



**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

May 11, 2015

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. Enclosed is the Notice of Intent (NOI) for Construction Activity – Storm Water Discharges and one hard copy and one electronic copy on CD of the site-specific Storm Water Pollution Prevention Plan (SWPPP).

Project # 25945-1477-04, PIN 117511.00
SIA, Serving Clarkrange Regional Business Park
Fentress 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)253-2545 if I can be of any assistance.

Sincerely,

A handwritten signature in blue ink, appearing to read "Andrew Wisniewski".

Andrew Wisniewski
Environmental Permits Section

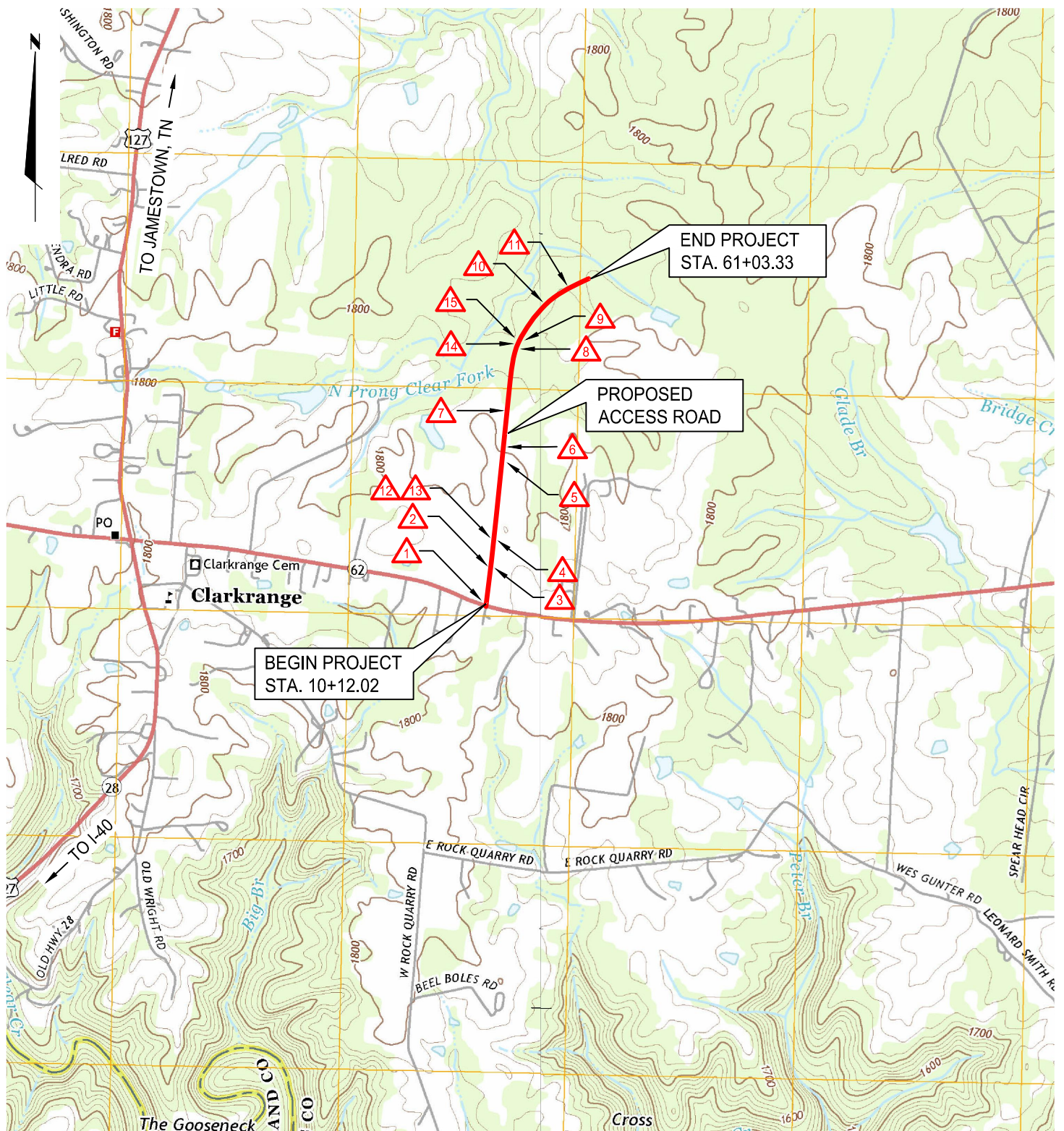
Enclosures


JLH: APW:

Enclosures for:

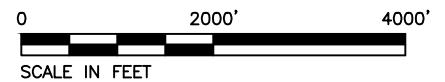
cc: Mr. Ken Flynn, Region 2 Construction (CD)

Reading File, NPDES File



 APPROXIMATE OUTFALL LOCATION

TOPOGRAPHIC MAPS: CLARKRANGE, TN (2013) AND
JONES KNOB, TN (2013) USGS QUADRANGLE MAPS



REGION 2, DISTRICT 27
COOKEVILLE, TN

STORM WATER POLLUTION PREVENTION PLAN
TOPOGRAPHIC (USGS) MAP
INDUSTRIAL ACCESS ROAD SERVING
CLARKRANGE REGIONAL BUSINESS PARK
FENTRESS COUNTY, TENNESSEE

DRAWN BY:	CHECKED BY:
BJJ	JTH
PIN	117511.00
PROJECT NO.	25945-1477-04
FIGURE	DATE:
1	5-6-2015

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2015	25945-3477-04	
P.E.	2015	25945-1477-04	S-1

SWPPP INDEX OF SHEETS

DESCRIPTION	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
10. NON-STORMWATER DISCHARGES	S-3
11. SPILL PREVENTION, MANAGEMENT AND NOTIFICATION.....	S-3
12. RECORD-KEEPING.....	S-4
13. SITE WIDE/PRIMARY PERMITTEE CERTIFICATION	S-5
14. SECONDARY PERMITTEE (OPERATOR) CERTIFICATION	S-5
15. ENVIRONMENTAL PERMITS	S-5
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)
1.3.2. ☐ KNOWN EXCEPTIONAL TENNESSEE WATERS
IF YES TO SECTION 1.3, HAVE THE EPSC PLANS BEEN PREPARED BY AN INDIVIDUAL WHO HAS COMPLETED TDEC LEVEL II? (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 HAS COMPLETED TDEC LEVEL II? (5.4.1.b)
☐YES ☐ NO ☐ N/A (MAY 23, 2013 CGP EXEMPTION)

2. SITE DESCRIPTION (3.5.1)

- 2.1. PROJECT LIMITS (3.5.1.g): REFER TO TITLE SHEET
- 2.2. PROJECT DESCRIPTION (3.5.1.a):
TITLE: INDUSTRIAL ACCESS ROAD SERVING CLARKRANGE REGIONAL BUSINESS PARK
COUNTY: FENTRESS
PIN: 117511.00
- 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) 12B-12F, DRAINAGE MAP SHEET 10, USGS QUAD MAP, AND THE OUTFALL TABLE IN SECTION 4.2.3 BELOW.
- 2.5. MAJOR SOIL DISTURBING ACTIVITIES (3.5.1.b) (CHECK ALL THAT APPLY):
2.5.1. ☒ CLEARING AND GRUBBING
2.5.2. ☒ 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): 13.2 ACRES

- 2.7. TOTAL AREA TO BE DISTURBED (3.5.1.c): 8.0 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 ☒
- 2.8. ARE THERE ANY SEASONAL LIMITATIONS ON WORK? YES ☐ NO ☒
IF YES, DESCRIBE AND LIST THE CORRESPONDING PLAN SHEET: _____
- 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)
LILY LOAM	B	27.5	0.28
LONEWOOD-CLARKRANGE COMPLEX	C	37.6	0.43
RAMSEY-ALTICREST-ROCK OUTCROP COMPLEX	D	34.9	0.20

- 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	0.1	0.8		0.95
SEMI-IMPERVIOUS	1.3	9.8		0.85
PERVIOUS (GRASS/BRUSH)	11.8	89.4		0.35
WEIGHTED CURVE NUMBER OR C-FACTOR =				0.40

RUNOFF COEFFICIENTS FOR POST-CONSTRUCTION CONDITIONS				
AREA TYPE	AREA(AC)	PERCENTAGE OF TOTAL AREA (%)	RUNOFF CN	C FACTOR
IMPERVIOUS	3.2	24.2		0.95
SEMI-IMPERVIOUS	1.5	11.4		0.85
PERVIOUS (GRASS/BRUSH)	8.5	64.4		0.35
WEIGHTED CURVE NUMBER OR C-FACTOR =				0.55

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

- 3.1. INSTALL STABILIZED CONSTRUCTION EXITS.
- 3.2. INSTALL PERIMETER PROTECTION WHERE RUNOFF SHEETS FROM THE SITE.
- 3.3. INSTALL INITIAL EPSC (EROSION PREVENTION AND SEDIMENT CONTROL) MEASURES.
- 3.4. PERFORM CLEARING AND GRUBBING (NOT MORE THAN 15 DAYS PRIOR TO GRADING OR EARTH-MOVING. REFER TO THE STABILIZATION PRACTICES BELOW.).
- 3.5. REMOVE AND STORE TOPSOIL.
- 3.6. STABILIZE DISTURBED AREAS WITHIN 14 DAYS OF COMPLETING ANY STAGE AND/OR PHASE OF ACTIVITY.
- 3.7. INSTALL STORM SEWERS, CULVERTS AND BRIDGE STRUCTURES.
- 3.8. INSTALL INLET AND CULVERT PROTECTION ONCE STRUCTURES ARE IN PLACE AND CAPABLE OF INTERCEPTING FLOW.
- 3.9. PERFORM FINAL GRADING AND INSTALL BASE STONE.
- 3.10. COMPLETE FINAL PAVING AND SEALING OF CONCRETE.
- 3.11. INSTALL TRAFFIC CONTROL AND PROTECTION DEVICES.
- 3.12. COMPLETE FINAL STABILIZATION (TOPSOIL, SOD, SEED, EROSION CONTROL BLANKET, ETC.)
- 3.13. REMOVE TEMPORARY EROSION CONTROLS AND ACCUMULATED SEDIMENT FROM AREAS THAT HAVE ESTABLISHED AT LEAST 70 PERCENT PERMANENT VEGETATIVE COVER.
- 3.14. 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. IF NO TO SECTION 4.1.1, WILL THIS PROJECT DISCHARGE INTO STATE WATERS THAT ARE LESS THAN OR EQUAL TO 1 FLOW MILE DOWN GRADIENT OF THE PROJECT LIMITS? YES ☐ NO ☐
4.1.3. IF YES TO SECTION 4.1.2, HAVE ANY OF THE RECEIVING WATERS DOWN GRADIENT BEEN CLASSIFIED BY TDEC AS FOLLOWS (CHECK ALL THAT APPLY):
4.1.3.1. ☐ 303d IMPAIRED FOR SILTATION
4.1.3.2. ☐ 303d IMPAIRED FOR HABITAT ALTERATION
4.1.3.3. ☐ HIGH QUALITY WATERS OR KNOWN EXCEPTIONAL TENNESSEE WATERS (KETW)
- 4.1.4. 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)	HIGH QUALITY OR 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 NORTH PRONG CLEAR FORK RIVER	NO	NO	YES	YES
WWC-1	WET WEATHER CONVEYANCE TO UNNAMED TRIBUTARY TO NORTH PRONG CLEAR FORK RIVER	NO	NO	YES	YES

- 4.1.5. ARE BUFFER ZONES REQUIRED (4.1.2, 5.4.2)? YES ☐ NO ☒
IF YES, THEY HAVE BEEN INCLUDED ON PLAN SHEET(S) _____
IF YES, CHECK THE APPROPRIATE BOX BELOW FOR SIZE OF BUFFER.
☐ 60-FEET FOR IMPAIRED AND 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.)

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

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

- 4.2.1. OF TEN ACRES OR MORE FOR AN OUTFALL(S) THAT DOES NOT DISCHARGE TO AN IMPAIRED STREAM OR KNOWN EXCEPTIONAL TENNESSEE WATERS (3.5.3.3) OR
- 4.2.2. OF FIVE ACRES OR MORE FOR AN OUTFALL(S) THAT DISCHARGES TO AN IMPAIRED STREAM OR KNOWN EXCEPTIONAL TENNESSEE WATERS (5.4.1.f).
- 4.2.3. OUTFALL TABLE (3.5.1.d, 5.4.1.f).

SEE SWPPP SHEET S-6 FOR OUTFALL INFORMATION.

4.2.4. WHERE POSSIBLE, HAS NON-PROJECT RUN-ON BEEN DIVERTED THROUGH THE PROJECT SO THAT THE OFF-SITE RUN-ON WILL NOT FLOW OVER DISTURBED AREAS WITHIN THE ROW, THUS SEPARATING NON-PROJECT RUN-OFF FROM PROJECT RUN-OFF THEREBY REDUCING THE DRAINAGE AREA TO ANY ONE OUTFALL?
YES ☒ NO ☐ N/A ☐

4.2.5. ARE EQUIVALENT MEASURES BEING SUBSTITUTED FOR A SEDIMENT BASIN(S)? YES ☐ NO ☐ N/A ☒

4.2.6. HAVE ALL OUTFALLS BEEN LABELED ON THE EPSC PLAN SHEETS (3.5.1.g, 5.4.1.f)? YES ☒ NO ☐

4.2.7. HAVE ALL OUTFALLS BEEN LABELED ON A USGS TOPOGRAPHIC MAP INCLUDED IN THE "DOCUMENTATION AND PERMITS" BINDER (2.6.2)?
YES ☒ NO ☐

4.3. WETLAND INFORMATION
WILL CONSTRUCTION AND/OR EROSION AND SEDIMENT CONTROLS IMPACT ANY WETLANDS? YES ☒ NO ☐
IF YES, THE STRUCTURAL EPSC MEASURES HAVE BEEN INCLUDED IN THE TOTAL PROJECT WETLAND IMPACTS AND HAVE BEEN INCLUDED IN THE ARAP PERMIT, 401 OR 404 PERMITS.

WETLAND INFORMATION				
WETLAND LABEL	FROM STATION LT OR RT	TO STATION LT OR RT	TEMPORARY IMPACTS (AC)	PERMANENT IMPACTS (AC)
WTL-1	10+85, RT	12+00±, RT	0.000	0.022
WTL-2	14+50, LT	20+20±, LT	0.000	0.035
WTL-3	14+52, RT	20+10±, RT	0.000	0.196
WTL-4	39+60, LT	45+80±, LT	0.000	0.130
WTL-5	59+80, LT	60+50, LT	0.000	0.000

- 4.4. TOTAL MAXIMUM DAILY LOADS (TMDL) INFORMATION (3.5.10)
- 4.4.1. IS THIS PROJECT LOCATED IN A WATERSHED THAT MAINTAINS AN EPA APPROVED TMDL FOR SILTATION? YES ☐ NO ☒
- 4.4.2. IF YES, IS THIS PROJECT LOCATED WITHIN A SUBWATERSHED WITH A WASTE LOAD ALLOCATION (WLA)? YES ☐ NO ☐
- 4.4.3. IF YES, DOES THE PROJECT HAVE A DIRECT DISCHARGE TO A 303(d) LISTED STREAM FOR SILTATION OR HABITAT ALTERATION?
YES ☐ NO ☐
- 4.4.4. IF YES, HAS A SUMMARY OF THE CONSULTATION (LETTER) BEEN INCLUDED WITH THE SWPPP DOCUMENTATION? YES ☐ NO ☐
- 4.5. ECOLOGY INFORMATION (3.5.5.e)
IF SPECIAL NOTES ARE PRESENT IN THE TDOT ECOLOGY REPORT, HAVE THEY BEEN ADDED TO THE APPROPRIATE PLAN SHEETS?

YES ☒ NO ☐ NO NOTES REQUIRED ☐
IF YES, LIST ALL PLAN SHEETS WHERE SPECIAL NOTES HAVE BEEN ADDED. 1B

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

- 5.1. EPSC MEASURES MUST BE DESIGNED, INSTALLED AND MAINTAINED TO CONTROL STORMWATER VOLUME AND VELOCITY WITHIN THE SITE TO MINIMIZE EROSION (4.1.1).
- 5.2. EPSC MEASURES MUST CONTROL STORMWATER DISCHARGES, INCLUDING BOTH PEAK FLOWS AND TOTAL STORMWATER VOLUME, TO MINIMIZE EROSION AT 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 ☐
- 5.6. HAVE STAGED EPSC PLANS BEEN PREPARED FOR THE PROJECT (3.5.2)?
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

- 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 (3.5.8.2.a).
- 7.1.4. ALL DISTURBED AREAS OF THE SITE THAT HAVE NOT BEEN FINALLY STABILIZED, AREAS USED FOR MATERIAL STORAGE THAT ARE EXPOSED TO PRECIPITATION, STRUCTURAL CONTROL MEASURES, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE, AND EACH OUTFALL WILL BE INSPECTED (3.5.8.2.b).
- 7.1.5. THE INSPECTOR WILL OVERSEE THE REQUIREMENTS OF OTHER CONSTRUCTION-RELATED WATER QUALITY PERMITS (I.E. TDEC ARAP, US COE AND TVA SECTION 26a PERMITS) FOR CONSTRUCTION ACTIVITIES AROUND WATERS OF THE STATE (10 "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 EFO.
- 7.3. MAINTENANCE PRACTICES (3.5.3.1 AND 3.5.7)

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2015	25945-3477-04	
P.E.	2015	25945-3477-04	S-2

TENNESSEE D.O.T.

DESIGN DIVISION

FILE NO.

5/5/2015 3:02:47 PMG:\Trn\CT133-TDOT SWPPP\CT13300L_SIA CorKrangge_FentrassCo\RP\T\SWPPP_Sheets\CAUD\SWPPPsheet3.dgn

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2015	25945-3477-04	
P.E.	2015	25945-1477-04	S-3

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 (½) THE HEIGHT OF THE DAM.

7.3.5.

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

7.3.6.

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

7.3.7.

THE 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):
VEGETATED DITCHES (SOD)

9.3.

OTHER ITEMS NEEDING CONTROL (3.5.5)

9.3.1.

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

9.3.1.1.

☒ LUMBER, GUARDRAIL, TRAFFIC CONTROL DEVICES

9.3.1.2.

☒ CONCRETE WASHOUT

9.3.1.3.

☒ CONCRETE AND CORRUGATED METAL PIPES

9.3.1.4.

☒ MINERAL AGGREGATES, ASPHALT

9.3.1.5.

☒ EARTH

9.3.1.6.

☒ LIQUID TRAFFIC STRIPING MATERIALS, PAINT

9.3.1.7.

☒ ROCK

9.3.1.8.

☒ CURING COMPOUND

9.3.1.9.

☐ EXPLOSIVES

9.3.1.10.

☐ OTHER

THESE MATERIALS WILL BE HANDLED AS NOTED IN THIS SWPPP.

9.3.2.

WASTE MATERIALS (3.5.5.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).

9.3.5.1.

☒ FERTILIZERS AND LIME

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

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.

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

11.1.1.3.1.

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.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STORMWATER
POLLUTION
PREVENTION
PLAN

TENNESSEE D.O.T.				DESIGN DIVISION	FILE NO.						
				TYPE	YEAR	PROJECT NO.		SHEET NO.			
				CONST.	2015	25945-3477-04					
				P.E.	2015	25945-1477-04		S-4			

- 12.4.2.2.

ALL CONSTRUCTION MATERIALS, WASTE AND WASTE HANDLING DEVICES, AND ALL EQUIPMENT, AND VEHICLES THAT WERE USED DURING CONSTRUCTION HAVE BEEN REMOVED AND PROPERLY DISPOSED; AND
- 12.4.2.3.

ALL STORMWATER CONTROLS THAT WERE INSTALLED AND MAINTAINED DURING CONSTRUCTION, EXCEPT THOSE THAT ARE INTENDED FOR LONG-TERM USE FOLLOWING TERMINATION OF PERMIT COVERAGE, HAVE BEEN REMOVED; AND
- 12.4.2.4.

ALL POTENTIAL POLLUTANTS AND POLLUTANT GENERATING ACTIVITIES ASSOCIATED WITH CONSTRUCTION HAVE BEEN REMOVED; AND
- 12.4.2.5.

THE PERMITTEE HAS IDENTIFIED WHO IS RESPONSIBLE FOR ONGOING MAINTENANCE OF ANY STORMWATER CONTROLS LEFT ON THE SITE FOR LONG-TERM USE FOLLOWING TERMINATION OF PERMIT COVERAGE; AND
- 12.4.2.6.


TEMPORARY 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.



AUTHORIZED TDOT PERSONNEL SIGNATURE (3.3.1)

JIM OZMENT

PRINTED NAME

ENVIRONMENTAL DIVISION DIRECTOR

TITLE

05-11-2015

DATE

14. SECONDARY PERMITTEE (OPERATOR) CERTIFICATION (7.7.6)

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

AUTHORIZED OPERATOR (CONTRACTOR) SIGNATURE (3.3.1)

PRINTED NAME

TITLE

DATE

15. ENVIRONMENTAL PERMITS (9.0)

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

ENVIRONMENTAL PERMITS			
PERMIT	YES OR NO	PERMIT OR TRACKING NO.	EXPIRATION DATE*
TDEC ARAP	YES		
CORPS OF ENGINEERS (COE)	YES		
TVA 26A	YES		
TDEC CGP	YES		
OTHER			

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2015	25945-3477-04	
P.E.	2015	25945-1477-04	S-5

- 12.4.2.2.

ALL CONSTRUCTION MATERIALS, WASTE AND WASTE HANDLING DEVICES, AND ALL EQUIPMENT, AND VEHICLES THAT WERE USED DURING CONSTRUCTION HAVE BEEN REMOVED AND PROPERLY DISPOSED; AND
- 12.4.2.3.

ALL STORMWATER CONTROLS THAT WERE INSTALLED AND MAINTAINED DURING CONSTRUCTION, EXCEPT THOSE THAT ARE INTENDED FOR LONG-TERM USE FOLLOWING TERMINATION OF PERMIT COVERAGE, HAVE BEEN REMOVED; AND
- 12.4.2.4.

ALL POTENTIAL POLLUTANTS AND POLLUTANT GENERATING ACTIVITIES ASSOCIATED WITH CONSTRUCTION HAVE BEEN REMOVED; AND
- 12.4.2.5.

THE PERMITTEE HAS IDENTIFIED WHO IS RESPONSIBLE FOR ONGOING MAINTENANCE OF ANY STORMWATER CONTROLS LEFT ON THE SITE FOR LONG-TERM USE FOLLOWING TERMINATION OF PERMIT COVERAGE; AND
- 12.4.2.6.

TEMPORARY 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.

AUTHORIZED TDOT PERSONNEL SIGNATURE (3.3.1)

JIM OZMENT
PRINTED NAME

ENVIRONMENTAL DIVISION DIRECTOR
TITLE

DATE

14. SECONDARY PERMITTEE (OPERATOR) CERTIFICATION (7.7.6)

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

AUTHORIZED OPERATOR (CONTRACTOR) SIGNATURE (3.3.1)

PRINTED NAME

TITLE

DATE

15. ENVIRONMENTAL PERMITS (9.0)

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

ENVIRONMENTAL PERMITS			
PERMIT	YES OR NO	PERMIT OR TRACKING NO.	EXPIRATION DATE*
TDEC ARAP	YES		
CORPS OF ENGINEERS (COE)	YES		
TVA 26A	YES		
TDEC CGP	YES		
OTHER			

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2015	25945-3477-04	
P.E.	2015	25945-1477-04	S-5

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2015	25945-3477-04	
P.E.	2015	25945-1477-04	S-6

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

EPSC STAGE	OUTFALL LABEL	SUB OUTFALL	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		10+20 LT	3	0.18	0.07	0.07	N/A	ROADSIDE DITCH	
1, 2	2		14+90 LT	1	1.10	1.73		N/A	WTL-2	
1, 2, 3	3		14+60 RT	1	0.42	1.61	1.93	N/A	WTL-3	
1, 2, 3	4		19+80 RT	1	0.30	1.22	4.48	N/A	WTL-3	
1, 2	5		34+75 RT	1.5	1.11	1.11		N/A	NATURAL SWALE	
1, 2, 3	6		35+40 RT	1.5	0.88	2.63	2.02	N/A	NATURAL SWALE	
1, 2, 3	7		44+40 LT	2	0.54	0.98	0.98	N/A	WTL-4	
1, 2	8		47+80 RT	4	0.97	1.03		N/A	STR-1	
1, 2, 3	9		48+00 RT	5	0.38	0.38	0.38	N/A	STR-1	
1, 2, 3	10		55+00 LT	3	0.68	0.35	0.52	N/A	NATURAL SWALE	
1, 2, 3	11		60+00 LT	2	1.69	1.69	0.34	N/A	WTL-5	
1, 2	12		18+60 LT	1	3.92	3.92		N/A	WTL-2	
1, 2, 3	13		18+80 LT	1	0.33	0.33	1.04	N/A	WTL-2	
2, 3	14		48+30 LT	4		3.22	3.22	N/A	STR-1	
1, 2, 3	15		48+90 LT	5	0.64	0.64	0.64	N/A	STR-1	

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



Documentation and Permits Binder

Industrial Access Road Serving Clarkrange Regional Business Park

Project No.: 25945-1477-04

PIN: 117511.00

Fentress County, Tennessee

**Prepared for:
Tennessee Department of Transportation – TDOT**

***Prepared by:*
ARCADIS**

Consultant Reference No.: CTT33001.0000

DOCUMENTS AND PERMITS BINDER

CHECKLIST

PROJECT NAME: Industrial Access Road Serving Clarkrange Regional Business Park

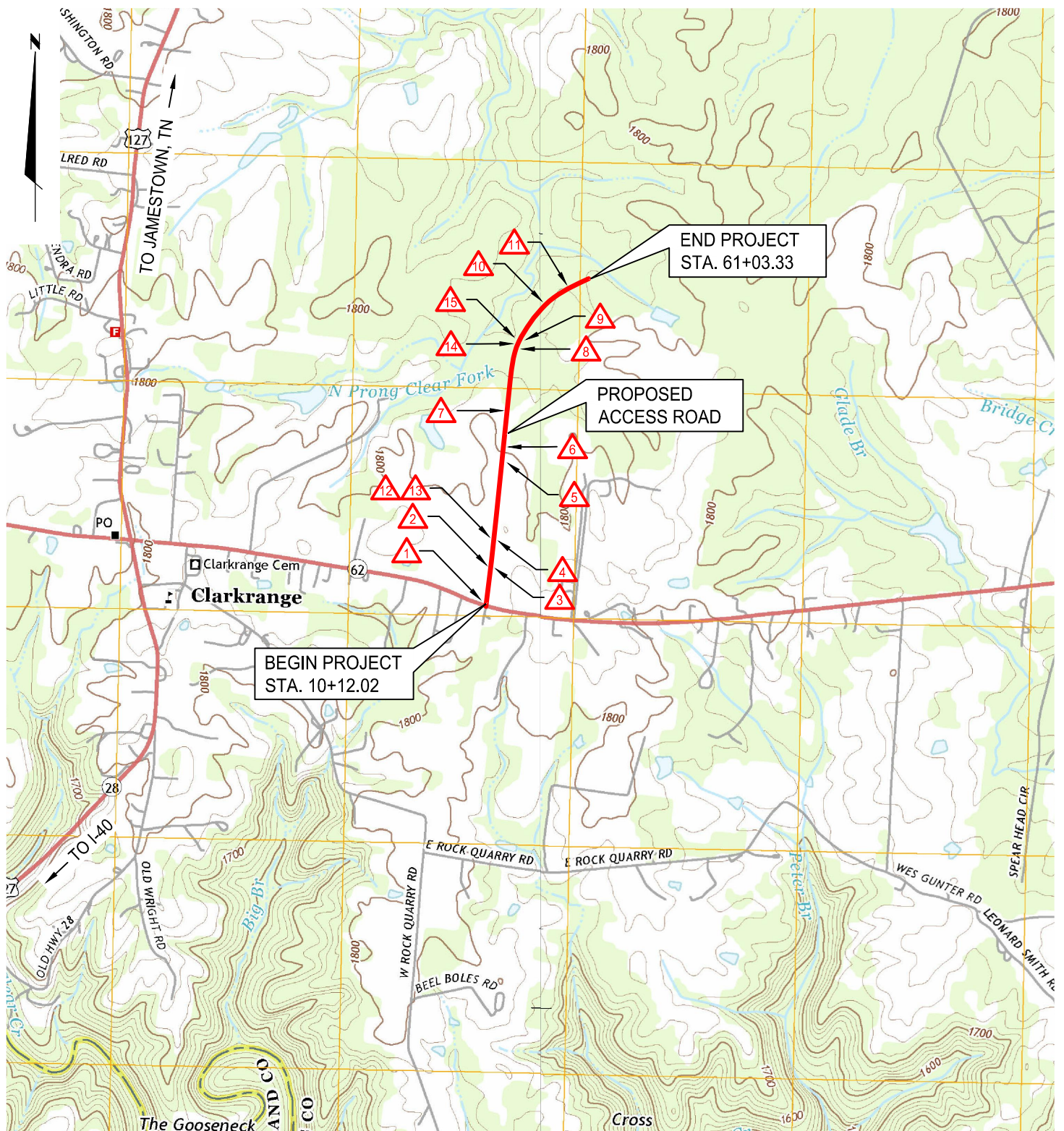
PIN: 117511.00


PROJECT NO. 25945-1477-04

FENTRESS COUNTY, TENNESSEE

1. ☒ INDEX OF REVISIONS
2. ☒ RAINFALL RECORD SHEETS
3. ☒ EPSC INSPECTION REPORTS
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
 - b. ☒ No





 APPROXIMATE OUTFALL LOCATION

TOPOGRAPHIC MAPS: CLARKRANGE, TN (2013) AND
JONES KNOB, TN (2013) USGS QUADRANGLE MAPS

0 2000' 4000'
SCALE IN FEET



REGION 2, DISTRICT 27
COOKEVILLE, TN

STORM WATER POLLUTION PREVENTION PLAN
TOPOGRAPHIC (USGS) MAP
INDUSTRIAL ACCESS ROAD SERVING
CLARKRANGE REGIONAL BUSINESS PARK
FENTRESS COUNTY, TENNESSEE

DRAWN BY:	CHECKED BY:
BJJ	JTH
PIN	117511.00
PROJECT NO.	25945-1477-04
FIGURE	DATE:
1	5-6-2015

2 - RAINFALL RECORD SHEETS



TDOT EPSC Inspection Monthly Rainfall Data Log

Month _____ Year _____

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								
31								

¹ Day of Week= Su,M,Tu,W,Th,F,Sa

² Predicted Precipitation Source: _____



NOAA Atlas 14, Volume 2, Version 3
Location name: Clarkrange, Tennessee, US*
Latitude: 36.1826°, Longitude: -85.0029°
Elevation: 1822 ft*
* source: Google Maps



POINT PRECIPITATION FREQUENCY ESTIMATES

G.M. Bonnín, 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

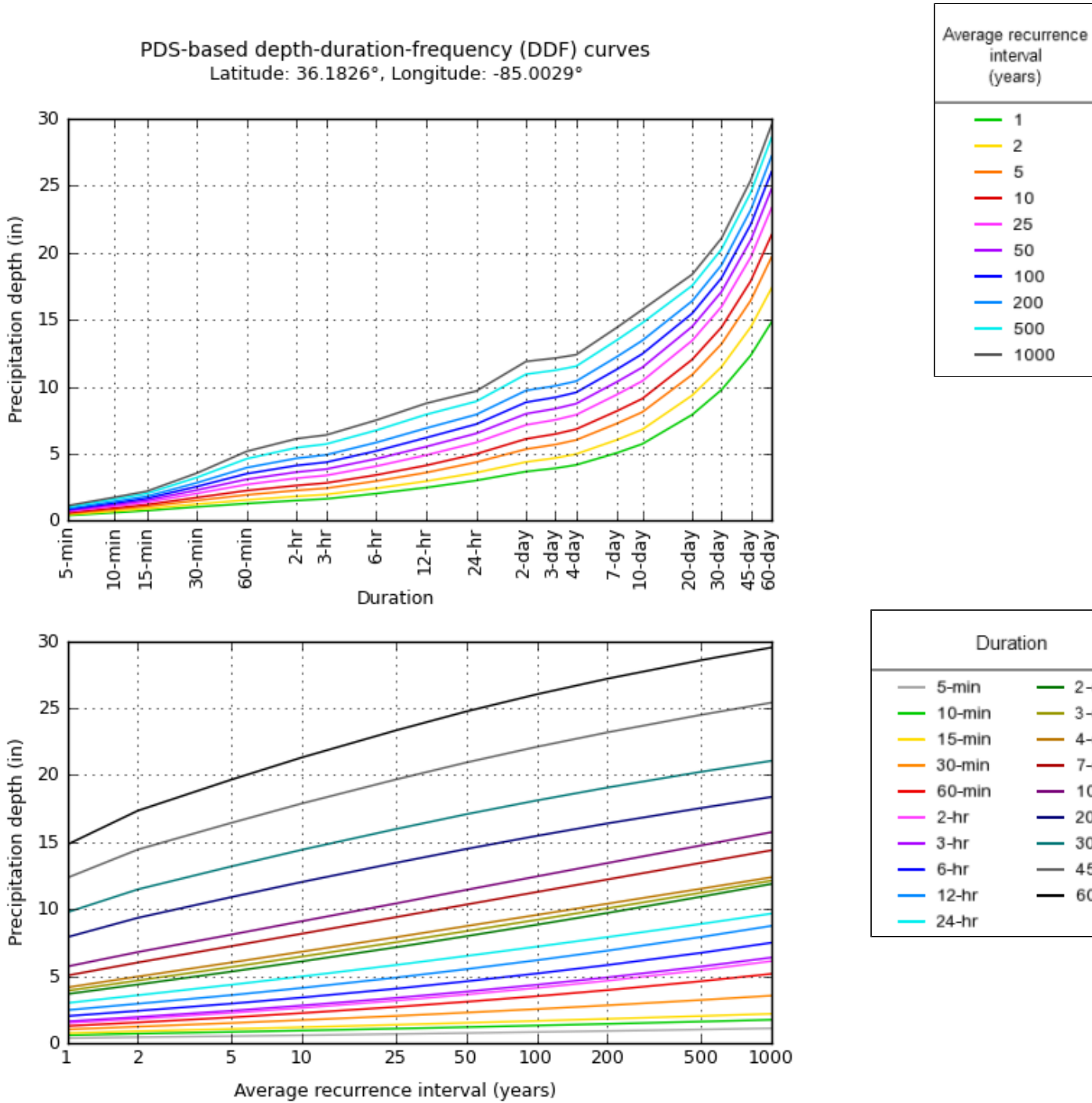
PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches) ¹										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.374 (0.343 0.409)	0.443 (0.406 0.484)	0.521 (0.478 0.569)	0.587 (0.536 0.640)	0.677 (0.613 0.737)	0.750 (0.675 0.815)	0.826 (0.739 0.897)	0.905 (0.802 0.984)	1.02 (0.887 1.10)	1.11 (0.955 1.20)
10-min	0.597 (0.547 0.654)	0.708 (0.650 0.774)	0.834 (0.765 0.911)	0.939 (0.857 1.02)	1.08 (0.977 1.17)	1.19 (1.08 1.30)	1.31 (1.17 1.43)	1.44 (1.27 1.56)	1.61 (1.40 1.75)	1.74 (1.50 1.90)
15-min	0.746 (0.684 0.817)	0.890 (0.817 0.973)	1.06 (0.967 1.15)	1.19 (1.08 1.30)	1.37 (1.24 1.49)	1.51 (1.36 1.64)	1.66 (1.48 1.80)	1.81 (1.61 1.97)	2.02 (1.77 2.20)	2.19 (1.89 2.38)
30-min	1.02 (0.938 1.12)	1.23 (1.13 1.34)	1.50 (1.37 1.64)	1.72 (1.57 1.88)	2.03 (1.84 2.20)	2.28 (2.05 2.48)	2.54 (2.27 2.76)	2.82 (2.50 3.06)	3.22 (2.81 3.50)	3.54 (3.06 3.85)
60-min	1.28 (1.17 1.40)	1.54 (1.42 1.69)	1.92 (1.76 2.10)	2.24 (2.05 2.44)	2.70 (2.44 2.94)	3.09 (2.78 3.35)	3.50 (3.13 3.80)	3.95 (3.50 4.30)	4.62 (4.03 5.02)	5.17 (4.46 5.63)
2-hr	1.50 (1.38 1.65)	1.81 (1.66 1.99)	2.25 (2.06 2.47)	2.62 (2.39 2.87)	3.17 (2.86 3.46)	3.62 (3.25 3.96)	4.12 (3.67 4.49)	4.65 (4.11 5.07)	5.45 (4.73 5.94)	6.12 (5.25 6.68)
3-hr	1.62 (1.50 1.77)	1.95 (1.79 2.14)	2.41 (2.21 2.64)	2.81 (2.57 3.06)	3.37 (3.06 3.66)	3.84 (3.46 4.17)	4.35 (3.89 4.72)	4.90 (4.34 5.32)	5.71 (4.98 6.20)	6.39 (5.50 6.95)
6-hr	2.02 (1.86 2.21)	2.41 (2.22 2.64)	2.95 (2.71 3.23)	3.40 (3.11 3.72)	4.06 (3.69 4.43)	4.61 (4.17 5.03)	5.19 (4.66 5.67)	5.83 (5.18 6.36)	6.74 (5.90 7.36)	7.49 (6.49 8.20)
12-hr	2.46 (2.29 2.67)	2.94 (2.72 3.20)	3.58 (3.32 3.89)	4.12 (3.80 4.48)	4.88 (4.48 5.30)	5.52 (5.04 5.98)	6.18 (5.61 6.70)	6.90 (6.20 7.48)	7.92 (7.03 8.60)	8.75 (7.68 9.53)
24-hr	2.99 (2.81 3.20)	3.57 (3.35 3.83)	4.36 (4.08 4.66)	4.98 (4.66 5.32)	5.82 (5.44 6.22)	6.50 (6.05 6.93)	7.20 (6.68 7.67)	7.91 (7.31 8.44)	8.89 (8.17 9.48)	9.67 (8.83 10.3)
2-day	3.66 (3.44 3.91)	4.38 (4.12 4.69)	5.34 (5.02 5.71)	6.10 (5.72 6.53)	7.14 (6.68 7.63)	7.98 (7.44 8.52)	8.83 (8.21 9.44)	9.71 (8.98 10.4)	10.9 (10.0 11.7)	11.9 (10.9 12.7)
3-day	3.91 (3.67 4.17)	4.67 (4.39 5.00)	5.68 (5.33 6.07)	6.46 (6.06 6.90)	7.52 (7.03 8.02)	8.35 (7.79 8.90)	9.20 (8.55 9.81)	10.1 (9.32 10.7)	11.2 (10.3 12.0)	12.1 (11.1 13.0)
4-day	4.16 (3.90 4.43)	4.97 (4.66 5.30)	6.02 (5.64 6.42)	6.82 (6.39 7.28)	7.90 (7.38 8.41)	8.73 (8.14 9.29)	9.57 (8.89 10.2)	10.4 (9.65 11.1)	11.5 (10.6 12.3)	12.4 (11.4 13.2)
7-day	5.04 (4.75 5.36)	6.02 (5.66 6.39)	7.24 (6.81 7.69)	8.17 (7.67 8.67)	9.39 (8.81 9.97)	10.3 (9.67 11.0)	11.3 (10.5 12.0)	12.2 (11.4 13.0)	13.5 (12.5 14.3)	14.4 (13.3 15.3)
10-day	5.72 (5.41 6.05)	6.80 (6.42 7.19)	8.10 (7.65 8.57)	9.10 (8.58 9.63)	10.4 (9.81 11.0)	11.4 (10.7 12.1)	12.4 (11.7 13.2)	13.4 (12.6 14.2)	14.7 (13.7 15.6)	15.7 (14.6 16.7)
20-day	7.91 (7.50 8.35)	9.35 (8.86 9.86)	10.9 (10.3 11.5)	12.0 (11.4 12.7)	13.4 (12.7 14.2)	14.5 (13.7 15.3)	15.5 (14.6 16.3)	16.4 (15.4 17.3)	17.5 (16.5 18.5)	18.4 (17.2 19.4)
30-day	9.76 (9.28 10.3)	11.5 (10.9 12.1)	13.2 (12.5 13.8)	14.4 (13.7 15.1)	16.0 (15.2 16.8)	17.1 (16.2 17.9)	18.1 (17.2 19.0)	19.1 (18.0 20.0)	20.2 (19.1 21.3)	21.1 (19.8 22.2)
45-day	12.3 (11.8 12.9)	14.4 (13.8 15.1)	16.4 (15.7 17.2)	17.9 (17.0 18.7)	19.7 (18.7 20.6)	20.9 (19.9 21.9)	22.1 (21.0 23.2)	23.2 (22.0 24.3)	24.5 (23.2 25.7)	25.4 (24.0 26.7)
60-day	14.8 (14.1 15.5)	17.3 (16.6 18.2)	19.7 (18.8 20.6)	21.3 (20.3 22.3)	23.3 (22.2 24.4)	24.8 (23.6 25.9)	26.0 (24.8 27.3)	27.2 (25.9 28.5)	28.6 (27.1 30.0)	29.5 (28.0 31.0)

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

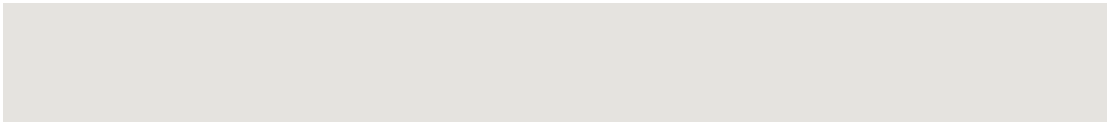
PF graphical



[Back to Top](#)

Maps & aerials

Small scale terrain





TENNESSEE DEPARTMENT OF TRANSPORTATION
EROSION PREVENTION & SEDIMENT CONTROL (EPSC) INSPECTION REPORT

EPSC Inspection Schedule (circle one): 1st Weekly or 2nd Weekly

Date of Inspection: _____

Site or Project Name (State Route (SR) / US Route or Road Name and Description):			Are corrective actions required by this inspection report (Yes /No):			Current approximate disturbed acreage:
County(ies):	TDOT PIN:	NPDES Tracking Number: TNR	Number of New Corrective Actions/Deficiencies:	Number of Recurring Corrective Actions/Deficiencies:	Number of New Sediment Releases:	Number of Un-Corrected Sediment Releases:
TDOT Project No.:	TDOT Contract No.:	Contractor:				

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 Gauge(s)

☐ Off-site Reference Rain Gauge Location: _____ Has daily rainfall been checked/documented on the TDOT Monthly Rainfall Log? ☐ Yes ☐ No

Best Management Practices (BMPs)			TDOT/Contractor Agrees with EPSC Inspection Report: NO or YES. If No, Explain and initial comment:	
Are the Erosion Prevention and Sediment Controls (EPSCs) functioning correctly: If "No," see attached page(s) for description.				
1.	Are all applicable (EPSCs) installed and maintained per the SWPPP?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
2.	Are EPSC's functioning correctly at all disturbed areas/material storage areas per section 4.1.5 of the CGP?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
3.	Are EPSC's functioning correctly at outfall/discharge points such that there is no objectionable color contrast in the receiving stream, and no other water quality impacts per section 5.3.2 of the CGP?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
4.	Are EPSC's functioning correctly at ingress/egress points such that there is no evidence of track out?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
5.	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 of the CGP? If, "No," refer to the attached page(s) for each location and measures taken to stabilize the area(s).	<input type="checkbox"/> Yes <input type="checkbox"/> No		
6.	Have pollution prevention measures been installed, implemented, and maintained to minimize the discharge of pollutants from equipment and vehicle washing, wheel and wash water and other wash waters per section 4.1.5 of the CGP? If "No," refer to the attached page(s) for measures to be implemented to address deficiencies.	<input type="checkbox"/> Yes <input type="checkbox"/> No		
7.	If applicable, have discharges from dewatering activities been managed by appropriate controls per Section 4.1.4 of the CGP? If "No," refer to the attached page(s) for measures to be implemented to address deficiencies.	<input type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No		
8.	If a concrete washout facility is located on site, is it clearly identified on the project and maintained? If "No," refer to the attached page(s) for measures to be implemented to address deficiencies.	<input type="checkbox"/> N/A <input type="checkbox"/> Yes <input type="checkbox"/> No		
(Additional pages may be attached, if needed)				

Certification and Signature (must be signed by the certified inspector and the permittees per Sections 3.5.8.2 (g) and 7.7.2 of the CGP)

<p>This document was prepared in accordance with a system designed to assure that qualified personnel properly gathered and evaluated information presented. Based on my inquiry of the person(s) who manage the system, or those persons directly responsible for gathering the information, I certify that inspections of storm water discharge points (outfalls) and of erosion and sediment controls have been performed and recorded. I certify that erosion and sediment controls in the drainage area of the identified outfall were installed as planned and designed in working order as recorded in the table above.</p> <p>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 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.</p>	EPSC Inspector Name, Title and Company (print or type):	Signature:	Date:
	TN EPSC Certification No.:		
	Contractor (Secondary Permittee) Name and Title (print or type):	Signature:	Date:
	TDOT Project Supervisor or Designee (Primary Permittee) Name and Title (print or type):	Signature:	Date:



State/US Route or Road Name: _____ TDOT Project No.: _____ TDOT Contract No.: _____ Date of Inspection: _____

Outfall Name or Station No.	Rain Gauge No.	Approx. Station No. From/To	LT, RT, or CL	Date Last Disturbed	Date of Stabilization and Code T=Temporary P=Permanent	Existing EPSC Control Measures Codes *	Current Condition Codes *	Objectionable Color Contrast Discharge to Receiving Stream or Other Water Quality Impacts? Y, N, N/A	Corrective Action(s) or Comment(s)

EROSION PREVENTION AND SEDIMENT CONTROL MEASURE CODES

- | | | |
|--|---|--|
| 1. Temporary Silt Fence | 15. Temporary Seeding with Mulch | 29. Excess Dirt Removed from Rdwy. Daily |
| 2. Temporary Diversion Berm or Ditch | 16. Temporary Mulching | 30. Haul Roads Dampened for Dust Control |
| 3. Temporary Slope Drain | 17. Erosion Control Blanket | 31. Ditch Liner |
| 4. Rock Check Dams | 18. Flexible Channel Liner | 32. Rock Silt Screen |
| 5. Brush Barrier | 19. Catch Basin / Storm Inlet Protection | 33. Temporary Silt Fence with Backing |
| 6. Sediment Removal | 20. Riprap Outlet Structure | 34. Enhanced Silt Fence |
| 7. Rock Filter Ring / Rock Ring | 21. Riprap Energy / Velocity Dissipater | 35. Sediment Tube |
| 8. Sand Bags | 22. Curb, Gutter, or Storm Sewer Protection | 36. Sediment Dam |
| 9. Sediment Trap / Basin | 23. Temporary Construction Exit / Entrance | 37. Concrete Washout, other pollution issues |
| 10. Temporary Sediment Filter Bag / Dewatering | 24. Temporary Stream Crossing | 38. Berm (soil, riprap, rock) |
| 11. Polyethylene Sheeting | 25. Turbidity Barrier / Silt Boom | 39. Gabion |
| 12. Machined Rip Rap | 26. Temporary Stream Diversion | 40. Sheet Piling |
| 13. Geotextile | 27. Preserve Natural Resource / Buffer Zone | 41. |
| 14. Permanent Seeding with Mulch or Sod | 28. Mineral Aggregate Base on Subgrade | 42. |

CONDITION CODES

- A Active (Under Construction)
C Cleaning Needed-Maintenance
FM Future Maintenance
FS Final Stabilized
I Increase Measures
R Repair and/or Replace-Maintenance
RO Repeat Occurrence
SR Sediment Release
S Stable (No Action Needed)
U Upgrade Needed (Failure Noted)
W Too Wet to Work Conditions
Other (#1): _____
Other (#2): _____
Other (#3): _____



CONSTRUCTION DIVISION EPSC DELEGATION OF AUTHORITY

In accordance with Section 7.7.3 (Duly Authorized Representative) of the *Tennessee General NPDES Permit for Discharges of Stormwater Associated with Construction Activities*, I _____
(print name of TDOT project supervisor), delegate the reporting responsibility of coordination with the erosion prevention and sediment control (EPSC) inspection services 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 and confirm that the TDOT delegate stated above has direct knowledge of the subject project and the ability to discuss the reports and recommendations from the EPSC inspection services consultant on the subject project directly to the contractor.

_____ (signature of TDOT Project Supervisor)

_____ (signature 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**

Division of Water Resources

William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Ave., 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:	Industrial Access Road Serving Clarkrange Regional Business Park (PIN 117511.00)	Existing NPDES Tracking Number: TNR
Street Address or Location:	International Blvd Clarkrange, TN	Start date: July 2015
		Estimated end date: July 2020
Site Activity Description:	New Roadway Alignment Construction	Latitude (dd.dddd): 36.182589
		Longitude (dd.dddd): -85.002873
County(ies): Fentress	MS4 Jurisdiction: TDOT	Acres Disturbed: 13.2
		Total Acres: 8.0

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.:

Receiving waters: Wet Weather Conveyance and Unnamed Tributary to North Prong Clear Fork River

Attach the SWPPP with the NOI ☒ SWPPP AttachedAttach a site location map ☒ Map AttachedSite Owner/Developer Entity (*Primary Permittee*): (person, company, or legal entity that has operational or design control over construction plans and specifications):
Tennessee Department of Transportation

Site Owner/Developer Signatory (V.P. level/higher - signs certification below): (individual responsible for site): Jim Ozment

Signatory's Title or Position (V.P. level/higher - signs certification below): Director - Environmental Division

Mailing Address: 900 James K. Polk Bldg., 505 Deaderick Street

City: Nashville

State: TN

Zip: 37243-0334

Phone: (615) 741-5373

Fax: (615) 741-1098

E-mail: Environmental.NPDES.TDOT@tn.gov

Optional Contact:
Khalid AhmedTitle or Position:
Senior Transportation Specialist

Mailing Address: 900 James K. Polk Bldg., 505 Deaderick Street

City: Nashville

State: TN

Zip: 37243-0334

Phone: (615) 253-0021

Fax: (615) 741-1098

E-mail: khalid.ahmed@tn.gov

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:

Date:

Contractor(s) Certification (must be signed by president, vice-president or equivalent, or ranking elected official) (*Secondary Permittee*)

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 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.

Contractor company name (print or type):

Contractor signatory (print/type): (V.P. level or higher)

Signature:

Date:

Mailing Address:

City:

State:

Zip:

Phone: ()

Fax: ()

E-mail:

Other Contractor company name (print or type):

Other Contractor signatory (print/type): (V.P. level or higher)

Signature:

Date:

Mailing Address:

City:

State:

Zip:

Phone: ()

Fax: ()

E-mail:

OFFICIAL STATE USE ONLY

Received Date:	Reviewer:	Field Office:	Permit Number TNR	Exceptional TN Water:
Fee(s):	T & E Aquatic Flora and Fauna:	Impaired Receiving Stream:	Notice of Coverage Date:	

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

Purpose of this form 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.

Permit application fee: (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 Disturbed	= or > 150 acres	= or > 50 < 150 acres	= or > 20 < 50 acres	= or > 5 < 20 acres	= or > 1 < 5 acres	Subsequent 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.

Complete the form 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.tn.gov/environment/wpc/stormh2o/docs/MS4s_Jan2012.pdf

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 **If your work will disturb or cause alterations of a stream or wetland, you must obtain an appropriate Aquatic Resource Alteration Permit (ARAP).** If you have a question about the ARAP program or permits, contact your local Environmental Field Office (EFO).

Submitting the form and obtaining more information 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 TDEC Nashville, TN address below, addressed to **Attention: Stormwater NOI Processing.**

Tennessee Department of Environment and Conservation
Division of Water Resources
Attn: Storm Water NOI Processing
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 11th Floor
Nashville, TN 37243



TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC)
Division of Water Resources
William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Ave., 11th Floor, Nashville, TN 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 TDEC Nashville, TN address depicted 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: Industrial Access Road Serving Clarkrange Regional Business Park (PIN 117511.00)	NPDES Tracking Number: TNR
Street Address or Location: International Blvd Clarkrange, TN	County(ies): Fentress

Name of Permittee Requesting Termination of Coverage: Tennessee Department of Transportation

Permittee Contact Name:	Title or Position:		
Mailing Address:	City:	State:	Zip:
Phone: ()	E-mail:		

Check the reason(s) for termination of permit coverage:

<input type="checkbox"/>	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.
<input type="checkbox"/>	You are no longer the operator at the construction site (i.e., termination of site-wide, primary or secondary permittee coverage).

Certification and Signature: (must be signed by president, vice-president or equivalent ranking elected 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.

Permittee name (print or type):	Signature:	Date:
---------------------------------	------------	-------

Tennessee Department of Environment and Conservation
Division of Water Resources
Attn: Storm Water NOI Processing
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 11th Floor
Nashville, TN 37243



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**

A handwritten signature in blue ink, appearing to read "B. Davis".

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

Tennessee General Permit No. TNR100000
Stormwater Discharges Associated with Construction Activities

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
1.2.2.	Stormwater discharges associated with construction support activities.....	1
1.2.3.	Non-stormwater discharges authorized by this permit	2
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)	4
1.4.2.	Stormwater Pollution Prevention Plan (SWPPP)	5
1.4.3.	Permit application fees	5
1.4.4.	Submittal of a copy of the NOC and NOT to the local MS4.....	6
1.4.5.	Permit Coverage through Qualifying Local Program.....	6
1.5.	Effective Date of Coverage	6
1.5.1.	Notice of Coverage (NOC)	6
1.5.2.	Permit tracking numbers	7
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)	9
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	10
2.4.4.	Late NOIs.....	11
2.5.	Who Must Sign the NOI?.....	11
2.6.	NOI Form	11

2.6.1.	Contents of the NOI form	11
2.6.2.	Construction site map	11
2.6.3.	Application completeness	12
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.	Registered engineer or landscape architect requirement	13
3.1.2.	Site Assessment	14
3.2.	SWPPP Preparation and Compliance	15
3.2.1.	Existing site	15
3.2.2.	New site	15
3.3.	Signature Requirements, Plan Review and Making Plans Available.....	15
3.3.1.	Signature Requirements for a SWPPP	15
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	16
3.5.2.	Description of stormwater runoff controls	17
3.5.3.	Erosion prevention and sediment controls	18
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	23
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.....	28
5.2.	Spills.....	29
5.3.	Discharge Compliance with State Water Quality Standards.....	29
5.3.1.	Violation of Water Quality Standards	29
5.3.2.	Discharge quality	29
5.4.	Discharges into Impaired or Exceptional Tennessee Waters	30
5.4.1.	Additional SWPPP/BMP Requirements for discharges into impaired or exceptional TN Waters	30
5.4.2.	Buffer zone requirements for discharges into impaired or exceptional TN waters	31
5.4.3.	Pre-Approved sites.....	32
6.	RETENTION, ACCESSIBILITY AND SUBMISSION OF RECORDS	32
6.1.	Documents	32
6.2.	Accessibility and Retention of Records	32
6.2.1.	Posting information at the construction site	33
6.3.	Electronic Submission of NOIs, NOTs and Reports	33
7.	STANDARD PERMIT CONDITIONS	33
7.1.	Duty to Comply	33
7.1.1.	Permittee's duty to comply.....	33
7.1.2.	Penalties for violations of permit conditions.....	34
7.1.3.	Civil and criminal liability.....	34
7.1.4.	Liability under state law	34
7.2.	Continuation of the Expired General Permit	34
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.....	35
7.7.1.	Signatory requirements for a Notice of Intent (NOI)	36
7.7.2.	Signatory requirements for reports and other items	36
7.7.3.	Duly authorized representative	37
7.7.4.	Changes to authorization	37
7.7.5.	Signatory requirements for primary permittees	37
7.7.6.	Signatory requirements for secondary permittees	37
7.8.	Penalties for Falsification of Reports	38
7.9.	Oil and Hazardous Substance Liability.....	38

7.10.	Property Rights.....	38
7.11.	Severability.....	38
7.12.	Requiring an Individual Permit	38
7.12.1.	Director can require a site to obtain an individual permit.....	38
7.12.2.	Permittee may request individual permit instead of coverage under this general permit	39
7.12.3.	Individual permit terminates general permit.....	39
7.13.	Other, Non-Stormwater, Program Requirements.....	39
7.14.	Proper Operation and Maintenance.....	40
7.15.	Inspection and Entry	40
7.16.	Permit Actions	40
8.	REQUIREMENTS FOR TERMINATION OF COVERAGE.....	40
8.1.	Termination of Developer and Builder Coverage	40
8.1.1.	Termination process for primary permittees	40
8.1.2.	NOT review	41
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)?.....	42
9.	AQUATIC RESOURCE ALTERATION PERMITS (ARAP).....	42
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 [Statewide Stormwater Management Plan \(SSWMP\)](#). 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 not authorize the following discharges:

- a) Post-Construction Discharges (Permanent Stormwater Management) - 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) Discharges Mixed with Non-Stormwater - 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) Discharges Covered by Another Permit - 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) Discharges Threatening Water Quality - 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 SWPPP that are designed to bring the discharge into compliance with water quality standards.
- e) Discharges into Impaired Streams - 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 [impaired waters](#). [Impaired waters](#) 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 [impaired 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.
- f) Discharges into Outstanding National Resource Waters - 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, [Chapter 1200-4-3-.06](#).
- g) Discharges into Exceptional Quality Waters - 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) Discharges Not Protective of Federal or State listed Threatened and Endangered Species, Species Deemed in Need of Management or Special Concern Species - 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) Discharges from a New or Proposed Mining Operation - This permit does not cover discharges from a new or proposed mining operation.
- j) Discharges Negatively Affecting a Property on the National Historic Register - Stormwater discharges that would negatively affect a property that is listed or is eligible for listing in the [National Historic Register](#) 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 EPA-approved 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 EPA-approved 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, [Chapter 1200-4-11](#). 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://tn.gov/environment/wpc/stormh2o/qlp.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 not confirm or imply an authorization to discharge under this permit. Correspondence

² <http://www.tn.gov/environment/wpc/dataviewer/>

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. Permit tracking numbers

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 co-permittees 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 design 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 day-to-day operational control of the construction site have not been identified at the time the comprehensive [SWPPP](#) 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 [operator\(s\)](#) (see section 2.4.3 below). These new [operators](#) (e.g., general contractor, utilities contractors, sub-contractors, erosion control contractors, hired commercial builders) are considered secondary permittees. The [SWPPP](#) must be updated to reflect the addition of new [operators](#) 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 day-to-day operational control of those activities at a project which are necessary to ensure compliance with the [SWPPP](#) 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 portion 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 [Best Management Practices \(BMPs\)](#) and other controls required by the [SWPPP](#). 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 [SWPPP](#).

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 [United States Geological Survey](#) (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. Application completeness

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 [Tennessee Code Annotated](#), Title 62, Chapter 2 (see part 10 below) and the rules of the [Tennessee Board of Architectural and Engineering Examiners](#). Engineering design of sediment basins and other sediment controls must be included in [SWPPPs](#) 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 “[Level II Design Principles for Erosion Prevention and Sediment Control for Construction Sites](#)” 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 [Aquatic Resources Alteration Permit](#) (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;
- l) 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. Description of stormwater runoff controls

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 [Tennessee Erosion and Sediment Control 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) Erodeable 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.

- l) 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 [Tennessee Erosion and Sediment Control Handbook](#). 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 after 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 [Aquatic Resources Alteration Permit \(ARAP\)](#)(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 [MS4](#) 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. Buffer zone requirements

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-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 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 [Aquatic Resources Alteration Permit](#) (ARAP), or equivalent permits issued by federal authorities. Additional **buffer zone** requirements may be established by the local [MS4](#) 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:

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.

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. Pollution prevention measures

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. Prohibited discharges

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 on-site 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, [Chapter 1200-4-3-.03](#). 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, [Chapter 1200-4-4](#). Construction activity carried out in the manner required by this permit shall be considered compliance with the TDEC Rules, [Chapter 1200-4-3-.03](#).
- 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 not 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 [Level II Design Principles for Erosion Prevention and Sediment Control for Construction Sites](#) 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](#), 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.
- g) 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-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 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. Pre-Approved sites

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 [Fundamentals of Erosion Prevention and Sediment Control 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 [T.C.A. § 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 ([T.C.A. § 69-3-101](#), 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. 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 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
 - (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.

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]

7.7.3. Duly authorized representative

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 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."

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 [Section 309 of the Clean Water Act](#) and in [T.C.A. §69-3-115](#) 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. Director can require a site to obtain an individual permit

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 [T.C.A. § 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. Termination process for primary permittees

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:

Tennessee General Permit No. TNR100000
Stormwater Discharges from Construction Activities

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 activitiesthe requirements for final vegetative or non-vegetative stabilization described in sub-section 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) (<http://www.tn.gov/environment/permits/arap.shtml>). 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 re-established, 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 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

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)

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://tn.gov/environment/wpc>.

“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 [Aquatic Resources Alteration Permit](#) (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 [State Board of Architectural and Engineer Examiners](#) pursuant to [Section 62-202, Tennessee Code Annotated](#), 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 [Tennessee Erosion and Sediment Control Handbook](#). 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\(d\)](#)). 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:

$$\text{TMDL} = \text{sum of non point sources (LA)} + \text{sum of point sources (WLA)} + \text{margin of safety}$$

A list of completed TMDLs that have been approved by EPA can be found at our web site: <http://tn.gov/environment/wpc/tmdl/approved.shtml>

“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 phase of at least two months. (Rules and Regulations of the State of Tennessee, Chapter [1200-4-3-.04\(3\)](#)).

11. LIST OF ACRONYMS

ARAP	Aquatic Resource Alteration Permit
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
(next page)

**TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION**

Division of Water Pollution Control

6th Floor Annex, L&C Tower, 401 Church Street, Nashville, Tennessee 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:		NPDES Tracking Number: TNR	
Street Address or Location:		Construction Start Date:	
		Estimated End Date:	
Site Description:		Latitude (dd.dddd):	
		Longitude (-dd.dddd):	
County(ies):	MS4 Jurisdiction:	Acres Disturbed:	
		Total Acres:	
Does a topographic map show dotted or solid blue lines <input type="checkbox"/> and/or wetlands <input type="checkbox"/> 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 Number:			
Receiving waters:			
Attach the SWPPP with the NOI <input type="checkbox"/> SWPPP Attached		Attach a site location map <input type="checkbox"/> Map Attached	
Name of Site Owner or Developer (Site-Wide Permittee): (person, company, or legal entity that has operational or design control over construction plans and specifications)			
Site Owner or Developer Contact Name: (individual responsible for site)		Title or Position: (the party who signs the certification below):	
Mailing Address:		City:	State: Zip:
Phone: ()	Fax: ()	E-mail:	
Optional Contact:		Title or Position:	
Mailing Address:		City:	State: Zip:
Phone: ()	Fax: ()	E-mail:	
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 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.			
Owner or Developer Name: (print or type)		Signature:	Date:
Contractor(s) Certification: (must be signed by president, vice-president or equivalent, or ranking elected official) (Secondary Permittee)			
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.			
Primary contractor name and address: (print or type)		Signature:	Date:
Other contractor name and address: (print or type)		Signature:	Date:
Other contractor name and address: (print or type)		Signature:	Date:
OFFICIAL STATE USE ONLY			
Received Date:	Reviewer:	Field Office:	Permit Number TNR
Fee(s):	T & E Aquatic Flora and Fauna:	Impaired Receiving Stream:	Exceptional TN Water: Notice of Coverage Date:

**CONSTRUCTION ACTIVITY – STORMWATER DISCHARGES
NOTICE OF INTENT (NOI) - INSTRUCTIONS**

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

Purpose of this form 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.

Permit fee (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). There is no fee for sites less than 1 acre.

Acres Disturbed	= or > 150 acres	= or > 50 < 150 acres	= or > 5 < 50 acres	= or > 1 < 5 acres
Fee	\$7,500	\$4,000	\$1,000	\$250

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.

Complete the form 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.

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 **If your work will disturb or cause alterations of a stream or wetland, you must obtain an appropriate Aquatic Resource Alteration Permit (ARAP).** If you have a question about the ARAP program or permits, contact your local Environmental Field Office (EFO).

Submitting the form and obtaining more information 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**.

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

APPENDIX B – Notice of Termination (NOT) Form
(next page)

**TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC)**

Division of Water Pollution Control (WPC)

6th Floor Annex, L&C Tower, 401 Church Street, 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 WPC 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 and not markers or pencil.

Site or Project Name:	NPDES Tracking Number: TNR
Street Address or Location:	County(ies):

Name of Permittee Requesting Termination of Coverage:			
Permittee Contact Name :		Title or Position:	
Mailing Address:	City:	State:	Zip:
Phone: ()	E-mail:		

Check the reason(s) for termination of permit coverage:

<input type="checkbox"/>	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.
<input type="checkbox"/>	You are no longer the operator at the construction site (i.e., termination of site-wide, primary or secondary permittee coverage).

Certification and Signature: (must be signed by president, vice-president or equivalent ranking elected 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 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 the site or portions of the site have obtained permit coverage by subsequent operators or that 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.

Permittee name (print or type):	Signature:	Date:
---------------------------------	------------	-------

EFO	Street Address	Zip Code	EFO	Street Address	Zip Code
Memphis	8383 Wolf Lake Drive, Bartlett, TN	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

APPENDIX C – Twice-Weekly Inspection Report Form
(next page)

**TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC)**

Division of Water Pollution Control (WPC)

6th Floor Annex, L&C Tower, 401 Church Street, Nashville, Tennessee 37243

1-888-891-8332 (TDEC)

General NPDES Permit for Stormwater Discharges from Construction Activities (CGP)**CGP Inspection Worksheet for Twice-Weekly Inspections of Erosion Prevention and Sediment Controls**

Site or Project Name:		NPDES Tracking Number: TNR
Primary Permittee Name:		Date of Inspection:
Current approximate disturbed acreage:	Has daily rainfall been documented? <input type="checkbox"/> Yes <input type="checkbox"/> No	Name of Inspector:
Current weather/site 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 in the following locations:**

1.	Disturbed areas/material storage areas	<input type="checkbox"/> Yes	<input type="checkbox"/> No
2.	Outfall points (or nearest accessible downstream point if an outfall is inaccessible)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
3.	Construction ingress/egress points	<input type="checkbox"/> Yes	<input type="checkbox"/> No

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:

4.	Are (EPSCs) installed and maintained in the field per SWPPP? If "No", describe below.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
5.	Have site discharges caused an objectionable color contrast in the receiving stream (Permit section 5.3.2)? If "Yes", describe below the measures implemented to eliminate contrast.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
6.	Have discharges from dewatering activities been managed by appropriate controls per Section 4.1.4 of the Permit? If "No", describe below the measures to be implemented to achieve compliance.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
7.	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).	<input type="checkbox"/> Yes	<input type="checkbox"/> No
8.	Are non-stormwater discharges (per Section 1.2.3) and housekeeping measures such as storing chemicals, construction related debris litter, oils, fuels, building products, truck wash (per Section 3.5.3.1 (f) and (g)) being properly managed? If "No", describe below the measures to be implemented to achieve compliance.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
9.	If a concrete washout facility is located on site, is it clearly identified on the project and maintained? If "No", describe below the measures to be implemented to achieve compliance.	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No
10.	Have all previous deficiencies been addressed? If not, describe the remaining deficiencies. <input type="checkbox"/> Check if deficiencies/corrective measures have been reported on a previous form.	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Certification and Signature (must be signed by the certified inspector and the permittee per Sections 3.5.8.2 (g) and 7.7.2 of the CGP)

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.

Inspector Name and Title (print or type):	Signature:	Date:
Permittee Name and Title (print or type):	Signature:	Date:

CGP Inspection Worksheet for Twice-Weekly Inspections of Erosion Prevention and Sediment Controls

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. 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 of the Permit.

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.

(This page intentionally left blank)



**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

October 31, 2014

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: Project 25945-1477-04
PIN 117511.00
SIA
Serving Clarkrange Regional Business Park
Fentress County

Dear Mr. Smith:

The Tennessee Department of Transportation is proposing to construct an industrial access drive to a proposed industrial park off of State Route 62 (east of Clarkrange) in Fentress County. The project involves the construction of a paved access drive along the existing non-paved road to provide access to an industrial park with a proposed typical section consisting of two (2) 12 ft. wide travel lanes, two (2) 4 ft. wide shoulders. Also included within the project scope are the crossing/impacts of four (4) wetlands and one (1) stream. The project scope also includes all associated drainage improvements. The total proposed length of roadway construction and improvements equals 0.992 miles. In accordance with T.C.A. 69-3-108(b), this office is submitting form CN-1091 identifying where permits may be needed.

In addition, and in accordance with the notification requirements of the U.S. Army Corps of Engineers, we are submitting this pre-construction notification and requesting concurrence at all locations described within the enclosed feature impact tables, meet the criteria of the nationwide permit identified.

By copy of this letter, we are also applying for a Section 26a permit or a letter of no objection from the Tennessee Valley Authority. Appropriate information is enclosed. This project will not cause any loss of flood storage or power storage volumes.

Purpose and Need

The primary purpose of the proposed project is to construct the industrial access road to develop an industrial park and providing employment to the citizens of Fentress County.

Reasonable Alternatives (TDEC Section 10.1)

There were two alternatives considered in the development of this project, a Build and the No-Build. The Build Alternative will provide an access point to the industrial park. There is currently no paved roadway to the project location. The State Industrial Access (SIA) will allow for continued development of the industrial park by allowing construction equipment access to the 11 lots. The proposed alignment location was evaluated according to environmental impacts, and existing land use. It was determined that the proposed alignment provides the fewest impacts to the environment.

The No Build Alternative will not fulfill the purpose and need and not provide proper access to an industrial park. For more information please see enclosed environmental document.

Impact Minimization (TDEC 10.1)

Efforts were made during the planning and design phases of this project to avoid impacts to waters of the State to the extent practicable, and to minimize impacts that were not avoidable. The proposed interchange will only disturb only the areas needed for construction. TDOT typically uses 6:1 slopes but to minimize the impact through the wetlands and over stream this project includes foreslopes of 3:1 and backslopes 2:1 and foreslopes of 4.3:1 for the pipe at STR-1. Implementation and maintenance of effective erosion prevention and sediment control (EPSC) measures will minimize water quality impacts. The purchase of mitigation credits from Tennessee Mitigation Fund (TMF) as compensation for offsetting unavoidable impacts will allow the continued restoration, establishment, enhancement, and preservation of aquatic resources.

Supplemental Information

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.

This project includes a total permanent wetland impact of 0.356 acres. We propose to mitigate the permanent wetland impacts by debiting, at a 2:1 ratio, 0.712 acres from available wetland credits from Tennessee Mitigation Fund (TMF). TMF does not currently have credits in the upper Cumberland SA. They are in the process of getting credits increased through the IRT. The Proposed Sale of Credit(s) Statement is enclosed.

TDOT sent over an email dated October 11, 2013 to the USFWS, the transmitting acoustic and mist netting survey results because of suitable habitat for bats. Based on negative survey results TDOT concluded that the project is "not likely to adversely affect" the Indiana bat (*Myotis sodalis*). In a response letter dated November 15, 2013, USFWS concurred with TDOT's determination of "not likely to adversely affect" and concluded they are unaware of any federally listed species that would be impacted by this project.

A search of the TDEC Division of Natural Areas, endangered species database, was conducted on January 27, 2014. This database search, paired with the findings from a site visit conducted on July 2, 2014 and July 9, 2014, identified two (2) rare but not listed species within one mile and three (3) listed species within four miles of the proposed site.

An email was sent from TDOT to the Tennessee Wildlife Resource Agency (TWRA) on January 17, 2014, requesting information on species that may be present in the vicinity of the proposed project. In a response email dated January 22, 2014 (enclosed), the TWRA stated no occurrences of listed species within two miles of the project location. Based on the project plans provided to TWRA recommends in addition to standard BMPs, mitigation be followed based on TDEC guidelines.

The Tennessee Division of Natural Heritage requested a wetland plant survey. The survey was conducted June 4-8, 2014 to investigate the areas on both sides of the current dirt road that will be expanded during the development and specific attention to the wetlands. The enclosed report dated July 2, 2014, stated one hundred thirty-four of vascular plants were observed and these are listed alphabetically within the four major divisions of vascular plants, below. No rare species were observed.

A TDOT archaeologist submitted a report to the State Historic Preservation Office (SHPO) of the site findings. In a response letter from the dated May 21, 2014, SHPO found the project area contains no archaeological resources eligible for listing in the National Register of Historic Places.

TDOT submitted an architectural report on February 27, 2014 of their finding in area based on the project scope. In a letter dated March 7, 2014, SHPO found that the proposed project contains no potential effects to architectural resources eligible for listing in the National Register of Historic Places.

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

It is the opinion of this office that all other aspects of the project not specifically mentioned in this letter meet the criteria for the General Permit for Wet Weather Conveyances. Please refer to the enclosed Form G for more information.

By copy of this letter, we are also requesting that the TDEC, Corps of Engineers, and the TVA 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 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 21, 2015 turn-in. We would greatly appreciate your initial review and request for additional information needed, or issuance of the public notice, within 15 days of receipt of our application; and issuance of the permits as soon as possible.

If you have any questions or we can be of further assistance please contact me at (615) 253-0021 or Andrew Wisniewski at (615) 253-2545.

Mr. Jimmy Smith
October 31, 2014
Page 4

Sincerely,



Khalid Ahmed
Senior Transportation Project Specialist, Environmental Permits Section

Enclosures

JLH: KMA: APW

cc: Mr. Jimmy Smith, TDEC
Ms. Tammy Turley, USACE, Nashville District

ec:

Ms. Jeanene Woodruff, TDEC
Ms. Kelly Baxter, TVA
Mr. James Ball, Project Management Office
Mr. Ken Flynn, Region 2 Construction Office
Mr. Wesley Huguen, Region 2 Project Development
Mr. Jay Norris, HQ (Region 2) Construction Office
Mr. Tommy Paul, Region 2 Environmental Coordinator
Mr. Rob Howard, Region 2 Ecology Section
Mr. Ronnie Porter, Program Operations Office
Mr. Hugh (Chip) Hannah, TDOT Compliance
Ms. Jennifer Stover, TDOT Compliance
Mr. John Hewitt, Natural Resources Office
Permit File

FEATURE SUMMARY TABLE:															
Location Information						Impact Description					Mitigation Description				Comments
Location #	Feature Name	Jurisdictional Determination	Latitude	Longitude	Stationing	Brief Impact Description	Impact Acreage to Waters of the US (ac.)	Corps Non-Notification (Y/N)	Total Existing Stream Length (ft.)	Total Proposed Stream Length (ft.)	In-Kind Stream Replace. Length (ft.)	Encapsul. Length @ 1.0 Ratio (ft.)	Stream Length Losses @ 1.0 Ratio (ft.)	Total In-Lieu Fee (@ \$240 per LF)	Location-Specific Miscellaneous Comments
4	STR-1	Stream	36.19249°	-85.0009°	48+29	new pipe	0.021	N	84	84	-	0	0	\$0	no mitigation required because under 200 feet.
Project Totals:							0.021	-	84	84	0	0	0	\$0	-

WETLAND SUMMARY TABLE:											
Location Information					Impact Description				Mitigation Description		Comments
Location #	Feature Name	Latitude	Longitude	Stationing	Brief Impact Description	Impact Acreage to Waters of the US (ac.)	Corps Non-Notification (Y/N)	Permanent Wetland Impact Area (ac.)	Wetland Debit (ac.) (@ 2:1 ratio)	Wetland Mitigation Bank Name	Location-Specific Miscellaneous Comments
1	WTL-1	36.18318°	-85.00255°	10+85-12+00± R	Fill in entire Wetland	0.022	N	0.022	0.04	Tennessee Mitigation Fund	-
2	WTL-2	36.18351°	-85.00298°	14+50-20+20 ± L	Partial Take of Wetland	0.035	N	0.035	0.07	Tennessee Mitigation Fund	-
2	WTL-3	36.18358°	-85.00255°	14+52-20+10± R	Partial Take of Wetland	0.196	N	0.196	0.39	Tennessee Mitigation Fund	-
3	WTL-4	36.19241°	-85.00131°	39+60-45+80± L	Partial Take of Wetland	0.103	N	0.103	0.21	Tennessee Mitigation Fund	-
Project Totals:						0.356	-	0.356	0.71	-	-

WET WEATHER CONVEYANCE SUMMARY TABLE:								
Location Information				Impact Description				Comments
Feature Name	Latitude	Longitude	Stationing	Brief Impact Description	Total Existing Feature Length (ft.)	Total Proposed Feature Length (ft.)	Total Feature Impact Area (ac.)	Location-Specific Miscellaneous Comments
WWC-1	36.1931°	-85.0014°	45+30-47+80	Fill	250	0	0.004	-
					250	0	0.004	-

FEATURE IMPACT TABLE:		Location #1,2, and 3 / WTL-1. WTL-2, WTL-3, WTL-4	
Location Information			
Location #	Location #1,2, and 3		
Feature Name:	WTL-1. WTL-2, WTL-3, WTL-4		
Stationing:	See Summary Table		
FEMA Floodplain Designation (if Zone AE, please enclose No-Rise Certification):	Zone X		
Permits Required - TDEC:	ARAP: Does not fit criteria under GARAP because of cumulative impacts. Will cause more than de minimis degradation to water quality at this location.		
Permits Required - Corps:	Pre-Construction Notification- Nationwide #14: Impacts at this site exceed one tenth of an acre, impacts wetlands or special aquatic site; therefore, Pre-Construction Notification is required.		
Permits Required - TVA:	Section 26A		
CN-1091 Section 6: Project Description			
6.1: Narrative description of project scope	Fill and partial fill of wetlands		
6.2: USGS Topographic Map	Please see enclosed		
6.3: Resource photographs	Please refer to photographs 1 through 5 in the enclosed Environmental Boundaries Report		
6.4: Existing feature characteristics	WTL-1 0.022 acres of wetland WTL-2 0.517 acres of wetland WTL-3 1.476 acres of wetland WTL-4 0.528 acres of wetland Please refer to the enclosed Environmental Boundaries Report for more information.		
6.5: Proposed feature characteristics	WTL-1 Permanently fill all of the wetland 0.022 acres WTL-2 Filling small edge of wetland 0.035 acres WTL-3 Filling small edge of wetland 0.196 acres WTL-4 Filling small portion of wetland. 0.103 acres Total 0.022+0.035+0.196+0.103=.356 acres		
* Impact acreage to waters of the US (acres):		0.356	
6.6: Wetland delineation documentation	Please refer to the enclosed Environmental Boundaries Report for more information.		
6.7: Water resource hydrologic and jurisdictional determination documentation	Please refer to the enclosed Environmental Boundaries Report for more information.		
CN-1091 Section 7: Project Rationale			
Description of the need for the proposed activity, alternatives, and impact minimization	Please refer to the enclosed cover letter for project rationale		
CN-1091 Section 8: Technical Information			
8.1: Detailed plans, specifications, etc. included for present conditions and proposed activity	Please see enclosed		
8.2: Sequencing of events and construction methods for proposed activity and compensatory mitigation	1. EPSC measures will be installed. Please refer to the enclosed EPSC sheets (12B-12K). 2. For the construction method at this location, please refer to the enclosed note sheet (3), present layout (4,5, and 7), and proposed and profile layout (4A, 5A. and 7A).		

<p>* Proposed impact mitigation:</p>	<p><u>WETLANDS</u> We propose to mitigate the permanent wetland impacts by purchasing credits from Tennessee Mitigation Fund (TMF).</p> <p>We propose to mitigate the permanent wetland impacts by debiting, at a 2:1 ratio, 0.71 acres from available wetland credits from TMF. An Advance Credit Availability sheet is enclosed</p>
<p>8.3: Depiction and narrative of EPSC measures</p>	<p>Please refer to the enclosed plan set, sheets 12 through 12K, for the EPSC plan sheets</p>
<p>CN-1091 Section 9: Water Resources Degradation (select one)</p>	
<p>My activity, as proposed, will not cause measurable degradation to water quality</p>	
<p>My activity, as proposed, will only cause de minimis degradation to water quality</p>	
<p>My activity, as proposed, will cause more than de minimis degradation to water quality (if selected, must complete Sections 10 and 11 below)</p>	<p>X</p>
<p>Unsure / need more information</p>	
<p>CN-1091 Section 10: Detailed Alternative Analysis</p>	
<p>10.1: Analysis of reasonable alternatives</p>	<p>Provided in the cover letter</p>
<p>10.2: Discussion of social and economic consequences</p>	<p>This project will help the local economy by bringing businesses and jobs to Fentress County.</p>
<p>10.3: Demonstration that degradation from alternative will not violate WQ criteria</p>	<p>Best Management Practices (BMPs) which includes the design, installation, and maintenance of erosion prevention and sediment control measures will be implemented during construction, which will protect the receiving waters.</p> <p>Mitigation through TMF as compensation for offsetting unavoidable impacts will allow the continued restoration, establishment, enhancement, and preservation for the aquatic resource.</p>
<p>CN-1091 Section 11: Compensatory Mitigation</p>	
<p>11.1: Detailed discussion of proposed compensatory mitigation</p>	<p><u>WETLANDS</u> We propose to mitigate the permanent wetland impacts by purchasing credits from Tennessee Mitigation Fund (TMF).</p> <p>We propose to mitigate the permanent wetland impacts by debiting, at a 2:1 ratio, 0.71 acres from available wetland credits from TMF. A Advance Credit Availability sheet is enclosed</p>
<p>11.2: Description of how compensatory mitig. will result in no net loss of resource value</p>	<p>TDOT has proposed to purchase credits from TMF with a ration of 2:1 in the same watershed for this impact. Therefore, the proposed impacts will result in no net loss of resource value.</p>
<p>11.3: Detailed monitoring plan</p>	<p>Will be provided by TMF.</p>
<p>11.4: Long-term protection measures for compensatory mitigation site</p>	<p>Will be provided by TMF.</p>

FEATURE IMPACT TABLE:		Location #4 / STR-1
Location Information		
Location #	Location #4	
Feature Name:	STR-1	
Stationing:	48+29	
FEMA Floodplain Designation (if Zone AE, please enclose No-Rise Certification):	Zone X	
Permits Required - TDEC:	ARAP: Meets the General ARAP criteria for the [Construction and removal of Minor Road Crossings]. Will only cause de minimis degradation to water quality.	
Permits Required - Corps:	Pre-Construction Notification- Nationwide #14: Impacts at this site exceed one tenth of an acre, impacts wetlands or special aquatic site; therefore, Pre-Construction Notification is required.	
Permits Required - TVA:	Section 26A	
CN-1091 Section 6: Project Description		
6.1: Narrative description of project scope	Proposed 84 ft of 8 ft X 5 ft. Reinforced Concrete Box Culvert (RCBC)	
6.2: USGS Topographic Map	Please see enclosed	
6.3: Resource photographs	Please refer to photographs 7 through 8 in the enclosed Environmental Boundaries Report	
6.4: Existing feature characteristics	Existing open stream: 84 ft. Existing structure length: 0 ft. Total existing length: 84 ft. Please refer to the enclosed Environmental Boundaries Report for more information about existing feature characteristics.	
6.5: Proposed feature characteristics	Proposed open stream: 0 ft. Proposed structure: 84 ft. Total proposed length: 84 ft.	
* Impact acreage to waters of the US (acres):		0.002
6.6: Wetland delineation documentation	N/A	
6.7: Water resource hydrologic and jurisdictional determination documentation	N/A	
CN-1091 Section 7: Project Rationale		
Description of the need for the proposed activity, alternatives, and impact minimization	Please refer to the enclosed cover letter for project rationale	
CN-1091 Section 8: Technical Information		
8.1: Detailed plans, specifications, etc. included for present conditions and proposed activity	Please see enclosed	
8.2: Sequencing of events and construction methods for proposed activity and compensatory mitigation	1. EPSC measures will be installed. Please refer to the enclosed EPSC sheets (12B-12K). 2. For the construction method at this location, please refer to the enclosed note sheet (3), present layout (7), and proposed and profile layout (7A).	
* Proposed impact mitigation:		Not required
8.3: Depiction and narrative of EPSC measures	Please refer to the enclosed plan set, sheets 12 through 12K, for the EPSC plan sheets	
CN-1091 Section 9: Water Resources Degradation (select one)		
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 (if selected, must complete Sections 10 and 11 below)		
Unsure / need more information		
CN-1091 Section 10: Detailed Alternative Analysis		

10.1: Analysis of reasonable alternatives	N/A
10.2: Discussion of social and economic consequences	N/A
10.3: Demonstration that degradation from alternative will not violate WQ criteria	N/A
CN-1091 Section 11: Compensatory Mitigation	
11.1: Detailed discussion of proposed compensatory mitigation	N/A
11.2: Description of how compensatory mitig. will result in no net loss of resource value	N/A
11.3: Detailed monitoring plan	N/A
11.4: Long-term protection measures for compensatory mitigation site	N/A

**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	Site #:	Permit #:
Section 1. Applicant Information (individual responsible for site, signs certification below)		
Applicant Name: Khalid Ahmed		
Company: Tennessee Department of Transportation		Signatory's Title or Position: Sr. Transportation Project Specialist
Mailing Address: 505 Deaderick Street Suite 900 J.K. Polk Bldg.		City: Nashville State: TN Zip: 37243
Phone: (615) 253-0021	Fax: N/A	E-mail: Khalid.Ahmed@tn.gov
Section 2. Alternate Contact/Consultant Information (a consultant is not required)		
Alternate Contact Name: Andrew Wisniewski		
Company: Tennessee Department of Transportation		Title or Position: Graudate Transportation Associate
Mailing Address: 505 Deaderick Street Suite 900 J.K. Polk Bldg.		City: Nashville State: TN Zip: 37243
Phone: (615) 253-2545	Fax: N/A	E-mail: Andrew.Wisniewski@tn.gov
Section 3. Fee (check appropriate box and submit requisite fee with application)		
<input checked="" type="checkbox"/> No Fee Submitted <input type="checkbox"/> Fee Submitted with Application Amount Submitted: \$ _____		
Current fee schedules for Aquatic Resource Alteration Permit processing may be found at the Division of Water Resources webpage at http://www.tn.gov/environment/permits/arap.shtml or by calling (615) 532-0625. Make checks payable to "Treasurer, State of Tennessee".		
Section 4. Project Details (fill in information and check appropriate boxes)		
Site or Project Name: SIA serving Clarkrange Regional Business Park		Nearest City, Town or Major Landmark: Clarkrange
Street Address or Location: East of Clarkrange		
County(ies): Fentress	MS4 Jurisdiction: TDOT	Latitude (dd.dddd): 36.18318 Longitude (dd.dddd): -85.00255
Resource Proposed for Alteration: <input checked="" type="checkbox"/> Stream <input checked="" type="checkbox"/> Wetland <input type="checkbox"/> Reservoir		
Name of Water Resource: *		
Brief Project Description (a more detailed description is required under Section 8): Construct an industrial access road for a new industrial park.		
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? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
If Yes, provide the permit reference numbers: _____		
Is the proposed activity associated with a larger common plan of development? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
If Yes, submit site plans and identify the location and overall scope of the common plan of development. Plans attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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: 4/27/15	Estimated end date: 4/27/20	
Is any portion of the activity complete now? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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 is not applicable, state the reason why it is not applicable. Please refer to the enclosed feature impact and summary tables.

Section 6. Project Description		Attached	
		Yes	No
6.1	A narrative description of the scope of the project	<input type="checkbox"/>	<input type="checkbox"/>
6.2	USGS topographic map indicating the exact location of the project (<i>can be a photographic copy</i>)	<input type="checkbox"/>	<input type="checkbox"/>
6.3	Photographs of the resource(s) proposed for alteration with location description (<i>photo locations should be noted on map</i>)	<input type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input type="checkbox"/>
6.6	In the case of wetlands, include a wetland delineation with delineation forms and site map denoting location of data points	<input type="checkbox"/>	<input type="checkbox"/>
6.7	A copy of all hydrologic or jurisdictional determination documents issued for water resources on the project site	<input type="checkbox"/>	<input type="checkbox"/>

Section 7. Project Rationale		Attached	
		Yes	No
Describe the need for the proposed activity, including, but not limited to, the purpose, alternatives considered, and what will be done to avoid or minimize impacts to streams or wetlands.		<input type="checkbox"/>	<input type="checkbox"/>

Section 8. Technical Information		Attached	
		Yes	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 (<i>e.g., stream cross sections where road crossings are proposed</i>)	<input type="checkbox"/>	<input type="checkbox"/>
8.2	For both the proposed activity and compensatory mitigation, provide a discussion regarding the sequencing of events and construction methods	<input type="checkbox"/>	<input type="checkbox"/>
8.3	Depiction and narrative on the location and type of erosion prevention and sediment control (EPSC) measures for the proposed alterations	<input type="checkbox"/>	<input type="checkbox"/>

Section 9. Water Resources Degradation (degree of proposed impact) Note that in most cases, activities that exceed the scope of the General Permit limitations are considered greater than de minimis degradation to water quality.

My activity, as proposed:

- a. ☐ Will not cause measurable degradation to water quality
- b. ☐ Will only cause de minimis degradation to water quality
- c. ☒ Will cause more than de minimis degradation to water quality (*Complete additional sections 9-11*)
- d. ☐ Unsure/need more information

Please refer to the enclosed feature impact and summary tables.

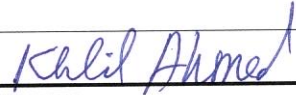
For information and guidance on the definition of de minimis and degradation, refer to the Antidegradation Statement in Chapter 0400-40-03-.06 of the Tennessee Water Quality Criteria Rule: <https://www.tn.gov/sos/rules/0400/0400-40/0400-40-03.20131216.pdf>. For more information on specifics on what General 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		Attached	
		Yes	No
10.1	Analyze all reasonable alternatives and describe the level of degradation caused by each of the feasible alternatives	<input type="checkbox"/>	<input type="checkbox"/>
10.2	Discuss the social and economic consequences of each alternative	<input type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input type="checkbox"/>

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

Section 11. Compensatory Mitigation		Attached	
		Yes	No
11.1	A detailed discussion of the proposed compensatory mitigation	<input type="checkbox"/>	<input type="checkbox"/>
11.2	Describe how the compensatory mitigation would result in no net loss of resource value	<input type="checkbox"/>	<input type="checkbox"/>
11.3	Provide a detailed monitoring plan for the compensatory mitigation site	<input type="checkbox"/>	<input type="checkbox"/>
11.4	Describe the long-term protection measures for the compensatory mitigation site (e.g., deed restrictions, conservation easement)	<input type="checkbox"/>	<input type="checkbox"/>

Certification and Signature			
<p>An application submitted by a corporation must be signed by a principal executive officer; from a partnership or proprietorship, by the partner or proprietor respectively; from a municipal, state, federal or other public agency or facility, the application must be signed by either a principal executive officer, ranking elected official, or other duly authorized employee.</p> <p><i>"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."</i></p>			
Khalid Ahmed	Sr. Transportation Project Specialist		10/31/2014
Printed Name	Official Title	Signature	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:			<input type="checkbox"/> Deficient Date: _____ <input type="checkbox"/> Complete Date: _____
Check #:	Exceptional TN Water:		

OMB No. 3316-0060
Exp. Date 08/31/2016

The Department of the Army (DA) permit program is authorized by **Section 10 of the Rivers and Harbors Act of 1899** and **Section 404 of the Clean Water Act (P.L. 95-217)**. These laws require permits authorizing structures and work in or affecting navigable waters of the United States and the discharge of dredged or fill material into waters of the United States. **Section 26a of the Tennessee Valley Authority Act**, as amended, prohibits the construction, operation, or maintenance of any structure affecting navigation, flood control, or public lands or reservations across, along, or in the Tennessee River or any of its tributaries until plans for such construction, operation, and maintenance have been submitted to and approved by the Tennessee Valley Authority (TVA).

<p>Name and Mailing Address of Applicant:</p> <p>Tennessee Department of Transportation 505 Deaderick Street, Suite 900 J.K. Polk Bldg Nashville, TN 37243</p> <p>Email Address: <u>Khalid.Ahmed@tn.gov</u></p> <p>Telephone Number: Home _____ Office <u>(615)253-0021</u> Mobile _____</p>	<p>Name, Mailing Address, and Title of Authorized Agent:</p> <p>Email Address: _____</p> <p>Telephone Number: Home _____ Office _____ Mobile _____</p>
<p>Facility/Activity Location (include all known information):</p> <p>Address: <u>SR-127, bridge over Woods Reservoir</u></p> <p>Subdivision, Lot No., and/or Tax Parcel No.: <u>see roadway plans</u></p> <p>Stream Name and Mile: <u>See Cover Letter</u> Longitude/Latitude: <u>-85.0009°/36.19249°</u></p>	
<p>Application submitted to <input checked="" type="checkbox"/> DA <input checked="" type="checkbox"/> TVA</p> <p>Date activity is proposed to commence: <u>4/27/2015</u> Date activity is proposed to be completed: <u>4/27/2020</u></p>	

Describe in detail the proposed activity, its purpose and intended use (*private, public, commercial, or other*). Describe structures to be erected including those placed on fills, piles, or floating platforms. Also describe the type, composition, and quantity of materials to be discharged or placed in the water; the means of conveyance; and the source of discharge or fill material. Please attach additional sheets if needed.

The Tennessee Department of Transportation is proposing to construct an industrial access drive to a proposed industrial park off of State Route 62 (east of Clarkrange) in Fentress County. The primary purpose of the proposed project is to construct the industrial access road to develop an industrial park and providing employment to the citizens of Fentress County. One 84 foot culvert is being placed in STR-1 for the proposed industrial access road.

Application is hereby made for approval of the activities described herein. I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief such information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities. I understand that TVA and the U.S. Army Corps of Engineers may contact an Authorized Agent listed above and such Agent may act on my behalf on all aspects of this application. **I agree that, if this application is approved by TVA, I will comply with the terms and conditions and any special conditions that may be imposed by TVA. Please note the U.S. Army Corps of Engineers may impose additional conditions or restrictions.**

10/31/2014

Date _____

Khalid Ahmed

Name of Applicant (Printed)

Signature of Applicant

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of The United States knowingly and willfully falsifies, conceals, or covers up by any trick, scheme, or device a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statement or entry, shall be fined not more than \$10,000 or imprisoned not more than five years, or both. The appropriate DA fee will be assessed when a permit is issued.

Names, addresses, and telephone numbers of adjoining property owners, lessees, etc., whose properties also join the waterway:

N/A

TVA RESTRICTED INFORMATION

List of previous DA/TVA permits/approvals	<input type="checkbox"/> DA	Permit Number	<input type="checkbox"/> TVA	Date
Previous Property Owner (if known) _____				

Is any portion of the activity for which authorization is sought now complete?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	(If "Yes" attach explanation)
Month and year the activity was completed: _____ . Indicate the existing work on the drawings.			

List all approvals or certifications required by other federal, interstate, state, or local agencies for any structures, construction, discharges, deposits, or other activities described in this application.

Issuing Agency	Type Approval	Identification No.	Date of Application	Date of Approval
TDEC	ARAP		10/31/2012	
TDEC	CGP			

Has any agency denied approval for the activity described herein or for any activity directly related to the activity described herein?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	(If "Yes" attach explanation)
---	------------------------------	--	-------------------------------

Project plans or drawings, on paper suitable for reproduction no larger than 11 x 17 inches or in electronic format (dxf, docx, or pdf), must accompany the application. Submit the application to the appropriate TVA and U.S. Army Corps of Engineers offices. An application that is not complete will be returned for additional information.

U.S.A.C.E. Offices		TVA Offices	
U.S. Army Corps of Engineers Eastern Regulatory Field Office 501 Adesa Parkway., Suite 250 Lenoir City, Tennessee 37771 (865) 986-7296 U.S. Army Corps of Engineers Regulatory Branch 3701 Bell Road Nashville, Tennessee 37214 (615) 369-7500 U.S. Army Corps of Engineers Norfolk District P.O. Box 338 Abingdon, Virginia 24212 (276) 623-5259	U.S. Army Corps of Engineers Savannah District The Plaza, Suite 130 1590 Adamson Parkway Morrow, Georgia 30260-1763 (678) 422-2729 U.S. Army Corps of Engineers Western Regulatory Field Office 2042 Beltline Road, SW, Bldg C, Suite 415 Decatur, Alabama 35602 (256) 350-5620 U.S. Army Corps of Engineers Asheville Regulatory Field Office 151 Patton Avenue, Room 208 Asheville, North Carolina 28801-5006 (828) 271-4856	Tennessee Valley Authority Chattanooga Regional Office 1101 Market Street, PSC 1E-C Chattanooga, Tennessee 37402-2801 1-800-882-5263 Tennessee Valley Authority Gray Regional Office 106 Tri-Cities Business Park Drive Gray, Tennessee 37615 1-800-882-5263 Tennessee Valley Authority Guntersville Regional Office 3696 Alabama Highway 69, CAB 1A-GVA Guntersville, Alabama 35976-7196 1-800-882-5263 Tennessee Valley Authority Lenoir City Regional Office 260 Interchange Park Drive, LCB 1A-LCT Lenoir City, Tennessee 37772-5664 1-800-882-5263	Tennessee Valley Authority Morristown Regional Office 3726 E. Morris Boulevard Morristown, Tennessee 37813-1270 1-800-882-5263 Tennessee Valley Authority Murphy Regional Office 4800 US Highway 64 West, Suite 102 Murphy, North Carolina 28906 1-800-882-5263 Tennessee Valley Authority Muscle Shoals Regional Office Post Office Box 1010, MPB 1H Muscle Shoals, Alabama 35662-1010 1-800-882-5263 Tennessee Valley Authority Paris Regional Office 2835-A East Wood Street Paris, Tennessee 38242-5948 1-800-882-5263

Privacy Act Statement

This information is being requested in accordance with Section 26a of the TVA Act as cited on the front page of this form. Disclosure of the information requested is voluntary; however, failure to provide any required information or documents may result in a delay in processing your application or in your being denied a Section 26a permit. An application that is not complete will be returned for additional information. TVA uses this information to assess the impact of the proposed project on TVA programs and the environment and to determine if the project can be approved. Information in the application is made a matter of public record through issuance of a public notice if warranted. Routine uses of this information include providing to federal, state, or local agencies, and to consultants, contractors, etc., for use in program evaluations, studies, or other matters involving support services to the program; to respond to a congressional inquiry concerning the application or Section 26a program; and for oversight or similar purposes, corrective action, litigation or law enforcement.

Burden Estimate Statement

Public reporting burden for this collection of information is estimated to average 2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Agency Clearance Officer, Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402; and to the Office of Management and Budget, Paperwork Reduction Project (3316-0060), Washington, D.C. 20503.

TVA RESTRICTED INFORMATION

OMB No. 3316-0060
Exp. Date 08/31/2016Section 26a Permit and Land Use Application
Applicant Disclosure Form

By signing the Joint Application Form (Department of Army/TVA) or TVA's Land Use Application and again below, you agree to disclose any business, political, or financial interest that may present an actual or potential conflict of interest with TVA. If a new significant business, political, or financial interest is obtained during the period of the time that the application is under review, you agree to file an additional disclosure.

Disclose if any of the following apply to you (check all that apply ☒). I am:

- ☐ An elected government official
- ☐ A policy making level employee of an entity that regulates TVA or its activities
- ☐ A management level employee of a power customer of TVA
- ☐ A TVA Director
- ☐ A TVA employee
- ☐ An immediate family member of one of the above
- ☐ A representative of a corporation or entity submitting an application and one of the above applies to me. Print entity or corporation name, and identify which of the above applies to you.

Project #25945-1477-04
PIN 117511.00
SIA: Access Road Serving Clarkrange
Regional Business Park
Fentress County

- ☐ A representative of a corporation or entity submitting an application and the corporation or entity has partners, investors, or senior management that are one of the above. Print entity or corporation name, and identify the partner(s), investor(s), or senior manager(s) and which of the above applies.

- ☒ None of the above

Do you have any other business or personal relationships not covered in your answers above that could appear to be a conflict of interest? (check one) Yes ☒ No ☐ If yes, provide more detail here.

By signing this form, you consent to this Applicant Disclosure Form being made available to the public in response to an appropriate request, including, without limitation, a request made under the Freedom of Information Act.

Please sign and return this form with your application package. Your application cannot be processed without receipt of this signed form.

Khalid Ahmed

Name of applicant (Printed)

Signature of Applicant

10/31/2014

Date

All applications and communications that occur as part of the application process may be made public to the extent permitted by applicable law, including the Freedom of Information Act and the Privacy Act, and could be reviewed formally by the Office of Inspector General (OIG). All written correspondence regarding your request may be forwarded to the TVA Chief Ethics and Compliance Officer (CECO) and the OIG, and all oral communication between TVA and the applicant regarding this request may be documented and maintained by TVA. Inquiries concerning your application from any person who falls into one of the categories described above will be disclosed to the CECO and OIG.

Privacy Act Statement

This information is being requested in accordance with Sections 4(k), 15d, 26a, and/or 31 of the TVA Act; 40 U.S.C. § 1314; 30 U.S.C. § 185; 16 U.S.C. § 667b; and/or 40 U.S.C. § 483. Disclosure of the information requested is voluntary; however, failure to provide any required information or documents may result in a delay in processing your application or in your application being denied. An application that is not complete will be returned for additional information. TVA uses this information to assess the impact of the proposed project on TVA programs and the environment and to determine if the project can be approved. Information in the application is made a matter of public record through issuance of a public notice if warranted. Routine uses of this information include providing to federal, state, or local agencies, and to consultants, contractors, etc., for use in program evaluations, studies, or other matters involving support services to the program; to respond to a congressional inquiry concerning the application or the applicable program; and for oversight or similar purposes, corrective action, litigation, or law enforcement.



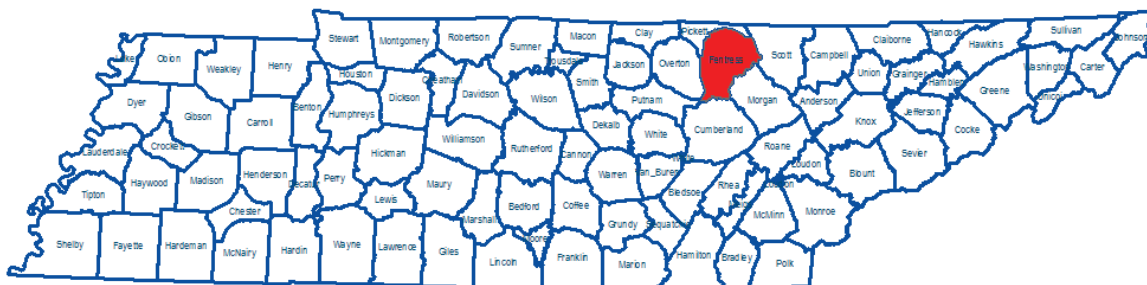
ENVIRONMENTAL BOUNDARIES REPORT

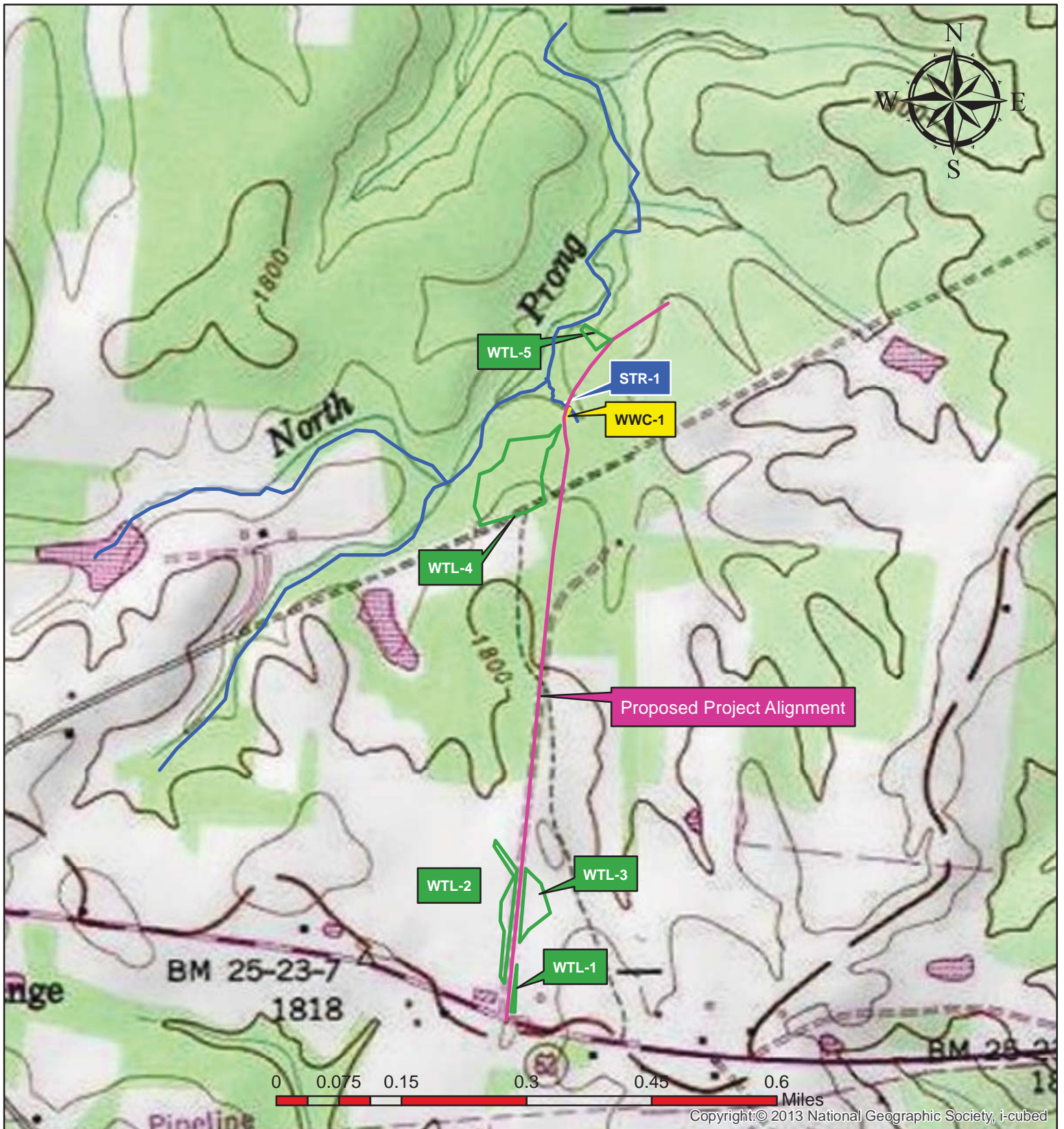
Fentress County, Industrial Access Road Serving Clarkrange Regional Business Park

PE 25945-1477-04, PIN 117511.00

31 January 2014

Project Location





**Aquatic Resources Topographic Map
Fentress County, SIA Serving Clarkrange Business Park**

**Clarkrange, TN Quad (108-NE)
27 January 2014**

**PE 25945-1477-04
PIN 117511.00**



WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont

Project/Site: Fentress County, SIA Serving Clarkrange Regional Business Park Map Label: WTL-1
P.E. and PIN: PE 25945-1477-04 PIN 117511.00 Date: 02 July 2014 Station: 0+85 RT to 2+00 RT
Investigator(s): R.L. Howard HUC 12 (code and name): North Prong Clear Fork - 051301040201
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 5%
Subregion (LRR or MLRA): LRR N / MLRA 125 Lat: N 36.1829° Long: W-85.0026° Datum: WGS-84
Soil Map Unit Name: LoC - Lonewood-Clarkrange Complex 2-6% Slopes NWI classification: Emergent
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐, Soil ☒, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☐ No ☒
Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: Photos: <u>1</u> Buffer (ft.): <u>No Buffer</u> Approximate Size (ac.): <u>0.1 acre</u> Portion Affected (permanent) (ac.): <u>0.1 acre</u> Portion Affected (temporary) (ac.): <u>-</u>	Confirmation (by, date): <u>TDEC, R. Thompson 16 July 2013</u> Mitigation (to be included in design): <u>Yes</u> Notes:

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input checked="" type="checkbox"/> Surface Water (A1) <input checked="" type="checkbox"/> True Aquatic Plants (B14) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input checked="" type="checkbox"/> Saturation (A3) <input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Water Marks (B1) <input checked="" type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>1-2"</u> Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>12"</u> Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0-12"</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks: <u>WTL-1 lies within ditch adjacent to existing farm road (east side).</u>	

VEGETATION (Four Strata) – Use scientific names of plants.

Map Label: WTL-1

Tree Stratum (Plot size: <u>10 m</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. --				Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A) Total Number of Dominant Species Across All Strata: _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
			_____ = Total Cover	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling/Shrub Stratum (Plot size: <u>5 m</u>)				
1. --				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
			_____ = Total Cover	
Herb Stratum (Plot size: <u>2 m</u>)				
1. <u>Scirpus atrovirens</u>			OBL	Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Commelina communis</u>			FAC	
3. <u>Rumex crispus</u>			FAC	
4. <u>Boltonia asteroides</u>			FACW	
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
12. _____				
			_____ = Total Cover	
Woody Vine Stratum (Plot size: <u>10 m</u>)				
1. --				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
6. _____				
			_____ = Total Cover	
Remarks: (Include photo numbers here or on a separate sheet.) Although vegetation altered and restricted to ditch area, hydrophytic vegetation present.				

SOIL

Map Label: WTL-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils³:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10) **(LRR N)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1) **(LRR N, MLRA 147, 148)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)

- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
- ___ Thin Dark Surface (S9) (**MLRA 147, 148**)
- ___ Loamy Gleyed Matrix (F2)
- ✓ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
- ___ Umbric Surface (F13) (**MLRA 136, 122**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 148**)

- ☐ 2 cm Muck (A10) **(MLRA 147)**
☐ Coast Prairie Redox (A16)
(MLRA 147, 148)
☐ Piedmont Floodplain Soils (F19)
(MLRA 136, 147)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont

Project/Site: Fentress County, SIA Serving Clarkrange Regional Business Park Map Label: WTL-2
P.E. and PIN: PE 25945-1477-04 PIN 117511.00 Date: 02 July 2014 Station: 4+50 LT to 10+20 LT
Investigator(s): R.L. Howard HUC 12 (code and name): North Prong Clear Fork - 051301040201
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 5%
Subregion (LRR or MLRA): LRR N / MLRA 125 Lat: N 36.1850° Long: W-85.0026° Datum: WGS-84
Soil Map Unit Name: LoC - Lonewood-Clarkrange Complex 2-6% Slopes NWI classification: Emergent
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐, Soil ☒, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☐ No ☒
Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: Photos: <u>2</u> Buffer (ft.): <u>>5m</u> Approximate Size (ac.): <u>0.5 acre</u> Portion Affected (permanent) (ac.): <u>0.1 acre</u> Portion Affected (temporary) (ac.): <u>0.2 acre</u>	Confirmation (by, date): <u>TDEC, R. Thompson 16 July 2013</u> Mitigation (to be included in design): <u>Yes</u> Notes:

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input checked="" type="checkbox"/> Surface Water (A1) <input checked="" type="checkbox"/> True Aquatic Plants (B14) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input checked="" type="checkbox"/> Saturation (A3) <input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Water Marks (B1) <input checked="" type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>3"</u> Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>6"</u> Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u> </u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WTL-2 on west side of existing farm road; connects to WTL-3 via culvert (one complex, altered by the farm road).

VEGETATION (Four Strata) – Use scientific names of plants.

Map Label: WTL-2

Tree Stratum (Plot size: <u>10 m</u>)	Absolute % Cover	Dominant Species?	Indicator Status		
1. --				Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A) Total Number of Dominant Species Across All Strata: _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)	
2. _____					
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
			_____ = Total Cover	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____	
Sapling/Shrub Stratum (Plot size: <u>5 m</u>)					
1. <u>Salix nigra</u>			OBL		
2. <u>Toxicodendron vernix</u>			OBL		
3. _____					
4. _____					
5. _____					
6. _____					
7. _____					
8. _____					
			_____ = Total Cover	Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation _____ 2 - Dominance Test is >50% _____ 3 - Prevalence Index is ≤3.0 ¹ _____ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain)	
Herb Stratum (Plot size: <u>2 m</u>)					
1. <u>Scirpus atrovirens</u>			OBL		
2. <u>Typha angustifolia</u>			OBL		
3. <u>Ludwigia alternifolia</u>			FACW		
4. <u>Eupatorium perfoliatum</u>			FACW		
5. <u>Rumex crispus</u>			FAC		
6. <u>Carex scabrata</u>			OBL		
7. _____					
8. _____					
			_____ = Total Cover	Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.	
Woody Vine Stratum (Plot size: <u>10 m</u>)					
1. --					
2. _____					
3. _____					
4. _____					
5. _____					
6. _____					
			_____ = Total Cover		Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____
Remarks: (Include photo numbers here or on a separate sheet.)					

SOIL

Map Label: WTL-2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils³:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10) **(LRR N)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1) **(LRR N, MLRA 147, 148)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)

- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
- ___ Thin Dark Surface (S9) (**MLRA 147, 148**)
- ___ Loamy Gleyed Matrix (F2)
- ✓ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
- ___ Umbric Surface (F13) (**MLRA 136, 122**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 148**)

- ☐ 2 cm Muck (A10) **(MLRA 147)**
☐ Coast Prairie Redox (A16)
(MLRA 147, 148)
☐ Piedmont Floodplain Soils (F19)
(MLRA 136, 147)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont

Project/Site: Fentress County, SIA Serving Clarkrange Regional Business Park Map Label: WTL-3
P.E. and PIN: PE 25945-1477-04 PIN 117511.00 Date: 02 July 2014 Station: 4+52 RT to 10+10 RT
Investigator(s): R.L. Howard HUC 12 (code and name): North Prong Clear Fork - 051301040201
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 5%
Subregion (LRR or MLRA): LRR N / MLRA 125 Lat: N 36.1847° Long: W-85.0024° Datum: WGS-84
Soil Map Unit Name: LoC - Lonewood-Clarkrange Complex 2-6% Slopes NWI classification: Emergent
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐, Soil ☒, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☐ No ☒
Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: Photos: <u>3</u> Buffer (ft.): <u>>5m</u> Approximate Size (ac.): <u>1.5 acre</u> Portion Affected (permanent) (ac.): <u>0.1 acre</u> Portion Affected (temporary) (ac.): <u>0.1 acre</u>	Confirmation (by, date): <u>TDEC, R. Thompson 16 July 2013</u> Mitigation (to be included in design): <u>Yes</u> Notes:

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> True Aquatic Plants (B14) <input type="checkbox"/> High Water Table (A2) <input checked="" type="checkbox"/> Hydrogen Sulfide Odor (C1) <input checked="" type="checkbox"/> Saturation (A3) <input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Water Marks (B1) <input checked="" type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>6"</u> Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>2"</u> Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>Surface</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WTL-3 on east side of existing farm road; connects to WTL-2 via culvert (one complex, altered by the farm road). WTL-3 accessible to livestock.

VEGETATION (Four Strata) – Use scientific names of plants.

Map Label: WTL-3

Tree Stratum (Plot size: <u>10 m</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. --				Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A) Total Number of Dominant Species Across All Strata: _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
			_____ = Total Cover	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling/Shrub Stratum (Plot size: <u>5 m</u>)				
1. --				
2. --				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
			_____ = Total Cover	
Herb Stratum (Plot size: <u>2 m</u>)				
1. <u>Leersia oryzoides</u>			OBL	Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
2. <u>Typha angustifolia</u>			OBL	
3. <u>Ludwigia alternifolia</u>			FACW	
4. <u>Eupatorium perfoliatum</u>			FACW	
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
			_____ = Total Cover	
Woody Vine Stratum (Plot size: <u>10 m</u>)				
1. --				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				

			_____ = Total Cover	
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Map Label: WTL-3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils³:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10) **(LRR N)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1) **(LRR N, MLRA 147, 148)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)

- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
- ___ Thin Dark Surface (S9) (**MLRA 147, 148**)
- ___ Loamy Gleyed Matrix (F2)
- ✓ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
- ___ Umbric Surface (F13) (**MLRA 136, 122**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 148**)

- ☐ 2 cm Muck (A10) **(MLRA 147)**
☐ Coast Prairie Redox (A16)
(MLRA 147, 148)
☐ Piedmont Floodplain Soils (F19)
(MLRA 136, 147)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont

Project/Site: Fentress County, SIA Serving Clarkrange Regional Business Park Map Label: WTL-4
P.E. and PIN: PE 25945-1477-04 PIN 117511.00 Date: 02 July 2014 Station: 29+60 LT to 35+80
Investigator(s): R.L. Howard HUC 12 (code and name): North Prong Clear Fork - 051301040201
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 5%
Subregion (LRR or MLRA): LRR N / MLRA 125 Lat: N 36.1846° Long: W-85.0006° Datum: WGS-84
Soil Map Unit Name: LIC - Lily Loam 3-8% Slopes NWI classification: PFO1
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐, Soil ☒, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☐ No ☒
Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: Photos: <u>5</u> Buffer (ft.): <u>>5m</u> Approximate Size (ac.): <u>0.5 acre</u> Portion Affected (permanent) (ac.): <u>0.1 acre</u> Portion Affected (temporary) (ac.): <u>0.1 acre</u>	Confirmation (by, date): <u>TDEC, R. Thompson 16 July 2013</u> Mitigation (to be included in design): <u>Yes</u> Notes:

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		<input type="checkbox"/> Surface Soil Cracks (B6)
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Moss Trim Lines (B16)
<input checked="" type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Iron Deposits (B5)		<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> Microtopographic Relief (D4)
<input type="checkbox"/> Aquatic Fauna (B13)		<input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>6"</u>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>4"</u>		
Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0-2"</u> (includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks: WTL-4 on west side of existing farm road.		

VEGETATION (Four Strata) – Use scientific names of plants.

Map Label: WTL-4

Tree Stratum (Plot size: <u>10 m</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Acer rubrum</u>			FAC	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A) Total Number of Dominant Species Across All Strata: _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
2. <u>Nyssa sylvatica</u>			FAC	
3. <u>Diospyros virginiana</u>			FAC	
4. <u>Quercus bicolor</u>			FACW	
5. _____				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
6. _____				
7. _____				
8. _____				
			_____ = Total Cover	Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation _____ 2 - Dominance Test is >50% _____ 3 - Prevalence Index is ≤3.0 ¹ _____ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain)
Sapling/Shrub Stratum (Plot size: <u>5 m</u>)				
1. <u>Acer rubrum</u>			FAC	
2. _____				
3. _____				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. _____				
5. _____				
6. _____				
7. _____				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
8. _____				
9. _____				
10. _____				
Herb Stratum (Plot size: <u>2 m</u>)				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____
1. <u>Microstegium vimineum</u>			FAC	
2. <u>Osmunda regalis</u>			OBL	
3. _____				
4. _____				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____
5. _____				
6. _____				
7. _____				
8. _____				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____
9. _____				
10. _____				
11. _____				
Woody Vine Stratum (Plot size: <u>10 m</u>)				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____
1. --				
2. _____				
3. _____				
4. _____				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____
5. _____				
6. _____				
7. _____				
			_____ = Total Cover	

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Map Label: WTL-4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils³:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☒ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) **(LRR N)**
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) **(LRR N, MLRA 147, 148)**
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
- ___ Thin Dark Surface (S9) (**MLRA 147, 148**)
- ___ Loamy Gleyed Matrix (F2)
- ✓ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
- ___ Umbric Surface (F13) (**MLRA 136, 122**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 148**)

- ☐ 2 cm Muck (A10) **(MLRA 147)**
☐ Coast Prairie Redox (A16)
(MLRA 147, 148)
☐ Piedmont Floodplain Soils (F19)
(MLRA 136, 147)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No

Remarks:

Ecology Field Data Sheet: Water Resources

Project: Fentress County, SIA Serving Clarkrange Business Park, PE 25945-1477-04 PIN 117511.00

Date of survey: 02 July 2013, 09 July 2013 **Biologist:** R.L. Howard **Affiliation:** TDOT

1-Station: from plans	36+80 to 38+40
2-Map label and name	WWC-1
3-Latitude/Longitude	N 36.1931°, W-85.0014° to N 36.1932°, W-85.0013°
4-Potential impact	Fill / Relocation / Encapsulation
5-Feature description:	
what is it	wet weather conveyance
blue-line on topo? (y/n)	No <input checked="" type="checkbox"/> Yes <input type="checkbox"/>
defined channel (y/n)	No <input type="checkbox"/> Yes <input checked="" type="checkbox"/>
straight or meandering	Straight <input checked="" type="checkbox"/> Meandering <input type="checkbox"/>
channel bottom width	2-3'
top of bank width	3-4'
bank height and slope ratio	0.5-1.0'
avg. gradient of stream (%)	5-10%
substratum	Sandstone Bedrock
riffle/run/pool	N/A
width of buffer zone	LDB: >5' RDB: >5'
water flow	No, some pooled water in holes.
water depth	N/A
water width	N/A
general water quality	N/A
OHWM indicators	N/A
groundwater connection	Unknown
bank stability: LDB, RDB	LDB: Stable <input checked="" type="checkbox"/> Eroding <input type="checkbox"/> Undercutting <input type="checkbox"/> Slumping/Sloughing <input type="checkbox"/> Roots Exposed <input type="checkbox"/> RDB: Stable <input checked="" type="checkbox"/> Eroding <input type="checkbox"/> Undercutting <input type="checkbox"/> Slumping/Sloughing <input type="checkbox"/> Roots Exposed <input type="checkbox"/>
dominant species: LDB, RDB	LDB: grasses RDB: grasses
overhead canopy (%)	0%, area cleared
benthos	None Observed
fish	None Observed
algae or other aquatic life	None Observed
habitat assessment score	--
photo number (s)	6
rainfall information	The area received 6.92" of precipitation in the ten (10) days prior to the field investigation. NOAA NCDC Station, Clarkrange, TN.
6-HUC code & name (12-digit)	North Prong Clear Fork - 051301040201
7-Confirmed by:	Not Required, Obvious Stream
8-Mitigation	No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> (include on Mitigation Form)
9-ETW	No <input checked="" type="checkbox"/> Yes <input type="checkbox"/>
10-303 (d) List	No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Habitat <input type="checkbox"/> Siltation <input type="checkbox"/> Other <input type="checkbox"/>
11-Assessed	No <input checked="" type="checkbox"/> Yes <input type="checkbox"/>
12-Notes Estimate size (acres) of lake or pond if applicable; provide any pertinent information needed to better describe feature; indicate if hydrologic determination form was completed.	WWC-1 receives flow from road runoff and conveys flow to STR-1

Ecology Field Data Sheet: Water Resources

Project: Fentress County, SIA Serving Clarkrange Business Park, PE 25945-1477-04 PIN 117511.00

Date of survey: 02 July 2013, 09 July 2013 **Biologist:** R.L. Howard **Affiliation:** TDOT

1-Station: from plans	38+80 (Flows Left)
2-Map label and name	STR-1
3-Latitude/Longitude	N 36.1932°, W-85.0014°
4-Potential impact	Crossing / Encapsulation, Runoff
5-Feature description:	
what is it	Stream
blue-line on topo? (y/n)	No <input type="checkbox"/> Yes <input checked="" type="checkbox"/>
defined channel (y/n)	No <input type="checkbox"/> Yes <input checked="" type="checkbox"/>
straight or meandering	Straight <input type="checkbox"/> Meandering <input checked="" type="checkbox"/>
channel bottom width	8-10'
top of bank width	15-20'
bank height and slope ratio	1-2', 1:1
avg. gradient of stream (%)	5-10%
substratum	Sandstone Bedrock 75%, Boulder 15%, Silt 10%
riffle/run/pool	Riffle 30%, Run 50%, Pool 20%
width of buffer zone	LDB: >5' RDB: >5'
water flow	Yes, moderate
water depth	0.5-1.5'
water width	6-8'
general water quality	Fair
OHWM indicators	Scour, Debris
groundwater connection	Unknown
bank stability: LDB, RDB	LDB: Stable <input checked="" type="checkbox"/> Eroding <input type="checkbox"/> Undercutting <input type="checkbox"/> Slumping/Sloughing <input type="checkbox"/> Roots Exposed <input type="checkbox"/> RDB: Stable <input checked="" type="checkbox"/> Eroding <input type="checkbox"/> Undercutting <input type="checkbox"/> Slumping/Sloughing <input type="checkbox"/> Roots Exposed <input type="checkbox"/>
dominant species: LDB, RDB	LDB: RDB:
overhead canopy (%)	75-80% upstream of crossing, mostly cleared downstream of crossing
benthos	None observed, evaluated reach has no habitat, sandstone bedrock.
fish	Minnows, water striders
algae or other aquatic life	Crayfish, Frogs
habitat assessment score	138
photo number (s)	7,8
rainfall information	The area received 6.92" of precipitation in the ten (10) days prior to the field investigation. NOAA NCDC Station, Clarkrange, TN.
6-HUC code & name (12-digit)	North Prong Clear Fork - 051301040201
7-Confirmed by:	Not Required, Obvious Stream
8-Mitigation	No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> (include on Mitigation Form)
9-ETW	No <input checked="" type="checkbox"/> Yes <input type="checkbox"/>
10-303 (d) List	No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Habitat <input type="checkbox"/> Siltation <input type="checkbox"/> Other <input type="checkbox"/>
11-Assessed	No <input checked="" type="checkbox"/> Yes <input type="checkbox"/>
12-Notes Estimate size (acres) of lake or pond if applicable; provide any pertinent information needed to better describe feature; indicate if hydrologic determination form was completed.	STR-1 flows left and currently is encapsulated with three culverts, side by side (48" plastic and 2 - 24" CMP). The plans propose a 5' x 8' x 84' box culvert. Surrounding Land Use : agriculture (pasture) and logging. Extensive logging in area northeast of the stream.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont

Project/Site: Fentress County, SIA Serving Clarkrange Regional Business Park Map Label: WTL-5
P.E. and PIN: PE 25945-1477-04 PIN 117511.00 Date: 02 July 2014 Station: 50+00 LT
Investigator(s): R.L. Howard HUC 12 (code and name): North Prong Clear Fork - 051301040201
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): None Slope (%): 5%
Subregion (LRR or MLRA): LRR N / MLRA 125 Lat: N 36.1848° Long: W-85.0001° Datum: WGS-84
Soil Map Unit Name: RaD - Ramsey-Alticrest-Rock Outcrop 5-20% Slopes NWI classification: PEM
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation ☐, Soil ☒, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☐ No ☒
Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: Photos: <u>8,9</u> Buffer (ft.): <u>>5m</u> Approximate Size (ac.): <u>0.25 acre</u> Portion Affected (permanent) (ac.): <u>0 acre</u> Portion Affected (temporary) (ac.): <u>0 acre</u>	Confirmation (by, date): <u>TDEC, R. Thompson 16 July 2013</u> Mitigation (to be included in design): <u>No</u> Notes:

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		
<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> True Aquatic Plants (B14)	<input type="checkbox"/> Surface Soil Cracks (B6)
<input type="checkbox"/> High Water Table (A2)	<input checked="" type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)
<input checked="" type="checkbox"/> Saturation (A3)	<input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Moss Trim Lines (B16)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input checked="" type="checkbox"/> Iron Deposits (B5)		<input type="checkbox"/> Stunted or Stressed Plants (D1)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Water-Stained Leaves (B9)		<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Aquatic Fauna (B13)		<input type="checkbox"/> Microtopographic Relief (D4)
		<input type="checkbox"/> FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>1-2"</u>	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>2"</u>		
Saturation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>0-1"</u> (includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		

Remarks:

WTL-5 west of proposed project alignment. Altered by farm road and logging activities.

VEGETATION (Four Strata) – Use scientific names of plants.

Map Label: WTL-5

Tree Stratum (Plot size: <u>10 m</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Salix nigra</u>			OBL	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A) Total Number of Dominant Species Across All Strata: _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
				Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation _____ 2 - Dominance Test is >50% _____ 3 - Prevalence Index is ≤3.0 ¹ _____ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
				Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Map Label: WTL-5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

[illegible]¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

Indicators for Problematic Hydric Soils³:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☒ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) **(LRR N)**
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) **(LRR N, MLRA 147, 148)**
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)

- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**MLRA 147, 148**)
- ___ Thin Dark Surface (S9) (**MLRA 147, 148**)
- ___ Loamy Gleyed Matrix (F2)
- ✓ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Iron-Manganese Masses (F12) (**LRR N, MLRA 136**)
- ___ Umbric Surface (F13) (**MLRA 136, 122**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 148**)

- ☐ 2 cm Muck (A10) **(MLRA 147)**
☐ Coast Prairie Redox (A16)
(MLRA 147, 148)
☐ Piedmont Floodplain Soils (F19)
(MLRA 136, 147)
☐ Red Parent Material (TF2)
☐ Very Shallow Dark Surface (TF12)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No

Remarks:	
----------	--



Photograph 1 – DSCN0919. N36.1828°, W-85.0028°. View of WTL-1 facing north along existing gravel road near STA 1+00 RT.



Photograph 2 – DSCN0929. N36.1850°, W-85.0026°. View of WTL-2 facing north near STA 8+50 LT.



Photograph 3 – DSCN0937. N36.1889°, W-85.0019°. View of WTL-3 facing east near STA 08+30 RT.



Photograph 4 – DSCN0932. N36.1928°, W-85.0015°. View facing up gradient and east toward the existing culvert outlet at STA 8+48. This culvert connects WTL-2 and WTL-3.



Photograph 5 – DSCN0958. N36.1956°, W-85.0006°. View of WTL-4 facing south near STA 34+00 LT.



Photograph 6 – DSCN0963. N36.1931°, W-85.0014°. View of WWC-1 facing up gradient and south near STA 37+00 RT.



Photograph 7 – DSCN1019. N36.1932°, W-85.0014°. View of STR-1 facing upstream and east near STA 38+80 LT.



Photograph 8 – DSCN0958. N36.1932°, W-85.0013°. View of STR-1 facing upstream and east near STA 38+80 LT.



Photograph 8 – DSCN0995. N36.1948°, W-85.0001°. View of WTL-5 facing east near STA 50+00 LT.



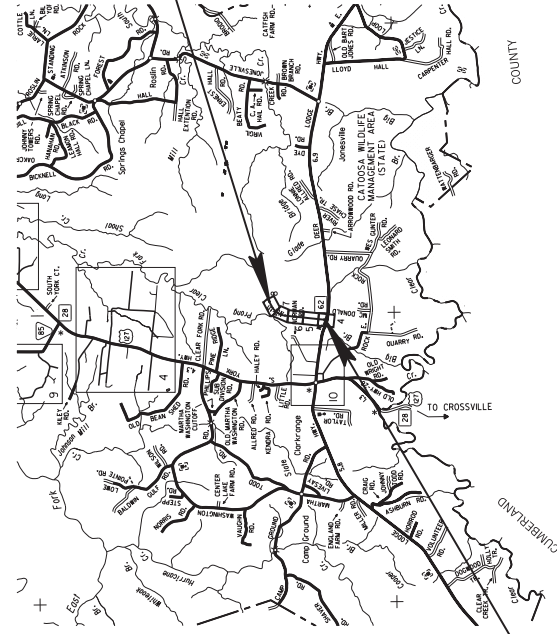
Photograph 8 – DSCN0992. N36.1948°, W-85.0001°. View of WTL-5 facing west near STA 50+00 LT.

Index of Sheets

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2-2B	TYPICAL SECTIONS & PAVEMENT SCHEDULE
3-3A	RIGHT-OF-WAY NOTES, UTILITY OWNERS, PROPERTY MAP
4-8	PRESENT LAYOUT SHEETS
9-8A	PROPOSED LAYOUT & PROFILE SHEETS
9-8B	PROFILES OF ENTRANCES
10	DRAINAGE MAP
11-11B	CULVERT CROSS SECTIONS
12-12K	EROSION PREVENTION & SEDIMENT CONTROL PLANS
13-65	MAINLINE CROSS SECTIONS

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING
FENTRESS COUNTY

INDUSTRIAL ACCESS ROAD SERVING
CLARKRANGE REGIONAL BUSINESS PARK
RIGHT-OF-WAY



BEGIN PROJ. NO. 25945-2477-04 R.O.W.
STA. 0+24.50

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 MARCH 1, 2006 AND ADDITIONAL SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT.

TDOT ROAD SP. SV. 2 ROBERT RODGERS
DESIGNER JAMES SARR, P.E. CHECKED BY BRIAN TROTIER, P.E.
P.E. NO. 25945-1477-04
PIN NO. 117511.00

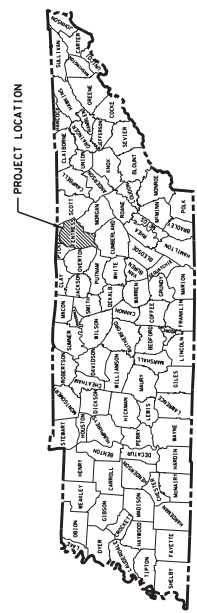
SCALE: 1"= 1 MILE

RIGHT-OF-WAY LENGTH 0.993 MILES

TRAFFIC DATA	
ADT 120 1	
ADT 120 1	
ADT 120 1	
D	
T (ADT)	2
T (DW)	2
V	30 MPH

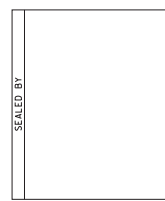
SURVEY DATE : JULY 17, 2013

TENN.	YEAR	SHEET NO.
	2013	1
FED. AID PROJ. NO.		
STATE PROJ. NO.	25945-2477-04	



NO EXCLUSIONS
NO EQUATIONS

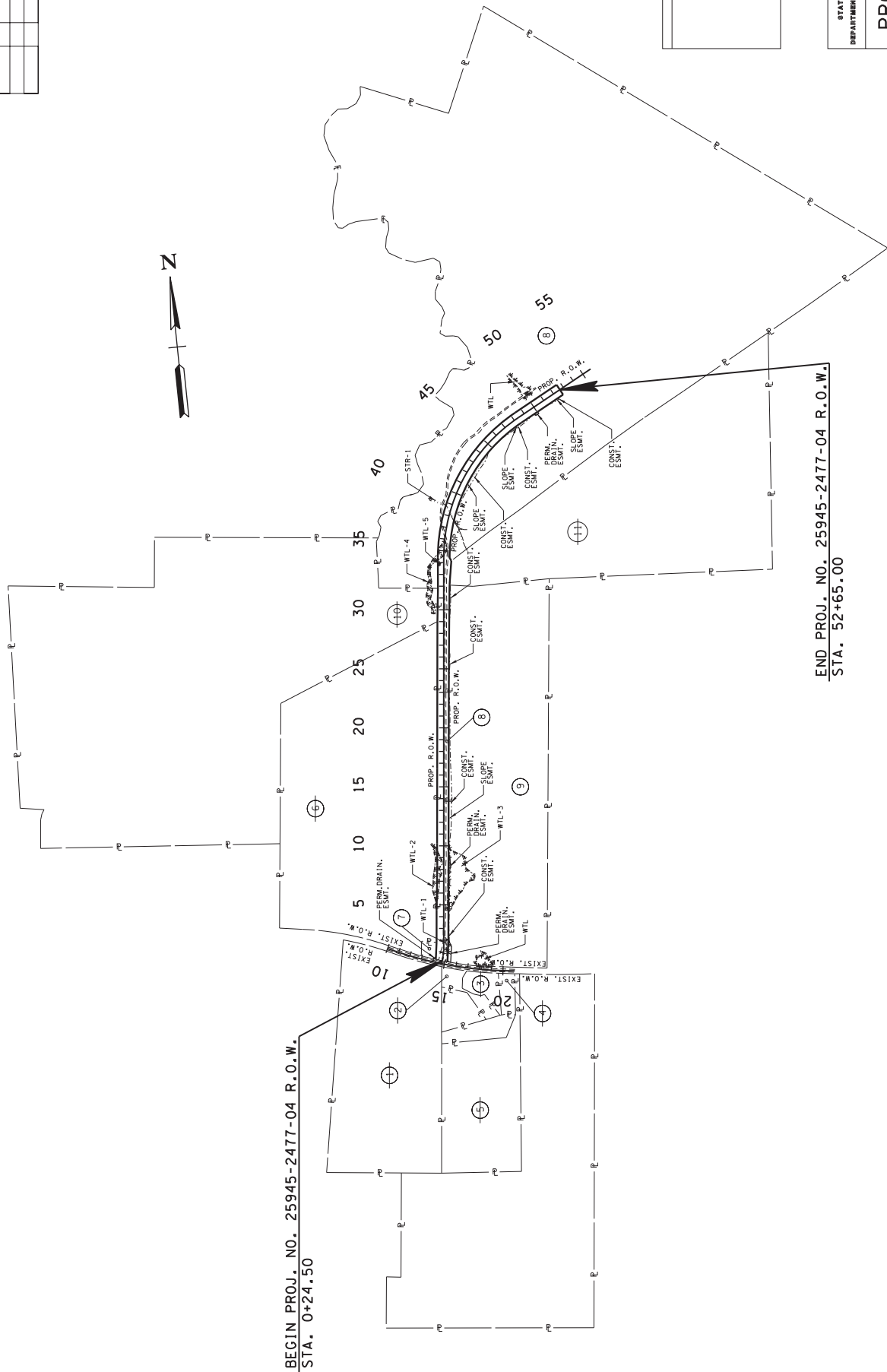
END PROJ. NO. 25945-2477-04 R.O.W.
STA. 52+65.00



APPROVED: Paul D. Rogers CHIEF ENGINEER
DATE: _____
APPROVED: _____ JOHN SCHROER, COMMISSIONER

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	
APPROVED: _____	
DIVISION ADMINISTRATOR	DATE

SHEET NO.	PROJECT NO.	YEAR	TYPE
3A	25945-2477-04	2013	R.O.W.



BEGIN PROJ. NO. 25945-2477-04 R.O.W.
STA. 0+24.50

END PROJ. NO. 25945-2477-04 R.O.W.
STA. 52+65.00

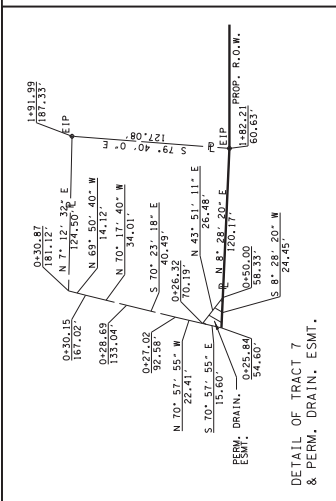
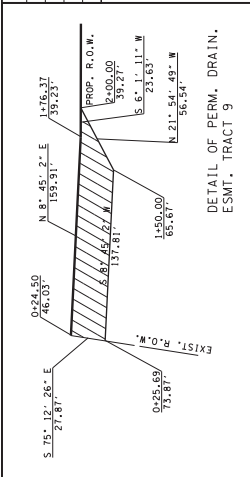
SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPERTY
MAP

SCALE: 1"=400'

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	25945-2477-04	4



ESCOL NORMAN AND WIFE MAXINE

LEO SMITH AND WIFE EMOGENE

DANIEL L. HALL AND OTHERS

DANNY HALL AND KENT HALL

BEGIN PROJ. NO. 25945-2477-04 R.O.W.
STA. 0+24.50

BRENDA FARR COPELAND

DONNIE V. HALL LE/REM.
CRISTALYN M. WALKER

DANNY HALL AND KENT HALL

INDUSTRIAL DEVELOPMENT
BOARD OF FENTRESS CO. INC.

INTERNATIONAL BLVD.
PI 0+94.73
N 674.811.1980
E 1145.063.5716
D 22° 00' 00"
L 250.44
L 21.48
SE 0.080 FT/FT
DESIGN SPEED 30 MPH
SEE PROFILE

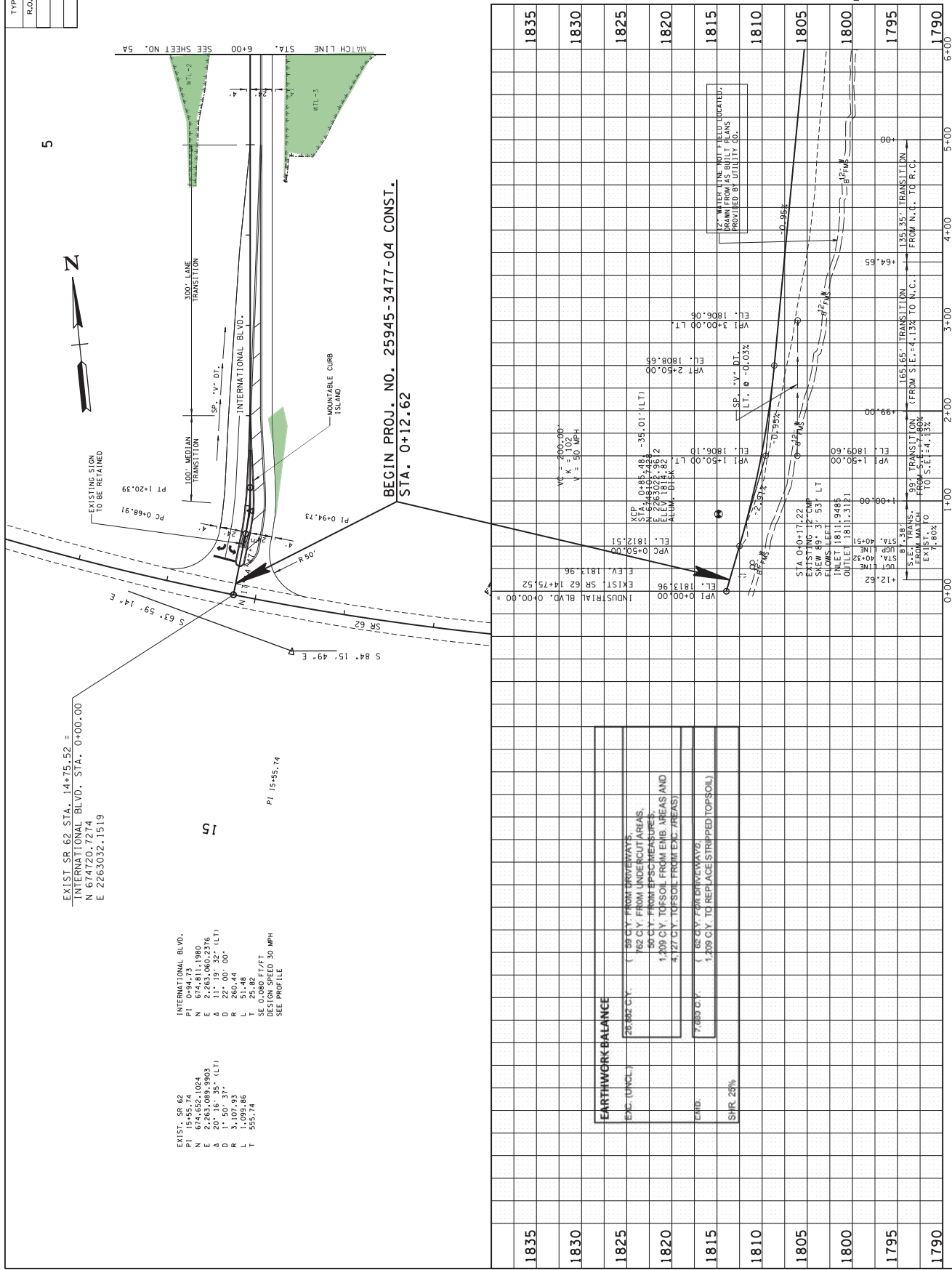
BRENDA FARR COPELAND LE
/REM. LAWRENCE E. MURDOCK
AND WIFE ALISON R.

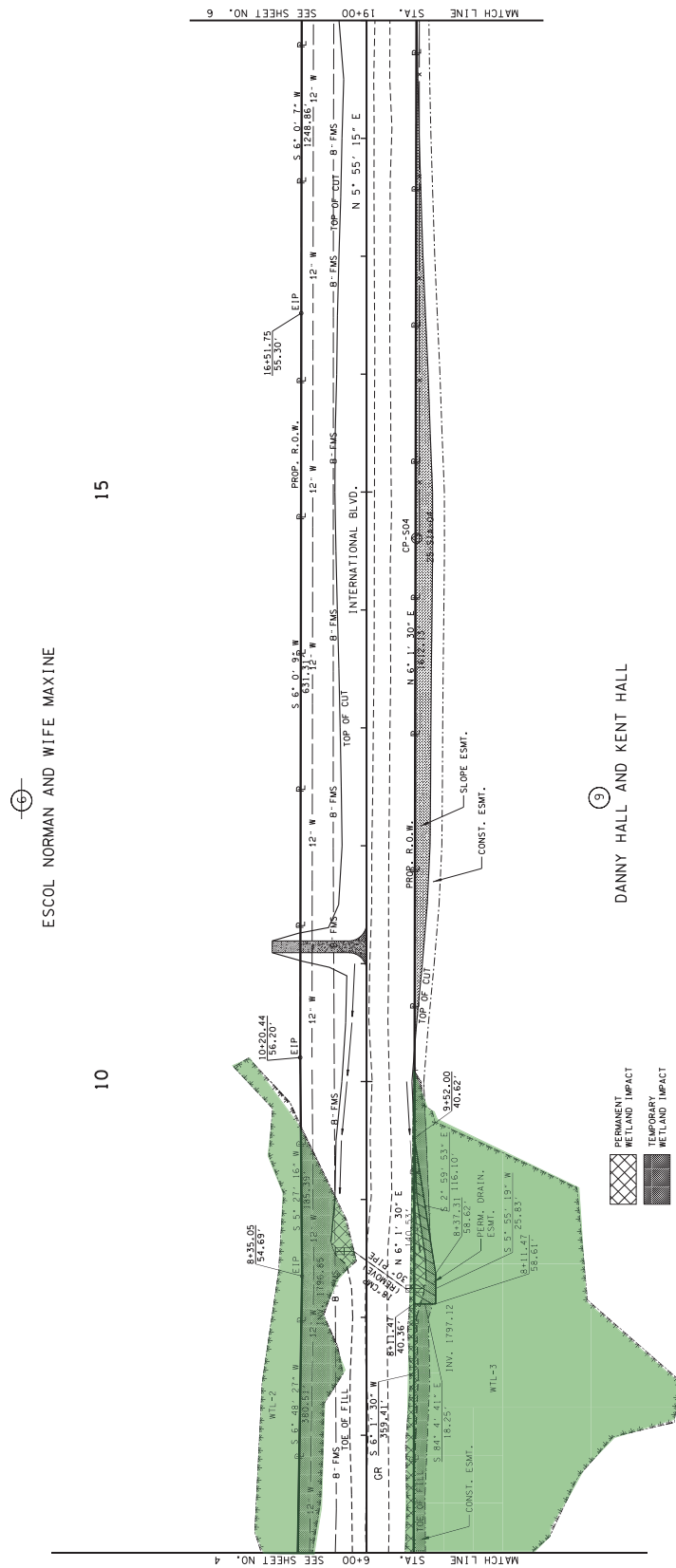
PERMANENT
WETLAND IMPACT
TEMPORARY
WETLAND IMPACT
WETLAND IMPACTS
WTL-1
AREA OF WETLAND = 0.022 AC
AREA OF PERMANENT WETLAND IMPACT = 0.002 AC
AREA OF TEMPORARY WETLAND IMPACT = 0
WTL-2
AREA OF WETLAND = 0.517 AC
AREA OF PERMANENT WETLAND IMPACT = 0.015 AC
AREA OF TEMPORARY WETLAND IMPACT = 0.004 AC
WTL-3
AREA OF WETLAND = 1.476 AC
AREA OF PERMANENT WETLAND IMPACT = 0.081 AC
AREA OF TEMPORARY WETLAND IMPACT = 0.116 AC

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
**PRESENT
LAYOUT**

BEGIN PROJ. TO STA. 6+00
SCALE: 1" = 50'

SEALED BY





⑨
DANNY HALL AND KENT HALL

SEALD BY

WTL-3
AREA OF PERMANENT WETLAND = 1.476 AC
AREA OF PERMANENT WETLAND IMPACT = 0.081 AC
AREA OF TEMPORARY WETLAND IMPACT = 0.116 AC
AREA OF TEMPORARY WETLAND IMPACT = 0.204 AC

COORDINATES ARE NAD/83(1995),
ARE DATUM ADJUSTED BY THE
FACTOR OF 1.000120 AND TIED TO
THE TGRN, ALL ELEVATIONS ARE
REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE

PRESENT
LAYOUT

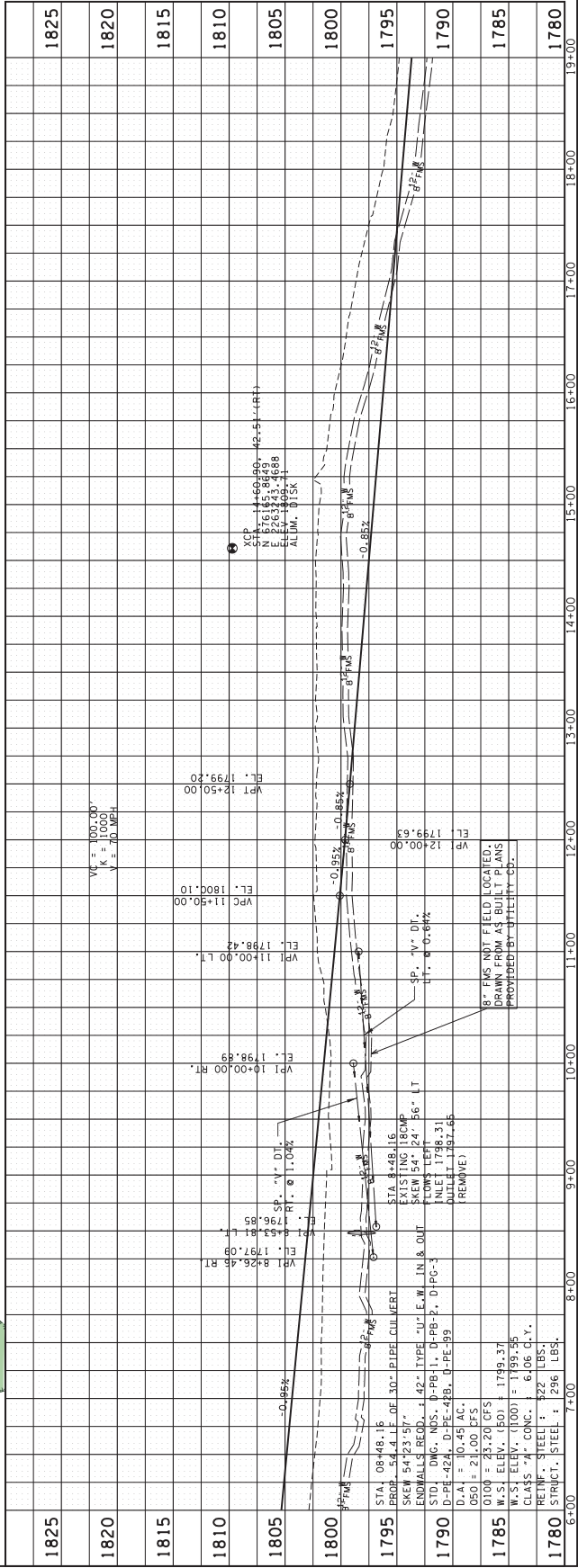
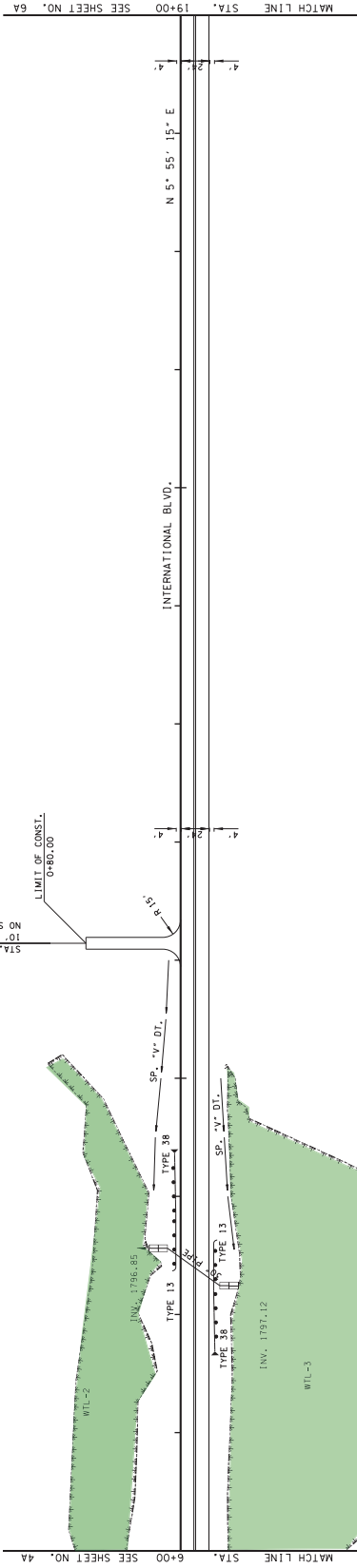
STA. 6+00 TO STA. 19+00

SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	25945-247T-04	5A

15

10



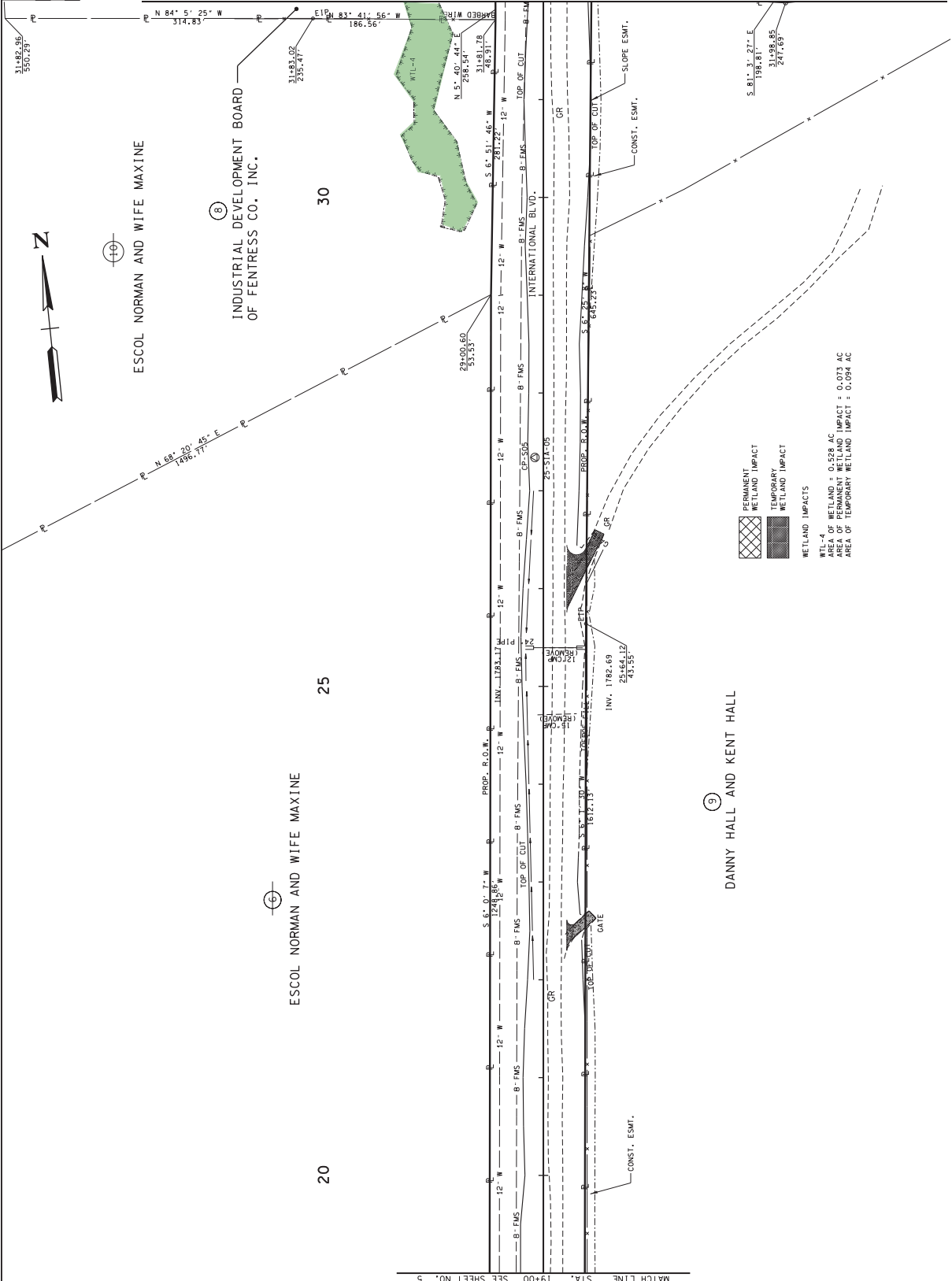
SEALED BY

COORDINATES ARE NAD 83/1983
 ELEVATIONS ARE IN FEET
 HORIZONTAL SCALE: 1" = 50' HORIZ.
 VERTICAL SCALE: 1" = 5' VERT.
 THE TORN ALL ELEVATIONS ARE
 REFERENCED TO THE NAD 1983.

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION

PROPOSED
 LAYOUT
 AND PROFILE
 STA. 6+00 TO STA. 19+00
 SCALE: 1" = 50' HORIZ.
 1" = 5' VERT.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	25945-247T-04	6



COORDINATES ARE UTM 84W/55E. ALL ELEVATIONS ARE IN FEET. THE HORIZONTAL SCALE IS 1"=50'. THE VERTICAL SCALE IS 1"=10'. THE TOP OF ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1983.

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT
 STA. 19+00 TO STA. 32+00
 SCALE: 1"= 50'

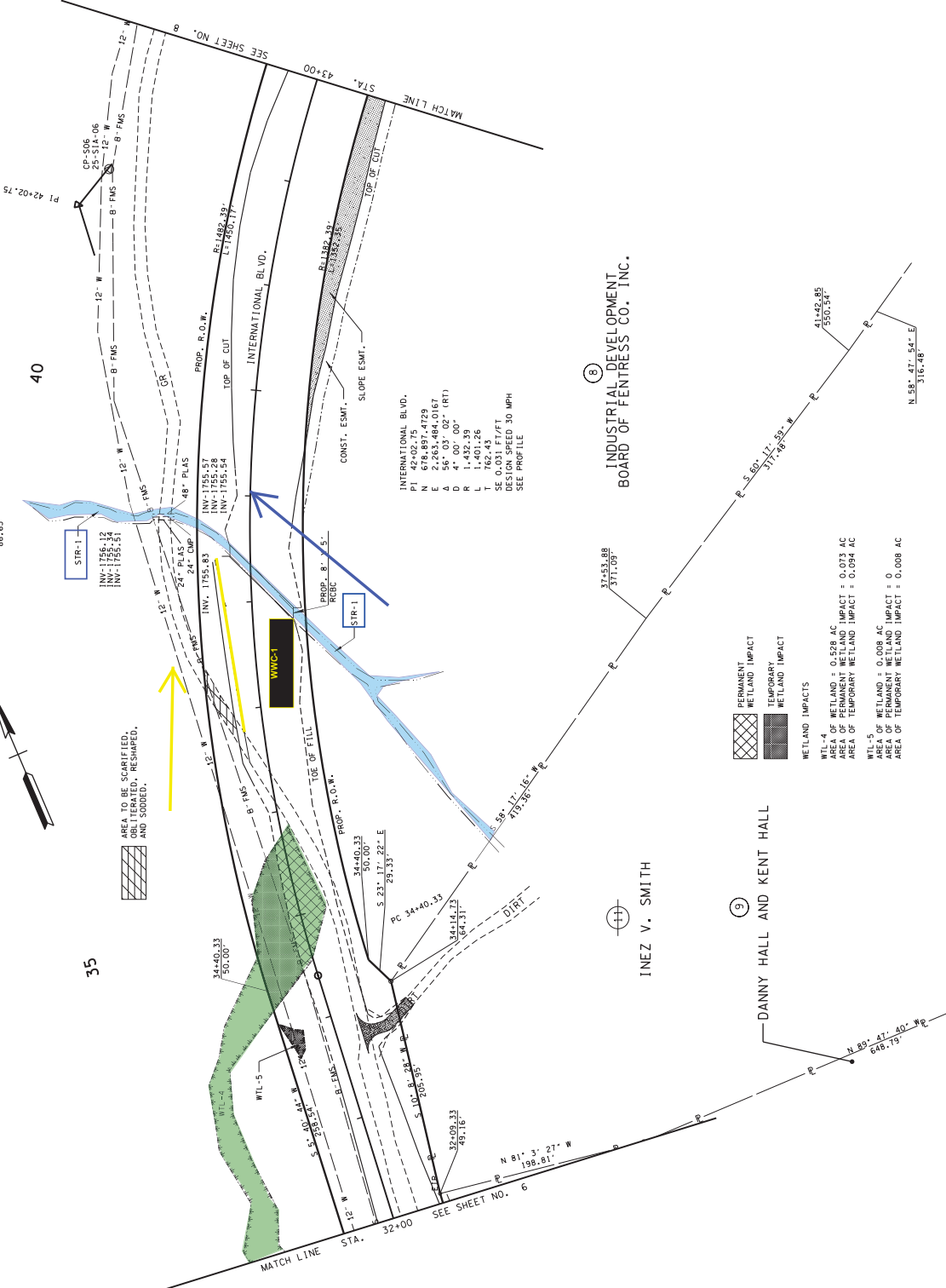
SEALED BY

SHEET NO.	PROJECT NO.	TYPE	YEAR
7	25945-2477-04	R.O.W.	2013

40+80.40 401.53	N 81° 26' 31" E 100.00	P
40+53.25 392.38	N 81° 26' 31" E 100.00	P
40+28.29 384.81	N 18° 28' 29" W 78.00	P
40+03.53 342.49	N 4° 58' 39" W 99.87	P
39+71.65 287.33	S 41° 9' 27" W 86.63	P
39+40.33 310.29	N 76° 3' 17" E 42.31	P
38+61.07 344.14	N 84° 11' 57" E 32.19	P
38+45.55 372.27	N 84° 11' 57" E 32.19	P

INDUSTRIAL DEVELOPMENT
BOARD OF FENTRESS CO. INC.

8



INTERNATIONAL BLVD.
PI 42+02.75
N 678.897.4729
E 254.500.0000
A 56° 03' 02" (RT)
D 4' 00' 00"
R 1.432.39
L 1.432.39
T 76.841.56
SE 0.031 FT/FT
DESIGN SPEED 30 MPH
SEE PROFILE

SEALED BY

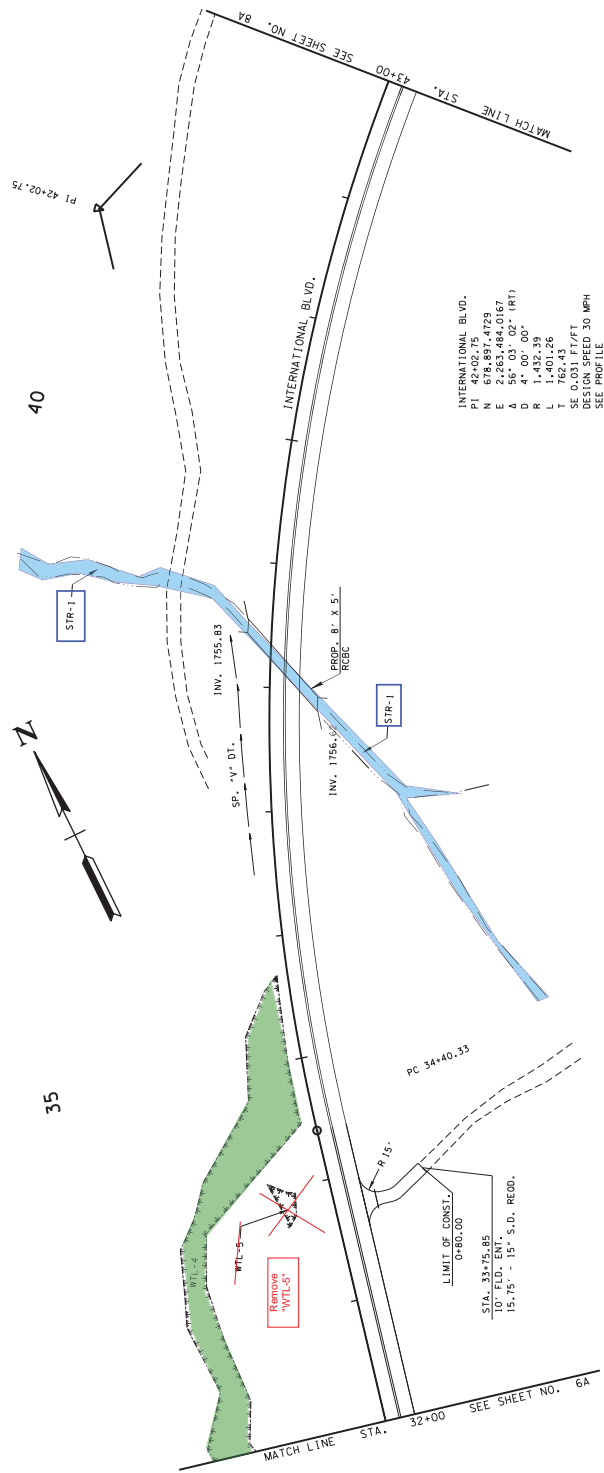
COORDINATES ARE UTM 83U/55E.
ALL ELEVATIONS ARE IN FEET.
THE TURN ALL ELEVATIONS ARE
REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT
LAYOUT

STA. 32+00 TO STA. 43+00
SCALE: 1" = 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	25945-2417-04	7A

[illegible]

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2013	25945-2477-04	BA

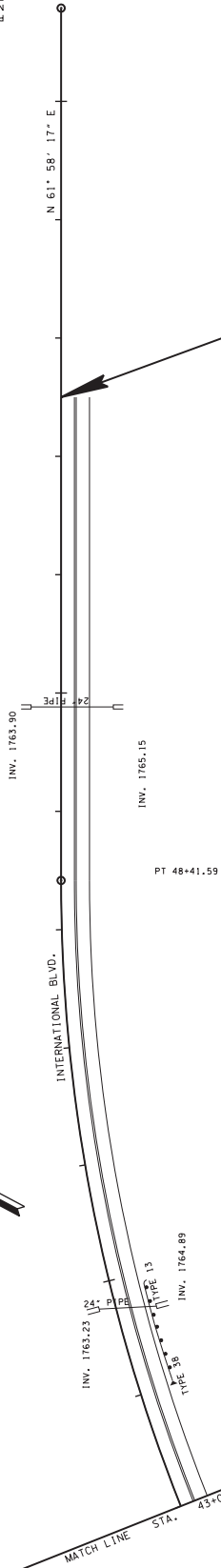
55

50

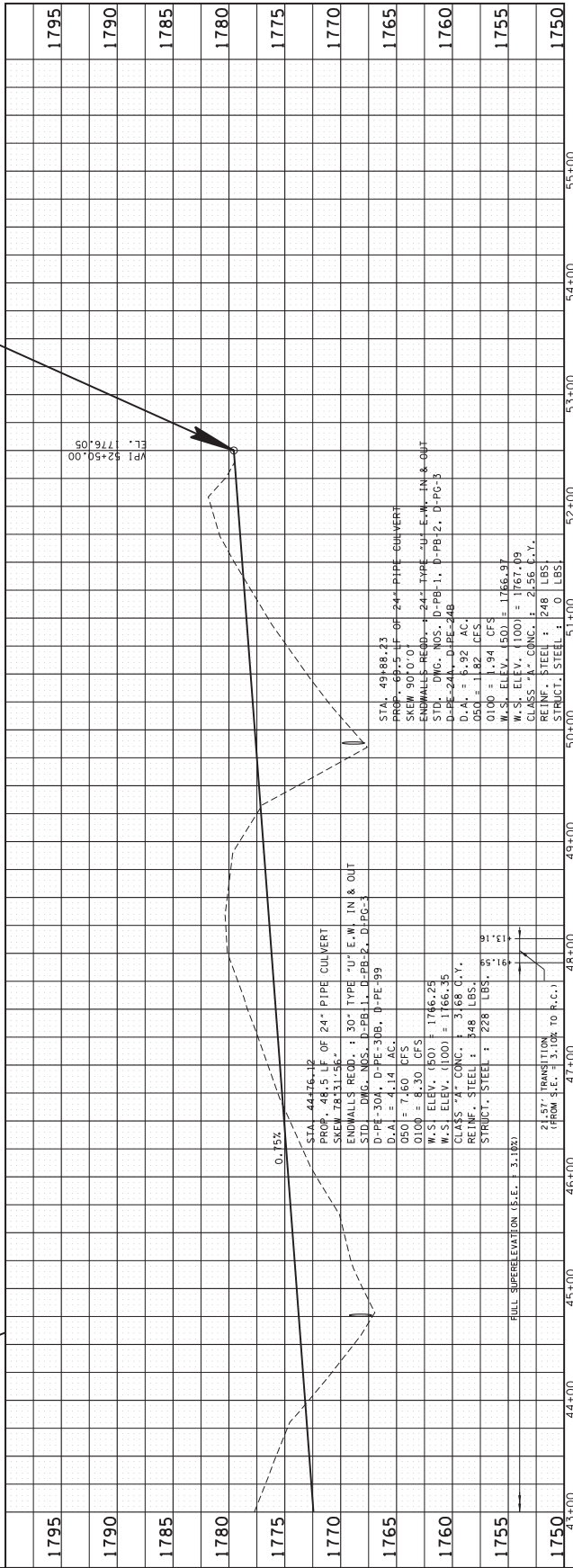
A5



POT 55+78.81
N 679602.1802
E 2264807.7779



END PROJ. NO. 25945-3477-04 CONST.
STA. 52+50.00



SEALED BY

COORDINATES ARE UTM 84N/84E.
ELEVATIONS ARE IN FEET AND ARE
FACTORED BY 1.000000 AND TIED TO
THE TORN ALL ELEVATIONS ARE
REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED
LAYOUT
AND PROFILE
STA. 43+00 TO END PROJ.
SCALE: 1"=50' HORIZ.
1"=5' VERT.

NO TMDL CONSULTATION IS REQUIRED FOR THIS PROJECT.

Index Of Sheets

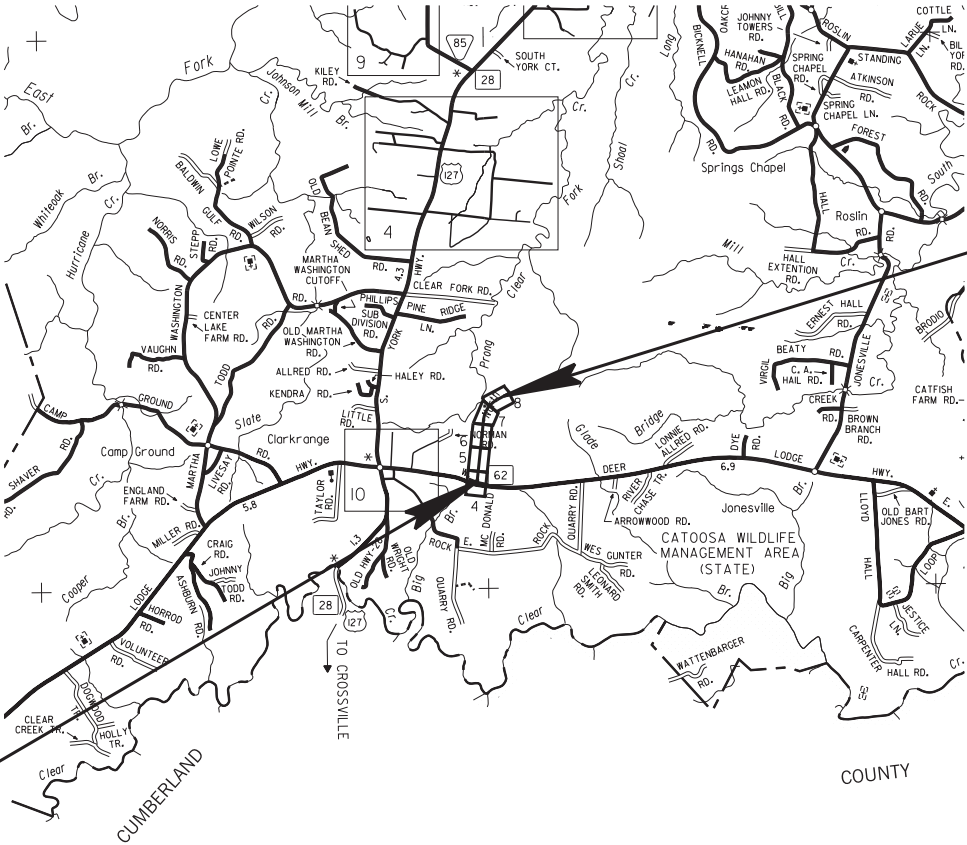
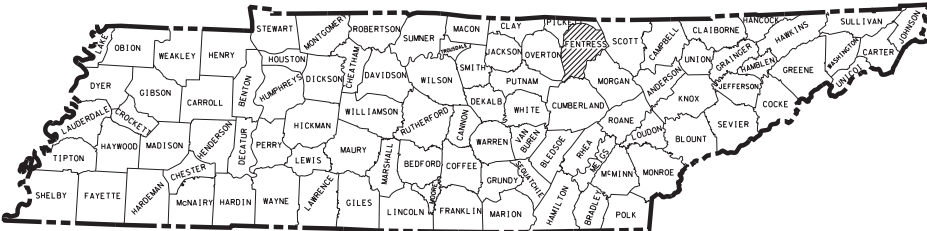
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2-2B	TYPICAL SECTIONS & PAVEMENT SCHEDULE
3-3A	RIGHT-OF-WAY NOTES, UTILITY OWNERS, PROPERTY MAP
4-8	PRESENT LAYOUT SHEETS
4A-8A	PROPOSED LAYOUT & PROFLIE SHEETS
9	PROFILES OF ENTRANCES
10	DRAINAGE MAP
11-11B	CULVERT CROSS SECTIONS
12-12K	EROSION PREVENTION & SEDIMENT CONTROL PLANS
13-65	MAINLINE CROSS SECTIONS

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING
FENTRESS COUNTY

INDUSTRIAL ACCESS ROAD SERVING
CLARKRANGE REGIONAL BUSINESS PARK

RIGHT-OF-WAY

TENN.	YEAR	SHEET NO.
	2013	1
FED. AID PROJ. NO.		
STATE PROJ. NO.	25945-2477-04	



NO EXCLUSIONS
NO EQUATIONS

END PROJ. NO. 25945-2477-04 R.O.W.
STA. 52+65.00

BEGIN PROJ. NO. 25945-2477-04 R.O.W.
STA. 0+24.50

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 MARCH 1, 2006 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT.

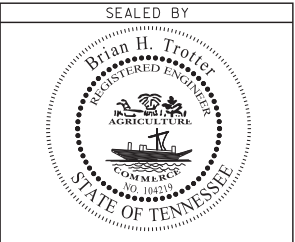
TDOT ROAD SP. SV. 2 ROBERT RODGERS, P.E.
DESIGNED BY ICA ENGINEERING
DESIGNER JAMES SARR, P.E. CHECKED BY BRIAN TROTTER, P.E.
P.E. NO. 25945-1477-04
PIN NO. 117511.00

SCALE: 1"= 1 MILE

RIGHT-OF-WAY LENGTH 0.993 MILES

SURVEY DATE : JULY 17, 2013

DESIGN SPEED : 30 MPH



APPROVED: _____
CHIEF ENGINEER
DATE: _____
APPROVED: _____
JOHN SCHROER, COMMISSIONER

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
APPROVED: _____
DIVISION ADMINISTRATOR DATE

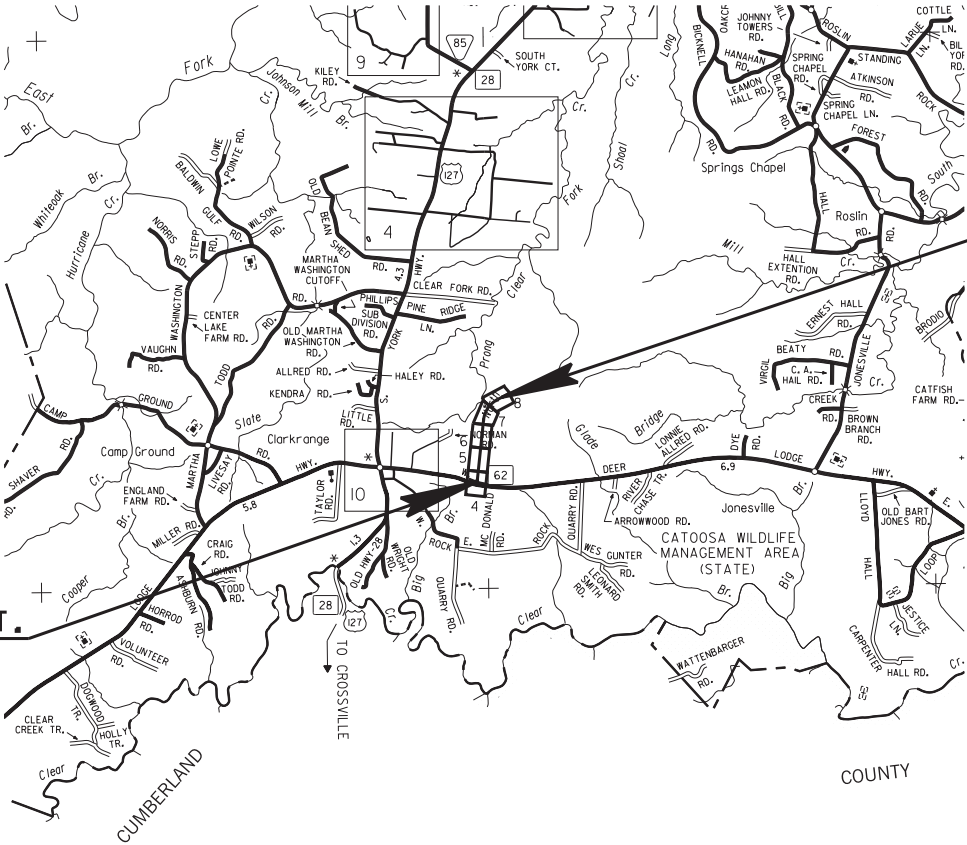
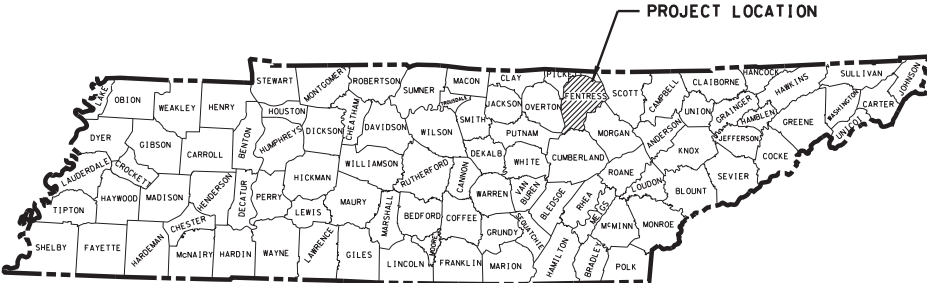
Index Of Sheets
(SEE SHEET 1A)

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING
FENTRESS COUNTY

INDUSTRIAL ACCESS ROAD SERVING
CLARKRANGE REGIONAL BUSINESS PARK

CONSTRUCTION

TENN.	YEAR	SHEET NO.
	2015	1
FED. AID PROJ. NO.		
STATE PROJ. NO. 25945-3477-04		

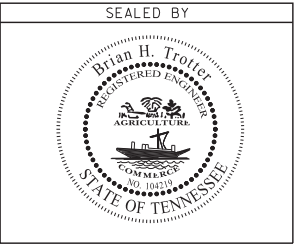


NO EXCLUSIONS
NO EQUATIONS

END PROJ. NO. 25945-3477-04 CONST.
STA. 61+03.33

BEGIN PROJ. NO. 25945-3477-04 CONST.
STA. 10+12.02

UNOFFICIAL
SET
NOT FOR
BIDDING



APPROVED: *Paul D. Rodgers*
CHIEF ENGINEER

DATE: _____

APPROVED: *[Signature]*
JOHN SCHROER, COMMISSIONER

SURVEY DATE : JULY 17, 2013
REVISED: JANUARY 24, 2014
REVISED: MAY 6, 2014

DESIGN SPEED : 30 MPH

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 ROBERT RODGERS, P.E.
DESIGNED BY ICA ENGINEERING
DESIGNER JAMES SARR, P.E. CHECKED BY BRIAN TROTTER, P.E.

P.E. NO. 25945-1477-04
PIN NO. 117511.00

ROADWAY LENGTH 0.964 MILES
BRIDGE LENGTH 0.000 MILES
BOX BRIDGE LENGTH 0.000 MILES
PROJECT LENGTH 0.964 MILES

SCALE: 1"= 1 MILE

4/28/2015 8:59:54 AM
H:\IIG003\Dgn\00a.sht

INDEX

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- 2D
GENERAL NOTES AND SPECIAL NOTES	2E – 2G
TABULATED QUANTITIES	2H – 2I
PROPERTY MAPS AND RIGHT-OF-WAY ACQUISITION TABLES.....	3 - 3A
PRESENT LAYOUTS	4 - 8
PROPOSED LAYOUT & PROFILE SHEETS	4A – 8A
PROFILES OF ENTRANCES	9
DRAINAGE MAP	10
CULVERT SECTIONS.....	11 – 11B
EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) PLANS	12 – 12P
TRAFFIC CONTROL PLANS WITH CONSTRUCTION PHASING NOTES.....	13 – 13A
SOILS SHEETS	14 – 14G
ROADWAY CROSS SECTIONS	15 - 46
STORM WATER POLLUTION PREVENTION PLAN (SWPPP) INDEX.....	S-1
UTILITY SHEETS	U1-1 – U1-4

STANDARD BRIDGE DRAWINGS

DWG. NO.	REV.	DESCRIPTION
BRIDGE APPURTENANCES ENGLISH (LRFD BOX CULVERTS)		
STD-17-1		INDEX OF DRAWINGS
STD-17-2		TERMINOLOGY
STD-17-3		GENERAL NOTES
STD-17-4		DESIGN SECTION LIMITS
STD-17-5		TYPICAL SECTION AND DETAILS
STD-17-6		TYPICAL ELEVATIONS
STD-17-7		CURB, RAIL & EDGE BEAM DETAILS - SKEW NOT LESS THAN 45 DEG
STD-17-9		INTERIOR WALL END TREATMENTS
STD-17-10		TYPICAL WINGWALL DETAILS AND NOTES
STD-17-14		WINGWALL DIMENSIONS AND QUANTITIES
STD-17-15		WINGWALL & SPECIAL RETAINING WALL DESIGN SECTIONS
STD-17-16		WINGWALL DESIGN SECTION
STD-17-17		BACKFILL AND DRAINAGE DETAILS
STD-17-18		BACKFILL DETAILS
STD-17-23		SIDEWALK AND MISCELLANEOUS DETAILS
STD-17-24		WARPED SLOPE DETAIL
STD-17-29		PRECAST BOX CULVERT DETAILS
STD-17-52		BOX BRIDGE, 1 BARREL AT 8', CLEAR HTS. 3' - 5', 0 - 60' FILL

STANDARD ROADWAY DRAWINGS

DWG. NO	REV.	DESCRIPTION
ROADWAY DESIGN STANDARDS		
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
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-SD-1		INTERSECTION SIGHT DISTANCE DESIGN AND GENERAL NOTES
RD01-SD-2		INTERSECTION SIGHT DISTANCE LANDSCAPE AND OBSTRUCTION
RD01-SD-3		INTERSECTION SIGHT DISTANCE 2-LANE ROADWAYS
RD01-SE-3	10-15-02	RURAL SUPERELEVATION DETAILS
RD01-TS-1	10-15-02	DESIGN STANDARDS FOR LOCAL ROADS AND STREETS

DRAINAGE - CULVERTS AND ENDWALL

D-PB-1	01-02-13	STANDARD DETAILS CLASS "B" BEDDING AND CULVERT EXCAVATION
D-PB-2	01-29-14	STANDARD DETAILS FOR FLEXIBLE PIPE INSTALLATION
D-PB-3		INDUCED TRENCH SOIL EMBANKMENT FOR PIPE CULVERT INSTALLATION
D-PE-1	02-12-76	TYPE "A" CONCRETE ENDWALL 2:1 SLOPE, 36" TO 78"
D-PE-4	01-15-13	STRAIGHT CONCRETE ENDWALL
D-PE-24A	06-14-13	24" CONCRETE ENDWALL CROSS DRAIN
D-PE-24B		24" CONCRETE ENDWALL CROSS DRAIN
D-PE-30A	06-14-13	30" CONCRETE ENDWALL CROSS DRAIN
D-PE-30B		30" CONCRETE ENDWALL CROSS DRAIN
D-PE-99	05-20-14	PIPE GRATE & SKEWED CONNECTION DETAILS FOR "U" ENDWALLS

ROADWAY AND PAVEMENT APPURTENANCES

RP-I-5	12-18-96	EXAMPLES OF STREET AND ALLEY INTERSECTIONS
RP-MC-2	02-28-02	STANDARD 6" SLOPING (MOUNTABLE) CONCRETE CURBS AND CONCRETE CURBS AND GUTTERS
RP-R-1	05-27-01	STANDARD RAMPS TO SIDE ROADS

DWG. NO	REV.	DESCRIPTION
SAFETY APPURTENANCES AND FENCE		
S-F-1	05-24-12	HIGH VISIBILITY FENCE
S-RP-2	01-19-99	STANDARD CONCRETE RIGHT-OF-WAY MARKERS
S-CZ-1		CLEAR ZONE CRITERIA
S-PL-1		SAFETY PLAN AT ROADSIDE HAZARDS
S-PL-6		SAFETY PLAN SAFETY HARDWARE PLACEMENT
S-GR31-1		W-BEAM GUARDRAIL
S-GRT-3		TYPE 21 GUARDRAIL TERMINAL
S-GRT-3D		TYPE 21 GUARDRAIL TERMINAL (DETAILS)
S-GRT-3P		EARTH PAD FOR TYPE 21 TERMINAL
S-GRT-4	11-06-14	TYPE 13 GUARDRAIL TERMINAL (TRAILING END)
S-GRA-3		GUARDRAIL ANCHOR FOR TYPE 12, 13 AND IN-LINE TERMINALS

TRAFFIC CONTROL APPURTENANCES

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
T-M-3	07-24-14	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS
T-M-4	07-24-14	STANDARD INTERSECTION PAVEMENT MARKINGS
T-S-17	07-19-13	STANDARD GROUND MOUNTED SIGN USING PERFORATED/KNOCKOUT SQUARE TUBE
T-S-18	02-14-14	END OF ROADWAY AND DEAD END SIGNS, METAL BARRICADES (TYPE III) & WORK ZONE SPEED SIGNS
T-S-19	07-19-13	STANDARD STEEL SIGN SUPPORTS
T-S-20	11-01-11	SIGN DETAILS

EROSION PREVENTION AND SEDIMENT CONTROL

EC-STR-2	08-01-12	SEDIMENT FILTER BAG
EC-STR-3B	08-01-12	SILT FENCE
EC-STR-3C	08-01-12	SILT FENCE WITH WIRE BACKING
EC-STR-3E	04-01-08	SILT FENCE FABRIC JOINING DETAILS
EC-STR-6	08-01-12	ROCK CHECK DAM
EC-STR-6A	08-01-12	ENHANCED ROCK CHECK DAM
EC-STR-11	08-01-12	CULVERT PROTECTION TYPE 1
EC-STR-11A	08-01-12	CULVERT PROTECTION TYPE 2
EC-STR-25	08-01-12	TEMPORARY CULVERT CROSSING, CONSTRUCTION EXIT, CONSTRUCTION FORD
EC-STR-27	08-01-12	TEMPORARY SLOPE DRAIN AND BERM
EC-STR-31	08-01-12	TEMPORARY DIVERSION CHANNELS
EC-STR-31A	04-01-08	TEMPORARY DIVERSION CHANNEL DESIGN
EC-STR-35	08-01-12	FILTER BERMS
EC-STR-37	06-10-14	SEDIMENT TUBE

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2015	25945-3477-04	1A

UNOFFICIAL
SET
NOT FOR
BIDDING

SEALED BY



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

INDEX
AND
STANDARD
DRAWINGS

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2015	25945-3477-04	1B

TENNESSEE DEPARTMENT OF TRANSPORTATION

County PIN: Route:

Termini

Project Commitments Plan Sheet

Commitment ID	Source Division	Description	Sta./ Location	Complete
EDEC001	Environmental Division, Ecology	Due to concerns for rare plant species, a wetland plant survey is required for all wetlands within the project limits. Botanists will survey the area in May-June 2014. TDOT Ecology will submit the results to TDEC upon completion.	Entire project area	<div><input checked="" type="checkbox"/></div> <div>June 2014</div>

UNOFFICIAL
SET
NOT FOR
BIDDING

SEALED BY



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROJECT
COMMI TMENTS

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2015	25945-3477-04	2

ESTIMATED ROADWAY QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
105-01	CONSTRUCTION STAKES, LINES AND GRADES	LS	1
201-01	CLEARING AND GRUBBING	LS	1
(1) 202-01	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LS	1
(2) 203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	C.Y.	36119
203-01.11	PRESPLITTING OF ROCK EXCAVATION	S.Y.	450
203-02.01	BORROW EXCAVATION (GRADED SOLID ROCK)	TON	1951
203-06	WATER	M.G.	239
204-08	FOUNDATION FILL MATERIAL	C.Y.	21
(3) 209-01.31	TEMPORARY MULCH FILTER BERM	C.Y.	1090
(3) 209-05	SEDIMENT REMOVAL	C.Y.	21
(3) 209-08.02	TEMPORARY SILT FENCE (WITH BACKING)	L.F.	4505
(3) 209-08.03	TEMPORARY SILT FENCE (WITHOUT BACKING)	L.F.	8360
(3) 209-08.07	ROCK CHECK DAM	EACH	73
(3) 209-08.08	ENHANCED ROCK CHECK DAM	EACH	31
(3)(6) 209-09.01	SANDBAGS	BAG	800
(3) 209-09.03	SEDIMENT FILTER BAG (15'X15')	EACH	3
(3) 209-20.03	POLYETHYLENE SHEETING (6 MIL. MINIMUM)	S.Y.	300
(3) 209-65.03	TEMPORARY DIVERSION CHANNEL	L.F.	195
303-01	MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	14341
303-01.01	GRANULAR BACKFILL (ROADWAY)	TON	248
(3) 303-10.01	MINERAL AGGREGATE (SIZE 57)	TON	38
307-01.01	ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING A	TON	2522
307-01.08	ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING B-M2	TON	1689
402-01	BITUMINOUS MATERIAL FOR PRIME COAT (PC)	TON	23
402-02	AGGREGATE FOR COVER MATERIAL (PC)	TON	91
403-01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	9
404-01.01	BITUMINOUS MATERIAL (DBST)	TON	17
404-01.02	MINERAL AGGREGATE (DBST)	TON	131
411-01.10	ACS MIX(PG64-22) GRADING D	TON	994
604-01.01	CLASS A CONCRETE (ROADWAY)	C.Y.	80
604-01.02	STEEL BAR REINFORCEMENT (ROADWAY)	LB.	15637
607-05.02	24" CONCRETE PIPE CULVERT (CLASS III)	L.F.	159
607-06.02	30" CONCRETE PIPE CULVERT (CLASS III)	L.F.	60
607-39.01	15" PIPE CULVERT (SIDE DRAIN)	L.F.	58
(3) 607-41.03	18" SLOPE DRAIN PIPE	L.F.	300
611-07.01	CLASS A CONCRETE (PIPE ENDWALLS)	C.Y.	8
611-07.02	STEEL BAR REINFORCEMENT (PIPE ENDWALLS)	LB.	222
611-07.57	24IN ENDWALL (CROSS DRAIN) 3:1	EACH	4
611-07.60	30IN ENDWALL (CROSS DRAIN) 3:1	EACH	2
702-01.01	EXTRUDED MOUNTABLE CURB	L.F.	265
705-02.02	SINGLE GUARDRAIL (TYPE 2)	L.F.	595
705-04.04	GUARDRAIL TERMINAL (TYPE 21)	EACH	8
(3) 707-08.11	HIGH-VISIBILITY CONSTRUCTION FENCE	L.F.	3230
(3) 709-05.05	MACHINED RIP-RAP (CLASS A-3)	TON	200
(3) 709-05.06	MACHINED RIP-RAP (CLASS A-1)	TON	239
(3)(6) 709-05.08	MACHINED RIP-RAP (CLASS B)	TON	1059

ESTIMATED ROADWAY QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
712-01	TRAFFIC CONTROL	LS	1
712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	5
712-06	SIGNS (CONSTRUCTION)	S.F.	83
712-07.03	TEMPORARY BARRICADES (TYPE III)	L.F.	48
(8) 713-16.20	SIGNS (R1-1, 36"X36" (STOP))	EACH	1
(8) 713-16.21	SIGNS (W14-1, 36"X36" (DEAD END))	EACH	1
(8) 713-16.22	SIGNS (CM4-1, 18"X18" (END OF ROAD MARKER))	EACH	2
(8) 713-16.23	SIGNS (W8-3, 36"X36" (PAVEMENT ENDS))	EACH	1
(8) 713-16.24	SIGNS (W16-2P, 24"X18" (500 FEET))	EACH	1
(8) 713-16.25	SIGNS (R2-1, 24"X30" (SPEED LIMIT 30))	EACH	4
(4)(8) 716-02.04	PLASTIC PAVEMENT MARKNG (CHANNELIZATION STRIPING)	S.Y.	14
(4)(8) 716-02.05	PLASTIC PAVEMENT MARKNG (STOP LINE)	L.F.	38
(4)(8) 716-02.06	PLASTIC PAVEMENT MARKNG (TURN LANE ARROW)	EACH	4
(8) 716-05.01	PAINTED PAVEMENT MARKING (4" LINE)	L.M.	4.0
717-01	MOBILIZATION	L.S.	1
(3)(7) 740-10.03	GEOTEXTILE (TYPE III)(EROSION CONTROL)	S.Y.	1468
740-10.04	GEOTEXTILE (TYPE IV)(STABILIZATION)	S.Y.	2349
(3) 740-11.03	TEMPORARY SEDIMENT TUBE 18IN (EROSION CONTROL)	L.F.	6910
801-01.07	TEMPORARY SEEDING (WITH MULCH)	UNIT	350
(5) 801-03	WATER (SEEDING & SODDING)	M.G.	227
803-01	SODDING (NEW SOD)	S.Y.	19123

- (1) SEE SHEET 2H FOR TABULATION OF ITEMS TO BE REMOVED
- (2) INCLUDES 28 CY FOR EPSC MEASURES, 80 CY FOR CULVERT EXCAVATION AND 1106 CY FOR UNDERCUTTING IN WETLANDS
- (3) SEE SUBSECTION 209.07 OF THE STANDARD SPECIFICATIONS FOR MAINTENANCE REPLACEMENT. ALL QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER.
- (4) CONTRACTOR MAY ELECT TO SUBSTITUTE PREFORMED PLASTIC FOR THERMOPLASTIC. PREFORMED PLASTIC SHALL BE PAID FOR AT THE SAME UNIT PRICE AS BID TO THERMOPLASTIC.
- (5) INCLUDES 35 MG FOR EPSC MEASURES
- (6) TO BE USED FOR TEMPORARY DIVERSION CHANNEL
- (7) INCLUDES 726 SY FOR TEMPORARY DIVERSION CHANNEL.
- (8) SEE PROPOSED LAYOUT SHEETS 4A-8A FOR SIGNING AND MARKING INFORMATION

UNOFFICIAL
SET
NOT FOR
BIDDING

SEALED BY



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ESTIMATED
QUANTITIES

GENERAL NOTES

GRADING

- (1) ANY AREA THAT IS DISTURBED OUTSIDE LIMITS OF CONSTRUCTION DURING THE LIFE OF THIS PROJECT SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.
- (2) THE CONTRACTOR SHALL NOT DISPOSE OF ANY MATERIAL EITHER ON OR OFF STATE-OWNED R.O.W. IN A REGULATORY FLOOD WAY AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY WITHOUT APPROVAL BY 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

- (1) 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.

GUARDRAIL

- (1) GUARDRAIL IS TO BE COMPLETE IN PLACE BEFORE THE MAINLINE ROADWAY IS OPENED TO TRAFFIC.

DRAINAGE

- (1) 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.
- (2) EXCAVATION FOR CULVERTS WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT WILL BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF PIPE (PIPE CULVERTS, STORM SEWERS, CONDUITS, ALL OTHER CULVERTS AND MINOR STRUCTURES).
- (3) 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.
- (4) 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).
- (5) WHERE A CULVERT (PIPE, SLAB OR BOX) IS MOVED TO A NEW LOCATION OTHER THAN THAT SHOWN ON 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.
- (6) 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.

FENCING

- (1) THE CONTRACTOR SHALL GIVE THE AFFECTED PROPERTY OWNERS TWO WEEKS NOTICE PRIOR TO CUTTING FENCES.

MISCELLANEOUS

- (1) 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 REFLECTORIZED PAINT IS USED

- (1) PERMANENT PAVEMENT LINE MARKINGS SHALL BE REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S 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 (4IN LINE), L.M.

GRADED SOLID ROCK

- (1) THE ROCK FILL (GRADED SOLID ROCK) MATERIAL SHALL CONSIST OF SOUND, NON-DEGRADABLE LIMESTONE OR SANDSTONE WITH A MAXIMUM SIZE OF 3'-0". AT LEAST 50% (BY WEIGHT) OF THE ROCK SHALL BE UNIFORMLY DISTRIBUTED BETWEEN 1'-0" AND 3'-0" IN DIAMETER, AND NO GREATER THAN 10% (BY WEIGHT) SHALL BE LESS THAN 2" IN DIAMETER. THE MATERIAL SHALL BE ROUGHLY EQUIDIMENSIONAL; THIN, SLABBY MATERIALS WILL NOT BE ACCEPTED. THE CONTRACTOR SHALL BE REQUIRED TO PROCESS THE MATERIAL WITH AN ACCEPTABLE MECHANICAL MEANS (A SCREENING PROCESS CAPABLE OF PRODUCING THE REQUIRED GRADATION). THE ROCK SHALL BE APPROVED BY A REPRESENTATIVE OF THE DIVISION OF MATERIALS AND TESTS BEFORE USE.

SIGNING

- (1) 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.
- (2) THE LETTERS, DIGITS, ARROWS, BORDERS, AND ALPHABET ACCESSORIES ON ALL FLAT SHEET SIGNS SHALL BE APPLIED BY SILK SCREENING PROCESS.

CONSTRUCTION WORK ZONE & TRAFFIC CONTROL

- (1) 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.
- (2) 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.
- (3) 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.
- (4) TRAFFIC CONTROL DEVICES SHALL NOT BE DISPLAYED OR ERECTED UNLESS RELATED CONDITIONS ARE PRESENT NECESSITATING WARNING.
- (5) 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 OF 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.
- (6) 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.
- (7) ALL DETOUR AND CONSTRUCTION SIGNING SHALL BE IN STRICT ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

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 OVER TEMPORARY EPSC MEASURES ON ALL PROJECTS.
- (5) CONSTRUCTION SHALL BE SEQUENCED AND STAGED TO MINIMIZE THE EXPOSURE TIME 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.
- (8) 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 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). ARRANGEMENTS CONCERNING REMOVAL OF SEDIMENT ON ADJOINING PROPERTY MUST BE SETTLED WITH THE ADJOINING PROPERTY OWNER BEFORE REMOVAL OF SEDIMENT.
- (9) 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 MANUFACTURER'S GUIDELINES AND FULLY DESCRIBED IN THE EPSC PLANS. WATER MUST BE HELD IN SETTLING BASINS UNTIL AT LEAST AS CLEAR AS THE RECEIVING WATERS. SETTLING BASINS SHALL 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. DISCHARGES FROM BASINS AND IMPOUNDMENTS SHALL UTILIZE OUTLET STRUCTURES THAT ONLY WITHDRAW WATER FROM NEAR THE SURFACE OF THE BASIN OR IMPOUNDMENT. DISCHARGES MUST NOT CAUSE AN OBJECTIONABLE COLOR CONTRAST WITH THE RECEIVING STREAM.
- (10) 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.
- (11) 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 STABILIZATION OF THE SITE. THE ENVIRONMENTAL AND ROADWAY DESIGN DIVISIONS MAY BE CONTACTED TO REVIEW AND CONCUR WITH ANY REVISION OF THE SWPPP BEFORE DISTURBANCE OF THE OUTFALL PROCEEDS
- (12) IF PERMANENT OR TEMPORARY VEGETATION IS TO BE USED AS AN EPSC MEASURE, THEN THE TIMING OF PLANTING OF VEGETATION SHALL BE SHOWN IN THE SWPPP. DELAYING PLANTING OF COVER VEGETATION UNTIL WINTER MONTHS OR DRY MONTHS SHOULD BE AVOIDED, IF POSSIBLE.
- (13) 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.
- (14) TEMPORARY EPSC MEASURES MAY BE REMOVED AT THE BEGINNING OF THE WORKDAY, BUT MUST BE REPLACED AT THE END OF THE WORKDAY.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2015	25945-3477-04	2E

UNOFFICIAL
SET
NOT FOR
BIDDING

SEALED BY



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GENERAL
NOTES

GENERAL NOTES

EROSION PREVENTION AND SEDIMENT CONTROL
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.
- (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.

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. THE SWPPP SHALL BE MODIFIED TO INCLUDE EPSC MEASURES 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 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.
- (31) 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.

MATERIALS

- (32) WASTE AND BORROW AREAS SHALL BE LOCATED IN NON-WETLAND AREAS AND ABOVE THE 100-YEAR, FEDERAL EMERGENCY MANAGEMENT AGENCY FLOODPLAIN. BORROW AND WASTE DISPOSAL AREAS SHALL NOT AFFECT ANY WATERS OF THE STATE/U.S. UNLESS THESE AREAS ARE SPECIFICALLY COVERED BY AN ARAP, 404, OR NPDES PERMIT, OBTAINED SOLELY BY THE CONTRACTOR.

SWPPP, PERMITS, PLANS, RECORDS

- (33) 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.
- (34) 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 ENGINEER. THE ENVIRONMENTAL DIVISION, ROADWAY 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.

- (35) 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.
- (36) 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 CONSTRUCTION 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 BRIEF 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 WHERE 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.
- (37) IF A CHANGE IN PROJECT SCOPE OCCURS DURING CONSTRUCTION, INCLUDING VALUE ENGINEERING, THE ENVIRONMENTAL DIVISION SHALL BE CONTACTED TO DETERMINE WHETHER PERMIT REVISIONS OR MODIFICATIONS OF THE SWPPP ARE NEEDED. THE ROADWAY DESIGN DIVISION SHALL BE CONTACTED TO DETERMINE IF ANY PLAN REVISIONS ARE NEEDED.
- (38) 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 ANY CORRESPONDENCE REGARDING THE EFFECTIVENESS OF THE SWPPP OR EPSC CONTROLS SHALL BE RETAINED IN THE SWPPP.
- (39) THE SWPPP SHALL BE UPDATED 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 OF APPLICATION.
- (40) IF A TMDL IS DEVELOPED FOR THE RECEIVING WATERS FOR A POLLUTANT OF CONCERN (SILTATION AND/OR HABITAT ALTERATION) THE SWPPP SHALL BE MODIFIED OR UPDATED.
- (41) 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 OF 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

- (42) 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.
- (43) 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.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2015	25945-3477-04	2F

UNOFFICIAL
SET
NOT FOR
BIDDING



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GENERAL
NOTES

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2015	25945-3477-04	20

SPECIAL NOTES

GRADING

- (1) THE GRADING TABULATIONS AND RESULTING EARTHWORK ASSOCIATED BID QUANTITIES WERE PREPARED UTILIZING AVAILABLE GEOTECHNICAL INFORMATION AND/OR REPORTS PREPARED FOR THIS PROJECT. THIS INFORMATION IS PROVIDED FOR GENERAL INFORMATION AND ESTIMATION GUIDANCE ONLY.
- (2) BORING DEPICTIONS SHOWN ON THE FOUNDATION DATA SHEETS, SOILS SHEETS, PLANS, AND CROSS-SECTIONS INDICATE SOIL AND ROCK CONDITIONS AT THE SPECIFIC BORING LOCATIONS. ANY SOIL PROFILE AND/OR ROCK LINE IS INTERPRETIVE BASED ON THE JUDGMENT OF THE GEOTECHNICAL ENGINEER/GEOLOGIST. THE TRANSITION BETWEEN BORINGS AND LAYERS MAY VARY SIGNIFICANTLY DEPENDING ON THE GEOLOGIC FORMATIONS ENCOUNTERED.
- (3) TO ASSIST IN BID PREPARATION FOR EARTHWORK AND FOUNDATION CONSTRUCTION. DETAIL ROCK AND SOIL DESCRIPTION AND ON SOME PROJECTS, ROCK CORE SAMPLES ARE AVAILABLE FOR INSPECTION AT THE MATERIALS AND TESTS HEADQUARTERS AT 6601 CENTENNIAL BOULEVARD, NASHVILLE, TN OR AT THE TDOT REGION 1 BUILDING IN KNOXVILLE, TN.
- (4) THE CONTRACTOR SHALL UTILIZE ALL INFORMATION PROVIDED IN THE PLANS, CROSS-SECTIONS AND CONTRACT DOCUMENTS INCLUDING ANY SPECIAL PROVISIONS AS WELL AS UTILIZING HIS PAST EXPERIENCE WITH PROJECTS OF SIMILAR NATURE, SCOPE AND LOCATION IN PREPARATION OF HIS BID FOR EARTHWORK ITEMS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE AND PROVIDE EQUIPMENT AND MEANS NECESSARY TO CONDUCT THE EXCAVATION ACTIVITIES IN ACCORDANCE WITH PLANS AND SPECIFICATIONS.
- (5) EARTHWORK IS PAID FOR UNDER ITEM 203-01, ROAD AND DRAINAGE EXCAVATION (UNCLASSIFIED). NO ADDITIONAL PAYMENT WILL BE MADE FOR EARTHWORK QUANTITIES BASED SOLELY ON A CLAIM THAT THE QUANTITIES SHOWN IN THE GRADING TABULATION OR ELSEWHERE IN THE PLANS ARE INACCURATE WITH RESPECT TO THE TYPE OF MATERIALS ENCOUNTERED DURING CONSTRUCTION EXCEPT AS PROVIDED FOR BY SECTION 104.02 IN THE CURRENT EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OR AS AMENDED IN SUPPLEMENTAL SPECIFICATIONS.

EROSION PREVENTION AND SEDIMENT CONTROL

NPDES

- (1) REFER TO THE EROSION PREVENTION AND SEDIMENT CONTROL PLAN, SHEET 12, FOR NOTES REGARDING SEASONAL WORK LIMITATION OR LIMITATION ON THE TOTAL AREA OF EXPOSED SOIL.

UNOFFICIAL
SET
NOT FOR
BIDDING

SEALED BY

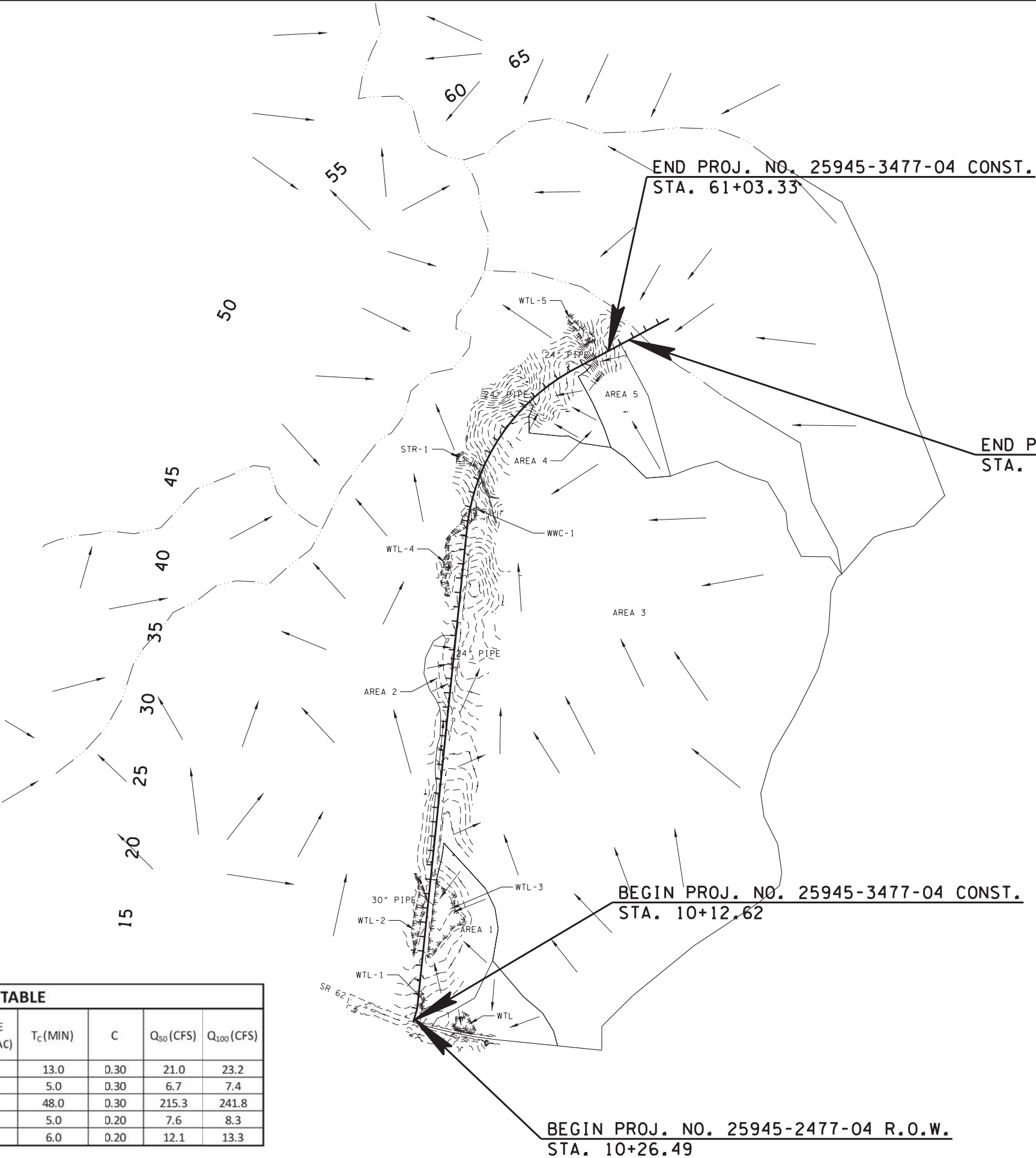


STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SPECIAL
NOTES

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	25945-2477-04	10
CONST.	2015	25945-3477-04	10

REV 12-05-14; REVISED WTL-4



UNOFFICIAL
SET
NOT FOR
BIDDING

SEALED BY



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

DRAINAGE
MAP

SCALE: 1"=400'

DRAINAGE TABLE							
DRAINAGE AREA	LOCATION	STRUCTURE	DRAINAGE AREA SIZE (AC)	T _c (MIN)	C	Q ₅₀ (CFS)	Q ₁₀₀ (CFS)
1	18+51.16	30" PIPE	10.45	13.0	0.30	21.0	23.2
2	35+39.57	24" PIPE	2.45	5.0	0.30	6.7	7.4
3	48+28.93	8' X 5' RCBC	189.90	48.0	0.30	215.3	241.8
4	54+76.12	24" PIPE	4.14	5.0	0.20	7.6	8.3
5	59+88.23	24" PIPE	6.92	6.0	0.20	12.1	13.3

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	25945-2477-04	12
CONST.	2015	25945-3477-04	12

EROSION PREVENTION AND SEDIMENT CONTROL NOTES

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.
- (2) 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 SSWMP.
- (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.

UNOFFICIAL
SET
NOT FOR
BIDDING

SEALED BY












STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION
PREVENTION
AND SEDIMENT
CONTROL NOTES

EROSION PREVENTION AND SEDIMENT CONTROL QUANTITIES						
ITEM NO.	DESCRIPTION	CLEARING & GRUBBING	CONSTRUCTION	FINAL STABILIZATION	TOTAL	UNIT
203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	14	14		28	C.Y.
209-05	SEDIMENT REMOVAL	9	12		21	C.Y.
209-01.31	TEMPOARY MULCH FILTER BERM	545	545		1090	C.Y.
209-08.02	TEMPORARY SILT FENCE (WITH BACKING)	2210	2295		4505	L.F.
209-08.03	TEMPORARY SILT FENCE (WITHOUT BACKING)	4237	4123		8360	L.F.
209-08.07	ROCK CHECK DAM PER	21	52		73	EACH
209-08.08	ENHANCED ROCK CHECK DAM	15	16		31	EACH
209-09.01	SAND BAGS	250	550		800	EACH
209-09.03	SEDIMENT FILTER BAG (15'X15')		3		3	EACH
209-20.03	POLYETHEYLENE SHEETING (6 MIL. MINIMUM)		300		300	S.Y.
209-65.03	TEMPORARY DIVERSION CHANNEL		195		195	L.F.
303-10.01	MINERAL AGGREGATE (SIZE 57)	17	21		38	TON
607-41.03	18" SLOPE DRAIN PIPE	200	100		300	L.F.
707-08.11	HIGH-VISIBILITY CONSTRUCTION FENCE	1925	1305		3230	L.F.
709-05.05	MACHINED RIP-RAP (CLASS A-3)	100	100		200	TON
709-05.06	MACHINED RIP-RAP (CLASS A-1)	114	125		239	TON
709-05.08	MACHINED RIP-RAP (CLASS B)		1059		1059	TON
740-10.03	GEOTEXTILE (TYPE III)(EROSION CONTROL)	387	1081		1468	S.Y.
740-11.03	TEMPORARY SEDIMENT TUBE 18IN (EROSION CONTROL)	3113	3497	300	6910	L.F.
801-01.07	TEMPORARY SEEDING (WITH MULCH)	200	150		350	UNIT
801-03	WATER (SEEDING AND SODDING)	20.0	15.0	191.2	226.2	M.G.
803-01	SODDING (NEW SOD)			19123	19123	S.Y.

NOTES: ALL QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER.
TEMPORARY CONSTRUCTION EXIT LOCATION TO BE DETERMINED BY THE ENGINEER

EROSION PREVENTION AND SEDIMENT CONTROL LEGEND		
SYMBOL	ITEM	STD. DWG.
* HVF * HVF	HIGH VISIBILITY FENCE	S-F-1
	SEDIMENT FILTER BAG	EC-STR-2
* SF * SF * SF *	SILT FENCE	EC-STR-3B
* SFB * SFB * SFB *	SILT FENCE WITH WIRE BACKING	EC-STR-3C
	ROCK CHECK DAM (V-DITCH)	EC-STR-6
	ENHANCED ROCK CHECK DAM (V-DITCH)	EC-STR-6A
	CULVERT PROTECTION (TYPE 1)	EC-STR-11
	CULVERT PROTECTION (TYPE 2)	EC-STR-11A
	TEMPORARY CONSTRUCTION EXIT	EC-STR-25
	TEMPORARY SLOPE DRAIN	EC-STR-27
	TEMPORARY DIVERSION CHANNEL (DESCRIBE-SIZE AND TYPE OF LINING)	EC-STR-31
	MULCH FILTER BERM	EC-STR-35
** TUBE ** TUBE **	SEDIMENT TUBE	EC-STR-37

PHASE 1 -CLEARING & GRUBBING		PHASE 2 - CONSTRUCTION		PHASE 3 - FINAL STABILIZATION	
OUTFALL	AREA	OUTFALL	AREA	OUTFALL	AREA
OUT-1	0.18 AC	OUT-1	0.07 AC	OUT-1	0.07 AC
OUT-2	1.10 AC	OUT-2	1.73 AC		
OUT-3	0.42 AC	OUT-3	1.61 AC	OUT-3	1.93 AC
OUT-4	0.30 AC	OUT-4	1.22 AC	OUT-4	4.18 AC
OUT-5	1.11 AC	OUT-5	1.11 AC		
OUT-6	0.88 AC	OUT-6	2.63 AC	OUT-6	2.02 AC
OUT-7	0.54 AC	OUT-7	0.98 AC	OUT-7	0.98 AC
OUT-8	0.97 AC	OUT-8	1.03 AC		
OUT-9	0.38 AC	OUT-9	0.38 AC	OUT-9	0.38 AC
OUT-10	0.68 AC	OUT-10	0.35 AC	OUT-10	0.52 AC
OUT-11	1.69 AC	OUT-11	1.69 AC	OUT-11	0.34 AC
OUT-12	3.92 AC	OUT-12	3.92 AC		
OUT-13	0.33 AC	OUT-13	0.33 AC	OUT-13	1.04 AC
		OUT-14	3.22 AC	OUT-14	3.22 AC
OUT-15	0.64 AC	OUT-15	0.64 AC	OUT-15	0.64 AC

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	25945-2477-04	12A
CONST.	2015	25945-3477-04	12A

UNOFFICIAL
SET
NOT FOR
BIDDING

SEALED BY



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION
PREVENTION
AND SEDIMENT
CONTROL NOTES

NOTES:

EPSC DIVERSION MEASURES TO BE
INSTALLED OUTSIDE LIMIT OF
CONSTRUCTION IN WETLAND AREAS
TO FACILITATE UNDERCUTTING
OPERATIONS WHILE PREVENTING
CROSS CONTAMINATION OF MATERIALS
DURING CONSTRUCTION AND TO
DIVERT OFFSITE DRAINAGE

THE CONTRACTOR SHALL ENSURE THAT
NO CONSTRUCTION ACTIVITIES OR
CONSTRUCTION EQUIPMENT ENTERS
ANY WETLAND AREA OUTSIDE PROPOSED
R.O.W., PERMANENT IMPACT AREAS AND
CONSTRUCTION EASEMENTS AND THAT NO
DISTURBANCE OCCURS OUTSIDE THOSE
AREAS.

EXIST SR 62 STA. 14+77.56 =
INTERNATIONAL BLVD. STA. 10+01.99
N 674720.1227
E 2263034.1019

15



OUT - 1

BEGIN PROJ. NO. 25945-3477-04 CONST.
STA. 10+12.62

BEGIN PROJ. NO. 25945-2477-04 R.O.W.
STA. 0+24.50

15

PERMANENT
WETLAND IMPACT

WETLAND IMPACTS

WTL-1
AREA OF WETLAND = 0.022 AC
AREA OF PERMANENT WETLAND IMPACT = 0.022 AC
AREA OF TEMPORARY WETLAND IMPACT = 0

WTL-2
AREA OF WETLAND = 0.517 AC
AREA OF PERMANENT WETLAND IMPACT = 0.035 AC
AREA OF TEMPORARY WETLAND IMPACT = 0

WTL-3
AREA OF WETLAND = 1.476 AC
AREA OF PERMANENT WETLAND IMPACT = 0.196 AC
AREA OF TEMPORARY WETLAND IMPACT = 0

PHASE 1- CLEARING & GRUBBING

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	25945-2477-04	12B
CONST.	2015	25945-3477-04	12B

REV 09-19-14; REVISED WETLAND IMPACT
PATTERN WTL-3, REVISED WETLAND IMPACT
AREAS WTL-2 & WTL-3, AMMEDED EPSC
NOTES

UNOFFICIAL
SET
NOT FOR
BIDDING

SEALED BY



COORDINATES ARE NAD/83(1995),
ARE DATUM ADJUSTED BY THE
FACTOR OF 1.000120 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. 16+00
SCALE: 1"= 50'

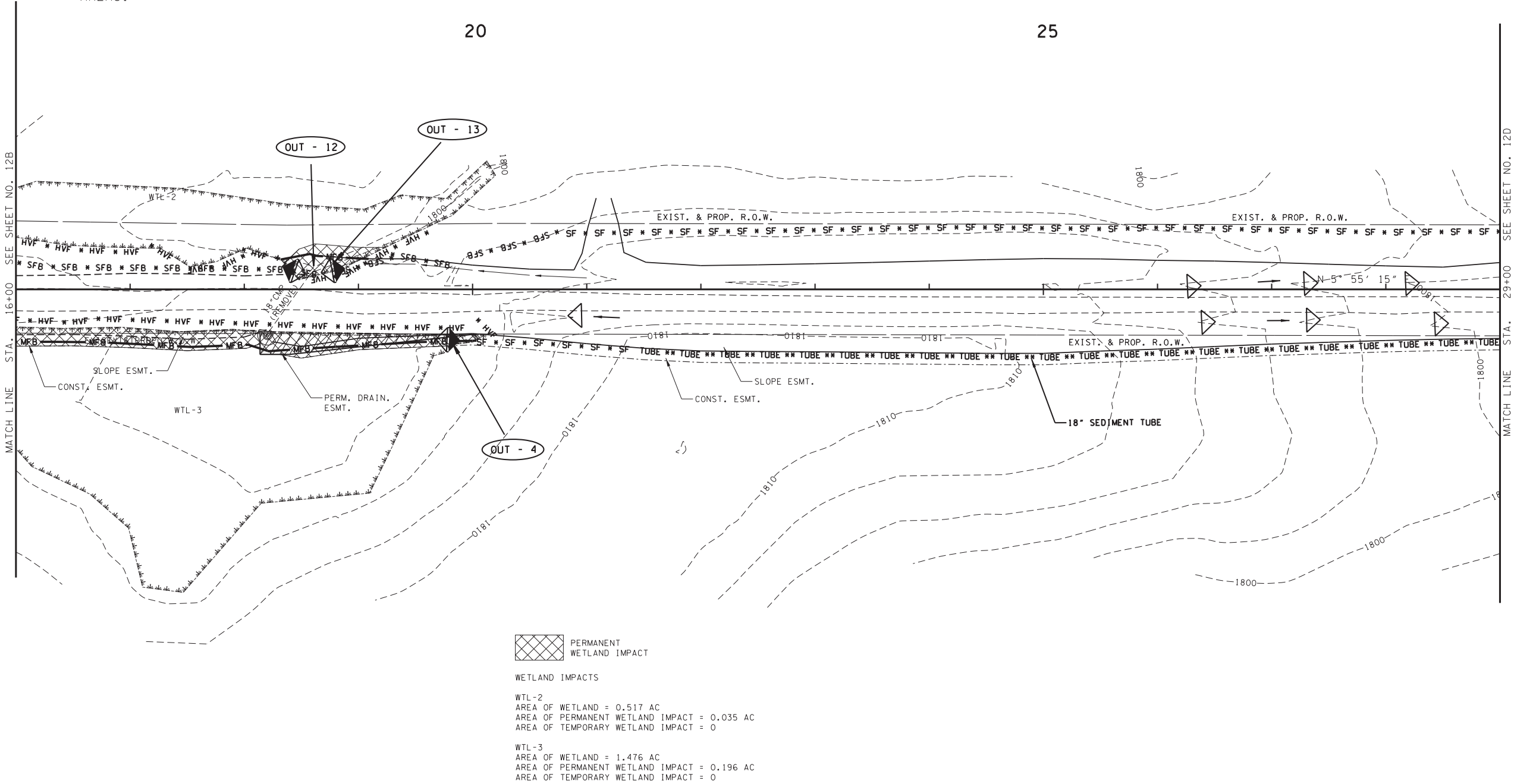
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	25945-2477-04	12C
CONST.	2015	25945-3477-04	12C

REV 09-19-14; REVISED WETLAND IMPACT PATTERN AND WETLAND IMPACT AREAS WTL-2 & WTL-3, REVISED NOTES

NOTES:

EPSC DIVERSION MEASURES TO BE INSTALLED OUTSIDE LIMIT OF CONSTRUCTION IN WETLAND AREAS TO FACILITATE UNDERCUTTING OPERATIONS WHILE PREVENTING CROSS CONTAMINATION OF MATERIALS DURING CONSTRUCTION AND TO DIVERT OFFSITE DRAINAGE

THE CONTRACTOR SHALL ENSURE THAT NO CONSTRUCTION ACTIVITIES OR CONSTRUCTION EQUIPMENT ENTERS ANY WETLAND AREA OUTSIDE PROPOSED R.O.W., PERMANENT IMPACT AREAS AND CONSTRUCTION EASEMENTS AND THAT NO DISTURBANCE OCCURS OUTSIDE THOSE AREAS.



UNOFFICIAL
SET
NOT FOR
BIDDING

SEALED BY



COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000120 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. 16+00 TO STA. 29+00
SCALE: 1"= 50'

PHASE 1- CLEARING & GRUBBING

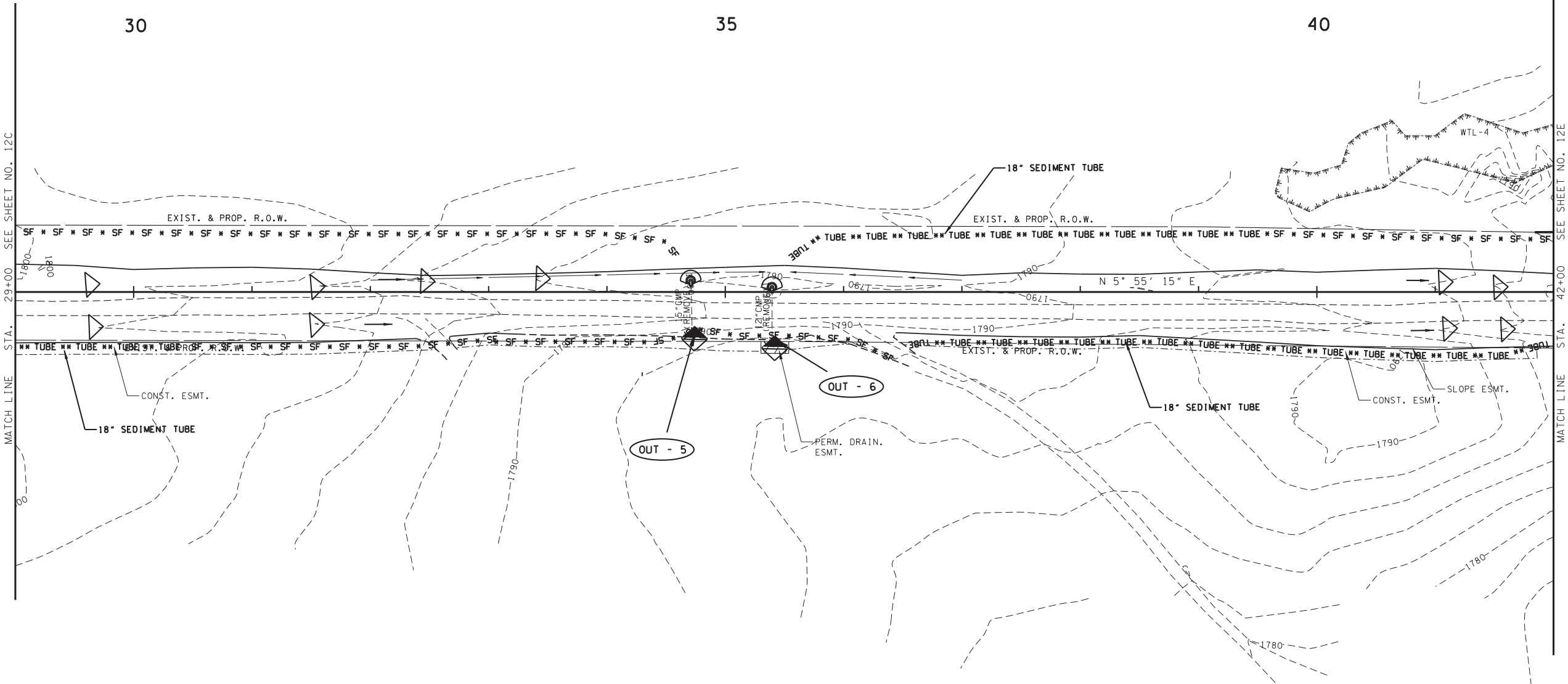
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	25945-2477-04	12D
CONST.	2015	25945-3477-04	12D

REV 09-19-14: REVISED IMPACT AREAS WTL-4, REVISED NOTES
REV 12-05-14: REVISED AREA & IMPACT AREA WTL-4

NOTES:

EPSC DIVERSION MEASURES TO BE INSTALLED OUTSIDE LIMIT OF CONSTRUCTION IN WETLAND AREAS TO FACILITATE UNDERCUTTING OPERATIONS WHILE PREVENTING CROSS CONTAMINATION OF MATERIALS DURING CONSTRUCTION AND TO DIVERT OFFSITE DRAINAGE

THE CONTRACTOR SHALL ENSURE THAT NO CONSTRUCTION ACTIVITIES OR CONSTRUCTION EQUIPMENT ENTERS ANY WETLAND AREA OUTSIDE PROPOSED R.O.W., PERMANENT IMPACT AREAS AND CONSTRUCTION EASEMENTS AND THAT NO DISTURBANCE OCCURS OUTSIDE THOSE AREAS.



WETLAND IMPACTS
WTL-4
AREA OF WETLAND = 0.552 AC
AREA OF PERMANENT WETLAND IMPACT = 0.130 AC
AREA OF TEMPORARY WETLAND IMPACT = 0

 PERMANENT WETLAND IMPACT

UNOFFICIAL
SET
NOT FOR
BIDDING

SEALED BY



COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000120 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

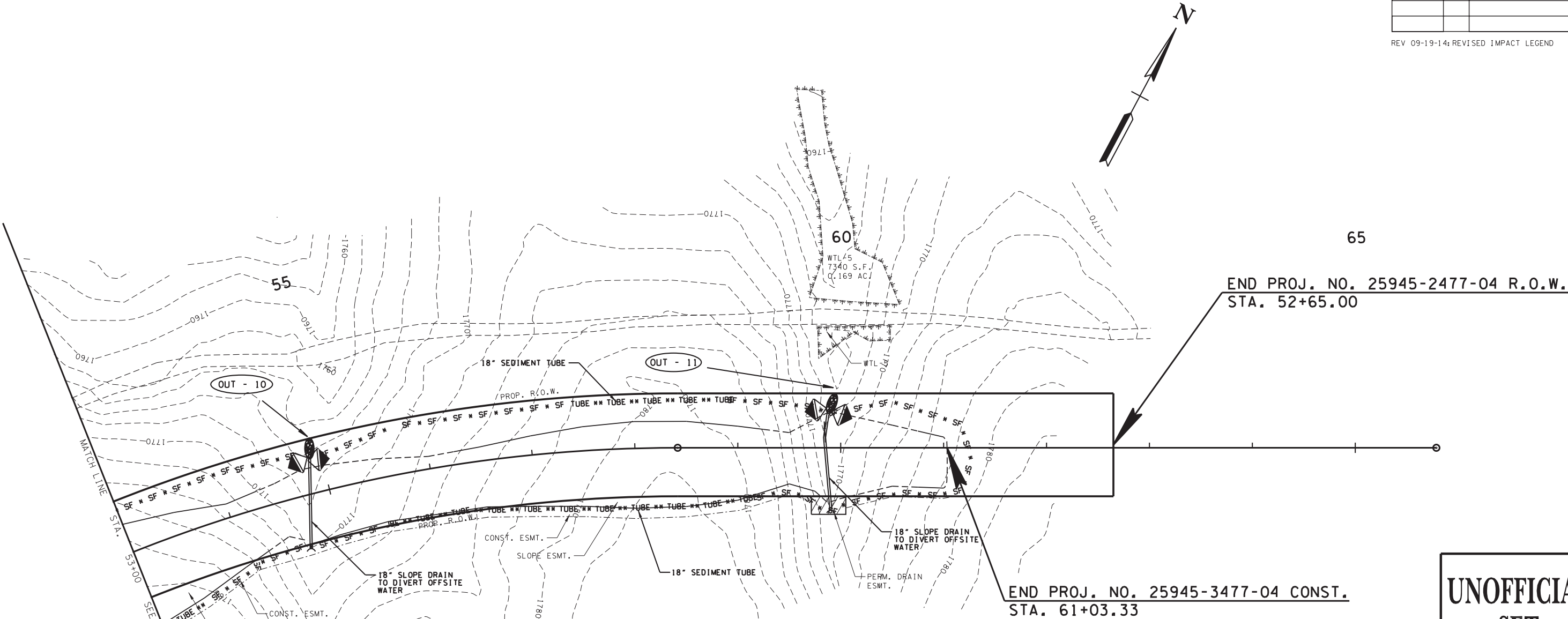
EROSION
PREVENTION
AND SEDIMENT
CONTROL PLAN

PHASE 1- CLEARING & GRUBBING

STA. 29+00 TO STA. 42+00
SCALE: 1"= 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	25945-2477-04	12F
CONST.	2015	25945-3477-04	12F

REV 09-19-14; REVISED IMPACT LEGEND



PERMANENT WETLAND IMPACT

WETLAND IMPACTS

WTL-5
AREA OF WETLAND = 0.194 AC
AREA OF PERMANENT WETLAND IMPACT = 0
AREA OF TEMPORARY WETLAND IMPACT = 0

NOTES:

EPSC DIVERSION MEASURES TO BE INSTALLED OUTSIDE LIMIT OF CONSTRUCTION IN WETLAND AREAS TO FACILITATE UNDERCUTTING OPERATIONS WHILE PREVENTING CROSS CONTAMINATION OF MATERIALS DURING CONSTRUCTION AND TO DIVERT OFFSITE DRAINAGE

THE CONTRACTOR SHALL ENSURE THAT NO CONSTRUCTION ACTIVITIES OR CONSTRUCTION EQUIPMENT ENTERS ANY WETLAND AREA OUTSIDE PROPOSED R.O.W., PERMANENT IMPACT AREAS AND CONSTRUCTION EASEMENTS AND THAT NO DISTURBANCE OCCURS OUTSIDE THOSE AREAS.

UNOFFICIAL
SET
NOT FOR
BIDDING

SEALED BY



COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000120 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. 53+00 TO END PROJ.
SCALE: 1"= 50'

PHASE 1- CLEARING & GRUBBING

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	25945-2477-04	120
CONST.	2015	25945-3477-04	120

REV 09-19-14: REVISED WETLAND IMPACT PATTERN WTL-3, REVISED WETLAND IMPACT AREAS WTL-2 & WTL-3, AMENDED EPSC NOTES

NOTES:

EPSC DIVERSION MEASURES TO BE INSTALLED OUTSIDE LIMIT OF CONSTRUCTION IN WETLAND AREAS TO FACILITATE UNDERCUTTING OPERATIONS WHILE PREVENTING CROSS CONTAMINATION OF MATERIALS DURING CONSTRUCTION AND TO DIVERT OFFSITE DRAINAGE

THE CONTRACTOR SHALL ENSURE THAT NO CONSTRUCTION ACTIVITIES OR CONSTRUCTION EQUIPMENT ENTERS ANY WETLAND AREA OUTSIDE PROPOSED R.O.W., PERMANENT IMPACT AREAS AND CONSTRUCTION EASEMENTS AND THAT NO DISTURBANCE OCCURS OUTSIDE THOSE AREAS.

15

BEGIN PROJ. NO. 25945-2477-04 R.O.W.
STA. 0+24.50

EXIST SR 62 STA. 14+77.56 =
INTERNATIONAL BLVD. STA. 10+01.99
N 674720.1227
E 2263034.1019

BEGIN PROJ. NO. 25945-3477-04 CONST.
STA. 10+12.62

15

WTL

PERMANENT
WETLAND IMPACT

WETLAND IMPACTS

WTL-1
AREA OF WETLAND = 0.022 AC
AREA OF PERMANENT WETLAND IMPACT = 0.022 AC
AREA OF TEMPORARY WETLAND IMPACT = 0

WTL-2
AREA OF WETLAND = 0.517 AC
AREA OF PERMANENT WETLAND IMPACT = 0.035 AC
AREA OF TEMPORARY WETLAND IMPACT = 0

WTL-3
AREA OF WETLAND = 1.476 AC
AREA OF PERMANENT WETLAND IMPACT = 0.196 AC
AREA OF TEMPORARY WETLAND IMPACT = 0

PHASE 2- CONSTRUCTION

UNOFFICIAL
SET
NOT FOR
BIDDING

SEALED BY



COORDINATES ARE NAD/83(1995),
ARE DATUM ADJUSTED BY THE
FACTOR OF 1.000120 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. 16+00
SCALE: 1"= 50'

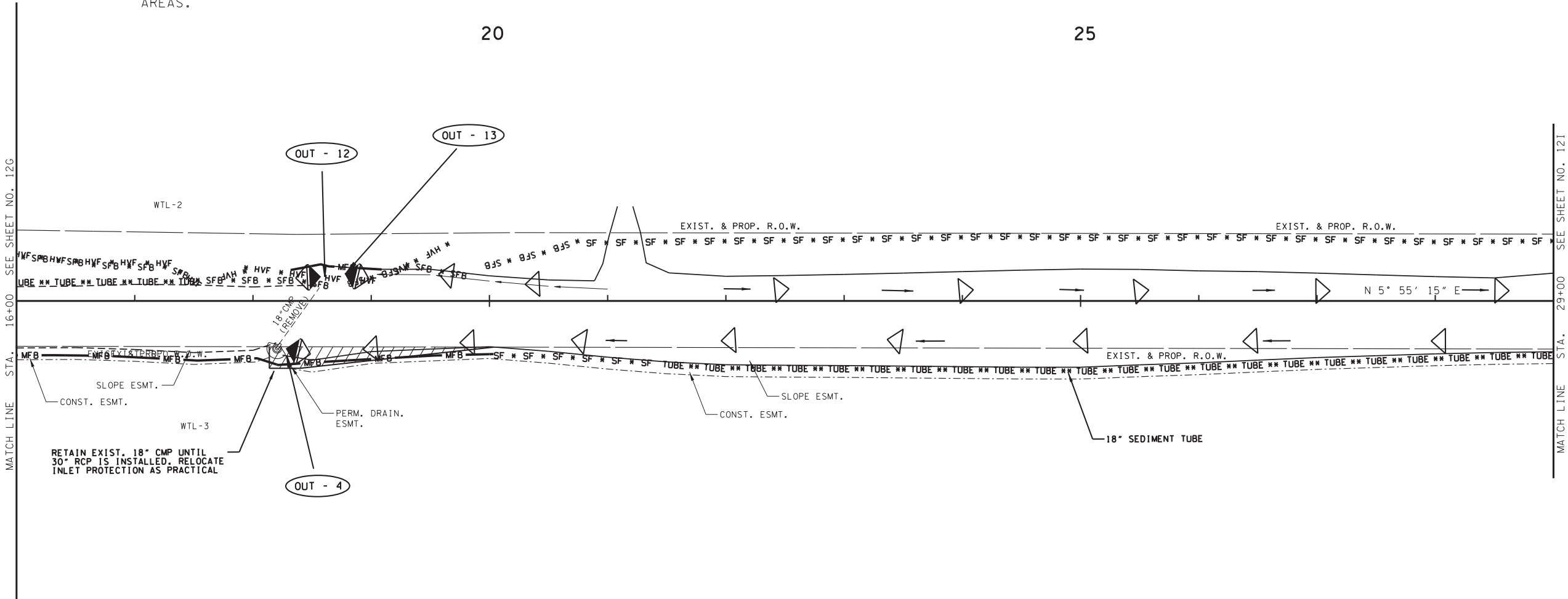
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	25945-2477-04	12H
CONST.	2015	25945-3477-04	12H

REV 09-19-14; REVISED WETLAND IMPACT PATTERN AND WETLAND IMPACT AREAS WTL-2 & WTL-3, REVISED NOTES

NOTES:

EPSC DIVERSION MEASURES TO BE INSTALLED OUTSIDE LIMIT OF CONSTRUCTION IN WETLAND AREAS TO FACILITATE UNDERCUTTING OPERATIONS WHILE PREVENTING CROSS CONTAMINATION OF MATERIALS DURING CONSTRUCTION AND TO DIVERT OFFSITE DRAINAGE

THE CONTRACTOR SHALL ENSURE THAT NO CONSTRUCTION ACTIVITIES OR CONSTRUCTION EQUIPMENT ENTERS ANY WETLAND AREA OUTSIDE PROPOSED R.O.W., PERMANENT IMPACT AREAS AND CONSTRUCTION EASEMENTS AND THAT NO DISTURBANCE OCCURS OUTSIDE THOSE AREAS.



RETAIN EXIST. 18" CMP UNTIL 30" RCP IS INSTALLED. RELOCATE INLET PROTECTION AS PRACTICAL

PERMANENT WETLAND IMPACT

WETLAND IMPACTS

WTL-2
AREA OF WETLAND = 0.517 AC
AREA OF PERMANENT WETLAND IMPACT = 0.035 AC
AREA OF TEMPORARY WETLAND IMPACT = 0

WTL-3
AREA OF WETLAND = 1.476 AC
AREA OF PERMANENT WETLAND IMPACT = 0.196 AC
AREA OF TEMPORARY WETLAND IMPACT = 0

UNOFFICIAL
SET
NOT FOR
BIDDING

SEALED BY



COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000120 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. 16+00 TO STA. 29+00
SCALE: 1"= 50'

PHASE 2- CONSTRUCTION

2/9/2015 11:00 PM
H:\116003\Drawings\021.shx



NOTES:

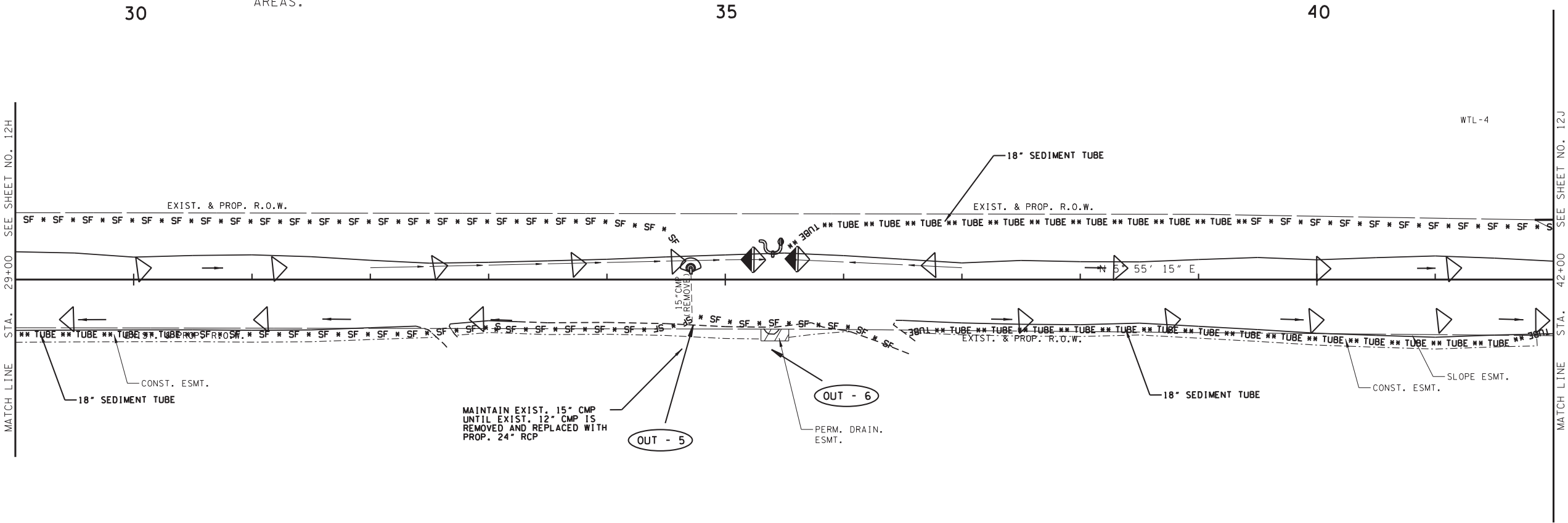
EPSC DIVERSION MEASURES TO BE
INSTALLED OUTSIDE LIMIT OF
CONSTRUCTION IN WETLAND AREAS
TO FACILITATE UNDERCUTTING
OPERATIONS WHILE PREVENTING
CROSS CONTAMINATION OF MATERIALS
DURING CONSTRUCTION AND TO
DIVERT OFFSITE DRAINAGE

THE CONTRACTOR SHALL ENSURE THAT
NO CONSTRUCTION ACTIVITIES OR
CONSTRUCTION EQUIPMENT ENTERS
ANY WETLAND AREA OUTSIDE PROPOSED
R.O.W., PERMANENT IMPACT AREAS AND
CONSTRUCTION EASEMENTS AND THAT NO
DISTURBANCE OCCURS OUTSIDE THOSE
AREAS.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	25945-2477-04	121
CONST.	2015	25945-3477-04	121

REV 09-19-14: REVISED IMPACT AREAS WTL-4,
REVISED NOTES

REV 12-05-14: REVISED AREA & IMPACT AREA
WTL-4



MAINTAIN EXIST. 15\"/>

OUT - 5

OUT - 6

PERM. DRAIN.
ESMT.

WETLAND IMPACTS

WTL-4
AREA OF WETLAND = 0.552 AC
AREA OF PERMANENT WETLAND IMPACT = 0.130 AC
AREA OF TEMPORARY WETLAND IMPACT = 0

 PERMANENT
WETLAND IMPACT

PHASE 2- CONSTRUCTION

UNOFFICIAL
SET
NOT FOR
BIDDING

SEALED BY



COORDINATES ARE NAD/83(1995),
ARE DATUM ADJUSTED BY THE
FACTOR OF 1.000120 AND TIED TO
THE TGRN. ALL ELEVATIONS ARE
REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

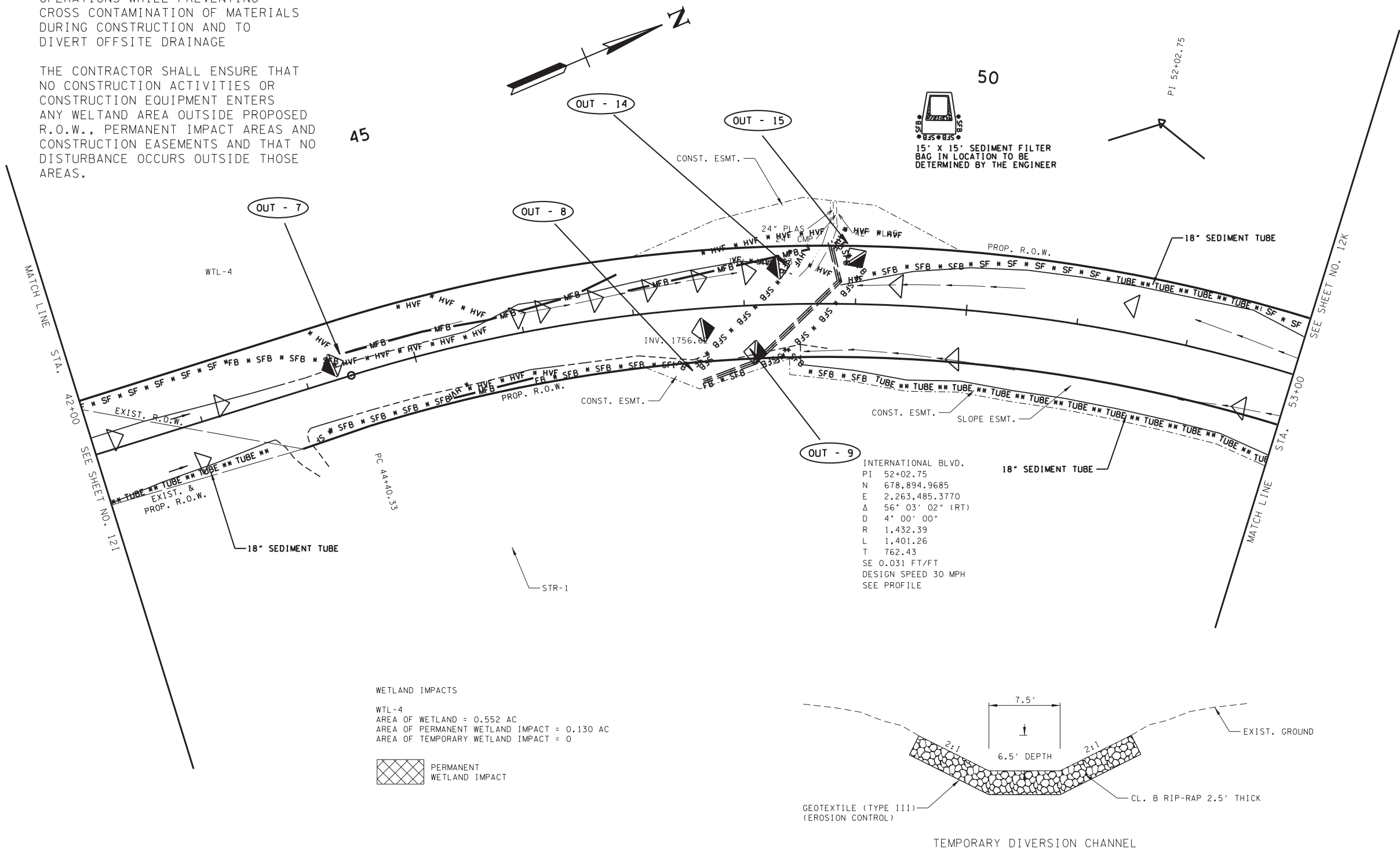
EROSION
PREVENTION
AND SEDIMENT
CONTROL PLAN

STA. 29+00 TO STA. 42+00
SCALE: 1"= 50'

NOTES:

EPSC DIVERSION MEASURES TO BE INSTALLED OUTSIDE LIMIT OF CONSTRUCTION IN WETLAND AREAS TO FACILITATE UNDERCUTTING OPERATIONS WHILE PREVENTING CROSS CONTAMINATION OF MATERIALS DURING CONSTRUCTION AND TO DIVERT OFFSITE DRAINAGE

THE CONTRACTOR SHALL ENSURE THAT NO CONSTRUCTION ACTIVITIES OR CONSTRUCTION EQUIPMENT ENTERS ANY WELTAND AREA OUTSIDE PROPOSED R.O.W., PERMANENT IMPACT AREAS AND CONSTRUCTION EASEMENTS AND THAT NO DISTURBANCE OCCURS OUTSIDE THOSE AREAS.



WETLAND IMPACTS

WTL-4
AREA OF WETLAND = 0.552 AC
AREA OF PERMANENT WETLAND IMPACT = 0.130 AC
AREA OF TEMPORARY WETLAND IMPACT = 0

PERMANENT WETLAND IMPACT

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	25945-2477-04	12J
CONST.	2015	25945-3477-04	12J

REV 09-19-14; REVISED IMPACT AREA AND PATTERNING WTL-4; REVISED NOTES
REV 12-05-14; REVISED AREA & IMPACT AREA WTL-4, REVISE EPSC MEASURES AT WTL-4 RT.

UNOFFICIAL
SET
NOT FOR
BIDDING

SEALED BY



COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000120 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

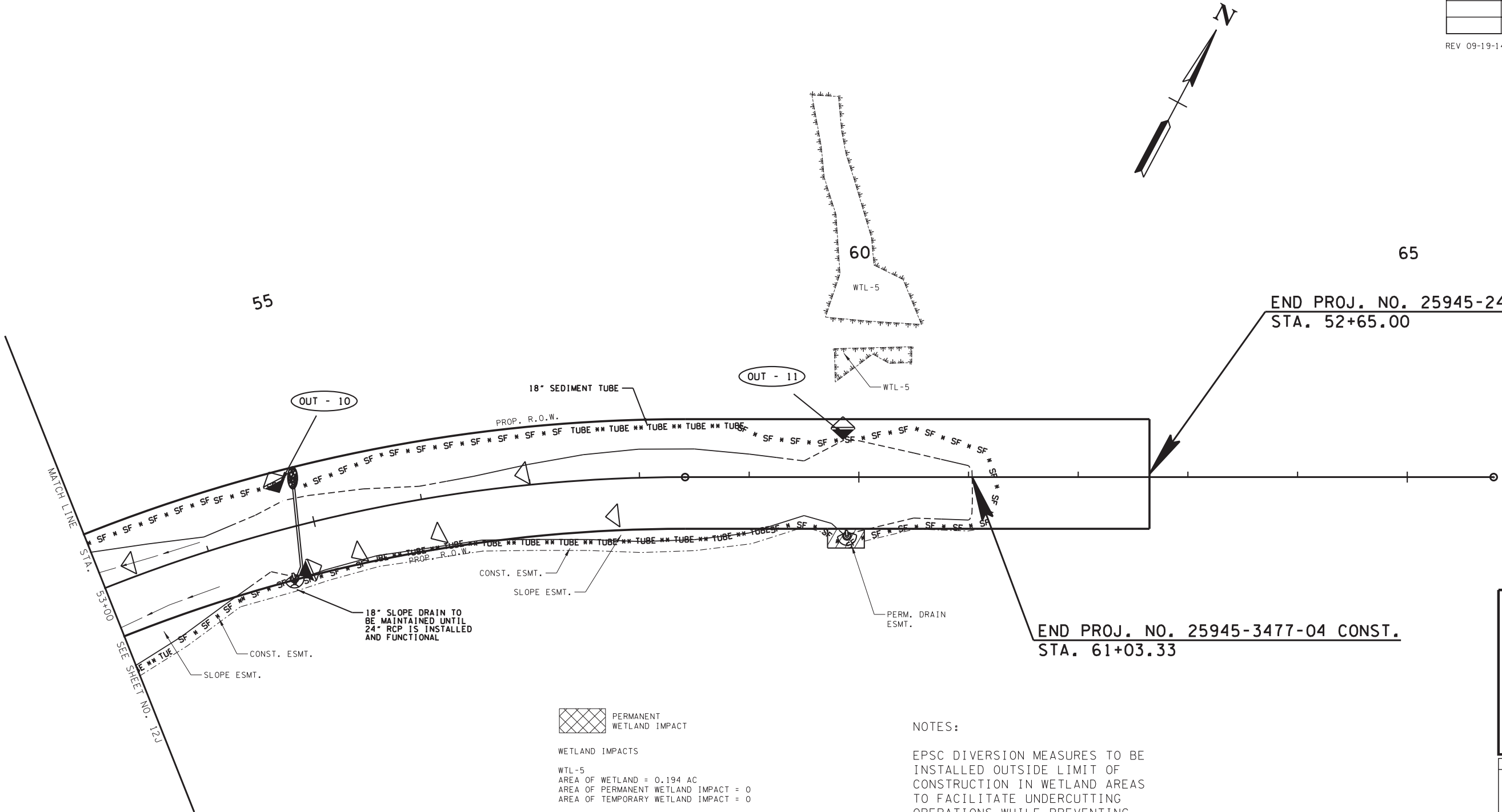
EROSION
PREVENTION
AND SEDIMENT
CONTROL PLAN

STA. 42+00 TO STA. 53+00
SCALE: 1"= 50'

PHASE 2- CONSTRUCTION

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	25945-2477-04	12K
CONST.	2015	25945-3477-04	12K

REV 09-19-14; REVISED IMPACT LEGEND



WETLAND IMPACTS
WTI-5
AREA OF WETLAND = 0.194 AC
AREA OF PERMANENT WETLAND IMPACT = 0
AREA OF TEMPORARY WETLAND IMPACT = 0

NOTES:

EPSC DIVERSION MEASURES TO BE INSTALLED OUTSIDE LIMIT OF CONSTRUCTION IN WETLAND AREAS TO FACILITATE UNDERCUTTING OPERATIONS WHILE PREVENTING CROSS CONTAMINATION OF MATERIALS DURING CONSTRUCTION AND TO DIVERT OFFSITE DRAINAGE

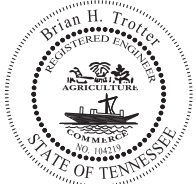
THE CONTRACTOR SHALL ENSURE THAT NO CONSTRUCTION ACTIVITIES OR CONSTRUCTION EQUIPMENT ENTERS ANY WETLAND AREA OUTSIDE PROPOSED R.O.W., PERMANENT IMPACT AREAS AND CONSTRUCTION EASEMENTS AND THAT NO DISTURBANCE OCCURS OUTSIDE THOSE AREAS.

END PROJ. NO. 25945-2477-04 R.O.W.
STA. 52+65.00

END PROJ. NO. 25945-3477-04 CONST.
STA. 61+03.33

UNOFFICIAL
SET
NOT FOR
BIDDING

SEALED BY



COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000120 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. 53+00 TO END PROJ.
SCALE: 1"= 50'

PHASE 2- CONSTRUCTION

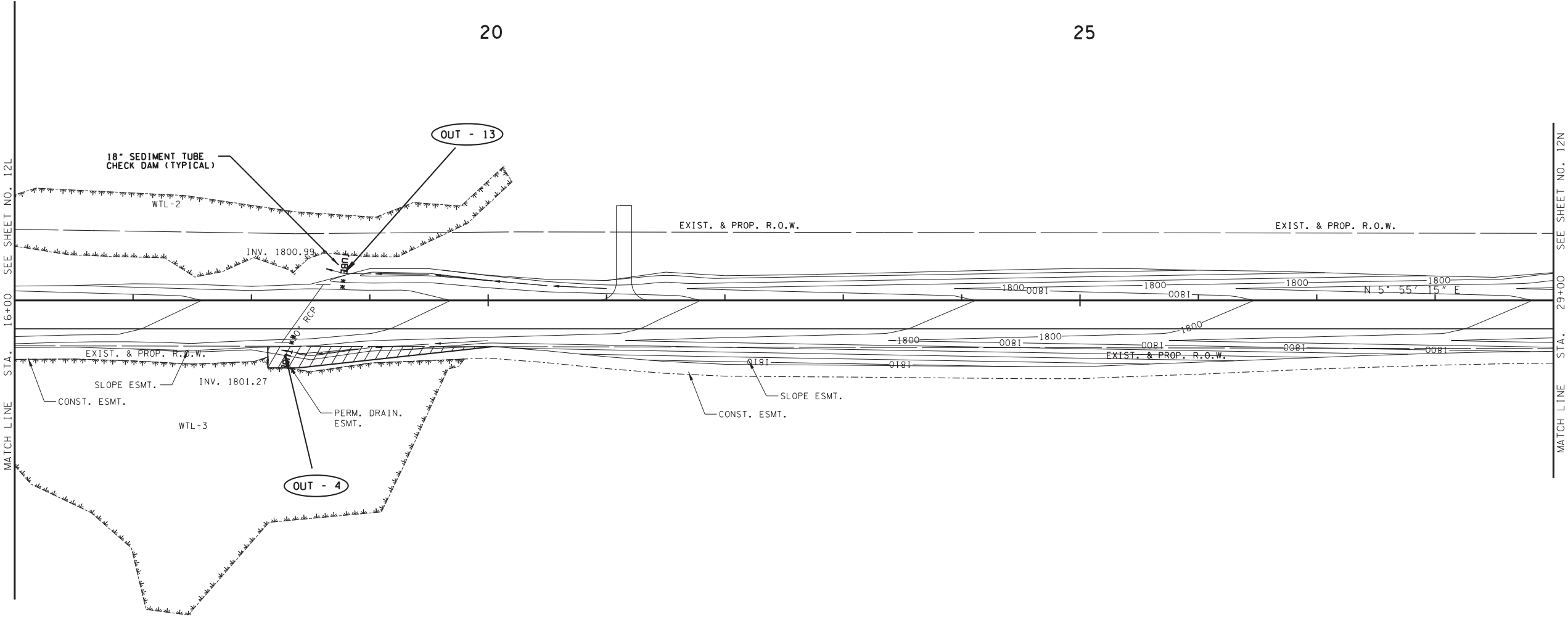
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	25945-2477-04	12M
CONST.	2015	25945-3477-04	12M

REV 09-19-14; REVISED REMAINDER WTL-2 & WTL-3



NOTE:

EPSC MEASURES TO REMAIN FROM PREVIOUS PHASE UNTIL SUCH TIME AS FINAL STABILIZATION HAS BEEN ESTABLISHED AND THE MEASRE IS NO LONGER PRACTICAL



UNOFFICIAL
SET
NOT FOR
BIDDING

SEALED BY



COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000120 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. 16+00 TO STA. 29+00
SCALE: 1"= 50'

PHASE 3- FINAL STABILIZATION

2/9/2015 11:03 PM
H:\116003\Drawn\02N.shx



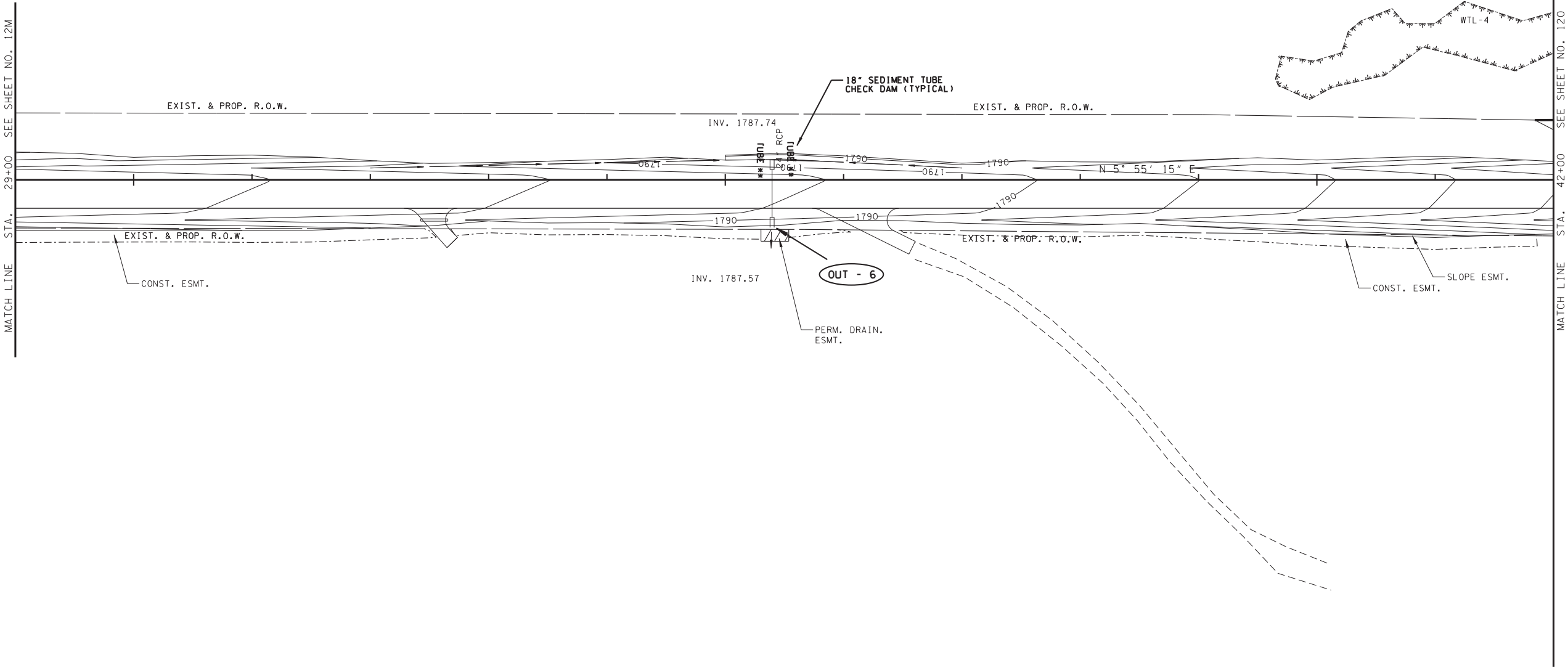
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	25945-2477-04	12N
CONST.	2015	25945-3477-04	12N

NOTE:
EPSC MEASURES TO REMAIN FROM
PREVIOUS PHASE UNTIL SUCH TIME
AS FINAL STABILIZATION HAS
BEEN ESTABLISHED AND THE
MEASURE IS NO LONGER PRACTICAL

30

35

40



UNOFFICIAL
SET
NOT FOR
BIDDING

SEALED BY



COORDINATES ARE NAD/83(1995),
ARE DATUM ADJUSTED BY THE
FACTOR OF 1.000120 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

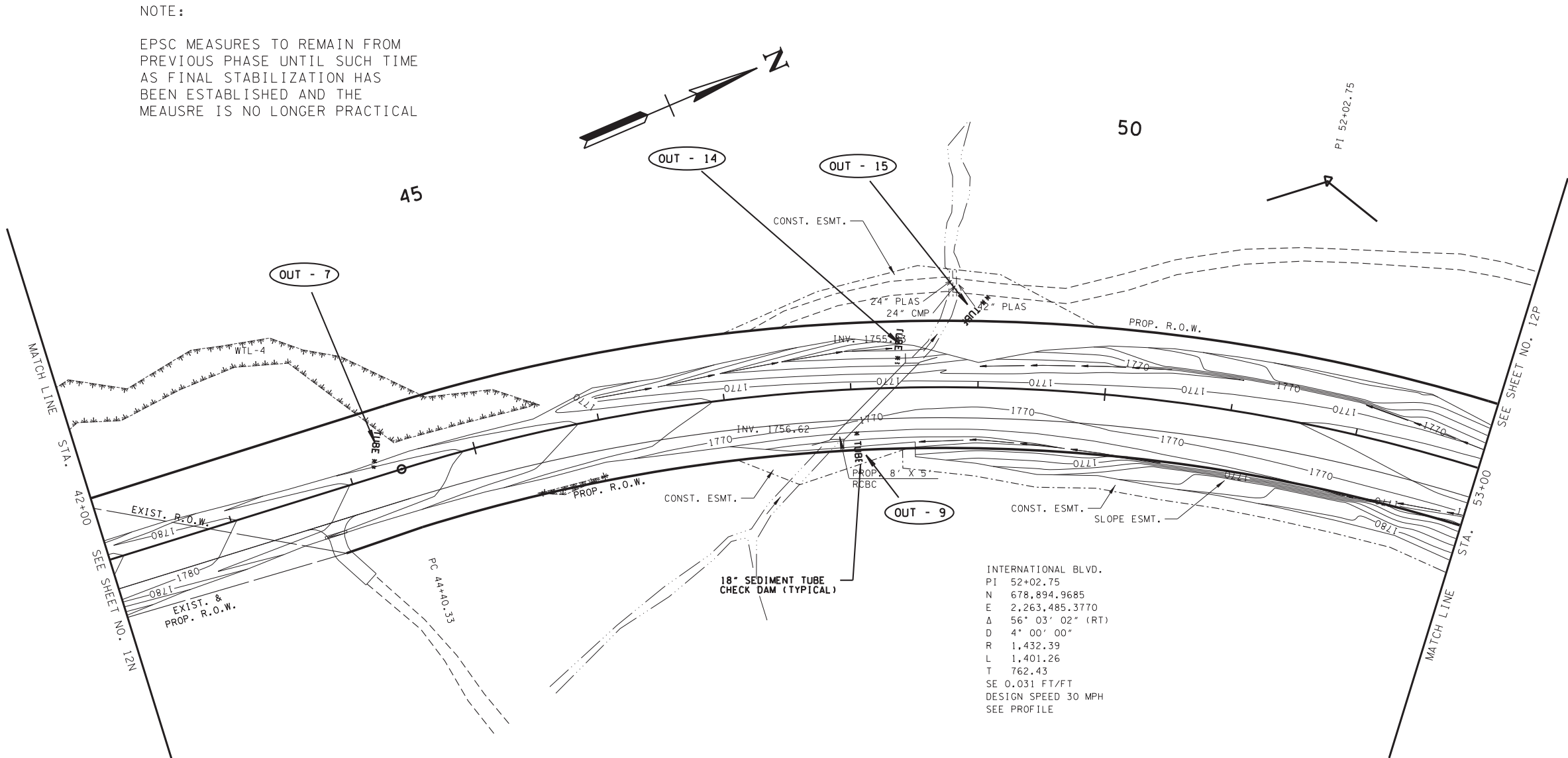
PHASE 3- FINAL STABILIZATION

STA. 29+00 TO STA. 42+00
SCALE: 1"= 50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	25945-2477-04	120
CONST.	2015	25945-3477-04	120

REV 09-19-14: REVISED WETLAND REMAINDER WTL-4

REV 12-05-14: REVISED WETLAND REMAINDER WTL-4



INTERNATIONAL BLVD.
PI 52+02.75
N 678,894.9685
E 2,263,485.3770
Δ 56° 03' 02" (RT)
D 4' 00' 00"
R 1,432.39
L 1,401.26
T 762.43
SE 0.031 FT/FT
DESIGN SPEED 30 MPH
SEE PROFILE

UNOFFICIAL
SET
NOT FOR
BIDDING

SEALED BY



COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000120 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

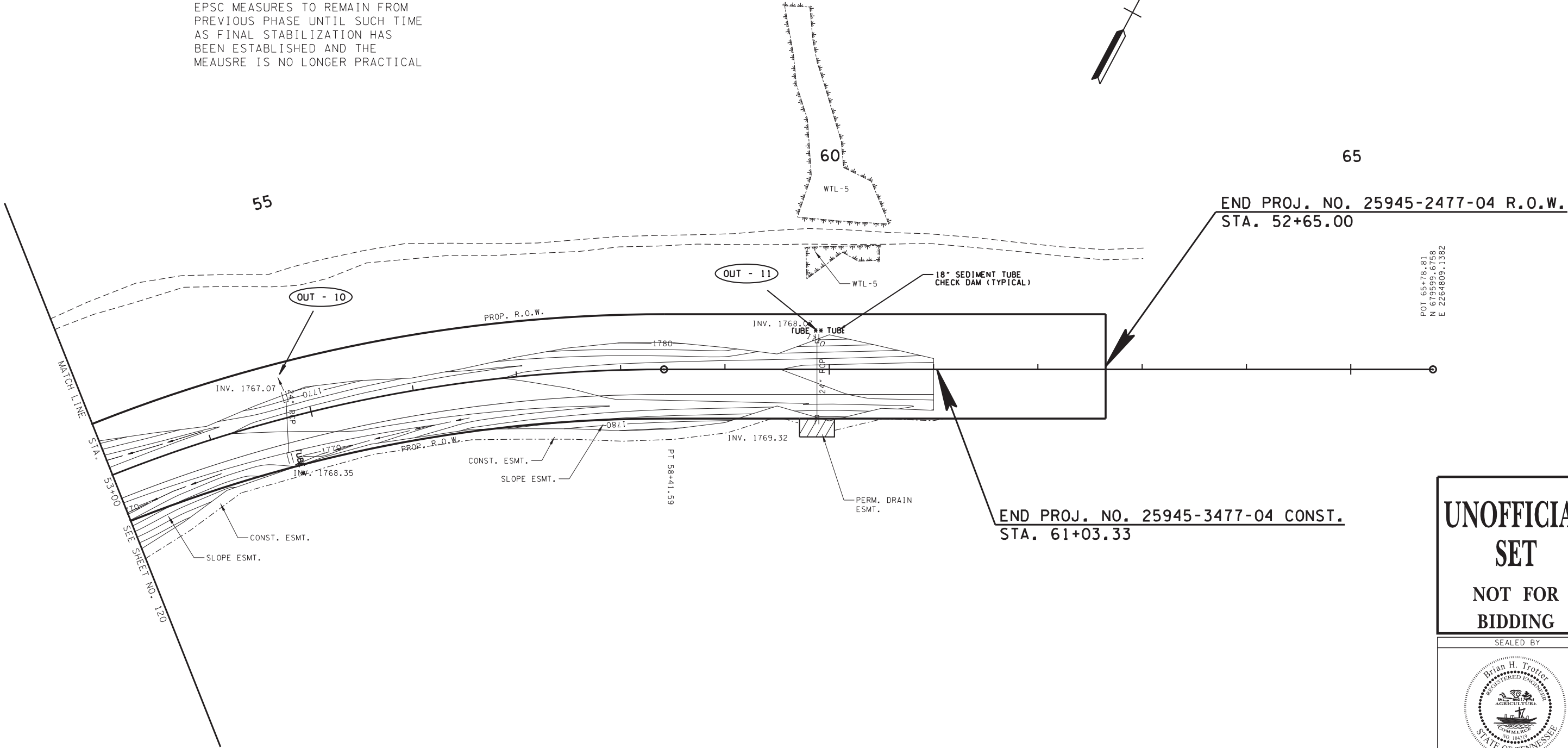
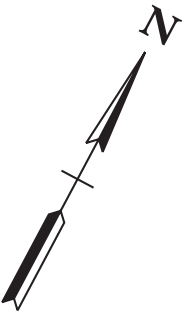
STA. 42+00 TO STA. 53+00
SCALE: 1"= 50'

PHASE 3 - FINAL STABILIZATION

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2014	25945-2477-04	12P
CONST.	2015	25945-3477-04	12P

NOTE:

EPSC MEASURES TO REMAIN FROM PREVIOUS PHASE UNTIL SUCH TIME AS FINAL STABILIZATION HAS BEEN ESTABLISHED AND THE MEASURE IS NO LONGER PRACTICAL



POT 65+78.81
N 679599.6758
E 2264809.1382

UNOFFICIAL
SET
NOT FOR
BIDDING

SEALED BY



COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.000120 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. 53+00 TO END PROJ.
SCALE: 1"= 50'

PHASE 3- FINAL STABILIZATION