Tennessee Valley Authority, 1101 Market Street, BR4A, Chattanooga, Tennessee 37402

October 3, 2018

Mr. Vojin Janjić
Division of Water Resources
Tennessee Department of Environment
and Conservation
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 11th Floor
Nashville, Tennessee 37243

Dear Mr. Janjić:

TENNESSEE VALLEY AUTHORITY (TVA) – ALLEN FOSSIL PLANT (ALF) – NOTICE OF INTENT (NOI) FOR COVERAGE UNDER THE NPDES GENERAL PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES - STORM WATER REROUTES

Enclosed is a completed NOI for the subject project. Also enclosed is a map, SWPPP, and a check for $250.00 to cover the application fee.

TVA appreciates your review and handling of this NOI. If you have questions or need additional information to support this request, please contact Chad Reed at (423) 751-3948 or by email at chreed@tva.gov.

Sincerely,

Travis R Mackey

for Terry E. Cheek
Senior Manager
Water Permits, Compliance, and Monitoring

Enclosures
cc: Memphis Environmental Field Office
Attention: Stormwater NOI Processing
8383 Wolf Lake Drive, Bartlett
Memphis, Tennessee 38133-4119

United States Treasury 15-51/000

TENNESSEE VALLEY AUTHORITY
KNOXVILLE, TN

4912 - 80308472
Check No.

09/18/18

Pay to the order of

$250AND00/100

$********250*00

TREASURER STATE OF TN

KNOXVILLE TN 37901
UNITED STATES

VOID AFTER ONE YEAR

TENNESSEE VALLEY AUTHORITY
T Tammy W Wilson T
V V
A DISBURSING OFFICER A

INQUIRY SHOULD INCLUDE COPY OF THIS FORM

TVA 8262 (FD-5-82)

DATE 09/18/18

REMITTANCE INFORMATION FROM TENNESSEE VALLEY AUTHORITY TO:

TVA VENDOR NO. 000403578 05

VENDOR:

TREASURER STATE OF TN

TVA CHECK NO. 80308472

AMOUNT REMITTED $250.00

INVOICE NUMBER	DATE	AMOUNT	DISCOUNT	REFERENCE	ADJUSTMENT
0917-15A		$250.00	$0.00		

ALF STORM WATER REROUTE PROJECT CONSTRUCTION GENERAL PERMIT

TN DEPT. OF ENV. & CONSERVATION

OCT 04 2018

DIVISION OF WATER RESOURCES

* Discount Taken

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)

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

Site or Project Name: TVA Allen Fossil Plant Storm Water Reroutes		***NPDES Tracking Number: TNR***	
Street Address or Location: 2574 Plant Road, Memphis, TN 38109-3014		Construction Start Date:	10/1/18
		Estimated End Date:	9/30/19
Site Description: Rerouting of site storm water to new and existing outfalls		Latitude (dd.dddd):	35.0726
		Longitude (-dd.dddd):	-90.1429
County(ies): Shelby	MS4 (if applicable): Memphiis	Acres Disturbed:	4.6
Check box if a SWPPP is attached : ☑	Check box if a site location map is attached: ☑	Total Acres:	67
Check the appropriate box(s) if there are streams and/or wetlands on or adjacent to the construction site:		Streams ☐	Wetlands ☐
Has a jurisdictional determination been made by the USACE or EPA identifying waters of the United States?: Yes ☐ No ☐ Note: if yes, attach the jurisdictional determination			
If an Aquatic Resource Alteration Permit (ARAP) has been obtained for this site, what is the permit number? NR(S)			
Receiving waters: McKellar Lake and Mississippi River			

Site Owner/Developer (Primary Permittee): (Provide person, company, or entity that has operational or design control over construction plans and specifications): Tennessee Valley Authority

For corporate entities only, provide correct Tennessee Secretary of State (SOS) Control Number:
(an incorrect SOS control number may delay NOI processing)

Site Owner or Developer Contact Name: (signs the certification below) Robert Deacy		Title or Position: SVP, GEN CON, PROJECTS & SERV	
Mailing Address: 1101 Market Street, LP 5D-C		City: CHATTANOOGA	State: TN	Zip: 37402
Phone: (423) 7516922	Fax: ( )	E-mail: rmdeacy@tva.gov	

Optional Contact: Stacey McCluskey		Title or Position: Prog Mgr, Environmental Support	
Mailing Address: 1010 Reservation Road , Muscle Shoals, AL		City: MUSCLE SHLS	State: AL	Zip: 35662
Phone: (256) 3147872	Fax: ( )	E-mail: ssmccluskey@tva.gov	

Owner/Developer(s) 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/Developer Name (print/type): Robert Deacy	Signature:	Date: 10/2/2018
Owner/Developer Name (print/type):	Signature:	Date:

Contractor 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. As specified in Tennessee Code Annotated Section 39-16- 702(a)(4), this declaration is made under penalty of perjury.

Contractor name, address, and SOS control number (if applicable):	Signature:	Date:

OFFICIAL STATE USE ONLY

Received Date:	Reviewer:	Field Office:	Permit Tracking Number: TNR	Exceptional TN Water:
Fee(s):	T & E Aquatic Flora/Fauna:	SOS Corporate Status:	Waters with Unavailable Parameters:	Notice of Coverage Date:

Storm Water Pollution Prevention Plan

Tennessee Department of Environment and Conservation
General NPDES Permit Application
for Discharges of Storm Water Associated with Construction Activities
Permit No. TNR100000
Part 3.5. Storm Water Pollution Prevention Plan (SWPPP)

TENNESSEE VALLEY AUTHORITY
ALLEN FOSSIL PLANT
STORM WATER REROUTES

Prepared for:

Tennessee Valley Authority
Coal Combustion Products
1101 Market Street
Chattanooga, TN 37402

September 7, 2018

Prepared by:

STANTEC CONSULTING SERVICES INC.

Stantec

3052 Beaumont Centre Circle
Lexington, KY 40513
(859) 422-3000
Stantec Project No. 175568252

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

SITE / OWNER INFORMATION

Project Name:	**Tennessee Valley Authority** **Allen Fossil Plant** **Stormwater Reroute Project**
Site Location (County):	Shelby County, Tennessee
Owner/Primary Permittee:	Tennessee Valley Authority
Owner/Primary Permittee Address & Phone:	Robert Deacy Tennessee Valley Authority 1101 Market Street Chattanooga, TN 37402 Phone: (423) 751-6922
General Contractor (Operator):	TBD
General Contractor Address & Phone:	TBD
Description of Proposed Project:	This project will involve selective demolition and modification of existing stormwater drainage system, grading areas to drain, and stabilization of disturbed ground.
Standard that EPSC Measures Meet:	5-year / 24-hour Storm Event

Discharges to Waters Impaired by Siltation or Habitat Alteration:	**Yes**	Is project located within a watershed which maintains an approved TMDL for siltation or habitat alteration? If so, include the 8-digit Hydrologic Unit Code (HUC) to the right.	No
Discharges to Exceptional Tennessee Waters:	**No**	Is project located within a sub-watershed which has a Waste Load Allocation (WLA? If so, include the 12-digit HUC (or 4-digit sub-watershed code).	N/A
Discharges to MS4:	**Yes**	Does project have a direct discharge to a 303(d) listed stream for siltation or habitat alteration? If so, list stream name to the right.	Yes, McKellar Lake

1.0 INTRODUCTION

This Storm Water Pollution Prevention Plan (SWPPP) has been developed and prepared in accordance with current engineering practices. This SWPPP identifies potential sources of pollution that one would reasonably expect to affect the quality of storm water discharges from the construction site. This SWPPP describes the implementation practices that will be used to effectively reduce pollutants in storm water associated with construction activities at the Allen Fossil Plant Stormwater Reroute project. It has been designed to comply with the terms and conditions of the Tennessee General Permit No. TNR100000 (Discharges of Storm Water Associated with Construction Activities).

In accordance with Section 3.5. of the Tennessee Department of Environment and Conservation's (TDEC) National Pollutant Discharge Elimination System (NPDES) General Permit TNR100000 (Permit), the components of the SWPPP for the site have been included herein.

1.1 Permitting Authority

This SWPPP has been prepared to cover storm water runoff from a construction site owned by the Tennessee Valley Authority. Therefore, under Section 1.4.5 of the Permit, permitting of storm water runoff from this federal agency site will remain solely under the authority of TDEC and is exempt from the jurisdiction of the local NPDES-permitted municipal separate storm sewer system (MS4) of the city of Memphis.

1.2 Discharges into Exceptional Tennessee Waters

The project site is upstream of and in relatively close proximity to Exceptional Tennessee Waters. Under the requirements of Section 5.4 of the Permit, the EPSC measures used at the site are designed to control storm water runoff generated by a 5-year, 24-hour storm event and this SWPPP has been prepared by a licensed professional Engineer.

Since there is no direct runoff into the Exceptional waters no further additional considerations have been taken in the preparation of this SWPPP relative to the Exceptional waters.

2.0 SITE DESCRIPTION

a) ***A description of all the construction activities at the site.***

The proposed project includes demolition and modification of existing site infrastructure, final grading for surface runoff management from the site, and placement of crushed stone for final stabilization of the site. See Figure 1 for a USGS topographic map and site vicinity map of the project.

b) ***The intended sequence of major activities that disturb soils for major portions of the site (e.g., grubbing, excavation, utilities, processing, grading, stabilization, etc.).***

1) Installation of initial sedimentation and erosion control devices, including silt fence perimeter protection and rock check dams;
2) Selective demolition and modification of existing site infrastructure (i.e. ash trench and sumps);
3) Regrading project areas to provide positive drainage for surface water runoff management;
4) Final stabilization (crushed stone);
5) Removal of temporary erosion control devices once final stabilization has been established.

The general sequence of major activities above will be replaced by a "Plan of Operation" provided by the Contractor prior to the start of Work. This "Plan of Operation" will indicate the Contractor's intended sequence of construction activities at the site. However, the "Plan of Operation" shall require that the EPSC measures for each Stage must be in place and functional prior to earth disturbing operations. It shall be attached to and included as part of the SWPPP.

c) ***Estimates of the total area of the site, and total area that is expected to be disturbed by excavation, grading, filling, or other construction activities.***

Total Project Area: ±67 acres

Total Disturbed Area: ±4.6 acres

d) ***A description of the topography of the site including an estimation of the percent slope and the variation in percent slope found on site (such estimation on a basis of a drainage area serving each outfall).***

The project areas have been previously developed and are part of the larger plant infrastructure. The project area is largely flat with low topographic relief. Maximum slopes of 1 – 2 percent are present in the project area.

e) ***An estimate of drainage area (acres) serving each outfall.***

This project has 4 outfall points depicted on Figure 1 and the erosion control plans in Appendix A. Table 1 lists the locations of impacted drainage features that could transport pollutants off-site, their associated outfall point numbers, drainage basin slopes and estimated drainage areas.

Table 1. Outfall Information

Outfall No.	Latitude / Longitude	Drainage Location Description	Impacted Drainage Feature	Disturbed Drainage Area (ac.)**	Estimated % Slope Within Drainage Basin
F4	N 35.0726° W 90.1429°	Existing 24" RCP	McKellar Lake	±3.6 ac	3% (max.)
F6	N 35.0709° W 90.1459°	Three Existing 18" RCP	Mississippi River	±0.5 ac	3% (max.)
F7	N 35.0754° W 90.1530°	Existing 30" CMP	McKellar Lake	±0.2 ac	3% (max.)
F9	N 35.0204° W 90.0417°	New 24" HDPE	McKeller Lake	±0.3 ac	3% (max.)

** Prior to construction, the disturbed areas drain to NPDES Outfall 001.

The drainage basin size and proximity to the sediment impaired waters of McKellar Lake will require that a Site Assessment be performed as specified by the requirements of the Individual NPDES Permit issued for this construction. At a minimum, Site Assessments will be performed per Section 3.1.2 of the Construction General Permit, TNR100000.

Based on the sequencing of construction, the disturbed drainage areas for the CT Reroute and Stormwater Reroutes will continue to drain to NPDES Outfall 001 through the East Ash Pond. These areas will be reclaimed (with crushed stone or vegetation) prior to discharge through stormwater outfalls F6, F7, and F9.

f) ***Data describing the soil, how the soil type will dictate the needed control measures and how the soil may affect the expected quality of discharge from the site. The data may be referenced or summarized.***

INFORMATION TAKEN FROM THE LOCAL SOIL SURVEY: The project is located in Shelby County, Tennessee. According to maps provided by the Natural Resources Conservation Service on the Web Soil Survey internet site and the County Soil Conservation District, the project site consists of various types of sandy silt loam soils. The entirety of the project site was previously developed during construction of the plant. Therefore, any foundation soils that may be exposed or excavated will represent placed fill. See Appendix B for additional soils information.

Silt loam soils will require check dams to slow water in channels so that the heavy particles can settle out. Detention or ponding of water will be the preferred method to remove suspended sediment prior to discharging through the outfalls.

The quality of discharge from properly implemented and maintained EPSC measures is expected to be sufficient to comply with the terms and conditions of this permit.

g) ***An estimate of the runoff coefficient of the site after construction activities are completed and a description of how the runoff will be handled to prevent erosion at the permanent outfall and receiving stream. An estimate of the percentage of impervious area before and after construction must also be provided.***

The pre-construction runoff curve number (RCN) was calculated using the 4.6-acre disturbed area. The pre-construction disturbed area is depicted in Table 2.

Table 2. Runoff Curve Number for Existing Conditions

Surface Description	Area (acres)	Runoff Curve Number
Impervious (concrete, buildings, gravel drives, rip rap, etc.)	4.6	90

A pre-construction weighted curve number was calculated from the above information and was determined to be 90.

The proposed project includes demolition/modification of existing site infrastructure, final grading for surface runoff management from the site, and final stabilization of the site. This construction will not substantially change the amount of pervious area; therefore, the RCN will be functionally equivalent to existing conditions. The post-construction runoff curve number was calculated using the 4.5-acre project area. The post-construction disturbed area is depicted in Table 3.

Table 3. Runoff Curve Number for Post-Construction Conditions

Surface Description	Area (acres)	Runoff Curve Number
Impervious (gravel drives, rip rap, etc.)	4.6	90

A post-construction weighted curve number was calculated from the above information and was determined to be 90.

Calculations for the runoff curve numbers depicted in the existing and post-construction conditions tables are found in Appendix C.

h) ***An erosion prevention and sediment control plan with the proposed construction area clearly outlined. The map should indicate the boundaries of the permitted area, drainage patterns, 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 and sinkholes, and identification on the erosion control plan of outfall points intended for coverage. The erosion control plan must meet requirements stated in Section 3.5.2 of the Permit (see Appendix F).***

1) See the attached USGS map (Figure 1) and EPSC Plans (Appendix A) for the construction boundaries, EPSC plans, and drainage patterns.

2) The areas that will have soil disturbance are designated on the erosion and sediment control plans by the limits of construction. Silt fence and check dams will be located along these lines/boundaries to protect receiving waters.

3) The areas of soil disturbance are shown on the plans in Appendix A and in Figure 1..

4) The locations of non-structural erosion controls are shown on the erosion and sediment control plans in Appendix A. For calculation details not provided on the erosion and sediment control plans, refer to the TDEC Erosion & Sediment Control Handbook for best management practices (BMPs).

5) Stabilization with erosion control measures will occur in selected areas. Temporary rock check dams will be used in ditches and swales throughout the project site to reduce the storm water velocities so that sediment will be removed prior to traveling off-site.

6) Initially, site runoff will be collected into drainage ditches within the project site and directed through the East Ash Pond prior discharging through Outfall No. 001.

7) During the reclamation process, the project site will be regraded to direct runoff to the north (through the existing Outfall F4 and the new Outfall F9) before discharging to McKellar Lake located within the Mississippi River watershed (HUC #08010100). Until reclamation is complete, stormwater will continue to be discharged through NPDES Outfall 001. McKellar Lake is listed on the Tennessee Department of Environment and Conservation's 2016 303(d) list as a receiving water impaired by siltation. The reroute of the CT sump will direct this flow currently discharged to existing outfall 001 to stormwater outfall F6. For the ACC utility reroutes, stormwater currently discharging through outfall F7 will continue to do so.

8) No wetland or other environmental features (i.e. sinkholes) are expected to be disturbed by the construction activities.

9) This project **does** discharge into waters with unavailable parameters for siltation and/or habitat alteration and into an existing MS4, and **does not** discharge into waters with an approved TMDL for siltation and/or habitat alteration, or into Exceptional Tennessee waters.

i) ***A description of any discharge associated with industrial activity other than construction storm water that originates on site and the location of that activity and its permit number.***

NPDES Permit No. TN0005355 regulates water discharged from the Allen Fossil Plant, and all discharge water sampling should be completed in accordance with this permit.

j) ***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 tracking number of the Aquatic Resources Alteration Permit (ARAP) or Section 401 Certification issued for the alteration.***

There are no identified streams or wetlands on or adjacent to the project.

k) ***The name of the receiving water(s) and approximate size and location of affected wetland acreage at the site.***

The receiving waters are as follows:

- McKellar Lake – TN0801010001_1200 – Outfall F4, F7, and F9
- Mississippi River – Outfall F6

This project will not affect any wetland areas.

l) ***If applicable, identify and outline the buffer zones established to protect waters of the state located within boundaries of the project.***

McKellar Lake, located north of the project site is listed as impaired by siltation or habitat alteration; however, the project drainage area will be stabilized with no exposed sediment. The new discharge flume and plunge pool for Outfall F9 is within 60 feet of the ordinary high-water mark for McKellar Lake. Per Section 5.4.2. of the general permit, BMPs providing equivalent protection to the natural 60-foot riparian buffer zone are required. Silt fence is planned between the construction activities and OHW line for the lake

to provide the necessary protection. The remaining construction activities all occur outside the 60-foot buffer zone.

m) *A description of lot-level EPSC measures to be implemented when a lot, or lots, at a subdivided construction project (residential, commercial, or industrial) is sold to a new owner prior to the completion of construction. The new operator must obtain coverage under this permit once the property is sold.*

This does not apply to this project – no subdivision will take place.

n) *Projects of more than 50 acres, the construction phases must be described.*

This project does not require more than 50 acres of disturbed area. Therefore, phasing is not required.

o) *A description of the protections (e.g. caution fencing or stream side buffer zones) employed to limit the disturbance if only a portion of the total acreage of the construction site is to be disturbed. The areas to be undisturbed shall be clearly marked in the field before construction activities begin.*

Only the 4.6 acres shown on the plans in Appendix A and Figure 1 will be disturbed.

For the area draining to F9, stormwater will continue to be conveyed in the concrete ash trenches to the concrete ash trench sump and pumped to the East Ash Pond until the ditch is constructed, riprap is placed, and outfall pipe is installed. At that point, the grade on the ash trench will be reversed to convey water to the west to the new ditch.

For the area draining to F4, the work upstream of the new proposed culvert will be completed prior to installing the culvert. Until the culvert is installed, the water will be pumped to the East Ash Pond. Once the new crushed stone stabilization is installed, the stormwater will be discharged out F4. No additional area outside of the disturbed area drains through the disturbed area

For the CT reroute work, stormwater is contained in the existing secondary containment bowl which is pumped to the East Ash Pond. This water will continue to be pumped to the East Ash Pond until the reroute is complete.

The ACC utility reroutes are in the upstream portion of the drainage area to outfall F7. Silt fence will be installed around the perimeter of the proposed trench excavations for the utility reroutes to protect stormwater from transporting sediment away from the proposed work.

p) *The name and number of the previously permitted Municipal Separate Storm Sewer to which the project discharges.*

This project does discharges into the Memphis/Shelby County municipal separate storm sewer system (MS4), permit number TNS068276.

3.0 EROSION PREVENTION AND SEDIMENT CONTROLS

The goal of this SWPPP is to maintain and protect the natural, physical, and biological characteristics and functions (e.g., no significant changes in the hydrological regime or pollutant input) of the receiving water by minimizing the dislodging and suspension of soil in runoff and by retaining mobilized sediment on-site.

3.1 Preconstruction and During Construction

Preconstruction planning should be used to sequence major grading activities to minimize the exposure time of graded or denuded areas. The erosion prevention and sediment control measures and/or plans shall be modified as necessary so that they are continuously effective throughout the course of the project. The Operator will be responsible for the implementation and execution of all storm water runoff controls. Preconstruction ground cover will 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. Temporary erosion control measures may be removed at the beginning of the workday but will be replaced at the end of the day. The structural controls to be used on this project and their placement are identified on the erosion prevention and sediment control plans in Appendix A.

3.2 Stabilization, Structural, and Non-Structural Controls

Storm water runoff controls for the proposed project will consist of the structural control measures themselves and the maintenance and inspection practices discussed later in this SWPPP. They have been designed to retain sediment on the project site. The following paragraphs describe the sequence of major construction activities that are planned for the site and the general stabilization and structural practices that will be associated with each activity. They also identify the party responsible for implementing the SWPPP.

3.2.1 Site Preparation

General Requirements: Site preparation must be held to the minimum necessary for grading and equipment operation. Erosion prevention and sediment control structures must be in place and functional before clearing, grubbing, excavation, grading, cutting or filling occurs, except as such work may be necessary to install erosion prevention and sediment control measures. Project plans, proposal contract, and standard details referenced in the project plans provide additional information regarding requirements for erosion prevention and sediment control, and protection of waters of the State and the United States.

Stabilization: Interim and permanent stabilization practices at site-specific locations are detailed on the Erosion Prevention and Sediment Control plans in Appendix A. Only the areas where grading and earth-moving activities are planned within 15 days will be cleared unless they are to be subsequently seeded and/or mulched or other temporary cover is installed. Stabilization practices rely primarily on seeding and mulching (if needed) of cleared and grubbed areas prior to other construction activities. Temporary seeding will be accomplished by using seed groups adapted for germination and growth during the subject season. Delay in planting cover vegetation until winter months (December – March) should be avoided, if possible.

Structural Practices: Structural practices include installation of silt fence, sediment tube checks, and construction of rock check dams in drainage ditches. These items will be installed prior to and during clearing operations. Silt fences and sediment tube checks will generally be installed parallel to slopes, but the ends of the fences and checks may turn slightly perpendicular and run up the slope to prevent bypass flows and ensure protection at those locations.

Stormwater will continue to be routed to the East Ash Pond until areas are stabilized. Once areas are stabilized, the proposed culverts can be installed and stormwater can be discharged to the proposed outfalls.

Responsible Party: The site Operator will be responsible for the implementation, maintenance, and inspection of the SWPPP structural practices during this construction activity.

3.2.2 Excavation, Backfilling, and Grading

General Requirements: Project plans, proposal contract, and standard details referenced in the project plans provide additional information regarding requirements for erosion prevention and sediment control and protection of waters of the State and the United States.

Stabilization Practices: Stabilization practices for this sequence includes backfilling excavated/stockpile locations to final grade with approved backfill to final grade and stabilizing during construction with stone surfacing, seeding and mulching (if needed), and/or installation of erosion control blankets as operations allow. Stabilization measures shall be initiated as soon as practicable on portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 15 days after the construction activity on that portion of the site has temporarily or permanently ceased, except in the following two situations:

1) Where the initiation of stabilization measures is precluded by snow cover or frozen ground conditions or adverse soggy conditions, stabilization measures shall be initiated as soon as practicable;
2) Where construction activity on a portion of the site is temporarily ceased, and earth disturbing activities will be resumed within 15 working days, temporary stabilization measures do not have to be initiated on that portion of the site.

Temporary or permanent stabilization will be completed within 15 days of final grading or earth-moving activities; areas with steep slopes (≥ 35%) are to be stabilized within 7 days, if applicable. Permanent or Temporary seeding will be accomplished by using seed groups adapted for germination and growth during the subject season. Delay in planting cover vegetation until winter months (December – March) should be avoided, if possible.

Structural Practices: Structural practices for the stormwater reroute project will include ditches with sufficient storage to provide sediment removal, installation of silt fence and sediment tube checks, and construction of rock check dams in drainage ditches. Silt fences and rock check dams will generally be installed parallel to slopes, but the ends of the fences and checks may turn slightly perpendicular and run up the slope to prevent bypass flows and ensure protection at those locations.

The ditch and pipe network for the project area is designed to provide sufficient storage to allow for sediment settling prior to discharge prior to release to McKellar Lake. Rock check dams will decrease flow velocity and provide for additional settlement removal by increasing residence time. Stormwater will continue to be routed to the East Ash Pond until areas are stabilized. Once areas are stabilized, the proposed culverts can be installed and stormwater can be discharged to the proposed outfalls.

Responsible Party: The site Operator will be responsible for the implementation, maintenance, and inspection of the SWPPP structural practices during this construction activity.

3.2.3 Final Stabilization

General Requirements: Project plans, proposal contract, and standard details referenced in the project plans provide additional information regarding requirements for erosion and siltation control and protection of waters of the State and the United States.

Stabilization Practices: Final stabilization will be accomplished by placing crushed stone cover over the stormwater reroutes and ACC utility reroutes. For the CT sump reroute, the areas will be stabilized with vegetation. Stormwater will continue to be routed to the East Ash Pond until areas are stabilized. Once areas are stabilized, stormwater can be discharged to the proposed outfalls.

A soil analysis must be performed prior to application of fertilizer to any portion of the project site. Soil analysis shall consist of parameters included within the Basic Test by the University of Tennessee Agricultural Extension for developing and maintaining fertilizer programs. Soil samples shall be representative of the project area where the fertilizer will be applied. Sample should be a composite and collected in general accordance with the University of Tennessee Extension "Soil Testing" brochure PB1061.

Table 4. Acceptable Seeding Mixtures

Seed Mixtures	Hydroseed Rate (pounds/acre PLS*)
Application Period: February 1 to November 15	
German Millet (Annual)	15
Bermuda Grass	15
Alfalfa	20
White Sweet Clover	5
Red Clover	5
Perennial Rye	30
Fescue (Endophyte free)	25
Weeping Lovegrass	3
Seed Mixes: November 15 to February 1	
Winter Wheat	60
Temporary Seed Mix:	
Annual Rye	60

* PLS Pure Live Seed is determined by multiplying the percent germination of the seed times the percent purity.

Structural Practices: All permanent structural practices have been completed at this point of the project. After final stabilization has been achieved, all silt fences, sediment tubes and rock check dams will be removed to prevent them from becoming pollutants.

Responsible Party: The site Operator will be responsible for the implementation, maintenance, and inspection of the SWPPP structural practices during this construction activity.

3.3 Post-Construction

The Owner does not anticipate any project-derived pollutants will occur after construction operations have been completed. The stabilized site should not present a significant increase in runoff or pollutants into the receiving waterway. Although maintenance and operation of the storm water management measures is not required by the permit, after discharges associated with construction activities have been eliminated from the site, the Owner will provide for routine maintenance of facilities.

3.3.1 Pollutant Controls

Procedures will include debris removal from drainage structures and trash removal and disposal from the installed facilities. Maintenance of the drainage ditches, conveyance pipes and structures will be the responsibility of the Owner.

3.3.2 Velocity Controls

The project includes the installation of rip rap aprons at the site drainage ditch outlets to reduce velocities of the flows exiting the site.

4.0 STORM WATER MANAGEMENT

4.1 Required Records

The operator will maintain at the site the following records of construction activities:

a) The dates when major grading activities occur;

b) The dates when construction activities temporarily or permanently cease on a portion of the site;

c) The dates when stabilization measures are initiated;

d) Records of inspections and corrective measures, including photographs of representative items requiring correction and the corrective action taken for it; and

e) Detailed records of rainfall events including dates, amounts of rainfall, and the approximate duration or starting and ending times.

4.2 Rainfall Monitoring Plan

Erosion prevention and sediment control measures and devices are utilized to minimize the dislodging and suspension of soil in runoff and to retain mobilized sediment on-site. Storm water runoff is directly proportional to the intensity and duration of a given rainfall event. Rainfall monitoring is necessary to estimate the effectiveness of erosion prevention and sediment control measures and devices at the construction site. The intent of the plan is to provide a means to record the volume of rainfall and the time in which it fell to estimate the intensity of the rainfall event. 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.

4.2.1 Equipment

If an on-site rain gauge is used, the following requirements shall be met. At a minimum, a fence post type rain gauge will be used to measure rainfall. The standard fence post rain gauge shall be a wedge-shaped gauge that measures up to six (6) inches (150mm) of rainfall (e.g. Tru-Chek® Direct-Reading Rain Gauge). An English scale should be provided on one face, with a metric scale on the other face. Graduation shall be permanently molded in durable weather-resistant plastic. The minimum graduations shall be 0.01inch (0.1 mm). An aluminum bracket with screws may be used for mounting the gauge on a wooden support.

4.2.2 Location

The rain gauge will be located at or along the project site, in an open area such that the measurement will not be influenced by outside factors (i.e. overhangs, gutters, trees, etc.). For linear projects, at least one rain gauge will be located within each linear mile (as measured along the centerline of the primary alignment) of the project where clearing, grubbing, excavation, grading, cutting or filling is being actively performed, or exposed soil has not yet been permanently stabilized.

4.2.3 Methods

The rain gauge or reference site data shall be checked after every rainfall event occurring on the project site. Detailed records of the rainfall event(s) including dates, amounts of rainfall, and the approximate duration or starting and ending times shall be maintained.

4.3 Maintenance

Maintenance activities will be undertaken to ensure that vegetation, erosion and sediment control measures, and other protective measures identified in the site Erosion Prevention and Sediment Control Plans 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. The need for maintenance will be determined through the inspection procedures listed below and will include, but not be limited to, the following practices:

a) Observation of control measures to determine compliance with the manufacturer's specifications and good engineering practices for installation and use of the control;

b) Removal of off-site sediment accumulations from the project site that have not reached a sinkhole and/or stream such that off-site impacts are minimized (Note: Sediment accumulations from the project site that have reached sinkholes and/or streams must not be removed until after consultation with TDEC);

c) Removal of sediment from silt fence and other sediment controls when the storage capacity has been reduced by 50 percent; and

d) Pickup or otherwise prevention of litter, construction debris, and construction chemicals from becoming a pollutant source prior to anticipated storm events.

In addition to the practices listed above, the project will be inspected as required by this SWPPP to ensure the maintenance and effectiveness of the erosion prevention and sediment control measures.

4.4 Inspection

The inspection schedule and documentation procedures have been designed to ensure that vegetation, erosion and sediment control measures, and other protective measures identified in the SWPPP are kept in good and effective operating condition. If the site description and pollution prevention measures in the SWPPP need to be revised based on the results of the inspection, those revisions will be completed as appropriate, but no later than 7 calendar days following the inspection identifying the need.

4.4.1 Schedule

Our review of the Tennessee Department of Environment and Conservation's 2016 303(d) List indicates that the project **will** discharge to bodies of water with unavailable parameters for siltation or habitat alteration, and **will not** discharge to waters with an approved TMDL or into Exceptional Tennessee Waters. The schedule for Erosion Prevention and Sediment Control inspections will be as follows:

a) Since the drainage areas are larger than 5 acres and within proximity to sediment impaired waters (McKellar Lake), a Site Assessment must be performed as specified by the requirements of the Individual NPDES Permit issued for this construction. At a minimum, Site Assessments will be performed per Section 3.1.2 of the General Permit, TNR100000. The first inspection is required within 30 days of construction commencing at each portion of the site that drains to qualifying acreage.

   Each Site Assessment should verify installation, functionality, and performance of the SWPPP EPSC measures. Each Site Assessment should be performed with the inspector and include a review and update (if applicable) of the SWPPP. The Site Assessment findings should be documented and kept with the SWPPP at the site. The documentation should at least include the inspection form, printed name/signature of the individual performing the Site Assessment, and certification statement. Additional Site Assessments may be required if the inspection conditions have the potential of causing pollution to the waters of the state.

b) At least twice per calendar week, at least 72 hours apart, during any construction and thereafter until the site is fully constructed and all disturbed areas not paved, concreted, or covered by stone are permanently stabilized. Site Assessments can take the place of one of the twice weekly inspections.

4.4.2 Documentation Requirements

Inspections will be documented in writing and include the following:

a) Scope of the inspection;

b) Name(s) and title or qualifications of personnel making the inspection;

c) The date(s) of the inspection;

d) Major observations relating to the implementation of the SWPPP, including the location(s) of discharges of sediment or other pollutants from the site and of any control devices that failed to operate as designed or proved inadequate for a particular location; and

e) Actions taken to replace, modify, or repair any control measures identified as inadequate or in disrepair during inspections.

All inspections shall be documented on the Construction Storm Water Inspection Certification form provided in Appendix D of this SWPPP.

4.4.3 Areas to be Inspected

Qualified personnel will inspect disturbed areas of the construction site that have not been finally stabilized for evidence of, or the potential for, pollutants to enter the drainage system. These areas include, but are not limited to, the following:

a) Disturbed areas and areas used for storage of materials that are exposed to precipitation;

b) Erosion prevention and sediment control measures identified in the SWPPP;

c) Outfall points (where discharges leave the site or enter waters of the State). Where outfall locations are inaccessible, the nearest possible downstream locations shall be inspected;

d) Locations where vehicles enter or exit the site shall be inspected for evidence of off-site sediment tracking; and

e) Fueling station(s) on-site (if applicable – See Section 5.3).

These inspection requirements do not apply to definable areas of the site that have met the final stabilization requirement and have been noted in the SWPPP.

4.4.4 Repairs, Modifications, and Revisions

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 storm event, but in no case more than 7 days after the need is identified.

4.4.5 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 must be kept on site with the SWPPP.

5.0 OTHER ITEMS REQUIRING CONTROL

5.1 Construction Materials

Construction materials that are anticipated to be present at this construction site include:

- Coal and residuals;
- Fill Soils;
- Sump/Pump system;
- Aggregate/Rock;
- Seed and mulch (if needed)

Stockpiled erodible construction materials will be secured by control measures installed down gradient of the stockpiles. Other materials necessary for this project will be placed in a staging area away from storm water conveyances until they are installed.

The Operator may keep several portable storage units on the project site to store construction equipment.

5.2 Waste Materials

Waste material (earth, rock, asphalt, concrete, etc.) not required for the construction of the project shall be disposed of by the Operator. The Operator will be required to obtain any and all necessary permits including, but not limited to, NPDES, Aquatic Resource Alteration Permit(s), Corps of Engineers Section 404 permits, and TVA Section 26A permits to dispose of waste material.

5.3 Other Materials

Other materials not used for construction but needed for construction at the proposed site must also be controlled to prevent pollution of the receiving waters. These items include, but are not limited to, the storage and dispensing of the following:

- Fertilizers and Lime
- Diesel and Gas
- Machinery Lubricants (oil and grease)
- Cleaning Solvents

Soils at fueling stations should be checked daily for signs of spillage or staining of the soil. Any fixed fueling station/tank storage shall have a containment system to prevent runoff by potential spills or tank rupture. Machinery should be serviced or repaired to prevent leaks of fluids.

The Operator will be responsible for compliance with all applicable Environmental Protection Agency (EPA) and USDOT guidelines regarding equipment-related fluids as well as all National Fire Protection Association regulations regarding flammable liquids. No construction materials or equipment are expected to produce pollutant runoff.

5.4 Non-Storm Water Discharges

The following non-storm water discharges have potential for occurring from the site during the construction period:

a) Groundwater may be intercepted during the construction of this project. While these locations are yet unknown, the SWPPP will be modified to incorporate these areas should they arise;

b) The use of wash waters to clean and remove construction generated soils from roadways (where there have been no spills or leaks of toxic or hazardous materials);

c) Dust suppression water used on haul routes and exposed soils;

d) Water used to wash vehicles (where detergents are not used and detention and/or filtering are provided before the water leaves the site).

All non-storm water discharges will be directed to stable discharge reduction structures prior to leaving the site outfall. Wash down or waste discharge of concrete trucks will not be permitted on-site unless a proper settlement area has been constructed in accordance with both state and federal regulations.

6.0 REQUIREMENTS FOR PLANS AND REPORTS

6.1 Keeping SWPPP Current

a) The Owner will amend the SWPPP when any of the following conditions apply:

b) Whenever there is a change in the scope of the project that would be expected to have a significant effect on the discharge of pollutants to the waters of the State and which has not otherwise been addressed in the SWPPP;

c) Whenever inspections or investigations by site Operators, local, state, or federal officials indicate the SWPPP is proving ineffective in eliminating or significantly minimizing pollutants from construction activity sources, or is otherwise not achieving the general objectives of controlling pollutants in storm water discharges associated with construction activity;

d) When any new Operator and/or sub-Operator is assigned or relieved of their responsibility to implement a portion of the SWPPP; and

e) When the SWPPP must be modified to prevent a negative impact to legally protected state or federally listed fauna or flora (or species proposed for such protection).

6.2 Making Plans Accessible

The operator will retain a copy of this SWPPP (including a copy of the permit language and all reports) at the construction site (or other local location accessible to TDEC and the public) from the date construction commences to the date of final stabilization. The Operator (who will have operations control over daily pollution prevention plan implementation) will have a copy of the SWPPP available at the location where work is occurring on-site for the use of operators and those identified as having responsibilities under the SWPPP whenever they are on the construction site.

Prior to the initiation of land disturbing activities and until the site has met the final stabilization criteria, the Operator will post a notice near the main entrance of the construction site with the following information

a) A copy of the cover page from the Individual NPDES Permit with the permit number for the project;

b) The name, telephone number, and address of the local TVA contact person as follows (see Appendix G);

TBD
2574 Plant Road
Memphis TN, 38019
(XXX) XXX - XXXX

c) A brief description of the project; and

d) The location of the SWPPP (especially important if the site is inactive or does not have an on-site location at which to store the SWPPP).

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

6.3 Notice of Termination

When all storm water discharges from construction activities that are authorized by the permit are eliminated by final stabilization, the Owner will submit a Notice of Termination (NOT) that is signed in accordance with the permit. For the purposes of the certification required by the NOT, the elimination of storm water discharges associated with the construction activity is understood to mean the following:

a) That all disturbed soils at the portion of the construction site where the Operator had control have been finally stabilized;

b) Temporary erosion and sediment control measures have been or will be removed at an appropriate time to ensure final stabilization is maintained; or

c) That all storm water discharges associated with construction activities from the identified site that are authorized by the individual NPDES permit have otherwise been eliminated from the portion of the construction site where the Operator had control.

The NOT will be submitted on the Tennessee Department of Environment and Conservation's NOT form provided in Appendix E of this SWPPP.

6.4 Retention of Records

The Owner 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. The Owner is aware the retention period may be extended by written request of the Director.

7.0 CERTIFICATIONS

OWNER'S CERTIFICATION

"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 – Tennessee Valley Authority

Signed: _____ _____

Robert Deacy Date

7.0 CERTIFICATIONS

OWNER'S CERTIFICATION

"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 – Tennessee Valley Authority

Signed: _____ 10/2/2018

Robert Deacy — Date

OPERATOR'S CERTIFICATION

"I certify under penalty of law that 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. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury."

General Contractor: _____

Signed: _____ _____
Date

General Contractor: _____

Signed: _____ _____
Date

General Contractor: _____

Signed: _____ _____
Date

General Contractor: _____

Signed: _____ _____
Date

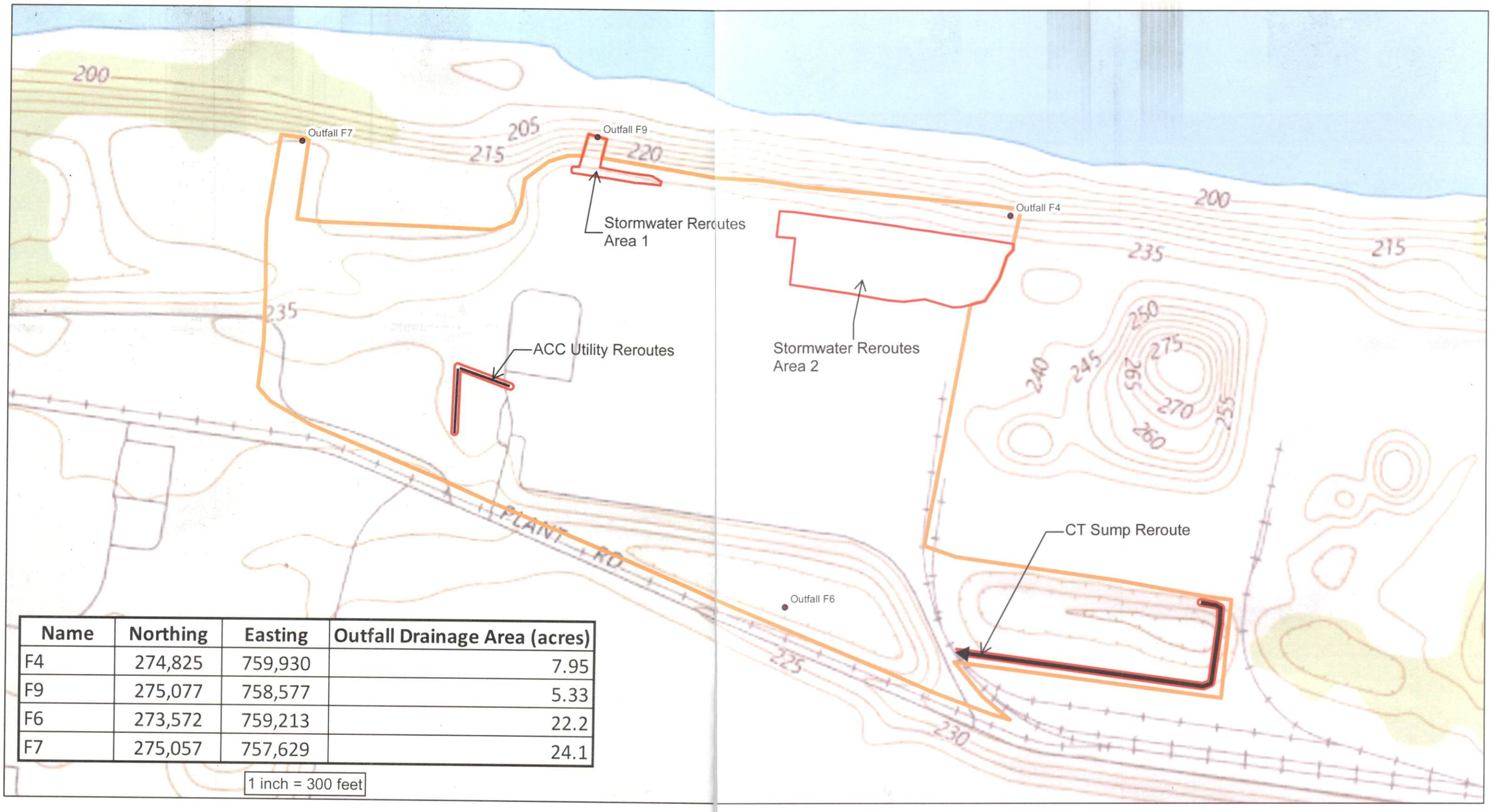
ENGINEER'S CERTIFICATION

I, Robert D. Fuller, certify that this SWPPP and accompanying drawings were prepared under my responsible charge.

Signature	TN License No.	Date
Robert D. Fuller	121343	9/7/2018

Figure 1

USGS Topographic Map



Name	Northing	Easting	Outfall Drainage Area (acres)
F4	274,825	759,930	7.95
F9	275,077	758,577	5.33
F6	273,572	759,213	22.2
F7	275,057	757,629	24.1

1 inch = 300 feet

\\Us1243-f01.workgroup.\1755\active\175568252\technical_production\design\working\.amcgrath\TVA Allen Outfall Figure_09052018.mxd
Revised: 2018-09-05 By: .ammcgrath

Stantec

Notes
1. Coordinate System: NAD 1927 StatePlane Tennessee FIPS 4100
2. Topographic data: USGS (24K)

Legend

- Outfalls
- Combustion Turbine Reroute (Discharge to Outfall F6)
- Limits of Disturbance
- Project Area

September 2018
Project No. 175568252

Client/Project
Tennessee Valley Authority
Allen Fossil Plant - Stormwater Reroutes
Memphis, Shelby County, Tennessee

Figure No.
1

Title
Outfalls for Stormwater Reroutes

Appendix A

Erosion Prevention and Sediment Control (EPSC) Plans

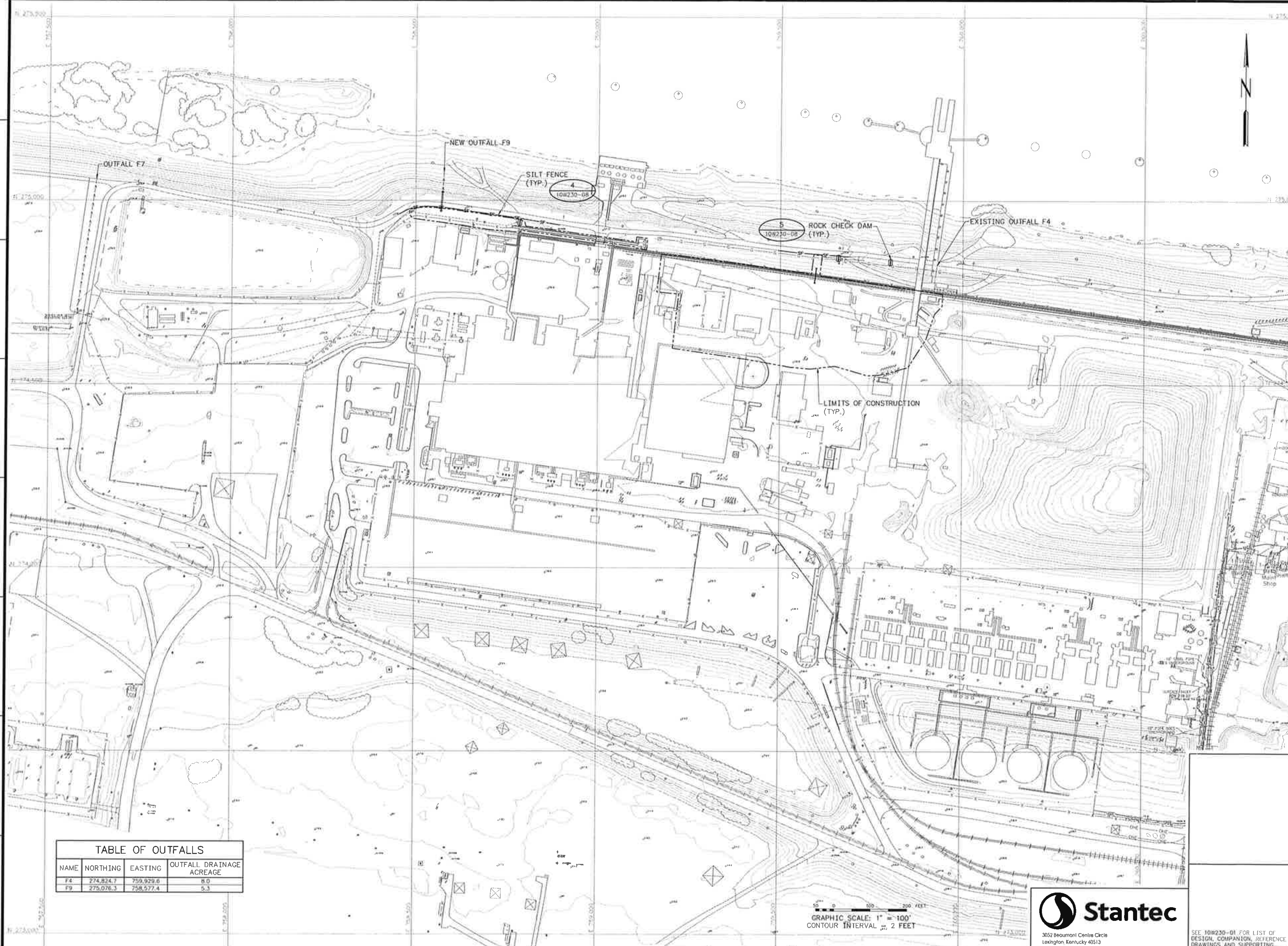


TABLE OF OUTFALLS

NAME	NORTHING	EASTING	OUTFALL DRAINAGE ACREAGE
F4	274,824.7	759,929.6	8.0
F9	275,076.3	758,577.4	5.3

SURVEY CONTROL NOTE:

A GLOBAL POSITIONING SYSTEM (GPS) BASE STATION HAS BEEN ESTABLISHED AND TRANSFORMATION PARAMETERS DETERMINED BY TVA USING SELECTED SURVEY CONTROL MONUMENTS. CONTACT WITH TVA SURVEYING DEPARTMENT (423)751-8416 OR (423)751-2571 SHALL BE MADE BEFORE ANY SURVEY OR CONSTRUCTION WORK IS COMMENCED. BASE STATION FREQUENCIES AND TRANSFORMATION PARAMETERS WILL BE PROVIDED TO THE CONTRACTOR FOR USE IN CONSTRUCTION ACTIVITIES AT THE SITE. PREVIOUSLY USED OR ESTABLISHED CONTROL POINTS AND MONUMENTS SHALL NOT BE USED BY THE CONTRACTOR WITHOUT PRIOR APPROVAL BY TVA SURVEYING DEPARTMENT.

TOPOGRAPHIC NOTE:

TOPOGRAPHIC MAPPING INFORMATION WAS OBTAINED FROM TUCK MAPPING SOLUTIONS, INC. ON 03/11/14 AND SUPPLEMENTED WITH DATA FROM ALLEN AND HOSHALL, INC. ON 06/29/16. HORIZONTAL DATUM IS LOCAL 27 AND VERTICAL DATUM IS NGVD29.

PHASE 1 SEQUENCING:

1. INSTALL PERIMETER EPSC CONTROLS TO PROVIDE PROTECTION DURING CONSTRUCTION.
2. PRIOR TO CONSTRUCTION, PROVIDE INLET PROTECTION AT MANHOLES WHERE REQUIRED.
3. PERFORM NECESSARY INSPECTIONS AND REPAIR BMPS PROMPTLY IF DAMAGED OR IN NEED OF MAINTENANCE.
4. PROVIDE TEMPORARY STABILIZATION IN AREAS WHERE NO WORK WILL BE PERFORMED IN 14 DAYS.
5. INSTALL FINAL STABILIZATION MEASURES AS SOON AS POSSIBLE AFTER AREA HAS REACHED FINAL GRADE.

LEGEND

- EXISTING INDEX CONTOUR
- EXISTING INTERMEDIATE CONTOUR
- EXISTING HYDROGRAPHIC INDEX CONTOUR
- EXISTING HYDROGRAPHIC INTERMEDIATE CONTOUR
- EXISTING TREELINE
- EXISTING DITCHLINE/POOL
- EXISTING OVERHEAD ELECTRIC LINE
- EXISTING TRANSMISSION TOWER
- EXISTING FENCELINE
- EXISTING SPOT ELEVATION
- EXISTING DEPRESSION
- EXISTING STRUCTURE
- EXISTING RAILROAD
- EXISTING ROAD

ISSUED FOR BID

REV NO	DATE	DSGN	DRWN	CHKD	SUPV	RVWD	APPD	ISSD	PROJECT ID	AS CONST
R -	-	-	-	-	-	-	-	-	-	-
R 0 ISSUED FOR BID	08/17/18	CJJ	ACC	RDF	RDF	SJM	AWS	CFC	609672	-

SCALE: 1"=100' EXCEPT AS NOTED

YARD

\-

D4 STORMWATER REROUTES
EPSC PLAN
PHASE 1

DESIGNED BY	DRAWN BY	CHECKED BY	SUPERVISED BY	REVIEWED BY	APPROVED BY	ISSUED BY
C.J. JONES	A.C. CLINK	R.D. FULLER	R.D. FULLER	S.J. MERRY	A.W. SEABAUGH	C.F. CHAPPEL

ALLEN FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

SEE 10W230-01 FOR LIST OF DESIGN, COMPANION, REFERENCE DRAWINGS AND SUPPORTING DESIGN CALCULATIONS NUMBER.

Stantec
3052 Beaumont Centre Circle
Lexington, Kentucky 40513
www.stantec.com

AUTOCAD R 2013	DATE 08/17/18	38	C	10W230-05	R 0

STANTEC	0
TASK COMPLETED BY:	REV NO.

PLOT FACTOR:1
W_TVA

C.A.D. DRAWING
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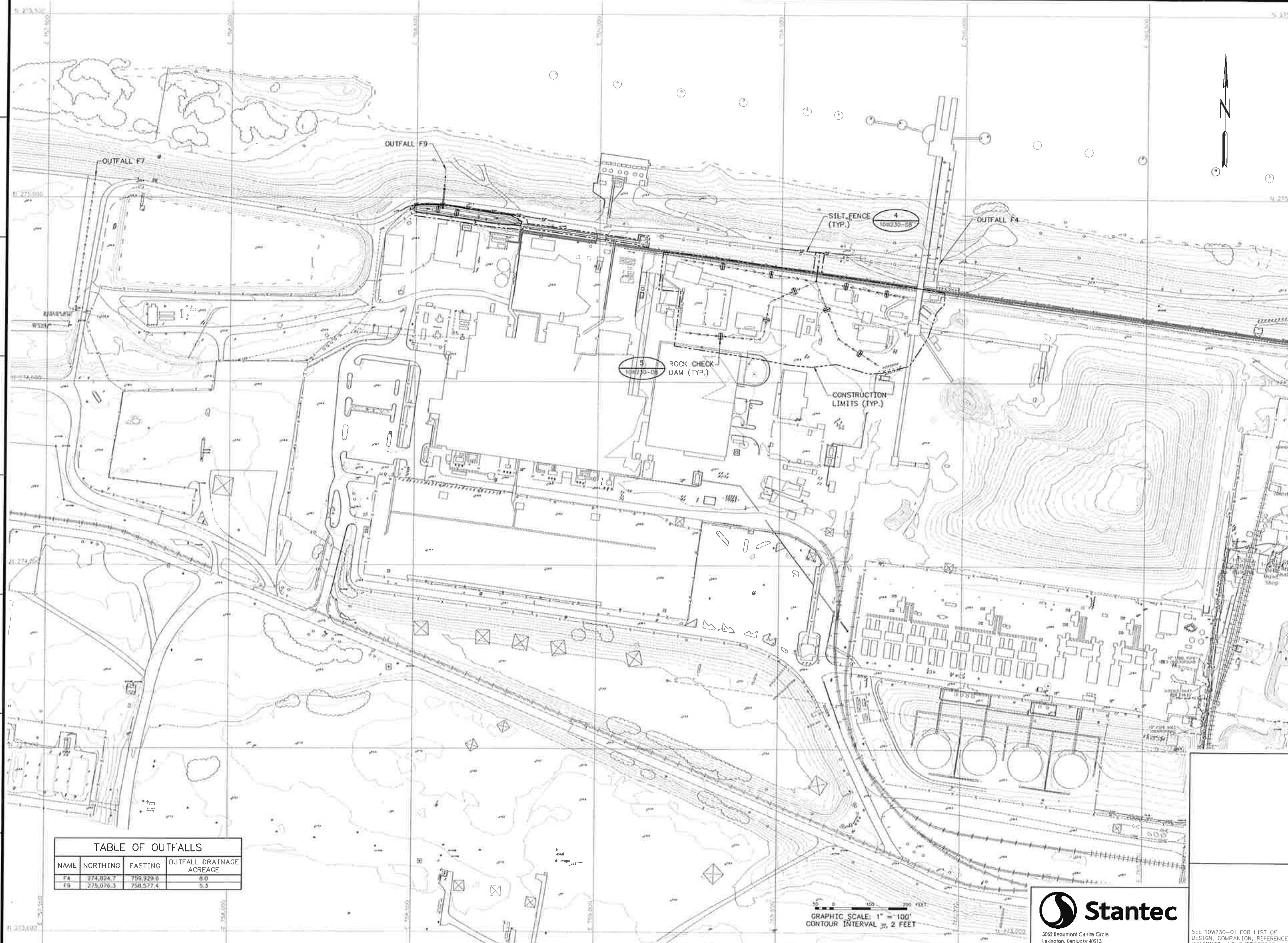

TABLE OF OUTFALLS

NAME	NORTHING	EASTING	OUTFALL DRAINAGE ACREAGE
F4	274,824.7	759,929.6	8.0
F9	275,076.3	758,577.4	5.3

SURVEY CONTROL NOTE:

A GLOBAL POSITIONING SYSTEM (GPS) BASE STATION HAS BEEN ESTABLISHED AND TRANSFORMATION PARAMETERS DETERMINED BY TVA USING SELECTED SURVEY CONTROL MONUMENTS. CONTACT WITH TVA SURVEYING DEPARTMENT (423)751-8416 OR (423)751-2571 SHALL BE MADE BEFORE ANY SURVEY OR CONSTRUCTION WORK IS COMMENCED. BASE STATION FREQUENCIES AND TRANSFORMATION PARAMETERS WILL BE PROVIDED TO THE CONTRACTOR FOR USE IN CONSTRUCTION ACTIVITIES AT THE SITE. PREVIOUSLY USED OR ESTABLISHED CONTROL POINTS AND MONUMENTS SHALL NOT BE USED BY THE CONTRACTOR WITHOUT PRIOR APPROVAL BY TVA SURVEYING DEPARTMENT.

TOPOGRAPHIC NOTE:

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PHASE 2 SEQUENCING:

1. PERFORM NECESSARY INSPECTIONS AND REPAIR BMPS PROMPTLY IF DAMAGED OR IN NEED OF MAINTENANCE.
2. PROVIDE TEMPORARY STABILIZATION IN AREAS WHERE NO WORK WILL BE PERFORMED IN 14 DAYS.
3. INSTALL FINAL STABILIZATION MEASURES AS SOON AS POSSIBLE AFTER AREA HAS REACHED FINAL GRADE.

LEGEND

- EXISTING INDEX CONTOUR
- EXISTING INTERMEDIATE CONTOUR
- EXISTING HYDROGRAPHIC INDEX CONTOUR
- EXISTING HYDROGRAPHIC INTERMEDIATE CONTOUR
- EXISTING TREELINE
- EXISTING DITCHLINE/POOL
- EXISTING OVERHEAD ELECTRIC LINE
- EXISTING TRANSMISSION TOWER
- EXISTING FENCELINE
- EXISTING SPOT ELEVATION
- EXISTING DEPRESSION
- EXISTING STRUCTURE
- EXISTING RAILROAD
- EXISTING ROAD
- PROPOSED INDEX CONTOUR
- PROPOSED INTERMEDIATE CONTOUR
- PROPOSED DITCHLINE

ISSUED FOR BID

REV NO	DATE	ECN	DRWN	CHKD	SUPV	RVWD	APPD	ISSD	PROJECT ID	AS CONST
R 0 ISSUED FOR BID	08/17/18	CJJ	ACC	RDF	RDF	SJM	AWS	CFC	609672	-

SCALE: 1"=100' EXCEPT AS NOTED

YARD

D4 STORMWATER REROUTES
EPSC PLAN
PHASE 2

DESIGNED BY	DRAWN BY	CHECKED BY	SUPERVISED BY	REVIEWED BY	APPROVED BY	ISSUED BY
C.J. JONES	A.C. CLINK	R.D. FULLER	R.D. FULLER	S.J. MERRY	A.W. SEABAUGH	C.F. CHAPPEL

ALLEN FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R 2013 | DATE 08/17/18 | 38 | C | 10W230-06 | R 0

SEE 10W230-01 FOR LIST OF DESIGN, COMPANION, REFERENCE DRAWINGS AND SUPPORTING DESIGN CALCULATIONS NUMBER.

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Lexington, Kentucky 40513
www.stantec.com

STANTEC | 0
TASK COMPLETED BY: | REV NO.

PLOT FACTOR:1
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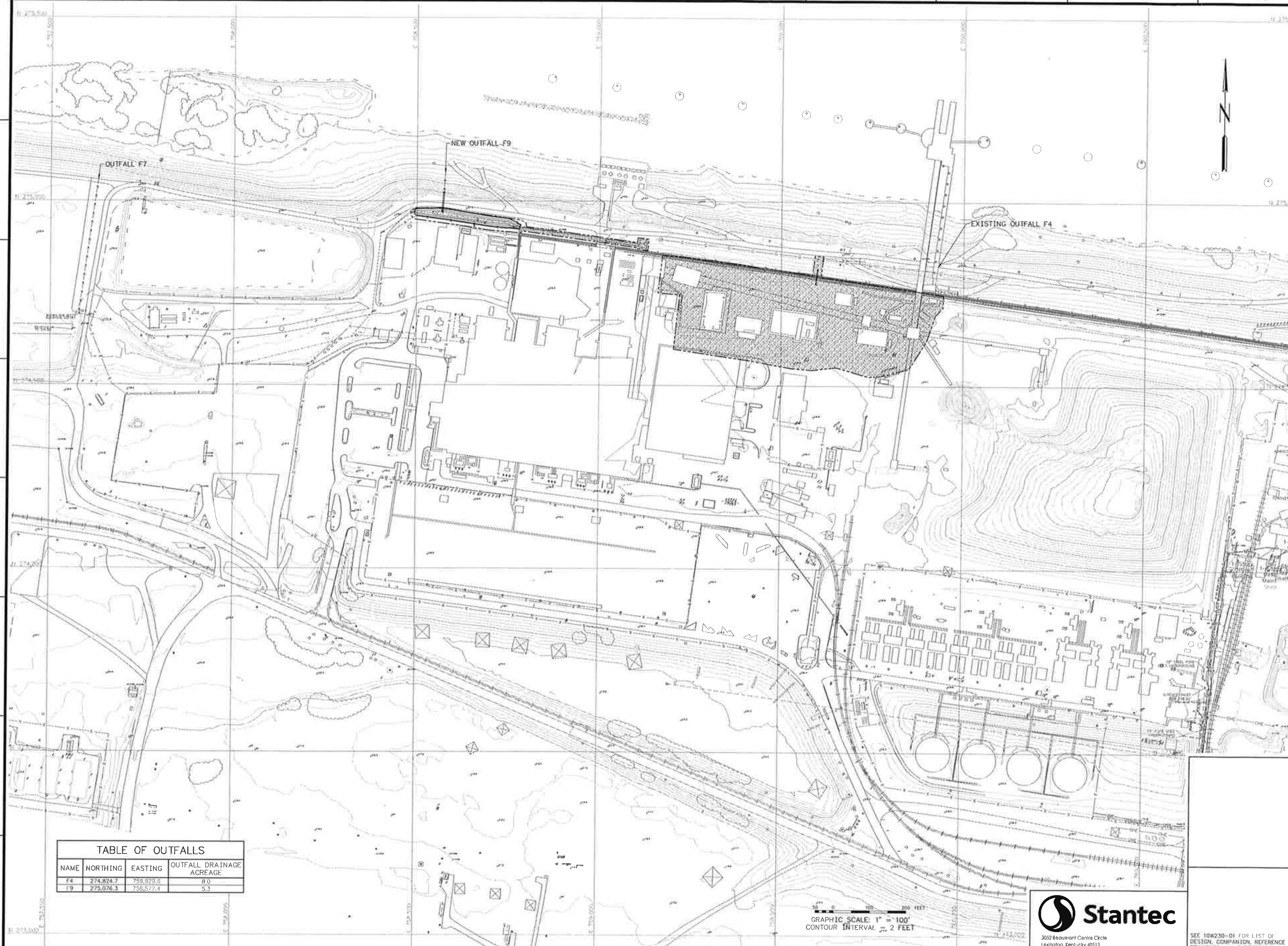

TABLE OF OUTFALLS			
NAME	NORTHING	EASTING	OUTFALL DRAINAGE ACREAGE
F4	274,824.7	759,929.6	8.0
F9	275,076.3	758,577.4	5.3

SURVEY CONTROL NOTE:

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PHASE 3 SEQUENCING:

1. PERFORM NECESSARY INSPECTIONS AND REPAIR BMPS PROMPTLY IF DAMAGED OR IN NEED OF MAINTENANCE.
2. PROVIDE TEMPORARY STABILIZATION IN AREAS WHERE NO WORK WILL BE PERFORMED IN 14 DAYS.
3. INSTALL FINAL STABILIZATION MEASURES AS SOON AS POSSIBLE AFTER AREA HAS REACHED FINAL GRADE.

NOTE:

SEDIMENT CONTROL FEATURES (SILT FENCE, ROCK CHECKS) SHALL BE INSPECTED AND MAINTAINED PER SWPPP UNTIL AREA HAS RECEIVED FINAL STABILIZATION.

LEGEND

- EXISTING INDEX CONTOUR
- EXISTING INTERMEDIATE CONTOUR
- EXISTING HYDROGRAPHIC INDEX CONTOUR
- EXISTING HYDROGRAPHIC INTERMEDIATE CONTOUR
- EXISTING TREELINE
- EXISTING DITCHLINE/POOL
- EXISTING OVERHEAD ELECTRIC LINE
- EXISTING TRANSMISSION TOWER
- EXISTING FENCELINE
- EXISTING SPOT ELEVATION
- EXISTING DEPRESSION
- EXISTING STRUCTURE
- EXISTING RAILROAD
- EXISTING ROAD
- PROPOSED INDEX CONTOUR
- PROPOSED INTERMEDIATE CONTOUR
- 6" TDOT NO. 57 STONE

ISSUED FOR BID

REV NO	DATE	DSGN	DRWN	CHKD	SUPV	RVWD	APPD	ISSD	PROJECT ID
R 0 ISSUED FOR BID	08/17/18	CJJ	ACC	RDF	RDF	SJM	AWS	CFC	609672

SCALE: 1"=100' EXCEPT AS NOTED

YARD

D4 STORMWATER REROUTES
EPSC PLAN
PHASE 3

DESIGNED BY	DRAWN BY	CHECKED BY	SUPERVISED BY	REVIEWED BY	APPROVED BY	ISSUED BY
C.J. JONES	A.C. CLINK	R.D. FULLER	R.D. FULLER	S.J. MERRY	A.W. SEABAUGH	C.F. CHAPPEL

ALLEN FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

Stantec
3052 Beaumont Centre Circle
Lexington, Kentucky 40513
www.stantec.com

SEE 10W230-01 FOR LIST OF DESIGN, COMPANION, REFERENCE DRAWINGS AND SUPPORTING DESIGN CALCULATIONS NUMBER.

AUTOCAD R 2013 | DATE 08/17/18 | 38 | C | 10W230-07 | R 0

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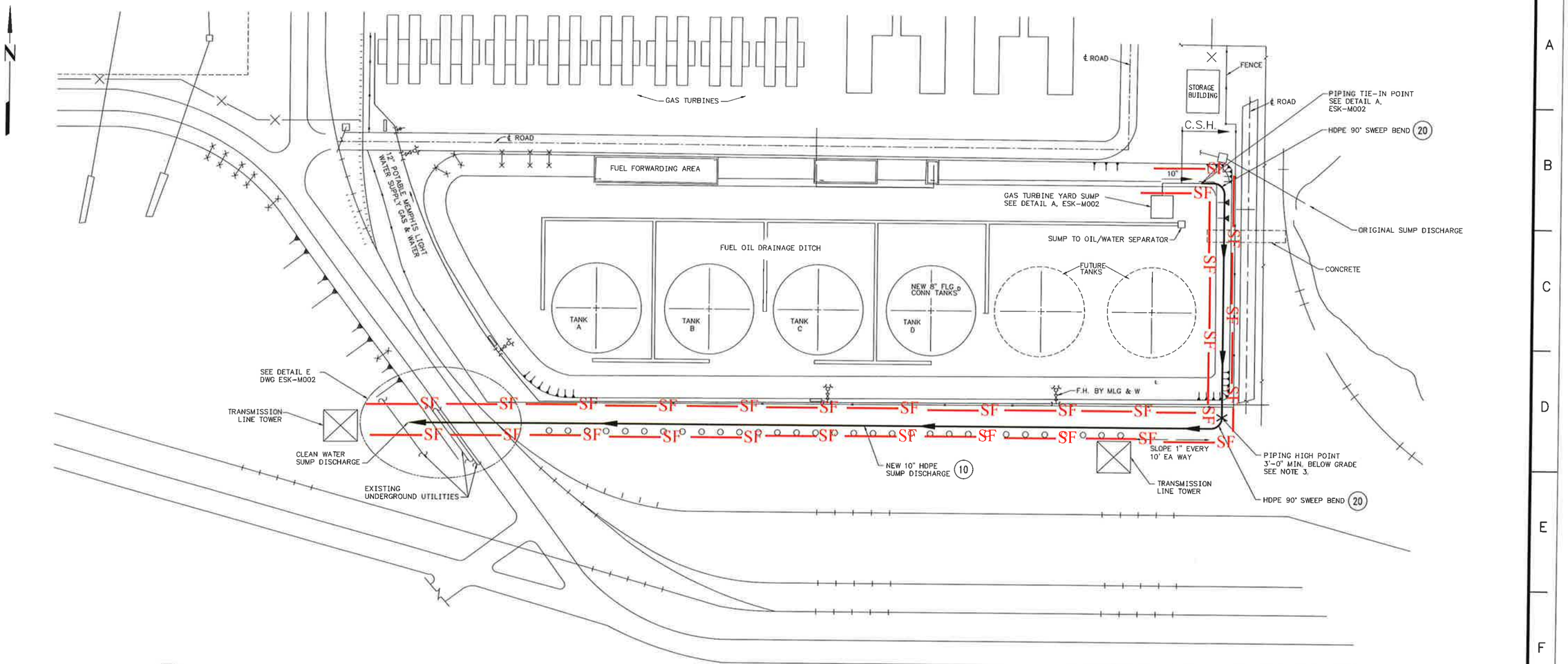
TASK COMPLETED BY: | REV NO.

PLOT FACTOR:1
W_TVA

C.A.D. DRAWING
DO NOT ALTER MANUALLY



NOTES:

1. SEE DWGS 10W235, 10W241, 10W267-3 17W500-5, FOR CURRENT YARD AND TURBINE DRAIN CONFIGURATION SEE TVA DWG 17W500-5 FOR NEW FUEL OIL TANK FARM SPILL CONTAINMENT SUMP PUMP AND PIPING CONFIGURATION
2. FOR PARTS NOTED WITH (XX), SEE BOM ON DRAWING ESK-M007.
3. PIPING SHALL MAKE A GRADUAL ASCENT FROM SUMP TIE-IN POINT TO PIPING HIGH POINT. FROM HIGH POINT, PIPING SHALL GRADUALLY SLOPE DOWN TOWARDS DISCHARGE

PHASE 1 - EPSC PLAN

EPSC LEGEND:

———SF——— SILT FENCE

EPSC NOTE:

SILT FENCE LOCATION IS APPROXIMATE. SILT FENCE TO BE PLACED ON EITHER SIDE OF THE WORKING AREA

DCN ALF-119819084
AA-01
RELEASE FOR CONSTRUCTION
8/22/18

R										
R 0	WAD	GLG	BSC	DHF						0
ISSUE FOR MECHANICAL REROUTES										
REV NO.	DATE	DSGN	DRWN	CHKD	SUPV	RVWD	APPD	ISSD	PROJECT ID	AS CONST

SCALE: 1"=10'-0" EXCEPT AS NOTED

YARD

MECHANICAL
ASH POND WATER REROUTES
CT SUMP DISCHARGE PIPING

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:

ALLEN FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R14	DATE	38	M	ESK-M001	R 0

PLOT FACTOR:120
W_TVA

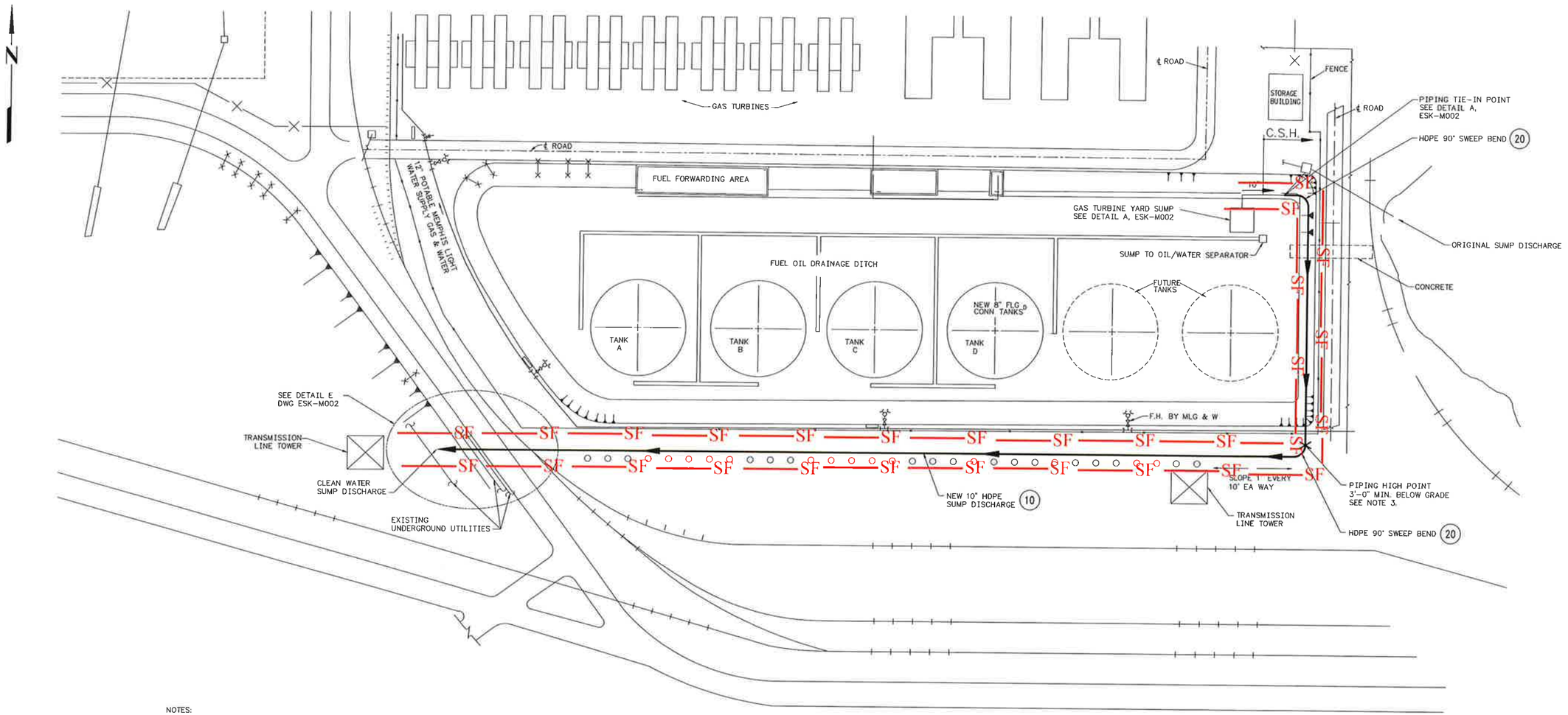
C.A.D. DRAWING
DO NOT ALTER MANUALLY

TASK COMPLETED BY: | REV NO.

DRAWING CHANGE AUTHORIZATION

0	G. GRANT	8/15/18	B. CALHOUN	8/21/18	DCN ALF-119819084 R0
Rev.	Prepared	Date	Checked	Date	Change Reference & Rev.

Contract No.: N/A | Shape | Attached Base Drawing No. | Sheet | Rev.:
DCA Prerequisites
Art. Dwg. No.: | Weight | Category SEC | DCA NO. ESK-ALF-119819084-M001 | 0
Discipline M | Unit: 0 | DCA BLOCK REV. 1



NOTES:

1. SEE DWGS 10W235, 10W241, 10W267-3 17W500-5, FOR CURRENT YARD AND TURBINE DRAIN CONFIGURATION SEE TVA DWG 17W500-5 FOR NEW FUEL OIL TANK FARM SPILL CONTAINMENT SUMP PUMP AND PIPING CONFIGURATION
2. FOR PARTS NOTED WITH (XX), SEE BOM ON DRAWING ESK-M007.
3. PIPING SHALL MAKE A GRADUAL ASCENT FROM SUMP TIE-IN POINT TO PIPING HIGH POINT. FROM HIGH POINT, PIPING SHALL GRADUALLY SLOPE DOWN TOWARDS DISCHARGE

PHASE 2 - EPSC PLAN

EPSC LEGEND:

——SF—— SILT FENCE

EPSC NOTE:

SILT FENCE LOCATION IS APPROXIMATE. SILT FENCE TO BE PLACED ON EITHER SIDE OF THE WORKING AREA

DCN ALF-119819084
AA-01
RELEASE FOR CONSTRUCTION
8/22/18

REV NO.	DATE	DSGN	DRWN	CHKD	SUPV	RVWD	APPD	ISSD	PROJECT ID	AS CONST
R 0		WAD	GLG	BSC	CHF					
ISSUE FOR MECHANICAL REROUTES										

SCALE: 1"=10'-0" EXCEPT AS NOTED

YARD

MECHANICAL
ASH POND WATER REROUTES
CT SUMP DISCHARGE PIPING

ALLEN FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R14 | DATE | 38 | M | ESK-M001 | R 0

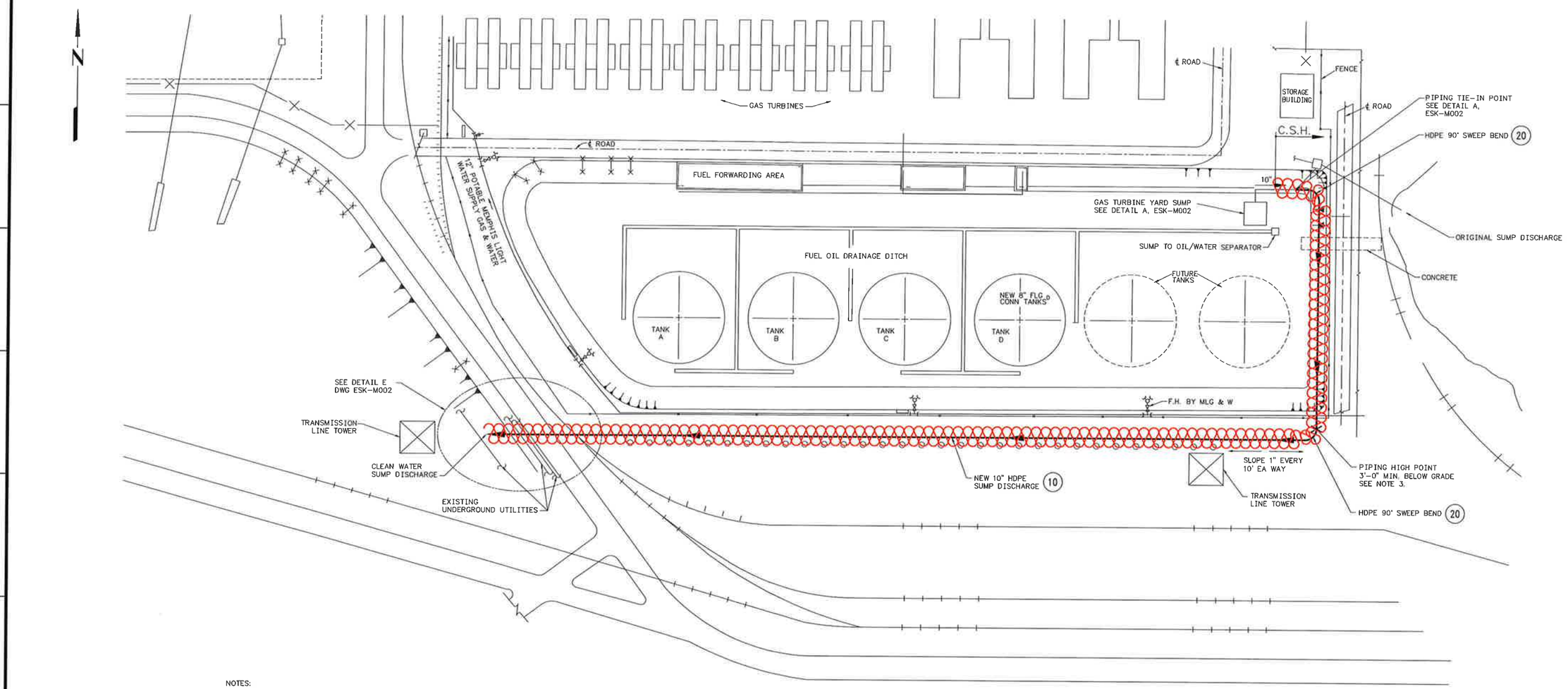
TASK COMPLETED BY: | REV NO

PLOT FACTOR:120
W_TVA

C.A.D. DRAWING
DO NOT ALTER MANUALLY

DRAWING CHANGE AUTHORIZATION					
0	G. GRANT	8/15/18	B. CALHOUN	8/21/18	DCN ALF-119819084 R0
Rev.	Prepared	Date	Checked	Date	Change Reference & Rev.

Contract No.: N/A | Stage | Affected Base Drawing No. | Sheet | Rev.
DCA Prerequisites
Add. Dwg. No.: | Draft | Category: SEC | DCA NO. ESK-ALF-119819084-M001 | 0
Discipline: M | Unit: 0 | DCA BLOCK REV. 1



NOTES:

1. SEE DWGS 10W235, 10W241, 10W267-3 17W500-5, FOR CURRENT YARD AND TURBINE DRAIN CONFIGURATION SEE TVA DWG 17W500-5 FOR NEW FUEL OIL TANK FARM SPILL CONTAINMENT SUMP PUMP AND PIPING CONFIGURATION
2. FOR PARTS NOTED WITH (XX), SEE BOM ON DRAWING ESK-M007.
3. PIPING SHALL MAKE A GRADUAL ASCENT FROM SUMP TIE-IN POINT TO PIPING HIGH POINT. FROM HIGH POINT, PIPING SHALL GRADUALLY SLOPE DOWN TOWARDS DISCHARGE

PHASE 3 - EPSC PLAN

EPSC LEGEND:

REVEGETATE

EPSC NOTE:

CONTRACTOR TO PLACE STRAW AND SEED IN DISTURBED AREAS TO ESTABLISH VEGETATIVE COVER.

DCN ALF-119819084
AA-01
RELEASE FOR CONSTRUCTION
8/22/18

REV NO.	DATE	DSGN	DRWN	CHKD	SUPV	RVWD	APPD	ISSD	PROJECT SR	AS CONST
R 0		WAD	QLG	BSC	DHF					
ISSUE FOR MECHANICAL REROUTES										

SCALE: 1"=10'-0" EXCEPT AS NOTED

YARD

MECHANICAL
ASH POND WATER REROUTES
CT SUMP DISCHARGE PIPING

DESIGNED BY:	DRAWN BY:	CHECKED BY:	SUPERVISED BY:	REVIEWED BY:	APPROVED BY:	ISSUED BY:

ALLEN FOSSIL PLANT
TENNESSEE VALLEY AUTHORITY
FOSSIL AND HYDRO ENGINEERING

AUTOCAD R14	DATE	38	M	ESK-M001	R 0

PLOT FACTOR:120
W_TVA

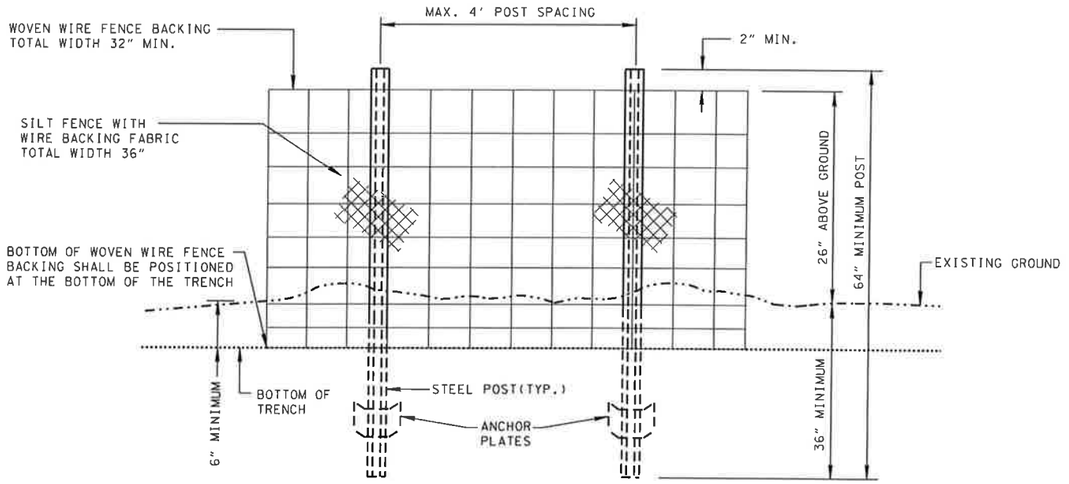
C.A.D. DRAWING
DO NOT ALTER MANUALLY

TASK COMPLETED BY:	REV NO.

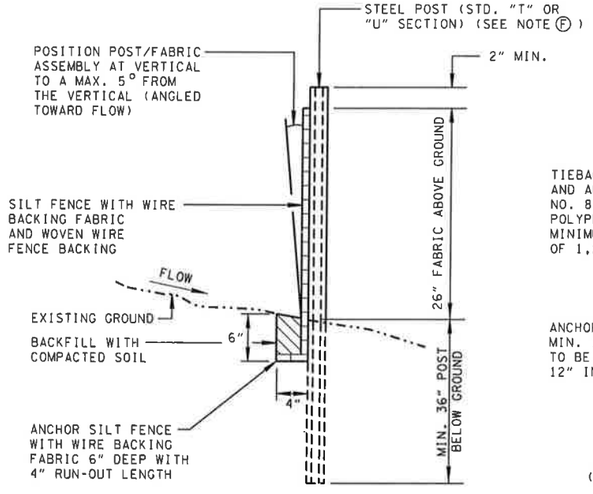
DRAWING CHANGE AUTHORIZATION

Rev.	Prepared	Date	Checked	Date	Change Reference & Rev.
0	G. GRANT	8/15/18	B. CALHOUN	8/21/18	DCN ALF-119819084 R0

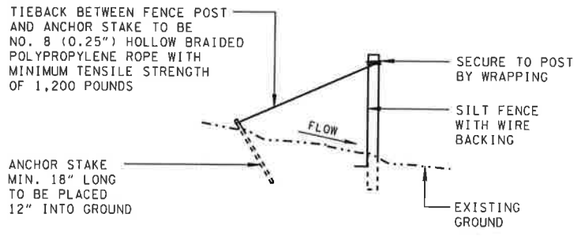
Contract No.: N/A | Stage | Attached Base Drawing No. | Sheet | Rev.
DCA Prerequisites | Sheet | Category SEC | DCA WO. ESK-ALF-119819084-M001 | 0
Add. Dwg. No.: | Discipline M | Unit 0 | DCA BLOCK REV. 1



ELEVATION VIEW



SECTIONAL VIEW



SILT FENCE TIEBACK

(WHEN REQUIRED BY THE ENGINEER OR NOTED IN THE PLANS. COST TO BE INCLUDED IN THE ITEMS FOR SILT FENCE WITH WIRE BACKING)

EROSION CONTROL PLAN LEGEND: • SFB • SFB • SFB • SILT FENCE WITH WIRE BACKING

SILT FENCE WITH WIRE BACKING FABRIC SPECIFICATIONS

FABRIC PROPERTY AND TEST METHODS	REQUIRED PHYSICAL PROPERTIES (MARV VALUES OF TEST DATA)
GEOTEXTILE FABRIC TYPE	WOVEN MONOFILAMENT
APPARENT OPENING SIZE (ASTM D4751)	# 70 TO # 100 STANDARD SIEVE
WATER FLUX (ASTM D4491)	≥ 18 GPM/FT^2
TENSILE STRENGTH (ASTM D4632)	≥ 310 LB. (WARP DIRECTION) X 200 LB. (FILL DIRECTION)
ULTRAVIOLET STABILITY (AFTER 500 HRS PER ASTM D4355)	≥ 90%
BURST STRENGTH (ASTM D3786)	≥ 400 PSI
PUNCTURE STRENGTH (ASTM D4833)	≥ 105 LB.
TRAPEZOIDAL TEAR (ASTM D4533)	≥ 100 LB. (WARP DIRECTION) X 60 LB. (FILL DIRECTION)

SILT FENCE WITH WIRE BACKING GENERAL NOTES

(A) SILT FENCE WITH WIRE BACKING IS USED TO INTERCEPT SMALL AMOUNTS OF SEDIMENT AND REDUCE VELOCITY FROM SHEET FLOW ONLY. USE SILT FENCE WITH WIRE BACKING UP-GRADIENT TO, AND ALONG THE PERIMETER OF STREAMS, WETLANDS, PONDS, SPRINGS, OR OTHER NATURAL WATER RESOURCES LOCATED WITHIN OR ADJACENT TO THE PROJECT RIGHT-OF-WAY AND AT LARGE FILL SLOPES.

(B) THE MAXIMUM DRAINAGE AREA SIZE FOR CONTINUOUS SILT FENCE WITH BACKING SHALL BE 1 ACRE PER 150 LINEAR FEET OF FENCE LENGTH. MAXIMUM SLOPE LENGTH BEHIND FENCE ON UPSLOPE SIDE SHALL BE 290 FEET (AS MEASURED ALONG THE GROUND SURFACE).

(C) WHEN INSTALLED AT THE TOE OF A SLOPE SILT FENCE WITH WIRE BACKING SHOULD BE PLACED 5 FEET TO 10 FEET AWAY FROM THE TOE TO ALLOW SPACE FOR PONDING OF WATER, COLLECTION OF SEDIMENT, AND EASE OF MAINTENANCE AND REMOVAL.

(D) WHEN TWO SECTIONS OF SILT FENCE WITH WIRE BACKING FABRIC ADJOIN EACH OTHER, THEY SHALL BE JOINED ACCORDING TO THE DETAILS ON STANDARD DRAWING EC-STR-3E.

(E) MAINTENANCE SHALL BE PERFORMED AS NEEDED; CAPTURED SOIL MATERIAL SHALL BE REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE AND/OR WHEN EVIDENCE OF FILTER CLOGGING IS OBSERVED.

(F) STEEL POSTS SHALL BE ROLLED FROM HIGH CARBON STEEL AND SHALL HAVE A MINIMUM WEIGHT OF 1.25 LB/FT. POSTS SHALL BE HOT-DIPPED GALVANIZED OR PAINTED WITH HIGH GRADE WEATHER RESISTANT STEEL PAINT. STEEL POSTS SHALL BE EQUIPPED WITH AN ANCHOR PLATE HAVING A MINIMUM AREA OF 14 SQUARE INCHES. POSTS SHALL BE STUDDED, EMBOSSED, OR PUNCHED TO AID IN THE ATTACHMENT OF THE WIRE BACKING. POSTS AND ANCHOR PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A702.

(G) STEEL POSTS SHALL HAVE A PROJECTION FOR FASTENING WIRE TO THEM. WOVEN WIRE FENCE BACKING TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES. THE WIRE FASTENERS SHOULD BE EVENLY SPACED WITH AT LEAST SIX PER POST.

(H) FABRIC SHALL BE FASTENED SECURELY TO WOVEN WIRE FENCE BACKING WITH THE TIES SPACED EVERY 24 INCHES ALONG TOP AND MIDSECTION.

(I) WOVEN WIRE FENCE BACKING SHALL MEET THE REQUIREMENTS FOR ASTM A-116 FOR NO. 11 FARM, DESIGN NO. 832-6-11, CLASS 3 COATING.

(J) SILT FENCE WITH BACKING SHOULD BE PLACED ALONG OR NEAR THE GROUND CONTOUR. THE BOTTOM OF FENCE AT GROUNDLINE SHOULD BE ON A ZERO PERCENT (0%) GRADE, PLUS OR MINUS FIVE TENTHS OF ONE PERCENT (±0.5%). THE END OF A ROW OF SILT FENCE WITH WIRE BACKING SHOULD BE TURNED UP SLOPE FORMING A J-HOOK TO FILTER ANY CONCENTRATED FLOW BEHIND FENCE.

(K) FOR TRENCH-BASED INSTALLATIONS, SILT FENCING WITH WIRE BACKING SHALL BE INSTALLED PER THE FOLLOWING STEPS AND IN THE FOLLOWING ORDER:

- EXCAVATE TRENCH A MAXIMUM OF 4 INCHES WIDE AND 6 INCHES DEEP. THE TRENCH SHALL BE HAND-CLEANED FOLLOWING EXCAVATION TO REMOVE BULKY DEBRIS SUCH AS ROCKS, STICKS, AND SOIL CLODS FROM THE TRENCH.
- DRIVE AND SET SUPPORT POSTS PER SPACING REQUIREMENTS GIVEN ON THE APPLICABLE FENCE DETAIL.
- ATTACH WOVEN WIRE FENCE BACKING TO POSTS AND FABRIC TO THE WIRE BACKING USING WIRE TIES. SPACING AND DENSITY OF TIES SHALL BE INSTALLED ACCORDING TO NOTES G AND H
- INSTALL FABRIC IN TRENCH.
- BACKFILL TRENCH (OVER-FILL) WITH SOIL PLACED AROUND FABRIC.
- COMPACT SOIL BACKFILL WITH MECHANICAL EQUIPMENT. DO NOT DAMAGE THE FABRIC DURING COMPACTION (DAMAGED FABRIC SHALL BE REPLACED).

(L) ONLY SILT FENCE WITH WIRE BACKING FABRIC LISTED ON THE QUALIFIED PRODUCTS LIST MAY BE USED. ANY PRODUCTS LISTED ON THE QUALIFIED PRODUCTS LIST AS AN APPROVED ALTERNATE MAY ALSO BE USED.

(M) SILT FENCE WITH WIRE BACKING SHALL BE PAID FOR UNDER THE FOLLOWING ITEM NUMBER:

209-08.02 TEMPORARY SILT FENCE (WITH BACKING) PER LINEAR FOOT

PAYMENT SHALL INCLUDE ALL MATERIALS AND LABOR NECESSARY FOR CONSTRUCTION, MAINTENANCE, AND REMOVAL OF THE SILT FENCE WITH WIRE BACKING.

(N) SEDIMENT SHALL BE REMOVED FROM BEHIND THE SILT FENCE WITH WIRE BACKING WHEN IT HAS ACCUMULATED TO ONE-HALF THE ORIGINAL HEIGHT OF THE STRUCTURE AND PAID FOR UNDER ITEM NUMBER 209-05, SEDIMENT REMOVAL PER CUBIC YARD.

REV. 12-18-03; MODIFIED TABLE ② AND GENERAL NOTE Ⓔ.

☐ REV. 7-29-04; CHANGED VALUES IN TABLE 2 FROM MEAN TO MARV VALUES.

☐ REV. 4-15-06; MODIFIED FABRIC HEIGHT. ADDED NOTES Ⓙ AND Ⓚ. REVISED TABLE TITLE. REORDERED GENERAL NOTES. REFORMATTED SHEET. REVISED NOTES, MISC. EDITS TO DRAWING.

☐ REV. 4-1-08; REMOVED TEMPORARY REFERENCE, REVISED NOTES, AND MISC. EDITS TO DRAWING.

☐ REV. 8-1-12; MINOR EDITS TO GENERAL NOTES.

☐ MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

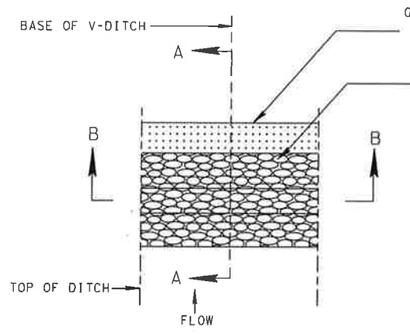
NOT TO SCALE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

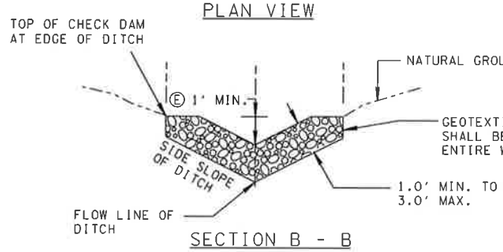
SILT FENCE WITH WIRE BACKING

12-18-02 EC-STR-3C

DETAIL FOR V-DITCH

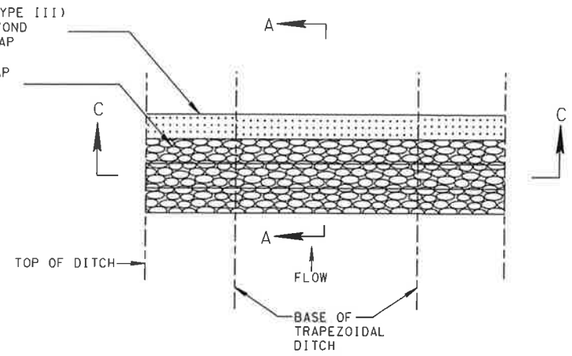


PLAN VIEW

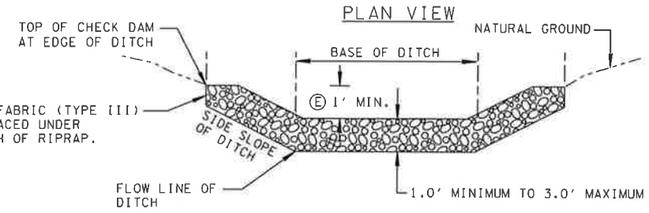


SECTION B - B

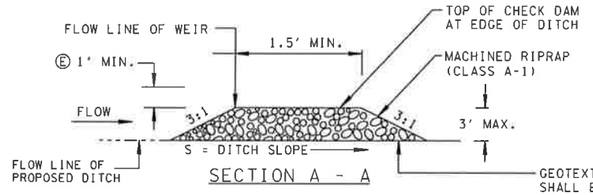
DETAIL FOR TRAPEZOIDAL DITCH



PLAN VIEW

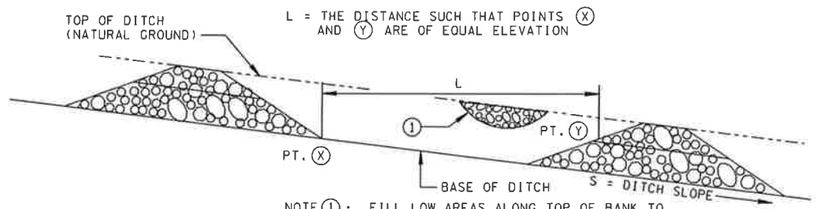


SECTION C - C



SECTION A - A

DETAIL FOR SPACING BETWEEN CHECK DAMS



NOTE 1: FILL LOW AREAS ALONG TOP OF BANK TO PREVENT BACKWATER FROM EXISTING DITCH.

ROCK CHECK DAM ESTIMATED QUANTITIES

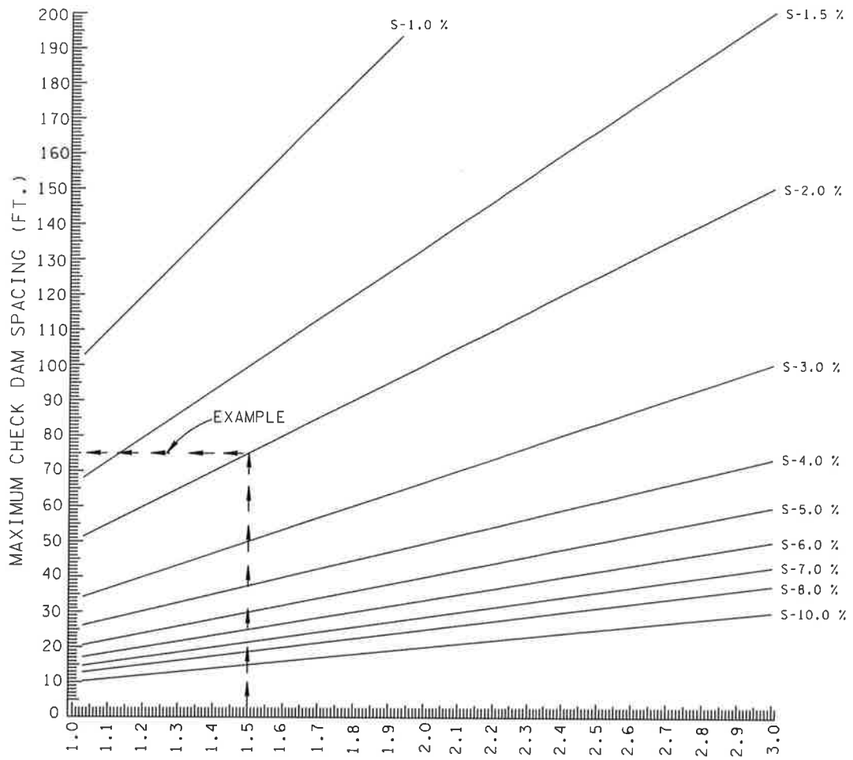
	2:1 DITCH SLOPE			3:1 DITCH SLOPE			4:1 DITCH SLOPE		
V-DITCH[1]	HEIGHT FT	RIP RAP TON	GEOTEXTILE SF	HEIGHT FT	RIP RAP TON	GEOTEXTILE SF	HEIGHT FT	RIP RAP TON	GEOTEXTILE SF
	1.5	6.5	16.8	1.5	9.2	23.7	1.5	12.0	30.9
	2.0	13.0	24.6	2.0	18.4	34.8	2.0	24.1	45.4
	2.5	22.8	33.9	2.5	32.3	48.0	2.5	42.1	62.5
	3.0	36.5	44.7	3.0	51.7	63.2	3.0	67.3	82.5
TRAPEZOIDAL DITCH[2]	HEIGHT FT	RIP RAP TON	GEOTEXTILE SF	HEIGHT FT	RIP RAP TON	GEOTEXTILE SF	HEIGHT FT	RIP RAP TON	GEOTEXTILE SF
	1.5	8.9	22.8	1.5	11.6	29.7	1.5	14.4	36.9
	2.0	16.9	31.9	2.0	22.3	42.1	2.0	27.9	52.7
	2.5	28.7	42.6	2.5	38.1	56.6	2.5	47.9	71.2
	3.0	44.7	54.7	3.0	59.8	73.2	3.0	75.5	92.4

1. ESTIMATED QUANTITIES BASED ON 4:1 SIDE SLOPES. QUANTITIES WILL VARY BASED ON ACTUAL DITCH CONFIGURATION.
2. ESTIMATED QUANTITIES BASED ON 4FT BOTTOM WIDTH, AND 4:1 SIDE SLOPES. QUANTITIES WILL VARY BASED ON ACTUAL DITCH CONFIGURATION.

EROSION CONTROL PLAN LEGEND : ROCK CHECK DAM (V-DITCH)

EROSION CONTROL PLAN LEGEND : ROCK CHECK DAM (TRAPEZOIDAL DITCH)

ROCK CHECK DAM SPACING



EXAMPLE: HEIGHT OF WEIR 1.5'; SLOPE 2%
EXTEND PERPENDICULAR FROM 1.5' HEIGHT TO INTERSECT S = 2.0% SLOPE
EXTEND 90° TO THE LEFT TO DETERMINE SPACING (75'+)

- REV. 12-18-95: CHANGED DRAWING NO. FROM ESC-STR-6 TO EC-STR-6.
- REV. 7-29-96: MADE MINOR CORRECTIONS TO GENERAL NOTES.
- REV. 4-15-98: CHANGED PAY ITEMS FOR CHECK DAMS.
- REV. 5-27-01: CHANGED DESCRIPTION FOR GEOTEXTILE FABRIC (TYPE III, CLASS A) TO GEOTEXTILE FABRIC (TYPE III).
- REV. 12-18-02: CHANGED GENERAL NOTE Ⓖ.
- REV. 1-22-03: CORRECTED NOTE IN SECTION A-A.
- REV. 4-15-06: REFORMATTED SHEET, REVISED NOTES, MISC. EDITS TO DRAWING.
- REV. 4-1-08: REMOVED TEMPORARY REFERENCE, REVISED NOTES, MISC. EDITS TO DRAWING, MODIFIED SPACING CHART.
- REV. 8-1-12: MINOR EDITS TO GENERAL NOTES.
- REV. 5-6-16: REVISED QUANTITIES TABLE, REVISED GENERAL NOTE Ⓘ REVISED DITCH DETAIL.

ROCK CHECK DAM GENERAL NOTES

(A) ROCK CHECK DAMS ARE TO BE USED FOR VELOCITY REDUCTION AND EROSION PREVENTION IN AREAS WHERE CONCENTRATED FLOW EXISTS. ROCK CHECK DAMS SHALL NOT BE USED IN STREAMS OR OTHER NATURAL WATER RESOURCES. ROCK CHECK DAMS ARE NOT TO BE USED FOR SEDIMENT CONTROL AND SHOULD NOT BE CONSIDERED A SEDIMENT TRAPPING DEVICE.

(B) THE DRAINAGE AREA FOR THE ROCK CHECK DAMS SHALL BE 10 ACRES OR LESS.

(C) ROCK CHECK DAMS MAY REMAIN IN PLACE AS PERMANENT CHECK DAMS, IF SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER.

(D) THE CENTER OF THE ROCK CHECK DAM MUST BE AT LEAST ONE (1) FOOT LOWER THAN THE OUTER EDGES.

(E) THE DEPTH OF FLOW ON THE CENTER OF THE STRUCTURE SHALL BE COMPUTED FOR THE PEAK FLOW RATE GENERATED BY THE 2-YEAR, 24-HOUR STORM IN ORDER TO ENSURE THAT THE TOP OF THE STRUCTURE WILL NOT BE OVERTOPPED. FOR SITES WHICH DRAIN TO EXCEPTIONAL TENNESSEE WATERS OR SEDIMENT-IMPARIED STREAMS, THE DEPTH SHOULD BE DETERMINED FOR THE 5-YEAR, 24-HOUR PEAK FLOW RATE. THIS WILL ELIMINATE THE ROCK-SOIL FAILURE POINT WHERE THE ROCK CHECK DAM AND NATURAL GROUND MERGE.

(F) FOR SITES WHICH DRAIN TO EXCEPTIONAL TENNESSEE WATERS OR SEDIMENT-IMPAIRED STREAMS, THE MINIMUM HEIGHT OF THE STRUCTURE ABOVE THE DITCH BOTTOM SHALL BE INCREASED TO 2 FEET.

(G) THE MAXIMUM SPACING BETWEEN ROCK CHECK DAMS SHOULD BE SUCH THAT THE TOE OF THE UPSTREAM DAM IS AT THE SAME ELEVATION AS THE FLOW LINE OF THE WEIR OF THE DOWNSTREAM DAM (SEE ROCK CHECK SPACING GRAPH THIS SHEET).

(H) ONLY GEOTEXTILE FABRIC (TYPE III) LISTED ON THE QUALIFIED PRODUCTS LIST SHALL BE USED.

(I) PRODUCTS LISTED ON THE QUALIFIED PRODUCTS LIST FOR FILTER SOCK DITCH APPLICATION MAY BE USED AND SHALL BE PAID UNDER FOLLOWING ITEM NUMBER:

209-08.09 FILTER SOCK CHECK DAM PER EACH

(J) ROCK CHECK DAMS SHALL BE PAID FOR UNDER THE FOLLOWING ITEM NUMBER:

209-08.07 ROCK CHECK DAM PER EACH

PAYMENT SHALL INCLUDE ALL MATERIALS AND LABOR NECESSARY FOR CONSTRUCTION, MAINTENANCE, AND REMOVAL OF ROCK CHECK DAMS.

(K) SEDIMENT SHALL BE REMOVED FROM BEHIND THE ROCK CHECK DAMS WHEN IT HAS ACCUMULATED TO ONE-HALF THE ORIGINAL HEIGHT OF THE DAM AND PAID FOR UNDER ITEM NUMBER 209-05, SEDIMENT REMOVAL PER CUBIC YARD.

☐ MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

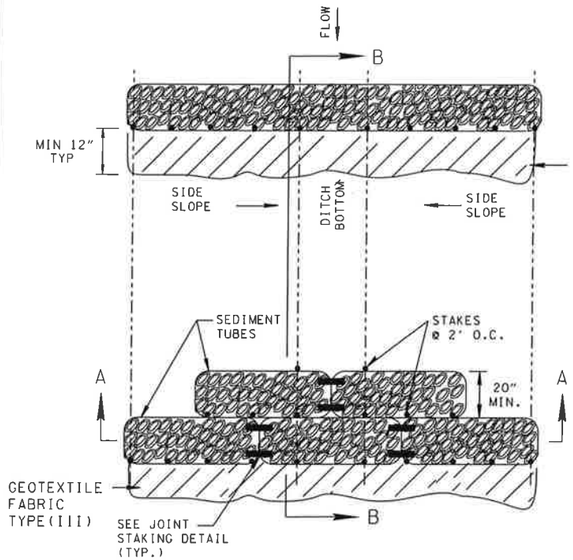
NOT TO SCALE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ROCK CHECK DAM

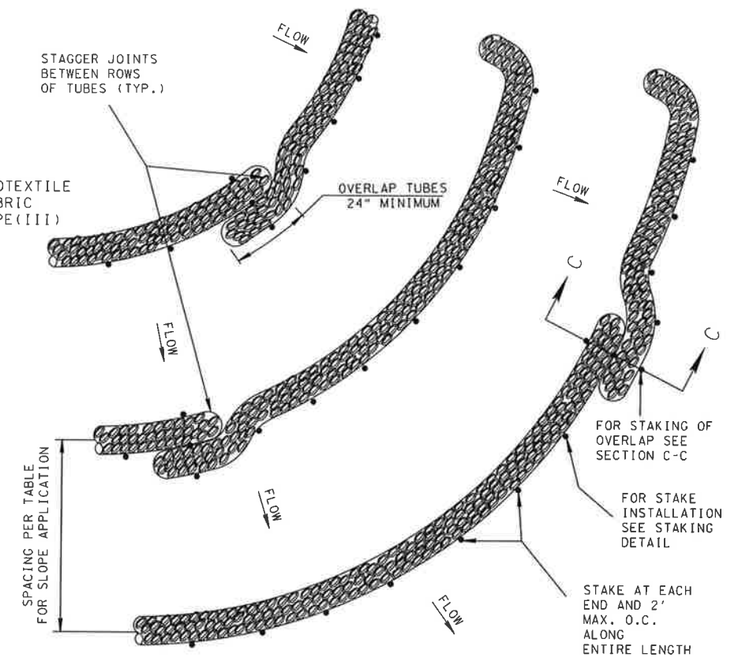
10-26-92 EC-STR-6

- REV. 4-15-06: REFORMATTED SHEET, REVISED NOTES, MISC. EDITS TO DRAWING.
- REV. 4-1-08: REMOVED TEMPORARY REFERENCE, ADDED OVERLAP DETAIL, OTHER MINOR MISC. EDITS, REVISED GENERAL NOTES.
- REV. 8-1-12: MINOR EDITS TO GENERAL NOTES.
- REV. 6-10-14: MODIFIED SPACING TABLES. ADDED GEOTEXTILES ADDED NOTE (P).



PLAN VIEW FOR DITCH APPLICATION

SEE NOTE (G)



PLAN VIEW FOR SLOPE APPLICATION

(P)

SEDIMENT TUBE SPACING FOR SLOPE APPLICATION

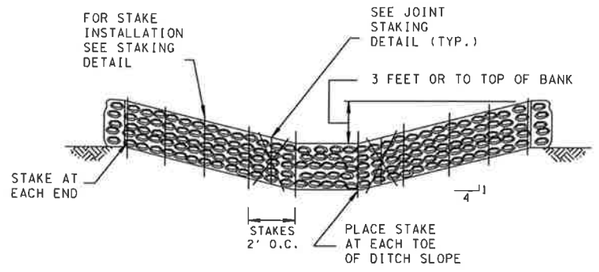
SLOPE	8"	12"	18"	20"	24"
2%	70'	80'	N/A	N/A	N/A
5%	30'	60'	80'	N/A	N/A
10%	20'	30'	70'	80'	80'
6:1	N/A	20'	40'	50'	55'
4:1	N/A	20'	30'	30'	30'
3:1	N/A	N/A	20'	20'	25'
2:1	N/A	N/A	20'	20'	20'

N/A = NOT RECOMMENDED
SPACING NOT TO EXCEED 80'

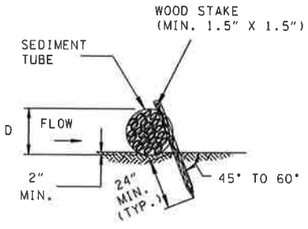
SEDIMENT TUBE SPACING TABLE FOR DITCH APPLICATION

SLOPE	MAXIMUM SEDIMENT TUBE SPACING
LESS THAN 2%	80'
2%	80'
3%	50'
4%	40'
5%	30'
6%	20'
GREATER THAN 6%	20'

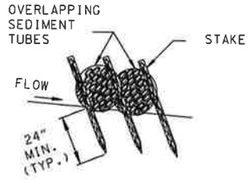
BASED ON A 20" SEDIMENT TUBE
SEE TABLE ON EC-STR-6 FOR OTHER HEIGHTS.



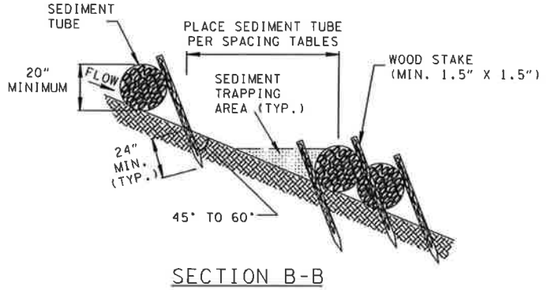
SECTION A-A



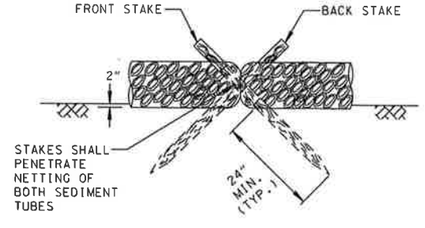
STAKING DETAIL



SECTION C-C



SECTION B-B



JOINT STAKING DETAIL

(DITCH APPLICATION ONLY)

EROSION CONTROL PLAN LEGEND: TUBE••TUBE••TUBE SEDIMENT TUBE

SEDIMENT TUBE GENERAL NOTES

(A) SEDIMENT TUBES CAN BE PLACED AT THE TOP, ON THE FACE, OR AT THE TOE OF SLOPES TO INTERCEPT RUNOFF, REDUCE FLOW VELOCITY, RELEASE THE RUNOFF AS SHEET FLOW AND PROVIDE REMOVAL OF SEDIMENT FROM THE RUNOFF.

(B) SEDIMENT TUBES SHALL BE INSTALLED ALONG OR ON THE GROUND CONTOUR, AT THE TOE OF SLOPES, OR IN A DITCH TO HELP REDUCE THE EFFECTS OF SOIL EROSION AND RETAIN SEDIMENT. SEDIMENT TUBES SHOULD NOT BE USED IN DITCHES OR STREAMS.

(C) FOR DITCH APPLICATIONS, THE MAXIMUM DRAINAGE AREA SHALL BE 15 ACRES. AT SITES WHICH DRAIN TO EXCEPTIONAL TENNESSEE WATERS OR SEDIMENT-IMPAIRED STREAMS, THE MAXIMUM DRAINAGE AREA SHALL BE 10 ACRES. FOR SLOPE APPLICATIONS, THE MAXIMUM DRAINAGE AREAS SHALL BE ¼ ACRE PER 100 LF OF TUBE.

(D) SEDIMENT TUBES SHALL NOT BE USED ON PAVEMENT, ROCKY SOILS, OR AT ANY OTHER LOCATIONS WHERE THE STAKES CANNOT BE DRIVEN TO THE REQUIRED DEPTH.

(E) SEDIMENT TUBES SHALL BE MANUFACTURED FROM WOOD EXCELSIOR, RICE OR WHEAT STRAW, COCONUT FIBERS, OR HARDWOOD MULCH THAT IS ENCLOSED BY A TUBULAR FLEXIBLE NETTING MATERIAL. ALL MATERIALS INCLUDING THE NETTING SHALL BE BIODEGRADABLE.

(F) PINE NEEDLE AND LEAF MULCH FILLED SEDIMENT TUBES AND STRAW BALES ARE NOT ACCEPTABLE MATERIALS.

(G) THE DIAMETER OF A SEDIMENT TUBE SHALL BE A MINIMUM OF 8 INCHES AND A MAXIMUM OF 24 INCHES. DIAMETER TOLERANCE IS 2 INCHES. FOR DITCH APPLICATIONS, SEDIMENT TUBES SHALL BE A MINIMUM OF 20 INCHES.

(H) SEDIMENT TUBES SHALL BE INSTALLED WITH WOODEN STAKES (MIN. 1.5" x 1.5" ACTUAL). THE STAKE SHALL BE EMBEDDED A MINIMUM OF 2 FEET.

(I) SEDIMENT TUBES SHALL BE TRENCHED IN A MINIMUM OF 2 INCHES.

(J) IF MORE THAN ONE SEDIMENT TUBE IS PLACED IN A ROW IN SLOPE APPLICATION, THE TUBES SHALL BE OVERLAPPED A MINIMUM OF 24 INCHES TO PREVENT FLOW AND SEDIMENT FROM PASSING THROUGH THE FIELD JOINT. WHEN USED IN DITCHES, TWO ROWS OF TUBE SHALL BE PLACED ON THE CHANNEL BOTTOM WITH STAGGERED JOINTS AS SHOWN.

(K) FOR DITCH APPLICATIONS, SEDIMENT TUBES SHALL BE A MINIMUM OF 20 INCH DIAMETER AND SHALL BE PLACED PERPENDICULAR TO THE FLOW OF WATER. SEDIMENT TUBES SHALL CONTINUE UP THE SIDE SLOPES A MINIMUM OF 3 FEET PLUS THE DIAMETER OF THE TUBE, OR TO THE TOP OF THE DITCH, WHICHEVER IS LESS.

(L) SEDIMENT TUBES USED IN SLOPE APPLICATIONS MAY REMAIN IN PLACE TO BIODEGRADE. FOR DITCH APPLICATIONS SEDIMENT TUBES SHALL BE COMPLETELY REMOVED AFTER FULLY ESTABLISHED VEGETATION HAS COMPLETELY DEVELOPED.

(M) SEDIMENT TUBES SHALL BE PAID FOR UNDER THE FOLLOWING ITEMS NUMBERS:

740-11.01 TEMPORARY SEDIMENT TUBE (8 INCH) PER LINEAR FOOT
740-11.02 TEMPORARY SEDIMENT TUBE (12 INCH) PER LINEAR FOOT
740-11.03 TEMPORARY SEDIMENT TUBE (18 INCH) PER LINEAR FOOT
740-11.04 TEMPORARY SEDIMENT TUBE (20 INCH) PER LINEAR FOOT
740-11.05 TEMPORARY SEDIMENT TUBE (24 INCH) PER LINEAR FOOT

PAYMENT SHALL INCLUDE ALL MATERIALS (INCLUDING GEOTEXTILE FABRIC IF USED) AND LABOR NECESSARY FOR CONSTRUCTION, MAINTENANCE, AND REMOVAL OF SEDIMENT TUBE.

(N) ONLY SEDIMENT TUBES LISTED ON THE QUALIFIED PRODUCTS LIST MAY BE USED.

(O) SEDIMENT SHALL BE REMOVED FROM BEHIND THE SEDIMENT TUBE WHEN IT HAS ACCUMULATED TO ONE-HALF THE ORIGINAL HEIGHT OF THE STRUCTURE AND PAID FOR UNDER ITEM NUMBER 209-05, SEDIMENT REMOVAL PER CUBIC YARD.

(P) GEOTEXTILE FABRIC REQUIRED FOR SLOPE APPLICATION STEEPER THAN 6:1.

☐ MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

NOT TO SCALE

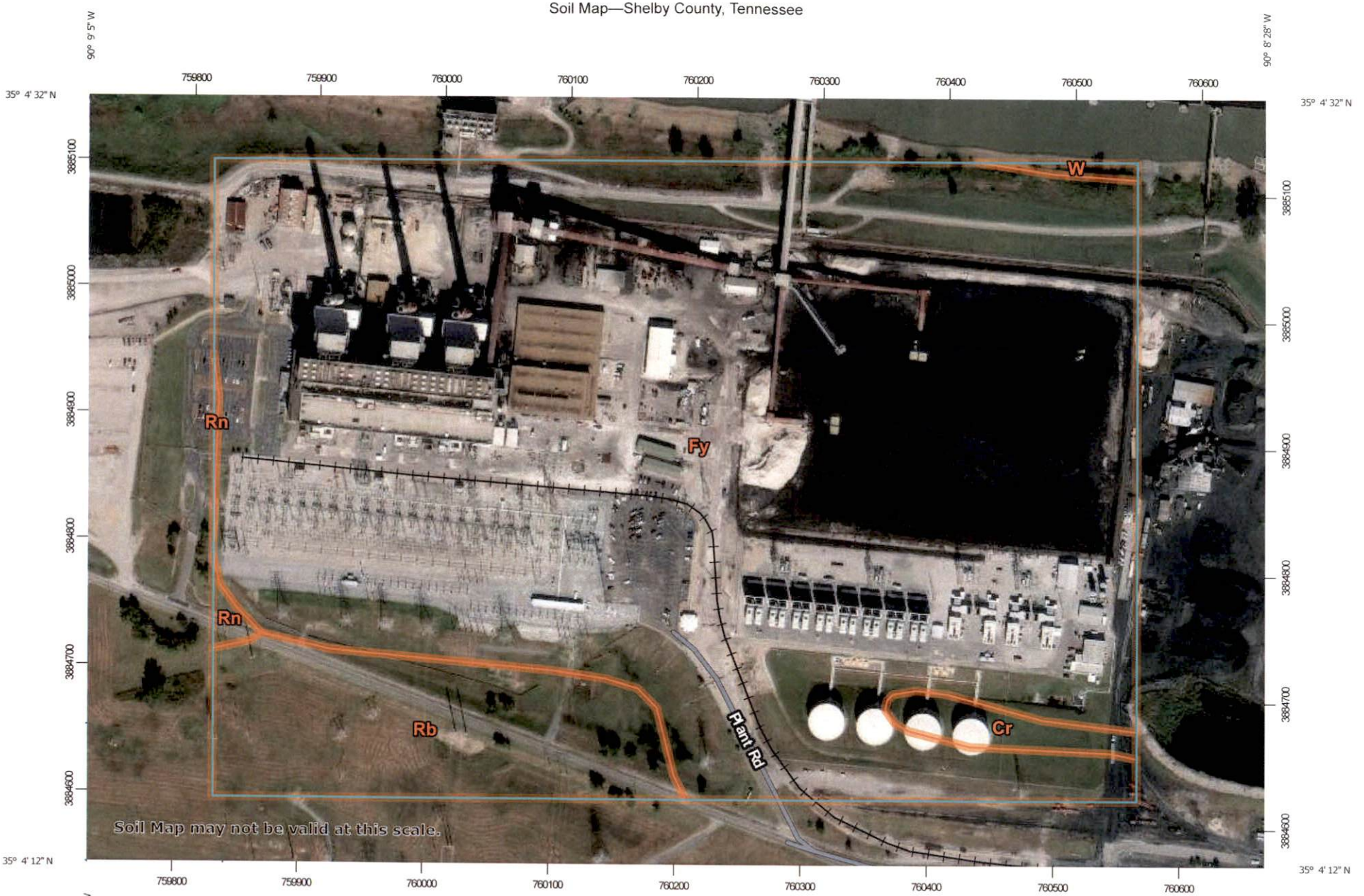
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SEDIMENT TUBE

1-20-06 EC-STR-37

Appendix B

Soils Information



Map Scale: 1:4,280 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 50 100 200 300

Feet: 0 200 400 800 1200

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 15N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Shelby County, Tennessee
Survey Area Data: Version 12, Sep 25, 2017

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Nov 13, 2015—Dec 10, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Cr	Commerce silt loam	1.3	1.5%
Fy	Filled land, sandy (udorthent, loamy)	80.1	87.2%
Rb	Robinsonville fine sandy loam	9.7	10.6%
Rn	Robinsonville silt loam	0.4	0.4%
W	Water	0.3	0.3%
Totals for Area of Interest		**91.8**	**100.0%**

Appendix C

Runoff Curve Number Calculations (TR-55 Worksheet)

RUNOFF CURVE NUMBER

(TR-55 Worksheet 2)

Existing Conditions

Runoff Curve Number (CN)

Soil Name and Hydrologic Group	Cover Description (cover type, treatment, and hydrologic condition; percent impervious; unconnected/connected impervious area ratio)	CN [1] Table 2-2	CN [1] Figure 2-3	CN [1] Figure 2-4	Area (acres)	Product of CN x Area
C	Gravel driveways or Impervious Areas	89			12.3	1094.7
—	Buildings / Concrete Paving	98			1	98.0
[1] Use only one CN source per line				**Totals**	13.3	1192.7
weighted CN = $\frac{\text{total Product}}{\text{total Area}}$				**Use CN**		**89.7**

Source: (210-VI-TR-55, Second Ed., June 1986)

Average curve number for pervious areas:

$$CN = \frac{1190.9}{13.3}$$

$$= 90$$

RUNOFF CURVE NUMBER

(TR-55 Worksheet 2)

Post-Construction Conditions

Runoff Curve Number (CN)

Soil Name and Hydrologic Group	Cover Description (cover type, treatment, and hydrologic condition; percent impervious; unconnected/connected impervious area ratio)	CN [1] Table 2-2	CN [1] Figure 2-3	CN [1] Figure 2-4	Area (acres)	Product of CN x Area
C	Gravel driveways	89			12.3	1094.7
—	Buildings / Concrete Paving	98			1	98.0
[1] Use only one CN source per line				**Totals**	13.3	1192.7
weighted CN = $\frac{\text{total Product}}{\text{total Area}}$					**Use CN**	**89.7**

Source: (210-VI-TR-55, Second Ed., June 1986)

Average curve number for pervious areas:

$$CN = \frac{1192.7}{13.3}$$

$$= 90$$

Appendix D

Inspection Forms

Tennessee Valley Authority
Tennessee Construction Stormwater Inspection Certification
Twice-Weekly Inspections, 72 hours apart

(With written notification to the state, inspection performed monthly on areas with temporary stabilization. No inspection requirements apply to definable areas that are identified on the SWPPP as having final stabilization).

Site or Project Name: ALF D4 Stormwater Reroute			**NPDES Tracking Number: TNR**	
Primary Permittee Name: Tennessee Valley Authority			Date of Inspection:	
Current approximate disturbed acreage:		Has rainfall been checked/documented daily? ☐Yes ☐ No	Name of Inspector:	
Current weather conditions:			Inspector's TNEPSC Certification Number:	

Please check the box if the following items are on-site:

☐ Notice of Coverage (NOC) ☐ Stormwater Pollution Prevention Plan (SWPPP) ☐ Twice-weekly inspection documentation

☐ Site contact information ☐ Rain Gage ☐ Off-site Reference Rain Gage Location: _____

Best Management Practices (BMPs):

Are the Erosion Prevention and Sediment Controls (EPSCs) functioning correctly: If "No", describe below in Comment Section			
1. Are all applicable EPSCs installed and maintained per the SWPPP?		☐Yes	☐No
2. Are EPSCs functioning correctly at all disturbed areas/material storage areas per section 4.1.5?		☐Yes	☐No
3. Are EPSCs 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?		☐Yes	☐No
4. Are EPSCs functioning correctly at ingress/egress points such that there is no evidence of track out?		☐Yes	☐No
5. If applicable, have discharges from dewatering activities been managed by appropriate controls per section 4.1.4? If "No", describe below the measures to be implemented to address deficiencies.	☐ N/A	☐Yes	☐No
6. If construction activity at any location on-site has temporarily/permanently ceased, was the area stabilized within 14 days per section 3.5.3.2? If "No", describe below each location and measures taken to stabilize the area(s).	☐ N/A	☐Yes	☐No
7. Have pollution prevention measures been installed, implemented, and maintained to minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters per section 4.1.5? If "No", describe below the measures to be implemented to address deficiencies.	☐ N/A	☐Yes	☐No
8. 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 address deficiencies.	☐ N/A	☐Yes	☐No
9. Have all previous deficiencies been addressed? If not, describe the remaining deficiencies in the Comments section. ☐ Check if deficiencies/corrective measures have been reported on a previous form.	☐ N/A	☐Yes	☐No

Comment Section. If the answer is "No" for any of the above, please describe the problem and corrective actions to be taken. Otherwise, describe any pertinent observations:

Certification and Signature (must be signed by 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 document and all attachments were prepared by me, or under my direction or supervision. The submitted information is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

Inspector Name and Title:	Signature:	Date:
Permittee Name and Title:	Signature:	Date:

(Rev. 5-13)

Construction Stormwater Inspection Certification Form (Twice-Weekly Inspections)

Purpose of this form/ Instructions

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

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

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

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

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

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

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

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

Trained certified inspectors shall complete inspection documentation to the best of their ability. Falsifying inspection records or other documentation or failure to complete inspection documentation shall result in a violation of this permit and any other applicable acts or rules.

Sequence of Control Measure Implementation, Maintenance, and Removal Log Form

Log to be maintained onsite and completed each time a control measure is implemented, maintained, or removed

Contractor:_____**Contract No.**:_____ Page_____ of _____

Control Measure and Location	Implementation, Maintenance, or Removal	Receiving Water (Channel #, etc.)	Foreman Initials	Date

MAJOR ACTIVITIES LOG

At a minimum the construction manager or designee shall record dates below for beginning of major grading, dates temporarily cease construction, dates re-commence construction, dates permanently cease construction and dates seeding and or stabilization begins. Include name of person recording activity. It is recommended that activity descriptions be recorded each day. Provide a copy of the form to the site Environmental Scientist when sheet is filled out or on a monthly basis.

Description of Major Activity	Date	Name

Provide to Plant Program Administrator (Environmental) monthly or as completed.

Inspect rainfall gage(s) and record daily inches of rain or “none” in measured rainfall column. Sign sheet for each day and present to designated TVA site representative when sheet has been filled and/or construction is complete. If prolonged storm event occurs, it is recommended that erosion control device checks be performed and results recorded on inspection form. Maintain a copy of this form and provide a copy to the Plant Environmental Scientist when the form is complete.

Gage Number	Date	Measured Rainfall (inches)	Inspector's Signature

Appendix E

Notice of Coverage (NOC)

Notice of Termination Form (NOT)

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)

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

Site or Project Name:		**Existing NPDES Tracking Number: TNR**
Street Address or Location:		Start date:
		Estimated end date:
Site Activity 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 ☐ 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:

Attach the SWPPP with the NOI ☐ SWPPP Attached	Attach a site location map ☐ Map Attached

Site Owner/Developer Entity (*Primary Permittee* - person, company, or legal entity that has operational or design control over construction plans and specifications):

Site Owner/Developer Signatory (V.P. level/higher - individual responsible for site - signs certification below):		Signatory's Title or Position (V.P. level/higher - signs 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 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)	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.

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:

(Continued on reverse)

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.state.tn.us/environment/water/water-quality_storm-water.shtml

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

ARAP permit may be required: **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

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC)

Division of Water Resources

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

1-888-891-TDEC (8332)

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

This form is required to be submitted when requesting termination of coverage from the CGP. The purpose of this form is to notify the TDEC that either all stormwater discharges associated with construction activity from the portion of the identified facility where you, as an operator, have ceased or have been eliminated; or you are no longer an operator at the construction site. Submission of this form shall in no way relieve the permittee of permit obligations required prior to submission of this form. Please submit this form to the local 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.

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:

☐	Stormwater discharge associated with construction activity is no longer occurring and the permitted area has a uniform 70% permanent vegetative cover OR has equivalent measures such as rip rap or geotextiles, in areas not covered with impervious surfaces.
☐	You are no longer the operator at the construction site (i.e., 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.

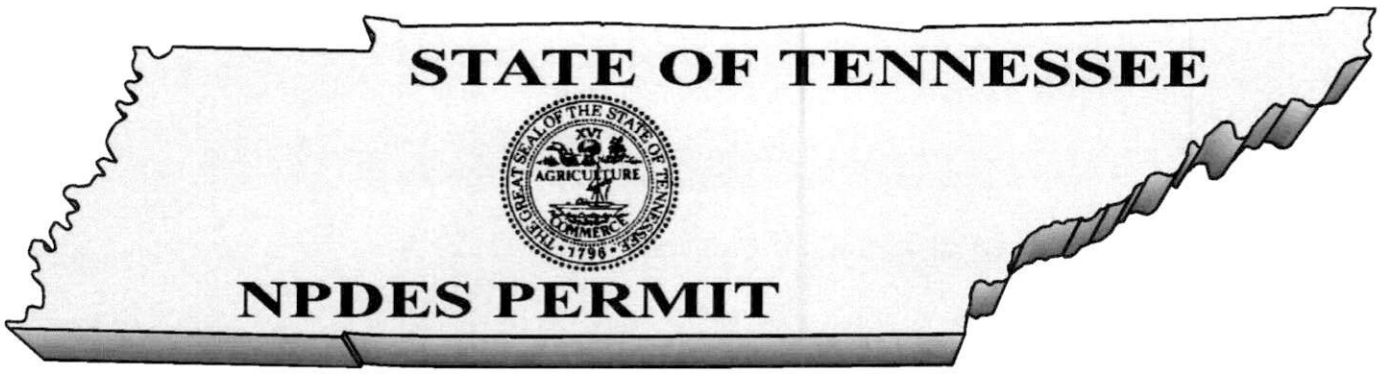
I certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision. The submitted information is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, 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:

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 F

Tennessee General NPDES Permit No. TNR100000



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 Waters with Unavailable Parameters 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: **September 30, 2016**

This permit is effective on: **October 1, 2016**

This permit expires on: **September 30, 2021**

for Tisha Calabrese Benton
Director

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

Table of Contents

1. COVERAGE UNDER THIS GENERAL PERMIT

1.1. Permit Area

The 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 that result in soil disturbances of one or more acres. Soil disturbances of less than one acre are required to obtain authorization under this permit if construction activities are part of a larger common plan of development or sale that comprises at least one acre of cumulative land disturbance. Construction activities include clearing, grading, filling and excavating. One or more site operators must maintain coverage under this permit for all portions of a site that have not been permanently stabilized.

Projects 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.

Any discharge of stormwater, or other fluid, to an improved sinkhole or injection well must be authorized by permit or rule as a Class V underground injection well under the provisions of Tennessee Rules, Chapter 0400-45-06.

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. Support activities may include concrete or asphalt batch plants, equipment staging yards, material storage areas, excavated material disposal areas and borrow areas. Support activities are authorized provided all of the following conditions are met:

a) The support activity is 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.
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 Policy. 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 collected stormwater and ground water.
b) Waters used to wash dust and soils from vehicles where detergents are not used and detention and/or filtering is provided before the water leaves site. Wash removal of process materials such as oil, asphalt or concrete is not authorized.
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.
g) Foundation or footing drains where flows are not contaminated with pollutants (e.g., process materials such as solvents, heavy metals, etc.).

All non-stormwater discharges authorized by this permit must be free of sediment and other solids, must not cause erosion of soils, and must not result in sediment impacts to receiving streams.

1.2.4. Other NPDES-permitted discharges

Discharges of stormwater or wastewater authorized by and in compliance with a different NPDES 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 and non-stormwater discharges listed in Section 1.2.3, all discharges covered by this permit shall be composed entirely of stormwater. This permit does not authorize the following discharges:

a) Post-construction discharges - Stormwater discharges associated with permanent stormwater management structures 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 (*Other NPDES-permitted discharges*) and in compliance with Section 3.5.9 (*Pollution prevention measures for non-stormwater discharges*) of this permit.

c) Discharges covered by another permit - Discharges associated with construction activities that have been issued an individual permit in accordance with Subpart 7.12 (*Individual Permit*).

d) Discharges threatening water quality - Discharges from construction sites that the director determines will cause, or has the reasonable potential to cause or contribute to, violations of water quality standards. Where such a determination has been made, the division will notify the discharger in writing that an individual permit application is necessary as described in Subpart 7.12 (*Individual Permit*). 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 waters with unavailable parameters - Discharges to waters with unavailable parameters that would cause measurable degradation of water quality for the parameter that is unavailable; or that would cause additional loadings of unavailable parameters that are bioaccumulative or that have criteria below method detection levels. Waters with unavailable parameters means any segment of surface waters that has been identified by the division as failing to support its designated classified uses. A discharge that complies with the additional requirements set forth in Subpart 5.4 is not considered to cause measurable degradation of waters with unavailable parameters, unless the division determines upon review of the SWPPP that there is a reason to limit coverage as set forth in Subpart 1.3(d) above and the SWPPP cannot be modified to bring the site into compliance.

f) Discharges into Outstanding National Resource Waters - Discharges into waters that are designated by the Water Quality Control Board as Outstanding National Resource Waters (ONRW) pursuant to Tennessee Rules, Chapter 0400-40-03-.06(5).

g) Discharges into Exceptional Tennessee Waters - Discharges that would cause more than de minimis degradation of water quality for any available parameter in waters designated by TDEC as Exceptional Tennessee Waters. A discharge that complies with the additional requirements set forth in Subpart 5.4 is not considered to cause more than de minimis degradation of available parameters unless the division determines upon review of the SWPPP that there is a reason to limit coverage as set forth in Subpart 1.3(d) above and the SWPPP cannot be modified to bring the site into compliance.

h) Discharges not protective of aquatic threatened and endangered species, species deemed in need of management or special concern species - Discharges or discharge-related activities that are likely to jeopardize the continued existence of listed or proposed threatened or endangered aquatic species, or their critical habitat, under the Endangered Species Act (ESA), or other applicable state law or rule.

   Discharges or conducting discharge related activities that will cause a prohibited take of federally listed aquatic species (as defined under Section 3 of the ESA and 50 CFR §17.3), unless such take is authorized under Sections 7 or 10 of the ESA.

   Discharges or conducting discharge-related activities that will cause a prohibited "take" of state listed aquatic species (as defined in the Tennessee Wildlife Resources Commission Proclamation, Endangered or Threatened Aquatic Species, and in the Tennessee Wildlife Resources Commission Proclamation, Wildlife in Need of Management), unless such take is authorized under the provisions of T.C.A. § 70-8-106(e).

i) Discharges from a new or proposed mining operation - Discharges from new or proposed mining operations are not authorized.

j) Discharges negatively affecting a property on the National Historic Register - 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) Discharges into waters with an approved Total Maximum Daily Load - Discharges of a pollutant to waters for which there is an EPA-approved or established total maximum daily load (TMDL) for that pollutant, unless the SWPPP incorporates measures or controls consistent with the assumptions and requirements of the TMDL. 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. If 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 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

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

a) issue an NOC to the operator identified as the initial site-wide primary permittee on the NOI form (see Subpart 1.5 below - *Effective Date of Coverage*),
b) publish new operators' supplemental NOI information on TDEC's dataviewer,
c) notify the applicant of needed changes to their NOI submittal (see Section 2.6.3 below - *Application completeness*), or
d) deny coverage under this general permit (see Subpart 7.12 below - *Individual Permit*).

1.4.1. Notice of Intent

Operators wishing to obtain coverage under this permit must submit a complete NOI in accordance with Part 2 below, using the NOI form provided in Appendix A of this permit. 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 submit a site-specific SWPPP with the NOI. The SWPPP, developed and submitted by the site-wide permittee (typically the owner/developer who applies for coverage prior to project commencement[1]), 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 address the total acreage

[1] See Subpart 2.1 on page 7 for a definition of a site-wide permittee.

planned to be disturbed (see definition for "disturbed area" in part 10), including any associated construction support activities (see Section 1.2.2 above). 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 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 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 the 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.

Site operators who are building single family residential houses on at-grade lots (see Section 2.2.2 below) and who are submitting an application for coverage under this permit, may complete and submit Form CN-1249, the Stormwater Pollution Prevention Plan (SWPPP) for Single Family Residential Homebuilding Sites. This SWPPP template is available at http://tdec.tn.gov/etdec/DownloadFile.aspx?row_id=CN-1249.Form CN-1249 is not appropriate if significant grading of the lot or lots is necessary.

1.4.3. Permit application fee

The permit application fee should accompany the applicant's NOI form. The fee is based on the total acreage planned to be disturbed (see definition of "disturbed area" in Part 10) by an entire construction project for which the applicant is requesting coverage, including any associated construction support activities (see Section 1.2.2 above). The applicant may present documentation of common areas in the project that will not be subject to disturbance at any time during the life of the project and have these areas excluded from the fee calculation.

The application fees shall be as specified in Tennessee Rules, Chapter 0400-40-11. 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." Electronic payment methods, if made available by the State of Tennessee, are deemed acceptable. The following conditions apply:

- 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.
- New primary operators must pay the fee applicable to projects seeking subsequent coverage under an actively covered larger common plan of development or sale.
- Areas not covered by the original application shall be covered under a separate tracking number and a new application fee shall be paid based on the new acreage to be covered.
- Please note that in addition to the application fee, an annual maintenance fee applies per Rule 0400-40-11-.02(12)(i).

1.4.4. Submittal of a documents to local municipalities

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 copy of the notice of coverage NOC, and at project completion, a copy of the signed NOT to the MS4 upon its 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 http://tn.gov/environment/article/tdec-dataviewers.

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 MS4 program. A Qualifying Local Program (QLP) is a municipal stormwater program implemented by an MS4 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: https://www.tn.gov/environment/article/tennessee-qualifying-local-program.

If a construction site is within the jurisdiction of, and has obtained a notice of coverage from, a QLP, the operator is authorized to discharge stormwater associated with construction activity under this general permit without the submittal of an NOI, SWPPP or application fee to the division. Permitting of stormwater runoff from construction sites from federal or state agencies (e.g., Tennessee Department of Transportation and Tennessee Valley Authority) and the local MS4 program itself will remain solely under the authority of TDEC.

The division may require any 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

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

For new operators seeking subsequent coverage under an existing tracking number, the division will not issue an NOC. New operators are covered under the permit when their permit record is published on TDEC's dataviewer as "active" and with an effective date.

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. The division reserves the right to deny coverage to artificial entities (e.g., corporations or partnerships, excluding entities not required to register with the Tennessee Secretary of State) that are not properly registered and in good standing (i.e., listed with an entity status of "active") with the Tennessee Secretary of State, Division of Business Services. The division also reserves the right

to issue permit coverage in the correct legal name of the individual or entity seeking coverage, including each general partner of a general partnership in addition to the general partnership.

If an Aquatic Resource Alteration Permit (ARAP) is required for a site proposed for active construction, the NOC will not be issued until an ARAP application is submitted and deemed complete by the division. The treatment and disposal of wastewater (e.g., sanitary wastewater) generated during and after the construction must be also addressed prior to issuance of the NOC. 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 who is the current owner of the construction site. This person is considered the primary permittee.
b) The person has day-to-day operational control of the activities necessary to ensure compliance with the SWPPP or other permit conditions. This person is typically a contractor or a commercial builder 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. Construction Site Operators

2.2.1. Owner/Developer

An owner or developer 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. and may be an individual, a corporate entity, or a governmental entity. An owner's 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 a site-wide permittee for the purpose of constructing and selling a structure (e.g., residential house, non-residential structure, commercial building, industrial facility); 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 an end user, such as 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 the activities necessary to ensure compliance with the SWPPP or other permit conditions (e.g., the 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: a general contractor, a grading contractor, an erosion control contractor, a sub-contractor responsible for land disturbing activities or EPSC implementation and maintenance, or a commercial builder hired by the primary permittee. 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. Permittees with design control

Permittees 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, 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 the SWPPP indicates the areas of the project where they have design control 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 BMPs (i.e., sediment treatment basin and drainage structures) 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 primary permittee; and
d) ensure that all operators on the site have permit coverage, if required, and are complying with the SWPPP.

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 a supplemental NOI is submitted identifying the new operators (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.

2.3.2. Permittees with day-to-day operational control

Permittees with day-to-day operational control of the activities necessary to ensure compliance with the SWPPP or other permit conditions must:

a) ensure the SWPPP for portions of the project where they are operators meets the requirements of Part 3 below (*SWPPP Requirements*) and identifies the parties responsible for implementing the control measures identified in the plan;
b) ensure the SWPPP indicates areas of the project where they have operational control over day-to-day activities; and
c) ensure that measures in the SWPPP are adequate to prevent erosion and control any sediment that may result from their earth disturbing activity.

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 sites

An operator presently permitted under the 2011 construction general permit shall be granted coverage under this new general permit.[2] 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. If the confirmation is required but not received by the division, coverage under the new general permit will be terminated. If a site with terminated coverage is unstable or if construction continues, a new NOI, SWPPP, and application fee must be submitted.

2.4.2. New sites or New Phases of Existing Sites

Except as provided in Section 2.4.3 below, operators must submit a complete NOI, SWPPP and an application 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 operators

A supplemental NOI should be submitted as soon as practicable before a new operator commences work at a site with existing coverage. The supplemental NOI must reference the project name and tracking number assigned to the primary permittee's NOI.

A new operator working as a residential home builder may submit Form CN-1249, the Stormwater Pollution Prevention Plan (SWPPP) for Single Family Residential Homebuilding Sites. This form may be found at http://tdec.tn.gov/etdec/DownloadFile.aspx?row_id=CN-1249 (see Section 1.4.2 above).

The NOI may not need to be submitted immediately upon assuming operational control if the portion of the site controlled by the new operator is inactive and all of the previously disturbed areas are stabilized. 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 the primary permittee's company name has changed (but not the site ownership or authorized signators), an updated NOI should be submitted to the division within 30 days of the name change, along with documentation that the name change has been properly registered with the Tennessee Secretary of State, Division of Business Services. If the new operator agrees to comply

[2] If the existing permittee is an artificial person (e.g., a partnership or corporation, excluding entities not required to register with the Tennessee Secretary of State), the division reserves the right to deny coverage under this new general permit if the permittee is not registered and in good standing (i.e., listed with an entity status of "active") with the Tennessee Secretary of State, Division of Business Services. The division further reserves the right to convert permit coverage to the correct legal name of the permittee and to name each general partner of a general partnership in addition to the general partnership.

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.

If the transfer of ownership is due to foreclosure or a permittee filing for bankruptcy proceedings, the new owner (e.g., 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 Subpart 2.2 above (*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.

2.6. NOI Form

2.6.1. Contents of the NOI form

The NOI for construction projects shall be submitted on the form provided in Appendix A of this permit. 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 contractors that meet the definition of the operator in Subpart 2.2 above (*Construction Site Operators*) shall apply for permit coverage on the same NOI, if possible. 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 SWPPP shall be prepared in accordance with Part 3 below, and must be submitted with the NOI unless the NOI is only being submitted to add a 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, a city map, or a county map with the proposed construction site centered, must be included with the NOI. The entire proposed construction area must be outlined in red on the map. The total acreage to be disturbed should be included on the map. All outfalls discharging runoff from the property should be identified. Streams receiving the discharge and storm sewer systems conveying the discharge from outfalls should be clearly identified and marked on the map. 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 for which they are applying for permit coverage, and the location of EPSCs that will be used at each lot (see Section 1.4.2 above).

2.6.3. Application completeness

The division recommends that all applicants use the Notice of Intent (NOI) & Stormwater Pollution Prevention Plan (SWPPP) Checklist (see Appendix D) to check the completeness of their submittal.

Based on a review of the NOI and other available information, the division shall, within 30 days:

a) issue an NOC to the initial site-wide primary operator for the construction site (see Subpart 1.5 above),
b) publish new operators' supplemental NOI information on TDEC's dataviewer,
c) prepare a deficiency letter stating additional information must be provided before the NOC can be issued, or
d) 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 Application Fee

The applicant shall submit the NOI, SWPPP, and application fee to the appropriate TDEC Environmental Field Office (EFO) for the county 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 different EFO service areas, the operators shall send the NOI and the application fee 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 (e.g., TDOT, 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 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 the 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 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 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 shall be prepared by an individual who has a working knowledge of erosion prevention and sediment controls, such as (but not limited to) 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 waters with unavailable parameters or Exceptional Tennessee Waters (see Section 5.4.1 below).

3.1.2. Site assessment

Quality assurance of erosion prevention and sediment controls (EPSCs) shall be done by performing site assessments. The site assessment shall be conducted at each outfall draining 10 or more acres (see Subsection 3.5.3.3 below) or 5 or more acres if draining to waters with unavailable parameters or Exceptional Tennessee Waters (see Section 5.4.1 below). Site assessments shall cover the entire disturbed area and occur within 30 days of construction commencing at each portion of the site that drains the qualifying acreage. The site assessment shall be performed by individuals with one or more of the following qualifications:

a) A licensed professional engineer or landscape architect.
b) A Certified Professional in Erosion and Sediment Control (CPESC).
c) A person who has successfully completed the "Level II Design Principles for Erosion Prevention and Sediment Control for Construction Sites" course.

At a minimum, site assessments should be performed to verify the installation, functionality and performance of the EPSC measures described in the SWPPP. If structural BMPs (or equivalent EPSC measures) are not constructed or construction is in progress at the time of the site assessment, a follow-up monthly assessment(s) are required until the BMPs are constructed per the SWPPP. The site assessment should be performed with the inspector (as defined in Part 10 below) 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 field SWPPP at the site. At a minimum, the documentation shall include information required in the inspection form provided in Appendix C of this permit, an assessment of any failing or unmaintained EPSCs, causes of failure and any action necessary to bring the site into compliance with this permit. The documented quality assurance site assessments shall also indicate if all EPSCs have been installed as designed in the submitted SWPPP and EPSC plans; and, if not, measures that need to be taken so those EPSCs meet the design specifications in the field SWPPP and EPSC plans. 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. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury."*

The site assessment can take the place of one of the twice weekly inspections required in Subsection 3.5.8.2 below if the entire site is inspected during the assessment.

The division may require additional site assessments to be performed if site inspections by division personnel reveal site conditions that have potential of causing pollution to waters of the state.

3.2. SWPPP Preparation and Compliance

3.2.1. Existing sites

Operators of an existing site presently permitted under the division's 2011 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. The permittee shall make the updated SWPPP available for the division's review upon request.

3.2.2. New sites or New Phases of Existing Sites

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, SWPPP Review and Making Plans Available

3.3.1. Signature requirements

The SWPPP shall be signed by the operators 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. Electronic signatures are deemed equivalent to original signatures. A SWPPP that does not bear an original signature or an electronic signature will be deemed incomplete.

3.3.2. SWPPP review

The permittee shall make updated plans and inspection reports available upon request to the director; the local agency approving erosion prevention and sediment control plans, 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 current version 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 off-site, 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 conditions apply:

a) Whenever there is a change in the scope of the project that would be expected to have a significant effect on the discharge of pollutants to the waters of the state and which has not otherwise been addressed in the SWPPP. 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; or 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, 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) Whenever any new operator (typically a secondary permittee) who will implement a measure of the SWPPP must be identified (see Subparts 2.1 and 2.2 above for further description of which operators must be identified).
d) Whenever it is necessary to include measures intended 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.
e) Whenever a TMDL is developed for the receiving waters for a pollutant of concern (e.g., siltation and habitat alterations due to in-channel erosion).

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: a site description; a description of stormwater runoff controls, erosion prevention and sediment control measures, stormwater management measures, and a description of any other items needing control; approved local government sediment and erosion control requirements; maintenance and inspection requirements; 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 pollutants 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 SWPPP 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 activities which disturb soils for major portions of the site (e.g., grubbing, excavation, grading, utilities and infrastructure installation).
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 percent slope and the variation in percent slope found on the site. The estimate should be on a basis of a drainage area serving each outfall, rather than an entire project.
e) An estimate of drainage area (acres) serving each outfall.
f) Data describing the soil, how the soil type will dictate the needed control measures and how the soil may affect the expected quality of runoff from the site. The data may be referenced or summarized.
g) An estimate of the runoff coefficient of the site after construction activities are completed and a description of how the runoff will be handled to prevent erosion at the permanent outfall and receiving stream. The estimate of the percentage of impervious area before and after construction must also be provided.
h) An erosion prevention and sediment control plan with the proposed construction area clearly outlined. The plan should indicate the boundaries of the permitted area, drainage patterns, 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 and sinkholes, and identification on the erosion control plan of outfall points intended for coverage. The erosion control plan must meet requirements stated in Section 3.5.2 below.
i) 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.
j) 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.
k) The name of the receiving waters and identification if those receiving waters have unavailable parameters for siltation and habitat alterations due to in-channel erosion or are Exceptional Tennessee Waters.
l) If applicable, clearly identify and outline the buffer zones established to protect waters of the state located within the boundaries of the project.
m) A description of lot-level EPSC measures to be implemented when a lot, or lots, at a subdivided construction project is sold to a new owner prior to the completion of construction. Subdivided construction projects may include residential or commercial subdivisions and industrial parks. The new operator must obtain coverage under this permit once the property is sold.
n) A description of the construction phasing for projects of more than 50 acres (see Subsection 3.5.3.1 below).
o) A description of the protections (e.g., caution fencing or stream side buffer zones) employed to limit the disturbance if only a portion of the total acreage of the construction site is to be disturbed. The limits of disturbance shall be clearly identified in the SWPPP and the 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 activity which disturbs soils for major portions of the site (e.g., grubbing, excavation, grading, utilities and infrastructure installation). The SWPPP must also describe:

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 EPSC plans showing the approximate location of each control measure and a description of when the measure will be implemented during the construction process (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 and the EPSC measures that will be utilized during each stage should be depicted on multiple plan sheets as described below. Half sheets are acceptable. One sheet showing the combined EPSCs that will be used during the life of a multi-phase project will not be considered complete.

At least two separate EPSC plan sheets shall be developed for site disturbances less than five acres. The first plan sheet will address the EPSC measures necessary to manage stormwater runoff, erosion and sediment during the initial land disturbance, or grading, stage. The second plan sheet will address the EPSC measures necessary to manage stormwater runoff, erosion and sediment during the final grading stage.

At least three separate EPSC plan sheets shall be developed for site disturbances of five or more acres. In addition to the two plan sheets described above, a third plan sheet will address the EPSC measures necessary to manage stormwater runoff, erosion and sediment during any interim grading stages.

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 control

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 the 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 or fine particle soils are present at the site, additional

physical or chemical treatment of stormwater runoff may be required. Proposed physical 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.

Chemicals used for treating stormwater runoff must be shown to be non-toxic to sensitive aquatic species through a 48-hour or 96-hour acute toxicity test as reported in the product's Material Safety Data Sheets. The chemical feed rate shall be such that the effluent concentration of the product is lower than the LC50 toxicity value for sensitive aquatic species as reported in the products Material Safety Data Sheets. Calculations used to determine the chemical feed rate so that runoff or effluent is not toxic to sensitive aquatic species shall also be included in the SWPPP. Chemicals used for treating stormwater runoff shall be applied in accordance with manufacturer specifications and securely stored on-site in the contractor's staging and storage area if not stored off-site or provided by others. Chemicals shall not be applied directly to any stream.

c) The timing of the planting of the vegetation cover must be discussed in the SWPPP if permanent or temporary vegetation is to be used as a control measure. Planting cover vegetation during winter months or dry months should be avoided.
d) If sediment escapes the permitted area, off-site accumulations that have not reached a stream must be removed at a frequency sufficient to minimize off-site impacts (e.g., sediment that has escaped a construction site and collected in a street must be removed so that it does not subsequently wash into storm sewers and streams during the next rain or so that it does not pose a safety hazard to users of public streets). Permittees shall not initiate remediation or restoration of a stream without consulting the division first. This permit does not authorize access to private property. Arrangements concerning the removal of sediment on adjoining property must be settled by the permittee and the adjoining landowner.
e) Sediment should be removed from sediment traps, silt fences, sedimentation basins and other sediment controls as recommended in the Tennessee Erosion and Sediment Control Handbook. Sediment 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 storm events or before being carried off of the site by wind so that they do not become a pollutant source for stormwater discharges. Erosion prevention and sediment control materials (e.g., silt fence) should be removed or otherwise prevented from becoming a pollutant source for stormwater discharges.
g) Erodible material storage areas (e.g., overburden and stockpiles of soil) and borrow pits that are used primarily for the permitted project and 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 14 days prior to grading or earth moving activities unless the area is subsequently temporarily or permanently stabilized.
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 recommended on all projects regardless of size as an effective 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.

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

   i. Where no one area of active soil disturbance is greater than 50 acres and the various areas of disturbance have separate receiving waterbodies.
   ii. Where contiguous disturbances amount to greater than 50 acres, but no single waterbody is receiving runoff from more than 50 disturbed acres.
   iii. With the department's written concurrence, where more than 50 acres of disturbance is to occur and where a single waterbody will receive runoff from more than 50 acres.
   iv. 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) EPSC 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 the 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 sediment and the generation of dust shall be minimized. A stabilized construction access 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 precipitation.

3.5.3.2. Stabilization practices

The SWPPP shall include a description of temporary and permanent stabilization practices, including site-specific scheduling of the implementation of the practices. Site plans should ensure that existing vegetation is preserved when possible Stabilization practices may include: temporary seeding, permanent seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees and the preservation of mature vegetation.. Use of impervious surfaces for final stabilization in lieu of a permanent vegetative cover should be avoided where practicable. No stabilization control measures or EPSC measures are to be installed in a stream without obtaining a Section 404 permit and an Aquatic Resources Alteration Permit (ARAP).

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 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.
b) Where construction activity on a portion of the site is temporarily ceased, but soil disturbing activities will resume within 14 days.

Steep slopes shall be stabilized no later than seven 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).

EPSC measures must be prepared in accordance with good engineering practices and the latest edition of the Tennessee Erosion and Sediment Control Handbook. In addition, EPSC measures 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. Chemical treatment of the stormwater runoff may be necessary to minimize the amount of sediment being discharged when clay and other fine particle soils or highly erodible soils are present at the construction site.

For an on-site outfall that 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.[3] A drainage area of 10 or more acres includes disturbed and undisturbed portions of the site and areas adjacent to the site, all draining through the common outfall. Where an equivalent control

[3] Two principal objectives in sediment basin design should be recognized: (a) lower wet and dry sediment treatment storage with a permanent pool, with a total minimum volume below the principal spillway riser crest of 134 yd^3/acre (b) upper hydrologic storage (i.e., 2-yr or 5-yr and 25-yr, 24-hr storms) for designing hydraulic controls such as principal and emergency spillways.

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, filtered or chemically treated prior to its discharge into surface waters. Water must be discharged through a pipe, 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, including a brief description of applicable State or local erosion and sediment control requirements.

For projects discharging to waters with unavailable parameters for siltation and habitat alterations 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 the increase in impervious area after the construction addressed in the permit application is completed, the nature of fill material and existing data describing the soil or the quality of the discharge. 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 operation and maintenance of stormwater management measures prior to final stabilization of the site and permit coverage being terminated. Permittees are not responsible for maintenance after permitted stormwater discharges associated with construction activity have been eliminated from the site. All permittees are encouraged to limit the amount of post construction runoff voluntarily, if not required by local building regulations or local MS4 program requirements, 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 (i.e.,, 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 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) The SWPPP shall identify and provide the necessary EPSC measures for the installation of any waste disposal system, sanitary sewer or septic system. Permittees must also comply with applicable state and local waste disposal, sanitary sewer or septic system regulations as necessary.
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 pollution from materials stored on site. Controls may include storage practices to minimize exposure of the materials to stormwater or 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 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 control 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 prevention and sediment control measures, buffer zones and other protective measures 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 seven days after the need is identified.

3.5.8. Inspections

3.5.8.1. Inspector training and certification

Twice weekly inspections can be performed by:

a) a person with a valid certification from the "Fundamentals of Erosion Prevention and Sediment Control Level I" course,
b) a licensed professional engineer or landscape architect,
c) a Certified Professional in Erosion an Sediment Control (CPESC), or
d) a person who has successfully completed the "Level II Design Principles for Erosion Prevention and Sediment Control for Construction Sites" 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 portions of construction sites have been temporarily stabilized, inspections only have to be conducted once per month until 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 Subsection 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. EPSC measures shall be observed to ensure that they are operating correctly.
d) Outfall points shall be inspected to determine whether EPSC measures are effectively preventing 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, modified or repaired as necessary, before the next rain event; but in no case more than seven 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 seven 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 and the permittee has obtained a written approval from the division to use the alternative form. 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. 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, a copy of the signed original must be submitted.

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 primary permittees who have obtained coverage under this permit should conduct twice weekly inspections, unless their portions of the site have been temporarily stabilized, 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 inspect 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

The SWPPP must identify the source of any non-stormwater discharge listed in Section 1.2.3 above if it is to be combined with stormwater discharges associated with construction activity. The SWPPP shall identify and ensure the implementation of appropriate pollution prevention measures for the non-stormwater components of the discharge. Any non-stormwater must be discharged through stable discharge structures. Estimated volume of the non-stormwater components 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) 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 consultations 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 controls 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 to minimize soil erosion in order to minimize pollutant discharges;
2.) Control stormwater discharges, including both peak flowrates and total stormwater volume, to minimize channel and streambank erosion and scour in the immediate vicinity of discharge points;
3.) Minimize the amount of soil exposed during construction activity;
4.) Minimize the disturbance of steep slopes;
5.) Minimize sediment discharges from the site. The design, installation and maintenance of erosion and sediment controls must address factors such as the amount, frequency, intensity and duration of precipitation, the nature of resulting stormwater runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site;
6.) Provide and maintain natural buffers as described in Section 4.1.2 below, direct stormwater to vegetated areas and maximize stormwater infiltration to reduce pollutant discharges, unless infeasible;
7.) Minimize soil compaction. Minimizing soil compaction is not required where the intended function of a specific area of the site dictates that it be compacted; and
8.) Unless infeasible, preserve topsoil. Preserving topsoil is not required where the intended function of a specific area of the site dictates that the topsoil be disturbed or removed.

4.1.2. Water quality riparian buffer zone requirements

Water quality riparian buffer zone requirements in this section apply to all streams adjacent to construction sites except for streams with unavailable parameters or Exceptional Tennessee Waters (see Section 5.4.2 below). A 30-foot natural water quality riparian buffer adjacent to all streams at a construction site shall be preserved, to the maximum extent practicable, during construction activities. The water quality riparian buffer is required to protect waters of the state that are not wet weather conveyances (e.g., perennial and intermittent streams, rivers, lakes, wetlands) located within or immediately adjacent to the boundaries of the project, as identified using Tennessee's standard operating procedures for hydrologic determinations set forth in Rule 0400-40-03-.05(9). [4] Because of heavy sediment load associated with construction site runoff, water quality riparian buffers are not primary sediment control measures and should not be relied on as such. However, the primary purpose of water quality riparian buffers is additional pollutant removal. Stormwater discharges must enter the water quality riparian buffer zone as sheet flow, not as concentrated flow, where site conditions allow. Rehabilitation and enhancement of a natural buffer zone is allowed, if necessary, to improve its effectiveness in protecting waters of the state.

The water quality 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. If the construction site encompasses both sides of a stream, buffer averaging can be applied to both sides, but must be applied independently.

[4] If obtaining permit coverage for the first time following the effective date of this permit, 15-foot buffers are also required for any wet weather conveyance identified as waters of the United States by the U.S. Army Corps of Engineers or the Environmental Protection Agency.

Every attempt should be made for construction activities to not take place within the water quality riparian buffer zone and for existing forested areas to be preserved. Where it is not practicable to maintain a full water quality riparian buffer, BMPs providing equivalent protection to a receiving stream as a natural water quality riparian buffer must be used at a construction site. Equivalent BMPs shall be designed to be as effective in protecting the receiving stream from the impacts of stormwater runoff as a natural water quality riparian buffer. 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 may include sewer line construction, roadway construction, utility line or equipment installation, greenway construction, construction of a permanent outfall or a velocity dissipating structure.

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. Water quality riparian buffer zone exemption based on existing uses

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

a) 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 may include 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.

b) 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 were pre-approved prior to February 1, 2010, is 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 written and dated 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. In arid, semiarid, and drought-stricken areas where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures such as, properly anchored mulch, soil binders or 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 may include weir tanks, dewatering tanks, gravity bag filters, sand media particulate filters, pressurized bag filters, cartridge filters 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:

a) 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;
b) 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
c) minimize the discharge of pollutants from spills and leaks, and implement chemical spill and leak prevention and response procedures.

Soil analysis shall be performed prior to the application of fertilizer to any portion of the site. Soil analysis shall include parameters included in the Basic Test by the UT Agriculture Extension for developing and maintaining fertilizer programs (e.g., soil pH, buffer value, phosphorus, potassium, calcium, magnesium). Soil samples should be representative of the area for which fertilizer will be applied. Sample type should be composite and should be collected in accordance with the guidance provided in the University of Tennessee Extension "Soil Testing" brochure PB1061, available at: http://utextension.tennessee.edu/publications/Documents/PB1061.pdf. Soil analysis results shall be used to determine correct fertilizer application rates to prevent the over-application of fertilizer to the site. Documentation of required soil analysis be maintained onsite with the SWPPP.

4.1.6. Prohibited discharges

The following discharges are prohibited:

a) Wastewater from washout of concrete, unless managed by an appropriate control.
b) Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials.
c) Fuels, oils or other potential pollutants used in vehicle and equipment operation and maintenance.
d) Soaps or solvents used in vehicle and equipment washing.

4.1.7. Surface outlets

Discharges from basins and impoundments shall 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 discharges 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), the Tennessee Emergency Management Agency (emergencies: 800-262-3300; non-emergencies: 800-262-3400) and the local emergency planning office (where applicable) 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) in addition to any follow up notifications required by federal law, 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 cause or contribute to a violation of a state water quality standard (Tennessee Rules, Chapters 0400-40-03, 0400-40-04). 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 violations. 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 Tennessee Rules, Chapter 0400-40-03-.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 impair the usefulness of waters of the state for any of the uses designated for that water body by Tennessee Rules, Chapter 0400-40-04. Construction activity carried out in the manner required by this permit shall be considered in compliance with the Tennessee Rules, Chapter 0400-40-03-.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 Waters with Unavailable Parameters or Exceptional Tennessee Waters

5.4.1. SWPPP/BMP requirements

Discharges that would cause measurable degradation of waters with unavailable parameters or that would cause more than de minimis degradation of 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 with unavailable parameters for siltation and habitat alterations due to in-channel erosion (or discharges upstream of such waters and because of the proximity to the segment with unavailable parameters and the nature of the discharge is likely to contribute sediment in amounts measurable in the waters with unavailable parameters) and for discharges to 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 cause more than de minimis degradation in the exceptional segment):

a) The SWPPP must certify that EPSC measures used at the site are designed to control stormwater 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"), at 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. Additional physical or chemical treatment of stormwater runoff, such as use of treatment chemicals, may be necessary to minimize the amount of sediment being discharged when clay and other fine particle soils are found on sites.
b) The SWPPP must be prepared by individuals with one or more of the following qualifications:

- A licensed professional engineer or landscape architect.
- A Certified Professional in Erosion and Sediment Control (CPESC).
- A person who has successfully completed the "Level II Design Principles for Erosion Prevention and Sediment Control for Construction Sites" course.

c) A copy of the certification or training record for inspector certification should be included with the field SWPPP.

d) 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.

e) The permittee must certify on the form provided in Appendix C of this permit whether or not all planned and designed EPSC measures 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. 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.

f) If the division finds that an operator is contributing to the impairment of a receiving stream despite complying with the SWPPP, The operator will be notified by the director in writing that the discharge is no longer eligible for coverage under the general permit. The operator 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 seven 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 (U.S. EPA NPDES Forms 1 and 2F). The project must be stabilized immediately and remain stable 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.

g) For an on-site outfall in a drainage area totaling five or more acres, a minimum 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. The drainage area includes both disturbed and undisturbed portions of the site and areas adjacent to the site, all draining through a common outfall. Where an equivalent control measure is substituted for a sediment retention basin, the equivalency must be justified in the SWPPP narrative. 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 and a marker installed signifying when sediment accumulation has reduced the wet storage volume by 50%. In a case that sediment marker is damaged by the volume of water or sediment, a best professional judgement should be used in evaluating sediment basin capacity.

h) For an on-site outfall in a drainage area totaling 3.5 - 4.9 acres, a minimum sediment trap volume that will provide treatment for a calculated volume of runoff from a 5-year, 24-hour storm and runoff from each acre drained, is recommended until final stabilization of the site. A drainage area of 3.5 - 4.9 acres includes both disturbed and undisturbed portions of the site or areas adjacent to the site, all draining through the common outfall. Runoff from any undisturbed acreage should be diverted around the disturbed area and the sediment trap. Diverted runoff can be omitted from the volume calculation. Sediment

storage expected from the disturbed areas must be included and a marker installed signifying when sediment accumulation has reduced the wet storage volume by 50%.

i) 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. Water quality riparian buffer zone requirements

Sites that contain, or are adjacent to, receiving waters with unavailable parameters or Exceptional Tennessee Waters shall preserve a 60-foot natural water quality riparian buffer zone adjacent to the receiving stream. The buffer zone shall be preserved to the maximum extent practicable during construction activities at the site. The water quality riparian buffer is required to protect waters of the state, as identified using Tennessee's standard operating procedures for hydrologic determinations set forth in Rule 0400-40-03-.05(9), located within, or immediately adjacent to, the boundaries of the project.[5] Because of heavy sediment load associated with construction site runoff, water quality riparian buffers are not primary sediment control measures and should not be relied on as such. The primary purpose of water quality riparian buffers is additional pollutant removal. Stormwater discharges must enter the water quality riparian buffer as sheet flow, not as concentrated flow, where site conditions allow. Rehabilitation and enhancement of a natural water quality riparian buffer zone is allowed, if necessary, to improve its effectiveness in protecting waters of the state.

The natural water quality riparian buffer zone should be preserved between the top of stream bank and the disturbed construction area. The 60-foot criterion for the width of the buffer can be established on an average width basis at a project, as long as the minimum width of the buffer is more than 30 feet at any measured location. If the construction site encompasses both sides of a stream, buffer averaging can be applied to both sides, but must be applied independently.

Every attempt should be made for construction activities not to take place within the water quality riparian buffer zone and for existing forested areas to be preserved. Where it is not practicable to maintain a full water quality riparian buffer, or if the construction site is located in an MS4 jurisdiction and would qualify for a smaller permanent water quality riparian buffer due to the size of the drainage area, then BMPs providing equivalent protection to a receiving stream as a natural riparian zone may be used at a construction site. Equivalent BMPs shall be designed to be as effective in protecting the receiving stream from the impacts of stormwater runoff as a natural water quality riparian 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 may include: sewer line construction, roadway construction, utility line or equipment installation, greenway construction, construction of a permanent outfall or a velocity dissipating structure.

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] If obtaining permit coverage for the first time following the effective date of this permit, 15-foot buffers are also required for any wet weather conveyance identified as waters of the United States by the U.S. Army Corps of Engineers or the Environmental Protection Agency.

5.4.2.1. Water quality riparian buffer zone exemption based on existing uses

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

a) 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 may include 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.

b) 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 February 1, 2010, are exempt from 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 SWPPPs, reports required by this permit, records of all data used to complete the NOI and the NOT for a period of at least three years from the date the NOT 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 and 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 SWPPP 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. The permittee shall maintain a copy of all records for a period of three years once coverage is terminated.

6.2.1. Posting information at the construction site

The initial site-wide 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) A name or 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.
d) The location of the SWPPP (see Section 3.3.3 above).

The notice must be maintained in a legible condition. The notice shall be posted in a local public building if posting this information near a main entrance is infeasible due to safety concerns or not accessible to the public. If the construction project is a linear construction project (e.g., pipeline or highway), 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 permittees to allow members of the public access to a construction site.

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

a) A rain gauge (or use a reference site for a record of daily precipitation),
b) A copy of the twice weekly inspection reports,
c) A documentation of quality assurance site assessments, if applicable (see Section 3.1.2 above).
d) A copy of the site inspector's certification (e.g., Fundamentals of Erosion Prevention and Sediment Control Level 1 or Level 2, P.E., P.L.A., CPESC).

6.3. Electronic Submission of Documents

If the division notifies dischargers by mail, E-mail, 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. 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 an enforcement action, permit termination, revocation and reissuance, modification; or for denial of a permit renewal application.

7.1.2. Penalties

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 2011 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 NOIs, SWPPPs, 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 shall be signed as described in Sections 7.7.1 and 7.7.2 below and dated.

7.7.1. Signatory requirements for an NOI[6]

The 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

[6] 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]

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.

b) For a general partnership, by each general partner in the general partnership,

c) For a sole proprietorship, by the proprietor,

d) 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 principle geographic unit of the agency (e.g., Regional Administrators of EPA).

NOTE: The division does not require specific assignments or delegations of authority to responsible corporate or municipal, state, federal, or other public agency officers. The division will presume that these officers have the requisite authority to sign permit applications unless the entity has notified the director to the contrary. Procedures governing authority to sign permit applications may provide for assignment or delegation to applicable positions rather than to specific individuals.

7.7.2. Signatory requirements for reports and other items

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

7.7.3. 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 on the SWPPP:

> "*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.*"

7.7.6. Signatory requirements for secondary permittees

Secondary permittees 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 on the 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. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury."*

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, or any exclusive privileges; nor does it authorize any injury to private property, any invasion of personal rights or 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. Individual Permits

7.12.1. Required coverage

The director may require any person covered by this permit to apply for and obtain an individual NPDES permit to ensure 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. 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 requested coverage

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. General permit termination

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. 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 NOT form provided in Appendix B of this permit. Primary permittees who abandon a site and fail to submit the NOT will be in violation of this permit. If the NOT was not submitted five years following the "estimated end date" (as identified on the NOI), the division can terminate the CGP coverage. 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 below occur at the site:

a) All earth-disturbing activities and, if applicable, construction support activities permitted under Section 1.2.2 at the site are complete and the following requirements are met:
   i. For any areas that were disturbed during construction, are not covered by permanent structures and over which the permittee had control during the construction activities; the requirements for final vegetation or non-vegetative stabilization described in Subsection 3.5.3.2 are met.
   ii. The permittee has removed and properly disposed of all construction materials; and, waste and waste handling devices. The permittee has removed all equipment and vehicles that were used during construction, unless they are intended for long-term use following termination of permit coverage.
   iii. 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.
   iv. 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.
b) 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) under this permit to another operator, and that operator has submitted an NOI and obtained coverage under this permit.
c) The permittee obtains coverage under an individual or alternative general NPDES permit.

8.1.2. NOT review

The division may review NOTs for completeness and accuracy and, when necessary, investigate the proposed site for which the NOT was submitted. Coverage under the permit is terminated when the permit record is published on TDEC's dataviewer as "inactive."

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 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 an NOC. 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. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury."*

8.4. Where to Submit an 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 (ARAPs)

Alterations to channels or waterbodies (streams, wetlands 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/article/permit-water-aquatic-resource-alteration-permit). It is the responsibility of the developer to provide a determination of the water's status.[7] This determination must be conducted in accordance with Tennessee's standard operating procedures for hydrologic determinations set forth at Rule 0400-40-03.05(9). 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 Division of Water Resources.

"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, 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**" or "**Water Quality Riparian Buffer**" 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 sediments, nutrients or other 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

[7] 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).

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

"Clearing" in the definition of discharges associated with construction activity, typically refers to removal of vegetation and disturbance of soil prior to grading or excavation in anticipation of construction activities. Clearing may also refer to wide area land disturbance in anticipation of non-construction activities; for instance, clearing forested land in order to convert forestland to pasture for wildlife management purposes. Clearing, grading and excavation do not refer to clearing of vegetation along existing or new roadways, highways, dams or power lines for sight distance or other maintenance and/or safety concerns, or cold planning, 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, excavating 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) or physical demarcation (including boundary signs, lot stakes, surveyor markings) 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 Resources 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), or construction materials or equipment storage or maintenance (e.g., earth fill piles, fueling, waste material) are located.

"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 or in the construction of roadways, sewers and water utilities, stormwater drainage structures, etc., to make the property marketable.

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

"Exceptional Tennessee Waters" are surface waters designated by the division as having the characteristics set forth at Tennessee Rules, Chapter 0400-40-03-.06(4). Characteristics include waters within parks or refuges; scenic rivers; waters with threatened or endangered species; waters that provide specialized recreational opportunities; waters within areas designated as lands unsuitable for mining; waters with naturally reproducing trout; waters with exceptional biological diversity and other waters with outstanding ecological or recreational value.

"**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 perennial, preferably native, vegetative cover with a uniform (i.e., evenly distributed, without large bare areas) density of at least 70 percent 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.

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.

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.

"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 with following qualifications:

a) a valid certification from the "Fundamentals of Erosion Prevention and Sediment Control Level I" course,
b) a licensed professional engineer or landscape architect,
c) a Certified Professional in Erosion an Sediment Control (CPESC), or
d) successfully completed the "Level II Design Principles for Erosion Prevention and Sediment Control for Construction Sites" 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 an 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.
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 residential and commercial subdivisions or high-rise structures is not considered a linear project.

"**Measurable Degradation**," as used in the context of discharges or withdrawals – Changes in parameters of waters that are of sufficient magnitude to be detectable by the best available instrumentation or laboratory analyses.

(Note: Because analytical techniques change, the Department may consider either the most sensitive detection method needed to comply with state standards or any biological, chemical, physical, or analytical method, conducted in accordance with U.S. EPA approved methods as identified in 40 C.F.R. part 136. Consistent with T.C.A. § 69-3-108, for scenarios involving cumulative, non-measurable activities or parameters that are managed by a narrative criterion, the Department will use mathematical models and ecological indices to ensure no degradation will result from the authorization of such activities, consistent with the state's mixing zone policy.)

"Monthly" refers to calendar months.

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

a) 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;
b) designed or used for collecting or conveying stormwater;
c) not a combined sewer; and
d) not part of a Publicly Owned Treatment Works (POTW) as defined in 40 CFR §122.2.

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

"NOT" means notice of termination (see Part 8 above).

"**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.

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, 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):

a) Requirements for construction site operators to implement appropriate erosion and sediment control best management practices.
b) 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.
c) 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.
d) Requirements to submit a site plan for review that incorporates consideration of potential water quality impacts.

"**Quality Assurance Site Assessment**" means a 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, drawings and details for EPSC measures 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, 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., waters with unavailable parameters, Exceptional TN Waters, or waters with available parameters).

"**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 a violation of a water quality criteria or receiving stream 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**" means 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 around or over a steep slope so as not to erode the slope. In addition, site managers should focus on erosion prevention on the slopes and stabilize the slopes as soon as practicable to prevent slope failure or sediment discharges from the project.

"Stormwater" means rainfall runoff, snow melt runoff, and surface runoff and drainage.

A **"Stream"** is a surface water that is not a wet weather conveyance. Therefore, as used in this permit, "stream" includes lakes, wetlands and other non-linear surface waters.

"Stormwater associated with industrial activity" is defined in 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 exempt from permit requirements, but stormwater discharges from agriculture-related activities that involve construction of structures (e.g., barn construction, road construction, pond construction) are considered associated with industrial activity. Maintenance to the original line and grade, hydraulic capacity; or to the 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" means activities that cause, contribute to or result in point source stormwater pollutant discharges. These activities may include excavation, site development, grading and other surface disturbance activities; and activities to control stormwater including the siting, construction and operation of best management practices (BMPs).

"**Stormwater Pollution Prevention Plan"** (SWPPP) means a written plan required by this permit that includes a site map, a description of construction activities that could introduce pollutants to stormwater runoff 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 or non-erodible surface has 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) means the sum of the individual wasteload allocations for point sources and load allocations for nonpoint sources and natural background (40 CFR 130.2(I)). TMDL is a study that quantifies the amount of a pollutant in a stream, identifies the sources of the pollutant and recommends regulatory or other actions that may need to be taken in order for the stream to cease being polluted. TMDLs can also be described by the following equation:

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

A list of completed TMDLs that have been approved by EPA can be found at our web site: http://www.tn.gov/environment/article/wr-ws-tennessees-total-maximum-daily-load-tmdl-program.

"Treatment chemicals" are polymers, flocculants or other chemicals used to reduce turbidity in stormwater discharges by chemically bonding to suspended silts and other soil materials and causing them to bind together and settle out. Common examples of anionic treatment chemicals are chitosan and anionic PAM.

"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.

"**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.

"**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.

"W**aters with unavailable parameters**" 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 due to in-channel erosion. 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, waters with unavailable parameters. Resources to be used in making this determination include biennial compilations of impaired waters, databases of assessment information, updated GIS coverages (http://tdeconline.tn.gov/dwrwqa/), and the results of recent field surveys. GIS coverages of the streams and lakes not meeting water quality standards, plus the biennial list of waters with unavailable parameters, can be found at http://tn.gov/environment/article/wr-wq-water-quality-reports-publications.

"**Wet weather conveyances**" are man-made or natural watercourses, including natural watercourses that have been modified by channelization, that meet the following:

a) The conveyance carries flow only in direct response to precipitation runoff in its immediate locality.
b) The conveyance's channels are at all times above the ground water table.
c) The flow carried by the conveyance is not suitable for drinking water supplies.
d) Hydrological and biological analyses indicate that, due to naturally occurring ephemeral or low flow under normal weather conditions, 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. (Tennessee Rules, Chapter 0400-40-3-.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
QLP	Qualifying Local Program
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.)

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)

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 (if applicable):	Acres Disturbed:
		Total Acres:

Check the appropriate box(s) if there are streams and/or wetlands on or adjacent to the construction site: Streams Wetlands
If wetlands are located on-site and may be impacted, attach wetlands delineation report.
If an Aquatic Resource Alteration Permit (ARAP) has been obtained for this site, what is the permit number?

Receiving waters:

Attach the SWPPP with the NOI: SWPPP Attached	Attach a site location map: Map Attached

Site Owner/Developer (Primary Permittee): (Provide person, company, or entity that has operational or design control over construction plans and specifications):

For corporate entities only, provide correct Tennessee Secretary of State (SOS) Control Number:
(an incorrect SOS control number may delay NOI processing)

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/Developer(s) 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/Developer Name (print/type):	Signature:	Date:
Owner/Developer Name (print/type):	Signature:	Date:

Contractor 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. As specified in Tennessee Code Annotated Section 39-16- 702(a)(4), this declaration is made under penalty of perjury.

Contractor name, address, and SOS control number (if applicable):	Signature:	Date:

OFFICIAL STATE USE ONLY

Received Date:	Reviewer:	Field Office:	Permit Tracking Number: TNR	Exceptional TN Water:
Fee(s):	T & E Aquatic Flora/Fauna:	SOS Corporate Status:	Waters with Unavailable Parameters:	Notice of Coverage Date:

CONSTRUCTION GENERAL PERMIT - NOTICE OF INTENT (NOI) - INSTRUCTIONS

A completed NOI must be submitted to obtain coverage under the CGP. **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.** CGP coverage is required for stormwater (SW) 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.

The application fee 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, etc.). A separate annual maintenance fee is also required for activities that exceed 1 year under CGP coverage. See TN Rules, Chapter 0400-40-11-.02(b)(12).

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

Who must submit the NOI form? All site operators must submit an NOI form. "Operator" for the purpose of this permit and in the context of SW 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, and 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 initial site-wide 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 add a subsequent permittee to an existing coverage. **Artificial entities (e.g., corporations or partnerships) must submit the correct Tennessee Secretary of State, Division of Business Services, control number. General partnerships. For general partnerships, the NOI must be signed by each general partner in the general partnership.**

The NOI will be considered incomplete without a correct control number, and the division reserves the right to deny coverage to artificial entities that are not properly registered and in good standing with the Tennessee Secretary of State (i.e., listed with an entity status of "active"). The division further reserves the right to issue permit coverage in the correct legal name of the individual or entity seeking coverage and to name each general partner of a general partnership in addition to the general partnership.

Complete the form: Type or print clearly. Answer each item or enter "NA," for not applicable. 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 and comprehensive site-specific SWPPP (if applicable).**

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 information available to describe the location (reference to adjacent highways, roads and structures; eg., intersection of state highways 70 and 100). Latitude and longitude (in decimal degrees) can be found at numerous other web sites. Attach a copy of a 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.

Name of the receiving waters: Trace the route of SW runoff from the site and determine the name of the 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 waterbody that the unnamed tributary enters.

An ARAP 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, contact your local 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**.

Notice of Coverage: The division will review NOIs for completeness and accuracy and issue an NOC to site-wide primary operators, authorizing SW discharge from the construction site as of the effective date of the NOC. New subsequent operators will not receive an NOC, but are considered covered under the permit when their permit record is published on TDEC's dataviewer as "active" and with an effective date. TDEC Permit Dataviewer can be found at: http://environment-online.tn.gov:8080/pls/enf_reports/f?p=9034:34001:0

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	1301 Riverfront Pkwy, Suite 206	37402
Nashville	711 R S Gass Boulevard	37243	Knoxville	3711 Middlebrook Pike	37921
Columbia	1421 Hampshire Pike	38401	Johnson City	2305 Silverdale Road	37601

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC)

Division of Water Resources

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

1-888-891-TDEC (8332)

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

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

Type or print clearly, using ink.

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

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:

☐	Stormwater discharge associated with construction activity is no longer occurring and the permitted area has a uniform 70% permanent vegetative cover OR has equivalent measures such as rip rap or geotextiles, in areas not covered with impervious surfaces.
☐	You are no longer the operator at the construction site (i.e., 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:

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	1301 Riverfront Parkway, Ste. 206	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 Resources
William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 11th Floor, Nashville, Tennessee 37243
1-888-891-8332 (TDEC)

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

Construction Stormwater Inspection Certification (Twice-Weekly Inspections)

Site or Project Name:		**NPDES Tracking Number: TNR**
Primary Permittee Name:		Date of Inspection:
Current approximate disturbed acreage:	Has rainfall been checked/documented daily? Yes No	Name of Inspector:
Current weather conditions:		Inspector's Training Certification Number:

Please check the box if the following items are on-site:

Notice of Coverage (NOC) Stormwater Pollution Prevention Plan (SWPPP) Twice-weekly inspection documentation

Site contact information Rain Gage Off-site Reference Rain Gage Location: _____

Best Management Practices (BMPs):

Are the Erosion Prevention and Sediment Controls (EPSCs) functioning correctly: If "No," describe below in Comment Section			
1.	Are all applicable EPSCs installed and maintained per the SWPPP?	Yes	No
2.	Are EPSCs functioning correctly at all disturbed areas/material storage areas per section 4.1.5?	Yes	No
3.	Are EPSCs 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?	Yes	No
4.	Are EPSCs functioning correctly at ingress/egress points such that there is no evidence of track out?	Yes	No
5.	If applicable, have discharges from dewatering activities been managed by appropriate controls per section 4.1.4? If "No," describe below the measures to be implemented to address deficiencies.	Yes	No
6.	If construction activity at any location 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)	Yes	No
7.	Have pollution prevention measures been installed, implemented, and maintained to minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters per section 4.1.5? If "No," describe below the measures to be implemented to address deficiencies.	Yes	No
8.	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 address deficiencies. N/A	Yes	No
9.	Have all previous deficiencies been addressed? If "No," describe remaining deficiencies in Comment section. Check if deficiencies/corrective measures have been reported on a previous form.	Yes	No

Comment Section. If the answer is "No" for any of the above, please describe the problem and corrective actions to be taken. Otherwise, describe any pertinent observations:

Certification and Signature (must be signed by 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 document and all attachments were prepared by me, or under my direction or supervision. The submitted information is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

Inspector Name and Title:	Signature:	Date:
Primary Permittee Name and Title:	Signature:	Date:

Construction Stormwater Inspection Certification Form (Twice-Weekly Inspections)

Purpose of this form/ Instructions

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

As described in section 3.5.8.1 of the Permit, 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/). Twice weekly inspections can also be performed by: a licensed professional engineer or landscape architect; a Certified Professional in Erosion and Sediment Control (CPESC) or a person who has successfully completed the "Level II Design Principles for Erosion Prevention and Sediment Control for Construction Sites" course. A copy of the certification or training record for inspector certification should be kept on site.

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

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

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

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

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

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

Trained certified inspectors shall complete inspection documentation to the best of their ability. Falsifying inspection records or other documentation or failure to complete inspection documentation shall result in a violation of this permit and any other applicable acts or rules.

APPENDIX D

Notice of Intent (NOI) & Stormwater Pollution Prevention Plan (SWPPP) Checklist

(Next Page)

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

Notice of Intent (NOI) & Stormwater Pollution Prevention Plan (SWPPP) Checklist for the General Permit for Discharges of Stormwater Associated with Construction Activities (CGP)

Date Received: _____ **Staff Review Completion Date:** _____ **New NPDES Tracking Number:** _____ **MS4 Jurisdiction:** _____

Reviewer: _____ **# of Disturbed Acres:** _____ **Site/Project Name:** _____

Impaired Waters: Yes ☐ No ☐ **Exceptional Waters:** Yes ☐ No ☐ **T & E Species:** Yes ☐ No ☐ *(Add comments below)* **Fee Collected:** Yes ☐ No ☐

This NOI/SWPPP checklist pertains to the current CGP, and is used during the NOI review process to help determine whether the submittal provides enough information to grant a Notice of Coverage under the permit. ***This checklist does not specifically address every condition of the permit or preclude the Division from asking for additional information.***

Yes	No	NOI Requirements	Yes	No	
		Correct site-wide permittee (Owner/Developer) entity name included			Start/End Dates listed
		Proper signature for the owner/developer provided			Disturbed acreage given
		Receiving waters listed			Latitude/Longitude given and is correct
		ARAP Required? ARAP #(s):			County(ies) listed
		Appropriate portion of USGS topo map provided showing the boundaries of the construction site [2.6.2]	County(ies):		

Yes	No	N/A	SWPPP Requirements	CGP pg #
			"Common Plan of Development"/Site Concept Plan has been provided *[1.2.1]*	1
			Plans and specs for structural control measures have been prepared and stamped by Professional Engineer or Landscape Architect *[3.1.1]*	13
			Includes engineering design of sediment basin/controls for projects 10 acres or greater (5 acres if impaired/exceptional waters) *[3.1.1]*	13, 14
			Includes Quality Assurance Site Assessment requirement criteria if applicable *[3.1.2]*	14
			Signed by the operator(s) *[3.3.1]*	15
			Includes multi-phase sheets: <5 ac. – 2-phase plan min.; ≥5 ac. – 3-phase plan min. *[3.5.2]*	18
			Depicts disturbance limits, buffer zones, watershed drainage patterns/acreage, and proposed contours/slopes *[3.5.1.d&g; 4.1.1]*	17
			Includes a description of all construction activity (not just grading and street construction) [3.5.1.a]	17
			Includes a description sequence of major activities (e.g., grubbing, excavation, grading, utilities, and infrastructure installation, etc.) [3.5.1.b]	17
			Includes estimates of the total site area versus the total area of the site to be disturbed [3.5.1.c]	17
			Includes a complete inventory of aquatic resources (including any stream, sinkhole or wetland) on or adjacent to the project [3.5.1.i]	17
			Includes a description of appropriate erosion prevention and sediment controls (EPSCs) and the general timing of implementation *[3.5.2]*	18
			Specifies which permittee is responsible for implementation of which EPSC *[3.5.2]*	18
			Specifies removal of trapped sediment from sediment controls at or before 50% design capacity *[3.5.3.1.e]*	19
			Specifies EPSCs will be implemented before earth-moving begins *[3.5.3.1.l]*	20
			Specifies stabilization within 15 days (7 days for ≥35% slopes) on site areas where construction has temporarily/permanently ceased [3.5.3.2]	21
			Specifies inspections of outfalls/EPSC measures at least twice weekly and at least 72 hours apart *[3.5.8.2.a]*	24
			Specifies that vegetation, EPSCs & other protective measures are repaired, replaced, or modified within 7 days *[3.5.7; 3.5.8.2.f]*	23, 24
			Depicts the proposed location of all major structural/nonstructural controls and all proposed stabilization practices *[3.5.1.g; 3.5.3.3]*	18
			Identifies all outfall locations intended for coverage under the CGP *[3.5.1.g]*	17
			Includes the name of the receiving water(s), and approximate size and location of affected wetland acreage at the site *[3.5.1.j]*	17
			Identifies construction phasing for activities that will disturb >50 acres *[3.5.1.m & 3.5.3.1.k]*	20
			EPSCs have been designed to control the rainfall and runoff from a 2-year, 24-hour return interval storm *[3.5.3.3]*	21
			Specifies sediment basins for construction sites with drainage areas >10 acres *[3.5.3.3]*	22
			Specifies a 30' natural riparian buffer zone adjacent to all streams, lakes, wetlands on/adjacent to the construction site *[4.1.2]*	26

Yes	No	N/A	Additional SWPPP Requirements for Discharges into Impaired or Exceptional TN Waters	CGP pg #
			Specifies that EPSCs proposed for the site have been designed to control storm runoff generated by a 5-year, 24-hour storm event *[5.4.1.a]*	30
			Specifies sediment basins for construction sites with drainage areas >5 acres that discharge to impaired or exceptional waters [3.5.3.3] *[5.4.1.f]*	31
			Specifies a 60' natural riparian buffer zone adjacent to all impaired or exceptional waters on/adjacent to the construction site [4.1.2] *[5.4.2]*	31
			SWPPP Requirements for Permanent (Post-Development) Stormwater Management	CGP pg #
			Specifies velocity dissipation devices at discharge locations and along the length of any outfall channel *[3.5.4]*	22
			Includes technical basis used to select velocity dissipation devices where flows exceed predevelopment levels *[3.5.4]*	23

Identification indicators of possible streams or wetlands utilizing site information and resources include:

1. Contour and stream indicators on USGS TOPO maps
2. Drainage area to a defined conveyance (20 acres east TN/40 middle TN/ 75 west TN),
3. Aerial photography identifying a sinuous tree line or grouping of remaining forest in an agricultural setting
4. Springhouse/box
5. Comparable nearby drainage that has previously been determined to have a stream
6. Onsite or adjacent ponds or impoundments
7. Check EFO HD GIS for previous determinations
8. NRCS soil maps or Web Soil Survey (http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx)
9. Wetlands on National Wetlands Inventory: (http://www.fws.gov/wetlands/data/mapper.HTML)

If sufficient indicators exist, a stream determination may need to be performed. Stream determinations must be performed by a QHP.

Comments

Appendix G

SWPPP Contact Notice

TVA

Allen Fossil Plant

D4 Stormwater Reroute

Description:

Construction activities associated with stormwater improvements at the Allen Fossil Plant.

CONTACT:

For Storm Water Pollution Prevention Plan located at

Allen Fossil Plant

2574 Plant Road

Memphis, TN 38019

TBD

PHONE: (XXX) XXX-XXXX