

Mary Showers

To: Water Permits
Cc: Robbie Stephens; Mary Showers; Maysoon Haddad; Mary Howard; John Hewitt; DJ Wiseman
Subject: Storm Water Permit Application, PIN 101204.00
Attachments: PIN 101204.00 Cover letter signed.pdf; PIN 101204.00 NOI and Location Maps.pdf

Storm Water Permit Application

PE # 47023-1257-14
PIN 101204.00
SR-62
Western Ave. construct from E of Texas Ave. to Major Ave.
Knox County

The Permits Section submits the attached cover letter and NOI for the storm water application on the above referenced project.

All of the SWPPP files have been placed on TDOT's FTP site for retrieval. To retrieve them, please follow these steps within seven days (files are deleted after this time):

1. Go to <https://webftp.tdot.state.tn.us/>
2. Select Business Partner
3. Select Receive Files
4. Right click the link named "Permit Application, PIN 101204.00.zip to Save Target As
5. Save to appropriate folder in your file system

If you have any questions or we can provide further assistance, please contact me or Robbie Stephens at (615) 253-7693.



Mary Showers | Transportation Project Specialist
Natural Resources Office, Permit Section
Environmental Division
James K Polk, 9th floor
505 Deaderick St. , Nashville, TN 37243
Mary.Showers@tn.gov
tn.gov/tdot
Tel. (615)253-1558

Mary Showers

From: Mary Showers
Sent: Friday, August 12, 2016 3:28 PM
To: EPLANS TURNINS; TDOT PrintShopLettingInfo
Cc: TDOT.HQ Construction; TDOT EstimatingOffice; Robbie Stephens; Frederick Miller
Subject: PIN 101204.00, SWPPP SHEET SUBMITTAL (region 1)
Attachments: PIN 101204.00 SWPPP Plans.pdf

LETTING PLANS REVISION

PIN 101204.00
Project # 47023-1257-14
SR-62
Western Ave. from Texans Avenue to Major Avenue in Knoxville
Knox County

Description of Revision: SWPPP Sheets

Number of Sheets Added: 9

This email serves as notification that the subject project is being electronically submitted for the 10/7/2016 Letting Process. Please find the SWPPP Sheets attached.

ATTENTION PRINT SHOP: 1 sets of 11" X17" prints of the revised sheets only is requested for the HQ Construction Office. Please contact their office when the prints are ready to be picked up.



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ENVIRONMENTAL DIVISION
SUITE 900, JAMES K. POLK BLDG.
505 DEADERICK STREET
NASHVILLE, TN 37243-0334
PHONE: 615.741.3655 FAX:
615.741.1098

LETTER OF TRANSMITTAL

TO: | **Mary Howard, TDOT Region 1 Construction**

FROM: | **Natural Resources Office – Environmental Permits Section**
Suite 900, James K. Polk Building
505 Deaderick Street
Nashville, Tennessee 37243-0334
Mary.Showers@tn.gov
(615) 253-1558

DATE: | August 16, 2016

SUBJECT: | TDOT Project No. 47023-1257-14
PIN 101204.00
SR-66 Western Ave. construct from E of Texas Ave. to Major Ave.
Knox County

ATTACHED ARE THE FOLLOWING ITEM(S):

- Plans Sketches Plans
 Environmental Boundaries Water Quality Permits
 Other:

COMMENTS:



**STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION**

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

JOHN C. SCHROER
COMMISSIONER

BILL HASLAM
GOVERNOR

August 12, 2016

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

RE: NOI and SWPPP Submittals for TDOT Construction Activities

Dear Mr. McAdoo:

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

Project # 47023-1257-14

PIN: 101204.00

Project Description: SR-62 Western Ave., Construct from E of Texas Ave. to Major Ave.
Knox County

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

Please forward our office the Notice of Coverage (NOC) for this project as soon as it becomes available. Please contact me at (615) 253-1558 if I can be of any assistance.

Sincerely,

A handwritten signature in cursive script that reads "Mary Showers".

Mary Showers
Environmental Permits Section

Enclosures

JLH:MCS

Mr. Jim McAdoo
August 12, 2016
Page 2

Enclosures for:
cc: Ms. Mary Howard, Region 1 Construction (CD)

Reading File, NPDES File



TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION

Division of Water Resources

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

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

Form fields for Site or Project Name, Existing NPDES Tracking Number, Street Address or Location, Site Activity Description, County(ies), MS4 Jurisdiction, Acres Disturbed, and 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.: NRS 14.030

Receiving waters: East Fork Third Creek, Tributary to East Ford Third Creek, & Third Creek

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): Tennessee Department of Transportation

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

Mailing Address: 900 James K. Polk Bldg., 505 Deaderick Street City: Nashville State: TN Zip: 37243-0334

Phone: (615) 741-5373 Fax: (615) 741-1098 E-mail: TDOT.Env.NPDES@tn.gov

Optional Contact: Mary Showers Title or Position: Transportation Project Specialist

Mailing Address: 900 James K. Polk Bldg., 505 Deaderick Street City: Nashville State: TN Zip: 37243-0334

Phone: (615) 253-1558 Fax: (615) E-mail: Mary.Showers@tn.gov

Owner or Developer Certification (must be signed by president, vice-president or equivalent, or ranking elected official) (Primary Permittee)

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

Owner or Developer Name; (print or type) Jim Ozment Signature: [Signature] Date: 8/12/2016

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

I certify under penalty of law that I have reviewed this document, any attachments, and the SWPPP referenced above. Based on my inquiry of the construction site owner/developer identified above and/or my inquiry of the person directly responsible for assembling this NOI and SWPPP, I believe the information submitted is accurate. I am aware that this NOI, if approved, makes the above-described construction activity subject to NPDES permit number TNR100000, and that certain of my activities on-site are thereby regulated. I certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision. The submitted information is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

Contractor company name (print or type):

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

Mailing Address: City: State: Zip:

Phone: () Fax: () E-mail:

Other Contractor company name (print or type):

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

Mailing Address: City: State: Zip:

Phone: () Fax: () E-mail:

OFFICIAL STATE USE ONLY

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

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

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

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

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

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

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

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

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

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

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

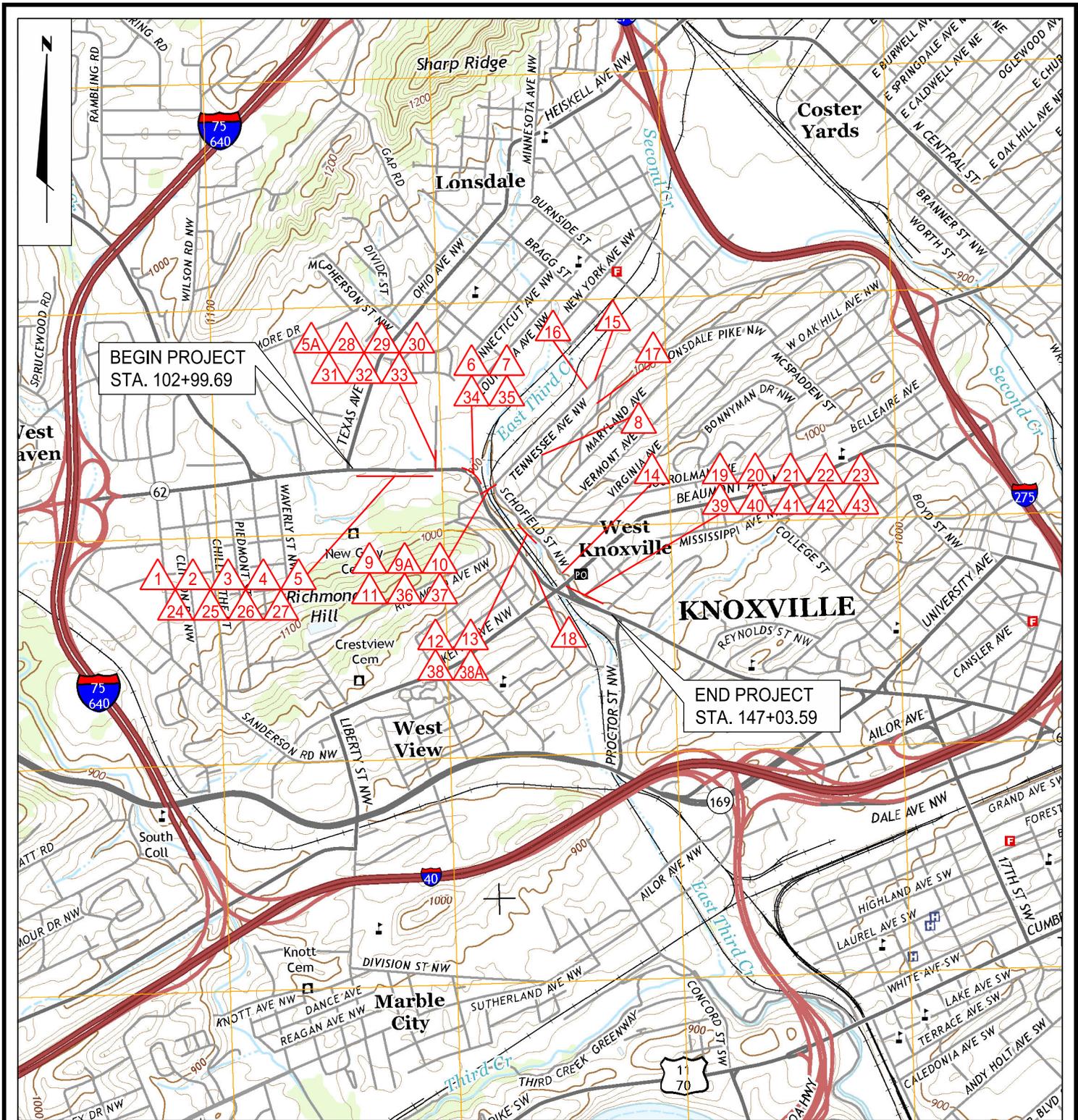
MS4 Jurisdiction: If this construction site is located within a Municipal Separate Storm Sewer System (MS4), please list name of MS4. A current list of MS4s in Tennessee may be found at http://www.tn.gov/environment/wpc/stormh2o/docs/MS4s_Jan2012.pdf

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

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

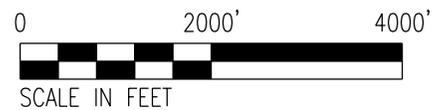
Submitting the form and obtaining more information Note that this form must be signed by the company President, Vice-President, or a ranking elected official in the case of a municipality, for details see subpart 2.5. For more information, contact your local EFO at the toll-free number 1-888-891-8332 (TDEC). Submit the completed NOI form (keep a copy for your records) to the TDEC Nashville, TN address below, addressed to **Attention: Stormwater NOI Processing.**

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



 - APPROXIMATE OUTFALL LOCATION

TOPOGRAPHIC MAP: KNOXVILLE, TN (2014) U.S.G.S. QUADRANGLE MAP



REGION 1, DISTRICT 18
KNOXVILLE, TN

STORM WATER POLLUTION PREVENTION PLAN

TOPOGRAPHIC (USGS) MAP
STATE ROUTE 62 (WESTERN AVE.)
FROM TEXAS AVENUE TO MAJOR AVENUE

KNOX COUNTY, TENNESSEE

DRAWN BY:	WCJ	CHECKED BY:	JTH
PIN	101204.00		
PROJECT NO.	47023-1257-14		
FIGURE	1	DATE:	8-3-2016

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2016	HPP/STP/NH-62(34)	
P.E.	2016	47023-1257-14	S-1

SWPPP INDEX OF SHEETS

DESCRIPTION	SHT.
1. SWPPP REQUIREMENTS (3.0)	S-1
2. SITE DESCRIPTION (3.5.1)	S-1
3. ORDER OF CONSTRUCTION ACTIVITIES (3.5.1.b, 3.5.2.a)	S-1
4. STREAM, OUTFALL, WETLAND, TMDL AND ECOLOGY INFORMATION	S-1
5. EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES (3.5.3)	S-2
6. POLYACRYLAMIDE	S-3
7. UTILITY RELOCATION	S-3
8. MAINTENANCE AND INSPECTION	S-4
9. SITE ASSESSMENTS (3.1.2)	S-4
10. STORMWATER MANAGEMENT (3.5.4)	S-4
11. NON-STORMWATER DISCHARGES (3.5.9)	S-5
12. SPILL PREVENTION, MANAGEMENT AND NOTIFICATION (3.5.5.c, 5.1)	S-5
13. RECORD-KEEPING	S-6
14. SITE WIDE/PRIMARY PERMITTEE CERTIFICATION (7.7.5)	S-7
15. SECONDARY PERMITTEE (OPERATOR) CERTIFICATION (7.7.6)	S-7
16. ENVIRONMENTAL PERMITS (9.0)	S-7
OUTFALL TABLE	S-8

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

1. SWPPP REQUIREMENTS (3.0)

1.1. HAS THE SWPPP TEMPLATE BEEN PREPARED BY AN INDIVIDUAL THAT HAS THE FOLLOWING CERTIFICATIONS (3.1.1)?
 YES NO (CHECK ALL THAT APPLY BELOW)
 CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC); OR
 TDEC LEVEL II

1.2. DO THE EPSC PLANS INVOLVE STRUCTURAL DESIGN, HYDRAULIC, HYDROLOGIC OR OTHER ENGINEERING CALCULATIONS FOR EPSC STRUCTURAL MEASURES (SEDIMENT BASINS, ETC.) (3.1.1)? YES NO
 IF YES, HAVE THE EPSC PLANS BEEN PREPARED, STAMPED AND CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER OR LANDSCAPE ARCHITECT? YES NO

1.3. DO THE PROJECT STORMWATER OUTFALLS DIRECTLY DISCHARGE INTO THE FOLLOWING (5.4.1)? YES NO (CHECK ALL THAT APPLY BELOW)
 IMPAIRED WATERS (303d FOR SILTATION OR HABITAT ALTERATION)
 KNOWN EXCEPTIONAL TENNESSEE WATERS (KETW)

IF YES TO SECTION 1.3, HAVE THE EPSC PLANS BEEN PREPARED BY AN INDIVIDUAL WHO IS TDEC LEVEL II CERTIFIED? (5.4.1.b)
 YES NO N/A (MAY 23, 2013 CGP EXEMPTION); AND

IF YES TO SECTION 1.3, HAS THE SWPPP TEMPLATE BEEN PREPARED BY AN INDIVIDUAL WHO IS TDEC LEVEL II CERTIFIED? (5.4.1.b)
 YES NO

2. SITE DESCRIPTION (3.5.1)

2.1. PROJECT LIMITS (3.5.1.g): REFER TO TITLE SHEET

2.2. PROJECT DESCRIPTION (3.5.1.a):
 TITLE: STATE ROUTE 62 (WESTERN AVE.), FROM TEXAS AVENUE TO MAJOR AVENUE IN KNOXVILLE
 COUNTY: KNOX
 PIN: 101204.00

2.3. SITE MAP(S) (3.5.1.g): REFER TO TITLE SHEET

2.4. DESCRIPTION OF EXISTING SITE TOPOGRAPHY (3.5.1.d): REFER TO EXISTING CONTOURS SHEET(S) 36B-36H, DRAINAGE MAP SHEET(S) 31-32, USGS QUAD MAP, AND THE OUTFALL TABLE IN SECTION 4.2.3.

2.5. MAJOR SOIL DISTURBING ACTIVITIES (3.5.1.b) (CHECK ALL THAT APPLY):
 CLEARING AND GRUBBING
 EXCAVATION
 CUTTING AND FILLING
 FINAL GRADING AND SHAPING
 UTILITIES
 OTHER (DESCRIBE): _____

2.6. TOTAL PROJECT AREA (3.5.1.c): 36.8 ACRES

2.7. TOTAL AREA TO BE DISTURBED (3.5.1.c): 29.5 ACRES
 NO MORE THAN 50 ACRES OF ACTIVE SOIL DISTURBANCE IS ALLOWED AT ANY TIME DURING THE CONSTRUCTION OF THE PROJECT.

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

2.9. ARE THERE ANY SEASONAL LIMITATIONS ON WORK? YES NO
 IF YES, LIST THE CORRESPONDING PLAN SHEET: _____

2.10. WAS ROW FINALIZED PRIOR TO FEBRUARY 1, 2010 (4.1.2.2)?
 YES _____ (DATE) NO
 IF ROW WAS FINALIZED PRIOR TO FEBRUARY 1, 2010, THIS PROJECT IS CONSIDERED A PRE-APPROVED SITE (4.1.2.2)

2.11. ARE UTILITIES INCLUDED IN THE CONTRACT? YES NO

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

SOIL PROPERTIES			
PRIMARY SOIL NAME	HSG	% OF SITE	ERODIBILITY (k value)
CORRYTON-UDORTHENTS-URBAN LAND COMPLEX, 2 TO 12 PERCENT SLOPES	B	2.1	0.32
DEWEY LOAM, 25 TO 40 PERCENT SLOPES, ERODED	B	0.3	0.32
DEWEY-UDORTHENTS-URBAN LAND COMPLEX, 2 TO 12 PERCENT SLOPES	B	13.5	0.32
DEWEY-UDORTHENTS-URBAN LAND COMPLEX, 12 TO 25 PERCENT SLOPES	B	31.9	0.32
HEISKELL SILT LOAM, 2 TO 5 PERCENT SLOPES	C	0.2	0.32
STEADMAN SILT LOAM, 0 TO 3 PERCENT SLOPES, OCCASIONALLY FLOODED	C	11.2	0.37
URBAN LAND	*	20.0	*
URBAN LAND-UDORTHENTS COMPLEX	*	20.8	*

* INFORMATION NOT AVAILABLE ON US WEB SOIL SURVEY

2.13. IS ACID PRODUCING ROCK (APR) (i.e. PYRITE) LOCATED WITHIN THE PROJECT LIMITS? YES NO
 2.13.1. IF YES TO SECTION 2.13, HAVE APR LOCATIONS BEEN IDENTIFIED WITHIN THE CONSTRUCTION PLANS AND/OR THE GEOTECHNICAL REPORT? YES NO; AND
 2.13.2. IF YES TO SECTION 2.13.1, HAS A SPECIAL HANDLING PLAN AND/OR ADAPTIVE MANAGEMENT PLAN (AMP) BEEN PREPARED FOR THE PROJECT? YES NO N/A (TDOT SP107L WILL BE APPLIED.)

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

RUNOFF COEFFICIENTS FOR EXISTING CONDITIONS				
AREA TYPE	AREA(AC)	PERCENTAGE OF TOTAL AREA (%)	RUNOFF CN	C FACTOR
IMPERVIOUS	16.1	43.8		0.95
SEMI-PERVIOUS	0.9	2.4		0.85
PERVIOUS	19.8	53.8		0.35
WEIGHTED CURVE NUMBER OR C-FACTOR =				0.62

RUNOFF COEFFICIENTS FOR POST-CONSTRUCTION CONDITIONS

AREA TYPE	AREA(AC)	PERCENTAGE OF TOTAL AREA (%)	RUNOFF CN	C FACTOR
IMPERVIOUS	18.5	50.3		0.95
SEMI-PERVIOUS	0.2	0.5		0.85
PERVIOUS	18.1	49.2		0.35
WEIGHTED CURVE NUMBER OR C-FACTOR =				0.65

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

CONSTRUCTION SHALL BE SEQUENCED AND STAGED TO: MINIMIZE THE EXPOSURE TIME OF GRADED OR DENUDED SOIL AREAS, PRESERVE TOPSOIL, AND MINIMIZE SOIL COMPACTION. NO WORK SHALL BE STARTED UNTIL THE CONTRACTOR'S PLAN FOR THE STAGING OF THEIR OPERATIONS, INCLUDING THE PLAN FOR STAGING OF TEMPORARY AND PERMANENT EPSC MEASURES, HAS BEEN ACCEPTED BY THE ENGINEER. THE CONTRACTOR'S EPSC PLAN SHALL INCORPORATE AND SUPPLEMENT, AS ACCEPTABLE, THE BASIC EPSC DEVICES ON THE EPSC PLAN CONTAINED IN THE APPROVED SWPPP.

- 3.1. SPECIAL SEQUENCING REQUIREMENTS (SEE SHEETS 37)
- 3.2. INSTALL STABILIZED CONSTRUCTION EXITS.
- 3.3. INSTALL PERIMETER PROTECTION WHERE RUNOFF SHEET FLOWS FROM THE SITE.
- 3.4. INSTALL INITIAL EPSC (EROSION PREVENTION AND SEDIMENT CONTROL) MEASURES BEFORE CLEARING, GRUBBING, EXCAVATION, GRADING, CULVERT OR BRIDGE CONSTRUCTION, CUTTING, FILLING, OR ANY OTHER EARTHWORK OCCURS, EXCEPT AS SUCH WORK MAY BE NECESSARY TO INSTALL EPSC MEASURES.
- 3.5. PERFORM CLEARING AND GRUBBING (NOT MORE THAN 15 DAYS PRIOR TO GRADING OR EARTH-MOVING. REFER TO THE STABILIZATION PRACTICES BELOW.).
- 3.6. REMOVE AND STORE TOPSOIL.
- 3.7. STABILIZE DISTURBED AREAS WITHIN 14 DAYS OF COMPLETING ANY STAGE AND/OR PHASE OF ACTIVITY.
- 3.8. INSTALL UTILITIES, STORM SEWERS, CULVERTS AND BRIDGE STRUCTURES.
- 3.9. INSTALL INLET AND CULVERT PROTECTION ONCE STRUCTURES ARE IN PLACE AND CAPABLE OF INTERCEPTING FLOW.
- 3.10. PERFORM FINAL GRADING AND INSTALL BASE STONE.
- 3.11. COMPLETE FINAL PAVING AND SEALING OF CONCRETE.
- 3.12. INSTALL TRAFFIC CONTROL AND PROTECTION DEVICES.
- 3.13. COMPLETE FINAL STABILIZATION (TOPSOIL, SEEDING, MULCH, EROSION CONTROL BLANKET, SOD, ETC.)
- 3.14. REMOVE TEMPORARY EROSION CONTROLS AND ACCUMULATED SEDIMENT FROM AREAS THAT HAVE ESTABLISHED AT LEAST 70 PERCENT UNIFORM PERMANENT VEGETATIVE COVER.
- 3.15. RE-STABILIZE AREAS DISTURBED BY REMOVAL ACTIVITIES.

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

4.1. STREAM INFORMATION
 4.1.1. WILL CONSTRUCTION AND/OR EROSION PREVENTION AND SEDIMENT CONTROLS IMPACT ANY STREAMS WITHIN THE PROJECT LIMITS? YES NO
 IF YES, THE STRUCTURAL EPSC MEASURES HAVE BEEN INCLUDED IN THE TOTAL PROJECT WETLAND IMPACTS AND HAVE BEEN INCLUDED IN THE WATER QUALITY PERMITS.

4.1.2. HAVE ANY OF THE RECEIVING WATERS LESS THAN OR EQUAL TO 1 FLOW MILE DOWN GRADIENT OF THE PROJECT LIMITS BEEN CLASSIFIED BY TDEC AS FOLLOWS (CHECK ALL THAT APPLY):
 303d IMPAIRED FOR SILTATION
 303d IMPAIRED FOR HABITAT ALTERATION
 KNOWN EXCEPTIONAL TENNESSEE WATERS (KETW)

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2016	HPP/STP/NH-62(34)	
P.E.	2016	47023-1257-14	S-2

4.1.3. RECEIVING STREAMS (3.5.1.j).

RECEIVING STREAM INFORMATION					
NATURAL RESOURCE LABEL	NAME OF RECEIVING NATURAL RESOURCE	303d IMPAIRED FOR SILTATION OR HABITAT ALTERATION (YES OR NO)	KETW (YES OR NO)	LOCATED WITHIN PROJECT LIMITS (YES OR NO)	LOCATED WITHIN ≤ 1 FLOW MILE DOWN GRADIENT OF PROJECT LIMITS (YES OR NO)
STR-1	TRIBUTARY TO EAST FORK THIRD CREEK	YES	NO	YES	YES
STR-2	EAST FORK THIRD CREEK	YES	NO	YES	YES

4.1.4. ARE BUFFER ZONES REQUIRED (4.1.2, 5.4.2)? YES NO
 IF YES, THEY HAVE BEEN INCLUDED ON PLAN SHEET(S) 36C, 36D, 36H, 37A, 37B, 37F, 38B, 38F
 IF YES, CHECK THE APPROPRIATE BOX BELOW FOR SIZE OF BUFFER.
 60-FEET FOR IMPAIRED AND KNOWN EXCEPTIONAL TENNESSEE WATERS (AVERAGE WIDTH PER SIDE WITH A MINIMUM OF 30-FEET)
 FOR PROJECTS THAT DISCHARGE INTO KNOWN EXCEPTIONAL TENNESSEE WATERS OR WATERS IMPAIRED BY SILTATION, A 60 FOOT NATURAL RIPARIAN BUFFER ZONE ADJACENT TO AND ON BOTH SIDES OF THE RECEIVING STREAM WITH THIS DESIGNATION SHALL BE PRESERVED TO THE MAXIMUM EXTENT PRACTICABLE DURING CONSTRUCTION ACTIVITIES AT THE SITE. THE 60 FOOT CRITERION FOR THE WIDTH OF THE BUFFER ZONE CAN BE ESTABLISHED ON AN AVERAGE WIDTH BASIS AT A PROJECT, AS LONG AS THE MINIMUM WIDTH OF THE BUFFER ZONE IS MORE THAN 30 FEET AT ANY MEASURED LOCATION.

WHERE 60-FT AVERAGE BUFFER ZONE CANNOT BE MAINTAINED, SILT RETENTION BARRIER DETAIL HAS INDICATED ON THE PLANS AS AN EQUIVALENT MEASURE TO A BUFFER ZONE.

 30-FEET FOR ALL OTHER STREAMS (AVERAGE WIDTH PER SIDE WITH A MINIMUM OF 15-FEET)
 A 30 FOOT NATURAL RIPARIAN BUFFER ZONE ADJACENT TO AND ON BOTH SIDES OF THE RECEIVING STREAM SHALL BE PRESERVED TO THE MAXIMUM EXTENT PRACTICABLE DURING CONSTRUCTION ACTIVITIES AT THE SITE. THE 30 FOOT CRITERION FOR THE WIDTH OF THE BUFFER ZONE CAN BE ESTABLISHED ON AN AVERAGE WIDTH BASIS AT A PROJECT, AS LONG AS THE MINIMUM WIDTH OF THE BUFFER ZONE IS MORE THAN 15 FEET AT ANY MEASURED LOCATION. EVERY ATTEMPT SHALL BE MADE FOR CONSTRUCTION ACTIVITIES NOT TO TAKE PLACE WITHIN THE BUFFER ZONES

IF NO, CHECK THE APPROPRIATE BOX BELOW.
 BUFFERS NOT REQUIRED (i.e. NO STREAM, WETLAND, ETC. IMPACTS)
 TDEC ARAP APPLIES

BUFFER ZONE REQUIREMENTS ARE NOT REQUIRED FOR PRE-APPROVED SITES (4.1.2.2.)

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

4.1.6. BUFFER ZONES ARE NOT SEDIMENT CONTROL MEASURES AND SHOULD NOT BE RELIED UPON AS PRIMARY SEDIMENT CONTROL MEASURES. THE RIPARIAN BUFFER ZONE SHALL BE ESTABLISHED BETWEEN THE TOP OF THE STREAM BANK AND THE DISTURBED CONSTRUCTION AREA. EVERY ATTEMPT SHALL BE MADE FOR CONSTRUCTION ACTIVITIES NOT TO TAKE PLACE WITHIN THE BUFFER ZONES. BEST MANAGEMENT PRACTICES (BMPs) PROVIDING EQUIVALENT PROTECTION AS THE NATURAL RIPARIAN ZONE MAY BE USED. A JUSTIFICATION FOR USE AND DESIGN EQUIVALENCY SHALL BE DOCUMENTED WITHIN THE SWPPP. THE ENVIRONMENTAL AND ROADWAY DESIGN DIVISIONS SHALL REVIEW AND APPROVE THIS REVISION OF THE SWPPP BEFORE DISTURBANCE OF THE SITE PROCEEDS, UNLESS

PREVIOUSLY EXEMPT IN THE NPDES CONSTRUCTION GENERAL PERMIT. WHERE ISSUED, ARAP/401 REQUIREMENTS WILL PREVAIL IF IN CONFLICT WITH THESE BUFFER ZONE REQUIREMENTS.

4.2. OUTFALL INFORMATION:

A SEDIMENT BASIN OR EQUIVALENT MEASURE(S) WILL BE PROVIDED FOR ANY OUTFALL IN A DRAINAGE AREA:
 4.2.1. OF TEN ACRES OR MORE FOR AN OUTFALL(S) THAT DOES NOT DISCHARGE TO AN IMPAIRED STREAM OR KNOWN EXCEPTIONAL TENNESSEE WATERS. FOR AN OUTFALL IN A DRAINAGE AREA OF 10 ACRES OR MORE, A TEMPORARY (OR PERMANENT) SEDIMENT BASIN OR EQUIVALENT CONTROL MEASURES THAT PROVIDES STORAGE FOR A CALCULATED VOLUME OF RUNOFF FROM A MINIMUM 2-YEAR/ 24-HOUR STORM EVENT, SHALL BE PROVIDED UNTIL FINAL STABILIZATION OF THE SITE. THE ENVIRONMENTAL AND ROADWAY DESIGN DIVISIONS MAY BE CONTACTED TO REVIEW AND CONCUR WITH ANY REVISION OF THE EPSC PLANS OR SWPPP BEFORE DISTURBANCE OF THE OUTFALL PROCEEDS. (3.5.3.3)

 OR
 OF FIVE ACRES OR MORE FOR AN OUTFALL(S) THAT DISCHARGES TO AN IMPAIRED STREAM OR KNOWN EXCEPTIONAL TENNESSEE WATERS. FOR PROJECTS THAT DISCHARGE INTO KNOWN EXCEPTIONAL TENNESSEE WATERS OR WATERS IMPAIRED BY SILTATION, AN OUTFALL IN A DRAINAGE AREA OF 5 ACRES OR MORE, A TEMPORARY (OR PERMANENT) SEDIMENT BASIN THAT PROVIDES STORAGE FOR A CALCULATED VOLUME OF RUNOFF FROM A 5-YEAR/ 24-HOUR STORM EVENT AND RUNOFF FROM EACH ACRE DRAINED, OR EQUIVALENT CONTROL MEASURES, SHALL BE PROVIDED UNTIL FINAL STABILIZATION OF THE SITE. THE ENVIRONMENTAL AND ROADWAY DESIGN DIVISIONS MAY BE CONTACTED TO REVIEW AND CONCUR WITH ANY REVISION OF THE SWPPP BEFORE DISTURBANCE OF THE OUTFALL PROCEEDS. (5.4.1.f).

4.2.2. OUTFALL TABLE (3.5.1.d, 5.4.1.f).
 SEE SWPPP SHEET S-8 FOR OUTFALL INFORMATION.

4.2.3. WHERE POSSIBLE, HAS NON-PROJECT RUN-ON BEEN DIVERTED AROUND OR THROUGH THE PROJECT SO AS TO ELIMINATE CONTACT WITH DISTURBED AREAS OF THE PROJECT AND SEPARATE IT FROM PROJECT RUN-OFF THEREBY REDUCING THE DRAINAGE AREA OF TO THE OUTFALLS IN THIS AREA?
 YES NO N/A

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

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

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

4.3. WETLAND INFORMATION

WILL CONSTRUCTION AND/OR EROSION AND SEDIMENT CONTROLS IMPACT ANY WETLANDS? YES NO

IF YES, THE STRUCTURAL EPSC MEASURES HAVE BEEN INCLUDED IN THE TOTAL PROJECT WETLAND IMPACTS AND HAVE BEEN INCLUDED IN THE WATER QUALITY PERMITS.

WETLAND INFORMATION				
WETLAND LABEL	FROM STATION LT OR RT	TO STATION LT OR RT	TEMPORARY IMPACTS (AC)	PERMANENT IMPACTS (AC)

4.4. TOTAL MAXIMUM DAILY LOADS (TMDL) INFORMATION (3.5.10)
 4.4.1. IS THIS PROJECT LOCATED IN A HUC-8 WATERSHED THAT MAINTAINS AN EPA APPROVED TMDL FOR SILTATION?
 YES NO

4.4.2. IF YES, IS THIS PROJECT LOCATED WITHIN A HUC-12 SUBWATERSHED WITH A WASTE LOAD ALLOCATION (WLA)?
 YES NO

4.4.3. IF YES, DOES THE PROJECT HAVE A DIRECT DISCHARGE TO A 303(d) LISTED STREAM FOR SILTATION OR HABITAT ALTERATION?
 YES NO

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

4.5. ECOLOGY INFORMATION (3.5.5.e)
 IF SPECIAL NOTES ARE PRESENT IN THE TDOT ECOLOGY REPORT, HAVE THE NOTES BEEN ADDED TO THE APPROPRIATE PLAN SHEETS?
 YES NO NO NOTES REQUIRED
 IF YES, THEY HAVE BEEN INCLUDED ON PLAN SHEET(S) 2M

4.6. ENVIRONMENTAL COMMITMENTS
 ARE THERE ANY NOTES ON THE ENVIRONMENTAL COMMITMENT SHEET?
 YES NO
 IF YES, THEY HAVE BEEN INCLUDED ON PLAN SHEET(S) 1B

5. **EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES** (3.5.3)
 5.1. EPSC MEASURES MUST BE DESIGNED, INSTALLED AND MAINTAINED TO CONTROL STORMWATER VOLUME AND VELOCITY WITHIN THE SITE TO MINIMIZE EROSION (4.1.1).

 5.2. EPSC MEASURES MUST CONTROL STORMWATER DISCHARGES, INCLUDING BOTH PEAK FLOWS AND TOTAL STORMWATER VOLUME, TO MINIMIZE EROSION AT OUTLETS, STREAM CHANNELS, AND STREAM BANKS. (4.1.1)

 5.3. HAVE THE CONTROL MEASURES BEEN DESIGNED ACCORDING TO THE SIZE AND SLOPE OF THE DISTURBED DRAINAGE AREA (3.5.3.3)?
 YES NO

5.4. THE CONTROL MEASURES HAVE, AT A MINIMUM, BEEN DESIGNED FOR THE 5-YEAR, 24 HOUR STORM EVENT (3.5.3.3, 5.4.1.a).

 5.5. ARE THE LIMITS OF DISTURBANCE CLEARLY MARKED ON THE EPSC PLANS (3.5.1.n)? YES NO

5.6. HAVE STAGED EPSC PLANS BEEN PREPARED FOR THE PROJECT (3.5.2)?
 YES NO (IF YES, CHECK ONE BELOW)
 5.6.1. PROJECT DISTURBED AREA IS THAN LESS THAN 5 ACRES (MINIMUM OF TWO STAGES OF EPSC PLANS)
 5.6.2. PROJECT DISTURBED AREA IS GREATER THAN 5 ACRES (MINIMUM OF THREE STAGES OF EPSC PLANS)

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

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

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

 5.10. ALL EPSC CONTROL MEASURES WILL BE INSTALLED ACCORDING TO TDOT STANDARDS (i.e. STANDARD DRAWINGS).

 5.11. EPSC MEASURES WILL NOT BE INSTALLED IN A STREAM WITHOUT FIRST OBTAINING APPROVAL FROM THE PERMITS SECTION.

 5.12. DISCHARGES FROM DEWATERING ACTIVITIES ARE PROHIBITED UNLESS MANAGED BY APPROPRIATE CONTROLS THAT PROVIDE THE LEVEL OF

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2016	HPP/STP/NH-62(34)	
P.E.	2016	47023-1257-14	S-3

TREATMENT (FILTRATION) NECESSARY TO COMPLY WITH PERMIT REQUIREMENTS. (4.1.4).

IMPOUNDMENT. DISCHARGES MUST NOT CAUSE AN OBJECTIONABLE COLOR CONTRAST WITH THE RECEIVING STREAM.

ACCEPTABLE TOXICITY PARAMETERS WHICH MEET OR EXCEED THE EPA REQUIREMENTS FOR THE STATE AND FEDERAL WATER QUALITY STANDARDS. WHOLE EFFLUENT TESTING DOES NOT MEET THIS REQUIREMENT AS PRIMARY REACTIONS HAVE OCCURRED AND TOXIC POTENTIALS HAVE BEEN REDUCED. CATIONIC FORMS OF PAM ARE NOT ALLOWED UNDER THIS SECTION DUE TO HIGH LEVELS OF TOXICITY TO AQUATIC ORGANISMS. PAM EMULSIONS SHALL NEVER BE APPLIED DIRECTLY TO STORMWATER RUNOFF OR RIPARIAN WATERS DUE TO SURFACTANT TOXICITY. THE CONTRACTOR MUST SEEK THE APPROVAL OF THE EPSC DESIGN ENGINEER AND TDOT IF CHITOSAN IS PROPOSED FOR USE ON THIS PROJECT.

- 5.13. DISCHARGES FROM SEDIMENT BASINS AND IMPOUNDMENTS MUST USE OUTLET STRUCTURES THAT ONLY WITHDRAW WATER FROM NEAR THE SURFACE OF THE BASIN OR IMPOUNDMENT, UNLESS INFEASIBLE (4.1.7).
- 5.14. THE CONTROL MEASURES LISTED IN THE QUANTITIES TABLE ON SHEET 2A-2A2 HAVE BEEN SELECTED IN ACCORDANCE WITH TDOT STANDARD DRAWINGS AND GOOD ENGINEERING PRACTICES (3.5.3.1.b).
- 5.15. THE QUANTITIES REQUIRED FOR STABILIZED CONSTRUCTION EXITS PER TDOT STANDARDS HAVE BEEN SPECIFIED ON SHEET 2A-2A2 (3.5.3.1.n).
- 5.16. AREAS TO BE UNDISTURBED SHALL BE CLEARLY MARKED IN THE FIELD BEFORE CONSTRUCTION ACTIVITIES BEGIN.
- 5.17. UNLESS OTHERWISE NOTED IN THE PLANS, THE CONTRACTOR SHALL NOT CLEAR/DISTURB ANY AREA BEYOND 15 FEET FROM SLOPE LINES OR ROW/ EASEMENT LINE, WHICHEVER IS LESSER.
- 5.18. CLEARING, GRUBBING, AND OTHER DISTURBANCE TO RIPARIAN VEGETATION SHALL BE LIMITED TO THE MINIMUM NECESSARY FOR SLOPE CONSTRUCTION AND EQUIPMENT OPERATIONS. EXISTING VEGETATION, INCLUDING STREAM AND WETLAND BUFFERS (UNLESS PERMITTED), SHOULD BE PRESERVED TO THE MAXIMUM EXTENT POSSIBLE. UNNECESSARY VEGETATION REMOVAL IS PROHIBITED.
- 5.19. EPSC MEASURES SHALL BE INSTALLED AND FUNCTIONAL PRIOR TO ANY EARTH MOVING OPERATIONS, AND SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.
- 5.20. TEMPORARY EPSC MEASURES MAY BE REMOVED AT THE BEGINNING OF THE WORKDAY, BUT MUST BE REINSTALLED AT THE END OF THE WORKDAY OR BEFORE A PRECIPITATION EVENT.
- 5.21. THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT THE OFF-SITE MIGRATION OR DEPOSIT OF SEDIMENT OFF THE PROJECT LIMITS (E.G. R.O.W., EASEMENTS, ETC.), INTO WATERS OF THE STATE/U.S., OR ONTO ROADWAYS USED BY THE GENERAL PUBLIC. IF SEDIMENT ESCAPES THE CONSTRUCTION SITE, OFF-SITE ACCUMULATIONS OF SEDIMENT THAT HAVE NOT REACHED A STREAM MUST BE REMOVED TO A LEVEL SUFFICIENT TO MINIMIZE OFF-SITE IMPACTS (E.G., FUGITIVE SEDIMENT THAT HAS ESCAPED THE CONSTRUCTION SITE AND HAS COLLECTED IN A STREET MUST BE REMOVED SO THAT IT IS NOT SUBSEQUENTLY WASHED INTO STORM SEWERS AND STREAMS BY THE NEXT RAIN AND/OR SO THAT IT DOES NOT POSE A SAFETY HAZARD TO USERS OF PUBLIC STREETS). ARRANGEMENTS CONCERNING REMOVAL OF SEDIMENT ON ADJOINING PROPERTY MUST BE SETTLED WITH THE ADJOINING PROPERTY OWNER BEFORE REMOVAL OF SEDIMENT. SEDIMENT THAT MIGRATES INTO WATERS OF THE STATE/US SHALL NOT BE REMOVED WITHOUT GUIDANCE FROM TDOT ENVIRONMENTAL PERSONNEL.
- 5.22. OFFSITE VEHICLE TRACKING OF SEDIMENTS AND THE GENERATION OF DUST SHALL BE MINIMIZED. A STABILIZED CONSTRUCTION EXIT (A POINT OF ENTRANCE/EXIT TO THE CONSTRUCTION PROJECT) SHALL BE PROVIDED TO REDUCE THE TRACKING OF MUD AND DIRT ONTO PUBLIC ROADS BY CONSTRUCTION VEHICLES.
- 5.23. THE DEWATERING OF WORK AREAS, TRENCHES, FOUNDATIONS, EXCAVATIONS, ETC. THAT HAVE COLLECTED STORMWATER, WATER FROM VEHICLE WASH AREAS, OR GROUNDWATER SHALL BE EITHER HELD IN SETTLING BASINS OR TREATED BY FILTRATION AND/OR CHEMICAL TREATMENT PRIOR TO ITS DISCHARGE. ALL PHYSICAL AND/OR CHEMICAL TREATMENT WILL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S GUIDELINES AND FULLY DESCRIBED IN THE EPSC PLANS. WATER DISCHARGED SHALL NOT CAUSE AN OBJECTIONABLE COLOR CONTRAST WITHIN THE RECEIVING NATURAL RESOURCE. WATER MUST BE HELD IN SETTLING BASINS UNTIL AT LEAST AS CLEAR AS THE RECEIVING WATERS. SETTLING BASINS AND SEDIMENT TRAPS SHALL BE PROPERLY DESIGNED ACCORDING TO THE SIZE OF THE DRAINAGE AREAS OR VOLUME OF WATER TO BE TREATED. TREATED WATER MUST BE DISCHARGED THROUGH A PIPE OR WELL- VEGETATED OR LINED CHANNEL, SO THAT THE DISCHARGE DOES NOT CAUSE EROSION OR SEDIMENT TRANSPORT. DISCHARGES FROM BASINS AND IMPOUNDMENTS SHALL UTILIZE OUTLET STRUCTURES THAT ONLY WITHDRAW WATER FROM NEAR THE SURFACE OF THE BASIN OR

- 5.24. DEWATERING STRUCTURES, SEDIMENT FILTER BAGS, SEDIMENT BASINS AND TRAPS SHALL NOT BE LOCATED CLOSER THAN 30 FEET (60 FEET DESIRABLE VEGETATIVE BUFFER) FOR IMPAIRED AND KNOWN EXCEPTIONAL TENNESSEE WATERS AND 15 FEET (30 FEET DESIRABLE VEGETATIVE BUFFER) FOR ALL OTHER FEATURES FROM THE TOP BANK OF A STREAM, WETLAND OR OTHER NATURAL RESOURCE AND SHALL BE PROPERLY DESIGNED ACCORDING TO THE SIZE OF THE DRAINAGE AREAS OR VOLUME OF WATER TO BE TREATED.
 - 5.25. DISCHARGES FROM SEDIMENT BASINS SHALL UTILIZE OUTLET STRUCTURES THAT ONLY WITHDRAW WATER FROM NEAR THE SURFACE OF THE BASIN OR IMPOUNDMENT. TREATED WATER MUST BE DISCHARGED THROUGH A PIPE, WELL- VEGETATED AND/OR LINED CHANNEL, SO THAT THE DISCHARGE DOES NOT CAUSE EROSION OR SEDIMENT TRANSPORT. WATER DISCHARGED SHALL NOT CAUSE AN OBJECTIONABLE COLOR CONTRAST WITHIN THE RECEIVING NATURAL RESOURCE.
 - 5.26. STABILIZATION PRACTICES: PRE-CONSTRUCTION VEGETATIVE COVER WILL NOT BE DESTROYED, REMOVED OR DISTURBED MORE THAN 15 DAYS PRIOR TO GRADING OR EARTH MOVING UNLESS THE AREA WILL BE SEEDED AND/OR MULCHED OR OTHER TEMPORARY COVER IS INSTALLED (3.5.3.1.h).
 - 5.27. STABILIZATION MEASURES WILL BE INITIATED AS SOON AS POSSIBLE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED. TEMPORARY OR PERMANENT STABILIZATION WILL BE COMPLETED WITHIN 14 DAYS AFTER ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED IN THAT AREA. PERMANENT STABILIZATION WILL REPLACE TEMPORARY MEASURES AS SOON AS PRACTICABLE (3.5.3.2).
 - 5.28. PRIORITY SHALL BE GIVEN TO FINISHING OPERATIONS AND PERMANENT EPSC MEASURES OVER TEMPORARY EPSC MEASURES ON ALL PROJECTS. UNPACKED GRAVEL CONTAINING FINES (SILT AND CLAY SIZED PARTICLES) OR CRUSHER-RUN WILL NOT BE CONSIDERED A NON-ERODIBLE SURFACE
 - 5.29. DELAYING THE PLANTING OF COVER VEGETATION UNTIL WINTER MONTHS OR DRY MONTHS SHOULD BE AVOIDED, IF POSSIBLE.
 - 5.30. FERTILIZERS SHALL BE APPLIED ONLY IN THE AMOUNTS SPECIFIED. ONCE APPLIED, FERTILIZERS SHALL BE WORKED INTO THE SOIL TO LIMIT THE EXPOSURE TO STORMWATER.
 - 5.31. STEEP SLOPES (3.5.3.2): STEEP SLOPES ARE DEFINED AS A NATURAL OR CREATED SLOPE OF 35% GRADE OR GREATER REGARDLESS OF HEIGHT. STEEP SLOPES SHALL BE TEMPORARILY STABILIZED NOT LATER THAN 7 DAYS AFTER CONSTRUCTION ACTIVITY ON THE SLOPE HAS TEMPORARILY OR PERMANENTLY CEASED.
 - 5.32. THE STRUCTURAL EPSC MEASURES HAVE BEEN INCLUDED IN THE TOTAL PROJECT IMPACTS AND HAVE BEEN INCLUDED IN THE AQUATIC RESOURCE ALTERATION (ARAP) PERMIT OR SECTION 401 CERTIFICATION (3.5.1.i). REFER TO THE LIST OF APPLICABLE ENVIRONMENTAL PERMITS LOCATED ON SWPPP SHEET 7. ALL PERMITS WILL BE MAINTAINED ON SITE IN THE "DOCUMENTATION AND PERMITS" BINDER.
- 6. POLYACRYLAMIDE**
- 6.1. ENSURE POLYACRYLAMIDE (PAM) EMULSIONS AND POWDERS ARE OF THE ANIONIC TYPE AND MEET THE FOLLOWING REQUIREMENTS:
 - 6.1.1. MEETS THE EPA AND FDA ACRYLAMIDE MONOMER LIMITS OF EQUAL TO OR GREATER THAN 0.005% ACRYLAMIDE MONOMER.
 - 6.1.2. HAS A DENSITY OF 10% TO 55% BY WEIGHT AND A MOLECULAR WEIGHT OF 16 TO 24 MG/MOLE.
 - 6.1.3. MIXTURE IS NON-COMBUSTIBLE.
 - 6.1.4. CONTAINS ONLY MANUFACTURER'S RECOMMENDED ADDITIVES.
 - 6.2. PAM SHALL BE MIXED AND APPLIED IN ACCORDANCE WITH ALL OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) MATERIAL SAFETY DATA SHEET REQUIREMENTS AND THE MANUFACTURER'S RECOMMENDATIONS FOR THE SPECIFIED USES CONFORMING TO ALL FEDERAL, STATE, AND LOCAL LAWS, RULES, AND REGULATIONS.
 - 6.3. ALL VENDORS AND SUPPLIERS OF PAM, PAM MIX, OR PAM BLENDS SHALL PRESENT OR SUPPLY A WRITTEN TOXICITY REPORT WHICH VERIFIES

- 6.4. ALL VENDORS AND SUPPLIERS OF PAM, PAM MIX, OR PAM BLENDS SHALL SUPPLY WRITTEN "SITE SPECIFIC" TESTING RESULTS DEMONSTRATING THAT A PERFORMANCE OF 95% OR GREATER REDUCTION OF NTU OR TSS FROM STORMWATER DISCHARGES.
- 6.5. EMULSION BATCHES SHALL BE MIXED FOLLOWING RECOMMENDATIONS OF THE TESTING LABORATORY THAT DETERMINES THE PROPER PRODUCT AND RATE TO MEET SITE REQUIREMENTS. APPLICATION METHOD SHALL ENSURE UNIFORM COVERAGE TO THE TARGET AREA. EMULSIONS SHALL NEVER BE APPLIED DIRECTLY TO STORMWATER RUNOFF OR RIPARIAN WATERS.
- 6.6. PAM POWDER MAY BE APPLIED BY A HAND OR MECHANICAL SPREADER. MIXING PAM POWDER WITH DRY SILICA SAND WILL AID IN SPREADING.
- 6.7. PREMIXING OF PAM POWDER INTO FERTILIZER, SEED, OR OTHER SOIL AMENDMENTS IS ALLOWED WHEN SPECIFIED IN THE DESIGN PLAN. APPLICATION METHOD SHALL ENSURE UNIFORM COVERAGE TO THE TARGET AREA.
- 6.8. PAM LOGS OR BLOCKS SHALL BE APPLIED FOLLOWING SITE TESTING RESULTS TO ENSURE PROPER PLACEMENT AND PERFORMANCE AND SHALL MEET OR EXCEED STATE AND FEDERAL WATER QUALITY REQUIREMENTS.

7. UTILITY RELOCATION

- 7.1. STORMWATER WHICH COLLECTS IN THE UTILITY TRENCH SHALL BE PUMPED INTO A DEWATERING STRUCTURE OR SEDIMENT FILTER BAG AND TREATED PRIOR TO DISCHARGE.
- 7.2. SILT FENCE SHALL BE INSTALLED ON THE DOWNGRADE SIDE OF STOCKPILED SOIL. TRENCHING ACROSS WET WEATHER CONVEYANCES SHALL BE DONE DURING DRY CONDITIONS AND STABILIZED BY THE END OF THE WORK DAY
- 7.3. UTILITY CROSSINGS IN ENVIRONMENTAL FEATURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH TDOT STANDARDS AND NO WORK SHALL BE CONDUCTED IN FLOWING WATERS. ENVIRONMENTAL PERMITS APPLY TO UTILITIES IN THIS PROJECT. THE STATE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE PERMITS.
- 7.4. IT IS THE RESPONSIBILITY OF THE STATE UTILITY CONTRACTOR TO PROTECT EXPOSED EARTH FROM EROSION AND TO PROVIDE FOR CONTAINMENT OF SEDIMENT THAT MAY RESULT FROM THEIR WORK. PRIOR TO BEGINNING WORK, ADEQUATE MEASURES MUST BE IN PLACE TO TRAP ANY SEDIMENT THAT MAY TRAVEL OFF-SITE IN THE EVENT OF RAIN. DURING THE PROGRESSION OF THEIR WORK, EXPOSED EARTH AREAS SHALL BE STABILIZED AS SOON AS POSSIBLE TO PREVENT EROSION. AT NO TIME SHALL EXPOSED EARTH RESULTING FROM THEIR OPERATIONS HAVE UNPROTECTED ACCESS TO FLOWING OFF-SITE AND ENTERING WATERS OF THE STATE/U.S.
- 7.5. FOR THE INSTALLATION OF BURIED UTILITIES (PIPES AND CABLES), TRENCHES SHALL BE BACKFILLED DAILY AS CONSTRUCTION PROCEEDS. BACKFILLED TRENCHES SHALL BE SEEDED AND MULCHED OR SODDED DAILY IF POSSIBLE, BUT NO LATER THAN SEVEN DAYS AFTER BEING BACKFILLED. ANY TEMPORARY SPOILS OF EXCAVATED EARTH SHALL BE LOCATED WITHIN TDOT EPSC MEASURES OR RECEIVE SEPARATE EPSC MEASURES. IF TRENCHES ARE NOT BACKFILLED OVERNIGHT, APPROPRIATE EPSC MEASURES WILL BE INSTALLED BY THE STATE UTILITY CONTRACTOR UNTIL SUCH TIME AS THE TRENCH IS BACKFILLED.
- 7.6. IN REGARD TO EPSC, TDEC REGULATIONS APPLY TO THE STATE UTILITY CONTRACTORS ON THIS PROJECT. THE STATE CONTRACTOR IS RESPONSIBLE FOR EPSC MEASURES RELATED TO UTILITY CONSTRUCTION INCLUDED IN THE STATE CONTRACT.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2016	HPP/STP/NH-62(34)	
P.E.	2016	47023-1257-14	S-4

- 7.7. TRENCHES FORMED FOR THE INSTALLATION OF BURIED UTILITIES MAY CAUSE STORMWATER RUNOFF TO CONCENTRATE AT THE TRENCH LINE. ADDITIONAL EPSC MEASURES MAY BE REQUIRED TO BE INSTALLED AS APPROVED BY THE TDOT PROJECT ENGINEER.
- 7.8. FOR THE INSTALLATION OF UNDERGROUND UTILITIES OUTSIDE OF THE TDOT RIGHT-OF-WAY, EPSC MEASURES SHALL BE INSTALLED PRIOR TO CLEARING (TRENCHING AND ASSOCIATED BLASTING) IN THOSE AREAS NECESSARY TO PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION AREA. THESE EPSC MEASURES SHALL REMAIN UNTIL THE BACKFILLED TRENCH IS STABILIZED WITH FINAL VEGETATIVE COVER.
- 7.9. THE UTILITY CONTRACTOR SHALL RESTORE ALL AFFECTED WET WEATHER CONVEYANCES TO THE EXISTING TOPOGRAPHIC CONDITIONS AS APPROVED BY THE TDOT RESPONSIBLE PARTY.
- 7.10. THE UTILITY CONTRACTOR WILL PROVIDE APPROPRIATE EPSC MEASURES TO REPLACE ONSITE EPSC MEASURES REMOVED TO FACILITATE THE INSTALLATION OF UTILITIES. REPLACEMENT OF EPSC MEASURES WILL BE COORDINATED WITH THE TDOT ENGINEER BEFORE COMMENCING WORK.

8. MAINTENANCE AND INSPECTION

- 8.1. INSPECTION PRACTICES (3.5.8)
 - 8.1.1. PROJECT EPSC INSPECTORS AND SUPERVISORS (INCLUDING TDOT STAFF, CONSULTANTS AND CONTRACTOR STAFF) RESPONSIBLE FOR THE INSPECTION, IMPLEMENTATION, MAINTENANCE, AND/OR REPAIR OF EPSC MEASURES SHALL SUCCESSFULLY COMPLETE THE TDEC "LEVEL 1 - FUNDAMENTALS OF EROSION PREVENTION AND SEDIMENT CONTROL FOR CONSTRUCTION SITES" COURSE AND ANY RECERTIFICATION COURSES AS REQUIRED.
 - 8.1.2. THE TDOT CONSTRUCTION SUPERVISOR (OR THEIR DESIGNEE) AND THE CONTRACTOR'S SITE SUPERINTENDENT ARE RESPONSIBLE FOR INSPECTIONS. MAINTENANCE AND REPAIR ACTIVITIES ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE TDOT CONSTRUCTION SUPERVISOR OR THEIR DESIGNEE SHALL COMPLETE THE EPSC INSPECTION REPORTS AND DISTRIBUTE COPIES PER THE CONTRACT.
 - 8.1.3. EPSC CONTROLS SHALL BE INSPECTED TO VERIFY MEASURES HAVE BEEN INSTALLED AND MAINTAINED IN ACCORDANCE WITH TDOT STANDARD DRAWINGS, SPECIFICATIONS, AND GOOD ENGINEERING PRACTICES. EPSC INSPECTIONS SHALL BE DOCUMENTED ON THE TDOT EPSC INSPECTION REPORT.
 - 8.1.4. OUTFALL POINTS SHALL BE INSPECTED TO ASCERTAIN WHETHER EPSC MEASURES ARE EFFECTIVE IN PREVENTING EROSION AND CONTROLLING SEDIMENT INCLUDING SIGNIFICANT IMPACTS TO SURROUNDING NATURAL RESOURCES AND ADJACENT PROPERTY OWNERS. WHERE DISCHARGE LOCATIONS ARE INACCESSIBLE, NEARBY DOWN GRADIENT LOCATIONS SHALL BE INSPECTED. LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFF-SITE ROADWAY SEDIMENT TRACKING.
 - 8.1.5. UPON CONCLUSION OF THE INSPECTIONS, EPSC MEASURES FOUND TO BE INEFFECTIVE SHALL BE REPAIRED, REPLACED, OR MODIFIED BEFORE THE NEXT RAIN EVENT, IF POSSIBLE, BUT IN NO CASE MORE THAN 24 HOURS AFTER THE INSPECTION OR WHEN THE CONDITION IS IDENTIFIED. IF THE REPAIR, REPLACEMENT OR MODIFICATION IS NOT PRACTICAL WITHIN THE 24 HOUR TIMEFRAME, WRITTEN DOCUMENTATION PROVIDED BY THE CONTRACTOR SHALL BE PLACED IN THE FIELD DIARY AND EPSC INSPECTION REPORT. AN ESTIMATED REPAIR, REPLACEMENT OR MODIFICATION SCHEDULE SHALL BE DOCUMENTED WITHIN 24 HOURS AFTER IDENTIFICATION.

- 8.1.6. INSPECTION, REPAIR, AND MAINTENANCE OF EPSC MEASURES SHALL BE PERFORMED ON A REGULAR BASIS. SEDIMENT SHALL BE REMOVED FROM SEDIMENT CONTROL STRUCTURES WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT (50%). DURING SEDIMENT REMOVAL, THE CONTRACTOR SHALL TAKE STEPS TO ENSURE THAT STRUCTURAL COMPONENTS OF EPSC MEASURES ARE NOT DAMAGED AND THUS MADE INEFFECTIVE. IF DAMAGE DOES OCCUR, THE CONTRACTOR SHALL REPAIR THE EPSC MEASURES AT THE CONTRACTOR'S OWN EXPENSE.
- 8.1.7. SEDIMENT REMOVED FROM SEDIMENT CONTROL STRUCTURES SHALL BE PLACED AND TREATED IN A MANNER SO THAT THE SEDIMENT IS CONTAINED WITHIN THE PROJECT LIMITS, DOES NOT MIGRATE INTO FEATURES REMOVED FROM, AND DOES NOT MIGRATE ONTO ADJACENT PROPERTIES AND/OR INTO WATERS OF THE STATE/U.S. COST FOR THIS TREATMENT SHALL BE INCLUDED IN PRICE BID FOR ITEM NO. 209-05 SEDIMENT REMOVAL, C.Y.
- 8.1.8. INSPECTIONS WILL BE CONDUCTED AT LEAST TWICE EVERY CALENDAR WEEK AND AT LEAST 72 HOURS A PART (3.5.8.2.a). A CALENDAR WEEK IS DEFINED AS SUNDAY THROUGH SATURDAY. QUALITY ASSURANCE AUDITS OF TDOT EPSC, NPDES AND WATER QUALITY PERMIT REQUIREMENTS SHALL BE PERFORMED PER THE TDOT ENVIRONMENTAL COMPLIANCE OFFICE.
- 8.1.9. THE FREQUENCY OF EPSC INSPECTIONS MAY BE REDUCED TO ONCE A MONTH (I.E. EXTREME DROUGHT CONDITIONS, FROZEN GROUND, ETC.) WITH WRITTEN NOTIFICATION BY THE TDOT REGIONAL ENGINEER TO TDEC NASHVILLE CENTRAL OFFICE AND SUBSEQUENT TDEC APPROVAL. WRITTEN NOTIFICATION MUST INCLUDE THE INTENT TO CHANGE FREQUENCY AND JUSTIFICATION (3.5.8.2.a).
- 8.1.10. ALL DISTURBED AREAS OF THE SITE THAT HAVE NOT BEEN FINALLY STABILIZED, AREAS USED FOR MATERIAL STORAGE THAT ARE EXPOSED TO PRECIPITATION, STRUCTURAL CONTROL MEASURES, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE, AND EACH OUTFALL WILL BE INSPECTED (3.5.8.2.b).
- 8.1.11. THE INSPECTOR WILL OVERSEE THE REQUIREMENTS OF OTHER CONSTRUCTION-RELATED WATER QUALITY PERMITS (I.E. TDEC ARAP, USACE SECTION 404, AND TVA SECTION 26a PERMITS) FOR CONSTRUCTION ACTIVITIES AROUND WATERS OF THE STATE (10 "INSPECTOR").
- 8.1.12. THE SWPPP WILL BE REVISED AS NECESSARY BASED ON THE RESULTS OF THE INSPECTION. REVISION(S) WILL BE RECORDED WITHIN 7 DAYS OF THE INSPECTION. REVISION(S) WILL BE IMPLEMENTED WITHIN 14 DAYS OF THE INSPECTION (3.8.5.2.e AND 3.8.5.2.f).
- 8.1.13. THE INSPECTOR SHALL CONDUCT PRE-CONSTRUCTION INSPECTIONS TO VERIFY AREAS THAT ARE NOT TO BE DISTURBED HAVE BEEN MARKED IN THE SWPPP AND IN THE FIELD BEFORE LAND DISTURBANCE ACTIVITIES BEGIN AND INITIAL MEASURES HAVE BEEN INSTALLED (10 "INSPECTOR") (3.5.1.n).
- 8.1.14. DOCUMENTATION OF INSPECTIONS WILL BE MAINTAINED ON SITE IN THE "DOCUMENTATION AND PERMITS" BINDER. REPORTS WILL BE SUBMITTED TO THE TDOT PROJECT SUPERVISOR PER THE CONTRACT.
- 8.1.15. THESE INSPECTION REQUIREMENTS DO NOT APPLY TO DEFINABLE AREAS OF THE SITE THAT HAVE MET FINAL STABILIZATION REQUIREMENTS AND HAVE BEEN NOTED IN THE SWPPP.
- 8.1.16. TRAINED CERTIFIED INSPECTORS SHALL COMPLETE INSPECTION TO THE BEST OF THEIR ABILITY. FALSIFYING INSPECTION RECORDS OR OTHER DOCUMENTATION OR FAILURE TO COMPLETE INSPECTION DOCUMENTATION SHALL RESULT IN A VIOLATION OF THIS PERMIT AND ANY OTHER APPLICABLE ACTS OR RULES (3.8.5.2.h).

- 8.2. DULY AUTHORIZED REPRESENTATIVE (7.7.3)
THE PROJECT SUPERVISOR MAY DELEGATE AN INDIVIDUAL AND/OR CONSULTANT TO SIGN EPSC INSPECTIONS REPORTS. FOR SATISFYING

SIGNATORY REQUIREMENTS FOR EPSC INSPECTION REPORTS, THE PROJECT SUPERVISOR AND NEWLY AUTHORIZED INDIVIDUAL ACCEPTING RESPONSIBILITY MUST PERFORM THE FOLLOWING:

- 8.2.1. COMPLETE AND SIGN THE TDOT CONSTRUCTION DIVISION EPSC DELEGATION OF AUTHORITY.
- 8.2.2. SUBMIT THE EPSC DELEGATION OF AUTHORITY TO THE LOCAL TDEC EFO.
- 8.3. MAINTENANCE PRACTICES (3.5.3.1 AND 3.5.7)
 - 8.3.1. ALL CONTROLS WILL BE MAINTAINED IN GOOD AND EFFECTIVE OPERATING ORDER. NECESSARY REPAIRS OR MAINTENANCE WILL BE ACCOMPLISHED BEFORE THE NEXT STORM EVENT AND IN NO CASE MORE THAN 24 HOURS AFTER THE NEED IS IDENTIFIED. IN A CASE WHERE THE ACTIVITY IS DEEMED IMPRACTICABLE, ANY SUCH CONDITIONS WILL BE DOCUMENTED (3.5.8.2.e).
 - 8.3.2. ALL CONTROLS WILL BE MAINTAINED IN ACCORDANCE WITH TDOT STANDARD DRAWINGS AND GOOD ENGINEERING PRACTICES. (3.5.3.1.b)
 - 8.3.3. SEDIMENT WILL BE REMOVED FROM SEDIMENT TRAPS, SILT FENCE, SEDIMENT BASINS, AND OTHER CONTROLS WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY 50% (3.5.3.1.e).
 - 8.3.4. CHECK DAMS WILL BE INSPECTED FOR STABILITY. SEDIMENT WILL BE REMOVED WHEN DEPTH REACHES ONE-HALF (1/2) THE HEIGHT OF THE DAM.
 - 8.3.5. LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORMWATER WILL BE PICKED UP AND REMOVED FROM STORMWATER EXPOSURE PRIOR TO ANTICIPATED STORM EVENTS OR BEFORE BEING CARRIED OFF OF THE SITE BY WIND, OR OTHERWISE PREVENTED FROM BECOMING A POLLUTANT SOURCE FOR STORMWATER DISCHARGES. AFTER USE, MATERIALS USED FOR EROSION CONTROL WILL BE REMOVED (3.5.3.1.f).
 - 8.3.6. ALL SEEDED AREAS WILL BE CHECKED FOR BARE SPOTS, EROSION WASHOUTS, AND VIGOROUS GROWTH FREE OF SIGNIFICANT WEED INFESTATIONS.
 - 8.3.7. THE TDOT PROJECT SUPERVISOR OR THEIR DESIGNEE AND THE CONTRACTOR'S SITE SUPERINTENDENT ARE RESPONSIBLE FOR INSPECTIONS. MAINTENANCE AND REPAIR ACTIVITIES ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE TDOT PROJECT SUPERVISOR OR THEIR DESIGNEE WILL COMPLETE THE INSPECTION REPORTS AND DISTRIBUTE COPIES PER THE CONTRACT.

9. SITE ASSESSMENTS (3.1.2)

QUALITY ASSURANCE SITE ASSESSMENTS OF EROSION PREVENTION AND SEDIMENT CONTROLS SHALL BE PERFORMED ACCORDING TO THE TDOT ENVIRONMENTAL DIVISION COMPREHENSIVE INSPECTIONS OFFICE GUIDELINES.

10. STORMWATER MANAGEMENT (3.5.4)

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

10.2. DESCRIBE ANY SPECIFIC POST-CONSTRUCTION MEASURES THAT WILL CONTROL VELOCITY, POLLUTANTS, AND/OR EROSION (3.5.1.f, 3.5.4):
RIPRAP DITCHES AND INLET/OUTLET PROTECTION

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2016	HPP/STP/NH-62(34)	
P.E.	2016	47023-1257-14	S-5

10.3. OTHER ITEMS NEEDING CONTROL (3.5.5)
CONSTRUCTION MATERIALS: THE FOLLOWING MATERIALS OR SUBSTANCES ARE EXPECTED TO BE PRESENT ON THE SITE DURING THE CONSTRUCTION PERIOD. (CHECK ALL THAT APPLY).
 LUMBER, GUARDRAIL, TRAFFIC CONTROL DEVICES
 CONCRETE WASHOUT
 CONCRETE AND CORRUGATED METAL PIPES
 MINERAL AGGREGATES, ASPHALT
 EARTH
 LIQUID TRAFFIC STRIPING MATERIALS, PAINT
 ROCK
 CURING COMPOUND
 EXPLOSIVES
 OTHER: _____
 THESE MATERIALS WILL BE HANDLED AS NOTED IN THIS SWPPP.

10.4. WASTE MATERIALS (3.5.5.b)
WASTE MATERIAL (EARTH, ROCK, ASPHALT, CONCRETE, ETC.) NOT REQUIRED FOR THE CONSTRUCTION OF THE PROJECT WILL BE DISPOSED OF BY THE CONTRACTOR IN ACCORDANCE WITH THE TDOT CONSTRUCTION CONTRACT AND FEDERAL AND STATE REGULATIONS. IMPACTS TO WATERS OF THE STATE/U.S. SHALL BE AVOIDED IF POSSIBLE. IF UNAVOIDABLE, THE CONTRACTOR WILL OBTAIN ANY AND ALL NECESSARY PERMITS INCLUDING, BUT NOT LIMITED TO NPDES, AQUATIC RESOURCES ALTERATION PERMIT(S) CORPS OF ENGINEERS SECTION 404 PERMITS, AND TVA SECTION 26A PERMITS TO DISPOSE OF WASTE MATERIALS.

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

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

10.4.3. OTHER MATERIALS
THE FOLLOWING MATERIALS OR SUBSTANCES ARE EXPECTED TO BE PRESENT ON THE SITE DURING THE CONSTRUCTION PERIOD. (CHECK ALL THAT APPLY).
 FERTILIZERS AND LIME
 PESTICIDES AND/OR HERBICIDES
 DIESEL AND GASOLINE
 MACHINERY LUBRICANTS (OIL AND GREASE)
 THESE MATERIALS WILL BE HANDLED AS NOTED IN THIS SWPPP.

11. **NON-STORMWATER DISCHARGES** (3.5.9)
11.1. THE FOLLOWING NON-STORMWATER DISCHARGES ARE ANTICIPATED DURING THE COURSE OF THIS PROJECT (CHECK ALL THAT APPLY):
 DEWATERING OF WORK AREAS OF COLLECTED STORMWATER AND GROUND WATER
 WATERS USED TO WASH VEHICLES (OF DUST AND SOIL) WHERE DETERGENTS ARE NOT USED AND DETENTION AND/OR FILTERING IS PROVIDED BEFORE THE WATER LEAVES THE SITE
 WATER USED TO CONTROL DUST (3.5.3.1.n)
 POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHINGS FROM WHICH CHLORINE HAS BEEN REMOVED TO THE MAXIMUM EXTENT PRACTICABLE
 UNCONTAMINATED GROUNDWATER OR SPRING WATER
 FOUNDATION OR FOOTING DRAINS WHERE FLOWS ARE NOT CONTAMINATED WITH POLLUTANTS
 OTHER: _____
 11.2. ALL ALLOWABLE NON-STORMWATER DISCHARGES WILL BE DIRECTED TO STABLE DISCHARGE STRUCTURES PRIOR TO LEAVING THE SITE. FILTERING OR CHEMICAL TREATMENT MAY BE NECESSARY PRIOR TO DISCHARGE.

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

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

11.5. ARE ANY DISCHARGES ASSOCIATED WITH INDUSTRIAL (NON-CONSTRUCTION STORMWATER) ACTIVITY EXPECTED (3.5.1.h)?
 YES NO
 IF YES, SPECIFY THE LOCATION OF THE ACTIVITY AND ITS PERMIT NUMBER: _____

12. **SPILL PREVENTION, MANAGEMENT AND NOTIFICATION** (3.5.5.c, 5.1)
 12.1. SPILL PREVENTION (3.5.5.c)
 CONTRACTOR'S BULK FUEL AND PETROLEUM PRODUCTS STORED ON-SITE OR ADJACENT TO THE R.O.W. IN ABOVE GROUND STORAGE TANKS WITH AGGREGATE STORAGE CAPACITY IN EXCESS OF 1,320 GALLONS SHALL HAVE SECONDARY CONTAINMENT.

 THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING A SPILL PREVENTION CONTROL AND COUNTERMEASURE (SPCC) PLAN AS REQUIRED BY LAW AND BE SOLELY RESPONSIBLE FOR OBTAINING ANY NECESSARY LOCAL, STATE, AND FEDERAL PERMITS. THE SPCC PLAN AND/OR PERMITS SHALL BE KEPT ON-SITE AND A COPY PROVIDED TO THE TDOT CONSTRUCTION SUPERVISOR.

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

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

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

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

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

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

12.4. SPILL MANAGEMENT
 12.4.1. IN ADDITION TO THE PREVIOUS HOUSEKEEPING AND MANAGEMENT PRACTICES, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP IF NECESSARY.
 12.4.2. FOR ALL HAZARDOUS MATERIALS STORED ON SITE, THE MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEAN UP WILL BE CLEARLY POSTED. SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATIONS OF THE INFORMATION AND CLEANUP SUPPLIES.
 12.4.3. APPROPRIATE CLEANUP MATERIALS AND EQUIPMENT WILL BE MAINTAINED BY THE CONTRACTOR IN THE MATERIALS STORAGE AREA ON-SITE AND UNDER COVER. AS APPROPRIATE, EQUIPMENT AND MATERIALS MAY INCLUDE ITEMS SUCH AS BOOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR CLEAN UP PURPOSES.
 12.4.4. ALL SPILLS WILL BE CLEANED IMMEDIATELY AFTER DISCOVERY AND THE MATERIALS DISPOSED OF PROPERLY. THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.
 12.4.5. THE CONTRACTOR'S RESPONSIBLE PARTY WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT THE SITE SUPERINTENDENT HAS HAD APPROPRIATE TRAINING FOR HAZARDOUS MATERIALS HANDLING, SPILL MANAGEMENT, AND CLEANUP.
 12.4.6. IF SPILLS REPRESENT AN IMMINENT THREAT OF ESCAPING THE SITE AND ENTERING RECEIVING WATERS, PERSONNEL WILL RESPOND IMMEDIATELY TO CONTAIN THE RELEASE AND NOTIFY THE SUPERINTENDENT AFTER THE SITUATION HAS BEEN STABILIZED.
 12.4.7. IF AN OIL SHEEN IS OBSERVED ON SURFACE WATER (E.G. SETTLING PONDS, DETENTION PONDS, SWALES), ACTION WILL BE TAKEN IMMEDIATELY TO REMOVE THE MATERIAL CAUSING THE SHEEN. THE CONTRACTOR WILL USE APPROPRIATE MATERIALS TO CONTAIN AND ABSORB THE SPILL. THE SOURCE OF THE OIL SHEEN WILL ALSO BE IDENTIFIED AND REMOVED OR REPAIRED AS NECESSARY TO PREVENT FURTHER RELEASES.
 12.4.8. IF A SPILL OCCURS THE CONTRACTOR'S SITE SUPERINTENDENT SHALL BE RESPONSIBLE FOR COMPLETING THE SPILL REPORTING FORM AND FOR REPORTING THE SPILL TO THE TDOT CONSTRUCTION SUPERVISOR AND/OR PROJECT ENGINEER. ALL SPILLS MUST BE REPORTED TO THE APPROPRIATE AGENCY, AND MEASURES SHALL BE TAKEN IMMEDIATELY TO PREVENT THE POLLUTION OF WATERS OF THE STATE/U.S., INCLUDING GROUNDWATER, SHOULD A SPILL OCCUR.
 12.4.9. APPROPRIATE CLEANUP MATERIALS AND EQUIPMENT SHALL BE MAINTAINED BY THE CONTRACTOR IN THE MATERIALS STORAGE AREA ON-SITE AND UNDER COVER. SPILL RESPONSE EQUIPMENT SHALL BE INSPECTED AND MAINTAINED BY THE CONTRACTOR AS

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2016	HPP/STP/NH-62(34)	
P.E.	2016	47023-1257-14	S-6

NECESSARY TO REPLACE ANY MATERIALS USED IN SPILL RESPONSE ACTIVITIES.

TIMES. GAUGES WILL BE REPAIRED OR REPLACED ON THE SAME DAY IF FOUND TO BE NON-OPERATIONAL OR MISSING.

CONSTRUCTION ACTIVITY. THE STAGES DEPICTED IN THE EPSC PLANS MAY NOT COINCIDE WITH THE ACTUAL STAGES OF CONSTRUCTION ESTABLISHED BY THE CONTRACTOR DURING CONSTRUCTION, THUS MODIFICATIONS WILL BE REQUIRED TO ENSURE THE EPSC PLAN IS MAINTAINED TO DEPICT CURRENT SITE CONDITIONS. IT SHOULD BE MAINTAINED SUCH THAT IT WILL ALWAYS REFLECT THE MEASURES THAT ARE INSTALLED DURING THE VARIOUS STAGES OF CONSTRUCTION. IT IS IMPRACTICAL TO DETERMINE ALL THE INTERMEDIATE PHASES OF CONSTRUCTION THAT WILL OCCUR, THUS THESE DOCUMENTS WILL HAVE TO BE UPDATED THROUGHOUT THE LIFE OF THE CONSTRUCTION PROJECT. THE ENVIRONMENTAL DIVISION MAY BE CONTACTED FOR GUIDANCE ON SPECIFIC SWPPP NEEDS. A COPY OF ANY REGULATORY CORRESPONDENCE REGARDING THE EFFECTIVENESS OF THE SWPPP OR EPSC CONTROLS SHALL BE RETAINED IN THE SWPPP.

- 12.5. SPILL NOTIFICATION (5.1)
WHERE A RELEASE CONTAINING A HAZARDOUS SUBSTANCE IN AN AMOUNT EQUAL TO OR IN EXCESS OF A REPORTABLE QUANTITY ESTABLISHED UNDER EITHER 40 CFR 117 OR 40 CFR 302 OCCURS DURING A 24 HOUR PERIOD:
- 12.5.1. THE TDOT PROJECT SUPERVISOR IS RESPONSIBLE FOR NOTIFYING THE REGIONAL ENVIRONMENTAL COORDINATOR OR ASSISTANT REGIONAL ENVIRONMENTAL COORDINATOR AS SOON AS HE OR SHE HAS KNOWLEDGE OF THE DISCHARGE.
- 12.5.2. THE TDOT REGIONAL ENVIRONMENTAL COORDINATOR WILL NOTIFY THE LOCAL TDEC ENVIRONMENTAL FIELD OFFICE AND ANY OTHER APPLICABLE REGULATORY AGENCIES WITHIN 24 HOURS OF THE SPILL.
- 12.5.3. A WRITTEN DESCRIPTION OF THE RELEASE, DATE OF RELEASE AND CIRCUMSTANCES LEADING TO THE RELEASE, WHAT ACTIONS WERE TAKEN TO MITIGATE EFFECTS OF THE RELEASE, AND STEPS TAKEN TO MINIMIZE THE CHANCE OF FUTURE OCCURRENCES WILL BE SUBMITTED TO THE APPROPRIATE TDEC ENVIRONMENTAL FIELD OFFICE WITHIN 14 DAYS OF KNOWLEDGE OF THE RELEASE.
- 12.5.4. THE SWPPP MUST BE MODIFIED WITHIN 14 DAYS OF KNOWLEDGE OF THE RELEASE PROVIDING A DESCRIPTION OF THE RELEASE, CIRCUMSTANCES LEADING TO THE RELEASE, AND THE DATE OF RELEASE. THE SWPPP WILL BE REVIEWED AND MODIFIED AS NECESSARY TO IDENTIFY MEASURES TO PREVENT THE REOCCURRENCE OF SUCH RELEASES AND TO RESPOND TO SUCH RELEASES.

- 13.2.4. EACH RAIN GAUGE WILL BE READ (FOR DETAILED RECORDS OF RAINFALL) AND EMPTIED AFTER EVERY RAINFALL EVENT OCCURRING ON THE PROJECT SITE AT APPROXIMATELY THE SAME TIME OF THE DAY (DURING NORMAL BUSINESS HOURS). DURING PERIODS OF DRY CONDITIONS, IT WILL NOT BE NECESSARY TO READ THE RAIN GAUGE EVERY DAY. IN LIEU OF THIS REQUIREMENT ON WEEKENDS AND ON STATE HOLIDAYS, THE RAIN GAUGES CAN BE EMPTIED THE NEXT BUSINESS DAY AND A REFERENCE SITE USED FOR A RECORD OF DAILY AMOUNT OF PRECIPITATION FOR THOSE DAYS. A REFERENCE SITE IS THE DOCUMENTATION FROM THE CLOSEST GAUGE WITHIN PROXIMITY OF THE PROJECT FROM A RECOGNIZED SOURCE SUCH AS THE NOAA NATIONAL WEATHER SERVICE.
- 13.2.5. DETAILED RECORDS WILL BE RECORDED OF RAINFALL EVENTS INCLUDE DATES, AMOUNTS OF RAINFALL, AND THE APPROXIMATE DURATION (OR THE STARTING AND ENDING TIMES). THE RAINFALL RECORDS SHALL BE RECORDED ON THE TDOT RAINFALL RECORD SHEET AND SHALL BE MAINTAINED IN THE "DOCUMENTATION AND PERMITS" BINDER.
- 13.2.6. IF, IN THE EVENT THAT THE RAINFALL EVENT IS STILL IN PROGRESS AT THE DAILY RECORDING TIME, THE GAUGE WILL BE EMPTIED AND THE RECORD WILL INDICATE THAT THE STORM EVENT WAS STILL IN PROGRESS.
- 13.2.7. RAIN GAUGE INFORMATION (DETAILED RECORDS), INCLUDING THE LOCATION OF THE NEAREST OUTFALL, WILL BE RECORDED ON THE EPSC INSPECTION REPORT FORMS AT THE TIME OF MEASUREMENT.

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

- 13.6.2. PRIOR TO THE INITIATION OF LAND DISTURBING ACTIVITIES AND UNTIL THE SITE HAS MET THE FINAL STABILIZATION CRITERIA, TDOT OR THEIR DESIGNEE WILL POST A NOTICE NEAR THE MAIN ENTRANCE OF THE CONSTRUCTION SITE WITH THE FOLLOWING INFORMATION (3.3.3) (6.2.1):
- A COPY OF THE NOTICE OF COVERAGE (NOC) WITH THE NPDES PERMIT NUMBER FOR THE PROJECT;
 - THE INDIVIDUAL NAME, COMPANY NAME, E-MAIL ADDRESS (IF APPLICABLE) AND TELEPHONE NUMBER OF THE LOCAL PROJECT SITE OWNER AND OPERATOR CONTACT;
 - A BRIEF DESCRIPTION OF THE PROJECT; AND
 - THE LOCATION OF THE SWPPP.

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

13. RECORD-KEEPING

- 13.1. REQUIRED RECORDS
TDOT OR THEIR DESIGNEE WILL MAINTAIN AT THE SITE THE FOLLOWING RECORDS OF CONSTRUCTION ACTIVITIES (3.5.3.1.m) (6.2.1):
- 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
 - RECORDS EPSC INSPECTION REPORTS AND CORRECTIVE MEASURES
 - RECORDS OF QUALITY ASSURANCE SITE ASSESSMENTS
 - COPY OF SITE EPSC INSPECTOR'S TDEC LEVEL 1 CERTIFICATION

- 13.3. KEEPING PLANS CURRENT (3.4)
TDOT OR THEIR DESIGNEE WILL MODIFY AND UPDATE THE SWPPP WHEN ANY OF THE FOLLOWING CONDITIONS APPLY:

- 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;
- WHENEVER INSPECTIONS OR INVESTIGATIONS BY SITE OPERATORS, LOCAL, STATE, OR FEDERAL OFFICIALS INDICATE THE SWPPP IS PROVING INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANTS FROM CONSTRUCTION ACTIVITY SOURCES, OR IS OTHERWISE NOT ACHIEVING THE GENERAL OBJECTIVES OF CONTROLLING POLLUTANTS IN STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY; WHERE LOCAL, STATE, OR FEDERAL OFFICIALS DETERMINE THAT THE SWPPP IS INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANT SOURCES, A COPY OF ANY CORRESPONDENCE TO THAT EFFECT MUST BE RETAINED IN THE SWPPP;
- WHEN ANY NEW OPERATOR AND/OR SUB-OPERATOR IS ASSIGNED OR RELIEVED OF THEIR RESPONSIBILITY TO IMPLEMENT A PORTION OF THE SWPPP;
- TO PREVENT A NEGATIVE IMPACT TO LEGALLY PROTECTED STATE OR FEDERALLY LISTED OR PROPOSED THREATENED OR ENDANGERED AQUATIC FAUNA;
- WHEN THERE IS A CHANGE IN CHEMICAL TREATMENT METHODS INCLUDING: USE OF DIFFERENT TREATMENT CHEMICALS, DIFFERENT DOSAGE OR APPLICATION RATES OR A DIFFERENT AREA OF APPLICATION NOT SPECIFIED ON THE EPSC PLANS.

ALL SWPPP REVISION(S) SHALL BE RECORDED WITHIN 7 DAYS BY THE PROJECT EPSC INSPECTOR.

- 13.2. RAINFALL MONITORING PLAN (3.5.3.1.o):
- 13.2.1. EQUIPMENT
AT A MINIMUM, THE CONTRACTOR WILL INSTALL A FENCE POST TYPE RAIN GAUGE TO MEASURE RAINFALL. THE STANDARD FENCE POST RAIN GAUGE WILL BE A WEDGE-SHAPED GAUGE THAT MEASURES UP TO 6 INCHES OF RAINFALL. AN ENGLISH SCALE WILL BE PROVIDED ON ONE FACE, WITH A METRIC SCALE ON THE OTHER FACE. GRADUATION WILL BE PERMANENTLY MOLDED IN DURABLE WEATHER-RESISTANT PLASTIC. THE MINIMUM GRADUATION WILL BE 0.01 INCH (OR 0.1MM). AN ALUMINUM BRACKET WITH SCREWS MAY BE USED TO MOUNT THE GAUGE ON A WOODEN SUPPORT.
- 13.2.2. LOCATION
THE RAIN GAUGE WILL BE LOCATED AT OR ALONG THE PROJECT SITE, AS DEFINED IN THE NOI OF THE NPDES PERMIT, IN AN OPEN AREA SUCH THAT THE MEASUREMENT WILL NOT BE INFLUENCED BY OUTSIDE FACTORS (I.E. OVERHANGS, GUTTER, TREES, ETC). AT LEAST ONE RAIN GAUGE PER LINEAR MILE IS REQUIRED ALONG (AS MEASURED ALONG THE CENTERLINE OF THE PRIMARY ALIGNMENT) THE PROJECT WHERE CLEARING, GRUBBING, EXCAVATION, GRADING, CUTTING OR FILLING IS ACTIVELY PERFORMED, OR EXPOSED SOIL HAS NOT YET BEEN PERMANENTLY STABILIZED.
- 13.2.3. METHODS
RAINFALL MONITORING WILL BE INITIATED PRIOR TO CLEARING, GRUBBING, EXCAVATION, GRADING, CUTTING, OR FILLING, EXCEPT AS SUCH MINIMAL CLEARING MAY BE NECESSARY TO INSTALL A RAIN GAUGE IN AN OPEN AREA. THE RAIN GAUGE WILL BE CHECKED FOR OPERATIONAL SOUNDNESS DAILY (DURING NORMAL BUSINESS HOURS) IN WET TIMES AND WEEKLY IN DRY

- 13.4. WHEN A TMDL IS DEVELOPED FOR THE RECEIVING WATERS FOR A POLLUTANT OF CONCERN (SILTATION AND/OR HABITAT ALTERATION), CONSTRUCTION SHALL NOTIFY THE PERMITS SECTION FOR PROPER COORDINATION.

- 13.5. THE EPSC PLAN IS TO SERVE AS AN INITIAL GUIDE FOR SITE PERSONNEL AS THE CONSTRUCTION PROCESS DEVELOPS. IT MUST BE AMENDED, MODIFIED, AND UPDATED WHENEVER EPSC INSPECTIONS INDICATE, OR WHERE STATE OR FEDERAL REGULATORY OFFICIALS DETERMINE EPSC MEASURES ARE PROVING INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANT SOURCES OR ARE OTHERWISE NOT ACHIEVING THE GENERAL OBJECTIVES OF CONTROLLING POLLUTANTS IN STORMWATER DISCHARGES ASSOCIATED WITH THE

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2016	HPP/STP/NH-62(34)	
P.E.	2016	47023-1257-14	S-7

13.7. NOTICE OF TERMINATION (8.0)

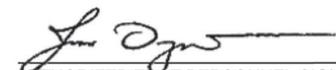
- 13.7.1. WHEN ALL STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES THAT ARE AUTHORIZED BY THE PERMIT ARE ELIMINATED BY FINAL STABILIZATION, THE TDOT REGIONAL ENGINEER WILL SUBMIT A NOTICE OF TERMINATION (NOT) THAT IS SIGNED IN ACCORDANCE WITH THE PERMIT TO THE TDEC CENTRAL OFFICE IN NASHVILLE, TN.
- 13.7.2. FOR THE PURPOSES OF THE CERTIFICATION REQUIRED BY THE NOT, THE ELIMINATION OF STORMWATER DISCHARGES ASSOCIATED WITH THE CONSTRUCTION ACTIVITY MEANS THE FOLLOWING:
- ALL EARTH-DISTURBING ACTIVITIES ON THE SITE ARE COMPLETED AND ALL DISTURBED SOILS AT THE PORTION OF THE CONSTRUCTION SITE WHERE THE OPERATOR HAD CONTROL HAVE BEEN FINALLY STABILIZED; AND
 - ALL CONSTRUCTION MATERIALS, WASTE AND WASTE HANDLING DEVICES, AND ALL EQUIPMENT, AND VEHICLES THAT WERE USED DURING CONSTRUCTION HAVE BEEN REMOVED AND PROPERLY DISPOSED; AND
 - ALL STORMWATER CONTROLS THAT WERE INSTALLED AND MAINTAINED DURING CONSTRUCTION, EXCEPT THOSE THAT ARE INTENDED FOR LONG-TERM USE FOLLOWING TERMINATION OF PERMIT COVERAGE, HAVE BEEN REMOVED; AND
 - ALL POTENTIAL POLLUTANTS AND POLLUTANT GENERATING ACTIVITIES ASSOCIATED WITH CONSTRUCTION HAVE BEEN REMOVED; AND
 - THE PERMITTEE HAS IDENTIFIED WHO IS RESPONSIBLE FOR ONGOING MAINTENANCE OF ANY STORMWATER CONTROLS LEFT ON THE SITE FOR LONG-TERM USE FOLLOWING TERMINATION OF PERMIT COVERAGE; AND
 - TEMPORARY EPSC MEASURES HAVE BEEN OR WILL BE REMOVED AT AN APPROPRIATE TIME TO ENSURE FINAL STABILIZATION IS MAINTAINED; AND
 - ALL STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES FROM THE IDENTIFIED SITE THAT ARE AUTHORIZED BY A NPDES GENERAL PERMIT HAVE OTHERWISE BEEN ELIMINATED FROM THE PORTION OF THE CONSTRUCTION SITE WHERE THE OPERATOR HAD CONTROL.

13.8. RETENTION OF RECORDS (6.2)

TDOT WILL RETAIN COPIES OF THE SWPPP, ALL REPORTS REQUIRED BY THE PERMIT, AND RECORDS OF ALL DATA USED TO COMPLETE THE NOTICE OF INTENT FOR THE PROJECT FOR A PERIOD OF AT LEAST THREE (3) YEARS FROM THE DATE THE NOT WAS FILED.

14. **SITE WIDE/PRIMARY PERMITTEE CERTIFICATION (7.7.5)**

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



AUTHORIZED TDOT PERSONNEL SIGNATURE (3.3.1)

JIM OZMENT
PRINTED NAME

ENVIRONMENTAL DIVISION DIRECTOR
TITLE

8/12/2016
DATE

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

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

AUTHORIZED OPERATOR (CONTRACTOR) SIGNATURE (3.3.1)

PRINTED NAME

TITLE

DATE

16. **ENVIRONMENTAL PERMITS (9.0)**

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

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

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

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2016	HPP/STP/NH-62(34)	
P.E.	2016	47023-1257-14	S-8

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

EPSC STAGE	OUTFALL LABEL	SUB OUTFALL	STATION CL, LT OR RT	SLOPE WITHIN ROW (%)	STAGE 1 (P1) DRAINAGE AREA (AC)	STAGE 2 (P2) DRAINAGE AREA (AC)	STAGE 3 (P3) DRAINAGE AREA (AC)	SEDIMENT BASIN OR EQUIVALENT MEASURE(S) (YES, NO OR N/A)	RECEIVING NATURAL RESOURCE NAME OR LABEL	COMMENTS
1	OUT - 1		107+32 RT	4.84%	0.65			N/A	STR-1	
1	OUT - 2		108+97 RT	3.03%	0.51			N/A	STR-1	
1	OUT - 3		109+12 RT	1.31%	0.06			N/A	STR-1	
1	OUT - 4		109+16 RT	2.14%	0.61			N/A	STR-1	
1	OUT - 5		109+15 LT	3.69%	1.10			N/A	STR-1	
1	OUT - 5A		12+05 LT MYNDERSE AVE	1.38%	0.12			N/A	STR-2	
1	OUT - 6		115+06 LT	14.93%	0.22			N/A	STR-2	
1, 2	OUT - 7		116+92 LT	9.77%	0.23	0.23		N/A	STR-2	
1, 2, 3	OUT - 8		202+67 LT MASSACHUSETTS AVE	7.06%	1.19	1.19	1.19	N/A	STR-2	
1	OUT - 9		120+19 RT	6.93%	0.10			N/A	STR-2	
1	OUT - 9A		120+04 RT	0.61%	0.10			N/A	STR-2	
1, 2, 3	OUT - 10		120+68 RT	18.00%	1.00	1.00	1.00	N/A	STR-2	
1, 2	OUT - 11		120+12 RT	0.48%	0.12	0.12		N/A	STR-2	
1	OUT - 12		126+43 RT	19.18%	1.30			N/A	STR-2	
1	OUT - 13		131+03 RT	16.43%	1.49			N/A	STR-2	
1, 2	OUT - 14		135+17 RT	6.50%	1.66	1.66		N/A	STR-2	
1	OUT - 15		77+60 RT TENNESSEE AVE	8.32%	1.09			N/A	STR-2	
1	OUT - 16		76+12 RT TENNESSEE AVE	15.60%	0.36			N/A	STR-2	
1	OUT - 17		206+94 LT MASSACHUSETTS AVE	9.97%	0.16			N/A	STR-2	
1	OUT - 18		135+09 RT	13.49%	1.81			N/A	STR-2	
1	OUT - 19		138+89 RT	4.73%	2.23			N/A	STR-2	
1	OUT - 20		141+82 RT	13.90%	0.28			N/A	STR-2	
1	OUT - 21		142+02 RT	10.30%	0.51			N/A	STR-2	
1	OUT - 22		142+05 RT	5.76%	0.10			N/A	STR-2	
1	OUT - 23		140+64 RT	9.63%	0.36			N/A	STR-2	
2, 3	OUT - 24		107+69 RT	4.84%		0.65	0.65	N/A	STR-1	
2, 3	OUT - 25		108+97 RT	3.03%		0.51	0.51	N/A	STR-1	
2, 3	OUT - 26		109+12 RT	1.31%		0.06	0.06	N/A	STR-1	
2, 3	OUT - 27		109+16 RT	2.14%		0.61	0.61	N/A	STR-1	
2, 3	OUT - 28		109+47 LT	2.00%		0.74	0.74	N/A	STR-1	
2	OUT - 29		11+82 LT MYNDERSE AVE	0.86%		0.49		N/A	STR-1	
2	OUT - 30		11+90 LT MYNDERSE AVE	1.38%		0.12		N/A	STR-2	
2	OUT - 31		12+51 LT MYNDERSE AVE	0.50%		0.13		N/A	STR-2	
2, 3	OUT - 32		12+55 RT MYNDERSE AVE	0.50%		0.40	0.40	N/A	STR-2	
2, 3	OUT - 33		11+50 RT MYNDERSE AVE	2.00%		0.64	0.64	N/A	STR-2	
2	OUT - 34		12+80 LT MYNDERSE AVE	3.07%		0.37		N/A	STR-2	
2, 3	OUT - 35		116+56 LT	9.77%		0.23	0.23	N/A	STR-2	
2	OUT - 36		119+98 RT	4.81%		0.13		N/A	STR-2	

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2016	HPP/STP/NH-62(34)	
P.E.	2016	47023-1257-14	S-9

EPSC STAGE	OUTFALL LABEL	SUB OUT-FALL	STATION CL, LT OR RT	SLOPE WITHIN ROW (%)	STAGE 1 (P1) DRAINAGE AREA (AC)	STAGE 2 (P2) DRAINAGE AREA (AC)	STAGE 3 (P3) DRAINAGE AREA (AC)	SEDIMENT BASIN OR EQUIVALENT MEASURE(S) (YES, NO OR N/A)	RECEIVING NATURAL RESOURCE NAME OR LABEL	COMMENTS
2	OUT - 37		119+98 RT	10.14%		0.15		N/A	STR-2	
2, 3	OUT - 38		126+53 RT	2.75%		4.12	4.12	N/A	STR-2	
2, 3	OUT - 38A		130+49 RT	4.87%		1.56	1.56	N/A	STR-2	
2, 3	OUT - 39		136+19 RT	6.93%		2.95	2.95	N/A	STR-2	
2, 3	OUT - 40		139+05 RT	5.40%		3.30	3.30	N/A	STR-2	
2	OUT - 41		140+48 RT	19.5%		0.09		N/A	STR-2	
2, 3	OUT - 42		141+77 RT	6.19%		0.34	0.34	N/A	STR-2	
2	OUT - 43		143+00 RT	4.11%		0.05		N/A	STR-2	

* SEE COMMENTS SECTION FOR ADDITIONAL INFORMATION REGARDING DRAINAGE AREA.

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

Index Of Sheets
See Sheet IA

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION BUREAU OF ENGINEERING

REV. 10-10-12: ADDED SHEET 10 TO LOCATION MAP. UPDATED SIGNATURES FOR CHIEF ENGINEER AND COMMISSIONER. REV. INDEX, SURVEY UPDATE, END OF PROJECT AND ROW LENGTH. REVISED FED. AID PROJ. NO. FROM HPP-62(34) TO HPP/STP-62(34). APPLY REVISED FED. AID PROJ. NO. TO ALL SHEETS.

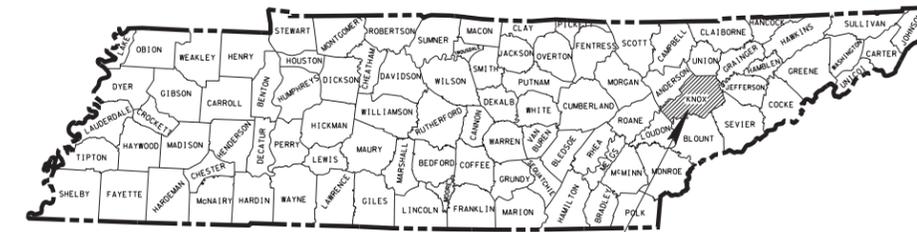
TENN.	YEAR	SHEET NO.
	2016	1
FED. AID PROJ. NO.	HPP/STP/NH-62(34)	
STATE PROJ. NO.	47023-3264-14	

KNOX COUNTY

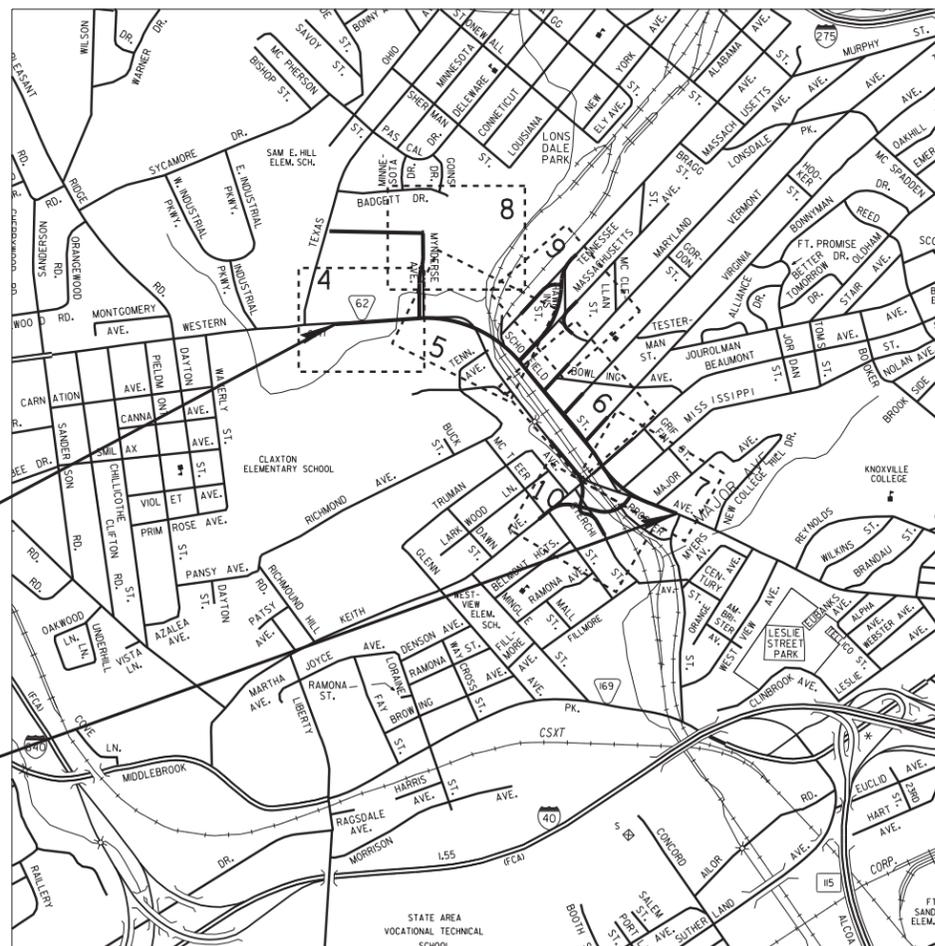
STATE ROUTE 62 (WESTERN AVE.)
FROM TEXAS AVENUE TO MAJOR AVENUE
IN KNOXVILLE

CONSTRUCTION

STATE HIGHWAY NO. 62 F.A.H.S. NO. 62
GRADING, DRAINAGE, BRIDGES, PAVING, RETAINING WALLS,
SIGNING, STRIPING, LIGHTING AND SIGNALS



PROJ. NO. HPP/STP/NH-62(34)
KNOX COUNTY



47023-3264-14
BEG. PROJ. NO. HPP/STP/NH-62(34) (CONST.)
STA. 102+99.69

47023-3264-14
END PROJ. NO. HPP/STP/NH-62(34) (CONST.)
STA. 147+03.59

SPECIAL NOTES

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

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

TDOT C.E. MANAGER 1 JAMES KELLEY, P.E.
DESIGNED BY NEEL-SCHAFFER, INC.
DESIGNER STEVEN C. LAMM, P.E. CHECKED BY MICHAEL AGNEW, P.E.
P.E. NO. 47023-1257-14
PIN NO. 101204.00

ROADWAY LENGTH **0.719 MILES**
BRIDGE LENGTH **0.115 MILES**
BOX BRIDGE LENGTH **0.000 MILES**
PROJECT LENGTH **0.834 MILES**

TRAFFIC DATA	
ADT (2017)	16,410
ADT (2037)	21,990
DHV (2037)	2530
D	50 - 50
T (ADT)	3 %
T (DHV)	2 %
V	45 mph

NO EQUATIONS
NO EXCLUSIONS



ORIGINAL SURVEY
08-16-2002
SURVEY UPDATE
7-05-2012

**UNOFFICIAL
SET
NOT FOR
BIDDING**

APPROVED: Paul D. Degges
PAUL D. DEGGES, CHIEF ENGINEER

DATE: _____

APPROVED: [Signature]
JOHN SCHROER, COMMISSIONER

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED: _____
DIVISION ADMINISTRATOR DATE

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2016	HPP/STP/NH-62(34)	1A

INDEX

STANDARD ROADWAY DRAWINGS

SHEET NAME	SHEET NO.
TITLE SHEET	1
ROADWAY INDEX AND STANDARD DRAWINGS INDEX.....	1A -1A1 – 1A2
PROJECT COMMITMENTS	1B
ESTIMATED BRIDGE QUANTITIES AND BRIDGE INDEX	2
ESTIMATED ROADWAY QUANTITIES	2A - 2A1, 2A2
ESTIMATED UTILITIES QUANTITIES	2B - 2B1
TYPICAL SECTIONS AND PAVING SCHEDULE	2C – 2I
GENERAL NOTES AND SPECIAL NOTES	2J – 2N
TABULATED QUANTITIES	2O – 2U
DETAIL SHEETS	2V – 2X
PROPERTY MAPS AND RIGHT-OF-WAY ACQUISITION TABLES.....	3, 3A – 3G
PRESENT LAYOUTS	4 – 10
R.O.W. DETAILS	4A – 10A
PROPOSED LAYOUTS	4B – 10B
PROPOSED PROFILES	4C – 7C
PROFILE OF SIDE ROADS STREETS.....	11 - 18
PROFILE OF PRIVATE DRIVES.....	19 – 29
RAILROAD GEOMETRIC LAYOUT AND PROFILE.....	30, 30A – 30C
DRAINAGE MAPS	31 - 32
CULVERT CROSS-SECTIONS	33 - 35
EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) PLANS	
NOTES AND STAGE 1.....	36, 36A – 36H
STAGE 2.....	37, 37A – 37F
STAGE 3.....	38, 38A - 38F
TRAFFIC CONTROL PLANS WITH CONSTRUCTION	
PHASING NOTES.....	39, 39A – 39M
EXISTING SIGNS	40, 40A – 40F
SIGNING AND PAVEMENT MARKING PLANS	41, 41A – 41F
SIGN SCHEDULE SHEETS	42, 42A – 42B
PROPOSED SIGNAL LAYOUTS	43, 43A – 43H
LIGHTING LAYOUTS	44, 44A – 44AA
SOILS SHEETS	45, 45A – 45H, 45J – 45N
ROADWAY CROSS SECTIONS	46 - 68
SIDE ROAD CROSS SECTIONS.....	69 – 109
RAILROAD CROSS SECTIONS	110 - 119
UTILITIES INDEX, UTILITY OWNERS, AND UTILITY SHEETS	U1-1 – U7-14
STORM WATER POLLUTION PREVENTION PLAN (SWPPP).....	S-1

DWG. NO	REV.	DESCRIPTION
STD-15-6	3-28-08	CURB AND RAIL DETAILS - SKEW NOT LESS THAN 45 DEG.
STD-15-7	3-02-02	STANDARD EDGE BEAM DETAILS FOR FILLS GREATER THAN 3' - 8"
STD-15-8	12-07-01	INTERIOR WALL END TREATMENTS
STD-15-9	2-28-03	TYPICAL WINGWALL DETAILS AND NOTES
STD-15-10	11-06-08	WINGWALL DIMENSIONS AND QUANTITIES
STD-15-11		WINGWALL DIMENSIONS AND QUANTITIES
STD-15-12	03-28-08	WINGWALL & SPECIAL RETAINING WALL DESIGN SECTION
STD-15-13		WINGWALL DESIGN SECTION
STD-15-14	06-01-11	BACKFILL AND DRAINAGE DETAILS
STD-15-15		BACKFILL AND DRAINAGE DETAILS
STD-15-38	09-19-06	BOX BRIDGE, 1 BARREL AT 10', CLEAR HTS. 4' - 6, 0 - 60' FILL
STD-17-1		INDEX OF DRAWINGS
STD-17-2		TERMINOLOGY
STD-17-3		GENERAL NOTES
STD-17-4		DESIGN SECTION LIMITS
STD-17-5		TYPICAL SECTION AND DETAILS
STD-17-6		TYPICAL ELEVATIONS
STD-17-7		CURB, RAIL & EDGE BEAM DETAILS - SKEW NOT LESS THAN 45 DEG
STD-17-8		EDGE BEAM DETAILS FOR FILLS GREATER THAN 3' – 6"
STD-17-9		INTERIOR WALL END TREATMENTS
STD-17-10		TYPICAL WINGWALL DETAILS AND NOTES
STD-17-11		WINGWALL DIMENSIONS AND QUANTITIES
STD-17-12		WINGWALL DIMENSIONS AND QUANTITIES
STD-17-13		WINGWALL DIMENSIONS AND QUANTITIES
STD-17-14		WINGWALL DIMENSIONS AND QUANTITIES
STD-17-15		WINGWALL & SPECIAL RETAINING WALL DESIGN SECTIONS
STD-17-16		WINGWALL DESIGN SECTION
STD-17-17	06-01-11	BACKFILL AND DRAINAGE DETAILS
STD-17-18		BACKFILL DETAILS
STD-17-20		LOW FLOW CHANNEL CONSTRUCTION DETAILS FOR CULVERT INLET AND OUTLET
STD-17-28		END SECTION DETAILS
STD-17-29		PRECAST BOX CULVERT DETAILS
STD-17-59		BOX BRIDGE, 1 BARREL AT 14', CLEAR HTS. 5' - 7, 0 - 60' FILL

DWG. NO	REV.	DESCRIPTION
RD-L-5	05-01-08	STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL
RD-L-6	03-30-10	STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL
RD-L-7	05-24-12	STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL
RD-L-8		STANDARD LEGEND FOR NATURAL STREAM DESIGN
RD01-S-11	04-04-03	DESIGN AND CONSTRUCTION DETAILS FOR ROADSIDE SLOPE DEVELOPMENT
RD01-S-11A	10-15-02	ROADSIDE DITCH DETAILS FOR DESIGN AND CONSTRUCTION
RD01-SD-1		INTERSECTION SIGHT DISTANCE DESIGN AND GENERAL NOTES
RD01-SD-3		INTERSECTION SIGHT DISTANCE 2-LANE ROADWAYS
RD01-SD-4		INTERSECTION SIGHT DISTANCE 5-LANE AND 4-LANE UNDIVIDED ROADWAYS
RD01-SE-2	10-15-02	URBAN SUPERELEVATION DETAILS
RD01-TS-1	02-05-16	DESIGN STANDARDS FOR LOCAL ROADS AND STREETS
RD01-TS-1A	02-05-16	DESIGN STANDARDS FOR LOW-VOLUME LOCAL ROADS (ADT <=400)
RD01-TS-6	01-25-16	TYPICAL CURB AND GUTTER SECTIONS WITH SHOULDER
RD01-TS-6A	07-31-13	TYPICAL CURB AND GUTTER SECTIONS WITHOUT SHOULDER
RD01-TS-7A	10-15-02	DESIGN STANDARDS 2-LANE CURB & GUTTER WITH CONTINUOUS 2-WAY LEFT-TURN LANE

DRAINAGE - CULVERTS AND ENDWALL

D-PB-1	01-02-13	STANDARD DETAILS FOR CONCRETE PIPE INSTALLATION
D-PE-1	02-12-76	TYPE "A" CONCRETE ENDWALL 2:1 SLOPE, 36" TO 78"
D-PE-4	02-03-16	STRAIGHT TYPE CONCRETE ENDWALL
D-PE-18A	01-06-15	18" CONCRRETE ENDWALL CROSS DRAIN
D-PE-18B		18" CONCRRETE ENDWALL CROSS DRAIN
D-PE-24A	01-21-16	24" CONCRRETE ENDWALL CROSS DRAIN
D-PE-24B		24" CONCRRETE ENDWALL CROSS DRAIN
D-PE-30A	01-21-16	30" CONCRRETE ENDWALL CROSS DRAIN WITH STEEL PIPE GRATE
D-PE-30B		30" CONCRRETE ENDWALL CROSS DRAIN WITH STEEL PIPE GRATE
D-PE-36A	06-14-13	36" CONCRRETE ENDWALL CROSS DRAIN WITH STEEL PIPE GRATE
D-PE-36B		36" CONCRRETE ENDWALL CROSS DRAIN WITH STEEL PIPE GRATE

DRAINAGE-CATCH BASINS AND MANHOLES

D-CB-12LP	08-01-12	LOW PROFILE 32" X 32" SQUARE CONCRETE NO. 12LP CATCH BASIN
D-CB-12P	03-11-14	STANDARD PRECAST RECTANGULAR CONCRETE NO. 12 CATCH BASIN
D-CB-12RA	03-11-14	STANDARD PRECAST 48" CIRCULAR NO. 12 CATCH BASIN (FOR USE WITH 6" NONMOUNTABLE CURB)
D-CB-12RB	03-11-14	STANDARD PRECAST 60" AND 72" CIRCULAR NO. 12 CATCH BASIN (FOR USE WITH 6" NONMOUNTABLE CURB)

STANDARD BRIDGE DRAWINGS

DWG. NO.	REV.	DESCRIPTION
STD-15-1	11-06-08	INDEX OF DRAWINGS AND TERMINOLOGY
STD-15-2	3-28-08	GENERAL NOTES
STD-15-3	2-28-03	DESIGN SECTION LIMITS
STD-15-4	12-07-01	TYPICAL SECTION AND DETAILS
STD-15-5	2-28-03	TYPICAL ELEVATION

ROADWAY DESIGN STANDARDS

RD-A-1	12-18-99	STANDARD ABBREVIATIONS
RD-L-1	10-26-94	STANDARD LEGEND
RD-L-2	09-05-01	STANDARD LEGEND FOR UTILITY INSTALLATIONS
RD-L-3	04-15-04	STANDARD LEGEND FOR SIGNALIZATION AND LIGHTING
RD-L-4	04-15-04	STANDARD LEGEND FOR SIGNALIZATION AND LIGHTING

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**INDEX
AND
STANDARD
DRAWINGS**

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2016	HPP/STP/NH-62(34)	1A2

STANDARD ROADWAY DRAWINGS

EROSION PREVENTION AND SEDIMENT CONTROL

EC-STR-2	08-01-12	SEDIMENT FILTER BAG
EC-STR-3B	08-01-12	SILT FENCE
EC-STR-3C	08-01-12	SILT FENCE WITH WIRE BACKING
EC-STR-3E	04-01-08	SILT FENCE FABRIC JOINING DETAILS
EC-STR-6	08-01-12	ROCK CHECK DAM
EC-STR-6A	08-01-12	ENHANCED ROCK CHECK DAM
EC-STR-7	08-01-12	SEDIMENT TRAP WITH CHECK DAM
EC-STR-11	08-01-12	CULVERT PROTECTION TYPE 1
EC-STR-19	04-01-08	CATCH BASIN PROTECTION
EC-STR-25	08-01-12	TEMPORARY CULVERT CROSSING, CONSTRUCTION EXIT, CONSTRUCTION FORD
EC-STR-27	08-01-12	TEMPORARY SLOPE DRAIN AND BERM
EC-STR-31	08-01-12	TEMPORARY DIVERSION CHANNEL
EC-STR-31A	04-01-08	TEMPORARY DIVERSION CHANNEL DESIGN
EC-STR-32	08-01-12	TEMPORARY DIVERSION CULVERTS
EC-STR-33	08-01-12	SUSPENDED PIPE DIVERSION (DOWNSTREAM)
EC-STR-33A	08-01-12	SUSPENDED PIPE DIVERSION (UPSTREAM)
EC-STR-34	08-01-12	EROSION CONTROL BLANKET FOR SLOPE INSTALLATION
EC-STR-37	06-10-14	SEDIMENT TUBE
EC-STR-39A	08-01-12	CURB INLET PROTECTION TYPE 3 & 4
EC-STR-42		CATCH BASIN FILTER ASSEMBLY (TYPE 2)
EC-STR-42A		CATCH BASIN FILTER ASSEMBLY (TYPE 2) SLIPCOVER DETAILS
EC-STR-44		CATCH BASIN FILTER ASSEMBLY (TYPE 4)
EC-STR-44A		CATCH BASIN FILTER ASSEMBLY (TYPE 4) SLIPCOVER DETAILS
EC-STR-46		CATCH BASIN FILTER ASSEMBLY (TYPE 6)
EC-STR-46A		CATCH BASIN FILTER ASSEMBLY (TYPE 6) SLIPCOVER DETAILS
EC-STR-47		CATCH BASIN FILTER ASSEMBLY (TYPE 7)
EC-STR-47A		CATCH BASIN FILTER ASSEMBLY (TYPE 7) SLIPCOVER DETAILS

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INDEX
AND
STANDARD
DRAWINGS

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2016	HPP/STP/NH-62(34)	1B

PROJECT COMMITMENTS			
COMMITMENT ID	SOURCE DIVISON	DESCRIPTION	STA. /LOCATION
EDML001	ENVIRONMENTAL DIVISION - MULTIPLE	PROVIDE LANDSCAPING ALONG NORTH SIDE OF THE PROJECT, FROM HAWKINS TO MAJOR TO LESSEN IMPACT ON THE MINORITY COMMUNITY	NASHVILLE, TENNESSEE
EDHZ002	ENVIRONMENTAL DIVISION - HAZARDOUS MATERIALS	THE UST SYSTEMS AT TRACT 93, 2240 KEITH AVE. (TDEC DUST FACILITY # 2470491) HAVE BEEN REMOVED, INCLUDING REGISTERED AND UNREGISTERED TANKS, LINES AND DISPENSERS HOWEVER, IN THE EVENT HAZARDOUS SUBSTANCES ARE ENCOUNTERED, THEIR DISPOSITION SHALL BE SUBJECT TO ALL APPLICABLE REGULATIONS, INCLUDING THE APPLICABLE SECTIONS OF THE FEDERAL RESOURCE CONSERVATION AND RECOVERY ACT AS AMENDED; AND THE CONPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT, AS AMENDED; AND THE TENNESSEE HAZARDOUS WASTE MANAGEMENT ACT OF 1983, AS AMENDED.	TRACT 93, 2240 KEITH AVE.
EDHZ001	ENVIRONMENTAL DIVISION - HAZARDOUS MATERIALS	THE UNDERGROUND STORAGE TANKS ON TRACT 93, CENETRAL CONVENIENCE CENTER, HAVE BEEN REMOVED. PLEASE NOTE THAT THERE MAY BE ODOR ISSUES ENCOUNTERED DURING FUTURE ROADWAY IMPROVEMENTS IN AND AROUND THIS AREA. THE SOIL SAMPLES IN THIS AREA ARE BELOW TDECT COMMERCIAL INITIAL SCREENING LEVELS AND SHOULD NOT POSE A PROBLEM. IF THERE ARE CONCERNS, PLEASE CONTACT HAZMAT OFFICE AT 615-532-8684.	NASHVILLE

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**PROJECT
COMMITMENTS**

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2016	HPP/STP/NH-62(34)	2A

ESTIMATED ROADWAY QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
105-01	CONSTRUCTION STAKES, LINES AND GRADES	LS	1
201-01	CLEARING AND GRUBBING	LS	1
7 202-01	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LS	1
202-04.50	REMOVAL OF STRUCTURES (15.5'X4' BOX, MYNDERSE STA. 12+23)	LS	1
202-04.51	REMOVAL OF STRUCTURES (14'X3' BOX, RT. SR 62 STA. 120+28)	LS	1
2 203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	C.Y.	66988
2 203-02.01	BORROW EXCAVATION (GRADED SOLID ROCK)	TON	222
2 203-03	BORROW EXCAVATION (UNCLASSIFIED)	C.Y.	11101
3 203-06	WATER	M.G.	470
204-08	FOUNDATION FILL MATERIAL	C.Y.	60
1 206-06.01	CONCRETE STEPS AND WALL	LS	1
1 206-06.02	250 LF CHAIN LINK FENCING	LS	1
1 206-06.03	250 LF CHAIN LINK FENCING	LS	1
1 206-06.04	150 LF CHAIN LINK FENCING	LS	1
1 206-06.05	100 LF CHAIN LINK FENCING	LS	1
1 206-06.06	1 STORY FRAME RESIDENCE, 721 SF, METAL CARPORT, 360 SF, FRAME OUTBUILDING, 102 SF, AND WOOD FENCING	LS	1
1 206-06.07	1 FRAME GARAGE, 539 SF, 450 LF CHAIN LINK FENCING	LS	1
1 206-06.08	PLASTIC SIGN ON 2 POST STEEL FRAME	LS	1
1 206-06.09	CHAIN LINK FENCING ON EX. RETAINING WALL THAT RUNS PARALLEL WITH REAR ALLEY AND LIGHT POLE	LS	1
1 206-06.10	CHAIN LINK FENCING ON EX. RETAINING WALL	LS	1
1 206-06.11	550 LF CHAIN LINK FENCING	LS	1
1 206-06.12	1-1/2 STORY FRAME RESIDENCE	LS	1
1 206-06.13	70 LF CHAIN LINK FENCING	LS	1
1 206-06.14	70 LF CHAIN LINK FENCING, SINGLE GATE, DOUBLE GATE	LS	1
1 206-06.15	500 LF CHAIN LINK FENCING	LS	1
1 206-06.16	70 LF CHAIN LINK FENCING	LS	1
1 206-06.17	70 LF CHAIN LINK FENCING	LS	1
1 206-06.18	70 LF CHAIN LINK FENCING	LS	1
1 206-06.19	2 POST WOOD COMMUNITY SIGN	LS	1
4,5 209-02.05	12" TEMPORARY SLOPE DRAIN	L.F.	520
4,5 209-02.07	18" TEMPORARY SLOPE DRAIN	L.F.	840
209-05	SEDIMENT REMOVAL	C.Y.	1003
4,5 209-06.05	BALED HAY OR STRAW	BALE	2668
4,5 209-08.02	TEMPORARY SILT FENCE (WITH BACKING)	L.F.	16590
4,5 209-08.03	TEMPORARY SILT FENCE (WITHOUT BACKING)	L.F.	13420
4,5 209-08.07	ROCK CHECK DAM	EACH	23
4,5 209-08.08	ENHANCED ROCK CHECK DAM	EACH	47
4,5 209-09.01	SANDBAGS	BAG	1200
4,5 209-09.03	SEDIMENT FILTER BAG (15' X 15')	EACH	6
4,5 209-09.43	CURB INLET PROTECTION (TYPE 4)	EACH	169
4,5 209-10.20	TEMPORARY SEDIMENT TRAP	C.Y.	1
4,5 209-20.03	POLYETHYLENE SHEETING (6 MIL. MINIMUM)	S.Y.	50
4,5 209-40.33	CATCH BASIN PROTECTION (TYPE D)	EACH	39
4,5 209-40.42	CATCH BASIN FILTER ASSEMBLY (TYPE 2)	EACH	72
4,5 209-40.44	CATCH BASIN FILTER ASSEMBLY (TYPE 4)	EACH	18
4,5 209-40.46	CATCH BASIN FILTER ASSEMBLY (TYPE 6)	EACH	71
4,5 209-40.47	CATCH BASIN FILTER ASSEMBLY (TYPE 7)	EACH	2
209-65.03	TEMPORARY DIVERSION CHANNEL	L.F.	350
303-01	MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	42735
303-01.01	GRANULAR BACKFILL (ROADWAY)	TON	505
4,5 303-10.01	MINERAL AGGREGATE (SIZE 57)	TON	137
303-10.04	MINERAL AGGREGATE (SIZE 4)	TON	64
307-01.01	ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING A	TON	5452
307-01.08	ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING B-M2	TON	4305
307-02.01	ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING A	TON	6710
307-02.08	ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING B-M2	TON	4396
307-02.02	ASPHALT CEMENT (PG70-22) (BPMB-HM) GRADING A-S	TON	157
307-02.03	AGGREGATE (BPMB-HM) GRADING A-S MIX	TON	4672
402-01	BITUMINOUS MATERIAL FOR PRIME COAT (PC)	TON	114
402-02	AGGREGATE FOR COVER MATERIAL (PC)	TON	452
403-01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	46
407-20.05	SAW CUTTING ASPHALT PAVEMENT	L.F.	1589
415-01.02	COLD PLANING BITUMINOUS PAVEMENT	S.Y.	2987
411-01.10	ACS MIX (PG64-22) GRADING D	TON	2907
411-02.10	ACS MIX (PG70-22) GRADING D	TON	2625

*SEE SHT. NO. 2A2 FOR FOOTNOTES

ESTIMATED ROADWAY QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
604-01.01	CLASS A CONCRETE (ROADWAY)	C.Y.	231
604-01.02	STEEL BAR REINFORCEMENT (ROADWAY)	LB.	51984
604-01.04	1-1/2" STEEL PIPE HANDRAIL	L.F.	48
604-01.20	BOX TUBE SAFETY RAIL	L.F.	665
32 604-10.90	MISCELLANEOUS BRIDGE ITEMS	LS	1
607-03.02	18" CONCRETE PIPE CULVERT (CLASS III)	L.F.	9526
607-05.02	24" CONCRETE PIPE CULVERT (CLASS III)	L.F.	1704
607-06.02	30" CONCRETE PIPE CULVERT (CLASS III)	L.F.	516
607-07.02	36" CONCRETE PIPE CULVERT (CLASS III)	L.F.	32
607-39.02	18" PIPE CULVERT (SIDE DRAIN)	L.F.	200
611-01.03	MANHOLES, > 8' - 12' DEPTH	EACH	1
611-01.04	MANHOLES, > 12' - 16' DEPTH	EACH	2
611-07.01	CLASS A CONCRETE (PIPE ENDWALLS)	C.Y.	7
611-07.02	STEEL BAR REINFORCEMENT (PIPE ENDWALLS)	LB.	240
611-07.54	18IN ENDWALL (CROSS DRAIN) 3:1	EACH	4
611-07.57	24IN ENDWALL (CROSS DRAIN) 3:1	EACH	1
611-07.60	30IN ENDWALL (CROSS DRAIN) 3:1	EACH	1
611-09.01	ADJUSTMENT OF EXISTING CATCHBASIN	EACH	7
611-09.03	CAPPING EXISTING CATCHBASIN	EACH	2
611-12.01	CATCH BASINS, TYPE 12, 0' - 4' DEPTH	EACH	29
611-12.02	CATCH BASINS, TYPE 12, > 4' - 8' DEPTH	EACH	73
611-12.03	CATCH BASINS, TYPE 12, > 8' - 12' DEPTH	EACH	3
611-14.02	CATCH BASINS, TYPE 14, > 4' - 8' DEPTH	EACH	28
611-14.04	CATCH BASINS, TYPE 14, > 12' - 16' DEPTH	EACH	1
611-38.03	CATCH BASINS, TYPE 38, 8' - 12' DEPTH	EACH	1
611-42.01	CATCH BASINS, TYPE 42, 0' - 4' DEPTH	EACH	16
611-42.02	CATCH BASINS, TYPE 42, > 4' - 8' DEPTH	EACH	5
621-03.02	18" TEMPORARY DRAINAGE PIPE	L.F.	70
621-03.03	24" TEMPORARY DRAINAGE PIPE	L.F.	480
621-03.05	36" TEMPORARY DRAINAGE PIPE	L.F.	300
621-03.06	42" TEMPORARY DRAINAGE PIPE	L.F.	392
621-03.07	48" TEMPORARY DRAINAGE PIPE	L.F.	240
621-05.01	TEMPORARY SHORING	S.F.	2000
701-01.01	CONCRETE SIDEWALK (4")	S.F.	83864
701-01.02	CONCRETE SIDEWALK (6")	S.F.	5569
701-02	CONCRETE DRIVEWAY	S.F.	8074
701-02.03	CONCRETE CURB RAMP	S.F.	7864
702-01	CONCRETE CURB	C.Y.	5
702-03	CONCRETE COMBINED CURB & GUTTER	C.Y.	1270
705-01.01	GUARDRAIL AT BRIDGE ENDS	L.F.	243
705-02.02	SINGLE GUARDRAIL (TYPE 2)	L.F.	1363
705-04.03	GUARDRAIL TERMINAL (TYPE 13)	EACH	2
705-04.04	GUARDRAIL TERMINAL (TYPE 21)	EACH	12
705-04.07	TAN ENERGY ABSORBING TERM (NCHRP 350, TL3)	EACH	3
705-08.50	PORTABLE IMPACT ATTENUATOR NCHRP350 TL-2	EACH	2
706-01	GUARDRAIL REMOVED	L.F.	360
707-08.11	HIGH-VISIBILITY CONSTRUCTION FENCE	L.F.	1520
708-02.01	MARKERS (CONCRETE R.O.W. POSTS)	EACH	72
709-05.05	MACHINED RIP-RAP (CLASS A-3)	TON	374
709-05.06	MACHINED RIP-RAP (CLASS A-1)	TON	255
709-05.08	MACHINED RIP-RAP (CLASS B)	TON	1461
710-02	AGGREGATE UNDERDRAINS (WITH PIPE)	L.F.	7390
708-02.01	MARKERS (CONCRETE R.O.W. POSTS)	EACH	72
709-05.05	MACHINED RIP-RAP (CLASS A-3)	TON	374
709-05.06	MACHINED RIP-RAP (CLASS A-1)	TON	1182
709-05.08	MACHINED RIP-RAP (CLASS B)	TON	85
710-02	AGGREGATE UNDERDRAINS (WITH PIPE)	L.F.	7390
712-01	TRAFFIC CONTROL	LS	1
712-01.04	TRAFFIC CONTROL SUPERVISOR	LS	1
712-02.02	INTERCONNECTED PORTABLE BARRIER RAIL	L.F.	750
712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	250
712-05.01	WARNING LIGHTS (TYPE A)	EACH	52
712-05.03	WARNING LIGHTS (TYPE C)	EACH	24
712-06	SIGNS (CONSTRUCTION)	S.F.	1489

*SEE SHT. NO. 2A2 FOR FOOTNOTES

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**ESTIMATED
ROADWAY
QUANTITIES**

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ESTIMATED ROADWAY QUANTITIES

ITEM NO.	DESCRIPTION	UNT	QUANTITY
712-07.03	TEMPORARY BARRICADES (TYPE III)	L.F.	360
712-08.03	ARROW BOARD (TYPE C)	EACH	4
713-11.02	PERFORATED/KNOCKOUT SQUARE TUBE POST	LE.	2501
16 713-13.02	FLAT SHEET ALUMINUM SIGNS (0.080" THICK)	S.F.	684
713-15	REMOVAL OF SIGNS, POSTS AND FOOTINGS	LS	1
713-15.07	SUSPENDED FLAT SHEET ALUMINUM SIGN (0.080" THICK)	EACH	4
713-16.01	CHANGEABLE MESSAGE SIGN UNIT	EACH	6
713-16.06	DEAD END SIGN AND SUPPORT	EACH	1
713-16.07	END OF ROADWAY SIGN AND SUPPORT	EACH	4
15 713-16.20	SIGNS (STREET NAME SIGN, MAST ARM MOUNT, PROVIDED BY CITY)	EACH	12
33 714-03.01	DIRECT BURIAL CONDUIT (2" PVC, SCHEDULE 40)	L.F.	345
34 714-05.05	PULL BOXES (KUB STANDARD)	EACH	1
35 714-05.46	WOOD POLE (35' CLASS A)	EACH	1
36 714-06.08	CABLE (2/C # 6 DUPLEX)	L.F.	6675
37 714-06.09	CABLE (1/C # 10 THWN)	L.F.	615
38 714-06.10	CABLE (1/C # 10 XHHW)	L.F.	4050
39 714-08.09	LIGHT STANDARDS (35' POLE)	EACH	22
40 714-08.10	LIGHT STANDARDS (27'-6" BRIDGE MOUNTED POLE)	EACH	3
41 714-08.20	FOUNDATION (ONLY) FOR LIGHT STANDARD	EACH	22
42 714-08.30	REMOVE & RELOCATE LIGHT STANDARD	EACH	3
43,45 714-09.09	LUMINAIRES (157W LED)	EACH	25
44,45 714-09.10	LUMINAIRES (212W LED)	EACH	28
46 714-14.03	MASTARM (6' FOR KUB UTILITY POLE)	EACH	13
47 714-14.04	MASTARM (15' FOR KUB UTILITY POLE)	EACH	15
48 714-14.05	MASTARM (6' FOR ALUMINUM LIGHT STANDARD)	EACH	12
49 714-14.06	MASTARM (15' FOR ALUMINUM LIGHT STANDARD)	EACH	13
50 714-25	ELECTRICAL CONNECTION	EACH	57
716-01.07	TEMPORARY RAISED PAVEMENT MARKER, YELLOW	EACH	42
716-01.21	Snwplwble Pmnt Mrkrs (Bi-Dir)(1 Color)	EACH	153
716-01.22	Snwplwble Pmnt Mrkrs (Mono-Dir)(1 Color)	EACH	204
6 716-02.04	PLASTIC PAVEMENT MARKING(CHANNELIZATION STRIPING)	S.Y.	2976
6 716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.	720
6 716-02.06	PLASTIC PAVEMENT MARKING (TURN LANE ARROW)	EACH	52
6 716-02.07	PLASTIC PAVEMENT MARKING (24" BARRIER LINE)	L.F.	150
6 716-02.09	PLASTIC PAVEMENT MARKING (LONGITUDINAL CROSS-WALK)	L.F.	996
6 716-03.01	PLASTIC WORD PAVEMENT MARKING (ONLY)	EACH	6
6 716-03.02	PLASTIC WORD PAVEMENT MARKING (RXR)	EACH	1
6 716-04.12	PLASTIC PAVEMENT MARKING (YIELD LINE)	S.F.	33
6 716-04.15	PLASTIC PAVEMENT MARKING-3IKE SYMBOL/ARROW	EACH	14
716-05.01	PAINTED PAVEMENT MARKING (4" LINE)	L.M.	1.8
716-05.02	PAINTED PAVEMENT MARKING (8" BARRIER LINE)	L.F.	660
716-05.05	PAINTED PAVEMENT MARKING (STOP LINE)	L.F.	150
716-05.06	PAINTED PAVEMENT MARKING (TURN LANE ARROW)	EACH	2
716-05.20	PAINTED PAVEMENT MARKING (6" LINE)	L.M.	0.4
716-05.50	PAINTED PAVEMENT MARKINGS(8" LINE)	L.F.	660
716-12.01	ENHANCED FLATLINE THERMO PVMT MRKNG (4IN LINE)	L.M.	6.4
716-12.02	ENHANCED FLATLINE THERMO PVMT MRKNG (6IN LINE)	L.M.	5.52
716-12.05	ENHANCED FLATLINE THERMO PVMT MRKNG (6IN DOTTED LINE)	L.F.	411
716-13.01	SPRAY THERMO PVMT MRKNG (60 mil) (4IN LINE)	L.M.	4.98
716-13.03	SPRAY THERMO PVMT MRKNG (60 mil) (8IN BARRIER LINE)	L.F.	150
717-01	MOBILIZATION	LS	1
31 725-02.16	CONDUIT (STRUCTURES - 2" RGS)	L.F.	655
725-02.41	FIBER OPTIC TERMINATION SPLICE UNIT	EACH	4
725-03.60	CABLE MARKER	EACH	6
18 725-05.04	SPLICE ENCLOSURE (UNDER GRADE)	EACH	4
21 725-05.06	FUSION SPLICE	EACH	12
12 730-01.02	REMOVAL OF SIGNAL EQUIPMENT	EACH	1
730-02.08	SIGNAL HEAD ASSEMBLY (130 POLE MOUNTED)	EACH	1
730-02.09	SIGNAL HEAD ASSEMBLY (130 WITH BACKPLATE)	EACH	17
713-11.01	"U" SECTION STEEL POSTS	LE.	1055
730-02.17	SIGNAL HEAD ASSEMBLY (150 A2H WITH BACKPLATE)	EACH	10
730-02.30	SIGNAL HEAD ASSEMBLY (130A3 WITH BACKPLATE)	EACH	1
730-02.31	SIGNAL HEAD ASSEMBLY (140A1 WITH BACKPLATE)	EACH	4

*SEE SHT. NO. 2A2 FOR FOOTNOTES

ESTIMATED ROADWAY QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
730-02.32	SIGNAL HEAD ASSEMBLY (150 A2V, POLE MOUNTED)	EACH	1
730-03.21	INSTALL PULL BOX (TYPE B)	EACH	16
730-03.23	INSTALL PULL BOX (FIBER OPTIC-TYPE A)	EACH	8
730-03.24	INSTALL PULL BOX (FIBER OPTIC-TYPE B)	EACH	4
19 730-05.01	ELECTRICAL SERVICE CONNECTION	EACH	4
730-05.02	SERVICE CABLE (2c, #8 AWG)	L.F.	600
730-08.03	SIGNAL CABLE - 7 CONDUCTOR	L.F.	2525
730-08.05	SIGNAL CABLE - 12 CONDUCTOR	L.F.	3360
730-08.10	SIGNAL CABLE - (EMERGENCY PREEMPT)	L.F.	2755
730-08.31	INTERCONNECT CABLE (12 FIBER MULTI-MODE)	L.F.	4325
730-08.40	INTERCONNECT CABLE - FIBER OPTIC (6F, MULTI-MODE DROP CABLE)	L.F.	300
730-12.02	CONDUIT 2" DIAMETER (PVC)	L.F.	1120
17 730-12.08	CONDUIT 2" DIAMETER (RGS)	L.F.	600
13 730-12.16	CONDUIT (2" SCHEDULE 80 PVC, DIRECTIONAL BORE)	L.F.	4155
730-12.18	CONDUIT (2" SCHEDULE 80 PVC, TRENCHED)	L.F.	1175
730-13.03	VEHICLE DETECTOR (4 - CHANNEL, RACK MOUNT)	EACH	8
23 730-13.07	VEHICLE DETECTOR (SIREN ACTIVATED PRIORITY CONTROL)	EACH	4
27 730-13.08	VEHICLE DETECTOR (MYNDERSE AVE)	EACH	1
28 730-13.09	VEHICLE DETECTOR (MASSACHUSETTS AVE)	EACH	1
29 730-13.10	VEHICLE DETECTOR (KEITH AVE)	EACH	2
29 730-13.11	VEHICLE DETECTOR (KEITH AVE WEST)	EACH	1
730-14.01	SHIELDED DETECTOR CABLE	L.F.	2510
30 730-15.11	MODIFY CABINET (KEITH AVE SIGNAL MODIFICATION)	EACH	1
25 730-15.32	CABINET (EIGHT PHASE BASE MOUNTED)	EACH	4
14 730-16.02	EIGHT PHASE ACTUATED CONTROLLER	EACH	4
22 730-18.01	MASTER CONTROLLER	EACH	1
26 730-23.30	PEDESTAL POLE (PED SIGNAL SUPPORT)	EACH	10
26 730-23.31	PEDESTAL POLE (PED & VEHICLE SIGNAL SUPPORT)	EACH	1
24,26 730-23.36	CANTILEVER SIGNAL SUPPORT (1 ARM @ 50')	EACH	2
24,26 730-23.37	CANTILEVER SIGNAL SUPPORT (1 ARM @ 55')	EACH	1
24,26 730-23.38	CANTILEVER SIGNAL SUPPORT (1 ARM @ 60')	EACH	1
24,26 730-23.39	CANTILEVER SIGNAL SUPPORT (2 @ 35' & 55')	EACH	2
24,26 730-23.96	CANTILEVER SIGNAL SUPPORT (2 @ 45' & 50')	EACH	1
24,26 730-23.97	CANTILEVER SIGNAL SUPPORT (2 @ 55' & 55')	EACH	1
730-26.05	COUNTDOWN PEDESTRIAN SIGNAL	EACH	2
20 730-26.06	PEDESTRIAN PUSHBUTTON POST	EACH	2
20 730-26.09	PEDESTRIAN PUSHBUTTON WITH 15IN SIGN	EACH	2
730-26.11	15IN SIGN	EACH	14
11 730-35.06	BATTERY BACK-UP AND POWER CONDITIONER	EACH	4
4,5 740-10.03	GEOTEXTILE (TYPE III)(EROSION CONTROL)	S.Y.	3042
4,5 740-11.03	TEMPORARY SEDIMENT TUBE 18IN (DESCRIPTION)	L.F.	5980
4,5 740-11.04	TEMPORARY SEDIMENT TUBE 20IN (DESCRIPTION)	L.F.	1350
801-01	SEEDING (WITH MULCH)	UNIT	50
4,5 801-01.07	TEMPORARY SEEDING (WITH MULCH)	UNIT	35
8 801-03	WATER (SEEDING & SODDING)	M.G.	299
802-13.02	CALYCANTHUS FLORIDUS (SWEETSHRUB 2-5FT CNTNR GRWN)	EACH	10
802-13.06	GRWN)	EACH	10
802-13.09	LINDERA BENZOIN (SPICEBUSH 2-5FT CNTNR GRWN)	EACH	10
802-13.16	CORYLUS AMERICANA (HAZELNUT) 2-5FT C.G.	EACH	110
802-13.21	VACCINIUM ARBOREUM (FARKLEBERRY 2-5FT C.G.)	EACH	110
802-13.54	CORNUS AMOMUM (SILKY DOGWOOD SDLNG BARE ROOT)	EACH	12
802-13.62	ILEX VERTICILLATA (CMMN WINTERBERRY SDLNG B.R.)	EACH	12
803-01	SODDING (NEW SOD)	S.Y.	29933
9 806-02.03	PROJECT MOWING	CYCL	6

*SEE SHT. NO. 2A2 FOR FOOTNOTES

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2016	HPP/STP/NH-62(34)	2A1

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DEPARTMENT OF TRANSPORTATION

**ESTIMATED
ROADWAY
QUANTITIES**

7/27/2016 11:54:48 AM
NA4823 SR 62 Knoxville\0\Deliverables\3-Const\Final Construction Plans\Unofficial\Set Sheets\002A2.SHT

FOOTNOTES:

- 1 BID PRICE INCLUDES ALL SALVAGE VALUE OF ALL MATERIAL. SEE TABULATED QUANTITIES SHEET NO. 2T FOR REMOVAL OF BUILDINGS AND OBSTRUCTIONS DESCRIPTION BLOCK.
- 2 REFER TO SPECIAL NOTES.
- 3 INCLUDES WATER FOR DUST CONTROL.
- 4 SEE SUBSECTION 209.07 OF STANDARD SPECIFICATIONS FOR MAINTENANCE REPLACEMENT.
- 5 FOR USE AS DIRECTED BY THE ENGINEER.
- 6 THE CONTRACTOR MAY ELECT TO SUBSTITUTE PREFORMED PLASTIC FOR THERMOPLASTIC. PREFORMED PLASTIC SHALL BE PAID FOR AT THE SAME UNIT PRICE AS BID FOR THERMOPLASTIC.
- 7 INCLUDES ANY AND ALL CONFLICTING STRUCTURES AND OBSTRUCTIONS NOT DESIGNATED TO REMAIN AND NOT INCLUDED IN ITEM NOS. 202-04.50, 202-04.51, 206-06.01-206-06.19. BID PRICE INCLUDES ALL SALVAGE VALUE OF MATERIAL. SALVAGE SHALL BECOME PROPERTY OF THE CONTRACTOR.
- 8 INCLUDES 10 THOUSAND GALLONS FOR EROSION PREVENTION AND SEDIMENT CONTROL.
- 9 ITEM INCLUDES LITTER AND TRASH REMOVAL. THIS WORK NOT BE MEASURED AND PAID FOR DIRECTLY BUT WILL BE INCLUDED IN THE COST OF ITEM NO. 806-02.03, PROJECT MOWING, CYCL.
- 10 THIS ITEM SHALL BE A PORTABLE ENERGY ABSORBING TERMINAL MEETING THE REQUIREMENTS OF NCHRP 350 FOR TEST LEVEL 3. EXAMPLES WOULD BE A QUAD-GUARD, A REACT 350 OR A TRACC. THE PAY ITEM WILL INCLUDE FURNISHING AND INSTALLING ALL COMPONENTS AS SHOWN ON THE MANUFACTURER'S DRAWING.
- 11 SEE SPECIAL NOTES AND CITY OF KNOXVILLE STANDARDS FOR SPECIFICATIONS.
- 12 ITEM FOR REMOVAL OF EXISTING SIGNAL AT KEITH AVE.
- 13 CONTRACTOR MAY ELECT TO USE HDPE CONDUIT WITH PRIOR APPROVAL FROM ENGINEER.
- 14 CONTROLLER SHALL BE NAZTEC TRAFFICWARE SIGNAL CONTROLLER SERIES 900ATC MODEL NO. 980-B240 WITH NAZTEC MMU, MODEL NO. 516L.
- 15 SIGNS TO BE PROVIDED BY CITY OF KNOXVILLE. CONTRACTOR RESPONSIBLE FOR INSTALLATION OF SIGNS ON SIGNAL CONTRACTOR TO CONTACT STEVE SHARP WITH CITY OF KNOXVILLE (865-215-6720) FOR FINAL APPROVAL BEFORE ORDERING CANTILEVER ARMS. CONTRACTOR TO CONTACT STEVE SHARP WITH CITY OF KNOXVILLE (865-215-6720) FOR FINAL APPROVAL BEFORE ORDERING SIGNS. ITEM SHALL INCLUDE REQUIRED MOUNTING BRACKETS.
- 16 ITEM INCLUDES FOUR (4) R10-12, 30"x36".
- 17 ITEM INCLUDES APPROXIMATELY 150' OF CONDUIT FOR EACH INTERSECTION (POWER SERVICE). CONTRACTOR TO COORDINATE WITH UTILITY OWNER AND ENGINEER PRIOR TO CONSTRUCTION TO DETERMINE LOCATION OF POWER SERVICE SOURCE. ANY ADDITIONAL RGS CONDUIT TO BE INCLUDED IN COST OF ELECTRICAL SERVICE CONNECTION.
- 18 TO BE INSTALLED IN PROPOSED TYPE B F.O. PULL BOX FOR FIBER SPLICING. ITEM SHALL PROVIDE FOR A MINIMUM OF 12 SPLICES.
- 19 ITEM SHALL MEET CITY OF KNOXVILLE SPECIFICATIONS AND INCLUDES SERVICE STEEL CONDUIT RISER IF APPLICABLE AND ASSOCIATED REQUIRED EQUIPMENT. CONTRACTOR SHALL COORDINATE WITH UTILITY OWNER AND DETERMINE SERVICE CHARGES TO BE INCLUDED IN ITEM. CONTRACTOR TO COORDINATE WITH UTILITY OWNER AND ENGINEER PRIOR TO CONSTRUCTION TO DETERMINE LOCATION OF POWER SERVICE SOURCE. POWER SERVICE SOURCE PENDING FINAL RELOCATION OF POWER FACILITIES BY UTILITY OWNER. FINAL CONDUIT PATH FOR POWER SERVICE TO CABINET MAY BE MODIFIED, CONFIRMED PRIOR TO CONSTRUCTION WITH PRIOR APPROVAL FROM ENGINEER.
- 20 SEE TDOT STD DRAWING T-SG-9A. ITEM INCLUDES FURNISHING REQUIRED FOUNDATION. PED PUSHBUTTON SHALL INCLUDE A.D.A. COMPLIANT AUDIBLE FEATURES. (LOCATED IN NW CORNER OF MASSACHUSETTS AVE.)
- 21 INCLUDES REQUIRED SPLICES FOR CONNECTION BETWEEN DROP CABLE AND TRUNK CABLE. CABLE END-OF-REEL SPLICES WILL NOT BE MEASURED OR PAID SEPARATELY.
- 22 TO BE COMPATIBLE WITH LOCAL SIGNAL CONTROLLERS AND EXISTING CITY CENTRAL SOFTWARE. MASTER CONTROLLER TO BE LOCATED AT KEITH AVE.
- 23 ITEM TO BE MEASURED AND PAID PER INTERSECTION. ITEM INCLUDES ALL MATERIALS REQUIRED TO IMPLEMENT EMERGENCY EPS CONTROL PER CITY OF KNOXVILLE STANDARDS. ITEM INCLUDES FURNISHING AND INSTALLING PROCESSOR UNIT, POWER SUPPLY, PHASE SELECTOR RACK AND CARDS, DETECTORS (MAST ARM MOUNTED) AND MISCELLANEOUS WIRING AND MOUNTING HARDWARE. SEE SIGNAL LAYOUT SHEETS FOR DETECTOR POSITIONS AND PHASE SELECTOR ASSIGNMENTS. DETECTOR CABLE IS MEASURED AND PAID UNDER ITEM NO 730-08.10. APPROXIMATE REQUIRED MATERIALS INCLUDE, BUT ARE NOT LIMITED TO, ONE (1) EACH OF PHASE SELECTOR, RACK AND POWER SUPPLY, AND THREE (3) EACH OF EXTERNAL DETECTORS.
- 24 ITEM INCLUDES VIBRATION DAMPENING DEVICE.
- 25 SEE SPECIAL NOTES. CONTROLLER TO BE FIBER-READY FOR I.T.S. CONNECTION. THE CABINET SHALL BE BASE MOUNTED WITH INTEGRATED UPS COMPARTMENT. CABINET SHALL INCLUDE REQUIRED FIBER OPTIC CABLE DISTRIBUTION/TERMINATION HARDWARE TO ALLOW FOR DROP CABLE INSTALLATION PER CITY SPECIFICATIONS.
- 26 SEE TDOT STD DRAWING T-SG-10 AND SPECIAL NOTES. ITEM TO BE BLACK POWDER COATED.
- 27 ITEM TO BE MEASURED AND PAID PER INTERSECTION. ITEM INCLUDES ALL MATERIALS REQUIRED TO IMPLEMENT RADAR VEHICLE DETECTION SYSTEM PER CITY OF KNOXVILLE STANDARDS. SEE SIGNAL LAYOUT SHEETS FOR DETECTOR POSITIONS. APPROXIMATE REQUIRED MATERIALS INCLUDE, BUT ARE NOT LIMITED TO, ONE (1) PREASSEMBLED BACKPLATE, RACK CARDS, PATCH CORDS, POWER SUPPLY, MOUNTING BRACKETS AND FOUR (4) EXTERNAL DETECTORS (MAST ARM MOUNTED). RADAR DETECTION EQUIPMENT SHALL BE CAPABLE OF PROVIDING STOP LINE AND ADVANCED DETECTION AS SHOWN ON PROPOSED SIGNAL LAYOUT SHEETS. DETECTOR CABLE REQUIRED FOR MYNDERSE AVE IS APPROXIMATELY 575'.
- 28 ITEM TO BE MEASURED AND PAID PER INTERSECTION. ITEM INCLUDES ALL MATERIALS REQUIRED TO IMPLEMENT RADAR VEHICLE DETECTION SYSTEM PER CITY OF KNOXVILLE STANDARDS. SEE SIGNAL LAYOUT SHEETS FOR DETECTOR POSITIONS. APPROXIMATE REQUIRED MATERIALS INCLUDE, BUT ARE NOT LIMITED TO, ONE (1) PREASSEMBLED BACKPLATE, RACK CARDS, PATCH CORDS, POWER SUPPLY, MOUNTING BRACKETS AND FOUR (4) EXTERNAL DETECTORS (MAST ARM MOUNTED). RADAR DETECTION EQUIPMENT SHALL BE CAPABLE OF PROVIDING STOP LINE AND ADVANCED DETECTION AS SHOWN ON PROPOSED SIGNAL LAYOUT SHEETS. DETECTOR CABLE REQUIRED FOR MASSACHUSETTS AVE IS APPROXIMATELY 960'.

- 29 ITEM TO BE MEASURED AND PAID PER INTERSECTION. ITEM INCLUDES ALL MATERIALS REQUIRED TO IMPLEMENT RADAR VEHICLE DETECTION SYSTEM PER CITY OF KNOXVILLE STANDARDS. SEE SIGNAL LAYOUT SHEETS FOR DETECTOR POSITIONS. APPROXIMATE REQUIRED MATERIALS INCLUDE, BUT ARE NOT LIMITED TO, ONE (1) PREASSEMBLED BACKPLATE, RACK CARDS, PATCH CORDS, POWER SUPPLY, MOUNTING BRACKETS AND FOUR (4) EXTERNAL DETECTORS (MAST ARM MOUNTED). RADAR DETECTION EQUIPMENT SHALL BE CAPABLE OF PROVIDING STOP LINE AND ADVANCED DETECTION AS SHOWN ON PROPOSED SIGNAL LAYOUT SHEETS. DETECTOR CABLE REQUIRED FOR KEITH AVE IS APPROXIMATELY 905' AND 715' FOR KEITH AVE WEST.
- 30 INCLUDES ALL ITEMS NECESSARY TO KEEP EXISTING SIGNAL AT KEITH AVE OPERATIONAL AS REQUIRED DURING PHASES 1 AND 2 OF CONSTRUCTION. CONTRACTOR TO COORDINATE WITH CITY ENGINEER PRIOR TO ANY ADJUSTMENTS. CONTRACTOR SHALL OBTAIN THE APPROVAL FROM CITY ON MANNER OF MAINTAINING EQUIPMENT THROUGH CONSTRUCTION PHASING. VEHICLE DETECTION MUST BE MAINTAINED THROUGHOUT CONSTRUCTION (VIDEO OR OTHER MEANS ACCEPTABLE). MAY USE CONTRACTOR OWNED EQUIPMENT TO SUPPLEMENT EXISTING EQUIPMENT IF NEEDED. CONTRACTOR SHALL MAINTAIN ALL EQUIPMENT DURING CONSTRUCTION. ITEM INCLUDES MAINTENANCE OF EXISTING POLES OR PROVIDING ALTERNATE TEMPORARY SIGNAL SUPPORT POLES SEE TDOT STANDARD DRAWING T-SG-11 FOR ADDITIONAL DETAILS.
- 31 ITEM INCLUDES 2" RGS CONDUIT FOR BRIDGE CROSSING. (SEE ITEM NUMBER 604-10.90 FOR BRIDGE HANGER SUPPORT SYSTEM). SCHEDULE 80 PVC CONDUIT MAY BE SUBSTITUTED WITH PRIOR APPROVAL FROM ENGINEER AND, WHERE APPLICABLE, RAILROAD OWNER.
- 32 ITEM REFERENCES BRIDGE CROSSING RAILROAD (LENGTH 655'). ITEM INCLUDES ALL LABOR AND REQUIRED BRACKETS AND MISCELLANEOUS MATERIALS TO ATTACH CONDUIT TO BRIDGE AND RETURN TO PULL BOXES ON EITHER SIDE. CONDUIT USED FOR BRIDGE CROSSINGS WILL BE PAID SEPARATELY.
- 33 INCLUDES THE COST TO INSTALL THE UNDERGROUND WARNING TAPE FURNISHED BY KUB.
- 34 FOR PAYMENT OF PULL BOX PBG ADJACENT TO LP 5. SHALL BE KUB STANDARD (SEE DETAIL 'G', SHEET 44P).
- 35 FOR NEW WOOD LIGHT POLE AT LP 20. ALSO INCLUDES THE COST OF RELOCATION OF THE EXISTING PRIVATE PROPERTY LUMINAIRE AND ARM BY CONTRACTOR.
- 36 SHALL BE DUPLEX CABLE WITH ALUMINUM CONDUCTORS AND POLYETHYLENE INSULATION (SEE DETAIL 'U', SHEET 44Y). FOR USE WITH OVERHEAD CONNECTIONS.
- 37 SHALL BE 600V INSULATED, 2 CONDUCTOR #10 TWHN TYPE, STRANDED COPPER (SEE DETAIL 'V', SHEET 44Z). FOR USE WITH LUMINAIRES HAVING OVERHEAD LIGHTING CONNECTIONS.
- 38 SHALL BE 600V INSULATED, #10 XHHW TYPE, STRANDED COPPER (SEE DETAIL 'W', SHEET 44AA). FOR USE WITH LUMINAIRES HAVING UNDERGROUND LIGHTING CONNECTIONS. SHALL ALSO BE USED FOR GROUNDING THE UNDERGROUND LIGHTING CONNECTIONS (SEE DETAIL 'B', SHEET 44L).
- 39 POLE SHALL BE KUB STANDARD (SEE DETAIL 'K', SHEET 44S).
- 40 SHALL BE KUB STANDARD (SEE DETAIL 'L', SHEET 44S).
- 41 SHALL BE KUB STANDARD (SEE DETAIL 'B', SHEET 44M). INCLUDES THE COST OF THE GROUND ROD (SEE DETAIL 'Q', SHEET 44V) AND ALL APPURTENANCES FOR A COMPLETE INSTALLATION.
- 42 INCLUDED FOR RELOCATION OF EXISTING PRIVATE PROPERTY LUMINAIRES AND ARMS TO LP 3, LP 18, AND LP 25 BY CONTRACTOR.
- 43 ROADWAY LUMINAIRE SHALL BE LED, 157W WITH TYPE III DISTRIBUTION. (SEE NOTES 12, 12A, 12B, AND 15E ON SHEET 44, AND DETAIL 'H', SHEET 44Q).
- 44 ROADWAY LUMINAIRE SHALL BE LED, 212W WITH TYPE III DISTRIBUTION. (SEE NOTES 12, 12A, 12C, AND 15F ON SHEET 44, AND DETAIL 'H', SHEET 44Q).
- 45 INCLUDES THE COST OF THE PHOTO ELECTRIC CELL (SEE DETAIL 'J', SHEET 44R).
- 46 INCLUDED FOR PAYMENT OF THE 6' TRUSS ARM FOR USE WITH KUB UTILITY POLES (LP 31 THRU LP 33, LP 37, LP 40 THRU LP 43, LP 46 THRU LP 49, AND LP 51). SEE DETAIL 'M', SHEET 44T.
- 47 INCLUDED FOR PAYMENT OF THE 15' TRUSS ARM FOR USE WITH KUB UTILITY POLES (LP 2 THRU LP 4, LP 7, LP 13 THRU LP 15, LP 18, AND LP 23 THRU LP 29). SEE DETAIL 'N', SHEET 44T.
- 48 INCLUDED FOR PAYMENT OF THE 6' TRUSS ARM FOR USE WITH ALUMINUM LIGHT STANDARDS (LP 30, LP 34, LP 35, LP 36, LP 38, LP 39, LP 44, LP 45, LP 50, AND LP 52 THRU LP 54). SEE DETAIL 'O', SHEET 44U.
- 49 INCLUDED FOR PAYMENT OF THE 15' TRUSS ARM FOR USE WITH THE ALUMINUM LIGHT STANDARDS (LP 1, LP 5, LP 6, LP 8 THRU LP 12, LP 16, LP 17, LP 19, LP 21, AND LP 22). SEE DETAIL 'O', SHEET 44U.
- 50 THE CONTRACTOR SHALL CONTACT THE LOCAL UTILITY TO OBTAIN THE ESTIMATE FOR ANY CHARGES BY THE UTILITY FOR PROVIDING THE SERVICE DROP CONNECTIONS AT SD1 THRU SD3 TO INCLUDE THE 30 AMP HEB-AA IN-LINE FUSE HOLDERS AND THE 5 AMP KTK FUSES. THESE CHARGES SHALL BE INCLUDED IN THE BID FOR THIS ITEM. ALSO, INCLUDES THE COST OF CONNECTION OF THE LUMINAIRES TO THE LIGHTING CIRCUITRY, THE PVC RISERS FOR SERVICE DROPS SD1 THRU SD3, AND ALL APPURTENANCES FOR A COMPLETE INSTALLATION.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2016	HPP/STP/NH-62(34)	2A2

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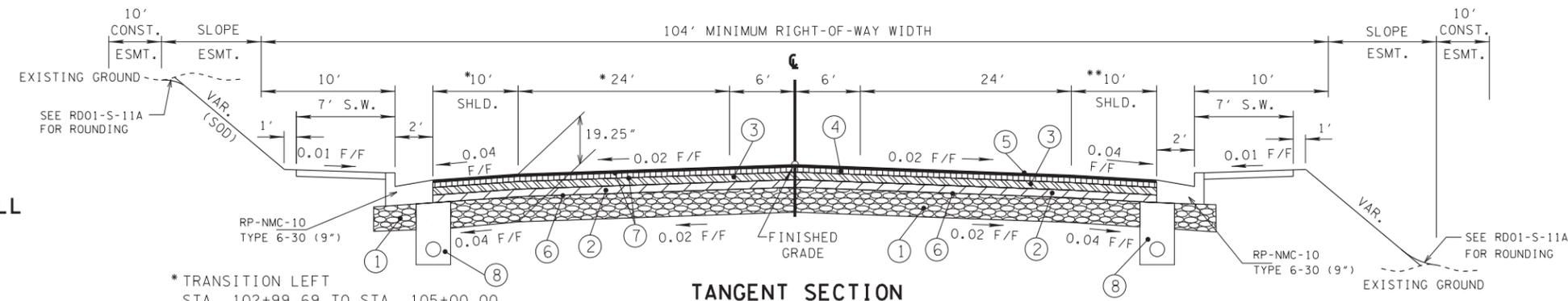
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**ESTIMATED
ROADWAY
QUANTITIES**

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-62(34)	2
CONST.	2016	HPP/STP/NH-62(34)	2C

REV. 10-10-12: TYPICAL AT BEG. OF PROJECT: DELETED RAISED MEDIAN, ADDED CENTER TURN LANE, CHANGED SHOULDER WIDTH TO 10' AND CHANGED LIMITS FROM 137+25+ TO 138+87.25. TYPICAL AT END OF PROJECT: ADDED TRANSITIONS FOR TRAVEL LANES AND CHANGED LIMITS FROM 144+58.29 TO 147+03.59.

PROPOSED RETAINING WALL
S.R. 62 RIGHT
STA. 114+65.00 TO STA. 116+59.00
STA. 122+65.00 TO STA. 124+00.00



TANGENT SECTION
(BASED ON STD. DWG. RD01-TS-6)

S.R. 62 (WESTERN AVE.)
STA. 102+99.69 TO 110+79.95
STA. 123+76.54 TO 130+49.29
STA. 134+37.85 TO 137+92.25

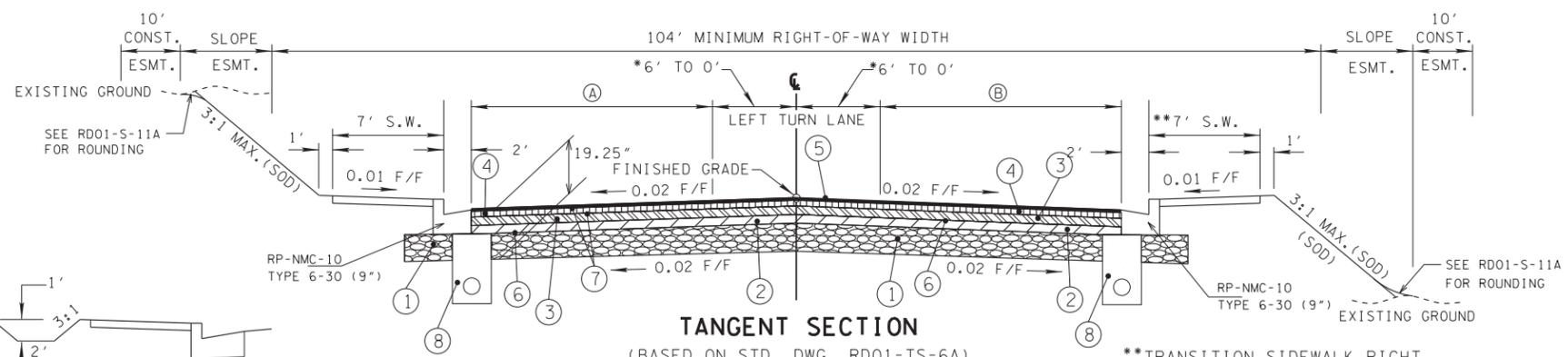
BEG. PROPOSED SIDEWALK,
CURB & GUTTER RT. STA. 104+95.23

**TRANSITION RIGHT SHOULDER
10' TO 0' STA. 138+87.25 TO STA. 139+58.12

SUPERELEVATED SECTION
S.R. 62 (WESTERN AVE.)
STA. 110+79.95 TO 116+59.00
STA. 116+59.00 TO 122+65.00 (BRIDGE NO. 1)
STA. 122+65.00 TO 123+76.54
STA. 130+49.29 TO 134+37.85
STA. 137+92.25 TO 138+87.25

SEE TDOT STD. DWG. RD01-TS-6
FOR SUPERELEVATED SECTION

PROPOSED RETAINING WALL
S.R. 62 LEFT
STA. 141+00.00 TO STA. 142+50.98
STA. 143+52.58 TO STA. 145+00.00



TANGENT SECTION
(BASED ON STD. DWG. RD01-TS-6A)

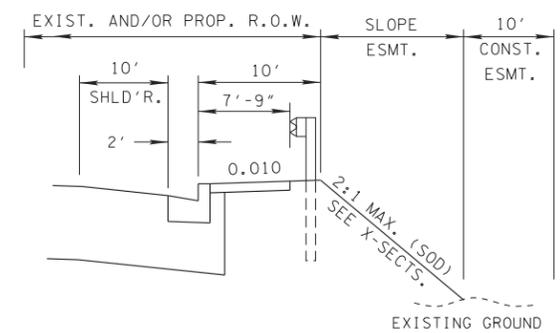
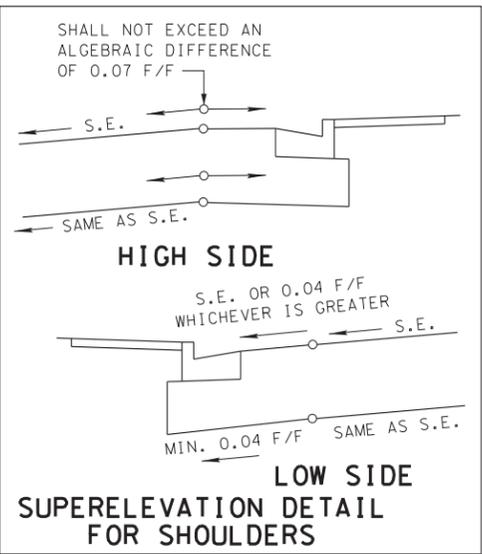
S.R. 62 (WESTERN AVE.)
STA. 144+64.60 TO 147+03.59

SUPERELEVATED SECTION
S.R. 62 (WESTERN AVE.)
STA. 138+87.25 TO STA. 144+64.60

- Ⓐ 36' STA. 138+87.25 TO STA. 140+35.00
36' TO 24' STA. 140+35.00 TO STA. 141+00.00
24' STA. 141+00.00 TO STA. 144+58.00
24' TO 23.96' STA. 144+58.00 TO STA. 147+03.59
- Ⓑ 24' TO 36' STA. 138+87.25 TO STA. 139+58.12
36' STA. 139+58.12 TO STA. 141+89.22
24' STA. 143+04.26 TO STA. 144+58.00
24' TO 23.90' STA. 144+58.00 TO STA. 147+03.59

PROPOSED PAVEMENT SCHEDULE

① MINERAL AGGREGATE BASE (10"± THICK) ITEM NO. 303-01 MINERAL AGGREGATE, TYPE A BASE, GRADING D	⑤ BITUMINOUS SURFACE @ 1.25"± THICK (APPROX. 132.5 LB./S.Y.) ITEM NO. 411-02.10 ACS MIX (PG70-22) GRADING D
② BITUMINOUS PLANT MIX BASE @ 3"± THICK (APPROX. 270.0 LBS./S.Y.) ITEM NO. 307-02.02 ASPHALT CEMENT MIX (PG70-22) (BPMB-HM) GRADING A-S ITEM NO. 307-02.03 AGGREGATE (BPMB-HM) GRADING A-S	⑥ PRIME COAT @ 0.30-0.35 GAL./S.Y. ITEM NO. 402-01 BITUMINOUS MATERIAL FOR PRIME COAT (PC) 0.30-.35 GAL./SQ. YD. ITEM NO. 402-02 AGGREGATE FOR COVER MATERIAL (PC) @ 8-12 LB./S.Y.
③ BITUMINOUS PLANT MIX BASE @ 3"± THICK (APPROX. 345 LBS./S.Y.) ITEM NO. 307-02.01 ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING A	⑦ TACK COAT @ 0.07 GAL./S.Y. ITEM NO. 403-01 BITUMINOUS MATERIAL FOR TACK COAT (TC) RATE = 0.07 GAL/SQ. YD. (GENERAL USE) RATE = 0.10 GAL/SQ. YD. (MILLING - COLD PLANE)
④ BITUMINOUS BINDER @ 2"± THICK (APPROX. 226.0 LBS./S.Y.) ITEM NO. 307-02.08 ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING B-M2	⑧ AGGREGATE UNDERDRAINS (WITH PIPE) (DETAIL "A" UNLESS OTHERWISE NOTED) ITEM NO. 710-02 AGGREGATE UNDERDRAINS (WITH PIPE)



PROPOSED GUARDRAIL DETAIL
S.R. 62

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**TYPICAL
SECTIONS**

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2016	HPP/STP/NH-62(34)	2J

GENERAL NOTES

GRADING

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

SEEDING AND SODDING

- (1) ALL EXISTING ROADS WITHIN THE RIGHT-OF-WAY AND NOT IN THE GRADED AREA THAT ARE TO BE ABANDONED SHALL BE SCARIFIED, OBLITERATED, TOPSOILED AND SEEDED. SCARIFYING AND OBLITERATING THE PAVEMENT WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COST WILL BE INCLUDED IN THE COST OF OTHER ITEMS. TOPSOIL, IN ACCORDANCE WITH SECTION 203 OF THE STANDARD SPECIFICATIONS, WILL BE MEASURED AND PAID FOR UNDER ITEMS 203-04 AND/OR 203-07. SEEDING, IN ACCORDANCE WITH SECTION 801 OF THE STANDARD SPECIFICATIONS, WILL BE MEASURED AND PAID FOR UNDER ITEM 801-01.
- (2) SOD SHALL BE PLACED AT LOCATIONS SHOWN ON THE PLANS TO PREVENT DAMAGE TO ADJACENT FACILITIES AND PROPERTY DUE TO EROSION ON ALL NEWLY GRADED CUT AND FILL SLOPES AS WORK PROGRESSES.

GUARDRAIL

- (1) THE CONTRACTOR SHALL NOT REMOVE ANY SECTIONS OF EXISTING GUARDRAIL TO REWORK SHOULDERS OR FLATTEN SLOPES UNTIL THE ENGINEER CONCURS IN THE NECESSITY OF REMOVAL DUE TO CONSTRUCTION REQUIREMENTS AND THE APPROPRIATE WARNING DEVICES ARE INSTALLED. THE PROPOSED GUARDRAIL, INCLUDING ANY ANCHOR SYSTEM, SHALL BE INSTALLED QUICKLY TO MINIMIZE TRAFFIC EXPOSURE TO ANY HAZARD. NO PAYMENT WILL BE MADE FOR A SECTION OF PROPOSED GUARDRAIL, INCLUDING ANCHORS, UNTIL IT IS COMPLETE IN PLACE.
- (2) IF ANY APPROACH END OF A SECTION OF GUARDRAIL OR BRIDGE RAIL MUST TEMPORARILY BE LEFT INCOMPLETE AND EXPOSED TO TRAFFIC, THE CONTRACTOR SHALL USE TWO (2) TEMPORARY BARRICADES OR DRUMS WITH TYPE A LIGHTS AND ROUNDED END ELEMENTS AS MINIMUM MEASURES TO PROTECT TRAFFIC FROM THE HAZARD OF AN EXPOSED END. ALL COST OF FURNISHING AND INSTALLING A TEMPORARY ROUNDED END ELEMENT SHALL BE INCLUDED IN THE COST OF THE PROPOSED GUARDRAIL.
- (3) GUARDRAIL IS TO BE COMPLETE IN PLACE BEFORE THE MAINLINE ROADWAY IS OPENED TO TRAFFIC.

DRAINAGE

- (1) THE CONTRACTOR SHALL SHAPE DITCHES TO THE SPECIFIED DESIGN. THIS WORK WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COST WILL BE INCLUDED IN THE COST OF OTHER ITEMS.
- (2) EXCAVATION FOR THE INSTALLATION OF PIPE CULVERTS, SEWERS, CONDUITS, ALL MINOR STRUCTURES OF ANY TYPE AND DESCRIPTION WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT WILL BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF PIPE.
- (3) CULVERT EXCAVATION FOR CONCRETE BOX OR SLAB TYPE CULVERTS OR BRIDGES WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COST WILL BE INCLUDED IN THE COST OF OTHER ITEMS.
- (4) THE CUTTING OF INLET AND OUTLET DITCHES WHERE SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER WILL BE MEASURED AND PAID FOR AS ITEM NO. 203-01 ROAD AND DRAINAGE EXCAVATION (UNCLASSIFIED).
- (5) WHERE A CULVERT PIPE, SLAB OR BOX IS MOVED TO A NEW LOCATION OTHER THAN THAT SHOWN ON THE PLANS, INCREASING OR DECREASING THE AMOUNT OF CULVERT EXCAVATION, NO INCREASE OR DECREASE IN THE AMOUNT OF PAYMENT WILL BE MADE DUE TO SUCH CHANGE.
- (6) DURING CONSTRUCTION OF DRAINAGE STRUCTURES ALL COST ASSOCIATED WITH MAINTAINING THE FLOW OF WATER AND TRAFFIC, AT

THESE STRUCTURES, DURING THE PHASED CONSTRUCTION OF THIS PROJECT ARE TO BE INCLUDED IN THE UNIT PRICE OF THE DRAINAGE STRUCTURES AND TRAFFIC CONTROL ITEMS.

MISCELLANEOUS

- (1) ALL DETOUR, ACCESS, SERVICE AND FRONTAGE ROADS SHALL BE CONSTRUCTED WITH A MINIMUM OF ONE (1) COURSE OF BASE MATERIAL BEFORE TRAFFIC IS INTERRUPTED ON EXISTING ROADS.
- (2) THE CONTRACTOR SHALL BE REQUIRED TO REMOVE AND RESET MAILBOXES WHERE AND AS DIRECTED BY THE ENGINEER.
- (3) NOTHING IN THE GENERAL NOTES OR SPECIAL PROVISIONS SHALL RELIEVE THE CONTRACTOR FROM HIS RESPONSIBILITIES TOWARD THE SAFETY AND CONVENIENCE OF THE GENERAL PUBLIC AND THE RESIDENTS ALONG THE PROPOSED CONSTRUCTION AREA.

ROAD CLOSURE

- (1) NO LESS THAN SEVEN (7) DAYS PRIOR TO THE CLOSURE OF THE ROAD, THE CONTRACTOR SHALL NOTIFY THE FOLLOWING INDIVIDUALS OR AGENCIES COMPLETELY DESCRIBING THE AFFECTED ROADS AND THE APPROXIMATE DURATION OF THE CONSTRUCTION: THESE PARTIES INCLUDE, BUT ARE NOT LIMITED TO: (1) LOCAL LAW ENFORCEMENT OFFICE, (2) LOCAL FIRE DEPARTMENT, (3) AMBULANCE SERVICE, (4) LOCAL SCHOOL SUPERINTENDENT, (5) UNITED STATES POSTAL SERVICE, AND (6) LOCAL ROAD SUPERINTENDENT.

PAVEMENT MARKINGS

TEMPORARY PAVEMENT MARKING ON INTERMEDIATE LAYERS

- (1) TEMPORARY PAVEMENT LINE MARKINGS ON INTERMEDIATE LAYERS OF PAVEMENT SHALL BE REFLECTIVE TAPE OR REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAYS WORK. SHORT, UNMARKED SECTIONS SHALL NOT BE ALLOWED. THESE MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-05.01, PAINTED PAVEMENT MARKING (4" LINE), L.V.
- (2) TEMPORARY PAVEMENT LINE MARKINGS ON INTERMEDIATE LAYERS OF PAVEMENT SHALL BE REFLECTIVE TAPE OR REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAYS WORK. SHORT, UNMARKED SECTIONS SHALL NOT BE ALLOWED. THESE MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-05.02, PAINTED PAVEMENT MARKING (8" BARRIER LINE), L.F.
- (3) WIDE (8 INCH) TEMPORARY PAVEMENT MARKING LINE WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-05.02 PAINTED PAVEMENT MARKING (8" BARRIER LINE), LIN. FT.

FINAL PAVEMENT MARKING IF 6" ENHANCED FLATLINE THERMOPLASTIC IS USED

- (3) PERMANENT PAVEMENT LINE MARKINGS SHALL BE 6" ENHANCED FLATLINE THERMOPLASTIC INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK. SHORT UNMARKED SECTIONS SHALL NOT BE ALLOWED. PAVEMENT MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-12.02, ENHANCED FLATLINE THERMO PVMT MRKNG (6IN LINE), L.M. THE CONTRACTOR SHALL HAVE THE OPTION OF USING REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK AND THEN INSTALLING THE PERMANENT MARKINGS AFTER THE PAVING OPERATION IS COMPLETED. THE TEMPORARY MARKINGS FOR THE FINAL SURFACE WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COSTS ARE TO BE INCLUDED IN THE PRICE BID FOR THE PERMANENT MARKINGS.

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

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

PAVEMENT

PAVING

- (1) THE CONTRACTOR SHALL BE REQUIRED TO PAVE IN THE DIRECTION OF TRAFFIC.
- (2) THE CONTRACTOR SHALL BE REQUIRED TO COLD PLANE AND PAVE IN THE DIRECTION OF TRAFFIC.
- (3) THE CONTRACTOR SHALL ATTACH A DEVICE TO THE SCREED OF THE PAVER SUCH THAT MATERIAL IS CONFINED AT THE END GATE AND EXTRUDES THE ASPHALT MATERIAL IN SUCH A WAY THAT RESULTS IN A CONSOLIDATED WEDGE-SHAPE PAVEMENT EDGE OF APPROXIMATELY 25 TO 30 DEGREES AS IT LEAVES THE PAVER (MEASURED FROM A LINE PARALLEL TO THE PAVEMENT SURFACE.) THE DEVICE SHALL MEET THE REQUIREMENTS THAT ARE CURRENTLY SET FORTH IN SPECIAL PROVISION 407SE.

RESURFACING

- (4) WHERE DIRECTED BY THE TDOT ENGINEER, THE CONTRACTOR SHALL BE REQUIRED TO SHAPE PUBLIC SIDE ROADS, BUSINESS ENTRANCES, AND PRIVATE DRIVES, AS WELL AS CLEANING OF EXISTING DRAINS BEFORE PLACING MATERIALS. ALL COSTS ARE TO BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION.
- (5) ALL PUBLIC SIDE ROADS SHALL BE PAVED ONE PAVER WIDTH THROUGH THE INTERSECTION AS A MINIMUM. A SATISFACTORY TRANSITION FROM THE NEW PAVEMENT TO THE EXISTING GRADE OF THE INTERSECTING PUBLIC ROAD OR BUSINESS ENTRANCE SHALL BE PROVIDED. SHOULD THE PAVEMENT OF THE INTERSECTING PUBLIC ROAD BE DISTRESSED, THE RESURFACING WIDTH MAY BE INCREASED TO THE NORMAL RIGHT OF WAY LINE.
- (6) PRIVATE DRIVEWAYS, FIELD ENTRANCES, AND BUSINESS ENTRANCES WILL BE RESURFACED A PAVER WIDTH (LANE WIDTH) AS A MINIMUM. A PAVEMENT TAPER TO TRANSITION THE NEW PAVEMENT SHALL BE REQUIRED, IT SHALL BE BASED ON AN ADDITIONAL ONE FOOT OF WIDTH PER ONE INCH DEPTH OF PAVEMENT. IF THE SHOULDER IS NARROW ENOUGH THAT THE SUM OF THE SHOULDER AND THE TRANSITION ARE LESS THAN A PAVER WIDTH, THE TRANSITION SHALL OCCUR WITHIN THE PAVER WIDTH. IF THE SUM OF THE SHOULDER AND THE TRANSITION IS GREATER THAN A PAVER WIDTH (LANE WIDTH), THE TRANSITION SHALL OCCUR OUTSIDE OF THE PAVER WIDTH.
- (7) ON CURB AND GUTTER SECTIONS, PUBLIC ROAD INTERSECTIONS SHALL BE RESURFACED TO THE END OF RADIUS. A SATISFACTORY TRANSITION FROM THE NEW PAVEMENT TO THE EXISTING GRADE OF THE INTERSECTING PUBLIC ROAD SHALL BE PROVIDED.
- (8) ON URBAN TYPICAL SECTIONS, (CURB AND GUTTER), RESIDENTIAL DRIVEWAYS AND BUSINESS ENTRANCES SHALL HAVE A MINIMUM WIDTH OF MATERIAL NOT LESS THAN ONE FOOT USED IN THE TRANSITION TO FEATHER THE PAVEMENT EDGE.
- (9) IN ALL CASES, THE LENGTH OF THE PAVEMENT TRANSITION, THE THICKNESS AND WIDTH OF THE RESURFACING AND ANY ADDITIONAL PAVEMENT MATERIALS SHALL BE AS DIRECTED BY THE TDOT ENGINEER.

GRADED SOLID ROCK

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

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**GENERAL
NOTES**

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2016	HPP/STP/NH-62(34)	2K

GENERAL NOTES

SIGNING

- (1) THE LETTERS, DIGITS, ARROWS, BORDERS, AND ALPHABET ACCESSORIES ON ALL FLAT SHEET SIGNS SHALL BE APPLIED BY SILK SCREENING PROCESS, EXCEPT THAT CUTOUT DIRECT APPLIED COPY SHALL BE USED ON ALL FLAT SHEET SIGNS WITH A GREEN BACKGROUND. THE LETTERS, DIGITS, ARROWS, BORDERS, AND ALPHABET ACCESSORIES ON ALL EXTRUDED PANEL SIGNS SHALL BE DEMOUNTABLE AND ATTACHED TO THE SIGN FACE, AS OUTLINED IN THE STANDARD SPECIFICATIONS. ALL SHIELDS ON GUIDE SIGNS SHALL BE DEMOUNTABLE AND ATTACHED TO THE SIGN FACE AS OUTLINED IN THE STANDARD SPECIFICATIONS.
- (2) THE LENGTHS OF ALL SIGN SUPPORTS SHOWN ON THE SIGN SCHEDULE ARE APPROXIMATE AND ARE FOR ESTIMATING PURPOSES ONLY. THE LENGTHS WERE COMPUTED FROM THE CROSS-SECTIONS CONTAINED IN THE CONSTRUCTION PLANS. IN THE EVENT THE SUPPORT LENGTHS ARE 2 FEET SHORTER OR LONGER THAN SHOWN ON THE PLANS, THE ENGINEER SHALL VERIFY THE SUPPORT TYPE WITH THE DESIGN DIVISION, SIGNING AND MARKING SECTION, TELEPHONE NO. (615)-741-0982. THE CONTRACTOR SHALL VERIFY ALL SUPPORT LENGTHS AT THE SITE PRIOR TO ORDERING MATERIAL.
- (3) THE TOP OF THE SIGN FOOTINGS SHALL BE PLACED LEVEL WITH THE GROUND LINE.
- (4) AFTER THE SIGN LOCATIONS HAVE BEEN STAKED, BUT PRIOR TO ORDERING ANY MATERIAL FOR THE SUPPORTS, THERE SHALL BE A FIELD INSPECTION AND APPROVAL BY THE REGIONAL CONSTRUCTION OFFICE.
- (5) THE CONTRACTOR SHALL BE REQUIRED TO FURNISH LAYOUT DRAWINGS (3 SETS) OF ALL EXTRUDED PANEL SIGNS WITH SPACING OF ALL LETTERS, NUMERALS, SHIELDS, AND ARROWS. THE LAYOUT DRAWINGS SHALL BE SENT TO THE DESIGN DIVISION, SIGNING AND MARKING SECTION, SUITE 1300, J. K. POLK BUILDING, NASHVILLE, TN 37243-1402.
- (6) ALL SIGNS MARKED 'TO BE REMOVED' ARE TO BE REMOVED BY THE CONTRACTOR AND PAID FOR UNDER ITEM 713-15 AND BECOME THE PROPERTY OF THE CONTRACTOR.
- (7) THE EXISTING FOOTINGS ARE TO BE REMOVED 6 INCHES BELOW GROUND LINE.
- (8) THE LETTERS, DIGITS, ARROWS, BORDERS, AND ALPHABET ACCESSORIES ON ALL FLAT SHEET SIGNS SHALL BE APPLIED BY SILK SCREENING PROCESS, EXCEPT THAT CUT-OUT DIRECT APPLIED COPY SHALL BE USED ON ALL FLAT SHEET SIGNS WITH A GREEN BACKGROUND, OR BROWN BACKGROUND.
- (9) THE LENGTHS OF ALL SIGN SUPPORTS SHOWN ON THE SIGN SCHEDULE ARE APPROXIMATE AND ARE FOR ESTIMATING PURPOSES ONLY. THE CONTRACTOR SHALL VERIFY ALL SUPPORT LENGTHS AT THE SITE PRIOR TO ERECTION.
- (10) THE LETTERS, DIGITS, ARROWS, BORDERS, AND ALPHABET ACCESSORIES ON ALL FLAT SHEET SIGNS SHALL BE APPLIED BY SILK SCREENING PROCESS.

SIGNALIZATION

- (1) EQUIPMENT AND INSTALLATION SHALL COMPLY WITH THE TDOT "SPECIAL PROVISIONS REGARDING SECTION 730K-TRAFFIC SIGNALS."
- (2) SALVAGEABLE EQUIPMENT SHALL BECOME THE PROPERTY OF THE CITY OF KNOXVILLE AND SHALL BE STOCKPILED AT A LOCATION DESIGNATED BY THE ENGINEER FOR PICKUP BY THE CITY OF KNOXVILLE.
- (3) ANY SIGNAL HEADS, WHEN VISIBLE TO DRIVERS BUT NOT OPERATIONAL, SHALL BE COMPLETELY COVERED.
- (4) SIGNAL HEADS SHALL FLASH A MINIMUM OF SEVEN (7) DAYS PRIOR TO ACTIVATION OF THE SIGNAL.
- (5) THE PROJECT ENGINEER SHALL NOTIFY THE LOCAL GOVERNMENTAL AGENCY RESPONSIBLE FOR TRAFFIC CONTROL MAINTENANCE AT LEAST ONE DAY IN ADVANCE OF THE COLD PLANING ACTIVITY AT SIGNALIZED INTERSECTIONS WHERE DETECTOR LOOPS ARE ON THE PAVEMENT. THE MAINTAINING AGENCY WILL THEN BE RESPONSIBLE FOR DISCONNECTING THE LOOP DETECTORS AND MAKING ANY NECESSARY TIMING ADJUSTMENTS IN THE SIGNAL CONTROLLER PRIOR TO THE CONSTRUCTION.

CONSTRUCTION WORK ZONE & TRAFFIC CONTROL

- (1) ADVANCED WARNING SIGNS SHALL NOT BE DISPLAYED MORE THAN FORTY-EIGHT (48) HOURS BEFORE PHYSICAL CONSTRUCTION BEGINS. SIGNS MAY

BE ERECTED UP TO ONE WEEK BEFORE NEEDED, IF THE SIGN FACE IS FULLY COVERED.

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

LIGHTING

- (1) INSTALLATION AND MATERIALS SHALL COMPLY WITH SECTIONS 714 AND 917 OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION DATED MARCH 1, 2006 AND WITH THE LATEST REVISIONS TO THE NATIONAL ELECTRIC CODE, NFPA 70.
- (2) ALL WIRING SHALL BE CONCEALED UNDERGROUND IN 2-INCH SCHEDULE 40 PVC RIGID CONDUIT.
- (3) THE GROUND WIRE SHALL BE RUN INSIDE CONDUIT WITHIN STRUCTURES, SHALL BE COLORED GREEN AND HAVE THW INSULATION.
- (4) EXISTING FOUNDATIONS TO BE REMOVED A MINIMUM OF SIX INCHES BELOW GRADE.
- (5) ALL INCIDENTAL EQUIPMENT AND MATERIAL REQUIRED FOR THE SUCCESSFUL EXECUTION OF THIS WORK SHALL BE FURNISHED IN 714 ITEMS WHETHER SPECIFICALLY NOTED OR NOT.
- (6) LIGHT STANDARDS SHALL BE ROUND TAPERED POLES. LENGTH SHALL BE DETERMINED BY REQUIRED MOUNTING HEIGHT.
- (7) STANDARDS SHALL BE DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORT FOR HIGHWAY SIGNS,

- (8) LUMINARIES AND TRAFFIC SIGNALS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS. STANDARDS SHALL BE DESIGNED FOR 80-MPH WIND PRESSURE AND SHALL SUPPORT A 62-POUND LUMINAIRE ON A 15-FOOT ARM.
- (9) ALL NEW ROADWAY LIGHT STANDARDS SHALL BE MOUNTED ON BASES WITH ACCESS DOOR. TRANSFORMER BASES SHALL MEET AASHTO SPECIFICATIONS AND HAVE FHWA APPROVAL. STANDARDS SHALL BE ALUMINUM WITH TRANSFORMER BASES.
- (10) BRACKET ARMS SHALL BE ROUND TAPERED TRUSS TYPE WITH STRAP MOUNTING AND LENGTHS AS SCHEDULED.
- (11) BRACKET ARM UPSWEEP SHALL BE THE SAME FOR ALL LIGHT STANDARDS OF THE SAME TYPE.

SEDIMENT CONTROL

- (1) EPSC MEASURES SHALL BE INSTALLED AND FUNCTIONAL PRIOR TO ANY EARTH MOVING OPERATIONS, AND SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.
- (2) THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT THE OFF-SITE MIGRATION OR DEPOSIT OF SEDIMENT ON ROADWAYS USED BY THE GENERAL PUBLIC. IF SEDIMENT ESCAPES THE CONSTRUCTION SITE, OFF-SITE ACCUMULATIONS OF SEDIMENT THAT HAVE NOT REACHED A STREAM MUST BE REMOVED AT A FREQUENCY SUFFICIENT TO MINIMIZE OFF-SITE IMPACTS (E.G., FUGITIVE SEDIMENT THAT HAS ESCAPED THE CONSTRUCTION SITE AND HAS COLLECTED IN A STREET MUST BE REMOVED SO THAT IT IS NOT SUBSEQUENTLY WASHED INTO STORM SEWERS AND STREAMS BY THE NEXT RAIN AND/OR SO THAT IT DOES NOT POSE A SAFETY HAZARD TO USERS OF PUBLIC STREETS). ARRANGEMENTS CONCERNING REMOVAL OF SEDIMENT ON ADJOINING PROPERTY MUST BE SETTLED WITH THE ADJOINING PROPERTY OWNER BEFORE REMOVAL OF SEDIMENT.
- (3) WATER PUMPED FROM WORKAREAS AND EXCAVATION MUST BE HELD IN SETTLING BASINS OR TREATED BY FILTRATION OR CHEMICAL TREATMENT PRIOR TO ITS DISCHARGE INTO SURFACE WATERS. ALL PHYSICAL AND/OR CHEMICAL TREATMENT WILL BE APPLIED IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES AND FULLY DESCRIBED IN THE EPSC PLANS. WATER MUST BE HELD IN SETTLING BASINS UNTIL AT LEAST AS CLEAR AS THE RECEIVING WATERS. SETTLING BASINS SHALL NOT BE LOCATED CLOSER THAN 20 FEET FROM THE TOP BANK OF A STREAM. SETTLING BASINS AND SEDIMENT TRAPS SHALL BE PROPERLY DESIGNED ACCORDING TO THE SIZE OF THE DRAINAGE AREAS OR VOLUME OF WATER TO BE TREATED. TREATED WATER MUST BE DISCHARGED THROUGH A PIPE OR WELL-VEGETATED OR LINED CHANNEL, SO THAT THE DISCHARGE DOES NOT CAUSE EROSION OR SEDIMENT TRANSPORT. DISCHARGES FROM BASINS AND IMPOUNDMENTS SHALL UTILIZE OUTLET STRUCTURES THAT ONLY WITHDRAW WATER FROM NEAR THE SURFACE OF THE BASIN OR IMPOUNDMENT. DISCHARGES MUST NOT CAUSE AN OBJECTIONABLE COLOR CONTRAST WITH THE RECEIVING STREAM.
- (4) CHECK DAMS SHALL BE USED WHERE RUNOFF IS CONCENTRATED. CLEAN ROCK, BRUSH, GABION, OR SANDBAG CHECK DAMS SHALL BE PROPERLY CONSTRUCTED TO REDUCE VELOCITY AND CONTROL EROSION.
- (5) DELAYING PLANTING OF PERMANENT CIVER VEGETATION UNTIL WINTER MONTHS OR DRY MONTHS SHOULD BE AVOIDED IF POSSIBLE..
- (6) OFFSITE VEHICLE TRACKING OF SEDIMENTS AND THE GENERATION OF DUST SHALL BE MINIMIZED. A STABILIZED CONSTRUCTION ACCESS (A POINT OF ENTRANCE/EXIT TO THE CONSTRUCTION PROJECT) SHALL BE PROVIDED, AS NEEDED, TO REDUCE THE TRACKING OF MUD AND DIRT ONTO PUBLIC ROADS BY CONSTRUCTION VEHICLES.
- (7) TEMPORARY EPSC MEASURES MAY BE REMOVED AT THE BEGINNING OF THE WORKDAY, BUT MUST BE REPLACED AT THE END OF THE WORKDAY.
- (8) ALL PHYSICAL AND/OR CHEMICAL TREATMENT WILL BE APPLIED IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES AND DESCRBED ON THE EPSC PLANS FOR ALL PROJECTS REQUIRING ADDITIONAL PHYSICAL OR CHEMICAL TREATMENT OF STORMWATER RUNOFF.

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DEPARTMENT OF TRANSPORTATION

**GENERAL
NOTES**

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2016	HPP/STP/NH-62(34)	2L

GENERAL NOTES

EROSION PREVENTION AND SEDIMENT CONTROL STREAM/WETLAND

- (1) SOL MATERIALS MUST BE PREVENTED FROM ENTERING WATERS OF THE STATE/U.S. EPSC MEASURES TO PROTECT WATER QUALITY MUST BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. APPROPRIATE EPSC MEASURES MUST BE INSTALLED ALONG THE BASE OF ALL FILLS AND CUTS, ON THE DOWNHILL SIDE OF STOCKPILED SOIL, AND ALONG STREAM BANKS IN CLEARED AREAS TO PREVENT SEDIMENT MIGRATION INTO STREAMS IN ACCORDANCE WITH TDOT STANDARDS. THEY MUST BE INSTALLED ON THE CONTOUR, ENTRENCHED AND STAKED, AND EXTEND THE WIDTH OF THE AREA TO BE CLEARED.
- (2) NEW CHANNEL CONSTRUCTION SHALL BE COMPLETED IN THE DRY AND STABILIZED FOR AT LEAST 72 HOURS PRIOR TO DIVERTING WATER FROM THE EXISTING AND/OR TEMPORARY CHANNEL.
- (3) INSTREAM EPSC DEVICES REQUIRE THE ENVIRONMENTAL DIVISION'S PERMITS SECTION REVIEW AND MUST BE PROCESSED BY THE PERMITS SECTION TO OBTAIN TDEC, USACE, AND TVA PERMITS.
- (4) THE OPERATION OF EQUIPMENT IN WATERS OF THE STATE/U.S., INCLUDING WETLANDS, SHALL BE ONLY AS SHOWN ON THE PROJECT PLANS AND/OR AS SO SPECIFIED IN THE ARAP/401, SECTION 404 PERMIT(S) AND/OR TVA26(A), IF APPLICABLE. ANY ADDITIONAL PERMITS REQUIRED BY THE CONTRACTOR'S METHOD OF OPERATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN, AFTER RECEIVING THE APPROVAL OF TDOT ENVIRONMENTAL DIVISION.
- (5) THE WIDTH OF THE FILL ASSOCIATED WITH TEMPORARY CROSSINGS SHALL BE LIMITED TO THE MINIMUM NECESSARY FOR THE ACTUAL CROSSING.
- (6) STREAM BEDS SHALL NOT BE USED AS TRANSPORTATION ROUTES FOR CONSTRUCTION EQUIPMENT. TEMPORARY CROSSINGS MUST BE LIMITED TO ONE POINT PER STREAM AND EPSC MEASURES MUST BE USED WHERE THE STREAM BANKS ARE DISTURBED. WHERE THE STREAMBED IS NOT COMPOSED OF BEDROCK, A PAD OF CLEAN ROCK MUST BE USED AT THE CROSSING POINT AND CULVERTED TO PREVENT THE IMPOUNDMENT OF WATER FLOW. CLEAN ROCK IS ROCK OF VARIOUS TYPE AND SIZE, DEPENDING UPON APPLICATION, WHICH CONTAINS NO FINES, SOILS, OR OTHER WASTES OR CONTAMINANTS. OTHER MATERIALS USED FOR ALL TEMPORARY FILLS MUST BE COMPLETELY REMOVED IN THEIR ENTIRETY AFTER THE WORK IS COMPLETED AND THE AFFECTED AREAS RETURNED TO THEIR PREEXISTING ELEVATION. ALL TEMPORARY CROSSINGS MUST BE CONSTRUCTED IN ACCORDANCE WITH STD. DWG. EC-STR-25 UNLESS SPECIFICALLY ADDRESSED IN THE EPSC PLANS. ALTERNATIVELY, PLACING A TEMPORARY BRIDGE (BAILEY BRIDGE OR EQUIVALENT, TIMBERS, ETC.) FROM TOP OF BANK TO TOP OF BANK OR THE APPROPRIATE USE OF BARGES AT THE CROSSING TO AVOID DISTURBANCE OF THE STREAMBED IS AN ACCEPTABLE OPTION.
- (7) HEAVY EQUIPMENT WORKING IN WETLANDS MUST BE PLACED ON MATS, OR OTHER MEASURES MUST BE TAKEN TO MINIMIZE SOIL DISTURBANCE UNLESS SPECIFICALLY ADDRESSED IN THE EPSC PLANS. ANY MATS AND OTHER MEASURES USED FOR HEAVY EQUIPMENT MUST BE REMOVED IN THEIR ENTIRETY AFTER THE WORK IS COMPLETED.
- (8) WETLANDS SHALL NOT BE USED AS EQUIPMENT STORAGE, STAGING, OR TRANSPORTATION AREAS, UNLESS PROVIDED FOR IN THE PLANS.

SPECIES

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

INSPECTION, MAINTENANCE, REPAIR

- (10) EPSC CONTROLS WILL BE MAINTAINED IN ACCORDANCE WITH TDOT STANDARD DRAWINGS AND GOOD ENGINEERING PRACTICES.
- (11) INSPECTION, REPAIR, AND MAINTENANCE OF EPSC MEASURES/STRUCTURES IS TO BE PERFORMED ON A REGULAR BASIS. SEDIMENT SHALL BE REMOVED FROM SEDIMENT CONTROL STRUCTURES WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT (50%). DURING SEDIMENT REMOVAL, THE CONTRACTOR SHALL TAKE CARE TO ENSURE THAT STRUCTURAL COMPONENTS OF EPSC MEASURES ARE NOT DAMAGED AND THUS MADE INEFFECTIVE. IF DAMAGE DOES OCCUR,

THE CONTRACTOR SHALL REPAIR THE STRUCTURES AT THE CONTRACTOR'S OWN EXPENSE.

- (12) SEDIMENT REMOVED FROM SEDIMENT CONTROL STRUCTURES SHALL BE PLACED AND BE TREATED IN A MANNER SO THAT THE SEDIMENT IS CONTAINED WITHIN THE PROJECT LIMITS AND DOES NOT MIGRATE INTO WATERS OF THE STATE/U.S. COST FOR THIS TREATMENT IS TO BE INCLUDED IN PRICE BID FOR ITEM NO. 209-05 SEDIMENT REMOVAL, C.Y.
- (13) THE CONTRACTOR SHALL INSTALL A RAIN GAUGE EVERY LINEAR MILE AT ALL SITES WHERE CLEARING, GRUBBING, EXCAVATION, GRADING CUTTING OR FILLING IS BEING ACTIVELY PERFORMED, OR EXPOSED SOIL HAS NOT YET BEEN PERMANENTLY STABILIZED. IF THE PROJECT LENGTH IS LESS THAN ONE LINEAR MILE, ONE RAIN GAUGE SHALL BE INSTALLED AT THE CENTER OF THE PROJECT OR AS INDICATED BY THE TDOT EPSC INSPECTOR. THE CONTRACTOR SHALL ENSURE THAT EACH GAUGE IS MAINTAINED IN GOOD WORKING CONDITION. TDOT AND/OR THE CONTRACTOR SHALL RECORD DAILY PRECIPITATION AND FORECASTED PERCENTAGE OF PRECIPITATION IN DETAILED RECORDS OF RAINFALL EVENTS INCLUDING DATES, AMOUNTS OF RAINFALL PER GAUGE, THE ESTIMATED DURATION (OR STARTING AND ENDING TIMES), AND FORECASTED PERCENTAGE OF PRECIPITATION FOR THE PROJECT. THIS INFORMATION SHALL BE PROVIDED TO THE ENGINEER ON A MONTHLY BASIS. THE COST FOR THE RAIN GAUGES IS TO BE INCLUDED IN THE UNIT BID PRICES FOR OTHER ITEMS. RAIN GAUGES SHALL BE AS SPECIFIED IN THE APPROVED TDOT RAINFALL MONITORING PLAN.
- (14) INSPECTION OF EPSC MEASURES SHALL BE DONE AT LEAST TWICE PER CALENDAR WEEK AT LEAST 72 HOURS APART. A CALENDAR WEEK IS DEFINED AS SUNDAY THROUGH SATURDAY. QUALITY ASSURANCE/QUALITY CONTROL SITE ASSESSMENT OF EPSC SHALL BE PERFORMED PER THE TDOT ENVIRONMENTAL DIVISION'S COMPREHENSIVE INSPECTION OFFICE GUIDELINES.
- (15) OUTFALL POINTS SHALL BE INSPECTED TO ASCERTAIN WHETHER EPSC MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO SURROUNDING WATERS. WHERE DISCHARGE LOCATIONS ARE INACCESSIBLE, NEARBY DOWNSTREAM LOCATIONS SHALL BE INSPECTED. LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFF-SITE ROADWAY SEDIMENT TRACKING.

MATERIALS

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

PROJECT COMMITMENTS

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

EROSION PREVENTION AND SEDIMENT CONTROL SWPPP, PERMITS, PLANS, RECORDS

- (18) THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR AND OBTAIN ANY NECESSARY ENVIRONMENTAL PERMITS OR APPROVALS, INCLUDING BUT NOT LIMITED TO TDEC ARAP/401, USACE SECTION 404, TVA SECTION 26A, AND TDEC NPDES PERMITS, FROM FEDERAL, STATE AND/OR LOCAL AGENCIES REGARDING THE OPERATION OF ANY PROJECT-DEDICATED ASPHALT AND/OR CONCRETE PLANTS.
- (19) ANY DISAGREEMENT BETWEEN THE PROJECT PLANS, THE PROJECT AS CONSTRUCTED, AND THE PERMIT(S) ISSUED FOR THE PROJECT, SHALL BE BROUGHT TO THE ATTENTION OF THE TDOT PROJECT ENGINEER. THE ENVIRONMENTAL DIVISION, DESIGN DIVISION, AND HEADQUARTERS CONSTRUCTION OFFICE SHALL BE CONTACTED IN THESE INSTANCES AND DECIDE WHICH HAS PRECEDENCE AND WHETHER PERMIT OR PLANS REVISIONS ARE NEEDED. IN GENERAL, PERMIT CONDITIONS WILL PREVAIL.
- (20) THE FOLLOWING INFORMATION SHALL BE MAINTAINED ON OR NEAR THE SITE: DATES THAT MAJOR GRADING ACTIVITIES OCCUR, DATES WHERE CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE, DATES WHEN STABILIZATION MEASURES ARE INITIATED, EPSC INSPECTION RECORDS, QUALITY ASSURANCE SITE ASSESSMENT RECORDS, PRECIPITATION RECORDS, SWPPP, PROJECT ENVIRONMENTAL PERMITS, AND A COPY OF THE PROJECT EPSC INSPECTOR'S TDEC LEVEL 1 CERTIFICATION.

- (21) ALL WATER QUALITY AND STORM WATER PERMITS, INCLUDING A COPY OF THE NOC WITH NPDES PERMIT TRACKING NUMBER AND THE LOCATION OF THE SWPPP, SHALL BE POSTED NEAR THE MAIN ENTRANCE OF THE CONSTRUCTION SITE ACCESSIBLE TO THE PUBLIC. THE NAME, COMPANY NAME, EMAIL ADDRESS, TELEPHONE NUMBER AND ADDRESS OF THE PROJECT SITE OWNER, OPERATOR, OR A LOCAL CONTACT PERSON WITH A BRIEF DESCRIPTION OF THE PROJECT SHALL ALSO BE POSTED. IF POSTING THIS INFORMATION NEAR A MAIN ENTRANCE IS INFEASIBLE, THE INFORMATION SHALL BE PLACED IN A PUBLICLY ACCESSIBLE LOCATION NEAR WHERE THE CONSTRUCTION IS ACTIVELY UNDERWAY AND MOVED AS NECESSARY. THIS LOCATION SHALL BE POSTED AT THE CONSTRUCTION SITE. ALL POSTINGS SHALL BE MAINTAINED IN LEGIBLE CONDITION.
- (22) IF A CHANGE IN PROJECT SCOPE OCCURS DURING CONSTRUCTION, INCLUDING VALUE ENGINEERING, THE ENVIRONMENTAL DIVISION SHALL BE CONTACTED TO DETERMINE WHETHER PERMIT REVISIONS OR MODIFICATIONS OF THE SWPPP ARE NEEDED. THE DESIGN DIVISION SHALL BE CONTACTED TO DETERMINE IF ANY PLAN REVISIONS ARE NEEDED.
- (23) THE SWPPP SHALL BE UPDATED BY CONSTRUCTION WHENEVER EPSC INSPECTIONS INDICATE, OR WHERE STATE OR FEDERAL OFFICIALS DETERMINE EPSC MEASURES ARE PROVING INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANT SOURCES OR ARE OTHERWISE NOT ACHIEVING THE GENERAL OBJECTIVES OF CONTROLLING POLLUTANTS IN STORM WATER DISCHARGES ASSOCIATED WITH THE CONSTRUCTION ACTIVITY. THE ENVIRONMENTAL DIVISION SHALL BE CONTACTED WHEN MAJOR DESIGN REVISIONS ARE REQUESTED BY CONSTRUCTION. THE ENVIRONMENTAL DIVISION MAY BE CONTACTED FOR GUIDANCE ON SPECIFIC SWPPP NEEDS. A COPY OF ANY CORRESPONDENCE REGARDING THE EFFECTIVENESS OF THE SWPPP OR EPSC CONTROLS SHALL BE RETAINED IN THE SWPPP.
- (24) THE SWPPP SHALL BE UPDATED BY CONSTRUCTION WHENEVER A CHANGE IN CHEMICAL TREATMENT METHODS IS MADE INCLUDING USE OF A DIFFERENT CHEMICAL, DIFFERENT DOSAGE OR APPLICATION RATE, OR A DIFFERENT AREA OF APPLICATION.
- (25) IF A TMDL IS DEVELOPED FOR THE RECEIVING WATERS FOR A POLLUTANT OF CONCERN (SILTATION AND/OR HABITAT ALTERATION) THE SWPPP SHALL BE MODIFIED OR UPDATED.
- (26) PROJECT INSPECTORS AND SUPERVISORS (INCLUDING TDOT STAFF, CONSULTANTS AND CONTRACTOR STAFF) RESPONSIBLE FOR THE IMPLEMENTATION AND MAINTENANCE OF EPSC PLANS SHALL SUCCESSFULLY COMPLETE THE TDEC "LEVEL 1 - FUNDAMENTALS OF EROSION PREVENTION AND SEDIMENT CONTROL FOR CONSTRUCTION SITES" COURSE AND ANY REFRESHER COURSES AS REQUIRED TO MAINTAIN CERTIFICATION. A COPY OF CERTIFICATION RECORDS FOR THE COURSES SHALL BE KEPT ON SITE AND AVAILABLE UPON REQUEST.

LITTER, DEBRIS, WASTE, PETROLEUM

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

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**GENERAL
NOTES**

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2016	HPP/STP/NH-62(34)	2M

SPECIAL NOTES

GRADING

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

PAVEMENT

RESURFACING

- (1) TRAFFIC WILL BE ALLOWED TO TEMPORARILY DRIVE ON THE MILLED SURFACE OF THE ROADWAY UNDER THE FOLLOWING CONDITIONS ONLY:
 - A. THE MILLED SURFACE IS FINE TEXTURED. THE FINE TEXTURE SHALL BE OBTAINED BY A MILLING MACHINE UTILIZING A MILLING HEAD WITH TEETH SPACING 3/8" OR LESS OPERATING AT LESS THAN 80 FEET PER MINUTE.
 - B. THE SURFACE SHALL BE SWEEPED AND CLEANED OF ALL LOOSE MATERIALS.
 - C. THE DIFFERENCE IN ELEVATION BETWEEN THE MILLED SURFACE AND THE ADJACENT LANE SHALL NOT EXCEED 1 1/2 INCHES.
 - D. THE MILLED SURFACE SHALL BE PAVED WITHIN 48 HOURS.
 - E. RAIN OR INCLEMENT WEATHER IS NOT EXPECTED OR FORECASTED WITHIN 48 HOURS AFTER MILLING.
 - F. ALL APPLICABLE SIGNING IS INSTALLED IN ACCORDANCE WITH THE MUTCD SIGNING SHALL INCLUDE MOTORCYCLE WARNING SIGNS (TN-64) PLACED IN ADVANCE OF ANY MILLED AREAS.
 - G. IF RAVELING OR DETERIORATION OF THE MILLED SURFACE IS OCCURRING WHILE TRAFFIC IS DRIVING ON THE MILLED SURFACE, THEN THIS PRACTICE WILL NOT BE ALLOWED AND PAVING SHALL BE COMPLETED IMMEDIATELY AFTER MILLING.
 - H. ONLY ONE LANE IN EACH DIRECTION SHALL HAVE A MILLED SURFACE AT ONE TIME.

SIGNALIZATION

- (1) THE DESIGN OF TRAFFIC SIGNAL SUPPORT POLES, MAST ARMS, STRAIN POLES, ETC. SHALL BE IN CONFORMANCE WITH THE AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, CURRENT EDITION. OVERHEAD CANTILEVERED TRAFFIC SIGNAL STRUCTURES SHALL BE DESIGNED FOR FATIGUE CATEGORY 1.

- (2) THE TRAFFIC SIGNAL SUPPORT POLES SHALL BE DESIGNED IN ACCORDANCE WITH THE AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS (CURRENT EDITION WITH ADDENDA). WIND LOADS SHALL BE BASED ON A BASIC WIND SPEED OF 90 MPH WITH A RECURRENCE INTERVAL OF 50 YEARS. OVERHEAD CANTILEVERED TRAFFIC SIGNAL STRUCTURES SHALL BE DESIGNED FOR FATIGUE CATEGORY I. FATIGUE LOADS ARE BASED ON THE REQUIREMENTS OF SECTION 11.7 OF THE SUBJECT AASHTO DOCUMENT AND THE FOLLOWING LOADS:
 - GALLOPING – NO DESIGN NECESSARY. VIBRATION DAMPENERS SHALL BE USED ON ALL CANTILEVERED ARMS THAT ARE 50' OR LONGER.
 - VORTEX SHEDDING – NOT APPLICABLE ON TRAFFIC SIGNAL SUPPORTS WITH A TAPER OF AT LEAST 0.14 IN/FT.
 - NATURAL WIND GUSTS – THE YEARLY MEAN WIND SPEED FOR NATURAL WIND GUSTS SHALL BE 11.2 MPH.

- (3) THE TRAFFIC SIGNAL SUPPORT POLES SHALL BE POLES WITH CURVED CANTILEVERED ARM(S) IN ACCORDANCE WITH METRO PUBLIC WORKS. FOR POLE AND ARM DETAILS, CONTACT MIKE HIRTZER AT 615-880-3261.

EROSION PREVENTION AND SEDIMENT CONTROL

NPDES

- (1) REFER TO THE EROSION PREVENTION AND SEDIMENT CONTROL PLAN, SHEET 36, FOR NOTES REGARDING SEASONAL WORK LIMITATION OR LIMITATION ON THE TOTAL AREA OF EXPOSED SOIL.

ENVIRONMENTAL

ECOLOGY

- (1) STAFF FROM THE TDOT ENVIRONMENTAL DIVISION OR A DESIGNEE WILL ADVISE THE CONTRACTOR DURING THE PRE-CONSTRUCTION MEETING CONCERNING WHEN ENVIRONMENTAL DIVISION PERSONNEL OR DESIGNATED CONSULTANT WILL NEED TO BE ON-SITE FOR WORK BEING DONE WHICH COULD AFFECT THE STREAM OR SPECIES.
- (2) STAFF FROM THE TDOT ENVIRONMENTAL DIVISION OR A DESIGNEE WILL ATTEND THE PRE-CONSTRUCTION MEETING FOR ALL PROJECTS WHICH HAVE THREATENED OR ENDANGERED SPECIES OR CRITICAL HABITAT PROXIMAL TO SCHEDULED BRIDGE WORK. THIS WILL PROVIDE THE OPPORTUNITY TO ENSURE THAT PERSONNEL INCLUDING THE CONTRACTOR'S PERSONNEL AND SUBCONTRACTORS ARE MADE AWARE OF THE NECESSARY PRECAUTIONS WHICH MUST BE FOLLOWED.
- (3) ALL BRIDGE PROJECTS WITH THREATENED OR ENDANGERED SPECIES OR CRITICAL HABITAT IDENTIFIED MUST HAVE MEASURES IN PLACE TO CONTAIN CONCRETE DUST, CEMENT DUST AND ALL OTHER MATERIALS. THESE MATERIALS ARE NOT ALLOWED TO ENTER THE STREAM.

STREAM RELOCATION

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

RETAINING WALLS

- (1) THE OPTIONS FOR RETAINING WALL TYPES SHALL BE LIMITED TO THE APPROVED ALTERNATIVES AS SPECIFIED ON THE RETAINING WALL SHEETS.
- (2) ALL COST OF BUILDING, INSTALLING AND BACKFILLING THE RETAINING WALL SHALL BE INCLUDED IN THE COST OF THE RETAINING WALL.

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**GENERAL
NOTES**

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-62(34)	3
CONST.	2016	HPP-STP/NH-62(34)	3

REV. 10-10-12: TR. NO.3, REV. AREA TO BE ACQUIRED AND CONST. ESM'T. TR. NO. 20 DELETED SLOPE ESM'T. AND REV. CONST. ESM'T. TR. NO. 19 REV. SLOPE AND CONST. ESM'T. TR. TR. NO. 30 DELETED CONST. AND SLOPE ESM'T. TR. NO. 35 REV. AREA TO BE ACQUIRED LT. TR. NO. 12 CORRECTED OWNER AND DELTED LINE THRU TRACT. TR. NO. 30 DELETED ESM'T. AND ADDED LINE THRU TRACT.

REV. 09-13-13: TR. NO. 12, ADDED AREA TO BE ACQUIRED, DELETED CONST. ESM'T. AND ADDED FOOTNOTE NO. 9. CORRECTED AREA REMAINING TR. NO. 13 RT.

REV. 10-02-14: TR. NO. 28. CHANGED OWNER, DELETED ESM'T.'S AND ADDED FOOTNOTE 10.

REV. 03-23-16: TR. NO. 29. DELETED SLOPE AND CONST. ESM'T.'S. LINED THROUGH TR. NO. 29.

R.O.W. ACQUISITION TABLE

TRACT NO.	PROPERTY OWNERS	COUNTY RECORDS				TOTAL AREA (ACRES)			AREA TO BE ACQUIRED (ACRES)			AREA REMAINING (ACRES)		EASEMENT (SQUARE FEET)		
		TAX MAP NO.	PARCEL NO.	DEED DOCUMENT		LEFT	RIGHT	TOTAL	LEFT	RIGHT	TOTAL	LEFT	RIGHT	PERM DRAINAGE	SLOPE	CONST. ①
				BK.	PAGE											
1	SAM ARMSTRONG & WIFE CHERYL ARMSTRONG	94-A-A	37.00	2082	50,53,64	4.854		4.854				4.854				
2	MITCH WINTERS & RANDY WINTERS	94-A-A	35.00	20050407	0079313	3330 S.F.		3330 S.F.				3330 S.F.				
3	JHS LIMITED PARTNERSHIP	94-A-A	32.00	20081229	0040067	1.777	3241 S.F.	1.852	0.268	3241 S.F.	0.343	1.509		128	0.116 AC	
4	JHS LIMITED PARTNERSHIP	94-A-A	30.00	20081229	0040067	2.828		2.828				2.828				
5	RICHARD C. JOHNSON & WIFE LINDA J. JOHNSON	94-A-A	21.00	1528	47	0.527	1697 S.F.	0.566	0.187	1697 S.F.	0.226	0.340	649	518	965	
6	RICHARD C. JOHNSON & WIFE LINDA J. JOHNSON	94-A-A	20.00	20060424	0088812	0.314	611 S.F.	0.328	3196 S.F.	611 S.F.	3807 S.F.	0.241		664	504	
7	BOB JONES	94-A-A	17.00	20061205	0046971	0.927	313 S.F.	0.934	0.230	313 S.F.	0.237	0.697		1781	2000	
8	RAY V. DePUE IV AND RENEE K. ALLEN	94-A-A	16.00	20080212	0060093	0.165		0.165	0.165		0.165					
9	JAMES ALLEN McNUTT & MARY ANNE F. McNUTT	94-A-A	15.00	20060206	0066231	0.211		0.211	0.211		0.211					
10	JOHN M. KIERNAN, JR.	94-A-A	14.00	2015	532	0.152		0.152	0.152		0.152					
11	HELEN S. KIERNAN, TRUSTEE	94-A-A	13.00	1901	328	0.635	0.238	0.872	0.635	0.238	0.872					
⑨	KXHR RAILROAD	94-A-A	N/A						0.229	0.233	0.462					
②	GERDAU AMERISTEEL US, INC.	94-A-B	13	20040812	0013507	54.622	1609 S.F.	54.659	0.234	1609 S.F.	0.271	54.388				
15	TENNESSEE FEDERATION OF GARDEN CLUBS, INC.	94-A-B	25	1485	1093	3.698		3.698				3.698				
17	RICHARD L. ROTH, JR.	94-A-C	7	20070625	0105576		0.334	0.334				0.334				
18	RONALD N. SHERRILL & MICHAEL L. ALLEN	94-A-C	6	20010429	0048878		0.165	0.165				0.165				
19	RUSSELL ARMSTRONG & WIFE LINDA ARMSTRONG	94-A-C	5	20080506	0083033		0.165	0.165				0.165		93	504	
20	RUSSELL ARMSTRONG & WIFE LINDA ARMSTRONG	94-A-C	4	20051017	0034281		0.165	0.165				0.165			355	
21	SANDRA K. CLINE, WIDOW	94-A-C	3	20020619	0104338		0.166	0.166		33 S.F.	33 S.F.	0.165		544	507	
22	WALTER HOBSON WARREN, JR.	94-A-C	2	1767	433		0.150	0.150		98 S.F.	98 S.F.	0.148		679	926	
23	WALTER HOBSON WARREN, JR.	94-A-C	1	1859	1017		0.141	0.141				0.141		881	990	
24	SHIRLEYA. SMITH	94-A-H	17	2167	42	3759 S.F.	927 S.F.	0.108	3759 S.F.	927 S.F.	0.108					
25	W. T. BRADSHAW & WIFE OPAL BRADSHAW	94-A-H	16	1503	693	0.116	1060 S.F.	0.141	0.116	1060 S.F.	0.141					
26	EARL COLLINS	94-A-H	15	2166	743	0.162	789 S.F.	0.180	0.162	789 S.F.	0.180					
⑩	HENRY WRANCHER	94-A-H	14	20041102	0037156	0.182		0.182	0.182		0.182					
28	EARL PERKINS	94-A-H	13	20110810	0007582	0.181		0.181				0.181		192	401	
29	PAUL KETH GIBSON	94-A-H	12	20041213	0047984	0.180		0.180				0.180				
30	BOYCE McCALL	94-A-H	11	20020204	0063646	0.358		0.358				0.358				
31	BOYCE McCALL	94-A-H	9	20051228	0055445	0.175		0.175				0.175				
32	RUBY JOHNSON & WRENZO THOMPSON	94-A-H	8	20060629	0110578	0.176		0.176				0.176				
33	RUBY JOHNSON	94-A-H	7	20020530	0098329	0.175		0.175				0.175				
34	DONNA KAY CLANTON & CHARLES MURPHY	94-A-H	6	20060915	0024051	0.174		0.174				0.174				
35	CARL T. NEWCOMB & WIFE WILMA R. NEWCOMB	94-A-H	1	1827	633	1.022	527 S.F.	1.034	0.128	527 S.F.	0.141	0.894		96	527	
36	MICHAEL L. WHITE	94-A-H	23	20051206	0049438	1.201	321 S.F.	1.209	1.201	321 S.F.	1.209					
③	MILDRED MELISSA POTTER HIPSHER	94-A-H	22	20070126	0060702	0.351	625 S.F.	0.365	2999 S.F.	625 S.F.	3624 S.F.	0.282		704	1015	
39	LORENE TINDELL & HUSBAND WALTER TINDELL	94-A-H	21	20011011	0028577	0.161	915 S.F.	0.182	1524 S.F.	915 S.F.	2440 S.F.	0.126		621	512	
40	ARNOLDE. POTTER & WIFE MARY POTTER	94-A-H	19, 20	1868	784	0.306	4054 S.F.	0.399	3426 S.F.	4054 S.F.	0.172	0.227		1645	1368	
41	TONY J. SHIRK	94-A-H	18	20060922	0026114	0.215	0.250	0.465	0.215	0.250	0.465					
42	ROBERT EARL DAVIS	94-A-C	41	2136	439		0.337	0.337				0.337		420	401	
43	FRED E. JACKSON	94-A-C	40	20030620	0118084		0.225	0.225				0.225		1318	1001	
44	JAMES S. DAVIS, MARRIED	94-A-G	15	20010227	0056228		0.165	0.165				0.165				
45	RICHARD E. ANDERSON & DEBRA G. WATSON	94-A-G	14	20080409	0075572		0.165	0.165				0.165				
46	CECIL KING	94-A-G	13	20021011	0031339		0.165	0.165				0.165				
47	CECIL KING	94-A-G	12	20010525	0082429		0.165	0.165				0.165				
48	CECIL KING	94-A-G	11	20010523	0081598		0.165	0.165				0.165		91	295	
49	SHIRLEY CLEVINGER	94-A-G	10	20060228	0072337		0.165	0.165				0.165		714	511	
50	SIDNEY RENERT	94-A-G	9	1720	41		0.167	0.167		747 S.F.	747 S.F.	0.149		573	1132	

- ① FOR WORKING ROOM AND INSTALLATION OF EROSION PREVENTION AND SEDIMENT CONTROL ITEMS.
- ② TRACT NO. 13 - COMBINED 13, 14, 16 AND 128 INTO TRACT NO. 13 DELETED TRACT NO.'S 14, 16 AND 128 FROM ACQUISITION TABLE.
- ③ TRACT NO. 38 COMBINED INTO TRACT NO. 37 DELETED TRACT NO. 38 FROM ACQUISITION TABLE.
- ⑨ SR-62 (WESTERN AVE.) BRIDGE - 0.115 ACRES LEFT AND 0.116 ACRES RIGHT KEITH AVENUE BRIDGE - 0.114 ACRES LEFT AND 0.117 ACRES RIGHT.
- ⑩ ACCESS IMPAIRED

DISTURBED AREA	
IN BETWEEN SLOPE LINES	27.143 (AC)
10 FOOT CONSTRUCTION EASEMENT OUTSIDE SLOPE LINES	2.341 (AC)
TOTAL DISTURBED AREA	29.484 (AC)

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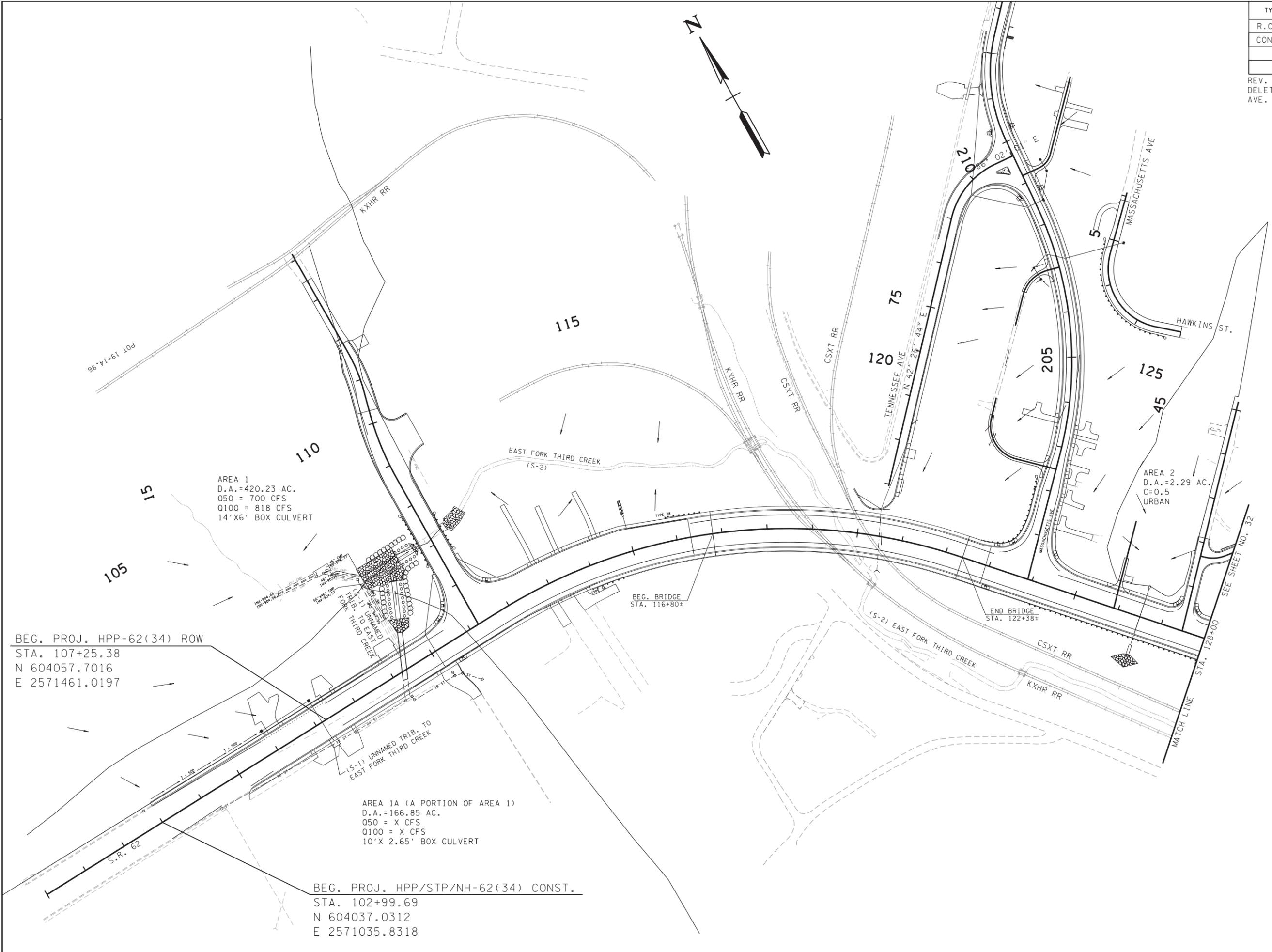
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RIGHT-OF-WAY ACQUISITION TABLE

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-62(34)	31
CONST.	2016	HPP/STP/NH-62(34)	31

REV. 10-10-12:REVISED SHEET NO.
DELETED IMPROVEMENTS TO TENNESSEE
AVE. TO WESTERN AVE.



BEG. PROJ. HPP-62(34) ROW
STA. 107+25.38
N 604057.7016
E 2571461.0197

BEG. PROJ. HPP/STP/NH-62(34) CONST.
STA. 102+99.69
N 604037.0312
E 2571035.8318

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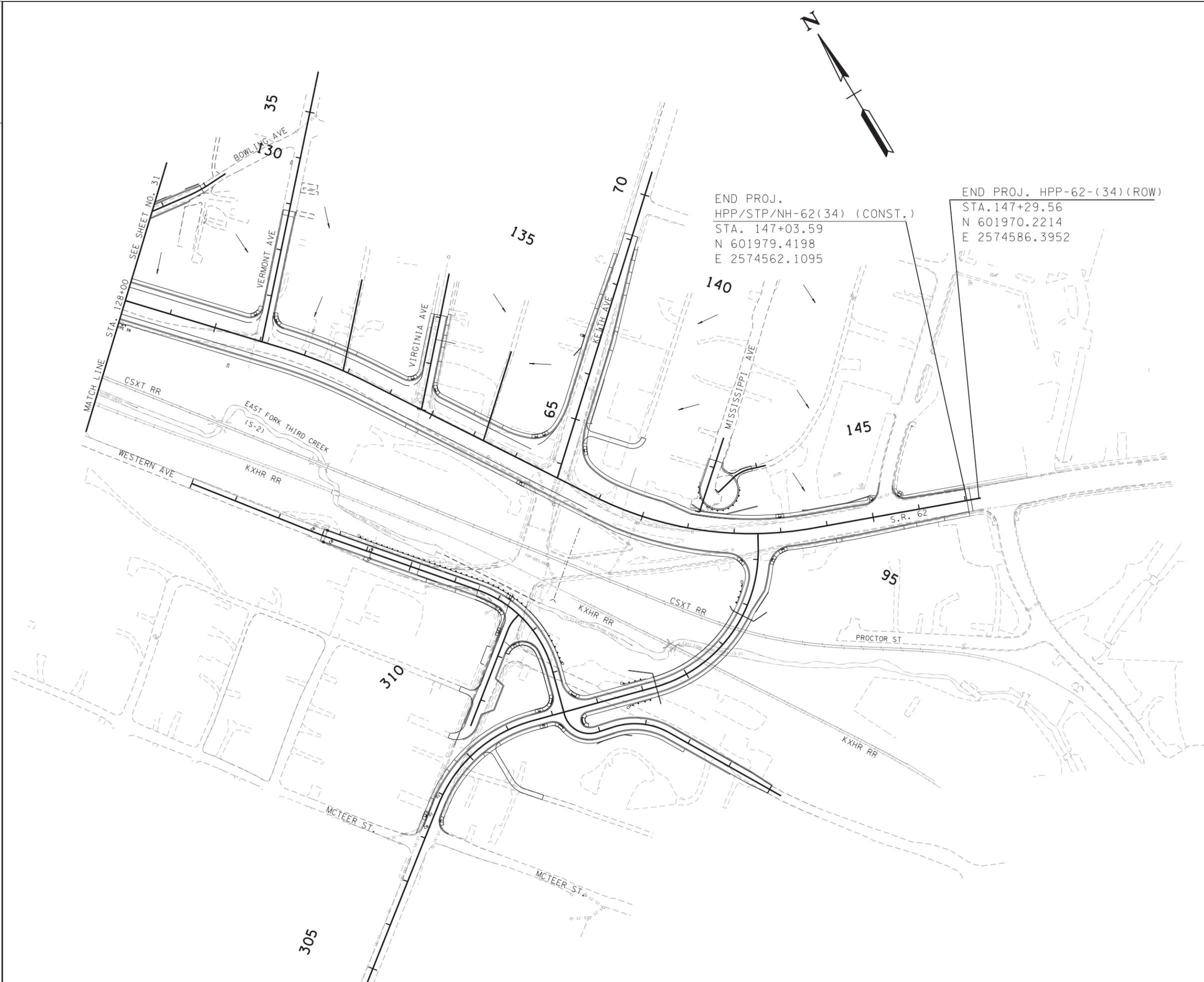
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**DRAINAGE
MAP**
BEG. PROJ TO STA.128+00
SCALE: 1"=100'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-62(34)	32
CONST.	2016	HPP/STP/NH-62(34)	32

REV. 10-10-12:REVISED SHEET NO.
ADDED ADDITIONAL SURVEY AND
PROPOSED IMPROVEMENTS TO OLD
WESTERN AVE., STERCHI ST. AND
KEITH AVE.



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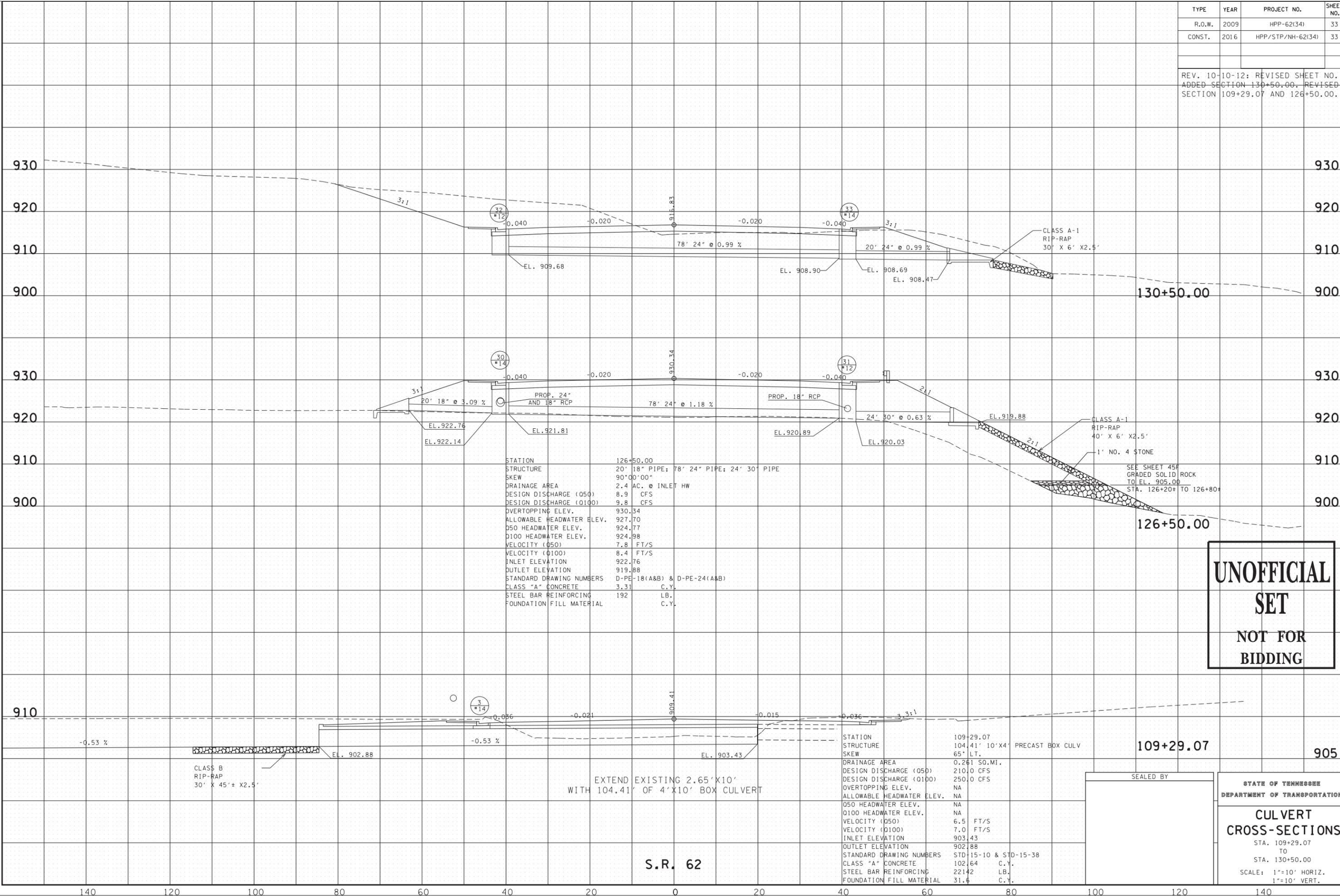
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DEPARTMENT OF TRANSPORTATION

**DRAINAGE
MAP**
STA. 128+00 TO END PROJ.
SCALE: 1"=100'

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-62(34)	33
CONST.	2016	HPP/STP/NH-62(34)	33

REV. 10-10-12: REVISED SHEET NO. ADDED SECTION 130+50.00. REVISED SECTION 109+29.07 AND 126+50.00.



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**CULVERT
CROSS-SECTIONS**

STA. 109+29.07
TO
STA. 130+50.00

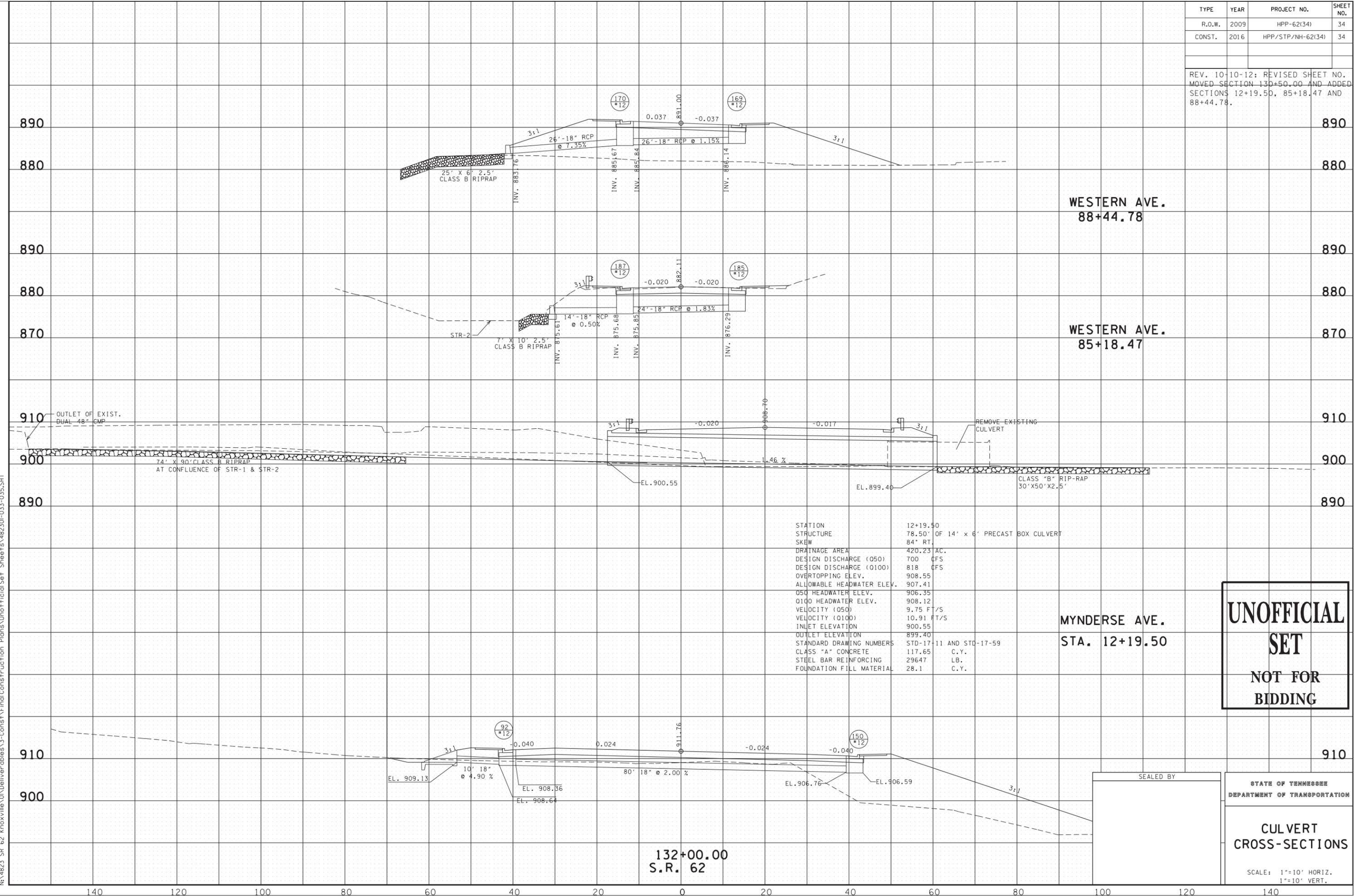
SCALE: 1"=10' HORIZ.
1"=10' VERT.

S.R. 62

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-62(34)	34
CONST.	2016	HPP/STP/NH-62(34)	34

REV. 10-10-12: REVISED SHEET NO. MOVED SECTION 130+50.00 AND ADDED SECTIONS 12+19.50, 85+18.47 AND 88+44.78.



STATION	12+19.50
STRUCTURE	78.50' OF 14' x 6' PRECAST BOX CULVERT
SKEW	84° RT.
DRAINAGE AREA	420.23 AC.
DESIGN DISCHARGE (050)	700 CFS
DESIGN DISCHARGE (0100)	818 CFS
OVERTOPPING ELEV.	908.55
ALLOWABLE HEADWATER ELEV.	907.41
050 HEADWATER ELEV.	906.35
0100 HEADWATER ELEV.	908.12
VELOCITY (050)	9.75 FT/S
VELOCITY (0100)	10.91 FT/S
INLET ELEVATION	900.55
OUTLET ELEVATION	899.40
STANDARD DRAWING NUMBERS	STD-17-11 AND STD-17-59
CLASS "A" CONCRETE	117.65 C.Y.
STEEL BAR REINFORCING	29647 LB.
FOUNDATION FILL MATERIAL	28.1 C.Y.

WESTERN AVE.
88+44.78

WESTERN AVE.
85+18.47

MYNDERSE AVE.
STA. 12+19.50

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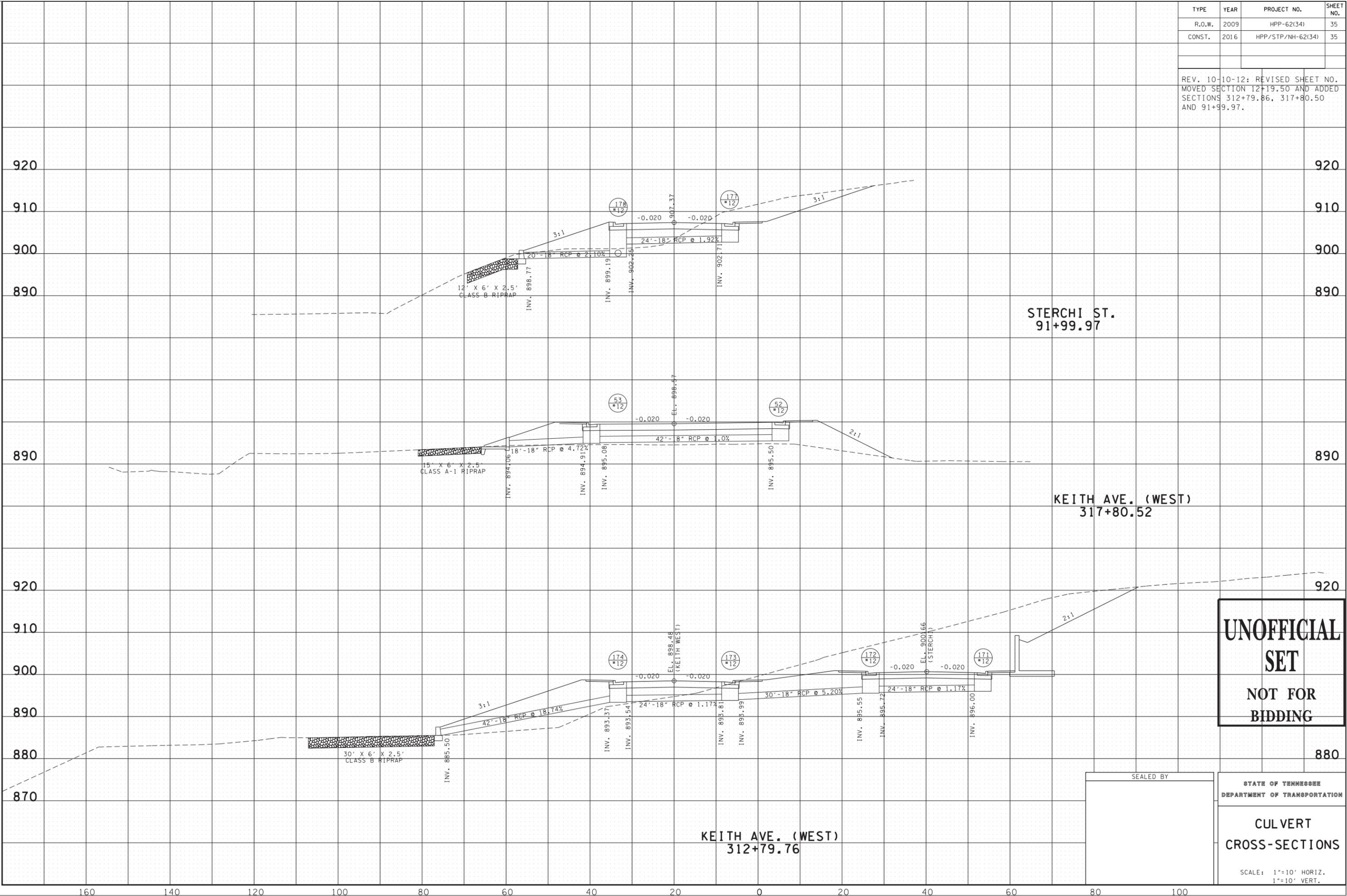
**CULVERT
CROSS-SECTIONS**

SCALE: 1"=10' HORIZ.
1"=10' VERT.

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-62(34)	35
CONST.	2016	HPP/STP/NH-62(34)	35

REV. 10-10-12: REVISED SHEET NO. MOVED SECTION 12+19.50 AND ADDED SECTIONS 312+79.86, 317+80.50 AND 91+99.97.



STERCHI ST.
91+99.97

KEITH AVE. (WEST)
317+80.52

KEITH AVE. (WEST)
312+79.76

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**CULVERT
CROSS-SECTIONS**
SCALE: 1"=10' HORIZ.
1"=10' VERT.

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EROSION PREVENTION AND SEDIMENT CONTROL NOTES

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-62(34)	36
CONST.	2016	HPP/STP/NH-62(34)	36

REV. 10-10-12: REVISED SHEET NO.

STREAM/WETLAND

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

KNOWN EXCEPTIONAL TENNESSEE WATERS

- (3) FOR PROJECTS THAT DISCHARGE INTO KNOWN EXCEPTIONAL TENNESSEE WATERS OR WATERS IMPAIRED BY SILTATION, AN OUTFALL IN A DRAINAGE AREA OF 5 ACRES OR MORE, A TEMPORARY (OR PERMANENT) SEDIMENT BASIN THAT PROVIDES STORAGE FOR A CALCULATED VOLUME OF RUNOFF FROM A 5-YEAR/ 24-HOUR STORM EVENT AND RUNOFF FROM EACH ACRE DRAINED, OR EQUIVALENT CONTROL MEASURES SHALL BE PROVIDED UNTIL FINAL STABILIZATION OF THE SITE. THE ENVIRONMENTAL AND DESIGN DIVISIONS MAY BE CONTACTED TO REVIEW AND CONCUR WITH ANY REVISION OF THE SWPPP BEFORE DISTURBANCE OF THE OUTFALL PROCEEDS, UNLESS PREVIOUSLY EXEMPT IN THE NPDES CONSTRUCTION GENERAL PERMIT.
- (4) FOR PROJECTS THAT DISCHARGE INTO KNOWN EXCEPTIONAL TENNESSEE WATERS OR WATERS IMPAIRED BY SILTATION, A 60 FOOT NATURAL RIPARIAN BUFFER ZONE ADJACENT TO AND ON BOTH SIDES OF THE RECEIVING STREAM WITH THIS DESIGNATION SHALL BE PRESERVED, TO THE MAXIMUM EXTENT PRACTICABLE, DURING CONSTRUCTION ACTIVITIES AT THE SITE. BUFFER ZONES ARE NOT SEDIMENT CONTROL MEASURES AND SHOULD NOT BE RELIED UPON AS PRIMARY SEDIMENT CONTROL MEASURES. THE RIPARIAN BUFFER ZONE SHALL BE ESTABLISHED BETWEEN THE TOP OF THE STREAM BANK AND THE DISTURBED CONSTRUCTION AREA. THE 60 FOOT CRITERION FOR THE WIDTH OF THE BUFFER ZONE CAN BE ESTABLISHED ON AN AVERAGE WIDTH BASIS AT A PROJECT, AS LONG AS THE MINIMUM WIDTH OF THE BUFFER ZONE IS MORE THAN 30 FEET AT ANY MEASURED LOCATION. EVERY ATTEMPT SHALL BE MADE FOR CONSTRUCTION ACTIVITIES NOT TO TAKE PLACE WITHIN THE BUFFER ZONES. BEST MANAGEMENT PRACTICES (BMPS) PROVIDING EQUIVALENT PROTECTION AS THE NATURAL RIPARIAN ZONE MAY BE USED. A JUSTIFICATION FOR USE AND DESIGN EQUIVALENCY SHALL BE DOCUMENTED WITHIN THE SWPPP. THE ENVIRONMENTAL AND DESIGN DIVISIONS SHALL REVIEW AND APPROVE THIS REVISION OF THE SWPPP BEFORE DISTURBANCE OF THE SITE PROCEEDS, UNLESS PREVIOUSLY EXEMPT IN THE NPDES CONSTRUCTION GENERAL PERMIT. WHERE ISSUED, ARAP/401 REQUIREMENTS WILL PREVAIL IF IN CONFLICT WITH THESE BUFFER ZONE REQUIREMENTS.

NPDES

- (5) NO WORK SHALL BE STARTED UNTIL THE CONTRACTOR'S PLAN FOR THE STAGING OF THEIR OPERATIONS, INCLUDING THE PLAN FOR STAGING OF TEMPORARY AND PERMANENT EPSC MEASURES, HAS BEEN ACCEPTED BY THE ENGINEER. THE CONTRACTOR'S EPSC PLAN SHALL INCORPORATE AND SUPPLEMENT, AS ACCEPTABLE, THE BASIC EPSC DEVICES ON THE EPSC PLAN CONTAINED IN THE APPROVED SWPPP.

- (6) THE EPSC MEASURES AND/OR PLAN SHALL BE MODIFIED AS NECESSARY SO THAT THEY ARE EFFECTIVE AT ALL TIMES THROUGHOUT THE COURSE OF THE PROJECT.
- (7) THE ACCEPTED EPSC PLAN SHALL REQUIRE THAT EPSC MEASURES BE IN PLACE BEFORE CLEARING, GRUBBING, EXCAVATION, GRADING, CUTTING OR FILLING OCCURS, EXCEPT AS SUCH WORK MAY BE NECESSARY TO INSTALL EPSC MEASURES, INCLUDING WITHOUT LIMITATION AS FOLLOWS:
 - A. INITIAL CLEARING AND GRUBBING SHALL BE LIMITED TO THAT NECESSARY FOR THE INSTALLATION OF APPLICABLE EPSC MEASURES IN ACCORDANCE WITH THE ACCEPTED EPSC PLAN INCORPORATED INTO THE SWPPP.
 - B. NO OTHER CLEARING AND GRUBBING OPERATIONS SHALL BE STARTED BEFORE APPLICABLE EPSC MEASURES ARE IN PLACE IN ACCORDANCE WITH THE ACCEPTED EPSC PLAN INCORPORATED INTO THE SWPPP.
 - C. NO CULVERT OR BRIDGE CONSTRUCTION SHALL BE STARTED BEFORE APPLICABLE EPSC MEASURES ARE IN PLACE IN ACCORDANCE WITH THE ACCEPTED EPSC PLAN INCORPORATED INTO THE SWPPP.
 - D. NO GRADING, EXCAVATION, CUTTING, FILLING, OR OTHER EARTHWORK SHALL BE STARTED BEFORE EPSC MEASURES ARE IN PLACE IN ACCORDANCE WITH THE ACCEPTED EPSC PLAN INCORPORATED INTO THE SWPPP.
- (8) PERMANENT EPSC MEASURES SHALL BE INITIATED WITHIN 14 CALENDAR DAYS AFTER FINAL GRADING OF ANY SEQUENCE OR PHASE. TEMPORARY OR PERMANENT STABILIZATION SHALL BE INITIATED WITHIN 14 CALENDAR DAYS AFTER FINAL GRADING OR WHEN CONSTRUCTION ACTIVITIES ON A PORTION OF THE SITE ARE TEMPORARILY CEASED AND EARTH DISTURBING ACTIVITIES WILL NOT RESUME UNTIL AFTER 14 CALENDAR DAYS. PERMANENT STABILIZATION WITH PERENNIAL VEGETATION OR OTHER PERMANENTLY STABLE NON-ERODING SURFACE SHALL REPLACE ANY TEMPORARY MEASURES AS SOON AS PRACTICABLE. UNPACKED GRAVEL CONTAINING FINES (SILT AND CLAY SIZED PARTICLES) OR CRUSHER-RUN WILL NOT BE CONSIDERED A NON-ERODIBLE SURFACE.
- (9) STEEP SLOPES (A NATURAL OR CREATED SLOPE OF 35% GRADE (2.8H:1V) OR GREATER REGARDLESS OF HEIGHT) SHALL BE TEMPORARILY STABILIZED NO LATER THAN 7 CALENDAR DAYS AFTER CONSTRUCTION ACTIVITY ON THE SLOPE HAS TEMPORARILY OR PERMANENTLY CEASED.
- (10) FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION SUPPORT ACTIVITIES; TDOT PROJECTS ARE COVERED UNDER THE "WASTE AND BORROW" MANUAL PER THE SSWMP.
- (11) EXCEPT AS OTHERWISE SPECIFIED, THERE ARE NO KNOWN SPECIAL ENVIRONMENTAL FACTORS PRESENT ON THIS PROJECT THAT INDICATE A NEED FOR SEASONAL LIMITATIONS ON THE CLEARING, GRUBBING, EXCAVATION, GRADING, CUTTING OR FILLING OPERATIONS OR ON THE TOTAL AREA OF EXPOSED SOIL.

UTILITY RELOCATION

- (12) RAIN WATER WHICH COLLECTS IN THE UTILITY TRENCH SHALL BE PUMPED INTO A DEWATERING STRUCTURE OR SEDIMENT FILTER BAG AND MAINTAINED.
- (13) SILT FENCE SHALL BE INSTALLED ON THE DOWNSTREAM SIDE OF STOCKPILED SOIL. TRENCHING ACROSS WET WEATHER CONVEYANCES SHALL BE DONE DURING NO FLOW CONDITIONS AND STABILIZED BY THE END OF THE WORK DAY
- (14) UTILITY CROSSINGS FOR PERENNIAL STREAMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH TDOT STANDARDS AND NO WORK SHALL BE CONDUCTED IN FLOWING WATERS. TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC) REGULATIONS APPLY TO UTILITIES IN THIS PROJECT IN REGARD TO EROSION PREVENTION AND SEDIMENT CONTROL (EPSC). THE STATE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE STORM WATER POLLUTION PREVENTION PLANS (SWPPP).
- (15) IT IS THE RESPONSIBILITY OF THE STATE UTILITY CONTRACTOR INSTALLER TO PROTECT FROM EROSION EXPOSED EARTH RESULTING FROM THEIR OPERATIONS AND TO PROVIDE FOR CONTAINMENT OF SEDIMENT THAT MAY RESULT FROM THEIR WORK. PRIOR TO BEGINNING WORK, ADEQUATE MEASURES MUST BE IN PLACE TO TRAP ANY SEDIMENT THAT MAY TRAVEL OFF-SITE IN THE EVENT OF RAIN. DURING THE PROGRESSION OF THEIR WORK, EXPOSED EARTH AREAS SHALL BE STABILIZED AS SOON AS POSSIBLE TO PREVENT EROSION. AT NO TIME

SHALL EXPOSED EARTH RESULTING FROM THEIR OPERATIONS HAVE UNPROTECTED ACCESS TO FLOWING OFF-SITE AND ENTERING WATERS OF THE STATE/US.

- (16) FOR THE INSTALLATION OF BURIED UTILITIES (PIPES AND CABLES), TRENCHES SHALL BE BACKFILLED DAILY AS CONSTRUCTION PROCEEDS. BACKFILLED TRENCHES SHALL BE SEEDED AND MULCHED OR SODDED DAILY IF POSSIBLE, BUT NO LATER THAN SEVEN DAYS AFTER BEING BACKFILLED. ANY TEMPORARY SPOIL OF EXCAVATED EARTH SHALL BE LOCATED WITHIN TDOT EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES OR RECEIVE SEPARATE EPSC MEASURES. IF TRENCHES ARE NOT BACKFILLED OVERNIGHT, APPROPRIATE EPSC MEASURES WILL BE INSTALLED BY THE STATE UTILITY CONTRACTOR UNTIL SUCH TIME AS THE TRENCH IS BACKFILLED.
- (17) IN REGARD TO EROSION PREVENTION AND SEDIMENT CONTROL (EPSC), TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC) REGULATIONS APPLY TO THE STATE UTILITY CONTRACTORS IN THIS PROJECT. THEREFORE, THE STATE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE STORM WATER POLLUTIONS PREVENTION PLANS (SWPPP). THE STATE CONTRACTOR IS RESPONSIBLE FOR EPSC MEASURES RELATED TO UTILITY CONSTRUCTION INCLUDED IN THE STATE CONTRACT WORK.
- (18) TRENCHES FORMED FOR THE INSTALLATION OF BURIED UTILITIES MAY CAUSE STORM WATER RUNOFF TO CONCENTRATE AT THE TRENCH LINE. ADDITIONAL EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES MAY BE REQUIRED TO BE INSTALLED AS APPROVED BY THE TDOT PROJECT ENGINEER.
- (19) FOR THE INSTALLATION OF UNDERGROUND UTILITIES OUTSIDE OF THE TDOT RIGHT-OF-WAY, EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) SHALL BE INSTALLED PRIOR TO CLEARING (TRENCHING AND ASSOCIATED BLASTING) IN THOSE AREAS NECESSARY TO PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION AREA. THESE EPSC MEASURES SHALL REMAIN UNTIL THE BACKFILLED TRENCH IS STABILIZED WITH FINAL VEGETATIVE COVER.
- (20) THE UTILITY CONTRACTOR SHALL RESTORE ALL AFFECTED WET WEATHER CONVEYANCES TO THE EXISTING TOPOGRAPHIC CONDITIONS (AS APPROVED BY THE TDOT PROJECT ENGINEER).
- (21) THE UTILITY CONTRACTOR WILL PROVIDE APPROPRIATE EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES TO REPLACE IN-PLACE EPSC MEASURES REMOVED TO FACILITATE THE INSTALLATION OF UTILITIES. REPLACEMENT OF EPSC MEASURES WILL BE COORDINATED WITH THE TDOT PROJECT ENGINEER BEFORE COMMENCING WORK.

LITTER, DEBRIS, WASTE, PETROLEUM

- (22) THE CONTRACTOR SHALL MAINTAIN A COMPLETE AND COMPREHENSIVE EROSION PREVENTION AND SEDIMENT CONTROL PLAN TO PREVENT ROADWAY AND/OR CONSTRUCTION SEDIMENT OR DEBRIS AND ANY PETROLEUM BASED PRODUCTS OR CHLORINATED SOLVENTS, PAINTS OR COATINGS ETC. FROM FALLING ONTO THE RAILROAD'S RIGHTS-OF-WAY AND/OR FROM ENTERING THE DRAINAGE DITCHES OR DRAINAGE STRUCTURES OF THE RAILROAD, AND ANY SEDIMENT OR DEBRIS OR PETROLEUM BASED PRODUCTS OR CHLORINATED SOLVENTS, ETC. THAT DO ENTER SUCH DRAINAGE AREAS OF THE RAILROAD'S RIGHTS-OF-WAY ARE TO BE REMOVED IN ACCORDANCE WITH RULES SET FORTH BY CSX RAILROAD AND KXHR RAILROAD AND AT THE CONTRACTOR'S EXPENSE.

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**EROSION
PREVENTION
AND SEDIMENT
CONTROL NOTES**

EROSION PREVENTION AND SEDIMENT CONTROL NOTES

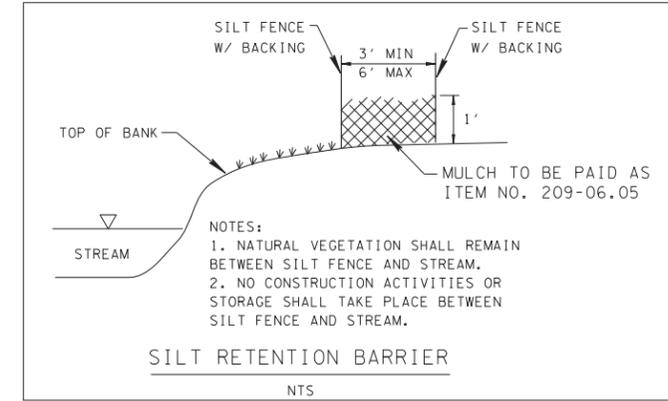
SPECIAL NOTES

- (1) OPERATION OF MOTORIZED EQUIPMENT IN EAST FORK THIRD CREEK (STR-2) IS PROHIBITED
- (2) ANY TEMPORARY CROSSINGS OF EAST FORK THIRD CREEK (STR-2) REQUIRED DURING PROJECT CONSTRUCTION WILL BE ACCOMPLISHED ACCORDING TO DOT STANDARD SPECIFICATIONS.
- (3) REMOVAL OF EXISTING STRUCTURE ON TENNESSEE AVENUE OVER EAST FORK THIRD CREEK (STR-2) IS TO BE ACCOMPLISHED IN SUCH A WAY THAT DISTURBANCE OF THE STREAM CHANNEL IS KEPT TO A MINIMUM. ONCE THE STRUCTURE IS REMOVED, THE CHANNEL AND BANKS ARE TO BE RESHAPED TO APPROXIMATE THOSE OF THE EXISTING UP AND DOWNSTREAM OF THIS LOCATION. THE RESHAPED BANKS ARE TO BE EITHER SEEDED AND MATTED OR SODDED TO STABILIZE THEM AS SOON AS POSSIBLE.
- (4) CONTRACTOR SHALL MAKE EVERY EFFORT POSSIBLE TO MINIMIZE THE TIME REQUIRED FOR THE USAGE OF THE ALL SUSPENDED PIPE DIVERSIONS DURING CONSTRUCTION.
- (5) PUMPING REQUIRED FOR EACH STAGE SHALL NOT BE PAID FOR DIRECTLY, BUT INCLUDED IN OTHER ITEMS OF CONSTRUCTION.

EROSION PREVENTION AND SEDIMENT CONTROL QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
209-02.05	12" TEMPORARY SLOPE DRAIN	L.F.	520
209-02.07	18" TEMPORARY SLOPE DRAIN	L.F.	840
209-05	SEDIMENT REMOVAL	C.Y.	1003
209-08.02	TEMPORARY SILT FENCE (WITH BACKING)	L.F.	16590
209-08.03	TEMPORARY SILT FENCE (WITHOUT BACKING)	L.F.	13420
209-08.07	ROCK CHECK DAM	EACH	23
209-08.08	ENHANCED ROCK CHECK DAM	EACH	47
209-09.01	SANDBAGS	BAG	1200
209-09.03	SEDIMENT FILTER BAG (15' X 15')	EACH	6
209-09.43	CURB INLET PROTECTION (TYPE 4)	EACH	169
209-10.20	SEDIMENT TRAP WITH ENHANCED ROCK CHECK DAM	EACH	1
209-20.03	POLYETHYLENE SHEETING (6 MIL. MINIMUM)	S.Y.	50
209-40.33	CATCH BASIN PROTECTION (TYPE D)	EACH	39
209-40.42	CATCH BASIN FILTER ASSEMBLY (TYPE 2)	EACH	72
209-40.44	CATCH BASIN FILTER ASSEMBLY (TYPE 4)	EACH	18
209-40.46	CATCH BASIN FILTER ASSEMBLY (TYPE 6)	EACH	71
209-40.47	CATCH BASIN FILTER ASSEMBLY (TYPE 7)	EACH	2
209-65.03	TEMPORARY DIVERSION CHANNEL	L.F.	350
621-03.03	24" TEMPORARY DRAINAGE PIPE	L.F.	480
621-03.05	36" TEMPORARY DRAINAGE PIPE	L.F.	300
621-03.07	48" TEMPORARY DRAINAGE PIPE	L.F.	240
707-08.11	HIGH-VISIBILITY CONSTRUCTION FENCE	L.F.	1520
709-05.05	MACHINED RIP-RAP (CLASS A-3)	TON	374
709-05.06	MACHINED RIP-RAP (CLASS A-1)	TON	712
740-10.03	GEOTEXTILE (TYPE II) (EROSION CONTROL)	S.Y.	2242
740-11.03	TEMPORARY SEDIMENT TUBE 18IN (DESCRIPTION)	L.F.	5980
740-11.04	TEMPORARY SEDIMENT TUBE 20IN (DESCRIPTION)	L.F.	1350
303-10.01	MINERAL AGGREGATE (SIZE 57)	TON	112
209-06.05	BALED HAY OR STRAW	EACH	2368

EROSION PREVENTION AND SEDIMENT CONTROL LEGEND		
SYMBOL	ITEM	STD. DWG.
	SEDIMENT FILTER BAG	EC-STR-2
* SF * SF * SF *	SILT FENCE	EC-STR-3B
* SFB * SFB * SFB *	SILT FENCE WITH WIRE BACKING	EC-STR-3C
	ROCK CHECK DAM (V-DITCH)	EC-STR-6
	ENHANCED ROCK CHECK DAM (V-DITCH)	EC-STR-6A
	SEDIMENT TRAP WITH ENHANCED ROCK CHECK DAM	EC-STR-7
	CULVERT PROTECTION (TYPE 1)	EC-STR-11
	CATCH BASIN PROTECTION (TYPE D)	EC-STR-19
	TEMPORARY CONSTRUCTION EXIT	EC-STR-25
	TEMPORARY CULVERT CROSSING (DESCRIBE NUMBER AND SIZE OF PIPES)	EC-STR-25
TTTTTTTTTT	TEMPORARY BERM	EC-STR-27
	TEMPORARY SLOPE DRAIN	EC-STR-27
	TEMPORARY DIVERSION CHANNEL (DESCRIBE SIZE AND TYPE OF LINING)	EC-STR-31
OOOOOOOOOO	SAND BAG BERM	EC-STR-33
	SUSPENDED PIPE DIVERSION	EC-STR-33 EC-STR-33A
** TUBE ** TUBE **	SEDIMENT TUBE	EC-STR-37
	CURB INLET PROTECTION (TYPE 4)	EC-STR-39A
	CATCH BASIN FILTER ASSEMBLY (TYPE 2)	EC-STR-42
	CATCH BASIN FILTER ASSEMBLY (TYPE 4)	EC-STR-44
	CATCH BASIN FILTER ASSEMBLY (TYPE 6)	EC-STR-46
	CATCH BASIN FILTER ASSEMBLY (TYPE 7)	EC-STR-47
* HVF * HVF	HIGH VISIBILITY FENCE	S-F-1
* SFB * SFB * SFB * * SFB * SFB * SFB *	SILT RETENTION BARRIER	SEE DETAIL BELOW



TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-62(34)	36A
CONST.	2016	HPP/STP/NH-62(34)	36A

REV. 10-10-12: ADDED SHEET TO PLANS.

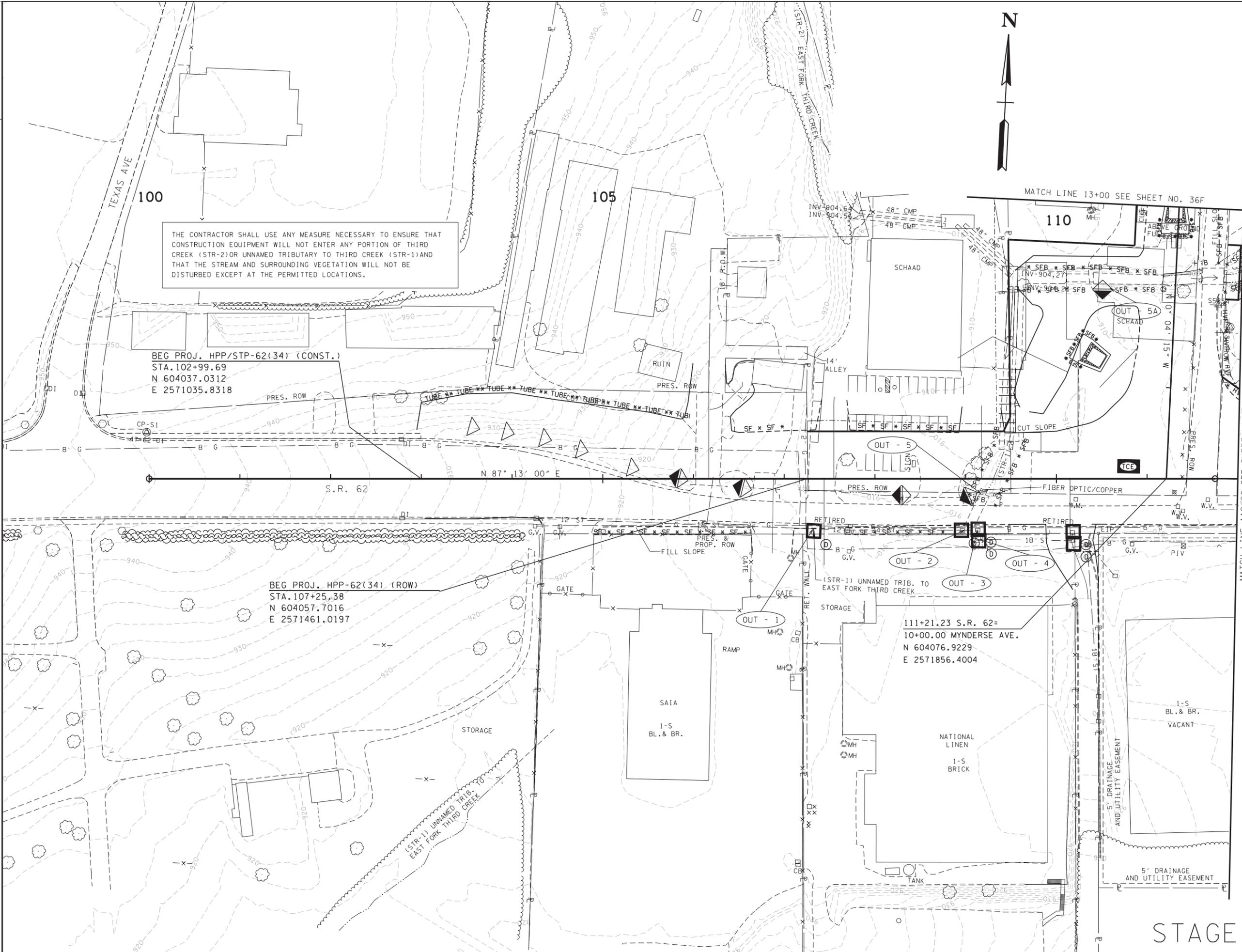
**UNOFFICIAL
SET
NOT FOR
BIDDING**

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**EROSION
PREVENTION
AND SEDIMENT
CONTROL NOTES**

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2016	HPP/STP/NH-62(34)	36B



THE CONTRACTOR SHALL USE ANY MEASURE NECESSARY TO ENSURE THAT CONSTRUCTION EQUIPMENT WILL NOT ENTER ANY PORTION OF THIRD CREEK (STR-2) OR UNNAMED TRIBUTARY TO THIRD CREEK (STR-1) AND THAT THE STREAM AND SURROUNDING VEGETATION WILL NOT BE DISTURBED EXCEPT AT THE PERMITTED LOCATIONS.

BEG PROJ. HPP/STP-62(34) (CONST.)
STA. 102+99.69
N 604037.0312
E 2571035.8318

BEG PROJ. HPP-62(34) (ROW)
STA. 107+25.38
N 604057.7016
E 2571461.0197

111+21.23 S.R. 62=
10+00.00 MYNDERSE AVE.
N 604076.9229
E 2571856.4004

STAGE 1

UNOFFICIAL SET
NOT FOR BIDDING

SEALED BY

COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.0001 & TIED TO THE TGRN.

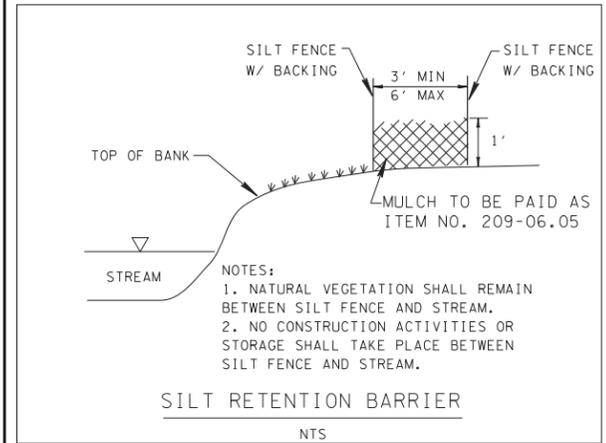
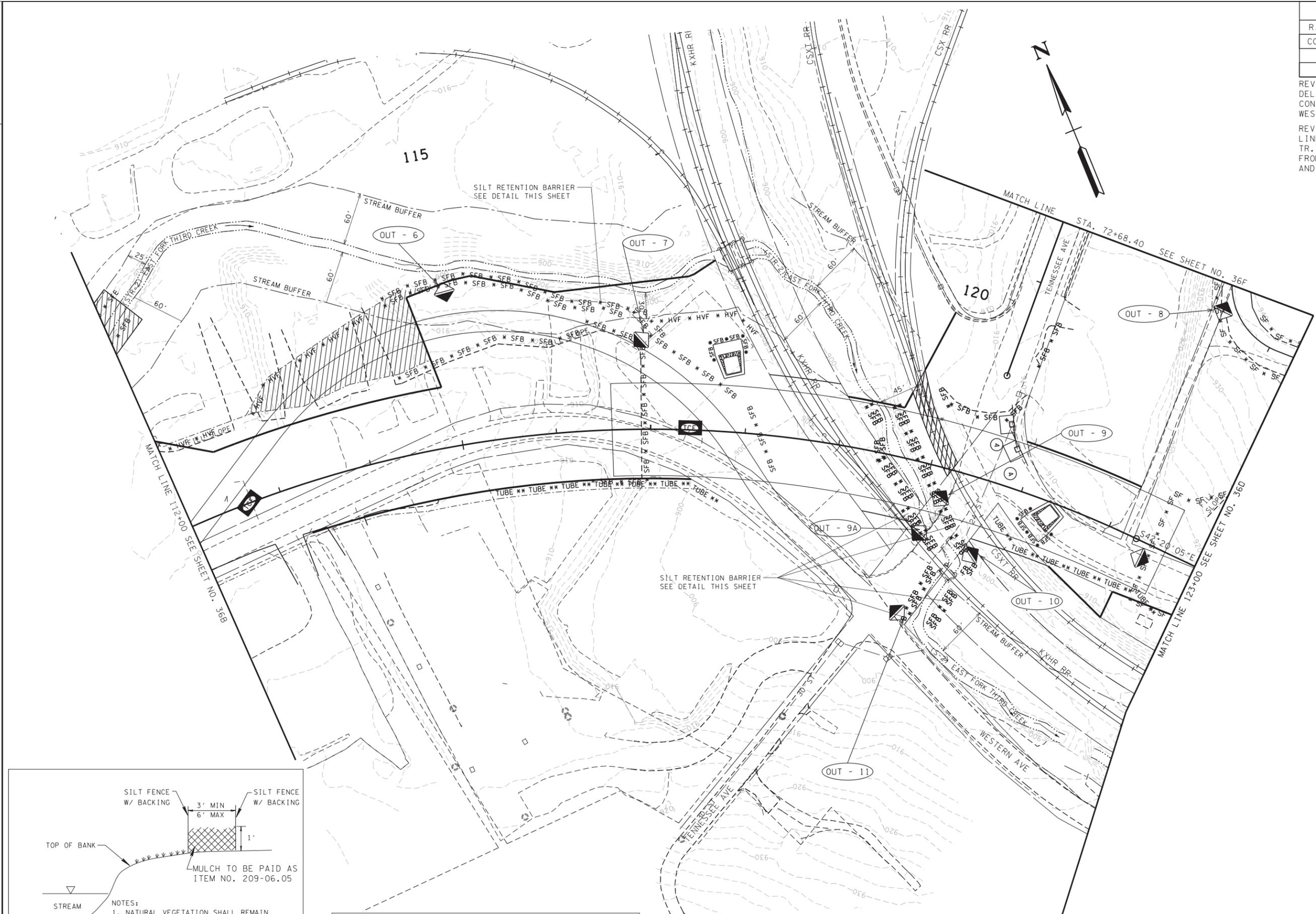
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN
STA. 100+00 TO STA. 112+00
SCALE: 1"=50'

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-62(34)	36B
CONST.	2016	HPP/STP/NH-62(34)	36C

REV. 10-10-12: REVISED SHEET NO. DELETED IMPROVEMENTS AND EROSION CONTROL FOR TENNESSEE AVE. TO WESTERN AVE.
REV. 09-13-13: REV. PROPERTY LINE AND PROP. R.O.W. FOR TR. NO. 172. REMOVED PATTERN FROM TR. NO. 12 LT. AND RT. AND TR. NO. 172 RT.



THE CONTRACTOR SHALL USE ANY MEASURE NECESSARY TO ENSURE THAT CONSTRUCTION EQUIPMENT WILL NOT ENTER ANY PORTION OF THIRD CREEK (STR-2) OR UNNAMED TRIBUTARY TO THIRD CREEK (STR-1) AND THAT THE STREAM AND SURROUNDING VEGETATION WILL NOT BE DISTURBED EXCEPT AT THE PERMITTED LOCATIONS.

**UNOFFICIAL SET
NOT FOR BIDDING**

SEALED BY

COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.0001 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN
STA. 112+00 TO STA. 123+00
SCALE: 1"=50'

STAGE 1

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-62(34)	36C
CONST.	2016	HPP/STP/NH-62(34)	36D

REV. 10-10-12: REVISED SHEET NO. AND MATCH LINE FOR WESTERN AVE.

UNOFFICIAL SET
NOT FOR BIDDING

SEALED BY

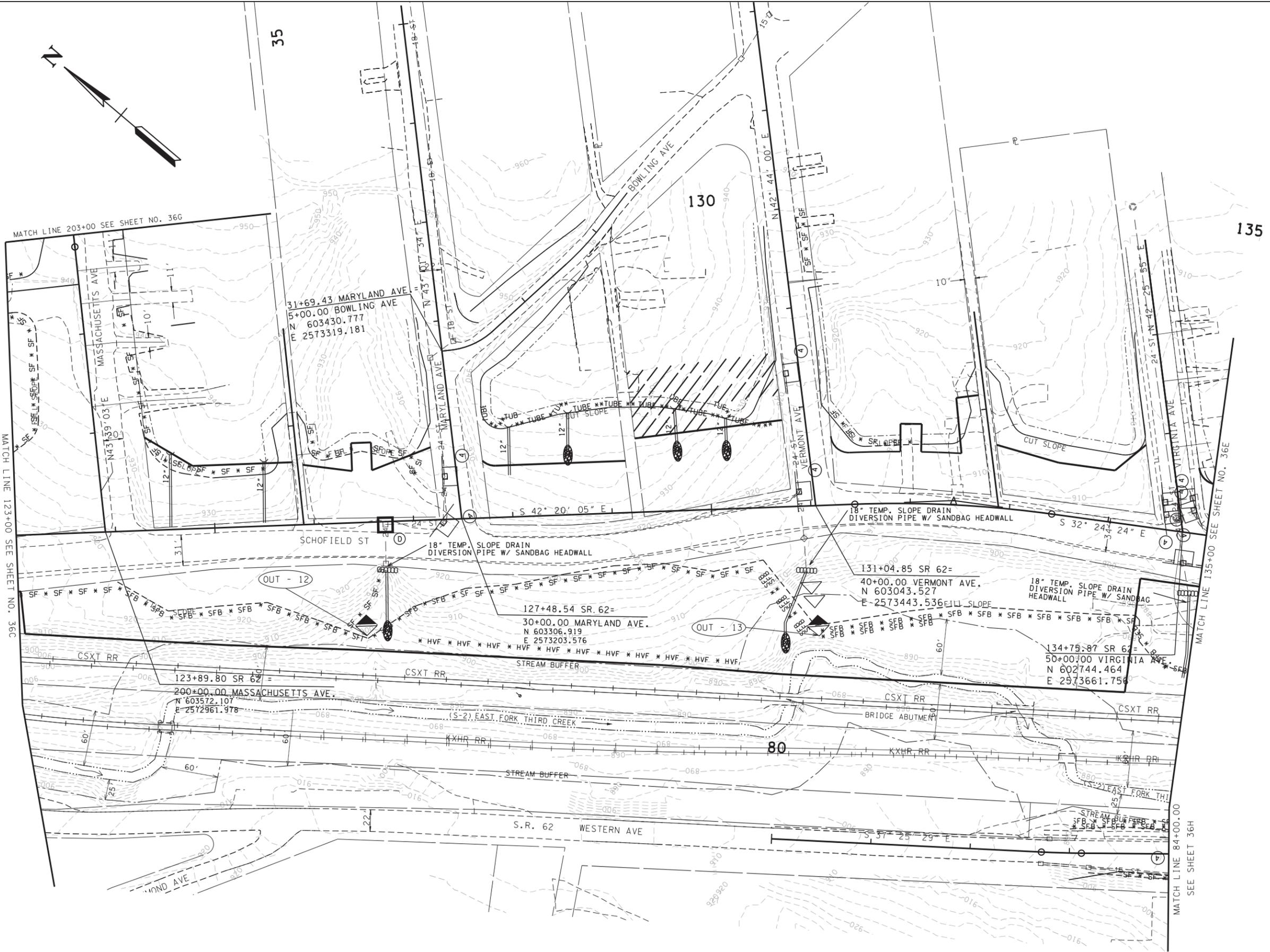
COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.0001 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN
STA. 123+00 TO STA. 135+00
SCALE: 1"=50'

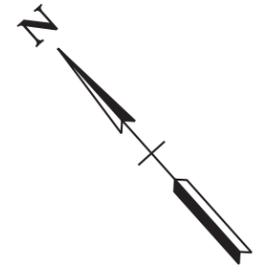
STAGE 1

THE CONTRACTOR SHALL USE ANY MEASURE NECESSARY TO ENSURE THAT CONSTRUCTION EQUIPMENT WILL NOT ENTER ANY PORTION OF THIRD CREEK (STR-2) OR UNNAMED TRIBUTARY TO THIRD CREEK (STR-1) AND THAT THE STREAM AND SURROUNDING VEGETATION WILL NOT BE DISTURBED EXCEPT AT THE PERMITTED LOCATIONS.



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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2016	HPP/STP/NH-62(34)	36E



END PROJ. HPP-62-(34)(ROW)
147+29.56
N 601970.2214
E 2574586.3952

END PROJ.
HPP/STP-62-(34)(CONST.)
147+03.59
N 601979.4198
E 2574562.1095

SR62 STA. 145+33.56 =
MAJOR STA. 20+00.00
N 602039.6456
E 2574403.1001

END PROJ. HPP/STP-62-(34)(CONST.)
147+03.59
N 601979.4206
E 2574562.1073

SR62 STA. 142+50.98 =
KEITHWEST STA. 318+55.35
N 602148.3142
E 2574142.6197

37.07' LT SR 621+00.00+19.75 =
MISSISSIPPI AVE
STA. 1+00.00

138+00.60 SR 62 =
63+68.74 KEITH AVE.
N 602470.305
E 25738359788

OUT - 14

**UNOFFICIAL
SET
NOT FOR
BIDDING**

SEALED BY

COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.0001 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**EROSION
PREVENTION
AND SEDIMENT
CONTROL PLAN**

STA. 135+00 TO STA. 147+00
SCALE: 1"=50'

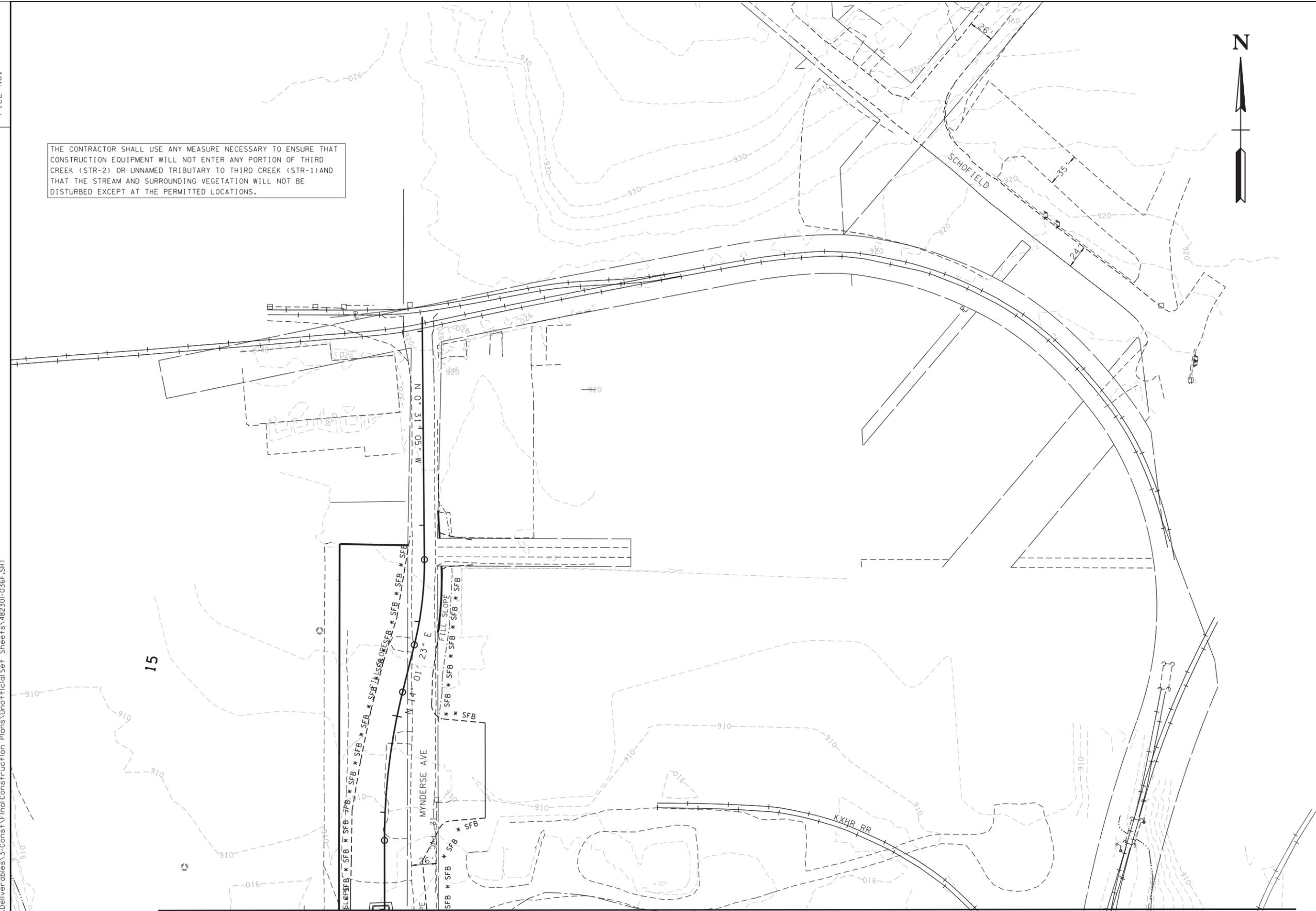
STAGE 1

THE CONTRACTOR SHALL USE ANY MEASURE NECESSARY TO ENSURE THAT CONSTRUCTION EQUIPMENT WILL NOT ENTER ANY PORTION OF THIRD CREEK (STR-2) OR UNNAMED TRIBUTARY TO THIRD CREEK (STR-1) AND THAT THE STREAM AND SURROUNDING VEGETATION WILL NOT BE DISTURBED EXCEPT AT THE PERMITTED LOCATIONS.

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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2016	HPP/STP/NH-62(34)	36F

THE CONTRACTOR SHALL USE ANY MEASURE NECESSARY TO ENSURE THAT CONSTRUCTION EQUIPMENT WILL NOT ENTER ANY PORTION OF THIRD CREEK (STR-2) OR UNNAMED TRIBUTARY TO THIRD CREEK (STR-1) AND THAT THE STREAM AND SURROUNDING VEGETATION WILL NOT BE DISTURBED EXCEPT AT THE PERMITTED LOCATIONS.



**UNOFFICIAL
SET
NOT FOR
BIDDING**

SEALED BY

COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.0001 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**EROSION
PREVENTION
AND SEDIMENT
CONTROL PLAN**

MYNDERSE AVE.
SCALE: 1"=50'

NOTE: CLEARING SHALL BE LIMITED
TO 10 FEET OR LESS OUTSIDE OF
DISTURBANCE (CUT/FILL LINES).

STAGE 1

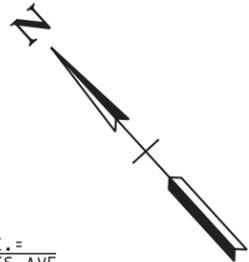
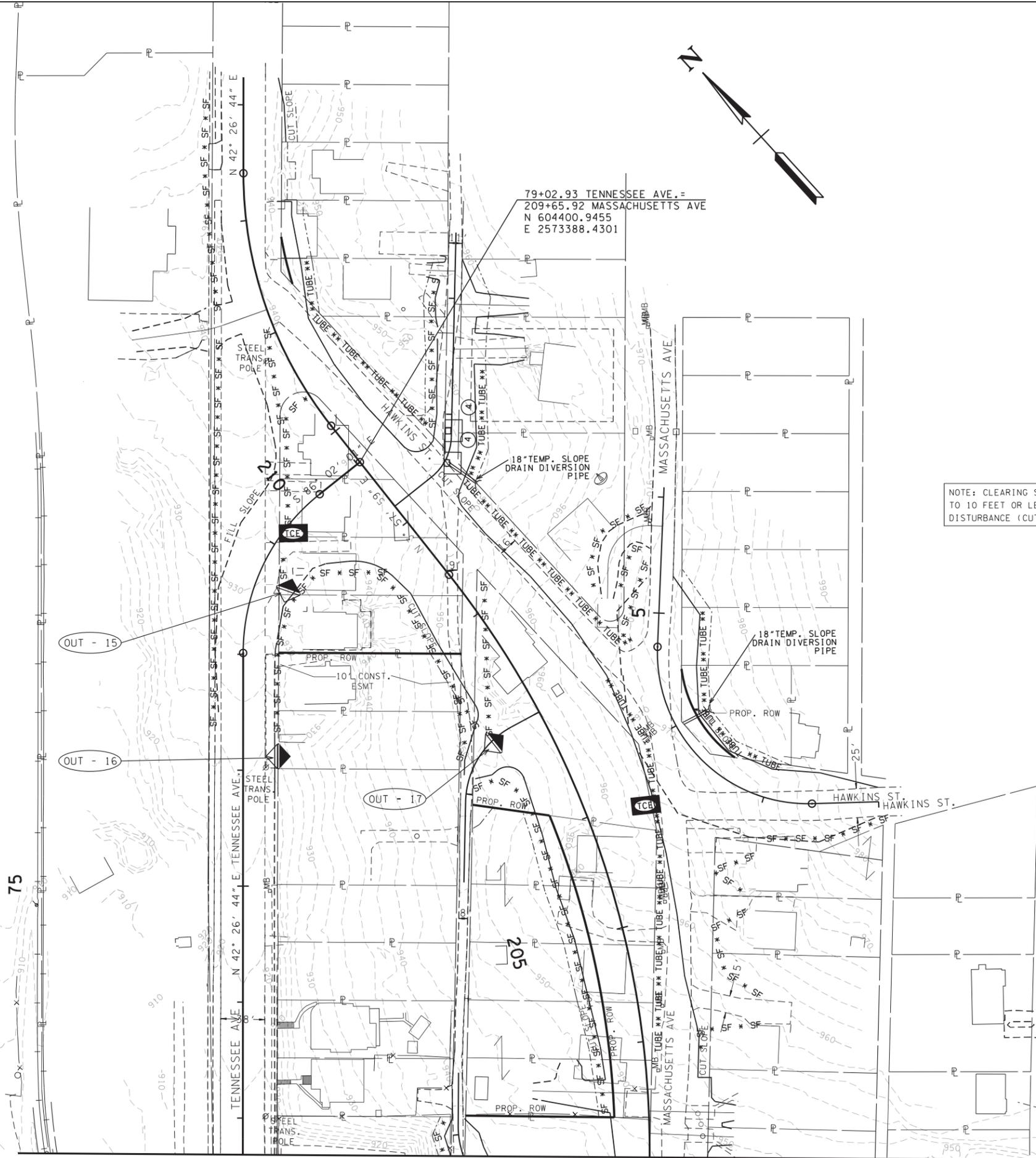
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MATCH LINE 13+00 SEE SHEET NO. 36C

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2016	HPP/STP/NH-62(34)	36G

THE CONTRACTOR SHALL USE ANY MEASURE NECESSARY TO ENSURE THAT CONSTRUCTION EQUIPMENT WILL NOT ENTER ANY PORTION OF THIRD CREEK (STR-2) OR UNNAMED TRIBUTARY TO THIRD CREEK (STR-1) AND THAT THE STREAM AND SURROUNDING VEGETATION WILL NOT BE DISTURBED EXCEPT AT THE PERMITTED LOCATIONS.

NOTE: CLEARING SHALL BE LIMITED TO 10 FEET OR LESS OUTSIDE OF DISTURBANCE (CUT/FILL LINES).



MATCH LINE STA. 72+68.40 SEE SHEET NO. 36C
TENNESSEE AVE.

MATCH LINE STA. 203+00 SEE SHEET NO. 36D
MASSACHUSETTS AVE.

STAGE 1

UNOFFICIAL SET
NOT FOR BIDDING

SEALED BY

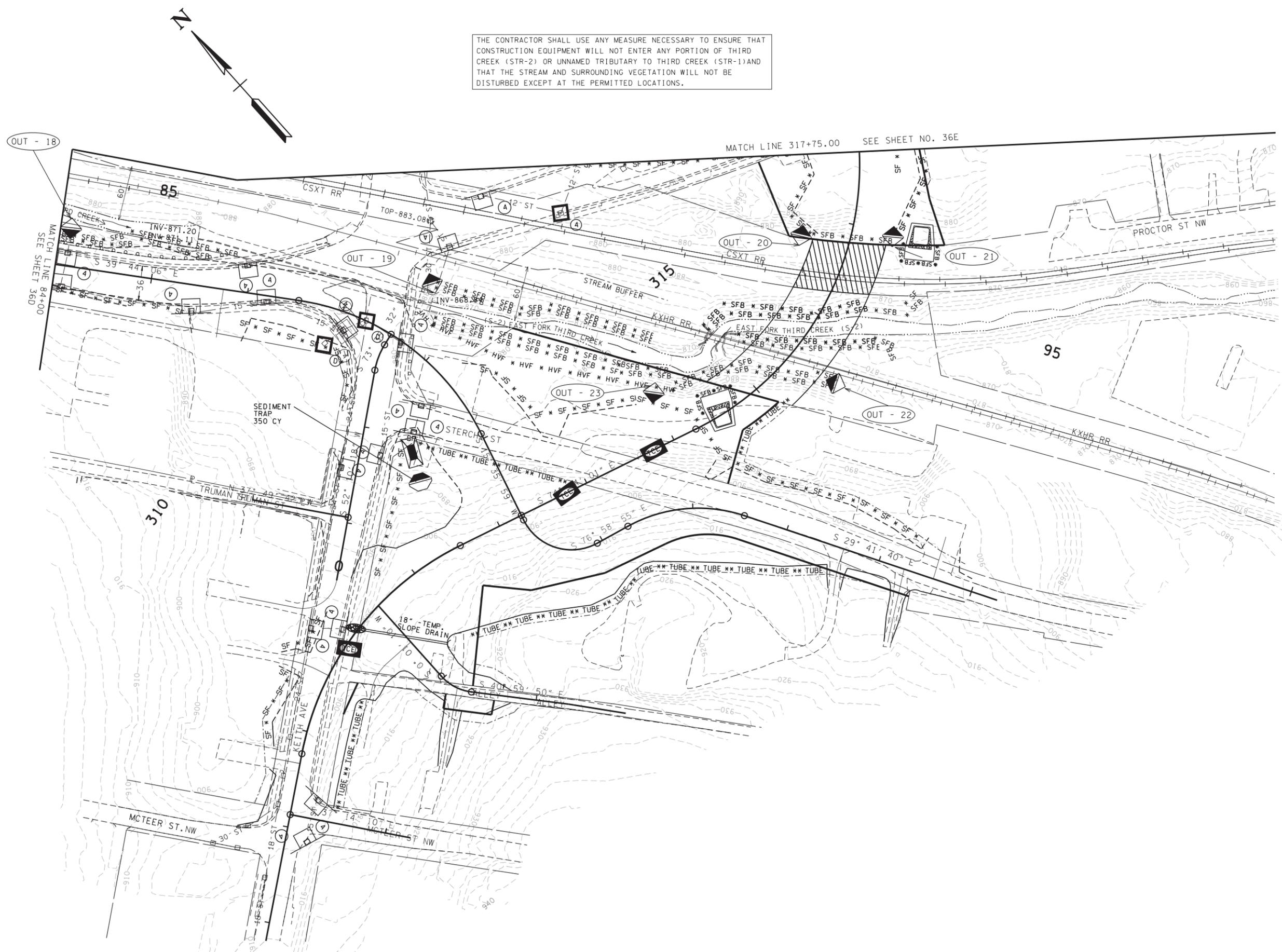
COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.0001 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN
MASSACHUSETTS AVE.
SCALE: 1"=50'

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2016	HPP/STP/NH-62(34)	36H

THE CONTRACTOR SHALL USE ANY MEASURE NECESSARY TO ENSURE THAT CONSTRUCTION EQUIPMENT WILL NOT ENTER ANY PORTION OF THIRD CREEK (STR-2) OR UNNAMED TRIBUTARY TO THIRD CREEK (STR-1) AND THAT THE STREAM AND SURROUNDING VEGETATION WILL NOT BE DISTURBED EXCEPT AT THE PERMITTED LOCATIONS.



NOTE: CLEARING SHALL BE LIMITED TO 10 FEET OR LESS OUTSIDE OF DISTURBANCE (CUT/FILL LINES).

UNOFFICIAL SET
NOT FOR BIDDING

SEALED BY

COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.0001 & TIED TO THE TGRN.

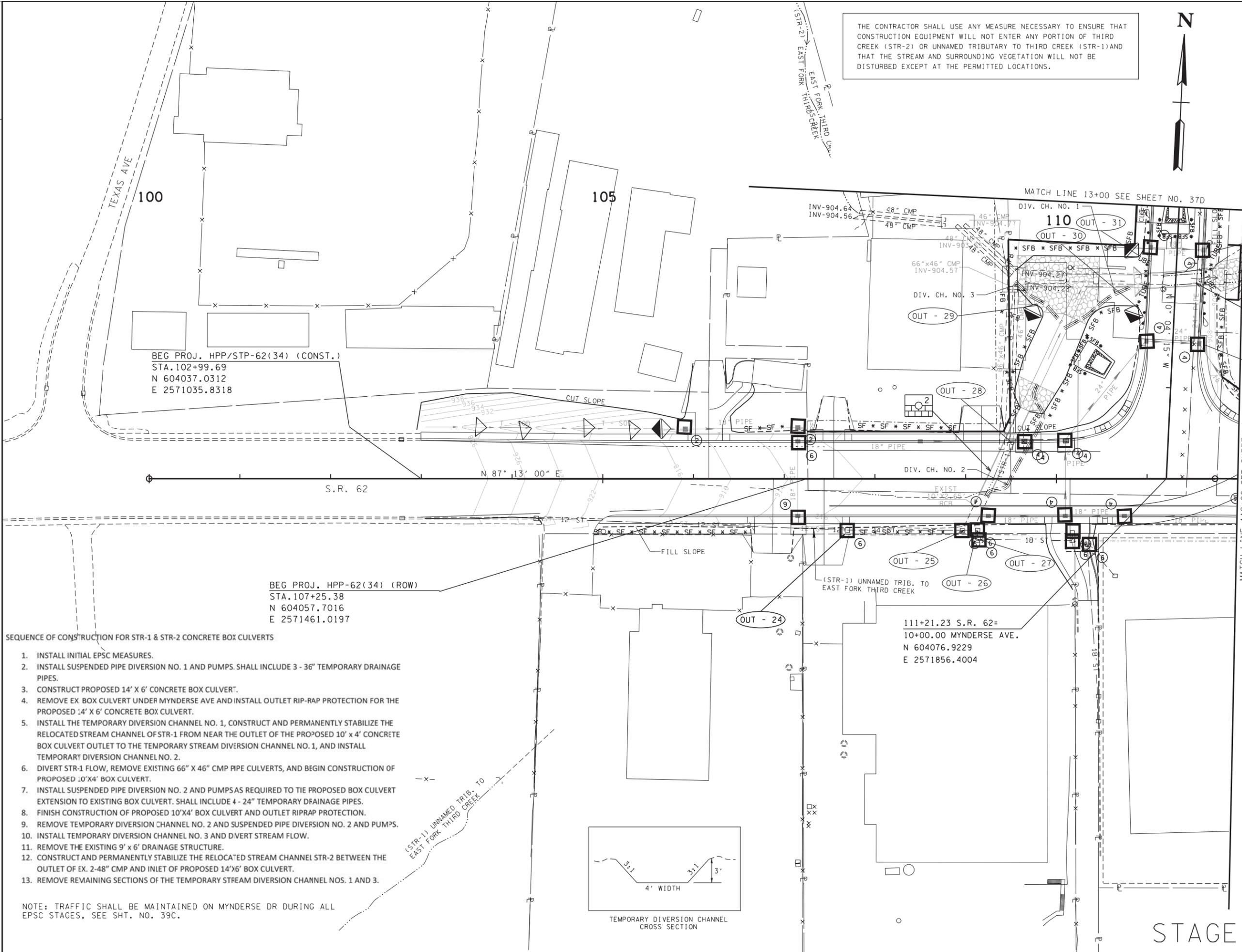
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN
KEITH AVE. WEST
SCALE: 1"=50'

STAGE 1

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2016	HPP/STP/NH-62(34)	37

THE CONTRACTOR SHALL USE ANY MEASURE NECESSARY TO ENSURE THAT CONSTRUCTION EQUIPMENT WILL NOT ENTER ANY PORTION OF THIRD CREEK (STR-2) OR UNNAMED TRIBUTARY TO THIRD CREEK (STR-1) AND THAT THE STREAM AND SURROUNDING VEGETATION WILL NOT BE DISTURBED EXCEPT AT THE PERMITTED LOCATIONS.



BEG PROJ. HPP/STP-62(34) (CONST.)
STA. 102+99.69
N 604037.0312
E 2571035.8318

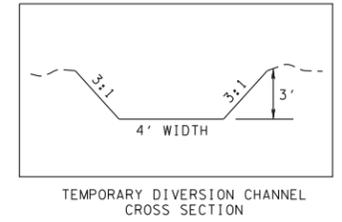
BEG PROJ. HPP-62(34) (ROW)
STA. 107+25.38
N 604057.7016
E 2571461.0197

111+21.23 S.R. 62=
10+00.00 MYNDERSE AVE.
N 604076.9229
E 2571856.4004

SEQUENCE OF CONSTRUCTION FOR STR-1 & STR-2 CONCRETE BOX CULVERTS

1. INSTALL INITIAL EPSC MEASURES.
2. INSTALL SUSPENDED PIPE DIVERSION NO. 1 AND PUMPS. SHALL INCLUDE 3 - 36" TEMPORARY DRAINAGE PIPES.
3. CONSTRUCT PROPOSED 14' X 6' CONCRETE BOX CULVERT.
4. REMOVE EX. BOX CULVERT UNDER MYNDERSE AVE AND INSTALL OUTLET RIP-RAP PROTECTION FOR THE PROPOSED 14' X 6' CONCRETE BOX CULVERT.
5. INSTALL THE TEMPORARY DIVERSION CHANNEL NO. 1, CONSTRUCT AND PERMANENTLY STABILIZE THE RELOCATED STREAM CHANNEL OF STR-1 FROM NEAR THE OUTLET OF THE PROPOSED 10' X 4' CONCRETE BOX CULVERT OUTLET TO THE TEMPORARY STREAM DIVERSION CHANNEL NO. 1, AND INSTALL TEMPORARY DIVERSION CHANNEL NO. 2.
6. DIVERT STR-1 FLOW, REMOVE EXISTING 66" X 46" CMP PIPE CULVERTS, AND BEGIN CONSTRUCTION OF PROPOSED 10' X 4' BOX CULVERT.
7. INSTALL SUSPENDED PIPE DIVERSION NO. 2 AND PUMPS AS REQUIRED TO TIE PROPOSED BOX CULVERT EXTENSION TO EXISTING BOX CULVERT. SHALL INCLUDE 4 - 24" TEMPORARY DRAINAGE PIPES.
8. FINISH CONSTRUCTION OF PROPOSED 10' X 4' BOX CULVERT AND OUTLET RIPRAP PROTECTION.
9. REMOVE TEMPORARY DIVERSION CHANNEL NO. 2 AND SUSPENDED PIPE DIVERSION NO. 2 AND PUMPS.
10. INSTALL TEMPORARY DIVERSION CHANNEL NO. 3 AND DIVERT STREAM FLOW.
11. REMOVE THE EXISTING 9' X 6' DRAINAGE STRUCTURE.
12. CONSTRUCT AND PERMANENTLY STABILIZE THE RELOCATED STREAM CHANNEL STR-2 BETWEEN THE OUTLET OF EX. 2-48" CMP AND INLET OF PROPOSED 14' X 6' BOX CULVERT.
13. REMOVE REMAINING SECTIONS OF THE TEMPORARY STREAM DIVERSION CHANNEL NOS. 1 AND 3.

NOTE: TRAFFIC SHALL BE MAINTAINED ON MYNDERSE DR DURING ALL EPSC STAGES, SEE SHT. NO. 39C.



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COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.0001 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

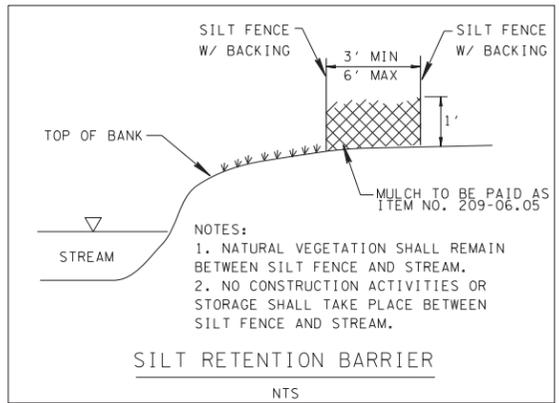
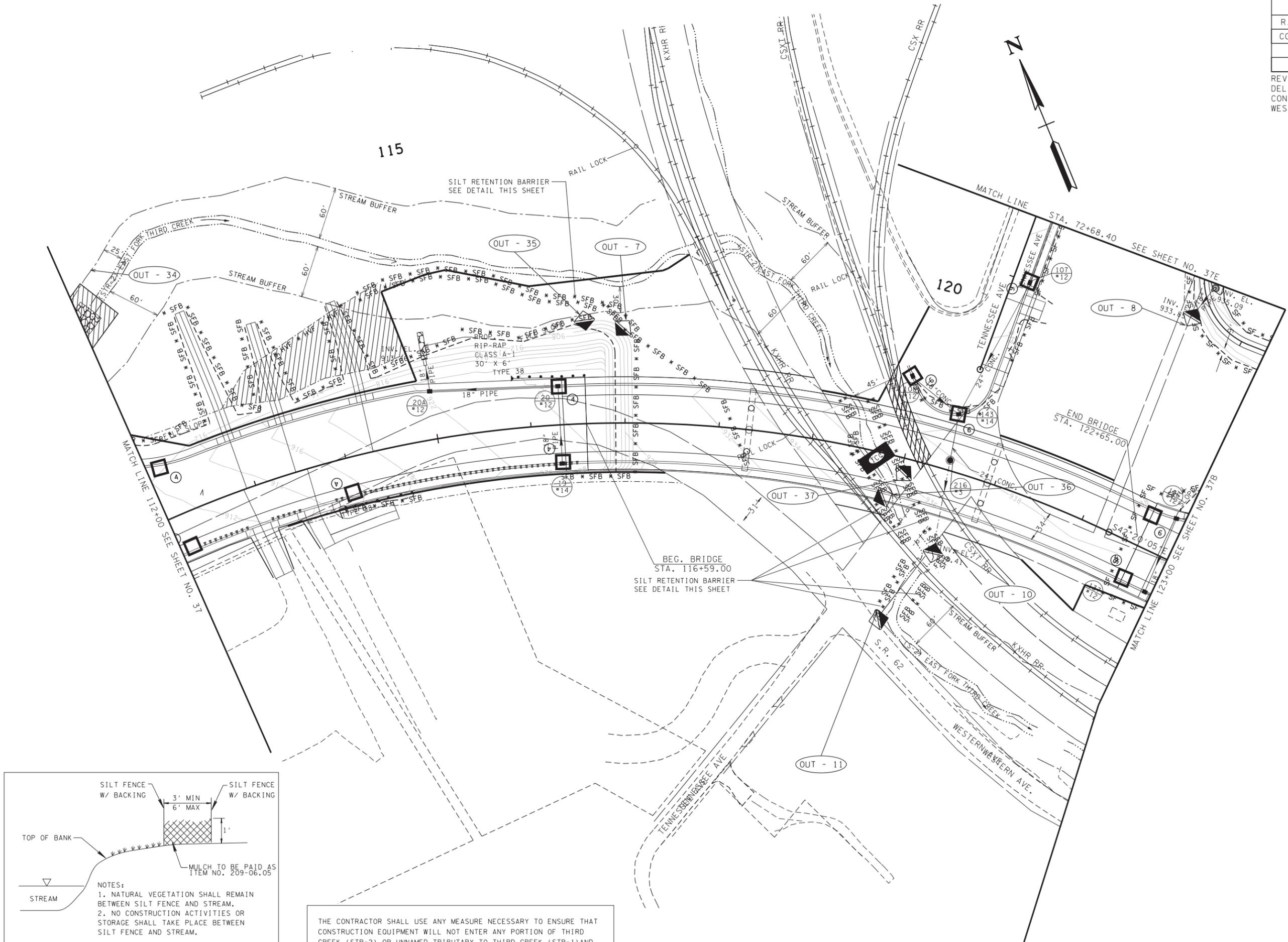
EROSION PREVENTION AND SEDIMENT CONTROL PLAN
STA. 100+00 TO STA. 112+00
SCALE: 1"=50'

STAGE 2

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TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-62(34)	36B
CONST.	2016	HPP/STP/NH-62(34)	37A

REV. 10-10-12: REVISED SHEET NO. DELETED IMPROVEMENTS AND EROSION CONTROL FOR TENNESSEE AVE. TO WESTERN AVE.



THE CONTRACTOR SHALL USE ANY MEASURE NECESSARY TO ENSURE THAT CONSTRUCTION EQUIPMENT WILL NOT ENTER ANY PORTION OF THIRD CREEK (STR-2) OR UNNAMED TRIBUTARY TO THIRD CREEK (STR-1) AND THAT THE STREAM AND SURROUNDING VEGETATION WILL NOT BE DISTURBED EXCEPT AT THE PERMITTED LOCATIONS.

UNOFFICIAL SET
NOT FOR BIDDING

SEALED BY

COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.0001 & TIED TO THE TGRN.

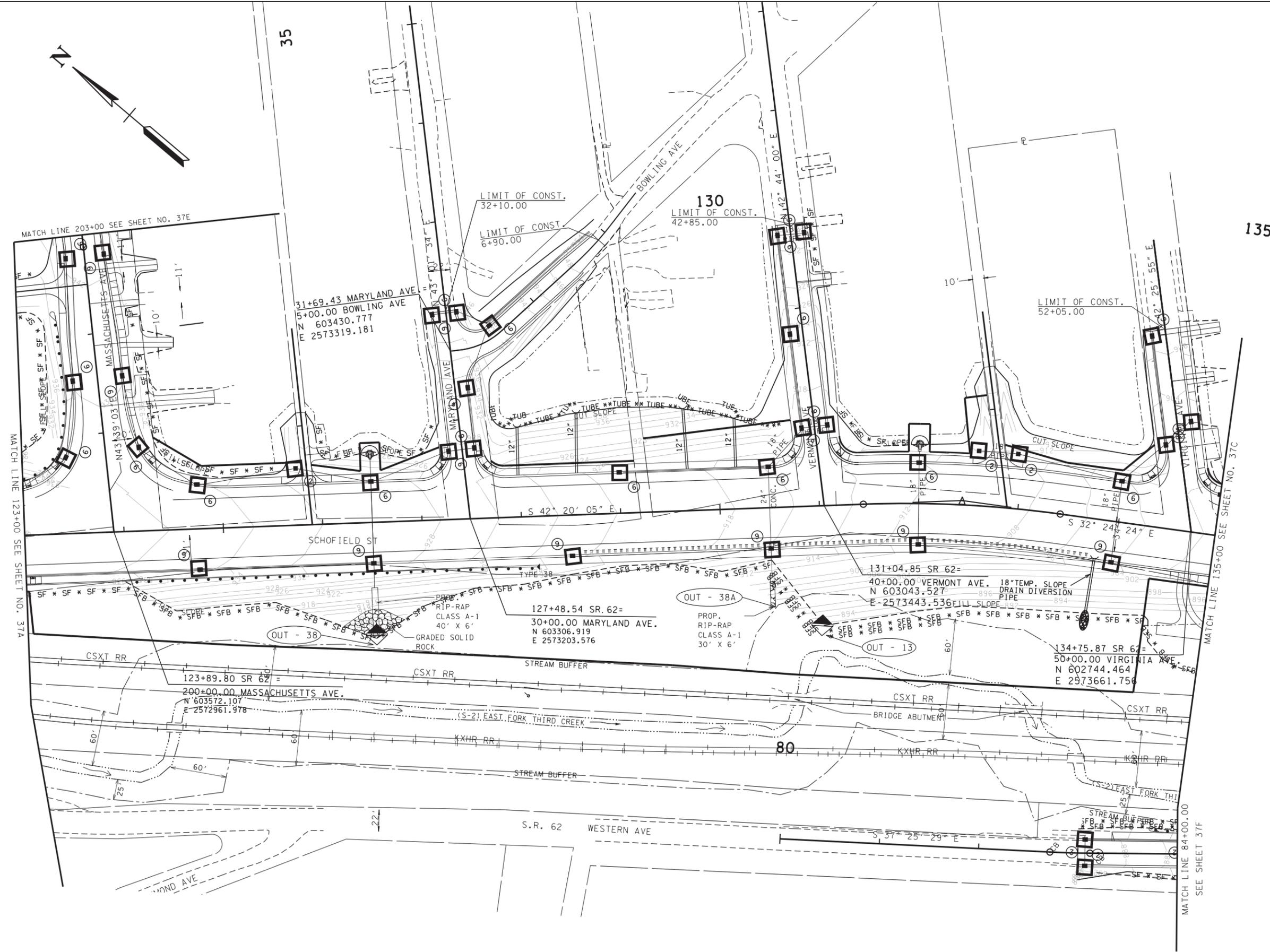
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN
STA. 112+00 TO STA. 123+00
SCALE: 1"=50'

STAGE 2

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-62(34)	36C
CONST.	2016	HPP/STP/NH-62(34)	37B

REV. 10-10-12: REVISED SHEET NO. AND MATCH LINE FOR WESTERN AVE.



THE CONTRACTOR SHALL USE ANY MEASURE NECESSARY TO ENSURE THAT CONSTRUCTION EQUIPMENT WILL NOT ENTER ANY PORTION OF THIRD CREEK (STR-2) OR UNNAMED TRIBUTARY TO THIRD CREEK (STR-1) AND THAT THE STREAM AND SURROUNDING VEGETATION WILL NOT BE DISTURBED EXCEPT AT THE PERMITTED LOCATIONS.

**UNOFFICIAL SET
NOT FOR BIDDING**

SEALED BY

COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.0001 & TIED TO THE TGRN.

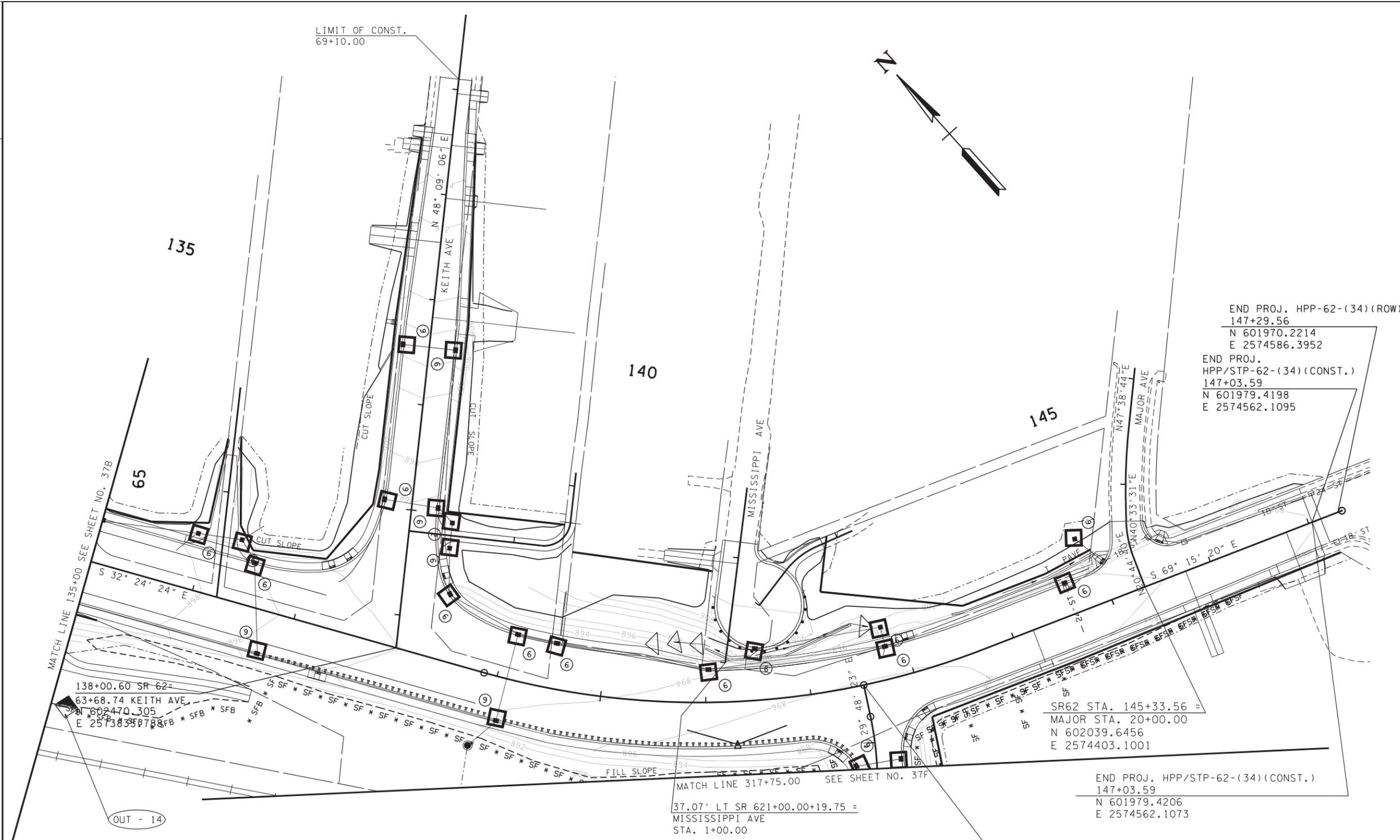
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN
STA. 123+00 TO STA. 135+00
SCALE: 1"=50'

STAGE 2

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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2016	HPP/STP/NH-62(34)	37C



END PROJ. HPP-62-(34) (ROW)
147+29.56
N 601970.2214
E 2574586.3952

END PROJ.
HPP/STP-62-(34) (CONST.)
147+03.59
N 601979.4198
E 2574562.1095

SR62 STA. 145+33.56 =
MAJOR STA. 20+00.00
N 602039.6456
E 2574403.1001

END PROJ. HPP/STP-62-(34) (CONST.)
147+03.59
N 601979.4206
E 2574562.1073

SR62 STA. 142+50.98 =
KEITHWEST STA. 318+55.35
N 602148.3142
E 2574142.6197

37.07' LT SR 621+00.00+19.75 =
MISSISSIPPI AVE
STA. 1+00.00

138+00.60 SR 62=
63+68.74 KEITH AVE
N 602470.305
E 2573835978

LIMIT OF CONST.
69+10.00

MATCH LINE 135+00 SEE SHEET NO. 37B

MATCH LINE 317+75.00 SEE SHEET NO. 37F

THE CONTRACTOR SHALL USE ANY MEASURE NECESSARY TO ENSURE THAT CONSTRUCTION EQUIPMENT WILL NOT ENTER ANY PORTION OF THIRD CREEK (STR-2) OR UNNAMED TRIBUTARY TO THIRD CREEK (STR-1) AND THAT THE STREAM AND SURROUNDING VEGETATION WILL NOT BE DISTURBED EXCEPT AT THE PERMITTED LOCATIONS.

UNOFFICIAL SET
NOT FOR BIDDING

SEALED BY

COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.0001 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

STAGE 2

STA. 135+00 TO STA. 147+00
SCALE: 1"=50'

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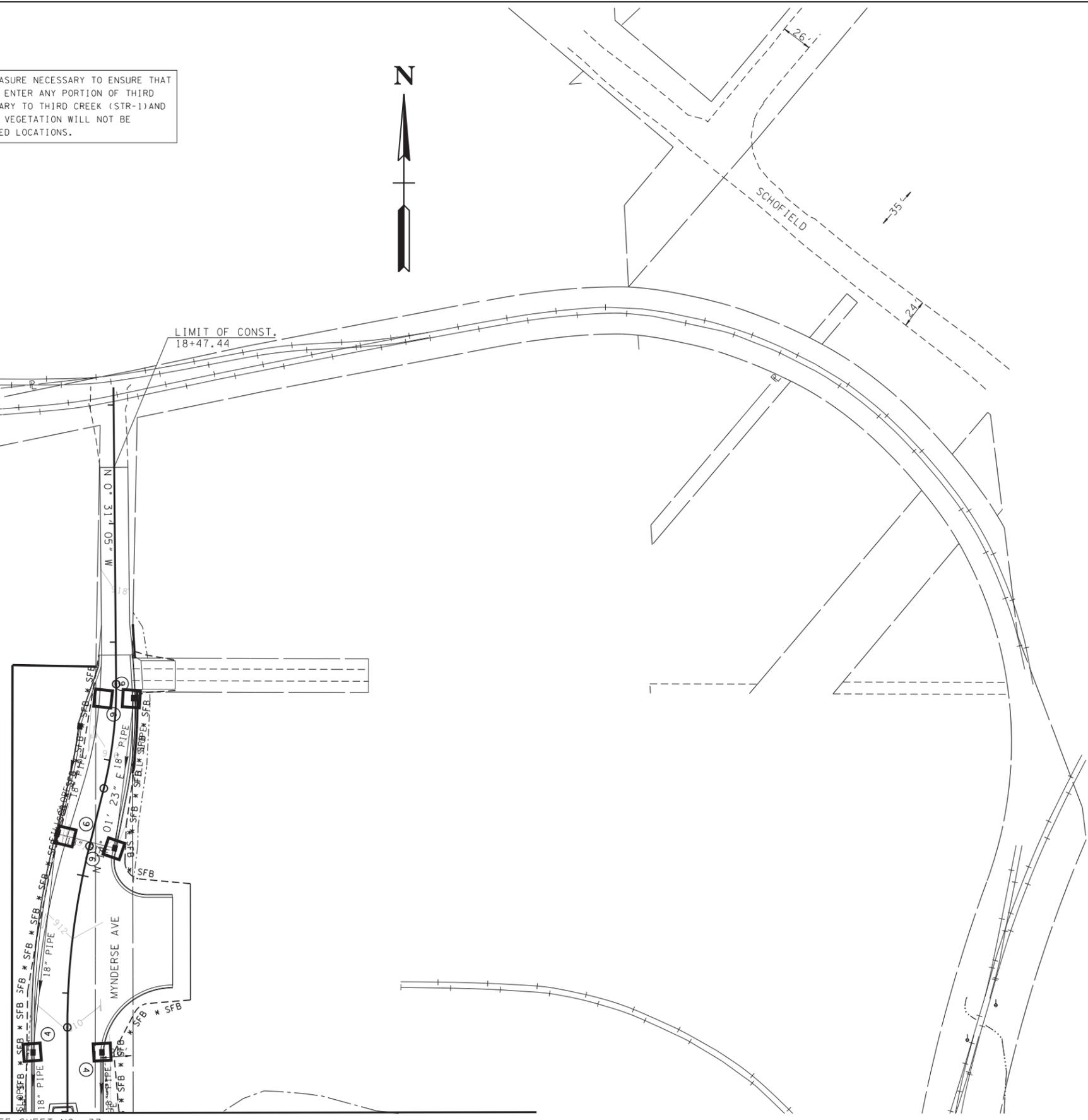
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2016	HPP/STP/NH-62(34)	37D

THE CONTRACTOR SHALL USE ANY MEASURE NECESSARY TO ENSURE THAT CONSTRUCTION EQUIPMENT WILL NOT ENTER ANY PORTION OF THIRD CREEK (STR-2) OR UNNAMED TRIBUTARY TO THIRD CREEK (STR-1) AND THAT THE STREAM AND SURROUNDING VEGETATION WILL NOT BE DISTURBED EXCEPT AT THE PERMITTED LOCATIONS.



15

LIMIT OF CONST.
18+47.44



MATCH LINE 13+00 SEE SHEET NO. 37

**UNOFFICIAL
SET
NOT FOR
BIDDING**

SEALED BY

COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.0001 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

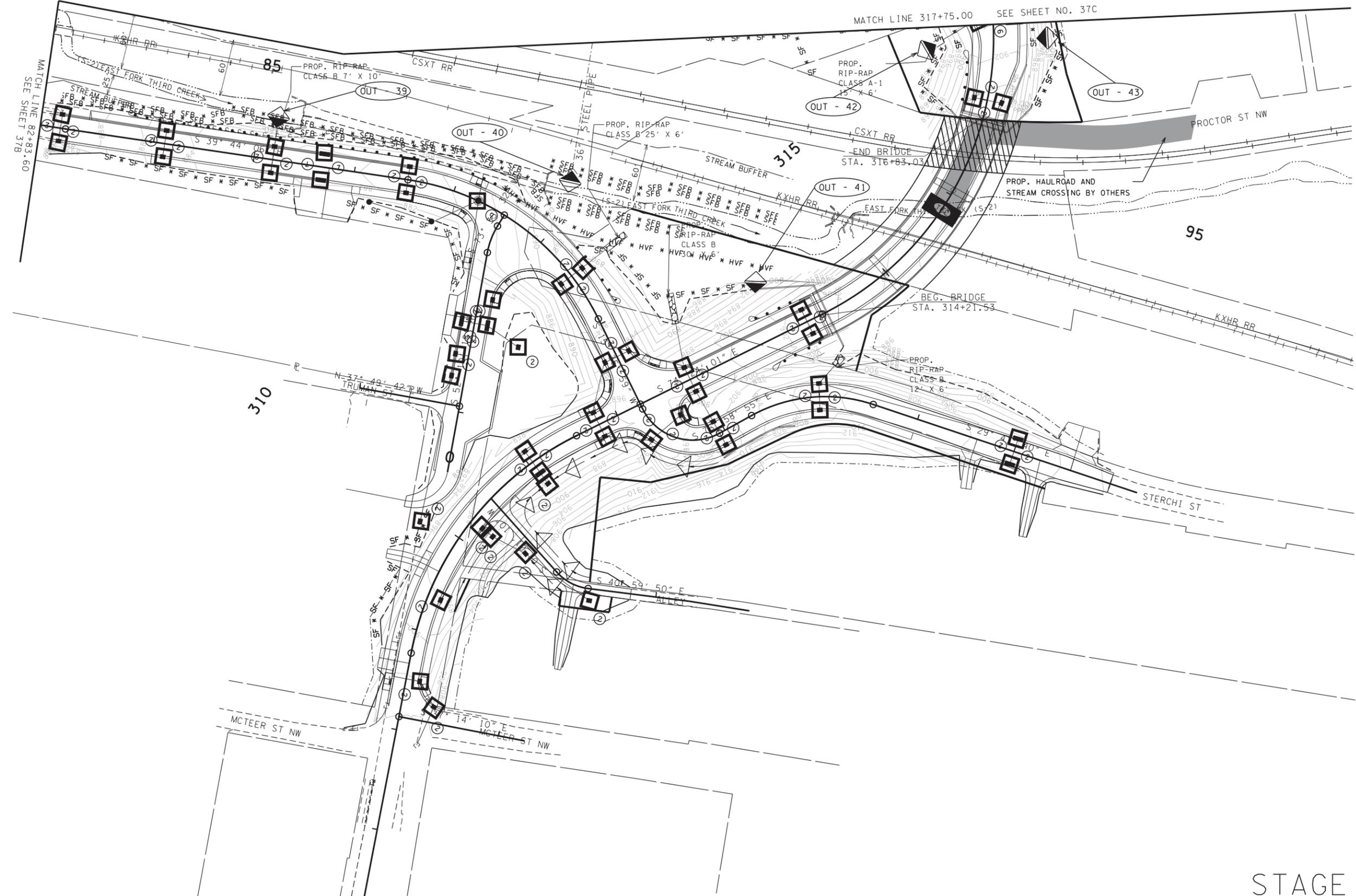
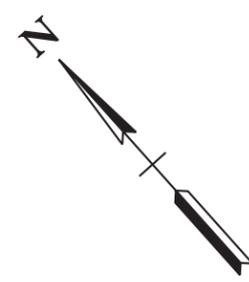
**EROSION
PREVENTION
AND SEDIMENT
CONTROL PLAN**

MYNDERSE AVE.
SCALE: 1"=50'

STAGE 2

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2016	HPP/STP/NH-62(34)	37F

THE CONTRACTOR SHALL USE ANY MEASURE NECESSARY TO ENSURE THAT CONSTRUCTION EQUIPMENT WILL NOT ENTER ANY PORTION OF THIRD CREEK (STR-2) OR UNNAMED TRIBUTARY TO THIRD CREEK (STR-1) AND THAT THE STREAM AND SURROUNDING VEGETATION WILL NOT BE DISTURBED EXCEPT AT THE PERMITTED LOCATIONS.



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NOT FOR BIDDING

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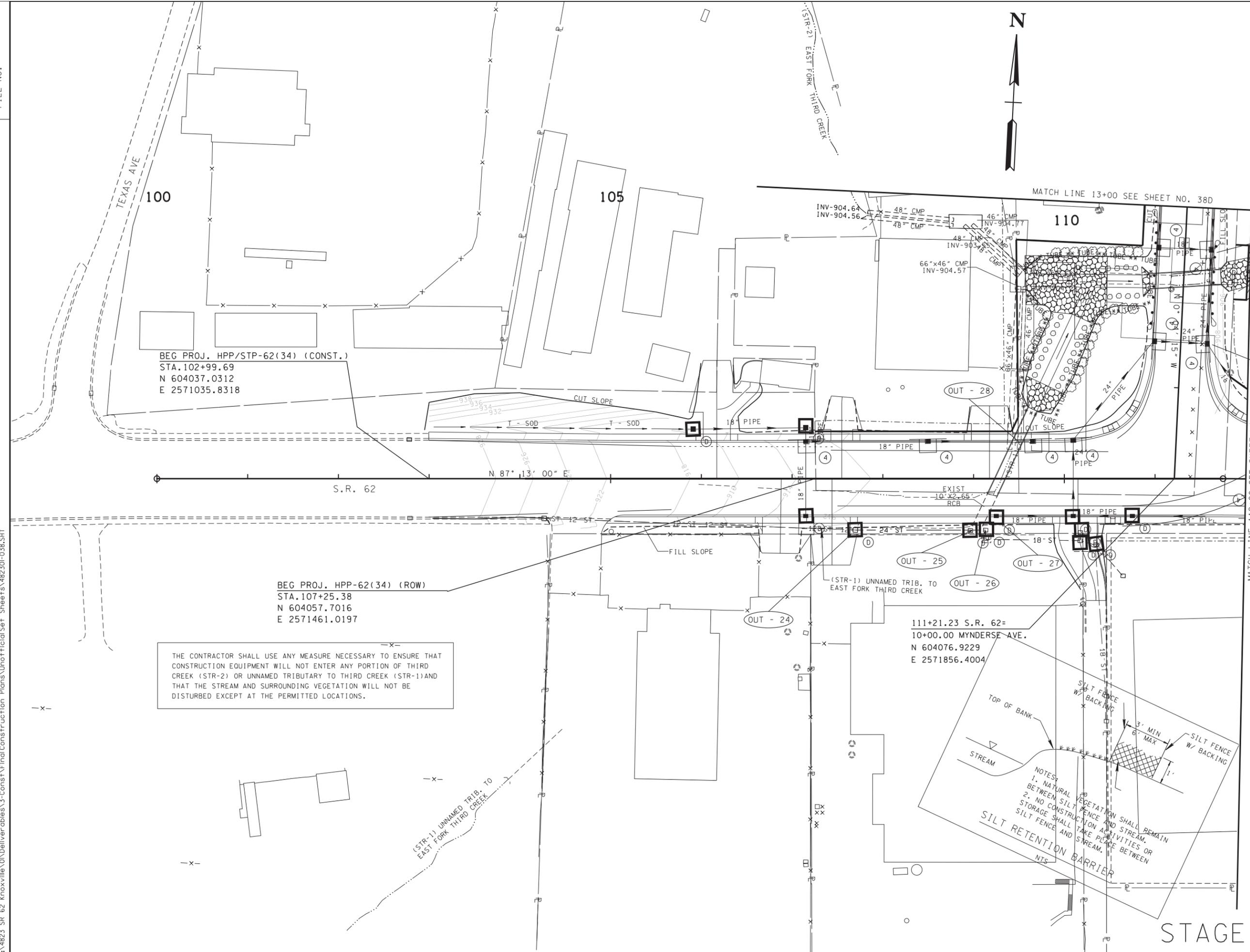
COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.0001 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN
KEITH AVE. WEST
SCALE: 1"=50'

STAGE 2

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2016	HPP/STP/NH-62(34)	38

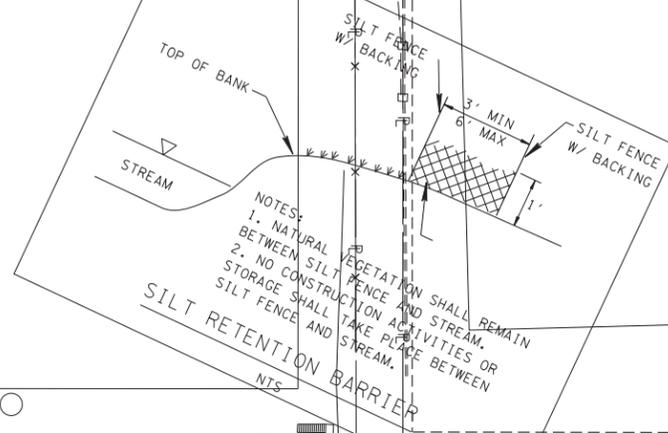


BEG PROJ. HPP/STP-62(34) (CONST.)
STA. 102+99.69
N 604037.0312
E 2571035.8318

BEG PROJ. HPP-62(34) (ROW)
STA. 107+25.38
N 604057.7016
E 2571461.0197

THE CONTRACTOR SHALL USE ANY MEASURE NECESSARY TO ENSURE THAT CONSTRUCTION EQUIPMENT WILL NOT ENTER ANY PORTION OF THIRD CREEK (STR-2) OR UNNAMED TRIBUTARY TO THIRD CREEK (STR-1) AND THAT THE STREAM AND SURROUNDING VEGETATION WILL NOT BE DISTURBED EXCEPT AT THE PERMITTED LOCATIONS.

111+21.23 S.R. 62=
10+00.00 MYNDERSE AVE.
N 604076.9229
E 2571856.4004



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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN
STA. 100+00 TO STA. 112+00
SCALE: 1"=50'

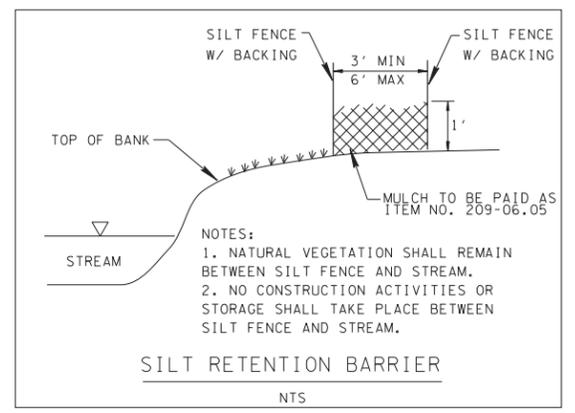
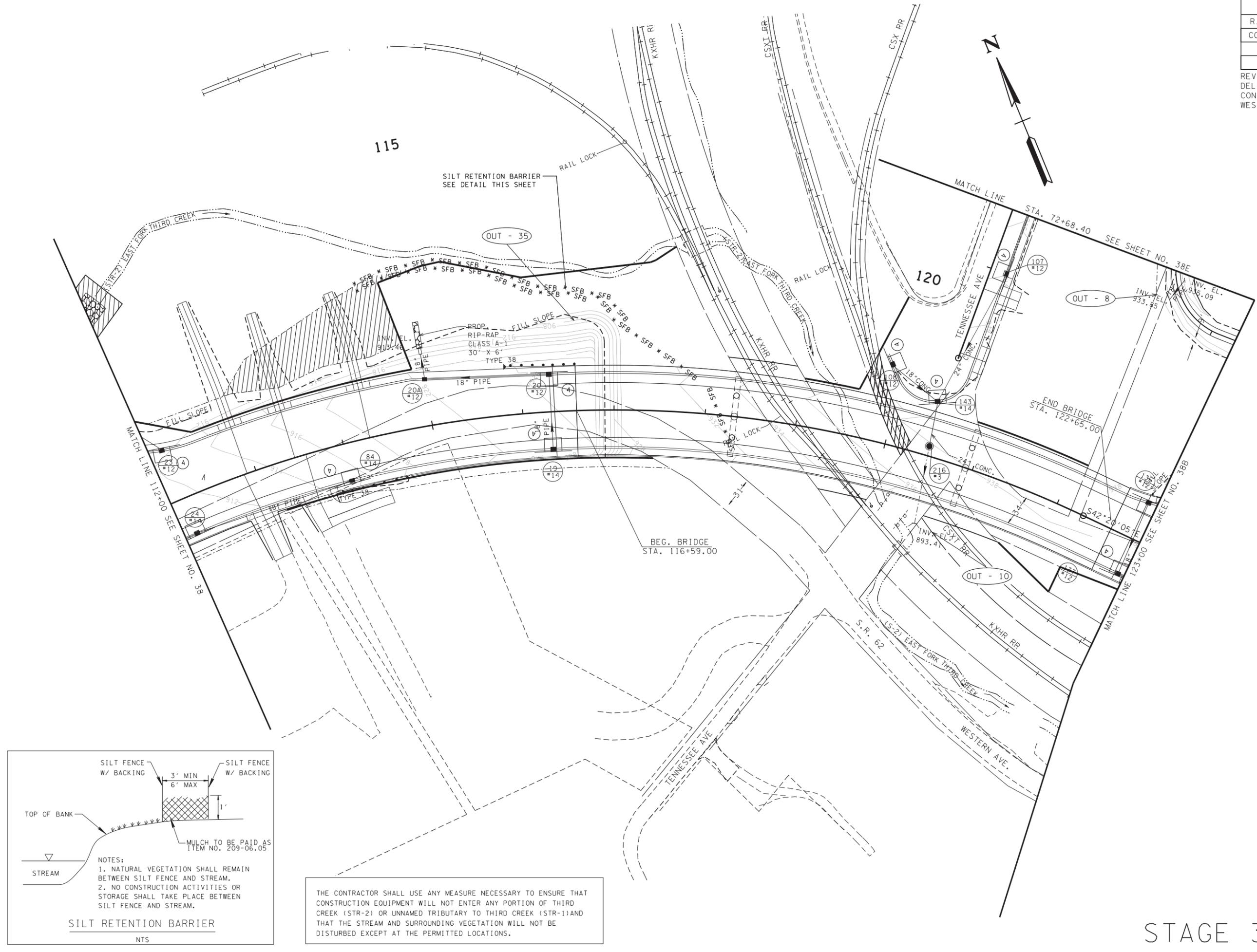
STAGE 3

7/26/2016 8:30:30 PM
N:\4823 SR 62 Knoxville\0\Deliverables\3-Const\FinalConstruction Plans\UnofficialSet_Sheets\482301-038.SHT

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-62(34)	36B
CONST.	2016	HPP/STP/NH-62(34)	38A

REV. 10-10-12: REVISED SHEET NO. DELETED IMPROVEMENTS AND EROSION CONTROL FOR TENNESSEE AVE. TO WESTERN AVE.

7/26/2016 8:30:31PM N:\4823 SR 62 Knoxville\01\Deliverables\3-Const\FinalConstruction Plans\Unofficial\Set Sheets\482301-038A.SHT



THE CONTRACTOR SHALL USE ANY MEASURE NECESSARY TO ENSURE THAT CONSTRUCTION EQUIPMENT WILL NOT ENTER ANY PORTION OF THIRD CREEK (STR-2) OR UNNAMED TRIBUTARY TO THIRD CREEK (STR-1) AND THAT THE STREAM AND SURROUNDING VEGETATION WILL NOT BE DISTURBED EXCEPT AT THE PERMITTED LOCATIONS.

**UNOFFICIAL SET
NOT FOR BIDDING**

SEALED BY

COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.0001 & TIED TO THE TGRN.

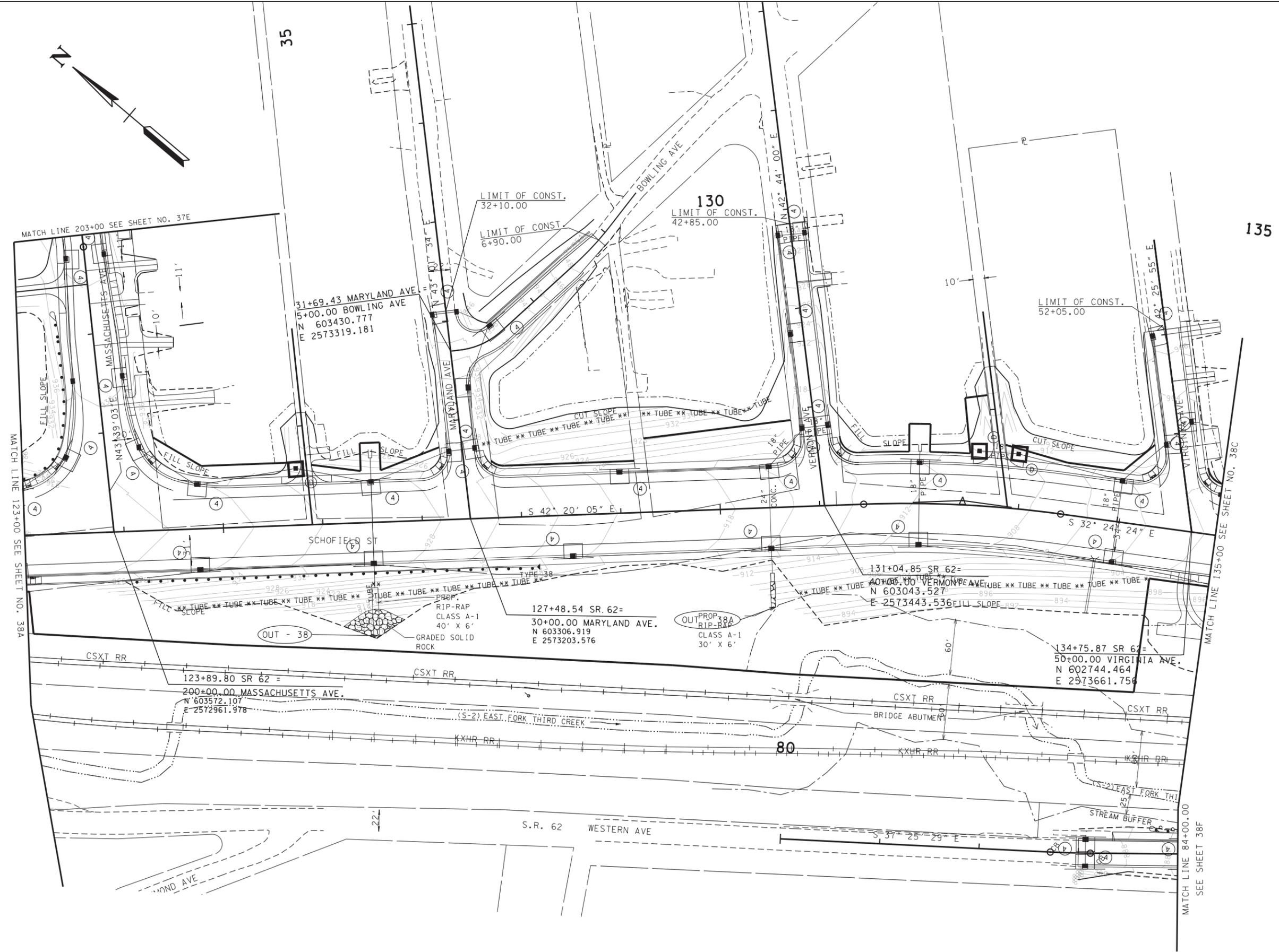
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN
STA. 112+00 TO STA. 123+00
SCALE: 1"=50'

STAGE 3

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-62(34)	36C
CONST.	2016	HPP/STP/NH-62(34)	38B

REV. 10-10-12: REVISED SHEET NO. AND MATCH LINE FOR WESTERN AVE.



THE CONTRACTOR SHALL USE ANY MEASURE NECESSARY TO ENSURE THAT CONSTRUCTION EQUIPMENT WILL NOT ENTER ANY PORTION OF THIRD CREEK (STR-2) OR UNNAMED TRIBUTARY TO THIRD CREEK (STR-1) AND THAT THE STREAM AND SURROUNDING VEGETATION WILL NOT BE DISTURBED EXCEPT AT THE PERMITTED LOCATIONS.

UNOFFICIAL SET
NOT FOR BIDDING

SEALED BY

COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.0001 & TIED TO THE TGRN.

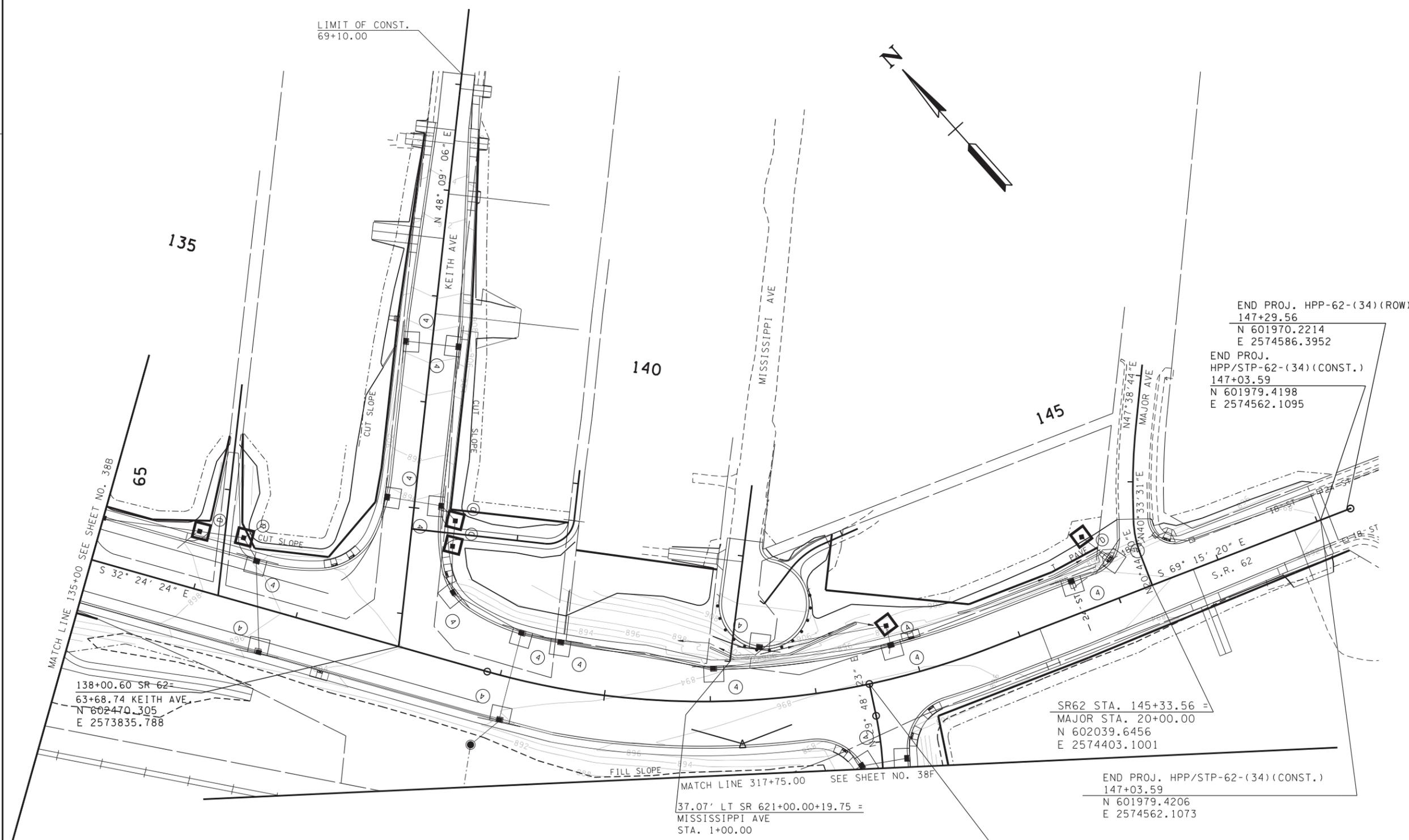
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN
STA. 123+00 TO STA. 135+00
SCALE: 1"=50'

STAGE 3

7/26/2016 8:30:32 PM
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TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2016	HPP/STP/NH-62(34)	38C



END PROJ. HPP-62-(34) (ROW)
147+29.56
N 601970.2214
E 2574586.3952

END PROJ.
HPP/STP-62-(34) (CONST.)
147+03.59
N 601979.4198
E 2574562.1095

**UNOFFICIAL
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NOT FOR
BIDDING**

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FACTOR 1.0001 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**EROSION
PREVENTION
AND SEDIMENT
CONTROL PLAN**

STA. 135+00 TO STA. 147+00
SCALE: 1"=50'

STAGE 3

THE CONTRACTOR SHALL USE ANY MEASURE NECESSARY TO ENSURE THAT CONSTRUCTION EQUIPMENT WILL NOT ENTER ANY PORTION OF THIRD CREEK (STR-2) OR UNNAMED TRIBUTARY TO THIRD CREEK (STR-1) AND THAT THE STREAM AND SURROUNDING VEGETATION WILL NOT BE DISTURBED EXCEPT AT THE PERMITTED LOCATIONS.

7/26/2016 8:30:38 PM
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MATCH LINE 135+00 SEE SHEET NO. 38B

MATCH LINE 317+75.00 SEE SHEET NO. 38F

138+00.60 SR 62 =
63+68.74 KEITH AVE.
N 602470.305
E 2573835.788

SR62 STA. 145+33.56 =
MAJOR STA. 20+00.00
N 602039.6456
E 2574403.1001

END PROJ. HPP/STP-62-(34) (CONST.)
147+03.59
N 601979.4206
E 2574562.1073

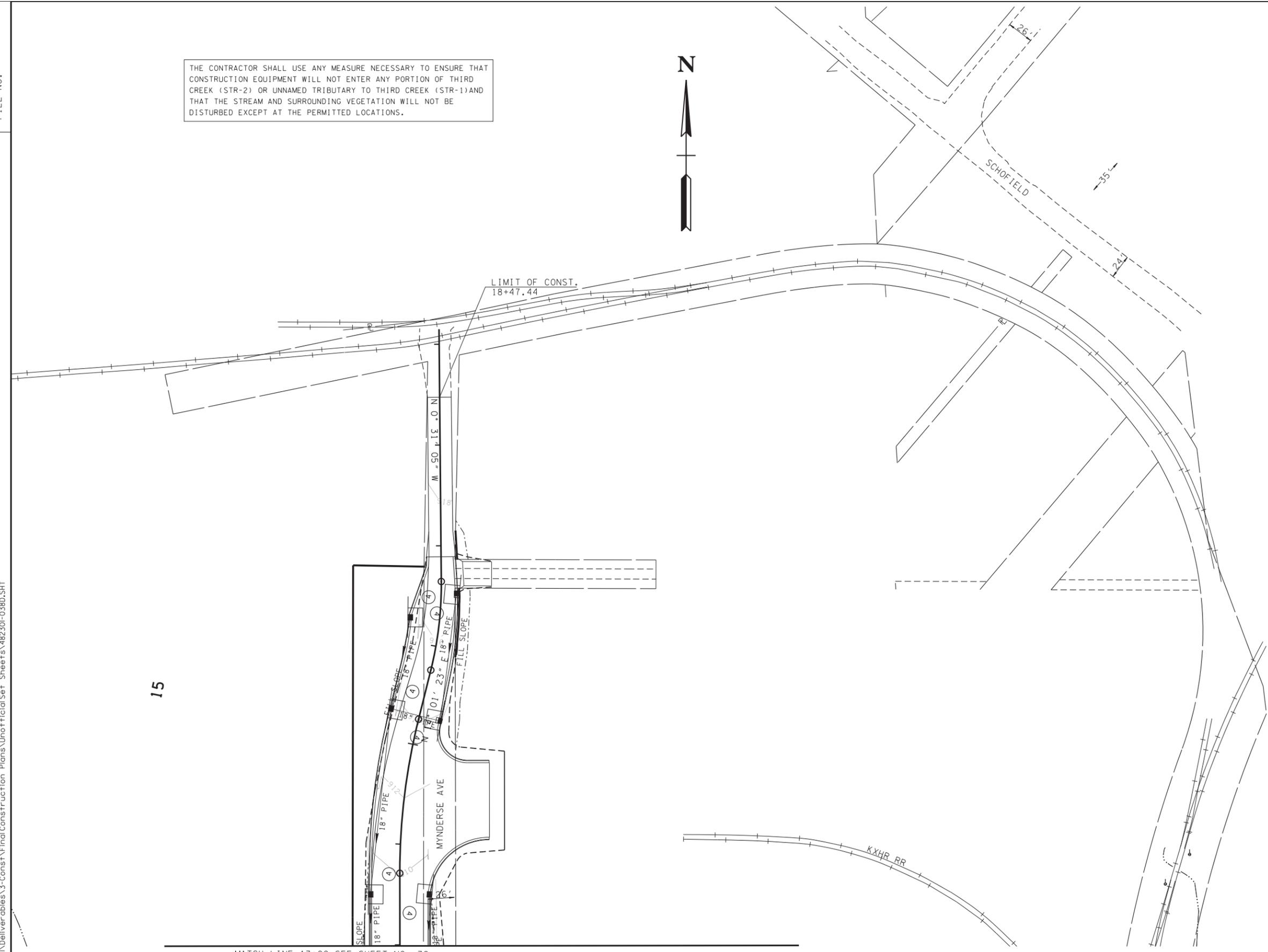
SR62 STA. 142+50.98 =
KEITHWEST STA. 318+55.35
N 602148.3142
E 2574142.6197

37.07' LT SR 621+00.00+19.75 =
MISSISSIPPI AVE
STA. 1+00.00

LIMIT OF CONST.
69+10.00

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2016	HPP/STP/NH-62(34)	38D

THE CONTRACTOR SHALL USE ANY MEASURE NECESSARY TO ENSURE THAT CONSTRUCTION EQUIPMENT WILL NOT ENTER ANY PORTION OF THIRD CREEK (STR-2) OR UNNAMED TRIBUTARY TO THIRD CREEK (STR-1) AND THAT THE STREAM AND SURROUNDING VEGETATION WILL NOT BE DISTURBED EXCEPT AT THE PERMITTED LOCATIONS.



MATCH LINE 13+00 SEE SHEET NO. 38

**UNOFFICIAL
SET
NOT FOR
BIDDING**

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COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.0001 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

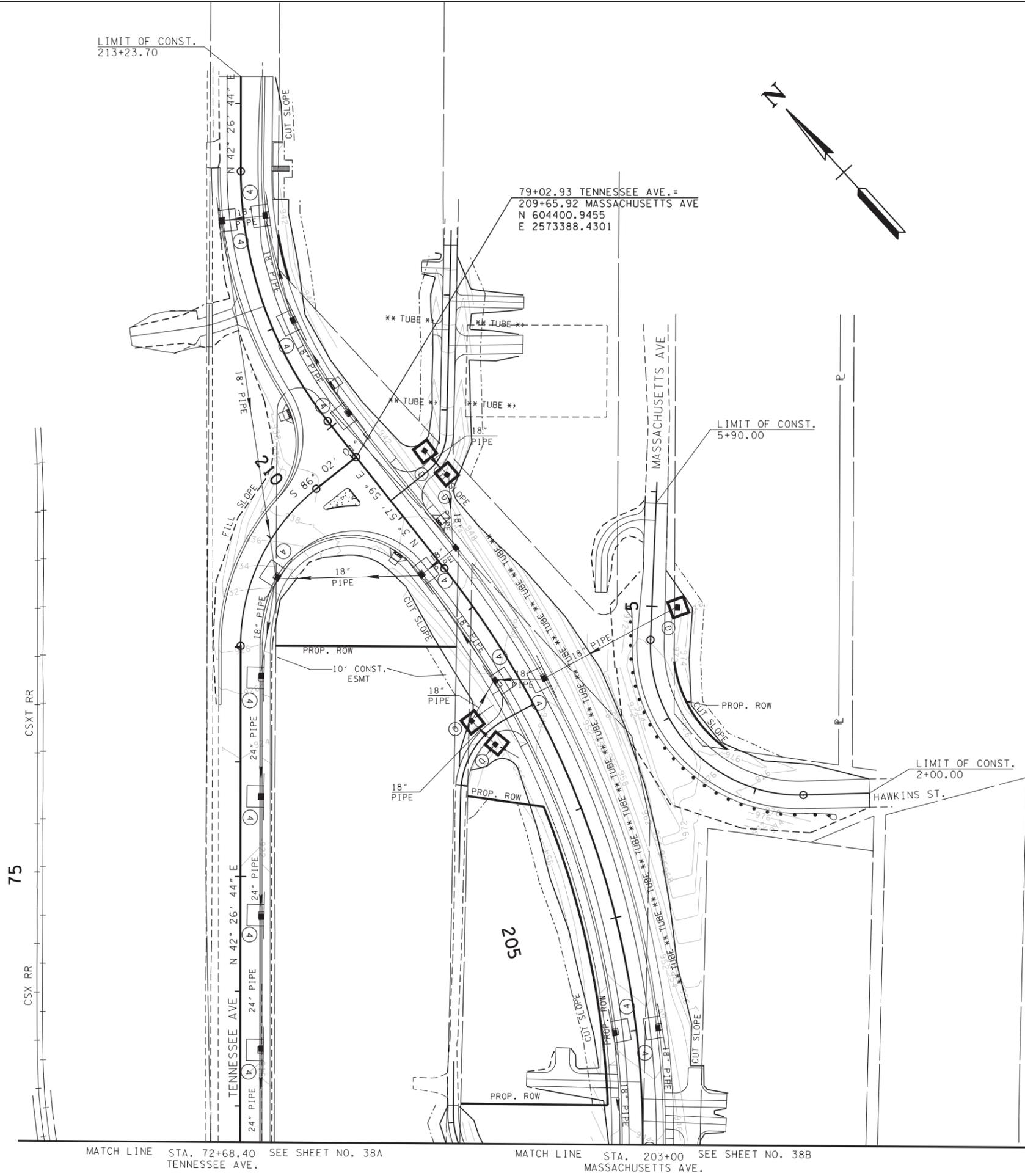
**EROSION
PREVENTION
AND SEDIMENT
CONTROL PLAN**
MYNDERSE AVE.
SCALE: 1"=50'

STAGE 3

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2016	HPP/STP/NH-62(34)	38E

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THE CONTRACTOR SHALL USE ANY MEASURE NECESSARY TO ENSURE THAT CONSTRUCTION EQUIPMENT WILL NOT ENTER ANY PORTION OF THIRD CREEK OR UNNAMED TRIBUTARY TO THIRD CREEK AND THAT THE STREAM AND SURROUNDING VEGETATION WILL NOT BE DISTURBED EXCEPT AT THE PERMITTED LOCATIONS.



UNOFFICIAL SET
NOT FOR BIDDING

SEALED BY

COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.0001 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN
MASSACHUSETTS AVE.
SCALE: 1"=50'

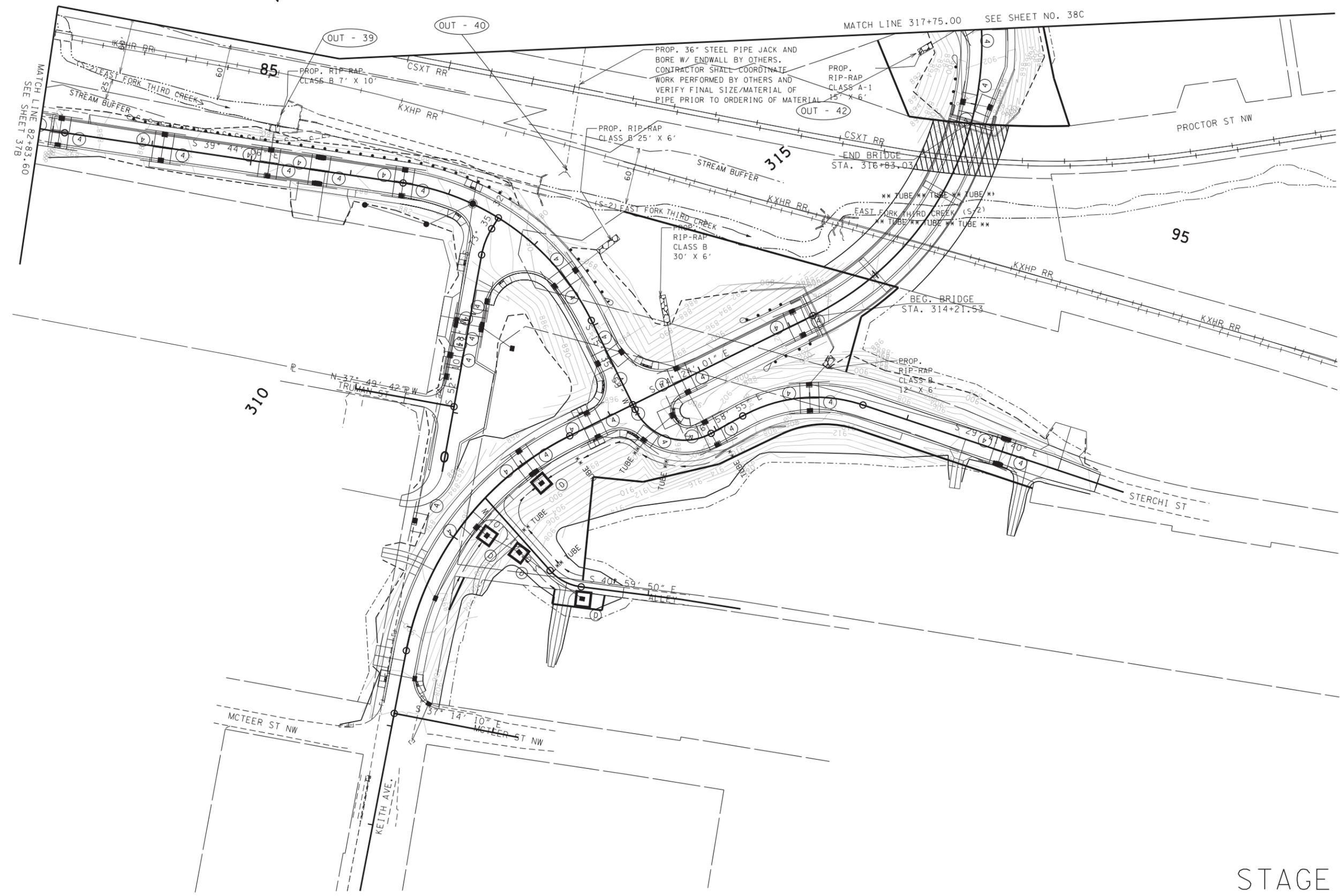
STAGE 3

MATCH LINE STA. 72+68.40 SEE SHEET NO. 38A
TENNESSEE AVE.

MATCH LINE STA. 203+00 SEE SHEET NO. 38B
MASSACHUSETTS AVE.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2016	HPP/STP/NH-62(34)	38F

THE CONTRACTOR SHALL USE ANY MEASURE NECESSARY TO ENSURE THAT CONSTRUCTION EQUIPMENT WILL NOT ENTER ANY PORTION OF THIRD CREEK (STR-2) OR UNNAMED TRIBUTARY TO THIRD CREEK (STR-1) AND THAT THE STREAM AND SURROUNDING VEGETATION WILL NOT BE DISTURBED EXCEPT AT THE PERMITTED LOCATIONS.



UNOFFICIAL SET
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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN
KEITH AVE. WEST
SCALE: 1"=50'

STAGE 3



Documentation and Permits Binder

State Route 62 (Western Ave.), From Texas Avenue to Major Avenue in Knoxville

Project No.: 47023-1257-14

PIN: 101204.00

Knox County, Tennessee

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

***Prepared by:*
CEC and ARCADIS**

Consultant Reference No.: (CEC 140-929) (ARCADIS CTT28011.0001)

Content Checklist

DOCUMENTS AND PERMITS BINDER

CHECKLIST

PROJECT NAME: STATE ROUTE 62 (WESTERN AVE.), FROM TEXAS AVENUE TO MAJOR AVENUE IN KNOXVILLE

PIN: 101204.00

PROJECT NO. 47023-1257-14

COUNTY: KNOX

1. INDEX OF REVISIONS
2. RAINFALL RECORD SHEETS
3. EPSC INSPECTION REPORTS
4. NOI AND NOC
5. BLANK NOT
6. CONSTRUCTION GENERAL PERMIT (CGP)
7. ENVIRONMENTAL PERMITS
 - 7.1 PERMIT APPLICATION LETTER
 - 7.2 PERMITS
 - a. TDEC ARAP
 - b. CORPS OF ENGINEERS (COE)
 - c. TVA 26A
 - d. OTHER
8. ECOLOGY REPORT
9. TRAINING CERTIFICATIONS
 - TDEC LEVEL I
 - a. EPSC INSPECTOR
 - b. TDOT PROJECT SUPERVISOR
 - c. TDOT PROJECT SUPERVISOR MANAGER
 - d. CONTRACTOR PROJECT SUPERVISOR
 - TDEC LEVEL II
 - e. TDOT PROJECT SUPERVISOR MANAGER
10. TMDL INFORMATION REQUIRED
 - a. Yes
 - b. No

1. Index of Revisions

2. Rainfall Record Sheets



TDOT EPSC Inspection Monthly Rainfall Data Log

Month _____ Year _____

Date	Day of Week ¹	Predicted Precipitation (%) ²	Rainfall Gage 1 (in)	Rainfall Gage 2 (in)	Rainfall Gage 3 (in)	Rainfall Gage 4 (in)	Rainfall Gage 5 (in)	Duration (hr)
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								

¹ Day of Week= Su,M,Tu,W,Th,F,Sa

² Predicted Precipitation Source: _____



NOAA Atlas 14, Volume 2, Version 3
Location name: Knoxville, Tennessee, US*
Latitude: 35.9741°, Longitude: -83.9589°
Elevation: 900 ft*
 * source: Google Maps



POINT PRECIPITATION FREQUENCY ESTIMATES

G.M. Bonnin, D. Martin, B. Lin, T. Parzybok, M.Yekta, and D. Riley

NOAA, National Weather Service, Silver Spring, Maryland

[PF_tabular](#) | [PF_graphical](#) | [Maps & aerials](#)

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)¹										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.320 (0.292 0.354)	0.377 (0.344 0.416)	0.445 (0.407 0.491)	0.507 (0.461 0.558)	0.588 (0.531 0.646)	0.655 (0.587 0.717)	0.724 (0.644 0.792)	0.793 (0.699 0.870)	0.889 (0.772 0.975)	0.971 (0.834 1.07)
10-min	0.512 (0.467 0.565)	0.603 (0.550 0.665)	0.713 (0.651 0.786)	0.812 (0.737 0.892)	0.938 (0.846 1.03)	1.04 (0.935 1.14)	1.15 (1.02 1.26)	1.26 (1.11 1.38)	1.41 (1.22 1.54)	1.53 (1.31 1.68)
15-min	0.639 (0.584 0.707)	0.758 (0.691 0.836)	0.902 (0.824 0.994)	1.03 (0.932 1.13)	1.19 (1.07 1.31)	1.32 (1.18 1.45)	1.45 (1.29 1.59)	1.59 (1.40 1.74)	1.77 (1.54 1.94)	1.92 (1.65 2.11)
30-min	0.877 (0.800 0.969)	1.05 (0.955 1.16)	1.28 (1.17 1.41)	1.49 (1.35 1.64)	1.76 (1.59 1.93)	1.99 (1.78 2.18)	2.23 (1.98 2.44)	2.47 (2.18 2.71)	2.82 (2.44 3.09)	3.11 (2.67 3.42)
60-min	1.09 (0.998 1.21)	1.31 (1.20 1.45)	1.64 (1.50 1.81)	1.94 (1.76 2.13)	2.34 (2.11 2.58)	2.69 (2.42 2.95)	3.07 (2.73 3.36)	3.47 (3.05 3.80)	4.04 (3.51 4.43)	4.54 (3.90 4.99)
2-hr	1.28 (1.17 1.41)	1.53 (1.40 1.68)	1.90 (1.74 2.09)	2.24 (2.04 2.46)	2.72 (2.45 2.98)	3.13 (2.81 3.42)	3.57 (3.17 3.90)	4.04 (3.56 4.42)	4.72 (4.09 5.17)	5.30 (4.53 5.82)
3-hr	1.38 (1.27 1.52)	1.65 (1.51 1.81)	2.04 (1.87 2.23)	2.39 (2.18 2.62)	2.89 (2.61 3.14)	3.32 (2.98 3.61)	3.77 (3.36 4.11)	4.26 (3.76 4.64)	4.96 (4.31 5.42)	5.56 (4.76 6.10)
6-hr	1.71 (1.58 1.86)	2.02 (1.87 2.20)	2.46 (2.27 2.68)	2.87 (2.64 3.11)	3.43 (3.14 3.71)	3.91 (3.56 4.23)	4.42 (3.99 4.78)	4.97 (4.44 5.38)	5.74 (5.06 6.22)	6.40 (5.56 6.97)
12-hr	2.12 (1.97 2.29)	2.50 (2.32 2.71)	3.03 (2.81 3.28)	3.51 (3.25 3.79)	4.16 (3.83 4.47)	4.70 (4.31 5.06)	5.27 (4.79 5.67)	5.86 (5.29 6.32)	6.68 (5.97 7.22)	7.36 (6.51 7.97)
24-hr	2.60 (2.41 2.81)	3.10 (2.88 3.35)	3.78 (3.51 4.09)	4.35 (4.02 4.69)	5.14 (4.72 5.56)	5.79 (5.29 6.28)	6.48 (5.86 7.06)	7.21 (6.46 7.89)	8.24 (7.27 9.11)	9.08 (7.90 10.1)
2-day	3.15 (2.91 3.42)	3.76 (3.47 4.09)	4.60 (4.24 5.00)	5.28 (4.86 5.74)	6.23 (5.69 6.80)	7.01 (6.36 7.67)	7.83 (7.04 8.60)	8.68 (7.73 9.61)	9.89 (8.67 11.1)	10.9 (9.40 12.3)
3-day	3.38 (3.13 3.66)	4.04 (3.74 4.37)	4.92 (4.55 5.33)	5.63 (5.19 6.09)	6.60 (6.05 7.16)	7.39 (6.72 8.05)	8.20 (7.40 8.97)	9.04 (8.09 9.96)	10.2 (9.00 11.4)	11.1 (9.69 12.5)
4-day	3.62 (3.36 3.90)	4.32 (4.01 4.66)	5.25 (4.86 5.66)	5.98 (5.52 6.44)	6.97 (6.40 7.53)	7.76 (7.08 8.42)	8.57 (7.76 9.34)	9.40 (8.44 10.3)	10.5 (9.32 11.7)	11.4 (9.99 12.8)
7-day	4.43 (4.12 4.76)	5.28 (4.91 5.68)	6.37 (5.91 6.85)	7.21 (6.68 7.75)	8.32 (7.67 8.96)	9.20 (8.43 9.93)	10.1 (9.19 10.9)	11.0 (9.92 11.9)	12.1 (10.9 13.3)	13.0 (11.5 14.4)
10-day	5.10 (4.77 5.47)	6.06 (5.66 6.50)	7.24 (6.76 7.77)	8.16 (7.61 8.76)	9.40 (8.72 10.1)	10.4 (9.56 11.2)	11.3 (10.4 12.3)	12.3 (11.2 13.4)	13.6 (12.2 14.9)	14.6 (13.0 16.1)
20-day	7.11 (6.69 7.54)	8.40 (7.91 8.91)	9.81 (9.23 10.4)	10.9 (10.2 11.5)	12.2 (11.4 12.9)	13.2 (12.3 14.0)	14.1 (13.1 15.1)	15.0 (13.9 16.1)	16.1 (14.8 17.4)	16.9 (15.4 18.3)
30-day	8.75 (8.31 9.23)	10.3 (9.76 10.9)	11.8 (11.2 12.4)	12.9 (12.2 13.6)	14.3 (13.5 15.1)	15.2 (14.4 16.1)	16.2 (15.2 17.1)	17.0 (15.9 18.1)	18.0 (16.8 19.3)	18.8 (17.4 20.1)
45-day	11.0 (10.5 11.5)	12.9 (12.3 13.5)	14.6 (13.9 15.3)	15.8 (15.1 16.6)	17.4 (16.5 18.3)	18.5 (17.5 19.5)	19.5 (18.4 20.6)	20.4 (19.2 21.6)	21.6 (20.2 22.9)	22.3 (20.8 23.8)
60-day	13.2 (12.6 13.9)	15.4 (14.7 16.2)	17.4 (16.6 18.3)	18.9 (18.0 19.9)	20.6 (19.6 21.7)	21.9 (20.7 23.1)	23.0 (21.8 24.3)	24.0 (22.7 25.5)	25.3 (23.7 26.9)	26.1 (24.4 27.9)

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

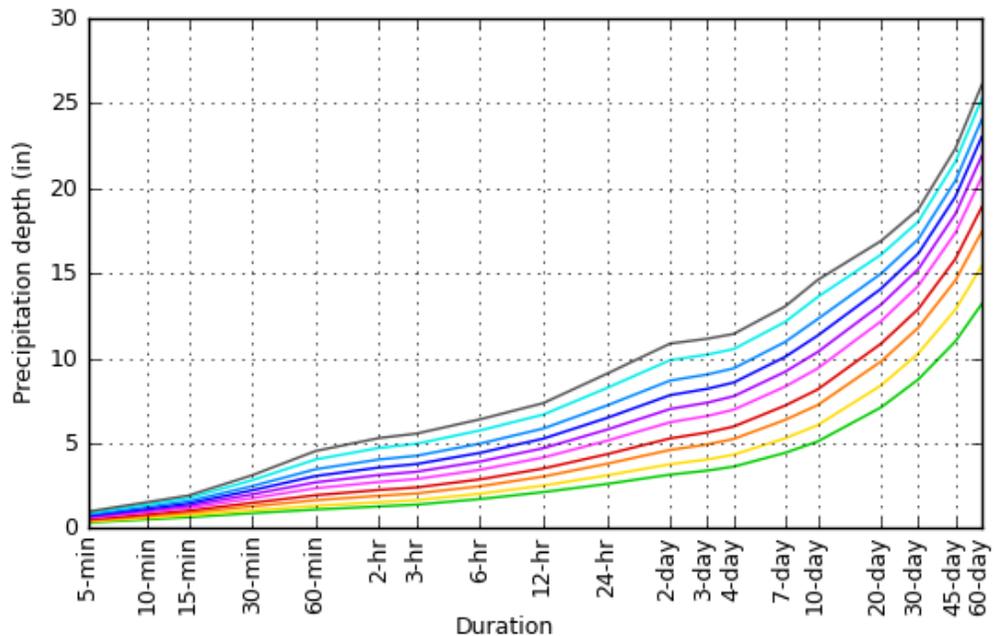
Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper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

Please refer to NOAA Atlas 14 document for more information.

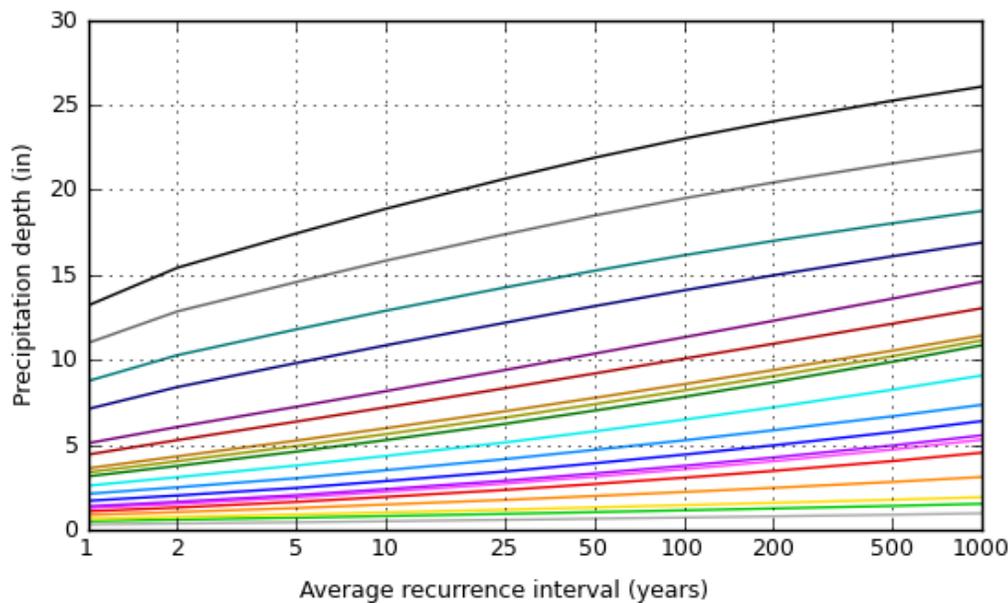
[Back to Top](#)

PF graphical

PDS-based depth-duration-frequency (DDF) curves
 Latitude: 35.9741°, Longitude: -83.9589°



Average recurrence interval (years)
1
2
5
10
25
50
100
200
500
1000

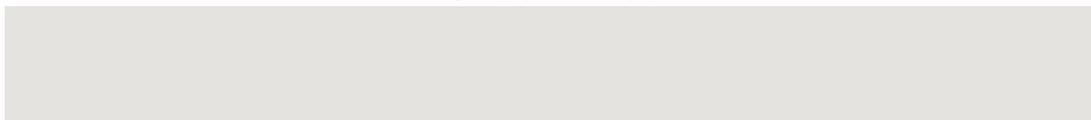


Duration	
5-min	2-day
10-min	3-day
15-min	4-day
30-min	7-day
60-min	10-day
2-hr	20-day
3-hr	30-day
6-hr	45-day
12-hr	60-day
24-hr	

[Back to Top](#)

Maps & aerials

Small scale terrain



3. EPSC Inspection Reports



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.

4. NOI & NOC



TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION

Division of Water Resources

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

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

Form fields: Site or Project Name (PE# 47023-1257-14 PIN 101204.00 SR-62), Existing NPDES Tracking Number (TNR), Street Address or Location (State Route 62...), Site Activity Description (Roadway realignment and bridge replacement), County (Knox), MS4 Jurisdiction (TDOT), Acres Disturbed (29.5), Total Acres (36.8)

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.: NRS 14.030

Receiving waters: East Fork Third Creek, Tributary to East Ford Third Creek, & Third Creek

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): Tennessee Department of Transportation

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

Mailing Address: 900 James K. Polk Bldg., 505 Deaderick Street City: Nashville State: TN Zip: 37243-0334

Phone: (615) 741-5373 Fax: (615) 741-1098 E-mail: TDOT.Env.NPDES@tn.gov

Optional Contact: Mary Showers Title or Position: Transportation Project Specialist

Mailing Address: 900 James K. Polk Bldg., 505 Deaderick Street City: Nashville State: TN Zip: 37243-0334

Phone: (615) 253-1558 Fax: (615) E-mail: Mary.Showers@tn.gov

Owner or Developer Certification (must be signed by president, vice-president or equivalent, or ranking elected official) (Primary Permittee)

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

Owner or Developer Name; (print or type) Jim Ozment Signature: [Signature] Date: 8/12/2016

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

I certify under penalty of law that I have reviewed this document, any attachments, and the SWPPP referenced above. Based on my inquiry of the construction site owner/developer identified above and/or my inquiry of the person directly responsible for assembling this NOI and SWPPP, I believe the information submitted is accurate. I am aware that this NOI, if approved, makes the above-described construction activity subject to NPDES permit number TNR100000, and that certain of my activities on-site are thereby regulated. I certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision. The submitted information is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

Contractor company name (print or type):

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

Mailing Address: City: State: Zip:

Phone: () Fax: () E-mail:

Other Contractor company name (print or type):

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

Mailing Address: City: State: Zip:

Phone: () Fax: () E-mail:

OFFICIAL STATE USE ONLY

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

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

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

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

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

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

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

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

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

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

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

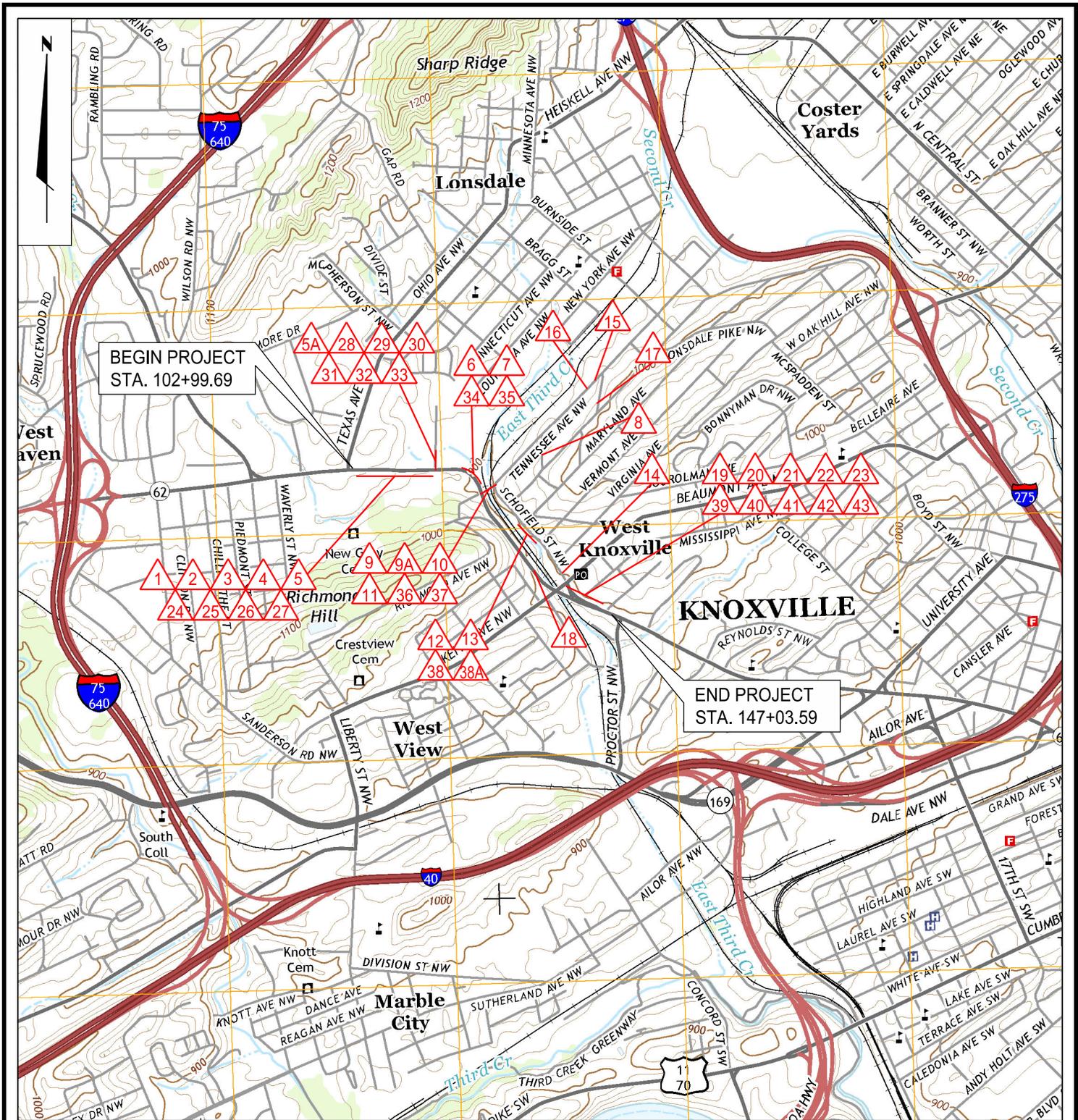
MS4 Jurisdiction: If this construction site is located within a Municipal Separate Storm Sewer System (MS4), please list name of MS4. A current list of MS4s in Tennessee may be found at http://www.tn.gov/environment/wpc/stormh2o/docs/MS4s_Jan2012.pdf

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

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

Submitting the form and obtaining more information Note that this form must be signed by the company President, Vice-President, or a ranking elected official in the case of a municipality, for details see subpart 2.5. For more information, contact your local EFO at the toll-free number 1-888-891-8332 (TDEC). Submit the completed NOI form (keep a copy for your records) to the TDEC Nashville, TN address below, addressed to **Attention: Stormwater NOI Processing.**

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

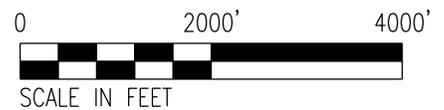


BEGIN PROJECT
STA. 102+99.69

END PROJECT
STA. 147+03.59

 - APPROXIMATE OUTFALL LOCATION

TOPOGRAPHIC MAP: KNOXVILLE, TN (2014) U.S.G.S. QUADRANGLE MAP



REGION 1, DISTRICT 18
KNOXVILLE, TN

STORM WATER POLLUTION PREVENTION PLAN

TOPOGRAPHIC (USGS) MAP
STATE ROUTE 62 (WESTERN AVE.)
FROM TEXAS AVENUE TO MAJOR AVENUE

KNOX COUNTY, TENNESSEE

DRAWN BY:	WCJ	CHECKED BY:	JTH
PIN	101204.00		
PROJECT NO.	47023-1257-14		
FIGURE	1	DATE:	8-3-2016

5. Blank NOT



TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC)
 Division of Water Resources
 William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Ave., 11th Floor, Nashville, TN 37243
 1-888-891-TDEC (8332)

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

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

Type or print clearly, using ink.

Site or Project Name: State Route 62 (Western Ave.), From Texas Avenue to Major Avenue in Knoxville	NPDES Tracking Number: TNR
Street Address or Location: State Route 62 (Western Ave.), From Texas Avenue to Major Avenue in Knoxville	County(ies): Knox

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

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

<input type="checkbox"/>	Stormwater discharge associated with construction activity is no longer occurring and the permitted area has a uniform 70% permanent vegetative cover OR has equivalent measures such as rip rap or geotextiles, in areas not covered with impervious surfaces.
<input type="checkbox"/>	You are no longer the operator at the construction site (i.e., termination of site-wide, primary or secondary permittee coverage).

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

<p>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.</p> <p>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.</p> <p>I certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision. The submitted information is to the best of my knowledge and belief, true, accurate, and complete. I am aware 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.</p>		
Permittee name (print or type):	Signature:	Date:

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

6. Construction General Permit



GENERAL NPDES PERMIT
FOR DISCHARGES OF STORMWATER
ASSOCIATED WITH CONSTRUCTION ACTIVITIES

PERMIT NO. TNR100000

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

This permit is issued on: **May 23, 2011**

This permit is effective on: **May 24, 2011**

This permit expires on: **May 23, 2016**

A handwritten signature in blue ink, appearing to read "P. Davis", is written over a horizontal line.

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

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

Table of Contents

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

2.6.1.	Contents of the NOI form	11
2.6.2.	Construction site map	11
2.6.3.	Application completeness	12
2.7.	Where to Submit the NOI, SWPPP and Permitting Fee?	12
2.8.	List of the TDEC Environmental Field Offices (EFOs) and Corresponding Counties	12
3.	STORMWATER POLLUTION PREVENTION PLAN (SWPPP) REQUIREMENTS	13
3.1.	The General Purpose of the SWPPP	13
3.1.1.	Registered engineer or landscape architect requirement	13
3.1.2.	Site Assessment	14
3.2.	SWPPP Preparation and Compliance	15
3.2.1.	Existing site	15
3.2.2.	New site	15
3.3.	Signature Requirements, Plan Review and Making Plans Available.....	15
3.3.1.	Signature Requirements for a SWPPP	15
3.3.2.	SWPPP Review	15
3.3.3.	Making plans available	15
3.4.	Keeping Plans Current.....	15
3.4.1.	SWPPP modifications.....	15
3.5.	Components of the SWPPP	16
3.5.1.	Site description	16
3.5.2.	Description of stormwater runoff controls	17
3.5.3.	Erosion prevention and sediment controls	18
3.5.4.	Stormwater management	22
3.5.5.	Other items needing control	23
3.5.6.	Approved local government sediment and erosion control requirements	23
3.5.7.	Maintenance.....	23
3.5.8.	Inspections	23
3.5.9.	Pollution prevention measures for non-stormwater discharges.....	25
3.5.10.	Documentation of permit eligibility related to Total Maximum Daily Loads (TMDL)	25
4.	CONSTRUCTION AND DEVELOPMENT EFFLUENT GUIDELINES.....	25
4.1.	Non-Numeric Effluent Limitations.....	25
4.1.1.	Erosion Prevention and Sediment Controls.....	25
4.1.2.	Buffer zone requirements	26
4.1.3.	Soil stabilization	27
4.1.4.	Dewatering.....	27
4.1.5.	Pollution prevention measures.....	28
4.1.6.	Prohibited discharges.....	28
4.1.7.	Surface outlets	28

5.	SPECIAL CONDITIONS, MANAGEMENT PRACTICES, AND OTHER NON-NUMERIC LIMITATIONS.....	28
5.1.	Releases in Excess of Reportable Quantities.....	28
5.2.	Spills.....	29
5.3.	Discharge Compliance with State Water Quality Standards.....	29
5.3.1.	Violation of Water Quality Standards	29
5.3.2.	Discharge quality	29
5.4.	Discharges into Impaired or Exceptional Tennessee Waters.....	30
5.4.1.	Additional SWPPP/BMP Requirements for discharges into impaired or exceptional TN Waters	30
5.4.2.	Buffer zone requirements for discharges into impaired or exceptional TN waters.....	31
5.4.3.	Pre-Approved sites.....	32
6.	RETENTION, ACCESSIBILITY AND SUBMISSION OF RECORDS	32
6.1.	Documents	32
6.2.	Accessibility and Retention of Records	32
6.2.1.	Posting information at the construction site	33
6.3.	Electronic Submission of NOIs, NOTs and Reports	33
7.	STANDARD PERMIT CONDITIONS	33
7.1.	Duty to Comply	33
7.1.1.	Permittee's duty to comply.....	33
7.1.2.	Penalties for violations of permit conditions.....	34
7.1.3.	Civil and criminal liability.....	34
7.1.4.	Liability under state law	34
7.2.	Continuation of the Expired General Permit	34
7.3.	Need to Halt or Reduce Activity Not a Defense	35
7.4.	Duty to Mitigate	35
7.5.	Duty to Provide Information	35
7.6.	Other Information	35
7.7.	Signatory Requirements.....	35
7.7.1.	Signatory requirements for a Notice of Intent (NOI)	36
7.7.2.	Signatory requirements for reports and other items	36
7.7.3.	Duly authorized representative	37
7.7.4.	Changes to authorization	37
7.7.5.	Signatory requirements for primary permittees	37
7.7.6.	Signatory requirements for secondary permittees	37
7.8.	Penalties for Falsification of Reports	38
7.9.	Oil and Hazardous Substance Liability.....	38

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

- APPENDIX A – Notice of Intent (NOI) Form**
- APPENDIX B – Notice of Termination (NOT) Form**
- APPENDIX C – Inspection Report Form**
- APPENDIX D – Stormwater Monitoring Report Form**

1. COVERAGE UNDER THIS GENERAL PERMIT

1.1. Permit Area

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

1.2. Discharges Covered by this Permit

1.2.1. Stormwater discharges associated with construction activities

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

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

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

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

1.2.2. Stormwater discharges associated with construction support activities

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

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

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

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

1.2.3. Non-stormwater discharges authorized by this permit

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

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

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

1.2.4. Other NPDES-permitted discharges

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

1.3. **Limitations on Coverage**

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

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

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

coverage under this general permit unless and until project plans are changed to adequately protect the species.

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

1.4. Obtaining Permit Coverage

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

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

1.4.1. Notice of Intent (NOI)

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

1.4.2. Stormwater Pollution Prevention Plan (SWPPP)

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

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

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

1.4.3. Permit application fees

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

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

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

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

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

1.4.5. Permit Coverage through Qualifying Local Program

Coverage equivalent to coverage under this general permit may be obtained from a qualifying local erosion prevention and sediment control Municipal Separate Storm Sewer System ([MS4](#)) program. A qualifying local program (QLP) is a municipal stormwater program for stormwater discharges associated with construction activity that has been formally approved by the division. More information about Tennessee's QLP program and MS4 participants can be found at: <http://tn.gov/environment/wpc/stormh2o/qlp.shtml>.

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

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

1.5. Effective Date of Coverage

1.5.1. Notice of Coverage (NOC)

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

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

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

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

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

1.5.2. Permit tracking numbers

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

2. NOTICE OF INTENT (NOI) REQUIREMENTS

2.1. Who Must Submit an NOI?

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

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

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

2.2. Typical Construction Site Operators

2.2.1. Owner/Developer

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

2.2.2. Commercial builders

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

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

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

2.2.3. Contractors

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

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

2.3. Responsibilities of Operators

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

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

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

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

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

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

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

2.4. NOI Submittal

2.4.1. Existing site

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

2.4.2. Application for new permit coverage

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

2.4.3. New operator

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

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

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

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

2.4.4. Late NOIs

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

2.5. **Who Must Sign the NOI?**

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

2.6. **NOI Form**

2.6.1. Contents of the NOI form

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

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

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

2.6.2. Construction site map

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

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

2.6.3. Application completeness

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

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

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

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

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

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

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

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

3. STORMWATER POLLUTION PREVENTION PLAN (SWPPP) REQUIREMENTS

3.1. The General Purpose of the SWPPP

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

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

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

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

3.1.1. Registered engineer or landscape architect requirement

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

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

3.1.2. Site Assessment

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

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

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

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

"I certify under penalty of law that this report and all attachments are, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

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

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

3.2. SWPPP Preparation and Compliance

3.2.1. Existing site

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

3.2.2. New site

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

3.3. Signature Requirements, Plan Review and Making Plans Available

3.3.1. Signature Requirements for a SWPPP

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

3.3.2. SWPPP Review

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

3.3.3. Making plans available

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

3.4. Keeping Plans Current

3.4.1. SWPPP modifications

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

- a) whenever there is a change in the scope of the project, which would be expected to have a significant effect on the discharge of pollutants to the **waters of the state** and which has

not otherwise been addressed in the [SWPPP](#). If applicable, the SWPPP must be modified or updated whenever there is a change in chemical treatment methods, including the use of different treatment chemical, different dosage or application rate, or different area of application;

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

3.5. Components of the SWPPP

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

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

3.5.1. Site description

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

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

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

3.5.2. Description of stormwater runoff controls

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

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

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

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

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

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

3.5.3. Erosion prevention and sediment controls

3.5.3.1. General criteria and requirements

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

and/or chemical treatment must be researched and applied according to the manufacturer's guidelines and fully described in the SWPPP. If periodic inspections or other information indicates a control has been used inappropriately, or incorrectly, the permittee must replace or modify the control for relevant site situations.

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

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

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

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

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

3.5.3.2. Stabilization practices

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

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

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

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

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

3.5.3.3. Structural practices

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

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

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

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

3.5.4. Stormwater management

The [SWPPP](#) shall include a description of any measures that will be installed during the construction process to control pollutants in stormwater discharges that will occur after construction operations have been completed.

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

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

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

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

3.5.5. Other items needing control

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

3.5.6. Approved local government sediment and erosion control requirements

Permittees must comply with any additional erosion prevention, sediment controls and stormwater management measures required by a local municipality or permitted [MS4](#) program.

3.5.7. Maintenance

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

3.5.8. Inspections

3.5.8.1. Inspector training and certification

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

3.5.8.2. Schedule of inspections

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

to definable areas that have been finally stabilized, as described in subpart 3.1 above. Written notification of the intent to change the inspection frequency and the justification for such request must be submitted to the local Environmental Field Office, or the division's Nashville Central Office for projects of the Tennessee Department of Transportation (TDOT) and the Tennessee Valley Authority (TVA). Should the division discover that monthly inspections of the site are not appropriate due to insufficient stabilization measures or otherwise, twice weekly inspections shall resume. The division may inspect the site to confirm or deny the notification to conduct monthly inspections.

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

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

3.5.9. Pollution prevention measures for non-stormwater discharges

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

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

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

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

4. CONSTRUCTION AND DEVELOPMENT EFFLUENT GUIDELINES

4.1. Non-Numeric Effluent Limitations

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

4.1.1. Erosion Prevention and Sediment Controls

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

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

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

4.1.2. Buffer zone requirements

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

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

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

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

4.1.2.1. Buffer zone exemption based on existing uses

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

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

4.1.2.2. Pre-Approved Sites

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

4.1.3. Soil stabilization

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

4.1.4. Dewatering

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

4.1.5. Pollution prevention measures

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

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

4.1.6. Prohibited discharges

The following discharges are prohibited:

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

4.1.7. Surface outlets

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

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

5.1. Releases in Excess of Reportable Quantities

The discharge of hazardous substances or oil in the stormwater discharge(s) from a facility shall be prevented or minimized in accordance with the applicable stormwater pollution prevention plan for the facility. This permit does not relieve the permittee of the reporting requirements of [40 CFR 117](#) and [40 CFR 302](#). Where a release containing a hazardous substance in an amount equal to or in excess of a reportable quantity established under either [40 CFR 117](#) or [40 CFR 302](#) occurs during a 24 hour period:

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

released), the date that such release occurred, the circumstances leading to the release, what actions were taken to mitigate effects of the release, and steps to be taken to minimize the chance of future occurrences, to the appropriate Environmental Field Office (see subpart 2.8 above); and

- c) the [SWPPP](#) required under part 3 above of this permit must be updated within 14 days of knowledge of the release: to provide a description of the release, the circumstances leading to the release, and the date of the release. This can be accomplished by including a copy of a written description of the release as described in the paragraph b) above. In addition, the [SWPPP](#) must be reviewed to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and the plan must be modified where appropriate.

5.2. Spills

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

5.3. Discharge Compliance with State Water Quality Standards

5.3.1. Violation of Water Quality Standards

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

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

5.3.2. Discharge quality

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

5.4. Discharges into Impaired or Exceptional Tennessee Waters

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

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

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

individual permit is issued. Only discharges from earth disturbing activities necessary for stabilization are authorized to continue until the individual permit is issued.

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

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

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

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

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

This requirement does not apply to an area that is being altered under the authorization of a valid [Aquatic Resources Alteration Permit](#) (ARAP), or equivalent permits issued by federal

authorities. Additional natural [buffer zone](#) requirements may be established by the local [MS4](#) program.

5.4.2.1. Buffer zone exemption based on existing uses

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

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

5.4.3. Pre-Approved sites

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

6. RETENTION, ACCESSIBILITY AND SUBMISSION OF RECORDS

6.1. Documents

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

6.2. Accessibility and Retention of Records

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

6.2.1. Posting information at the construction site

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

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

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

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

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

6.3. Electronic Submission of NOIs, NOTs and Reports

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

7. STANDARD PERMIT CONDITIONS

7.1. Duty to Comply

7.1.1. Permittee's duty to comply

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

7.1.2. Penalties for violations of permit conditions

Pursuant to [T.C.A. § 69-3-115](#) of The Tennessee Water Quality Control Act of 1977, as amended:

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

7.1.3. Civil and criminal liability

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

7.1.4. Liability under state law

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

7.2. Continuation of the Expired General Permit

Permittees shall maintain coverage under this general permit until a new general permit is issued. Permittees who choose not to maintain coverage under the expired general permit, or are required to obtain an individual permit, must submit an application (U.S. EPA NPDES Forms [1](#) and [2F](#) and any other [applicable forms](#)) at least 180 days prior to expiration of this general permit.

Permittees who are eligible and choose to be covered by the new general permit must submit an NOI by the date specified in that permit. Facilities that have not obtained coverage under this permit by the permit expiration date cannot become authorized to discharge under the continued permit.

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

7.3. Need to Halt or Reduce Activity Not a Defense

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

7.4. Duty to Mitigate

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

7.5. Duty to Provide Information

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

7.6. Other Information

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

7.7. Signatory Requirements

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

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

NOI shall be signed as follows:

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

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

- b) For a partnership or sole proprietorship, by a general partner or the proprietor, respectively.
- c) For a municipality, state, federal, or other public agency, by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:
 - (i) the chief executive officer of the agency, or
 - (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

7.7.2. Signatory requirements for reports and other items

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

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

7.7.3. Duly authorized representative

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

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

7.7.4. Changes to authorization

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

7.7.5. Signatory requirements for primary permittees

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

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

7.7.6. Signatory requirements for secondary permittees

Secondary permittees (typically construction contractors) required to sign an NOI and **SWPPP** because they meet the definition of an **operator** but who are not primarily responsible for

preparing an NOI and [SWPPP](#), shall sign the following certification statement on the NOI and [SWPPP](#):

“I certify under penalty of law that I have reviewed this document, any attachments, and the SWPPP referenced above. Based on my inquiry of the construction site owner/developer identified above and/or my inquiry of the person directly responsible for assembling this NOI and SWPPP, I believe the information submitted is accurate. I am aware that this NOI, if approved, makes the above-described construction activity subject to NPDES permit number TNR100000, and that certain of my activities on-site are thereby regulated. I am aware that there are significant penalties, including the possibility of fine and imprisonment for knowing violations, and for failure to comply with these permit requirements.”

7.8. Penalties for Falsification of Reports

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

7.9. Oil and Hazardous Substance Liability

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

7.10. Property Rights

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

7.11. Severability

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

7.12. Requiring an Individual Permit

7.12.1. Director can require a site to obtain an individual permit

The director may require any person authorized by this permit to apply for and/or obtain an individual NPDES permit in order to obtain adequate protection of designated uses of a receiving stream. Any interested person may petition the director in writing to take action under this paragraph, but must include in their petition the justification for such an action. Where the

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

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

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

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

7.12.3. Individual permit terminates general permit

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

7.13. Other, Non-Stormwater, Program Requirements

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

7.14. Proper Operation and Maintenance

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

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

7.15. Inspection and Entry

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

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

7.16. Permit Actions

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

8.1.1. Termination of builder and contractor coverage

8. REQUIREMENTS FOR TERMINATION OF COVERAGE

8.1. Termination of Developer and Builder Coverage

8.1.1. Termination process for primary permittees

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

Tennessee General Permit No. TNR100000
Stormwater Discharges from Construction Activities

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

8.1.2. NOT review

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

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

The division retains the right to deny termination of coverage under this general permit upon receipt of the NOT. If the local Environmental Field Office has information indicating that the permit coverage is not eligible for termination, written notification will be provided that permit

coverage has not been terminated. The notification will include a summary of existing deficiencies. When the site meets the termination criteria, the NOT should be re-submitted.

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

8.2. Termination of Builder and Contractor Coverage

8.2.1. Termination process for secondary permittees

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

8.3. NOT certification

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

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

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

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

9. Aquatic Resource Alteration Permits (ARAP)

Alterations to channels or waterbodies (stream, wetland and/or other [waters of the state](#)) that are contained on, traverse through or are adjacent to the construction site, may require an [Aquatic Resources Alteration Permit \(ARAP\)](#) (<http://www.tn.gov/environment/permits/arap.shtml>). It is

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

10. DEFINITIONS

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

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

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

“Buffer Zone” is a strip of dense undisturbed perennial native vegetation, either original or re-established, that borders streams and rivers, ponds and lakes, wetlands, and seeps. Buffer zones are established for the purposes of slowing water runoff, enhancing water infiltration, and minimizing the risk of any potential nutrients or pollutants from leaving the upland area and reaching surface waters. Buffer zones are most effective when stormwater runoff is flowing into and through the buffer zone as shallow sheet flow, rather than in concentrated form such as in channels, gullies, or [wet weather conveyances](#). Therefore, it is critical that the design of any development include management practices, to the maximum extent practical, that will result in stormwater runoff flowing into and through the buffer zone as shallow sheet flow. Buffer zones are established for the primary purpose of protecting water quality and maintaining a healthy aquatic ecosystem in receiving waters.

“Clearing” in the definition of discharges associated with construction activity, typically refers to removal of vegetation and disturbance of soil prior to grading or excavation in anticipation of construction activities. Clearing may also refer to wide area land disturbance in anticipation of

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

non-construction activities; for instance, clearing forested land in order to convert forestland to pasture for wildlife management purposes. Clearing, grading and excavation do not refer to clearing of vegetation along existing or new roadways, highways, dams or power lines for sight distance or other maintenance and/or safety concerns, or cold planing, milling, and/or removal of concrete and/or bituminous asphalt roadway pavement surfaces. The clearing of land for agricultural purposes is exempt from federal stormwater NPDES permitting in accordance with Section 401(1)(1) of the 1987 Water Quality Act and state stormwater NPDES permitting in accordance with the Tennessee Water Quality Control Act of 1977 ([T.C.A. 69-3-101](#) et seq.).

“Commencement of construction” The initial disturbance of soils associated with clearing, grading, or excavating activities or other construction activities.

“Common plan of development or sale” is broadly defined as any announcement or documentation (including a sign, public notice or hearing, sales pitch, advertisement, drawing, permit application, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating construction activities may occur on a specific plot. A common plan of development or sale identifies a situation in which multiple areas of disturbance are occurring on contiguous areas. This applies because the activities may take place at different times, on different schedules, by different operators.

“Control measure” As used in this permit, refers to any Best Management Practice (BMP) or other method used to prevent or reduce the discharge of pollutants to [waters of the state](#).

“CWA” means the Clean Water Act of 1977 or the Federal Water Pollution Control Act ([33 U.S.C. 1251](#), et seq.)

“Department” means the Department of Environment and Conservation.

“Director” means the director, or authorized representative, of the Division of Water Pollution Control of the State of Tennessee, Department of Environment and Conservation.

“Discharge of stormwater associated with construction activity” As used in this permit, refers to stormwater point source discharges from areas where soil disturbing activities (e.g., clearing, grading, excavation, etc.), or construction materials or equipment storage or maintenance (e.g., earth fill piles, fueling, waste material etc.) are located.

“Division” means the Division of Water Pollution Control of the State of Tennessee, Department of Environment and Conservation.

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

- a. A uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a uniform density of at least 70 percent of the (preferably) native vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, and all slopes and channels have been permanently stabilized against erosion, or

- b. Equivalent permanent stabilization measures (such as the use of riprap; permanent geotextiles, hardened surface materials including concrete, asphalt, gabion baskets, or Reno mattresses) have been employed, or
- c. For construction projects on land used for agricultural or silvicultural purposes, final stabilization may be accomplished by returning the disturbed land to its preconstruction agricultural or silvicultural use.

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

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

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

“Inspector” An inspector is a person that has successfully completed (has a valid certification from) the [“Fundamentals of Erosion Prevention and Sediment Control Level I”](#) course or equivalent course. An inspector performs and documents the required inspections, paying particular attention to time-sensitive permit requirements such as stabilization and maintenance activities. An inspector may also have the following responsibilities:

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

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

“Monthly” refers to calendar months.

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

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

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

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

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

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

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

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

“Qualifying State, Tribal, or local erosion and sediment control program” is one that includes, as defined in [40 CFR 122.44\(s\)](#):

- (i) Requirements for construction site operators to implement appropriate erosion and sediment control best management practices;
- (ii) Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;
- (iii) Requirements for construction site operators to develop and implement a stormwater pollution prevention plan. (A stormwater pollution prevention plan includes site descriptions, descriptions of appropriate control measures, copies of approved State, Tribal or local requirements, maintenance procedures, inspection procedures, and identification of non-stormwater discharges); and
- (iv) Requirements to submit a site plan for review that incorporates consideration of potential water quality impacts.

“Quality Assurance Site Assessment” means documented site inspection to verify the functionality and performance of the [SWPPP](#) and for determining if construction, operation and maintenance accurately comply with permit requirements, as presented in the narrative, engineering specifications; maps, plans and drawings; and details for erosion prevention, sediment control and stormwater management.

“Registered Engineer” and **“Registered Landscape Architect”** An engineer or landscape architect certified and registered by the [State Board of Architectural and Engineer Examiners](#) pursuant to [Section 62-202, Tennessee Code Annotated](#), to practice in Tennessee.

“Runoff coefficient” means the fraction of total rainfall that will appear at the conveyance as runoff. Runoff coefficient is also defined as the ratio of the amount of water that is NOT absorbed by the surface to the total amount of water that falls during a rainstorm.

“Sediment” means solid material, both inorganic (mineral) and organic, that is in suspension, is being transported, or has been moved from the site of origin by wind, water, gravity, or ice as a product of erosion.

“Sediment basin” A temporary basin consisting of an embankment constructed across a wet weather conveyance, or an excavation that creates a basin or by a combination of both. A sediment basin typically consists of a forebay cell, dam, impoundment, permanent pool, primary spillway, secondary or emergency spillway, and surface dewatering device. The size and shape of the basin depends on the location, size of drainage area, incoming runoff volume and peak flow, soil type and particle size, land cover, and receiving stream classification (i.e., impaired, HQ, or unimpaired).

“**Sedimentation**” means the action or process of forming or depositing sediment.

“**Significant contributor of pollutants to waters of the state**” means any discharge containing pollutants that are reasonably expected to cause or contribute to an impairment of receiving stream water quality or designated uses.

“**Soil**” means the unconsolidated mineral and organic material on the immediate surface of the earth that serves as a natural medium for the growth of plants.

“**Steep Slope**” A natural or created slope of 35% grade or greater. Designers of sites with steep slopes must pay attention to stormwater management in the **SWPPP** to engineer runoff non-erosively around or over a steep slope. In addition, site managers should focus on erosion prevention on the slope(s) and stabilize the slope(s) as soon as practicable to prevent slope failure and/or sediment discharges from the project.

“**Stormwater**” means rainfall runoff, snow melt runoff, and surface runoff and drainage.

“**Stormwater associated with industrial activity**” is defined at [40 CFR 122.26\(b\)\(14\)](#) and incorporated here by reference. Most relevant to this permit is [40 CFR 122.26\(b\)\(14\)\(x\)](#), which relates to construction activity including clearing, grading, filling and excavation activities (including borrow pits containing erodible material). Disturbance of soil for the purpose of crop production is exempted from permit requirements, but stormwater discharges from agriculture-related activities which involve construction of structures (e.g., barn construction, road construction, pond construction, etc.) are considered associated with industrial activity. Maintenance performed to maintain the original line and grade, hydraulic capacity, or original purpose of the facility, e.g. re-clearing, minor excavation performed around an existing structure necessary for maintenance or repair, and repaving of an existing road, is not considered a construction activity for the purpose of this permit.

“**Stormwater discharge-related activities**” include: activities which cause, contribute to, or result in point source stormwater pollutant discharges, including but not limited to: excavation, site development, grading and other surface disturbance activities; and measures to control stormwater including the siting, construction and operation of best management practices (BMPs) to control, reduce or prevent stormwater pollution.

“**Stormwater Pollution Prevention Plan**”(SWPPP): A written plan required by this permit that includes site map(s), an identification of construction/contractor activities that could cause pollutants in the stormwater, and a description of measures or practices to control these pollutants. It must be prepared and approved before construction begins. In order to effectively reduce erosion and sedimentation impacts, Best Management Practices (BMPs) must be designed, installed, and maintained during land disturbing activities. The SWPPP should be prepared in accordance with the [Tennessee Erosion and Sediment Control Handbook](#). The handbook is designed to provide information to planners, developers, engineers, and contractors on the proper selection, installation, and maintenance of BMPs. The handbook is intended for use during the design and construction of projects that require erosion and sediment controls to protect **waters of the state**. It also aids in the development of SWPPPs and other reports, plans, or specifications required when participating in Tennessee's water quality regulations.

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

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

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

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

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

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

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

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

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

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

“**Wet weather conveyances**” are man-made or natural watercourses, including natural watercourses that have been modified by channelization that flow only in direct response to

precipitation runoff in their immediate locality; whose channels are at all times above the ground water table; that are not suitable for drinking water supplies; and in which hydrological and biological analyses indicate that, under normal weather conditions, due to naturally occurring ephemeral or low flow there is not sufficient water to support fish or multiple populations of obligate lotic aquatic organisms whose life cycle includes an aquatic phase of at least two months. (Rules and Regulations of the State of Tennessee, Chapter [1200-4-3-.04\(3\)](#)).

11. LIST OF ACRONYMS

ARAP	Aquatic Resource Alteration Permit
BMP	Best Management Practice
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CGP	Construction General Permit
CWA	Clean Water Act
EFO	Environmental Field Office
EPA	(U.S.) Environmental Protection Agency
EPSC	Erosion Prevention and Sediment Control
MS4	Municipal Separate Storm Sewer System
NOC	Notice of Coverage
NOI	Notice of Intent
NOT	Notice of Termination
NPDES	National Pollutant Discharge Elimination System
ONRW	Outstanding National Resource Waters
POTW	Publicly Owned Treatment Works
SWPPP	Stormwater Pollution Prevention Plan
TDEC	Tennessee Department of Environment and Conservation
TDOT	Tennessee Department of Transportation
TMDL	Total Maximum Daily Load
TMSP	Tennessee Multi-Sector General Permit for the Discharge of Stormwater from an Industrial Activity
TVA	Tennessee Valley Authority
TWQCA	Tennessee Water Quality Control Act
UIC	Underground Injection Control
USGS	United States Geological Survey

(End of body of permit; appendices follow.)

Tennessee General Permit No. TNR100000
Stormwater Discharges from Construction Activities

APPENDIX A – Notice of Intent (NOI) Form
(next page)



TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
 Division of Water Pollution Control
 6th Floor Annex, L&C Tower, 401 Church Street, Nashville, Tennessee 37243
 1-888-891-8332 (TDEC)

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

Site or Project Name:		NPDES Tracking Number: TNR	
Street Address or Location:		Construction Start Date:	
Site Description:		Estimated End Date:	
County(ies):		Latitude (dd.dddd):	
MS4 Jurisdiction:		Longitude (-dd.dddd):	
		Acres Disturbed:	
		Total Acres:	
Does a topographic map show dotted or solid blue lines <input type="checkbox"/> and/or wetlands <input type="checkbox"/> on or adjacent to the construction site? If wetlands are located on-site and may be impacted, attach wetlands delineation report. If an Aquatic Resource Alteration Permit has been obtained for this site, what is the permit number? ARAP Number:			
Receiving waters:			
Attach the SWPPP with the NOI <input type="checkbox"/> SWPPP Attached		Attach a site location map <input type="checkbox"/> Map Attached	
Name of Site Owner or Developer (Site-Wide Permittee): (person, company, or legal entity that has operational or design control over construction plans and specifications)			
Site Owner or Developer Contact Name: (individual responsible for site)		Title or Position: (the party who signs the certification below):	
Mailing Address:		City:	State: Zip:
Phone: ()	Fax: ()	E-mail:	
Optional Contact:		Title or Position:	
Mailing Address:		City:	State: Zip:
Phone: ()	Fax: ()	E-mail:	
Owner or Developer Certification: (must be signed by president, vice-president or equivalent, or ranking elected official) (Primary Permittee)			
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.			
Owner or Developer Name: (print or type)		Signature:	Date:
Contractor(s) Certification: (must be signed by president, vice-president or equivalent, or ranking elected official) (Secondary Permittee)			
I certify under penalty of law that I have reviewed this document, any attachments, and the SWPPP referenced above. Based on my inquiry of the construction site owner/developer identified above and/or my inquiry of the person directly responsible for assembling this NOI and SWPPP, I believe the information submitted is accurate. I am aware that this NOI, if approved, makes the above-described construction activity subject to NPDES permit number TNR100000, and that certain of my activities on-site are thereby regulated. I am aware that there are significant penalties, including the possibility of fine and imprisonment for knowing violations, and for failure to comply with these permit requirements.			
Primary contractor name and address: (print or type)		Signature:	Date:
Other contractor name and address: (print or type)		Signature:	Date:
Other contractor name and address: (print or type)		Signature:	Date:

OFFICIAL STATE USE ONLY

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

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

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

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

Permit fee (see table below) must accompany the NOI and is based on total acreage to be disturbed by an entire project, including any associated construction support activities (e.g. equipment staging yards, material storage areas, excavated material disposal areas, borrow or waste sites). There is no fee for sites less than 1 acre.

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

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

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

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

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

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

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

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

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

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

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



TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC)

Division of Water Pollution Control (WPC)

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

1-888-891-TDEC (8332)

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

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

Type or print clearly, using ink and not markers or pencil.

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

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

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

<input type="checkbox"/>	Stormwater discharge associated with construction activity is no longer occurring and the permitted area has a uniform 70% permanent vegetative cover OR has equivalent measures such as rip rap or geotextiles, in areas not covered with impervious surfaces.
<input type="checkbox"/>	You are no longer the operator at the construction site (i.e., termination of site-wide, primary or secondary permittee coverage).

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

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

For the purposes of this certification, elimination of stormwater discharges associated with construction activity means that all disturbed soils at the portion of the construction site where the operator had control have been finally stabilized, the temporary erosion and sediment control measures have been removed, and/or the site or portions of the site have obtained permit coverage by subsequent operators or that all stormwater discharges associated with construction activities from the identified site that are authorized by a NPDES general permit have otherwise been eliminated from the portion of the construction site where the operator had control.

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

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



TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC)

Division of Water Pollution Control (WPC)

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

1-888-891-8332 (TDEC)

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

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

Site or Project Name:		NPDES Tracking Number: TNR
Primary Permittee Name:		Date of Inspection:
Current approximate disturbed acreage:	Has daily rainfall been documented? <input type="checkbox"/> Yes <input type="checkbox"/> No	Name of Inspector:
Current weather/site conditions:		Inspector's TNEPSC Certification Number:

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

- Notice of Coverage (NOC)
 Stormwater Pollution Prevention Plan (SWPPP)
 Twice weekly inspection documentation
 Site contact information
 Rain Gage
 Off-site Reference Rain Gage Location: _____

Best Management Practices (BMPs):

Are the Erosion Prevention and Sediment Controls (EPSCs) functioning correctly in the following locations:

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

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

4.	Are (EPSCs) installed and maintained in the field per SWPPP? If "No", describe below.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
5.	Have site discharges caused an objectionable color contrast in the receiving stream (Permit section 5.3.2)? If "Yes", describe below the measures implemented to eliminate contrast.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
6.	Have discharges from dewatering activities been managed by appropriate controls per Section 4.1.4 of the Permit? If "No", describe below the measures to be implemented to achieve compliance.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
7.	If construction activity at any location on-site has temporarily/permanently ceased, was the area stabilized within 14 days per Section 3.5.3.2? If "No", describe below each location and measures taken to stabilize the area(s).	<input type="checkbox"/> Yes	<input type="checkbox"/> No
8.	Are non-stormwater discharges (per Section 1.2.3) and housekeeping measures such as storing chemicals, construction related debris litter, oils, fuels, building products, truck wash (per Section 3.5.3.1 (f) and (g)) being properly managed? If "No", describe below the measures to be implemented to achieve compliance.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
9.	If a concrete washout facility is located on site, is it clearly identified on the project and maintained? If "No", describe below the measures to be implemented to achieve compliance.	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes <input type="checkbox"/> No
10.	Have all previous deficiencies been addressed? If not, describe the remaining deficiencies. <input type="checkbox"/> Check if deficiencies/corrective measures have been reported on a previous form.	<input type="checkbox"/> Yes	<input type="checkbox"/> No

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

I certify under penalty of law that this report and all attachments are, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

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

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

Purpose of this form/ Instructions

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

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

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

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

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

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

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

All inspections shall be documented on this Construction Stormwater Inspection Certification form. Alternative inspection forms may be used as long as the form contents and the inspection certification language are, at a minimum, equivalent to the division's form and the permittee has obtained a written approval from the division to use the alternative form. Inspection documentation will be maintained on site and made available to the division upon request. Inspection reports must be submitted to the division within 10 days of the request. If the division requests the Construction Stormwater Inspection Certification form to be submitted, the submitted form must contain the printed name and signature of the trained certified inspector and the person who meets the signatory requirements of section 7.7.2 of the Permit.

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

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7. Environmental Permits



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

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

May 16, 2014

Melanie Bumpus
Tennessee Department of Transportation
505 Deaderick Street, Suite 900
Nashville, TN 37243

RE: ARAP Applicant's Responsibility for Public Notification
State Route 2, Western Avenue, From East of Texas Avenue to major Avenue
File# NRS 14.030, Knox County, TN.

Dear Ms. Bumpus:

Thank you for your Aquatic Resource Alteration Permit application submitted to the Division of Water Resources on 03/06/2014. The Division is ready to begin the public notice process to allow for public comment on the proposed activities (as described below), and has posted a public notice on our website (<http://www.state.tn.us/environment/ppo/#water>).

The Rules of the Water Quality Control Board require the applicant to publish the enclosed public notice one time in the legal notices section of a local newspaper of general circulation. The applicant bears responsibility for any associated costs. The applicant is also required to post and maintain a sign for 30 days where it is legible from a public road near the proposed activity. The public notice sign may be picked up at the Knoxville Environmental Field Office (865-594-6035). Using a permanent marker, complete the blank areas on both sides of the public notice sign with the following information:

Applicant: Tennessee Department of Transportation
File#: NRS 14.030
Proposes to: Widen State Route 62, install two span bridges and relocate associated utility lines. Project impacts 2 perennial streams.
Comment Period: (date posted) through (30 days after date posted)

Once the notice has been posted for the required period of time, you must provide proof the public notification requirements have been met, including photographic evidence of

the sign posting and proof of newspaper publication. Proof of publication should be submitted within 45 days of receipt of this letter, failure to do so will result in suspension of application processing and possible termination of your application. We cannot take final action on your application until after the public comment period has expired (30 days after the public notice has been published).

Thank you for your attention to these details, and fulfilling your obligations in the public notice process. If you have any questions, please contact Vena Jones at (615) 532-0645.

Sincerely,



Vena Jones
Natural Resources Section

Cc: DJ Wiseman, TDOT, DJ.Wiseman@tn.gov
Transportation Project Specialist
File Copy
Enc: Legal Notice

PUBLIC NOTICE

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

TO WHOM IT MAY CONCERN: The application described below has been submitted for an Aquatic Resource Alteration Permit under *The Tennessee Water Quality Control Act of 1977*, T.C.A. §69-3-108. In addition, federal permits may be required from the U. S. Army Corps of Engineers and the Tennessee Valley Authority under §404 of the *Clean Water Act* and §26a of the *Tennessee Valley Authority Act*, respectively. Section 401 of the *Clean Water Act* requires that an applicant obtain a water quality certification from the state when a federal permit is required. This notice may cover applications subject to §401.

No decision has been made whether to issue or deny this permit. The purpose of this notice is to inform interested parties of this permit application and to ask for comments and information necessary to determine possible impacts to water quality. Persons wishing to comment on the proposal are invited to submit written comments to the department. Written comments must be received within **thirty days of the date that this notice is posted**. Comments will become part of the record and will be considered in the final decision. The applicant's name and permit number should be referenced.

The permit application, supporting documentation including detailed plans and maps, and related comments are available for review and/or copying at the department's natural resources section.

Interested persons may also request in writing that the department hold a public hearing on this application. The request must be filed within the comment period, indicate the interest of the person requesting it, the reasons that the hearing is warranted, and the water quality issues being raised. When there is sufficient public interest in water quality issues, the department shall hold a public hearing in accordance with 0400-40-07-.04(4)(f).

In deciding whether to issue or deny a permit, the department will consider all comments of record and the requirements of applicable federal and state laws. In making this decision, a determination will be made regarding the lost value of the resource compared to the value of any proposed mitigation. The department shall consider practicable alternatives to the alteration. The department shall also consider loss of waters or habitat, diminishment in biological diversity, cumulative or secondary impacts to the water resource, and adverse impact to unique, high quality, or impaired waters.

PERMIT APPLICATION NUMBER: NRS 14.030

APPLICANT:

Tennessee Department of Transportation
c/o Melanie Bumpus
505 Deaderick Street, Suite 900
Nashville, TN 37243

LOCATION: East Fork Third Creek, Knox County, State Route 62 (Western Road)

Impact 1: Latitude:35.9755 Longitude:-83.9622

Impact 2: Latitude:35.9755 Longitude:-83.9622

Impact 3: Latitude:35.9751 Longitude:-83.9595

Impact 4: Latitude:35.9704 Longitude:-83.9549

WATERSHED / WATERBODY DESCRIPTION: East Fork Third Creek flows into Third Creek which is part of the Watts Bar Watershed, HUC 06010201. The Watts Bar Watershed is approximately 1,355 square miles and includes parts of eight Tennessee counties. For more information on this watershed please visit the TDEC website at <http://www.tn.gov/environment/water/watersheds/watts-bar.shtml>.

STR-1: Unnamed tributary to East Fork Third Creek (ID TN06010201067_1000) is in the Southern Limestone/Dolomite Valleys and Low Rolling Hills Ecoregion, 67f. The channel dimensions are as follows: channel bottom width is 2-4 feet, channel top width is 4-6 feet, water depth is 1 foot, and bank height is 1 foot. Typical substrate in this section is comprised of silt and gravel.

STR-2: East Fork Third Creek (ID TN06010201067_0100) is in the Southern Limestone/Dolomite Valleys and Low Rolling Hills Ecoregion, 67f. The channel dimensions are as follows: channel bottom width 15-18 feet, channel top width 20-25 feet, water depth 1-2 feet, and bank height 4 feet. Typical substrate in this section is comprised of silt and gravel.

East Fork Third Creek was assessed in 2009. It is not supporting its designated uses. The specific uses that are not meeting use support and the causes are as follows: Fish and Aquatic Life, E. Coli and Recreation, other anthropogenic causes, siltation and sedimentation. Therefore the stream is unavailable for additional impacts to habitat. The applicant will offset the proposed impacts by daylighting sections of an encapsulated stream on site.

PROJECT DESCRIPTION: The applicant is proposing to install two culverts and associated rip-rap along two perennial stream channels, East Fork Third Creek (STR-2) and an unnamed tributary to East Fork Third Creek (STR-1). The applicant is further proposing to relocate 82 feet of STR-1 and install two span bridges over STR-2. Approximately 53 linear feet of STR-2 will require stream bank stabilization. The existing gas, telephone, water and sanitary sewer utility lines associated with SR-62 are proposed to be removed and relocated along the length of the proposed expansion. The applicant will offset these impacts by reducing the amount of encapsulation of STR-1 and STR-2 by 77 feet and 150 feet respectively and increasing the length of the STR-1 by 15 feet.

More details on the proposal can be viewed on the Internet at <http://www.state.tn.us/environment/ppo/#water>.

In accordance with the Tennessee Antidegradation Statement (Rule 0400-40-03-.06), the division has determined that the proposed activity will result in degradation to water quality.

PERMIT COORDINATOR: Vena Jones



DEPARTMENT OF THE ARMY
 NASHVILLE DISTRICT, CORPS OF ENGINEERS
 501 ADESA PKWY, SUITE 250
 LENOIR CITY, TENNESSEE 37771

RECEIVED

JUN 04 2014

REPLY TO
 ATTENTION OF:

May 29, 2014

TDOT Environmental Division
 Permits section

Regulatory Branch

SUBJECT: File No. LRN-2002-00605; State Route 62 (Western Ave) Unnamed Tributary of East Fork Third Creek and East Fork Third Creek, Tennessee River Mile 645.R, Knoxville, Knox County, Tennessee (PIN 101204.00)

Tennessee Department of Transportation
 Attn: Melanie Bumpus
 505 Deaderick Street
 Suite 900, J.K. Polk Building
 Nashville, TN 37243

Dear Ms. Bumpus:

This refers to your recent application requesting a Department of the Army (DA) permit for a modified alignment to State Route 62 (Western Avenue) in Knox County, Tennessee. Please refer to File Number LRN-2002-00605 in reference to this project.

Based upon the information submitted to this office, we have determined your proposed work meets the criteria of DA Nationwide Permit (NWP) #14 Linear Transportation Projects and NWP #12 Utility Line Activities which became effective March 19, 2012 [77 FR 10184]. The proposed activity includes the impacts listed in the table below.

Feature	Latitude	Longitude	Impact Type	Measurement	Minimization Measures
STR-1 Perennial Location #1 Unnamed Trib to East Fork Third Creek	35.9755	-83.9622	-10ft x 4ft box culvert construction -Reroute portion of stream -Riprap at box culvert -Riprap at confluence of STR-1 & STR-2 -Remove/retire existing gas, water, telephone and sewer lines -Install water and telephone lines - Temporary stream crossing	- 104.41 feet new box culvert - 82 feet - 30 feet riprap - 35 feet riprap - approx 6ft x 25 ft each 2 total - 25 ft x 20 ft	- Open 147 feet of stream including 82 feet of stream relocation -Place 2 rows of trees on both sides of new channel. 75% viability over 5 years
STR-2 Perennial Location #2 East Fork Third Creek	35.9755	-83.9622	-14ft x 6ft box culvert construction - Riprap at confluence of STR-1 & STR-2 - Riprap 50 feet at box culvert outlet -Remove existing water and	- 78.5 feet new box culvert - 91 feet of riprap - 50 feet of riprap	- remove 131 ft of concrete lining in channel - remove 30 feet of 9ft x 6ft box culvert - remove 24 feet of 16.5ft x 4ft box culvert

			sewer lines -Install water line - Temporary stream crossing	-25ft x 6ft - 25 ft x 20 ft	
STR-2 Perennial Location #3 East Fork Third Creek	35.9751	-83.9595	-Remove water, telephone, gas, electrical and sewer lines -Install water, sewer, gas, electrical and telephone lines - Temporary stream crossing - Span Bridge- no impact	Approx 25ft x 6ft each crossing - 25 ft x 20 ft	No minimization proposed
STR-2 Perennial Location #4 East Fork Third Creek	35.9704	-83.9549	- Riprap - Remove sewer line - Install sewer line - Temporary stream crossing - Span bridge - no impact	- 53 ft of riprap - Approx 25ft x 6ft each crossing - 25 ft x 20 ft	No minimization proposed

The proposed work must be constructed in accordance with the enclosed plans, NWP Conditions and Special Conditions. This verification is valid until March 18, 2017, unless the NWP authorization is modified, suspended, or revoked. If the work has not been completed by that time, you should contact this office to obtain another permit determination in accordance with the rules and regulations in effect at that time.

In order for this Nationwide Permit to be valid, you must obtain a water quality certification from the state. You must provide our office with a copy of the required certification or waiver of certification from the state prior to proceeding with the work. You must also comply with all conditions of the state certification. You may also need to obtain approval from the Tennessee Valley Authority. In addition, you are responsible for obtaining any other federal, state, and/or local permits, approvals, or authorizations.

If changes in the location or approved plans are necessary, revised plans shall be submitted promptly to this office for review and approval. NWP General Condition #30 requires that you submit a signed certification. **Please sign and return the enclosed "Compliance Certification" form upon completion of the proposed activity.**

If you have any questions, please contact Cathy Elliott at the above address, telephone (865) 986-7296, or email catherine.b.elliott@usace.army.mil.

Sincerely,



Eric Reusch
Chief, Eastern Regulatory Section
Operations Division

Enclosures

1. Special Conditions
2. NWP #14 Conditions
3. NWP #12 Conditions
3. NWP General Conditions
4. Project Plans
5. Location Map
6. Compliance Certification

Copy Furnished:

TVA - Via Email

SPECIAL CONDITIONS FOR DA PERMIT LRN-2002-00605,
TDOT; SR 62- Western Avenue
ROAD IMPROVEMENT PROJECT

1. The stream channel relocation segments shall be constructed using natural stream design techniques to re-establish the appropriate hydro-geomorphic configuration, in accordance with the attached project drawings. Where feasible, in-stream structures and habitat features such as bank boulders, boulder clusters, root wads and large woody debris shall be installed to enhance aquatic habitat.
2. The stream impact minimization measures shall be completed as described in the Minimization Measures section of the impacts table included on the first page of this verification letter. Specifically, at Location #1, 147 feet of stream shall be opened, including 82 feet of stream relocation; at Location #2, 131 feet of concrete lining in the channel shall be removed, and 30 feet of 9 ft x 6 ft box culvert and 24 feet of 16.5 x 4 ft box culvert shall be removed.
3. The vegetation plantings for stream relocation shall be completed in accordance with the approved project plans and shall only include native species.
4. In order to demonstrate that stream channel relocation segments have an appropriate hydro-geomorphic configuration, the permittee shall submit post-project site photos and documentation that the stream channel was constructed in accordance with the approved project plans. This documentation shall be submitted to the Corps within 90 days of the construction completion date. If an appropriate hydro-geomorphic configuration is not achieved within 90 days of the construction completion date, remediation and further monitoring may be required.



Nationwide Permit

No. 12, Utility Line Activities

Activities required for the construction, maintenance, repair, and removal of utility lines and associated facilities in waters of the United States, provided the activity does not result in the loss of greater than ½-acre of waters of the United States for each single and complete project.

Utility lines: This NWP authorizes the construction, maintenance, or repair of utility lines, including outfall and intake structures, and the associated excavation, backfill, or bedding for the utility lines, in all waters of the United States, provided there is no change in pre-construction contours. A “utility line” is defined as any pipe or pipeline for the transportation of any gaseous, liquid, liquescent, or slurry substance, for any purpose, and any cable, line, or wire for the transmission for any purpose of electrical energy, telephone, and telegraph messages, and radio and television communication. The term “utility line” does not include activities that drain a water of the United States, such as drainage tile or french drains, but it does apply to pipes conveying drainage from another area.

Material resulting from trench excavation may be temporarily sidecast into waters of the United States for no more than three months, provided the material is not placed in such a manner that it is dispersed by currents or other forces. The district engineer may extend the period of temporary side casting for no more than a total of 180 days, where appropriate. In wetlands, the top 6 to 12 inches of the trench should normally be backfilled with topsoil from the trench. The trench cannot be constructed or backfilled in such a manner as to drain waters of the United States (e.g., backfilling with extensive gravel layers, creating a french drain effect). Any exposed slopes and stream banks must be stabilized immediately upon completion of the utility line crossing of each waterbody.

Utility line substations: This NWP authorizes the construction, maintenance, or expansion of substation facilities associated with a power line or utility line in non-tidal waters of the United States, provided the activity, in combination with all other activities included in one single and complete project, does not result in the loss of greater than ½-acre of waters of the United States. This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters of the United States to construct, maintain, or expand substation facilities.

Foundations for overhead utility line towers, poles, and anchors: This NWP authorizes the construction or maintenance of foundations for overhead utility line towers, poles, and anchors in all waters of the United States, provided the foundations are the minimum size necessary and separate footings for each tower leg (rather than a larger single pad) are used where feasible.

Access roads: This NWP authorizes the construction of access roads for the construction and maintenance of utility lines, including overhead power lines and utility line substations, in non-tidal waters of the United States, provided the activity, in combination with all other activities included in one single and complete project, does not cause the loss of greater than ½-acre of non-tidal waters of the United States. This NWP does not authorize discharges into nontidal wetlands adjacent to tidal waters for access roads. Access roads must be the minimum width necessary (see Note 2, below). Access roads must be constructed so that the length of the road minimizes any adverse effects on waters of the United States and must be as near as possible to pre-construction contours and

elevations (e.g., at grade corduroy roads or geotextile/gravel roads). Access roads constructed above pre-construction contours and elevations in waters of the United States must be properly bridged or culverted to maintain surface flows.

This NWP may authorize utility lines in or affecting navigable waters of the United States even if there is no associated discharge of dredged or fill material (See 33 CFR Part 322). Overhead utility lines constructed over section 10 waters and utility lines that are routed in or under section 10 waters without a discharge of dredged or fill material require a section 10 permit.

This NWP also authorizes temporary structures, fills, and work necessary to conduct the utility line activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if any of the following criteria are met: (1) The activity involves mechanized land clearing in a forested wetland for the utility line right-of-way; (2) a section 10 permit is required; (3) the utility line in waters of the United States, excluding overhead lines, exceeds 500 feet; (4) the utility line is placed within a jurisdictional area (i.e., water of the United States), and it runs parallel to or along a stream bed that is within that jurisdictional area; (5) discharges that result in the loss of greater than $\frac{1}{10}$ -acre of waters of the United States; (6) permanent access roads are constructed above grade in waters of the United States for a distance of more than 500 feet; or (7) permanent access roads are constructed in waters of the United States with impervious materials. (See general condition 31.)

(Sections 10 and 404)

Note 1: Where the proposed utility line is constructed or installed in navigable waters of the United States (i.e., section 10 waters) within the coastal United States, the Great Lakes, and United States territories, copies of the pre-construction notification and NWP verification will be sent by the Corps to the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), for charting the utility line to protect navigation.

Note 2: Access roads used for both construction and maintenance may be authorized, provided they meet the terms and conditions of this NWP. Access roads used solely for construction of the utility line must be removed upon completion of the work, in accordance with the requirements for temporary fills.

Note 3: Pipes or pipelines used to transport gaseous, liquid, liquescent, or slurry substances over navigable waters of the United States are considered to be bridges, not utility lines, and may require a permit from the U.S. Coast Guard pursuant to Section 9 of the Rivers and Harbors Act of 1899. However, any discharges of dredged or fill material into waters of the United States associated with such pipelines will require a section 404 permit (see NWP 15).

Note 4: For overhead utility lines authorized by this NWP, a copy of the PCN and NWP verification will be provided to the Department of Defense Siting Clearinghouse, which will evaluate potential effects on military activities.



US Army Corps
of Engineers®

Nashville District

Nationwide Permit General Conditions

The following General Conditions must be followed in order for any authorization by NWP to be valid:

- 1. Navigation.** (a) No activity may cause more than a minimal adverse effect on navigation. (b) Any safety lights and signals prescribed by the US Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the US. (c) The permittee understands and agrees that, if future operations by the US require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the US. No claim shall be made against the US on account of any such removal or alteration.
- 2. Aquatic Life Movements.** No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species.
- 3. Spawning Areas.** Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.
- 4. Migratory Bird Breeding Areas.** Activities in waters of the US that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.
- 5. Shellfish Beds.** No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.
- 6. Suitable Material.** No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).
- 7. Water Supply Intakes.** No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.
- 8. Adverse Effects From Impoundments.** If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.
- 9. Management of Water Flows.** To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).
- 10. Fills Within 100-Year Floodplains.** The activity must comply with applicable FEMA-approved state or local floodplain management requirements.
- 11. Equipment.** Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.
- 12. Soil Erosion and Sediment Controls.** Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the US during periods of low-flow or no-flow.
- 13. Removal of Temporary Fills.** Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.
- 14. Proper Maintenance.** Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.
- 15. Single and Complete Project.** The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.
- 16. Wild and Scenic Rivers.** No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, US Forest Service, US Fish and Wildlife Service).
- 17. Tribal Rights.** No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.
- 18. Endangered Species.** (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed. (b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address ESA compliance for the NWP activity, or whether additional ESA consultation is necessary. (c) Non-federal permittees must submit a pre-construction notification (PCN) to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, and shall not begin work on the activity until notified by the

district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the PCN must include the name(s) of the endangered or threatened species that might be affected by the proposed work or that utilize the designated critical habitat that might be affected by the proposed work. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete PCN. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the project, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification of the proposed activities will have "no effect" on listed species or critical habitat, or until Section 7 consultation has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from Corps. (d) As a result of formal or informal consultation with the USFWS or NMFS the district engineer may add species-specific regional endangered species conditions to the NHPs. (e) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the USFWS or the NMFS, The Endangered Species Act prohibits any person subject to the jurisdiction of the US to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering. (f) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the USFWS and NMFS at <http://www.fws.gov/ipac> and <http://www.noaa.gov/fisheries.html> respectively.

19. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for obtaining any "take" permits required under the USFWS's regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act. The permittee should contact the appropriate local office of the USFWS to determine if such "take" permits are required for a particular activity.

20. Historic Properties. (a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied. (b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address section 106 compliance for the NWP activity, or whether additional section 106 consultation is necessary. (c) Non-federal permittees must submit a pre-construction notification to the district engineer if the authorized activity may have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of Section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the district engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties on which the activity

may have the potential to cause effects and notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA is complete. (d) The district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA Section 106 consultation is required. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR §800.3(a)). If NHPA section 106 consultation is required and will occur, the district engineer will notify the non-Federal applicant that he or she cannot begin work until Section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps. (e) Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the activity on historic properties.

21. Discovery of Previously Unknown Remains and Artifacts. If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal and state coordination required to determine if the items or remains warrant recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. Designated Critical Resource Waters. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment. (a) Discharges of dredged or fill material into waters of the US are not authorized by NHPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, and 52 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters. (b) For NHPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with general condition 31, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NHPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

23. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that adverse effects on the aquatic environment are minimal: (a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the US to the maximum extent practicable at the project site (i.e., on site). (b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal. (c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse effects of the proposed activity are minimal, and provides a project-specific waiver of this

requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effects on the aquatic environment. Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332. (1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in minimal adverse effects on the aquatic environment. (2) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, wetland restoration should be the first compensatory mitigation option considered. (3) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) – (14) must be approved by the district engineer before the permittee begins work in waters of the US, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)). (4) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the impact site and the number of credits to be provided. (5) Compensatory mitigation requirements (e.g., resource type and amount) to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan. (d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation, such as stream rehabilitation, enhancement, or preservation, to ensure that the activity results in minimal adverse effects on the aquatic environment. (e) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2-acre of waters of the US, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that a project already meeting the established acreage limits also satisfies the minimal impact requirement associated with the NWPs. (f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the restoration or establishment, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, riparian areas may be the only compensatory mitigation required. Riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to establish a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or establishing a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses. (g) Permittees may propose the use of mitigation banks, in-lieu fee programs, or separate permittee-responsible mitigation. For activities resulting in the loss of marine or estuarine resources, permittee-responsible compensatory mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management. (h) Where certain functions and services of waters of the US are permanently adversely affected, such as the conversion of a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse effects of the project to the minimal level.

24. Safety of Impoundment Structures. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. Water Quality. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

26. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or USEPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the US authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the US for the total project cannot exceed 1/3-acre.

29. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature: "When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

Transferee _____

Date _____

30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include: (a) A statement that the authorized work was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions; (b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification

must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and (c) The signature of the permittee certifying the completion of the work and mitigation.

31. Pre-Construction Notification (PCN). (a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a PCN as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either: (1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or (2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 20 that the activity may have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f) and/or Section 106 of the National Historic Preservation (see 33 CFR 330.4(g)) has been completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2). (b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information: (1) Name, address and telephone numbers of the prospective permittee; (2) Location of the proposed project; (3) A description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause, including the anticipated amount of loss of water of the US expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. The description should be sufficiently detailed to allow the district engineer to determine that the adverse effects of the project will be minimal and to determine the need for compensatory mitigation. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans); (4) The PCN must include a delineation of wetlands, other special aquatic sites, and waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many waters of the US. The 45 day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate; (5) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse effects are minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan. (6) If any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated

critical habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work. Federal applicants must provide documentation demonstrating compliance with the Endangered Species Act; and (7) For an activity that may affect a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, for non-Federal applicants the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property. Federal applicants must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act. (c) Form of PCN Notification: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is a PCN and must include all of the information required in paragraphs b)(1) through (7) of this general condition. A letter containing the required information may also be used. (d) Agency Coordination: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects to a minimal level. (2) For all NWP activities that require PCN notification and result in the loss of greater than 1/2-acre of waters of the US, for NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require PCN notification and will result in the loss of greater than 300 linear feet of intermittent and ephemeral stream bed, and for all NWP 48 activities that require PCN notification, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (USFWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Office (THPO)), and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to telephone or fax the district engineer notice that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the PCN notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure the net adverse environmental effects to the aquatic environment of the proposed activity are minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each PCN notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5. (3) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act. (4) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of PCN notifications to expedite agency coordination.

Further Information

1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.
2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.
3. NWPs do not grant any property rights or exclusive privileges.
4. NWPs do not authorize any injury to the property or rights of others.
5. NWPs do not authorize interference with any existing or proposed Federal project.



US Army Corps
of Engineers®
Nashville District

Nationwide Permit

LRN-2009-00367

No. 14, Linear Transportation Projects

Activities required for the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, airport runways, and taxiways) in waters of the United States. For linear transportation projects in non-tidal waters, the discharge cannot cause the loss of greater than $\frac{1}{2}$ -acre of waters of the United States. For linear transportation projects in tidal waters, the discharge cannot cause the loss of greater than $\frac{1}{3}$ -acre of waters of the United States. Any stream channel modification, including bank stabilization, is limited to the minimum necessary to construct or protect the linear transportation project; such modifications must be in the immediate vicinity of the project.

This NWP also authorizes temporary structures, fills, and work necessary to construct the linear transportation project. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to preconstruction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

This NWP cannot be used to authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train stations, or aircraft hangars.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) The loss of waters of the United States exceeds $\frac{1}{10}$ -acre; or (2) there is a discharge in a special aquatic site, including wetlands. (See general condition 31.)

(Sections 10 and 404)

Note: Some discharges for the construction of farm roads or forest roads, or temporary roads for moving mining equipment, may qualify for an exemption under Section 404(f) of the Clean Water Act (see 33 CFR 323.4).



Nationwide Permit General Conditions

The following General Conditions must be followed in order for any authorization by NWP to be valid:

LRN-2009-00367

- 1. Navigation.** (a) No activity may cause more than a minimal adverse effect on navigation. (b) Any safety lights and signals prescribed by the US Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the US. (c) The permittee understands and agrees that, if future operations by the US require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the US. No claim shall be made against the US on account of any such removal or alteration.
- 2. Aquatic Life Movements.** No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species.
- 3. Spawning Areas.** Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.
- 4. Migratory Bird Breeding Areas.** Activities in waters of the US that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.
- 5. Shellfish Beds.** No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.
- 6. Suitable Material.** No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).
- 7. Water Supply Intakes.** No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.
- 8. Adverse Effects From Impoundments.** If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.
- 9. Management of Water Flows.** To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

- 10. Fills Within 100-Year Floodplains.** The activity must comply with applicable FEMA-approved state or local floodplain management requirements.
- 11. Equipment.** Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.
- 12. Soil Erosion and Sediment Controls.** Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the US during periods of low-flow or no-flow.
- 13. Removal of Temporary Fills.** Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.
- 14. Proper Maintenance.** Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.
- 15. Single and Complete Project.** The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.
- 16. Wild and Scenic Rivers.** No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, US Forest Service, US Fish and Wildlife Service).
- 17. Tribal Rights.** No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.
- 18. Endangered Species.** (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed. (b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address ESA compliance for the NWP activity, or whether additional ESA consultation is necessary. (c) Non-federal permittees must submit a pre-construction notification (PCN) to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, and shall not begin work on the activity until notified by the

district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the PCN must include the name(s) of the endangered or threatened species that might be affected by the proposed work or that utilize the designated critical habitat that might be affected by the proposed work. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete PCN. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the project, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification of the proposed activities will have "no effect" on listed species or critical habitat, or until Section 7 consultation has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from Corps. (d) As a result of formal or informal consultation with the USFWS or NMFS, the district engineer may add species-specific regional endangered species conditions to the NWP's. (e) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the USFWS or the NMFS, The Endangered Species Act prohibits any person subject to the jurisdiction of the US to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering. (f) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the USFWS and NMFS at <http://www.fws.gov/ipac> and <http://www.noaa.gov/fisheries.html> respectively.

19. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for obtaining any "take" permits required under the USFWS's regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act. The permittee should contact the appropriate local office of the USFWS to determine if such "take" permits are required for a particular activity.

20. Historic Properties. (a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied. (b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address section 106 compliance for the NWP activity, or whether additional section 106 consultation is necessary. (c) Non-federal permittees must submit a pre-construction notification to the district engineer if the authorized activity may have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of Section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the district engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties or which the activity

may have the potential to cause effects and notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA is complete. (d) The district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA Section 106 consultation is required. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR §800.3(a)). If NHPA section 106 consultation is required and will occur, the district engineer will notify the non-Federal applicant that he or she cannot begin work until Section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps. (e) Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the activity on historic properties.

21. Discovery of Previously Unknown Remains and Artifacts. If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal and state coordination required to determine if the items or remains warrant recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. Designated Critical Resource Waters. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment. (a) Discharges of dredged or fill material into waters of the US are not authorized by NWP's 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, and 52 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters. (b) For NWP's 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with general condition 31, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWP's only after it is determined that the impacts to the critical resource waters will be no more than minimal.

23. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that adverse effects on the aquatic environment are minimal: (a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the US to the maximum extent practicable at the project site (i.e., on site). (b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal. (c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse effects of the proposed activity are minimal, and provides a project-specific waiver of this

requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effects on the aquatic environment. Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332. (1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in minimal adverse effects on the aquatic environment. (2) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, wetland restoration should be the first compensatory mitigation option considered. (3) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) – (14) must be approved by the district engineer before the permittee begins work in waters of the US, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)). (4) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the impact site and the number of credits to be provided. (5) Compensatory mitigation requirements (e.g., resource type and amount) to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan. (d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation, such as stream rehabilitation, enhancement, or preservation, to ensure that the activity results in minimal adverse effects on the aquatic environment. (e) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2-acre of waters of the US, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that a project already meeting the established acreage limits also satisfies the minimal impact requirement associated with the NWPs. (f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the restoration or establishment, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, riparian areas may be the only compensatory mitigation required. Riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to establish a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or establishing a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses. (g) Permittees may propose the use of mitigation banks, in-lieu fee programs, or separate permittee-responsible mitigation. For activities resulting in the loss of marine or estuarine resources, permittee-responsible compensatory mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management. (h) Where certain functions and services of waters of the US are permanently adversely affected, such as the conversion of a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse effects of the project to the minimal level.

24. Safety of Impoundment Structures. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. Water Quality. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

26. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or USEPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the US authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the US for the total project cannot exceed 1/3-acre.

29. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature: "When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

Transferee _____

Date _____

30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include: (a) A statement that the authorized work was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions; (b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification

must include the documentation required by 33 CFR 332.3(i)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and (c) The signature of the permittee certifying the completion of the work and mitigation.

31. Pre-Construction Notification (PCN). (a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a PCN as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity under the NWP with any special conditions imposed by the district or division engineer; or (2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 20 that the activity may have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation (see 33 CFR 330.4(g)) has been completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2). (b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information: (1) Name, address and telephone numbers of the prospective permittee; (2) Location of the proposed project; (3) A description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause, including the anticipated amount of loss of water of the US expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. The description should be sufficiently detailed to allow the district engineer to determine that the adverse effects of the project will be minimal and to determine the need for compensatory mitigation. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans); (4) The PCN must include a delineation of wetlands, other special aquatic sites, and waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many waters of the US. The 45 day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate; (5) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse effects are minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan. (6) If any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated

critical habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work. Federal applicants must provide documentation demonstrating compliance with the Endangered Species Act; and (7) For an activity that may affect a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, for non-Federal applicants the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property. Federal applicants must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act. (c) Form of PCN Notification: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is a PCN and must include all of the information required in paragraphs (b)(1) through (7) of this general condition. A letter containing the required information may also be used. (d) Agency Coordination: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects to a minimal level. (2) For all NWP activities that require PCN notification and result in the loss of greater than 1/2-acre of waters of the US, for NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require PCN notification and will result in the loss of greater than 300 linear feet of intermittent and ephemeral stream bed, and for all NWP 48 activities that require PCN notification, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (USFWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Office (THPO), and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to telephone or fax the district engineer notice that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the PCN notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure the net adverse environmental effects to the aquatic environment of the proposed activity are minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each PCN notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5. (3) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act. (4) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of PCN notifications to expedite agency coordination.

Further Information

1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.
2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.
3. NWPs do not grant any property rights or exclusive privileges.
4. NWPs do not authorize any injury to the property or rights of others.
5. NWPs do not authorize interference with any existing or proposed Federal project.

ATTENTION

YOU ARE REQUIRED TO SUBMIT THIS SIGNED CERTIFICATION REGARDING THE COMPLETED ACTIVITY AND MITIGATION.

Nationwide Permit General Condition 30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and any required compensatory mitigation. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately at a compliance inspection.

I hereby certify that the work authorized by **Permit No. 2002-00605** and any required mitigation was done in accordance with the Corps authorization, including any general, regional, or special conditions.

Permittee Signature

Date _____

Submit this signed certification to:

Eastern Regulatory Field Office
501 Adesa Pkwy, Suite 250
Lenoir City, TN 37771

State Route 62 (Western Ave) Unnamed Tributary of East Fork Third Creek and East Fork Third Creek, Tennessee River Mile 645.R, Knoxville, Knox County, Tennessee (PIN 101204.00)

FILE NO LRN-2002-00605
VICINITY MAP



APPLICATION BY:
TENNESSEE DEPARTMENT OF TRANSPORTATION
PE # 47023-1257-14
PIN 101204.00
FED. CONST. PROJ. * HHP-62(34)

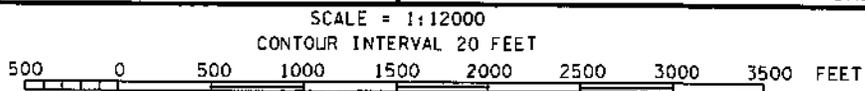
QUAD: KNOXVILLE, TN 147-NW

S.R. 62 (WESTERN AVE.)
FROM: 525' ± EAST OF TEXAS AVE.
TO: MAJOR AVE.

COUNTY: KNOX
NEAR: KNOXVILLE

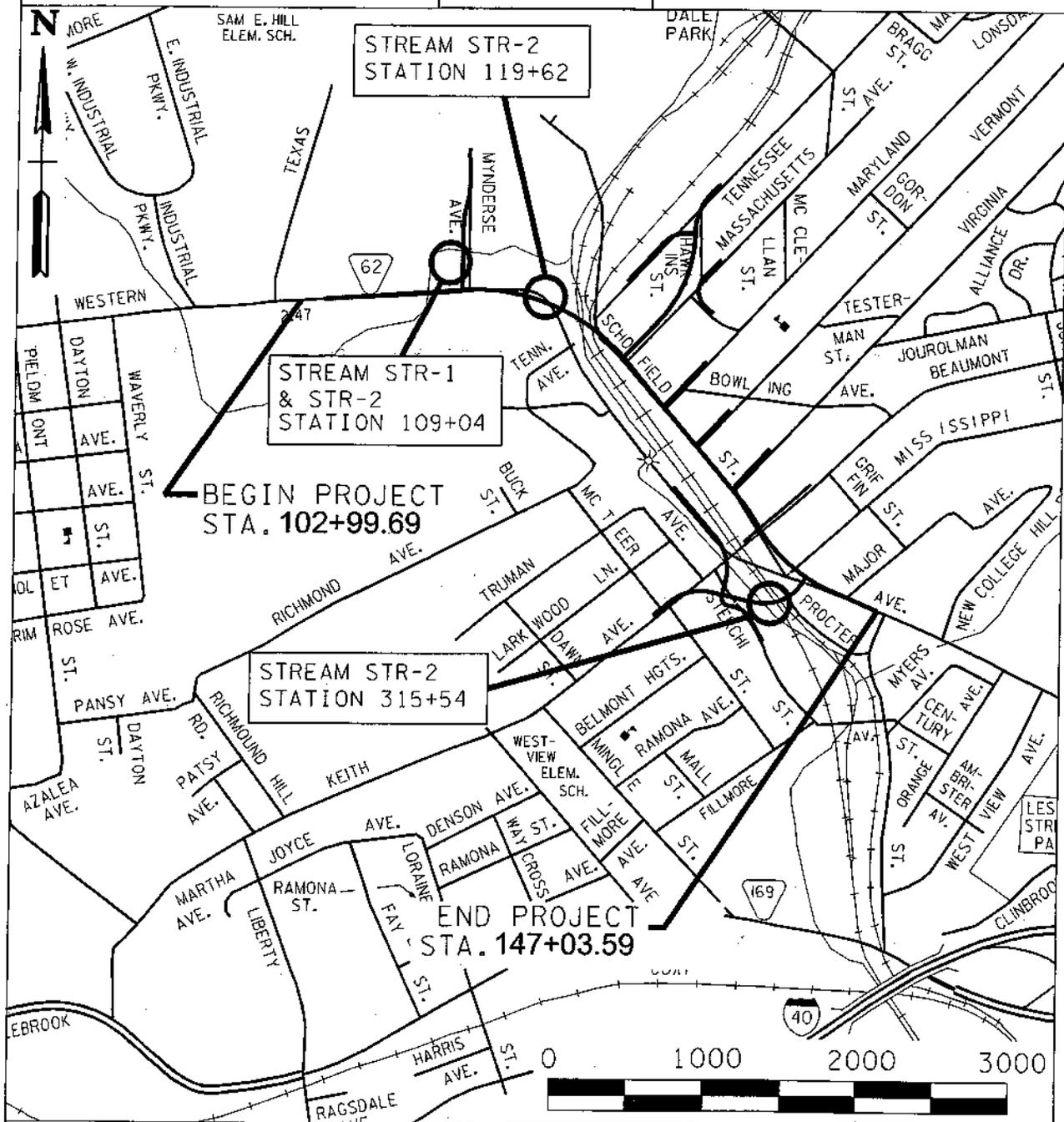
DATE: 12/3/12 REVISED: / /

SHEET 2 OF 11



FILE NO. LRN-2002-00605

Location Map



KNOX COUNTY

APPLICATION BY:
 TENNESSEE DEPARTMENT OF TRANSPORTATION
 PE # 47023-1257-14
 PIN # 101204.00
 S.R. 62 (WESTERN AVE.)
 FROM: 525'± EAST OF TEXAS AVE.
 TO: MAJOR AVE.
 KNOX COUNTY

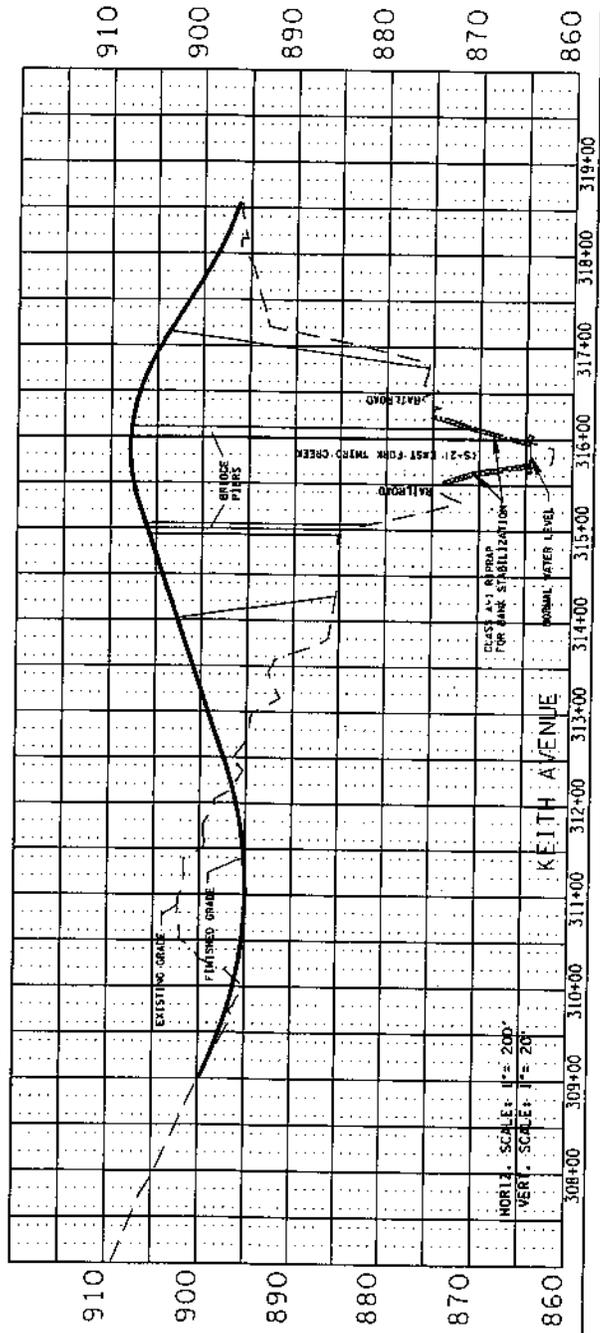
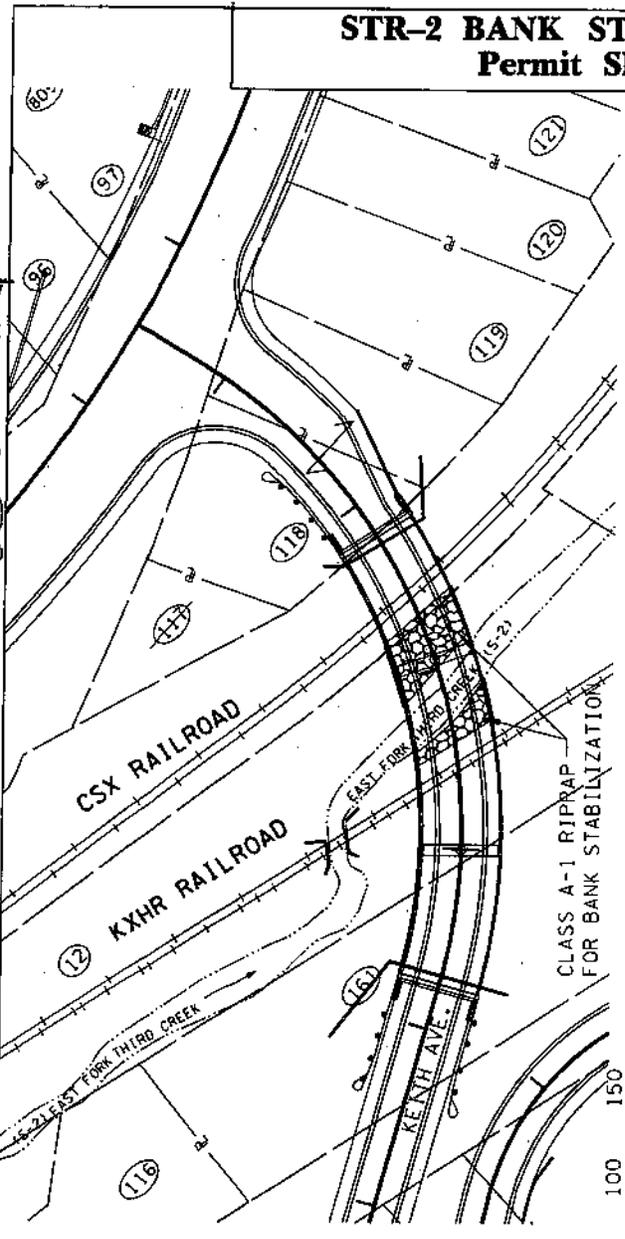
DATE: 12/3/12

REVISED: / /

SHEET 1 OF 11

FILE NO. LEN-2002-00605 Location #4

STR-2 BANK STABILIZATION Permit Sketch



STREAM IMPACT TABLE	
EXISTING	
OPEN STREAM	53 FT.
STRUCTURE	0 FT.
TOTAL EXISTING STRUCTURE	0 FT.
TOTAL EXISTING IMPACT LENGTH	53 FT.
PROPOSED	
OPEN STREAM	53 FT.
INCLUDES: RIP-RAP FOR BANK STABILIZATION	53 FT.
STRUCTURE	53 FT.
INCLUDES: 3-SPAN BRIDGE	53 FT.
TOTAL PROPOSED STRUCTURE	53 FT.
TOTAL PROPOSED LENGTH	53 FT.

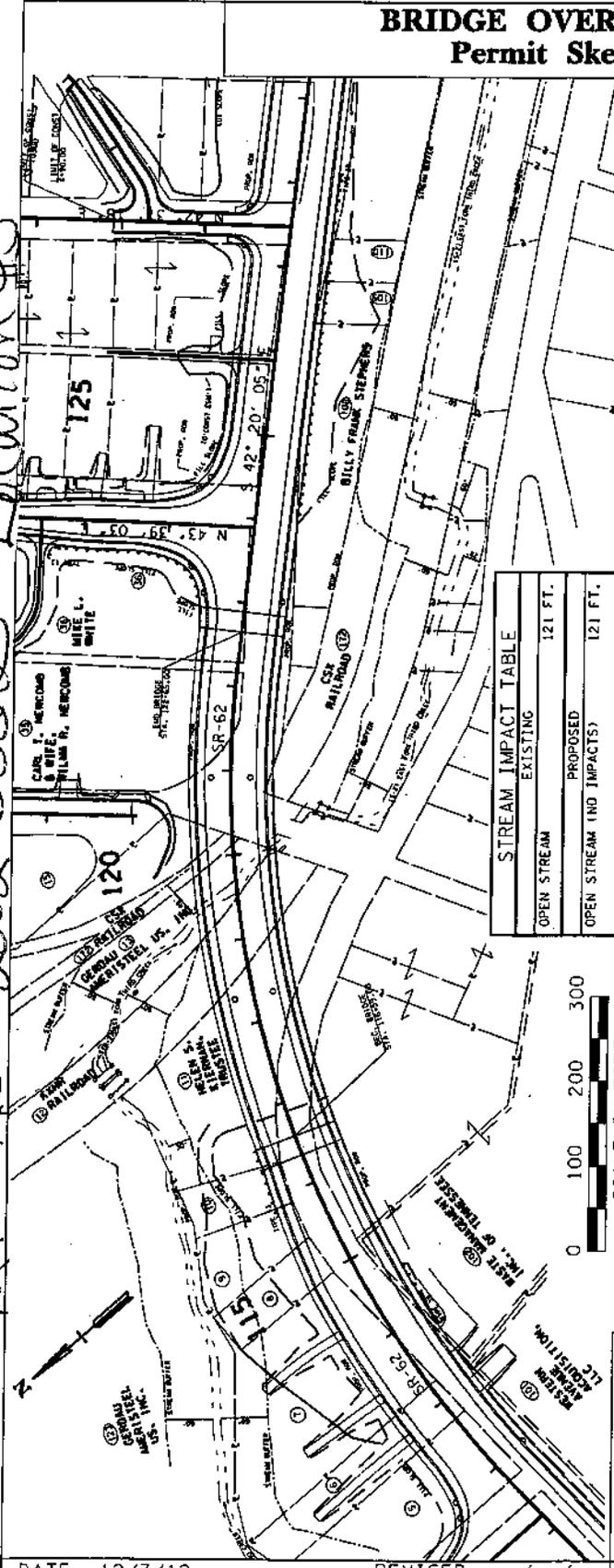
APPLICATION BY:
 TENNESSEE DEPARTMENT OF TRANSPORTATION
 PE # 47023-1257-14
 PIN # 101204.00
 STATE ROUTE 62 (WESTERN AVE.)
 FROM: 525' EAST OF TEXAS AVE.
 TO: MAJOR AVE.
 KNOX COUNTY

DATE: 12/3/12

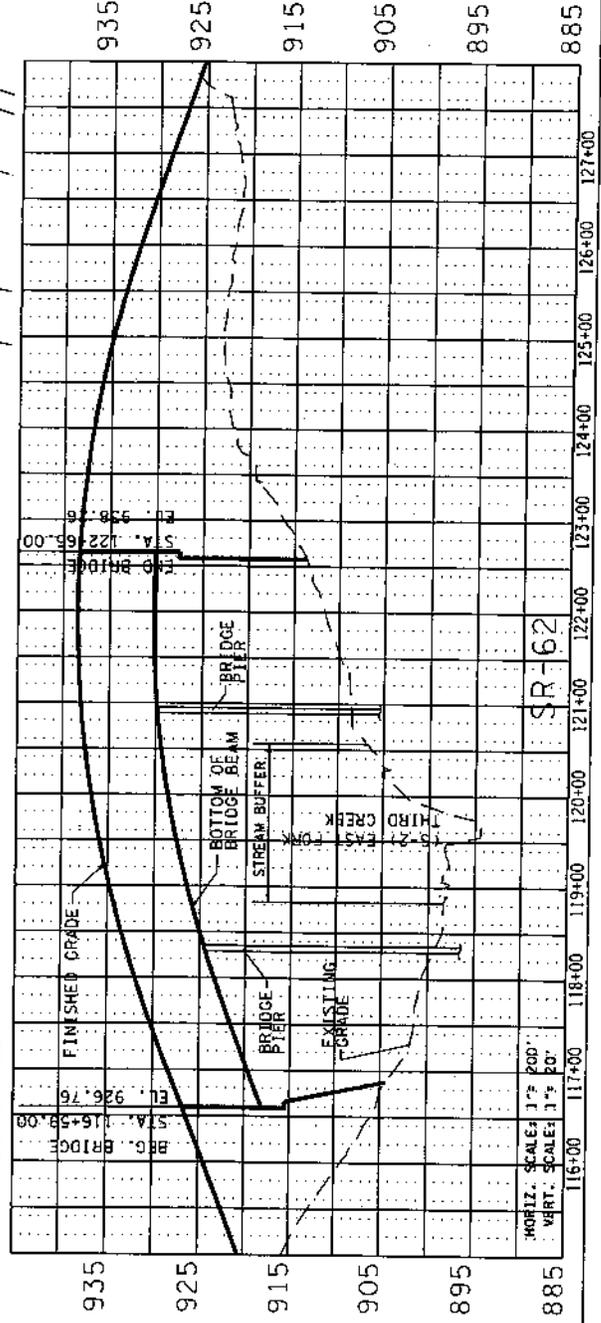
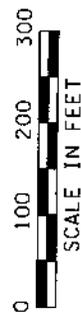
REVISED: / /

BRIDGE OVER STR-2 Permit Sketch

File No. LRN-2002-80605 Location #3



STREAM IMPACT TABLE	
OPEN STREAM	EXISTING 121 FT.
OPEN STREAM (NO IMPACTS)	PROPOSED 121 FT.



APPLICATION BY:
 TENNESSEE DEPARTMENT OF TRANSPORTATION
 PE # 47023-1257-14
 PIN # 101204.00
 STATE ROUTE 62 (WESTERN AVF.)
 FROM: 525' EAST OF TEXAS AVE.
 TO: MAJOR AVE.
 KNOX COUNTY

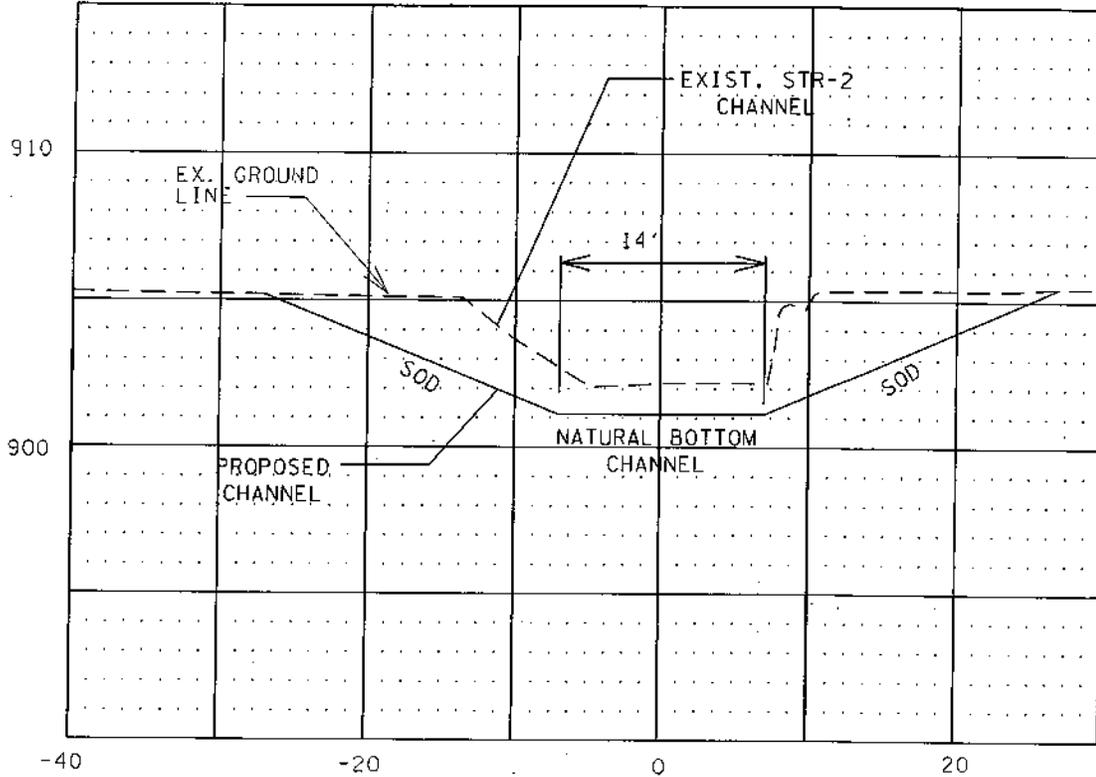
DATE: 12/3/12

REVISED: / /

SHEET 10 OF 11

File No. LRN-2002-00605 Location # 2

**STREAM RELOCATION
(STR-2) Permit Sketch**



STREAM 2 CROSS-SECTION
SECTION B-B

STREAM IMPACT TABLE	
EXISTING	
OPEN STREAM	85 FT.
STRUCTURE 1- CONCRETE LINED CHANNEL UNDER EXIST. BUILDING	55 FT.
STRUCTURE 2- 9' X 6' BOX CULVERT	30 FT.
STRUCTURE 3- CONCRETE LINED CHANNEL UNDER EXIST. BUILDING	76 FT.
STRUCTURE 4- 16.5' X 4' BOX CULVERT	24 FT.
TOTAL EXISTING STRUCTURES LENGTH	185 FT.
TOTAL EXISTING IMPACT LENGTH	270 FT.
PROPOSED	
OPEN STREAM	191.5 FT.
INCLUDES: RIP-RAP AT BOX CULVERT OUTLET RIP-RAP AT CONFLUENCE OF STR-1 AND STR-2	50 FT. 91 FT.
STRUCTURE 14' X 6' BOX CULVERT	78.5 FT.
TOTAL PROPOSED STRUCTURE LENGTH	78.5 FT.
TOTAL PROPOSED IMPACT LENGTH	270 FT.
DATE: 12/3/12	REVISED: / /

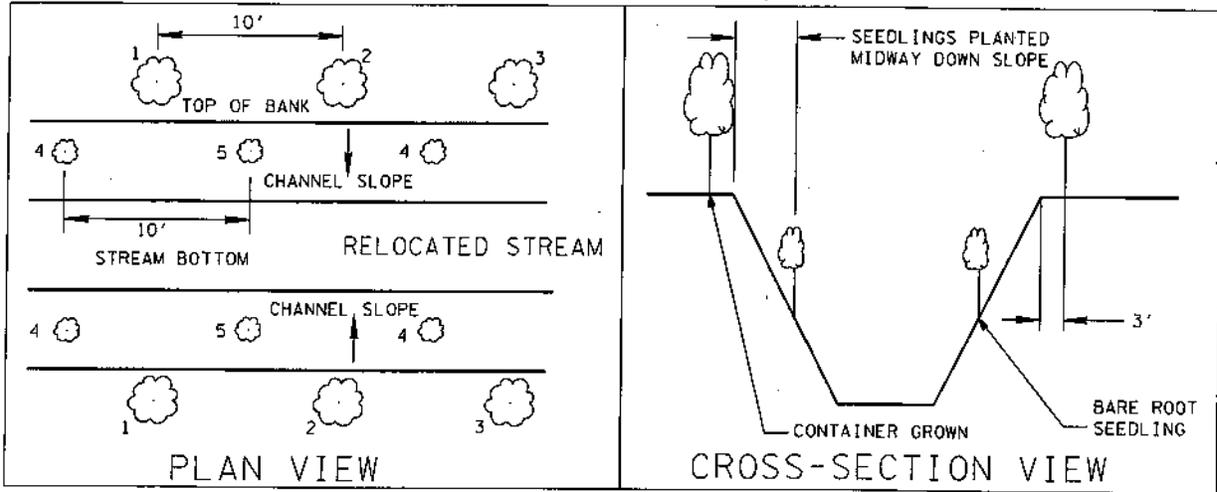
NOT TO SCALE

APPLICATION BY:
TENNESSEE DEPARTMENT OF TRANSPORTATION
PE # 47023-1257-14
PIN # 101204.00
STATE ROUTE 62 (WESTERN AVF.)
FROM: 525' EAST OF TEXAS AVE.
TO: MAJOR AVE.
KNOX COUNTY

File No. LRN-2002-00605 Location # 142

**STREAM RELOCATION MITIGATION
(STR-1 & STR-2) Permit Sketch**

TREE PLANTING SCHEME FOR STR-1 & STR-2



ESTIMATED TREE QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
802-13.02	1. CALYCANTHUS FLORIDUS (SWEETSHRUB 2-5FT CNTNR GRWN)	EACH	10
802-13.06	2. HYDRANGEA QUERCIFOLIA (OAKLF HYDRANGEA 2-5FT CNTNR GRWN)	EACH	10
802-13.09	3. LINDERA BENZOIN (SPICEBUSH 2-5FT CNTNR GRWN)	EACH	10
802-13.54	4. CORNUS AMOMUM (SILKY DOGWOOD SDLNG BARE ROOT)	EACH	19
802-13.62	5. ILEX VERTICILLATA (CMMN WINTERBERRY SDLNG B.R.)	EACH	19

NOT TO SCALE

APPLICATION BY:
 TENNESSEE DEPARTMENT OF TRANSPORTATION
 PE # 47023-1257-14
 PIN # 101204.00
 STATE ROUTE 62 (WESTERN AVF.)
 FROM: 525' EAST OF TEXAS AVE.
 TO: MAJOR AVE.
 KNOX COUNTY

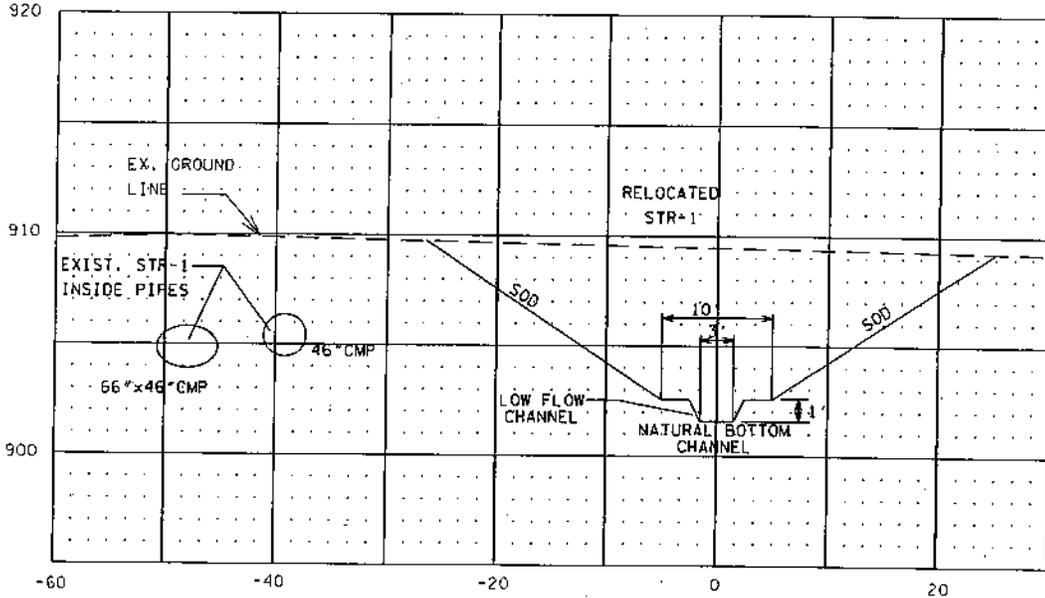
DATE: 12/3/12

REVISED: / /

SHEET 9 OF 11

File No LRN-2002-00005 Location #1

**STREAM RELOCATION
(STR-1) Permit Sketch**



STREAM 1 CROSS-SECTION
SECTION A-A

STREAM IMPACT TABLE	
EXISTING	
STRUCTURE 1- 10' x 2.65' BOX CULVERT	38.59 FT.
OPEN STREAM	55 FT.
STRUCTURE 2- DUAL PIPE CULVERTS 46" CMP & 66" X 46" CMP (EXISTING STR-1 FLOWS INSIDE OF PIPES. EXISTING PIPES TO BE ABANDONED AND STR-1 TO BE RELOCATED INTO NATURAL BOTTOM CHANNEL.)	181 FT.
TOTAL EXISTING STRUCTURES LENGTH	221 FT.
TOTAL EXISTING IMPACT LENGTH	275 FT.
PROPOSED	
OPEN STREAM INCLUDES: RIP-RAP AT BOX CULVERT OUTLET 30 FT. RIP-RAP AT CONFLUENCE OF STR-1 AND STR-2 35 FT. IN KIND STREAM REPLACEMENT 82 FT.	147 FT.
STRUCTURE 10' X 4' BOX CULVERT (EXTENSION OF EXISTING BOX CULVERT)	143 FT.
TOTAL STRUCTURE LENGTH	183 FT.
TOTAL PROPOSED LENGTH	290 FT.

NOT TO SCALE

APPLICATION BY:
TENNESSEE DEPARTMENT OF TRANSPORTATION
PE # 47023-1257-14
PIN # 101204.00
STATE ROUTE 62 (WESTERN AVE.)
FROM: 525' EAST OF TEXAS AVE.
TO: MAJOR AVE.
KNOX COUNTY

DATE: 12/3/12

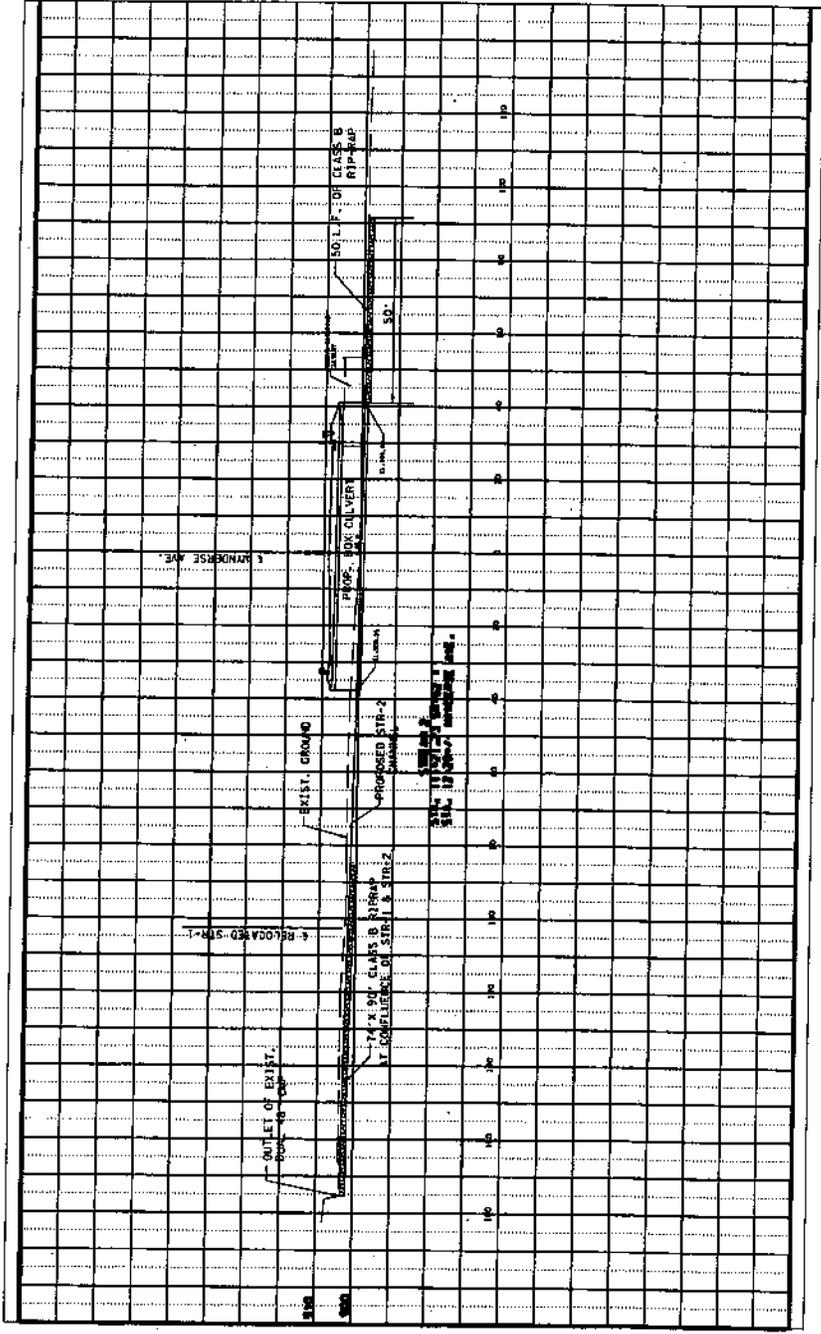
REVISED: / /

SHEET 7 OF 11

File No. LRN-2002-00605 Location # Jet # 2

CULVERT SECTIONS STR-2

CULVERT SECTIONS STREAM 2 Permit Sketch



APPLICATION BY:
TENNESSEE DEPARTMENT OF TRANSPORTATION
PE # 47023-1257-14
PIN # 101204.00
STATE ROUTE 62 (WESTERN AVE.)
FROM: 525' EAST OF TEXAS AVE.
TO: MAJOR AVE.
KNOX COUNTY

DATE: 12/3/12

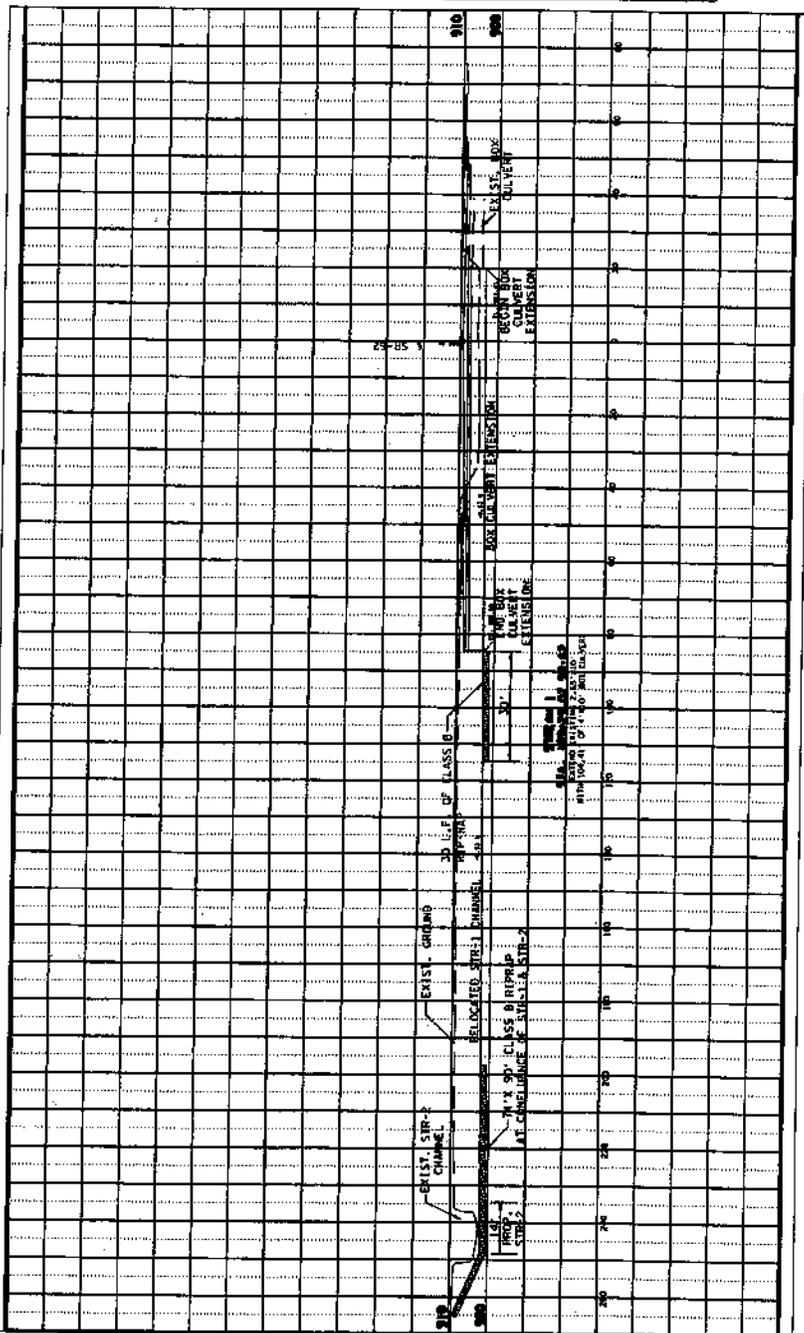
REVISED: / /

SHEET 6 OF 11

File No LRN-2002-00685 Location # 1 & 4D

CULVERT SECTIONS STR-1

CULVERT SECTIONS STREAM 1 Permit Sketch



APPLICATION BY:
TENNESSEE DEPARTMENT OF TRANSPORTATION
PE # 47023-1257-14
PIN # 101204.00
STATE ROUTE 62 (WESTERN AVE.)
FROM: 525' EAST OF TEXAS AVE.
TO: MAJOR AVE.
KNOX COUNTY

DATE: 12/3/12

REVISED: / /

SHEET 5 OF 11

File No. LRN-2002-00605 Location # 142

**STREAM RELOCATION (STR-1)
Permit Sketch**

3
JHS LIMITED PARTNERSHIP



GERDAU AMERISTEEL US, INC.

124
JHS LIMITED PARTNERSHIP

123

123

BEGIN STR-2 IMPACT
218' LT. SR 62
STA. 109+57

END STR-1 IMPACT
213' LT. SR 62
STA. 110+28

END STR-2 IMPACT
237' LT. SR 62
STA. 112+13

46" CMP
INV-904.77
48" CMP
55" CMP
03-48" CMP

RIPRAP CLASS B
74' X 90'

CUT SLOPE

MYNDERSE AVE

FILL SLOPE

PROP. 14" X 6" BOX CUR. VERT.

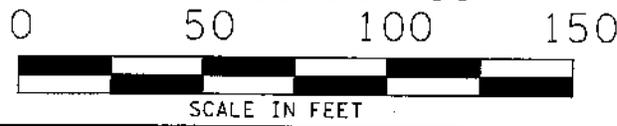
RIPRAP CLASS B
30' X 50'

5

MATCH LINE SHEET 3 OF 9

RICHARD C. JOHNSON & WIFE,
LINDA J. JOHNSON

APPLICATION BY:
TENNESSEE DEPARTMENT OF TRANSPORTATION
PE # 47023-1257-14
PIN # 101204.00
STATE ROUTE 62 (WESTERN AVE.)
FROM: 525' EAST OF TEXAS AVE.
TO: MAJOR AVE.
KNOX COUNTY



DATE: 12/3/12

REVISED: / /

SHEET 4 OF 11

File No. LRN-2002-08685

**STREAM RELOCATION (STR-1)
Permit Sketch**



3

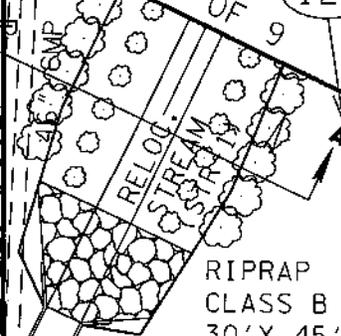
JHS LIMITED PARTNERSHIP

(STR-1) UNNAMED TRIB. TO EAST FORK THIRD CREEK
PROP. ROW

JHS LIMITED PARTNERSHIP

MATCH LINE SHEET 4 OF 9 124

66" X 46" CMP



10' CONST. ESM'T

OUT SLOPE

BEGIN STR-1 IMPACT
RT. SR 62 STA. 109+04

PROP. 10' X 4'
BOX CULVERT
INV. 902.88

SR 62

PRES. ROW

110+00

(STR-1) UNNAMED TRIB. TO EAST FORK THIRD CREEK

24" ST

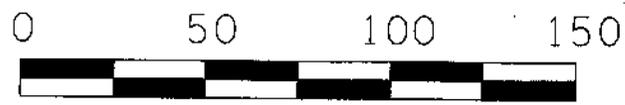
18" S

WESTERN

Location #1

99

ALSCO, INC.



SCALE IN FEET

APPLICATION BY:
TENNESSEE DEPARTMENT OF TRANSPORTATION
PE # 47023-1257-14
PIN # 101204.00
STATE ROUTE 62 (WESTERN AVE.)
FROM: 525' EAST OF TEXAS AVE.
TO: MAJOR AVE.
KNOX COUNTY

DATE: 12/3/12

REVISED: / /

SHEET 3 OF 11



Tennessee Valley Authority

Section 26a Approval

Permit # 262815	Reservoir Lenoir City - Off	Category 2
DOT Project # 47023-1257-14		

Name	Company	Address	Phone/Email
	Tennessee Department of Transportation	Suite 900 J.K. Polk Building 505 Deaderick Street, Nashville TN 37243	615-253-2477 Melanie.Bumpus@tn.gov

Tract(s)

Subdivision/Lot(s)	Stream	Mile	Bank	Map Sheet(s)
Subdivision: N/A	Unnamed Tributary			147 Quad Sheet NW

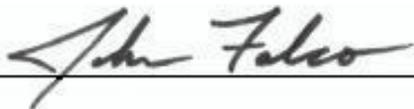
The facilities and/or activities listed below are APPROVED subject to the plans and general and special conditions attached.

- | | |
|---|---|
| 1. Culvert - Roadway (STR-1) | Length (ft., in.): 104' 5"; Width (ft., in.): 10' |
| 2. Riprap (STR-1) | Height (ft., in.): 4'; Length (ft., in.): 30' |
| 3. Riprap (STR-1) | Height (ft., in.): 6'; Length (ft., in.): 35' |
| 4. Utilities - Underground - Water (STR-1) | |
| 5. Utilities - Underground - Telephone (STR-1) | |
| 6. Culvert - Roadway (STR-2, #2) | Length (ft., in.): 78' 6"; Width (ft., in.): 14' |
| 7. Riprap (STR-2, #2) | Height (ft., in.): 6'; Length (ft., in.): 91' |
| 8. Riprap (STR-2, #2) | Height (ft., in.): 4'; Length (ft., in.): 50' |
| 9. Utilities - Underground - Water (STR-2, #2) | |
| 10. Bridge - Vehicular (STR-2, #3) | Length (ft., in.): 606'; Width (ft., in.): 74' |
| 11. Utilities - Underground - Water (STR-2, #3) | |
| 12. Utilities - Underground - Sewer (STR-2, #3) | |
| 13. Utilities - Underground - Other (i.e., chemical, etc.) (Gas Line) (STR-2, #3) | |
| 14. Utilities - Underground - Electric (STR-2, #3) | |
| 15. Utilities - Underground - Telephone (STR-2, #3) | |
| 16. Riprap (STR-2, #4) | Height (ft., in.): 4'; Length (ft., in.): 53' |
| 17. Utilities - Underground - Sewer (STR-2, #4) | |



Tennessee Valley Authority
Section 26a Approval

This permit SUPERSEDES all previous TVA approvals at this location including permits approved under land record numbers:

TVA Representative:  John Falco Date: 08/06/2014

May require review by U.S. Army Corps of Engineers (USACE). Plans have been forwarded to the USACE.
No construction shall commence until you have written approval or verification that no permit is required.
Applicant is also responsible for all local and state approvals that may be required relating to water quality.
No construction shall commence until you have written approval or verification that no permit is required.

GENERAL AND STANDARD CONDITIONS

Section 26a

General Conditions

- 1) You agree to make every reasonable effort to construct and operate the facility authorized herein in a manner so as to minimize any adverse impact on water quality, aquatic life, wildlife, vegetation, and natural environmental values.
- 2) This permit may be revoked by TVA by written notice if:
 - a) the structure is not completed in accordance with approved plans;
 - b) if in TVA's judgment the structure is not maintained in a good state of repair and in good, safe, and substantial condition;
 - c) the structure is abandoned;
 - d) the structure or work must be altered or removed to meet the requirements of future reservoir or land management operations of the United States or TVA;
 - e) TVA finds that the structure has an adverse effect upon navigation, flood control, or public lands or reservations;
 - f) all invoices related to this permit are not timely paid;
 - g) you no longer have sufficient property rights to maintain a structure at this location; or
 - h) a land use agreement (e.g., license, easement, lease) for use of TVA land at this location related to this permit expires, is terminated or cancelled, or otherwise ceases to be effective.
- 3) If this permit for this structure is revoked, you agree to remove the structure, at your expense, upon written notice from TVA. In the event you do not remove the structure within 30 days of written notice to do so, TVA shall have the right to remove or cause to have removed, the structure or any part thereof. You agree to reimburse TVA for all costs incurred in connection with removal.
- 4) In issuing this Approval of Plans, TVA makes no representations that the structures or work authorized or property used temporarily or permanently in connection therewith will not be subject to damage due to future operations undertaken by the United States and/or TVA for the conservation or improvement of navigation, for the control of floods, or for other purposes, or due to fluctuations in elevations of the water surface of the river or reservoir, and no claim or right to compensation shall accrue from any such damage. By the acceptance of this approval, applicant covenants and agrees to make no claim against TVA or the United States by reason of any such damage, and to indemnify and save harmless TVA and the United States from any and all claims by other persons arising out of any such damage.
- 5) In issuing this Approval of Plans, TVA assumes no liability and undertakes no obligation or duty (in tort, contract, strict liability or otherwise) to the applicant or to any third party for any damages to property (real or personal) or personal injuries (including death) arising out of or in any way connected with applicant's construction, operation, or maintenance of the facility which is the subject of this Approval of Plans.
- 6) This approval shall not be construed to be a substitute for the requirements of any federal, state, or local statute, regulation, ordinance, or code, including, but not limited to, applicable building codes, now in effect or hereafter enacted. State 401 water quality certification may apply.
- 7) The facility will not be altered, or modified, unless TVA's written approval has been obtained prior to commencing work.
- 8) You understand that covered second stories are prohibited by Section 1304.204 of the Section 26a Regulations.
- 9) You agree to notify TVA of any transfer of ownership of the approved structure to a third party. Third party is required to make application to TVA for permitting of the structure in their name (1304.10). Any permit which is not transferred within 60 days is subject to revocation.
- 10) You agree to stabilize all disturbed areas within 30 days of completion of the work authorized. All land-disturbing activities shall be conducted in accordance with Best Management Practices as defined by Section 208 of the Clean Water Act to control erosion and sedimentation to prevent adverse water quality and related aquatic impacts. Such practices shall be consistent with sound engineering and construction principles; applicable federal, state, and local statutes, regulations, or ordinances; and proven techniques for controlling erosion and sedimentation, including any required conditions under Section 6 of the Standard Conditions.
- 11) You agree not to use or permit the use of the premises, facilities, or structures for any purposes that will result in draining or dumping into the reservoir of any refuse, sewage, or other material in violation of applicable standards or requirements relating to pollution control of any kind now in effect or hereinafter established.

- 12) The Native American Graves Protection and Repatriation Act and the Archaeological Resources Protection Act apply to archaeological resources located on the premises of land connected to any application made unto TVA. If LESSEE {or licensee or grantee (for easement) or applicant (for 26a permit)} discovers human remains, funerary objects, sacred objects, objects of cultural patrimony, or any other archaeological resources on or under the premises, LESSEE {or licensee, grantee, or applicant} shall immediately stop activity in the area of the discovery, make a reasonable effort to protect the items, and notify TVA by telephone (865-228-1374). Work may not be resumed in the area of the discovery until approved by TVA.
- 13) You should contact your local government official(s) to ensure that this facility complies with all applicable local floodplain regulations.
- 14) You agree to abide by the conditions of the vegetation management plan. Unless otherwise stated on this permit, vegetation removal is prohibited on TVA land.
- 15) You agree to securely anchor all floating facilities to prevent them from floating free during major floods.
- 16) You are responsible for accurately locating your facility, and this authorization is valid and effective only if your facility is located as shown on your application or as otherwise approved by TVA in this permit. The facility must be located on land owned or leased by you, or on TVA land at a location approved by TVA.
- 17) You agree to allow TVA employees access to your water use facilities to ensure compliance with any TVA issued approvals.
- 18) It is understood that you own adequate property rights at this location. If at any time it is determined that you do not own sufficient property rights, or that you have only partial ownership rights in the land at this location, this permit may be revoked. TVA may require the applicant to provide appropriate verification of ownership.
- 19) In accordance with 18 CFR Part 1304.9, Approval for construction covered by this permit expires 18 months after the date of issuance unless construction has been initiated.

Standard Conditions (Only items that pertain to this request have been listed.)

2) Ownership Rights

- e) You recognize and understand that this authorization conveys no property rights, grants no exclusive license, and in no way restricts the general public's privilege of using shoreland owned by or subject to public access rights owned by TVA. It is also subject to any existing rights of third parties. Nothing contained in this approval shall be construed to detract or deviate from the rights of the United States and TVA held over this land under the Grant of Flowage Easement. This Approval of Plans does not give any property rights in real estate or material and does not authorize any injury to private property or invasion of private or public rights. It merely constitutes a finding that the facility, if constructed at the location specified in the plans submitted and in accordance with said plans, would not at this time constitute an obstruction unduly affecting navigation, flood control, or public lands or reservations.

3) Shoreline Modification and Stabilization

- c) Bank, shoreline, and floodplain stabilization will be permanently maintained in order to prevent erosion, protect water quality, and preserve aquatic habitat.

5) Bridges and Culverts

- a) You agree to design/construct any instream piers in such a manner as to discourage river scouring or sediment deposition.
- b) Applicant agrees to construct culvert in phases, employing adequate streambank protection measures, such that the diverted streamflow is handled without creating streambank or streambed erosion/sedimentation and without preventing fish passage.
- c) Concrete box culverts and pipe culverts (and their extensions) must create/maintain velocities and flow patterns which offer refuge for fish and other aquatic life, and allow passage of indigenous fish species, under all flow conditions. Culvert floor slabs and pipe bottoms must be buried below streambed elevation, and filled with naturally occurring streambed materials. If geologic conditions do not allow burying the floor, it must be otherwise designed to allow passage of indigenous fish species under all flow conditions.
- d) All natural stream values (including equivalent energy dissipation, elevations, and velocities; riparian vegetation; riffle/pool sequencing; habitat suitable for fish and other aquatic life) must be provided at all stream modification sites. This must be accomplished using a combination of rock and bioengineering, and is not accomplished using solid, homogeneous riprap from bank to bank.
- e) You agree to remove demolition and construction by-products from the site for recycling if practicable, or proper disposal--outside of the 100-year floodplain. Appropriate BMPs will be used during the removal of any abandoned roadway or structures.

6) Best Management Practices

- a) You agree that removal of vegetation will be minimized, particularly any woody vegetation providing shoreline/streambank stabilization.
- b) You agree to installation of cofferdams and/or silt control structures between construction areas and surface waters prior to any soil-disturbing construction activity, and clarification of all water that accumulates behind these devices to meet state water quality criteria at the stream mile where activity occurs before it is returned to the unaffected portion of the stream. Cofferdams must be used wherever construction activity is at or below water elevation.
- c) A floating silt screen extending from the surface to the bottom is to be in place during excavation or dredging to prevent sedimentation in surrounding areas. It is to be left in place until disturbed sediments are visibly settled.
- d) You agree to keep equipment out of the reservoir or stream and off reservoir or stream banks, to the extent practicable (i.e., performing work "in the dry").
- e) You agree to avoid contact of wet concrete with the stream or reservoir, and avoid disposing of concrete washings, or other substances or materials, in those waters.
- f) You agree to use erosion control structures around any material stockpile areas.
- g) You agree to apply clean/shaken riprap or shot rock (where needed at water/bank interface) over a water permeable/soil impermeable fabric or geotextile and in such a manner as to avoid stream sedimentation or disturbance, or that any rock used for cover and stabilization shall be large enough to prevent washout and provide good aquatic habitat.
- h) You agree to remove, redistribute, and stabilize (with vegetation) all sediment which accumulates behind cofferdams or silt control structures.
- i) You agree to use vegetation (versus riprap) wherever practicable and sustainable to stabilize streambanks, shorelines, and adjacent areas. These areas will be stabilized as soon as practicable, using either an appropriate seed mixture that includes an annual (quick cover) as well as one or two perennial legumes and one or two perennial grasses, or sod. In winter or summer, this will require initial planting of a quick cover annual only, to be followed by subsequent establishment of the perennials. Seed and soil will be protected as appropriate with erosion control netting and/or mulch and provided adequate moisture. Streambank and shoreline areas will also be permanently stabilized with native woody plants, to include trees wherever practicable and sustainable (this vegetative prescription may be altered if dictated by geologic conditions or landowner requirements). You also agree to install or perform additional erosion control structures/techniques deemed necessary by TVA.

Additional Conditions



**STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION**

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

JOHN C. SCHROER
COMMISSIONER

BILL HASLAM
GOVERNOR

March 4, 2014

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

Subject: Project #47023-1257-14
PIN 101204.00
State Route 62 (Western Ave)
From East of Texas Avenue
To Major Avenue
Knox County

Dear Mr. Smith:

In accordance with T.C.A. 69-3-108(b), this office is submitting form CN-1091; drawings; portions of the USGS quad map for Knoxville, TN (147-NW) showing the location of all proposed stream impacts; and a half-size set of plans with a location map on the plans cover sheet; where we believe permits may be needed.

LOCATION #1

Permits Required

TDEC: ARAP

This location does not fit a General ARAP. By replacing areas that had structure with open stream, we feel that this location will only cause de minimis degradation to water quality.

Corps: Non-notification

This roadway crossing meets all of the following criteria required for non-notification under Nationwide #14:

- *Discharge results in the loss of less than a tenth of an acre*
- *Does not affect a special aquatic site*
- *Does not affect federally listed species*

- Does not affect historic properties
- All conditions of the Nationwide #14 General Permit will be followed during construction.

This utility crossings meet all of the following criteria required for non-notification under Nationwide #12:

- A section 10 permit is not required
- Mechanized land clearing in forested wetlands for the ROW is not occurring
- Discharge results in the loss of less than a tenth of an acre
- Utility line does not exceed 500 linear feet in waters of the US AND does not run parallel to a stream bed within jurisdictional area

All conditions of the Nationwide #12 General Permit will be followed during construction.

TVA: Section 26a

Site Information

Feature Name: STR-1, Tributary to East Fork Third Creek

Proposed Impact Type: Stream Relocation/Encapsulation

Impact Area: 1,740 square ft (6 ft width x 290 ft length)

Latitude 35.9755°, Longitude 83.9622°

Station 109+29.07±

Roadway Impact Description:

Existing open stream: 55 ft

Total existing structures: 219.59 ft:

- 38.59 ft of 10 ft by 2.65 ft box culvert (to remain)
- 181 ft of dual pipe culverts: a 46 inch CMP and 66" x 46" CMP (to be abandoned and STR-1 to be relocated into natural bottom channel)

Total Existing Length: 275 ft

Proposed open stream: 147 ft, including 82 ft of in kind stream replacement

Proposed structure: 104.41 ft of 10 ft by 4 ft box culvert extension, plus 30 ft of rip rap at box culvert outlet and 35 ft of rip rap at confluence of STR-1 and STR-2

Total structure: 143 ft of box culvert

Total proposed length: 290 ft

Associated Roadway Impact

35 ft of Class B rip rap at confluence of STR-1 and STR-2

Gas Utility Impact Description

Remove/retire gas line

	<p><u>Water Utility Impact Description</u> Remove/retire water line Install water line</p> <p><u>Telephone Utility Impact Description</u> Remove/retire telephone line Install telephone line</p> <p><u>Sanitary Sewer Utility Impact Description</u> Remove/retire sanitary sewer line</p>
<p><u>Mitigation:</u> Replacement in-kind: As part of 82 ft of on-site stream restoration/replacement, we propose to plant two rows of trees on both sides of the new channel. The proposed stream channel has been designed to mimic existing channel characteristics (size, shape, etc.) as closely as possible. For more details, see the proposed roadway plans.</p> <p>Credits needed to accommodate rip rap in stream: 26 (35 x 0.75) Credits generated by opening stream: 77 (220 – 143) Credits generated by stream length increase: 15 (290 – 275) Total credits created: 66 (77 + 15 – 26)</p>	
<p><u>Monitoring Requirements</u> Monitoring shall occur for a period of five years. Performance for the stream relocations will be evaluated based on four parameters: 1) channel stability, 2) vegetation, 3) morphological assessment and 4) hydrology.</p> <ul style="list-style-type: none">• <u>Channel Stability</u> – Channel morphology will be surveyed annually. Visual assessments will be used to qualitatively evaluate project site conditions.• <u>Vegetation</u> – Tree planting should occur from late November to approximately March 15. Replanting should be conducted if planted species survival falls below 75% of the planted woody vegetation. Tree counts should be surveyed annually during the growing season. Native volunteer tree and shrub species will also be counted, and may permit a lower survival rate of planted species.• <u>Morphological Assessment</u> – Channel measurements will also be collected and compared to proposed/as-built channel dimensions. Constructed channel dimensions shall not deviate significantly from the approved plans.• <u>Hydrology</u> – Visual observation of flow. If visual observation of flow is not observed at the time of the site visit, secondary indicators (excluding geomorphic indicators¹) as summarized in the TDEC Hydrologic Determination Training Guidance will be used for determining the existence or loss of hydrology. Secondary indicators include hydrologic indicators such as the presence of subsurface flow, water in channel and > 48 hours since last significant rainfall, leaf litter in channel (January-September), sediment on plants or debris, organic drift piles and drift lines (wrack lines), and hydric soils, and biological indicators, such as the presence of fibrous roots, rooted plants in streambed, crayfish, bivalves, amphibians, benthic macroinvertebrates, filamentous algae and periphyton, iron oxidizing bacteria/fungus, and wetland plants observed may be used as indicators for the existence or loss of hydrology.	

To further assist in the qualitative evaluation of the project, photographs will be taken to assist in characterizing the site and to allow qualitative evaluation of the overall site conditions. Monitoring reports shall be submitted annually according to the specifications outlined in the Stream Mitigation Guidelines for the State of Tennessee (July 1, 2004) and developed according to the criteria set forth in the Corps of Engineers Regulatory Guidance Letter 08-03.

Monitoring Reports

The first monitoring report shall be due by October 31 of the first monitoring year (and all subsequent reports shall be due by October 31 of each year). If the authorized activity has not been implemented then a report shall be filed that documents the time frame for implementation and completion. Failure to submit the monitoring reports shall result in a Notice of Violation (NOV). The monitoring reports will follow the guidelines of Regulatory Guidance Letter 08-03. At a minimum, annual monitoring reports will include the following items:

1. Permit Number(s)
2. Names of party(s) responsible for the monitoring.
3. A brief narrative of the key elements of the proposed mitigation work.
4. A description of the baseline conditions (e.g., soils, hydrology, vegetation, and wildlife).
5. A listing of measurable success factors with quantifiable criteria for determining success.
6. Definitions for success factors and other terms used in the plan.
7. Descriptions of equipment, materials, and methods to be used.
8. Proposed protective measures (e.g., restrictive covenants or conservation easements).
9. Vegetation monitoring
10. Hydrological monitoring
11. For stream mitigation, pre/post construction habitat assessments, survey of channel pattern, profile, and dimension for all restored stream segments.
12. Conclusions
13. Recommendations

¹ Because stream geomorphic indicators are an indirect result of natural channel evolution, they should not be used as secondary indicators as it relates to channel restoration/creation.

Alternatives:

Several alignments were considered for this project. This alignment was chosen because of its shorter length, lesser amount of ROW needed, non-impact to Richmond Hill, and because of flooding concerns.

Because of the chosen alignment, the stream impacts at this location could not be avoided. A structure at this location has been replaced with open channel and designed to mimic natural stream conditions in this area.

Due to the location of the proposed roadway the existing utility lines cannot be used. Therefore new lines will be needed to supply service to the surrounding area. The proposed lines will be located outside of proposed roadway slopes when possible, which will allow the utility company to perform maintenance to the lines and prevent damaging the roadway system.

Credits generated by opening stream: 105 (185 – 80)
Credits generated by stream length increase: 0 (270 – 270)
Total credits created: 36 (105 – 69)

Monitoring Requirements

Monitoring shall occur for a period of five years. Performance for the stream relocations will be evaluated based on four parameters: 1) channel stability, 2) vegetation, 3) morphological assessment and 4) hydrology.

- **Channel Stability** – Channel morphology will be surveyed annually. Visual assessments will be used to qualitatively evaluate project site conditions.
- **Vegetation** – Tree planting should occur from late November to approximately March 15. Replanting should be conducted if planted species survival falls below 75% of the planted woody vegetation. Tree counts should be surveyed annually during the growing season. Native volunteer tree and shrub species will also be counted, and may permit a lower survival rate of planted species.
- **Morphological Assessment** – Channel measurements will also be collected and compared to proposed/as-built channel dimensions. Constructed channel dimensions shall not deviate significantly from the approved plans.
- **Hydrology** – Visual observation of flow. If visual observation of flow is not observed at the time of the site visit, secondary indicators (excluding geomorphic indicators¹) as summarized in the TDEC Hydrologic Determination Training Guidance will be used for determining the existence or loss of hydrology. Secondary indicators include hydrologic indicators such as the presence of subsurface flow, water in channel and > 48 hours since last significant rainfall, leaf litter in channel (January-September), sediment on plants or debris, organic drift piles and drift lines (wrack lines), and hydric soils, and biological indicators, such as the presence of fibrous roots, rooted plants in streambed, crayfish, bivalves, amphibians, benthic macroinvertebrates, filamentous algae and periphyton, iron oxidizing bacteria/fungus, and wetland plants observed may be used as indicators for the existence or loss of hydrology.

To further assist in the qualitative evaluation of the project, photographs will be taken to assist in characterizing the site and to allow qualitative evaluation of the overall site conditions. Monitoring reports shall be submitted annually according to the specifications outlined in the Stream Mitigation Guidelines for the State of Tennessee (July 1, 2004) and developed according to the criteria set forth in the Corps of Engineers Regulatory Guidance Letter 08-03.

Monitoring Reports

The first monitoring report shall be due by October 31 of the first monitoring year (and all subsequent reports shall be due by October 31 of each year). If the authorized activity has not been implemented then a report shall be filed that documents the time frame for implementation and completion. Failure to submit the monitoring reports shall result in a Notice of Violation (NOV). The monitoring reports will follow the guidelines of Regulatory Guidance Letter 08-03. At a minimum, annual monitoring reports will include the following items:

1. Permit Number(s)
2. Names of party(s) responsible for the monitoring.
3. A brief narrative of the key elements of the proposed mitigation work.
4. A description of the baseline conditions (e.g., soils, hydrology, vegetation, and

- wildlife).
5. A listing of measurable success factors with quantifiable criteria for determining success.
 6. Definitions for success factors and other terms used in the plan.
 7. Descriptions of equipment, materials, and methods to be used.
 8. Proposed protective measures (e.g., restrictive covenants or conservation easements).
 9. Vegetation monitoring
 10. Hydrological monitoring
 11. For stream mitigation, pre/post construction habitat assessments, survey of channel pattern, profile, and dimension for all restored stream segments.
 12. Conclusions
 13. Recommendations

¹ Because stream geomorphic indicators are an indirect result of natural channel evolution, they should not be used as secondary indicators as it relates to channel restoration/creation.

Alternatives:

Several alignments were considered for this project. This alignment was chosen because of its shorter length, lesser amount of ROW needed, non-impact to Richmond Hill, and because of flooding concerns.

Because of the chosen alignment, the stream impacts at this location could not be avoided. A structure at this location has been replaced with open channel, designed to mimic natural stream conditions in this area. Because of velocities in this area, the addition of rip rap at this area was needed to provide for a stable stream channel.

Due to the location of the proposed roadway the existing utility lines cannot be used. Therefore new lines will be needed to supply service to the surrounding area. The proposed lines will be located outside of proposed roadway slopes when possible, which will allow the utility company to perform maintenance to the lines and prevent damaging the roadway system.

LOCATION #3

Permits Required

TDEC: ARAP

Does not fit criteria under GARAP because of cumulative impacts. Will only cause de minimis degradation to water quality at this location.

Corps: Non-notification

This roadway crossing meets all of the following criteria required for non-notification under Nationwide #14:

- *Discharge results in the loss of less than a tenth of an acre*
- *Does not affect a special aquatic site*
- *Does not affect federally listed species*
- *Does not affect historic properties*

All conditions of the Nationwide #14 General Permit will be followed during construction.

These utility crossings meet all of the following criteria required for non-notification under Nationwide #12:

- *A section 10 permit is not required*
- *Mechanized land clearing in forested wetlands for the ROW is not occurring*
- *Discharge results in the loss of less than a tenth of an acre*
- *Utility line does not exceed 500 linear feet in waters of the US AND does not run parallel to a stream bed within jurisdictional area*

All conditions of the Nationwide #12 General Permit will be followed during construction.

TVA: Section 26a

Site Information

Feature Name: STR-2, East Fork Third Creek

Proposed Impact Type: Span Bridge

Latitude 35.9751°, Longitude 83.9595°

<p>Sta. 116+59± to Sta. 122+65±</p> <p>Sta. 117+25±: Sta. 119+80±: Sta. 120+50±:</p> <p>Sta. 119+50±: Sta. 120+00±: Sta. 120+50±:</p> <p>Sta. 120+00±: Sta. 120+60±:</p> <p>Sta. 120+00± RT: Sta. 120+50± RT:</p> <p>Sta. 120+00±: Sta. 120+25±:</p> <p>Sta. 120+20±:</p> <p>Sta. 124+00±:</p>	<p><u>Roadway Impact Description:</u></p> <p>Existing structure: 0 ft Proposed structure: 606 ft of span bridge</p> <p><u>Sanitary Sewer Utility Impact Description:</u> Remove/retire sanitary sewer line Install sanitary sewer line Remove/retire sanitary sewer line</p> <p><u>Electrical Utility Impact Description:</u> Remove/Retire existing electrical line Install electrical line Remove/retire existing electrical line</p> <p><u>Water Utility Impact Description</u> Install water line Remove/retire water line</p> <p><u>Telephone Utility Impact Description</u> Install telephone line Remove/retire telephone line</p> <p><u>Gas Line Utility Impact Description:</u> Install gas line Remove/retire gas line</p> <p><u>Sanitary Sewer Utility Impact Description:</u> Remove/retire sanitary sewer line</p> <p><u>Electric Utility Line Impact Description:</u> Install guy lead</p>
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Mitigation & Monitoring:

No mitigation required.

Alternatives:

Several alignments were considered for this project. This alignment was chosen because of its shorter length, lesser amount of ROW needed, non-impact to Richmond Hill, and because of flooding concerns.

Because of the chosen alignment, the stream impacts at this location could not be avoided. Therefore, the alignment minimizes channel changes and encapsulations to East Fork Third Creek.

LOCATION #4

Permits Required

TDEC: ARAP

Does not fit criteria under GARAP because of cumulative impacts. Will only cause de minimis degradation to water quality at this location.

Corps: Non-Notification

This roadway crossing meets all of the following criteria required for non-notification under Nationwide #14:

- *Discharge results in the loss of less than a tenth of an acre*
- *Does not affect a special aquatic site*
- *Does not affect federally listed species*
- *Does not affect historic properties*

All conditions of the Nationwide #14 General Permit will be followed during construction.

TVA: Section 26a

Site Information

Feature Name: STR-2, East Fork Third Creek

Proposed Impact Type: Span Bridge

Impact Area: 0 square ft (0 ft width x 606 ft length)

Latitude 35.9704°, Longitude 83.9549°

Roadway Impact Description:

Existing structure: 0 ft

Proposed structure: 270 ft of span bridge, including 53 ft of bank stabilization

Sta. 314+30± to Sta. 317+00±,
Keithwest Ave

Sta. 313+00, Keith Avenue±: Sta. 314+50, Keith Avenue±:	<u>Sanitary Sewer Utility Impact Description:</u> Remove/retire sanitary sewer line Install sanitary sewer line
<u>Mitigation & Monitoring:</u> No mitigation required.	
<u>Alternatives:</u> Several alignments were considered for this project. This alignment was chosen because of its shorter length, lesser amount of ROW needed, non-impact to Richmond Hill, and because of flooding concerns. Based on the General Aquatic Resource Alteration Permits criteria from TDEC, this crossing should meet the requirements of the General Permit for Construction and Removal of Minor Road Crossing. Therefore TDOT feels that the proposed structure would result in no net loss of resource value to the watershed.	

SECTION 5.0

The applicant proposes to construct 0.83 mi of State Route 62 along the modified alignment for public use. The new construction will consist of 12 ft. lanes, and varying shoulder and sidewalk widths, and varied guardrail.

SECTIONS 8.3 - 8.6

Please refer to the attached Environmental Boundary report for more information.

SECTION 9

The proposed project involves the widening of State Route 62 (Western Avenue) in Knox County from the existing two-lane section to a four-lane section with a continuous turn lane. The improvement would start at the existing four-lane section east of Texas Avenue and end east of Major Avenue. An elevated structure over Tennessee Avenue and the adjoining double set of railroad tracks is proposed, as well as the relocation of the intersection of SR-62 and Keith Avenue. In addition, part of the project will be the widening of Massachusetts Avenue and Hawkins Street from Schofield Street/Western Avenue to Tennessee Avenue to provide access to the I-275 Corridor redevelopment project (Coster Rail Yards) at the northern end of Tennessee Avenue.

Several alternatives were considered for this project. Please refer to the enclosed/previously submitted NEPA document for a detailed list of alternatives.

Efforts were made during the planning and design phases of this project to avoid impacts to waters of the U.S. and waters of the State to the extent practicable, and to minimize impacts that were not avoidable. Mitigation for these impacts has been proposed on the project site, where practicable.

SUPPLEMENTARY INFORMATION

A search of the TDEC, Division of Natural Areas, database on January 22, 2014, indicated there are 2 records of threatened or endangered species within a 4 mile radius. Please refer to the attached Form N for more information.

Due to the recent modification of the USFWS stance regarding the Indiana bat, specific consideration of the Indiana bat (*Myotis sodalis*) is required. Based on the fact that little potential habitat is present within the proposed impact area of the project, it is the opinion of the Tennessee Department of Transportation that this project is not likely to adversely affect the Indiana bat. USFWS concurred with TDOT's findings, and the letter dated February 16, 2012, is attached.

In addition to the impact listed above, we are requesting that the Tennessee Department of Environment and Conservation and the Corps of Engineers include approval for all proposed outfall structures (ditches, pipes, etc) associated with the proposed bridge crossing in your permit.

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

By copy of this letter, we request the concurrence of the Corps of Engineers that this project meets the criteria of Nationwide Permit 14 for Linear Transportation Projects for those sites where a pre-construction notification is required.

By copy of this letter, we are also applying for a Section 26a Permit from the Tennessee Valley Authority. Appropriate information is enclosed. This project will not cause any loss of flood storage or power storage volumes.

By copy of this letter, we are also requesting that the TDEC, Corps of Engineers, and the TVA please include approval of a potential temporary stream crossing at each permitted location in your permits. Temporary crossings will be located within right-of-way or easements. Copies of TDOT Standard Drawings EC-STR-25 (Temporary Road Stabilization and Temporary Culvert Crossing), EC-STR-31 (Temporary Diversion Channels), EC-STR-31A (Temporary Diversion Channel Design), and EC-STR-32 (Temporary Diversion Culverts) are enclosed for your information and use.

The subject project is in the City of Knoxville Flood Insurance Study. We have enclosed a copy of our letter to the city official and a "No-Rise" certification stating that "this project will not adversely impact the 100 year flood elevations, floodway elevations and floodway widths". The design of our roadway system is in compliance with the floodplain management criteria set forth in the National Flood Insurance Regulations of Title 44 of the Code of Federal Regulations (CFR). It is also consistent with requirements of floodplain management guidelines for implementing Executive Order 11988 and Federal Highway Administration guidelines 23 CFR 650A. Please refer to the attached FEMA Map for additional information.

This project is currently scheduled for the September 24, 2014 turn-in. We would greatly appreciate your initial review and request for additional information needed, or issuance of the public notice, within 15 days of receipt of our application; and issuance of the permits within 90 days.

Mr. Smith
March 4, 2014
Page 12

If you have any questions or we can be of further assistance please contact Melanie Bumpus at (615) 253-2466 or DJ Wiseman at (615) 532-4554.

Sincerely,



Melanie Bumpus, EI
Environmental Permits Section

Enclosures

JLH:MBB:DJW:pc

cc: Via Hardcopy
Ms. Tammy Turley, USACE
Ms. Kelly Baxter, TVA

Via Email
Ms. Jeanene Woodruff, TDEC
Ms. Kelly Baxter, TVA
Mr. Mike Russell, Project Management Office
Mr. Brandon Crowley, HQ (Region 1) Construction Office
Ms. Mary Howard, Region 1 Construction Office
Mr. Mark Doty, Region 1 Environmental Coordinator
Mr. Keven Brown, Region 1 Biologist
Mr. Matt Richards, HQ Ecology Section
Ms. R. Deedee Kathman, HQ Ecology Section
Mr. Baxter Wilson, TDOT Compliance
Mr. Hugh (Chip) Hannah, TDOT Compliance
Mr. John Hewitt, Natural Resources Office
Permit File

8. Ecology Report



**STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL DIVISION**
SUITE 900 - JAMES K. POLK BUILDING
505 DEADERICK STREET
NASHVILLE, TENNESSEE 37243-0334

MEMORANDUM

TO: Ataur Rahman
Region 1 Design

FROM: Keven Brown
Region 1 Ecology

DATE: March 16, 2012

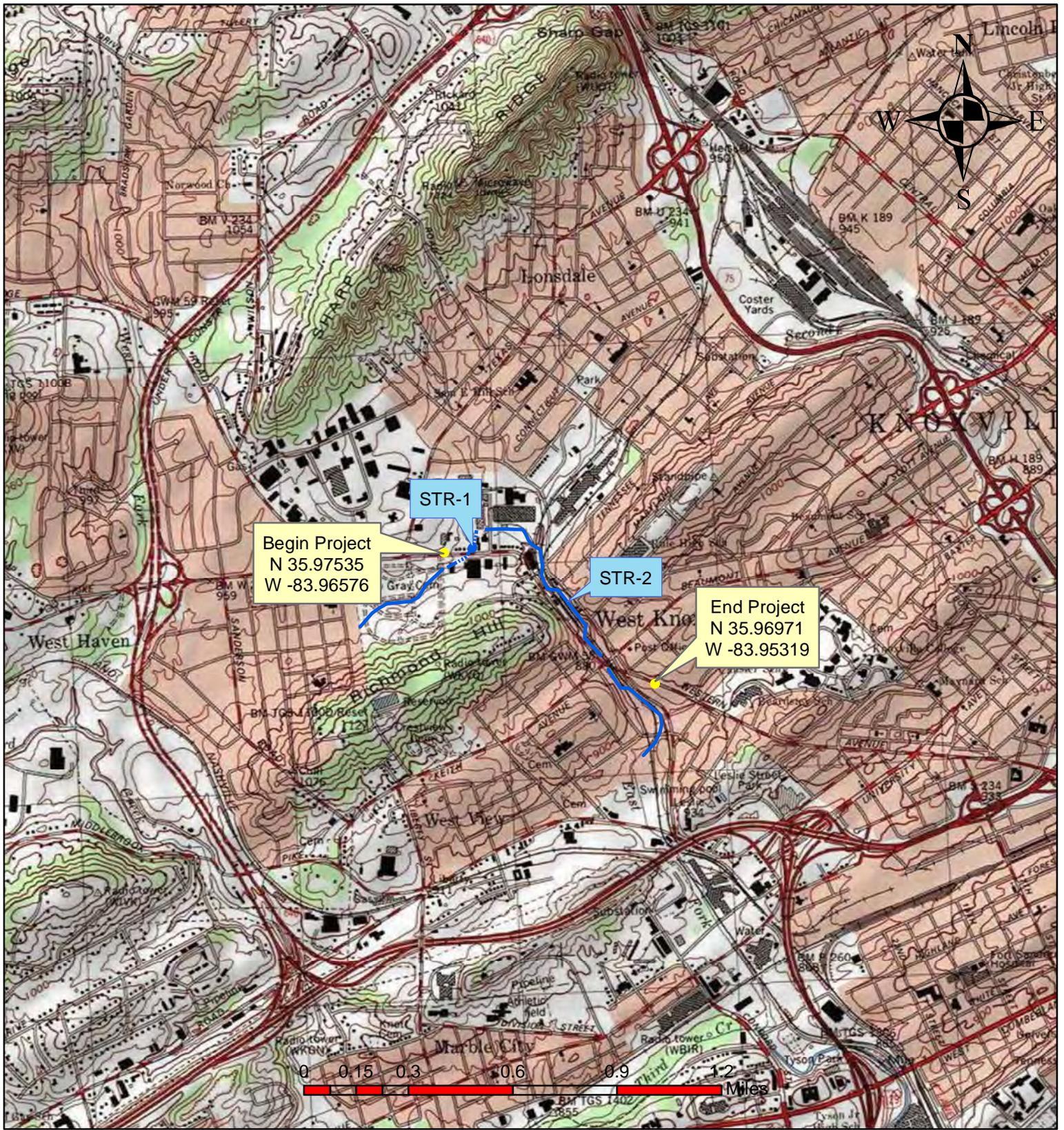
SUBJECT: SR-62: From Texas Avenue To Major Avenue
Knox County, TN
PIN: 101204.00 P.E. # 47023-1257-14

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

- No wetlands identified:
- Streams present:
 - STR-1 (Tributary to East Fork Third Creek)
 - STR-2 (East Fork Third Creek)
- Protected species identified within project impact area:

Please incorporate this information into the project plans as needed. Thank you for your assistance with this project. If you have any questions or comments please contact me at Keven.Brown@tn.gov or 865-594-2437.

Copy: Ataur Rahman – w/attachment G, N
John Hewitt: - w/attachments G, N
Jon Zirkle – w/attachments G, N
Ronnie Walker – w/attachments G, N
David Thompson – w/attachments G, N
Project File: - w/attachments G, N

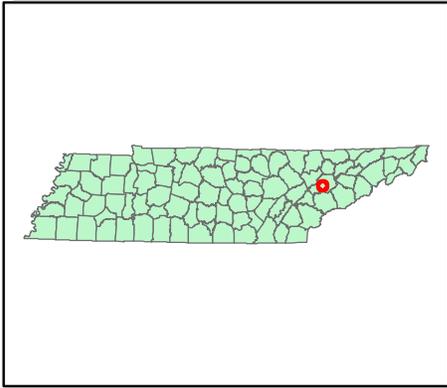


Begin Project
 N 35.97535
 W -83.96576

STR-1

STR-2

End Project
 N 35.96971
 W -83.95319



Map G
SR-62 : From Texas Avenue To Major Avenue
Knox County

Knoxville, TN Quad (147-NW)
27 February 2012

P.E. 47023-1257-14
PIN 101204.00



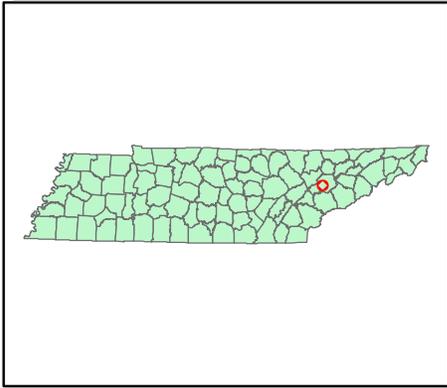
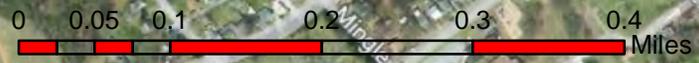


Begin Project
N 35.97535
W -83.96576

STR-1

STR-2

End Project
N 35.96971
W -83.95319



Map G
SR-62 : From Texas Avenue To Major Avenue
Knox County

Knoxville, TN Quad (147-NW)
27 February 2012

P.E. 47023-1257-14
PIN 101204.00



Project: SR-62 (Western Ave) From Texas Avenue to Major Avenue**PE No. 47023-1257-14 PIN: 101204.00****Date of survey: 17 January 2012 Biologists: K. Brown / R. Howard Affiliation: TDOT / CEC, Inc.**

1-Station: from plans	STA 109+29L	STA 110+00
2-Map label and name	STR-1 (Tributary to East Fork Third Creek)	STR-2 (East Fork Third Creek)
3-Latitude/Longitude	N 35.97540° W-83.96226°	N 35.97615° W-83.96122°
4-Potential impact	Runoff / Relocation	Runoff
5-Feature description:		
what is it	Perennial Stream	Perennial Stream
blue-line on topo? (y/n)	Yes	Yes
defined channel (y/n)	Yes	Yes
straight or meandering	Straight	Straight
channel bottom width	2-3 FT	15-18 FT
top of bank width	2 FT	20-25 FT
bank height and slope ratio	1 FT; 1:1	4FT; 1:1
avg. gradient of stream (%)	<5%	<5%
substratum	Silt 50%, Gravel 50%	Silt 50%, Gravel 50%
riffle/run/pool	Riffle 10%, Run 75%, Pool 15%	Riffle 10%, Run 75%, Pool 15%
width of buffer zone	0	0
water flow	Yes	Yes
water depth	1 FT	1-2 FT
water width	2 FT	15-18 FT
general water quality	Poor	Poor
OHWI indicators	Scour / Debris	Scour / Debris
groundwater connection	Yes	Yes
bank stability: LB, RB	Eroding	Eroding
dominant species: LB, RB	Lawn Grass Species	Osage Orange, Sycamore, Box Elder, Privet
overhead canopy (%)	0%	30%
benthos	None Observed	None Observed
fish	None Observed	None Observed
algae or other aquatic life	None Observed	None Observed
habitat assessment score	--	--
photo number (s)	1-4	5-12
rainfall information	TVA Gauge #0207 - 1/17 -0.44", 1/12 - 0.06", 1/11 - 0.76", 1/10 - 0.02", 1/9 - 0.24", 1/8 - 0.05", 1/7 - 0.17"	TVA Gauge #0207 - 1/17 -0.44", 1/12 - 0.06", 1/11 - 0.76", 1/10 - 0.02", 1/9 - 0.24", 1/8 - 0.05", 1/7 - 0.17"
6-HUC code & name (12-digit)	Third Creek - 060102010202	Third Creek - 060102010202
7-Confirmed by:	Obvious Stream, Not required	Obvious Stream, Not required
8-Mitigation	No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> : (include on Form J)	No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> : (include on Form J)
9-ETW	No <input checked="" type="checkbox"/> Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/> Yes <input type="checkbox"/>
10-303 (d) List	No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> Habitat <input checked="" type="checkbox"/> Siltation <input checked="" type="checkbox"/> Other <input checked="" type="checkbox"/>	No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> Habitat <input checked="" type="checkbox"/> Siltation <input checked="" type="checkbox"/> Other <input checked="" type="checkbox"/>
11-Notes Estimate size (acres) of lake or pond if applicable; provide any pertinent information needed to better describe feature; indicate if hydrologic determination form completed	In addition to Habitat & Siltation, East Fork Third Creek is listed for <i>E. coli</i> impacts	In addition to Habitat & Siltation, East Fork Third Creek is listed for <i>E. coli</i> impacts

Photo Summary: SR-62: From Texas Avenue to Major Avenue, Knox County
Project Description: Lane Additions with Curbs and Gutters
P.E.: 47023-1257-14 PIN: 101204.00



Photograph 1 – DSCN3756. N35.97534°, W-83.96495°. View of SR-62 facing west towards Texas Avenue at STA 101+00.



Photograph 2 – DSCN3758. N35.97534°, W-83.96495°. View of SR-62 facing east at STA 101+00.



Photograph 3 – DSCN3774. N35.97540°, W-83.96227°. View of STR-1 facing upstream and south at the outlet of the existing structure at STA 109+29 L.



Photograph 4 – DSCN3775. N35.97540°, W-83.96227°. View of STR-1 facing downstream and north at STA 109+29 L.

Photo Summary: SR-62: From Texas Avenue to Major Avenue, Knox County
Project Description: Lane Additions with Curbs and Gutters
P.E.: 47023-1257-14 PIN: 101204.00



Photograph 5 – DSCN3781. N35.97602°, W83.96194°. View of STR-1 at the confluence with STR-2 (East Fork Third Creek) facing the encapsulated STR-1 outlet at STA 109+50 L.



Photograph 6 – DSCN3876. N35.97453°, W-83.96394°. View of STR-1 facing downstream and southwest at the culvert inlet beneath commercial property at STA 104+40 R.

Photo Summary: SR-62: From Texas Avenue to Major Avenue, Knox County
Project Description: Lane Additions with Curbs and Gutters
P.E.: 47023-1257-14 PIN: 101204.00



Photograph 7 – DSCN3874. N35.97416°, W-83.96445°. View of STR-1 facing upstream and east at STA 104+00 R.



Photograph 8 – DSCN3790. N35.97610°, W-83.96146°. View of STR-2 (East Fork Third Creek) facing upstream and east from Mynderse Avenue at STA 111+50 L.

Photo Summary: SR-62: From Texas Avenue to Major Avenue, Knox County
Project Description: Lane Additions with Curbs and Gutters
P.E.: 47023-1257-14 PIN: 101204.00



Photograph 9 - DSCN3792. N35.97612°, W-83.96121°. View of STR-2 (East Fork Third Creek) facing downstream and east at STA 112+50 L.



Photograph 10 – DSCN3798. N35.97612°, W-83.96121°. View of STR-2 (East Fork Third Creek) facing upstream and west toward existing structure beneath Mynderse Avenue at STA 112+50 L.

Photo Summary: SR-62: From Texas Avenue to Major Avenue, Knox County
Project Description: Lane Additions with Curbs and Gutters
P.E.: 47023-1257-14 PIN: 101204.00



Photograph 11 – DSCN3810. N35.97458°, W-83.95888°. View of STR-2 (East Fork Third Creek) facing upstream and west at STA 120 +25L.



Photograph 12 – DSCN. N35.97449°, W-83.95888°. View of STR-2 (East Fork Third Creek) facing downstream and south east at STA 120 +50L.



Photograph 13 – DSCN3832. N35.97114°, W-83.95622°. View of STR-2 (East Fork Third Creek) facing downstream and east towards the inlet of the existing structure at STA 137+50.



Photograph 14 – DSCN3833. N35.97114°, W-83.95622°. View of STR-2 (East Fork Third Creek) facing upstream and west towards the inlet of the existing structure at STA 137+50.

Photo Summary: SR-62: From Texas Avenue to Major Avenue, Knox County
Project Description: Lane Additions with Curbs and Gutters
P.E.: 47023-1257-14 PIN: 101204.00



Photograph 15 - DSCN3843. N35.97024°, W-83.95558°. View of STR-2 (East Fork Third Creek) facing upstream and west at the outlet of the existing structure at STA 138+50.



Photograph 16 - DSCN3842. N35.97024°, W-83.95558°. View of STR-2 (East Fork Third Creek) facing downstream and east at STA 138+50.

Photo Summary: SR-62: From Texas Avenue to Major Avenue, Knox County
Project Description: Lane Additions with Curbs and Gutters
P.E.: 47023-1257-14 PIN: 101204.00



Photograph 17 – DSCN3844. N35.97043°, W-83.95538°. View of SR-62 facing east at STA 139+00.

Index Of Sheets

- 1 TITLE SHEET
- 2-2E TYPICAL SECTIONS
- 3-3C RIGHT-OF-WAY ACQUISITION TABLES
- 3D-3E PROPERTY MAPS
- 4-9 PRESENT LAYOUT
- 4A-9A R.O.W. DETAILS
- 4B-9B PROPOSED LAYOUT
- 4C-7C PROPOSED PROFILES
- 10-15 PROFILE OF SIDE ROADS AND STREETS
- 16-25 PROFILE OF PRIVATE DRIVES
- 26 RAILROAD GEOMETRIC LAYOUT
- 26A-26C RAILROAD PROFILES
- 27-28 DRAINAGE MAPS
- 29-31 CULVERT CROSS-SECTIONS
- 32-32F EROSION CONTROL PLAN
- 33-33E EXISTING CONTOURS
- 34-34E PROPOSED CONTOURS
- 35-56 ROADWAY CROSS SECTIONS
- 57-84 SIDE ROAD CROSS SECTIONS
- 85-92 RAILROAD CROSS SECTIONS

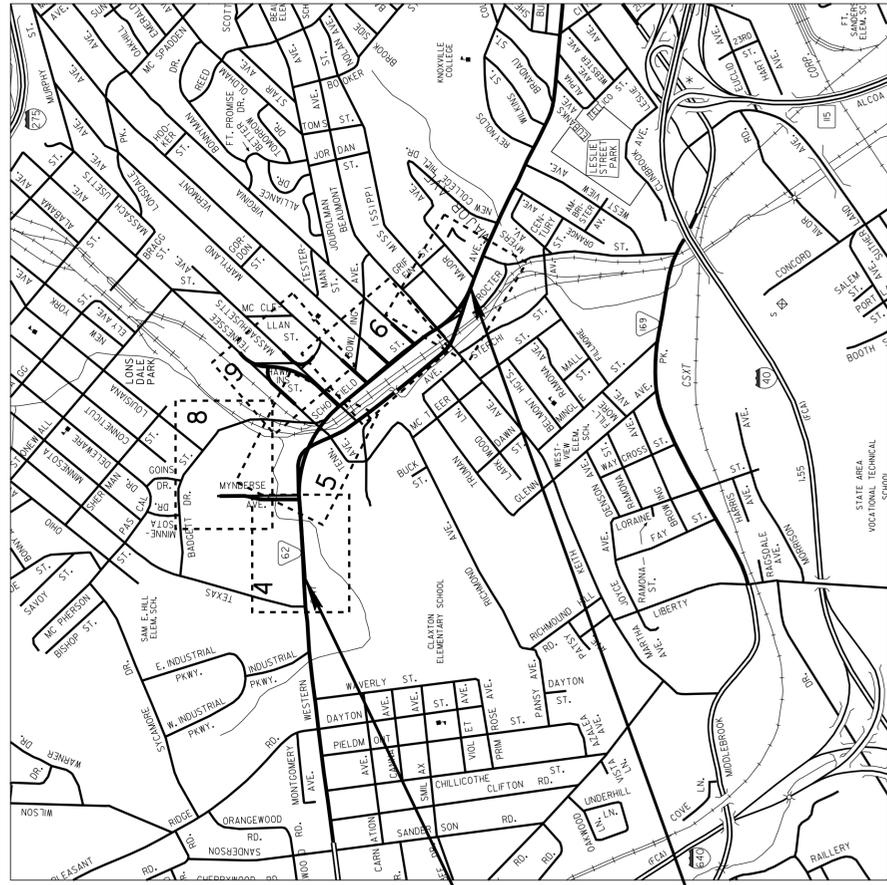
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING

KNOX COUNTY

STATE ROUTE 62 (WESTERN AVE.)
FROM: 525' ± EAST OF TEXAS AVE.
TO: MAJOR AVE.

RIGHT-OF-WAY

STATE HIGHWAY NO. 62 F.A.H.S. NO. 62



47023-2261-14
BEG. PROJ. NO. HPP-62(34) (ROW)
STA. 107+25.38

47023-2261-14
END PROJ. NO. HPP-62(34) (ROW)
STA. 144+93.40

SPECIAL NOTES

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

THIS PROJECT TO BE CONSTRUCTED UNDER THE STANDARD SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION DATED MARCH 1, 2006 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT.

TDOT C.E. MANAGER 1 ATAUR RAHMAN
DESIGNED BY NEEL-SCHAFFER, INC.
DESIGNER JOSEPH C. DEERING, P.E. CHECKED BY SHARON SCHUTZ, P.E.
P.E. NO. 47023-1257-14
PIN NO. 101204.00

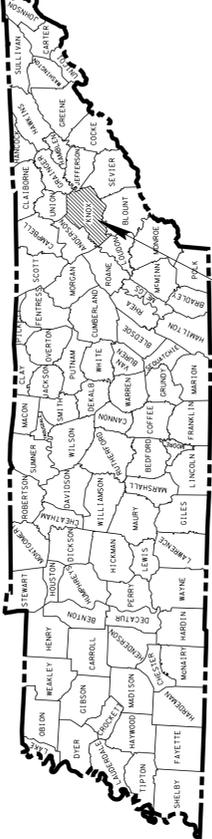
R.O.W. LENGTH 0.713 MILE (S.R. 62)

SCALE: 1" = 1000'

TRAFFIC DATA

ADT (2009)	28,531
ADT (2029)	42,790
DHV (2029)	4279
D (ADT)	54 - 45
T (DHV)	7 %
V	5 %
	45 mph

TENN.	YEAR	SHEET NO.
	2009	1
FED. AID PROJ. NO.	HPP-62(34)	
STATE PROJ. NO.	47023-2261-14	



PROJ. NO. HPP-62(34)
KNOX COUNTY

NO EQUATIONS
NO EXCLUSIONS

**R.O.W.
PLANS**

ORIGINAL SURVEY
08-16-2002
SURVEY UPDATE
9-10-2009

APPROVED: Paul D. Deering CHIEF ENGINEER
DATE:
APPROVED: Sharon Schutz COMMISSIONER

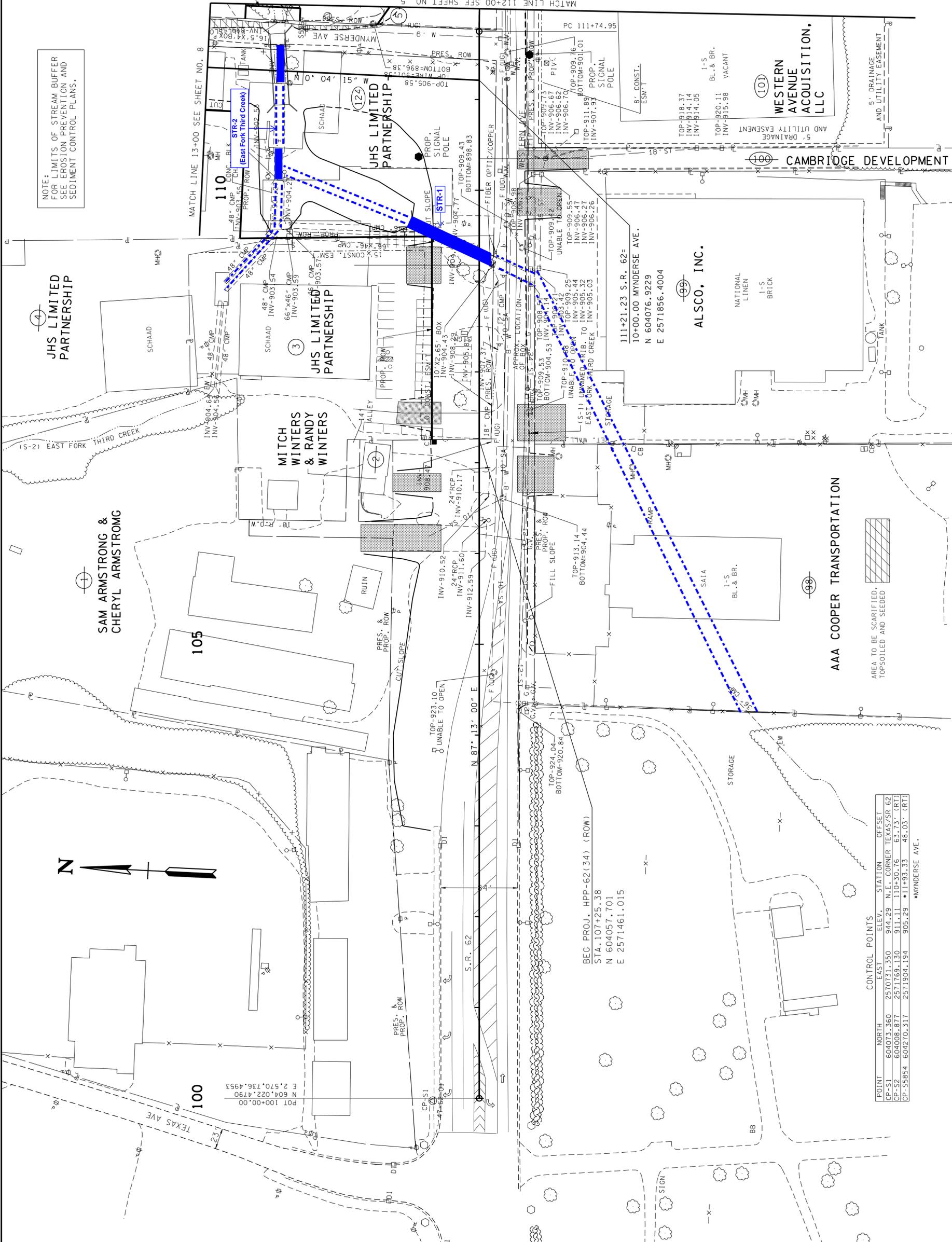


U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED:
DIVISION ADMINISTRATOR
DATE

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-62(34)	4

NOTE:
FOR LIMITS OF STREAM BUFFER
SEE EROSION PREVENTION AND
SEDIMENT CONTROL PLANS.



CONTROL POINTS

POINT	NORTH	ELEV.	STATION	OFF-SET
CP-S1	604073.360	2570731.350	944.29 N.E. CORNER TEXAS/SR 62	
CP-S2	604008.877	2571769.130	911.11 110+30.76	63.73' (RT)
CP-S5B54	604270.317	2571904.194	905.29 *11+93.33	48.03' (RT)

*MYNDERSE AVE.

BEG. PROJ. HPP-62(34) (ROW)
STA. 107+25.38
N 604057.701
E 2571461.015

R.O.W. PLANS

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

COORDINATE VALUES ARE NAD(83)99S
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.0001 & TIED TO THE TGRN.

PRESENT LAYOUT

STA. 100+00 TO STA. 112+00
SCALE: 1" = 50'

FILE NO.
DESIGN DIVISION
TENNESSEE D.O.T.

*****D:\S\TIME\PC*****

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-62(34)	4B

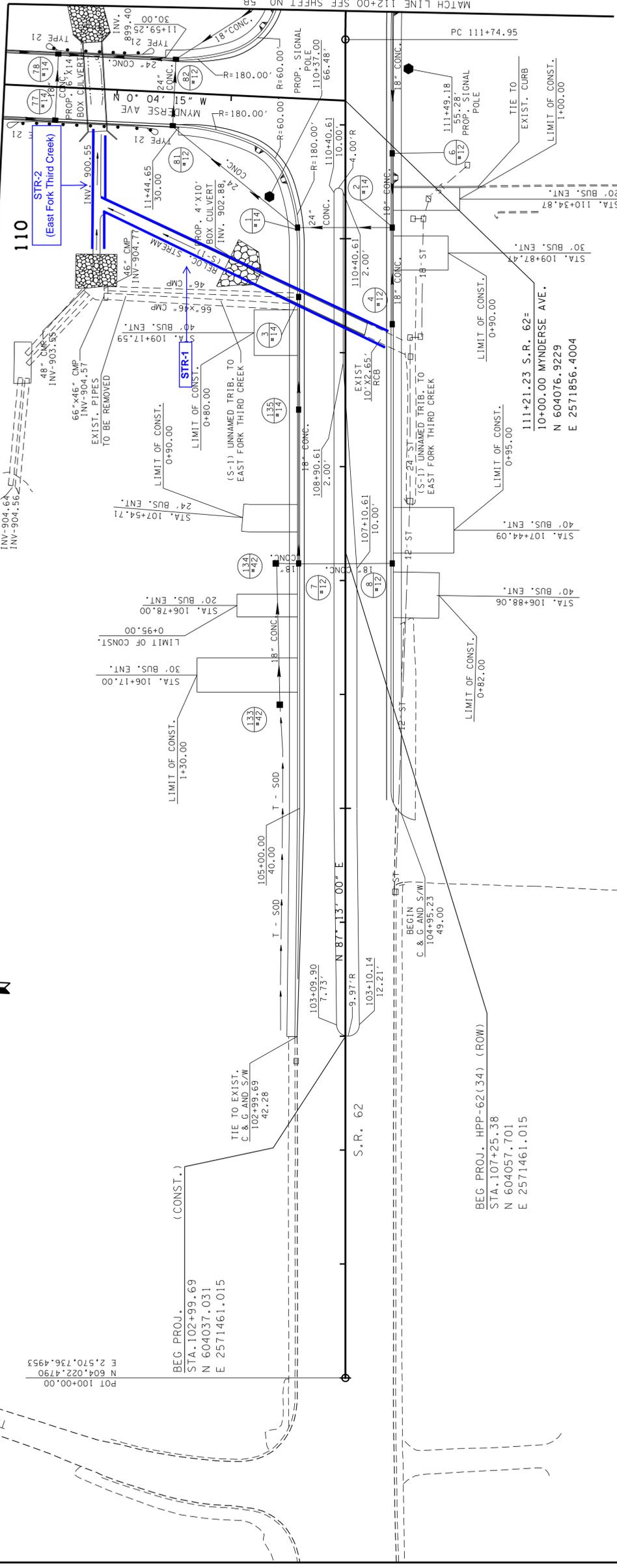
NOTE:
FOR LIMITS OF STREAM BUFFER
SEE EROSION PREVENTION AND
SEDIMENT CONTROL PLANS.



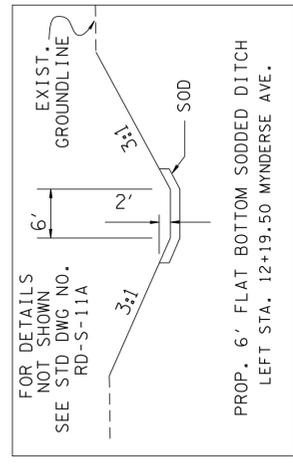
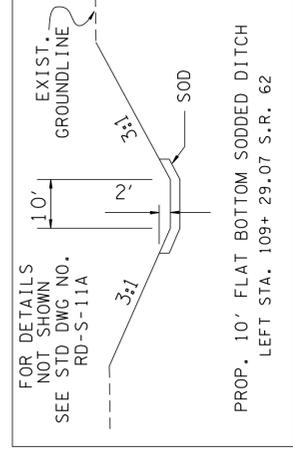
105

100

MATCH LINE 13+00 SEE SHEET NO. 8B



- | | | | |
|---|---|-----|---|
| 1 | GT. EL. 908.60
IN. EL. 902.67
OUT. EL. 902.34 | 77 | GT. EL. 909.31
IN. EL. 903.66
OUT. EL. 903.33 |
| 2 | GT. EL. 908.61
IN. EL. 903.47
OUT. EL. 903.14 | 78 | GT. EL. 909.31
IN. EL. 902.75
OUT. EL. 902.42 |
| 3 | GT. EL. 909.80
IN. EL. 903.26 | 81 | GT. EL. 908.45
IN. EL. 901.42
OUT. EL. 901.25 |
| 4 | GT. EL. 908.94
OUT. EL. 904.99 | 82 | GT. EL. 908.45
IN. EL. 904.43
OUT. EL. 901.00 |
| 5 | GT. EL. 908.80
IN. EL. 905.41
OUT. EL. 904.29 | 133 | GT. EL. 916.23
OUT. EL. 913.28 |
| 6 | GT. EL. 912.25
IN. EL. 907.65
OUT. EL. 907.48 | 134 | GT. EL. 911.00
IN. EL. 908.17
OUT. EL. 908.05 |
| 7 | GT. EL. 912.25
IN. EL. 907.65
OUT. EL. 907.48 | 135 | GT. EL. 909.80
IN. EL. 905.99
OUT. EL. 905.87 |
| 8 | GT. EL. 912.25
OUT. EL. 908.85 | | |



R.O.W. PLANS

COORDINATE VALUES ARE NAD(83) (99S) AND ARE DATUM ADJUSTED BY THE FACTOR 1.0001 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT

STA. 100+00 TO STA. 112+00
SCALE: 1" = 50'

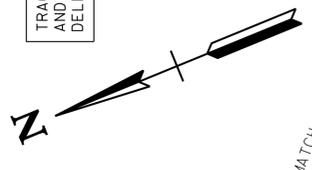
- 5 RICHARD C. JOHNSON & WIFE, LINDA J. JOHNSON
- 6 RICHARD C. JOHNSON & WIFE LINDA J. JOHNSON
- 7 BOB JONES
- 8 RAY V. DePUE IV & RENEE K. ALLEN
- 9 JAMES ALLEN MCNUTT & MARY ANNE F. MCNUTT
- 10 JOHN M. KEIRNAN, JR.

115
STR-2
GERDAU AMERISTEEL US, INC.

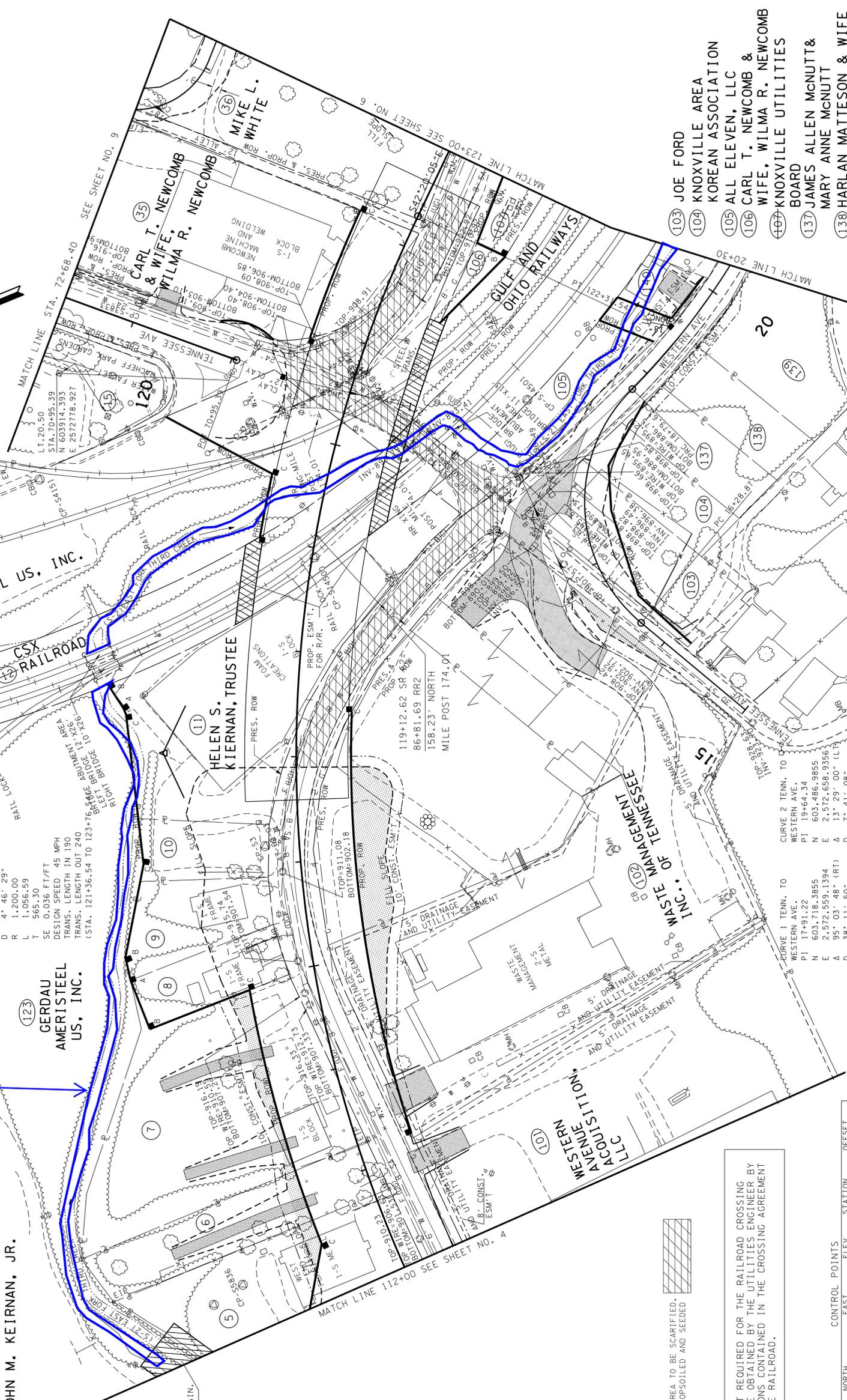
SR62 CUR-1
PI 117+40.24
N 604.106.9807
E 2.572.474.6863
D 50' 26' 54" (RT)
A 4' 46' 29"
R 1.200.00
L 1.056.59
T 565.30
SE 0.036 FT/FT
DESIGN SPEED 45 MPH
TRANS. LENGTH IN 190
TRANS. LENGTH OUT 240
(STA. 121+36.54 TO 123+76.96)
RIGHT BRIDGE 10 X 26.6
LEFT BRIDGE 10 X 26.6

NOTE:
FOR LIMITS OF STREAM BUFFER
FOR EROSION PREVENTION AND
SEDIMENT CONTROL PLANS.

TRACT NO. 13 - COMBINED 13, 14, 16
AND 128 INTO TRACT NO. 13
DELETED TRACT NO.'S 14, 16 FROM PLANS.



TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-62(34)	5



EASEMENT REQUIRED FOR THE RAILROAD CROSSING IS TO BE OBTAINED BY THE UTILITIES ENGINEER BY PROVISIONS CONTAINED IN THE CROSSING AGREEMENT WITH THE RAILROAD.

POINT	CONTROL POINTS		STATION	OFFSET	
	NORTH	EAST			
CP-S3	604050.820	2572356.000	911.43	116+17.23	32.43' (LT)
CP-S7	603839.816	2572547.645	898.70	118+85.41	79.71' (RT)
CP-S14500	603903.194	2572592.434	898.41	118+90.99	2.29' (RT)
CP-S13	603878.570	2572733.635	908.69	120+18.64	57.48' (LT)

AREA TO BE SCARIFIED,
TOPSOILED AND SEEDED

R.O.W. PLANS

COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.0001 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

STA. 112+00 TO STA. 123+00
SCALE: 1" = 50'

- 103 JOE FORD
- 104 KNOXVILLE AREA KOREAN ASSOCIATION
- 105 ALL ELEVEN, LLC
- 106 CARL T. NEWCOMB & WIFE, WILMA R. NEWCOMB
- 107 KNOXVILLE UTILITIES BOARD
- 108 JAMES ALLEN MCNUTT & MARY ANNE MCNUTT
- 109 HARLAN MATTESON & WIFE MARY MATTESON
- 110 KNOXVILLE AREA KOREAN ASSOCIATION
- 111 ROGER BRANAM

13 GERDAU AMERISTEEL US, INC.

11 HELEN S. KIERNAN, TRUSTEE

119+12.62 SR 119
86+81.69 RR2
MILE POST 174.01

102 WASTE MANAGEMENT INC. OF TENNESSEE

CURVE 1 TENN. TO WESTERN AVE.
PI 17+91.22
N 603.718.3855
E 2.572.559.1394
D 95' 03' 48" (RT)
A 3' 29' 00" (LT)
R 7.41' 50"
L 745.49
T 175.43
SE 0.040 FT/FT
DESIGN SPEED 20 MPH
TRANS. LENGTH 100

CURVE 2 TENN. TO WESTERN AVE.
PI 19+64.34
N 603.466.9855
E 2.572.658.9356
D 13' 29' 00" (LT)
A 7' 41' 08"
R 745.49
L 175.43
T 88.12
SE 0.040 FT/FT
DESIGN SPEED 20 MPH
TRANS. LENGTH 100

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-62(34)	5B

FILE NO.
DESIGN DIVISION
TENNESSEE D.O.T.

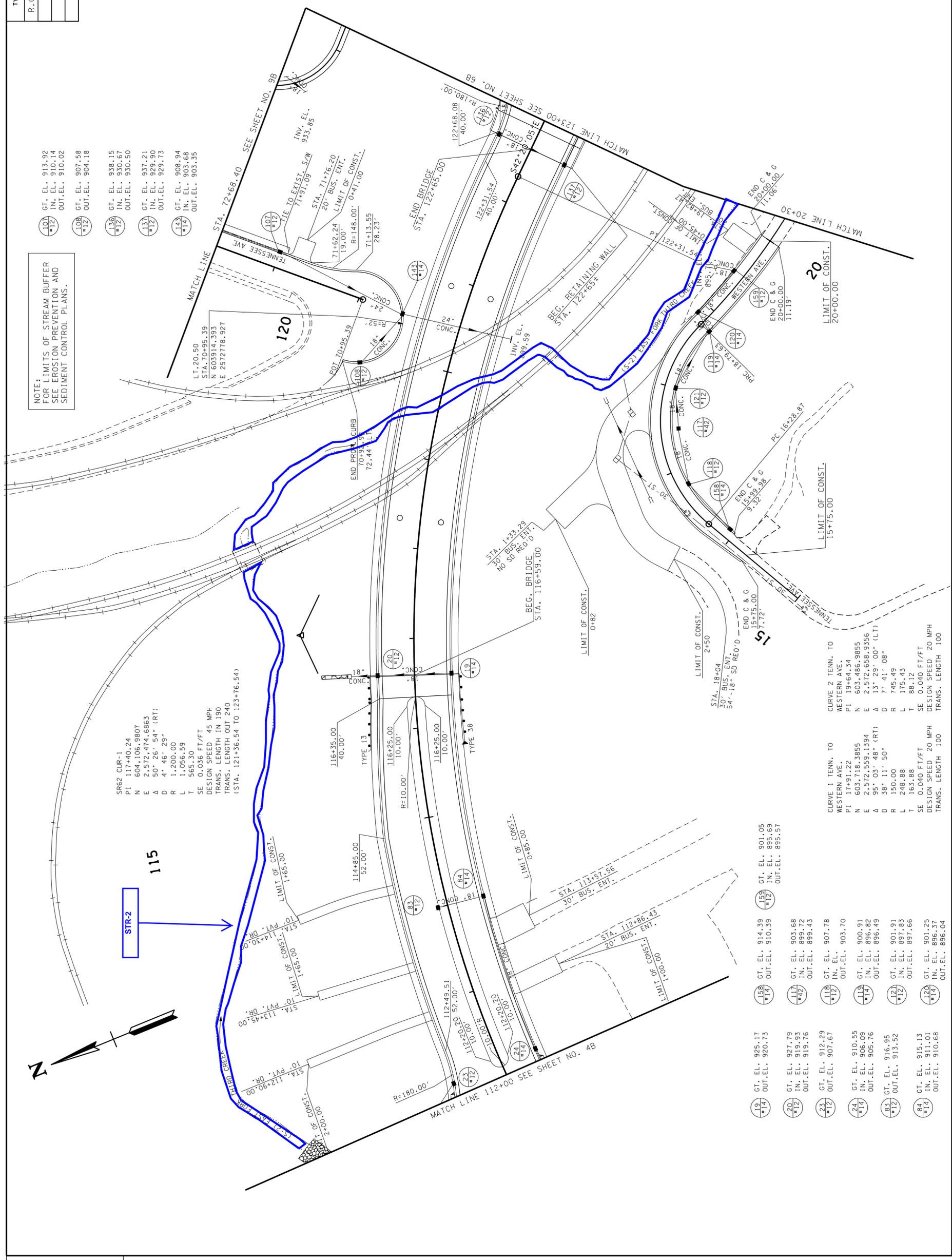
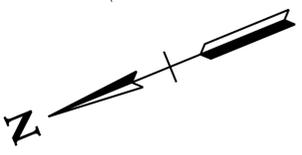
NOTE:
FOR LIMITS OF STREAM BUFFER
SEE EROSION PREVENTION AND
SEDIMENT CONTROL PLANS.

- (10) #12 GT. EL. 913.92
IN. EL. 910.14
OUT. EL. 910.02
- (108) #12 GT. EL. 907.58
OUT. EL. 904.18
- (136) #12 GT. EL. 938.15
IN. EL. 930.67
OUT. EL. 930.50
- (137) #12 GT. EL. 937.21
IN. EL. 929.90
OUT. EL. 929.73
- (143) #14 GT. EL. 908.94
IN. EL. 903.68
OUT. EL. 903.35

SR62 CUR-1
PI 117+40.24
N 604.106.9807
E 2.572.474.6863
D 50' 26' 54" (RT)
D 4' 46' 29"
R 1.200.00
L 1.056.59
T 565.30
SE 0.036 FT/FT
DESIGN SPEED 45 MPH
TRANS. LENGTH IN 190
TRANS. LENGTH OUT 240
(STA. 121+36.54 TO 123+76.54)

115

STR-2



- (19) #14 GT. EL. 925.17
OUT. EL. 920.73
- (20) #12 GT. EL. 927.79
IN. EL. 919.93
OUT. EL. 919.76
- (23) #12 GT. EL. 912.29
OUT. EL. 907.67
- (24) #14 GT. EL. 910.55
IN. EL. 906.09
OUT. EL. 905.76
- (83) #12 GT. EL. 916.95
IN. EL. 897.83
OUT. EL. 897.66
- (84) #14 GT. EL. 915.13
IN. EL. 896.37
OUT. EL. 896.04
- (158) #14 GT. EL. 914.39
OUT. EL. 910.39
- (117) #12 GT. EL. 903.68
IN. EL. 899.72
OUT. EL. 899.43
- (118) #12 GT. EL. 907.78
IN. EL. 893.70
- (119) #14 GT. EL. 900.91
IN. EL. 896.82
OUT. EL. 896.49
- (120) #12 GT. EL. 901.91
IN. EL. 897.83
OUT. EL. 897.66
- (120) #14 GT. EL. 901.25
IN. EL. 896.37
OUT. EL. 896.04
- (159) #12 GT. EL. 901.05
IN. EL. 895.69
OUT. EL. 895.57

CURVE 1 TENN. TO
WESTERN AVE.
PI 17+91.22
N 603.718.3855
E 2.572.559.1394
D 95' 03' 48" (RT)
D 38' 11' 50"
R 150.00
L 248.88
T 163.88
SE 0.040 FT/FT
DESIGN SPEED 20 MPH
TRANS. LENGTH 100

CURVE 2 TENN. TO
WESTERN AVE.
PI 19+64.34
N 603.486.9855
E 2.572.658.9356
D 13' 29' 00" (LT)
D 7' 41' 08"
R 745.49
L 175.43
T 88.12
SE 0.040 FT/FT
DESIGN SPEED 20 MPH
TRANS. LENGTH 100

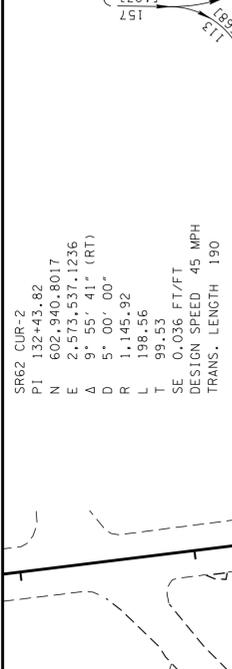
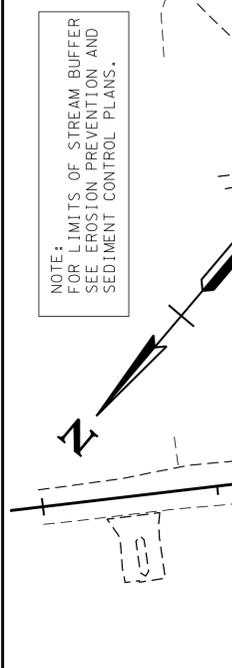
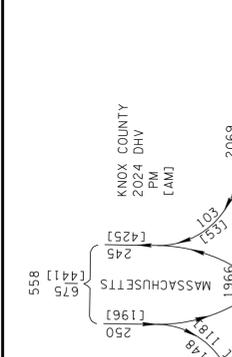
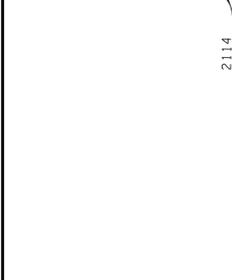
R.O.W. PLANS

COORDINATE VALUES ARE NAD(83) (995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.0001 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROPOSED LAYOUT

STA. 112+00 TO STA. 123+00
SCALE: 1" = 50'



TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-62(34)	6B

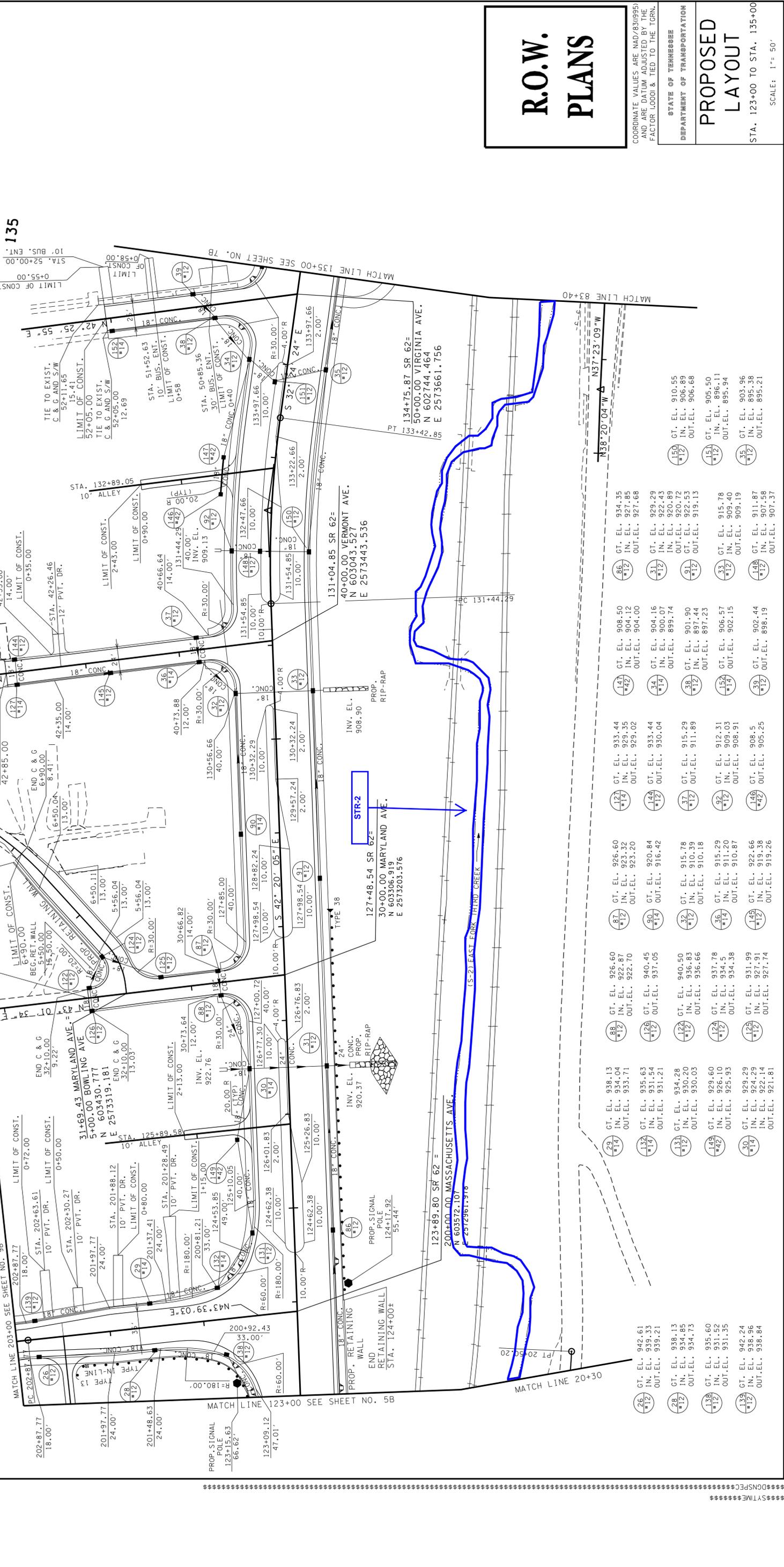
SR62 CUR-2
PI 132+43.82
N 602.940.8017
E 2.573.537.1236
A 9° 55' 41" (RT)
D 5' 00' 00"
R 1.145.92
L 198.56
T 99.53
SE 0.036 FT/FT
DESIGN SPEED 45 MPH
TRANS. LENGTH 190

NOTE:
FOR LIMITS OF STREAM BUFFER
SEE EROSION PREVENTION AND
SEDIMENT CONTROL PLANS.

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FOR LIMITS OF STREAM BUFFER
SEE EROSION PREVENTION AND
SEDIMENT CONTROL PLANS.



STATION	GT. EL.	IN. EL.	OUT. EL.
25	942.61	939.33	939.21
26	942.61	939.33	939.21
27	942.61	939.33	939.21
28	938.13	934.85	934.73
29	938.13	934.85	934.73
30	935.60	931.52	931.35
31	935.60	931.52	931.35
32	942.24	938.96	938.84
33	942.24	938.96	938.84
34	926.60	924.62	924.50
35	926.60	924.62	924.50
36	937.78	934.38	934.38
37	937.78	934.38	934.38
38	940.50	936.66	936.66
39	940.50	936.66	936.66
40	915.78	910.39	910.18
41	915.78	910.39	910.18
42	926.60	922.87	922.70
43	926.60	922.87	922.70
44	926.60	922.87	922.70
45	926.60	922.87	922.70
46	926.60	922.87	922.70
47	926.60	922.87	922.70
48	926.60	922.87	922.70
49	926.60	922.87	922.70
50	926.60	922.87	922.70
51	926.60	922.87	922.70
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97	926.60	922.87	922.70
98	926.60	922.87	922.70
99	926.60	922.87	922.70
100	926.60	922.87	922.70
101	926.60	922.87	922.70
102	926.60	922.87	922.70
103	926.60	922.87	922.70
104	926.60	922.87	922.70
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119	926.60	922.87	922.70
120	926.60	922.87	922.70
121	926.60	922.87	922.70
122	926.60	922.87	922.70
123	926.60	922.87	922.70
124	926.60	922.87	922.70
125	926.60	922.87	922.70
126	926.60	922.87	922.70
127	926.60	922.87	922.70
128	926.60	922.87	922.70
129	926.60	922.87	922.70
130	926.60	922.87	922.70
131	926.60	922.87	922.70
132	926.60	922.87	922.70
133	926.60	922.87	922.70
134	926.60	922.87	922.70
135	926.60	922.87	922.70

R.O.W. PLANS

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

COORDINATE VALUES ARE NAD(83)99S
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.0001 & TIED TO THE TGRN.

PROPOSED LAYOUT

STA. 123+00 TO STA. 135+00
SCALE: 1" = 50'

POINT	NORTH	EAST	STATION	OFFSET
CP-56	602320.483	2573607.510	460+38.74	40.69' (LT)
CP-520	602460.330	2573861.168	138+22.58	16.11' (LT)
CP-54	602122.209	2574088.480	142+19.10	50.29' (RT)
CP-55	601904.462	2574668.030	891.27 S.E. CORNER PROCTORY/SR 62	

EASEMENT REQUIRED FOR THE RAILROAD CROSSING IS TO BE OBTAINED BY THE UTILITIES ENGINEER BY PROVISIONS CONTAINED IN THE CROSSING AGREEMENT WITH THE RAILROAD.

AREA TO BE SCARIFIED, TOPSOILED AND SEED.

- (91) G.E. KING, MARRIED
- (132) HENRY L. JONES & WIFE, SYLVIA JONES
- (133) DORIS E. WEAVER

NOTE:
FOR LIMITS OF STREAM BUFFER SEE EROSION PREVENTION AND SEDIMENT CONTROL PLANS.

SR62 CUR-3
PI 141+37.10
N 602,186.2151
E 2,574,016.1244
Δ 36° 50' 55" (LT)
D 7° 38' 22"
R 750.00
L 482.35
T 249.85
SE 0.040 FT/FT
DESIGN SPEED 45 MPH
TRANS. LENGTH 190

- (81) KNOXVILLE HABITAT FOR HUMANITY, INC.
- (82) ROY T. MONTGOMERY & WIFE, BETTY A. MONTGOMERY
- (83) NIGHTOWL RENTALS, LLC
- (84) BRUCE EDWARD CROWE & WIFE, MARGARET W. CROWE
- (85) BRUCE EDWARD CROWE & WIFE, MARGARET W. CROWE
- (86) DALE THOMPSON & WIFE JILL THOMPSON
- (87) DALE THOMPSON & WIFE JILL THOMPSON
- (134) CITY OF KNOXVILLE
- (141) VALENCIA BRYANT

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-62(34)	7

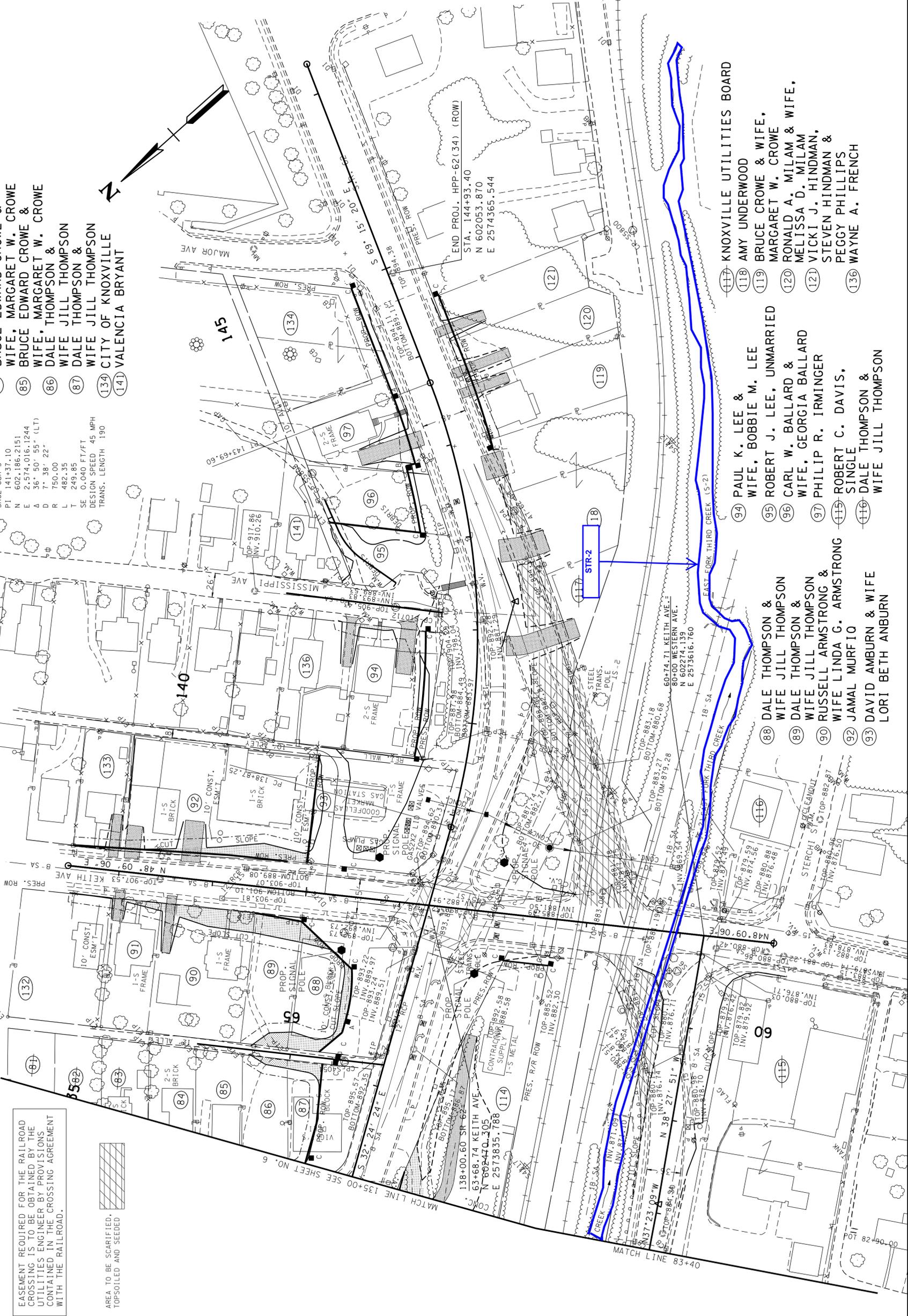
R.O.W. PLANS

COORDINATE VALUES ARE NAD(83) (995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.0001 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

STA. 135+00 TO STA. 147+00
SCALE: 1" = 50'



- (88) DALE THOMPSON & WIFE JILL THOMPSON
- (89) DALE THOMPSON & WIFE JILL THOMPSON
- (90) RUSSELL ARMSTRONG & WIFE LINDA G. ARMSTRONG
- (92) JAMAL MURFIO
- (93) DAVID AMBURN & WIFE LORI BETH AMBURN
- (94) PAUL K. LEE & WIFE, BOBBIE M. LEE
- (95) ROBERT J. LEE, UNMARRIED
- (96) CARL W. BALLARD & WIFE, GEORGIA BALLARD
- (97) PHILIP R. IRMINGER
- (115) ROBERT C. DAVIS, SINGLE
- (116) DALE THOMPSON & WIFE JILL THOMPSON
- (94) PAUL K. LEE & WIFE, BOBBIE M. LEE
- (95) ROBERT J. LEE, UNMARRIED
- (96) CARL W. BALLARD & WIFE, GEORGIA BALLARD
- (97) PHILIP R. IRMINGER
- (115) ROBERT C. DAVIS, SINGLE
- (116) DALE THOMPSON & WIFE JILL THOMPSON
- (117) KNOXVILLE UTILITIES BOARD
- (118) AMY UNDERWOOD
- (119) BRUCE CROWE & WIFE, MARGARET W. CROWE
- (120) RONALD A. MILAM & WIFE, MELISSA D. MILAM
- (121) VICKI J. HINDMAN, STEVEN HINDMAN & PEGGY PHILLIPS
- (136) WAYNE A. FRENCH

Project: SR-62 (Western Ave) From Texas Avenue to Major Avenue**PE No.: 47023-1257-14 PIN: 101204.00****Date of survey: 17 January 2012 Biologists: K. Brown / R. Howard Affiliation: TDOT / CEC, Inc.**

1-Station: from plans	STA 100+00R to STA 109+29R	STA 109+31L – STA 109+65L
2-Map label and name	STR-1 (Tributary to East Fork Third Creek)	STR-1 (Tributary to East Fork Third Creek)
3-Latitude/Longitude	N 35.97344° W-83.96532°	N 35.97540° W-83.96226°
4-Potential impact	Runoff	Runoff / Relocation
5-Feature description:		
what is it	Perennial Stream	Perennial Stream
blue-line on topo? (y/n)	Yes	Yes
defined channel (y/n)	Yes	Yes
straight or meandering	Straight	Straight
channel bottom width	6-10 FT	2-3 FT
top of bank width	10-15 FT	2 FT
bank height and slope ratio	4 FT; 2:1	1 FT; 1:1
avg. gradient of stream (%)	<5%	<5%
substratum	Silt 50%, Gravel 50%	Silt 50%, Gravel 50%
riffle/run/pool	Riffle 10%, Run 75%, Pool 15%	Riffle 10%, Run 75%, Pool 15%
width of buffer zone	0	0
water flow	Yes	Yes
water depth	1 FT	1 FT
water width	2 FT	2 FT
general water quality	Poor	Poor
OHWM indicators	Scour / Debris	Scour / Debris
groundwater connection	Yes	Yes
bank stability: LB, RB	Eroding	Eroding
dominant species: LB, RB	Lawn Grass Species	Lawn Grass Species
overhead canopy (%)	0%	0%
benthos	None Observed	None Observed
fish	None Observed	None Observed
algae or other aquatic life	None Observed	None Observed
habitat assessment score	--	--
photo number (s)	1-2	3-4
rainfall information	TVA Gauge #0207 – 1/17 -0.44", 1/12 – 0.06", 1/11 – 0.76", 1/10 – 0.02", 1/9 – 0.24", 1/8 – 0.05", 1/7 – 0.17"	TVA Gauge #0207 – 1/17 -0.44", 1/12 – 0.06", 1/11 – 0.76", 1/10 – 0.02", 1/9 – 0.24", 1/8 – 0.05", 1/7 – 0.17"
6-HUC code & name (12-digit)	Third Creek - 060102010202	Third Creek - 060102010202
7-Confirmed by:	Obvious Stream, Not required	Obvious Stream, Not required
8-Mitigation	No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> (include on Form J)	No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> (include on Form J)
9-ETW	No <input checked="" type="checkbox"/> Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/> Yes <input type="checkbox"/>
10-303 (d) List	No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> Habitat <input checked="" type="checkbox"/> Siltation <input checked="" type="checkbox"/> Other <input checked="" type="checkbox"/>	No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> Habitat <input checked="" type="checkbox"/> Siltation <input checked="" type="checkbox"/> Other <input checked="" type="checkbox"/>
11-Notes Estimate size (acres) of lake or pond if applicable; provide any pertinent information needed to better describe feature; indicate if hydrologic determination form completed	Stream also 303(d) listed for <i>E. coli</i> impacts.	Stream also 303(d) listed for <i>E. coli</i> impacts.

9. Training Certifications

10. TMDL Information



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

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

August 16, 2016

Ms Mary Showers
Transportation Project Specialist
Tennessee Department of Transportation
Environmental Division
Suite 900 James K. Polk Building
505 Deaderick Street
Nashville, TN 37243-1402
Mary.Showers@tn.gov

Subject: **TMDL Consultation in Construction General Permit
SR-62 between Texas Avenue and Major Avenue
Project # 47023-1257-14, PIN 101204.00
Knox County
Latitude: 35.97413°, Longitude: -83.95885°**

Dear Ms Showers:

This letter is to acknowledge receipt of your letter dated August 10, 2016 satisfying the conditions of Section 3.5.10 Documentation of permit eligibility related to Total Maximum Daily Load (TMDL) of the General NPDES permit for Discharges of Storm Water Associated with Construction Activities (CGP).

This proposed TDOT project is to realign and widen SR-62 between Texas Avenue and Major Avenue in Knox County. This project will disturb approximately 29.5 acres of land.

This proposed project will discharge into the Ft. Loudoun Lake Watershed, specifically into East Fork Third Creek (HUC: TN06010201067_0100), which is listed as unavailable conditions for sedimentation and siltation due to “Discharges from Municipal Separate Storm Sewer Systems (MS4)”.

The *Total Maximum Daily Load (TMDL) for Siltation and Habitat Alteration in the Ft. Loudoun Lake Watershed (HUC: TN06010201)*, issued on February 1reason, 2006, establishes an existing sediment load and a corresponding annual percentage reduction of sediment load for point sources (waste load allocation – WLA) and non-point sources (load allocation – LA). The existing sediment load was expressed as pounds of sediment per acre per year, and calculated on the HUC-12 sub watershed basis. At the same time, the TMDL document requires that the WLAs provided to the NPDES regulated construction activities be implemented as Best Management Practices (BMPs) specified in the CGP.

Section 8.1.3 NPDES Regulated Construction Storm Water of the TMDL states, in part:

“Strict compliance with the provisions of the *General NPDES Permit for Storm Water Discharges Associated with Construction Activity* (TDEC, 2005a) can reasonably be expected to achieve reduced sediment loads to stream.”

Based on the information in the letter and a review of the CGP and the TMDL, the Division of Water Resources agrees that complying with Sections 4.1.1 and 4.1.2 of the CGP will be protective of the waters of the state.

Upon receipt of a complete application, a notice of intent (NOI), and a storm water pollution prevention plan (SWPPP), we do not anticipate significant obstacles for obtaining coverage under the CGP. A reminder that a complete application should be submitted at least 30 days prior to anticipated commencement of construction activities, or in the case of TDOT, letting of the project. However, if our NOI and/or SWPPP review show any inadequacies or we conclude that additional BMPs would be required to assure compliance with the WLA, we will address such issues in a separate correspondence.

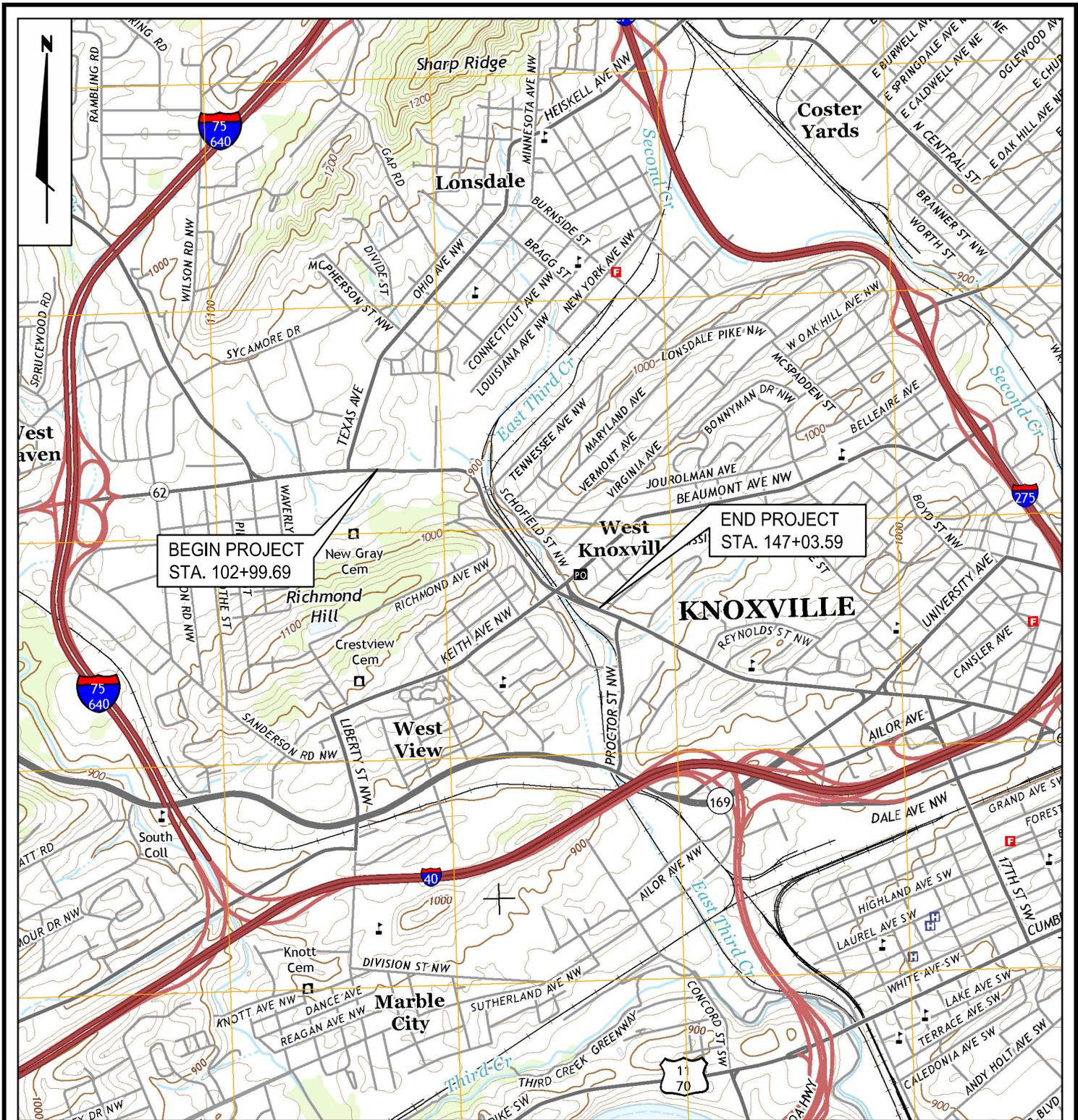
If you have questions, please contact Mr. Jim McAdoo at (615) 532-0684 or by E-mail at Jim.McAdoo@tn.gov.

Sincerely,



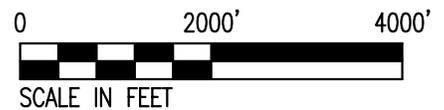
Vojin Janjić
Manager, Water-Based Systems

CC: Environmental.NPDES.TDOT@TN.gov
Shari.Winburn@tn.gov, Knoxville Environmental Field Office



 - APPROXIMATE OUTFALL LOCATION

TOPOGRAPHIC MAP: KNOXVILLE, TN (2014) U.S.G.S. QUADRANGLE MAP



REGION 1, DISTRICT 18
KNOXVILLE, TN

STORM WATER POLLUTION PREVENTION PLAN

TOPOGRAPHIC (USGS) MAP
STATE ROUTE 62 (WESTERN AVE.)
FROM TEXAS AVENUE TO MAJOR AVENUE

KNOX COUNTY, TENNESSEE

DRAWN BY:	WCJ	CHECKED BY:	JTH
PIN		101204.00	
PROJECT NO.		47023-1257-14	
FIGURE	1	DATE:	8-3-2016