

SWPPP INDEX OF SHEETS

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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 LICENSING AND/OR CERTIFICATIONS (3.1.1)?
 YES (CHECK ALL THAT APPLY BELOW) OR NO
- CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC)
 - A TN LICENSED PROFESSIONAL ENGINEER OR LANDSCAPE ARCHITECT
 - HAS SUCCESSFULLY COMPLETED TDEC LEVEL II COURSE
- 1.2. DO THE EPSC PLANS INVOLVE STRUCTURAL DESIGN, HYDRAULIC, HYDROLOGIC OR OTHER ENGINEERING CALCULATIONS FOR EPSC STRUCTURAL MEASURES (E.G. SEDIMENT BASINS) (3.1.1)? YES NO
- IF YES, HAVE THE EPSC PLANS BEEN PREPARED, STAMPED AND CERTIFIED BY A TN LICENSED PROFESSIONAL ENGINEER OR LANDSCAPE ARCHITECT? YES NO
- 1.3. DO THE PROJECT STORMWATER OUTFALLS DIRECTLY DISCHARGE INTO THE FOLLOWING (5.4.1)? YES (CHECK ALL THAT APPLY BELOW) NO
- WATERS WITH UNAVAILABLE PARAMETERS (303d FOR SILTATION OR HABITAT ALTERATION)
 - EXCEPTIONAL TENNESSEE WATERS
- IF YES TO SECTION 1.3, HAS THE SWPPP TEMPLATE BEEN PREPARED BY AN INDIVIDUAL THAT HAS THE FOLLOWING LICENSING AND/OR CERTIFICATIONS (5.4.1.b)?
 YES (CHECK ALL THAT APPLY BELOW) NO
- CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC)
 - A TN LICENSED PROFESSIONAL ENGINEER OR LANDSCAPE ARCHITECT
 - HAS SUCCESSFULLY COMPLETED TDEC LEVEL II COURSE

2. SITE DESCRIPTION (3.5.1)

- 2.1. PROJECT LIMITS (3.5.1.h): REFER TO TITLE SHEET
- 2.2. PROJECT DESCRIPTION (3.5.1.a):
 TITLE: S.I.A. SERVING CLINICAL MANAGEMENT CONCEPTS IN JOHNSON CITY
 COUNTY: WASHINGTON
 PIN: 116966.00
- 2.3. SITE MAP(S) (2.6.2.): REFER TO TITLE SHEET
- 2.4. DESCRIPTION OF EXISTING SITE TOPOGRAPHY (3.5.1.d): REFER TO EXISTING CONTOURS SHEET(S) 10-11, DRAINAGE MAP SHEET(S) 8-8A, USGS QUAD MAP, AND THE OUTFALL TABLE IN SECTION 4.3.
- 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): 9.407 ACRES
- 2.7. TOTAL AREA TO BE DISTURBED (3.5.1.c): 8.425 ACRES
- 2.8. NO MORE THAN 50 ACRES OF ACTIVE SOIL DISTURBANCE IS ALLOWED AT ANY TIME DURING THE CONSTRUCTION OF THE PROJECT.
- 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. SOIL PROPERTIES (3.5.1.f) (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) |
| Ur - URBAN LAND | B | 98.9 | 0.31 |
| Uu - URBAN LAND-UDORTHENTS COMPLEX | B | 1.1 | 0.31 |

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

| RUNOFF COEFFICIENTS FOR EXISTING CONDITIONS | | | | |
|---|----------|------------------------------|-----------|----------|
| AREA TYPE | AREA(AC) | PERCENTAGE OF TOTAL AREA (%) | RUNOFF CN | C FACTOR |
| IMPERVIOUS (ROADS, SHOULDERS, ETC.) | 3.578 | 38 | | 0.9 |
| PERVIOUS (GRASS, FORESTS, ETC.) | 5.829 | 62 | | 0.38 |
| WEIGHTED C-FACTOR = | | | | 0.58 |

| RUNOFF COEFFICIENTS FOR POST-CONSTRUCTION CONDITIONS | | | | |
|--|----------|------------------------------|-----------|----------|
| AREA TYPE | AREA(AC) | PERCENTAGE OF TOTAL AREA (%) | RUNOFF CN | C FACTOR |
| IMPERVIOUS (ROADS, SHOULDERS, ETC.) | 4.804 | 51.1 | | 0.9 |
| PERVIOUS (GRASS, FORESTS, ETC.) | 4.603 | 48.9 | | 0.4 |
| WEIGHTED C-FACTOR = | | | | 0.66 |

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 ORDER OF

CONSTRUCTION ACTIVITIES AND THE BASIC EPSC DEVICES DEPICTED ON THE EPSC PLAN CONTAINED WITHIN THE APPROVED SWPPP.

- 3.1. SPECIAL SEQUENCING REQUIREMENTS (SEE SHEETS 2E-2F)
- 3.2. INSTALL STABILIZED CONSTRUCTION EXITS.
- 3.3. INSTALL PERIMETER PROTECTION WHERE RUNOFF SHEET FLOWS FROM THE SITE.
- 3.4. INSTALL INITIAL EPSC 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 14 DAYS PRIOR TO GRADING OR EARTH-MOVING. REFER TO THE STABILIZATION PRACTICES BELOW.)
- 3.6. REMOVE AND STORE TOPSOIL.
- 3.7. STABILIZE DISTURBED AREAS WITHIN 14 DAYS OF COMPLETING ANY STAGE AND/OR PHASE OF ACTIVITY.
- 3.8. INSTALL STORM SEWERS AND CULVERTS.
- 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 (3.5.1.j, 3.5.1.k)
- 4.1.1. WILL CONSTRUCTION AND/OR EROSION PREVENTION AND SEDIMENT CONTROLS IMPACT ANY STREAMS WITHIN THE PROJECT LIMITS? YES NO
 IF YES, THE IMPACT(S) HAVE BEEN INCLUDED IN THE TOTAL PROJECT IMPACTS AND HAVE BEEN INCLUDED IN THE WATER QUALITY PERMITS.
- 4.1.2. HAVE ANY OF THE RECEIVING STATE 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 WITH UNAVAILABLE PARAMETERS FOR SILTATION
 - 303d WITH UNAVAILABLE PARAMETERS FOR HABITAT ALTERATION
 - EXCEPTIONAL TENNESSEE WATERS (ETW)
- 4.1.3. RECEIVING WATERS OF THE STATE (3.5.1.k).

| RECEIVING WATERS OF THE STATE INFORMATION | | | | | |
|---|-------------------------------|--|-----------------|---|--|
| TDOT STATE WATER LABEL FROM EBR | NAME OF RECEIVING STATE WATER | 303d WITH UNAVAILABLE PARAMETERS FOR SILTATION OR HABITAT ALTERATION (YES OR NO) | ETW (YES OR NO) | LOCATED WITHIN PROJECT LIMITS (YES OR NO) | LOCATED WITHIN ≤ 1 FLOW MILE DOWN GRADIENT OF PROJECT LIMITS (YES OR NO) |
| | BRUSH CREEK | YES | NO | NO | YES |
| | COBB CREEK | YES | NO | NO | YES |
| | NOB CREEK | YES | NO | NO | YES |

- 4.1.4. ARE THERE ANY WATER QUALITY RIPARIAN BUFFER ZONES REQUIRED FOR WATERS OF THE STATE? (4.1.2, 5.4.2)
 YES NO
- BUFFER ZONE REQUIREMENTS ARE NOT REQUIRED FOR PRE-APPROVED SITES (4.1.2.2.)**
 IF YES, THEY HAVE BEEN INCLUDED ON PLAN SHEET(S) _____.

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

60-FEET FOR WATERS WITH UNAVAILABLE PARAMETERS AND EXCEPTIONAL TENNESSEE WATERS (AVERAGE WIDTH PER SIDE WITH A MINIMUM OF 30-FEET).

A 60 FOOT NATURAL WATER QUALITY RIPARIAN BUFFER ZONE ADJACENT TO AND ON BOTH SIDES OF THE RECEIVING STATE 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. IF THE CONSTRUCTION SITE ENCOMPASSES BOTH SIDES OF A STREAM, BUFFER AVERAGING CAN BE APPLIED TO BOTH SIDES, BUT MUST BE APPLIED INDEPENDENTLY.

30-FEET FOR ALL OTHER STREAMS (AVERAGE WIDTH PER SIDE WITH A MINIMUM OF 15-FEET).

A 30 FOOT NATURAL WATER QUALITY RIPARIAN BUFFER ZONE ADJACENT TO AND ON BOTH SIDES OF THE RECEIVING STATE 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. IF THE CONSTRUCTION SITE ENCOMPASSES BOTH SIDES OF A STREAM, BUFFER AVERAGING CAN BE APPLIED TO BOTH SIDES, BUT MUST BE APPLIED INDEPENDENTLY.

4.1.5. ARE THERE ANY WATER QUALITY RIPARIAN BUFFER ZONES NOT REQUIRED FOR STATE WATERS DUE TO A TDEC ARAP? (9.0)
 YES NO

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

4.1.7. EVERY ATTEMPT SHOULD BE MADE FOR CONSTRUCTION ACTIVITIES TO NOT TAKE PLACE WITHIN THE WATER QUALITY RIPARIAN BUFFER ZONE AND FOR EXISTING FORESTED AREAS TO BE PRESERVED. (5.4.2.)

4.1.8. BECAUSE OF HEAVY SEDIMENT LOAD ASSOCIATED WITH CONSTRUCTION SITE RUNOFF, WATER QUALITY RIPARIAN BUFFER ZONES ARE NOT SEDIMENT CONTROL MEASURES AND SHOULD NOT BE RELIED UPON AS PRIMARY SEDIMENT CONTROL MEASURES. THE WATER QUALITY RIPARIAN BUFFER ZONE SHALL BE ESTABLISHED BETWEEN THE TOP OF THE STREAM BANK AND THE DISTURBED CONSTRUCTION AREA.

4.1.9. WHERE IT IS NOT PRACTICABLE TO MAINTAIN A FULL WATER QUALITY RIPARIAN BUFFER, BEST MANAGEMENT PRACTICES (BMPs) PROVIDING EQUIVALENT PROTECTION AS THE NATURAL RIPARIAN ZONE MUST 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 CGP. WHERE ISSUED, ARAP/401 REQUIREMENTS WILL PREVAIL IF IN CONFLICT WITH THESE BUFFER ZONE REQUIREMENTS.

4.2. RECEIVING WATERS OF THE UNITED STATES (WOTUS) (EPHEMERAL)

WILL CONSTRUCTION AND/OR EROSION AND SEDIMENT CONTROLS IMPACT ANY WOTUS (EPHEMERAL)? YES NO

| RECEIVING WOTUS (EPHEMERAL) INFORMATION | | |
|---|---|--|
| TDOT WOTUS LABEL | LOCATED WITHIN PROJECT LIMITS (YES OR NO) | LOCATED WITHIN 15-FT OF THE PROJECT LIMITS (YES OR NO) |
| WWC/EPH-1 | YES | YES |

4.2.1. ARE WATER QUALITY RIPARIAN BUFFER ZONES REQUIRED FOR WOTUS (4.1.2)? YES NO

IF YES, A 15 FOOT NATURAL WATER QUALITY RIPARIAN BUFFER ZONE ADJACENT TO AND ON BOTH SIDES OF THE RECEIVING EPHEMERAL STREAM IDENTIFIED AS A WOTUS (EPHEMERAL) BY THE U.S. ARMY CORPS OF ENGINEERS (USACE) OR THE ENVIRONMENTAL PROTECTION AGENCY SHALL BE PRESERVED TO THE MAXIMUM EXTENT PRACTICABLE DURING CONSTRUCTION ACTIVITIES AT THE SITE.

IF YES, THEY HAVE BEEN INCLUDED ON PLAN SHEET(S) 10-10B

4.2.2. ARE THERE ANY WATER QUALITY RIPARIAN BUFFER ZONES NOT REQUIRED FOR WOTUS (EPHEMERAL) DUE TO A USACE PERMIT?
 YES NO

4.3. OUTFALL INFORMATION

4.3.1. OUTFALL TABLE (3.5.1.e). SEE SWPPP SHEET S-8 FOR OUTFALL INFORMATION.

4.3.2. HAVE ALL OUTFALLS BEEN LABELED ON THE EPSC PLAN SHEETS (3.5.1.h)? YES NO

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

4.3.4. WHERE POSSIBLE, HAS NON-PROJECT RUN-ON BEEN DIVERTED AROUND OR THROUGH THE PROJECT 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

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

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

OF TEN ACRES OR MORE FOR AN OUTFALL(S) THAT DOES NOT DISCHARGE TO A STATE STREAM WITH UNAVAILABLE PARAMETERS OR EXCEPTIONAL TENNESSEE WATERS. 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. (3.5.3.3)

OR

OF FIVE ACRES OR MORE FOR AN OUTFALL(S) THAT DISCHARGES TO A STATE STREAM WITH UNAVAILABLE PARAMETERS OR EXCEPTIONAL TENNESSEE WATERS. 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. (5.4.1.g).

IN BOTH INSTANCES, 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.

4.4. 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 IMPACTS AND IN THE WATER QUALITY PERMITS.

| WETLAND INFORMATION | | | | |
|---------------------|-----------------------|---------------------|------------------------|------------------------|
| TDOT WETLAND LABEL | FROM STATION LT OR RT | TO STATION LT OR RT | TEMPORARY IMPACTS (AC) | PERMANENT IMPACTS (AC) |
| N/A | N/A | N/A | N/A | N/A |

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

4.5.1. IS THIS PROJECT LOCATED IN A HUC-8 WATERSHED THAT MAINTAINS AN EPA APPROVED TMDL FOR SILTATION AND HABITAT ALTERATION?
 YES NO

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

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

4.5.4. IF YES, HAS A SUMMARY OF THE CONSULTATION LETTER BEEN SUBMITTED/RECEIVED?
 YES NO

4.6. ECOLOGY INFORMATION (3.5.5.e)

DOES THE TDOT ENVIRONMENTAL BOUNDARIES REPORT SPECIFY SPECIAL NOTES TO BE ADDED TO THE PLAN SHEETS?
 YES NO

IF YES, THEY HAVE BEEN INCLUDED ON PLAN SHEET(S) _____.

4.7. ENVIRONMENTAL COMMITMENTS

ARE THERE ANY NOTES ON THE ENVIRONMENTAL COMMITMENT SHEET?
 YES NO

IF YES, THEY HAVE BEEN INCLUDED ON PLAN SHEET(S) _____.

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 PER 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.h)? YES NO

5.6. AREAS TO BE UNDISTURBED SHALL BE CLEARLY MARKED IN THE FIELD BEFORE CONSTRUCTION ACTIVITIES BEGIN.

5.7. 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.

5.8. 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.

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

5.9.1. PROJECT DISTURBED AREA IS THAN LESS THAN 5 ACRES (MINIMUM OF TWO STAGES OF EPSC PLANS)

5.9.2. PROJECT DISTURBED AREA IS GREATER THAN 5 ACRES (MINIMUM OF THREE STAGES OF EPSC PLANS)

5.10. STEEP SLOPES ARE DEFINED AS A NATURAL OR CREATED SLOPE OF 35% GRADE OR GREATER REGARDLESS OF HEIGHT. HAVE STEEP SLOPES 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

5.11. 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.j). REFER TO THE LIST OF APPLICABLE ENVIRONMENTAL PERMITS LOCATED ON SWPPP SHEET S-7. ALL PERMITS WILL BE MAINTAINED ON SITE WITHIN THE "DOCUMENTATION AND PERMITS" BINDER.

5.12. THE EPSC CONTROL MEASURES LISTED IN THE QUANTITIES TABLE ON SHEET 2_9A HAVE BEEN SELECTED IN ACCORDANCE WITH TDOT STANDARD DRAWINGS AND GOOD ENGINEERING PRACTICES (3.5.3.1.b).

- 5.13. EPSC MEASURES SHALL BE INSTALLED PER TDOT STANDARDS (i.e. STANDARD DRAWINGS) AND SHALL BE FUNCTIONAL PRIOR TO ANY EARTH MOVING OPERATIONS.
- 5.14. EPSC MEASURES WILL NOT BE INSTALLED WITHIN A STREAM WITHOUT FIRST OBTAINING APPROVAL FROM THE PERMITS SECTION.
- 5.15. 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.
- 5.16. EPSC MEASURES LOCATED IN WOTUS (EPHEMERAL STREAMS) MUST BE CONSIDERED TEMPORARY AND SHALL BE REMOVED AT THE END OF CONSTRUCTION.
- 5.17. 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 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.
- 5.18. 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.
- 5.19. THE QUANTITIES REQUIRED FOR STABILIZED CONSTRUCTION EXITS PER TDOT STANDARDS HAVE BEEN SPECIFIED ON SHEET 2 (3.5.3.1.n).
- 5.20. DISCHARGES FROM DEWATERING ACTIVITIES ARE PROHIBITED UNLESS MANAGED BY APPROPRIATE CONTROLS THAT PROVIDE THE LEVEL OF TREATMENT (FILTRATION) NECESSARY TO COMPLY WITH PERMIT REQUIREMENTS. (4.1.4).
- 5.21. SETTLING BASINS AND SEDIMENT TRAPS SHALL BE PROPERLY DESIGNED PER 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.
- 5.22. DISCHARGES FROM SEDIMENT BASINS AND IMPOUNDMENTS 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. (4.1.7).
- 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 CHEMICAL TREATMENTS MUST BE APPLIED PER SECTION 6 FLOCCULANTS.
- 5.24. WATER DISCHARGED FROM DEWATERING ACTIVITIES SHALL NOT CAUSE AN OBJECTIONABLE COLOR CONTRAST WITHIN THE RECEIVING NATURAL RESOURCE. WATER MUST BE HELD WITHIN SETTLING BASINS UNTIL IT IS AT LEAST AS CLEAR AS THE RECEIVING WATERS.
- 5.25. DEWATERING STRUCTURES, SEDIMENT FILTER BAGS, SEDIMENT BASINS AND TRAPS SHALL NOT BE LOCATED CLOSER THAN 30 FEET (60 FEET DESIRABLE VEGETATIVE BUFFER) FOR WATERS WITH UNAVAILABLE PARAMETERS AND EXCEPTIONAL TENNESSEE WATERS AND 15 FEET (30 FEET DESIRABLE VEGETATIVE BUFFER) FOR ALL OTHER FEATURES FROM THE TOP BANK OF A STREAM, WOTUS (EPHEMERAL), WETLAND OR OTHER NATURAL RESOURCE AND SHALL BE PROPERLY DESIGNED PER THE SIZE OF THE DRAINAGE AREAS OR VOLUME OF WATER TO BE TREATED.
- 5.26. STABILIZATION PRACTICES: PRE-CONSTRUCTION VEGETATIVE COVER WILL NOT BE DESTROYED, REMOVED OR DISTURBED MORE THAN 14 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. A SOIL ANALYSIS SHALL BE PERFORMED PRIOR TO THE APPLICATION OF FERTILIZERS TO ANY PORTION OF THE STE. SOILS SHOULD BE ANALYZED FOR pH, BUFFER VALUE, PHOSPHOROUS, POTASSIUM, CALCIUM AND MAGNESIUM. SOIL SAMPLES SHOULD BE REPRESENTATIVE OF THE AREA FOR WHICH FERTILIZER WILL BE APPLIED. SAMPLE TYPE SHOULD BE COLLECTED AND ANALYZED IN ACCORDANCE WITH THE UT EXTENSION "SOIL TESTING" BROCHURE PB1061. (4.1.5.)
- 5.31. FERTILIZERS SHALL BE APPLIED ONLY IN THE AMOUNTS SPECIFIED FROM THE ANALYSES. ONCE APPLIED, FERTILIZERS SHALL BE WORKED INTO THE SOIL TO LIMIT THE EXPOSURE TO STORMWATER.
- 5.32. STEEP SLOPES SHALL BE TEMPORARILY STABILIZED NOT LATER THAN 7 DAYS AFTER CONSTRUCTION ACTIVITY ON THE SLOPE HAS TEMPORARILY OR PERMANENTLY CEASED. (3.5.3.2).

6. FLOCCULANTS (3.5.3.1.b)

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

IF YES, THE FOLLOWING NOTES APPLY:

- 6.1. POLYACRYLAMIDES (PAM) SHALL BE OF THE ANIONIC OR NEUTRALLY CHARGED TYPE ONLY. PAM REQUIREMENTS ARE AS FOLLOWS:
 - 6.1.1. CATIONIC PAM IS NOT ALLOWED BECAUSE OF ITS TOXICITY TO FISH AND AQUATIC LIFE.
 - 6.1.2. ANIONIC AND NEUTRALLY CHARGED PAM SHALL MEET THE EPA AND FDA ACRYLAMIDE MONOMER LIMITS OF EQUAL TO OR LESS THAN 0.05% BY WEIGHT ACRYLAMIDE MONOMER.
 - 6.1.3. ANIONIC AND NEUTRALLY CHARGED PAM SHALL HAVE A DENSITY OF 10% TO 55% BY WEIGHT AND A MOLECULAR WEIGHT OF 16 TO 24 MG/MOLES.
 - 6.1.4. PAM MIXTURES SHALL BE NON-COMBUSTIBLE.
 - 6.1.5. PAM SHALL CONTAIN ONLY MANUFACTURER-RECOMMENDED ADDITIVES.
- 6.2. 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).
- 6.3. FLOCCULANTS SHALL BE HANDLED IN ACCORDANCE WITH ALL OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) MATERIAL SAFETY DATA SHEET (MSDS) REQUIREMENTS AND SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS FOR THE SPECIFIED USE CONFORMING TO ALL FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS.
- 6.4. ALL VENDORS AND SUPPLIERS OF FLOCCULANTS SHALL PRESENT OR SUPPLY A WRITTEN TOXICITY REPORT FOR BOTH ACUTE AND CHRONIC TOXICITY TESTS WHICH VERIFIES THAT THE FLOCCULANT EXHIBITS 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.
- 6.5. DO NOT APPLY FLOCCULANTS DIRECTLY TO, OR WITHIN 60 FEET, OF ANY STREAMS, WETLANDS, OR OTHER NATURAL WATER RESOURCE LOCATED ON OR ADJACENT TO THE CONSTRUCTION SITE. DO NOT APPLY FLOCCULANTS DIRECTLY INTO WATERS CONTAINED WITHIN SEDIMENT PONDS OR TO SLOPES THAT PRODUCE RUNOFF DIRECTLY INTO A STREAM, WETLAND, OR OTHER NATURAL WATER RESOURCE. DO NOT APPLY FLOCCULANTS IMMEDIATELY AT A STORMWATER OUTFALL WHERE RUNOFF LEAVES THE PROJECT LIMITS.

- 6.6. BEFORE FLOCCULANTS CAN BE USED ON A CONSTRUCTION PROJECT, SITE-SPECIFIC SOIL SAMPLES MUST BE OBTAINED AND TESTED BY THE MANUFACTURER OR THEIR REPRESENTATIVE, TO IDENTIFY THE OPTIMUM FLOCCULANT TYPE AND APPLICATION RATE. SINCE FLOCCULANT EFFICACY IS HIGHLY DEPENDENT ON SOIL TYPE, SOIL SAMPLES WILL NEED TO BE OBTAINED FROM EACH SOIL HORIZON THAT WILL BE ACCESSED DURING EXCAVATION. FLOCCULANTS SHOULD BE APPLIED ON A CONSTRUCTION SITE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDED APPLICATION OR DOSAGE RATE. APPLICATION METHOD SHALL ENSURE UNIFORM COVERAGE TO THE TARGET AREA. DO NOT APPLY EMULSION FORMS OF FLOCCULANTS DIRECTLY TO STORMWATER RUNOFF OR TO STREAMS, WETLANDS, OR OTHER WATER RESOURCES DUE TO SURFACTANT TOXICITY.
- 6.7. FLOCCULANT POWDER MAY BE APPLIED BY A HAND SPREADER OR A MECHANICAL SPREADER. IF APPROVED BY THE MANUFACTURER, FLOCCULANT MAY BE MIXED WITH DRY SILICA SAND, FERTILIZER, SEED, OR OTHER SOIL AMENDMENTS TO AID IN SPREADING. FLOCCULANTS MAY ALSO BE APPLIED WITH A WATER TRUCK OR AS PART OF HYDRO-SEEDING. APPLICATION METHOD SHALL ENSURE UNIFORM COVERAGE TO THE TARGET AREA.
- 6.8. MANUFACTURER'S GUIDANCE SHOULD BE FOLLOWED FOR BLOCK, LOG AND SOCK SPACING CONFIGURATIONS. BEFORE FLOCCULANTS CAN BE USED ON A CONSTRUCTION PROJECT, SITE-SPECIFIC SOIL SAMPLES MUST BE OBTAINED AND TESTED BY THE MANUFACTURER OR THEIR REPRESENTATIVE, TO IDENTIFY THE OPTIMUM FLOCCULANT TYPE AND APPLICATION RATE. SINCE FLOCCULANT EFFICACY IS HIGHLY DEPENDENT ON SOIL TYPE, SOIL SAMPLES WILL NEED TO BE OBTAINED FROM EACH SOIL HORIZON THAT WILL BE ACCESSED DURING EXCAVATION. FLOCCULANTS SHOULD BE APPLIED ON A CONSTRUCTION SITE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDED APPLICATION OR DOSAGE RATE.

7. UTILITY RELOCATION

ARE UTILITIES INCLUDED IN THE CONTRACT? YES NO

IF YES, THE FOLLOWING APPLY:

- 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 DOWNGRADIENT SIDE OF STOCKPILED SOIL. ANY TRENCHING ACROSS WET WEATHER CONVEYANCES SHALL BE DONE DURING DRY CONDITIONS, REMOVED 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 EPSC 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 FOURTEEN 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 THE TRENCH IS BACKFILLED.
- 7.6. IN REGARDS 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.
- 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.
- 7.11. FOR UTILITY CROSSINGS THAT UTILIZE HORIZONTAL DIRECTIONAL DRILLING THE FOLLOWING SHALL APPLY:
- 7.11.1. THE ENTRY AND EXIT POINTS SHALL BE AT LEAST 50 FEET FROM THE STREAM BANK OR WETLAND BOUNDARY.
- 7.11.2. THE DEPTH OF BORE BELOW THE STREAMBED IS SUFFICIENT TO PREVENT RELEASE OF DRILLING FLUID, BASED ON THE PARENT MATERIAL.
- 7.11.3. A SITE-SPECIFIC CONTINGENCY AND CONTAINMENT PLAN FOR INADVERTENT RELEASE OF DRILLING FLUID SHALL BE ESTABLISHED PRIOR TO COMMENCEMENT OF WORK. THIS PLAN SHALL BE SUBMITTED TO THE TDOT PROJECT ENGINEER AND THE TDOT ENVIRONMENTAL DIVISION PERMITS AND/OR COMPLIANCE AND FIELD SERVICES OFFICE FOR REVIEW AND APPROVAL.

8. MAINTENANCE AND INSPECTION

- 8.1. INSPECTION PRACTICES (3.5.8)
- 8.1.1. PROJECT EPSC INSPECTORS AND ENGINEERS (INCLUDING TDOT STAFF, CONSULTANTS AND CONTRACTOR STAFF) RESPONSIBLE FOR THE INSPECTION, IMPLEMENTATION, MAINTENANCE, AND/OR REPAIR OF EPSC MEASURES SHALL MEET ONE OF THE FOLLOWING REQUIREMENTS (3.5.8.1.):
- 8.1.1.1. SUCCESSFULLY COMPLETED THE TDOT EPSC INSPECTIONS TRAINING AND ANY RECERTIFICATION COURSE AS REQUIRED.
- 8.1.1.2. SUCCESSFULLY COMPLETED THE TDEC "LEVEL I - FUNDAMENTALS OF EROSION PREVENTION AND SEDIMENT CONTROL" COURSE AND ANY RECERTIFICATION COURSES AS REQUIRED.
- 8.1.1.3. BE A CURRENT TN LICENSED PROFESSIONAL ENGINEER OR LANDSCAPE ARCHITECT.
- 8.1.1.4. BE A CURRENT CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC).
- 8.1.1.5. SUCCESSFULLY COMPLETED TDEC "LEVEL II - DESIGN PRINCIPLES FOR EROSION PREVENTION AND SEDIMENT CONTROL FOR CONSTRUCTION SITES" COURSE AND ANY RECERTIFICATION COURSE AS REQUIRED.
- 8.1.2. THE TDOT CONSTRUCTION ENGINEER (OR THEIR DULY AUTHORIZED REPRESENTATIVE) AND THE CONTRACTOR'S SITE SUPERINTENDENT ARE RESPONSIBLE FOR INSPECTIONS. MAINTENANCE AND REPAIR ACTIVITIES ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE TDOT CONSTRUCTION ENGINEER OR THEIR DULY AUTHORIZED REPRESENTATIVE SHALL COMPLETE THE EPSC INSPECTION REPORTS AND DISTRIBUTE COPIES PER THE CONTRACT.
- 8.1.3. 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.o).
- 8.1.4. 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 FORM AND THE TDEC CONSTRUCTION STORMWATER INSPECTION CERTIFICATION (TWICE-WEEKLY INSPECTIONS) FORM.
- 8.1.5. OUTFALL POINTS SHALL BE INSPECTED TO ASCERTAIN WHETHER EPSC MEASURES ARE EFFECTIVE IN PREVENTING EROSION AND CONTROLLING SEDIMENT INCLUDING SIGNIFICANT IMPACTS TO

SURROUNDING STATE WATERS, WOTUS (EPHEMERAL), WETLANDS, OTHER 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.

- 8.1.6. INSPECTIONS WILL BE CONDUCTED AT LEAST TWICE EVERY CALENDAR WEEK AND AT LEAST 72 HOURS APART (3.5.8.2.a). A CALENDAR WEEK IS DEFINED AS SUNDAY THROUGH SATURDAY. QUALITY ASSURANCE INSPECTIONS OF TDOT EPSC, NPDES AND WATER QUALITY PERMIT REQUIREMENTS SHALL BE PERFORMED PER THE TDOT ENVIRONMENTAL DIVISION COMPLIANCE AND FIELD SERVICES OFFICE.
- 8.1.7. THE FREQUENCY OF EPSC INSPECTIONS MAY BE REDUCED TO ONCE A MONTH WHERE SITES OR PORTIONS OF SITES HAVE BEEN TEMPORARILY STABILIZED UNTIL CONSTRUCTION ACTIVITIES RESUME 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).
- 8.1.8. 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).
- 8.1.9. 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").
- 8.1.10. 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 (3.5.8.2.e AND 3.5.8.2.f).
- 8.1.11. DOCUMENTATION OF INSPECTIONS WILL BE MAINTAINED ON SITE IN THE "DOCUMENTATION AND PERMITS" BINDER. REPORTS WILL BE SUBMITTED TO THE TDOT PROJECT ENGINEER PER THE CONTRACT.
- 8.1.12. 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.
- 8.1.13. 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 (3.5.8.2.h).
- 8.2. DULY AUTHORIZED REPRESENTATIVE (7.7.3)
- THE PROJECT ENGINEER MAY DELEGATE AN INDIVIDUAL AND/OR CONSULTANT TO SIGN EPSC INSPECTIONS REPORTS. FOR SATISFYING SIGNATORY REQUIREMENTS FOR EPSC INSPECTION REPORTS, THE PROJECT ENGINEER AND NEWLY AUTHORIZED INDIVIDUAL ACCEPTING RESPONSIBILITY MUST COMPLETE AND SIGN THE TDOT CONSTRUCTION DIVISION EPSC DELEGATION OF AUTHORITY.
- 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 AND IN ACCORDANCE WITH TDOT STANDARD DRAWINGS AND GOOD ENGINEERING PRACTICES. (3.5.3.1.b)
- 8.3.2. MAINTENANCE AND REPAIR ACTIVITIES ARE THE RESPONSIBILITY OF THE CONTRACTOR.
- 8.3.3. 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. (3.5.8.2.e).

- 8.3.4. SEDIMENT SHALL BE REMOVED FROM SEDIMENT CONTROL STRUCTURES (SEDIMENT TRAPS, SILT FENCE, SEDIMENT BASINS, OTHER CONTROLS, ETC.) WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT (50%). (3.5.3.1.e).
- 8.3.5. 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.
- 8.3.6. CHECK DAMS WILL BE INSPECTED FOR STABILITY. SEDIMENT WILL BE REMOVED WHEN DEPTH REACHES ONE-HALF (½) THE HEIGHT OF THE DAM.
- 8.3.7. 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.
- 8.3.8. 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 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).
- 8.3.9. ALL SEEDED AREAS WILL BE CHECKED FOR BARE SPOTS, EROSION WASHOUTS, AND VIGOROUS GROWTH FREE OF SIGNIFICANT WEED INFESTATIONS.

9. SITE ASSESSMENTS (3.1.2)

QUALITY ASSURANCE SITE ASSESSMENTS OF EROSION PREVENTION AND SEDIMENT CONTROLS SHALL BE PERFORMED PER THE TDOT ENVIRONMENTAL DIVISION COMPLIANCE AND FIELD SERVICES 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 DEPICTED ON THE PLANS AND NOTED AS PERMANENT.
- 10.2. DESCRIBE ANY SPECIFIC POST-CONSTRUCTION MEASURES THAT WILL CONTROL VELOCITY, POLLUTANTS, AND/OR EROSION (3.5.4): RIP-RAP AND TURF REINFORCEMENT MAT FOR DITCH AND SIDESLOPE STABILIZATION.
- 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
- PIPE CULVERTS (I.E. CONCRETE, CORRUGATED METAL, HDPE, ETC.)
- 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 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.

10.5. 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 ALL NECESSARY PERMITS TO DISPOSE OF HAZARDOUS MATERIAL.

10.6. 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 ALL NECESSARY PERMITS TO DISPOSE OF SANITARY WASTE.

10.7. 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 CONSTRUCTION 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 FLUSHING 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. ALL CHEMICAL TREATMENTS MUST BE APPLIED PER SECTION 6 FLOCCULANTS.

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.i)?

- 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)

12.1.1. 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.

12.1.2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING A SPILL PREVENTION CONTROL AND COUNTERMEASURE (SPCC) PLAN AS REQUIRED BY TDOT SPECIAL PROVISION 107FP (REGARDING WATER QUALITY AND STORM WATER PERMITS) AND THE LAW.

12.1.3. THE CONTRACTOR SHALL 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 ENGINEER.

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 THE SOIL ANALYSIS OR 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 PER 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

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

12.4.1. 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.

12.4.2. 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.

12.4.3. 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.

12.4.4. 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.

12.4.5. 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.

12.4.6. 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.

12.4.7. 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 ENGINEER 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.

12.4.8. 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 NECESSARY TO REPLACE ANY MATERIALS USED IN SPILL RESPONSE ACTIVITIES.

12.5. SPILL NOTIFICATION (5.1)

WHERE A RELEASE CONTAINING A HAZARDOUS SUBSTANCE IN AN AMOUNT EQUAL TO, OR MORE THAN 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 ENGINEER IS RESPONSIBLE FOR NOTIFYING THE REGIONAL PROJECT DEVELOPMENT OFFICE (E.G. TRANSPORTATION ENVIRONMENTAL STUDIES SPECIALIST) AS SOON AS HE OR SHE HAS KNOWLEDGE OF THE DISCHARGE.

12.5.2. THE TDOT REGIONAL PROJECT DEVELOPMENT OFFICE WILL NOTIFY THE LOCAL TDEC ENVIRONMENTAL FIELD OFFICE AND ANY OTHER APPLICABLE REGULATORY AGENCIES WITHIN 24 HOURS OF THE SPILL.

12.5.3. IN ADDITION TO ANY FOLLOW UP NOTIFICATIONS REQUIRED BY FEDERAL LAW, 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. RECORD-KEEPING

13.1. REQUIRED RECORDS

TDOT OR THEIR DULY AUTHORIZED REPRESENTATIVE WILL MAINTAIN AT THE SITE THE FOLLOWING RECORDS OF CONSTRUCTION ACTIVITIES (3.5.3.1.m) (4.1.5.) (6.2.1):

- 13.1.1. THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR.
- 13.1.2. THE DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE.
- 13.1.3. THE DATES WHEN STABILIZATION MEASURES ARE INITIATED.
- 13.1.4. RECORDS EPSC INSPECTION REPORTS AND CORRECTIVE MEASURES.
- 13.1.5. RECORDS OF QUALITY ASSURANCE SITE ASSESSMENTS.
- 13.1.6. COPY OF SITE EPSC INSPECTOR'S CERTIFICATION AND/OR LICENSING
- 13.1.7. COPY OF REQUIRED SOIL ANALYSIS
- 13.1.8. A COPY OF ANY REGULATORY CORRESPONDENCE REGARDING THE EFFECTIVENESS OF THE SWPPP OR EPSC CONTROLS.

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

- 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 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.

13.3. KEEPING PLANS CURRENT (3.4)

- 13.3.1. 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 CONSTRUCTION ACTIVITY.

- 13.3.2. THE STAGES DEPICTED WITHIN 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 STAGES OF CONSTRUCTION THAT WILL OCCUR, THUS THESE DOCUMENTS MUST BE UPDATED THROUGHOUT THE LIFE OF THE CONSTRUCTION PROJECT.

- 13.3.3. THE TDOT EPSC INSPECTOR OR THEIR DULY AUTHORIZED REPRESENTATIVE WILL MODIFY AND UPDATE THE SWPPP WHEN ANY OF THE FOLLOWING CONDITIONS APPLY:

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

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

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

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

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

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

- 13.3.3.7. 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.

13.4. MAKING PLANS ACCESSIBLE

- 13.4.1. 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).

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

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

- 13.4.2.2. THE INDIVIDUAL NAME, COMPANY NAME, E-MAIL ADDRESS (IF APPLICABLE) AND TELEPHONE NUMBER OF THE LOCAL PROJECT SITE OWNER AND OPERATOR CONTACT;

- 13.4.2.3. A BRIEF DESCRIPTION OF THE PROJECT; AND

- 13.4.2.4. THE LOCATION OF THE SWPPP.

- 13.4.3. ALL INFORMATION DESCRIBED IN SECTION 13.4.2 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.

13.5. NOTICE OF TERMINATION (8.0)

- 13.5.1. 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.

- 13.5.2. FOR THE PURPOSES OF THE CERTIFICATION REQUIRED BY THE NOT, THE ELIMINATION OF STORMWATER DISCHARGES ASSOCIATED WITH THE CONSTRUCTION ACTIVITY MEANS THE

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

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

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

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

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

- 13.5.2.6. TEMPORARY EPSC MEASURES HAVE BEEN OR WILL BE REMOVED AT AN APPROPRIATE TIME TO ENSURE FINAL STABILIZATION IS MAINTAINED; AND

- 13.5.2.7. ALL STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES FROM THE IDENTIFIED SITE THAT ARE AUTHORIZED BY A NPDES GENERAL PERMIT HAVE OTHERWISE BEEN ELIMINATED FROM THE PORTION OF THE CONSTRUCTION SITE WHERE THE OPERATOR HAD CONTROL.

13.6. 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 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.

John Z. Hewitt

AUTHORIZED TDOT PERSONNEL SIGNATURE (3.3.1)

JOHN HEWITT

PRINTED NAME

CE MANAGER 2

TITLE

DECEMBER 20, 2017

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 ONSITE ARE THEREBY REGULATED. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS, AND FOR FAILURE TO COMPLY WITH THESE PERMIT REQUIREMENTS. AS SPECIFIED IN TENNESSEE CODE ANNOTATED SECTION 39-16-702(a)(4), THIS DECLARATION IS MADE UNDER PENALTY OF PERJURY.

AUTHORIZED TDOT PERSONNEL 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 DULY AUTHORIZED REPRESENTATIVE):

| 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.

OUTFALL TABLE (3.5.1.d, 5.4.1.g)

| EPSC STAGE | OUTFALL LABEL | SUB OUT-FALL | STATION CL, LT OR RT | SLOPE WITHIN ROW (%) | STAGE 1 DRAINAGE AREA (AC) | STAGE 2 DRAINAGE AREA (AC) | STAGE 3 DRAINAGE AREA (AC) | SEDIMENT BASIN OR EQUIVALENT MEASURE(S) (YES, NO OR N/A) | RECEIVING RESOURCE (TDOT EBR LABEL) OR OTHER | COMMENTS |
|------------|---------------|-----------------|-----------------------------|----------------------------|-------------------------------------|-------------------------------------|----------------------------------|--|---|----------|
| 1 | OUT-1 | | 100+41.77 LT | 2 | 1.718 | | | N/A | | |
| 2-3 | OUT-2 | | 100+81.18 LT | 2 | | 3.167 | 3.167 | N/A | WWC-1/EPH-1 | |
| 2-3 | | OUT-2A | 100+70.79 LT | 5 | | 0.097 | 0.097 | N/A | WWC-1/EPH-1 | |
| 2-3 | | OUT-2B | 100+58.60 RT | 6 | | 0.405 | 0.405 | N/A | WWC-1/EPH-1 | |
| 2-3 | | OUT-2C | 100+84.35 RT | 5 | | 1.069 | 1.069 | N/A | WWC-1/EPH-1 | |
| 2-3 | | OUT-2D | 207+77.18 LT W MARKET ST | 3 | | 1.296 | 1.296 | N/A | WWC-1/EPH-1 | |
| 2-3 | | OUT-2E | 102+89.93 LT | 3 | | 0.300 | 0.300 | N/A | WWC-1/EPH-1 | |
| 1-3 | OUT-3 | | 101+38.04 LT | 15 | 1.171 | 1.171 | 1.171 | N/A | WWC-1/EPH-1 | |
| 1-3 | OUT-4 | | 103+12.62 LT | 6 | 4.200 | 4.200 | 4.200 | N/A | WWC-1/EPH-1 | |
| 1-3 | | OUT-4A | 104+94.42 RT | 7 | 0.184 | 0.184 | 0.184 | N/A | WWC-1/EPH-1 | |
| 1-3 | | OUT-4B | 105+44.44 RT | 1 | 0.461 | 2.319 | 2.319 | N/A | WWC-1/EPH-1 | |
| 1 | OUT-5 | | 104+87.79 LT | 3 | 0.055 | | | N/A | WWC-1/EPH-1 | |
| 1 | OUT-6 | | 104+88.90 LT | 6 | 3.815 | | | N/A | WWC-1/EPH-1 | |
| 1 | | OUT-6A | 111+13.31 RT | 3 | 0.169 | | | N/A | WWC-1/EPH-1 | |
| 1 | | OUT-6B | 111+35.20 LT | 4 | 0.100 | | | N/A | WWC-1/EPH-1 | |
| 1 | OUT-7 | | 109+74.25 RT | 4 | 3.858 | | | N/A | | |
| 2-3 | OUT-7 | | 109+74.25 RT | 3 | | 3.858 | 3.858 | N/A | | |
| 1 | | OUT-7A | 114+80.81 RT | 3 | 0.662 | | | N/A | | |
| 2-3 | | OUT-7A | 114+80.81 RT | 2 | | 0.662 | 0.662 | N/A | | |
| 1 | OUT-8 | | 117+57.20 LT | 4 | 4.933 | | | N/A | | |
| 1 | OUT-9 | | 121+02.65 RT | 7 | 1.567 | | | N/A | | |
| 1 | OUT-10 | | 320+91.88 LT SR-381 | 6 | 0.330 | | | N/A | | |
| 2-3 | OUT-10 | | 320+91.88 LT SR-381 | 4 | | 0.057 | 0.057 | N/A | | |
| 1 | OUT-11 | | 323+24.55 LT SR-381 | 5 | 0.496 | | | N/A | | |
| 2-3 | OUT-11 | | 323+24.55 LT SR-381 | 3 | | 0.147 | 0.147 | N/A | | |
| 2-3 | OUT-12 | | 204+61.92 LT W MARKET ST | 2 | | 0.408 | 0.408 | N/A | | |
| 2-3 | OUT-13 | | 104+82.87 LT | 3 | | 2.322 | 2.322 | N/A | WWC-1/EPH-1 | |
| 2-3 | OUT-14 | | 322+22.08 LT SR-381 | 3 | | 0.303 | 0.303 | N/A | | |
| 2-3 | | OUT-14A | 120+68.68 LT | 4 | | 0.185 | 0.185 | N/A | | |
| 2-3 | | OUT-14B | 120+90.55 RT | 5 | | 0.576 | 0.576 | N/A | | |
| 2-3 | | OUT-14C | 120+05.67 RT | 8 | | 0.094 | 0.094 | N/A | | |
| 2-3 | | OUT-14D | 118+86.13 RT | 3 | | 0.089 | 0.089 | N/A | | |
| 2-3 | | OUT-14E | 118+74.42 RT | 4 | | 0.839 | 0.839 | N/A | | |
| 2-3 | | OUT-14F | 118+07.30 LT | 8 | | 0.251 | 0.251 | N/A | | |
| 2-3 | | OUT-14G | 117+95.11 RT | 6 | | 3.432 | 2.319 | N/A | | |
| 2-3 | | OUT-14H | 116+30.40 LT | 2 | | 0.617 | 0.617 | N/A | | |

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

Index of Sheets

| SHT. | DESCRIPTION |
|---------|---|
| 1 | TITLE SHEET |
| 2A | TYPICAL SECTIONS AND PAVEMENT SCHEDULE |
| 2B-2F | TYPICAL SECTIONS |
| 2G | TYPICAL DRIVEWAY SECTIONS AND PAVEMENT SCHEDULE |
| 2H | SPECIAL DITCH DETAILS |
| 2I | SPECIAL DITCH DETAILS |
| 3 | PROPERTY MAP |
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| 6 | PROFILE OF SIDE ROADS AND STREETS |
| 7-7A | PROFILE OF PRIVATE DRIVES |
| 8 | MULTI-PURPOSE TRAIL PLAN-PROFILE |
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| 9-9E | STORM DRAIN PROFILES |
| 9F-9K | STORM DITCH PROFILES |
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| 11 | EROSION PREVENTION AND SEDIMENT CONTROL NOTES |
| 11A-11B | EROSION PREVENTION AND SEDIMENT CONTROL PLANS |
| 12-12A | EXISTING CONTOURS |
| 13-13A | PROPOSED CONTOURS |
| 14-14F | TRAFFIC CONTROL PLANS |
| 16-30 | ROADWAY CROSS SECTIONS |
| 31-35 | SIDE ROAD CROSS SECTIONS |

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION BUREAU OF PLANNING AND DEVELOPMENT

WASHINGTON COUNTY

LARK STREET
FROM: S.R. 34 (U.S. 11E/321, W. MARKET ST.)
TO: S.R. 381 (N. STATE OF FRANKLIN RD.)
GRADE, DRAIN, PAVE, SIGN, AND STRIPING
RIGHT-OF-WAY PLANS

STATE HIGHWAY NO. N/A F.A.H.S. NO. N/A

| | | |
|--------------------|------|---------------|
| TENN. | YEAR | SHEET NO. |
| | 2013 | 1 |
| FED. AID PROJ. NO. | | |
| STATE PROJ. NO. | | 90953-1533-04 |



PROJECT

BEGIN PROJECT NO. 90953-1533-04 ROW
STA. 100+39.82

END PROJECT NO. 90953-1533-04 ROW
STA. 121+68.00

**R.O.W.
FIELD
REVIEW**

NO EXCLUSIONS
NO EQUATIONS

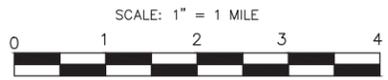
APPROVED: Paul D. Degges
PAUL D. DEGGES, CHIEF ENGINEER
DATE: _____
APPROVED: John Schroer
JOHN SCHROER, COMMISSIONER



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.



ROADWAY LENGTH 0.403 MILES
BRIDGE LENGTH 0.000 MILES
BOX BRIDGE LENGTH 0.000 MILES
PROJECT LENGTH 0.403 MILES

SURVEY DATE: JANUARY 12, 2012

| TRAFFIC DATA | |
|--------------|--------|
| ADT (2003) | N/A |
| ADT (2023) | N/A |
| DHV (2023) | N/A |
| D | N/A |
| T (ADT) | N/A % |
| T (DHV) | N/A % |
| V | 40 MPH |

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

TDOT C.E. MANAGER I PAUL BEEBE
DESIGNED BY CITY OF JOHNSON CITY DESIGNER JOHN B. PACHOL, P.E.
P.E. NO. 90953-1533-04 PIN NO. 116966.00

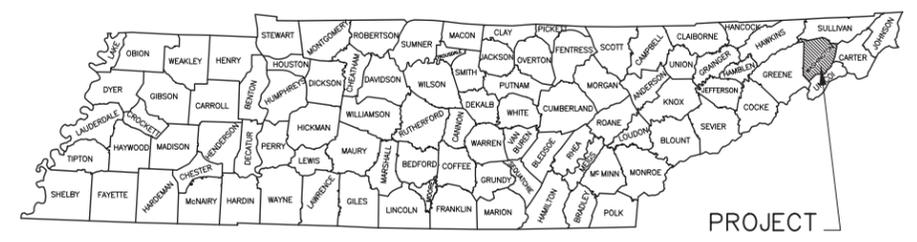
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

Index Of Sheets
SEE SHEET NO. 1A FOR INDEX

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING AND DEVELOPMENT

| | | |
|--------------------|---------------|-----------|
| TENN. | YEAR | SHEET NO. |
| | 2017 | 1 |
| FED. AID PROJ. NO. | | |
| STATE PROJ. NO. | 90953-3533-04 | |

WASHINGTON COUNTY
INDUSTRIAL ACCESS ROAD SERVING CLINICAL MANAGEMENT
CONCEPTS IN JOHNSON CITY
FOR COORDINATION ONLY
(CITY TO ACQUIRE R.O.W. AND RELOCATE UTILITIES)

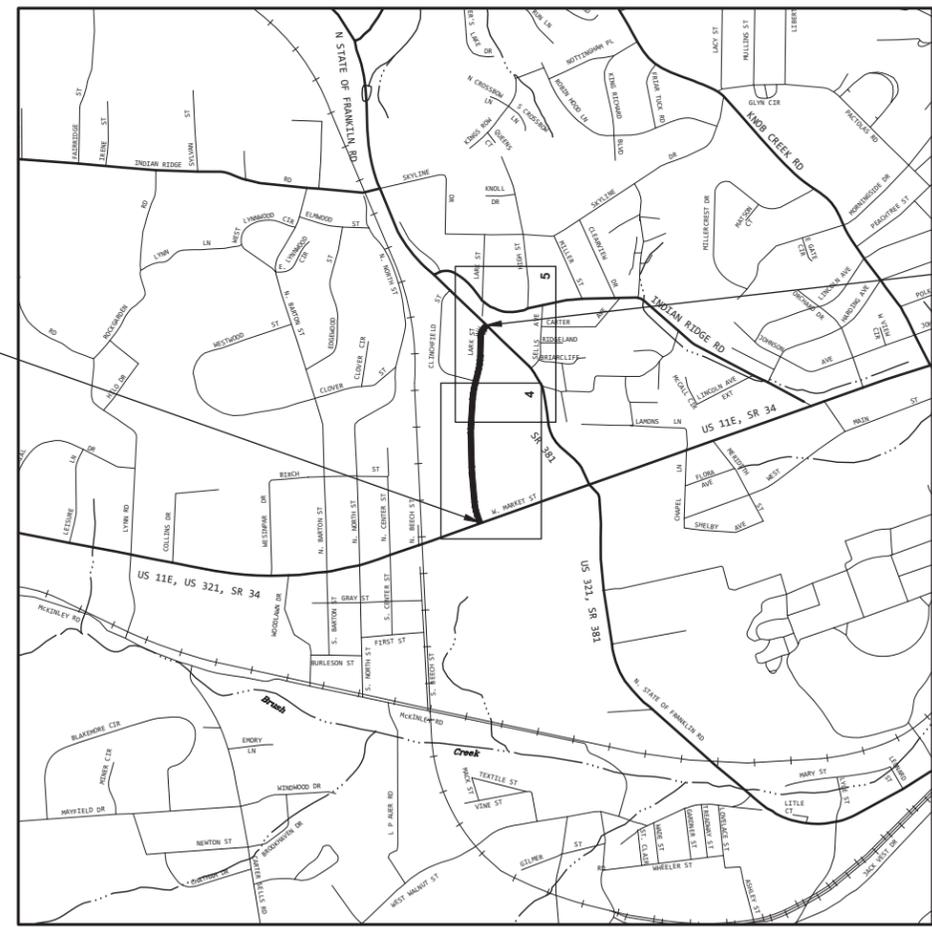


STATE HIGHWAY NO. N/A F.A.H.S. NO. N/A

**LOCALS
TO
ACQUIRE**

BEGIN CONST. PROJECT NO. 90953-3533-04
STA. 100+31.04 (CONST.)

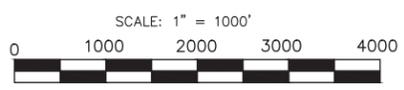
END CONST. PROJECT NO. 90953-3533-04
STA. 121+76.33 (CONST.)



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.



ROADWAY LENGTH **0.406 MILES**
BRIDGE LENGTH **0.000 MILES**
BOX BRIDGE LENGTH **0.000 MILES**
PROJECT LENGTH **0.406 MILES**

TDOT DESIGN MANAGER ERIC WILSON
DESIGNED BY CITY OF JOHNSON CITY DESIGNER JOHN B. PACHOL, P.E.
P.E. NO. 90953-1533-04 PIN NO. 116966.00

**NO EXCLUSIONS
NO EQUATIONS**

SURVEY DATES: AUGUST 19, 2011
OCTOBER 7, 2011
JANUARY 12, 2012
JANUARY 24, 2012
JUNE 6, 2012
AUGUST 17, 2012
AUGUST 28, 2012
SEPTEMBER 13, 2012
SEPTEMBER 28, 2012
AUGUST 11, 2014
AUGUST 22, 2014
SEPTEMBER 5, 2014
SEPTEMBER 8, 2014
SEPTEMBER 11, 2014

| TRAFFIC DATA | |
|--------------|--------|
| ADT (2003) | N/A |
| ADT (2023) | N/A |
| DHV (2023) | N/A |
| D | N/A |
| T (ADT) | N/A % |
| T (DHV) | N/A % |
| V | 40 MPH |



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

DATE: _____
APPROVED: John Schroer
JOHN SCHROER, COMMISSIONER

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

DESIGN EXCEPTION FOR VERTICAL ALIGNMENT

10/14/2017 7:54:48 PM D:\Projects\Lark Street Ext\Survey and Design\Drawing Production\1202_TITL.dwg

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| DESCRIPTION | SHT. |
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STANDARD ROADWAY DRAWINGS

STANDARD ABBREVIATIONS AND LEGENDS

| DRAWING | REVISION DATE | DESCRIPTION |
|---------|---------------|---|
| 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 | 03-16-17 | STANDARD LEGEND FOR SIGNALIZATION AND LIGHTING |
| RD-L-4 | 03-16-17 | STANDARD LEGEND FOR SIGNALIZATION AND LIGHTING |
| 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 |
| RD-TP-1 | 09-26-16 | STANDARD ROADWAY DRAWINGS TITLE SHEET |

TYPICAL SECTIONS AND DESIGN CRITERIA

| DRAWING | REVISION DATE | DESCRIPTION |
|------------|---------------|---|
| 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-2 | 03-16-17 | DESIGN STANDARDS FOR COLLECTOR ROADS AND STREETS |
| RD01-TS-2A | 10-15-02 | DESIGN STANDARDS 4 AND 6 LANE COLLECTOR HIGHWAYS WITH DEPRESSED MEDIANS |
| RD01-TS-2B | 10-15-02 | DESIGN STANDARDS 4 AND 6 LANE COLLECTOR HIGHWAYS WITH FLUSH MEDIANS |
| RD01-TS-3 | 10-15-02 | DESIGN STANDARD FOR 2-LANE ARTERIAL HIGHWAYS |
| RD01-TS-3A | 10-15-02 | DESIGN STANDARDS 4 AND 6 LANE ARTERIAL HIGHWAYS WITH DEPRESSED MEDIANS |
| RD01-TS-3B | 10-15-02 | DESIGN STANDARDS 4 AND 6 LANE ARTERIALS WITH INDEPENDENT ROADWAYS |
| RD01-TS-3C | 10-15-02 | DESIGN STANDARDS 4 AND 6 LANE ARTERIAL HIGHWAYS WITH FLUSH MEDIANS |
| RD01-TS-4 | 07-23-13 | DESIGN STANDARDS 1 AND 2 LANE RAMPS |
| RD01-TS-5 | 10-15-02 | DESIGN STANDARDS FREEWAYS WITH DEPRESSED MEDIANS |
| RD01-TS-5A | 10-15-02 | DESIGN STANDARDS FREEWAYS WITH INDEPENDENT ROADWAYS |
| RD01-TS-5B | 10-15-02 | DESIGN STANDARDS FREEWAYS WITH MEDIAN BARRIER |

| | | |
|------------|----------|--|
| RD01-TS-5 | | TYPICAL DETAIL FOR INSIDE LANE WIDENING OF FREEWAYS |
| RD01-TS-6 | 10-10-16 | TYPICAL CURB AND GUTTER SECTIONS WITH SHOULDER |
| RD01-TS-6A | 07-31-13 | TYPICAL CURB AND GUTTER SECTIONS WITHOUT SHOULDER |
| RD01-TS-6B | | TYPICAL CURB AND GUTTER FOR HIGH SPEED SUBURBAN ROADWAYS |
| RD01-TS-7 | 10-15-02 | DESIGN STANDARDS 2-LANE HIGHWAY WITH CONTINUOUS 2-WAY LEFT-TURN LANE |
| RD01-TS-7A | 10-15-02 | DESIGN STANDARDS 2-LANE CURB AND GUTTER WITH CONTINUOUS 2-WAY LEFT-TURN LANE |
| RD01-TS-8 | 03-16-17 | SHARED USE PATH TYPICAL SECTIONS |
| RD01-TS-9 | 06-15-12 | DESIGN STANDARDS FOR SINGLE LANE URBAN AND RURAL ROUNDABOUTS |
| RD01-TS-10 | 06-15-12 | DESIGN STANDARDS FOR MULTI-LANE URBAN AND RURAL ROUNDABOUTS |
| RD01-SE-2 | 10-15-02 | URBAN SUPERELEVATION DETAILS |
| RD01-SE-3 | 10-15-02 | RURAL SUPERELEVATION DETAILS |

SLOPE DEVELOPMENT

| DRAWING | REVISION DATE | DESCRIPTION |
|------------|---------------|--|
| RD01-S-11 | 04-04-03 | DESIGN AND CONSTRUCTION DETAILS FOR ROADSIDE SLOPE DEVELOPMENT |
| RD01-S-11A | 10-15-02 | ROADSIDE DITCH DETAILS FOR DESIGN AND CONSTRUCTION |
| RD01-S-11B | 10-15-02 | DESIGN AND CONSTRUCTION DETAILS FOR ROCK CUT SLOPE AND CATCHMENT |
| RD01-SA-1 | 10-15-02 | SAFETY APPROACH TO UNDERPASSES GRADING DESIGN AND SLOPE PROTECTION |

INTERSECTION SIGHT DISTANCE

| DRAWING | REVISION DATE | DESCRIPTION |
|-----------|---------------|--|
| RD01-SD-1 | | INTERSECTION SIGHT DISTANCE DESIGN AND GENERAL NOTES |
| RD01-SD-2 | | INTERSECTION SIGHT DISTANCE LANDSCAPE AND OBSTRUCTION |
| RD01-SD-3 | | INTERSECTION SIGHT DISTANCE 2-LANE ROADWAYS |
| RD01-SD-4 | | INTERSECTION SIGHT DISTANCE 5-LANE AND 4-LANE UNDIVIDED ROADWAYS |
| RD01-SD-5 | | INTERSECTION SIGHT DISTANCE 4-LANE DIVIDED HIGHWAYS |
| RD01-SD-6 | | INTERSECTION SIGHT DISTANCE 6-LANE DIVIDED HIGHWAYS |
| RD01-SD-7 | | INTERSECTION SIGHT DISTANCE FOR PASSIVE RAILROAD HIGHWAY GRADE-CROSSINGS |

UNDERDRAINS

| DRAWINGS | REVISION DATE | DESCRIPTION |
|----------|---------------|--|
| RD-UD-3 | 09-05-96 | UNDERDRAIN DETAILS |
| RD-UD-4 | 01-25-16 | UNDERDRAIN LATERAL DETAILS |
| RD-UD-6 | 12-18-94 | LATERAL UNDERDRAIN ENDWALL DETAIL FOR 1:1 & 2:1 SLOPES |
| RD-UD-7 | 12-18-94 | LATERAL UNDERDRAIN ENDWALL DETAIL FOR 3:1 & 4:1 SLOPES |
| RD-UD-8 | | LATERAL UNDERDRAIN ENDWALL DETAIL FOR 5:1 SLOPES |
| RD-UD-9 | 12-18-94 | LATERAL UNDERDRAIN ENDWALL DETAIL FOR 6:1 SLOPES |

PIPE CULVERTS AND ENDWALLS

| DRAWINGS | REVISION DATE | DESCRIPTION |
|----------|---------------|---|
| B-FLU-1 | | FLUME DETAILS |
| D-PB-1 | 03-06-17 | STANDARD DETAILS FOR CONCRETE PIPE INSTALLATION |
| D-PB-2 | 01-29-14 | STANDARD DETAILS FOR FLEXIBLE PIPE INSTALLATION |
| D-PB-3 | | INDUCED TRENCH SOIL EMBANKMENT FOR PIPE CULVERT INSTALLATION |
| D-PG-3 | 04-15-97 | FERROUS AND ALUMINUM CORRUGATED METAL PIPE |
| B-PG-4 | 07-29-94 | FERROUS AND ALUMINUM CORR. METAL PIPE ARCHES |
| D-PO-1 | 05-27-01 | STANDARD OVAL & FLAT-BASE CONCRETE CULVERT PIPE |
| B-PS-1 | 03-15-76 | STRUTTING DETAILS FOR CORR. METAL & STRUCTURAL PLATE ROUND PIPE |

SAFETY CROSS DRAIN ENDWALLS

| DRAWINGS | REVISION DATE | DESCRIPTION |
|----------|---------------|--|
| B-PE-15A | 06-14-13 | 15" CONCRETE ENDWALL CROSS DRAIN (FOR 3:1, 4:1 & 6:1 SLOPES) |
| B-PE-15B | | 15" CONCRETE ENDWALL CROSS DRAIN (FOR 3:1, 4:1 & 6:1 SLOPES) |
| D-PE-18A | 01-06-15 | 18" CONCRETE ENDWALL CROSS DRAIN (FOR 3:1, 4:1 & 6:1 SLOPES) |
| D-PE-18B | | 18" CONCRETE ENDWALL CROSS DRAIN (FOR 3:1, 4:1 & 6:1 SLOPES) |
| B-PE-24A | 01-21-16 | 24" CONCRETE ENDWALL CROSS DRAIN (FOR 3:1, 4:1 & 6:1 SLOPES) |
| B-PE-24B | | 24" CONCRETE ENDWALL CROSS DRAIN (FOR 3:1, 4:1 & 6:1 SLOPES) |

| | | |
|----------|------------|---|
| D-PE-30A | 10-10-16 | 30" CONCRETE ENDWALL CROSS DRAIN WITH STEEL PIPE GRATE (FOR 3:1, 4:1 & 6:1 SLOPES) |
| D-PE-30B | | 30" CONCRETE ENDWALL CROSS DRAIN WITH STEEL PIPE GRATE (FOR 3:1, 4:1 & 6:1 SLOPES) |
| D-PE-36A | 06-14-13 | 36" CONCRETE ENDWALL CROSS DRAIN WITH STEEL PIPE GRATE (FOR 3:1, 4:1 & 6:1 SLOPES) |
| D-PE-36B | | 36" CONCRETE ENDWALL CROSS DRAIN WITH STEEL PIPE GRATE (FOR 3:1, 4:1 & 6:1 SLOPES) |
| D-PE-42A | 06-14-2013 | 42" CONCRETE ENDWALL CROSS DRAIN WITH STEEL PIPE GRATE (FOR 3:1, 4:1 & 6:1 SLOPES) |
| D-PE-42B | | 42" CONCRETE ENDWALL CROSS DRAIN WITH STEEL PIPE GRATE (FOR 3:1, 4:1 & 6:1 SLOPES) |
| D-PE-48A | 06-14-2013 | 48" CONCRETE ENDWALL CROSS DRAIN WITH STEEL PIPE GRATE (FOR 3:1, 4:1 & 6:1 SLOPES) |
| D-PE-48B | | 48" CONCRETE ENDWALL CROSS DRAIN WITH STEEL PIPE GRATE (FOR 3:1, 4:1 & 6:1 SLOPES) |
| D-PE-99 | 11-01-2013 | PIPE GRATE & SKEWED CONNECTION DETAILS FOR "U" ENDWALLS (FOR 3:1, 4:1 & 6:1 SLOPES) |

SAFETY SIDE DRAIN ENDWALLS

| DRAWINGS | REVISION DATE | DESCRIPTION |
|-----------|---------------|--|
| D-SEW-1A | 03-06-17 | SIDE DRAIN CONCRETE ENDWALL WITH STEEL PIPE GRATE FOR 15" AND 18" PIPES 12:1 SLOPE |
| D-SEW-12D | 06-14-13 | CONCRETE ENDWALL TYPE "SD" WITH STEEL PIPE GRATE FOR 15" AND 18" PIPES 12:1 SL |

PROTECTED ENDWALLS

| DRAWINGS | REVISION DATE | DESCRIPTION |
|----------|---------------|---|
| D-PE-1 | 02-12-76 | TYPE "A" CONCRETE ENDWALL 2:1 SLOPE, 36" TO 78" |
| D-PE-4 | 10-10-16 | STRAIGHT CONCRETE ENDWALL |
| D-PE-5 | 05-27-01 | STANDARD WINGWALLS HORIZONTAL OVAL CONCRETE PIPES |
| D-PE-7 | 05-27-01 | STANDARD STRAIGHT ENDWALLS FLATBASE CONCRETE PIPES |
| D-PE-7A | 05-27-01 | STANDARD WINGWALLS FLATBASE CONCRETE PIPES |
| D-PE-8 | 01-19-97 | DETAIL OF STANDARD PIPE AND PIPE ARCH CULVERT WITH BEVELED ENDS AND RIP-RAP |
| D-PE-9 | 04-25-90 | CONCRETE ENDWALLS TYPE "B" (FOR ROUND & SIDE TAPERED INLETS, PIPE SIZES 15" TO 78", ALL SKEWS, 2:1 AND 4:1 SLOPES) 1976 |
| D-PE-9A | 10-25-82 | GENERAL DIMENSION QUANTITIES ROUND PIPE CONCRETE ENDWALLS TYPE "B" (PIPE SIZES 15" TO 78", ALL SKEWS, 2:1 AND 4:1 SLOPES) 1976 |
| D-PE-9B | | GENERAL DIMENSIONS AND QUANTITIES, SIDE TAPER INLETS CONCRETE ENDWALLS - TYPE "B" (PIPE SIZES 15" TO 78", ALL SKEWS, 2:1 AND 4:1 SLOPES) 1976 |
| D-PE-9C | | BILL OF STEEL (SHEET 1 OF 4) CONCRETE ENDWALLS TYPE "B" (FOR CONCRETE ROUND AND SIDE TAPERED INLET, PIPE SIZES 15" TO 78", ALL SKEWS, 2:1 SLOPE) 1976 |
| D-PE-9D | | BILL OF STEEL (SHEET 2 OF 4) CONCRETE ENDWALLS - TYPE "B" (FOR CONCRETE ROUND AND SIDE TAPERED INLET, PIPE SIZES 15" TO 78", ALL SKEWS, 4:1 SLOPE) 1976 |
| D-PE-9E | | BILL OF STEEL (SHEET 3 OF 4) CONCRETE ENDWALLS TYPE "B" (FOR STEEL ROUND AND SIDE TAPERED INLET, PIPE SIZES 15" TO 78", ALL SKEWS, 2:1 SLOPE) 1976 |
| D-PE-9F | | BILL OF STEEL (SHEET 4 OF 4) CONCRETE ENDWALLS TYPE "B" (FOR STEEL ROUND AND SIDE TAPERED INLET, PIPE SIZES 15" TO 78", ALL SKEWS, 4:1 SLOPE) 1976 |

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|--------|------|---------------|-----------|
| CONST. | 2017 | 90953-3533-04 | 1A |
| | | | |
| | | | |

**CONST.
FIELD
REVIEW**

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**INDEX AND
STANDARD
DRAWINGS**

CATCH BASINS AND MANHOLES

| DRAWINGS | REVISION DATE | DESCRIPTION |
|------------|---------------|--|
| D-CB-10LPC | 08-01-12 | LOW PROFILE LOWERED CURB 32" X 26" RECTANGULAR CONCRETE NO. 10LPC CATCH BASIN |
| D-CB-10RA | 03-11-14 | STANDARD PRECAST 48" CIRCULAR NO. 10 CATCH BASIN (FOR USE WITH 6" NONMOUNTABLE CURB) |
| D-CB-10S | 03-11-14 | STANDARD RECTANGULAR CONCRETE NO. 10 CATCH BASIN |
| D-CB-10SB | 03-11-14 | STANDARD 4' X 4' SQUARE CONCRETE NO. 10 CATCH BASIN |
| D-CB-12LP | 08-01-12 | LOW PROFILE 32" X 32" SQUARE CONCRETE NO. 12LPCATCH BASIN (FOR USE WITH 6" NON MOUNTABLE CURB) |
| 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) |
| D-CB-12RC | 03-11-14 | STANDARD PRECAST 84" THRU 120" CIRCULAR NO. 12 CATCH BASIN (FOR USE WITH 6" NONMOUNTABLE CURB) |
| D-CB-12S | 03-11-14 | STANDARD RECTANGULAR CONCRETE NO. 12 CATCH BASIN |
| D-CB-12SB | 03-11-14 | STANDARD 4' X 4' SQUARE CONCRETE NO. 12 CATCH BASIN |
| D-CB-12SC | 03-11-14 | STANDARD 5' 2" X 5' 2" SQUARE CONCRETE NO. 12 CATCH BASIN |
| D-CB-12SD | 03-11-14 | STANDARD 7' X 7' SQUARE CONCRETE NO. 12 CATCH BASIN |
| D-CB-12SE | 03-11-14 | STANDARD 9' X 9' SQUARE CONCRETE NO. 12 CATCH BASIN |
| D-CB-13P | 03-11-14 | STANDARD PRECAST RECTANGULAR CONCRETE NO. 13 CATCH BASIN |
| D-CB-13RA | 03-11-14 | STANDARD PRECAST 48" CIRCULAR NO. 13 CATCH BASIN (FOR USE WITH 6" NONMOUNTABLE CURB) |
| D-CB-13RB | 03-11-14 | STANDARD PRECAST 60" AND 72" CIRCULAR NO. 13 CATCH BASIN (FOR USE WITH 6" NONMOUNTABLE CURB) |
| D-CB-13RC | 03-11-14 | STANDARD PRECAST 84" THRU 120" CIRCULAR NO. 13 CATCH BASIN (FOR USE WITH 6" NONMOUNTABLE CURB) |
| D-CB-13S | 03-11-14 | STANDARD RECTANGULAR CONCRETE NO. 13 CATCH BASIN |
| D-CB-14P | 03-11-14 | STANDARD PRECAST RECTANGULAR CONCRETE NO. 14 CATCH BASIN |
| D-CB-14RB | 03-11-14 | STANDARD PRECAST CIRCULAR NO. 14RB CATCH BASIN |
| D-CB-14S | 03-11-14 | STANDARD RECTANGULAR CONCRETE NO. 14 CATCH BASIN |
| D-CB-14SE | 03-11-14 | STANDARD 9' X 9' SQUARE CONCRETE NO. 14 CATCH BASIN |
| D-CB-16S | 03-11-14 | STANDARD RECTANGULAR CONCRETE NO. 16 CATCH BASIN |
| D-CB-17S | 03-11-14 | STANDARD RECTANGULAR CONCRETE NO. 17 CATCH BASIN |
| D-CB-25LP | 08-01-12 | LOW PROFILE 32" X 32" SQUARE CONCRETE NO. 25LP CATCH BASIN (FOR USE WITH 6" MOUNTABLE CURB) |
| D-CB-25P | 03-11-14 | STANDARD PRECAST RECTANGULAR CONCRETE NO.25 CATCH BASIN (FOR USE WITH 6" MOUNTABLE CURB) |
| D-CB-25RA | 01-27-16 | STANDARD PRECAST 48" CIRCULAR NO. 25 CATCH BASIN (FOR USE WITH 6" MOUNTABLE CURB) |
| D-CB-25RB | 01-27-16 | STANDARD PRECAST CIRCULAR NO. 25 CATCH BASIN (FOR USE WITH 6" MOUNTABLE CURB) |
| D-CB-25S | 03-11-14 | STANDARD RECTANGULAR CONCRETE NO. 25 CATCH BASIN (FOR USE WITH 6" MOUNTABLE CURB) |
| D-CB-25SB | 03-11-14 | STANDARD 4' X 4' SQUARE CONCRETE NO. 25 CATCH BASIN (FOR USE WITH 6" MOUNTABLE CURB) |
| D-CB-25SC | 03-11-14 | STANDARD 5' 2" X 5' 2" SQUARE CONCRETE NO. 25 CATCH BASIN (FOR USE WITH 6" MOUNTABLE CURB) |
| D-CB-25SD | 03-11-14 | STANDARD 7' X 7' SQUARE CONCRETE NO. 25 CATCH BASIN (FOR USE WITH 6" MOUNTABLE CURB) |
| D-CB-25SE | 03-11-14 | STANDARD 9' X 9' SQUARE CONCRETE NO. 25 CATCH BASIN (FOR USE WITH 6" MOUNTABLE CURB) |
| D-CB-26P | 03-11-14 | STANDARD PRECAST RECTANGULAR CONCRETE NO.26 CATCH BASIN (FOR USE WITH 6" MOUNTABLE CURB) |
| D-CB-26S | 03-11-14 | STANDARD RECTANGULAR CONCRETE NO. 26 CATCH BASIN (FOR USE WITH 6" MOUNTABLE CURB) |
| D-CB-27S | 03-11-14 | STANDARD RECTANGULAR CONCRETE NO. 27 CATCH BASIN (FOR USE WITH 6" MOUNTABLE CURB) |
| D-CB-28LP | 08-01-12 | LOW PROFILE 32" X 32" SQUARE CONCRETE NO. 28LP CATCH BASIN (FOR USE WITH 4" MOUNTABLE CURB) |
| D-CB-28P | 03-11-14 | STANDARD PRECAST RECTANGULAR CONCRETE NO.28 CATCH BASIN (FOR USE WITH 4" MOUNTABLE CURB) |
| D-CB-28RA | 04-12-16 | STANDARD PRECAST 48" CIRCULAR NO. 28 CATCH BASIN (FOR USE WITH 4" SLOPING CURB) |
| D-CB-28RB | 04-12-16 | STANDARD PRECAST CIRCULAR NO. 28 CATCH BASIN (FOR USE WITH 4" SLOPING CURB) |
| D-CB-28S | 03-11-14 | STANDARD RECTANGULAR CONCRETE NO. 28 CATCH BASIN (FOR USE WITH 4" MOUNTABLE CURB) |
| D-CB-29P | 03-11-14 | STANDARD PRECAST RECTANGULAR CONCRETE NO. 29 CATCH BASIN (FOR USE WITH 4" MOUNTABLE CURB) |
| D-CB-29S | 03-11-14 | STANDARD RECTANGULAR CONCRETE NO. 29 CATCH BASIN (FOR USE WITH 4" MOUNTABLE CURB) |
| D-CB-31R | 03-11-14 | STANDARD PRECAST CIRCULAR NO. 31 CATCH BASIN (FOR USE UNDER CONCRETE MEDIAN BARRIER WALL) |
| D-CB-31SD | 03-11-14 | STANDARD 7' X 7' SQUARE CONCRETE NO. 31 CATCH BASIN (FOR USE UNDER CONCRETE MEDIAN BARRIER CURB) |

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| D-CB-31SE | 03-11-14 | STANDARD 9' X 9' SQUARE CONCRETE NO. 31 CATCH BASIN (FOR USE UNDER CONCRETE MEDIAN BARRIER CURB) |
| D-CB-32LP | 08-01-12 | STANDARD 80" X 32" RECTANGULAR CONCRETE NO. 32 CATCH BASIN (FOR USE UNDER CONCRETE MEDIUM BARRIER WALL) |
| D-CB-38RB | 03-11-14 | STANDARD PRECAST CIRCULAR NO. 38 CATCH BASIN |
| D-CB-38S | 08-01-12 | STANDARD 32" X 32" SQUARE CONCRETE NO. 38 CATCH BASIN |
| D-CB-38SB | 03-11-14 | STANDARD 4' X 4' SQUARE CONCRETE NO. 38 CATCH BASIN |
| D-CB-38SC | 03-11-14 | STANDARD 5' 2" X 5' 2" SQUARE CONCRETE NO. 38 CATCH BASIN |
| D-CB-39RB | 03-11-14 | STANDARD PRECAST CIRCULAR NO. 39 CATCH BASIN |
| D-CB-39S | 08-01-12 | STANDARD 4' X 4' SQUARE CONCRETE NO. 39 CATCH BASIN |
| D-CB-39SC | 03-11-14 | STANDARD 5' 2" X 5' 2" SQUARE CONCRETE NO. 39 CATCH BASIN |
| D-CB-39SD | 03-11-14 | STANDARD 7' X 7' SQUARE CONCRETE NO. 39 CATCH BASIN |
| D-CB-39SE | 03-11-14 | STANDARD 9' X 9' SQUARE CONCRETE NO. 39 CATCH BASIN |
| D-CB-40S | 08-01-12 | STANDARD 4' X 8" RECTANGULAR CONCRETE NO. 40 CATCH BASIN |
| D-CB-40SE | 03-11-14 | STANDARD 9' X 9' SQUARE CONCRETE NO. 40 CATCH BASIN |
| D-CB-41LP | 08-01-12 | LOW PROFILE 32" X 32" SQUARE CONCRETE NO. 41LP CATCH BASIN (FOR USE UNDER CONCRETE MEDIAN BARRIER WALL) |
| D-CB-41P | 03-11-14 | STANDARD 4' X 3' PRECAST RECTANGULAR CONCRETE NO. 41 CATCH BASIN (FOR USE UNDER CONCRETE MEDIAN BARRIER WALL) |
| D-CB-41RB | 03-11-14 | STANDARD PRECAST CIRCULAR NO. 41 CATCH BASIN (FOR USE UNDER CONCRETE MEDIAN BARRIER WALL) |
| D-CB-41S | 03-11-14 | STANDARD 4' X 3' RECTANGULAR CONCRETE NO. 41 CATCH BASIN (FOR USE UNDER CONCRETE MEDIAN BARRIER WALL) |
| D-CB-41SB | 03-11-14 | STANDARD 4' X 4' SQUARE CONCRETE NO. 41 CATCH BASIN (FOR USE UNDER CONCRETE MEDIAN BARRIER WALL) |
| D-CB-41SC | 03-11-14 | STANDARD 5' 2" X 5' 2" SQUARE CONCRETE NO. 41 CATCH BASIN (FOR USE UNDER CONCRETE MEDIAN BARRIER WALL) |
| D-CB-41SD | 03-11-14 | STANDARD 7' X 7' SQUARE CONCRETE NO. 41 CATCH BASIN (FOR USE UNDER CONCRETE MEDIAN BARRIER WALL) |
| D-CB-41SE | 03-11-14 | STANDARD 9' X 9' SQUARE CONCRETE NO. 41 CATCH BASIN (FOR USE UNDER CONCRETE MEDIAN BARRIER WALL) |
| D-CB-42RB | 03-11-14 | STANDARD PRECAST CIRCULAR NO. 42 CATCH BASIN |
| D-CB-42S | 08-01-12 | STANDARD 32" X 32" SQUARE CONCRETE NO. 42 CATCH BASIN |
| D-CB-42SB | 03-11-14 | STANDARD 4' X 4' SQUARE CONCRETE NO. 42 CATCH BASIN |
| D-CB-42SC | 03-11-14 | STANDARD 5' 2" X 5' 2" SQUARE CONCRETE NO. 42 CATCH BASIN |
| D-CB-42SD | 03-11-14 | STANDARD 7' X 7' SQUARE CONCRETE NO. 42 CATCH BASIN |
| D-CB-43R | 03-11-14 | STANDARD PRECAST CIRCULAR NO. 43R CATCH BASIN |
| D-CB-43SB | 03-11-14 | STANDARD 8' X 4' RECTANGULAR CONCRETE NO. 43SB CATCH BASIN |
| D-CB-43SC | 03-11-14 | STANDARD 8' X 5' 2" RECTANGULAR CONCRETE NO. 43SC CATCH BASIN |
| D-CB-44SE | 03-11-14 | STANDARD 9' X 9' SQUARE CONCRETE NO. 44 CATCH BASIN |
| D-CB-45S | 03-11-14 | STANDARD 8' X 4' RECTANGULAR CONCRETE NO. 45 CATCH BASIN (FOR USE UNDER CONCRETE MEDIAN BARRIER WALL) |
| D-CB-46SE | 03-11-14 | STANDARD 9' X 9' SQUARE CONCRETE NO. 46 CATCH BASIN (FOR USE UNDER CONCRETE MEDIAN BARRIER WALL) |
| D-CB-51SC | 03-11-14 | STANDARD 5' 2" X 5' 2" SQUARE CONCRETE NO. 51 CATCH BASIN (FOR USE IN FRONT OF CONCRETE RETAINING WALL) |
| D-CB-51SD | 03-11-14 | STANDARD 7' X 7' SQUARE CONCRETE NO. 51 CATCH BASIN (FOR USE IN FRONT OF CONCRETE RETAINING BASIN) |
| D-CB-51SE | 03-11-14 | STANDARD 9' X 9' SQUARE CONCRETE NO. 51 CATCH BASIN |
| D-CB-52SE | 03-11-14 | STANDARD 9' X 9' SQUARE CONCRETE NO. 52 CATCH BASIN |
| D-CB-99 | 05-20-14 | MISCELLANEOUS DETAILS FOR RECTANGULAR STRUCTURES |
| D-CB-99R | 03-11-14 | MISCELLANEOUS DETAILS FOR ROUND STRUCTURES |
| D-CB-99RA | 03-19-14 | BILL OF STEEL FOR ROUND CATCH BASIN LIDS |
| D-CB-99RB | | ROUND JUNCTION BOX SPRING DRAIN BOX |
| D-CBB-12A | 05-27-01 | TYPE 'B' CAST IRON FRAME, GRATE & NONMOUNTABLE INLET DETAILS FOR NOS. 10, 12, 14, 16 & 17 TYPE CATCH BASINS |
| D-CBB-12B | 05-27-01 | TYPE 'B' CAST IRON FRAME, GRATE & 6" MOUNTABLE INLET DETAILS FOR NOS. 25, 26 & 27 TYPE CATCH BASINS |
| D-CBB-12C | 05-27-01 | TYPE 'B' CAST IRON FRAME, GRATE & 4" MOUNTABLE INLET DETAILS FOR NOS. 28 & 29 TYPE CATCH BASINS |
| D-CBB-13 | 05-27-01 | TYPE 'B' CAST IRON FRAME, GRATE & NONMOUNTABLE INLET DETAILS FOR NO. 13 TYPE CATCH BASINS |
| D-CBB-31 | 05-27-01 | TYPE 'B' CAST IRON FRAME, GRATE & INLET DETAILS FOR NOS. 31, 41, 45, 46, & 51 TYPE CATCH BASIN |
| D-CBB-42 | 05-27-01 | CAST IRON GRATE DETAILS FOR NOS. 42, 43, & 44 TYPE CATCH BASIN |

JUNCTION BOXES

| DRAWING | REVISION DATE | DESCRIPTION |
|---------|---------------|---|
| D-JBS-1 | 08-01-12 | STANDARD 32" X 32" SQUARE CONCRETE NO. 1 JUNCTION BOX |
| D-JBS-2 | 08-01-12 | STANDARD 4' X 4' SQUARE CONCRETE NO. 2 JUNCTION BOX |

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|---------|----------|---|
| D-JBS-3 | 08-01-12 | STANDARD 5' 2" X 5' 2" SQUARE CONCRETE NO. 3 JUNCTION BOX |
| D-JBS-4 | 08-01-12 | STANDARD 7' X 7' SQUARE CONCRETE NO. 4 JUNCTION BOX |
| D-JBS-5 | 08-01-12 | STANDARD 9' X 9' SQUARE CONCRETE NO. 5 JUNCTION BOX |

MANHOLES

| DRAWING | REVISION DATE | DESCRIPTION |
|---------|---------------|--|
| D-MH-2 | 02-02-16 | STANDARD MASONRY & PRECAST NO. 3 MANHOLE |
| D-MH-3 | 04-21-14 | TYPICAL DESIGN OF LIDS FOR NO. 3 MANHOLE |
| D-MH-4 | 04-01-14 | STANDARD NO. 3 MANHOLE CASTINGS AND STEPS |
| D-MH-5 | 04-01-14 | STANDARD 5' 2" X 5' 2" SQUARE CONCRETE NO. 3 MANHOLE |
| D-MH-6 | 04-01-14 | STANDARD 7' X 7' SQUARE CONCRETE NO. 3 MANHOLE |
| D-MH-7 | 04-01-14 | STANDARD 9' X 9' SQUARE CONCRETE NO. 3 MANHOLE |
| D-RF-1 | 02-02-16 | STANDARD PRECAST RISER |

SPRING DRAIN BOXES

| DRAWING | REVISION DATE | DESCRIPTION |
|----------|---------------|--|
| D-SDS-1 | 08-01-12 | STANDARD 32" X 32" SQUARE CONCRETE NO. 1 SPRING DRAIN BOX |
| D-SDS-2A | 08-01-12 | STANDARD 4' X 4' SQUARE CONCRETE NO. 2A SPRING DRAIN BOX |
| D-SDS-2B | 08-01-12 | STANDARD 4' X 4' SQUARE CONCRETE NO. 2B SPRING DRAIN BOX |
| D-SDS-3A | 08-01-12 | STANDARD 5' 2" X 5' 2" SQUARE CONCRETE NO. 3A SPRING DRAIN BOX |

SLOTTED AND TRENCH DRAINS

| DRAWING | REVISION DATE | DESCRIPTION |
|---------|---------------|----------------|
| D-SLD-1 | 02-02-16 | SLOTTED DRAINS |
| D-SLD-2 | 05-27-01 | SLOTTED DRAINS |
| D-SLD-3 | 02-02-16 | SLOTTED DRAINS |
| D-TD-1 | | TRENCH DRAIN |

NATURAL STREAM DESIGN

| DRAWINGS | REVISION DATE | DESCRIPTION |
|-----------|---------------|---|
| D-NSD-13 | 11/01/2016 | LONGITUDINAL STONE TOE |
| D-NSD-21 | | BOULDER CLUSTERS |
| D-NSD-22 | | BOULDER CROSS VANE |
| D-NSD-23 | | BOULDER CROSS VANE WITH STEP |
| D-NSD-24 | | BOULDER W-WEIR |
| D-NSD-25 | | BOULDER VANES AND J-HOOK |
| D-NSD-26 | | LOG VANES, ROOT WADS, AND BOULDER J-HOOK |
| D-NSD-27 | | LOG AND BOULDER STEP POOLS |
| D-NSD-28 | | LOG AND BOULDER RIFFLES |
| D-NSD-28A | | LOG AND BOULDER RIFFLES |
| D-NSD-29 | | CONSTRUCTED ALLUVIAL RIFFLES |
| D-NSD-30 | | SUBSTRATE RESTORATION |
| D-NSD-31 | | CLAY CHANNEL PLUG |
| D-NSD-32 | | WOOD AND BOULDER TOE WITH GEO-LIFTS |
| D-NSD-32A | | WOOD AND BOULDER TOE WITH GEO-LIFTS |
| D-NSD-33 | | COIR FIBER EROSION CONTROL BLANKET AND COIR FIBER ROLLS |
| D-NSD-34 | | LIVE STAKES AND LIVE SILTATION |
| D-NSD-35 | | LIVE FASCINES |
| D-NSD-36 | | BRUSH MATTRESS |
| D-NSD-37 | | SPECIAL NOTES FOR NATURAL STREAM DESIGN |

CONCRETE PAVEMENT

| DRAWINGS | REVISION DATE | DESCRIPTION |
|----------|---------------|---|
| RP-CS-1 | 09-29-10 | CONCRETE SHOULDER RUMBLE STRIP DETAIL (FOR 4-LANE DIVIDED HIGHWAY) |
| RP-CS-2 | 09-29-10 | CONCRETE SHOULDER RUMBLE STRIP DETAIL (FOR 6-LANE OR WIDER DIVIDED HIGHWAY) |
| RP-J-1 | 10-26-00 | PORTLAND CEMENT CONCRETE PAVEMENT JOINT TYPES AND SPACING |
| RP-J-3 | 10-26-00 | PORTLAND CEMENT CONCRETE PAVEMENT JOINT TYPES AND SPACING |
| RP-J-5 | 07-01-01 | TYPICAL ACCELERATION AND DECELERATION LANE JOINT TYPES AND SPACING FOR CONCRETE RAMPS |
| RP-J-7 | 07-14-14 | CONCRETE RAMP JOINT TYPES AND SPACING |
| RP-J-9 | 02-02-12 | CONTRACTION AND CONSTRUCTION JOINTS FOR CONCRETE PAVEMENT |
| RP-J-11 | 07-29-96 | 3/4" AND 1-3/4" EXPANSION AND EDGE PAVEMENT JOINTS |
| RP-J-13 | 03-20-91 | 3/4" AND 1-3/4" ELASTOMERIC COMPRESSION JOINT SEALS |
| RP-J-15 | 01-19-02 | LONGITUDINAL CONTRACTION AND CONSTRUCTION JOINTS |
| RP-J-17 | 02-02-12 | DOWEL ASSEMBLY DEVICES |
| RP-J-18 | 02-02-12 | DOWEL ASSEMBLY DEVICES |
| RP-J-19 | 02-02-12 | DOWEL ASSEMBLY DEVICES RP-J-23 |
| RP-J-23 | 07-25-12 | CONCRETE PAVEMENT REPAIR DETAILS |
| RP-J-24 | 05-27-01 | CONCRETE PAVEMENT SPALL AND RANDOM CRACK REPAIR DETAILS |
| RP-J-25 | 05-27-01 | CONCRETE PAVEMENT JOINT REPAIR DETAILS |

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|--------|------|---------------|-----------|
| CONST. | 2017 | 90953-3533-04 | 1A1 |
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**CONST.
FIELD
REVIEW**

SEALED BY

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION

**STANDARD
DRAWINGS**

INTERSECTIONS

| DRAWING | REVISION DATE | DESCRIPTION |
|----------|---------------|--|
| RP-D-15 | 04-08-16 | DETAILS OF STANDARD CONCRETE DRIVEWAYS |
| RP-D-16 | 04-08-16 | DETAILS OF LOWERED STANDARD CONCRETE DRIVEWAYS |
| RP-DHO-1 | 10-26-93 | MEDIAN OPENINGS ON 4-LANE DIVIDED HIGHWAY |
| RP-I-5 | 12-18-96 | EXAMPLES OF STREET & ALLEY INTERSECTIONS |
| RP-R-1 | 05-27-01 | STANDARD RAMPS TO SIDE ROADS |
| RP-PMR-1 | 05-27-01 | STANDARD DETAILS FOR PROPOSED PERMANENT MAINTENANCE RAMP |

CURBS

| DRAWING | REVISION DATE | DESCRIPTION |
|-----------|---------------|--|
| RP-MC-1 | 02-28-02 | STANDARD 4" SLOPING (MOUNTABLE) CONCRETE CURBS AND CONCRETE CURBS AND GUTTERS |
| RP-MC-2 | 02-28-02 | STANDARD 6" SLOPING (MOUNTABLE) CONCRETE CURBS AND CONCRETE CURBS AND GUTTERS |
| RP-NMC-10 | 07-29-03 | STANDARD VERTICAL (NONMOUNTABLE) CONCRETE CURBS AND CONCRETE CURBS AND GUTTERS |
| RP-NMC-11 | 02-28-02 | STANDARD VERTICAL (NONMOUNTABLE) CONCRETE CURBS AND CONCRETE CURBS AND GUTTERS |
| RP-R-2 | | STANDARD CONSTRUCTION DETAILS FOR ROUNDABOUTS |

SIDEWALKS

| DRAWING | REVISION DATE | DESCRIPTION |
|---------|---------------|--|
| RP-H-3 | 10-10-16 | CURB RAMP AND TRUNCATED DOME SURFACE DETAIL |
| RP-H-4 | 10-10-16 | PERPENDICULAR CURB RAMP |
| RP-H-5 | 10-10-16 | PARALLEL CURB RAMP RP-H-6 10-10-16 PEDESTRIAN REFUGE |
| RP-H-7 | 10-10-16 | PERPENDICULAR CURB RAMP IN CURVE |
| RP-H-8 | 10-10-16 | PERPENDICULAR CURB RAMP PLACED OUTSIDE CURVE |
| RP-H-9 | 10-10-16 | PARALLEL CURB RAMP IN CURVE |
| RP-S-7 | 02-05-16 | DETAILS FOR CONCRETE SIDEWALKS |
| RP-S-8 | 02-05-16 | DETAILS FOR STANDARD CONCRETE STEPS AND PIPE HANDRAILS |
| RP-S-9 | | ALTERNATE DETAILS FOR PEDESTRIAN FACILITIES |

WALLS

| DRAWING | REVISION DATE | DESCRIPTION |
|---------|---------------|--|
| W-CIP-1 | | ROADWAY FEATURES AT CAST IN PLACE RETAINING WALL |
| W-MSE-1 | | ROADWAY FEATURES FOR MSE SEGMENTAL PRECAST FACING RETAINING WALL |
| W-MSE-2 | | ROADWAY FEATURES FOR MSE MODULAR BLOCK FACING RETAINING WALL |
| W-SG-1 | | STANDARD GRAVITY-TYPE RETAINING WALLS |
| W-SP-1 | | ROADWAY FEATURES AT SOLDIER PILE AND SOIL ANCHORED RETAINING WALLS |

CLEAR ZONE AND SAFETY PLANS

| DRAWING | REVISION DATE | DESCRIPTION |
|---------|---------------|---|
| S-CZ-1 | | CLEAR ZONE CRITERIA |
| S-PL-1 | | SAFETY PLAN AT ROADSIDE HAZARDS |
| S-PL-2 | 10-10-16 | SAFETY PLAN AT SIDEROADS OR PRIVATE DRIVES |
| S-PL-3 | 10-10-16 | SAFETY PLAN: MINIMUM INSTALLATION AT BRIDGE ENDS |
| S-PL-4 | 10-10-16 | SAFETY PLAN FOR BRIDGE PIERS IN CLEAR ZONE |
| S-PL-5 | 10-10-16 | SAFETY PLAN FOR BRIDGE ENDS IN MEDIANS |
| S-PL-6 | 10-10-16 | SAFETY PLAN SAFETY HARDWARE PLACEMENT ON OUTSIDE EDGE |
| S-PL-6A | | SAFETY PLAN SAFETY HARDWARE PLACEMENT IN MEDIAN |

CABLE BARRIER

| DRAWING | REVISION DATE | DESCRIPTION |
|---------|---------------|-------------------------|
| S-CB-1 | | CABLE BARRIER PLACEMENT |

CRASH CUSHIONS

| DRAWING | REVISION DATE | DESCRIPTION |
|---------|---------------|-------------------------------|
| S-CC-1 | 08-26-15 | CRASH CUSHION |
| S-CC-2 | | CRASH CUSHION (GATING) BARREL |

GUARDRAIL DETAILS

| DRAWING | REVISION DATE | DESCRIPTION |
|-----------|---------------|--|
| S-GR31-1 | 10-20-16 | W-BEAM GUARDRAIL |
| S-GR31-1A | | W-BEAM BARRIER FASTENING HARDWARE |
| S-GR5-1 | 01-29-16 | SPECIAL CASE LONG SPAN GUARDRAIL ONE POST OMITTED |
| S-GR5-2 | 05-25-16 | SPECIAL CASE: GUARDRAIL ATTACHMENT TO CONCRETE DECKS |
| S-GR5-3 | | SPECIAL CASE: GUARDRAIL FOOTING |
| S-GR5-4 | 03-16-17 | SPECIAL CASE GUARDRAIL HEIGHT TRANSITION DETAIL |
| S-GRC-1 | 10-10-16 | GUARDRAIL CONNECTION TO BRIDGE ENDS OR BARRIER WALL |

| | | |
|---------|----------|--|
| S-GRC-2 | 10-10-16 | GUARDRAIL CONNECTION TO BRIDGE ENDS FOR LOCAL ROADS (ADT < 2000) |
| S-GRC-3 | 10-10-16 | MEDIAN DIVIDER GUARDRAIL TRANSITION TO CONCRETE MEDIAN BARRIER |

GUARDRAIL TERMINALS

| DRAWING | REVISION DATE | DESCRIPTION |
|----------|---------------|---|
| S-GRT-1 | 03-16-17 | TYPE 12 GUARDRAIL TERMINAL BURIED IN BACKSLOPE |
| S-GRT-2 | 04-04-16 | TYPE 38 GUARDRAIL TERMINAL |
| S-GRT-2P | 10-10-16 | EARTH PAD FOR TYPE 38 AND TYPE 21 TERMINAL |
| S-GRT-2R | 10-10-16 | EARTH PAD FOR TYPE 38 AND TYPE 21 TERMINAL (RETROFIT) |
| S-GRT-3 | 10-10-16 | TYPE 21 GUARDRAIL END TERMINAL |
| S-GRT-4 | 10-10-16 | TYPE 13 GUARDRAIL TERMINAL (TRAILING END) |

GUARDRAIL ANCHORS

| DRAWING | REVISION DATE | DESCRIPTION |
|----------|---------------|---|
| S-GRA-1 | 10-10-16 | TYPE 12 GUARDRAIL ANCHOR |
| S-GRA-1A | | GUARDRAIL ANCHOR FOR TYPE 12 TERMINAL (ALTERNATIVE) |
| S-GRA-3 | 10-10-16 | TYPE 13 GUARDRAIL ANCHOR |
| S-GRA-4 | 10-10-16 | IN-LINE GUARDRAIL ANCHOR |
| S-GRA-5 | | FLARED GUARDRAIL ANCHOR |

CONCRETE MEDIAN BARRIERS

| DRAWING | REVISION DATE | DESCRIPTION |
|----------|---------------|---|
| S-SSMB-1 | 08-19-13 | 32" SINGLE SLOPE CONCRETE BARRIER WALL |
| S-SSMB-2 | 08-19-13 | 51" SINGLE SLOPE CONCRETE BARRIER WALL |
| S-SSMB-3 | 07-16-13 | 51" HALF SIZE SINGLE SLOPE CONCRETE BARRIER WALL |
| S-SSMB-4 | 04-12-16 | FLARED SINGLE SLOPE CONCRETE MEDIAN BARRIER WALL (VERTICAL BACK) |
| S-SSMB-5 | | SINGLE SLOPE MEDIAN BARRIER WALL CATCH BASIN DETAIL |
| S-SSMB-6 | 10-10-16 | GUARDRAIL ATTACHMENT TO SINGLE SLOPE CONCRETE BARRIER WALL |
| S-SSMB-7 | 05-10-14 | FOOTING DETAILS FOR OVERHEAD SIGN STRUCTURE 32" MEDIAN BARRIER WALL |
| S-SSMB-8 | 05-20-14 | FOOTING DETAILS FOR OVERHEAD SIGN STRUCTURE 51" MEDIAN BARRIER WALL |
| S-SSMB-9 | 07-16-13 | SINGLE SLOPE BARRIER WALL FOR GRADE SEPARATED MEDIAN |

BICYCLE/PEDESTRIAN RAIL

| DRAWING | REVISION DATE | DESCRIPTION |
|---------|---------------|------------------------|
| S-BPR-1 | 02-05-16 | BIKE/PEDESTRIAN SAFETY |

FENCE AND RIGHT-OF-WAY MARKERS

| DRAWING | REVISION DATE | DESCRIPTION |
|---------|---------------|---|
| S-F-1 | 05-24-12 | HIGH VISIBILITY FENCE |
| S-F-10 | 06-01-09 | STANDARD RIGHT-OF-WAY STOCK FENCE |
| S-F-10A | 06-01-09 | STANDARD RIGHT-OF-WAY STOCK FENCE WITH TIMBER POSTS |
| S-F-10B | 05-14-10 | STANDARD RIGHT-OF-WAY CHAIN LINK FENCE |
| S-F-10C | 05-14-10 | RIGHT-OF-WAY FENCE AT BRIDGES AND BOX CULVERTS |
| S-F-10D | | RIGHT-OF-WAY FENCE LOCATIONS AT INTERCHANGES |
| S-FG-11 | 05-14-10 | STANDARD STOCK FENCE GATE |
| S-FG-20 | 01-24-08 | EXAMPLES OF WATER GATES AND WATER CROSSINGS |
| S-RP-2 | 02-08-16 | STANDARD CONCRETE RIGHT-OF-WAY MARKERS |

PAVEMENT MARKINGS

| DRAWING | REVISION DATE | DESCRIPTION |
|---------|---------------|--|
| T-M-1 | 07-24-14 | DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS AND MARKING ABBREVIATIONS |
| T-M-2 | 10-10-16 | DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS |
| T-M-3 | 07-24-14 | MARKING STANDARDS FOR TRAFFIC ISLANDS, MEDIANS & PAVED SHOULDERS ON CONVENTIONAL ROADS |
| T-M-4 | 10-10-16 | STANDARD INTERSECTION PAVEMENT MARKINGS |
| T-M-5 | 04-23-13 | MARKING DETAILS FOR EXPRESSWAYS & FREEWAYS |
| T-M-6 | 06-22-12 | MARKING DETAIL FOR EXPRESSWAY & FREEWAY INTERCHANGES |
| T-M-7 | 01-12-12 | GORE MARKING DETAILS FOR EXPRESSWAY & FREEWAY INTERCHANGES |
| T-M-8 | 01-12-12 | MARKING DETAILS FOR EXPRESSWAYS & FREEWAYS |
| T-M-9 | 11-01-11 | PAVEMENT MARKING AND SIGNING DETAILS FOR RAMP INTERSECTIONS |
| T-M-10 | 06-15-12 | SIGNING AND PAVEMENT MARKINGS FOR SHARED-USE PATHS |
| T-M-11 | 10-10-16 | SIGNING AND PAVEMENT MARKINGS FOR BICYCLE LANES OR ROUTES |
| T-M-12 | 01-30-15 | SIGNING AND PAVEMENT MARKINGS FOR BICYCLE LANES ON URBAN ROADWAYS |

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| T-M-13 | | SIGNING AND PAVEMENT MARKINGS FOR BICYCLE LANES |
| T-M-14 | 11-01-11 | SIGNING AND PAVEMENT MARKINGS FOR BICYCLE LANES AT INTERSECTIONS |
| T-M-15 | | ASPHALT SHOULDER RUMBLE STRIP INSTALLATION DETAILS FOR INTERSTATE AND ACCESS CONTROLLED ROUTES |
| T-M-15A | 01-30-15 | ASPHALT SHOULDER RUMBLE STRIP INSTALLATION DETAILS FOR NON-ACCESS CONTROLLED ROUTES |
| T-M-16 | 01-30-15 | ASPHALT SHOULDER RUMBLE STRIP INSTALLATION DETAILS FOR NON-ACCESS CONTROLLED ROUTES |
| T-M-16A | 07-24-14 | ASPHALT CENTER LINE RUMBLE STRIPE |
| T-M-17 | 02-20-14 | PAVEMENT MARKING DETAILS FOR ROUNDABOUTS |

WORK ZONES

| DRAWING | REVISION DATE | DESCRIPTION |
|---------|---------------|--|
| T-FAB-1 | 05-27-97 | FLASHING YELLOW ARROW BOARD |
| T-PBR-1 | 03-16-17 | INTERCONNECTED PORTABLE BARRIER RAIL |
| T-PBR-2 | 03-16-17 | DETAIL FOR VERTICAL PANELS AND FLEXIBLE DELINEATORS |
| T-WZ-10 | 04-02-12 | ADVANCE ROAD WORK SIGNING ON HIGHWAYS AND FREEWAYS |
| T-WZ-11 | 03-13-09 | ONE LANE CLOSURE DETAIL ON DIVIDED HIGHWAYS |
| T-WZ-12 | 03-13-09 | ONE LANE CLOSURE DETAIL FOR BRIDGES ON DIVIDED HIGHWAYS |
| T-WZ-13 | 03-13-09 | TWO OUTSIDE LANE CLOSURE ON FREEWAY OR EXPRESSWAY |
| T-WZ-14 | 03-13-09 | TWO OUTSIDE LANE CLOSURE ON INTERSTATES AND EXPRESSWAYS (PORTABLE BARRIER RAIL) |
| T-WZ-15 | 04-02-12 | INTERIOR LANE CLOSURE ON FREEWAYS OR EXPRESSWAYS |
| T-WZ-16 | 03-13-09 | LANE SHIFT ON DIVIDED HIGHWAYS AND FREEWAYS |
| T-WZ-18 | 03-13-09 | SHOULDER CLOSURE DETAIL FOR FREEWAYS AND DIVIDED HIGHWAYS |
| T-WZ-19 | 04-02-12 | MEDIAN CROSS-OVER DETAIL ON DIVIDED HIGHWAYS |
| T-WZ-20 | 12-18-99 | GEOMETRIC MEDIAN CROSS-OVER DETAIL ON DIVIDED HIGHWAYS |
| T-WZ-21 | 03-15-11 | LANE CLOSURE WITH LEFT HAND MERGE AND LANE SHIFT |
| T-WZ-30 | 09-01-05 | TRAFFIC CONTROL 2-LANE, 2-WAY DIVERSION (40MPH OR LESS) |
| T-WZ-31 | 09-01-05 | TRAFFIC CONTROL 2-LANE, 2-WAY DIVERSION (GREATER THAN 40 MPH) |
| T-WZ-32 | 10-29-13 | TRAFFIC CONTROL PLAN SIGNAL LAYOUT FOR TRAFFIC SIGNAL AT TWO LANE BRIDGE RECONSTRUCTION SITE |
| T-WZ-33 | 05-27-98 | TRAFFIC CONTROL PLAN FOR CLOSE INTERSECTION CONDITIONS USING TRAFFIC SIGNAL AT TWO LANE BRIDGE RECONSTRUCTION SITE |
| T-WZ-34 | 09-01-05 | TRAFFIC CONTROL PLAN GENERAL NOTES FOR TRAFFIC SIGNAL AT TWO LANE BRIDGE RECONSTRUCTION SITE |
| T-WZ-35 | 04-02-12 | TRAFFIC CONTROL PLAN PAY ITEM AND SIGN DETAILS FOR TRAFFIC SIGNAL AT TWO LANE BRIDGE RECONSTRUCTION SITE |
| T-WZ-36 | 04-02-12 | LANE CLOSURE ON LOW VOLUME 2-LANE HIGHWAY |
| T-WZ-40 | 04-02-12 | RIGHT LANE CLOSURES AT NEAR SIDE OF INTERSECTIONS |
| T-WZ-41 | 04-02-12 | LEFT LANE CLOSURES AT NEAR SIDE OF INTERSECTIONS |
| T-WZ-42 | 04-02-12 | CENTER LANE CLOSURES AT NEAR SIDE OF INTERSECTIONS |
| T-WZ-50 | 04-02-12 | TRAFFIC CONTROL FOR SIGNALS ONLY PROJECTS ON 2 OR 3 LANE MAJOR ROUTES |
| T-WZ-51 | 04-02-12 | TRAFFIC CONTROL FOR SIGNALS ONLY PROJECTS ON 4 OR 5 LANE MAJOR ROUTES |
| T-WZ-52 | 04-02-12 | TRAFFIC CONTROL FOR SIGNALS ONLY PROJECTS ON 4 OR 5 LANE MAJOR AND MINOR ROUTES |
| T-WZ-53 | 04-02-12 | TRAFFIC CONTROL FOR SIGNALS ONLY PROJECTS ON 4 OR MORE LANE DIVIDED MAJOR ROUTES |
| T-WZ-54 | 04-02-12 | TRAFFIC CONTROL FOR SIGNALS ONLY PROJECTS ON 4 OR MORE LANE DIVIDED MAJOR ROUTES AND 4 OR MORE LANE MINOR ROUTES |
| T-WZ-55 | 10-10-16 | SIDEWALK TRAFFIC CONTROL |

DEWATERING DEVICES

| DRAWING | REVISION DATE | DESCRIPTION |
|----------|---------------|----------------------|
| EC-STR-1 | 08-01-12 | DEWATERING STRUCTURE |
| EC-STR-2 | 08-01-12 | SEDIMENT FILTER BAG |

SLOPE DEVICES

| DRAWING | REVISION DATE | DESCRIPTION |
|-----------|---------------|-----------------------------------|
| EC-STR-3B | 03-16-17 | SILT FENCE |
| EC-STR-3C | 08-01-12 | SILT FENCE WITH WIRE BACKING |
| EC-STR-3D | 04-01-08 | ENHANCED SILT FENCE |
| EC-STR-3E | 04-01-08 | SILT FENCE FABRIC JOINING DETAILS |
| EC-STR-8 | 06-10-14 | FILTER SOCK |
| EC-STR-27 | 08-01-12 | TEMPORARY SLOPE DRAIN AND BERM |
| EC-STR-29 | 08-01-12 | PERMANENT SLOPE DRAIN PIPE |

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| EC-STR-34 | 08-01-12 | EROSION CONTROL BLANKET FOR SLOPE INSTALLATION |
| EC-STR-35 | 08-01-12 | FILTER BERMS |
| EC-STR-37 | 06-10-14 | SEDIMENT TUBE |

DITCH DEVICES

| DRAWING | REVISION DATE | DESCRIPTION |
|-----------|---------------|---|
| EC-STR-4 | 08-01-12 | ENHANCED SILT FENCE CHECK (TRAPEZOIDAL DITCH) |
| EC-STR-4A | 08-01-12 | ENHANCED SILT FENCE CHECK (V-DITCH) |
| EC-STR-4B | 08-01-12 | ENHANCED SILT FENCE CHECK DETAILS |
| EC-STR-6 | 05-06-16 | ROCK CHECK DAM |
| EC-STR-6A | 05-06-16 | ENHANCED ROCK CHECK DAM |
| EC-STR-7 | 08-01-12 | SEDIMENT TRAP WITH CHECK DAM |
| EC-STR-55 | 08-01-12 | GABION CHECK DAM |
| EC-STR-56 | 04-01-08 | GABION CHECK DAM DESIGN TABLES |
| EC-STR-57 | 04-01-08 | GABION ASSEMBLY DETAILS |
| EC-STR-58 | 04-01-08 | GABION ASSEMBLY DETAILS |
| EC-STR-59 | 08-01-12 | GABION CHECK DAM GENERAL NOTES AND COMPONENT PROPERTIES |
| EC-STR-61 | 03-16-17 | LEVEL SPREADERS |

INLET PROTECTION

| DRAWING | REVISION DATE | DESCRIPTION |
|------------|---------------|--|
| EC-STR-11 | 03-16-17 | CULVERT PROTECTION TYPE 1 |
| EC-STR-19 | 04-01-08 | CATCH BASIN PROTECTION |
| EC-STR-39 | 08-01-12 | CURB INLET PROTECTION TYPE 1 & 2 |
| EC-STR-39A | 08-01-12 | CURB INLET PROTECTION TYPE 3 & 4 |
| EC-STE-40 | | CATCH BASIN FILTER ASSEMBLY FOR CIRCULAR STRUCTURES |
| EC-STR-41 | | CATCH BASIN FILTER ASSEMBLY (TYPE 1) |
| EC-STR-41A | | CATCH BASIN FILTER ASSEMBLY (TYPE 1) SLIPCOVER DETAILS |
| EC-STR-42 | | CATCH BASIN FILTER ASSEMBLY (TYPE 2) |
| EC-STR-42A | | CATCH BASIN FILTER ASSEMBLY (TYPE 2) SLIPCOVER DETAILS |
| EC-STR-43 | | CATCH BASIN FILTER ASSEMBLY (TYPE 3) |
| EC-STR-43A | | CATCH BASIN FILTER ASSEMBLY (TYPE 3) SLIPCOVER DETAILS |
| EC-STR-44 | | CATCH BASIN FILTER ASSEMBLY (TYPE 4) |
| EC-STR-44A | | CATCH BASIN FILTER ASSEMBLY (TYPE 4) SLIPCOVER DETAILS |
| EC-STR-45 | | CATCH BASIN FILTER ASSEMBLY (TYPE 5) |
| EC-STR-45A | | CATCH BASIN FILTER ASSEMBLY (TYPE 5) 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 |
| EC-STR-48 | | CATCH BASIN FILTER ASSEMBLY (TYPE 8) |
| EC-STR-48A | | CATCH BASIN FILTER ASSEMBLY (TYPE 8) SLIPCOVER DETAILS LEVEL SPREADERS |
| EC-STR-49 | | CATCH BASIN FILTER ASSEMBLY (TYPE 9) |
| EC-STR-49A | | CATCH BASIN FILTER ASSEMBLY (TYPE 9) SLIPCOVER DETAILS |
| EC-STR-50 | | CATCH BASIN FILTER ASSEMBLY (TYPE 10) |
| EC-STR-50A | | CATCH BASIN FILTER ASSEMBLY (TYPE 10) SLIPCOVER DETAILS |
| EC-STR-51 | | CATCH BASIN FILTER ASSEMBLY (TYPE 11) |
| EC-STR-51A | | CATCH BASIN FILTER ASSEMBLY (TYPE 11) SLIPCOVER DETAILS |

DETAINING DEVICES

| DRAWING | REVISION DATE | DESCRIPTION |
|-----------|---------------|--|
| EC-STR-12 | 08-01-12 | ROCK SEDIMENT DAM |
| EC-STR-13 | 08-01-12 | ROCK AND EARTH SEDIMENT EMBANKMENT |
| EC-STR-15 | 08-01-12 | SEDIMENT BASIN |
| EC-STR-16 | 08-01-12 | SEDIMENT BASINS RISER AND COLLAR APPURTENANCES |
| EC-STR-17 | 08-01-12 | SEDIMENT BASIN EMBANKMENT DETAILS |
| EC-STR-18 | | SEDIMENT BASIN FLOATING OUTLET STRUCTURE |
| EC-STR-21 | 08-01-12 | PERMANENT RIPRAP BASIN ENERGY DISSIPATORS |

IN-STREAM DEVICES

| DRAWING | REVISION DATE | DESCRIPTION |
|------------|---------------|--|
| EC-STR-11A | 08-01-12 | CULVERT PROTECTION TYPE 2 |
| EC-STR-25 | 08-01-12 | TEMPORARY CULVERT CROSSING, CONSTRUCTION EXIT, CONSTRUCTION FORD |
| EC-STR-30 | | INSTREAM DIVERSION (WITHOUT TRAFFIC) |
| EC-STR-30A | | INSTREAM DIVERSION (WITH TRAFFIC) |
| 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-36 | 08-01-12 | TURF REINFORCEMENT MAT FOR CHANNEL INSTALLATION |
| EC-STR-38 | 08-01-12 | FLOATING TURBIDITY CURTAIN |

STANDARD TRAFFIC OPERATIONS DRAWINGS

SIGNS

| DRAWING | REVISION DATE | DESCRIPTION |
|---------|---------------|---|
| T-S-6 | 02-12-91 | STANDARD MOUNTING DETAILS BOLTED EXTRUDED PANELS |
| T-S-7 | 02-12-91 | HIGHWAY SHIELDS USED ON INTERSTATE AND U.S. NUMBERED ROUTES |
| T-S-8 | 07-15-91 | HIGHWAY SHIELDS USED ON STATE NUMBERED ROUTES AND ARROWS |
| T-S-9 | 06-10-14 | STANDARD LAYOUT GROUND MOUNTED SIGNS |
| T-S-10 | 04-04-12 | STANDARD MOUNTING DETAILS FLAT SHEET SIGNS ALUMINUM-STEEL DESIGN |
| T-S-11 | 06-06-11 | DELINEATOR AND MILEPOST DETAILS |
| T-S-12 | 07-02-15 | STANDARD STEEL GROUND MOUNTED SIGNS, BREAK-AWAY TYPE POST FOOTING DETAILS, SQUARE TUBES |
| T-S-13 | 07-20-12 | STANDARD STEEL GROUND MOUNTED SIGNS, BREAK-AWAY TYPE POST FOOTING DETAILS, I-BEAMS |
| T-S-14 | 08-17-12 | STANDARD STEEL GROUND MOUNTED SIGNS, BREAK-AWAY TYPE POST FOOTING DETAILS, WF-BEAMS |
| T-S-15 | 12-07-90 | STANDARD CONDUIT & GROUND DETAILS FOR OVERHEAD & CANTILEVER SIGN STRUCTURES |
| T-S-16 | 07-02-15 | GROUND MOUNTED ROADSIDE SIGN PLACEMENT DETAILS |
| T-S-16A | 07-02-15 | GROUND MOUNTED ROADSIDE SIGN PLACEMENT DETAILS |
| T-S-17 | 07-02-15 | STANDARD GROUND MOUNTED SIGN USING PERFORATED/KNOCKOUT SQUARE TUBE |
| T-S-18 | 02-14-14 | END OF ROADWAY, DEAD END SIGNS, AND METAL BARRICADES (TYPE III) |
| T-S-19 | 07-19-15 | STANDARD STEEL SIGN SUPPORTS |
| T-S-20 | 11-01-11 | SIGN DETAILS |
| T-S-21 | 07-02-15 | DETAILS FOR SIGNS MOUNTS ON CONCRETE MEDIAN BARRIERS |
| T-S-22 | 09-12-13 | SIGN LAYOUT FOR HOV LANES |
| T-S-23A | 07-02-15 | MULTI-DIRECTIONAL SLIP BASE BREAKAWAY P-POST SIGN SUPPORT |
| T-S-23B | 07-19-13 | MULTI-DIRECTIONAL SLIP BASE BREAKAWAY STRUCTURAL PIPE SIGN SUPPORT |
| T-S-23C | 07-02-15 | BREAKAWAY POST SIGN SUPPORTS |
| T-S-24 | 08-02-13 | DETAILS OF SIGN WITH SOLAR FLASHING ASSEMBLY |

SIGNALS

| DRAWING | REVISION DATE | DESCRIPTION |
|---------|---------------|--|
| T-SG-1 | 06-27-16 | WOOD POLE DETAILS FOR SPAN MOUNTED SIGNALS |
| T-SG-2 | 06-27-16 | LOOP LEAD-INS, CONDUIT AND PULL BOXES |
| T-SG-3 | 06-27-16 | STANDARD NOTES AND DETAILS OF INDUCTIVE LOOPS |
| T-SG-3A | 06-27-16 | ALTERNATE DETECTION DETAILS |
| T-SG-4 | 06-27-16 | SPAN WIRE AND MESSENGER CABLE DETAILS |
| T-SG-5 | 06-27-16 | CONTROLLER CABINET DETAILS |
| T-SG-6 | | PEDESTRIAN SIGNAL DETAILS |
| T-SG-7 | 06-27-16 | SIGNAL HEAD ASSEMBLIES |
| T-SG-7A | | TYPICAL SIGNAL HEAD PLACEMENT APPROACHES WITH NO THROUGH MOVEMENTS |
| T-SG-7B | | TYPICAL SIGNAL HEAD PLACEMENT APPROACHES WITH NO THROUGH MOVEMENTS |
| T-SG-7C | | TYPICAL SIGNAL HEAD PLACEMENT ONE-LANE AND TWO-LANE APPROACHES |
| T-SG-7D | | TYPICAL SIGNAL HEAD PLACEMENT TWO-LANE APPROACHES |
| T-SG-7E | | TYPICAL SIGNAL HEAD PLACEMENT THREE-LANE APPROACHES |
| T-SG-7F | | TYPICAL SIGNAL HEAD PLACEMENT THREE-LANE APPROACHES |
| T-SG-7G | | TYPICAL SIGNAL HEAD PLACEMENT THREE-LANE APPROACHES |
| T-SG-7H | | TYPICAL SIGNAL HEAD PLACEMENT THREE-LANE AND FOUR-LANE APPROACHES |

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| T-SG-7I | | TYPICAL SIGNAL HEAD PLACEMENT FOUR-LANE APPROACHES |
| T-SG-7J | | TYPICAL SIGNAL HEAD PLACEMENT FOUR-LANE APPROACHES |
| T-SG-7K | | TYPICAL SIGNAL HEAD PLACEMENT FOUR-LANE APPROACHES |
| T-SG-7L | | TYPICAL SIGNAL HEAD PLACEMENT FOUR-LANE APPROACHES |
| T-SG-7M | | TYPICAL SIGNAL HEAD PLACEMENT FIVE-LANE APPROACHES |
| T-SG-7N | | TYPICAL SIGNAL HEAD PLACEMENT FIVE-LANE APPROACHES |
| T-SG-7O | | TYPICAL SIGNAL HEAD PLACEMENT FIVE-LANE APPROACHES |
| T-SG-7P | | TYPICAL SIGNAL HEAD PLACEMENT FIVE-LANE APPROACHES |
| T-SG-7Q | | TYPICAL SIGNAL HEAD PLACEMENT FIVE-LANE APPROACHES |
| T-SG-7R | | TYPICAL SIGNAL HEAD PLACEMENT SIX-LANE APPROACHES |
| T-SG-7S | | TYPICAL SIGNAL HEAD PLACEMENT SIX-LANE AND SEVEN-LANE APPROACHES |
| T-SG-8 | 06-27-16 | STRAIN POLE DETAILS FOR SPAN MOUNTED SIGNALS |
| T-SG-9 | 06-27-16 | DETAILS OF CANTILEVER SIGNAL SUPPORT |
| T-SG-9A | 06-27-16 | MISCELLANEOUS SIGNAL DETAILS |
| T-SG-10 | 06-27-16 | MAST ARM POLE AND STRAIN POLES FOUNDATION DETAILS |
| T-SG-11 | 06-27-16 | MAINTENANCE OF EXISTING SIGNALS DURING HIGHWAY CONSTRUCTION |
| T-SG-12 | 06-27-16 | TYPICAL WIRING FOR SIGNAL HEADS AND DETECTION LOOPS |
| T-SG-13 | 06-27-16 | FLASHING BEACON DETAIL LIGHTING AND UTILITY POLES |

LIGHTING AND UTILITY POLES

| DRAWINGS | REVISION | DESCRIPTION |
|----------|----------|--|
| T-FO-1 | | FIBER OPTIC AERIAL ENTRANCE DETAILS |
| T-FO-2 | | FIBER OPTIC UNDERGROUND ENTRANCE DETAILS |
| T-FO-3 | | FIBER OPTIC AERIAL CONNECTION DETAILS |
| T-FO-4 | | FIBER OPTIC PULL BOX, CABINET & POLE DETAILS |
| T-L-1 | 12-04-13 | STANDARD LIGHTING FOUNDATION DETAILS |
| T-L-15A | 09-11-13 | STANDARD LIGHTING DETAILS FOR SINGLE ARM SUPPORTS |
| T-L-1TM | | STANDARD LIGHTING DETAILS TENON MOUNTED |
| T-L-2 | 12-04-13 | FOUNDATION DETAIL FOR LUMINAIRE MOUNTED ON CONCRETE MEDIAN BARRIER |
| T-L-3 | 04-15-96 | STANDARD LIGHTING DETAILS PULL BOXES |
| T-L-4 | 05-25-11 | STANDARD LIGHTING DETAILS CONDUIT, CABLE INSTALLATION |

RAILROAD CROSSING

| DRAWINGS | REVISION | DESCRIPTION |
|----------|----------|---|
| T-RR-1 | 11-01-11 | TYPICAL PAVEMENT MARKING AT RAILROAD ACTIVE HIGHWAY GRADE CROSSINGS AND RAILROAD ADVANCE WARNING SIGN |
| T-RR-2 | 11-01-11 | STANDARD DRAWING FOR RAILROAD AND HIGHWAY CROSSING SIGNAL WITH GATE |
| T-RR-3 | 11-01-11 | STANDARD DRAWING FOR RAILROAD-HIGHWAY CROSSING SIGNAL |
| T-RR-4 | 11-01-11 | STANDARD DRAWING FOR TYPICAL CURB & GUTTER PLAN FOR RAILROAD-HIGHWAY CROSSING WITH OR WITHOUT GATES |
| T-RR-5 | 11-01-11 | RAILROAD-HIGHWAY CROSSING SIGNAL TYPICAL CANTILEVER SPAN |
| T-RR-6 | 10-25-13 | TYPICAL SIGNING AND MARKING AT PASSIVE RAILROAD HIGHWAY GRADE |

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
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| CONST. | 2017 | 90953-3533-04 | 1A3 |
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|--------|------|---------------|-----------|
| CONST. | 2017 | 90953-3533-04 | 2 |
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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

| ESTIMATED ROADWAY QUANTITIES | | | |
|------------------------------|---|------|------------|
| ITEM NO. | DESCRIPTION | UNIT | QUANTITY |
| 105-01 | CONSTRUCTION STAKES, LINES AND GRADES | LS | 1 |
| 201-01 | CLEARING AND GRUBBING | LS | 1 |
| 202-01 | REMOVAL OF STRUCTURES AND OBSTRUCTIONS | LS | 1 |
| 203-01 | ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED) | C.Y. | 35776 |
| 203-04 | PLACING AND SPREADING TOPSOIL | C.Y. | 1897 |
| 203-06 | WATER | M.G. | 105 |
| 209-05 | SEDIMENT REMOVAL | C.Y. | 249 |
| 209-08.02 | TEMPORARY SILT FENCE (WITH BACKING) | L.F. | 1090 (1) |
| 209-08.03 | TEMPORARY SILT FENCE (WITHOUT BACKING) | L.F. | 697 (1)(3) |
| 209-08.06 | ENHANCED SILT FENCE CHECK (TRAPEZOIDAL) | EACH | 1 (1) |
| 209-08.07 | ROCK CHECK DAM | EACH | 41 (1) |
| 209-08.08 | ENHANCED ROCK CHECK DAM | EACH | 7 (1) |
| 303-01 | MINERAL AGGREGATE, TYPE A BASE, GRADING D | TON | 11430 (2) |
| 303-01.03 | GRANULAR BACKFILL (RETAINING WALLS) | TON | 5 |
| 303-10.01 | MINERAL AGGREGATE (SIZE 57) | TON | 23 |
| 307-01.01 | ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING A | TON | 1360 |
| 307-01.07 | ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING B-M | TON | 830 |
| 307-01.08 | ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING B-M2 | TON | 864 |
| 307-01.09 | ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING C | TON | 59 |
| 307-03.02 | PERF. GRADE ASPH. CEMENT (PG76-22) GRADING AS | TON | 6 |
| 307-03.03 | AGGREGATE(BPMB-HM) GRADING AS | TON | 162 |
| 307-03.06 | ASPHALT CONCRETE MIX (PG76-22) (BPMB-HM) GRADING B | TON | 240 |
| 307-03.07 | ASPHALT CONCRETE MIX (PG76-22) (BPMB-HM) GRADING B-M | TON | 75 |
| 402-01 | BITUMINOUS MATERIAL FOR PRIME COAT (PC) | TON | 14 |
| 402-02 | AGGREGATE FOR COVER MATERIAL (PC) | TON | 55 |
| 403-01 | ASPHALT CEMENT FOR TACK COAT (TC) | TON | 6 |
| 407-20.05 | SAW CUTTING ASPHALT PAVEMENT | L.F. | 80 |
| 411-01.10 | ACS MIX(PG64-22) GRADING D | TON | 531 |
| 411-01.11 | ACS MIX(PG64-22) GRADING E RDWY | TON | 364 |
| 411-03.10 | ACS MIX(PG76-22) GRADING D | TON | 71 |
| 415-01.03 | COLD PLANING BITUMINOUS PAVEMENT | CY | 31 |
| 604-07.02 | RETAINING WALL NO. 2 (MODULAR BLOCK FACING MSE WALL) | S.F. | 156 |
| 611-01.01 | MANHOLES, 0' - 4' DEPTH | EACH | 1 |
| 611-01.02 | MANHOLES, > 4' - 8' DEPTH | EACH | 5 |
| 611-01.03 | MANHOLES, > 8' - 12' DEPTH | EACH | 1 |
| 611-05.01 | TRENCH DRAINS | L.F. | 56 |
| 611-05.02 | 12IN PVC PIPE FOR TRENCH DRAINS | L.F. | 20 |
| 611-07.01 | CLASS A CONCRETE (PIPE ENDWALLS) | C.Y. | 11 |
| 611-07.02 | STEEL BAR REINFORCEMENT (PIPE ENDWALLS) | LB. | 397 |
| 611-09.04 | RETROFIT CATCH BASIN | EACH | 2 |
| 707-01.01 | CHAIN-LINK FENCE (4-FOOT) | L.F. | 423 |
| 707-01.02 | END & CORNER POST ASSEMBLY(CHAIN-LINK FENCE 4') | EACH | 5 |
| 707-01.03 | GATE - CHAIN-LINK FENCE (4-FOOT) (2 @ 6' GATES) | EACH | 1 |
| 707-08.02 | GATE - WELDED STEEL TUBE (2 @ 24' GATES) | EACH | 1 |
| 707-08.11 | HIGH-VISIBILITY CONSTRUCTION FENCE | L.F. | 1017 |
| 707-10.08 | WIRE MESH (6"X6" - W1.4 X W1.4) | S.Y. | 83 |
| 708-02.01 | MARKERS (CONCRETE R.O.W. POSTS) | EACH | 13 |
| 709-02.01 | RUBBLE STONE RIP-RAP (GROUTED) | C.Y. | 71 |
| 709-05.05 | MACHINED RIP-RAP (CLASS A-3) | TON | 676 |
| 709-05.06 | MACHINED RIP-RAP (CLASS A-1) | TON | 181 |
| 710-10.01 | 4" PERFORATED PLASTIC PIPE | L.F. | 86 |
| 712-01 | TRAFFIC CONTROL | LS | 1 |
| 712-02.02 | INTERCONNECTED PORTABLE BARRIER RAIL | L.F. | 20 |
| 712-04.01 | FLEXIBLE DRUMS (CHANNELIZING) | EACH | 68 |
| 712-05.01 | WARNING LIGHTS (TYPE A) | EACH | 8 |

| ESTIMATED ROADWAY QUANTITIES | | | |
|------------------------------|--|------|----------|
| ITEM NO. | DESCRIPTION | UNIT | QUANTITY |
| 712-05.03 | WARNING LIGHTS (TYPE C) | EACH | 68 |
| 712-06 | SIGNS (CONSTRUCTION) | S.F. | 617 |
| 712-07.03 | TEMPORARY BARRICADES (TYPE III) | L.F. | 96 |
| 712-08.03 | ARROW BOARD (TYPE C) | EACH | 3 |
| 713-11.02 | PERFORATED/KNOCKOUT SQUARE TUBE POSTS | LB. | 217 |
| 713-11.21 | P POST SLIP BASE | EACH | 9 |
| 713-13.02 | FLAT SHEET ALUMINUM SIGNS (0.080" THICK) | S.F. | 10 |
| 713-13.03 | FLAT SHEET ALUMINUM SIGNS (0.100" THICK) | S.F. | 56 |
| 716-02.03 | PLASTIC PAVEMENT MARKING (CROSS-WALK) | L.F. | 434 |
| 716-02.05 | PLASTIC PAVEMENT MARKING (STOP LINE) | L.F. | 99 |
| 716-02.06 | PLASTIC PAVEMENT MARKING (TURN LANE ARROW) | EACH | 8 |
| 716-03.01 | PLASTIC WORD PAVEMENT MARKING (ONLY) | EACH | 3 |
| 716-04.03 | PLASTIC PAVEMENT MARKING (4" DOTTED LINE) | L.F. | 345 |
| 716-04.10 | PLASTIC PAVEMENT MARKING (HANDICAP SYMBOL) | EACH | 3 |
| 716-05.08 | PAINTED PAVEMENT MARKING (PARKING LINE) | L.F. | 1430 |
| 716-12.01 | ENHANCED FLATLINE THERMO PVMT MRKNG (4IN LINE) | L.M. | 1.14 |
| 717-01 | MOBILIZATION | LS | 1 |
| 740-10.03 | GEOTEXTILE (TYPE III)(EROSION CONTROL) | S.Y. | 1170 |
| 740-11.04 | TEMPORARY SEDIMENT TUBE (20 INCH) | L.F. | 770 |
| 797-05.52 | 8IN PVC GRAVITY SEWER 6FT-12FT DEPTH | L.F. | 42 |
| 797-05.56 | 10IN PVC GRAVITY SEWER 6FT-12FT DEPTH | L.F. | 42 |
| 801-01 | SEEDING (WITH MULCH) | UNIT | 52 |
| 801-01.07 | TEMPORARY SEEDING (WITH MULCH) | UNIT | 40 (4) |
| 801-02 | SEEDING (WITHOUT MULCH) | UNIT | 145 |
| 801-03 | WATER (SEEDING & SODDING) | M.G. | 40 (5) |
| 801-07 | SEED (SUPPLEMENTAL APPLICATION) | LB. | 52 |
| 801-08 | FERTILIZER (SUPPLEMENTAL APPLICATION) | TON | 0.4 |
| 805-01.01 | TURF REINFORCEMENT MAT (CLASS I) | S.Y. | 711 |
| 805-12.01 | EROSION CONTROL BLANKET (TYPE I) | S.Y. | 15320 |
| 805-12.02 | EROSION CONTROL BLANKET (TYPE II) | S.Y. | 41 |

NOTES:

1. ALL QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER.
2. INCLUDES PROVIDING TEMPORARY ACCESS AT ALL ENTRANCES, 50 TONS PER ENTRANCE AT SIX ENTRANCES.
3. INCLUDES 400 L.F. FOR TOPSOIL STORAGE AREAS.
4. FOR SEEDING TOPSOIL STORAGE AREAS.
5. INCLUDES SEVEN THOUSAND GALLONS FOR EROSION PREVENTION AND SEDIMENT CONTROL.

NON-PARTICIPATING

| ESTIMATED ROADWAY QUANTITIES | | | |
|------------------------------|---|------|----------|
| ITEM NO. | DESCRIPTION | UNIT | QUANTITY |
| 209-05 | SEDIMENT REMOVAL | C.Y. | 30 |
| 209-09.41 | CURB INLET PROTECTION (TYPE 2) | EACH | 3 (1) |
| 209-09.43 | CURB INLET PROTECTION (TYPE 4) | EACH | 4 (1) |
| 209-40.33 | CATCH BASIN PROTECTION (TYPE D) | EACH | 1 (1) |
| 209-40.34 | CATCH BASIN PROTECTION (TYPE E) | EACH | 3 (1) |
| 209-40.41 | CATCH BASIN FILTER ASSEMBLY(TYPE 1) | EACH | 2 (1) |
| 209-40.42 | CATCH BASIN FILTER ASSEMBLY(TYPE 2) | EACH | 10 (1) |
| 209-40.43 | CATCH BASIN FILTER ASSEMBLY(TYPE 3) | EACH | 1 (1) |
| 209-40.44 | CATCH BASIN FILTER ASSEMBLY(TYPE 4) | EACH | 2 (1) |
| 209-40.45 | CATCH BASIN FILTER ASSEMBLY(TYPE 5) | EACH | 3 (1) |
| 209-40.47 | CATCH BASIN FILTER ASSEMBLY(TYPE 7) | EACH | 3 (1) |
| 209-40.48 | CATCH BASIN FILTER ASSEMBLY(TYPE 8) | EACH | 1 (1) |
| 303-01.03 | GRANULAR BACKFILL (RETAINING WALLS) | TON | 30 |
| 303-10.05 | MINERAL AGGREGATE (SIZE 4) | TON | 7 |
| 604-01.04 | 1-1/2" STEEL PIPE HANDRAIL | L.F. | 45 |
| 604-07.01 | RETAINING WALL NO. 1 (CANTILEVER WALL) | S.F. | 208 |
| 607-03.02 | 18" CONCRETE PIPE CULVERT (CLASS III) | L.F. | 638 |
| 607-03.30 | 18" PIPE CULVERT | L.F. | 191 |
| 607-05.02 | 24" CONCRETE PIPE CULVERT (CLASS III) | L.F. | 386 |
| 607-06.02 | 30" CONCRETE PIPE CULVERT (CLASS III) | L.F. | 400 |
| 607-07.02 | 36" CONCRETE PIPE CULVERT (CLASS III) | L.F. | 257 |
| 607-07.30 | 36" PIPE CULVERT | L.F. | 347 |
| 611-12.02 | CATCH BASINS, TYPE 12, > 4' - 8' DEPTH | EACH | 6 |
| 611-12.03 | CATCH BASINS, TYPE 12, > 8' - 12' DEPTH | EACH | 2 |
| 611-14.02 | CATCH BASINS, TYPE 14, > 4' - 8' DEPTH | EACH | 3 |
| 611-14.03 | CATCH BASINS, TYPE 14, > 8' - 12' DEPTH | EACH | 1 |
| 611-14.04 | CATCH BASINS, TYPE 14, > 12' - 16' DEPTH | EACH | 1 |
| 611-16.02 | CATCH BASINS, TYPE 16, > 4' - 8' DEPTH | EACH | 3 |
| 611-16.03 | CATCH BASINS, TYPE 16, > 8' - 12' DEPTH | EACH | 1 |
| 611-17.05 | CATCH BASINS, TYPE 17, > 16' - 20' DEPTH | EACH | 1 |
| 611-42.01 | CATCH BASINS, TYPE 42, 0' - 4' DEPTH | EACH | 3 |
| 611-42.02 | CATCH BASINS, TYPE 42, > 4' - 8' DEPTH | EACH | 2 |
| 611-42.04 | CATCH BASINS, TYPE 42, > 12' - 16' DEPTH | EACH | 1 |
| 701-01.01 | CONCRETE SIDEWALK (4 ") | S.F. | 18944 |
| 701-01.04 | CAST-IN-PLACE TACTILE WARNING SYSTEM | EACH | 4 |
| 701-02 | CONCRETE DRIVEWAY | S.F. | 2897 |
| 701-02.02 | CONCRETE DRIVEWAY (8") | S.F. | 746 |
| 702-01 | CONCRETE CURB | C.Y. | 29 |
| 702-03 | CONCRETE COMBINED CURB & GUTTER | C.Y. | 174 |
| 707-10.08 | WIRE MESH (6"X6" - W1.4 X W1.4) | S.Y. | 83 |
| 710-09.01 | 6" PERFORATED PIPE WITH VERTICAL DRAIN SYSTEM | L.F. | 78 |

**CONST.
FIELD
REVIEW**

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
**ESTIMATED
ROADWAY
QUANTITIES**

GENERAL NOTES

GRADING

- ANY AREA THAT IS DISTURBED OUTSIDE LIMITS OF CONSTRUCTION DURING THE LIFE OF THIS PROJECT SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.
- CERTIFICATION FOR ALL BORROW PITS MUST BE OBTAINED IN ACCORDANCE WITH SUBSECTION 107.06 OF THE STANDARD SPECIFICATIONS.
- 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

- 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.
- 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.
- ITEM NO. 805-12.01 SHALL BE USED ON SLOPES 3:1 OR STEEPER AND OTHER AREAS AS INDICATED IN THE PLANS THAT ARE INACCESSIBLE FOR MOWING.
- ITEM NO. 801-01, SEEDING (WITH MULCH), SHALL BE USED WHERE EROSION CONTROL BLANKET OR SOD ARE NOT APPLIED.
- ITEM NO. 801-02, SEEDING (WITHOUT MULCH) AND EROSION CONTROL BLANKET, SHALL BE PLACED AT LOCATIONS SHOWN ON THE PLANS AS WELL AS LOCATIONS DIRECTED BY THE ENGINEER.

DRAINAGE

- 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.
- EXCAVATION FOR CATCH BASINS, MANHOLES, PIPE ENDWALLS, STORM SEWERS, AND WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT WILL BE INCLUDED IN THE PRICE BID PER LINEAR FOOT OF PIPE (PIPE CULVERTS, STORM SEWERS, CONDUITS, ALL OTHER CULVERTS AND MINOR STRUCTURES).
- 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).
- 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.
- DURING CONSTRUCTION OF DRAINAGE STRUCTURES ALL COST ASSOCIATED WITH MAINTAINING THE FLOW OF WATER AND TRAFFIC, AT THESE STRUCTURES, DURING THE PHASED CONSTRUCTION OF THIS PROJECT ARE TO BE INCLUDED IN THE UNIT PRICE OF THE DRAINAGE STRUCTURES AND TRAFFIC CONTROL ITEMS.

UTILITIES

- SEE SHEET NO. 3A.

MISCELLANEOUS

- THE CONTRACTOR SHALL BE REQUIRED TO REMOVE AND RESET MAILBOXES WHERE AND AS DIRECTED BY THE ENGINEER.
- 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

RIGHT - OF - WAY

- SEE SHEET NO. 3A.

PAVEMENT MARKINGS

TEMPORARY PAVEMENT MARKING ON INTERMEDIATE LAYERS

- 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 DAY'S WORK. SHORT, UNMARKED SECTIONS SHALL NOT BE ALLOWED. THESE MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-05.01, PAINTED PAVEMENT MARKING (4" LINE), L.M.

FINAL PAVEMENT MARKING

- 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.
- PERMANENT PAVEMENT LINE MARKINGS SHALL BE 8" 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. 716-13.03, SPRAY THERMO PVMT MRKNG (60 MIL) (8IN BARRIER LINE), L.F. 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

- THE CONTRACTOR SHALL BE REQUIRED TO PAVE IN THE DIRECTION OF TRAFFIC.
- THE CONTRACTOR SHALL BE REQUIRED TO COLD PLANE AND PAVE IN THE DIRECTION OF TRAFFIC.
- 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

- 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.
- 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.
- 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.
- 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.
- 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.
- 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.

SIGNING

- 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.
- 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 TRAFFIC OPERATIONS DIVISION, SIGNING SECTION, TELEPHONE NO. (615)-741-0802. THE CONTRACTOR SHALL VERIFY ALL SUPPORT LENGTHS AT THE SITE PRIOR TO ORDERING MATERIAL.
- THE TOP OF THE SIGN FOOTINGS SHALL BE PLACED LEVEL WITH THE GROUND LINE.
- 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.
- 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 TRAFFIC OPERATIONS DIVISION, SIGNING SECTION, TELEPHONE NO. (615)-741-0802, SUITE 1200, J. K. POLK BUILDING, NASHVILLE, TN 37243-1402.
- 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.
- THE EXISTING FOOTINGS ARE TO BE REMOVED 6 INCHES BELOW GROUND LINE.
- 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.
- 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.
- THE LETTERS, DIGITS, ARROWS, BORDERS, AND ALPHABET ACCESSORIES ON ALL FLAT SHEET SIGNS SHALL BE APPLIED BY SILK SCREENING PROCESS.

CONSTRUCTION WORK ZONE & TRAFFIC CONTROL

- 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.
- 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.

- 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.
- TRAFFIC CONTROL DEVICES SHALL NOT BE DISPLAYED OR ERECTED UNLESS RELATED CONDITIONS ARE PRESENT NECESSITATING WARNING.
- 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.
- THE CONTRACTOR SHALL NOT BE PERMITTED TO PARK ANY VEHICLES OR CONSTRUCTION EQUIPMENT DURING PERIODS OF INACTIVITY, WITHIN THIRTY (30) FEET OF THE EDGE OF PAVEMENT WHEN THE LANE IS OPEN TO TRAFFIC UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL BE INCREASED TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. PRIVATELY OWNED VEHICLES SHALL NOT BE ALLOWED TO PARK WITHIN THIRTY (30) FEET OF A OPEN TRAFFIC LANE AT ANY TIME UNLESS PROTECTED AS DESCRIBED ABOVE FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL BE INCREASED TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE.. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS REQUIRED SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.
- ALL DETOUR AND CONSTRUCTION SIGNING SHALL BE IN STRICT ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- ALL DETOURS SHALL BE PAVED, STRIPED, SIGNED AND THE VERTICAL PANELS ARE TO BE IN PLACE BEFORE IT IS OPENED TO TRAFFIC.

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|--------|------|---------------|-----------|
| CONST. | 2017 | 90953-3533-04 | 2E |
| | | | |
| | | | |

**CONST.
FIELD
REVIEW**

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

| |
|------------------|
| TENNESSEE D.O.T. |
| DESIGN DIVISION |
| FILE NO. |

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 72 HOURS IF THE CURRENT ADT IS ≥ 70,000 OR WITHIN 96 HOURS IF THE CURRENT ADT IS < 70,000.
 - 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 MILLED SURFACE BEGINS TO DETERIORATE, PAVING TO COVER UP DETERIORATING MILLED SURFACES SHOULD OCCUR AS DIRECTED BY THE ENGINEER DURING THE NEXT WORKING DAY. IF SEVERE DISTRESS OCCURS, IMMEDIATE RESPONSE WILL BE REQUIRED.
 - H. ONLY ONE LANE IN EACH DIRECTION SHALL HAVE A MILLED SURFACE AT ONE TIME.

EROSION PREVENTION AND SEDIMENT CONTROL

NPDES

- (1) REFER TO THE EROSION PREVENTION AND SEDIMENT CONTROL PLAN, SHEET 9, 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 SHALL 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 WATERS OF THE STATE/ U.S. OR SPECIES.
- (2) STAFF FROM THE TDOT ENVIRONMENTAL DIVISION OR A DESIGNEE SHALL ATTEND THE PRE-CONSTRUCTION MEETING FOR ALL PROJECTS WHICH HAVE THREATENED OR ENDANGERED SPECIES OR CRITICAL HABITAT PROXIMAL TO SCHEDULED 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.

SCOPE OF WORK

THE GRADING AND DRAINAGE OF 0.399 MILES OF STATE INDUSTRIAL ACCESS ROAD, LARK STREET, TO SERVE CLINICAL MANAGEMENT CONCEPTS, EXTENDING FROM S.R. 34 (U.S. 11E AND U.S. 321), WEST MARKET STREET, TO S.R. 381, NORTH STATE OF FRANKLIN ROAD.

THE CONVERSION OF A GRASS MEDIAN ON S.R. 34 TO A LEFT TURNING LANE TO SERVE LARK STREET.

THE INSTALLATION OF A STORM DRAIN SYSTEM AND ENDWALLS AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER, TYING TO THE EXISTING STORM DRAIN SYSTEMS OF THE STATE ROUTES.

THE BASE AND PAVING OF LARK STREET AND S.R. 34 TURNING LANE AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER.

THE REMOVAL FROM THE PROJECT SITE 27,145 CUBIC YARDS OF WASTE.

THE INSTALLATION OF AN UNDERGROUND STORMWATER DETENTION SYSTEM TO REPLACE A DETENTION BASIN THAT WILL BE FILLED BY THE PROJECT.

THE CONSTRUCTION OF TWO (2) RETAINING WALLS AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER.

THE INSTALLATION OF CONCRETE CURB & GUTTER AND CONCRETE SIDEWALK AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER.

THE PAVEMENT MARKING AND SIGNING AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER.

ALL SEEDING, EPSC, AND ALL OTHER ITEMS SHOWN ON THE PLANS AND AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER.

PROPERTY ACCESS

PHYSICAL ACCESS TO ALL BUSINESSES DURING CONSTRUCTION MUST BE MAINTAINED. ENTRANCES SHALL HAVE ACCESS PAVED WITHIN 24 HOURS OR AS DIRECTED BY THE TDOT OPERATIONS DISTRICT ENGINEER

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|--------|------|---------------|-----------|
| CONST. | 2017 | 90953-3533-04 | 2F |
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| | | | |

**CONST.
FIELD
REVIEW**

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| SEALED BY |
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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

SPECIAL NOTES

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 REFERENCE | | LEFT | RIGHT | TOTAL | LEFT | RIGHT | TOTAL | LEFT | RIGHT | PERM. DRAINAGE | SLOPE | CONST. |
| | | | | BK. | PAGE | | | | | | | | | | | |
| 1 | SCOTT CAUDLE | 045M, D | 10.00 | 699 | 266 | | | | | | | | | | | |
| 2 | DR. SCOTT CAUDLE | 045M, D | 11.00 | 699 | 266 | | | | | | | | | | | |
| 3 | GARY R. MITCHELL | 045M, D | 13.00 | R-275 | I-250 | | | | | | | | | | | |
| 4 | GARY R. MITCHELL | 045M, D | 14.00 | R-275 | I-250 | | | | | | | | | | | |
| 5 | GARY MITCHELL | 045M, D | 15.00 | R-275 | I-247 | | | | | | | | | | | |
| 6 | GARY R. MITCHELL | 045M, D | 16.00 | R-275 | I-250 | | | | | | | | | | | |
| 7 | GARY R. MITCHELL | 045M, D | 17.00 | R-275 | I-250 | | | | | | | | | | | |
| 8 | MARY E. HAREN TESTED | 045M, D | 18.00 | R-661 | I-1808 | | | | | | | | | | | |
| 9 | MARY E. HAREN | 045M, D | 21.00 | 633 | 667 | | | | | | | | | | | |
| 10 | APULINE HUBBARD BLEVINS | 045M, D | 22.00 | 338 | 379 | | | | | | | | | | | |
| 11 | JEFFREY W. & JENNIFER M. SCHOONDYKE | 045M, E | 1.00 | R-807 | I-1674 | 2.407 | | 2.407 | 482 S.F. | | 482 S.F. | 2.396 | | 1839 | | 973 |
| 12 | J.M. COX, JR. | 045M, E | 1.02 | R-48 | I-2215 | | | | | | | | | | | |
| 13 | APC PROPERTIES, LLC / JEFF & JENNIFER SCHOONDYKE | 045M, E | 1.01 | R721/R885 | I2454/I2846 | 1.016 | | 1.016 | 2104 S.F. | | 2104 S.F. | 0.968 | | 1329 | | 266 |
| 14 | CITY OF JOHNSON CITY | 045M, E | 16.01 | R-883 | I-902 | | 4198 S.F. | 4198 S.F. | | | | 4198 S.F. | | | | |
| 15 | MEDICAL EDUCATION ASSISTANCE CORPORATION | 045M, E | 15.00 | R-913 | I-2585 | | 1.126 | 1.126 | | 181 S.F. | 181 S.F. | 1.122 | | 1863 | | 2623 |
| 16 | CITY OF JOHNSON CITY | 045M, E | 25.01 | 658 | 77 | | | | | | | | | | | |
| 17 | CITY OF JOHNSON CITY | 045M, E | 27.00 | 659 | 556 | | | | | | | | | | | |
| 18 | CITY OF JOHNSON CITY | 054A, A | 26.00 | 435 | 459 | 7.928 | 6.818 | 14.746 | 0.620 | 0.265 | 0.885 | 7.308 | 6.553 | 1565 | 0.581 AC | 0.462 AC |
| 19 | DEBRA M. WILSON | 054A, A | 26.10 | R-372 | I-213 | | | | | | | | | | | |
| 20 | CLINCHFIELD RAILROAD | 012 | 406.00 | | | | | | | | | | | | | |
| 21 | GUY B. & DEBRA M. WILSON, JR. | 054A, A | 26.02 | R-372 | I-213 | | 3.645 | 3.645 | | | | 3.645 | | | | |
| 23 | CITY OF JOHNSON CITY | 054A, B | 12.00 | 548 | 1 | 1.350 | 8.534 | 9.884 | 1.350 | 0.390 | 1.740 | | 8.144 | 0.232 AC | 0.360 AC | 0.439 AC |
| 24 | BRUMIT REALTY LIMITED PARTNERSHIP | 054A, B | 11.05 | R-69 | I-2649 | | | | | | | | | | | |
| 25 | GUY B. & DEBRA M. WILSON, JR. | 054A, A | 26.01 | R-372 | I-213 | | | | | | | | | | | |
| 27 | CITY OF JOHNSON CITY | 054A, B | 13.00 | R-176 | I-1834 | 7.427 | | 7.427 | 114 S.F. | | 114 S.F. | 7.424 | | 0.204 AC | 2285 | 0.564 AC |

REVISED 12/18/2015:
REVISE PROPOSED R.O.W. AND DRAINAGE,
SLOPE AND CONSTRUCTION EASEMENTS
ON ALL TRACTS.

**CONST.
FIELD
REVIEW**

(1) FOR WORKING ROOM, EPSC DEVICES, AND TEMPORARY WASTE STORAGE AREA

UTILITY NOTES

1. THE LOCATIONS OF UTILITIES SHOWN WITHIN THESE PLANS ARE APPROXIMATE ONLY. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD BY CONTACTING THE UTILITY COMPANIES INVOLVED. NOTIFICATION BY CALLING THE TENNESSEE ONE CALL SYSTEM, INC., AT 1-800-351-1111 AS REQUIRED BY TCA 65-31-106 WILL BE REQUIRED.
2. UNLESS OTHERWISE NOTED, ALL UTILITY ADJUSTMENTS WILL BE PERFORMED BY THE UTILITY OR ITS REPRESENTATIVE. THE CONTRACTOR AND UTILITY OWNERS WILL BE REQUIRED TO COOPERATE WITH EACH OTHER IN ORDER TO EXPEDITE THE WORK REQUIRED BY THIS CONTRACT. ON CONTRACTS WHERE CONSTRUCTION STAKES, LINES, AND GRADES ARE CONTRACT ITEMS, THE CONTRACTOR WILL BE REQUIRED TO PROVIDE RIGHT-OF-WAY OR SLOPE STAKES, DITCH OR STREAM BED GRADES, OR OTHER ESSENTIAL SURVEY STAKING TO PREVENT CONFLICTS WITH THE HIGHWAY CONSTRUCTION. FREQUENTLY, THIS WILL BE REQUIRED AS THE FIRST ITEM OF WORK AND AT ANY LOCATION ON THE PROJECT DIRECTED BY THE ENGINEER.
3. THE CONTRACTOR WILL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THIS PROJECT. IN THE EVENT THAT SPECIAL EQUIPMENT IS REQUIRED TO WORK OVER AND AROUND THE UTILITIES, THE CONTRACTOR WILL BE REQUIRED TO FURNISH SUCH EQUIPMENT. THE COST OF PROTECTING UTILITIES FROM DAMAGE AND FURNISHING SPECIAL EQUIPMENT WILL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION.
4. PRIOR TO SUBMITTING HIS BID, THE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR CONTACTING OWNERS OF ALL AFFECTED UTILITIES IN ORDER TO DETERMINE THE EXTENT TO WHICH UTILITY RELOCATIONS AND/OR ADJUSTMENTS WILL HAVE UPON THE SCHEDULE OF WORK FOR THE PROJECT. WHILE SOME WORK MAY BE REQUIRED 'AROUND' UTILITY FACILITIES THAT WILL REMAIN IN PLACE, OTHER UTILITY FACILITIES MAY

NEED TO BE ADJUSTED CONCURRENTLY WITH THE CONTRACTOR'S OPERATIONS. ADVANCE CLEAR CUTTING MAY BE REQUIRED BY THE ENGINEER AT ANY LOCATION WHERE CLEARING IS CALLED FOR IN THE SPECIFICATIONS AND CLEAR CUTTING IS NECESSARY FOR A UTILITY RELOCATION. ANY ADDITIONAL COST WILL BE INCLUDED IN THE UNIT PRICE BID FOR THE CLEARING ITEM SPECIFIED IN THE PLANS.

5. THE CONTRACTOR SHALL NOTIFY EACH INDIVIDUAL UTILITY OWNER OF HIS PLAN OF OPERATION IN THE AREA OF THE UTILITIES. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS AND REQUEST THEM TO PROPERLY LOCATE THEIR RESPECTIVE UTILITY ON THE GROUND. THIS NOTIFICATION SHALL BE GIVEN AT LEAST THREE (3) BUSINESS DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND THE UTILITY IN ACCORDANCE WITH TCA 65-31-106.

R I G H T - O F - W A Y N O T E S

1. EXISTING PAVED DRIVEWAY PER TRACT REMAINDER WILL BE REPLACED IN-KIND TO A TOUCHDOWN POINT.
2. WHERE THE EXISTING DRIVEWAY IS UNPAVED AND THE PROPOSED DRIVEWAY EXCEEDS 7 PERCENT IN GRADE, EACH DRIVEWAY WILL BE PAVED TO A TOUCHDOWN POINT OR UNTIL THE GRADE IS LESS THAN 7 PERCENT.
3. WHERE THE EXISTING DRIVEWAY IS UNPAVED AND THE PROPOSED DRIVEWAY IS LESS THAN 7 PERCENT IN GRADE, EACH DRIVEWAY WILL BE PAVED A SHOULDER WIDTH FROM THE EDGE OF PAVEMENT AND THE REMAINDER OF THAT DRIVEWAY REPLACED IN KIND TO A TOUCHDOWN POINT.
4. ANY NECESSARY PAVING OF DRIVEWAYS WILL BE DONE DURING PAVING OPERATIONS ON THE MAIN ROADWAY.
5. TRACT REMAINDERS NOT HAVING AN EXISTING DRIVEWAY WILL BE PROVIDED ONE 50-FOOT OPENING IN THE ACCESS CONTROL FENCE AND A DRIVEWAY WILL BE CONSTRUCTED UNLESS ACCESS IS PROVIDED FROM AN INTERSECTING ROAD OR BASED ON

PHYSICAL CONDITIONS AND/OR CONFLICTS WITH OTHER DESIGN CONSIDERATIONS WHICH PREVENT AN ACCESS OPENING. PAVING OF THESE NEW DRIVEWAYS WILL BE IN ACCORDANCE TO THE 7 PERCENT CRITERIA PREVIOUSLY MENTIONED FOR EXISTING DRIVEWAYS.

6. NEW DRIVEWAYS PROVIDED IN THE PLANS WILL BE PAVED BASED ON THE 7 PERCENT CRITERIA. THOSE 7 PERCENT OR STEEPER IN GRADE WILL BE PAVED AND THOSE FLATTER THAN 7 PERCENT WILL BE COVERED WITH BASE STONE.
7. ON PROJECTS WITHOUT CURB AND GUTTER THAT ARE ON STATE ROUTES, IT WILL BE THE RESPONSIBILITY OF THE OWNER TO SECURE A PERMIT AND TO CONSTRUCT ADDITIONAL DRIVEWAYS AND FIELD ENTRANCES OTHER THAN THOSE PROVIDED IN THE PLANS.
8. ON PROJECTS WITH CURB AND GUTTER THAT ARE ON STATE ROUTES, IT WILL BE THE RESPONSIBILITY OF THE OWNER TO SECURE A PERMIT. AFTER THE PERMIT HAS BEEN GRANTED, THE DEPARTMENT WILL CONSTRUCT THE DRIVEWAY OR FIELD ENTRANCE THROUGH THE CURB AND SIDEWALK, PROVIDED THE CURB AND SIDEWALK HAVE NOT BEEN CONSTRUCTED. IT WILL BE THE RESPONSIBILITY OF THE PROPERTY OWNER TO CONSTRUCT THE DRIVEWAY OR FIELD ENTRANCE FROM BACK OF SIDEWALK TO TOUCHDOWN POINT FOR ANY ADDITIONAL DRIVEWAYS OR FIELD ENTRANCES OTHER THAN THOSE PROVIDED IN THE PLANS

| DISTURBED AREA | |
|------------------------|----------|
| IN BETWEEN SLOPE LINES | 5.398 AC |
| OUTSIDE SLOPE LINES | 3.027 AC |
| TOTAL DISTURBED AREA | 8.425 AC |

PLUS 0.982 ACRES OF PAVED STAGING AREA. ALTHOUGH THE ASPHALT IN THE STAGING AREA IS NOT BE EXCAVATED OR REMOVED, DAMAGE TO THE ASPHALT DUE TO STORAGE AND MOVEMENT OF EQUIPMENT AND MATERIALS MAY REMAIN UN-REPAIRED AFTER THE PROJECT IS COMPLETE.

SEALED BY

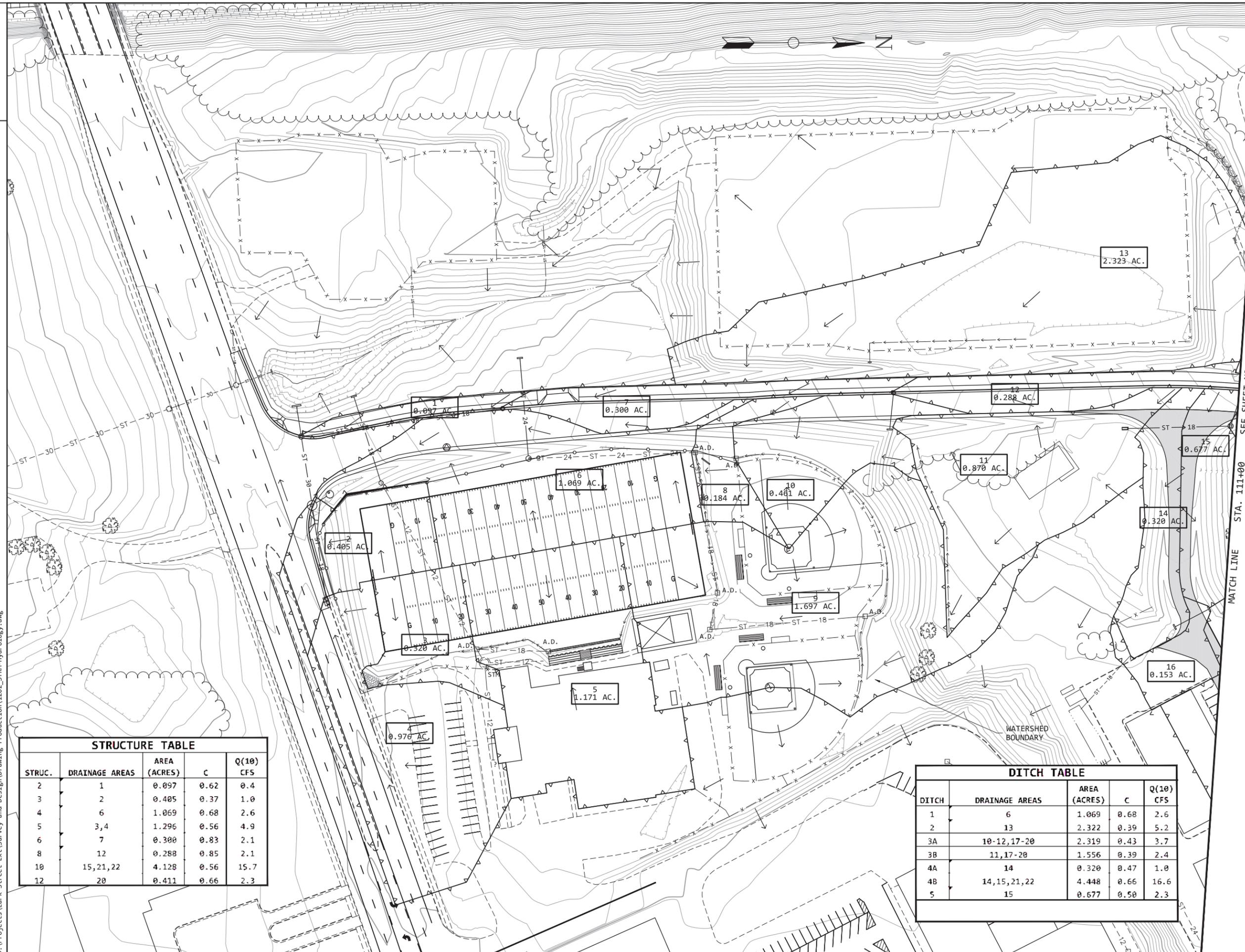
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**RIGHT-OF-WAY
ACQUISITION
TABLE**

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|--------|------|---------------|-----------|
| R.O.W. | 2014 | 90953-1533-04 | 8 |
| CONST. | 2017 | 90953-3533-04 | 8 |

REVISED 12/18/2015
INCORPORATE REBUILD OF BOYS CLUB ATHLETIC FIELDS AND THE EFFECTS ON DRAINAGE. REVISE DRIVEWAY ACROSS TRACT 23.

REVISED 01/17/2017
ADD SECONDARY CONTAINMENT TO SUBSTATION.



SEE SHEET NO. 8A
STA. 111+00
MATCH LINE

CONST. FIELD REVIEW

| STRUC. | DRAINAGE AREAS | AREA (ACRES) | C | Q(10) CFS |
|--------|----------------|--------------|------|-----------|
| 2 | 1 | 0.097 | 0.62 | 0.4 |
| 3 | 2 | 0.405 | 0.37 | 1.0 |
| 4 | 6 | 1.069 | 0.68 | 2.6 |
| 5 | 3,4 | 1.296 | 0.56 | 4.9 |
| 6 | 7 | 0.300 | 0.83 | 2.1 |
| 8 | 12 | 0.288 | 0.85 | 2.1 |
| 10 | 15,21,22 | 4.128 | 0.56 | 15.7 |
| 12 | 20 | 0.411 | 0.66 | 2.3 |

| DITCH | DRAINAGE AREAS | AREA (ACRES) | C | Q(10) CFS |
|-------|----------------|--------------|------|-----------|
| 1 | 6 | 1.069 | 0.68 | 2.6 |
| 2 | 13 | 2.322 | 0.39 | 5.2 |
| 3A | 10-12,17-20 | 2.319 | 0.43 | 3.7 |
| 3B | 11,17-20 | 1.556 | 0.39 | 2.4 |
| 4A | 14 | 0.320 | 0.47 | 1.0 |
| 4B | 14,15,21,22 | 4.448 | 0.66 | 16.6 |
| 5 | 15 | 0.677 | 0.50 | 2.3 |

SEALED BY

COORDINATE VALUES ARE NAD/83 (1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.0010 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

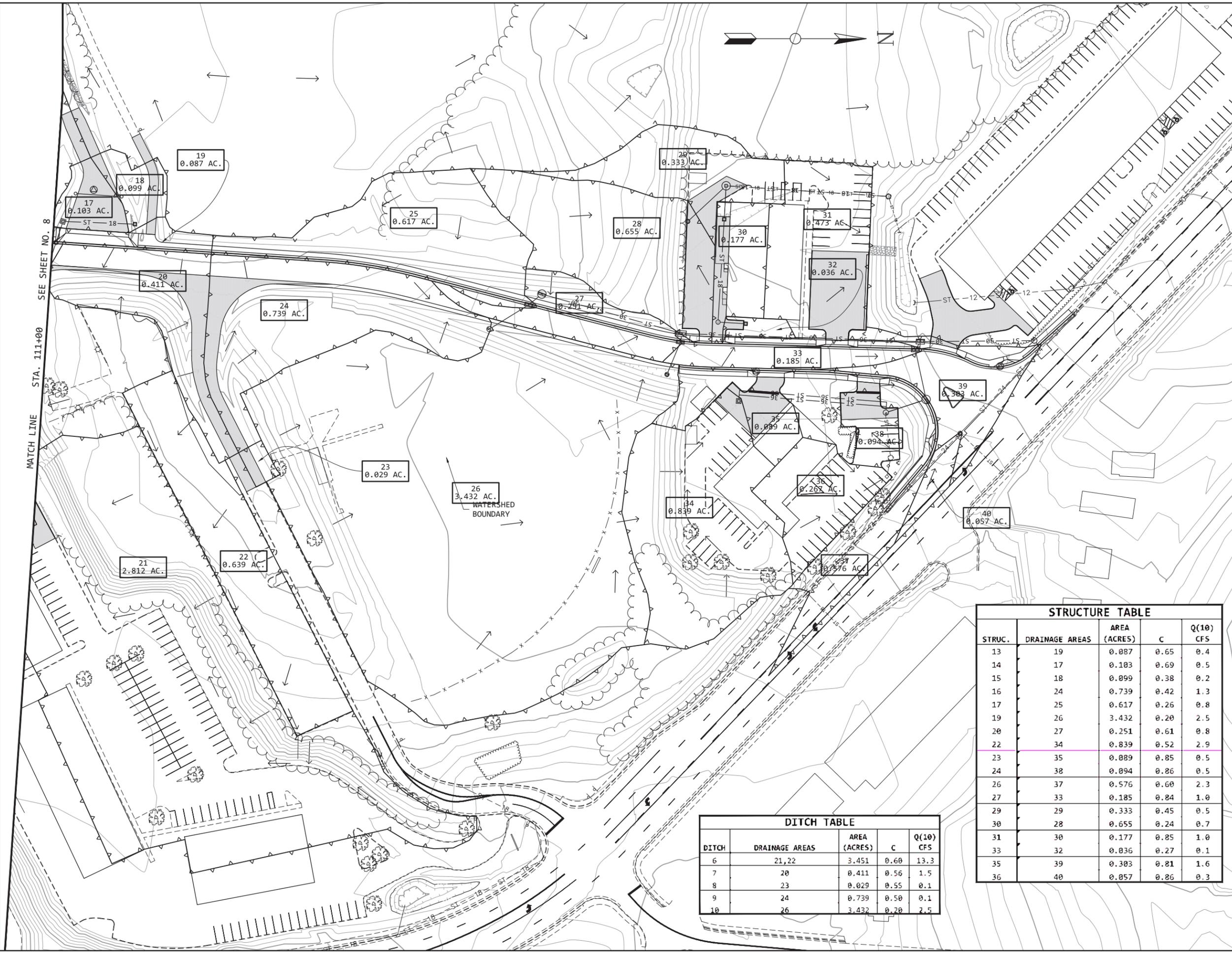
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

DRAINAGE MAP

STA. 100+31.04
TO STA. 111+00.00
SCALE: 1" = 50'

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|--------|------|---------------|-----------|
| R.O.W. | 2014 | 90953-1533-04 | 8A |
| CONST. | 2017 | 90953-3533-04 | 8A |

REVISED 12/18/2015
 REVISE DRIVEWAY TO TRACT 13.
 ELIMINATE OPTIMIST STREET AND ADD A DRIVEWAY TO TRACT 18.



**CONST.
 FIELD
 REVIEW**

| STRUC. | DRAINAGE AREAS | AREA (ACRES) | C | Q(10) CFS |
|--------|----------------|--------------|------|-----------|
| 13 | 19 | 0.087 | 0.65 | 0.4 |
| 14 | 17 | 0.103 | 0.69 | 0.5 |
| 15 | 18 | 0.099 | 0.38 | 0.2 |
| 16 | 24 | 0.739 | 0.42 | 1.3 |
| 17 | 25 | 0.617 | 0.26 | 0.8 |
| 19 | 26 | 3.432 | 0.20 | 2.5 |
| 20 | 27 | 0.251 | 0.61 | 0.8 |
| 22 | 34 | 0.839 | 0.52 | 2.9 |
| 23 | 35 | 0.089 | 0.85 | 0.5 |
| 24 | 38 | 0.094 | 0.86 | 0.5 |
| 26 | 37 | 0.576 | 0.60 | 2.3 |
| 27 | 33 | 0.185 | 0.84 | 1.0 |
| 29 | 29 | 0.333 | 0.45 | 0.5 |
| 30 | 28 | 0.655 | 0.24 | 0.7 |
| 31 | 30 | 0.177 | 0.85 | 1.0 |
| 33 | 32 | 0.036 | 0.27 | 0.1 |
| 35 | 39 | 0.303 | 0.81 | 1.6 |
| 36 | 40 | 0.057 | 0.86 | 0.3 |

| DITCH | DRAINAGE AREAS | AREA (ACRES) | C | Q(10) CFS |
|-------|----------------|--------------|------|-----------|
| 6 | 21,22 | 3.451 | 0.60 | 13.3 |
| 7 | 20 | 0.411 | 0.56 | 1.5 |
| 8 | 23 | 0.029 | 0.55 | 0.1 |
| 9 | 24 | 0.739 | 0.50 | 0.1 |
| 10 | 26 | 3.432 | 0.20 | 2.5 |

SEALED BY

COORDINATE VALUES ARE NAD/83 (1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00010 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION

DRAINAGE MAP

STA. 111+00.00
 TO STA. 121+68.30
 SCALE: 1" = 50'

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|--------|------|---------------|-----------|
| R.O.W. | 2014 | 90953-1533-04 | 9 |
| CONST. | 2017 | 90953-3533-04 | 9 |
| | | | |

**CONST.
FIELD
REVIEW**

SEALED BY

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

**EROSION
PREVENTION &
SEDIMENT CONTROL
GENERAL NOTES**

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

NATURAL RESOURCES

- (1) SOIL MATERIALS MUST BE PREVENTED FROM ENTERING WATERS OF THE STATE/U.S. EPSC MEASURES TO PROTECT NATURAL RESOURCES AND WATER QUALITY SHALL 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 NATURAL RESOURCES IN CLEARED AREAS TO PREVENT SEDIMENT MIGRATION INTO STREAMS, WETLANDS OR OTHER NATURAL FEATURES IN ACCORDANCE WITH TDOT STANDARDS. EPSC MEASURES SHALL 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 AND EPHEMERAL, INTERMITTENT, AND PERENNIAL STREAMS, IS NOT ALLOWED.
- (5) THE WIDTH OF THE FILL ASSOCIATED WITH TEMPORARY CROSSINGS SHALL BE LIMITED TO THE MINIMUM NECESSARY FOR THE ACTUAL CROSSING, NOT TO EXCEED THE WIDTH SPECIFIED IN THE STANDARD DRAWING.
- (6) STREAM BEDS SHALL NOT BE USED AS TRANSPORTATION ROUTES FOR CONSTRUCTION EQUIPMENT. TEMPORARY CULVERT CROSSINGS SHALL BE LIMITED TO ONE POINT PER STREAM AND EPSC MEASURES SHALL BE USED WHERE THE STREAM BANKS ARE DISTURBED. WHERE THE STREAMBED IS NOT COMPOSED OF BEDROCK, A PAD OF CLEAN ROCK SHALL 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 SHALL BE COMPLETELY REMOVED IN THEIR ENTIRETY AFTER THE WORK IS COMPLETED AND THE AFFECTED AREAS RETURNED TO PREEXISTING ELEVATIONS. ALL TEMPORARY CROSSINGS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. DWG. EC-STR-25 UNLESS SPECIFICALLY ADDRESSED IN THE EPSC PLANS. ALTERNATIVELY, PLACING A TEMPORARY BRIDGE (E.G. 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 WITH PERMITTED TEMPORARY IMPACTS SHALL BE PLACED ON MATS, OR OTHER MEASURES MUST BE TAKEN TO MINIMIZE SOIL DISTURBANCE AND COMPACTION UNLESS SPECIFICALLY ADDRESSED IN THE CONSTRUCTION PLANS. ANY MATS AND OTHER MEASURES USED FOR HEAVY EQUIPMENT SHALL BE REMOVED IN THEIR ENTIRETY AFTER THE WORK IS COMPLETED. ALL AFFECTED AREAS SHOULD BE RETURNED TO PRE-EXISTING CONDITIONS.
- (8) WETLANDS SHALL NOT BE USED AS EQUIPMENT STORAGE, STAGING, OR TRANSPORTATION AREAS, UNLESS SPECIFICALLY PROVIDED FOR IN THE CONSTRUCTION PLANS AND PERMITS.
- (9) THE CONTRACTOR SHALL TAKE APPROPRIATE STEPS PRIOR TO ANY CONSTRUCTION AND MAINTENANCE ACTIVITIES TO ENSURE THAT ENVIRONMENTAL FEATURES (E.G., STREAMS, WETLANDS, SPRINGS, ETC.) ARE NOT IMPACTED BEYOND PERMITTED LOCATIONS. IF THE CONTRACTOR OR TDOT INSPECTOR IS UNSURE OF THE IDENTITY OF AN ENVIRONMENTAL FEATURE, THE INSPECTOR SHALL CONTACT THE TDOT REGION ENVIRONMENTAL TECH GROUP IMMEDIATELY.

SPECIES

- (1) 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.
- (2) SHOULD CLIFF SWALLOW OR BARN SWALLOW NESTS, EGGS, OR BIRDS (YOUNG AND ADULTS) BE PRESENT, THE CONTRACTOR SHALL CONTACT THE REGIONAL ECOLOGY OFFICE TO DETERMINE IF SEASONAL RESTRICTIONS WILL BE NECESSARY. GENERALLY, BIRDS, NESTS, AND EGGS MAY NOT BE DISTURBED BETWEEN APRIL 15 AND JULY 31. FROM AUGUST 1 TO APRIL 14, NESTS CAN BE REMOVED OR DESTROYED SO LONG AS BIRDS OR EGGS ARE NOT PRESENT, AND MEASURES IMPLEMENTED TO PREVENT FUTURE NEST BUILDING AT THE SITE (I.E., CLOSING OFF AREA USING NETTING).

- (3) IF THE REMOVAL OF ANY TREES WITH A DIAMETER AT BREST HEIGHT (DBH) GREATER THAN 3 INCHES IS DEEMED NECESSARY THE TDOT SUPERVISOR SHALL CONTACT THE TDOT ENVIRONMENTAL DIVISION, ECOLOGY SECTION IMMEDIATELY

INSPECTION, MAINTENANCE, REPAIR

- (1) REFER TO THE STORM WATER POLLUTION AND PREVENTION PLAN SHEETS (S-1 THROUGH S-4) FOR SWPPP, PERMITS, AND RECORDS NOTES.

PERMITS, PLANS & RECORDS

- (1) THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR AND OBTAIN ANY NECESSARY ENVIRONMENTAL PERMITS OR APPROVALS, INCLUDING BUT NOT LIMITED TO ARCHAEOLOGY, ECOLOGY, HISTORICAL, HAZARDOUS MATERIALS, AIR AND NOISE, TDEC ARAP/401, USACE SECTION 404, TVA SECTION 26A, AND TDEC NPDES PERMITS, FROM FEDERAL, STATE AND/OR LOCAL AGENCIES REGARDING ANY MATERIAL AND STAGING AREAS AND THE OPERATION OF ANY PROJECT-DEDICATED ASPHALT AND/OR CONCRETE PLANTS TO BE USED. ANY SUCH PERMITS SHALL BE SUPPLIED TO THE TDOT PROJECT RESPONSIBLE PARTY PRIOR TO THE USE OF THE PERMITTED AREA(S).
- (2) ANY DISAGREEMENT BETWEEN THE CONSTRUCTION PLANS, THE PROJECT AS CONSTRUCTED, AND THE PERMIT(S) ISSUED FOR THE PROJECT, SHALL BE BROUGHT TO THE ATTENTION OF THE TDOT PROJECT RESPONSIBLE PARTY. THE ENVIRONMENTAL DIVISION, DESIGN DIVISION, AND HEADQUARTERS CONSTRUCTION OFFICE SHALL BE CONTACTED IN THESE INSTANCES AND DECIDE WHICH HAS PRECEDENCE AND WHETHER PERMIT OR PLANS REVISIONS ARE NEEDED. IN GENERAL, PERMIT CONDITIONS WILL PREVAIL.
- (3) IF A CHANGE IN PROJECT SCOPE OCCURS DURING CONSTRUCTION, INCLUDING VALUE ENGINEERING, THE TDOT PERMIT SECTION SHALL BE CONTACTED TO DETERMINE WHETHER PERMIT REVISIONS ARE NEEDED. THE ROADWAY DESIGN DIVISION SHALL BE CONTACTED TO DETERMINE IF ANY PLAN REVISIONS ARE NEEDED.
- (4) THE CONTRACTOR SHALL REVIEW ALL EXISTING PERMITS TO ENSURE THAT WORK AT PERMITTED SITES DOES NOT EXCEED EXPIRATION DATE. IF WORK IS GOING TO BE CONTINUED AFTER EXPIRATION DATES, THE CONTRACTOR SHALL CONTACT THE TDOT PROJECT RESPONSIBLE PARTY TO COMMENCE PERMIT RENEWAL PROCESS.
- (5) ALL WATER QUALITY PERMITS 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.

GOOD HOUSEKEEPING MEASURES & WASTE DISPOSAL

- (1) 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.
- (2) 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. APPROPRIATE CONTAINMENT MEASURES FOR THESE AREAS SHALL BE USED.
- (3) CONTRACTORS SHALL PROVIDE DESIGNATED TRUCK WASHOUT AREAS ON THE SITE. THESE AREAS MUST BE SELF CONTAINED, NOT CONNECTED TO ANY STORMWATER OUTLET OF THE SITE, AND PROPERLY SIGNED. WASH DOWN OR WASTE DISCHARGE OF CONCRETE TRUCKS SHALL NOT BE PERMITTED ONSITE UNLESS PROPER SETTLEMENT AREAS HAVE BEEN PROVIDED IN ACCORDANCE WITH BOTH STATE AND FEDERAL REGULATIONS.
- (4) WHEEL WASH WATER SHALL BE COLLECTED AND ALLOWED TO SETTLE OUT SUSPENDED SOLIDS PRIOR TO DISCHARGE. WHEEL WASH WATER SHALL NOT BE DISCHARGED DIRECTLY INTO ANY STORMWATER SYSTEM OR STORMWATER TREATMENT SYSTEM.

- (5) IF PORTABLE SANITARY FACILITIES ARE PROVIDED ON CONSTRUCTION SITES, SANITARY WASTE SHALL BE COLLECTED FROM THE PORTABLE UNITS IN A TIMELY MANNER BY A LICENSED WASTE MANAGEMENT CONTRACTOR OR AS REQUIRED BY ANY REGULATIONS. THE CONTRACTOR SHALL OBTAIN ANY AND ALL NECESSARY PERMITS TO DISPOSE OF SANITARY WASTE.

- (6) ONLY CONSTRUCTION PRODUCTS NEEDED SHALL BE STORED ONSITE BY THE CONTRACTOR. THE CONTRACTOR SHALL STORE ALL MATERIALS UNDER COVER AND IN APPROPRIATE CONTAINERS. PRODUCTS MUST BE STORED IN ORIGINAL CONTAINERS AND LABELED. MATERIAL MIXING SHALL BE CONDUCTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. THE CONTRACTOR'S RESPONSIBLE PARTY SHALL INSPECT MATERIALS STORAGE AREAS REGULARLY TO ENSURE PROPER USE AND DISPOSAL.

- (7) WHEN POSSIBLE, ALL PRODUCTS SHALL BE USED COMPLETELY BEFORE PROPERLY DISPOSING OF THE CONTAINER OFFSITE. THE MANUFACTURER'S DIRECTIONS FOR DISPOSAL OF MATERIALS AND CONTAINERS SHALL BE FOLLOWED.

- (8) ALL PAINT CONTAINERS SHALL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT SHALL BE DISPOSED OF ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS AND APPLICABLE STATE AND LOCAL REGULATIONS.

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

- (10) OPEN BURNING IS PROHIBITED UNLESS IT IS SPECIFICALLY ALLOWED BY LAW. IF ALLOWED, NATURAL VEGETATION, TREES, AND UNTREATED LUMBER SHALL BE THE ONLY MATERIALS THAT CAN BE OPEN BURNED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL APPLICABLE STATE AND LOCAL PERMITS PRIOR TO ANY BURNING.

- (11) DISPOSAL OF ONSITE VEGETATION AND TREES BY CHIPPING THEM INTO MULCH IS PREFERABLE TO OPEN BURNING. THIS MULCH MAY BE USED AS AN ONSITE SOIL STABILIZATION MEASURE WHERE APPROPRIATE.

- (12) WASTE MATERIAL (EARTH, ROCK, ASPHALT, CONCRETE, ETC.) NOT REQUIRED FOR THE CONSTRUCTION OF THE PROJECT WILL BE DISPOSED OF BY THE CONTRACTOR. 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.

SUPPORT ACTIVITIES

- (1) MATERIALS AND STAGING AREAS SHALL NOT AFFECT ANY WATERS OF THE STATE/U.S. UNLESS THESE AREAS ARE SPECIFICALLY COVERED BY ENVIRONMENTAL PERMITS, OBTAINED SOLELY BY THE CONTRACTOR. THE CONTRACTOR SHALL REVIEW ALL EXISTING PERMITS TO ENSURE THAT WORK AT PERMITTED SITES DOES NOT EXCEED EXPIRATION DATES. IF WORK IS GOING TO BE CONTINUED AFTER EXPIRATION DATES, THE CONTRACTOR SHALL CONTACT THE TDOT PROJECT RESPONSIBLE PARTY TO COMMENCE PERMIT RENEWAL PROCESS.

ENVIRONMENTAL

- (1) 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.

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|--------|------|---------------|-----------|
| R.O.W. | 2014 | 90953-1533-04 | 9 |
| CONST. | 2017 | 90953-3533-04 | 9A |
| | | | |

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

| INLET PROTECTION DEVICES | | | | | | | | | | | | | | | | | |
|--------------------------|--------------------------|-----------|------------|---------------|----------------|----------------------------|-----------------------|---------------------|------------------------|---------------------|-----------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| SHEET NO. | LOCATION | STATION | OFFSET | DRAINAGE CODE | STRUCTURE TYPE | INSIDE DIMENSIONS (INCHES) | PAY ITEMS | | | | | | | | | | |
| | | | | | | | CURB INLET PROTECTION | | CATCH BASIN PROTECTION | | CATCH BASIN FILTER ASSEMBLY | | | | | | |
| | | | | | | | TYPE 2 209-09.41 | TYPE 4 209-09.43 | TYPE D 209-40.33 | TYPE E 209-40.34 | TYPE 1 209-40.41 | TYPE 2 209-40.42 | TYPE 3 209-40.43 | TYPE 4 209-40.44 | TYPE 5 209-40.45 | TYPE 7 209-40.47 | TYPE 8 209-40.48 |
| 4B | W. MARKET ST. | 204+61.94 | 41.81' LT | | EX. CB. | | | | | | | | | | | | |
| 4B | W. MARKET ST. | 205+72.00 | 41.80' LT | | EX. CB. | | | | | | | | | | | | |
| 4B | LARK ST. | 100+75.07 | 50.32' LT | 2 | 12 | 72 | | | | | | | 1 | | | | |
| 4B | LARK ST. | 100+60.99 | 26.25' LT | 3 | 12 | 120 | | | | | | | | 1 | | | |
| 4B | LARK ST. | 100+83.11 | 20.96' LT | 4 | MH | 84 | | | | | | | 1 | | | | |
| 4B | LARK ST. | 102+88.84 | 38.00' LT | 6 | 12 | 48 | | | | | | | | | | | |
| 4B | LARK ST. | 104+96.97 | 29.27' RT | | EX. DI. | | | | 1 | | | | | | | | |
| 4B | LARK ST. | 105+41.41 | 39.73' RT | | EX. DI. | | | | 1 | | | | | | | | |
| 4B | LARK ST. | 107+19.76 | 26.00' LT | 8 | 12 | 48 | | | | 1 | | | | | | | |
| 4B | LARK ST. | 110+29.79 | 53.03' RT | | EX. DI. | | | 1 | | | | | | | | | |
| 4B | LARK ST. | 110+93.30 | 15.88' LT | 12 | 42 | 60 | | | | | 1 | | | | | | |
| 5B | LARK ST. | 111+03.79 | 26.00' LT | 13 | 12 | 48 | | | | | 1 | | | | | | |
| 5B | LARK ST. | 111+12.71 | 10.01' RT | | EX. CB. | | | 1 | | | | | | | | | |
| 5B | LARK ST. | 111+09.96 | 49.08' LT | 14 | 42 | 48 X 48 | | | | 1 | | | | | | | |
| 5B | LARK ST. | 111+34.75 | 50.01' LT | | EX. CB. | | | 1 | | | | | | | | | |
| 5B | LARK ST. | 111+89.91 | 51.48' LT | 15 | 42 | 32 X 32 | | | | | | | | | | | |
| 5B | LARK ST. | 114+83.66 | 501.13' RT | | EX. CB. | | | 1 | | | | | | | | | |
| 5B | LARK ST. | 115+94.93 | 11.83' LT | 16 | MH | 48 | | | | | | | | | | | |
| 5B | LARK ST. | 116+30.40 | 26.00' LT | 17 | 14 | 96 X 36 | | | | | | | | | 1 | | |
| 5B | LARK ST. | 117+95.11 | 23.39' LT | 19 | 12 | 48 | | | | | 1 | | | | | | |
| 5B | LARK ST. | 118+07.30 | 14.87' LT | 20 | 14 | 96 X 36 | | | | | | | | | 1 | | |
| 5B | LARK ST. | 118+74.42 | 48.82' RT | 22 | 42 | 48 X 48 | | | | | 1 | | | | | | |
| 5B | LARK ST. | 120+90.55 | 39.94' LT | 26 | 14 | 96 | | | | | | | 1 | | | | |
| 5B | LARK ST. | 120+68.68 | 14.17' LT | 27 | 14 | 96 X 36 | | | | | | | | | 1 | | |
| 5B | LARK ST. | 118+53.89 | 189.11' LT | 29 | 42 | 96 | | | | | | | 1 | | | | |
| 5B | LARK ST. | 118+04.91 | 147.82' LT | 30 | 12 | 48 | | | | | | | | | | | |
| 5B | LARK ST. | 118+52.81 | 152.04' LT | 31 | EX. DI. | | | | | | 1 | | | | | | |
| 5B | LARK ST. | 118+79.79 | 36.99' LT | 33 | 42 | 32 X 32 | | | | 1 | | | | | | | |
| 5B | LARK ST. | 121+02.66 | 22.67' RT | | EX. DI. | | | 1 | | | | | | | | | |
| 5B | N. STATE OF FRANKLIN RD. | 322+22.08 | 36.01' LT | 35 | 16 | 96 X 48 | | | | | | | | | 1 | | |
| 5B | N. STATE OF FRANKLIN RD. | 320+91.64 | 31.79' LT | 36 | EX. CB. | | | | | | 1 | | | | | | |
| 5B | N. STATE OF FRANKLIN RD. | 323+24.29 | 31.68' LT | | EX. CB. | | | | | | 1 | | | | | | |
| TOTALS | | | | | | | 3 | 4 | 1 | 3 | 2 | 10 | 1 | 2 | 3 | 3 | 1 |

**CONST.
FIELD
REVIEW**

| EROSION PREVENTION AND SEDIMENT CONTROL QUANTITIES | | | | | | |
|--|---|-------|------------|----------|-----------|-------|
| ITEM NO. | DESCRIPTION | UNITS | QUANTITIES | | | |
| | | | STAGE I | STAGE II | STAGE III | TOTAL |
| 203-01 | ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED) | C.Y. | 91 | 86 | | 177 |
| 209-05 | SEDIMENT REMOVAL | C.Y. | 93 | 93 | 93 | 279 |
| 209-08.02 | TEMPORARY SILT FENCE (WITH BACKING) | L.F. | 1090 | | | 1090 |
| 209-08.03 | TEMPORARY SILT FENCE (WITHOUT BACKING) | L.F. | 697 | | | 697 |
| 209-08.06 | ENHANCED SILT FENCE CHECK (TRAPEZOIDAL) | EACH | 1 | | | 1 |
| 209-08.07 | ROCK CHECK DAM | EACH | 2 | 39 | | 41 |
| 209-08.08 | ENHANCED ROCK CHECK DAM | EACH | 3 | 4 | | 7 |
| 209-09.41 | CURB INLET PROTECTION (TYPE 2) | EACH | 3 | | | 3 |
| 209-09.43 | CURB INLET PROTECTION (TYPE 4) | EACH | 3 | 1 | | 4 |
| 209-40.33 | CATCH BASIN PROTECTION (TYPE D) | EACH | 1 | | | 1 |
| 209-40.34 | CATCH BASIN PROTECTION (TYPE E) | EACH | 3 | | | 3 |
| 209-40.41 | CATCH BASIN FILTER ASSEMBLY(TYPE 1) | EACH | | 2 | | 2 |
| 209-40.42 | CATCH BASIN FILTER ASSEMBLY(TYPE 2) | EACH | 1 | 9 | | 10 |
| 209-40.43 | CATCH BASIN FILTER ASSEMBLY(TYPE 3) | EACH | | 1 | | 1 |
| 209-40.44 | CATCH BASIN FILTER ASSEMBLY(TYPE 4) | EACH | 2 | | | 2 |
| 209-40.45 | CATCH BASIN FILTER ASSEMBLY(TYPE 5) | EACH | 1 | 2 | | 3 |
| 209-40.47 | CATCH BASIN FILTER ASSEMBLY(TYPE 7) | EACH | | 3 | | 3 |
| 209-40.48 | CATCH BASIN FILTER ASSEMBLY(TYPE 8) | EACH | | 1 | | 1 |
| 303-10.01 | MINERAL AGGREGATE (SIZE 57) | TON | 23 | | | 23 |
| 707-08.11 | HIGH-VISIBILITY CONSTRUCTION FENCE | L.F. | 1017 | | | 1017 |
| 709-02.01 | RUBBLE STONE RIPRAP (GROUTED) | C.Y. | 24 | 47 | | 71 |
| 709-05.05 | MACHINED RIPRAP (CLASS A-3) | TON | 338 | 338 | | 676 |
| 709-05.06 | MACHINED RIPRAP (CLASS A-1) | TON | 181 | | | 181 |
| 740-10.03 | GEOTEXTILE (TYPE III) (EROSION CONTROL) | S.Y. | 671 | 379 | 120 | 1170 |
| 740-11.04 | TEMPORARY SEDIMENT TUBE 20IN | L.F. | 70 | 700 | | 770 |
| 801-01 | SEEDING (WITH MULCH) | UNIT | | 11 | 41 | 52 |
| 801-02 | SEEDING (WITHOUT MULCH) | UNIT | | | 145 | 145 |
| 805-01.01 | TURF REINFORCEMENT MAT (CLASS I) | S.Y. | | | 711 | 711 |
| 805-12.01 | EROSION CONTROL BLANKET (TYPE I) | S.Y. | | | 15320 | 15320 |
| 805-12.02 | EROSION CONTROL BLANKET (TYPE II) | S.Y. | | | 41 | 41 |

NOTES:
1. THIS QUANTITIES TABLE INCLUDES SIX TEMPORARY CONSTRUCTION EXITS, ONE RIPRAP ENERGY DISSIPATOR, AND ONE CULVERT PROTECTION TYPE 1.
2. A LENGTH OF 10 FEET WAS USED IN THE QUANTITY CALCULATION FOR EACH SEDIMENT TUBE.

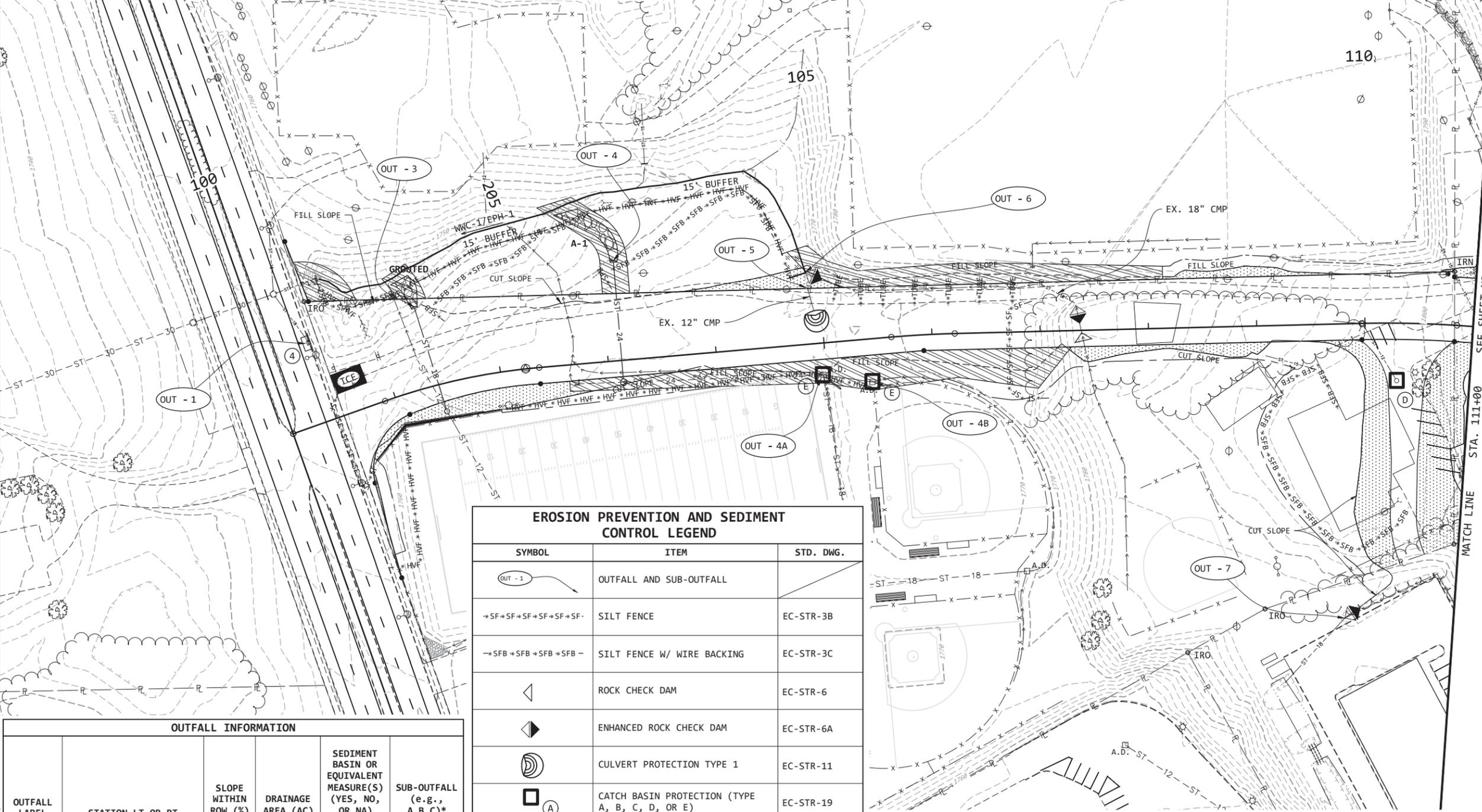
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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
**EROSION
PREVENTION &
SEDIMENT CONTROL
QUANTITIES**

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| SILT FENCE TABLE | | | | | | |
|------------------|--------------|-------------------|----------------|-------------------|----------------------------|-----------|
| LOCATION | AREA (ACRES) | FENCE LENGTH (FT) | ACRE/X' LENGTH | SLOPE LENGTH (FT) | SILT FENCE TYPE | STD. DWG. |
| 100+44, 30' RT | 0.123 | 130 | 0.03 | 52 | SILT FENCE | EC-STR-3B |
| 101+30, 88' LT | 0.197 | 105 | 0.28 | 114 | SILT FENCE W/ WIRE BACKING | EC-STR-3C |
| 102+17, 100' LT | 0.836 | 176 | 0.71 | 250 | SILT FENCE W/ WIRE BACKING | EC-STR-3C |
| 103+78, 120' LT | 0.250 | 219 | 0.17 | 97 | SILT FENCE W/ WIRE BACKING | EC-STR-3C |
| 106+71, 0' | 0.141 | 135 | 0.10 | 62 | SILT FENCE | EC-STR-3B |
| 109+20, 144' RT | 0.864 | 324 | 0.40 | 237 | SILT FENCE W/ WIRE BACKING | EC-STR-3C |

X = 100' FOR SILT FENCE, 150' FOR SILT FENCE W/ WIRE BACKING



| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|--------|------|---------------|-----------|
| R.O.W. | 2014 | 90953-1533-04 | 10 |
| CONST. | 2017 | 90953-3533-04 | 10 |

REVISED 12/18/2015:
REVISE PLAN DUE TO REQUIREMENTS FOR DISCHARGING TO AN IMPAIRED STREAM, CHANGES AT THE BOYS & GIRLS CLUB, AND THE ADDITION OF TRACT 25 DRIVEWAY.

REVISED 01/17/2017:
ADD SEDIMENT BASIN, TEMPORARY STOCKPILE, AND SECONDARY CONTAINMENT.

CONST. FIELD REVIEW

EROSION PREVENTION AND SEDIMENT CONTROL LEGEND

| SYMBOL | ITEM | STD. DWG. |
|--------------------------|--|---------------------------|
| OUT - 1 | OUTFALL AND SUB-OUTFALL | |
| *SF*SF*SF*SF*SF*SF* | SILT FENCE | EC-STR-3B |
| *SFB*SFB*SFB*SFB* | SILT FENCE W/ WIRE BACKING | EC-STR-3C |
| ◁ | ROCK CHECK DAM | EC-STR-6 |
| ◄ | ENHANCED ROCK CHECK DAM | EC-STR-6A |
| ⊙ | CULVERT PROTECTION TYPE 1 | EC-STR-11 |
| ⊠ | CATCH BASIN PROTECTION (TYPE A, B, C, D, OR E) | EC-STR-19 |
| TCE | TEMPORARY CONSTRUCTION EXIT | EC-STR-25 |
| ---TUBE---TUBE---TUBE--- | SEDIMENT TUBE | EC-STR-37 |
| ⊠ 3 | CURB INLET PROTECTION (TYPE 3 OR TYPE 4) | EC-STR-39A |
| ⊠ 2 | CATCH BASIN FILTER ASSEMBLY (TYPE 1 THROUGH TYPE 11) | EC-STR-40 THRU EC-STR-51A |

OUTFALL INFORMATION

| OUTFALL LABEL | STATION LT OR RT | SLOPE WITHIN ROW (%) | DRAINAGE AREA (AC) | SEDIMENT BASIN OR EQUIVALENT MEASURE(S) (YES, NO, OR NA) | SUB-OUTFALL (e.g., A, B, C)* |
|---------------|----------------------|----------------------|--------------------|--|------------------------------|
| OUT-1 | 100+41.77, 74.51 LT | 2 | 1.718 | NO | NA |
| OUT-3 | 101+38.04, 74.99 LT | 15 | 1.171 | NO | NA |
| OUT-4 | 103+12.62, 91.90 LT | 6 | 4.200 | NO | A, B |
| OUT-4A | 104+94.42, 32.50 RT | 7 | 0.184 | NO | A |
| OUT-4B | 105+44.44, 40.94 RT | 1 | 0.461 | NO | B |
| OUT-5 | 104+87.79, 52.20 LT | 3 | 0.055 | NO | NA |
| OUT-6 | 104+88.90, 66.53 LT | 6 | 3.815 | NO | A, B |
| OUT-7 | 109+74.25, 271.37 RT | 4 | 3.858 | NO | NA |

- CONSTRUCTION SEQUENCE:**
1. INSTALL CONSTRUCTION EXIT AT OPTIMIST PARK - SELLS AVE. THIS IS THE MAIN ENTRANCE/EXIT. SEE SHEET 11.
 2. INSTALL HIGH VISIBILITY FENCE ALONG EPHEMERAL STREAM BUFFER AND THE FOOTBALL FIELD.
 3. PRIOR TO CLEARING AND GRUBBING, INSTALL SILT FENCE AT TOE OF THE AREA AND THE ROCK CHECK DAMS IN THE EX. DITCH.
 4. INSTALL MARKET ST. CONSTRUCTION EXIT IF AND WHEN NECESSARY. MARKET ST. CURB INLET PROTECTION IS ONLY NECESSARY IF MARKET ST. CONSTRUCTION EXIT IS INSTALLED. INSTALL THE CURB INLET PROTECTION PRIOR TO THE CONSTRUCTION EXIT INSTALLATION.
 5. INSTALL SILT FENCE ALONG MARKET ST. AND EPHEMERAL STREAM.
 6. INSTALL INLET PROTECTION AT EX. 12" CMP.
 7. INSTALL SEDIMENT TUBES IN EX. DITCH.
 8. INSTALL CATCH BASIN PROTECTION DEVICES AT THE TWO EXISTING DROP INLETS LOCATED NORTHWEST OF THE FOOTBALL FIELD.
 9. IN ORDER TO DIVERT CLEAN WATER THROUGH THE CONSTRUCTION SITE, INSTALL STORM DRAIN STRUCTURES 37 THROUGH 40, INCLUDING THEIR INTERCONNECTING PIPES.
 10. INSTALL RIPRAP OUTLET PROTECTION AT STRUCTURES 38 AND 40.

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EROSION PREVENTION & SEDIMENT CONTROL STAGE I

STA. 100+31.04 TO STA. 111+00.00
SCALE: 1" = 50'

| SILT FENCE TABLE | | | | | | |
|------------------|--------------|-------------------|------------------|-------------------|----------------------------|-----------|
| LOCATION | AREA (ACRES) | FENCE LENGTH (FT) | ACRE/100' LENGTH | SLOPE LENGTH (FT) | SILT FENCE TYPE | STD. DWG. |
| 101+30, 88' LT | 0.072 | 105 | 0.28 | 114 | SILT FENCE W/ WIRE BACKING | EC-STR-3C |
| 102+17, 100' LT | 0.214 | 165 | 0.51 | 250 | SILT FENCE W/ WIRE BACKING | EC-STR-3C |
| 103+78, 120' LT | 0.248 | 219 | 0.17 | 97 | SILT FENCE W/ WIRE BACKING | EC-STR-3C |

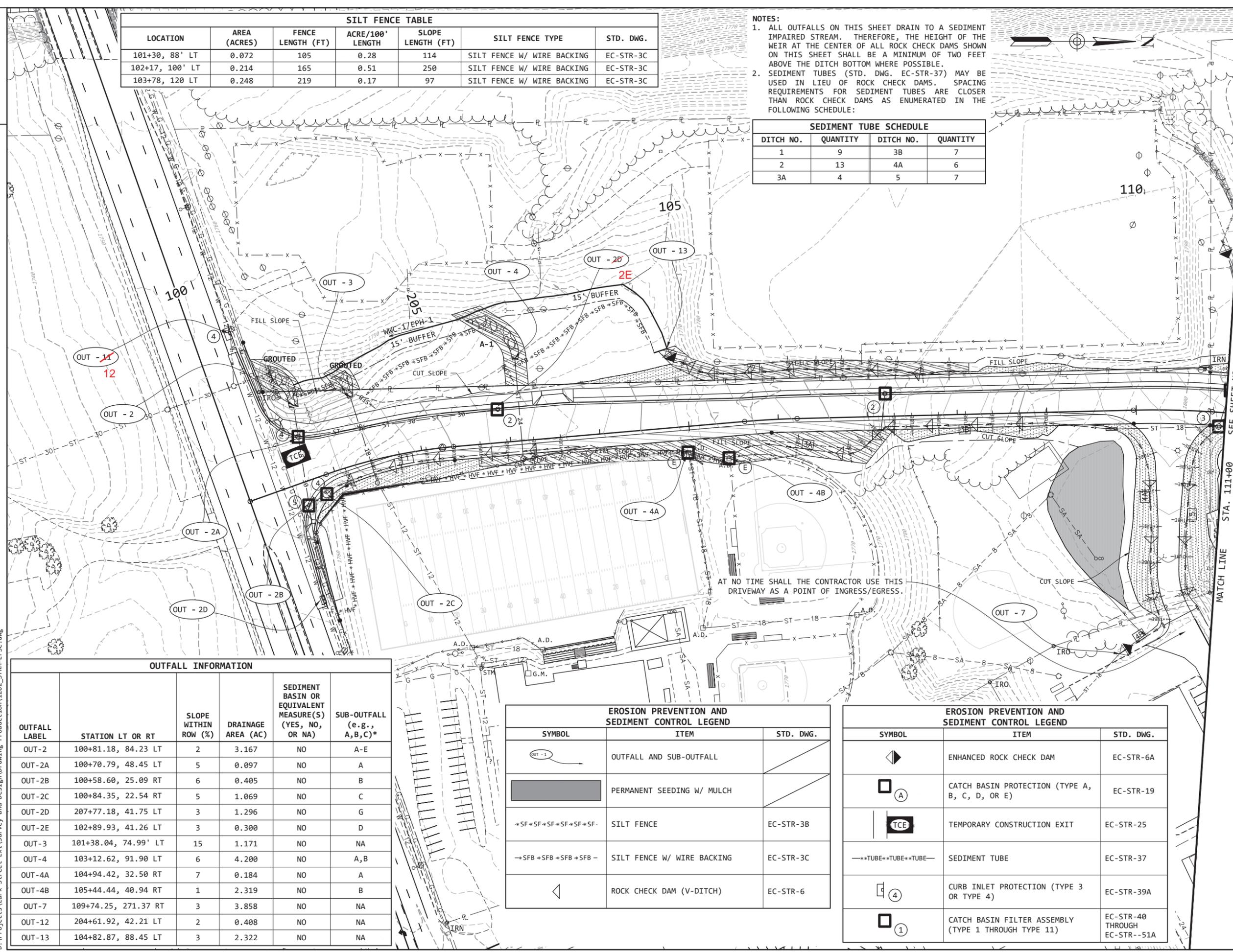
NOTES:
1. ALL OUTFALLS ON THIS SHEET DRAIN TO A SEDIMENT IMPAIRED STREAM. THEREFORE, THE HEIGHT OF THE WEIR AT THE CENTER OF ALL ROCK CHECK DAMS SHOWN ON THIS SHEET SHALL BE A MINIMUM OF TWO FEET ABOVE THE DITCH BOTTOM WHERE POSSIBLE.
2. SEDIMENT TUBES (STD. DWG. EC-STR-37) MAY BE USED IN LIEU OF ROCK CHECK DAMS. SPACING REQUIREMENTS FOR SEDIMENT TUBES ARE CLOSER THAN ROCK CHECK DAMS AS ENUMERATED IN THE FOLLOWING SCHEDULE:

| SEDIMENT TUBE SCHEDULE | | | |
|------------------------|----------|-----------|----------|
| DITCH NO. | QUANTITY | DITCH NO. | QUANTITY |
| 1 | 9 | 3B | 7 |
| 2 | 13 | 4A | 6 |
| 3A | 4 | 5 | 7 |

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|--------|------|---------------|-----------|
| R.O.W. | 2014 | 90953-1533-04 | 10A |
| CONST. | 2017 | 90953-3533-04 | 10A |

REVISED 12/18/2015:
REVISE PLAN DUE TO CHANGES AT THE BOYS & GIRLS CLUB AND THE ADDITION OF TRACT 25 DRIVEWAY.

REVISED 01/17/2017:
ADD SEDIMENT BASIN, TEMPORARY STOCKPILE, AND SECONDARY CONTAINMENT.



**CONST.
FIELD
REVIEW**

OUTFALL INFORMATION

| OUTFALL LABEL | STATION LT OR RT | SLOPE WITHIN ROW (%) | DRAINAGE AREA (AC) | SEDIMENT BASIN OR EQUIVALENT MEASURE(S) (YES, NO, OR NA) | SUB-OUTFALL (e.g., A,B,C)* |
|---------------|----------------------|----------------------|--------------------|--|----------------------------|
| OUT-2 | 100+81.18, 84.23 LT | 2 | 3.167 | NO | A-E |
| OUT-2A | 100+70.79, 48.45 LT | 5 | 0.097 | NO | A |
| OUT-2B | 100+58.60, 25.09 RT | 6 | 0.405 | NO | B |
| OUT-2C | 100+84.35, 22.54 RT | 5 | 1.069 | NO | C |
| OUT-2D | 207+77.18, 41.75 LT | 3 | 1.296 | NO | G |
| OUT-2E | 102+89.93, 41.26 LT | 3 | 0.300 | NO | D |
| OUT-3 | 101+38.04, 74.99' LT | 15 | 1.171 | NO | NA |
| OUT-4 | 103+12.62, 91.90 LT | 6 | 4.200 | NO | A,B |
| OUT-4A | 104+94.42, 32.50 RT | 7 | 0.184 | NO | A |
| OUT-4B | 105+44.44, 40.94 RT | 1 | 2.319 | NO | B |
| OUT-7 | 109+74.25, 271.37 RT | 3 | 3.858 | NO | NA |
| OUT-12 | 204+61.92, 42.21 LT | 2 | 0.408 | NO | NA |
| OUT-13 | 104+82.87, 88.45 LT | 3 | 2.322 | NO | NA |

| EROSION PREVENTION AND SEDIMENT CONTROL LEGEND | | |
|--|----------------------------|-----------|
| SYMBOL | ITEM | STD. DWG. |
| OUT-1 | OUTFALL AND SUB-OUTFALL | |
| [Shaded Area] | PERMANENT SEEDING W/ MULCH | |
| +SF+SF+SF+SF+SF- | SILT FENCE | EC-STR-3B |
| -+SFB+SFB+SFB+SFB- | SILT FENCE W/ WIRE BACKING | EC-STR-3C |
| [Triangle] | ROCK CHECK DAM (V-DITCH) | EC-STR-6 |

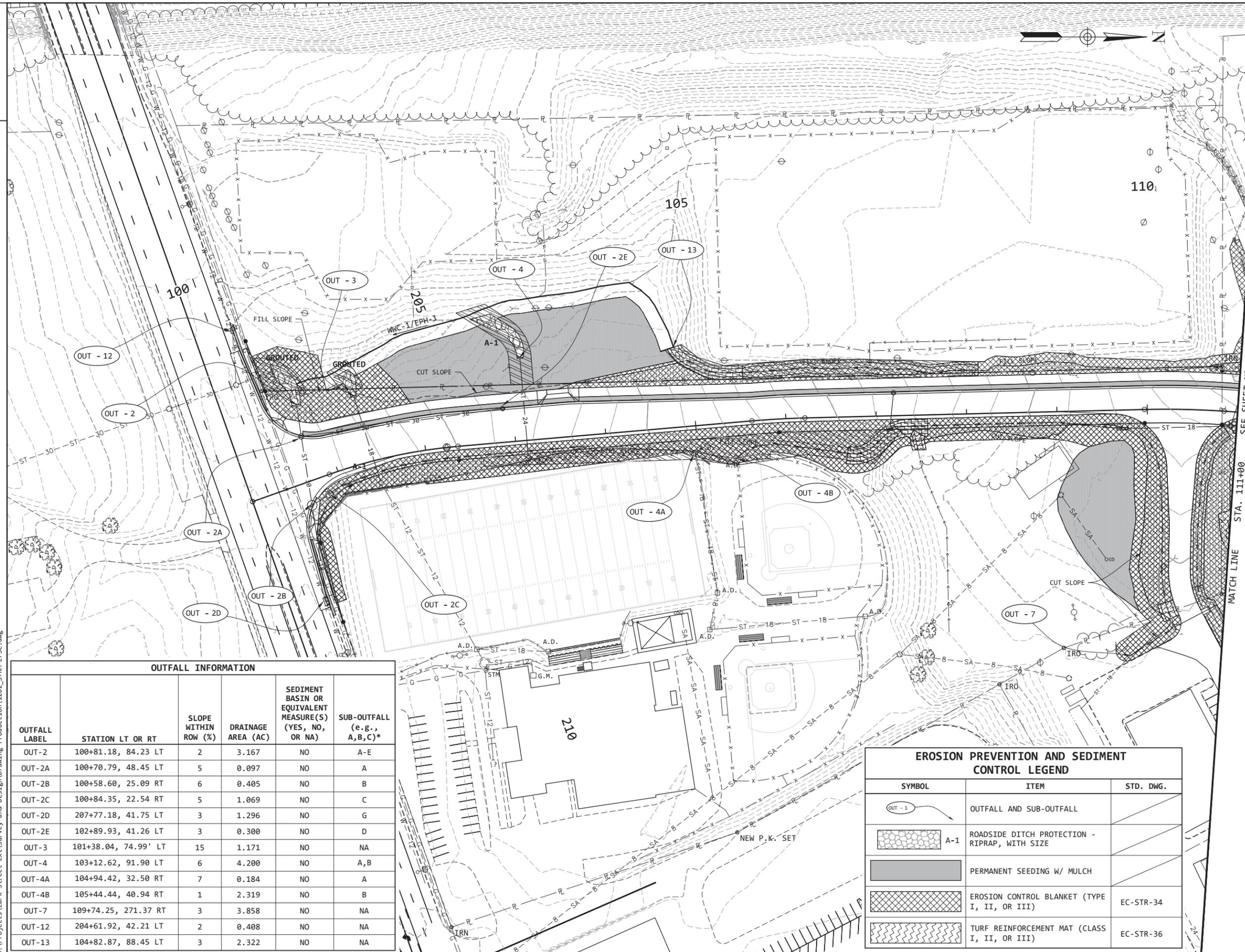
| EROSION PREVENTION AND SEDIMENT CONTROL LEGEND | | |
|--|--|-------------------------------|
| SYMBOL | ITEM | STD. DWG. |
| [Diamond] | ENHANCED ROCK CHECK DAM | EC-STR-6A |
| [Square with A] | CATCH BASIN PROTECTION (TYPE A, B, C, D, OR E) | EC-STR-19 |
| [TCE] | TEMPORARY CONSTRUCTION EXIT | EC-STR-25 |
| [Line with Tube] | SEDIMENT TUBE | EC-STR-37 |
| [Square with 4] | CURB INLET PROTECTION (TYPE 3 OR TYPE 4) | EC-STR-39A |
| [Square with 1] | CATCH BASIN FILTER ASSEMBLY (TYPE 1 THROUGH TYPE 11) | EC-STR-40 THROUGH EC-STR--51A |

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
EROSION PREVENTION & SEDIMENT CONTROL STAGE II
STA. 100+31.04 TO STA. 111+00.00
SCALE: 1" = 50'

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|--------|------|---------------|-----------|
| R.O.W. | 2014 | 90953-1533-04 | 10B |
| CONST. | 2017 | 90953-3533-04 | 10B |

REVISED 12/18/2015:
REVISE PLAN DUE TO CHANGES AT THE
BOYS & GIRLS CLUB AND THE ADDITION OF
TRACT 25 DRIVEWAY.



**CONST.
FIELD
REVIEW**

OUTFALL INFORMATION

| OUTFALL LABEL | STATION LT OR RT | SLOPE WITHIN ROW (%) | DRAINAGE AREA (AC) | SEDIMENT BASIN OR EQUIVALENT MEASURE(S) (YES, NO, OR NA) | SUB-OUTFALL (e.g., A,B,C)* |
|---------------|----------------------|----------------------|--------------------|--|----------------------------|
| OUT-2 | 100+81.18, 84.23 LT | 2 | 3.167 | NO | A-E |
| OUT-2A | 100+70.79, 48.45 LT | 5 | 0.097 | NO | A |
| OUT-2B | 100+58.60, 25.09 RT | 6 | 0.405 | NO | B |
| OUT-2C | 100+84.35, 22.54 RT | 5 | 1.069 | NO | C |
| OUT-2D | 207+77.18, 41.75 LT | 3 | 1.296 | NO | G |
| OUT-2E | 102+89.93, 41.26 LT | 3 | 0.300 | NO | D |
| OUT-3 | 101+38.04, 74.99' LT | 15 | 1.171 | NO | NA |
| OUT-4 | 103+12.62, 91.90 LT | 6 | 4.200 | NO | A,B |
| OUT-4A | 104+94.42, 32.50 RT | 7 | 0.184 | NO | A |
| OUT-4B | 105+44.44, 40.94 RT | 1 | 2.319 | NO | B |
| OUT-7 | 109+74.25, 271.37 RT | 3 | 3.858 | NO | NA |
| OUT-12 | 204+61.92, 42.21 LT | 2 | 0.408 | NO | NA |
| OUT-13 | 104+82.87, 88.45 LT | 3 | 2.322 | NO | NA |

| EROSION PREVENTION AND SEDIMENT CONTROL LEGEND | | |
|--|---|-----------|
| SYMBOL | ITEM | STD. DWG. |
| OUT - 1 | OUTFALL AND SUB-OUTFALL | |
| A-1 | ROADSIDE DITCH PROTECTION - RIPRAP, WITH SIZE | |
| [Solid Grey] | PERMANENT SEEDING W/ MULCH | |
| [Cross-hatch] | EROSION CONTROL BLANKET (TYPE I, II, OR III) | EC-STR-34 |
| [Wavy Lines] | TURF REINFORCEMENT MAT (CLASS I, II, OR III) | EC-STR-36 |

SEALED BY

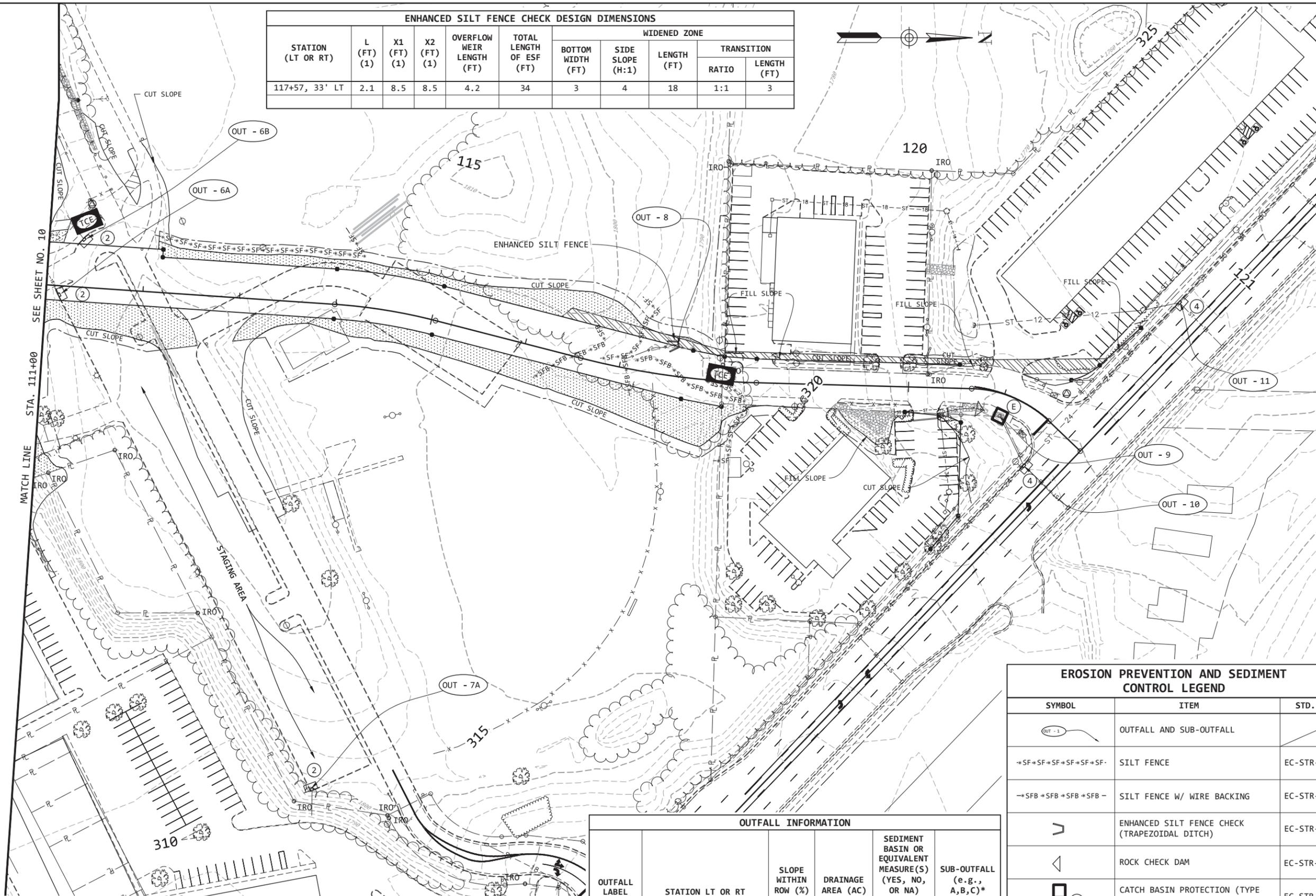
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
**EROSION PREVENTION
& SEDIMENT CONTROL
STAGE III**
STA. 100+31.04 TO
STA. 111+00.00
SCALE: 1" = 50'

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| ENHANCED SILT FENCE CHECK DESIGN DIMENSIONS | | | | | | | | | | | |
|---|------------------|-------------------|-------------------|------------------------------------|-----------------------------------|-------------------------|------------------------|----------------|------------|----------------|--|
| STATION (LT OR RT) | L (FT) (1) | X1 (FT) (1) | X2 (FT) (1) | OVERFLOW WEIR LENGTH (FT) | TOTAL LENGTH OF ESF (FT) | WIDENED ZONE | | | | | |
| | | | | | | BOTTOM WIDTH (FT) | SIDE SLOPE (H:1) | LENGTH (FT) | TRANSITION | | |
| | | | | | | | | | RATIO | LENGTH (FT) | |
| 117+57, 33' LT | 2.1 | 8.5 | 8.5 | 4.2 | 34 | 3 | 4 | 18 | 1:1 | 3 | |

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|--------|------|---------------|-----------|
| R.O.W. | 2014 | 90953-1533-04 | 11 |
| CONST. | 2017 | 90953-3533-04 | 11 |

REVISED 12/18/2015:
REVISE EPSC PLAN AT TRACTS 15 AND 18.



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REVIEW**

| EROSION PREVENTION AND SEDIMENT CONTROL LEGEND | | |
|--|--|------------|
| SYMBOL | ITEM | STD. DWG. |
| OUT - 1 | OUTFALL AND SUB-OUTFALL | |
| *SF*SF*SF*SF*SF*SF* | SILT FENCE | EC-STR-3B |
| -SFB *SFB *SFB *SFB - | SILT FENCE W/ WIRE BACKING | EC-STR-3C |
| [Symbol] | ENHANCED SILT FENCE CHECK (TRAPEZOIDAL DITCH) | EC-STR-4 |
| [Symbol] | ROCK CHECK DAM | EC-STR-6 |
| [Symbol] | CATCH BASIN PROTECTION (TYPE A, B, C, D, OR E) | EC-STR-19 |
| TCE | TEMPORARY CONSTRUCTION EXIT | EC-STR-25 |
| [Symbol] | CURB INLET PROTECTION (TYPE 1 OR TYPE 2) | EC-STR-39 |
| [Symbol] | CURB INLET PROTECTION (TYPE 3 OR TYPE 4) | EC-STR-39A |

| OUTFALL INFORMATION | | | | | | |
|---------------------|----------------------|----------------------|--------------------|--|------------------------------|--|
| OUTFALL LABEL | STATION LT OR RT | SLOPE WITHIN ROW (%) | DRAINAGE AREA (AC) | SEDIMENT BASIN OR EQUIVALENT MEASURE(S) (YES, NO, OR NA) | SUB-OUTFALL (e.g., A, B, C)* | |
| OUT-6A | 111+13.31, 9.92 RT | 3 | 0.169 | NO | A | |
| OUT-6B | 111+35.20, 49.85 LT | 4 | 0.100 | NO | B | |
| OUT-7A | 114+80.81, 500.68 RT | 3 | 0.662 | NO | A | |
| OUT-8 | 117+57.20, 33.00 LT | 4 | 4.933 | NO | NA | |
| OUT-9 | 121+02.65, 22.62 RT | 7 | 1.567 | NO | A | |
| OUT-10 | 320+91.88, 31.51 LT | 6 | 0.330 | NO | NA | |
| OUT-11 | 323+24.55, 31.86 LT | 5 | 0.496 | NO | NA | |

| SILT FENCE TABLE | | | | | | |
|------------------|--------------|-------------------|----------------|-------------------|----------------------------|-----------|
| LOCATION | AREA (ACRES) | FENCE LENGTH (FT) | ACRE/X' LENGTH | SLOPE LENGTH (FT) | SILT FENCE TYPE | STD. DWG. |
| 113+20, 50' LT | 0.192 | 200 | 0.10 | 82 | SILT FENCE | EC-STR-3B |
| 116+51, 0' | 1.002 | 108 | 1.39 | 227 | SILT FENCE W/ WIRE BACKING | EC-STR-3C |
| 117+17, 36' LT | 0.089 | 106 | 0.08 | 83 | SILT FENCE | EC-STR-3B |
| 117+64, 0' | 0.223 | 158 | 0.10 | 199 | SILT FENCE W/ WIRE BACKING | EC-STR-3C |
| 118+23, 33' RT | 0.082 | 126 | 0.07 | 49 | SILT FENCE | EC-STR-3B |

X = 100' FOR SILT FENCE, 150' FOR SILT FENCE W/ WIRE BACKING

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EROSION PREVENTION & SEDIMENT CONTROL STAGE I

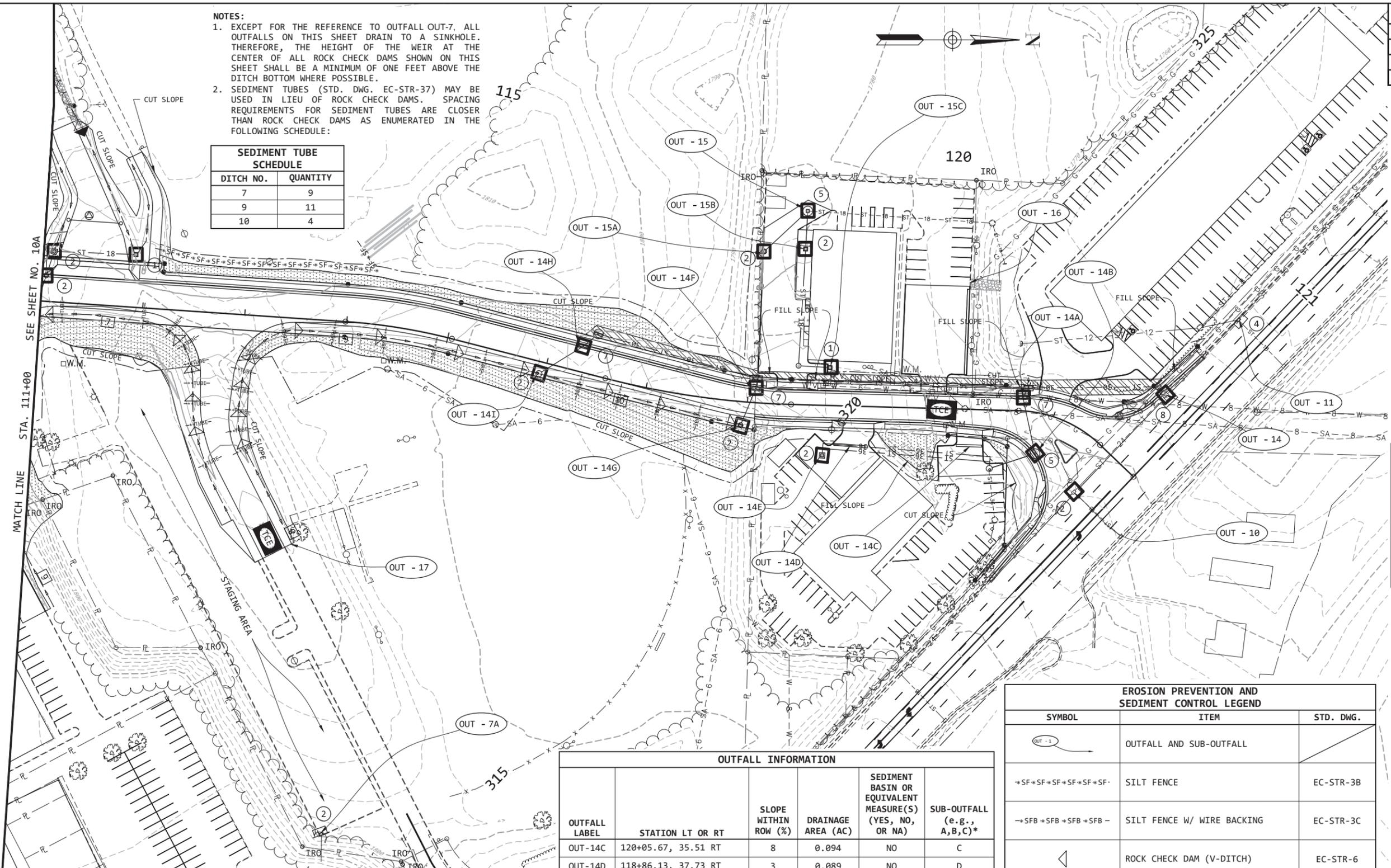
STA. 111+00.00 TO STA. 121+68.43
SCALE: 1" = 50'

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|--------|------|---------------|-----------|
| R.O.W. | 2014 | 90953-1533-04 | 11A |
| CONST. | 2017 | 90953-3533-04 | 11A |

REVISED 12/18/2015:
REVISE EPSC PLAN AT TRACTS 15 AND 18.

- NOTES:**
- EXCEPT FOR THE REFERENCE TO OUTFALL OUT-7, ALL OUTFALLS ON THIS SHEET DRAIN TO A SINKHOLE. THEREFORE, THE HEIGHT OF THE WEIR AT THE CENTER OF ALL ROCK CHECK DAMS SHOWN ON THIS SHEET SHALL BE A MINIMUM OF ONE FEET ABOVE THE DITCH BOTTOM WHERE POSSIBLE.
 - SEDIMENT TUBES (STD. DWG. EC-STR-37) MAY BE USED IN LIEU OF ROCK CHECK DAMS. SPACING REQUIREMENTS FOR SEDIMENT TUBES ARE CLOSER THAN ROCK CHECK DAMS AS ENUMERATED IN THE FOLLOWING SCHEDULE:

| DITCH NO. | QUANTITY |
|-----------|----------|
| 7 | 9 |
| 9 | 11 |
| 10 | 4 |



**CONST.
FIELD
REVIEW**

| OUTFALL LABEL | STATION LT OR RT | SLOPE WITHIN ROW (%) | DRAINAGE AREA (AC) | SEDIMENT BASIN OR EQUIVALENT MEASURE(S) (YES, NO, OR NA) | SUB-OUTFALL (e.g., A,B,C)* |
|---------------|----------------------|----------------------|--------------------|--|----------------------------|
| OUT-14C | 120+05.67, 35.51 RT | 8 | 0.094 | NO | C |
| OUT-14D | 118+86.13, 37.73 RT | 3 | 0.089 | NO | D |
| OUT-14E | 118+74.42, 48.82 RT | 4 | 0.839 | NO | E |
| OUT-14F | 118+07.30, 14.87 LT | 8 | 0.251 | NO | F |
| OUT-14G | 117+95.11, 23.39 RT | 6 | 3.432 | NO | G |
| OUT-14H | 116+30.40, 26.00 LT | 2 | 0.617 | NO | H |
| OUT-14I | 115+94.93, 11.83 RT | 4 | 0.739 | NO | I |
| OUT-15 | 118+53.89, 189.11 LT | 9 | 0.333 | NO | NA |
| OUT-15A | 118+04.91, 147.82 LT | 9 | 0.655 | NO | A |
| OUT-15B | 118.52.81, 152.04 LT | 3 | 0.177 | NO | B |
| OUT-15C | 118+79.79, 36.99 LT | 3 | 0.036 | NO | C |
| OUT-16 | 120+14.88, 123.46 LT | 2 | 0.473 | NO | NA |
| OUT-17 | 113+60.61, 219.80 RT | 0.5 | 0.029 | NO | NA |

| OUTFALL LABEL | STATION LT OR RT | SLOPE WITHIN ROW (%) | DRAINAGE AREA (AC) | SEDIMENT BASIN OR EQUIVALENT MEASURE(S) (YES, NO, OR NA) | SUB-OUTFALL (e.g., A,B,C)* |
|---------------|----------------------|----------------------|--------------------|--|----------------------------|
| OUT-7A | 114+80.81, 500.68 RT | 2 | 0.662 | NO | A |
| OUT-10 | 320+91.88, 31.51 LT | 4 | 0.057 | NO | NA |
| OUT-11 | 323+24.55, 31.86 LT | 3 | 0.147 | NO | NA |
| OUT-14 | 322+22.08, 36.01 LT | 3 | 0.303 | NO | NA |
| OUT-14A | 120+68.68, 14.17 LT | 4 | 0.185 | NO | A |
| OUT-14B | 120+90.55, 39.94 RT | 5 | 0.576 | NO | B |

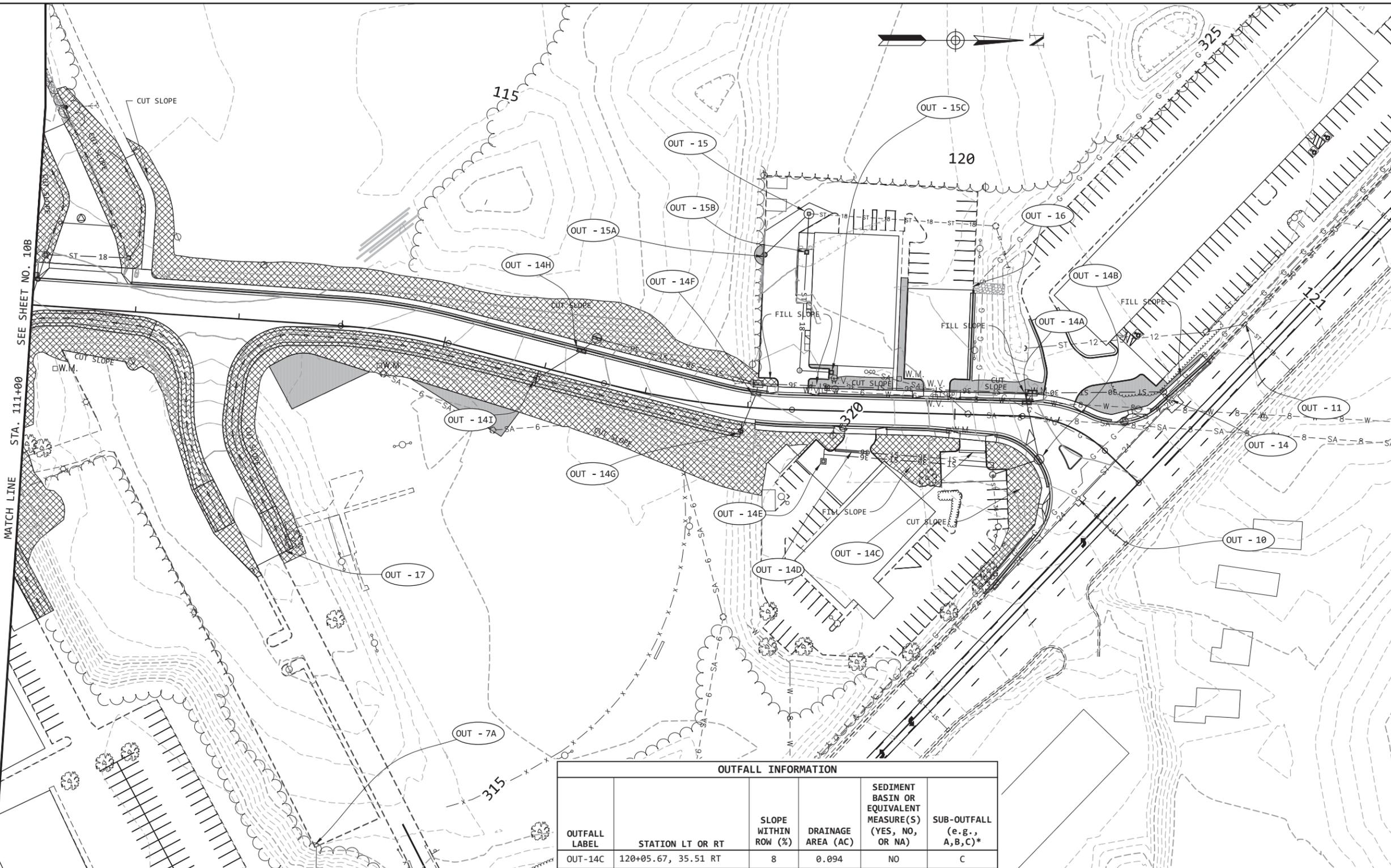
| SYMBOL | ITEM | STD. DWG. |
|-------------------|--|-------------------------------|
| OUT-1 | OUTFALL AND SUB-OUTFALL | |
| -SF+SF+SF+SF+SF- | SILT FENCE | EC-STR-3B |
| -SFB+SFB+SFB+SFB- | SILT FENCE W/ WIRE BACKING | EC-STR-3C |
| ◁ | ROCK CHECK DAM (V-DITCH) | EC-STR-6 |
| ▷ | ENHANCED ROCK CHECK DAM | EC-STR-6A |
| TCE | TEMPORARY CONSTRUCTION EXIT | EC-STR-25 |
| -TUBE+TUBE+TUBE- | SEDIMENT TUBE | EC-STR-37 |
| ④ | CURB INLET PROTECTION (TYPE 3 OR TYPE 4) | EC-STR-39A |
| ① | CATCH BASIN FILTER ASSEMBLY (TYPE 1 THROUGH TYPE 11) | EC-STR-40 THROUGH EC-STR--51A |

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
EROSION PREVENTION & SEDIMENT CONTROL STAGE II
STA. 111+00.00 TO STA. 121+68.43
SCALE: 1" = 50'

| TYPE | YEAR | PROJECT NO. | SHEET NO. |
|--------|------|---------------|-----------|
| R.O.W. | 2014 | 90953-1533-04 | 11B |
| CONST. | 2017 | 90953-3533-04 | 11B |

REVISED 12/18/2015:
REVISE EPSC PLAN AT TRACT 18.



**CONST.
FIELD
REVIEW**

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| OUTFALL LABEL | STATION LT OR RT | SLOPE WITHIN ROW (%) | DRAINAGE AREA (AC) | SEDIMENT BASIN OR EQUIVALENT MEASURE(S) (YES, NO, OR NA) | SUB-OUTFALL (e.g., A,B,C)* |
|---------------|----------------------|----------------------|--------------------|--|----------------------------|
| OUT-7A | 114+80.81, 500.68 RT | 2 | 0.662 | NO | A |
| OUT-10 | 320+91.88, 31.51 LT | 4 | 0.057 | NO | NA |
| OUT-11 | 323+24.55, 31.86 LT | 3 | 0.147 | NO | NA |
| OUT-14 | 322+22.08, 36.01 LT | 3 | 0.303 | NO | NA |
| OUT-14A | 120+68.68, 14.17 LT | 4 | 0.185 | NO | A |
| OUT-14B | 120+90.55, 39.94 RT | 5 | 0.576 | NO | B |

| OUTFALL LABEL | STATION LT OR RT | SLOPE WITHIN ROW (%) | DRAINAGE AREA (AC) | SEDIMENT BASIN OR EQUIVALENT MEASURE(S) (YES, NO, OR NA) | SUB-OUTFALL (e.g., A,B,C)* |
|---------------|----------------------|----------------------|--------------------|--|----------------------------|
| OUT-14C | 120+05.67, 35.51 RT | 8 | 0.094 | NO | C |
| OUT-14D | 118+86.13, 37.73 RT | 3 | 0.089 | NO | D |
| OUT-14E | 118+74.42, 48.82 RT | 4 | 0.839 | NO | E |
| OUT-14F | 118+07.30, 14.87 LT | 8 | 0.251 | NO | F |
| OUT-14G | 117+95.11, 23.39 RT | 6 | 3.432 | NO | G |
| OUT-14H | 116+30.40, 26.00 LT | 2 | 0.617 | NO | H |
| OUT-14I | 115+94.93, 11.83 RT | 4 | 0.739 | NO | I |
| OUT-15 | 118+53.89, 189.11 LT | 9 | 0.333 | NO | NA |
| OUT-15A | 118+04.91, 147.82 LT | 9 | 0.655 | NO | A |
| OUT-15B | 118.52.81, 152.04 LT | 3 | 0.177 | NO | B |
| OUT-15C | 118+79.79, 36.99 LT | 3 | 0.036 | NO | C |
| OUT-16 | 120+14.88, 123.46 LT | 2 | 0.473 | NO | NA |
| OUT-17 | 113+60.61, 219.80 RT | 0.5 | 0.029 | NO | NA |

| EROSION PREVENTION AND SEDIMENT CONTROL LEGEND | | |
|--|--|-----------|
| SYMBOL | ITEM | STD. DWG. |
| OUT - 1 | OUTFALL AND SUB-OUTFALL | |
| [Solid Gray Box] | PERMANENT SEEDING W/ MULCH | |
| [Cross-hatched Box] | EROSION CONTROL BLANKET (TYPE I, II, OR III) | EC-STR-34 |
| [Wavy-hatched Box] | TURF REINFORCEMENT MAT (CLASS I, II, OR III) | EC-STR-36 |

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
EROSION PREVENTION & SEDIMENT CONTROL STAGE III
STA. 111+00.00 TO STA. 121+68.43
SCALE: 1" = 50'