



**STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION**

**ENVIRONMENTAL DIVISION  
REGION 3 ENVIRONMENTAL SECTION**  
6601 CENTENNIAL BOULEVARD, BUILDING A  
NASHVILLE, TENNESSEE 37209  
(615) 335-8783

**BUTCH ELEY**  
DEPUTY GOVERNOR &  
COMMISSIONER OF TRANSPORTATION

**BILL LEE**  
GOVERNOR

**To:** Ms. April Grippo

**Date:** 06/28/2024

**Subject:** PIN 070041.00P  
State Route 438, Culvert Replacement at LM 7.4  
Hickman County  
Permits Needed by: ASAP

All:

**INTRODUCTORY PROJECT DESCRIPTION AND RATIONALE / TDEC ARAP REQUIRED**

(per CN-1091, Section 6.1, 7)

The Tennessee Department of Transportation is proposing to replace an existing 30FT 48IN CMP culvert, which has rusted through the bottom, with a proposed series of three adjacent 30FT 36IN HDPE culverts. The proposed series of three culverts will have a combined width of 9FT, meeting the bankfull width at this location as determined by TDOT ecologists, and will be embedded to a minimum of 30% of their height. TDOT is not proposing to backfill the proposed culverts with streambed material due to their size and will instead embed the culverts to the required depth and allow them to fill with stream material over time.

**IMPACT TABLES**

**Site Information**

**Feature Name:** STR-1

**Proposed Impact Type:** *Culvert Replacement*

*Latitude: 35.763490°, Longitude: -87.649461°*

**Permits Required**

**TDEC:** General Permit for Maintenance Activities

**Corps:** Non-notification, Nationwide #3

**TVA:** Not Required (Zone X)

**Impact Description:**

**Existing structures:** 30 ft of 48 in CMP (to be removed)

**Existing impact length:** 30 ft

**Proposed Structure:** 30 ft of three 36 in CMP culverts

**Proposed impact length:** 30 ft

**Impact Minimization**

Construction impacts have been minimized by requesting that the proposed work is conducted in low-flow conditions and requiring that all work be conducted separately from flowing waters. Erosion Prevention and Sediment Control (EPSC) best management practice (BMP) measures will be installed and maintained during roadway construction, thus reducing the likelihood of sediment and debris deposition from the project site into adjacent environmental features during construction activities.

Long term impacts to stream health as a result of this culvert crossing have been minimized by ensuring that the proposed embedment depth and structure width meet Aquatic Organism Passage (AOP) guidelines, ensuring that the State Route 438 crossing over STR-1 will not divide species populations. Due to the size of the existing culvert, this represents an improvement in stream conditions following project completion.

**Mitigation**

**TDEC:** Mitigation not required.

**Corps:** Mitigation not required.

### **SPECIES INFORMATION**

The following list represents a summary of associated agency coordination that has been initiated for this project, with regard to potential species present in the vicinity of the project site.

- USFWS:
  - May 28, 2024 – Email sent from TDOT requesting information on species that may be present in the vicinity of the proposed project.
  - May 28, 2024 – TDOT received an email response stating that a review of their database does not indicate that any federally listed or proposed species or designated critical habitat would be impacted by the project. The email also noted that the federally petitioned and State-listed egg-mimic darter (*Etheostoma pseudovulatum*) and State-listed saddled madtom (*Noturus fasciatus*) have been observed downstream of the project. Implementation of construction BMPs will be necessary to ensure that project-related pollutants are kept out of the stream. Equipment staging and maintenance areas should be developed an adequate distance away to prevent petroleum-based pollutants into the water. Work should be scheduled during a lower flow period.
- TWRA:
  - May 28, 2024 – email sent from TDOT requesting information on species that may be present in the vicinity of the proposed project.
  - May 28, 2024 – TDOT received an email response stating that the TWRA does not anticipate adverse impacts upon listed species under their authority due to the project and they have no concerns or objection to the proposed project.
- TN Department of Natural Areas:
  - Project determined to be covered under the 2023 Memorandum of Agreement between TDOT, FHWA, and TDEC DNA.

### **CLOSING PARAGRAPHS**

This project is currently scheduled for construction in August, during low flow conditions.

If you have any questions or we can be of further assistance, please contact me at (615)-350-3375.

Sincerely,

Anthony Myers  
TDOT Manager  
TDOT Region 3 Environmental Section

Enclosures

ARM:TPC

ec:

Ms. Claire Sichko, TDOT, Environmental Engineering Office  
Ms. Traci Smith, TDOT, Environmental Engineering Office  
Mr. Nathan Vatter, TDOT, Region 3 Construction  
Ms. Taylor Simpson, TDOT, Region 3 Environmental Section  
Mr. Michael Finks, TDOT, Region 3 Environmental Section  
Mr. Trent Thomas, TDOT, Environmental Compliance  
Mr. George Lankford, TDOT, District 38 Operations  
Mr. Derek Pryor, TDOT, District 38 Operations