## **Public Notice**

## APPLICANT: TDOT

#### PERMIT APPLICATION: NRS #05.457

LOCATION: SR-15 (U.S. 64) Waynesboro West of SR-99 to Old Hwy 64 Barlow Branch, Tributaries to Furnace Branch, Furnace Branch Site Lat. 35.3234° Long. –87.7461° Wayne County

**WATERSHED DESCRIPTION:** The project is located in the Buffalo River Watershed (HUC 06040004). The land use surrounding the project area is agricultural and residential. This area was mined for iron ore in the late 1800's. Barlow Branch, a trib. to Hurricane Creek, has a bedrock bottom, steep banks, with little to no canopy at the impact area. Furnace Branch drains to Fortyeight Creek and has cobble substrate. Furnace branch is spring fed with a wooded riparian zone upstream of Pondview Lane on the left descending bank. Dynamite Hill separates the watersheds of Hurricane Creek and Fortyeight Creek. USGS Topographic Quad: Waynesboro East (42 SW)

**PROJECT DESCRIPTION:** This application is for aquatic resource alterations along a 3.803mile segment of the existing SR-15. Ten streams and two springs will be impacted by this road project. Hurricane Creek, S-1 is to remain unaffected on this project.Stream 2,Station 25+70 Lt to Station 27+60, Barlow Branch, a trib. to Hurricane Creek, is to have 120 ft of riprap installed on bed and bank as channel protection between SR-99 and the existing crossing of SR-15.

Stream 6, unnamed tributary to Barlow Branch, Station 109+94.37, (coordinates 35.3239, -87.7200). Plugging and abandoning existing 24"culvert Stream was determined to start at the culvert outlet. The replacement culvert is to 156 ft of steel pipe jacked in place, with 90ft of 24 inch concrete pipe with headwalls. The new culvert is to be located approximately 25ft west of the current location with 43ft of riprap lined transition channel at the outlet. Underground cable and telephone lines are also proposed to cross this stream. This stream is first order flowing on soil and gravel substrate.

Stream 7 unnamed tributary to Hurricane Creek, Station 119+77, (coordinates 35.3229, -87.7157), replacing existing culvert with 150ft of 18-inch fabric wrapped, perforated pipe in rock fill with 50ft of riprap at the outlet to maintain flow post construction. A V shaped riprapped stormwater outfall is proposed at station 119 Rt into riprap on the left descending bank. Total linear feet of stream impact is 200ft.

Stream 8, unnamed tributary to Hurricane Creek, Station 149+74, (coordinates 35.3232, -87.7039) replacing existing culvert and constructing 130 ft french drain composed of an 18 inch fabric wrapped, perforated pipe in rock fill with 30ft of rip rap outlet protection. A V shaped riprapped lined storm water conveyance is proposed to enter the right descending bank in the riprap. The new culvert is being constructed west of the existing culvert and will flow to the French drained section of stream. Total linear ft of stream impact is 160ft.

Stream 9, unnamed tributary to Furnace Branch, Station 165+38, (coordinates 35.3243, -87.7008) plug and abandoned existing metal pipe. Construct new culvert approximately 25ft west consisting of 255ft of steel pipe culvert jacked in place with a 66ft of 30 inch concrete pipe with 43ft of riprap lined channel at the outlet, intersecting the channel of stream 9. Underground cable lines are proposed at this location. This stream was determined to begin at the end of the existing pipe and flows north from SR 15 to Stream 4 on soil and gravel substrate under forested canopy.

Stream 10, unnamed tributary to Furnace Branch, Station 176+36, (coordinates 35.3261, -87.6977) a 153ft extension of the existing 140ft pipe is proposed with 50ft of riprapped transition channel at the outlet. Mitigation isn't being required as the stream was determined to start at the exit of the existing pipe. Two rip rapped, V shaped storm water outfalls are proposed into the riprap on both the right and left descending banks downstream of SR15.Total stream impacts 203ft. This stream flows south of SR 15.

Stream 11, unnamed tributary to Furnace Branch, Station 183+00 to 186+15, (coordinates 35.3261, -87.6977). This stream flows south of SR 15 but does not have a surface channel connecting to Furnace Branch. Proposed is 350ft of French drain composed of 18inch fabric wrapped, perforated pipe in rock fill with an additional 30ft of riprap outlet protection. Two V shaped ripraped lined storm water conveyances are proposed on each the left and right descending banks at the end of the French drain in the 30ft of rip rap. Total stream impact is 383 linear ft. Proposed as mitigation is \$70,000 to the Tennessee Stream Mitigation Program for the 350 linear ft of encapsulation.

Furnace Branch, Stream 3, will have three storm water outfalls at station 200+50 Rt , 203+50 Rt, and Station 216 Rt and two driveway crossings removed and replaced under this proposal. Each of the storm water conveyances consist of pipes leading from SR 15 terminating in riprap outfalls then flowing overland to Furnace Branch.

The first driveway crossing is for Pondview Lane, Station 213+30Rt. The existing structure at this location consists of 2 metal pipes 72" in diameter and 20' long. The replacement structure is to be approximately 50ft upstream consisting of a 30 ft 6' x 6' concrete box culvert with 25' of riprap at the inlet and outlet. A spring is located between the existing crossing and the location of the proposed crossing for Pondview Lane with a spring box proposed to maintain flow to Furnace Branch.

Further downstream at Station 220+02Rt a private driveway is to be relocated slightly upstream. The 25 ft of existing 54-inch diameter metal pipe is to be removed. The replacement structure is to be a 30 ft, 14' x 5' box culvert with 30 ft of riprap at the outlet. Total impacts to Furnace Branch are 140 linear ft.

Stream 4, an unnamed tributary to Furnace Branch, Station 213+19.55 (coordinates 35.3341, -87.6872) flowing on gravel substrate with little canopy at the project site will have the existing 10' x 6' box culvert extended 61ft, from 115 ft to 176 ft with 20 ft of riprap at the outlet, resulting in 186ft total impact. Underground cable and telephone lines are also proposed to cross this stream.

At the confluence of Stream 4 with Furnace Branch a retaining wall is proposed from Station 212+50 Rt to Station 215+50. This wall is proposed to minimize the impacts to Furnace Branch.

Stream 5, unnamed tributary to Furnace Branch, also flowing from the north on gravel substrate with little canopy will have two impacts (coordinates 35.3354, -87.6846). When the intersection with Old Highway 64 and the new US 64 (SR-15) is realigned, the existing 70 ft of 24" concrete pipe on at Station 216+62.86 Old Hwy 64 will be removed. The replacement structure will be 85 ft of 24" concrete pipe with a U shaped endwall, a 40ft transition, 10 ft of riprap at the inlet and 40ft of riprap at the outlet. The existing 80 ft- 54" diameter concrete pipe on SR-15 will be removed and replaced with 177 ft of 6' x 4' box culvert with 30 ft of rip rap transition at the inlet. Total stream impact is 332 linear feet. Proposed as mitigation for the 262 ft of encapsulation is \$52,400 to the TSMP. Underground telephone lines are also proposed to cross this stream.

In accordance with the Tennessee Antidegradation Statement (Rule 1200-4-3-.06), the Division has determined that the proposed activity will result in degradation to two tributaries of Furnace Branch, Streams 4 and 5, and stream 11, a tributary to groundwater. Tier evaluations were conducted showing Furnace Branch and its headwaters south of SR 15 to be Tier II, Exceptional Tennessee Waters. Streams 4 and 5 were determined to be Tier I. Stream 11 is currently being evaluated, if this stream is found to be Tier II, a subsequent notice will be made.

A public hearing notice is running concurrently for this project, the public hearing is to be held at 2:00pm at the Columbia Environmental Field Office on Friday, August 31, 2007.

# PERMIT COORDINATOR: Judy Manners

No decision has been made whether to issue or deny this permit. The purpose of this notice is to inform interested parties of this permit application and to ask for comments and information necessary to determine possible impacts to water quality. Persons wishing to comment on the proposal are invited to submit written comments to the department. Written comments must be received within **thirty days of the date that this notice is posted**. Comments will become part of the record and will be considered in the final decision. The applicant's name and permit number should be referenced.

Interested persons may also request in writing that the department hold a public hearing on this application. The request must be filed within the comment period, indicate the interest of the person requesting it, the reasons that the hearing is warranted, and the water quality issues being raised. When there is sufficient public interest in water quality issues, the department will hold a public hearing.

The permit application, supporting documentation including detailed plans and maps, and related comments are available at the department's address for review and/or copying. The department's address is:

Tennessee Department of Environment & Conservation Division of Water Pollution Control, Natural Resources Section 7th Floor L & C Annex 401 Church Street Nashville, TN 37243

In deciding whether to issue or deny a permit, the department will consider all comments on record and the requirements of applicable federal and state laws.

# Photos



Barlow Branch (Stream 2) where 120ft of rip rap is proposed



Stream 6 at culvert exit under SR 15



Stream 6 downstream (north of SR 15)



Stream 7 culvert outfall under SR 15



Stream 11 iron staining at culvert outlet



Stream 11, existing condition with flow



Existing Pondview Lane at Furnace Branch, Stream 3



Furnace Branch near Pondview Lane



Spring 2 at Pondview Lane



Stream 4, area of proposed retaining wall



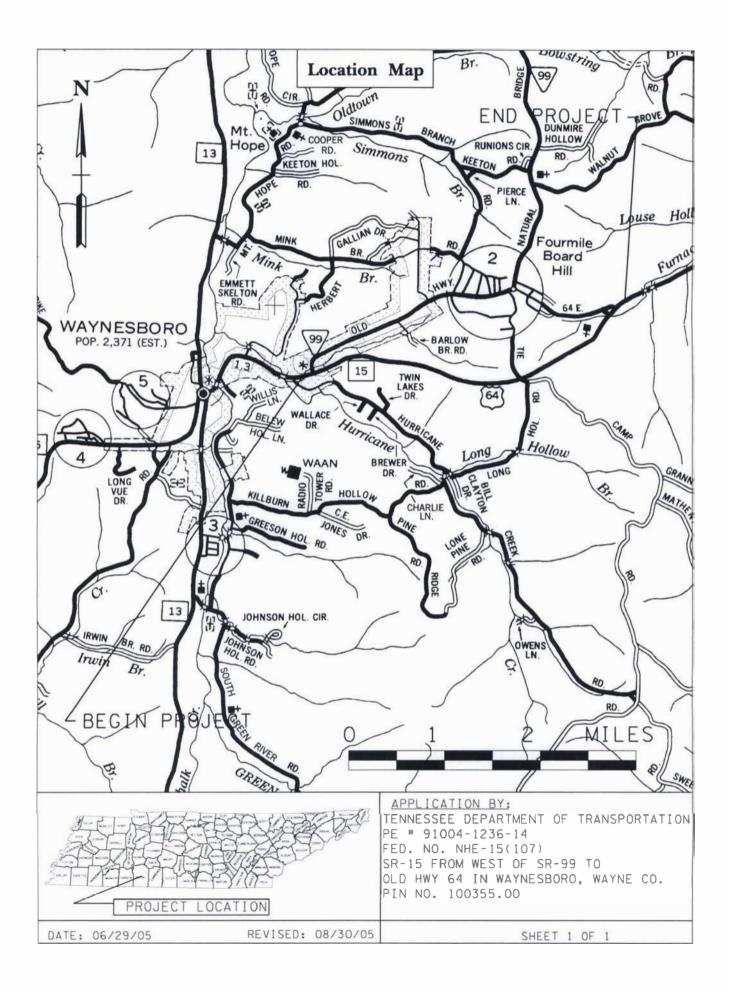
Stream 4 culvert exit to Furnace Branch, location of proposed headwall



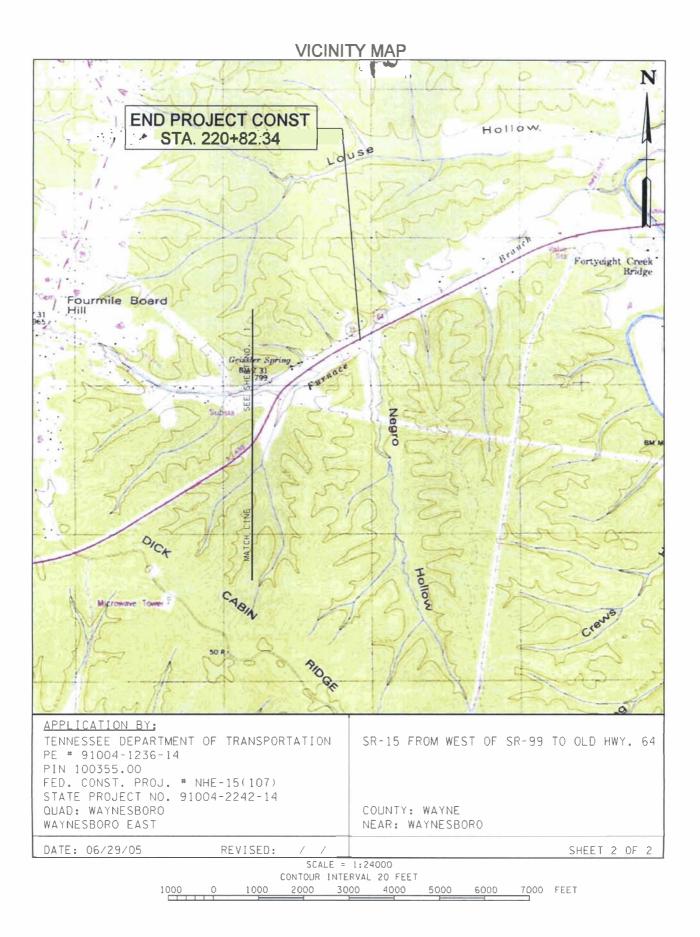
Stream 5 as exiting from SR 15

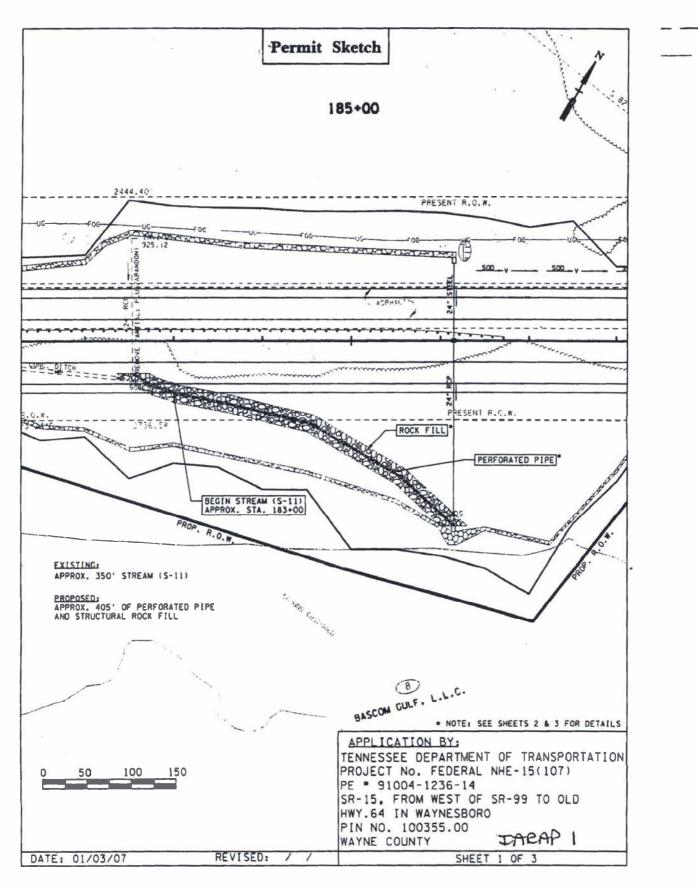


Stream 5 downstream of SR 15 prior to confluence with Furnace Branch

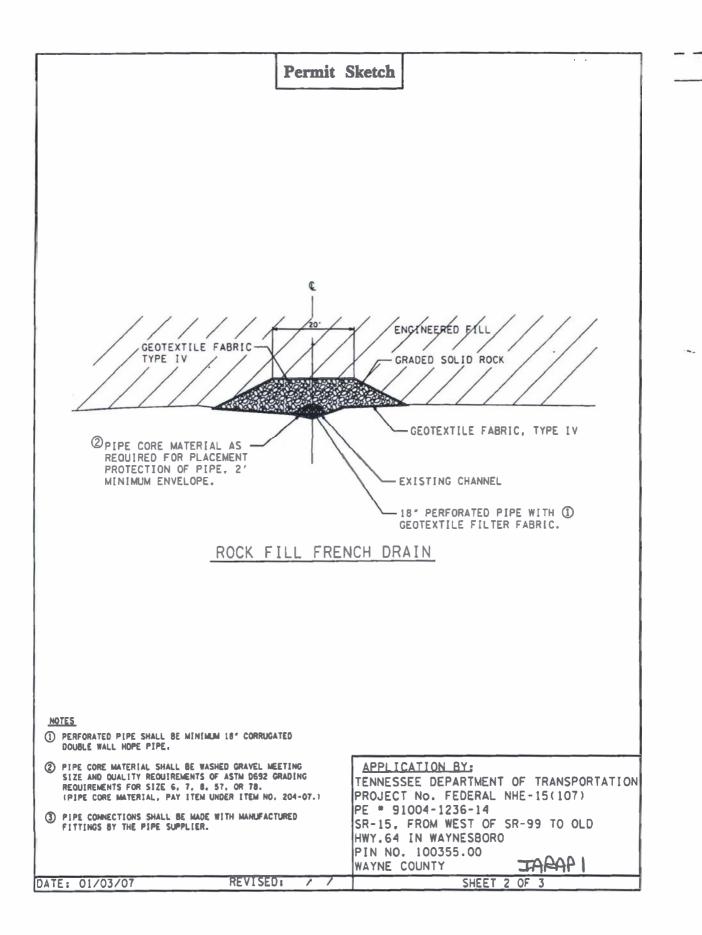


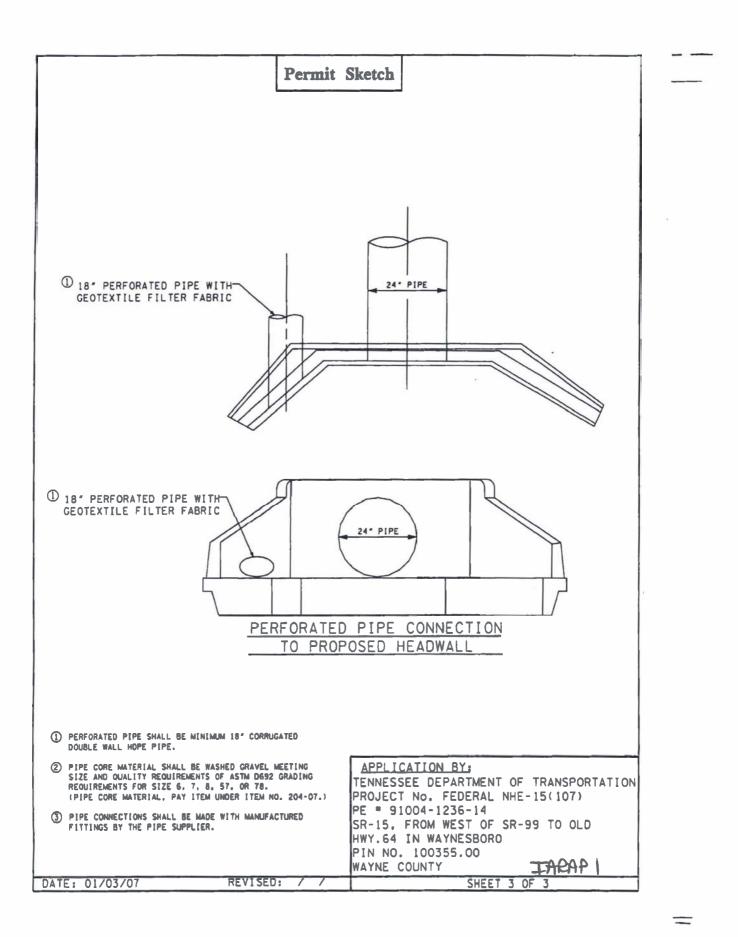
VICINITY MAP Fork AMS 109 N Hollow Mint Branch Mink Branel York Hallow BM'R Waynesboro Hurican 800 Diant Branch Barlo Old Town Cem WAYNESBORO · Belew Hollow BEGIN PROJECT CONST STA. 20+00 ton anch HADID TOWER APPLICATION BY: TENNESSEE DEPARTMENT OF TRANSPORTATION SR-15 FROM WEST OF SR-99 TO OLD HWY. 64 PE # 91004-1236-14 PIN 100355.00 FED. CONST. PROJ. \* NHE-15(107) STATE PROJECT NO. 91004-2242-14 QUAD: WAYNESBORO COUNTY: WAYNE WAYNESBORD EAST NEAR: WAYNESBORD SHEET 1 OF 2 DATE: 06/29/05 **REVISED:** SCALE = 1:24000 CONTOUR INTERVAL 20 FEET 2000 3000 4000 5000 6000 7000 FEET 1000 0

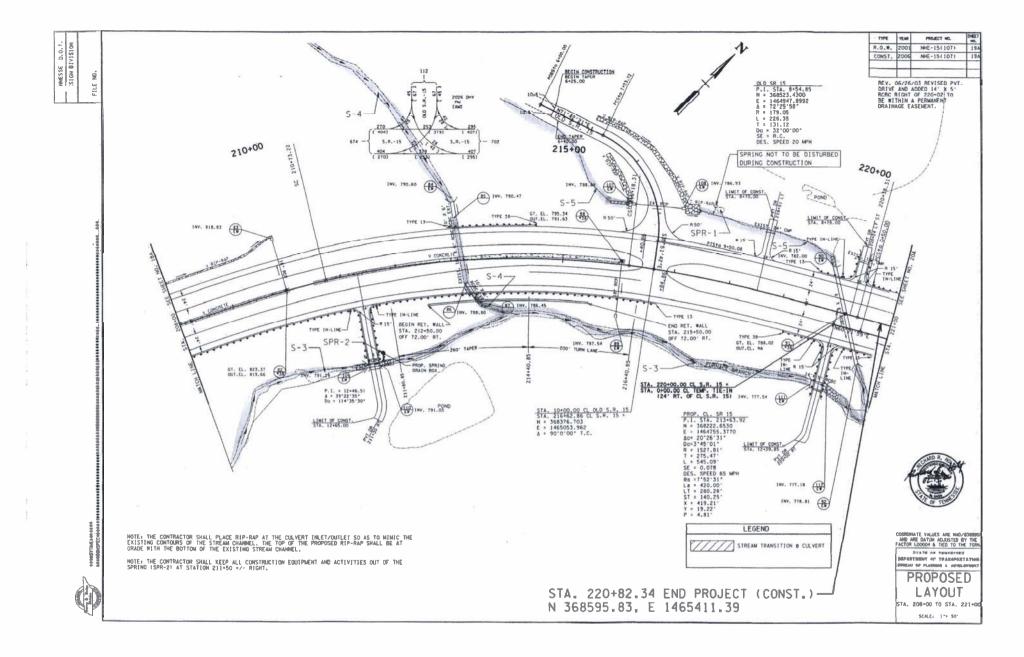




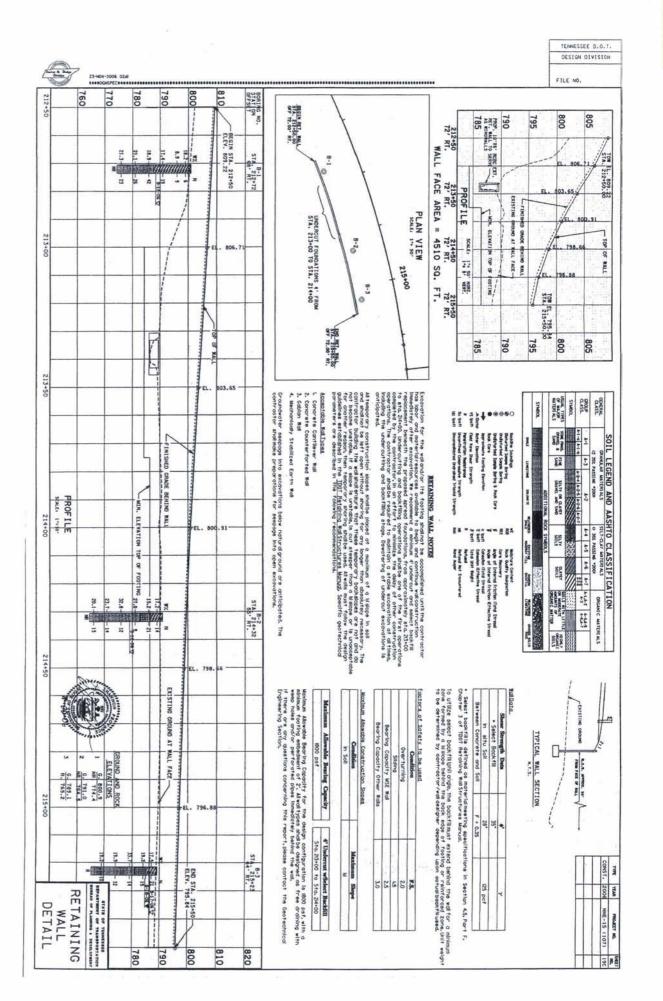
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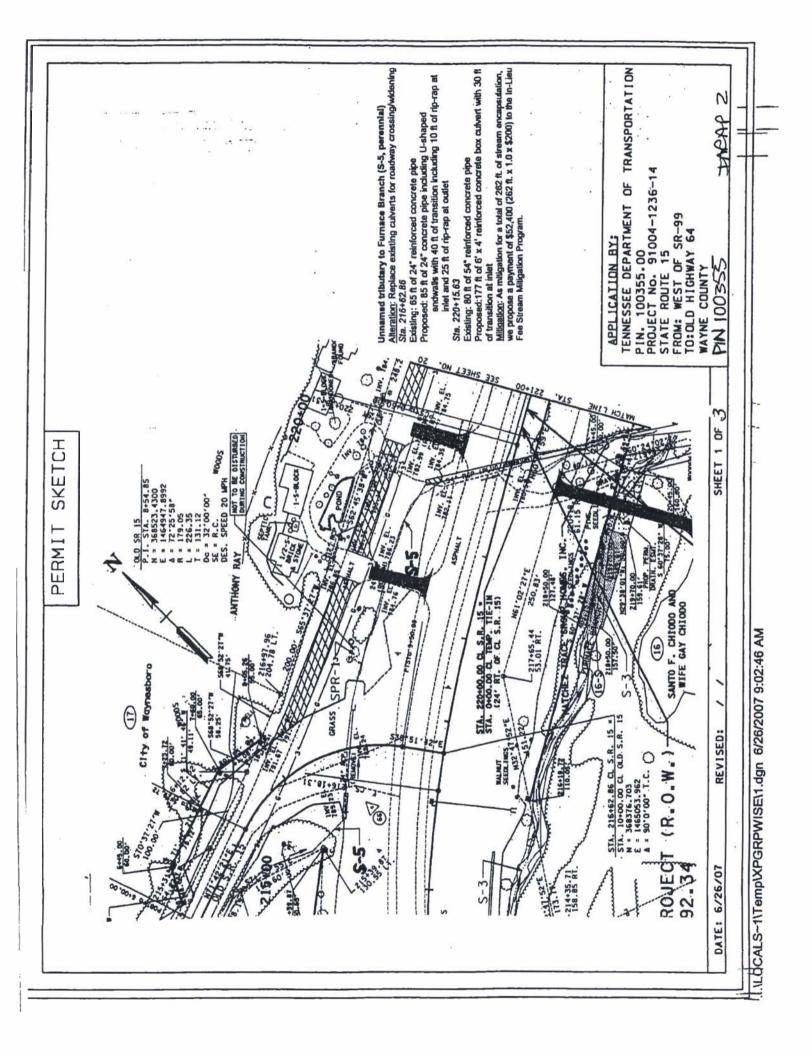






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