Public Notice PERMIT APPLICATION: NRS #06.132

APPLICANT: TDOT

505 Deaderick Street

Suite 900 James K Polk Bldg. Nashville, TN 37243-0339

(615) 253-2477

LOCATION: SR 99 From US41A (SR 6) near Eagleville to west of SR 269

Site 35.7337°N, -86.6016°W Eagleville, Rutherford County

WATERSHED DESCRIPTION: The project is located in the Harpeth River (HUC 05130204) watershed. Impacted will be 9 streams; Kelley Creek, 3 unnamed tributaries to the Harpeth River, Puckett Branch, 1 unnamed tributary to Puckett Branch, 3 unnamed tributaries to Concord Creek and 5.87 acres of wetland, 4.226 acres of permanent fill and 1.64 acres temporary disturbance. Portions of these wetlands are located adjacent to the Harpeth Wetland Bank, LLC property. Land use surrounding SR 99 is rural residential. These streams have been assessed as not supporting their designated uses. USGS Topo Quad: Rover, TN (71-NE) and Chapel Hill, TN (71 NW).

PROJECT DESCRIPTION: This application is for aquatic resource alterations along a 4.587-mile segment of SR 99 including a new intersection and realignment from US41A (SR 6) South of Eagleville to intersect the existing SR 99 near Swamp Road. SR 99 is to be widened along existing alignment from Swamp Road to the five lane already constructed west of SR 269 (Concord Road), however, portions of the old road will be scarified as the new road meanders slightly off the existing road in places. A connector road is to be constructed from the existing SR 99 in Eagleville at the eastern most city limit to the new alignment south of the city limits. The intersection at Mt. Pleasant Road is to be realigned and widened.

Proposed for Stream 1, Kelley Creek, Station 58+55.78, Lat. 35.7385°, Long-86.6320° is a 43ft extension of the existing 3 barrel, 47ft box bridge, with a 25ft transition at the inlet. Also proposed for Kelley Creek are two 4ft wide 2ft deep trapezoidal storm water outfalls upstream of SR 99, one on the left descending bank at Station 58 Rt and one on the right descending bank at Station 58+40 Rt. Kelly Creek is approximately 25ft wide flowing on soil and gravel substrate with limited riparian canopy at SR 99.

Proposed for Stream 5A, unnamed tributary to the Harpeth River, Station 71+50 Rt to 72+30 Rt, Lat. 35.7371°, Long-86.6280° is a 55ft relocation and three sod storm water outfalls. An existing 36-inch diameter metal pipe is to remain in place. The storm water outfalls are to enter this stream on either side of the private driveway. The relocated channel is to be a 2ft wide trapezoidal sod channel with 3:1 side slopes. This stream enters the project area from a drain tile in an agricultural field. The existed channel is trapezoidal, approximately 3ft bottom width and approximately 4 ft deep. The substrate is bedrock with soil, gravel and riprap.

Proposed for Stream 2, unnamed tributary to the Harpeth River, Station 72+18.17 Lat. 35.7371°, Long-86.6277° are two storm water outfalls and a 10ft extension of the existing 2 barrel box bridge with a 20ft transition at the inlet and a 25ft transition at the outlet. The storm water outfalls are to be located on the right descending bank on either side of SR 99. The outfall downstream is to be a 2ft wide, 1 ft deep trapezoidal sod ditch. The outfall upstream is to be a 4ft wide, 2 ft deep trapezoidal sod ditch. It is proposed to disturb up to 10ft of bank for each outfall stabilized with sod. This stream channel is approximately 10ft wide and 5ft deep flowing on cobble and gravel substrate with minimal canopy.

Proposed for Stream 5, unnamed tributary to the Harpeth River, Station 85+33 Lat. 35.7361°, Long-86.6248° are two storm water outfalls upstream of SR 99 and the replacement of the existing crossing at SR 99. The storm water outfalls are to be located on each the left and right descending banks immediately upstream of the proposed 74ft 36-inch concrete pipe under SR 99. This crossing is to have 24ft U shaped endwalls on the inlet and the outlet and a 37ft-riprapped transition at the outlet. It is proposed to disturb up to 10ft of bank for each outfall. This stream flows on soil and gravel substrate with limited canopy, is located approx. 175ft east of Stream 6, and enters the Harpeth River 150ft north of SR 99.

Proposed for Stream 6, unnamed tributary to the Harpeth River, Station 87+00 (Lt) and Station 87+21 (Lt) Lat. 35.7355°, Long-86.6231° are 2 storm water outfalls and a new crossing under SR 99. The storm water outfalls are to be 2ft sod ditches located immediately downstream of SR 99 on each the left and right descending banks. The existing 2 metal pipes under SR 99 are to be removed and replaced with a 76ft, 2 barrel box culvert, each barrel to be 8ft x 4ft. A 30ft rip rapped transition is proposed for the outlet. The right descending barrel is to be the low flow barrel. The right barrel is to be by the installation of riprap and coir rolls. This stream flows on soil and gravel substrate with limited riparian canopy. The stream channel is approximately 4ft wide and 3ft deep discharging the Harpeth River approximately 125ft south of SR 99, which is approx. 200ft from the head of the river.

Proposed for Wetland 1, Station 87+60 Rt to Station 93+70 Rt Lat. 35.7352° Long-86.6229° is the filling of 0.469 acres and temporary impacts to 0.321 acres. The areas of temporary impacts are to be restored to pre disturbance condition. The topsoil is to be removed and stockpiled prior to construction. Post-construction the topsoil is to be graded to pre-construction contours. Proposed as mitigation for the 0.469 acres of wetland fill is debiting of 0.938 credits from the Harpeth Wetland Bank, a 2:1 ratio. The wetland being filled is an emergent wetland is located south of SR 99 adjacent to stream 6.

The springhead of the Harpeth River is located approximately 125ft north on the opposite side of the road from Wetland 1. According to the plans submitted, there are to be no impacts to the spring or the riparian canopy. The plans show that the toe of fill will be

approximately 45ft from this spring. The trees surrounding the spring are not to be impacted.

Proposed for Stream 7, an unnamed tributary to Concord Creek Station 152+69, Lat. 35.7336° Long-86.6017° is a relocation, a storm water outfall and a new road crossing. This stream begins from seeps along the roadside, flows over soil substrate through a metal pipe under SR 99 flowing through farmland to Concord Creek. The proposal is to relocate this first order stream approximately 75ft south into the V sod ditch that will be also used to convey storm water. The channel upstream of the culvert is to be V shaped approx. 3ft deep with 3:1 side slopes. The new crossing is to consist of 2, 70ft long-30 inch diameter concrete pipes with 20ft U shaped endwalls on the inlet and the outlet, and a 30ft riprapped transition on the outlet. A 4ft trapezoidal sod storm water outfall is proposed for Station 152+68 Rt, the left descending bank of stream 7, immediately upstream of the proposed new culvert.

Proposed for Wetland 2, Station 172+50 Rt To Station 175+05 Rt, Lat.35.7388, Long.-86.5944, is the permanent filling of 0.145 acres and temporary impacts to 0.153 acres. Mitigation proposed for the permanent impacts is the debiting of 0.30 acres, a 2:1 ratio at the Harpeth Wetland Bank. The area of temporary wetland impacts are proposed to be restored to preconstruction conditions by removing the topsoil and stockpiling it prior to construction, the regarding to pre construction contours post construction. The wetland being impacted is emergent dominated by herbaceous plant species.

Proposed for Wetland 3, Harpeth Wetland Bank, LLC property, Station 172+40(Lt) to Station 175+40 (Lt) Lat.35.7334, Long.-86.5944, is the permanent filling of 0.293 acres and temporary impacts to 0.178 acres. Proposed mitigation for permanent wetland impacts is the debiting of .586 acres from the Harpeth Wetland Bank, a 2:1 ratio. The areas of temporary impacts are to be restored to preconstruction condition as stated previously.

Proposed for Stream 8, an unnamed tributary to Concord Creek, Station 177+74 Lat. 35.7327° Long-86.5931° is a relocation, two new road crossings, two storm water outfalls, and 65ft of rip rapped lined channel. This stream flows north along the west side of Mt. Pleasant road, crosses under Mt. Pleasant road in a 29ft, 12 inch diameter metal pipe then flows north on the east side of Mt. Pleasant Road through a metal pipe to a channelized 4ft wide 3ft deep trapezoidal channel through the Harpeth Wetland Bank. Proposed is the relocation of the stream to accommodate the new curvature and widening of Mt. Pleasant Road including the removal of the existing pipe on Mt. Pleasant Road. The relocation begins with the transition into the new culvert under Mt. Pleasant Road, approximately Station 16+75Lt. The replacement structure is to be a 38 ft, 24 inch x 14inch metal pipe with 5ft of riprap at the outlet. The stream will discharge from this pipe to a 2 ft wide 1ft deep V sod channel for approximately 175ft, then to the 30ft long 8ft wide 1.5ft deep rip rapped trapezoidal transition for the new SR 99 box culvert. The existing stream crossing on SR 99 is being removed. The stream at this location is be redirected to accommodate the skew of the new intersection. Proposed is an 81ft, 2-barrel box culvert, each barrel to be 8ft wide x 4ft high. The left descending barrel has been designated as

the low flow channel. The right barrel will have riprap and coir rolls installed. At the outfall of the new culvert the stream channel is to be riprapped for 30ft. Two storm water outfalls are proposed at the inlet on the new culvert, on each the left and right banks of the stream. The left bank is to be a discharge from a 30-inch pipe to a 2ftrip rapped channel. The right bank is to be a 2ft trapezoidal sod ditch entering into the rip rapped transition.

Wetland 4, Harpeth Wetland Bank, LLC property, Station 177+80 to Station 182+60, Lat 35.7332°, Long –86.5924° permanent filling of 0.723 acres and 0.207 acres of temporary impacts of wetland. Proposed is restoration to the temporarily impacted area as described previously. Mitigation proposed for the 0.723 acres of wetlands fill is a debiting of 1.446 credits, a 2:1 ratio, from the Harpeth Wetland Bank.

Wetland 5, Harpeth Wetland Bank, LLC property, Station 184+80 to Station 194+70, Lat 35.7336°, Long –86.5092° permanent filling of 2.227 acres and temporary impacts to 0.447 acres of wetland. Proposed is restoration of the area of temporary impacts has described previously. Mitigation proposed for the 2.227 acres of wetlands fill is a debiting of 4.454 credits, a 2:1 ratio, from the Harpeth Wetland Bank. This wetland surrounds Puckett Branch.

Proposed for Stream 3, Puckett Branch, Station 192+15 Lt to Station 195+00 Rt, Lat 35.7334° Long-86.5872°, is a relocation including 182ft of riprap, a new road crossing with overflow, and two storm water outfalls. SR 99 is being scarified and the existing 16'x 20' bridge plus abutments are to be removed. At the inlet of the new culvert, a 90 ft transition is proposed to be a15 ft wide trapezoidal channel with 2:1 rip rapped side slopes. Live willow stakes are to be placed in the riprap on 5-foot centers. The new crossing is to be 132ft, 2 barrel box bridge each barrel to be 18ft x 7ft. The outlet transition is to be a 92ft long, 15ft wide trapezoidal channel with 2:1 rip rapped side slopes. Storm water outfalls are proposed to Puckett Branch at Station 190 Rt, approximately 320ft downstream of the new crossing, and at station 192 Rt, in the upstream transition area. Eight feet of stream loss is anticipated. Proposed is mitigation of \$29,000 to the TSMP; \$1,600 for the eight feet of stream loss, \$27,400 for the 182ft of riprap.

Proposed for Wetland 6, Station 196+15 to Station 199+85, Lat 35.7341°, Long. – 86.5861° permanent filling of 0.369 acres and temporary impacts to 0.334 acres of wetland. Proposed is restoration of the area of temporary impacts has described previously. Mitigation proposed for the 0.369 acres of wetlands fill is a debiting of 0.738 acres, a 2:1 ratio at the Harpeth Wetland Bank.

Proposed for Stream 4, an unnamed tributary to Concord Creek, Station 238+40, Lat.35.7351, Long. –86.5727 are 5 storm water outfalls, a 24ft riprapped transition on the inlet, 16ft riprapped transition on the outlet, and a new crossing. The existing metal pipe under SR 99 is being removed and the road is being scarified at this location. The new crossing is to be L-shaped with the inlet southeast of the current crossing at Station 238+50 Rt. Proposed is a rip rapped 4ft wide, 24ft transition with two right angles at the

inlet, a 24ft U shaped endwall at the inlet, a 70ft, 36 inch diameter concrete pipe 5ft junction box, 42ft, 36 inch concrete pipe, 26ft endwall at the outlet, and a 16ft rip rapped transition at the outlet. Total impacts are 207 ft: structure length is 167ft with 40ft of rip rapped transitions. Storm water outfalls are proposed at Stations 225+50 (Ditch Lane), Station

Total permanent wetland impacts total 4.226 acres. As wetland mitigation, 8.45 credits, a 2:1 ratio, are to be debited from the Harpeth Wetland Bank. Total proposed stream mitigation to the TSMP is \$29,000

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 Stream 5, Station 71+50; Stream 7, Station 152+69; Stream 8 Station 177+74; Puckett Branch (Stream 3) Station 192+15; Stream 4, Station 238+40. Tier evaluations were conducted, showing that these streams were Tier 1.

More details on the proposal can be viewed on the Internet at http://www.state.tn.us/environment/wpc/ppo/arap.

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.



Stream 5A



Stream 5A



Wetland 1



Stream 6



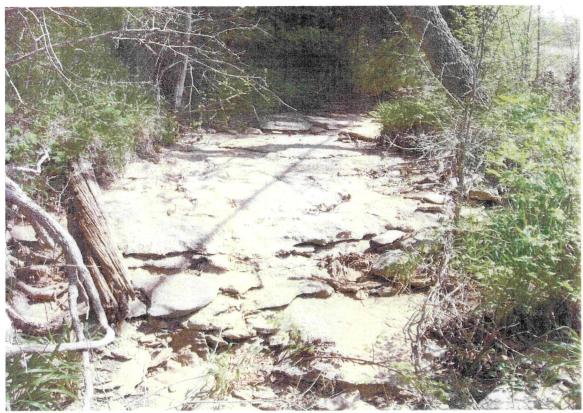
Stream 7



Station 85+33 Lt., Unnamed Tributary to Harpeth River (S-5), photo looking upstream



Station 85+33 Lt., Unnamed Tributary to Harpeth River (S-5), photo looking downstream



Stream S-4, looking upstream

