

SUMMARY OF IMPACTS
KY 32 (Brown Ridge Road) Major Widening
Elliott County, Kentucky
KYTC Item No.: 9-88022.00

Anticipated impacts and compensatory mitigation associated with the project are described below in more detail and summarized in the provided Table 1: Summary of Impacts.

Project Purpose: The purpose of this project is to improve horizontal, vertical, and width deficiencies within a portion of KY 32 between approximate mile points 9.2 and 10.2.

Project Description: The proposed project involves the major widening/curve correction of KY 32 (Brown Ridge Road) southeast of Sandy Hook, Elliott County, Kentucky. The project includes the major widening/curve correction of a 1.0-mile section of KY 32 from 9.2 to 10.2-mile marker.

Piping/Culverts and Roadway: The widening of KY 32 will result in permanent impacts to 872 linear feet (0.100-acre) of perennial stream, 1,127 linear feet (0.085-acre) of intermittent stream, and 0.228-acre of wetland associated with construction activities. Roadway construction includes grading, filling, ditching, piping, paving, and guardrail installation.

Temporary Construction Access: Heavy equipment may need to enter project streams during construction of the proposed roadway. Once construction activities are complete, all temporary work pads, coffer dams, fills, etc. will be removed in their entirety and the affected areas will be returned to pre-construction elevations. Construction access activities are expected to result in temporary impacts to approximately 362 linear feet (0.037-acre) of stream.

Water Control Structures: The use of a coffer dam(s) may be necessary during construction of the pipes/culverts to isolate the work area and minimize stream impacts.

Temporary Impacts Restoration Plan: Temporary fills and, if necessary, cofferdams will be installed to maintain normal downstream flows and minimize flooding to the maximum extent practicable. All temporary fill will consist of shot rock or rip rap and be placed in a manner that will not be eroded by expected high flows. All temporary fills will be removed in their entirety and the affected areas will be returned to pre-construction elevations.

Logging Disturbance: Portions of the Prewitt parcel were extensively logged in the spring of 2025, prior to KYTC right-of-way acquisition. Logging activities (skidder roads) within the proposed roadway "disturbance limits" include approximately 342 linear feet (0.020-acre) of intermittent stream (S-04 and S-08), 123 linear feet (0.011-acre) of ephemeral stream (S-05), and 0.146-acre of wetland (W-1).

Compensatory Mitigation: The KYTC proposes to compensate for unavoidable impacts to streams 1, 4, 10, 14, Butcher Branch (1,384 linear feet) and wetlands (0.228 acre) through the purchase of credits from an approved mitigation bank(s) in the service area and/or the in-lieu fee (ILF) program. See Appendix F for photographs of impacted waters requiring mitigation.

Stream – Unavoidable impacts to intermittent (512 linear feet), and perennial (872 linear feet) Waters of the United States (WOTUS) will require compensatory mitigation totaling 537.7 Ecological Integrity Units (EIU) credits, if purchased or debited through an approved mitigation bank/advanced site. A RIBITS search on July 23, 2025 identified two mitigation banks with available stream credits in the Big Sandy River primary service area. If approved bank credits are unavailable at letting, the KYTC proposes to purchase EIU credits from the ILF program administered by the Kentucky Department of Fish and Wildlife Resources (KDFWR). This includes a 20 percent increase for temporal loss required when purchasing credits from the ILF program. As such, the required credit purchase will total 645.2 for impacts to intermittent and perennial streams. Table 1 below summarizes the proposed project’s stream impact EIU calculation.

Table 1. Mitigation Summary for Impacted Jurisdictional Streams

Feature Name	Flow Regime	Impact Length (l.f.)	Avg. Impact Width	Acreage of Impact	Impact Type	EII	EIU's for Mitigation
S-01	Intermittent	260	5	0.030	Piping/Ditching	0.49	127.4
S-04	Intermittent	170	2	0.008	Fill	0.35	59.5
S-10	Intermittent	46	3	0.003	Piping	0.48	22.1
S-14	Intermittent	36	2	0.002	Ditching/Piping	0.41	14.8
Butcher Branch	Perennial	872	5	0.100	Ditching/Piping	0.36	313.9
						Total	537.7

Wetland – Unavoidable WOTUS wetland impacts (0.228-acre) requiring compensatory mitigation total 0.5 Adjusted Mitigation Unit (AMU) if an approved wetland mitigation bank is available. A RIBITS search, accessed July 23, 2025, returned no wetland bank in the Big Sandy River service area, but should one become available prior to project letting, the KYTC will provide mitigation via purchase from the approved mitigation bank. Therefore, the KYTC proposes to provide mitigation for unavoidable impacts to these features via purchase of wetland credit from the Wetland ILF program administered by the KDFWR. A 20 percent increase for temporal loss is required when purchasing credits from the ILF program; thus, the required credit purchase will total 0.5 AMU credit. See attached RIBITS credit search report. Table 2 below summarizes the proposed project’s wetland impact AMU calculation.

Table 2. Mitigation Summary for Impacted Jurisdictional Wetlands

Feature Name	Classification	Acreage of Impact	Impact Type	AMU's for Mitigation
W-01	PEM	0.228	Fill	0.5
			Total	0.5