

ENVIRONMENTAL STUDIES FINDINGS

IMPROVEMENTS TO SH-4 NEAR BRIDGE CREEK & TUTTLE, OK BETWEEN THE H.E. BAILEY TURNPIKE (I-44) & SH-37 GRADY COUNTY J/P 35161(04)

The project area was assessed for environmental resources or conditions that pose any type of problems. The following is a summary of known environmental challenges in the project area:

Waters and Wetlands:

In a nutshell: No adverse impacts are expected. A permit may be required because of potential stream and wetland impacts.

More in depth: The proposed project could cross several streams and tributaries. Any new stream crossings will incorporate water quality protection best management practices to prevent erosion and keep sediment out of the creeks. New and modified crossings would be subject to U.S. Army Corps of Engineers permitting under Section 404 of the Clean Water Act with a Nationwide General Permit. No significant, permanent adverse impacts to waterbodies are expected.

Threatened and Endangered Species:

In a nutshell: A habitat review was completed and threatened and endangered wildlife species were identified in the project area. No adverse impacts to protected species are expected.

More in depth: Habitat reviews were conducted for federally listed threatened and endangered species, as well as for other protected bird species. There are several protected species of birds, bats, fish and insects potentially located within the study area or general vicinity, but there was no designated critical habitat. Consultation with the U.S. Fish and Wildlife Service was conducted and it was determined that no permanent adverse impacts to protected species are anticipated.

Cultural Resources:

In a nutshell: A study to determine the effects on cultural resources was completed. No effects on cultural resources are anticipated.

More in depth: No potentially significant historic or pre-historic sites or properties were found within the project area during the study. ODOT completed the Section 106 consultation on behalf of FHWA and determined the project will have no effect on cultural resources. ODOT also consulted with the following tribes: Apache Tribe, Chickasaw Nation, Comanche Nation, Fort Sill Apache Tribe, Kiowa Tribe, Osage Nation, Quapaw

Nation, and Wichita and Affiliated Tribes. The Chickasaw Nation, Comanche Nation, and Quapaw Nation responded that there will be no adverse effects from the project.

Hazardous Materials:

In a nutshell: A full hazardous materials study was completed by ODOT. No impacts are expected.

More in depth: Hazardous materials and waste related impacts were determined by evaluating the regulatory database reports, assessing the Oklahoma Corporation Commission's (OCC) records, reviewing the Oklahoma Water Resources Board's (OWRB) well databases, and by performing a field study. Some areas were identified that could pose an environmental risk within the proposed project footprint and adjacent to the study area. ODOT determined that these sites are not considered to be high risk. No significant adverse impacts are anticipated.

Floodplains:

In a nutshell: Portions of the project are located within a floodplain. Any development or fill within a floodplain area may require permitting.

More in depth: During large rain events and wet seasons, the floodplain helps to manage flood waters and prevent impacts to homes and property. ODOT will avoid or minimize any impact to an acceptable level. Any development or fill within a floodplain area may require permitting.

Noise: A traffic noise analysis was performed for this project which identified impacted residents along the corridor. A traffic noise impact occurs when future predicted exterior traffic noise levels approach by one decibel (dB), meet or exceed any of the FHWA Noise Abatement Criteria (NAC), or when there is a substantial noise increase where future levels exceed current levels by 15 dB or more.

As planned, the proposed SH-4 improvements will have traffic noise impacts. Noise mitigation in the form of a free-standing noise wall within five feet of the project right-of-way is considered the most appropriate noise abatement measure for those identified impacted receptors. Nine (9) receptors have direct driveway access to SH-4. Without access control, the gap that would be required for the driveway connection access would make noise abatement measures ineffective, and therefore, a noise wall would not prove feasible. Two (2) other receptors were evaluated but mitigation was not feasible or reasonable. The barrier analysis results indicated that mitigation proved insufficient due to the inability to reduce the required noise levels with a noise wall 741 feet long and 20 feet high per the ODOT noise policy.