

Oklahoma Department of Transportation

Environmental Programs Division

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Documented Categorical Exclusion (DCE) for I-40: Pavement Reconstruction and Added Lanes from the Douglas Interchange, Extend East 5.0 Miles Oklahoma County Project Number J3-1011(005), J3-1011(006), J3-1011(007) JP Number 31011(05)(06)(07)

Existing Conditions and Purpose and Need for the Action

Existing I-40 from east of Douglas Boulevard to I-240 is a four-lane divided interstate highway with limited access. Existing I-40 has four 12-foot-wide driving lanes with 10-foot-wide outside shoulders, 4-foot-wide inside shoulders, and a center grass median between 30 and 32 feet wide. There are eight bridges within the current project. The existing bridge carrying Post Road over I-40 (NBI 15552) is 28 feet wide and has a vertical clearance of 16.5 feet. This bridge has a sufficiency rating of 59.4 and is listed as functionally obsolete. The existing bridge carrying Westminster Road over I-40 (NBI 15544) is 24 feet wide and has a vertical clearance of 16.4 feet. This bridge has a sufficiency rating of 54.7 and is listed as functionally obsolete. The two existing bridges carrying I-40 over Anderson Road (NBI 15524 and 15525) are 38 feet wide and have vertical clearances of 14.8 feet. The eastbound bridge (NBI 15524) has a sufficiency rating of 96.8 and is not listed as structurally deficient. The westbound bridge (NBI 15525) has a sufficiency rating of 95.8 and is not listed as structurally deficient. The existing bridge carrying I-40 over Hog Creek (NBI 15473) is a 208-foot long reinforced concrete box (RCB) with a 3-foot additional curtain wall. This structure has a 34-foot clear roadway width and has a sufficiency rating of 83.0 and is not listed as structurally deficient. The existing bridge carrying SE 59th Street over I-40 (NBI 15563) is 24 feet wide and has a vertical clearance of 16.4 feet. This bridge has a sufficiency rating of 66.2 and is listed as functionally obsolete. The two existing bridges carrying I-40 over I-240 Westbound (NBI 15554 and 15555) are 38 feet wide with vertical clearances of 17.4 feet. The eastbound bridge (NBI 15554) has a sufficiency rating of 84.8 and is not listed as structurally deficient. The westbound bridge (NBI 15555) has a sufficiency rating of 84.8 and is not listed as structurally deficient.

The current (2015) traffic on this segment of I-40 (east of Douglas Boulevard) is 22,230 vehicles per day (vpd) with a 2045 projected traffic of 31,620 vpd. Level of Service (LOS) on the existing highway is currently LOS D. With no improvements, future LOS would degrade to F. Collision rates within the project area are also substantial; 677 accidents were documented between 2006-2016, including 10 fatalities. The fatal accident rate on this section of I-40 is over twice the state average for similar facilities.

The purpose of the project is to accommodate existing and future traffic demand and provide adequate vertical clearance under bridges. The project is included in the 2015-2018 Statewide Transportation Improvement Program (STIP). The project is also included in the ODOT 2017-2024 8-Year Construction

Work Plan.

Prior Planning & Alternatives Considered

The current project is part of a larger corridor study currently underway by ODOT for I-40 from I-35 to I-240. Improvements considered as part of this larger study include widening of I-40, improvements to interchanges, and various frontage road concepts. For the current project segment of I-40, additional driving lanes and improved vertical clearance under bridges were found to be needed improvements. Because the majority of the surrounding land use in this portion of the corridor is residential, no frontage roads are needed in this section of I-40. On the west this project ties to improvements at the I-40/Douglas Boulevard interchange, currently under design, and on the east this project ties to improvements at the I-40/Choctaw Road interchange (scheduled for construction in 2017).

Several alternatives were considered for the widening of I-40 within the current project limits and the correction of the substandard vertical clearances at Post Road, Westminster Road, and Anderson Road. Widening to the middle was selected as the preferred alternative because this allows the improvements to be accomplished without the need for additional right-of-way and reduces the impact to adjacent properties. To correct the vertical clearances, alternatives included lowering I-40 or raising/replacing the existing bridges. At Post Road, lowering the profile of I-40 is preferred because it provides the needed vertical clearance without requiring work on the bridge, which is a cost savings and eliminates the need to close Post Road. The raising of the bridge at Westminster Road is preferred over replacement as a way to reuse the adequate bridge structure which saves cost and minimizes disruption to the traveling public. It is preferred to replace the bridges on I-40 at Anderson Road because they will need to be wider in addition to taller to accommodate the additional lanes on I-40.

Description of Proposed Action

The proposed project will reconstruct and widen I-40 from 4 to 6 lanes beginning 0.56 mile east of the Douglas Boulevard Interchange through the I-240 Interchange, a total distance of 4.86 miles. The typical section proposed for this project is consistent with the adjacent projects. The widening will be primarily to the inside to remain within existing right-of-way. The outside shoulder will be maximized to the required 10-foot width as much as possible without acquiring additional right-of-way; any deviation from this required 10-foot shoulder width would require a design exception. I-40 will be lowered approximately 6 inches in the vicinity of Post Road to provide adequate vertical clearance under the Post Road bridge (NBI 15552). The Westminster Road bridge (NBI 15544) over I-40 will be raised approximately 1 foot to provide adequate vertical clearance over I-40. The bridges on I-40 over Anderson Road (NBI 15524 and 15525) and on I-40 over the WB I-240 ramp (NBI 15554 and 15555) will be replaced to accommodate the proposed 6-lane I-40 roadway and to tie into the adjacent I-40/Choctaw Road project to the east [JP 20324(04)]. No additional right-of-way will be required. Two lanes of traffic on I-40 will be maintained at all times during construction. Post Road, Anderson Road, and I-240 will also remain open during construction. Westminster Road will require a temporary closure while the bridge is raised. Access to all properties will be maintained at all times.

Public Involvement & Agency Solicitations

ODOT initially notified one potentially affected property owner of the project by letter in October 2016. This letter notified the property owner that ODOT intended to widen the highway and informed the property owner that environmental investigations would be performed.

The Oklahoma Department of Transportation (ODOT) held a public meeting about the project on February 21, 2017. Notification of the meeting was provided by letter to all federal and state resource agencies, Indian tribes, elected officials, local government officials, utility owners, local school districts, emergency service providers, and medical facilities in the project area. The meeting was also advertised

by dynamic message boards along I-40. Sixty-six people signed in for the meeting, including representatives from ODOT and their consultants and the public. The meeting included a presentation about the project and was followed by a question and answer period. Display boards of the proposed project area were available for viewing. ODOT received six (6) written comments from agencies and three (3) written comments from the public. Three of the agency comments had no objections to the project. One identified a plugged well in the area, one included a recommendation to notify the FAA of the construction, and one was related to minimizing erosion and sedimentation in streams. Public comments included requests to include 2-lane ramps at Anderson Road and at Choctaw Road, improving safety, drainage, and access at Choctaw Road, and widening Anderson Road.

ODOT considered and responded to all comments, and posted those responses on the ODOT website. ODOT will complete the required notification to FAA if required. ODOT will minimize impacts to streams as much as possible. Two-lane ramps at Anderson Road will be investigated if there is sufficient right-of-way. The Choctaw interchange is scheduled for construction in 2017 and will include 2-lane ramps, traffic signals, and adequate drainage. Access to the I-40/I-240 interchange from Choctaw Road will be improved. The new bridges on I-40 over Anderson Road will be long enough to accommodate widening of Anderson Road underneath. ODOT will work with the City of Oklahoma City to address improvements on Anderson Road.

The project does not have any substantial public controversy on environmental grounds.

Social, Economic, and Environmental Impacts & Agency Coordination

Right of Way and Relocations

The project has no additional right-of-way.

Environmental Justice

There will be no impacts to properties and no high or adverse impacts to the surrounding populations will occur. Therefore, disproportionately high or adverse impacts to environmental justice populations are not anticipated.

Cultural Resources

On behalf of FHWA, the Department has completed a screened exemption project review and determined that the proposed project has no potential to affect historic properties.

Section 4(f) and Section 6(f) Involvement

The action does not involve the use of properties protected by Section 4(f) of the Department of Transportation Act (49 U.S.C. 303).

Waters and Wetlands

The action involves work in Hog Creek and two tributaries, and in a tributary to Soldier Creek, which exhibit the characteristics of jurisdictional waterways (and potentially jurisdictional wetlands). The proposed construction activities will be evaluated to ensure that the appropriate Clean Water Act Section 404 permit application is made.

Threatened & Endangered Species, Bald Eagles, and Migratory Birds

A biological field review was performed for the referenced project. The Department has determined that the project, as proposed, will have no effect on the federally-listed Interior Least Tern, Whooping Crane, Piping Plover, and Red Knot. The U.S. Fish and Wildlife Service (USFWS) has concurred with the Department's findings.

The project as proposed could adversely affect Cliff (and/or Barn) Swallows, a species protected by the Migratory Bird Treaty Act (MBTA), if construction activities occur during the nesting season of this species. A Cliff (and/or Barn) Swallow plan note requiring avoidance of demolition or construction of any existing structures with swallow use during the nesting season will be added to the final construction plans.

Floodplains

The project is located in located in a regulatory floodway. However, the proposed project will not require a flood map revision as determined by the appropriate state or local authority.

Farmlands

The action occurs within existing right-of-way or in an urban area. Hence the project will not affect any farmlands. No coordination with the Natural Resources Conservation Service was performed.

Hazardous Waste

There are no known hazardous materials sites or previous land uses with potential for hazardous materials remains within the proposed action area.

Changes to Access or Access Control

The project does not involve any permanent changes to the operation of an Interstate highway, associated interchanges, or ramps.

Temporary Construction Impacts

I-40 will remain open to through traffic. Westminster Road will be closed to through traffic for a short period (60-90 days) while the bridge over I-40 is raised.

Noise

A traffic noise analysis was performed using the FHWA's computer model Traffic Noise Model (TNM) version 2.5 in accordance with the FHWA 23 CFR 772 and complies with the ODOT Policy Directive Highway Noise Abatement C-201-3 dated July 13, 2011. Using a precision sound level meter, field measurements were performed along the existing roadway for purposed of validating the noise model, which proved successful.

The land uses along the project extent are predominantly residential. The noise sensitive land uses for this project are considered to be single family residences as Noise Abatement Criteria (NAC) Activity Category B in which an impact occurs at 66 dB(A) Leq(h) or greater. Eighty-nine (89) model receiver sites were analyzed. For the existing (2015) condition, thirty-eight (38) residential receptors are impacted. Based on the proposed project and future traffic volumes (design year 2045), fifty-six (56) residential receivers are expected to be impacted. No receivers will experience a 15-decibel increase in noise levels over the current condition, with the highest increase being 5.4 dB.

Noise abatement in the form of free-standing noise walls was considered for the impacted residential receivers identified. Twelve (12) noise walls were evaluated at various heights and lengths placed 15 feet inside highway right-of-way within seven (7) designated Noise Assessment Areas (NAA). The results of the analyses indicated that with wall heights ranging from 17 feet to the maximum allowed height of 22 feet, mitigation proved not feasible and/or reasonable in accordance with ODOT noise policy. In summary, installation of noise walls would not be effective primarily due to factors such as long distances between the receptors and the noise wall, insufficient number of benefitted receptors, and/or the scattered nature of receptor locations, all of which resulted in either a high cost per benefitted receptor or not

attaining the acceptable reduction of future noise levels. Therefore, noise mitigation is not recommended for this project.

Other Permits & Coordination

The action may require notifying the Federal Aviation Administration (FAA) of proposed construction via FAA Form 7460-1 prior to construction, in accordance with 14 CFR 77.13-77.17 due to the location of Tinker Air Force Base within 4 miles of the project location.

Summary of Commitments

- 1. ODOT will obtain a design exception from FHWA if the outside shoulder on I-40 will be less than 10 feet in width.
- 2. Plan notes requiring construction season restrictions for the following species will be added to the final project plans under "Environmental Mitigation Notes" per policy Directive C-201-2D(2). (List species below)
 - Migratory Birds: Migratory birds are protected by the federal Migratory Bird Treaty Act. Many birds commonly use bridges and culverts for nesting. The nesting season for most migratory bird species extends from April 1 to August 31. Migratory bird nesting use of five of the structures involved with this project was observed. These five structures include a reinforced concrete box (RCB) at Sta. 395+00, a RCB at 436+00, a RCB at 451+00, a RCB at 467+60, and at Bridge NBI 15473. Painting, repair, retrofit, rehabilitation or demolition of the existing bridges/structures shall be conducted between September 1, and March 31, when migratory bird nests are not occupied. If painting, repair, retrofit, rehabilitation or demolition cannot be completed between September 1 and March 31, the bridge shall be protected from new nest establishment prior to April 1, by means that do not result in bird death or injury. Options include the exclusion of adult birds from suitable nest sites on or within a structure by the placement of weather-resistant polypropylene netting with 0.25-inch or smaller openings, prior to April 1. Methods other than netting must be preapproved by the ODOT Biologist.
- 3. The action may involve work in potentially jurisdictional waters and potentially jurisdictional wetlands. The 404 permit application form needs to be submitted by the Designer through Project Management Division to Environmental Programs Division at the time of Right-of-Way submittal for evaluation and determination of the appropriate Clean Water Act Section 404 permit for the project.
- 4. The following Airport/Airfield is located within 4 miles of this project. This action may require notifying the Federal Aviation Administration (FAA) of proposed construction via FAA Form 7460-1 prior to construction: Tinker Air Force Base

Conclusions

The Oklahoma Department of Transportation (ODOT) has completed the environmental analysis and review of the referenced project. ODOT has determined that this project does not individually or cumulatively have a significant impact on the environment as defined by NEPA, or involve unusual circumstances as defined in 23 CFR 771.117(b), and is therefore excluded from the requirements to prepare an Environmental Assessment or Environmental Impact Statement. As provided by the 2011 Federal Highway Administration (FHWA)/ODOT Programmatic Agreement Processing of Categorical Exclusions, FHWA has previously determined that processing this action as a Documented Categorical Exclusion (DCE) is appropriate. Based on consideration of prior planning studies, appropriate agency solicitation, thorough environmental review, and public coordination, ODOT has determined that this action results in no significant impacts to the human and natural environment, involves no public controversy on environmental grounds, and no inconsistency with any federal, state or local laws,

regulations, and administrative determinations relating to the environment. FHWA concurrence with this finding is requested.

All documentation, analyses, and agency coordination regarding this Categorical Exclusion are contained in a supporting appendix maintained in the project file at the Oklahoma Department of Transportation, Environmental Programs Division.

Preparer/Reviewer Signatures	
Luoncely	12/8/2017
Environmental Consultant Project Manager (If Applicable)	Date
GARVER	
Environmental Consultant Firm Name (If Applicable)	
N/A	N/A
County Commissioner or City Manager (For County Local Government or City Projects)	Date
Rachel Hamigan	1/5/2018
ODOT Environmental Project Manager	Date
gh-	1.8-18
Assistant Environmental Programs Division Engineer	Date
XVV XVVV	1/8/18
Environmental Programs Division Engineer	Date
Concurrence that this project qualifies for a Documented Categorical Exclusion:	
Karensio Orton	1/12/18
Environmental Programs Manager, FHWA	Date
Attachments: Memos with Plan Notes	

Location Map

Plans/Study Footprint

Studies

DCE Justification Document

Distribution List (Check Applicable Ones)

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