Date

**CATEGORICAL EXCLUSION DETERMINATION**

*[Per 23 CFR 771.117(d)]*

**Job Number:** J012345 **Route:** Route XXX **County:** XXX

**Project Description:** MoDOT plans to construct an approximate 0.84-mile northbound passing lane on Route XX, north of the town of XXX for improved safety and traffic flow. The terrain in the area is extremely hilly and the road is particularly curvy limiting travelers the ability to safely pass. Therefore, two horizontal curves located within the passing lane limits will be straightened to further enhance safety.   There is increased freight traffic from added industry in XXX City and the town of XXX and numerous serious accidents have occurred on this segment of Route 37. The new passing lane will ease congestion and backups, prevent delays, and reduce the circumstances that cause collisions along this stretch of road. Slower moving vehicles will be provided a safe lane in which to travel, thereby reducing conflicts between slower moving traffic—particularly heavy trucks—and passing vehicles. A Google Earth kmz file of the project location was submitted with this document.

The project begins at the northern terminus, approximately 500 feet south of Farm Road 2228, at Station 771+14.33. See the attached *Plan Sheet 7*. This location was chosen because it provides ample length for a passing lane in this area. This length also allows the passing lane to tie-in at a straight tangent, creating a smoother roadway transition.

The project ends 500 feet north of XXX city limits at Station 815+75. See the attached *Plan Sheet 8*. This section of Route XX was selected as the logical southern terminus because it offers a higher speed limit where there is a greater need to pass, and minimizes impacts to the residential area within the XXX community.

The proposed improvements to this 0.84-mile segment would be similar to those that have been made north and south of the project limits; therefore, providing consistency for its users throughout the entire corridor.

The project requires 5.4 acres of new right of way for pavement widening to construct the northbound passing lane and for straightening roadway curves.

It is programmed in the 2019-2023 Statewide Transportation Improvement Program (STIP).

**Current ADT:** 5,679 (2020) **Future ADT:** 6,406 (2038)

**Right-of-Way Required in Acres:** New right of way………….…………….5.40

Permanent Easements……………….0.00

Temporary Easements..……………..0.00

**Displacements (Type and Number):** Residential— 0 Commercial—0

**Socioeconomic/Community Impacts:** Executive Order 12898—Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, enacted in 1993, requires each federal agency make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects to minority and low-income populations.

*Demographics*

The project corridor is within Census Tract XXX Block Group XXXX. The study area to assess community impacts is defined as the project limits plus a 0.25-mile radius buffer around the project corridor. MoDOT’s environmental specialist reviewed the study area using the online EJScreen mapping tool provided by the U.S. Environmental Protection Agency (EPA), and 2019 estimated data from the U.S. Census Bureau Quick Facts. The population of the project study area is 62. Percentages of minority populations in the project study area are lower than the state, county, and overall block group. Percentages of low-income populations in the project study area are significantly higher than the state, county, and block group.

The study area was also assessed for limited English proficiency. A household with limited English proficiency, also referred to as a linguistically isolated household (LIHH), is one in which no member 14 years of age or older speaks only English or speaks English “very well”. Of the population age 5 years and over within the study area, 100 percent speak only English, higher than the state, county, and block group. The project does not require any displacements.

See the *Environmental Justice Populations* table below, which summarizes the data on the following page.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ENVIRONMENTAL JUSTICE POPULATIONS** | | | | |
|  | **Missouri** | **XXX County** | **Census Tract XXX**  **Block Group XXXX** | **Project Study Area**  Project limits + 0.25-mile radius |
| Total Population: | 6,113,532 | 35,668 | 1,308 | 62 |
| \*Minority: | 20.5% | 14.7% | 6.73% | 6.0% |
| †Poverty: | 13.4% | 16.1% | 10.78% | 49.0% |
| Age 5+ English Speaking Only: | 94.0% | 91.1% | 98.0% | 100% |

*\*Minority – non-white and/or Hispanic*

*†Poverty – income below the current poverty rate*

Most of the residents in XXX County—approximately 73 percent, live in rural areas and the project corridor itself is rural. Route XXX through XXX County includes six communities. From north to south these are XXX, XXX, XXX, XXX, XXX, and XXX. According to the U.S. Census Bureau American Community Survey (ACS), XXX County and all six of these communities on Route XXX experienced population increases between 2000 and 2014. See the *Populations 2000-2014* table below.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **POPULATIONS 2000-2014** | | | | |
| **Jurisdiction** | **2000 Population** | **2014 Population** | **2000-2014**  **# Change** | **2000-2014**  **% Change** |
| XXX County | 34,010 | 35,681 | 1,580**↑** | 4.56**↑** |
| XXX | 7,396 | 8,935 | 1,539**↑** | 20.8**↑** |
| XXX | 1,103 | 1,253 | 150 **↑** | 13.6**↑** |
| XXX | 397 | 524 | 127 **↑** | 32.0**↑** |
| XXX | 2,890 | 3,275 | 385 **↑** | 13.3**↑** |
| XXX | 448 | 622 | 174 **↑** | 38.8**↑** |
| XXX | 887 | 1,099 | 212 **↑** | 23.9**↑** |

The XXX Transportation Advisory Committee (TAC) named this project as its 2019-2020 top priority for the 10-county region because of the increased traffic and consequent safety improvement needs in the area. The TAC serves in an advisory capacity to the RPC/COG for determining transportation needs for the region, which are then incorporated into MoDOT’s STIP.

*Traffic Impacts*

Constructing the new passing lane and straightening roadway curves will not require total road closure and detours. Flagging operations will control traffic during construction. At the tie-ins for the passing lane, construction staging or selected asphalt milling and wedging will temporarily maintain at least one lane of traffic at all times and two lanes prior to the end of each day’s construction. MoDOT will issue press releases to notify the public two weeks prior to construction. Changeable Message Sign boards will alert traffic to temporary lane changes and closures.  The district will post the project on its public website and on the Traveler’s Information Map. The construction contract will include a Traffic Management Plan for responding to temporary disruptions in travel patterns and travel time.

* **Commitment:** MoDOT will not implement any total road closures and detours during construction of the passing lane and curve straightening. Flagging operations will control traffic during construction. At the tie-ins for the passing lane, construction staging or selected asphalt milling and wedging will temporarily maintain at least one lane of traffic at all times and two lanes prior to the end of each day’s construction. MoDOT will issue press releases two weeks prior to construction. Changeable Message Sign boards will alert traffic to temporary lane changes and closures.  The district will post the project on its public website and the Traveler’s Information Map.

MoDOT will ensure a Traffic Management Plan (TMP) is included in the construction contract to respond to temporary disruptions in travel patterns and travel time. Once developed, MoDOT will assess the impacts of the TMP within the framework of NEPA. If the TMP could result in impacts that were not previously reviewed under NEPA—such as new or additional road closures, access changes, or other circumstances that could cause new or modified impacts to resources, MoDOT’s environmental section will review these impacts prior to implementing the TMP.

* **Commitment:** MoDOT will ensure a Traffic Management Plan (TMP) is included in the construction contract to respond to temporary disruptions in travel patterns and travel time. Once developed, MoDOT will assess the impacts of the TMP within the framework of NEPA.  If the TMP could result in impacts that were not previously reviewed under NEPA—such as new or additional road closures, access changes, or other circumstances that could cause new or modified impacts to resources, MoDOT’s environmental section will review these impacts prior to implementing the TMP.

*Property Acquisitions*

The project requires 5.4 acres of new right of way—2.9 acres to the east and 2.5 acres to the west of Route XX to widen the roadway for constructing the northbound passing lane and for straightening roadway curves. The complete set of right of way plans is available upon request.

|  |  |  |
| --- | --- | --- |
| **PROPERTY ACQUISTIONS** | | |
| **Property Owner Name** | **NEW ROW (acres)** | |
| **Westside of Rt XX** | **Eastside of Rt XX** |
| XXX | 2.5 | 0 |
| XXX | 0 | 0.80 |
| XXX | 0 | 0.60 |
| XXX | 0 | 1.50 |
| **TOTAL** | **2.5** | **2.9** |

MoDOT will conduct right of way acquisitions and provide services to all impacted households without discrimination in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (referred to as the Uniform Act). The Uniform Act and Missouri state laws require just compensation be paid to owners(s) of private property taken for public use. The Uniform Act is carried out in compliance with Title IV (the Civil Rights Act of 1964), the President’s Executive Order on Environmental Justice, and the Americans with Disabilities Act.

An appraisal of fair market value is the basis for determining just compensation offered to the owner for property acquired. The Uniform Act defines an appraisal as a written statement independently and impartially prepared by a qualified appraiser setting forth an opinion of defined value of an adequately described property as of a specific date, supported by the presentation and analysis of relevant market information.

* **Commitment:** MoDOT will conduct right of way acquisitions and provide services to all impacted households without discrimination in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (referred to as the Uniform Act).

*Public Involvement*

On June 12, 2019, MoDOT advertised in the XXX Times and XXX Newspaper and issued a press release to local radio and television stations for a public meeting scheduled on July 10, 2019. Message boards were installed along the project route notifying the traveling public of the meeting. A notice of public meeting was mailed directly to elected officials and to individuals whose properties could be affected by the improvements. Twenty-four people were listed on the sign-in sheet as having attended.

On July 10, 2019, the district held the open house-style public meeting from 4:30 p.m. to 6:00 p.m., at XXX Community Building, in the town of XXX. The *Public Meeting Transcript* is attached. Project information was also posted on MoDOT’s District website and on Facebook and these are attached.

The district presented a larger project at the public meeting under MoDOT Job No. J001234. This included a 32.3-mil- long corridor of safety improvements, consisting of guardrail modifications at Route XX intersection, warning lights at Route XX intersection, left turn lane at Farm Road XX, three culvert extensions between Farm Roads XX and XX, and construction of the northbound passing lane north of the town of XX with roadway curve straightening. However, construction of the passing lane and curve straightening were later separated as a stand-alone project under MoDOT Job No. J012345. These improvements under Job No. J012345 have independent utility and logical termini, and can be constructed more quickly on their own to address the serious traffic conditions in the area.

Two sets of project displays and a strip map were exhibited during the meeting and attendees were provided a flyer describing the project. Comment sheets were available, which could be completed at the meeting or off site. Comments were accepted to July 24, 2019. MoDOT district staff, a XXX County Commissioner, and a representative from the city of XX attended the meeting to address comments and questions about the project. Verbal discussions at the meeting focused primarily on impacts to private property and differences between two proposed options for the Route XX and Route X intersection. No requests were made at the meeting to record a statement. However, sixty written comments were received prior to the July 24, 2019, comment deadline. Generally, the public supports the overall improvements as proposed in the original project. Most of the public comments concerned the Route XX and Route X intersection, which is not included under Job No. J012345. Relative to the northbound passing lane improvements, one person provided written support for the passing lane north of the town of XX. There were no comments against this safety improvement.

*Summary*

Based on MoDOT’s previous public involvement opportunities; no residential or commercial displacements; implementation of the Uniform Act; MoDOT’s plan to effectively minimize temporary impacts during construction; and the safety benefits the new passing lane and roadway curve straightening will provide to all persons traveling through the area, it is determined in accordance with the provisions of E.O. 12898 and FHWA Order 6640.23, that temporary construction impacts and the completed project will not result in disproportionately high and adverse effects on any minority and low-income populations.

**Farmland:** The Farmland Protection Policy Act (FPPA) mandates agencies identify and consider adverse effects of federal projects on farmland. In cooperation with the local Natural Resources Conservation Service (NRCS) office, the act requires assessment for potential conversion of farmland to non-farming purposes for all federally funded projects.

The project corridor is outside of a designated urbanized area according to the 2010 U.S. Census Bureau Urban Area Reference Map, and requires new right of way. Therefore, the project is subject to the FPPA.

On October 22, 2020, MoDOT’s environmental specialist submitted the Farmland Conversion Impact Rating Form AD-1006 to the NRCS for review and response. The AD-1006 form was completed under the original MoDOT Job No. J001234, and included the new passing lane and curve straightening north of the town of XX. On October 30, 2020, NRCS determined the project site did not contain prime or local important farmland. Nothing further is required.

**Section 404 - Wetlands/Streams:** Wetlands are defined (*Federal Register*, 1982) as “Those areas inundated or saturated by surface or groundwater at a frequency and duration to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil condition.” Recognizing the variety of beneficial functions of wetlands, Executive Order (E.O.) 11990 (Wetlands Protection) mandates consideration of wetland impacts, as does Missouri's E.O. 96-03. Further, E.O. 11990 mandates a no-net-loss-of-national-wetlands policy. Section 404 of the Clean Water Act of 1977 authorizes the U.S. Army Corps of Engineers (USACE) to regulate the discharge of dredged or fill material in all waters of the United States, including jurisdictional wetlands.

*Wetlands*

MoDOT wetland biologists reviewed the environmental features within the project limits for the new passing lane and curve realignments using the U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory maps, U.S. Geological Survey topographic maps, and aerial imagery. MoDOT biologists also conducted a field investigation on March 27, 2020. Sources reviewed and the field investigation identified no wetlands in the project limits.

*Streams*

The new passing lane and curve straightening require relocating 2,770 linear feet of a tributary to XX Creek with 0.38-acre of permanent impacts. Impacts to this jurisdictional stream are greater than the 0.10-acre threshold thereby requiring submittal of a preconstruction notification (PCN) to the USACE. Mitigation is also required for these impacts. On October 15, 2020, MoDOT submitted a PCN to the USACE who has 45 days to review the project. Prior to FHWA authorization for construction, MoDOT will purchase approximately 10,953 stream credits from a USACE-approved Stream Stewardship and Trust Fund (SSTF) stream mitigation credit provider or from a mitigation bank to mitigate the impacts to this jurisdictional stream within the project footprint.

MoDOT anticipates that impacts associated with this project will be authorized by Section 404 Nationwide Permit 14—Linear Transportation Projects, through a PCN to the USACE. MoDOT will ensure Section 404 NWP 14 permitting conditions, including the General Conditions within the General Provisions are followed, as well as the provisions specified in the Section 401 Water Quality Conditions.

* **Commitment:** MoDOT will purchase approximately 10,953 credits from a USACE-approved Stream Stewardship and Trust Fund (SSTF) stream mitigation credit provider or from a mitigation bank prior to FHWA authorization for construction, to mitigate the impacts to this jurisdictional stream within the project footprint.
* **Commitment:** MoDOT will ensure Section 404 NWP 14 permitting conditions, including the General Conditions within the General Provisions are followed, as well as the provisions specified in the Section 401 Water Quality Conditions.

**Stormwater/Land Disturbance:**

*Section 402 NPDES (Transportation Separate Storm Sewer System (TS4) Permit)*

Per the Federal Water Pollution Control Act under authority granted to the State of Missouri compliant with Missouri State Law, State Operating Permit MO-0137910 allows MoDOT to discharge stormwater from its TS4 system. MoDOT must develop and implement a comprehensive program to prevent pollution of surface waters from stormwater runoff in regulated municipal separate storm sewer system (MS4) areas, watersheds subject to an approved and effective Total Maximum Daily Load, and Outstanding Nation and State Resource Waters in the state.

According to MoDOT’s MS4 Urban Areas ArcMap GIS layer, the project is outside MoDOT’s TS4 area. Requirements of MO State Operating Permit MO-0137910 do not apply.

*Section 402 NPDES (Land Disturbance Permit)*

MoDOT will adhere to its statewide Operating Permit MO-0137910, Section II Area-Wide Land Disturbance Stormwater Permit Conditions for construction projects with land disturbance greater than or equal to one acre and projects disturbing less than one acre when part of a common plan of development or sale causing land disturbance of one acre or more.

MoDOT’s Operating Permit requires MoDOT implement an on-site Storm Water Pollution Prevention Plan (SWPPP) to prevent or minimize adverse impacts to streams in and adjacent to a project area. The plan describes best management practices and procedures to minimize pollution, suspended solids, turbidity, and downstream sedimentation that may degrade water quality and adversely impact aquatic life.  Stormwater compliance requirements are in the supplemental revisions in every MoDOT construction contract.

This project will involve land disturbance of 1-acre or greater. MoDOT will adhere to its statewide Operating Permit MO-0137910, Section II Area-Wide Land Disturbance Stormwater Permit Conditions for this project.

* **Commitment:** MoDOT will adhere to its statewide Operating Permit MO-0137910, Section II Area-Wide Land Disturbance Stormwater Permit Conditions for this project.

**Floodplain/Regulatory Floodway:** Executive Order 11988—Floodplain Management, and subsequent federal floodplain management guidelines mandate evaluation of floodplain impacts. When available, flood hazard boundary maps produced by Federal Emergency Management Agency (FEMA) and flood insurance studies prepared for the National Flood Insurance Program are used to determine limits of the base floodplain (also known as the one percent or 100-year floodplain) and the extent of encroachment.

FEMA and FHWA guidelines at 23 CFR 650 identify the base flood as the flood having a one percent probability of being equaled or exceeded in any given year. The base flood is the area of one percent flood hazard within a county or community. The regulatory floodway is the channel of a stream in addition to adjacent floodplain areas that must be kept free of encroachment so the one percent flood discharge can be conveyed without increasing the base flood elevation more than a specified amount. FEMA mandates projects cause no rise in the regulatory floodway and a maximum of one-foot cumulative rise for all projects in the base floodplain.

If an action results in development within a floodplain or floodway, agencies are required to minimize potential harm to persons and property and to natural and beneficial floodplain values. FHWA requirements for compliance are outlined in 23 CFR Section 650, Subpart A.

The analysis and findings for this project are summarized in the attached *23 CFR Section 650 Subpart A Technical Memo*.

According to a review of current FEMA flood insurance rate maps for the area of the new passing lane and curve straightening, a portion of the project area is within the 100-year floodplain of intermittent tributary to XX Creek. Roughly 2,100 feet of 100-year floodplain will be impacted by the placement of an embankment along the west side of existing Route XX to construct the new passing lane. See the attachment—*Floodplain Impact Areas*, which includes the FEMA National Flood Hazard Layer Firmette map and project plan sheet showing the areas of impact to the floodplain. The existing channel will be reconstructed to similar grade and size to simulate the existing channel conditions.

Temporary soil disturbance will occur during construction activities. Measures to restore and preserve the natural and beneficial floodplain values will include sediment and erosion control best management practices during construction and disturbed areas will be seeded following construction.

This is not considered significant floodplain encroachment and improvements will not support incompatible floodplain development. The project does not result in a significant potential for interruption or termination of this transportation facility, which is needed for emergency vehicles or a community's only evacuation route. It also does not result in a significant risk or potential for loss of life or property or substantial adverse impact on natural and beneficial floodplain values. This highway improvement project will maintain local and regional access to existing rural and agricultural areas, and surrounding communities throughout construction.

On May 11, 2019, FEMA issued the attached *Floodplain Development Permit*. The project is not mapped in the regulatory floodway; therefore, preparation of a no-rise certification was not required.

* **Commitment:** MoDOT will ensure sediment and erosion control best management practices are implemented during construction and disturbed areas are seeded following construction for restoring and preserving natural and beneficial floodplain values.

**FEMA Buyout Sites:** Disaster Protection Act of 1973, as amended by the Disaster Relief and Emergency Assistance Act of 1988 (The Stafford Act), identified use of disaster relief funds under Section 404 for the Hazard Mitigation Grant Program (HMGP), including acquisition and relocation of flood-damaged property. The Volkmer Bill further expanded use of HMGP funds under Section 404 to “buy out” flood-damaged property affected by the Great Flood of 1993. Numerous restrictions are placed on FEMA buyout properties and processing an exemption from FEMA to use a parcel can require two to three years.

According to the ArcMap GIS FEMA buyout layer, no FEMA flood buyout sites are in or near the project limits. The project will not result in development on any FEMA buyout sites.

**Air Quality:** The Clean Air Act (CAA) requires adoption of air quality standards, quality control regions, and state implementation plans. The federal government established National Ambient Air Quality Standards (NAAQS) to protect public health, safety, and welfare from known or anticipated effects of sulfur dioxide, particulate matter, carbon monoxide, nitrogen dioxide, ozone, and lead. Missouri established additional criteria for hydrogen sulfide and sulfuric acid. Transportation can contribute to four of six NAAQS pollutants: ozone, carbon monoxide, particulate matter, and nitrogen dioxide. Transportation conformity with the NAAQS ensures federally funded or approved transportation plans, programs, and projects conform to air quality objectives established in State Implementation Plans. MoDOT is responsible for implementing the conformity regulation in nonattainment and maintenance areas.

This project is in a non-classified area as defined by the EPA through the CAA. Therefore, conformity requirements of 40 CFR Part 93 do not apply. The project is exempt according to §93.126 and no further action is necessary. The project is not expected to generate large and permanent quantities of air pollutants. Temporary fugitive dust and emissions from construction vehicles and equipment will occur but will be minor.

**Noise:** The 1972 Federal-aid Highway Act required FHWA to develop a noise standard for new Federal-aid highway projects. FHWA Noise Standards give highway agencies flexibility to conform to national requirements. MoDOT’s noise policy on highway traffic noise and construction noise is located in the Engineering Policy Guide at 127.13. It describes MoDOT's implementation of the FHWA Noise Standard requirements contained in 23 CFR Part 772. MoDOT developed the noise policy, which was approved by FHWA.

Primary sources of highway traffic noise are tire-pavement interface, engine noise, and exhaust noise. In very general terms, the lower threshold of highway noise impact is roughly the point at which interference with normal human speech is appreciable.

According to 23 CFR Part 772, construction of the new passing lane and curve realignment meet the criteria to designate it as a Type I project.  Therefore, a noise analysis is required.

On July 29, 2020, MoDOT’s noise specialist conducted a field visit to the project area. The existing field conditions measurement resulted in a Leq (equivalent continuous sound pressure level) of 67.3 dB A (A-weighted decibel). To assess the worst-case noise conditions in the project area, MoDOT’s noise specialist conducted a screening analysis by creating a straight-line model design using the FHWA Traffic Noise Model (TNM 2.5). The projected traffic noise level for the build alternative is calculated at 68.9 dBA, a slight increase from the existing conditions of 67.3 dBA.

Activity Category A is the only applicable Noise Abatement Criteria (NAC) activity category within the study corridor, with the presence of two residences. The noise traffic impacts to these homes exceed the NAC set by FHWA for residences.  However, for noise abatement to be considered feasible, MoDOT requires at least a 5 dBA reduction in highway traffic noise levels to provide noticeable and effective attenuation for a minimum of two, first-row impacted receivers.  The project study area contains only one first-row, impacted receiver—one on each side of the highway; therefore, abatement is determined infeasible.

As is required by 23 CFR 772.19, MoDOT considered the temporary increase in noise levels from construction. Considering the proximity of the nearby residences to the project area, noise from construction vehicles and equipment will be distinct.  MoDOT will limit construction to Monday through Friday, during normal working hours, to the extent possible.

MoDOT construction specifications require all construction equipment be in good working order. Mufflers will be required to help reduce construction noise impacts. Interference with speech communication for those passing by, working, or living near the construction area is to be expected. Overall, noise impacts from construction will be minor and temporary.

* **Commitment:** MoDOT will limit construction to Monday through Friday, during normal working hours, to the extent possible. MoDOT will ensure construction specifications require all construction equipment to be in good working order. Mufflers will be required to help reduce construction noise impacts.

**Cultural Resources/Section 4(f) Historic Sites:**

*Section 106*

Efforts to identify historic properties and assess potential adverse effects have been implemented pursuant to 36 CFR Part 800, Protection of Historic Properties, the regulations implementing Section 106 of the National Historic Preservation Act (16 U.S.C. 470).

*Architecture*

MoDOT Historic Preservation staff completed a cultural resources survey for identifying architectural resources. The area of potential effect (APE) for architecture included the project footprint plus necessary right of way, and a 100-foot buffer for the consideration of direct and indirect effects. One building, a tin roof shed, is within the APE, but is not considered eligible for listing in the National Register of Historic Places (NRHP). No significant architectural resources were identified in the APE.

*Archaeology*

On November 26th and 27th, 2018, and again on February 4th and 5th, 2020, MoDOT Historic Preservation staff conducted an archaeological survey for the proposed passing lane north of the town of XX and the roadway curve straightening. The APE for archaeology included the project footprint and necessary right of way. Based on the survey, no previously recorded sites were identified within the APE. It is MoDOT’s conclusion that Job No. J012345 will not have an adverse effect on any historic properties and should proceed as planned.

On September 10, 2020, MoDOT Historic Preservation staff submitted the attached *Letter to the SHPO* along with the Section 106 Survey Memo detailing the results of the cultural resources investigation for the northbound passing lane and roadway straightening, and requested SHPO’s concurrence with MoDOT’s no historic properties affected recommendation.

On October 10, 2020, the SHPO issued a letter indicating it had reviewed the *Phase I Cultural Resources Survey, MoDOT Job No. J012345*. Further, the SHPO concurred with MoDOT’s recommendation that there will be no historic properties affected for the construction of the passing lane and curve realignment and has no objection to the initiation of project activities. The *SHPO letter* is attached.

*Tribal Consultation*

FHWA must consult with any Native American Indian tribe that may attach religious and cultural significance to historic properties that could be affected by project undertakings.

In the attached *FHWA Tribal Consultation Notification Email* of December 18, 2020, FHWA initiated consultation with the following Tribes: *(list interested tribes).*

On December 19, 2020, the XX Tribe sent the attached *Response Letter* to FHWA stating there are no religious or culturally significant sites in the project area and wishes to continue as a consulting party. On November 20, 2020, MoDOT submitted the Phase I Cultural Resources Survey report and MoDOT’s finding of no historic properties affected to this tribe.

On January 9, 2021, the Tribal Historic Preservation Officer (THPO) of the XX Tribe sent the attached *Response Letter* to FHWA recommending completion of a cultural resources survey and requested a copy of the report. On May 1, 2021, MoDOT responded to the THPO via the attached cultural resources survey.

As of the date of this document, no further comments or requests have been received from any of the tribes.

*Section 4(f) Historic Sites*

Section 4(f) is part of the Department of Transportation Act of 1966 designed in part to preserve privately or publicly owned historic sites. Federally funded actions cannot impact Section 4(f) eligible sites unless there is no feasible and prudent avoidance alternative to the use of the land and the proposed action includes all possible planning to minimize harm to the property resulting from such use, or FHWA determines the use of the property will have a de minimis impact.

No Section 4(f) historic sites will be affected by construction of the new passing lane and curve straightening.

**Public Lands - Section 4(f) and Section 6(f):**

*Section 4(f)*

Section 4(f) is part of the Department of Transportation Act of 1966 designed to preserve publicly owned parks, recreation areas, and wildlife and waterfowl refuges. Federally funded actions cannot impact Section 4(f) eligible sites unless there is no feasible and prudent avoidance alternative to the use of the land and the proposed action includes all possible planning to minimize harm to the property resulting from such use, or FHWA determines the use of the property will have a de minimis impact.

*Section 6(f)*

Section 6(f) is part of the Land and Water Conservation Fund (LWCF) Act is designed to provide restrictions for public recreation facilities funded with LWCF money. The LWCF Act provides funds for acquisition and development of public outdoor recreation facilities that could include community, county, and state parks; trails, fairgrounds, conservation areas, boat ramps, shooting ranges, etc. LWCF-assisted facilities must be maintained for outdoor recreation in perpetuity and therefore, require mitigation including replacement land of at least equal value and recreation utility.

According to a review of Google Earth imagery and ArcMap GIS public lands layers, no Section 4(f) or Section 6(f) resources are within or adjacent to the project limits. The project will not result in a use to any Section 4(f) properties or conversion of any Section 6(f) lands.

**Threatened and Endangered Species:** The Endangered Species Act (ESA) provides for protection of threatened and endangered species, both plants and animals, and habitats considered critical to the survival of these species, e.g., breeding, nesting, roosting, and foraging areas. The ESA requires FHWA and MoDOT consult with U.S. Fish and Wildlife Service (USFWS) about projects and the measures that can be implemented to minimize or eliminate project impacts to these species.

Projects also must address potential impacts to state listed species.  The State of Missouri maintains endangered species legislation to protect State ESA species. The state ESA and Missouri Wildlife Code protect state listed species. The Missouri Cave Resources Act protects caves from trespass, vandalism, contamination, and destruction.  Missouri Department of Conservation (MDC) is the administrative, regulatory, and enforcement agency for state-sensitive species.

MoDOT’s threatened and endangered species biologist submitted the project to the USFWS Information, Planning and Conservation System (IPaC) online screening tool to obtain an official species list (Consultation Code: 03E14000-2020-SLI-XXX, October 11, 2019).

The following federal trust species were listed for the project area: Gray bats, Indiana bats, and Northern long-eared bats. According to the IPaC, no designated critical habitats are in the project area. The MDC Natural Heritage Database (NHD) and Missouri Speleological Society (MSS) Cave Database were also reviewed for additional natural resource information in the project area.

*Gray Bat*

Gray bats are year-round cave obligate species in limestone karst areas of the state. In winter they hibernate in deep, vertical caves. In summer they roost in caves along rivers. No records of this species are near the project area. Reviews of the NHD and MSS cave database reveal multiple caves within 0.50-mile of the project area. However, Gray bat records are not associated with these caves. There will be no impacts to caves and the project will have No Effect to Gray bats.

*Indiana and Northern Long-eared Bats*

Indiana and Northern long-eared bats winter in caves and summer in forested areas of the state where they may use suitable summer roost trees with exfoliating bark or bark forming a shingle-like structure under which bats may roost.  Summer habitat for the threatened Northern long-eared bat overlaps greatly with Indiana bat habitat and includes additional habitat use of trees with splits, crevices, hollow sections, and other damage. Removal of these trees any time of year may affect both species.  This project will have no impact to caves. No records for either bat species are found near the project area. The nearest record is at least 3.0 miles away.

On October 30, 2019, MoDOT’s threatened and endangered species biologist conducted a habitat assessment for work proposed under MoDOT Job No. J001234. This included construction of the new passing lane and roadway straightening. Improvements under MoDOT Job No. 012345 require approximately 1.8-acre of tree clearing. MoDOT determined suitable habitat for Indiana and Northern long-eared bats exists within the project limits. All suitable habitat trees are within 100 feet of the existing roadway.

As a conservation measure, MoDOT will include the attached *Tree Clearing Restriction JSP* (job special provision) in the construction contract to ensure tree clearing occurs between only November 1 and March 31. With adherence to these tree clearing restriction dates, MoDOT determined this project May Affect, but is Not Likely to Adversely Affect Indiana and Northern long-eared bats. On November 6, 2019, MoDOT requested concurrence from USFWS with this determination. On December 12, 2019, USFWS concurred with the May Affect, Not Likely to Adversely Affect Indiana and Northern long-eared bats determination. See the attached *USFWS Concurrence Email*.

* **Commitment:**  MoDOT will include the attached *Tree Clearing Restriction JSP* (job special provision) in the construction contract to ensure tree clearing occurs between only November 1 and March 31.

*Migratory Birds*

The Migratory Bird Treaty Act of 1918 (MBTA) makes it illegal to take, possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase or barter any migratory bird, or the parts, nests, or eggs of such a bird except under terms of a valid permit issued pursuant to Federal regulations. “Take” refers to killing adults, eggs, or young of a bird species protected by the act. MoDOT conducts project field checks for the presence of nesting birds when impacts to the underside of bridge decks and substructures are proposed. MoDOT further assesses when birds are found nesting on a structure, and may apply a JSP to protect against disturbance or harm to any nests or birds during the active breeding season.

Construction of the new passing lane will not include improvements to any structures that may be suitable for nesting. Therefore, there are no conflicts or concerns with the Migratory Bird Treaty Act.

**Hazardous Waste:** MoDOT’s goals to address hazardous and solid wastes are to avoid unacceptable cleanup costs and legal liability and to comply with federal and state laws and regulations regarding cleanup.

MoDOT’s hazardous waste specialist reviewed the project using the MDNR online E-START mapping tool. This source identifies the following sites: Superfund, Federal Facilities, Resource Conservation and Recovery Act Corrective Action, Brownfields/Voluntary Cleanup Program, Brownfield Assessments, and Petroleum and Hazardous Substance Storage Tank Facilities.

Based on this review, MoDOT found no sites of concern in the project limits for the new passing lane and roadway curve straightening.

The potential to encounter hazardous wastes from sites unknown to MoDOT should always be a consideration. Any unknown hazardous waste sites found during project construction will be handled according to Federal and State Laws and Regulations. If regulated solid or hazardous wastes are found during construction, MoDOT’s construction inspector shall direct the contractor to cease work at the suspect site. The construction inspector will contact MoDOT’s hazardous waste specialist to discuss options for remediation. The hazardous waste specialist, construction office, and contractor will develop a plan for sampling, remediation, and continuation of project construction. Independent consulting, analytical, and remediation services will be contracted, if necessary. MDNR and EPA will be contacted for coordination and approval of required activities.

* **Commitment:** MoDOT will ensure any unknown hazardous waste sites found during project construction will be handled according to Federal and State Laws and Regulations. If regulated solid or hazardous wastes are found during construction, MoDOT’s construction inspector shall direct the contractor to cease work at the suspect site. The construction inspector will contact MoDOT’s hazardous waste specialist to discuss options for remediation. The hazardous waste specialist, construction office, and contractor will develop a plan for sampling, remediation, and continuation of project construction. Independent consulting, analytical, and remediation services will be contracted, if necessary. MDNR and EPA will be contacted for coordination and approval of required activities.

**Environmental Commitments:**

1. MoDOT will not implement any total road closures and detours during construction of the passing lane and curve straightening. Flagging operations will control traffic during construction. At the tie-ins for the passing lane, construction staging or selected asphalt milling and wedging will temporarily maintain at least one lane of traffic at all times and two lanes prior to the end of each day’s construction. MoDOT will issue press releases two weeks prior to construction. Changeable Message Sign boards will alert traffic to temporary lane changes and closures.  The district will post the project on its public website and the Traveler’s Information Map.
2. MoDOT will ensure a Traffic Management Plan (TMP) is included in the construction contract to respond to temporary disruptions in travel patterns and travel time. Once developed, MoDOT will assess the impacts of the TMP within the framework of NEPA. If the TMP could result in impacts that were not previously reviewed under NEPA—such as new or additional road closures, access changes, or other circumstances that could cause new or modified impacts to resources, MoDOT’s environmental section will review these impacts prior to implementing the TMP.
3. MoDOT will conduct right of way acquisitions and provide services to all impacted households without discrimination in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (referred to as the Uniform Act).
4. MoDOT will purchase approximately 10,953 credits from a USACE-approved Stream Stewardship and Trust Fund (SSTF) stream mitigation credit provider or from mitigation bank prior to FHWA authorization for construction, to mitigate the impacts to this jurisdictional stream within the project footprint.
5. MoDOT will ensure Section 404 NWP 14 permitting conditions including the General Conditions within the General Provisions are followed, as well as the provisions specified in the Section 401 Water Quality Conditions.
6. MoDOT will adhere to its statewide Operating Permit MO-0137910, Section II Area-Wide Land Disturbance Stormwater Permit Conditions for this project.
7. MoDOT will ensure sediment and erosion control best management practices are implemented during construction and disturbed areas are seeded following construction for restoring and preserving natural and beneficial floodplain values.
8. MoDOT will limit construction to Monday through Friday, during normal working hours, to the extent possible. MoDOT will ensure construction specifications require all construction equipment to be in good working order. Mufflers will be required to help reduce construction noise impacts.
9. MoDOT will include the attached *Tree Clearing Restriction JSP* (job special provision) in the construction contract to ensure tree clearing occurs between only November 1 and March 31.
10. MoDOT will ensure any unknown hazardous waste sites found during project construction will be handled according to Federal and State Laws and Regulations. If regulated solid or hazardous wastes are found during construction, MoDOT’s construction inspector shall direct the contractor to cease work at the suspect site. The construction inspector will contact MoDOT’s hazardous waste specialist to discuss options for remediation. The hazardous waste specialist, construction office, and contractor will develop a plan for sampling, remediation, and continuation of project construction. Independent consulting, analytical, and remediation services will be contracted, if necessary. MDNR and EPA will be contacted for coordination and approval of required activities.
11. If there are changes in the project scope, project limits, existing conditions, pertinent regulations or environmental commitments, MoDOT must re-evaluate potential impacts prior to implementation. Environmental commitments are not subject to change without prior written approval from the Federal Highway Administration.