

Biological Assessment and Habitat Connectivity Analysis



Cumulative Impacts Assessment

Technical Memorandum

Date:	June 28, 2024
Project:	Minatare to US-385 Project Number: NH-26-1(172); Control Number: 51521
Subject:	Cumulative Impacts

Introduction

The Nebraska Department of Transportation (NDOT), in cooperation with the United States Department of Transportation's (USDOT) Federal Highway Administration (FHWA), is proposing to improve an 18-mile-long segment of United States Highway 26 (US 26) and Nebraska Highway Link 62A (L62A), both of which are on the National Highway System (NHS), beginning at the City of Minatare, Nebraska, extending east to the junction of United States Highway 385 (US 385). The proposed project has logical termini connecting two existing four-lane sections.

The purpose of this memo is to address cumulative impacts that could occur as a result of aggregate project impacts and the impacts associated with other projects (e.g., road construction for other actions within or near the study corridors could also affect access and travel patterns). Cumulative impacts are identified and described for resources that would be potentially adversely affected by the project and other actions near the project that would have the potential to affect the same resources.

A cumulative impact is defined as, "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time" (40 CFR 1508.7). Thus, cumulative impacts include the direct and indirect impacts of a project together with the impacts from reasonably foreseeable future actions of other projects.

This assessment of the cumulative impacts of federal, state, and private actions is required by Council on Environmental Quality (CEQ) regulations for implementing the National Environmental Policy Act (NEPA). The cumulative impacts with respect to the Project were evaluated in accordance with CEQ guidance (CEQ 1997) and other sources, including FHWA interim guidance titled "Questions and Answers Regarding Indirect and Cumulative Impact Considerations in the NEPA Process" (FHWA 2003) and the FHWA position paper titled "Secondary and Cumulative Impact Assessment in the Highway Project Development Process" (FHWA 1993).

Affected Environment

The Study Area to determine cumulative impacts includes the US 26/L62A corridor from Minatare to US 385 for a length of approximately 18 miles, adjacent and connected roadways, and an area several miles in all directions from the project corridor. The majority of the land use in the corridor is agricultural-related with Minatare being an anchor community on the west end of the project. Multiple agriculture service businesses, livestock operations, and field and grain crop production fields dominate the corridor.

Actions Evaluated for Cumulative Impacts

The methodology used to address cumulative impacts involves identifying past, present, and reasonably foreseeable future actions; reviewing resources potentially affected by the project; determining the approximate impact time frames and locations; considering the types of impacts likely for reasonably foreseeable future actions; and selecting the resources requiring detailed cumulative impact evaluation. For actions to be reasonably foreseeable, they are likely to occur or probable not just merely possible. Reasonably foreseeable future actions can include ongoing projects, such as transportation and commercial or industrial development, which are not expected to be completed by the time the analyzed project would begin construction or planned projects included in planning documents for the area. These sources were used include NDOT Statewide Transportation Improvement Plan, Western Nebraska Regional Airport, local media outlets, and county and city websites.

Past Actions

Past actions on US 26/L62A include usual maintenance and repair activities. In 2015 a resurfacing project of US 26 from Minatare east to 0.2 mi west of the junction with L62A was completed. This project is part of the Heartland Expressway, which is the central portion of the Great Plains International Trade Corridor (GPITC) connecting four states of Colorado, Nebraska, Wyoming, and South Dakota and portions of this larger project have been completed. The GPITC is described in more detail in Chapter 1, Introduction of the EA.

- EACNH-26-1(146) CN 50826, US 26 from Scottsbluff to Minatare: work included expanding the roadway from two-lane to four lanes with construction in 2003-2004. This is one portion of the larger Heartland Expressway system.
- A past development, a Dollar General store opened on the north side of Minatare in January of 2022. The store is located north of US 26 on Stonegate Road and is the City of Minatare's only grocery store.
- NDOT CN 51432, TCSP-71-2(112), Heartland Expressway, US 385 from Highway L62A to Alliance: work included the preliminary engineering and right-ofway to convert a two-lane undivided roadway to a four-lane divided roadway

spanning approximately 22 miles. Construction for a portion of the project (from L62A North) was done under CN 51443 and was completed in 2023. Construction of US 385 from Alliance south under CN 51522 was completed in 2018.

The John McLellan Jr. Expressway officially opened on Tuesday, October 25th, 2005. This stretch of N-71 runs from US 26 to the Scotts Bluff County/Banner County line and is within the larger Heartland Expressway system.

Present Actions

• NDOT CN 51665, MISC-385-3(1025), US-385 South of Bridgeport: work includes safety improvements to add approximately 0.75 miles of turn lanes on US 385 at South Railroad Avenue located in Morrill County. The project's construction could begin as early as fall 2024 with an expected completion date by winter of 2024.

Future Actions

- NDOT CN <u>51654</u>, NH-71-2(<u>116</u>), Heartland Expressway, N-71 from I-80 to US 26: an existing four-lane divided expressway approximately 47 miles will have shoulders hard surfaced, roads milled and resurfaced. Planning is underway with construction set to begin in FY 2030.
- NDOT CN 51642, NH-STP-25-1(17), US 26 and US 385 in Bridgeport; and N-88 south of Bridgeport: work includes concrete repairs, mill and resurface existing asphalt, curb & gutter, bridge work. Construction is anticipated to begin in FY 2026.
- NDOT CN 51637, STP-L79E(113), L79E over the North Platter River between Melbeta and Minatare: work includes a bridge replacement over the North Platte River. Construction is anticipated to start in FY 2025.
- Western Nebraska Regional Airport taxiway: an FAA FY24 BIL grant was received for the design of the taxiway. FAA approved a Categorical Exclusion on 12/4/2023 for the new taxiway. Construction is anticipated to begin summer of 2025.

Resources Considered for Impact Analysis

The following resources which were assessed individually in the EA, were evaluated for cumulative impacts but determined not to warrant a detailed analysis because of the minor impacts resulting from the Preferred Alternative. A brief statement of why a detailed cumulative impacts analysis was determined to be unnecessary is noted below for each resource. No adverse cumulative impacts are anticipated for any of these resources as a result of this project nor from reasonably foreseeable actions described above.

- Land Use: Land use changes are not anticipated as a result of the Preferred Alternative. There would be conversion of agricultural land and residential farmstead property to NDOT ROW, but that this conversion is compatible with land use plans. Additionally, reasonably foreseeable future actions are not anticipated to result in substantial changes in local land use.
- Farmland: The project would convert 260 acres of farmland into highway right-of-way and roadway construction. Of the 260 acres, approximately 188 acres are designated as prime farmland, if irrigated, or farmland of statewide importance. The completed Farmland Conversion Impact Rating Forms (NRCS-CPA-106) resulted in a corridor assessment of 139 points for the portion of the project in Scotts Bluff County, and 143 points for the portion in Morrill County which is below the 160-point site assessment threshold and therefore NRCS confirmed that no further coordination would be required. There is potential to impact 22 existing center pivot irrigation systems and two of these center pivots may require relocation which will be determined as part of final design. The acquisition of additional ROW would also affect approximately 9 acres at the feedlot northeast of the intersection of US 26 and L62A. These impacts may result in the reconfiguration of the feedlot operations, but no buildings would be acquired.

Landowners would be compensated for the removal or relocation of the center pivots and storage buildings as applicable with state and federal law. Alterations to agricultural land would be minor in nature as no full parcel or entire centerpivot system, nor feedlot would be acquired and therefore would have little effect on farming operations. Cumulative impacts on farmland from construction of this project along with the other reasonably foreseeable projects are expected to be minor and beneficial because the projects would improve the transportation network and would benefit agriculture in the Study Area.

Right-of-way and Relocations: Although most of the acquisitions would be minor amounts of right-of-way from parcels, the Preferred Alternative is anticipated to require structure relocations from 17 agricultural properties. A total of 16 houses from 13 of the properties would be displaced; however, many would likely be relocated to another place on the same landowner's property. Several outbuildings such as sheds, silos, and garages may be relocated or removed, and two cattle operations would be impacted. Up to five of the properties may not remain functional as they do currently, once the project is constructed. The final impacts to these properties would be determined during final design. Property rights acquisition would be conducted by paying fair market value for the property rights and damages that may occur. ROW acquisition would be conducted in conformance with the Uniform Act (42 USC 4601 et seq.), Title VI of the Civil Rights Act of 1964, and the Nebraska Relocation Assistance Act (Nebraska Revised Statutes Section 76-1214 et seq.). Impacts from other reasonably foreseeable actions are expected to be minor and therefore cumulative impacts to ROW and relocations are not anticipated.

- Community Impact Assessment: The Preferred Alternaitve would not negatively impact community cohesion, quality of life or access to emergency services and would experience a benefit as a result of the more efficient and reliable roadway. Reasonably foreseeable future actions are not anticipated to have any adverse cumulative impacts to the community characteristics.
- Environmental Justice: Minority and low-income populations are located in the project area; however, there are no anticipated disproportionally adverse human health or environmental impacts as a result of the Preferred Alternative. It is possible that one or more reasonably foreseeable future actions would affect the same minority and low-income populations, but due to the different timeframes and locations, they would not be anticipated to cause any cumulative impacts.
- Transportation: The Preferred Alternative would be a four-lane divided facility with spot improvements at several intersections. The new lanes would be constructed on the north side of the existing lanes so traffic can be maintained throughout construction. It is anticipated that the project would improve travel through this corridor. Reasonably foreseeable future actions are not anticipated to have any adverse cumulative impacts to transportation.
- Historic Properties Historic properties within the project have been identified; however, the impacts have been resolved through consultation with the Nebraska State Historic Preservation Office. Cumulative impacts from reasonably foreseeable future actions are not anticipated.
- Visual Visual changes are anticipated as a result of the Preferred Alternative with the addition of two lanes and the depressed median; however, this change is consistent with other portions of US 26. Further, once constructed, this roadway would not impede the view of Chimney Rock National Historic Park which is several miles away from the corridor. Cumulative impacts to visual qualities from reasonably foreseeable future actions are not anticipated.
- Section 4(f): The Preferred Alternative would result in a de minimis use of one Section 4(f) resource, the Sod House property. Although reasonably foreseeable future actions could possibly affect other Section 4(f) resources, these projects would not contribute to cumulative impacts on the Sod House property.
- Section 6(f): Although there is a property in Minatare, Minatare Park that is
 encumbered by Land and Water Conservation Funds (LWCF), the improvements
 associated with the Preferred Alternative would not impact this park. It is not
 anticipated that reasonably foreseeable future actions would not have cumulative
 impacts to Section 6(f) resources.
- Utilities: There would be the need to relocate utilities with the Preferred Alternative; however, the relocations would be at the expense of the utility provider. Cumulative impacts from reasonably foreseeable future actions to utilities are not anticipated.

- Air Quality: The project area is in attainment for air quality and the Preferred Alternative would not contribute to air quality degradation. Reasonably foreseeable future actions are not anticipated to have any adverse cumulative impacts to air quality.
- Irrigation Canals and Districts: The three canals in the project corridor would be impacted by the Preferred Alternative; however, formal agreements between the irrigation districts and NDOT would be completed prior to construction. Cumulative impacts to the amount of water and its use are not anticipated. Cumulative impacts from reasonably foreseeable future actions on the canals and drainage over what is required for normal maintenance and modernization are not anticipated.
- Noise: The Preferred Alternative would not have a noise impact on any receivers that would remain along the corridor. Reasonably foreseeable future actions are not anticipated to result in cumulative impacts on remaining receivers as to increase their noise levels to be considered an impact.
- Hazardous Materials: The Preferred Alternative would have a medium potential to encounter hazardous materials during construction. Construction commitments regarding encountering contamination are in place and would mitigate impacts. It is possible that one or more of the reasonably foreseeable future actions may encounter hazardous materials, but due to the different timeframes and locations of the actions, they are not anticipated to cause any cumulative impacts.
- Paleontology: There is a moderate potential to impact previously unidentified paleontological resources during construction. Reasonably foreseeable future actions identified are not likely to have cumulative impacts on paleontology. However, if paleontological resources are encountered, construction will be suspended until arrangements for removal and preservation are made.
- Floodplains: The Preferred Alternative crosses the 100-year floodplain of Ninemile Creek in Scotts bluff county which will require a floodplain permit.
 Floodplains in Morrill county are considered non-participating, but would be certified to meet state minimum standards before construction. The construction at these locations would not cause a cumulative impact nor is it anticipated that reasonably foreseeable future actions would result in cumulative impacts.
- Water Quality: Approximately twelve (12) groundwater wells could be affected by the Preferred Alternative, which would be mitigated by relocation or decommissioning. The Preferred Alternative would include grading and soil disturbance. However, cumulative impacts to surface and groundwater quality are not anticipated. Any project with an acre or more of soil or ground disturbance must meet National Pollutant Discharge Elimination System (NPDES) requirements, with protections for stormwater and water quality. Additionally, any impacts on wells or wellhead protection areas must comply with local and state regulations.

- Wetlands and Water Resources: The Preferred Alternative would affect approximately 13.5 acres of wetlands and 1.6 acres (7,253 linear feet) from eight named and several unnamed waterways. As a result, a CWA Section 404 permit from USACE would be required. Reasonably foreseeable actions could have an impact on wetlands and water resources; however, the impact is anticipated to be minor since the projects listed above tend to be located in existing ROW with low potential for impacts on other resources. Commitments from mitigation and permitting in conjunction with federal and state wetland policy to maintain no net loss of wetlands (23 CFR 777.11(g)) are part of the project. This ensures that the project along with other foreseeable actions would not contribute to cumulative impacts of wetlands and water resources.
- Threatened & Endangered Species: The Preferred Alternative would result in a "May Affect, Not Likely To Adversely Affect" for the swift fox, northern long-eared bat and tri-colored bat. Conservation conditions to prevent adverse effects would be utilized during construction. Although reasonably foreseeable future actions may also affect these T&E species, they would be evaluated under NDOT T&E protocols with associated construction commitments. Therefore, the Project would not contribute to cumulative impacts of the other considered actions.
- Fish, Wildlife, and Vegetation: The Preferred Alternative will have an impact on upland grassland, cropland, windbreaks, open land wildlife habitat and wetland habitat. Most of the habitat types are abundant in the corridor and thus the Preferred Alternative would not contribute to cumulative impacts. Reasonably foreseeable future actions are not anticipated to have a cumulative impact to fish, wildlife and vegetation. Additionally, federal, state, and NDOT standard specifications would require revegetation plans and other measures to restore disturbed areas post construction. The Preferred Alternative, as well as reasonably foreseeable actions, would comply with NDOT revegetation standard specifications and seed mixes.

Conclusions

The Preferred Alternative would not result in any long-term adverse cumulative impacts to any of the resources discussed above when considered with other past, present, and future reasonably foreseeable actions. Past actions have been permitted as needed based on federal, state, and local requirements. The Preferred Alternative would result in long-term beneficial cumulative impacts to the community and transportation network surrounding the US 26/L62A corridor. This project would improve the reliability and connectivity of the local transportation network as well as the regional transportation network resulting in a cumulative beneficial impact. Temporary impacts associated with Preferred Alternative construction are expected but would not result in cumulative impacts with the other projects as they occur in different timeframes and locations.

Overview of Effects and Required Conservation Conditions

Threatened and Endangered Species Effect Determination:

- This project will have "no effect" to all listed species and their habitats. *If an IPLE was written to justify the no effect determination, the BA is sent to FHWA for concurrence.
- A "may affect, not likely to adversely affect" determination is made for the following species/critical habitat with the conservation conditions listed below (and will have "no effect" on all other listed species, except for any listed in the 3rd check box): Black-footed Ferret, Northern Long-eared Bat, Tri-colored Bat, and Swift Fox

This project is within the NGPC range for Northern long-eared bat but not the USFWS range. Based on guidance from the NGPC and USFWS, this project was processed through the NGPC Conservation and Environmental Report Tool and conservation measures from the generated Environmental Review Report for NLEB are proposed in this IPLE.

Tri-Colored bat is a proposed endangered species. Since Tri-colored bat is not included in any programmatic agreements NDOT is evaluating the impacts to TCB in an IPLE.

A "may affect, likely to adversely affect" determination is made for the following species/critical habitat with the conservation conditions listed below (and will have "no effect" on all other listed species, except for any listed above):

Platte River Flow Depletions and Borrow:

If the excavation of borrow sites will occur within the Platte River Basin and result in open water that could constitute a depletion to the Platte River system, <u>upstream</u> of the Loup confluence, the Nebraska Department of Natural Resources will be contacted. If a borrow site will result in a depletion to the Platte River system, <u>downstream</u> of the Loup confluence, NDOT will coordinate with the Nebraska Game and Parks Commission.

Migratory Bird Treaty Act:

NDOT has developed an Avian Protection Plan (APP) to reduce conflicts between construction of NDOT projects and the laws governing migratory birds. This procedure is designed to protect and conserve avian populations and reduce avian conflicts through changes in project scheduling (i.e. tree clearing outside of primary nesting period), increased migratory bird surveys, and changes in project construction timelines. NDOT will utilize its APP to reduce conflicts with migratory birds on this project.

Bald and Golden Eagle Protection Act:

This project was reviewed for potential impacts to bald and golden eagles. NDOT believes the project sites does not have appropriate habitat for eagles. Due to the lack of suitable habitat and information that there are not known bald eagle nests within the project area, NDOT has determined that there will be no impact to these species.

Project Name: Minatare to US-385 Federal-aid Number: NH-26-1(172) Control Number: 51521

Fish and Wildlife Coordination Act:

A wetland and water resources delineation was completed by Benesch from July 26 – July 29, 2021. Anticipated permanent impacts include 13.452 acres of wetlands and 1.571 acres/7253 linear feet of channel impacts. At this time there are no projected temporary impacts. Wetlands were primarily located in the roadside ditches and along streams and irrigation ditches. NDOT received an AJD on 2/7/204 from the USACE. At this time, the project will require an Individual Permit for impacts to waters of the U.S. Coordination under the FWCA would take place during the permitting process.

Conservation Conditions: Responsible Party for conservation condition shown in parentheses. Listed below are the required Conservation Conditions that apply to this project. These measures are not subject to change without the prior written approval of the NDOT Environmental Section. <u>Copy and paste the conditions listed below verbatim in the NEPA</u> <u>document, the Green Sheet, and in the contract documents:</u>

- A-1 Changes in Project Scope. If there is a change in the project scope, the project limits, or environmental commitments, the Highway Project Manager shall coordinate with the NDOT Environmental Section to evaluate potential impacts prior to implementation. Environmental commitments are not subject to change without prior written approval from the NDOT Environmental Section. (District Construction)
- A-2 **Conservation Conditions**. Conservation conditions are to be fully implemented within the project limits as shown on the plans. (*District Construction, Contractor*)
- A-3 Early Construction Starts. Contractor request for early construction starts must be coordinated by the Project Construction Engineer with NDOT Environmental for approval of early start to ensure avoidance of listed species sensitive lifecycle timeframes. Work in these timeframes could require consultation with the USFWS and NGPC. (District Construction, Contractor)
- A-4 **T&E Species**. If federal or state listed species are observed during construction, the Highway Project Manager will contact NDOT Environmental Section to determine if additional species conservation conditions would be required prior to continuing project construction activities. Contact NDOT Environmental for a reference of federal and state listed species. Coordination with the USFWS and NGPC may be required depending on the species identified and construction activities. (NDOT Environmental, District Construction, Contractor)
- **A-5 Refueling**. Refueling will be conducted outside of those sensitive areas identified on the plans, in the contract, and/or marked in the field. *(Contractor)*
- A-6 **Restricted Activities**. The following project activities shall, to the extent possible, be restricted to between the beginning and ending points (stationing, reference posts, mile markers, and/or section-township-range references) of the project, within the right-of-way designated on the project plans: borrow sites, burn sites, construction debris waste disposal areas, concrete and asphalt plants, haul roads, stockpiling areas, staging areas, and material storage sites.

For activities outside the project limits, the contractor should refer to the Nebraska Game and Park Commission website to determine which species ranges occur within the off-site area. The contractor should plan accordingly for any species surveys that may be required to approve the use of a borrow site, or other off-site activities. The contractor should review the T&E Matrix agreement (on NDOT's website), where species survey protocols can be found, to estimate the level of effort and timing requirements for surveys.

Any project related activities that occur outside of the project limits must be environmentally cleared/permitted with the Nebraska Game and Parks Commission as well as any other appropriate agencies by the contractor and those clearances/permits submitted to the District Construction Project Manager prior to the start of the above listed project activities. The contractor shall submit information such as an aerial photo showing the proposed activity site, a soil survey map with the location of the site, a plansheet or drawing showing the location and dimensions of the activity site, a minimum of 4 different ground photos showing the existing conditions at the proposed activity site, depth to ground water and depth of pit, and the "Platte River depletion status" of the site. The contractor must receive notice of acceptance from NDOT environmental, prior to starting the above listed project activities. These project activities cannot adversely affect state and/or federally listed species or designated critical habitat. *(NDOT Environmental, District Construction, Contractor)*.

- A-7 Waste/Debris. Construction waste/debris will be disposed of in areas or a manner which will not adversely affect state and/or federally listed species and/or designated critical habitat. (*Contractor*)
- **A-8 Post Construction Erosion Control.** Erosion control activities carried out by NDOT Maintenance or others after construction is complete, but prior to project close-out, shall adhere to any standard conservation conditions for species designated for the project limits during construction. (NDOT Maintenance, District Construction, Contractor)
- **S-1 Fencing**. When project-related fence construction/relocation work is required to be done prior to the start of construction, and if the fence work occurs outside urban or cropland areas that are not within swift fox range, then fencing can be installed/relocated at any time using the following criteria:
 - a. the fencing is temporary in nature and/or consists of only hand-driven posts
 - b. the work does not compact the soils (ex. through the use of heavy equipment) or cause soil disturbance beyond the driving of posts

If the fencing work cannot meet these criteria, then NDOT Right-of-Way Division shall coordinate with NDOT Environmental Section prior to the completion of Right-of-way negotiations.

S-2 Platte River Depletions. To the maximum extent practical, efforts will be made to design the project and select borrow sites to prevent depletions to the Platte River. If there is any potential to create a depletion, NDOT (during design) and the Contractor (for borrow sites) shall follow the current Platte River depletion protocols for coordination, minimization, and mitigation. In general, the following are considered de minimis depletions, but may still require agency coordination; a project which: a) creates an annual depletion less than 0.1 acre feet, b) creates a detention basin that detains water for less than 72 hours, c) diverted water that will be returned to its natural basin within 30

days, or d) creates a one-time depletion of less than 10 acre feet. (NDOT Roadway Design, Contractor)

- S-3 Revegetation. All permanent seeding and plantings (excluding managed landscaped areas) shall use species and composition native to the project vicinity as shown in the Plan for the Roadside Environment. However, within the first 16 feet of the road shoulder or within high erosion prone locations, tall fescue or perennial ryegrass may be used at minimal rates to provide quick groundcover to prevent erosion, unless state or federally listed threatened or endangered plants were identified in the project area during surveys. If listed plants were identified, any seed mix requirements identified during resource agency consultations shall be used for the project. (NDOT Environmental)
- **S-4 Sensitive Areas.** Environmentally Sensitive Areas will be marked on the plans, in the field, or in the contract by NDOT Environmental for avoidance. (*NDOT Environmental, NDOT Roadway Design, District Construction*)
- **S-5 Species Surveys.** If species surveys are required during the construction phase of the project (including pre-construction surveys), results will be sent by NDOT Environmental Section to the USFWS, NGPC, and if applicable the USACE. (*NDOT Environmental, District Construction*)
- S-6 Permanent LED Lighting (<u>NDOT Design Commitment</u>): Only LED roadway luminaries listed on the NDOT "Nebraska Qualified Material Vendors List" will be considered for use on Nebraska highway lighting projects. Proposed changes to the following LED lighting requirements would require resource agency (USFWS and/or NGPC) coordination and approval prior to installation:
 - Nominal CCT 3000 +/- 300 K
 - BUG Ratings Maximum nominal Backlight (N/A), Uplight (0), Glare (N/A)
 - Lumen Output N/A

Any proposed changes to the listed requirement(s) must be presented to the NDOT Environmental Section for Agency Coordination and approval.

Black-footed Ferret:

No conservation conditions are required for this species.

Northern Long-eared Bat / Tri-Colored Bat:

- **NLEB / TCB -3:** All phases and aspects of the project shall be modified, to the extent practicable, to avoid tree removal in excess of what is required to implement the project safely. Tree removal shall be limited to removals specified in the project plans, which will be clearly marked in the field. (*Design, Contractor*)
- **NLEB / TCB CM-2**: No removal of suitable trees or roosting structures between May 15 and July 31 (maternity roosting season) (*Contractor*)

Swift Fox:

- **SF-1** Two weeks prior to the start of construction, a qualified biologist <u>shall</u> survey the environmental study area according to protocol to determine if active swift fox den sites are present. If an active den with young is located and it is outside the project limits, then a buffer zone shall be established around the den and all construction activities shall avoid the buffer until the den is abandoned. If an occupied den with or without young is identified within the project limits or staging areas, NDOT shall immediately coordinate with the NGPC to determine how to proceed. A buffer zone shall be established around the den and all construction activities shall avoid the buffer area. Between April 1 and August 31, the buffer zone shall be 250 yards around the active den site; other times of the year, the buffer shall be 100 yards around the active den site. (*NDOT Environmental*)
- SF-2 Fencing shall be designed for wildlife safety and wildlife friendly passage with a bottom wire at least 16" from the ground. If different fencing design is required for safety or access control, additional coordination with resource agencies shall be required. (NDOT Design, NDOT Environmental)
- SF-3 Fence posts shall not be placed within potential den sites that appear to have animal activity. If fence posts cannot avoid potential den sites that appear to have animal activity, NDOT Environmental will be notified and will re-initiate consultation with resource agencies. Work will not commence until agency concurrence is received. (Contractor)
- **SF-A** NDOT shall coordinate with the NGPC regarding the installation of artificial escape dens in suitable locations along the L62A corridor. Swift Fox Escape Den Installation protocols shall be utilized. (NDOT Environmental, NDOT Design)

The overall Biological Assessment package was prepared by:

Scott Rupe Date: 2024.09.04 16:12:27 -05'00'	Scott Rupe	Senior Scientist / Benesch	9/4/2024	
Signature	Printed Name	Title and Agency/Firm	Date	- 12

Approved by the following qualified NDOT biologist:

	Matthew Greiner	9/10/2024
Signature	Printed Name	Date

Check if FHWA signature required (NDOT Environmental use only). Approved by FHWA Environmental (FHWA signature only needed when the project is unassigned under the most current CE MOU <u>and</u> the project results in a "may affect" determination, or an Individual Project Level Evaluation, modified Conservation Conditions, or Individual BA is required.):

Luke Pitts	Luke Pitts	9/10/2024
Signature	Printed Name	Date

Check if USFWS and/or NGPC concurrence is required (NDOT Environmental use only).

Check if the project occurs on federal or tribal land (*NDOT Environmental use only*). If yes, provide federal or tribal agency name: _____

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by NDOT pursuant to 23 USC 326 and the First Renewed Memorandum of Understanding dated September 17, 2021, and executed by FHWA and NDOT.

Species Evaluation Parameters

Form to assist in completing the Endangered & Threatened Species Evaluation Procedures Guide Sheet and Determining the Potential Effect

The following questions identify the potential for suitable habitat within the Action Area, or if the project is within the range of a federally or state listed species. If a species is listed during construction or implementation, the species will be addressed in the Individual Project Level Evaluation document.

Proposed Project Information

Project Sponsor and Contact: Matthew Greiner, NDOT

Biologist Completing Assessment: Scott Rupe, Benesch

Project No.: NH-26-1(172)

Control No.: 51521

Project Name: Minatare to US-385

County: Scotts Bluff and Morrill Counties

Limits of Work

Start: US-26 Mile Marker (MM) 32.63

End: L-62A MM 9.19

Total Length: 18.47 Miles

Activity Checklist Date: 8-26-24

Project Description Date: 8-22-24

Project Description: This project is 18.47 miles in length and is located on Highways US-26 and L-62A in Scotts Bluff and Morrill Counties, starting 0.41 miles west of the west Minatare corporate limits at mile marker (MM) 32.63 and extending east to the junction of US-26 and L-62A at MM 41.92. The project continues east on L-62A from the junction with US-26 at MM 0+00 to the junction of US-385 and L-62A at MM 9.19.

Construction may begin and/or end approximately 1500 feet ahead of or beyond the actual project limits to accommodate transitioning the pavement.

The existing roadway on US-26 from MM 32.63 to MM 32.98 consists of a transition section from a 4-lane divided roadway with 12-foot-wide composite pavement lanes, a 14-foot flush median and 10-foot shoulders, of which 8 feet is paved with asphalt to a 3-lane roadway. The existing roadway from MM 32.98 to MM 33.45 consists of two 12-foot-wide composite pavement lanes and a 12-foot two-way center turn lane with shoulders varying from 6 feet with curb and gutter to 10 feet, of which 8 feet is paved with asphalt. The existing roadway on US-26 from MM 33.45 to MM 41.92 and on L-62A from MM 0+00 to MM 9.19 consists of two 12-foot-wide composite pavement lanes and 10-foot shoulders, of which 8 feet is paved with asphalt.

The improvements on this project consist of widening US-26 and L-62A from an existing 2-lane roadway to a 4-lane divided roadway with a depressed median using the strategy of constructing new lanes on the north side of the US-26/L-62A corridor and milling and resurfacing the exiting lanes which will remain in place. Improvements include new paving, milling and resurfacing, culvert and storm sewer work, new guardrail, removing and replacing guardrail, a new bridge, new intersections, improved intersections, access relocations (i.e. new frontage roads) and side road modifications.

Grading will be required for the entire length of this project.

The bridge over Ninemile Creek (Structure Number S026 03470) will be used in place and a new bridge will be built with the new set of lanes. A grade raise of the entire structure is not anticipated. Work will be required in the waterway. Guardrail will be built with the new bridge.

The following bridge-size box culverts will be extended: Structure Number S026 03505 (Minatare Drain - Canal), S026 03916 (Irrigation Conveyance), S026 04114 (Wildhorse Creek), SL62A 00116 (Wildhorse Canyon), SL62A 00537 (Tri-State Canal), SL62A 00582 (Tri-State Canal), and SL62A 00613 (Tri-State Canal). The following bridge-size box culverts will be replaced: SL62A 00152 (Irrigation Conveyance), SL62A 00463 (West Water Creek), SL62A 00595 (Red Willow Creek) and SL62A 00648 (Irrigation Conveyance).

This project will be constructed under traffic with lane closures controlled by appropriate traffic control devices and practices.

Additional property rights will be required to build this project.

Access to adjacent properties will be maintained during construction but may be limited at times due to phasing requirements.

Project Limits: The Project Limits are defined as the area between the project beginning and end points, from right-of-way to right-of-way, as marked in the construction plans, including temporary construction easements, detours, and any designated waste, staging, stockpile or material sites.

Project Action Area:

- Noise 1.1 miles and 0.30 miles
- Visual 0.25 mile
- Waterway 300 feet upstream, 1500 feet downstream
- Lighting 500 feet radius

The initial action area for this project was established using a 1.1 mile buffer to encompass the loudest potential noise impact. Upon review of the project location, project activities, and species in range; the action area has been revised to a 0.3 mile or 1599 feet buffer, with a spot location at Nine Mile Creek of 1.1 miles. The project is in Scottsbluff and Morrill County and is generally located in a rural setting. The following sections describe how the revised action area was developed. Attached to this biological assessment is a project action area map.

Noise

The loudest equipment used for the project would be a pile driver. Throughout the rest of the project, a concrete saw is the loudest equipment that would be used. The ambient noise level for US-26 and L-62A is 59.9 dBA. FHWA Table 9.1 identifies impact pile drivers and vibratory pile drivers as the loudest construction equipment at 95 dBA at Spec. 721.560 Lmax @ 50 feet

and 101 dBA for Actual Measured Lmax @ 50 feet (FHWA 2006). Using an ambient noise level of 59.9 dBA, Actual Measured Lmax @ 50 feet sound level for impact pile drivers and vibratory pile drivers of 101 dBA, and the inverse square law, the noise levels would dissipate to ambient noise levels in a free field without obstructions at 5,675 feet (1.1 miles). Pile driving would occur along both sides (east and west) of the Nine Mile Creek. A 1.1 mile buffer was applied from the pile driving locations. For the remainder of the project, the loudest equipment is a concrete saw (90 dBA for Actual Measured Lmax @ 50 feet) resulting in a dissipation distance of 1,599 feet or approximately 0.3 miles.

Waterway

Waterways in the form of creeks, canals, and drainages exist along the project alignment. The major waterways include: Nine Mile Creek, Wildhorse Drain, Wildhorse Canyon, Red Willow Creek, Minatare Drain, Tri State Canal, and Interstate Canal. At Nine Mile Creek, the action area extends 1.1 miles due to potential noise impacts, while for the remainder of the corridor, the noise impact area is 0.3 miles. Since the waterway action area falls within the noise action area, no adjustments to the size of the action area at the waterways are required.

Visual and Lighting

Lighting is anticipated to be used on the project. It is anticipated that new light poles would be utilized at the new intersections of L-62A/US-26 and the US-26/US-385 intersection. However, lighting impacts would likely be less than the action area required for noise and visual. For visual impacts, according to the USFWS and the NGPC species ranges, the project area falls within the ranges of the whooping crane, piping plover, northern long-eared bat, and swift fox. All these species could potentially be disturbed by activity within 0.25 miles, except for the whooping crane and swift fox, which requires a disturbance buffer of 0.5 miles and 750ft, respectively. Since the project area does not contain suitable habitat for the whooping crane and piping plover, a visual action area of 0.25 miles (1,320 feet) would be applied to this project.

Project Action Area Habitat Description:

The study area predominantly comprises rural farmland and rangeland, with the exception of the community of Minatare. Habitat diversity within the study area can be categorized into open land (including grassland, farmland, and rangeland), wetland/waterways, and woodland categories.

Open Land (Grassland, Farmland, and Rangeland):

When evaluating regions of Nebraska, the majority of the project is located within the Topographic Region of the Valleys and Valley-Side Slopes, which consists of flat-lying land along major streams (North Platte River) and moderately sloping land between escarpments located on the eastern edge of the project. According to Kaul and Rolfsmeier in Native Vegetation of Nebraska (1993), several different ecoregions exist in both Scottsbluff and Morrill County; however the project primarily spans a mosaic of mixed grass and shortgrass prairie and salt marsh and flats.

Mosaic of Mixed-grass/Shortgrass Prairie: This region is characterized with short-grass prairie vegetation in the drier sites and mixed grass prairie in slightly more mesic sites. Much of the plant community has been converted to cropland, particularly on level land, although large expanses of this prairie type remain on the rocky escarpments along the eastern edge of the project. Lowlands and gentler slopes are heavily grazed.

Salt Marshes and Flats: This region contains saline marshes, ponds and flats that are subject to summer drying. Vegetation is patchy with areas of bare ground that often are encrusted with salts.The salt marshes and flats are typically associated with the western part of the alignment.

In the study area, natural vegetation remains confined to small pockets due to the agricultural character of the corridor, with much of the existing vegetation along the alignment having been previously disturbed by road construction grading or farming activities. The grassland cover encompasses various land uses, including the existing right-of-way, which consists of mowed areas, irrigated pasture land, hayland, and rangeland. Rangeland vegetation is predominantly composed of native species such as bluestem, grama switchgrass, Indiangrass, buffalograss, and sedges, while vegetation in the right-of-way, irrigated pasture, and hayland may consist of both native and introduced species.

Additionally, agricultural fields predominantly used for row cropping were categorized as farmland, with nearly all of it under irrigation. Primary row crops cultivated in these fields include corn, sugar beets, and dry edible beans.

Wetlands/Waterways:

The study area contains forested wetlands and wetlands dominated by grasses and herbaceous plants. Cottonwood and willow are the dominant trees and shrubs in wooded wetlands. Cattails, sedges, reed canary grass, smartweeds and dock are the primary grasses and herbs in non-forested wetlands.

Waterways in the form of creeks, canals, and drainages exist throughout the project alignment. The major waterways include: Nine Mile Creek, Wildhorse Drain, Wildhorse Canyon, Red Willow Creek, Minatare Drain, Tri State Canal, and Interstate Canal. These waterways have associated drainage ditches that feed the irrigated farmland throughout the corridor.

Woodlands:

Wooded areas are primarily limited to the major water ways crossing the project study area including Nine Mile Creek, Wildhorse Drain, Wildhorse Canyon, and Red Willow Creek. Additional trees are associated with windbreaks and rural housing.

Field Visit Summary, as applicable: The NDOT personnel conducted a site visit on 4/3/2024 to inspect the concrete box culverts and a bridge located along US-26 and L-62A for any evidence of bats. After assessment of the box culverts and bridge, no evidence of bats was detected.

Highway	Structure ID	Туре	Crossing	Assessment
	SL62A 00116	Box	Flowing Water	No Evidence of Bats
	SL62A 00152	Box	Seasonal Water	No Evidence of Bats
	SL62A 00220	Box	Seasonal Water	No Evidence of Bats
	SL62A 00295	Box	Seasonal Water	No Evidence of Bats
	SL62A 00405	Box	Seasonal Water	No Evidence of Bats
т (24	SL62A 00463	Box	Flowing Water	No Evidence of Bats
L-02A	SL62A 00537	Box	Seasonal Water	No Evidence of Bats
	SL62A 00582	Box	Seasonal Water	No Evidence of Bats
	SL62A 00595	Box	Flowing Water	No Evidence of Bats
	SL62A 00613	Box	Seasonal Water	No Evidence of Bats
	SL62A 00648	Box	Seasonal Water	No Evidence of Bats
	SL62A 00740	Box	Seasonal Water	No Evidence of Bats
	S026 03470	Bridge	Flowing Water	No Evidence of Bats
116 26	S026 03505	Box	Flowing Water	No Evidence of Bats
05-20	S026 03916	Box	Flowing Water	No Evidence of Bats
	S026 04114	Box	Flowing Water	No Evidence of Bats

Nebraska Federal and State Listed Species and Critical Habitat

E = Endangered	P = Proposed for Listing	XN = Experimental
		Population
T = Threatened	C = Candidate (no specific review required)	CH = Critical Habitat

Animals American Burying Beetle (T) Black-footed Ferret (E) Blacknose Shiner (E) Eastern Black Rail (T) Eskimo Curlew (E) Finescale Dace (T) Gray Wolf (E) Interior Least Tern (E) Lake Sturgeon (T) Mountain Plover (T) Northern Long-Eared Bat (E) Northern Redbelly Dace (T) Pallid Sturgeon (E) Piping Plover (T) Salt Creek Tiger Beetle (E; CH) Scaleshell Mussel (E) Southern Flying Squirrel (T) Sturgeon Chub (E) Swift Fox (E) Thick-Billed Longspur (T) Timber Rattlesnake (T) Topeka Shiner (E; CH) Western Massasauga (T) Whooping Crane (E; CH)

<u>Plants</u> American Ginseng (T) Blowout Penstemon (T) Colorado Butterfly Plant (T) Saltwort (E) Small White Lady's Slipper (T) Ute Ladies'-tresses (T) Western Prairie Fringed Orchid (T)

Species Information: <u>http://www.fws.gov/nebraskaes/species.php</u> and <u>http://outdoornebraska.gov/naturalheritageprogram/#rangemaps</u> Nature Serve: <u>http://www.natureserve.org</u>

STEP 1: RANGE AND OCCURRENCE EVALUATION

<u>Species</u>	Is the Project A the estimated species as ider USFWS and	ction Area in range of the ntified by the d NGPC ¹ ?	Are there Natural Heritage records within 5-miles of the Project Limits <u>in the last 30</u> <u>years?</u>		
American Burying Beetle ²	🗆 Yes	⊠ No	🗆 Yes	⊠ No	
American Ginseng	🗌 Yes	🖂 No	□ Yes	⊠ No	
Black-footed Ferret	🛛 Yes	🗆 No	🗌 Yes	⊠ No	
Blacknose Shiner	🗌 Yes	⊠ No	🗌 Yes	🖾 No	
Blowout Penstemon	⊠ Yes	□ No	□ Yes	⊠ No	
Colorado Butterfly Plant	□ Yes	⊠ No	□ Yes	⊠ No	
Eastern Black Rail	⊠ Yes	□ No	□ Yes	⊠ No	
Eskimo Curlew	🖂 Yes	□ No	🗌 Yes	⊠ No	
Finescale Dace		⊠ No	🗌 Yes 🛛 No		
Gray Wolf	⊠ Yes	□ No			
Tern ³	🗌 Yes	⊠ No	🗌 Yes 🛛 No		
Lake Sturgeon		⊠ No		No	
Mountain Plover		⊠ No		⊠ No	
Eared Bat	⊠ Yes	□ No	□ Yes	⊠ No	
Northern Redbelly Dace	🗆 Yes	⊠ No	🗆 Yes	🖾 No	
Pallid Sturgeon ³	🛛 Yes	□ No	🗌 Yes	⊠ No	
Piping Plover ³	⊠ Yes	□ No		No	
Rufa Red Knot	⊠ Yes	□ No		⊠ No	
Salt Creek Tiger Beetle	🗌 Yes	⊠ No	□ Yes	⊠ No	
Salt Creek Tiger Beetle Critical Habitat	🗌 Yes	🖾 No	N	٩	
Saltwort	🗌 Yes	🖾 No	🗌 Yes	🖾 No	
Scaleshell Mussel	□ Yes	⊠ No	🗆 Yes	⊠ No	
Small White Lady's Slipper	□ Yes	⊠ No	□ Yes	⊠ No	
Southern Flying Squirrel	□ Yes	⊠ No	□ Yes	⊠ No	
Sturgeon Chub	🗆 Yes	⊠ No	□ Yes	⊠ No	
Swift Fox	🖂 Yes	□ No	🖂 Yes	🗆 No	
Thick-Billed Longspur	🗌 Yes	⊠ No	□ Yes	⊠ No	

Timber Rattlesnake	🗆 Yes 🛛 No	🗆 Yes 🛛 No
Topeka Shiner	🗆 Yes 🛛 No	🗆 Yes 🛛 No
Topeka Shiner Critical Habitat	🗆 Yes 🛛 No	NA
Ute Ladies'- tresses	🗆 Yes 🛛 No	🗆 Yes 🛛 No
Western Massasauga	🗆 Yes 🛛 No	🗆 Yes 🛛 No
Western Prairie Fringed Orchid	🛛 Yes 🗌 No	🗆 Yes 🛛 No
Whooping Crane ³	🖾 Yes 🛛 No	🛛 Yes 🛛 No
Whooping Crane Critical Habitat	□ Yes 🛛 No	NA

- Species ranges can be found at: <u>https://cert.outdoornebraska.gov/content/map</u> AND/OR <u>http://outdoornebraska.gov/naturalheritageprogram/#rangemaps</u> AND <u>https://ecos.fws.gov/ipac/</u>.
- ² American Burying Beetle (ABB) species range differs between USFWS and NGPC. Both species ranges will be reviewed, and the range question marked "yes" if action area is within either USFWS or NGPC species range for ABB.
- ³ This species is a Platte River Recovery Implementation Program Target Species for enhancing, restoring, and protecting habitat.

If the species is not identified in either column, then there is a "no effect" to the species from action. If any "yes" boxes are checked, carry these species to Step 2.

Does the Project Action Area occur directly adjacent to or on Federal or Tribal land?* \Box Yes \boxtimes No

*Federal and Tribal lands can be found at: <u>https://apps.nationalmap.gov/viewer/_and</u> http://news.legislature.ne.gov/lrd/files/2015/12/lrd_mow_2.pdf

If yes, the project Biological Evaluation documentation will be provided to the tribe and Bureau of Indian Affairs (BIA), or the Federal land managing agency regardless of the effect determination. This documentation will be provided concurrently with the resource agency submittals in May Affect situations. If a tribe, BIA, or Federal land managing agency does not concur with the effect determination or conservation conditions, then a consultation with all parties, including the resource agencies, shall occur.

Has a survey, Natural Heritage Database, or other source identified an occurrence within 1.0 mile of the Project Action Area, within the last 30 years?

⊠Yes ⊓No

If yes, indirect effects of the activity will be analyzed below. Indirect effects may include but are not limited to hydrologic changes (ditching, diking, etc.). If any indirect effects are identified that are not captured elsewhere in the Matrix, then May Affect. (NDOT Environmental).

Indirect Effects Analysis

The indirect effects of the project on the Swift Fox primarily stem from the conversion of grasslands to pavement and the addition of grassed medians and shoulders. Although this change impacts a portion of their potentially suitable habitat, the vast availability of similar habitats in the surrounding area suggests that the project is unlikely to cause long-term adverse effects on the Swift Fox population. It is important to note that the project includes reseeding efforts with shortgrass prairie mixtures, which are beneficial for maintaining the quality of their habitat. Moreover, existing prairie dog colonies along L-62A, a crucial food source for the Swift Fox, will remain intact. Indirect effects are further discussed in the Individual Project Level Evaluation.

Will the project impact animal movements, such as by adding traffic capacity within occupied habitats, or will the project provide an opportunity to improve known existing habitat fragmentation conditions?

🛛 Yes 🛛 🗆 No

If yes, the effects will be analyzed below.

Completed in June 2024, a Habitat Connectivity Analysis is documented and archived with the NDOT. The conclusions drawn from this analysis are summarized as follows:

The expansion of US-26 and L-62A involves adding two new lanes to the existing highway infrastructure. While this development extends the roadway's footprint, it does so without significantly altering the fundamental landscape or habitat usage. The existing wildlife corridors are expected to remain functional, as the project does not introduce new barriers to wildlife movement. The inclusion of a depressed median, while not a specific environmental mitigation measure, may incidentally benefit wildlife by providing a potential crossing area. Moving forward, it will be important to monitor the project's impact on local wildlife and habitat to ensure that any unforeseen effects are addressed promptly, thereby maintaining the region's biodiversity.

STEP 2: HABITAT EVALUATION

For each species checked above, complete the Yes/No questions to assist in scoping for the potential affects to the listed species. All the questions associated with a species need to be evaluated individually to determine Yes/No applicability (see below).

If ALL answers are "No" for the species or critical habitat below, then there is a "No Effect" to that particular species or critical habitat.

If ANY answer is "Yes" on this Habitat Evaluation worksheet, then carry the "Yes" species forward and proceed to the Step 3 – Federal or State Species Matrix for further effects guidance.

In rare situations, Unique Circumstances are present that justify a question be answered "No" where it would normally be checked "Yes." In these situations, check the "Unique Circumstances" box by the species name and provide detailed reasoning for this conclusion in the box at the end of Step 2.

	SPECIES			
Americ	can Burying Beetle			
	*Note to practitioner: The ABB is not included in the Matrix Process. Utilize the species-specific ABB programmatic agreement in development, or in the interim, utilize IPLE's or the formal consultation process (see interim implementation guidance in PA appendix).			
Americ	can Ginseng Unique Circu	mstance	es 🗌	
	Check which question applies:			
	Based on a desktop survey, does the action area include mature deciduous forest along a river bluff?	Yes	No	
	Based on a field visit, does the action area include mature	Yes	No	
	deciduous forest along a river bluff? (<i>include field visit information in the opening section of this form</i>)			
Black-	footed Ferret Unique Circu	mstance	es 🗌	
	Does the action area include, in whole or in part, a prairie dog town or	Yes	No	
	complex which is 1,000 acres or more in size? A complex consists of two or more neighboring prairie dog towns with the spacing between the adjacent neighboring town being less than 4.0 miles.	\boxtimes		
Blacknose Shiner Unique Circumstance			es 🗌	
		Yes	No	
	Does the action area include a stream, connected backwater areas, and/or topographic floodplain?*			
Blowo	ut Penstemon Unique Circu	mstance	es 🗌	
	Check which question applies:			
	Based on a desktop survey, does the action area include open	Yes	No	
	areas of bare sand?		\square	
	Based on a field visit, does the action area include open areas of	Yes	No	
	bare sand? (include field visit information in the opening section of this form)			

Colora	ado Butterfly Plant Unique Circu	mstance	es 🗌
	Check which question applies:		
	Based on a desktop survey, does the action area include pasture,	Yes	No
	grassland, or hay land on floodplain and lower stream terraces along Lodgepole Creek?		
	Based on a field visit, does the action area include pasture,	Yes	No
	grassland, or hay land on floodplain and lower stream terraces along Lodgepole Creek? (<i>include field visit information in the</i> <i>opening section of this form</i>)		
Easte	rn Black Rail Unique Circu	mstance	es 🗌
	Does the action area contain dense or thick emergent vegetation with	Yes	No
	high vegetation density (interspersion) within 0.5 mile of the Harvard WPA as well as a mixture of new and residual growth?		\boxtimes
Eskim	o Curlew Unique Circu	mstance	es 🗌
		Yes	No
	Does the action area contain wet meadows, burned over prairies, or newly plowed fields?	\boxtimes	
Fines	cale Dace Unique Circu	mstance	es 🗌
	Deep the action area include a stream connected healtwater error	Yes	No
	and/or topographic floodplain?*		
Gray V	Nolf Unique Circu	mstance	es 🗌
		Yes	No
	Does the Heritage Database indicate known species occurrences within 5 miles of the in the last 30 years?		\boxtimes
Interio	or Least Tern Unique Circu	mstance	es 🗌
		Yes	No
	Does the action area include un-vegetated or sparsely vegetated sand, shale, or gravel such as a beach, peninsula, or bar?		
	Is the action area (noise and sight) within suitable babitat to include but	Yes	No
	not limited to a beach area, sand pits, peninsula, sand, shale, or gravel bar?		
Lake \$	Sturgeon Unique Circu	mstance	es 🗌
	Is the action area within a large river system (i.e mainstem Missouri River, lower Platte, Elkhorn, or Niobrara rivers, or lower reach of their	Yes	No
	*refer to the USFWS/NGPC construction timeframes for specific river reaches		
Mountain Plover Unique Circur			es
	Does the action area contain heavily grazed/disturbed short grass	Yes	No
	prairies or areas with very little cover such as tilled cropland on gently rolling to level topography?		

Northe	ern Long-Eared Bat		
	*Note to Practitioner: The NLEB is not included in the Matrix Process.		
	Utilize the FHWA/USFWS Range-wide Programmatic Agreement and IPaC		
	for NLEB review (see Nebraska Implementation Guidance Document for		
	Northern Long-eared Bat appendix).		
Northe	ern Redbelly Dace Unique Circui	nstance	es 🗌
		Yes	No
	Does the action area include a stream, connected backwater areas, and/or topographic floodplain?*		
Pallid	Sturgeon Unique Circu	nstance	es 🗌
	Is the action area within a large river system (i.e mainstem Missouri River, lower Platte, Elkhorn, or Niobrara rivers, or lower reach of their	Yes	No
	tributaries*)? *refer to the USFWS/NGPC construction timeframes for specific river reaches		\boxtimes
Piping	Plover Unique Circu	nstance	es 🗌
C		Yes	No
	Does the action area include un-vegetated or sparsely vegetated sand, shale, or gravel such as a beach, peninsula, or bar?		\boxtimes
	is the action area (naise and eight) within quitable behitst to include but	Yes	No
	not limited to a beach area, sand pits, peninsula, sand, shale, or gravel bar?		\boxtimes
Rufa Red Knot Unique Circur		nstance	es 🗌
	Does the action area contain open mud flats and/or mud and sandy shorelines free of vegetation?	Yes	No 🖂
Salt C	reek Tiger Beetle Unique Circui	nstance	es 🗌
		Yes	No
	Are saline wetlands and/or salt flats present within action area?		
Salt C	reek Tiger Beetle (Critical Habitat) Unique Circui	nstance	es 🗌
	Does the action area include exposed mudflats associated with saline	Yes	No
	wetlands, or exposed banks and islands of streams and seeps that contain adequate soil moisture and soil salinity, and adjacent vegetated wetlands within the Little Salt, Rock, Oak or Haines Branch Creeks?		
Saltwort Unique Circur			es 🗌
	Are saline wetlands, salt flats, or saline soils present within the action area?	Yes	No
Scaleshell Mussel Unique Circu		nstance	es 🗌
	Is the action area within the topographic floodplain of the Missouri	Yes	No
	Recreational River segment below Gavin's Point dam and the associated lower portion of tributaries in this area?		

Small	Small White Lady's Slipper Unique Circumstances			
	Check which question applies:			
	Based on a desktop survey, does the action area include an	Yes	No	
	undisturbed native, sub-irrigated wet meadow or wet ditches adjacent to undisturbed wet meadows?			
	Based on a field visit, does the action area include an undisturbed	Yes	No	
	native, sub-irrigated wet meadow or wet ditches adjacent to undisturbed wet meadows? (<i>include field visit information in the</i> <i>opening section of this form</i>)			
South	ern Flying Squirrel Unique Circu	mstance	es 🗌	
		Yes	No	
	Is the action area within or adjacent to a mature deciduous woodland with mast producing trees including walnut, hickory, or oak component?			
Sturge	eon Chub Unique Circu	mstance	es 🗌	
	Is the action area within a large river system (i.e mainstem Missouri	Yes	No	
	River, lower Platte, Elkhorn, or Niobrara rivers, or lower reach of their tributaries*)? *refer to the USFWS/NGPC construction timeframes for specific river reaches			
Swift I	Fox Unique Circui	mstance	es 🗌	
	Does the action area include connected suitable habitat that contains	Yes	No	
	vegetation <6 inches in height, including gently rolling to level intact upland grasslands and field borders that are outside of densely populated residential, commercial, industrial areas?			
Thick-	Billed Longspur Unique Circu	mstance	es 🗌	
	Does the action area include heavily grazed/disturbed short grass prairie	Yes	No	
	prairie dog towns, or areas with very little cover, such as tilled cropland on gently rolling to level topography?			
Timbe	r Rattlesnake Unique Circu	mstance	es 🗌	
	Check which question applies:			
	Based on a desktop survey, does the action area include mature	Yes	No	
	forest and limestone or sandstone rocky outcrops, or large rubble, down trees, logs or slash piles?			
	Based on a field visit, does the action area include mature forest	Yes	No	
	and limestone or sandstone rocky outcrops, or large rubble, down trees, logs or slash piles? (<i>include field visit information in the opening section of this form</i>)			
		Yes	No	
	Is the action area within 1.5-miles of a known den or occurrence site, according to records in the Nebraska Natural Heritage Database?			
Topeka Shiner Unique Circur			es 🗌	
		Yes	No	
	Is the action area within a stream, connected backwater areas and/or floodplain?			

Topek	mstances 🗌			
	Does action area include intermittent or perennial small low order		No	
	prairie streams with good clear water quality, relatively cool temperatures, and low fish diversity within the Taylor Creek drainage?			
Ute Ladies'-tresses Unique Circui				
	Based on a desktop survey, does the action area include wet	Yes	No	
	meadow on floodplain and lower stream terraces along the Niobrara River?			
	Based on a field visit, does the action area include wet meadow	Yes	No	
	on floodplain and lower stream terraces along the Niobrara River? (<i>include field visit information in the opening section of this form</i>)			
Weste	mstance	es 🗌		
	Check which question applies:			
	Based on a desktop survey, does the action area within a wet site	Yes	No	
	(including, but not limited to wetlands, ditches, and floodplains) characterized by the presence herbaceous wetland vegetation OR an upland grassland habitat adjacent to said wet site?			
	Based on a field visit, does the action area include a wet site	Yes	No	
	(including, but not limited to wetlands, ditches, and floodplains) characterized by the presence herbaceous wetland vegetation and crayfish burrows OR an upland grassland habitat adjacent to said wet site? (<i>include field visit information in the opening section of</i> <i>this form</i>)			
Western Prairie Fringed Orchid Unique Circums				
	Based on a desktop survey, does the action area have no history of cropping and include undisturbed wet mesic prairie and sedge meadows in alluvial soils of river floodplains or sandy soils of subirrigated meadows and prairie swales?	Yes	No	
	Based on a field visit, does the action area have no history of cropping and include undisturbed wet mesic prairie and sedge meadows in alluvial soils of river floodplains or sandy soils of	Yes	No	
suk	subirrigated meadows and prairie swales? (include field visit information in the opening section of this form)			
Whoo	ping Crane Unique Circu	mstance	es 🗌	
	Is the action area:	Yes	No	
	 outside of densely populated residential, commercial, or industrial areas and does it include suitable habitat, such as sub-irrigated grasslands, meadows, shallow wetland habitat, farm ponds, or major rivers? 			
Whooping Crane (Critical Habitat) Unique Circumstances				
	Does the action area include wide, open river channel with shallow sand	Yes	No	
	and gravel bars with nearby bottomland areas, including wet meadows, that are isolated and provide protection from disturbance within the 56- mile-long by 3-mile-wide reach of the Platte River from the Lexington, Nebraska bridge to near Denman, Nebraska?			

*The topographic floodplain for this project is identified on the attached map.

Describe Unique Circumstances here, if applicable:

Minatare - US-385 CN 51521; NH-26-1(172)

		-	
Sources of Impacts	Within Project	Black- footed Ferret	Eskimo Curlew
Asphalt Patching	x	NE	NE
Bridge Substructure New, Replacement, or Repair - Perennial	Х	NE	NE
Bridge Superstructure New, Replacement, or Repair - Perennial	x	NE	NE
Channelization, Intermittent	х	NE	NE
Clearing and Grubbing - Non-woody Vegetation	х	NE	NE
Clearing and Grubbing - Trees & Shrubs	х	NE	NE
Concrete Pavement Repair	х	NE	NE
Culvert New, Replacement, Extension, Repair - Intermittent	х	NE	NE
Culvert New, Replacement, Extension, Repair - Perennial	х	NE	NE
Curb & Gutter	х	NE	NE
Earth Shoulder Construction	х	NE	NE
Erosion Control - Barriers	х	NE	NE
Erosion Control - Erosion Checks	x	NE	NE
Erosion Control - Inlet/Outlet Protection	x	NE	NE
Erosion Control - Mulching	х	NE	NE
Erosion Control - Rolled Erosion Control	х	NE	NE
Erosion Control - Slope Interuption	х	NE	NE
Erosion Control - Vegetation	x	NE	NE
Fencing	x	NE	NE
Grading Within the Hinge Point		NE	NE
Grading Outside the Hinge Point	x	NE	NE
Guardrail Repair, Replacement, or Installation with Soil Disturbance	x	NE	NE
Habitat Fragmentation, Modification of Connectivity	х	MA	NE
Lighting, Traffic and Pedestrian Signals, Dynamic Message Signs w/ soil disturbance		NE	NE
Milling and/or In-place Recycling	x	NE	NE
Pavement Removal	x	NE	NE
Paving	х	NE	NE
Piers	х	NE	NE
Pile Driving - Impact	х	NE	NE
Pile Driving - Vibratory	х	NE	NE
Pipe Jacking & Casing	х	NE	NE
Removal of Structures and Obstructions	х	NE	NE
Resurfacing-Fog/Slurry Seal, Armor Coat/Chip Seal	х	NE	NE
Rock or Gravel Surfacing	х	NE	NE
Signs with Soil Disturbance	х	NE	NE
Stream Channel Impact, Intermittent	X	NE	NE
Stream Channel Impact, Perennial	Х	NE	NE
Temporary Crossing, Causeway, Work Platform	X	NE	NE
Trenched Widening	X	NE	NE
Wetland Mitigation	х	NE	NE

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Sources of Impacts		Within Project Swift Fox	
Asphalt Patching		x NE	
Bridge Substructure New, Replacement, or Repair - Perennial		NLAA CC ¹	
Bridge Superstructure New, Replacement, or Repair - Perennial		NLAA CC ¹	
Channelization, Intermittent		NLAA CC ¹	
Clearing and Grubbing - Non-woody Vegetation	х	NLAA CC ¹	
Clearing and Grubbing - Trees & Shrubs	х	NLAA CC ¹	
Concrete Pavement Repair	х	NE	
Culvert New, Replacement, Extension, Repair - Intermittent		NLAA CC ¹	
Culvert New, Replacement, Extension, Repair - Perennial		NLAA CC ¹	
Curb & Gutter		NE	
Earth Shoulder Construction	х	NLAA CC ¹	
Erosion Control - Barriers	х	NE	
Erosion Control - Erosion Checks	х	NE	
Erosion Control - Inlet/Outlet Protection	х	NE	
Erosion Control - Mulching	х	NE	
Erosion Control - Rolled Erosion Control	x	NE	
Erosion Control - Slope Interuption	x	NE	
Erosion Control - Vegetation	x	NE	
Fencing		NLAA CC ^{2,3}	
Grading Within the Hinge Point		NLAA CC ¹	
Grading Outside the Hinge Point	х	NLAA CC ¹	
Guardrail Repair, Replacement, or Installation with Soil Disturbance	х	NLAA CC ¹	
Habitat Fragmentation, Modification of Connectivity	х	MA	
Lighting, Traffic and Pedestrian Signals, Dynamic Message Signs w/ soil disturbance		NLAA CC ¹	
Milling and/or In-place Recycling	х	NE	
Pavement Removal		NE	
Paving	x	NE	
Piers	x	NLAA CC ¹	
Pile Driving - Impact	x	NLAA CC ¹	
Pile Driving - Vibratory	x	NLAA CC ¹	
Pipe Jacking & Casing	x	NLAA CC ¹	
Removal of Structures and Obstructions	x	NLAA CC ¹	
Resurfacing-Fog/Slurry Seal, Armor Coat/Chip Seal		NE	
Rock or Gravel Surfacing		NE	
Signs with Soil Disturbance	x	NLAA CC ¹	
Stream Channel Impact, Intermittent		NLAA CC ¹	
Stream Channel Impact, Perennial		NLAA CC ¹	
Temporary Crossing, Causeway, Work Platform		NLAA CC ¹	
Trenched Widening		NE	
Wetland Mitigation		NLAA CC ¹	

Updated 2/17/2023

Individual Project Level Evaluation

Project Name: Minatare to US-385 Federal-aid number: NH-26-1(172) Control Number: 51521

This Individual Project Level Evaluation, in association with the completed Habitat Evaluation Form, the Matrix and associated conservation conditions, the Overview of Effects and Required Conservation Conditions sheet, and the associated appendices constitutes the complete Biological Assessment documentation for the above-referenced project.

1. SPECIES TO BE EVALUATED INDIVIDUALLY

Note, these are the species to be evaluated in-depth, separate from the evaluation completed for the remaining state and federally listed species documented through the Habitat Assessment form and Matrix.

<u>Common Name</u> Black Footed Ferret Northern Long-eared Bat Tricolored Bat Swift Fox <u>Scientific Name</u> Mustela nigripes Myotis septentrionalis Perimyotis subflavus Vulpes velox <u>Status</u> FE, SE SE,FE Proposed E SE

2. SPECIES EVALUATION

BLACK FOOTED FERRET (Mustela nigripes)

Black Footed Ferret Life History Information

The black-footed ferret is a medium-sized carnivore and the only ferret native to North America. It is yellow buff in color with whitish under parts and face, and a distinctive black facial mask, feet, and legs. The fur is short and fine-textured, and the ears are conspicuous and rounded. These weasel-like animals are about the size of a mink ranging from 18-24 inches in length with a 4-6-inch tail and have black feet and face mask (Clark and Stromberg, 1987). Females are usually 10 percent smaller than males, as is typical of mustelids (Fitzgerald et al., 1992).

The species is primarily nocturnal with the most daytime activity limited to the first few morning hours (USFWS, 1988, and Nebraska Game and Parks, 1992). They spend the majority of time in underground burrows and occur in areas with low human densities. The black-tail prairie dog (*Cynomys ludovicianus*) is the black-footed ferret's primary prey and the burrows of prairie dog towns are utilized for maintaining its livelihood. Ferrets do not hibernate but limit activity during the winter months. They have been found to remain underground in the same burrow system for a week at a time in the winter. However, they have been observed to travel more than 4 miles in one night in September (male travel distances tend to be about double that of females (Forest et al., 1988, and Nebraska Game and Parks, 1992). Behavior of ferrets has been observed to be playful, especially in juveniles. Vocalizations are used for various purposes including a hiss for an alarm call and female whimpers to encourage young to follow (Nebraska Game and Parks, 1992).

Black-footed ferrets lead solitary lives except during the breeding season. Breeding activity generally occurs in March and April, and after a gestation period of 41 to 45 days, a litter (typically of three or four) are born generally in May or June. Young are born blind and helpless, but development is fairly rapid. Young do not come above ground until they are 6 weeks old, and females will remain with young until about mid-August (USFWS, 1995).

Ferrets were once found throughout the Great Plains, from Texas to southern Saskatchewan, Canada (Nature Serve, 2009). Their historic range extended from the Rocky Mountains eastward through the Dakotas and south through Nebraska, Kansas, Oklahoma, and Texas (USFWS, 1995). The current range exists in portions of Nebraska, South Dakota, Montana, and Wyoming, although small populations might exist in other states.

In Nebraska, the ferret probably occurred in the western three-quarters of the state, coinciding with the range of the prairie dog. The last known museum specimen from Nebraska is an animal killed on a road near Overton in Dawson County in 1949 (Nebraska Game and Parks Commission (NGPC), 1992). Many reports have been received since but there have been no confirmed reports of the black-footed ferret in Nebraska. It is believed that existing prairie dog colonies are either too small or isolated from one another to support the species. Past efforts of the USFWS to reintroduce the species into the wild have focused on ecosystems such as the one near Wind Cave National Park in South Dakota. However, larger prairie dog colonies such as those once observed in the southern portions and the Panhandle of Nebraska may still provide habitat for the species. New sites for reintroduction that are relatively plague-free are currently being considered by the USFWS. Nebraska may have some potential sites in the southern and Panhandle portions of the state.

Survey History (if applicable)

NDOT has not conducted any surveys for the black footed ferret at the project location. No surveys are known to have been completed in the project vicinity. Very few surveys for the black footed ferret have been completed in the state of Nebraska. The species has not been seen in Nebraska since 1949 and is considered extirpated from Nebraska by the USFWS.

Black Footed Ferret Habitat Evaluation and Suitability

Black-footed ferrets are dependent on prairie dog towns for foraging and shelter. Prairie dogs comprise approximately 75% of a Black-footed ferret diet (Hillman and Clark 1980). Therefore, habitat suitability is in part dependent on the presence of active prairie dog towns. Through the review of aerial imagery, approximately 5010 acres of potentially active prairie dog towns were identified within the escarpment regions separating the North Platte River Valley from the Sandhills (Figure 1). It is estimated that 222 acres of prairie dog towns are required per black-footed ferret (USFWS 2019). Female home ranges barely overlap, whereas female-male ranges completely overlap (Powell 1979, Livieri and Anderson 2012). Based on this, 33 black-footed ferrets could be supported by this prairie dog complex, assuming a sex ratio of 2:1 females to males (A complex consists of two or more neighboring prairie dog towns with the spacing between the adjacent neighboring towns being less than 4.0 miles) (USFWS 2019). It is estimated that a colony of 30 blackfooted ferrets could provide a stable population of ferrets (USFWS 2013 and 2019). Prairie dog towns were considered potentially active based on apparent prairie dog town expansion or activity viewed through aerial imagery over time. More prairie dog towns may be active across the escarpments region that could be considered part of the complex. However, upto-date aerial imagery on Google Earth was not available for much of the region, and only areas with imagery from 2024 were examined. Immediately adjacent to the project alignment are 4 prairie dog towns to the north and south of L62A. To the north and south of L62A, the prairie dog towns are approximately 451 and 567 acres, respectively (**Figure 2**).

With the acreage of prairie dog towns in this area, this location could be suitable for blackfooted re-introduction. However, other factors must be considered when looking at potential re-introduction sites. This includes 1) Risk of Disease, 2) Human Activity, 3) Legal and Regulatory Limitations, and 4) Connectivity to other ferret re-introduction sites.

Risk of Disease

One of the most critical considerations for re-introducing black-footed ferrets at a site is the presence of the Sylvatic Plague (*Yersinia pestis*). Sylvatic Plague can decimate prairie dog colonies as well as black-footed ferrets. While to NDOT's knowledge, there is no officially documented presence of Sylvatic Plage in this complex, reports from local landowners suggest that plague has spread through the populations and has caused severe declines in the past. Further, active management of plague is not currently occurring at this location, nor are there any plans to, to NDOT's knowledge. Active plague management would be critical before the re-introduction of black-footed ferrets in this location (USFWS 2013).

Human Activity

The escarpments region where the prairie dog complex is located has relatively low active human disturbances. Most of this region is used as grazing land to raise cattle. However, through a review of aerial imagery, active landowner eradication of prairie dog towns occasionally occurs. Fragmentation of this prairie dog complex is present from the presence of the L62A and US 385 Highways. Private landowner attitudes towards prairie dogs will need to continue to shift, and public agreements to improve connectivity in this region across roadways would likely be critical to any successful reintroductions.

Legal and Regulatory Limitations

The reintroduction of black-footed ferrets in this location would require support from local government and private landowners. The prairie dog complex occurs almost entirely on private land. Private landowners would have to consent to the reintroduction and enter into voluntary or safe harbor agreements. Due to the numerous numbers of land owners across the region and general attitudes towards government interference, this would likely pose serious limitations to any re-introductions.

Connectivity to Other Black-footed Ferret Re-introduction Sites

Currently, new re-introduction sites of black-footed ferrets are focused on locations near other established re-introduction sites to improve habitat connectivity under the lens of landscape-level conservation while also being able to utilize established management infrastructures and benefiting from local knowledge and experience gained at established sites (A. Ciurej, USFWS, personal communication). This location is far from any currently established black-footed ferret colonies. Within Nebraska, re-introductions are likely to be focused in northwestern Nebraska near the border of South Dakota, closer to the reintroduction sites at Badlands National Park and Wind Cave National Park.

Therefore, while this area does have suitable habitat for black-footed ferrets through the presence of a large prairie dog complex, it is not a likely site for the reintroduction of black-footed ferrets in the near future due to its lack of connectivity to other reintroduction sites, lack of plague management, and the requirement of significant private landowner support.

Black Footed Ferret Analysis and Determination of Effects

The project involves widening L-62A from a 2-lane to a 4-lane divided roadway with a depressed median in the eastern segment near the prairie dog colony. This will be accomplished by constructing new lanes on the north side of the L-62A corridor and resurfacing the existing lanes. Approximately 22 acres of new right-of-way (ROW) will be required between the Lowline Canal and US-385, with about 10 acres currently utilized by prairie dogs, considered suitable habitat for black-footed ferrets. This habitat will be converted into a new roadway and ditch.

The Matrix of Effects table identifies the activity "Habitat Fragmentation, Modification of Connectivity" as "May Affect." All other activities were identified as having No Effect on the Black-footed Ferret.

activity "Habitat Fragmentation, Modification of Connectivity" occurs because the expansion of the L-62A highway from a two-lane to a four-lane divided roadway could result in increased mortality associated with vehicle collisions and further fragment the prairie dog complex, potentially reducing the viability of a potential re-introduction of black-footed ferrets in this location.

Roadways appear to be a source of mortality for black-footed ferrets. In Nebraska, the last recorded black-footed ferret occurrence was killed on a road near Overton, Nebraska, in 1949. In Colorado, at the Rocky Mountain Arsenal National Wildlife Refuge reintroduction site, six ferrets were killed in vehicle collisions from 2015 to 2019 (USFWS 2019). While, to NDOT's knowledge, there is no research on how black-footed ferrets interact with roads, it is likely that black-footed ferrets do not view roads as obstacles entirely and will cross highways, as evidenced by records of road mortality. However, black-footed ferrets are not expected to occur in Nebraska. The USFWS considers the species extirpated from the state of Nebraska. Mortality from road collisions associated with the expanded highway would be considered discountable as the likelihood of black-footed ferrets existing in this location is extremely low.

If the re-introduction of black-footed ferrets occurs at this location, the further fragmentation caused by the highway expansion could pose challenges to black-footed ferrets. In the event of a re-introduction of black-footed ferrets in this location, safe passage of black-footed ferrets for traversing the roadway would likely be necessary. The prairie dog complex sprawls to the North and South of L-62A and to the east of US 385. The largest densities of prairie dog towns occur near L-62A. However, as discussed in the

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habitat evaluation and suitability section, this area is not a likely site for reintroducing black-footed ferrets.

Therefore, because this site is not currently planned for the re-introduction of black-footed ferrets or is likely to become a site for re-introduction considering the focus of current black-footed ferret re-introductions by the USFWS and the need for significant landowner buy in, NDOT has determined this project, "May affect, but is not likely to adversely affect" the black-footed ferret or its habitat.

Determination

Due to the lack of black footed ferret in Nebraska in the prairie dog complex on the east end of the alignment and the low likelihood the site would be a re-introduction site in the future, NDOT has determined that this project may affect, but is not likely to adversely affect, the black footed ferret or its habitat.

NORTHERN LONG-EARED BAT (*Myotis septentrionalis*) and **TRICOLORED BAT** (*Perimyotis subflavus*)

This project is within the NGPC range for Northern long-eared bat but not the USFWS range. Based on guidance from the NGPC and USFWS, this project was processed through the NGPC Conservation and Environmental Report Tool and conservation measures from the generated Environmental Review Report for NLEB are proposed in this IPLE.

Tri-colored bat is proposed to be federally listed endangered; an official federal listing opinion is anticipated in 2024. All species federally listed as threatened or endangered are also listed by the state of Nebraska under State Statute 37-802(1). Due to the similar habitat requirements for northern long-eared bat and tri-colored bat, Project effects have been evaluated concurrently.

Northern Long-eared Bat Life History Information

Northern long eared-bat (NLEB) (*Myotis septentrionalis*) was recognized as a distinct species in 1979 apart from Keen's long-eared myotis (*Myotis keenii*) (Fitch and Schump 1979). Adult NLEB weighs five to eight grams on average, with a body length ranging from 77 to 95 millimeters and a wingspan ranging from 228 to 258 millimeters (Barbour and Davis 1969; Caceres and Pybus 1997). Their fur coloration ranges from medium to dark brown on their back, dark brown ears and wing membranes, and tawny to pale-brown ventral sides (Nagorsen and Brigham 1993; Whitaker and Mumford 2009). NLEB have relatively long ears compared to other *Mytosis* species.

NLEB range spans most of the eastern and north-central U.S. and all Canadian provinces (Nagorsen and Brigham 1993, p. 89; Caceres and Pybus 1997). Within Nebraska, the species is estimated to be present in the eastern and northern half of the state. The NLEB

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annual life cycle consists of hibernation¹ (winter), foraging (spring, summer, fall), roosting (summer), swarming (fall), and migration (spring and fall). NLEB primarily hibernate in hibernacula, including caves and mines. However, when caves and hibernacula are not readily available, the species has been known to utilize abandoned railroad tunnels, the entrance of storm sewers, hydroelectric dam facilities, aqueducts, and dry wells. Within Nebraska, NLEB hibernates in mining caves and rock crevices associated with Karst areas (White et al. 2020). Short regional migration, up to 55 miles, between winter hibernacula and summer roosts have been reported (Nagorsen and Brigham 1993). During the summer, NLEB roosts singly or in maternity colonies in cavities and underneath bark or crevices in trees and snags (Sasse and Pekins 1996; Foster and Kurta 1999; Owen et al. 2002; Carter and Feldhamer 2005; Perry and Thill 2007; Timpone et al. 2010). Other documented roosting habitats for NLEB include structures such as buildings, barns, utility poles, bridges, and culverts (USFWS 2021). It is theorized that NLEB will utilize human structures more when natural habitat is unavailable (Henderson and Broders 2008).

NLEB are nocturnal foragers with a diverse diet of moths, flies, leafhoppers, caddisflies, and beetles (Griffith and Gates 1985, Nagorsen and Brigham 1993, Brack and Whitaker 2001), with lepidopterans and coleopterans being the most common prey (Brack and Whitaker 2001). NLEB prefers to forage in the understory of canopies on forested hillsides and ridges (Nagorsen and Brigham 1993) rather than forested riparian areas (LaVal et al. 1977). Highly fragmented habitats or areas that have been cleared of trees are not preferred by NLEB (USFWS 2015).

Tri-Colored Bat Life History Information

Tricolored Bat (*Perimyotis subflavus*) (TCB) is a small insectivorous bat with a unique tricolored fur that distinguishes it in eastern North America. Adult TCB exhibits fur coloration ranging from dark at the base, lighter in the middle, to dark at the tip (Barbour and Davis 1969, P. 115). Both males and females are colored alike, but females are consistently heavier than males (LaVal and LaVal 1980, p.44). The TCB range is known throughout 39 States, including Nebraska, 4 Canadian Provinces, and several Central American Countries. The species range and distribution has been expanding westward in recent decades and is attributed to an increase in trees along rivers, and an increase in suitable winter roosting sites, such as abandoned mines and other human-made structures (Benedict et al. 2000, p. 77; Geluso et al. 2005, p. 406; slider and Kurta 2011, p. 380).

During the spring, summer, and fall (i.e., non-hibernating seasons) TCB primarily roost among live and dead leaf clusters of live or recently dead deciduous hardwood trees. In addition, TCB have been observed roosting during summer among pine needles, eastern red cedar, and within artificial roosts such as barns, porch roofs, and bridges (Veilleux et al. 2003, p. 1071; Perry and Thill 2007, pp. 976–977; Thames 2020, p. 32; Jones and Pagels 1968, entire; Barbour and Davis 1969, p. 116). Female TCB exhibit high site fidelity,

¹ Hibernation is a term that refers to long periods of 'topor' which is a state of decreased physiological activity in an animal, usually marked by reduced body temperature and metabolic rates, allowing them to survive periods of reduced food availability. Topor may be daily or seasonal in nature, and even seasonal periods of topor may be punctuated by periods of activity or arousal, referred to as 'torpor bouts.' In bats, topor can be daily or seasonal, lasting from a few hours to a month, and may occur during extended cold or hot periods, or even during brief periods of extreme weather.

returning year after year to the same summer roosting locations (Allen 1921, p. 54; Veilleux and Veilleux 2004a, p. 197).

During the winter, TCB hibernates in caves and mines, although in the southern U.S., where caves are sparse, TCB often hibernate in road-associated culverts (Sandel et al. 2001, p. 174; Katzenmeyer 2016, p. 32; Limon et al. 2018, entire; Bernard et al. 2019, p. 5; Lutsch 2019, p. 23; Meierhofer et al. 2019, p. 1276) and sometimes tree cavities (Newman 2020, p. 14) and abandoned water wells (Sasse et al. 2011, p. 126). TCB are one of the first cave-hibernating species to enter hibernation in the fall and one of the last to leave in the spring in Missouri and Pennsylvania (LaVal and LaVal 1980, p. 29; Merritt 1987, p. 102). Hibernating TCB do not typically form large clusters; most commonly roost singly, but sometimes in pairs, or in small clusters of both sexes away from other bats (Hall 1962, p. 29; Barbour and Davis 1969, p. 117; Mumford and Whitaker 1982, p. 169; Raesly and Gates 1987, p. 19; Briggler and Prather 2003, p. 408; Vincent and Whitaker 2007, p. 62). In road associated-culverts in the southern U.S., however, TCB exhibit shorter torpor bouts and move within and between culverts throughout the winter (Anderson et al. undated).

TCB are opportunistic feeders and consume small insects including caddisflies (Trichoptera), flying moths (Lepidoptera), small beetles (Coleoptera), small wasps and flying ants (Hymenoptera), true bugs (Homoptera), and flies (Diptera) (Whitaker 1972, p. 879; LaVal and LaVal 1980, p. 24; Griffith and Gates 1985, p. 453; Hanttula and Valdez 2021, p. 132). TCB emerge early in the evening and forage at treetop level or above (Davis and Mumford 1962, p. 397; Barbour and Davis 1969, p. 116) but may forage closer to ground later in the evening (Mumford and Whitaker 1982, p. 170). TCB forage most commonly over waterways and forest edges (Barbour and Davis 1969, p. 116; Mumford and Whitaker 1982, pp. 170–171; Hein et al. 2009, p. 1204). Maximal distance traveled from roost areas to foraging grounds was 4.3 kilometers (km; 2.7 miles) for reproductive (pregnant or lactating) adult females in Indiana (Veilleux et al. 2003, p. 1074) and 24.4 km (15.2 miles) (mean=11.4 km; 7.1 miles) for male TCB in Tennessee (Thames 2020, p. 61).

Male and female TCB converge at cave and mine entrances between mid-August and mid-October to swarm and mate. Females typically give birth to two young, rarely one or three between May and July (Allen 1921, p. 55; Barbour and Davis 1969, p. 117; Cope and Humphrey 1972, p. 9). Adults often abandon maternity roosts soon after weaning, but young remain longer (Whitaker 1998, p. 653). TCB are considered juveniles (i.e., subadults) when entering their first hibernation and most probably do not mate their first fall (Fujita and Kunz 1984, p. 3).

TCB disperse from winter hibernacula to summer roosting habitat in the spring. Fraser et al. 2012 (p. 5) concluded that at least some TCB engage in latitudinal migration that is more typically associated with hoary bats (*Lasiurus cinereus*), eastern red bats, and silver-haired bats, and this behavior is more common for males than for females. The maximum migration distance on record is a female TCB who migrated a straight-line distance of 243 km (151 miles) from her winter hibernaculum in southern Tennessee to a summer roost in Georgia (Samoray et al. 2019, p. 17). Other migration records between winter hibernacula and summer habitat include less than 80 km (50 miles) (Barbour and Davis 1969, p. 117),

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44 km (27 miles) (Samoray et al. 2019, p. 18), and 137 km (85 miles) (Griffin 1940, p. 237). Hibernaculum to hibernaculum movement up to 209 km (130 miles) has also been documented between two consecutive winters (Lutsch 2019, p. 38).

NLEB and TCB Survey History (if applicable)

NDOT conducted a site visit on 4/03/2024 to inspect box culverts and bridge structures located along US-26 and L62A for any evidence of bats. After assessment of the box culverts and bridge structures, no evidence of bats was detected. Survey forms are attached to this biological assessment.

NLEB and TCB Habitat Evaluation and Suitability

NLEB and TCB are primarily forest-dependent bats. Both species are specialized for living within and adjacent to forested areas. The project area is predominantly rural, with a mix of farmland, rangeland, and small pockets of natural habitats. Most of the alignment does not contain any forested areas of substantial size that would be able to support NLEB or TCB. Trees are limited to narrow wooded corridors along the waterways of the project, such as Nine-mile Creek, Wildhorse Drain, Wildhorse Canyon, and Red Willow Creek. Most of these streams have stretches with absent trees and lack a forested connection to larger treed corridors. Both NLEB and TCB utilize treed corridors as traveling corridors, which implies that most of these streams would not be suitable for the species. Further, all sparsely treed corridors along the streams lose all trees just north along the project alignment as the plains/valleys associated with the North Plate River shift into arid escarpments before transitioning into the sandhills. Therefore, most of the sparsely wooded corridors would not act as travel corridors as they do not connect to large forested areas that would be suitable for roosting or foraging, and the corridors themselves need to be more substantial to support the species for roosting or foraging.

The only area of potential habitat for NLEB and TCB would be near Red Willow Creek from MM 5.87 to MM 6.17 (**Figure 3**). Just North of the alignment at this location, the wooded corridor along Red Willow Creek disappears as Red Willow Creek transitions into arid escarpments. To the south of the alignment, Red Willow Creek has moderate to low connectivity to the North Platte River Wooded Riparian Corridor. The heavier forested corridors that best support NLEB and TCB foraging and roosting are located to the south of the project alignment. Further, it should be noted that Red Willow Creek is classified as an intermittent channel, which indicates that it is dry for part of the year. This could pose challenges to both northern long-eared bats and tri-colored bats, as they both require access to water. Therefore, the only location of suitable habitat for NLEB and TCB along the alignment is at Red Willow Creek. Further, this is the only area where the NGPC identifies as within the range of NLEB on the project alignment.

NLEB and TCB Analysis and Determination of Effects

The activities Bridge Superstructure New, Replacement, or Repair – Perennial; Bridge Substructure New, Replacement, or Repair – Perennial; Clearing and Grubbing Trees and

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Shrubs; Culvert New, Replacement, Extension, Repair – Intermittent and Perennial; and removal of Structures and Obstructions are identified as a "May Affect, Not Likely to Adversely Affect" NLEB with the implementation of the conservation conditions NLEB – 1 or NLEB 2, NLEB CM- 5 or CM – 6, and NLEB – 3 and NLEB CM – 2 (See section3 below). Habitat Fragmentation, Modification of Connectivity is identified as a "May Affect". All other activities are identified as a "No Effect".

With the activity *Bridge Superstructure New, Replacement, or Repair – Perennial* and *Bridge Substructure New, Replacement, or Repair – Perennial* are for building a new bridge. No work on currently existing bridges will be occurring, therefore conservation conditions NLEB -1 or -2, which relate to work on existing bridge structures will not be applied on this project.

With the activities *Culvert New, Replacement, Extension, Repair – Intermittent and Perennial* no culverts are greater than 130ft within areas of suitable habitat for NLEB and TCB. Therefore, as outlined by the NGPC through their Conservation and Environment Review Tool the conservation conditions NLEB CM – 5 or CM – 6 do not need to be applied on this project.

The activity Habitat Fragmentation, Modification of Connectivity is triggered by the widening US-26 and L62A from an existing 2-lane roadway to a 4-lane divided roadway, which may result in further fragmenting habitat and modifying the existing connectivity between habitats. As identified in the Habitat Evaluation and Suitability section, the only location identified as suitable habitat for NLEB and TCB is near Red Willow Creek from MM 5.87 – MM 6.17. The expansion of the highway at this location will occur to the north of the existing highway and remove an estimated 0.48 acres of trees, with an additional 0.07 acres of tree removal on the south side of Red Willow Creek associated with the installation of a new concrete box culvert. Expansion of the roadway and associated tree removal in this area could reduce the ability of NLEB and TCB to travel between the forested areas on the North and South of the Alignment. Most suitable habitat near the alignment occurs south of the highway at this location along Red Willow Creek. By choosing the northern alternative in this location, NDOT minimizes the impacts to the south with the larger suitable habitat. To the north of the highway, the forested area is small and disappears quickly as the topography transitions into arid escarpments. Due to the small size of the forested area to the north, this area is not anticipated to be overly crucial to NELB or TCB for foraging or roosting and does not act as a travel corridor to more extensive tracts of forest. Due to the small size of the forested area to the north and lack of connectivity to larger forested areas farther north, the activity Habitat Fragmentation, Modification of Connectivity "May affect, but is not likely to adversely affect" NLEB or TCB.

Determination

Considering the scope of the project, the location and amount of suitable habitat within the project's proximity, and the implementation of conservation conditions NLEB CM - 2 and

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NLEB / TCB —3, the NDOT concludes that the project "may affect, not likely to adversely affect" the Northern long-eared Bat and Tricolored Bat or their habitat.

SWIFT FOX (Vulpes velox)

Swift Fox Life History Information

The swift fox averages 5 pounds and measures about 3 feet from head to tail. It is about the size of a large domestic cat and about one-half the size of the more common red fox. Its fur is buff yellow or tan, with reddish and gray overtones. The tail is black tipped, and there are also areas of black found on each side of the snout. Winter pelage is dark buffy gray above, orange-tan on the sides, legs, and lower surface of the tail, and buff to white on the chest and belly; in summer, the coat is shorter, harsher, and more reddish. Swift fox differ from the kit fox in that they have smaller ears, broader snout, and shorter tail. The red fox also has a white tipped tail.

Swift fox are primarily nocturnal, and vocal. They spend more time underground than any other canid. Although social animals, they keep one mate throughout their lifetime. They received their name because of their speediness (up to 25 mph). Coyotes, eagles, and hawks have been reported as predators of swift fox. Swift fox breed when they are 1 to 2 years old. Breeding generally occurs in December and early March, with the gestation period being 50 to 60 days (Nebraska Game and Parks Commission (NGPC), 2010). The average litter size ranges from 2 to 6. The young emerge from dens at 3 to 4 weeks and are weaned 6 to 7 weeks. The young will stay with adults for about 4 to 5 months. Swift fox have a lifespan of 3 to 6 years. Dens are used on a daily basis throughout the entire year. Dens may be excavated by the swift fox or they may use old badger holes or prairie dog burrows.

Historically, the swift fox was widely distributed from southern Canada to the panhandle of Texas, and from the northwest of Montana to western Minnesota. They have been reduced to about 60 percent of their former range. The historic geographic range of the swift fox extended over most of Nebraska. "Nebraska is on the eastern edge of the swift fox range today. Populations have been found only in the Panhandle and southwestern Nebraska, and the species is listed as endangered in the state (Grier, 2003)." At present, they are found in a few areas in the western Panhandle and in the southwestern part of the state.

The swift fox prefers open semi-arid, shortgrass and mixed grass prairie, including areas intermixed with winter wheat fields, generally away from intensively cultivated or irrigated cropland (with little or no shrubs). They also inhabit areas of mixed agricultural use, but in these areas the population densities are lower. They select habitat with low-growing vegetation and relatively flat terrain, friable soils and high den availability, and areas near roads. Low-growing vegetation and flat terrain allow swift foxes to scan large areas for potential predators such as coyotes, their main cause of mortality (Sovada et al., 1998, Olson and Lindzey, 2002). Swift foxes are the most burrow-dependent canid in North America, (Jackson and Choate 2000), using them for predator avoidance and pup rearing (Herrero et al., 1991, and Stephens and Anderson, 2005). Prairie dog towns are also a preferred habitat of the swift fox (Kahn et al, 1997).

Principle foods are cottontails, jackrabbits, small birds, insects, and small mammals (including mice and ground squirrels), and vegetable matter (grasses and berries). Swift fox also readily feed on carrion.

Survey History (if applicable)

According to the Natural Heritage Database, the Swift Fox has an identified occurrence within 1.0 mile of the project area, within the last 30 years.

Habitat Evaluation and Suitability

The project action area is situated within the Shortgrass Prairie Ecoregion, notably beginning in the rolling hills and side slopes of the North Platte River valley. Characterized as part of the Topographic Region of the Valleys and Valley-Side Slopes, this area features flat-lying land along major streams, including the North Platte River, and moderately sloping land between escarpments. The eastern portion of the project area, which contains prairie dog colonies, provides a substantial source of food and shelter for the swift fox, making it a particularly suitable habitat.

West of the Lowline Canal, the study area predominantly comprises rural farmland and rangeland, encompassing a vast expanse of natural and semi-natural environments. Due to the amount of agricultural disturbance, the project west of the lowline canal would be considered marginally suitable habitat for the swift fox.

Based on aerial review of the project action area the following classifications of Swift Fox habitat were considered:

Suitable habitat for the swift fox include:

• Shortgrass prairie, along L62A from the Lowline Canal east to the intersection of US-385. This area includes the prairie dog colonies.

Marginally suitable habitat for the swift fox is mapped to include:

- Heterogeneous crop land, intermixed with areas of rangeland, hayland, and the commercial feedlots adjacent to US-26 and L62A, typically west of the Lowline Canal.
- Agricultural cropland that is irrigated, including the corners of the pivot fields
- While swift fox will inhabit landscapes partially converted to agriculture, highly cultivated and irrigated cropland is not considered suitable (Kamler, 2002)

Unsuitable habitat for the swift fox is mapped to include:

• Urban centers; such as the center of the City of Minatare

Analysis and Determination of Effects

The Matrix of Effects table identifies the following activities as "May affect, not likely to adversely affect" with the implementation of conservation conditions SF- 1, SF -2, and SF

- 3: Bridge Substructure New, Replacement, or Repair - Perennial; Bridge Superstructure New, Replacement, or Repair - Perennial; Channelization, Intermittent; Clearing and Grubbing - Non-woody Vegetation; Clearing and Grubbing - Trees & Shrubs; Culvert New, Replacement, Extension, Repair - Intermittent; Culvert New, Replacement, Extension, Repair - Perennial; Earth Shoulder Construction; Fencing; Grading Within the Hinge Point; Grading Outside the Hinge Point; Guardrail Repair, Replacement, or Installation with Soil Disturbance; Lighting, Traffic and Pedestrian Signals, Dynamic Message Signs with Soil Disturbance; Piers; Pile Driving - Impact; Pile Driving -Vibratory; Pipe Jacking & Casing; Removal of Structures and Obstructions; Signs with Soil Disturbance; Stream Channel Impact, Intermittent; Stream Channel Impact, Perennial; Temporary Crossing, Causeway, Work Platform; and Wetland Mitigation.

The Matrix of Effects table identifies the activity *Habitat Fragmentation, Modification of Connectivity* as a "May Affect". This activity is triggered by the expansion of the roadway from a two lane highway to a four lane highway along the entire project alignment, thereby potentially expanding existing habitat fragmentation conditions and reducing connectivity of suitable habitats. This could result in increased mortality from collisions, loss of habitat, and reduction in connection between areas of suitable habitat.

Expanding the roadway from a two-lane highway to a four-lane highway would result in increased pavement that swift foxes would need to cross when traversing the highway. Swift foxes often used roadways for movement, foraging, and denning. Further, swift foxes likely do not view roadways as a barrier to movement (Pruss, 1999; Clevenger et al. 2010). Expanding the roadway could result in more collision-related mortality of swift foxes due to the need to cross more pavement where cars will be (Allardyce and Sovada 2003). Juvenile Swift Fox's may be particularly vulnerable to vehicle mortality (Cypher et al. 2009). However, mortality from the expansion of the roadway may not occur. The swift fox is primarily nocturnal (NGPC 2023), which aligns well with the periods of lowest traffic volumes, occurring during nighttime hours. This natural behavior likely reduces their risk of encountering vehicles, even with a slight speed limit increase to 70 mph from the currently posted 65 mph. Traffic volumes would remain low and are expected to rise minimally in the future, perpetuating a low-density traffic environment. This Project would not result in increased traffic volumes. Additionally, the project includes the construction of a wide, 40-foot grassy median. This enhancement improves visibility for both swift foxes and drivers, reducing the likelihood of vehicle-induced mortality and providing a safe resting area for wildlife between road crossings. The expanded median allows swift foxes greater sight distance to see oncoming traffic and navigate safely, enhancing their ability to move across the landscape without harm. In addition, approximately seven culverts connecting the north and south sides of L62A could be used for passage under the roadway by swift fox (Figure 2). However, it should be noted that swift fox may not use below-grade crossings as often as above-grade crossings (CDOT 2010). Nevertheless, increased mortality from vehicle collisions could occur due to this project.

Vehicle collision-caused mortality is not likely to have a significant effect on Swift Fox in Nebraska (Albrecht 2015, NGPC 2023). From a range-wide perspective, a primary threat to swift foxes is depredation from predators such as coyotes. To offset any potential

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collision-related mortality from the expansion of the roadway, NDOT will install artificial escape dens in the vicinity of the Project to provide escape and reduce swift fox mortality from coyotes and other predators. Successful use of artificial dens has been demonstrated with studies of the similar federally-listed San Joaquin kit fox (*Vulpes macrotis mutica*) in California (Bjurlin et al. 2005) and swift fox in northwest Texas (McGee et al., 2006). The beneficial effects of the artificial escape dens for use by swift foxes to avoid predation would offset the detrimental effects of roadway vehicle-animal mortality. Escape den specifications and habitat suitability maps were created for the project "Junction L62A/US-385 to Alliance" and can be found in the attached Swift Fox Escape Den Installation Protocol (attached).

Artificial den locations would be determined through further consultation with NGPC to determine the appropriate number and placement of the dens in the landscape. The escape dens are assumed to be located within the shortgrass prairie and within the ROW for the additional lanes to the north of L62A.

Indirect Effects

Based on the swift fox habitat suitability described earlier, the Project entails converting approximately 22 acres of suitable habitat into highway right-of-way (ROW). This ROW will be sourced from the north side of the L62A corridor, stretching from the Lowline Canal to the US-385 interchange, to construct the proposed 4-lane divided highway. Based on NGPC habitat suitability modeling, Morrill County has approximately 360,427 acres of potentially suitable swift fox habitat. These acres may not all be available for swift fox use due to other factors the model did not account for (i.e., predation risk, vegetation composition and structure, habitat already occupied, etc.) However, given the configuration of the acres impacted by the Project, in combination with the amount of potentially suitable swift fox habitat (even if it is not all available) and the possibility that lack of habitat is not the limiting factor for swift fox, it is not likely the Project will have a long-term adverse impact on habitat availability or suitability for swift fox. Given the extensive amount of available habitat within the shortgrass prairie in this region, the proportion of habitat affected by the Project's ROW and limits of construction is relatively small. Consequently, the impact on swift fox habitat from the required land conversion for this Project would be deemed negligible.

Determination

Through offsetting potential mortality of swift from vehicle collisions by installation of escape dens to reduce mortality from predation, this project May Affect, not Likely to Adversely Affect swift fox or their habitat.

3. CONSERVATION MEASURES (if applicable)

Northern Long-eared Bat / Tri-Colored Bat

NLEB / TCB -3: All phases and aspects of the project shall be modified, to the extent practicable, to avoid tree removal in excess of what is required to

implement the project safely. Tree removal shall be limited to removals specified in the project plans, which will be clearly marked in the field. (*Design, Contractor*)

NLEB / TCB CM-2: No removal of suitable trees or roosting structures between May 15 and July 31 (maternity roosting season) (*Contractor*)

Swift Fox:

- **SF-1** Two weeks prior to the start of construction, a qualified biologist <u>shall</u> survey the environmental study area according to protocol to determine if active swift fox den sites are present. If an active den with young is located and it is outside the project limits, then a buffer zone shall be established around the den and all construction activities shall avoid the buffer until the den is abandoned. If an occupied den with or without young is identified within the project limits or staging areas, NDOT shall immediately coordinate with the NGPC to determine how to proceed. A buffer zone shall be established around the den and all construction activities shall avoid the buffer until NDOT gives approval to enter the buffer area. Between April 1 and August 31, the buffer zone shall be 250 yards around the active den site; other times of the year, the buffer shall be 100 yards around the active den site. (*NDOT Environmental*)
- **SF-2** Fencing shall be designed for wildlife safety and wildlife friendly passage with a bottom wire at least 16" from the ground. If different fencing design is required for safety or access control, additional coordination with resource agencies shall be required. (NDOT Design, NDOT Environmental)
- **SF-3** Fence posts shall not be placed within potential den sites that appear to have animal activity. If fence posts cannot avoid potential den sites that appear to have animal activity, NDOT Environmental will be notified and will re-initiate consultation with resource agencies. Work will not commence until agency concurrence is received. (Contractor)
- **SF-A** NDOT shall coordinate with the NGPC regarding the installation of artificial escape dens in suitable locations along the L62A corridor. Swift Fox Escape Den Installation protocols shall be utilized. (NDOT Environmental, NDOT Design)

Black Footed Ferret:

No Conservation Conditions are required for the Black Footed Ferret.

4. COORDINATION

NDOT met with the USFWS during any agency coordination meeting on 2/15/2023. USFWS had no comments at this time.

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6. ADDITIONAL INFORMATION

Project related documents including field notes, photographs, surveys, etc., are located in the consultant project file and at the Nebraska Department of Transportation Environmental Services Office.



Figure 1. Potentially active black-tail prairie dog (*Cynomys ludovicianus*) towns within the escarpments region between the North Platte River Valley and the Sandhills. Areas highlighted in green indicate potentially active prairie dog towns. In total 5010 acres of prairie dog towns were identified. To the North of L62A are 2420 acres, to the south of L62A are 1,370 acres, and to the east of US-385 are 1,220 acres of black-tail prairie dog towns.



Figure 2. Black-tail prairie dog (*Cynomys ludovicianus*) towns near the project alignment with limits of construction. Orange lines crossing the alignment represent culverts.



Figure 3. Location of suitable habitat for northern long-eared bat and tri-colored bat at Red Willow Creek with limits of Construction.











Da of .	te & Time Assessment 4/3/2024	DOT Project Number 51521	Ro Ca	oute/Facility arried	62A	ounty Morrill			
Fe Str	<u>deral</u> ucture ID SL62A 00116	Structure Coordinates (latitude and longitude) MM 1.16	<u>Sti</u> (a)	<u>ructure Height</u> pproximate)			<u>St</u> Le	<u>ructure</u> 101'	
St	ructure Type (check one)		S	tructure Mat	teri	al (check all	th	at apply)	
Br	idge Construction Style		De	eck Material	Be	am Material	Er	nd/Back Wall	Material
0	Cast-in-place	Pre-stressed Girder	′⊩	Metal Concrete	H	None	┡	Concrete Timber	
			╢─	Timber		Steel	┝	Stone/Masonry	
\cup	Flat Slab/Box			Open grid		Timber		Other:	
0	Truss Side View		F	Other:		Other:	Сі	reosote Evide	nce
0	Parallel Box Beam	Other:	Сι	ulvert Material	1		B	Yes Unknown	O No
Сι	Ilvert Type	Other Structure	Ê	Metal			Ňc	otes:	
0	Roy	<u>+ </u>	╞	Plastic					
ŏ	Pipe/Round			Stone/Masonry					
Ò	Other:	<u> </u>		Other:					
Cı	ossings Traversed (check all th	nat apply)	S	urrounding	На	bitat (check	all	l that apply)	
	Bare ground	X Open vegetation	\mathbf{X}	Agricultural				Grassland	
Ļ	Rip-rap	X Closed vegetation		Commercial				Ranching	
×	Flowing water	Railroad	╼┠╤	Residential-urbar	n		┝	Riparian/wetiand	1
\vdash	Standing water	Other	− I⊋	Woodland/forest	ed		┢──	Other: Trees alnong t	bank
Δ,	case Assassed (check all that an		·				Ŋ		
Ch	eck all areas that apply If an area is not	present in the structure, check the "not pre	sent	" hox					
Do	icument all bat indicators observed during	a the assessment. Include the species pre-	sent,	if known, and p	orovi	ide photo docur	ner	ntation as indica	ated.
Δı	(check if assessed)	Assessment Notes		vidence of F	Pat	e (include nt	not	os if present	·)
<u> </u>	All crevices and cracks:		╧		Jac) Species
	Bridges/culverts: rough surfaces or	Not present	-F	Visual - live #		dead #	┝	Odor	Opecies
h	imperfections in concrete			Guano				Photos	1
Ľ	Other structures: soffits, rafters, attic			Staining					
	areas								
「	Construction of the second sec	Not present	┣	Land Brott		·		Audible	Species
\times	Concrete surfaces (open roosting on	NO evidence of Bats	F	Visual - live #		dead #	┢	Odor	-
	concrete	NO EVIDENCE OF DALS		Staining				Photos	-
⊢	·	X Not present	╧	-				Audible	Species
\square	Spaces between concrete end walls		7	Visual - live #		dead #		Odor	 ·
⊢	and the bridge deck			Guano			Ľ	Photos]
Ļ	C		╺┥┝═	Staining			1	A. Justo	Origaina
	Crack between concrete railings on top	X Not present		Visual - live #		dead #	┝─	Audibie	Species
				Guano			┝	Photos	4
	Railing H			Staining	_				
		X Not present		1				Audible	Species
b	Vertical surfaces on concrete I-beams			Visual - live #		dead #	Ľ	Odor	4
			┢	Guano				Photos	
┝	··	X Not present	╧			-		Audible	Species
\vdash	Spaces between wells, coiling joists	Not process	–⊢_	Visual - live #		dead #		Odor	
┡	Spaces between wans, centry joists			Guano				Photos]
	·		╇	Staining	_			T	
	Ween holes scunner drains, and	X Not present		Vieual - live #		the dead		Audible	Species
	inlets/nines		F	Guano			┢──	Photos	-
				Staining				Thetee	-
		X Not present		1				Audible	Species
	All quiderails		Ъ	Visual - live #		dead #		Odor	
			\vdash	Guano				Photos	-
-		X Not procent	┿	Staining			-	Audible	Species
		Not present	- [Visual - live #		dead #	<u> </u>	Odor	opecies
\square	All expansion joints			Guano				Photos	1
				Staining					
Na	ame: Rick Schmunk		Si	ignature: Ric	k \$	Schmunk			

Da of	te & Time Assessment 4/3/2024	DOT Project Number 51521	Ro Ca							
Fe Sti	<u>deral</u> ucture ID L62A 00152	Structure Coordinates (latitude and longitude) MM 1.52	<u>Sti</u> (a)	<u>ructure Height</u> pproximate)			<u>St</u> Le	ructure ngth		
St	ructure Type (check one)		S	tructure Mat	ucture Material (check all that apply)					
Br	idge Construction Style		De	eck Material	Be	am Material	Er	nd/Back Wall I	Vaterial	
0	Cast-in-place	O Pre-stressed Girder		Metal	H	None	┝	Concrete		
			╢──	Timber		Steel	\vdash	Stone/Masonry		
\cup	Flat Slab/Box			Open grid		Timber		Other:		
0	Truss Side View		E	Other:		Other:	Cı	reosote Evider	ıce	
0	Parallel Box Beam	Other:	Сι	ulvert Material			0	Yes Unknown	O No	
Сι	Ilvert Type	Other Structure	Ê	Metal			Nc	otes:		
0	Box	<u>+ </u>	┢	Plastic						
ŏ	Pipe/Round			Stone/Masonry						
Ô	Other:			Other:						
С	ossings Traversed (check all th	at apply)	S	urrounding	На	bitat (check	all	I that apply)		
Х	Bare ground	Open vegetation	\mathbf{X}	Agricultural				Grassland		
	Rip-rap	Closed vegetation	┡	Commercial				Ranching		
_	Flowing water		┢	Residential-urbar	n		┝	Riparian/wetianu		
X	Seasonal water	Other:	┢	Woodland/forest	ed		⊢	Other:		
	reas Assessed (check all that ar			1			n			
Ch	eck all areas that apply. If an area is not	present in the structure. check the "not pres	sent	" box.						
Do	cument all bat indicators observed during	g the assessment. Include the species pres	ent,	if known, and p	orovi	de photo docur	ner	ntation as indica	ited.	
A	ea (check if assessed)	Assessment Notes	Τ _E ,	vidence of E	Bat	s (include pr	ot	os if present)	
	All crevices and cracks:	Not present	t]				Audible	Species	
	Bridges/culverts: rough surfaces or		1_	Visual - live #		dead #		Odor		
	imperfections in concrete	1		Guano				Photos		
	Other structures: soffits, rafters, attic	1	L	Staining						
	areas	<u></u>					4			
	Concrete surfaces (open reasting on	Not present	-			4004 #		Audible	Species	
X	concrete)	NO evidence of Bats	F	Guano		deau #	L	Uaor Photos		
				Staining				Fliotos		
	· · · · · · · · · · · · · · · · · · ·	X Not present	F					Audible	Species	
	Spaces between concrete end walls		⊫	Visual - live #		dead #		Odor		
┢	and the bridge deck	1	F	Guano			L	Photos		
┡	Creek between concrete railings on ton		╋	Staining				Audible	Spacies	
 	of the bridge deck Gap	Not present	-匚	Visual - live #		dead #	┝─	Odor	Obecies	
		1		Guano				Photos		
	Kalling	<u> </u>		Staining						
	· · · · · · · · · · · · · · · · · · ·	X Not present	┣			· • • •		Audible	Species	
	Vertical surfaces on concrete I-beams	1	F	Visual - live #		dead #	Ļ	Odor		
	1	1	\vdash	Staining			┡	Photos		
	·	X Not present	t			i		Audible	Species	
\square	Spaces between walls, ceiling joists		1	Visual - live #		dead #		Odor		
┞─	opacco botticeri trano, centig jetete	1	F	Guano	_		Ľ	Photos		
Ļ	 '		╋	Staining				Audible	Spacies	
	Weep holes. scupper drains, and	Not present	-	Visual - live #		dead #	┝─	Odor	Opecies	
	inlets/pipes	1		Guano				Photos		
	<u> </u>	<u> </u>		Staining						
	· · · · · · · · · · · · · · · · · · ·	X Not present	F					Audible	Species	
	All guiderails	1		Visual - live #		dead #		Odor		
	1	1		Staining				Photos		
┝	/·	Not present	┢				-	Audible	Species	
	All expansion joints		Ŀ	Visual - live #		dead #		Odor		
				Guano				Photos		
			┶	Staining						
Na	ame: Rick Schmunk		Si	ignature: Ric	k S	Schmunk				

Da of .	te & Time Assessment 4/3/2024	DOT Project Number 51521	Ro Ca	oute/Facility arried	ounty Morrill				
Fe Str	<u>deral</u> ucture IDL62A 00220	Structure Coordinates (latitude and longitude) MM 2.20	<u>Sti</u> (a)	ructure Height oproximate)			<u>St</u> Le	<u>ructure</u> 120' ngth	
St	ructure Type (check one)		S	tructure Mat	teri	al (check all	th	at apply)	
Br	idge Construction Style		De	eck Material	Be	am Material	Er	nd/Back Wall	Material
0	Cast-in-place	O Pre-stressed Girder	┡	Metal Concrete	H	None		Concrete Timber	
			┢	Timber		Steel	┢	Stone/Masonry	
\cup	Flat Slab/Box			Open grid		Timber		Other:	
0	Truss Side View		E	Other:		Other:	Cı	reosote Evide	nce
0	Parallel Box Beam	Other:	Сι	ulvert Material			B	Yes Unknown	O No
Сι	Ilvert Type	Other Structure	Ê	Metal			Nc	otes:	
0	Box	<u>+ </u>	┢	Plastic					
ŏ	Pipe/Round			Stone/Masonry					
0	Other: Double Brokeback			Other:					
С	ossings Traversed (check all th	nat apply)	S	urrounding	На	bitat (check	all	l that apply)	
	Bare ground	X Open vegetation	\mathbf{X}	Agricultural			L	Grassland	
	Rip-rap	Closed vegetation	┡	Commercial				Ranching	
	Flowing water	Railroad	┢	Residential-urba	n		┢	Kiparian/weiianu Miyed use	
X	Seasonal water	Other:	峎	Woodland/forest	ed		┢	Other:	
Δ	reas Assessed (check all that an			μ. <u>.</u>	-			ų -	
Ch	eck all areas that apply. If an area is not	present in the structure, check the "not pres	sent	" hox.					
Do	cument all bat indicators observed during	g the assessment. Include the species press	ent,	if known, and p	orovi	de photo docur	ner	ntation as indica	ated.
Ar	rea (check if assessed)	Assessment Notes	TE	vidence of E	Bat	s (include pl	not	os if present)
-	All crevices and cracks:	Not present	t					Audible	Species
	Bridges/culverts: rough surfaces or		1_	Visua <u>l</u> - live #		dead #		Odor	
	imperfections in concrete			Guano				Photos]
	Other structures: soffits, rafters, attic			Staining	_				
	areas			-			-it	-	
	Concrete surfaces (open reasting on	Not present	╧	Visual live #		dood #	L	Audible	Species
X	concrete)	NO evidence of Bats	F	Guano		deau #	╞	Daor Photos	4
				Staining			-	Filotos	1
		X Not present	F					Audible	Species
h	Spaces between concrete end walls		⊫	Visual - live #		dead #		Odor	
	and the bridge deck		F	Guano				Photos	4
-	Creek between concrete railings on ton	V Not present	╋	Staining			_	Audible	Species
.	of the bridge deck Gap	Not present	-厂	Visual - live #		dead #	┢	Odor	Opecies
\vdash				Guano				Photos	1
				Staining					1
		X Not present	┣	Court live #			Ľ	Audible	Species
	Vertical surfaces on concrete I-beams		F	Visuai - live #		dead #	┡	Odor Bhotos	4
	1		┢	Staining		-	┞	Photos	1
	l	X Not present	⇇					Audible	Species
\square	Spaces between walls, ceiling joists		\mathbb{L}	Visual - live #		dead #		Odor	
⊢			F	Guano				Photos	
-	 		╋	Staining				Audible	Spaciae
Ļ	Weep holes, scupper drains, and	X Not present	-[Visual - live #		dead #	┝─	Odor	Species
\square	inlets/pipes			Guano				Photos	1
	· · ·			Staining					l
		X Not present	F					Audible	Species
	All guiderails		F	Visual - live #		dead #	┢	Odor	-
			\vdash	Staining			┢──	Photos	-
-	l	X Not present	┢					Audible	Species
	All expansion jointe		1_	Visual - live #		dead #		Odor	
\vdash				Guano				Photos	
			┶	Staining					
Na	ame: Rick Schmunk		Si	gnature: Ric	k S	Schmunk			

Da of	<u>te & Time</u> Assessment 4/3/2024	DOT Project Number 51521	Route/Facility Carried L62A County Morrill						
Fe Sti	<u>deral</u> r <u>ucture ID</u> SL62A 00295	Structure Coordinates (latitude and longitude) MM 2.95	<u>St</u> (a	<u>ructure Height</u> pproximate)	_		<u>Str</u> Le	<u>ngth</u> 80'	
S	ructure Type (check one)		S	tructure Mat	at apply)				
Br	idge Construction Style		De	eck Material	Be	am Material	Er	nd/Back Wall I	Material
O	Cast-in-place	O Pre-stressed Girder	┡	Metal Concrete	┠┤	None Concrete	\vdash	Concrete Timber	
			┢	Timber	H	Steel	\vdash	Stone/Masonry	
\cup	Flat Slab/Box			Open grid		Timber		Other:	
0			E	Other:		Other:	Cr	reosote Evider	nce
0	Parallel Box Beam	Other:	Сі	ulvert Material			0	Yes Unknown	O No
Сι	Jvert Type	Other Structure	Ě	Metal Concrete			No	otes:	
0	Box		È	Plastic					
Q	Pipe/Round			Stone/Masonry					
0	Other:		ľ	Other:			L		
CI	rossings Traversed (check all th	iat apply)	S	urrounding	Ha	bitat (check	all	that apply)	
	Bare ground	Closed vegetation	식	Agricultural		ľ	Ŕ	Grassland	
┝	Rip-rap Flowing water	Railroad	┢	Residential-urbar	n		P	Rinarian/wetland	
\vdash	Standing water	Road/trail - Type:	┢	Residential-rural	-		F	Mixed use	
X	Seasonal water	Other:	\mathbf{X}	Woodland/forest	ed			Other:	
A	reas Assessed (check all that ap	(ylqu							
Ch	eck all areas that apply. If an area is not	present in the structure, check the "not pres	sent	" box.					
Do	cument all bat indicators observed during	ງ the assessment. Include the species prese	ent,	if known, and p	rovi	de photo docun	ner	ntation as indica	ted.
A	r ea (check if assessed)	Assessment Notes	E	vidence of E	<u>3at</u>	s (include ph	ot	o <u>s if present</u>)	
	All crevices and cracks:	X Not present	F					Audible	Species
	Bridges/culverts: rough surfaces or	1		Visual - live #		dead #	Ľ	Odor	
	imperfections in concrete	1	┝	Guano		/		Photos	
	Other structures: soffits, ratters, attic	1		Stairing			I		
┝	areas	Not present	┢	1				Audible	Species
	Concrete surfaces (open roosting on		1_	Visual - live #		dead #		Odor	
\vdash	concrete)	NO evidence of Bats		Guano				Photos	
	ļ		╇	Staining		!		1	
	Spaces between concrete end walls	X Not present	-Ċ	Visual - live #		dead #	⊢	Audible	Species
	and the bridge deck	1	F	Guano		ucau n	⊢	Photos	
[l		Staining		ï			
	Crack between concrete railings on top	X Not present	F	1		I		Audible	Species
	of the bridge deck Gap		\mathbb{H}	Visual - live #		dead #		Odor	
ļ	Railing →	1	\vdash	Guano		!		Photos	
┝		Not present	┢	Staming			_	Audible	Species
┝			┺	Visual - live #		dead #		Odor	
┡		1		Guano				Photos	
	ļ		ᆂ	Staining		!		· · · · · · ·	
		X Not present	Ŀ	Visual - live #		dead #	┝	Audible	Species
	Spaces between walls, ceiling joists	1	F	Guano			\vdash	Photos	
		<u> </u>		Staining					
		X Not present	F					Audible	Species
	Weep holes, scupper drains, and	1	F	Visual - live #		dead #	L	Odor	
	inlets/pipes	1	\vdash	Guano		ł		Photos	
	<u> </u>	Not present	┢					Audible	Species
	All quidoraile		1_	Visual - live #		dead #		Odor	/ /
┡─	All guiderans	1		Guano				Photos	
	Ļ		ᄂ	Staining		!		A	
		X Not present	ł	Vieual - live #		# head	⊢	Audible	Species
	All expansion joints	1		Guano		ucau n	⊢	Photos	
		l		Staining		!			
			T				in the second		

Da of	<u>te & Time</u> Assessment 4/3/2024	DOT Project Number 51521	Route/Facility Carried L62A County Morrill						
<u>Fe</u> Str	<u>leral</u> ucture ID SL62A 00405	Structure Coordinates (latitude and longitude) MM 4.05	<u>St</u> (a)	<u>ructure Height</u> pproximate)			<u>St</u> Le	<u>ructure</u> 88' <u>ngth</u>	
St	ructure Type (check one)		S	tructure Mat	teri	al (check all	th	at apply)	
Br	idge Construction Style		De	eck Material	Be	am Material	Eı	nd/Back Wall I	Vaterial
0	Cast-in-place	O Pre-stressed Girder	┡	Metal	\mathbb{H}	None	L	Concrete Timber	
E			┢─	Timber		Steel	┝	Stone/Masonry	
\cup	Flat Slab/Box	O Steel I-beam		Open grid		Timber		Other:	
0		O Covered	E	Other:		Other:	Сі	reosote Evider	nce
0	Parallel Box Beam	Other:	Сι	ulvert Material	1		0	Yes Unknown	No
Сι	Ilvert Type	Other Structure	×	Metal Concrete			No	otes:	
0	Вох		F	Plastic					
8	Pipe/Round	P	┡	Stone/Masonry					
	other:	and analy)			Ча	hitat (check	2		
	Bare ground		쯙		Πα	Ditat (Check		Grassland	
	Rip-rap	X Closed vegetation	ĥ	Commercial			╞──	Ranching	
	Flowing water	Railroad		Residential-urbar	n		X	Riparian/wetland	
	Standing water	Road/trail - Type:	\mathbf{X}	Residential-rural				Mixed use	
X	Seasonal water	Other:		Woodland/forest	ed			Other:	
Ar	eas Assessed (check all that ap	/ply)							
Ch	eck all areas that apply. If an area is not	present in the structure, check the "not pres	ent	." box.		· · · · ·			
Do	cument all bat indicators observed during	J the assessment. Include the species prese	ent,	if known, and p	orov	de photo docur	nei	ntation as indica	ited.
Ar	ea (check if assessed)	Assessment Notes	E	vidence of E	Bat	s (include ph	not	os if present))
	All crevices and cracks:	X Not present	F					Audible	Species
	Bridges/culverts: rough surfaces or	1	F	Visual - live #		dead #	Ļ	Odor	
	imperfections in concrete	1	\vdash	Guano				Photos	
	Other structures: soffits, ratters, attic	1		Starring					
┝	areas	Not present		1			1	Audible	Species
	Concrete surfaces (open roosting on		┶	Visual - live #		dead #	┢	Odor	
쓰	concrete)	NO evidence of Bats		Guano				Photos	
		<u></u>		Staining					
	Spaces between concrete and walls	X Not present	-			400d #	L	Audible	Species
	spaces between concrete end wans	1	F	Guano		deau #		Daor	
	and the bruge deck	1	\vdash	Staining				Fliotos	
	Crack between concrete railings on top	× Not present	┢	4		i		Audible	Species
	of the bridge deck Gap		Ŀ	Visual - live #		dead #		Odor	
	Railing	1	L	Guano				Photos	
ļ_			┡	Staining				A	
			┢	Visual - live #		dead #	╞	Audibie	Species
\square	Vertical surfaces on concrete I-beams	1		Guano			╞	Photos	
	l	<u> </u>		Staining					
		X Not present	F					Audible	Species
b	Spaces between walls, ceiling joists	1	F	Visual - live #		dead #		Odor	
		1	\vdash	Guano Staining				Photos	
┝	·	Not present	┢	Stanning				Audible	Species
\vdash	Weep holes, scupper drains, and		1_	Visual - live #		dead #		Odor	
\vdash	inlets/pipes	1		Guano				Photos	
	[_]		ᄂ	Staining				1	
		X Not present	-	Visual - live #		theob	┝	Audible	Species
	All guiderails		F	Guano			┢	Photos	
	1		F	Staining				1 Hotob	
				4				Audible	Species
		X Not present		1					opecies
	All expansion joints	X Not present	E	Visual - live #		dead #		Odor	Opecies
	All expansion joints	X Not present	E	Visual - live # Guano		dead #	E	Odor Photos	opecies
	All expansion joints	X Not present		Visual - live # Guano Staining		dead #		Odor Photos	

Da of	te & Time Assessment 4/3/2024	DOT Project Number 51521	Route/Facility L62A County Morrill						
Fe Sti	deral SL62A 00463	Structure Coordinates (latitude and longitude) MM 4.63	<u>Sti</u> (a)	ructure Height oproximate)			<u>Sti</u> Le	<u>ructure</u> 115' ngth	
St	ructure Type (check one)		S	tructure Mat	teri	al (check all	th	at apply)	
Br	idge Construction Style		De	eck Material	Be	am Material	Er	nd/Back Wall I	Material
0	Cast-in-place	O Pre-stressed Girder		Metal Concrete	H	None Concrete		Concrete Timber	
			┢	Timber	H	Steel	-	Stone/Masonry	
\cup	Flat Slab/Box			Open grid		Timber		Other:	
0			E	Other:		Other:	Cı	reosote Evide	nce
0	Parallel Box Beam	O Other:	Сι	ulvert Material	1		B	Yes Unknown	O No
Сι	Ivert Type	Other Structure	É	Metal			Nc	otes:	
0	Box	<u>+ </u>	ĥ	Plastic					
ŏ	Pipe/Round		L	Stone/Masonry					
0	Other:			Other:					
С	rossings Traversed (check all th	at apply)	S	urrounding	На	bitat (check	all	l that apply)	
	Bare ground	X Open vegetation	$\mathbf{\Sigma}$	Agricultural			X	Grassland	
ŕ	Rip-rap	Closed vegetation	┡	Commercial			ŀ	Ranching	
\vdash	Flowing water	Railroad Doad/trail - Type:	┢	Residential-urba	n		싁	Kiparian/weiianu Miyed use	
\vdash	Seasonal water	Other:	뛵	Woodland/forest	ed		┢	Other:	
Δ	reas Assessed (check all that an		1	1	-		n	<u>1</u> -	
Ch	leck all areas that apply. If an area is not	present in the structure. check the "not pres	sent	" box.					
Do	ocument all bat indicators observed during	g the assessment. Include the species prese	ent,	if known, and p	orovi	de photo docur	ner	ntation as indica	ated.
A	rea (check if assessed)	Assessment Notes	Τ _Ε ,	vidence of E	Bat	s (include ph	not	os if present)
-	All crevices and cracks:	Not present	t					Audible	Species
	Bridges/culverts: rough surfaces or		1_	Visua <u>l</u> - live #		dead #		Odor	
	imperfections in concrete	1		Guano				Photos	
	Other structures: soffits, rafters, attic	1		Staining	_				
	areas	<u></u>		-			-it	-	
	Concrete surfaces (open reasting on	Not present	-	Visual live #		dood #	L	Audible	Species
Х	concrete)	NO evidence of Bats	F	Guano		deau #	╞	Daor Photos	
	concrete)			Staining			-	Filotos	
		X Not present	厈	1]		Audible	Species
	Spaces between concrete end walls		F	Visual - live #		dead #		Odor	
	and the bridge deck	1	F	Guano				Photos	
H	Creek between concrete railings on ton	V Not present	╇╧	Staining			_	Audible	Species
 	of the bridge deck Gab	Not present	-匚	Visual - live #		dead #	┢	Odor	Obecies
		1		Guano				Photos	
		<u> </u>		Staining					
		X Not present	┣	Court live #			Ľ	Audible	Species
	Vertical surfaces on concrete I-beams	1	F	Visuai - live #		dead #	┡	Odor Bhotos	
	1	1	\vdash	Staining			┞	Photos	
		X Not present	T					Audible	Species
	Spaces between walls, ceiling joists		\mathbb{L}	Visual - live #		dead #		Odor	
┣		1		Guano				Photos	
┡	/ '	V Not present	┶	Staining				Audible	Species
	Weep holes, scupper drains, and	Not present	F	Visual - live #		dead #	┢─	Odor	Opecies
	inlets/pipes	1		Guano				Photos	
		<u> </u>		Staining					
		X Not present	_					Audible	Species
	All guiderails		F	Visual - live #		dead #	┢	Odor	
			F	Staining			-	Photos	
		X Not present	亡					Audible	Species
	All expansion joints		1_	Visual - live #		dead #		Odor	
\vdash		1		Guano				Photos	
			┶	Staining					
	ama Rick Schmunk		Si	anature: Ric	k S	Schmunk			

Da of /	<u>te & Time</u> <u>Assessment</u> 4/3/2024	DOT Project Number 51521	Ro Ca	oute/Facility arried						
Fe Str	<u>leral</u> ucture ID SL62A 00537	Structure Coordinates (latitude and longitude) MM 5.37	<u>Str</u> (ar	ructure Height pproximate)			<u>St</u> Le	<u>ructure</u> 80' ength		
St	ructure Type (check one)		Structure Material (check all that apply)							
Br	idge Construction Style		De	eck Material	Be	am Material	Er	End/Back Wall Material		
0	Cast-in-place	OPre-stressed Girder		Metal	H	None		Concrete		
H			┢	Timber		Steel	┢	Stone/Masonry		
\odot	Flat Slab/Box			Open grid		Timber		Other:		
0		O Covered	E	Other:		Other:	Сі	reosote Evide	ence	
0	Parallel Box Beam	Other:	Сι	ulvert Material	1		8	Yes Unknown	O No	
Сι	Ivert Type	Other Structure	Ê	Metal			Ňc	otes:		
0	Вох	<u>+</u>	ĥ	Plastic		-				
ŏ	Pipe/Round			Stone/Masonry						
0	Other:			Other:						
Cr	ossings Traversed (check all th	nat apply)	S	urrounding	На	bitat (check	al	I that apply)		
X	Bare ground	Open vegetation	\times	Agricultural				Grassland		
	Rip-rap	Closed vegetation	L	Commercial	_			Ranching		
\square	Flowing water	Railroad	ĥ	Residential-urbar	n		┝	Riparian/wetlan	d	
$\overline{\mathbf{X}}$	Standing water	Cother	₩	Woodland/forest	ed		┢	Niixeu use Other		
HA.	acc Accord (chock all that ar			Woodiana, iore	04			Outor.		
AI Ch	eas Assesseu (Uneux an una ap	ply)	ont	" hov						
	ECK all areas that apply. If an area is not	present in the structure, check the not pres	senn ont	if known and n	rovi	ide photo docui	mai	atation as indic	hatad	
			Te,							
Ar	ea (check if assesseu)	Assessment notes	1		Sau	s (include pi	າວເ	os IT presen	t)	
	All crevices and cracks.	X Not present		Vieual - live #		theop	Ļ	Audible	Species	
	Bridges/cuiveris: Tough surfaces of		F	Guano		ueau #	┢	Photos		
Ľ	Other structures: soffits rafters attic			Staining			┢	Thouse	-	
	areas			<u> </u>						
		Not present	T	1				Audible	Species	
\mathbf{X}	Concrete surfaces (open roosting on		\mathbb{H}	Visual - live #		dead #		Odor		
\square	concrete)	NO evidence of Bats		Guano				Photos	4	
		I V Net procent	╇	Staining				Ludiblo	Species	
	Spaces between concrete end walls	X Not present		Visual - live #		dead #	╞	Odor	opecies	
\square	and the bridge deck			Guano				Photos		
				Staining					T	
	Crack between concrete railings on top	X Not present	F					Audible	Species	
	of the bridge deck Gap	1		Visual - live #		dead #		Odor	4	
	Railing	1	\vdash	Guano			L	Photos	-	
\vdash		V Not present	╘	Starring				Audible	Species	
\square		Not present		Visual - live #		dead #	┝	Odor	opooloo	
Ľ	Vertical surfaces on concrete i-peams			Guano				Photos	1	
	4			Staining			Ĺ	-		
			·				1	Audible	Species	
		X Not present	F			-! - a d #	⊢		-	
	Spaces between walls, ceiling joists	X Not present	F	Visual - live #		dead #	F	Odor	4	
	Spaces between walls, ceiling joists	X Not present	Ē	Visual - live # Guano Staining		dead #		Odor Photos	-	
	Spaces between walls, ceiling joists	X Not present		Visual - live # Guano Staining		dead #		Odor Photos Audible	Species	
	Spaces between walls, ceiling joists Weep holes, scupper drains, and	X Not present X Not present		Visual - live # Guano Staining Visual - live #		dead # dead #		Odor Photos Audible Odor	Species	
	Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes	Not present Not present		Visual - live # Guano Staining Visual - live # Guano		dead # dead #		Odor Photos Audible Odor Photos	Species	
	Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes	Not present Not present		Visual - live # Guano Staining Visual - live # Guano Staining		dead # dead #		Odor Photos Audible Odor Photos	Species	
	Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes	Not present Not present Not present Not present		Visual - live # Guano Staining Visual - live # Guano Staining Visual - live #		dead # dead # dead #		Odor Photos Audible Odor Photos Audible Odor	Species Species	
	Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes All guiderails	Not present Not present Not present Not present		Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano		dead # dead # dead #		Odor Photos Audible Odor Photos Audible Odor Photos	Species Species	
	Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes All guiderails	Not present Not present Not present Not present		Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining		dead # dead # dead #		Odor Photos Odor Photos Audible Odor Photos	Species Species	
	Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes All guiderails	Not present Not present Not present Not present Not present Not present		Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining		dead # dead # dead #		Odor Photos Odor Photos Audible Odor Photos Audible	Species Species Species	
	Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes All guiderails All expansion joints	Not present Not present Not present Not present Not present Not present		Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining		dead # dead # dead # dead # dead #		Odor Photos Odor Photos Audible Odor Photos Audible Odor Odor	Species Species	
	Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes All guiderails All expansion joints	Not present Not present Not present Not present Not present Not present		Visual - live # Guano Staining Visual - live # Guano Visual - live # Guano Staining Visual - live # Guano		dead # dead # dead # dead #		Odor Photos Odor Photos Audible Odor Photos Audible Odor Photos	Species Species	
	Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes All guiderails All expansion joints	Not present Not present Not present Not present Not present Not present		Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining		dead # dead # dead # dead #		Odor Photos Odor Photos Audible Odor Photos Audible Odor Photos Odor Photos	Species Species	

Da of	te & Time Assessment 4/3/2024	DOT Project Number 51521	Ro Ca	oute/Facility arried	ounty Morrill				
Fe Sti	<u>deral</u> ucture ID SL62A 00582	Structure Coordinates (latitude and longitude) MM 5.82	<u>Sti</u> (a)	ructure Height oproximate)			<u>Sti</u> Le	ructure 98'	
St	ructure Type (check one)		S	tructure Mat	e Material (check all that apply)				
Br	idge Construction Style		De	eck Material	Be	am Material	Er	nd/Back Wall	Material
0	Cast-in-place	O Pre-stressed Girder		Metal	H	None	┝	Concrete Timber	
			┢	Timber		Steel	\vdash	Stone/Masonry	
\cup	Flat Slab/Box			Open grid		Timber		Other:	
0	Truss Side View		E	Other:		Other:	Сі	reosote Evide	nce
0	Parallel Box Beam	Other:	Сι	ulvert Material			0	Yes Unknown	O No
Сι	Ilvert Type	Other Structure	Ĕ	Metal Concrete			Nc	otes:	
0	Вох	<u>+ 1</u>	Ê	Plastic					
Ó	Pipe/Round			Stone/Masonry					
0	Other:		Ļ	Other:					
Cı	ossings Traversed (check all th	<u>iat apply)</u>	S	urrounding	Ha	bitat (check	all	that apply)	
×	Bare ground	Open vegetation	╇	Agricultural			×	Grassland	
┝	Rip-rap Elowing water	Closed Vegetation	┢	Commerciai Residential-urbai	n		⊢	Riparian/wetland	1
⊢	Standing water	Road/trail - Type:	┢	Residential-rural				Mixed use	
X	Seasonal water	Other:	\times	Woodland/forest	ed			Other:	
A	eas Assessed (check all that ap	(vlac							
Ch	eck all areas that apply. If an area is not	present in the structure, check the "not pres	sent	" box.					
Do	cument all bat indicators observed during	g the assessment. Include the species prese	ent,	if known, and p	orovi	de photo docur	ner	ntation as indica	ated.
A	ea (check if assessed)	Assessment Notes	E	vidence of E	Bat	s (include ph	ot	os if present)
Γ	All crevices and cracks:	X Not present	F					Audible	Species
	Bridges/culverts: rough surfaces or		F	Visual - live #		dead #		Odor	
	imperfections in concrete		F	Guano				Photos	
	Other structures: soffits, ratters, attic			Stairing					
┝	areas	Not present	+	1				Audible	Species
	Concrete surfaces (open roosting on		1_	Visual - live #		dead #		Odor	P
	concrete)	NO evidence of Bats		Guano				Photos]
Ļ			╇	Staining				1. m.	0
	Spaces between concrete end walls	X Not present	-	Visual - live #		dead #	L	Audible	Species
	and the bridge deck			Guano			⊢	Photos	1
				Staining					·
	Crack between concrete railings on top	X Not present	F					Audible	Species
	of the bridge deck Gap		F	Visual - live #		dead #		Odor	
	Railing		\vdash	Guano				Photos	
	,	Not present	⇇					Audible	Species
	Vortical surfaces on concrete I-beams		1_	Visual - live #		dead #		Odor	
⊢	Vertical surfaces on concrete r seame		F	Guano				Photos	
	 '		╇━	Staining			_	Audible	Chaption
		X Not present	-[Visual - live #		dead #	╞	Odor	Species
μ	Spaces between walls, ceiling joists			Guano				Photos	1
	'			Staining					1
	Wear balas, souppor drains, and	X Not present	-			-1 m m m 4 H		Audible	Species
	weep noies, scupper drains, and		F	Visual - live #		dead #	L	Odor	
	lillets/pipes			Staining			-	Fliotos	
		X Not present	F	1				Audible	Species
	All quiderails		ᡄ	Visual - live #		dead #		Odor	
			\vdash	Guano				Photos	
┝	<u> </u>	V Not present	┢	Staming			_	Audible	Species
		Represent	┺	Visual - live #		dead #	┢	Odor	opeoles
	All expansion joints			Guano				Photos	
	<u> </u>	<u> </u>		Staining					
Na	ame: Rick Schmunk		Si	gnature: Ric	k S	Schmunk			

Da of /	<u>te & Time</u> <u>Assessment</u> 4/3/2024	DOT Project Number 51521	Ro Ca	oute/Facility arried	62 <i>A</i>	ounty Morrill			
Fe Str	deral ructure ID SL62A 00595	Structure Coordinates (latitude and longitude) MM 5.95	<u>Str</u> (ar	ructure Height pproximate)			<u>St</u> Le	ructure ngth	
St	ructure Type (check one)		Structure Material (check					at apply)	
Br	idge Construction Style		De	eck Material	Be	am Material	Eı	nd/Back Wall	Material
0	Cast-in-place	O Pre-stressed Girder	┡	Metal Concrete	┞	None Concrete	-	Concrete Timber	
			┢	Timber		Steel	╞	Stone/Masonry	
\cup	Flat Slab/Box			Open grid		Timber		Other:	
0			E	Other:		Other:	Cı	reosote Evide	nce
0	Parallel Box Beam	Other:	Сι	ulvert Material	1	İ	8	Yes	O No
Сι	ılvert Type	Other Structure	Ĕ	Metal Concrete			No	otes:	
0	Box		Ċ	Plastic					
Q	Pipe/Round			Stone/Masonry					
0	Other:		Ļ	Other:			L		
Cr	cossings Traversed (check all th	<u>iat apply)</u>	S	urrounding	Ha	bitat (check	al	that apply)	
\square	Bare ground	X Open vegetation	Ц×	Agricultural			×	Grassland	
Ĥ	Rip-rap	X Closed vegetation	┡	Commercial Residential-urbai	n		╟─	Ranching Biporian/wetland	
Ĥ	Standing water	Road/trail - Type:	╟	Residential-ural	ſ i		┢	Mixed use	
	Seasonal water	Other:	$\mathbf{\Sigma}$	Woodland/forest	ed			Other:	
Ar	reas Assessed (check all that an			<u> </u>					
Ch	leck all areas that apply. If an area is not	present in the structure, check the "not pres	sent	" box.					
Do	ocument all bat indicators observed during	g the assessment. Include the species press	ent,	if known, and p	orov	ide photo docur	nei	ntation as indica	ated.
Ar	(check if assessed)	Assessment Notes	Ι _Ε ,	vidence of E	Rat	s (include pl	not	os if present)
/	All crevices and cracks:	X Not present	E					Audible	/ Species
	Bridges/culverts: rough surfaces or	X Not procent	╢	Visual - live #		dead #		Odor	opence
	imperfections in concrete			Guano				Photos	1
	Other structures: soffits, rafters, attic			Staining					
	areas								
		Not present	┣			· · · #		Audible	Species
\times	Concrete surfaces (open roosting on	NO evidence of Bats	F	Visual - live #		dead #		Odor	
	concrete			Staining				Photos	
		X Not present	亡					Audible	Species
	Spaces between concrete end walls		\vdash	Visual - live #		dead #		Odor	
	and the bridge deck			Guano				Photos	
	Creak between concrete railings on ton		╇═	Staining				Audiblo	Spacios
<u> </u>	Crack between concrete rainings on top	X Not present		Visual - live #		dead #	┝─	Odor	Species
Ш		1		Guano			┢	Photos	
	Kalling— <u> </u> →			Staining					
		X Not present	F	1				Audible	Species
	Vertical surfaces on concrete I-beams		F	Visual - live #		dead #	Ļ	Odor	
	1		┝	Staining				Photos	
-	l	Not present	┢					Audible	Species
	Spaces between walls, ceiling joists			Visual - live #		dead #		Odor	
⊢	Spaces between wans, coming joints			Guano				Photos]
	 	Text No	╇	Staining				A contract of	0
	L.,	X Not present		Visual - live #		dead #	┝	Audibie	Species
	Ween holes scupper drains, and	•		Guano			┢─	Photos	
	Weep holes, scupper drains, and inlets/pipes			Oddino					4
	Weep holes, scupper drains, and inlets/pipes		F	Staining					
┝	Weep holes, scupper drains, and inlets/pipes	X Not present	F	Staining				Audible	Species
	Weep holes, scupper drains, and inlets/pipes All guiderails	X Not present		Staining Visual - live #		dead #		Audible Odor	Species
	Weep holes, scupper drains, and inlets/pipes All guiderails	X Not present		Staining Visual - live # Guano		dead #		Audible Odor Photos	Species
	Weep holes, scupper drains, and inlets/pipes All guiderails	X Not present		Staining Visual - live # Guano Staining		dead #		Audible Odor Photos	Species
	Weep holes, scupper drains, and inlets/pipes All guiderails	Not present Not present		Staining Visual - live # Guano Staining Visual - live #		dead # dead #		Audible Odor Photos Audible Odor	Species Species
	Weep holes, scupper drains, and inlets/pipes All guiderails All expansion joints	X Not present X Not present		Staining Visual - live # Guano Staining Visual - live # Guano		dead # dead #		Audible Odor Photos Audible Odor Photos	Species Species
	Weep holes, scupper drains, and inlets/pipes All guiderails All expansion joints	X Not present X Not present		Staining Staining Guano Staining Visual - live # Guano Staining		dead # dead #		Audible Odor Photos Audible Odor Photos	Species Species

Da of /	te & Time Assessment 4/3/2024	DOT Project Number 51521	Ro Ca	oute/Facility arried	52A	A	Co	ounty Morrill				
<u>Fe</u> Str	deral ^{ucture ID} SL62A 00613	Structure Coordinates (latitude and longitude) MM 6.13	<u>St</u> (a)	ructure Height pproximate)			<u>St</u> Le	ructure ngth				
St	ructure Type (check one)		Structure Material (check all that apply)									
Br	idge Construction Style		De	eck Material	Be	am Material	Er	nd/Back Wall N	Material			
0	Cast-in-place	O Pre-stressed Girder	┡	Metal	H	None	┡	Concrete				
			┢	Timber	H	Steel	╞	Stone/Masonry				
\circ	Flat Slab/Box			Open grid		Timber		Other:				
0		O Covered	E	Other:		Other:	Сі	reosote Evider	ice			
0	Parallel Box Beam	Other:	Сι	ulvert Material			8	Yes Unknown	○ No			
Сι	Ilvert Type	Other Structure	É	Metal Concrete			Ňc	otes:				
0	Box	 	ĥ	Plastic								
ŏ	Pipe/Round			Stone/Masonry			1					
0	Other:			Other:								
Cr	rossings Traversed (check all th	at apply)	S	urrounding	На	bitat (check	all	that apply)				
Х	Bare ground	Open vegetation	\mathbf{X}	Agricultural			X					
	Rip-rap	Closed vegetation	L	Commercial				Ranching				
	Flowing water	Railroad	ŕ	Residential-urbar	n			Riparian/wetland				
$\overline{\mathbf{x}}$	Standing water	Cother	长	Woodland/forest	ed	!	┢─	Mixea use Other				
Ĥ,	reas Accessed (shock all that an			Woodid. 10, 1010	00		1	Outor				
Ai Ch	eas Assesseu (Uneux an una ap	DIV)	ont	" hov								
	eck all aleas that apply. If an area is not	present in the structure, one or the not pres	en. ont	if known and n	rov	ide nhoto docur	nor	ntation as indica	ted			
			TE,				ne.		leu.			
Ai	'ea (CNECK II assesseu)		<u>1</u>		Sau	s (include pr	IOI I	os ir presenu				
	All crevices and cracks.	X Not present	┢	Vieual - live #		t head	L	Audible	Species			
\square	imperfections in concrete	1	F	Guano		ueau #	┢──	Photos				
μ	Other structures: soffits rafters attic	1	\vdash	Staining				THOUS				
	areas	1										
		Not present	F	1				Audible	Species			
\mathbf{X}	Concrete surfaces (open roosting on		Ŀ	Visual - live #		dead #		Odor				
	concrete)	NO evidence of Bats		Guano				Photos				
<u> </u>	 '	Lat present	┡	Staining				Audible	Secolog			
L	Spaces between concrete end walls	Not present		Visual - live #		dead #	╞	Odor	opecies			
μ	and the bridge deck	1		Guano				Photos				
		<u> </u>		Staining				<u> </u>				
	Crack between concrete railings on top	X Not present	F					Audible	Species			
	of the bridge deck Gap	1	F	Visual - live #		dead #		Odor				
	Railing	1	\vdash	Guano				Photos				
-	·	Y Not present	╘	Stanning				Audible	Species			
		Not present	ſ	Visual - live #		dead #	╞	Odor	Opeolee			
	Vertical surfaces on concrete i-peams	1		Guano				Photos				
<u> </u>	·	<u></u>	L	Staining								
		X Not present	┢	Vieuel live #		dood #		Audible	Species			
	Spaces between walls, ceiling joists	1	F	Guano		deau #	┝	Odor Dhotos	1			
	1	1	\vdash	Staining				FIIOLOS				
		X Not present	⊨					Audible	Species			
	Weep holes, scupper drains, and		Ŀ	Visual - live #		dead #		Odor				
┝	inlets/pipes	1	L	Guano				Photos				
	l		┡	Staining				T.A. 1911-				
	1	X Not present	Ŀ	Visual - live #		dead #	┝	Audibie	Species			
	Į	l	E C			ucau n		Dhataa				
	All guiderails			Guano				Photos				
	All guiderails		F	Guano Staining				Photos				
	All guiderails	X Not present	F	Guano Staining				Audible	Species			
	All guiderails All expansion joints	X Not present	E	Guano Staining Visual - live #		dead #		Audible Odor	Species			
	All guiderails All expansion joints	X Not present		Guano Staining Visual - live # Guano		dead #		Audible Odor Photos	Species			
	All guiderails All expansion joints	X Not present		Guano Staining Visual - live # Guano Staining		dead #		Audible Odor Photos	Species			
of /	te & Time Assessment 4/3/2024	DOT Project Number 51521	Route/Facility Carried			۸	Co	ounty Morrill				
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Fee Str	<u>deral</u> <u>ucture ID</u> SL62A 00648	Structure Coordinates (latitude and longitude) MM 6.48	<u>Str</u> (ar	ructure Height oproximate)			<u>St</u> Le	ructure ength				
St	ructure Type (check one)		St	tructure Mat	teri	al (check al	l th	at apply)				
Bri	idge Construction Style		De	eck Material	Be	am Material	Er	nd/Back Wall	Material			
0	Cast-in-place	OPre-stressed Girder	\mid	Metal	H	None	┡	Concrete Timber				
È				Timber		Steel	┢	Stone/Masonry				
\circ	Flat Slab/Box			Open grid		Timber	L	Other:				
0		O Covered	E	Other:		Other:	Сі	reosote Evide	ence			
0	Parallel Box Beam	Other:	Сι	ulvert Material			00	Yes	O No			
Си	ılvert Type	Other Structure	Metal				Ň	otes:				
\odot	Box	/ _ · · · · · · · · · · · · · · · · · ·	Ë	Plastic								
Ó	Pipe/Round	O '		Stone/Masonry			1					
0	Other:			Other:	_							
Cr	ossings Traversed (check all th	at apply)	Sı	urrounding	На	bitat (check	al	I that apply)				
Ц	Bare ground	X Open vegetation	\mathbf{X}	Agricultural			X	Grassland				
Н	Rip-rap	Closed vegetation	┡	Commercial Bosidontial-urbai	~		┝	Ranching Biparian/wetlan	4			
H	Flowing water	Road/trail - Type:	╟┤	Residential-urba	[]		┢	Mixed use	a			
\times	Seasonal water	Other:	\mathbf{X}	Woodland/forest	ed			Other:				
Ar	reas Assessed (check all that ap	nlv)										
Ch	eck all areas that apply. If an area is not	present in the structure, check the "not pres	enť	" box.								
Do	cument all bat indicators observed during	the assessmen <u>t. Include the species pres</u> ε	ent,	if known, and p	rovi	de ph <u>oto docu</u>	m <u>e</u> i	ntatio <u>n as indic</u>	ated.			
Ar	ea (check if assessed)	Assessment Notes	E١	vidence of E	Bat	s (include pl	not	os if presen	t)			
	All crevices and cracks:	X Not present	Ē			• (Audible	Species			
	Bridges/culverts: rough surfaces or		Ŀ	Visual - live #		dead #		Odor	╋ ┙ ╵ ╽			
	imperfections in concrete	1		Guano				Photos				
	Other structures: soffits, rafters, attic	1		Staining								
Ц	areas		┝	1			i.	The state				
	Concrete surfaces (open roosting on	Not present	-b	Visual - live #		dead #	\vdash	Audible	Species			
\mathbf{X}	concrete)	NO evidence of Bats	F	Guano		ueau m	┢	Photos				
				Staining								
							-	Audible				
		X Not present	F		Visual - live # dead #			4	Species			
	Spaces between concrete end walls	X Not present		Visual - live #		dead #		Odor	Species			
	Spaces between concrete end walls and the bridge deck	X Not present		Visual - live # Guano Staining		dead #		Odor Photos	Species			
	Spaces between concrete end walls and the bridge deck	Not present		Visual - live # Guano Staining		dead #		Odor Photos Audible	Species			
	Spaces between concrete end walls and the bridge deck Crack between concrete railings on top of the bridge deck Gap	Not present Not present		Visual - live # Guano Staining Visual - live #		dead #		Odor Photos Audible Odor	Species Species			
	Spaces between concrete end walls and the bridge deck Crack between concrete railings on top of the bridge deck Gap Railing	Not present Not present		Visual - live # Guano Staining Visual - live # Guano		dead # dead #		Odor Photos Audible Odor Photos	Species			
	Spaces between concrete end walls and the bridge deck Crack between concrete railings on top of the bridge deck Gap Railing	Not present Not present		Visual - live # Guano Staining Visual - live # Guano Staining		dead # dead #		Odor Photos Audible Odor Photos	Species			
	Spaces between concrete end walls and the bridge deck Crack between concrete railings on top of the bridge deck Gap Railing	Not present Not present Not present Not present		Visual - live # Guano Staining Visual - live # Guano Staining Visual - live #		dead #		Odor Photos Audible Odor Photos Audible	Species Species			
	Spaces between concrete end walls and the bridge deck Crack between concrete railings on top of the bridge deck Gap Railing	Not present Not present Not present Not present		Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano		dead # dead # dead #		Odor Photos Audible Odor Photos Audible Odor Photos	Species Species			
	Spaces between concrete end walls and the bridge deck Crack between concrete railings on top of the bridge deck Gap Railing	Not present Not present Not present Not present		Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining		dead # dead # dead #		Odor Photos Audible Odor Photos Audible Odor Photos	Species Species Species Species			
	Spaces between concrete end walls and the bridge deck Crack between concrete railings on top of the bridge deck Railing Vertical surfaces on concrete I-beams	Not present Not present Not present Not present Not present		Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining		dead # dead # dead #		Odor Photos Audible Odor Photos Audible Odor Photos Audible	Species Species Species			
	Spaces between concrete end walls and the bridge deck Crack between concrete railings on top of the bridge deck Gap Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists	Not present Not present Not present Not present Not present Not present		Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining Visual - live #		dead # dead # dead # dead #		Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Audible	Species Species Species Species Species			
	Spaces between concrete end walls and the bridge deck Crack between concrete railings on top of the bridge deck Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists	X Not present		Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano		dead # dead # dead # dead #		Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos	Species Species Species Species Species			
	Spaces between concrete end walls and the bridge deck Crack between concrete railings on top of the bridge deck Gap Railing → ↓ Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists			Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining		dead # dead # dead # dead #		Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible	Species Species Species Species Species			
	Spaces between concrete end walls and the bridge deck Crack between concrete railings on top of the bridge deck Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists Weep holes, scupper drains, and	X Not present		Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining Visual - live #		dead # dead # dead # dead # dead #		Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos	Species Species Species Species Species Species			
	Spaces between concrete end walls and the bridge deck Crack between concrete railings on top of the bridge deck Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes	X Not present		Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining Visual - live #		dead # dead # dead # dead # dead #		Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos	Species Species Species Species Species Species Species			
	Spaces between concrete end walls and the bridge deck Crack between concrete railings on top of the bridge deck Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes			Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining		dead # dead # dead # dead # dead #		Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos	Species Species Species Species Species Species			
	Spaces between concrete end walls and the bridge deck Crack between concrete railings on top of the bridge deck Gap Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes	X Not present		Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining		dead # dead # dead # dead # dead # dead #		Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos	Species Species Species Species Species Species Species Species			
	Spaces between concrete end walls and the bridge deck Crack between concrete railings on top of the bridge deck Gap Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes	X Not present		Visual - live # Guano Staining Visual - live # Guano		dead # dead # dead # dead # dead # dead #		Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos	Species Species Species Species Species Species Species Species			
	Spaces between concrete end walls and the bridge deck Crack between concrete railings on top of the bridge deck Gap Railing	X Not present		Visual - live # Guano Staining Visual - live # Guano Staining		dead # dead # dead # dead # dead # dead #		Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos	Species Species Species Species Species Species Species Species			
	Spaces between concrete end walls and the bridge deck Crack between concrete railings on top of the bridge deck Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes All guiderails			Visual - live # Guano Staining Visual - live # Guano Staining		dead # dead # dead # dead # dead # dead #		Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos	Species			
	Spaces between concrete end walls and the bridge deck Crack between concrete railings on top of the bridge deck Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes All guiderails	X Not present X Not present		Visual - live # Guano Staining Visual - live # Guano Staining		dead # dead # dead # dead # dead # dead # dead # dead #		Odor Photos Audible Ddor Photos Audible Ddor Photos	Species			
	Spaces between concrete end walls and the bridge deck Crack between concrete railings on top of the bridge deck Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes All guiderails	X Not present		Visual - live # Guano Staining Visual - live # Guano Staining		dead #		Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos	Species			
	Spaces between concrete end walls and the bridge deck Crack between concrete railings on top of the bridge deck Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes All guiderails All expansion joints	X Not present		Visual - live # Guano Staining Visual - live # Guano Staining		dead #		Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos	Species			

Da of	te & Time Assessment 4/3/2024	DOT Project Number 51521	Route/Facility Carried Carried				County Morrill			
Fe Sti	deral ructure ID SL62A 00740	Structure Coordinates (latitude and longitude) MM 7.40	<u>Sti</u> (a)	<u>ructure Height</u> pproximate)	_		<u>Str</u> Le	ructure ngth		
S	ructure Type (check one)		S	tructure Mat	teri	al (check all	l that apply)			
Br	idge Construction Style		De	eck Material	Be	am Material	Er	nd/Back Wall N	Naterial	
O	Cast-in-place	O Pre-stressed Girder	┡	Metal	┞┦	None	\vdash	Concrete Timber		
			┢	Timber	H	Steel	Stone/Masonry			
\cup	Flat Slab/Box			Open grid		Timber	Other:			
0			E	Other:		Other:	Cr	reosote Evider	nce	
0	Parallel Box Beam	Other:	Сι	ulvert Material	!		0	Yes Unknown	O No	
Сι	Jvert Type	Other Structure	Ě	Metal Concrete			No	otes:		
0	Box	Í_I	E	Plastic						
Q	Pipe/Round			Stone/Masonry						
0	Other:		Ļ	Other:			L			
C	rossings Traversed (check all th	at apply)	S	urrounding	Ha	bitat (check	all	that apply)		
⊢×	Bare ground	Open vegetation	씍	Agricultural		ľ	Ŕ	Grassland		
\vdash	Rip-rap	Railroad	╟─	Residential-urbar	n		P	Riparian/wetland		
\vdash	Standing water	Road/trail - Type:	\mathbf{x}	Residential-rural			F	Mixed use		
X	Seasonal water	Other:	\times	Woodland/forest	ed			Other:		
A	reas Assessed (check all that ap	(ylqu								
Ch	eck all areas that apply. If an area is not	present in the structure, check the "not pres	ent	i" box.						
Do	cument all bat indicators observed during	ງ the assessment. Include the species prese	ent,	if known, and p	orovi	de photo docun	ner	ntation as indica	ted.	
A	r ea (check if assessed)	Assessment Notes	E	vidence of E	<u>3at</u>	s (include ph	ot	os if present))	
	All crevices and cracks:	X Not present						Audible	Species	
	Bridges/culverts: rough surfaces or	1		Visual - live #		dead #	Ĺ	Odor		
	imperfections in concrete	1	┝	Guano		/		Photos		
	Other structures: soffits, ratters, attic	1	\vdash	Stairing			I			
┝	areas	Not present	\vdash	1				Audible	Species	
\vdash	Concrete surfaces (open roosting on		┺	Visual - live #		dead #		Odor		
\vdash	concrete)	NO evidence of Bats		Guano				Photos		
	·	1	╧	Staining		!		1		
	Spaces between concrete end walls	X Not present	-	Visual - live #		dead #	⊢	Audible	Species	
	and the bridge deck	1	F	Guano			⊢	Odor Photos		
[1		Staining		ï				
	Crack between concrete railings on top	X Not present	F	1		I		Audible	Species	
	of the bridge deck Gap		F	Visual - live #		dead #		Odor		
ļ	Railing	1	\vdash	Guano		!		Photos		
┝		Y Not present	╘	Staming			_	Audible	Species	
┝	Vertical surfaces on concrete L beems		┞	Visual - live #		dead #		Odor	Opence	
		1		Guano				Photos		
Ļ	·		╇	Staining		!		1 s		
		X Not present	Ŀ	Visual - live #		dead #	┝	Audible	Species	
	Spaces between walls, ceiling joists	1	F	Guano			\vdash	Photos		
				Staining						
		X Not present	F					Audible	Species	
	Weep holes, scupper drains, and	1	F	Visual - live #		dead #	L	Odor		
	iniets/pipes	1	\vdash	Staining		ł	┝─	Photos		
	<u> </u>	Not present	⊨					Audible	Species	
	All quidoraile		1_	Visual - live #		dead #		Odor		
┡─	All guiderans	1	Guano				Photos			
	ļ		ᄂ	Staining		!		1 A 1911		
		X Not present	┢	Vieual - live #		# head	⊢	Audible	Species	
	All expansion joints	1	F	Guano		deau #	⊢	Photos		
l _		1		Staining		!		1		
					(internet)		-			

of /	<u>te & Time</u> <u>Assessment</u> 4/3/24	DOT Project Number 51521	Route/Facility Carried HWY 26			<u>Cc</u>	ounty Scotts	sbluff	
Fe Str	<u>deral</u> <u>ucture ID</u> S026 03470	Structure Coordinates (latitude and longitude) MM 34.70	<u>Structure He</u> (approximate	<u>eight</u> ∋) 10'		<u>Sti</u> Le	ngth 83'		
St	ructure Type (check one)		Structure	Mater	ial (check al	l th	at apply)		
Br	idge Construction Style		Deck Mater	rial Be	eam Material	Er	nd/Back Wal	l Material	
0	Cast-in-place	Pre-stressed Girder	Metal		None	×	Concrete Timber		
			Timber	^^	Steel	┢	Stone/Masonry	1	
\circ	Flat Slab/Box	O Steel I-beam ⊥ ⊥ ⊥	Open grid		Timber		Other:		
0		O Covered	Other:		Other:	Сі	Creosote Evidence		
0	Parallel Box Beam	Other:	Culvert Mat	terial		0	Yes Unknown	O No	
Си	ılvert Type	Other Structure	Metal Concrete			Nc	<u>otes:</u>		
0	Box		Plastic						
0	Pipe/Round	0	Stone/Mas	onry					
	rossings Travorsod (check all th	l l pat apply)	Surround	ing Ha	hitat (chock	ി	that apply)		
X	Bare ground	Open vegetation					Grassland		
\hat{X}	Rip-rap	X Closed vegetation	Commercia	al		┢	Ranching		
X	Flowing water	Railroad	Residentia	l-urban		È	Riparian/wetlar	nd	
	Standing water	Road/trail - Type:	Residentia	l-rural			Mixed use		
	Seasonal water	Other:	Woodland/	forested/			Other: Trees alnon	g banks	
Ar	reas Assessed (check all that ap	pply)							
Ch	eck all areas that apply. If an area is not	present in the structure, check the "not pres	ent" box.						
Do	cument all bat indicators observed during	g the assessment. Include the species prese	ent, if known, a	and prov	ide photo docu	mer	ntation as indi	cated.	
Ar	rea (check if assessed)	Assessment Notes	Evidence	of Bat	s (include pl	hot	os if preser	nt)	
	All crevices and cracks:	Not present					Audible	Specie	s
	Bridges/culverts: rough surfaces or	NO evidence of Bats	Visual - live	e #	dead #		Odor	-	
\mathbf{X}	Imperfections in concrete	NO evidence of bals	Staining				Photos	-	
	other structures: sollits, railers, allic		etanning			1			
		Not present				1	Audible	Specie	s
	Concrete surfaces (open roosting on		Visual - live	e #	dead #		Odor		
\square	concrete)	NO evidence of Bats	Guano				Photos		
			Staining						
	Spaces between concrete end walls			o #	dead #		Audible	Specie	S
\mathbf{X}	and the bridge deals		Guano				()dor		
	and the bridde deck	INO evidence of Bats	Guano				Odor Photos	_	
	and the bridge deck	NO evidence of Bats	Guano Staining				Odor Photos	-	
	Crack between concrete railings on top	NO evidence of Bats	Guano				Odor Photos Audible	Specie	s
\times	Crack between concrete railings on top of the bridge deck Gap	NO evidence of Bats	Guano Staining Visual - live	e #	dead #		Audible Odor	Specie	S
X	Crack between concrete railings on top of the bridge deck Gap Railing	NO evidence of Bats NO evidence of Bats	Guano Visual - live Guano	e #	dead #		Odor Photos Audible Odor Photos	Specie	S
\times	Crack between concrete railings on top of the bridge deck Gap Railing	NO evidence of Bats NO evidence of Bats	Guano Visual - live Guano Staining	e #	dead #		Odor Photos Audible Odor Photos	Specie	s
X	Crack between concrete railings on top of the bridge deck Gap Railing	NO evidence of Bats Not present NO evidence of Bats Not present	Visual - live Guano Visual - live Guano Staining Visual - live	e #	dead # dead #		Odor Photos Odor Photos Audible Odor	Specie	s
X	Crack between concrete railings on top of the bridge deck Gap Railing	NO evidence of Bats Not present NO evidence of Bats Not present NO evidence of Bats	Guano Staining Visual - live Guano Staining Visual - live Guano	e #	dead # dead #		Odor Photos Odor Photos Audible Odor Photos	Specie	s
X	Crack between concrete railings on top of the bridge deck Gap Railing → ↓	NO evidence of Bats Not present NO evidence of Bats Not present NO evidence of Bats	Guano Staining Visual - live Guano Staining Visual - live Guano Staining	e #	dead # dead #		Odor Photos Odor Photos Audible Odor Photos	Specie	s
XX	Crack between concrete railings on top of the bridge deck Gap Railing A Concrete I-beams	NO evidence of Bats Not present NO evidence of Bats Not present NO evidence of Bats NO evidence of Bats X Not present	Guano Staining Visual - live Guano Staining Visual - live Guano Staining	e #	dead # dead #		Odor Photos Audible Odor Photos Audible Odor Photos Audible	Specie	s s
XX	Crack between concrete railings on top of the bridge deck Gap Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists	NO evidence of Bats	Visual - live Guano Visual - live Guano Staining Visual - live Guano Staining Visual - live Guano	e # e # e #	dead # dead # dead #		Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos	Specie	S S
	Crack between concrete railings on top of the bridge deck Gap Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists	NO evidence of Bats X Not present	Visual - live Guano Visual - live Guano Staining Visual - live Guano Staining Visual - live Guano Staining Staining	e # e # e #	dead # dead # dead #		Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos	Specie	s s
	Crack between concrete railings on top of the bridge deck Gap Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists	NO evidence of Bats Not present NO evidence of Bats Not present NO evidence of Bats X Not present	Visual - live Guano Visual - live Guano Staining Visual - live Guano Staining Visual - live Guano Staining	e # e # e #	dead # dead # dead #		Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible	Specie	s s s
	Crack between concrete railings on top of the bridge deck Gap Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists Weep holes, scupper drains, and	NO evidence of Bats Not present NO evidence of Bats Not present NO evidence of Bats X Not present	Visual - live Guano Staining Visual - live Guano Staining Visual - live Guano Staining Visual - live Guano Staining	e # e # e #	dead # dead # dead # dead #		Audible Odor Photos Photos Audible Odor Photos Audible Odor Photos Audible Odor Audible Odor	Specie	s s s
	Crack between concrete railings on top of the bridge deck Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes	NO evidence of Bats Not present NO evidence of Bats Not present NO evidence of Bats X Not present	Visual - live Guano Staining Visual - live Guano Staining Visual - live Guano Staining Visual - live Guano Staining	e # e # e #	dead # dead # dead # dead #		Audible Odor Photos Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos	Specie	s s s
	and the bridge deck Crack between concrete railings on top of the bridge deck Gap Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes	NO evidence of Bats Not present NO evidence of Bats Not present NO evidence of Bats X Not present	Visual - live Guano Staining Visual - live Guano Staining Visual - live Guano Staining Visual - live Guano Staining	e # e # e #	dead # dead # dead # dead #		Odor Photos Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos	Specie	s s s
	Crack between concrete railings on top of the bridge deck Gap Railing	NO evidence of Bats Not present NO evidence of Bats Not present NO evidence of Bats X Not present X Not present Not present	Visual - live Guano Staining Visual - live Guano Staining Visual - live Guano Staining Visual - live Guano Staining Visual - live Guano	e # e # e # e #	dead # dead # dead # dead # dead #		Audible Odor Photos Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos	Specie	s s s s
	and the bridge deck Crack between concrete railings on top of the bridge deck Gap Railing Image: Image deck Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes All guiderails	NO evidence of Bats Not present NO evidence of Bats Not present NO evidence of Bats X Not present X Not present Not present Not present	Visual - live Guano Staining Visual - live Guano Staining Visual - live Guano Staining Visual - live Guano Staining Visual - live Guano Staining	e # e # e # e #	dead # dead # dead # dead # dead #		Odor Photos Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos	Specie	s s s
	and the bridge deck Crack between concrete railings on top of the bridge deck Gap Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes All guiderails	NO evidence of Bats Not present NO evidence of Bats Not present NO evidence of Bats X Not present X Not present Not present Not present Not present Not present	Guano Staining Visual - live Guano Staining	e # e # e # e # e #	dead # dead # dead # dead # dead #		Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos	Specie	s s s
	and the bridge deck Crack between concrete railings on top of the bridge deck Gap Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes All guiderails	NO evidence of Bats Not present NO evidence of Bats Not present NO evidence of Bats X Not present X Not present	Visual - live Guano Staining Visual - live Guano Staining Visual - live Guano Staining Visual - live Guano Staining Visual - live Guano Staining	e # e # e # e # e #	dead # dead # dead # dead # dead #		Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos	Specie	s s s s
	and the bridge deck Crack between concrete railings on top of the bridge deck Gap Railing Image: Image deck Cap Railing Image: Image deck Crack between concrete railings on top of the bridge deck Cap Railing Image: Image deck Cap Railing Image: Image deck Cap Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes All guiderails All expansion joints	NO evidence of Bats Not present NO evidence of Bats Not present NO evidence of Bats X Not present NO evidence of Bats Not present	Guano Guano Staining Visual - live Guano Staining	e # e # e # e # e # e #	dead # dead # dead # dead # dead # dead #		Odor Photos Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos	Specie	s s s s
	and the bridge deck Crack between concrete railings on top of the bridge deck Gap Railing Image: Image deck Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes All guiderails All expansion joints	NO evidence of Bats Not present NO evidence of Bats Not present NO evidence of Bats X Not present X Not present Not present Not present Not present Not present Not present NO evidence of Bats Not present NO evidence of Bats Not present NO evidence of Bats	Guano Guano Staining Visual - live Guano Staining	e # e # e # e # e # e # e #	dead # dead # dead # dead # dead # dead #		Odor Photos Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos	Specie	s s s s
	and the bridge deck Crack between concrete railings on top of the bridge deck Gap Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes All guiderails All expansion joints	NO evidence of Bats Not present NO evidence of Bats Not present NO evidence of Bats X Not present NO evidence of Bats Not present NO evidence of Bats Not present NO evidence of Bats	Visual - live Guano Staining Staining Staining Staining	e # e # e # e # e # e #	dead # dead # dead # dead # dead # dead #		Odor Photos Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos	Specie	s s s s

Dat of A	<u>e & Time</u> <u>Issessment</u> 4/3/2024	DOT Project Number 51521	Route/Facility Carried 26				County Scottsbluff			ff
<u>Fed</u> Strι	<u>eral</u> _{icture ID} S026 03505	Structure Coordinates (latitude and longitude) MM 35.05	<u>Sti</u> (aț	ructure Height pproximate)			<u>Sti</u> Le	ngth 117'		
Str	ructure Type (check one)		St	tructure Mat	teri	i al (check all	th	at apply)		
Brie	dge Construction Style		De	eck Material	Be	am Material	Er	nd/Back Wall I	Mate	erial
0	Cast-in-place	OPre-stressed Girder	⊢	Metal		None	Concrete			
			┢─	Timber	Н	Steel	Stone/Masonry			
O	Flat Slab/Box	O Steel I-beam ⊥ ⊥ ⊥	F	Open grid	Г	Timber	Other:			
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Da of /	<u>te & Time</u> <u>Assessment</u> 4/3/2024	<u>DOT Project</u> 51521 <u>Number</u>	Route/Facility Carried 26				County Scottsbluff			ff
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Da of	te & Time Assessment 4/3/2024	DOT Project Number 51521	Route/Facility Carried 26				County Morrill				
Fe Sti	<u>deral</u> <u>ucture ID</u> S026 04114	Structure Coordinates (latitude and longitude) MM 41.14	<u>St</u> (a	<u>ructure Height</u> pproximate)			<u>Sti</u> Le	<u>ructure</u> 102' <u>ngth</u>			
St	ructure Type (check one)		S	tructure Mat	teri	al (check all	l that apply)				
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Environmental Review Report

Project Information

Report Generation Date:
Project Title:
User Project Number(s):
System Project ID:
Project Type:
Project Activities:

9/6/2024 10:14:26 AM Minatare to US-385 51521; NH-26-1(172) NE-CERT-013108 Transportation, Roads/Bridges/Trails - NDOT (not FHWA) Asphalt Patching Bridge Substructure New, Replacement, or Repair - Perennial Bridge Superstructure New, Replacement, or Repair - Perennial Channelization, Intermittent Clearing and Grubbing - Non-woody Vegetation Clearing and Grubbing - Trees & Shrubs Concrete Pavement Repair Culvert New, Replacement, Extension, Repair - Intermittent Culvert New, Replacement, Extension, Repair - Perennial Curb & Gutter Earth Shoulder Construction **Erosion Control - Barriers Erosion Control - Erosion Checks Erosion Control - Inlet/Outlet Protection** Erosion Control - Mulching **Erosion Control - Rolled Erosion Control Erosion Control - Slope Interuption Erosion Control - Vegetation** Fencing (part of transportation construction project) Grading Outside the Hinge Point Grading Within the Hinge Point Guardrail Repair, Replacement, or Installation with Soil Disturbance Habitat Fragmentation, Modification of Connectivity Lighting, Traffic and Pedestrian Signals, Dynamic Message Signs w/ soil disturbance Milling and/or In-place Recycling **Pavement Removal** Paving

Piers Pile Driving - Impact Pile Driving - Vibratory Pipe Jacking & Casing Removal of Structures and Obstructions Resurfacing-Fog/Slurry Seal, Armor Coat/Chip Seal Rock or Gravel Surfacing Signs with Soil Disturbance Stream Channel Impact, Intermittent Stream Channel Impact, Perennial Temporary Crossing, Causeway, Work Platform Trenched Widening Wetland Mitigation 275.23 acres Morrill; Scotts Bluff North Platte Middle North Platte-Scotts Bluff Bayard Drain-North Platte River; Indian Creek; Middle Red Willow Creek; Moffat Drain + **Panhandle Prairies** 021N050W; 021N051W; 021N052W; 021N053W 41.816522 / -103.327514

Project Size: County(s): Watershed(s): Watershed(s) HUC 8: Watershed(s) HUC 12:

Biologically Unique Landscape(s): Township/Range and/or Section(s): Latitude/Longitude:

Contact Information

Organization: Contact Name: Contact Phone: Contact Email: Contact Address: Prepared By: Submitted On Behalf Of: Nebraska Department of Transportation Matthew Greiner 402-479-4419 matthew.greiner@nebraska.gov 1500 Nebraska Parkway Lincoln NE 68502

Project Description

Project Description: This project is 18.47 miles in length and is located on Highways US-26 and L-62A in Scotts Bluff and Morrill Counties, starting 0.41 miles west of the west Minatare corporate limits at mile marker (MM) 32.63 and extending east to the junction of US-26 and L-62A at MM 41.92. The project continues east on L-62A from the junction with US-26 at MM 0+00 to the junction of US-385 and L-62A at MM 9.19. Construction may begin and/or end approximately 1500 feet ahead of or beyond the actual project limits to accommodate transitioning the pavement. The existing roadway on US-26 from MM 32.63 to MM 32.98 consists of a transition section from a 4-lane divided roadway with 12-foot-wide composite pavement lanes, a 14-foot flush median and 10-foot shoulders, of which 8 feet is paved with asphalt to a 3-lane roadway. The existing roadway from MM 32.98 to MM 33.45 consists of two 12-foot-wide composite pavement lanes and a 12-foot two-way center turn lane with shoulders varying from 6 feet with curb and gutter to 10 feet, of which 8 feet is paved with asphalt. The existing roadway on US-26 from MM 33.45 to MM 41.92 and on L-62A from MM 0+00 to MM 9.19 consists of two 12-foot-wide composite pavement lanes and 10-foot shoulders, of which 8 feet is paved with asphalt. The improvements on this project consist of widening US-26 and L-62A from an existing 2-lane roadway to a 4-lane divided roadway with a depressed median using the strategy of constructing new lanes on the north side of the US-26/L-62A corridor and milling and resurfacing the exiting lanes which will remain in place. Improvements include new paving, milling and resurfacing, culvert and storm sewer work, new guardrail, removing and replacing guardrail, a new bridge, new intersections, improved intersections, access relocations (i.e. new frontage roads) and side road modifications. Grading will be required for the entire length of this project. The bridge over Ninemile Creek (Structure Number S026 03470) will be used in place and a new bridge will be built with the new set of lanes. A grade raise of the entire structure is not anticipated. Work will be required in the waterway. Guardrail will be built with the new bridge. The following bridge-size box culverts will be extended: Structure Number S026 03505 (Minatare Drain - Canal), S026 03916 (Irrigation Conveyance), S026 04114 (Wildhorse Creek), SL62A 00116 (Wildhorse Canyon), SL62A 00537 (Tri-State Canal), SL62A 00582 (Tri-State Canal), and SL62A 00613 (Tri-State Canal). The following bridge-size box culverts will be replaced: SL62A 00152 (Irrigation Conveyance), SL62A 00463 (West Water Creek), SL62A 00595 (Red Willow Creek) and SL62A 00648 (Irrigation Conveyance). This project will be constructed under traffic with lane closures controlled by appropriate traffic control devices and practices. Additional property rights will be required to build this project. Access to adjacent properties will be maintained during construction but may be limited at times due to phasing requirements.

The Nebraska Nongame and Endangered Species Conservation Act (NESCA)

The Nebraska Game and Parks Commission (Commission or NGPC) has responsibility for protecting state-listed endangered and threatened species under authority of the Nongame and Endangered Species Conservation Act (NESCA) (Neb. Rev. Stat. § 37-801 to 37-814). Pursuant to §37-807 (3)(c) of NESCA, all state agencies shall, in consultation with the Commission, ensure projects they authorize (i.e., issue a permit for), fund or carry out do not jeopardize the continued existence of state-listed endangered or threatened species or result in the destruction or modification of habitat of such species which is determined by the Commission to be critical. If a proposed project may affect state-listed species or designated critical habitat, further consultation with the Commission is required.

Informal consultation pursuant to NESCA can be completed by using the Conservation and Environmental Review Tool (CERT). The CERT analyzes the project type and location, and based on the analysis, provides information about potential impacts to listed species, habitat questions and/or conservation conditions.

- If project proponent agrees to implement conservation conditions, as outlined in the report and applicable to the project type, then this document serves as documentation of consultation with the Commission and the following actions can be taken to move forward with the project:
 - Sign the report in the designated areas, and
 - Upload the signed and dated report into the project within CERT, and
 - Change the edit status to Final from Draft status.
- When these actions are completed, no additional coordination (i.e., contacting the Commission) is required.
- If the report indicates further consultation is required in the Overall Results section on the following page and/or conservation conditions cannot be met, then the following actions must be taken:
 - Project proponent is required to contact and consult with the Commission. Contact information can be found under the Additional Considerations section.

Review the Overall Results section on the following page for further instructions.

Disclaimer

The U.S. Fish and Wildlife Service has responsibility for conservation and management of fish and wildlife resources for the benefit of the American public under the following authorities: 1) Endangered Species Act; 2) Fish and Wildlife Coordination Act; 3) Bald and Golden Eagle Protection Act; and 4) Migratory Bird Treaty Act.

It is recommended that a project start with requesting an Official Species List via the Information for Planning and Consultation (IPaC) Tool, to begin informal consultation with the U.S. Fish & Wildlife Service.

The information generated in a CERT Environmental Review Report DOES NOT satisfy consultation obligations between the lead federal agency and the U.S. Fish and Wildlife Service pursuant to the Endangered Species Act (ESA).

For the purposes of ESA, the information in this report should be considered as technical assistance, and does not serve as the U.S. Fish and Wildlife Service's concurrence letter, even if the user signs and agrees to implement conservation conditions in order to satisfy consultation requirements of NESCA.

Review the Additional Considerations section for further information.

Overall Results

The following result is based on a detailed analysis of your project.

• The project may have potential impacts on state-listed species. More information is needed, please answer the questions under the Question and Conservation Conditions section. If conservation conditions are required, review the Conservation Conditions Agreement section. Additional consultation with the Nebraska Game and Parks Commission may or may not be required; please review all the information provided in this document.

Additional Information

S-3: Revegetation. All permanent seeding and plantings (excluding managed landscaped areas) shall use species and composition native to the project vicinity as shown in the Plan for the Roadside Environment. However, within the first 16 feet of the road shoulder, and within high erosion prone locations, tall fescue or perennial ryegrass may be used at minimal rates to provide quick groundcover to prevent erosion, unless state or federally listed threatened or endangered plants were identified in the project area during surveys. If listed plants were identified during survey, any seed mix requirements identified during resource agency consultations shall be used for the project. (NDOR Environmental)

Questions and Conservation Conditions

Blowout Penstemon

This project is within the range of the state and federally listed endangered blowout penstemon (*Penstemon haydenii*). Habitat Question for Blowout Penstemon:

Does the Action Area or the area of potential effect include open areas of bare sand?

_____ Unknown

_____ No. Conservation measures are not needed for this species unless otherwise indicated.

_____ Yes. The following conservation measures must be implemented in order to avoid adverse impacts on on Blowout Penstemon:

If "YES" was checked for the habitat question, then this project "MAY AFFECT" blowout penstemon. FURTHER CONSULTATION IS REQUIRED even if conservation measures are listed for this or other species. Contact the Nebraska Game and Parks Commission and the U.S. Fish and Wildlife Service prior to proceeding with the project.

For Bridge deck repair, Bridge deck replacement, Bridge painting, Bridge rail repair/replacement, Bridge superstructure (new, replacement, or repair on ephemeral, intermittent or perennial streams) and/or Pile driving (impact or vibratory): either BOP-1 or BOP-2 (see below) may be implemented in the locations where these activities will take place. For OTHER sources of impacts (other than those mentioned in the previous sentence) which cause soil disturbance in blowout penstemon habitat, implement BOP-1 in those areas.

BOP-1: A qualified biologist will survey according to protocol during the growing season (June - July) prior to the completion of the Process. If the Natural Heritage Database identifies a known occurrence within 1.0 mile of the project, since the year 1975, there will be another survey according to protocol during the growing season immediately prior to construction. If species are not found during the survey, then the May Affect, Not Likely to Adversely Affect stands. If positive finding, then consultation is required.

(NDOT Environmental Note: since BOP-1 is a condition to complete before the completion of the Process, this conservation measure (BOP-1) language is not copied verbatim as a condition in the biology document, NEPA document and Green Sheet. Document the survey finding in the text of the biology document and NEPA document.)

BOP-2: Bridge deck debris will be captured and/or contained to prevent material from falling below the structure. All work will remain on the roadway surface. (District, Contractor)

Northern Long-eared Bat

This project is within the range of the state and federally listed endangered Northern long-eared bat (NLEB) (*Myotis septentrionalis*).

Suitable summer roosting habitat for NLEB consist of forests or woodlots which contain suitable roost trees. In Nebraska, suitable roost trees consist of deciduous and/or pine live or dead trees or snags that are greater than or equal to 3 dbh (diameter at breast height) that exhibit peeling bark or have cracks, crevices or cavities. Linear features such as fencerows, riparian forests, and other wooded corridors are suitable for NLEB if they contain potential roost trees. Individual trees may be considered suitable habitat when they exhibit characteristics of suitable roost trees and are within 1,000 feet of other forested/wooded habitat.

NLEB have also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat when they are within 1000 feet of suitable forested habitat (see above).

Examples of **UN-SUITABLE** habitat for the NLEB include:

- Individual trees that are greater than 1,000 feet from forested/wooded areas;
- Trees found in highly developed urban areas (e.g., street trees, downtown areas) but note that NLEBs sometimes use relatively extensive forested natural areas within urban areas for summer roosting habitat;
- A pure stand of less than 3-inch dbh trees that are not mixed with larger trees.

Habitat Questions for Northern Long-eared Bat:

Is suitable summer habitat, as defined above, located within 1000 feet of the project activities?

____ Unknown.

____ No. Conservation measures are not needed for this species unless otherwise indicated. Additional habitat questions for this species are not applicable if suitable habitat is not present.

____ Yes. The following conservation measures must be implemented in order to avoid adverse impacts on Northern long-eared bat.

If "YES" was checked for the habitat questions, then this project "MAY AFFECT" northern long-eared bat. FURTHER CONSULTATION IS REQUIRED even if conservation measures are listed for this or other species. Contact the Nebraska Game and Parks Commission and the U.S. Fish and Wildlife Service prior to proceeding with the project.

NLEB CM-2: No removal of suitable trees or roosting structures between May 15 and July 31 (maternity roosting season).

Is (are) the culvert(s) greater than or equal to 4 ft in height/diameter AND greater than 130 ft in length?

____ No. This culvert would not be considered suitable habitat for NLEB. Culvert related conservation measures are not necessary.

____Yes. Implement one (not both) of the following conservation measures:

NLEB CM-5 Culvert maintenance and/or removal will not occur between May 15 – July 31 (maternity roosting season), to avoid impacts to northern long-eared bats.

OR

NLEB CM-6 If culvert maintenance and/or removal MUST occur during the northern long-eared bat maternity roosting season (May 15 – July 31), before work may begin, a qualified biologist or trained personnel must first conduct a Culvert Assessment per USFWS's Range-wide Indiana Bat & Northern Long-Eared Bat Survey Guidelines to determine if bat species are present. If bat presence is detected, then FURTHER CONSULTATION is required with Nebraska Game and Parks Commission Environmental Review staff before any work may begin.

Conservation measure NLEB-1 or NLEB-2 is required (not both), in addition to any other conservation measures listed for this species:

NLEB-1: Bridge deck joint replacement over the bridge deck, and bridge deck/superstructure removal activities will not occur between May 15th - July 31st to avoid impacts to the northern long-eared bat maternity roosting period. **OR**

NLEB-2: If bridge deck joint replacement over the bridge deck, or removal of bridge or bridge superstructure occurs during the northern long-eared bat maternity roosting period (May 15th – July 31st), qualified biologists/trained personnel will perform bat roosting surveys prior to the start of these activities at the following locations:

______ (location of suitable roosting habitat). If bat species are found, Qualified Biologist and Project Manager will immediately notify USFWS (<u>nebraskaes@fws.gov</u>) and NGPC (Shaun Dunn 402-471-5419) for additional consultation prior to the start of construction.

Note to Practitioner: The NLEB is not included in the NDOT/FHWA/NGPC/USFWS Matrix Process. If this project is funded by FHWA, utilize the FHWA/USFWS Range-wide Programmatic Agreement and IPaC to review impacts to NLEB. If this project is an NDOT State-Funds-Only, proceed with the review and conservation measures in CERT, and utilize the IPaC NLEB Range-wide Determination Key.

NLEB-3 All phases and aspects of the project shall be modified, to the extent practicable, to avoid tree removal in excess of what is required to implement the project safely. Tree removal shall be limited to removals specified in the project plans, which will be clearly marked in the field.

Swift Fox

This project is within the range of the state-listed endangered swift fox (*Vulpes velox*). Habitat Question for Swift Fox:

Does the action area or area of potential effect include connected suitable habitat that contains vegetation <6 inches in height, including gently rolling to level intact upland grasslands and field borders that are outside of densely populated residential, commercial, industrial areas?

_____ Unknown

_____ No. Conservation measures are not needed for this species unless otherwise indicated.

Yes. The following conservation measures must be implemented in order to avoid adverse impacts on swift fox:

If "YES" was checked for the habitat question, then this project **"MAY AFFECT"** swift fox. **FURTHER CONSULTATION IS REQUIRED** even if conservation measures are listed for this or other species. Contact the Nebraska Game and Parks Commission prior to proceeding with the project.

SF-1: Two weeks prior to the start of construction, a qualified biologist shall survey the environmental study area according to protocol to determine if active swift fox den sites are present. If an active den with young is located and it is outside the project limits, then a buffer zone shall be established around the den and all construction activities shall avoid the buffer until the den is abandoned. If an occupied den with or without young is identified within the project limits or staging areas, NDOT shall immediately coordinate with the NGPC to determine how to proceed. A buffer zone shall be established around the den and all construction activities shall avoid the buffer until NDOT gives approval to enter the buffer area. Between April 1 and August 31, the buffer zone shall be 250 yards around the active den site; other times of the year, the buffer shall be 100 yards around the active den site. (NDOT Environmental)

SF-2: Fencing shall be designed for wildlife safety and wildlife friendly passage with a bottom wire at least 16" from the ground. If different fencing design is required for safety or access control, additional coordination with resource agencies shall be required. (NDOT Design, NDOT Environmental)

SF-3: Fence posts shall not be placed within potential den sites that appear to have animal activity. If fence posts cannot avoid potential den sites that appear to have animal activity, NDOT Environmental will be notified and will reinitiate consultation with resource agencies. Work will not commence until agency concurrence is received. (Contractor) **R-4:** For **listed plants**: Asphalt plants and staging areas for construction supplies and Contractors equipment shall be located in areas that are frequently disturbed such as, but not limited to, field entrances, crop fields, abandoned roadway, farmsteads and roads. If this is not possible, the contractor shall coordinate with NDOT Environmental with a site plan showing the desired staging/stockpile location(s), which will be sited in such a way as to avoid impacting protected species.

NOTE for NDOT Environmental: For activities where equipment may pull off and pull back onto pavement (ex. paving) where a no effect determination was made and the NDOT Biologist knows there is a potential for occupied habitat within 15 feet of the paved road surface, then the NDOT biologist will coordinate with FHWA, NGPC, and USFWS to determine if additional measures should be included in the biology document. This coordination shall occur during the NEPA review and shall be included in the OERCC document.

Conservation Measures Agreement

Based on the information contained in the report, follow the instructions for A, B or C below.

A) If one or more of the habitat questions were answered with "Yes", insert an "X" for one of the two Options below:

Option 1. For all species for which there is habitat present (as indicated by checking "Yes" to a habitat question) I understand and agree to implement and/or incorporate the conservation measures for those species as indicated. By agreeing to implement and/or incorporate the conservation measures for those species as indicated, no further consultation with the Nebraska Game and Parks Commission is required.

Sign and date on the line below, and also sign and date the Certification section. Submit a copy of the signed and dated (i.e. certified) report with any type of permit/application required for the project.

Applicant/project proponent signature

Date

Option 2. I have concerns regarding one or more of the conservation measures. Sign the Certification section below. When submitting the project as "Final" in CERT, please attach a separate document explaining your concerns with the conservation measures and why they cannot be implemented. Then, contact the Nebraska Game and Parks Commission for further information.

B) If one or more habitat questions were answered with "Unknown" then leave your project as "Draft" and contact the Nebraska Game and Parks Commission for more information. Once your concerns are addressed with the Commission, adjust your answer to "Yes" or "No", sign and date under the Certification section, upload the report using the File Attachments feature and change the Edit Status to "Final".

C) If ALL the habitat questions were answered "No" then sign the Certification section below and submit the project as "Final" in CERT. Once these steps are completed, no additional correspondence with the Nebraska Game and Parks Commission is required. Submit a copy of the signed report with any type of permit/application needed for the project.

Additional coordination with the U.S. Fish and Wildlife Service may be necessary depending on the determination made by the lead federal agency pursuant to their obligations under the Endangered Species Act (ESA).

Certification

I certify that ALL the project information in this report (including project location, project size/configuration, project type, project activities, answers to questions) is true, accurate and complete. If the project type, activities, location, size, or configuration of the project change; if a species listing status is reclassified; if a new species is listed; or if any of the answers to any questions asked in this report change, then this document is no longer valid, and re-consultation with the Nebraska Game and Parks Commission is required.

Date

Applicant/project proponent signature

Additional Considerations

Nebraska Game and Parks	U.S. Fish and Wildlife Service	U.S. Army Corps of Engineers							
Commission									
Environmental Review Team	Nebraska Ecological Services	Omaha Regulatory Office							
2200 North 33 Street	9325 South Alda Road	8901 South 154 Street							
Lincoln, NE 68503	Wood River, NE 68883	Omaha, NE 68138							
Phone: (402) 471-5423	Phone: (308) 382-6468	Phone: (402) 896-0896							
Email: ngpc.envreview@nebraska	.gov Email: nebraskaes@fws.gov	Email: NE404Reg@usace.army.mil							

The following federal laws contribute to the conservation and management of fish and wildlife resources in the United States: Endangered Species Act, Bald and Golden Eagle Protection Act, Migratory Bird Treaty Act, Clean Water Act, and the Fish and Wildlife Coordination Act.

Bald and Golden Eagle Protection Act

The federal Bald and Golden Eagle Protection Act (Eagle Act) (16 U.S.C. 668-668c) provides for the protection of the bald eagle (*Haliaeetus leucocephalus*) and golden eagle (*Aquila chrysaetos*). Under the Eagle Act, "take" of eagles, their parts, nests or eggs is prohibited. Disturbance resulting in injury to an eagle or a decrease in productivity or nest abandonment by substantially interfering with normal breeding, feeding, or sheltering behavior is a form of "take."

Nebraska Specific Information

Bald eagles use mature, forested riparian areas near rivers, streams, lakes, and wetlands and occur along all the major river systems in Nebraska. The bald eagle southward migration begins as early as October and the wintering period extends from December-March. The golden eagle is found in arid open country with grassland for foraging in western Nebraska and usually near buttes or canyons which serve as nesting sites. Golden eagles are often a permanent resident in the Pine Ridge area of Nebraska. Additionally, many bald and golden eagles nest in Nebraska from mid-February through mid-July. Disturbances within 0.5-miles of an active nest or within line-of-sight of the nest could cause adult eagles to discontinue nest building or to abandon eggs. Both bald and golden eagles frequent river systems in Nebraska during the winter where open water and forested corridors provide feeding, perching, and roosting habitats, respectively. The frequency and duration of eagle use of these habitats in the winter depends upon ice and weather conditions. Human disturbances and loss of wintering habitat can cause undue stress leading to cessation of feeding and failure to meet winter thermoregulatory requirements. These affects can reduce the carrying capacity of preferred wintering habitat and reproductive success for the species.

To comply with the Eagle Act, it is recommended that the project proponent determine if the proposed project would impact bald or golden eagles or their habitats. This can be done by conducting a habitat assessment, surveying nesting habitat for active and inactive nests, and surveying potential winter roosting habitat to determine if it is being used by eagles. The area to be surveyed is dependent on the type of project; however for most projects we recommend surveying the project area and a ½ mile buffer around the project area. If it is determined that either species could be affected by the proposed project, the Commission recommends that the project proponent notify the Nebraska Game and Parks Commission as well as the Nebraska Field Office, U.S. Fish and Wildlife Service for recommendations to avoid "take" of bald and golden eagles.

Migratory Bird Treaty Act and Nebraska Revised Statute §37-540

We recommend the project proponent comply with the Migratory Bird Treaty Act (16 U.S.C. 703-712: Ch. 128 as amended) (MBTA). The project proponent should also comply with Nebraska Revised Statute §37-540, which prohibits take and destruction of nests or eggs of protected birds (as defined in Nebraska Revised Statute §37-237.01). Construction activities in grassland, wetland, stream, woodland, and river bank habitats that would result in impacts on birds, their nests or eggs protected under these laws should be avoided. Although the provisions of these laws are applicable year-round, most migratory bird nesting activity in Nebraska occurs during the period of April 1 to July 15. However, some migratory birds are known to nest outside of the aforementioned primary nesting season period. For example, raptors can be expected to nest in woodland habitats during February 1 through July 15, whereas sedge wrens, which occur in some wetland habitats, normally nest from July 15 to September 10. If development in this area is planned to occur during the primary nesting season or at any other time which may result in impacts to birds, their nests or eggs protected under these laws, we request that the project proponent arrange to have a qualified biologist conduct a field survey of the affected habitats to determine the absence or presence of nesting migratory birds. If a field survey identifies the existence of one or more active bird nests that cannot be avoided by the planned construction activities, the Nebraska Game and Parks Commission and the Nebraska Field Office, U.S. Fish and Wildlife Service should be contacted immediately. For more information on avoiding impacts to migratory birds, their nests and eggs, or to report active bird nests that cannot be avoided by planned construction activities, please contact the U.S. Fish and Wildlife Service and/or the Nebraska Game and Parks Commission (contact information within report). Adherence to these guidelines will help avoid unnecessary impacts on migratory birds.

Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act (FWCA) requires consultation with the U.S. Fish and Wildlife Service (Service) and the State fish and wildlife agency (i.e., Nebraska Game and Parks Commission) for the purpose of preventing loss of and damage to fish and wildlife resources in the planning, implementation, and operation of federal and federally funded, permitted, or licensed water resource development projects. This statute requires that federal agencies take into consideration the effect that the water related project would have on fish and wildlife resources, to take action to prevent loss or damage to these resources, and to provide for the development and improvement of these resources. The comments in this letter are provided as technical assistance only and are not the document required of the Secretary of the Interior pursuant to Section 2(b) of FWCA on any required federal environmental review or permit. This technical assistance is valid only for the described conditions and will have to be revised if significant environmental changes or changes in the proposed project are being considered under FWCA, the lead federal agency must notify the Service in writing of how the comments and recommendations in this technical assistance letter are being considered into the proposed project.

Section 404 of the Clean Water Act

In general, the Nebraska Game and Parks Commission and the U.S. Fish and Wildlife Service have concerns for impacts to wetlands, streams and riparian habitats. We recommend that impacts to wetlands, streams, and associated riparian corridors be avoided and minimized, and that any unavoidable impacts to these habitats be mitigated. If any fill materials will be placed into waterways or wetlands, the U.S. Army Corps of Engineers Regulatory Office in Omaha should be contacted to determine if a 404 permit is needed.



Minatare to US-385 Aerial Image Basemap With Locator Map

Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS Earthstar Geographics Esri, USGS



Minatare to US-385 Topographic Basemap With Sections and Protected Areas

Esri, CGIAR, USGS Nebraska Game & Parks Commission, Esri, TomTom, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA, USFWS

Minatare to US-385 Web Map As Submitted By User



Project Boundary

Esri, CGIAR, USGS

Table 1 Protected Areas in Immediate Vicinity of Project (project review area)

This table has no results.

Table 2 Documented Occurrences in Immediate Vicinity of Project (project review area): Natural communities and selected special areas

Name	Other Information	SRank	GRank
Rock Outcrop	Rock Outcrop	S4	G4?
Threadleaf Sedge Western Mixed-grass Prairie	Threadleaf Sedge Western Mixed-grass Prairie	S3S4	GNR
Western Alkaline Meadow	Western Alkaline Meadow	S3	G3
Panhandle Prairies Biologically Unique Landscape	Link to BUL document		
Large Intact Block of Habitat for At-risk Species			

Table 3Regional Documented Occurrences of Species within 1 Mile of Project Review Area:Tier 1 and 2 at-risk species and additional S1-S3 plants

Scientific Name	Common Name	USFWS	State	SGCN	SRank	GRank	Taxonomic Group
Amphiscirpus nevadensis	Nevada Bulrush			Tier 2	S2	G4	Vascular Plant - Monocots
Aquila chrysaetos	Golden Eagle			Tier 2	S3	G5	Vertebrate Animal - Birds
Astragalus hyalinus	Summer Orophaca			Tier 2	S2	G4	Vascular Plant - Dicots
Athene cunicularia	Burrowing Owl			Tier 1	S2	G4	Vertebrate Animal - Birds
Buteo regalis	Ferruginous Hawk			Tier 1	S2	G4	Vertebrate Animal - Birds
Catostomus catostomus	Longnose Sucker			Tier 2	S2	G5	Vertebrate Animal - Fishes
Chenopodium subglabrum	Northern Narrow-leaf Goosefoot				S3S4	G3G4	Vascular Plant - Dicots
Cygnus buccinator	Trumpeter Swan			Tier 2	S2	G4	Vertebrate Animal - Birds
Cynomys Iudovicianus	Black-tailed Prairie Dog			Tier 2	S3	G4	Vertebrate Animal - Mammals
Delphinium nuttallianum	Blue Larkspur			Tier 2	S1	G5	Vascular Plant - Dicots
Ericameria parryi var. howardii	Parry's Rabbit-brush				S2S3	G5T5	Vascular Plant - Dicots
Fundulus sciadicus	Plains Topminnow			Tier 1	S3	G4	Vertebrate Animal - Fishes
Haliaeetus leucocephalus	Bald Eagle			Tier 2	S3	G5	Vertebrate Animal - Birds
Hybognathus placitus	Plains Minnow			Tier 1	S2	G4	Vertebrate Animal - Fishes

Table 3
Regional Documented Occurrences of Species within 1 Mile of Project Review Area:
Tier 1 and 2 at-risk species and additional S1-S3 plants

Scientific Name	Common Name	USFWS	State	SGCN	SRank	GRank	Taxonomic Group
Ipomopsis congesta	Ball-head Ipomopsis				S2S4	G5	Vascular Plant - Dicots
Lepus townsendii	White-tailed Jackrabbit		NC	Tier 2	S3	G5	Vertebrate Animal - Mammals
Lomatium nuttallii	Dog-parsley			Tier 1	S2	G3	Vascular Plant - Dicots
Luxilus cornutus	Common Shiner			Tier 2	S2	G5	Vertebrate Animal - Fishes
Myotis lucifugus	Little Brown Myotis			Tier 1	SNR	G3	Vertebrate Animal - Mammals
Numenius americanus	Long-billed Curlew			Tier 1	S3	G5	Vertebrate Animal - Birds
Platygobio gracilis	Flathead Chub			Tier 1	S2	G5	Vertebrate Animal - Fishes
Polites mystic	Long Dash			Tier 2	S3	G5	Invertebrate Animal - Butterflies and Skippers
Pontia occidentalis	Western White			Tier 2	S2	G5	Invertebrate Animal - Butterflies and Skippers
Primula pauciflora var. pauciflora	Northern Shooting-star			Tier 2	S2	G5T5	Vascular Plant - Dicots
Spilogale putorius	Eastern Spotted Skunk			Tier 1	S1	G4	Vertebrate Animal - Mammals
Thelypodium integrifolium	Entire-leaf Thelypody				S2S4	G5	Vascular Plant - Dicots
Trimerotropis saxatilis	Lichen Grasshopper			Tier 1	S1	G3	Invertebrate Animal - Grasshoppers
Vulpes velox	Swift Fox		E	Tier 1	S2	G3	Vertebrate Animal - Mammals

Table 4

Potential Occurrences in Immediate Vicinity of Project (project review area): Special status species (Tier 1 at-risk species and Bald and Golden Eagle), based on models or range maps

Scientific Name	Common Name	Data Type	USFWS	State	SGCN	SRank	GRank	Taxonomic Group
Aquila chrysaetos	Golden Eagle	Model			Tier 2	S3	G5	
Argynnis idalia	Regal Fritillary	Range			Tier 1	S3	G3?	
Asio flammeus	Short-eared Owl	Range			Tier 1	S2	G5	
Athene cunicularia	Burrowing Owl	Range			Tier 1	S2	G4	
Boloria myrina sabulocollis	Kohler's Fritillary	Range			Tier 1	S1S2	G5?T3	
Buteo regalis	Ferruginous Hawk	Range			Tier 1	S2	G4	
Cicindela limbata limbata	Sandy Tiger Beetle	Range			Tier 1	S4	G5T3T4	

Table 4Potential Occurrences in Immediate Vicinity of Project (project review area):Special status species (Tier 1 at-risk species and Bald and Golden Eagle), based on models or range maps

Scientific Name	Common Name	Data Type	USFWS	State	SGCN	SRank	GRank	Taxonomic Group
Coccinella novemnotata	Nine-spotted Ladybird Beetle	Range			Tier 1	S1	G5	
Dalea cylindriceps	Large-spike Prairie-clover	Range			Tier 1	S2	G3	
Danaus plexippus	Monarch	Range			Tier 1	S2	G4	
Ellipsoptera lepida	Ghost Tiger Beetle	Range			Tier 1	S2	G3	
Euphyes bimacula illinois	Two-spotted Skipper	Range			Tier 1	S3	G4T1T2	
Fundulus sciadicus	Plains Topminnow	Range			Tier 1	S3	G4	
Haliaeetus leucocephalus	Bald Eagle	Range			Tier 2	S3	G5	
Hesperia ottoe	Ottoe Skipper	Range			Tier 1	S2	G3	
Hybognathus placitus	Plains Minnow	Range			Tier 1	S2	G4	
Lanius Iudovicianus	Loggerhead Shrike	Range			Tier 1	S3	G4	
Lasiurus borealis	Eastern Red Bat	Range			Tier 1	S3	G3G4	
Lasiurus cinereus	Hoary Bat	Range			Tier 1	S3	G3G4	
Lethe eurydice fumosus	Smoky-eyed Brown	Range			Tier 1	S3	G5T3T4	
Lomatium nuttallii	Dog-parsley	Range			Tier 1	S2	G3	
Myotis lucifugus	Little Brown Myotis	Range			Tier 1	SNR	G3G4	
Myotis septentrionalis	Northern Long-eared Myotis	Range	Е	E	Tier 1	S1S2	G2G3	
Penstemon haydenii	Blowout Penstemon	Range	Е	Е	Tier 1	S1	G2	
Perimyotis subflavus	Tricolored Bat	Range			Tier 1	S3	G3G4	
Pica hudsonia	Black-billed Magpie	Range			Tier 1	S2	G5	
Platygobio gracilis	Flathead Chub	Range			Tier 1	S2	G5	
Sceloporus graciosus	Sagebrush Lizard	Range			Tier 1	S1	G5	
Trimerotropis saxatilis	Lichen Grasshopper	Range			Tier 1	S1	G3	
Vulpes velox	Swift Fox	Range		Е	Tier 1	S2	G3	

Overview of Effects and Required Conservation Conditions

Threatened and Endangered Species Effect Determination:

- This project will have "no effect" to all listed species and their habitats. *If an IPLE was written to justify the no effect determination, the BA is sent to FHWA for concurrence.
- A "may affect, not likely to adversely affect" determination is made for the following species/critical habitat with the conservation conditions listed below (and will have "no effect" on all other listed species, except for any listed in the 3rd check box): Black-footed Ferret, Northern Long-eared Bat, Tri-colored Bat, and Swift Fox

This project is within the NGPC range for Northern long-eared bat but not the USFWS range. Based on guidance from the NGPC and USFWS, this project was processed through the NGPC Conservation and Environmental Report Tool and conservation measures from the generated Environmental Review Report for NLEB are proposed in this IPLE.

Tri-Colored bat is a proposed endangered species. Since Tri-colored bat is not included in any programmatic agreements NDOT is evaluating the impacts to TCB in an IPLE.

A "may affect, likely to adversely affect" determination is made for the following species/critical habitat with the conservation conditions listed below (and will have "no effect" on all other listed species, except for any listed above):

Platte River Flow Depletions and Borrow:

If the excavation of borrow sites will occur within the Platte River Basin and result in open water that could constitute a depletion to the Platte River system, <u>upstream</u> of the Loup confluence, the Nebraska Department of Natural Resources will be contacted. If a borrow site will result in a depletion to the Platte River system, <u>downstream</u> of the Loup confluence, NDOT will coordinate with the Nebraska Game and Parks Commission.

Migratory Bird Treaty Act:

NDOT has developed an Avian Protection Plan (APP) to reduce conflicts between construction of NDOT projects and the laws governing migratory birds. This procedure is designed to protect and conserve avian populations and reduce avian conflicts through changes in project scheduling (i.e. tree clearing outside of primary nesting period), increased migratory bird surveys, and changes in project construction timelines. NDOT will utilize its APP to reduce conflicts with migratory birds on this project.

Bald and Golden Eagle Protection Act:

This project was reviewed for potential impacts to bald and golden eagles. NDOT believes the project sites does not have appropriate habitat for eagles. Due to the lack of suitable habitat and information that there are not known bald eagle nests within the project area, NDOT has determined that there will be no impact to these species.

Project Name: Minatare to US-385 Federal-aid Number: NH-26-1(172) Control Number: 51521

Fish and Wildlife Coordination Act:

A wetland and water resources delineation was completed by Benesch from July 26 – July 29, 2021. Anticipated permanent impacts include 13.452 acres of wetlands and 1.571 acres/7253 linear feet of channel impacts. At this time there are no projected temporary impacts. Wetlands were primarily located in the roadside ditches and along streams and irrigation ditches. NDOT received an AJD on 2/7/204 from the USACE. At this time, the project will require an Individual Permit for impacts to waters of the U.S. Coordination under the FWCA would take place during the permitting process.

Conservation Conditions: Responsible Party for conservation condition shown in parentheses. Listed below are the required Conservation Conditions that apply to this project. These measures are not subject to change without the prior written approval of the NDOT Environmental Section. <u>Copy and paste the conditions listed below verbatim in the NEPA</u> <u>document, the Green Sheet, and in the contract documents:</u>

- A-1 Changes in Project Scope. If there is a change in the project scope, the project limits, or environmental commitments, the Highway Project Manager shall coordinate with the NDOT Environmental Section to evaluate potential impacts prior to implementation. Environmental commitments are not subject to change without prior written approval from the NDOT Environmental Section. (District Construction)
- A-2 **Conservation Conditions**. Conservation conditions are to be fully implemented within the project limits as shown on the plans. (*District Construction, Contractor*)
- A-3 Early Construction Starts. Contractor request for early construction starts must be coordinated by the Project Construction Engineer with NDOT Environmental for approval of early start to ensure avoidance of listed species sensitive lifecycle timeframes. Work in these timeframes could require consultation with the USFWS and NGPC. (District Construction, Contractor)
- A-4 **T&E Species**. If federal or state listed species are observed during construction, the Highway Project Manager will contact NDOT Environmental Section to determine if additional species conservation conditions would be required prior to continuing project construction activities. Contact NDOT Environmental for a reference of federal and state listed species. Coordination with the USFWS and NGPC may be required depending on the species identified and construction activities. (NDOT Environmental, District Construction, Contractor)
- **A-5 Refueling**. Refueling will be conducted outside of those sensitive areas identified on the plans, in the contract, and/or marked in the field. *(Contractor)*
- A-6 **Restricted Activities**. The following project activities shall, to the extent possible, be restricted to between the beginning and ending points (stationing, reference posts, mile markers, and/or section-township-range references) of the project, within the right-of-way designated on the project plans: borrow sites, burn sites, construction debris waste disposal areas, concrete and asphalt plants, haul roads, stockpiling areas, staging areas, and material storage sites.

For activities outside the project limits, the contractor should refer to the Nebraska Game and Park Commission website to determine which species ranges occur within the off-site area. The contractor should plan accordingly for any species surveys that may be required to approve the use of a borrow site, or other off-site activities. The contractor should review the T&E Matrix agreement (on NDOT's website), where species survey protocols can be found, to estimate the level of effort and timing requirements for surveys.

Any project related activities that occur outside of the project limits must be environmentally cleared/permitted with the Nebraska Game and Parks Commission as well as any other appropriate agencies by the contractor and those clearances/permits submitted to the District Construction Project Manager prior to the start of the above listed project activities. The contractor shall submit information such as an aerial photo showing the proposed activity site, a soil survey map with the location of the site, a plansheet or drawing showing the location and dimensions of the activity site, a minimum of 4 different ground photos showing the existing conditions at the proposed activity site, depth to ground water and depth of pit, and the "Platte River depletion status" of the site. The contractor must receive notice of acceptance from NDOT environmental, prior to starting the above listed project activities. These project activities cannot adversely affect state and/or federally listed species or designated critical habitat. *(NDOT Environmental, District Construction, Contractor)*.

- A-7 Waste/Debris. Construction waste/debris will be disposed of in areas or a manner which will not adversely affect state and/or federally listed species and/or designated critical habitat. (*Contractor*)
- **A-8 Post Construction Erosion Control.** Erosion control activities carried out by NDOT Maintenance or others after construction is complete, but prior to project close-out, shall adhere to any standard conservation conditions for species designated for the project limits during construction. (NDOT Maintenance, District Construction, Contractor)
- **S-1 Fencing**. When project-related fence construction/relocation work is required to be done prior to the start of construction, and if the fence work occurs outside urban or cropland areas that are not within swift fox range, then fencing can be installed/relocated at any time using the following criteria:
 - a. the fencing is temporary in nature and/or consists of only hand-driven posts
 - b. the work does not compact the soils (ex. through the use of heavy equipment) or cause soil disturbance beyond the driving of posts

If the fencing work cannot meet these criteria, then NDOT Right-of-Way Division shall coordinate with NDOT Environmental Section prior to the completion of Right-of-way negotiations.

S-2 Platte River Depletions. To the maximum extent practical, efforts will be made to design the project and select borrow sites to prevent depletions to the Platte River. If there is any potential to create a depletion, NDOT (during design) and the Contractor (for borrow sites) shall follow the current Platte River depletion protocols for coordination, minimization, and mitigation. In general, the following are considered de minimis depletions, but may still require agency coordination; a project which: a) creates an annual depletion less than 0.1 acre feet, b) creates a detention basin that detains water for less than 72 hours, c) diverted water that will be returned to its natural basin within 30

days, or d) creates a one-time depletion of less than 10 acre feet. (NDOT Roadway Design, Contractor)

- S-3 Revegetation. All permanent seeding and plantings (excluding managed landscaped areas) shall use species and composition native to the project vicinity as shown in the Plan for the Roadside Environment. However, within the first 16 feet of the road shoulder or within high erosion prone locations, tall fescue or perennial ryegrass may be used at minimal rates to provide quick groundcover to prevent erosion, unless state or federally listed threatened or endangered plants were identified in the project area during surveys. If listed plants were identified, any seed mix requirements identified during resource agency consultations shall be used for the project. (NDOT Environmental)
- **S-4 Sensitive Areas.** Environmentally Sensitive Areas will be marked on the plans, in the field, or in the contract by NDOT Environmental for avoidance. (*NDOT Environmental, NDOT Roadway Design, District Construction*)
- **S-5 Species Surveys.** If species surveys are required during the construction phase of the project (including pre-construction surveys), results will be sent by NDOT Environmental Section to the USFWS, NGPC, and if applicable the USACE. (*NDOT Environmental, District Construction*)
- S-6 Permanent LED Lighting (<u>NDOT Design Commitment</u>): Only LED roadway luminaries listed on the NDOT "Nebraska Qualified Material Vendors List" will be considered for use on Nebraska highway lighting projects. Proposed changes to the following LED lighting requirements would require resource agency (USFWS and/or NGPC) coordination and approval prior to installation:
 - Nominal CCT 3000 +/- 300 K
 - BUG Ratings Maximum nominal Backlight (N/A), Uplight (0), Glare (N/A)
 - Lumen Output N/A

Any proposed changes to the listed requirement(s) must be presented to the NDOT Environmental Section for Agency Coordination and approval.

Black-footed Ferret:

No conservation conditions are required for this species.

Northern Long-eared Bat / Tri-Colored Bat:

- **NLEB / TCB -3:** All phases and aspects of the project shall be modified, to the extent practicable, to avoid tree removal in excess of what is required to implement the project safely. Tree removal shall be limited to removals specified in the project plans, which will be clearly marked in the field. (*Design, Contractor*)
- **NLEB / TCB CM-2**: No removal of suitable trees or roosting structures between May 15 and July 31 (maternity roosting season) (*Contractor*)

Swift Fox:

- **SF-1** Two weeks prior to the start of construction, a qualified biologist <u>shall</u> survey the environmental study area according to protocol to determine if active swift fox den sites are present. If an active den with young is located and it is outside the project limits, then a buffer zone shall be established around the den and all construction activities shall avoid the buffer until the den is abandoned. If an occupied den with or without young is identified within the project limits or staging areas, NDOT shall immediately coordinate with the NGPC to determine how to proceed. A buffer zone shall be established around the den and all construction activities shall avoid the buffer area. Between April 1 and August 31, the buffer zone shall be 250 yards around the active den site; other times of the year, the buffer shall be 100 yards around the active den site. (*NDOT Environmental*)
- SF-2 Fencing shall be designed for wildlife safety and wildlife friendly passage with a bottom wire at least 16" from the ground. If different fencing design is required for safety or access control, additional coordination with resource agencies shall be required. (NDOT Design, NDOT Environmental)
- SF-3 Fence posts shall not be placed within potential den sites that appear to have animal activity. If fence posts cannot avoid potential den sites that appear to have animal activity, NDOT Environmental will be notified and will re-initiate consultation with resource agencies. Work will not commence until agency concurrence is received. (Contractor)
- **SF-A** NDOT shall coordinate with the NGPC regarding the installation of artificial escape dens in suitable locations along the L62A corridor. Swift Fox Escape Den Installation protocols shall be utilized. (NDOT Environmental, NDOT Design)

The overall Biological Assessment package was prepared by:

Scott Rupe 16:12:27-05'00'	Scott Rupe	Senior Scientist / Benesch	9/4/2024
Signature	Printed Name	Title and Agency/Firm	Date

Approved by the following qualified NDOT biologist:

20	Matthew Greiner	9/10/2024	
Signature	Printed Name	Date	

Check if FHWA signature required (NDOT Environmental use only). Approved by FHWA Environmental (FHWA signature only needed when the project is unassigned under the most current CE MOU <u>and</u> the project results in a "may affect" determination, or an Individual Project Level Evaluation, modified Conservation Conditions, or Individual BA is required.):

Signature

Printed Name

Date

Check if USFWS and/or NGPC concurrence is required (NDOT Environmental use only).

Check if the project occurs on federal or tribal land (*NDOT Environmental use only*). If yes, provide federal or tribal agency name: _____

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by NDOT pursuant to 23 USC 326 and the First Renewed Memorandum of Understanding dated September 17, 2021, and executed by FHWA and NDOT.

Species Evaluation Parameters

Form to assist in completing the Endangered & Threatened Species Evaluation Procedures Guide Sheet and Determining the Potential Effect

The following questions identify the potential for suitable habitat within the Action Area, or if the project is within the range of a federally or state listed species. If a species is listed during construction or implementation, the species will be addressed in the Individual Project Level Evaluation document.

Proposed Project Information

Project Sponsor and Contact: Matthew Greiner, NDOT

Biologist Completing Assessment: Scott Rupe, Benesch

Project No.: NH-26-1(172)

Control No.: 51521

Project Name: Minatare to US-385

County: Scotts Bluff and Morrill Counties

Limits of Work

Start: US-26 Mile Marker (MM) 32.63

End: L-62A MM 9.19

Total Length: 18.47 Miles

Activity Checklist Date: 8-26-24

Project Description Date: 8-22-24

Project Description: This project is 18.47 miles in length and is located on Highways US-26 and L-62A in Scotts Bluff and Morrill Counties, starting 0.41 miles west of the west Minatare corporate limits at mile marker (MM) 32.63 and extending east to the junction of US-26 and L-62A at MM 41.92. The project continues east on L-62A from the junction with US-26 at MM 0+00 to the junction of US-385 and L-62A at MM 9.19.

Construction may begin and/or end approximately 1500 feet ahead of or beyond the actual project limits to accommodate transitioning the pavement.

The existing roadway on US-26 from MM 32.63 to MM 32.98 consists of a transition section from a 4-lane divided roadway with 12-foot-wide composite pavement lanes, a 14-foot flush median and 10-foot shoulders, of which 8 feet is paved with asphalt to a 3-lane roadway. The existing roadway from MM 32.98 to MM 33.45 consists of two 12-foot-wide composite pavement lanes and a 12-foot two-way center turn lane with shoulders varying from 6 feet with curb and gutter to 10 feet, of which 8 feet is paved with asphalt. The existing roadway on US-26 from MM 33.45 to MM 41.92 and on L-62A from MM 0+00 to MM 9.19 consists of two 12-foot-wide composite pavement lanes and 10-foot shoulders, of which 8 feet is paved with asphalt.

The improvements on this project consist of widening US-26 and L-62A from an existing 2-lane roadway to a 4-lane divided roadway with a depressed median using the strategy of constructing new lanes on the north side of the US-26/L-62A corridor and milling and resurfacing the exiting lanes which will remain in place. Improvements include new paving, milling and resurfacing, culvert and storm sewer work, new guardrail, removing and replacing guardrail, a new bridge, new intersections, improved intersections, access relocations (i.e. new frontage roads) and side road modifications.

Grading will be required for the entire length of this project.

The bridge over Ninemile Creek (Structure Number S026 03470) will be used in place and a new bridge will be built with the new set of lanes. A grade raise of the entire structure is not anticipated. Work will be required in the waterway. Guardrail will be built with the new bridge.

The following bridge-size box culverts will be extended: Structure Number S026 03505 (Minatare Drain - Canal), S026 03916 (Irrigation Conveyance), S026 04114 (Wildhorse Creek), SL62A 00116 (Wildhorse Canyon), SL62A 00537 (Tri-State Canal), SL62A 00582 (Tri-State Canal), and SL62A 00613 (Tri-State Canal). The following bridge-size box culverts will be replaced: SL62A 00152 (Irrigation Conveyance), SL62A 00463 (West Water Creek), SL62A 00595 (Red Willow Creek) and SL62A 00648 (Irrigation Conveyance).

This project will be constructed under traffic with lane closures controlled by appropriate traffic control devices and practices.

Additional property rights will be required to build this project.

Access to adjacent properties will be maintained during construction but may be limited at times due to phasing requirements.

Project Limits: The Project Limits are defined as the area between the project beginning and end points, from right-of-way to right-of-way, as marked in the construction plans, including temporary construction easements, detours, and any designated waste, staging, stockpile or material sites.

Project Action Area:

- Noise 1.1 miles and 0.30 miles
- Visual 0.25 mile
- Waterway 300 feet upstream, 1500 feet downstream
- Lighting 500 feet radius

The initial action area for this project was established using a 1.1 mile buffer to encompass the loudest potential noise impact. Upon review of the project location, project activities, and species in range; the action area has been revised to a 0.3 mile or 1599 feet buffer, with a spot location at Nine Mile Creek of 1.1 miles. The project is in Scottsbluff and Morrill County and is generally located in a rural setting. The following sections describe how the revised action area was developed. Attached to this biological assessment is a project action area map.

Noise

The loudest equipment used for the project would be a pile driver. Throughout the rest of the project, a concrete saw is the loudest equipment that would be used. The ambient noise level for US-26 and L-62A is 59.9 dBA. FHWA Table 9.1 identifies impact pile drivers and vibratory pile drivers as the loudest construction equipment at 95 dBA at Spec. 721.560 Lmax @ 50 feet

and 101 dBA for Actual Measured Lmax @ 50 feet (FHWA 2006). Using an ambient noise level of 59.9 dBA, Actual Measured Lmax @ 50 feet sound level for impact pile drivers and vibratory pile drivers of 101 dBA, and the inverse square law, the noise levels would dissipate to ambient noise levels in a free field without obstructions at 5,675 feet (1.1 miles). Pile driving would occur along both sides (east and west) of the Nine Mile Creek. A 1.1 mile buffer was applied from the pile driving locations. For the remainder of the project, the loudest equipment is a concrete saw (90 dBA for Actual Measured Lmax @ 50 feet) resulting in a dissipation distance of 1,599 feet or approximately 0.3 miles.

Waterway

Waterways in the form of creeks, canals, and drainages exist along the project alignment. The major waterways include: Nine Mile Creek, Wildhorse Drain, Wildhorse Canyon, Red Willow Creek, Minatare Drain, Tri State Canal, and Interstate Canal. At Nine Mile Creek, the action area extends 1.1 miles due to potential noise impacts, while for the remainder of the corridor, the noise impact area is 0.3 miles. Since the waterway action area falls within the noise action area, no adjustments to the size of the action area at the waterways are required.

Visual and Lighting

Lighting is anticipated to be used on the project. It is anticipated that new light poles would be utilized at the new intersections of L-62A/US-26 and the US-26/US-385 intersection. However, lighting impacts would likely be less than the action area required for noise and visual. For visual impacts, according to the USFWS and the NGPC species ranges, the project area falls within the ranges of the whooping crane, piping plover, northern long-eared bat, and swift fox. All these species could potentially be disturbed by activity within 0.25 miles, except for the whooping crane and swift fox, which requires a disturbance buffer of 0.5 miles and 750ft, respectively. Since the project area does not contain suitable habitat for the whooping crane and piping plover, a visual action area of 0.25 miles (1,320 feet) would be applied to this project.

Project Action Area Habitat Description:

The study area predominantly comprises rural farmland and rangeland, with the exception of the community of Minatare. Habitat diversity within the study area can be categorized into open land (including grassland, farmland, and rangeland), wetland/waterways, and woodland categories.

Open Land (Grassland, Farmland, and Rangeland):

When evaluating regions of Nebraska, the majority of the project is located within the Topographic Region of the Valleys and Valley-Side Slopes, which consists of flat-lying land along major streams (North Platte River) and moderately sloping land between escarpments located on the eastern edge of the project. According to Kaul and Rolfsmeier in Native Vegetation of Nebraska (1993), several different ecoregions exist in both Scottsbluff and Morrill County; however the project primarily spans a mosaic of mixed grass and shortgrass prairie and salt marsh and flats.

Mosaic of Mixed-grass/Shortgrass Prairie: This region is characterized with short-grass prairie vegetation in the drier sites and mixed grass prairie in slightly more mesic sites. Much of the plant community has been converted to cropland, particularly on level land, although large expanses of this prairie type remain on the rocky escarpments along the eastern edge of the project. Lowlands and gentler slopes are heavily grazed.

Salt Marshes and Flats: This region contains saline marshes, ponds and flats that are subject to summer drying. Vegetation is patchy with areas of bare ground that often are encrusted with salts.The salt marshes and flats are typically associated with the western part of the alignment.

In the study area, natural vegetation remains confined to small pockets due to the agricultural character of the corridor, with much of the existing vegetation along the alignment having been previously disturbed by road construction grading or farming activities. The grassland cover encompasses various land uses, including the existing right-of-way, which consists of mowed areas, irrigated pasture land, hayland, and rangeland. Rangeland vegetation is predominantly composed of native species such as bluestem, grama switchgrass, Indiangrass, buffalograss, and sedges, while vegetation in the right-of-way, irrigated pasture, and hayland may consist of both native and introduced species.

Additionally, agricultural fields predominantly used for row cropping were categorized as farmland, with nearly all of it under irrigation. Primary row crops cultivated in these fields include corn, sugar beets, and dry edible beans.

Wetlands/Waterways:

The study area contains forested wetlands and wetlands dominated by grasses and herbaceous plants. Cottonwood and willow are the dominant trees and shrubs in wooded wetlands. Cattails, sedges, reed canary grass, smartweeds and dock are the primary grasses and herbs in non-forested wetlands.

Waterways in the form of creeks, canals, and drainages exist throughout the project alignment. The major waterways include: Nine Mile Creek, Wildhorse Drain, Wildhorse Canyon, Red Willow Creek, Minatare Drain, Tri State Canal, and Interstate Canal. These waterways have associated drainage ditches that feed the irrigated farmland throughout the corridor.

Woodlands:

Wooded areas are primarily limited to the major water ways crossing the project study area including Nine Mile Creek, Wildhorse Drain, Wildhorse Canyon, and Red Willow Creek. Additional trees are associated with windbreaks and rural housing.

Field Visit Summary, as applicable: The NDOT personnel conducted a site visit on 4/3/2024 to inspect the concrete box culverts and a bridge located along US-26 and L-62A for any evidence of bats. After assessment of the box culverts and bridge, no evidence of bats was detected.

Highway	Structure ID	Туре	Crossing	Assessment
	SL62A 00116	Box	Flowing Water	No Evidence of Bats
	SL62A 00152	Box	Seasonal Water	No Evidence of Bats
	SL62A 00220	Box	Seasonal Water	No Evidence of Bats
	SL62A 00295	Box	Seasonal Water	No Evidence of Bats
	SL62A 00405	Box	Seasonal Water	No Evidence of Bats
т (24	SL62A 00463	Box	Flowing Water	No Evidence of Bats
L-02A	SL62A 00537	Box	Seasonal Water	No Evidence of Bats
	SL62A 00582	Box	Seasonal Water	No Evidence of Bats
	SL62A 00595	Box	Flowing Water	No Evidence of Bats
	SL62A 00613	Box	Seasonal Water	No Evidence of Bats
	SL62A 00648	Box	Seasonal Water	No Evidence of Bats
	SL62A 00740	Box	Seasonal Water	No Evidence of Bats
	S026 03470	Bridge	Flowing Water	No Evidence of Bats
US 26	S026 03505	Box	Flowing Water	No Evidence of Bats
05-20	S026 03916	Box	Flowing Water	No Evidence of Bats
	S026 04114	Box	Flowing Water	No Evidence of Bats

Nebraska Federal and State Listed Species and Critical Habitat

E = Endangered	P = Proposed for Listing	XN = Experimental
		Population
T = Threatened	C = Candidate (no specific review required)	CH = Critical Habitat

Animals American Burying Beetle (T) Black-footed Ferret (E) Blacknose Shiner (E) Eastern Black Rail (T) Eskimo Curlew (E) Finescale Dace (T) Gray Wolf (E) Interior Least Tern (E) Lake Sturgeon (T) Mountain Plover (T) Northern Long-Eared Bat (E) Northern Redbelly Dace (T) Pallid Sturgeon (E) Piping Plover (T) Salt Creek Tiger Beetle (E; CH) Scaleshell Mussel (E) Southern Flying Squirrel (T) Sturgeon Chub (E) Swift Fox (E) Thick-Billed Longspur (T) Timber Rattlesnake (T) Topeka Shiner (E; CH) Western Massasauga (T) Whooping Crane (E; CH)

<u>Plants</u> American Ginseng (T) Blowout Penstemon (T) Colorado Butterfly Plant (T) Saltwort (E) Small White Lady's Slipper (T) Ute Ladies'-tresses (T) Western Prairie Fringed Orchid (T)

Species Information: <u>http://www.fws.gov/nebraskaes/species.php</u> and <u>http://outdoornebraska.gov/naturalheritageprogram/#rangemaps</u> Nature Serve: <u>http://www.natureserve.org</u>

STEP 1: RANGE AND OCCURRENCE EVALUATION

<u>Species</u>	Is the Project Action Area in the estimated range of the species as identified by the USFWS and NGPC ¹ ?		Are there Natural Heritage records within 5-miles of the Project Limits <u>in the last 30</u> <u>years?</u>		
American Burying Beetle ²	🗌 Yes	⊠ No	□ Yes	⊠ No	
American Ginseng	🗌 Yes	⊠ No	□ Yes	⊠ No	
Black-footed Ferret	⊠ Yes	□ No	🗆 Yes	⊠ No	
Blacknose Shiner	🗌 Yes	⊠ No	🗌 Yes	⊠ No	
Blowout Penstemon	⊠ Yes	□ No	□ Yes	⊠ No	
Colorado Butterfly Plant	🗌 Yes	⊠ No	□ Yes	⊠ No	
Eastern Black Rail	⊠ Yes	□ No	🗌 Yes	⊠ No	
Eskimo Curlew	🛛 Yes	□ No	🗌 Yes	⊠ No	
Finescale Dace		⊠ No		⊠ No	
Gray Wolf	⊠ Yes				
Tern ³		⊠ No		🖾 No	
Lake Sturgeon		No		⊠ No	
Mountain Plover		⊠ No		⊠ No	
Eared Bat	🖂 Yes	□ No		⊠ No	
Northern Redbelly Dace	🗌 Yes	⊠ No	🗆 Yes	⊠ No	
Pallid Sturgeon ³	🛛 Yes	🗌 No	🗌 Yes	⊠ No	
Piping Plover ³	⊠ Yes	□ No		⊠ No	
Rufa Red Knot	🖂 Yes			⊠ No	
Beetle	🗆 Yes	⊠ No		⊠ No	
Salt Creek Tiger Beetle Critical Habitat	□ Yes	⊠ No	N	Ą	
Saltwort	🗌 Yes	🖾 No	🗌 Yes	🖂 No	
Scaleshell Mussel	🗌 Yes	⊠ No	🗆 Yes	⊠ No	
Small White Lady's Slipper	□ Yes	⊠ No	□ Yes	⊠ No	
Southern Flying Squirrel	🗌 Yes	⊠ No	□ Yes	⊠ No	
Sturgeon Chub	🗌 Yes	⊠ No	□ Yes	⊠ No	
Swift Fox	🛛 Yes	□ No	🖂 Yes	□ No	
I hick-Billed Longspur	🗌 Yes	⊠ No	🗆 Yes	⊠ No	

Timber Rattlesnake	🗆 Yes 🛛 No	🗆 Yes 🛛 No
Topeka Shiner	🗆 Yes 🛛 No	🗆 Yes 🛛 No
Topeka Shiner Critical Habitat	🗆 Yes 🛛 No	NA
Ute Ladies'- tresses	🗆 Yes 🛛 No	🗆 Yes 🛛 No
Western Massasauga	🗆 Yes 🛛 No	🗆 Yes 🛛 No
Western Prairie Fringed Orchid	🛛 Yes 🗌 No	🗆 Yes 🛛 No
Whooping Crane ³	🖾 Yes 🛛 No	🖾 Yes 🛛 No
Whooping Crane Critical Habitat	□ Yes 🛛 No	NA

- Species ranges can be found at: <u>https://cert.outdoornebraska.gov/content/map</u> AND/OR <u>http://outdoornebraska.gov/naturalheritageprogram/#rangemaps</u> AND <u>https://ecos.fws.gov/ipac/</u>.
- ² American Burying Beetle (ABB) species range differs between USFWS and NGPC. Both species ranges will be reviewed, and the range question marked "yes" if action area is within either USFWS or NGPC species range for ABB.
- ³ This species is a Platte River Recovery Implementation Program Target Species for enhancing, restoring, and protecting habitat.

If the species is not identified in either column, then there is a "no effect" to the species from action. If any "yes" boxes are checked, carry these species to Step 2.

Does the Project Action Area occur directly adjacent to or on Federal or Tribal land?* \Box Yes \boxtimes No

*Federal and Tribal lands can be found at: <u>https://apps.nationalmap.gov/viewer/_and</u> http://news.legislature.ne.gov/lrd/files/2015/12/lrd_mow_2.pdf

If yes, the project Biological Evaluation documentation will be provided to the tribe and Bureau of Indian Affairs (BIA), or the Federal land managing agency regardless of the effect determination. This documentation will be provided concurrently with the resource agency submittals in May Affect situations. If a tribe, BIA, or Federal land managing agency does not concur with the effect determination or conservation conditions, then a consultation with all parties, including the resource agencies, shall occur.

Has a survey, Natural Heritage Database, or other source identified an occurrence within 1.0 mile of the Project Action Area, within the last 30 years?

⊠Yes ⊓No

If yes, indirect effects of the activity will be analyzed below. Indirect effects may include but are not limited to hydrologic changes (ditching, diking, etc.). If any indirect effects are identified that are not captured elsewhere in the Matrix, then May Affect. (NDOT Environmental).

Indirect Effects Analysis

The indirect effects of the project on the Swift Fox primarily stem from the conversion of grasslands to pavement and the addition of grassed medians and shoulders. Although this change impacts a portion of their potentially suitable habitat, the vast availability of similar habitats in the surrounding area suggests that the project is unlikely to cause long-term adverse effects on the Swift Fox population. It is important to note that the project includes reseeding efforts with shortgrass prairie mixtures, which are beneficial for maintaining the quality of their habitat. Moreover, existing prairie dog colonies along L-62A, a crucial food source for the Swift Fox, will remain intact. Indirect effects are further discussed in the Individual Project Level Evaluation.

Will the project impact animal movements, such as by adding traffic capacity within occupied habitats, or will the project provide an opportunity to improve known existing habitat fragmentation conditions?

🛛 Yes 🛛 🗆 No

If yes, the effects will be analyzed below.

Completed in June 2024, a Habitat Connectivity Analysis is documented and archived with the NDOT. The conclusions drawn from this analysis are summarized as follows:

The expansion of US-26 and L-62A involves adding two new lanes to the existing highway infrastructure. While this development extends the roadway's footprint, it does so without significantly altering the fundamental landscape or habitat usage. The existing wildlife corridors are expected to remain functional, as the project does not introduce new barriers to wildlife movement. The inclusion of a depressed median, while not a specific environmental mitigation measure, may incidentally benefit wildlife by providing a potential crossing area. Moving forward, it will be important to monitor the project's impact on local wildlife and habitat to ensure that any unforeseen effects are addressed promptly, thereby maintaining the region's biodiversity.
STEP 2: HABITAT EVALUATION

For each species checked above, complete the Yes/No questions to assist in scoping for the potential affects to the listed species. All the questions associated with a species need to be evaluated individually to determine Yes/No applicability (see below).

If ALL answers are "No" for the species or critical habitat below, then there is a "No Effect" to that particular species or critical habitat.

If ANY answer is "Yes" on this Habitat Evaluation worksheet, then carry the "Yes" species forward and proceed to the Step 3 – Federal or State Species Matrix for further effects guidance.

In rare situations, Unique Circumstances are present that justify a question be answered "No" where it would normally be checked "Yes." In these situations, check the "Unique Circumstances" box by the species name and provide detailed reasoning for this conclusion in the box at the end of Step 2.

SPECIES			
Americ	can Burying Beetle		
	*Note to practitioner: The ABB is not included in the Matrix Process. Utilize the species-specific ABB programmatic agreement in development, or in the interim, utilize IPLE's or the formal consultation process (see interim implementation guidance in PA appendix).		
Americ	can Ginseng Unique Circu	mstance	es 🗌
	Check which question applies:		
	Based on a desktop survey, does the action area include mature deciduous forest along a river bluff?	Yes	No
	Based on a field visit, does the action area include mature	Yes	No
	deciduous forest along a river bluff? (<i>include field visit information in the opening section of this form</i>)		
Black-footed Ferret Unique Circumstances			
	Does the action area include, in whole or in part, a prairie dog town or	Yes	No
	complex which is 1,000 acres or more in size? A complex consists of two or more neighboring prairie dog towns with the spacing between the adjacent neighboring town being less than 4.0 miles.	\boxtimes	
Blacknose Shiner Unique Circu		mstance	es 🗌
		Yes	No
	Does the action area include a stream, connected backwater areas, and/or topographic floodplain?*		
Blowout Penstemon Unique Circumstances			es 🗌
Check which question applies:			
	Based on a desktop survey, does the action area include open	Yes	No
	areas of bare sand?		\square
	Based on a field visit, does the action area include open areas of	Yes	No
	bare sand? (include field visit information in the opening section of this form)		

Colorado Butterfly Plant Unique Circumstances			
Check which question applies:			
	Based on a desktop survey, does the action area include pasture,	Yes	No
	grassland, or hay land on floodplain and lower stream terraces along Lodgepole Creek?		
	Based on a field visit, does the action area include pasture,	Yes	No
	grassland, or hay land on floodplain and lower stream terraces along Lodgepole Creek? (<i>include field visit information in the</i> <i>opening section of this form</i>)		
Easte	rn Black Rail Unique Circu	mstance	es 🗌
	Does the action area contain dense or thick emergent vegetation with	Yes	No
	high vegetation density (interspersion) within 0.5 mile of the Harvard WPA as well as a mixture of new and residual growth?		\boxtimes
Eskim	o Curlew Unique Circu	mstance	es 🗌
		Yes	No
	Does the action area contain wet meadows, burned over prairies, or newly plowed fields?	\boxtimes	
Fines	cale Dace Unique Circu	mstance	es 🗌
	Deep the action area include a stream connected healtwater grass	Yes	No
	Does the action area include a stream, connected backwater areas, and/or topographic floodplain?*		
Gray Wolf Unique Circur		mstance	es 🗌
		Yes	No
	Does the Heritage Database indicate known species occurrences within 5 miles of the in the last 30 years?		\boxtimes
Interio	or Least Tern Unique Circu	mstance	es 🗌
		Yes	No
	Does the action area include un-vegetated or sparsely vegetated sand, shale, or gravel such as a beach, peninsula, or bar?		
	Is the action area (noise and sight) within suitable babitat to include but	Yes	No
	not limited to a beach area, sand pits, peninsula, sand, shale, or gravel bar?		
Lake Sturgeon Unique Circum			es 🗌
	Is the action area within a large river system (i.e mainstem Missouri River, lower Platte, Elkhorn, or Niobrara rivers, or lower reach of their	Yes	No
	tributaries*)? *refer to the USFWS/NGPC construction timeframes for specific river reaches		
Mountain Plover Unique Circu		mstance	es
	Doop the action area contain beauly areas d/disturbed abort areas	Yes	No
prairies or areas with very little cover such as tilled cropland on gently rolling to level topography?			

Northern Long-Eared Bat			
	*Note to Practitioner: The NLEB is not included in the Matrix Process.		
	Utilize the FHWA/USFWS Range-wide Programmatic Agreement and IPaC		
	for NLEB review (see Nebraska Implementation Guidance Document for		
	Northern Long-eared Bat appendix).		
Northe	ern Redbelly Dace Unique Circui	mstance	es 🗌
		Yes	No
	Does the action area include a stream, connected backwater areas, and/or topographic floodplain?*		
Pallid	Sturgeon Unique Circu	mstance	es 🗌
	Is the action area within a large river system (i.e mainstem Missouri River, lower Platte, Elkhorn, or Niobrara rivers, or lower reach of their	Yes	No
	tributaries*)? *refer to the USFWS/NGPC construction timeframes for specific river reaches		\boxtimes
Piping	Plover Unique Circu	nstance	es 🗌
C		Yes	No
	Does the action area include un-vegetated or sparsely vegetated sand, shale, or gravel such as a beach, peninsula, or bar?		\boxtimes
	is the action area (naise and eight) within quitable behitst to include but	Yes	No
	not limited to a beach area, sand pits, peninsula, sand, shale, or gravel bar?		\boxtimes
<i>Rufa</i> F	Red Knot Unique Circui	mstance	es 🗌
	Does the action area contain open mud flats and/or mud and sandy shorelines free of vegetation?	Yes	No 🖂
Salt C	reek Tiger Beetle Unique Circui	mstance	es 🗌
		Yes	No
	Are saline wetlands and/or salt flats present within action area?		
Salt C	reek Tiger Beetle (Critical Habitat) Unique Circui	mstance	es 🗌
	Does the action area include exposed mudflats associated with saline	Yes	No
	wetlands, or exposed banks and islands of streams and seeps that contain adequate soil moisture and soil salinity, and adjacent vegetated wetlands within the Little Salt, Rock, Oak or Haines Branch Creeks?		
Saltwort Unique Circuit		mstance	es 🗌
	Are saline wetlands, salt flats, or saline soils present within the action area?	Yes	No
Scaleshell Mussel Unique Circu		nstance	es 🗌
	Is the action area within the topographic floodplain of the Missouri	Yes	No
	Recreational River segment below Gavin's Point dam and the associated lower portion of tributaries in this area?		

Small	Small White Lady's Slipper Unique Circumstances		
	Check which question applies:		
	Based on a desktop survey, does the action area include an	Yes	No
	undisturbed native, sub-irrigated wet meadow or wet ditches adjacent to undisturbed wet meadows?		
	Based on a field visit, does the action area include an undisturbed	Yes	No
	native, sub-irrigated wet meadow or wet ditches adjacent to undisturbed wet meadows? (<i>include field visit information in the</i> <i>opening section of this form</i>)		
South	ern Flying Squirrel Unique Circu	mstance	es 🗌
		Yes	No
	Is the action area within or adjacent to a mature deciduous woodland with mast producing trees including walnut, hickory, or oak component?		
Sturge	eon Chub Unique Circu	mstance	es 🗌
	Is the action area within a large river system (i.e mainstem Missouri	Yes	No
	River, lower Platte, Elkhorn, or Niobrara rivers, or lower reach of their tributaries*)? *refer to the USFWS/NGPC construction timeframes for specific river reaches		
Swift I	Fox Unique Circu	mstance	es 🗌
	Does the action area include connected suitable habitat that contains	Yes	No
	vegetation <6 inches in height, including gently rolling to level intact upland grasslands and field borders that are outside of densely populated residential, commercial, industrial areas?	\boxtimes	
Thick-Billed Longspur Unique Circur		mstance	es 🗌
	Does the action area include heavily grazed/disturbed short grass prairie	Yes	No
	prairie dog towns, or areas with very little cover, such as tilled cropland on gently rolling to level topography?		
Timber Rattlesnake Unique Circun			es 🗌
	Check which question applies:		
	Based on a desktop survey, does the action area include mature	Yes	No
	forest and limestone or sandstone rocky outcrops, or large rubble, down trees, logs or slash piles?		
	Based on a field visit, does the action area include mature forest	Yes	No
	and limestone or sandstone rocky outcrops, or large rubble, down trees, logs or slash piles? (<i>include field visit information in the opening section of this form</i>)		
		Yes	No
	Is the action area within 1.5-miles of a known den or occurrence site, according to records in the Nebraska Natural Heritage Database?		
Topeka Shiner Unique Circu		mstance	es 🗌
-	·	Yes	No
	Is the action area within a stream, connected backwater areas and/or floodplain?		

Topek	a Shiner (Critical Habitat) Unique Circui	mstance	es 🗌
Does action area include intermittent or perennial small low order		Yes	No
	prairie streams with good clear water quality, relatively cool temperatures, and low fish diversity within the Taylor Creek drainage?		
Ute La	idies'-tresses Unique Circu	mstance	es 🗌
	Based on a desktop survey, does the action area include wet	Yes	No
	meadow on floodplain and lower stream terraces along the Niobrara River?		
	Based on a field visit, does the action area include wet meadow	Yes	No
	on floodplain and lower stream terraces along the Niobrara River? (<i>include field visit information in the opening section of this form</i>)		
Weste	rn Massasauga Unique Circu	mstance	es 🗌
	Check which question applies:		
	Based on a desktop survey, does the action area within a wet site	Yes	No
	(including, but not limited to wetlands, ditches, and floodplains) characterized by the presence herbaceous wetland vegetation OR an upland grassland habitat adjacent to said wet site?		
	Based on a field visit, does the action area include a wet site	Yes	No
	Based on a field visit, does the action area include a wet site (including, but not limited to wetlands, ditches, and floodplains) characterized by the presence herbaceous wetland vegetation and crayfish burrows OR an upland grassland habitat adjacent to said wet site? (include field visit information in the opening section of this form)		
Western Prairie Fringed Orchid Unique Circur		mstance	es 🗌
	Based on a desktop survey, does the action area have no history of cropping and include undisturbed wet mesic prairie and sedge meadows in alluvial soils of river floodplains or sandy soils of subirrigated meadows and prairie swales?	Yes	No
	Based on a field visit, does the action area have no history of cropping and include undisturbed wet mesic prairie and sedge meadows in alluvial soils of river floodplains or sandy soils of subirrigated meadows and prairie swales? (<i>include field visit information in the opening section of this form</i>)	Yes	No
Whooping Crane Unique Circumstances			es 🗌
	Is the action area:	Yes	No
	 outside of densely populated residential, commercial, or industrial areas and does it include suitable habitat, such as sub-irrigated grasslands, meadows, shallow wetland habitat, farm ponds, or major rivers? 		
Whooping Crane (Critical Habitat)Unique Circumstance			es 🗌
	Does the action area include wide, open river channel with shallow sand	Yes	No
	and gravel bars with nearby bottomland areas, including wet meadows, that are isolated and provide protection from disturbance within the 56- mile-long by 3-mile-wide reach of the Platte River from the Lexington, Nebraska bridge to near Denman, Nebraska?		

*The topographic floodplain for this project is identified on the attached map.

Describe Unique Circumstances here, if applicable:

Minatare - US-385 CN 51521; NH-26-1(172)

		-	
Sources of Impacts	Within Project	Black- footed Ferret	Eskimo Curlew
Asphalt Patching	x	NE	NE
Bridge Substructure New, Replacement, or Repair - Perennial	Х	NE	NE
Bridge Superstructure New, Replacement, or Repair - Perennial	x	NE	NE
Channelization, Intermittent	х	NE	NE
Clearing and Grubbing - Non-woody Vegetation	х	NE	NE
Clearing and Grubbing - Trees & Shrubs	х	NE	NE
Concrete Pavement Repair	х	NE	NE
Culvert New, Replacement, Extension, Repair - Intermittent	х	NE	NE
Culvert New, Replacement, Extension, Repair - Perennial	х	NE	NE
Curb & Gutter	х	NE	NE
Earth Shoulder Construction	х	NE	NE
Erosion Control - Barriers	х	NE	NE
Erosion Control - Erosion Checks	x	NE	NE
Erosion Control - Inlet/Outlet Protection	x	NE	NE
Erosion Control - Mulching	х	NE	NE
Erosion Control - Rolled Erosion Control	х	NE	NE
Erosion Control - Slope Interuption	х	NE	NE
Erosion Control - Vegetation	x	NE	NE
Fencing	x	NE	NE
Grading Within the Hinge Point	x	NE	NE
Grading Outside the Hinge Point	x	NE	NE
Guardrail Repair, Replacement, or Installation with Soil Disturbance	x	NE	NE
Habitat Fragmentation, Modification of Connectivity	х	MA	NE
Lighting, Traffic and Pedestrian Signals, Dynamic Message Signs w/ soil disturbance	x	NE	NE
Milling and/or In-place Recycling	x	NE	NE
Pavement Removal	x	NE	NE
Paving	х	NE	NE
Piers	х	NE	NE
Pile Driving - Impact	х	NE	NE
Pile Driving - Vibratory	х	NE	NE
Pipe Jacking & Casing	х	NE	NE
Removal of Structures and Obstructions	х	NE	NE
Resurfacing-Fog/Slurry Seal, Armor Coat/Chip Seal	х	NE	NE
Rock or Gravel Surfacing	х	NE	NE
Signs with Soil Disturbance	x	NE	NE
Stream Channel Impact, Intermittent	X	NE	NE
Stream Channel Impact, Perennial	X	NE	NE
Temporary Crossing, Causeway, Work Platform	х	NE	NE
Trenched Widening	x	NE	NE
Wetland Mitigation	х	NE	NE

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CN 51521; NH-26-1(172)

Sources of Impacts	Within Project	Swift Fox	
Asphalt Patching	x	NE	
Bridge Substructure New, Replacement, or Repair - Perennial	Х	NLAA CC ¹	
Bridge Superstructure New, Replacement, or Repair - Perennial	x	NLAA CC ¹	
Channelization, Intermittent	х	NLAA CC ¹	
Clearing and Grubbing - Non-woody Vegetation	х	NLAA CC ¹	
Clearing and Grubbing - Trees & Shrubs	х	NLAA CC ¹	
Concrete Pavement Repair	х	NE	
Culvert New, Replacement, Extension, Repair - Intermittent	х	NLAA CC ¹	
Culvert New, Replacement, Extension, Repair - Perennial	х	NLAA CC ¹	
Curb & Gutter	х	NE	
Earth Shoulder Construction	х	NLAA CC ¹	
Erosion Control - Barriers	х	NE	
Erosion Control - Erosion Checks	х	NE	
Erosion Control - Inlet/Outlet Protection	х	NE	
Erosion Control - Mulching	х	NE	
Erosion Control - Rolled Erosion Control	x	NE	
Erosion Control - Slope Interuption	x	NE	
Erosion Control - Vegetation	x	NE	
Fencing	x	NLAA CC ^{2,3}	
Grading Within the Hinge Point	х	NLAA CC ¹	
Grading Outside the Hinge Point	х	NLAA CC ¹	
Guardrail Repair, Replacement, or Installation with Soil Disturbance	х	NLAA CC ¹	
Habitat Fragmentation, Modification of Connectivity	х	MA	
Lighting, Traffic and Pedestrian Signals, Dynamic Message Signs w/ soil disturbance	х	NLAA CC ¹	
Milling and/or In-place Recycling	x	NE	
Pavement Removal	х	NE	
Paving	x	NE	
Piers	x	NLAA CC ¹	
Pile Driving - Impact	x	NLAA CC ¹	
Pile Driving - Vibratory	x	NLAA CC ¹	
Pipe Jacking & Casing	x	NLAA CC ¹	
Removal of Structures and Obstructions	x	NLAA CC ¹	
Resurfacing-Fog/Slurry Seal, Armor Coat/Chip Seal	x	NE	
Rock or Gravel Surfacing	x	NE	
Signs with Soil Disturbance	x	NLAA CC ¹	
Stream Channel Impact, Intermittent	Х	NLAA CC ¹	
Stream Channel Impact, Perennial	X	NLAA CC ¹	
Temporary Crossing, Causeway, Work Platform	x	NLAA CC ¹	
Trenched Widening	x	NE	
Wetland Mitigation	x	NLAA CC ¹	

Updated 2/17/2023

Individual Project Level Evaluation

Project Name: Minatare to US-385 Federal-aid number: NH-26-1(172) Control Number: 51521

This Individual Project Level Evaluation, in association with the completed Habitat Evaluation Form, the Matrix and associated conservation conditions, the Overview of Effects and Required Conservation Conditions sheet, and the associated appendices constitutes the complete Biological Assessment documentation for the above-referenced project.

1. SPECIES TO BE EVALUATED INDIVIDUALLY

Note, these are the species to be evaluated in-depth, separate from the evaluation completed for the remaining state and federally listed species documented through the Habitat Assessment form and Matrix.

<u>Common Name</u> Black Footed Ferret Northern Long-eared Bat Tricolored Bat Swift Fox <u>Scientific Name</u> Mustela nigripes Myotis septentrionalis Perimyotis subflavus Vulpes velox <u>Status</u> FE, SE SE,FE Proposed E SE

2. SPECIES EVALUATION

BLACK FOOTED FERRET (Mustela nigripes)

Black Footed Ferret Life History Information

The black-footed ferret is a medium-sized carnivore and the only ferret native to North America. It is yellow buff in color with whitish under parts and face, and a distinctive black facial mask, feet, and legs. The fur is short and fine-textured, and the ears are conspicuous and rounded. These weasel-like animals are about the size of a mink ranging from 18-24 inches in length with a 4-6-inch tail and have black feet and face mask (Clark and Stromberg, 1987). Females are usually 10 percent smaller than males, as is typical of mustelids (Fitzgerald et al., 1992).

The species is primarily nocturnal with the most daytime activity limited to the first few morning hours (USFWS, 1988, and Nebraska Game and Parks, 1992). They spend the majority of time in underground burrows and occur in areas with low human densities. The black-tail prairie dog (*Cynomys ludovicianus*) is the black-footed ferret's primary prey and the burrows of prairie dog towns are utilized for maintaining its livelihood. Ferrets do not hibernate but limit activity during the winter months. They have been found to remain underground in the same burrow system for a week at a time in the winter. However, they have been observed to travel more than 4 miles in one night in September (male travel distances tend to be about double that of females (Forest et al., 1988, and Nebraska Game and Parks, 1992). Behavior of ferrets has been observed to be playful, especially in juveniles. Vocalizations are used for various purposes including a hiss for an alarm call and female whimpers to encourage young to follow (Nebraska Game and Parks, 1992).

Black-footed ferrets lead solitary lives except during the breeding season. Breeding activity generally occurs in March and April, and after a gestation period of 41 to 45 days, a litter (typically of three or four) are born generally in May or June. Young are born blind and helpless, but development is fairly rapid. Young do not come above ground until they are 6 weeks old, and females will remain with young until about mid-August (USFWS, 1995).

Ferrets were once found throughout the Great Plains, from Texas to southern Saskatchewan, Canada (Nature Serve, 2009). Their historic range extended from the Rocky Mountains eastward through the Dakotas and south through Nebraska, Kansas, Oklahoma, and Texas (USFWS, 1995). The current range exists in portions of Nebraska, South Dakota, Montana, and Wyoming, although small populations might exist in other states.

In Nebraska, the ferret probably occurred in the western three-quarters of the state, coinciding with the range of the prairie dog. The last known museum specimen from Nebraska is an animal killed on a road near Overton in Dawson County in 1949 (Nebraska Game and Parks Commission (NGPC), 1992). Many reports have been received since but there have been no confirmed reports of the black-footed ferret in Nebraska. It is believed that existing prairie dog colonies are either too small or isolated from one another to support the species. Past efforts of the USFWS to reintroduce the species into the wild have focused on ecosystems such as the one near Wind Cave National Park in South Dakota. However, larger prairie dog colonies such as those once observed in the southern portions and the Panhandle of Nebraska may still provide habitat for the species. New sites for reintroduction that are relatively plague-free are currently being considered by the USFWS. Nebraska may have some potential sites in the southern and Panhandle portions of the state.

Survey History (if applicable)

NDOT has not conducted any surveys for the black footed ferret at the project location. No surveys are known to have been completed in the project vicinity. Very few surveys for the black footed ferret have been completed in the state of Nebraska. The species has not been seen in Nebraska since 1949 and is considered extirpated from Nebraska by the USFWS.

Black Footed Ferret Habitat Evaluation and Suitability

Black-footed ferrets are dependent on prairie dog towns for foraging and shelter. Prairie dogs comprise approximately 75% of a Black-footed ferret diet (Hillman and Clark 1980). Therefore, habitat suitability is in part dependent on the presence of active prairie dog towns. Through the review of aerial imagery, approximately 5010 acres of potentially active prairie dog towns were identified within the escarpment regions separating the North Platte River Valley from the Sandhills (Figure 1). It is estimated that 222 acres of prairie dog towns are required per black-footed ferret (USFWS 2019). Female home ranges barely overlap, whereas female-male ranges completely overlap (Powell 1979, Livieri and Anderson 2012). Based on this, 33 black-footed ferrets could be supported by this prairie dog complex, assuming a sex ratio of 2:1 females to males (A complex consists of two or more neighboring prairie dog towns with the spacing between the adjacent neighboring towns being less than 4.0 miles) (USFWS 2019). It is estimated that a colony of 30 blackfooted ferrets could provide a stable population of ferrets (USFWS 2013 and 2019). Prairie dog towns were considered potentially active based on apparent prairie dog town expansion or activity viewed through aerial imagery over time. More prairie dog towns may be active across the escarpments region that could be considered part of the complex. However, upto-date aerial imagery on Google Earth was not available for much of the region, and only areas with imagery from 2024 were examined. Immediately adjacent to the project alignment are 4 prairie dog towns to the north and south of L62A. To the north and south of L62A, the prairie dog towns are approximately 451 and 567 acres, respectively (**Figure 2**).

With the acreage of prairie dog towns in this area, this location could be suitable for blackfooted re-introduction. However, other factors must be considered when looking at potential re-introduction sites. This includes 1) Risk of Disease, 2) Human Activity, 3) Legal and Regulatory Limitations, and 4) Connectivity to other ferret re-introduction sites.

Risk of Disease

One of the most critical considerations for re-introducing black-footed ferrets at a site is the presence of the Sylvatic Plague (*Yersinia pestis*). Sylvatic Plague can decimate prairie dog colonies as well as black-footed ferrets. While to NDOT's knowledge, there is no officially documented presence of Sylvatic Plage in this complex, reports from local landowners suggest that plague has spread through the populations and has caused severe declines in the past. Further, active management of plague is not currently occurring at this location, nor are there any plans to, to NDOT's knowledge. Active plague management would be critical before the re-introduction of black-footed ferrets in this location (USFWS 2013).

Human Activity

The escarpments region where the prairie dog complex is located has relatively low active human disturbances. Most of this region is used as grazing land to raise cattle. However, through a review of aerial imagery, active landowner eradication of prairie dog towns occasionally occurs. Fragmentation of this prairie dog complex is present from the presence of the L62A and US 385 Highways. Private landowner attitudes towards prairie dogs will need to continue to shift, and public agreements to improve connectivity in this region across roadways would likely be critical to any successful reintroductions.

Legal and Regulatory Limitations

The reintroduction of black-footed ferrets in this location would require support from local government and private landowners. The prairie dog complex occurs almost entirely on private land. Private landowners would have to consent to the reintroduction and enter into voluntary or safe harbor agreements. Due to the numerous numbers of land owners across the region and general attitudes towards government interference, this would likely pose serious limitations to any re-introductions.

Connectivity to Other Black-footed Ferret Re-introduction Sites

Currently, new re-introduction sites of black-footed ferrets are focused on locations near other established re-introduction sites to improve habitat connectivity under the lens of landscape-level conservation while also being able to utilize established management infrastructures and benefiting from local knowledge and experience gained at established sites (A. Ciurej, USFWS, personal communication). This location is far from any currently established black-footed ferret colonies. Within Nebraska, re-introductions are likely to be focused in northwestern Nebraska near the border of South Dakota, closer to the reintroduction sites at Badlands National Park and Wind Cave National Park.

Therefore, while this area does have suitable habitat for black-footed ferrets through the presence of a large prairie dog complex, it is not a likely site for the reintroduction of black-footed ferrets in the near future due to its lack of connectivity to other reintroduction sites, lack of plague management, and the requirement of significant private landowner support.

Black Footed Ferret Analysis and Determination of Effects

The project involves widening L-62A from a 2-lane to a 4-lane divided roadway with a depressed median in the eastern segment near the prairie dog colony. This will be accomplished by constructing new lanes on the north side of the L-62A corridor and resurfacing the existing lanes. Approximately 22 acres of new right-of-way (ROW) will be required between the Lowline Canal and US-385, with about 10 acres currently utilized by prairie dogs, considered suitable habitat for black-footed ferrets. This habitat will be converted into a new roadway and ditch.

The Matrix of Effects table identifies the activity "Habitat Fragmentation, Modification of Connectivity" as "May Affect." All other activities were identified as having No Effect on the Black-footed Ferret.

activity "Habitat Fragmentation, Modification of Connectivity" occurs because the expansion of the L-62A highway from a two-lane to a four-lane divided roadway could result in increased mortality associated with vehicle collisions and further fragment the prairie dog complex, potentially reducing the viability of a potential re-introduction of black-footed ferrets in this location.

Roadways appear to be a source of mortality for black-footed ferrets. In Nebraska, the last recorded black-footed ferret occurrence was killed on a road near Overton, Nebraska, in 1949. In Colorado, at the Rocky Mountain Arsenal National Wildlife Refuge reintroduction site, six ferrets were killed in vehicle collisions from 2015 to 2019 (USFWS 2019). While, to NDOT's knowledge, there is no research on how black-footed ferrets interact with roads, it is likely that black-footed ferrets do not view roads as obstacles entirely and will cross highways, as evidenced by records of road mortality. However, black-footed ferrets are not expected to occur in Nebraska. The USFWS considers the species extirpated from the state of Nebraska. Mortality from road collisions associated with the expanded highway would be considered discountable as the likelihood of black-footed ferrets existing in this location is extremely low.

If the re-introduction of black-footed ferrets occurs at this location, the further fragmentation caused by the highway expansion could pose challenges to black-footed ferrets. In the event of a re-introduction of black-footed ferrets in this location, safe passage of black-footed ferrets for traversing the roadway would likely be necessary. The prairie dog complex sprawls to the North and South of L-62A and to the east of US 385. The largest densities of prairie dog towns occur near L-62A. However, as discussed in the

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habitat evaluation and suitability section, this area is not a likely site for reintroducing black-footed ferrets.

Therefore, because this site is not currently planned for the re-introduction of black-footed ferrets or is likely to become a site for re-introduction considering the focus of current black-footed ferret re-introductions by the USFWS and the need for significant landowner buy in, NDOT has determined this project, "May affect, but is not likely to adversely affect" the black-footed ferret or its habitat.

Determination

Due to the lack of black footed ferret in Nebraska in the prairie dog complex on the east end of the alignment and the low likelihood the site would be a re-introduction site in the future, NDOT has determined that this project may affect, but is not likely to adversely affect, the black footed ferret or its habitat.

NORTHERN LONG-EARED BAT (*Myotis septentrionalis*) and **TRICOLORED BAT** (*Perimyotis subflavus*)

This project is within the NGPC range for Northern long-eared bat but not the USFWS range. Based on guidance from the NGPC and USFWS, this project was processed through the NGPC Conservation and Environmental Report Tool and conservation measures from the generated Environmental Review Report for NLEB are proposed in this IPLE.

Tri-colored bat is proposed to be federally listed endangered; an official federal listing opinion is anticipated in 2024. All species federally listed as threatened or endangered are also listed by the state of Nebraska under State Statute 37-802(1). Due to the similar habitat requirements for northern long-eared bat and tri-colored bat, Project effects have been evaluated concurrently.

Northern Long-eared Bat Life History Information

Northern long eared-bat (NLEB) (*Myotis septentrionalis*) was recognized as a distinct species in 1979 apart from Keen's long-eared myotis (*Myotis keenii*) (Fitch and Schump 1979). Adult NLEB weighs five to eight grams on average, with a body length ranging from 77 to 95 millimeters and a wingspan ranging from 228 to 258 millimeters (Barbour and Davis 1969; Caceres and Pybus 1997). Their fur coloration ranges from medium to dark brown on their back, dark brown ears and wing membranes, and tawny to pale-brown ventral sides (Nagorsen and Brigham 1993; Whitaker and Mumford 2009). NLEB have relatively long ears compared to other *Mytosis* species.

NLEB range spans most of the eastern and north-central U.S. and all Canadian provinces (Nagorsen and Brigham 1993, p. 89; Caceres and Pybus 1997). Within Nebraska, the species is estimated to be present in the eastern and northern half of the state. The NLEB

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annual life cycle consists of hibernation¹ (winter), foraging (spring, summer, fall), roosting (summer), swarming (fall), and migration (spring and fall). NLEB primarily hibernate in hibernacula, including caves and mines. However, when caves and hibernacula are not readily available, the species has been known to utilize abandoned railroad tunnels, the entrance of storm sewers, hydroelectric dam facilities, aqueducts, and dry wells. Within Nebraska, NLEB hibernates in mining caves and rock crevices associated with Karst areas (White et al. 2020). Short regional migration, up to 55 miles, between winter hibernacula and summer roosts have been reported (Nagorsen and Brigham 1993). During the summer, NLEB roosts singly or in maternity colonies in cavities and underneath bark or crevices in trees and snags (Sasse and Pekins 1996; Foster and Kurta 1999; Owen et al. 2002; Carter and Feldhamer 2005; Perry and Thill 2007; Timpone et al. 2010). Other documented roosting habitats for NLEB include structures such as buildings, barns, utility poles, bridges, and culverts (USFWS 2021). It is theorized that NLEB will utilize human structures more when natural habitat is unavailable (Henderson and Broders 2008).

NLEB are nocturnal foragers with a diverse diet of moths, flies, leafhoppers, caddisflies, and beetles (Griffith and Gates 1985, Nagorsen and Brigham 1993, Brack and Whitaker 2001), with lepidopterans and coleopterans being the most common prey (Brack and Whitaker 2001). NLEB prefers to forage in the understory of canopies on forested hillsides and ridges (Nagorsen and Brigham 1993) rather than forested riparian areas (LaVal et al. 1977). Highly fragmented habitats or areas that have been cleared of trees are not preferred by NLEB (USFWS 2015).

Tri-Colored Bat Life History Information

Tricolored Bat (*Perimyotis subflavus*) (TCB) is a small insectivorous bat with a unique tricolored fur that distinguishes it in eastern North America. Adult TCB exhibits fur coloration ranging from dark at the base, lighter in the middle, to dark at the tip (Barbour and Davis 1969, P. 115). Both males and females are colored alike, but females are consistently heavier than males (LaVal and LaVal 1980, p.44). The TCB range is known throughout 39 States, including Nebraska, 4 Canadian Provinces, and several Central American Countries. The species range and distribution has been expanding westward in recent decades and is attributed to an increase in trees along rivers, and an increase in suitable winter roosting sites, such as abandoned mines and other human-made structures (Benedict et al. 2000, p. 77; Geluso et al. 2005, p. 406; slider and Kurta 2011, p. 380).

During the spring, summer, and fall (i.e., non-hibernating seasons) TCB primarily roost among live and dead leaf clusters of live or recently dead deciduous hardwood trees. In addition, TCB have been observed roosting during summer among pine needles, eastern red cedar, and within artificial roosts such as barns, porch roofs, and bridges (Veilleux et al. 2003, p. 1071; Perry and Thill 2007, pp. 976–977; Thames 2020, p. 32; Jones and Pagels 1968, entire; Barbour and Davis 1969, p. 116). Female TCB exhibit high site fidelity,

¹ Hibernation is a term that refers to long periods of 'topor' which is a state of decreased physiological activity in an animal, usually marked by reduced body temperature and metabolic rates, allowing them to survive periods of reduced food availability. Topor may be daily or seasonal in nature, and even seasonal periods of topor may be punctuated by periods of activity or arousal, referred to as 'torpor bouts.' In bats, topor can be daily or seasonal, lasting from a few hours to a month, and may occur during extended cold or hot periods, or even during brief periods of extreme weather.

returning year after year to the same summer roosting locations (Allen 1921, p. 54; Veilleux and Veilleux 2004a, p. 197).

During the winter, TCB hibernates in caves and mines, although in the southern U.S., where caves are sparse, TCB often hibernate in road-associated culverts (Sandel et al. 2001, p. 174; Katzenmeyer 2016, p. 32; Limon et al. 2018, entire; Bernard et al. 2019, p. 5; Lutsch 2019, p. 23; Meierhofer et al. 2019, p. 1276) and sometimes tree cavities (Newman 2020, p. 14) and abandoned water wells (Sasse et al. 2011, p. 126). TCB are one of the first cave-hibernating species to enter hibernation in the fall and one of the last to leave in the spring in Missouri and Pennsylvania (LaVal and LaVal 1980, p. 29; Merritt 1987, p. 102). Hibernating TCB do not typically form large clusters; most commonly roost singly, but sometimes in pairs, or in small clusters of both sexes away from other bats (Hall 1962, p. 29; Barbour and Davis 1969, p. 117; Mumford and Whitaker 1982, p. 169; Raesly and Gates 1987, p. 19; Briggler and Prather 2003, p. 408; Vincent and Whitaker 2007, p. 62). In road associated-culverts in the southern U.S., however, TCB exhibit shorter torpor bouts and move within and between culverts throughout the winter (Anderson et al. undated).

TCB are opportunistic feeders and consume small insects including caddisflies (Trichoptera), flying moths (Lepidoptera), small beetles (Coleoptera), small wasps and flying ants (Hymenoptera), true bugs (Homoptera), and flies (Diptera) (Whitaker 1972, p. 879; LaVal and LaVal 1980, p. 24; Griffith and Gates 1985, p. 453; Hanttula and Valdez 2021, p. 132). TCB emerge early in the evening and forage at treetop level or above (Davis and Mumford 1962, p. 397; Barbour and Davis 1969, p. 116) but may forage closer to ground later in the evening (Mumford and Whitaker 1982, p. 170). TCB forage most commonly over waterways and forest edges (Barbour and Davis 1969, p. 116; Mumford and Whitaker 1982, pp. 170–171; Hein et al. 2009, p. 1204). Maximal distance traveled from roost areas to foraging grounds was 4.3 kilometers (km; 2.7 miles) for reproductive (pregnant or lactating) adult females in Indiana (Veilleux et al. 2003, p. 1074) and 24.4 km (15.2 miles) (mean=11.4 km; 7.1 miles) for male TCB in Tennessee (Thames 2020, p. 61).

Male and female TCB converge at cave and mine entrances between mid-August and mid-October to swarm and mate. Females typically give birth to two young, rarely one or three between May and July (Allen 1921, p. 55; Barbour and Davis 1969, p. 117; Cope and Humphrey 1972, p. 9). Adults often abandon maternity roosts soon after weaning, but young remain longer (Whitaker 1998, p. 653). TCB are considered juveniles (i.e., subadults) when entering their first hibernation and most probably do not mate their first fall (Fujita and Kunz 1984, p. 3).

TCB disperse from winter hibernacula to summer roosting habitat in the spring. Fraser et al. 2012 (p. 5) concluded that at least some TCB engage in latitudinal migration that is more typically associated with hoary bats (*Lasiurus cinereus*), eastern red bats, and silver-haired bats, and this behavior is more common for males than for females. The maximum migration distance on record is a female TCB who migrated a straight-line distance of 243 km (151 miles) from her winter hibernaculum in southern Tennessee to a summer roost in Georgia (Samoray et al. 2019, p. 17). Other migration records between winter hibernacula and summer habitat include less than 80 km (50 miles) (Barbour and Davis 1969, p. 117),

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44 km (27 miles) (Samoray et al. 2019, p. 18), and 137 km (85 miles) (Griffin 1940, p. 237). Hibernaculum to hibernaculum movement up to 209 km (130 miles) has also been documented between two consecutive winters (Lutsch 2019, p. 38).

NLEB and TCB Survey History (if applicable)

NDOT conducted a site visit on 4/03/2024 to inspect box culverts and bridge structures located along US-26 and L62A for any evidence of bats. After assessment of the box culverts and bridge structures, no evidence of bats was detected. Survey forms are attached to this biological assessment.

NLEB and TCB Habitat Evaluation and Suitability

NLEB and TCB are primarily forest-dependent bats. Both species are specialized for living within and adjacent to forested areas. The project area is predominantly rural, with a mix of farmland, rangeland, and small pockets of natural habitats. Most of the alignment does not contain any forested areas of substantial size that would be able to support NLEB or TCB. Trees are limited to narrow wooded corridors along the waterways of the project, such as Nine-mile Creek, Wildhorse Drain, Wildhorse Canyon, and Red Willow Creek. Most of these streams have stretches with absent trees and lack a forested connection to larger treed corridors. Both NLEB and TCB utilize treed corridors as traveling corridors, which implies that most of these streams would not be suitable for the species. Further, all sparsely treed corridors along the streams lose all trees just north along the project alignment as the plains/valleys associated with the North Plate River shift into arid escarpments before transitioning into the sandhills. Therefore, most of the sparsely wooded corridors would not act as travel corridors as they do not connect to large forested areas that would be suitable for roosting or foraging, and the corridors themselves need to be more substantial to support the species for roosting or foraging.

The only area of potential habitat for NLEB and TCB would be near Red Willow Creek from MM 5.87 to MM 6.17 (**Figure 3**). Just North of the alignment at this location, the wooded corridor along Red Willow Creek disappears as Red Willow Creek transitions into arid escarpments. To the south of the alignment, Red Willow Creek has moderate to low connectivity to the North Platte River Wooded Riparian Corridor. The heavier forested corridors that best support NLEB and TCB foraging and roosting are located to the south of the project alignment. Further, it should be noted that Red Willow Creek is classified as an intermittent channel, which indicates that it is dry for part of the year. This could pose challenges to both northern long-eared bats and tri-colored bats, as they both require access to water. Therefore, the only location of suitable habitat for NLEB and TCB along the alignment is at Red Willow Creek. Further, this is the only area where the NGPC identifies as within the range of NLEB on the project alignment.

NLEB and TCB Analysis and Determination of Effects

The activities Bridge Superstructure New, Replacement, or Repair – Perennial; Bridge Substructure New, Replacement, or Repair – Perennial; Clearing and Grubbing Trees and

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Shrubs; Culvert New, Replacement, Extension, Repair – Intermittent and Perennial; and removal of Structures and Obstructions are identified as a "May Affect, Not Likely to Adversely Affect" NLEB with the implementation of the conservation conditions NLEB – 1 or NLEB 2, NLEB CM- 5 or CM – 6, and NLEB – 3 and NLEB CM – 2 (See section3 below). Habitat Fragmentation, Modification of Connectivity is identified as a "May Affect". All other activities are identified as a "No Effect".

With the activity *Bridge Superstructure New, Replacement, or Repair – Perennial* and *Bridge Substructure New, Replacement, or Repair – Perennial* are for building a new bridge. No work on currently existing bridges will be occurring, therefore conservation conditions NLEB -1 or -2, which relate to work on existing bridge structures will not be applied on this project.

With the activities *Culvert New, Replacement, Extension, Repair – Intermittent and Perennial* no culverts are greater than 130ft within areas of suitable habitat for NLEB and TCB. Therefore, as outlined by the NGPC through their Conservation and Environment Review Tool the conservation conditions NLEB CM – 5 or CM – 6 do not need to be applied on this project.

The activity Habitat Fragmentation, Modification of Connectivity is triggered by the widening US-26 and L62A from an existing 2-lane roadway to a 4-lane divided roadway, which may result in further fragmenting habitat and modifying the existing connectivity between habitats. As identified in the Habitat Evaluation and Suitability section, the only location identified as suitable habitat for NLEB and TCB is near Red Willow Creek from MM 5.87 – MM 6.17. The expansion of the highway at this location will occur to the north of the existing highway and remove an estimated 0.48 acres of trees, with an additional 0.07 acres of tree removal on the south side of Red Willow Creek associated with the installation of a new concrete box culvert. Expansion of the roadway and associated tree removal in this area could reduce the ability of NLEB and TCB to travel between the forested areas on the North and South of the Alignment. Most suitable habitat near the alignment occurs south of the highway at this location along Red Willow Creek. By choosing the northern alternative in this location, NDOT minimizes the impacts to the south with the larger suitable habitat. To the north of the highway, the forested area is small and disappears quickly as the topography transitions into arid escarpments. Due to the small size of the forested area to the north, this area is not anticipated to be overly crucial to NELB or TCB for foraging or roosting and does not act as a travel corridor to more extensive tracts of forest. Due to the small size of the forested area to the north and lack of connectivity to larger forested areas farther north, the activity Habitat Fragmentation, Modification of Connectivity "May affect, but is not likely to adversely affect" NLEB or TCB.

Determination

Considering the scope of the project, the location and amount of suitable habitat within the project's proximity, and the implementation of conservation conditions NLEB CM - 2 and

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NLEB / TCB —3, the NDOT concludes that the project "may affect, not likely to adversely affect" the Northern long-eared Bat and Tricolored Bat or their habitat.

SWIFT FOX (Vulpes velox)

Swift Fox Life History Information

The swift fox averages 5 pounds and measures about 3 feet from head to tail. It is about the size of a large domestic cat and about one-half the size of the more common red fox. Its fur is buff yellow or tan, with reddish and gray overtones. The tail is black tipped, and there are also areas of black found on each side of the snout. Winter pelage is dark buffy gray above, orange-tan on the sides, legs, and lower surface of the tail, and buff to white on the chest and belly; in summer, the coat is shorter, harsher, and more reddish. Swift fox differ from the kit fox in that they have smaller ears, broader snout, and shorter tail. The red fox also has a white tipped tail.

Swift fox are primarily nocturnal, and vocal. They spend more time underground than any other canid. Although social animals, they keep one mate throughout their lifetime. They received their name because of their speediness (up to 25 mph). Coyotes, eagles, and hawks have been reported as predators of swift fox. Swift fox breed when they are 1 to 2 years old. Breeding generally occurs in December and early March, with the gestation period being 50 to 60 days (Nebraska Game and Parks Commission (NGPC), 2010). The average litter size ranges from 2 to 6. The young emerge from dens at 3 to 4 weeks and are weaned 6 to 7 weeks. The young will stay with adults for about 4 to 5 months. Swift fox have a lifespan of 3 to 6 years. Dens are used on a daily basis throughout the entire year. Dens may be excavated by the swift fox or they may use old badger holes or prairie dog burrows.

Historically, the swift fox was widely distributed from southern Canada to the panhandle of Texas, and from the northwest of Montana to western Minnesota. They have been reduced to about 60 percent of their former range. The historic geographic range of the swift fox extended over most of Nebraska. "Nebraska is on the eastern edge of the swift fox range today. Populations have been found only in the Panhandle and southwestern Nebraska, and the species is listed as endangered in the state (Grier, 2003)." At present, they are found in a few areas in the western Panhandle and in the southwestern part of the state.

The swift fox prefers open semi-arid, shortgrass and mixed grass prairie, including areas intermixed with winter wheat fields, generally away from intensively cultivated or irrigated cropland (with little or no shrubs). They also inhabit areas of mixed agricultural use, but in these areas the population densities are lower. They select habitat with low-growing vegetation and relatively flat terrain, friable soils and high den availability, and areas near roads. Low-growing vegetation and flat terrain allow swift foxes to scan large areas for potential predators such as coyotes, their main cause of mortality (Sovada et al., 1998, Olson and Lindzey, 2002). Swift foxes are the most burrow-dependent canid in North America, (Jackson and Choate 2000), using them for predator avoidance and pup rearing (Herrero et al., 1991, and Stephens and Anderson, 2005). Prairie dog towns are also a preferred habitat of the swift fox (Kahn et al, 1997).

Principle foods are cottontails, jackrabbits, small birds, insects, and small mammals (including mice and ground squirrels), and vegetable matter (grasses and berries). Swift fox also readily feed on carrion.

Survey History (if applicable)

According to the Natural Heritage Database, the Swift Fox has an identified occurrence within 1.0 mile of the project area, within the last 30 years.

Habitat Evaluation and Suitability

The project action area is situated within the Shortgrass Prairie Ecoregion, notably beginning in the rolling hills and side slopes of the North Platte River valley. Characterized as part of the Topographic Region of the Valleys and Valley-Side Slopes, this area features flat-lying land along major streams, including the North Platte River, and moderately sloping land between escarpments. The eastern portion of the project area, which contains prairie dog colonies, provides a substantial source of food and shelter for the swift fox, making it a particularly suitable habitat.

West of the Lowline Canal, the study area predominantly comprises rural farmland and rangeland, encompassing a vast expanse of natural and semi-natural environments. Due to the amount of agricultural disturbance, the project west of the lowline canal would be considered marginally suitable habitat for the swift fox.

Based on aerial review of the project action area the following classifications of Swift Fox habitat were considered:

Suitable habitat for the swift fox include:

• Shortgrass prairie, along L62A from the Lowline Canal east to the intersection of US-385. This area includes the prairie dog colonies.

Marginally suitable habitat for the swift fox is mapped to include:

- Heterogeneous crop land, intermixed with areas of rangeland, hayland, and the commercial feedlots adjacent to US-26 and L62A, typically west of the Lowline Canal.
- Agricultural cropland that is irrigated, including the corners of the pivot fields
- While swift fox will inhabit landscapes partially converted to agriculture, highly cultivated and irrigated cropland is not considered suitable (Kamler, 2002)

Unsuitable habitat for the swift fox is mapped to include:

• Urban centers; such as the center of the City of Minatare

Analysis and Determination of Effects

The Matrix of Effects table identifies the following activities as "May affect, not likely to adversely affect" with the implementation of conservation conditions SF- 1, SF -2, and SF

- 3: Bridge Substructure New, Replacement, or Repair - Perennial; Bridge Superstructure New, Replacement, or Repair - Perennial; Channelization, Intermittent; Clearing and Grubbing - Non-woody Vegetation; Clearing and Grubbing - Trees & Shrubs; Culvert New, Replacement, Extension, Repair - Intermittent; Culvert New, Replacement, Extension, Repair - Perennial; Earth Shoulder Construction; Fencing; Grading Within the Hinge Point; Grading Outside the Hinge Point; Guardrail Repair, Replacement, or Installation with Soil Disturbance; Lighting, Traffic and Pedestrian Signals, Dynamic Message Signs with Soil Disturbance; Piers; Pile Driving - Impact; Pile Driving -Vibratory; Pipe Jacking & Casing; Removal of Structures and Obstructions; Signs with Soil Disturbance; Stream Channel Impact, Intermittent; Stream Channel Impact, Perennial; Temporary Crossing, Causeway, Work Platform; and Wetland Mitigation.

The Matrix of Effects table identifies the activity *Habitat Fragmentation, Modification of Connectivity* as a "May Affect". This activity is triggered by the expansion of the roadway from a two lane highway to a four lane highway along the entire project alignment, thereby potentially expanding existing habitat fragmentation conditions and reducing connectivity of suitable habitats. This could result in increased mortality from collisions, loss of habitat, and reduction in connection between areas of suitable habitat.

Expanding the roadway from a two-lane highway to a four-lane highway would result in increased pavement that swift foxes would need to cross when traversing the highway. Swift foxes often used roadways for movement, foraging, and denning. Further, swift foxes likely do not view roadways as a barrier to movement (Pruss, 1999; Clevenger et al. 2010). Expanding the roadway could result in more collision-related mortality of swift foxes due to the need to cross more pavement where cars will be (Allardyce and Sovada 2003). Juvenile Swift Fox's may be particularly vulnerable to vehicle mortality (Cypher et al. 2009). However, mortality from the expansion of the roadway may not occur. The swift fox is primarily nocturnal (NGPC 2023), which aligns well with the periods of lowest traffic volumes, occurring during nighttime hours. This natural behavior likely reduces their risk of encountering vehicles, even with a slight speed limit increase to 70 mph from the currently posted 65 mph. Traffic volumes would remain low and are expected to rise minimally in the future, perpetuating a low-density traffic environment. This Project would not result in increased traffic volumes. Additionally, the project includes the construction of a wide, 40-foot grassy median. This enhancement improves visibility for both swift foxes and drivers, reducing the likelihood of vehicle-induced mortality and providing a safe resting area for wildlife between road crossings. The expanded median allows swift foxes greater sight distance to see oncoming traffic and navigate safely, enhancing their ability to move across the landscape without harm. In addition, approximately seven culverts connecting the north and south sides of L62A could be used for passage under the roadway by swift fox (Figure 2). However, it should be noted that swift fox may not use below-grade crossings as often as above-grade crossings (CDOT 2010). Nevertheless, increased mortality from vehicle collisions could occur due to this project.

Vehicle collision-caused mortality is not likely to have a significant effect on Swift Fox in Nebraska (Albrecht 2015, NGPC 2023). From a range-wide perspective, a primary threat to swift foxes is depredation from predators such as coyotes. To offset any potential

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collision-related mortality from the expansion of the roadway, NDOT will install artificial escape dens in the vicinity of the Project to provide escape and reduce swift fox mortality from coyotes and other predators. Successful use of artificial dens has been demonstrated with studies of the similar federally-listed San Joaquin kit fox (*Vulpes macrotis mutica*) in California (Bjurlin et al. 2005) and swift fox in northwest Texas (McGee et al., 2006). The beneficial effects of the artificial escape dens for use by swift foxes to avoid predation would offset the detrimental effects of roadway vehicle-animal mortality. Escape den specifications and habitat suitability maps were created for the project "Junction L62A/US-385 to Alliance" and can be found in the attached Swift Fox Escape Den Installation Protocol (attached).

Artificial den locations would be determined through further consultation with NGPC to determine the appropriate number and placement of the dens in the landscape. The escape dens are assumed to be located within the shortgrass prairie and within the ROW for the additional lanes to the north of L62A.

Indirect Effects

Based on the swift fox habitat suitability described earlier, the Project entails converting approximately 22 acres of suitable habitat into highway right-of-way (ROW). This ROW will be sourced from the north side of the L62A corridor, stretching from the Lowline Canal to the US-385 interchange, to construct the proposed 4-lane divided highway. Based on NGPC habitat suitability modeling, Morrill County has approximately 360,427 acres of potentially suitable swift fox habitat. These acres may not all be available for swift fox use due to other factors the model did not account for (i.e., predation risk, vegetation composition and structure, habitat already occupied, etc.) However, given the configuration of the acres impacted by the Project, in combination with the amount of potentially suitable swift fox habitat (even if it is not all available) and the possibility that lack of habitat is not the limiting factor for swift fox, it is not likely the Project will have a long-term adverse impact on habitat availability or suitability for swift fox. Given the extensive amount of available habitat within the shortgrass prairie in this region, the proportion of habitat affected by the Project's ROW and limits of construction is relatively small. Consequently, the impact on swift fox habitat from the required land conversion for this Project would be deemed negligible.

Determination

Through offsetting potential mortality of swift from vehicle collisions by installation of escape dens to reduce mortality from predation, this project May Affect, not Likely to Adversely Affect swift fox or their habitat.

3. CONSERVATION MEASURES (if applicable)

Northern Long-eared Bat / Tri-Colored Bat

NLEB / TCB -3: All phases and aspects of the project shall be modified, to the extent practicable, to avoid tree removal in excess of what is required to

implement the project safely. Tree removal shall be limited to removals specified in the project plans, which will be clearly marked in the field. (*Design, Contractor*)

NLEB / TCB CM-2: No removal of suitable trees or roosting structures between May 15 and July 31 (maternity roosting season) (*Contractor*)

Swift Fox:

- **SF-1** Two weeks prior to the start of construction, a qualified biologist <u>shall</u> survey the environmental study area according to protocol to determine if active swift fox den sites are present. If an active den with young is located and it is outside the project limits, then a buffer zone shall be established around the den and all construction activities shall avoid the buffer until the den is abandoned. If an occupied den with or without young is identified within the project limits or staging areas, NDOT shall immediately coordinate with the NGPC to determine how to proceed. A buffer zone shall be established around the den and all construction activities shall avoid the buffer until NDOT gives approval to enter the buffer area. Between April 1 and August 31, the buffer zone shall be 250 yards around the active den site; other times of the year, the buffer shall be 100 yards around the active den site. (*NDOT Environmental*)
- **SF-2** Fencing shall be designed for wildlife safety and wildlife friendly passage with a bottom wire at least 16" from the ground. If different fencing design is required for safety or access control, additional coordination with resource agencies shall be required. (NDOT Design, NDOT Environmental)
- **SF-3** Fence posts shall not be placed within potential den sites that appear to have animal activity. If fence posts cannot avoid potential den sites that appear to have animal activity, NDOT Environmental will be notified and will re-initiate consultation with resource agencies. Work will not commence until agency concurrence is received. (Contractor)
- **SF-A** NDOT shall coordinate with the NGPC regarding the installation of artificial escape dens in suitable locations along the L62A corridor. Swift Fox Escape Den Installation protocols shall be utilized. (NDOT Environmental, NDOT Design)

Black Footed Ferret:

No Conservation Conditions are required for the Black Footed Ferret.

4. COORDINATION

NDOT met with the USFWS during any agency coordination meeting on 2/15/2023. USFWS had no comments at this time.

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6. ADDITIONAL INFORMATION

Project related documents including field notes, photographs, surveys, etc., are located in the consultant project file and at the Nebraska Department of Transportation Environmental Services Office.



Figure 1. Potentially active black-tail prairie dog (*Cynomys ludovicianus*) towns within the escarpments region between the North Platte River Valley and the Sandhills. Areas highlighted in green indicate potentially active prairie dog towns. In total 5010 acres of prairie dog towns were identified. To the North of L62A are 2420 acres, to the south of L62A are 1,370 acres, and to the east of US-385 are 1,220 acres of black-tail prairie dog towns.



Figure 2. Black-tail prairie dog (*Cynomys ludovicianus*) towns near the project alignment with limits of construction. Orange lines crossing the alignment represent culverts.



Figure 3. Location of suitable habitat for northern long-eared bat and tri-colored bat at Red Willow Creek with limits of Construction.










Da of	te & Time Assessment 4/3/2024	DOT Project Number 51521	Ro Ca	oute/Facility arried	52A	Α	Co	ounty Morrill	
Fe Sti	<u>deral</u> ucture ID SL62A 00116	Structure Coordinates (latitude and longitude) MM 1.16	<u>Sti</u> (at	ructure Height oproximate)			<u>St</u> Le	ngth 101'	
St	ructure Type (check one)		St	tructure Mat	teri	al (check all	th	at apply)	
Br	idge Construction Style		De	eck Material	Be	am Material	Er	nd/Back Wall	Material
0	Cast-in-place	OPre-stressed Girder		Metal Concrete	H	None		Concrete Timber	
			-	Timber		Steel	┢	Stone/Masonry	
\cup	Flat Slab/Box			Open grid		Timber		Other:	
0	Truss Side View		E	Other:		Other:	Cı	reosote Evide	nce
0	Parallel Box Beam	Other:	Сι	ulvert Material			В	Yes Unknown	O No
Сι	Ilvert Type	Other Structure	Ê	Metal			No	otes:	
0	Roy	 	┢	Plastic					
ŏ	Pipe/Round			Stone/Masonry					
Ò	Other:	<u> </u>		Other:					
С	ossings Traversed (check all th	nat apply)	S	urrounding	На	bitat (check	all	l that apply)	
	Bare ground	X Open vegetation	X	Agricultural				Grassland	
Ļ	Rip-rap	Closed vegetation	┡	Commercial				Ranching	
Å	Flowing water	Railroad	┡	Residential-urbai	n		┡	Riparian/wetiand	1
⊢	Standing water	Other [.]	÷	Woodland/forest	ed		┢	Other: Trees alnong I	bank
Δ.	case Assassed (check all that an			1100000	64				
Ch	eck all areas that apply If an area is not	present in the structure check the "not pres	sent	" hoy					
Do	cument all bat indicators observed during	a the assessment. Include the species pres	ent,	if known, and p	rovi	ide photo docur	mer	ntation as indic	ated.
Δ	(check if assessed)	Assessment Notes	T _E ,	vidence of F	2 at	e (include nt	not	os if present	·)
<u> </u>	All crevices and cracks:		╘		Jai) Species
	Bridges/culverts: rough surfaces or	INOL present	-[]	Visual - live #		dead #	┝	Odor	Opecies
	imperfections in concrete			Guano				Photos	1
⊢	Other structures: soffits, rafters, attic			Staining					
	areas								
[_	Construction of the second sec	Not present	┣			·		Audible	Species
Х	Concrete surraces (open roosting on	NO evidence of Bats	F	Visuai - live #		dead #	┡	Odor Bhotos	-
	concrete			Staining		-	┞	Photos	
┢	·	× Not present	╞					Audible	Species
	Spaces between concrete end walls		\mathbb{H}	Visual - live #		dead #		Odor	
⊢	and the bridge deck		F	Guano			L	Photos	
_	Orack between concrete rollings on ton		╇═	Staining				Audiblo	Spacing
	Gab	Not present	-[Visual - live #		dead #	┝		Species
		1		Guano			┢─	Photos	1
				Staining				T.	
		X Not present	F					Audible	Species
	Vertical surfaces on concrete I-beams		F	Visual - live #		dead #	Ļ	Odor	4
	1		\vdash	Guano Staining				Photos	-
	//	Not present	┢					Audible	Species
	Spaces between walls, ceiling joists		1_	Visual - live #		dead #		Odor	} →' '
	Spaces between wans, centry joists			Guano				Photos]
			╇	Staining				1	
	Ween holes scunner drains and	X Not present	-[Visual - live #		thead #	<u> </u>	Audibie	Species
	inlets/pipes		F	Guano			╟─	Photos	-
			L	Staining				1.11012.2	
		X Not present	F					Audible	Species
	All quiderails			Visual - live #		dead #		Odor	
	3		\vdash	Guano				Photos	-
	·	X Not present	┢	Staining				Audible	Species
		Not present	┲	Visual - live #		dead #	┢	Odor	Opecies
	All expansion joints			Guano				Photos	
	1			Staining					
Na	ame: Rick Schmunk		Si	gnature: Ric	k S	Schmunk			

Da of	te & Time Assessment 4/3/2024	DOT Project Number 51521	Ro Ca	oute/Facility arried	;2A	λ	Co	ounty Morrill	
Fe Sti	deral ructure ID L62A 00152	Structure Coordinates (latitude and longitude) MM 1.52	<u>St</u> (a	<u>ructure Height</u> pproximate)	_		<u>Str</u> Le	<u>ructure</u> 86'	
St	ructure Type (check one)		S	tructure Mat	teri	al (check all	th	at apply)	
Br	idge Construction Style		De	eck Material	Be	am Material	Er	nd/Back Wall N	Material
0	Cast-in-place	O Pre-stressed Girder	┡	Metal	┡	None	\vdash	Concrete	
			┢	Timber	H	Steel	H	Stone/Masonry	
\cup	Flat Slab/Box			Open grid		Timber		Other:	
0			E	Other:		Other:	Cr	eosote Evider	ice
0	Parallel Box Beam	O Other:	Cı	ulvert Material	!		0	Yes Unknown	O No
Сι	ulvert Type	Other Structure	Ê	Metal			No	otes:	
0	Box	<u>+</u>	┢	Plastic					
ŏ	Pipe/Round		L	Stone/Masonry					
Ô	Other:			Other:					
С	rossings Traversed (check all th	at apply)	S	urrounding	Ha	bitat (check	all	that apply)	
Х	Bare ground	Open vegetation	\mathbf{X}	Agricultural				Grassland	
	Rip-rap	Closed vegetation	┡	Commercial	<u> </u>	!	⊢	Ranching	
_	Flowing water	Railroad	┢	Residential-urpar	n	ļ	⊢	Riparian/wetianu	
X	Seasonal water	Other:	┢	Woodland/forest	ed		⊢	Other:	
	reas Assessed (check all that an			1					
Ch	neck all areas that apply. If an area is not	present in the structure. check the "not pres	ent	" box.					
Do	ocument all bat indicators observed during	g the assessment. Include the species prese	ent,	if known, and p	orovi	de photo docur	ner	ntation as indica	ted.
A	rea (check if assessed)	Assessment Notes	ΓE [,]	vidence of E	3at	s (include ph	ot	os if present)	
	All crevices and cracks:	Not present	t			<u></u>		Audible	Species
	Bridges/culverts: rough surfaces or		1_	Visual - live #		dead #		Odor	
	imperfections in concrete	1		Guano	_			Photos	
	Other structures: soffits, rafters, attic	1	L	Staining					
	areas	<u> </u>					_	-	
	Concrete surfaces (open reasting on	Not present	┢			dood #	⊢	Audible	Species
X	concrete surfaces (open roosing on	NO evidence of Bats	F	Guano		deau #	⊣	Odor Photos	
				Staining			┢──	Fliotos	
		X Not present	F					Audible	Species
	Spaces between concrete end walls		F	Visual - live #		dead #		Odor	
┢	and the bridge deck	1	F	Guano		!	L	Photos	
┡	Creak between concrete railings on ton	Multiprocent	╇╧	Staining			-	Audible	Spacies
 	of the bridge deck Gap	Not present	Ē	Visual - live #		dead #	⊢	Odor	Opecies
		1		Guano				Photos	
	Kalling	<u> </u>		Staining	_				
		X Not present	┣				Ľ	Audible	Species
	Vertical surfaces on concrete I-beams	1	F	Visual - live #		dead #	⊣	Odor	
		1	\vdash	Staining			H	Photos	1
	·	X Not present	t			i		Audible	Species
\square	Spaces between walls, ceiling joists		Ŀ	Visual - live #		dead #		Odor	·
	opacco between wane, centry jetere	1	F	Guano		/	L	Photos	
Ļ	·	Milliot procent	┢	Staining				Audible	Spacies
	Weep holes. scupper drains, and	Not present	Ē	Visual - live #		dead #	⊢	Odor	Opecies
	inlets/pipes	1		Guano				Photos	
		<u> </u>		Staining	_			<u> </u>	
		X Not present	┢					Audible	Species
	All guiderails		F	Visual - live #		dead #	⊢	Odor	
			F	Staining			⊢	Photos	
		X Not present	亡					Audible	Species
	All expansion jointe		1	Visual - live #		dead #		Odor	'
	All expansion joints			Guano				Photos	
		<u> </u>	┶	Staining					

Da of	te & Time Assessment 4/3/2024	DOT Project Number 51521	Ro Ca	ute/Facility <u>arried</u> L6	52A	λ	Co	ounty Morrill	
Fe Sti	<u>deral</u> <u>ucture ID</u> L62A 00220	Structure Coordinates (latitude and longitude) MM 2.20	<u>Str</u> (ar	ructure Height oproximate)			<u>Sti</u> Le	ructure ength	
St	ructure Type (check one)		St	ructure Mat	teri	al (check all	l th	at apply)	
Br	idge Construction Style		De	eck Material	Be	am Material	Er	nd/Back Wall	Material
0	Cast-in-place	OPre-stressed Girder	$\Box \vdash$	Metal Concrete	H	None		Concrete Timber	
				Timber		Steel	┢	Stone/Masonry	
\cup	Flat Slab/Box			Open grid		Timber		Other:	
0	Truss Side View			Other:		Other:	Cı	reosote Evide	ence
0	Parallel Box Beam	Other:	Сι	ulvert Material			В	Yes Unknown	No No
Сι	Ilvert Type	Other Structure		Metal			Nc	otes:	
0	Box	<u>+ </u>	-	Plastic					
ŏ	Pipe/Round			Stone/Masonry			1		
0	Other: Double Brokeback			Other:					
С	ossings Traversed (check all th	nat apply)	Sı	urrounding	На	bitat (check	all	l that apply)	
	Bare ground	X Open vegetation	X	Agricultural			L	Grassland	
	Rip-rap	X Closed vegetation	₽	Commercial			┡	Ranching	
┝	Flowing water			Residential-urbai	n		┝	Kiparian/weiian	d
X	Seasonal water	Other:	- X	Woodland/forest	ed		┢	Other:	
Δ	reas Assessed (check all that an			<u>1</u>	-			1	
Ch	eck all areas that apply. If an area is not	present in the structure, check the "not r	resenť	" hox					
Do	cument all bat indicators observed during	a the assessment. Include the species pr	resent,	if known, and p	orovi	ide photo docur	mer	ntation as indic	ated.
Δ	(check if assessed)	Assessment Notes	E\	vidence of E	Rate	e (include pl	not	os if presen	t)
<i>F</i>	All crevices and cracks:	Y Not present			Jui		I.		Species
	Bridges/culverts: rough surfaces or	Not present	$-\Box$	Visual - live #		dead #	┝	Odor	opeolos
	imperfections in concrete			Guano				Photos	1
	Other structures: soffits, rafters, attic			Staining					
	areas								
[_	Construction of the second sec	Not present		Viewel live #		· · #	L	Audible	Species
X	Concrete surfaces (open roosting on	NO evidence of Bats	F	Visual - live #		dead #	╞	Odor	-
	concrete	NO evidence of bats		Staining				Photos	-
┢	·	▼ Not present		otanni.g				Audible	Species
	Spaces between concrete end walls			Visual - live #		dead #		Odor	
┞─	and the bridge deck			Guano			L	Photos	
L	C		━╇╘┙	Staining				Accellate	Origina
	Crack between concrete railings on top	X Not present		Visual - live #		dead #	\vdash	Audibie	Species
		1		Guano			┢	Photos	-
	Railing H	l		Staining	_				1
		X Not present						Audible	Species
	Vertical surfaces on concrete I-beams		- H	Visual - live #		dead #	Ľ	Odor	
				Guano			L	Photos	-
┝	··	X Not present	━╋	Stanning				Audible	Species
	Spaces between wells, coiling joists			Visual - live #		dead #		Odor	
┡┙	Spaces between wans, centry joists			Guano				Photos]
	·		┯┯	Staining	_			1	
	Ween holes scunner drains, and	X Not present	$-\Box$	Vieual - live #		the dead		Audible	Species
	inlets/nines			Guano			┢	Photos	-
		l		Staining			┢	Thouse	-
		X Not present		-				Audible	Species
	All quiderails		_F	Visual - live #		dead #		Odor	
⊢			\vdash	Guano				Photos	-
-		Not present	━₽	Staining			-	Audible	Species
			$-\Box$	Visual - live #		dead #	┢	Odor	Species
	All expansion joints			Guano			┢──	Photos	-
				Staining			Ĺ		
Na	ame: Rick Schmunk		Si	gnature: Ric	k S	Schmunk			

Da of	<u>te & Time</u> Assessment 4/3/2024	DOT Project Number 51521	Ro Ca	oute/Facility arried	;2A	λ	Co	ounty Morrill	
Fe Sti	<u>deral</u> r <u>ucture ID</u> SL62A 00295	Structure Coordinates (latitude and longitude) MM 2.95	<u>St</u> (a)	<u>ructure Height</u> pproximate)	_		<u>Str</u> Le	<u>ngth</u> 80'	
S	ructure Type (check one)		S	tructure Mat	teri	al (check all	th	at apply)	
Br	idge Construction Style		De	eck Material	Be	am Material	Er	nd/Back Wall I	Material
O	Cast-in-place	O Pre-stressed Girder	┡	Metal Concrete	┠┤	None Concrete	\vdash	Concrete Timber	
			┢	Timber	H	Steel	\vdash	Stone/Masonry	
\cup	Flat Slab/Box			Open grid		Timber		Other:	
0			E	Other:		Other:	Cr	reosote Evider	nce
0	Parallel Box Beam	Other:	Сι	ulvert Material			0	Yes Unknown	O No
Сι	Jvert Type	Other Structure	F	Metal Concrete			No	otes:	
0	Box		È	Plastic					
Q	Pipe/Round		L	Stone/Masonry					
0	Other:		Ļ	Other:			L		
CI	rossings Traversed (check all th	iat apply)	S	urrounding	Ha	bitat (check	all	that apply)	
	Bare ground	Closed vegetation	씍	Agricultural		ľ	Ŕ	Grassland	
┝	Rip-rap Flowing water	Railroad	┢	Residential-urbar	n		P	Rinarian/wetland	
\vdash	Standing water	Road/trail - Type:	┢	Residential-rural	-		F	Mixed use	
X	Seasonal water	Other:	\times	Woodland/forest	ed			Other:	
A	reas Assessed (check all that ap	(ylqu							
Ch	eck all areas that apply. If an area is not	present in the structure, check the "not pres	ent	" box.					
Do	cument all bat indicators observed during	ງ the assessment. Include the species prese	ent,	if known, and p	rovi	de photo docun	ner	ntation as indica	ted.
A	r ea (check if assessed)	Assessment Notes	E	vidence of E	<u>3at</u>	s (include ph	ot	o <u>s if present</u>)	
	All crevices and cracks:	X Not present						Audible	Species
	Bridges/culverts: rough surfaces or	1		Visual - live #		dead #	Ľ	Odor	
	imperfections in concrete	1	┝	Guano		/		Photos	
	Other structures: soffits, ratters, attic	1	\vdash	Stairing			I		
┝	areas	Not present	\vdash	1				Audible	Species
\vdash	Concrete surfaces (open roosting on		┺	Visual - live #		dead #		Odor	
\vdash	concrete)	NO evidence of Bats		Guano				Photos	
	ļ		╧	Staining		!		1	
	Spaces between concrete end walls	X Not present	-	Visual - live #		teeb #	⊢	Audible	Species
	and the bridge deck	1	F	Guano		ucau n	⊢	Photos	
[l		Staining		ï			
	Crack between concrete railings on top	X Not present	F	1		I		Audible	Species
	of the bridge deck Gap		F	Visual - live #		dead #		Odor	
ļ	Railing →	1	\vdash	Guano		!		Photos	
┝		Not present	╘	Staming			_	Audible	Species
┝	Vertical surfaces on concrete L beams		┞	Visual - live #		dead #		Odor	
┡		1		Guano				Photos	
	ļ		╇	Staining		!		· · · · · · ·	
		X Not present	Ŀ	Visual - live #		dead #	┝	Audible	Species
	Spaces between walls, ceiling joists	1	F	Guano			⊢	Photos	
			E	Staining		ï			
		X Not present	F					Audible	Species
	Weep holes, scupper drains, and	1	F	Visual - live #		dead #	L	Odor	
	iniets/pipes	1	\vdash	Staining		ł	┝─	Photos	
	<u> </u>	Not present	⊨					Audible	Species
	All quidoraile		1_	Visual - live #		dead #		Odor	/ /
┡─	All guiderans	1		Guano				Photos	
	Ļ		ᄂ	Staining		!		A	
		X Not present	┢	Vieual - live #		# head	⊢	Audible	Species
	All expansion joints	1		Guano		ucau n	⊢	Photos	
		l		Staining		!			
			T				in the second		

Da of /	<u>te & Time</u> <u>Assessment</u> 4/3/2024	DOT Project Number 51521	Ro Ca	oute/Facility arried	2A	1	Co	ounty Morril	Ι
Fe Str	<u>deral</u> ucture ID SL62A 00405	Structure Coordinates (latitude and longitude) MM 4.05	<u>Str</u> (ar	ructure Height pproximate)			<u>St</u> Le	ructure ngth	
St	ructure Type (check one)		St	tructure Mat	eri	al (check all	l th	at apply)	
Br	idge Construction Style		De	eck Material	Be	am Material	Eı	nd/Back Wal	l Material
0	Cast-in-place	O Pre-stressed Girder		Metal	H	None	┡	Concrete	
H			┢	Timber	H	Steel	┢	Stone/Masonry	,
\cup	Flat Slab/Box			Open grid		Timber	L	Other:	
0		O Covered	E	Other:		Other:	Сі	reosote Evid	ence
0	Parallel Box Beam	Other:	Сι	ulvert Material			8	Yes Unknown	O No
Сι	Ilvert Type	Other Structure	Ê	Metal Concrete			No	otes:	
0	Вох	<u>+ r</u>	╞	Plastic			ł		
ŏ	Pipe/Round		L	Stone/Masonry					
0	Other:			Other:					
Cr	ossings Traversed (check all th	nat apply)	S	urrounding	На	bitat (check	al	that apply)	
	Bare ground	X Open vegetation	\times	Agricultural				Grassland	
	Rip-rap	X Closed vegetation	L	Commercial	_		Ļ	Ranching	
\square	Flowing water	Railroad	ĥ	Residential-urbar	n		¥	Riparian/wetlar	ıd
\mathbf{k}	Standing water	Cother ¹	┢	Woodland/forest	⊳d		┢	Other:	
HA.	acc Accord (chock all that ar			Woodiana, iore	04			Outon	
AI Ch	eas Assesseu (UIIEUK all Lilar ap	ply)	cont	" hov					
	ECK all areas that apply. If an area is not	a the assessment include the species pres	3ern ont	if known and n	rovi	ide photo docui	moi	ntation as indi	eated
			Te,					Ilation as man	
Ar	ea (cneck IT assesseu)	Assessment Notes	<u><u></u><u></u></u>	Vidence of E	sau	s (include pi	າວເ	os It presen	(t)
	All crevices and cracks:	X Not present	-					Audible	Species
	Bridges/cuiverts: rough surfaces or		F	Guano		deau #	╟	Daor Photos	-
Ц	Imperiections in concrete		\vdash	Staining				FIIOIOS	-
	oreas			<u> </u>			1		
		Not present	T	1			1	Audible	Species
$\overline{\mathbf{v}}$	Concrete surfaces (open roosting on		╘	Visual - live #		dead #		Odor	
	concrete)	NO evidence of Bats		Guano				Photos	
		Texa list successed	╇	Staining				1 A	Orreion
	Spaces between concrete end walls	X Not present	-	Visual - live #		dead #	╞	Audibie	Species
	and the bridge deck		F	Guano			┢	Photos	-
		l		Staining				1	
	Crack between concrete railings on top	X Not present	F	1				Audible	Species
	of the bridge deck Gap			Visual - live #		dead #		Odor	
			—	4					
	Railing			Guano				Photos	
Ļ	Railing— <u></u> →	V IN at procent	E	Guano Staining				Photos	
	Railing H	X Not present	E	Guano Staining Visual - live #		dead #		Audible	Species
	Railing →	X Not present		Guano Staining Visual - live # Guano		dead #		Audible Odor Photos	Species
	Railing →	X Not present		Guano Staining Visual - live # Guano Staining		dead #		Audible Odor Photos	Species
	Railing →	X Not present X Not present		Guano Staining Visual - live # Guano Staining		dead #		Audible Odor Photos Audible	Species Species
	Railing → Vertical surfaces on concrete I-beams	X Not present X Not present		Guano Staining Visual - live # Guano Staining Visual - live #		dead # dead #		Audible Odor Photos Audible Odor	Species Species
	Railing → ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	X Not present X Not present		Guano Staining Visual - live # Guano Staining Visual - live # Guano		dead # dead #		Audible Odor Photos Audible Odor Photos	Species Species
	Railing → ↓ ↓	Not present Not present Not present		Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining		dead # dead #		Audible Odor Photos Audible Odor Photos Audible	Species
	Railing → ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	Not present Not present Not present Not present		Guano Staining Visual - live # Guano Staining Visual - live # Staining Visual - live #		dead # dead # dead # dead #		Audible Odor Photos Audible Odor Photos Audible Odor	Species Species
	Railing → ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	Not present Not present Not present Not present		Guano Staining Visual - live # Guano Staining Visual - live # Guano Visual - live # Guano		dead # dead # dead #		Audible Odor Photos Audible Odor Photos Audible Odor Photos	Species Species
	Railing → Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes	Not present Not present Not present Not present		Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining		dead # dead # dead #		Audible Odor Photos Audible Odor Photos Audible Odor Photos	Species Species Species
	Railing	Not present Not present Not present Not present Not present Not present	┶┺┓╎╷╎╌╜┓╎╷╎╌┚┓╏╷╎└┺┓╢╷	Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining Visual - live #		dead # dead # dead #		Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible	Species Species Species Species
	Railing → Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes All guiderails	Not present Not present Not present Not present Not present Not present		Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining		dead # dead # dead # dead # dead #		Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Datas	Species Species Species Species
	Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes	Not present Not present Not present Not present Not present Not present		Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining		dead # dead # dead # dead # dead #		Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Audible Odor Photos	Species Species Species Species Species
	Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes All guiderails	Not present		Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining		dead # dead # dead # dead # dead #		Photos Audible Odor Photos Audible	Species Species Species Species Species
	Railing → Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes All guiderails	Not present Not present		Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining Visual - live #		dead # dead # dead # dead # dead #		Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos	Species Species Species Species Species
	Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes All guiderails All expansion joints	Not present Not present		Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano		dead # dead # dead # dead # dead # dead #		Photos Audible Odor Photos Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos	Species Species Species Species Species Species Species
	Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes All guiderails All expansion joints	Not present Not present		Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining Visual - live #		dead # dead # dead # dead # dead # dead #		Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos	Species Species Species Species Species Species Species

Da of	te & Time Assessment 4/3/2024	DOT Project Number 51521	Ro Ca	oute/Facility arried	52A	\ \	Co	ounty Morrill	
Fe Sti	deral SL62A 00463	Structure Coordinates (latitude and longitude) MM 4.63	<u>Sti</u> (a)	ructure Height oproximate)			<u>Sti</u> Le	<u>ructure</u> 115' ngth	
St	ructure Type (check one)		S	tructure Mat	teri	al (check all	th	at apply)	
Br	idge Construction Style		De	eck Material	Be	am Material	Er	nd/Back Wall I	Material
0	Cast-in-place	O Pre-stressed Girder		Metal Concrete	H	None Concrete		Concrete Timber	
			┢	Timber		Steel	┢	Stone/Masonry	
\cup	Flat Slab/Box			Open grid		Timber		Other:	
0			E	Other:		Other:	Cı	reosote Evide	nce
0	Parallel Box Beam	O Other:	Сι	ulvert Material	1		B	Yes Unknown	O No
Сι	Ivert Type	Other Structure	Ê	Metal			Nc	otes:	
0	Box	<u>+ </u>	ĥ	Plastic					
ŏ	Pipe/Round		L	Stone/Masonry					
0	Other:			Other:					
С	rossings Traversed (check all th	at apply)	S	urrounding	На	bitat (check	all	l that apply)	
	Bare ground	X Open vegetation	$\mathbf{\Sigma}$	Agricultural			X	Grassland	
ŕ	Rip-rap	Closed vegetation	┡	Commercial			ŀ	Ranching	
\vdash	Flowing water	Railroad Doad/trail - Type:	┢	Residential-urba	n		싁	Kiparian/weiianu Miyed use	
\vdash	Seasonal water	Other:	뛵	Woodland/forest	ed		┢	Other:	
Δ	reas Assessed (check all that an		1	1	-		n	<u>1</u> -	
Ch	leck all areas that apply. If an area is not	present in the structure. check the "not pres	sent	" box.					
Do	ocument all bat indicators observed during	g the assessment. Include the species prese	ent,	if known, and p	orovi	de photo docur	ner	ntation as indica	ated.
A	rea (check if assessed)	Assessment Notes	Τ _Ε ,	vidence of E	Bat	s (include ph	not	os if present)
-	All crevices and cracks:	Not present	t					Audible	Species
	Bridges/culverts: rough surfaces or		1_	Visua <u>l</u> - live #		dead #		Odor	
	imperfections in concrete	1		Guano				Photos	
	Other structures: soffits, rafters, attic	1		Staining	_				
	areas	<u></u>		-			-it	-	
	Concrete surfaces (open reasting on	Not present	-	Visual live #		dood #	L	Audible	Species
Х	concrete)	NO evidence of Bats	F	Guano		deau #	╞	Daor Photos	
	concrete)			Staining			-	Filotos	
		X Not present	厈	1]		Audible	Species
	Spaces between concrete end walls		F	Visual - live #		dead #		Odor	
	and the bridge deck	1	F	Guano				Photos	
H	Creek between concrete railings on ton	V Not present	╇╧	Staining			_	Audible	Species
 	of the bridge deck Gab	Not present	-匚	Visual - live #		dead #	┢	Odor	Obecies
		1		Guano				Photos	
		<u> </u>		Staining					
		X Not present	┣	Court live #			Ľ	Audible	Species
	Vertical surfaces on concrete I-beams	1	F	Visuai - live #		dead #	┡	Odor Bhotos	
	1	1	\vdash	Staining			┞	Photos	
		X Not present	T					Audible	Species
	Spaces between walls, ceiling joists		\mathbb{L}	Visual - live #		dead #		Odor	
┣		1		Guano				Photos	
┡	/ '	V Not present	┶	Staining				Audible	Species
	Weep holes, scupper drains, and	Not present	F	Visual - live #		dead #	┢	Odor	Opecies
	inlets/pipes	1		Guano				Photos	
		<u> </u>		Staining					
		X Not present	_					Audible	Species
	All guiderails		F	Visual - live #		dead #	┢	Odor	
			F	Staining			-	Photos	
		X Not present	亡					Audible	Species
	All expansion joints		1_	Visual - live #		dead #		Odor	
\vdash		1		Guano				Photos	
			┶	Staining					
	ama Rick Schmunk		Si	anature: Ric	k S	Schmunk			

Da of /	<u>te & Time</u> <u>Assessment</u> 4/3/2024	DOT Project Number 51521	Ro Ca	oute/Facility arried	62 <i>P</i>	ł	<u>Co</u>	ounty Morrill	
Fe Str	deral ructure ID SL62A 00537	Structure Coordinates (latitude and longitude) MM 5.37	<u>Str</u> (ar	ructure Height pproximate)			<u>St</u> Le	<u>ructure</u> 80'	
St	ructure Type (check one)		St	tructure Mat	teri	al (check all	l th	at apply)	
Br	idge Construction Style		De	eck Material	Be	am Material	Εı	nd/Back Wall	Material
0	Cast-in-place	OPre-stressed Girder	\vdash	Metal	\mathbb{H}	None	┡	Concrete Timber	
			╟┤	Timber		Steel	┢	Stone/Masonry	
\cup	Flat Slab/Box	Steel I-beam		Open grid		Timber		Other:	
0		O Covered	E	Other:		Other:	С	reosote Evide	nce
0	Parallel Box Beam	Other:	Сι	ulvert Material	1		00	Yes Unknown	O No
Сι	lvert Type	Other Structure	É	Metal			Ň	otes:	
0	Box	<u>+</u>	┢	Plastic					
ŏ	Pipe/Round			Stone/Masonry			1		
0	Other:			Other:					
Cr	rossings Traversed (check all th	nat apply)	S	urrounding	На	bitat (check	al	I that apply)	
Х	Bare ground	Open vegetation	\mathbf{X}	Agricultural				Grassland	
	Rip-rap	Closed vegetation		Commercial	_			Ranching	
	Flowing water	Railroad	ĥ	Residential-urbar	n		┡	Riparian/wetland	1
\mathbf{x}	Standing water	Cother	长	Woodland/forest	⊳d		┢	Niixeu use Other	
	reas Assassed (shock all that ar			Woodid. 10, 1010	00			Outor:	
Ai Ch	eas Assesseu (Uneux an una ap	PIV)	ont	" hov					
	eck all areas that apply. If an area is not	present in the structure, check the mot pres	sen. ont	if known and n	vrov	ide photo docur	mai	atation as indic	atad
			Te,						
Ar	ea (cneck II assesseu)	Assessment notes	E		รลเ	s (include pr	າວເ	os II presem)
	All crevices and cracks.	X Not present		Vieual - live #		# heeb	Ļ	Audible	Species
	imporfections in concrete		F	Guano		ueau #	┢	Photos	
\vdash	Other structures: soffits rafters attic		\vdash	Staining			┢	Thotes	1
	areas			<u> </u>					
		Not present	F	1				Audible	Species
$\mathbf{\nabla}$	Concrete surfaces (open roosting on		Ŀ	Visual - live #		dead #		Odor	
	concrete)	NO evidence of Bats		Guano				Photos	
	 	Texa list is a second	╇	Staining				A	
<u> </u>	Spaces between concrete end walls	X Not present		Visual - live #		dead #	┡		Species
	and the bridge deck		F	Guano			┢	Photos	
		l		Staining					1
	Crack between concrete railings on top	X Not present	F	1				Audible	Species
	of the bridge deck Gap		\vdash	Visual - live #		dead #		Odor	
	Railing 🕌	1		Guano				Photos	4
_		Tet Iblet present	╄	Staining				ملطناهم	(Cracico
				Visual - live #		dead #	┡		Species
	Vertical surfaces on concrete I-beams			Guano			┢	Photos	1
				Staining					l
		X Not present	F	1				Audible	Species
	Spaces between walls, ceiling joists			Visual - live #		dead #	L	Odor	4
			\vdash	Guano			┞	Photos	-
-	<u> </u>		┢	Stanning				Audible	Species
		X Not present	-			dood #		Odor	
	Weep holes, scupper drains, and	X Not present	╓	Visual - live #		dead #			
μ	Weep holes, scupper drains, and inlets/pipes	Not present	E	Visual - live # Guano		dead #	L	Photos	1
	Weep holes, scupper drains, and inlets/pipes	X Not present	Ē	Visual - live # Guano Staining				Photos	
	Weep holes, scupper drains, and inlets/pipes	X Not present		Visual - live # Guano Staining		dead #		Photos	Species
	Weep holes, scupper drains, and inlets/pipes All guiderails	X Not present X Not present		Visual - live # Guano Staining Visual - live #		dead #		Photos Audible Odor	Species
	Weep holes, scupper drains, and inlets/pipes All guiderails	X Not present X Not present		Visual - live # Guano Staining Visual - live # Guano Staining		dead #		Photos Audible Odor Photos	Species
	Weep holes, scupper drains, and inlets/pipes All guiderails	Not present Not present Not present		Visual - live # Guano Staining Visual - live # Guano Staining		dead #		Photos Audible Odor Photos Audible	Species
	Weep holes, scupper drains, and inlets/pipes All guiderails	Not present Not present Not present Not present		Visual - live # Guano Staining Visual - live # Guano Staining Visual - live #		dead #		Photos Audible Odor Photos Audible Odor	Species Species
	Weep holes, scupper drains, and inlets/pipes All guiderails All expansion joints	Not present Not present Not present Not present		Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano		dead # dead #		Photos Audible Odor Photos Audible Odor Photos	Species Species
	Weep holes, scupper drains, and inlets/pipes All guiderails All expansion joints	Not present Not present Not present Not present		Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining		dead # dead #		Photos Audible Odor Photos Audible Odor Photos	Species Species

Da of	te & Time Assessment 4/3/2024	DOT Project Number 51521	Ro Ca	oute/Facility arried	62A	١	<u>Cc</u>	ounty Morrill	
Fe Sti	<u>deral</u> ucture ID SL62A 00582	Structure Coordinates (latitude and longitude) MM 5.82	<u>St</u> (a	<u>ructure Height</u> pproximate)	_		<u>Str</u> Le	<u>ructure</u> 98' <u>ngth</u>	
St	ructure Type (check one)		S	tructure Mat	teri	al (check all	th	at apply)	
Br	idge Construction Style		De	eck Material	Be	am Material	Er	nd/Back Wall I	Naterial
0	Cast-in-place	O Pre-stressed Girder	┡	Metal	┞┤	None	\vdash	Concrete Timber	
			┢	Timber	H	Steel	H	Stone/Masonry	
\cup	Flat Slab/Box			Open grid		Timber		Other:	
0	Truss Side View		E	Other:		Other:	Cr	reosote Evider	nce
0	Parallel Box Beam	Other:	С	ulvert Material			0	Yes Unknown	O No
Сι	Ilvert Type	Other Structure	É	Metal Concrete	_		No	otes:	
0	Box	 	ĥ	Plastic					
Ò	Pipe/Round			Stone/Masonry	_				
0	Other:			Other:					
С	ossings Traversed (check all th	iat apply)	S	urrounding	Ha	bitat (check	all	that apply)	
X	Bare ground	Open vegetation	¥	Agricultural			Ľ⊻	Grassland	
	Rip-rap	Closed vegetation	┡	Commercial Bosidontial-urbai			⊢	Ranching	
┝	Flowing water	Railfoad Road/trail - Type	┢	Residential-urba	n		⊢	Mixed use	
X	Seasonal water	Other:	Þ	Woodland/forest	ed		E	Other:	
A	reas Assessed (check all that ap			<u> </u>					
Ch	eck all areas that apply. If an area is not	present in the structure, check the "not pres	sent	" box.					
Do	cument all bat indicators observed during	g the assessment. Include the species prese	ent,	if known, and p	provi	de photo docun	ner	ntation as indica	ited.
A	rea (check if assessed)	Assessment Notes	E	vidence of E	3at	s (include ph	ot	os if present)
	All crevices and cracks:	X Not present	t	1		· · · ·		Audible	Species
	Bridges/culverts: rough surfaces or		\mathbb{L}	Visual - live #		dead #		Odor	
	imperfections in concrete	1	F	Guano			L	Photos	
	Other structures: soffits, rafters, attic	1	\vdash	Staining			1		
-	areas	Not present	t		_		_	Audible	Species
	Concrete surfaces (open roosting on	Not present	Ē	Visual - live #		dead #	⊢	Odor	Opecies
Х	concrete)	NO evidence of Bats		Guano				Photos	
		<u> </u>		Staining					
	Shares between concrete and walls	X Not present	┢				L	Audible	Species
	Spaces between concrete end waits	1	F	Visuai - live #		dead #	⊣	Odor Photos	
	and the phage deck	1		Staining			┢	FIIOIOS	
⊢	Crack between concrete railings on top	X Not present	T	<u>1</u>				Audible	Species
	of the bridge deck Gap		Ъ	Visual - live #		dead #		Odor	
	Railing	1		Guano			L	Photos	
_			╇╧	Staining			-	Audible	Spacios
		Not present	Ē	Visual - live #		dead #	⊢	Odor	opecies
	Vertical surfaces on concrete i-peams	1		Guano			L	Photos	
	'	<u></u>		Staining					
	1	X Not present	┢			4004 #	L	Audible	Species
	Spaces between walls, ceiling joists	1	F	Guano		deau #	⊢	Daor Photos	
	l'	I		Staining			┢──	Thous	
		X Not present	F	1				Audible	Species
	Weep holes, scupper drains, and		F	Visual - live #		dead #		Odor	
	inlets/pipes	1		Guano				Photos	
┝	<u> </u>	Not present	╘	Staming				Audible	Species
			┺	Visual - live #		dead #	H	Odor	
μ	All guideralis	1		Guano				Photos	
	'		Ļ	Staining					- ·
	1	X Not present	┢			dood #	∟	Audible	Species
	All expansion joints	1		Guano		deau #	⊢	Odor Photos	
	1	1	F	Staining				Filotos	
			al second						i de la companya de l

Da of /	<u>te & Time</u> <u>Assessment</u> 4/3/2024	DOT Project Number 51521	Ro Ca	oute/Facility arried	62 <i>A</i>	ł	Co	ounty Morrill	
Fe Str	deral ructure ID SL62A 00595	Structure Coordinates (latitude and longitude) MM 5.95	<u>Str</u> (ar	ructure Height pproximate)			<u>St</u> Le	ructure ngth	
St	ructure Type (check one)		St	tructure Mat	teri	al (check all	th	at apply)	
Br	idge Construction Style		De	eck Material	Be	am Material	Er	nd/Back Wall I	Material
0	Cast-in-place	OPre-stressed Girder	┡	Metal Concrete	\mathbb{H}	None Concrete	┝	Concrete Timber	
			┢	Timber		Steel		Stone/Masonry	
\cup	Flat Slab/Box			Open grid		Timber		Other:	
0			E	Other:		Other:	Сі	reosote Evider	nce
0	Parallel Box Beam	Other:	Сι	ulvert Material	1		8	Yes	O No
Сι	ılvert Type	Other Structure	Ĕ	Metal Concrete			No	<u>stes:</u>	
0	Box		Ċ	Plastic					
Q	Pipe/Round			Stone/Masonry					
0	Other:		Ļ	Other:			L		
Cr	cossings Traversed (check all th	<u>iat apply)</u>	S	urrounding	Ha	bitat (check	all	that apply)	
	Bare ground	X Open vegetation	凶	Agricultural			×	Grassland	
F	Rip-rap	X Closed vegetation	┢	Commercial Residential-urbai	n		 	Rancning Riparian/wetland	
Ĥ	Standing water	Road/trail - Type:	┢	Residential-rural	11		┝	Mixed use	
	Seasonal water	Other:	\mathbf{X}	Woodland/forest	ed			Other:	
Ar	reas Assessed (check all that ap	(vlac							
Ch	leck all areas that apply. If an area is not	present in the structure, check the "not pres	sent	" box.					
Do	cument all bat indicators observed during	g the assessment. Include the species prese	ent,	if <u>known, and p</u>	orov	id <u>e photo docur</u>	ner	ntation as indica	ated.
Ar	r ea (check if assessed)	Assessment Notes	E١	vidence of E	Bat	s (include ph	ot	os if present)
	All crevices and cracks:	X Not present	┢	1				Audible	Species
	Bridges/culverts: rough surfaces or		1	Visual - live #		dead #		Odor	
	imperfections in concrete			Guano			Ē	Photos	
	Other structures: soffits, rafters, attic			Staining					
_	areas		╞					A	
	Concrete surfaces (open roosting on		-	Visual - live #		dead #	 -		Species
\times	concrete)	NO evidence of Bats		Guano			⊢	Photos	
				Staining					
		X Not present	F	1 ,				Audible	Species
	Spaces between concrete end walls		F	Visual - live #		dead #	L	Odor	
	and the bridge deck		\vdash	Guano Staining				Photos	
	Crack between concrete railings on top	Not present	┢					Audible	Species
	of the bridge deck Gap		╢	Visual - live #		dead #		Odor	op 2
	Railing	1		Guano				Photos	
			┡	Staining			_	1	
		X Not present	┢	Visual - live #		dead #	L	Audibie	Species
	Vertical surfaces on concrete I-beams			Guano			┝	Photos	
				Staining				<u> </u>	
		X Not present	F					Audible	Species
	Spaces between walls, ceiling joists		F	Visual - live #		dead #		Odor	
			┢	Staining				Pnotos	
	l	Not present	┢	-				Audible	Species
	Weep holes, scupper drains, and		Ŀ	Visual - live #		dead #		Odor	
	inlata/ninaa			Guano				Photos	
	miers/pipes			Staining				Audible	Species
	iniets/pipes		←						
	iniets/pipes	X Not present	Ē	Visual - live #		dead #	┝	Odor	Opecies
	All guiderails	X Not present	Ē	Visual - live # Guano		dead #		Odor Photos	Opecies
	All guiderails	X Not present		Visual - live # Guano Staining		dead #		Odor Photos	
	All guiderails	Not present Not present Not present		Visual - live # Guano Staining		dead #		Odor Photos Audible	Species
	All guiderails All expansion joints	Not present Not present Not present		Visual - live # Guano Staining Visual - live #		dead # dead #		Odor Photos Audible Odor Bhotos	Species
	All guiderails All expansion joints	Not present Not present Not present		Visual - live # Guano Staining Visual - live # Guano Staining		dead # dead #		Audible Odor Photos Audible Odor Photos	Species
	All guiderails All expansion joints	X Not present X Not present		Visual - live # Guano Staining Visual - live # Guano Staining		dead # dead #		Audible Photos Audible Odor Photos	Species

Da of	te & Time Assessment 4/3/2024	DOT Project <u>Number</u> 51	1521	Ro Ca	oute/Facility arried	52A	N	Co	ounty Morrill	
Fe Str	<u>deral</u> ucture ID SL62A 00613	<u>Structure Coordi</u> (latitude and lon	<u>inates</u> gitude) MM 6.13	<u>Sti</u> (aț	ructure Height oproximate)			<u>Str</u> Le	ructure ngth	
St	ructure Type (check one)			S	tructure Mat	teri	al (check all	th	at apply)	
Br	idge Construction Style			De	eck Material	Be	am Material	Er	nd/Back Wall I	Material
0	Cast-in-place	Pre-stressed G	Girder		Metal Concrete	H	None	\square	Concrete Timber	
				┢	Timber		Steel	\vdash	Stone/Masonry	
\cup	Flat Slab/Box	O Steel I-beam			Open grid		Timber		Other:	
0	Truss Side View	O Covered		E	Other:		Other:	Cr	reosote Evider	nce
0	Parallel Box Beam	Other:		Сι	ulvert Material	1		Ö	Yes Unknown	O No
Сι	Ilvert Type	Other Structur	е	×	Metal Concrete			No	otes:	
0	Box				Plastic					
8	Pipe/Round	O			Stone/Masonry					
Č	rossings Traversed (check all th	vat annlv)		S		На	hitat (check	all	that apply)	
X	Bare ground	Open vegetatic	nn	K	Aaricultural	T Tu		X	Grassland	
	Rip-rap	Closed vegetat	tion	Ê	Commercial			Ë	Ranching	
	Flowing water	Railroad			Residential-urba	n			Riparian/wetland	
Ľ	Standing water	Road/trail - Typ	pe:	X	Residential-rural				Mixed use	
X	Seasonal water	Other:		X	Woodland/forest	ed			Other:	
Ar	eas Assessed (check all that ap	ply)								
Ch	eck all areas that apply. If an area is not	present in the str	ructure, check the "not pres	sent	" box.				t-ti-a an indiac	ام
	cument all bat indicators observed during	I the assessment	I. Include the species prese	eni,				nei	Itation as inuica	v
Ar	ea (check II assessed)	Assessment	i Notes	E	Vidence of E	Sat	s (include pri	101(os ir present,)
	All crevices and cracks.	X Not present		-	Visual - live #		dead #		Audible	Species
h	imperfections in concrete	1		F	Guano		ueau #	\vdash	Photos	
μ	Other structures: soffits, rafters, attic	1			Staining				Thetee	
	areas	I								
	· · · · · · · · · · · · · · · · · · ·	Not present			1				Audible	Species
X	Concrete surfaces (open roosting on			┢	Visual - live #		dead #		Odor	
· ·	concrete)	NO eviden	ICE OF Bais	┝	Guano Staining				Photos	-
┝	··	X Not present		┢	Stanning				Audible	Species
\vdash	Spaces between concrete end walls			1_	Visua <u>l</u> - live #		dead #		Odor	
⊢	and the bridge deck	1			Guano				Photos]
<u> </u>					Staining				1	
	Crack between concrete railings on top	X Not present		-	Vieual - live #		# heeb	\vdash	Audible	Species
\square		1		F	Guano		ueau 7r	⊢	Photos	
	Railing	l			Staining				1 110101	
	· · · · · · · · · · · · · · · · · · ·	X Not present		F	1				Audible	Species
	Vertical surfaces on concrete I-beams				Visual - live #		dead #		Odor	
	1	1		┢	Guano Staining				Photos	
	/·	X Not present		┢	Otaning				Audible	Species
\vdash	Spaces between walls, ceiling joists			1_	Visua <u>l</u> - live #		dead #		Odor	
⊢	Spaces between wans, centry joists	1			Guano				Photos]
<u> </u>	·'	Ltollblat propert		┥—	Staining				A could be	0
	Ween holes, scupper drains, and	X Not present			Visual - live #		dead #	⊢	Audible	Species
	inlets/pipes	1			Guano		doud ,,	H	Photos	-
					Staining				r	
	· · · · · · · · · · · · · · · · · · ·	X Not present		F					Audible	Species
	All guiderails	1			Visual - live #		dead #		Odor	
	1	1		\vdash	Staining				Photos	-
-	/·	X Not present			Gtanning				Audible	Species
	All expansion joints			╘	Visual - live #		dead #		Odor	
		1			Guano				Photos	
	<u> </u>				Staining					
Na	ame: Rick Schmunk			Si	gnature: Ric	k S	Schmunk			

of /	te & Time Assessment 4/3/2024	DOT Project Number 51521	Ro Ca	arried L6	52A	۸	Co	ounty Morrill	
Fee Str	<u>deral</u> <u>ucture ID</u> SL62A 00648	Structure Coordinates (latitude and longitude) MM 6.48	<u>Str</u> (ar	ructure Height oproximate)			<u>St</u> Le	ructure ength	
St	ructure Type (check one)		St	tructure Mat	teri	al (check al	l th	at apply)	
Bri	idge Construction Style		De	eck Material	Be	am Material	Er	nd/Back Wall	Material
0	Cast-in-place	OPre-stressed Girder	\mid	Metal	H	None	┡	Concrete Timber	
È				Timber		Steel	┢	Stone/Masonry	
\circ	Flat Slab/Box			Open grid		Timber	L	Other:	
0		O Covered	E	Other:		Other:	Сі	reosote Evide	ence
0	Parallel Box Beam	Other:	Сι	ulvert Material			00	Yes	O No
Си	ılvert Type	Other Structure	Ě	Metal Concrete			Ň	otes:	
\odot	Box	/ _ · · · · · · · · · · · · · · · · · ·	Ë	Plastic					
Ó	Pipe/Round	O '		Stone/Masonry			1		
0	Other:			Other:	_				
Cr	ossings Traversed (check all th	at apply)	Sı	urrounding	На	bitat (check	al	I that apply)	
Ц	Bare ground	X Open vegetation	\mathbf{X}	Agricultural			X	Grassland	
Н	Rip-rap	Closed vegetation	┡	Commercial Bosidontial-urbai	~		┝	Ranching Biparian/wetlan	4
H	Flowing water	Road/trail - Type:	╟┤	Residential-urba	[]		┢	Mixed use	a
\times	Seasonal water	Other:	\mathbf{X}	Woodland/forest	ed			Other:	
Ar	reas Assessed (check all that ap	nlv)							
Ch	eck all areas that apply. If an area is not	present in the structure, check the "not pres	enť	" box.					
Do	cument all bat indicators observed during	the assessmen <u>t. Include the species pres</u> ε	ent,	if known, and p	rovi	de ph <u>oto docu</u>	m <u>e</u> i	ntatio <u>n as indic</u>	ated.
Ar	ea (check if assessed)	Assessment Notes	E١	vidence of E	Bat	s (include pl	not	os if presen	t)
	All crevices and cracks:	X Not present	Ē			• (Audible	Species
	Bridges/culverts: rough surfaces or		Ŀ	Visual - live #		dead #		Odor	╋ ┙ ╵ ╽
	imperfections in concrete	1		Guano				Photos	
	Other structures: soffits, rafters, attic	1		Staining					
Ц	areas		┝	1			i.	The state	
	Concrete surfaces (open roosting on	Not present	-b	Visual - live #		dead #	\vdash	Audible	Species
\mathbf{X}	concrete)	NO evidence of Bats	F	Guano		ueau m	┢	Photos	
				Staining				J	f
							-	Audible	
		X Not present	F					4	Species
	Spaces between concrete end walls	X Not present	Ē	Visual - live #		dead #		Odor	Species
	Spaces between concrete end walls and the bridge deck	X Not present		Visual - live # Guano Staining		dead #		Odor Photos	Species
	Spaces between concrete end walls and the bridge deck	Not present		Visual - live # Guano Staining		dead #		Odor Photos Audible	Species
	Spaces between concrete end walls and the bridge deck Crack between concrete railings on top of the bridge deck Gap	Not present Not present		Visual - live # Guano Staining Visual - live #		dead #		Odor Photos Audible Odor	Species Species
	Spaces between concrete end walls and the bridge deck Crack between concrete railings on top of the bridge deck Gap Railing	Not present Not present		Visual - live # Guano Staining Visual - live # Guano		dead # dead #		Odor Photos Audible Odor Photos	Species
	Spaces between concrete end walls and the bridge deck Crack between concrete railings on top of the bridge deck Gap Railing	Not present Not present		Visual - live # Guano Staining Visual - live # Guano Staining		dead # dead #		Odor Photos Audible Odor Photos	Species
	Spaces between concrete end walls and the bridge deck Crack between concrete railings on top of the bridge deck Gap Railing	Not present Not present Not present Not present		Visual - live # Guano Staining Visual - live # Guano Staining Visual - live #		dead #		Odor Photos Audible Odor Photos Audible	Species Species
	Spaces between concrete end walls and the bridge deck Crack between concrete railings on top of the bridge deck Gap Railing	Not present Not present Not present Not present		Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano		dead # dead # dead #		Odor Photos Audible Odor Photos Audible Odor Photos	Species Species Species Species
	Spaces between concrete end walls and the bridge deck Crack between concrete railings on top of the bridge deck Gap Railing	Not present Not present Not present Not present		Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining		dead # dead # dead #		Odor Photos Audible Odor Photos Audible Odor Photos	Species Species Species Species
	Spaces between concrete end walls and the bridge deck Crack between concrete railings on top of the bridge deck Gap Railing Vertical surfaces on concrete I-beams	Not present Not present Not present Not present Not present		Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining		dead # dead # dead #		Odor Photos Audible Odor Photos Audible Odor Photos Audible	Species Species Species
	Spaces between concrete end walls and the bridge deck Crack between concrete railings on top of the bridge deck Gap Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists	Not present Not present Not present Not present Not present Not present		Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining Visual - live #		dead # dead # dead # dead #		Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Audible	Species Species Species Species Species
	Spaces between concrete end walls and the bridge deck Crack between concrete railings on top of the bridge deck Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists	X Not present		Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano		dead # dead # dead # dead #		Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos	Species Species Species Species Species
	Spaces between concrete end walls and the bridge deck Crack between concrete railings on top of the bridge deck Gap Railing → ↓ Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists			Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining		dead # dead # dead # dead #		Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible	Species Species Species Species Species
	Spaces between concrete end walls and the bridge deck Crack between concrete railings on top of the bridge deck Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists Weep holes, scupper drains, and	X Not present		Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining Visual - live #		dead # dead # dead # dead # dead #		Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos	Species Species Species Species Species Species
	Spaces between concrete end walls and the bridge deck Crack between concrete railings on top of the bridge deck Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes	X Not present		Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining Visual - live #		dead # dead # dead # dead # dead #		Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos	Species Species Species Species Species Species Species
	Spaces between concrete end walls and the bridge deck Crack between concrete railings on top of the bridge deck Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes			Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining		dead # dead # dead # dead # dead #		Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos	Species Species Species Species Species Species
	Spaces between concrete end walls and the bridge deck Crack between concrete railings on top of the bridge deck Gap Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes	X Not present		Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining Visual - live # Guano Staining		dead # dead # dead # dead # dead # dead #		Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos	Species Species Species Species Species Species Species Species
	Spaces between concrete end walls and the bridge deck Crack between concrete railings on top of the bridge deck Gap Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes	X Not present		Visual - live # Guano Staining Visual - live # Guano		dead # dead # dead # dead # dead # dead #		Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos	Species Species Species Species Species Species Species Species
	Spaces between concrete end walls and the bridge deck Crack between concrete railings on top of the bridge deck Gap Railing	X Not present		Visual - live # Guano Staining Visual - live # Guano Staining		dead # dead # dead # dead # dead # dead #		Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos	Species Species Species Species Species Species Species Species
	Spaces between concrete end walls and the bridge deck Crack between concrete railings on top of the bridge deck Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes All guiderails			Visual - live # Guano Staining Visual - live # Guano Staining		dead # dead # dead # dead # dead # dead #		Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos	Species
	Spaces between concrete end walls and the bridge deck Crack between concrete railings on top of the bridge deck Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes All guiderails	X Not present X Not present		Visual - live # Guano Staining Visual - live # Guano Staining		dead # dead # dead # dead # dead # dead # dead # dead #		Odor Photos Audible Ddor Photos Audible Ddor Photos Audible Ddor Photos	Species
	Spaces between concrete end walls and the bridge deck Crack between concrete railings on top of the bridge deck Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes All guiderails	X Not present		Visual - live # Guano Staining Visual - live # Guano Staining		dead #		Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos	Species
	Spaces between concrete end walls and the bridge deck Crack between concrete railings on top of the bridge deck Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes All guiderails All expansion joints	X Not present		Visual - live # Guano Staining Visual - live # Guano Staining		dead # dead # dead # dead # dead # dead # dead #		Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos	Species

Da of	te & Time Assessment 4/3/2024	DOT Project Number 51521	Ro Ca	oute/Facility arried	62A	λ	Co	ounty Morrill	
Fe Sti	<u>deral</u> ructure IDSL62A 00740	Structure Coordinates (latitude and longitude) MM 7.40	<u>Sti</u> (a)	<u>ructure Height</u> pproximate)	_		<u>Str</u> Le	ructure ngth	
S	ructure Type (check one)		S	tructure Mat	teri	al (check all	th	at apply)	
Br	idge Construction Style		De	eck Material	Be	am Material	Er	nd/Back Wall N	Naterial
O	Cast-in-place	O Pre-stressed Girder	┡	Metal	┞┦	None	\vdash	Concrete Timber	
			┢	Timber	H	Steel	\vdash	Stone/Masonry	
\cup	Flat Slab/Box			Open grid		Timber		Other:	
0			E	Other:		Other:	Cr	reosote Evider	nce
0	Parallel Box Beam	Other:	Сι	ulvert Material	!		0	Yes Unknown	O No
Сι	Jvert Type	Other Structure	Ě	Metal Concrete			No	otes:	
0	Box	Í_I	E	Plastic					
Q	Pipe/Round			Stone/Masonry					
0	Other:		Ļ	Other:			L		
C	rossings Traversed (check all th	at apply)	S	urrounding	Ha	bitat (check	all	that apply)	
Ě	Bare ground	Open vegetation	씍	Agricultural		ľ	Ŕ	Grassland	
\vdash	Rip-rap	Railroad	╟─	Residential-urbar	n		P	Riparian/wetland	
\vdash	Standing water	Road/trail - Type:	\mathbf{x}	Residential-rural			F	Mixed use	
X	Seasonal water	Other:	\times	Woodland/forest	ed			Other:	
A	reas Assessed (check all that ap	(ylqu							
Ch	eck all areas that apply. If an area is not	present in the structure, check the "not pres	ent	i" box.					
Do	cument all bat indicators observed during	ງ the assessment. Include the species prese	ent,	if known, and p	orovi	de photo docun	ner	ntation as indica	ted.
A	r ea (check if assessed)	Assessment Notes	E	vidence of E	<u>3at</u>	s (include ph	ot	os if present))
	All crevices and cracks:	X Not present						Audible	Species
	Bridges/culverts: rough surfaces or	1		Visual - live #		dead #	Ĺ	Odor	
	imperfections in concrete	1	┝	Guano		/		Photos	
	Other structures: soffits, ratters, attic	1	\vdash	Stairing			I		
┝	areas	Not present	\vdash	1				Audible	Species
\vdash	Concrete surfaces (open roosting on		┺	Visual - live #		dead #		Odor	
\vdash	concrete)	NO evidence of Bats		Guano				Photos	
	·	1	╧	Staining		!		1	
	Spaces between concrete end walls	X Not present	-	Visual - live #		dead #	⊢	Audible	Species
	and the bridge deck	1	F	Guano		deau #	⊢	Photos	
[1		Staining		ï			
	Crack between concrete railings on top	X Not present	F	1		ı		Audible	Species
	of the bridge deck Gap		F	Visual - live #		dead #		Odor	
ļ	Railing	1	\vdash	Guano		!		Photos	
┝		Y Not present	╘	Staming			_	Audible	Species
┝	Vertical surfaces on concrete L beems		┞	Visual - live #		dead #		Odor	Opence
		1		Guano				Photos	
Ļ	·		╇	Staining		!		1 s	
		X Not present	Ŀ	Visual - live #		dead #	┝	Audible	Species
	Spaces between walls, ceiling joists	1	F	Guano			\vdash	Photos	
				Staining					
		X Not present	F					Audible	Species
	Weep holes, scupper drains, and	1	F	Visual - live #		dead #	L	Odor	
	iniets/pipes	1	\vdash	Staining		ł	┝─	Photos	
	<u> </u>	Not present	⊨					Audible	Species
	All quidoraile		1_	Visual - live #		dead #		Odor	
┡─	All guiderans	1		Guano				Photos	
	ļ		ᄂ	Staining		!		1 A 1911	
		X Not present	┢	Vieual - live #		# head	⊢	Audible	Species
	All expansion joints	1	F	Guano		deau #	⊢	Photos	
l _		1		Staining		!		1	
					Station of the local division of the local d		-		

of /	<u>te & Time</u> <u>Assessment</u> 4/3/24	DOT Project Number 51521	Route/Facility Carried HWY 26			<u>Cc</u>	County Scottsbluff				
Fe Str	<u>deral</u> <u>ucture ID</u> S026 03470	Structure Coordinates (latitude and longitude) MM 34.70	<u>Structure He</u> (approximate	<u>eight</u> ∋) 10'		<u>Sti</u> Le	ngth 83'				
St	ructure Type (check one)		Structure	Mater	ial (check al	l th	at apply)				
Br	idge Construction Style		Deck Mater	rial Be	eam Material	Er	nd/Back Wal	l Material			
0	Cast-in-place	Pre-stressed Girder	Metal		None	×	Concrete				
			Timber	^^	Steel	┢	Stone/Masonry	1			
\circ	Flat Slab/Box	O Steel I-beam ⊥ ⊥ ⊥	Open grid		Timber		Other:				
0		O Covered	Other:		Other:	Сі	reosote Evid	ence			
0	Parallel Box Beam			terial		0	Yes Unknown	O No			
Си	ılvert Type	Other Structure	Metal Concrete				<u>otes:</u>				
0	Box		Plastic								
0	Pipe/Round	0	Stone/Mas	onry							
	rossings Travorsod (check all th	l l pat apply)	Surround	ing Ha	hitat (chock	ി	that apply)				
X	Bare ground	Open vegetation					Grassland				
\hat{X}	Rip-rap	X Closed vegetation	Commercia	al		┢	Ranching				
X	Flowing water	Railroad	Residentia	l-urban		È	Riparian/wetlar	nd			
	Standing water	Road/trail - Type:	Residentia	l-rural			Mixed use				
	Seasonal water	Other:	Woodland/	forested/			Other: Trees alnon	g banks			
Ar	reas Assessed (check all that ap	pply)									
Ch	eck all areas that apply. If an area is not	present in the structure, check the "not pres	ent" box.								
Do	cument all bat indicators observed during	g the assessment. Include the species prese	ent, if known, a	and prov	ide photo docu	mer	ntation as indi	cated.			
Ar	rea (check if assessed)	Assessment Notes	Evidence	of Bat	s (include pl	hot	os if preser	nt)			
	All crevices and cracks:	Not present					Audible	Specie	s		
	Bridges/culverts: rough surfaces or	NO evidence of Bats	Visual - live	e #	dead #		Odor	-			
\mathbf{X}	Imperfections in concrete	NO evidence of bals	Staining				Photos	-			
	other structures: sollits, railers, allic		etanning			1					
		Not present				1	Audible	Specie	s		
	Concrete surfaces (open roosting on		Visual - live	Visual - live # dead #			Odor				
\square	concrete)	NO evidence of Bats	Guano				Photos				
			Staining								
	Spaces between concrete end walls			o #	dead #		Audible	Specie	S		
\mathbf{X}	and the bridge deals		Guano				()dor				
	and the bridde deck	INO evidence of Bats	Guano				Odor Photos	_			
	and the bridge deck	NO evidence of Bats	Guano Staining				Odor Photos	-			
	Crack between concrete railings on top	NO evidence of Bats	Guano				Odor Photos Audible	Specie	s		
\times	Crack between concrete railings on top of the bridge deck Gap	NO evidence of Bats	Guano Staining Visual - live	e #	dead #		Audible Odor	Specie	S		
X	Crack between concrete railings on top of the bridge deck Gap Railing	NO evidence of Bats NO evidence of Bats	Guano Visual - live Guano	e #	dead #		Odor Photos Audible Odor Photos	Specie	S		
\times	Crack between concrete railings on top of the bridge deck Gap Railing	NO evidence of Bats NO evidence of Bats	Guano Staining Visual - live Guano Staining	e #	dead #		Odor Photos Audible Odor Photos	Specie	s		
X	Crack between concrete railings on top of the bridge deck Gap Railing	NO evidence of Bats NO evidence of Bats NO evidence of Bats Not present	Guano Staining Visual - live Guano Staining Visual - live	e #	dead # dead #		Odor Photos Odor Photos Audible Odor	Specie	s		
X	Crack between concrete railings on top of the bridge deck Gap Railing I Concrete I-beams	NO evidence of Bats Not present NO evidence of Bats Not present NO evidence of Bats	Guano Staining Visual - live Guano Staining Visual - live Guano	e #	dead # dead #		Odor Photos Odor Photos Audible Odor Photos	Specie	s		
X	Crack between concrete railings on top of the bridge deck Gap Railing → ↓	NO evidence of Bats Not present NO evidence of Bats Not present NO evidence of Bats	Guano Staining Visual - live Guano Staining Visual - live Guano Staining	e #	dead # dead #		Odor Photos Odor Photos Audible Odor Photos	Specie	s		
XX	Crack between concrete railings on top of the bridge deck Gap Railing A Concrete I-beams	NO evidence of Bats Not present NO evidence of Bats Not present NO evidence of Bats NO evidence of Bats X Not present	Visual - live Guano Visual - live Guano Staining Visual - live Guano Staining	e #	dead # dead #		Odor Photos Audible Odor Photos Audible Odor Photos Audible	Specie	s s		
XX	Crack between concrete railings on top of the bridge deck Gap Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists	NO evidence of Bats	Visual - live Guano Visual - live Guano Staining Visual - live Guano Staining Visual - live Guano	e # e # e #	dead # dead # dead #		Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos	Specie	S S		
	Crack between concrete railings on top of the bridge deck Gap Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists	NO evidence of Bats X Not present	Visual - live Guano Visual - live Guano Staining Visual - live Guano Staining Visual - live Guano Staining Staining	e # e # e #	dead # dead # dead #		Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos	Specie	s s		
	Crack between concrete railings on top of the bridge deck Gap Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists	NO evidence of Bats Not present NO evidence of Bats Not present NO evidence of Bats X Not present	Visual - live Guano Visual - live Guano Staining Visual - live Guano Staining Visual - live Guano Staining	e # e # e #	dead # dead # dead #		Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible	Specie	s s s		
	Crack between concrete railings on top of the bridge deck Gap Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists Weep holes, scupper drains, and	NO evidence of Bats Not present NO evidence of Bats Not present NO evidence of Bats X Not present	Visual - live Guano Staining Visual - live Guano Staining Visual - live Guano Staining Visual - live Guano Staining	e # e # e #	dead # dead # dead # dead #		Audible Odor Photos Photos Audible Odor Photos Audible Odor Photos Audible Odor Audible Odor	Specie	s s s		
	Crack between concrete railings on top of the bridge deck Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes	NO evidence of Bats Not present NO evidence of Bats Not present NO evidence of Bats X Not present	Visual - live Guano Staining Visual - live Guano Staining Visual - live Guano Staining Visual - live Guano Staining	e # e # e #	dead # dead # dead # dead #		Audible Odor Photos Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos	Specie	s s s		
	and the bridge deck Crack between concrete railings on top of the bridge deck Gap Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes	NO evidence of Bats Not present NO evidence of Bats Not present NO evidence of Bats X Not present	Visual - live Guano Staining Visual - live Guano Staining Visual - live Guano Staining Visual - live Guano Staining	e # e # e #	dead # dead # dead # dead #		Audible Odor Photos Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos	Specie	s s s		
	Crack between concrete railings on top of the bridge deck Gap Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes	NO evidence of Bats Not present NO evidence of Bats Not present NO evidence of Bats X Not present X Not present Not present	Visual - live Guano Staining Visual - live Guano Staining Visual - live Guano Staining Visual - live Guano Staining Visual - live Guano	e # e # e # e #	dead # dead # dead # dead # dead #		Audible Odor Photos Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos	Specie	s s s s		
	and the bridge deck Crack between concrete railings on top of the bridge deck Gap Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes All guiderails	NO evidence of Bats Not present NO evidence of Bats Not present NO evidence of Bats X Not present X Not present Not present Not present	Visual - live Guano Staining Visual - live Guano Staining Visual - live Guano Staining Visual - live Guano Staining Visual - live Guano Staining	e # e # e # e #	dead # dead # dead # dead # dead #		Odor Photos Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos	Specie	s s s		
	and the bridge deck Crack between concrete railings on top of the bridge deck Gap Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes All guiderails	NO evidence of Bats Not present NO evidence of Bats Not present NO evidence of Bats X Not present X Not present Not present Not present Not present	Guano Staining Visual - live Guano Staining	e # e # e # e # e #	dead # dead # dead # dead # dead #		Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos	Specie	s s s		
	and the bridge deck Crack between concrete railings on top of the bridge deck Gap Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes All guiderails	NO evidence of Bats Not present NO evidence of Bats Not present NO evidence of Bats X Not present X Not present	Visual - live Guano Staining Visual - live Guano Staining Visual - live Guano Staining Visual - live Guano Staining Visual - live Guano Staining	e # e # e # e # e #	dead # dead # dead # dead # dead #		Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos	Specie	s s s s		
	and the bridge deck Crack between concrete railings on top of the bridge deck Gap Railing Image: Image deck Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes All guiderails All expansion joints	NO evidence of Bats Not present NO evidence of Bats Not present NO evidence of Bats X Not present NO evidence of Bats Not present	Guano Guano Staining Visual - live Guano Staining	e # e # e # e # e # e #	dead # dead # dead # dead # dead # dead #		Odor Photos Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos	Specie	s s s s		
	and the bridge deck Crack between concrete railings on top of the bridge deck Gap Railing Image: Image deck Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes All guiderails All expansion joints	NO evidence of Bats Not present NO evidence of Bats Not present NO evidence of Bats X Not present X Not present Not present Not present Not present Not present Not present NO evidence of Bats Not present NO evidence of Bats Not present NO evidence of Bats	Guano Guano Staining Visual - live Guano Staining	e # e # e # e # e # e # e #	dead # dead # dead # dead # dead # dead #		Odor Photos Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos	Specie	s s s s		
	and the bridge deck Crack between concrete railings on top of the bridge deck Gap Railing Vertical surfaces on concrete I-beams Spaces between walls, ceiling joists Weep holes, scupper drains, and inlets/pipes All guiderails All expansion joints	NO evidence of Bats Not present NO evidence of Bats Not present NO evidence of Bats X Not present NO evidence of Bats Not present NO evidence of Bats Not present NO evidence of Bats	Visual - live Guano Staining Staining Staining Staining	e # e # e # e # e # e #	dead # dead # dead # dead # dead # dead #		Odor Photos Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos Audible Odor Photos	Specie	s s s s		

Dat of A	<u>e & Time</u> <u>Issessment</u> 4/3/2024	DOT Project Number 51521	Route/Facility Carried 26				County Scottsbluff					
<u>Fed</u> Strι	<u>eral</u> _{icture ID} S026 03505	Structure Coordinates (latitude and longitude) MM 35.05	<u>Sti</u> (aț	ructure Height pproximate)			<u>Sti</u> Le	ngth 117'				
Str	ructure Type (check one)		St	tructure Mat	teri	i al (check all	th	at apply)				
Brie	dge Construction Style		Deck Material Beam Material					End/Back Wall Material				
0	Cast-in-place	OPre-stressed Girder	⊢	Metal		None	┝	Concrete				
			┢─	Timber	Н	Steel	⊢	Stone/Masonry				
O	Flat Slab/Box	O Steel I-beam ⊥ ⊥ ⊥	F	Open grid	Г	Timber		Other:				
0		Covered		Other:		Other:	Сı	reosote Evide	nce			
0	Parallel Box Beam	Other:	Culvert Material				000	Yes Unknown	0	No		
Cul	Ivert Type Other Structure			Metal			Nc	<u>otes:</u>				
\odot	Box		ĥ	Plastic								
ŏ	Pipe/Round			Stone/Masonry								
Ŏ	Other: Tripple Box			Other:								
Cre	ossings Traversed (check all th	nat apply)	Sı	urrounding	На	bitat (check	all	l that apply)				
	Bare ground	X Open vegetation	X	Agricultural		•		Grassland				
	Rip-rap	X Closed vegetation	\times	Commercial			\times	Ranching				
\mathbf{X}	Flowing water	Railroad		Residential-urba	n			Riparian/wetland				
	Standing water	Road/trail - Type:	×	Residential-rural	o d		┝	Mixed use				
		Other:		woodland/lorest	ea			Other:				
Are	eas Assessed (check all that ap	(PIV)										
Check all areas that apply. If an area is not present in the structure, check the "not present" box.												
Document all bat indicators observed during the assessment. Include the species present, if known, and provide photo documentation as indicated.												
Are	ea (check if assessed)	Assessment Notes	E١	Vidence of E	dence of Bats (Inclu		IOI	os it present	ηι) Ι Ιου Ι			
1	All crevices and cracks:	Not present		Vieual live #		dood #	L	Audible		Species		
	Bridges/cuivens: rough surfaces or		F	Guano		ueau #	<u> </u>	Daor Photos				
L-L'	Other structures: soffits, rafters, attic		⊢	Staining				1 110103				
	areas			<u> </u>								
		Not present		4				Audible		Species		
∇	Concrete surfaces (open roosting on		L	Visual - live #		dead #		Odor				
	concrete)	NO evidence of Bats		Guano				Photos				
\vdash		V Not present	∟	Staining			<u> </u>	Audible		Chaolog		
	Spaces between concrete end walls			Visual - live #		dead #	┢──	Odor	<u> </u>	opecies		
	and the bridge deck			Guano			⊢	Photos				
	5			Staining								
	Crack between concrete railings on top	X Not present						Audible		Species		
	of the bridge deck Gap			Visual - live #		dead #	L	Odor				
	Railing →		⊢	Staining				Photos				
\vdash		X Not present	E					Audible		Species		
H,	Vertical surfaces on concrete L beams		L	Visual - live #		dead #		Odor				
Н			Ĺ	Guano				Photos				
\square				Staining				Accellete		0		
Ц				Visual - live #		dead #	⊨	Odor	Ľ	opecies		
	Spaces between walls, ceiling joists			Guano			⊢	Photos				
				Staining				•				
		X Not present						Audible		Species		
	vveep noies, scupper drains, and		F	Visual - live #		dead #	-	Odor Dhata				
	miers/pipes		⊢	Guario Staining				Photos				
\vdash		X Not present	E					Audible		Species		
Н		<u></u>	<u> </u>	Visual - live #		dead #		Odor				
H			Guano				Photos					
\vdash			Staining									
		X Not present		Vieual livo #		dead #	⊨	Audible	ЦI;	Species		
	All expansion joints		F	Guano		ucau #	┣─	Photos				
	, ,		F	Ctaining								
			L.	Staining								
				Staining								

Da of /	<u>te & Time</u> <u>Assessment</u> 4/3/2024	<u>DOT Project</u> 51521 <u>Number</u>	Route/Facility Carried 26				County Scottsbluff					
Fe Str	^{deral} _{ucture ID} S025 03916	Structure Coordinates (latitude and longitude) MM 39.16	<u>Sti</u> (aț	ructure Height pproximate)			<u>Sti</u> Le	ngth 85'				
St	ructure Type (check one)		St	tructure Mat	teri	al (check all	th	at apply)				
Br	idge Construction Style		Deck Material Beam Material					End/Back Wall Material				
0	Cast-in-place	OPre-stressed Girder	⊢	Metal		None	_	Concrete				
				Timber	H	Steel	⊢	Stone/Masonry				
\circ	Flat Slab/Box	O Steel I-beam ⊥ ⊥ ⊥	F	Open grid	H	Timber		Other:				
0		Covered		Other:	Ε	Other:	Сı	reosote Evide	nce			
0	Parallel Box Beam	Other:	Culvert Material				00	Yes Unknown	0	No		
Сι	Ilvert Type	Other Structure	X	Metal Concrete			Nc	<u>otes:</u>				
0	Box		Ť	Plastic			1					
0	Pipe/Round	O		Stone/Masonry								
0	Other: Double Box			Other:								
Cr	ossings Traversed (check all th	at apply)	Sı	urrounding	На	bitat (check	all	that apply)				
	Bare ground	X Open vegetation	×	Agricultural				Grassland				
	Rip-rap	Closed vegetation		Commercial Desidential urbas			┢	Ranching				
Ě	Flowing water	Railfoad Road/trail - Type:		Residential-urba	n		┢──	Riparian/wetiand				
	Seasonal water	Other:	ĥ	Woodland/forest	ed		┢	Other:				
٨	was Assassed (check all that an			4				<u>n</u> -				
Ch	Areas Assessed (CNECK all INAI apply) Check all areas that apply. If an area is not present in the structure, check the "not present" how											
Do	Document all bat indicators observed during the assessment. Include the species present box.											
Δr	(check if assessed)	Assessment Notes	Evidence of Bats (include photos if present)									
	All crevices and cracks:	X Not present	Evidence of Bats (include pil					/ 	Species			
	Bridges/culverts: rough surfaces or	Not present		Visual - live #		dead #	┝	Odor		opecies		
	imperfections in concrete			Guano			┢	Photos				
	Other structures: soffits, rafters, attic			Staining								
	areas											
		Not present						Audible		Species		
X	Concrete surfaces (open roosting on	NO avidance of Pata		Visual - live #		dead #	┡	Odor				
	concrete)	NO evidence of Bals		Staining								
		× Not present						Audible		Species		
	Spaces between concrete end walls		L	Visual - live #		dead #		Odor				
	and the bridge deck			Guano				Photos				
			L	Staining				1				
	Crack between concrete railings on top			Visual - live #		dead #		Audible		Species		
\square				Guano			┢	Photos				
	Railing H			Staining								
		X Not present						Audible		Species		
	Vertical surfaces on concrete I-beams			Visual - live #		dead #		Odor				
			⊢	Guano Staining			┡	Photos				
-		X Not present						Audible		Species		
	Spaces between wells, spiling injets			Visual - live #		dead #		Odor				
\square	Spaces between waits, centing joists			Guano				Photos				
				Staining				1		.		
	Ween holes scunner drains and			Visual - live #		dead #	⊢	Audible	\square	Species		
	inlets/pipes		F	Guano		2000 /r	┢	Photos				
				Staining			Photos					
		X Not present		1				Audible		Species		
	All guiderails		F	Visual - live #		dead #	Ĺ	Odor				
	-		Guano				Photos					
X Not present		X Not present	\vdash					Audible		Species		
	All evenesion is inte			Visual - live #		dead #	┢	Odor	<u> </u>			
	All expansion joints			Guano				Photos	1			
				Staining								
	me: Rick Schmunk	Si	anature Ric	k S	Schmunk	_		_				

Da of	te & Time Assessment 4/3/2024	DOT Project Number 51521	Route/Facility Carried 26				County Morrill					
Fe Sti	<u>deral</u> <u>ucture ID</u> S026 04114	Structure Coordinates (latitude and longitude) MM 41.14	<u>St</u> (a	<u>ructure Height</u> pproximate)			<u>Sti</u> Le	<u>ructure</u> 102' <u>ngth</u>				
St	ructure Type (check one)		S	tructure Mat	teri	al (check all	l that apply)					
Br	idge Construction Style		De	Deck Material Beam Material				End/Back Wall Material				
0	Cast-in-place	O Pre-stressed Girder	┡	Metal	H	None	┡	Concrete Timber				
E			┢	Timber	H	Steel	┢	Stone/Masonry				
\cup	Flat Slab/Box		E	Open grid		Timber	L	Other:				
0	Truss Side View		E	Other:	Þ	Other:	Cr	reosote Evider	nce			
0	Parallel Box Beam	Other:	Cı	ulvert Material	!		00	Yes Unknown	O No			
Сι	Ilvert Type	Other Structure	Ě	Metal Concrete			Nc	otes:				
0	Box		È	Plastic								
Q	Pipe/Round	O		Stone/Masonry								
0	Other:		Ļ	Other:			L					
Cı	ossings Traversed (check all th	iat apply)	S	urrounding	Ha	bitat (check	ali	that apply)				
┝	Bare ground	X Open vegetation	4	Agricultural			╞	Grassland				
$\overline{\mathbf{x}}$	Rip-rap Flowing water	Railroad	┢	Residential-urbar	n		┢	Rinarian/wetland				
Ê	Standing water	Road/trail - Type:		Residential-rural				Mixed use				
	Seasonal water	Other:		Woodland/forest	ed			Other: Trees alnong b	ank			
A	eas Assessed (check all that ap	(ylqu										
Ch	Check all areas that apply. If an area is not present in the structure, check the "not present" box.											
Do	Document all bat indicators observed during the assessment. Include the species present, if known, and provide photo documentation as indicated.											
A	ea (check if assessed)	Assessment Notes	E	vidence of E	<u>3at</u>	<mark>s</mark> (include ph	ot	os if present)			
	All crevices and cracks:	X Not present	F					Audible	Species			
	Bridges/culverts: rough surfaces or	1		Visual - live #		dead #	L	Odor				
	imperfections in concrete	1	┝	Guano			┝	Photos				
	Other structures: soffits, ratters, attic	1		Stairing								
	areas	Not present	┢					Audible	Species			
$\overline{\mathbf{\nabla}}$	Concrete surfaces (open roosting on		1_	Visual - live #		dead #		Odor				
\square	concrete)	NO evidence of Bats	Guano				Photos					
			Staining									
Ļ	Spaces between concrete end walls	X Not present	-C	Visual - live #		dead #	┝	Audible	Species			
	and the bridge deck	1	F	Guano			┢	Photos				
				Staining								
	Crack between concrete railings on top	X Not present	F					Audible	Species			
	of the bridge deck Gap	1	F	Visual - live #		dead #	L	Odor				
	Railing H	1	\vdash	Guano Staining			┝	Pnotos				
⊢	/	X Not present	┢	-				Audible	Species			
	Vertical surfaces on concrete I-beams		₽	Visual - live #		dead #		Odor				
┣─	Vertical surfaces on concrete r seame	1	F	Guano			L	Photos				
┝	<u> </u>	V Not procent	╇	Staining			-	Audible	Spacies			
		Not present		Visual - live #		dead #	╞	Odor	opecies			
	Spaces between walls, ceiling joists	1		Guano			L	Photos	1			
				Staining								
	Ween holes, souppor drains, and	X Not present	┢			dood #	┡	Audible	Species			
	weep noies, scupper urains, and	1	F	Guano		deau #	┢	Odor Rhotos				
	iniets/pipes	1		Staining			Photos					
		X Not present	F	1				Audible	Species			
	All quiderails		F	Visual - live #		dead #	F	Odor				
	Ĭ		Guano Staining			Photos						
		X Not present	亡	Stairiirig				Audible	Species			
	All expension jointe		┺	Visual - live #		dead #	┢╴	Odor	opeolog			
\vdash	All expansion joints			Guano			Photos					
				Let the					1			
			┢	Staining								



Environmental Review Report

Project Information

Report Generation Date:							
Project Title:							
User Project Number(s):							
System Project ID:							
Project Type:							
Project Activities:							

9/6/2024 10:14:26 AM Minatare to US-385 51521; NH-26-1(172) NE-CERT-013108 Transportation, Roads/Bridges/Trails - NDOT (not FHWA) Asphalt Patching Bridge Substructure New, Replacement, or Repair - Perennial Bridge Superstructure New, Replacement, or Repair - Perennial Channelization, Intermittent Clearing and Grubbing - Non-woody Vegetation Clearing and Grubbing - Trees & Shrubs Concrete Pavement Repair Culvert New, Replacement, Extension, Repair - Intermittent Culvert New, Replacement, Extension, Repair - Perennial Curb & Gutter Earth Shoulder Construction **Erosion Control - Barriers Erosion Control - Erosion Checks Erosion Control - Inlet/Outlet Protection** Erosion Control - Mulching **Erosion Control - Rolled Erosion Control Erosion Control - Slope Interuption Erosion Control - Vegetation** Fencing (part of transportation construction project) Grading Outside the Hinge Point Grading Within the Hinge Point Guardrail Repair, Replacement, or Installation with Soil Disturbance Habitat Fragmentation, Modification of Connectivity Lighting, Traffic and Pedestrian Signals, Dynamic Message Signs w/ soil disturbance Milling and/or In-place Recycling **Pavement Removal** Paving

Piers Pile Driving - Impact Pile Driving - Vibratory Pipe Jacking & Casing Removal of Structures and Obstructions Resurfacing-Fog/Slurry Seal, Armor Coat/Chip Seal Rock or Gravel Surfacing Signs with Soil Disturbance Stream Channel Impact, Intermittent Stream Channel Impact, Perennial Temporary Crossing, Causeway, Work Platform Trenched Widening Wetland Mitigation 275.23 acres Morrill; Scotts Bluff North Platte Middle North Platte-Scotts Bluff Bayard Drain-North Platte River; Indian Creek; Middle Red Willow Creek; Moffat Drain + **Panhandle Prairies** 021N050W; 021N051W; 021N052W; 021N053W 41.816522 / -103.327514

Project Size: County(s): Watershed(s): Watershed(s) HUC 8: Watershed(s) HUC 12:

Biologically Unique Landscape(s): Township/Range and/or Section(s): Latitude/Longitude:

Contact Information

Organization: Contact Name: Contact Phone: Contact Email: Contact Address: Prepared By: Submitted On Behalf Of: Nebraska Department of Transportation Matthew Greiner 402-479-4419 matthew.greiner@nebraska.gov 1500 Nebraska Parkway Lincoln NE 68502

Project Description

Project Description: This project is 18.47 miles in length and is located on Highways US-26 and L-62A in Scotts Bluff and Morrill Counties, starting 0.41 miles west of the west Minatare corporate limits at mile marker (MM) 32.63 and extending east to the junction of US-26 and L-62A at MM 41.92. The project continues east on L-62A from the junction with US-26 at MM 0+00 to the junction of US-385 and L-62A at MM 9.19. Construction may begin and/or end approximately 1500 feet ahead of or beyond the actual project limits to accommodate transitioning the pavement. The existing roadway on US-26 from MM 32.63 to MM 32.98 consists of a transition section from a 4-lane divided roadway with 12-foot-wide composite pavement lanes, a 14-foot flush median and 10-foot shoulders, of which 8 feet is paved with asphalt to a 3-lane roadway. The existing roadway from MM 32.98 to MM 33.45 consists of two 12-foot-wide composite pavement lanes and a 12-foot two-way center turn lane with shoulders varying from 6 feet with curb and gutter to 10 feet, of which 8 feet is paved with asphalt. The existing roadway on US-26 from MM 33.45 to MM 41.92 and on L-62A from MM 0+00 to MM 9.19 consists of two 12-foot-wide composite pavement lanes and 10-foot shoulders, of which 8 feet is paved with asphalt. The improvements on this project consist of widening US-26 and L-62A from an existing 2-lane roadway to a 4-lane divided roadway with a depressed median using the strategy of constructing new lanes on the north side of the US-26/L-62A corridor and milling and resurfacing the exiting lanes which will remain in place. Improvements include new paving, milling and resurfacing, culvert and storm sewer work, new guardrail, removing and replacing guardrail, a new bridge, new intersections, improved intersections, access relocations (i.e. new frontage roads) and side road modifications. Grading will be required for the entire length of this project. The bridge over Ninemile Creek (Structure Number S026 03470) will be used in place and a new bridge will be built with the new set of lanes. A grade raise of the entire structure is not anticipated. Work will be required in the waterway. Guardrail will be built with the new bridge. The following bridge-size box culverts will be extended: Structure Number S026 03505 (Minatare Drain - Canal), S026 03916 (Irrigation Conveyance), S026 04114 (Wildhorse Creek), SL62A 00116 (Wildhorse Canyon), SL62A 00537 (Tri-State Canal), SL62A 00582 (Tri-State Canal), and SL62A 00613 (Tri-State Canal). The following bridge-size box culverts will be replaced: SL62A 00152 (Irrigation Conveyance), SL62A 00463 (West Water Creek), SL62A 00595 (Red Willow Creek) and SL62A 00648 (Irrigation Conveyance). This project will be constructed under traffic with lane closures controlled by appropriate traffic control devices and practices. Additional property rights will be required to build this project. Access to adjacent properties will be maintained during construction but may be limited at times due to phasing requirements.

The Nebraska Nongame and Endangered Species Conservation Act (NESCA)

The Nebraska Game and Parks Commission (Commission or NGPC) has responsibility for protecting state-listed endangered and threatened species under authority of the Nongame and Endangered Species Conservation Act (NESCA) (Neb. Rev. Stat. § 37-801 to 37-814). Pursuant to §37-807 (3)(c) of NESCA, all state agencies shall, in consultation with the Commission, ensure projects they authorize (i.e., issue a permit for), fund or carry out do not jeopardize the continued existence of state-listed endangered or threatened species or result in the destruction or modification of habitat of such species which is determined by the Commission to be critical. If a proposed project may affect state-listed species or designated critical habitat, further consultation with the Commission is required.

Informal consultation pursuant to NESCA can be completed by using the Conservation and Environmental Review Tool (CERT). The CERT analyzes the project type and location, and based on the analysis, provides information about potential impacts to listed species, habitat questions and/or conservation conditions.

- If project proponent agrees to implement conservation conditions, as outlined in the report and applicable to the project type, then this document serves as documentation of consultation with the Commission and the following actions can be taken to move forward with the project:
 - Sign the report in the designated areas, and
 - Upload the signed and dated report into the project within CERT, and
 - Change the edit status to Final from Draft status.
- When these actions are completed, no additional coordination (i.e., contacting the Commission) is required.
- If the report indicates further consultation is required in the Overall Results section on the following page and/or conservation conditions cannot be met, then the following actions must be taken:
 - Project proponent is required to contact and consult with the Commission. Contact information can be found under the Additional Considerations section.

Review the Overall Results section on the following page for further instructions.

Disclaimer

The U.S. Fish and Wildlife Service has responsibility for conservation and management of fish and wildlife resources for the benefit of the American public under the following authorities: 1) Endangered Species Act; 2) Fish and Wildlife Coordination Act; 3) Bald and Golden Eagle Protection Act; and 4) Migratory Bird Treaty Act.

It is recommended that a project start with requesting an Official Species List via the Information for Planning and Consultation (IPaC) Tool, to begin informal consultation with the U.S. Fish & Wildlife Service.

The information generated in a CERT Environmental Review Report DOES NOT satisfy consultation obligations between the lead federal agency and the U.S. Fish and Wildlife Service pursuant to the Endangered Species Act (ESA).

For the purposes of ESA, the information in this report should be considered as technical assistance, and does not serve as the U.S. Fish and Wildlife Service's concurrence letter, even if the user signs and agrees to implement conservation conditions in order to satisfy consultation requirements of NESCA.

Review the Additional Considerations section for further information.

Overall Results

The following result is based on a detailed analysis of your project.

• The project may have potential impacts on state-listed species. More information is needed, please answer the questions under the Question and Conservation Conditions section. If conservation conditions are required, review the Conservation Conditions Agreement section. Additional consultation with the Nebraska Game and Parks Commission may or may not be required; please review all the information provided in this document.

Additional Information

S-3: Revegetation. All permanent seeding and plantings (excluding managed landscaped areas) shall use species and composition native to the project vicinity as shown in the Plan for the Roadside Environment. However, within the first 16 feet of the road shoulder, and within high erosion prone locations, tall fescue or perennial ryegrass may be used at minimal rates to provide quick groundcover to prevent erosion, unless state or federally listed threatened or endangered plants were identified in the project area during surveys. If listed plants were identified during survey, any seed mix requirements identified during resource agency consultations shall be used for the project. (NDOR Environmental)

Questions and Conservation Conditions

Blowout Penstemon

This project is within the range of the state and federally listed endangered blowout penstemon (*Penstemon haydenii*). Habitat Question for Blowout Penstemon:

Does the Action Area or the area of potential effect include open areas of bare sand?

_____ Unknown

_____ No. Conservation measures are not needed for this species unless otherwise indicated.

_____ Yes. The following conservation measures must be implemented in order to avoid adverse impacts on on Blowout Penstemon:

If "YES" was checked for the habitat question, then this project "MAY AFFECT" blowout penstemon. FURTHER CONSULTATION IS REQUIRED even if conservation measures are listed for this or other species. Contact the Nebraska Game and Parks Commission and the U.S. Fish and Wildlife Service prior to proceeding with the project.

For Bridge deck repair, Bridge deck replacement, Bridge painting, Bridge rail repair/replacement, Bridge superstructure (new, replacement, or repair on ephemeral, intermittent or perennial streams) and/or Pile driving (impact or vibratory): either BOP-1 or BOP-2 (see below) may be implemented in the locations where these activities will take place. For OTHER sources of impacts (other than those mentioned in the previous sentence) which cause soil disturbance in blowout penstemon habitat, implement BOP-1 in those areas.

BOP-1: A qualified biologist will survey according to protocol during the growing season (June - July) prior to the completion of the Process. If the Natural Heritage Database identifies a known occurrence within 1.0 mile of the project, since the year 1975, there will be another survey according to protocol during the growing season immediately prior to construction. If species are not found during the survey, then the May Affect, Not Likely to Adversely Affect stands. If positive finding, then consultation is required.

(NDOT Environmental Note: since BOP-1 is a condition to complete before the completion of the Process, this conservation measure (BOP-1) language is not copied verbatim as a condition in the biology document, NEPA document and Green Sheet. Document the survey finding in the text of the biology document and NEPA document.)

BOP-2: Bridge deck debris will be captured and/or contained to prevent material from falling below the structure. All work will remain on the roadway surface. (District, Contractor)

Northern Long-eared Bat

This project is within the range of the state and federally listed endangered Northern long-eared bat (NLEB) (*Myotis septentrionalis*).

Suitable summer roosting habitat for NLEB consist of forests or woodlots which contain suitable roost trees. In Nebraska, suitable roost trees consist of deciduous and/or pine live or dead trees or snags that are greater than or equal to 3 dbh (diameter at breast height) that exhibit peeling bark or have cracks, crevices or cavities. Linear features such as fencerows, riparian forests, and other wooded corridors are suitable for NLEB if they contain potential roost trees. Individual trees may be considered suitable habitat when they exhibit characteristics of suitable roost trees and are within 1,000 feet of other forested/wooded habitat.

NLEB have also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat when they are within 1000 feet of suitable forested habitat (see above).

Examples of **UN-SUITABLE** habitat for the NLEB include:

- Individual trees that are greater than 1,000 feet from forested/wooded areas;
- Trees found in highly developed urban areas (e.g., street trees, downtown areas) but note that NLEBs sometimes use relatively extensive forested natural areas within urban areas for summer roosting habitat;
- A pure stand of less than 3-inch dbh trees that are not mixed with larger trees.

Habitat Questions for Northern Long-eared Bat:

Is suitable summer habitat, as defined above, located within 1000 feet of the project activities?

____ Unknown.

____ No. Conservation measures are not needed for this species unless otherwise indicated. Additional habitat questions for this species are not applicable if suitable habitat is not present.

____ Yes. The following conservation measures must be implemented in order to avoid adverse impacts on Northern long-eared bat.

If "YES" was checked for the habitat questions, then this project "MAY AFFECT" northern long-eared bat. FURTHER CONSULTATION IS REQUIRED even if conservation measures are listed for this or other species. Contact the Nebraska Game and Parks Commission and the U.S. Fish and Wildlife Service prior to proceeding with the project.

NLEB CM-2: No removal of suitable trees or roosting structures between May 15 and July 31 (maternity roosting season).

Is (are) the culvert(s) greater than or equal to 4 ft in height/diameter AND greater than 130 ft in length?

____ No. This culvert would not be considered suitable habitat for NLEB. Culvert related conservation measures are not necessary.

____Yes. Implement one (not both) of the following conservation measures:

NLEB CM-5 Culvert maintenance and/or removal will not occur between May 15 – July 31 (maternity roosting season), to avoid impacts to northern long-eared bats.

OR

NLEB CM-6 If culvert maintenance and/or removal MUST occur during the northern long-eared bat maternity roosting season (May 15 – July 31), before work may begin, a qualified biologist or trained personnel must first conduct a Culvert Assessment per USFWS's Range-wide Indiana Bat & Northern Long-Eared Bat Survey Guidelines to determine if bat species are present. If bat presence is detected, then FURTHER CONSULTATION is required with Nebraska Game and Parks Commission Environmental Review staff before any work may begin.

Conservation measure NLEB-1 or NLEB-2 is required (not both), in addition to any other conservation measures listed for this species:

NLEB-1: Bridge deck joint replacement over the bridge deck, and bridge deck/superstructure removal activities will not occur between May 15th - July 31st to avoid impacts to the northern long-eared bat maternity roosting period. **OR**

NLEB-2: If bridge deck joint replacement over the bridge deck, or removal of bridge or bridge superstructure occurs during the northern long-eared bat maternity roosting period (May 15th – July 31st), qualified biologists/trained personnel will perform bat roosting surveys prior to the start of these activities at the following locations:

______ (location of suitable roosting habitat). If bat species are found, Qualified Biologist and Project Manager will immediately notify USFWS (<u>nebraskaes@fws.gov</u>) and NGPC (Shaun Dunn 402-471-5419) for additional consultation prior to the start of construction.

Note to Practitioner: The NLEB is not included in the NDOT/FHWA/NGPC/USFWS Matrix Process. If this project is funded by FHWA, utilize the FHWA/USFWS Range-wide Programmatic Agreement and IPaC to review impacts to NLEB. If this project is an NDOT State-Funds-Only, proceed with the review and conservation measures in CERT, and utilize the IPaC NLEB Range-wide Determination Key.

NLEB-3 All phases and aspects of the project shall be modified, to the extent practicable, to avoid tree removal in excess of what is required to implement the project safely. Tree removal shall be limited to removals specified in the project plans, which will be clearly marked in the field.

Swift Fox

This project is within the range of the state-listed endangered swift fox (*Vulpes velox*). Habitat Question for Swift Fox:

Does the action area or area of potential effect include connected suitable habitat that contains vegetation <6 inches in height, including gently rolling to level intact upland grasslands and field borders that are outside of densely populated residential, commercial, industrial areas?

_____ Unknown

_____ No. Conservation measures are not needed for this species unless otherwise indicated.

Yes. The following conservation measures must be implemented in order to avoid adverse impacts on swift fox:

If "YES" was checked for the habitat question, then this project **"MAY AFFECT"** swift fox. **FURTHER CONSULTATION IS REQUIRED** even if conservation measures are listed for this or other species. Contact the Nebraska Game and Parks Commission prior to proceeding with the project.

SF-1: Two weeks prior to the start of construction, a qualified biologist shall survey the environmental study area according to protocol to determine if active swift fox den sites are present. If an active den with young is located and it is outside the project limits, then a buffer zone shall be established around the den and all construction activities shall avoid the buffer until the den is abandoned. If an occupied den with or without young is identified within the project limits or staging areas, NDOT shall immediately coordinate with the NGPC to determine how to proceed. A buffer zone shall be established around the den and all construction activities shall avoid the buffer until NDOT gives approval to enter the buffer area. Between April 1 and August 31, the buffer zone shall be 250 yards around the active den site; other times of the year, the buffer shall be 100 yards around the active den site. (NDOT Environmental)

SF-2: Fencing shall be designed for wildlife safety and wildlife friendly passage with a bottom wire at least 16" from the ground. If different fencing design is required for safety or access control, additional coordination with resource agencies shall be required. (NDOT Design, NDOT Environmental)

SF-3: Fence posts shall not be placed within potential den sites that appear to have animal activity. If fence posts cannot avoid potential den sites that appear to have animal activity, NDOT Environmental will be notified and will reinitiate consultation with resource agencies. Work will not commence until agency concurrence is received. (Contractor) **R-4:** For **listed plants**: Asphalt plants and staging areas for construction supplies and Contractors equipment shall be located in areas that are frequently disturbed such as, but not limited to, field entrances, crop fields, abandoned roadway, farmsteads and roads. If this is not possible, the contractor shall coordinate with NDOT Environmental with a site plan showing the desired staging/stockpile location(s), which will be sited in such a way as to avoid impacting protected species.

NOTE for NDOT Environmental: For activities where equipment may pull off and pull back onto pavement (ex. paving) where a no effect determination was made and the NDOT Biologist knows there is a potential for occupied habitat within 15 feet of the paved road surface, then the NDOT biologist will coordinate with FHWA, NGPC, and USFWS to determine if additional measures should be included in the biology document. This coordination shall occur during the NEPA review and shall be included in the OERCC document.

Conservation Measures Agreement

Based on the information contained in the report, follow the instructions for A, B or C below.

A) If one or more of the habitat questions were answered with "Yes", insert an "X" for one of the two Options below:

Option 1. For all species for which there is habitat present (as indicated by checking "Yes" to a habitat question) I understand and agree to implement and/or incorporate the conservation measures for those species as indicated. By agreeing to implement and/or incorporate the conservation measures for those species as indicated, no further consultation with the Nebraska Game and Parks Commission is required.

Sign and date on the line below, and also sign and date the Certification section. Submit a copy of the signed and dated (i.e. certified) report with any type of permit/application required for the project.

Applicant/project proponent signature

Date

Option 2. I have concerns regarding one or more of the conservation measures. Sign the Certification section below. When submitting the project as "Final" in CERT, please attach a separate document explaining your concerns with the conservation measures and why they cannot be implemented. Then, contact the Nebraska Game and Parks Commission for further information.

B) If one or more habitat questions were answered with "Unknown" then leave your project as "Draft" and contact the Nebraska Game and Parks Commission for more information. Once your concerns are addressed with the Commission, adjust your answer to "Yes" or "No", sign and date under the Certification section, upload the report using the File Attachments feature and change the Edit Status to "Final".

C) If ALL the habitat questions were answered "No" then sign the Certification section below and submit the project as "Final" in CERT. Once these steps are completed, no additional correspondence with the Nebraska Game and Parks Commission is required. Submit a copy of the signed report with any type of permit/application needed for the project.

Additional coordination with the U.S. Fish and Wildlife Service may be necessary depending on the determination made by the lead federal agency pursuant to their obligations under the Endangered Species Act (ESA).

Certification

I certify that ALL the project information in this report (including project location, project size/configuration, project type, project activities, answers to questions) is true, accurate and complete. If the project type, activities, location, size, or configuration of the project change; if a species listing status is reclassified; if a new species is listed; or if any of the answers to any questions asked in this report change, then this document is no longer valid, and re-consultation with the Nebraska Game and Parks Commission is required.

Date

Applicant/project proponent signature

Additional Considerations

Nebraska Game and Parks	U.S. Fish and Wildlife Service	U.S. Army Corps of Engineers								
Commission										
Environmental Review Team	Nebraska Ecological Services	Omaha Regulatory Office								
2200 North 33 Street	9325 South Alda Road	8901 South 154 Street								
Lincoln, NE 68503	Wood River, NE 68883	Omaha, NE 68138								
Phone: (402) 471-5423	Phone: (308) 382-6468	Phone: (402) 896-0896								
Email: ngpc.envreview@nebraska	.gov Email: nebraskaes@fws.gov	Email: NE404Reg@usace.army.mil								

The following federal laws contribute to the conservation and management of fish and wildlife resources in the United States: Endangered Species Act, Bald and Golden Eagle Protection Act, Migratory Bird Treaty Act, Clean Water Act, and the Fish and Wildlife Coordination Act.

Bald and Golden Eagle Protection Act

The federal Bald and Golden Eagle Protection Act (Eagle Act) (16 U.S.C. 668-668c) provides for the protection of the bald eagle (*Haliaeetus leucocephalus*) and golden eagle (*Aquila chrysaetos*). Under the Eagle Act, "take" of eagles, their parts, nests or eggs is prohibited. Disturbance resulting in injury to an eagle or a decrease in productivity or nest abandonment by substantially interfering with normal breeding, feeding, or sheltering behavior is a form of "take."

Nebraska Specific Information

Bald eagles use mature, forested riparian areas near rivers, streams, lakes, and wetlands and occur along all the major river systems in Nebraska. The bald eagle southward migration begins as early as October and the wintering period extends from December-March. The golden eagle is found in arid open country with grassland for foraging in western Nebraska and usually near buttes or canyons which serve as nesting sites. Golden eagles are often a permanent resident in the Pine Ridge area of Nebraska. Additionally, many bald and golden eagles nest in Nebraska from mid-February through mid-July. Disturbances within 0.5-miles of an active nest or within line-of-sight of the nest could cause adult eagles to discontinue nest building or to abandon eggs. Both bald and golden eagles frequent river systems in Nebraska during the winter where open water and forested corridors provide feeding, perching, and roosting habitats, respectively. The frequency and duration of eagle use of these habitats in the winter depends upon ice and weather conditions. Human disturbances and loss of wintering habitat can cause undue stress leading to cessation of feeding and failure to meet winter thermoregulatory requirements. These affects can reduce the carrying capacity of preferred wintering habitat and reproductive success for the species.

To comply with the Eagle Act, it is recommended that the project proponent determine if the proposed project would impact bald or golden eagles or their habitats. This can be done by conducting a habitat assessment, surveying nesting habitat for active and inactive nests, and surveying potential winter roosting habitat to determine if it is being used by eagles. The area to be surveyed is dependent on the type of project; however for most projects we recommend surveying the project area and a ½ mile buffer around the project area. If it is determined that either species could be affected by the proposed project, the Commission recommends that the project proponent notify the Nebraska Game and Parks Commission as well as the Nebraska Field Office, U.S. Fish and Wildlife Service for recommendations to avoid "take" of bald and golden eagles.

Migratory Bird Treaty Act and Nebraska Revised Statute §37-540

We recommend the project proponent comply with the Migratory Bird Treaty Act (16 U.S.C. 703-712: Ch. 128 as amended) (MBTA). The project proponent should also comply with Nebraska Revised Statute §37-540, which prohibits take and destruction of nests or eggs of protected birds (as defined in Nebraska Revised Statute §37-237.01). Construction activities in grassland, wetland, stream, woodland, and river bank habitats that would result in impacts on birds, their nests or eggs protected under these laws should be avoided. Although the provisions of these laws are applicable year-round, most migratory bird nesting activity in Nebraska occurs during the period of April 1 to July 15. However, some migratory birds are known to nest outside of the aforementioned primary nesting season period. For example, raptors can be expected to nest in woodland habitats during February 1 through July 15, whereas sedge wrens, which occur in some wetland habitats, normally nest from July 15 to September 10. If development in this area is planned to occur during the primary nesting season or at any other time which may result in impacts to birds, their nests or eggs protected under these laws, we request that the project proponent arrange to have a qualified biologist conduct a field survey of the affected habitats to determine the absence or presence of nesting migratory birds. If a field survey identifies the existence of one or more active bird nests that cannot be avoided by the planned construction activities, the Nebraska Game and Parks Commission and the Nebraska Field Office, U.S. Fish and Wildlife Service should be contacted immediately. For more information on avoiding impacts to migratory birds, their nests and eggs, or to report active bird nests that cannot be avoided by planned construction activities, please contact the U.S. Fish and Wildlife Service and/or the Nebraska Game and Parks Commission (contact information within report). Adherence to these guidelines will help avoid unnecessary impacts on migratory birds.

Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act (FWCA) requires consultation with the U.S. Fish and Wildlife Service (Service) and the State fish and wildlife agency (i.e., Nebraska Game and Parks Commission) for the purpose of preventing loss of and damage to fish and wildlife resources in the planning, implementation, and operation of federal and federally funded, permitted, or licensed water resource development projects. This statute requires that federal agencies take into consideration the effect that the water related project would have on fish and wildlife resources, to take action to prevent loss or damage to these resources, and to provide for the development and improvement of these resources. The comments in this letter are provided as technical assistance only and are not the document required of the Secretary of the Interior pursuant to Section 2(b) of FWCA on any required federal environmental review or permit. This technical assistance is valid only for the described conditions and will have to be revised if significant environmental changes or changes in the proposed project are being considered under FWCA, the lead federal agency must notify the Service in writing of how the comments and recommendations in this technical assistance letter are being considered into the proposed project.

Section 404 of the Clean Water Act

In general, the Nebraska Game and Parks Commission and the U.S. Fish and Wildlife Service have concerns for impacts to wetlands, streams and riparian habitats. We recommend that impacts to wetlands, streams, and associated riparian corridors be avoided and minimized, and that any unavoidable impacts to these habitats be mitigated. If any fill materials will be placed into waterways or wetlands, the U.S. Army Corps of Engineers Regulatory Office in Omaha should be contacted to determine if a 404 permit is needed.



Minatare to US-385 Aerial Image Basemap With Locator Map

Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS Earthstar Geographics Esri, USGS



Minatare to US-385 Topographic Basemap With Sections and Protected Areas

Esri, CGIAR, USGS Nebraska Game & Parks Commission, Esri, TomTom, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA, USFWS

Minatare to US-385 Web Map As Submitted By User



Project Boundary

Esri, CGIAR, USGS

Table 1 Protected Areas in Immediate Vicinity of Project (project review area)

This table has no results.

Table 2 Documented Occurrences in Immediate Vicinity of Project (project review area): Natural communities and selected special areas

Name	Other Information	SRank	GRank
Rock Outcrop	Rock Outcrop	S4	G4?
Threadleaf Sedge Western Mixed-grass Prairie	Threadleaf Sedge Western Mixed-grass Prairie	S3S4	GNR
Western Alkaline Meadow	Western Alkaline Meadow	S3	G3
Panhandle Prairies Biologically Unique Landscape	Link to BUL document		
Large Intact Block of Habitat for At-risk Species			

Table 3Regional Documented Occurrences of Species within 1 Mile of Project Review Area:Tier 1 and 2 at-risk species and additional S1-S3 plants

Scientific Name	Common Name	USFWS	State	SGCN	SRank	GRank	Taxonomic Group
Amphiscirpus nevadensis	Nevada Bulrush			Tier 2	S2	G4	Vascular Plant - Monocots
Aquila chrysaetos	Golden Eagle			Tier 2	S3	G5	Vertebrate Animal - Birds
Astragalus hyalinus	Summer Orophaca			Tier 2	S2	G4	Vascular Plant - Dicots
Athene cunicularia	Burrowing Owl			Tier 1	S2	G4	Vertebrate Animal - Birds
Buteo regalis	Ferruginous Hawk			Tier 1	S2	G4	Vertebrate Animal - Birds
Catostomus catostomus	Longnose Sucker			Tier 2	S2	G5	Vertebrate Animal - Fishes
Chenopodium subglabrum	Northern Narrow-leaf Goosefoot				S3S4	G3G4	Vascular Plant - Dicots
Cygnus buccinator	Trumpeter Swan			Tier 2	S2	G4	Vertebrate Animal - Birds
Cynomys Iudovicianus	Black-tailed Prairie Dog			Tier 2	S3	G4	Vertebrate Animal - Mammals
Delphinium nuttallianum	Blue Larkspur			Tier 2	S1	G5	Vascular Plant - Dicots
Ericameria parryi var. howardii	Parry's Rabbit-brush				S2S3	G5T5	Vascular Plant - Dicots
Fundulus sciadicus	Plains Topminnow			Tier 1	S3	G4	Vertebrate Animal - Fishes
Haliaeetus leucocephalus	Bald Eagle			Tier 2	S3	G5	Vertebrate Animal - Birds
Hybognathus placitus	Plains Minnow			Tier 1	S2	G4	Vertebrate Animal - Fishes

Table 3
Regional Documented Occurrences of Species within 1 Mile of Project Review Area:
Tier 1 and 2 at-risk species and additional S1-S3 plants

Scientific Name	Common Name	USFWS	State	SGCN	SRank	GRank	Taxonomic Group
Ipomopsis congesta	Ball-head Ipomopsis				S2S4	G5	Vascular Plant - Dicots
Lepus townsendii	White-tailed Jackrabbit		NC	Tier 2	S3	G5	Vertebrate Animal - Mammals
Lomatium nuttallii	Dog-parsley			Tier 1	S2	G3	Vascular Plant - Dicots
Luxilus cornutus	Common Shiner			Tier 2	S2	G5	Vertebrate Animal - Fishes
Myotis lucifugus	Little Brown Myotis			Tier 1	SNR	G3	Vertebrate Animal - Mammals
Numenius americanus	Long-billed Curlew			Tier 1	S3	G5	Vertebrate Animal - Birds
Platygobio gracilis	Flathead Chub			Tier 1	S2	G5	Vertebrate Animal - Fishes
Polites mystic	Long Dash			Tier 2	S3	G5	Invertebrate Animal - Butterflies and Skippers
Pontia occidentalis	Western White			Tier 2	S2	G5	Invertebrate Animal - Butterflies and Skippers
Primula pauciflora var. pauciflora	Northern Shooting-star			Tier 2	S2	G5T5	Vascular Plant - Dicots
Spilogale putorius	Eastern Spotted Skunk			Tier 1	S1	G4	Vertebrate Animal - Mammals
Thelypodium integrifolium	Entire-leaf Thelypody				S2S4	G5	Vascular Plant - Dicots
Trimerotropis saxatilis	Lichen Grasshopper			Tier 1	S1	G3	Invertebrate Animal - Grasshoppers
Vulpes velox	Swift Fox		E	Tier 1	S2	G3	Vertebrate Animal - Mammals

Table 4

Potential Occurrences in Immediate Vicinity of Project (project review area): Special status species (Tier 1 at-risk species and Bald and Golden Eagle), based on models or range maps

Scientific Name	Common Name	Data Type	USFWS	State	SGCN	SRank	GRank	Taxonomic Group
Aquila chrysaetos	Golden Eagle	Model			Tier 2	S3	G5	
Argynnis idalia	Regal Fritillary	Range			Tier 1	S3	G3?	
Asio flammeus	Short-eared Owl	Range			Tier 1	S2	G5	
Athene cunicularia	Burrowing Owl	Range			Tier 1	S2	G4	
Boloria myrina sabulocollis	Kohler's Fritillary	Range			Tier 1	S1S2	G5?T3	
Buteo regalis	Ferruginous Hawk	Range			Tier 1	S2	G4	
Cicindela limbata limbata	Sandy Tiger Beetle	Range			Tier 1	S4	G5T3T4	

Table 4Potential Occurrences in Immediate Vicinity of Project (project review area):Special status species (Tier 1 at-risk species and Bald and Golden Eagle), based on models or range maps

Scientific Name	Common Name	Data Type	USFWS	State	SGCN	SRank	GRank	Taxonomic Group
Coccinella novemnotata	Nine-spotted Ladybird Beetle	Range			Tier 1	S1	G5	
Dalea cylindriceps	Large-spike Prairie-clover	Range			Tier 1	S2	G3	
Danaus plexippus	Monarch	Range			Tier 1	S2	G4	
Ellipsoptera lepida	Ghost Tiger Beetle	Range			Tier 1	S2	G3	
Euphyes bimacula illinois	Two-spotted Skipper	Range			Tier 1	S3	G4T1T2	
Fundulus sciadicus	Plains Topminnow	Range			Tier 1	S3	G4	
Haliaeetus leucocephalus	Bald Eagle	Range			Tier 2	S3	G5	
Hesperia ottoe	Ottoe Skipper	Range			Tier 1	S2	G3	
Hybognathus placitus	Plains Minnow	Range			Tier 1	S2	G4	
Lanius Iudovicianus	Loggerhead Shrike	Range			Tier 1	S3	G4	
Lasiurus borealis	Eastern Red Bat	Range			Tier 1	S3	G3G4	
Lasiurus cinereus	Hoary Bat	Range			Tier 1	S3	G3G4	
Lethe eurydice fumosus	Smoky-eyed Brown	Range			Tier 1	S3	G5T3T4	
Lomatium nuttallii	Dog-parsley	Range			Tier 1	S2	G3	
Myotis lucifugus	Little Brown Myotis	Range			Tier 1	SNR	G3G4	
Myotis septentrionalis	Northern Long-eared Myotis	Range	Е	Е	Tier 1	S1S2	G2G3	
Penstemon haydenii	Blowout Penstemon	Range	Е	Е	Tier 1	S1	G2	
Perimyotis subflavus	Tricolored Bat	Range			Tier 1	S3	G3G4	
Pica hudsonia	Black-billed Magpie	Range			Tier 1	S2	G5	
Platygobio gracilis	Flathead Chub	Range			Tier 1	S2	G5	
Sceloporus graciosus	Sagebrush Lizard	Range			Tier 1	S1	G5	
Trimerotropis saxatilis	Lichen Grasshopper	Range			Tier 1	S1	G3	
Vulpes velox	Swift Fox	Range		Е	Tier 1	S2	G3	