

**APPENDIX B
DRAFT MEMORANDUM OF AGREEMENT
BETWEEN THE NATIONAL PARK SERVICE AND THE
NORTH DAKOTA STATE HISTORIC PRESERVATION OFFICE**

DRAFT MEMORANDUM OF AGREEMENT
**BETWEEN THE NATIONAL PARK SERVICE AT THEODORE ROOSEVELT
NATIONAL PARK AND THE NORTH DAKOTA STATE HISTORIC PRESERVATION
OFFICER REGARDING THE SOUTH UNIT SCENIC LOOP ROAD REPAIR
PROJECT, BILLINGS COUNTY**

WHEREAS, Theodore Roosevelt National Park (THRO) is a unit of the National Park Service (NPS) within Interior Region 5 in the state of North Dakota, and the NPS is charged to meet the directives of the NPS Organic Act of 1916 (PL 64-235, 39 Stat. 535) to “conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations,” as it applies to the park units; and

WHEREAS, NPS plans to repair and improve 6.15 miles of the South Unit Scenic Loop Road (Loop Road); and

WHEREAS, NPS initiated consultation with traditionally associated American Indian tribes and other groups (Tribes) on January 8, 2021 and continued consultations through December 22, 2021, and has involved the public through the public comment process of the National Environmental Quality Act, and NPS will maintain ongoing consultation with all parties as required, including the following Tribes: Blackfeet Nation, Crow Tribe, Chippewa Cree Tribe; Mandan, Hidatsa, and Arikara Nation (Three Affiliated Tribes), Fort Peck Assiniboine & Sioux Tribes, Spirit Lake Tribe, Standing Rock Sioux Tribe, and Turtle Mountain Band of Chippewa, and have invited the Tribes as concurring parties to this Memorandum of Agreement (Agreement) document; and

WHEREAS, NPS has developed the *Theodore Roosevelt National Park South Unit Loop Road Reconstruction Project Environmental Assessment* as part of compliance with the National Environmental Policy Act, and that this action constitutes an Undertaking as defined by the implementing regulations for Section 106 of the National Historic Preservation Act (NHPA), as amended, 54 USC 306108, and *Protection of Historic Properties*, found at 36 CFR 800 A herein referred to as Section 106 and a summary of the undertaking is provided as Appendix A to this Agreement; and

WHEREAS, the NPS has worked in collaboration with Federal Highway Administration (FHWA) to have the road designed and engineered to meet Park Road Standards; however, the NPS retains responsibility for compliance with Section 106; and

WHEREAS, FHWA, the project designer, agrees that the NPS is the lead federal agency, and FHWA is not an invited signatory to this Agreement; and

WHEREAS, the project is in the South Unit of THRO in Billings County and the NPS has defined the undertaking’s Area of Potential Effect (APE) as a 6.15-mile-long corridor that covers areas within 200 feet of the center line of the road. The APE is illustrated in Appendix B and the APE encompasses all direct, indirect, and cumulative effects of the undertaking; and

WHEREAS, the NPS had a cultural resources survey conducted for the APE as described in *Addendum Report: Theodore Roosevelt South Unit Scenic Loop Drive Reconstruction Project: Class III Cultural Resource Inventory, Billings County, North Dakota* (McDonald 2021), which recommended Loop Road (Site 32BI1196) was eligible for listing in the National Register under Criteria A and C; and

WHEREAS, the NPS has determined that the undertaking may adversely affect properties listed in, or eligible for listing in, the NRHP and the NPS has consulted with the North Dakota State Historic Preservation Officer (ND SHPO) pursuant to 36 CFR Part § 800.5(a); and

WHEREAS, the ND SHPO concurred on December 13, 2021 that the project constitutes an Undertaking and that APE encompasses all direct, indirect, and cumulative effects and concurred that 32BI1196 is eligible for listing on the National Register of Historic Places under Criteria A and C; and

WHEREAS, the NPS has determined that the undertaking will adversely affect 32BI1196 pursuant to 36 CFR Part § 800.5(a), and ND SHPO concurred with this assessment on December 13, 2021; and

WHEREAS, the NPS has determined that the undertaking will not adversely affect any other historic properties, and ND SHPO concurred with this assessment on December 13, 2021, though archeological site 32BI1195, which consists of a lithic scatter that overlaps the westernmost parking lot in the project area, is eligible for listing on the National Register of Historic Places under Criterion D but the portion of the site within the APE does not contribute to its significance and thus the undertaking will have no adverse effect to the site, and

WHEREAS, the SHPO is authorized to enter into this Agreement in order to fulfill its role of advising and assisting federal agencies in carrying out their responsibilities under Sections 101 and 106 of the NHPA (36 CFR §§ 800.2[c][1][i] and 800.6[b]), and SHPO is a signatory to this MOA; and

WHEREAS, in accordance with 36 CFR § 800.6(a)(1), the NPS notified the Advisory Council on Historic Preservation (ACHP) of its adverse effect determination December 22, 2021 with specified documentation, and on January 21, 2022, the ACHP informed the NPS that they chose not to participate in the consultation pursuant to 36 CFR § 800.6(a)(1)(iii); and

WHEREAS, pursuant to 36 CFR§800.2(d), the NPS will solicit and consider public comment throughout the Section 106 process, utilizing accepted practices; and

WHEREAS, the definitions in this MOA follow 36 CFR § 800.16; and

NOW, THEREFORE, the NPS and the ND SHPO agree that should NPS proceed with the undertaking, NPS will ensure that the following stipulations are implemented to take into account the effect of the undertaking on historic properties.

STIPULATIONS

The NPS shall ensure that the following measures are carried out:

I. PROFESSIONAL QUALIFICATIONS

- A. All work carried out pursuant to this MOA shall meet the *Secretary of the Interior's Standards for Archaeology and Historic Preservation*, as per Section 112(a)(1)(A) of the NHPA and § 800.2(a)(1) of the implementing regulations.
- B. All archeological work shall be conducted by or under the direct supervision of an archeologist who meets the qualifications set forth therein. These include a graduate degree in archeology or anthropology; demonstrated ability to implement and carry archeological research to completion, and at least 36 months of full-time professional experience and/or specialized training including at least 12 months experience and/or specialized training in the kind of activity or skills the individual will perform.
- C. All work to address historic structures will be conducted by or under the direct supervision of a Historical Architect or Historical Landscape Architect that meets the associated qualifications. These include a graduate degree in the associated discipline, demonstrated ability to implement and carry historical research to completion, and at least 36 months of full-time professional experience and/or specialized training including at least 12 months experience and/or specialized training in documentation and evaluation of historic structures.
- D. All work conducted by a tribal cultural specialist will be performed by personnel that are experienced with monitoring of ground disturbing activities and identification of historic properties of traditional cultural significance. Appropriate personnel will be selected through consultation between the NPS and tribes that are traditionally associated with THRO.

II. ROLES AND RESPONSIBILITIES

The signatories and invited signatory agree that NPS is the lead agency for administering and implementing this MOA. These responsibilities include, but are not limited to, consulting and coordinating with the consulting parties, conducting Government-to-Government consultation with the consulting Tribes, overseeing all cultural resources work including any additional cultural resources inventory work, drafting and implementing the historic property treatment plan (HPTP); assembling all submissions to the consulting parties, including the additional cultural resources inventory reports (if needed), the HPTP, and the preliminary and final data recovery reports; and seeking SHPO concurrence with all agency compliance decisions.

III. RESOLUTION OF ADVERSE EFFECTS

- A. Historic Properties Treatment Plan

Pursuant to Section 800.6(a) of the NHPA, the NPS has provided a Historic Property Treatment Plan (HPTP) within this document as Appendix C. This plan was developed in consultation with the ND SHPO and tribes that are traditionally associated with THRO. The HPTP focuses on treatment of the Loop Road site 32BI1196 to include a Historic American Landscapes Survey (HALS) for the portion of the Loop Road within the project area and will ensure it is consistent with Secretary of the Interior's Standards and Guidelines for Architectural and Engineering Documentation (68 FR No. 139, 44730-34). The HPTP will also include measures to repair contributing features in the district and an updated National Register of Historic Places nomination form. Additional measures to conduct construction monitoring and protection and documentation of any unanticipated discoveries are also provided. The HPTP, which will be implemented prior to and during road construction, specifies:

1. The contributing elements of the Loop Road that would be affected by the undertaking where HALS documentation would be carried out.
2. The results of previous research relevant to the undertaking.
3. The field and laboratory analysis methods to be used.
4. Specification of the level of effort, textually and on-site maps, to be expended on the treatment of the property, including treatment locations and methods of HALS documentation.
5. Follow guidelines for repair of contributing features of the historic district and placement of new masonry and riprap designed to minimize the effects to the historic character of contributing culverts, headwalls, rock retaining walls, and the overall historic setting of the district. This includes use of masonry techniques that replicate the aesthetics of existing significant features. Masonry shall utilize techniques that include matching mortar type, composition, color, and joint profile for each feature. Repairs to contributing features and construction of new culvert headwalls and riprap shall incorporate locally sourced sandstone (or stone with similar attributes), reuse historic fabric (e.g., stones, masonry) where possible, rebuild stone headwalls in the same alignment, and place riprap in consideration of visual compatibility with the historic setting. Any source of building materials will be assessed for potential disturbance to historic properties and fully comply with associated requirements of the National Historic Preservation Act.
6. Implement rehabilitation measures for stone culverts 32BI1196 Features 2, 3 (32BI540), 28, and 29 (32BI541), as these structures represent the most aesthetically and technologically impressive and best-preserved examples from the period of significance. This includes repointing mortar, replacing displaced rocks, removing accumulated sediment, and reducing accumulated hazard fuels in the immediate area.

7. Completion of a National Register of Historic Places nomination form for 32BI1196. This form will incorporate existing information in 2021 reporting on the district, including the North Dakota cultural resources survey form and the Class III inventory of the district. The form will include a summary of implemented project actions that altered contributing features of the district such as updated photographs, descriptions, location information, and associated narratives.
8. A discussion of permits and personnel qualifications for field crews.
9. The methods to be used in data management and dissemination to the professional community and public, including a proposed schedule for field implementation and a schedule for the submittal of draft and final reports to consulting parties for review and comment.
10. Procedures for monitoring, evaluating, and treating discoveries of unanticipated or newly identified cultural resources during construction associated with the Undertaking, including consultation with appropriate parties.
11. A protocol for the treatment of ancestral human remains, if such remains are encountered, describing methods and procedures for the recovery, inventory, treatment, and disposition of ancestral remains, associated and unassociated funerary objects, and objects of tribal patrimony.
12. A monitoring and discovery plan, for archeological and tribal monitoring of construction.
13. A schedule to implement the HPTP including proposed timelines for the report submittals and reviews.

B. Interpretation

As part of road construction, the NPS will, in consultation with ND SHPO and Tribes, develop and install a professionally designed interpretive panel to communicate the Loop Road's history and significance. The interpretive sign will be installed at the parking area at the west end of the project area near the junction of East River Road, or other appropriate location. The NPS will also update the Theodore Roosevelt National Park website to include a webpage detailing similar information, with associated pictures and links to more information. This may be correlated to similar construction present at other park units completed by the Civilian Conservation Corps in the 1930s-early 1940s. Materials should highlight the stone culverts 32BI540 and 32BI541, particularly for their workmanship and excellent preservation.

IV. REVIEW AND COMMENT

The NPS will submit all documentation related to the undertaking (e.g., HPTP, HALS reporting, etc.) to the consulting parties for review and comment, unless stipulated elsewhere in this MOA. Consulting parties shall have 30 days from receipt to provide written comments. If a party does not comment on a submittal during this period, the NPS will follow-up by telephone or e-mail with the party. If, after such reasonable and good faith efforts to reach an unresponsive consulting party, there has still been no response, the NPS will proceed to the next step.

V. CONSTRUCTION MONITORING AND DISCOVERIES

- A. The NPS will ensure that road construction within or adjacent archeological site 32BI1195 is monitored by an archeologist or archeologists meeting the Secretary of the Interior's Professional Qualifications Standards for Archeology (NPS Director's Order-28: Appendix C). These include an advanced degree in archeology, demonstrated ability to implement and carry archeological research to completion, and at least 36 months of full-time professional experience and/or specialized training including at least 12 months experience and/or specialized training in construction monitoring in lands within or adjacent to the Park. An archeological monitor will be on hand for a project kick-off meeting at the project area to identify the location and extent of this resource, provide an educational briefing describing the types of archeological materials that have been found and could be encountered during construction, and provide guidance for protecting and reporting any discoveries during construction. The portions of the site outside of the APE will be marked with flagging or fencing to ensure ground disturbance does not occur in these areas. The archeological monitoring will occur during ground disturbing activities within and adjacent to this site, and on an intermittent basis to respond to any inadvertent discoveries in other project locations. The monitor will be authorized to halt ground disturbing activities at a specific location while recovering materials and data.
- B. In consultation with tribal partners, the NPS will ensure that road construction within or adjacent to archeological site 32BI1195 and adjacent to resources outside of the area of potential effects but identified by tribal partners as potential resources of traditional significance will include tribal cultural monitoring. These resources include five large sandstone rocks identified in field studies as "LR 4" and an isolated find consisting of a large sandstone rock with a bowl-shaped depression on one side. The tribal monitor shall be qualified and experienced with the work of tribal monitoring for ground disturbing activities in North Dakota, preferably with previous experience in the Park. The monitor will be identified through NPS consultation with tribes that are traditionally associated with the Park. Tribal governments will decide, in consultation with the Park, who will perform the work. The monitor will be present during the project kick-off meeting to identify the location and extent of these resources, provide a briefing on traditional use of the area and measures to protect associated resources, and describe the process for protecting and reporting any unanticipated resources. The monitor will be

authorized to halt ground disturbing activities at a specific location while recovering materials and data.

- C. Archeological and tribal monitoring will occur in partnership with construction crews. The monitors can decide, in consultation with the NPS and tribal governments, if proposed work requires their presence in certain areas and not others. This decision will be based on the location of work, findings during previous surveys, excavation, and previous days of monitoring, the extent of ground disturbance, and the nature of proposed work. This will allow for flexibility during the months of implementation of the project and unanticipated challenges such as construction delays, shifts in schedule, and differences in the location, extent, and significance of findings during monitoring.
- D. The NPS will include the expertise of a historical landscape architect as part of construction design teams and during implementation. This is to ensure requirements to avoid, minimize, and mitigate effects to the historic district 32BI1196 are implemented in the project. The historical landscape architect must meet the Secretary of Interior's Standards for Historic Preservation, Professional Historic Landscape Architect, Historian, or Historic Architect, who are able to demonstrate completion of previous similar research (Appendix C, DO-28, 1997). These include a graduate degree in the associated discipline, demonstrated ability to implement and carry historical research to completion, and at least 36 months of full-time professional experience and/or specialized training including at least 12 months experience and/or specialized training in documentation and evaluation of historic structures. The historical landscape architect will be included in the project kick-off meeting to identify contributing features of the district, discuss construction requirements associated with repair and rehabilitation of those features (e.g., masonry requirements to conduct in-kind replacement of stone headwalls), and address questions. The historical landscape architect will also be available for project update meetings and intermittent monitoring of implementation of masonry and similar measures on contributing elements of the district. Findings from these efforts will be incorporated into the regular quality control assessments during construction.
- E. The NPS will ensure that the location of archeological sites, places of potential traditional significance, and contributing elements of the historic district within or adjacent to the project area are incorporated into construction design documents. This process will make sure to safeguard this information to not to identify sensitive resources to personnel not directly involved with the undertaking. These polygons will be labeled as "Cultural Monitoring Required" and incorporate a buffer of 100 feet. Having the extent of these resources in the designs will allow for more efficient communication and ensure that crew members coordinate with archeological and/or tribal monitors.
- F. Construction crews will notify the NPS 14 calendar days before working within or adjacent to culturally sensitive areas, such as archeological sites, locations of

potential traditional significance, and contributing features of the historic district, and shall specify the estimated length of time and extent of ground-disturbing and structural actions (e.g., digging within the road prism or outside of it, estimated depth, removal and reconstruction of culvert headwalls, repairing stone culverts). This information will be shared with the associated archeological, tribal, and historical architecture monitors to determine if their presence is required during construction.

- G. If previously unreported cultural resources are identified during the monitoring, the work shall be halted until the discovery is documented and evaluated for its significance and NRHP eligibility in coordination with the NPS archeologist. Consultation with ND SHPO and Tribes will follow, as appropriate. The NPS will notify SHPO and Tribes of the discovery following instructions in Stipulation VI of this MOA.

VI. POST REVIEW DISCOVERIES

The NPS shall ensure that all construction documents include the following provisions:

- A. If previously unidentified historic properties or unanticipated effects to historic properties are discovered during construction activities, the contractor shall immediately halt all activity within a 100-foot radius of the discovery, notify the NPS of the discovery, and implement interim measures to protect the discovery from looting and vandalism.
- B. Immediately upon receipt of the notification required in Stipulation VI.A of this document, the NPS shall:
 - 1. Inspect the site to determine the extent of the discovery and ensure that construction activities have halted;
 - 2. Clearly mark the area of the discovery;
 - 3. Implement additional measures, as appropriate, to protect the discovery from looting and vandalism;
 - 4. Have a qualified subject matter expert (archeologist, architect, etc. as appropriate) inspect the construction site to determine the extent of the discovery and provide recommendations regarding its NRHP eligibility and treatment; and
 - 5. Depending on recommendations from the archeological and/or tribal monitor after discussion with NPS cultural resources personnel, for resources that could potentially be eligible for the NRHP notify ND SHPO. For new findings that are limited to new architectural features associated with the road, notification can be limited to ND SHPO. For any new findings of archeological or traditional cultural value that could be potentially eligible for the NRHP, notify ND SHPO and tribes traditionally associated with THRO. Notification will include a description of the

finding and the measures that have been implemented to comply with Stipulations VI.B.1-4 of this document.

- C. Within 48 hours of receipt of the notification described in Stipulation VI.B.5 of this document, the NPS shall provide the ND SHPO and tribes traditionally associated with THRO with its assessment of the NRHP eligibility of the discovery and the measures it proposes to take to resolve adverse effects. In making its official evaluation, the NPS, in consultation with the ND SHPO and tribes may assume the discovery to be NRHP eligible for the purposes of Section 106 pursuant to 36 CFR Part § 800.13(c). The ND SHPO and tribes shall respond within 48 hours of receipt.
- D. The NPS, which shall take into account the consulting parties' recommendations on eligibility and treatment of the discovery, shall ensure that appropriate actions are carried out and provide the ND SHPO and the other consulting parties with a report on these actions when they have been implemented.
- E. Construction activities may proceed in the discovery area when the NPS has determined that implementation of the actions undertaken to address the discovery pursuant to Stipulation VI.A-D are complete.

VII. HUMAN REMAINS

To prepare for the unlikely event that human remains are encountered during the undertaking, the NPS will implement an Inadvertent Discovery Plan as part of construction documents, which is included in Appendix C. This includes treating all human remains in a manner consistent with the ACHP's "Policy Statement Regarding Treatment of Burial Sites, Human Remains and Funerary Objects" (February 23, 2007) or ACHP policy in effect at the time remains and funerary artifacts are handled.

- A. If the remains found on federal lands are determined to be of Native American origin, the NPS shall comply with the provisions of the Native American Graves Protection and Repatriation Act (NAGPRA) (25 U.S.C. Sec 3001 et seq.). If the remains are determined not to be of Native American origin, the NPS shall coordinate with North Dakota law enforcement to ensure compliance with the North Dakota Century Code 23-06: Care and Custody of the Dead.
- B. The NPS shall use reasonable efforts to ensure that the general public is excluded from viewing any burial site or associated funerary artifacts. The consulting parties to this Agreement shall release no photographs of any burial site or associated funerary artifacts to the press or general public. The NPS shall notify the tribes when burials, human skeletal remains, or funerary artifacts are encountered on the project.

VIII. CURATION

Within 30 days of approval of the final technical report, the NPS shall submit the HALS documentation to the Washington office and the Library of Congress. This includes complying with the archival requirements of the Library of Congress. The NPS is

encouraged to contact HALS staff in the Washington office if questions arise. All such items shall be made available to educational institutions and individual scholars for appropriate exhibit and/or research under the operating policies of the NPS.

IX. ANNUAL REPORTING AND REVIEW

- A. Each year following the execution of this Agreement until it expires or is terminated, the NPS will compose an annual letter report (Annual Report) to review the progress under this Agreement and under the approved HPTP. The Annual Report will include an update on project schedule, status, and any ongoing cultural resources monitoring or mitigation activities, discovery situations, proposed future actions, or outstanding tasks to be completed under this Agreement or the HPTP. Consulting parties will have 30 calendar days to review the Annual Report and provide comments to the NPS, who will then address the comments. The NPS will share the report with consulting parties to this Agreement and ask if parties are interested in attending a virtual annual meeting.
- B. If an annual meeting is requested by consulting parties, the NPS will address the comments on the annual report to develop the meeting agenda. The meeting shall include a discussion of construction progress, any scheduling changes proposed, any problems encountered, associated findings for any disturbances or enhancements to historic properties, identification of any new discoveries, and any disputes and objections received in NPS's efforts to carry out the terms of this Agreement.
- C. Within 14 days after the annual meeting, the NPS will summarize the meeting, including proposed action items and how they are to be addressed, in a letter to consulting parties. Consulting parties will have 20 days to review and comment on the meeting notes and, if necessary, provide the NPS with any edits to the meeting notes. If changes are needed, the NPS will produce revised meeting notes within 30 days of receipt of comments and will provide the final notes to the consulting parties.

X. DISPUTE RESOLUTION

Should any signatory to this Agreement object at any time to any actions proposed or the manner in which the terms of this Agreement are implemented, the NPS shall consult with such party to resolve the objection. If the NPS determines that such objection cannot be resolved, the NPS will:

- A. Forward all documentation relevant to the dispute, including NPS's proposed resolution, to the ACHP. The ACHP shall provide the NPS with its advice on the resolution of the objection within 30 days of receiving adequate documentation. Prior to reaching a final decision on the dispute, the NPS shall prepare a written response that takes into account any timely advice or comments regarding the dispute from the ACHP, signatories and concurring parties, and provide them with a copy of this written response. The NPS will then proceed according to its final decision.

- B. If the ACHP does not provide its advice regarding the dispute within the 30-day period, the NPS may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, the NPS shall prepare a written response that takes into account any timely comments regarding the dispute from the signatories to the Agreement and provide them and the ACHP with a copy of such written response.
- C. THRO's responsibility to carry out all other actions subject to the terms of this Agreement that are not the subject of the dispute remain unchanged.

XI. CONFIDENTIALITY

To the maximum extent allowed by federal and state law, the NPS will maintain confidentiality of sensitive information regarding historic properties that could be damaged through looting or disturbance, and/or to help protect a historic property to which a Tribe attaches religious or cultural significance. However, any documents or records the NPS has in its possession are subject to the Freedom of Information Act (FOIA) (5 USC 552 et seq.) and its exemptions, as applicable. The NPS shall evaluate whether a FOIA request for records or documents would involve a sensitive historic property, or a historic property to which a Tribe attaches religious or cultural significance, and if such documents contain information that the NPS is authorized to withhold from disclosure by other statutes including the Section 304 of the NHPA, as well as the Archeological Resources Protection Act. If this is the case, then the NPS will consult with the Keeper of the National Register of Historic Places and the ACHP regarding withholding the sensitive information. If a Tribally sensitive property is involved, the NPS will also consult with the relevant Tribe prior to making a determination in response to a FOIA request.

XII. AMENDMENTS

This Agreement may be amended when such an amendment is agreed to in writing by all signatories. The amendment will be effective on the date a copy signed by all of the signatories is filed with the ACHP.

XIII. TERMINATION

- A. If any signatory to this Agreement determines that its terms will not or cannot be carried out, that party shall immediately consult with the other parties to attempt to develop an amendment per Stipulation VIII of this Agreement. If within 30 days an amendment cannot be reached, any signatory may terminate the Agreement upon written notification to the other signatories and concurring parties.
- B. Once the Agreement is terminated, and prior to work continuing on the undertaking, the NPS must either (a) execute a Memorandum of Agreement pursuant to 36 CFR § 800.6 or (b) request, take into account, and respond to the comments of the ACHP under 36 CFR § 800.7. The NPS shall notify the signatories as to the course of action it will pursue.

XIV. DURATION

This Agreement will expire if its terms are not carried out within 5 years from the date of its execution. Prior to such time, the signatories may consult and agree in writing to an extension for carrying out the terms of the Agreement in accordance with Stipulation XII above.

XV. ANTI-DEFICIENCY ACT

The NPS's obligations under this Agreement are subject to the availability of appropriated funds, and the stipulations of this Agreement are subject to the provisions of the Anti-Deficiency Act. The NPS shall make reasonable and good faith efforts to secure the necessary funds to implement this Agreement in its entirety. If compliance with the Anti-Deficiency Act alters or impairs the NPS's ability to implement the stipulations of this agreement, the NPS shall consult in accordance with the amendment and termination procedures found at Stipulations XII and XIII of this agreement.

Execution of this Agreement by the NPS and the ND SHPO and implementation of its terms are evidence that the NPS has taken into account the effects of the Project on historic properties, and that the NPS has satisfied its Section 106 responsibilities for the undertaking covered by this Agreement.

DRAFT

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NATIONAL PARK AND THE NORTH DAKOTA STATE HISTORIC PRESERVATION
OFFICER REGARDING THE SOUTH UNIT SCENIC LOOP ROAD REPAIR
PROJECT, BILLINGS COUNTY**

SIGNATORIES:

National Park Service – Theodore Roosevelt National Park

_____ Date
Angela Richman, THRO Acting Superintendent

North Dakota Historic Preservation Officer

_____ Date
Bill Peterson, State Historic Preservation Officer

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CONCURRING PARTIES:

Crow Tribe

_____ Date
Frank White Clay, Chairman

Chippewa Cree Tribe

_____ Date
Harlan Gopher Baker, Chairman

Fork Peck Assiniboine & Sioux Tribes

_____ Date
Floyd Azure, Chairman

Spirit Lake Tribe of Fort Totten

_____ Date
Douglas Yankton, Sr., Chairman

Standing Rock Sioux Tribe

_____ Date
Mike Faith, Chairman

Turtle Mountain Band of Chippewa

_____ Date
Jamie Azure, Chairman

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ADDITIONAL CONSULTING PARTIES:

Blackfeet Nation

_____ Date
Timothy Davis, Chairman

Mandan, Hidatsa, and Arikara Nation (Three Affiliated Tribes)

_____ Date
Mark N. Fox, Chairman

DRAFT

Appendix A: Description of Undertaking

Introduction

The National Park Service (NPS) proposes to conduct repairs and improvements to the South Unit Scenic Loop Road (Loop Road) at Theodore Roosevelt National Park (Park). Roughly the southern half of the loop has been closed since spring 2019 due to various damages, including collapse of a 150-foot portion of the road. The project area covers the closed approximately 6.15 miles of the road between mile marker 22 and 28 from its junction with the East River Road to the Old East Entrance Station pull off. The road is one of the major attractions of the Park and provides access to the stunning Badlands ecosystem and exciting views present in the area. The project involves various proposed repairs to the road and associated drainage system and parking lots, including some improvements.

Background

The Loop Road was constructed in the 1930s largely through cut and fill in the steep Badlands topography and has been afflicted by recurring damages primarily associated with erosion. It includes a complex network of drainage culverts, rundown pipes, curbing, and small ditches. Multiple road repair projects have occurred in the historic and modern eras, with emphasis on fixing locations where the downslope shoulder, partial lane, or entire lane has been displaced. This includes efforts to repair damaged areas in 2001 and 2016. In April 2019, an approximately 150-foot-long section of the road slid. Multiple other areas with similar topography and hydrology were also found to have signs of analogous deterioration. This includes two locations of potential roadway failure at Scoria Point and West Ridgeline, which were identified in fall 2019 and shown to have worsened when reassessed in winter 2019-2020. Additional damages present throughout the project area include pavement cracking, downslope soil movement, embankment failures, unstable trees, and damaged drainage features. Subsequent geotechnical, pavement engineering, visitor use, and hydrological analyses have recommended various repairs and improvements. These include fixing failure points, reconstructing the road with stable subgrade and road base materials, repairing and upgrading drainage systems, constructing retaining walls, expanding parking areas to include accessibility improvements, and repaving to provide long-term solutions to recurring damages. This undertaking has been prioritized by the political leadership in North Dakota, as the road is one of the premier attractions in the state.

Project Undertaking and Area of Potential Effects

The construction extent includes 6.15-miles of road to consist of repairs within the prism, large-scale repair of a large road failure, construction of retaining walls below the road in unstable areas, modification of existing culverts and installation of new culverts, installation of drainage run down pipes below the road prism, and modification of parking areas. The planning and design for the undertaking has included a 400-foot-wide corridor (200 feet on each side of the road centerline) to assess potential effects to resources. However, the anticipated construction extent, and associated ground disturbance, varies widely between project actions and locations and is generally within 50 feet of the centerline. Proposed actions are best summarized in draft

schematic design documents that include areas of increased complexity designated as Sites A-D, F, I-M, and Parking Sites 1-9. Of all proposed actions, only erosion control planned for the large road failure (Site A) extends close to the edge of the 200-foot corridor. Guardrails are also proposed for locations where new walls are proposed. These would be composed of wood posts connected by metal rails that would be 3 feet tall located between the downslope shoulder and the top of the wall. The rails and hardware would be painted with a brown Natina finish.

In general, the minimum extent of disturbance involves removal of the asphalt layer, subbase (primarily scoria), and subgrade to a depth of approximately 1-2 feet below the asphalt, and rebuilding within the same extent with stable soil and subbase gravels and repaving. This is anticipated throughout the project area. The project also plans to install wire mesh exclusion fencing below the subbase in an approximately 0.4-mile-long portion of the road that passes through a prairie dog town at the west end of the project area, which includes a parking lot. The prairie dog town has been present in this location for decades and the animals cause recurring damages by creating holes in the asphalt. The mesh will prevent this process from occurring. The anticipated ground disturbance is 1 foot deep directly below the pavement, though the mesh may extend up to approximately 3 feet from the edge of pavement buried 1 foot deep.

Construction will include removal of vegetation in various locations along the road prism and adjacent areas, particularly for parking lot expansion, new culverts, run down pipes, and reconstruction of road failures. Revegetation and erosion control efforts will be conducted in these areas, with emphasis on replanting native herbaceous plants, shrubs, and trees. Additional measures include placing organic filter fabric, fiber rolls, wooden posts to keep fabric and rolls in place, small earth and rock berms, stone riprap, stone and soil benching, and placement of native slash. Ground disturbance for these actions is anticipated to be a maximum of 1-2 feet below surface.

The project includes nine existing parking areas, of which eight are proposed for improvements. Parking lots proposed for expansion (Sites 1, 3, 4, 6, 7, and 9) would include measures such as increasing the amount of parking spaces, adding pull-through parking for large recreation vehicles (Sites 1, 6, 7, and 9), adding accessible grades and sidewalks (Sites 1, 3, 7, 9), eliminating or reducing small vegetated islands surrounded by existing pavement (Sites 3, 7, and 9), improving trailhead access by paving the heavily eroded starting point (Site 6), ecologically restoring social trails and denuded areas, and constructing or rebuilding retaining walls. Proposed improvements also include six benches, likely composed of sandstone blocks similar to the materials present in the local area, and replacement bear-proof trash cans. New curbing will also be installed and a few parking areas (Sites 1, 2, 4) will have small portions removed and revegetated. The extent of ground disturbance in these areas is anticipated to be a maximum of 2 feet below ground surface. These modifications will only be visible from the local area, but are focal points for visitors.

The project includes installation of various new culverts, upsizing or combining existing culverts, and installing run down pipes. These modifications are proposed in various locations throughout the project area and approximately 64 culverts are already present, with an anticipated 10-15 additional culverts proposed. The necessity to add or upsize culverts or install run down piping was determined based on a hydrological modeling study that considered the

upslope watershed, anticipated average rainfall and storm events (including adjustments for climate change), and the condition of existing culverts and any associated upslope or downslope erosion. Installation of a culvert involves excavating an approximately 3-foot-wide trench across the road prism to a depth of approximately 3-5 feet. A concrete pipe is laid, and inlets and outlets are positioned. In some cases, drop inlets, positioned on the road shoulder, are used, while most culverts have inlets at the edge of the prism. Culvert pipes are anticipated to be 18-30 inches in diameter and existing corrugated metal pipes will be replaced with concrete. In one case, a triple-pipe culvert, consisting of three 18-inch metal corrugated metal pipes connected by an 8-foot-long headwall, will be consolidated into a single 42-inch concrete pipe and associated headwall. Some of the existing inlets and outlets have stacked rock riprap to reduce erosion. These structures will remain in place or be repaired, with associated ground disturbance to 2 feet below surface. In cases where culverts are replaced, if an existing headwall constructed in the historic period is present, it will be rebuilt using the same materials (e.g., sandstone rocks and blocks, mortar) and architectural style (e.g., same positioning and alignment of rocks) to the extent possible. Existing culverts that have structural damage (e.g., loose rock, broken or crushed pipe, damaged headwalls) or have filled with sediment will be repaired and cleaned out.

Run down pipes are longer than culverts and are placed in locations with significant erosion issues, usually on very steep slopes where the outlet flow has scoured a gully that either has already backed up to the fill slope of the road prism or will erode to that point if left untreated. Various existing run down pipes are present at the road, and consist of corrugated metal placed slightly above or on the ground surface. Proposed new pipes would be buried and surrounded by gravels, rock, and native plants designed to reduce erosion. These pipes may extend to approximately 150 feet from the road centerline. Construction in these very steep areas will require benching the slope to provide stable working conditions for heavy equipment. Access in most cases will be direct from the road in line with the pipe, while in others it may require a slightly displaced route that follows the slope contour more closely. Anticipated ground disturbance for these pipes is a maximum of 2-3 feet below ground surface, though benching may require excavation to 5 feet into the slope. As the heavy equipment is moved back up the slope, the benching will be filled and the grade adjusted to natural contour. Disturbed areas will be revegetated and erosion control measures will be installed.

At least six soldier pile retaining wall segments are planned for portions of the road with signs of displacement of the fill slope and heavy erosion. These areas are identified on the schematics as Sites A, B, C, and F, with a short additional wall proposed between road stations 235 and 245. The length of these walls varies, with the shortest section approximately 40 feet long between stations 235 and 245. The remaining walls include 325 feet at Site A (large road failure), 430 feet at Site B, 400 feet at Site C, and 200 feet at Site F (Scoria Point). These walls will be constructed using steel piles connected by wood lagging. In some cases, the wall will include tiebacks to increase stability. The walls will be a significant departure from the existing design of the road, as the few retaining walls currently present are generally short and composed of dry laid or mortared sandstone rock. The new walls will vary in height, generally 10-20 feet above the surrounding slope. In most cases only the tops of the walls will be visible from the road. However, the wall proposed at Site F will be visible while approaching on the road from the northwest, as here the road turns sharply back toward itself in a deep ravine. Construction of

these walls will require removing the road shoulder and some of the fill slope. The steel piles will be driven into the ground to a maximum of 15 feet below the surface and connected with the wood lagging. The fill slope and road would then be rebuilt behind the walls. Drainage measures such as weep holes and culverts will also be integrated into the design. Alternative wall options were considered as part of project planning, such as colored shotcrete, mortared stone, and concrete, but through the value analysis process were determined to be less desirable, particularly due to concerns about cost, visual impact, and longevity.

The most intensive proposed ground disturbance will be for repair of the portion of the road that has failed at Site A. Here the slope has broken and shifted and only a small portion of the upslope lane remains in its original position. Existing damaged culvert pipes, subbase, and paving will be removed, and the associated damaged areas of the road prism fully excavated to stable sediments or bedrock and rebuilt. The road prism will be supported by the soldier pile wall mentioned above and will include at least one drop inlet and associated culvert. The estimated ground disturbance for reconstruction of the road is 2 to 15 feet below surface. On the slope below, various erosion control measures are also proposed, which extend from the road to the bottom of a natural drainage. The proposed construction area is up to 100-170 feet north of the road centerline. Construction in this area will require benching to support heavy equipment, which will be used to install a culvert pipe that includes a protective rock apron on each end. This rockwork will be lined on the bottom with geotextile fabric. A series of existing gabion baskets at the bottom of the damaged culverts will be removed. The benching will be filled and the grade adjusted to natural contour. Erosion control efforts will include placement of fiber rolls and blanketing, planting, and recurring treatments to ensure vegetation growth and slope stability. Anticipated ground disturbance will be a maximum of 5 feet below surface along the slope for benching, while erosion control efforts will generally require 1-2 feet of disturbance below surface. The resulting site area, with its engineered slope and walls, will look significantly different from the original landscape, though will only be visible from adjacent areas on the road.

The project will involve a combination of heavy equipment and hand tools and will require importing thousands of cubic yards of subbase gravels from existing commercial quarries. Equipment and materials staging will occur along the road and associated parking areas. Thousands of cubic yards of removed asphalt, subbase, filter fabric, rock, vegetation, and culvert pipes will be hauled to an existing disposal facility. This work will include use of the currently closed and open portions of the Loop Road and East River Road, which connects to Medora.

Proposed Actions on Loop Road Historic District (32BI1196)

The significant components of the historic district 32BI1196 include the road itself, 24 contributing culverts and headwalls (including two previously documented stone arch culverts [32BI540 and 32BI541]), and two partially mortared stone retaining walls. The proposed undertaking involves various proposed modifications to the road and historically significant components, in addition to adding various modern features (Table 1). Please note that this table includes both the temporary field designation for the features and the architectural feature number assigned as part of the North Dakota cultural resource survey architectural form for the district. The adverse effect was determined particularly from addition of various retaining walls,

replacement of corrugated pipe culverts with concrete, upsizing some culverts, and combining the one triple-pipe culvert into a single large culvert. Notably, the proposed undertaking includes some repairs to historic structures, including 32BI1196 Features 2, 3 (32BI540), 28, and 29 (32BI541), which are the best preserved and largest examples from the period of significance. This includes repointing mortar, replacing displaced rocks, removing accumulated sediment, and reducing accumulated hazard fuels in the immediate area. Repair actions vary slightly between features.

Table 1. Contributing Features of 32BI1196 (Loop Road) Impacted by the Undertaking.

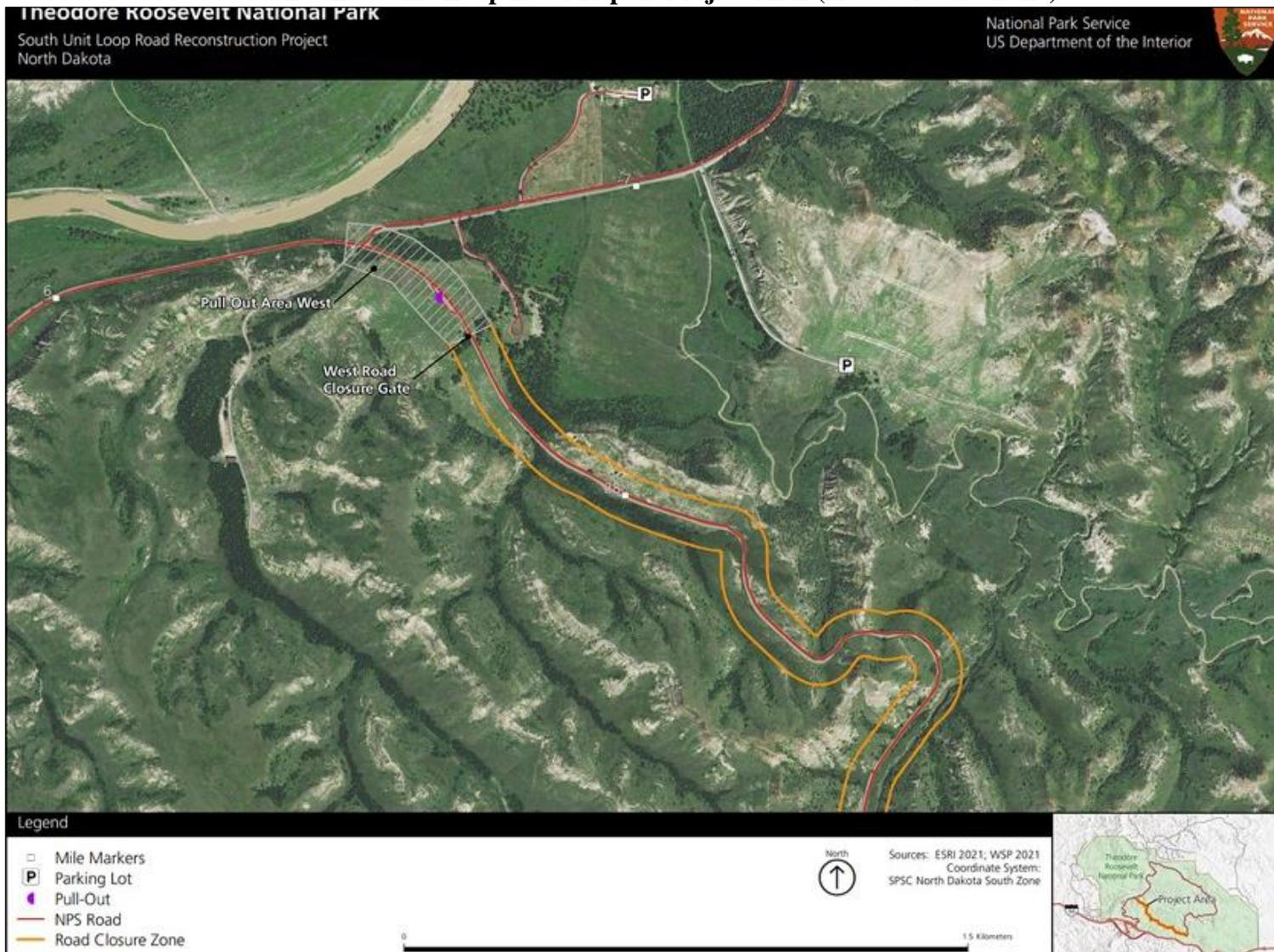
Feature Number	Field Designation	Type	Project Activity
2	THRO LR2	Stone arch culvert	Clean out accumulated sediment, repoint mortar, and return displaced rocks to their original positions
3	THRO LR2.5 (32BI540)	Stone arch culvert	Clean out accumulated sediment, repoint mortar, and return displaced rocks to their original positions
4	THRO LR3	Corrugated metal pipe culvert, 24-inch diameter	Replace with 24-inch diameter concrete pipe, rebuild headstone with salvaged stone
5	THRO LR4	Corrugated metal pipe culvert, 24-inch diameter	Replace with 24-inch diameter concrete pipe, preserve wall as much as possible/repair as needed
6	THRO LR8	Corrugated metal pipe culvert, 18-inch diameter	Replace with 18-inch concrete pipe, rebuild headwall with salvaged stone
7	THRO LR5	Corrugated metal pipe culvert, 24-inch diameter	Replace with 24-inch concrete pipe, rebuild headwall with salvaged stone
8	THRO LR6	Corrugated metal pipe culvert, 36-inch diameter	Replace with 36-inch diameter concrete pipe, rebuild headwall with salvaged stone
9	THRO LR7	Corrugated metal pipe culvert, 18-inch diameter	Upsize with 24-inch diameter concrete pipe, rebuild headwall with salvaged stone
10	THRO LR14	Plastic pipe culvert with stone headwall	Heavily damaged surrounding slope, particularly erosion below outlet. Headwall will not be preserved. A pipe run down will be installed in this location, out falling well below the existing outlet, and the existing culvert will be removed.
11	THRO LR13	Corrugated metal pipe culvert, 24-inch diameter	Replace with 24-inch diameter concrete pipe, rebuild headwall, with salvaged stone, and install riprap on the outlet

Feature Number	Field Designation	Type	Project Activity
12	THRO LR12	Corrugated metal pipe culvert, 24-inch diameter	Replace with 24-inch diameter concrete pipe, rebuild headwall with salvaged stone, install riprap on downstream side and rundowns
13	THRO LR11	Concrete pipe culvert, 36-inch diameter	Replace with 36-inch diameter concrete pipe, rebuild headwall with salvaged stone
14	THRO LR10	Concrete pipe culvert, 24-inch diameter	Replace with 24-inch diameter concrete pipe, rebuild headwall on south side with salvaged stone
15	THRO LR9	Corrugated metal pipe culvert, 24-inch diameter	Replace with 24-inch concrete pipe, rebuild headwall with salvaged stone
16	THRO LR23	Corrugated metal pipe culvert, unclear diameter (damaged)	Upsize to 30-inch diameter concrete pipe, rebuild headwall with salvaged stone, potentially install additional culverts
17	THRO LR22	Plastic pipe culvert with stone headwall, unclear diameter (damaged)	Upsize to 30-inch diameter concrete pipe, rebuild headwall with salvaged stone, potentially install additional culverts
18	THRO LR21	Corrugated metal pipe culvert, 18-inch diameter	Upsize to 24-inch diameter concrete pipe, rebuild headwall with salvaged stone
19	THRO LR20	Stone retaining wall	Repoint mortar and return any displaced rocks to their original positions
20	THRO LR19	Corrugated metal pipe culvert, 30-inch diameter	Replace with 30-inch concrete pipe, rebuild headwall with salvaged stone
21	THRO LR18	Corrugated metal pipe culvert, 24-inch diameter	Replace with 24-inch concrete pipe, rebuild headwall with salvaged stone
22	THRO LR17	Stone retaining wall	Repoint mortar and return any displaced rocks to their original positions
23	THRO LR16	Corrugated metal pipe culvert, 24-inch diameter	Replace with a 24-inch diameter concrete pipe, rebuild headwall with salvaged stone
24	THRO LR15	Triple corrugated metal pipe culvert, 18-inch diameter	Replace with single 42-inch diameter concrete pipe or four 18-inch diameter concrete pipes, rebuild headwall with salvaged stone
25	THRO LR24	Corrugated metal pipe culvert, 18-inch diameter, with large stone wall on outlet side	Remove culvert, rehabilitate stone wall, and redirect flows to new 24-inch diameter concrete pipe outside of the limits of the existing culvert and associated stone wall

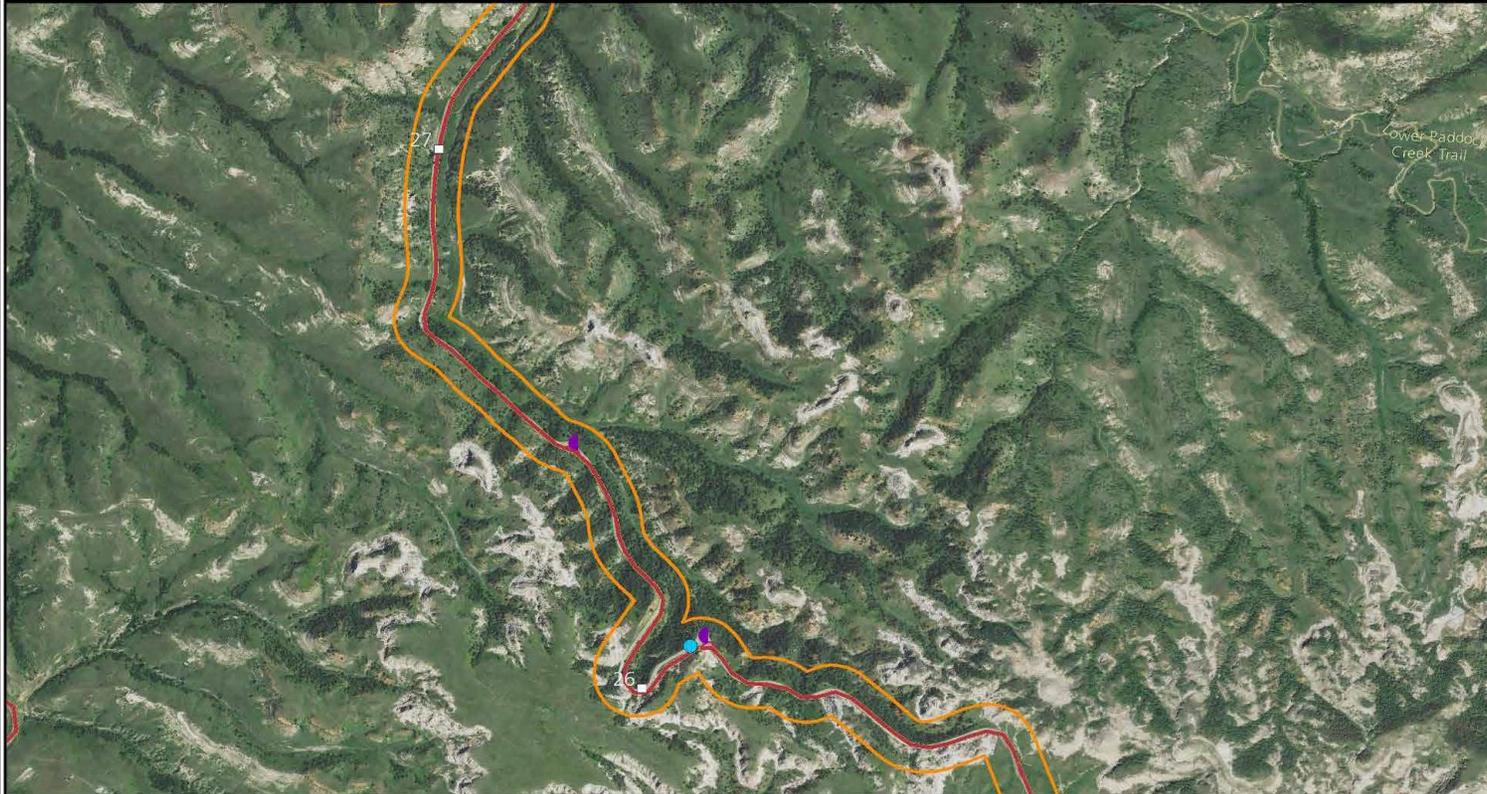
Feature Number	Field Designation	Type	Project Activity
26	THRO LR25	Corrugated metal pipe culvert, 24-inch diameter	Replace with 24-inch diameter concrete pipe, rebuild headwall with salvaged stone
27	THRO LR26	Corrugated metal pipe culvert, 18-inch diameter	Replace with 18-inch concrete pipe, rebuild headwall with salvaged stone, and install additional adjacent culvert
28	THRO LR27	Stone arch culvert	Repoint mortar
29	32BI541	Large stone arch culvert	Clean out accumulated sediment, repoint mortar, and return displaced rocks to their original positions
	Scenic Loop Drive Road	Road alignment and associated prism	Replace with new road along same alignment, additional culverts including some drop inlets, install six soldier pile walls with wood lagging, improve and expand Site 7 parking area, place riprap or vegetation in strategic locations to slow stormwater and reduce erosion, and place additional curbing.

The Park and design team advocated for the minimum amount of disturbance to historical components of the district by clarifying the need for drainage improvements and road modifications, particularly installation of the soldier pile walls. This included not installing walls, or construction walls built with shotcrete textured and colored to look similar to the surrounding soils. These options were both determined to result in further deterioration of the road and could not be constructed to appear natural and consistent with the surrounding landscape. Each existing culvert was assessed in hydrological detail, and some culverts initially proposed for upsizing were left the same diameter if adjacent culverts could be used.

South Unit Scenic Loop Road Repair Project APE (Road Closure Zone)



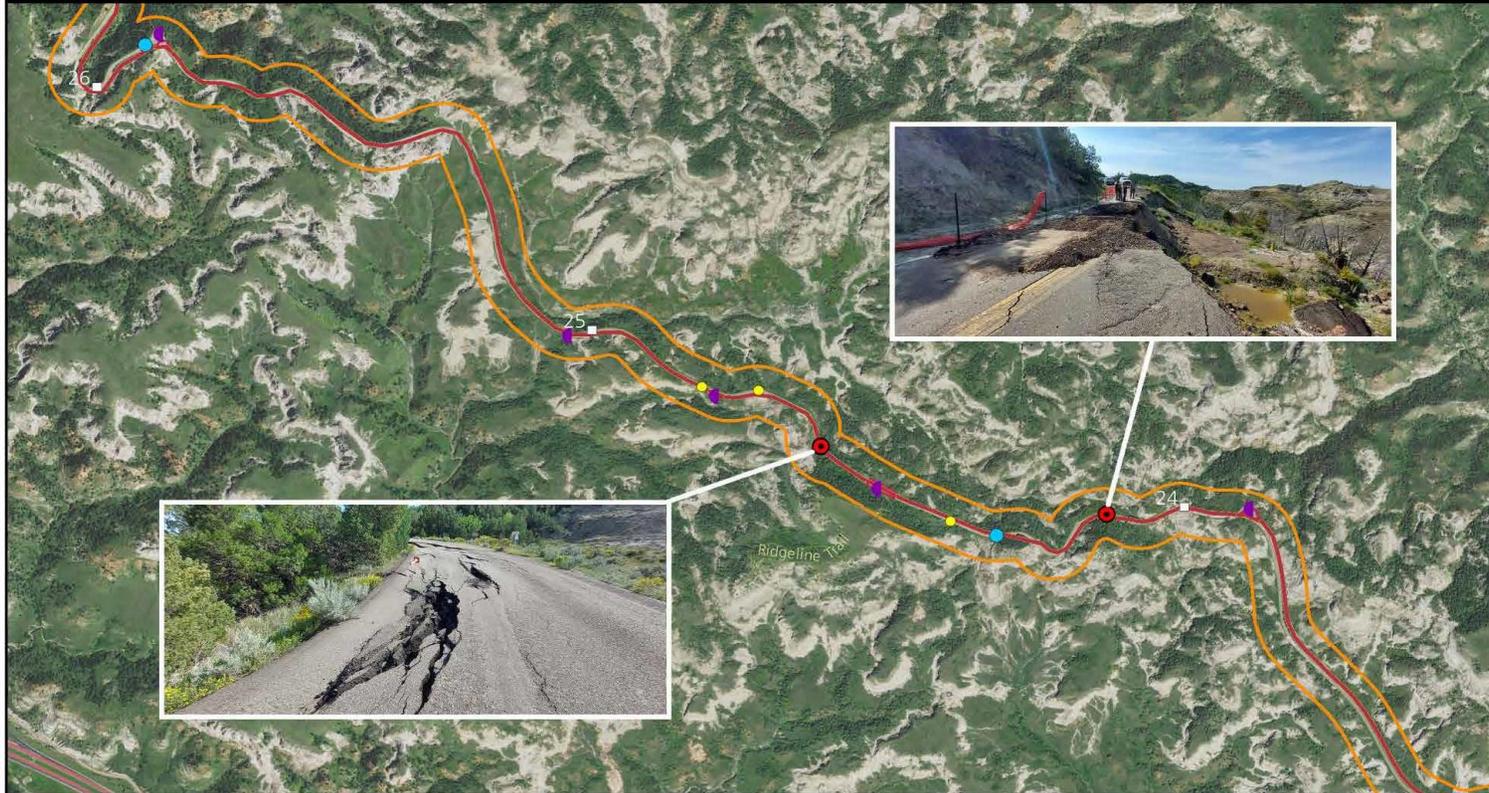
South Unit Scenic Loop Road Repair Project Area: Detail 1



Legend

Mile Markers	Road Problem Areas (20191025)		Sources: ESRI 2021; WSP 2021 Coordinate System: SPSC North Dakota South Zone
Pull-Out	Major Issue - Needs Detailed Examination		
NPS Road			
Road Closure Zone			

South Unit Scenic Loop Road Repair Project Area: Detail 2

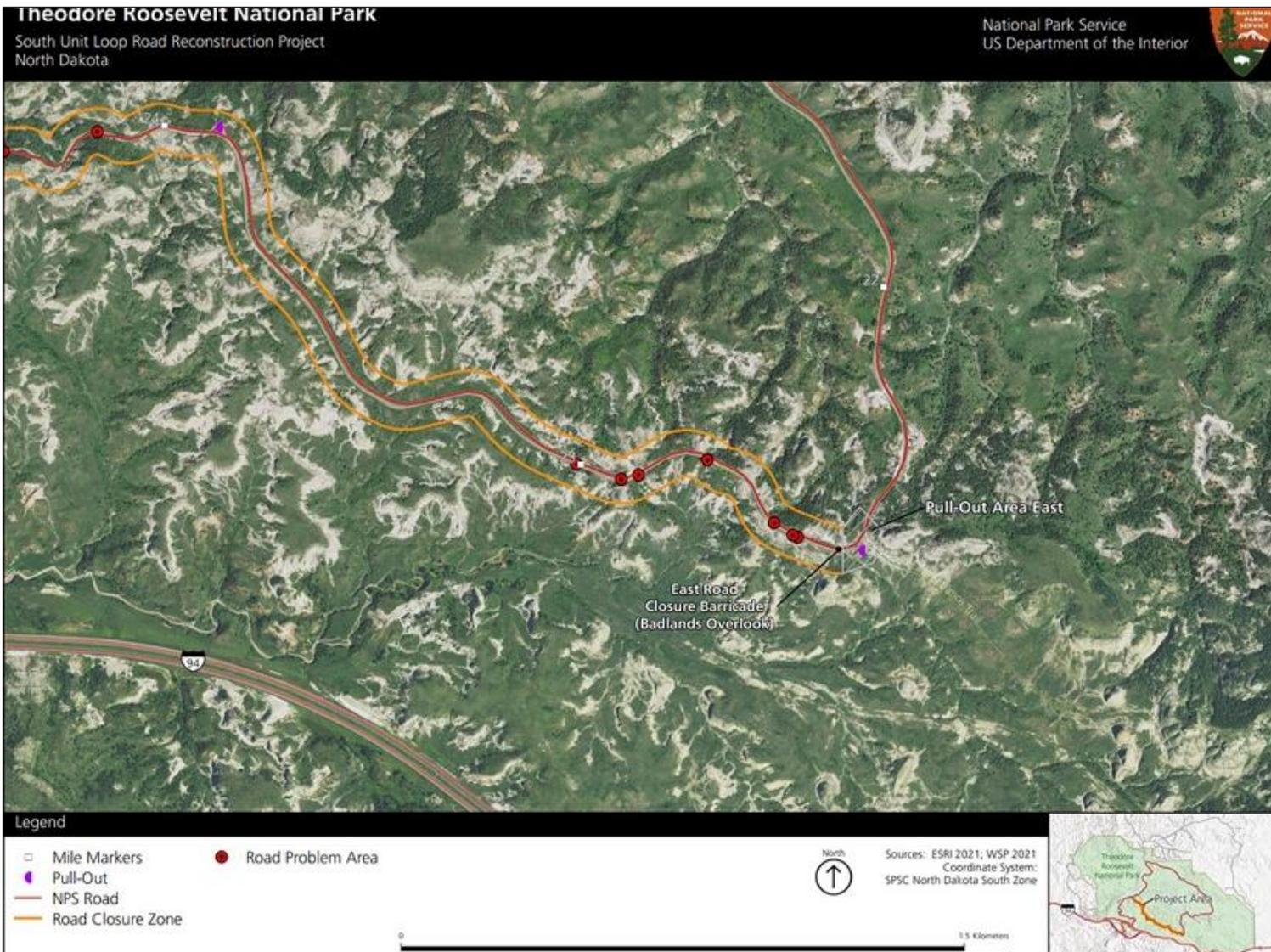


Legend

□ Mile Markers	Road Problem Areas (20191025)	North Sources: ESRI 2021; WSP 2021 Coordinate System: SPSC North Dakota South Zone
● Pull-Out	● Major Issue - Road Failure	
— NPS Road	● Major Issue - Needs Detailed Examination	
— Road Closure Zone	● Continued Monitoring of Area	

0 1.5 Kilometers
 0 1 Miles

South Unit Scenic Loop Road Repair Project Area: Detail 3



South Unit Scenic Loop Road Repair Project Area: Detail 4

Appendix B: Historic Properties Treatment Plan

1. Historic Road District Treatment Measures
2. Archeological Construction Monitoring
3. Tribal Construction Monitoring
4. Inadvertent Discovery Plan

**Please note the cultural resource information contained in these appendixes is protected from public disclosure under 16 U.S.C. Section 470w-3, of the National Historic Preservation Act of 1966, as amended, and 16 U.S.C. Section 470hh, of the Archaeological Resources Protection Act of 1979. As such, the associated details are not included in this public review copy of the environmental assessment.*

Inadvertent Discoveries

None of the investigations being proposed as a part of this project are intended or designed to excavate, uncover, disturb or remove Native American human remains, funerary objects, sacred objects, or objects of cultural patrimony. In the event that human remains, funerary objects, sacred objects, or objects of cultural patrimony are unintentionally exposed by some aspect of research in this study, procedures identified in “Guidance for National Park Service Compliance with the Native American Graves Protection and Repatriation Act (NAGPRA), NPS Cultural Resource Management Guideline, Appendix R will be followed.

If Native American human remains, funerary objects, sacred objects, or objects of cultural patrimony are inadvertently discovered, the project archeologist or tribal monitor must stop work and immediately notify the superintendent by telephone and confirm in writing. The project archeologist or tribal monitor will immediately stop all ground disturbing activities in the area of the inadvertent discovery and make a reasonable effort to protect the remains and objects from further disturbance. As soon as possible, but not later than three working days after receipt of the written confirmation of notification, the superintendent must certify receipt of the written notification, further secure and protect the remains and/or items, and notify lineal descendants, and the appropriate Indian tribes about the inadvertent discovery. If appropriate, the cultural items may be stabilized or covered to ensure their protection and to protect them from public viewing. The superintendent will initiate consultation about the cultural affiliation and disposition of Native American human remains, funerary objects, sacred objects, or objects of cultural patrimony. Ground disturbance in the area of the inadvertent discovery will not continue until a written agreement is executed between the NPS and the affiliated Indian tribe (s) that allows the Native American human remains, funerary objects, sacred objects, or objects of cultural patrimony to remain safely *in situ* or that adopts a recovery plan for the excavation or removal of the remains and objects. The disposition of all Native American human remains, funerary objects, sacred objects, and objects of cultural patrimony will be carried out according to the priority listing in the regulations [43 CFR 10.6].