PROGRAMMATIC AGREEMENT

AMONG THE UNITED STATES COAST GUARD, THE NORTH DAKOTA STATE HISTORIC PRESERVATION OFFICER, AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION REGARDING THE PROPOSED BRIDGE PROJECT AT MILE 1315.0 ON THE MISSOURI RIVER NEAR BISMARCK AND MANDAN, BURLEIGH COUNTY, NORTH DAKOTA

WHEREAS, the United States Coast Guard (USCG) is the lead federal agency, responsible for making a federal bridge permit decision for the BNSF Railway Company (BNSF) Bridge Replacement Project (Undertaking) in accordance with the General Bridge Act of 1946, as amended; and

WHEREAS, the Undertaking is defined as construction of a railroad bridge to replace or accompany the existing BNSF Bridge 0038-196.6, a historic through-truss bridge over the Missouri River, Jamestown Subdivision, Milepost 1315.0 (hereafter known as Bismarck Bridge), in Burleigh County, North Dakota, constructed 1880-1883 (substructure) and 1905-1906 (superstructure); and

WHEREAS, BNSF has determined that the Bismarck Bridge has reached the end of its useful life for rail traffic and needs to be replaced in order to safely move future rail traffic along BNSF's northern corridor; and

WHEREAS, the USCG has consulted with the North Dakota State Historic Preservation Officer (SHPO) pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA) (54 United States Code Section 306108) and its implementing regulations at *Code of Federal Regulations* (CFR) Title 36 Part 800, as amended; and

WHEREAS, the USCG has defined the Area of Potential Effects (APE) as the footprint of the proposed Undertaking within which all proposed construction and ground disturbing activity is confined, including existing and proposed right of way for replacement of the Bismarck Bridge (Attachment A – APE map), and the SHPO provided formal written concurrence with the APE on October 2, 2019, with the request that they would like to see any additional areas to be used for disposal, borrow or staging as those areas are identified; and

WHEREAS, during consultation, the USCG and SHPO agreed to consider a broader visual APE to take into account visual impacts that may affect historic properties beyond the original APE, and to consider potential construction vibration impacts to historic properties; and

WHEREAS, in 2017 BNSF had a Class I literature review conducted for resources within 1 mile of the project area and a Class III Inventory of the project area encompassing 58 acres, and the review identified 49 previously recorded cultural resources within 1 mile of the bridge, the majority of which are within the North Dakota National Guard's Fraine Barracks, southeast of the project area (the Bismarck Indian School/Fraine Barracks is considered a Traditional Cultural Property that is eligible for the National Register of Historic Places (NRHP) by the Mandan, Hidatsa, and Arikara (MHA) Nation, Standing Rock Sioux Tribe, and Turtle Mountain Band of Chippewa, and has been recorded as site CHFBL2) (see Attachment B for table of identified resources and map of non-confidential sites); and

WHEREAS, cultural resources within the APE are Site Lead 32MOx626, which is a drainage or irrigation ditch, and the Bismarck Bridge (site 32BL801/32MO1459); and

WHEREAS, the USCG, in consultation with the SHPO, has determined Site Lead 32MOx626 not eligible for listing in the NRHP and determined the Bismarck Bridge eligible for listing in the NRHP under Criterion A for its association with broad patterns of railroad, commercial, and military history in the United States, and under Criterion C for design and construction, and for its association with engineers George Shattuck Morison and Ralph Modjeski; and

WHEREAS, one of the two spans of the western approach to the Bismarck Bridge dates from 1906; the other western approach span is from 1980 and the five spans of the eastern approach are from 1991 – these six spans have no historic materials remaining; and

WHEREAS, many residents of Bismarck, Mandan, and surrounding areas regard the Bismarck Bridge to be an iconic landmark for their community identity and a compelling visual feature in the cultural landscape of the Missouri Valley; and

WHEREAS, the National Trust for Historic Preservation listed the Bismarck Bridge on *America's 11*Most Endangered Historic Places for 2019 because it was the first bridge to cross the upper Missouri River, George Shattuck Morison designed and oversaw its construction between 1880 and 1883, and the project employed advanced construction methods including pneumatic caissons such as those used to build its contemporary, the Brooklyn Bridge; and

WHEREAS, MHA Nation ancestral sites overlook this industrial infrastructure that altered the history of their lands and people, and the bridge is upriver from On-A-Slant Village where Mandan Chief Sheheke was born and later accompanied Lewis and Clark back to Washington, D.C. where Sheheke and President Jefferson met; and

WHEREAS, known ancestral areas upriver of the APE (see Attachment A for APE map) include Chief Looking's Village (site 32BL3), Crying Hill (site CHFMO38) (see Attachment B), and areas of the Missouri River bottomlands used to plant corn, beans, and squash; and

WHEREAS, the Bismarck Bridge is an important resource in the cultural landscape of the Northern Plains National Heritage Area and is closely tied with many important historic places and events in the Heritage Area; and

WHEREAS, the USCG, in consultation with the SHPO, has determined that the Undertaking would have an adverse effect on the Bismarck Bridge, and may have an adverse visual effect or effects from construction vibration on additional historic properties; and

WHEREAS, in accordance with 36 CFR 800.6(a)(1), the USCG has notified the Advisory Council on Historic Preservation (ACHP) of its adverse effect determination with specified documentation and the ACHP has chosen to participate in the consultation pursuant to 36 CFR 800.6(a)(1)(iii); and

WHEREAS, the USCG, in consultation with the ACHP and SHPO, has determined that the development of a Programmatic Agreement (PA), in accordance with 36 CFR 800.14(b)(1)(ii), is warranted because effects of the Undertaking are not fully known; and

WHEREAS, Consulting Parties are defined to include Signatories, Invited Signatories, and Concurring Parties; and

WHEREAS, "Signatories" as defined in 36 CFR 800.6(c)(1) have the sole authority to execute, amend, or terminate this agreement, and "Invited Signatories" as defined in 36 CFR 800.6(c)(2) have the same rights with regard to seeking amendment or termination of this agreement as the Signatories; and

WHEREAS, any reference within this PA to a "Signatory" includes Signatories and Invited Signatories; and

WHEREAS, Concurring Parties are asked to concur in this PA, indicating acceptance of the process leading to the PA, but they cannot prevent the PA from being executed, amended, or terminated; and

WHEREAS, BNSF is the project proponent, has specific responsibilities under this PA, and has been invited to participate in this consultation and to sign this PA as an Invited Signatory; and

WHEREAS, Friends of the Rail Bridge (FORB) has specific responsibilities under this PA and they have been invited to participate in this consultation and to sign this PA as an Invited Signatory; and

WHEREAS, because the Undertaking requires authorization by the United States Army Corps of Engineers (USACE) under the Clean Water Act Section 404, the Omaha District of USACE (North Dakota Regulatory Office) has been invited to participate in this consultation and to sign this PA as a Concurring Party; and

WHEREAS, the USCG has consulted with Bismarck Parks and Recreation District, Bismarck Historical Society, Bismarck-Mandan Historical and Genealogical Society, Bismarck Tour Company, Bismarck-Mandan Metropolitan Planning Organization, Burleigh County, Captain's Landing Township, City of Bismarck, City of Mandan, Fort Abraham Lincoln Foundation, Historic Bridge Foundation, Mandan Historical Society, Lakota Consulting, Morton County, Morton County Historical Society, National Trust for Historic Preservation, North Dakota Department of Transportation, North Dakota Parks and Recreation Natural Resources Division, North Dakota State Railroad Museum, North Dakota State University Department of Landscape Architecture, Preservation North Dakota, Rails to Trails Conservancy, and the North Dakota Indian Affairs Commission regarding the effects of the Undertaking on historic properties and has invited them to participate in this consultation and to sign this PA as Concurring Parties; and

WHEREAS, in accordance with 36 CFR 800.2(c)(2)(ii), the USCG invited the following Federally recognized Indian tribes to participate in consultation on this Undertaking and to sign this PA as Concurring Parties: Cheyenne River Sioux Tribe, Chippewa Cree, Crow Creek Sioux Tribe, Crow Nation, Flandreau Santee Sioux Tribe, Fort Peck Assiniboine and Sioux Tribes, MHA Nation, Northern Cheyenne Nation, Oglala Sioux Tribe, Rosebud Sioux Tribe, Santee Sioux Nation, Sisseton-Wahpeton Oyate, Spirit Lake Tribe, Standing Rock Sioux, Turtle Mountain Band of Chippewa, and Yankton Sioux Tribe; and

WHEREAS, the USCG invited the Wahpekute Band of Dakotah, a non-Federally recognized Indian tribe, to participate in consultation on this Undertaking and to sign this PA as a Concurring Party; and

WHEREAS, the MHA Nation and the Northern Cheyenne Nation accepted the invitation to participate in consultation; and

WHEREAS, the USCG initiated Section 106 consultation with the SHPO on May 10, 2017 and has made a good faith effort to consult with interested parties to discuss the Undertaking, its effects, and potential mitigation measures, including 12 Consulting Parties' meetings between January 2018 and September 2020, as documented in the consultation log in Attachment C; and

WHEREAS, the USCG held a public meeting and open house on December 14, 2017, in compliance with Section 106 of the NHPA, to provide the public with information about the Undertaking and its effects on historic properties, seek public comment and input, and provide general information about the project;

NOW, THEREFORE, the USCG, SHPO, ACHP, BNSF, and FORB agree that the USCG shall ensure that the following stipulations are implemented to take into account the effects of the Undertaking on historic properties, and that these stipulations shall govern the Undertaking and all of its parts.

STIPULATIONS

The USCG shall ensure that the following measures are implemented:

I. AREA OF POTENTIAL EFFECTS

- A. The APE may require amendments or revisions as the project design develops and construction methodologies are detailed. If the APE requires amendment or revision, the following procedure will apply.
 - 1. BNSF will notify the USCG and SHPO in writing of requested changes to the APE within 7 days of learning an amendment or revision is needed. BNSF will provide a map showing the existing APE and the proposed amendment(s) or revision(s), accompanied by a written explanation of the reason for the change(s).
 - 2. The USCG will consult with the SHPO on the requested changes to the APE and will revise or amend the APE as they determine appropriate.
 - 3. The USCG will notify Consulting Parties of changes to the APE along with the map showing the existing APE and the proposed amendment(s) or revision(s), as well as the written explanation of the reason for the change(s), within 15 days of the USCG and SHPO being informed by BNSF of the need for an amendment(s) or revision(s).
 - 4. Consulting Parties will have 30 days to review and comment on the amended or revised APE.
 - 5. The USCG will take all comments into consideration when finalizing the amended or revised APE. The USCG will provide the finalized APE to the Consulting Parties within 30 days of receiving comments. Any disagreements on changes to the APE will be resolved as stated in Stipulation XIV.

- 6. Once APE changes are finalized, the USCG will file them electronically with the ACHP through e-106.
- 7. The USCG will ensure that all areas added to the APE that have not been previously surveyed will be surveyed for cultural resources. If any cultural resources are identified, the USCG will determine if they are eligible for the NRHP and submit those determinations to the SHPO for concurrence.
- 8. If historic properties are identified within the APE revisions, the USCG will consult with the SHPO and other Consulting Parties to determine the effects of the Undertaking on those properties. If those effects are found to be adverse, the USCG will consult with BNSF and the SHPO to explore ways to avoid or minimize the effects.
- 9. If adverse effects to historic properties within the APE revisions cannot be avoided, those adverse effects will be mitigated through a second tier Memorandum of Agreement (MOA) as provided in Stipulation VIII.
- B. **Visual APE.** The USCG will consult with the SHPO to identify a proposed visual APE that encompasses those areas where removal of the existing Bismarck Bridge and/or the addition of a new rail bridge could have visual impacts on historic properties.
 - 1. Once the proposed visual APE is drafted, the USCG will provide it to all Consulting Parties.
 - 2. Consulting Parties will have 30 days to review and comment on the proposed visual APE.
 - 3. The USCG will take all comments into consideration when finalizing the visual APE. The USCG will provide the final visual APE to the Consulting Parties within 30 days of receiving comments. Any disagreements on the visual APE will be resolved as stated in Stipulation XIV.
 - 4. The USCG will consult with the SHPO on a reasonable and good faith cultural resources survey methodology for areas in the visual APE that have not been previously surveyed. The USCG will determine if cultural resources identified by the survey are eligible for the NRHP and submit those determinations to the SHPO for concurrence.
 - 5. If historic properties are identified within the visual APE, the USCG will consult with the SHPO and other Consulting Parties to determine the effects of the Undertaking on those properties. If those effects are found to be adverse, the USCG will consult with BNSF to explore ways to avoid or minimize the effects. The USCG will also consult with the Bridge Advisory Committee (BAC) established for the Undertaking pursuant to Stipulation V.B. to assist with ideas to minimize visual impacts.
 - 6. If adverse effects to historic properties within the visual APE cannot be avoided, those adverse effects will be mitigated through a second tier MOA as provided in Stipulation VIII.

II. VIBRATION MONITORING

A. The USCG will identify a vibration APE for construction <u>and demolition</u> activities that may have adverse effects on historic properties as a result of vibration impacts. The vibration

APE will be based on a 500-foot radius from the construction footprint. 500 feet is considered a reasonable and conservative threshold for screening of construction activities that do not involve blasting, according to the National Cooperative Highway Research Program Project 25-25 (Task 72). No blasting or explosives will be used by BNSF or their contractors. The USCG will distribute the vibration APE to the other consulting parties.

- B. BNSF will strive to avoid and minimize vibration impacts from construction on historic buildings and structures.
- C. BNSF will hire a qualified consultant (pursuant to Stipulation X) to identify historic buildings and structures (eligible for or listed in the NRHP) within the vibration APE.
 - If any historic buildings or structures are identified within the vibration APE, 1. BNSF will have 60 days from identification of said buildings and/or structures to conduct an initial screening evaluation by a vibration expert using methods recommended by the Federal Transit Administration's Transit Noise and Vibration Impact Assessment (May 2006), taking into consideration local soil conditions. The Federal Transit Administration provides a peak particle velocity unit of 0.2 inch per second as the level for potential construction vibration damage to non-engineered timber and masonry buildings with plaster walls and/or ceilings. Peak particle velocity for vibration at the Bismarck Bridge will be specific to the bridge and take into consideration the existing vibrations it currently experiences from train traffic. If the screening indicates construction vibrations are likely to exceed a peak particle velocity unit of 0.2 inch per second at identified historic buildings or structures, or to exceed the velocity level determined for the Bismarck Bridge, then BNSF will explore the feasibility of options to reduce the vibrations below 0.2 inch per second at identified historic buildings or structures, or below the level determined for the Bismarck Bridge.
 - 2. If measures to reduce the vibrations to below 0.2 inch per second at historic buildings are not feasible, BNSF will perform a condition assessment on those historic buildings and structures within the vibration APE prior to construction. The condition assessment will be performed by the vibration expert, a structural engineer, a licensed architect, and an architectural historian, all retained by BNSF, and will include photo and/or video documentation. It will specifically evaluate susceptibility to vibration damage for each building and structure. The assessment will determine specific vibration thresholds for structural and architectural (cosmetic) damage. The condition assessments must be completed before construction can begin. No condition assessment of the Bismarck Bridge will be performed as existing BNSF inspections will suffice.
 - 3. If any of the specific vibration thresholds determined in Stipulation II.C.2. exceed 0.2 inch per second, BNSF, in consultation with the SHPO and affected property owners, will explore vibration mitigation measures to protect the building(s) and/or structure(s) and significant architectural features, and whether these measures are feasible and reasonable. If, after said consultation, BNSF determines these measures to be feasible and reasonable, BNSF will implement them, in consultation and with the approval of the property owner(s). Mitigation measures will not apply to the Bismarck Bridge as it will continue to operate as an active rail bridge under BNSF ownership

throughout construction.

- 4. In addition to potential vibration mitigation measures, the vibration expert will install vibration amplitude monitoring at the vulnerable historic building(s) and/or structure(s). The vibration monitoring will be done by the vibration expert, who will establish warning and stop work thresholds, as well as procedures for threshold exceedances. Once the vibration expert has established these thresholds and procedures, BNSF will provide this information to the USCG, who will in turn notify the Consulting Parties, and construction may then proceed.
- 5. If a stop work threshold is exceeded, BNSF will notify the USCG as soon as possible, within normal working hours. BNSF will engage a structural engineer, a licensed architect, and an architectural historian to inspect the building(s) and/or structure(s) for damage within 72 hours of USCG notification. Construction can continue once the inspection is complete.
 - a) If the inspection determines there is no damage, the vibration expert will consult with the structural engineer, licensed architect, and architectural historian to determine if the threshold should be raised and adjust accordingly.
 - b) If the inspection determines there is minor structural or architectural damage, BNSF will provide for any necessary repairs, consistent with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*. BNSF will offer the SHPO an opportunity to comment on the consistency of such repairs with the *Standards* and will modify the repairs in response to any SHPO comments. The vibration expert will consult with the structural engineer, licensed architect, and architectural historian to determine if a lower stop work threshold is needed and adjust accordingly.
 - c) If the inspection determines there is severe damage, BNSF will provide for any necessary repairs, consistent with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*. BNSF will offer the SHPO an opportunity to comment on the consistency of such repairs with the *Standards* and will modify the repairs in response to any SHPO comments. BNSF will direct the contractor to immediately stop working on that construction activity until appropriate safeguards can be put in place. The vibration expert will consult with the structural engineer, licensed architect, and architectural historian to determine if a lower stop work threshold is needed and adjust accordingly.
 - d) If vibration levels approach or exceed the stop work levels repeatedly, BNSF will direct the contractor to immediately stop working on that construction activity and will consult with the USCG and SHPO on alternative construction methods or other avoidance/mitigation solutions.

III. NEW ALTERNATIVE WITH NO NET RISE

Interested parties may conduct an independent floodplain evaluation to determine if there is another alternative that meets the Federal Emergency Management Agency (FEMA) no net rise requirement (40 CFR 60.3(d)(3)).

A. If such an alternative is identified, the interested parties will submit a flood model

evaluation of a new railroad bridge adjacent to the existing bridge that would cause no net rise in the floodplain. The interested parties will submit this evaluation to FEMA and/or the local floodplain administrators for the cities of Bismarck and Mandan for certification 60 days prior to the USCG publishing the draft environmental impact statement, and will simultaneously notify the USCG of said submission and provide submitted materials to the USCG. The interested parties will keep the USCG informed of the status of the evaluation throughout the floodplain review process, including but not limited to copying the USCG on all correspondence with FEMA and the local floodplain administrators.

- B. The USCG will then analyze this information and the alternative's potential impacts on the environment and include it in the draft environmental impact statement for public comment.
- C. The interested parties will submit the certified flood model evaluation or Conditional Letter of Map Revision (CLOMR); explanation of the alternative, including environmental impacts from such alternative; and identification and evaluation of any necessary mitigation measures to the USCG at least 30 days prior to the USCG issuing the Record of Decision for the environmental impact statement.

IV. **NEW ALTERNATIVE WITH A NET RISE**

If an interested party identifies a new alternative(s) to be carried forward that results in a net rise to the floodplain, such party(s) must identify the potential mitigation measures associated with the net rise for that alternative(s). Such party would be responsible for that mitigation as well as all actions in Stipulation IV.A., B., and D.

- A. Any new alternative(s) resulting in a net rise must go through the CLOMR process and be accepted by the local floodplain administrators for the cities of Bismarck and Mandan, as well as the state water commission. The process begins with FEMA's acceptance of the CLOMR. Then the floodway review application (which includes the CLOMR) is submitted to the state water commission by the local floodplain administrators for review and acceptance. Coordination of the submittal review is led by the state's National Flood Insurance Program Coordinator. Upon approval and acceptance by the state water commission, the floodplain development permits are issued by the local floodplain administrators for the cities of Bismarck and Mandan. In addition, a Sovereign Lands Permit from the Office of the State Engineer is required for any work completed below the Ordinary High Water Mark. Any ditch modifications require a North Dakota Surface Drain Application, also from the Office of the State Engineer. Local city permits or other permissions may also be required, depending on the type and extent of mitigation considered.
- B. The interested parties will submit the flood plain model evaluation to FEMA and/or the local floodplain administrators for the cities of Bismarck and Mandan for certification 60 days prior to the USCG publishing the draft environmental impact statement, and will simultaneously notify the USCG of said submission and provide submitted materials to the USCG. Explanation of such alternative(s) and its mitigation measures, including identification and evaluation of environmental impacts of such mitigation measures, must be submitted to the USCG at least 60 days prior to the USCG publishing the draft environmental impact statement for public comment. The interested parties will keep the USCG informed of the status of the evaluation throughout the floodplain review process, including but not limited to copying the USCG on all

correspondence with FEMA and the local floodplain administrators.

- C. The USCG will then analyze this alternative(s) and its potential impacts on the environment and include it in the draft environmental impact statement for public comment.
- D. The interested party must submit FEMA's CLOMR acceptance and the state water commission's approval for the alternative to the USCG at least 30 days prior to the USCG issuing the Record of Decision for the environmental impact statement. See also approvals regarding floodplain rise described in Stipulation V.B. under Public Private Partnership responsibilities.

V. RETAIN EXISTING BRIDGE

If the USCG determines that retaining the existing Bismarck Bridge and constructing a new adjacent bridge is feasible and reasonable, then the following actions will be implemented.

- A. Effects to historic properties, including how the new bridge will visually affect the existing bridge and any surrounding historic properties within the visual APE, will be addressed in the MOA (see Stipulation VIII.C.).
- B. The actions in the following table must be completed by the indicated responsible party and by the date or schedule provided. If a party cannot meet the date or schedule stipulated, that party will request an amendment to this PA in compliance with Stipulation XV. This request will be made in writing to the USCG and will include what progress has been made on the action, why the delay has occurred, and provide an anticipated revised date or schedule. The USCG will convey this request to the other consulting parties, who will then consult on the potential change to schedule. After consultation, the decision on any re-scheduling will be the responsibility of the USCG.

Responsible Party	Action
USCG	 Lead the consultation to develop the MOA (Stipulation VIII) that will detail mitigation measures needed to resolve any adverse effects. First draft of the MOA is due to Consulting Parties no later than 30 days after the ACHP signs and executes this PA, and consultation meetings will occur within 60 days.
	Prepare a determination of eligibility for the Bismarck Bridge approaches prior to issuing the draftfinal environmental impact statement and submit said determination to the SHPO for concurrence. If the approaches are found to be eligible for the NRHP, effects to them and any mitigation, if necessary, will be addressed in the in the MOA (see Stipulation VIII.C.).
	 Identify a vibration APE for construction activities and distribute to other consulting parties.
FORB	 Establish a Bridge Advisory Committee (BAC) to consider how the new bridge could be visually compatible with the Bismarck Bridge and its landscape, setting, and viewshed. The

role of the BAC would be limited to advice and comment on aesthetic issues and would not involve input on the engineering. The BAC may include representatives from the SHPO, FORB, North Dakota State Water Commission, BNSF, Bismarck Historic Preservation Commission, and tribes. After receiving BNSF's information on bridge design, the BAC The BAC will present their initial recommendations to the USCG no later than 60 days prior to the USCG publishing the draft environmental impact statement for public comment so their recommendations can be included in the draft environmental impact statement.

- Establish a public private partnership or other governance body that could accept ownership of the Bismarck Bridge and other responsibilities listed in the following table section. FORB will have 30-45 days from ACHP signature on and execution of this PA to identify a public partner with a commitment toand establish a working formal partnership, and to inform the USCG of this partnership.
- Submit to the USCG a conceptual plan to identify how funds
 will be raised and funding sources for all costs associated with
 the project to retain the bridge and convert it to a non-rail
 use by the close of the draft environmental impact statement
 public comment period.

Public Private Partnership

- Draft a contract or lease agreement with BNSF to take ownership of or become the lessee for the existing bridge within 60 days of the USCG publishing the final environmental impact statement. Such contract or lease agreement must be signed within 30 days of issuance of the Record of Decision for the environmental impact statement.
- Establish a <u>fund-vehicle to receive funds</u> for ongoing maintenance and management of the Bismarck Bridge and notify the USCG of such establishment within 60 days of ACHP signature on and execution of this PA.
- Submit a financial management plan and a <u>detailed fund</u> <u>raising</u> plan to <u>identify how funds will be raised to the USCG</u> for the following items to the <u>USCG</u> by the close of the draft environmental impact statement public comment period:
 - Bridge maintenance and management fund.
 - Initial phase of bridge-to-trail conversion. Estimated fundraising goal is \$700,000* for design and plan preparation, permitting, and inspections.
 - Added design costs and construction premiums above those for BNSF's proposed action. BNSF will

	provide the estimated amount of funding (see BNSF's responsibilities in the following table section). Cost to remove the Bismarck Bridge to prevent hazard to navigation in the event of bridge failure or dereliction, estimated at \$4 million, once the bridge is no longer used for rail and becomes the responsibility of the Public Private Partnership. This responsibility would not apply until after BNSF's responsibility in Stipulation VII expires. Cost of construction to repurpose the Bismarck Bridge from a rail bridge to a pedestrian bridge. Estimated cost* is \$6,191,720. Cost to design and implement any mitigation measures, if needed, for alternatives identified under Stipulations III and IV.
	 Obtain all necessary approvals and permits to construct any floodplain rise mitigation, and fully design such mitigation, including construction documents, to prove feasibility. Approvals/permits and design documents must be provided to the USCG within 30 days of issuance of the USCG bridge permit decision.
BNSF	 Comply with vibration monitoring plan provided in Stipulation II.
	 Draft a contract or lease agreement with the Public Private Partnership for them to take ownership of or become the lessee for the existing bridge within 60 days of the USCG publishing the final environmental impact statement. Such contract or lease agreement must be signed within 30 days of issuance of the Record of Decision for the environmental impact statement.
	 Provide the estimated amount of added design costs and construction premiums above those for BNSF's proposed action. BNSF must provide these costs and supporting documentation to the USCG and Public Private PartnershipFORB within 60 days of ACHP signature on and execution of this PA.
	 BNSF will present engineering drawings for the new bridge, including architectural renderings, to the BAC no later than 30 days after the ACHP signs and executes this PA, and work in collaboration to develop design considerations.
	o Final Foogibility Study, Juno 20, 2010

^{*}Estimates and work items from Final Feasibility Study, June 30, 2019.

C. If any part of Stipulation V. cannot be fulfilled, then the process <u>may</u> moves to

Stipulation VI, at the discretion of the USCG. If a party cannot meet the obligation(s) stipulated, that party will request an amendment to this PA in compliance with Stipulation XV. This request will be made in writing to the USCG and will include what progress has been made on the action, why the obligation cannot be fulfilled, and suggested revisions or substitutions to accomplish the goal of the stipulated action in question. The USCG will convey this request to the other consulting parties, who will then consult on the potential change. After consultation, the decision on any revisions to the stipulated obligation(s) will be the responsibility of the USCG.

VI. REMOVE EXISTING BRIDGE

- A. If the USCG determines that retaining the existing bridge and constructing a new adjacent bridge is not feasible and reasonable, then the actions in the following table must be completed by the indicated responsible party, and by the date or schedule provided.
- B. If any part of this stipulation cannot be fulfilled, then the process <u>may</u> moves to Stipulation XVI., at the discretion of the USCG. If a party cannot meet the obligation(s) stipulated, that party will request an amendment to this PA in compliance with Stipulation XV. This request will be made in writing to the USCG and will include what progress has been made on the action, why the obligation cannot be fulfilled, and suggested revisions or substitutions to accomplish the goal of the stipulated action in question. The USCG will convey this request to the other consulting parties, who will then consult on the potential change. After consultation, the decision on any revisions to the stipulated obligation(s) will be the responsibility of the USCG.

Responsible Party	Action
USCG	 Lead the consultation to develop the second tier MOA (Stipulation VIII) that will detail mitigation measures needed to resolve any adverse effects from the removal of the historic Bismarck Bridge and the addition of a new bridge. First draft of MOA is due to Consulting Parties no later than 30 days after the ACHP signs and executes this PA, and consultation meetings will occur within 60 days. Prepare a determination of eligibility for the Bismarck Bridge approaches prior to issuing the draft environmental impact statement and submit said determination to the SHPO for concurrence. If the approaches are found to be eligible for the NRHP, effects to them and any mitigation, if necessary, will be addressed in the MOA (see Stipulation VIII.C.). Identify a vibration APE for construction and demolition activities and distribute to other consulting parties.

FORB	 Establish a BAC to consider how the new bridge could be visually compatible with the landscape, setting, and viewshed. The role of the BAC would be limited to advice and comment on aesthetic issues and would not involve input on the engineering. The BAC may include representatives from the SHPO, FORB, North Dakota State Water Commission, BNSF, Bismarck Historic Preservation Commission, and tribes. After receiving BNSF's information on bridge design, Tthe BAC will present their initial recommendations to the USCG no later than 60 days prior to the USCG publishing the draft environmental impact statement for public comment so their recommendations can be included in the draft environmental impact statement.
	 No less than 30 days before the draft environmental impact statement is issued by the USCG, provide recommendations to the USCG regarding which, if any, portions of the existing Bismarck Bridge might be retained in place to preserve the history of the bridge while still maintaining no net rise. If there are any impacts related to keeping a portion of the Bismarck Bridge in the waterway, FORB must evaluate these impacts and identify mitigation for these impacts (See Stipulation IV.B.) within this same time period. Present a plan to the USCG to identify how funds for said mitigation will be raised by the close of the draft environmental impact statement public comment period.
BNSF	 Comply with vibration monitoring plan provided in Stipulation II.

VII. IMMINENT FAILURE

The parties acknowledge that, if the existing Bismarck Bridge is determined by BNSF to be subject to derailment, imminent failure, or other serious physical hazard, BNSF would immediately notify the USCG, USACE, and SHPO, and immediately commence the USCG (Commandant Instruction M16590.5C, Chapter 4.F.) and USACE (33 CFR 325.2(e)(4)) emergency permit process prior to bridge removal and replacement. BNSF will notify the other Consulting Parties within 24 hours of notifying the agencies. A second tier MOA will then be developed pursuant to Stipulation VIII. by the USCG, ACHP, SHPO, BNSF, and other Consulting Parties to mitigate the loss of the historic bridge. This provision may only be invoked prior to the conversion of the Bismarck Bridge to a non-rail purpose, and prior to BNSF and the Public Private Partnership executing a contract or lease for the bridge. In the event that BNSF invokes this provision, BNSF shall be exclusively responsible for paying any and all costs associated with the demolition.

VIII. SECOND TIER MEMORANDUM OF AGREEMENT

- A. A second tier MOA will be developed by the USCG, ACHP, and the other Consulting Parties to address adverse effects that the Undertaking may have on historic properties and develop detailed mitigation plans, assign responsibilities, and provide timelines.
- B. The USCG will provide the first draft of the MOA to Consulting Parties no later than 30 days after the ACHP signs and executes this PA.
- C. The MOA will include specific commitments to minimize and mitigate adverse visual effects from the new bridge on the existing Bismarck Bridge, if it is retained, and also on any other historic properties in the visual APE.

IX. POST-REVIEW DISCOVERIES

- A. If properties are discovered that may be historically significant, or if unanticipated effects on historic properties are found, the USCG shall implement the inadvertent discovery plan included as Attachment D of this PA.
- B. If human remains are discovered during construction, work in that portion of the project shall stop immediately and the USCG shall implement the human remains section of the inadvertent discovery plan included as Attachment D of this PA.

Administrative Provisions

X. PROFESSIONAL QUALIFICATIONS

All work carried out pursuant to this PA will be developed and/or implemented by, or under the direct supervision of, a person or persons meeting or exceeding the minimum professional qualifications, appropriate to the affected resource(s), listed in the Secretary of the Interior's Professional Qualification Standards as defined and officially adopted in 1983 (48 FR 44716, September 29) and the Secretary of the Interior's Historic Preservation Professional Qualification Standards as expanded and revised in 1997 (62 FR 33708, June 20).

XI. **EFFECTIVE DATE**

The terms of this agreement will become effective upon signature of all Signatories. The USCG will file a copy with the ACHP.

If an emergency is declared in the area of the Undertaking by the President of the United States or Governor of North Dakota, any deadlines written into this PA are automatically extended 60 days.

XII. **DURATION**

This PA will expire if its terms are not carried out within 10 years from the date of issuance of the USCG bridge permit. Prior to such time, the USCG may consult with the other Signatories to reconsider the terms of the PA and amend it in accordance with Stipulation XV.

XIII. MONITORING AND REPORTING

BNSF and FORB shall each provide all Consulting Parties to this PA a monthly summary report detailing work undertaken pursuant to its terms on the first of each month following the execution of this PA until the USCG bridge permit is issued, at which point reporting can occur annually, commencing on the first of the month after the date of the signed Record of

Decision, until the PA expires or is terminated. Such reports shall include all proposed scheduling changes and disputes or objections received in parties' efforts to carry out the terms of this PA. These reports will be emailed to the USCG point of contact (POC) as well as to POCs for all Consulting Parties. The USCG will hold periodic (quarterly or annual) Consulting Party meetings after the PA is executed based on the interest of the Signatories.

XIV. DISPUTE RESOLUTION

If any Consulting Party to this agreement objects to any actions conducted during the term of this PA or to the manner in which the terms of this PA are implemented, the USCG shall consult with such party to resolve the objection. If the USCG determines that such objection(s) cannot be resolved, the USCG will:

- A. Forward all documentation relevant to the dispute, including the USCG's proposed resolution, to the ACHP. The ACHP shall provide the USCG with its advice on the resolution of the objection within 30 calendar days of receiving documentation. Prior to reaching a final decision on the dispute, the USCG shall prepare a written response that takes into account any timely advice or comments regarding the dispute from the ACHP and Signatories and provide them with a copy of this written response. The USCG will then proceed according to its final decision.
- B. If the ACHP does not provide its advice regarding the dispute within the 30-day time period, the USCG may make a final decision regarding the dispute and proceed accordingly. Prior to reaching a final decision, the USCG shall prepare a written response that takes into account any timely advice or comments regarding the dispute from the Signatories to the PA and provide them and the ACHP with a copy of such written response.
- C. The USCG's responsibility to carry out all other actions subject to the terms of this PA that are not the subject of the dispute remain unchanged.

XV. AMENDMENTS AND ADDITIONAL PARTIES

- A. This agreement may be modified upon the mutual written consent of the Signatories in accordance with 36 CFR 800.6(c)(7).
- B. If additional approvals are needed from another agency that is not a party to this PA and the Undertaking remains unchanged, such agency may comply with Section 106 by agreeing in writing to the terms of this PA and notifying and consulting with the SHPO and ACHP. Any necessary modifications would be considered in accordance with Stipulation XV.A.

XVI. TERMINATION

- A. If any Signatory determines that the terms of this PA will not or cannot be carried out, that party shall immediately consult with the other signatories to attempt to develop an amendment per Stipulation XV above. If within 90 days (or another time period agreed to by all signatories) an amendment cannot be reached, the Signatory may terminate the PA upon written notification to the other signatories. The party proposing to terminate the agreement shall so notify all other signatories to this agreement explaining the reasons for termination and affording at least 60 days to consult and seek alternatives to termination. The signatories shall then consult.
- B. Should such consultation fail to resolve the dispute, any Signatory may terminate the

agreement by so notifying all Consulting Parties. Should this agreement be terminated, the USCG shall either:

- 1. Consult in accordance with 36 CFR 800.6(a) in an effort to resolve any adverse effects, or
- 2. Terminate consultation and request ACHP comment in accordance with 36 CFR 800.7(c).

XVII. POINTS OF CONTACT

The USCG POC will be Brian Dunn, Chief, Office of Bridge Programs, Coast Guard Headquarters (202) 372-1510. The SHPO POC will be Lorna Meidinger, Architectural Historian (701) 328-2089). The ACHP POC will be Christopher Wilson, Program Analyst (202) 517-0229. The BNSF POC will be Mike Herzog, Director of Bridge Construction (913) 551-4229.

Execution of this PA by the USCG, SHPO, ACHP, BNSF, and FORB, and implementation of its terms, is evidence that the USCG has taken into account the effects of this Undertaking on historic properties and afforded the ACHP an opportunity to comment.

SIGNATORY PAGE

PROGRAMMATIC AGREEMENT

AMONG THE UNITED STATES COAST GUARD, THE NORTH DAKOTA STATE HISTORIC PRESERVATION OFFICER, AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION REGARDING THE PROPOSED BRIDGE PROJECT AT MILE 1315.0 ON THE MISSOURI RIVER NEAR BISMARCK AND MANDAN, BURLEIGH COUNTY, NORTH DAKOTA

Signatory:		
United States Coast Guard		
	Date	
David R. Callahan, Rear Admiral, U.S. Coast Guard		

Commander, Eighth Coast Guard District

SIGNATORY PAGE

PROGRAMMATIC AGREEMENT

Signatory:		
North Dakota State Historic Preservation Officer		
	Date	
William Peterson, State Historic Preservation Officer		

SIGNATORY PAGE

PROGRAMMATIC AGREEMENT

Signatory:		
Advisory Council on Historic Preservation		
	Date	
John M. Fowler, Executive Director		_

INVITED SIGNATORY PAGE

PROGRAMMATIC AGREEMENT

Invited Signatory:		
BNSF Railway Company		
Mike Herzog, P.E., Director of Bridge Construction, BNSF Railway	_ Date	
Company		

INVITED SIGNATORY PAGE

PROGRAMMATIC AGREEMENT

nvited Signatory:		
Friends of the Rail Bridge		
Mark Zinga awa an Danidant Friends of the Deil Bridge	Date	
Mark Zimmerman, President, Friends of the Rail Bridge		

CONCURRING PARTY PAGE

PROGRAMMATIC AGREEMENT

Concurring Party:		
Historic Bridge Foundation		
Kitty Henderson. Executive Director	Date	

CONCURRING PARTY PAGE

PROGRAMMATIC AGREEMENT

Concurring Party:		
City of Bismarck		
	Date	
Steve Bakken, Mayor, City of Bismarck		

CONCURRING PARTY PAGE

PROGRAMMATIC AGREEMENT

Concurring Party:	
Preservation North Dakota	
	Date
Emily Sakariassen, President	