UNITED STATES COAST GUARD (COAST GUARD) RECORD OF DECISION (ROD) FOR

BNSF RAILWAY BRIDGE 196.6 REPLACEMENT PROJECT ACROSS THE MISSOURI RIVER, MILE 1315.0, BETWEEN BISMARCK AND MANDAN, BURLEIGH AND MORTON COUNTIES, NORTH DAKOTA

P(11-22-8)

Description of proposed project: BNSF Railway Company (BNSF) proposes to replace the existing BNSF Railway Bridge 196.6 across the Missouri River between Bismarck and Mandan, Morton and Burleigh Counties, North Dakota. The new BNSF Railway Bridge 196.6A would be constructed 20 feet upstream of, and parallel to the existing Bridge 196.6, which will be removed.

Decision: The Commander, Eighth Coast Guard District, has recommended, and the Commandant, U.S. Coast Guard, has decided to approve the location and plans for the replacement of the BNSF Railway Bridge 196.6 across the Missouri River between Bismarck and Mandan, North Dakota. This decision is considered to be in the best public interest for satisfying project objectives with the least impacts on navigation and on the environment.

The purpose and need for the action is: The purpose of the project is to provide a safe and reliable crossing of the Missouri River. With in-service components that are over 130 years old and a history of exposure to ice jams, Bridge 196.6 is approaching the end of its useful life and needs to be replaced to safely move future rail traffic. The existing structure has shallow-foundation piers making the structure scour-critical. In addition, the existing main spans are configured with two pin-connected through trusses. Each truss contains fracture-critical members, which are subject to tensile loads. Failure of such a component would result in partial or total collapse. Lastly, due to the age and condition of the existing bridge, current rail usage is limited by speed, height, and weight.

Alternatives examined were:

- No Action Alternative: Maintain the existing bridge; no new construction.
- Preferred Alternative: Build a new bridge with 200-foot spans and piers, 20 feet upstream of the existing bridge, and remove the existing structure.
- Offset Alternative 1: Build a new bridge with 200-foot spans and piers, 92.5 feet upstream of the existing bridge, and retain the existing structure.
- Offset Alternative 2: Build a new bridge with 400-foot spans and piers, 92.5 feet upstream of the existing bridge, and retain the existing structure.
- Offset Alternative 3: Build a new bridge with 200-foot spans and piers, 42.5 feet upstream of the existing bridge, and retain the existing structure.

The preferred alternative is: Build a new bridge with 200-foot spans and piers, 20 feet upstream of the existing bridge, and remove the existing structure

For the purposes of navigation the design will provide:

Horizontal Clearance:
BNSF Railway Bridge 196.6A: 191.0 feet minimum between piers, normal to the axis of the channel

Vertical Clearance:
BNSF Railway Bridge 196.6A: 52.35 feet minimum above OHW elevation 1628.50 feet, NAVD88

All practicable means of avoiding or minimizing environmental harm have been incorporated into the selected alternative.

[1] Signature of the Environmental Reviewer/Senior Environmental Professional for the Bridge Administration Program may be that of the Preparer's.

The following mitigation, monitoring, and enforcement have been adopted (if applicable): The preferred alternative is expected to result in short-term impacts to the human and natural environment during the construction period. Implementation of standard best management practices through a Stormwater Pollution Prevention Plan, a Temporary Erosion and Sediment Control Plan, a Spill Prevention, Control, and Countermeasure Plan, and a Construction Noise Logistics Plan have been proposed to reduce these construction-related impacts.

The Preferred Alternative was designed through an iterative process to avoid and minimize impacts. Protective measures will be implemented as part of the project to help ensure the protection of natural and cultural resources. Impact mitigation is not part of the selected alternative because avoidance and minimization best management practices (BMPs) are part of the selected alternative. BNSF and its construction contractor(s) will implement protection measures and BMPs to minimize adverse impacts to natural resources. Table 2 in the Final EIS lists these environmental commitments.

The existing Bridge 196.6 is a historic through-truss railroad bridge that is eligible for listing on the National Register of Historic Places, and the project would have an adverse impact on the bridge. A Section 106 Memorandum of Agreement was developed to dictate mitigation measures for removal of the existing bridge.

Conclusion: Based on an independent review of all pertinent factors, including navigation and the human environment, the Coast Guard concludes that the proposed bridge across the Missouri River, as described above, would meet the reasonable needs of navigation and that all planning for and mitigation of significant impacts on the quality of the human environment have been included.

I reviewed the environmental impact statement (EIS)/ROD and submitted my written comments to the Proponent.

Digital	Shelly H Sugarman — Digitally signed by Shelly H Sugarman Date: 2022.12.22 10:12:45 -05'00'	Chief, Bridge Permits & Policy	Level II
Date	Shelly H. Sugarman Environmental Reviewer[1]	Title/Position	Provisional, Interim, I, II, or III

I reviewed the EIS/ROD and submitted my written comments to the Proponent.

Digital	Shelly H Sugarman — Digitally signed by Shelly H Sugarman Date: 2022.12.22 10:17:42 -05'00'	Chief, Bridge Permits & Policy	Level II
Date	Shelly H. Sugarman Senior Environmental Professional[1]	Title/Position	Interim, II, or III

I have reviewed the EIS/ROD and submitted my written comments to the Proponent.

Digital	PAVILONIS.TIMOTHY.WILLIAM.1037230061 — Digitally signed by PAVILONIS.TIMOTHY.WILLIAM.1037230061 Date: 2022.12.22 11:45:57 -05'00'	USCG Legal Counsel
Date	Timothy W. Pavilonis Legal Reviewer	Title/Position

In reaching my decision/recommendation on the Coast Guard's proposed action, I considered the information contained in this EIS/ROD and considered and acknowledged the written comments submitted to me from the Environmental and Legal Reviewers.

Digital	DUNN.BRIAN.L.1173033954 — Digitally signed by DUNN.BRIAN.L.1173033954 Date: 2022.12.22 11:50:25 -05'00'	Chief, Office of Bridge Programs
Date	Brian L. Dunn Proponent	Title/Position

[1] Signature of the Environmental Reviewer/Senior Environmental Professional for the Bridge Administration Program may be that of the Preparer's.