From:	Herzog, Mike L (Engineering)
To:	Ryan.Ackerman[redacted]
Cc:	Price, Lori/TPA; Angel, Aimee/TPA; Dunn, Brian CIV; Sugarman, Shelly CIV; Robertson, Matthew S CIV; Garneau, Allen M CIV; Washburn, Eric CIV; "Susan Wefald"; "Mark Zimmerman"; McCaskey, Rob E; Herzog, Mike L (Engineering)
Subject:	[Non-DoD Source] RE: Request for Hydraulic Modeling Information - BNSF Bridge 196.6 Replacement - Bismarck/Mandan, ND
Date:	Friday, June 12, 2020 6:03:13 PM
Attachments:	6680-007 Missouri River XSecs 11-23-15 - Final.csv 6680-007 Missouri River XSECS Point List.pdf 0038-196.6 - Existing.pdf FEMA.rasmap FEMA.f01 FEMA.f02 FEMA.g01 FEMA.g01.hdf FEMA.O01 FEMA.O02 FEMA.p01 FEMA.p01.hdf FEMA.p02 FEMA.p02.hdf FEMA.prj FEMA.r01 FEMA.r02

Mr. Ackerman:

From our conversations with the U.S. Coast Guard, our understanding is that Friends of the Rail Bridge (FORB) has contracted with you to determine a reasonable alternative not already put forward by the railroad that will not cause a rise in floodplain elevation while allowing the current structure to stand.

In order to expedite your review and design of a new alternative, we are including the HEC-RAS models for the no action alternative. We do not see what benefit would accrue to your design efforts of seeing the other documents you requested. Because we are in the middle of the National Environmental Policy Act Environmental Impact Statement process, and because the parties have been asked by multiple federal agencies to work within the process, we believe all additional information should come through that process. In addition, we would encourage you to look at all the documentation that has previously been provided to FORB through the National Historic Preservation Act Section 106 process, which includes thousands of pages of analysis and explanation of the design process the railroad has already undertaken.

Below is a brief explanation of the attached baseline hydraulic modeling information used for development of the CLOMR.

We look forward to seeing any design alternative that meets the requirements set forth by federal law that has not already been considered by the agencies.

Thanks!

Mike

HEC-RAS model:

- This is the original model received at the start of the project.
  - It includes only the baseflood plan and the floodway plan
    - This is the “effective” model used to generate the current flood insurance study, and flood insurance rate maps
  - It does not include any of the modifications/updates or alternatives that we analyzed for this project
  - The model is in vertical datum NGVD29
  - The model does include the existing bridge. However, the provided modeling approach was to modify the channel bathymetry within the bridge cross section to represent the piers and corresponding reduction in conveyance area.
  - As part of the CLOMR submittal, the bridge piers were removed from the channel bathymetry

and the river cross sections augmented with additional cross-sections surveyed near the bridge site. The survey data used is provided as an attachment. The existing bridge piers were then modeled through the use of the standard bridge routine within HEC-RAS. The existing pier width used was set to match the plan set (see attached) which varies per pier. 20' 5" wide at the footing tapering to 10 feet wide at the low member of the bridge for the two center piers. The two outer piers are 12' 7" wide at the footing tapering to 8 feet wide at the low member of the bridge.

6680-007 Missouri River XSecs 11-23-15 – Final.csv and 6680-007 Missouri River XSECS Point List.pdf:

- River cross-section survey data taken upstream and downstream of the existing bridge.
- The HEC-RAS model was updated to incorporate this survey data

0038-196.600 – Existing:

- Geometric details of the existing bridge

Mike Herzog, P.E.
Director Bridge Construction
BNSF Railway
4515 Kansas Avenue
Kansas City, KS 66106
[redacted]
Fax: 913/551-4646

From: McCaskey, Rob E [mailto:Rob.E.McCaskey@uscg.mil]
Sent: Friday, May 15, 2020 7:46 AM
To: Herzog, Mike L (Engineering) [redacted]
Cc: Price, Lori/TPA [redacted]; Angel, Aimee/TPA [redacted]; Dunn, Brian CIV [redacted]; Sugarman, Shelly CIV [redacted]; Robertson, Matthew S CIV [redacted]; Garneau, Allen M CIV [redacted]; Washburn, Eric CIV [redacted] 'Susan Wefald' [redacted] 'Mark Zimmerman' [redacted]
Subject: FW: Request for Hydraulic Modeling Information - BNSF Bridge 196.6 Replacement - Bismarck/Mandan, ND

Mike
Please provide the information Mr, Ackerman requests below,
Very Respectfully
Rob McCaskey
Bridge Management Specialist
USCG D8 Western River
[redacted]

From: Ryan Ackerman <[redacted]
Sent: Thursday, May 14, 2020 1:46 PM
To: McCaskey, Rob E [redacted]
Cc: Susan Wefald [redacted]; Thomas Johnson [redacted] Mark Zimmerman [redacted]; Erik Sakariassen [redacted]
Subject: [Non-DoD Source] Request for Hydraulic Modeling Information - BNSF Bridge 196.6 Replacement - Bismarck/Mandan, ND

Good afternoon, Mr. McCaskey:

The Friends of the Rail Bridge of Bismarck / Mandan, North Dakota has retained our firm to independently analyze the hydraulic modeling that has been performed to date on this project by BNSF Railway and its consultants. In order to perform this review, electronic copies of the modeling information that has been utilized as well as backup data is requested. The attached letter identifies the specific data requests.

Since the USCG is the lead agency for the NEPA process, we felt it would be appropriate to make the request for this information through the USCG. A hard copy of this letter will follow via US Mail.

Please let me know if you have any questions or if we should be requesting this information through a different avenue.

Sincerely,

Ryan Ackerman, PE
Ackerman-Estvold
1907 17th Street SE
Minot, ND 58701
Office: 701.837.8737
[redacted]
www.ackerman-estvold.com
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