



FW: PMRE Segment 6 - Bridge 174.3

Barbara Hotchkin

to:

Bittner, Judy, Catherine.Nadals@stb.dot.gov

12/18/2013 03:42 PM

Cc:

Elizabeth Grover, "Duvall, Shina A (DNR)", "Rickman, Summer L (DNR)

(summer.rickman@alaska.gov)"

Hide Details

From: Barbara Hotchkin <Hotchkinb@akrr.com>

To: "Bittner, Judy" <judy.bittner@alaska.gov>, "Catherine.Nadals@stb.dot.gov"

<Catherine.Nadals@stb.dot.gov>

Cc: Elizabeth Grover <Elizabeth.Grover@hdrinc.com>, "Duvall, Shina A (DNR)"

<shina.duvall@alaska.gov>, "Rickman, Summer L (DNR) (summer.rickman@alaska.gov)"

<summer.rickman@alaska.gov>

History: This message has been forwarded.

2 Attachments



image001.png



Br 174.3 STB.PDF

Judy and Cathy,

As indicated in this e-mail stream, ARRC recently determined that minor changes are needed to the existing Little Susitna River Railroad Bridge (ANC-00085) at Mile 174.3, which is within Segment 6 of the PMRE. A figure is attached HDR (Elizabeth Grover) evaluated the potential for adverse effects, and determined that although there would be minor impacts to integrity of materials and design, these impacts would have minimal impact on the bridge's eligibility for the National Register. Therefore, these changes would have no adverse effect on Bridge 174.3 (ANC-00085). We both believe additional Section 106 consultation with STB and SHPO is needed regarding these proposed changes, so I will draft a formal letter for STB's use. Let me know if you have any questions. Thanks Barb

From: Grover, Elizabeth [<mailto:Elizabeth.Grover@hdrinc.com>]
Sent: Tuesday, December 17, 2013 6:06 PM
To: Barbara Hotchkin
Subject: RE: PMRE Segment 6 - Bridge 174.3

Hi Barb,

I have reviewed the information you provided in regards to the Little Susitna River Railroad Bridge (Bridge 174.3; ANC-00085).

This bridge was found eligible for the National Register for the purposes of the Port MacKenzie Rail Extension (PMRE) project during consultation with STB and SHPO regarding Segment 6 in Summer 2012. Under the proposed project at that time, the bridge would have remained in place and continued to be used by ARRC, maintaining its historic association with the ARRC. In addition, the only impact to integrity would have been a minor indirect (visual) impact to setting as a new bridge of similar scale would be constructed adjacent to the older structure. However, this would have been consistent with character of use of the existing bridge and would not have diminished its integrity. As such, it was determined during consultation that the proposed project would result in no adverse effect on ANC-00085, and no mitigation would be required because adverse effects were avoided.

Based on my review of the information you provided regarding the current proposed changes to the bridge, I believe that these changes would have a minor direct effect on the structure in regards to integrity of materials and design. However, I believe that these impacts would have minimal impact on the bridge's eligibility for the National Register. Bridge decks are routinely replaced as needed, and the deck for this bridge was most recently replaced in 1979. Although the deck design would be slightly modified (ballasted deck versus open deck), this change is reversible. While some materials and design elements associated with the deck would be changed (i.e., new steel pan, ties, and ballast), the majority of the materials and design elements (e.g., steel girder, floor beams, stringers, and lateral braces) would not be changed. These changes would not be apparent from most viewpoints. The change in deck design could benefit the bridge by strengthening the structure, which could increase its longevity for continued use by ARRC.

I do not believe these changes would have an adverse effect on Bridge 174.3 (ANC-00085). I agree that additional Section 106 consultation with STB and SHPO is needed regarding these proposed changes.

Please let me know if I can be of further assistance.

Thanks!
Elizabeth

ELIZABETH GROVER

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From: Barbara Hotchkin [<mailto:Hotchkinb@akrr.com>]
Sent: Monday, December 16, 2013 2:48 PM
To: Grover, Elizabeth
Subject: PMRE Segment 6 - Bridge 174.3

Elizabeth,

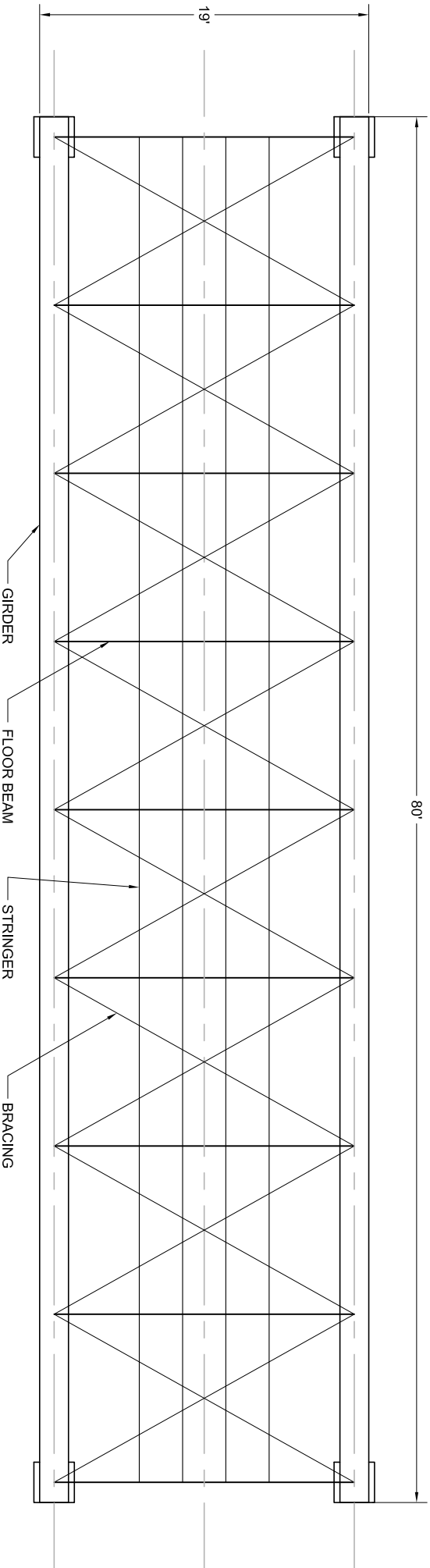
ARRC recently determined that minor changes are needed to the existing Little Susitna River Railroad Bridge (ANC-00085) at Mile 174.3, which is within Segment 6 of the PMRE. A description of the proposed changes are provided below, and a figure is attached.

ARRC identified a need to strengthen the bridge, which would be accomplished by converting the existing open deck to a ballast deck. Currently, the open deck is fixed in elevation and prevents adding new ballast in the track adjacent to the bridge, resulting in poor track geometry in the bridge approaches. The poor geometry is cumulative with the abrupt change in track support stiffness occurring directly off each end of the open deck bridge. This in turn increases load impact factors experienced by the bridge structure and track components. The proposed replacement of the open deck with a ballasted deck would eliminate the abrupt change in track support stiffness, thereby reducing track maintenance cycles and increasing bridge component life. We have designed the bridge modification so that there would be no change to the steel girder, floor beams, stringers, or lateral braces. The designed ties on the existing deck are set between the floor beams and connected to the stringers. These ties would be removed and replaced with a steel pan with side panels, which would be connected to the stringers. Standard railroad ties and ballast would be placed in the pans. These changes would strengthen the bridge and increase its longevity. Notably, all of these changes are reversible, and the bridge could be converted back to an open deck bridge at any time.

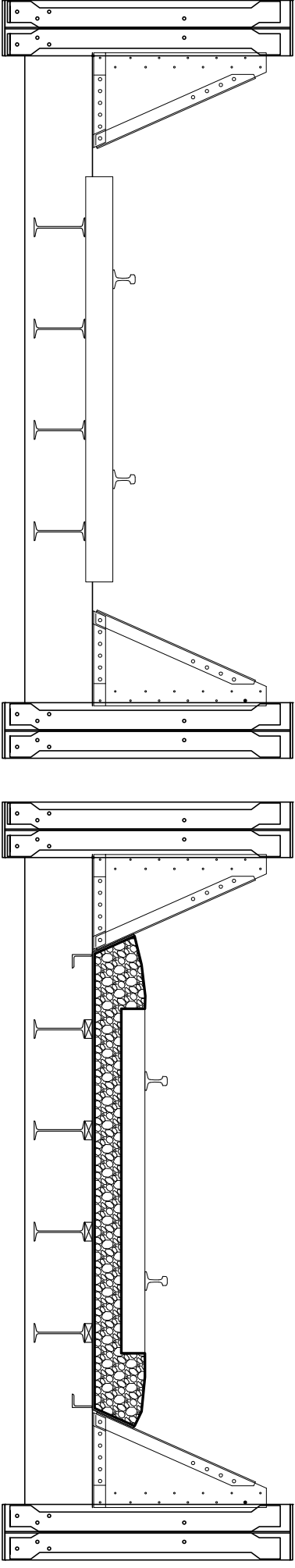
Based on previous consultation between STB and SHPO, the Little Susitna River Railroad Bridge (ANC-00085) is assumed eligible for the NRHP for the purposes of the PMRE project. I believe additional Section 106 consultation will be required to address the proposed changes to Br. 174.3. Please evaluate the proposed changes, and let me know if you believe there would be an adverse effect on the bridge. I will then draft a letter for STB's use in consulting with SHPO. Thanks, Barb

Barbara Hotchkin
Manager, Project Permits & NEPA

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A
1
STRUCTURE PLAN VIEW
SCALE: NOT TO SCALE



B
1
EXISTING BRIDGE SECTION
SCALE: NOT TO SCALE

C
1
BALLAST DECK SECTION
SCALE: NOT TO SCALE



ALASKA RAILROAD CORPORATION
ENGINEERING SERVICES
P.O. BOX 107500, ANCHORAGE, ALASKA 99510-7500

**80 FOOT THRU GIRDER
BRIDGE 174.3**

**MODIFICATIONS FOR BALLAST DECK
PLAN AND SECTIONS**

TITLE:

DESIGNED BY: ARRC
DRAWN BY: ARRC
CHECKED BY: ARRC
APPROVED BY: ARRC

SCALE : NTS

DATE : 12/13/13

A/E NO.: N/A

ACAD FILE:
DWG. NO.

1 OF **1**