Supplemental Supporting Information for a Finding of Effect

Project: Rockland 22920.00
Scope: Bridge Rehabilitation
Finding of Effect: **No Adverse Effect**

Purpose and Need
The purpose of the project is to maintain a critical rail route between Brunswick and Thomaston on the Central Maine and Quebec Railroad (Knox & Lincoln Railroad/Rockland Branch) which is controlled by the Maine Department of Transportation (MaineDOT). The line has three primary customers: Dragon Products, Bath Iron Works, and Dicalite Management Group. Use equates to approximately one 10-15 car train using the line in one direction, once a week. In 2018 the line was used as follows:

- Dragon Products (Thomaston)
    - Shipped 54 loads to PanAm in Brunswick
    - Shuttled 1044 loads to Rockland (shipping)
- Bath Iron Works (Bath)
    - Received 60 loads from PanAm in Brunswick
- Dicalite Management Group (Thomaston)
    - Received 44 loads from PanAM in Brunswick

The need is due to the poor condition of the substructure (predominantly at the piers) and bridge bearings. The granite blocks of the piers have shifted over time and compromise the bearing capacity of the substructure units. MaineDOT has observed scouring at the abutments. MaineDOT estimates the line would need to be closed within 5 years if corrective action were not taken at the bridges.

Proposed Action
The proposed rehabilitation work would include the strengthening of the in-water piers by encapsulating the bottom portions of the masonry foundation using steel plates and an interlocking system of walers and tie rods. Steel plates would be vertically placed against the side of the piers and connected to one another via steel tie rods that would create a rigid frame and formwork for backfilling. The annulus of the new footprint would then be filled with light-weight concrete to lock the masonry blocks together and create a new unified pier. Abutments would receive scour protection of stone riprap up to 12” diameter or equivalent to prevent undermining and stabilize slopes near wingwalls. Bearing replacement would consist of temporary jacking and support of the bridge to remove the extant bearing and replace with new bearings of similar form and function. The work would be completed from floats, spud barge, and crawler crane.

Federal Action
Federal funding.

Definition of Area of Potential Effect (APE)
The proposed project is located in the Town of Warren and the Town of Newcastle. Maps are attached below that shows the project APE.

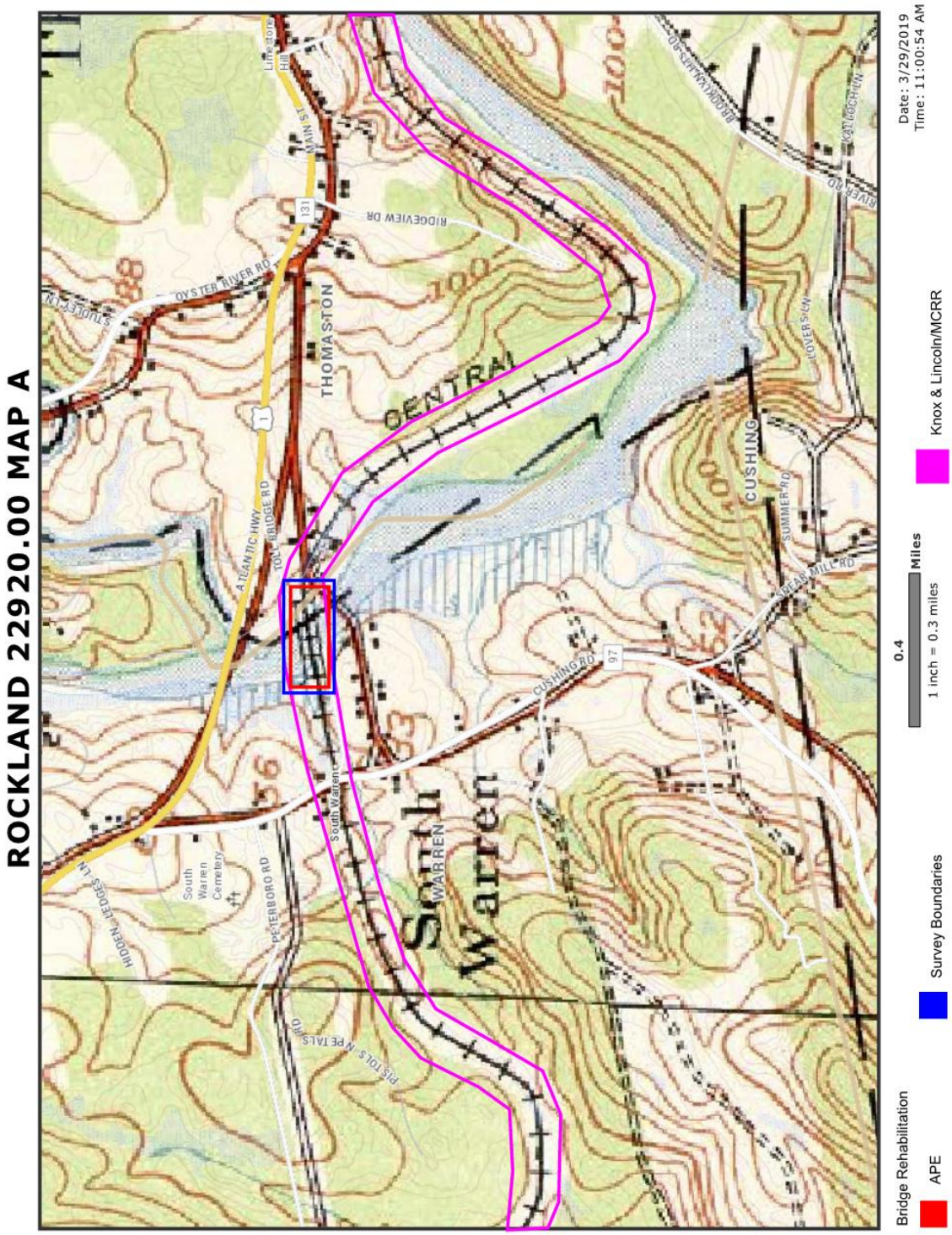

Figure 1. Rockland 22920.00 Area of Potential Effect (A) in Warren

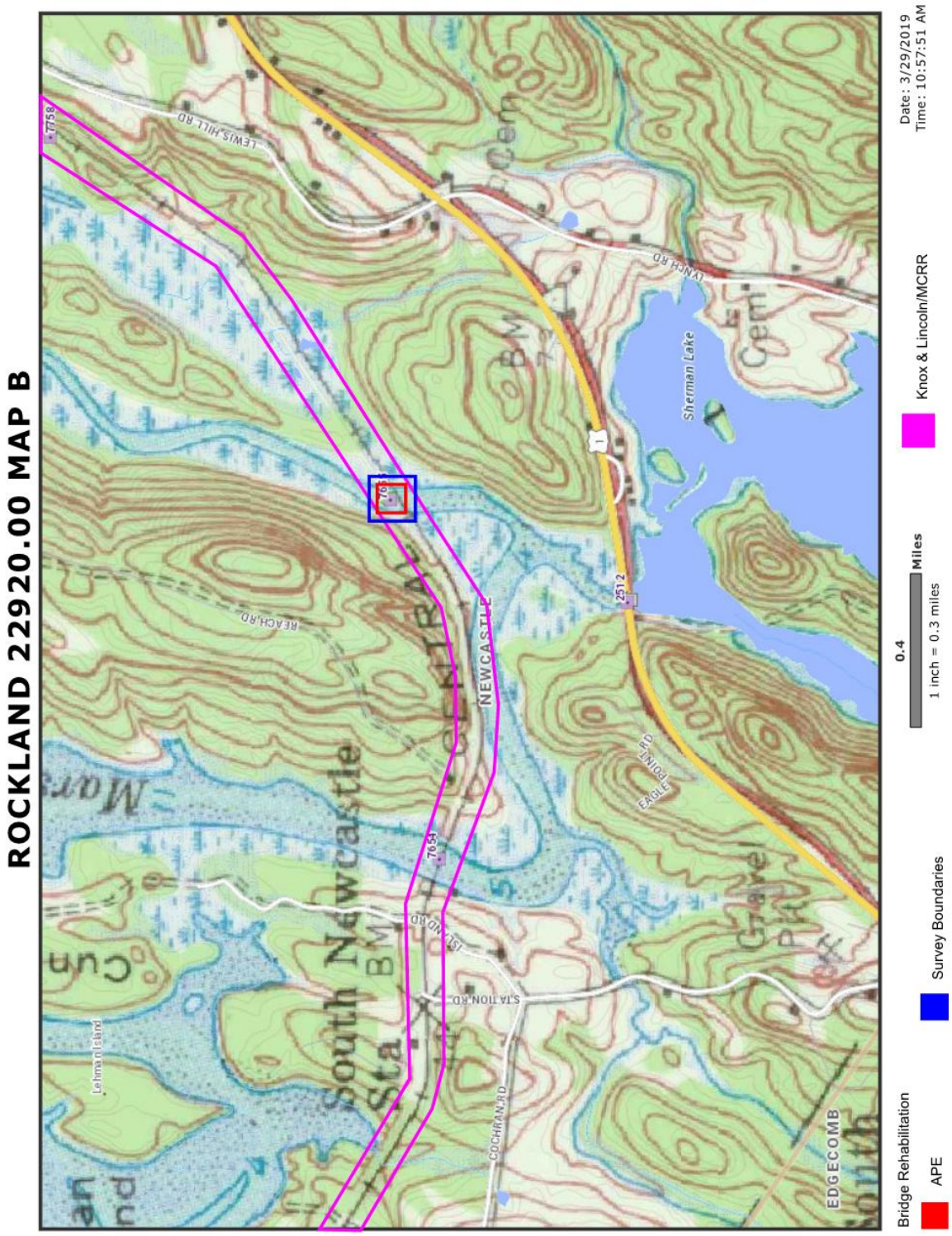

Figure 2: Rockland 22920.00 Area of Potential Effect (B) in Newcastle

Historic Properties

The proposed project is in the Towns of Thomaston and Newcastle and the following descriptions are based on Maine Historic Preservation Commission (MHPC) survey forms.

Thomaston #79.17 Bridge 7667 (MaineDOT)

Individual, National Register-Eligible, Criterion A & C

Contributing Resource, National Register-Eligible Knox & Lincoln Railroad/Rockland Branch Historic District

Thomaston #79.17 is a three-span bridge consisting of a Warren thru truss, a Warren Pony truss, and a bascule lift span. It is eligible for its statewide significance in Engineering as one of the few remaining examples of a bascule lift span. Additionally, the bridge is a characteristic example of Warren Thru trusses and Warren Pony trusses. The bridge is also eligible under Criterion A for Transportation for its association with intertidal shipping traffic on smaller rivers represented by the small lift span opening. Its period of significance is 1921.

Newcastle #53.04 Bridge #7655 (MaineDOT)

Individual, National Register-Eligible, Criterion C

Contributing Resource, National Register-Eligible Knox & Lincoln Railroad/Rockland Branch Historic District

Newcastle #53.04 is a five-span bridge crossing the Nichols River north of Route 1. Every span consists of plate girder carrying wood ties and steel rails. The easternmost span is a swing span which is cantilevered on an octagonal pier. The gear and wheels to swing the span to allow boats to pass are visible in the most inspection report. The bridge is eligible for its statewide significance in Engineering as one of few remaining swing spans. The 2004 MaineDOT historic bridge survey inventoried 8 swing spans and determined 4 of those eligible. Since that time, 6 have been replaced and only Southport and Songo Lock Draw bridges remain. Its period of significance is its date of construction: 1920.

Knox & Lincoln Railroad/Rockland Branch Historic District, (Maine Central Railroad)

National Register-Eligible, Criteria A & C

The Knox & Lincoln Railroad/Rockland Branch Historic District is eligible for its local significance for Industry, Entertainment/Culture, and Transportation. The railroad was used for passengers (including tourists heading towards their summer houses and resorts, particularly the Samoset) and freight. Stops included most every large town and village on the coast between the termini. The route was critical to the success of the lime industry in the Rockland area after the demise of the shipping trade. The branch also served what is now the Dragon Cement Plant. At one point in the mid-20th century, the plant was railroad's largest (and potentially only) non-wood product related customer. The branch also connected to at least one other smaller line in Rockland which was specifically for bringing lime from inland quarries to the Rockland wharves and kilns. Rockland had at least 160 waterfront kilns, only one of which remains. The period of significance is 1871 to 1958, which marks the close of the last lime kiln.

Archeological Resources
There are no archaeological resources in the project area.

Impacts to Property
The following addresses potential impacts to properties as a result of the proposed action.

Thomaston #79.17 Bridge 7667
Individual, National Register-Eligible, Criterion A & C
Contributing Resource, National Register-Eligible Knox & Lincoln Railroad/Rockland Branch Historic District
Pier rehabilitation, scour protection measures, and bearing replacements do not represent changes to character defining features that would diminish any aspect of integrity. The National Cooperative Highway Research Program (NCHRP)'s *A Context For Historic Bridge Types* identifies the character defining features of a Warren Truss as "parallel top and bottom chords, inclined end posts (or vertical end posts for bedsteads), diagonals, floor beams, stringers, method of connections, and for through trusses, struts and portal features (e.g., struts, bracing)." The MaineDOT has determined that because the proposed action would not include action at these elements, nor the bascule span, the project would result in **No Adverse Effect** to the bridge.

Newcastle #53.04 Bridge #7655
Individual, National Register-Eligible, Criterion C
Contributing Resource, National Register-Eligible Knox & Lincoln Railroad/Rockland Branch Historic District
Pier rehabilitation, scour protection measures, and bearing replacements do not represent changes to character defining features that would diminish any aspect of integrity. The MaineDOT is not proposing any alteration or change to the elements that comprise the swing span or its mechanism; therefore, the MaineDOT has determined that there would be **No Adverse Effect** to this bridge as a result of this project.

Knox & Lincoln Railroad/Rockland Branch Historic District, (Maine Central Railroad)
National Register-Eligible, Criteria A & C
Pier rehabilitation, scour protection measures, and bearing replacements to Bridge #7667 and Bridge #7655 do not represent changes to character defining features that would diminish any aspect of integrity. Character defining features include: the rail, bridges, turn table, and depot. Therefore, the MaineDOT has determined there would be **No Adverse Effect** to this resource as a result of this project.

Archeological Resources
There are no archaeological resources in the project area.

Avoidance and Minimization Efforts
The MaineDOT has sought to avoid effects at this time by taking a minimally invasive approach to slow deterioration. The proposed project avoids any disturbance to adjacent river banks by accessing the piers by barge.

Dismissed Alternatives

No Build — The No Build alternative does not take any action and does not meet the purpose and need of the project because it would not address elements in poor condition and lead to closure. Therefore, it was removed from further consideration.

Public Outreach

The Towns of Thomaston and Newcastle, along with applicable historical societies, were notified of this project. Margaret McCrea of the Thomaston Historical Society has received official Section 106 consulting party status.

Proposed Materials

Concrete, steel bearings

Plans

No plans were produced for this project.

Attachments

J. N. Leith, MHPC, to Julie Senk, MaineDOT, April 19, 2019
Kirk Mohney, MHPC, to Julie Senk, MaineDOT, Concur, May 20, 2019

STATE OF MAINE

Memorandum

Date: May 10, 2019

RECEIVED
MAY 10 2019
By 04/11-19

To: Kirk F. Mohney, MHPC
From: Julie Senk, Maine DOT/ENV
Subject: Section 106 request for concurrence
Project: Rockland 22920.00
Scope: Bridge Rehabilitation

The Maine DOT has reviewed this project pursuant to the Maine Programmatic Agreement (PA) and Section 106 of the National Historic Preservation Act of 1966, as amended.

The MaineDOT is proposing rehabilitation to bridge piers of two bridges on the Rockland Branch of the Maine Central Railroad.

In accordance with 36 CFR Part 800.4, the following identification efforts of historic properties were made:

800.4(a) (1) - The Area of Potential Effect (APE) includes properties/structures adjacent to the bridges and within the project limits. The project limits are defined by the structure and the immediately adjacent area, as well as potential approach roadway and intersection improvements nearby. Properties/structures adjacent to this project limit are considered to be within the APE. The APE is shown as a red polygon on the attached map.

800.4(a) (2) – Review of existing information consisted of researching the National Register and MHPC survey databases. The Maine Historic Preservation Commission Archaeological staff has reviewed the undertaking.

800.4(a) (3) – The towns of Newcastle, Thomaston, and Warren were contacted via letter and asked to comment on knowledge of, or concerns with, historic properties in the area, and any issues with the undertaking's effect on historic properties. The town was also requested to provide information regarding local historic societies or groups. The town has not replied to date. Margaret McCrea, who is representing the Thomaston Historical Society, has been granted official consulting party status.

800.4(a) (4) – Letters outlining project location and scope were sent to the 4 federally recognized Tribes in Maine. The Penobscot Nation, Passamaquoddy Tribe, and Houlton Band of Maliseets have replied with no concern.

800.4(c) – The Maine DOT conducted historic architectural surveys within the APE to determine if properties met National Register criteria. Maine Historic Preservation Commission Archaeological staff is currently reviewing this undertaking. **The Maine DOT has determined three historic properties within the APE are eligible for listing in the National Register. The properties are Rockland #79.17 (#7667), Rockland #53.44 (#7655), and the Knox & Lincoln/Rockland Branch MCRR.**

In accordance with the PA and 36 CFR Part 800, please reply with your concurrence or objection to this determination of National Register eligibility within 30 days.

Please contact me at Julie.Senk@maine.gov or 592-3486 if you have any questions. Thank you.

cc: CPD e-file
enc: Architectural survey

CONCUR

Kirk F. Mohney 5/20/19

Kirk F. Mohney, Date
State Historic Preservation Officer

STATE OF MAINE
Memorandum

Date: April 19, 2019

To: Julie Senk, Historic Coordinator, Maine DOT/ENV

From: J. N. Leith Smith, MHPC

Subject: Initial Archaeology Review

Project: Pier maintenance of Railroad Bridges #7655 spanning Nichols River in Newcastle and #7667 spanning the St. George River connecting Warren and Thomaston (WIN 22920.00) (MHPC #0471-19) Rockland, Maine.

Dear Julie,

After reviewing our archaeological survey records and maps, including historic maps and surficial geology maps, and comparing this information with a predictive model of archaeological site locations, we find that no archaeological fieldwork is necessary for this project, based on the project location and general project description information received with your memo of April 11, 2019. It is extremely unlikely that an archaeological site would be affected by this project, in our opinion.

In following the procedures specified in the Federal Highway/MHPC/MDOT programmatic agreement, we **recommend a finding that there will be no archaeological properties affected by the proposed undertaking.**