Portageville Bridge Project

Scoping Document

August 2008

New York State Department of Transportation

Norfolk Southern Corporation
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INTRODUCTION

Norfolk Southern (NS) is proposing to increase the load carrying capacity, remove operational constraints and maintain acceptable levels of safety of the Portageville Bridge. The Portageville Bridge, also known as the High Bridge, is located at milepost 361.66 along the Southern Tier Route. The Southern Tier Route is Norfolk Southern’s mainline route between Buffalo and Binghamton, NY. The bridge crosses the Genesee River in Letchworth State Park near the town of Portageville, NY. See Figure 1 for a project location map. Within the park, the Genesee River flows from south to north through a deep gorge and over three scenic waterfalls. The bridge is situated near the southern end of the park adjacent to the Upper Falls and is oriented in a general east-west direction.

The existing bridge is an 819 feet long steel viaduct carrying a single railroad track, approximately 245 feet above the floor of the gorge. The viaduct spans the gorge on six steel towers constructed in 1875. The superstructure of the viaduct consists of three spans of pin-connected deck trusses and ten spans of deck plate girders built in 1903. The aging Portageville Bridge is a vital yet weak link on the Southern Tier Route.

This project will examine various alternatives to increase capacity, remove operational constraints and maintain acceptable levels of safety. The alternatives will include maintaining the status quo, replacement on new or existing alignment, and rehabilitation of the existing bridge.

The New York State Department of Transportation requires that projects receiving state funding follow the provisions of the State Environmental Quality Review Act (SEQR). In addition, some of the alternatives may require a formal action by the New York State Office of Parks, Recreation and Historic Preservation (NYSOPRHP), such as providing an additional Right of Way easement on state parkland, which is also subject to SEQR review. As such, an Environmental Impact Statement (EIS) will be prepared for the Portageville Bridge Project. New York State Department of Transportation (NYSDOT) will serve as the lead agency. As a
major involved agency, NYSOPRHP will participate in NYSDOT’s implementation of the SEQR processes.

The first step in the preparation of an EIS is the public scoping process. The public scoping process begins with publication of this Scoping Document. The purpose of this Scoping Document is to provide the public and agencies with an initial opportunity to comment on the Draft EIS (DEIS) process including the project’s purpose and need, alternatives considered, and the methodologies to be used in the analyses. This Scoping Document presents a description of the project’s purpose and need, the project goals and objectives, alternatives to be considered, the methodology to be used for the environmental analyses, and a description of the plan for public and agency involvement.
Figure 1 – Project Location Map
PROJECT PURPOSE AND NEED

Background

Norfolk Southern Corporation is a Norfolk, VA-based company that controls a major freight railroad, Norfolk Southern Railway Company. The railway operates approximately 21,000 route miles in 22 eastern states, the District of Columbia and Ontario, Canada. It serves all major eastern ports and connects with rail partners in the West and Canada, linking customers to markets around the world. NS provides comprehensive logistics services and offers the most extensive intermodal network in the East.

The Southern Tier Route is Norfolk Southern’s mainline between Buffalo and Binghamton, NY with through connections to Boston, MA. NS owns and operates this section of railroad. The Southern Tier Route is vital to NS’s local and national operations. There are 12 to 14 trains per day over the route and it is the only NS east-west line in New York State. The line supports the movement of double stack cars from the west to east coast. The Portageville Bridge is the last bridge on NS’s Southern Tier Route that is not capable of carrying 286,000 pound gross weight (286 kip) freight cars, a current industry standard.

The existing bridge is the second bridge to occupy this location. The first bridge was constructed in 1851 and was owned by the Erie Railroad. The original bridge was a timber trestle. The trestle was completely destroyed by fire in 1875. The existing iron/steel bridge was constructed on some of the same piers of the original bridge that same year and is still in use today. In 1907 William Prior Letchworth, who owned a 1,000-acre estate surrounding the bridge, deeded his estate to the State of New York. Following his death in 1910, Letchworth State Park was created and the bridge has been part of the park viewshed ever since. Today the park encompasses 14,350 acres in Wyoming and Livingston Counties.

More than 150,000,000 people reside within a 500-mile radius of the Southern Tier, representing approximately 50% of the U.S. population and 60% of the nation's buying power. Sixty-two percent of Canada's population and 80% of its manufacturing activity are also within this radius.
Problem Identification

In order for NS to maintain a safe, economically competitive railroad, aging infrastructure must constantly be maintained, upgraded, and/or replaced. The 133-year old Portageville Bridge is part of this aging infrastructure. Norfolk Southern considers safety to be of paramount importance. The NS vision statement “Be the safest, most customer-focused and successful transportation company in the world” clearly emphasizes that goal of safety, which includes operational, environmental and personal safety. The following issues, each directly related to the existing Portageville Bridge and its associated track alignment, are all in direct conflict with this vision.

Operational Constraints

Operational constraints refer to any issue that causes the railroad to operate at a level below the railroads preferred optimal performance level. Several such operational constraints exist in this project. The first is the load carrying capability of the existing bridge. In the United States, the ability for Class 1 freight railroads to carry 286,000 pound gross weight (286 kip) traffic is the current industry standard. As was stated above, the existing Portageville Bridge is the last bridge on NS’s Southern Tier Route that is not capable of meeting this standard. In order for NS to maintain an efficient, economical service on the Southern Tier Route their infrastructure must be consistent with this standard. Providing a structure capable of carrying these loads will bring the entire Southern Tier Route to this standard.

The second operational constraint is a relatively low train speed. The existing track geometry limits the train speed to 35 MPH; although due to the condition and age of the bridge trains currently operate at approximately 10 MPH over the bridge. Also, interaction with park patrons limits the train speeds as described below. This is caused by several sharp curves on both the east and west approach to the bridge. The Federal Railroad Administration (FRA) categorizes all track into six classes based upon maximum speed limit. The current dominant class of track for Class 1 freight railroad mainline track is Class 4 which corresponds to 60 MPH. For railroads, as with most businesses, time is money. When trains operate at less than the preferred speed more time is required to move goods. In order for NS to maintain an economically competitive
railroad, any new infrastructure, including trackwork, should be designed for 60 MPH train speeds.

Interaction with Park Patrons
Letchworth State Park is described as the “Grand Canyon of the East”. This description comes from the scenic gorge surrounding the Genesee River through the park. The river flows over three scenic waterfalls within the park. The Portageville Bridge spans the scenic gorge near the Upper Falls. Although it is illegal and dangerous to trespass on railroad property, park patrons frequently use the existing bridge as an overlook point to get a better view of the falls and surrounding gorge. This creates a safety concern for the Park and NS. To help ensure the safety of the park patrons, NS currently operates at a train speed of approximately 10 MPH over the bridge. This is mostly due to the limited sight distance caused by the sharp curves approaching the bridge from both directions. Park patrons trespassing on the bridge cannot see an approaching train and the engineer cannot see the trespassing park patrons until the train is almost on the bridge. Minimizing the interaction of the railroad and the park patrons is in the best interest of both parties.

Maintenance Difficulties
The Portageville Bridge has been an ongoing maintenance issue for the railroad. Since NS acquired this line segment from Conrail in 1999, over $850,000 has been spent on the Portageville Bridge to maintain it in a safe operational condition for current traffic. Because of the condition of the bridge, frequent inspections and repairs are necessary. A high-level bridge of this type is relatively difficult and dangerous to inspect and maintain and poses a safety challenge for inspectors and maintenance personnel to access. These issues are directly related to the age of the bridge. The 133-year old bridge has significantly exceeded the expected design life of 100 years. As fatigue and corrosion continue to take their toll on the existing bridge these maintenance issues will likely become more frequent and severe.

Planning Context
Since NS acquired this line segment from Conrail in 1999, numerous improvements have been made. Three bridges on this line have been replaced, each now capable of carrying 286,000
pound gross weight traffic. The Portageville Bridge is the last bridge on this route that is incapable of carrying 286,000 pound gross weight traffic. The following table summarizes the infrastructure improvements NS has made in this segment.

Norfolk Southern – Southern Tier Route
Recent Infrastructure Improvement Activities

<table>
<thead>
<tr>
<th>Bridge</th>
<th>Year Replaced</th>
<th>Approximate Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridge SR-421.83 over Clinton Street in Buffalo</td>
<td>2002</td>
<td>$5,000,000</td>
</tr>
<tr>
<td>Bridge SR-214.42 over Front St. in Binghamton</td>
<td>2004</td>
<td>$3,500,000</td>
</tr>
<tr>
<td>Bridge SR-393.68 over Buffalo Rd. in Attica</td>
<td>2007</td>
<td>$700,000</td>
</tr>
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</table>

The entire route is only as good as the weakest link. None of these improvements can be utilized to their full potential until the Portageville Bridge is brought to a comparable operating level.

**PROJECT GOALS AND OBJECTIVES**

A project’s goals and objectives are the foundation of its purpose and need under SEQR. They are used as the basis for developing the criteria and screening methodology for evaluating the project alternatives. Goals have been developed for the Portageville Bridge Project, relating to operational standards, reliability, safety, compatibility, cost-effectiveness, and environmental considerations. Objectives will be developed for each goal during the scoping process to provide specific and measurable means by which to evaluate and compare project alternatives. The project goals are as follows:

Goal #1: Eliminate operational constraints caused by the existing bridge.
Goal #2: Minimize dangerous interaction of railroad activities and Letchworth State Park patrons.
Goal #3: Minimize dangerous and costly maintenance.
Goal #4: Optimize existing infrastructure and planned improvements to the Southern Tier Route.
Goal #5: Minimize impacts on environmental, historic, and recreational resources.
ALTERNATIVES

Norfolk Southern is proposing the Portageville Bridge Project to address problems posed by the existing bridge and the associated alignment. The project will consider alternatives including replacement of and rehabilitation of the existing bridge. The replacement alternatives will consider using the existing alignment as well as new alignments. All new alignments will cross the gorge south of the existing bridge to avoid interference with the scenic Upper Falls. The new alignments may extend beyond the existing NS right-of-way. Consistent with SEQR requirements, the project alternatives will include a No Action Alternative, wherein the existing structure would remain in service and receive only regular maintenance, and several build alternatives.

The table below lists the preliminary list of alternatives to be considered. In the initial stages of the EIS process, the list of alternatives will be screened to evaluate which meet the project purpose and need, along with other factors (e.g., environmental impacts, cost). The remaining alternatives will be further evaluated in the EIS.

Portageville Bridge – Preliminary List of Alternatives

<table>
<thead>
<tr>
<th>Alternative No.</th>
<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>No action alternative</td>
</tr>
<tr>
<td>2</td>
<td>Repair/retrofit existing bridge; maintain current alignment.</td>
</tr>
<tr>
<td>3</td>
<td>Replace existing bridge with new bridge; maintain current alignment.</td>
</tr>
<tr>
<td>4</td>
<td>New bridge parallel to existing bridge; maintain current alignment. Leave existing bridge for Parks use.</td>
</tr>
<tr>
<td>5</td>
<td>New bridge parallel to existing bridge; maintain current alignment. Remove existing bridge.</td>
</tr>
<tr>
<td>6</td>
<td>New bridge outside of park. Leave existing bridge for Parks use.</td>
</tr>
<tr>
<td>7</td>
<td>New bridge outside of park. Remove existing bridge</td>
</tr>
<tr>
<td>8</td>
<td>No replacement bridge. Reroute traffic to existing alternate rail lines. Leave existing bridge for Parks use.</td>
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No Action Alternative

The No Action Alternative assumes that the existing Portageville Bridge will remain in service and will be subject only to regular maintenance. This alternative serves as a baseline for comparison to the build alternatives. The No Action Alternative also takes into account planned improvements that have recently been completed or are programmed for completion in the near future. Small-scale projects may include “state-of-good-repair” maintenance. Major investment projects involve substantial improvements to the rail system in the region. A complete list of applicable projects to be included in the No Action Alternative will be included in the EIS.

Build Alternatives

The EIS will consider a number of different build alternatives to improve the existing Southern Tier Route rail crossing over the Genesee River. These alternatives will consider both reusing the existing bridge and construction of a new bridge. For a new bridge, alternatives proposed will vary in the type of new bridge (for example truss-bridge, girder-bridge or arch) and track alignment. All new designs will follow the requirements of the American Railway Engineering and Maintenance-of-Way Association (AREMA) Manual for Railway Engineering and any Norfolk Southern specifications.

Alternatives Reusing the Existing Portageville Bridge

These alternatives would retain the existing bridge and include the necessary repairs and retrofits required to increase the load carrying capacity to that of current design standards.

Alternatives Building a new Portageville Bridge

These alternatives would involve the construction of a new bridge. The existing bridge could be removed or retained. The possible location of the new bridge includes on the existing alignment,
adjacent to and upstream of the existing alignment, and an alignment outside the park boundaries.

**ENVIRONMENTAL IMPACTS**

**Guidelines**

A Draft Environmental Impact Statement (DEIS) will be prepared consistent with 17 New York State Codes, Rules, and Regulations (NYCRR) Part 15, State Environmental Quality Review (SEQR). In addition, the requirements in the New York State Department of Environmental Conservation (NYSDEC) regulations for SEQR (6 NYCRR Part 617) will be considered. The DEIS will also meet the requirements for EISs under NEPA. In particular, the DEIS will identify and discuss the following (where applicable and significant):

- Reasonably related short-term and long-term impacts, cumulative impacts, and other associated environmental impacts.
- Adverse environmental impacts that cannot be avoided or adequately mitigated if the proposed action is implemented.
- Any irreversible and irretrievable commitments of environmental resources that would be associated with the proposed action.
- Impacts of the proposed action on the use and conservation of energy.
- A description of mitigation measures.

**Lead Agency**

The NYSDOT will be SEQR lead agency for this project. NYSOPRHP will be an involved agency in the environmental review process.

**DEIS Scoping**

Scoping of the DEIS will be performed during the early stages of the project. The scoping process has six objectives:
• Focus the draft EIS on the potentially significant adverse environmental impacts;
• Eliminate non-significant and non-relevant issues.
• Identify the extent and quality of information needed.
• Identify the range of reasonable alternatives to be discussed.
• Provide an initial identification of mitigation measures that may be needed.
• Provide the public and regulatory agencies with an opportunity to participate in the identification of impacts.

Affected Environment

A review of existing conditions will be conducted. This will be accomplished to provide data and information sufficient to understand the impacts of the proposed action and alternatives. This task involves collecting data, which will include, but not be limited to the following:

• Presence of wetlands
• Presence of state or federally listed threatened or endangered species and significant natural communities
• Presence of culturally significant areas (e.g., historic structures, historic areas, native American significant areas)
• Visual conditions
• Land use and zoning
• Unique land forms
• Wild, Scenic, and Recreational Rivers
• Parks, recreation and open space

Environmental Consequences - Specific Impact Categories

The potential environmental impact categories will be examined to determine which may be significant. As part of this process, specific consultation with environmental agencies will take place. Consistent with New York State SEQR regulations and guidance materials, the following impact categories will be addressed in the preparation of the Environmental Consequences section of the DEIS.
Impact on land - The most significant impact in this category is expected to be related to a unique land form (i.e., the Genesee River Gorge). Other potential impacts would be for disturbance of bedrock and a short-term impact for siting of the construction staging area.

Impact on water - The Flood Insurance Rate Map or the Flood Insurance Study Report will be reviewed to determine if the proposed project is located within a flood plain. The presence or absence of flood plains and the potential for impacts will be documented. The potential effects of the proposed project on water quality will be discussed. The following factors will be considered to the extent applicable for the proposed project.

- Erosion controls to prevent siltation.
- Designs to preserve existing drainage or to minimize dredge and fill.
- Location with regard to an aquifer or sensitive ecological areas such as wetlands.

Measures to minimize water pollution and runoff effects will be identified to demonstrate that state water quality standards and federal, state, or local requirements can be met.

Wetlands delineation will be conducted and a Wetlands Delineation Report will be prepared for the proposed action. The survey will be completed according to the 1987 Corps of Engineers Wetlands Delineation Manual by a qualified professional. This will include consultation with the United States Army Corps of Engineers and the New York State Department of Environmental Conservation (if necessary) to verify that the wetlands delineation and report preparation are conducted consistent with appropriate regulations and standards. Impacts to wetlands will be assessed.

Impact on air - This includes a review of regulatory requirements to determine if a detailed air quality analysis is needed. Consultation will be made with the USEPA Green Book for current National Ambient Air Quality Standards (NAAQS) attainment status. Given the scope of the bridge project, it is assumed that a detailed air quality analysis is not needed.

Impact on plants and animals - Letters will be obtained from the United States Fish and Wildlife Service (USF&WS) and the New York Natural Heritage Program (NYNHP) regarding the
wildlife aspects of the proposed project for the purposes of determining the possible impacts to wildlife resources. In addition, State Park staff in Albany and the parks offices will be consulted on this item. If needed, recommendations to minimize or reduce impacts to wildlife resources will be made. The USF&WS and the NYNHP will be contacted to determine if there are endangered or threatened species or significant natural communities that may be impacted by the proposed project.

Impact on agricultural resources - This section identifies the effects of converting farmland to non-agricultural uses and involves determining if the farmland is protected by the Farmland Protection Policy Act (FPPA). Farmland protected by the FPPA is either prime farmland which is not already committed to urban development or water storage, unique farmland, or farmland which is of state or local importance. The Soil Conservation Service and other applicable agencies will be contacted to determine whether the FPPA is applicable.

Impact on aesthetic resources - This section considers the extent to which any lighting or visual impacts associated with the proposed project will create an annoyance among people in the vicinity of the installation. Facilities that are located in visual proximity to sensitive land uses can produce significant visual impacts. The NYSDEC has a policy and guidance document which defines what visual and aesthetic impacts are and which describes when a visual assessment is necessary. The document also defines avoidance, mitigation, and offset measures that eliminate, reduce, or compensate for negative visual effects.

Impact on historic and archaeological resources - The Portageville Bridge is included on the National and State Preservation Offices’ Listing of Historic Places as a “contributing element” to Letchworth State Park. The State Historic Preservation Office (SHPO) will be contacted to determine if the proposed project will impact any properties and whether there is reason to believe that significant scientific, prehistoric, historic, archaeological, or paleontological resources would be lost or destroyed as a result of the proposed project. At a minimum, a Reconnaissance (Phase I A) Survey study will be performed. The project may involve the need to prepare mitigation measures for impacts to historic resources, and preparation of a Letter of
Resolution between involved agencies and the SHPO as the structure could potentially be an historic resource.

**Impact on open space and recreation** - There are a variety of activities in the Park, including hiking, horseback riding, biking, and camping. Letchworth also offers nature, history and performing arts programs, guided walks and tours, a summer lecture series, whitewater rafting, kayaking, hot air ballooning, and swimming. Winter activities include ice skating, snow tubing, cross-country skiing, snowmobiling and horse-drawn sleigh rides. Both short-term and long-term impacts to open space and recreation could potentially occur given the location of the proposed project in Letchworth State Park. Disruption or disturbance to these activities could be caused by land use changes, construction and noise. The project also provides an opportunity to enhance the recreational activities within Letchworth Park. Depending on the alternative selected, and engineering, operational, and financial considerations, there may be an opportunity to create a pedestrian bridge crossing connecting trails on either side of the Genesee River. If the project requires the use of additional parkland, then the Federal 6(f) conversion process as well as FHA 4(f) may be involved.

**Impact on critical environmental areas** – The Genesee River within Letchworth Park is listed as a Wild, Scenic and Recreational River by the NYSDEC. Potential impacts will be identified and mitigation measures will be recommended. In addition, the project will be reviewed to determine if the proposed action will impact the exceptional or unique characteristics of a Critical Environmental Area (CEA) established pursuant to 6 NYVRR 617.14(g).

**Impact on transportation** - Depending on which alternative is selected, rail traffic could be disrupted during the construction phase. Minor short-term disruption to vehicle traffic in the area could occur during construction.

**Impact on energy** - Energy requirements associated with the proposed project include assessing the following impacts:
• Those which relate to changed demands for stationary facilities. Any major changes in stationary facilities, which would have a measurable effect on local supplies, will be identified.

• Those which involve the movement of vehicles and rail equipment.

This is not considered to be a significant potential impact.

**Impact on noise and odor** - Noise is defined as any loud, discordant or disagreeable sound or sounds. More commonly, in an environmental context, noise is defined simply as unwanted sound. Certain activities inherently produce sound levels or sound characteristics that have the potential to create noise. When lands adjoining an existing or proposed facility contain residential, commercial, institutional or recreational uses that are proximal to the facility, noise is likely to be a matter of concern to users of these lands. The NYSDEC has a policy that presents noise impact assessment methods, examines the circumstances under which sound creates significant noise impacts, and identifies avoidance and mitigative measures to reduce or eliminate noise impacts. Changes in noise levels and frequency associated with the proposal will be compared to background and existing noise levels.

**Impact on public health** - This section will deal with potential impacts on the public health and safety from implementation of the proposed project. This includes risks from explosion, release of hazardous substances, and storage of hazardous chemicals. In addition this will address construction activities near solid or hazardous waste disposal sites.

**Impact on growth and character of community or neighborhood** - The proposed bridge project is not expected to have a significant impact on this category. There would be no expected change in regional growth, budgets, or the need for community services.

**Secondary (induced) impacts** - The potential for induced or secondary impacts on surrounding areas will be identified. The DEIS will describe in general terms such factors as shifts in patterns of population movement and growth, public service demands, and changes in business and economic activity to the extent influenced by the proposed bridge replacement project.
PUBLIC INVOLVEMENT

Two public meetings are anticipated. The first will be a public information meeting held early in
the project to solicit public input during the scoping process. The second public meeting will be
a combined public information meeting and public hearing to solicit input on the DEIS and
accept public comments. A mailing/email list will be developed to keep interested citizens and
regulatory agencies current on the project.

A 2005 amendment to the New York State SEQR Law requires every Environmental Impact
Statement (DEIS and Final EIS [FEIS]) to be posted on a publicly accessible web site. The
DEIS will be posted as soon as it is accepted and will remain posted until the FEIS is accepted.
The FEIS will be posted when it is accepted, and will remain posted until one year after all final
approvals have been issued for the project.