PROJECT SCOPING REPORT/
FINAL DESIGN REPORT
April 2014

Bridge Project
PIN: 2BOW.04.101
BIN: 1045630
NYS Route 315 over Big Creek
Oneida County
Town of Marshall

U.S. Department of Transportation Federal Highway Administration

NEW YORK STATE DEPARTMENT OF TRANSPORTATION
ANDREW M. CUOMO, Governor
JOAN MCDONALD, Commissioner
PROJECT APPROVAL SHEET
(Pursuant to SAFETEA-LU Matrix)

A. IPP Approval: These bridge locations are included in the Critical Bridges Over Water Program.

W. Albert, PE, MO Program Director
6/5/14

B. Public Hearing Certification (23 USC 128): A public hearing was not required.

Design Squad Leader or Project Manager
6/4/14

C. Recommendation for Scoping & Design Approval: The project cost and schedule are consistent with the objectives of the Critical Bridges Program.

W. Albert, PE, MO Program Director
6/5/14

D. Recommendation for Scoping, Design, & Nonstandard Feature Approval: All requirements requisite to these actions and approvals have been met, the required independent quality control reviews separate from the functional group reviews have been accomplished, and the work is consistent with established standards, policies, regulations and procedures, except as otherwise noted and explained.

Regional Design Engineer
6/4/14

E. Environmental Determination: All environmental requirements requisite to these actions and approvals have been met, and the work is consistent with established standards, policies, and regulations, except as otherwise noted and explained.

Terence Smith, Office of Environment, Acting Co-Director
6/5/14

F. Nonstandard Feature Approval: No non-standard features have been identified, created or retained.

Deputy Chief Engineer
6/5/14

G. Scoping & Design Approval: The required environmental determinations have been made and the preferred alternative for this project is ready for final design.

Deputy Chief Engineer
6/5/14
LIST OF PREPARERS

Group Director Responsible for Production of the Design Approval Document:

Michael D. Panichelli,  P.E., President, MJ Engineering and Land Surveying, PC

Description of Work Performed: Directed the preparation of the Design Approval Document in accordance with established standards, policies, regulations and procedures, except as otherwise explained in this document.

Note: It is a violation of law for any person, unless they are acting under the direction of a licensed professional engineer, architect, landscape architect, or land surveyor, to alter an item in any way. If an item bearing the stamp of a licensed professional is altered, the altering engineer, architect, landscape architect, or land surveyor shall stamp the document and include the notation "altered by" followed by their signature, the date of such alteration, and a specific description of the alteration.
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A. Plans, Profiles & Typical Sections
B. Environmental Information
C. Traffic Information
D. Public Information
E. Hydraulic Analysis
F. Soil Boring Data
CHAPTER 1 - EXECUTIVE SUMMARY

1.1. Introduction
This report was prepared in accordance with the New York State Department Of Transportation (NYSDOT) Project Development Manual, 17 NYCRR (New York Codes, Rules and Regulations) Part 15, and 23 CFR 771. Transportation needs have been identified (section 1.2), objectives established (section 1.2.3) to address the needs, and cost-effective alternatives developed (section 1.3). This project is federally funded.

1.2. Purpose and Need
1.2.1. Where is the Project Located?
The general project location is shown in Exhibit 1.2-A.

A. Route number – NYS Route 315
B. SH number and official highway description – SH 837, NA
C. BIN and Feature crossed - BIN 1045630; Big Creek
D. Town - Town Of Marshall
E. County - Oneida County
F. Length - 1815 ft.
G. RM – 315 2601 1021

<table>
<thead>
<tr>
<th>Exhibit 1.2-A – Project Location</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>
1.2.2. Why is the Project Needed?
The project was initiated by the NYSDOT because of the hydraulic vulnerability and deteriorated condition of the bridge. The bridge is vital to local residents, regional travelers, and businesses to maintain uninterrupted movement, mobility and connectivity on this State Route.

1.2.3. What are the Objectives/Purposes of the Project?
The main objectives of this project are to:

1. Improve the hydraulic opening, reduce the scour vulnerability, and reduce the likelihood that the bridge and adjoining roadway will flood.

2. Restore the crossing to a condition which provides a minimum 75 year service life, using cost effective techniques to minimize the life cycle cost of maintenance and repair.

1.3. What Alternative(s) Are Being Considered?

1.3.1 Null Alternative
The null alternative will maintain the existing structure, roadway section and geometry. There would be no improvements made to the structure other than routine maintenance and none of the physical deficiencies would be corrected. This alternative would not accomplish any of the project objectives, but it will remain feasible in the event that funding is not available or the environmental impacts of the other alternatives are deemed too great to continue.

1.3.2 Alternative 1 – Replace on existing alignment
Alternative 1 will replace the existing bridge with a new structure on the existing alignment. The new structure will have a span of approximately 63'-0" and will be skewed approximately 30 degrees to accommodate the expected flows of Big Creek. The proposed structure will be founded on piles or on spread footings on bedrock and will have an increased hydraulic opening, which will accomplish the objectives of this project.

The reconstructed roadway width and bridge roadway width will match the existing as closely as possible throughout the project limits in order to minimize Right-Of-Way impacts; however, the profile must be raised approximately 3 ft to improve the hydraulic opening, which will require FEE takings within the project limits. The total project length will be approximately 1815'-0" including both approach roadways and the proposed bridge.

The road will be closed during construction and a detour will be used to redirect traffic.

1.3.3 Alternative 2 – Rehabilitation
Alternative 2 will rehabilitate the existing structure. This is not a feasible alternative, as it will not accomplish the stated objective of improving the hydraulic opening and reducing the scour vulnerability of this structure. This alternative will not be progressed and is eliminated from further consideration.

1.4 Environmental Review

1.4.1 NEPA (National Environmental Policy Act):
This project is being progressed as a Class II action (Categorical Exclusion) because it does not individually or cumulatively have a significant environmental impact and is excluded from the requirement to prepare an Environmental Impact Statement (EIS) or an Environmental Assessment (EA) as documented in the Federal Environmental Approval Worksheet (see Appendix B) and discussion under Chapter 3.

Specifically, in accordance with the Federal Highway Administration’s regulations 23CFR 771.117(d) this project meets the project description of the ‘D’ list as primarily a repair/reconstruction of an existing bridge
in the same location with no additional capacity (no added thru lanes) and does not significantly impact the environment.

1.4.2 SEQRA (State Environmental Quality Review Act):
The Department is the SEQRA lead agency as per 17 NYCRR Part 15 “Procedures for Implementation of State Environmental Quality Review Act”, Section 15.5.

The State has determined that this project is a SEQRA Type II Action in accordance with 17 NYCRR, Part 15. No further SEQRA processing is required. The project has been identified as a Type II action, per 17 NYCRR Section 15.14, Subdivision (e), Item 37, Paragraph (iv) – “replacement, reconstruction or rehabilitation, at present site or immediately adjacent thereto, of existing bridges, culverts or other transportation structures, including railroad crossing structures, not involving substantial expansion of the structure”. This permits the project to be classified as Type II since the project does not violate any of the criteria contained in subdivision (d) of Section 15.14.

1.5 How will the Alternatives Affect the Environment?

<table>
<thead>
<tr>
<th>Category</th>
<th>Alternatives</th>
<th>#1 (Replacement)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wetland impacts</td>
<td>Temporary</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Permanent</td>
<td>None</td>
</tr>
<tr>
<td>100 year floodplain impact</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Archeological Sites Impacted</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Section 106/Section 4(f) impacts</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Impact to forested areas</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Property impacts</td>
<td>None</td>
<td>0.14 Acres (Permanent)</td>
</tr>
<tr>
<td>Operation at ETC + 30</td>
<td>LOS of A</td>
<td>LOS of A</td>
</tr>
<tr>
<td>30 year Crash Costs</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Meets Project Objectives</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Anticipated Permits/Certifications/Coordination:

New York State Department of Environmental Conservation (NYSDEC):

- Section 401 Water Quality Certification
- SPDES General Permit GP-0-10-001

Army Corps of Engineers (USACE):

- Section 404 Nationwide Permit #3 - Maintenance
Coordination:

- Coordination with NYSDEC pursuant to the “NYSDEC/NYSDOT Memorandum of Understanding Regarding ECL Articles 15 & 24”
- Coordination with Federal Highway Administration
- Coordination with the US Fish and Wildlife Service
- Coordination with the New York Natural Heritage Program
- Coordination with the Town of Marshall
- Coordination with Oneida County

1.6 What are the Costs & Schedules?
This project will be 100% federally funded.

Design Approval is scheduled for April of 2014. The construction schedule is pending federal funding approval.

1.7 Which Alternative is Preferred?
Alternative 1 has been identified as the preferred alternative because it will meet all of the project objectives, and is being advanced for Design Approval.

1.8 What are the Opportunities for Public Involvement?

<table>
<thead>
<tr>
<th>Exhibit 1.8-A - Public Involvement Plan Schedule of Milestone Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity</td>
</tr>
<tr>
<td>----------------------------------------------</td>
</tr>
<tr>
<td>Initial Environmental Findings</td>
</tr>
<tr>
<td>Field Pre-Scoping Meeting</td>
</tr>
<tr>
<td>Stake holder Meeting</td>
</tr>
<tr>
<td>Meeting with Town Reps.</td>
</tr>
<tr>
<td>Public Informational Meeting</td>
</tr>
</tbody>
</table>

The Region has sent letters to all municipalities, schools and county emergency coordinators informing them of the bridge project and proposed work zone traffic control (off site detour or staged construction). The county emergency coordinators were asked to forward the information to all local emergency responders. A request for responses by March 7, 2014 was stated in the letter. No responses were received as of March 19, 2014. This will complete the public outreach prior to design approval. The Region will hold public information meetings at specific sites to be determined after design approval.

You can contact:

New York State Department of Transportation (Please include “2BOW.04.101”)
Steve Emrich, P.E., Project Manager
New York State Department of Transportation Region 2
207 Genesee St.
Utica, NY 13501
Email: Steve.Emrich@dot.ny.gov
Telephone: (315) 793-2736

The remainder of this report is a detailed technical evaluation of the existing conditions, the proposed alternatives, the impacts of the alternatives, copies of technical reports and plans and other supporting information.
CHAPTER 2 – PROJECT INFORMATION

2.1 Local Plans for the Project Area
There are no approved developments planned within the project area that will impact traffic operations.

2.2. Abutting Highway Segments and Future Plans for Abutting Highway Segments
The roadway over the existing single span, steel multi-girder jack arch bridge consists of two 11'-0"± wide travel lanes with two 1'-6"± wide paved shoulders for a total clear bridge roadway width of 26'-4"±. The highway approaches consist of two 11'-0"± wide travel lanes with 5'-0"± wide paved shoulders. The horizontal alignment of the bridge consists of a slight curve with a horizontal curvature of approximately 1200'. The profile of the road at the structure has a maximum grade of 1.65% within the project limits. The clear zone varies throughout the project site, with a minimum clear zone of 1'-6"± on each side of the bridge corresponding to the minimum shoulder width.

The New York State Department of Transportation Regional Planning Group has confirmed that there are no plans to reconstruct or widen this highway segment, or the adjoining segments, within the next 20 years.

2.3 Transportation Conditions, Deficiencies and Engineering Considerations
2.3.1 Traffic and Safety and Maintenance Operations
2.3.1.1 Functional Classification and National Highway System (NHS) –

<table>
<thead>
<tr>
<th>Exhibit 2.3-A - Classification Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Route(s)</td>
</tr>
<tr>
<td>Functional Classification</td>
</tr>
<tr>
<td>National Highway System (NHS)</td>
</tr>
<tr>
<td>Designated Truck Access Route</td>
</tr>
<tr>
<td>Qualifying Highway</td>
</tr>
<tr>
<td>Within 1 mile of a Qualifying Highway</td>
</tr>
<tr>
<td>Within the 16 ft vertical clearance network</td>
</tr>
</tbody>
</table>

2.3.1.2 Control of Access
This roadway is currently without control of access and will continue to be without control of access after the project is complete.

2.3.1.3 Traffic Control Devices
There are no traffic control devices within the project limits.
2.3.1.4 Traffic Volumes
The projected ETC and ETC+30 traffic volumes were provided by the Department and are shown in Exhibit 2.3-B.

<table>
<thead>
<tr>
<th></th>
<th>Year</th>
<th>ADT</th>
<th>DHV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing (2013)</td>
<td>1660</td>
<td>190</td>
<td></td>
</tr>
<tr>
<td>ETC</td>
<td>1700</td>
<td>195</td>
<td></td>
</tr>
<tr>
<td>ETC+30</td>
<td>2000</td>
<td>229</td>
<td></td>
</tr>
</tbody>
</table>

2.3.1.5 Speeds
The posted speed limit at the project site is 55 MPH. The maximum design speed for the functional classification of Rural-Minor Arterial is 60 mph. The Regional Traffic Engineer has concurred with the use of a 60 mph design speed.

2.3.1.6 Level of Service
The roadway currently operates at a LOS A and will operate at a LOS A in the design year. The Regional Planning and Program Manager does not anticipate capacity improvements within 30 years.

2.3.1.7 Work Zone Safety & Mobility
2.3.1.7(1) Work Zone Traffic Control (WZTC) Plan
Traffic will be maintained during construction utilizing an off-site detour. The detour will utilize NYS Route 12B, US Route 20 and NYS Route 12 which will add approximately 18 miles and up to 20 minutes for vehicles traveling through the area.

Per the Workzone Method Comparison Worksheet created under EI 10-041, utilization of staged construction was eliminated from consideration for the construction of this project.

The use of a temporary on-site diversion structure was evaluated but was deemed not cost effective.

Coordination of work zone traffic control with potential nearby projects will be considered during Final Design.

2.3.1.7(2) Special Provisions
Due to the close proximity to a residential home, night time construction will not be utilized. The use of time related provisions will be evaluated during final design. The work zone traffic control will need to be coordinated with local officials, emergency responders, and residents.

2.3.1.7(3) Significant Projects (per 23 CFR 630.1010)
The Department has determined that the subject project is not significant per 23 CFR 630.1010.

A Transportation Management Plan (TMP) will be prepared for the project consistent with 23 CFR 630.1012. The TMP will consist of a Temporary Traffic Control (TTC) plan. Transportation Operations (TO) and Public Information (PI) components of a TMP will be considered during final design.

2.3.1.8 Safety Considerations, Accident History and Analysis
An accident analysis was performed by the Department in accordance with NYS Highway Design Manual Chapter 5 in 2013. This section of NYS Route 315 includes one (1) structure - BIN 1045630. The accident rate for this segment of NYS Route 315 is 8.09 accidents per million vehicle miles based on
thirteen (13) accidents occurring during the study period of March 1, 2010 to February 28, 2013. This is above the statewide accident rate for two-lane undivided Rural Minor Arterial highways with free access, which is 2.60 accidents per million vehicle miles.

Based on the 13 accidents that occurred during the study period, it is noted that one accident occurred in the vicinity of the bridge. However, the accident involved a collision with a deer and therefore was not attributed to the roadway conditions or bridge. All other accidents reported for this section of NYS Route 315 did not occur on or in close proximity to the bridge, nor were attributed to the bridge conditions. Additionally, none of the accidents reported involved a pedestrian or a bicyclist.

There is a high accident location (HAL) reported within the study area. The HAL occurs between reference markers 315-2601-1021 to 1027. As mentioned above, there were no accidents attributed to the bridge. It is also noted that the bridge is located between reference markers 315-2601-1021 and 1022, which is not within the reported HAL limits.

Numerous accidents in the HAL were reported involving vehicles sliding off the road from slick driving conditions. Although speed and driving conditions play a large role in these accidents, the existing superelevation rates to the north and south of the bridge are currently below the NYSDOT design standards for their respective horizontal curvature radii. Of the six (6) accidents that involve vehicles sliding off the road, five (5) accidents occurred due to vehicles sliding off the high side of the superelevated roadway. The proposed roadway will have improved superelevation rates that meet NYSDOT standards, which could aid in reducing the risk of such accidents.

The predominate accident types are shown in Exhibit 2.3-C.

<table>
<thead>
<tr>
<th>Type of Collision</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal</td>
<td>3</td>
<td>23</td>
</tr>
<tr>
<td>Right Angle</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Other</td>
<td>9</td>
<td>69</td>
</tr>
</tbody>
</table>

An accident analysis including an accident summary (TE-213) is included in Appendix C. The accident history did not identify any safety issues that need to be addressed within this project.

2.3.1.9 Ownership and Maintenance Jurisdiction

NYS Route 315 and the bridge crossing Big Creek (BIN 1045630) are owned and maintained by the New York State Department of Transportation. Ownership and maintenance jurisdiction will not change as a result of this project.

2.3.2 Multimodal

2.3.2.1 Pedestrians

There are no separate provisions for pedestrians due to infrequent demand. Occasional pedestrians may legally use the paved shoulder. A Pedestrian Generator Checklist is included in Appendix C.

2.3.2.2 Bicyclists

The existing shoulder width is approximately 1'-6"±. The proposed bridge will have 5'-0" wide shoulders. There are no separate provisions for bicyclists. There are no plans for bicycle route within the project limits. Bicyclists may legally use the paved shoulder.

2.3.3 Infrastructure

2.3.3.1 Design Standards

The design criteria for this Bridge Project are based on Chapter 2 of the NYSDOT Highway Design Manual (HDM) and Section 2 of the NYSDOT Bridge Manual (BM) - US Customary, 1st edition, and are
presented in Exhibit 2.3-D. The project is being designed in consideration of traffic anticipated for the design year ETC+30, a Highway classification of "Rural Arterial", and a design speed of 60 mph.

2.3.3.2 Critical Design Elements

<table>
<thead>
<tr>
<th>PIN:</th>
<th>2BOW.04.101</th>
<th>NHS (Y/N): No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Route No. &amp; Name:</td>
<td>NYS 315, SH 837</td>
<td>Functional Classification: Rural - Minor Arterial</td>
</tr>
<tr>
<td>Project Type:</td>
<td>Bridge Replacement</td>
<td>Design Classification: Rural Arterial</td>
</tr>
<tr>
<td>% Trucks:</td>
<td>8.0</td>
<td>Terrain: Level</td>
</tr>
<tr>
<td>ETC+30</td>
<td>2000</td>
<td>Truck Access/Qualifying Hw.</td>
</tr>
<tr>
<td>ADT:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Element</th>
<th>Standard</th>
<th>Existing Condition</th>
<th>Proposed Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Design Speed</td>
<td>60 mph1 – HDM Sect. 2.7.2.1 A</td>
<td>55 mph (posted)</td>
<td>60 mph</td>
</tr>
<tr>
<td>2 Lane Width</td>
<td>Match full approach width, but not less than existing (11 ft) of greater than 12 ft. BM Section 2.3.1 and Table 2-1</td>
<td>11'-0&quot;</td>
<td>11'-0&quot;</td>
</tr>
<tr>
<td>Approach Lane Width</td>
<td></td>
<td>11'-0&quot;</td>
<td>11'-0&quot;</td>
</tr>
<tr>
<td>Shoulder Width</td>
<td>Match approach traveled way (1'-6&quot; to 2'-6&quot;), but not less than 4'-0&quot; or greater than 6'-0&quot; BM 2A Table N - BM Table 2-1</td>
<td>1'-6&quot; to 2'-6&quot;</td>
<td>5'-0&quot;</td>
</tr>
<tr>
<td>Approach Shoulder Width</td>
<td></td>
<td>5'-0&quot;</td>
<td>5'-0&quot;</td>
</tr>
<tr>
<td>Bridge Roadway Width</td>
<td>Match approach traveled way, but not greater than 36'-0&quot; - BM 2A Table N - BM Table 2-1</td>
<td>26'-4&quot;</td>
<td>32'-0&quot;</td>
</tr>
<tr>
<td>Approach Roadway Width</td>
<td></td>
<td>32'-0&quot;</td>
<td>32'-0&quot;</td>
</tr>
<tr>
<td>5 Maximum Grade</td>
<td>3.0%</td>
<td>1.65% (Max.)</td>
<td>1.25% (Max.)</td>
</tr>
<tr>
<td>HDM Section 2.7.2.1 E, Table 2-5</td>
<td></td>
<td>1250 ft (Min.)</td>
<td>1250 ft (Min.)</td>
</tr>
<tr>
<td>6 Horizontal Curvature</td>
<td>1200 ft (@ e = 8.0%)</td>
<td>4.9% (HC 315-1)*</td>
<td>5.0% (HC 315-1)</td>
</tr>
<tr>
<td>HDM Section 2.7.3.1 F</td>
<td>3.7% (HC 315-2)</td>
<td>5.0% (HC 315-2)</td>
<td>8.0% (HC 315-3)</td>
</tr>
<tr>
<td>7 Superelevation Rate</td>
<td>8% Maximum</td>
<td>6.2% (HC 315-4)*</td>
<td>7.8% (HC 315-4)</td>
</tr>
<tr>
<td>HDM Section 2.7.3.1 G</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Stopping Sight Distance</td>
<td>570 ft (Min.)</td>
<td>&gt;570 ft (Min.)</td>
<td>&gt;570 ft (Min.)</td>
</tr>
<tr>
<td>HDM Section 2.7.2.1 H, Exhibit 2-3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 Horizontal Clearance</td>
<td>5'-0&quot; w/ Barrier, 10'-0&quot; w/out Barrier</td>
<td>1'-6&quot; w/ Barr.*</td>
<td>5'-0&quot; w/ Barr.</td>
</tr>
<tr>
<td>HDM Section 2.7.3.1 I</td>
<td>&gt;10'-0&quot; w/out Barr.</td>
<td>&gt;10'-0&quot; w/out Barr.</td>
<td></td>
</tr>
<tr>
<td>10 Vertical Clearance</td>
<td>14'-0&quot; Min., 14'-6&quot; Desirable – BM Sect. 2.4.1, Table 2-2</td>
<td>Unknown</td>
<td>14'-0&quot; Min.</td>
</tr>
<tr>
<td>(above traveled way)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 Travel Lane Cross Slope</td>
<td>1.5% Min. to 2% Max.</td>
<td>1.2% Min. to 2.5% Max.*</td>
<td>1.5% Min. to 2.0% Max.</td>
</tr>
<tr>
<td>HDM Section 2.7.3.1 K</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 Rollover</td>
<td>4% between travel lanes; 8% at edge of traveled way;</td>
<td>4.6% (Max.)*</td>
<td>4.0% (Max.)</td>
</tr>
<tr>
<td>HDM Section 2.7.3.1 L</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13 Structural Capacity</td>
<td>NYSDOT LRFD Specifications AASHTO HL-93 Live Load and NYSDOT Design Permit Vehicle</td>
<td>H-15</td>
<td>HL-93 &amp; DPV</td>
</tr>
<tr>
<td>14 Pedestrian Accommodation</td>
<td>Complies with HDM Chapter 18</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

(1) The Regional Traffic Engineer has concurred that the use of a Design Speed of 60 mph is consistent with the anticipated off-peak 85th percentile speed within the range of functional class speeds for the terrain and volume. *Denotes non-standard feature.
2.3.3.3 Other Design Parameters

Exhibit 2.3-E - Other Design Parameters

<table>
<thead>
<tr>
<th>Element</th>
<th>Standard</th>
<th>Existing Conditions</th>
<th>Proposed Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freeboard</td>
<td>( Q_{50} + 2 \text{ ft (BM 2.4.3)} )</td>
<td>( Q_{50} - 1.2 \text{ ft}^* )</td>
<td>( Q_{50} + 2.0 \text{ ft} )</td>
</tr>
<tr>
<td>Guide Rail</td>
<td>360 ft (HDM 10.2.2.2)</td>
<td>55 ft North Approach*</td>
<td>420 ft North Approach</td>
</tr>
<tr>
<td></td>
<td></td>
<td>70 ft South Approach*</td>
<td>430 ft South Approach</td>
</tr>
</tbody>
</table>

*Indicates non-conforming element

Exhibit 2.3-F - Other Design Parameter: Design Vehicle

<table>
<thead>
<tr>
<th>Location</th>
<th>Design Vehicle</th>
<th>Vehicle Accommodated</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIN 1045630</td>
<td>Minimum Design Vehicle: Single Unit Truck (SU), will accommodate large school bus (S-BUS-40)</td>
<td>Minimum Design Vehicle: Single Unit Truck (SU), will accommodate large school bus (S-BUS-40)</td>
</tr>
</tbody>
</table>

2.3.3.4 Existing and Proposed Highway/Bridge Plan and Section

The existing superstructure has an out-to-out width of 29'-0"± with a rail-to-rail width of 26'-4"±. The highway approaches consist of two 11'-0"± wide lanes with 5'-0"± wide shoulders.

The proposed bridge roadway will be 32'-0" wide consisting of two 11'-0" wide travel lanes with two 5'-0" wide shoulders. The approaches in the vicinity of the bridge will consist of two 11'-0" wide travel lanes and two 5'-0" wide shoulders.

See Typical Sections, Plans and Profiles sheets in Appendix A for both the existing and the proposed conditions.

2.3.3.5 Non-Standard/Non-Conforming Features

There are no non-standard or non-conforming features within the project limits.

2.3.3.6 Pavement and Shoulder Conditions

The existing roadway at the approaches primarily consists of asphalt paved travel lanes and asphalt paved shoulders and is in good condition. The approach pavement would rate “7”, except erosion from recent storms has caused a part of the northwest approach to become slightly undermined. The approach pavement condition rating is “4”. The roadway on the bridge is an asphalt wearing surface and is in good condition. The deck wearing surface condition rating is “7” according to the 2011 inspection report. The project will include full-depth pavement reconstruction within the project limits.

2.3.3.7 Drainage Systems

The approaches to the bridge are uncurbed, allowing roadway runoff to sheet flow off the approaches on to the embankments at all four quadrants. The embankment at the northwest approach is eroding and has begun to undermine the roadway at that location. There are concrete curbs on the bridge and roadway runoff flows off the bridge through scuppers on both sides of the bridge.

The proposed structure will be uncurbed with a steel bridge railing, allowing for sheet flow off the bridge deck. The existing drainage pattern of the approaches will remain with the proposed project.

2.3.3.8 Geotechnical

Soil boring data was obtained at the bridge and is included in Appendix G. It is noted that borings were progressed to a depth of approximately 25 ft, at which point bedrock was encountered.
The minimum drive pile length is 10 feet. It is unlikely that this length can be met due to the elevation of the bedrock at the site location. It is anticipated that the abutments will be founded on piles socketed into the bedrock or spread footings on bedrock.

2.3.3.9 Structure

The existing structure is a 30'-0" long, single span, steel multi-girder jack arch superstructure, supported by concrete gravity abutments founded on spread footings. Wingwalls are gravity type walls founded on spread footings. The existing bridge is on a 25 degree skew and has an out-to-out width of 29'-0" ± with a rail-to-rail width of 26'-4" ±. The existing structure provides a clear opening (perpendicular to the flow) of approximately 29'-0" ± with a low chord elevation of 975.41 ±, resulting in a hydraulic opening of approximately 136 SF.

The proposed structure will have a span of approximate 63'-0" and will be skewed approximately 25 degrees. The new bridge will have a 35'-4" out-to-out width and 32'-0" clear roadway consisting of two 11'-0" wide travel lanes and two 5'-0" wide shoulders. The proposed structure will provide a clear opening (perpendicular to the flow) of 46'-0" ± with a low chord elevation of 978.65 ± resulting in a hydraulic opening of approximately 336 SF.

<table>
<thead>
<tr>
<th>Data</th>
<th>Existing Structure</th>
<th>Proposed Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIN</td>
<td>1045630</td>
<td>1045630</td>
</tr>
<tr>
<td>Feature Carried/Crossed</td>
<td>NYS 315 over Big Creek</td>
<td>NYS 315 over Big Creek</td>
</tr>
<tr>
<td>Type of Bridge</td>
<td>Steel multi-girder jack arch superstructure on concrete abutments founded on spread footings</td>
<td>To be determined during final design</td>
</tr>
<tr>
<td>Number and Length of Spans</td>
<td>One 30'-0&quot; Span</td>
<td>One 63'-0&quot; Span</td>
</tr>
<tr>
<td>Lane Width(s)</td>
<td>11'-0&quot;</td>
<td>11'-0&quot;</td>
</tr>
<tr>
<td>Shoulder Width(s)</td>
<td>1'-6&quot; to 2'-6&quot;</td>
<td>5'-0&quot;</td>
</tr>
<tr>
<td>Sidewalk(s)</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Utilities Carried</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Vertical Clearance(s)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Federal Sufficiency Rating</td>
<td>62.6</td>
<td>-</td>
</tr>
<tr>
<td>State Condition Rating</td>
<td>4.055</td>
<td>-</td>
</tr>
</tbody>
</table>

2.3.3.9(1) History & Deficiencies

The existing bridge was constructed in 1930 and consists of a steel multi-girder jack arch superstructure supported by concrete gravity abutments. The bridge is in fair condition with the primary members and substructure controlling the ratings.

There are no geometric deficiencies associated with the approach roadway; the bridge roadway width will be increased to match the design criteria outlined in the HDM chapter 2.

The stream flows toward the north abutment causing erosion problems at this location. This condition will be addressed by maintaining a 25 degree bridge skew and widening the clear opening of the bridge.
2.3.3.9(2) Inspection

Federal Sufficiency Rating – 62.6

State Condition Rating – 4.055

The 2011 Biennial Inspection gave the bridge a General Condition Rating of “4”, which shades between a rating of “5” (minor deterioration but functioning as originally designed) and “3” (serious deterioration or not functioning as designed).

Where exposed, the primary member steel girders display corrosion with section loss to the steel members. The Primary Members are rated “4”. The stay-in-place forms were found to be heavily corroded and the structural deck has extensive spalls and deterioration. The structural deck is rated “3”.

The components of the abutments are generally rated between “4” and “5” indicating minor to moderate deterioration throughout. Erosion was found at the north abutment and the erosion rating for that abutment was “3”. The waterway opening was rated “2”.

The condition rating gives maximum weight to items of most importance such as primary members, abutment stems, structural deck, etc. Relative weights along with scour ratings are used in calculating the condition rating. The overall superstructure is rated “3”, and portions of the substructure are rated “4”.

2.3.3.9(3) Restrictions

There are currently no restrictions for this bridge.

2.3.3.9(4) Waterway

Big Creek is not a USACE or a US Coast Guard navigable waterway.

2.3.3.10 Hydraulics of Bridges and Culverts

The following table summarizes the existing and proposed hydraulic conditions at the bridge site.

<table>
<thead>
<tr>
<th>Data</th>
<th>Existing</th>
<th>Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q50 (cfs)</td>
<td>2160</td>
<td>2160</td>
</tr>
<tr>
<td>Q100 (cfs)</td>
<td>2510</td>
<td>2510</td>
</tr>
<tr>
<td>Low Chord Elevation (ft)</td>
<td>975.41</td>
<td>978.65</td>
</tr>
<tr>
<td>Q50 Design High Water (ft)</td>
<td>976.65</td>
<td>976.65</td>
</tr>
<tr>
<td>Q100 Design High Water (ft)</td>
<td>977.15</td>
<td>977.15</td>
</tr>
<tr>
<td>Q50 Freeboard (ft)</td>
<td>-1.24</td>
<td>2.0</td>
</tr>
<tr>
<td>Q100 Freeboard (ft)</td>
<td>-1.74</td>
<td>1.5</td>
</tr>
<tr>
<td>Velocity (ft/s)</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

The proposed structure increases the available freeboard by 3.24 ft during the 50-year design event. The hydraulic analysis has been provided by the Department and is included in Appendix E.
2.3.3.11 Utilities
Continuity of all utility services will be maintained throughout the project’s construction duration to the maximum extent practical. It is anticipated that the overhead lines will need to be temporarily relocated within the existing right-of-way prior to construction.

<table>
<thead>
<tr>
<th>Exhibit 2.3-I – Utilities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Owner</strong></td>
</tr>
<tr>
<td>Unknown</td>
</tr>
</tbody>
</table>

2.3.3.12 Right of Way
It is anticipated that there will be a need for FEE acquisitions. The acquisitions will be located along the east side of both approaches and the west side of the north approach for construction and maintenance purposes. The proposed right-of-way acquisitions are outlined in the table below.

<table>
<thead>
<tr>
<th>Exhibit 2.3-J – Right-of-Way Acquisitions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tax Map No.</strong></td>
</tr>
<tr>
<td>383.000-1-66.2</td>
</tr>
<tr>
<td>383.000-1-66.3</td>
</tr>
</tbody>
</table>

2.3.3.13 Landscaping/Environmental Enhancement
The roadside terrain in the project area is generally flat and is located in rural areas. Tree clearing is not anticipated for this project and the overall visual environment will not be impacted.

2.4 Miscellaneous
2.4.1 NYS Smart Growth Public Infrastructure Policy Act (SGPIPA)
Pursuant to ECL Article 6, this project is compliant with the New York State Smart Growth Public Infrastructure Policy Act (SGPIPA). To the extent practicable this project has met the relevant criteria as described in ECL § 6-0107. The Smart Growth Screening Tool has been completed, and is included in Appendix B.
CHAPTER 3 – SOCIAL, ECONOMIC AND ENVIRONMENTAL CONSIDERATIONS

3.1 National Environmental Policy Act (NEPA)

This project is being progressed as a Class II action (Categorical Exclusion) because it does not individually or cumulatively have a significant environmental impact and is excluded from the requirement to prepare an Environmental Impact Statement (EIS) or an Environmental Assessment (EA) as documented in the Federal Environmental Approval Worksheet (see Appendix B) and following discussion under Chapter 3.

Specifically, in accordance with the Federal Highway Administration’s regulations 23CFR 771.117(d) this project meets the project description of the ‘D’ list as primarily a repair/reconstruction of an existing bridge in the same location with no additional capacity (no added thru lanes) and does not significantly impact the environment.

3.2 State Environmental Quality Review Act (SEQRA)

The Department is the SEQRA lead agency as per 17 NYCRR Part 15 “Procedures for Implementation of State Environmental Quality Review Act”, Section 15.5.

The Department has determined that this project is a SEQRA Type II Action in accordance with 17 NYCRR, Part 15. No further SEQRA processing is required. The project has been identified as a Type II action, per 17 NYCRR Section 15.14, Subdivision (e), Item 37, Paragraph (iv) – “replacement, reconstruction or rehabilitation, at present site or immediately adjacent thereto, of existing bridges, culverts or other transportation structures, including railroad crossing structures, not involving substantial expansion of the structure”. This permits the project to be classified as Type II since the project does not violate any of the criteria contained in subdivision (d) of Section 15.14, and is of a scale and scope illustrated by the following:

Specifically, the project does not include or result in any of the following:

- The acquisition of an occupied dwelling or business structure;
- Significant changes in passenger or vehicle traffic volumes, vehicle mix, local travel patterns or access;
- More than minor social, economic or environmental effects upon occupied dwelling units, businesses, abutting properties or other established human activities;
- Significant inconsistency with current plans or goals that have been adopted by local government bodies;
- Physical alteration of more than 1 ha (2.5 ac) of publicly owned or operated park land, recreational area or designated open space;
- An effect on a district, building, structure or site eligible for, or listed on, the National Register of Historic Places; or any historic building, structure, site or prehistoric site that has been proposed by the Committee on the Registers for consideration by the New York State Board of Historic Preservation for a recommendation to the State Historic Preservation Officer for nomination for inclusion in said National Register;
- More than minor alteration of, or adverse effect upon, any property, protected area, or natural or man-made resource of national, State or local significance, including but not limited to:
  - Freshwater or tidal wetlands and associated areas;
  - Floodplains;
  - Prime or unique agricultural land;
  - Agricultural districts, when more than one acre may be affected;
  - Water resources, including lakes, reservoirs, rivers and streams;
  - Water supply sources;
  - Designated wild, scenic and recreational rivers;
  - Unique ecological, natural wooded or scenic areas;
3.3 Environmental
3.3.1 General Ecology & Endangered Species

The United States Fish and Wildlife Service (USFWS) Information, Planning, and Conservation System (IPaC) website and the New York Natural Heritage Program (NYNHP) database were consulted to obtain a project-specific species list of all the federal and state protected threatened, endangered, or proposed plant and animal species. A discussion of each of these species, their likelihood of being impacted by the project, and NYSDOT’s effect determination for each is summarized below.

The Northern Long-Eared Bat (*Myotis septentrionalis*) whose range encompasses all of New York State, is proposed for inclusion on the USFWS Endangered Species List. At this time, clearing of zero (0) trees (4" dbh and greater) is generally considered to have no effect on the northern long-eared bat. Since this project proposes to not cut any trees, NYSDOT made a preliminary effect determination of "no effect" for this species and the Federal Highway Administration has concurred with this determination. Additionally, pursuant to 6 NYCRR Part 182, NYSDOT determined that the proposed activity is not likely to result in the take or taking of northern long-eared bat and was therefore not subject to regulation under this Part. The NYS Department of Environmental Conservation has agreed with this determination. Based on concurrence from both agencies, no further coordination with these agencies is needed in reference to threatened and endangered species.

Indiana bat (*Myotis sodalis*) is listed by the USFWS as an endangered species. Therefore, this species is afforded protection under Section 9 of the Federal Endangered Species Act. This species is to be considered for any project in New York State that is located at or below an elevation of 900 feet NGVD, and is within 40 miles of a known hibernaculum. Of particular importance are projects that involve clearing of trees greater than four inches in diameter at breast height. Although the Indiana Bat was identified by the USFWS as inhabiting Oneida County, the project is located at an elevation of approximately 980 feet NGVD, which is above that where Indiana bats are known to occur. NYSDOT made a preliminary effect determination of “no effect” for this species and the Federal Highway Administration has concurred with this determination. Additionally, pursuant to 6 NYCRR Part 182, NYSDOT determined that the proposed activity is not likely to result in the take or taking of Indiana bat and was therefore not subject to regulation under this Part. The NYS Department of Environmental Conservation has agreed with this determination. Based on concurrence from both agencies, no further coordination with these agencies is needed in reference to threatened and endangered species.

Bog Turtle (*Clemmys muhlenbergii*) is listed by the USFWS as a threatened species and by New York State as an endangered species. This species prefers humid environments including open swamps with hummock-forming tussocks and shallow, slow flowing, clean clear water. The habitat and soils within and adjacent to the project site consist of a combination of steep and shallow banks as well as Pittsfield loam and Wakeville silt loam soils, both of which are not associated with the ponding of surface water. Based on the lack of essential habitat and soils preferred by the bog turtle within the project footprint, NYSDOT made a preliminary effect determination of “no effect” for this species and the Federal Highway Administration has concurred with this determination. Additionally, pursuant to 6 NYCRR Part 182, NYSDOT determined that the proposed activity is not likely to result in the take or taking of the bog turtle and was therefore not subject to regulation under this Part. The NYS Department of Environmental Conservation has agreed with this determination. Based on concurrence from both agencies, no further coordination with these agencies is needed in reference to threatened and endangered species.

Bald Eagle (*Haliaeetus leucocephalus*) is protected under the federal Bald and Golden Eagle Protection Act (BGEPA) and is a New York State listed threatened species. Coordination with both the NYNHP and NYSDEC indicates bald eagle nests are not present in the project area. During the site visit, no bald eagle nests were observed within or adjacent to the project area. NYSDOT made a BGEPA effect determination of “unlikely to disturb nesting bald eagles” for this species and the Federal Highway Administration...
Administration has concurred with this determination. Additionally, pursuant to 6 NYCRR Part 182, NYSDOT determined that the proposed activity is not likely to result in the take or taking of bald eagle and was therefore not subject to regulation under this Part. The NYS Department of Environmental Conservation has agreed with this determination. Based on concurrence from both agencies, no further coordination with these agencies is needed in reference to threatened and endangered species.

3.3.2 Wetlands
3.3.2.1 State Freshwater Wetlands
There are no NYSDEC regulated freshwater wetlands or regulated adjacent areas (100ft) within the project area, as per the NYSDEC Environmental Resource Mapper, accessed on December 13, 2013. A site visit was performed to verify this. No further investigation is required and Environmental Conservation Law, Article 24 is satisfied.

3.3.2.3 Federal Jurisdictional Wetlands
Based on a site visit and field observations made on November 18, 2013, it was determined that federal jurisdictional wetlands exist on the project site. The wetland impacts under the proposed alternative will permanently impact approximately 0.09 acres and temporarily impact approximately 0.09 acres of federal jurisdictional wetlands.

It is anticipated that the work will comply with Section 404 Nationwide Permit #3 (Maintenance), authorizing the repair, rehabilitation or replacement of any previously authorized, currently serviceable structure, or fill, or of any currently serviceable structure or fill authorized by 33 CFR 330.3. It is anticipated no PCN will be required.

A Blanket Section 401 Water Quality Certification applies to this project, since the work required will meet the requirements set forth in NYS Dept. of Environmental Conservation Required General Conditions under Section 404 Nationwide Permit #3.

3.3.2.2 Surface Waterbodies and Watercourses
Big Creek is classified as a Class C(T) stream. The New York State Department of Conservation (NYSDEC) has been consulted regarding any restrictions to construction activities due fish spawning or other water quality concerns. Instream work will be restricted to the time period between May 15 to October 1 as required in Class C(t) and C(ts) streams.

It is anticipated that the work will comply with Section 404 Nationwide Permit #3 (Maintenance) and Nationwide Permit #13 (Bank Stabilization) and all General and Regional Conditions. It is anticipated no PCN will be required.

A Blanket Section 401 Water Quality Certification applies to this project, since the work required will meet the requirements set forth in NYS Dept. of Environmental Conservation Required General Conditions under Section 404 Nationwide Permits #3 and #13.

3.3.2.4 Executive Order 11990
It has been determined that the proposed project activities will comply with the terms and conditions of a Programmatic Executive Order 119900 Find (EO). This Programmatic EO has been prepared for a Transportation Improvement Project which is a Federally Aided Highway Project and classifies as a Categorical Exclusion under 23 CFR 771.117 and projects which only require a USACE Section 404 Nationwide Permit for work which will affect waters of the United States. There are no practicable alternatives to the proposed construction in wetlands. The proposed project will include all practicable measures to minimize harm to the involved wetlands which may result from such use. No further approval from FHWA is required.
3.3.2.5 Mitigation Summary
At the conclusion of the construction, the temporarily impacted areas will be restored to their original grading and seeded with a seed mix similar in functionality to the following Wetland Seed Mix:

SPECIES:

Grasses
River bank Wild Rye (Elymus riparius), Virginia Wild Rye (Elymus virginicus), Creeping Red Fescue (Festuca rubra), Switch Grass (Panicum virgatum), Blunt Broom Sedge (Carex coparia), Fowl Bluegrass (Poa palustris) Tufted Hairgrass (Deschampsia cespitosa), Redtop (Agrostis alba), Creeping Bentgrass (Agrostis stolonifera), Soft Rush (Juncus effusus), Wool Grass (Scirpus cyperinus)

Wildflowers
Blue Vervain (Verbena hastata), Calico Aster (Aster lateriflorus), Nodding Bur Marigold (Bidens cernua), Common Sneezeweed (Helenium autumnale), Showy Tick Trefoil (Desmodium canadense), Boneset Eupartorium perfoliatum), New England Aster (Aster novaeangliae), Spotted Joe Pye Weed (Eupatorium maculatum), New York Ironweed (Vernonia noveboracensis), Monkey Flower (Mimulus ringens)

Shrubs
Elderberry (Sambucus canadensis), Silky Dogwood (Cornus amomum), Arrow Wood (Viburnum dentatum, Steeple Bush (Spiraea tomentosa)

No wetland mitigation/monitoring plan is required for this project, since permanent impacts to wetlands are 1/10 of an acre or less, and a Nationwide Permit applies to the proposed activities.

3.3.3 Floodplains
3.3.3.1 State Flood Insurance Compliance Program
Based on the FIRM for the Town of Marshall, Oneida County, the project is within floodplain limits. In addition to the new structure proposed along the existing alignment, construction practices will be implemented to minimize impacts to floodplain functions and values. Compared to existing conditions, the project will improve the hydraulic capacity at the crossing (see Hydraulics Analysis in Appendix E). Based on the evaluation of the project design in conjunction with hydraulic studies, surveyed elevations, and existing culvert capacities, the project will satisfy the requirements of 6 NYCRR 502 and EO 11988.

3.3.3.2 Executive Order 11988
In order to comply with EO 11988, potential effects of any actions taken within the floodplain have been evaluated, and the proposed project will not impact the floodplain. There will be no anticipated permits.

3.3.4 Stormwater Management
This project will disturb more than one acre and will require a SPDES General Permit GP-0-10-001. This project is required to assess the requirements for stormwater management practices. The results of a preliminary SPDES assessment indicate that portions of the project corridor to undergo roadway reconstruction or new construction will be subject to post-construction stormwater quantity and quality controls. The appropriate sediment and erosion control measures will be identified during final design. The project will employ effective erosion and sediment control practices during construction, as set forth in NYSDOT’s statewide stormwater and erosion and sedimentation control specifications, standard construction details, and design and construction guidance procedures.

3.4 Historical and Cultural Resources
The bridge is 50 years old or older, but has been determined Not Eligible for the National Register of Historic Places. The project will not disturb any previously undisturbed soils and therefore has no potential to affect archeological resources. There are no known listed or eligible historic buildings, structures, or districts in or adjacent to the project area that require consideration in accordance with Section 106 of the National Historic Preservation Act (36 CFR Part 800).
3.5 Lead-Based Paint Assessment

3.5.1 Screening
Lead-based paint screenings have been performed by MJ Engineering and Land Surveying for this project and it has been determined that some components may be comprised of lead.

3.5.2 Assessment and Quantification
Green paint chip samples from the bridge rail were collected for lead analysis on November 18, 2013. Lead-based paint is defined as paint exhibiting lead concentrations equal to or exceeding 1.0 milligram per square centimeter (mg/cm²) or 0.5% lead by weight by the Lead-Based Paint Poisoning Prevention Act. The green paint chip sample was determined to contain 12% lead by weight. The analytical results are included in Appendix B.

Based upon the paint chip sample analytical results, the bridge rails containing green paint should be segregated into appropriate waste streams and removed and disposed of in accordance with all applicable regulations during demolition of the bridge and ancillary appurtenances.

3.6 Asbestos Assessment

3.6.1 Screening
Asbestos screenings have been performed by MJ Engineering and Land Surveying for this project and it has been determined that some components may contain asbestos.

3.6.2 Assessment and Quantification
Samples from the abutment sealant were collected for asbestos sampling on November 18, 2013. Asbestos Containing Material (ACM) is defined as any material containing greater than one percent (1%) of asbestos, according to the NYS Department of Labor. The abutment sealant samples were found to contain up to 1.5% Chrysotile. The analytical results are included in Appendix B.

Based upon the abutment sealing sample analytical results, the abutment sealant containing asbestos should be segregated into appropriate waste streams and removed and disposed of in accordance with all applicable regulations during demolition of the bridge and ancillary appurtenances.

3.7 Hazardous Waste and Contaminated Materials

3.7.1 Screening and Site Assessment
A Hazardous Waste/Contaminated Materials Site Screening has been conducted in accordance with NYSDOT Environmental Procedures Manual, Chapter 5, in order to document the likely presence or absence of hazardous/contaminated environmental conditions. A hazardous/contaminated environmental condition is the presence or likely presence of any hazardous substances or petroleum products (including products currently in compliance with applicable regulations) on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property.

The Hazardous Waste/Contaminated Materials Site Screening included a review of NYSDEC regulatory data files and a site ‘walkover’, conducted on November 18, 2013. In addition, historic topographic maps and historic aerial photographs have been reviewed.

No hazardous waste/contaminated materials were identified within or adjacent to the project area during the course of the Hazardous Waste/Contaminated Materials Site Screening. The potential risk for involvement with documented or undocumented inactive hazardous waste/contaminated materials is low. No additional studies or investigations are warranted.
APPENDICES
APPENDIX A – Plans, Profiles & Typical Sections
APPROACH QUANTITIES

UNCLASSIFIED EXCAVATION ITEM 4:

- Soft as per Purchase Schedule
- Basalt rock
- Ornamental Structures and soil of 1' thickness
- For estimate

Total

PORTLAND CEMENT ITEM 15

- 1 CF First Class Concrete
- For estimate

Total

FIRST CLASS CONCRETE ITEM 26

- 2.0 Cu. Yds.

Total

CABLE GUIDE RAILING ITEM 28

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<td>87-02</td>
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For estimate

Total

BOTTOM COURSE BROKEN STONE ITEM 33

- 300 SQ. YDS.

Total

TOP COURSE BIT MAC. OPTIONAL REMEDY

- 300 SQ. YDS.

Total

FOUNDATION COURSE FOR DRIVE ITEM 41

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For estimate

Total

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<tr>
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SUB-SECTION A

- Soft as per estimate

TYPICAL SECTION

- Soft as per estimate

The above values for location, measuring and depth of excavation shall be those shown on Item 41. This section is shown in Item 41.01.
APPENDIX B – Environmental Information
Smart Growth Screening Tool

Prepared By: NYSDOT

Smart Growth Screening Tool (STEP 1)

NYSDOT & Local Sponsors – Fill out the Smart Growth Screening Tool until the directions indicate to STOP for the project type under consideration. For all other projects, complete answering the questions. For any questions, refer to Smart Growth Guidance document.

Title of Proposed Project: Scour Critical/Flood Prone Bridge Mitigation Program

Location of Project: Statewide

Brief Description: This program will address flood prone bridges through replacement, thereby enhancing their resiliency to withstand future major weather events

A. Infrastructure:

Addresses SG Law criterion a. –
(To advance projects for the use, maintenance or improvement of existing infrastructure)

1. Does this project use, maintain, or improve existing infrastructure?
   Yes ☒ No ☐ N/A ☐

   Explain: (use this space to expand on your answers above – the form has no limitations on the length of your narrative)

   The objective of the Scour Critical/Flood Prone Bridge Mitigation Program is to address over 100 bridges located over water, all of which are susceptible to flooding thereby affecting their ability to function as originally intended. The focus of these bridge projects will be on critical corridors that provide the public added protection and improved egress during storm events, and access for emergency responders and health and safety providers.

   The Program will involve replacing the existing scour critical bridges with new structures that are more resilient to extreme weather events. The new bridges will include larger hydraulic openings (potentially larger spans) to allow for a more efficient conveyance of water and additional foundation support through the installation of piles.

   For most projects, the scope will not involve adding any additional travel lanes except in those instances where a left turn lane is needed to improve traffic flow and/or for safety reasons.

Maintenance Projects Only

SG-13 (revised May, 2013)
Smart Growth Screening Tool

a. Continue with screening tool for the four (4) types of maintenance projects listed below, as defined in NYSDOT PDM Exhibit 7-1 and described in 7-4:
https://www.dot.ny.gov/divisions/engineering/design/dqab/pdm

- Shoulder rehabilitation and/or repair;
- Upgrade sign(s) and/or traffic signals;
- Park & ride lot rehabilitation;
- 1R projects that include single course surfacing (inlay or overlay), per Chapter 7 of the NYSDOT Highway Design Manual.

b. For all other maintenance projects, STOP here. Attach this document to the programmatic Smart Growth Impact Statement and signed Attestation for Maintenance projects.

For all other projects (other than maintenance), continue with screening tool.

B. Sustainability:

NYSDOT defines Sustainability as follows: A sustainable society manages resources in a way that fulfills the community/social, economic and environmental needs of the present without compromising the needs and opportunities of future generations. A transportation system that supports a sustainable society is one that:

- Allows individual and societal transportation needs to be met in a manner consistent with human and ecosystem health and with equity within and between generations.
- Is safe, affordable, and accessible, operates efficiently, offers choice of transport mode, and supports a vibrant economy.
- Protects and preserves the environment by limiting transportation emissions and wastes, minimizes the consumption of resources and enhances the existing environment as practicable.

For more information on the Department’s Sustainability strategy, refer to Appendix 1 of the Smart Growth Guidance and the NYSDOT web site, www.dot.ny.gov/programs/greenlites/sustainability

Addresses SG Law criterion j : to promote sustainability by strengthening existing and creating new communities which reduce greenhouse gas emissions and do not compromise the needs of future generations, by among other means encouraging broad based public involvement in developing and implementing a community plan and ensuring the governance structure is adequate to sustain and implement.)

1. Will this project promote sustainability by strengthening existing communities?
   Yes ☒ No ☐ N/A ☐

2. Will the project reduce greenhouse gas emissions?
   Yes ☐ No ☐ N/A ☒

   Explain: (use this space to expand on your answers above)

SG-13 (revised May, 2013)
The Scour Critical/Flood Prone Bridge Mitigation Program supports sustainability and strengthens communities by ensuring the continuing availability of these vital transportation links. In addition, the replacement bridges will add protection and improve egress during storm events and provide access for emergency responders as well as health and safety responders.

Many of the bridge projects will include sidewalks or wide shoulders for pedestrian and bicyclists use.

C. Smart Growth Location:

Plans and investments should preserve our communities by promoting its distinct identity through a local vision created by its citizens.

(Addresses SG Law criteria b and c: to advance projects located in municipal centers; to advance projects in developed areas or areas designated for concentrated infill development in a municipally approved comprehensive land use plan, local waterfront revitalization plan and/or brownfield opportunity area plan.)

1. Is this project located in a developed area?
   - Yes ☐
   - No ☐
   - N/A ☒

2. Is the project located in a municipal center?
   - Yes ☐
   - No ☐
   - N/A ☒

3. Will this project foster downtown revitalization?
   - Yes ☐
   - No ☐
   - N/A ☒

4. Is this project located in an area designated for concentrated infill development in a municipally approved comprehensive land use plan, waterfront revitalization plan, or Brownfield Opportunity Area plan?
   - Yes ☐
   - No ☐
   - N/A ☒

Explain: (use this space to expand on your answers above)

The replacement bridge projects are located in areas that are prone to flooding, and provide a vital link within or to many established communities. The replacement of existing bridges will not contribute to sprawl development, but rather afford continued sustainability to those communities linked via the corridors, especially before, during and after extreme weather events.
Smart Growth Screening Tool

D. Mixed Use Compact Development:

Future planning and development should assure the availability of a range of choices in housing and affordability, employment, education transportation and other essential services to encourage a jobs/housing balance and vibrant community-based workforce.

Addresses SG Law criteria e and i: to foster mixed land uses and compact development, downtown revitalization, brownfield redevelopment, the enhancement of beauty in public spaces, the diversity and affordability of housing in proximity to places of employment, recreation and commercial development and the integration of all income groups; to ensure predictability in building and land use codes.)

1. Will this project foster mixed land uses?
   Yes ☐ No ☐ N/A ☒

2. Will the project foster brownfield redevelopment?
   Yes ☐ No ☐ N/A ☒

3. Will this project foster enhancement of beauty in public spaces?
   Yes ☒ No ☐ N/A ☐

4. Will the project foster a diversity of housing in proximity to places of employment and/or recreation?
   Yes ☐ No ☐ N/A ☒

5. Will the project foster a diversity of housing in proximity to places of commercial development and/or compact development?
   Yes ☐ No ☐ N/A ☒

6. Will this project foster integration of all income groups and/or age groups?
   Yes ☐ No ☐ N/A ☒

7. Will the project ensure predictability in land use codes?
   Yes ☐ No ☐ N/A ☒

8. Will the project ensure predictability in building codes?
   Yes ☐ No ☐ N/A ☒

**Explain:** (use this space to expand on your answers above)

The Scour Critical/Flood Prone Bridge Mitigation program is a transportation infrastructure improvement program. The bridge replacement projects will maintain the state’s quality of life by preserving important transportation links to established communities and continuing access to employment, education, commercial and recreational centers.

Also, consideration will be made to the aesthetics of the bridge replacement projects.
E. Transportation and Access:

NYSDOT recognizes that Smart Growth encourages communities to offer a wide range of transportation options, from walking and biking to transit and automobiles, which increase people's access to jobs, goods, services, and recreation.

(Addresses SG Law criterion f: to provide mobility through transportation choices including improved public transportation and reduced automobile dependency.)

1. Will this project provide public transit?
   Yes ☐   No ☐   N/A ☑

2. Will this project enable reduced automobile dependency?
   Yes ☑   No ☐   N/A ☐

3. Will this project improve bicycle and pedestrian facilities (such as shoulder widening to provide for on-road bike lanes, lane striping, crosswalks, new or expanded sidewalks or new/improved pedestrian signals)?
   Yes ☑   No ☐   N/A ☐

(Note: Question 3 is an expansion on question 2. The recently passed Complete Streets legislation requires that consideration be given to complete street design features in the planning, design, construction, reconstruction and rehabilitation, but not including resurfacing, maintenance, or pavement recycling of such projects.)

**Explain:** (use this space to expand on your answers above)

For each bridge replacement project, the NYSDOT is completing a Pedestrian Generator checklist to determine if there is a need for pedestrian accommodations. The checklist focuses on the existence of pedestrian destinations/generators rather than on existing pedestrian activity since the lack of facilities may be the root cause of the lack of pedestrian activity. Once the need has been established, the accommodations may include sidewalks, adequate shoulders to permit use by pedestrians and/or bicyclists, and/or other accommodations.

F. Coordinated, Community-Based Planning:

Past experience has shown that early and continuing input in the transportation planning process leads to better decisions and more effective use of limited resources. For information on community based planning efforts, the MPO may be a good resource if the project is located within the MPO planning area.

(Addresses SG Law criteria g and h: to coordinate between state and local government and intermunicipal and regional planning; to participate in community based planning and collaboration.)
Smart Growth Screening Tool

1. Has there been participation in community-based planning and collaboration on the project?
   Yes ☒ No ☐ N/A ☐

2. Is the project consistent with local plans?
   Yes ☒ No ☐ N/A ☐

3. Is the project consistent with county, regional, and state plans?
   Yes ☒ No ☐ N/A ☐

4. Has there been coordination between inter-municipal/regional planning and state planning on the project?
   Yes ☒ No ☐ N/A ☐

Explain: (use this space to expand on your answers above)

Several of the bridge replacement projects were identified in local plans developed through the "New York Rising Community Reconstruction Program". This program was established by Governor Cuomo to provide additional rebuilding and revitalization assistance to Communities severely damaged by Hurricanes Sandy and Irene and Tropical Storm Lee. To facilitate this effort, community redevelopment planning funds were made available to assist the most affected areas to develop locally-driven recovery plans. These planning efforts required communities to engage stakeholders including the public through public meetings and other outreach.

Several projects are also mentioned in other planning efforts such as the REDC Sustainability Plans and County Hazard Mitigation Plans.

G. Stewardship of Natural and Cultural Resources:

Clean water, clean air and natural open land are essential elements of public health and quality of life for New York State residents, visitors, and future generations. Restoring and protecting natural assets, and open space, promoting energy efficiency, and green building, should be incorporated into all land use and infrastructure planning decisions.

(Addresses SG Law criterion d: To protect, preserve and enhance the State’s resources, including agricultural land, forests surface and ground water, air quality, recreation and open space, scenic areas and significant historic and archeological resources.)

1. Will the project protect, preserve, and/or enhance agricultural land and/or forests?
   Yes ☐ No ☐ N/A ☒

2. Will the project protect, preserve, and/or enhance surface water and/or groundwater?
   Yes ☒ No ☐ N/A ☐

3. Will the project protect, preserve, and/or enhance air quality?
   Yes ☐ No ☐ N/A ☒
4. Will the project protect, preserve, and/or enhance recreation and/or open space?
   Yes ☐  No ☐  N/A ☒

5. Will the project protect, preserve, and/or enhance scenic areas?
   Yes ☐  No ☐  N/A ☒

6. Will the project protect, preserve, and/or enhance historic and/or archeological resources?
   Yes ☒  No ☐  N/A ☐

Explain: (use this space to expand on your answers above)

   The replacement bridge projects will be constructed within existing NYSDOT right-of-way to the maximum extent possible, and will follow the existing road alignment to the extent practicable, thereby minimizing disturbance to preserved habitats and environmental resources. If it is found that avoidance of natural assets is not viable, effort will be made to minimize the affect and appropriate mitigation measures will be applied. Other measures to protect the project area include:
   - A Stormwater Pollution Plan will be developed to protect/preserve the waterbody at each site.
   - All project sites will be screened for cultural/archeological artifacts in accordance with Section 106 of the Natural Historic Preservation Act.
Smart Growth Impact Statement (STEP 2)

**NYSDOT:** Complete a Smart Growth Impact Statement (SGIS) below using the information from the Screening Tool.

**Local Sponsors:** The local sponsors are not responsible for completing a Smart Growth Impact Statement. Proceed to Step 3.

**Smart Growth Impact Statement**

**PIN:**

**Project Name: Flood Prone Bridge Mitigation Program**

Pursuant to ECL Article 6, this project is compliant with the New York State Smart Growth Public Infrastructure Policy Act. This project has been determined to meet the relevant criteria, to the extent practicable, described in ECL Sec. 6-0107. Specifically, the project:

- Will involve replacing existing bridges with new structures that are more resilient to extreme weather events. The new bridges will include larger hydraulic openings to allow for a more efficient conveyance of water, and additional foundation support with the installation of piles.
- Will be located in critical corridors that provide added protection and improved egress during storm events and access for emergency responders, health and safety providers.
- Will maintain the state's quality of life by preserving important transportation links to established communities and continuing access to employment, education, commercial and recreational centers.
- Will include facilities for pedestrians and bicyclists upon establishment of the need (Pedestrian Generator Checklist). Also, consideration will be made to aesthetics during the design/build of these projects.
- Has or will be presented to the public and local officials to engage their input. Several of the projects are identified in local plans developed through the "New York Rising Community Reconstruction Program". In addition, projects are also mentioned in other planning efforts such as the REDC Sustainability Plans and County Hazard Mitigation Plans.
- Will be constructed within existing NYSDOT right-of-way to the maximum extent possible, and will follow the existing road alignment to the extent practicable, thereby minimizing disturbance to preserved habitats and environmental resources.

This publically supported infrastructure project complies with the state policy of maximizing the social, economic and environmental benefits from public infrastructure development. The project will not contribute to the unnecessary costs of sprawl development, including environmental
degradation, disinvestment in urban and suburban communities, or loss of open space induced by sprawl.
Review & Attestation Instructions (STEP 3)

Local Sponsors: Once the Smart Growth Screening Tool is completed, the next step is to submit the project certification statement (Section A) to Responsible Local Official for signature. After signing the document, the completed Screening Tool and Certification statement should be sent to NYSDOT for review as noted below.

NYSDOT: For state-let projects, the Screening Tool and SGIS is forwarded to Regional Director/ RPPM/Main Office Program Director or designee for review, and upon approval, the attestation is signed (Section B.2). For locally administered projects, the sponsor’s submission and certification statement is reviewed by NYSDOT staff, the appropriate box (Section B.1) is checked, and the attestation is signed (Section B.2).

A. CERTIFICATION (LOCAL PROJECT)

I HEREBY CERTIFY, to the best of my knowledge, all of the above to be true and correct.

Preparer of this document:

Signature

Date

Title

Printed Name

Responsible Local Official (for local projects):

Signature

Date

Title

Printed Name
B. ATTESTATION (NYSDOT)

1. I HEREBY:

☑ Concur with the above certification, thereby attesting that this project is in compliance with the State Smart Growth Public Infrastructure Policy Act

☐ Concur with the above certification, with the following conditions (information requests, confirming studies, project modifications, etc.):

(Attach additional sheets as needed)

☐ do not concur with the above certification, thereby deeming this project ineligible to be a recipient of State funding or a subrecipient of Federal funding in accordance with the State Smart Growth Public Infrastructure Policy Act.

2. NOW THEREFORE, pursuant to ECL Article 6, this project is compliant with the New York State Smart Growth Public Infrastructure Policy Act, to the extent practicable, as described in the attached Smart Growth Impact Statement.

NYSDOT Commissioner, Regional Director, MO Program Director, Regional Planning & Programming Manager (or official designee):

\[Signature\]  \[Mar 10, 2014\]  \[Leland Albert\]

\[Title\]  \[MO Program Director\]  \[Printed Name\]
Federal Environmental Approval Worksheet

**PIN:** 2BOW.04.101  **FUNDING TYPE:** Federal
**BIN:** 1045630  **Date Comp.:** 3/4/14
**DESCRIPTION:** NYS Route 315 over Big Creek  **NEPA CLASS:** II
**LOCALITY (Village, Town, City):** Town of Marshall  **SEQR TYPE:** II
**COUNTY:** Oneida

**Purpose of this Worksheet:**
- Communicate project National Environmental Policy Act (NEPA) classification to Federal Highway Administration (FHWA).
- Identify additional required FHWA environmental determinations, approvals and/or concurrences required before the Categorical Exclusion (CE) determination can be made.
- Reflect the documentation in the Design Approval Document (DAD) and enable the approving authority (per PDM Exhibit 4-2) to make the CE determination.

**Instructions:** (also see “WorksheetInstructions.doc”)
Complete the worksheet prior to the end of Design Phase I. If project parameters or site condition changes result in potential resource impacts, re-do worksheet prior to Design Approval to confirm NEPA determination and recertify (on page 4)

*Categorical Exclusion (CE)*- a category of actions which do not individually or cumulatively have a significant effect on the human environment and which have been found to have no such effect in procedures adopted by a Federal agency (40 CFR 1508.4). Actions that do not individually or cumulatively have a significant environmental effect are excluded from the requirement to prepare an Environmental Assessment (EA) or Environmental Impact Statement (EIS) (23 CFR 771.115(b)).

**Step 1: Unusual Circumstances Threshold Determination** – 23 CFR 771.117(b)

Any action which normally would be classified as a CE but could involve unusual circumstances (or even uncertainty) will require consultation with FHWA to determine if the CE classification is proper or whether an EA or EIS is required.

**Do any, or the potential for any, unusual circumstances exist?**

1. Significant environmental impacts;  **YES**  **NO**
2. Substantial controversy on environmental grounds;  **YES**  **NO**
3. Significant impact on properties protected by Section 4(f) of the DOT Act or Section 106 of the National Historic Preservation Act; or  **YES**  **NO**
4. Inconsistencies with any Federal, State, or local law, requirement or administrative determination relating to the environmental aspects of the action.  **YES**  **NO**

- If yes to any of the above, contact the Main Office Project Liaison (MOPL) (see PDM Exhibit 4-1). If after consultation with FHWA it is determined that the project cannot be progressed as a CE, skip to step 4 and see PDM Chapter 4 for NEPA Class I (EIS) or Class III (EA) processing.

- **or-**

- If no to all, then this project qualifies as a Categorical Exclusion (CE); proceed to step 2.
**Step 2: Other FHWA environmental actions required prior to CE Determination**

Classification as a CE does not exempt the project from further environmental review. Compliance with Federal Statutes, Regulations and Executive Orders (EO’s) must be documented. Refer to the Department’s Project Development Manual (PDM) and Environmental Manual (TEM) to determine the requirements.

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Proceed to step 3.

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\(^1\) See thresholds.doc
Step 3: Who makes the NEPA Categorical Exclusion Determination?

FHWA Regulations describe two types of CEs; CEs listed in 23 CFR 771.117(c) [aka the C list], and CEs such as those listed in 23 CFR 771.117 (d) [aka the D list]. NYSDOT can make the CE determination for C list projects once all required approvals and concurrences have been secured. NEPA determination for d list projects has been retained by FHWA. NYSDOT can also make the CE determination where a project meets the July 15, 1996 FHWA NY Division NEPA Programmatic Categorical Exclusion memo criteria.

To determine by whom, FHWA or NYSDOT, and how the CE determination is made, follow the instructions beginning in section 3.1 of the table below:

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<th>Condition</th>
<th>Action</th>
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<tr>
<td>3</td>
<td>Determine whether FHWA or NYSDOT makes the CE determination.</td>
</tr>
<tr>
<td>3.1</td>
<td>If the project is an action that would normally be a CE in 23 CFR 771.117 (c) (drop down list), check the “Yes” box. If not, check the “No” box.</td>
</tr>
<tr>
<td>3.1.1</td>
<td>If yes, NYSDOT can make the CE determination once all the approvals and coordinations required are complete.</td>
</tr>
<tr>
<td></td>
<td>Is the project an action that would normally be a CE in 23 CFR771.117(c)?</td>
</tr>
<tr>
<td></td>
<td>YES ☐ NO ☐ Choose an item.</td>
</tr>
<tr>
<td></td>
<td>If yes, choose an item and proceed to step 3.1.1.</td>
</tr>
<tr>
<td></td>
<td>If no, proceed to step 3.2.</td>
</tr>
<tr>
<td>3.1.2</td>
<td>Determine if any of the required environmental determinations, compliance and/or approvals/concurrences are outstanding.</td>
</tr>
<tr>
<td>3.1.2</td>
<td>If there are:</td>
</tr>
<tr>
<td></td>
<td>• outstanding environmental determinations (Table 2.1: checks in column A without dates in column B)</td>
</tr>
<tr>
<td></td>
<td>• and/or circumstances requiring demonstration of applicable EO compliance or issues requiring FHWA environmental review (checks in column A in Table 2.2)</td>
</tr>
<tr>
<td></td>
<td>The project will use Memo Shell 2 (FHWA needs to review this project).</td>
</tr>
<tr>
<td></td>
<td>Proceed to step 4.</td>
</tr>
<tr>
<td></td>
<td>If the project does not meet the conditions above proceed to step 3.1.2.</td>
</tr>
<tr>
<td>3.1.3</td>
<td>No Determinations, Approvals, Concurrences or Notifications required.</td>
</tr>
<tr>
<td>3.1.3</td>
<td>The project will use Memo Shell 1 (memo to file).</td>
</tr>
<tr>
<td>3.1.3</td>
<td>Proceed to step 4.</td>
</tr>
<tr>
<td>3.2</td>
<td>The project is a D list CE as per 23 CFR 771.117(d). Choose appropriate entry from drop down list. If “other” provide an explanation.</td>
</tr>
<tr>
<td>3.2</td>
<td>Certain actions eligible for categorical exclusion require NYSDOT to transmit documentation and a determination that a CE applies. Examples of activities that may proceed as a CE are listed in 23 CFR 771.117(d) (D list). Activities not directly listed on the D List also have the potential to proceed as a CE with submitted documentation (other).</td>
</tr>
<tr>
<td></td>
<td>All other environmental, social and economic factors that affect the project’s NEPA classification, as per 23 CFR 771.117 and the July 1996 FHWA NY Division NEPA Programmatic Categorical Exclusion memo must still be addressed, for example the project: does not change the functional class; does not add mainline capacity; is not on new location; will not change travel patterns; acquires only minor amounts of ROW (temporary or permanent); does not cause displacements; does not change access control; is air quality exempt; is consistent with NYS Coastal Zone Management Plan; and the analysis and requirements of the Farmland Protection Policy Act have been satisfied.</td>
</tr>
<tr>
<td></td>
<td>The project is an action that would normally be a CE in 23 CFR 771.117(d). &quot;Bridge rehabilitation, reconstruction or replacement or the construction of grade separation to replace existing at-grade railroad crossings.&quot;.</td>
</tr>
<tr>
<td></td>
<td>Other: provide explanation here</td>
</tr>
<tr>
<td></td>
<td>Proceed to step 3.2.1.</td>
</tr>
</tbody>
</table>
Federal Environmental Approval Worksheet

Determine if any of the required environmental determinations, compliance and/or approvals/ concurrences are outstanding and/or notification is required.

If there are:
• any outstanding environmental determinations (any checks in column A without dates in column B in Table 2.1);
• and/or any circumstances requiring demonstration of applicable EO compliance (any checks in column A in Table 2.2);
• and/or issues requiring FHWA environmental notification (any checks in column A in Table 2.3); then

The project will use Memo Shell 4 (MOPL and FHWA need to review this project). Proceed to Step 4.

Design Approval Document sent to FHWA

If the project:
• does not meet the conditions above (3.2.1), then the project has met the criteria established as per the programmatic agreement dated July 15, 1996.

The project will use Memo Shell 5 (memo to file). Proceed to Step 4.

Step 4: Summary and Recommendation

• This project does qualify to be progressed as a Categorical Exclusion.
• The NEPA Determination is being made by FHWA
• All outstanding FHWA environmental approvals will be obtained and are listed here.

List outstanding FHWA environmental approvals here:

I certify that the information provided above is true and accurate and recommend the project be processed as described above.

[Signature]
Date 4/17/14

Print Name and Title: Eric Williams, P. E., Associate, Project Manager

[Signature]
Date 4/17/14

Regional Environmental Unit Supervisor

Print Name and Title: Terence Smith, Office of Environment, Acting Co-Director

[Signature]
Date

Regional Local Project Liaison

Print Name and Title: (Locally Administered Projects Only)

Changes that may have occurred since the preparation of the worksheet which would create the need to go through the Worksheet again include but are not limited to:
• A change in the scope of the proposed project.
• A change in the social, economic or environmental circumstances or the setting of the project study area (i.e. the affected environment).
• A change in the federal statutory environmental standards.
• Discovering new information not considered in the original process.
• A significant amount of time has passed (equal or greater than three years).
To: John Romeo  
From: Alpine Lab  
Fax: 571-0822  
Pages: 8 (incl. cover)  
Phone:  
Date: 11/25/2013  
Re:  
CC:

☐ Urgent  ☐ For Review  ☐ Please Comment  ☐ Please Reply  ☐ Please Recycle

• Comments: Enclosed you will find the results for various brines.
# Chain of Custody

**Client:** MJ Engineering  
**Project:** Various Bridges  
**Project Number:** MJ 746.08  
**Sampled By:** John Romeo  
**Date / Time Collected:** 11/18/2013

---

**Log No.** | **Sample No.** | **Sample Location** | **Sample Material** | **Analysis** | **Results**  
--- | --- | --- | --- | --- | ---  
LP-1 | 1045630 - Railing | Green Paint | Lead |  
ASB-1 | 1045630 - Expansion Abutment | Sealant | NOB-TEM Stop on Positive |  
ASB-2 | 1045630 - Expansion Abutment | Sealant | NOB-TEM Stop on Positive |  
ASB-3 | 1045630 - Expansion Abutment | Sealant | NOB-TEM Stop on Positive |  
ASB-11 | 1045640 - Expansion Abutment | Sealant | NOB-TEM Stop on Positive |  
ASB-12 | 1045640 - Expansion Abutment | Sealant | NOB-TEM Stop on Positive |  
ASB-13 | 1045640 - Expansion Abutment | Sealant | NOB-TEM Stop on Positive |  
ASB-21 | 1039040 - Wingwalls | Sealant | NOB-TEM Stop on Positive |  
ASB-22 | 1039040 - Wingwalls | Sealant | NOB-TEM Stop on Positive |  
ASB-23 | 1039040 - Wingwalls | Sealant | NOB-TEM Stop on Positive |  

**Disposition of Samples:** Accept | Reject | Comments:  

---

**Relinquished By:** John Romeo  
**Received By:** [Signature]  
**Date:** 11/19/13  
**Time:** 9:00 AM  

---  

**Page of:**
# CHAIN OF CUSTODY

**Client:** MJ ENGINEERING  
1533 Crescent Road  
Clifton Park, NY 12065  
Contact: John Romeo  
Phone/Fax: 518-371-0799

**Project:** Various Bridges

**Project Number:** MJ 746.08  
**Sampled By:** Client: John Romeo  
**Date / Time Collected:** 11/18/2013

---

**ALL SAMPLES ARE TO IMMEDIATELY GO TO TEM AT 24HR, 48HR, 72HR, OTHER:________**

**Turnaround Time:** Immediate 24HR 48HR 72HR

<table>
<thead>
<tr>
<th>Log No.</th>
<th>Sample No.</th>
<th>Sample Location</th>
<th>Sample Material</th>
<th>Analysis</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>LP-2</td>
<td>1020120</td>
<td>Concrete Railing</td>
<td>White Paint</td>
<td>Lead</td>
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<tr>
<td>LP-3</td>
<td>1020120</td>
<td>Concrete Railing</td>
<td>Purple Paint</td>
<td>Lead</td>
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<tr>
<td>ASB-31</td>
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<td>Expansion Abutment</td>
<td>Sealant</td>
<td>NOB-TEM Stop on Positive</td>
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<td>1020120</td>
<td>Expansion Abutment</td>
<td>Sealant</td>
<td>NOB-TEM Stop on Positive</td>
<td></td>
</tr>
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<td>ASB-33</td>
<td>1020120</td>
<td>Expansion Abutment</td>
<td>Sealant</td>
<td>NOB-TEM Stop on Positive</td>
<td></td>
</tr>
</tbody>
</table>

**Disposition of Samples:** Accept____  Reject____  Comments:

**Relinquished By:** John Romeo  
**Received By:** John Romeo  
**Date:** 11/19/13  
**Time:** 9:00am

---

Page 1 of ___


**Chain of Custody**

Project: Various Bridges  Project #13-15008-A

Sampled By: J. Romeo  Cert. # **.*.*.*

Date / Time Collected: 11/19/13  Contact: Jeff Earnest

Carrier: FedEx  Tracking # 795863476928

Turn Around Time Requested: 24 Hour

---

**ALL NEGATIVE PLC NOB's ARE TO IMMEDIATELY GO TO TEM AT 24HR TAT**

<table>
<thead>
<tr>
<th>Log No.</th>
<th>Sample No.</th>
<th>Sample Location</th>
<th>Sample Material</th>
<th>Analysis Requested</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASB-1</td>
<td>1045630</td>
<td>Expansion Abutment</td>
<td>Sealant</td>
<td>NOB/TEM Positive Stop</td>
<td>Do Not Analyze if Previous Sample is Positive.</td>
</tr>
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<td>1045630</td>
<td>Expansion Abutment</td>
<td>Sealant</td>
<td>NOB/TEM Positive Stop</td>
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<tr>
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<td>Sealant</td>
<td>NOB/TEM</td>
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<td>Sealant</td>
<td>NOB/TEM Positive Stop</td>
<td>Do Not Analyze if Previous Sample is Positive.</td>
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<td>NOB/TEM</td>
<td>Do Not Analyze if Previous Sample is Positive.</td>
</tr>
</tbody>
</table>

Disposition of Samples: Accept ___  Reject ___  Comments: ___

Relinquished By: [Signature]  Received By: [Signature]  Date: 11/21  Time: 16:50

Alpine Environmental Services, Inc.
1146 Central Avenue
Albany, NY 12205

Phone: (518) 453-0146 Fax: (518) 453-0175 email: lab@alpineenv.com

Emily Wright  11/21  13  7:40 A
### Test Report: Asbestos Analysis of Bulk Material

<table>
<thead>
<tr>
<th>Test Description</th>
<th>Sample ID</th>
<th>Date</th>
<th>Color</th>
<th>Asbestos</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEM NYS 198.4 NOB</td>
<td>PLM NYS 198.1 Friable</td>
<td>11/22/2013</td>
<td>Black</td>
<td>Positive Stop (Not Analyzed)</td>
</tr>
<tr>
<td>TEM NYS 198.4 NOB</td>
<td>PLM NYS 198.6 VCM</td>
<td>11/22/2013</td>
<td>Black</td>
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</tr>
<tr>
<td>TEM NYS 198.4 NOB</td>
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</tr>
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## Test Report: Asbestos Analysis of Bulk Material

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Initial Report From: 11/22/2013 12:00:46
Test Report 198VCM-7.30.0  Printed: 11/22/2013 12:00:48 PM Page 2
Test Report: Asbestos Analysis of Bulk Material

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</table>

Analyst(s)

Derrick Young

Emily Myint

James Hall, Laboratory Manager
or other approved signatory

NOB = Non Fribale Organically Bound   N/A = Not Applicable   VCM = Vermiculite Containing Material
-In New York State, TEM is currently the only method that can be used to determine if NOB materials can be considered or treated as non-asbestos containing.
-All samples examined for the presence of vermiculite when analyzed via NYS 198.1.
-EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL.
-EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. Samples were received in good condition unless otherwise noted.
-This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. This report may contain data that is not covered by the NVLAP accreditation.
-Samples analyzed by EMSL Analytical, Inc. New York, NY NYS ELAP 11506

Initial Report From 11/22/2013 12:00:48
Test Report 198VCM-7.30.0 Printed: 11/22/2013 12:00:48 PM
THIS IS THE LAST PAGE OF THE REPORT.
# CHAIN OF CUSTODY

**Project:** Various Bridges  
**Project #:** 13-15566-A  
**Project Address:**  
**Sampled By:** J. Romeo  
**Cert. #:** *.*.***  
**Date/Time Collected:** 11/19/13  
**Contact:** Jeff Eames  
**Carrier:** FedEx  
**Tracking #:** 795865476928  
**Turn Around Time Requested:** 24 Hour

ALL NEGATIVE PLM NOB's ARE TO IMMEDIATELY GO TO TEM AT 24HR TAT

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<th>Sample Material</th>
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<th>Comments</th>
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<td>Pb by AAS</td>
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<tr>
<td>LP-2</td>
<td>1020120 - Concrete Railing</td>
<td>White Paint</td>
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<td>LP-3</td>
<td>1020120 - Concrete Railing</td>
<td>Purple Paint</td>
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Disposition of Samples: Accept _ Reject _ Comments:  

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<td><em>Signature</em></td>
<td><em>Signature</em></td>
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<td>10:50 AM</td>
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Alpine Environmental Services, Inc.  
1146 Central Avenue  
Albany, NY 12205  

Phone: (518) 453-0146  
Fax: (518) 453-0175  
email: lab@alpineenv.com
Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B*7000B)

<table>
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<td>12 % wt</td>
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<td>Site: 1045630/ RAILING</td>
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<td>Desc: GREEN PAINT</td>
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<tr>
<td>LP-2</td>
<td>0002</td>
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<td>11/22/2013</td>
<td>1.5 % wt</td>
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<td>Desc: WHITE PAINT</td>
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<tr>
<td>LP-3</td>
<td>0003</td>
<td>11/19/2013</td>
<td>11/22/2013</td>
<td>0.014 % wt</td>
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<td>Desc: PURPLE PAINT</td>
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</table>

M. Apfeldorfer, Laboratory Manager or other approved signatory

Reporting limit is 0.010 % wt based on the minimum sample weight per our SOP. The QC data associated with these results included in this report meet the method QC requirements, unless specifically indicated otherwise. Unless noted, results in this report are not blank corrected. EMSL bears no responsibility for sample collection activities. Samples received in good condition unless otherwise noted.

* slight modifications to methods applied. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request.

Samples analyzed by EMSL Analytical, Inc. New York, NY NY ELAP, LLC-ELAP Accredited #102591, NYES ELAP 11508

Initial report from 11/22/2013 11:00:52

Test Report ChmSinglePm/hQC-7.21.0 Printed: 11/22/2013 11:00:52 AM
Mr. Daniel Hitt, RLA  
Chief, Office of Environment  
New York State Department of Transportation  
50 Wolf Road  
Albany, NY

Subject: Critical Bridges Over Water Program  
Determination for ESA Section 7 Conference, Northern Long-eared Bat  
No Effect Concurrence

Dear Mr. Hitt:

This letter is in regards to the Conference Process for projects under Section 7 of the Endangered Species Act (ESA), specifically regarding Northern Long-eared Bat (*Myotis septentrionalis*). This letter applies to the 13 projects within the Critical Bridges Over Water (CBOW) Program that are listed in the attached spreadsheet: “NLEB Batch Summary Table, No Trees Being Cut”.

On October 2, 2013, the U.S. Fish and Wildlife Service (USFWS) proposed to list the Northern Long-eared Bat for protection under the ESA for its range. The range of the Northern Long-eared Bat encompasses the entire state of New York, with no known exclusion areas. FHWA is anticipating that the Northern Long-eared Bat will be formally listed under the ESA within approximately 12 months of the proposal date. During the period of time when a species is “proposed” to be listed under the ESA, FHWA is required to “conference” on the species.

FHWA has reviewed your letter and submission of March 17, 2014 requesting FHWA’s concurrence with a determination that 13 projects within the CBOW Program will result in “No Effect” to the Northern Long-eared Bat based on the lack of tree cutting for each project, and based on the fact that all of the project sites are located greater than 5 miles from a known hibernaculum, greater than 3 miles from a mist net capture site, and greater than 1.5 miles from a known maternity roost site. These distances are cited in the January 6, 2014 Northern Long-eared Bat Interim Conference and Planning Guidance as distances to use for buffers around known locations of Northern Long-eared Bat.

Based on our review of the submitted documentation, FHWA concurs that the 13 projects in the CBOW Program will have “No Effect” on the Northern Long-eared Bat, due to the fact that the projects have no potential to remove habitat because there is no tree cutting, and due to the fact
that the projects are outside the distance buffers where noise and vibration could affect known hibernacula, maternity roost sites, or known capture areas. This letter concludes the Conference Process for Section 7 of the ESA for this species. If you have any questions or concerns, please contact me at 518-431-8867.

Sincerely,

[Signature]

Melissa Toni
Environmental Program Coordinator

Attachment: Spreadsheet, NLEB Batch Summary Table, No Trees Being Cut
- PIN 1BOW.00
  - NYS Route 145 over Fox Creek, Town of Rensselaerville, Albany County. The project consists of replacement of BIN 1038200.
  - 0 > 5.0 mi > 3 mi > 1.5 mi

- PIN 2BOW.00
  - Rte 28 over Multanner Creek, Town of Middleville, Herkimer County. The project consists of replacement of BIN 1020120.
  - 0 > 5.0 mi > 3 mi > 1.5 mi

- PIN 3BOW.00
  - NY Rte 168 over Tributary to Otsquago, Town of Stark, Herkimer County. The project consists of replacement of BIN 1039040.
  - 0 > 5.0 mi > 3 mi > 1.5 mi

- PIN 4BOW.00
  - NYS Route 315 over Big Creek, Town of Marshall, Oneida County. The project consists of replacement of BIN 1045630.
  - 0 > 5.0 mi > 3 mi > 1.5 mi

- PIN 5BOW.00
  - NYS Route 168 over Otsquago Creek, Town of Stark, Herkimer County. The project consists of replacement of BIN 1051360.
  - 0 > 5.0 mi > 3 mi > 1.5 mi

- PIN 3BOW.00
  - West Main Street over Steele Creek, Town of Ilion, Herkimer County. The project consists of replacement of BIN 1002720.
  - 0 > 5.0 mi > 3 mi > 1.5 mi

- PIN 4BOW.00
  - NYS Route 392 over Gridley Creek, Town of Virgil, Cortland County. The project consists of replacement of BIN 1034370.
  - 0 > 5.0 mi > 3 mi > 1.5 mi

- PIN 5BOW.00
  - NYS Route 327 over West Branch of Enfield Creek, Town of Enfield, Tompkins County. The project consists of replacement of BIN 1045930.
  - 0 > 5.0 mi > 3 mi > 1.5 mi

- PIN 6BOW.00
  - NYS Route 5 over Tonawanda Creek, Town of Batavia, Genesee County. The project consists of replacement of BIN 1001690.
  - 0 > 5.0 mi > 3 mi > 1.5 mi

- PIN 7BOW.00
  - NYS Route 20A over Cayuga Creek, Town of Sheldon, Wyoming County. The project consists of replacement of BIN 1016120.
  - 0 > 5.0 mi > 3 mi > 1.5 mi

- PIN 8BOW.00
  - NYS Route 19 over Sandy Creek, Town of Hamlin, Monroe County. The project consists of replacement of BIN 1015310.
  - 0 > 5.0 mi > 3 mi > 1.5 mi

- PIN 9BOW.00
  - NYS Route 20 over Oatka Creek, Town of Pavilion, Genesee County. The project consists of replacement of BIN 1015680.
  - 0 > 5.0 mi > 3 mi > 1.5 mi

- PIN 10BOW.00
  - US Route 219 over Crowley Creek, Town of Ellicottville, Erie County. The project consists of replacement of BIN 1041550.
  - 0 > 5.0 mi > 3 mi > 1.5 mi
APPENDIX C – Traffic Information and Pedestrian Generator Checklist
TO: S. G. Emrich  
Regional Structures Engineer

FROM: M. E. Davis  
Data Services

SUBJECT: Traffic Data  
Critical Bridges Over Water  
Various Locations

DATE: December 5, 2013

Listed below are the data requested for the subject project. If you have any questions, please call me at ext. 2691.

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<th>BIN</th>
<th>LOCATION</th>
<th>EXISTING AADT</th>
<th>ETC (2015) AADT</th>
<th>ETC + 30</th>
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| 1045630 | Rte 315 – Rte 12 to Shanley Rd.  
1000’ S. of Brothertown Rd.  
RM-315-2601-1036 | 1660          | 1700            | 2000     |

MED:kr
Listed below are the data requested for the subject project.

BIN 1039040 & 1051360 Existing DHV - 25 Existing DDHV - 15
BIN 1020120 Existing DHV - 480 Existing DDHV - 290
BIN 1002720 Existing DHV - 810 Existing DDHV - 480
BIN 4424090 Existing DHV - 40 Existing DDHV - 25
BIN 1025680 Existing DHV - 675 Existing DDHV - 405
BIN 1046750 Existing DHV - 765 Existing DDHV - 425
BIN 1045630 Existing DHV - 190 Existing DDHV - 110
BIN 1045640 Existing DHV - 230 Existing DDHV - 135
BIN 2206680 Existing DHV - 425 Existing DDHV - 245
BIN 4426240 Existing DHV - 85 Existing DDHV - 55

If you have any questions please call me at x 2691.
### Accident Details, History Location

**State of New York Department of Transportation**
**Traffic Safety Division**

**Diagram No.:**

**Case No.:**

**Town:**

**File:** SIMS

**City:**

**By:** DDD

**Village of:**

**Date:** 02/11/14

**Reference Marker 315-2601-1018 to 315-2601-1026**

**County:** Oneida

**P.I.N.:** 2BOW.04.101

**Route No. or Street Name:**

- NYS Route 315
- AT INTERSECTION WITH/OR BETWEEN:

**Roadway Surface Condition:**

1. Dry
2. Wet
3. Muddy
4. Snow/Ice
5. Slush

**Weather:**

1. Clear
2. Cloudy
3. Rain
4. Snow
5. Sleet/Hail/Freezing Rain
6. Fog/Smog/Smoke
7. Other

**Number of Months:**

36

**No. of Vehciles:**

4 5

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<th>ROADWAY SURFACE CONDITION</th>
<th>WEATHER</th>
<th>APPARENT CONTRIBUTING FACTORS</th>
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<td>12/07/12</td>
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<td>11/07/10</td>
<td>7:12</td>
<td>INJ</td>
<td>1 2 2 2 19</td>
<td>WB</td>
<td>Other V1 WB going straight struck tree</td>
<td>1024</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>5</td>
<td>12/23/10</td>
<td>11:12</td>
<td>PDO</td>
<td>1 4 5 2 19, 66</td>
<td>SEB,NB Right Angle</td>
<td>V1 SB going straight struck V2 NB parked</td>
<td>1024</td>
<td></td>
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<tr>
<td>6</td>
<td>03/06/11</td>
<td>12:00</td>
<td>PDO</td>
<td>1 5 4 5 19, 66</td>
<td>SEB</td>
<td>Other V1 SEB going straight struck guide rail</td>
<td>1024</td>
<td></td>
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<td>7</td>
<td>12/17/11</td>
<td>8:23</td>
<td>PDO</td>
<td>1 4 4 4 19, 66</td>
<td>SB</td>
<td>Other V1 SB going straight struck earth element/rock cut/ditch</td>
<td>1024</td>
<td></td>
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<tr>
<td>8</td>
<td>09/28/12</td>
<td>10:00</td>
<td>NR</td>
<td>1 5 2 3 19, 40</td>
<td>SB</td>
<td>Other V1 SB going straight struck sign post</td>
<td>1024</td>
<td></td>
<td></td>
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<tr>
<td>9</td>
<td>12/29/12</td>
<td>12:55</td>
<td>PDO</td>
<td>1 5 4 4 19, 66</td>
<td>NB</td>
<td>Other V1 NB going straight struck guide rail</td>
<td>1024</td>
<td></td>
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<tr>
<td>10</td>
<td>12/09/10</td>
<td>5:38</td>
<td>NR</td>
<td>5 5 4 4 19, 66</td>
<td>NB</td>
<td>Other V1 NB going straight guide rail</td>
<td>1025</td>
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<tr>
<td>11</td>
<td>05/16/11</td>
<td>14:36</td>
<td>NR</td>
<td>1 4 2 2 19</td>
<td>NB</td>
<td>Other V1 NB going straight guide rail</td>
<td>1025</td>
<td></td>
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<td>12</td>
<td>02/12/12</td>
<td>1:36</td>
<td>PDO</td>
<td>5 4 1 1 19</td>
<td>NB</td>
<td>Other V1 NB going straight guide rail</td>
<td>1025</td>
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<td>13</td>
<td>03/01/11</td>
<td>14:16</td>
<td>NR</td>
<td>1 6 2 1 4, 66</td>
<td>NB</td>
<td>Other V1 NB going straight guide rail</td>
<td>1026</td>
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</table>

**TE 213 (9/79)**
PEDESTRIAN FACILITY DESIGN

Exhibit 18-1 Pedestrian Generator Checklist

P.I.N.: 2BOW.04.101  Project Location: NY Route 315 over Big Creek

**PEDESTRIAN GENERATOR CHECKLIST**

*Note: The term “generator” in this document refers to both pedestrian generators (where pedestrians originate) and destinations (where pedestrians travel to). A check of “yes” indicates a potential need to accommodate pedestrians and coordination with the Regional Bicycle and Pedestrian Coordinator is necessary during project scoping. Answers to the following questions should be checked with the local municipality to ensure accuracy.*

1. Is there an existing or planned sidewalk, trail, or pedestrian-crossing facility?  
   - YES  
   - NO

2. Are there bus stops, transit stations or depots/terminals located in or within 800 m of the project area?  
   - YES  
   - NO

3. Is there more than occasional pedestrian activity? Evidence of pedestrian activity may include a worn path.  
   - YES  
   - NO

4. Are there existing or approved plans for generators of pedestrian activity in or within 800 m of the project that promote or have the potential to promote pedestrian traffic in the project area, such as schools, parks, playgrounds, places of employment, places of worship, post offices, municipal buildings, restaurants, shopping centers, or other commercial areas, or shared-use paths?  
   - YES  
   - NO

5. Are there existing or approved plans for seasonal generators of pedestrian activity in or within 800 m of the project that promote or have the potential to promote pedestrian traffic in the project area, such as ski resorts, state parks, camps, amusement parks?  
   - YES  
   - NO

6. Is the project located in a residential area within 800 m of existing or planned pedestrian generators such as those listed in 4 above?  
   - YES  
   - NO

7. From record plans, were pedestrian facilities removed during a previous highway reconstruction project?  
   - YES  
   - NO

8. Did a study of secondary impacts indicate that the project promotes or is likely to promote commercial and/or residential development within the intended life cycle of the project?  
   - YES  
   - NO

9. Does the community’s comprehensive plan call for development of pedestrian facilities in the area?  
   - YES  
   - NO

10. Based on the ability of students to walk and bicycle to school, would the project benefit from engineering measures under the Safe-Routes-To-School program? Eligible infrastructure-related improvements must be within a 3.2 km radius of the project.  
    - YES  
    - NO

*Note: This checklist should be revisited due to a project delay or if site conditions or local planning changes during the project development process.*

Comments:

Regional Bicycle and Pedestrian Coordinator:

Project Designer: MJ Engineering and Land Surveying

§18.5.1  03/30/06
The Regional Traffic Engineer has concurred the use of a design speed for the following CBOW locations are consistent with the anticipated off-peak 85th percentile speed within the range of functional class speeds for the terrain and volume. (Refer to Section 2.3.1.5 Speeds and Delays and Appendix C of this report for additional information on speed data):

- BiN 1020120: Rte. 28 over Multanner Cr., Middleville, 40 MPH
- BiN 1039040: Rte. 168 over Trib. Otsquago Cr., Stark, 60 MPH
- BiN 1045630: Rte. 315 over Big Creek, Marshall, 60 MPH
- BiN 1051360: Rte. 168 over Otsquago Cr., 60 MPH

James J. Papaleo, P.E.

Assistant Regional Traffic Engineer, R-2

New York State Department of Transportation

207 Genesee Street, Utica, NY 13501

Jim.Papaleo@dot.ny.gov  Tele: (315) 793-2462 Fax: (315) 793-2522
APPENDIX D – Public Information
Public Involvement Plan

Bridge Replacement Project
PIN: 2BOW.04.101       BIN: 1045630
Route 315 over Big Creek
Oneida County
Town of Marshall

Name of Preparer: Jonathan Tibbitts, Project Team Leader   Date Prepared: 03/25/2014
Preparer’s Functional Area: Regional Design Group

Current Phase (check one): ☐ Scoping  ☒ Phase I-IV  ☐ Phase V-VI  ☐ Construction  ☐ Other

Project Schedule as of Date Prepared

IPP Approved  ------------------------------------Unknown
Scoping & Design Approval  -----------------------------------Spring 2014
PS&E  --------------------------------------------------------Winter 2014
Construction Begins  ----------------------------------------Spring 2015
Construction Completion  -----------------------------------Fall 2015

1. IPP update

List changes that have occurred since IPP: Unknown

2. Project Data

Funding. . . . . . . . . . .  ☐Fed-Aid NHS  ☒ Fed-Aid Non-NHS  ☐100% State

Check Project Type (s).  ☐ NEPA Class I  ☒ NEPA Class II  ☐ NEPA Class III
                      ☐ SEQR Non-Type II  ☐ SEQR Type II

Brief Description of Project Work: replace the existing bridge with a new structure on the existing alignment. The new structure will have a span of approximately 55’-0” and will be skewed approximately 25 degrees to accommodate the expected flows of Big Creek. The proposed structure will be founded on piles and will have an increased hydraulic opening.

NYSDOT person designated as community contact  Steve Emrich

Public Involvement prior to IPP (y/n)  No
If yes, describe
Attach relevant correspondence and/or meeting minutes.
3. Project Scoping

PI Objectives in Scoping:
1. Identify Stakeholders
2. Inform stakeholders of project and proposed project scope/needs.
3. Gather information on the project context.

3.1 Identify Stakeholders

Internal Stakeholders: Regional Planning; Regional Design Group; Regional Structures Group; Regional Landscape/Environmental Group; Regional Traffic and Safety Group; Regional Construction Group; Regional Maintenance Group.

External Stakeholders: Town of Marshall, County of Oneida, Waterville Central School District, USACOE, FHWA, NYSDEC, Local Businesses, Emergency Services, local/seasonal residents, traveling public.

3.2 Potential community concerns: Increased hydraulic opening, impacts to local businesses, work zone traffic control by off-site detour, emergency services during construction.

3.3 Communication Methods to be used to inform Stakeholders:

Meetings with public officials: Direct mailings to local governments, County emergency managers and school district.

Public information meetings: None planned

Is a citizen’s advisory committee necessary? No
If yes, attach description of how it will be organized, list committee make-up and affiliation, and committee objectives.

Other public involvement techniques:
News releases

3.4 Schedule for Public Involvement Activities: Meetings with stakeholders will be as needed.
4. Design

PI Objectives during Design:

**Preliminary Design:** Summarize information gained from Scoping. Seek consensus on preferred alternative.

**Detailed Design:** Update stakeholders on progress, discuss any changes.

4.1 Information

**Internal Stakeholders:** Regional Planning; Regional Design Group; Regional Structures Group; Regional Landscape/Environmental Group; Regional Traffic and Safety Group; Regional Construction Group; Regional Maintenance Group.

**External Stakeholders:** Town of Marshall, County of Oneida, Waterville Central School District, USACOE, FHWA, NYSDEC, Local Businesses, Emergency Services, local/seasonal residents, traveling public

4.2 Communication Methods to be Used:

**Meetings with public officials:** Meetings may be held to introduce the project to the municipalities involved and receive feedback from them.

**Public information meetings:**
- **Meeting formats:** Open house meetings with presentations followed by Q & A session
- **Brochure:** yes
- **Comment Form:** yes
- **Visualizations:** yes

**Other public involvement techniques:**
- Direct mailings
- News releases
- Website
- E-mail

4.3 Schedule for Public Involvement Activities: If requested by local governments an a public information meeting will be held during final design. In addition, a website may be created for public access with an email account. Direct mailings and news releases will also be used to notify the public of the meetings.

5. Construction Phase

PI Objective During Construction:

Inform and maintain contact with affected residents/businesses/other stakeholders concerning construction activity schedule and impacts.
5.1 Issues requiring continued public outreach:

- **Maintenance and protection of traffic (MPT):** Proposed stage construction will require continual interaction with local highway owner and effected stakeholders.
- **Public education for operational features (e.g., roundabout):** None
- **Minimizing community economic impacts during construction:** Provide incentive and disincentive clauses in the contract to help assure project efficiency and adherence to schedule.
- **Post-construction community feedback:** As needed
- **Other issues:** None

5.2 Communication Methods to be Used:
- Variable message signs
- Website

5.3 Schedule for Public Involvement Activities: Keep the public informed through the media, use of highway message signs, and project website.
February 19, 2014

Nelson A. Blau, Supervisor
Town of Marshall
6738 West Hill Road
Deansboro, New York 13328

RE: STATE ROUTE 315 OVER BIG CREEK
BIN 1045630
TOWN OF MARSHALL, ONEIDA COUNTY

Dear Mr. Blau:

As part of the New York State Department of Transportation’s (NYSDOT) increased emphasis on public involvement in the development, planning, and construction of all transportation projects, this letter is intended to provide information and solicit public input regarding the above-referenced capital project.

Although the scope of work on this particular structure has not been finalized, this project will address scour and/or flood prone issues through replacement or permanent scour retrofits of flood susceptible structures. This will enhance the resiliency of our State’s transportation network to withstand future extreme weather events. Funding of these structures has not been secured as of yet, but is expected to be made available through Federal Agencies.

This project includes work on the bridge carrying State Route 315 over Big Creek in the Town of Marshall. It is expected that traffic will be maintained utilizing an off-site detour. A map of the project area is included for your convenience with the proposed detour route shown. Please note that this bridge is currently safe to cross.

Please reply with any questions or comments regarding this project by March 7, 2014. If you would like to further discuss the project, please do not hesitate to contact me at (315) 793-2594 or by email at Steve.Emrich@dot.ny.gov.

Sincerely,

Original Signed
by SGE
Steven G. Emrich, P. E.
Acting Regional Structures Engineer

Attachment
February 19, 2014

Charles Chafee, Superintendent
Waterville Central School District
381 Madison Street
Waterville, New York 13480

RE: STATE ROUTE 315 OVER BIG CREEK
BIN 1045630
TOWN OF MARSHALL, ONEIDA COUNTY

Dear Mr. Chafee:

As part of the New York State Department of Transportation’s (NYSDOT) increased emphasis on public involvement in the development, planning, and construction of all transportation projects, this letter is intended to provide information and solicit public input regarding the above-referenced capital project.

Although the scope of work on this particular structure has not been finalized, this project will address scour and/or flood prone issues through replacement or permanent scour retrofits of flood susceptible structures. This will enhance the resiliency of our State’s transportation network to withstand future extreme weather events. Funding of these structures has not been secured as of yet, but is expected to be made available through Federal Agencies.

This project includes work on the bridge carrying State Route 315 over Big Creek in the Town of Marshall. It is expected that traffic will be maintained utilizing an off-site detour. A map of the project area is included for your convenience with the proposed detour route shown. Please note that this bridge is currently safe to cross.

Please reply with any questions or comments regarding this project by March 7, 2014. If you would like to further discuss the project, please do not hesitate to contact me at (315) 793–2594 or by email at Steve.Emrich@dot.ny.gov.

Sincerely,

Original Signed
by SGE
Steven G. Emrich, P. E.
Acting Regional Structures Engineer

Attachment
February 24, 2014

Kevin W. Revere  
Director of Emergency Services  
Oneida County Emergency Services  
120 Base Road  
Oriskany, New York 13424

RE: FUTURE BRIDGE PROJECTS  
ONEIDA COUNTY

Dear Mr. Revere:

As part of the New York State Department of Transportation’s (NYSDOT) increased emphasis on public involvement in the development, planning, and construction of all transportation projects, this letter is intended to provide information and solicit public input regarding the above-referenced capital project.

Although the scope of work on these particular structures has not been finalized, these projects will address scour and/or flood prone issues through replacement or permanent scour retrofits of flood susceptible structures. This will enhance the resiliency of our State’s transportation network to withstand future extreme weather events. Funding of these structures has not been secured as of yet, but is expected to be made available through Federal Agencies.
It is expected that traffic will be maintained either utilizing stage construction or utilizing an off-site detour, as shown in the below table. A map of each project area is included for your convenience with the proposed detour routes shown. I am requesting that you please contact the emergency service providers (i.e. Fire Departments, Police Departments, Emergency Medical Departments, etc.) for each bridge location. Please note that these bridges are currently safe to cross.

<table>
<thead>
<tr>
<th>Town/City</th>
<th>BIN</th>
<th>Carried</th>
<th>Crossed</th>
<th>Detour/Staged</th>
</tr>
</thead>
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<tr>
<td>Town of Marshall</td>
<td>1045630</td>
<td>Route 315</td>
<td>Big Creek</td>
<td>Detour</td>
</tr>
<tr>
<td>Town of Marshall</td>
<td>1045640</td>
<td>Route 315</td>
<td>Oriskany Creek</td>
<td>Detour</td>
</tr>
<tr>
<td>Town of Remsen</td>
<td>4426240</td>
<td>Dustin Road</td>
<td>Kayuta Lake</td>
<td>Detour</td>
</tr>
<tr>
<td>City of Utica, Town of New Hartford</td>
<td>2206680</td>
<td>Chenango Road</td>
<td>Sauquoit Creek</td>
<td>Detour</td>
</tr>
</tbody>
</table>

Please reply with any questions or comments regarding this project by March 7, 2014. If you would like to further discuss the project, please do not hesitate to contact me at (315) 793–2594, or by email at Steve.Emrich@dot.ny.gov.

Sincerely,

Steven G. Emrich, P. E.
Acting Regional Structures Engineer

Attachment
bcc:  J. Williams, Region 2 Interim Regional Director
     D. Windecker, Assistant to the Regional Director/Regional Real Estate Officer (via email)
     A. Romanych, Regional Planning & Program Group Manager (via email)
     M. Pawloski, Herkimer County Resident Engineer (via email)
     M. Murphy, Oneida East Resident Engineer (via email)
     J. Bronk, Oneida West/Madison Resident Engineer (via email)
     J. Piccola, Regional PIO (via email)
     W. Albert, Director of Structures Design, MO (via email)
APPENDIX E – Hydraulic Analysis
Preliminary Hydraulic Report for the structure BIN 1045630
Route 315 Over Big Creek, Town of Marshall, Oneida County
January 28, 2014

Hydrology: Based on USGS StreamStats for ungaged streams

Design Flood (Q50): 2,160 cfs
Basic Flood (Q100): 2,510 cfs
LFRD Check Flood (Q500): 3,320 cfs

Hydraulic Analysis:
Existing Structure: Simple Span, Rolled Beam Jack Arch
  Bridge Span: 30 ft. along roadway
  Clear Opening: 22.98 ft perpendicular to flow
  Low clearance: 975.41 ft.
  Abutment on a 30° skew and 40° skew to the stream
  Continuous footings on Spread-on Rock.

Proposed Structure: Bridge Span = 63 ft along the roadway
  Clear Opening = 45.96’ perpendicular to flow
  Bottom angle of 38.3’+/− @ elevation 972.1’ perpendicular to flow, but we raise the top of road and the low chord of the bridge by 3.25’ so that the Low Clearance = 978.65 ft.
  Skew Angle = 40° to the stream.

Comment: This configuration takes both the $Q_{50}$ and the $Q_{100}$ out of pressure/weir flow, and the $Q_{500}$ will be taken out of pressure/weir flow and will be strictly in pressure flow. That is to say the water surface for all flows will be improved. The new structure will provide 1.5 ft freeboard for the Q100, and 2.0 ft freeboard for the Q50.

Flow Conditions: Existing Structure: In pressure/weir flow for the $Q_{50}$, $Q_{100}$ & $Q_{500}$.
  Proposed Structure: In pressure flow for the $Q_{500}$ only.

Existing Files  : bigcreek.p02, .g02, .f01
Proposed Files: bigcreek.p08, .g08, .f0
APPENDIX F – Soil Boring Data
### SUBSURFACE EXPLORATION LOG

**HOLE** DN-B-1  
**LINE** B.L.  
**OFFSET** 8.49 ft LEFT  
**SURF. ELEV.** 978.87

<table>
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<tr>
<th>DATE START</th>
<th>DATE FINISH</th>
<th>CASING O. D.</th>
<th>CASING I. D.</th>
<th>WT OF HAMMER-CASING</th>
<th>HAMMER FALL-CASING</th>
<th>SAMPLER O. D.</th>
<th>SAMPLER I. D.</th>
<th>WT OF HAMMER-SAMPLER</th>
<th>HAMMER FALL-SAMPLER</th>
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<tr>
<td>14-NOV-2013</td>
<td>14-NOV-2013</td>
<td>3 1/2 in</td>
<td>3 in</td>
<td>140 lb</td>
<td>30 in</td>
<td>2 in</td>
<td>1 3/8 in</td>
<td>140 lb</td>
<td>30 in</td>
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**DESCRIPTION OF SOIL AND ROCK**

<table>
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<tr>
<th>DEPTH BELOW SURFACE (ft)</th>
<th>SAMPLE NO.</th>
<th>BLOWS ON SAMPLER in</th>
<th>MOIST. CONT. (%)</th>
<th>DESCRIPTION OF SOIL AND ROCK</th>
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</thead>
<tbody>
<tr>
<td>0.0</td>
<td>J1</td>
<td>9</td>
<td>8%</td>
<td>(0.00) ASPHALT</td>
</tr>
<tr>
<td>0.0</td>
<td>J2</td>
<td>2</td>
<td>8%</td>
<td>(0.00) Br, Silty, ANGULAR GRAVEL</td>
</tr>
<tr>
<td>0.0</td>
<td>J3</td>
<td>8</td>
<td>48%</td>
<td>(10.00) Gr, Sandy, ANGULAR GRAVEL, With Pieces Of Wood</td>
</tr>
<tr>
<td>20.0</td>
<td>R1</td>
<td></td>
<td></td>
<td>(14.70) Run #1 Drilled from 14'8&quot; To 19'8&quot; ROCK</td>
</tr>
<tr>
<td>20.0</td>
<td>R2</td>
<td></td>
<td></td>
<td>(15.70) Run #2 Drilled from 19'8&quot; To 24'8&quot; ROCK</td>
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</tbody>
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**BOTTOM OF HOLE AT 24.70 ft**

- **REC.** 49" 81.7%  
- NW DOUBLE TUBE, SWIVEL

---

The subsurface information shown here was obtained for design and estimate purposes. It is made available so that users may have access to the same information available to the State. It is presented in good faith. By the nature of the exploration process, the information represents only a small fraction of the total volume of the material at the site. Interpolation between data samples may not be indicative of the actual material encountered.

**DRILL RIG OPERATOR** Scott Misener  
**SOIL & ROCK DESCRIPTION** Rodney Whitaker  
**REG GEOTECHNICAL ENGINEER** David W. Patterson  
**DATE APPROVED** 12-DEC-2013  
**CONTRACTOR** NYSDOT  
**STRUCTURE NAME** SM 282 E 12/02  
**B.I.N.** 1045630
Notes: A 140 lb auto hammer was used for SPT at all sampling depths. At 10 ft, pieces of wood (possibly corduroy road) were in sample.
**SUBSURFACE EXPLORATION LOG**

**HOLE**   DN-B-2
**LINE**   B.L.
**STA**   85+92.11
**OFFSET**   3.42 ft LEFT

**ACTUAL COORDINATES**  
(N) 1.078,929.040  
(E) 1.135,955.730  
DATUM NAD83

**DATE START**  13-NOV-2013  
**DATE FINISH**  13-NOV-2013

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<thead>
<tr>
<th>CASING O. D.</th>
<th>3 1/2 in</th>
<th>I. D.</th>
<th>3 in</th>
<th>WT OF HAMMER-CASING</th>
<th>140 lb</th>
<th>HAMMER FALL-CASING</th>
<th>30 in</th>
</tr>
</thead>
<tbody>
<tr>
<td>CASING BLOWS/ft</td>
<td>0.0</td>
<td>0</td>
<td>6</td>
<td>12</td>
<td>18</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>SAMPLE DEPTH BELOW SURFACE</td>
<td>0 in</td>
<td>6 in</td>
<td>12 in</td>
<td>18 in</td>
<td>24 in</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**DESCRIPTION OF SOIL AND ROCK**

- **(0.00)** Asphalt
- **(1.00)** Gr. Subbase GRAVEL
- **(2.00)** Br. Silty, SAND, With Angular Gravel  
  *(M-NPL)*
- **(3.00)** Br. Silty, SAND, With Angular Gravel  
  *(M-NPL)*
- **(4.00)** Br. Silty, SAND, With Fine Angular Gravel  
  *(M-NPL)*
- **(5.00)** Br. Angular Gravelly, SAND, Silty  
  *(M-NPL)*
- **(6.00)** Br. Angular Gravelly, SAND, Silty  
  *(M-NPL)*
- **(7.00)** Br. Angular Gravelly, SAND, Silty  
  *(M-NPL)*
- **(8.00)** Br. Angular Gravelly, SAND, Silty  
  *(M-NPL)*

**BOTTOM OF HOLE AT 25.00 ft**

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**DRILL RIG OPERATOR**  Scott Misener
**SOIL & ROCK DESCRIPTION**  Rodney Whitaker
**REG GEOTECHNICAL ENGINEER**  David W. Patterson
**DATE APPROVED**  12-DEC-2013
**RESIDENT ENGINEER**  David W. Patterson
**PROJECT**  CRITICAL BRIDGES OVER WATER
**CONTRACTOR**  NYSDOT
**CONTRACT**  SM 282 E 12/02
**ADDRESS**  11995 BORNUM 2
**REGION**  ONEIDA
**COUNTY**  ONEIDA
**PIN**  2BOW.00.101
**HOLE**  DN-B-2
**STRUCTURE NAME**  2BOW.00.101
**DATE START**  13-NOV-2013
**DATE FINISH**  13-NOV-2013
**DATE FINISH**  13-NOV-2013
**DATE FINISH**  13-NOV-2013
**DATE FINISH**  13-NOV-2013
**DATE FINISH**  13-NOV-2013

**STATE OF NEW YORK**
**DEPARTMENT OF TRANSPORTATION**
**GEOTECHNICAL ENGINEERING BUREAU**

**ROWN 1 OF 2**

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**Notes:**
- **WT OF HAMMER-CASING**  140 lb
- **WT OF HAMMER-SAMPLER**  140 lb
- **DATE APPROVED**  12-DEC-2013
- **RESIDENT ENGINEER**  David W. Patterson
- **CONTRACT**  SM 282 E 12/02
- **ADDRESS**  11995 BORNUM 2
- **REGION**  ONEIDA
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Notes: A 140lb. auto hammer was used for SPT at all sampling depths. Attempted to sample at 14.0ft. No Recovery. Used roller bit to progress hole to 15.0 ft thru weathered rock.

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<table>
<thead>
<tr>
<th>DATE</th>
<th>TIME</th>
<th>DEPTH ft</th>
<th>ARTESIAN HEAD HEIGHT ABOVE GROUND</th>
<th>FILLED WITH WATER AT END OF DAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>13-Nov-13</td>
<td>14:30</td>
<td>24.00</td>
<td>15.00</td>
<td>NO</td>
</tr>
</tbody>
</table>

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