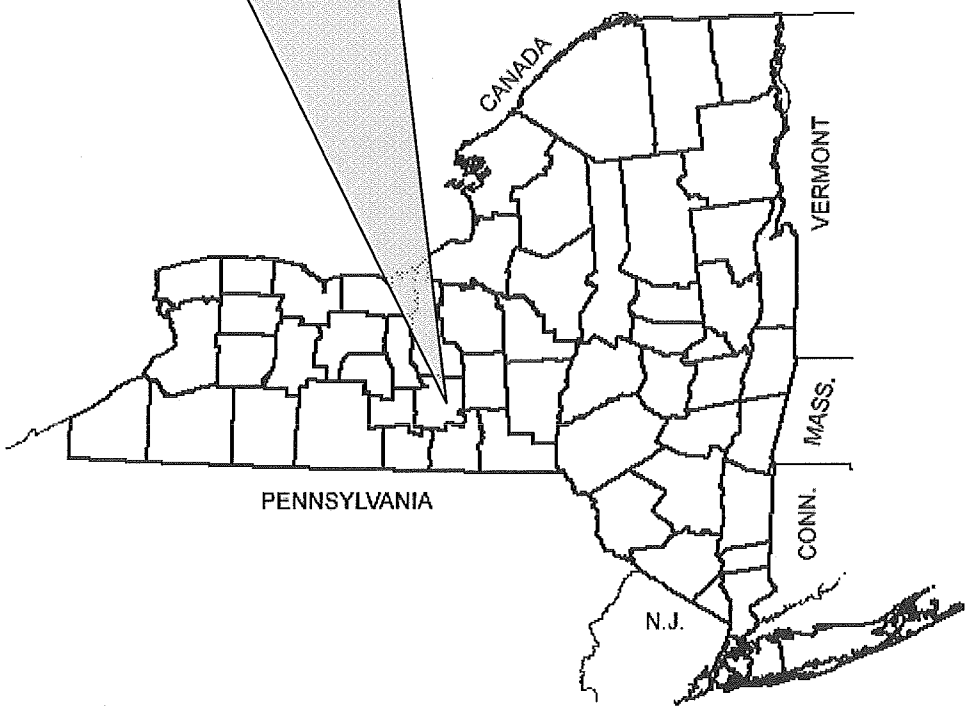
INITIAL PROJECT PROPOSAL

February 2013

Bridge Reconstruction Project
P.I.N. **TBD** BIN: **3209800**
Route: **Freese Road** over **Fall Creek**
Tompkins County
Town of Dryden
County of Tompkins



ITHACA-TOMPKINS COUNTY TRANSPORTATION COUNCIL (ITCTC)

NEW YORK STATE DEPARTMENT OF TRANSPORTATION
ANDREW M. CUOMO, Governor JOAN MCDONALD, Commissioner

PIN: NA

PROJECT NAME: Freese Road Bridge Reconstruction.

MUNICIPALITY: Dryden **COUNTY: Tompkins**

Road Name/CR or SR #: Freese Road

BIN: **3209800**

LIMITS: **Mile points:**
Reference Markers: to

PROJECT LENGTH: **CENTERLINE MILES** **LANE MILES** 200 ft

FEDERAL AID SYSTEM: Non-NHS **FUNCTIONAL CLASS:** Local

EXISTING AADT: 2,100 vehicles/day

PERCENT TRUCKS: 5%

EXISTING CHARACTERISTICS OF CONCERN

ELEMENT	**MEASURE/INDICATOR**
BIN	Condition Rating = 4.014; Sufficiency Rating = 23.4 List deficient structural element with rating.

Begin Bearings	4
End Bearings	4
Begin Seat & Pedestals	3
Begin Backwall	4
Begin Stem	4
Begin Wing Walls	4
Channel Alignment	4
Channel Erosion	4
Adequacy of Opening	4
Bank Protection	3
Primary Member	3
Secondary Member	4
Superstructure Pint	3
Pier Pedestals	4
Pier Cap	4
Pier Stem	4

Bridge Deficiencies

- Paint (Rate 3): Class 1 containment for removal of existing coating and application of new paint system.
- One-lane bridge (width = 12.9 feet, curb-curb)
- 15-ton posted weight limit

Highway Deficiencies

- Sub-standard horizontal curve on end approach

Other Pertinent Measures

Scour Critical Bridge: scour mitigation required at pier. Bridge carries municipal water line.

PROJECT DESCRIPTION:

Project will rehabilitate or replace the bridge, possibly on new alignment, and improve approaches. New structure would have AASHTO recommended lane and shoulder widths including pedestrian accommodations. Historic bridge trusses could be rehabilitated, painted, and placed on each side of the new structure or re-used at another site. Abutments and new center pier will be designed to eliminate hydraulic vulnerability/scour critical deficiencies. Project would implement goals and objectives of 1999 federally funded transportation study (NESTS). 2-lane width with elimination of load posting is proposed to provide access for emergency and service vehicles and to eliminate inadequate bridge deck geometry which the NYSDOT Bridge database (WINBolts) rates as a "Basically intolerable condition requiring high priority of replacement."

PROJECT OBJECTIVE(S):

1. Provide a safe and serviceable bridge;
2. Remove bridge from list of deficient structures;
3. Mitigate hydraulic vulnerability and eliminate scour critical designation;
4. Implement NESTS Transportation Plan goals;
5. Mitigate community and historic preservation impacts;
6. Eliminate current 15-ton load posting;
7. Increase bridge width to improve vehicle, bicycle, & pedestrian safety & serviceability;
8. Provide 70-year structure life;
9. Improve approach alignment.

PRELIMINARY SCOPE OF WORK: Bridge Reconstruction

PROJECT ELEMENT(S) TO BE INVESTIGATED:

- ☐ Deck/minor Br. Rehab.
- ☒ Major Bridge Rehab.
- ☐ Highway Resurface
- ☐ Appurtenance
- ☐ Traffic Control
- ☐ Other:

- ☒ Bridge Replacement, New Location
- ☒ Bridge Replacement, Existing Location
- ☒ Highway Reconstruction
- ☐ Large Culvert RH/RP

PRIORITY RESULTS: ☒ Mobility & Reliability ☐ Economic Competitiveness ☒ Safety ☐ Security ☒ Environmental Stewardship

ENVIRONMENTAL RECOMMENDED CLASSIFICATION:

PROJECTED ENVIRONMENTAL PROCESS:				
NEPA	☐ No Federal Funds	☐ Class II, CE ☐ CE/Auto ☐ CE/Prog ☐ CE/Doc	☒ Class III, EA ☒ SAFETEA-LU/ MAP-21 Applies	☐ Class I, EIS ☐ SAFETEA-LU/ MAP-21 Applies
SEQR	☐ Exempt	☐ Type II	☒ Non-Type II ☒ EA -or-	☐ EIS

The following Checklist is attached:
☐ NEPA Checklist

MPO INVOLVEMENT: ☐ No ☒ Yes TIP Name: 2014-18 TIP
PIN: NA

TIP STATUS: ☐ On TIP ☒ Not on TIP (Needs to be added)

STIP STATUS: ☐ On STIP ☒ Not on STIP (Needs to be added)

TIP ACTION: ☒ New Project ☐ Amend/Modify existing project

NOTES ON SPECIAL CIRCUMSTANCES

- Public sensitivity: The neighboring community (hamlet of Varna) is very active concerning traffic and transportation planning and a great deal of public involvement is expected.
- Cultural/ historic: The existing bridge was built in 1920 and was included in the NYSDOT 2002 Inventory of National Register Eligible Bridges.

SPECIAL TECHNICAL ACTIVITES REQUIRED: NA

PLANNED PUBLIC INVOLVEMENT: Public involvement will be encouraged by holding a series of public meetings during preliminary design. The public will be made aware of these meetings and of construction via web postings, press releases, and advance notice signage on site. There will also be a pre-construction meeting for the public.

PROBABLE SCHEDULE AND COST:

DESIRED LETTING: 2018

ANTICIPATED SCHEDULED QUALIFIERS:

- ☐ Public Hearing
- ☒ Major Permits
- ☒ Consultant(s) for: Design and Construction Inspection
- ☐ No Consultant Needed
- ☒ 4(f)/106 – Parkland Impacts
- ☐ Other

Project Phase	Activity Duration	Estimated Cost	Fund Source	Obligation Date
Scoping	6 months	$80,000	STP-Flex or Off-System bridge	**10-2014**
Preliminary Design	1 year	$110,000		**10-2014**
Final Design	6 months	$185,000		**10-2014**
ROW Incidentals	6 months	$40,000		**10-2014**
ROW Acquisition	1 year	$110,000		**10-2016**
Construction	1 year	$2,480,000	STP-Flex or Off-System bridge	**12-2017**
Construction Inspection	1 year	$270,000		**12-2017**
TOTAL	**4 years**	**$3,275,000**		

Note: It is recommended to review similar recent projects to develop more accurate project duration estimates. Many sponsors significantly underestimate the time required to process TIP projects.

BASIS OF ESTIMATE: NYSDOT estimating guidance

PROGRAM DISPOSITION: Scheduled for letting in SFY 2018

ASSIGNED PROJECT MANAGER/MUNICIPAL CONTACT: **John Lampman**
PHONE: **607-274-0307**
EMAIL: **jlampman@tompkins-co.org**

IPP PREPARED BY: **John Lampman** **DATE: 2/22/2013**

Attachment 4: Narrative Beyond Preservation Form Questions

Beyond Preservation Project Review NARRATIVE SHEET					
Section A: Project Description					
Project Type ("X" one):	X	← System Renewal		← Modernization	
Project PIN:		**Project Name:**	**Freese Road Bridge Replacement**		
Project Scope:	Replace 15-ton posted, 1-lane bridge with new 2-lane structure. Improve alignment.				
Project Objective:	Remove bridge from list of deficient structures. Eliminate 15-ton load posting. Eliminate scour critical designation and mitigate hydraulic vulnerability. Address goals expressed in Federally-funded, 1999 North East Sub-area Transportation Study (NESTS) Transportation Plan.				
Section B: Project Context					
1. Describe how the proposed project provides critical links to the area the project serves (examples are multi-modal connections, large residential areas, emergency routes, freight routes, employment centers etc). Discuss type and magnitude of link.					
The project is a critical link between the large residential Northeast area of Ithaca and the eastern Cornell campus. It will improve connections and safety for all modes of use. It can also shorten emergency service response.					
2. Describe other factors influencing the priority of this project such as preserving, enhancing or supporting significant economic competitiveness, social equity/community viability and environmental conditions.					
The bridge may be eligible for National Historic Register listing. Freese Road provides an alternative to crowded minor arterials that pass through the Historic District in neighboring Forest Home. Preservation of historic trusses would be included in the project.					
3. How is this project part of an overall corridor strategy? How does the project serve users between communities, within a community (residential, business, commuters) or both? Explain.					
The project would further the recommendations of the North East Sub-area Transportation Study (NESTS) Transportation Plan, completed in 1999 with federal aid. It will serve residential, business, and commuting users that travel between Lansing, Northeast Ithaca, Cornell, and its southeast surroundings.					
4. Describe unique mobility requirements. Specifically, describe if/how the project improves the convenience, access, connectivity and/or completes a gap to public transportation, bicycle/pedestrian network, or multimodal system.					
A 2-lane bridge would improve north-south connectivity in the area. Unique requirements for connectivity result from the lack of such connections between NYS route 13 on the north and the city of Ithaca which results in high traffic on low-capacity roadways.					

Section C: Safety and System Optimization Considerations
1. If the project involves safety improvements, indicate if it addresses a High Accident Location (PIL/SDL) within the project limits. Identify the crash rate and expected reduction in crashes as applicable. Indicate if a Highway Safety Investigation has been conducted for this location and provide the study number. Identify the benefit/cost ratio for the safety improvements if known.
This bridge is not at a High Accident Location. The benefit/cost ratio for the safety improvements is unknown.
2. What is the risk, cost and impact to the community if the bridge and pavement at this location is closed or restricted? Describe any special community concerns for addressing safety at this location.
Closure may result from deterioration of the fracture-critical primary (truss) members and or from scour-induced failure of the center pier. Impacts of closure would be a detour of 4.6 miles for commuter, delivery, and agricultural traffic and loss of connectivity within the hamlet from one side of the creek to the other.
3. Describe any ITS-related, mobility and/or optimization benefits derived from this project. Indicate if the project maintains or improves information detection and dissemination capabilities (include how this impacts/supports 511). Describe any reduction in delay or improved LOS for the site.
Not applicable.
Section D: Cost Effectiveness and BP Data
1. Describe any cost-sharing, special or innovative fund sources, local matches, leveraging of private funds, etc. that are contributing to the funding of this project.
The Town of Dryden would be asked to fund approximately 20% of the local share.
2. How has the project scope been focused to achieve the most cost effective solution?
The scope is cost effective by not "over-widening " the bridge, accommodating pedestrians and bicycles on the same width as the adjoining approaches instead of providing separate facilities.
3. Have you checked the data loaded to the BP Form for accuracy and completeness? Please identify and explain any data modifications. Please explain if the shortest detour length is not used.
The detour length included in the 2012 WINBOLTS data is 1 mile. This is not correct. The shortest alternative route from one side of the creek to the other is 4.6 miles.

Attachment 3 – Supplemental Information

This form will supplement the information in the IPP form in order to establish a project ranking. Additional information at the bottom of the page will assist NYSDOT in more quickly preparing the ranking index, but may or may not be available to your municipality.

Bridge	Pavement
Detour Route: Please attach a map highlighting the proposed route) **Detour Length: 4.63 miles** **Detour Route AADT(s):** **Hanshaw Road.....6,357 vpd** **NYS Route 366.....7,348 vpd** **NYS Route 13.....14,313 vpd**	**Last Work:** The year and type of work performed on the pavement. **Planned Work Type:** Include further details under "project description" on page 2 of the IPP form. **Begin Milepoint:** **End Milepoint:**

Other Information (if available):

BIN: Bridge Identification Number **3209800**	**Pavement Condition and Distress Information** – If your municipality has a pavement rating inventory. **Current Rating:** The latest available NYSDOT Surface Distress Rating Index. **Dominant Distress:** A distress in the pavement that requires a higher level of treatment to repair. **Average IRI (in/mi):** A measure of the ride quality or smoothness of the pavement. Units are inches of bounce per mile; the higher the number, the rougher the road surface.