

SESSION 2.2.2

Old Penfield Road over Irondequoit Creek

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Synopsis:

The original Old Penfield Road Bridge over Irondequoit Creek, located in the Town of Penfield, Monroe County, was constructed in 1900. In 1998, it was decided that the bridge needed to be replaced and a replacement project was initiated. The project was sponsored by Monroe County, the owner of the bridge, but the road is owned and maintained by the Town of Penfield. During final design, the bridge was re-designated as eligible for the National Register of Historic Places. Therefore, the project had to backtrack and investigate how to best preserve the pony trusses and attached lattice railing system. This presentation will describe the options investigated, methods used to coordinate with the SHPO and describe the selected preservation alternative.

About the Presenter:

Timothy Bradley is an Engineering Manager and Project Manager in the Rochester office of Stantec's US Northeast region. Mr. Bradley graduated from Northeastern University in 1981 with a Bachelor of Science degree in Civil Engineering. He is a Registered Professional Engineer in New York, Ohio and California with more than 23 years of professional experience. Mr. Bradley has been involved in all phases of transportation projects including early phase scoping of projects and final phase construction of new bridges and bridge rehabilitations. He has also prepared load rating reports for various bridge types.

Old Penfield Road Over Irondequoit Creek



- Located in Town of Penfield, Monroe County.
- Bridge owned by Monroe County.
- Approaches owned by Town of Penfield.
- AADT = 587



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Project Background



- Old Penfield Road begins and ends on Penfield Road.
- West Approach
 - Single family homes.
 - Manitou Concrete plant.
 - Possible senior housing development.
- East Approach
 - Genesee Conservation League.
 - Brook Hill Apartments.
 - Forest Hills Condominiums.
 - RG&E Power Substation.



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Project Background

- Existing bridge built in 1900.
- Steel pony Warren truss.
- 2003 inspection General Rating of 3.
- Red Flagged and closed prior to construction.



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Project Background



- Single lane operation.
- Bridge and vegetation result in substandard sight distance exiting driveways.
- Bridge is not compatible with US Army Corps of Engineers flood control project.



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Cultural Resource Activities Timeline



- March 2000 – Cultural Resource Screening by NYSDOT.
 - Not on NYSDOT list of bridges eligible for National Register.
- August 2001 – Stage 1 Cultural Resource Survey (site archeology).
 - Potential prehistoric site near bridge.
 - Stage 2 investigation recommended.



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Cultural Resource Activities Timeline



- December 2001 – Stage 2 Site Examination (site archeology).
 - Site not eligible for National Register due to prior disturbance and fill.
- December 2001 – Stage 1 Cultural Resource Survey and Stage 2 Site Examination reports sent to SHPO.



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Cultural Resource Activities Timeline

- January 2002 - Supplemental information sent to SHPO.
 - Project Review Cover Form
 - NYSDOT Inventory Form
 - Project description narrative
 - Location Map
 - Photos
- February 2002 – Determination by SHPO that bridge is eligible for National Register.

New York State Office of Parks, Recreation and Historic Preservation
Historic Preservation Field Services Bureau
Peoples Island Resource Center, PO Box 189, Waterford, NY 12188-0189

PROJECT REVIEW COVER FORM

Please complete this form and attach it to the top of any and all information submitted to this office for review. Accurate and complete forms will assist the office in the timely processing and response to your request.

☐ This information relating to a previously submitted project
PROJECT NUMBER PR
(Previous number assigned to the project by the office)

☐ This is a new project

Project Name _____

Location _____
You MUST include street number, street name and/or County, State of Interstate route number if applicable

City/Town/Village _____
Use the correct municipality in which your project is being undertaken. If it is a NON-CORPORATED hamlet/village you must also provide the name of the town.

County _____

TYPE OF REVIEW REQUESTED

1. Is this project being developed using New York State funds? ☐ Federal funds? ☐
If you checked either or both of these boxes for the New York State and/or Federal Agency or Program that is providing the funding.

2. Does the project require a New York State permit? ☐ Federal permit? ☐
If you checked either or both of these boxes for the New York State and/or Federal Agency or Program that is providing the permit and the type of permit being requested.

3. SDRA ☐ New York State Development Quality Review Act ☐ 4. Information Request ☐
No work or limited funding or project involved

CONTACT PERSON FOR PROJECT

Name _____ Title _____

Firm/Agency _____

Address _____ City _____ STATE _____ Zip _____

Phone (____) _____ Fax (____) _____



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SHPO Statement of Significance



“ . . . eligible for listing in the State and National Registers of Historic Places as a rare surviving example of a pony Warren truss bridge constructed in 1900, the bridge is also noteworthy for the survival of its original lattice pattern railings.”



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Cultural Resource Activities Timeline



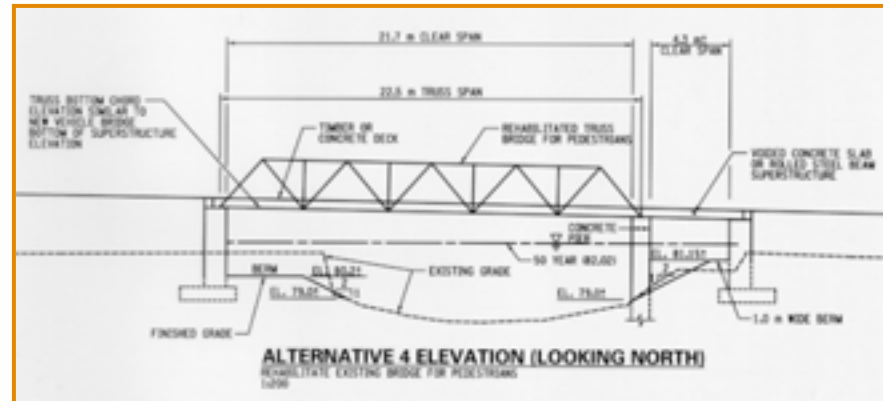
- May to October 2002 – Telephone calls with SHPO to discuss truss preservation alternatives.
 - Do nothing.
 - Rehabilitate existing bridge.
 - Attach trusses to new fascia girders.
 - Use existing bridge as adjacent pedestrian bridge.
 - Relocate trusses to new location (park).
 - Attach trusses to new fascia girders & add additional trusses for longer span.



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Cultural Resource Activities Timeline

- ● ● ● ●
 - October to December 2002.
 - Emailed *conceptual* Plan, Elevation and Section of three alternatives to SHPO for discussion.



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Cultural Resource Activities Timeline



- October to December 2002.
 - Emailed *conceptual* Plan, Elevation and Section of three alternatives to SHPO for discussion.
 - SHPO preference for two of three alternatives.
 - Two alternatives sent to US Army Corps of Engineers for analysis of impact to Flood Control Project.
 - Formal submission to SHPO. Alternative 3 indicated as preferred alternative.



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Evaluation of Alternatives Report



Simple report with location map, narrative, photos and sketches.

Alt. 1 – Null / Do Nothing.

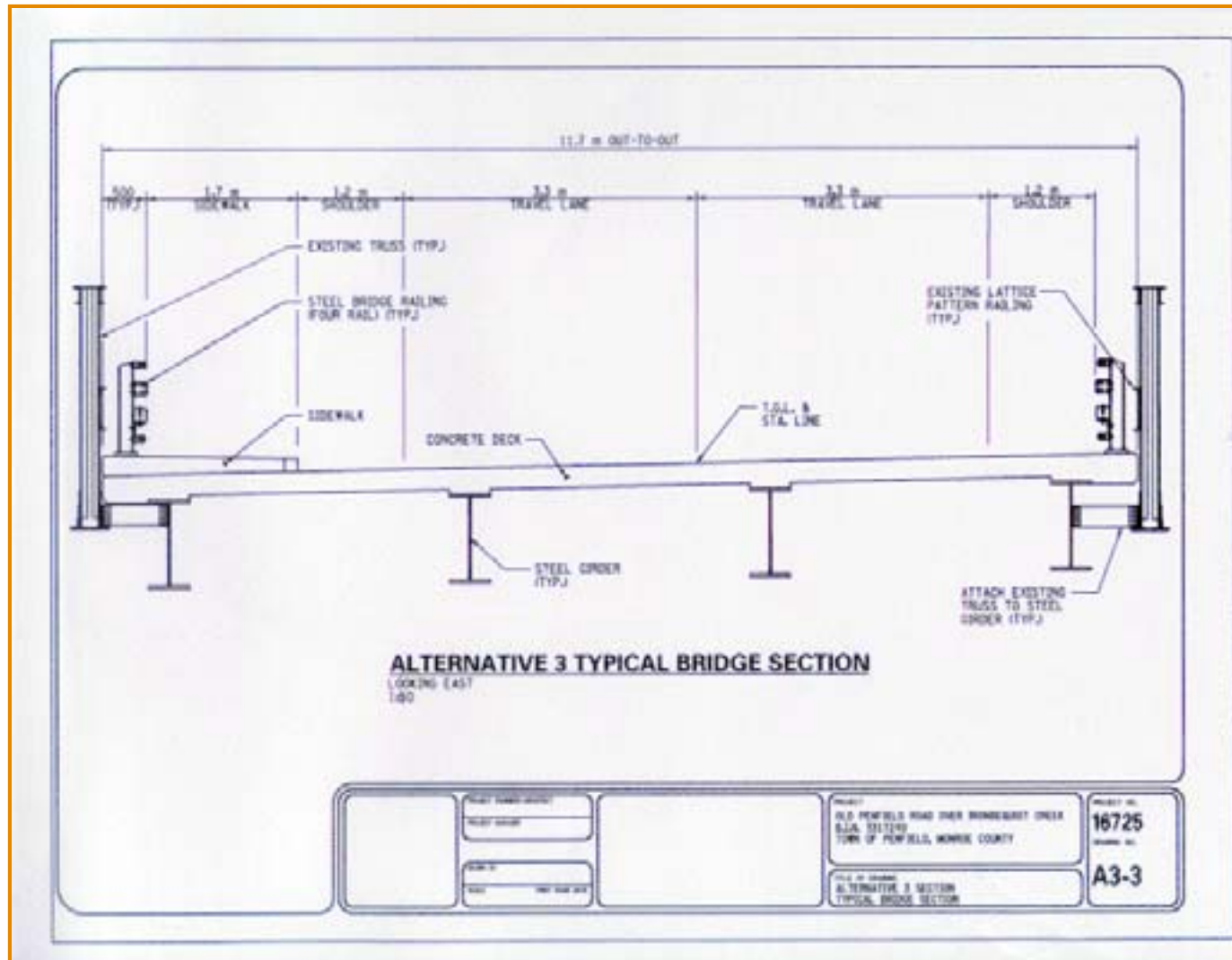
Alt. 2 – Rehabilitate existing bridge.

Alt. 3 – Trusses attached to new bridge fascia girders.

Alt. 4 – Trusses used as adjacent pedestrian bridge.

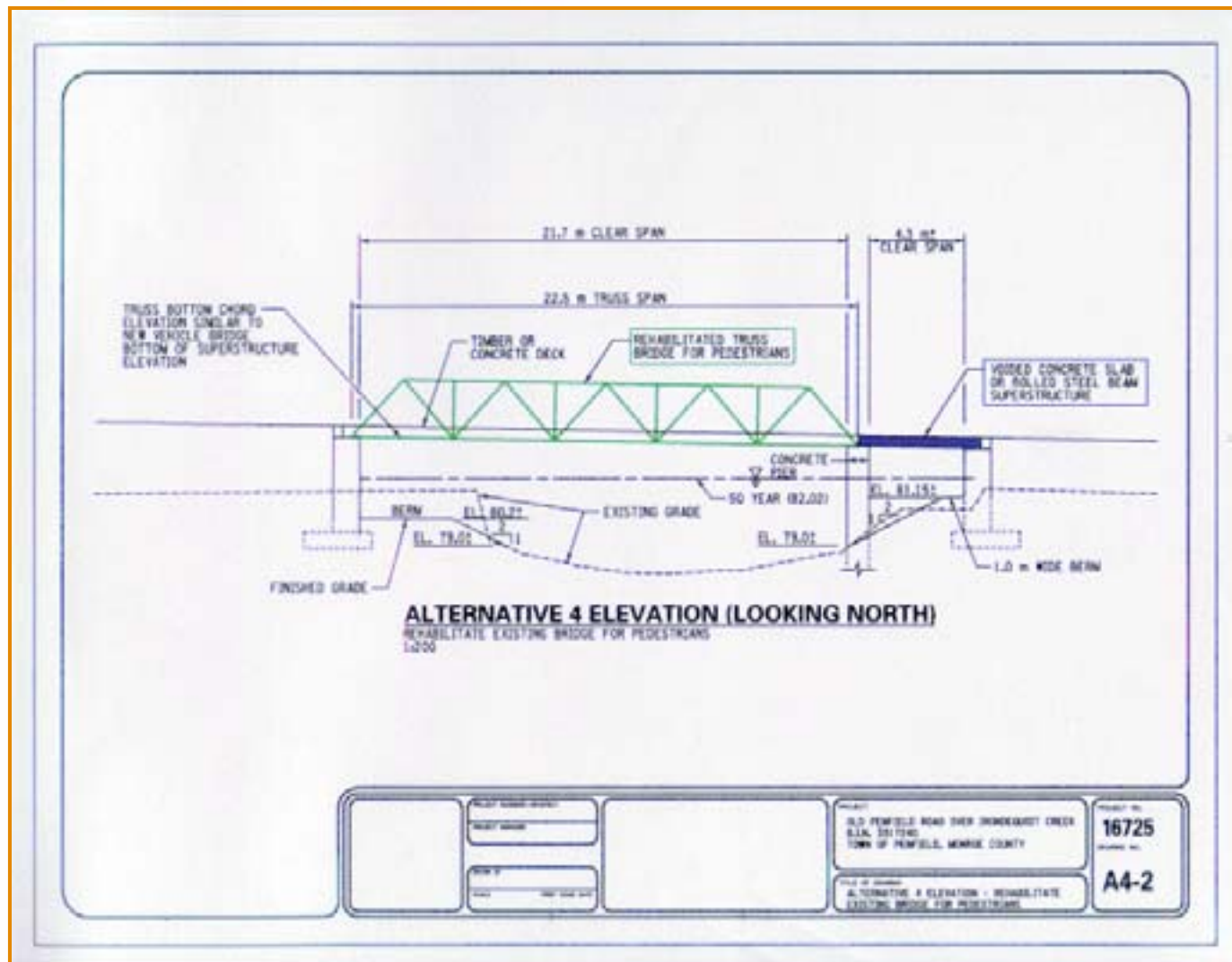


Alternative 3 Report Sketches



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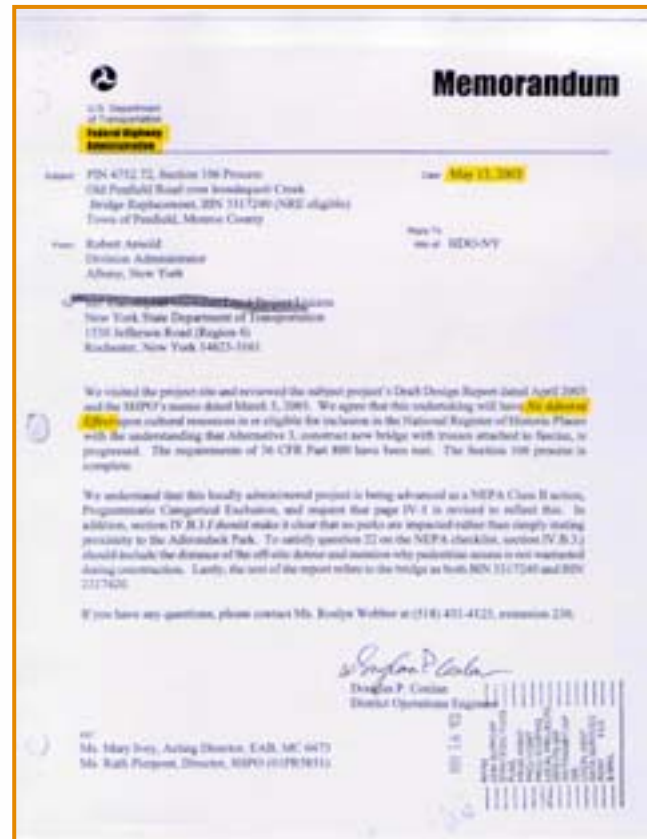
Alternative 4 Report Sketches



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Cultural Resource Activities Timeline

- March 2003 – SHPO “No Adverse Effect”.
- May 2003 – FHWA “No Adverse Effect”.



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Cultural Resource Activities Timeline



- July 2003 – Final Design Report issued.
- March 2004 – Discussions with SHPO regarding use of concrete formliners for spandrel walls.
- May 2004 – Bid Opening.
- August 2004 – Construction begins.



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Lessons Learned



- Always include Project Review Cover Form with any transmittals to SHPO.
- Use certified mail with return receipt when sending material to SHPO.
- Informal phone calls, emails and faxes helped to “grease the wheels” with SHPO and aided arrival at consensus.
- Collaborative effort between SHPO, MCDOT, NYSDOT and Stantec.



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Truss Removal



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Construction Challenge



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Project Contacts



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