CONSTRUCTION & LIFE-CYCLE COST SUMMARIES

- 2002 TMACOG REPORT by Lucas County Engineer
- 2010 ODOT IOC February 16, 2010

To: Mike L ingest P.E., Planning & Program Admin, District 2
From: Tim Keller, P.E., Administrator, Office of Structural Engineering

CONCLUSION
It is the current opinion of this Office replacing the structure with a new structure is considerably more economical than rehabilitating the existing structure. Finally, the concept of rehabilitation needs to be brought into context. The existing structure has fallen into such poor condition that the magnitude of the effort required to restore the bridge to a safe level of performance is not feasible and prudent alternative.

- 2012 PLANNING LEVEL REPORT by Claude Brown and Associates
- 2013 IMPLEMENTATION LEVEL REPORT by Claude Brown and Associates
- 2015 Historic CSX Bridge Alternative Analysis by DGL Consulting Engineers, LLC

CONCLUSION
Table 1 illustrates the combined construction and future life-cycle costs. Evaluating simply the initial construction estimate, the cost to rehabilitate the bridge is nearly double the cost to build a replacement. Considering the results from a complete Life-Cycle Cost Analysis increases the relative cost of rehabilitation to nearly three and a half times that of construction a new bridge.

<table>
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<th>Alternative #1: Rehabilitation</th>
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<tr>
<td>Initial Construction Costs</td>
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<td>Future Life-Cycle Costs</td>
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<td>Total Life-Cycle Costs</td>
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<td>Ratio of Construction Costs</td>
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<td>Ratio of Total Life-Cycle Costs</td>
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Subject: RE: WOO-CSX RR update 100460
Date: Monday, January 4, 2016 at 3:22:10 PM Eastern Standard Time
From: Stacy.Schimmoeller@dot.ohio.gov
To: Richard Martinko, Mike.Gramza@dot.ohio.gov
CC: Deborah.Baldwin@dot.ohio.gov, Rex Huffman, Richard McGuckin

From Central Office 12-23-15:
(Central Office History of Architecture supervisor) have read through the engineering alternative analysis for the subject project and believe the rehabilitation option (without altering the historic integrity) is sufficiently supported as not prudent. Therefore, the following summarizes the next steps in the Section 4(f) & Section 106 processes: Upon signature of the Adverse Effect letter (currently at SHPO as of 12-23-15) for the removal of the historic bridge, the project manager should initiate the preparation of the Documentation for Consultation (Determination of Effects Report) as specified by the CR manual and 36 CFR Section 800.11(e). ODOT-OES (Monica is the lead) will concurrently draft a MOA for inclusion in the DFC report. ODOT-OES will send the draft MOA and the DFC to the ACHP to determine participation in resolving the adverse effect. The Consulting Parties and SHPO will be copied on the draft MOA & DFC concurrently as the ACHP.
Stage 2 Plans

Stage 2 plans complete. Stage 3 plans will take 3 weeks to complete after authorization to begin.

The Stage 2 plans are at the consultant so that they can write the waterway permit determination request. They have requested minor changes. ODOT sent a few questions to Rich McGuckin (DGL) one of which was concerning if any temp r/w would be needed on the south/east side of the river for construction access.

Stage 3 Plans

ODOT cannot authorize Stage 3 until the environments doc has been approved.

The stage 3 plans cannot get underway until environmental clearance is obtained. This current estimated date is the end of September. Please let me know if you have any questions. The stage 3 plans cannot get underway until environmental clearance is obtained. This current estimated date is the end of September.

U.S. Coast Guard

Lighting the navigation channel resolved by including it in the construction project.

Public Involvement

NEPA requirement because there is an adverse effect to a structure on the National Register of Historic Places. A draft of the press release and property owner/tenant letters were reviewed by Martinko and Huffman and approved. Official WCPA contact is listed as Tom Uhler since it is presently a local let project.

The public involvement will start as soon as I receive WCPA contact info (sent request to Cher).

The WCPA will need to email me documentation of all comments received (email, calls, letters, etc.) and also coordinate with ODOT (Gramz) prior to response to ensure proper responses to each of the comments, as required. The environmental consultant will be helping to organize and respond to the comments, but we need to receive them all from the WCPA.

Once the public involvement has been started the coordination can start with OHPO and the Advisory Council in DC.

Local Let v ODOT Let

May be advantages to ODOT Let. Construction costs possibly covered by ODOT in ODOT Let option. LPA status may not be attainable with this option.

To document the change from an LPA local let to an LPA Traditional ODOT let project ODOT needs a letter from the sponsor formally requesting the change and providing the reasons for the change. The plan would be for the LPA to manage the project until the plan package needs to be filed in Central Office. ODOT would take over from that point.

Right of Way

DGL finds that no temporary right of way is needed. Area for the construction equipment and lay down area can be contained in existing right of way.

MOA A draft of the Memorandum of Agreement (MOA) that is proposed to be sent to the agencies (Ohio Historical Preservation Office in Columbus, Advisory Council on Historic Reservation in D.C.) has been reviewed and approved by Rex Huffman and Tom Uhler. It describes in it the mitigation that ODOT would typically propose for the removal of the bridge listed on the National Register of Historic Places (NRPH) which is the same as the bridge for this project

PLAQUE TEXT & RENDERING: ODOT will ensure a commemorative plaque will be installed near one of the ends of the existing bridge. The commemorative plaque will document: the date of construction, builder, and historic context. The SHPO will be provided an opportunity to review the text and rendering prior to final design. The ODOT District 2 Environmental Coordinator will ensure specifications and installation location for the commemorative plaque are included in the contract.

Marketing the WOO/LUC-CSX Railroad Bridge over the Maumee River: ODOT will market the bridge for adaptive reuse to regional parks departments, multi-use trail groups, and other entities that may have an interest in reusing all or part of the historic truss system. The bridge will be posted on ODOT’s Reusable Bridges website for a reasonable duration, not less than 90 days.
o **Means and Methods** Specifying barge removal and base bid. This eliminates necessity for mussel survey ($200k). Causeway option would require mussel survey and will be included as an option. If causeway option is bid and is less expensive (including mussel survey) then it will be awarded as such. There will also be an option for full removal.

o **Flood Plain Study**
  
  **Subject:** FW: PID 100460 Removal of CSX RR structure over the Maumee River  
  **Date:** Thursday, May 5, 2016 at 11:40:38 AM Eastern Daylight Time  
  **From:** Mike.Gramza@dot.ohio.gov  
  **To:** Cher Johnson, Martinko, Richard, Christine Connell, Rex Huffman, Richard McGuckin  
  
  Attached is the official “waiver” from Wood County which eliminates the necessity for a hydraulic study prior to removing the CSX bridge. I have also included the COT’s email waiver. I will send along the official version from the City of Toledo when available. This will eliminate a significant design engineering cost to the project. Although we have received waivers from the floodplain coordinators from having to perform the hydraulic calculations the project will still need permits from the local coordinators.

o **Construction** Spring 2017