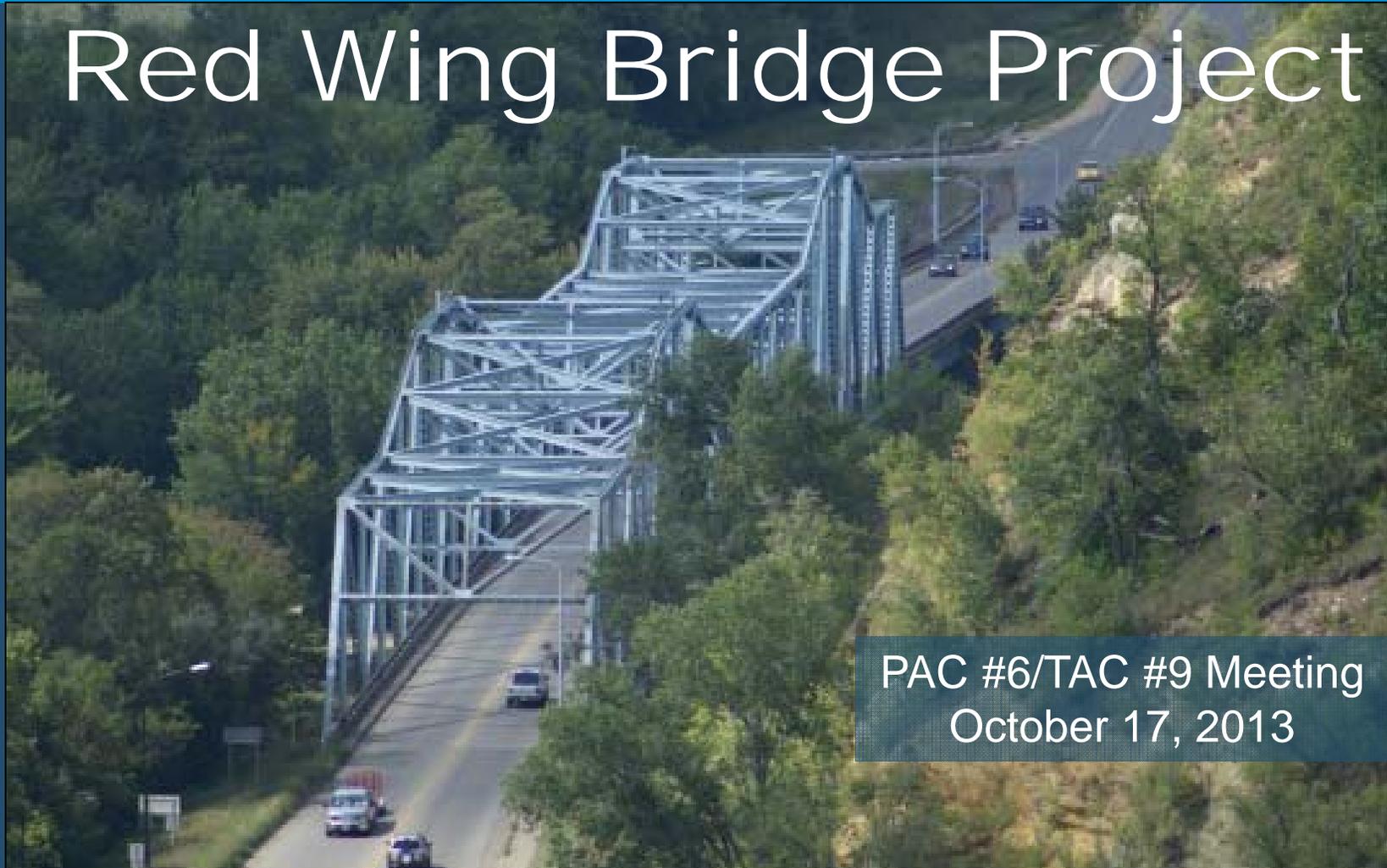




# Red Wing Bridge Project



PAC #6/TAC #9 Meeting  
October 17, 2013

*Your Destination...Our Priority*





# Agenda

- Alternatives Analysis
  - Overview of Past Progress
  - Progress Since July PAC/TAC
  - Next Steps in the Analysis Process
- Public Outreach Update
- Next Meetings





# Overview of Past Progress

- Determined the river crossing will be kept at current location
- Identified and refined a preferred set of concepts for the Minnesota and Wisconsin approach roadways
- Decided to proceed with a new two-lane river crossing option
- Completed Bridge 9103 Rehabilitation Study
- Identified three preferred river bridge types

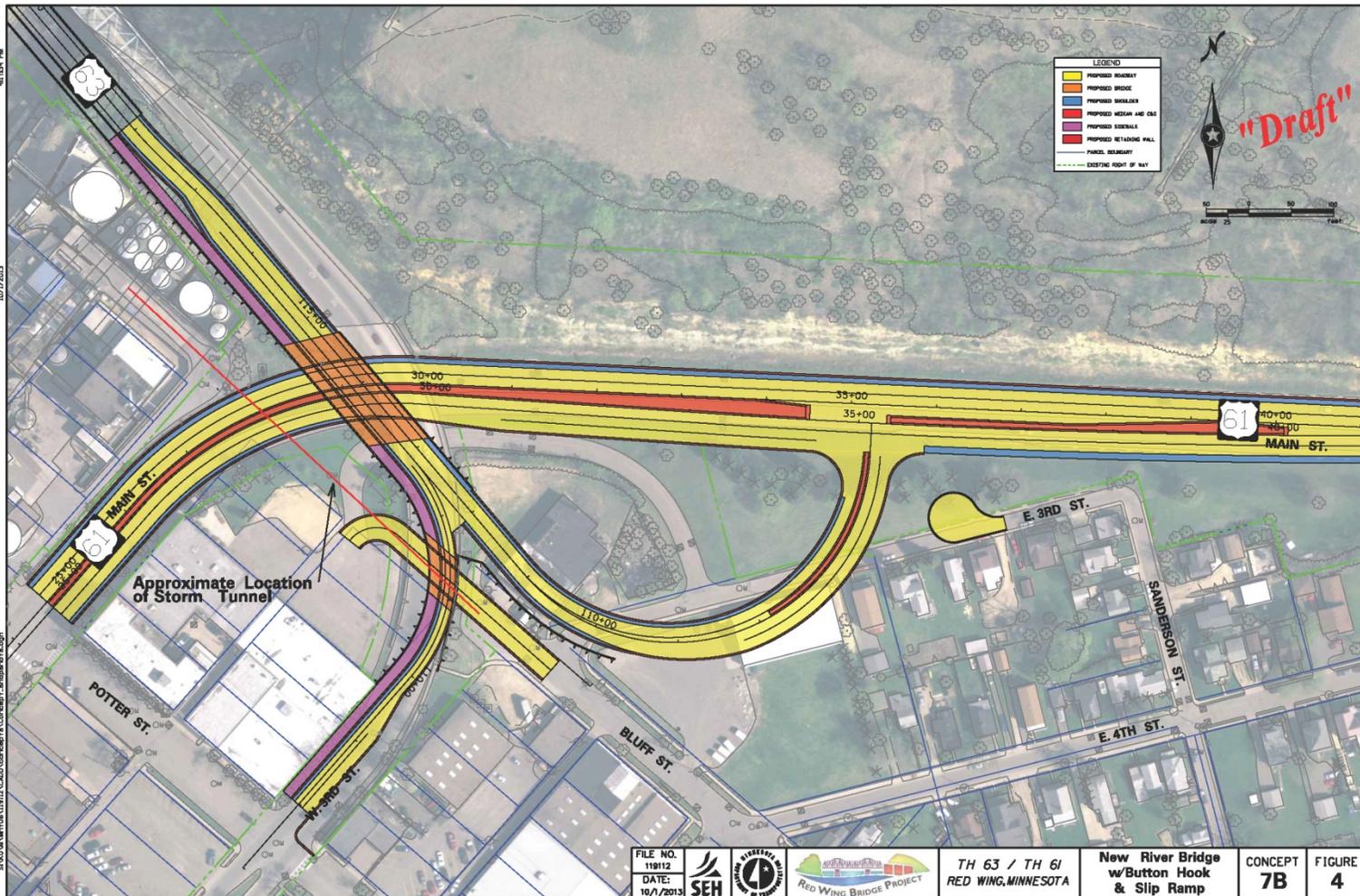








# Buttonhook





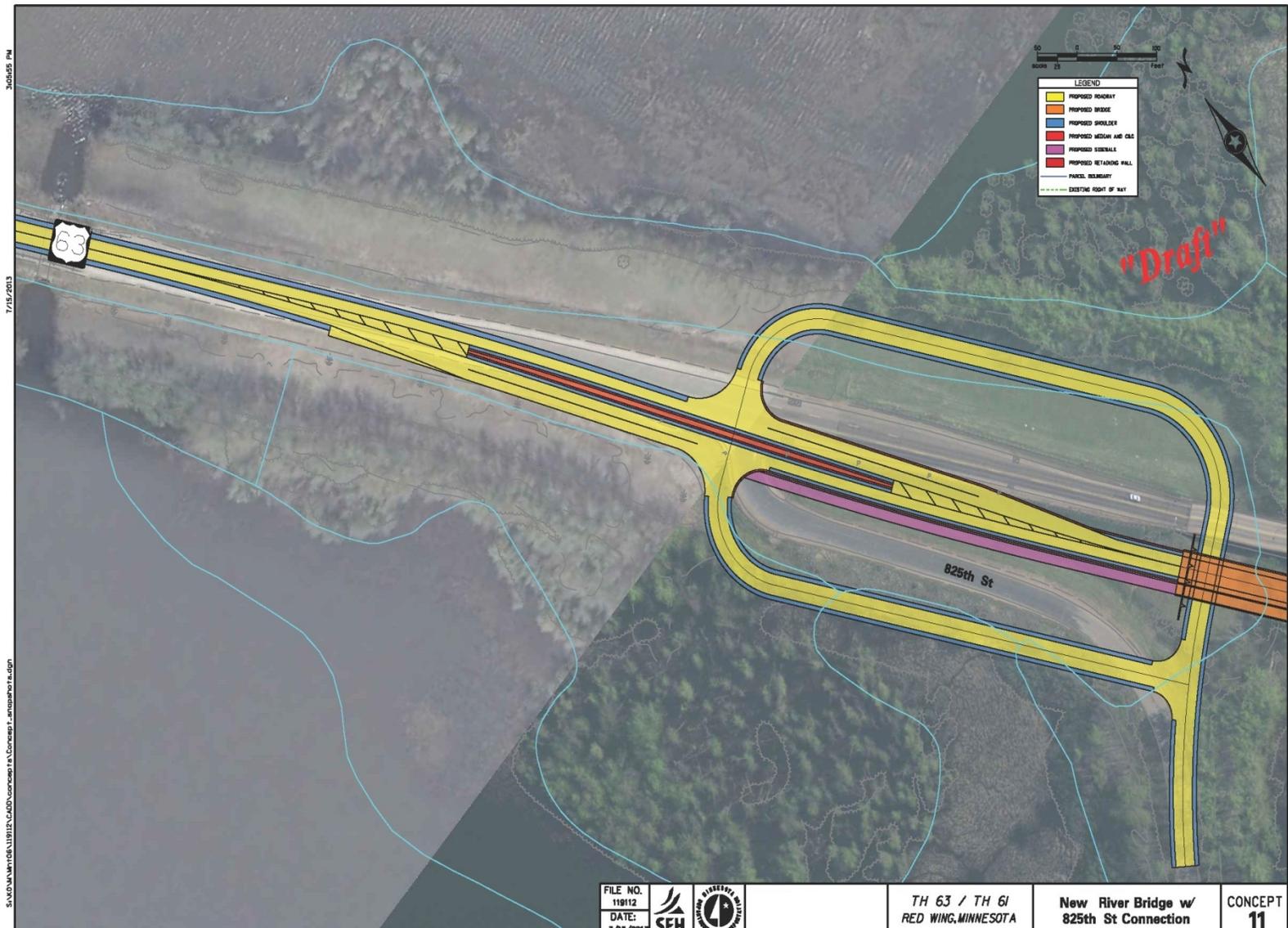
# Minnesota Approach Alternatives – Detailed Evaluation

- Evaluation centers on the Following:
  - Purpose and Need
  - Cost Factors
  - Social, Economic, and Environmental Factors





# Wisconsin Approach – Preferred Option





# New River Crossing Bridge Concepts





# Tied Arch

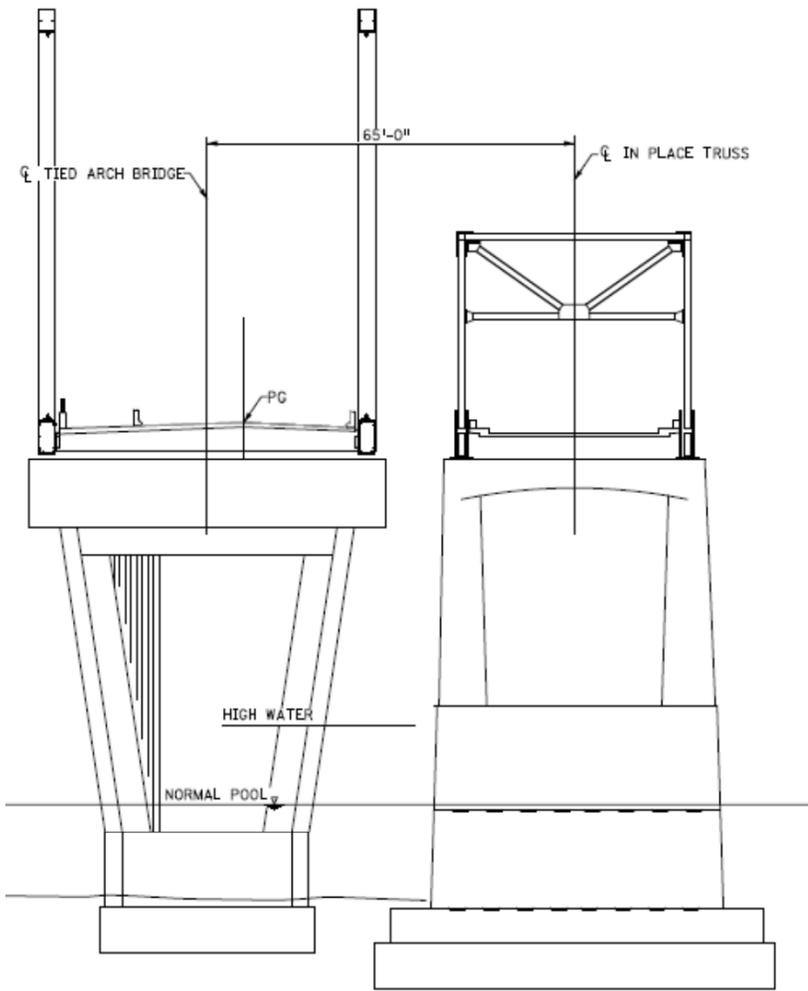




# Tied Arch

- Grade and Profile
- Span Arrangement
- Constructability
- Inspection and Maintenance

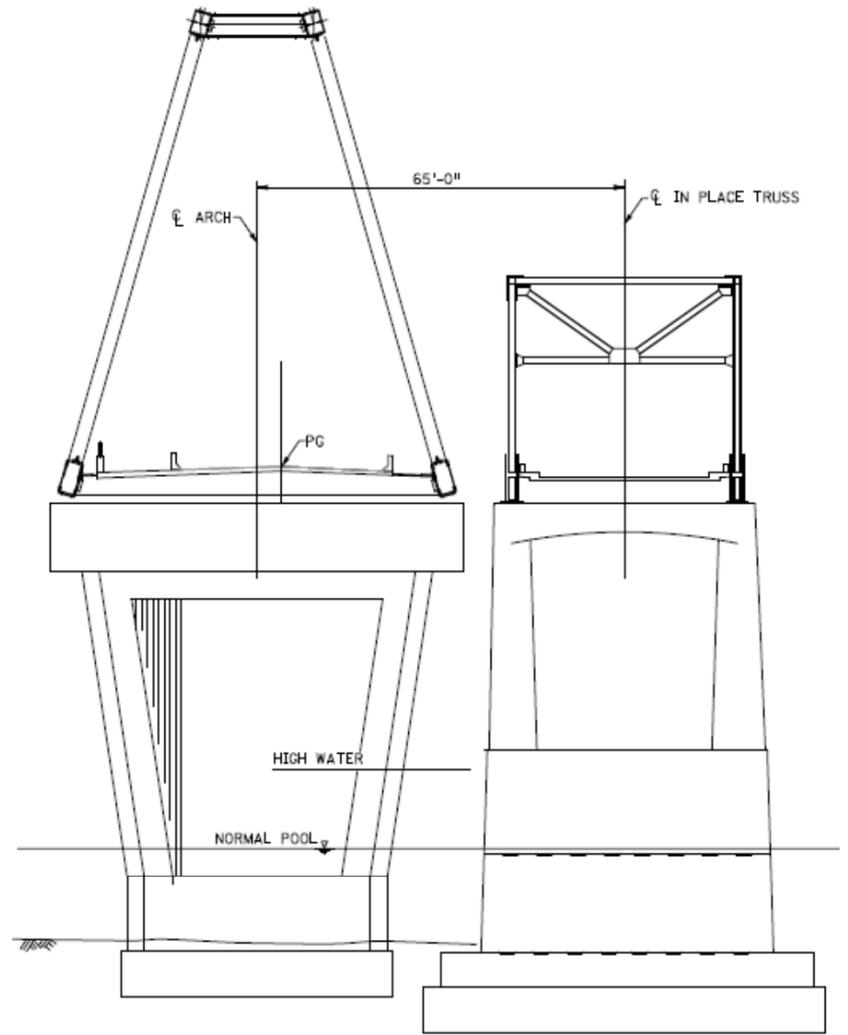




PROPOSED PIER 2 ELEVATION

EXISTING PIER 2 ELEVATION

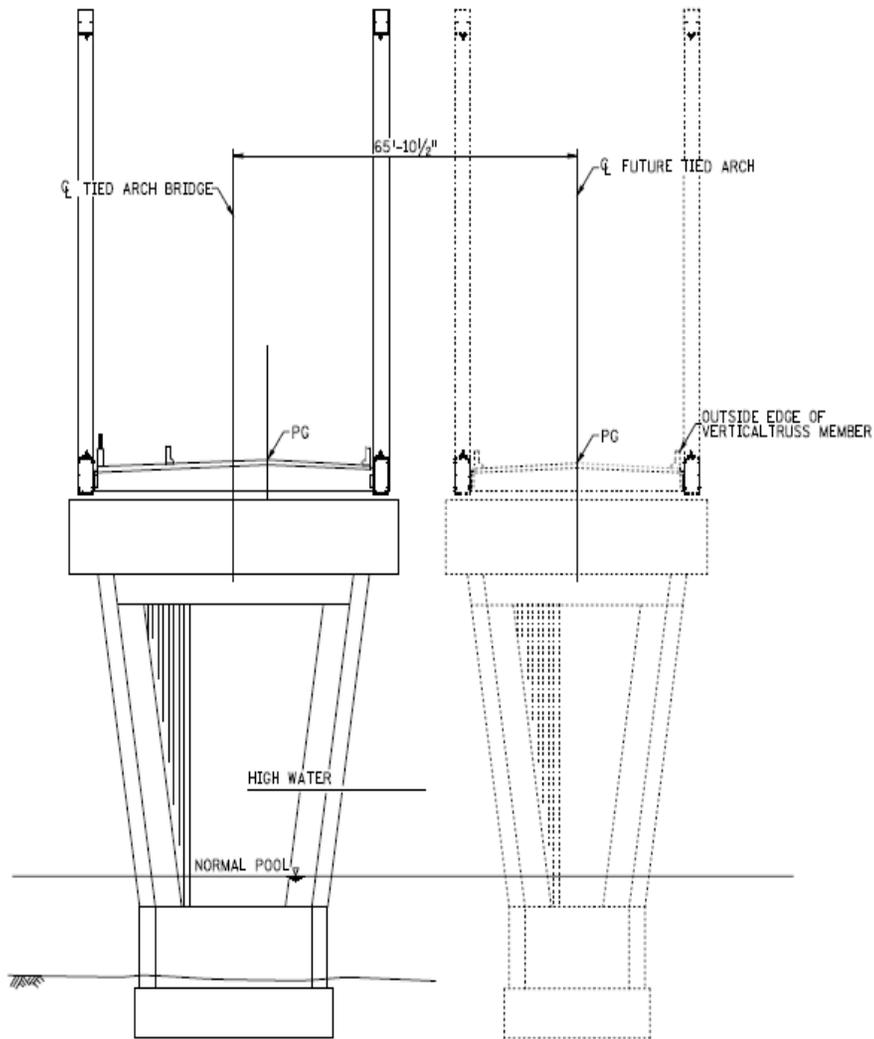
VERTICAL TIED ARCH SHOWN ADJACENT TO IN PLACE TRUSS



PROPOSED PIER 2 ELEVATION

EXISTING PIER 2 ELEVATION

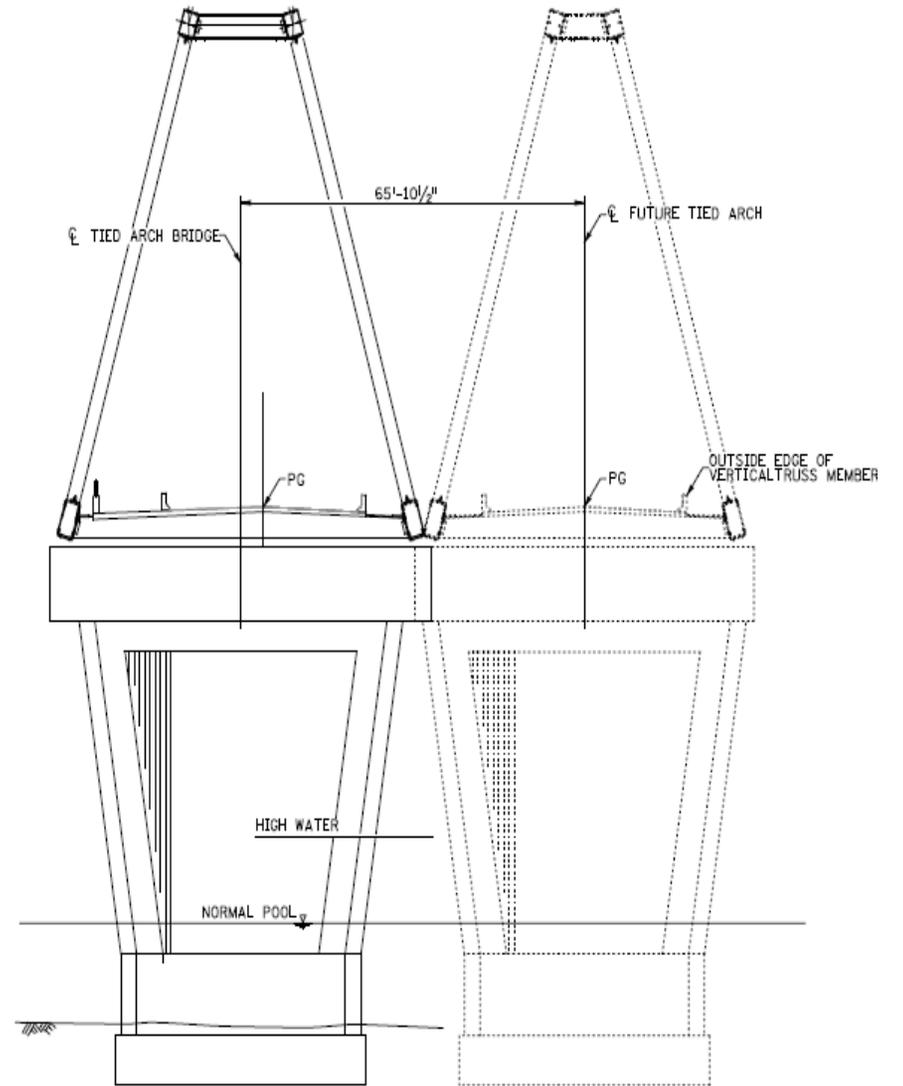
BASKET HANDLED TIED ARCH SHOWN ADJACENT TO IN PLACE TRUSS



PROPOSED PIER 2 ELEVATION

FUTURE PIER 2 ELEVATION

VERTICAL TIED ARCH



PROPOSED PIER 2 ELEVATION

FUTURE PIER 2 ELEVATION

BASKET HANDLED TIED ARCH



# Steel Box Girder

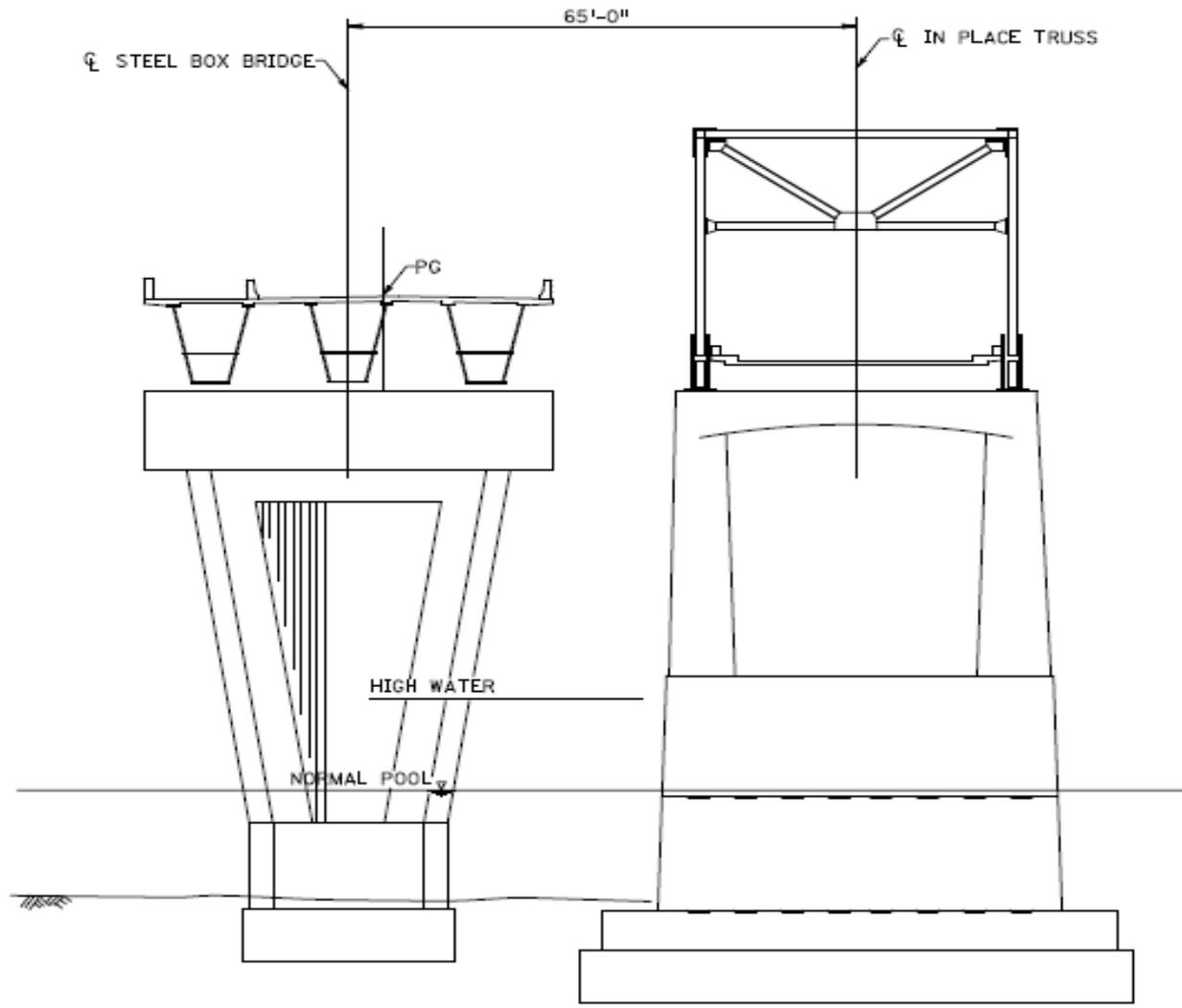




# Steel Box Girder

- Grade and Profile
- Span Arrangement
- Constructability
- Inspection and Maintenance

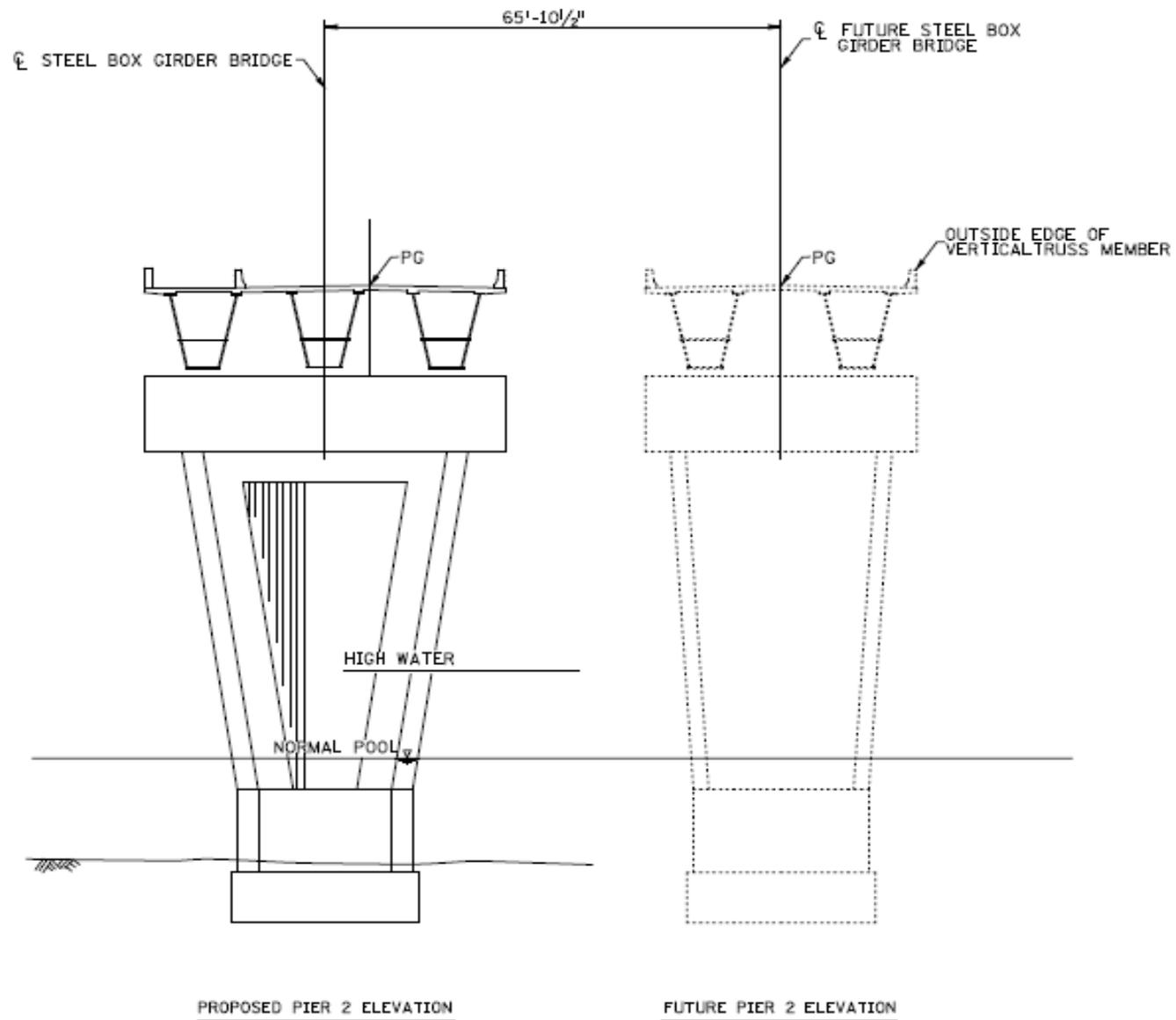




PROPOSED PIER 2 ELEVATION

EXISTING PIER 2 ELEVATION

STEEL BOX GIRDER SOWN ADJACENT TO IN PLACE TRUSS



STEEL BOX GIRDER



# Segmental Concrete Box Girder

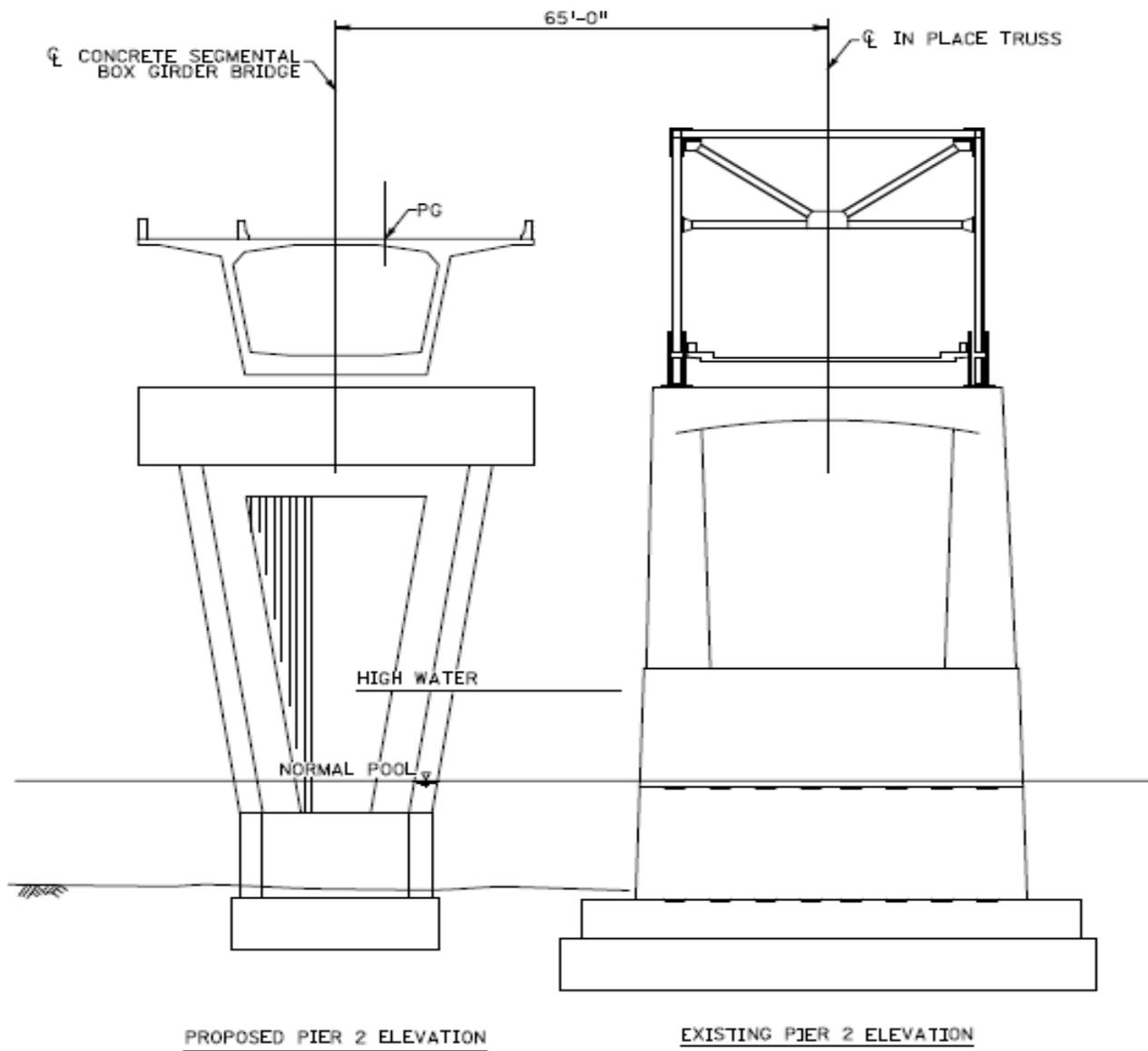




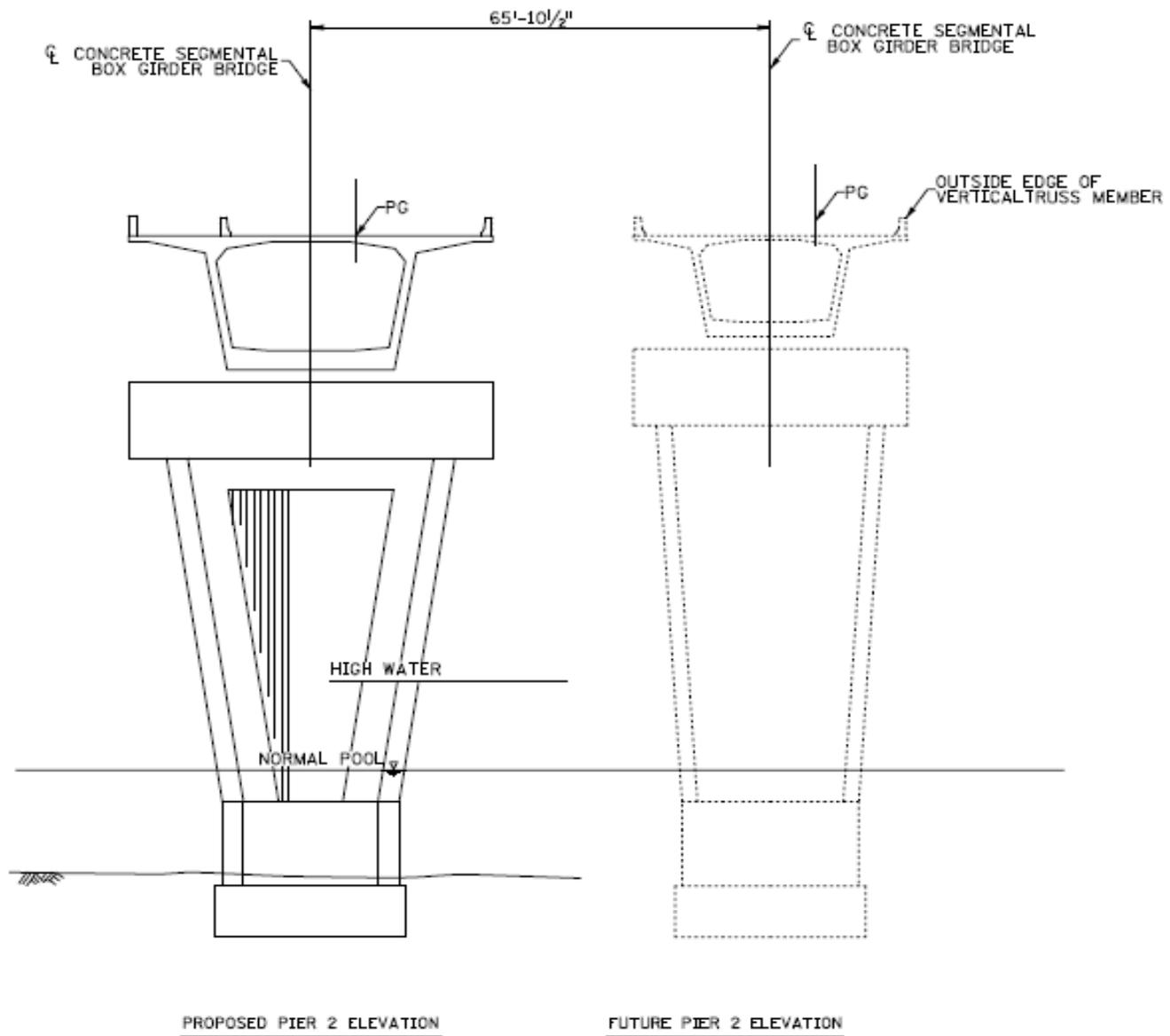
# Segmental Concrete Box Girder

- Grade and Profile
- Span Arrangement
- Constructability
- Inspection and Maintenance





SEGMENTAL CONCRETE BOX GIRDER SHOWN ADJACENT TO IN PLACE TRUSS



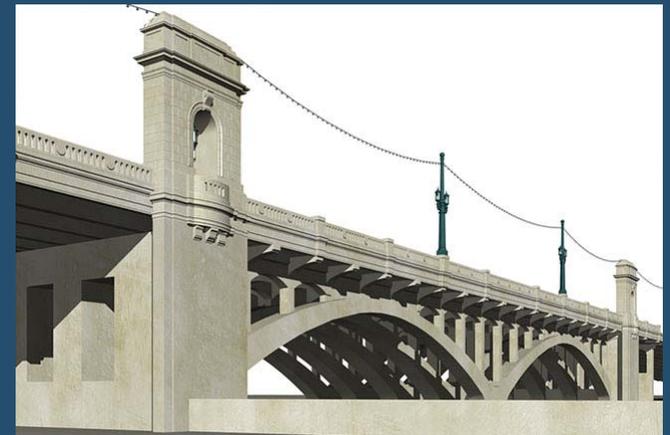
SEGMENTAL CONCRETE BOX GIRDER



# Aesthetic Discussion



**Bradley C. Touchstone, AIA, has dedicated his career to the development of signature bridge projects and as such, has expanded the role of architects on these projects both nationally and internationally. Mr. Touchstone works with design teams and community groups to ensure that the bridge design selected fits in harmony with the local culture and environment. In his capacity as Bridge Architect he has developed design guidelines for repair and replacement of bridge projects world-wide.**







# Classic Arch Bridge





# Classic Arch Bridge





# Contemporary Arch Bridge





# Contemporary Arch Bridge





# Classic Girder Bridge





# Classic Girder Bridge





# Contemporary Girder Bridge





# Contemporary Girder Bridge





# Bridge Aesthetics





# Next Steps in the Analysis Process

- Complete evaluation of the Minnesota approach alternatives and the three bridge types;
- Obtain public input;
- Identify the recommended Minnesota approach option and river bridge type.
- Proceed with the Environmental Assessment (EA)





# Public Outreach Update

- Listening Session to be Held in November
- Open House #3 – early 2014
- Newsletter #3 – to be issued prior to Open House #3
- Project Presentation Opportunities
- Website: <http://www.dot.state.mn.us/d6/projects/redwing-bridge/index.html>





# Next Meetings

- November TAC - Cancelled
- December 19<sup>th</sup> PAC #6/TAC #10 - 1:00 p.m. to 3:00 p.m. – Red Wing Library





# Questions / Comments



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