



Henry Road Bridge Case Study

Steel Bridge Essentials Summer 2021 Webinar Series
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Press-Brake Tub Girder

Henry Road Bridge, Mercer County, PA

Fabricator: Valmont/Con-Struct
Contractor: Jett Excavating
Deck Precaster: Faddis Concrete Products

Existing Structure

55 yr old, 42 ft Span Beam Bridge
Deterioration and Deficient
Closed to Traffic for 2 yrs

Replacement Structure Requirements

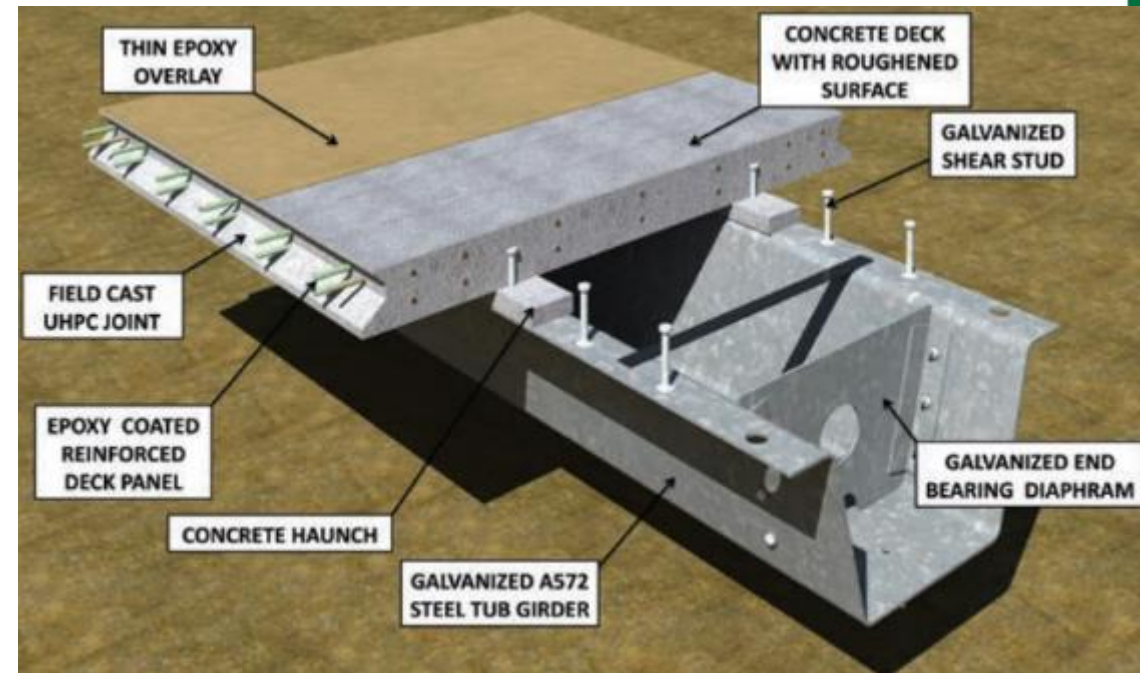
Use Existing Abutments (Limited Capacity)
60° Skew on Abutments
Superstructure Only Replacement
Design-Build thru PennDOT
County Funds (Local Funding)



Press-Brake Tub Girder

Con-Struct / Valmont
Winning Bid \$ 327,750

Press-Brake Tub Girder
4 PBTG Units
8 Precast Concrete Deck Panels
CIP Curbs w/ Railings
Epoxy Overlay



Press-Brake Tub Girder

Fabrication



Press-Brake Tub Girder

Finishing Fabrication – Two Methods

Pre-Decked - Composite

- PBTGs Pre-Decked
- Closure Pours
- CIP Curbs



Field Assembly - Composite

- PBTGs no Deck
- Precast Deck Panels
- Grouted Shear Pockets
- Closure Pours
- CIP Curbs



Press-Brake Tub Girder

Henry Road Bridge, Mercer County, PA
Field Assembly - Composite
PBTGs no Deck



Press-Brake Tub Girder

Henry Road Bridge, Mercer County, PA
Field Assembly - Composite
Precast Deck Panels



Press-Brake Tub Girder

Henry Road Bridge, Mercer County, PA
Field Assembly - Composite
Grouted Shear Pockets



Press-Brake Tub Girder

Henry Road Bridge, Mercer County, PA

Field Assembly - Composite

Cast-in-Place Curbs & Closure Pours



Press-Brake Tub Girder

Henry Road Bridge, Mercer County, PA
Field Assembly - Composite
Completed Bridge

Economical
Ease of Erection
Sustainable

