



Galvanized Steel Bridge Case Studies – Performance in Practice (Part II)

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Zinc Protects Steel®

V&S GALVANIZING



Millington, TN

Johnstown, PA

Columbus, OH

Redford, MI

Jonestown, PA

New Castle, DE

Perth Amboy, NJ

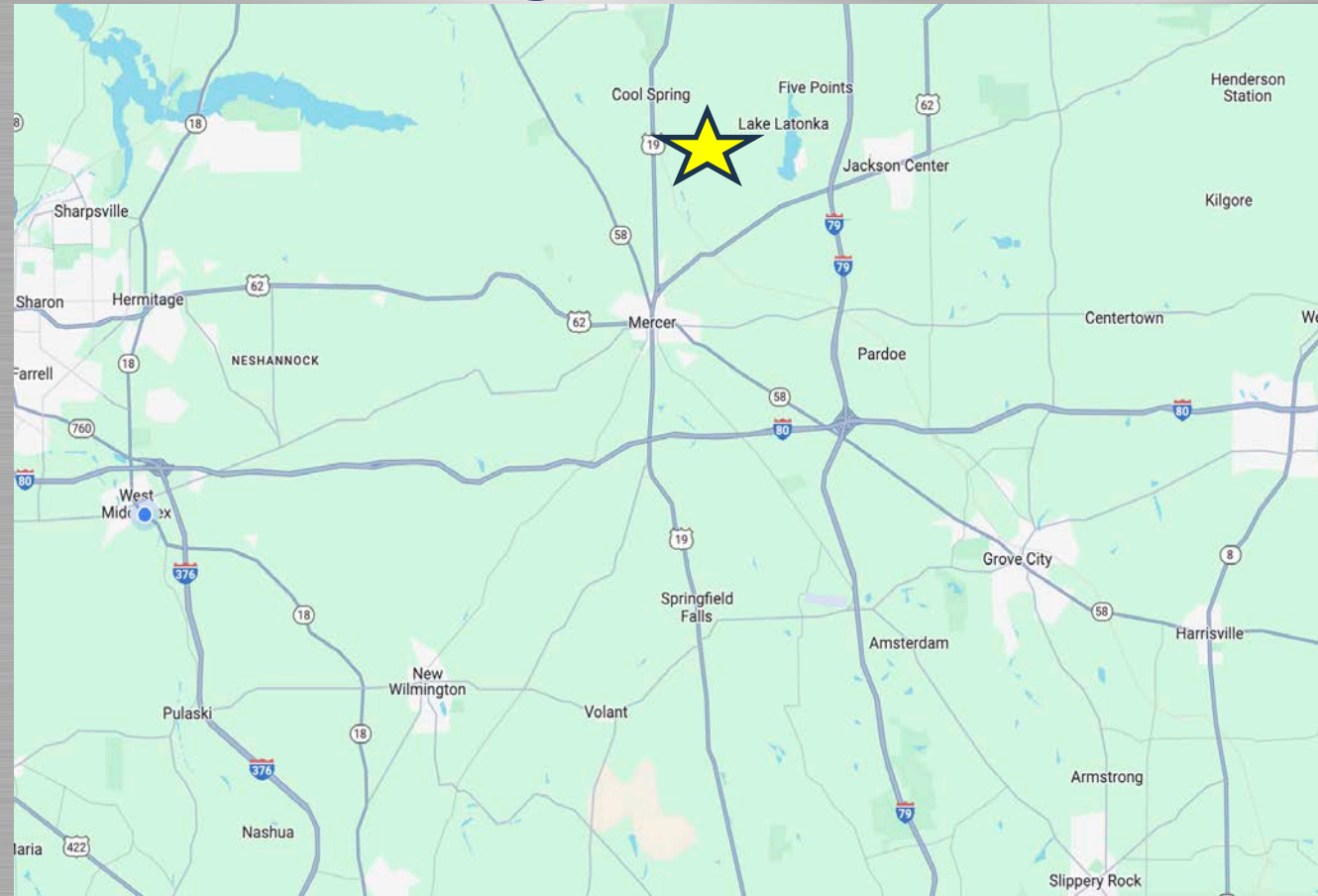
Taunton, MA

Owego, NY

Mercer County, PA Tait Road Bridge Replacement Project



Bridge Location



Project Background

- Tait Road Bridge over Otter Creek
 - Originally Constructed 1966
 - Reason for Replacement: Reached Service Life
- Owned by Mercer County, PA
 - Coolspring Township
- Bid Date 2/2023
- Project Cost \$644,000



Bridge Replacement Consideration

- Urgent Timeline / Safety Concerns
- Steel vs. Concrete
 - Galvanizing vs. Painting
- Notice to Proceed 4/2023
- Project Completion 12/2023



Design Considerations



- Galvanized Steel Beams
 - Chosen for exceptional corrosion protection due to constant moisture exposure
 - Quick Delivery
 - Cost Effective Replacement
- Guiderrail Post Connections
- Galvanized Steel Open Grating

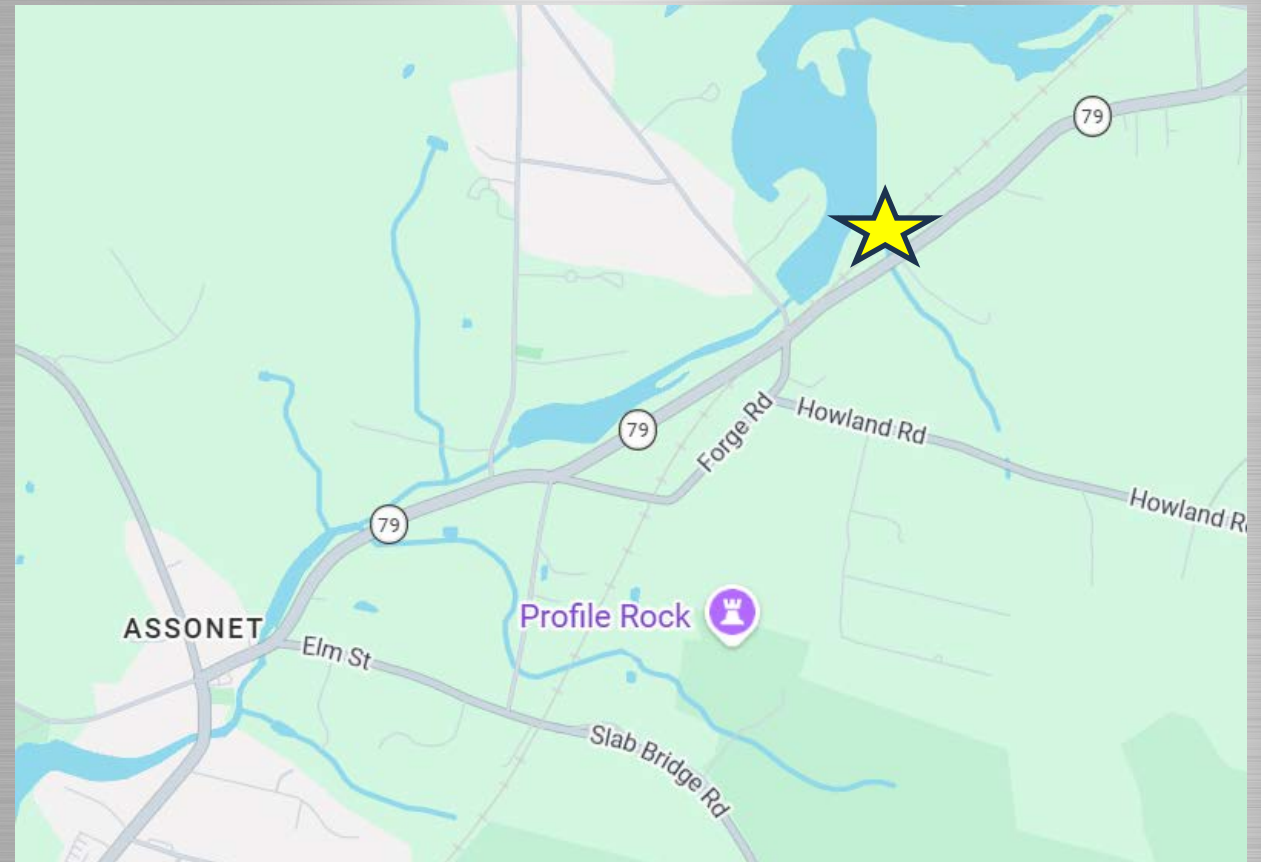
Completion



Assonet River Bridge Replacement



Bridge Location



Project Background

- Assonet River Bridge Over Assonet River
 - Reason for Replacement:
Reached Service Life
- Owned by MBTA



Bridge Replacement Consideration

Why Steel was chosen

- Accelerated Construction Schedule
- Resilience
- Lightweight Superstructure
- Long-Lasting Durable



Design Considerations



- Galvanized Steel Beams
 - Chosen for exceptional corrosion protection due to constant moisture exposure.
 - Galvanized Components: Girders, Plates, Beams, and Angles
 - Avoid warpage & distortion 3:1 web to flange thickness.

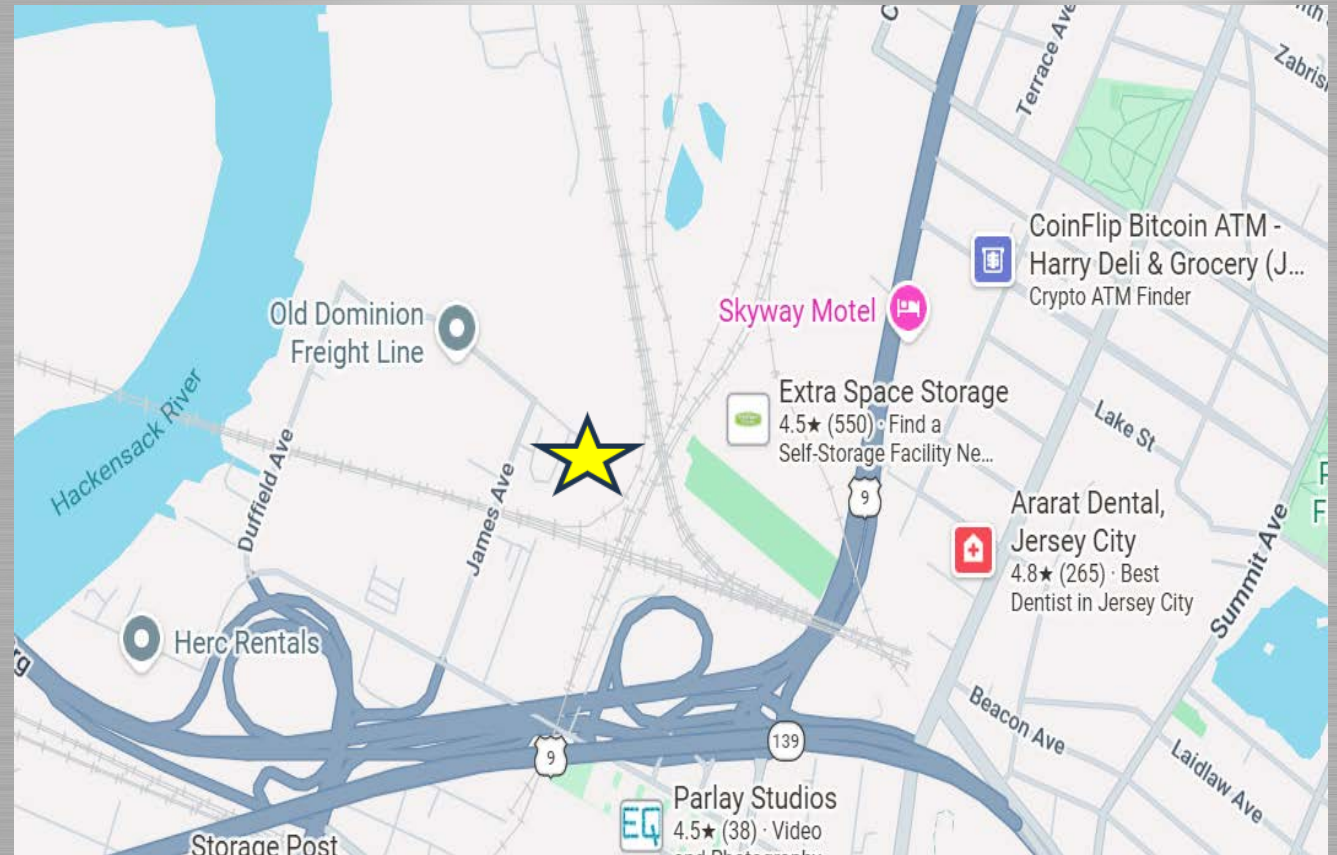
Completion



Wye Truss Bridge

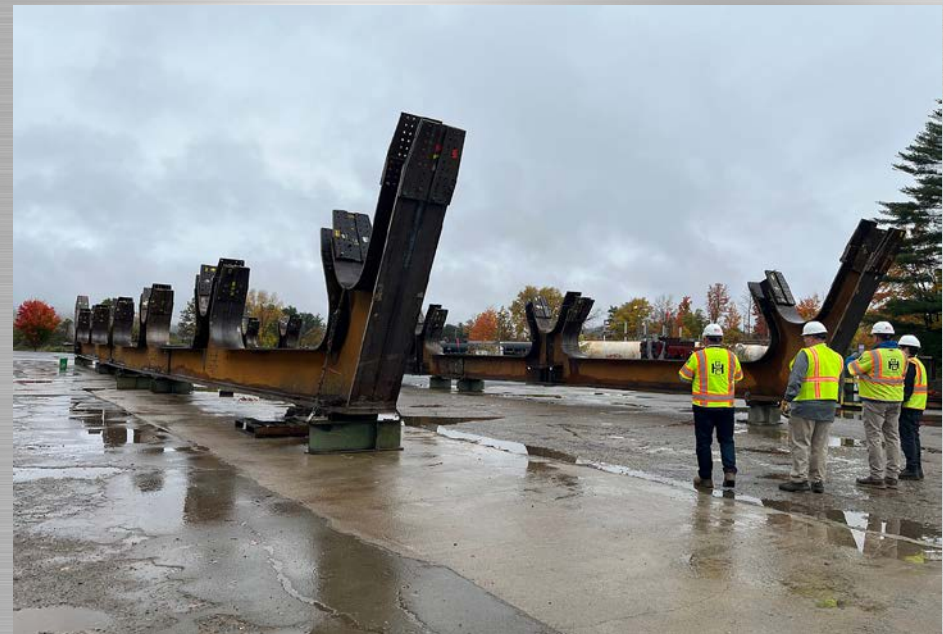


Bridge Location



Project Background

- Wye Truss Bridge St. Paul's Ave to Van Keuren Ave.
 - Reason for Replacement:
Reached service life & structural integrity
- Owned by the New Jersey Department of Transportation



Bridge Replacement Consideration

- Freedom and versatility
- Due to the tight space at the job site in Jersey City many of the pieces with plate assemblies couldn't be assembled and bolted in the field.



Design Considerations



- Galvanized Members with Metalized Members
 - Chosen for exceptional corrosion protection & low maintenance cost.
 - Galvanized/Metalized Components: Girders, Plates, Beams, and Angles

Completion



Questions

