



Welcome to the Newark & Harrison Public Information Center Meeting for the:

Local Preliminary Engineering for the Bridge Street Bridge Project

👤 Presented by: Bridge Street Bridge Project Team

🕒 March 20, 2024 @ 6:00 pm

📍 *City of Newark / Town of Harrison, New Jersey*

🌐 www.bridgestreetbridge.com



Agenda

- Introduction
- Meeting Purpose
- Project Phases
- Existing Bridge
- Constraints
- Bridge Data & Deficiencies
- Environmental (NEPA) Process
- Utilities
- Project Needs
- Proposed Bridge
- Community Involvement
- Next Steps

Introduction

to the Project Team



Project Team

Sarbjit Kahlon

NJTPA Project Manager

Sascha Frimpong

NJTPA Program Director

Eileen Schack

NJDOT Local Aid Manager

Frank McCombs

NJDOT Local Aid Supervising Engineer

Pamela Garrett, PMP, CPM

NJDOT Environmental Project Manager

Marie Limage

NJDOT Environmental Coordinator

Sanjeev Varghese, PE

Essex County Engineer

Andres Gomez-Ortiz, PE

Essex County Principal Engineer

agomez@essexcountynj.org

973-226-8500 x2500

Thomas Malavasi, PE

Hudson County Engineer

Joseph Glembocki, PE

Hudson Assistant County Engineer

jglembocki@hcnj.us / 201-369-4340 x4160

Kevin Johns, PE

Modjeski & Masters (M&M) Project Principal in Charge

Rich Jackson, PE

Modjeski & Masters (M&M) Project Manager

Mohammad Majd, PE

Modjeski & Masters (M&M) Project Engineer

Matthew Colon, PE

Mott MacDonald (MMD) Deputy Project Manager

Andrew Gennaro

Mott MacDonald (MMD) Project Engineer

Jennifer Kohlsaatt

Mott MacDonald (MMD) Environmental Lead

Paul McEachen

Principal Senior Archaeologist

Sophia Fox

Community Involvement Facilitator

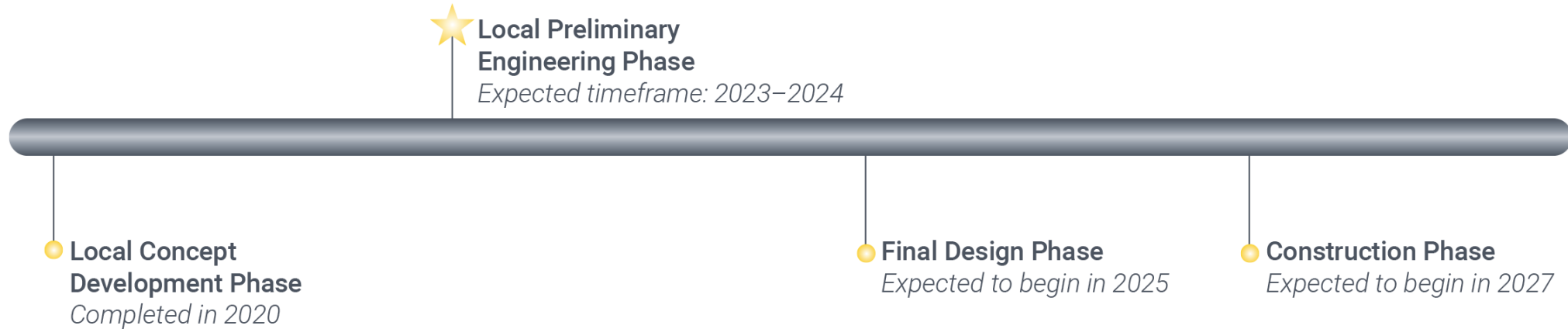
Nicole Pace-Addeo

Community Involvement Supervisor

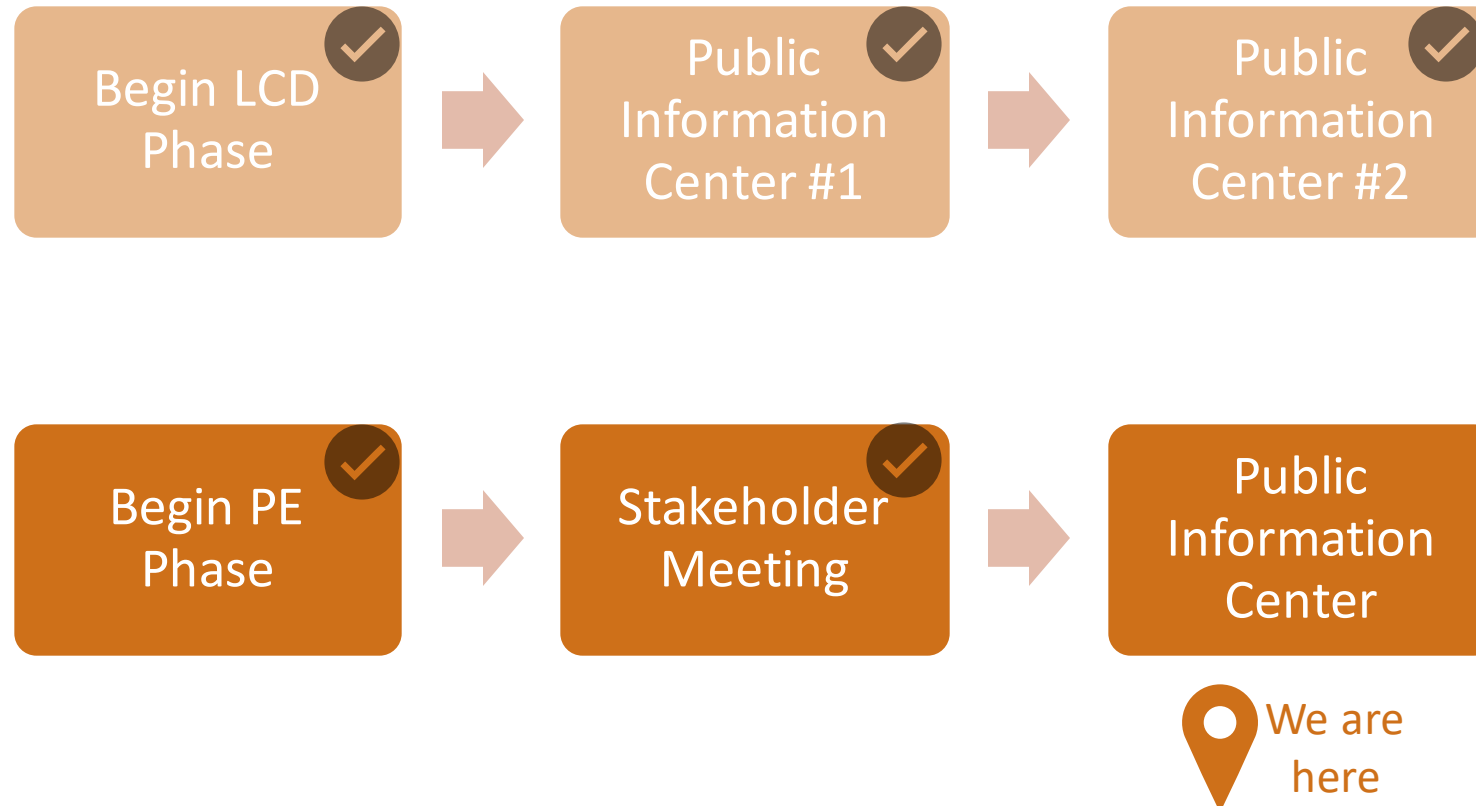
Meeting Purpose

- Provide a project status update to the public
- Discuss the Preliminary Preferred Alternative (PPA)
- Present the improvements of the proposed bridge replacement
- Obtain input and answer questions from the community

Bridge Street Bridge Project Phases & Schedule



Community Outreach Phases



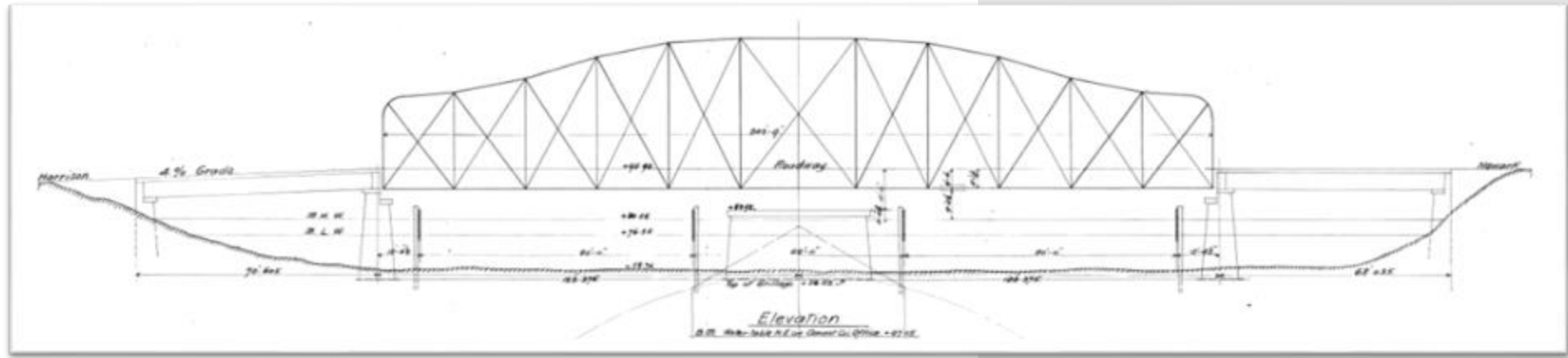
Bridge Street Bridge Data

- Bridge Spans the Passaic River connecting the City of Newark & the Town of Harrison
- Year Built: 1913 (Major rehab. 1981)
- Bridge type: 3 spans – 244-ft swing span flanked by 65-ft deck girder spans
- ADT = 22,165 vehicles per day
- Number of Pedestrians = 83 per hour (peak)



Bridge Street Bridge Data

- Overall Length: 374-ft
- Bridge Roadway Width: 39-ft 0-in
- Two lanes (one each way)
- No Shoulders on bridge
- 7-ft wide cantilevered sidewalk on both sides
- Bridge Navigational Vertical Clearance in closed position: 7-ft (at MHW); Horizontal Clearance = 80-ft per channel



Project Details



Why is Bridge Being Replaced?

- **Age** – Over 110 years old (built in 1913)
- **Condition** - The bridge has been classified as structurally deficient and functionally obsolete due to the deteriorating condition and periodic mechanical & electrical failures
- **Safety**
 - The bridge railings do not meet current crash and safety standards.
 - No outside shoulders are present along the bridge. The minimum required width is 8 feet.
 - The Bridge Street EB left turn lane at Passaic Ave has a width of 8 feet. The minimum required lane width is 10 feet.
 - Substandard roadway and pedestrian lighting.
 - There is an existing angle point between Bridge Street and the bridge over Passaic River. No horizontal curve is present.
 - The movable bridge traffic safety features are in disrepair and do not meet current standards.
- **Cost** - Annual operation & maintenance costs continue to increase.



Project Details

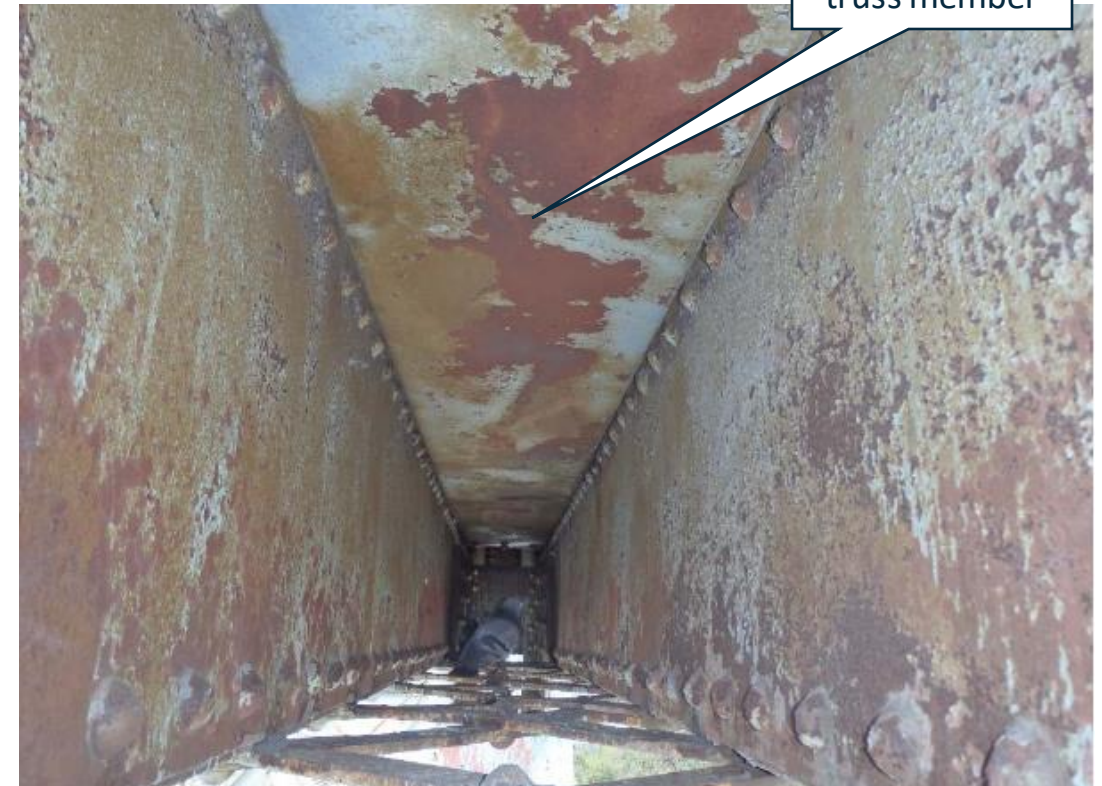
Bridge Deficiencies

- Bridge is in Poor Condition due to condition of the superstructure and is considered Structurally Deficient
- Bridge may soon need to be load posted due to the advancing deterioration of the steel superstructure members
- Sufficiency Rating = 48.5 out of 100 (SR < 50 means the bridge replacement is eligible for federal funding)
- Bridge railings are substandard
- Bridge operating machinery is substandard
- Bridge electrical system is at the end of its service life
- Bridge can only be operated at creep speed

Bridge Deficiencies – Structural Elements



Hole in
floorbeam
gusset plate



Typical
corrosion inside
truss member

Bridge Deficiencies – Structural Elements

Significant corrosion to Floorbeams and Connections



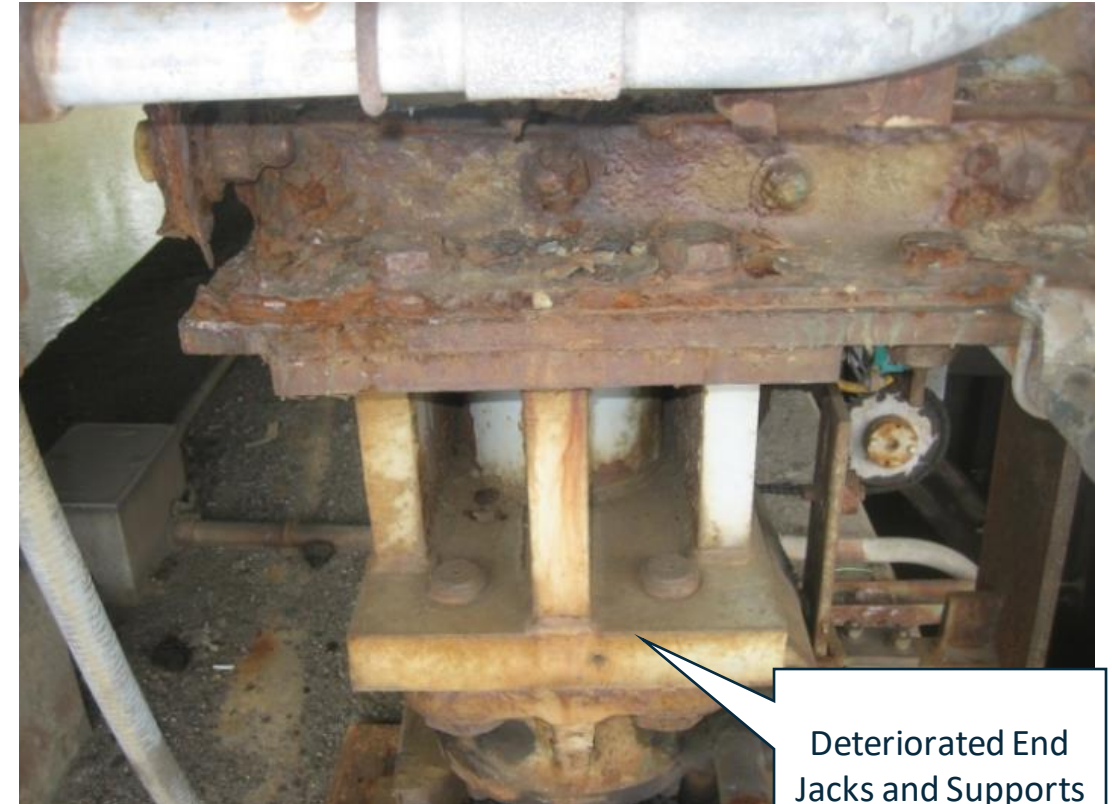
Impact damage to sidewalk bracket



Bridge Deficiencies – Mechanical



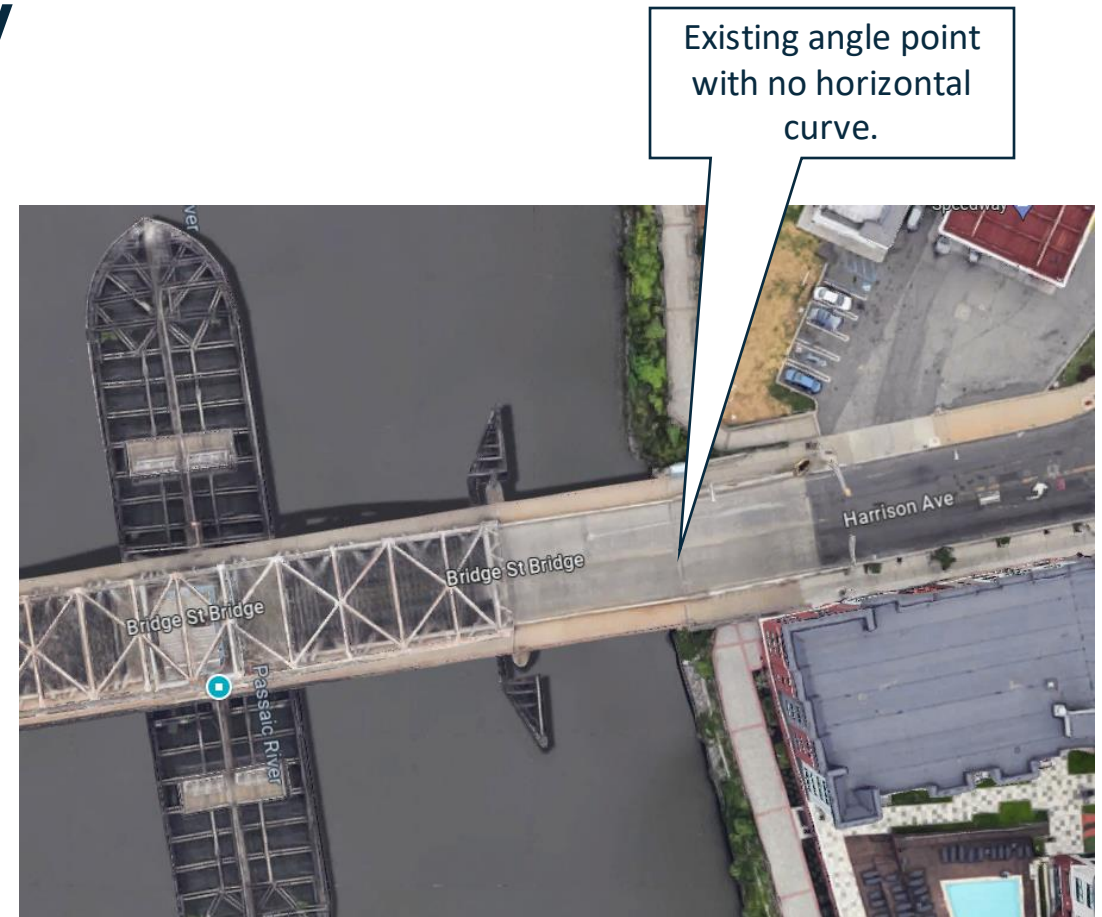
Bridge Deficiencies – Mechanical



Bridge Deficiencies – Roadway



Bridge Deficiencies – Roadway

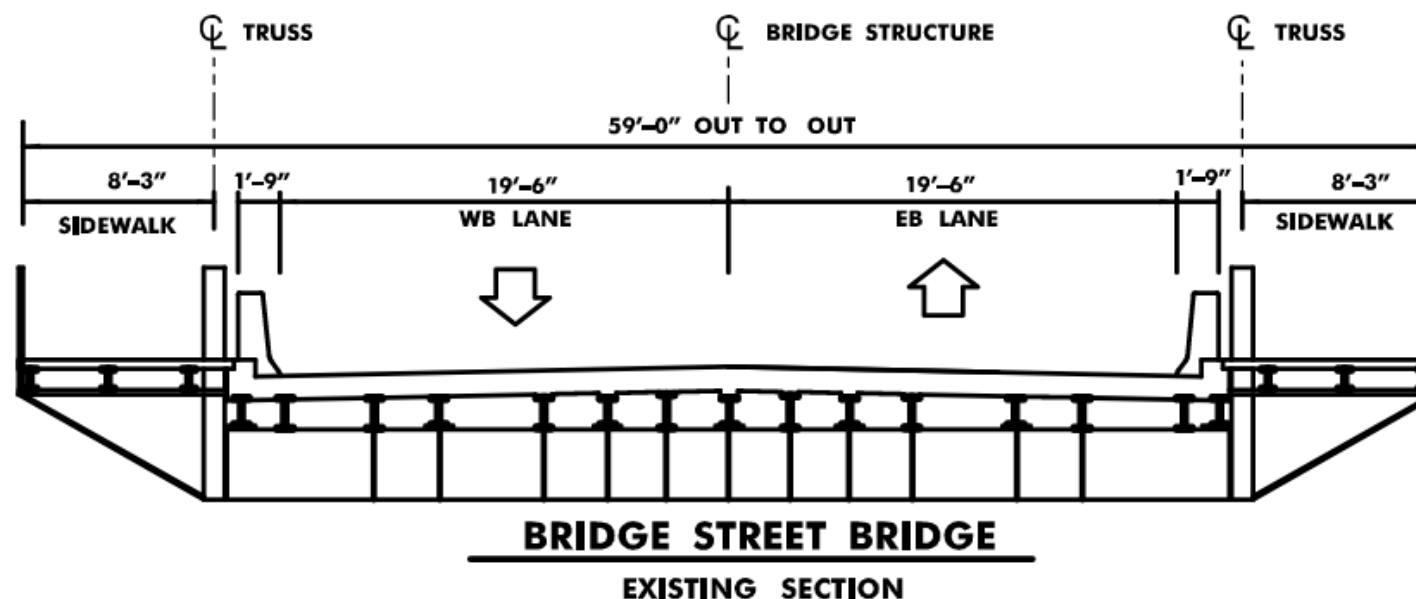


Controlling Substandard Design Elements (CSDE)

CSDE	Direction	Milepost	Description	Existing	Required
Lane Width	EB	N/A	Bridge Street Left Turn Lane at Passaic Ave.	8'	10' Minimum (NJDOT-RDM Section 5.3)
Outside Shoulder Width	EB/WB	12.60 to 12.36	Bridge Street from Route 21 to Passaic Ave.	0'	8' Minimum (NJDOT-RDM Section 5.4.2)
Minimum Radius of Curve	EB/WB	N/A	Angle Point between Bridge Street and the Bridge over the Passaic River	None	231' (NJDOT-RDM Table 4-5)

Existing Bridge Cross Section

- No outside shoulders along Bridge Street
- Substandard Guide Rail



Environmental (NEPA) Process

- Federally funded projects require NEPA (National Environmental Policy Act) documentation
- NEPA requires that agencies consider the environmental, social, and economic effects of their proposed actions
- Studies include:
 - Cultural Resources
 - Section 4(f) (impacts to parks / recreational areas)
 - Ecology / Wetlands
 - Socio-Economic Study
 - Air Quality & Noise
 - Hazardous Waste

Utilities

- Coordination with Utility Companies in the project area will occur during all phases of the project
- Utilities in the project area include:
 - City of Newark Department of Water and Sewer Utilities
 - Comcast
 - Crown Castle (fiber optic cable)
 - PSE&G
 - Passaic Valley Sewerage Commission
 - Town of Harrison Water & Sewer Department
 - Verizon
 - AT&T
 - NJDOT

Project Needs

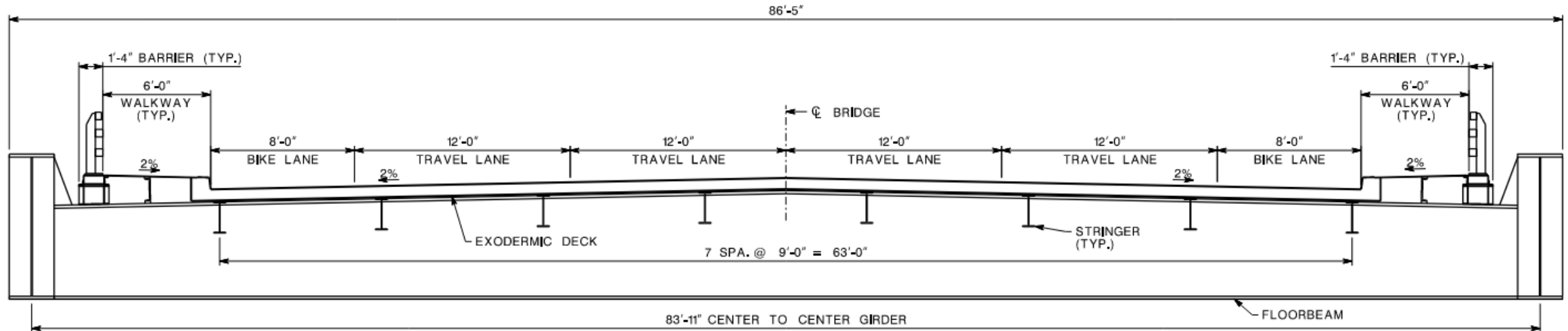
- Provide a structure that meets current design standards which includes new bridge railings, approach guiderail, standard lanes and shoulders, and lighting
- Provide bicycle compatibility and connectivity
- Provide Americans with Disabilities Act (ADA)-compliant pedestrian facilities and crossings as well as connectivity to the approach roadways
- Correct the controlling substandard design elements
- Modernize bridge mechanical and electrical components to meet current standards
- Maintain traffic operations and volume with minimal disruption and delay during construction
- Avoid or minimize social, economic, and environmental impacts

Proposed Improvements

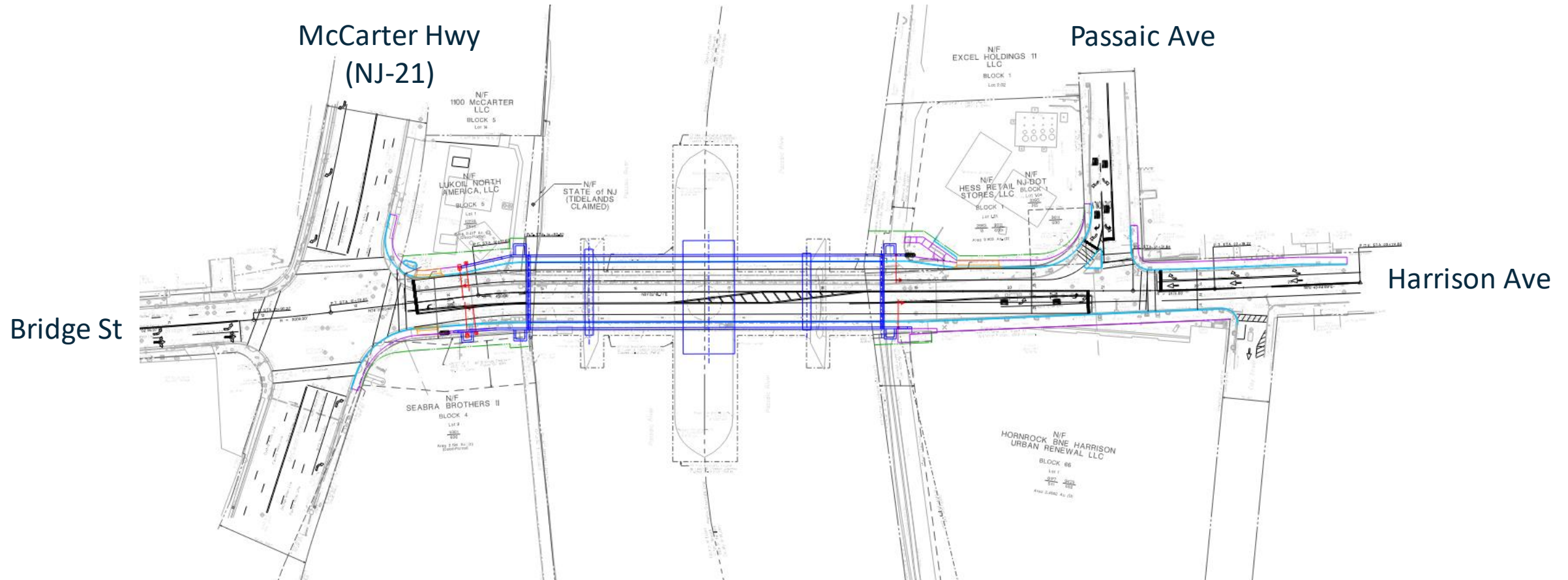
- New bridge that meets current design standards
 - Support present day vehicles
 - Provide 12-ft lane widths
 - Provide 8-ft shoulder / bike lanes
 - Provide crash-tested bridge railing and guiderail systems
 - Provide movable span traffic safety features (signals, warning gates and barrier gates)
- Protect movable bridge mechanical and electrical components from weather
- Provide a closed deck on the movable span (smooth uniform riding surface)
- Provide uniform roadway and pedestrian lighting on bridge and approaches
- Approach roadway intersection improvements
 - Traffic signal phasing
 - Pedestrian push buttons & crossing countdowns
 - Painted crosswalks
 - ADA-compliant curb ramps

Proposed Bridge Cross Section

- Four 12' wide travel lanes
- 8' wide bike lane / shoulder each side
- 6' wide sidewalk each side



Proposed Project Limits



Bridge Replacement Rendering



Project Details

Bridge Replacement Rendering



Project Details

Bridge Replacement Rendering



Project Details

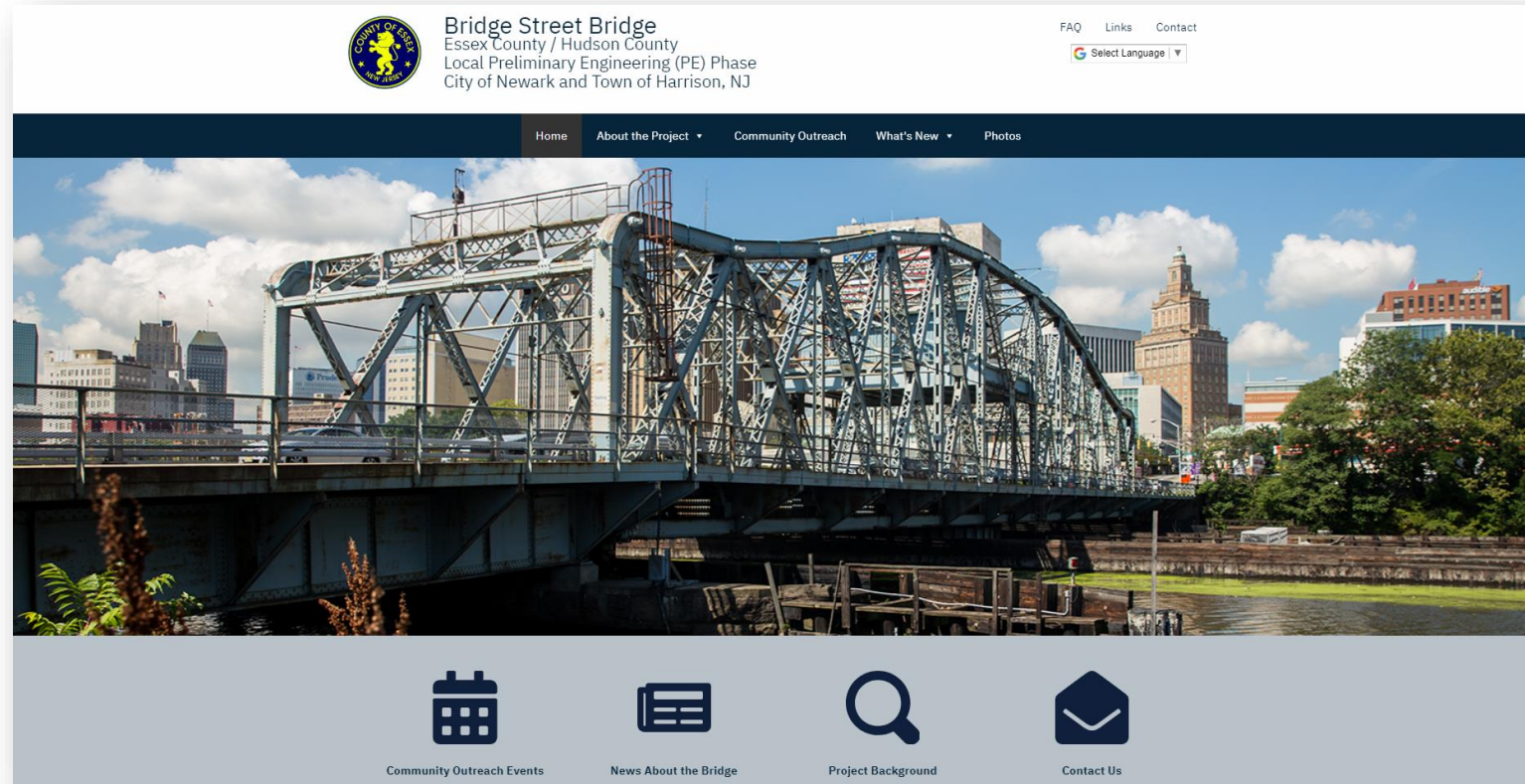
Bridge Replacement Rendering



Project Details

Community Involvement

- Visit **www.bridgestreetbridge.com** to stay up to date with the latest developments and submit questions and comments to the project team



Next Steps

- Complete Preliminary Engineering – Fall 2024
- Final Design – Winter 2025 to Fall 2026 (anticipated)
- Construction – Winter 2027 (anticipated)

Q&A and Open Discussion

Thank you!

Rich Jackson, PE
Project Manager

re.jackson@modjeski.com
856-608-7400 x17302



For Additional Information

Please visit the project website:

www.bridgestreetbridge.com

