



COUNTY OF BERGEN AND COUNTY OF ESSEX

Kingsland Avenue (Avondale and De Jessa Memorial) Bridge over the Passaic River

TOWNSHIPS OF LYNDHURST AND NUTLEY, NJ

LOCAL PRELIMINARY ENGINEERING PHASE – PUBLIC INFORMATION CENTER

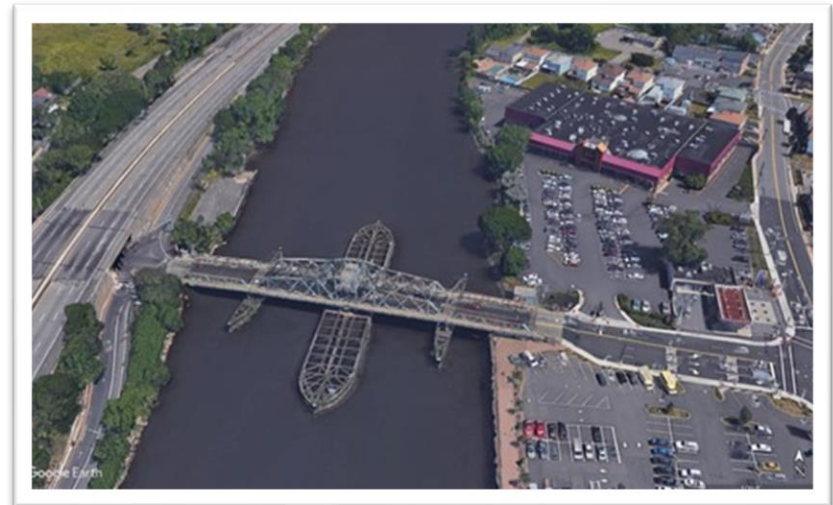
FEBRUARY 8, 2024

Online Meeting Guidelines

- Please keep all phones/mics on mute and cameras off during the presentation.
- If possible, please submit questions in the Chat Box feature, located in upper margin, at any time during the presentation.
- During Q&A after the presentation, questions and comments will be read aloud in order of receipt in the Chat Box and a Project Team member will respond.
- If time allows after all Chat Box comments are addressed, participants can use the Raise Hand feature, and unmute themselves if they wish to ask a question.
- Q&A will end around 7:55 pm for closing remarks.
- The meeting will officially close at 8:00 pm.
- This public meeting is being recorded and will post to the project website.

Public Meeting Presentation Agenda

- Welcome and Introductions
- Project Location and Overview
- Local Preliminary Engineering Phase - Bridge Replacement Design
- Environmental and Cultural Resources
- Community Involvement and Public Outreach
- Question and Answer Session
- Next Steps
- Closing Remarks



Project Team

Bergen County Department of Planning & Engineering

- Joseph A. Femia, P.E., *Department Director / County Engineer*
- Joseph Baladi, P.E., P.P., C.M.E., *Division Head-Planning (Bergen County Project Manager)*
- Martin Maver, P.E., *Principal Engineer-Bridges*
- Adam Camerlengo, E.I.T., *Assistant Engineer*

Essex County Division of Engineering

- Sanjeev Varghese, P.E., P.P., *Public Works Director / County Engineer*
- Luis E. Rodriguez, *Assistant County Engineer*
- Andres F. Gomez-Ortiz, P.E., *Principal Engineer*

New Jersey Department of Transportation (NJDOT)

- Nabil Ayoub, *Supervising Engineer, Local Aid District 2*
- Paul Miranda, *Project Manager, Local Aid District 2*
- Sean Warren, *Section Chief, Bureau of Environmental Program Resources*
- Sean Ream, *Environmental Project Manager, Bureau of Environmental Program Resources*

North Jersey Transportation Planning Authority (NJTPA)

- Sascha Frimpong, *NJTPA Director Local Programs*
- Richard Brundage, *NJTPA Project Manager*

Hardesty & Hanover Team

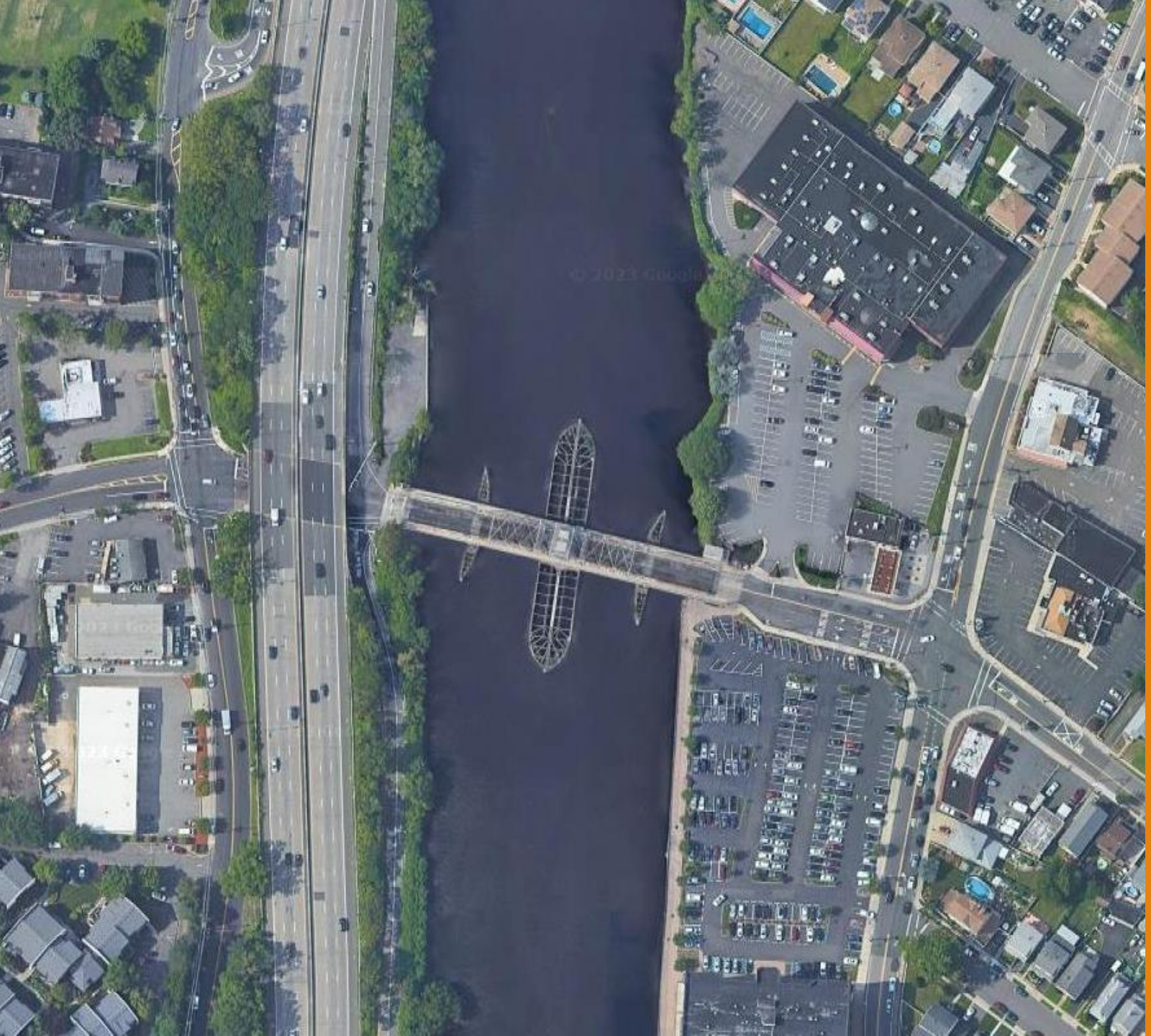
- Glen Schetelich, P.E., *Principal in Charge, Hardesty & Hanover*
- Bruce Riegel, P.E., *Project Manager, Hardesty & Hanover*
- Brian Medino, P.E., *Deputy Project Manager, Hardesty & Hanover*
- Matt Witkowski, P.E., *Traffic Engineer, Hardesty & Hanover*
- Sue Quackenbush, PWS, *Environmental Specialist, Davey Resource Group*
- Lynn Alpert, *Principal Senior Architectural Historian, Richard Grubb & Associates, Inc.*
- Martine Culbertson, *Community Involvement Facilitator, M.A. Culbertson, LLC*



Project Overview and Background

- Bridge Built in 1905
- Spans the Passaic River connecting Townships of Lyndhurst and Nutley
- Under jurisdiction of and maintained by Bergen and Essex Counties
- NJTPA Local Concept Development (LCD) Study completed in June 2020
- Local Preliminary Engineering commenced in August 2022
- Federally funded



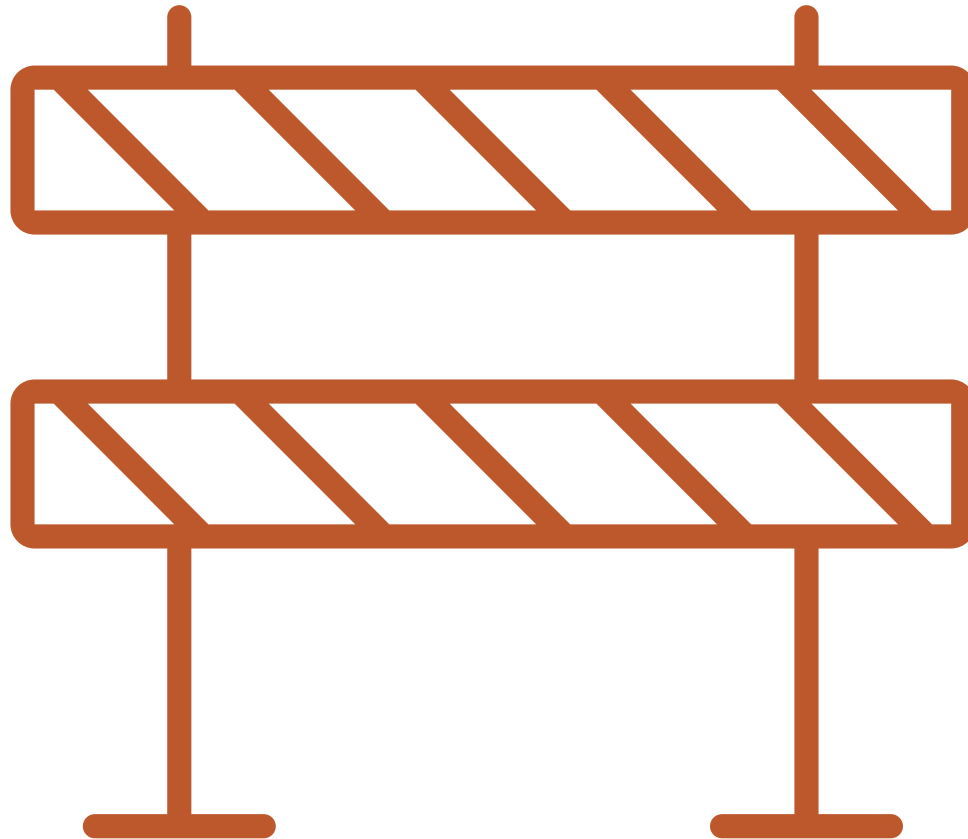


Project Location



Challenges and Limitations





Existing
Conditions

Kingsland Avenue Bridge | Facts and Figures

- Overall Length: 364 Feet
- 4 Spans: 2-span Riveted Warren Through-truss Rim-bearing Swing Center Span (204 Feet); West & East Approaches Steel Through Pony Truss Spans (80 Feet)
- Bridge Roadway Width: 29 Feet, 3 Inches
- 6-foot-wide Cantilevered Sidewalk on Both Sides
- No Shoulders on Bridge
- ADT = 20,808 (2016)
- Bridge Navigational Vertical Clearance
 - Vertical (Closed): 7 feet (at MHW)
 - Horizontal: 65 feet



Kingsland Avenue Bridge – Existing Condition

- 2020 Bridge Re-evaluation Survey Report
 - Poor overall condition
 - Structurally deficient
- Sufficiency Rating = 34.1 (2020)
- Superstructure
 - Poor condition, Rating = 4 (severe corrosion and/or loss of section of below deck truss members, gusset plates, floor beams, and stringers)
- Substructure
 - Satisfactory condition, Rating = 6
- Substandard bridge railings





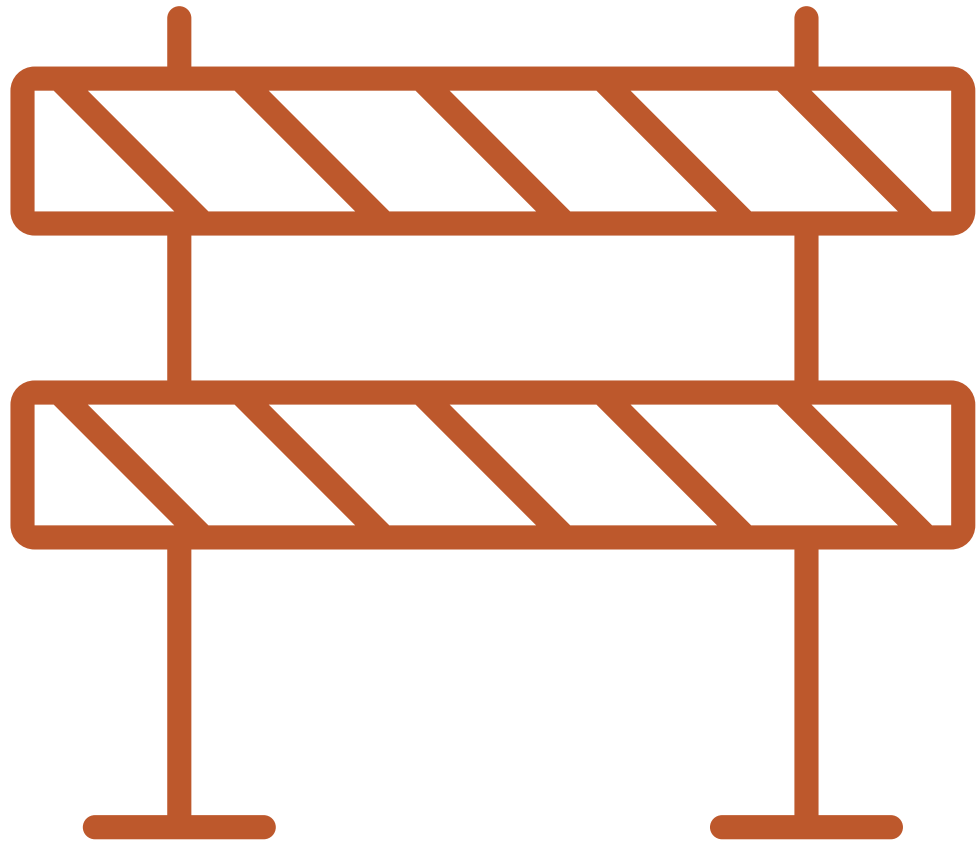
Passaic River Waterway Navigational Channel

Kingsland Avenue Bridge over the Passaic River: Navigation Impact Report

- Channel usage
 - Predominantly recreational (R.M. 2.2 – 13.2)
- 16 Feet* minimum vertical clearance above MHW required
 - Vicinity of Kingsland Avenue Bridge (Passaic Valley Sewerage Commission skimmer vessel)
 - *12 feet with mitigation
 - United States Coast Guard, July 10, 2019 letter
- Maintain one 75-foot channel for future navigation
 - USCG, October 3, 2019 e-mail



Looking North



Purpose & Need

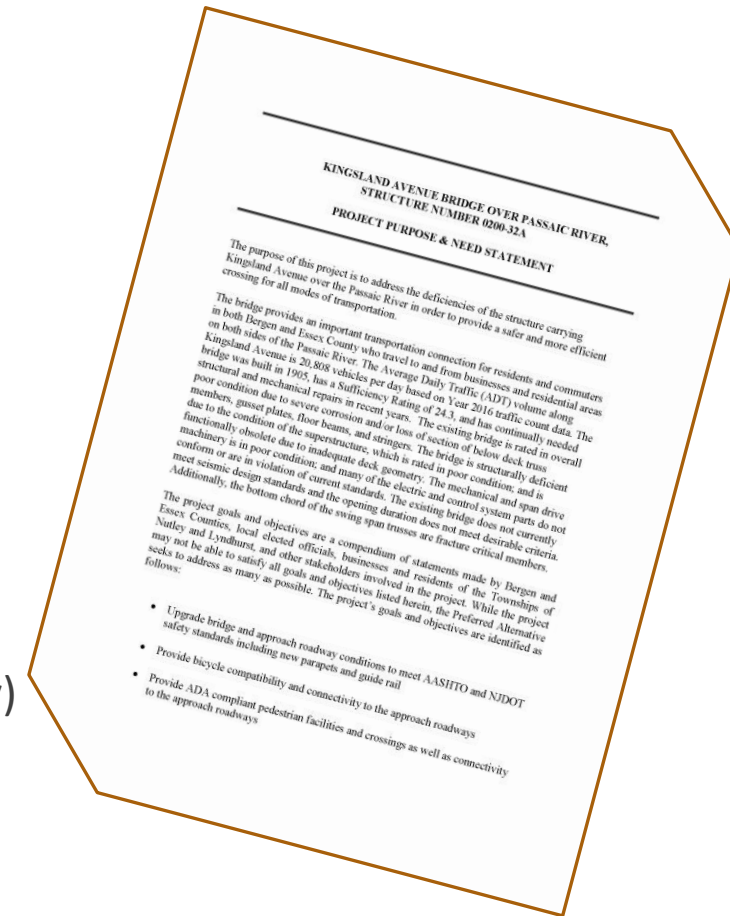
Purpose & Need Statement

■ Purpose

- Address deficiencies to provide safer and more efficient crossing

■ Need

- Critical transportation connection for residents and commuters
- Bridge Condition
 - Overall poor condition
 - Sufficiency rating of 34.1
 - Structurally deficient and functionally obsolete (inadequate deck geometry)
 - Mechanical span drive machinery - poor condition
 - Bottom chords of steel truss are fracture critical members



Goals & Objectives

- Provide Bicycle Compatibility & Connectivity to Approach Roadways
- Provide ADA-compliant Pedestrian Facilities, Crossings & Connectivity to Approach Roadways
- Upgrade Bridge & Approach Roadway Conditions to Meet AASHTO & NJDOT Safety Standards including New Parapets & Guide Rail
- Correct Controlling Substandard Design Elements (CSDE)
- Avoid or Minimize Social, Economic, & Environmental Impacts
- Reduce Frequency of Major Bridge Maintenance Activities that Disrupt Traffic
- Maintain Traffic Operations & Volume with Minimal Disruption & Delay during Construction

Goals & Objectives

- Maintain Pedestrian & Vehicular Access to Properties during Construction & Minimize Detours
- Provide Accommodations for Current & Future Users of the Passaic River
- Address High Rate of Vehicular Crashes at the intersections of Kingsland Avenue & Riverside Avenue and Park Avenue & River Road
- Address Traffic Signals Operating at Peak Hour Congestion at all Approach Roadway Intersections



Local
Preliminary
Engineering

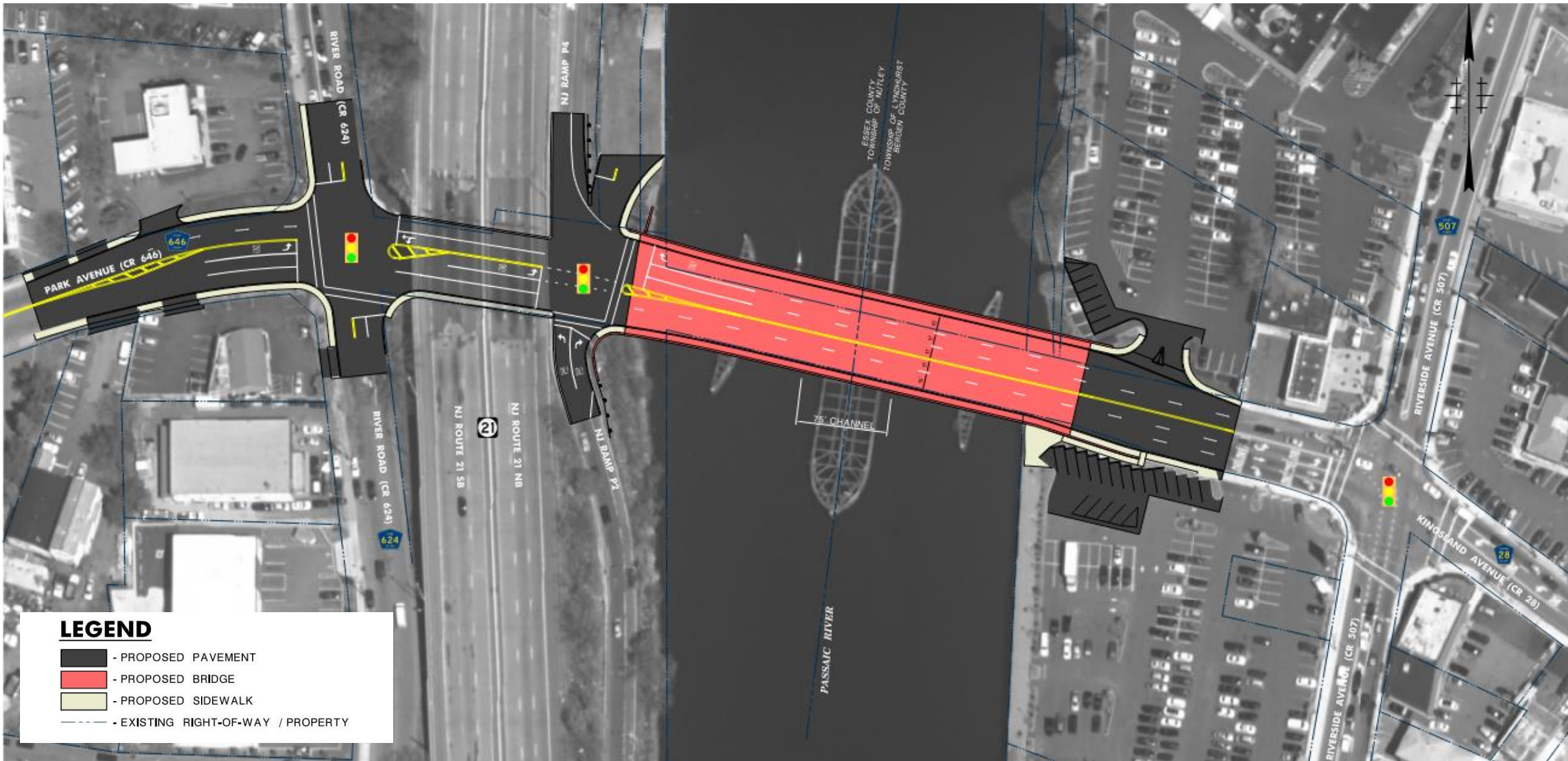
Bridge
Replacement
Design

Local Capital Project Delivery Process

Local Concept Development <i>Completed June 2020</i>	Local Preliminary Engineering <i>Anticipated Completion Spring 2024</i>	Final Design / Right of Way Acquisition <i>Anticipated Summer 2024-Summer 2026</i>	Construction <i>Anticipated Fall 2026-Spring 2028</i>
Purpose and Need Statement	Determine Access & Right of Way Impacts	Construction Contract Documents and PS&E package	Implement Construction
Data Collection and Environmental Screening Report	Cost Estimates (Final Design, ROW & Construction)	Environmental Reevaluations	Create As-Built
Selection of Preliminary Preferred Alternative	Complete Environmental Documentation	Secure Environmental Permits	Update and Finalize Design Communications Report
NEPA Classification	Establish Project Footprint and Complete Preliminary Design	Acquisition of ROW	Close-out Documentation
Concept Development Report	Preliminary Engineering Plans & Report	Final Utility Relocation Schemes	Continue Public Outreach & Involvement
Initiate Public Outreach & Involvement	Continue Public Outreach & Involvement	Continue Public Outreach & Involvement	

Local Preliminary Engineering Phase – Work Effort

- Development of design level base plans
- Geotechnical studies for foundation and pavement design
- Structural studies that document the structural selection process and the recommended structure and aesthetic treatments
- Utility discovery and verification
- Environmental studies (including Section 106 and Section 4(f) evaluation)
- NEPA document (Categorical Exclusion)
- Preliminary drainage work
- Access and Right of Way impact evaluation
- Development of project cost estimates

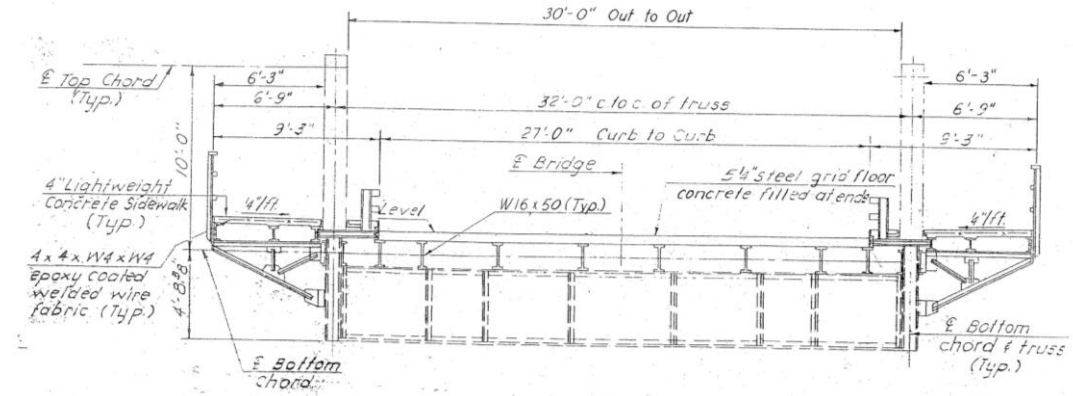


Kingsland Avenue Bridge

Bridge Replacement & Intersection Improvements

- New fixed bridge
 - Width = approx. 78 feet
 - Additional westbound lane - justified by traffic analysis
 - 15-foot outside lane (bicycle compatibility)
 - 6-foot sidewalks, both sides
- Intersection improvements at all three intersections
 - ADA-compliant curb ramps
 - Pedestrian countdown heads and pushbuttons, crosswalks & traffic calming elements to address pedestrian safety
- Requires mitigation
 - PVSC vessel needing less than 12-ft vertical clearance to perform river skimming program

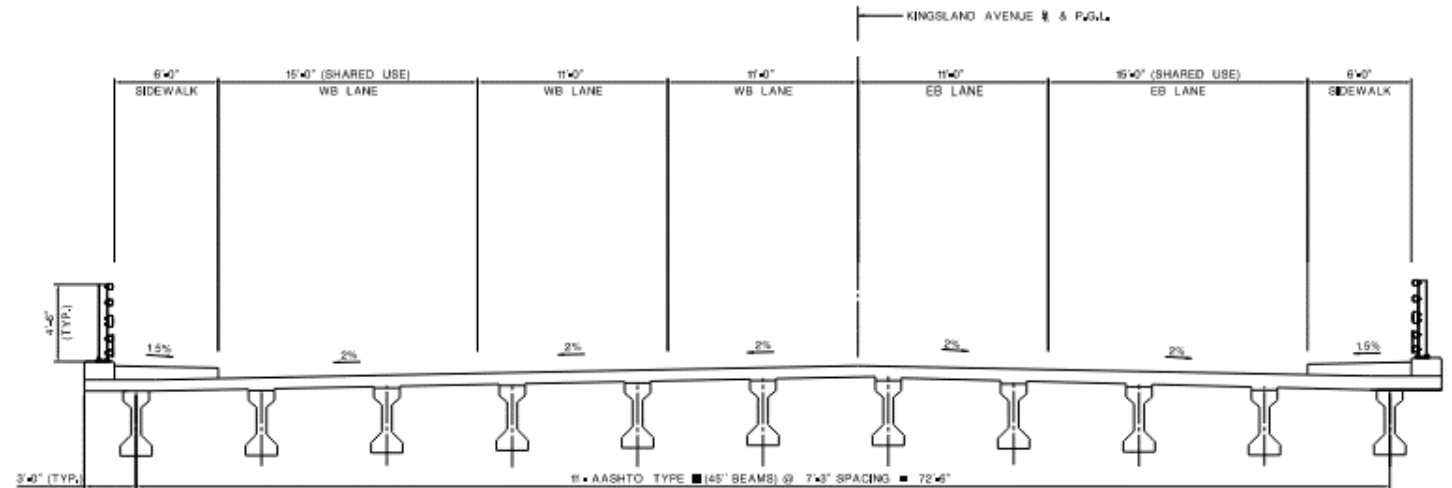
Existing Bridge Section



KINGSLAND AVENUE BRIDGE

(LOOKING EAST)

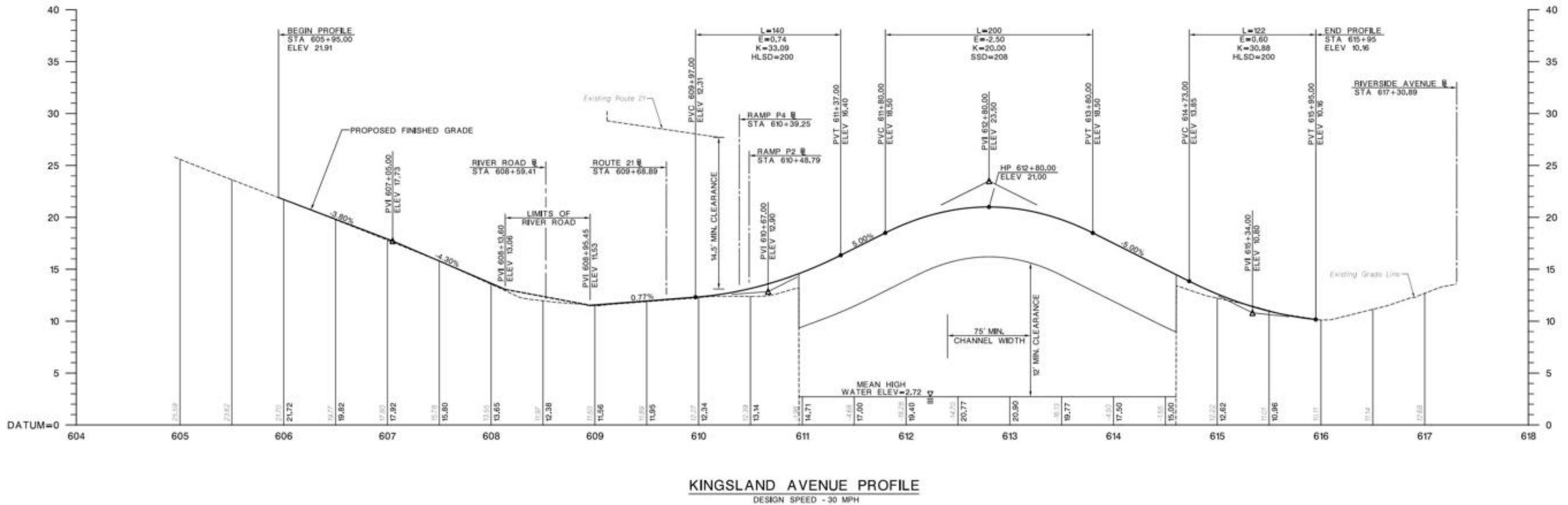
Proposed Bridge Section



KINGSLAND AVENUE - BRIDGE SECTION CONCRETE BEAM OPTION

(LOOKING EAST)

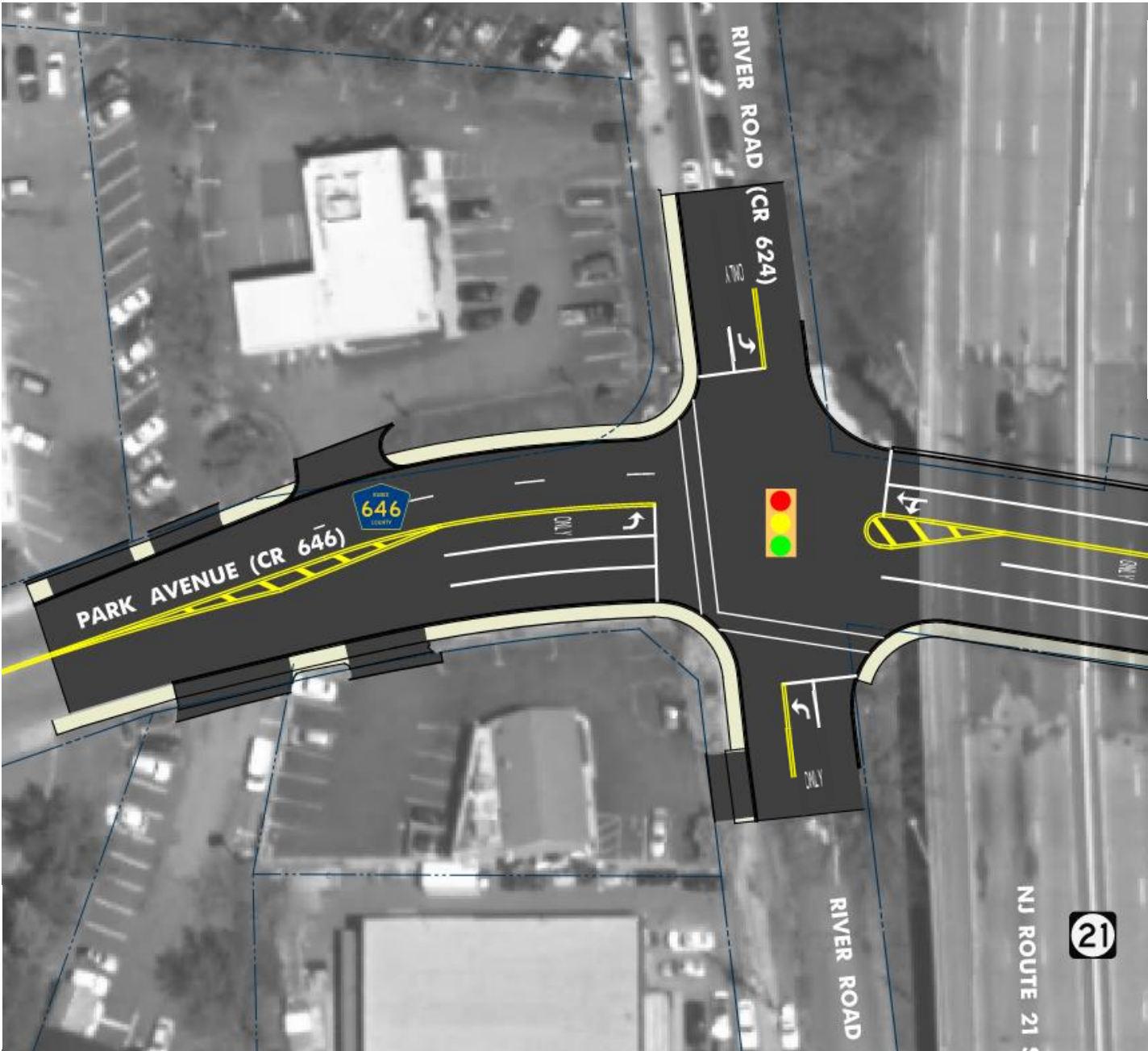
Kingsland Avenue Bridge Profile



Park Avenue & River Road

LEGEND

- PROPOSED PAVEMENT
- PROPOSED BRIDGE
- PROPOSED SIDEWALK
- EXISTING RIGHT-OF-WAY / PROPERTY



Park Avenue & Route 21 Ramps

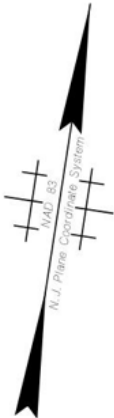
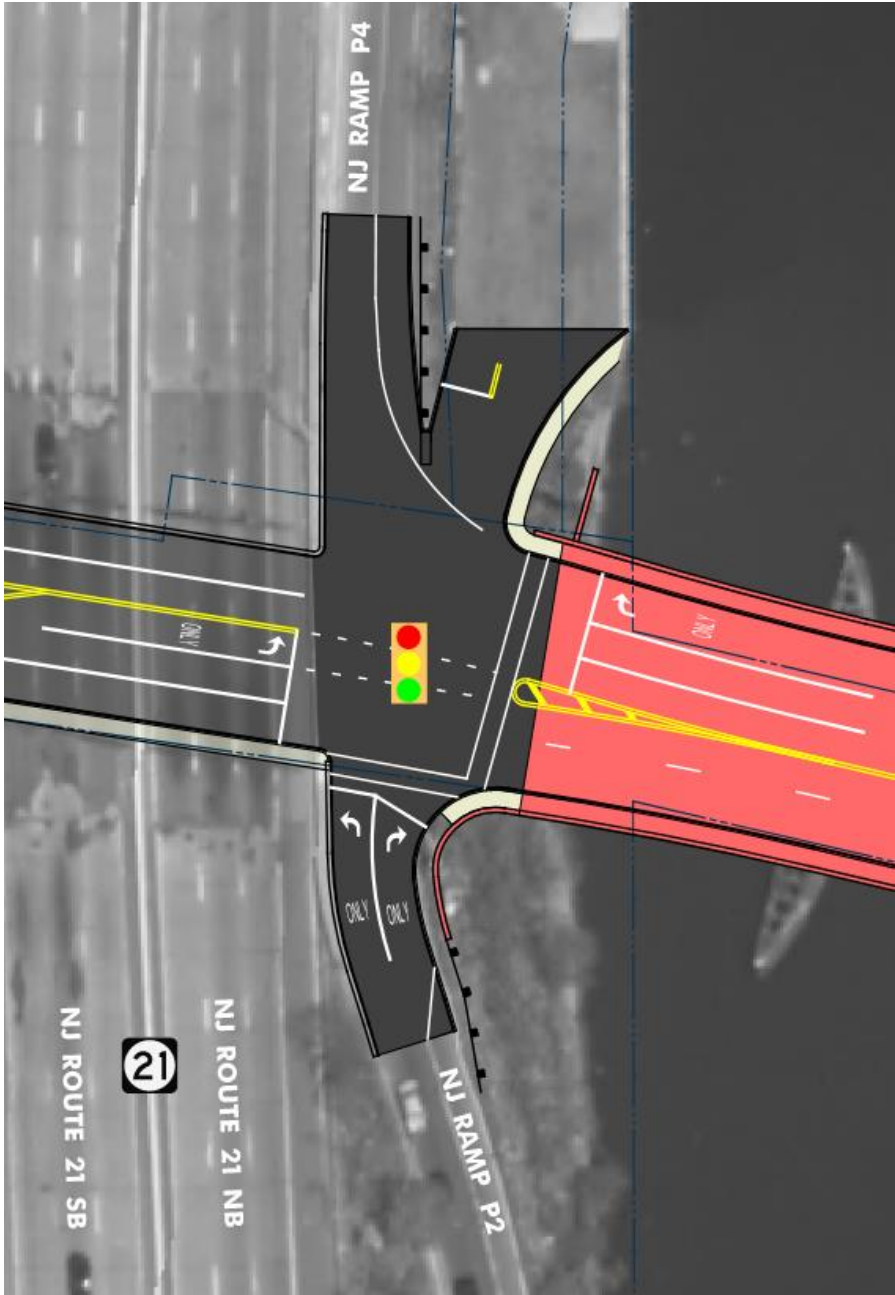
LEGEND

- PROPOSED PAVEMENT

- PROPOSED BRIDGE





- PROPOSED SIDEWALK

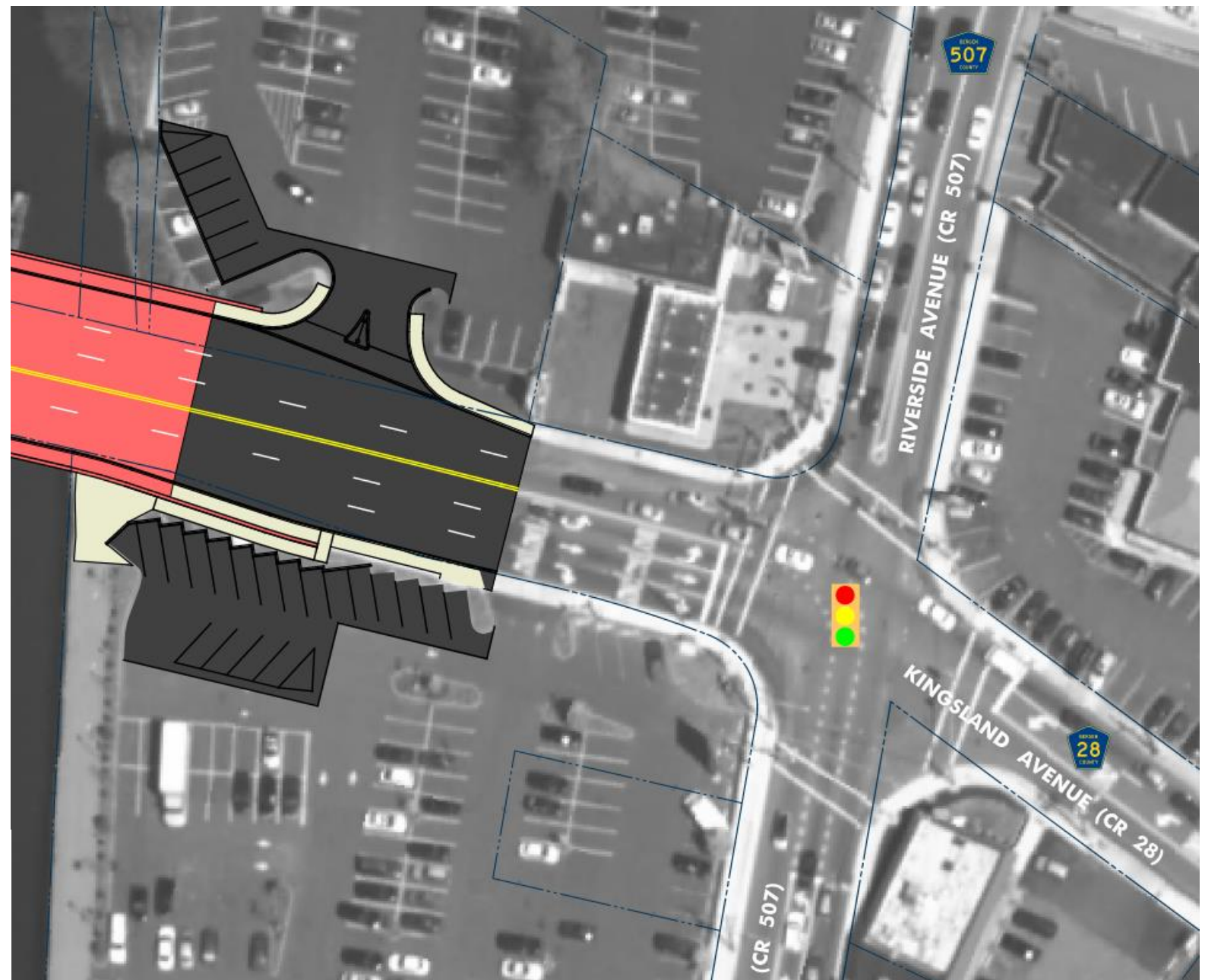
- EXISTING RIGHT-OF-WAY / PROPERTY



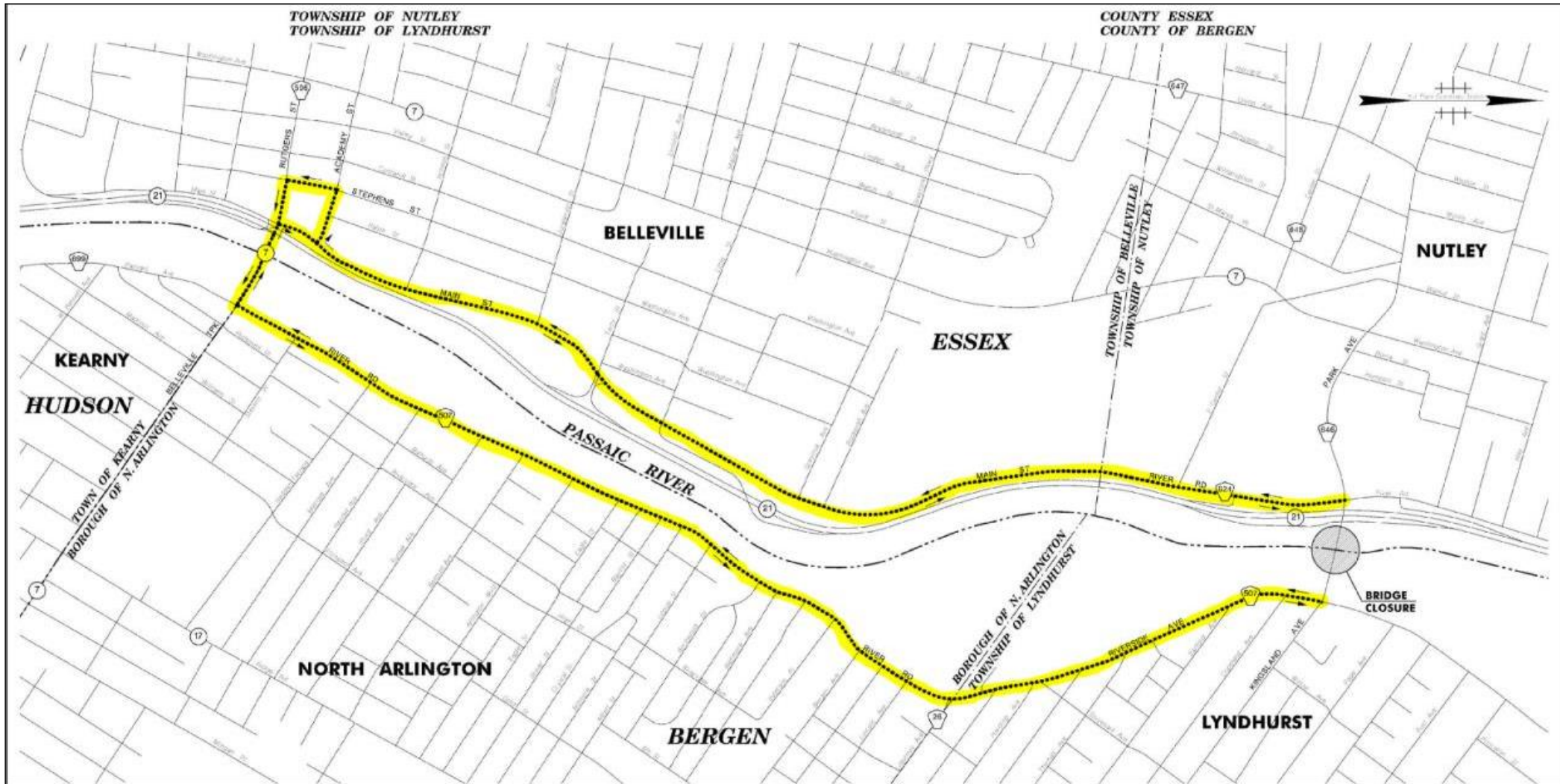
Kingsland Avenue & Riverside Avenue

LEGEND

-  - PROPOSED PAVEMENT
-  - PROPOSED BRIDGE
-  - PROPOSED SIDEWALK
-  - EXISTING RIGHT-OF-WAY / PROPERTY



Proposed Detour Route Map

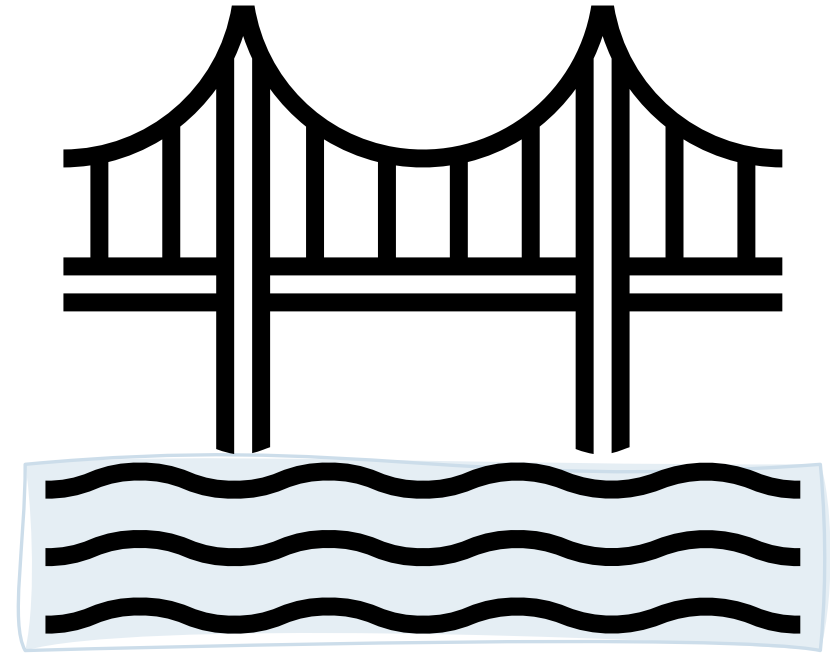


Proposed Detour Route Overview

- Existing bridge will be closed during construction of the new bridge
- Detour route examined during LCD is south through North Arlington and Belleville to Route 7 utilizing the Belleville Turnpike Bridge
- Optional route to the north utilizing Route 3 and 21 is being evaluated
- Estimated duration of proposed detour is 18 months
- Provisions/accommodations for pedestrians and bicyclists during bridge closure will be determined

Bridge Replacement Considerations

- New Fixed Bridge
 - Width = approx. 78 ft
 - Length = approx. 388 ft
 - 12-ft vertical clearance / 75-ft horizontal clearance over the navigation channel
 - Limited structure depth due to profile constraints (5ft max.)
 - Channel span centered over the waterway to meet clearances
 - Provide preferred clearance for Passaic River Rowing Association (PRRA)
 - Marine environment corrosion considerations / Future maintenance
 - Low freeboard
 - 3-Span and 5-Span (recommended) layouts



Bridge Replacement Layouts

■ 3-Span Layout

- Shallow shorter center span / longer deeper approach spans
- Low freeboard due to deeper approach span beams
- Non-continuous – 3 simple spans – deck joints required
- Two less piers results in some cost and schedule reductions
- More suitable for steel superstructure

■ 5-Span Layout - Recommended

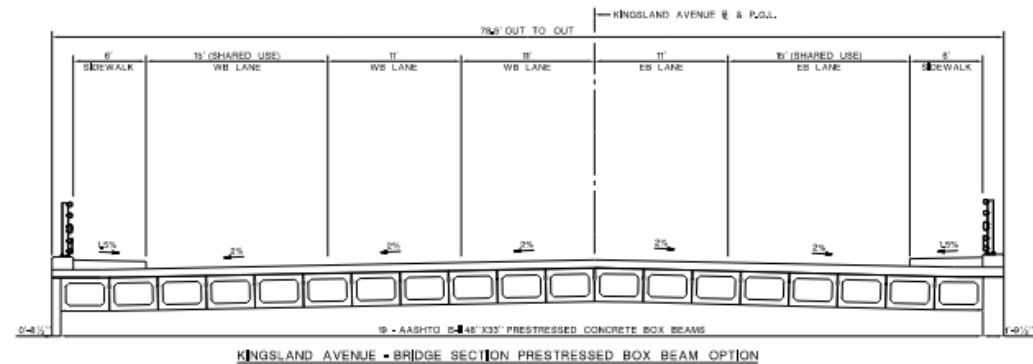
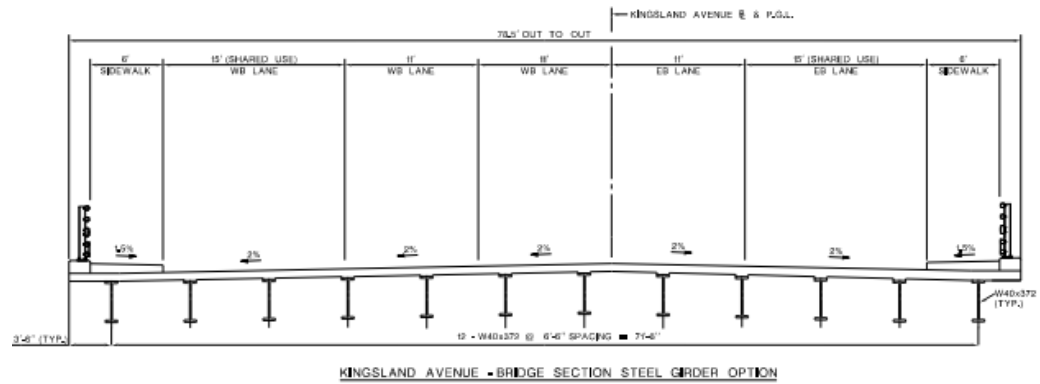
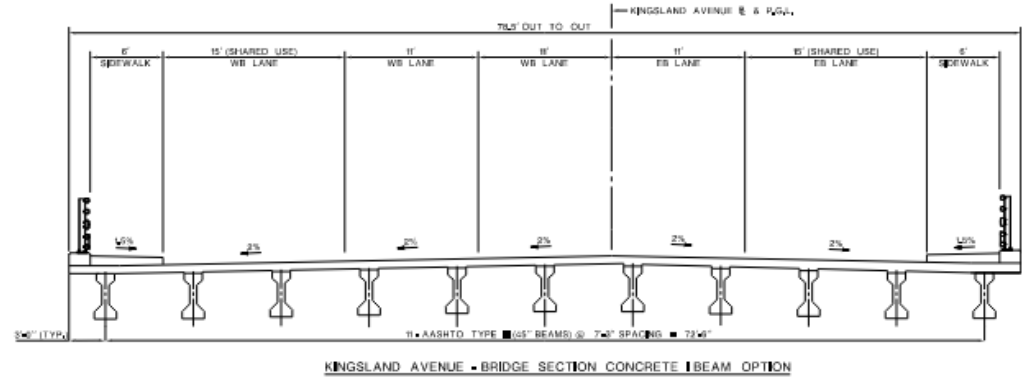
- Longer center span / shorter approach spans
- All beams of the same type
- Increased freeboard at approaches
- 5 span continuous deck – joints at abutments only
- Requires two additional piers
- More suitable for prestressed concrete superstructure

Prestressed Concrete I-Beams

Types of Bridge Beam

Steel I-Beams

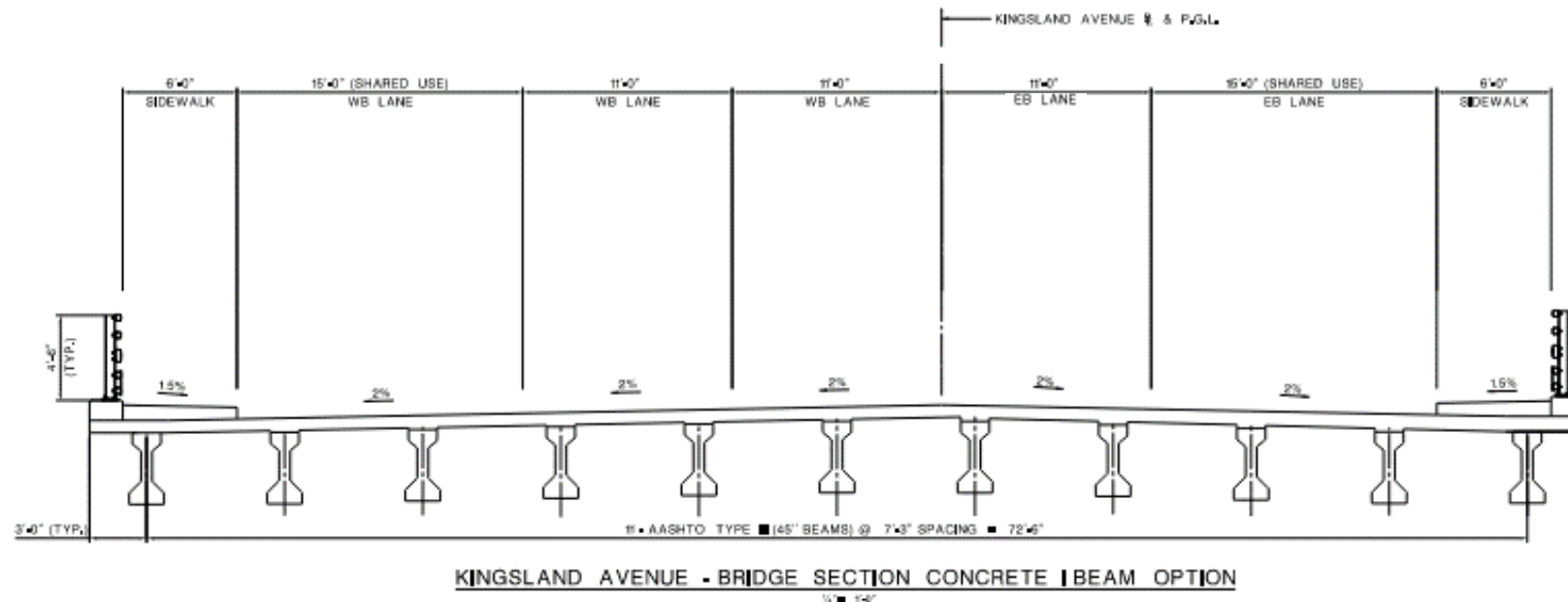
Prestressed Concrete Box Beams



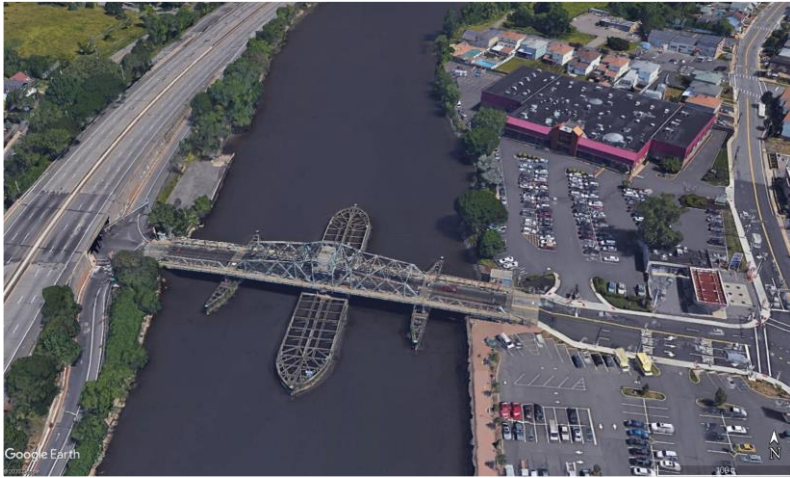
Bridge Structure Type Recommendation

- Prestressed Concrete I-Beams

- Prestressed concrete less costly than steel
- More cost effective than prestressed concrete box beams
- Minimum risk of corrosion vs steel beams
- No painting compared to steel
- Reduced maintenance and life-cycle cost compared to steel



Kingsland Avenue Bridge Conceptual Rendering - Aerial



Kingsland Avenue Bridge Conceptual Rendering – River View





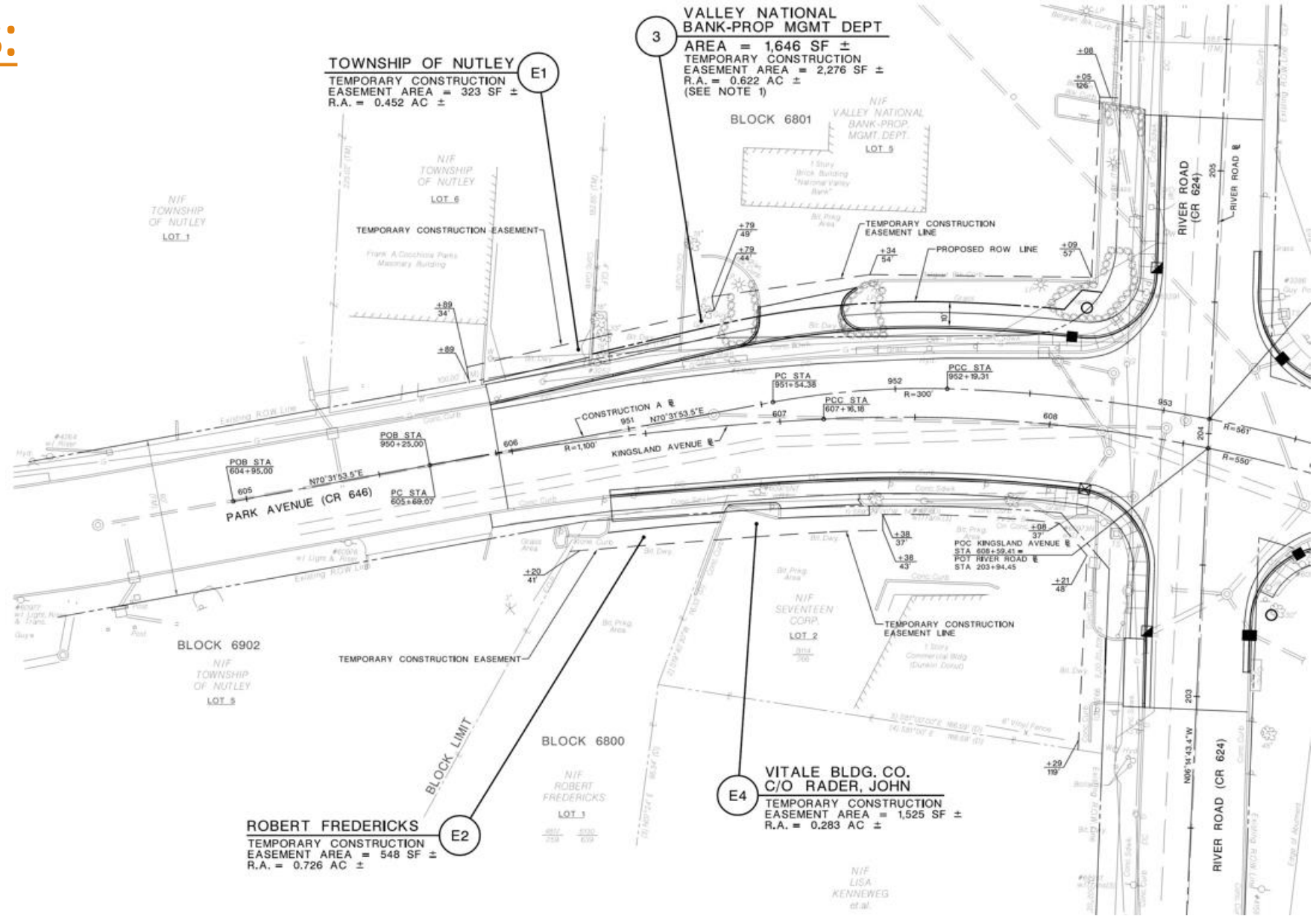
Right of Way & Access Impacts

Overview of Impacted Properties



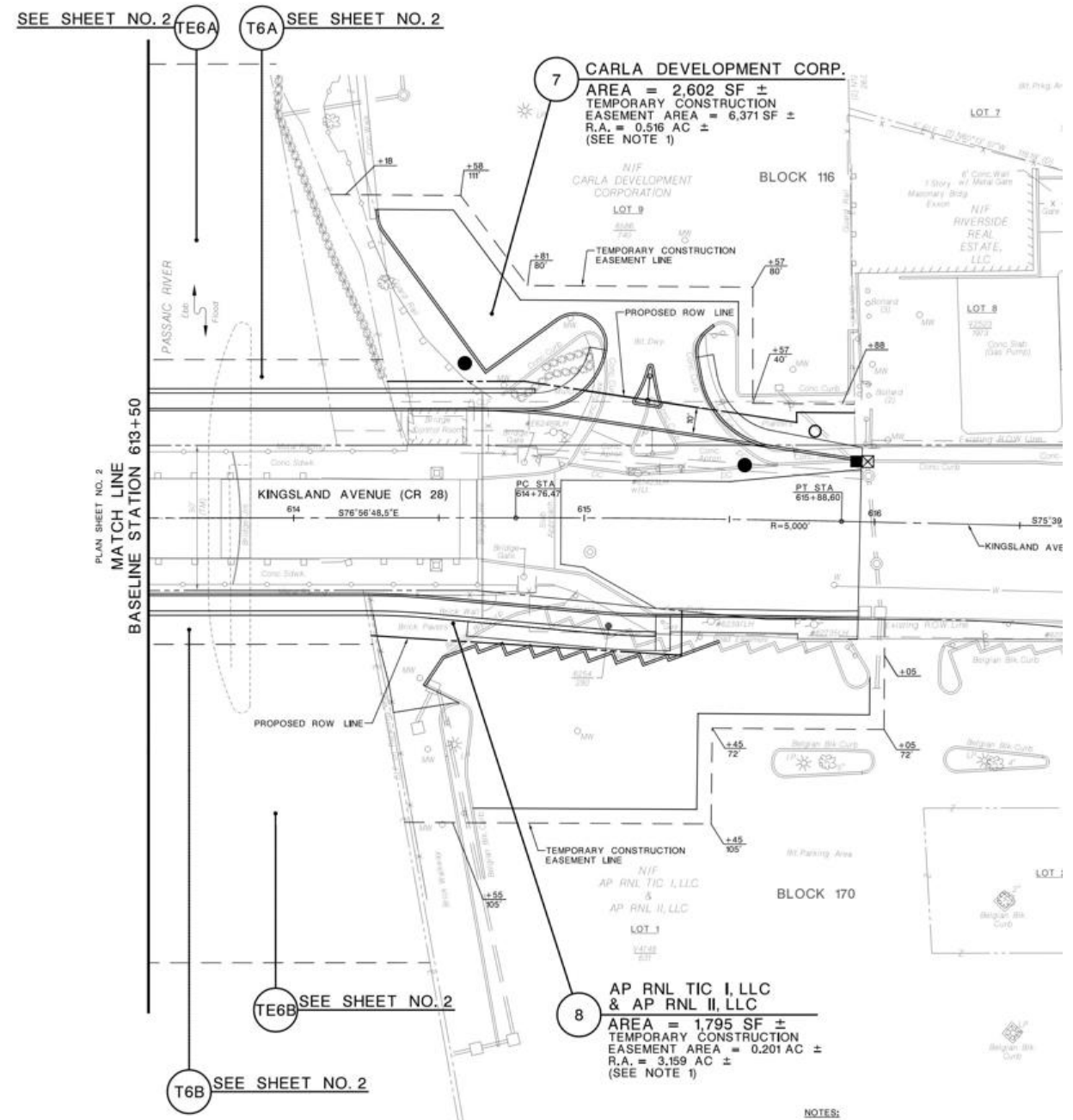
Right of Way Impacts: Nutley Township, Essex County

- Block 6800, Lot 1
- Block 6800, Lot 2
- Block 6801, Lot 5
- Block 6801, Lot 6



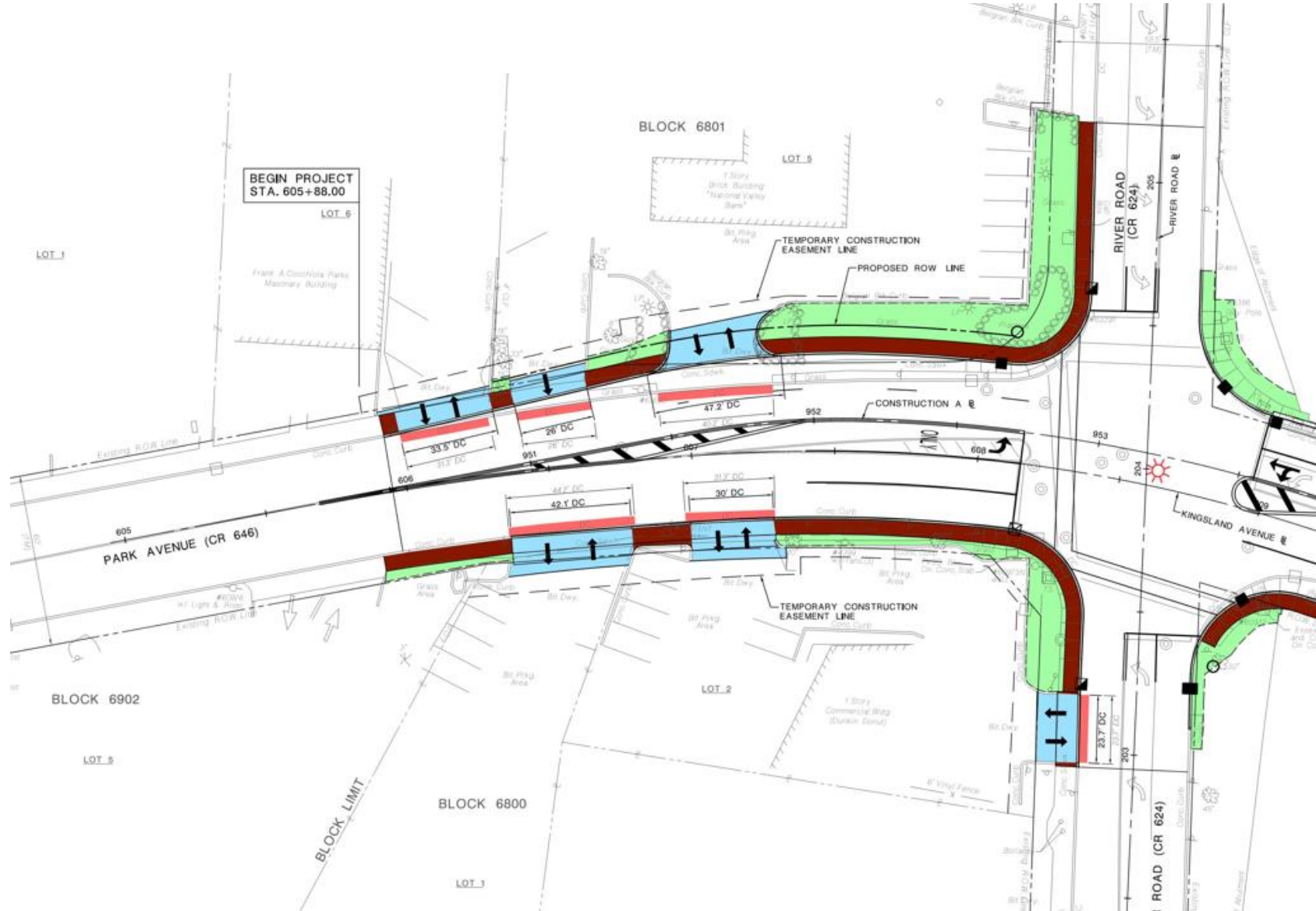
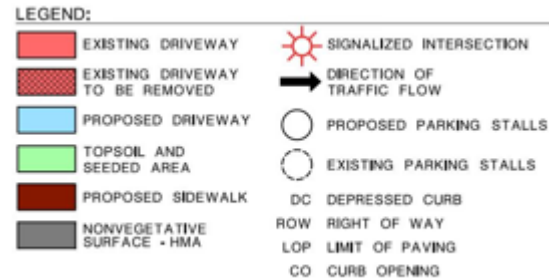
Right of Way Impacts : Lyndhurst Township, Bergen County

- Block 116, Lot 9
- Block 170, Lot 1
- NOTE: Tidelands License Areas & Riparian Grant Areas will be necessary in both Bergen & Essex Counties



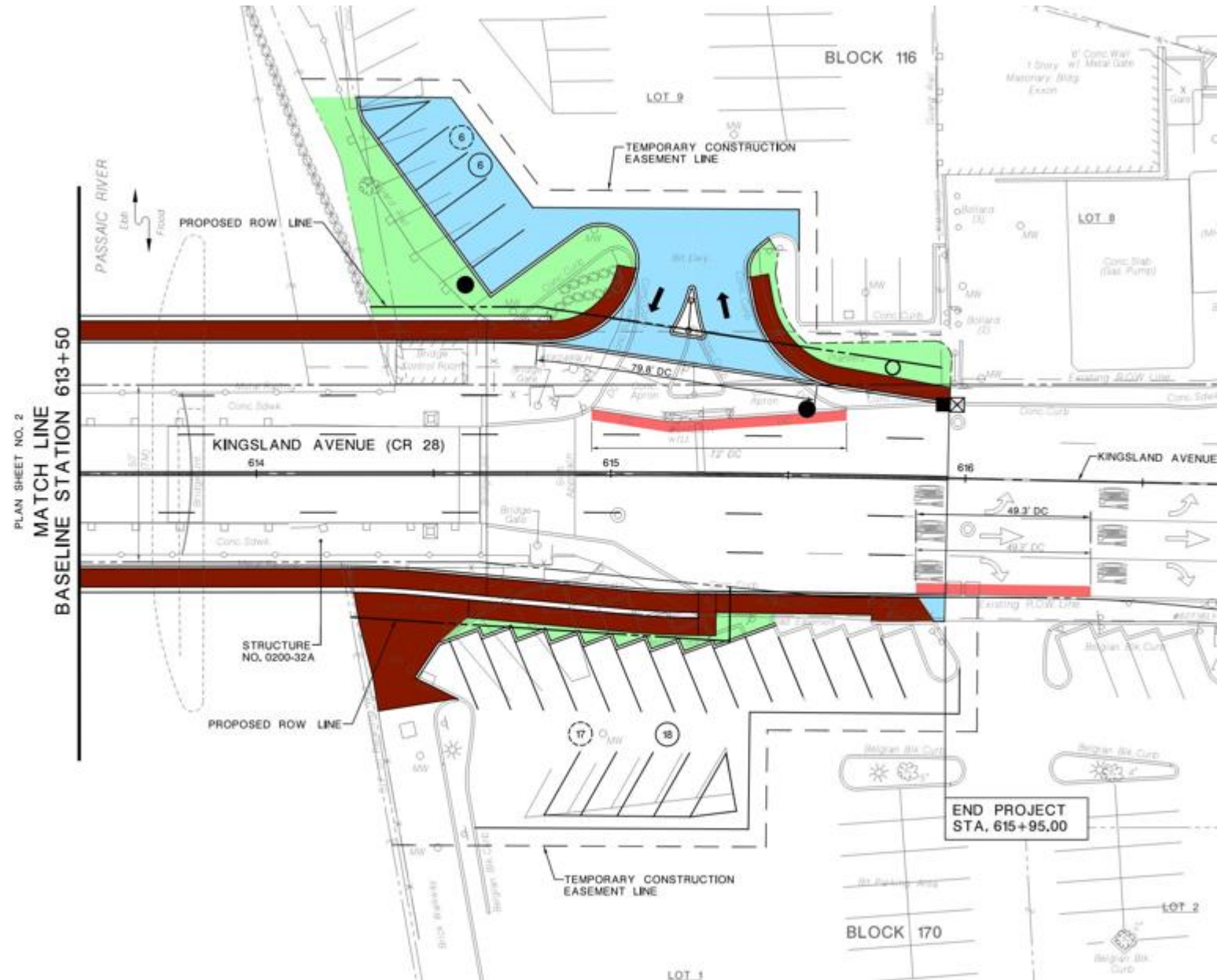
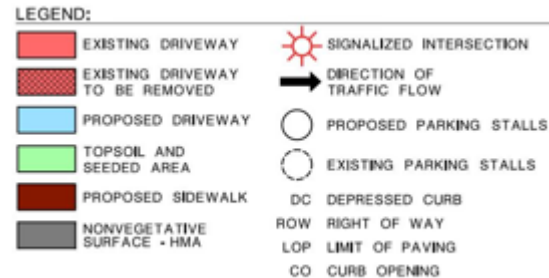
Access Impacts: Nutley Township, Essex County

- Impacts to six (6) existing driveways
- Parking stalls & circulation not affected by driveway/access improvements



Access Impacts: Lyndhurst Township, Bergen County

- Impacts to two (2) existing driveways
- Proposed parking stall count is equal to or greater than existing condition





Environmental and Cultural Resources

NEPA – Categorical Exclusion Document

Environmental Considerations:

- A. Noise
- B. Air Quality
- C. Potential Ecological Constraints
- D. Anticipated Environmental Permits/Approvals/Coordination
- E. Cultural Resources
- F. Section 4(f) Involvement
- G. Hazardous Materials and Landfills
- H. Socioeconomics
- I. Environmental Justice
- J. Public Reaction
- K. Environmental Commitments

Potential Ecological Constraints



Legend

- Project Area
- Streams with Water Quality
- 50-foot Riparian Buffer Zone Boundary
- 100-year FEMA Floodplain
- Tidelands



Sources:
GIS Coverages for the State of New Jersey, New Jersey Department of Environmental Protection (NJDEP), Office of Information Resources Management, Bureau of Geographic Information Systems, 2023.
Federal Emergency Management Agency (FEMA) County Flood Hazard Layer, a compilation of all Digital Flood Insurance Rate Map (DFIRM) databases for Bergen & Essex Counties, NJ, distributed by FEMA Map Service Center, Washington, DC, August 2019 and April 2020 with the latest LOMR date of September 2020.
New Jersey 2020 High Resolution Orthophotography, NAD83 NJ State Plane Feet, MrSID MG3 Tiles, State of New Jersey Office of Information Technology, Office of Geographic Information Systems (NJOGIS), Trenton, NJ, April 2021.
This (map/publication/report) was developed using New Jersey Department of Environmental Protection Geographic Information System digital data, but this secondary product has not been verified by NJDEP and is not State-authorized.

**Figure
Environmental Constraints Map**
Kingsland Avenue (De Jessa Memorial)
Bridge over Passaic River
Bridge Replacement Project
Lyhurst Township, Bergen County
and Nutley Township, Essex County
New Jersey

DRGNJ Project # 4837

150
Feet

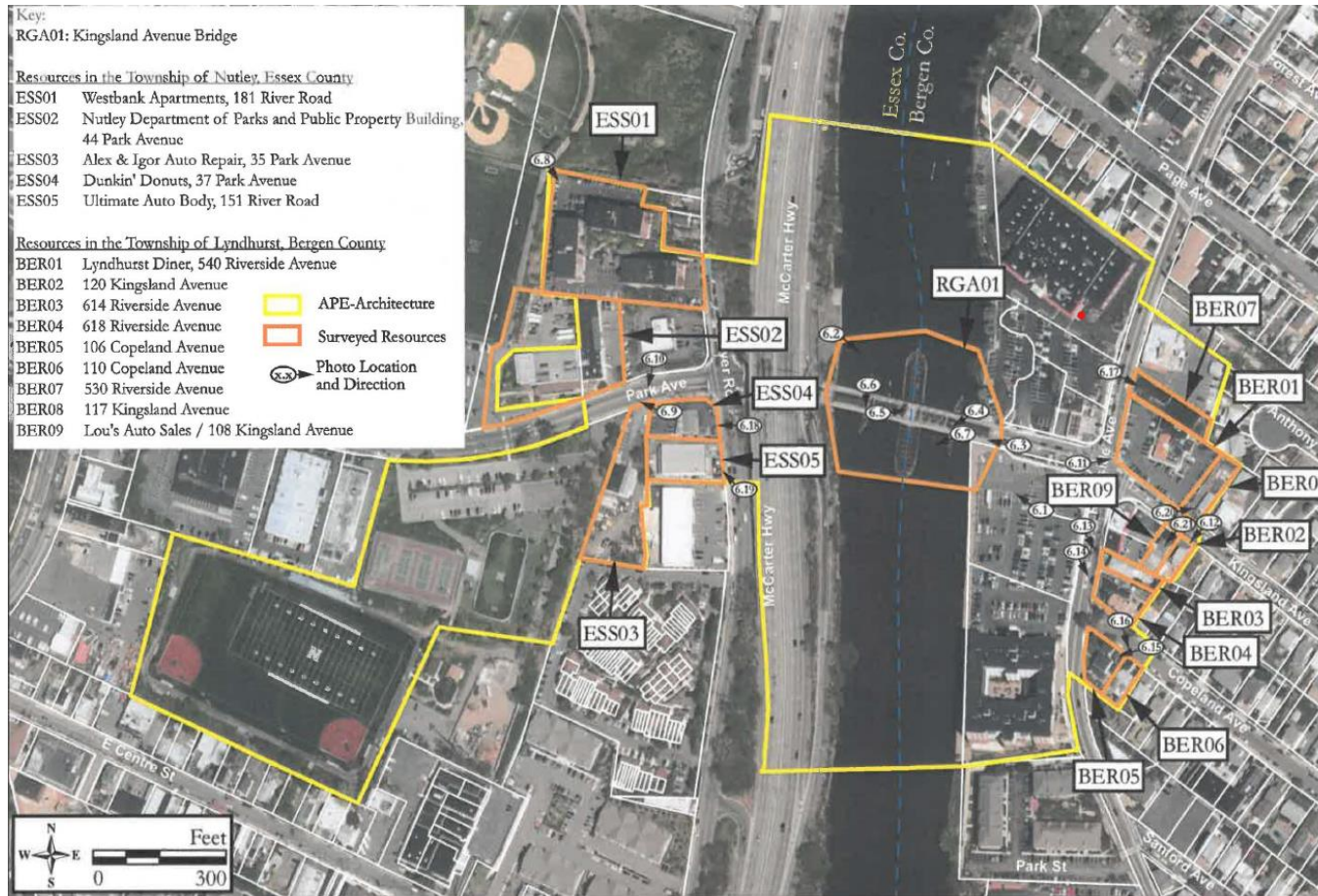


Anticipated Environmental Permits/Approvals/Coordination

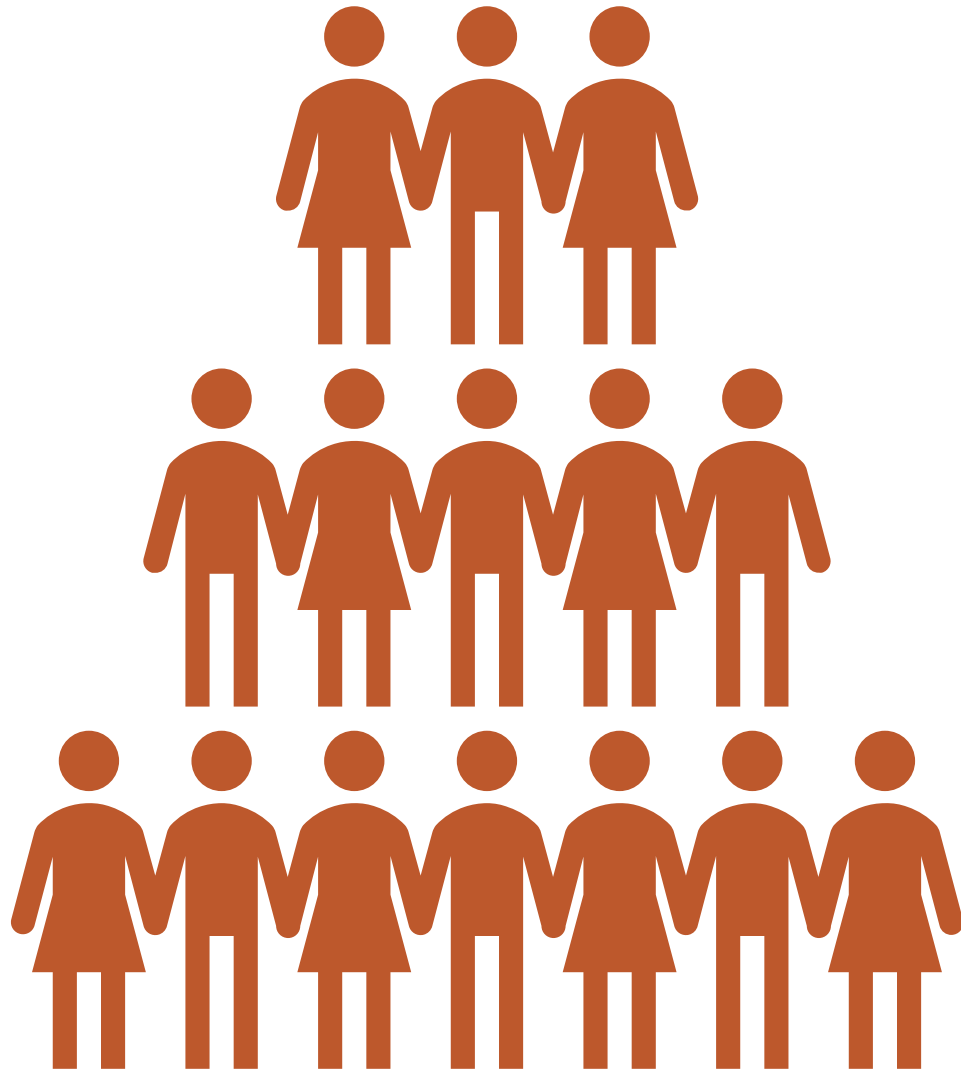
- ★ Soil Erosion & Sediment Control Plan Certification
- ★ NJDEP Waterfront Development Permit, including:
 - Section 401 Water Quality Certificate
 - NJ Flood Hazard Area Control Act Rule (NJAC 7:13) Compliance
 - NJ Stormwater Management Rule (NJAC 7:8) Compliance
 - USACE Section 10 and 404 Permits
 - US Coast Guard (33 CFR 115.50) Bridge Permit
 - NOAA NMFS ESA Section 7 Consultation (Sturgeon/Sea Turtles)
 - NOAA NMFS Magnuson – Stevens Act coordination (Essential Fish Habitat)

Cultural Resources

- Ongoing coordination with NJHPO for cultural resources



- Kingsland Avenue Bridge determined eligible for National Register of Historic Places (NRHP) as a type of swing bridge built by the New Jersey Bridge Company.
- Replacement will have adverse effect on NRHP-eligible bridge.
- In order to mitigate the adverse effect, recommended measures include interpretative signage and documentation of the structure to the standards of the Historic American Engineering Record.



Community Involvement & Public Outreach

Community Outreach Meetings – LCD Study Phase

- Local Officials Meetings (LOMt看g)
 - LOMtg No. 1 – Township of Nutley - July 25, 2016
 - LOMtg No. 1 – Township of Lyndhurst - July 27, 2016
 - LOMtg No. 2 – Twp. of Lyndhurst & Twp. of Nutley – October 29, 2019

- Community Stakeholders Meetings (CSMt看g)
 - CSMtg No. 1 – September 29, 2016
 - CSMtg No. 2 – April 26, 2017

- Public Information Center (PIC) Meetings
 - PIC Mtg. No. 1 – October 17, 2016
 - PIC Mtg. No. 2 – December 12, 2019



Community Involvement – LPE Phase

- Local Officials Meetings (LOMtgt)
 - LOMtgt No. 1 – Twp. of Lyndhurst & Twp. of Nutley - September 13, 2022
 - LOMtgt No. 2 – Twp. of Lyndhurst & Twp. of Nutley - November 30, 2023
- Community Stakeholders Meeting No. 1 – April 25, 2023
- Public Information Center (PIC)
PIC Meeting No. 1 – February 8, 2024

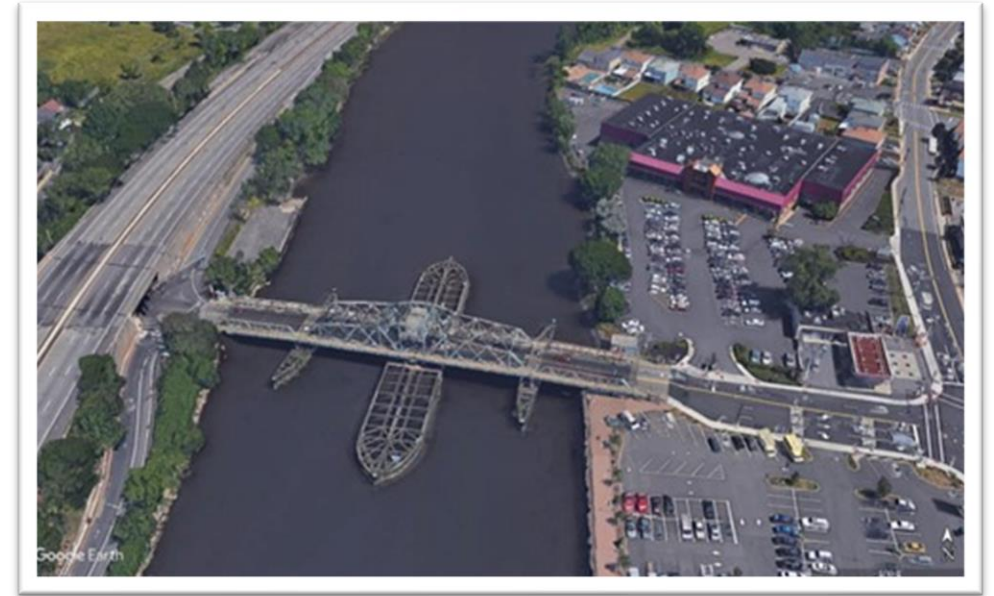
Project Website: www.kingslandavenuebridge.com

Email Address: kingslandavenuebridge@gmail.com



Question and Answer Session

- For questions, please use the Chat Box.
- **Official comments** must be submitted via the methods listed by **Friday, March 15, 2024** to be accepted as public record documentation.



Comments may be submitted via:

E-mail: kingslandavenuebridge@gmail.com

Online: www.kingslandavenuebridge.com

Mail: Joseph Baladi, P.E., P.P., C.M.E.
Division Head – Planning (Bergen County Project Manager)
One Bergen County Plaza, 4th Floor
Hackensack, NJ 07601

Fax: 201-336-6449

Next Steps

- PIC presentation and recording will be available to view on the project website: www.kingslandavenuebridge.com
- PIC Summary Meeting Report will post to website after 30-day public comment period ends 3/15/24.
- Preparation of Local Preliminary Engineering Report.
- Interagency Review Committee to Concur on Project Advancement to Final Design phase*.
- Visit Project Website for Updates: www.kingslandavenuebridge.com
- For questions and comments, please send to: kingslandavenuebridge@gmail.com

**contingent upon funding availability*



Thank You!

For information:

www.kingslandavenuebridge.com

To submit questions or comments:

kingslandavenuebridge@gmail.com

Contact Information

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