

Route 495, Route 1&9 /
Paterson Plank Road Bridge
Township of North Bergen, Town of Secaucus, and
Union City, Hudson County

PRE-BID MEETING

April 28, 2017











NJDOT Engineering & Operations Building
Training Room A

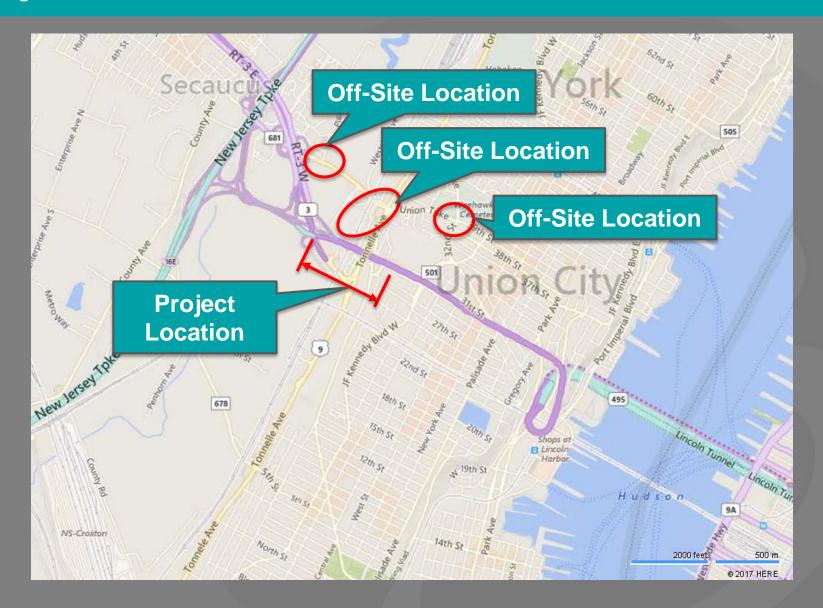
Agenda

- Introductions
- Project Location
- Construction Schedule
- Contract Provisions of Note
- Structural Scope
- Approach Roadway Scope
- Maintenance and Protection of Traffic (MPT)
- Off-Site Work
- Agency Coordination
- Public Outreach
- Environmental Considerations
- Advance ITS Project





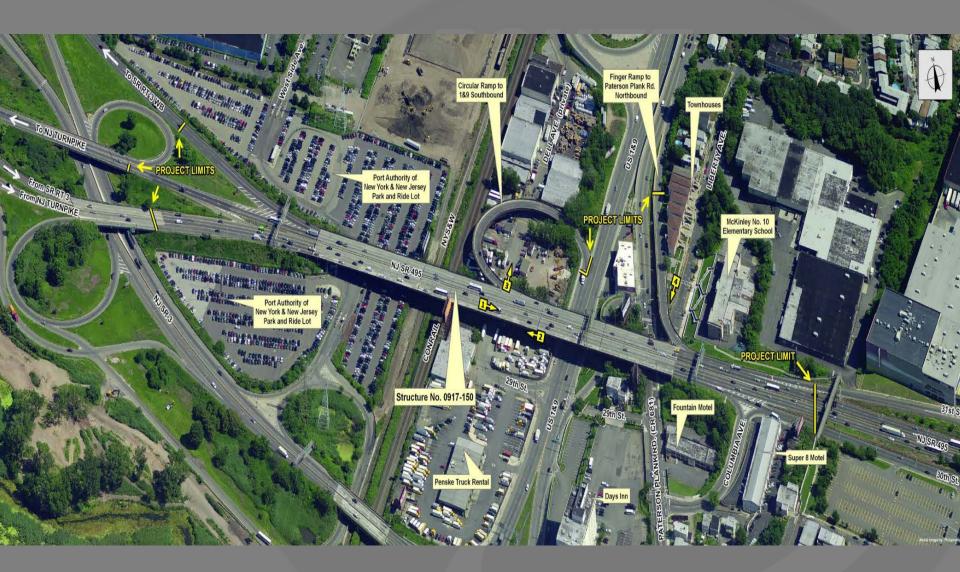
Project Location







Project Location







Construction Schedule

- 48 months from project award to substantial completion
- Approximately 15 months from award to start of long term lane closings
- Offsite work to be completed prior to long term lane closings
- Long term lane restrictions for approximately 2+ years
- Work items with multiple work crews
- Advance ITS Contract 2017 completion

Milestones						
Milestone - A dministrative						
W800	ROWAvailability	0		27-Mar-17	1	ROWAVallability:
M050	PS&E Certified	0		31-Mar-17	1	PPS&E Certified
M100	Advertise Date	0	20-Apr-17		1	Advertise Date
M200	Bid Date	0	18-May-17		1	😩 Bid Date
M300	Award Date	0	08-Jun-17		2	♣ Award Date
M350	Execute Contract	0		18-Jul-17	3	🛎 Execute Contract
M500	Construction Start Date	0	17-Aug-17		22	🕰 Construction Start Date
M700	Interim Completion (Complete Stage V)	0		15-Jul-19	2	🗣 Inferim Completion (Complete Stage V)
M710	Interim Completion (Complete Stage VII)	0		14-Nov-19	1	♣ Interim Completion (Complete Stage VII)
M720	Interim Completion (Complete Stage IX)	0		21-Jul-20	2	📯 tnterim Completion (Complete Slage IX)
M900	Substantial Completion	0		20-May-21	0	A Substantial Completion
M950	Completion	0		18-Aug-21	0	A Cómpletion
Militaria Construction						





Contract Provisions of Note

- Insurance requirements differ significantly from NJDOT Standard Specifications
- Specialty items involved
- High level agency and owner involvement
- Field office and materials lab requirements





Structure Rehabilitation - Deck











Complete Deck Reconstruction / Viaduct and Ramp Structures





Structural Scope – Steel Repairs











Complex Viaduct and Connected Ramp Framing





Structural Scope - Steel Repairs

- Approximately 80 types of repairs/1400+ individual repairs
- More than half of repair types must be completed after deck removal
- Structural Steel Repair, Type 2 Supplemental Support Brackets/Joint Reframing must be performed prior to deck work
 - Approximately 900,000 lbs. of structural steel
 - Fracture Critical elements
 - Galvanized and painted

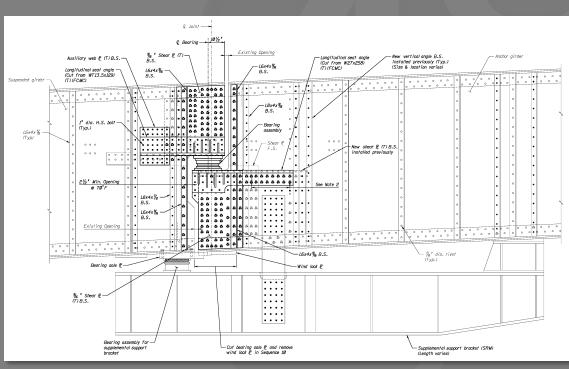




Structural Scope – Steel Repairs

Mainline Route 495

Structural Steel Repair, Type 2 – Supplemental Support Bracket/Joint Reframing





Contract Plan Detail

Example

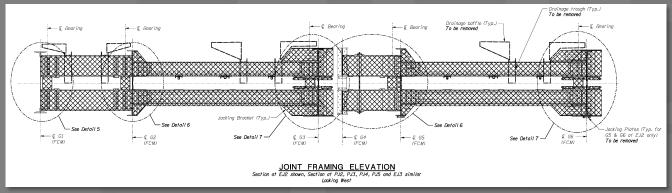




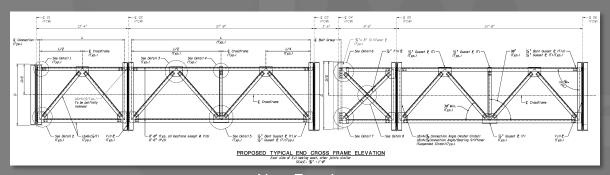
Structural Scope – Steel Repairs

Mainline Route 495

Structural Steel Repair, Type 2 – Supplemental Support Bracket/Joint Reframing



Existing Framing To Be Removed



New Framing



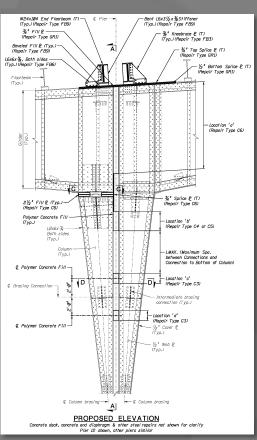


Structural Scope - Steel Repairs







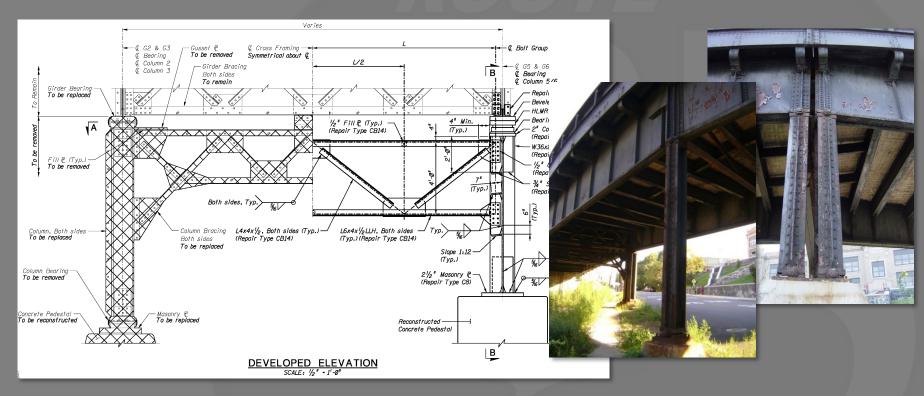


Southbound Ramp to US 1&9





Structural Scope – Steel Repairs



Northbound Ramp to Paterson Plank Road





Structural Scope - Bridge Repainting

- Complete removal of existing lead based paint
- Sensitive Receptors
 - Significant restrictions
 - NJ Transit Park and Ride Lot, McKinley School, and residences







Structural Scope – Substructure Repairs

- Removal of Span 1a and replacement with MSE retaining wall
- Reconstruction of Southbound Ramp abutment
- Reconstruction of Southbound and Northbound Ramp pier pedestals
- Filling of Northbound Ramp vault with Lightweight Geosynthetic Fill
- Spall repairs on all concrete substructure elements











Maintenance and Protection of Traffic

- 12 total construction stages
 - 2 Pre-stages 3 months duration
 - 8 primary stages for deck reconstruction 2 duration
 - 3 of 4 lanes maintained in each direction
 - 2 Post-stages 3 months duration
- Exclusive Bus Lane (XBL) maintained
- Multiple ramp closures with detours
- Westbound ITS facilities
 - Overhead Lane Control Signals





Off-Site Work – Intersection Improvements



Park Plaza Drive/ Paterson Plank Road

Union Turnpike/
Paterson Plank Road







Off-Site Work – Intersection Improvements



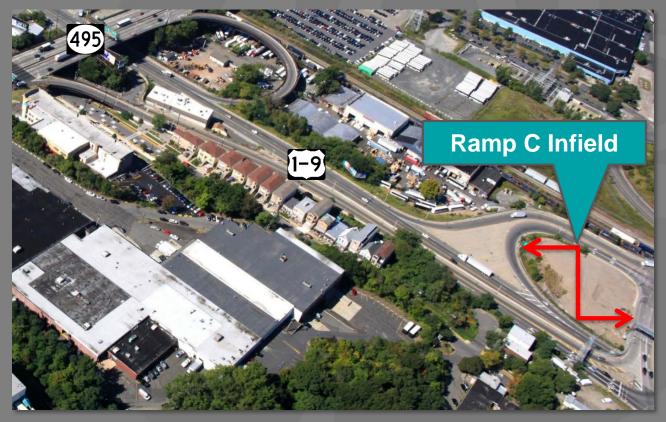
Union Turnpike / Bergen Turnpike





Off-Site Work - Ramp C Infield

- Required to accommodate relocated tenants
- Relocation prior to occupying easement areas adjacent to SB Ramp
- Restored to the previous water quality basin







Off-Site Work – NJ Transit Property

- Establish contractor access road off of West Side Avenue
- Prepare existing empty lot to accommodate parking







Agency Coordination

PANYNJ

- Owns majority of property beneath structure
- Owner of Park and Ride Lot property
- Operator of XBL
- Own and maintain westbound ITS
- Tenant Construction and Alteration Permit (TCAP)
- NJ Transit
 - Lessee of Park and Ride Lot
 - Primary user of XBL
 - Access restrictions to and within Park and Ride Lot





Agency Coordination

- Railroads
 - NYS&W and Conrail
- New Jersey Sports and Exposition Authority
 - Signal timing changes for multiple intersections
- New Jersey Turnpike Authority
 - MPT within their jurisdiction
- Hudson County and local municipalities
 - Signal timing changes for multiple intersections





Route 495 Public Outreach

Designed to educate the public about the project before and during construction

- Public Information Centers
- Notification Program
- Project specific Public
 Outreach Subconsultant





Environmental Considerations

- Sensitive Receptors: Park and Ride Lot, McKinley Elementary School and Residential Properties
- Noise Mitigation Program
- Regulated material,
 On-site LSRP
- Pending addendum/ change of plan for Flood Hazard Area Individual Permit







Route 495 Advance ITS Project

- NJ 495 Westbound ITS Improvements
- Required for MPT during Rehabilitation Project
- PANYNJ owned and controlled facilities
- 5 DMS, 5 VSLS, 18 OLCS









Route 495, Route 1&9/ Paterson Plank Road Bridge

Township of North Bergen, Town of Secaucus, and Union City, Hudson County

Thank you! **Questions?**

April 28, 2017







