ONLINE PUBLIC INFORMATION CENTER TRANSCRIPT

Reconstruction of Bridge MC#140.9 (NJDOT #1100-055) Carrying Lincoln Avenue (CR 626) over the Northeast Corridor Rail Line, an Inactive Rail Yard, and Assunpink Creek

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Slide 1 – Title Slide

Welcome to the online Public Information Center for the Reconstruction of Bridge MC#140.9 (NJDOT #1100-055) which carries Lincoln Avenue over the Northeast Corridor Rail Line, an inactive rail yard and the Assunpink Creek. The overall purpose of this project is to replace the subject bridge with a low maintenance, long-term solution that eliminates all existing structural deficiencies; incorporates operational, safety and pedestrian access improvements to the bridge; and minimizes impacts to the adjoining community and environment. This Public Information Center is intended to share the progress to date on this project, which is currently nearing the end of the Preliminary Engineering design phase, and to solicit feedback from the public in order to enhance the project as it progresses to Final Design and Construction.

Slide 2 – Presentation Overview

This presentation will begin with an introduction to the Project Team along with a brief overview of the project delivery process, followed by a discussion of the project's Purpose and Need, existing conditions and the proposed improvements and how they will enhance the quality of life for the affected public and stakeholders. Lastly, we will discuss the project schedule, estimated cost and share information on how you – the public – can provide us with your valuable feedback.

Slide 3 – Project Team

The individuals on the Project Team responsible for advancing this project through design and construction are as follows:

- From Mercer County, Mr. Basit A. Muzaffar, who is serving as the County's Project Manager, and is also the Assistant County Engineer along with Mr. George Fallat who serves as the County Engineer and Mr. Aaron Watson who serves as the Deputy Administrator and Director of Transportation and Infrastructure.
- From the New Jersey Department of Transportation, Mr. Kyle Skala from the Bureau of Local Aid and Economic Development.
- From the Delaware Valley Regional Planning Commission, Mr. John Coscia, Jr. who serves as the Manager of the Office of Project Implementation
- And, from Greenman-Pedersen, Incorporated, which is the firm providing consulting engineering services on this project, are Mr. Bernard Boerchers and Mr. William Farrow, serving as GPI's Project Manager and Deputy Project Manager, respectively.

Slide 4 – Project Delivery Process

The Project Delivery Process consists of four distinct phases. The first phase is the Concept Development phase during which data on the existing conditions is collected and analyzed, the project's Purpose and Need is determined, alternatives and their impacts are investigated, and a Preliminary Preferred Alternative is selected. This is followed by Preliminary Engineering which is the current phase of this project. During Preliminary Engineering, the Preliminary Preferred Alternative is advanced to the point necessary to obtain approval of any required design exceptions along with the environmental document. The final phase in design is Final Design during which all necessary permits are obtained, right of way is

acquired and the construction documents are finalized. After Final Design, the project advances to Construction.

Slide 5 – Project Location

The Lincoln Avenue Bridge Replacement Project is located in the City of Trenton, Mercer County. The bridge is denoted as Mercer County Structure No.140.9 and NJDOT Structure No. 100-055, and it carries Lincoln Avenue over the Amtrak Northeast Corridor Rail Line, an inactive rail yard and the Assunpink Creek.

It is also located immediately north of the NJDOT Trenton Amtrak Bridges Project. The NJDOT Project, which is currently in the Preliminary Engineering (PE) Phase includes the replacement of the two bridges carrying E. State Street and Monmouth Street over Amtrak and the replacement of the bridge carrying Chestnut Avenue over Amtrak with a new pedestrian bridge that will also carry utilities over the railroad.

The two projects will be coordinated through Final Design and Construction.

Slide 6 – Purpose and Need

As previously mentioned, the overall purpose of this project is to replace Structure No. 1100-055, to provide a low maintenance, long-term solution that eliminates all existing structural deficiencies; incorporates operational, safety and pedestrian access improvements to the bridge and the approach roadways; and minimizes impacts to the adjoining community and environment. Based on the 15th Cycle Bridge Re-Evaluation Report, the superstructure the bridge is in serious condition due to the exposed, moderately to severely rusted steel in the girders and floorbeams at the areas of missing encasement. As a result, the deck is also in poor condition with large areas of spalled and delaminated concrete with exposed rusted rebar. The substructure is in fair condition due to wide vertical cracks, large spalls and delaminated concrete with exposed rusted rebar, and loose coping. This bridge has a sufficiency rating of 46.2. It should be noted that the fact that a bridge is "structurally deficient" does not imply that it is likely to collapse or that it is unsafe. It means the bridge must be monitored, inspected and maintained and possibly rehabilitated or replaced.

Slide 7 – Existing Conditions (Bridge)

Structure No. 1100-055 was originally built in 1931 and it was reconstructed in 1965. The current 89-year-old bridge replaced the previous timber and then steel truss bridge on a similar alignment. It is 687 feet long, 56 feet wide out-to-out and 36 feet wide curb-to-curb. The existing minimum vertical clearance is 20’-9” to top of track; less than the required minimum clearance of 24’-3”, as required by Amtrak and 24’-6”, as required by NJDOT. The bridge is not scour critical. The overall condition of the structure is serious due to the condition of the superstructure. The deck is in poor condition due to the large areas of spalled and delaminated concrete with exposed rusted rebar. The underside of the deck exhibits areas of heavy efflorescence along the centerline joint; spall areas with exposed rusted rebar on some spans; and areas of checkerboard cracking throughout all spans. It is estimated that 45% of the total deck area is chloride contaminated.

The superstructure is in serious condition due to the exposed, moderately to severely rusted girder and floorbeam steel at areas of missing encasement. The exposed areas of the web plates and bottom flanges at the through girders exhibit severe rust and section loss at random locations on all spans. In addition, multiple knee braces exhibit through holes up to 1” by 3” at the sidewalk level. The substructure is in fair condition due to wide vertical cracks in the abutment breastwalls and backwalls. There are large spalls and delaminated concrete with exposed rusted rebar in the east abutment breastwall; pier crashwalls;

pier columns and caps; wingwalls; and loose coping of the southwest wingwall. The fracture critical through girders exhibit moderate to severe rust in the exposed web plates and bottom flanges with section losses as previously noted.

Slide 8 – Existing Conditions (Roadway)

Lincoln Avenue is a two lane, urban minor arterial with no posted speed limit. Therefore, a speed limit of 25 mph is assumed based on the urban setting. On and east of the bridge, Lincoln Avenue is under the jurisdiction of Mercer County and is designated as CR 626. West of the bridge, Lincoln Avenue is under the jurisdiction of Trenton City. The existing roadway cross section consists of two 18-foot wide lanes with no shoulders. On structure, 6-foot 2-inch wide sidewalks are present between the through-girders and concrete parapets. Lincoln Avenue serves as an important connector across the Northeast Corridor and Assunpink Creek and is the first crossing outside of the central business district of Trenton City. Adjacent land use is a mix of residential and business / commercial use. The Catholic Youth Organization East State Street Center and Martin House are located in the southwest and northwest corners of the signalized intersection of Lincoln Avenue and E. State Street, respectively. The Rush Crossing Apartment/Townhome Development and Lincoln Supply Company are located immediately west of the bridge on the south and north sides of Lincoln Avenue, respectively. Roadway lighting exists on both sides of the bridge. Luminaire standards are mounted onto the through girders with the base plates connected directly to the girder. Each standard consists of two luminaires mounted on separate arms with one arm extending over the roadway and the other over the sidewalk.

The roadway within the project limits has the following substandard design elements: stopping sight distance on vertical curves, shoulder width, and cross slope. In addition, the clear zone is obstructed by the through girders which results in deficient horizontal stopping sight distance.

Slide 9 – Existing Conditions (Rail)

The Northeast Corridor rail line runs from Washington, D.C. to Boston and is used by Amtrak, NJ Transit and freight trains within NJ. Five (5) mainline and one (1) siding electrified tracks with overhead catenary lines are present under the bridge. The Northeast Corridor rail line is on the NJ Register as an eligible historic district (identified as Pennsylvania RR, NY to Philadelphia). The rail line has a period of significance between 1835 and 1963. Between the Assunpink Creek and the NEC, NJ Transit owns four inactive rail lines, catenary structures, and a concrete platform.

Slide 10 – Existing Conditions (Environmental Constraints)

The National Environmental Policy Act (NEPA) document for this project is a Categorical Exclusion Document (CED). The Monmouth Field (Assunpink Greenway) property was identified as Green Acres encumbered and owned by the City of Trenton. Forested wetlands were identified along a portion of the Assunpink Creek. A wetlands swale was also identified along the east side of the Northeast Corridor, north of Lincoln Avenue. The Assunpink Creek, which is classified as a freshwater, non-trout (FW2-NT) waterway, has a FEMA mapped 100-year floodplain. NJDEP Landscape Project Mapping identifies suitable foraging habitat for the NJ State endangered bald eagle within the project area. However, no suitable bald eagle nest trees were observed within the project area during field investigations. Several properties with areas of environmental concern regarding hazardous waste are situated within the project study area. Also, a preliminary evaluation confirmed the presence of asbestos and lead paint on the bridge superstructure. Sensitive receptors, such as educational, religious, residential and service areas, were identified within the project limits. The anticipated environmental permits include Freshwater Wetlands

General Permit, Stormwater Construction General Permit, Flood Hazard Area Individual Permit, and Section 4(f).

Slide 11 – Existing Conditions (Utilities)

The existing bridge currently carries ten (10) 4-inch electrical conduits and a 16-inch equivalent gas main. In addition, an existing 30-inch cast iron water main is located under the bridge through the foundation. Of additional note, 138 kV power lines are located above the bridge, catenary lines are attached to the bottom of the bridge, and a USGS stream gauge station is located adjacent to the Assunpink Creek and Pier 6.

Slide 12 – Approved Project Plan

The Approved Project Plan includes replacement of the existing bridge with a new bridge on a similar alignment consisting of five spans with a cast-in-place reinforced concrete deck supported by continuous welded steel plate girders. The new superstructure will be supported by cast-in-place reinforced concrete piers and full height abutments founded on deep foundations. Concrete approach slabs will be used to transition the bridge to the approach roadways. The location of the abutments will be maintained to avoid encroachment into the floodway and to satisfy hydraulic requirements. Proposed pier locations were selected to meet lateral clearance requirements to the existing rail lines and to provide flexibility for future track placement within the area of the former Belvidere – Delaware Connector two track line and Barracks Yard. The roadway profile was designed to provide the minimum required vertical clearance over current and former railway lines. The roadway width on the bridge will be improved to provide right side shoulders and bicycle compatibility. Sidewalks will be maintained along both sides of the bridge. The proposed improvements will eliminate the existing substandard design elements along with ends of the through girders which are currently located within the clear zone.

Context Sensitive Design applications including aesthetic treatment and roadway lighting will be incorporated into the project to provide a visually appealing bridge to the public and recognize the historical context of the site. The aesthetic treatments will be coordinated with the proposed East State Street and Monmouth Street Bridges in the Amtrak Bridge Replacement Project being advanced by NJDOT.

In addition, the traffic signal and curb ramps at the intersection of Lincoln Avenue / Chambers Street and E. State Street will be upgraded to meet current MUTCD and ADA requirements.

Slide 13 – Construction Staging

The construction of the bridge will be completed in two primary stages. Eastbound vehicular traffic will be detoured while westbound vehicular traffic will be maintained in both stages. In addition, pedestrian traffic will be maintained across the bridge for the duration of construction. In the first stage, construction will be performed on the southern half of the bridge while westbound vehicular traffic and pedestrian access is maintained on the north side of the existing bridge.

Slide 14 – Construction Staging

In the second stage, construction will be performed on the northern half of the bridge while westbound vehicular traffic and pedestrian access is maintained on the south side of the recently reconstructed bridge.

Slide 15 – Approved Project Plan (Construction Staging / MPT)

The construction of the bridge will be completed in two primary stages. Eastbound vehicular traffic will be detoured while westbound vehicular traffic will be maintained throughout construction. In addition, pedestrian traffic will be maintained across the bridge for the duration of construction. The partial detour reroutes eastbound traffic from the intersection of Lincoln Avenue/Perry Street and North Clinton Avenue around the project site via North Clinton Avenue northbound, North Olden Avenue eastbound, and East State Street southbound. Since the partial detour may increase congestion and delay along and in the vicinity of the detour route, low impact mitigation strategies, including signal retiming and optimization along with modifications in lane use and parking restrictions, are proposed as part of the traffic control plan. Specifically, the lane configuration of the eastbound approach at the intersection of Lincoln Avenue/Perry Street and North Clinton Avenue will be modified to provide dual left turn lanes and a shared through/right lane, and parking along North Clinton Avenue will be prohibited between Lincoln Avenue and Grant Avenue.

Slide 16 – Project Schedule and Construction Cost Estimate

The project is nearing the completion of the Preliminary Engineering phase of design. The Concept Development phase was completed in the Fall of 2018, and it is anticipated that the current Preliminary Engineering phase will be completed by the end of this year. Following this phase will be the Final Design phase which is scheduled to be completed in the Fall of 2022. Construction is anticipated to begin in the Spring of 2023 and completed by Fall 2025. The estimated construction cost is $38 million dollars and the anticipated right of way acquisition costs are approximately $1 million dollars.

Slide 17 – Public Feedback

Thank you for your interest in this project and for taking the time to view this presentation! If you have any questions, comments or suggestions, please fill out the survey form at the link indicated on this slide. Additionally, you may contact the County Engineer. His contact information is also provided on this slide. Again, thank you!