

## Q1: Instead of a new utility bridge, were other options considered instead of a utility bridge?

**A1:** The following alternatives were considered to accommodate utilities during construction activities of the Market Street Bridge Rehabilitation project. All facilities need to be moved from their current locations in order for the contractor to have room to complete the rehabilitation activities.

- Leaving in place This would entail three separate utility relocations (and outages) for eight different utilities. Coordination in construction could add up to six years to the overall construction project. This was deemed unacceptable because of single lane traffic for up to ten years.
- 2.) Hanging utilities by cantilevering from the Market Street Bridge The Design Team looked at hanging the utilities off the downstream side of the existing Market Street bridges. Unfortunately, the historic East spans cannot structurally accommodate the additional loading of the utilities.
- 3.) <u>Total removal of utilities from Market Street Bridge (no relocation)</u> This is not a viable option. There are several utilities that service City Island including electric, communications, and sewer.
- 4.) <u>Construction of a new utility structure</u> It was deemed a cost-effective solution (\$14 Million to construct) to relocate all utilities from the current Market Street Bridge to a new utility structure directly downstream of Market Street Bridge during Phase 1 (prior to any lane closures) in order to avoid significant negative impacts to the construction schedule. Advantages include: minimizing traffic interruptions, reducing construction duration, and limiting utility disruptions.
- 5.) Relocate utilities to Walnut Street Bridge This would require significant rehabilitation and reconstruction work to the existing Walnut Street Bridge as well as utility construction work requiring lane closures along Front Street on both the East and West Shores in order to connect to existing facilities. There are several spans missing from the western Walnut Street Bridge. This option also has significant community and local business owner opposition.
- 6.) Relocate utilities to CAT Bridge A full rehabilitation of the CAT bridge to accommodate bikes, pedestrians, and utilities is anticipated to cost in excess of \$40 million as well as require work along Front Street on the East Shore and Market St on the West Shore in order to connect to existing facilities. Along with coordination with railroads (which own land required to access the CAT bridge) and connections to existing infrastructure in two municipalities, utility disruptions would be expected for extended periods.
- 7.) Combinations of relocation Some options were considered to relocate dry utilities (telecommunications) and leave wet utilities (gas and sewer) on the structure. Unless all the utilities are removed from the Market Street Bridge, the construction duration will not be reduced significantly. To utilize a combination of the other alternatives would be more costly and result in an increased construction schedule.

## Q2: Can the utility bridge also accommodate bicycle and pedestrian traffic?

**A2:** As currently depicted, the utility bridge can only accommodate utility worker access. A different structure type would be required. This would likely be steel beams in lieu of the truss with a concrete deck placed over the beams and utilities located between the beams. If this were employed, a



dedicated bicycle and pedestrian path of approximately 14ft width could be provided. This option remains a consideration for the design team moving forward.

Q3: Can the proposed utility bridge be more aesthetically pleasing?

**A3:** Aesthetic treatments of the utility bridge can be changed from the depicted renderings. Stakeholder input will be gathered during the final design to assist in making the final aesthetic decisions.

Q4: There are concerns about safety without a barrier between motorists and the sidewalks. Can barriers be provided?

**A4:** Design criteria for this bridge length, traffic volumes, and speed limit do not require barrier-separated sidewalks. PennDOT did consider barriers, but due to the nature of the historic eastern bridge, placing barriers would take away from available sidewalk widths — which are already limited. For the western bridge, adding barriers between motorists and the sidewalk would require additional substructure widening. It was also decided to keep the bridge roadway and sidewalk widths consistent between the east and west shores.

Q5: Can the Lemoyne Bottleneck be fixed before the Market Street Bridge project starts to accommodate bike/ped use?

**A5:** Yes, that project is currently anticipated to be constructed before the bridge project is completed.

Q6: Will entry and exit from the bridge into Harrisburg or Wormleysburg for better bike/ped safety be addressed?

**A6:** Connections to and from the bridges at the adjacent traffic signals in Harrisburg and Wormleysburg will be included in the project. Specifically, the Lemoyne Bottleneck Project will be coordinated to ensure infrastructure improvement connections between projects.

Q7: Are the environmental impacts of adding the utility bridge being considered?

**A7:** Yes, any potential environmental impacts of the project, including the utility bridge, are being evaluated and will be minimized or mitigated to the greatest extent possible.

Q8: Will traffic calming improvements as well as multimodal accommodations be included in the design?

**A8:** Traffic calming measures such as narrow lanes and wider sidewalks have been considered in the development of the project. Traffic calming measures within the constraints of the bridge project will be considered during the final design. Safer multimodal connections will be included at the City Island Ramps to better restrict left-turns from vehicles and place pedestrians and bicycles in more visible locations when crossing both access ramps.

Q9: Are the surrounding projects, such as South Bridge and Lemoyne Bottleneck, being coordinated by the Market St. Bridge Team?

**A9:** Yes, the department is coordinating between these three projects to account for construction timing and potential impacts.