

Appendix G: Technical Feasibility-Scope of Work

Project: *U.S. Route 202/Interstate 95 Interchange Bridge Replacement and Pedestrian Safety Improvements Project*

Applicant: Maine Department of Transportation

Grant: FY 2022 Bridge Investment Program (BIP) Bridge Projects

Once MaineDOT has called for, received and analyzed bids for the Project, a contractor will be selected and awarded. All affected parties and nearby landowners will again be notified prior to construction commencing. Materials needed will be coordinated, ordered, fabricated, obtained and delivered to construction staging areas throughout the duration of the Project. The contractor will begin their on-site operations by mobilizing to the Project location and completing any clearing/site preparation required, which will be minimal. Maintenance of traffic will necessitate constructing a temporary bridge just north of the existing bridge to maintain three lanes of traffic (two westbound lanes, one eastbound lane) at all times during construction. The temporary bridge and its temporary approaches will be one of the first construction tasks.

Project work calls for replacing the existing four-span bridge with a new two-span bridge, reducing the span of the structure from 257 feet to 156 feet. This will enable construction of the new substructure units to begin under the existing structure while traffic is maintained above. This means the lower approximate 2/3 of the proposed abutments will simultaneously be constructed under the existing bridge end spans while the temporary bridge is being constructed. Next, the intersection of U.S. Route 202 (Western Avenue) and Whitten Road will be reworked to shift the intersection west to connect with the temporary bridge alignment and provide additional construction space for the contractor around the existing bridge. Once the intersection is shifted and the temporary bridge and approaches are complete, traffic will be shifted to the temporary bridge. With traffic moved, demolition of the existing bridge will begin.

This work will require excavation of the existing roadway, removal of the existing concrete bridge deck and steel beams and removal of the existing concrete substructure. Care will be taken during removal to minimize traffic impacts to Interstate 95. With the existing bridge removed, the remainder of new abutments will be constructed while the median pier will be simultaneously constructed on the same location as the existing median pier. With substructure units complete, the new bridge superstructure will be installed.

The superstructure consists of steel beams with a concrete bridge deck, concrete sidewalks and steel bridge railing. With superstructure in place, the bridge approaches will be filled in and aligned with finished grade elevations. The bridge deck will have waterproofing membrane and bituminous asphalt pavement installed as bridge wearing surface and approaches will be paved to match. I-95 ramps in the area will then be reconstructed to better match reconstructed bridge approaches. With ramps reconstructed, new guardrail will be installed throughout. With new guardrail installed, traffic will be shifted on to the new bridge and construction will be substantially complete at this point. The temporary bridge and approaches will be removed and all slope work will be finalized. Once the temporary bridge is removed, final paving and permanent roadway striping will be completed.

A large component of the Project includes providing improved connectivity through the area for vehicular, bicycle and pedestrian traffic. Sidewalks will be added to both sides of the new bridge and be connected into existing sidewalk systems on each approach. The existing sidewalk system through the area does not connect across the bridge on the south side of U.S. 202; therefore, significant lengths of sidewalk will be added to the approaches on each end of the bridge to provide complete connection through the area. Whitten Road will also have a sidewalk added to each side of the roadway. These sidewalks will provide additional connectivity to retail areas south of the Project limits. Wider shoulders on the bridge and approaches will allow for improved bicycle access. Portions of sidewalk construction can be performed simultaneously with bridge construction; however, some will need to be constructed following the bridge approaches. Once all bridge, approach and sidewalk work is complete, the contractor will demobilize and construction will be complete.

If selected for funding, MaineDOT looks forward to signing a comprehensive agreement with USDOT that includes a detailed Statement of Work outlining all parameters of the Project and the steps to follow for cost reimbursement. MaineDOT also welcomes the opportunity to create periodic construction and performance reports as required.

“In accordance with Title VI of the Civil Rights Act of 1964 and other authorities, MaineDOT is committed to ensuring that the fundamental principles of equal opportunity are upheld in all decisions involving our employees and contractors/consultants, and to ensuring that the public-at-large is afforded access to our programs and services. To that end, no person shall be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any MaineDOT program or activity on the grounds of race, color, or national origin. MaineDOT will work with staff, sub-recipients, contractors and service beneficiaries to promote awareness for the provisions of Title VI and the responsibilities associated with that Act.