

8 Conclusion

Construction of the Northeast Boundary Tunnel Project will result in moderately adverse impacts throughout construction to transit and traffic operations. The analysis was based on construction year 2020 and assumed a conservative approach with construction at all proposed sites occurring simultaneously. Construction activities will require temporary lane restrictions, and require lane closures, and will temporarily reduce the number of on-street parking spaces available to residents and businesses.

DC Water has coordinated extensively with both DDOT and WMATA to devise an approach amicable to all parties. Ultimately, DC Water received a No Conflict Notice on April 21, 2015. DC Water is committed to continued coordination with DDOT and WMATA through final design, procurement and construction.

8.1 Study Area 1

The intersection of West Virginia Avenue NE and Mt Olivet Road NE is the most adversely impacted intersection within Study Area 1 due to the proposed construction activity associated with the Mt Olivet Road Sites. Traffic analysis showed a projected level of service reduction at this intersection to operate at a LOS “F” for both the AM and PM peak hours due to construction activities. To mitigate these temporary impacts, it is proposed to restrict eastbound and westbound Mt Olivet Road NE traffic from turning left onto West Virginia Avenue NE and adjust signal timings at the intersection to reduce delays. By implementing these improvements, the intersection is predicted to function at a level of service “C,” for the AM and PM peak hours during construction.

Motorists can expect up to five (5) additional minutes of travel time along the Mt Olivet Road NE corridor through the construction staging areas during the peak traffic hours.

8.2 Study Area 2

The two (2) primary intersections of concern within Study Area 2 are Rhode Island Avenue NE at 4th Street NE and Reed Street NE. Construction activities will detour 4th Street NE northbound traffic north of Rhode Island Avenue NE to Lincoln Road NE and reduce lanes along Rhode Island Avenue near 4th Street NE and Reed Street NE. The 4th Street NE intersection showed a level of service reduction to an “F” in the AM peak hour and “E” for PM peak hour during construction. To assist in mitigating the reductions in the level of service at this intersection, it is proposed to adjust signal timings and offsets, add a permissive/protect phase to eastbound Lincoln Road NE to accommodate the northbound 4th Street NE detour, and remove the median on the west leg of Rhode Island Avenue NE at Lincoln Road NE to create an eastbound left turn bay. Implementing these mitigation measures is projected to improve the level of service to a “D” for the PM peak hour at the Rhode Island Avenue NE and 4th Street NE intersection during construction.

A level of service “E” in the AM peak hour and “F” in the PM peak hour is anticipated at the intersection of Rhode Island Avenue NE and Reed Street NE, during construction. Queuing is anticipated to increase along both eastbound and westbound Rhode Island Avenue NE. To help mitigate reductions in operations it is being proposed to adjust signal timings and offsets, relocate the bus stop at 10th Street NE to the far side of the intersection, and restrict eastbound left turns at the Reed Street NE and 10th Street NE intersections.

Travel times along the Rhode Island Avenue NE corridor during construction are expected to increase. Motorists can expect up to twelve (12) minutes of additional time to travel through the construction staging areas in Study Area 2.

8.3 Study Area 3

The intersections along Rhode Island NW and Florida Avenue NW are of primary concern in Study Area 3. Lane reductions will occur along Rhode Island Avenue NW, 6th Street NW, Florida Avenue NW and 3rd Street NW and R Street NW. Motorists will be detoured during various phases of construction. In order to improve operations, various timing, phasing and offset adjustments are proposed including:

- Providing for permissive/protected operations for the Rhode Island Avenue NW westbound left turn movement at 7th Street NW.
- Providing for permissive/protected operations for the eastbound left turn movement at the intersection of Rhode Island Avenue NW and 2nd Street NW.
- Additional parking restrictions on 7th Street NW south of Rhode Island Avenue to allow the detoured left turn movement
- Providing signal timing adjustments along Rhode Island Avenue NW between First Street NW and 7th Street NW

The work associated with the T Street and Pumping Station sites will reduce the level of service at the Rhode Island Avenue NE and 2nd Street NW intersection to an “F.” This reduction relates to the volume of traffic generated by the Envision McMillan development anticipated to turn left from Rhode Island Avenue NW northbound on 2nd Street NW due to the detour along northbound First Street NW. At this time improvements cannot be planned for this intersection due to the variability in phasing associated with the Envision McMillan project and the Northeast Boundary Tunnel Project. Depending on the progression of the Envision McMillan Development project, mitigation measures stemming from the developer will be incorporated.

The Rhode Island Avenue NW corridor is expected to experience longer queues and increased travel times through the construction staging areas. Up to six (6) minutes of additional travel time can be expected in Study Area 3.

8.4 Proposed Traffic Calming Measures

In order to calm traffic on detour routes and around construction staging areas, DC Water proposes to coordinate with the DC Metropolitan Police Department to perform the following duties:

- Provide officers at construction staging areas and along detour routes to limit speeding, illegal parking and aggressive driving
- Install speed cameras at and around construction staging areas and along detour routes

Based on coordination on the First Street Tunnel, currently under construction in Bloomingdale, DC Water has included an allowance provision in its Northeast Boundary Tunnel Contract to ensure these measures are fully covered.

8.5 Mandatory Requirements and Conceptual Traffic Management Plans

Based on the results of the traffic analysis completed as part of this Package, mandatory requirements for the maintenance of vehicular, pedestrian, and bicycle traffic with estimated construction durations have been developed. The mandatory requirements are included within Appendix B, Tables B-1 through B-8. Requirements associated with the maintenance of transit facilities are summarized at the conclusion of Section 5. These requirements will be included in DC Water's RFP Documents (construction bid set) as mandatory criteria for the Design-Build Contractor to follow in the preparation of detailed maintenance of traffic plans. In accordance with the Northeast Boundary MOU, DDOT will review and approve the Design-Build Contractor's detailed maintenance of traffic plans prepared in accordance with this Package within fifteen (15) days of receipt. In order to demonstrate that the requirements outlined in the Package are feasible, DC Water has prepared Conceptual Traffic Management Plans (TMP's) and included them in Appendix B. These plans illustrate the construction staging areas, potential construction phasing, associated lane shifts and maintenance of vehicular, pedestrian and bicycle traffic. The Design-Build Contractor may elect to utilize these specific phasing plans, but it is more likely that they will develop variations based on their means and methods while still complying with the mandatory requirements established in this Package.

Due to the centralized impacts of the NEBT Project along the Rhode Island Avenue corridor, DC Water is proposing to implement a multi-faceted outreach plan utilizing websites, public meetings and media to:

- Alert motorists of upcoming lane reductions prior to construction
- Post suggested detour routes to minimize traffic along Rhode Island Avenue during construction
- Evaluate providing an incentive to utilize transit in the Rhode Island Avenue corridor
- Provide dynamic message signs with travel time information

Additionally, DC Water has utilized their public outreach team to discuss the anticipated construction impacts with the community prior to construction and address the concerns of residents and business owners along the tunnel alignment. An extensive outreach program is currently underway and includes meeting with elected officials, ANC chairs, affected ANCs, residents and business owners in close proximity to the construction sites to discuss the proposed infrastructure with the community.

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