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DEPARTMENT OF TRANSPORTATION



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Frequently Asked Questions (FAQ)

What is the purpose of the project?

- The purpose of the project is to extend the useful life of the bridges by performing bridge preservation activities. The two bridges are I-293 Northbound/NH 101 Westbound over the Merrimack River and Pan Am Railroad and I-293 Southbound/NH 101 Eastbound over the Merrimack River and Pan Am Railroad between Manchester and Bedford.

What is the need for the project?

- The bridges are structurally deficient. Leaking expansion joints have led to cracked and spalled piers underneath the leaking expansion joints, therefore placing the bridges on the State's Red List. Delaying repairs to the bridge will result in further deterioration to bridge components that would require major efforts to address the piers, would cost significantly more and require longer closures.

What is the scope of work for the project?

- The expansion joints (2 per bridge) will be replaced and the concrete repairs will be made to the piers. These repairs will remedy existing deficiencies and extend the useful life of the bridges. During the time required for the expansion joint replacement, the project will also remove and replace the pavement and membrane on the bridges and perform any partial or full depth concrete deck repair.

What construction impacts will there be during construction?

- Currently there are three travel lanes across each I-293/NH 101 bridge. During construction the three travel lanes across each bridge will be reduced to two in order to provide a safe work zone for the Contractor.

What are the traffic control implications?

- **3 existing travel lanes over the bridges will be reduced to 2 travel lanes during construction.** It is expected that the lane reduction will cause traffic backups particularly during the morning and afternoon peak commuting hours. Drivers travelling through the work zone should anticipate slower travel speeds and allow for extra time.

- **The Brown Avenue westbound On-Ramp will need to be closed for the duration of the work on the I-293 Northbound/NH 101 Westbound bridge.** Currently the On-Ramp from Brown Avenue to I-293 Northbound/NH 101 Westbound enters the highway in its own dedicated lane. With the reduction in the number of travel lanes on the bridge from three to two during construction, this On-Ramp configuration from Brown Avenue cannot be maintained. Ideally, the On-Ramp would merge with the I-293 Northbound/NH 101 Westbound travel lanes in advance of the bridge/work zone. Unfortunately, this cannot be implemented safely due to the proximity to the bridge. With the limited space between the ramp and the bridge, the merge would occur too abruptly and result in an unsafe condition for drivers. Understanding that driver safety is paramount and cannot be compromised by the bridge construction.
- **The On-Ramp from the FEET to I-293 Southbound/NH 101 Eastbound will be reconfigured.** Currently the On-Ramp enters the highway in its own dedicated lane. With the reduction in the number of travel lanes on the bridge from three to two during construction, this On-Ramp configuration from the FEET cannot be maintained. However, there is sufficient distance from the ramp to the bridge to properly merge the FEET traffic with the I-293 Southbound/NH 101 Eastbound mainline traffic. Drivers should expect slower travel speeds and allow for extra time/delay resulting from this merge particularly during the morning and afternoon peak commuting hours.

What detour routes are available?

- To accommodate the closure of the On-Ramp from Brown Avenue to I-293 Northbound/NH 101 Westbound, a signed detour will be implemented to direct traffic on Brown Avenue to head east on I-293 Southbound/NH 101 Eastbound and use Exit 1 (South Willow St.) to reverse direction to access I-293 Northbound/NH 101 Westbound.
- Brown Avenue traffic that is south of the I-293/NH 101 bridge could also head south to Raymond Wieczorek Drive (Manchester Airport Access Road) to connect to the FEET and head north to the FEET/I-293/NH 101 interchange, thereby avoiding the bridge work zone altogether.
- Brown Avenue traffic that is north of the I-293/NH 101 bridge could head north on South Beech Street to NH 28 (South Willow Street) and then head west on US 3/NH 3A (Queen City Avenue) to access I-293. This traffic could also head south and use the alternative route described in the previous bullet.
- All airport traffic that wants to head north will be signed to the Raymond Wieczorek Drive (Manchester Airport Access Road) to connect to the FEET and head north to the FEET/I-293/NH 101 interchange.

What else will be done to mitigate the closure of the On-Ramp from Brown Avenue to I-293 Northbound/NH 101 Westbound?

- The lane markings along the northbound approach of Brown Avenue to the I-293 Southbound/NH 101 Eastbound ramps will be reconfigured such that the rightmost lane will only accommodate right turns to the I-293 Southbound/NH 101 Eastbound ramp. At the request of City officials, this change in the lane use will be implemented on a permanent basis in order to alleviate existing congestion and queuing along Brown Avenue.

- The lane use along the southbound approach of Brown Avenue to the I-293 Northbound/NH 101 Westbound ramps will be reconfigured such that the rightmost lane will accommodate through traffic. This will help to mitigate the impacts of closing the On-Ramp.
- At both the Exit 1 and Exit 2 interchanges along I-293/NH 101, the traffic signal timing will be monitored and adjusted to best accommodate the revised traffic patterns that result from the detour.
- Smart work zone technology will be implemented to better inform the motoring public of real-time travel information through the work zone.
- Advance signing and message boards will be utilized to inform motorists of the potential delay. What other alternatives were considered?

What other alternatives were considered?

- Several alternatives were considered to keep the Brown Avenue On-Ramp open during construction:
 1. Maintain use of the Brown Ave westbound on ramp during construction by merging the two travel lanes of traffic on I-293 Northbound/NH 101 Westbound to one travel lane in advance of the On-Ramp from Brown Avenue
 - The volume of vehicles travelling along I-293 Northbound/NH 101 Westbound is significantly higher than those on Brown Avenue. Analyses showed the reduction of travel lanes along I-293 Northbound/NH 101 Westbound resulted in significant regional congestion that results in major impacts to the Exit 1 interchange as well as I-93
 2. Making geometric adjustments to the Brown Avenue On-Ramp and realigning the ramp to provide more merge distance during a portion of the construction
 - Ramp would still be closed for approximately 50% of the construction
 - Work to realign ramp would affect ramp traffic during construction
 3. Four Phase Construction
 - Would allow for three lanes of traffic but require lane widths of 10 feet which are too narrow and unacceptable for this roadway
 - Unsafe conditions for the Contractor to work in between traffic for the middle construction efforts.
 - Construction twice as long to complete
 4. Widen the bridges to the median
 - Additional construction time to complete work
 - Additional cost of \$14.6 M (\$7.3M per bridge)

What is the time frame for the project?

- Construction is anticipated to take five to six months. The On-Ramp from Brown Avenue is expected to be closed for approximately four to five of those months. Final approach paving and lane striping will need to be completed to reestablish the three lanes across the bridge. Both bridges will be worked on at the same time in order to accelerate construction to the extent practicable. Construction is anticipated to start in mid-April of 2019 with completion in mid-October of 2019.

What can the public do to help?

- Please be patient. Preservation of existing infrastructure can be challenging since it is difficult to repair facilities that are heavily used on a daily basis by the public. However, this highlights the need of why such repairs are so critical. Avoiding or delaying these repairs will only exacerbate the deficiencies resulting in greater future inconveniences and costly consequences to the public. With this in mind, it is requested that the public be patient during the construction of this project with the understanding that these improvements are necessary and in the best interest of the public. Understandably, detours and ramp closures can be an inconvenience, but for this specific project, must be implemented to increase the safety for you and your family.

Any additional questions brought up at the Ward 8 & 9 neighborhood public outreach meetings can be added and answered here.