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 E-03-002

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ENGINEERING DIRECTIVE

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<u>MEASURES TO LIMIT MOTORIST TRAVEL DELAYS</u> <u>THROUGH CONSTRUCTION WORK ZONES</u>

Purpose

This directive reinforces procedures necessary to limit motorist travel delays through construction work zones. MassHighway Resident Engineers must remain sensitive to motorist travel delays caused by construction operations and must take appropriate actions to limit such delays.

This directive supersedes Engineering Directive E-93-005 and is effective immediately.

Adherence to Scheduled Work Hours

Contractors shall adhere to the work hour schedule requirements specified in the contract. Contractors shall take all necessary measures to ensure that personnel and equipment are well off the traveled way and shoulders during all non-work hours, as specified in the contract.

Contractors shall not commence operations prior to specified contract hours. This includes traffic set-ups that restrict the flow of traffic upstream of and through the construction work zone.

When operations, including traffic control work, are expected to run more than fifteen (15) minutes beyond the specified contract hours, the Resident Engineer shall take the following steps:

- 1. As soon as it is determined that a time overrun is likely, the Resident Engineer shall contact the District Highway Director or, at the District Highway Director's option, the District Construction Engineer or District Maintenance Engineer. The Resident Engineer shall explain the situation and request authorization from the District Highway Director to work extended hours.
- 2. In those rare cases that extended hours are approved, the Resident Engineer shall immediately prepare a SmarTraveler Alert with the details of lane closures, locations, etc. and shall immediately thereafter fax or phone such Alert to the Commissioner's office, the Boston Radio Room and the District Safety Inspector.

Delays During Scheduled Operations (12-Minute Rule)

Resident Engineers must be aware of travel delays caused by construction operations. Travel delays of over twelve (12) minutes beyond what are considered the normal travel delays for the affected roadway(s) shall be considered unacceptable. At any time during construction operations when a travel delay of over twelve (12) minutes occurs and the situation is worsening, the Resident Engineer shall suspend operations. When it appears that an unacceptable delay is developing, the Resident Engineer or another responsible person (Assistant Resident Engineer, Construction Area Engineer, police officer, etc.) shall drive the queue to determine the actual time of delay. Travel delays shall be monitored continuously until the delays subside, the job activity is complete and off the traveled way, or a determination is made to suspend operations.

When certain construction operations result in repeated unacceptable travel delays, the Resident Engineer shall review the Traffic Management Plans for those operations and, after consultation with appropriate persons (District Traffic Engineer, Boston Traffic personnel, design engineer, etc.) shall implement revised Traffic Management Plans or work schedules to minimize travel delays, if feasible.

When a suspension of construction operations due to unacceptable travel delays will cause a negative impact on public safety, such as when there are open trenches or a lack of proper delineation, the Resident Engineer may allow the operations to continue until such time that the negative impact on public safety can be averted. The Resident Engineer shall immediately notify the District Highway Director of such situations and shall keep him/her briefed on the status of the work. This type of situation should be avoided to the greatest extent possible through careful planning and monitoring of construction operations.

General Procedures

Variable Message Boards and other appropriate signs shall be used to inform motorists of work zone conditions and shall be placed far enough in advance of the work zone to allow motorists to make decisions about alternate routes.

Resident Engineers shall remain aware of special events or conditions in the vicinity of their project sites that could potentially impact travel through the work zone and shall adjust work zone construction plans and/or schedules accordingly to minimize travel delays. These events and conditions include major sporting events, concerts, and adjacent construction projects not accounted for in the original design documents. All changes to Traffic Management Plans should only be completed with the approval of the District Traffic Engineer or the Boston Traffic Engineer.

The Resident Engineer is responsible for monitoring the effects of construction operations on travel delays and public safety. Overall job performance may be influenced in part by continued travel delay occurrences on projects under his/her control. Failure to perform duties in accordance with this Engineering Directive can lead to disciplinary action.