



**SPECIAL PROVISIONS
FOR
TRAFFIC MONITORING WITH INCIDENT RESPONSE
AND TRAFFIC QUEUE PROTECTION AND RESPONSE**

**Warren County
IM-NHS-035-2(378)54--03-91**

**Effective Date
December 20, 2016**

THE STANDARD SPECIFICATIONS, SERIES 2015, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE SPECIAL PROVISIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.

Replace Article 2528.01, B of the Standard Specifications with the following:

B. Traffic Monitoring With Incident Response and Traffic Queue Protection and Response.

- 1.** Provide 24 hour per day continuous monitoring of traffic control devices and incident response for emergency situations on projects during complex traffic situations as defined in the contract documents and traffic queue protection and response during periods of restricted traffic flow on the mainline. The contract documents will identify projects requiring monitoring with incident response. Ensure a vehicle and operator traverses the project throughout the entire traffic control zone at all times, except for refueling and short rest breaks no greater than 15 minutes in duration.
- 2.** Furnish this work according to the contract documents any time that signs, barriers, barricades, or other traffic control devices are in place during complex traffic situations.
- 3.** Provide a traffic monitoring and incident response vehicle and operator for this work as follows:
 - a. Equipment.**
 - 1)** Meet the following requirements:
 - a)** ~~3/4-ton~~ 11,000 pound gross vehicle weight rating (GVWR) pickup truck or another similar vehicle.
 - b)** Contractor's insignia on the vehicle.
 - c)** Adequate weight and power and suitably equipped to move stalled automobiles or pickup trucks.
 - d)** Equipped with an LED amber revolving light or amber strobe light bar visible in all directions, inverter with two sets of outlets, air compressor with outlets for front

and rear bumper, push bumper, radio, citizens band radio, programmable scanner, and a cellular telephone or similar type of mobile phone.

- e) Capable of carrying traffic signs, tools, traffic control devices, and other necessary equipment.

~~2) When used on projects where more than one lane in one direction is maintained at all times, ensure this vehicle is also be equipped with a Type C arrow panel as described in [Article 2528.03, C](#), mounted to be visible to traffic approaching from behind.~~

b. Operation.

- 1) Furnish an operator for the vehicle. Ensure the operator re-erects, repairs, or replaces defective devices immediately upon discovery.
- 2) Have the operator:
 - a) Traverse the project throughout the entire traffic control zone at all times, except for refueling and short rest breaks no greater than 15 minutes in duration.
 - a b) Be available to assist persons with vehicle problems and move automobiles, pickup trucks and other obstructions so as to keep all travel lanes and shoulders available for public traffic.
 - b c) Continue assistance to motorists and involvement with obstructions until they are no longer an impediment to traffic and further assistance can be provided safely by others.
 - e d) Assist motorists or remove obstructions promptly and safely when a vehicle or anything else is obstructing a travel lane or shoulder intended to be clear.
 - d e) Summon further assistance if needed.
 - f) Provide notification to Iowa DOT Transportation Management Center (TMC) and emergency responders (when appropriate) when events occur in the work zone that involve traffic accidents and/or traffic queuing events. Coordinate with queue protection vehicles to initiate management of queue event operations.
 - e g) Keep a report of any events that restrict the normal traffic flow during complex operations, including responses to emergency situations, on forms provided by the Engineer. Provide the Engineer with a copy of this report daily.
- 3) During anticipated peak traffic times, the Engineer may direct the Contractor to provide additional monitoring personnel.

4. Provide two traffic queue protection and response vehicles and operators for this work as follows:

a. Equipment.

- 1) Meet the following requirements:
 - a) Truck capable of supporting all additional required equipment, including truck mounted attenuator.
 - b) Contractor's insignia on the vehicle.
 - c) Iowa DOT approved dynamic message sign meeting the requirements of Article 4188.07 of the Standard Specifications, except that the sign shall be truck mounted.
 - d) A truck mounted attenuator that meets or exceeds NCHRP TL-3 requirements.
 - e) LED amber light bar visible in all directions.
 - f) Radio, citizens band radio, programmable scanner, and a cellular telephone.

b. Operation.

- 1) Position one vehicle on each end of work zone, outside of work limits in a position where the vehicle will not become stranded in traffic in the event of a queuing situation.
- 2) The following procedures will be followed until free flow traffic conditions are present.
 - a) The queue protection truck shall be positioned approximately 1/2 mile upstream from the back of the slow moving traffic.
 - b) The queue protection truck shall be positioned on the shoulder and clear of the traveled way so as not to impede traffic.

- c) The queue protection truck shall utilize PDMS to indicate slow or stopped traffic ahead.
- d) The queue protection truck shall relocate as needed to maintain the approximate 1/2 mile distance from the back of the slow moving traffic.
- e) Queue length estimates and traffic conditions shall be reported to the Iowa DOT TMC at the following periods:
 - When deployed.
 - At 30 minute intervals.
 - At significant changes.
 - When free flow traffic is achieved.

Replace Article 2528.04, K with the following:

K. Traffic Monitoring with Incident Response.

The Engineer will count the number of calendar days based on the contract quantity that Traffic Monitoring with Incident Response is utilized. ~~Additional personnel required by the Engineer to provide additional traffic monitoring of CMS operation will be measured in calendar days per person needed.~~

Add the following to Article 2528.04 of the Standard Specifications:

L. Traffic Queue Protection and Response.

The Engineer will count the number of calendar days that Traffic Queue Protection and Response is utilized.

Replace Article 2528.05, K with the following:

K. Traffic Monitoring with Incident Response.

1. Per calendar day for the number of calendar days used.
2. This payment is full compensation for:
 - Furnishing the necessary vehicle (including operation, maintenance, and supplies),
 - Furnishing the operator,
 - Documentation of any events that restrict the normal flow of traffic including responses to an emergency situation,
 - Re-erecting, repairing, or replacing traffic control devices,
 - Providing assistance to persons with vehicle problems,
 - Moving stalled vehicles, and
 - Summoning further assistance when needed.
- ~~3. Payment for the number of calendar days that additional personnel, such as for CMS operation required by the Engineer, will be the contract unit price per calendar day. Payment is full compensation for furnishing the required personnel and necessary support vehicles.~~

Add the following to Article 2528.05 of the Standard Specifications:

L. Traffic Queue Protection and Response.

1. Per calendar day for the number of calendar days used.
2. This payment is full compensation for:
 - Furnishing the necessary vehicle and equipment (including operation and maintenance),
 - Furnishing the operator,
 - Reporting of any events that restrict the normal flow of traffic, and

- Summoning further assistance when needed.