South Carolina Department of Transportation Traffic Engineering Guidelines

NUMBER: TG-30

SUBJECT: Bridge Pier and Bridge End Delineation

- **BACKGROUND:** Section 2C.65 of the MUTCD establishes provisions for the delineation of obstructions (such as bridge ends, bridge piers, and abutments) not in the roadway but so close to the edge of the road that they need delineation. These provisions, however, do not specifically address when to use these signs or where to mount them to delineate bridge ends or bridge piers. This guideline has been developed to maintain uniformity for signing these locations.
- **GUIDELINE:** An object marker (OM-3.5L-24 or OM-3.5R-24) should be used to delineate all bridge piers except ones that are:
 - 1. More than 30 feet (30') from the travel lane of the highway.
 - 2. Behind guardrail or concrete barrier and is 20 feet (20') or more from the travel lane.
 - 3. Within a continuous installation of concrete barrier.

Object markers used to delineate bridge piers that are eight feet (8') or less from the shoulder or curb should be mounted with the bottom of the panel four feet above surface of the roadway edge and with the roadway side of the marker in line with the edge of the obstruction closest to the roadway. Bridge piers that are more than eight feet (8') from the shoulder or curb should be mounted with the bottom of the panel four feet above the ground. The marker should be installed as close as practical to the centerline of the pier but out of the line of water flow or drippage from the bridge.

Type 3 object markers (OM-3L-12 and OM-3R-12) should be used to delineate ends of bridges. If guardrail is present, the ends should be delineated in accordance with Standard Drawing 651-120-00. In addition, the guardrail may be delineated along its length on the face. In general, bridge ends should be delineated with object markers (OM-3L-12 and OM-3R-12) as noted below:

- 1. All ends of a bridge on a two-lane roadway (4signs).
- 2. Each end of the approach end of each bridge on a multilane roadway where there is a separate bridge for each direction of travel (4signs).
- 3. The right side of each end of the bridge on a multi-lane facility where the two roadways carrying opposing traffic are separated by a raised median or concrete barrier and only one bridge exists (2signs).
- 4. Each end of a bridge on a multi-lane facility where the two roadways carrying opposing traffic are separated by either a double center line or a smooth median (4signs).

Type 3 object markers used to delineate bridge ends should be mounted with the bottom of the panel four feet above the surface of the roadway edge and with the roadway side of the marker in line with the inner edge of the obstruction.

The sign design details for Type III object markers are as shown in the "Standard Highway Signs and Markings" book. The sign design details for the bridge pier markers are as shown on Traffic Engineering's layouts for OM-3.5L-24 and OM-3.5R-24. The sheeting type shall be as specified by Engineering Directive Memorandum Number 4.

Approved:

Director of Traffic Engineering

October 31, 2013 Date