Memorandum

To: DEPUTY DISTRICT DIRECTORS OPERATIONS
   DEPUTY DISTRICT DIRECTORS PROJECT DEVELOPMENT

From: DEPARTMENT OF TRANSPORTATION
      Division of Traffic Operations

Date: June 16, 1993

Subject: Lighting for Nonstandard Sag Vertical Curves

Attached is a Memorandum from W.P. Smith, Chief of the Office of Project Planning and Design (OPPD), clarifying the lighting of sag vertical curves with nonstandard stopping sight distance.

When the OPPD Coordinator and the Traffic Liaison Engineer, with input from the district functional units, determine that lighting should be installed, the following guidelines should be used to decide the locations of electroliers:

a) The responsible project engineer (civil) shall provide the actual sight distance from the beginning of the curve and the length of the curve, for each direction of travel, to the electrical engineers doing the lighting design.

b) The first electrolier should be located at the actual sight distance down-stream from the beginning of the curve. Additional electroliers should be located at 180-foot intervals to within 90 feet of the end of the curve. (Note that the last electrolier will, in some cases, be beyond the end of the curve.)

c) The types of electroliers used should be those with 310-watt HPS luminaire and pole shaft of 35 feet in length.

d) As an example (see attached drawing), if the actual sight distance of the nonstandard vertical curve is 360 feet and the length of the curve is 970 feet for the direction shown, then--

1) The location of the electrolier should be 360 feet (the actual sight distance) from the beginning of the curve. The second electrolier should be 540 feet (360 + 180 feet) from the beginning of curve, the third 720 feet (540 + 180 feet), and the fourth 900 feet (720 + 180 feet).
2) Since the last electrolier is within 90 feet from the end of the curve, no additional electroliers are needed.

e) Repeat the same procedure for the opposing direction.

Original Signed by

ROBERT L. DONNER, Chief
Office of Electrical Systems

Attachments

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