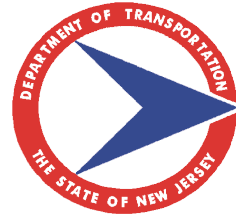


New Jersey Department of Transportation

1035 Parkway Avenue, PO Box 600, Trenton, New Jersey 08625-0600



Baseline Document Change Announcement

ANNOUNCEMENT: BDC13MR-07

DATE: March 25, 2014

SUBJECT: Revised Design Manual -Roadway Section 11, Highway Lighting Systems, and Section 12, Traffic Signal Design

The Department has revised Design Manual - Roadway Section 11, Highway Lighting Systems and Section 12, Traffic Signal Design.

The following is the summary of the revisions.

Section 11

- General revisions to the entire document:
All the references to Traffic Signal and Safety Engineering (TSSE), have been changed to Bureau of Traffic Engineering (BTE).

Subsection 11.3.1, Paragraph B on Page 11-3

- Added:
The deceleration and adjacent lanes must be illuminated unless otherwise directed.

Subsection 11.3.13 Paragraph 3 on Page 11-10

- Added:
Load centers shall be located above the flood hazard area (100 year flood +25%) design flood elevation.

Subsection 11.4 Paragraph 2 on Page 11-11

- Changed:
“The light loss factor 1.00” to “The light loss factor for mercury vapor type is 1.00.”

And added:

The light loss factor for metal halide type is 0.72.

Subsection 11.4 Paragraph 3 on Page 11-11

- The first sentence was changed to add “or Pulse Start 150 watt metal halide fixtures.”
- The last sentence in that paragraph “A minimum of two luminaires shall be provided for each sign panel.” Has been removed.

- **Added Section:**

11.12 Roundabout Lighting

Lighting must conform to the current IES-DG-19-08 design guide for roundabout lighting. Preliminary plans of the lighting layout must be submitted to the Bureau of Traffic Engineering for review and approval.

- **Added Section:**

- 11.13 **Pedestrian Crosswalks**

- **Section 11.12 has been renumbered to 11.14**

- 11.14 **Light Trespass from Off-site Development**

Section 12

- General revisions to the entire document:

All the references to Traffic Signal and Safety Engineering (TSSE), has been changed to Bureau of Traffic Engineering (BTE).

Subsection 12.3.2B, Paragraph 5 on Page 12-3

- First paragraph under 5th bullet (last) has been changed to:

Signal heads shall be aligned over the roadway as noted above, except that in this case, the near side signal head will be placed to the left of the median or barrier curb , typically back to back with the far right through signal head for opposing traffic.

Subsection 12.3.3 Paragraph A., 2. Closed Loop on page 12-5

- Changed title Closed Loop to Closed Loop / Adaptive.
- Removed the minimum of 30 local intersections.
- All reference to the ITS Engineering unit was changed to the Bureau of Mobility and Systems Engineering (MSE)

Paragraph B. Minimum Green–Yellow - Red Times on page12-6

- The word ‘shall’ has been changed to ‘should’

Subsection 12.3.5 Pre-Emption on page 12-7

Paragraph A

- In the last sentence, the word “must” has been changed to “should”.
- Added "The latter however can be truncated as per the MUTCD."

Paragraph B, Railroad on page 12-8

- Deleted "an active track is within 200 feet of an existing or proposed traffic signal or where"

The following is added on page 12-5:

- A copy of the letter shall be sent to the Manager, Bureau of Traffic Engineering (BTE).
- **Figures 12-A, 12-B, 12-C have been deleted. Figure 12-D has been reentered as Figure 12-A**

BDC09MR-02, dated October 28, 2009, entitled “Revisions to Section 11 Highway Lighting Systems & Section 12 Traffic Signal Design” is hereby superseded.

The revised Sections 11 and 12 shall replace the current Sections 11 and 12.

Implementation Code R (ROUTINE)

Changes must be implemented in all applicable Department projects scheduled for Final Design Submission at least one month after the date of the BDC announcement. This will allow designers to make necessary plan, specifications, and estimate/proposal changes without requiring the need for an addenda or postponement of advertisement or receipt of bids.

Recommended By:

Approved By:

Original Signed by

Original Signed by

Richard Jaffe, P.E.
Director
Capital Program Support

Richard T. Hammer
Assistant Commissioner,
Capital Program Management

Attachment: Design Manual – Roadway, Sections 11 and 12

