

New Jersey Department of Transportation
QUALITY IMPROVEMENT ADVISORY

QUALITY MANAGEMENT SERVICES

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QIA No. QIA013

Approved B. Strizki

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Process Affected:

Scope Design Right of Way Utilities Environmental Historic Construction

**Bureaus Affected: All CPM Units
All Design Consultants**

**Procedure(s) Affected: Design Development
Construction**

Route & Section: N/A

County/Municipality: N/A

Project Summary: N/A

Nature of Problem(s):

Contained in Section 14-09 of the NJDOT Design Manual-Roadway are warrants for the use of moveable construction barrier. However, in the State of New Jersey moveable construction barrier is currently underutilized. In order to achieve the benefits that can result from the use of moveable barrier, designers should seek out more applications than are presently being considered. In an effort to assist designers in identifying specific types of projects which may be good candidates for the use of moveable construction barriers, the following guidelines are provided.

Recommendation(s):

Two categories of projects where construction barrier moveable (CBM) may be warranted are as follows:

1. The first category, are those projects that meet **all** of the following criteria:

- A. An engineering analysis has been performed in accordance with Section 14-08.2 (Warrants) of the NJDOT Design Manual-Roadway and it has been determined that the use of precast concrete curb, construction barrier is required in order to shield an obstruction, **and**
- B. An adjacent temporary lane closure will be performed during non-peak traffic periods (e.g. during non-rush hours) using traffic control devices such as drums, cones or breakaway barricades.
- C. The construction duration is long-term and the length of project is substantial.
- D. The roadway is a limited access highway.

2. The second category are those projects where the use of CBM will allow for the creation of a

reversible lane during peak hours, thereby reducing:

- traffic congestion
- construction duration
- the cost of construction

As specified in Section 14-09 of the NJDOT Design Manual-Roadway, the designer should make the determination that the potential benefits resulting from the use of CBM including the resulting increased worker safety makes the use of the CBM system a viable alternative to conventional traffic control devices.

Input for justification should continue to be obtained from Traffic Signal and Safety Engineering and Regional Construction.

Implementation:

Impact Assessment:

Schedule Quality Cost Scope

Cost Impact: