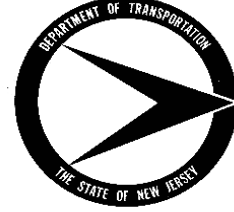


New Jersey Department of Transportation

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Baseline Document Change Announcement

NJDOT Design Manual - Roadway Changes

BDC97MR-004

May 29, 1998

Subject: Release of revisions and additions to *NJDOT Design Manual - Roadway*, Section 6, "At-Grade Intersections", and Section 9, "Guidelines for the Selection and Design of Crash Cushions"

Attached for inclusion in your copy of the *NJDOT Design Manual - Roadway* are revisions and additions to the following pages of Sections 6 and 9 along with a revised Table of Contents:

Metric Version:

TC-5 to TC-6

6-23 to 6-26

9-1 to 9-15

English Version:

v to vi

6-23 to 6-26

9-1 to 9-15

Replace the existing superseded pages.

Instructions to Designers

This section is effective immediately and shall apply to all projects, except those projects where the implementation of the new criteria will require substantial cost or schedule changes. In such cases, the Designer shall contact the Department's Project Manager to determine how to proceed.

Based on Corrective Action Notice No. CAN009 dated April 29, 1998, in no case shall Advanced Dynamic Impact Extension Module (ADIEM) attenuators be used in permanent applications on projects under design and shall be removed from projects where the design has been completed but have not yet been advertised. Currently, the approved alternate system is the QuadGuard attenuator. The responsibility of each unit to ensure that this is carried out as outlined in CAN No. CAN009

The Hex-Foam Sandwich System and the Guard Rail Energy Absorbing Terminal (G.R.E.A.T.) System have not passed the NCHRP Report 350 test criteria. In no case shall the Hex-Foam Sandwich System or the G.R.E.A.T. System be used in permanent and/or temporary applications on projects under design, and

shall be removed from projects where the design has been completed but have not yet been advertised, and replaced with the QuadGuard System. For projects currently under construction, Transpo Industries Inc. have been substituting the QuadGuard for the Hex-Foam Sandwich System or the G.R.E.A.T. System in the field.

The specifications for the QuadGuard attenuator will be included in the 1998 Supplement to the 1996 Standard Specifications which is scheduled to be released in June 1998. Currently, the QuadGuard specification will be placed in appropriate project specific specifications by the Technical Specifications Unit.

The changes being incorporated to the manual are as follows:

| LIST OF ENGLISH REVISIONS | PAGE NOS. |
|---|-------------|
| Table of Contents | v & vi |
| Fig. 6-P, changed "GREAT" to "QUADGUARD" and eliminated "ADIEM" | 6-23 |
| Fig. 6-Q, changed "G.R.E.A.T." to "QUADGUARD" and eliminated "ADIEM" | 6-25 |
| Sec. 9-01, added last sentence to the third paragraph. | 9-1 |
| Sec. 9-02, renumbered subsections after adding the "9-02.1 General" subsection. | 9-1 to 9-9 |
| Sec. 9-02.1, deleted "Hex-Foam Sandwich System" here and throughout Section 9, figures and text. | 9-1 to 9-14 |
| Sec. 9-02.1, changed "Guard Rail Energy Absorbing Terminal (G.R.E.A.T.)" to "QuadGuard System" here and throughout Section 9, figures and text. | 9-1 to 9-14 |
| Sec. 9-02.1, added "QuadGuard LMC System" here and throughout Section 9, text only. | 9-1 to 9-14 |
| Sec. 9-02.1, added one paragraph and deleted two paragraphs. | 9-1 & 9-3 |
| Sec. 9-02.2, changed first paragraph due to new crash cushions. | 9-3 |
| Fig. 9-B, changed "Hazard" to "Obstruction". | 9-4 |
| Fig. 9-C, deleted figure "Hex Foam Sandwich System" and renumbered all the following figures in Section 9. | 9-5 to 9-13 |
| Fig. 9-C, added "DESIGN SPEED (MPH)" column and other changes to the table. | 9-6 |
| Fig. 9-E, deleted figure "Design Data Table Hex Foam Sandwich System" and renumbered all the following figures in Section 9. | 9-6 to 9-13 |
| Fig. 9-F, deleted figure "Design Data Table G.R.E.A.T. System" and renumbered all the following figures in Section 9. | 9-6 to 9-13 |
| Sec. 9-02.5, changed "imminency of" to "impending" in the first paragraph. | 9-7 |
| Sec. 9-02.5, changed the second paragraph to include "as required by the manufacturer." | 9-8 |
| Sec. 9-02.8, changed "g's" to "G's" here and throughout Section 9, text only. | 9-8 to 9-15 |
| Sec. 9-02.9, deleted second sentence. | 9-8 |
| Sec. 9-02.12, added last sentence. | 9-9 |
| Sec. 9-02.13, added fourth paragraph. | 9-9 |
| Sec. 9-03.1, changed the variables in Equations 1 & 2, affecting figures and text. | 9-9 to 9-14 |
| Sec. 9-03.2, added second paragraph. | 9-14 |

Distribution to In-House Staff and Various Public Agencies

This memorandum along with a copy of the attachments will be distributed to In-House staff and various Public Agencies in accordance with the *NJDOT Design Manual - Roadway* distribution list by the Office of Document Control. Please make additional copies as needed.

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Distribution to other Outside Agencies (Consultants, Contractors, etc.)

This memorandum will be posted on the New Jersey Department of Transportation's Electronic Bulletin Board System (BBS) under conference number 10 - "Highway Design", File Area 56 - "Baseline Document Change Memorandums". This memorandum along with a copy of the attachments will be mailed to all *NJDOT Design Manual - Roadway* holders. Make additional copies as needed.

Copies of the *NJDOT Design Manual - Roadway* can be obtained by contacting:

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This BDC memorandum file and attachment file can be downloaded from the New Jersey Department of Transportation Web Page at <http://www.state.nj.us/transportation>. See "Distribution to In-House Staff and Various Public Agencies" above for complete instructions.

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attachment
BJS:CG:mc

 BDC97MR-004.doc

Approved By:

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Assistant Commissioner,
Capital Program Management