



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

JAMES H. TROGDON, III
SECRETARY

MEMORANDUM TO: Project Engineers
Project Design Engineers

FROM: B. C. Hanks, P. E.
State Structures Engineer

DATE: May 17, 2018

SUBJECT: TYPE III GUARDRAIL ANCHOR UNIT

To be in compliance with the AASHTO Manual for Assessing Safety Hardware (MASH), the dimension from the riding surface to the centerline of a Type III guardrail anchor unit (GRAU) has decreased from 1'-11" to 1'-9".

The following Standard Drawings have been revised:

Standard No.	Summary of Revision(s)
GRA3	<ul style="list-style-type: none">Decreased dimension from the riding surface to the centerline guardrail anchor assembly from 1'-11" to 1'-9".Added taper to the One Bar Metal Rail End Post and 32" Alaska Rail End Post.
BAS4, BMR1, BMR89, CBR2, PCBB8, PCS3	<ul style="list-style-type: none">Revised spacing of the "B" bars in the Vertical Concrete Barrier Rail to avoid conflict with the through-bolts of a Type III GRAU.Revised tapered end of the Vertical Concrete Barrier Rail End Post from 7" x 24" to 10" x 24".Revised spacing of the "F" bars in the One Bar Metal Rail End Post, Three Bar Metal Rail End Post, 32" Alaska Rail End Post and 42" Oregon Rail End Post to avoid conflict with the through-bolts of a Type III GRAU.Added taper to the One Bar Metal Rail End Post and 32" Alaska Rail End Post.

The following Design Manual Figures have been revised:

Figure	Summary of Revision(s)
6-10, 6-11	<ul style="list-style-type: none"> • Revised spacing of the “B” bars in the Vertical Concrete Barrier Rail to avoid conflict with the through-bolts of a Type III GRAU.
6-32, 6-35d	<ul style="list-style-type: none"> • Revised spacing of the “F” bars in the Three Bar Metal Rail End Post and 42" Oregon Rail End Post to avoid conflict with the through-bolts of a Type III GRAU. • Decreased dimension from the riding surface to the centerline guardrail anchor assembly from 1’-11” to 1’-9” in the Three Bar Metal Rail End Post and 42" Oregon Rail End Post.
6-33	<ul style="list-style-type: none"> • Decreased dimension from the riding surface to the centerline guardrail anchor assembly from 1’-11” to 1’-9” in the Two Bar Metal Rail End Post.
6-34, 6-35c	<ul style="list-style-type: none"> • Revised spacing of the “F” bars in the One Bar Metal Rail End Post and 32" Alaska Rail End Post to avoid conflict with the through-bolts of a Type III GRAU. • Decreased dimension from the riding surface to the centerline guardrail anchor assembly from 1’-11” to 1’-9” in the One Bar Metal Rail End Post and 32" Alaska Rail End Post. • Added taper to the One Bar Metal Rail End Post and 32" Alaska Rail End Post.

This policy is effective immediately. The revised Standard Drawings and Design Manual Figures are available online.

BCH/DCM/THC/ksl

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