NESTED MGS W-BEAM TO THRIE BEAM TRANSITION WITH CURB

STG04a-b

BEGIN STIFFENED THRIE BEAM BRIDGE RAIL

325 13/16" [8275]

BEGIN SGR20a-c OR EQUIVALENT

37 1/2" [953]

75" [1905]

Optional Post

PDB18 FOR a OR PDB21 FOR b

PDB10a FOR a OR PDB11a FOR b

16D DOUBLE HEADED NAIL

Optional Post

2-RTM10a DOUBLE (2-PLY NESTED)

12-FBB01

RTM09a

RWT02

FBB06 FOR a OR FBB07 FOR b

8-FBB01

31" [788]

Optional Post

2-RWM04a DOUBLE (2-PLY NESTED)

Curb

Ground Line

PWE06 FOR a OR PDE02 FOR b

No Bolt

4" [102]

A

B

C

A

B

C
INTENDED USE

Nested Midwest Guardrail System (MGS) W-beam to Thrie Beam Transition with Curb is intended to be used when the MGS is placed adjacent to a stiffened thrie beam approach guardrail transition to a stiff bridge rail with a 4” [102] curb. The Nested MGS W-beam to Thrie Beam Transition with Curb without the optional post upstream of the Asymmetrical W-beam to Thrie Beam Transition (RWT02) should be used in locations where a maximum dynamic deflection of 32.5” [826] or less is acceptable and where a working width of 40.8” [1,306] is provided. Nested MGS W-beam to Thrie Beam Transition with Curb with the optional post upstream of the Asymmetrical W-beam to Thrie Beam Transition (RWT02) may be used in locations where safety benefits of reduced vehicle pocketing and snag and system dynamic deflections of 27” [686] or less is desired. The Nested MGS W-beam to Thrie Beam Transition with Curb may be used with or without soil backfill and should be installed with a minimum of 24” [610] of level or gently-sloped fill placed behind the posts.

The Nested MGS W-beam to Thrie Beam Transition with Curb should be used with the following guidelines:

1. A minimum barrier length installed upstream of the nested W-beam (RWM04a) should be the total system length of an acceptable Test Level (TL-3) guardrail end terminal. The guardrail end terminal’s interior end (stroke length) should not intrude into the nested W-beam (RWM04a).
2. A minimum barrier length of 412.5” [10,478] should be installed beyond the upstream end of the nested W-beam (RWM04a), which includes standard MGS, a crashworthy guardrail end terminal, and an acceptable anchorage system.
3. For flared guardrail applications, a minimum barrier length of 150” [3810] should be used between the upstream end of the nested W-beam (RWM04a) and the start of the flared section (i.e., bend between flare and tangent sections).

The Nested MGS W-beam to Thrie Beam Transition with Curb has been crash tested under TL-3 conditions of the Manual for Assessing Safety Hardware (MASH) and deemed crash-worthy according to the MASH safety performance criteria.

COMPONENTS

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ELIGIBILITY

FHWA eligibility will be pursued.
NESTED MGS W-BEAM TO THRIE BEAM TRANSITION WITH CURB

STG04a-b

MWRSF

NESTED MGS W-BEAM TO THRIE BEAM TRANSITION WITH CURB

SECTION C-C

Line

PWE06 FOR a OR

PDE02 FOR b

2-RWM04g DOUBLE
(2-Ply Nested)

HEAD NAIL

16D DOUBLE

PDB10a FOR a OR

PDB11 FOR b

8"

203

SECTION B-B

FBB07 FOR b

HEAD NAIL

RWT02

16D DOUBLE

PDB18 FOR a OR

PDB21 FOR b

8"

203

SECTION A-A

FBB06 FOR a OR

FBB07 FOR b

HEAD NAIL

RTM09a

PDB18 FOR a OR

PDB21 FOR b

8"

203

DATE: 12/5/2016

STG04a-b

SHEET NO. 3
REFERENCES

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