EXPLANATION OF REVISIONS

.DGN NAME	CONTENTS	DATE APPROVED
index_sheet.dgn	previously 10/15/04 added note #11 which addresses slope roundings	10/17/06
index_sheet.dgn	previously 10/17/06 added "of sheets and general notes" to description, and moved "roadway plans" up	1/07/10
index_sheet.dgn	previously 1/07/10 update std plan date to 2010 deleted general notes 3 and 4	1/20/11
	sheet model deleted no content change	11/21/14
stdsym1_2.dgn	added proposed median cable gr updated exist. drainage manhole symbol added unknown manhole to underground utilities	11/29/11
	Added/revised Environmental lines	11/21/14
ErosStrat.dgn	new approved detail sheet	11/29/11
	Added notes 3.5 and 5.5	3/19/12
	Added notes 2.8 E, 10.3, and 11.9 Modified notes 2.1, 2.7, 2.8, 4.3, 5.4, 9.1, 9.2, 10.1, 10.2, 11.3, and Table 1	10/30/12
	Modified notes 1.5 and 10.3	01/10/13
	Modified note 2.8 D and E	12/21/15
THE FOLLOWING DETAILS ARE NOW STANDARD PLANS APPROVED 7/29/2010		
EAGRT.dgn	preferred platform grading for energy absorbing guardrail terminal	06/07/05
EAGRTALT.dgn	alternative platform grading for energy absorbing guardrail terminal	06/07/05
GR-E2.dgn	type E-2 guardrail terminal	03/01/06
GR-E2HD.dgn	hardware for guardrail terminal type E-2 and E-2 modified	03/01/06
GR-E2MOD30.dgn	type E-2 modified (30MPH) guardrail terminal	03/01/06
GR-E2MOD40.dgn	type E-2 modified (40MPH) guardrail terminal	03/01/06
GR-E2MOD45.dgn	type E-2 modified (45MPH) guardrail terminal	03/01/06

EXPLANATION OF REVISIONS

.DGN NAME	CONTENTS	DATE APPROVED
DBL NEST RAIL.dgn	revised note 1 (eliminated GR-1A) corrected spelling of WITHOUT in note no. 5	02/04/13
stdsym1_2.dgn	added its symbols to traffic signal section and its note to notes	03/15/13
MASH_GR-02A.dgn	renamed from 2013-mod_gr-02.dgn corrected splice locations and dimensions, udated beam hardware designations	03/21/13
DBL NEST RAIL.dgn	added (MAXIMUM) to note below CENTERLINE CULVERT note.	03/29/13
MASH_GR-02A.dgn	changed item no 603.18001 to 606.18001. changed blockout to offset blocks.	04/18/13
MASH_GR-02A.dgn	see MEMORANDUM dated August 14, 2013	08/15/13
term_unit_delin	added TERMINAL UNIT DELINEATION. "The detail has been revised to change the item numbers and description, removing the color reference. This is consistent with the Supplemental Specification Amendment to Section 621 dated on 09/08/2014."	09/23/2014
	drawing edited to delete blank border and extra model. Minor cleanup changes.11-21-14edm	11/21/14
prf_pltfrm_offst.dgn	Deleted sheet 1 of 1 note Deleted not to scale note Changed .DGN name to fit in box Changed revision date to 11/24/14	11/24/14
	This drawing replaced by ppo_tl2_3.dgn & ppo_tl2_25.dgn	06/18/15
alt_pltfrm_offst.dgn	Deleted sheet 1 of 1 note Deleted not to scale note Changed .DGN name to fit in box Changed revision date to 11/24/14	11/24/14
	This drawing replaced by apo_tl2_3.dgn & apo_tl2_25.dgn	06/18/15

EXPLANATION OF REVISIONS

.DGN NAME	CONTENTS	DATE APPROVED
GR-Stiff-detail	Added Mid-Splice W-Beam GR Stiffening Detail	02/25/15

STATE OF NEW HAMPSHIRE
INTRA-DEPARTMENT COMMUNICATION

DATE: June 18, 2015

FROM: Michael D. Hazlett, PE
Final Design Group Leader

AT (OFFICE): Highway Design Bureau

SUBJECT: Updated Special Details
TL 2 and TL-3 EAGRT Offset Platforms

THRU: James A. Marshall, PE
Administrator, Bureau of Highway Design

TO: Project Development
Operations Bureau Administrators

MEMORANDUM

Please be aware that the Special Details noted above are being provided to replace the existing Special Details for the 50 foot and 25 foot EAGRT platforms. The modifications are due to the changes in those EAGRT units allowed in the appropriate Item 606 special provision. A summary follows:

- Change titles of the details to reflect Test Level application while adding clarification notes regarding length of EAGRT units consistent with the appropriate 606 special provision. This resulted in 6 special details based on the length of the terminal:
    - TL-3 Preferred EAGRT platform (based on a 50 foot length of terminal.)
    - TL-3 Alternate EAGRT platform (based on a 50 foot length of terminal.)
    - TL-2 Preferred EAGRT platform (based on a 37.5 foot length of terminal.)
    - TL-2 Alternate EAGRT platform (based on a 37.5 foot length of terminal.)
    - TL-2 Preferred EAGRT platform (based on a 25 foot length of terminal.)
    - TL-2 Alternate EAGRT platform (based on a 25 foot length of terminal.)

Some background behind the EAGRT platforms' designs follows:

- The Preferred Platforms are intended to provide a reasonable approach grading reflecting typical constraints.

- The Alternate Platforms are intended to provide a reasonable approach grading where the constraints are more restrictive.

- The TL-2 platforms (based on 25 foot terminal length) are provided for site conditions where only the grading for a minimum terminal length for TL-2 can be provided.

- The platforms shown are designed to provide the opportunity for installation of a number of different terminals to be installed on the platforms. This allows uniformity in construction and maintenance. The platform designs utilize the lowest common denominator of the characteristics of the various EAGRT designs. For example, in some instances terminals chosen may be allowed to be placed at a steeper taper rate than indicated. In others, the terminal chosen may be shorter than what is indicated. To keep consistency in construction and the maintenance, flatter tapers required by certain terminals have been used and longer lengths of certain terminals have been accounted for. These are intentional and not to be changed due to the type of terminal chosen.

The revised special details are anticipated to be available on the website shortly.

Please do not hesitate to contact me with any questions.

cc: W. Cass
C. Waszczuk
W. Janelle
J. Marshall
K. Cota

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STATE OF NEW HAMPSHIRE
INTRA-DEPARTMENT COMMUNICATION

FROM: James A. Marshall, PE
Administrator

DATE: February 18, 2015
AT (OFFICE): Bureau of Highway Design

SUBJECT: **Mid-Splice W-Beam Guardrail Stiffening Detail**

TO: Project Development and Operations Staff

MEMORANDUM

Highway Design Bureau is issuing Special Detail titled "Mid-Splice W-Beam Guardrail Stiffening Detail" for use as appropriate in future projects . The detail allows lessening of the offset for the mid-span guardrail to an obstruction from a minimum of 6 feet to a minimum of 4 feet but only "**when the obstruction cannot practically be moved or otherwise be made safe within the zone of intrusion as normally required.**" The detail is available as a pdf and a dgn on the Department's Website at:

http://www.nh.gov/dot/org/projectdevelopment/highwaydesign/detailsheets/index.htm

Please contact Mike Hazlett (x-1599) or myself if you have any questions.

Cc: W. Cass
W. Janelle
K. Cota

STATE OF NEW HAMPSHIRE
INTRA-DEPARTMENT COMMUNICATION

DATE: September 24, 2014

FROM: William J. Oldenburg, PE
Assistant Director of Project Development

AT (OFFICE): Executive Office

SUBJECT: **Revised Terminal Unit Delineation**

TO: Project Development and Operations Staff

MEMORANDUM

Consistent with the Supplemental Specification Amendment to Section 621, dated 09/08/2014, Highway Design Bureau is issuing the revised Terminal Unit Delineation Special Detail for inclusion into future projects. The revision changes the Item Numbers and removes the color from the Item Descriptions. The detail is available as a pdf and a dgn on the Department's Website at:

http://www.nh.gov/dot/org/projectdevelopment/highwaydesign/detailsheets/index.htm

The intent of this detail is to provide post mounted delineation for Highway Maintenance at guardrail terminals.

Please contact Mike Hazlett (x-1599) or myself if you have any questions.

Cc: W. Cass
W. Janelle
K. Cota

STATE OF NEW HAMPSHIRE
INTRA-DEPARTMENT COMMUNICATION

DATE: August 14, 2013

FROM: Michael D. Hazlett, PE

AT (OFFICE): Highway Design Bureau
Final Design Section.

SUBJECT: Updated Special Detail
31" Beam Guardrail Standard Section Steel Posts
And Hardware Details

THRU: for William J. Oldenburg, PE

TO: Project Development and Operations Bureau Administrators

MEMORANDUM

Please be aware that the Special Detail noted above is being revised and replaced. The Department had submitted the existing special detail for the mid-splice 31" high Steel Post W-beam Guardrail with 8 inch Offset Blocks to Federal Highway Administration for review to become part of the Standard Plans. A number of comments came back that indicated that the detail required additional work. A summary follows:

- Replaced reference "length of need" with "roadside barrier" for better compliance with the AASHTO Roadside Design Guide.
- Revised note on Sample Guardrail Installation Layout regarding use of the Terminal Unit G-2.
- Clarified Standard Section Plan view by moving the 3' – 1 ½ " dimension from the space between two posts to the length between the center of the splice and the center of the post.
- Revised the Sample Guardrail Installation Layout so the lapping of the splices is consistent with the direction of traffic if a G-2 Terminal unit was used.
- Revised the Typical Side View to align the face of rail with the edge of pavement.
- Revised the General Notes as follows:
    - Note 1 reworded to replace "length of need" with "roadside barrier" and to note portions of crash cushions and terminals and the entire G-2 terminal are not considered part of the roadside barrier.
    - Note 2 shortened the reference.
    - Note 3 reworded to omit reference to long discontinued type of terminal unit and include any appropriate units.
    - Note 4: Unchanged
    - Note 5 reworded to clarify how to determine where the rail height is determined from and under what conditions.
    - Note 6 reworded to clarify when posts shorter than 7' in length may be used.
    - Note 7 eliminated through rewording of note 6.
    - Note 7 reworded for clarity.
    - Note 8 replaces note 9 in a simpler, clearer statement.

The revised special detail is anticipated to be available on the website on August 15, 2013.
I hope that these changes improve the understanding of this system, its installation, and maintenance. Please do not hesitate to contact me with any questions.

Cc: W. Cass
W. Janelle
W. Oldenburg
K. Cota

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STATE OF NEW HAMPSHIRE
INTRA-DEPARTMENT COMMUNICATION

DATE: September 24, 2013

FROM: Michael D. Hazlett, PE

AT (OFFICE): Highway Design Bureau
Final Design Section.

SUBJECT: Updated Special Detail
31" Beam Guardrail Standard Section Steel Posts
And Hardware Details
Revision 2

THRU: William J. Oldenburg, PE WJO 9/24/13

TO: Project Development and Operations Bureau Administrators

MEMORANDUM

Please be aware that the Special Detail noted above is being revised and replaced. The following revisions have been made to the referenced sheet:

- Regarding the Sample Guardrail Installation Layout:
  - The G-2 has been moved to the other end of the run to be consistent with the lapping of the beam at the splices as shown in the Elevation view Standard Section. The existing detail indicates that the direction of traffic would be opposite of the lapping of the splices.
  - The note regarding the G-2 has been revised to better reflect that it is intended as an anchorage rather than a crashworthy terminal.

The revised special detail is anticipated to be available on the website September 25, 2013.
Please do not hesitate to contact me with any questions.

Cc: W. Cass
W. Janelle
W. Oldenburg
K. Cota