



TRANSPORTATION CABINET


Frankfort, Kentucky 40622
www.transportation.ky.gov/

Steven L. Beshear
Governor

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DESIGN MEMORANDUM NO. 03-14

TO: Chief District Engineers
Design Engineers
Active Consultants

FROM: William Gulick, P.E. 
Director, Division of Highway Design

DATE: July 22, 2014

SUBJECT: Modified End Anchors for Type 3 and Type 7 End Treatments; and
Separate Guardrail Connector to Bridge End Type A and A-1 Drawings

This memorandum is being issued to summarize changes to the Type 3 and the Type 7 End Treatments as well as to the Guardrail Connector to Bridge End Type A and A-1 Standard Drawings. These changes affect multiple Standard Drawings as well as newly created drawings.

Currently, End Treatments Type 3 and Type 7 specify the construction of a concrete block anchor. In some cases a concrete anchor is not a practical option. In those instances, it may be necessary to modify the end anchor to fit the situation. The Modified Alternate End Anchor Drawings allow for the use of a steel post and attached plate, securing the rail section to the post, in lieu of the concrete anchor.

For clarity, RBC-001-10, Guardrail Connector to Bridge End Type A and A-1 was split into two separate drawings. Note 3a that referenced back-up plates was removed. The spacer tube, which is required, was added to Note 4a. The appropriate Pay Items are now listed on each drawing.

In all, there will be a total of 7 drawings affected, 4 of which will be NEW drawings and 3 are existing drawings with revisions. There was no change to the footprint of any of these devices or the Bid Items used, the Pay Limits were not changed and the design selection criteria used in choosing a particular device has not changed.

This memorandum is to take effect on all Cabinet projects starting with the October 24, 2014 letting.

Attachments



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ACTIVE SENSITIZED FILM REPRODUCIBLES
(FOR PLAN USE IN LIEU OF STANDARD DRAWINGS)

DATE 7-22-14

SHEET 1 OF 4

DRAWING NO.	DATE	EFFECTIVE LETTING DATE	DRAWING NAME	REMARKS
001	10-28-04	06-15-12	Delineators at Narrow Shoulder Bridges	Revised Pay Item descriptions and notes.
002	12-01-99	06-15-12	Delineators for Guardrail	Revised Pay Item descriptions and notes.
003	12-01-99	08-21-00	Treatment of Open Sinkholes	See Design Memo No. 07-92 Design Change
004 RBM-020-08	04-15-08	07-13-12	Delineators for Concrete Barriers	Revised Notes, Pay Item Descriptions and Details. Added New Bid Code
005 RGX-005-05	11-21-07	06-15-12	Right-of-Way Monuments	Added Type 3 Monument Detail.
006 BHS-008-01	12-02-11	06-15-12	Rail System Type 3	Changed Drill Hole Centerline Dimension in Elevation A-A.
007 RBR-025-04	12-02-11	06-15-12	Guardrail End Treatment Type 2A	Added Details "A" and "B". Revised Notes.
008 RBR-005-10	12-01-99	06-15-12	Guardrail Components	Removed Cable Assembly Type 3.

*Depicts New or Revised Drawing

ACTIVE SENSITIZED FILM REPRODUCIBLES
(FOR PLAN USE IN LIEU OF STANDARD DRAWINGS)

DATE 7-22-14

SHEET 2 OF 4

DRAWING NO.	DATE	EFFECTIVE LETTING DATE	DRAWING NAME	REMARKS
009 RBE-100-09	8-24-11	10-19-12	Crash Cushion Type VI-BT	Removed Class CT and Associated Notes from Drawing.
010 TPM-150-01	12-02-11	3-22-13	Centerline Rumble Strips	Removed "Major/Minor" Designation from Drawing.
011 NEW DRAWING	10-23-12	3-22-13	Shoulder Rumble strips	
012 RBR-001-11	11-21-07	3-22-13	Steel Beam Guardrail ("W" BEAM)	ADDED Note 7 and removed drawing and references to Back-up Plates
013 RBR-015-04	12-01-99	9-27-13	Guardrail Posts	ADDED Note 2 specifying that the 2 holes 7" from top are REQUIRED.
014 RBC-003-07	11-21-07	9-27-13	Guardrail Connector To Bridge End Type A and A-1 Components	ADDED Note 1 specifying that the 2 holes 7" from top are REQUIRED.
015 RBC-100-03	12-01-99	9-27-13	Guardrail Connector To Concrete Median Barrier Wall	Corrected dimensions on Sections A-A & B-B.

*Depicts New or Revised Drawing

ACTIVE SENSITIZED FILM REPRODUCIBLES
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DATE 7-22-14

SHEET 3 OF 4

DRAWING NO.	DATE	EFFECTIVE LETTING DATE	DRAWING NAME	REMARKS
016 RDX-225	11-21-07	10-25-13	Silt Trap Type B	Revised Note 2 to remove Geotextile Fabric. Also removed Detail "A".
017 TTC-100	12-2-11	12-13-13	LANE CLOSURE TWO-LANE HIGHWAY	Revised Note 1 to include definition of Freeway and Expressway. Original note 8 was removed and Note 7 was revised.
018 NEW DRAWING	8-29-12	12-13-13	FLEXIBLE DELINEATOR POST ARRANGEMENTS FOR HORIZONTAL CURVES	
019 NEW DRAWING	8-29-12	12-13-13	FLEXIBLE DELINEATOR POST ARRANGEMENTS FOR INTERCHANGE RAMP AND CROSSOVERS	
020* RBB-002	12-2-02	3-28-14	GUARDRAIL AND BRIDGE END DRAINAGE FOR TWIN STRUCTURES	Added Guardrail, Bridge End Connector and End Treatment Type 2A to inside Shoulder of trailing end of bridge. Also shown in Detail "A".
021* NEW DRAWING	5-30-14	10-24-14	GUARDRAIL END TREATMENT TYPE 7 ALTERNATE END ANCHOR	

*Depicts New or Revised Drawing

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DATE 7-22-14

SHEET 4 OF 4

022* RBR-050	5-30-14	10-24-14	GUARDRAIL END TREATMENT TYPE 7	Note 4 added. Maximum Offset designation was change to Minimum Offset.
023* NEW DRAWING	5-30-14	10-24-14	GUARDRAIL END TREATMENT TYPE 3 ALTERNATE END ANCHOR	
024* RBR-030	5-30-14	10-24-14	GUARDRAIL END TREATMENT TYPE 3	Note 5 added.
025* RBR-031	5-30-14	10-24-14	GUARDRAIL END TREATMENT TYPE 3 PIPE DRAINAGE DETAIL	Note 5 added.
026* NEW DRAWING	5-30-14	10-24-14	GUARDRAIL CONNECTOR TO BRIDGE END TYPE A	Note 3a referencing back-up plates was removed. Spacer tube was added to Note 4a. Pay Items now listed.
027* NEW DRAWING	5-30-14	10-24-14	GUARDRAIL CONNECTOR TO BRIDGE END TYPE A-1	Note 3a referencing back-up plates was removed. Spacer tube was added to Note 4a. Pay Items now listed.