

CONSTRUCTION AND DESIGN JOINT MEMORANDUM

CONSTRUCTION MEMORANDUM No. 06-07
DESIGN MEMORANDUM No. 02-07

TO: Chief District Engineers
Design Engineers
Active Consultants

FROM: David E. Kratt, Director *DEK*
Division of Highway Design

FROM: ^{FOR} Greta Smith, Director *GS*
Division of Construction

DATE: November 21, 2007

SUBJECT: *Standard Specifications for Road and Bridge Construction Edition of 2008*
Standard Drawings Revision No. 1 to Reprint No. 9

The Kentucky Department of Highways intends to publish the new *Standard Specifications for Road and Bridge Construction Edition of 2008* and *Standard Drawings Revision No. 1 to Reprint No. 9*. These documents will be effective with all applicable projects let for construction on January 1, 2008 and thereafter.

By mid-December, hard copies may be obtained through the Policy Support Branch of the Division of Personnel within the Kentucky Transportation Cabinet. Electronic copies (PDF) will be posted for viewing on the Divisions' websites. The *Standard Specifications* will be posted on December 14th, 2007, and the *Standard Drawings* are ready for viewing now. Below are the addresses to the Divisions' websites:

<http://transportation.ky.gov/construction/>

http://transportation.ky.gov/design/standard/standard_drawings.html

The Headwall Supplement (RDH Series) is not revised, but will be available to new holders of the Standard Drawings. The 2000 edition will continue to be used on applicable projects.

Included with this memorandum is an index listing of all drawings with functional changes along with a brief explanation.

Please direct any questions regarding this memo to Ms. Greta Smith, P.E., Director, Division of Construction or Mr. David Kratt, Director, Division of Highway Design.

DEK: JDJ: CW
Attachments

EXPLANATION OF REVISION NO. 1 TO REPRINT NO. 9
(ROADWAY, TRAFFIC AND BRIDGE DRAWINGS)

DRAWING NUMBERS			DRAWING NAME	REMARKS
CURRENT	REVISED	NEW		
RBC-001-08	RBC-001-09		Guardrail Connector to Bridge End Type A and A-1	Revised note number 5 Added note number 8
RBC-002	RBC-002-01		Guardrail Connector to Bridge End Type A and A-1 Components	Editorial Change
RBC-003-06	RBC-003-07		Guardrail Connector to Bridge End Type A and A-1 Components	Editorial Change
RBC-110-08	RBC-110-09		Connection Details of Crash Cushion Type VI to Double Face Guardrail	Changed to allow for New Vendors, Types, and Classes of Crash Cushions
RBE-040-08	RBE-040-09		Crash Cushion Type VII (One & Two Direction)	Changed to allow for New Vendors, Types, and Classes of Crash Cushions
RBE-060-13	RBE-060-13		Crash Cushion Type VI (One & Two Direction)	Changed to allow for New Vendors, Types and Classes of Crash Cushions
RBE-065-05	RBE-065-06		Concrete Median Barrier End	Removed 6" Wall as and Option
RBE-070-03	RBE-070-04		Concrete Median Barrier End For Crash Cushion Type IX	Removed 6" Wall Option

DRAWING NUMBERS			DRAWING NAME	REMARKS
CURRENT	REVISED	NEW		
RBE-100-08	RBE-100-09		Crash Cushion Type VI-T	Changed to allow for New Vendors, Types, and Classes of Crash Cushions
RBE-200-03	RBE-200-04		Crash Cushion Type IX	Changed to allow for New Vendors of Crash Cushions
RBE-205-03	RBE-205-04		Crash Cushion Type IX-A	Changed to allow for New Vendors of Crash Cushions
RBI-003-06	RBI-003-07		Typical Installation of Guardrail End Treatment Type 2A	Clarity of use changes, added "Solid Rock Cut" Note
RBI-004-02	RBI-004-03		Installation of Guardrail End Treatment Type 1	Editorial Changes Revised to require the use of Steel Breakaway Post
RBI-005-06	RBI-005-07		Guardrail Installation at Bridge Columns	Note 2 was changed to "Located in the Clear Zone Distance 30'-0" whichever is greater"
RBI-009-03	RBI-009-03		Crash Cushion Installation at Median Piers (Raised or Flush median)	Editorial Change
RBM-020-07	RBM-020-08		Delineators For Concrete Barriers	Delineators Now Taken From Approved Materials List

DRAWING NUMBERS			DRAWING NAME	REMARKS
CURRENT	REVISED	NEW		
RBM-115-07	RBM-115-08		Concrete Barrier Wall Type 9T (TEMPORARY)	Drainage Slots Revised to 2" Height
RBR-001-11	RBR-001-11		Steel Beam Guardrail ("W" Beam)	Editorial Changes
RBR-016-04	RBR-016-04		Guardrail Posts	Editorial Changes
RBR-020-02	RBR-020-03		Guardrail End Treatment Type 1	Changed to require steel breakaway posts
		RBR-031	Guardrail End Treatment Type 3 Pipe Drainage Detail	New Drawing showing omitted post for drainage
RBR-035-07	RBR-035-08		Guardrail End Treatment Type 4A	Editorial Changes, Change to straight line unit, no more parabolic section
RBR-050-04	RBR-050-05		Guardrail End Treatment Type 7	Added note 3 about low speed. low volume rural road usage without adequate room
RDB-003-07	RDB-003-07		Drop Box Inlet Type 3	Editorial Change

DRAWING NUMBERS			DRAWING NAME	REMARKS
CURRENT	REVISED	NEW		
RDB-004-08	RDB-004-09		Drop Box Inlet Type 4	Editorial Change Corrected Grate Frame Dimension
RDB-006-07	RDB-006-07		Drop Box Inlet Type 6A-6B-6C-6D-6E & 6F	Editorial Change
RDB-012-08	RDB-012-09		Drop Box Inlet Type 12 or 12A	Added Note 12 "These grates are bicycle friendly"
RDB-013-05	RDB-013-06		Drop Box Inlet Type 13	Added Note 12 "This grate is bicycle friendly"
RDB-030-02	RDB-030-03		Drop Box Inlet Type 16	Added Note 14 "This grate is bicycle friendly"
RDB-230-07	RDB-230-08		Concrete Median Barrier Box Inlet	Added Slip Forming Option
RDB-231-09	RDB-231-10		Concrete Median Barrier Box Inlet	Added Slip Forming Option
RDB-240	RDB-240-01		Concrete Median Barrier Box Inlet (50" Tall Wall)	Added Slip Forming Option
RDB-241	RDB-241-01		Concrete Median Barrier Box Inlet (50" Tall Wall)	Added Slip Forming Option

DRAWING NUMBERS			DRAWING NAME	REMARKS
CURRENT	REVISED	NEW		
RDB-270-07	RDB-270-08		Curb Box Inlet Type A (Detail Drawing)	Minimum Heights in Note 12 Redefined
RDB-271-04	RDB-271-04		Curb Box Inlet Type A (Steel Drawing)	Editorial Change
RDB-280-04	RDB-280-05		Curb Box Inlet Type A (Detail Drawing)	Minimum Heights in Note 11 Redefined
RDD-030-07	RDD-030-07		Channel Lining Class IA (Mattress Units)	Editorial Change
RDI-001-07	RDI-001-08		Culvert, Entrance, and Storm Sewer Pipe Types and Cover Heights	Changed to accommodate positive aspects of certain pipe materials. See Design Memo 9-05
RDI-002-02	RDI-002-03		Culvert, Entrance, and Storm Sewer Pipe Types and Cover Heights	Changed to accommodate positive aspects of certain pipe materials. See Design Memo 9-05
RDI-003-02	RDI-003-03		Culvert, and Storm Sewer Pipe Types and Cover Heights	Changed to accommodate positive aspects of certain pipe materials. See Design Memo 9-05
RDI-004-02	RDI-004-03		Culvert, and Storm Sewer Pipe Types and Cover Heights	Changed to accommodate positive aspects of certain pipe materials. See Design Memo 9-05

DRAWING NUMBERS			DRAWING NAME	REMARKS
CURRENT	REVISED	NEW		
RDI-005-02	RDI-005-03		Culvert, and Storm Sewer Pipe Types and Cover Heights	Changed to accommodate positive aspects of certain pipe materials. See Design Memo 9-05
RDI-006-02	RDI-006-03		Culvert, and Storm Sewer Pipe Types and Cover Heights	Changed to accommodate positive aspects of certain pipe materials. See Design Memo 9-05
RDI-007-02	RDI-007-03		Culvert, and Storm Sewer Pipe Types and Cover Heights	Changed to accommodate positive aspects of certain pipe materials. See Design Memo 9-05
RDI-008-02	RDI-008-03		Culvert, and Storm Sewer Pipe Types and Cover Heights	Changed to accommodate positive aspects of certain pipe materials. See Design Memo 9-05
RDI-011-01	RDI-011-02		Culvert, & Storm Sewer Pipe Types & Cover Heights	Changed to accommodate positive aspects of certain pipe materials. See Design Memo 9-05
RDI-012-01	RDI-012-02		Culvert, & Storm Sewer Pipe Types & Cover Heights	Changed to accommodate positive aspects of certain pipe materials. See Design Memo 9-05
RDI-016-01	RDI-016-02		Culvert, & Storm Sewer Pipe Types & Cover Heights	Changed to accommodate positive aspects of certain pipe materials. See Design Memo 9-05
		RDI-021	Pipe Bedding For Culverts, Entrance, and Storm Sewer Reinforced Concrete Pipe	New Drawing, to accommodate positive aspects of certain pipe materials. See Design Memo 9-05

DRAWING NUMBERS			DRAWING NAME	REMARKS
CURRENT	REVISED	NEW		
		RDI-026	Pipe Bedding Trench Condition Reinforced Conc. Pipe	New Drawing, to accommodate positive aspects of certain pipe materials. See Design Memo 9-05
RDI-100-03	RDI-100-04		Fill Heights For Precast Reinf. Conc., Box Culverts	Changed note to HS 25 live load
RDP-006-03	RDP-006-03		Perforated Pipe Underdrains	Editorial Change
RDP-010-07	RDP-010-08		Perforated Pipe Headwalls	Added gravel around headwall
RDX-005-02	RDX-005-02		Junction Box Type B	Editorial Change
RDX-200			Silt Check Type I Straw Bales	VOIDED
RDX-205			SILT CHECK TYPE II & III CRUSHED STONE VOIDED, BECOMES SILT TRAP TYPE "B"	VOIDED
RDX-220-03	RDX-220-04		Silt Trap Type A	The old Type "B" becomes an alternate to the Type "A"

DRAWING NUMBERS			DRAWING NAME	REMARKS
CURRENT	REVISED	NEW		
		RDX-225	Silt Trap Type B	Revised and moved old Standard Drawing RDX-205, Silt Check Type III & III Crushed Stone
		RDX-230	Silt Trap Type C	New Drawing
RFC-002-04	RFC-002-04		Chain Link Fence 8' to 12' high	Editorial Change
RFG-011-05	RFG-011-05		Water Gate Type 3	Editorial Change
RGS-002-04	RGS-002-05		Superelevation for Multilane Pavement	Show how the runoff length can be distributed into a curve on Multilane Pavement.
RGX-001-04	RGX-001-05		Miscellaneous Standards Part 1	Note added about "In Horizontal Curve, Rounding Should Be used At Hinge
RGX-005-04	RGX-005-05		Right-Of-Way monuments	Revised to show new monuments and witness post etc. See Design Memo 6B-04
		RGX-060	Breakaway Sign Support System For Type C Beam	New Drawing
		RGX-061	Footing Details For Type C Beam	New Drawing

DRAWING NUMBERS			DRAWING NAME	REMARKS
CURRENT	REVISED	NEW		
		RGX-065	Type D Breakaway Sign Support	New Drawing
RGX-100-04	RGX-100-05		Treatment Of Embankments At End-Bents	Revised to increase clarity of Special Provision 69. See Design Memo 4-05
RGX-105-05	RGX-105-06		Treatment Of Embankments At End-Bents	Revised to increase clarity of Special Provision 69. See Design Memo 4-05
RPM-011-05	RPM-011-05		Mountable Median	Editorial Change
RPM-110-04	RPM-110-05		Approaches, Entrances, and Mailbox Turnout	Revised taper on road approach
RPM-150-05	RPM-150-06		Concrete Entrance, Pavement and Sidewalk	Revised for ADA compliant sidewalk ramps etc. See Design Memo 4-06
RPM-152-05	RPM-152-06		Concrete Entrance Pavement and Sidewalk	Revised for ADA compliant sidewalk ramps etc. See Design Memo 4-06
RPM-160-02	RPM-160-03		Typical Installations For Sidewalk Ramps	Added detectable warning as required
RPM-170-05	RPM-170-06		Sidewalk Ramp	Added detectable warnings on sidewalk ramps

DRAWING NUMBERS			DRAWING NAME	REMARKS
CURRENT	REVISED	NEW		
RPN-001-05	RPN-001-06		Non-Reinforced Concrete Pavement For Shoulders and Medians	Removed part of note 6 that referenced a non-existent bid item
RPS-020-12	RPS-020-13		Expansion and Contraction Joint Load Transfer Assemblies	Added Straight Leg Option
TPM-100	TPM-100-01		Pavement Marker Arrangements Multi-Lane Roadways	Changed to conform to the latest version of the MUTCD manual and/or slight editorial changes.
TPM-105	TPM-105-01		Pavement Marker Arrangements Multi-Lane Roadways	Changed to conform to the latest version of the MUTCD manual and/or slight editorial changes.
TPM-110	TPM-110-01		Pavement Marker Arrangements Multi-Lane Roadways	Changed to conform to the latest version of the MUTCD manual and/or slight editorial changes.
TPM-115	TPM-115-01		Pavement Marker Arrangements Two-Lane, Two-Way Roadways	Changed to conform to the latest version of the MUTCD manual and/or slight editorial changes.
TPM-120	TPM-120-01		Pavement Marker Arrangement Two-Lane to Four-Lane Transitions	Changed to conform to the latest version of the MUTCD manual and/or slight editorial changes.
TPM-125	TPM-125-01		Pavement Marker Arrangement Exit Gore and Off-Ramp	Changed to conform to the latest version of the MUTCD manual and/or slight editorial changes.
TPM-130	TPM-130-01		Pavement Marker Arrangement On- Ramp With Tapered Acceleration Lane	Changed to conform to the latest version of the MUTCD manual and/or slight editorial changes.

DRAWING NUMBERS			DRAWING NAME	REMARKS
CURRENT	REVISED	NEW		
TPM-135	TPM-135-01		Pavement Marker Arrangement On-Ramp With Parallel Acceleration Lane	Changed to conform to the latest version of the MUTCD manual and/or slight editorial changes.
TPM-140	TPM-140-01		Pavement Marker Arrangements Two-Way, Left Turn Lane	Changed to conform to the latest version of the MUTCD manual and/or slight editorial changes.
TPM-145	TPM-145-01		Pavement Marker Arrangement Channelized Intersection	Changed to conform to the latest version of the MUTCD manual and/or slight editorial changes.
TTC-100	TTC-100-01		Lane Closure Two-Lane Highway Case I	Changed to conform to the latest version of the MUTCD manual and/or slight editorial changes.
TTC-105	TTC-105-01		Lane Closure Two-Lane Highway Case II	Changed to conform to the latest version of the MUTCD manual and/or slight editorial changes.
TTC-110	TTC-110-01		Lane Closure Using Traffic Signals	Changed to conform to the latest version of the MUTCD manual and/or slight editorial changes.
TTC-115	TTC-115-01		Lane Closure Multi-Lane Highway Case I	Changed to conform to the latest version of the MUTCD manual and/or slight editorial changes.
TTC-120	TTC-120-01		Lane Closure Multi-Lane Highway Case II	Changed to conform to the latest version of the MUTCD manual and/or slight editorial changes.

DRAWING NUMBERS			DRAWING NAME	REMARKS
CURRENT	REVISED	NEW		
TTC-125	TTC-125-01		Double Lane Closure	Changed to conform to the latest version of the MUTCD manual and/or slight editorial changes.
TTC-130			Interior Lane Closure	VOIDED
TTC-135	TTC-135-01		Shoulder Closure	Changed to conform to the latest version of the MUTCD manual and/or slight editorial changes.
TTC-140	TTC-140-01		Median Crossover Case I	Changed to conform to the latest version of the MUTCD manual and/or slight editorial changes.
TTC-141	TTC-141-01		Median Crossover Case I	Changed to conform to the latest version of the MUTCD manual and/or slight editorial changes.
TTC-145	TTC-145-01		Median Crossover Case II	Changed to conform to the latest version of the MUTCD manual and/or slight editorial changes.
TTC-146	TTC-146-01		Median Crossover Case II	Changed to conform to the latest version of the MUTCD manual and/or slight editorial changes.
TTC-150	TTC-150-01		Road Closure With Diversion	Changed to conform to the latest version of the MUTCD manual and/or slight editorial changes.
TTC-155	TTC-155-01		Temporary Pavement Marker Arrangements For Construction Zones	Changed to conform to the latest version of the MUTCD manual and/or slight editorial changes.

DRAWING NUMBERS			DRAWING NAME	REMARKS
CURRENT	REVISED	NEW		
TTC-160	TTC-160-01		Temporary Pavement Marker Arrangements For Lane Closures	Changed to conform to the latest version of the MUTCD manual and/or slight editorial changes.
TTD-100			Miscellaneous Traffic Control Devices	VOIDED
TTD-105			Miscellaneous Traffic Control Devices	VOIDED
TTD-110	TTD-110-01		Post Splicing Detail	Changed to conform to the latest version of the MUTCD manual and/or slight editorial changes.
TTD-115			Arrow Panel	VOIDED
		TTD-120	Work Zone, Speed Limit, and Double Fine Signs	New Drawing
		TTD-125	Mobile Operation For Paint Striping Case I	New Drawing
TTS-100	TTS-100-01		Mobile Operation For Paint Striping Case I	Changed to conform to the latest version of the MUTCD manual and/or slight editorial changes.
TTS-105	TTS-105-01		Mobile Operation For Paint Striping Case II	Changed to conform to the latest version of the MUTCD manual and/or slight editorial changes.

DRAWING NUMBERS			DRAWING NAME	REMARKS
CURRENT	REVISED	NEW		
TTS-110	TTS-110-01		Mobile Operation For Paint Striping Case III	Changed to conform to the latest version of the MUTCD manual and/or slight editorial changes.
TTS-115	TTS-115-01		Mobile Operation For Paint Striping Case IV	Changed to conform to the latest version of the MUTCD manual and/or slight editorial changes.
TTS-120	TTS-120-01		Mobile Operation For Durable Striping Case I	Changed to conform to the latest version of the MUTCD manual and/or slight editorial changes.
TTS-125	TTS-125-01		Mobile Operation For Durable Striping Case II	Changed to conform to the latest version of the MUTCD manual and/or slight editorial changes.
TTS-130	TTS-130-01		Mobile Operation For Durable Striping Case III	Changed to conform to the latest version of the MUTCD manual and/or slight editorial changes.
TTS-135	TTS-135-01		Mobile Operation For Durable Striping Case IV	Changed to conform to the latest version of the MUTCD manual and/or slight editorial changes.
BDP-001-03	BDP-001-03		Box Beam General Notes & References	Editorial Change
BDP-003-03	BDP-003-03		Box Beam Miscellaneous Details	Editorial Change

DRAWING NUMBERS			DRAWING NAME	REMARKS
CURRENT	REVISED	NEW		
BDP-006-03	BDP-006-03		Box Beam B12 and CB12	Editorial Change
BDP-013-01	BDP-013-01		Slab Bridge For 12" and 17" Beams	Editorial Change
BGX-010-04			Barrier Transition	VOIDED
BGX-011-04			Barrier Transition End Drainage	VOIDED
BGX-013-02			Curved Barrier Transition	VOIDED
BGX-014-02			Curved Transition End Drainage	VOIDED
		BGX-017	Approach Slab	New Drawing
		BHS-008	Rail System Type 3	New Drawing
BJE-001-11	BJE-001-11		Neoprene Expansion Dams and Armored Edges	Editorial Change. Remove IEB Detail