



COMMONWEALTH OF KENTUCKY
TRANSPORTATION CABINET

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**HIGHWAY DESIGN MEMORANDUM NO. 01-25; STRUCTURAL DESIGN MEMORANDUM TM 25-01;
DIVISION OF CONSTRUCTION MEMORANDUM CM 25-02**

TO: Chief District Engineers; KYTC Central Office Directors; TEBMs for Project Development;
TEBMs for Project Delivery and Preservation; Section Engineers; Active Consultants

FROM: Tim Layson, P.E., Director *WTL*
Division of Highway Design

Mike Carpenter, P.E., Director *MC*
Division of Structural Design

Matt Simpson, P.E., Director *MPS*
Division of Construction

DATE: January 28, 2025

SUBJECT: Expansion Joint Filler Material

KYTC will be transitioning from AASHTO M153, Type II (cork) to AASHTO M153, Type I (sponge rubber) in expansion joint filler applications. Additionally, in concrete blocking applications, AASHTO M153, Type I (sponge rubber) may be utilized as a “glued-up” alternative to Styrofoam, and AASHTO M251, Grade 3 (50 Durometer) neoprene rubber will be used for B12-B21 and CB12-CB21 box beam bearing pads.

Sepias reflecting these revisions have been posted on the Division of Highway Design’s website. The following table outlines and links to the new sepias:

Sepia #	Title	Date	DGN	PDF	Replaces
43	BEARING DETAILS	12/12/2024	Sepia 043	Sepia043	Replaces BBP-002
44	BOX BEAM BEARING DETAILS	12/12/2024	Sepia044	Sepia044	Replaces BDP-002
45	SLAB BRIDGE FOR 12” & 17” BEAMS	12/12/2024	Sepia045	Sepia045	Replaces BDP-013
46	CONCRETE SLOPEWALLS FOR GRADE SEPARATION BRIDGES	12/12/2024	Sepia046	Sepia046	Replaces BGX-004
47	CONCRETE SLOPEWALLS FOR GRADE SEPARATION BRIDGES	12/12/2024	Sepia047	Sepia047	Replaces BGX-005
48	JOINT WATERPROOFING	12/12/2024	Sepia048	Sepia048	Replaces BGX-022
49	0° SKEW SUPPORT VARIABLE WIDTH ABUTMENT 50% SKEWED WINGS	12/12/2024	Sepia049	Sepia049	Replaces BSA-001
50	5° SKEW SUPPORT VARIABLE WIDTH ABUTMENT 50% SKEWED WINGS	12/12/2024	Sepia050	Sepia050	Replaces BSA-003
51	10° SKEW SUPPORT VARIABLE WIDTH ABUTMENT 50% SKEWED WINGS	12/12/2024	Sepia051	Sepia051	Replaces BSA-005
52	15° SKEW SUPPORT VARIABLE WIDTH ABUTMENT 50% SKEWED WINGS	12/12/2024	Sepia052	Sepia052	Replaces BSA-007

Sepia #	Title	Date	DGN	PDF	Replaces
53	20° SKEW SUPPORT VARIABLE WIDTH ABUTMENT 50% SKEWED WINGS	12/12/2024	Sepia053	Sepia053	Replaces BSA-009
54	25° SKEW SUPPORT VARIABLE WIDTH ABUTMENT 50% SKEWED WINGS	12/12/2024	Sepia054	Sepia054	Replaces BSA-011
55	30° SKEW SUPPORT VARIABLE WIDTH ABUTMENT 50% SKEWED WINGS	12/12/2024	Sepia055	Sepia055	Replaces BSA-013
56	35° SKEW SUPPORT VARIABLE WIDTH ABUTMENT 50% SKEWED WINGS	12/12/2024	Sepia056	Sepia056	Replaces BSA-015
57	40° SKEW SUPPORT VARIABLE WIDTH ABUTMENT 50% SKEWED WINGS	12/12/2024	Sepia057	Sepia057	Replaces BSA-017
58	45° SKEW SUPPORT VARIABLE WIDTH ABUTMENT 50% SKEWED WINGS	12/12/2024	Sepia058	Sepia058	Replaces BSA-019
59	0° SKEW SUPPORT VARIABLE WIDTH ABUTMENT 25% SKEWED WINGS	12/12/2024	Sepia059	Sepia059	Replaces BSA-021
60	5° SKEW SUPPORT VARIABLE WIDTH ABUTMENT 25% SKEWED WINGS	12/12/2024	Sepia060	Sepia060	Replaces BSA-023
61	10° SKEW SUPPORT VARIABLE WIDTH ABUTMENT 25% SKEWED WINGS	12/12/2024	Sepia061	Sepia061	Replaces BSA-025
62	15° SKEW SUPPORT VARIABLE WIDTH ABUTMENT 25% SKEWED WINGS	12/12/2024	Sepia062	Sepia062	Replaces BSA-027
63	20° SKEW SUPPORT VARIABLE WIDTH ABUTMENT 25% SKEWED WINGS	12/12/2024	Sepia063	Sepia063	Replaces BSA-029
64	25° SKEW SUPPORT VARIABLE WIDTH ABUTMENT 25% SKEWED WINGS	12/12/2024	Sepia064	Sepia064	Replaces BSA-031
65	30° SKEW SUPPORT VARIABLE WIDTH ABUTMENT 25% SKEWED WINGS	12/12/2024	Sepia065	Sepia065	Replaces BSA-033
66	35° SKEW SUPPORT VARIABLE WIDTH ABUTMENT 25% SKEWED WINGS	12/12/2024	Sepia066	Sepia066	Replaces BSA-035
67	40° SKEW SUPPORT VARIABLE WIDTH ABUTMENT 25% SKEWED WINGS	12/12/2024	Sepia067	Sepia067	Replaces BSA-037
68	45° SKEW SUPPORT VARIABLE WIDTH ABUTMENT 25% SKEWED WINGS	12/12/2024	Sepia068	Sepia068	Replaces BSA-039
69	0° SKEW SUPPORT VARIABLE WIDTH ABUTMENT PARALLEL WINGS	12/12/2024	Sepia069	Sepia069	Replaces BSA-041
70	5° SKEW SUPPORT VARIABLE WIDTH ABUTMENT PARALLEL WINGS	12/12/2024	Sepia070	Sepia070	Replaces BSA-043
71	10° SKEW SUPPORT VARIABLE WIDTH ABUTMENT PARALLEL WINGS	12/12/2024	Sepia071	Sepia071	Replaces BSA-045
72	15° SKEW SUPPORT VARIABLE WIDTH ABUTMENT PARALLEL WINGS	12/12/2024	Sepia072	Sepia072	Replaces BSA-047
73	20° SKEW SUPPORT VARIABLE WIDTH ABUTMENT PARALLEL WINGS	12/12/2024	Sepia073	Sepia073	Replaces BSA-049
74	25° SKEW SUPPORT VARIABLE WIDTH ABUTMENT PARALLEL WINGS	12/12/2024	Sepia074	Sepia074	Replaces BSA-051
75	30° SKEW SUPPORT VARIABLE WIDTH ABUTMENT PARALLEL WINGS	12/12/2024	Sepia075	Sepia075	Replaces BSA-053
76	35° SKEW SUPPORT VARIABLE WIDTH ABUTMENT PARALLEL WINGS	12/12/2024	Sepia076	Sepia076	Replaces BSA-055
77	40° SKEW SUPPORT VARIABLE WIDTH ABUTMENT PARALLEL WINGS	12/12/2024	Sepia077	Sepia077	Replaces BSA-057
78	45° SKEW SUPPORT VARIABLE WIDTH ABUTMENT PARALLEL WINGS	12/12/2024	Sepia078	Sepia078	Replaces BSA-059
80	0° SKEW 24'-0" - 25'-6" BRIDGE WIDTH ABUTMENT 2:1 FILL SLOPES, 4'-0" MIN. SHOULDER	12/12/2024	Sepia080	Sepia080	Replaces BSA-102
81	0° SKEW 32'-0" - 33'-6" BRIDGE WIDTH ABUTMENT 2:1 FILL SLOPES, 4'-0" MIN. SHOULDER	12/12/2024	Sepia081	Sepia081	Replaces BSA-103
82	15° SKEW 16'-0" - 17'-6" BRIDGE WIDTH ABUTMENT 2:1 FILL SLOPES, 4'-0" MIN. SHOULDER	12/12/2024	Sepia082	Sepia082	Replaces BSA-104

Sepia #	Title	Date	DGN	PDF	Replaces
83	15° SKEW 24'-0" - 25'-6" BRIDGE WIDTH ABUTMENT 2:1 FILL SLOPES, 4'-0" MIN. SHOULDER	12/12/2024	Sepia083	Sepia083	Replaces BSA-105
84	15° SKEW 32'-0" - 33'-6" BRIDGE WIDTH ABUTMENT 2:1 FILL SLOPES, 4'-0" MIN. SHOULDER	12/12/2024	Sepia084	Sepia084	Replaces BSA-106
85	30° SKEW 16'-0" - 17'-6" BRIDGE WIDTH ABUTMENT 2:1 FILL SLOPES, 4'-0" MIN. SHOULDER	12/12/2024	Sepia085	Sepia085	Replaces BSA-107
86	30° SKEW 24'-0" - 25'-6" BRIDGE WIDTH ABUTMENT 2:1 FILL SLOPES, 4'-0" MIN. SHOULDER	12/12/2024	Sepia086	Sepia086	Replaces BSA-108
87	30° SKEW 32'-0" - 33'-6" BRIDGE WIDTH ABUTMENT 2:1 FILL SLOPES, 4'-0" MIN. SHOULDER	12/12/2024	Sepia087	Sepia087	Replaces BSA-109
88	45° SKEW 16'-0" - 17'-6" BRIDGE WIDTH ABUTMENT 2:1 FILL SLOPES, 4'-0" MIN. SHOULDER	12/12/2024	Sepia088	Sepia088	Replaces BSA-110
89	45° SKEW 24'-0" - 25'-6" BRIDGE WIDTH ABUTMENT 2:1 FILL SLOPES, 4'-0" MIN. SHOULDER	12/12/2024	Sepia089	Sepia089	Replaces BSA-111
90	45° SKEW 32'-0" - 33'-6" BRIDGE WIDTH ABUTMENT 2:1 FILL SLOPES, 4'-0" MIN. SHOULDER	12/12/2024	Sepia090	Sepia090	Replaces BSA-112
91	PILE END BENT 0° SKEW	12/12/2024	Sepia091	Sepia091	Replaces BSE-001
92	PILE END BENT 15° SKEW	12/12/2024	Sepia092	Sepia092	Replaces BSE-002
93	PILE END BENT 30° SKEW	12/12/2024	Sepia093	Sepia093	Replaces BSE-003
94	PILE END BENT 45° SKEW	12/12/2024	Sepia094	Sepia094	Replaces BSE-004

This table is provided for reference only. In the future, there may be additional Standard Drawings modified by Sepia to address this issue.

If you have any questions contact the Division of Highway Design, at 502-564-3280 or the Division of Structural Design at 502-564-2374, Division of Construction at 502-564-4780.