

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

DESIGN DIVISION

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CLAY BRIGHT COMMISSIONER BILL LEE GOVERNOR

INSTRUCTIONAL BULLETIN NO. 21-17

Regarding Various Revised, New and Voided Standard Drawings

Effective March 25, 2022 letting (January 12, 2022 Turn-in), the following Standard Drawings have been revised, are new or have been voided. In addition, Chapter 10 of the Roadway Design Guidelines - Index of Standard Drawings and the web site have been updated accordingly and are available online. The effected sections of the Drainage Manual will be updated at a later date.

The new PEW series has been structurally redesigned and refined to offer the best performance using the least amount of material and replace the existing Type A and B pipe endwall drawings. The new protected pipe endwalls are typically installed at locations that require skewed drainage pipe crossing. When installed within the clear zone, the pipe endwall shall be shielded with either guardrail or barrier.

New Standard Drawings:

10-101.00	PIPE CULVERTS AND ENDWALLS	
10-101.04	PROTECTED ENDWALL	.s
DRAWING NUMBER	REVISION DATE	DESCRIPTION
D-PEW-1		PROTECTED ENDWALLS FOR ROUND & OVAL PIPES (PIPE SIZES 18" TO 72", ALL SKEWS, 2:1 & 3:1 SLOPES)
D-PEW-2		PROTECTED ENDWALLS FOR ROUND PIPES DETAILS & QUANTITIES (PIPE SIZES 18" TO 72", ALL SKEWS, 2:1 & 3:1 SLOPES)
D-PEW-3		PROTECTED ENDWALLS FOR OVAL PIPES DETAILS & QUANTITIES (EQU. PIPE SIZES 18" TO 72", ALL SKEWS, 2:1 & 3:1 SLOPES)
D-PEW-4		PROTECTED STRAIGHT ENDWALLS (PIPE SIZES 18" TO 30" & EQU. OVAL PIPES)

RIP-RAP END TREATMENT FOR CORRUGATED METAL PIPE, OVAL AND PIPE ARCH CULVERTS WITH BEVELED ENDS (PIPE SIZES 42" & LARGER)

Voided Standard Drawings:

10-101.00	PIPE CULVERTS AND	O ENDWALLS
10-101.04	PROTECTED ENDWALLS	
10-101.04	PROTECTED ENDWALLS	
DRAWING NUMBER	REVISION DATE	DESCRIPTION
D-PE-1	06-28-19	TYPE "A" CONCRETE ENDWALLS FOR ROUND PIPE (PIPE SIZES 36" TO 78", ALL SKEWS, 2:1 SLOPE)
D-PE-8	06-28-19	RIP-RAP END TREATMENT FOR CORRUGATED METAL PIPE, OVAL AND PIPE ARCH CULVERTS WITH BEVELED ENDS (PIPE SIZES 42" & LARGER)
D-PE-9	06-28-19	TYPE "B" CONCRETE ENDWALLS FOR ROUND AND SIDE TAPERED INLETS (PIPE SIZES 15" TO 78", ALL SKEWS, 2:1 AND 4:1 SLOPES)
D-PE-9A	06-28-19	TYPE "B" CONCRETE ENDWALLS FOR ROUND INLETS, DETAILS & QUANTITIES (PIPE SIZES 15" TO 78", ALL SKEWS, 2:1 AND 4:1 SLOPES)
D-PE-9B	06-28-19	TYPE "B" CONCRETE ENDWALLS FOR SIDE TAPER INLETS, DETAILS & QUANTITIES (PIPE SIZES 15" TO 78", ALL SKEWS, 2:1 AND 4:1 SLOPES)
D-PE-9C	06-28-19	TYPE "B" CONCRETE ENDWALLS, BILL OF STEEL FOR CONCRETE PIPES (PIPE SIZES 15" TO 78", ALL SKEWS, 2:1 SLOPE)
D-PE-9D	06-28-19	TYPE "B" CONCRETE ENDWALLS, BILL OF STEEL FOR CONCRETE PIPES (PIPE SIZES 15" TO 78", ALL SKEW, 4:1 SLOPE)
D-PE-9E	06-28-19	TYPE "B" CONCRETE ENDWALLS, BILL OF STEEL FOR STEEL PIPES (PIPE SIZES 15" TO 78", ALL SKEWS, 2:1 SLOPE)
D-PE-9F	06-28-19	TYPE "B" CONCRETE ENDWALLS, BILL OF STEEL FOR STEEL PIPES (PIPE SIZES 15" TO 78", ALL SKEWS, 4:1 SLOPE)

IB 21-17 Page 3

These standard drawings are located on the web site and in Chapter 10 of the Design Guidelines and can be found in the following links.

Standard Drawings:

https://www.tn.gov/content/tn/tdot/roadway-design/standard-drawings-library/standard-roadway-drawings.html

Chapter 10 - Index of Standard Drawings is available online at this location:

https://www.tn.gov/content/dam/tn/tdot/roadway-design/documents/design_guidelines/DG-C10.pdf

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KJL:ARH:RBB September 17, 2021