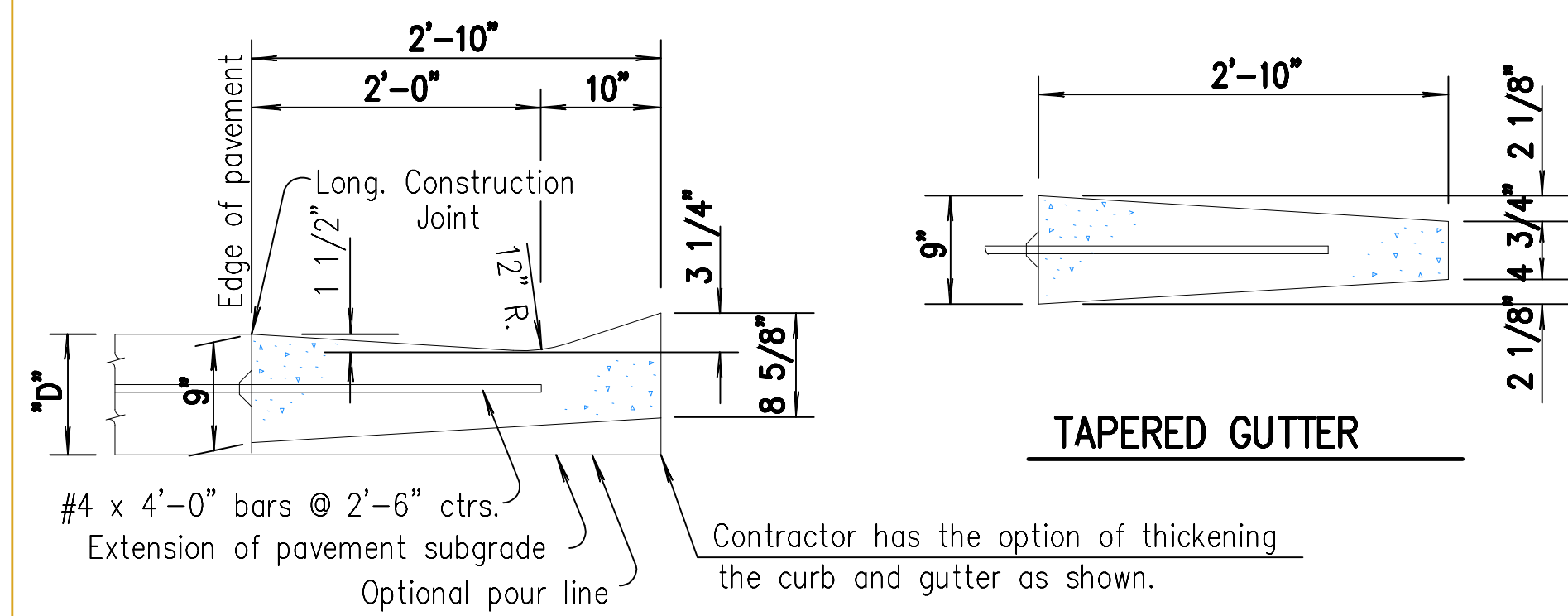


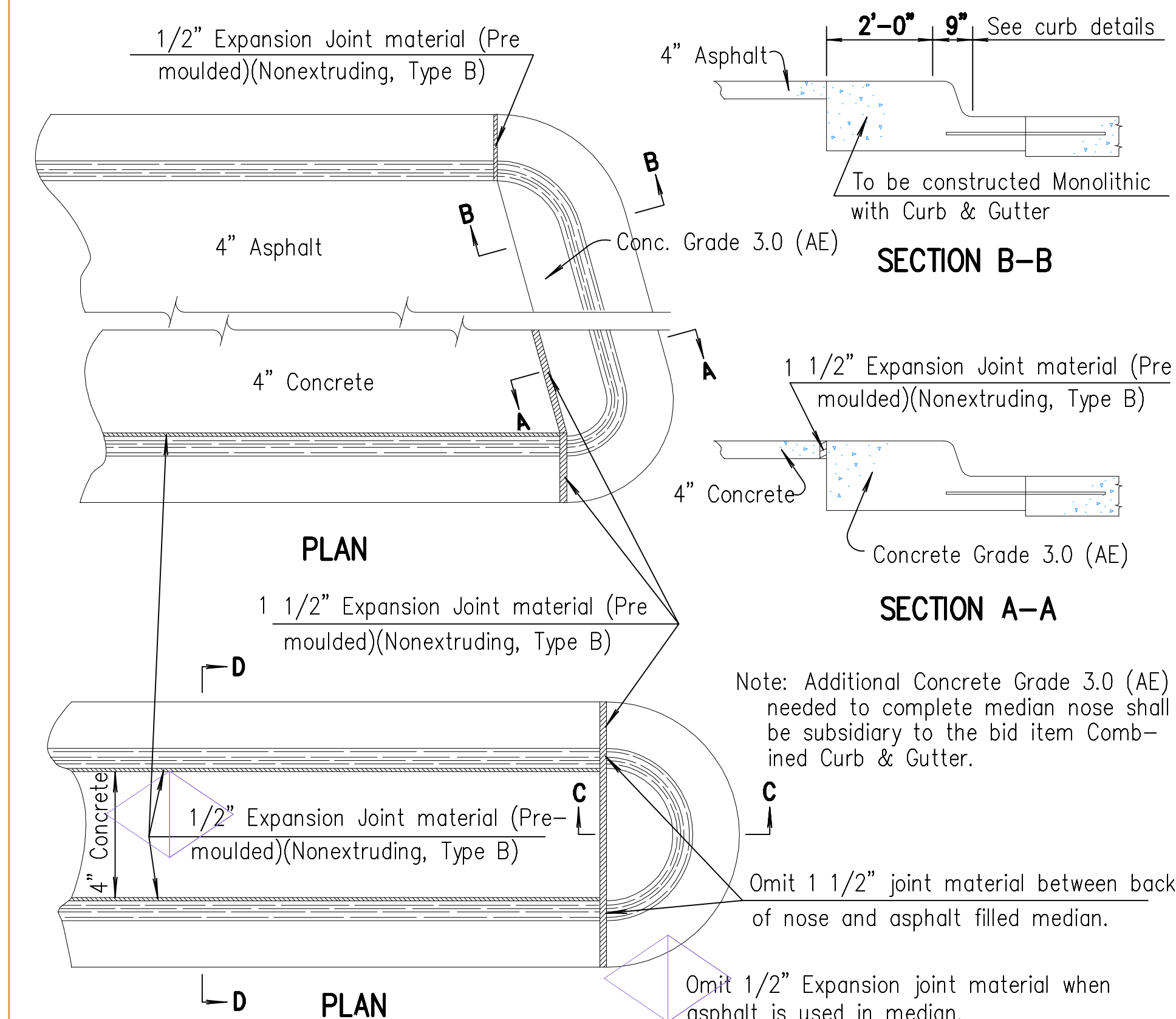
FHWA REG. NO.	STATE	PROJECT NO.:	YEAR	SHEET NUMBER	TOTAL SHEETS
7	KANSAS	87N-0238-01	2009	22	59



**DETAIL OF GUTTER**  
(Normal section)

**GUTTER**

Note: Concrete gutter contains 0.065 cu. yds. Concrete Grade 3.0 (AE) per lin. ft.

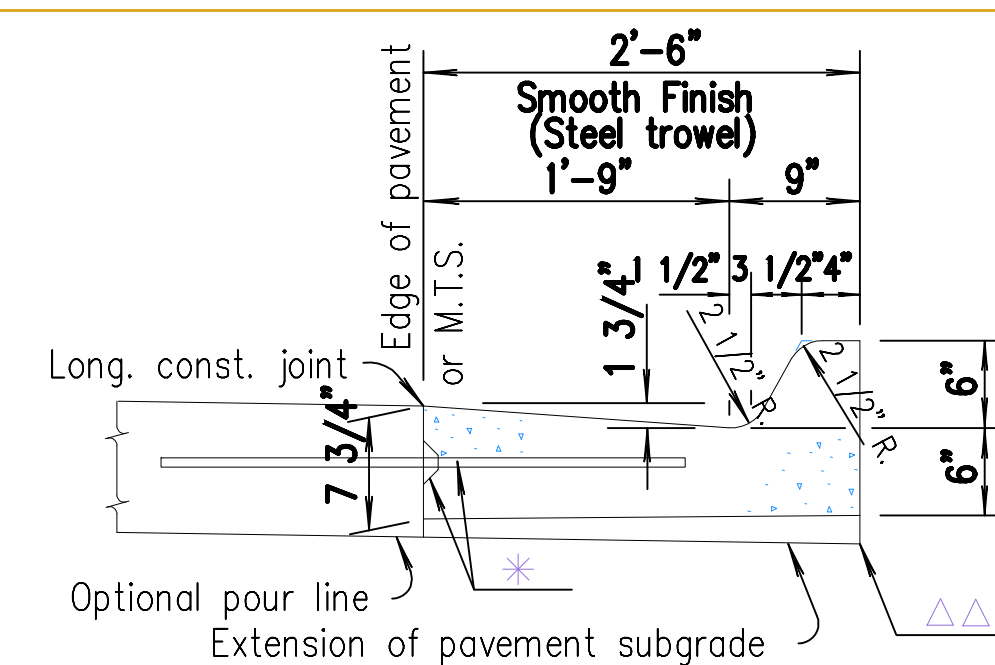


**SECTION D-D**

**SECTION C-C**

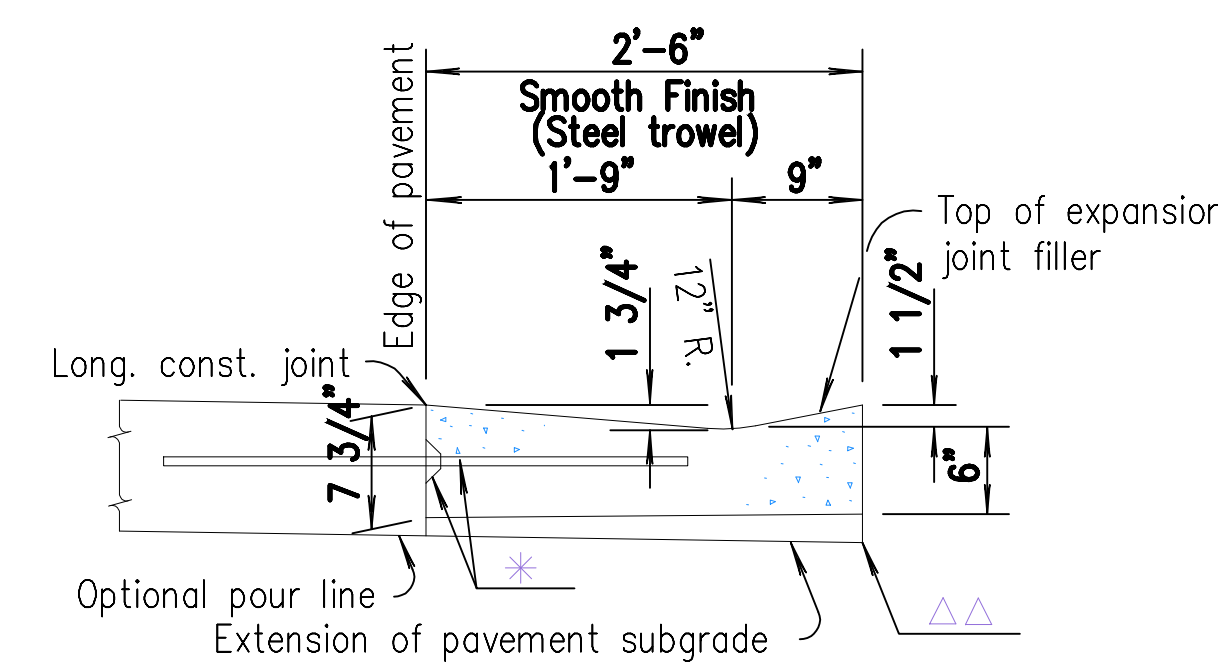
Note: Expansion joints shall be placed in concrete median as follows. In long runs expansion joints shall be 1/2" expansion joint material (Nonextruding, Type B) flush with the surface. Expansion joints in the median shall match expansion joints in the curb and gutter with a maximum spacing of 125'. Plane of weakness in median shall match plane of weakness in curb & gutter.

**TYPICAL NOSE DETAILS FOR RAISED MEDIANS**



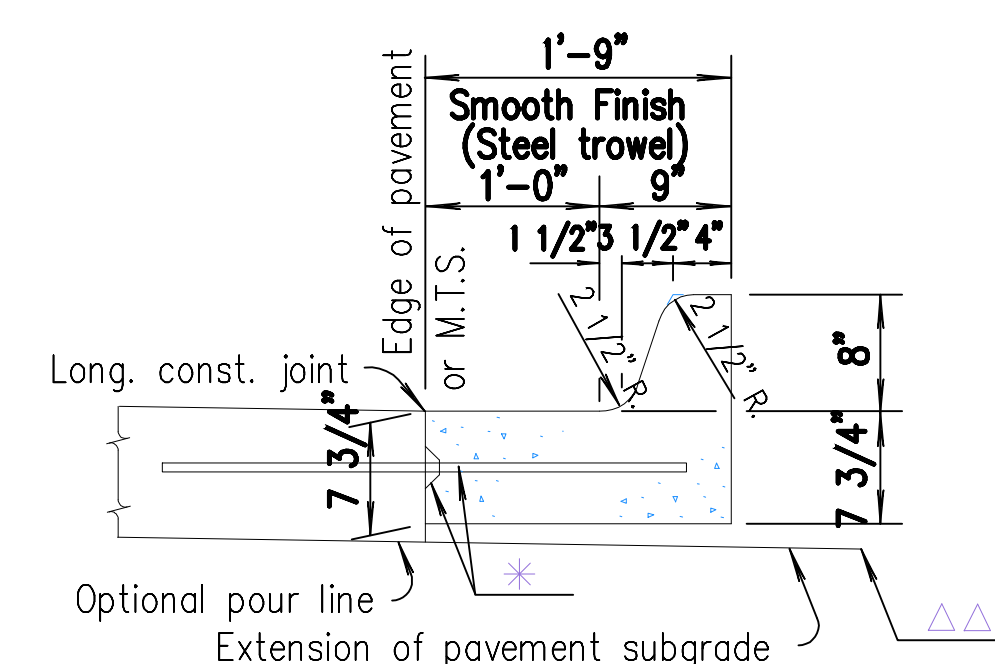
**TYPICAL SECTION**  
**COMBINED CURB & GUTTER - TYPE I** (2'-6" WIDTH)

Note: Conc. C.&G. I contains 0.060 cu. yds. Conc. Grade 3.0 (AE) per lin.ft.



**TYPICAL SECTION**  
**COMBINED CURB & GUTTER - TYPE II** (2'-6" WIDTH)

Note: Conc. C.&G. II contains 0.053 cu. yds. Conc. Grade 3.0 (AE) per lin.ft.



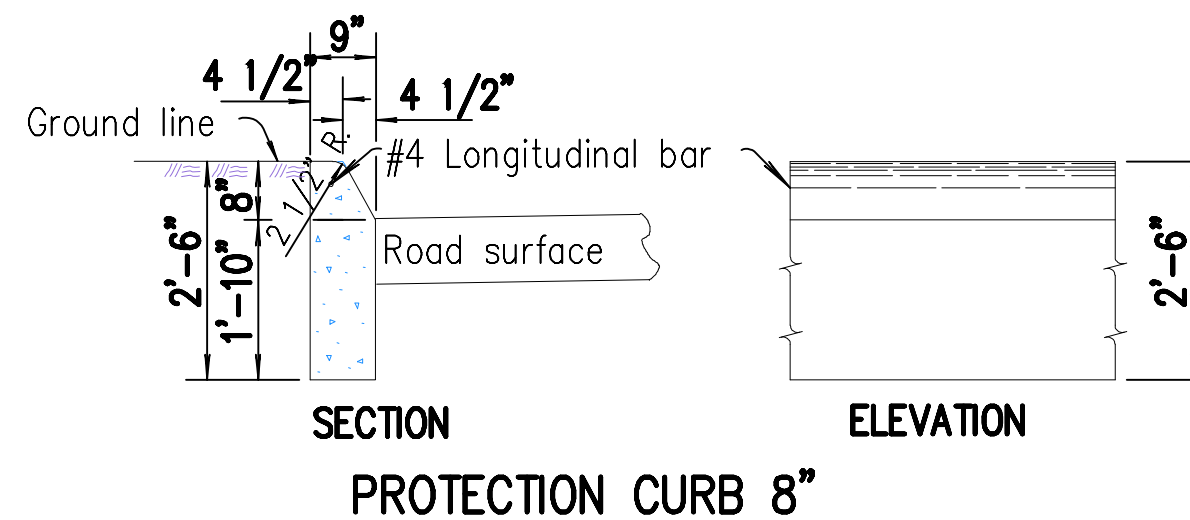
**TYPICAL SECTION**  
**COMBINED CURB & GUTTER - TYPE III** (1'-9" WIDTH)

Note: Conc. C.&G. III contains 0.054 cu. yds. Conc. Grade 3.0 (AE) per lin.ft.

\* Longitudinal construction joint and #4 x 3'-0" bars @ 2'-6" ctrs., where concrete pavement is constructed.

△△ Contractor has the option of thickening the curb and gutter as shown.

Note: Use Concrete Grade 3.0 (AE) throughout. All exposed edges shall be finished with an edging tool. Place a 1" pre-moulded Expansion Joint Filler (nonextruding, Type B) at a spacing of not to exceed 250'.



**SECTION** **ELEVATION**  
**PROTECTION CURB 8"**

**GENERAL NOTE**

Combined curb and gutter or gutter adjoining concrete pavement may, at the contractor's option, be poured either monolithically or separately, using either the mix used in the concrete pavement or Concrete Grade 3.0 (AE). The combined curb and gutter or gutter shall have the same section as shown on the plans. If poured monolithically, dowel bars may be omitted from the combined curb and gutter or gutter, but the welded wire reinforcement shall be extended to 6" or less from the back of the curb or gutter. Pavement joints shall be continued through curb or gutter and no other planes of weakness will be required. Joints in the combined curb and gutter or gutter are to be filled with the same material as used for the pavement joints.

Expansion joints in the combined curb and gutter are to be placed opposite expansion joints in the pavement.

Where combined curb and gutter or gutter does not abut concrete pavement or concrete base course, omit tie bars and longitudinal construction joint and place a 1" pre-moulded Expansion Joint Filler (Nonextruding, Type B) cut to the dimensions of the combined curb and gutter or gutter, at a spacing of not to exceed 250' and at the ends of curb returns.

Where combined curb and gutter or gutter is adjacent to asphalt construction, planes of weakness shall be constructed at 10'-0" intervals.

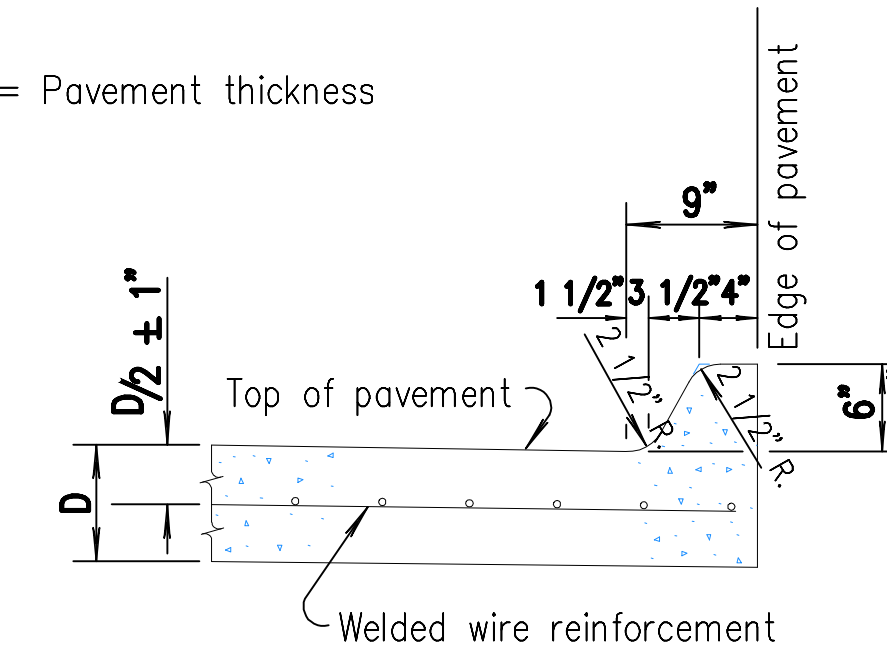
A 4' length of transition from normal gutter section to the tapered gutter section shall be used at the ends of each run of gutter except where the gutter abuts a curb, such as at the end of a bridge. Inlets shall be located so as not to fall within this transition section.

Where pressure relief joint (Urethane Foam) is placed across the pavement, and gutter or curb and gutter is continued on for more than 10', use Type B, nonextruding, joint filler through gutter section, shaped to fit gutter or curb and gutter. Material may be solid Type B, approximately 4" thick, or other thickness pieces (Type B), bonded together with cold mastic or other material, as approved by the Engineer.

For expansion joint treatment where combined curb and gutter or gutter abuts a bridge wing on a U type abutment see bridge drawings.

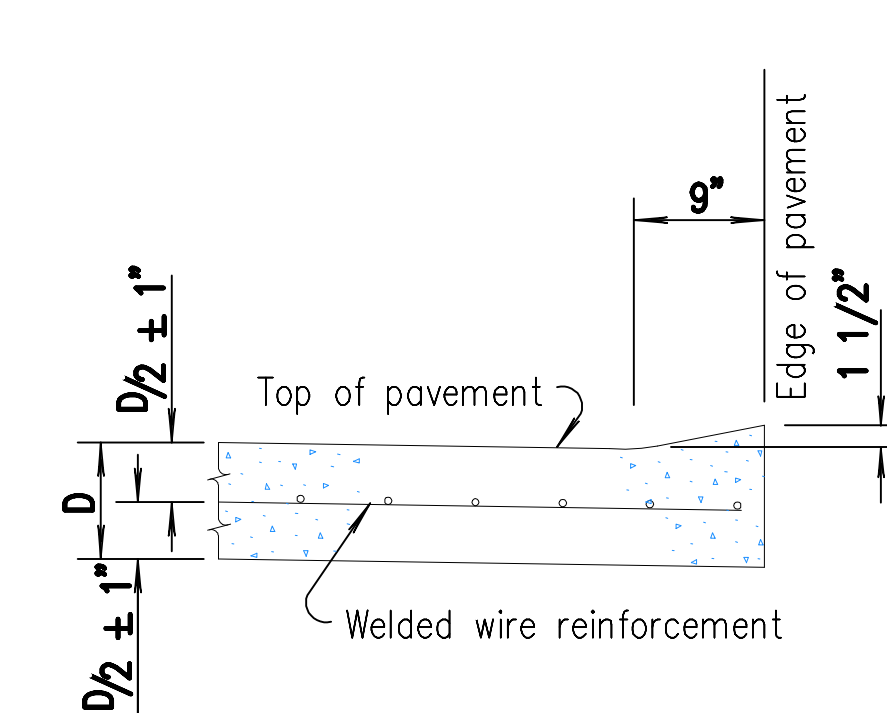
Longitudinal joints shall be sawed and sealed with joint sealant, see Special Provisions for type.

"D" = Pavement thickness



**TYPICAL SECTION**

**6" OR 8" EDGE CURB (MONOLITHIC)**



**TYPICAL SECTION**

**1 1/2" EDGE CURB (MONOLITHIC)**

Note: Planes of weakness are to be constructed over the contraction joints in the concrete pavement.

A 1" pre-moulded Expansion Joint Filler (Nonextruding, Type B) cut to the dimensions of the Edge Curb shall be used over the expansion joints in the concrete pavement.

NO.	DATE	REVISIONS	BY	APP'D
1.6	1-10-07	Changed bituminous to asphalt	S.W.K.	J.O.B.
1.5	3-30-05	Chg. Class to Grade conc., reinf.	S.W.K.	J.O.B.
1.4	12-08-04	Chg. bit. plane of weakness to 10'-0"	S.W.K.	J.O.B.
1.3	3-20-96	Del. Curb & Gutter Ref. to Br. Appr.	R.J.S.	J.O.B.

KANSAS DEPARTMENT OF TRANSPORTATION

**CURB, GUTTER AND COMBINED CURB & GUTTER**

RD635

FHWA APPROVAL	06-10-05	APP'D. James O. Brewer
DESIGNED	DETAILED	QUANTITIES
DESIGN CK.	DETAIL CK.	QUAN. CK.
		TRACE CK. Seitz

Drawn By : diliner  
File : rd635.dgn (rd635)  
Plotted : 20-Nov-2008 14:14