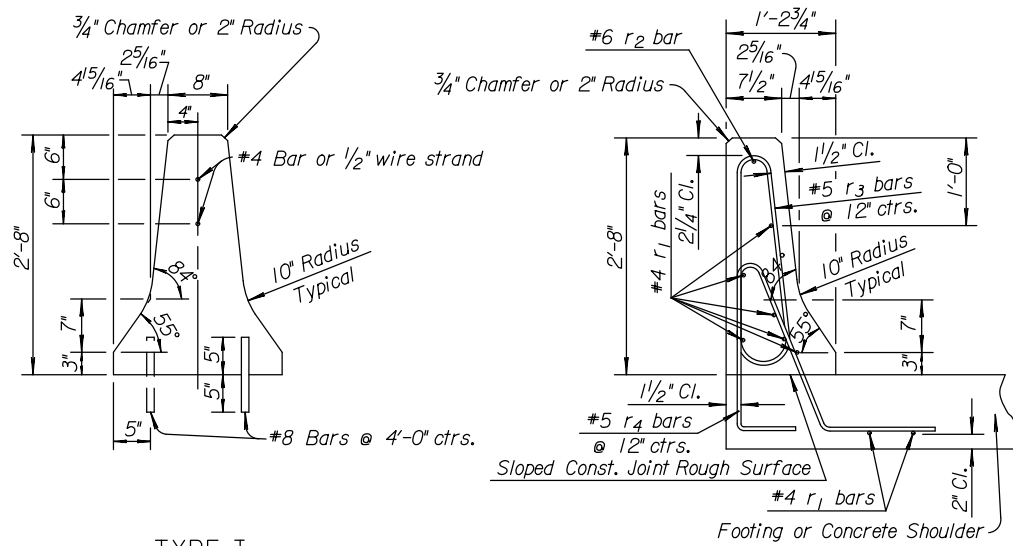
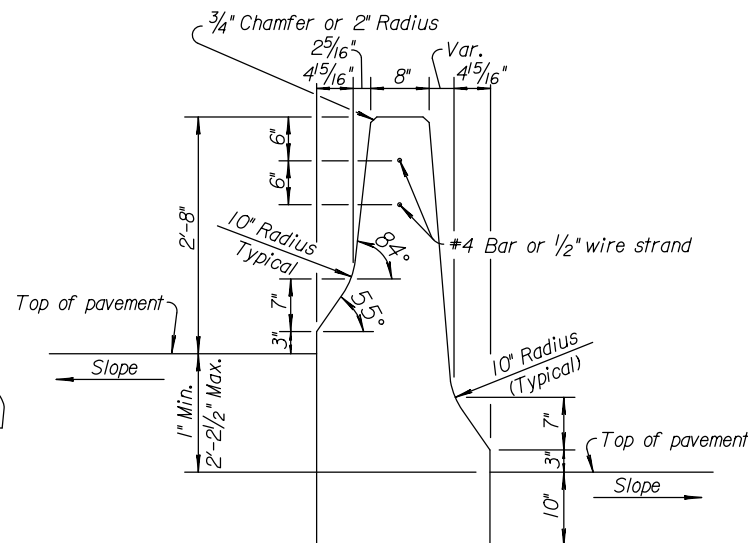


STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS		2009	13	187

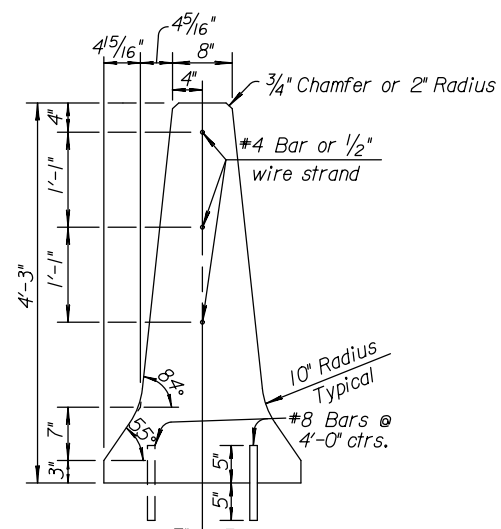


TYPE I

TYPE II



TYPE III



TYPE IV

GENERAL NOTE
 Use either Concrete Grade 3.0 (AE) or the mix used in the concrete pavement throughout.
 Drainage slots shall be constructed where specified in the Plans, at inlet locations, or as directed by the Engineer.
 Bars designated by number, e.g., #8 bars, are deformed reinforcing bars, intermediate grade.
 Payment for all reinforcing bars, joint material, median barrier filler material, reflectors and supporting materials, associated work, etc., shall be subsidiary.
 The section furnished must generally comply with the dimensions shown. Requests for minor variations in section geometry may be submitted for review.
 Permanent concrete barriers shall be cast in place or slip formed construction only. Precast barriers will not be permitted.

EXPANSION JOINTS
 Expansion Joints shall be made of Expansion Joint Material (Nonextruding, Type B), 1" thick, and constructed where shown, to match expansion joints in concrete pavement, at structures, and at the end of each day's pour. Where pavement joints are greater than 1 1/2" in thickness, the joint may be left open with no joint material above the adjoining surface. Expansion joint material shall be recessed 1/4" from barrier surface.

CONTRACTION JOINTS
 Contraction Joints may be either formed or sawed on 20' centers maximum. Where barrier is placed on or adjacent to concrete pavement, joints shall be spaced to match contraction joints and definite transverse cracks in the pavement; not to exceed 20' centers.

BARRIER BASE
 Where the median is not paved full width, barrier shall be placed on a 10"x2'-0" bed of Concrete Grade 3.0 or the mix used in the concrete pavement, or asphalt base course, at the contractor's option with approval of Engineer, to assure proper alignment.

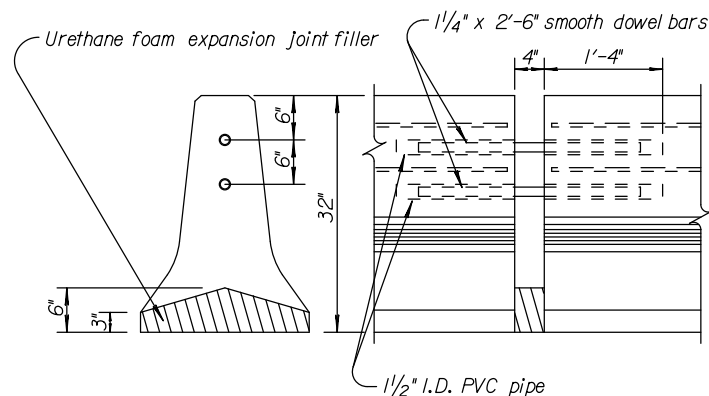
PRESSURE RELIEF JOINT
 Joint material shall be preformed urethane foam. Joint material installed with lubricant adhesive, cut to the shape shown. The joint shall be constructed to match the 4" pressure relief joint of the concrete pavement approach slabs. Approximately three-fifths of the length of each dowel bar shall be coated with a hard grease prior to installation.

The cutting to length of the dowel bars shall be done in such a manner to result in no appreciable deformation of the ends.

Each dowel bar shall be coated with an epoxy coating with the average film thickness of not less than 10 mils, with individual determinations within a tolerance of +/- 3 mils of the average. The coating material shall be a powdered epoxy resin approved by the Engineer of Materials and shall be uniformly applied according to accepted practices and the resin manufacturer's recommendations.

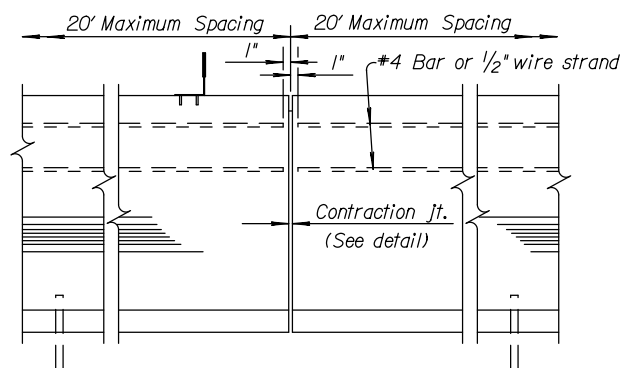
All work and materials required for installation of joint material shall be subsidiary to Concrete Safety Barrier and shall conform to the Standard Specifications.

DELINEATION
 See Standard Drawing RD624 for details of barrier delineation.

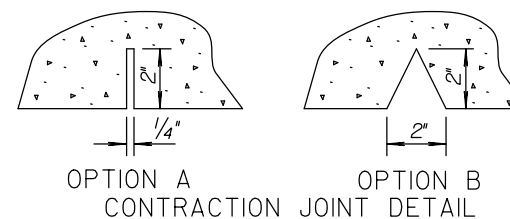


PRESSURE RELIEF JOINT

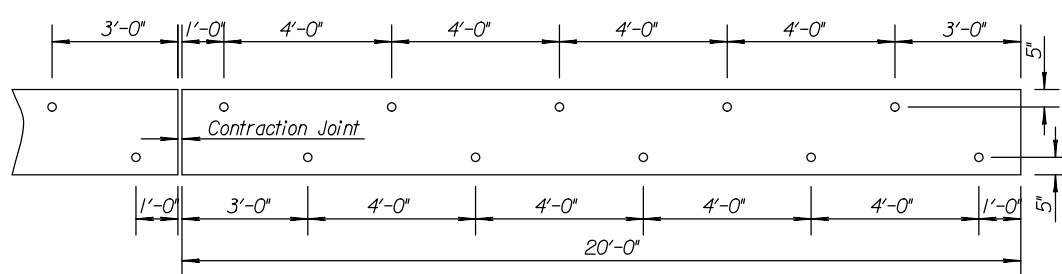
Pressure relief joint will match relief joint in bridge approach slab.



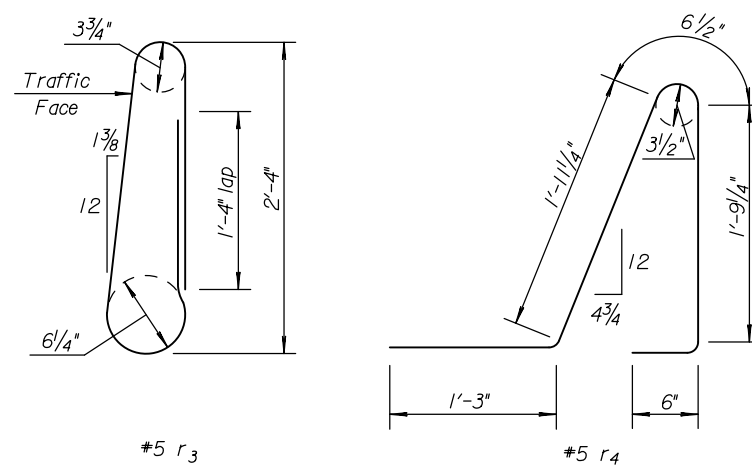
ELEVATIONS



OPTION A
CONTRACTION JOINT DETAIL



DOWEL PLACEMENT DETAIL
(TYPE I & IV)



BENDING DIAGRAMS

Note: All dimensions are out to out of bars.

NO.	DATE	REVISIONS	BY	APP'D
3	1-10-07	Changed bituminous to asphalt	S.W.K.	J.O.B.
2	1-28-05	Changed Class to Grade concrete	S.W.K.	J.O.B.
1	12-12-00	Revised bending diagram	R.J.S.	J.O.B.

KANSAS DEPARTMENT OF TRANSPORTATION

PERMANENT
CONCRETE SAFETY BARRIER
TYPE I, II, III & IV (F-SHAPE)

DESIGNED	APP'D, James O. Brewer
DESIGN CK.	TRACED, Bowser
QUANTITIES	QUAN. CK.
DETAIL CK.	TRACE CK. Seltz

Plotted : 16-JAN-2009 11:31

Drawn By : kraus
File : rd625.dgn (rd625)