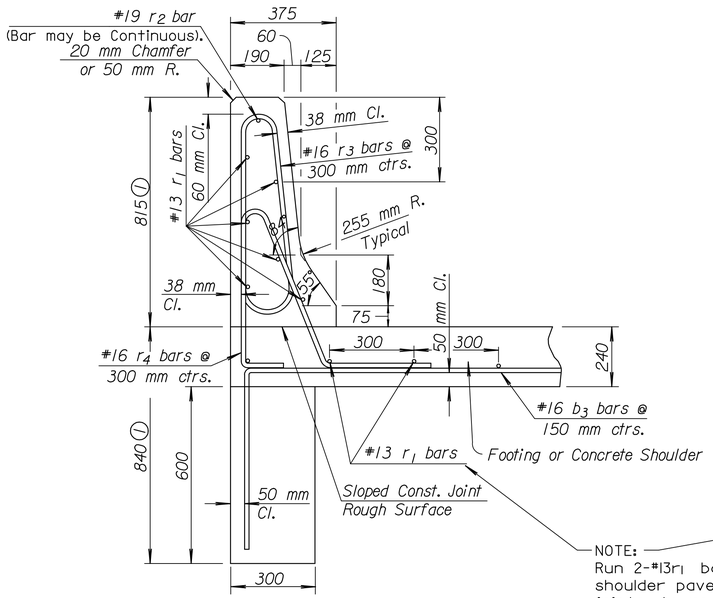
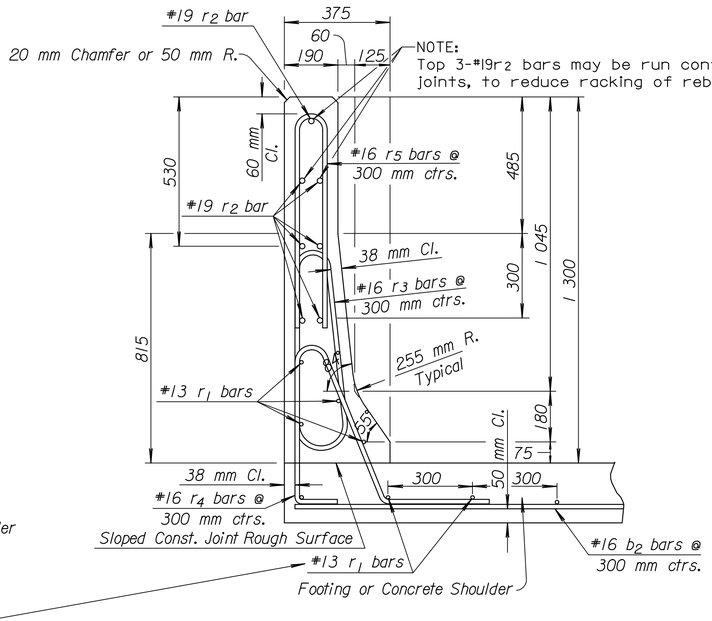
FHWA REGION NO.	STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
7	KANSAS	54-87 K-6657-01	2002	229	1122

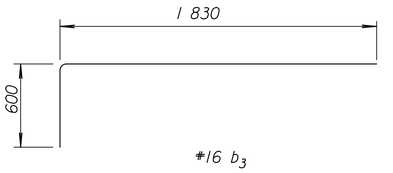


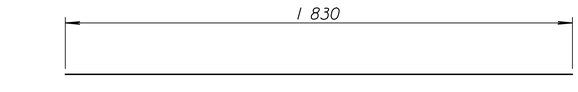
TYPE III

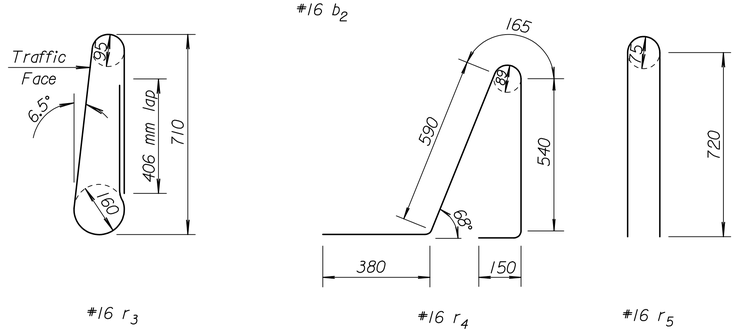


TYPE IV

NOTE:
Run 2-#13r1 bars un cut through shoulder pavement transverse joints, to reduce racking of rebar cage during slip-forming.







BENDING DIAGRAMS

Note: All dimensions are out to out of bars.

#13 r_1 bars - Longitudinal Bars (Min. Lap=380mm)

#19 r_2 bars - Longitudinal Bars (Min. Lap=640mm)

NOTE: See R.F.I. #033 (3-13-03)

GENERAL NOTE

Use either Class A Concrete (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., #25 bars, are deformed reinforcing bars, intermediate grade.

Payment for all 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), 25 mm 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 38 mm in thickness, the joint may be left open with no joint material above the adjoining surface. Expansion joint material shall be recessed 6 mm from barrier surface.

CONTRACTION JOINTS

Contraction Joints may be either formed or sawed on 6 m 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 12 m centers.

BARRIER BASE

Where the median is not paved full width, barrier shall be placed on a 250 mm x 600 mm bed of Class A Concrete or the mix used in the concrete pavement, or bituminous base course, at the contractor's option with approval of Engineer, to assure proper alignment.

100 mm 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 100 mm 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 0.25 mm, with individual determinations within a tolerance of +/- 0.08 mm 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.

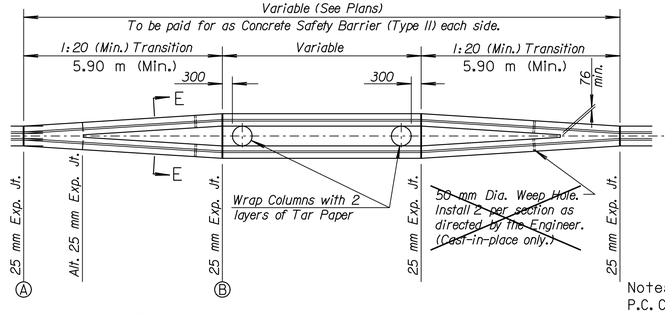
All work and materials required for installation of joint material shall be subsidiary to Concrete Safety Barrier and shall conform to the Standard Specifications.

DELINEATION

See Standard Drawing RD649 SI for details of barrier delineation.

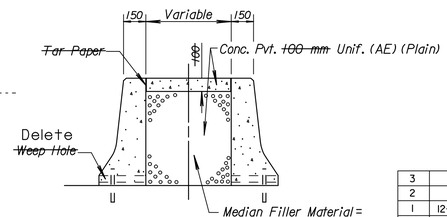
Note: See previous sheet for Surface Coating Finish and Joint Details

① Surface Coating Finish to be applied to this area on C.S.B. (Type III)



Total Width of CSB at Ⓐ =0.840 m.
Total Width of CSB at Ⓑ =
0.760 + (0.375-0.040)x2=1.430 m
Ⓑ - Ⓐ =1.430-0.840=0.590 m
Half the difference=0.590/2=0.295 m
Transition length (Min.)=0.295x20=5.9 m=20 ft.

TRANSITION AT SIGN SUPPORTS



SECTION E-E P.C. Concrete

Notes:
P.C. Concrete utilized for "median filler material".
Cut deep contraction joints at shoulder transverse joints, in CSB.
Epoxy coat ends of cut epoxy rebar at expansion joints.

RECORD DRAWING

NO.	DATE	REVISIONS	BY	APP'D
3				
2				
1	12-12-00	Revised bending diagram	R.J.S.	J.O.B.

KANSAS DEPARTMENT OF TRANSPORTATION

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

~~RD632 SI~~

FHWA APPROVAL	12-18-00	APP'D James O. Brewer	
DESIGNED	DETAILED	QUANTITIES	TRACED Bowser
DESIGN CK.	DETAIL CK.	QUAN.CK.	TRACE CK. Seitz

DSNR: WDH OPER: GDR SCALE: 1:100
I:/1997/97362/As-Builts/dgn's/Sh 229-KDOT_Std-RD632SIRev.dgn Last Rev: 8-20-07 By: gdr