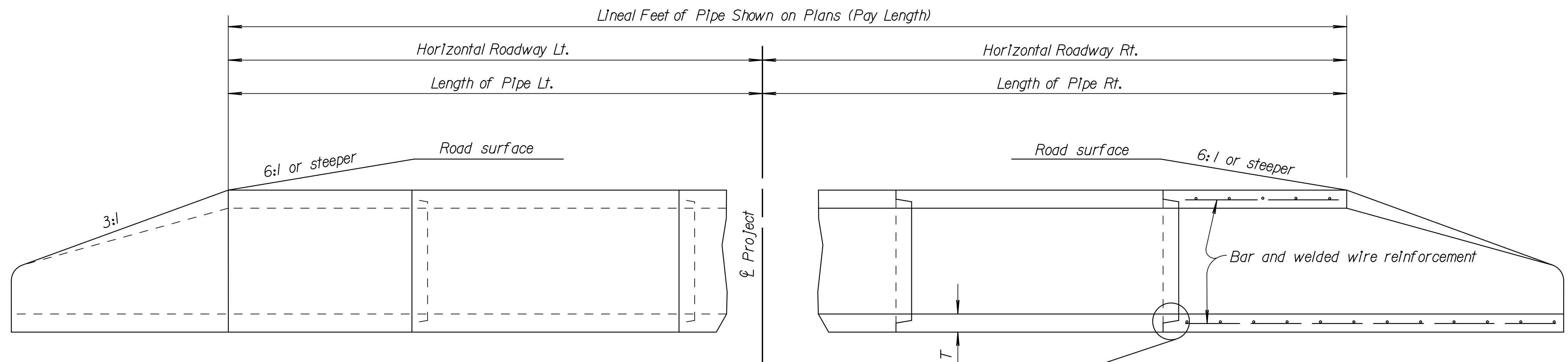
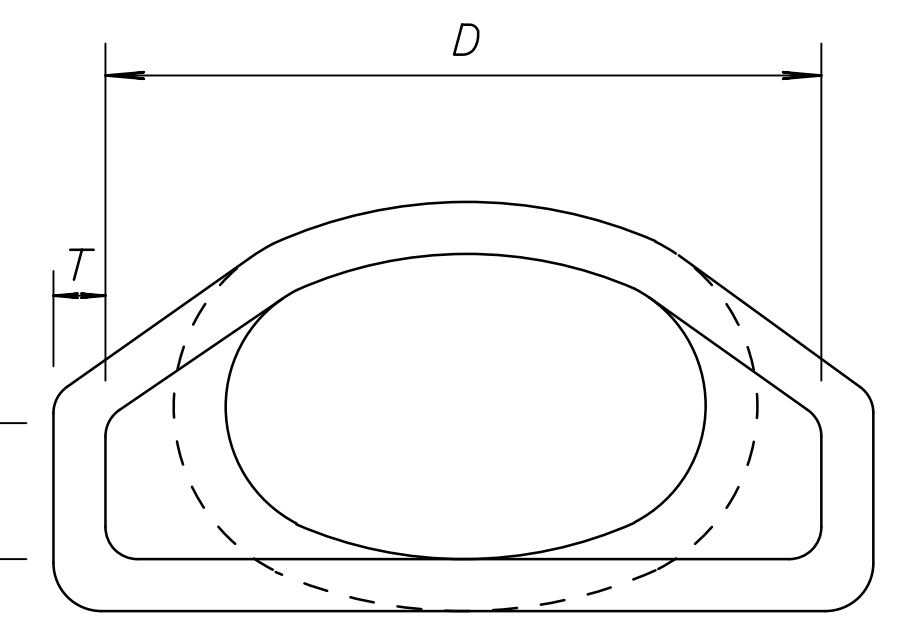


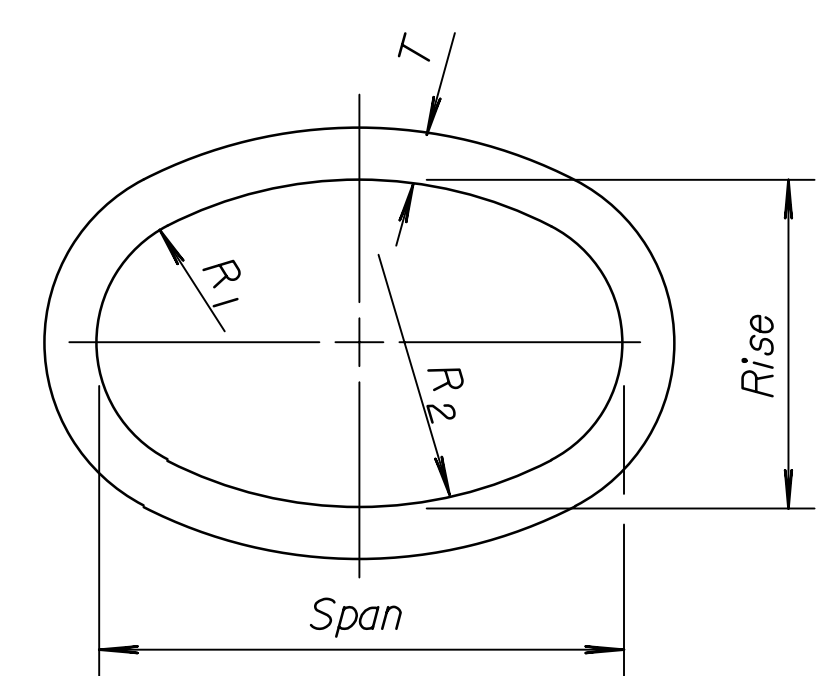
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	87 N-0388-01	2010	61	143



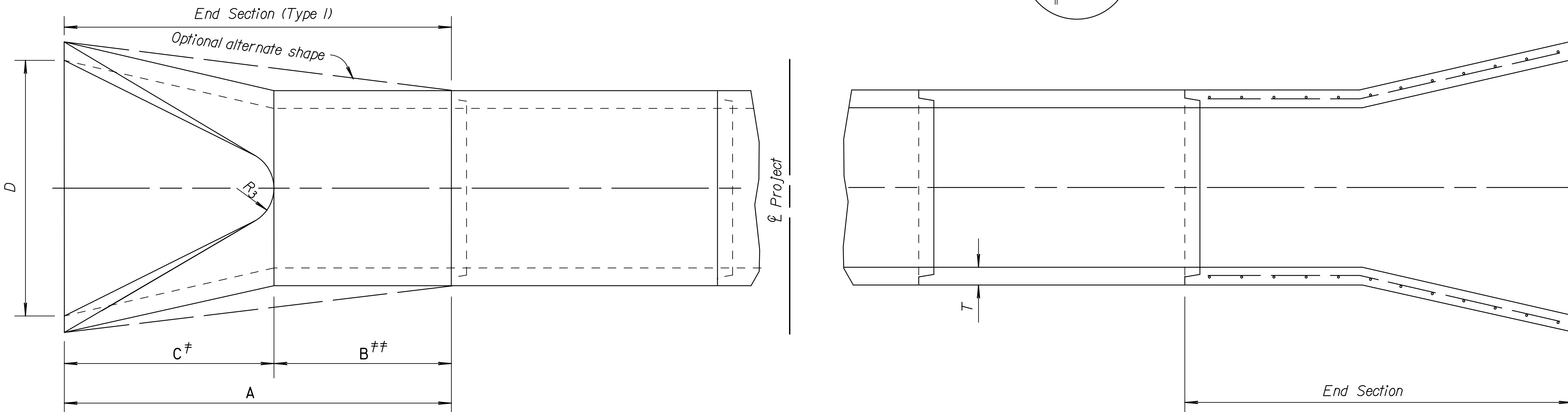
ELEVATION AND SECTION



FLARED END SECTION ELEVATION



END ELEVATION



PLAN AND SECTION

END SECTION (TYPE I) NOMINAL DIMENSIONS												
Bld Designation Sq. Ft.	Min. W.W. Area Sq. Ft.	Span	Rise	Overall Length A	Barrel Length B ††	C †	D	E	R <sub>1</sub>	R <sub>2</sub>	R <sub>3</sub>	T
1.0 or 1.5	1.8	23"	14"	6'-0"	3'-9"	2'-3"	3'-0"	8"	6"	20"	6"	2 3/4"
2.0, 2.5 or 3.0	3.3	30"	19"	6'-0"	2'-9"	3'-3"	4'-0"	8 1/2"	8 1/4"	26 1/4"	7"	3 1/4"
4.0	4.1	34"	22"	6'-0"	2'-2"	3'-10"	4'-6"	9"	9 1/4"	29 17/32"	8"	3 1/2"
5.0	5.1	38"	24"	6'-0"	1'-6"	4'-6"	5'-0"	9 1/2"	10 1/4"	32 3/4"	9"	3 3/4"
6.0	6.3	42"	27"	6'-0"	1'-3"	4'-9"	5'-6"	10 3/8"	11 7/16"	36 3/16"	10 1/2"	3 3/4"
7.0	7.4	45"	29"	8'-0"	3'-0"	5'-0"	6'-0"	11 1/4"	12 1/4"	39 1/4"	12"	4 1/2"
8.5	8.8	49"	32"	8'-0"	3'-0"	5'-0"	6'-3"	12"	13 9/16"	42 21/32"	12 1/2"	4 3/4"
10.0	10.2	53"	34"	8'-0"	3'-0"	5'-0"	6'-6"	15 3/4"	14 3/4"	46"	13"	5"
11.0 or 12.5	12.9	60"	38"	8'-0"	3'-0"	5'-0"	7'-0"	21"	16 1/2"	51 3/4"	14"	5 1/2"
14.0 or 16.5	16.6	68"	43"	8'-0"	3'-0"	5'-0"	7'-6"	25 1/2"	18 21/32"	58 3/32"	16"	6"

† Paid for as separate item of "End Sections".  
 †† Included in pay length of pipe.

Design of end section shall conform to standard reinforced concrete horizontal elliptical pipe. Slight variations in the dimensions specified will be allowed.

Note to Designer: KDOT Pipe Policy provides guidance in identifying the prohibited and/or restricted uses of CSP, ACSP, PEP, PVC, CAP & RCP. Provide end sections of the same type and coating as the pipe. Exceptions to this are noted in the Standard Specifications. Refer to the KDOT Design Manual, Volume I (Part C), Road Section, Elements of Drainage & Culvert Design for structural pipe design information which includes: corrugations, sizes, gauges, maximum/minimum fill heights and classes of pipe.

Drawn By: djb\_xm Plotted: 8/26/2010  
 File: I:\2005\05789\Standards\05789-rd663.dgn

NO.	DATE	REVISIONS	BY	APP'D
3	4-18-08	Added ref. to KDOT Pipe Policy	S.W.K.	J.O.B.
2	4-6-05	Revised reinforcement callout	S.W.K.	J.O.B.
1	6-16-95	Revised table & labeling	R.J.S.	J.O.B.

KANSAS DEPARTMENT OF TRANSPORTATION

**CONCRETE END SECTION FOR REINFORCED CONCRETE HORIZONTAL ELLIPTICAL PIPE TYPE I**

**RD663**

DESIGNED	6-27-08	APP'D. James O. Brewer
DESIGN CK.	DETAIL CK.	QUANTITIES
		QUAN. CK.
		TRACED Bowser
		TRACE CK. King