

A diagram of a circular culvert. It shows a cross-section of a circular pipe. The diameter of the pipe is indicated by a horizontal double-headed arrow passing through the center, with the text "Diameter of culvert" written above it. The pipe is shown within a larger, irregular shape representing the surrounding structure or ground.

A diagram of a circular cell. The cell is represented by a thick outer boundary. Inside the cell, there are two radial lines extending from the center towards the boundary, each labeled with the letter 'R'.

Diam.	A	B [#]	C [#]	D	E	R _I	Slope	T
300	1 850	1 240	610	610	100	230	1:3	50
375	1 855	1 170	685	760	150	280	1:3	57
450	1 855	1 170	685	915	230	300	1:3	63
600	1 865	760	1 105	1 220	240	355	1:3	75
750	1 870	500	1 370	1 525	300	380	1:3	88
900	2 485	885	1 600	1 830	380	510	1:3	100
1 050	2 490	890	1 600	1 980	535	560	1:3	113
1 200	2 490	660	1 830	2 135	610	560	1:3	125
1 350	2 495	845	1 650	2 285	685	610	1:2.4	138
1 500	2 515	990	1 525	2 440	890	610	1:2	150
1 800	2 515	535	1 980	2 745	915	610	1:1.86	175
2 100	2 835	535	2 300	3 050	915	610	1:1.6	200

Diam.	Min. W.W. Area m ² *	F	G	H	I	J	K	R	T
600	0.42	1 295	685	435	800	38	200	300	75
750	0.65	1 460	850	545	1 005	51	255	375	88
900	0.94	1 625	1 015	650	1 200	51	300	450	100
1 050	1.27	1 790	1 180	760	1 405	64	355	525	113
1 200	1.66	1 955	1 345	865	1 605	76	405	600	125
1 350	2.11	2 120	1 510	980	1 810	89	460	675	138
1 500	2.60	2 285	1 675	1 090	2 010	102	510	750	150
1 800	3.74	2 615	2 005	1 310	2 410	127	610	900	175
2 100	5.09	2 945	2 335	1 535	2 810	152	710	1 050	200

Technical drawing of a pipe trench showing inlet and outlet ends. The drawing includes dimensions for horizontal roadway length, pipe length, and road surface width. It also shows the slope of the road surface (1:6 or steeper) and the reinforcement details (bar and steel fabric reinforcement) for the pipe. The inlet end is labeled 'INLET END' and the outlet end is labeled 'OUTLET END'. The drawing is divided into two sections by a vertical line labeled 'Project'.

Labels and dimensions include:

- Meters of Pipe Shown on Plans (Pay Length)
- Horizontal Roadway Lt.
- Horizontal Roadway Rt.
- Length of Pipe Lt.
- Length of Pipe Rt.
- Road surface
- 1:6 or steeper
- Bar and steel fabric reinforcement
- Double reinforcement for 900 mm and larger pipes
- 1:1 or variable
- Direction of flow
- INLET END
- OUTLET END
- Project
- G #
- Variable #
- T
- A
- E

Greater than or equal to I

$G \#$ Variable $\# \#$

1:4 or flatter 4

Alternate Plan Shape

4 T

INLET END

PLAN VIEW

OUTLET END

Technical drawing of a tapered pipe end section (Type I). The drawing shows a side view of a pipe with a tapered end. Key dimensions and features include:

- End Section (Type I)**: Label for the tapered portion.
- Round inside edge of end section, see Section A-A**: Note indicating the internal radius at the end.
- Optional alternate shape**: Label for the alternative tapered profile.
- Dimensions**:
 - $B \pm \frac{1}{8}$: Dimension for the main body of the pipe.
 - $C \pm \frac{1}{8}$: Dimension for the tapered section.
 - A : Total length dimension.
 - T : Thickness of the pipe wall.
 - D : Outer diameter of the pipe.
 - W : Width of the drawing area.

OUTLET END

[illegible]

NO.	DATE	REVISIONS		BY	APP'D
KANSAS DEPARTMENT OF TRANSPORTATION CONCRETE END SECTIONS FOR CONCRETE PIPES TYPE I & SIDE TAPERED INLET SECTION (TYPE III)					
RD712 SI					
FHWA APPROVAL		4-5-94	APP'D. James O. Brewer		
DESIGNED	DETAILED	QUANTITIES		TRACED BOWSER	
DESIGN CK.	DETAIL CK.	QUAN.CK.		TRACE CK. Self	