

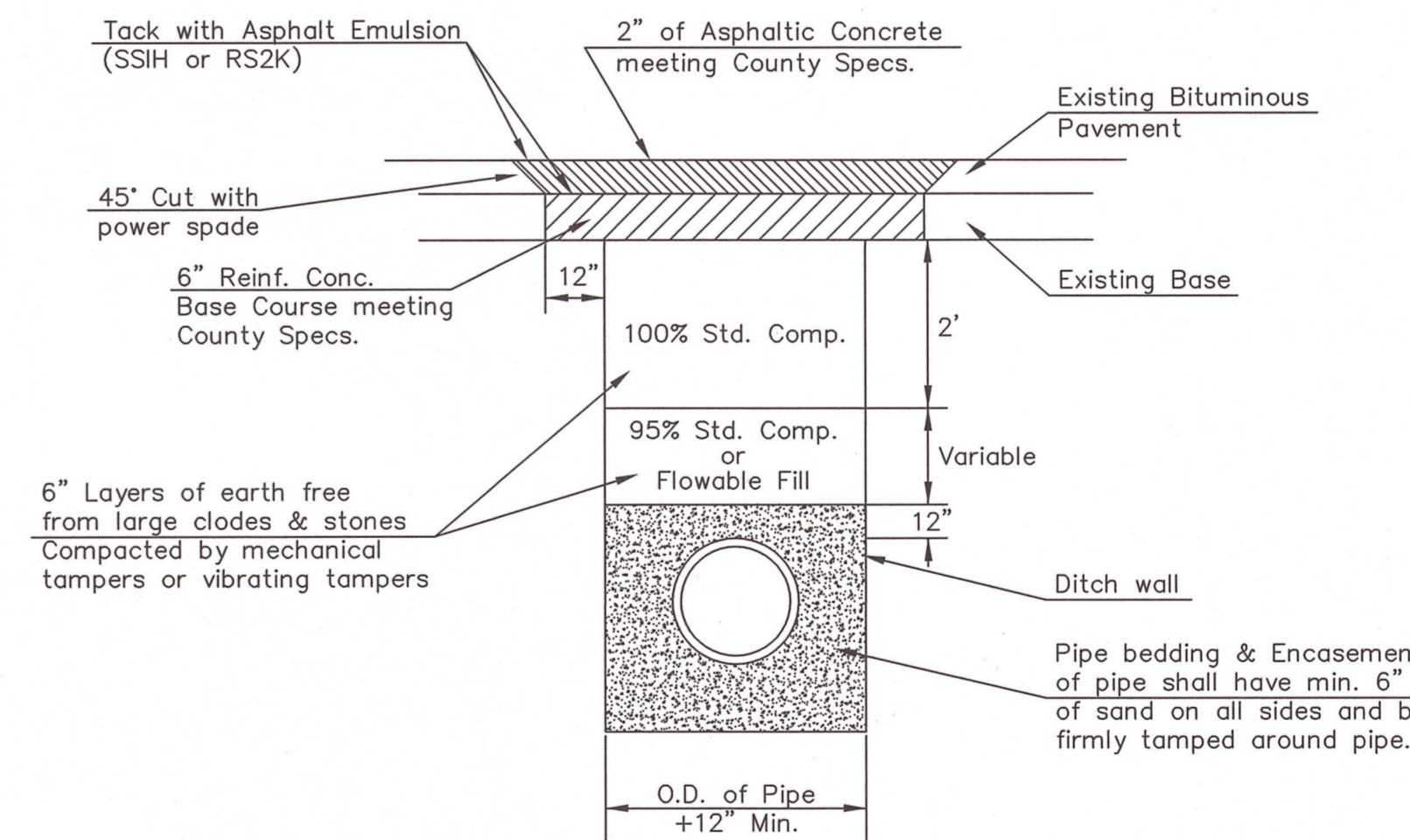
Note: Encasement to begin and end at a Bell on Sanitary Sewer Pipe.

REINFORCED CONCRETE ENCASEMENT OF SANITARY SEWER

PIPE SIZE	THRUST AT FITTINGS IN TONS-AT 150#/IN ² P					
	PLUG	90°	45°	22 1/2°	11 1/4°	TEE
6"	2.8	3.95	2.15	1.09	.55	2.8
8"	4.9	6.95	3.75	1.90	.96	4.9
12"	11.4	16.1	8.75	4.45	2.25	11.4
16"	20.15	28.5	15.4	7.85	3.95	20.15
20"	31.15	44.0	23.85	12.15	6.10	31.15
24"	44.55	63.0	34.1	17.4	8.75	44.55

TYPICAL THRUST BLOCKS

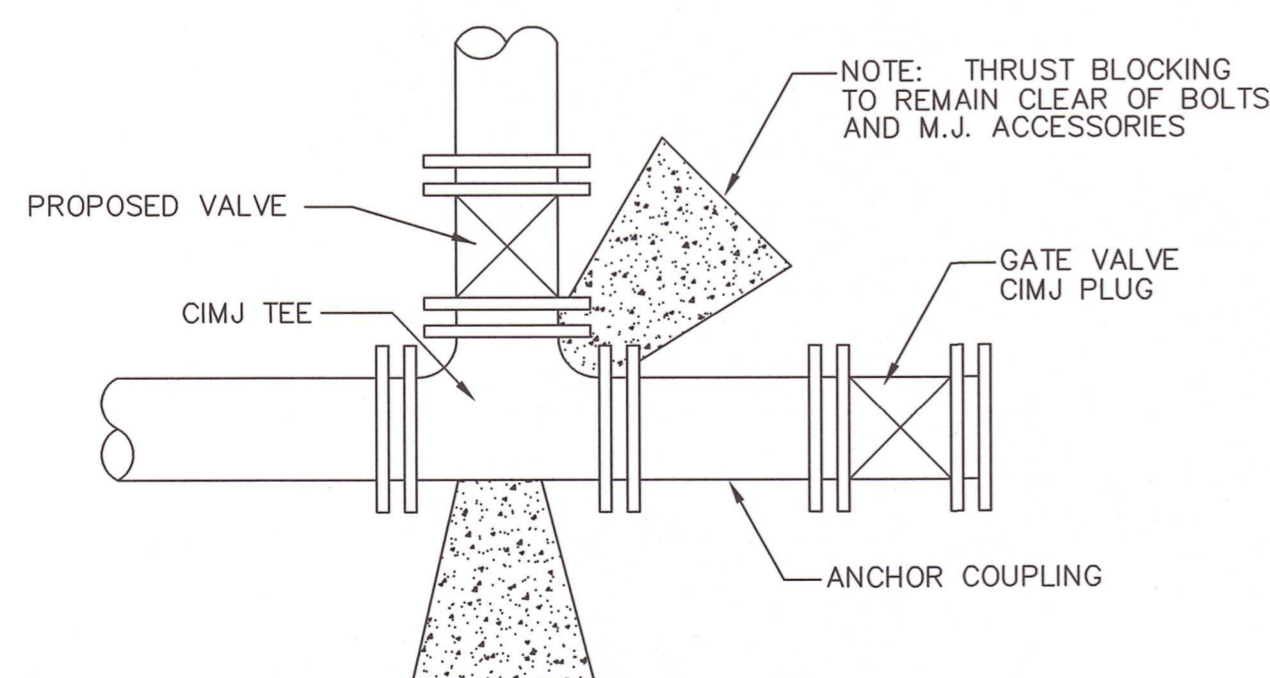
SETTLEMENT & COMPACTION ON CITY AND COUNTY ROAD RIGHT-OF-WAY EXCEPT UNDER PAVEMENT



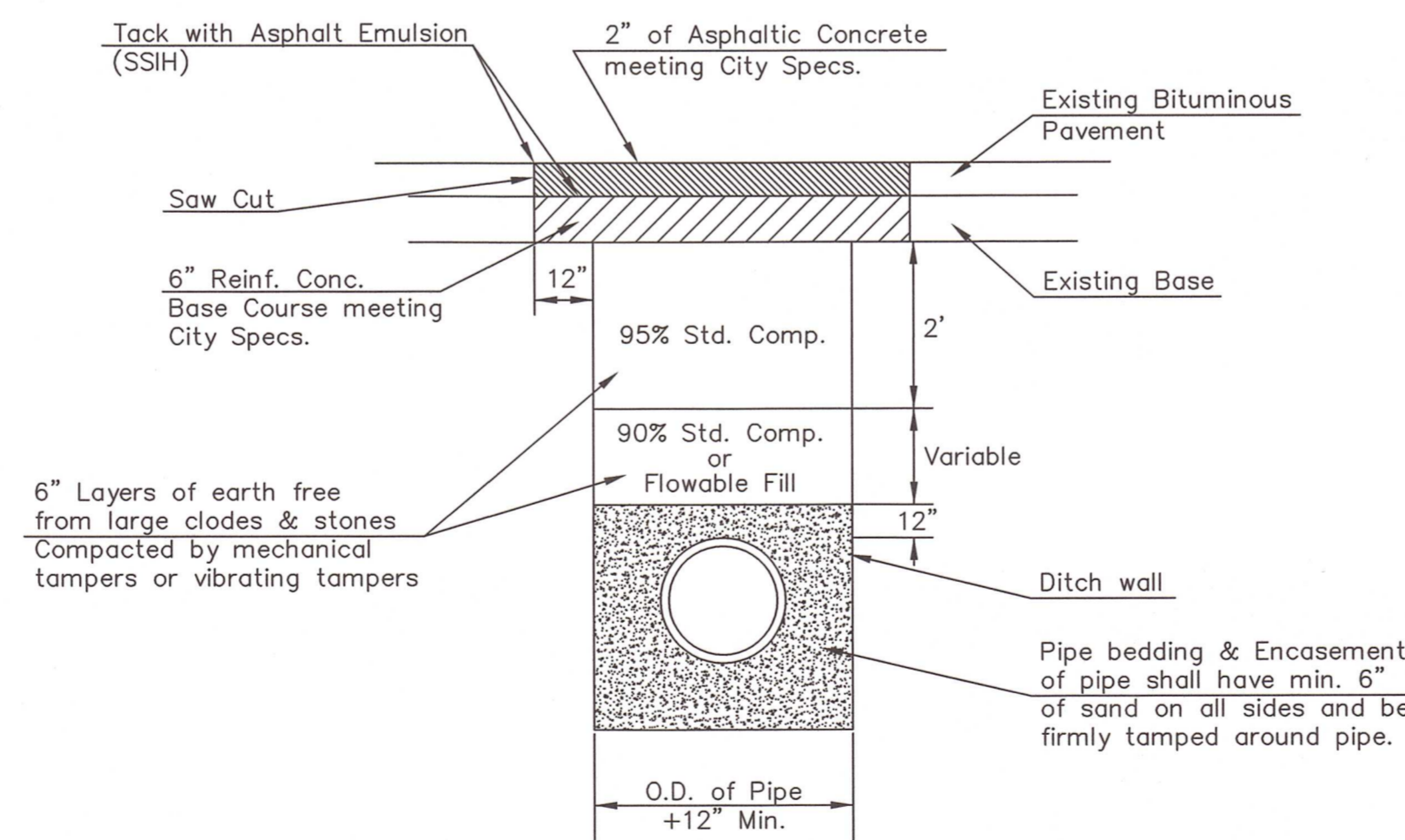
Standard Density Test, as described in the latest addition of ASTM D698, shall be performed to verify the above requirements to the Satisfaction of the Sedgwick County Director of Public Works. All testing costs shall be included in the unit price bid for the pipe in place.

When laying under paving, parallel with the centerline of the street, a minimum of one (1) Standard Density Test shall be performed on each 300 lineal feet of ditch.

PAVEMENT REPLACEMENT & DITCH COMPACTION UNDER EXISTING AND PROPOSED COUNTY ROADS



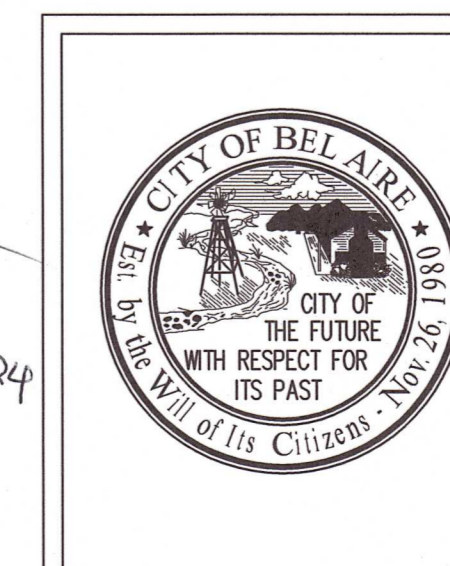
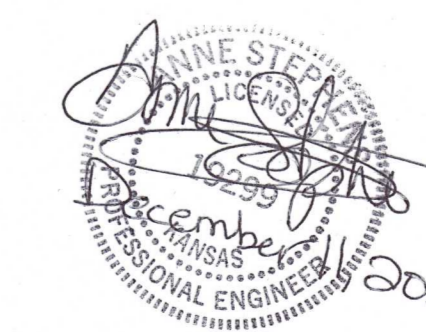
KEY BLOCK DETAIL



Standard Density Test, as described in the latest addition of ASTM D698, shall be performed to verify the above requirements to the Satisfaction of the Bel Aire City Engineer. All testing costs shall be included in the unit price bid for the pipe in place.

When laying under paving, parallel with the centerline of the street, a minimum of one (1) Standard Density Test shall be performed on each 300 lineal feet of ditch.

PAVEMENT REPLACEMENT & DITCH COMPACTION UNDER EXISTING AND PROPOSED CITY ROADS



MISCELLANEOUS WATER DETAILS	
CITY OF BEL AIRE, KANSAS	
PROJECT NUMBER	DRAWING NAME
	WTRDRTL2.DWG
DATE	SHEET OF
JAN 2003	