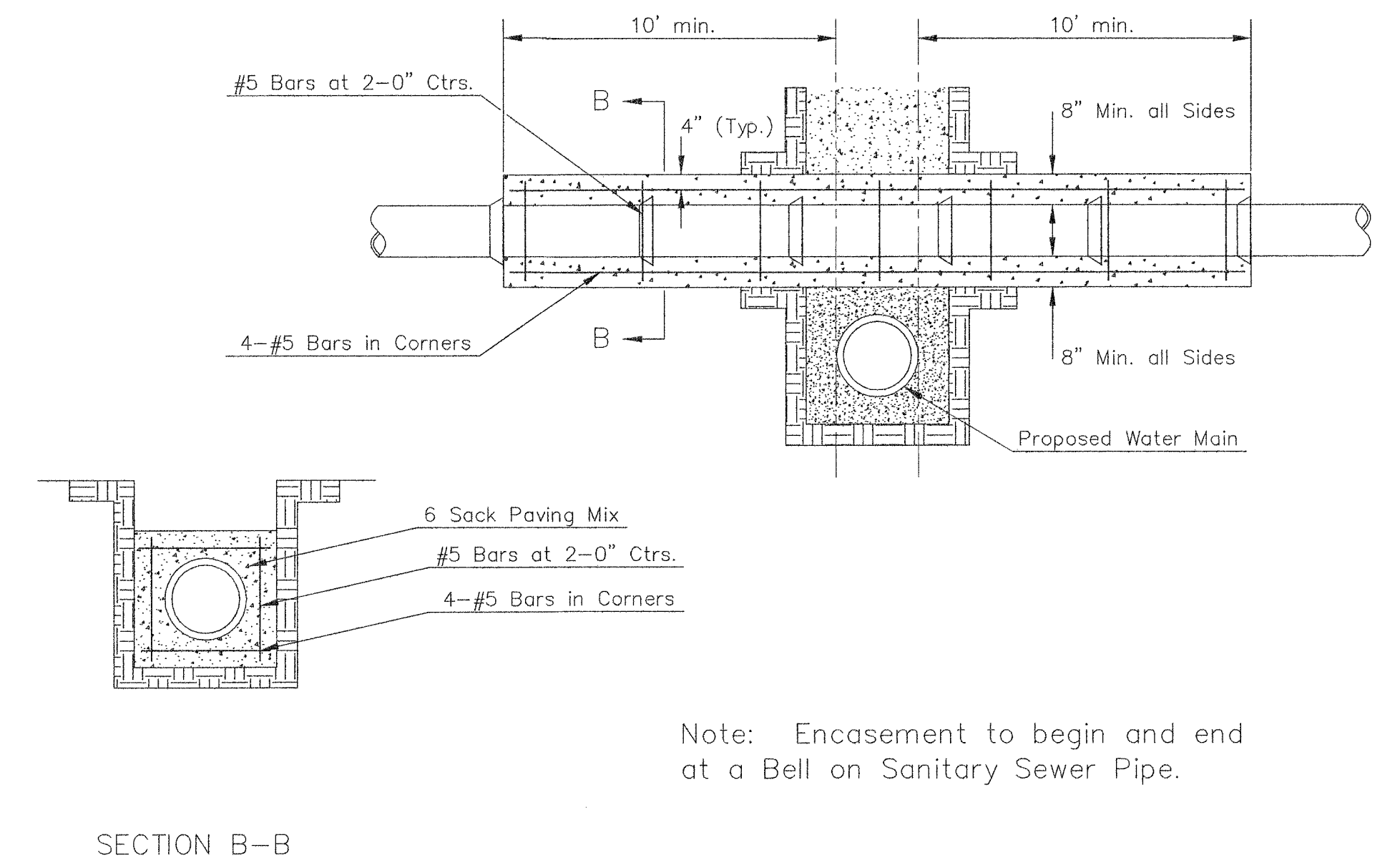


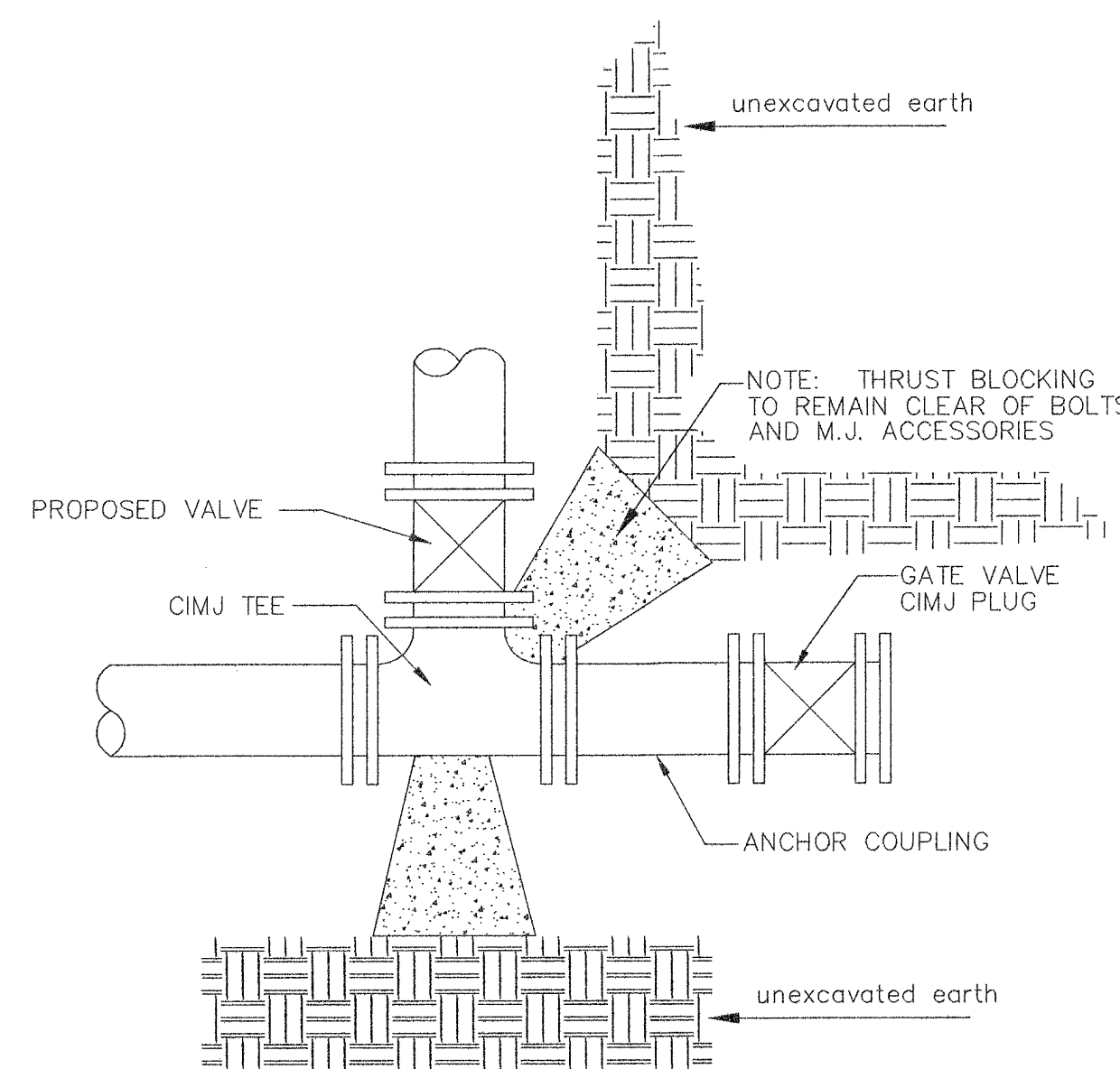
TRENCH COMPACTION IN ROAD RIGHT-OF-WAY



REINFORCED CONCRETE ENCASEMENT OF SANITARY SEWER

PIPE SIZE	THRUST AT FITTINGS IN TONS--AT 150#/IN <sup>2</sup> 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

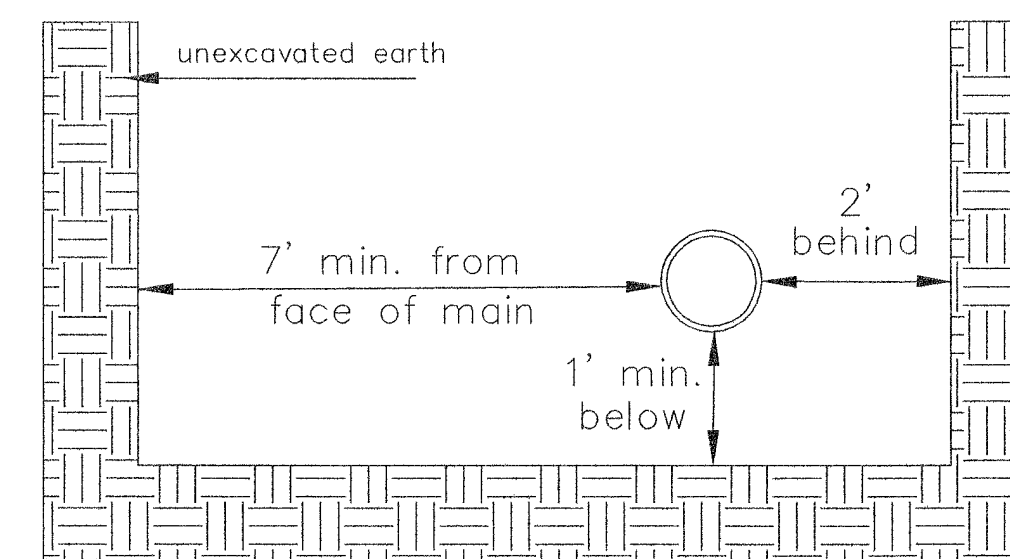
TYPICAL THRUST BLOCKS



KEY BLOCK DETAIL

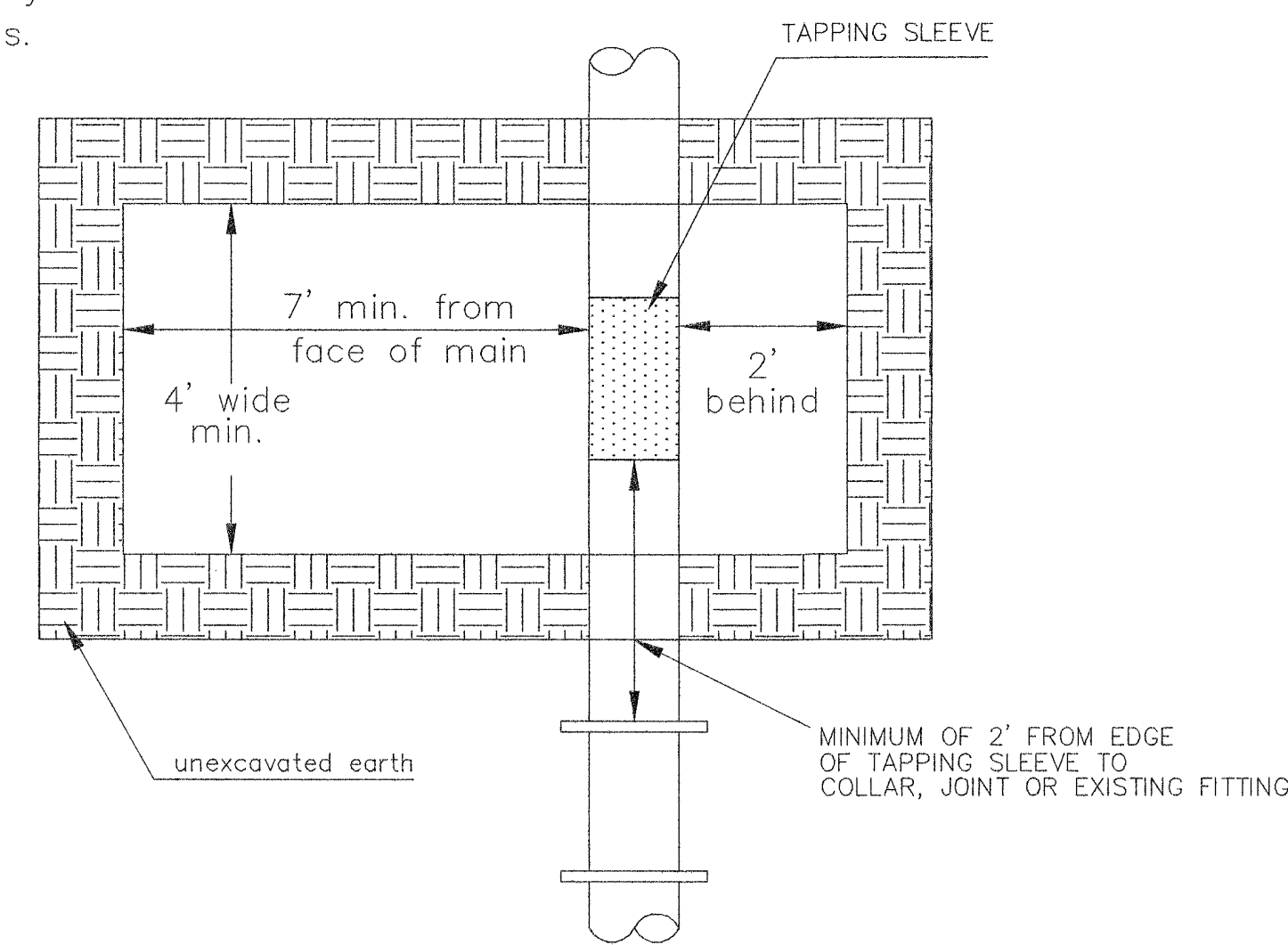
\* PLANS GOVERN UNLESS OTHERWISE NOTED ON PLANS

SIDE VIEW

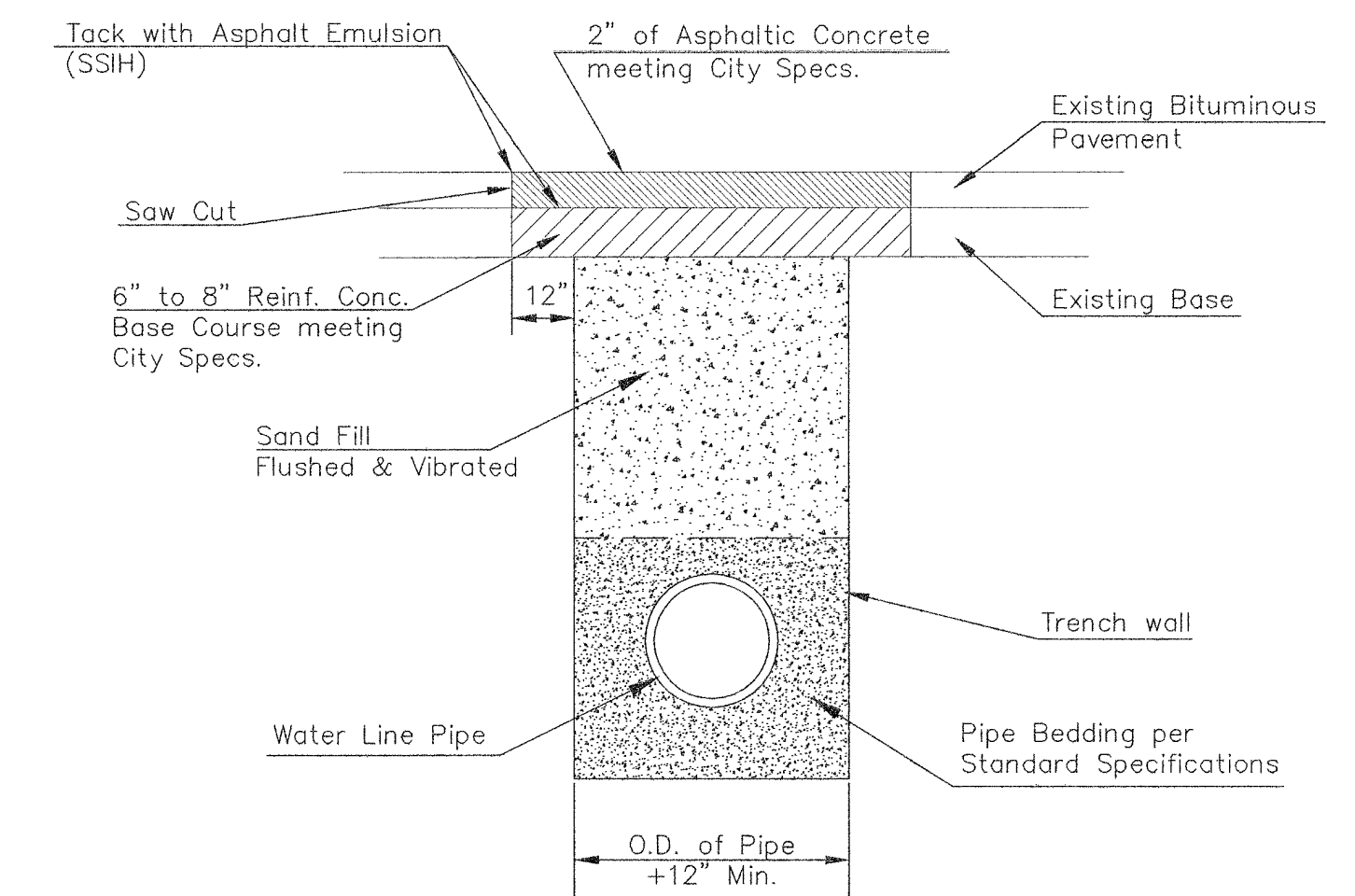


Note: When shoring is required it is to be per The City of Wichita Standard Specifications.

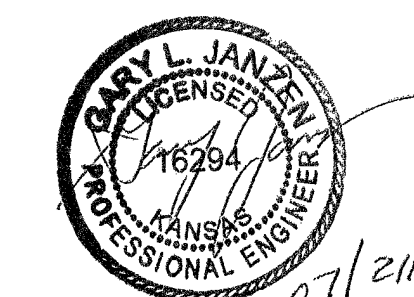
TOP VIEW



EXCAVATION FOR WET TAP



PAVEMENT REPLACEMENT & TRENCH COMPACTION UNDER EXISTING AND PROPOSED CITY ROADS



REVISED: JULY 2015

**CITY OF WICHITA**  
PUBLIC WORKS & UTILITIES ENGINEERING DIVISION

**MISCELLANEOUS WATER DETAILS**

CITY ENGINEER  
**GARY JANZEN, P.E.**

PROJECT NUMBER 448-90831	OCA NUMBER 735577	DATE SEPT 2017
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CITY ENGINEER'S OFFICE  
CITY HALL - SEVENTH FLOOR  
455 NORTH MAIN STREET  
WICHITA, KANSAS 67202-1620  
(316) 268-4501

SHEET  
**03 OF 11**