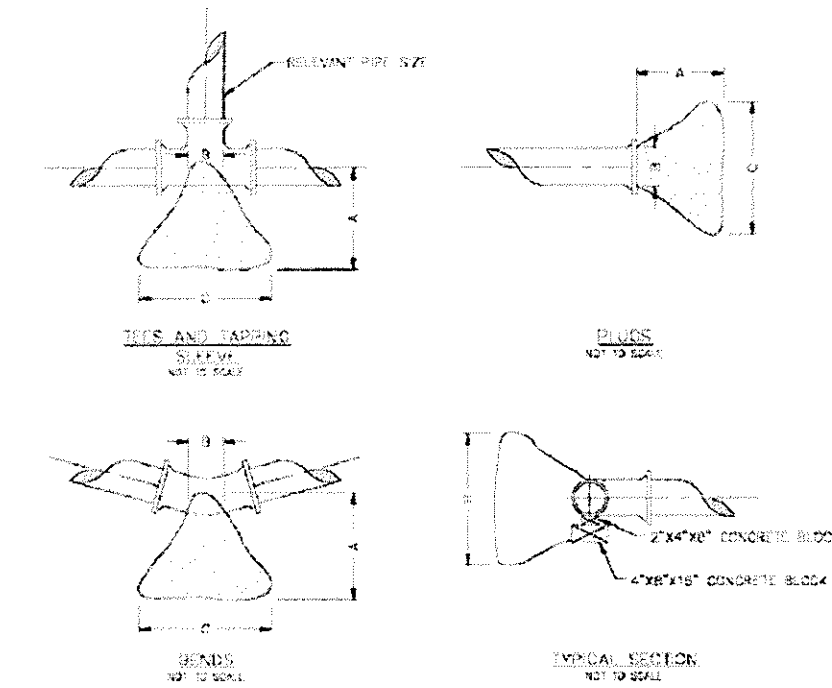


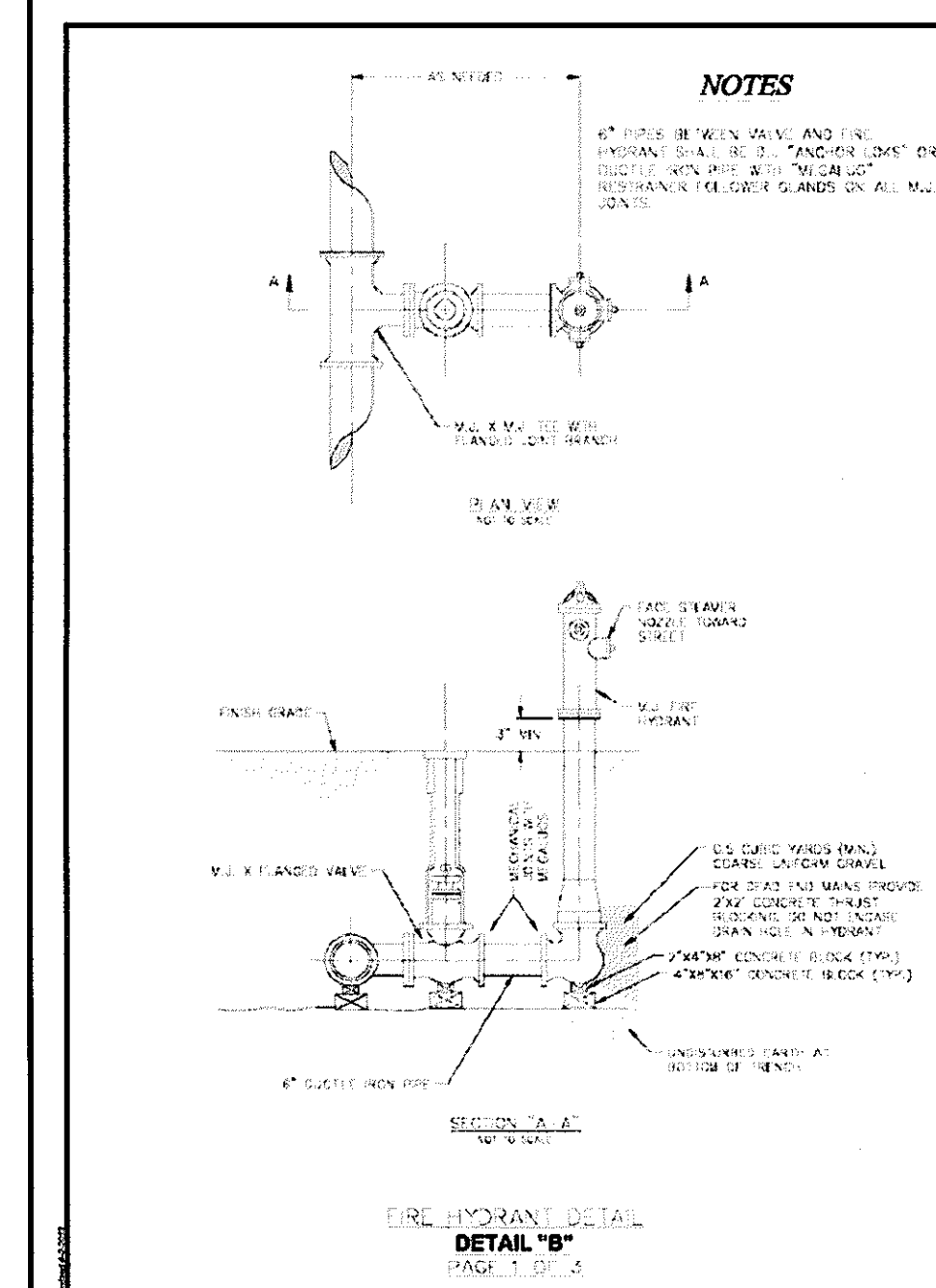
NOTES
 1) SEE SPECIFICATIONS FOR ADDITIONAL NOTES FOR BEDDING AND SPACING.
TYPICAL TRENCH SECTION FOR PVC PIPE
DETAIL "A"
 PAGE 1 OF 2



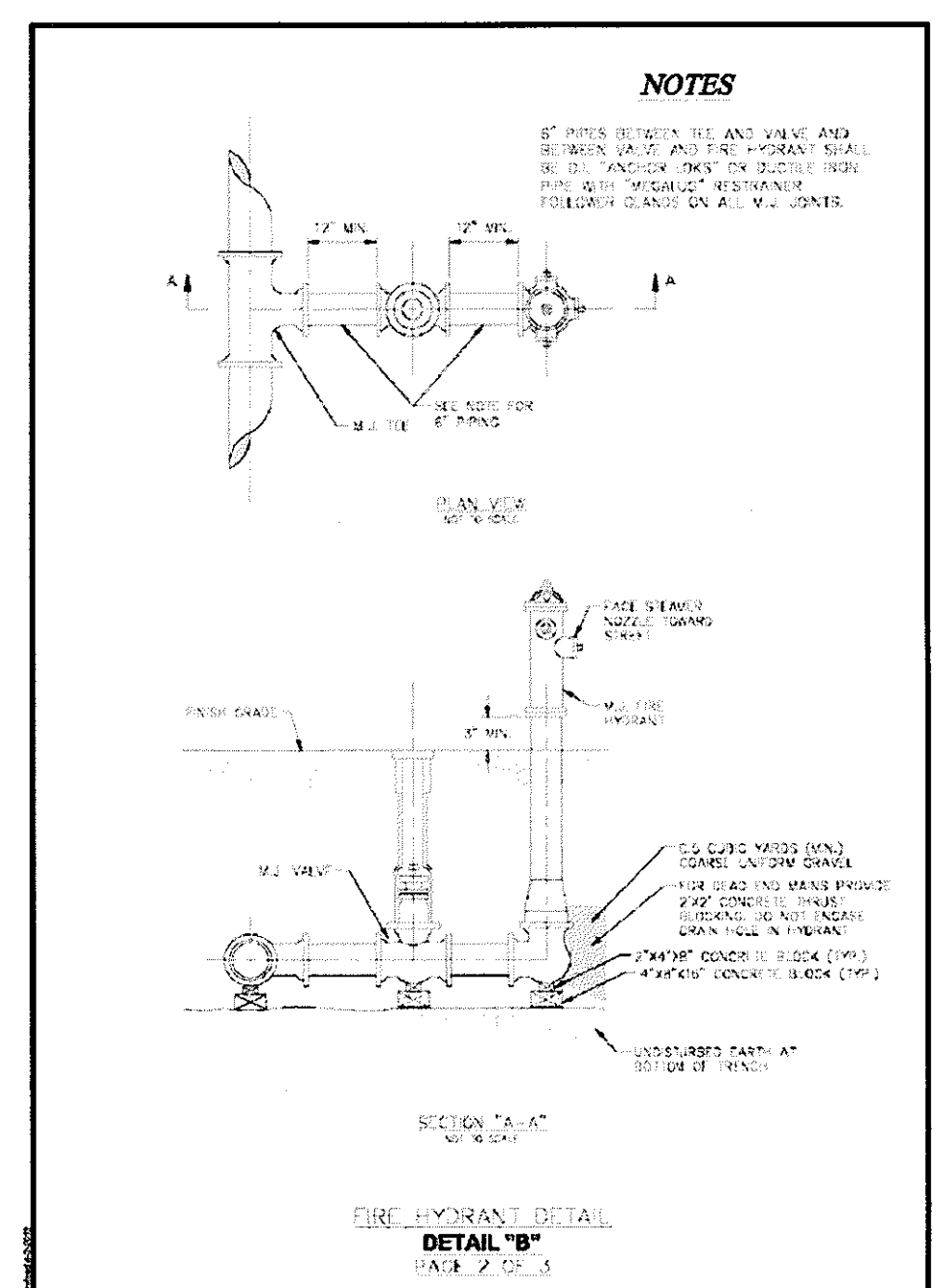
THRUST BLOCK DIMENSIONS - INCHES

PIPE DIA.	ALL FTGS.			90 DEGREE BEND		45 DEGREE BEND		22-1/2 BEND		11-1/4 BEND	
	A	B	C	C	H	C	H	C	H	C	H
4	14	4	24	12	28	15	18	12	12	12	12
6	18	6	30	15	36	24	30	18	24	12	12
8	24	8	36	20	42	30	36	24	30	18	18
10	30	10	42	25	48	36	42	30	36	24	24
12	36	12	48	30	54	42	48	36	42	30	30

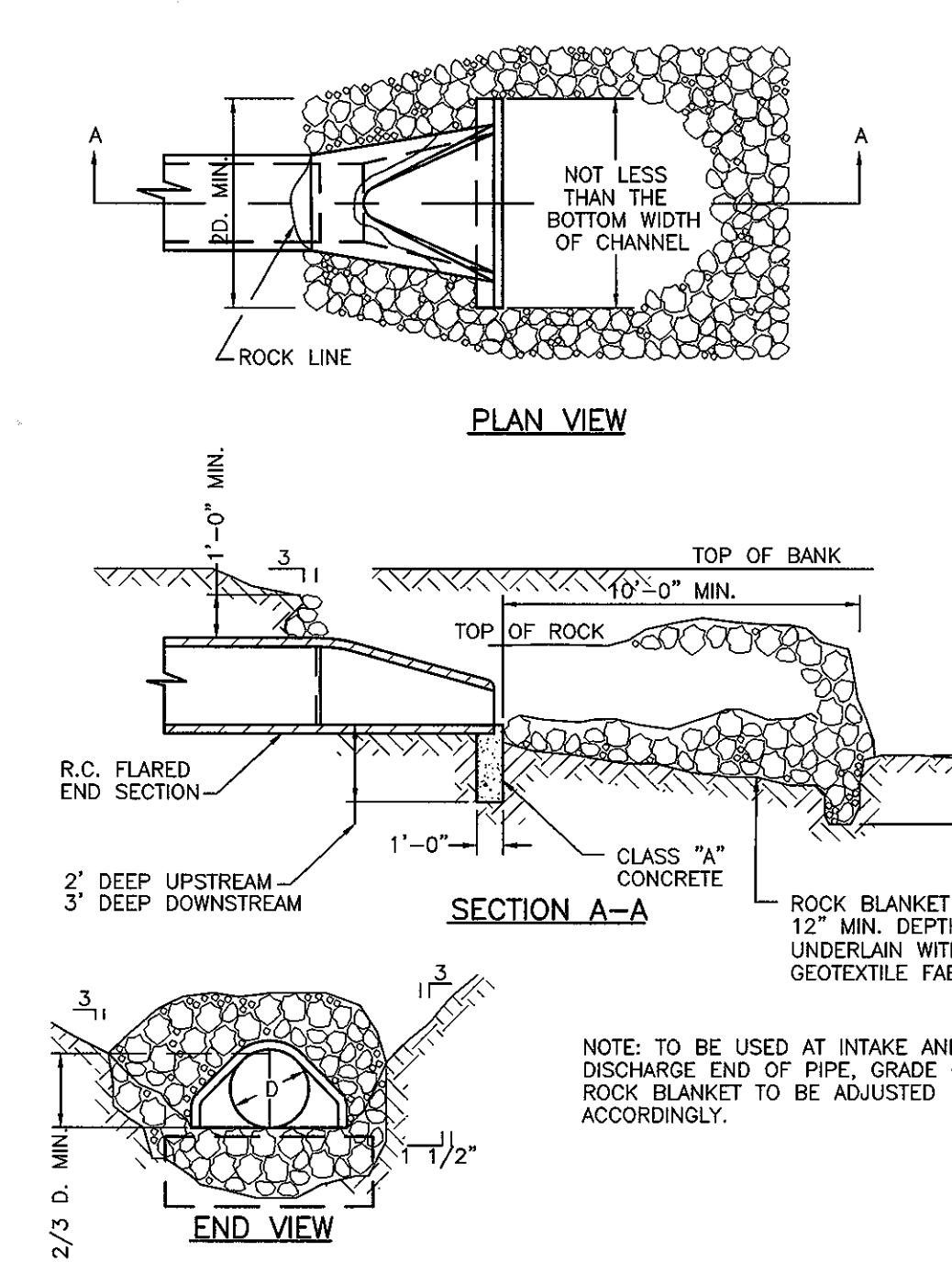
NOTE
 1) SEE SPECIFICATIONS FOR ADDITIONAL NOTES FOR BEDDING AND SPACING.
HORIZONTAL THRUST BLOCKING
DETAIL "C"



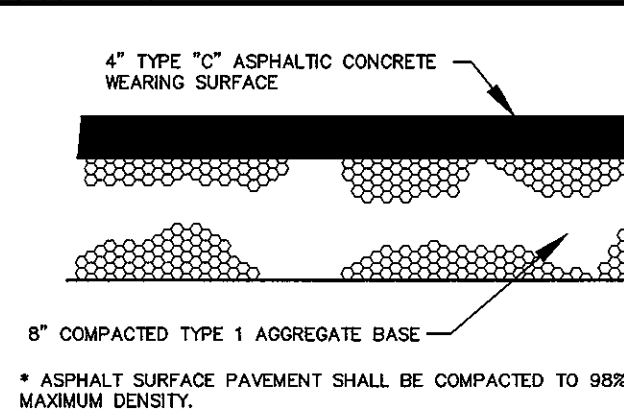
NOTES
 1) THESE BLOCKS SHALL BE PLACED ON THE INSIDE OF THE TRENCH AND THE REINFORCING SHALL BE 3" LONGER THAN THE TRENCH WIDTH AND SHALL BE PLACED ON ALL 4 SIDES.
DETAIL "B"
 PAGE 1 OF 2



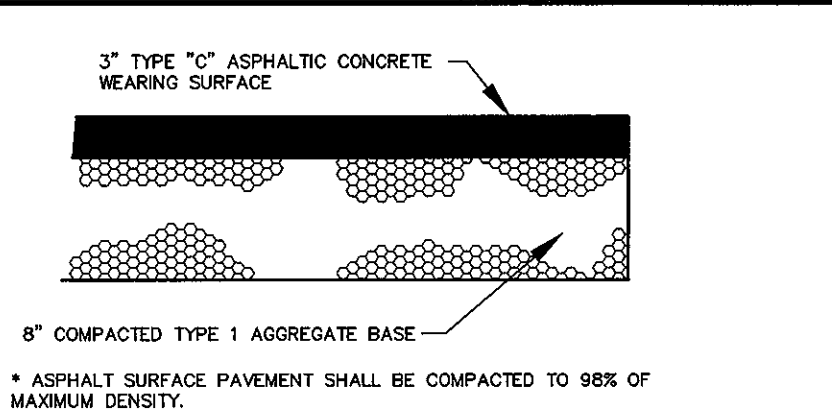
NOTES
 1) THESE BLOCKS SHALL BE PLACED ON THE INSIDE OF THE TRENCH AND THE REINFORCING SHALL BE 3" LONGER THAN THE TRENCH WIDTH AND SHALL BE PLACED ON ALL 4 SIDES.
DETAIL "B"
 PAGE 2 OF 2



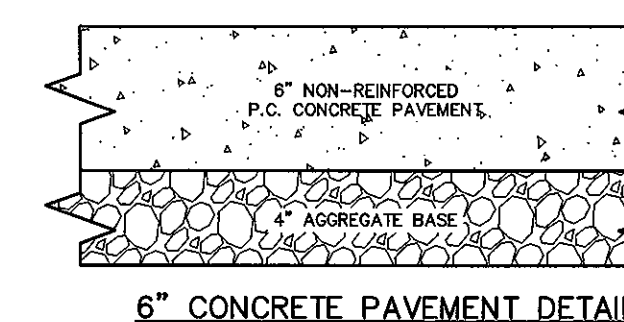
FLARED END SECTION
 NOTE: TO BE USED AT INTAKE AND DISCHARGE END OF PIPE, GRADE OF ROCK BLANKET TO BE ADJUSTED ACCORDINGLY.



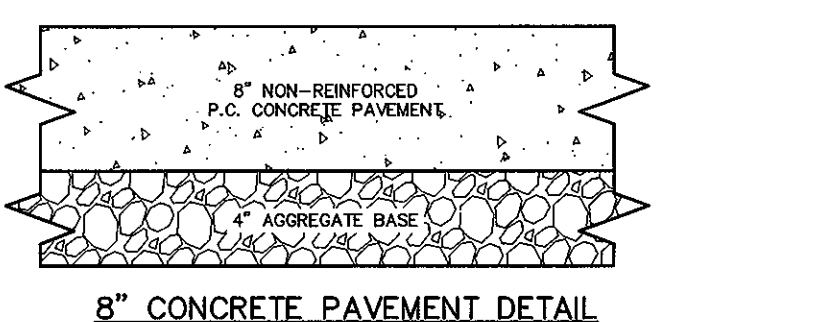
ASPHALT DRIVE AISLE PAVEMENT DETAIL
 NOT TO SCALE



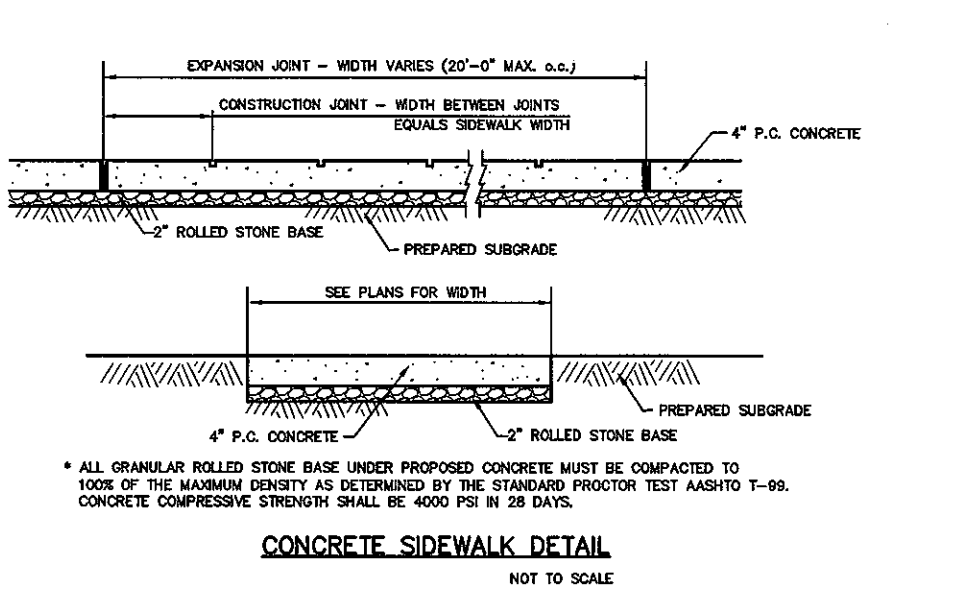
ASPHALT PAVEMENT DETAIL
 NOT TO SCALE



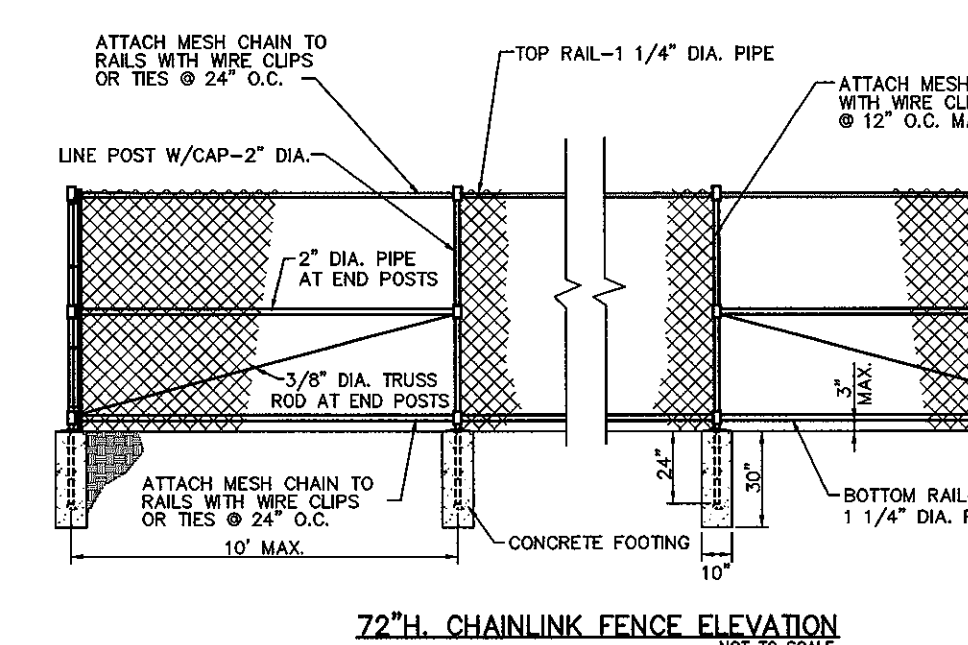
6" CONCRETE PAVEMENT DETAIL
 NOT TO SCALE



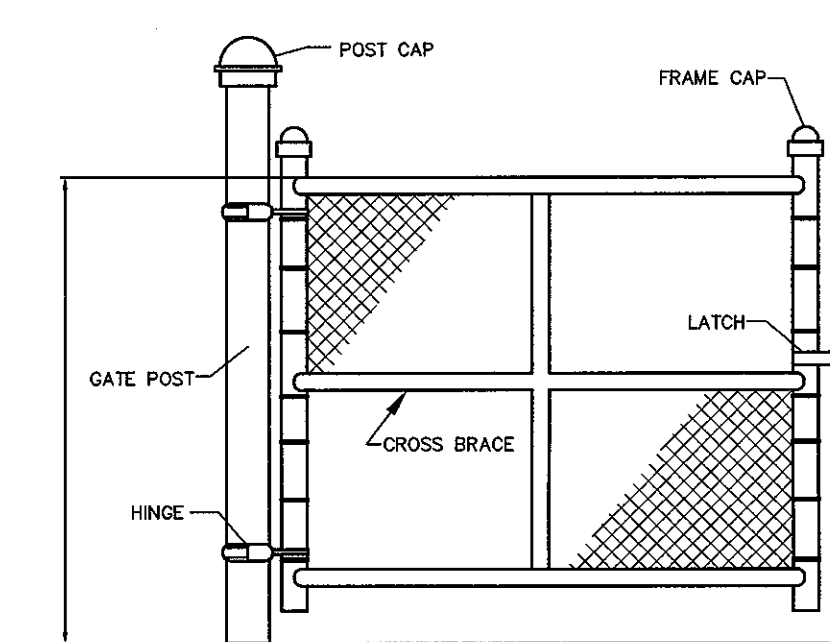
8" CONCRETE PAVEMENT DETAIL
 NOT TO SCALE



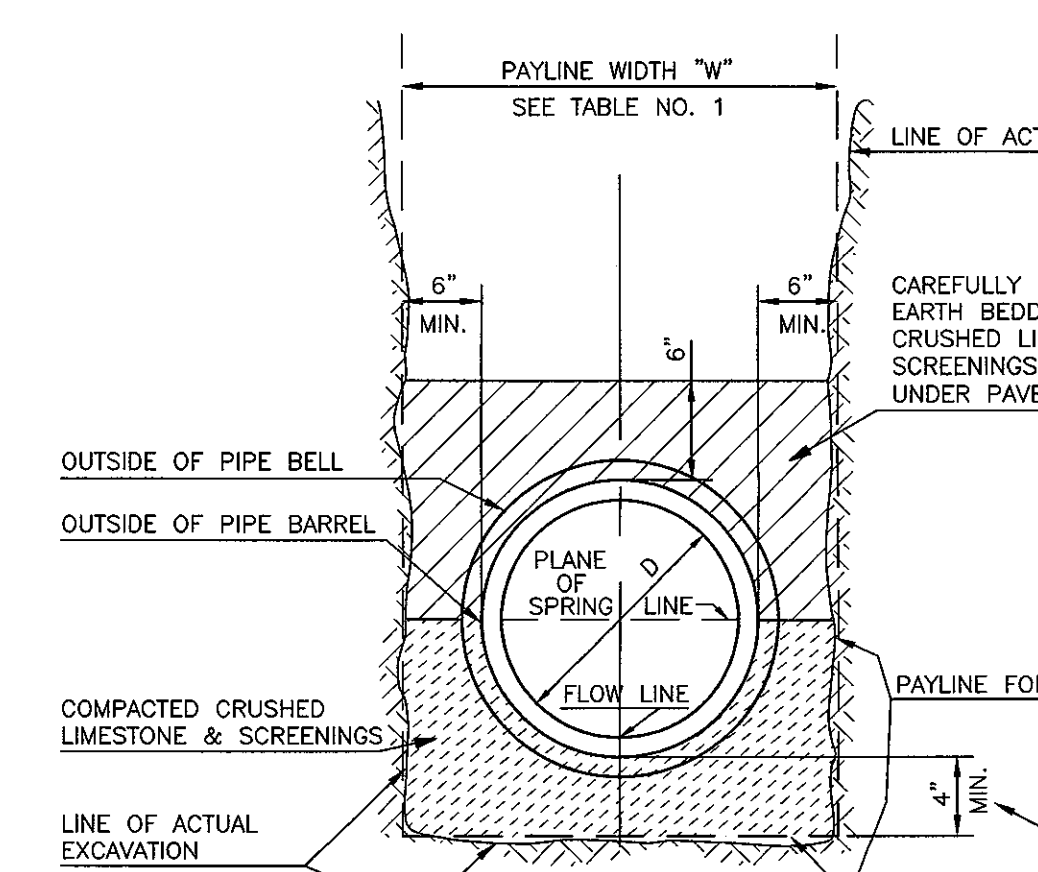
CONCRETE SIDEWALK DETAIL
 NOT TO SCALE



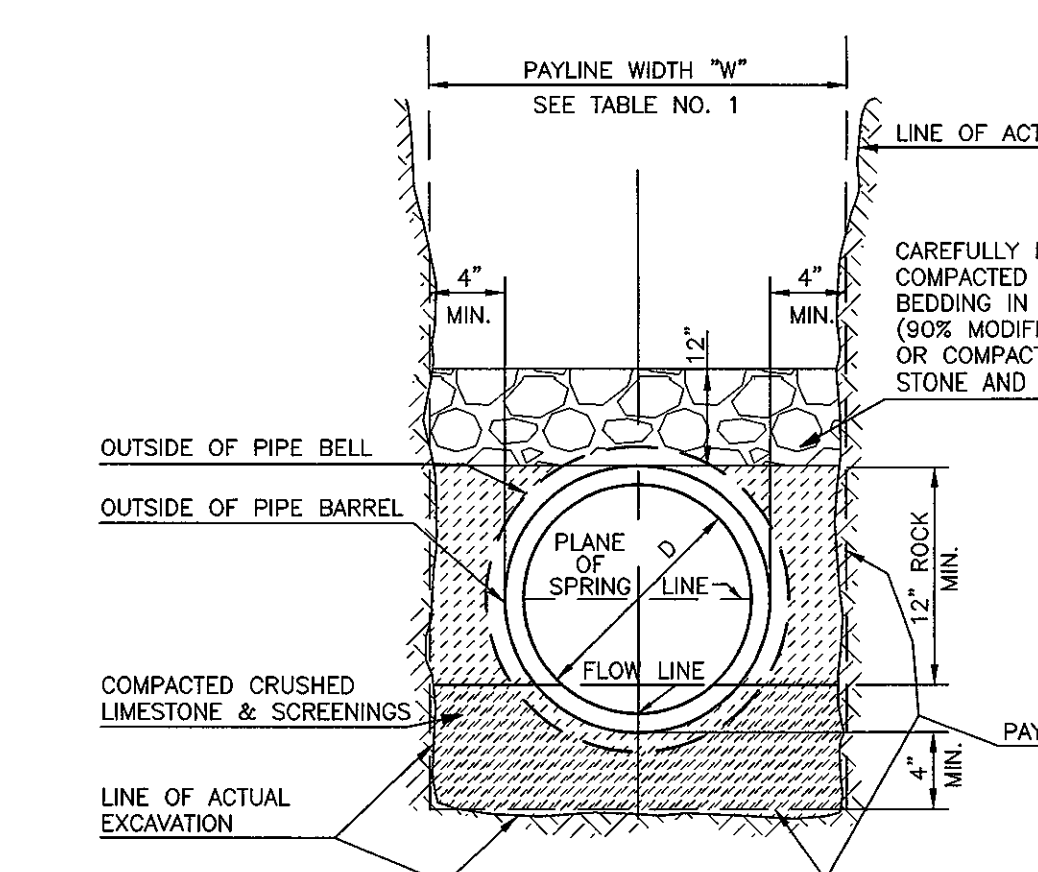
72" H. CHAINLINK FENCE ELEVATION
 NOT TO SCALE



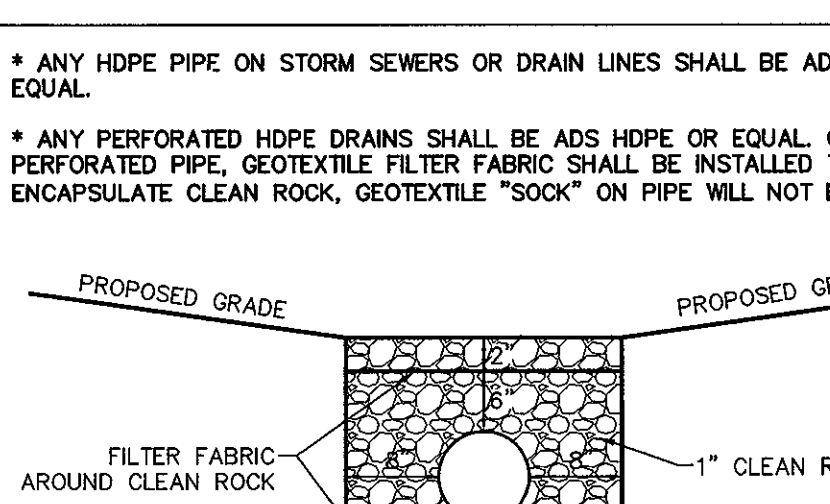
SWING GATE
 NOT TO SCALE



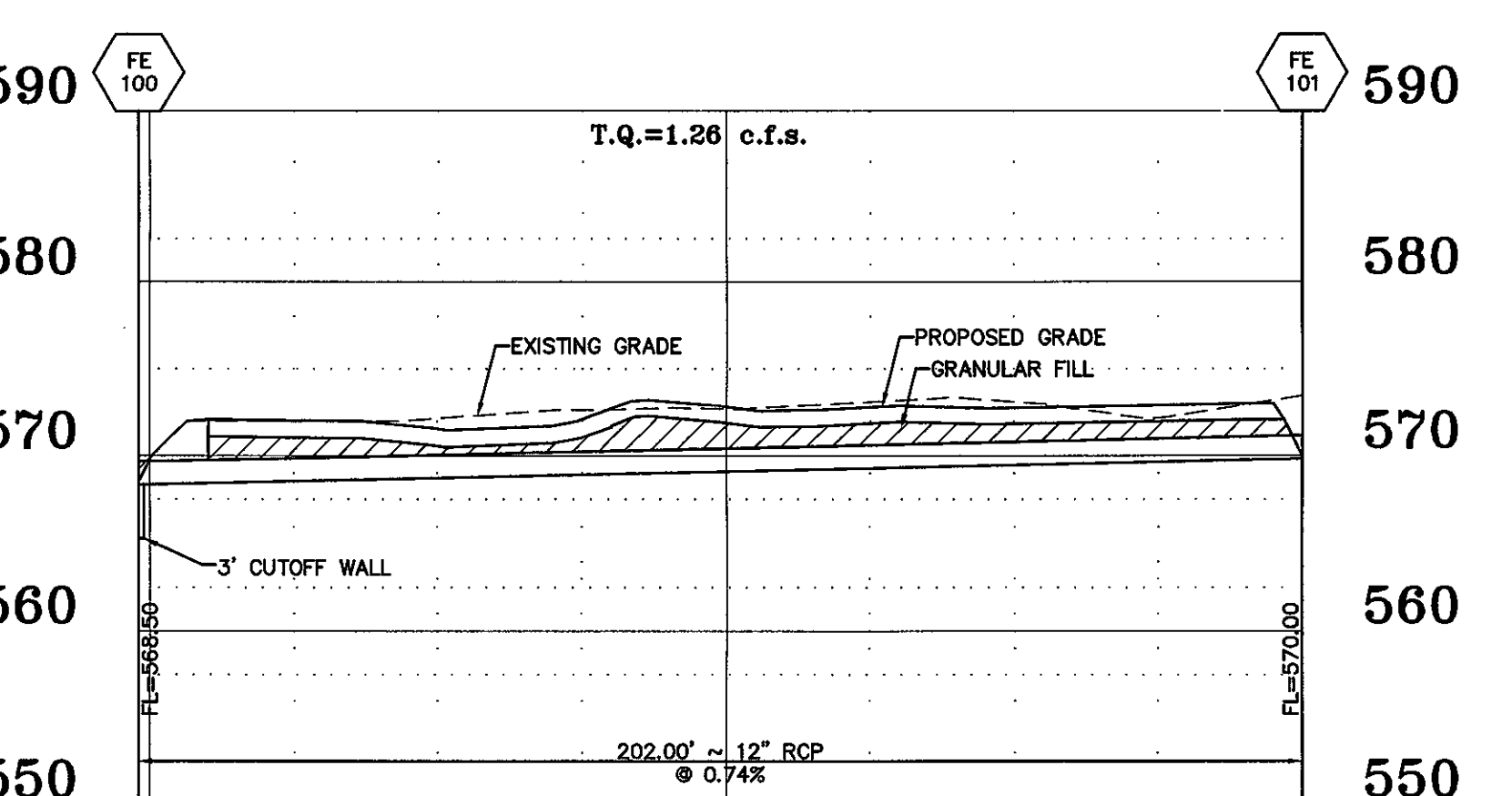
O'FALLON DETAIL PIPE BEDDING CLASS "C" (MODIFIED FOR REINFORCED CONCRETE PIPE)



PIPE BEDDING CLASS "C" (FOR ALL PIPE EXCEPT REINFORCED CONCRETE PIPE)



FRENCH DRAIN DETAIL (N.T.S.)



STORM SEWER PROFILE (PRIVATE)
 HORIZONTAL SCALE: 1"=30'
 VERTICAL SCALE: 1"=10'

ROUND PIPE				HORIZONTAL ELLIPTICAL PIPE			
INSIDE DIAMETER OF PIPE (INCHES)	TRENCH WIDTH (INCHES)	TRENCH DEPTH (FEET)	PAY-VOLUME OF CONCRETE (CU. YD.)	INSIDE DIMENSIONS OF PIPE (INCHES)	TRENCH WIDTH (INCHES)	TRENCH DEPTH (FEET)	PAY-VOLUME OF CONCRETE (CU. YD.)
4	30	2.50	3.28				
6	30	2.50	3.59				
8	30	2.50	3.87				
10	30	2.50	4.09				
12	30	2.50	4.28				
15	36	3.00	5.55				
18	36	3.00	5.77	14 x 23	41	3.42	5.94
21	39	3.25	6.61				
24	42	3.50	7.39	19 x 30	49	4.06	7.66
27	45	3.75	8.18	22 x 34	55	4.42	8.81
30	48	4.00	8.30	24 x 38	58	4.83	8.70
33	53	4.42	10.53	27 x 42	62	5.17	10.71
36	56	4.67	11.43	28 x 45	66	5.50	11.72
39	DISCONTINUED			32 x 49	71	5.92	13.14
42	63	5.25	13.38	34 x 53	75	6.25	14.05
48	72	5.83	15.67	38 x 60	83	6.92	16.18
54	77	6.42	18.15	43 x 68	92	7.67	18.81
60	84	7.00	20.73	46 x 75	107	8.42	21.09
66	91	7.58	23.45	53 x 83	109	8.68	24.35
72	98	8.17	26.37	58 x 91	118	9.63	27.45
78	103	8.75	29.38	63 x 98	128	10.00	30.50
84	112	9.33	32.57	68 x 105	135	11.25	33.91
90	119	9.92	35.80	72 x 113	143	11.92	36.99
96	126	10.50	39.37	77 x 121	152	12.87	40.69
102	133	11.08	42.89	82 x 128	160	13.33	44.45
108	140	11.67	46.75	87 x 136	168	14.20	47.79
114	147	12.25	50.88	92 x 143	178	14.87	51.70
120	154	12.83	54.72	97 x 151	185	15.42	56.01
126	161	13.42	58.92				
132	168	14.00	63.27	108 x 168	202	16.83	64.40
144	182	15.17	72.40	116 x 180	218	18.17	73.56

TABLE 1 PAYLINE WIDTHS OF TRENCH AND PAY-QUANTITIES OF CONCRETE
 METROPOLITAN ST. LOUIS SEWER DISTRICT
 Standard Details of Sewer Construction
 D. B. S. J.C.K. 2009 SHEET 1

BAX PROJECT NAME : C. BENNETT BUILDING ADDITION
 BAX PROJECT NO. : 03-12266C
 DESIGN DATE : 07-19-16
 FILENAME : 12266C

UPP STR	LOW STR	L DIA	UPPER FL LN	LOWER FL LN	PS	UPPER ST EL	DEPTH HY GR	UPPER HY EL	LOWER HY EL	HYDR GRADE	FR HEAD	VEL	JUNC LOSS	TURN LOSS	CURVE LOSS	STR GRADE	INL CAP	DR AREA	PI	Q	TQ	PIPE CAP	LINE NUMBER	REMARKS	
FE101	FE100	202	12	570.00	568.50	0.74	571.00	0.56	570.44*	569.50	.00130	0.25	1.60	0.04	0.04	0.00	0.00	0.00	0.61	2.07	1.26	1.26	3.07	1	TIP=569.50

* INDICATES CRITICAL DEPTH

ENGINEERS SEAL DOES NOT APPLY TO O'FALLON, P.W.S.D. NO. 2, AND MSD DETAILS ON THIS SHEET.

PROJECT TITLE:
C. BENNETT BUILDING ADDITION
 1700 W. TERRA LANE
 O'FALLON, ST. CHARLES COUNTY, MISSOURI, 63066

ENGINEERING FIRM:
BAX ENGINEERING PLANNING SURVEYING
 221 Point West Blvd.
 St. Charles, MO 63001
 636-928-9552
 FAX 636-928-1710

DISCLAIMER OF RESPONSIBILITY:
 I hereby specify that the documents intended to be authorized by my seal are limited to this sheet, and I hereby disclaim any responsibility for all other drawings, specifications, estimates, reports or other documents or instruments relating to or intended to be used for any part or parts of the architectural or engineering project or survey.

STATE OF MISSOURI
LARRY D. WALKER
 NUMBER 0000144
 PROFESSIONAL ENGINEERING
 11/10/16
 Larry D. Walker
 Civil Engineer
 Engineers License No. 2007020343

Bax Engineering Company, Inc.
 Missouri State Certificate of Authority
 Engineering #000855
 Missouri State Certificate of Authority
 Surveying #000144

REVISIONS	
09-13-16	PWSD NO.2 COMMENTS
10-06-16	CITY COMMENTS
10-13-16	CITY COMMENTS
11-01-16	FIRE DIST. COMMENTS
11-10-16	PWSD NO.2 COMMENTS

Developer / Owner:
SHOCKLEY COMMERCIAL
 501 FIRST CAPITOL DRIVE, SUITE 5
 ST. CHARLES, MISSOURI 63301
 (636) 946-9753

P+Z No.: #4503.01.03
 Approved 07-07-16
City No.: #16-010181

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