

STORM SEWER IMPROVEMENTS INCLUDING DETENTION POND

FOR

TOWNE PARC 3rd AND 4th ADDITION

Private Project Number

324PPS (607861)

CITY OF WICHITA, KANSAS

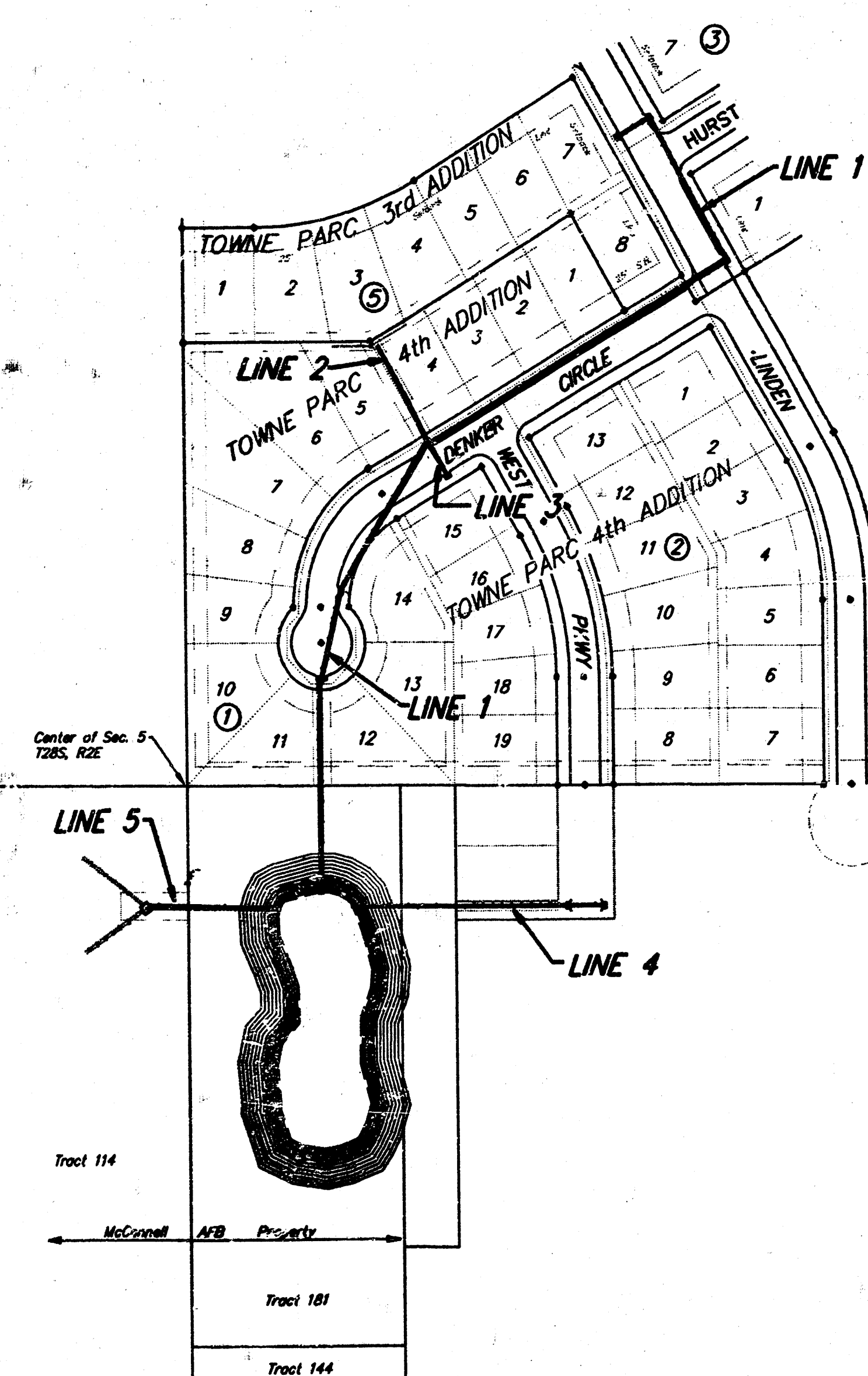
Michael E. Lindebak City Engineer

General Notes

The Contractor shall be responsible for preserving property irons. The Contractor will be required to re-establish any property irons which are damaged or destroyed by his construction operations. Such irons shall be re-established by a licensed land surveyor in accordance with state laws.

Bench Mark:

"□" Cut Top of Curb 68'± W. of 1/4
Section Line, S. side of Hurst.
Elev. = 211.22 City Datum



SCALE: 1" = 150'

Sheet Index

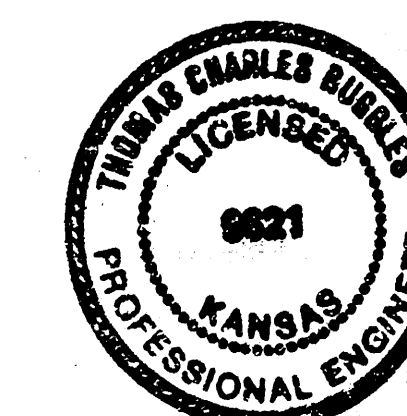
1. TITLE SHEET
- 2-3. LINE 1
4. LINE 1, LINE 2 & LINE 3
5. LINE 4, LINE 5
6. DETENTION POND
- 7-8. TYPE 1A INLET DETAILS
9. DROP INLET DETAILS

APPROVED AS NOTED
BY CITY ENGINEER OF WICHITA

Sanitary Sewers _____
Storm Sewers VRH 1/28/92
Driveway Approaches _____
Water Mains _____
Paving _____

NOTE TO CONTRACTORS

Inspection and testing for this project is to be provided by a Licensed Consulting Engineering Firm under contract with the Owner/Developer. Said inspection to be in accordance with the City of Wichita standard construction engineering practices and certified by a Licensed Professional Engineer. No work shall be performed in dedicated easements or public right-of-way by the Contractor without such inspection nor shall any work be commenced without written authorization by the City Engineer.

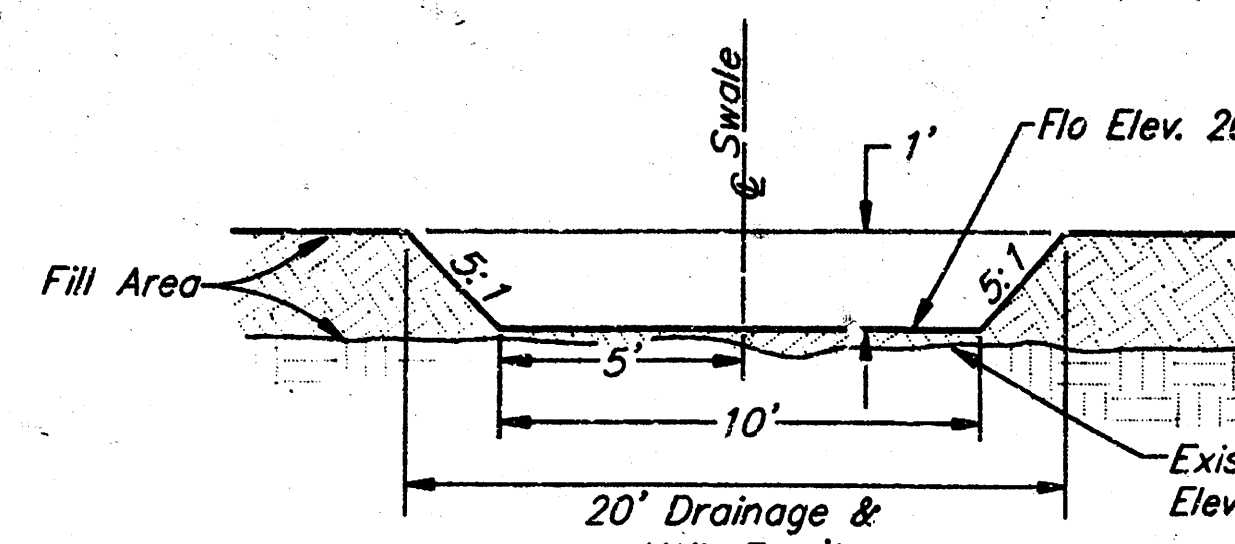


Revised as built 10-2-92 TCR

BAUGHMAN COMPANY P. A.
ENGINEERING & SURVEYING
316/262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

POND STAKING COORDINATES					
Pt.	Northing	Easting	Pt.	Northing	Easting
10	1140.67	71.00	63	744.4	309.1
11	1140.39	223.00	64	747.1	303.1
12	1140.8	84.5	65	765.7	265.3
13	1140.6	92.5	66	750.4	245.8
14	1140.6	105.1	67	715.4	271.6
15	1140.6	107.2	68	688.4	279.5
16	1140.6	109.7	69	604.5	328.8
17	1121.0	111.6	70	599.3	313.4
18	1089.9	95.9	71	570.6	314.4
19	1092.7	106.9	72	585.2	308.1
20	1096.1	119.6	73	597.4	282.9
21	1105.1	127.6	74	611.7	287.8
22	1110.9	129.8	75	633.3	222.7
23	1118.6	133.6	76	646.8	229.5
24	1129.6	137.0	77	680.4	238.2
25	1126.7	167.6	78	704.6	233.1
26	1112.8	168.7	79	746.7	230.6
27	1101.5	169.0	80	750.8	193.2
28	1077.3	167.0	81	710.1	183.6
29	1067.4	167.0	82	701.3	180.4
30	1044.3	170.3	83	690.8	174.2
31	1016.3	180.2	84	678.6	165.4
32	1023.2	209.5	85	741.5	120.6
33	1053.4	207.3	86	746.0	134.9
34	1059.3	207.0	87	767.2	178.8
35	1063.7	207.2	88	804.1	170.7
36	1116.0	204.0	89	796.2	123.0
37	1124.9	201.0	90	794.7	108.1
38	1133.1	199.6	91	850.4	108.0
39	1139.5	213.9	92	849.9	123.1
40	1139.4	216.1	93	845.0	170.6
41	1134.0	223.3	94	869.5	182.0
42	1140.4	230.3	95	889.1	136.3
43	1132.1	238.9	96	897.2	123.7
44	1095.7	240.6	97	908.3	129.9
45	1125.1	269.8	98	906.6	144.8
46	1079.6	307.1	99	902.2	192.6
47	1061.4	257.3	100	944.5	185.3
48	1020.0	244.7	101	930.8	139.4
49	988.3	264.3	102	926.0	125.1
50	1005.8	302.7	103	964.6	112.6
51	1020.6	323.4	104	968.2	127.1
52	939.0	333.8	105	972.3	172.1
53	938.3	318.5	106	1002.8	171.8
54	937.1	276.4	107	1005.1	136.1
55	892.6	267.6	108	1006.7	107.3
56	884.6	309.3	109	1046.7	102.9
57	880.6	328.6	110	1040.2	116.5
58	851.9	307.0	111	1048.8	130.0
59	851.4	264.7	112	1049.8	140.8
60	796.1	272.6	113	1078.5	139.1
61	796.1	315.2			
62	797.8	320.6			

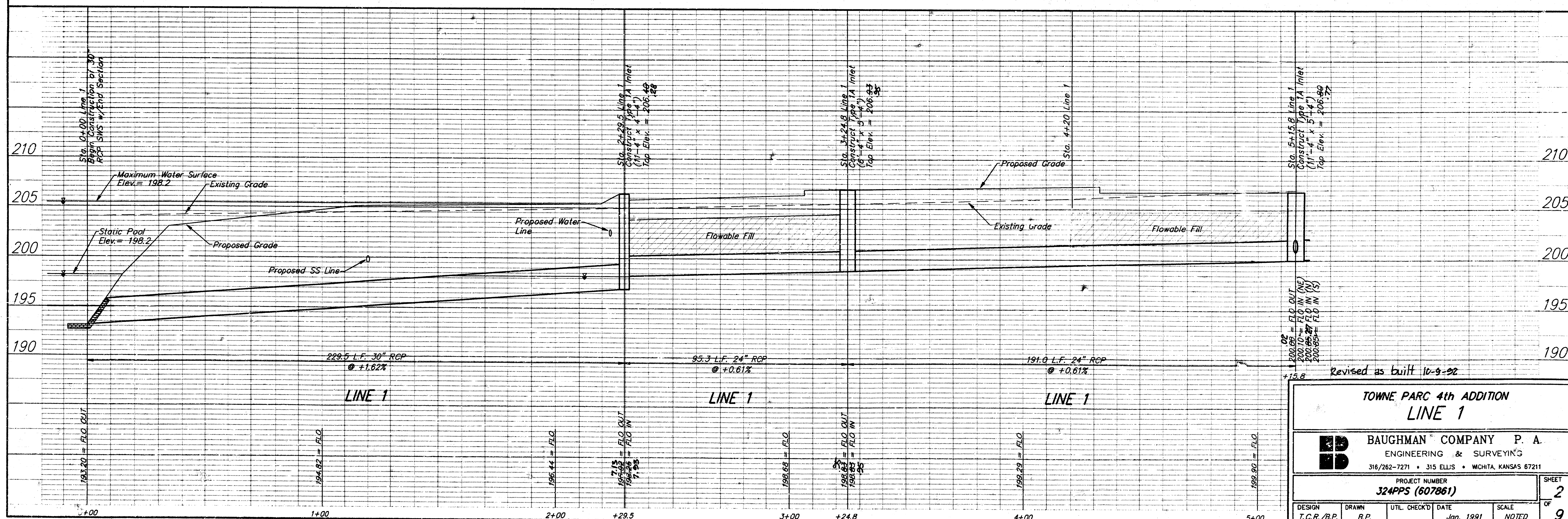
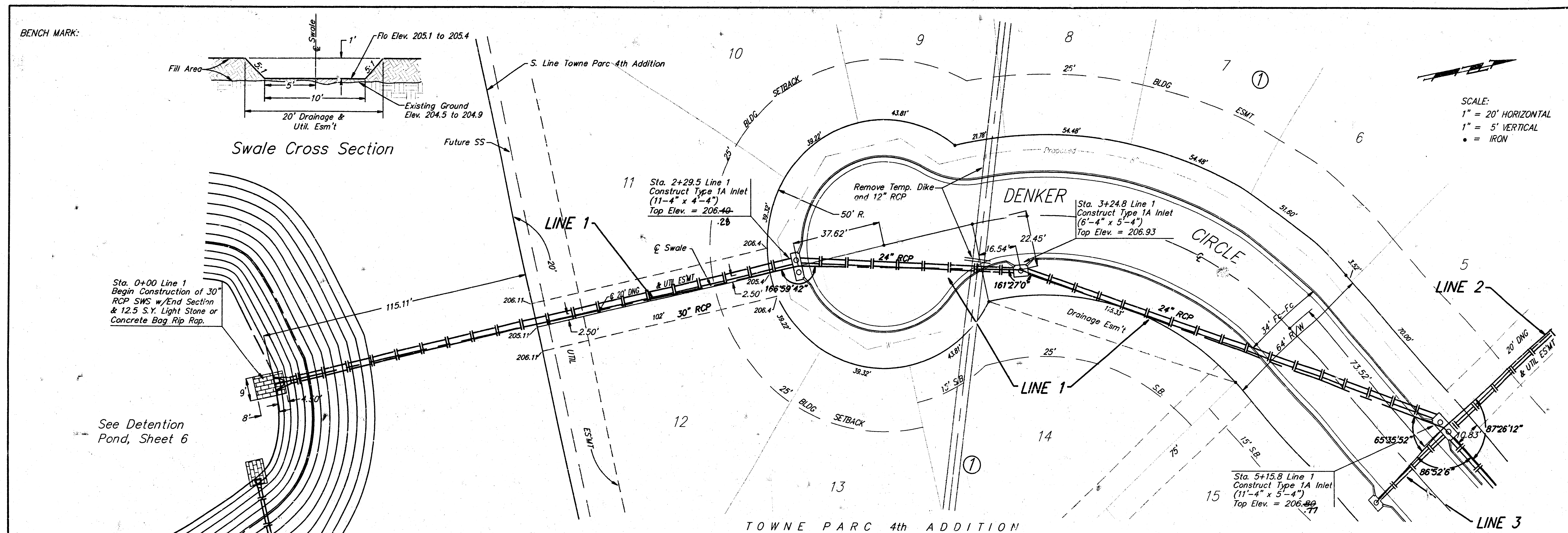
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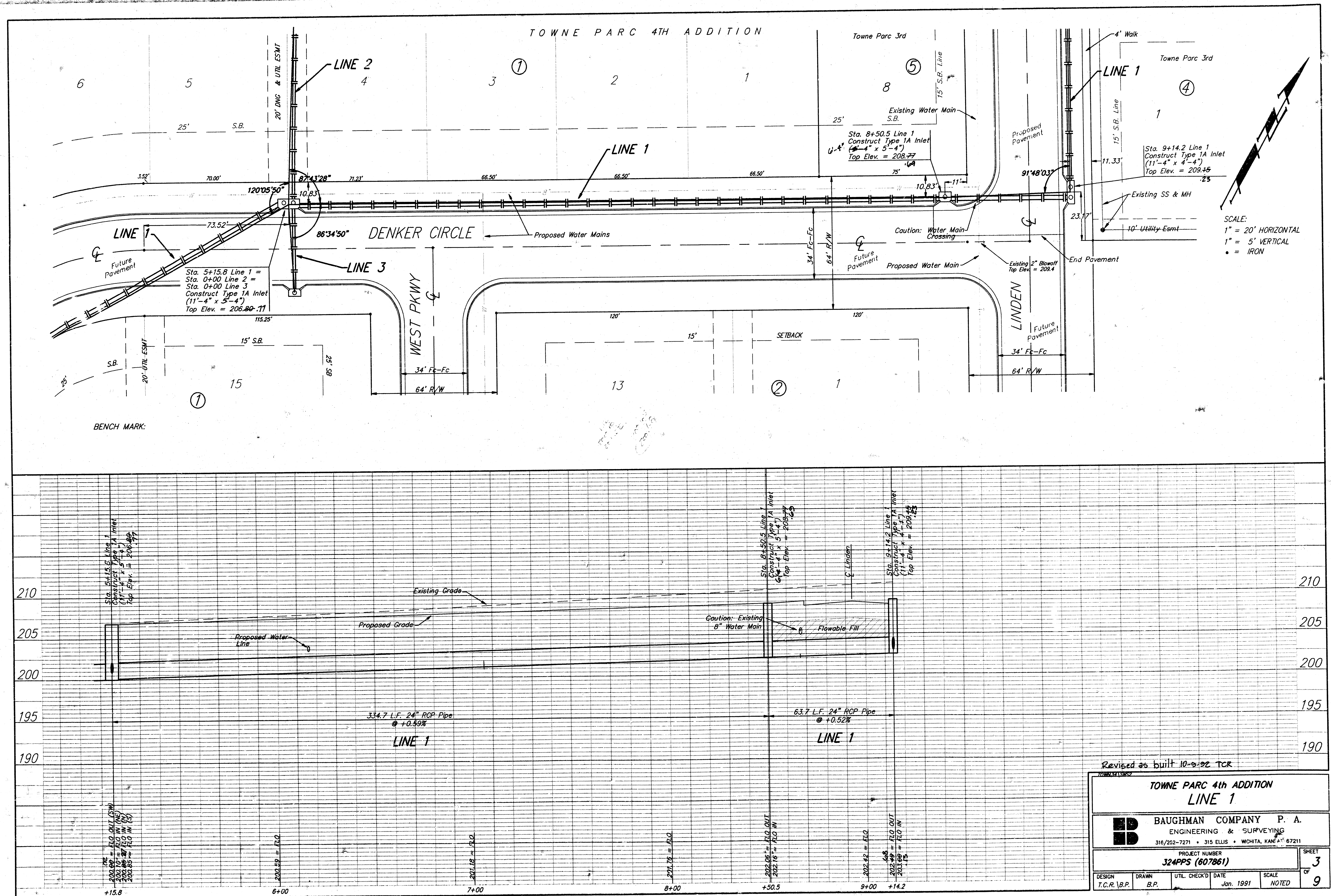
Swale Cross Section

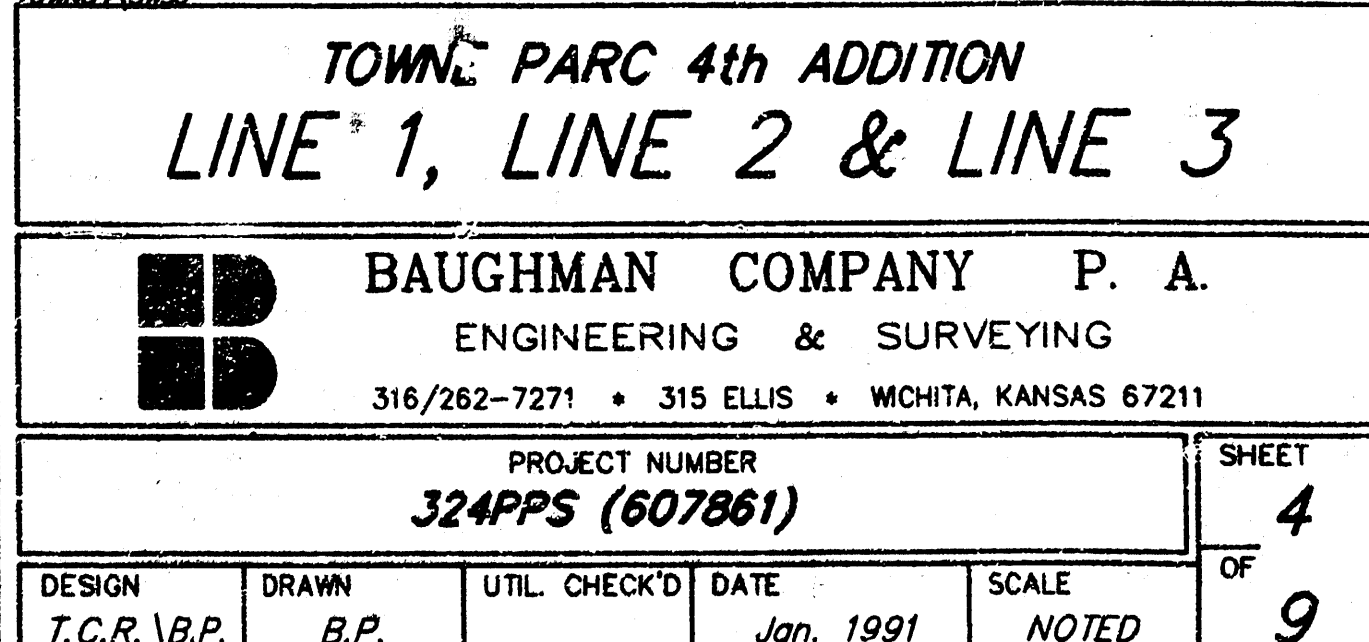
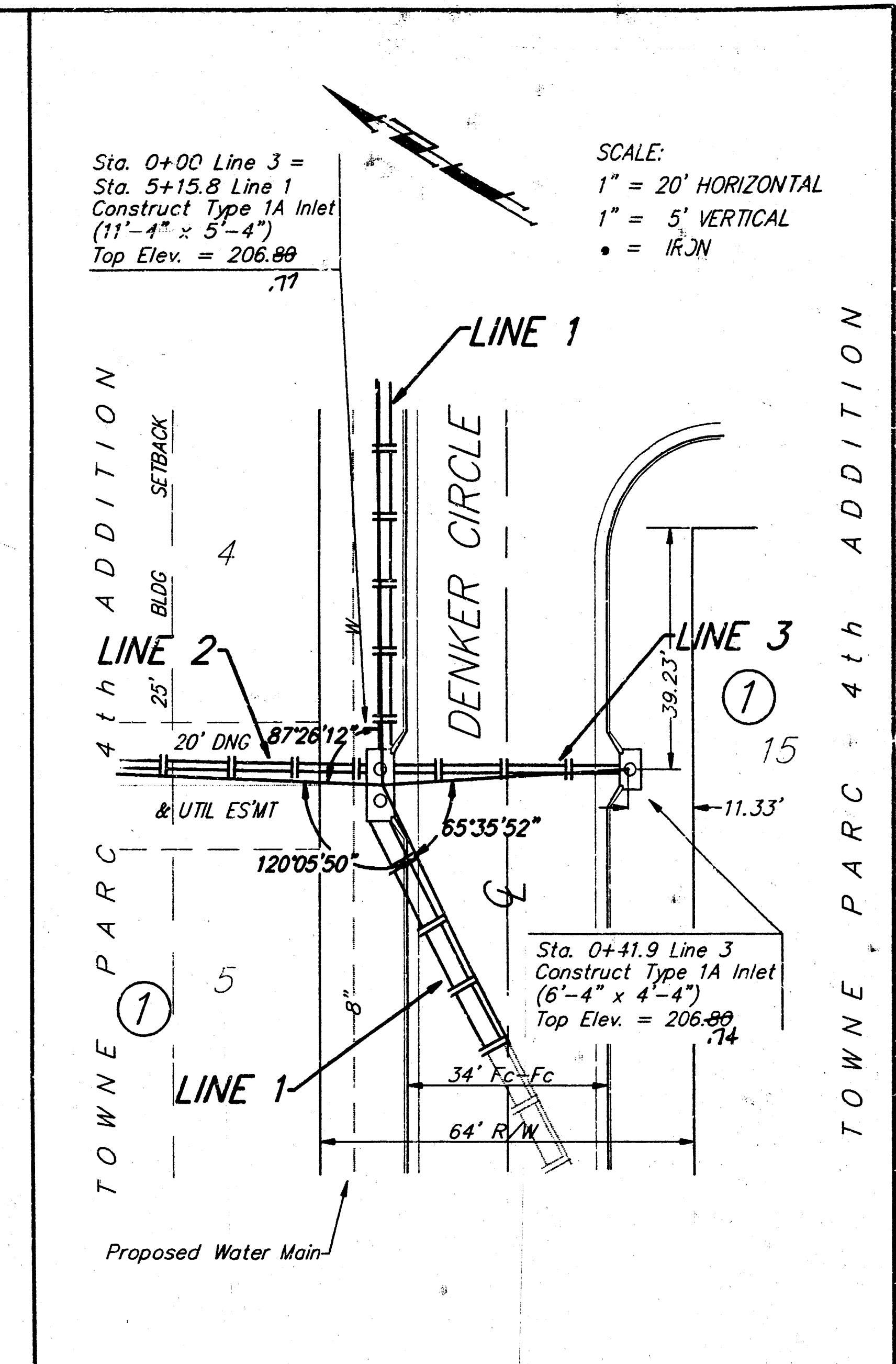
Sta. 0+00 Line 1
Begin Construction of 30"
RCP SWS w/End Section
& 12.5 S.Y. Light Stone or
Concrete Bag Rip Rap.

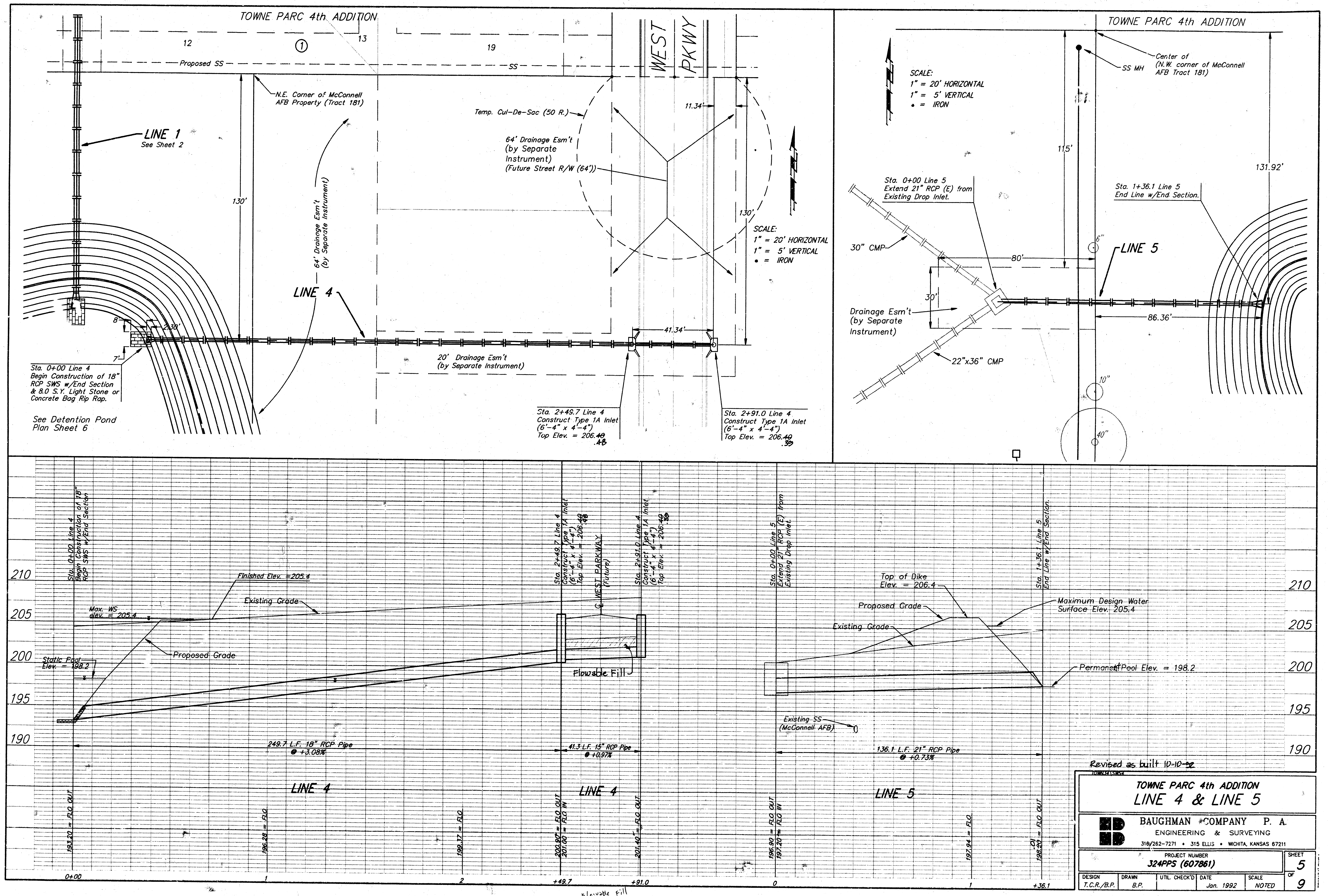
See Detention
Pond, Sheet 6

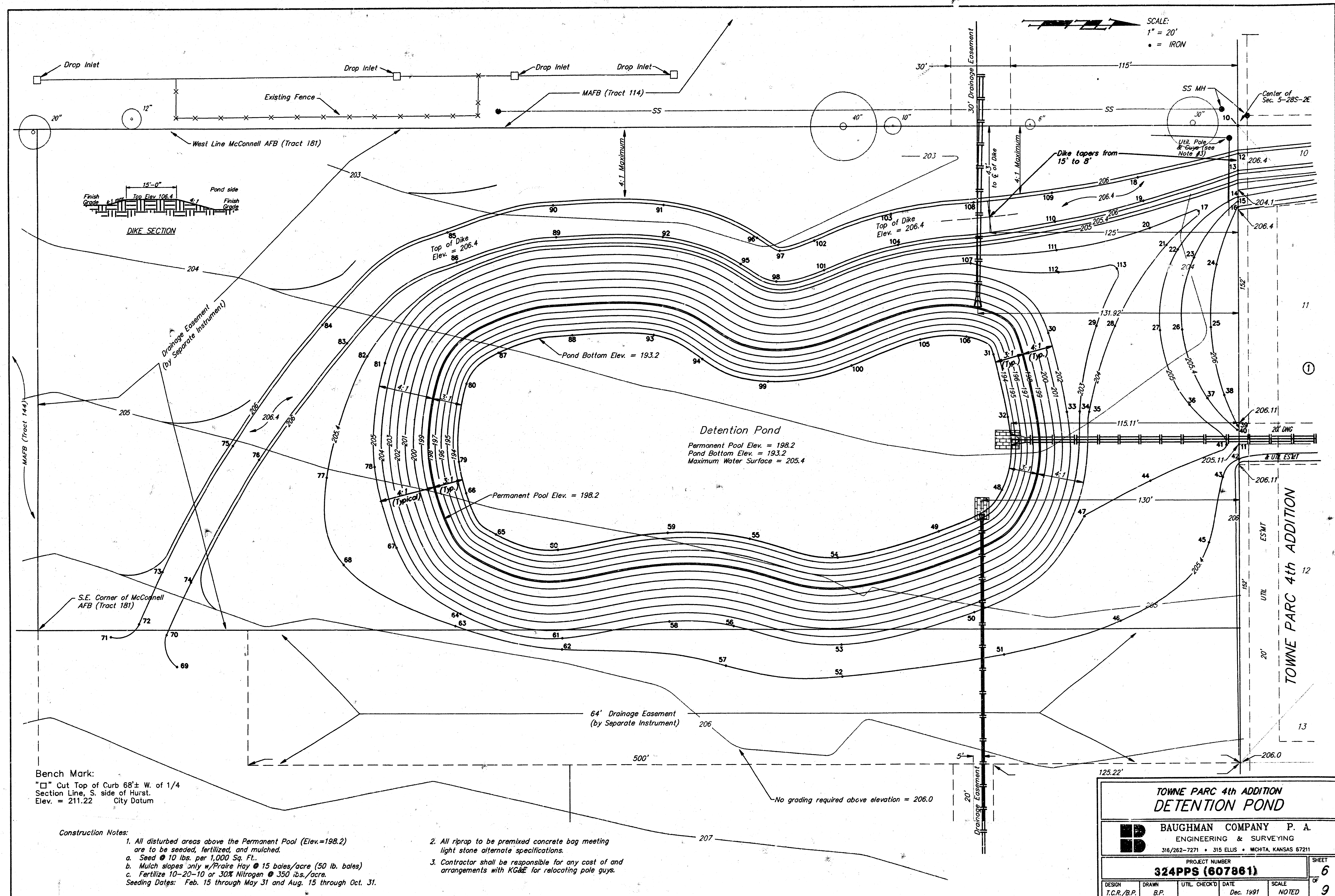


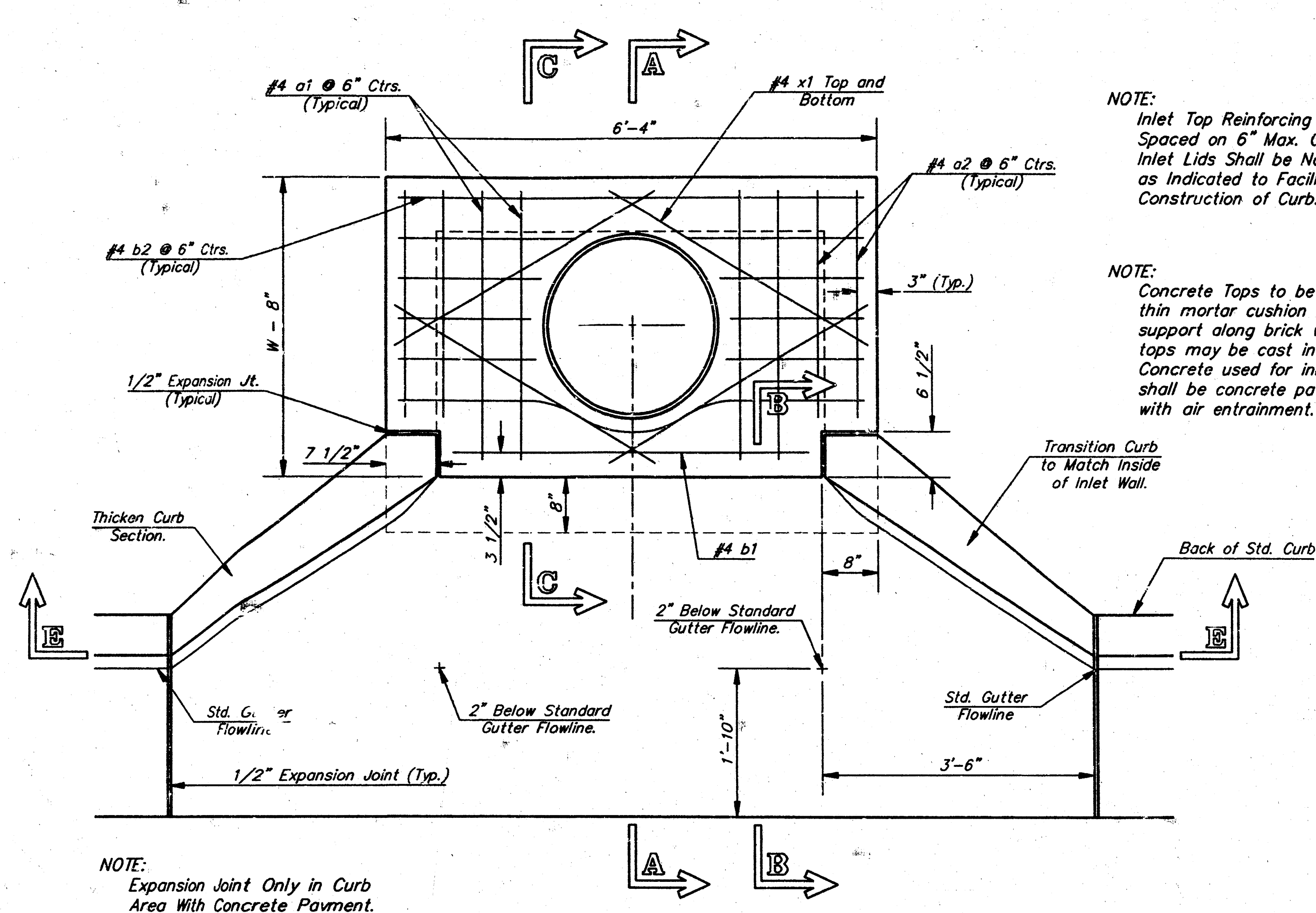
TOWNE PARC 4th ADDITION LINE 1			
BAUGHMAN COMPANY P. A. ENGINEERING & SURVEYING 316/262-7271 • 315 ELLIS • WICHITA, KANSAS 67211			
PROJECT NUMBER 324PPS (607861)			SHEET 2 OF 9
DESIGN T.C.R./B.P.	DRAWN B.P.	UTIL. CHECK'D DATE Jan. 1991	SCALE NOTED



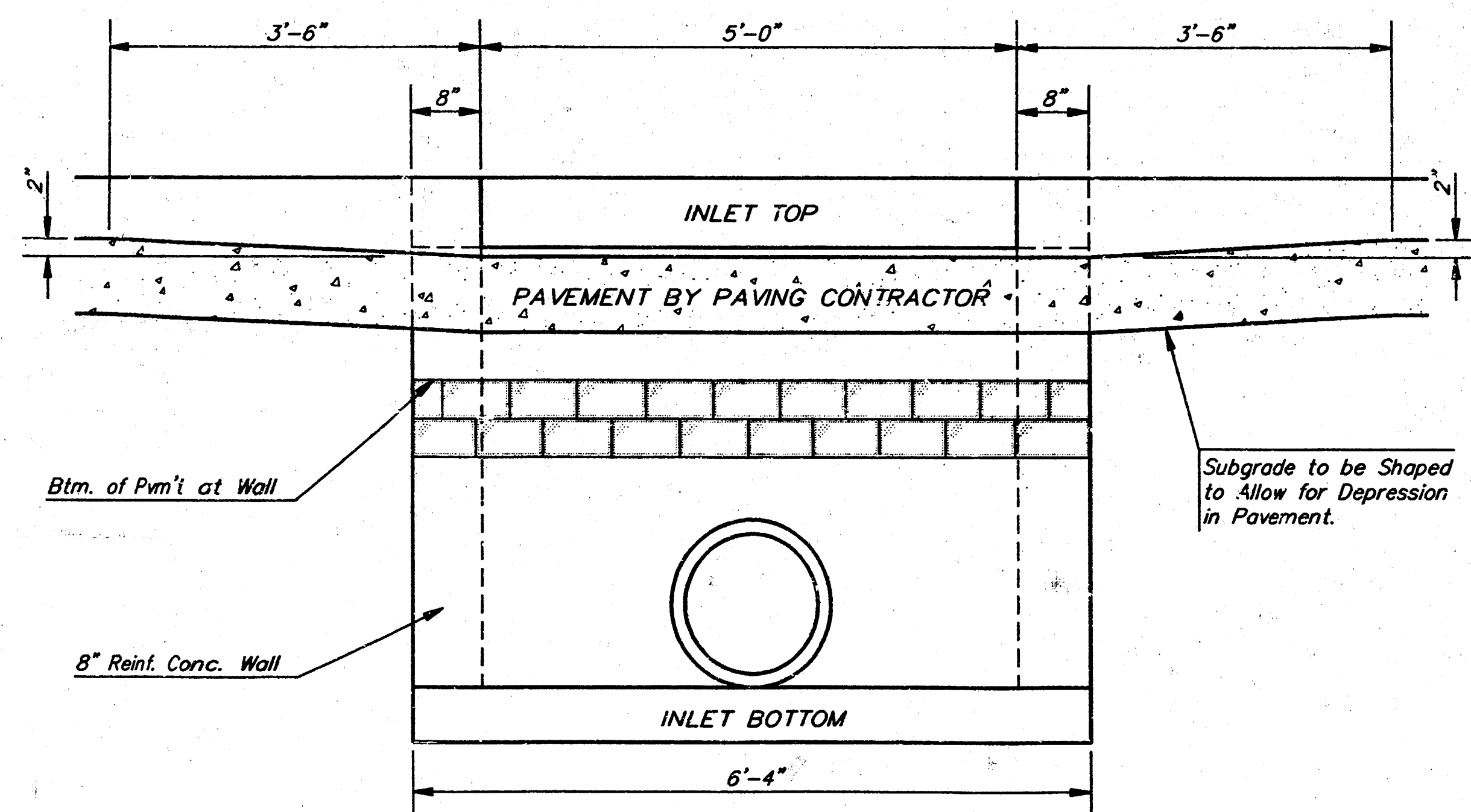




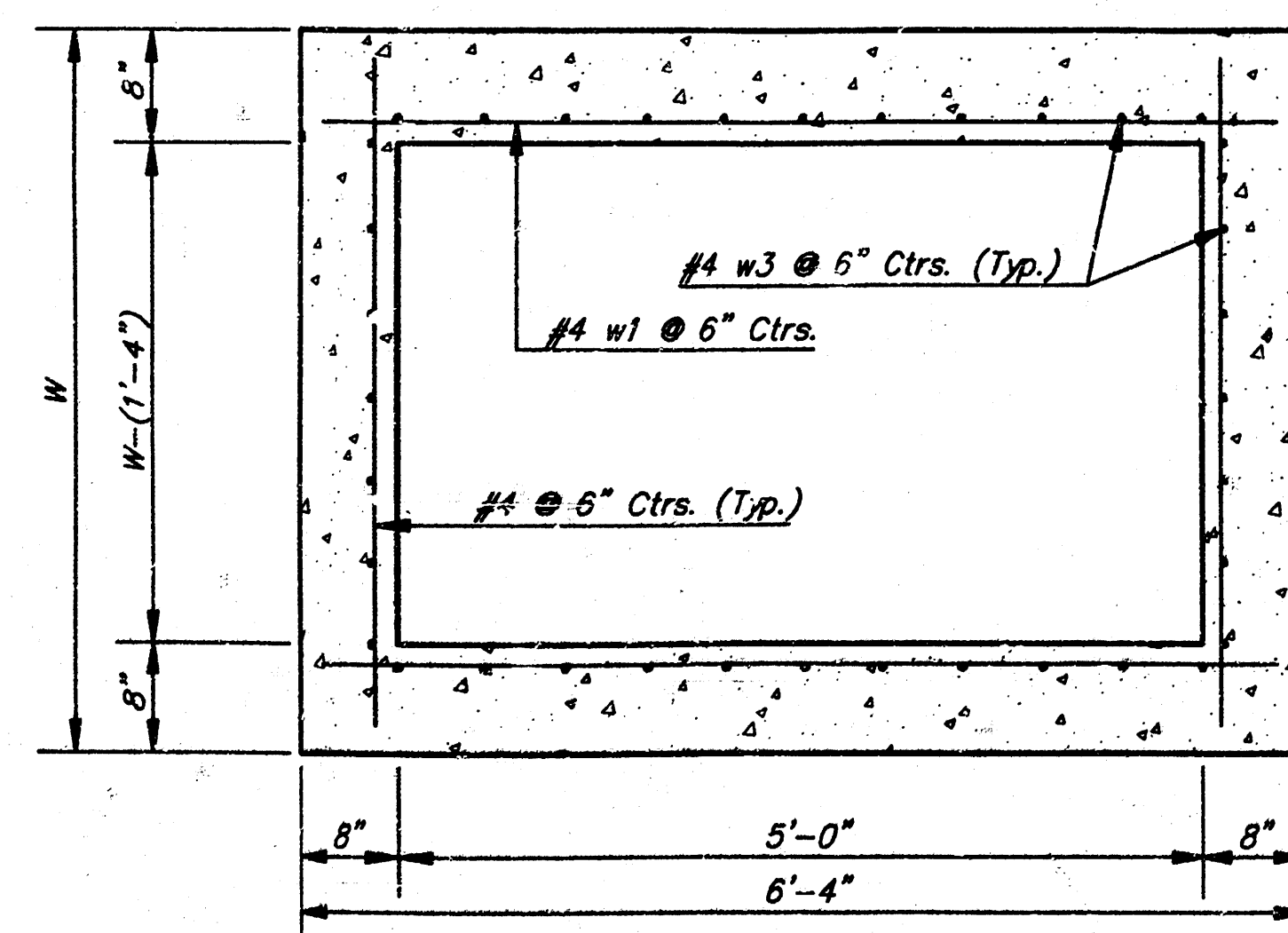




PLAN



SECTION E-E

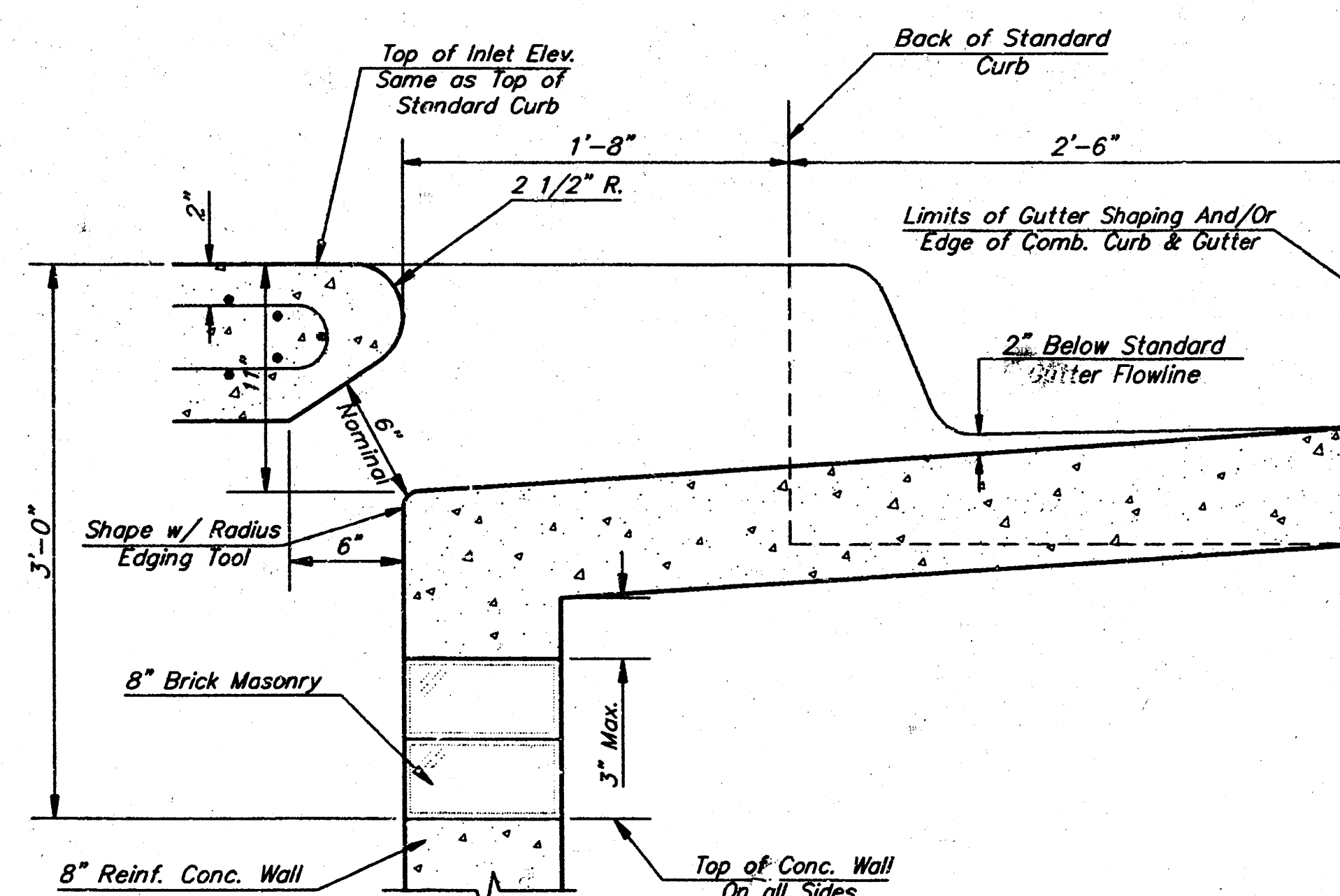
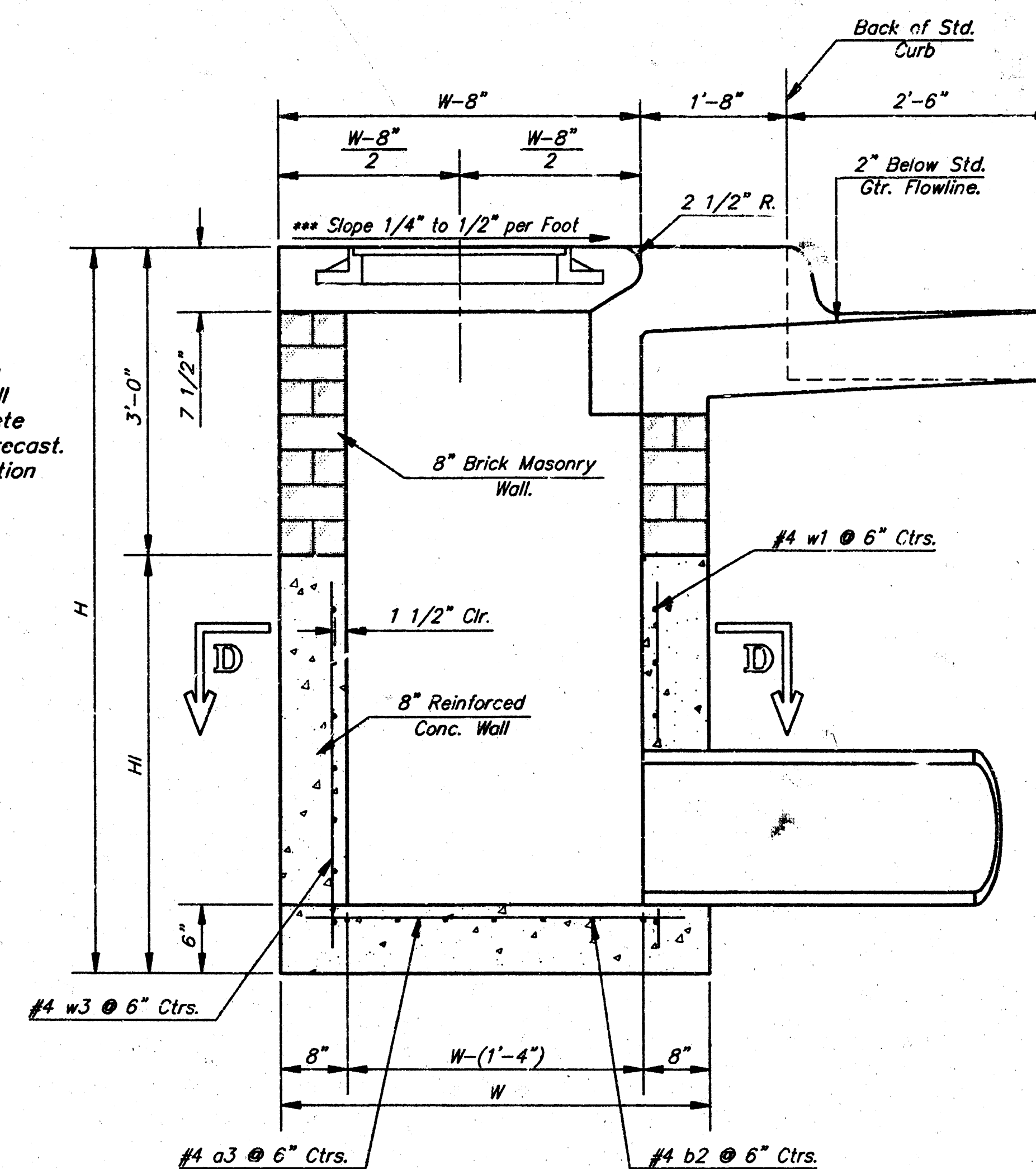


NOTE: Contractor shall have the option of constructing 8" brick masonry walls between the concrete inlet base and top on this inlet when W=6'-4" and H=7'-0" or less.

Additional curb and gutter construction necessary to connect set-back inlet to pavement will be paid for at the unit price bid for each inlet hookup.

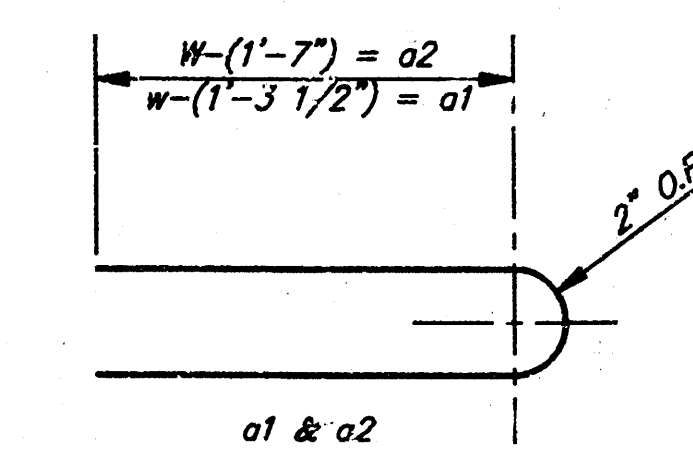
Inlet invert shall be shaped with 8 sack sand mix concrete to create flow channels and to increase hydraulic efficiency such that the inlet will be self-cleaning between all inlet and/or outlet pipes.

The ends of all pipes installed in inlets shall be cut off flush with the inside face of the inlet wall

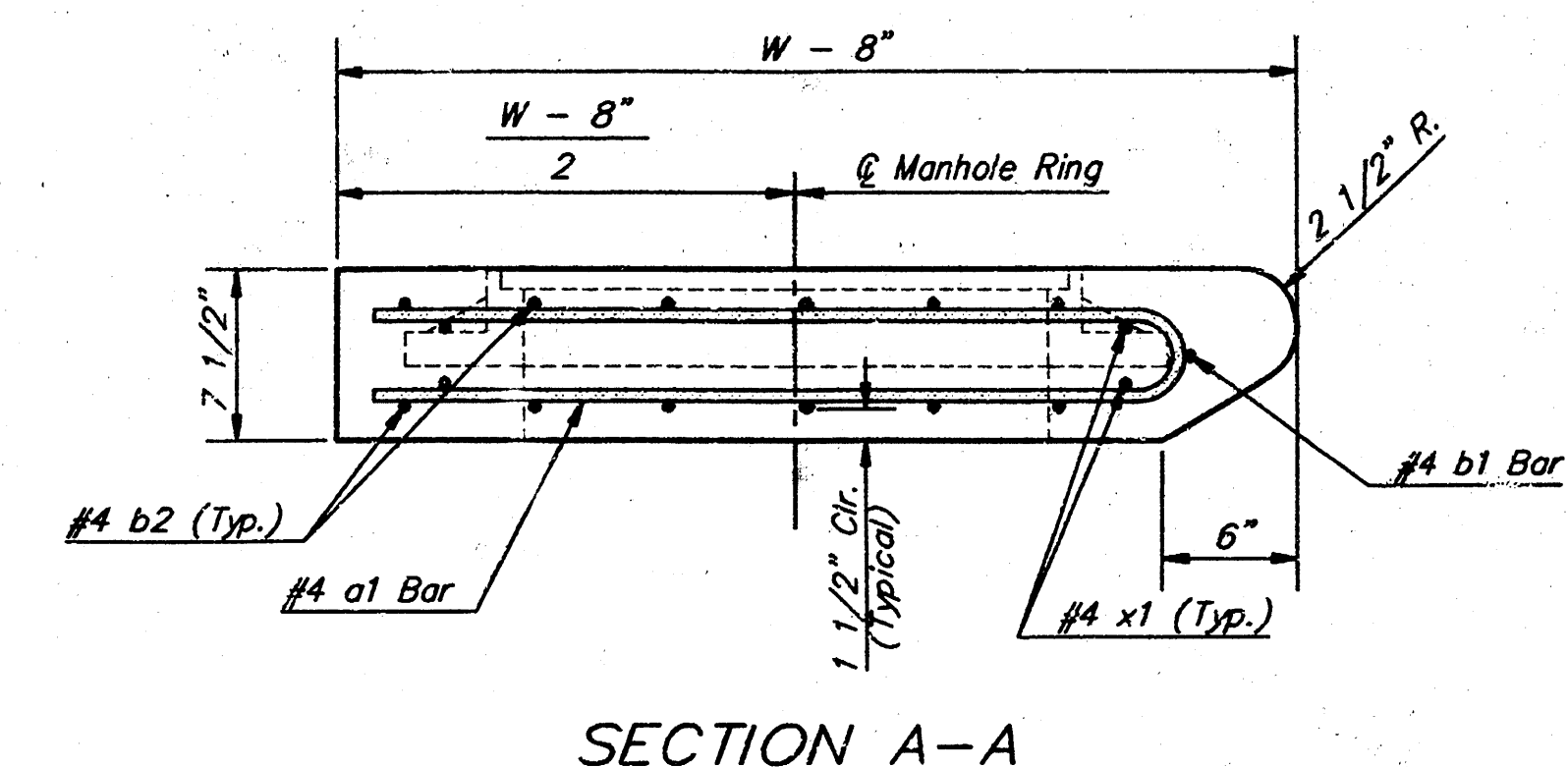
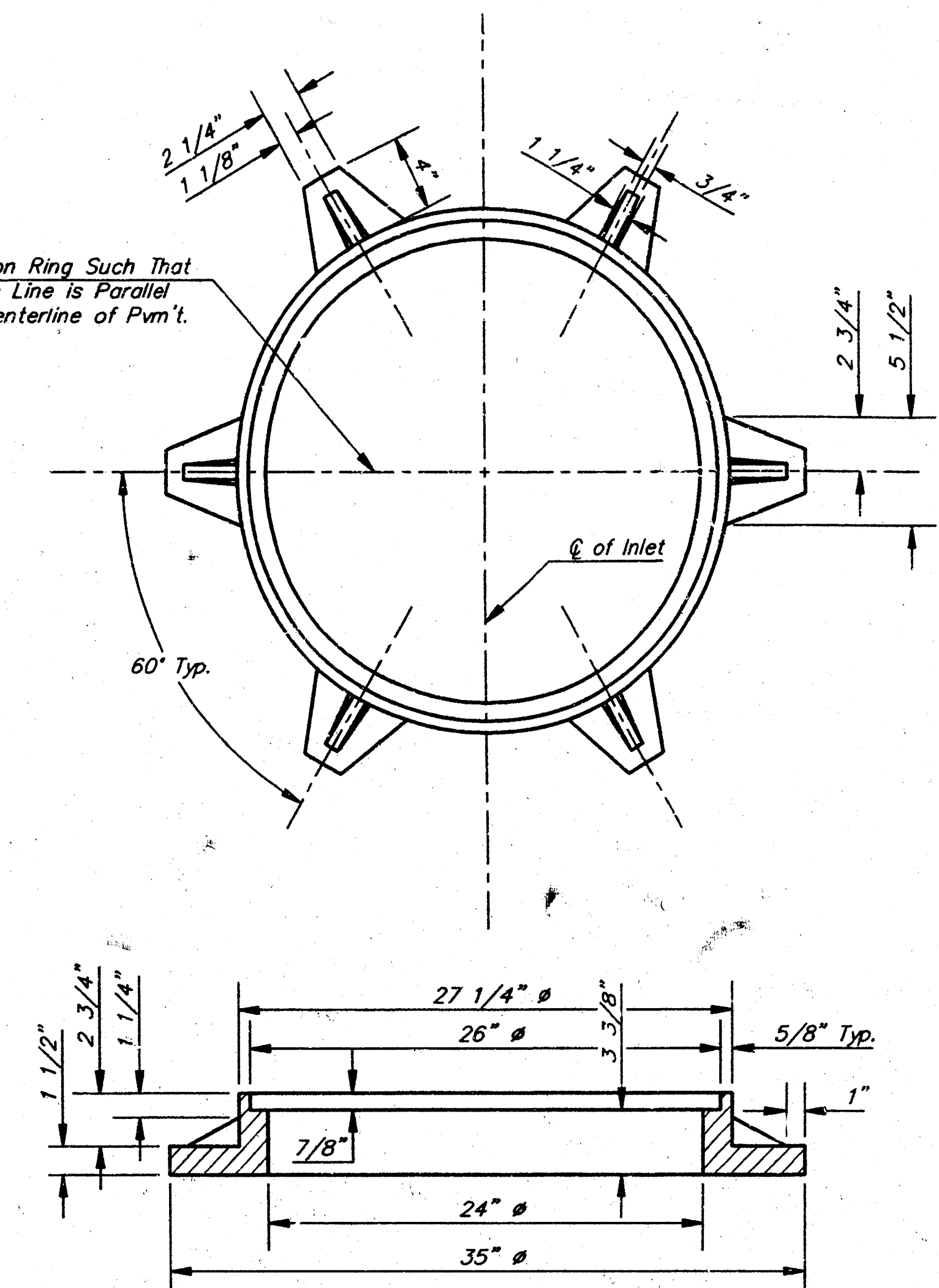


PRECAST SLAB AND FLOOR REINFORCING											
MARK	SIZE	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH
a1	#4	6	6'-7"	6	8'-7"	6	10'-7"	6	12'-7"	6	14'-7"
a2	#4	4	6'-0"	4	8'-0"	4	10'-0"	4	12'-0"	4	14'-0"
a3	#4	13	4'-1"	13	5'-1"	13	6'-1"	13	7'-1"	13	8'-1"
b1	#4	1	4'-9"	1	4'-9"	1	4'-9"	1	4'-9"	1	4'-9"
b2	#4	23	6'-1"	29	6'-1"	35	6'-1"	41	6'-1"	47	6'-1"
x1	#4	8	3'-10"	8	4'-2"	8	4'-6"	8	4'-10"	8	5'-2"

* Field Bend or Cut Reinforcing as Required for Clearance.
 ① 4 (H = 12") (H = 21") Rounded down to nearest 0.5"
 ② H = 3"



STANDARD CURB INLET PRECAST TOPS			
W	PRE-CAST TOP SIZE	PIPE SIZE	CU. YD. CONC.
4'-4"	3'-8" x 6'-4" x 7 1/2"	21" & SMALLER	0.38±
5'-4"	4'-8" x 6'-4" x 7 1/2"	24" & 30"	0.51±
6'-4"	5'-8" x 6'-4" x 7 1/2"	36" & 42"	0.64±
7'-4"	6'-8" x 6'-4" x 7 1/2"	48" & 54"	0.77±
8'-4"	7'-8" x 6'-4" x 7 1/2"	60" & 66"	0.90±



CITY OF WICHITA STANDARD TYPE 1A
 CURB INLET DETAILS
 INLET OPENING = 6" x 5'-0"

PROJECT NUMBER
324PPS (607861)

BAUGHMAN COMPANY P. A.
 ENGINEERING & SURVEYING
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Revised - Feb. 16, 1989

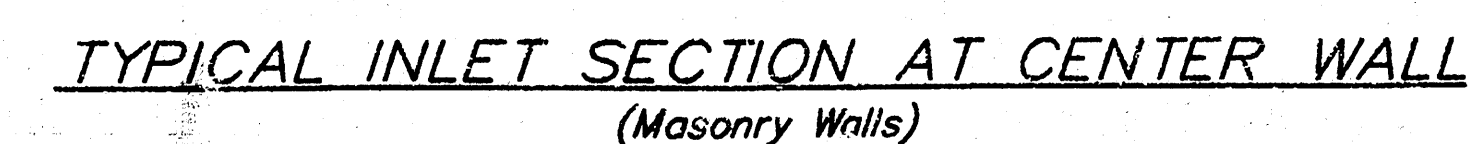
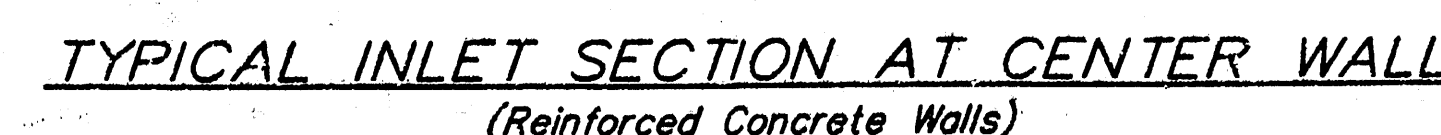


PLAN

*Left Side Shown Without Slab Reinforcing
Right Side Shown With Slab Reinforcing



NOTE:
Center Wall Pipe Size shall be as Specified in Inlet Construction Notes on the Plan/Profile Sheets for those Cases not Shown Here.



NOTES:

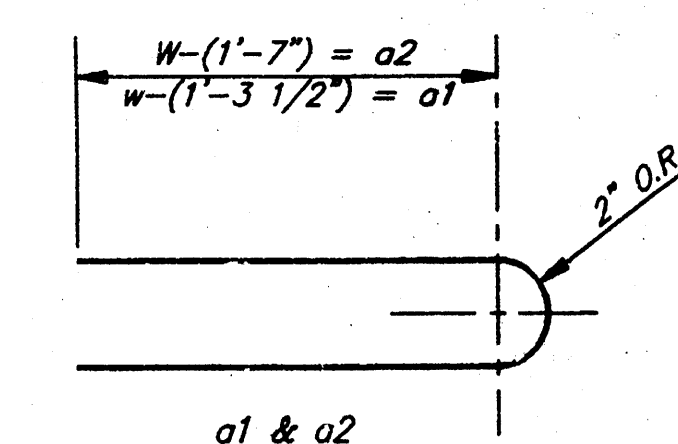
**** A center wall opening shall be provided by means of a section of reinforced concrete pipe. See Case I and Case II above.**

*** Slope of inlet tops to match sidewalk of parking slopes within limits indicated

* Field Bend or Cut Reinforcing as Required for Clearance.
 ① 4 (HI - 12") (HI - 21") Rounded down to nearest 0.5'
 ② HI - 3"

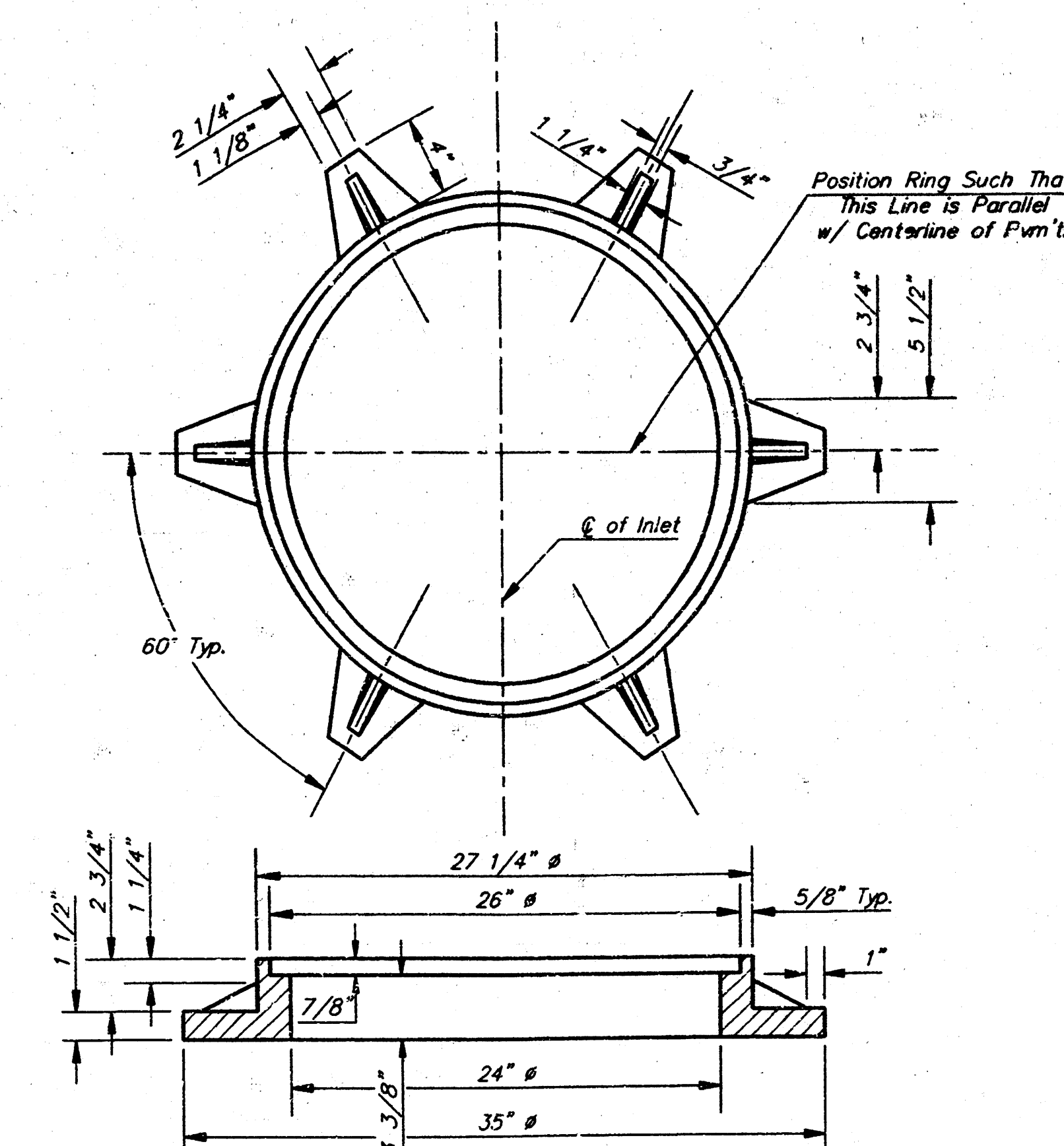
GENERAL NOTES:

1. The contractor shall be required to construct 8" brick masonry walls between the concrete inlet base and top on this inlet when $W \leq 4'$ or less and $H = 7'-0"$ or less. When W is greater than $6'-4"$ and H is less than $7'-0"$ the outside inlet walls below the brick stack shall be reinforced concrete construction and the center wall shall be of masonry construction as shown for the masonry wall option.
2. Inlet invert shall be shaped with 8 sock sand mix concrete to create flow channels and to increase hydraulic efficiency such that the inlet will be self cleaning between all inlet and/or outlet pipes.
3. Concrete tops to be installed on thin mortar cushion to insure full support along brick walls. Concrete tops may be cast in place or precast. Concrete used for inlet construction shall be concrete pavement mix.
4. Inlet top reinforcing shall be spaced on 6" max. centers. Inlet lids shall be notched out as indicated to facilitate construction of curb. Bars in inlet top to be field bent or cut to clear manhole ring.
5. The ends of all pipes installed in inlets shall be cut off flush with the inside face of the inlet wall.



BENDING DIAGRAM

W	PRE-CAST TOP SIZE	PIPE SIZE	CU. YD. CO.
4'-4"	3'-8" 11'-4" 7 1/2"	21" & SMALLER	0.83±
5'-4"	4'-8" 11'-4" 7 1/2"	24" & 30"	1.08±
6'-4"	5'-8" 11'-4" 7 1/2"	36" & 42"	1.35±
7'-4"	6'-8" 11'-4" 7 1/2"	48" & 54"	1.61±
8'-4"	7'-8" 11'-4" 7 1/2"	60" & 66"	1.87±



MANHOLE RING AND COVER

Weight = 180 lbs.

*See City of Wichita Standard Manhole Ring and Cover Detail Sheet for Cover Details to Be Used With Inlet Frame.

Revised - Feb. 16, 1989

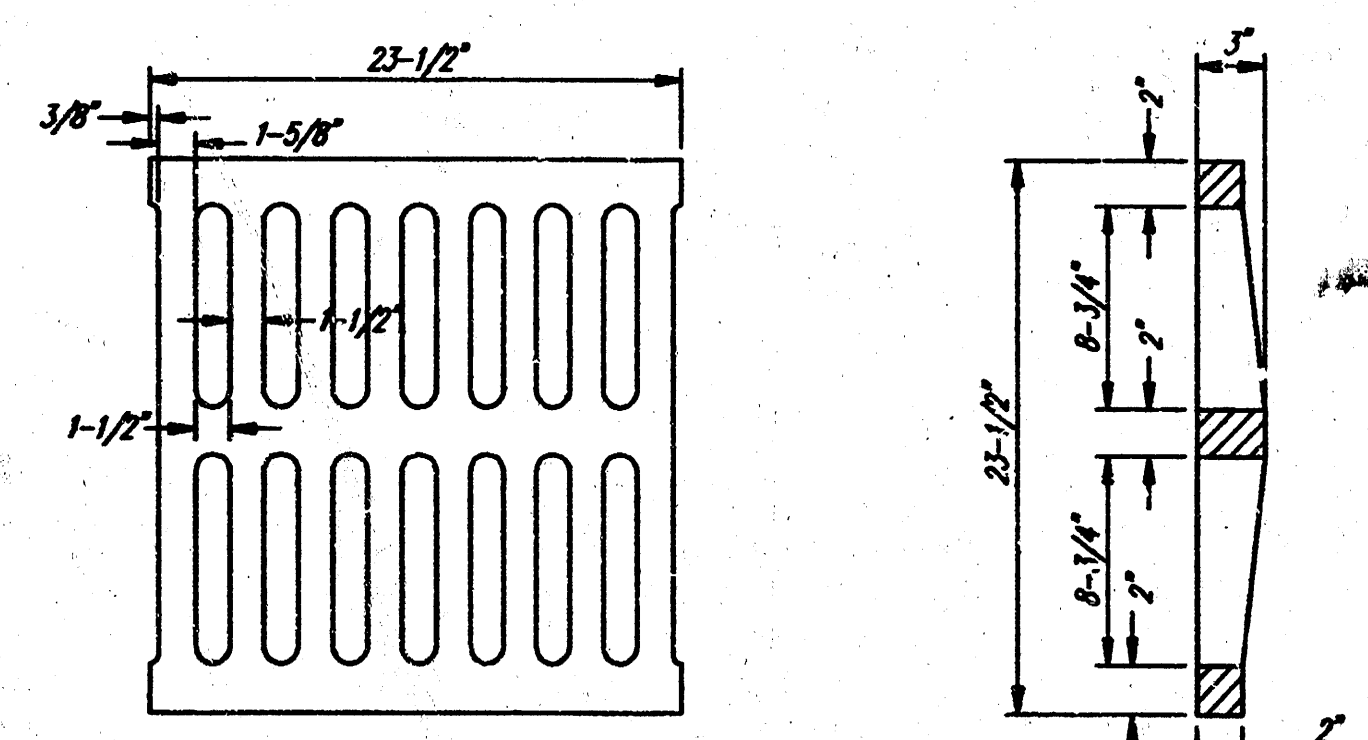
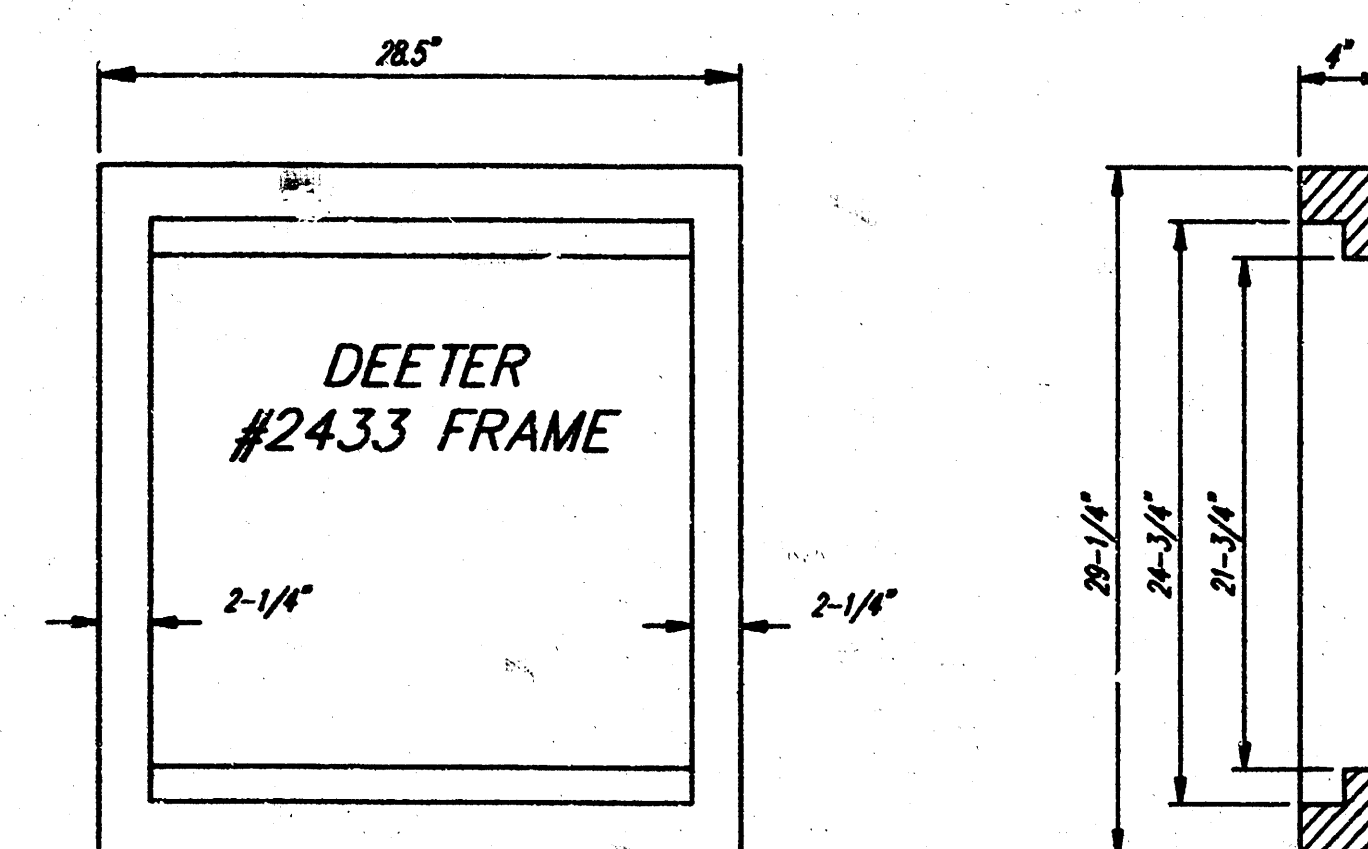
CITY OF WICHITA STANDARD TYPE 1A
CURB INLET DETAILS
INLET OPENING = 6" x 10'-0"

PROJECT NUMBER
324PPS (607861)

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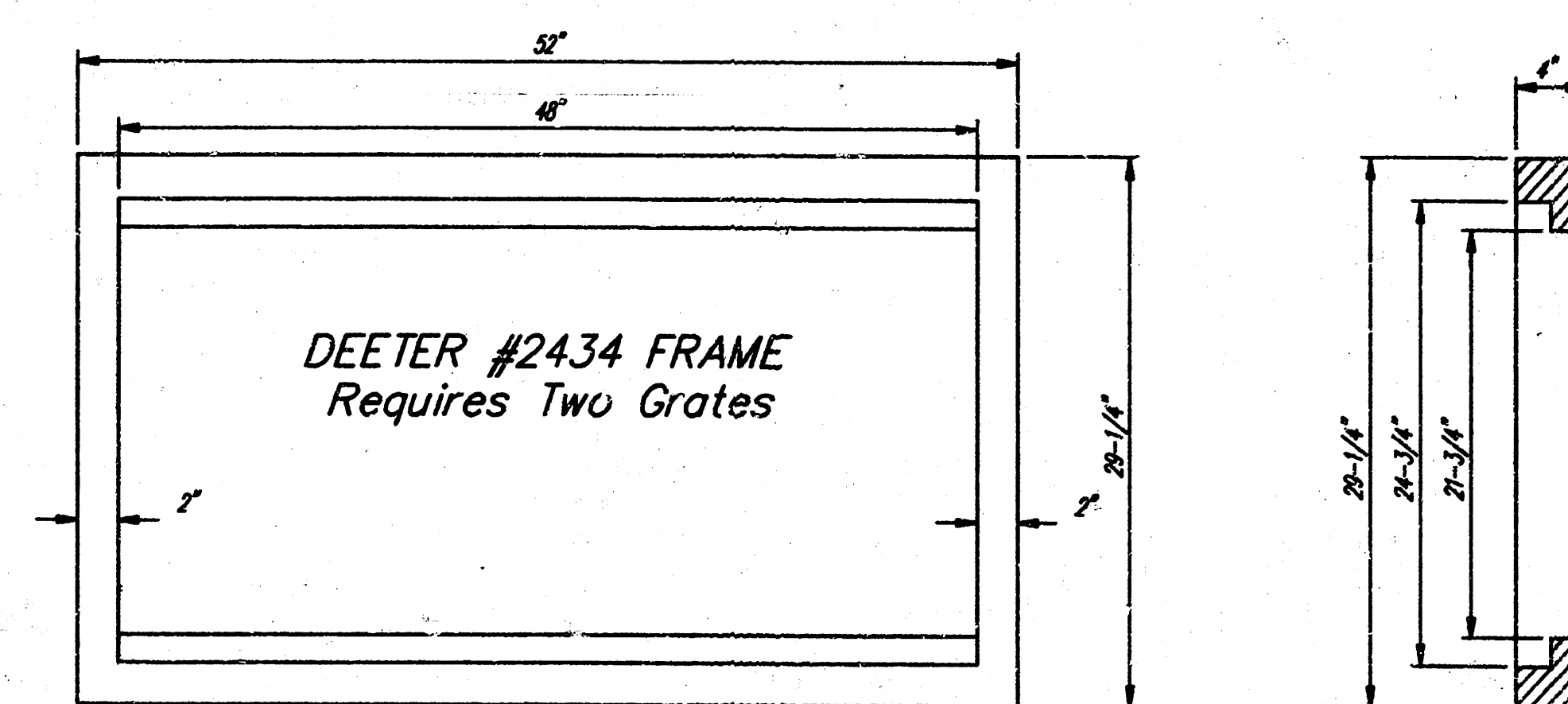
BAUGHMAN COMPANY P. A.
ENGINEERING & SURVEYING

316/262-7271 • 315 ELLIS • WICHITA, KANSAS 6721



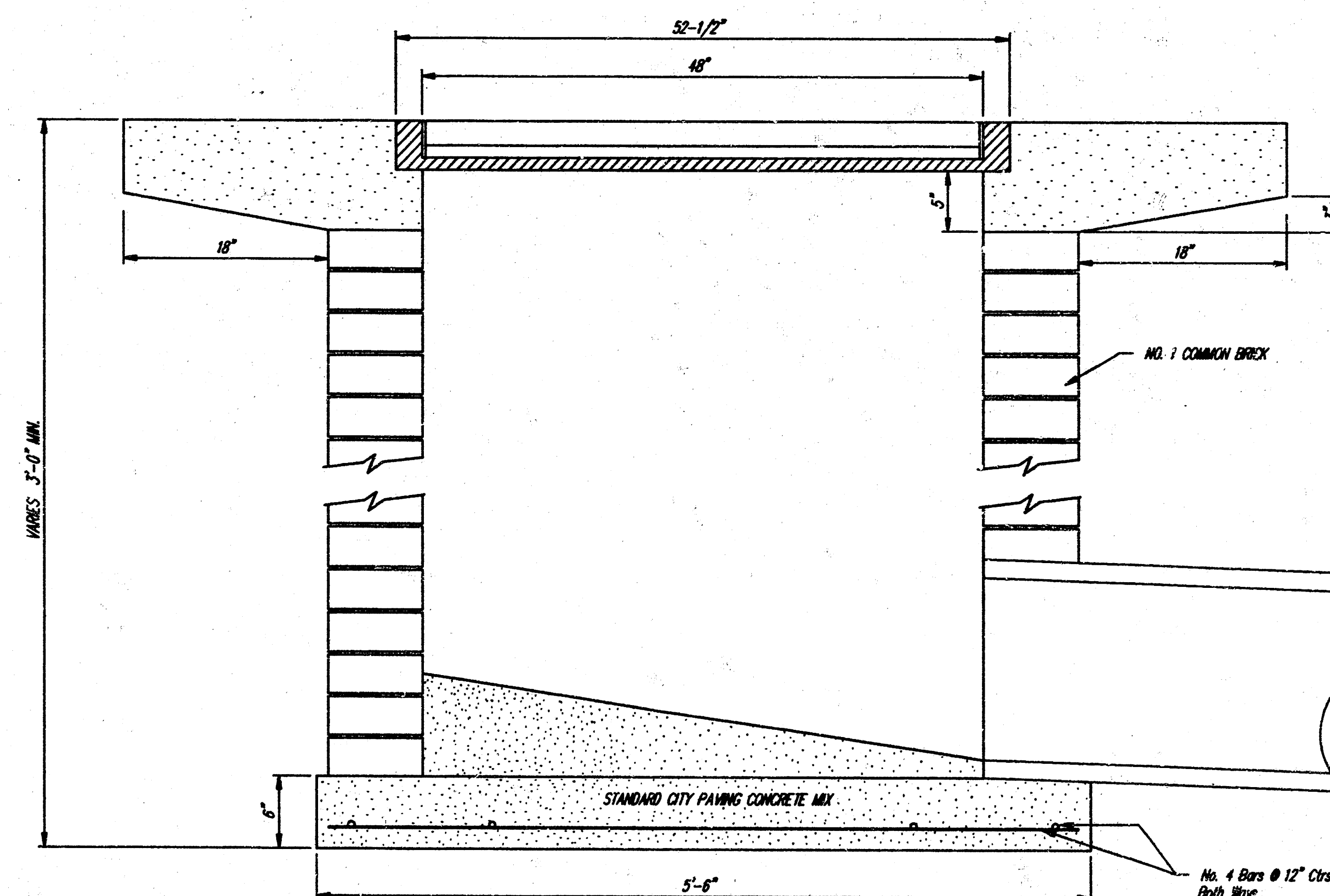
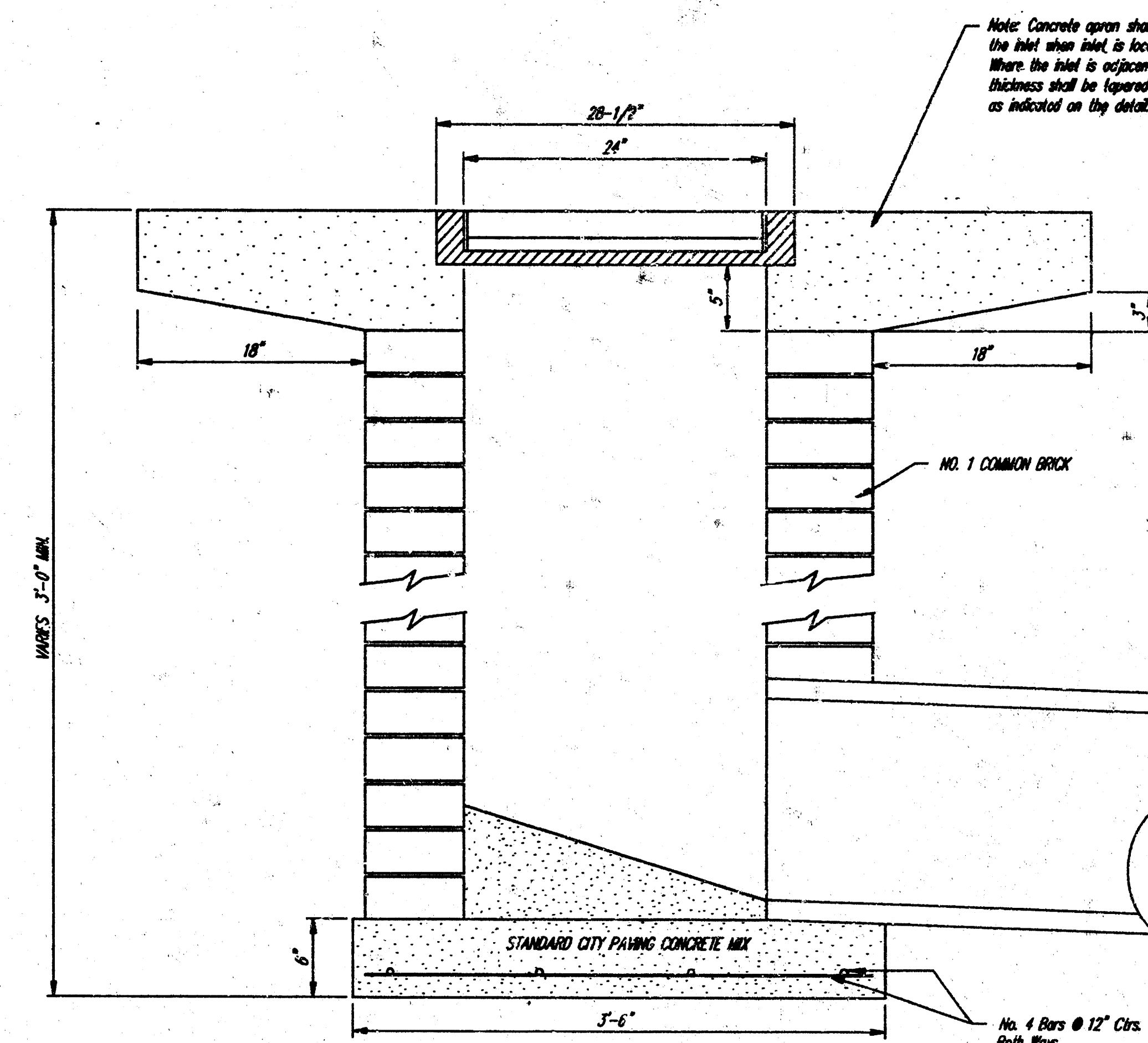
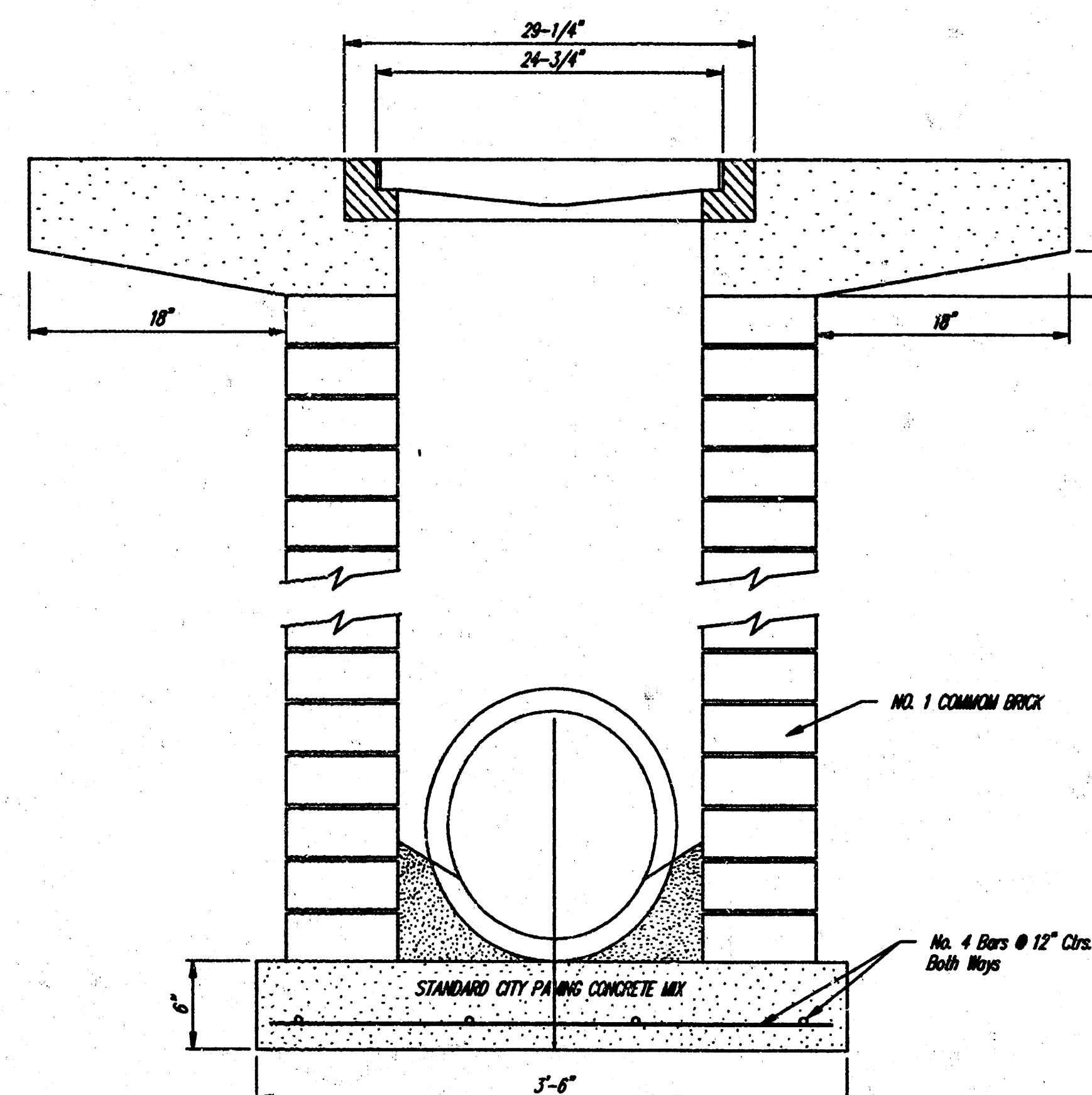
DEETER #2433 GRATE

24" x 24" Frame and Grate Detail



Double 24" x 24" Frame Detail

NOTE: Grates shall be imprinted on the top surface with "CITY OF WICHITA" using letters at least 1" in height. Other marking methods may be approved by the engineer.



DROP INLET DETAILS
M.E. Lindebak, City Engineer
City of Wichita, Kansas

Project Number

324PPS (607861)

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