STORM WATER SEWER NO. 228

IN BRAD BOONE ADDITION

GENERAL NOTES

1) CONTRACTOR SHALL COORDINATE WORK WITH PAVING AND SANITARY CONTRACTORS, AND CONTACT RELEVANT UTILITY COMPANIES AND OTHER AGENCIES INVOLVED WITH THIS PROJECT.

2) ~~FIELD ENGINEER SHALL TAKE TIES TO ALL IRONS AND THIMBLES IN THE PROJECT AREA BEFORE CONSTRUCTION BEGINS. FIELD ENGINEER SHALL REPLACE ALL SUCH IRONS AND THIMBLES DISTURBED DURING CONSTRUCTION.~~

3) THE TOPS OF INLETS AND MANHOLES AS NOTED ON THE PLANS MAY VARY SO AS TO MEET PROPOSED TOP OF CURB ELEVATIONS OR PAVEMENT ELEVATIONS. THE FIELD ENGINEER SHALL LOCATE INLETS AND MANHOLES WITH REFERENCE TO PROPOSED PAVING PLANS OF THE PERTINENT STREETS.

4) ALL CONCRETE SHALL BE STANDARD PAVING MIX UNLESS OTHERWISE NOTED.

5) CONTRACTOR SHALL HAVE THE OPTION OF INSTALLING PRE-CAST TYPE 1A CURB INLET IN LIEU OF THE BRICK TYPE STRUCTURE. SEE STANDARD DETAIL PRE-CAST TYPE 1A CURB INLET DATED AUGUST, 1979.

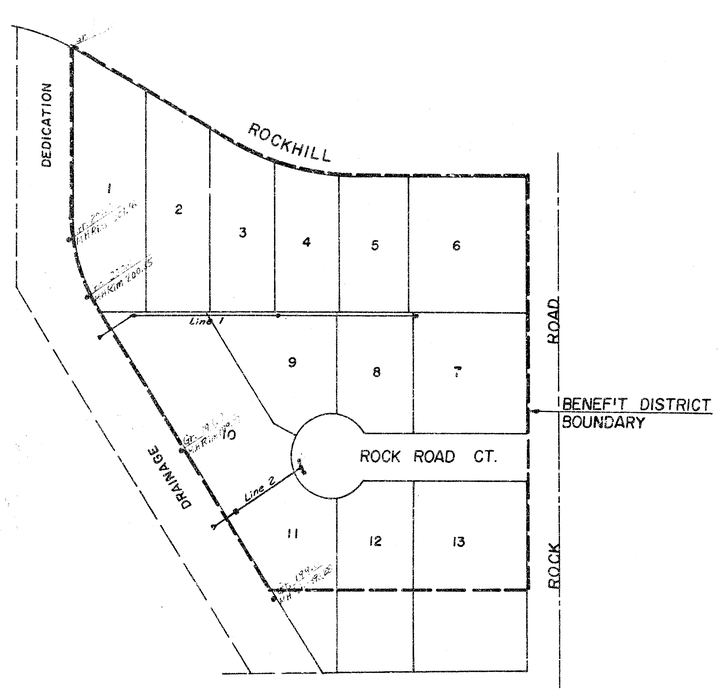
6) DRAINAGE CONTRACTOR TO PERFORM GRADING WITHIN THE DRAINAGE DEDICATION IN THE FOLLOWING MANNER: CONTRACTOR TO GRADE BETWEEN EXISTING SANITARY SEWER MANHOLES ON A STRAIGHT GRADE SUCH THAT TOPS OF MANHOLES ARE 4 INCHES ABOVE GROUND. GRADING IS ALSO TO BE DONE SUCH THAT MANHOLES ARE NOT LEFT IN A SUMP. GRADING TO BE BID AND PAID AS GRADING LUMP SUM.

THE AREA of the TRENCH WITHIN the CHANNEL shall be BACKFILLED and COMPACTED in 6" LIFTS to 90% STD. DENSITY.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR SHALL BE REQUIRED TO RE-ESTABLISH ANY PROPERTY IRONS WHICH ARE DISTURBED OR DESTROYED BY HIS CONSTRUCTION OPERATIONS. SUCH IRONS SHALL BE RE-ESTABLISHED BY A LICENSED LAND SURVEYOR OR A LICENSED PROFESSIONAL ENGINEER IN ACCORDANCE WITH STATE LAWS.

N

Scale: 1"=100'



Index

Sheet	1	Cover Sheet
Sheet	2-3	Plan & Profile
Sheet	4	Type 1A Inlet
Sheet	5	Special Inlet w/ Beehive Grate
Sheet	6	Std. Drop Inlet

R.W. BRUGGEMAN, DIRECTOR OF ENGINEERING / CITY ENGINEER

CITY OF WICHITA, KANSAS

PROJECT NO. 468 76 245 81101 000 000 001

DATE: _____

CRAIG L. BREITENSTEIN LICENSED 8206 KANSAS PROFESSIONAL ENGINEER

DEDICATION

DRAINAGE

BRAD

BOONE

ADDITION

1 2 3 4 5 6 7 8 9 10

Scale :
Plan-1" = 20'
Profile - 1" = 20' Hor.
- 1" = 5' Vert.

N

Sta. 0+75 = ℄ Sta. 0+50, 5' Rt.
Constr. Special Field Inlet w/
Beehive Grate, Top = 202.90
See Detail 1, Sheet 5

Sta. 2+97.67, Constr. Std.
Double 2x2 Drop Inlet
Top = 203.98, See Sheet 6

Sta. 5+12.67, Constr.
Special II Field Inlet w/
Beehive Grate, Top = 204.5
See Detail 3, Sheet 5

Utility & Storm Sewer Easement

Proposed SS

Iron ℄ Sta. 0+00

10.66'

Sta. 0+07 = ℄ Sta. -27.49, 28.35' Rt.
Install 30" End Section

Utility & Storm Sewer Easement

Sanitary Sewer Easement

10' Utility Easement

B.M. 199.70 City Std Disc 28' E of ℄ Rock Rd
& 51' N of ℄ R.R. Tracks

Sta. 0+07, Install 30" End Sec.

Sta. 0+28.35 E.i. Drainage Dedication

Sta. 2+28.35 Constr. Special Field Inlet w/ Beehive Grate

Sta. 2+97.67 Constr. Std. Double 2x2 Drop Inlet

Sta. 5+12.67 Constr. Special II Field Inlet w/ Beehive Grate

68 LF of 30" RCP @ 0.40%
Alt. 68 LF of 30" CMP @ 0.40%
(fully paved & fully coated)

223 LF of 18" RCP @ 1.00%
Alt. 223 LF of 18" CMP @ 1.00% (fully coated)

215 LF of 15" RCP @ 0.80%
Alt. 215 LF of 15" CMP @ 0.80% (fully coated)

Existing Ground

Proposed Swale Pt. "by others"

Existing 12"ss
FE = 194.9

Channel
FE = 196.8

FE = 192.53

Bottom of Box
Elev. = 197.80

FE out = 200.03
FE in = 200.28

Rim = 202.5

205
200
195
190

210
205
200

0 1 - 198.05 2 - 199.05 3 - 200.30 4 - 201.10 5 - 201.90

S.W.S. No. 228, Line 1

2/6

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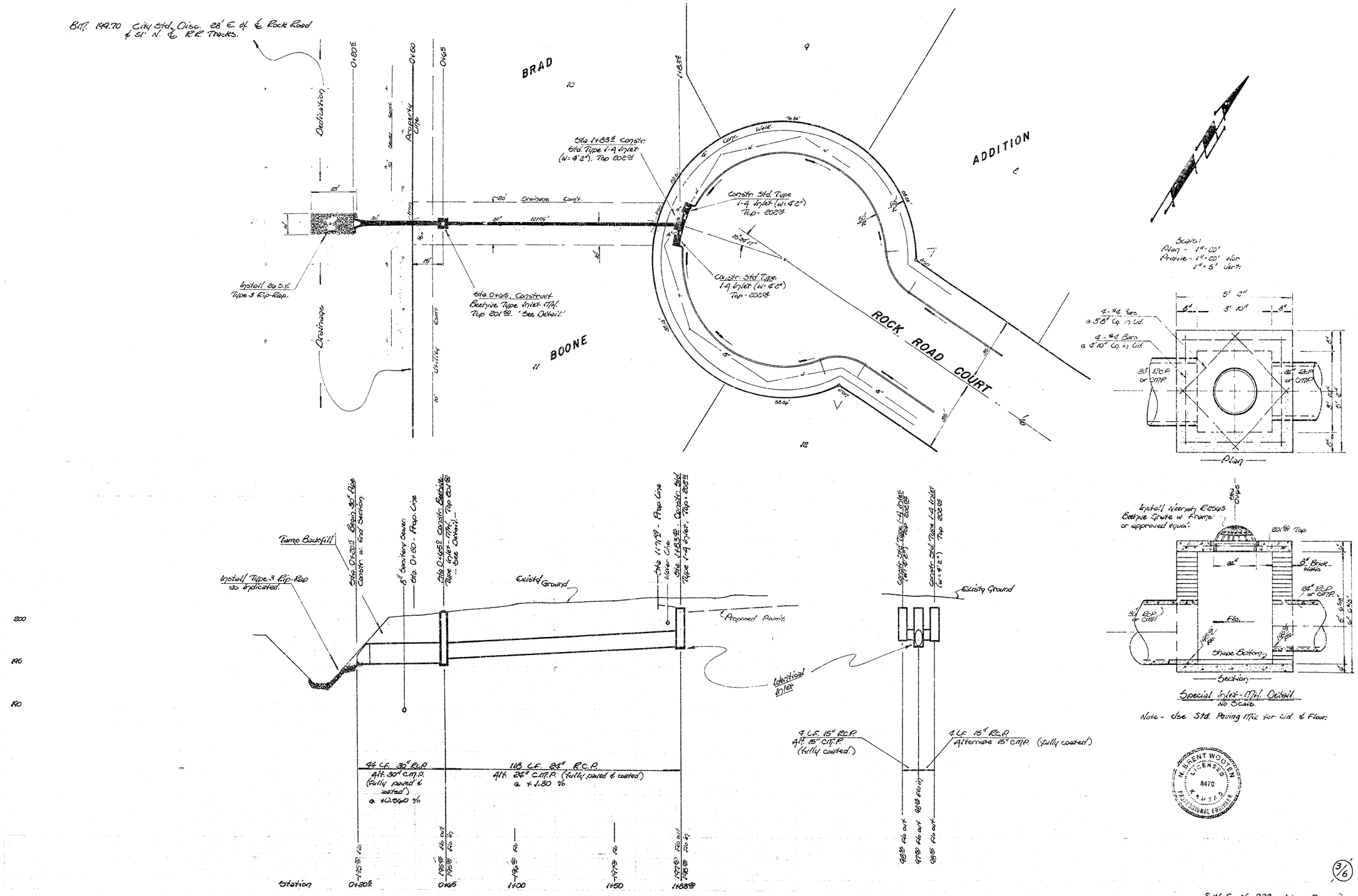

S.W.S. No. 228, Line 2 3/6

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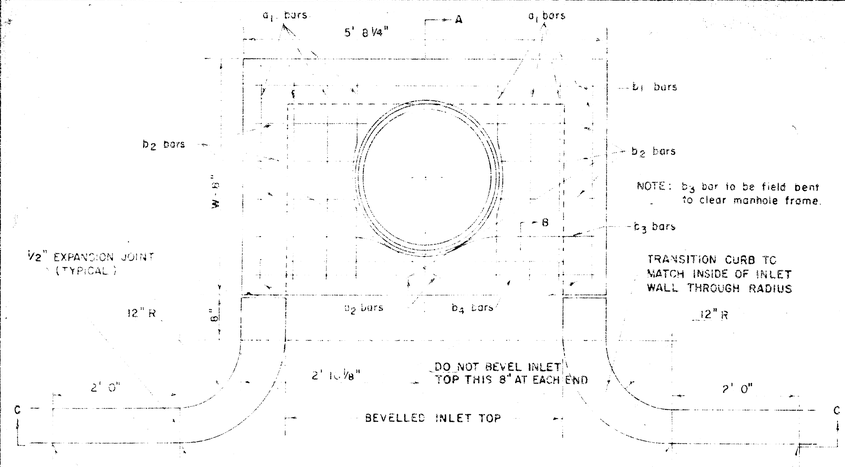
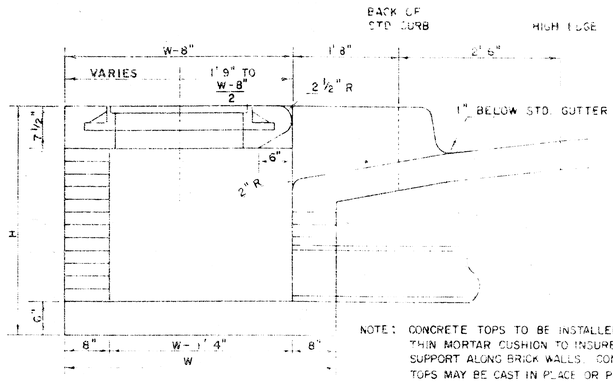
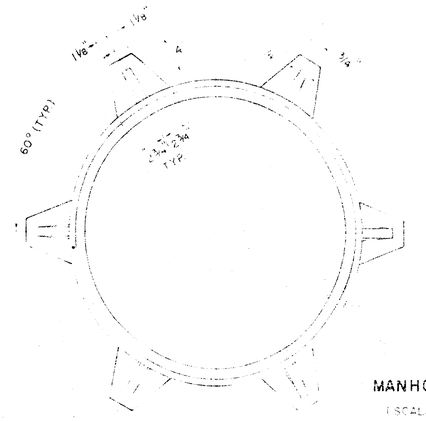


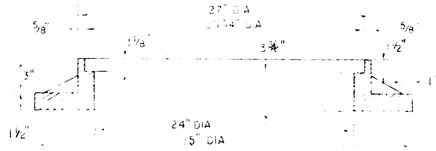


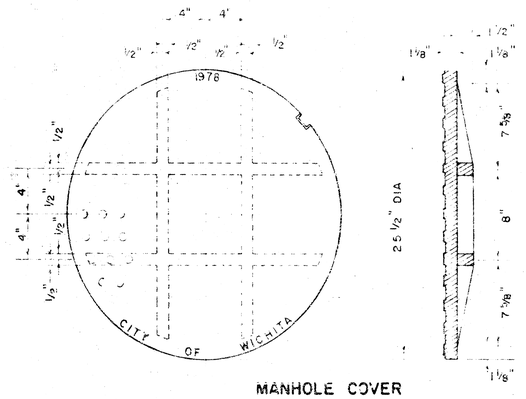
SECTION A-A
(SCALE 1" = 1'0")

NOTE: 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. FOR INLET TOPS AND FLOORS SHALL BE ***STANDARD*** PAVING MIX

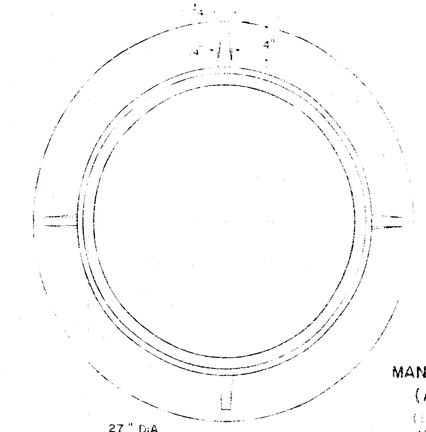


MANHOLE FRAME
(SCALE 1" = 6")
WEIGHT = 180 LBS.

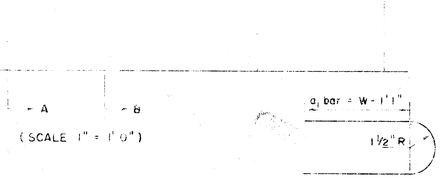




MANHOLE COVER
(SCALE 1" = 6")
WEIGHT = 170 LBS.



MANHOLE FRAME (ALTERNATE)
(SCALE 1" = 6")
WEIGHT = 180 LBS.



PLAN (SCALE 1" = 1'0")

BENDING DIAGRAM

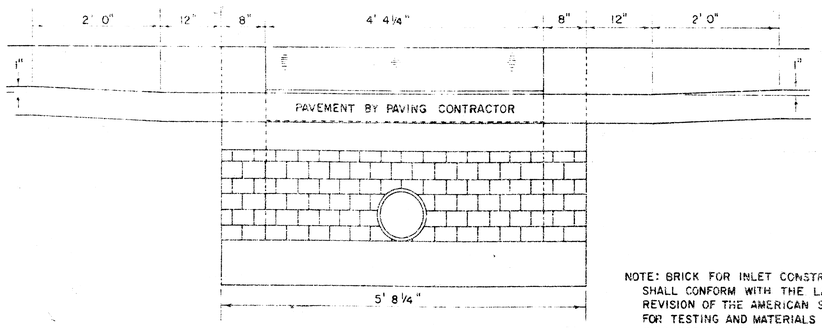
STEEL SCHEDULE

BAR	a_1	a_2 *	b_1 W=4'2"	b_1 W=5'0"	b_1 W=6'0"	b_1 W=7'0"	b_1 W=8'0"	b_2	b_3	b_4	WT. LBS.
NUMBER	8	2	1	2	5	7	9	6	1	1	
SIZE	#4	#6	#4	#4	#4	#4	#4	#4	#4	#6	
LENGTH W=4'2"	6'5"	3'4"	5'5"	–	–	–	–	1'5"	5'6"	5'5"	60 #
LENGTH W=5'0"	8'1"	4'4"	–	5'5"	–	–	–	1'5"	5'6"	5'5"	77 #
LENGTH W=6'0"	10'1"	5'4"	–	–	5'5"	–	–	1'5"	5'6"	5'5"	97 #
LENGTH W=7'0"	11'1"	6'4"	–	–	–	5'5"	–	1'5"	5'6"	5'5"	111 #
LENGTH W=8'0"	12'1"	7'4"	–	–	–	–	5'5"	1'5"	5'6"	5'5"	124 #

* NOTE: a_2 BARS TO BE PLACED APPROX. 2" BELOW TOP OF INLET COVER

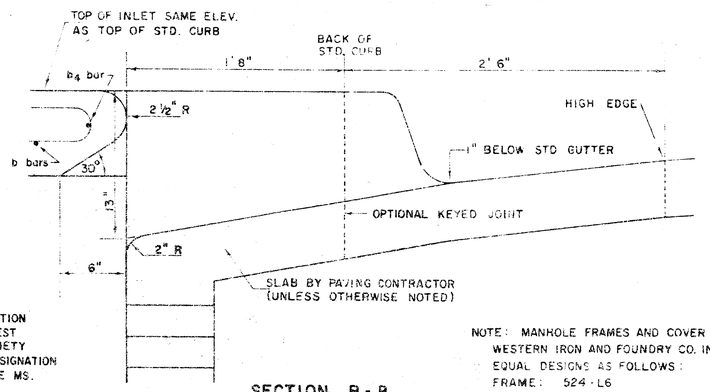
STANDARD CURB INLET PRECAST TOPS			
W	PRE-CAST TOP SIZE	PIPE SIZE	CU. YD. CONC.
4' 2"	36"x5'8¼"x7½"	21" & SMALLER	0.46 *
5' 0"	44"x5'8¼"x7½"	24" & 30"	0.57 *
6' 0"	54"x5'8¼"x7½"	36" & 42"	0.71 *
7' 0"	64"x5'8¼"x7½"	48" & 54"	0.84 *
8' 0"	74"x5'8¼"x7½"	60" & 66"	0.97 *

* GROSS VOLUME



SECTION C-C
(SCALE 1" = 1'0")

NOTE: BRICK FOR INLET CONSTRUCTION SHALL CONFORM WITH THE LATEST REVISION OF THE AMERICAN SOCIETY FOR TESTING AND MATERIALS DESIGNATION C-32 FOR MANHOLE BRICK GRADE MS.



SECTION B-B
(SCALE 1" = 6")

NOTE: MANHOLE FRAMES AND COVER ARE WESTERN IRON AND FOUNDRY CO. INC. OR EQUAL DESIGNS AS FOLLOWS:
FRAME: 524-L6
FRAME (ALTERNATE): 500 A4
COVER: 222 S4 "NOBBY"

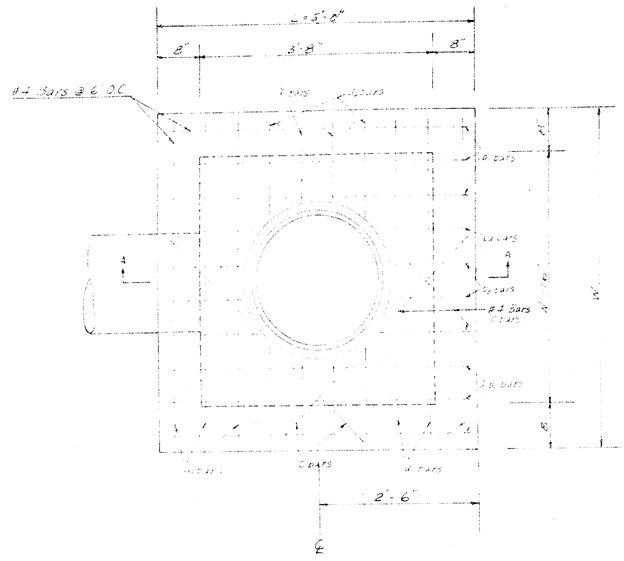
DETAIL STANDARD TYPE IA CURB INLET

CITY OF WICHITA, KANSAS

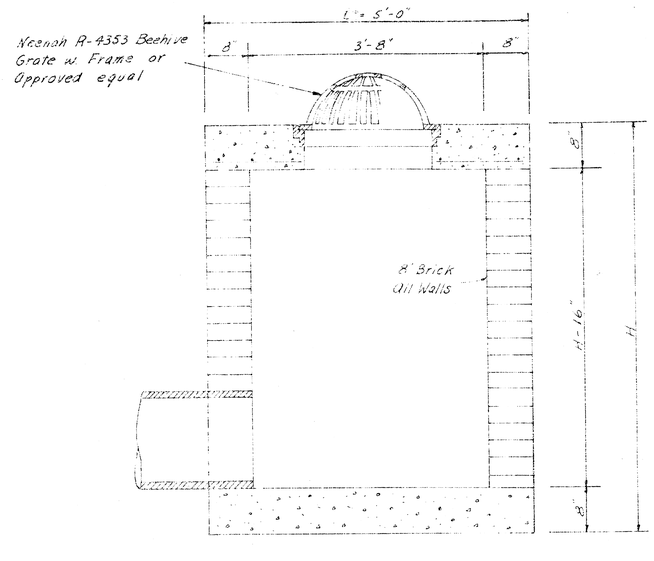
R. W. LINN — CITY ENGINEER

OCTOBER 1978

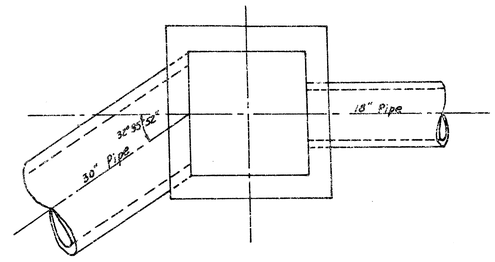
4/2/16



PLAN
(SCALE 1" = 1'0")



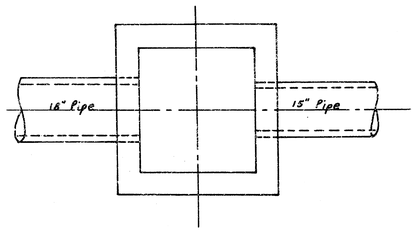
SECTION A-A
(SCALE 1" = 1'0")



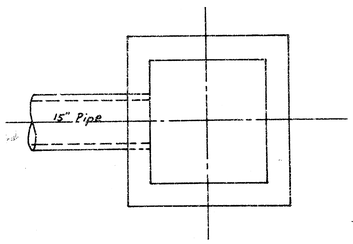
DETAIL 1

STEEL SCHEDULE

BAR	a_1	a_2	a_3	b_1 W=5'0"	b_1 W=6'0"	b_2	b_3	C	WT. LBS.	PIPE SIZE	Cu Yd. Conc.
NUMBER	6	4	4	6	8	4	4	4			
SIZE	#4	#4	#4	#4	#4	#4	#4	#4			
LENGTH W=5'0"	4'8"	1'6"	1'1"	4'8"	—	1'6"	1'1"	4'4"	63	30" & LESS	1.17
LENGTH W=6'0"	5'8"	2'0"	1'7"	—	4'8"	1'6"	1'1"	4'10"	77	36"	1.41



DETAIL 2



DETAIL 3

DETAILS OF

SPECIAL INLET WITH BEEHIVE GRATE

CITY OF WICHITA, KANSAS

S.W.S. NO. 228

PROJECT NO. 468 76 245 81101 000 000 001

5/6

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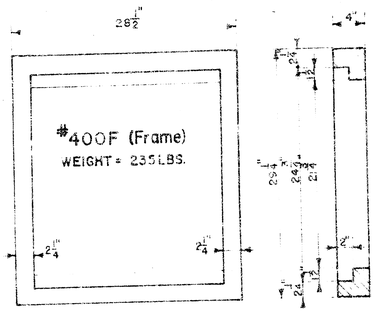
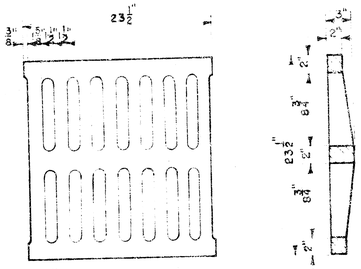
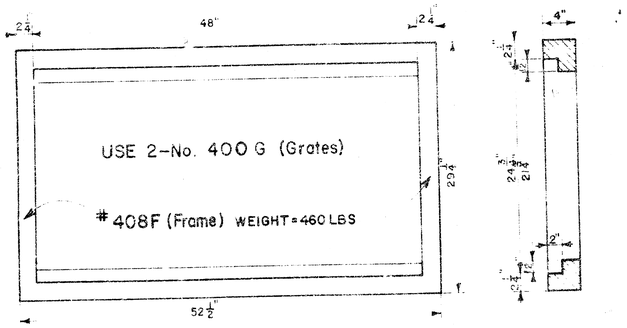
NOTE: Grates shall be imprinted on the top surface with "CITY OF WICHITA" using letters at least 1" in height. Other marking methods may be used only if approved by the engineer.

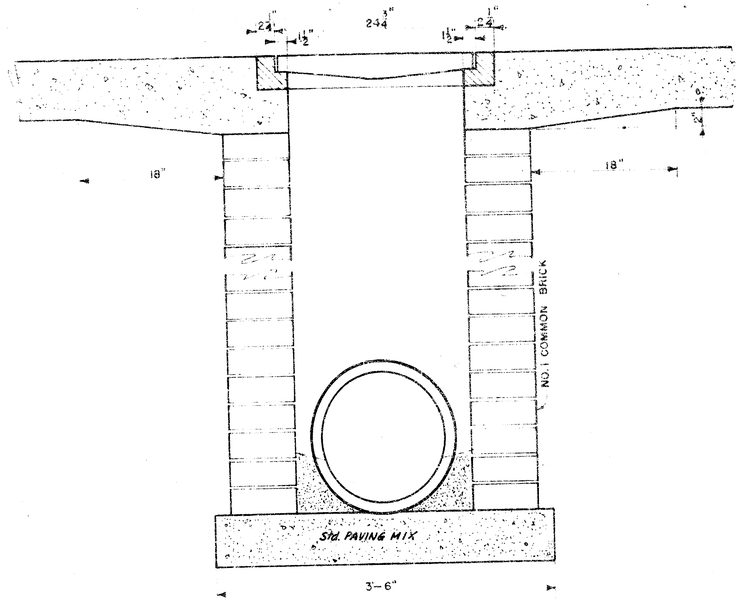


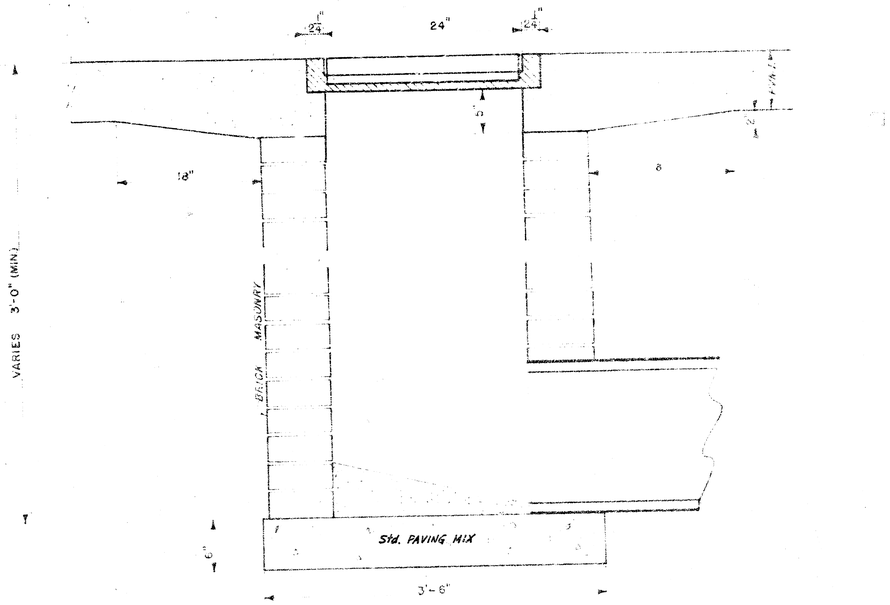


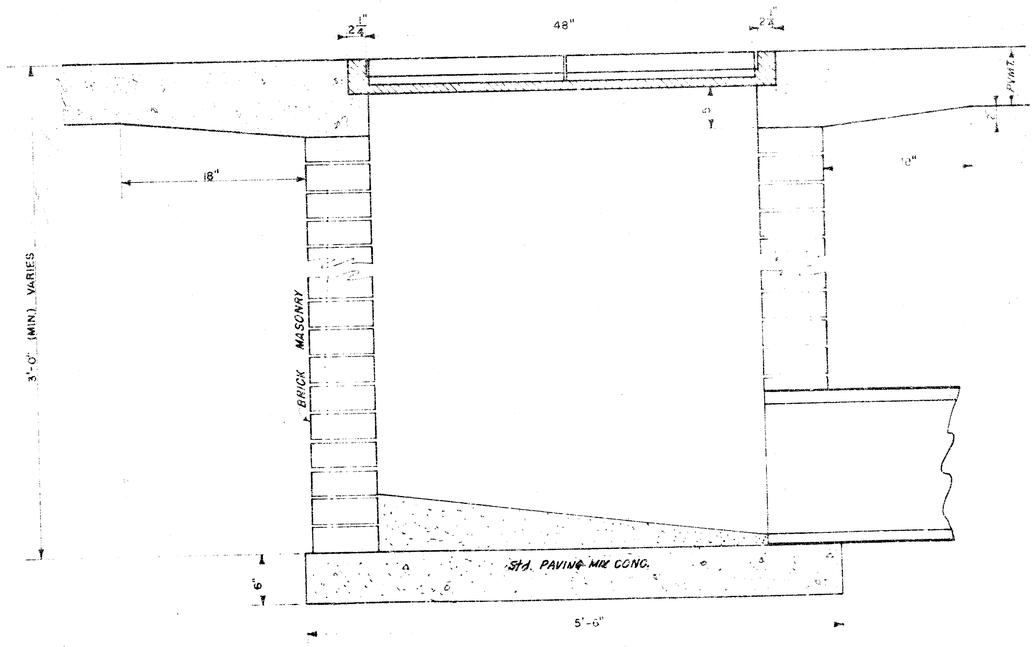
24"x24" Frame & Grate Detail



Double 24"x24" Frame Detail







DROP INLET DETAILS

R.W. Bruggeman, City Engineer
City of Wichita, Kansas
Project
Project No.
Date:
Scale: 1-1/2" = 1'-0"

6/6

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