SHEET NO.	TOTAL SHEETS
1	11

CITY OF WICHITA, KANSAS
MICHAEL E. LINDEBAK, P.E., CITY ENGINEER

STORM WATER SEWER NO. 304

IN

FAIRFIELD ESTATES AND FAIRFIELD ESTATES 2ND ADDITIONS

CITY OF WICHITA PROJECT NO. 468-76-245-81537-000-000-001

INDEX NO. 600874

INDEX OF SHEETS

1. TITLE SHEET
2.-3. PLAT
4.-8. PLAN/PROFILE
9. STD. TYPE 1A CURB INLET DETAILS (11'-4")
10. STD. TYPE 1A CURB INLET DETAILS (8'-4")
11. STD. MANHOLE RING AND COVER DETAILS

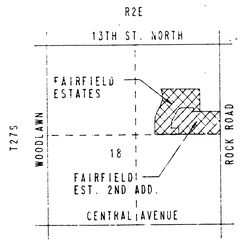
PROJECT SURVEY CONTROL

CITY OF WICHITA DATUM

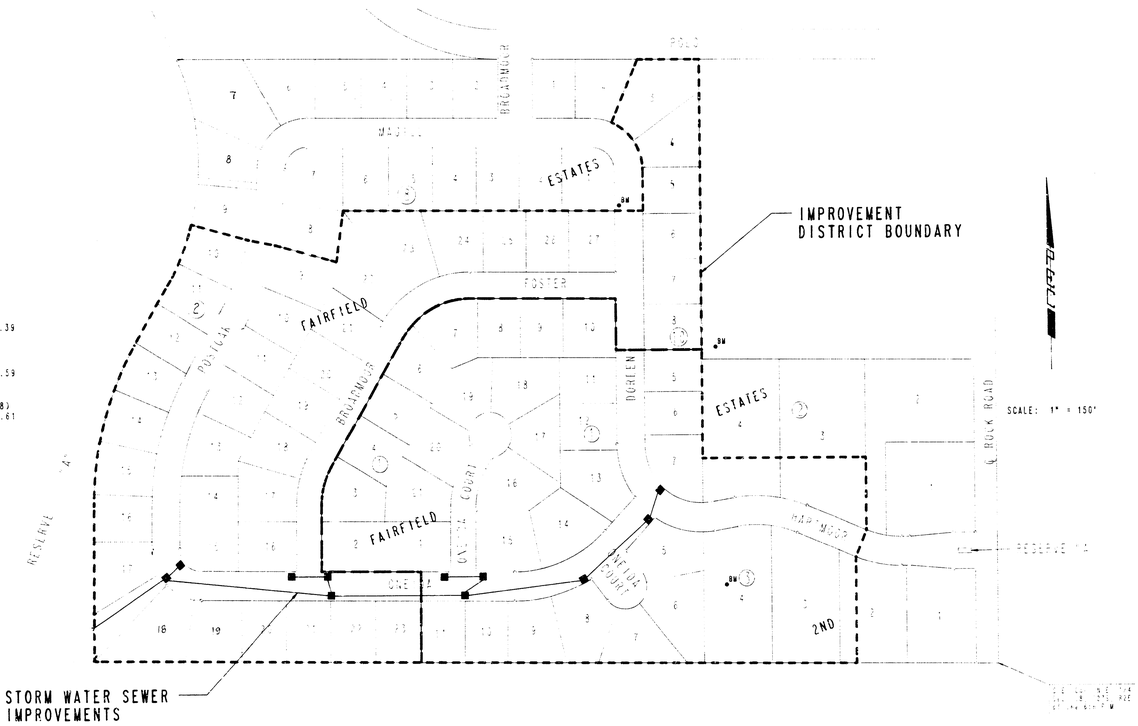
BENCH MARK: R.R. SPIKE IN 42" ELM, 1.0' ABOVE GROUND, LOCATED IN LOT 4, BLOCK 3 FAIRFIELD ESTATES 2ND ADDITION
ELEV.=1184.39

BENCH MARK: R.R. SPIKE IN 38" ELM, EAST OF THE SE CORNER OF LOT 8, BLOCK 2 FAIRFIELD ESTATES 2ND ADDITION
ELEV.=1186.59

BENCH MARK: CHISELED "X" ON TOP OF CURB W. SIDE DOREEN ST. APPROX. 2.6' N. OF S. END OF CURB (STREET STA. 48+38)
ELEV.=1183.61



VICINITY MAP



GENERAL NOTES

1. UNDERGROUND UTILITY SERVICE LINES AND OVERHEAD UTILITY POLE LINES ARE TO BE ADJUSTED AS NECESSARY BY OTHERS PRIOR TO CONSTRUCTION UNLESS THE PLANS SPECIFICALLY CALL FOR THEIR ADJUSTMENT BY THE CONTRACTOR. EXISTING UTILITIES AND THEIR LOCATION, AS SHOWN ON THE PLANS, REPRESENT THE BEST INFORMATION OBTAINABLE FOR DESIGN. LOCATION INFORMATION HAS BEEN OBTAINED FROM THE VARIOUS UTILITY COMPANIES AND IS EITHER FROM COMPANY RECORD DRAWINGS OR COMPANY PROVIDED FIELD LOCATIONS. THE CONTRACTOR WILL BE REQUIRED TO WORK AROUND EXISTING UTILITIES WITHIN THE RIGHT-OF-WAY WHICH DO NOT CONFLICT WITH PROPOSED CONSTRUCTION.

2. RUBBLE FROM THE REMOVAL OF MISCELLANEOUS STRUCTURES AND EXCESS EXCAVATION WHICH IS TO BE WASTED SHALL BE DISPOSED OF ON SITES TO BE PROVIDED BY THE CONTRACTOR. THESE SITES SHALL BE APPROVED BY THE ENGINEER AS TO SUITABILITY, APPEARANCE AND SITE LOCATION. LOCATIONS THAT, IN THE OPINION OF THE ENGINEER, WILL LEAVE AN UNSIGHTLY APPEARANCE WILL NOT BE APPROVED.

3. CONTRACTOR SHALL SATISFY HIMSELF OF SUBSURFACE CONDITIONS PRIOR TO CONSTRUCTION.

4. TREES AND SHRUBS IN PUBLIC RIGHT-OF-WAY WHICH ARE IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE REMOVED BY THE CONTRACTOR WITH THE ENGINEER'S APPROVAL. TREES AND SHRUBS WHICH ARE NOT IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE SAVED AND PROTECTED FROM DAMAGE.

5. THE CONTRACTOR SHALL GIVE ALL PROPERTY OWNERS AND/OR TENANTS OF DEVELOPED PROPERTY DIRECTLY ADJUTTING THE CONSTRUCTION OF THIS PROJECT A MINIMUM OF TEN (10) DAYS ADVANCE NOTICE PRIOR TO START OF CONSTRUCTION.

6. 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 H-S CONSTRUCTION OPERATIONS. SUCH IRONS SHALL BE RE-ESTABLISHED BY A LICENSED LAND SURVEYOR OR A LICENSED PROFESSIONAL ENGINEER IN ACCORDANCE WITH STATE LAWS.

7. CONTRACTOR WILL BE REQUIRED TO PROVIDE A MINIMUM ADVANCE NOTICE OF TWENTY-FOUR (24) HOURS TO UTILITY COMPANIES PRIOR TO STARTING ANY EXCAVATION AS FOLLOWS:

SOUTHWESTERN BELL TELEPHONE COMPANY	1-316-571-261;
CABLEVISION	262-4270 OR 262-2041
KPL GAS SERVICE	263-7511
KANSAS GAS & ELECTRIC	264-1141
CITY OF WICHITA WATER DEPARTMENT	268-4905
CITY OF WICHITA SEWER DEPARTMENT	268-4071
ARKLA GAS COMPANY	942-8350 OR 263-8161

8. THE CONTRACTOR SHOULD BE AWARE THAT DUE TO THE PREVIOUS USE OF PROPERTY WITHIN THE LIMITS OF THIS SUBDIVISION, ACTIVE AND INACTIVE UTILITY SERVICE LINES MAY BE ENCOUNTERED DURING TRENCHING OPERATIONS. THE CONTRACTOR SHOULD BE PARTICULARLY CAREFUL IN THE AREA SURROUNDING THE EXISTING HOUSE IN LOT 3, BLOCK 2 OF FAIRFIELD ESTATES 2ND ADDITION. ANY ACTIVE UTILITY SERVICE LINES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED IMMEDIATELY BY THE CONTRACTOR. ANY INACTIVE UTILITY SERVICE LINES SHALL BE REPAIRED BY CONTRACTOR AS DIRECTED BY THE SUBDIVISION DEVELOPER. ALL COSTS INCURRED FOR WORK INVOLVING EXISTING UTILITY SERVICE LINES SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.

9. ALL AREAS WITHIN RESERVE "A", FAIRFIELD ESTATES WHICH ARE DISTURBED BY S.W.S. AND OVERFLOW CHANNEL CONSTRUCTION SHALL BE SEEDED, FERTILIZED, AND MULCHED PER CITY OF WICHITA SPECIFICATIONS. THIS WORK SHALL BE CONSIDERED SUBSIDIARY TO OTHER WORK ITEMS.

10. THE OPENING OF ALL CURB INLETS LOCATED WITHIN FUTURE PAVEMENT LIMITS SHALL BE PLUGGED BY BOARDS, PLANKS OR OTHER APPROVED METHODS TO PREVENT SOIL FROM ENTERING THE STORM WATER SEWER. THIS WORK SHALL BE CONSIDERED SUBSIDIARY TO OTHER WORK ITEMS.

APRIL, 1988

PLANS PREPARED BY
PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
ENGINEERS
WICHITA, KANSAS

BOOKED 12/88 MCG

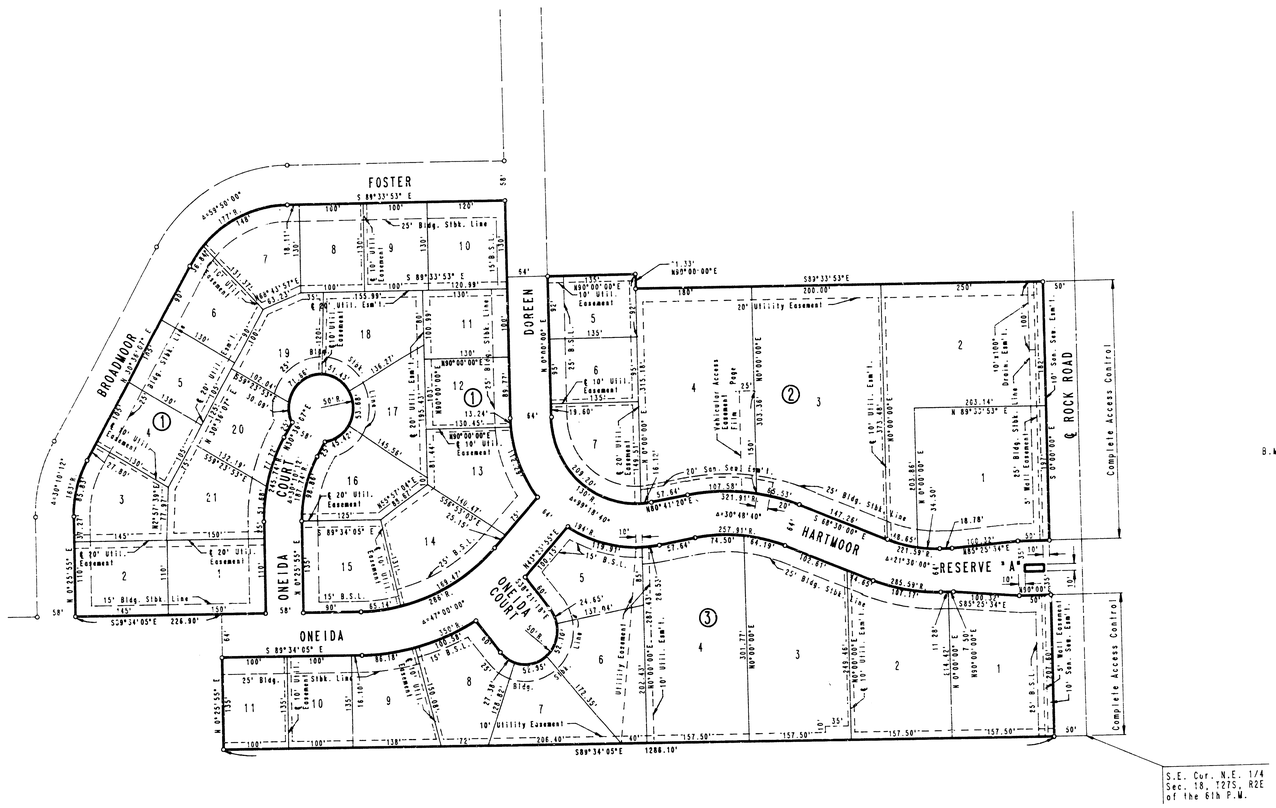
CHARLES S. BROWN LICENSED 7581 KANSAS PROFESSIONAL ENGINEER

1/11

PROJECT NO.	SHEET NO.	TOTAL SHEETS
472-76-243-81537-000-000-001	2	11

FAIRFIELD ESTATES 2ND ADDITION

AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS



SCALE: 1" = 100'

o = IRON SET

B.S.L.=BUILDING SETBACK LINE

B.M. - CHISELED "O" S. END CURB RETURN WEST SIDE ROCK RD. AT E. 1/4 COR. SEC. 18, T27S, R2E. ELEV.=1179.18 CITY DATUM

FAIRFIELD ESTATES 2ND ADDITION

PLAT

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
ENGINEERS
WICHITA, KANSAS

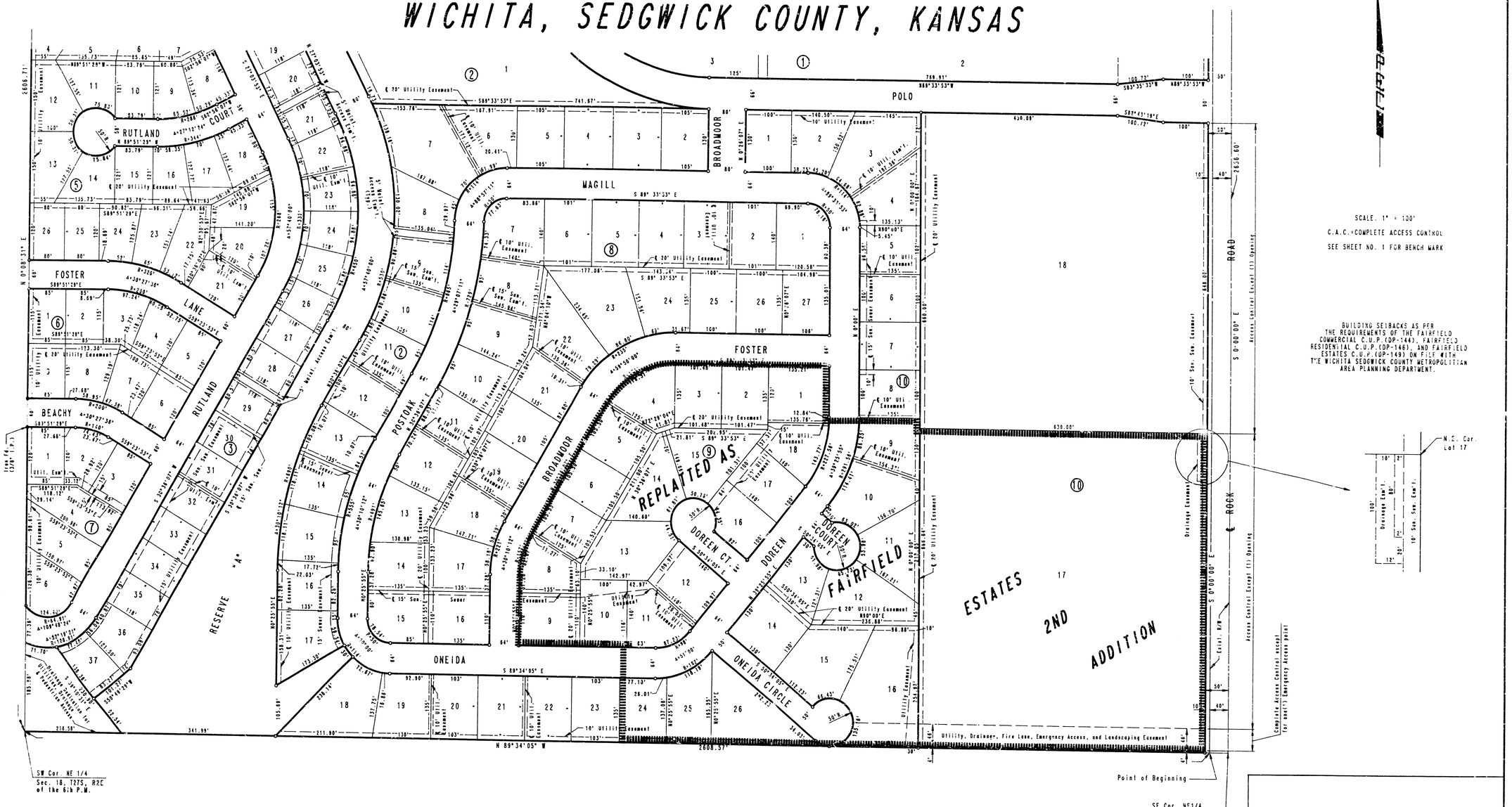
2/11

Designed by		Checked by	
Drawn by	DEP	Date MAR., 1988	Job No. 87815-1

PROJECT NO.	SHEET NO.	TOTAL SHEETS
472-76-245-81537-000-000-041	3	11

FAIRFIELD ESTATES

WICHITA, SEDGWICK COUNTY, KANSAS



SCALE: 1" = 100'

C.A.C.=COMPLETE ACCESS CONTROL

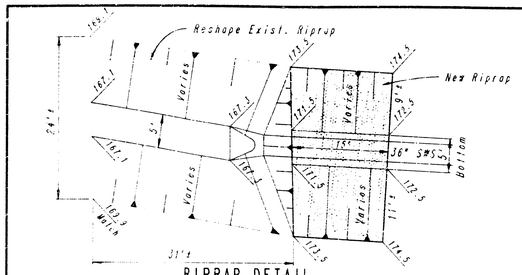
SEE SHEET NO. 1 FOR BENCH MARK

BUILDING SETBACKS AS PER THE REQUIREMENTS OF THE FAIRFIELD COMMERCIAL C.U.P. (DP-144), FAIRFIELD RESIDENTIAL C.U.P. (DP-146), AND FAIRFIELD ESTATES C.U.P. (DP-149) ON FILE WITH THE WICHITA SEDGWICK COUNTY METROPOLITAN AREA PLANNING DEPARTMENT.

PLAT

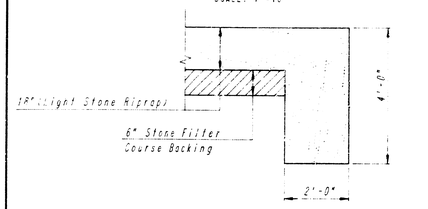
PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
ENGINEERS
WICHITA, KANSAS

Designed by		Checked by	
Drawn by	DEP	Date MAR., 1988	Job No. 87615-1



RIPRAP DETAIL

SCALE: 1"=10'



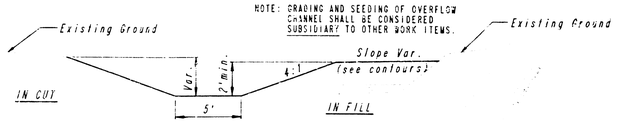
TYPICAL SECTION THRU TOEWALL

NO SCALE

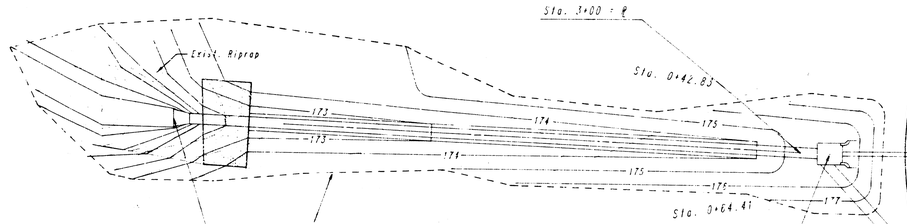
NOTES

1. ALL RIPRAP FOR THIS PROJECT SHALL BE NATURAL STONE. NEITHER BROKEN CONCRETE, FABRIC ENVELOPE, NOR PREMIXED DRY PACKAGED CONCRETE BAG ALTERNATES WILL BE ALLOWED.
2. TOEWALLS SHALL BE INSTALLED ALONG ALL EDGES OF STONE RIPRAP.
3. GROUTING OF THE SURFACE OF THE RIPRAP SHALL NOT BE PERFORMED. GROUTING OF THE TOEWALLS SHALL BE PERFORMED PER CITY SPECIFICATIONS.
4. REMOVAL AND REPLACEMENT OF EXISTING RIPRAP AND RESHAPING OF SUBGRADE SHALL BE CONSIDERED SUBSIDIARY TO OTHER WORK ITEMS.
4. EXISTING 6" STONE FILTER COURSE SHALL BE EXCAVATED AND DISPOSED OF BY CONTRACTOR. THE CONTRACTOR SHALL SUPPLY AND INSTALL NEW 6" STONE FILTER COURSE WHERE EXISTING RIPRAP IS TO BE RESHAPED. THIS WORK SHALL BE CONSIDERED SUBSIDIARY TO OTHER WORK ITEMS.

NOTE: GRADING AND SEEDING OF OVERFLOW CHANNEL SHALL BE CONSIDERED SUBSIDIARY TO OTHER WORK ITEMS.

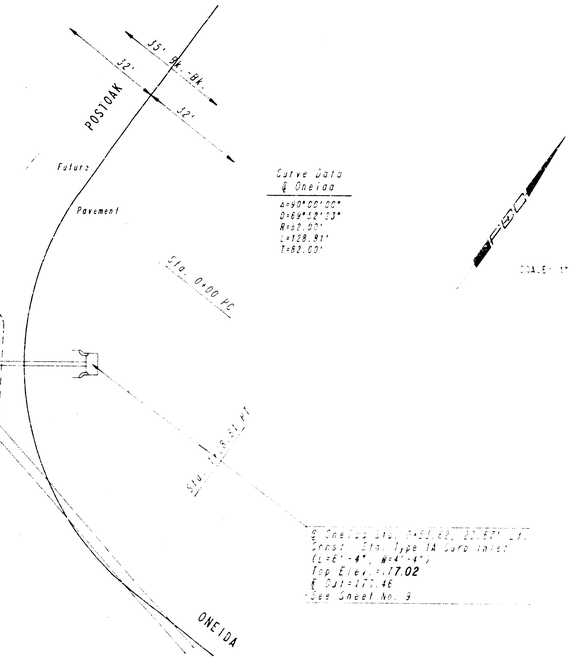


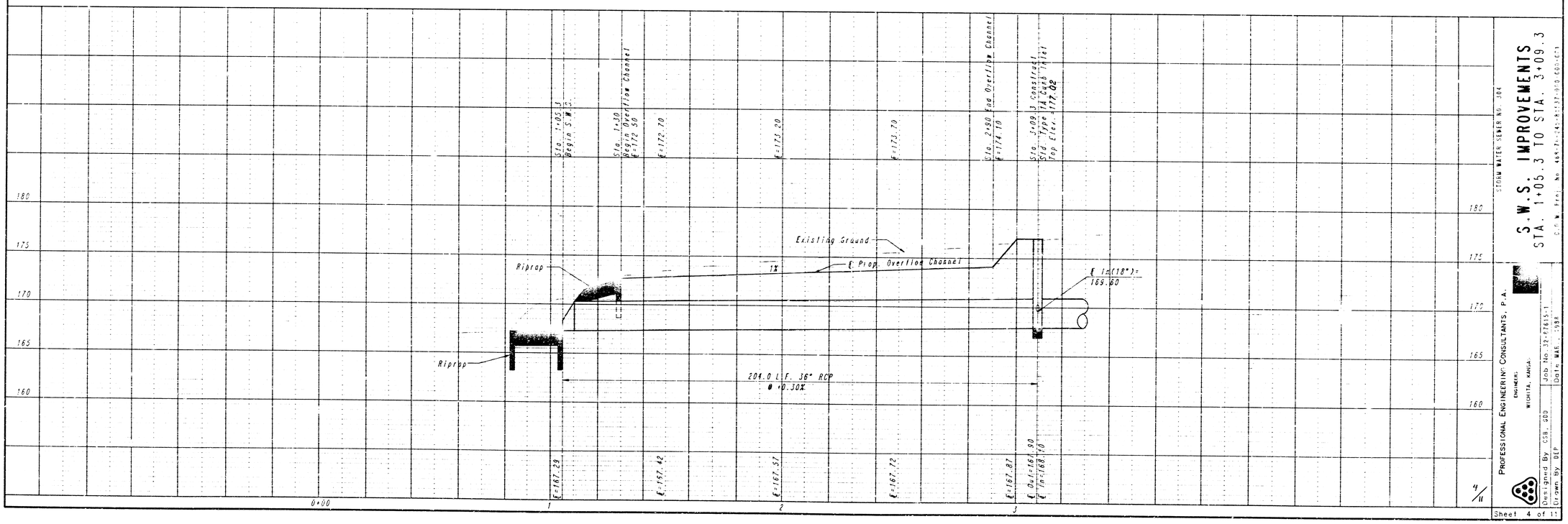
TYPICAL SECTION OVERFLOW CHANNEL



Sta. 1+05.3
℄ Oneida Sta. 0+51.11, 226.60' Rt.
Begin Storm Water Sewer
Install 204.0 L.F. 36" RCP(NE)
(Includes End Section)
Remove exist. Riprap and Reshape subgrade to conform to detail.
Reinstall existing Riprap
Install 35.8 S.Y. New Light Stone Riprap
See Detail this sheet

Sta. 3+09.3
℄ Oneida Sta. 0+53.62, 22.67' Rt.
Const. Std. Type 1A Curb Inlet
(LT=6'-4", W=8'-4")
Top Elev.=177.02
Install 43.3 L.F. 36" RCP(NE)
℄ In(18")=169.60
Install 384.1 L.F. 36" RCP(SE)
See Sheet No. 9





STORM WATER SEWER NO. 304

S.W.S. IMPROVEMENTS
STA. 1+05.3 TO STA. 3+09.3

C.O.W. Proj. No. 468-71-45-81137-03-660-01

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
ENGINEERS:
WICHITA, KANSAS

Designed By CSB, GBD | Job No. 32-F7613-1
Drawn By DEP | Date MAR. 1988

4/11

Sheet 4 of 11

Curve Data
℄ Oneida
Δ=90°00'00"
D=69°52'23"
R=82.00'
L=128.81'
T=82.00'

Sta. 0+00 PC

Sta. 0+42.83

Sta. 0+64.41

Sta. 1+28.81 PT

POSTOAK

ONEIDA

BROADMOOR

FAIRFIELD ESTATES

(℄ Oneida Sta. 3+37.31, 21.17' Lt.)
Const. Std. Type 1A Curb Inlet
(L=11'-4", W=5'-4")
Top Elev.=177.72
℄ Out=170.88
See Sheet No. 10

FAIRFIELD ESTATES 2ND

(℄ Oneida Sta. 4+15.81, 21.17' Lt.)
Const. Std. Type 1A Curb Inlet
(L=8'-4", W=5'-4")
Top Elev.=177.42
Install 78.5 L.F. 24" RCP(W)
℄ In=170.49
℄ Out=170.29
See Sheet No. 9

Sta. 3+09.3
(℄ Oneida Sta. 0+53.62, 22.67' Rt.
Std. Type 1A Curb Inlet

Sta. 3+77.81 ℄ Oneida=
Sta. 30+00.00 ℄ Broadmoor

Sta. 6+93.4
(℄ Oneida Sta. 4+27.71, 21.67' Rt.)
Const. Std. Type 1A Curb Inlet
(L=6'-4", W=6'-4")
Top Elev.=177.46
Install 306.0 L.F. 36" RCP(E)
Install 44.5 L.F. 24" RCP(N)
See Sheet No. 9

℄ Oneida Sta. 3+40.81

℄ Oneida Sta. 4+06.81

℄ Oneida Sta. 4+27.71

29' B.-B.

29'

29'

20' R., FCCb (Typ.)

24" SWS @ +0.50%

90°00'

36" SWS

18" SWS

24" SWS

30" SWS

32'

35' B.-B.

32'

Future Pavement

Existing Pavement

1 2 3 4 5

SCALE: 1" = 20'

Future Ground (By Others)

Existing Ground

E=169.60
18" RCP(HE)

E=171.07
24" RCP(N)

584.1 L.F. 36" RCP
@ +0.20%

E Out=169.60
E In=169.14

E=168.18
E=168.28
E=168.38
E=168.48
E=168.58
E=168.68
E=168.78

E Out=169.47
E In=169.07

Sta. 3+09.3
(℄ Oneida Sta. 0+53.62, 22.67' Rt.)
Std. Type 1A Curb Inlet
Top Elev.=174.82

Sta. 6+93.4
(℄ Oneida Sta. 4+27.71, 21.67' Rt.)
Const. Std. Type 1A Curb Inlet
(L=6'-4", W=6'-4")
Top Elev.=177.46
Install 306.0 L.F. 36" RCP(E)
Install 44.5 L.F. 24" RCP(N)

180
175
170
165

3 4 5+00 6 7

STORM WATER SEWER NO. 304

S.W.S. IMPROVEMENTS
STA. 3+09.3 TO STA. 6+93.4

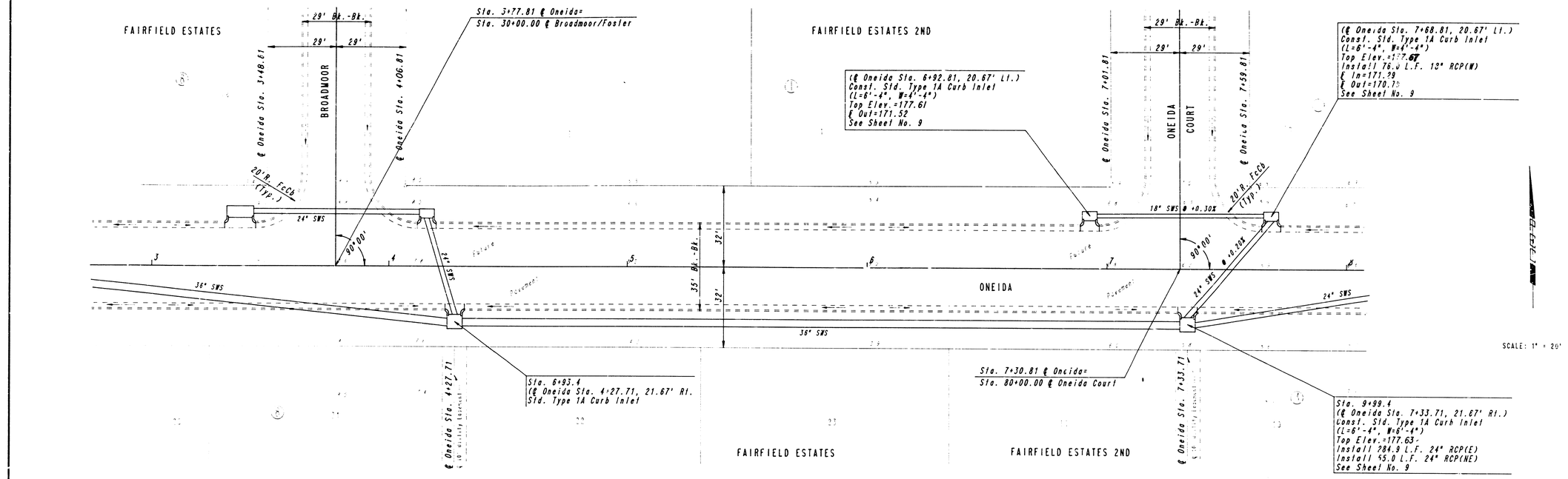
C.O.W. Proj. No. 468-78-245-81537-000-000-001

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
ENGINEERS
WICHITA, KANSAS

Designed By CSB, GDD
Drawn By DEP
Job No. 32-87615-1
Date MAR., 1988

5/11

Sheet 5 of 11



STORM WATER SEWER NO. 304

S.W.S. IMPROVEMENTS
STA. 6+93.4 TO STA. 9+99.4

C.O.W. PROJECT NO. 468-78-245-81537-000-000-001

PROFESSIONAL ENGINEERING CONSULTANT--, P.A.
ENGINEERS
WICHITA, KANSAS

Designed By CSB, CDD | Job No. 32-87615-1
Drawn By DEP | Date MAR., 1988

6/11

Sheet 6 of 11

SCALE: 1" = 20'

Curve Data
@ Oneida
Δ=47°00'00"
D=18°01'03"
R=318.00'
L=260.86'
T=138.27'

Sta. 10+65.09 @ Oneida=
Sta. 20+00.00 @ Oneida Court

Sta. 11+10.67
P.T.

FAIRFIELD ESTATES 2ND

29' Bk.-Bk.
29' 29'
@ Oneida Sta. 7+01.81
@ Oneida Sta. 7+59.81
ONEIDA COURT
20'R FcCb
Typ.
18" SWS
90°00'
24" SWS
7
8
9
ONEIDA
24" SWS
36" SWS
Sta. 8+49.81 PC
Prop. 8" Water
BOV
Proposed
32'
35' Bk.-Bk.
Pavement
RV
RV
Fire Hydrant
Tree
10
18" SWS
ONEIDA COURT
20'R
Prop. 8" Water
@ Oneida Sta. 10+19.50

Sta. 7+30.81 @ Oneida=
Sta. 80+00.00 @ Oneida Court

Sta. 9+99.4
(@ Oneida Sta. 7+33.71, 21.67' Rt.
Std. Type 1A Curb Inlet

Sta. 12+84.3
(@ Oneida Sta. 10+11.82, 21.17' Rt.)
Const. Std. Type 1A Curb Inlet
(L=6'-4", W=5'-4")
Top Elev.=178.65
Install 198.4 L.F. 18" RCP(NE)
See Sheet No. 9

@ Oneida Sta. 7+33.71

FAIRFIELD ESTATES 2ND

Sta. 9+99.4
@ Oneida Sta. 7+33.71
Top Elev.=177.63

E=170.68
24" RCP(NE)

Existing Ground
Future Ground (By Others)
Proposed Ground

284.9 L.F. 24" RCP
@ +0.82%

E Out=169.68
E In=170.08
E=171.93
E=171.50
E=171.91
E=172.32
E=172.73
Sta. 12+84.3
E Out=173.02
E In=173.52
Sta. Type 1A Curb Inlet
Top Elev.=178.65

180
175
170
165

10+00
11
12
13

STORM WATER SEWER NO. 304

S.W.S. IMPROVEMENTS
STA. 9+99.4 TO STA. 12+84.3

C.O.W. PROJECT NO. 468-78-245-81537-000-000-001

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
ENGINEERS
WICHITA, KANSAS

Designed By: CSB, GDD
Drawn By: DFP
Job No.: 32-87615-1
Date: MAR., 1988

7/11
Sheet 7 of 11

SCALE: 1" = 20'

Sta. 8+49.81 P.C.

Curve Data
℄ Oneida
Δ=47°00'00"
D=18°01'03"
R=318.00'
L=260.86'
T=138.27'

FAIRFIELD ESTATES 2ND

Sta. 11+10.67 P.T.

Prop. 8" Water

Sta. 12+40.17 ℄ Oneida=
Sta. 55+35.06 ℄ Hartmoor

20' R. F.C.b. (Typ.)

35' B.-B.

DOREEN

32'

℄ Doreen/Hartmoor
Sta. 51+03.39

Curve Data
℄ Doreen/Hartmoor
Δ=99°18'40"
D=35°22'04"
R=162.00'
L=280.80'
T=190.72'

FAIRFIELD ESTATES 2ND

14" SWS

10' U.E.

11

Proposed ONEIDA COURT Pavement

12

Remove Trees

18" SWS

13" SWS

Sta. 15+42.6
(℄ Hartmoor Sta. 55+35.06, 20.67' Lt.)
Const. Std. Type 1A Curb Inlet
(L=6'-4", W=4'-4")
Top Elev.=181.44
See Sheet No. 9

Sta. 12+84.3
(℄ Oneida Sta. 10+11.82, 21.17' Rt.
Std. Type 1A Curb Inlet.

FAIRFIELD ESTATES 2ND

℄ Oneida Sta. 10+19.50

Prop. 8" Water

71' B.-B.

50'

50'

20' R. F.C.b. (Typ.)

FAIRFIELD ESTATES 2ND

Sta. 14+80.7
(℄ Oneida Sta. 12+02.64, 20.67' Rt.)
Const. Std. Type 1A Curb Inlet
(L=6'-4", W=4'-4")
Top Elev.=180.96
Install 61.9 L.F. 15" RCP(HE)
See Sheet No. 9

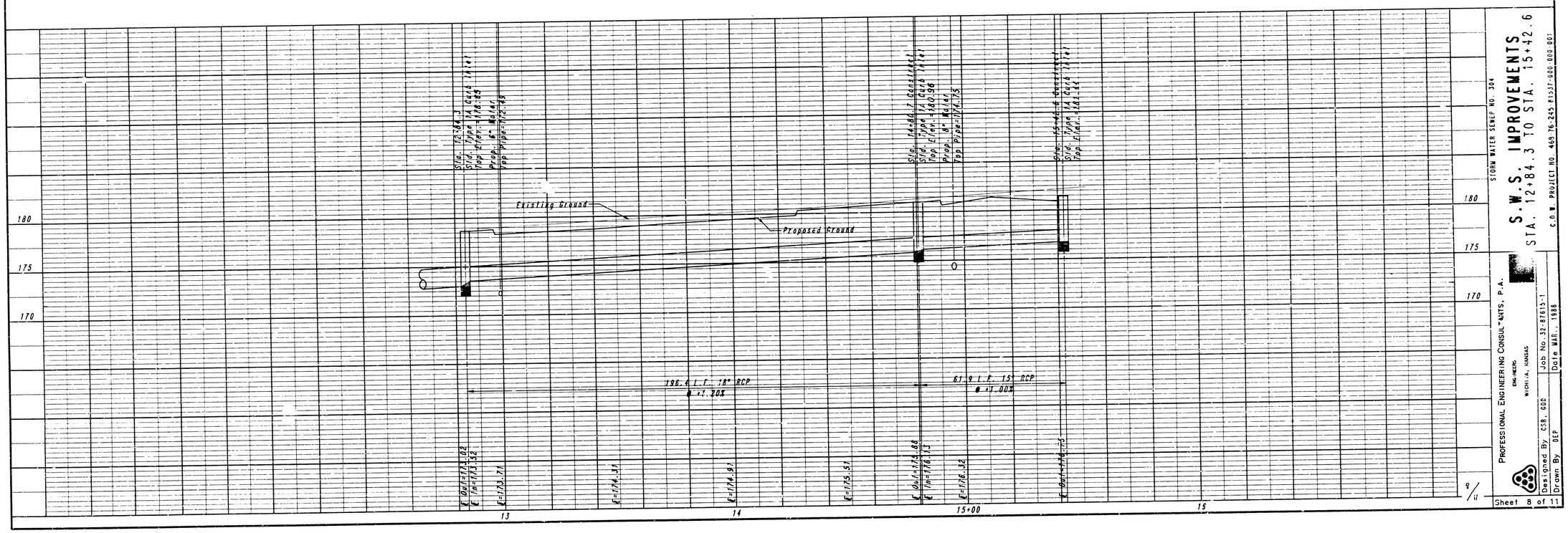
℄ Oneida Sta. 12+10.82

Prop. 8" Water

HARTMOOR

℄ Doreen/Hartmoor
Sta. 56+84.19

Sta. 10+65.09 ℄ Oneida=
Sta. 20+00.00 ℄ Oneida Court



STORM WATER SEWER NO. 304

S.W.S. IMPROVEMENTS
STA. 12+84.3 TO STA. 15+42.6

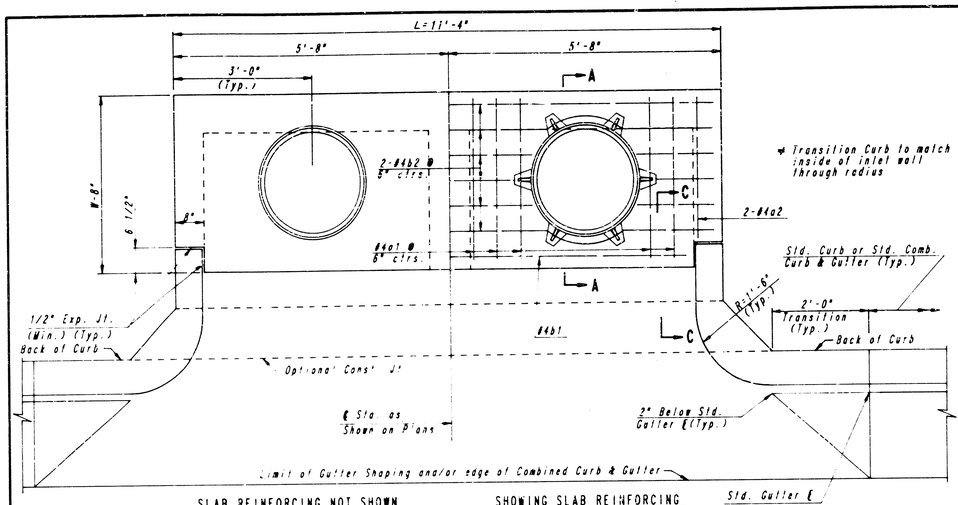
C.O.W. PROJECT NO. 468-76-245 K1537-600-800-801

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
ENGINEERS
WICHITA, KANSAS

Designed By CSR, GDD | Job No. 32-87815-1
Drawn By DEP | Date MAR., 1988

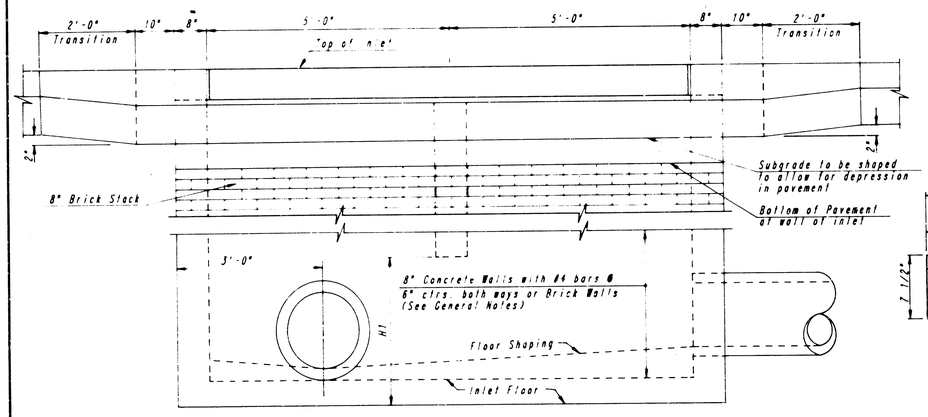
Sheet 8 of 11

PROJECT NO.	SHEET NO.	TOTAL SHEETS
4GB TG 245 81537 000 000 001	9	11

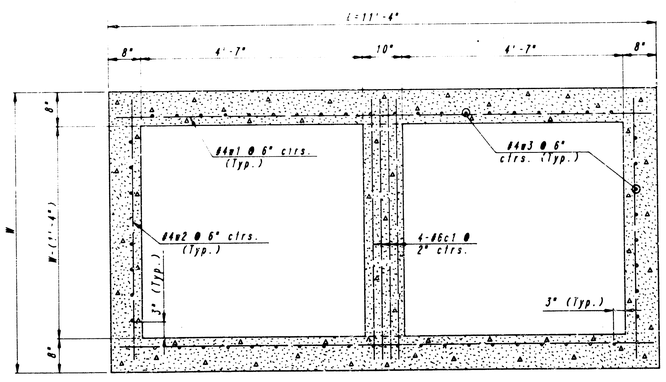


SLAB REINFORCING NOT SHOWN. SHOWING SLAB REINFORCING

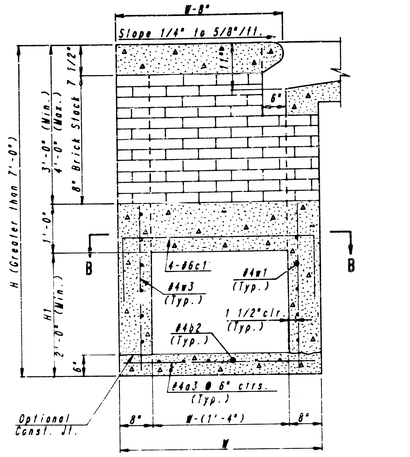
PLAN



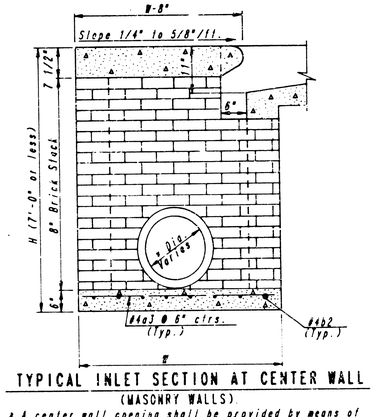
ELEVATION



SECTION B-B

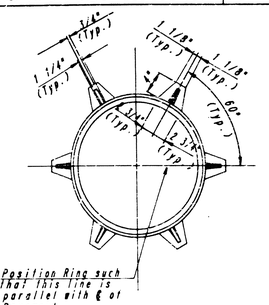


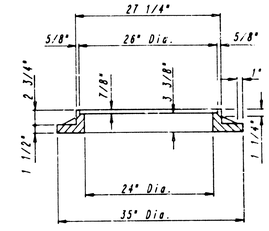
TYPICAL INLET SECTION AT CENTER WALL
(REINFORCED CONCRETE WALLS)



TYPICAL INLET SECTION AT CENTER WALL
(MASONRY WALLS).

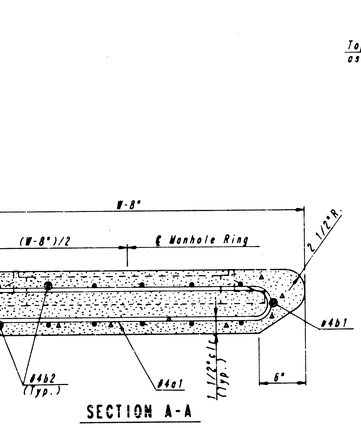
* A center wall opening shall be provided by means of a section of reinforced concrete pipe. The minimum diameter used shall be that of the outlet pipe.



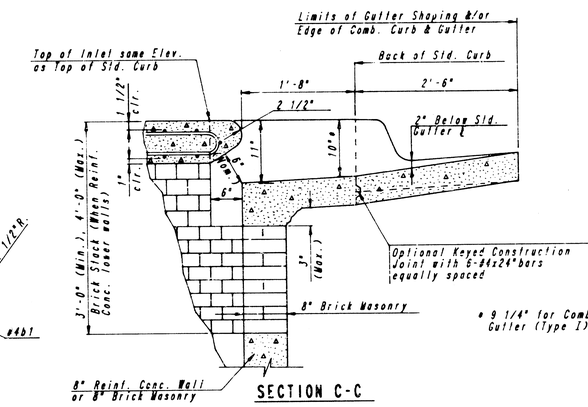


CAST IRON INLET FRAME
Wt.=180 lbs.

See City of Wichita Standard Manhole Frame and Cover Detail Sheet for Cover Details to be used with Inlet Frame



SECTION A-A



SECTION C-C

* 9 1/4" for Combined Curb & Gutter (Type I)

GENERAL NOTES

THE CONTRACTOR WILL BE REQUIRED TO CONSTRUCT 8" BRICK MASONRY WALLS BETWEEN THE CONCRETE INLET BASE AND TOP ON THIS INLET WHEN W=8'-4" OR LESS AND H=7'-0" OR LESS. WHEN W IS GREATER THAN 8'-4" AND H IS LESS THAN 7'-0". THE OUTSIDE 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.

INLET INVERT SHALL BE SHAPED WITH A 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.

CONCRETE SHALL BE CITY OF WICHITA STANDARD PAVING MIX. ALL EXPOSED EDGES SHALL BE FINISHED WITH AN EDGING TOOL. INLET TOPS ARE TO BE PLACED ON A THIN MORTAR CUSHION TO INSURE FULL SUPPORT ALONG BRICK WALLS. CONCRETE TOPS MAY BE PRECAST OR CAST IN PLACE. INLET TOPS SHALL BE NOTCHED OUT AS INDICATED TO FACILITATE CONSTRUCTION OF CURB.

UNLESS OTHERWISE NOTED, ALL BARS ARE #4 ON 6" MAX. CENTERS AND SHALL HAVE A MINIMUM CLEARANCE OF 1-1/2". BARS SHALL BE FIELD BENT OR CUT TO CLEAR MANHOLE RINGS AND PIPE OPENINGS.

THE ENDS OF ALL PIPES INSTALLED IN INLETS SHALL BE CUT OFF FLUSH WITH THE INSIDE FACE OF THE INLET WALL.

ADDITIONAL CURB AND/OR CURB AND GUTTER CONSTRUCTION NECESSARY TO CONNECT SET-BACK INLET TO PAVEMENT WILL BE PAID FOR AT THE UNIT PRICE BID PER EACH FOR "INLET HOOKUP".

SLAB AND FLOOR REINFORCING

		W=4'-4"		W=5'-4"		W=6'-4"		W=7'-4"		W=8'-4"	
MARK	SIZE	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH
a1	#4	13	6'-7 1/4"	13	8'-7 1/4"	13	10'-7 1/4"	13	12'-7 1/4"	13	14'-7-1/4"
a2	#4	2	6'-0"	2	8'-0"	2	10'-0"	2	12'-0"	2	14'-0"
a3	#4	20	4'-1"	20	5'-1"	20	6'-1"	20	7'-1"	20	8'-1"
b1	#4	1	9'-8"	1	9'-8"	1	9'-8"	1	9'-8"	1	9'-8"
*b2	#4	18	11'-1"	24	11'-1"	30	11'-1"	36	11'-1"	42	11'-1"

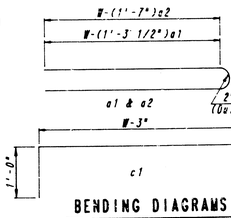
WALL REINFORCING

		W=4'-4"		W=5'-4"		W=6'-4"		W=7'-4"		W=8'-4"	
MARK	SIZE	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH
c1	#6	4	6'-1"	4	7'-1"	4	8'-1"	4	9'-1"	4	10'-1"
*a1	#4	①	11'-1"	①	11'-1"	①	11'-1"	①	11'-1"	①	11'-1"
*a2	#4	①	4'-1"	①	5'-1"	①	6'-1"	①	7'-1"	①	8'-1"
*a3	#4	②	③	②	③	②	③	①	③	②	③

* Field bend or cut Reinforcing as required for clearance

① 4(H1-6")+4 (H1-6") Rounded down to nearest 0.5'

② 40+4(W - 15") ③ H1+(9")



BENDING DIAGRAMS

CITY OF WICHITA, KANSAS

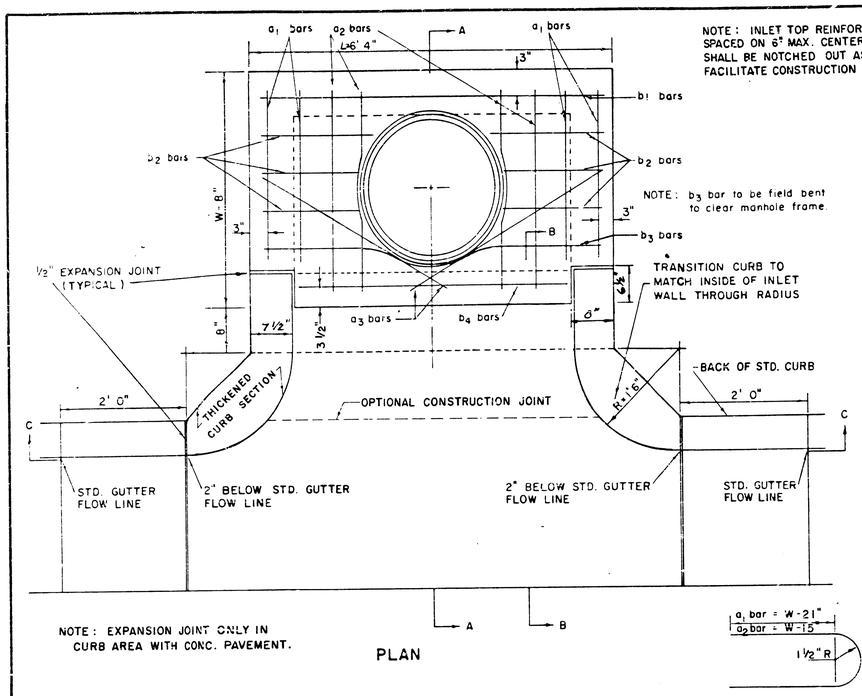
DETAIL STANDARD TYPE IA CURB INLET

(INLET OPENING = 8"X10'-8" (L=11'-4")

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
ENGINEERS
WICHITA, KANSAS

9/11

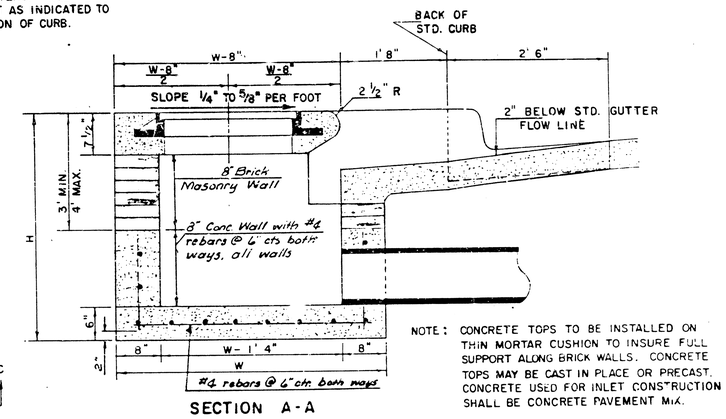
Designed by		Checked by	
Drawn by		Date	Job No. 5765-1



NOTE: EXPANSION JOINT ONLY IN CURB AREA WITH CONC. PAVEMENT.

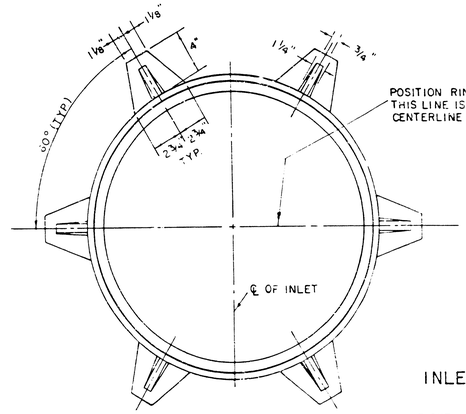
PLAN

NOTE: INLET TOP REINFORCING SHALL BE SPACED ON 6" MAX. CENTERS. INLET LIDS SHALL BE NOTCHED OUT AS INDICATED TO FACILITATE CONSTRUCTION OF CURB.



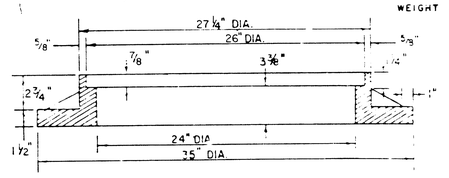
SECTION A-A

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 USED FOR INLET CONSTRUCTION SHALL BE CONCRETE PAVEMENT MIX.



INLET FRAME

WEIGHT = 180 LBS.



SEE CITY OF WICHITA STANDARD MANHOLE FRAME AND COVER DETAIL SHEET FOR COVER DETAILS TO BE USED WITH INLET FRAME.

BENDING DIAGRAM

STEEL SCHEDULE

BAR		a_1	a_2	a_3*	b_1 W=4'4"	W=5'4"	W=6'4"	W=7'4"	W=8'4"	b_2	b_3	b_4	WT. LBS.
NUMBER		4	4	2	1	3	5	7	9	6	1	1	
SIZE		#4	#4	#4	#4	#4	#4	#4	#4	#4	#4	#6	
LENGTH	W=4'4"	5'7"	6'7"	4'0"	6'1"	–	–	–	–	1'9"	6'2"	4'8"	60±
	W=5'4"	7'7"	8'7"	5'0"	–	6'1"	–	–	–	1'9"	6'2"	4'8"	81±
	W=6'4"	9'7"	10'7"	6'0"	–	–	6'1"	–	–	1'9"	6'2"	4'8"	101±
	W=7'4"	11'7"	12'7"	7'0"	–	–	–	6'1"	–	1'9"	6'2"	4'8"	121±
	W=8'4"	13'7"	14'7"	8'0"	–	–	–	–	6'1"	1'9"	6'2"	4'8"	141±

* NOTE: a_3 BARS TO BE PLACED APPROX. 2" BELOW TOP OF INLET COVER

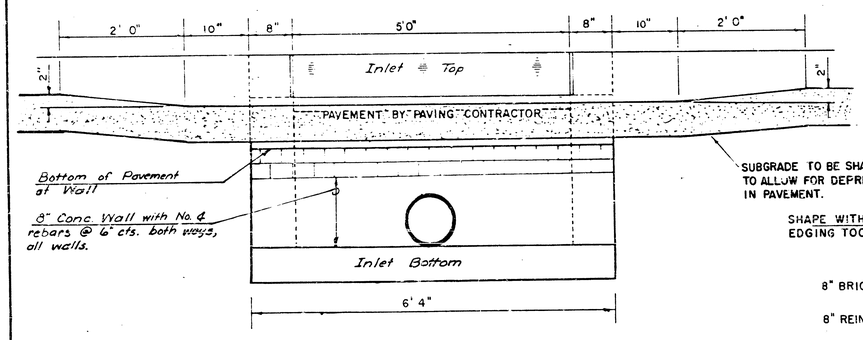
NOTE: CONTRACTOR SHALL HAVE THE OPTION OF CONSTRUCTING 8" BRICK MASONRY WALLS BETWEEN THE CONCRETE INLET BASE AND TOP ON THIS INLET WHEN W = 6'4" AND H = 7'0" OR LESS.

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.

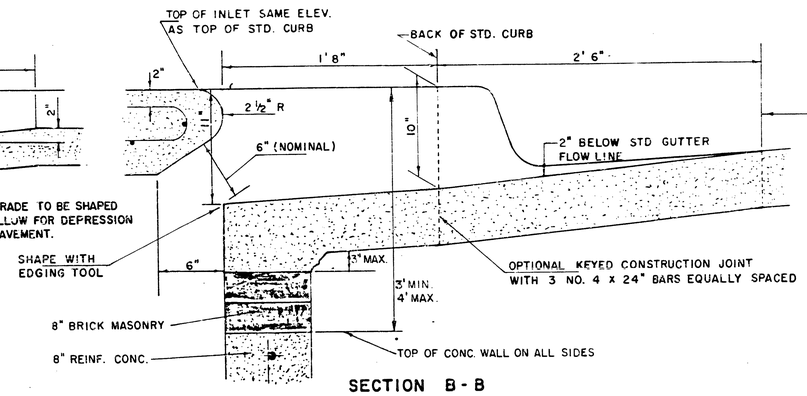
INLET INVERT SHALL BE SHAPED WITH 8 SACK SAND MIX CONCRETE TO CREATE FLOW CHANNELS AND TO INCREASE HYDRAULIC EFFICIENCY SUCH THAT THE INLET WILL BE SELF CLEANING BETWEEN ALL INLET AND/OR OUTLET PIPES.

THE ENDS OF ALL PIPES INSTALLED IN INLETS SHALL BE CUT OFF FLUSH WITH THE INSIDE FACE OF THE INLET WALL.

STANDARD CURB INLET PRECAST TOPS			
W	PRE-CAST TOP SIZE	PIPE SIZE	CU.YD. CONC.
4' 4"	3'8"x 6'4" x7 1/2"	21" & SMALLER	0.38 ±
5' 4"	4'8"x 6'4" x7 1/2"	24" & 30"	0.51 ±
6' 4"	5'8"x 6'4" x7 1/2"	36" & 42"	0.64 ±
7' 4"	6'8"x 6'4" x7 1/2"	48" & 54"	0.77 ±
8' 4"	7'8"x 6'4" x7 1/2"	60" & 66"	0.90 ±



SECTION C-C



SECTION B-B

REVISED 12-21-1984 Proj. No. 468 76 245 81537 000 000 001

DETAIL STANDARD TYPE IA CURB INLET

CITY OF WICHITA, KANSAS

INLET OPENING = 6" x 5' 0"

(L = 6'-4")

JUNE 1984

MANHOLE FRAME AND COVER DETAIL

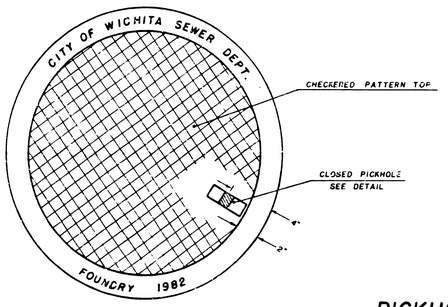
ADOPTED AS STANDARD DESIGN

BY

City of Wichita, Kansas

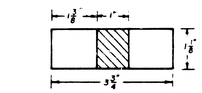
MANHOLE COVER

Weight: 180 Lbs.

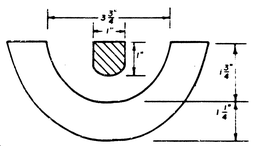


TOP VIEW

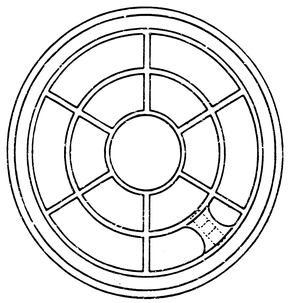
PICKHOLE DETAIL



TOP VIEW



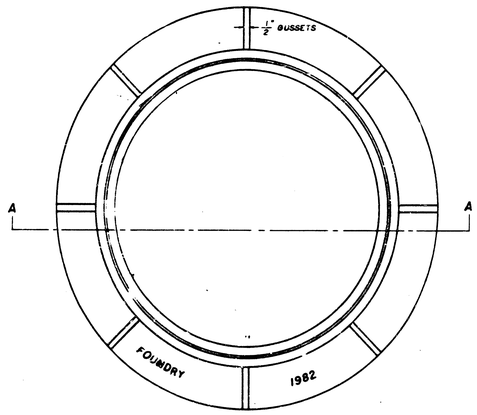
SECTION VIEW



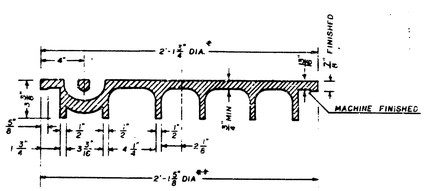
BOTTOM VIEW

MANHOLE FRAME

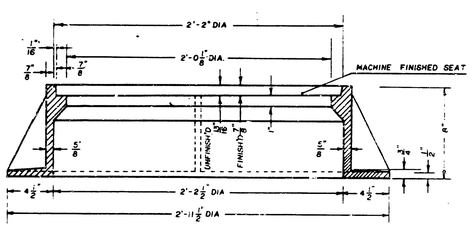
Weight: 240 Lbs.



TOP VIEW



SECTION VIEW



SECTION A-A

* OUTSIDE DIA TOP OF COVER

** OUTSIDE DIA BOTTOM OF COVER

GENERAL NOTES

1. MANHOLE CASTINGS SHALL BE MANUFACTURED USING GOOD QUALITY GRAY IRON CONFORMING TO CLASS 30 OF A.S.T.M. DESIGNATION A-48. DIMENSIONS AND WEIGHTS SHOWN ON THE DETAILED DRAWINGS SHALL BE CONSIDERED AS MINIMUM REQUIREMENTS AND ANY DEVIATIONS FROM THE DIMENSIONS SHOWN MUST BE SPECIFICALLY APPROVED. THE FINISHED CASTINGS SHALL BE OF UNIFORM QUALITY, FREE FROM BLOWHOLES, POROSITY, HARD SPOTS, SHRINKAGE DISTORTIONS OR OTHER DEFECTS.

2. MANHOLE CASTINGS SHALL BE COATED WITH AN ASPHALT PAINT RESULTING IN A SMOOTH, TOUGH AND TENACIOUS COATING WHICH IS NOT BRITTLE OR TACKY.

3. MANHOLE CASTINGS SHALL BE MANUFACTURED SUCH THAT A COVER MANUFACTURED BY ANY ONE FOUNDRY WILL FIT INTERCHANGEABLY INTO A FRAME MANUFACTURED BY ANOTHER FOUNDRY AND STILL MEET ALLOWABLE CLEARANCES AND NON-ROCKING REQUIREMENTS. THIS WILL REQUIRE MANUFACTURING OF THE MATCHING FACES ON THE COVER AND THE FRAME TO CLOSE TOLERANCES.

4. THE OUTSIDE CIRCUMFERENCE OF THE VERTICAL FACE OF THE COVER AND THE INSIDE CIRCUMFERENCE OF THE VERTICAL FACE IN THE FRAME RECESS SHALL BE MANUFACTURED TO TOLERANCES SUCH THAT THE CLEARANCE BETWEEN THE COVER AND FRAME WILL NOT EXCEED 1/8" AT ANY POINT AROUND THE CIRCUMFERENCE OF THE COVER. THE SEATING SURFACES BETWEEN THE COVER AND FRAME SHALL BE MACHINED SUCH THAT THESE SURFACES SHALL MAKE FULL CONTACT FOR THEIR FULL CIRCUMFERENCE TO PRECLUDE THE COVER FROM ROCKING IN THE FRAME.

5. THE MANHOLE FRAME AND COVER SHALL BE MARKED WITH LETTERING INDICATING THE NAME OF THE MANUFACTURER AND THE YEAR WHEN THE COVER OR FRAME WAS CAST. THE COVER SHALL BE FURTHER IDENTIFIED WITH REGARDS TO OWNERSHIP USING LETTERS AT LEAST 1" IN HEIGHT. THIS IDENTIFICATION SHALL BE "CITY OF WICHITA SEWER DEPARTMENT". THE WORD DEPARTMENT MAY BE ABBREVIATED. THE TEXTURE OF THE TOP SURFACE OF THE COVER SHALL BE MANUFACTURED IN A CHECKERED PATTERN DESIGN AS INDICATED ON THE DRAWINGS. SMOOTH BLOCKOUTS SHALL BE UTILIZED TO HIGHLIGHT THE LETTERING ON THE COVER SURFACE. THE TOTAL AREA OF SMOOTH SURFACE BLOCKOUT SHALL NOT EXCEED THE AREA AS INDICATED ON THE DRAWING. POSITIONING OF SMOOTH BLOCKOUTS AND LETTERING MAY VARY FROM THAT SHOWN ON THE DETAILED DRAWING.

JNL DEC. 1981

Proj. No. 468 76 245 81537 000 000 001