CITY OF WICHITA, KANSAS

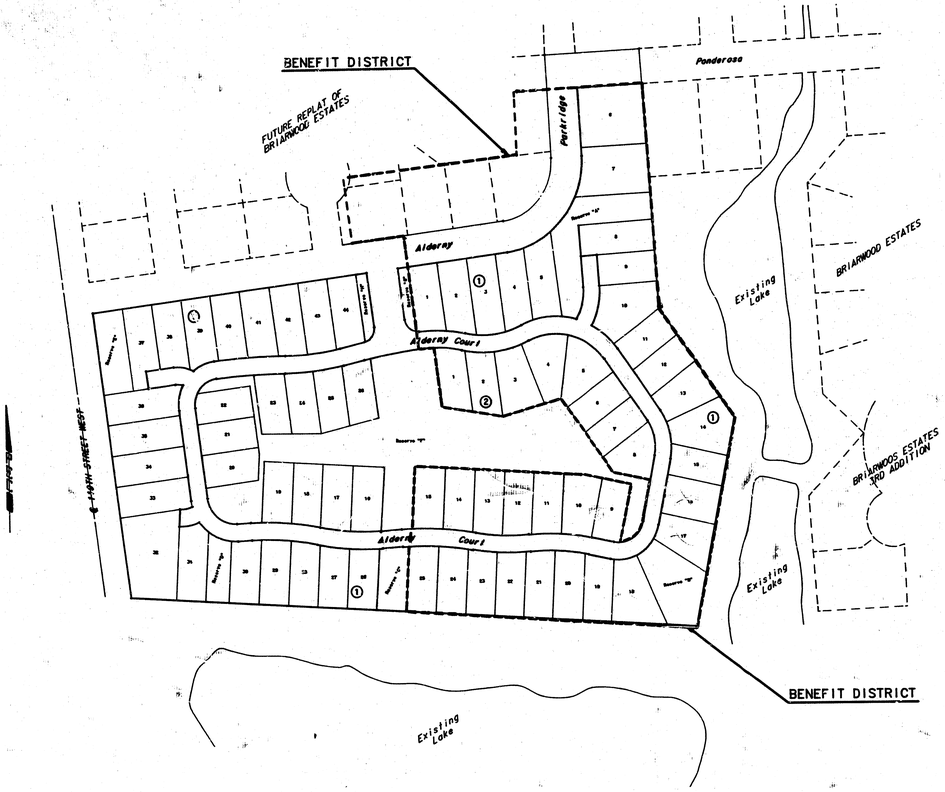
ALDERNY COURT - E. L. LOT 26, BLK. 1 TO S. L. ALDERNY
ALDERNY / PARKRIDGE - E. L. LOT 44, BLK. 1 TO S. L. PONDEROSA
PONDEROSA - W. L. PARKRIDGE TO E. L. BLK. 1

(BRIARWOOD ESTATES 4TH ADDITION)

CITY OF WICHITA PROJECT NO. 472-76-245-81375-000-000-001

INDEX OF SHEETS

SHEET NO. 1	TITLE SHEET
SHEET NO. 2	PLAT (SURVEY CONTROL)
SHEET NO. 3	TYPICAL SECTION
SHEET NO. 4-7	PLAN SHEETS
SHEET NO. 8	CURVE TABLES
SHEET NO. 9	PLAN-PROFILE STORM SEWER
SHEET NO. 10	STANDARD TYPE 1A CURB INLET
SHEET NO. 11	FRAME AND COVER DETAIL



GENERAL NOTES

1. EARTHWORK FOR THIS PROJECT SHALL BE PAID FOR AT THE CONTRACT LUMP SUM PRICE BID FOR THE ITEM "EARTHWORK". THIS WORK SHALL INCLUDE ALL EXCAVATION, COMPACTED FILL, MANIPULATED FILL, BORROW MATERIAL, LOOSE FILL, WASTE, WATER, AND INCIDENTALS NECESSARY TO BUILD THE SUBGRADE TO THE LINES AND GRADES SHOWN ON THE PLANS.

   THE CONTRACTOR SHALL VIEW THE SITE PRIOR TO SUBMITTING HIS BID TO ASCERTAIN THE SCOPE OF EARTHWORK INVOLVED BASED UPON EXISTING GRADE STAKES. ADDITIONAL MATERIAL FOR BORROW, IF REQUIRED IS AVAILABLE ON SITE.

2. ONLY ONE TYPE OF SUBGRADE STABILIZATION MATERIAL, PEBBLE LIME, SHALL BE ALLOWED. THE RATE OF APPLICATION SHALL BE DETERMINED BY CITY OF WICHITA PERSONNEL. THE QUANTITY OF PEBBLE LIME INCLUDED IN THE BID DOCUMENTS IS FOR THE SOLE PURPOSE OF SOLICITING COMPETITIVE BIDS.

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR SHALL 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 OR A LICENSED PROFESSIONAL ENGINEER IN ACCORDANCE WITH STATE LAW.

4. THE ASPHALTIC CONCRETE PAVEMENT BETWEEN THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 7" ASPHALTIC CONCRETE (5" BITUMINOUS BASE).

5. THE BITUMINOUS BASE UNDER AND BEHIND THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 2-1/2" BITUMINOUS BASE.

6. A TACK COAT OF EMULSIFIED ASPHALT (SC-1H OR CSS-1H) SHALL BE APPLIED AT AN APPROXIMATE RATE OF 0.05 GALLONS PER SQUARE YARD BETWEEN EACH LIFT OF ASPHALTIC MATERIAL.

7. BITUMINOUS BASE AND ASPHALTIC CONCRETE WEARING SURFACE SHALL BE PLACED WITH A LAYDOWN MACHINE HAVING AUTOMATIC CONTROLS FOR LINE AND GRADE.

8. CONSTRUCTION JOINTS IN EACH LIFT SHALL BE STAGGERED A MINIMUM DISTANCE OF ONE (1) FOOT FROM JOINTS IN PRECEDING LIFTS AND PLACED SO THAT A JOINT WILL BE CONSTRUCTED ON THE CENTERLINE OF THE TOP LIFT.

BRENT E. RANSBARGER LICENSED 6168 KANSAS PROFESSIONAL ENGINEER

JUNE, 1984

PLANS PREPARED BY

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

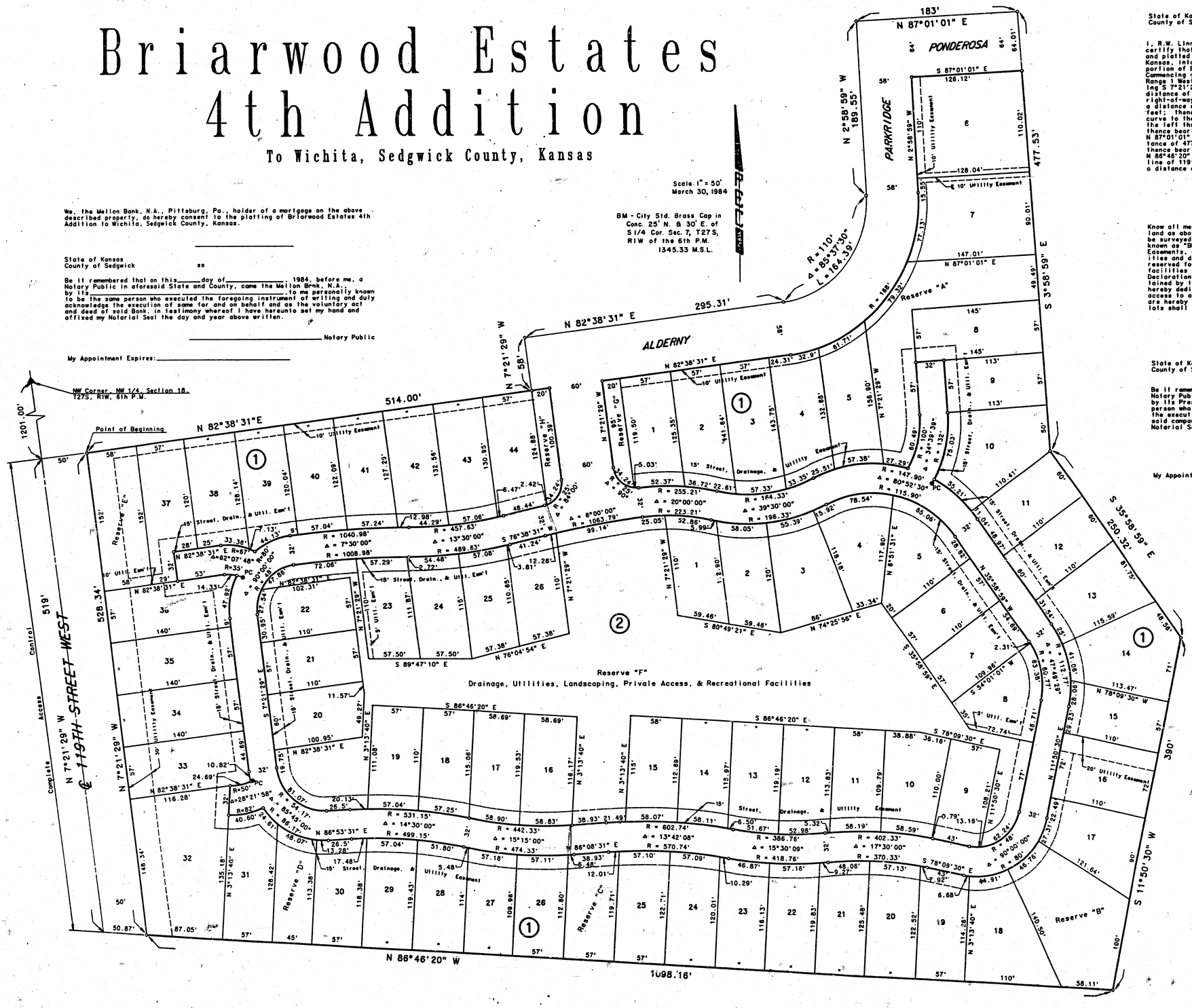
Note: Expansion Joints Shall Be Constructed At All Radius Points On This Project. A Radius Point Shall Be Defined To Include All P.C.'s, P.T.'s, P.R.C.'s & P.C.C.'s.

Briarwood Estates
4th Addition

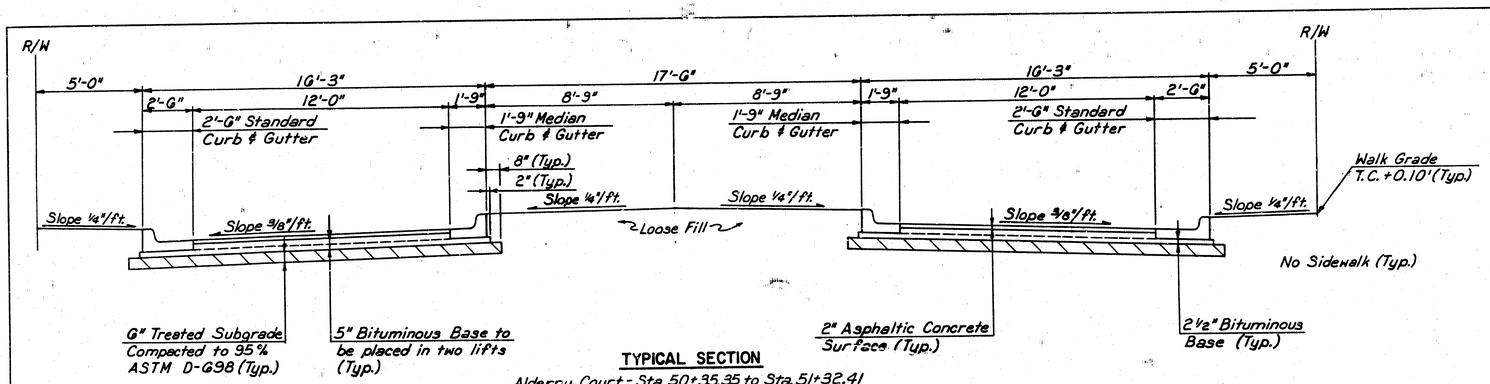
To Wichita, Sedgwick County, Kansas

Scale: 1" = 50'
March 30, 1984

BM - City Std. Brass Cap in Conc. 25' N. & 30' E. of S1/4 Cor. Sec. 7, T27S, R1W of the 6th P.M.
1345.33 M.S.L.

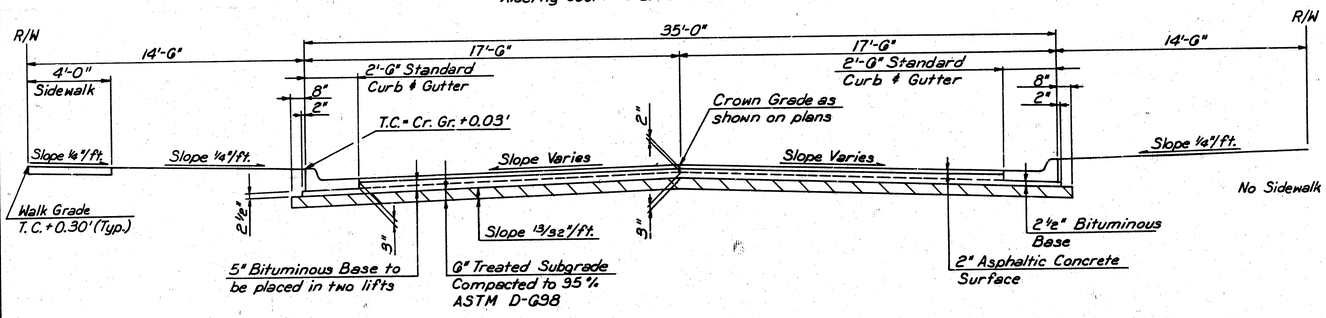

183'
N 87°01'01" E
PONDEROSA
64'
64.01'
S 87°01'01" E
126.12'
58'
N 2°58'59" W
189.55'
PARKRIDGE
N 2°58'59" W
110'
10' Utility Easement
6
110.02'
128.04'
10' Utility Easement
477.53'
7
90.01'
147.01'
N 87°01'01" E
S 3°58'59" E
49.49'
R=110'
Δ=85°37'30"
L=164.39'
77.13'
15.55'
R=148'
70.32'
Reserve "A"
N 82°38'31" E
295.31'
ALDERNY
N 7°21'29" W
58'
8
145'
57'
- 145'
113'
32'
9
113'
N 82°38'31" E
24.31'
32.9'
61.71'
10' Utility Easement
Reserve "C"
95'
1
2
3
4
5
156.90'
N 7°21'29" W
132.85'
119.50'
125.35'
141.64'
143.75'
10
50'
18' Street, Drain., & Util. Easement
75.03'
5.03'
15' Street, Drainage, & Utility Easement
57.38'
27.29'
52.37'
36.72'
22.61'
57.33'
33.35'
25.51'
R=147.90'
Δ=80°52'30"
R=115.90'
PC
60.49'
R=100'
Δ=34°39'30"
R=132'
35.21'
110.41'
11
60'
110'
15' Street, Drain., & Util. Easement
48.87'
S 35°58'59" E
250.32'
12
13
115.59'
31.54'
25.87'
41.04'
48.58'
1
14
71'
113.47'
N 78°09'30" W
15
110'
16
72'
20' Utility Easement
390'
S 11°50'30" W
17
121.64'
90'
Reserve "B"
140.50'
100'
58.11'
R=255.21'
Δ=20°00'00"
R=223.21'
R=164.33'
Δ=39°30'00"
R=196.33'
78.54'
15.92'
85.06'
55.39'
2.99'
58.05'
S 35°58'59" W
54.69'
R=115.71'
Δ=47°48'29"
R=68.77'
26.08'
N 11°50'30" E
77'
S 78°09'30" E
38.88'
36.16'
S 86°46'20" E
1098.16'
N 86°46'20" W
Reserve "D"
Reserve "E"
Reserve "F"
Drainage, Utilities, Landscaping, Private Access, & Recreational Facilities
Reserve "H"
100.39'
N 7°21'29" W
514.00'
N 82°38'31" E
Point of Beginning
NW Corner, NW 1/4, Section 18, T27S, R1W, 6th P.M.
1201.00'
50'
519'
Control Access Complete
528.34'
N 7°21'29" W
℄ 119TH STREET WEST
50.87'
87.05'
148.34'
135.18'
N 3°13'40" E
128.42'
113.38'
118.38'
119.43'
114'
108.98'
112.80'
119.71'
122.71'
120.01'
118.13'
119.83'
125.48'
122.52'
114.28'
N 3°13'40" E
44.91'
6.68'
10.29'
46.87'
57.16'
57.13'
48.06'
9.27'
43'
2.92'
S 78°09'30" E
46.76'
62.24'
R=48'
Δ=90°00'00"
R=80'
57.31'
22.48'
R=531.15'
Δ=14°30'00"
R=499.15'
R=442.33'
Δ=15°15'00"
R=474.33'
R=602.74'
Δ=13°42'08"
R=570.74'
R=386.76'
Δ=15°30'09"
R=418.76'
R=402.33'
Δ=17°30'00"
R=370.33'
N 86°53'31" E
N 86°08'31" E
S 86°46'20" E
57.04'
51.80'
57.18'
57.11'
57.10'
57.09'
58.90'
58.83'
58.07'
58.11'
58.19'
58.59'
38.93'
6.48'
12.01'
6.50'
5.32'
51.67'
52.98'
0.79'
13.16'
108.21'
N 11°50'30" E
77'
26.5'
13.28'
17.48'
15' Street, Drainage, & Utility Easement
5.48'
10.82'
24.69'
R=50'
Δ=28°21'58"
R=82'
40.60'
24.61'
R=84.17'
Δ=85°45'00"
R=86.17'
48.07'
N 82°38'31" E
116.28'
N 7°21'29" W
R=35'
Δ=62°07'48"
R=60'
Δ=90°00'00"
R=60'
47.88'
N 82°38'31" E
14.33'
R=67'
PC
44.13'
7.13'
33.36'
28'
25'
53'
29'
58'
10' Utility Easement
152'
152'
Reserve "G"
Reserve "E"
15' Street, Drain., & Util. Easement
57.04'
57.24'
12.98'
44.29'
57.06'
6.47'
2.42'
48.44'
57.63'
R=457.63'
Δ=13°30'00"
R=489.63'
R=1040.98'
Δ=7°30'00"
R=1008.98'
57.08'
54.48'
2.72'
3.81'
12.26'
57.29'
72.06'
S 76°38'31" W
41.24'
N 7°21'29" W
110'
N 82°38'31" E
102.31'
30.35'
27.34'
S 7°21'29" E
15' Street, Drain., & Util. Easement
5' Utility Easement
57.50'
57.50'
57.38'
57.38'
S 89°47'10" E
N 76°04'54" E
R=1063.79'
Δ=6°00'00"
99.14'
25.05'
32.86'
2.99'
58.05'
59.46'
59.46'
S 80°49'21" E
N 74°25'56" E
R=1083.79'
Δ=6°00'00"
117.90'
N 8°51'31" E
118.18'
33.34'
86'
20'
S 54°01'01" W
109.96'
2.31'
S 35°58'59" E
63.38'
R=68.77'
Δ=47°48'29"
R=115.71'
26.08'
28.23'
72.74'
46.71'
35'
3' Utility Easement
S 78°09'30" E
S 11°50'30" E
N 11°50'30" E
77'
S 35°58'59" E
S 35°58'59" W
N 35°58'59" W
S 7°21'29" E
N 7°21'29" W
N 7°21'29" W
N 7°21'29" W

PROJECT NO.	SHEET NO.	TOTAL SHEETS
472-76-245-81375-000-000-001	3	11



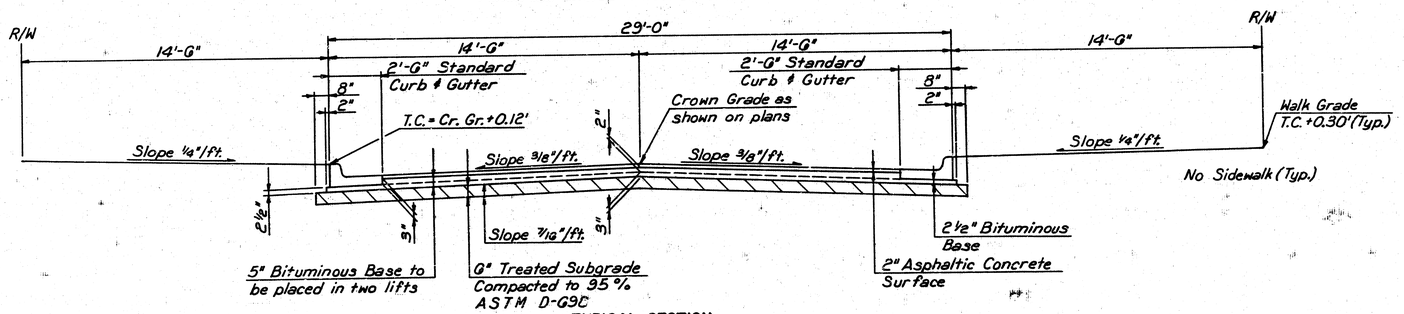
TYPICAL SECTION

Alderny Court - Sta. 50+35.35 to Sta. 51+32.41



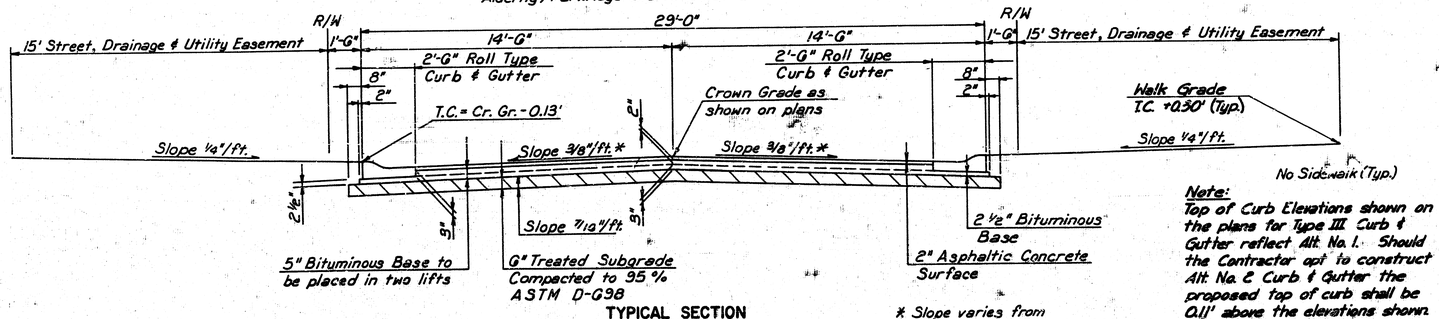
TYPICAL SECTION

Ponderosa - Sta. 90+34.00 to Sta. 91+50.77



TYPICAL SECTION

Alderny / Parkridge - Sta. 70+44.50 to Sta. 75+73.59

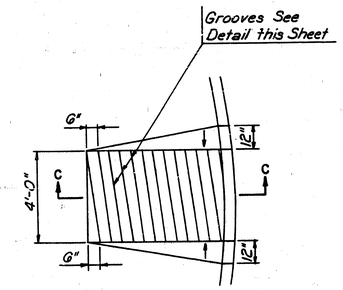


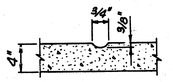
TYPICAL SECTION

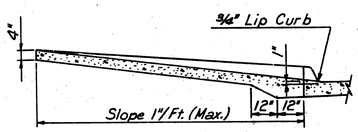
Alderny Court - Sta. 20+00 to Sta. 33+98.62
Alderny Court - Sta. 40+30.27 to Sta. 41+35.88

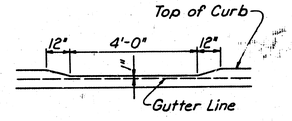
* Slope varies from Sta. 40+30.27 to Sta. 41+35.88

Note:
Top of Curb Elevations shown on the plans for Type III Curb & Gutter reflect Alt. No. 1. Should the Contractor opt to construct Alt. No. 2 Curb & Gutter the proposed top of curb shall be 0.11' above the elevations shown.

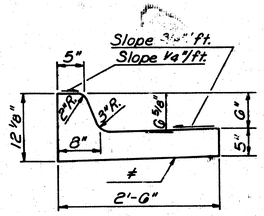


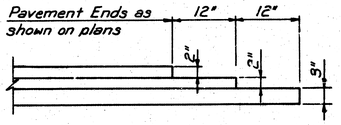




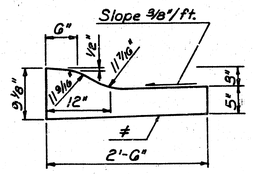


WHEELCHAIR RAMP DETAILS

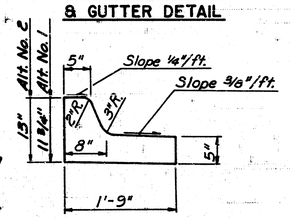




Transverse Construction Joints shall be constructed in flexible base pavements at locations where pavement temporarily ends to facilitate future pavement construction as shown by detail. The cost of constructing the Transverse Construction Joint shall not be measured or paid for directly, but shall be included in the price bid for square yard of asphaltic concrete pavement.



≠ Slope 7/16"/ft. (35' Pavement)
≠ Slope 15/32"/ft. (29' Pavement)



TYPICAL SECTIONS

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

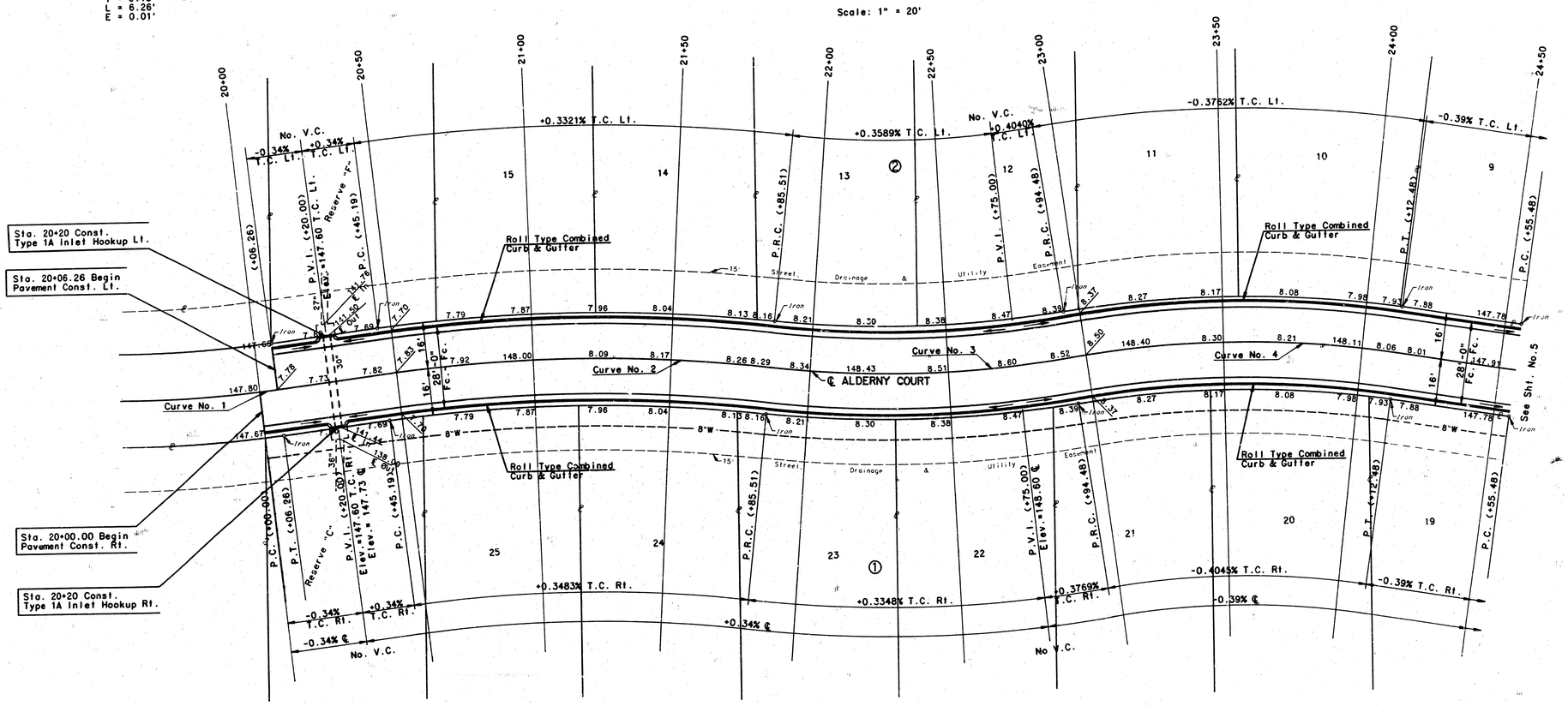
3/10

Designed by	BER	Checked by	
Drawn by	JGP	Date June, 1984	Job No. 83713-1

Curve No. 1
P.I. Sta. 20+03.13 (Bk.) =
P.I. Sta. 20+03.13 (Ahd.)
℄ Curve Data
Δ = 0° 46' 57"
D = 12° 30' 04"
R = 458.33'
T = 3.13'
L = 6.26'
E = 0.01'

Curve No. 3
P.I. Sta. 22+40.33 (Bk.) =
P.I. Sta. 22+39.66 (Ahd.)
℄ Curve Data
Δ = 15° 30' 09"
D = 14° 13' 33"
R = 402.76'
T = 54.82'
L = 108.97'
E = 3.71'

Scale: 1" = 20'



Curve No. 2
P.I. Sta. 21+15.69 (Bk.) =
P.I. Sta. 21+15.01 (Ahd.)
℄ Curve Data
Δ = 13° 42' 08"
D = 9° 45' 54"
R = 586.74'
T = 70.50'
L = 140.32'
E = 4.22'

See Shl. No.8 for Curve Tables

Curve No. 4
P.I. Sta. 23+53.94 (Bk.) =
P.I. Sta. 23+53.02 (Ahd.)
℄ Curve Data
Δ = 17° 30' 00"
D = 14° 49' 51"
R = 386.33'
T = 59.46'
L = 118.00'
E = 4.55'

No.	Revision	By	Date

ALDERNY COURT
STA. 20+00 TO STA. 24+50

Proj. No. 472-76-245-81375-000-000-001

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

Designed by BER	Job No. 83713-1	Shl. 4 of 11
Drawn by YODA, JGP	Date June, 1984	

4/10

Scale: 1" = 20'

Curve No. 5

P.I. Sta. 25+19.48 (Bk.) =
P.I. Sta. 24+92.01 (Ahd.)

℄ Curve Data

Δ = 90° 00' 00"
D = 89° 31' 29"
R = 64.00'
T = 64.00'
L = 100.53'
E = 26.51'

Curve No. 6

P.I. Sta. 27+22.64 (Bk.) =
P.I. Sta. 27+17.59 (Ahd.)

℄ Curve Data

Δ = 47° 49' 29"
D = 59° 12' 30"
R = 96.77'
T = 42.91'
L = 80.77'
E = 9.09'

See Sht. No.8 for Curve Tables

Roll Type Combined Curb & Gutter

See Sht. No.4

Roll Type Combined Curb & Gutter

Roll Type Combined Curb & Gutter

See Sht. No.6

Roll Type Combined Curb & Gutter

-0.39% T.C. Rt.

+0.39% T.C. Lt.

16' 16'
28'-0" Fc.-Fc.

8" W

147.78

147.91

147.89

24+50

P.C. (+55.48)

-0.4753% T.C. Lt.

+0.4753% T.C. Lt.

+0.39% T.C.

+0.4560% T.C.Lt.

P.T. (+60.50)

Sta. 25+25 Const. Type 1A Inlet Hookup Lt.

Reserve "F"

15' Street, Drainage, & Utility Easement

8" San. Sew.

P.T. (+56.01)

P.C. (+79.73)

Curve No.5

Curve No.6

℄ ALDERNY COURT

-0.32% T.C. Rt.

-0.39% ℄

Reserve "F" (+55.00)

P.V.I. (+55.00)

25+00

Sta. 25+25 Const. Type 1A Inlet Hookup Rt.

No. V.C.

+0.32% T.C. Rt.

+0.39% T.C. Rt.

+0.39% ℄

+0.34074% T.C. Rt.

27+50

28+00

28+50

29+00

25+50

26+00

26+50

27+00

No.	Revision	By	Date

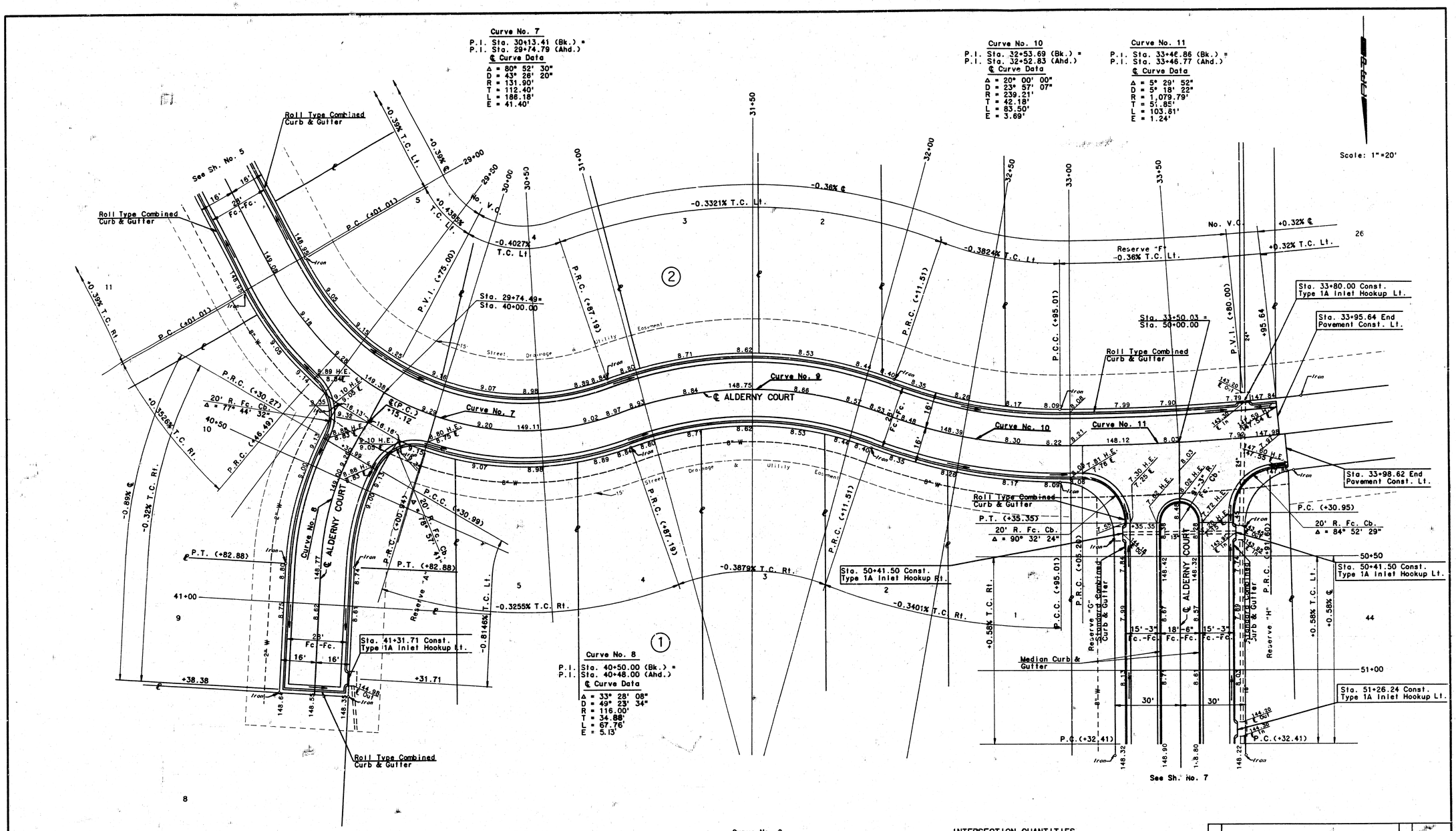
ALDERNY COURT
STA. 24+50 TO STA. 29+00

Proj. No. 472-76-245-81375-000-000-001

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

5/10

Designed by BER	Job No. 83713-1	Sht. 5 of 11
Drawn by Yoda, JGP	Date July, 1984	



Curve No. 8
P.I. Sta. 40+50.00 (Bk.) =
P.I. Sta. 40+48.00 (Ahd.)
℄ Curve Data
Δ = 33° 28' 08"
D = 49° 23' 34"
R = 116.00'
T = 34.88'
L = 67.76'
E = 5.13'

Curve No. 9
P.I. Sta. 31+52.25 (Bk.) =
P.I. Sta. 31+47.07 (Ahd.)
℄ Curve Data
Δ = 39° 30' 00"
D = 31° 46' 22"
R = 180.33'
T = 64.75'
L = 124.32'
E = 11.27'

INTERSECTION QUANTITIES

141.32 S.Y. 7" Asphaltic Concrete Pavement (5" Bit. Base)
16.77 S.Y. 2 1/2" Bituminous Base
161.00 S.Y. Manipulation
2.01 Tons Pebble Lime
54.70 L.F. Combined Curb & Gutter (Roll Type)

INTERSECTION QUANTITIES

239.00 S.Y. 7" Asphaltic Concrete Pavement (5" Bit. Base)
28.57 S.Y. 2 1/2" Bituminous Base
274.25 S.Y. Manipulation
3.43 Tons Pebble Lime
72.65 L.F. Combined Curb & Gutter (Roll Type)
29.06 L.F. 1'-9" Median Curb & Gutter

No.	Revision	By	Date

ALDERNY COURT

STA. 29+00 TO STA. 33+98.62

Proj. No. 472-76-245-81375-000-000-001

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

6/10

Designed by BER	Job No. 83713-1	Sht. 6 of 11
Drawn by Yoda, JGP	Date July, 1984	

INTERSECTION QUANTITIES

390.16 S.Y. 7" Asphaltic Concrete Pavement (5" Bit. Base)
38.52 S.Y. 2 1/2" Bituminous Base
435.48 S.Y. Manipulation
5.44 Tons Pebble Lime
125.68 L.F. Combined Curb & Gutter (Standard)
1 Each Wheelchair Ramp

Scale 1"=20'

See Sh. No. 8 for Curve Table

Curve No. 12
P.I. Sta. 73+74.08(Bk.)=
P.I. Sta. 73+24.27(Ahd.)
℄ Curve Data
Δ = 85° 37' 30"
D = 41° 13' 12"
R = 139.00'
T = 128.77'
L = 207.73'
E = 50.48'

INTERSECTION QUANTITIES

239.84 S.Y. 7" Asphaltic Concrete Pavement (5" Bit. Base)
27.28 S.Y. 2 1/2" Bituminous Base
272.21 S.Y. Manipulation
3.40 Tons Pebble Lime
68.34 L.F. Combined Curb & Gutter (Standard)
29.06 L.F. Median Curb & Gutter

Sta. 89+60.67 Const. Type 1A Inlet Hookup Adjust Inlet Top Elev. = 148.47

Const. Wheelchair Ramp

Sta. 90+37.97 Const. Type 1A Inlet Hookup Adjust Inlet Top Elev. = 147.81

4"x4' Conc. Sidewalk

Standard Combined Curb & Gutter

-1.3530% T.C. Lt. -1.50% ℄ Wk. Gr. +0.3'

183'

℄ PONDEROSA

Sta. 78+10.59 Parkridge = Sta. 90+00.00 Ponderosa

P.C. (+73.59)

20' R. Fc. Cb. (Typ.) Δ = 90° 00' 00"

Sta. 91+50.77 End Pavement Const.

Sta.75+67.42 Const. Type 1A Inlet Hookup Lt.

75+50

75+00

74+50

74+00

73+50

73+00

72+50

72+00

71+50

71+00

70+50

70+00

69+50

-1.3188% T.C. Rt.

+0.36% T.C. Lt.

+0.36% T.C. Rt.

-0.8406% T.C. Rt.

+0.1260% T.C. Rt.

-0.92% T.C. Rt.

+0.32% T.C. Rt.

-0.32% T.C. Lt.

+0.32% T.C. Lt.

-0.92% ℄

No V.C.

50' V.C.

P.V.I. (+75.00)

P.V.I. (+50.00)

P.V.I. Elev.=149.18 ℄

P.V.T. (+75.00)

P.V.C. (+25.00)

P.C. (+45.31)

P.V.T. (+90.00)

P.V.I. (+65.00)

P.V.I. Elev.=147.24 ℄

P.V.C. (+40.00)

P.T. (+66.00)

P.T. (+34.00)

P.T. (+53.04)

P.C. (+32.41)

P.T. (+45.50)

Sta. 69+50.00 Begin Pavement Const.

Sta.69+75 Const. Type 1A Inlet Hookup

Sta. 70+00.00 Alderny = Sta. 51+86.43 Alderny Court

Standard Combined Curb & Gutter

℄ ALDERNY

℄ PARKRIDGE

Curve No. 12

Sta.73+75 Const. Type 1A Inlet Hookup L.

Sta.73+75 Const. Type 1A Inlet Hookup Rt.

Reserve "A" (+65.00)

Reserve "H"

Reserve "G"

8" W

8" San. Sewer

Fc.-Fc.

10' Utility Easement

20' Utility Easement

Match Existing

℄ Transition to Match Existing

See Sh. No. 6

No.	Revision	By	Date

ALDERNY / PARKRIDGE
STA. 69+50.00 TO STA. 76+10.59
PONDEROSA
STA. 90+00.00 TO STA. 91+50.77
Proj. No. 472-78-245-81375-000-000-001

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

Designed by BER	Job No. 83713-1	Sht. 7 of 11
Drawn by Yoda, JGP	Date July, 1984	

PROJECT NO.	SHEET NO.	TOTAL SHEETS
472-76-245-81375-000-000-001	8	11

CURVE NO. 1

℄ CURVE DATA

Δ=0°46'57" D=12°30'04" R=458.33' L=6.26' T=3.13' E=0.01'

CURVE DATA BASED ON ℄ RADIUS Δ/2=0°23'28.5"

℄ STATION	℄ ARC LENGTH	CHORD LENGTH 8' OFF LEFT FACE CURB	CHORD LENGTH 8' OFF RIGHT FACE CURB	℄ DEFLECTION ANGLE	℄ TOTAL DEFLECTION
20+00.00	——	——	——	——	——
20+06.26	6.26'	——	6.56'	0°23'28.5"	0°23'28.5"

CURVE NO. 2

℄ CURVE DATA

Δ=13°42'08" D=9°45'54" R=586.74' L=140.32' T=70.50' E=4.22'

CURVE DATA BASED ON ℄ RADIUS Δ/2=6°51'04"

℄ STATION	℄ ARC LENGTH	CHORD LENGTH 8' OFF LEFT FACE CURB	CHORD LENGTH 8' OFF RIGHT FACE CURB	℄ DEFLECTION ANGLE	℄ TOTAL DEFLECTION
20+45.19	——	——	——	——	——
20+50.00	4.81'	4.99'	4.63'	0°14'06"	0°14'06"
20+75.00	25.00'	25.93'	24.06'	1°13'14"	1°27'20"
21+00.00	25.00'	25.93'	24.06'	1°13'14"	2°40'34"
21+25.00	25.00'	25.93'	24.06'	1°13'14"	3°53'48"
21+50.00	25.00'	25.93'	24.06'	1°13'14"	5°07'02"
21+75.00	25.00'	25.93'	24.06'	1°13'14"	6°20'16"
21+85.51	10.51'	10.91'	10.12'	0°30'48"	6°51'04"

CURVE NO. 3

℄ CURVE DATA

Δ=15°30'09" D=14°13'33" R=402.76' L=108.97' T=54.82' E=3.71'

CURVE DATA BASED ON ℄ RADIUS Δ/2=7°45'04.5"

℄ STATION	℄ ARC LENGTH	CHORD LENGTH 8' OFF LEFT FACE CURB	CHORD LENGTH 8' OFF RIGHT FACE CURB	℄ DEFLECTION ANGLE	℄ TOTAL DEFLECTION
21+85.51	——	——	——	——	——
22+00.00	14.49'	13.70'	15.28'	1°01'50.4"	1°01'50.4"
22+25.00	25.00'	23.63'	26.36'	1°46'42"	2°48'32.4"
22+50.00	25.00'	23.63'	26.36'	1°46'42"	4°35'14.4"
22+75.00	25.00'	23.63'	26.36'	1°46'42"	6°21'56.4"
22+94.48	19.48'	18.41'	20.54'	1°23'08.1"	7°45'04.5"

CURVE NO. 4

℄ CURVE DATA

Δ=17°30'00" D=14°49'51" R=386.33' L=118.00' T=59.46' E=4.55'

CURVE DATA BASED ON ℄ RADIUS Δ/2=8°45'00"

℄ STATION	℄ ARC LENGTH	CHORD LENGTH 8' OFF LEFT FACE CURB	CHORD LENGTH 8' OFF RIGHT FACE CURB	℄ DEFLECTION ANGLE	℄ TOTAL DEFLECTION
22+94.48	——	——	——	——	——
23+00.00	5.52'	5.83'	5.20'	0°24'33"	0°24'33"
23+25.00	25.00'	26.42'	23.57'	1°51'14"	2°15'47"
23+50.00	25.00'	26.42'	23.57'	1°51'14"	4°07'01"
23+75.00	25.00'	26.42'	23.57'	1°51'14"	5°58'15"
24+00.00	25.00'	26.42'	23.57'	1°51'14"	7°49'29"
24+12.48	12.48'	13.19'	11.77'	0°55'31"	8°45'00"

CURVE NO. 5

℄ CURVE DATA

Δ=90°00'00" D=89°31'29" R=64.00' L=100.53' T=64.00' E=26.51'

CURVE DATA BASED ON ℄ RADIUS Δ/2=45°00'00""

℄ STATION	℄ ARC LENGTH	CHORD LENGTH 8' OFF LEFT FACE CURB	CHORD LENGTH 8' OFF RIGHT FACE CURB	℄ DEFLECTION ANGLE	℄ TOTAL DEFLECTION
24+55.48	——	——	——	——	——
24+75.00	19.52'	12.76'	28.13'	8°44'16"	8°44'16"
25+00.00	25.00'	16.30'	33.38'	11°11'26"	19°55'42"
25+25.00	25.00'	16.30'	33.38'	11°11'26"	31°07'08"
25+50.00	25.00'	16.30'	33.38'	11°11'26"	42°18'34"
25+56.01	6.01'	3.94'	8.07'	2°41'26"	45°00'00"

CURVE NO. 6

℄ CURVE DATA

Δ=47°49'29" D=59°12'30" R=96.77' L=80.77' T=42.91' E=9.09'

CURVE DATA BASED ON ℄ RADIUS Δ/2=23°54'44.5"

℄ STATION	℄ ARC LENGTH	CHORD LENGTH 8' OFF LEFT FACE CURB	CHORD LENGTH 8' OFF RIGHT FACE CURB	℄ DEFLECTION ANGLE	℄ TOTAL DEFLECTION
26+79.73	——	——	——	——	——
27+00.00	20.27'	15.63'	24.83'	6°00'04"	6°00'04"
27+25.00	25.00'	19.26'	30.60'	7°24'05"	13°24'09"
27+50.00	25.00'	19.26'	30.60'	7°24'05"	20°48'14"
27+60.50	10.50'	8.11'	12.88'	3°06'30.5"	23°54'44.5"

CURVE NO. 7

℄ CURVE DATA

Δ=80°52'30" D=43°26'20" R=131.90' L=186.18' T=112.40' E=41.40'

CURVE DATA BASED ON ℄ RADIUS Δ/2=40°26'15"

℄ STATION	℄ ARC LENGTH	CHORD LENGTH 8' OFF LEFT FACE CURB	CHORD LENGTH 8' OFF RIGHT FACE CURB	℄ DEFLECTION ANGLE	℄ TOTAL DEFLECTION
29+01.01	——	——	——	——	——
29+25.00	23.99'	19.96'	27.95'	5°12'38"	5°12'38"
29+48.49	21.49'	17.89'	25.05'	4°40'03"	9°52'41"
29+50.00	3.51'	2.92'	4.09'	0°45'44"	10°38'25"
29+75.00	25.00'	20.80'	29.13'	5°25'48"	16°04'13"
30+00.00	25.00'	20.80'	29.13'	5°25'48"	21°30'01"
30+00.94	0.94'	0.78'	1.10'	0°12'15"	21°42'16"
30+25.00	24.06'	20.02'	28.03'	5°13'32"	26°55'48"
30+50.00	25.00'	20.80'	29.13'	5°25'48"	32°21'36"
30+75.00	25.00'	20.80'	29.13'	5°25'48"	37°47'24"
30+87.19	12.19'	10.15'	14.22'	2°38'51"	40°26'15"

CURVE NO. 8

℄ CURVE DATA

Δ=33°28'08" D=49°23'34" R=116.00' L=67.76' T=34.88' E=5.13'

CURVE DATA BASED ON ℄ RADIUS Δ/2=16°44'04"

℄ STATION	℄ ARC LENGTH	CHORD LENGTH 8' OFF LEFT FACE CURB	CHORD LENGTH 8' OFF RIGHT FACE CURB	℄ DEFLECTION ANGLE	℄ TOTAL DEFLECTION
40+15.12	——	——	——	——	——
40+30.27	15.15'	12.27'	18.01'	3°44'30"	3°44'30"
40+30.99	0.72'	0.58'	0.86'	0°10'40"	3°55'10"
40+50.00	19.01'	15.39'	22.59'	4°41'41"	8°36'51"
40+75.00	25.00'	20.22'	29.68'	6°10'27"	14°47'18"
40+82.88	7.88'	6.38'	9.37'	1°56'46"	16°44'04"

CURVE NO. 9

℄ CURVE DATA

Δ=39°30'00" D=31°46'22" R=180.33' L=124.32' T=64.75' E=11.27'

CURVE DATA BASED ON ℄ RADIUS Δ/2=19°45'00"

℄ STATION	℄ ARC LENGTH	CHORD LENGTH 8' OFF LEFT FACE CURB	CHORD LENGTH 8' OFF RIGHT FACE CURB	℄ DEFLECTION ANGLE	℄ TOTAL DEFLECTION
30+87.19	——	——	——	——	——
31+00.00	12.81'	14.37'	11.24'	2°02'06"	2°02'06"
31+25.00	25.00'	28.03'	21.93'	3°58'18"	6°00'24"
31+50.00	25.00'	28.03'	21.93'	3°58'18"	9°58'42"
31+75.00	25.00'	28.03'	21.93'	3°58'18"	13°57'00"
32+00.00	25.00'	28.03'	21.93'	3°58'18"	17°55'18"
32+11.51	11.51'	12.91'	10.10'	1°49'42"	19°45'00"

CURVE NO. 10

℄ CURVE DATA

Δ=20°00'00" D=23°57'07" R=239.21' L=83.50' T=42.18' E=3.69'

CURVE DATA BASED ON ℄ RADIUS Δ/2=10°00'00"

℄ STATION	℄ ARC LENGTH	CHORD LENGTH 8' OFF LEFT FACE CURB	CHORD LENGTH 8' OFF RIGHT FACE CURB	℄ DEFLECTION ANGLE	℄ TOTAL DEFLECTION
32+11.51	——	——	——	——	——
32+25.00	13.49'	12.25'	14.73'	1°36'56"	1°36'56"
32+50.00	25.00'	22.69'	27.29'	2°59'38.5"	4°36'34.5"
32+75.00	25.00'	22.69'	27.29'	2°59'38.5"	7°36'13"
32+95.01	20.01'	18.16'	21.84'	2°23'47"	10°00'00"

CURVE NO. 11

℄ CURVE DATA

Δ=5°29'52" D=5°18'22" R=1,079.79' L=103.61' T=51.85' E=1.24'

CURVE DATA BASED ON ℄ RADIUS Δ/2=2°44'56"

℄ STATION	℄ ARC LENGTH	CHORD LENGTH 8' OFF LEFT FACE CURB	CHORD LENGTH 8' OFF RIGHT FACE CURB	℄ DEFLECTION ANGLE	℄ TOTAL DEFLECTION
32+95.01	——	——	——	——	——
33+00.00	4.99'	4.89'	5.10'	0°07'57"	0°07'57"
33+05.20	5.20'	5.10'	5.31'	0°08'17"	0°16'14"
33+25.00	19.80'	19.40'	20.20'	0°31'31"	0°47'45"
33+50.00	25.00'	24.50'	25.51'	0°39'48"	1°27'33"
33+75.00	25.00'	24.50'	25.51'	0°39'48"	2°07'21"
33+91.60	16.60'	16.26'	16.93'	0°26'25"	2°33'46"
33+95.64	4.04'	3.96'	4.12'	0°06'26"	2°40'12"
33+98.62	2.98'	2.91'	3.03'	0°04'44"	2°44'56"

CURVE NO. 12

℄ CURVE DATA

Δ=85°37'30" D=41°13'12" R=139.00' L=207.73' T=128.77' E=50.48'

CURVE DATA BASED ON ℄ RADIUS Δ/2=42°48'45"

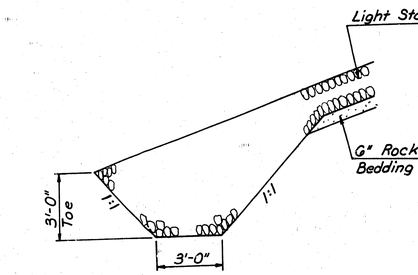
℄ STATION	℄ ARC LENGTH	CHORD LENGTH 8' OFF LEFT FACE CURB	CHORD LENGTH 8' OFF RIGHT FACE CURB	℄ DEFLECTION ANGLE	℄ TOTAL DEFLECTION
72+45.31	——	——	——	——	——
72+50.00	4.69'	3.95'	5.43'	0°57'59"	0°57'59"
72+75.00	25.00'	21.01'	28.92'	5°09'09"	6°07'08"
73+00.00	25.00'	21.01'	28.92'	5°09'09"	11°16'17"
73+25.00	25.00'	21.01'	28.92'	5°09'09"	16°25'26"
73+30.00	25.00'	21.01'	28.92'	5°09'09"	21°34'35"
73+75.00	25.00'	21.01'	28.92'	5°09'09"	26°43'44"
74+00.00	25.00'	21.01'	28.92'	5°09'09"	31°52'53"
74+25.00	25.00'	21.01'	28.92'	5°09'09"	37°02'02"
74+50.00	25.00'	21.01'	28.92'	5°09'09"	42°11'11"
74+53.04	3.04'	2.56'	3.52'	0°37'34"	42°48'45"

CURVE TABLES

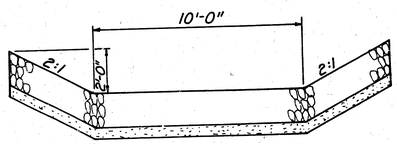
PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
ENGINEERS
WICHITA, KANSAS

8/10

Designed by	BER	Checked by	
Drawn by	Yoda, JGP	Date July, 1984	Job No. 8371-3-1

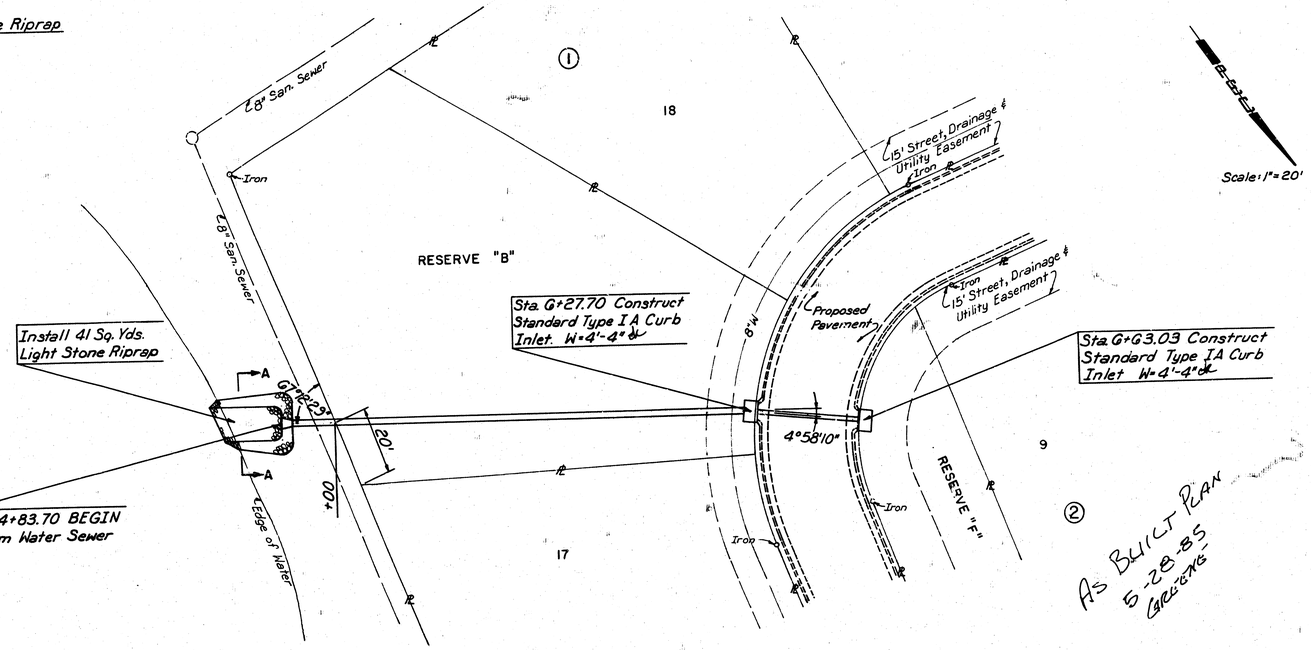


TOE DETAIL



SECTION A-A

LIGHT STONE RIPRAP DETAILS



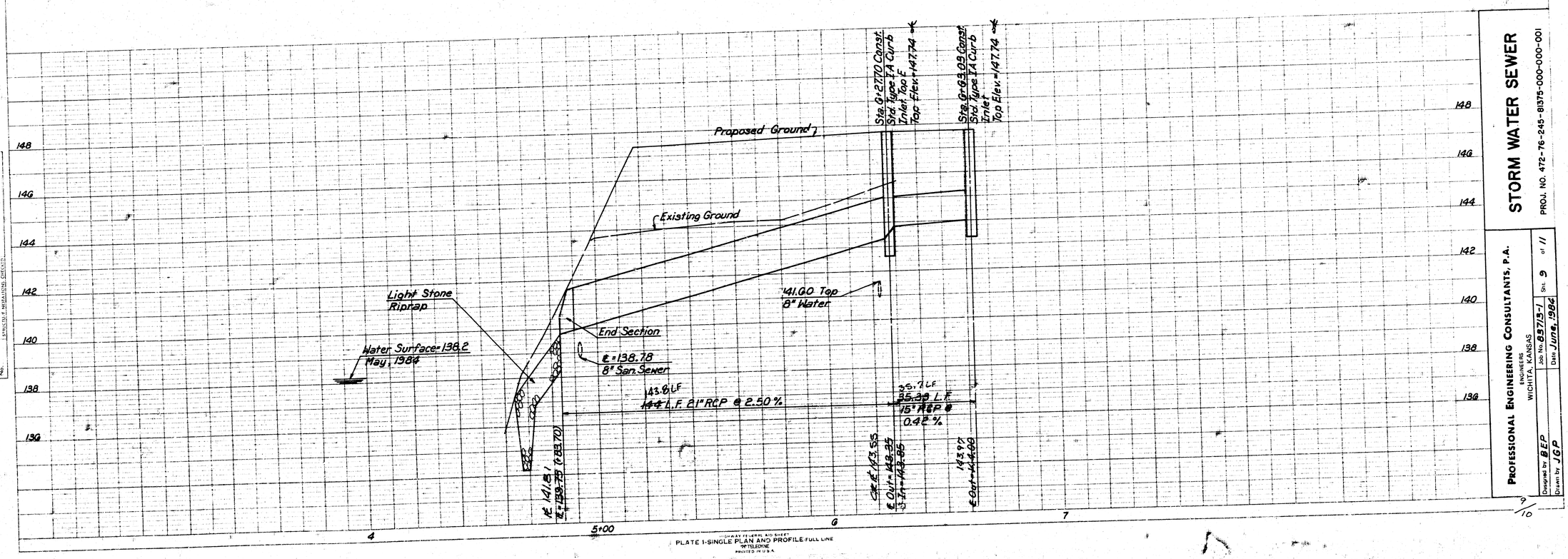


PLATE 1-SINGLE PLAN AND PROFILE-FULL LINE

HIGHWAY FEDERAL AID SHEET
7P TELEDYNE
PRINTED IN U.S.A.

PLAN SURVEYED / DRAWN / NOTE BOOK, GRADES CHECKED / No. / # "K" POINTS / CONTROL STATIONS CHECKED / BY / DATE

PROFILE SURVEYED / DRAWN / NOTE BOOK, GRADES CHECKED / No. / CONTROL STATIONS CHECKED / BY / DATE

STORM WATER SEWER

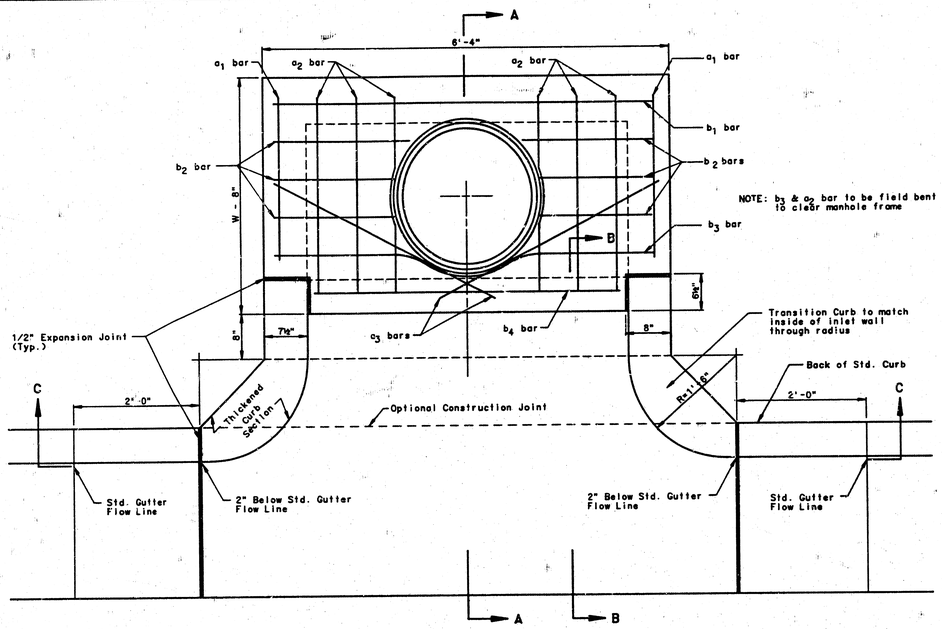
PROJ. NO. 472-76-245-81375-000-000-001

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

Designed by BEP | Job No. 83713-1 | Sht. 9 of 11
Drawn by JGP | Date June, 1984

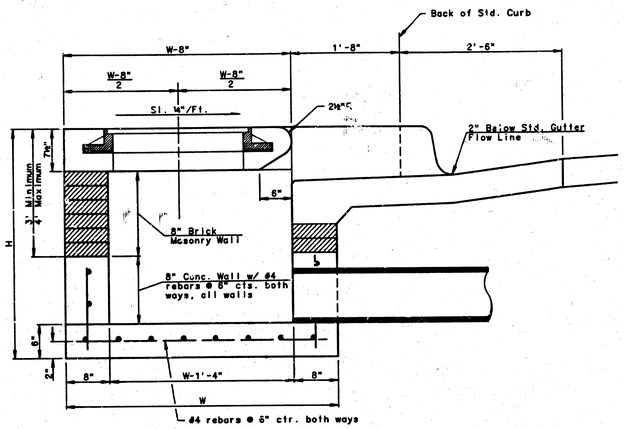
9/10

PROJECT NO.	SHEET NO.	TOTAL SHEETS
472-76-245-81375-000-000-001	10	11

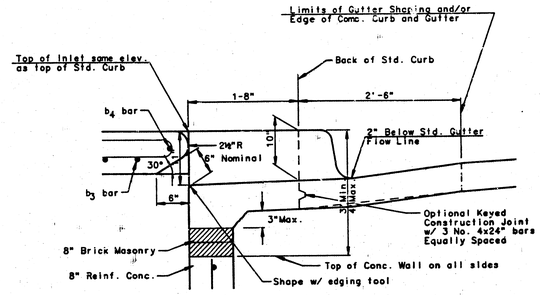


PLAN

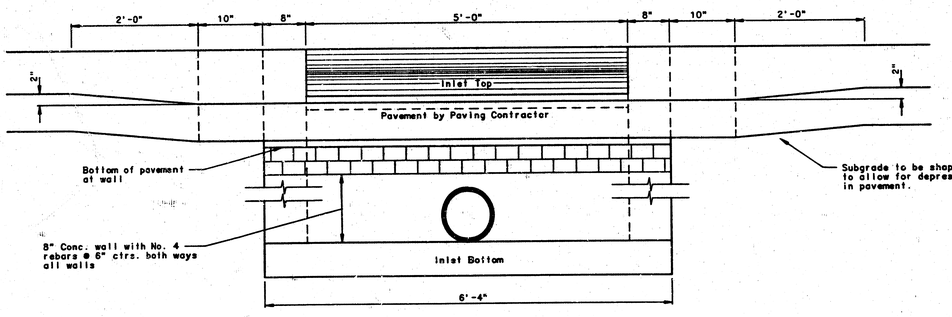
NOTE: b_3 & a_2 bar to be field bent to clear manhole frame



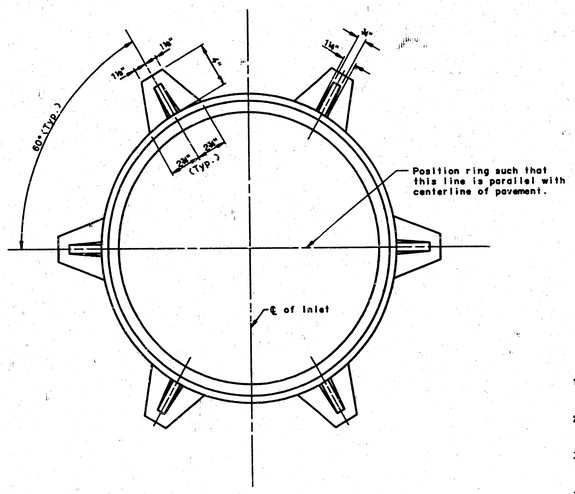
SECTION A-A

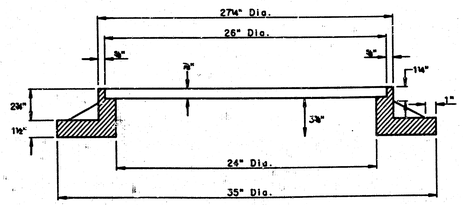


SECTION B-B



SECTION C-C





MANHOLE FRAME

(WEIGHT = 180 LBS.)

See Sheet No. for cover details to be used with inlet frame.

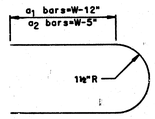
GENERAL NOTES

1. The contractor shall have the option of constructing 8" brick masonry walls between the concrete inlet base and top on this inlet when W = 4'4" and H = 6'0" or less.
2. Additional curb and gutter construction necessary to connect setback inlet to pavement will be paid for at the unit price bid for each inlet hookup.
3. 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.
4. 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.
5. Inlet top reinforcing shall be spaced on 6" max. centers. Inlet lids shall be notched out as indicated to facilitate construction of curb.

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"	5'9"	6'11"	4'0"	6'1"	--	--	--	--	1'9"	6'2"	4'8"	69±
	W=5'4"	7'9"	8'11"	5'0"	--	6'1"	--	--	--	1'9"	6'2"	4'8"	83±
	W=6'4"	9'9"	10'11"	6'0"	--	--	6'1"	--	--	1'9"	6'2"	4'8"	110±
	W=7'4"	11'9"	2'11"	7'0"	--	--	--	6'1"	--	1'9"	6'2"	4'8"	130±
	W=8'4"	13'9"	4'11"	8'0"	--	--	--	--	6'1"	1'9"	6'2"	4'8"	150±

*NOTE: a_3 Bars to be placed approx. 2" below top of inlet cover.



BENDING DIAGRAM

STANDARD CURB INLET PRECAST TOPS			
W	PRECAST TOP SIZE	PIPE SIZE	CU.YD.CONC.
4'4"	3'8"x6'4"x7¼"	21" & Smaller	0.38±
5'4"	4'8"x6'4"x7¼"	24" & 30"	0.51±
6'4"	5'8"x6'4"x7¼"	36" & 42"	0.64±
7'4"	6'8"x6'4"x7¼"	48" & 54"	0.77±
8'4"	7'8"x6'4"x7¼"	60" & 66"	0.90±

CITY OF WICHITA, KANSAS

STD TYPE 1A CURB INLET
INLET OPENING = 6" x 5'-0"

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

Designed by	City of Wichita	Checked by	10/10
Drawn by	Yoda	Date June, 1984	Job No.