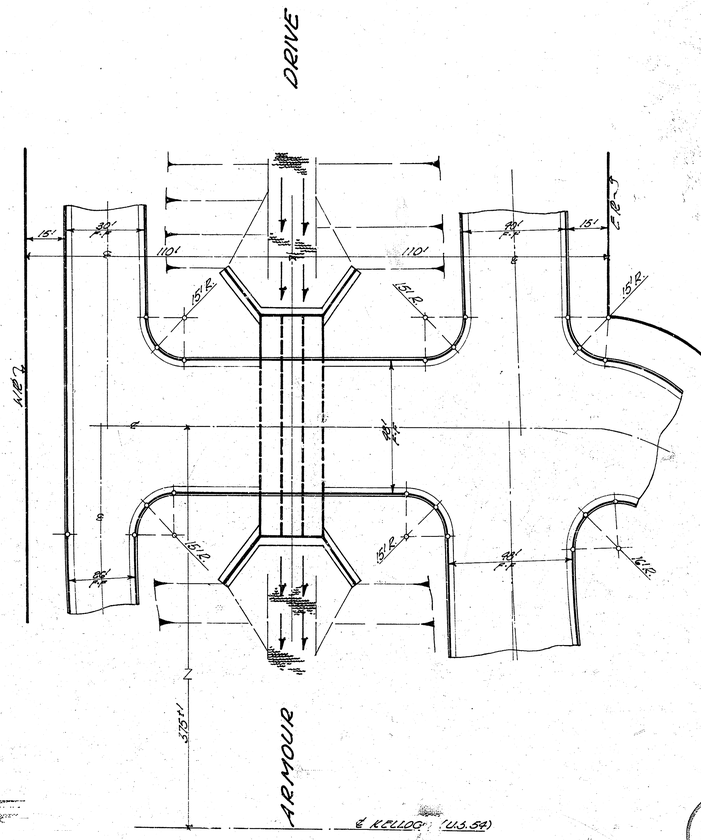
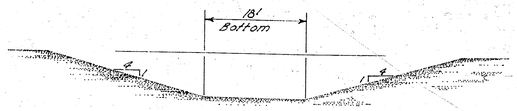


•LOCATION MAP•
No 5001.5







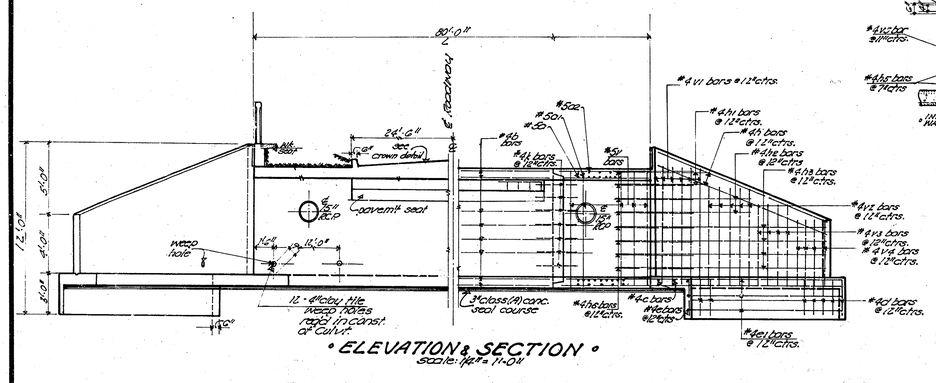
• EXISTING CHANNEL SECTION •

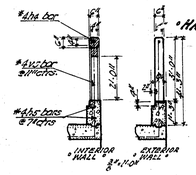
R. W. LINN LICENSED 3584 KANSAS PROFESSIONAL ENGINEER

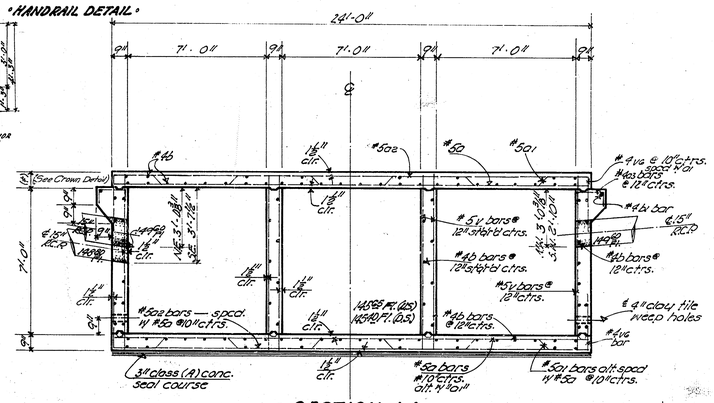
B. E. SMITH LICENSED 436 KANSAS PROFESSIONAL ENGINEER

LOCATION MAP

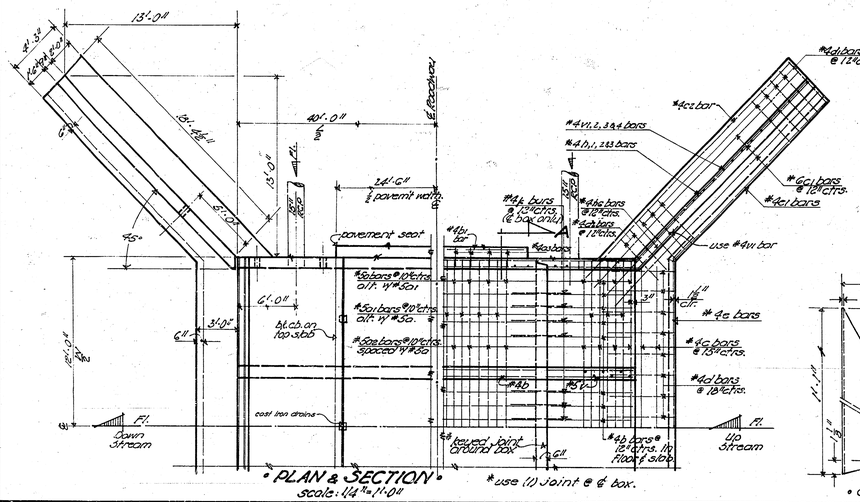
•3 - 7'x 7'x 80' REINF. CONC. BOX CULVERT.•
Armour Drive • Nly. U.S. Hiway 54 to
Sly. 3 Nd. Roadway of 3 Nd. Addition.
City of Wichita, Kansas
B.E. Smith — City Engineer
Date: July 1967 — 1/5 — Proj. No. C16-79

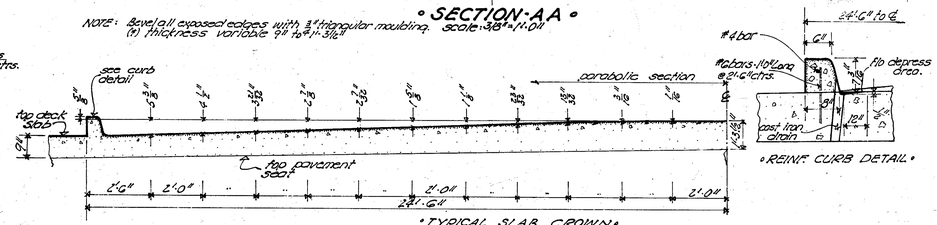


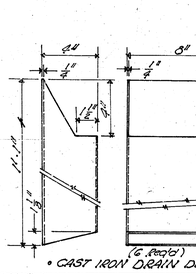


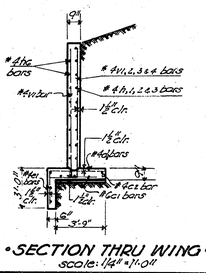


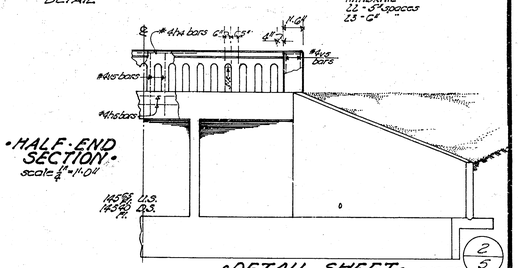
NOTE: Bevel all exposed edges with 3/4" triangular moulding.
(t) thickness variable 9" to 9"-3 1/2"











• HAND RAIL •
12 - 5'-0" spaces
= 60'-0"

• DETAIL SHEET • CIC-79

2/5

BAR SCHEDULE

bar	size	length	number	location	shape	spacing	weight
a	#5	23'-9"	192	box		10"	4756.08
a1	#5	25'-0"	190	"		"	4954.25
a2	#5	23'-9"	192	"		10"	4756.08
a3	#4	2'-6"	96	"		12"	159.36
a	#4	59'-3"	200	"		12"	5249.60
b1	#4	23'-9"	4	"		-	63.46
c	#4	23'-0"	4	apron		15"	61.46
c1	#4	22'-0"	14	"		12"	396.53
c2	#4	22'-0"	4	"		-	58.78
d	#4	11'-6"	32	"		12"	160.32
d1	#4	6'-6"	68	"		"	295.26
de	#4	9'-0"	8	"		"	21.38
e	#4	78'-0"	6	"		"	112.22
e1	#4	16'-0"	12	"		"	128.26
f	#4	19'-2"	8	wingwall		"	102.43
h1	#4	8'-6"	8	"		"	45.42
h2	#4	12'-9"	8	"		"	68.14
h3	#4	20'-3"	16	"		12"	216.43
h4	#4	23'-9"	2	handrail		-	31.73
h5	#4	24'-9"	4	toeboard		7"	53.46
h6	#4	11'-0"	32	wingwall		12"	149.63
k	#4	3'-0"	76	box		"	152.30
V	#5	9'-11"	320	"		"	2976.04
V1	#4	10'-3"	24	wingwall		"	164.33
V2	#4	8'-5"	20	"		"	112.85
V3	#4	7'-7"	16	"		12"	82.89
V4	#4	6'-5"	16	"		12"	68.59
V5	#4	6'-5"	96	toeboard		11"	411.49
V6	#4	3'-0"	320	box		10"	721.52
Reinforcement in conc. curb							30.04

BILL OF MATERIALS

item	quantity	unit	
class A.E. Concrete	218.80	C.Y.	Lump Sum Bid
reinforcing steel	26,605	LBS	
Concrete handrail	48	L.F.	
Hand excavation	3	C.Y.	
2x5 brick inlets	10	ea.	Bid Items
18" reinf. concrete pipe	410	L.F.	
common excavation	420	C.Y.	
compacted fill	350	C.Y.	
Class A concrete	2.62	C.Y.	

◦GENERAL NOTES◦

◦CLASS A.E. Concrete◦ shall be used throughout this project. All reinforcing steel shall conform to A.S.T.M. specifications.

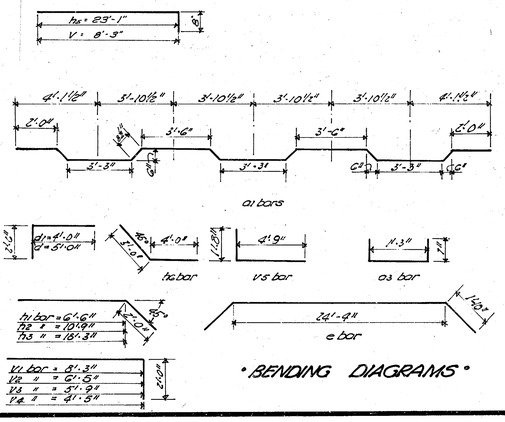
◦EARTHWORK◦ all earthwork shall be considered as "Common Excavation" except for the toewall. Toewall Excavation shall be included in "Lump Sum Bid."

◦BACKFILL◦ shall be compacted to the bottom of new pavement grade. All backfill and excavation to extend to (2') beyond sides of box & wingwalls.

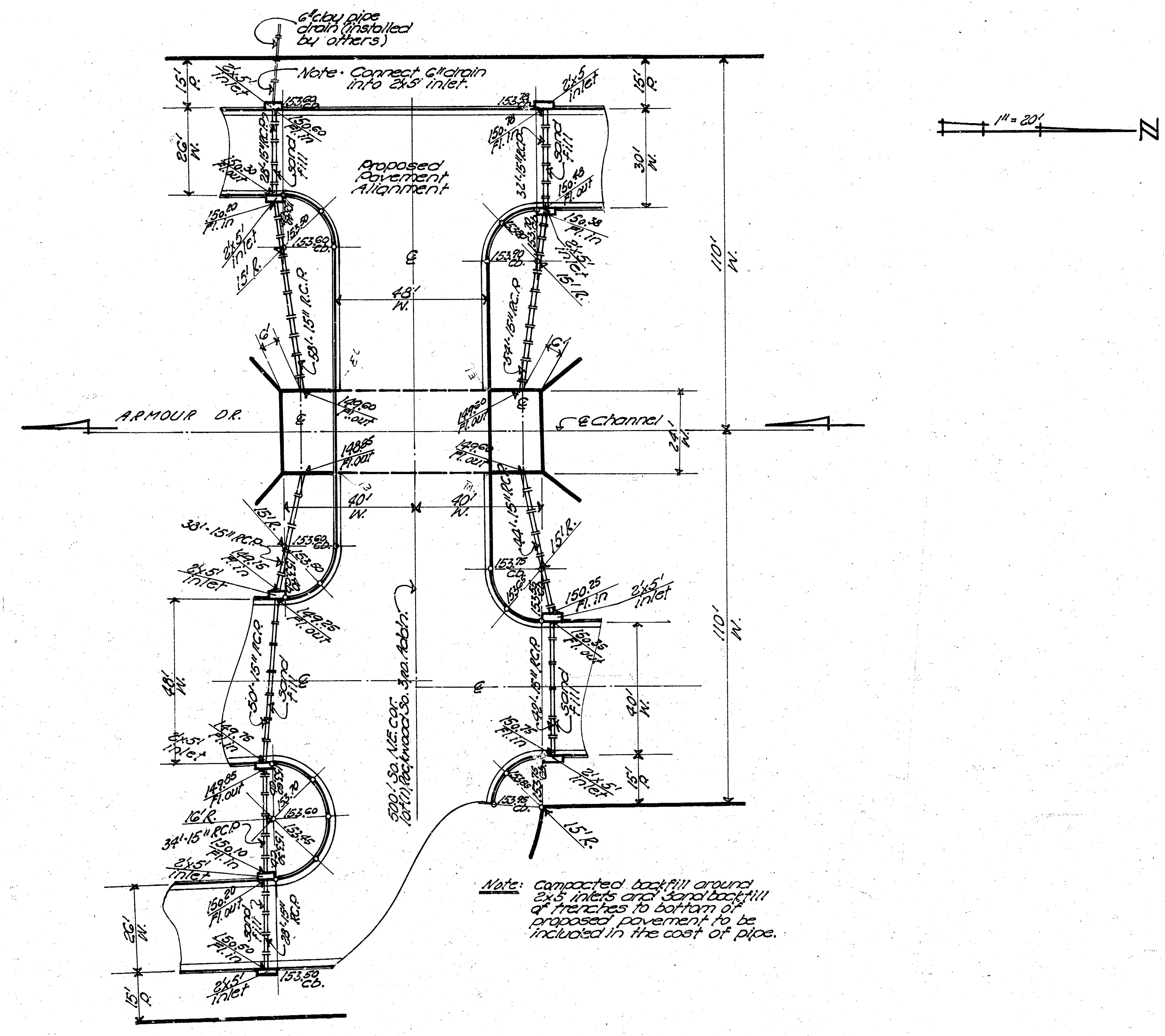
◦WEEP HOLES◦ Coarse aggregate shall be deposited behind each weephole to occupy a space extending (1ft) in all directions above weephole flowline. This work shall not be paid for directly, but shall be considered a part of the excavation work.

◦SEAL COURSE◦ A seal course consisting of (3ft) Class A concrete shall be constructed only where specified on the plans or by the Engineer. No reinforcing shall be placed until the seal course has gained sufficient strength to carry working upon it without injury.

◦BIDDING OF CULVERT◦ the culvert shall be bid as a "Lump Sum Bid" except for the following items: cuyds common excavation, cuyds compacted fill, class A concrete, 4.Ft. 15" R.C.P., 2x5 brick inlets. The quantities shown in the "BILL OF MATERIALS" for items which are included in the "LUMP SUM BID" or the culvert are for "INFORMATION PURPOSES ONLY." The Contractor must satisfy himself to the "quantities" and the Engineer assumes no responsibility for their accuracy. The Contractor will have the full responsibility for providing all materials shown on the detailed plans necessary to complete this project.



◦BENDING DIAGRAMS◦



(4/5) •INCIDENTAL DRAINAGE•

in connection with 3-7x7x80 R.C.B.C.

CIG-79

FUR. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	Kansas	54-87 K 5190(2)	1967	1	9

STATE OF KANSAS

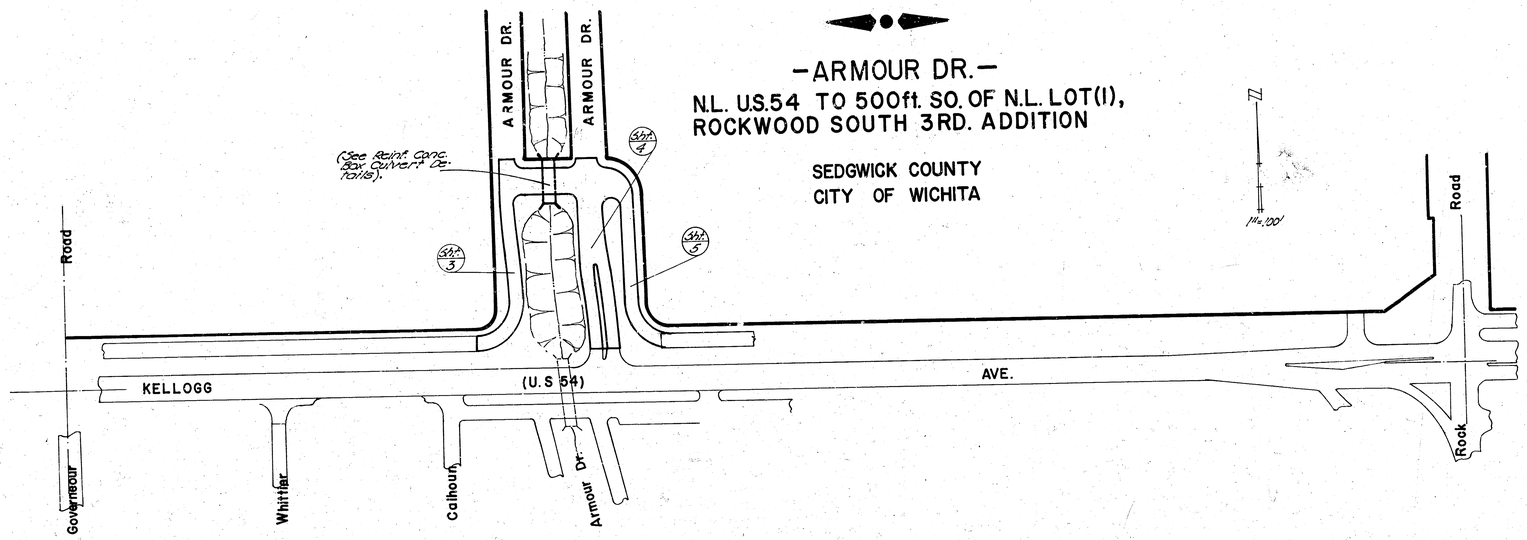
STATE HIGHWAY COMMISSION

STATE PROJ. NO. 54-87 K 5190(2)
CITY PROJ. NO. C16-79

-ARMOUR DR.-

N.L. U.S.54 TO 500ft. SO. OF N.L. LOT(1), ROCKWOOD SOUTH 3RD. ADDITION

SEDGWICK COUNTY
CITY OF WICHITA



N

1"=100'

APPROVED	DATE
W. J.	7/14/67
STATE HIGHWAY ENGINEER STATE HIGHWAY COMMISSION OF KANSAS	

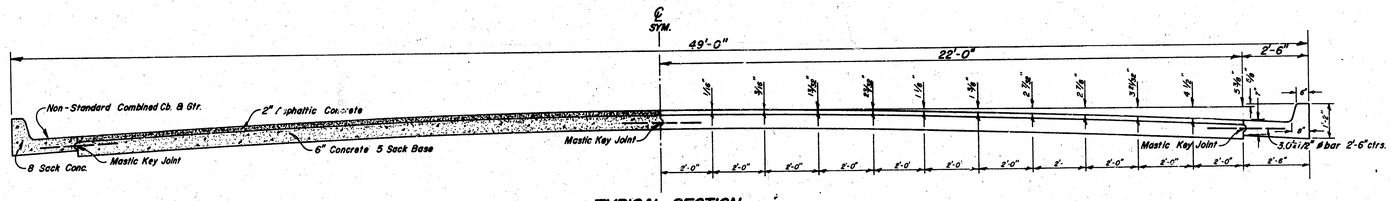
APPROVED	DATE July 1967
B.C. Smith	7/12/67
CITY ENGINEER DEPARTMENT OF PUBLIC WORKS CITY OF WICHITA, KANSAS	

-2-

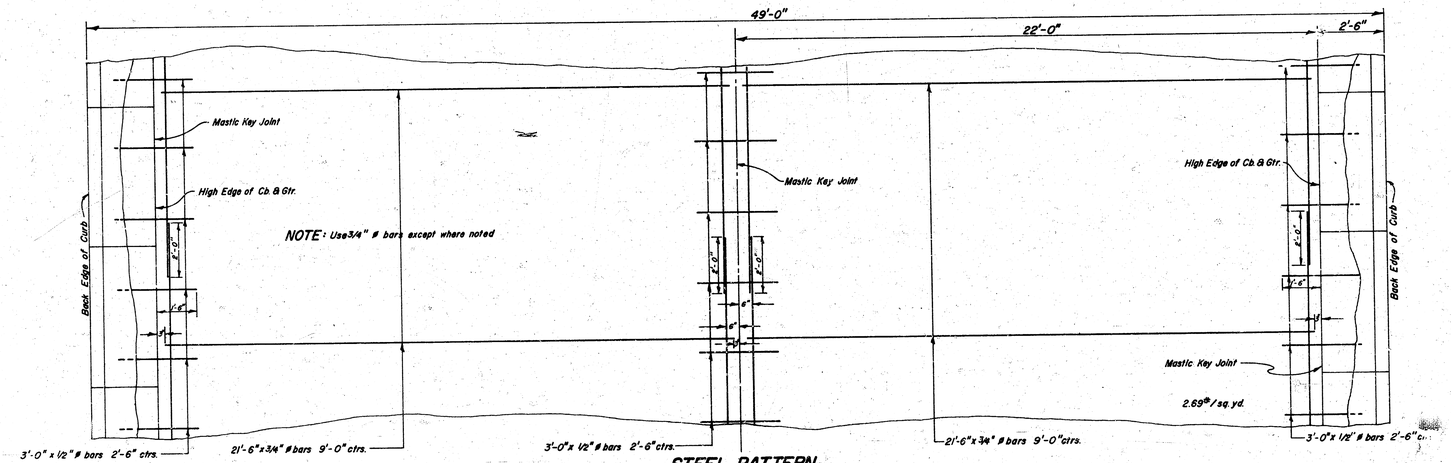
ARMOUR DRIVE

N.L. U.S. HIGHWAY 54 TO 500ft. SO. N.L. ROCKWOOD SO. 3rd. ADDN.

PROJECT NO. C16-79

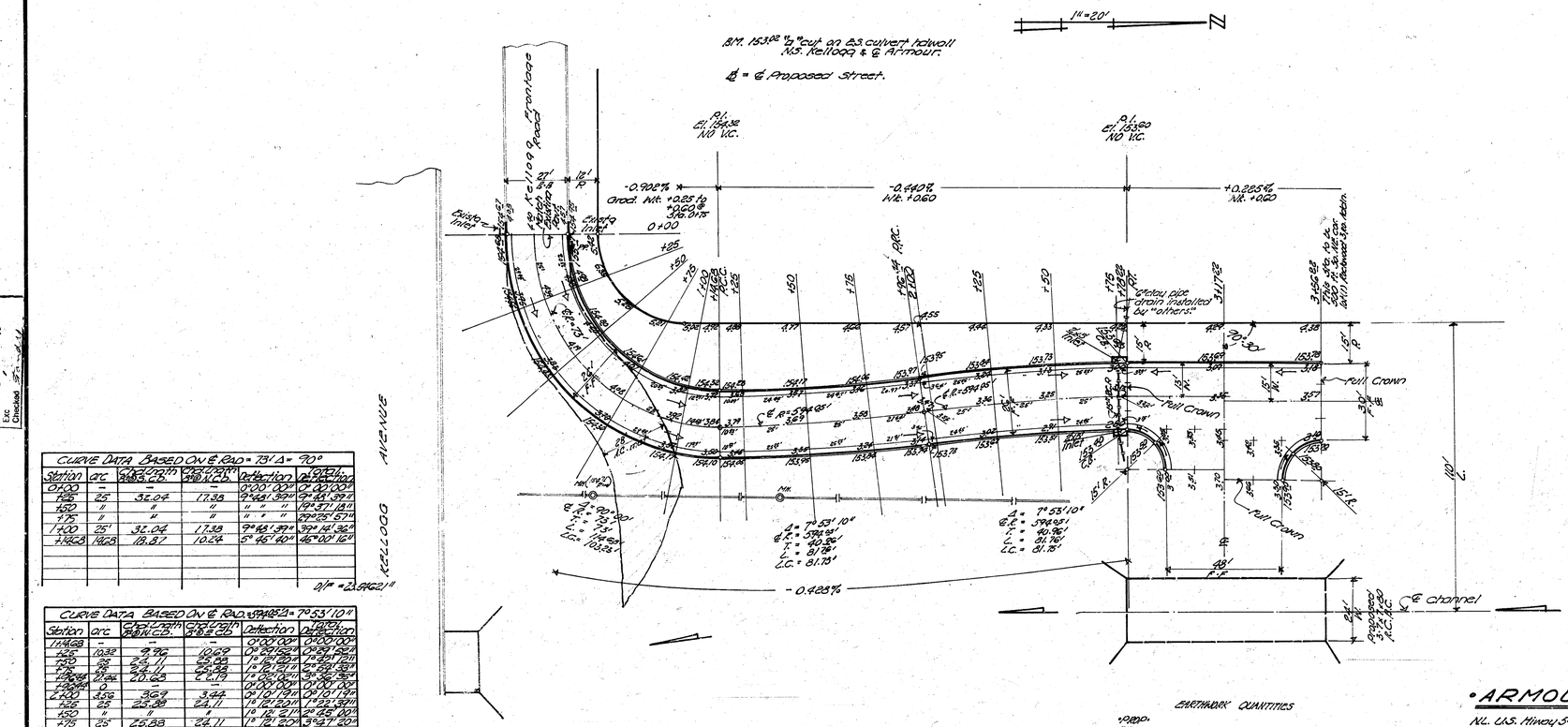


TYPICAL SECTION
Scale 1"=2'-0"



STEEL PATTERN
Scale 1"=2'-0"

2/9



CURVE DATA BASED ON ℄ RAD. = 731.4' Δ = 90°					
Station	arc	Chord length from P.C.	Chord length from P.T.	Deflection	Total deflection
0+00	–	–	–	0° 00' 00"	0° 00' 00"
1+25	25'	32.04'	17.38'	2° 48' 39"	2° 48' 39"
1+50	"	"	"	" " "	5° 37' 18"
1+75	"	"	"	" " "	8° 25' 57"
2+00	25'	32.04'	17.38'	2° 48' 39"	11° 14' 36"
2+11.68	11.68'	19.87'	10.24'	5° 48' 40"	16° 03' 16"

D/r = 23.8462'

CURVE DATA BASED ON ℄ RAD. = 594.95' Δ = 7° 53' 10"					
Station	arc	Chord length from P.C.	Chord length from P.T.	Deflection	Total deflection
1+11.68	–	–	–	0° 00' 00"	0° 00' 00"
1+25	13.32'	9.96'	10.62'	0° 38' 22"	0° 38' 22"
1+50	25'	24.11'	25.00'	1° 26' 11"	2° 04' 33"
1+75	25'	24.11'	25.00'	1° 26' 11"	3° 30' 44"
1+96.68	21.68'	20.63'	21.79'	1° 14' 07"	4° 44' 51"
2+00	3.32'			0° 11' 29"	4° 56' 20"
2+03	3.78'	3.69'	3.44'	0° 10' 19"	5° 06' 39"
2+26	25'	25.38'	24.11'	1° 26' 11"	6° 32' 50"
2+50	"	"	"	" " "	7° 59' 01"
2+75	25'	25.38'	24.11'	1° 26' 11"	9° 25' 12"
2+78.32	3.32'	3.30'	3.07'	0° 09' 15"	9° 34' 27"

D/r = 2.3934'

EARTHWORK QUANTITIES

"PROP."
CMP(A)
238.8 CY.
255 " (110%)
280.3 CY.

JAMES H. TAYLOR LICENSED 2012 KANSAS PROFESSIONAL ENGINEER

R. W. LINN LICENSED 3694 KANSAS PROFESSIONAL ENGINEER

B. E. SMITH LICENSED 436 KANSAS PROFESSIONAL ENGINEER

Survey
Plan
Ck.
Checked

•ARMOUR DRIVE•

N.L. U.S. Hiway 54 • 500'S. N.L. Rockwood 3rd. 3rd Addition.

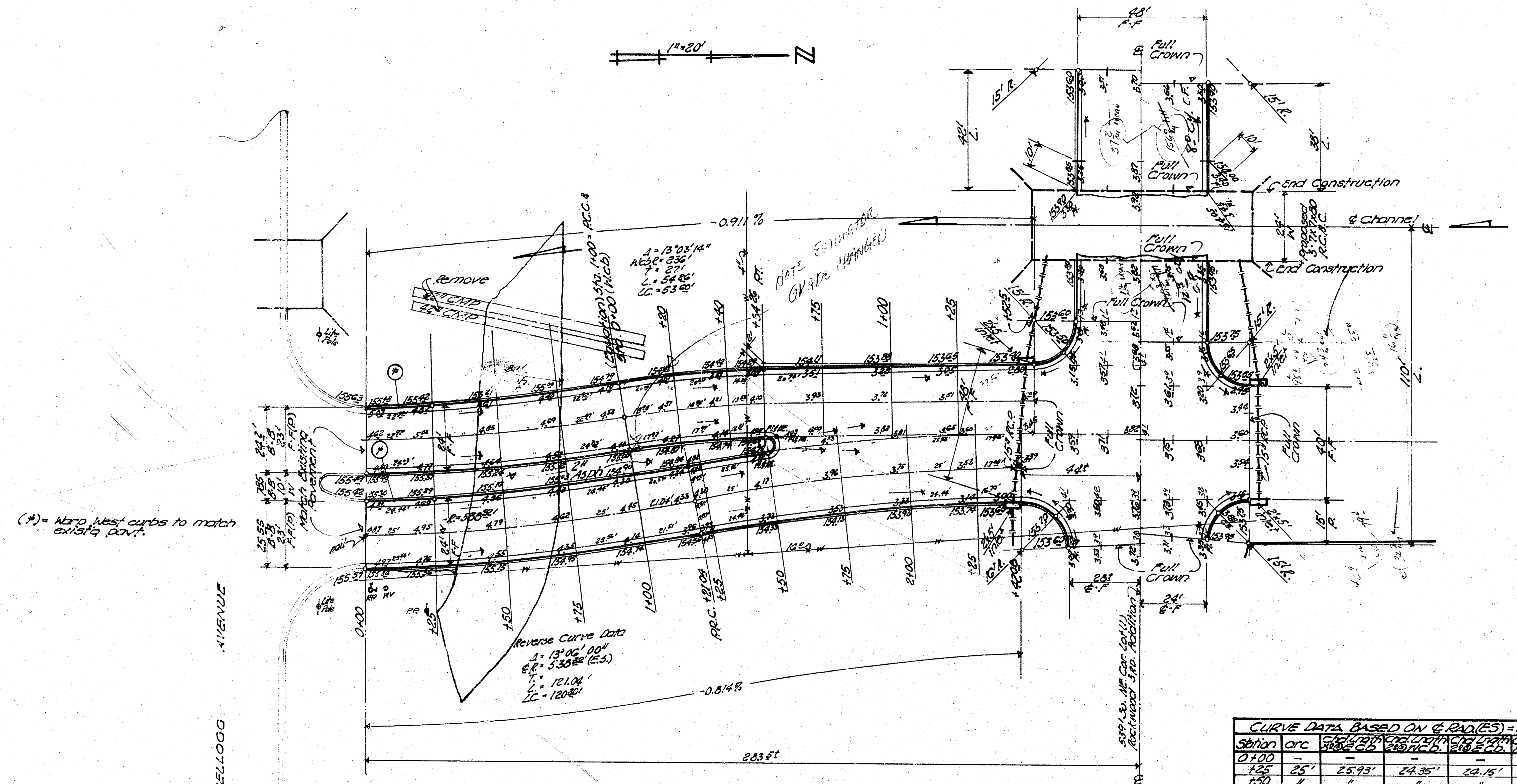
442.98' A.C. with 22'-8" B.C. A.C. frontage roads

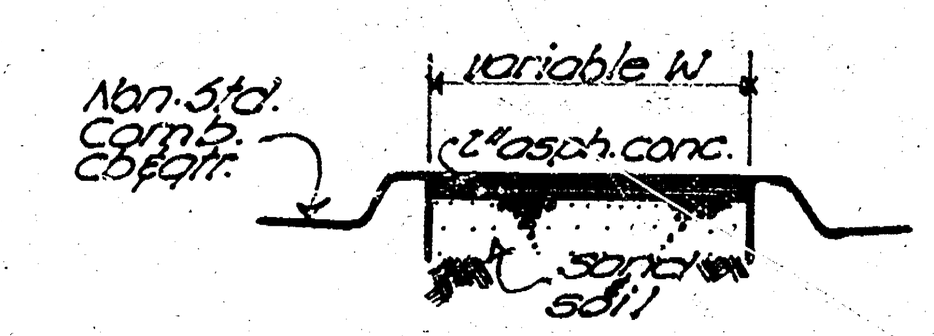
City of Wichita, Kansas

B.E. Smith City Engineer

Date: July 1967 Proj. No. C1G-79

3/9





ASPHALT
"MEDIAN DETAIL"

NOTE: "Select Fill Material" is to consist of 80% conc. sand & 20% select soil thoroughly mixed. This material is to be mechanically compacted in the median area to the satisfaction of the Engr.

CURVE DATA BASED ON ℄ RAD.(ES) = 538.32' Δ = 13° 06'							
Station	arc	Chd. Lngth 3'@E.Cb.	Chd. Lngth 2'@W.Cb.	Chd. Lngth 2'@E.Cb.	Chd. Lngth 8'@W.Cb.	Deflection	Total Deflection
0+00	–	–	–	–	–	0°00'00"	0°00'00"
+25	25'	25.93'	24.35'	24.15'	22.56'	1°19'50"	1°19'50"
+50	"	"	"	"	"	1°19'49"	2°39'39"
+75	"	"	"	"	"	1°19'50"	3°59'29"
1+00	25'	25.93'	24.35'	24.15'	22.56'	1°19'49"	5°19'19"
P.R.C. +21.04	21.04'	21.82'	20.49'	–	–	1°07'11"	6°26'30"
+21.04	–	–	–	–	–	0°00'00"	0°00'00"
+25	3.96'	3.86'	4.11'	–	–	0°12'40"	0°12'40"
+50	25'	24.35'	25.93'	–	–	1°19'50"	1°32'30"
+75	"	"	"	–	–	1°19'49"	2°52'19"
2+00	"	"	"	–	–	1°19'50"	4°22'09"
+25	25'	24.35'	25.93'	–	–	1°19'40"	5°31'58"
+42.08	17.08'	16.64'	17.72'	–	–	0°54'32"	6°26'30"

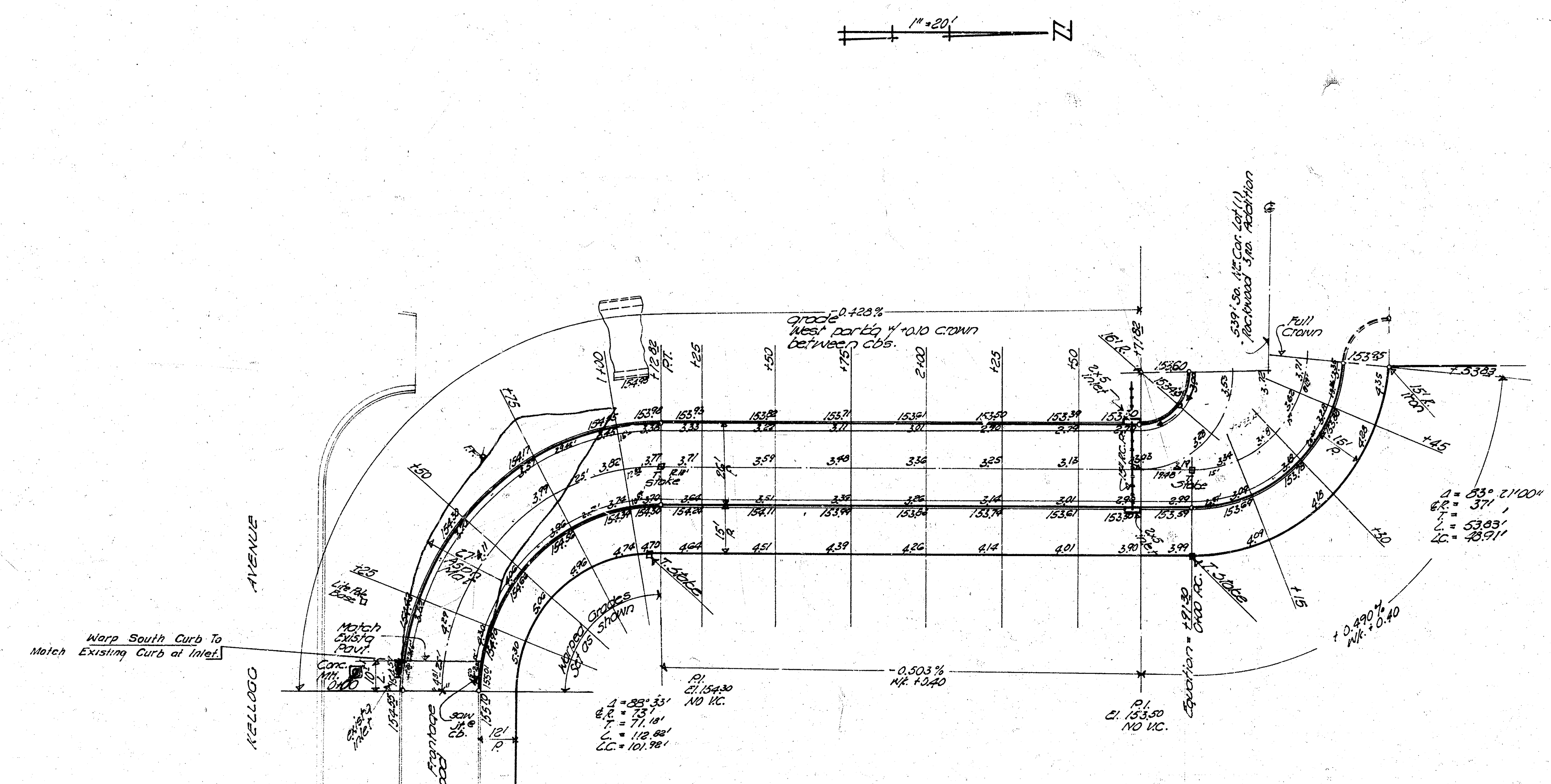
Dif = 3.19303"

• Earthwork •
578.2 C.Y. excav.
503.4 C.Y. fill

32.7
24.7
37.2
94.6

4/9

• Armour Drive •
C1G-79



CURVE DATA Based On ℄ Rad. = 73' Δ = 88°33'					
Station	arc	Chd. Lngth @ S. curb	Chd. Lngth @ N. curb	Deflection	Total Deflection
0+00	—	—	—	0°00'00"	0°00'00"
+25	25'	17.72'	32.04'	9°48'39"	9°48'39"
+50	"	"	"	"	19°37'18"
+75	"	"	"	"	29°25'57"
1+00	25'	17.72'	32.04'	9°48'39"	39°14'36"
+12.82	12.82'	9.09'	16.43'	5°01'52"	44°16'28"

D/2 = 23.54621 mins.

° Earthwork Quantities °
excav. = 390± C.Y.

° Armour Drive °
C16-79