CITY PROJECT NO. C-8

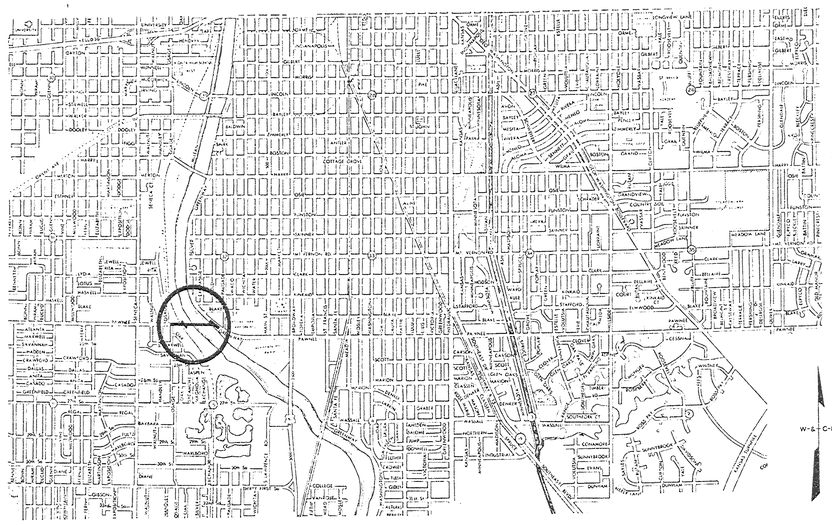
PART I
GRADING
DRAINAGE
PAVING

PART II
BRIDGE

CITY OF WICHITA

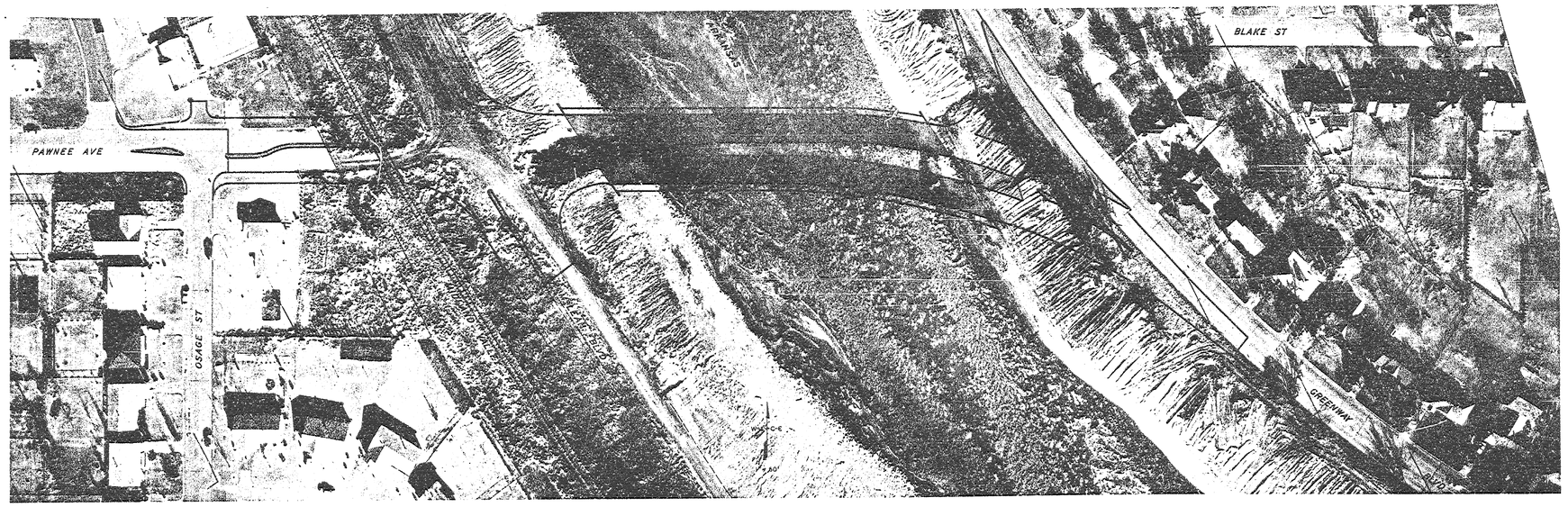
SEDGWICK COUNTY, KANSAS

PAWNEE AVENUE BRIDGE



ARKANSAS RIVER CROSSING

1961



PAWNEE AVENUE BRIDGE

INDEX OF SHEETS

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9. BRIDGE APPROACH PAVEMENT
10. CURB DETAILS & SECTIONS
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12. 72" DRAINAGE STRUCTURE DETAILS
13. DRAINAGE DETAILS
14. BRIDGE CONSTRUCTION LAYOUT
15. SCREED GEOMETRY
16. WEST ABUTMENT DETAILS
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23. REINFORCING DETAILS

WICHITA, KANSAS — PAWNEE AVENUE BRIDGE

INDEX & AERIAL SITE PLAN

PART I & PART II

ROBERT E. EALE 1809

WILSON & COMPANY ENGINEERS & ARCHITECTS

DATE: APRIL 1961

FILE NO. 61-10

SHEET NO. 2 OF 23

Sta 13+03, 22.5' Lt.
Remove Catch Basin
Remove 12 L.F. 15" RCP N.W.
Sta 13+08, 27.5' Lt.
Construct Std. Catch Basin
Install 6 L.F. 15" RCP South
Install 12 L.F. 15" RCP West &
Construct Conc. Collar to
connect with exist. 15" RCP
See sheet No. 11

Sta 13+67, 22.5' Lt.
Remove Catch Basin
Remove 4 L.F. 15" RCP West
Sta 13+67, 26.2' Lt.
Construct Std. Catch Basin
Install 4 L.F. 15" RCP S.W.
See sheet No. 11

Sta 15+18 50' Lt.
Construct Std. Catch Basin
Install 90 L.F. 15" R.C.P. N.E.
See Sheet No. 11.

Sta 13+25, 39.5' Rt.
Construct Std. Catch Basin
Install 4 L.F. 15" RCP West
See Sheet No. 11

Sta 13+61, 39.5' Rt.
Remove Catch Basin

Sta 13+30, 39.5' Rt.
Remove Catch Basin
Remove 28 L.F. 18" RCP N.W.

Sta 13+29.7, 39.5' Rt.
Construct Std. Catch Basin
Install 20 L.F. 18" RCP N.W. & 2 L.F. 15" RCP East
See Sheet No. 11

Sta 13+08.3, 22.5' Rt.
Remove Catch Basin
Sta 13+08.3, 37.5' Rt.
Construct Std. Catch Basin
Install 6 L.F. 18" RCP North
See Sheet No. 11

Sta 10+78.3, 65' Rt. & McLean
Construct Std. Catch Basin
Install 122 L.F. 15" RCP SE
See Sheet No. 11.

Sta 17+43, 50.3' Lt.
Construct Outlet Headwall for 72" RCP
Install 72" Automatic Gate Salvaged from
Exist. Headwall Rt Sta 16+94
See Sheet No. 12.

Sta 20+43, 53' Lt.
Construct Outlet Headwall for 18" CMP
Install 13' Automatic Gate
See Sheet No. 13

CAUTION
HIGH PRESSURE GAS LINE
See Sheet No. 14

Sta 16+94, 3.3' Rt
Remove exist. Outlet Headwall
Remove & Salvage 72" Automatic Gate

Sta 16+61 to Sta 16+95 Rt
Remove & Salvage 32 L.F.
72" RCP

Sta 16+27, 66' Rt
Construct Junction Box
Install 66 L.F. new & 32 L.F. salvaged 72" RCP NE
See Sheet No. 12

Sta 01+50 Rt. Greenway Blvd S.B.
Construct Std. Catch Basin
Install 64 L.F. 15" RCP SE
See Sheet No. 11

Remove 12" Automatic Gate
& 6 Lin. Ft. 12" CMP

Sta 21+58, (50' Lt) to Sta 21+76 (55' Lt)
Install 18 L.F. 18" RCP

Sta 21+58, 50' Lt.
Construct Reinf. Conc. Manhole
Install 100 L.F. 18" CMP West
With 45° Bend
See Sheet No. 13

Sta 23+35 WB Rt.
Construct Special Catch Basin
Install 34 L.F. 15" RCP SW
See Sheet No. 11

Sta 23+40 EB Rt.
Construct Std. Catch Basin
Install 100 L.F. 18" CMP SW
See Sheet No. 11

Sta 23+06 EB Rt.
Construct Outlet Headwall for 18" CMP
See Sheet No. 13

SCALE 1"=40'

Limit of Work
Channel Bottom
Construct Toewall
72" Storm Sewer Outlet
Storm Sewer Outlet
Elev. 1292.50
Quarry Run Protection Stone
Easement
Limit of Work
Limit of Work

McLEAN
PAWNEE
AVE.
GREENWAY
BLAKE ST.
15" A.C.P.
MIDLAND VALLEY R.R.
OSAGE ST.
BLVD.
RIVER
933'
170'
200' Trans.
200' Trans.
20' Berm
4:1
6:1
2:1
R-27 1500
R-27

STREAM FLOW DATA
Q = 25,500 CFS
V = 6.5 Ft/sec @ Constriction
Ft. River = 1270.0 MSL

Note: 1187.4 Vert. Eq. from MSL to City Datum
Design H.W. = 1286.2 MSL (C of E)

40 0 40 80 12
1" = 40'

2'-0" Wide Toewall
230' Channel Bottom
Design Channel Bottom
Elev. 1282.40 (1270.0 MSL)
W.S. Elev. 1287
January 1961
5'-0"
6'-0"

ROCK TOE DETAIL

2800 6600 11500

MAJOR TRAFFIC FLOW DIAGRAM
ADT 1981

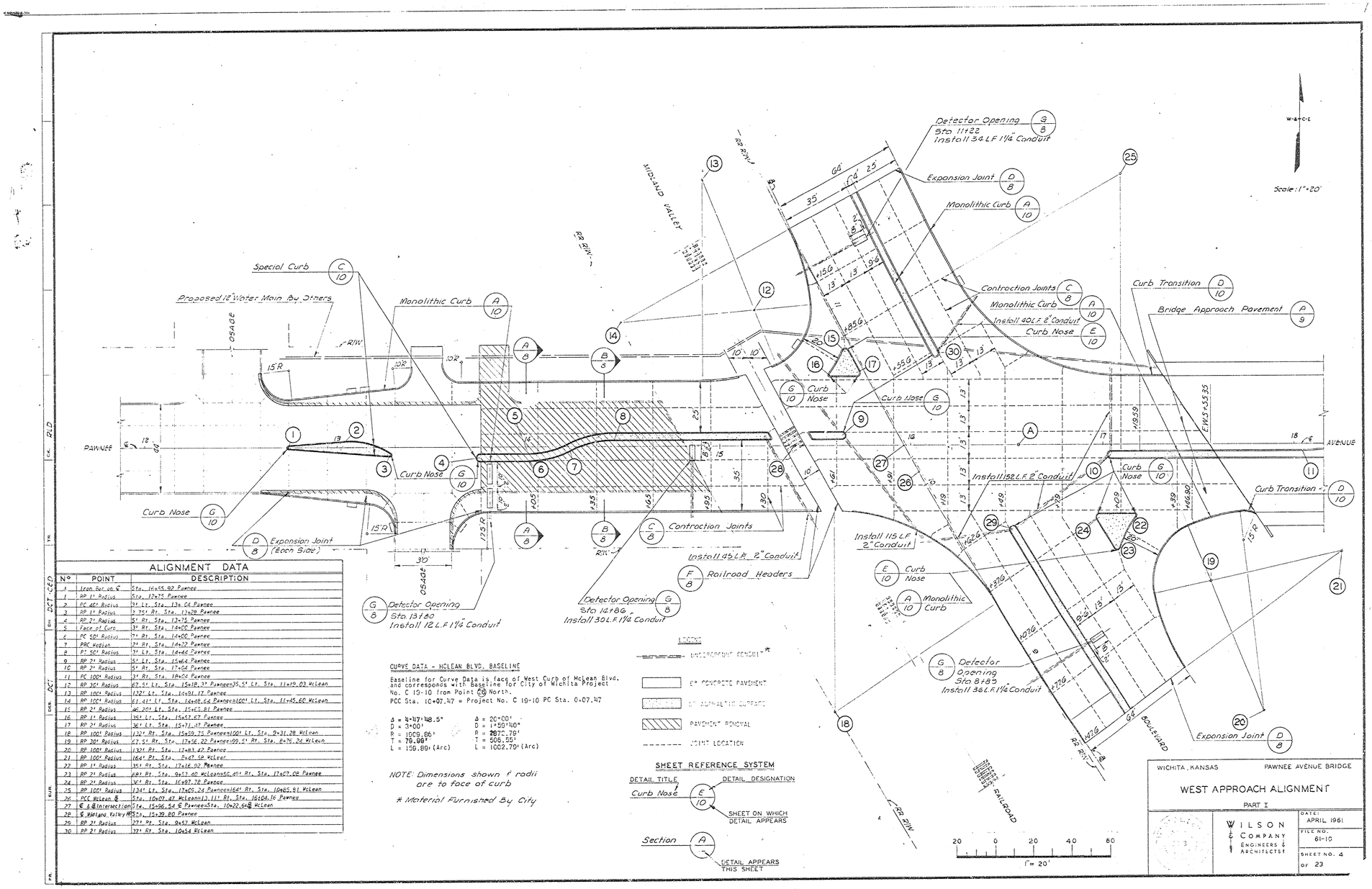
WICHITA, KANSAS — PAWNEE AVENUE BRIDGE

GENERAL PLAN

PART I & PART II

WILSON & COMPANY
ENGINEERS & ARCHITECTS

DATE: APRIL 1961
FILE NO. 61-10
SHEET NO. 3 OF 23



ALIGNMENT DATA

N°	POINT	DESCRIPTION
A	Iron Bar on ℄	Sta. 16+55.92 Pawnee
1	RP 1° Radius	Sta. 12+75 Pawnee
2	PC 40° Radius	31' Lt. Sta. 13+ 04 Pawnee
3	RP 1° Radius	3.75' Rt. Sta. 13+28 Pawnee
4	RP 21 Radius	5' Rt. Sta. 13+76 Pawnee
5	Face of Curb	31' Rt. Sta. 14+00 Pawnee
6	PC 50° Radius	7' Rt. Sta. 14+00 Pawnee
7	PRC Median	2' Rt. Sta. 14+22 Pawnee
8	PT 50° Radius	31' Lt. Sta. 14+46 Pawnee
9	RP 21 Radius	5' Lt. Sta. 15+64 Pawnee
10	RP 21 Radius	5' Rt. Sta. 17+04 Pawnee
11	PC 100' Radius	31' Rt. Sta. 10+04 Pawnee
12	RP 30° Radius	67.5' Lt. Sta. 15+18.31' Pawnee=35.5' Lt. Sta. 11+19.03 McLean
13	RP 100' Radius	132' Lt. Sta. 16+21.17 Pawnee
14	RP 100' Radius	61.41' Lt. Sta. 16+48.64 Pawnee=100' Lt. Sta. 11+45.60 McLean
15	RP 21 Radius	46.20' Lt. Sta. 15+63.81 Pawnee
16	RP 1° Radius	35' Lt. Sta. 15+57.67 Pawnee
17	PT 21 Radius	36' Lt. Sta. 15+71.37 Pawnee
18	RP 100' Radius	132' Rt. Sta. 15+59.75 Pawnee=100' Lt. Sta. 9+31.28 McLean
19	RP 30° Radius	47.5' Rt. Sta. 17+36.22 Pawnee=99.5' Rt. Sta. 8+76.24 McLean
20	RP 100' Radius	132' Rt. Sta. 17+81.42 Pawnee
21	RP 100' Radius	164' Rt. Sta. R+47.58 McLean
22	RP 1° Radius	35' Rt. Sta. 17+16.02 Pawnee
23	RP 21 Radius	68' Rt. Sta. R+73.40 McLean=50.40' Rt. Sta. 17+07.08 Pawnee
24	RP 21 Radius	36' Rt. Sta. 16+97.78 Pawnee
25	RP 100' Radius	134' Lt. Sta. 17+05.24 Pawnee=164' Rt. Sta. 10+85.81 McLean
26	PCC McLean ℄	Sta. 10+07.47 McLean=13.11' Rt. Sta. 16+04.16 Pawnee
27	℄ & ℄ Intersection	Sta. 15+56.54 ℄ Pawnee=Sta. 10+22.64 ℄ McLean
28	℄ Midland Valley R/W	Sta. 15+29.80 Pawnee
29	RP 21 Radius	27.1' Rt. Sta. R+57 McLean
30	PP 21 Radius	32' Rt. Sta. 10+54 McLean

CURVE DATA - MCLEAN BLVD. BASELINE

Baseline for Curve Data is face of West Curb of McLean Blvd. and corresponds with baseline for City of Wichita Project No. C 19-10 from Point 28 North.

PCC Sta. 10+07.47 = Project No. C 19-10 PC Sta. 0+07.47

Δ = 4°47'38.5" D = 3°00' R = 1909.86' T = 78.98' L = 159.89' (Arc)

Δ = 20°00' D = 1°50'40" R = 3877.79' T = 506.55' L = 1002.79' (Arc)

NOTE: Dimensions shown ⊥ radii are to face of curb

* Material Furnished By City

LEGEND

- UNDERGROUND CONDUIT *
- 6" CONCRETE PAVEMENT
- 4" ASPHALTIC SURFACE
- PAVEMENT REMOVAL
- JOINT LOCATION

SHEET REFERENCE SYSTEM

DETAIL TITLE: Curb Nose — DETAIL DESIGNATION: E 10 — SHEET ON WHICH DETAIL APPEARS

Section A 1 — DETAIL APPEARS THIS SHEET

WICHITA, KANSAS — PAWNEE AVENUE BRIDGE

WEST APPROACH ALIGNMENT

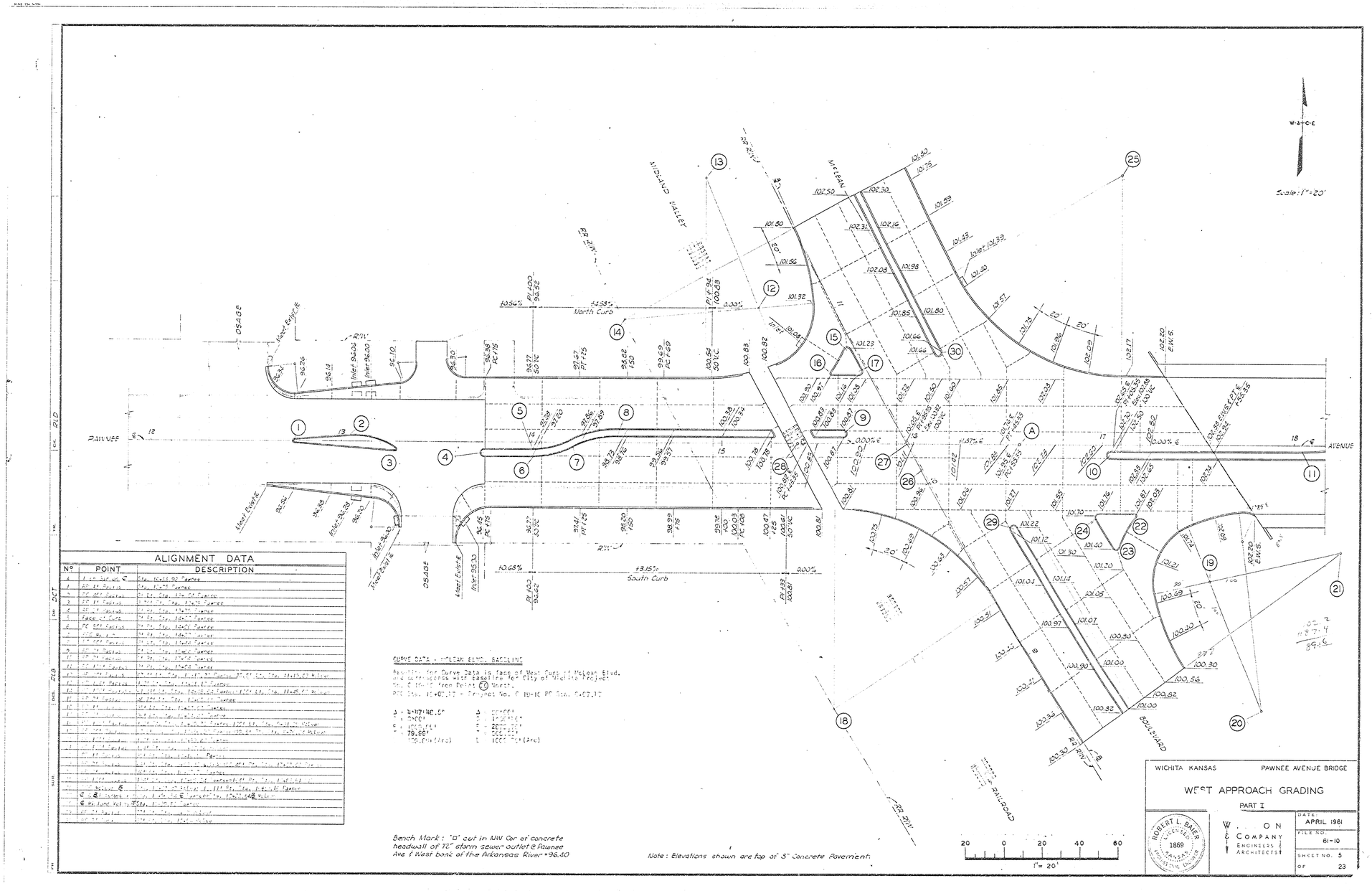
PART I

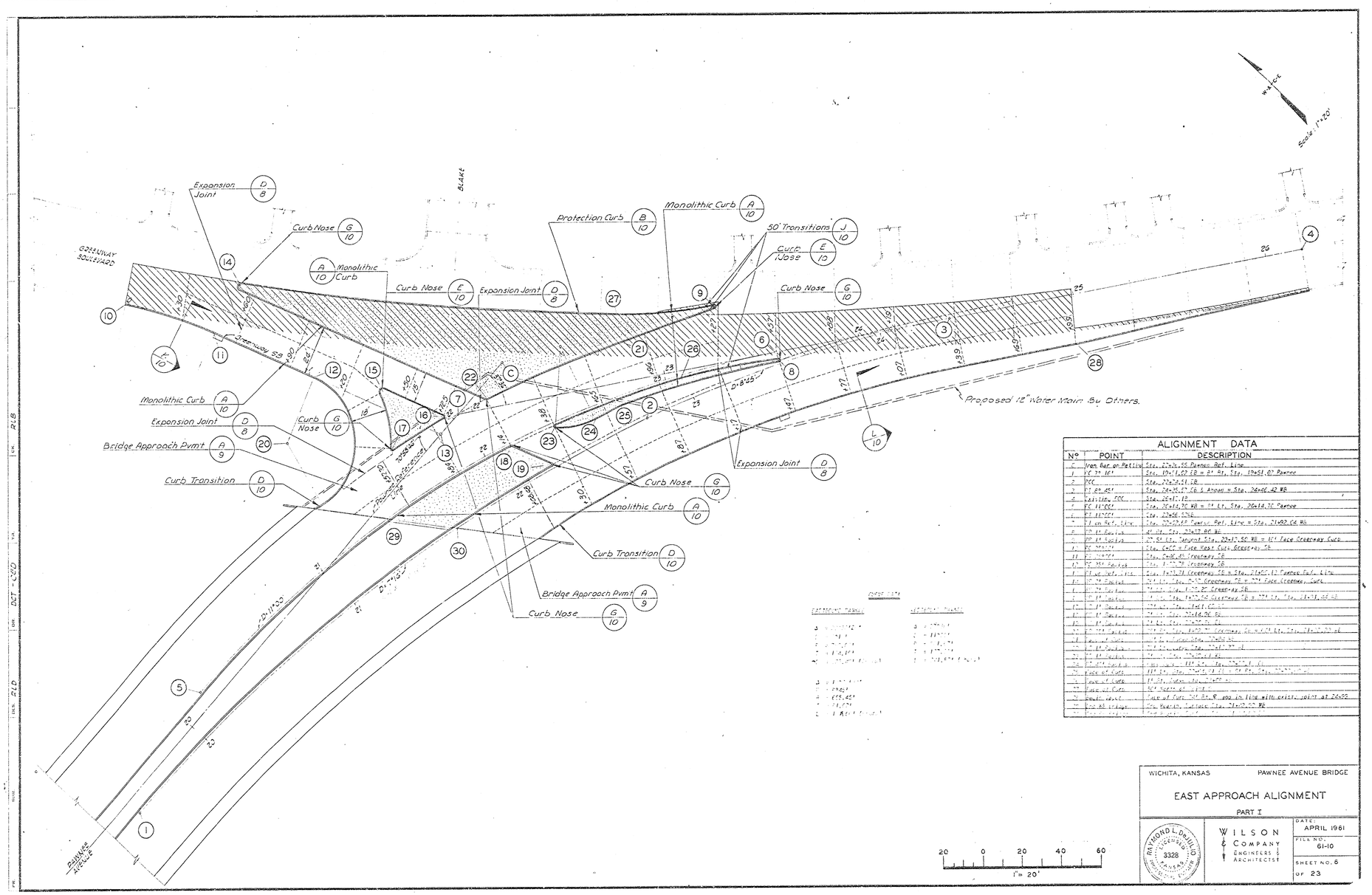
WILSON & COMPANY ENGINEERS & ARCHITECTS

DATE: APRIL 1961

FILE NO. 61-10

SHEET NO. 4 OF 23


W-E-N-C-E
Scale: 1"=20'
OSAGE
PAWNEE
AVENUE
BOULEVARD
McLEAN
CENTRAL
North Curb
South Curb
14.33%
10.65%
2.00%
Inlet 94.00 R.I.
Inlet 94.00
Inlet 94.00
Inlet 94.00



ALIGNMENT DATA

Nº	POINT	DESCRIPTION
C	Iron Bar on Petition	Sta. 21+76.55 Pawnee Ref. Line
1	PC 29° 10'	Sta. 10+61.07 RB = 21° Rt., Sta. 10+51.07 Pawnee
2	PCC	Sta. 24+74.21 RB
3	PT 29 45'	Sta. 24+15.07 RB & Angle = Sta. 26+45.42 WB
4	Centerline POC	Sta. 26+61.18
5	PC 11°00'	Sta. 31+13.70 WB = 0° Lt., Sta. 31+13.70 Pawnee
6	PT 11°00'	Sta. 32+46.00 RB
7	Iron Ref. Line	Sta. 32+79.67 Pawnee Ref. Line = Sta. 21+92.04 WB
8	PC 11 Curve	21.91 Lt., Sta. 33+27.80 WB
9	PT 11 Curve	21.91 Lt., Tangent Sta. 33+17.50 WB = 10' Face Greenway Curb
10	PC 30°00'	Sta. 6+00 = Face Heat Curb Greenway SB
11	Corner	Sta. 7+00 SB Greenway SB
12	PC 30° Curve	Sta. 7+73.73 Greenway SB
13	PT of Curve	Sta. 7+73.73 Greenway SB = Sta. 21+07.13 Pawnee Ref. Line
14	PT 30° Curve	24.00 Lt., Sta. 8+00 Greenway SB = 24' Face Greenway Curb
15	PC 29° Curve	Sta. 8+23.73 Greenway SB
16	PT of Curve	Sta. 8+73.73 Greenway SB = Sta. 21+57.13 Pawnee Ref. Line
17	PT 29° Curve	24.00 Lt., Sta. 8+73.73 Greenway SB = 24' Face Greenway Curb
18	PC 11° Curve	Sta. 11+13.70 Greenway SB
19	PT of Curve	Sta. 11+46.00 Greenway SB
20	PC 11° Curve	111.91 Lt., Sta. 11+13.70 SB
21	PT of Curve	111.91 Lt., Sta. 11+46.00 SB
22	Face of Curb	111.91 Lt., Sta. 11+13.70 SB = PC, Sta. 11+46.00 SB
23	Face of Curb	111.91 Lt., Sta. 11+46.00 SB
24	Face of Curb	54.91 North of 11+46
25	Face of Curb	Face of Curb 54.91 N. & 111.91 W. of 11+46
26	Face of Curb	Face of Curb 54.91 N. & 111.91 W. of 11+46 and in line with exist. joint at 26+00
27	Face of Curb	Face of Curb, Tangent Sta. 31+13.70 WB
28	Face of Curb	Face of Curb, Tangent Sta. 32+46.00 RB
29	Face of Curb	Face of Curb, Tangent Sta. 11+46.00 SB
30	Face of Curb	Face of Curb, Tangent Sta. 11+13.70 SB

WICHITA, KANSAS — PAWNEE AVENUE BRIDGE

EAST APPROACH ALIGNMENT

PART I

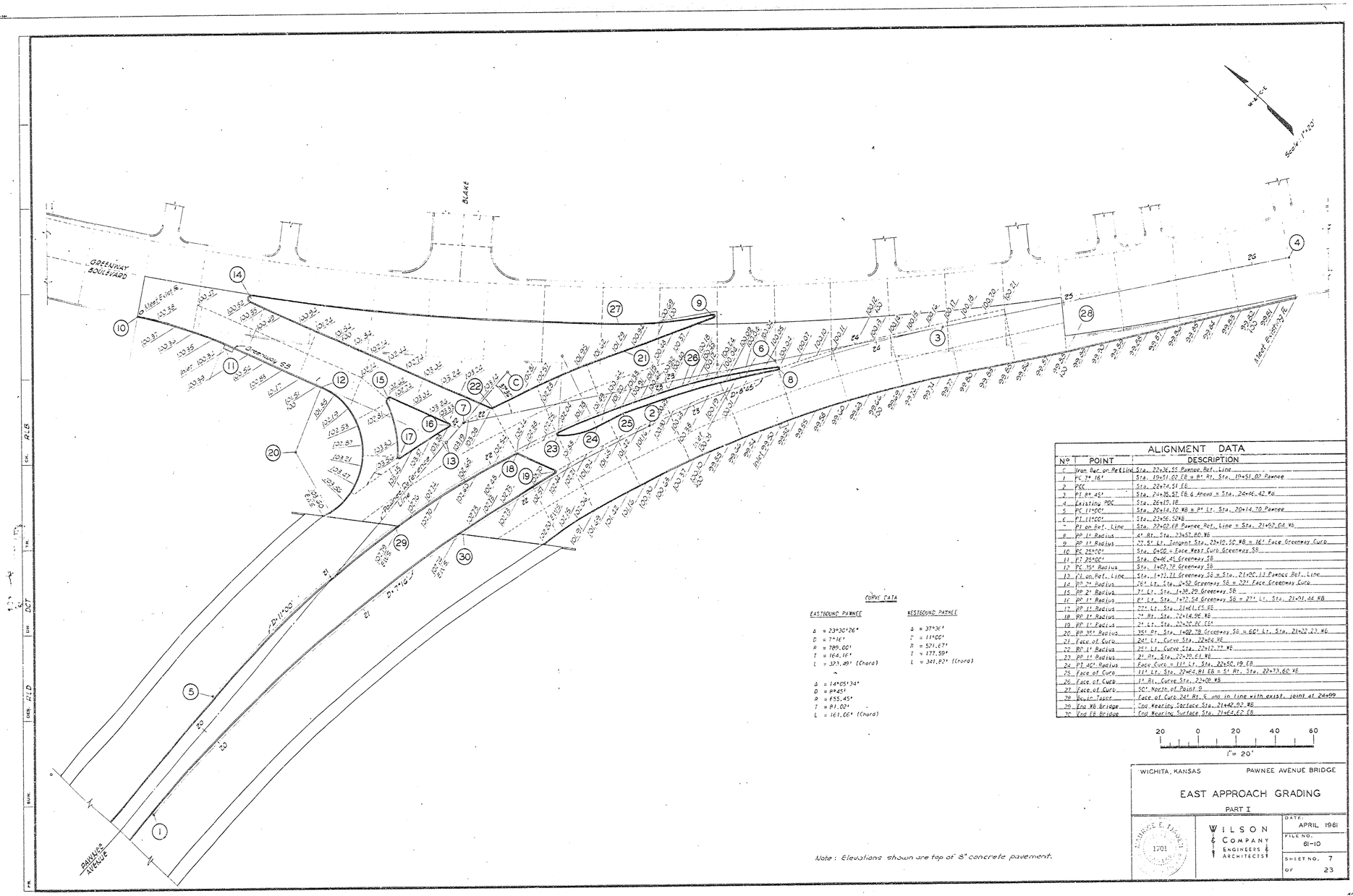
RAYMOND L. DAVID LICENSED 3328 PROFESSIONAL ENGINEER STATE OF KANSAS

WILSON & COMPANY ENGINEERS & ARCHITECTS

DATE: APRIL 1961

FILE NO.: 61-10

SHEET NO. 6 OF 23



CURVE DATA

EASTBOUND PAWNEE

Δ = 23°30'26"
D = 7°16'
R = 780.00'
T = 164.16'
L = 323.49' (Chord)

Δ = 14°05'34"
D = 8°45'
R = 655.45'
T = 81.02'
L = 161.66' (Chord)

WESTBOUND PAWNEE

Δ = 37°36'
D = 11°00'
R = 521.67'
T = 177.59'
L = 341.82' (Chord)

ALIGNMENT DATA

N°	POINT	DESCRIPTION
C	Iron Rec. on Ref. Line	Sta. 22+36.55 Pawnee Ref. Line
1	PC 7° 16'	Sta. 19+51.02 EB = 81' Rt. Sta. 19+51.02 Pawnee
2	PCC	Sta. 22+74.51 EB
3	PI on 45°	Sta. 24+35.37 EB & Ahead = Sta. 24+46.42 WB
4	Existing POC	Sta. 26+17.18
5	PC 11°00'	Sta. 20+14.70 WB = 81' Lt. Sta. 20+14.70 Pawnee
6	PT 11°00'	Sta. 21+56.52 WB
7	PI on Ref. Line	Sta. 22+03.68 Pawnee Ref. Line = Sta. 21+92.04 WB
8	PP 1° Radius	41' Rt. Sta. 23+57.80 WB
9	PP 1° Radius	22.51' Lt. Tangent Sta. 23+10.50 WB = 16' Face Greenway Curb
10	PC 25°00'	Sta. 0+00 = Face West Curb Greenway SB
11	PT 25°00'	Sta. 0+46.45 Greenway SB
12	PC 15° Radius	Sta. 1+07.78 Greenway SB
13	PI on Ref. Line	Sta. 1+73.71 Greenway SB = Sta. 21+20.13 Pawnee Ref. Line
14	PP 2° Radius	76' Lt. Sta. 0+52 Greenway SB = 22' Face Greenway Curb
15	PP 2° Radius	7' Lt. Sta. 1+38.25 Greenway SB
16	PP 1° Radius	6' Lt. Sta. 1+77.54 Greenway SB = 27' Lt. Sta. 21+91.44 WB
17	PP 1° Radius	22' Lt. Sta. 21+61.65 EB
18	PP 1° Radius	7' Rt. Sta. 22+14.96 WB
19	PP 1° Radius	21' Lt. Sta. 22+20.26 EB
20	PP 35° Radius	35' Rt. Sta. 1+02.78 Greenway SB = 66' Lt. Sta. 21+22.23 WB
21	Face of Curb	24' Lt. Curve Sta. 22+24 RE
22	PP 1° Radius	26' Lt. Curve Sta. 22+12.77 WB
23	PP 1° Radius	21' Rt. Sta. 22+30.61 WB
24	PT 40° Radius	Face Curb = 111' Lt. Sta. 22+50.19 EB
25	Face of Curb	111' Lt. Sta. 22+63.81 EB = 51' Rt. Sta. 22+73.60 WB
26	Face of Curb	11' Rt. Curve Sta. 22+28 WB
27	Face of Curb	50' North of Point 9
28	Ex. in Tower	Face of Curb 24' Rt. & end in line with exist. joint at 26+99
29	End WB Bridge	End Wearing Surface Sta. 21+42.52 WB
30	End EB Bridge	End Wearing Surface Sta. 21+63.62 EB

20 0 20 40 60
1" = 20'

Note: Elevations shown are top of 8" concrete pavement.

WICHITA, KANSAS — PAWNEE AVENUE BRIDGE

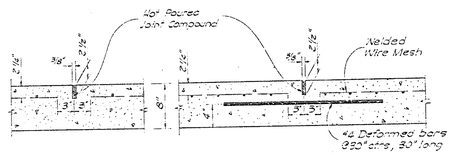
EAST APPROACH GRADING

PART I

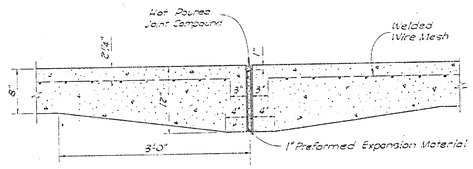
CLAUDE E. TUCKER 1701 REGISTERED ENGINEER

WILSON & COMPANY ENGINEERS & ARCHITECTS

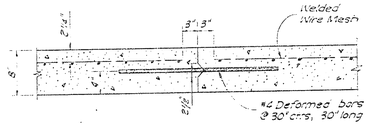
DATE: APRIL 1981
FILE NO. 81-10
SHEET NO. 7 OF 23



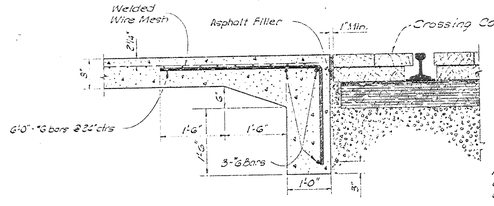
CONTRACTION JOINT DETAIL (C)



EXPANSION JOINT DETAIL (D)

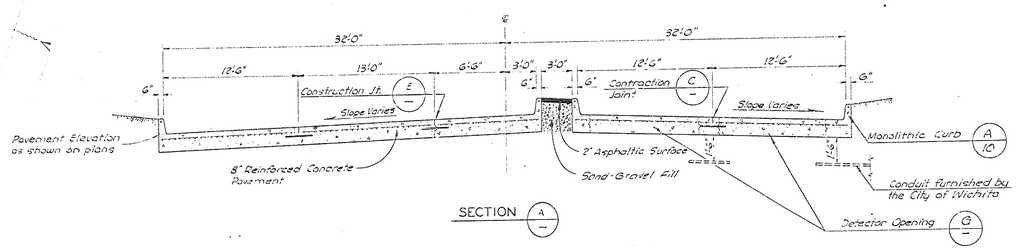


CONSTRUCTION JOINT DETAIL (E)

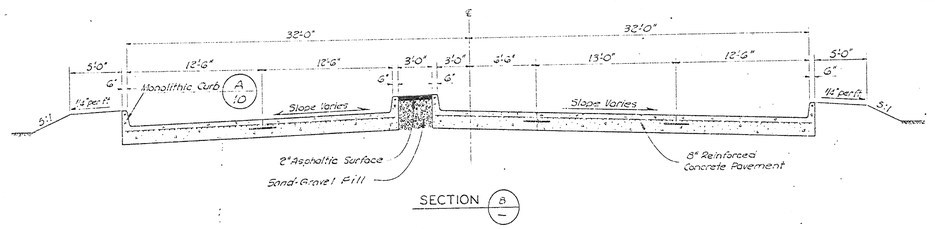


HEADER FOR RAILROAD CROSSING (F)

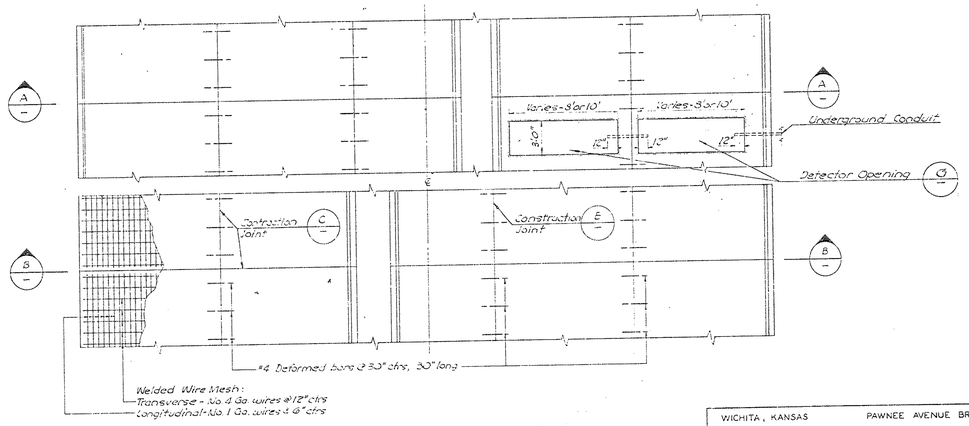
Note: Header to be paid for as additional area of concrete pavement, to be computed by adding two (2) feet times the width parallel to A.R. track for each header.



SECTION (A)



SECTION (B)



PLAN

WICHITA, KANSAS — PAWNEE AVENUE BRIDGE

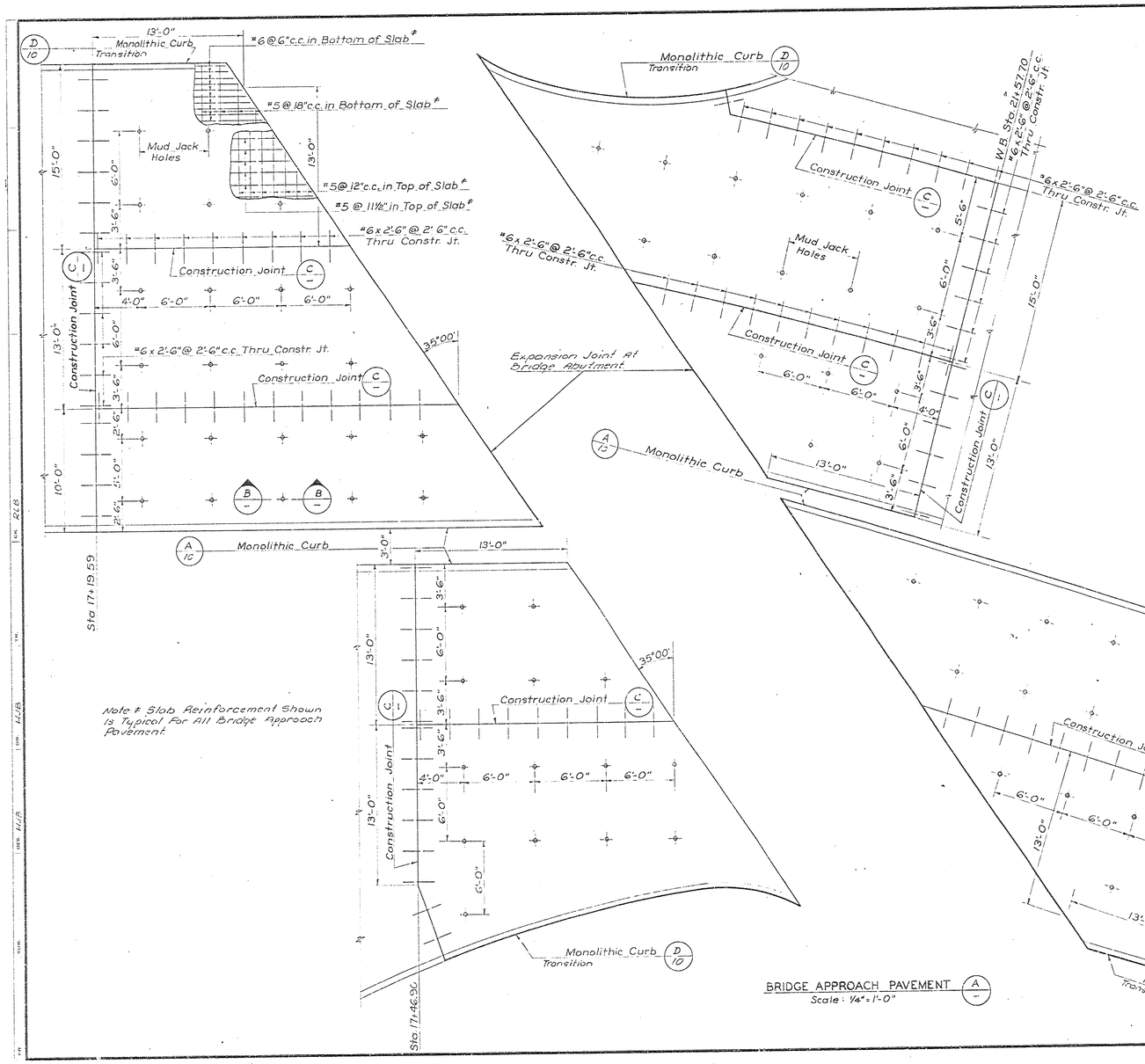
PAVING DETAILS

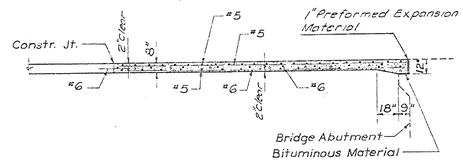
PART I

ROBERT L. BAKER 1869

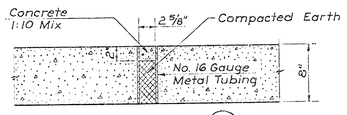
WILSON & COMPANY ENGINEERS & ARCHITECTS

DATE: APRIL 1981
FILE NO.: 61-10
SHEET NO. 8 OF 23



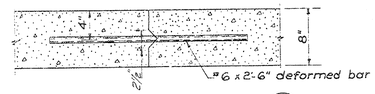


LONGITUDINAL SECTION ALONG CONSTRUCTION JOINT
Not to Scale



SECTION (B/—)
Scale: 1½"=1'-0"

NOTE: Metal Tube to be 2⅝" in diameter. Any seams to be smooth on the inside.
No material other than that shown shall be allowed inside of tube



DETAIL OF CONSTRUCTION JOINT (C/—)
Scale: 1½"=1'-0"
Note: Slab Reinforcing Steel Shall Terminate 3" From Joints.

1 0 1 2 4 6 8 7 8 9
¼"=1'-0"

1 0 1 2
1½"=1'-0"

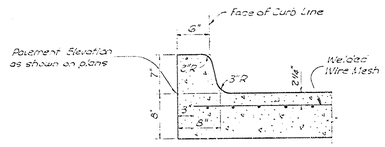
WICHITA, KANSAS — PAWNEE AVENUE BRIDGE

BRIDGE APPROACH PAVEMENT
PART I

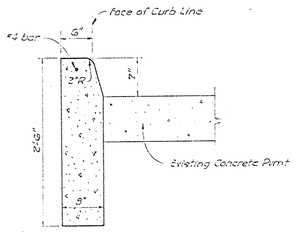
H. J. BERDA LICENSED 1570 KANSAS PROFESSIONAL ENGINEER

WILSON & COMPANY ENGINEERS & ARCHITECTS

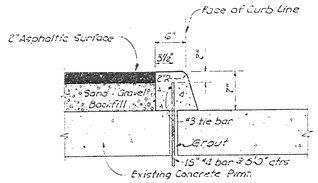
DATE APRIL 1961
FILE NO. 61-10
SHEET NO. 9 OF 23



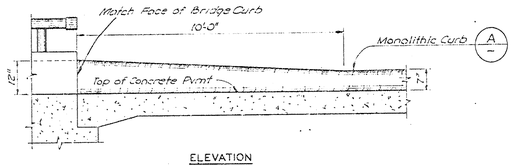
MONOLITHIC CURB (A)



PROTECTION CURB (B)

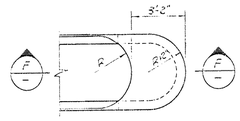


SPECIAL CURB (C)

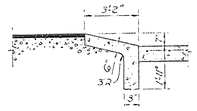


ELEVATION

CURB TRANSITION DETAIL (D)

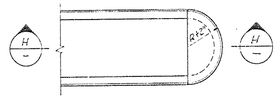


PLAN

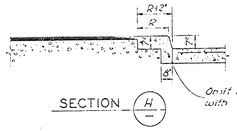


SECTION (F)

CURB NOSE DETAIL* (E)



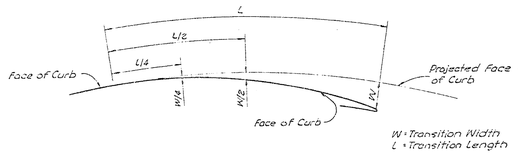
PLAN



SECTION (H)

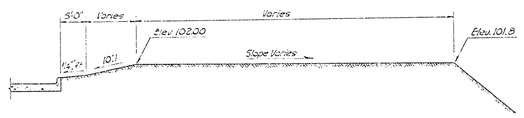
CURB NOSE DETAIL* (G)

Note: * Curb Nose Will be Paid For as L.F. Monolithic Curb.

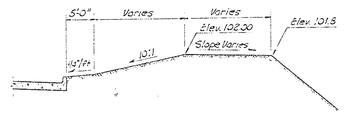


W = Transition Width
L = Transition Length

TRANSITION DIAGRAM (J)



SECTION (K)



SECTION (L)

WICHITA, KANSAS — PAWNEE AVENUE BRIDGE

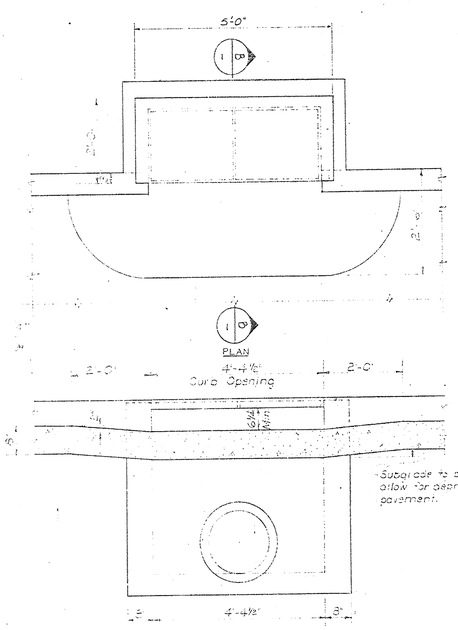
CURB DETAILS & SECTIONS

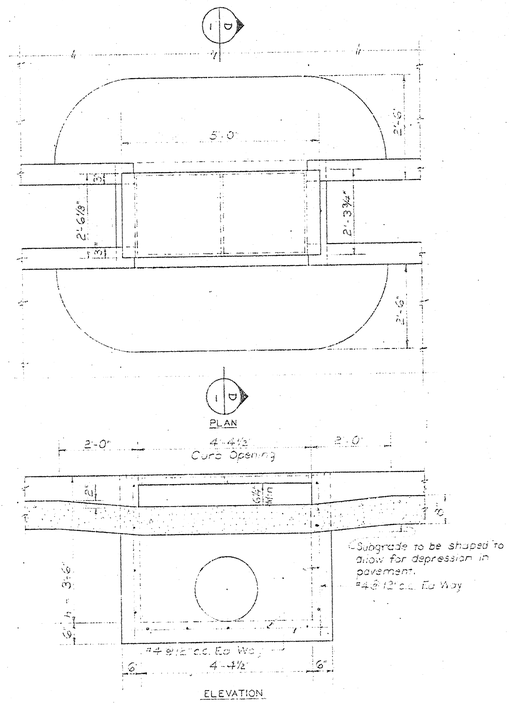
PART 1

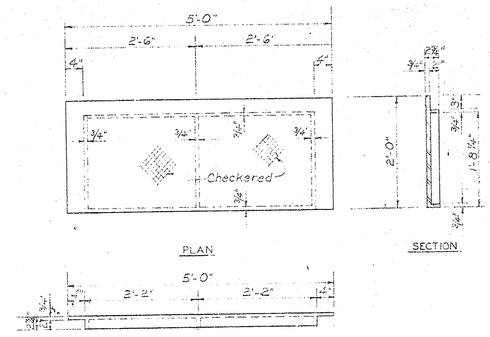
ROBERT L. BAILEY LICENSED 1869 KANSAS PROFESSIONAL ENGINEER

WILSON & COMPANY ENGINEERS & ARCHITECTS

DATE: APRIL 1961
FILE NO. 61-10
SHEET NO. 10 OF 23



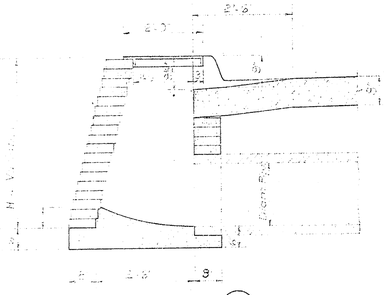


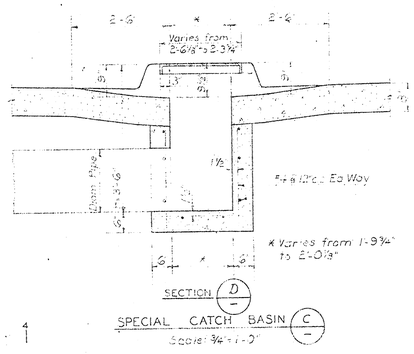


CITY OF WICHITA CAST IRON INLET COVER

Scale: 1"=1'-0"

Weight of Casting = 325#



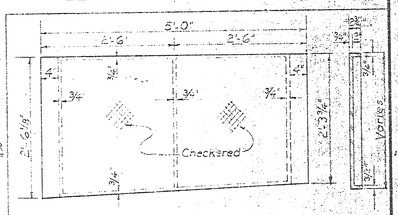


CITY OF WICHITA STEEL INLET COVER

Scale: 1"=1'-0"

Weight = 206#

Snap Palm Block Asphalt



CAST IRON COVER FOR SPECIAL CATCH BASIN

Scale: 1"=1'-0"

Note: Elevation is the same as for City of Wichita Cast Iron Inlet Cover.

SCHEDULE OF CATCH BASINS

Station	Side	Type	Top El.	Flow El.	H
13+08 Pawnee Ave.	Lt.	Std.	96.64	92.14	4'-6"
13+08.3 Pawnee Ave.	Rt.	Std.	96.85	91.69	5'-2"
13+16.7 Pawnee Ave.	Lt.	Std.	96.58	92.58	4'-0"
13+29.7 Pawnee Ave.	Rt.	Std.	96.58	91.83	4'-9"
13+64.5 Pawnee Ave.	Rt.	Std.	96.48	93.54	2'-11½"
10+78.3 McLean Blvd.	Rt.	Std.	101.97	96.14	5'-10"
23+35 W.B.	Rt.	Spec.	100.61	97.11	3'-6"
23+40 E.B.	Rt.	Std.	100.08	95.58	4'-6"
0+50 Greenway Blvd.	Rt.	Std.	100.92	95.92	5'-0"
15+18 Pawnee Ave.	Lt.	Std.	101.66	96.66	5'-0"

WICHITA, KANSAS — PAWNEE AVENUE BRIDGE

CATCH BASIN DETAILS

PART I

M. J. BENDA LICENSED 1570 KANSAS PROFESSIONAL ENGINEER

WILSON & COMPANY ENGINEERS & ARCHITECTS

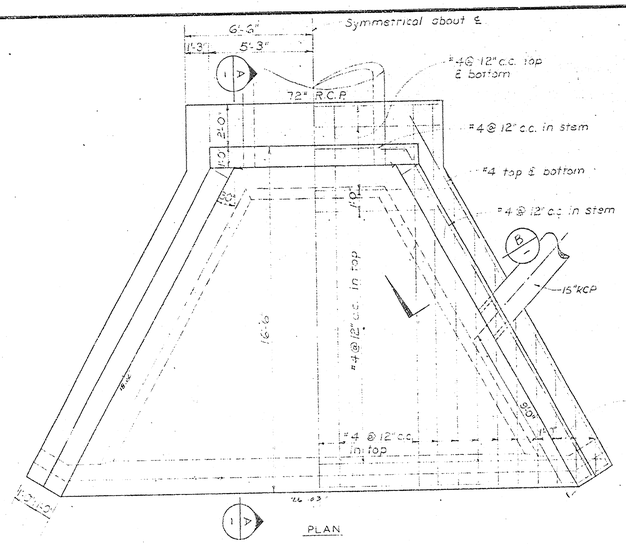
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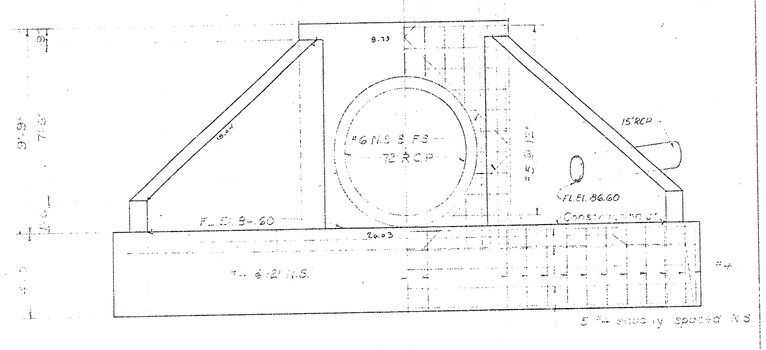
FILE NO. 61-10

SHEET NO. 11 OF 23

0 1 2 4
¾"=1'-0"

0 1 2 3
1"=1'-0"

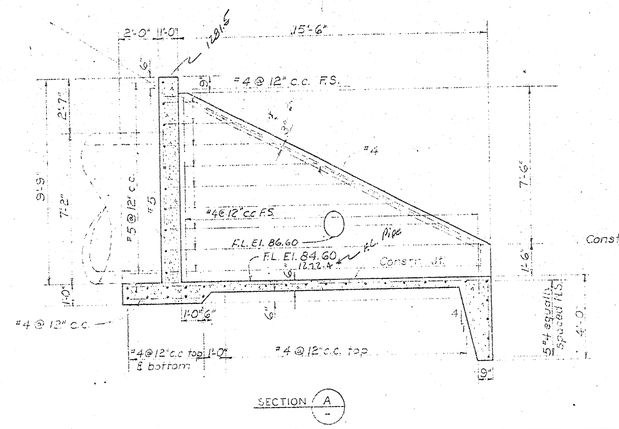




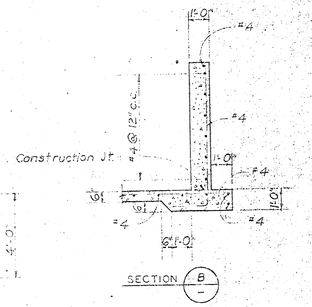
ELEVATION

OUTLET HEADWALL FOR 72" R.C.P.
Scale: 3/8" = 1'-0"

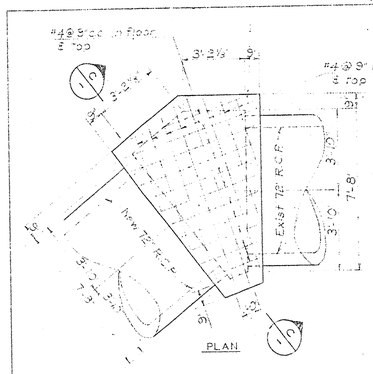
NOTE: 72" Automatic Gate Salvaged from Exist. Headwall Sta 16+34 Rt., to be Installed on this Headwall.

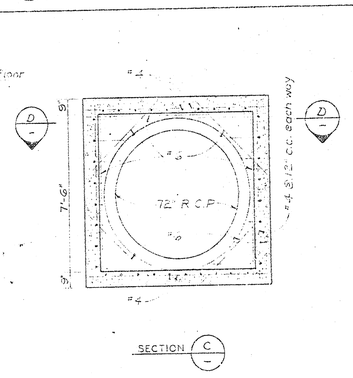


SECTION A

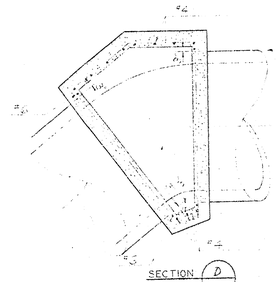


SECTION B

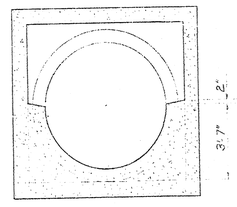




SECTION C



SECTION D



SECTION SHOWING SHAPING OF FLOOR

JUNCTION BOX
Scale: 3/8" = 1'-0"

0 1 2 3 4 5 6 7 8
3/8" = 1'-0"

WICHITA, KANSAS — PAWNEE AVENUE BRIDGE

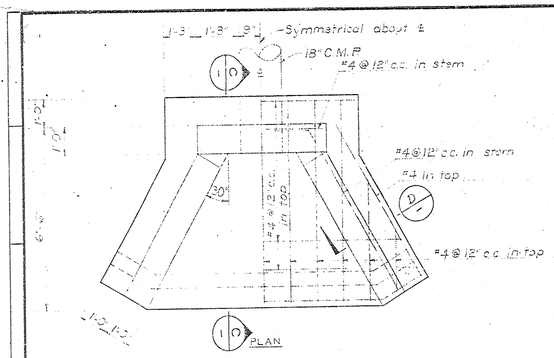
72" DRAINAGE STRUCTURE DETAILS

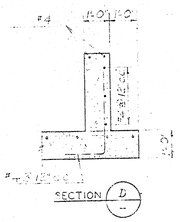
PART I

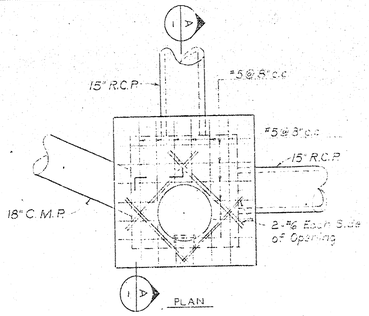
H. J. BENDA LICENSED 1570 KANSAS PROFESSIONAL ENGINEER

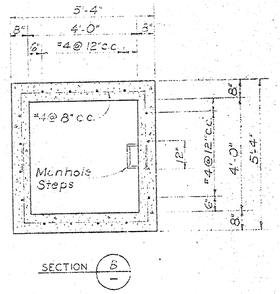
WILSON & COMPANY ENGINEERS & ARCHITECTS

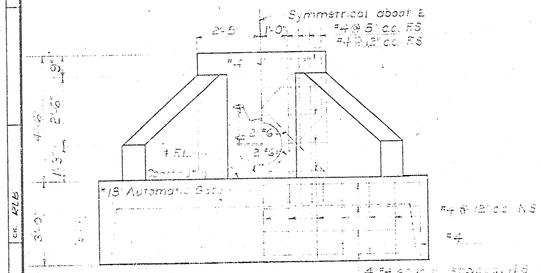
DATE: APRIL 1961
FILE NO. 61-10
SHEET NO. 12 OF 23

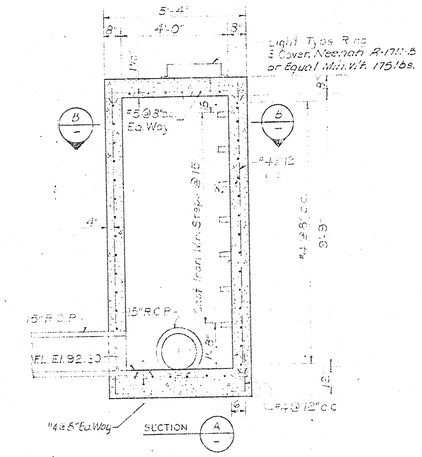


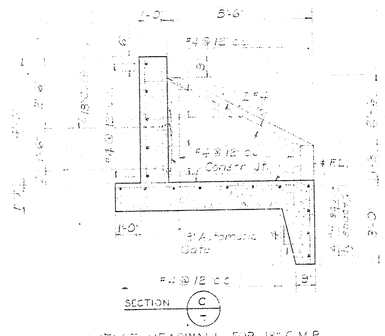


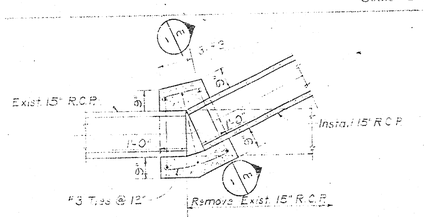


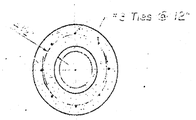












CONCRETE CONNECTING COLLAR
Scale: ½" = 1'-0"

0 1 2 3 5 7
½" = 1'-0"

WICHITA, KANSAS — PAWNEE AVENUE BRIDGE

DRAINAGE DETAILS

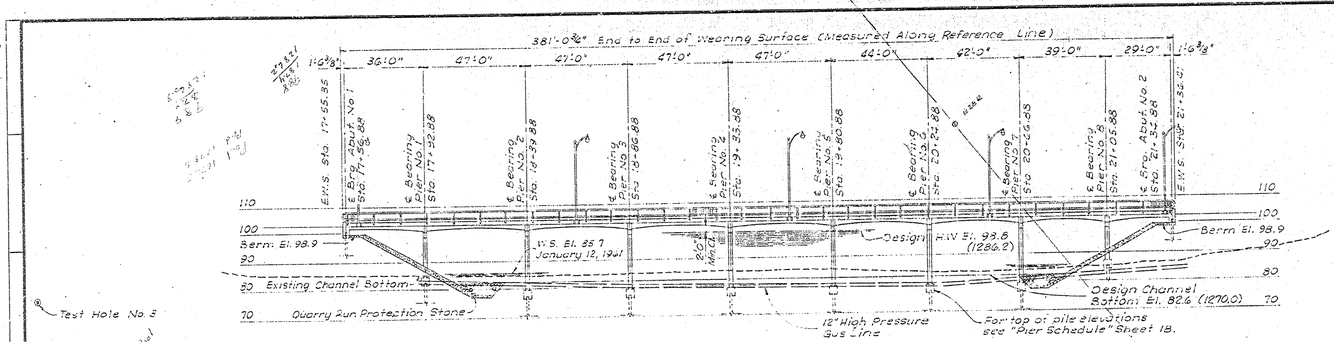
PART I

M. J. BEINOR LICENSED 1570 KANSAS PROFESSIONAL ENGINEER

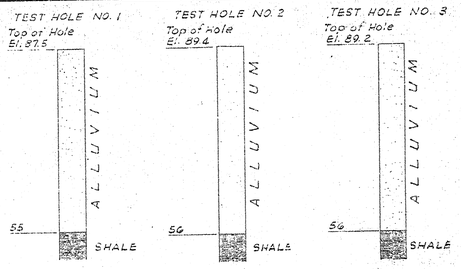
WILSON & COMPANY ENGINEERS & ARCHITECTS

DATE: APRIL 1981
FILE NO. 81-110
SHEET NO. 13 OF 23

G1-10



ELEVATION
Shown Normal to Stream



LOG OF BORINGS

PILE TABULATION

Substructure Unit	NORTH BRIDGE No.	Size	Est. Lgth.	SOUTH BRIDGE No.	Size	Est. Lgth.
West Abut.	4	10BP42	45'	4	10BP42	45'
Pier 1	10	12BP53*	30'	10	12BP53*	30'
Pier 2	10	do	25	10	do	25'
Pier 3	9	do	25'	9	do	24'
Pier 4	8	do	25'	8	do	25'
Pier 5	8	do	24'	8	do	26'
Pier 6	8	do	26'	5	do	26'
Pier 7	8	do	26'	9	do	26'
Pier 8	8	do	33'	9	do	33'
East Abut.	5	10BP42	46'	5	10BP42	46'

* or 14" Prestressed Concrete (See Sheet 21.)

GENERAL NOTES:

Design Loading: H20-S16-44 AASHO Specifications, 1957 Edition.

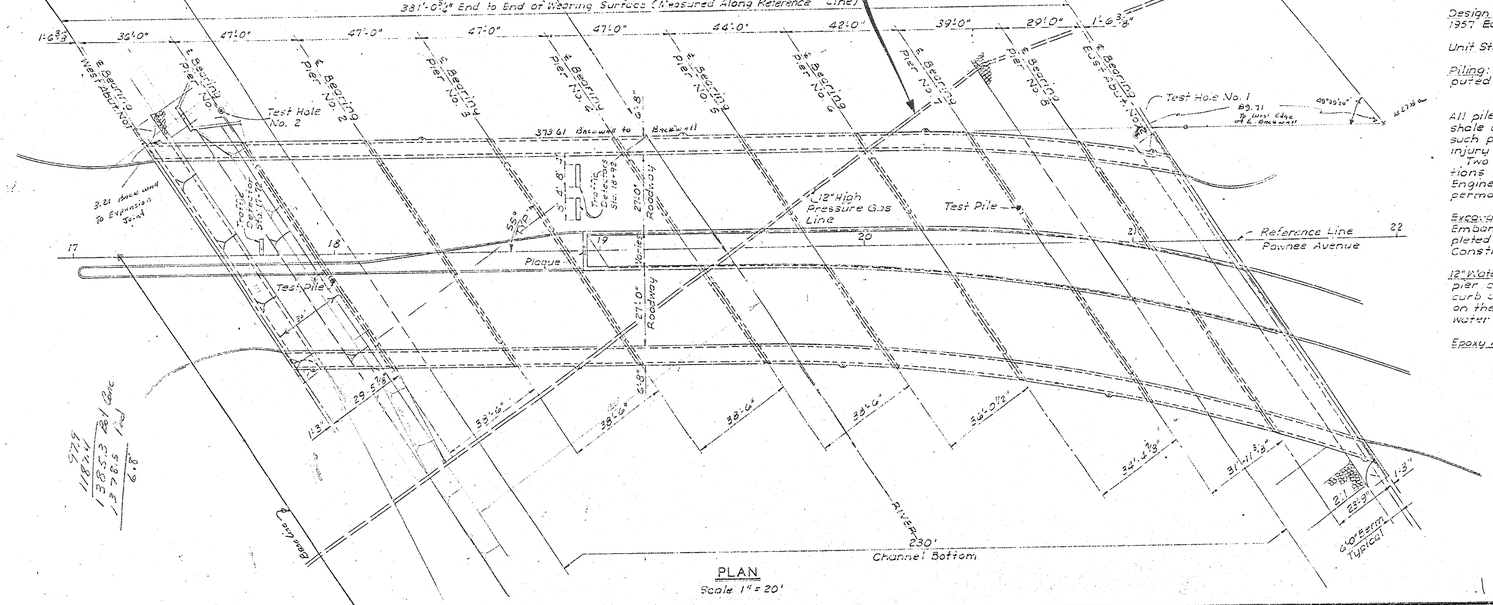
Unit Stresses: fc=4000 p.s.i. fs=16000 p.s.i. fs=20000 p.s.i.

Piling: Piles shall be driven to a minimum computed bearing value as follows:
Pier Piling: 47 tons
Abutment Piling: 37 tons
All piles shall be driven to a penetration into shale unless in the opinion of the Engineer such penetration cannot be obtained without injury to the pile.
Two test piles shall be driven at the locations shown on the plans or as directed by the Engineer. Test piles shall remain in place as permanent piling.

Excavation and Embankment: Excavation and Embankment for Pawnee Avenue shall be completed in the vicinity of the Bridge prior to Construction of Piers and Abutments.

12" Water Line: After pouring of the deck and pier caps and prior to forming for the north curb and walk, a 12" water line shall be positioned on the pier caps to facilitate later hanging of the water line under the sidewalk.

Epoxy Resin Seal for Bridge Deck: See Specifications



PLAN
Scale 1" = 20'

WICHITA, KANSAS — PAWNEE AVENUE BRIDGE

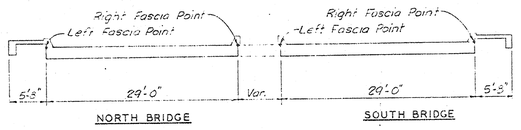
BRIDGE CONSTRUCTION LAYOUT
PART II

WILSON & COMPANY ENGINEERS & ARCHITECTS

DATE: APRIL 1961
FILE NO. 61-10
SHEET NO. 14 OF 23

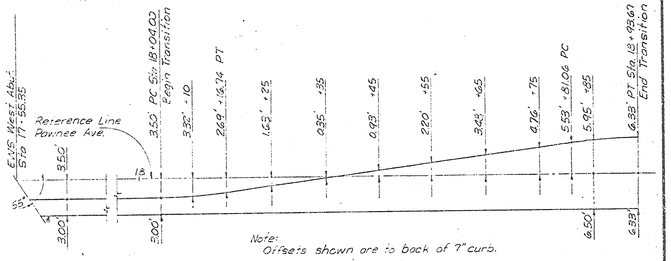
Station	North Bridge Left Fascia Offset	North Bridge Left Fascia Elev.	North Bridge Right Fascia Offset	North Bridge Right Fascia Elev.	South Bridge Left Fascia Offset	South Bridge Left Fascia Elev.	South Bridge Right Fascia Offset	South Bridge Right Fascia Elev.
18+60.00	35.00'	102.19	6.00'	102.76	6.00'	102.76	35.00'	102.18
18+70.00	35.00	102.21	6.00		6.00		35.00	
18+80.00	35.00	102.23	6.00		6.00		35.00	
18+90.00	35.00	102.31	6.00		6.00		35.00	
19+00.00	35.00	102.39	6.00		6.00		35.00	
19+10.00	35.00	102.47	6.00		6.00		35.00	
19+20.00	35.00	102.55	6.00		6.00		35.00	
19+30.00	35.00	102.63	6.00		6.00		35.00	
19+43.00	35.00	102.72	6.00		6.00		35.00	
19+50.00	35.00	102.80	6.00		6.00		35.00	
19+60.00	35.00	102.88	6.00		6.05		35.05	
19+70.00	35.00	102.97	6.00		6.23		35.24	
19+80.00	35.00	103.05	6.00		6.53		35.55	
19+90.00	35.00	103.13	6.00		6.96		36.00	
20+00.00	35.00	103.22	6.00		7.52		36.58	
20+10.00	35.00	103.30	6.00		8.20		37.29	
20+20.00	34.97	103.38	5.97		9.01		38.13	
20+30.00	34.79	103.46	5.79		9.95		39.10	
20+32.00	34.42	103.53	5.35		11.02		42.21	
20+50.00	33.86	103.57	4.80		12.22		41.45	
20+60.00	33.13	103.60	4.02		13.54		42.83	
20+70.00	32.21	103.53	3.05		15.00		44.35	
20+80.00	31.10	103.63	1.85		16.59		46.00	
20+90.00	29.81	103.58	0.52		18.31		47.78	
21+00.00	28.33	103.53	- 1.05		20.16		49.71	
21+10.00	26.66	103.33	- 2.81		22.14		51.77	
21+20.00			- 4.76		24.26		53.97	
21+30.00			- 6.95		26.51		56.32	
21+40.00			- 9.33		28.91		58.81	
21+50.00					31.46		61.44	
21+60.00					34.11		64.22	
21+70.00							67.15	
21+80.00							70.22	

Line & Brg. Of	North Bridge Left Fascia Station	Offset	Elev.	North Bridge Right Fascia Station	Offset	Elev.	South Bridge Left Fascia Station	Offset	Elev.	South Bridge Right Fascia Station	Offset	Elev.
West Abut.	17+32.37	35.00'	102.18	17+52.63	6.00'	102.76	17+61.08	6.00'	102.76	17+81.39	35.00'	102.18
Pier No. 1	17+63.37	35.00	102.18	17+83.63	6.00	102.76	17+97.08	6.00	102.76	18+17.39	35.00	102.18
Pier No. 2	18+15.37	35.00	102.18	18+35.63	6.00	102.76	18+49.08	6.00	102.76	18+69.39	35.00	102.18
Pier No. 3	18+62.37	35.00	102.19	18+82.63	6.00	102.76	19+01.08	6.00	102.76	19+11.39	35.00	102.18
Pier No. 4	19+09.37	35.00	102.47	19+29.68	6.00	102.76	19+33.08	6.00	102.76	19+53.40	35.04	102.18
Pier No. 5	19+56.37	35.00	102.85	19+76.68	6.00	102.76	19+85.61	6.76	102.76	20+06.82	37.05	102.18
Pier No. 6	20+00.37	35.00	103.22	20+20.70	5.97	102.76	20+31.99	10.15	102.76	20+54.91	42.03	102.18
Pier No. 7	20+42.88	34.26	103.54	20+64.34	3.62	102.76	20+78.30	16.31	102.76	21+01.96	50.10	102.18
Pier No. 8	20+84.49	30.54	103.33	21+07.53	- 2.36	102.76	21+28.39	25.01	102.76	21+48.64	61.09	102.18
East Abut.	21+17.13	25.35	103.03	21+41.72	- 9.76	102.76	21+58.47	33.69	102.76	21+85.21	71.85	102.18
E.W.S. At												
West Abut.	17+30.34	35.00	102.16	17+51.15	6.00	102.76	17+59.55	6.00	102.76	17+79.86	35.00	102.18
East Abut.	21+18.39	25.02	103.23	21+43.57	-10.23	102.76	21+60.38	34.20	102.76	21+87.19	72.52	102.18



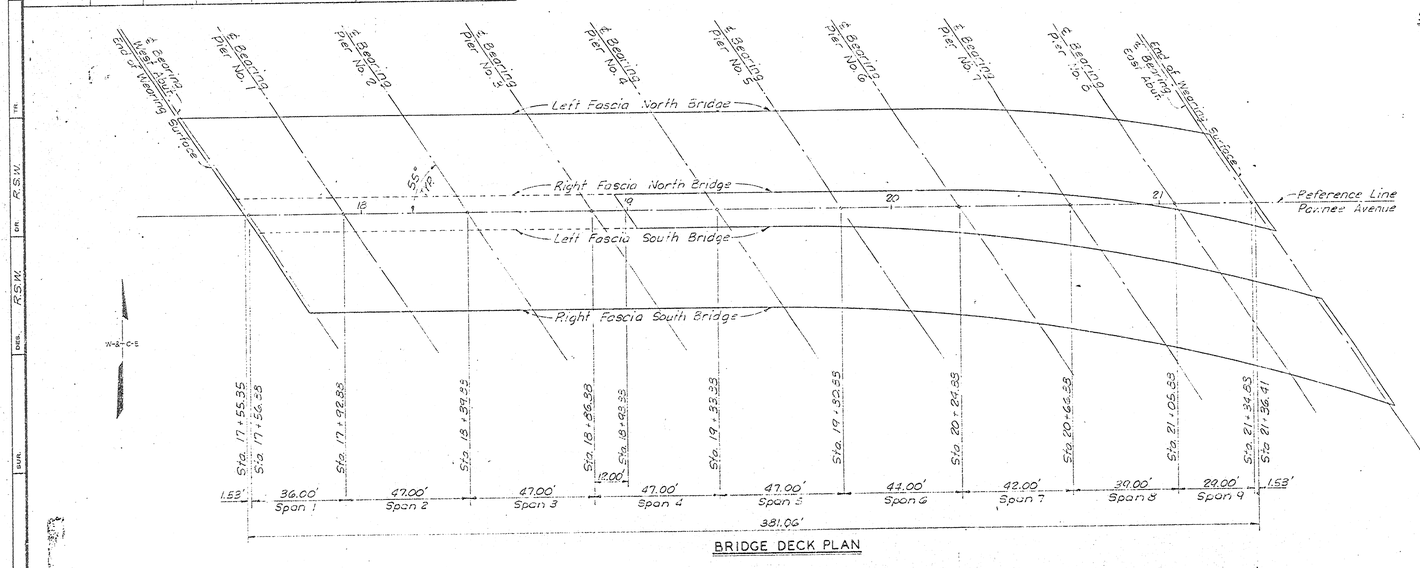
CROSS SECTION OF BRIDGE

Shown Normal to Roadways



Note:
Offsets shown are to back of 7" curb.

STORAGE LANE CURB OFFSETS



BRIDGE DECK PLAN

Note:
In setting screeds for the deck, the camber shown on the Dead Load Camber Diagram, Sheet 19, must be added to the tabulated elevations and an additional amount must be added for any settlement or deflection anticipated in the forms.

WICHITA, KANSAS — PAWNEE AVENUE BRIDGE

SCREED GEOMETRY

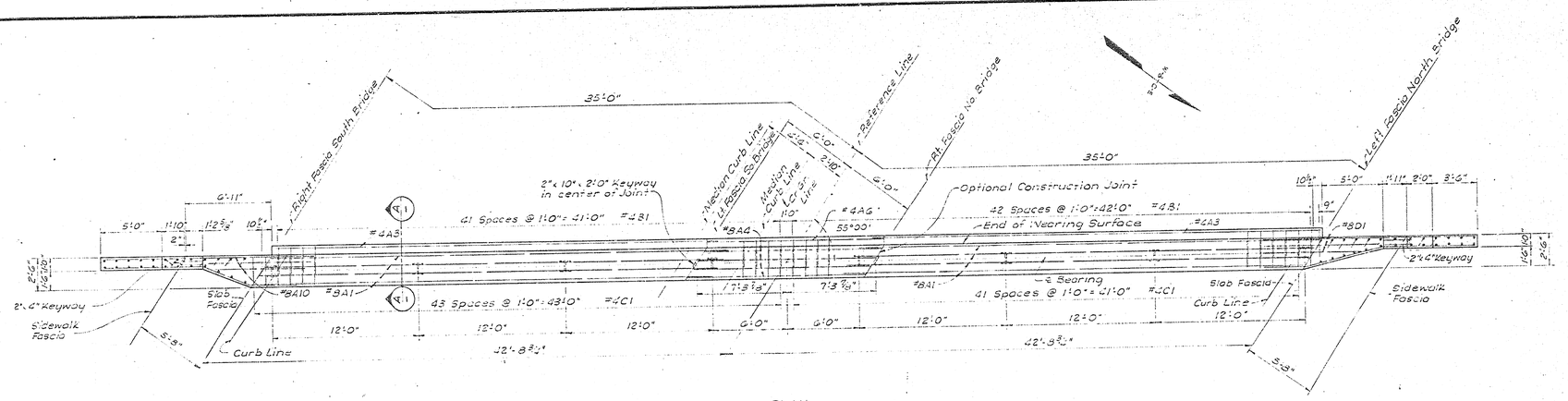
PART II

WILSON & COMPANY ENGINEERS & ARCHITECTS

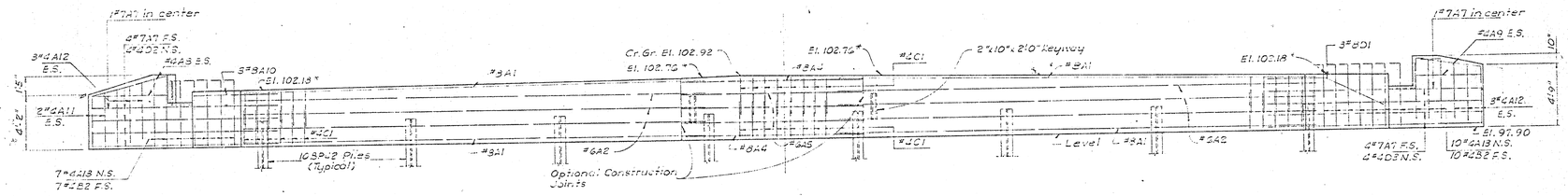
DATE: APRIL 1961

FILE NO. 61-10

SHEET NO. 15 OF 23



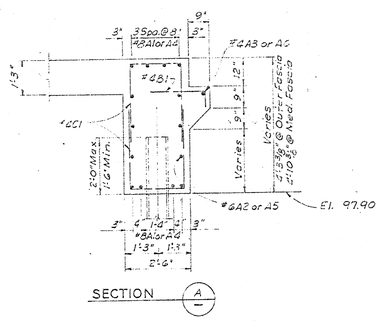
PLAN



ELEVATION

Looking Southwest

* At intersection of slab fascia with end of wearing surface



SHEET REFERENCE SYSTEM

A 20 — Section Designation; Sheet on which Section is drawn

SECTION A 19 — Section Designation; Sheet on which Section is cut.

A Dash in lieu of the sheet designation indicates that the section is cut and drawn on the same sheet.

GENERAL NOTES:

Reinforcing: All dimensions relative to reinforcing steel are to centerline of bars unless otherwise noted.

Falsework: Falsework shall be left in place in any span until the concrete in that span and the next adjacent span constructed lastest shall have attained its design strength.

Construction Joints: Construction joints are optional with the Contractor, but if used shall be made only at locations shown.

Camber: Camber shall be provided as shown on the Camber Diagram. Additional camber shall be provided for settlement or deflection of Falsework.

Concrete Placing Sequence: Concrete placing sequence shall be as indicated in the diagram. Placing may be continous provided a pour over a pier is made only after adjacent midspan pours or as part of a pour including completion of adjacent midspan pours.

WICHITA, KANSAS — PAWNEE AVENUE BRIDGE

WEST ABUTMENT DETAILS

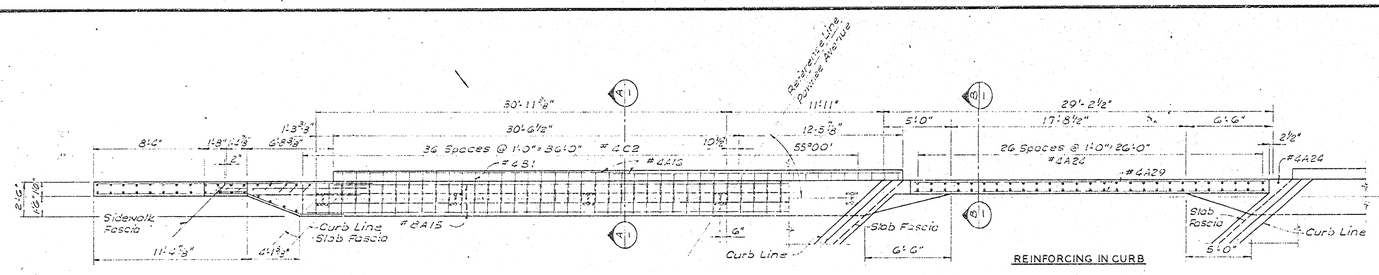
PART II

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DATE: APRIL 1961

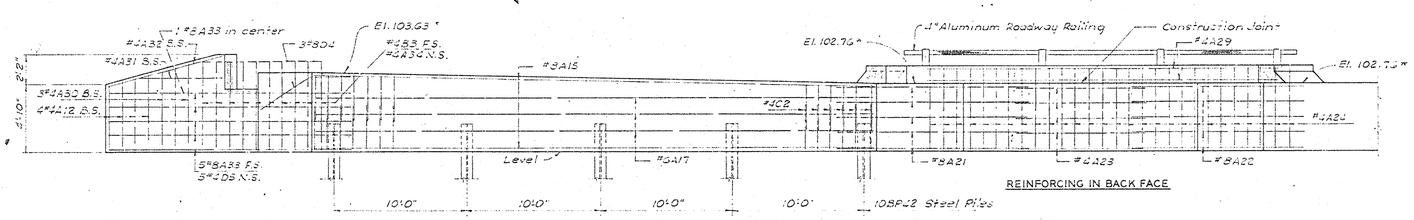
FILE NO. 61-10

SHEET NO. 16 OF 23



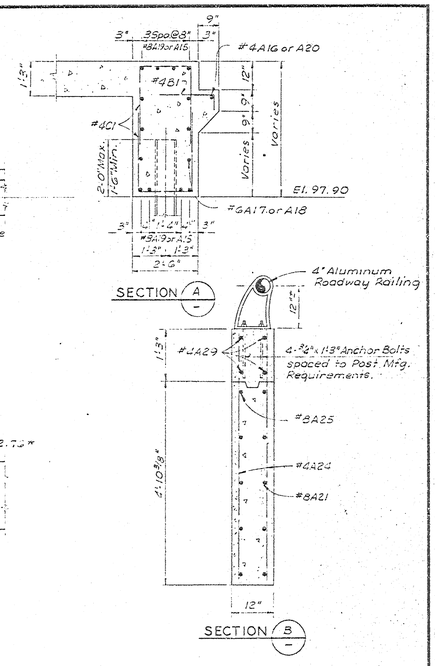
REINFORCING IN CURB

PLAN - NORTH BRIDGE



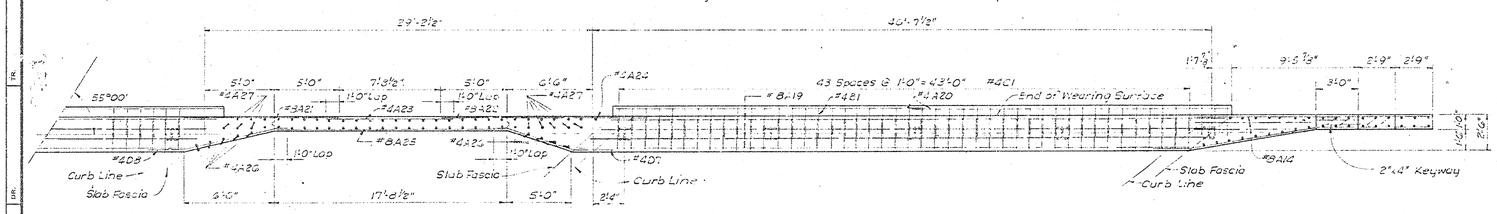
REINFORCING IN BACK FACE

ELEVATION - NORTH BRIDGE
Looking Northeast



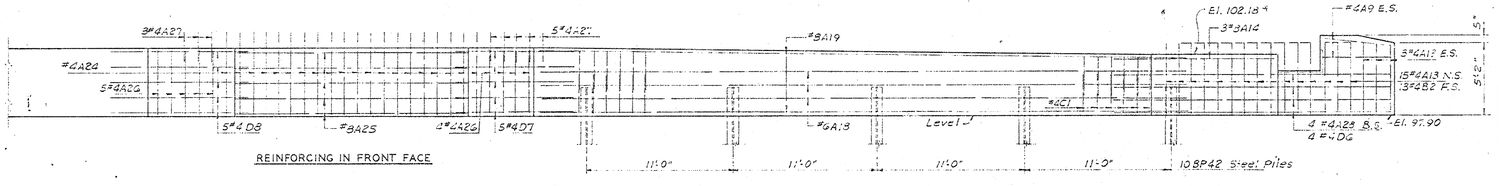
SECTION A

SECTION B



REINFORCING IN WALL

PLAN - SOUTH BRIDGE



REINFORCING IN FRONT FACE

ELEVATION - SOUTH BRIDGE
Looking Northeast

* At intersection of Slab Fascia with end of wearing surface.

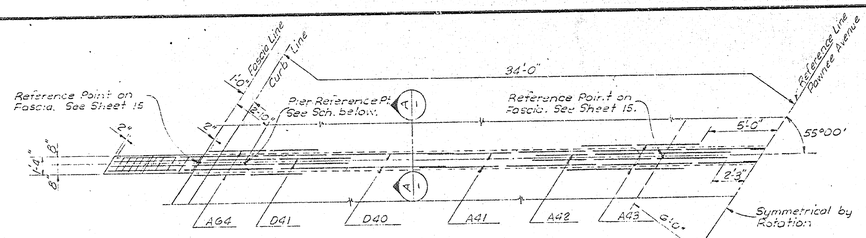
WICHITA, KANSAS — PAWNEE AVENUE BRIDGE

EAST ABUTMENT DETAILS

PART II

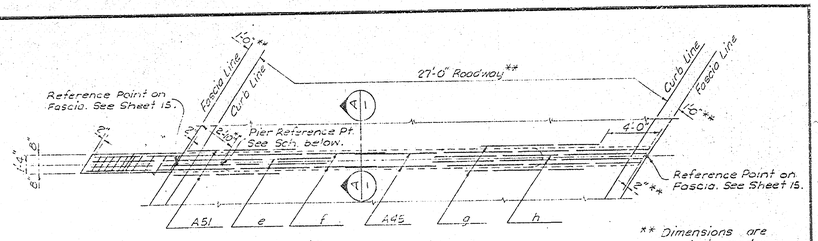
WILSON & COMPANY ENGINEERS & ARCHITECTS

DATE: APRIL 1961
FILE NO. 61-10
SHEET NO. 17 OF 23



Reinforcing shown in top of beam

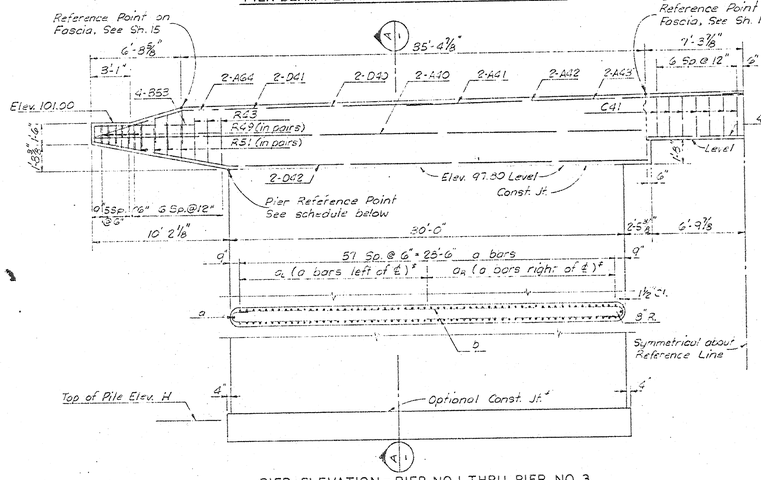
PIER BEAM PLAN - PIER NO. 1 THRU PIER NO. 3



Reinforcing shown in top of beam

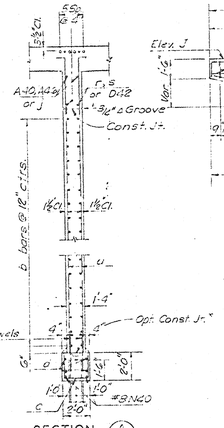
** Dimensions are normal to roadway.

PIER BEAM PLAN - PIER NO. 4 THRU PIER NO. 8

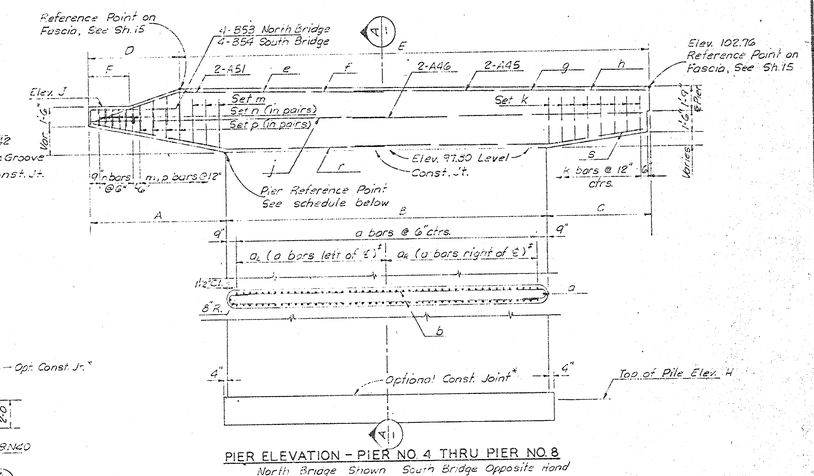


PIER ELEVATION - PIER NO. 1 THRU PIER NO. 3

Shown without sidewalk and median curb



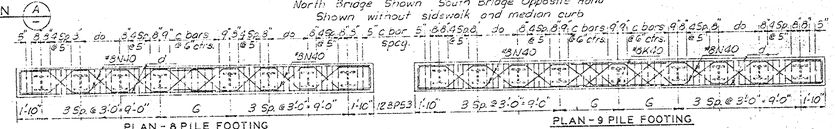
SECTION (A)



PIER ELEVATION - PIER NO. 4 THRU PIER NO. 8

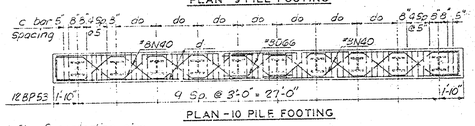
North Bridge Shown South Bridge Opposite Hand

Shown without sidewalk and median curb



PLAN - 8 PILE FOOTING

PLAN - 9 PILE FOOTING



PLAN - 10 PILE FOOTING

*If optional construction joint is not used:
1. Use a 4" fillet at intersection of footing and pier.
2. The 4" projection beyond the end of the pier may be omitted.
3. One piece vertical bars may be used.

PIER SCHEDULE

	Pier No.	Reference Point Station	Reference Point Offset	Dimensions A	B	C	D	E	F	G	Elevations H	Elevations J	No. Of Piles	Reinforcing Steel a_L	a_R	b	c	d	e	f	g	h	i	Set k	Set m	Set n	Set p	r	s
North Bridge	1	17+70.33	32.17'			As	detailed	above			84.0	——	10	59-B40	59-A41	22-P40	44-C40	4-A58					As detailed	above					
	2	18+17.36	32.17'			As	detailed	above			79.0	——	10	59-B42	59-A43	32-P40	44-C40	4-A58					As detailed	above					
	3	18+64.35	32.17'			As	detailed	above		4'-6"	79.0	——	9	59-B42	59-B43	32-P40	48-C40	4-A58					As detailed	above					
	4	19+11.36	32.17'	10'-2½"	26'-0"	7'-11⅞"	6'-8⅝"	35'-6⅞"	3'-1"	3'-0"	79.0	101.24	8	47-B43	47-B43	36-P41	38-C40	4-A59	2-D41	2-D40	2-A52	2-A54	2-A46	R41	R43	R39	R31	2-D49	2-D59
	5	19+58.36	32.17'	10'-2½"	26'-0"	7'-11⅞"	6'-8⅝"	35'-6⅝"	3'-1"	3'-0"	77.5	101.62	8	47-B46	47-B46	JO-P41	38-C40	4-A59	2-D41	2-D40	2-A52	2-A56	2-A46	R41	R41	R50	R52	2-D50	2-D59
	6	20+02.36	32.17'	10'-2½"	26'-0"	7'-11⅞"	6'-8⅝"	35'-5⅝"	3'-1"	3'-0"	79.5	101.97	8	47-B47	47-B47	30-P41	38-C40	4-A59	2-D41	2-D40	2-A52	2-A54	2-A46	R41	R43	R50	R53	2-D51	2-D59
	7	20+44.94	31.33	10'-6⅝"	26'-0"	7'-10⅞"	6'-11⅜"	37'-5"	3'-2"	5'-0"	79.0	102.29	8	51-B49	51-B47	30-P42	42-C40	4-A60	2-D41	2-D43	2-A52	2-A54	2-A47	R41	R45	R50	R53	2-D52	2-D60
	8	20+86.70	27.40	11'-3"	27'-0"	9'-3⅞"	7'-4⅜"	40'-2"	3'-4⅞"	6'-0"	85.0	102.40	8	53-B49	53-B50	22-P43	44-C40	4-A61	2-D41	2-D45	2-A53	2-A56	2-A45	R40	R42	R50	R55	2-D53	2-D61
South Bridge	1A	18+15.40	32.17'			As	detailed	above			84.0	——	10	59-B41	59-B40	26-P40	44-C40	4-A58					As detailed	above					
	1	18+62.40	32.17'			As	detailed	above			79.0	——	10	59-B43	59-B42	36-P40	44-C40	4-A58					As detailed	above					
	2	19+09.40	32.17'			As	detailed	above		4'-6"	77.0	——	9	59-B44	59-B45	JO-P40	48-C40	4-A58					As detailed	above					
	3	19+56.42	32.19'	10'-3"	26'-0"	7'-11⅝"	6'-9⅛"	35'-5⅜"	3'-1"	3'-0"	79.0	101.00	8	47-B43	47-B42	34-P41	38-C40	4-A59	2-D41	2-D40	2-A52	2-A50	2-A46	R41	R43	R49	R51	2-D54	2-D59
	4	20+04.78	31.05	10'-0⅛"	26'-0"	7'-3⅛"	7'-1⅜"	36'-11⅜"	3'-3"	5'-0"	79.0	101.00	8	51-B49	51-B42	34-P42	42-C40	4-A60	2-D41	2-D43	2-A52	2-A55	2-A47	R42	R47	R49	R53	2-D55	2-D62
	5	20+52.10	33.88	11'-4⅛"	28'-0"	7'-0⅜"	7'-0¼"	38'-11"	3'-5"	7'-0"	79.0	101.00	8	55-B48	55-B42	34-P44	46-C40	4-A62	2-D44	2-D46	2-A52	2-A55	2-A48	R42	R47	R49	R54	2-D56	2-D63
	6	20+92.61	36.70	12'-1⅝"	29'-0"	8'-1⅝"	8'-0⅜"	41'-3"	3'-7⅛"	4'-0"	79.0	101.00	9	57-B43	57-B42	36-P48	46-C40	4-A63	2-D44	2-D47	2-A52	2-A55	2-A49	R41	R47	R49	R55	2-D57	2-D64
	7	20+92.61	46.70	12'-1⅝"	29'-0"	8'-1⅝"	8'-0⅜"	41'-3"	3'-7⅛"	4'-0"	79.0	101.00	9	59-B51	59-B52	22-P40	48-C40	4-A58	2-D44	2-D48	2-A53	2-A56	2-A50	R40	R48	R49	R56	2-D58	2-D65
	8	21+46.12	57.27	13'-0⅛"	30'-0"	9'-1⅞"	8'-7⅝"	44'-0⅝"	3'-11"	4'-6"	80.0	101.00	9	59-B51	59-B52	22-P40	48-C40	4-A58	2-D44	2-D48	2-A53	2-A56	2-A50	R40	R48	R49	R56	2-D58	2-D65

*Note: Right and left of centerline pier obtained by looking east.

Note:
Openings through piers 3 and 5 for the 12" High Pressure Gas Line shall provide a clearance of 6" between pipe and all adjacent concrete. After backfilling the line shall be driven plumb, a conflict is found between pipe and plumb, the piers shall be restudied at the direction of the Engineer.

WICHITA, KANSAS — PAWNEE AVENUE BRIDGE

PIER DETAILS

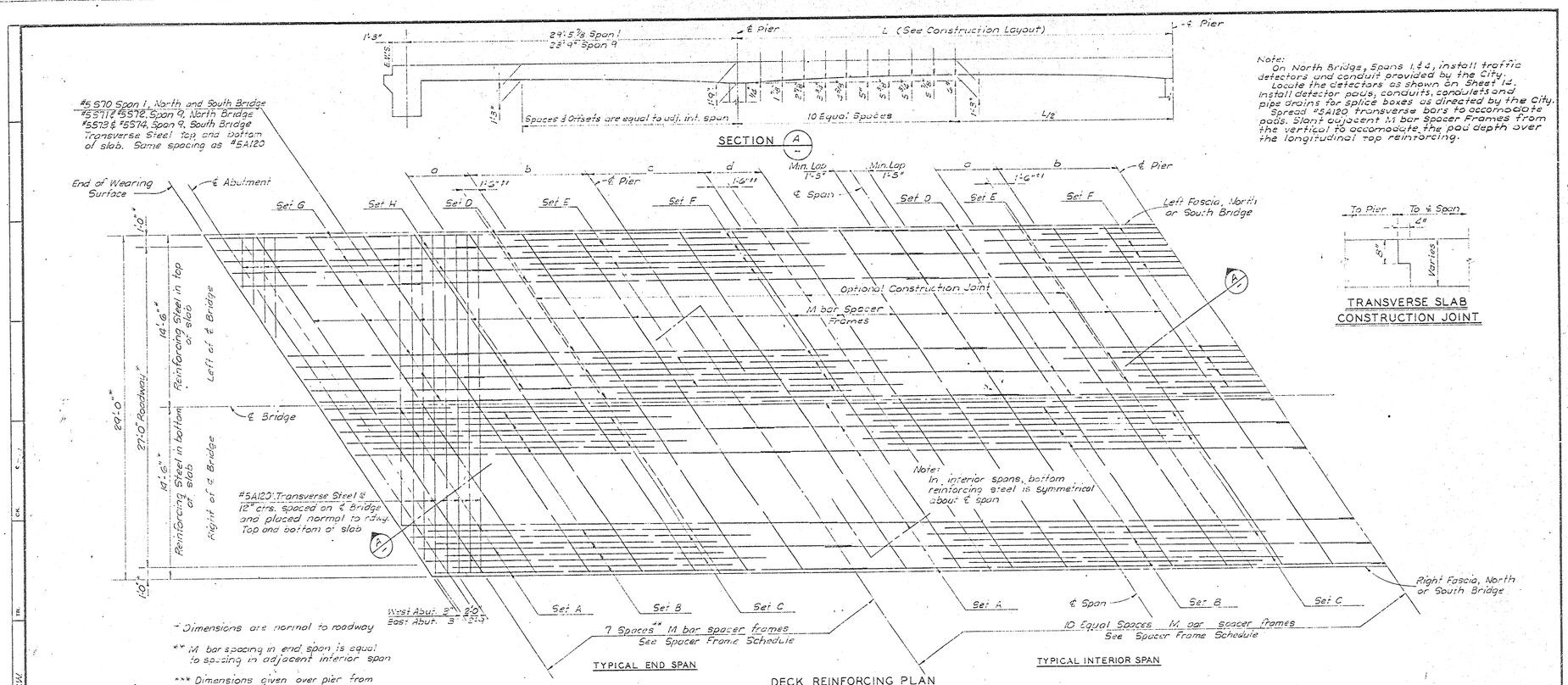
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WILSON & COMPANY ENGINEERS & ARCHITECTS

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FILE NO. 61-10

SHEET NO. 18 OF 23



DECK REINFORCING SCHEDULE

	Reinf. in Span	Bottom of Slab: Set A Lt. of ℄	Set A Rt. of ℄	Set B	Set C	Reinf. over Pier	Top of Slab: Set D Lt. of ℄	Set D Rt. of ℄	Set E	Set F	Set G	Set H Lt. of ℄	Set H Rt. of ℄	Dimensions over Pier*** a	b	c	d
North Bridge	1	B-A70	B-A70	28-A71	14-A72	1	B-A97	B-A97	14-A98	28-A99	16-B70	7-B71	7-B71	5'-0	10'-6	10'-6"	5'-6
	2	B-A73	B-A73	28-A74	14-A75	2	B-A100	B-A100	14-A98	28-A99				5'-0	10'-6	10'-6	5'-6
	3	B-A73	B-A73	28-A74	14-A75	3	B-A100	B-A100	14-A98	28-A99				5'-6	10'-6	10'-6	5'-6
	4	B-A73	B-A73	28-A74	14-A75	4	B-A100	B-A100	14-A98	28-A99				5'-6	10'-6	10'-6	5'-6
	5	B-A73	B-A73	28-A74	14-A75	5	B-A101	B-A101	14-A102	28-A103				6'-0	10'-0	11'-6	5'-6
	6	B-A76	B-A76	28-A77	14-A78	6	B-A104	B-A105	14-A106	28-A107				6'-0	9'-6	9'-6	6'-0
	7	B-A79	B-A80	28-A77	14-A78	7	B-A108	B-A104	14-A109	28-A107				5'-6	9'-6	9'-6	5'-6
	8	B-A81	B-A80	28-A77	14-A78	8	B-A110	B-A111	14-A112	28-A113	16-B72	7-B73	7-B74	4'-6	5'-6	9'-6	9'-6
	9	B-A82	B-A83	28-A84	14-A85												
South Bridge	1	B-A70	B-A70	28-A71	14-A72	1	B-A97	B-A97	14-A98	28-A99	16-B70	7-B71	7-B71	5'-6	10'-6	10'-6	5'-6
	2	B-A73	B-A73	28-A74	14-A75	2	B-A100	B-A100	14-A98	28-A99				5'-6	10'-6	10'-6	5'-6
	3	B-A73	B-A73	28-A74	14-A75	3	B-A100	B-A100	14-A98	28-A99				5'-6	10'-6	10'-6	5'-6
	4	B-A78	B-A78	28-A74	14-A75	4	B-A114	B-A115	14-A98	28-A99				5'-6	10'-6	10'-6	5'-6
	5	B-A86	B-A87	28-A74	14-A88	5	B-A114	B-A116	14-A98	28-A99				5'-6	10'-6	10'-6	5'-6
	6	B-A89	B-A90	28-A74	14-A75	6	B-A117	B-A118	14-A98	28-A99				5'-6	10'-6	10'-6	5'-6
	7	B-A91	B-A92	28-A74	14-A88	7	B-A117	B-A116	14-A98	28-A99				5'-6	10'-6	10'-6	5'-6
	8	B-A93	B-A94	28-A74	14-A75	8	B-A97	B-A119	14-A98	28-A99	16-B75	7-B76	7-B77	5'-6	10'-6	10'-6	5'-6
	9	B-A95	B-A96	28-A74	14-A88												

SPACER FRAME SCHEDULE

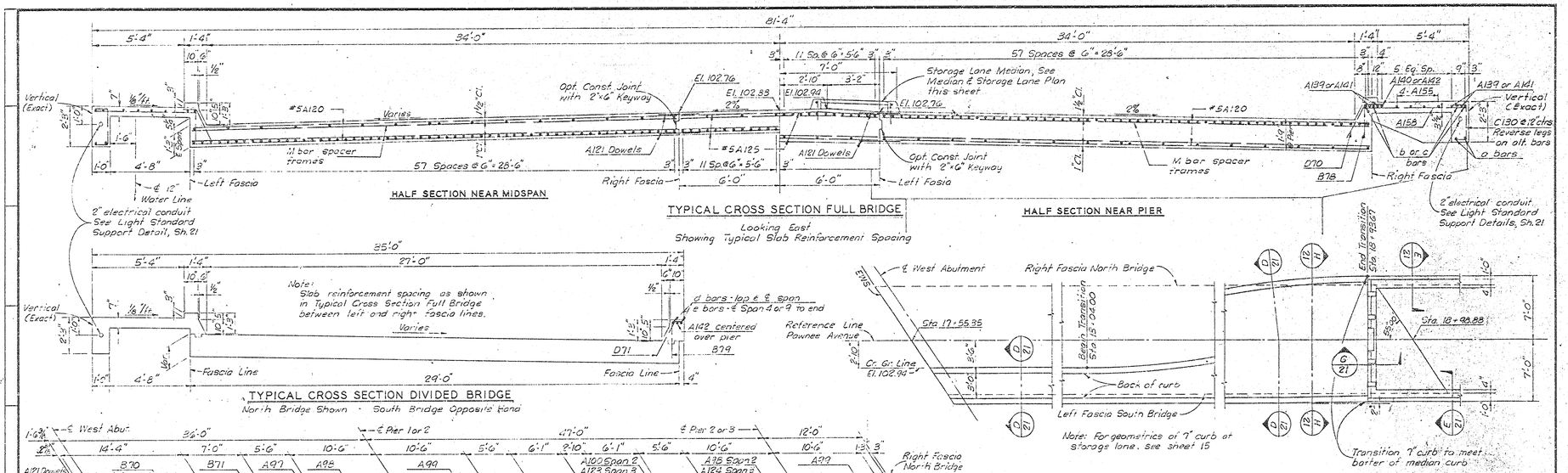
	Span No.	Mark or M. bar set
North Bridge	1	M70
	2	M74
	3	M72
	4	M74
	5	M74
	6	M74
	7	M75‡
	8	M76‡
	9	M71‡
South Bridge	1	M70
	2	M74
	3	M74
	4	M74
	5	M75‡
	6	M77‡
	7	M78‡
	8	M79‡
	9	M72‡

WICHITA, KANSAS — PAWNEE AVENUE BRIDGE

DECK REINFORCING
PART II

WILSON & COMPANY ENGINEERS & ARCHITECTS

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SIDEWALK & MEDIAN CURB REINFORCING SCHEDULE

	Reinf. in Span	Bottom SW Beam a	Reinf over Pier	Top of Sidewalk b	Top of Sidewalk c	Top of Median Curb d	Top of Median Curb e
North Bridge	1	A130	1	A144	A143	—	—
	2	A131	2	A145	—	—	—
	3	A131	3	A146	—	—	—
	4	A131	4	A145	—	A160	A159
	5	A131	5	A146	—	A161	—
	6	A132	6	A147	—	A162	—
	7	A133	7	A148	—	A162	—
	8	A134	8	A149	A150	A163	A164
	9	A135					
South Bridge	1	A130	1	A144	A143	—	—
	2	A131	2	A145	—	—	—
	3	A131	3	A146	—	—	—
	4	A131	4	A151	—	A166	A165
	5	A136	5	A152	—	A160	—
	6	A137	6	A152	—	A167	—
	7	A136	7	A152	—	A163	—
	8	A136	8	A153	A154	A169	A170
	9	A138					

WICHITA, KANSAS — PAWNEE AVENUE BRIDGE

SUPERSTRUCTURE DETAILS

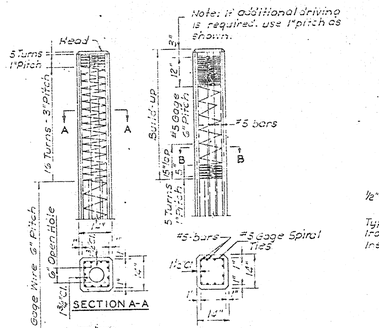
PART II

WILSON & COMPANY ENGINEERS & ARCHITECTS

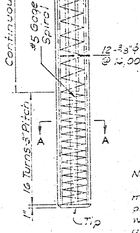
DATE: APRIL 1961

FILE NO. 61-10

SHEET NO. 20 OF 23



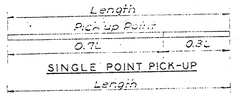
Note: All Corners to be Chamfered 1".



Note:
14" Prestressed Concrete Piles may be substituted for the 12BP53 pier piles shown. No substitution will be allowed for the 10BP42 abutment piles.

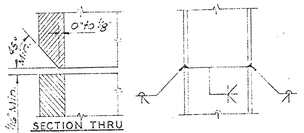
14" PRESTRESSED CONCRETE PILES

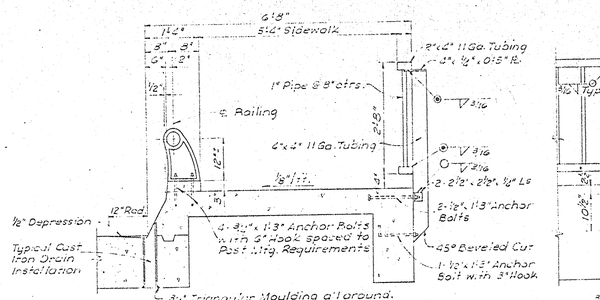
Top and bottom - 4 feet shall be cast solid. The entire pile may be cast solid at the option of the Contractor.

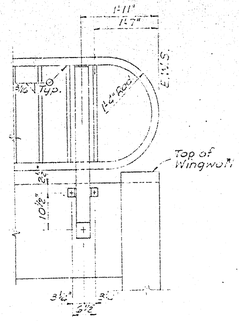


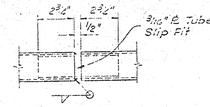
Note: Piles shall be notched at pick-up Points to indicate proper points for attaching handling lines.

Maximum Length - 60' Single Point Pick-up
Maximum Length - 95' Double Point Pick-up

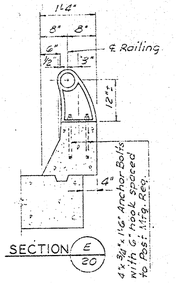


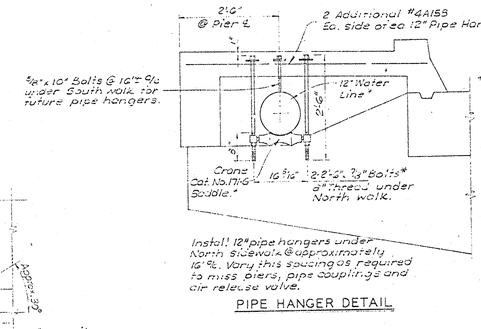






10 Joints thus each rail @ approximately equal spaces. Locate each joint @ ½ point between posts. At the Contractors option the curved portion of the railing may be 3/16" rather than 11 Ga. Tubing to facilitate shaping to the curve. End sections may be made up of 3/16" plate welded and ground smooth.

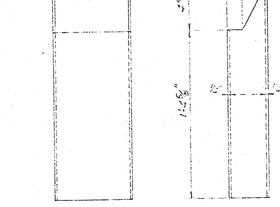


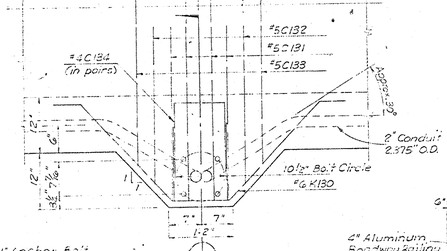


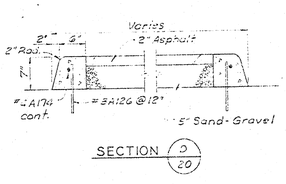
*Note:
Install pipe and saddles provided by the owner. Provide and install ⅞" x 2'-6" bolts and hex nuts.

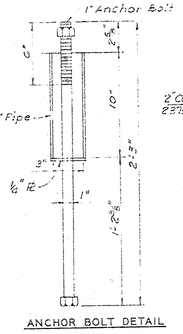
The City will provide pipe with dresser couplings in the following lengths:
2 - 32' Long
6 - 24' Long
1 - 19' Long

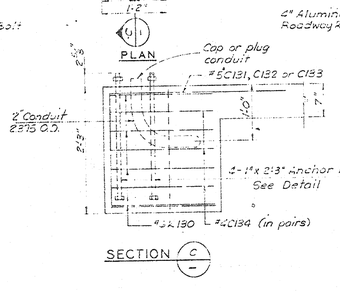
The City will also provide one handhole lid and frame to be installed in north side-walk over a pressure relief valve near the west end of the Bridge.

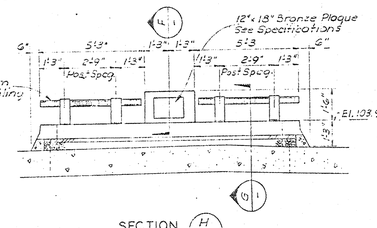


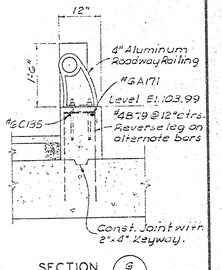


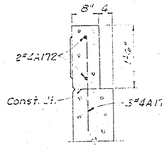












LIGHT STANDARD SUPPORT LOCATIONS		
	Offset	Station
SW. Fascia North Bridge		17 + 28.5
		18 + 26.0
		19 + 21.5
		20 + 15.0
		21 + 09.5
SW. Fascia South Bridge		17 + 91.0
		18 + 91.0
		19 + 90.5
		20 + 90.0
		21 + 87.0

LIGHT STANDARD SUPPORT DETAIL

CAST IRON DRAIN LOCATIONS
Left Fascia - North Bridge: ½ and ⅔ Points of spans 2 thru 6.
Right Fascia - North Bridge: ½ and ⅔ Points of spans 5 thru 3 and ⅔ Point span 1.
Right Fascia - South Bridge: ½ and ⅔ Points of spans 2 thru 8.
In end spans adjacent to spans having drains, place one drain at a distance from the pier equal to the distance from the pier to the near drain in the adjacent span.

37 Required.

WICHITA, KANSAS — PAWNEE AVENUE BRIDGE

MISCELLANEOUS DETAILS

PART II

WILSON & COMPANY ENGINEERS & ARCHITECTS

DATE: APRIL 1961
FILE NO. 61-10
SHEET NO. 21 OF 23

ABUTMENT & WINGWALL REINFORCING

LOC	MARK	DIMENSIONS a	b	c	d	e	f	g	NO.	SIZE	LENGTH	WT.
	A1	3'-1 6"							16	#8	3'-1 6"	
	A2	3'-1 6"							12	#8	3'-1 6"	
	A3	3'-3 0"							2	#4	3'-3 0"	
	A4	1'-8 6"							8	#8	1'-8 6"	
	A5	1'-1 0"							6	#4	1'-1 0"	
	A6	1'-1 6"							1	#4	1'-1 6"	
	A7	1'-5 0"							10	#7	1'-7 0"	
	A8	0'-3"							2	#4	0'-3"	
	A9	0'-3"							3	#3	0'-3"	
	A10	0'-6"							3	#3	0'-6"	
	A11	2'-0"							1	#4	2'-0"	
	A12	0'-5"							20	#4	0'-5"	
	A13	3'-0"							37	#4	3'-0"	
	A14	10'-10"							3	#8	10'-10"	
	A15	4'-8 7"							6	#8	4'-8 7"	
	A16	22'-0"							2	#4	22'-0"	
	A17	4'-8 7"							6	#8	4'-8 7"	
	A18	4'-6 4"							6	#8	4'-6 4"	
	A19	4'-6 4"							6	#8	4'-6 4"	
	A20	2'-3 8"							2	#4	2'-3 8"	
	A21	1'-1 7"							5	#8	1'-1 7"	
	A22	1'-5 6"							5	#8	1'-5 6"	
	A23	9'-9"							5	#4	9'-9"	
	A24	5'-9"							28	#8	5'-9"	
	A25	1'-7 6"							5	#8	1'-7 6"	
	A26	2'-7 4"							9	#4	2'-7 4"	
	A27	2'-1"							8	#4	2'-7 4"	
	A28	1'-9 6"							6	#4	1'-9 6"	
	A29	27'-5"							1	#4	27'-5"	
	A30	5'-8"							6	#4	5'-8"	
	A31	3'-6"							2	#4	3'-6"	
	A32	8'-9"							6	#4	8'-9"	
	A33	2'-0"							6	#3	2'-0"	
	A34	0'-6"							10	#4	0'-5"	
	B1	2'-9"	0'-5"						176	#4	3'-3"	
	B2	5'-0"	1'-0"						30	#4	6'-0"	
	B3	6'-2"	1'-0"						10	#4	7'-4"	
	C1	0'-2"	2'-10"						262	#4	7'-10"	
	C2	2'-2"	3'-5"						74	#4	8'-8"	
	D1	0	4'-6"	4'-9"	2'-2"	5'-2"			3	#8	9'-11"	
	D2	3'-3"	5'-10½"	6'-1"	1'-6"	7'-2"			4	#8	15'-6"	
	D3	3'-3"	6'-6"	7'-3"	1'-6"	8'-8"			4	#4	17'-2"	
	D4	0	8'-10"	8'-3"	2'-2½"	10'-4"			3	#8	17'-9"	
	D5	3'-3"	9'-7½"	11'-3"	1'-6"	11'-5"			5	#4	18'-11"	
	D6	3'-3"	9'-7"	8'-7"	1'-6"	9'-8"			4	#4	21'-6"	
	D7	3'-3"	5'-0½"	11'-2"	1'-6"	5'-3"			5	#4	9'-6"	
	D8	3'-3"	6'-6"	11'-2"	1'-6"	6'-8"			5	#4	11'-1"	

PIER REINFORCING

LOC	MARK	DIMENSIONS a	b	c	d	e	f	g	NO.	SIZE	LENGTH	WT.
	A39	6'-1 9"							12	#6	6'-1 9"	
	A41	2'-7 4"							16	#8	2'-7 4"	
	A42	1'-5 0"							12	#8	1'-5 0"	
	A43	9'-3"							12	#8	9'-3"	
	A44	1'-2 8"							12	#10	1'-2 8"	
	A45	1'-0 4"							80	#9	1'-0 4"	
	A46	2'-1 3"							28	#6	2'-1 3"	
	A47	2'-3 9"							4	#3	2'-3 9"	
	A48	2'-6 11"							4	#3	2'-6 11"	
	A49	2'-8 6"							2	#3	2'-8 6"	
	A50	3'-1 9"							6	#3	3'-1 9"	
	A51	9'-4"							20	#10	9'-4"	
	A52	3'-10"							15	#9	3'-10"	
	A53	1'-3 6"							4	#10	1'-3 6"	
	A54	1'-5 0"							10	#10	1'-5 0"	
	A55	1'-5 0"							5	#11	1'-5 0"	
	A56	1'-7 5"							4	#10	1'-7 5"	
	A57	3'-6"							1750	#3	3'-5"	
	A58	3'-0 4"							83	#6	3'-0 4"	
	A59	2'-1 1"							10	#6	2'-1 1"	
	A60	2'-6 4"							8	#6	2'-6 4"	
	A61	2'-7 4"							6	#6	2'-7 4"	
	A62	2'-3 4"							4	#6	2'-3 4"	
	A63	2'-0 4"							4	#6	2'-0 4"	
	A64	2'-1 4"							12	#6	2'-1 4"	
	B13	0'-3"	0'-5"						176	#4	1'-7 4"	
	B14	1'-1 6"	0'-6"						118	#4	1'-10 1"	
	B15	2'-3"	0'-6"						93	#4	2'-3 4"	
	B16	2'-8 6"	0'-6"						98	#4	2'-10 1"	
	B17	2'-0"	0'-6"						59	#4	2'-0 4"	
	B18	2'-4 0"	0'-6"						50	#4	2'-4 9"	
	B19	2'-7 0"	0'-6"						90	#4	2'-7 4"	
	B20	2'-7 9"	0'-6"						43	#4	2'-8 5"	
	B21	2'-9 11"	0'-6"						51	#4	2'-10 1"	
	B22	2'-10 6"	0'-6"						52	#4	2'-11 1"	
	B23	2'-11 3"	0'-6"						54	#4	3'-0 1"	
	B50	16'-0"	0'-6"						59	#4	16'-3"	
	B51	15'-5"	0'-5"						59	#4	15'-8"	
	B52	15'-9"	0'-6"						59	#4	16'-0"	
	B53	5'-0"	1'-3"						20	#9	7'-3"	
	B54	3'-0"	1'-3"									
	C40	1'-8"	1'-5"	1'-8"					712	#4	5'-0"	
	C41	1'-4"	2'-3"	2'-8"					72	#4	6'-5"	
	D40	1'-3"	6'-1"	0	2'-2"	3'-11"			20	#10	25'-8"	
	D41	1'-9"	6'-1"	0	2'-2"	3'-11"			20	#10	19'-8"	
	D42	32'-8"	10'-0"	0	1'-9"	13'-2"			12	#5	42'-5"	
	D43	2'-3"	7'-10"	0	2'-3"	7'-2"			4	#10	7'-7"	
	D44	1'-5"	7'-4"	0	2'-2"	7'-2"			6	#11	20'-2"	
	D45	2'-3"	7'-3"	0	2'-2"	7'-1"			6	#10	30'-1"	
	D46	2'-9"	7'-4"	0	2'-2"	7'-3"			2	#11	23'-5"	
	D47	2'-11"	7'-10"	0	2'-2"	8'-1"			2	#11	35'-3"	
	D48	1'-0"	8'-4"	0	2'-2"	8'-7"						

PIER REINFORCING

LOC	MARK	DIMENSIONS a	b	c	d	e	f	g	NO.	SIZE	LENGTH	WT.
	D39	1'-0"	10'-0"	0	1'-1"	10'-2"			12	#6	22'-11"	
	D38	12'-9"	10'-0"	0	2'-2"	10'-2"			12	#6	23'-0"	
	D37	10'-9"	10'-0"	0	2'-3"	10'-4"			12	#6	23'-1"	
	D36	1'-9"	10'-4"	0	3'-10"	10'-9"			12	#6	24'-6"	
	T35	11'-3"	1'-1"	0	8'-2"	11'-6"			12	#6	35'-9"	
	T34	10'-9"	10'-1"	0	1'-3"	10'-2"			12	#6	22'-11"	
	D33	12'-9"	10'-1"	0	1'-3"	10'-3"			12	#6	23'-5"	
	D32	1'-9"	11'-1"	0	1'-3"	11'-3"			12	#6	26'-0"	
	D31	15'-3"	11'-1"	0	1'-3"	11'-3"			12	#6	37'-3"	
	T30	15'-0"	12'-0"	0	1'-3"	12'-1"			12	#6	28'-6"	
	D29	12'-0"	7'-6"	0	1'-3"	7'-8"			12	#6	20'-3"	
	D28	1'-9"	7'-4"	0	1'-3"	7'-5"			12	#6	21'-7"	
	D27	10'-3"	2'-10"	0	1'-3"	9'-0"			12	#6	23'-7"	
	D26	13'-9"	6'-11"	0	1'-3"	7'-1"			12	#6	21'-1"	
	T25	10'-1"	0'-7"	0	1'-3"	6'-0"			12	#6	21'-10"	
	D24	12'-3"	7'-8"	0	1'-3"	7'-10"			12	#6	23'-5"	
	D23	13'-9"	9'-1"	0	1'-3"	9'-3"			12	#6	22'-5"	
	D22	2'-0"	2'-0"	2'-0"	1'-7"	2'-7"			6	#8	6'-7"	
	N40	2'-0"	2'-0"	1'-0"	0'-0"	2'-3"	1'-7"		3	#8	10'-1"	
	N40	See Detail							64	#3	13'-11"	
	A40	23'-10"	1'-5"	1'-0"					222	#4	51'-3"	
	A41	23'-10"	1'-5"	1'-0"					113	#4	0'-9"	
	A42	23'-10"	1'-5"	1'-0"					72	#4	37'-3"	
	A43	23'-10"	1'-5"	1'-0"					22	#4	25'-3"	
	A44	24'-10"	1'-5"	1'-0"					30	#4	0'-9"	
	A45	21'-10"	1'-5"	1'-0"					56	#4	35'-3"	
	R40	0'-2½"	2'-3"	2'-4"					2 Sets	#4		
	R41	0'-5"	2'-8"	1'-5"					2 Sets	#4		
	R42	0'-5½"	2'-8"	1'-5"					2 Sets	#4		
	R43	0'-9"	3'-3"	3'-7"					2 Sets	#4		
	R44	0'-2½"	3'-3"	4'-1"					1 Set	#4		
	R45	0'-5"	4'-0"	4'-6"					2 Sets	#4		
	R46	0'-5"	2'-0"	2'-9"					1 Set	#4		
	R47	0'-9"	3'-1"	3'-7"					2 Sets	#4		
	R48	0'-11½"	3'-0"	3'-6"					1 Set	#4		
	R49	0'-10½"	1'-2½"	1'-5"					2 Sets	#4		
	R50	0'-11"	11'-1½"	11'-7½"					2 Sets	#4		
	R51	0'-2"	1'-7"	2'-4"					2 Sets	#4		
	R52	0'-3½"	11'-7½"	6'-6"					1 Set	#4		
	R53	0'-3½"	11'-9½"	2'-3"					2 Sets	#4		
	R54	0'-3"	1'-3"	2'-3"					2 Sets	#4		
	R55	0'-2½"	1'-5"	2'-3"					1 Set	#4		
	R56	0'-2"	1'-5"	2'-1"					1 Set	#4		

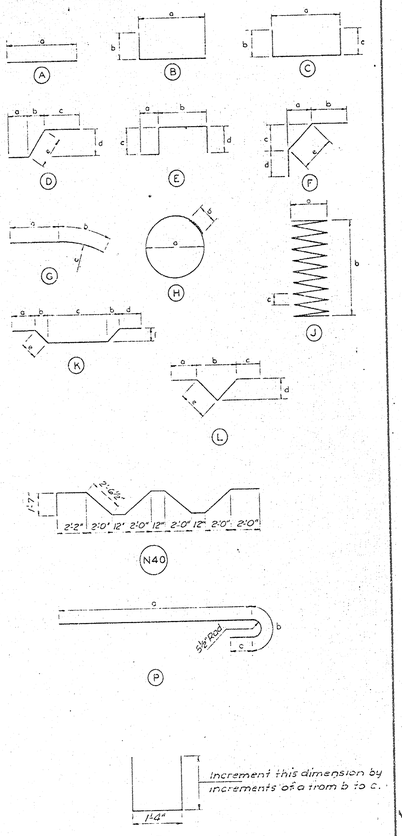
Letter prefix of bar mark denotes shape - See Bending Diagram

* See Note in regard to optional Construction Joint in Pier on Sheet No. 16.

NOTE:
The information given on this sheet is for submission only and in no way relieves the Contractor of all responsibility for providing the reinforcing shown on the detailed drawings.

BENDING DIAGRAMS

DIMENSIONS ARE OUT TO OUT OF BAR



R40 thru R48 Cut 1 bar each length per set.
R49 thru R56 Cut 2 bars each length per set.

WICHITA, KANSAS — PAWNEE AVENUE BRIDGE

REINFORCING DETAILS

PART II

WILSON & COMPANY ENGINEERS & ARCHITECTS

DATE: APRIL 1961
FILE NO. 61-10
SHEET NO. 22 OF 23

Letter prefix of bar mark denotes shape. - See Bending Diagram

DECK REINFORCING

LOC	MARK	a	b	c	d	e	f	g	NO.	SIZE	LENGTH	WT.
1	A70	33'-8"							38	#10	39'-9"	
	A71	23'-0"							28	#10	23'-10"	
	A72	29'-0"							32	#10	29'-4"	
	A73	29'-7"							164	#10	30'-1"	
	A74	24'-0"							240	#10	24'-10"	
	A75	30'-0"							138	#9	30'-0"	
	A76	26'-4"							16	#9	26'-4"	
	A77	23'-0"							24	#9	23'-0"	
	A78	19'-0"							23	#10	20'-0"	
	A79	45'-5"							3	#9	45'-5"	
	A80	43'-0"							14	#9	43'-0"	
	A81	41'-0"							6	#9	45'-0"	
	A82	38'-9"							4	#9	39'-9"	
	A83	31'-9"							3	#9	31'-9"	
	A84	33'-2"							28	#9	33'-2"	
	A85	31'-2"							12	#10	31'-10"	
	A86	50'-1"							6	#10	50'-1"	
	A87	51'-0"							6	#10	51'-0"	
	A88	31'-0"							12	#10	31'-0"	
	A89	49'-9"							6	#10	49'-9"	
	A90	50'-4"							6	#10	50'-4"	
	A91	50'-1"							6	#10	50'-1"	
	A92	50'-11"							3	#10	50'-11"	
	A93	49'-1"							6	#10	49'-1"	
	A94	50'-0"							3	#10	50'-0"	
	A95	50'-0"							6	#10	50'-0"	
	A96	49'-8"							6	#10	49'-8"	
	A97	47'-3"							6	#10	47'-3"	
	A98	47'-11"							6	#10	47'-11"	
	A99	2'-0"							3402	#11	21'-0"	
	A100	49'-0"							34	#11	49'-0"	
	A101	43'-4"							13	#10	43'-4"	
	A102	33'-0"							12	#11	33'-0"	
	A103	21'-6"							25	#11	21'-6"	
	A104	49'-8"							13	#10	49'-8"	
	A105	49'-8"							9	#10	49'-8"	
	A106	31'-0"							14	#11	31'-0"	
	A107	19'-0"							56	#10	19'-0"	
	A108	45'-9"							6	#10	45'-9"	
	A109	35'-3"							12	#11	35'-3"	
	A110	43'-9"							6	#10	43'-9"	
	A111	45'-2"							6	#10	45'-2"	
	A112	2'-0"							14	#10	2'-0"	
	A113	1'-0"							22	#10	1'-0"	
	A114	50'-4"							13	#11	50'-4"	
	A115	50'-1"							6	#11	50'-1"	
	A116	51'-0"							13	#11	51'-0"	
	A117	50'-5"							12	#11	50'-5"	
	A118	2'-0"							5	#11	50'-0"	
	A119	49'-0"							3	#10	49'-6"	
	A120	24'-9"							232	#5	24'-9"	
	A121	3'-0"							232	#5	3'-0"	
	A122	15'-2"							6	#10	15'-2"	
	A123	32'-8"							6	#11	32'-8"	
	A124	27'-9"							6	#11	27'-9"	
	A125	1'-6"							170	#5	1'-6"	
	A126	1'-6"							208	#3	1'-6"	

DECK REINFORCING

LOC	MARK	a	b	c	d	e	f	g	NO.	SIZE	LENGTH	WT.
	B70	15'-1"	4'-0"						38	#11	20'-1"	
	B71	23'-1"	4'-0"						24	#11	27'-1"	
	B72	16'-2"	4'-0"						16	#11	20'-5"	
	B73	22'-4"	4'-0"						7	#11	27'-2"	
	B74	24'-4"	4'-0"						7	#11	29'-4"	
	B75	17'-1"	4'-0"						16	#11	21'-7"	
	B76	21'-7"	4'-0"						7	#11	26'-4"	
	B77	23'-8"	4'-0"						7	#11	28'-4"	
	B78	1'-10"	0'-2"						394	#4	2'-2"	
	B79	2'-8"	0'-2"						237	#4	3'-10"	
	D70	0'-3"	0'-11"	0	1'-7"	1'-10"			399	#4	2'-6"	
	D71	0'-5"	1'-0"	0	0'-0"	2'-4"			235	#4	2'-10"	
	A170	33'-0"	1'-0"	15	1'-0"				2668	#4		
	A171	21'-9"	2'-0"	9	1'-9"				1561	#4		
	A172	23'-6"	3'-0"	10	1'-0"				1561	#4		
	A173	10'-1"	1'-9"	6	1'-0"				1561	#4		
	A174	25'-0"	1'-6"	13	1'-0"				3326	#4		
	A175	19'-0"	1'-0"	8	1'-0"				2226	#4		
	A176	20'-1"	1'-0"	9	1'-0"				1561	#4		
	A177	19'-0"	0'-9"	9	1'-0"				1561	#4		
	A178	20'-1"	1'-0"	9	1'-0"				1561	#4		
	A179	22'-6"	1'-6"	10	1'-2"				1561	#4		
	A180	11'-4"	1'-4"	6	1'-2"				1561	#4		
	A181	13'-0"	1'-6"	6	1'-2"				1561	#4		
	E70	1'-5"	1'-0"	0'-2"					1561	#5		
	E71	0'-11"	3'-5"	20'-0"					2561	#5		
	E72	1'-0"	20'-0"	21'-0"					2561	#5		
	E73	0'-9½"	3'-4"	17'-0"					2561	#5		
	E74	0'-10"	17'-0"	21'-0"					2561	#5		
	E75	1'-5"	3'-0"	10'-1"					1561	#5		
	A130	39'-8"							4	#10	39'-8"	
	A131	29'-7"							14	#10	29'-7"	
	A132	46'-7"							2	#10	47'-4"	
	A133	25'-1"							2	#10	25'-1"	
	A134	24'-6"							2	#10	24'-6"	
	A135	35'-11"							2	#10	35'-11"	
	A136	51'-3"							6	#10	51'-3"	
	A137	50'-7"							2	#10	50'-7"	
	A138	41'-9"							2	#10	41'-9"	
	A139	12'-6"							16	#10	12'-6"	
	A140	10'-0"							4	#10	10'-0"	
	A141	21'-0"							64	#10	21'-0"	
	A142	13'-0"							26	#10	13'-0"	
	A143	20'-7"							8	#10	20'-7"	
	A144	44'-1"							8	#10	44'-1"	
	A145	49'-7"							20	#10	49'-7"	
	A146	45'-1"							4	#10	45'-1"	

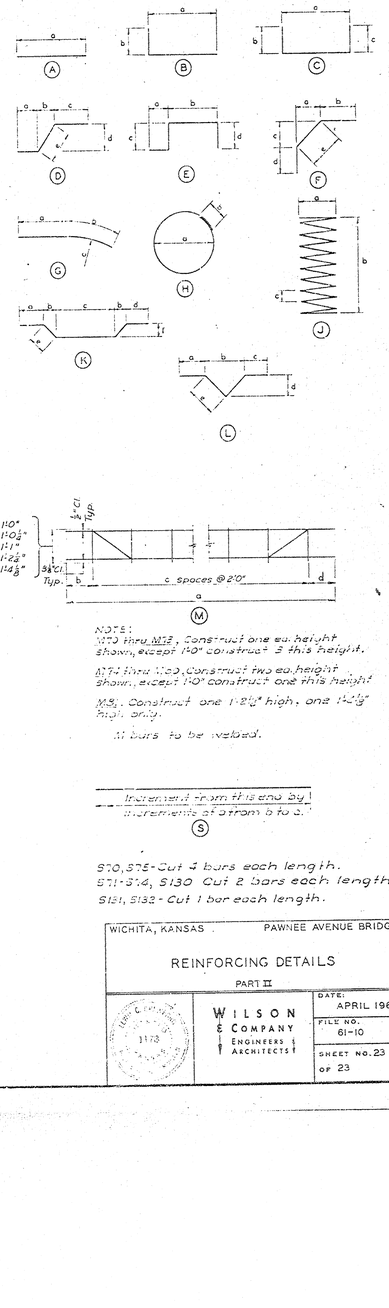
SIDEWALK, CURB & SIDEWALK BEAM REINFORCING

LOC	MARK	a	b	c	d	e	f	g	NO.	SIZE	LENGTH	WT.
	A147	45'-10"							4	#10	46'-10"	
	A148	44'-8"							4	#10	44'-8"	
	A149	40'-0"							6	#10	40'-0"	
	A150	19'-4"							4	#10	19'-4"	
	A151	50'-5"							4	#10	50'-5"	
	A152	51'-0"							12	#10	51'-0"	
	A153	46'-1"							4	#10	46'-1"	
	A154	22'-6"							1	#10	22'-6"	
	A155	10'-0"							G8	#4	10'-0"	
	A156	38'-6"							3	#4	38'-6"	
	A157	31'-3"							8	#4	31'-3"	
	A158	6'-0"							653	#4	6'-0"	
	A159	13'-8"							2	#10	13'-8"	
	A160	49'-7"							4	#10	49'-7"	
	A161	48'-1"							2	#10	48'-1"	
	A162	46'-5"							2	#10	46'-5"	
	A163	41'-1"							2	#10	41'-11"	
	A164	20'-6"							2	#10	20'-6"	
	A165	22'-4"							2	#10	22'-9"	
	A166	49'-10"							2	#10	49'-10"	
	A167	49'-2"							2	#10	50'-2"	
	A168	48'-10"							2	#10	48'-10"	
	A169	48'-7"							2	#10	48'-7"	
	A170	21'-2"							6	#10	21'-2"	
	A171	12'-9"							1	#5	12'-9"	
	A172	2'-5"							10	#4	2'-5"	
	A173	2'-5"							3	#4	2'-5"	
	A174	10'-0"							7	#4	10'-0"	
	C130	2'-0"	0'-9"	0'-9"					70	#4	3'-6"	
	C131	2'-0"	3'-6"	1'-3"					10	#5	6'-11"	
	C132	2'-0"	2'-10"	1'-5"					20	#5	5'-3"	
	C133	2'-0"	2'-6"	1'-1"					20	#5	5'-7"	
	C134	0'-11"	1'-5"	1'-5"					20	#4	3'-9"	
	C135	1'-9"	1'-6"	1'-2"					1	#5	15'-9"	
	A130	0'-6"	1'-9"	1'-1"	0'-6"	2'-0"	1'-9"		40	#5	7'-1"	
	S130	1'-5"	3'-3"	0'-3"					2626	#4		
	S131	0'-11"	3'-4"	5'-2"					1562	#4		
	S132	0'-9"	3'-0"	5'-3"					1562	#4		

NOTE:
The information given on this sheet is for information only and it is not to relieve the Contractor of full responsibility for knowledge the various details of the work as shown on drawings.

BENDING DIAGRAMS

DIMENSIONS ARE OUT TO OUT OF BAR



NOTES:
M70 thru M72, Construct one ea. height shown, except 1'-0" construct 2 this height.

M74 thru M80, Construct two ea. height shown, except 1'-0" construct one this height.

M81, Construct one 1'-2½" high, one 1'-2⅞" high only.

All bars to be welded.

S70, S75 - Cut 4 bars each length.
S71 - S74, S130 Cut 2 bars each length.
S131, S132 - Cut 1 bar each length.

WICHITA, KANSAS — PAWNEE AVENUE BRIDGE

REINFORCING DETAILS

PART II

WILSON & COMPANY
ENGINEERS & ARCHITECTS

DATE: APRIL 1961
FILE NO. 61-10
SHEET NO. 23 OF 23