FHWA REGION NO.	STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
7	KANSAS	87 ER-164(1)	1974	10	28

DAKB 574005

B.M. #1 R.R. Spk. in 60' Elm tree 185' Rt. Sta. 8+23 El. 114.86

B.M. #2 Ch. "a" on ret wall 71' Lt. Sta. 12+17 El. 112.99

P.V.C. 8+00.50 El. 114.60

P.V.I. 10+00.50 El. 116.60

P.R.V.C. 12+00.50 El. 114.60

+1.00%

-1.00%

Sta. 8+00 Sta. 9+00 Sta. 10+00 Sta. 11+00 Sta. 12+00

397'-7⅜" End to End of Wearing Surface

37'-3 1/16" | 64'-0" | 65'-0" | 65'-0" | 65'-0" | 64'-0" | 37'-3 1/16"

400' V.C.

Cr. Gr. El. 114.61 | Cr. Gr. El. 114.95 | Cr. Gr. El. 115.36 | Cr. Gr. El. 115.57

2-48' Piling (Vert)

15-48' Piling (Batt)

Sand & Debris 83.6
Fine/Med Sand 84.6
Gray Clay 82.6
Fine/Med Sand 72.9
Gray Clayey Shale 59.6
Shale with Gypsum 47.6

Exc. Bndry. Plane

Des. W.S. El. 106.2'

El. 94.0

El. 87.50

Class I Above / Class II Below

El. 98.40

El. 105.00

16-34' Piling (Vert)

8-34' Piling (Batt) (Typ.)

8-48'
6-40' Piling (Vert)
2-40' Piling (Batt) (Typ.)

NOTE: See Detail Sheets for Pile Cutoffs and elevations

Sand & Debris 103.8
Fine/Med Sand 98.8
Coal/Med Sand 93.8
Fine/Med Sand 76.8
Gray Clay 62.8
Shale 57.8
Shale & Gypsum 51.8
Clayey Shale 50.8
Shale 47.8
Shale & Gypsum 41.7

1'-3 1/16" | 36'-0" | 64'-0" | 65'-0" | 65'-0" | 65'-0" | 64'-0" | 36'-0"

397'-7⅜" End to End of Wearing Surface

ELEVATION

36' R.C. Girder Span, 64'-3 @ 65'-64' Cont. Prestressed Concrete Beam Spans, 36' R.C. Girder Span. 2-27' Roadways, 6' Median. Skew 17° Left Sidewalk Lt. & Rt.

Sta. 8+01.60 E.M.S.

Sta. 8+05 ℄ Abut. #1

Sta. 8+39 ℄ Pier #1

Sta. 9+03 ℄ Pier #2

℄ Sta. 10+02.23 = River Mile 774.19 Fld. Cont Sta. 192+55 ℄ Design Channel Arkansas River

Sta. 9+68 ℄ Pier #3

Sta. 10+33 ℄ Pier #4

Sta. 10+98 ℄ Pier #5

Sta. 11+62 ℄ Pier #6

Sta. 11+99.31 E.M.S.

Sta. 11+98 ℄ Abut. #2

ARKANSAS RIVER

Storm Sewer and Outfall structure by others

Reinf. Concrete Riprap (5") See Sheet 8

Reinf. Concrete Riprap (5") See Sheet 9

T.H. #1

T.H. #2

27'-0"

27'-0"

Sta. 7+59.19 = 65.32' N27°40'10"W of R-43 on River Bank Traverse

Project Marker See Sheets 20 & 24

R-43

Fill to El. 97.6

Sta. 12+13.93 = 48.33' N8°59'W of R42-3 on River Bank Traverse

R42-3

℄ Project

Existing R/W 53' ℄

15' Access Easement

Existing R/W

Walk - by others

SCALE 1"=20'

PLAN

NOTE: Only Steel Piles HP10x42 shall be used in the abutments and in Piers 1 & 6. Only Steel Piles HP12x53 shall be used in Piers 2, 3, 4 & 5.

DRAINAGE DATA

River Mile = 774.19

Big Arkansas River design discharge = 25,500 cfs. (Corps of Engineers) Waterway provided below design water surface 4,783 Sq. Ft.

GEOLOGICAL DATA:

Legend:
Penetration
50 Blows : = 1.0'
(140 lb. hammer
30 in. drop)

See Sheet 11 for General Notes and tabulation of bridge quantities.

Rev. 12/17/74

CITY OF WICHITA, KANSAS
R.W. LINN, P.E., CITY ENGINEER

FIRST STREET BRIDGE OVER THE ARKANSAS RIVER

CONSTRUCTION LAYOUT

DELAMATER, FREUND & SCHERER, P.A.
CONSULTING ENGINEERS
WICHITA, KANSAS

SCALE 1"=20' | DATE June, 1974 | DRWG NO. 89-G-10