FHWA REGION NO.	STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
7	KANSAS	87 ER-164(1)	1974	22	28

DAKB 574005

SUPERSTRUCTURE

Straight Bars Mark	No. Req.	Size	Lgth.	Bent Bars Mark	No. Req.	Size	Lgth.
SL1	1232	4	24'-0"	DV1	96	4	9'-8"
SL2	140	7	44'-3"	DV2	8	4	8'-2"
SL3	140	8	50'-0"	DV3	16	4	7'-0"
SL4	140	7	22'-0"	DV4	192	4	11'-10"
SL5	140	8	40'-0"	DV5	32	4	7'-7"
SL6	128	9	22'-0"	DV6	64	4	9'-10"
SL7	128	9	20'-0"	DV7	160	4	3'-9"
SL8	24	6	44'-3"	DV8	40	4	7'-9"
SL9	24	6	50'-0"	DV9	32	4	8'-4"
SL10	24	6	22'-0"				
SL11	24	6	40'-0"				
SL12	70	7	30'-0"	ST	1280	5	30'-7"
SL13	12	6	30'-0"				
SB	1280	5	29'-5"				
				SW1	1296	4	7'-11"
DH1	16	6	4'-9"				
DH2	8	6	21'-0"	SM	1278	4	5'-6"
DH3	448	4	4'-1"				
DH5	24	6	29'-8"				
DH7	64	4	2'-8"	DH4	8	4	4'-11"
DH8⊕	40	6	3'-6"	DH6	64	6	27'-1"
DH9	20	6	21'-0"	DH10	16	4	4'-3½"
DH11	32	4	1'-5"	DH12	48	5	4'-3"
DH14	128	4	2'-8"	DH13	176	4	1'-9"
				DH16	16	4	2'-5"
RF1	152	5	7'-9"				
RF2	228	6	7'-9"	MC1	640	4	4'-0"
RF3	8	5	9'-3"				
RF4	12	6	9'-3"				
RF5	32	5	6'-10"				
RF6	48	6	6'-10"				
RF7	8	5	8'-4"				
RF8	12	6	8'-4"	RP1	608	6	2'-3"
				RP2	408	5	2'-3"

⊕ Special Threaded Bar See Detail

PIERS No. 1 & 6 (ONE)

Straight Bars Mark	No. Req.	Size	Lgth.	Bent Bars Mark	No. Req.	Size	Lgth.
				PU1	60	5	10'-6"
PH21	12	10	24'-0"	PU2	76	5	7'-0"
PH22	4	5	15'-6"	PU5	4	5	13'-10"
PH23	4	5	16'-9"	PU6	12	5	#
PH24	4	5	18'-0"	PU7	14	5	7'-0½"
PH26	16	10	21'-6"	PU21	42	4	9'-2"
PH27	6	5	40'-0"	PU22	42	4	4'-8"
PH29	4	5	6'-7"	PU23	10	4	6'-2"
PH30	20	7	40'-0"				
				PH7	8	6	8'-0"
				PH25	16	10	20'-9"
				PH28	10	10	13'-10"
PC21	88	9	10'-11"	PO	48	4	9'-0"
				PC2	64	5	9'-9"
				PX21	80	4	4'-0"
PV2	16	8	10'-0"	PV1	32	8	7'-2"
				PV3	32	8	11'-6"
				PV4	8	4	17'-1"
				PV5	8	4	15'-1"
AV4	58	8	8'-0"	AV2	28	8	14'-0"
				AV3	30	8	17'-0"
PX22	24	4	4'-0"				
				PX1	*	4	5'-0"

*See Bending Diagrams

PIERS No. 2-3-4 & 5 (ONE)

Straight Bars Mark	No. Req.	Size	Lgth.	Bent Bars Mark	No. Req.	Size	Lgth.
				PF1	64	5	11'-6"
				PF2	64	5	9'-0"
				PF3	12	5	#
PF5	12	7	25'-6"	PF4	12	5	#
PF7	8	11	28'-0"	PF6	20	5	14'-0"
PF8	8	11	31'-0"				
PF9	4	11	29'-6"	PC2	152	5	9'-9"
PF10	4	11	30'-6"				
PF11	8	11	25'-6"	PD1	88	11	10'-6"
PC1	88	11	22'-6"				
				PH4	16	10	36'-3"
PH1	8	10	25'-6"	PH5	10	10	14'-4"
PH2	8	5	#	PH7	8	6	8'-0"
PH3	4	5	32'-6"	PH8	8	6	5'-3"
PH6	4	5	7'-9"				
				PU1	44	5	10'-6"
				PU2	74	5	7'-0"
				PU3	8	5	#
				PU4	4	5	#
				PU5	6	5	13'-10"
				PU6	12	5	#
				PU7	24	5	7'-0½"
PX1	*	4	5'-0"				

*See Bending Diagrams

*96 for Piers No. 2 & 5
112 for Piers No. 3 & 4

ABUTMENTS (ONE)

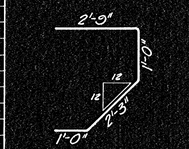
Straight Bars Mark	No. Req.	Size	Lgth.	Bent Bars Mark	No. Req.	Size	Lgth.
				AO	6	4	3'-4"
				AH1	24	8	39'-7"
AF1	20	8	40'-0"				
AF2	8	6	5'-0"				
AF3	8	4	2'-8"	AU1	146	4	7'-8"
				AU2	14	5	6'-3"
AH2	4	8	31'-4"				
AH3	16	5	38'-5"	AV2	56	8	14'-0"
AH4	10	5	31'-4"	AV3	60	8	17'-0"
				AV7	12	7	11'-11"
				AV8	8	7	8'-11"
AV1	32	8	11'-9"	AV9	8	7	7'-0"
AV4	58	8	8'-0"	AV10	8	7	10'-0"
AV5	8	8	4'-0"				
AV6	28	8	5'-9"	AW1	12	7	16'-3"
				AW2	8	5	15'-9"
AD1	152	8	6'-9"	AW3	4	7	14'-6"
AX	24	4	4'-0"	AW5	12	7	14'-3"
				AW6	8	5	15'-9"
AW4	4	7	13'-6"	AW9	24	5	4'-6"
AW7	17	5	6'-9"				
AW8	17	4	6'-9"	AB1	58	5	8'-0"
AW10	24	4	4'-6"	G1	40	10	38'-10"
AW11	16	4	11'-2"	SG1	12	9	38'-8"
				SW1	148	4	7'-11"
				SW2	144	5	7'-7"
AB2	4	5	29'-6"	U1	32	4	#
G2	16	10	36'-8"	U2	216	4	10'-7"
SG2	8	9	36'-8"	U3	132	4	8'-1"
G3	16	5	36'-0"	S1	28	6	#
				S2	54	6	29'-6"
L1	100	4	36'-10"	S3	6	5	#
L2	56	6	29'-0"	S4	26	5	30'-4"
L3	40	6	23'-0"	S5	8	5	#
DH5	10	6	29'-8"	S6	6	5	#
				S7	26	5	30'-4"
DH15	8	6	28'-8"	S8	8	5	#
S9	28	5	#	DH12	12	5	4'-3"
S10	54	5	28'-2"	M3	148	5	5'-6"

*See Bending Diagrams

APPROACH SLABS (ONE)

Straight Bars Mark	No. Req.	Size	Lgth.	Bent Bars Mark	No. Req.	Size	Lgth.
RF9	4	5	11'-9"				
RF10	4	6	11'-9"				
RF11	2	6	7'-0"				
RP3	22	6	3'-0"				
RP4	20	5	3'-0"				
AC2	6	6	11'-6"	AC1	8	4	3'-1"
TB2	12	8	35'-6"	AC3	26	4	2'-6"
WEST							
AS1	91	8	12'-0"	TB1	69	4	7'-8"
AS2	12	5	30'-2"				
AS3	12	5	#				
EAST							
AS1	88	8	12'-0"	TB1	67	4	7'-8"
AS2	24	5	30'-2"				

*See Bending Diagrams



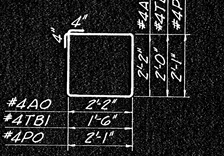
#4DV3

Thd. (Galv.) 4"
#6x3'-6"
Option-butt weld to threaded ¾"φ

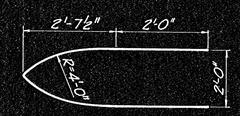
#6DH8

5'-6"	#5PF1 & #5PF2
#	#5PF3 & #5PF4
3'-2"	#5PU1 & #5PU2
3'-2"	#5PU3 & #5PU4
3'-2"	#5PU5 & #5PU6
2'-2"	#4PU21 & #4PU22
3'-8"	#4AU1
2'-3"	#5AU2
9"	#4DV5 & #4DV7

9'-0"	#7AV7 & #7AV10
6'-0"	#7AV8 & #7AV9
1'-8"	#6RP1
1'-8"	#5RP2
8'-10"	#11PD1
6'-0"	#8AV2
9'-0"	#8AV3
13'-6"	#7AW3

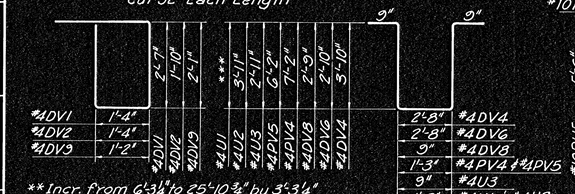


#4AO	2'-2"
#4TB1	1'-6"
#4PO	2'-1"



#5PC2

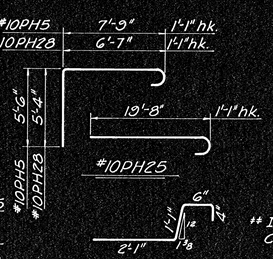
*** Incr. from 4'-2" to 5'-2" by 1'-0"
Cut 32 Each Length



#4DV1	1'-4"
#4DV2	1'-4"
#4DV9	1'-2"

2'-8"	#4DV4
2'-8"	#4DV6
9"	#4DV8
1'-3"	#4PV4 & #4PV5
9"	#4U3
1'-3"	#4U1 & #4U2

** Incr. from 6'-3¼" to 25'-10¾" by 3'-3¼"
Cut 8 Each Length



#10PH25

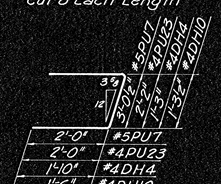
#4MC1

** Incr. from 3'-6" to 5'-3" by 10½"
Cut 16 Each Length

*** Incr. from 1'-11" to 5'-3" by 8"
Cut 12 Each Length

#8PV3

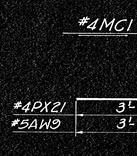
#5S3 Incr. from 11'-2½" to 24'-3½" by 6'-6½"
4'-6½" Cut 4 Each Length
#5S5 Incr. from 7'-11" to 27'-6½" by 6'-6½"
4'-0½" Cut 4 Each Length
#5S6 Incr. from 14'-5½" to 27'-6½" by 6'-6½"
5'-0½" Cut 4 Each Length
#5S8 Incr. from 4'-8" to 24'-3½" by 6'-6½"
3'-6½" Cut 4 Each Length
28'-2"
#5S7 3'-6½" 5'-0½"
#5S4 4'-0½" 4½" 3'-2" 4½" 3'-11" 4½" 3'-2" 4½" 3'-11" 4½" 3'-2" 4½" 4'-6½"
4½" 6½"
7" hk. (Typ.)
Make all end cuts horiz.



2'-0"	#5PU7
2'-0"	#4PU23
1'-10"	#4DH4
1'-6"	#4DH10

#5SW2	7'-0"	7" hk.
#6S1	**	8" hk.
#4SM	5'-0"	6" hk.
#5DH12	3'-8"	7" hk.
#4DH13	1'-3"	6" hk.
#4DH16	1'-11"	6" hk.
#7AW1	15'-6"	9" hk.
#7AW5	13'-6"	9" hk.
#8AH1	38'-9"	10" hk.

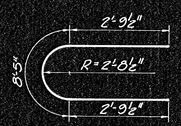
#6S2	28'-2"	8" hk.
#10G1	36'-8"	1'-1" hk.
#9SG1	36'-8"	1'-0" hk.
#5S7	29'-5"	7" hk.
#4SW1	6'-11"	6" hk.
#6DH6	25'-9"	8" hk.
#8PV1	5'-6"	10" hk.



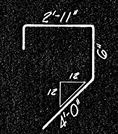
#4PX21	3'-0"
#5AW9	3'-9"

#6PH7	6'-6"
#6PH8	3'-10"

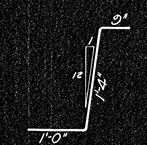
Incr. from 2'-0" to 2'-6" by 6"
Cut 8 Each Length
Incr. from 3'-0" to 4'-0" by 4"
Cut 8 Each Length



#5PF6

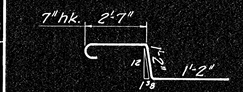


#5AB1



#4AC1

#4AC3



#5M3

#10PH4

Incr. from 30'-2" to 32'-11" by 3" Cut 1 Each Length	#5AS3
Incr. from 6'-3¼" to 25'-10¾" by 3'-3¼" Cut 8 Each Length	#5S9
Incr. from 28'-3" to 31'-0" by 2'-9" Cut 16 Each Length	#5PH2

#5AW2

#5AW6

NOTE:
ALL DIMENSIONS SHOWN IN THE BENDING DIAGRAMS ARE OUT TO OUT OF BARS UNLESS OTHERWISE NOTED.

SEE SHEET 21 FOR BAR LIST AND BENDING DIAGRAMS FOR RETAINING WALLS.

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

FIRST STREET BRIDGE OVER THE ARKANSAS RIVER

BAR LISTS & BENDING DIAGRAMS

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

SCALE ——— DATE June, 1974 DWG. NO. 89-G-22

APP. | CKD. | TR. | DR. E.C.F. | DES. ——— | RCT. ——— | SUPV. ———