BILL OF MATERIALS FOR SIDEWALK CONSTRUCTION

TIMBER

ITEM	No.	SIZE	FBM	REMARKS
Stringers	36	2"x12"x 13'-0"	1,404	Creosote treated
"	36	2"x12"x 4'-0"	144	" "
"	5	2"x12"x 13'-0"	65	" "
"	78	2"x12"x 2'-0"	1,560	" "
"	4	2"x12"x 4'-9"	304	" "
"	1	2"x12"x 3'-6½"	8	" "
"	1	2"x 6"x 3'-6"	4	" "
Timber piste	3	2"x 6"x 4'-0"	12	" "
" "	1	2"x 6"x 1'-4"	4	" "
" "	5	2"x 6"x 4'-0"	20	" "
Diagonal bracing	6	2"x 6"x 2'-6"	15	" "
(Longitudinal)	36	2"x 4"x12'-0"	288	" "
Flooring	333	@2"x 4"x 4'-0"	3,052	" "
Bridging	62	2"x 4"x 1'-2½"	79	" "
"	78	2"x 4"x 1'-4"	93	" "
"	24	2"x 4"x 1'-2"	58	" "
"	10	2"x 6"x12'-0"	120	" "
Posts	58	4"x 4"x 4'-0"	459	Sel. Treated
"	5	4"x 4"x 6'-0"	40	" "
Splashboard	36	2"x 6"x12'-0"	432	" "
Handrail	1	2"x 8"x14'-0"	28	" "
"		*Cut to:		" "
"		2 @ 12'-0½"		" "
"	117	2"x 4"x12'-0"	1404	" "
"		*Cut to:		" "
"		1 @ 12'-0"		" "
"		1 @ 11'-8½"		" "
"		2 @ 11'-6"		" "
"	2	2"x 4"x10'-0"	20	" "
"		*Cut to:		" "
"		1 @ 9'-0"		" "
"		1 @ 8'-10½"		" "
"		2 @ 5'-0")		" "
"	1	2"x 4"x 4'-0"	3	" "
"		*Cut to:		" "
"		1 @ 2'-5½"		" "
"	40	2"x 4"x12'-0"	320	" "
"		*Cut to:		" "
"		3 @ 12'-0"		" "
"		1 @ 11'-8½"		" "
"		1 @ 11'-5"		" "
"		1 @ 11'-0"		" "
"		1 @ 3'-10½"		" "
Handrail Posts	8	3"x 3"x 3'-7"		Creosote Treated

HARDWARE

ITEM	No.	SIZE
Machine bolts	1,088	5/8"x 5"
" "	208	5/8"x 7"
" "	40	5/8"x 10"
" "	324	5/8"x 12"
" "	272	5/8"x 14"

Note:
5/8" bolts each require 2 malleable iron washers. 1/2" bolts each require 2 flat washers.

SUMMARY OF QUANTITIES

ITEM	QUAN.	UNIT
Creosoted Lumber	9,943	F.B.M.
Salt Treated Lumber	2,706	F.B.M.
Hardware Bolts & Washers	1,476	Lbs.
Concrete	9.00	Cu. Yds.
Reinforcing Steel	200	Lbs.
Structural Steel	11,565	Lbs.

* Suggested order list.
\# This breakdown is listed for the use of the Contractor.
@ Bolts may be purchased at the Contractor's option, all of any item, by Ex. 1% of the same length and same total board feet.

NOTES:
TREATMENT: All salt treated timber shall be treated with Chromated Zinc Chloride in conformance with K.H.D. Specifications, Section 711, Item 5, Par. 6 Retention shall be 0.60 lbs. of dry salt per cu. ft. All creosote treated timber shall be treated to 8 10# Final retention with Grade No.1 creosote oil, in conformance with K.H.D. Specifications.
GRADING: All 2"x12" stringers and 4"x4" posts shall be No.1 or better, all remaining timber shall be No. 2 or better.
All timber shall conform to the Grading and Dressing Rules of the West Coast Lumbermen's Association, Portland, Oregon, and Bill of Materials: The above Bill of Materials is listed for the convenience of the Contractor only for construction of the bridge as a unit, as bid, with no regard to which portion is to be used for the construction of each individual sidewalk.

GENERAL NOTES:
Item I --- BRIDGE REPAIRS: Includes repairs to existing floor as described in the Specifications, plus the construction of scaffolding and other work necessary to placing hinges or ties as detailed on Sheet 5.
Item A --- BEAM HINGES: Covers the setting or direct cost of fabricating and placing Beam Hinges as detailed on Sheet 5.
Item B --- BEAM TIES: Covers the setting or direct cost of fabricating and placing Beam Ties as detailed on Sheet 5.
Item C --- RECONDITION HANDRAIL POSTS: Includes all labor and materials required to recondition existing bridge handrail as directed by the Engineer, with new posts of the same size and material, as described in the specifications.
Payment for Items A, B, and C will be on a unit price basis for the number of units of each item actually placed in the bridge, as directed by the Engineer.
Item D --- WALK AND APPROACHES: Includes all labor, materials, and equipment required to fabricate and erect sidewalk and approaches as detailed herein, and described in the specifications, including structural frames, treated timber, hardware, concrete risks and slope, and reinforcing steel.

SUMMARY OF CONTRACT ITEMS:
I --- Repair Bridge Floor — Lump Sum
~~A --- Install Beam Hinges — 6 Each~~ — Not used - beam ties used thruout.
B --- Install Beam Ties — ~~48 Each~~ 54 Each
C --- Recondition Handrail Posts — 24 Each
D --- Construct Walk and Approaches — Lump Sum.

BRIDGE REPAIRS AND SIDEWALK CONSTRUCTION ON LINCOLN STREET BRIDGE OVER THE ARKANSAS RIVER

CITY OF WICHITA
ENGINEERING DEPARTMENT
B.E. SMITH, CITY ENGINEER

PLANS PREPARED BY:
R. S. DELAMATER
CONSULTING ENGINEER
WICHITA, KANSAS
1954

Index of Sheets
Sheet No. 1. Summary of Quantities
2. Timber Framing
3. Ends Details
4. Steel Details
5. Hinge Details

1	C.T.	6-1-54	Revised to as built plans.

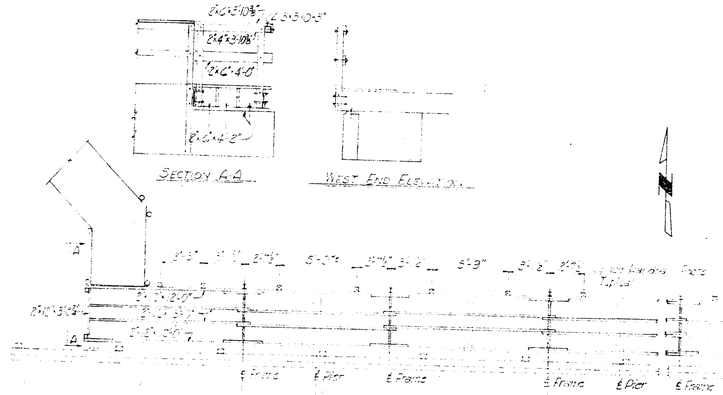
CITY OF WICHITA, KANSAS
B.E. SMITH, CITY ENGINEER

SUMMARY OF QUANTITIES
BRIDGE REPAIRS &
SIDEWALK CONSTRUCTION
LINCOLN STREET BRIDGE

R. S. DELAMATER
CONSULTING ENGINEER
WICHITA, KANSAS

DATE June, 1954
SCALE
DWG. NO. 13-E-1

Sheet | Total Sheets
2 | 5



No.	By	Revised to as built plans.
		REVISION

CITY OF WICHITA, KANSAS
B. E. SMITH, CITY ENGINEER

TIMBER FRAMING
FOR CONSTRUCTION OF SIDEWALK
ON LINCOLN STREET BRIDGE

R. S. DELAMATER
CONSULTING ENGINEER
WICHITA, KANSAS

DATE June 3 1954
SCALE
DWG. NO. 7952

Sheet No. 3 | Total Sheets 5

Transverse Joint

3'-0"

1" Premolded Joint

Slope 6"

Catch basin

10'-6"

1'-0"

6"

4'-4½"

4'-3"

Elev. top of curb 99.95

End of bridge

5'-1½"

Slope 6"

A

B

B

A

Section A-A

3'-0"

1'-9½"

100.45

1" Premolded Joint

Present grade

View A-A

¾ x 5'-6" 6 bars

14 bars @ 10 ctrs. 14 bars @ 9" ctrs. for straight corners

Section B-B

8'-10"

1'-4"

1'-5½"

12

12

Expansion Joint Detail

Elev. top of curb 99.96

2'-9¾"

5'-4"

5'-2"

9" 1'-10" 1'-10" 9"

11'-2¾"

Footing Plan, First End

1'-5"

RIW 30' ℄

1'-8"

1'-8"

5'-2"

4'-0"

10'-0"

11'-8¾"

Outside Corner Detail

End of bridge

4'-0"

5'-12'-0"

5'-6" Elev.

5'-0" 2'-2"

Sidewalk Footing Plan

Space 4'-10" Extra

Present grade

Elev. 97.46

Present grade

4.4% turn

Where floor slab rests against end bulkhead, construct 1" expansion joint.

Footing Plan

5'-11"

5'-11"

5'-10¾"

4'-0"

3'-5"

X = Existing post

APP.	CKD.	TR.	DR.	QUS.	PHOT.	SURV.

No.	By	Date	Revision
1	PCT	9/27/54	Revised to as built plans.

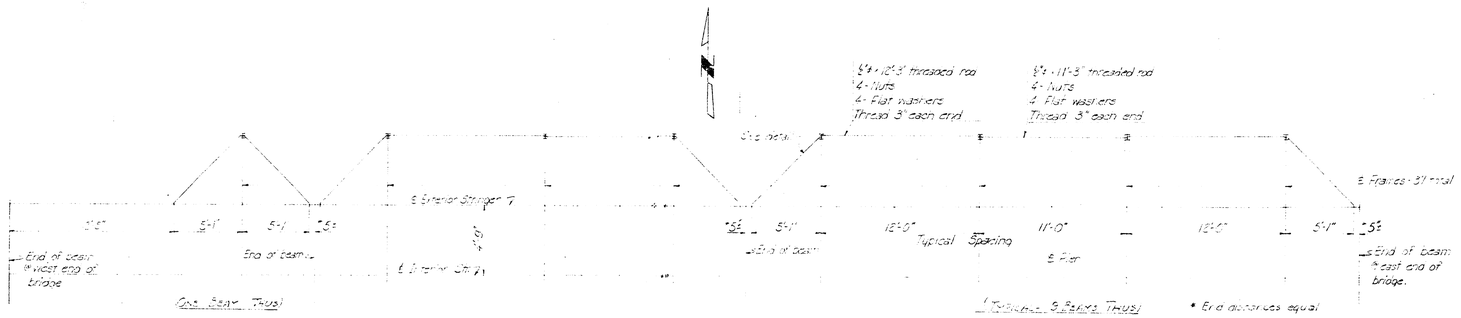
Bridge Division
State Highway Commission of Kansas

Plan Details
for Construction of Sidewalk on Lincoln Street Bridge

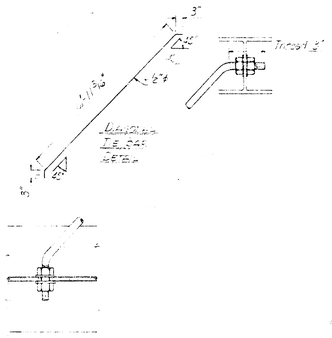
R. S. DELAMATER
CONSULTING ENGINEER
WICHITA, KANSAS

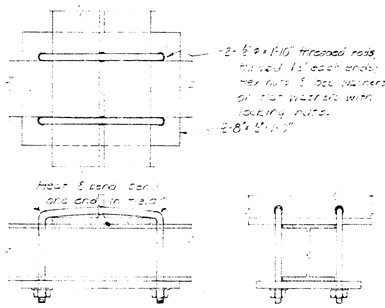
DATE June, 1954
SCALE
DWG. NO.

Sheet Total No. of Sheets 4 - 5



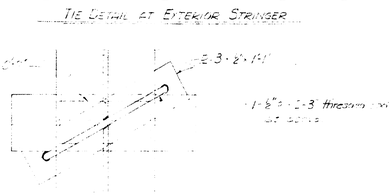
STEEL FRAMING PLAN







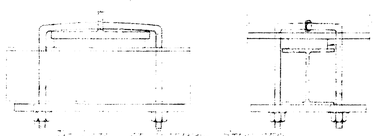
HANDRAIL SPLICE DETAILS



TIE DETAIL AT EXTERIOR STRINGER



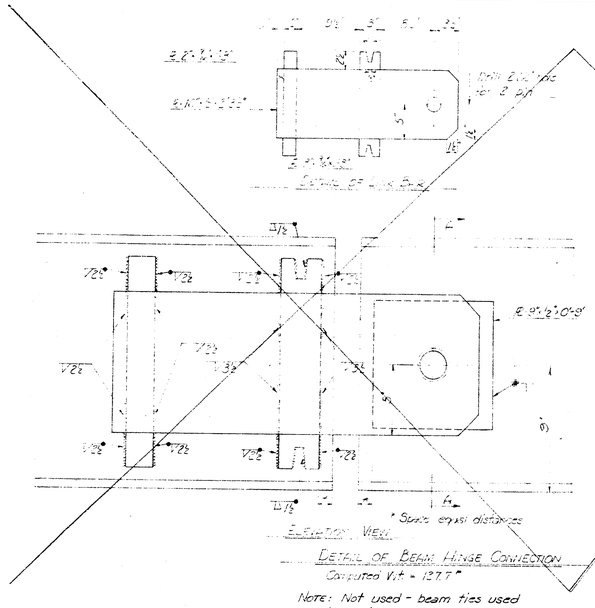
FRAME DETAILS
37 REQ'D.



DETAIL AT INTERIOR STRINGER

City of Wichita, Kansas B.E. Smith, City Engineer	
Steel Details for Construction of Sidewalk on Lincoln Street Bridge	
R. S. DELAMATER CONSULTING ENGINEER WICHITA, KANSAS	DATE June, 1954 SCALE DWG. NO. 1954-4

Sheet No.	Total Sheets
5	5



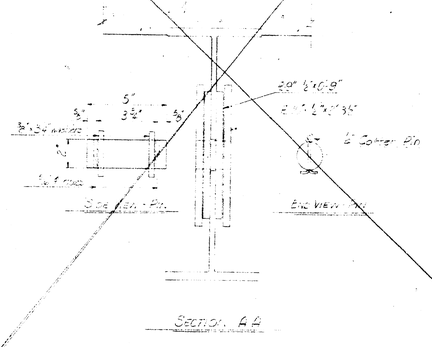
* Shims equal distances

ELEVATION VIEW

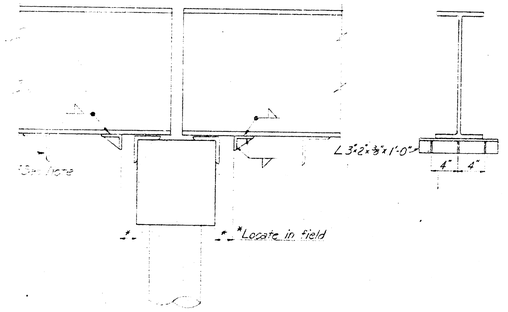
DETAIL OF BEAM HINGE CONNECTION

Computed V.t. = 127.7°

Note: Not used - beam ties used thruout.



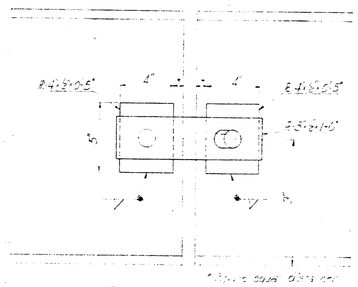
SECTION A-A



"Locate in field

ANGLE STOP DETAIL

Note: Pier caps jacked to center at ℄ of beam ties from temporary jack angles shown.

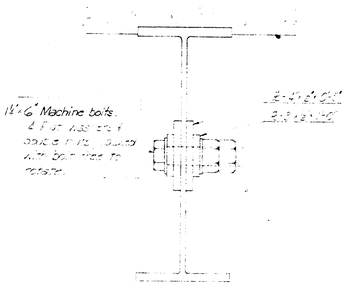


ELEVATION VIEW

TIE BAR DETAIL

DETAIL OF BEAM TIE BAR CONNECTION

Computed V.t. 240°



SECTION

No.	By	Revised to as built plans.
1	F.C.T.	11/27/54

CITY OF WICHITA, KANSAS

B.E. SMITH, CITY ENGINEER

TIE BAR AND HINGE DETAILS FOR BRIDGE REPAIRS ON LINCOLN STREET BRIDGE

R. S. DELAMATER
CONSULTING ENGINEER
WICHITA, KANSAS

DATE June, 1954

SCALE ———

DWG. NO. 192 S

SURV. | PLOT. | DES. | DR. | TR. | CKD. | APP.