CITY OF WICHITA

SEDGWICK COUNTY, KANSAS

PART I
GRADING
DRAINAGE
PAVING

PART II
BRIDGE

GREIFFENSTEIN BRIDGE

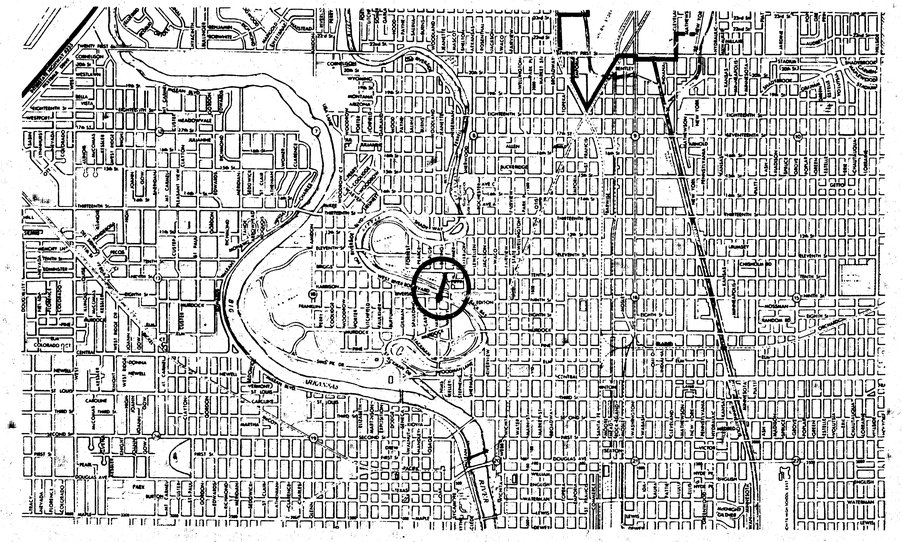
INDEX OF SHEETS

PART I

TITLE SHEET
1-1 GENERAL LAYOUT
1-2 GRADING & DRAINAGE - PLAN & PROFILE
1-3 GRADING PLAN - ALTERNATES 1 & 2.
1-4 TYPICAL SECTIONS
1-5 HEADWALL & MANHOLE DETAILS
1-6 DRAINAGE DETAILS

PART II

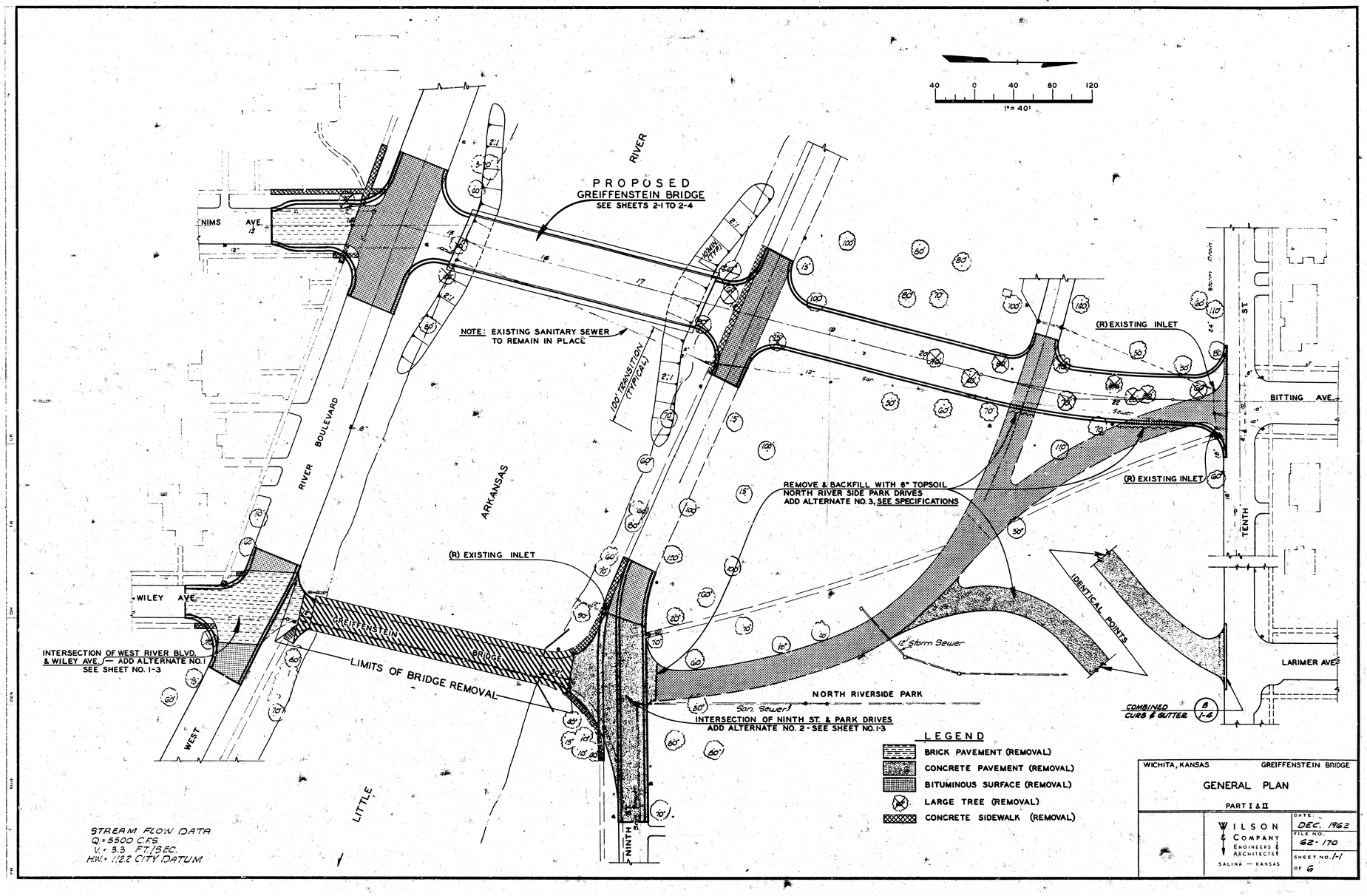
2-1 BRIDGE CONSTRUCTION LAYOUT
2-2 ABUTMENT & MISC. DETAILS
2-3 PIER & MISC. DETAILS
2-4 DECK REINFORCING

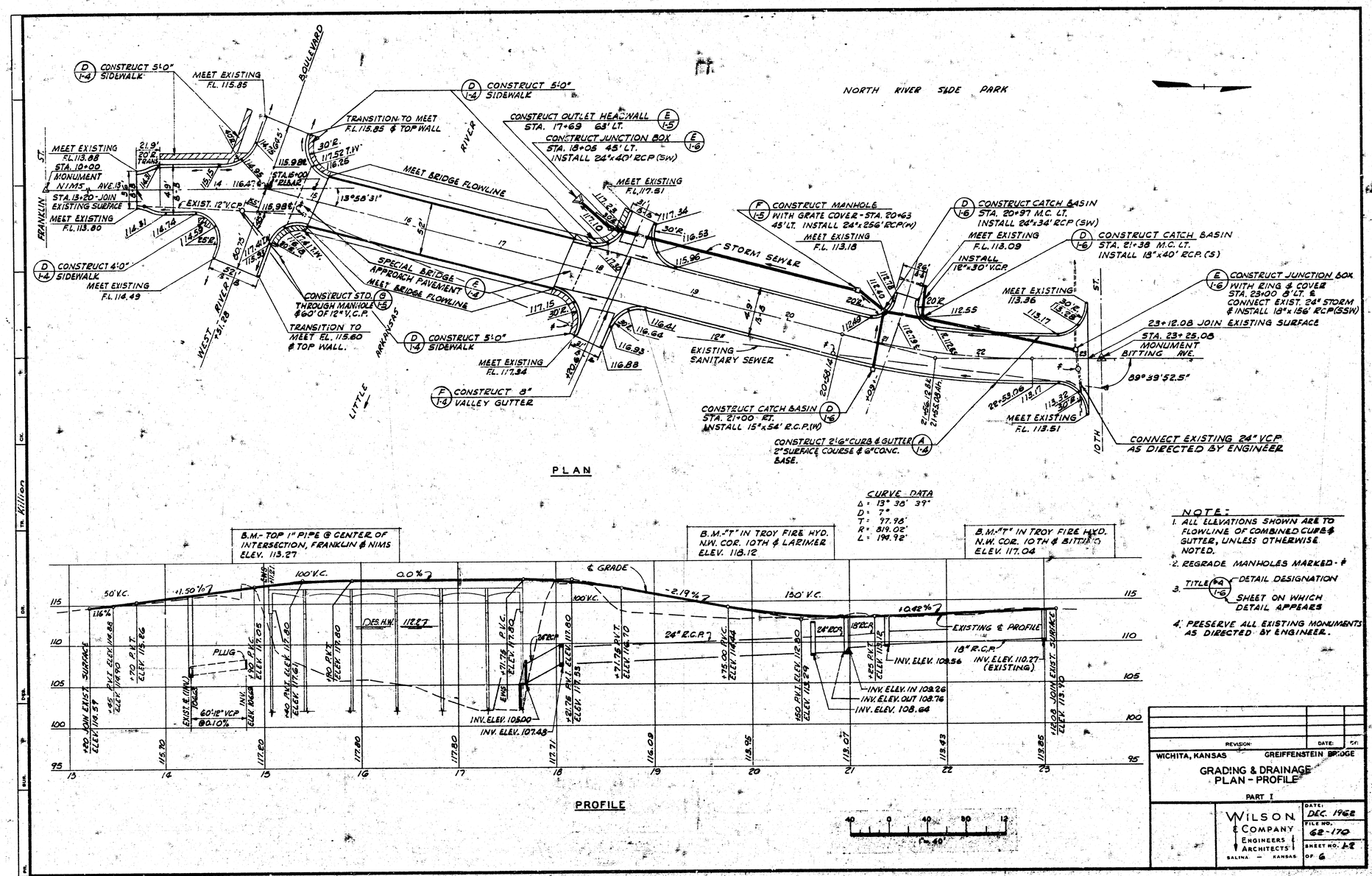


12/20/62

LITTLE ARKANSAS RIVER CROSSING

1962


40 0 40 80 120
1"= 40'
PROPOSED
GREIFFENSTEIN BRIDGE
SEE SHEETS 2-1 TO 2-4
RIVER
NIMS AVE.
NOTE: EXISTING SANITARY SEWER TO REMAIN IN PLACE
100' TRANSITION (TYPICAL)
RIVER BOULEVARD
ARKANSAS
(R) EXISTING INLET
REMOVE & BACKFILL WITH 6" TOPSOIL
NORTH RIVER SIDE PARK DRIVES
ADD ALTERNATE NO. 3, SEE SPECIFICATIONS
(R) EXISTING INLET
BITTING AVE.
TENTH ST.
WILEY AVE.
GREIFFENSTEIN BRIDGE
INTERSECTION OF WEST RIVER BLVD. & WILEY AVE. — ADD ALTERNATE NO.1 SEE SHEET NO. 1-3
LIMITS OF BRIDGE REMOVAL
IDENTICAL POINTS
12" Storm Sewer
LARIMER AVE.
NORTH RIVERSIDE PARK
San. Sewer
INTERSECTION OF NINTH ST. & PARK DRIVES
ADD ALTERNATE NO. 2 - SEE SHEET NO.1-3
COMBINED CURB & GUTTER
WEST
LITTLE
NINTH ST.
STREAM FLOW DATA
Q = 5500 C.F.S.
V. = 3.3 FT./SEC.
H.W. = 1122 CITY DATUM
LEGEND
BRICK PAVEMENT (REMOVAL)
CONCRETE PAVEMENT (REMOVAL)
BITUMINOUS SURFACE (REMOVAL)
LARGE TREE (REMOVAL)
CONCRETE SIDEWALK (REMOVAL)
WICHITA, KANSAS
GREIFFENSTEIN BRIDGE
GENERAL PLAN
PART I & II
WILSON & COMPANY ENGINEERS & ARCHITECTS
SALINA — KANSAS
DATE DEC. 1962
FILE NO. 62-170
SHEET NO. 1-1
OF 6



NOTE:

1. ALL ELEVATIONS SHOWN ARE TO FLOWLINE OF COMBINED CURB & GUTTER, UNLESS OTHERWISE NOTED.
2. REGRADE MANHOLES MARKED - #
3. TITLE (D-4) — DETAIL DESIGNATION; (1-6) — SHEET ON WHICH DETAIL APPEARS
4. PRESERVE ALL EXISTING MONUMENTS AS DIRECTED BY ENGINEER.

REVISION:	DATE:	BY:

WICHITA, KANSAS — GREIFFENSTEIN BRIDGE

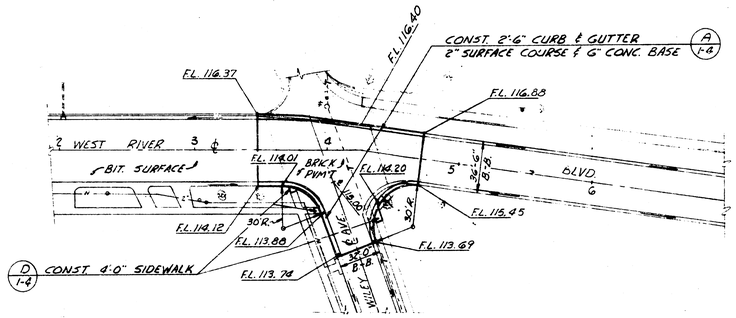
GRADING & DRAINAGE PLAN - PROFILE

PART I

WILSON & COMPANY ENGINEERS ARCHITECTS SALINA — KANSAS

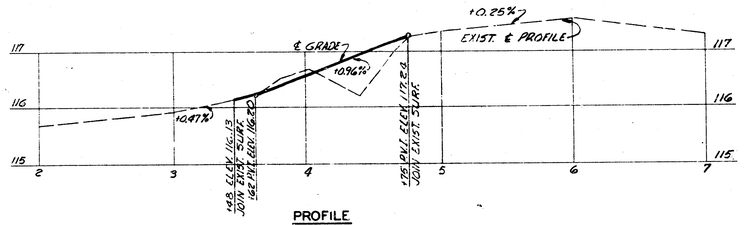
DATE: DEC. 1962
FILE NO. 62-170
SHEET NO. 28 OF 6

SCALE 1"=40'



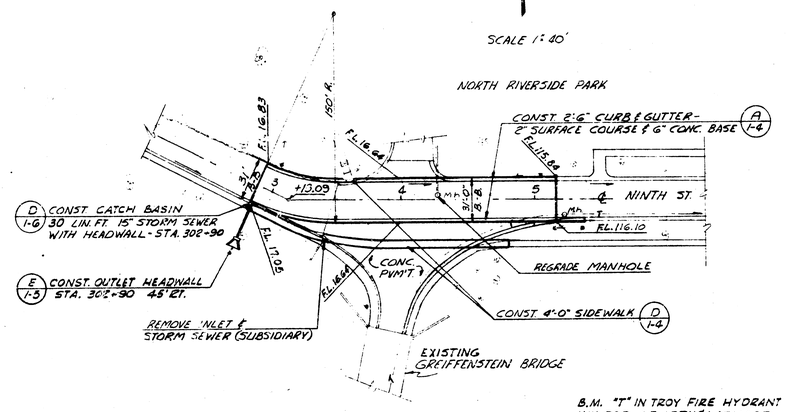
PLAN

B.M. TOP 1" PIPE - SW COR. OF WILEY AVE. & WEST RIVER DRIVE
ELEV. 114.77



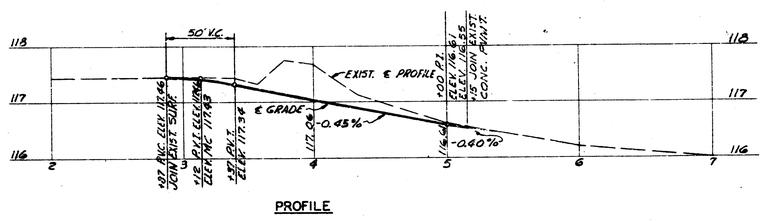
PROFILE

INTERSECTION OF WEST RIVER BLVD. & WILEY AVE.
ADD ALTERNATE NO. 1



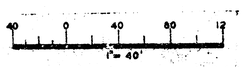
B.M. "T" IN TROY FIRE HYDRANT
NW COR. OF 10TH & LARIMER
ELEV. 118.12

PLAN



PROFILE

INTERSECTION OF NINTH ST. & PARK DRIVES
ADD ALTERNATE NO. 2



REVISION:	DATE:	BY:

WICHITA, KANSAS — GREIFFENSTEIN BRIDGE

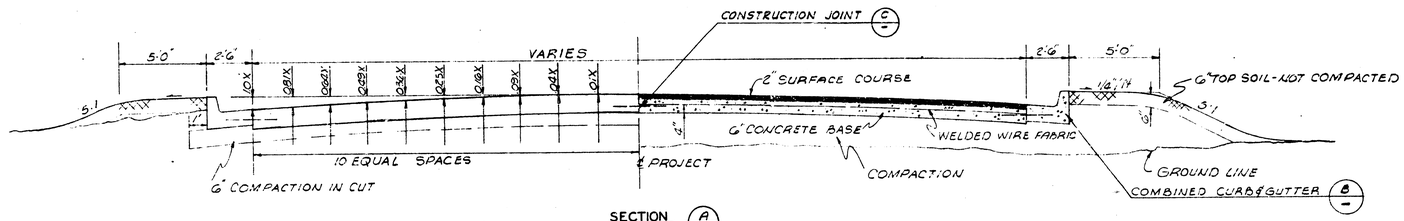
GRADING PLAN ALTERNATES 1 & 2

PART I

WILSON & COMPANY
ENGINEERS & ARCHITECTS
SALINA — KANSAS

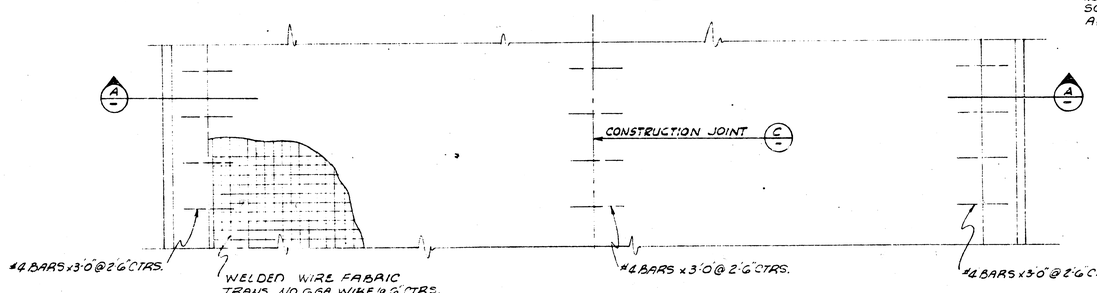
DATE: DEC. 1968
FILE NO. 68-170
SHEET NO. 1-3
OF 6

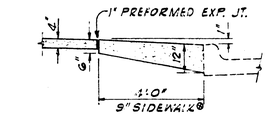
WIDTH-FEET BACK TO BACK	CROWN "X"
49 FOOT	.49 FOOT
36 FOOT	.36 FOOT
31 FOOT	.31 FOOT



SECTION A

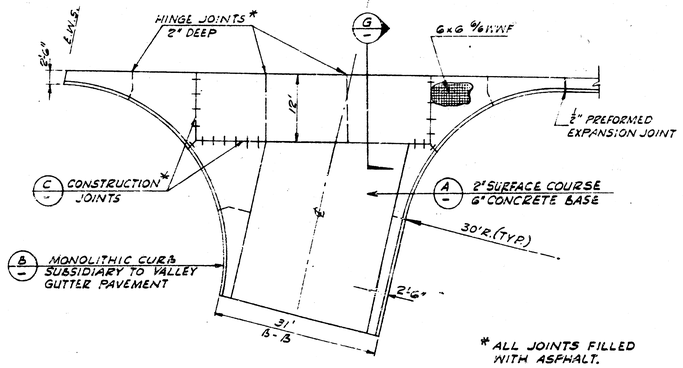
INTERSECTION OF ALL SLOPE LINES SHALL BE SOFTENED AND ROUNDED FOR PLEASING APPEARANCE.





SIDEWALK D

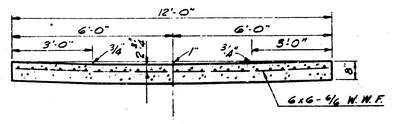
* AT END OF SIDEWALK IN INTERSECTIONS OR AT BRIDGE ABUTMENT.



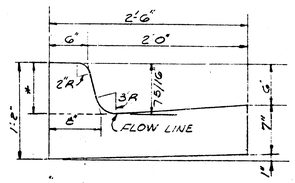
TYPICAL PLAN

8" VALLEY GUTTER F
SCALE 1"=10'

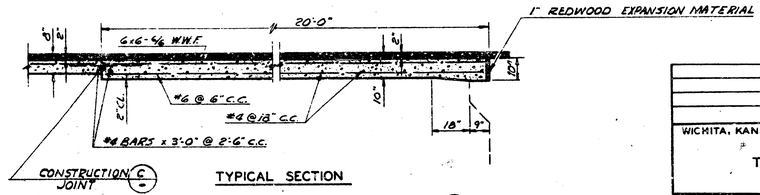
PLAN



SECTION G
SCALE 1/2"=1'-0"



COMBINED CURB & GUTTER B
* VARY TO MEET EXISTING CURB WHERE REQUIRED. LENGTH OF TRANSITION = 3 FOOT MIN.



TYPICAL SECTION

SPECIAL BRIDGE APPROACH PAVEMENT E
PAID FOR AS 2" SURF COURSE & 6" CONC. BASE
SCALE 1/2" = 1'-0"

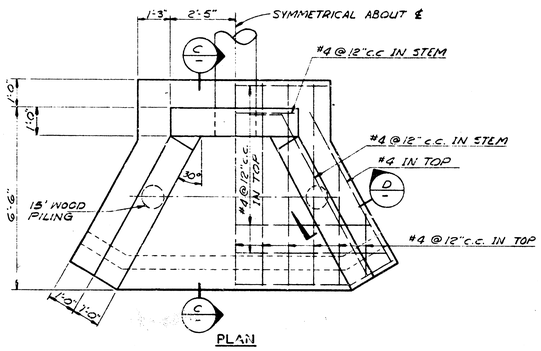
REVISION:	DATE:	BY:

WICHITA, KANSAS — GREIFFENSTEIN BRIDGE

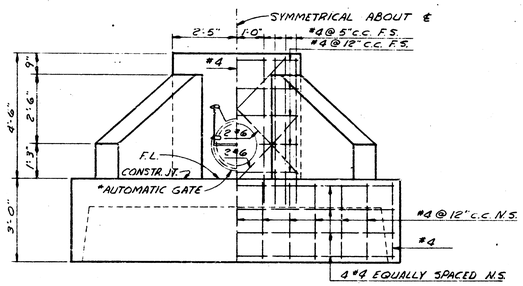
TYPICAL SECTIONS
PART I

WILSON & COMPANY ENGINEERS ARCHITECTS
SALINA — KANSAS

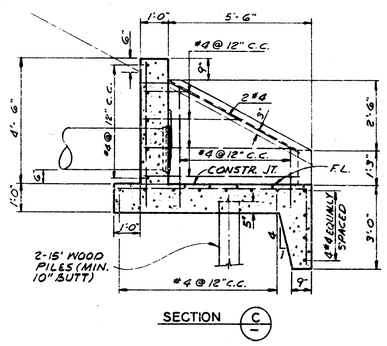
DATE: DEC. 1962
FILE NO. 62-170
SHEET NO. 1-A
OF 6



PLAN



ELEVATION



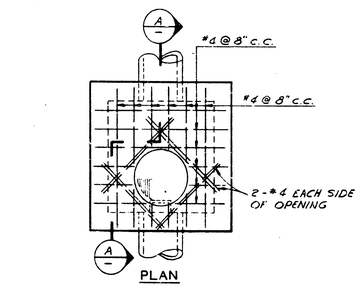
SECTION C

OUTLET HEADWALL FOR *

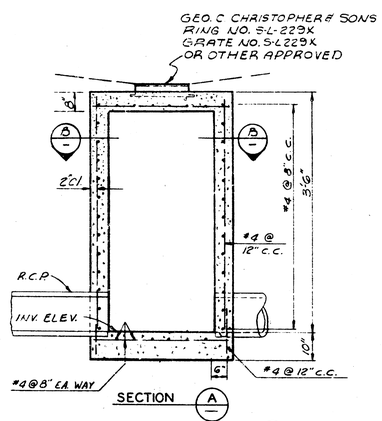
SCALE: 1/8" = 1'-0"

E

* 24" RCP & 15" R.C.P.



PLAN

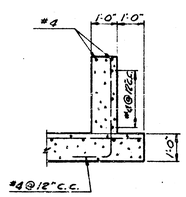


SECTION A

MANHOLE DETAILS

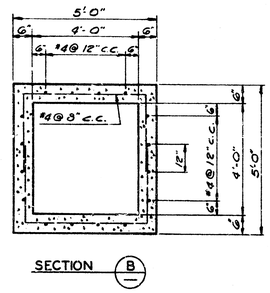
NOT TO SCALE

F

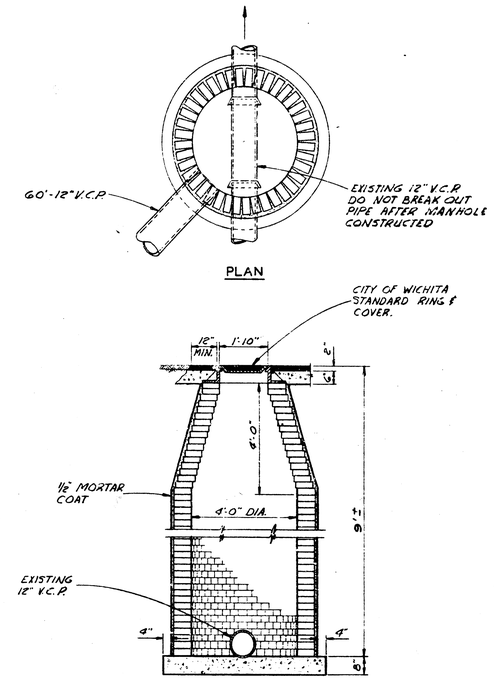


SECTION D

*NOTE: AUTOMATIC GATE TO BE USED ONLY WHEN SPECIFIED ON PLAN SHEET.



SECTION B



PLAN

SECTION

STANDARD THROUGH MANHOLE G

SCALE: 1/2" = 1'-0"

REVISION:	DATE:	BY:

WICHITA, KANSAS — GREIFFENSTEIN BRIDGE

HEADWALL & MANHOLE DETAILS

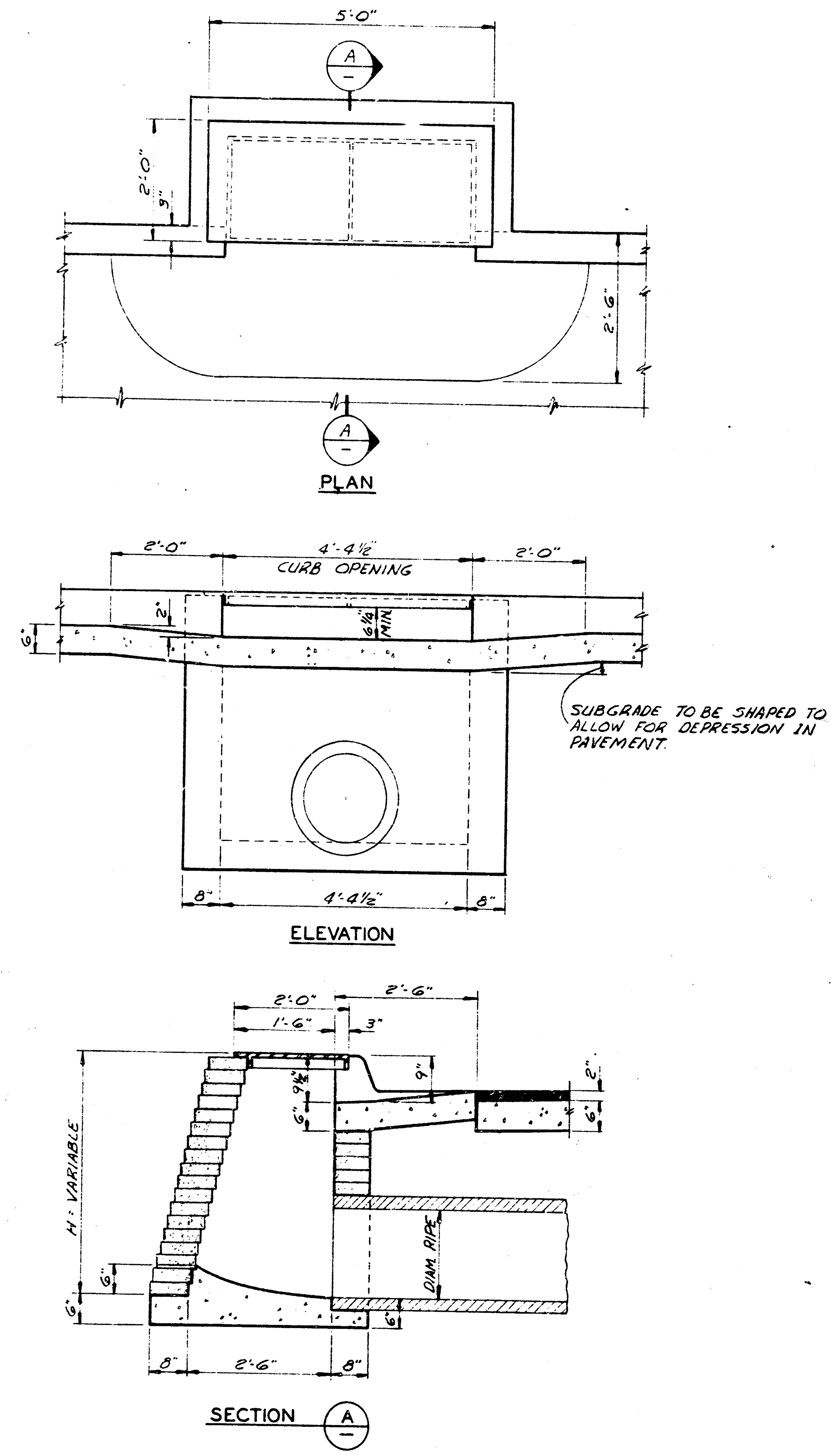
PART I

WILSON & COMPANY ENGINEERS & ARCHITECTS SALINA — KANSAS

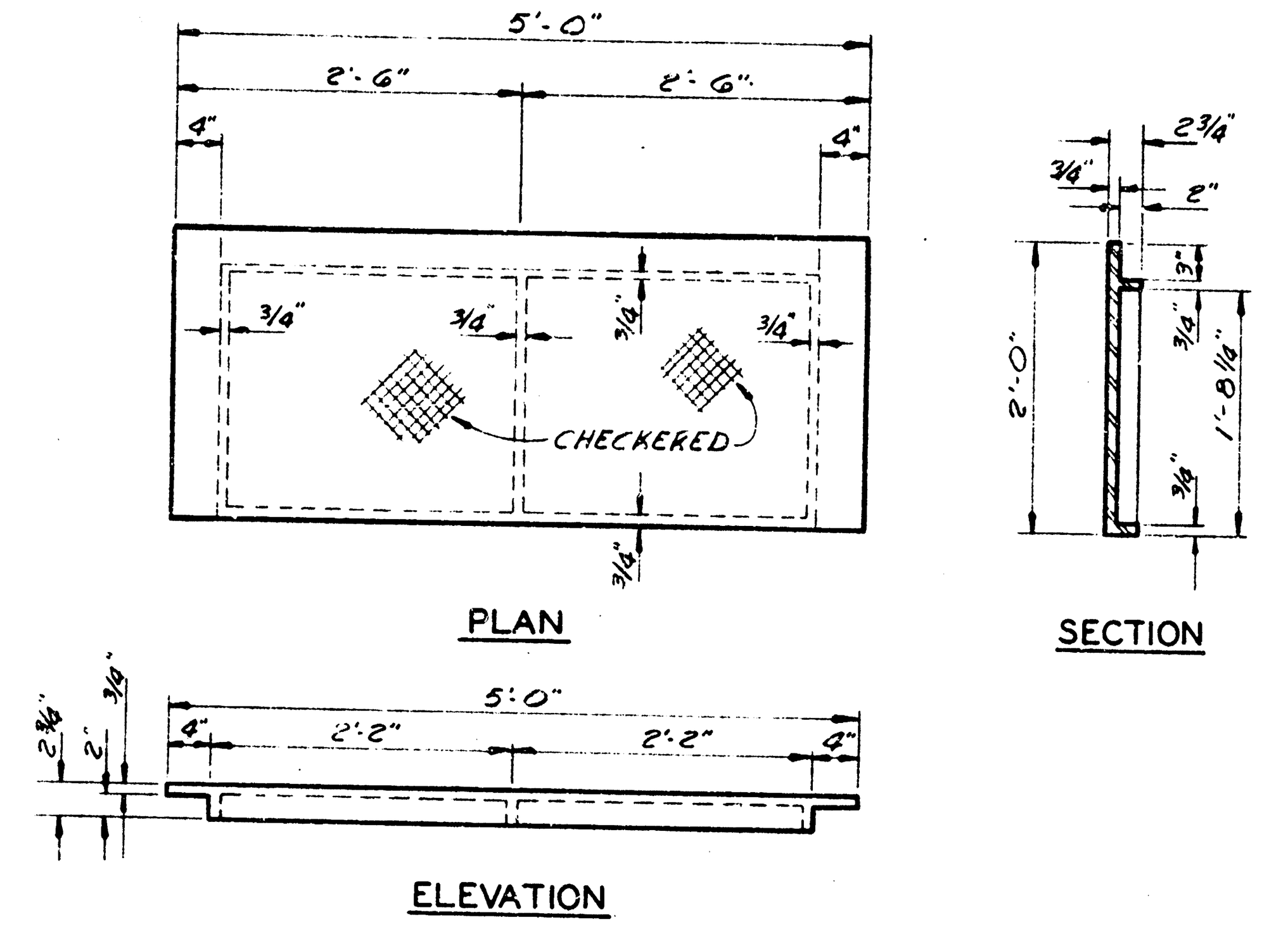
DATE: DEC. 1962

FILE NO. 62-170

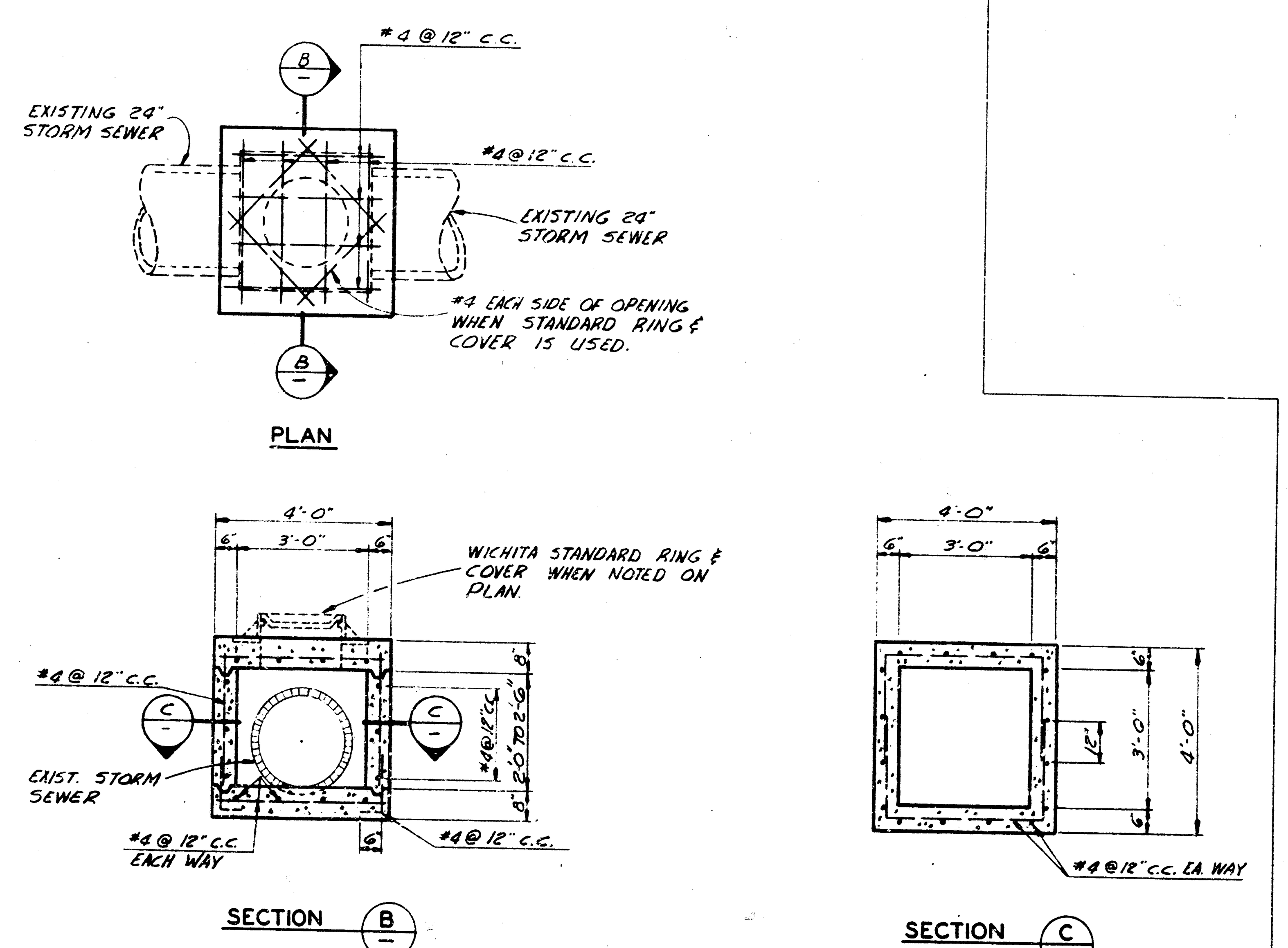
SHEET NO. 1-5 OF 6



STANDARD CATCH BASIN (D)
SCALE: 3/8" = 1'-0"



CITY OF WICHITA CAST IRON INLET COVER
SCALE: 1" = 1'-0"
WEIGHT OF CASTING = 325 LBS.



JUNCTION BOX DETAILS (E)
SCALE: ½" = 1'-0"

SCHEDULE OF STRUCTURES

STATION	SIDE	TYPE	TOP EL.	INV. EL.	H.
17+69	LT.	HW	–	105.00	–
18+05	LT.	JB	–	107.48	–
20+63	LT.	MH	112.39	108.64	3.50
20+97	LT.	CB	113.01	108.76	4.25
21+00	RT	CB	113.07	109.57	3.50
21+38	LT.	CB	113.16	109.56	3.60
23+00	LT.	JB	113.83	110.27	3.56
23+03	RT.	JB	–	110.55	3.00
*2+90	RT.	CB	117.66	113.66	4.00
*2+90	RT	HW	–	105.00	–

* INTERSECTION OF NINTH ST. & PARK DRIVES (ADD ALTERNATE NO. 2)

REVISION:	DATE:	BY:

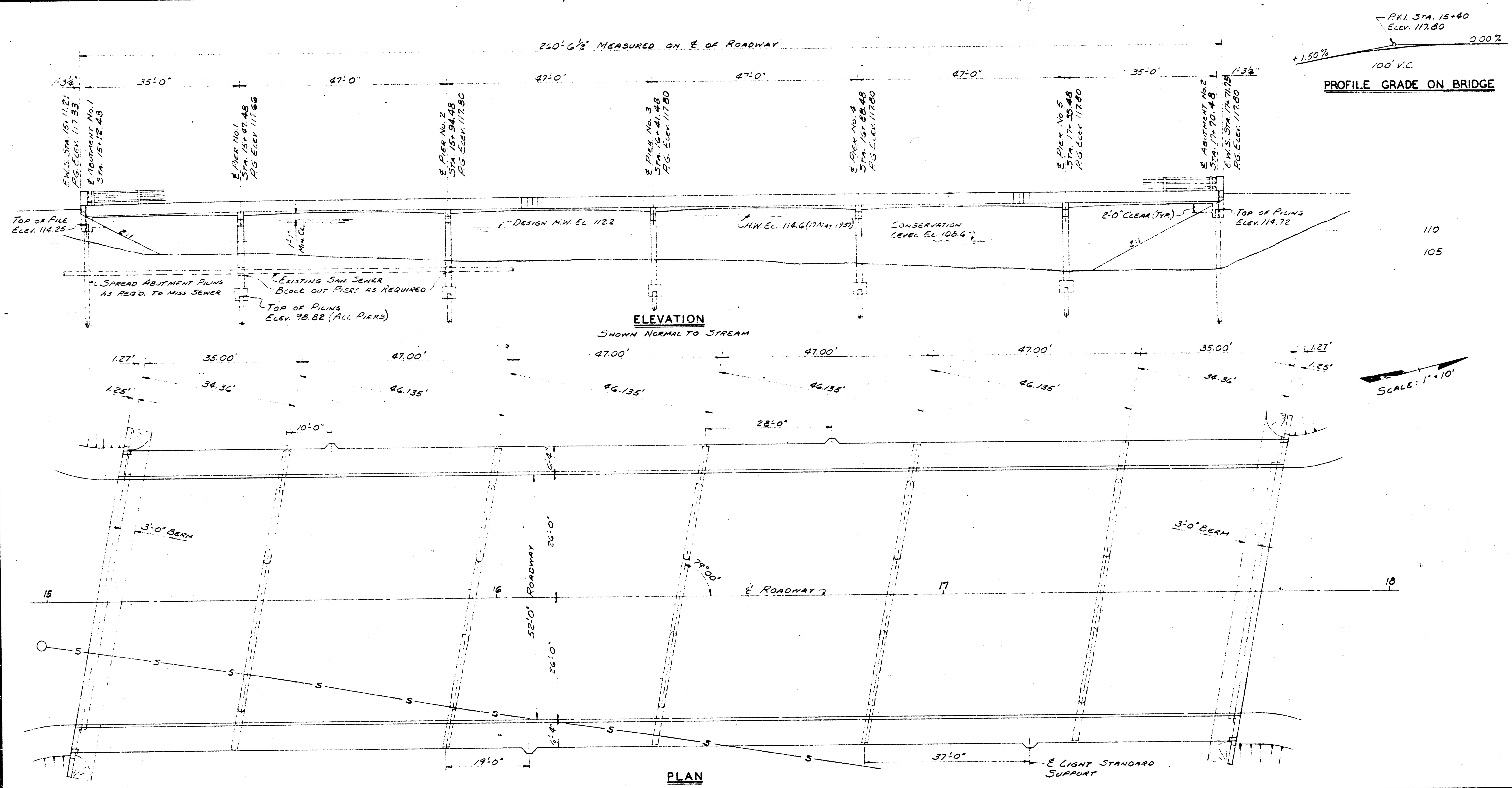
WICHITA, KANSAS — GREIFFENSTEIN BRIDGE

DRAINAGE DETAILS

PART I

WILSON & COMPANY
ENGINEERS & ARCHITECTS
SALINA — KANSAS

DATE: DEC. 1962
FILE NO. 62-170
SHEET NO. 1-6 OF 6



GENERAL NOTES:

DESIGN LOADING: H20-S16-44 A.A.S.H.O SPECIFICATIONS 1961 ED.
UNIT STRESSES: f'_c = 4000 P.S.I., f_c = 1600 P.S.I., f_s = 20,000 P.S.I.
EXCAVATION AND EMBANKMENT: COMPLETE EXCAVATION AND EMBANKMENT IN THE VICINITY OF THE BRIDGE PRIOR TO CONSTRUCTING ABUTMENTS.
EPOXY RESIN SEAL: SEE SPECIFICATIONS.
PILING: ABUTMENT PILING 10BP42 DRIVEN TO A COMPUTED BEARING VALUE OF 37 TONS PER PILE. PIER PILING 12BP53 OR 12" SQUARE PRESTRESSED CONCRETE DRIVEN TO A COMPUTED BEARING VALUE OF 47 TONS PER PILE. SEE SPECIFICATIONS.
GEOLOGY: SEE SPECIFICATIONS FOR LOG OF BORINGS.

EXISTING SANITARY SEWER: KEEP SEWER IN SERVICE DURING CONSTRUCTION. BLOCK OUT PIERS TO ACCOMODATE SEWER, LEAVING 2" MIN. CLEARANCE ALL AROUND. BEND OR CUT REINFORCING AT BLOCKOUTS AT THE DIRECTION OF THE ENGINEER.
EXISTING PILING: SEE SPECIFICATIONS.

REVISION:	DATE:	BY:

WICHITA, KANSAS — GREIFFENSTEIN BRIDGE

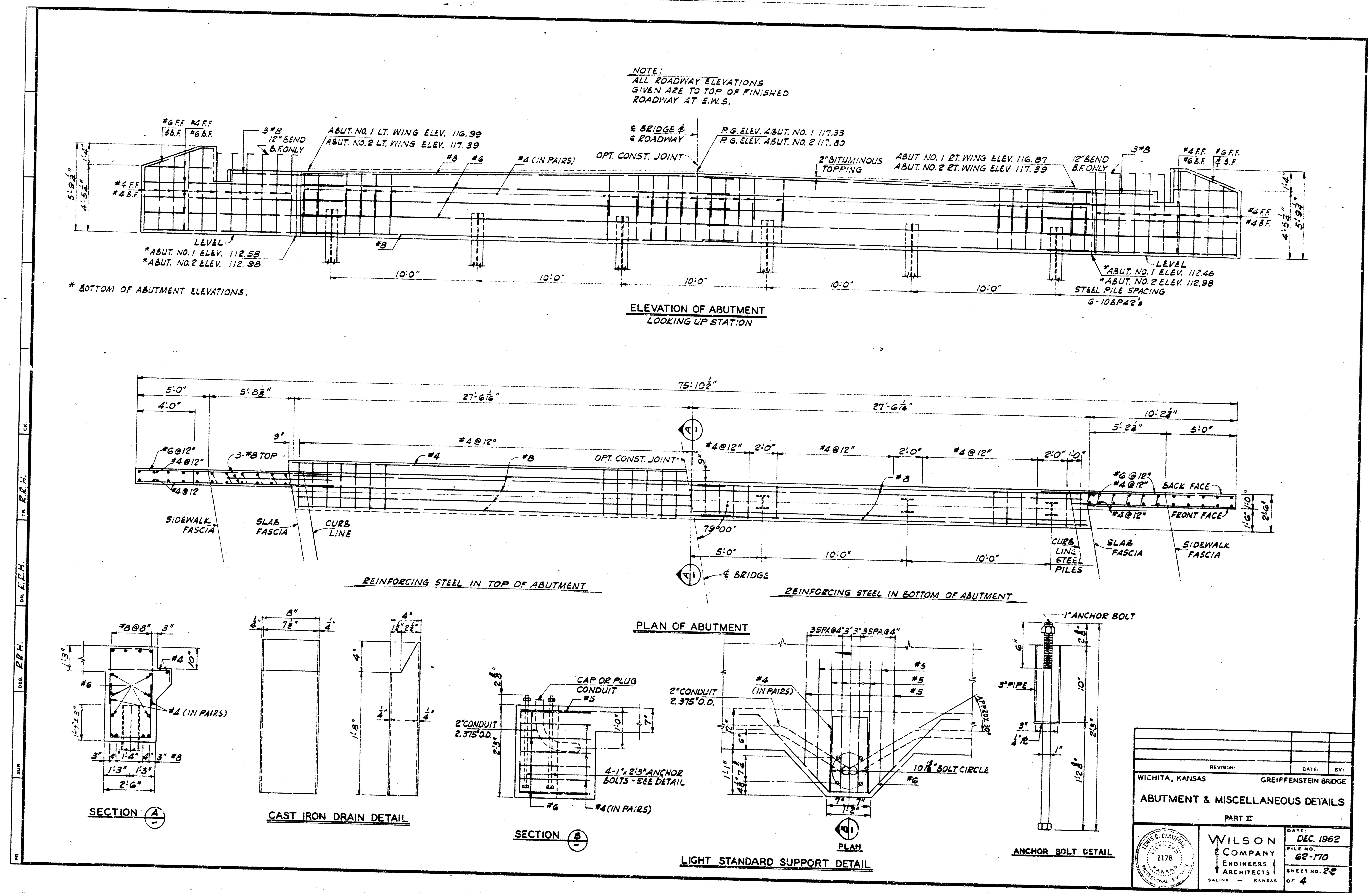
BRIDGE CONSTRUCTION LAYOUT

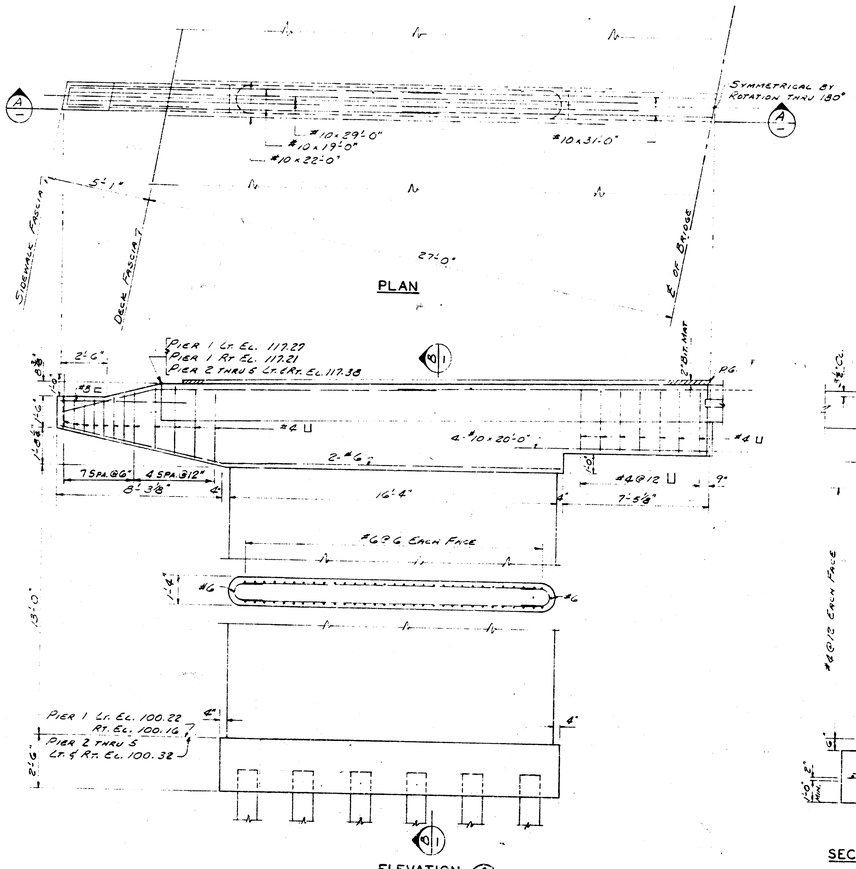
PART II

LEWIS C. CRAWFORD — LICENSED — 1178 — KANSAS

WILSON & COMPANY
ENGINEERS ARCHITECTS
SALINA — KANSAS

DATE: DEC. 1962
FILE NO. 62-170
SHEET NO. 2-1 OF 4


NOTE:
ALL ROADWAY ELEVATIONS GIVEN ARE TO TOP OF FINISHED ROADWAY AT E.W.S.
ABUT. NO. 1 LT. WING ELEV. 116.99
ABUT. NO. 2 LT. WING ELEV. 117.39
P.G. ELEV. ABUT. NO. 1 117.33
P.G. ELEV. ABUT. NO. 2 117.80
OPT. CONST. JOINT
2" BITUMINOUS TOPPING
ABUT. NO. 1 RT. WING ELEV. 116.87
ABUT. NO. 2 RT. WING ELEV. 117.39
#4 (IN PAIRS)
LEVEL
*ABUT. NO. 1 ELEV. 112.58
*ABUT. NO. 2 ELEV. 112.98
*ABUT. NO. 1 ELEV. 112.46
*ABUT. NO. 2 ELEV. 112.98
STEEL PILE SPACING
6-10BP42's
* BOTTOM OF ABUTMENT ELEVATIONS.
ELEVATION OF ABUTMENT
LOOKING UP STATION
75'-10½"
27'-6⅛"
SIDEWALK FASCIA
SLAB FASCIA
CURB LINE
BACK FACE
FRONT FACE
STEEL PILES
℄ BRIDGE
REINFORCING STEEL IN TOP OF ABUTMENT
REINFORCING STEEL IN BOTTOM OF ABUTMENT
PLAN OF ABUTMENT
SECTION A
CAST IRON DRAIN DETAIL
SECTION B
CAP OR PLUG CONDUIT
2" CONDUIT 2.375" O.D.
4-1"⌀ 2'-3" ANCHOR BOLTS - SEE DETAIL
PLAN
LIGHT STANDARD SUPPORT DETAIL
1" ANCHOR BOLT
3" PIPE
ANCHOR BOLT DETAIL
REVISION:
DATE:
BY:
WICHITA, KANSAS
GREIFFENSTEIN BRIDGE
ABUTMENT & MISCELLANEOUS DETAILS
PART II
LEWIS C. CRAWFORD LICENSED 1178 KANSAS PROFESSIONAL ENGINEER
WILSON & COMPANY ENGINEERS & ARCHITECTS
SALINA — KANSAS
DATE: DEC. 1962
FILE NO. 62-170
SHEET NO. 2E OF 4



REVISION: | DATE: | BY:

WICHITA, KANSAS — GREIFFENSTEIN BRIDGE

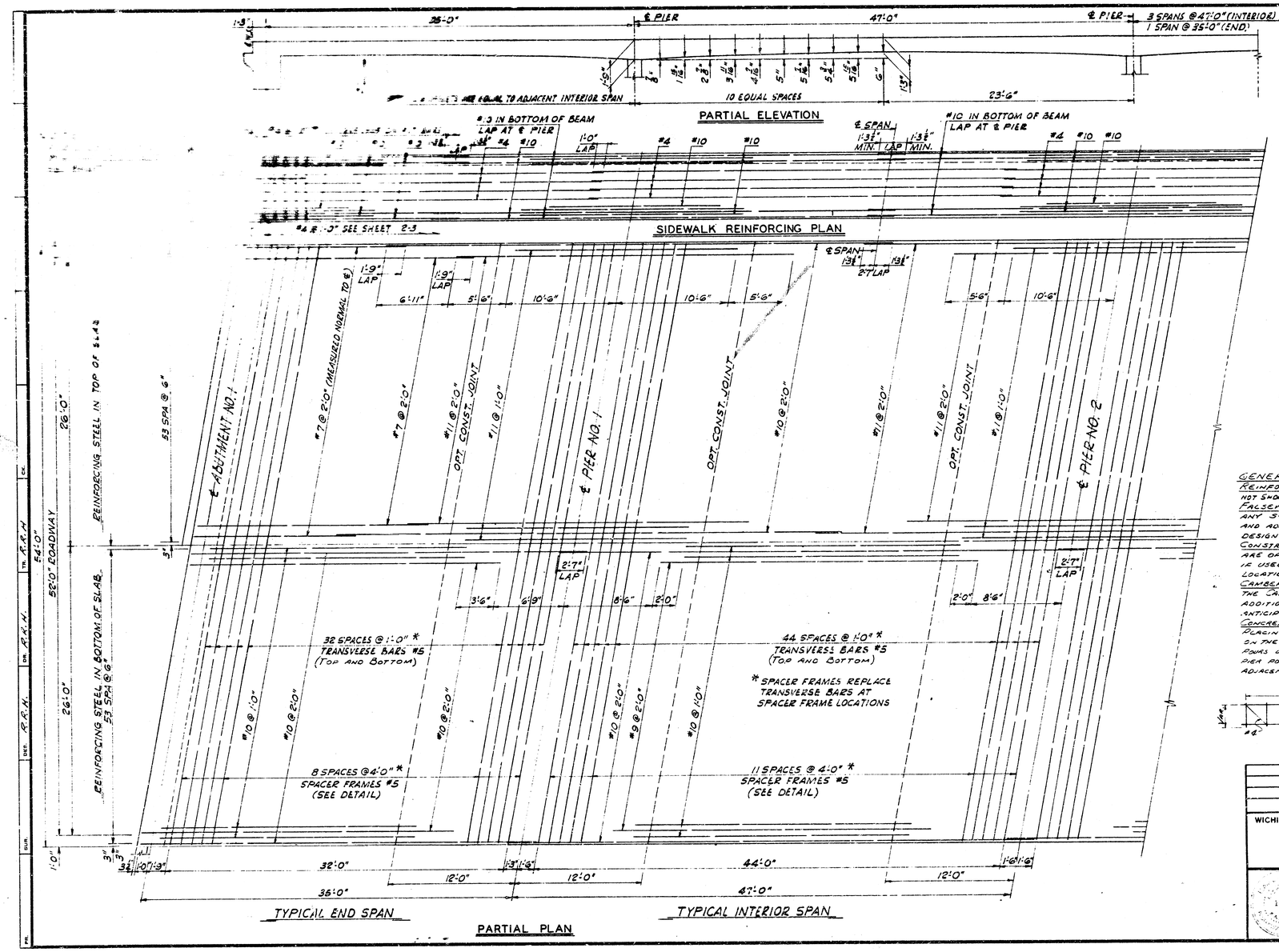
PIER AND MISCELLANEOUS DETAILS

PART II

WILSON & COMPANY ENGINEERS ARCHITECTS
SALINA — KANSAS

DATE: DEC. 1962
FILE NO. 68-170
SHEET NO. 2-3 OF 4

DES. L.G.C. | DR. L.G.C. | TR. C.G.C. | CK. R.S.K. | BUR. | PR.



GENERAL NOTES:

REINFORCING: BAR LENGTHS AND SPACINGS NOT SHOWN TO BE SCALED FROM PLANS

FALSEWORK: LEAVE FORMS IN PLACE IN ANY SPAN UNTIL CONCRETE IN THAT SPAN AND ADJACENT SPANS HAS ATTAINED ITS DESIGN STRENGTH.

CONSTRUCTION JOINTS: CONSTRUCTION JOINTS ARE OPTIONAL WITH THE CONTRACTOR, BUT IF USED SHALL BE MADE ONLY AT THE LOCATIONS SHOWN.

CAMBER: PROVIDE CAMBER AS SHOWN ON THE CAMBER DIAGRAM ALONG WITH ADDITIONAL CAMBER TO ACCOMODATE ANY ANTICIPATED DEFLECTION OF FALSEWORK.

CONCRETE PLACING SEQUENCE: CONCRETE PLACING SEQUENCE SHALL BE AS INDICATED ON THE DIAGRAM, EXCEPT THAT CONTINUOUS POURS WILL BE ALLOWED PROVIDED THAT NO PIER POUR IS MADE WITHOUT INCLUDING ADJACENT MID-SPAN POURS IN THE SAME POUR.

REVISION:	DATE:	BY:

WICHITA, KANSAS GREIFFENSTEIN BRIDGE

DECK REINFORCING

PART II

WILSON & COMPANY ENGINEERS ARCHITECTS SALINA — KANSAS

DATE: DEC. 1962
FILE NO. 62-170
SHEET NO. 2-4
OF 4