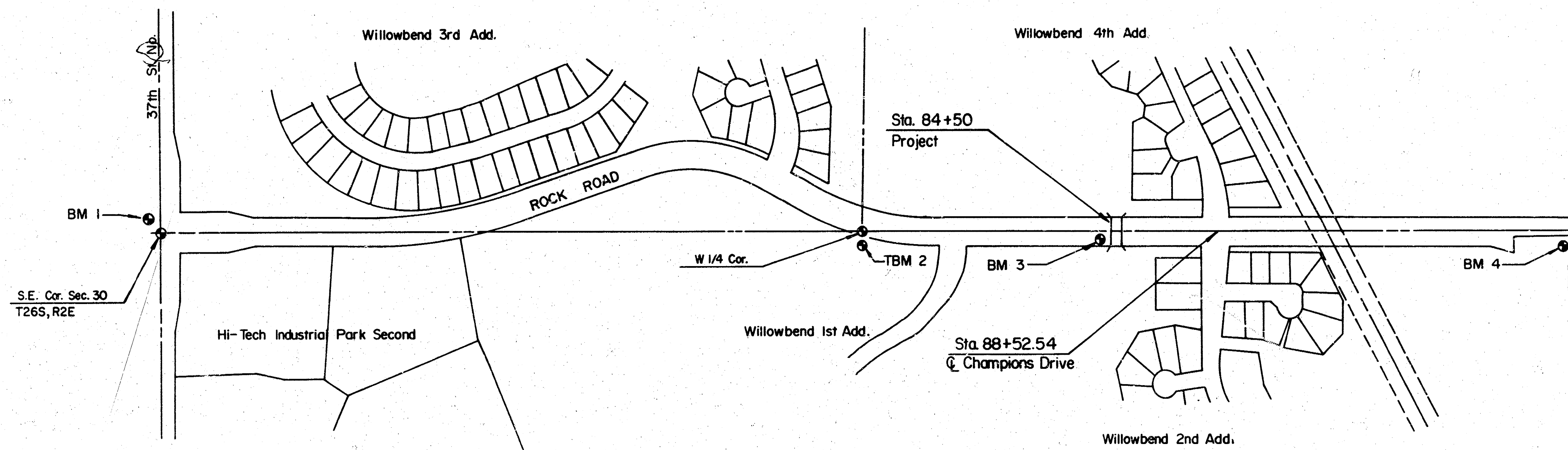


REINFORCED CONCRETE BOX CULVERT ON ROCK ROAD PROJECT NO. 472-76-248-80001-000-000-025

CITY OF WICHITA, KANSAS
MICHAEL E. LINDEBAK, CITY ENGINEER
JANUARY, 1986

BENCH MARKS

- B.M. #1 CITY STANDARD 44' S & 48' W OF CENTERLINE OF 37TH & ROCK ROAD.
ELEV. = 204.11
- B.M. #2 TBM RR - SPK IN S FACE OF CORNER FENCE POST + 50' E OF W QUARTER CORNER SECTION 29 -26-2E.
ELEV. = 169.79
- B.M. #3 " " CUT ON NE CORNER OF RCB + 900' N OF W QUARTER CORNER SECTION 29-26-2E.
ELEV. = 185.36
- B.M. #4 RR SPK IN W FACE POWER POLE SE CORNER 45TH ST. NORTH & ROCK ROAD.
ELEV. = 197.93



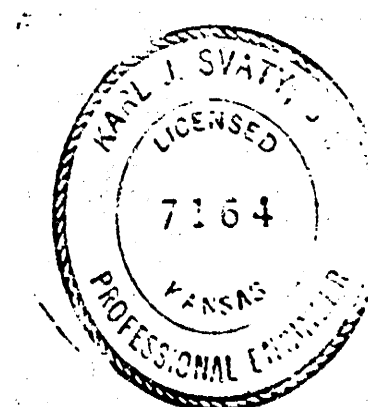
INDEX TO DRAWINGS

Sheet No.	Description
1	Title Sheet
2	Soil Saver
3	Std. Multiple Concrete Box
4	Bridge Railing

By CITY ENGINEER OF WICHITA

Sanitary Sewers _____
Storm Sewers _____
Driveway Approaches _____
Water Mains _____
* RCBC CLO 2-2-87

* Handrail Design to be provided at a later date.



ROCK ROAD
RCBC

Design
KJS
Drawn by
DSS
Date
Jan. 1987
Scale

MID-KANSAS ENGINEERING CONSULTANTS PA
3500 NORTH ROCK ROAD
BUILDING #800
WICHITA, KANSAS 67226

682-6561

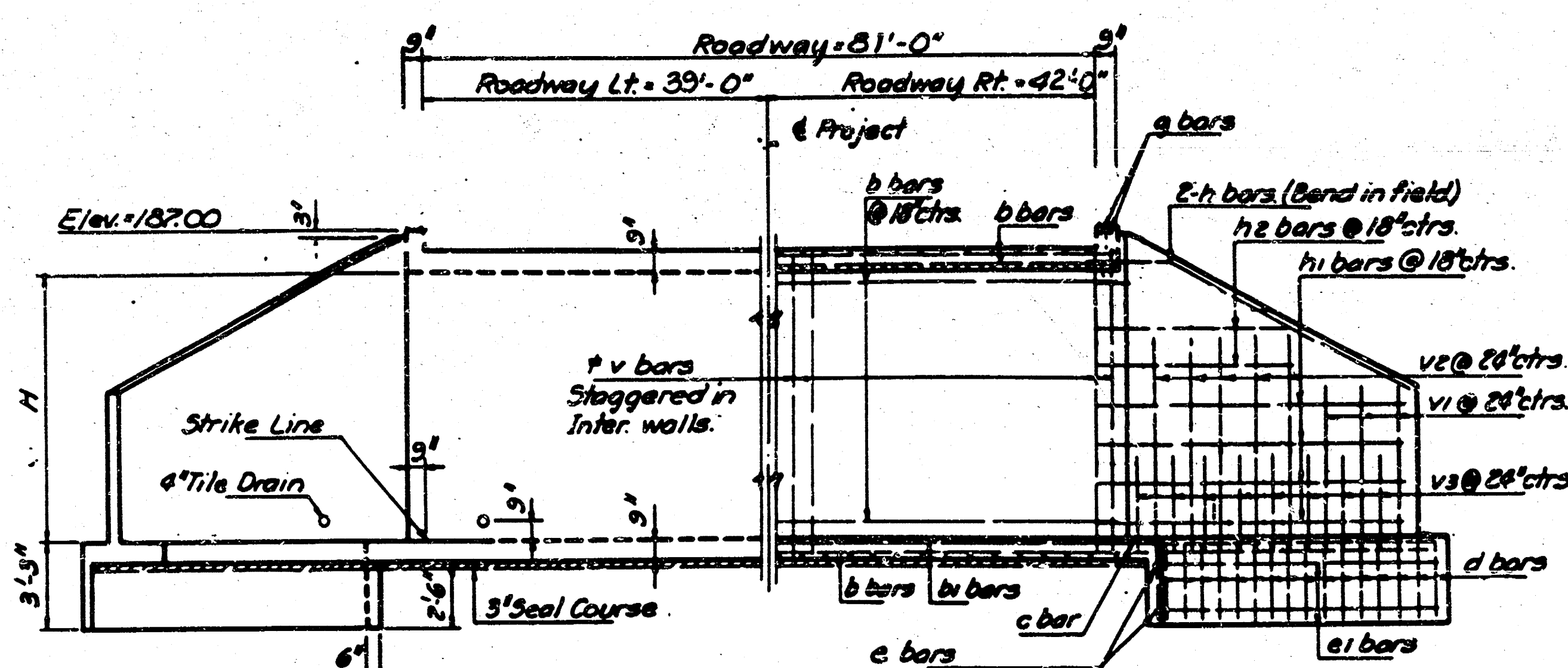
Sheet
1
of
4

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FHWA REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KANSAS				

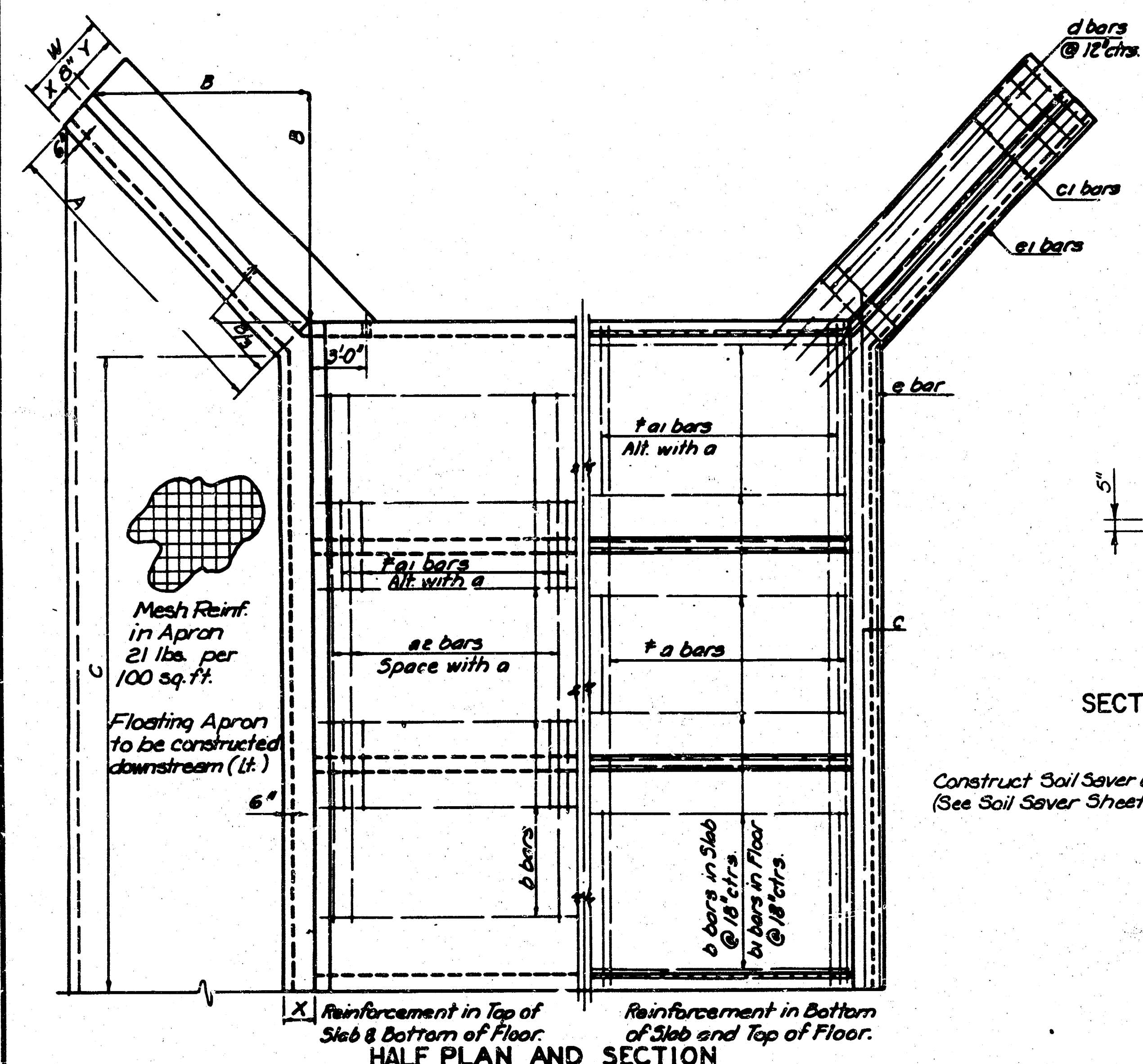
LIST OF BARS AND DIMENSIONS

Letter	A	B	C	H	R	TW	W	X	Y	Bar	a	a1	V
Dimension	14'-0"	12'-0"	3'-0"	3'-0"	0'	0'	4'-0"	10'-0"	2'-0"	Space	12"	12"	1/2"
Bar	a	a1	a2	b	b1	c	d	e	f	g	h	h1	h2
Number	124	122	123	125	126	127	128	129	130	131	132	133	134
Size	#5	#5	#5	#5	#5	#5	#5	#5	#5	#5	#5	#5	#5
Length	31'-9"	32'-5"	22'-0"	45'-0"	32'-0"	19'-0"	2'-0"	31'-7"	16'-0"	31'-0"	18'-0"	16'-0"	3'-0"

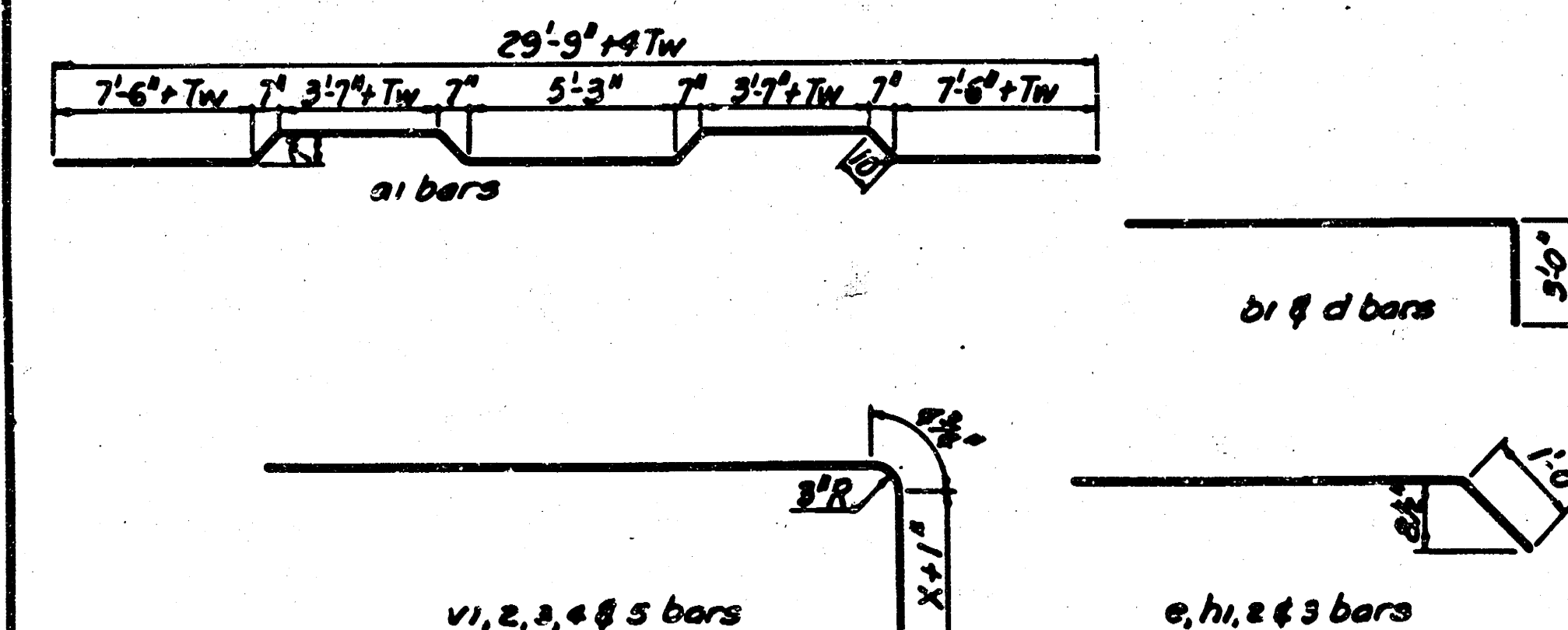


ELEVATION AND SECTION

* See Bar List for size & spacing.

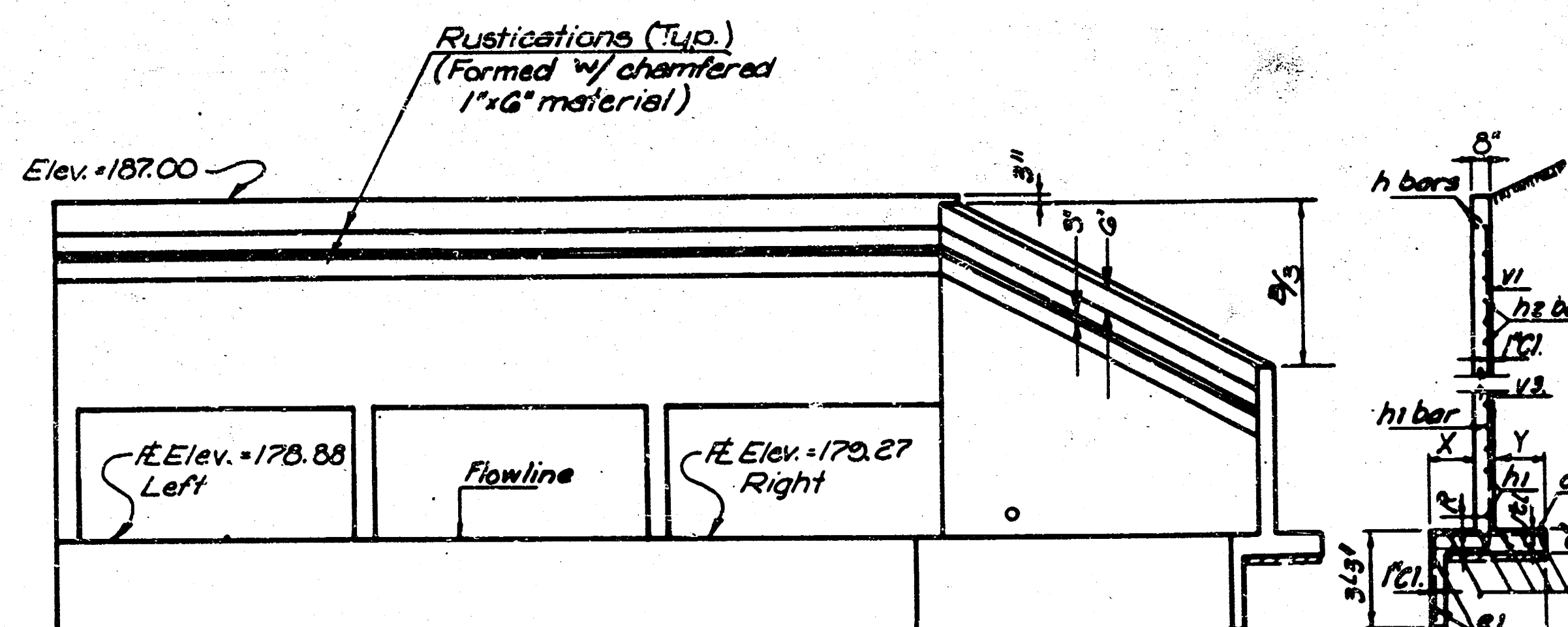


HALF PLAN AND SECTION

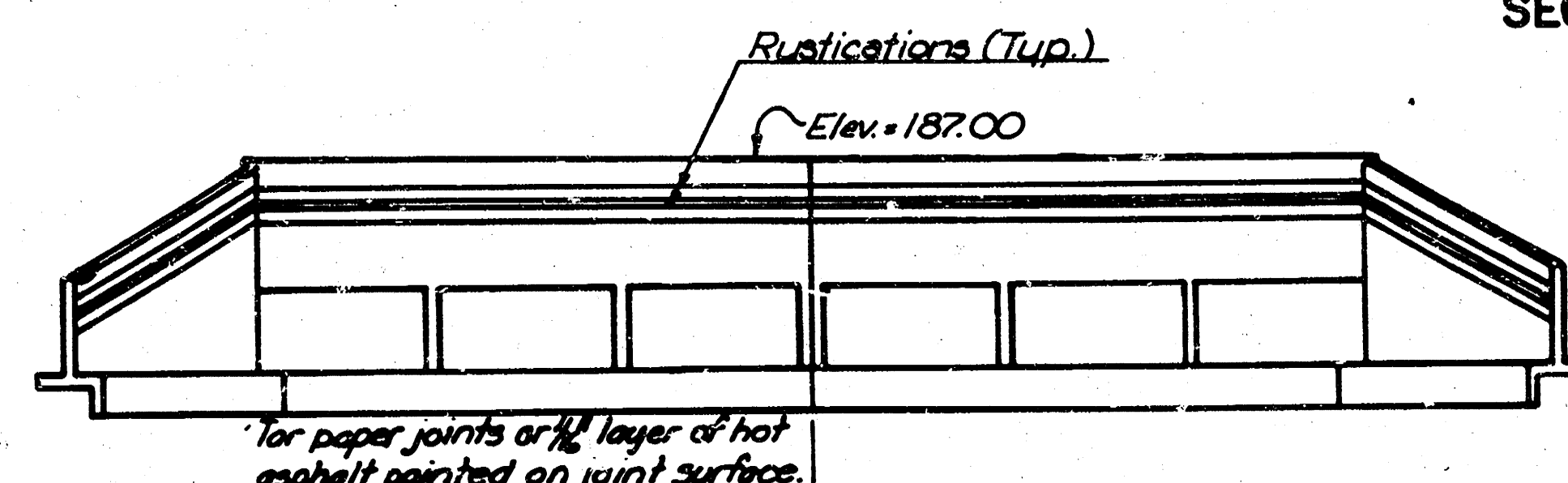


BENDING DIAGRAMS

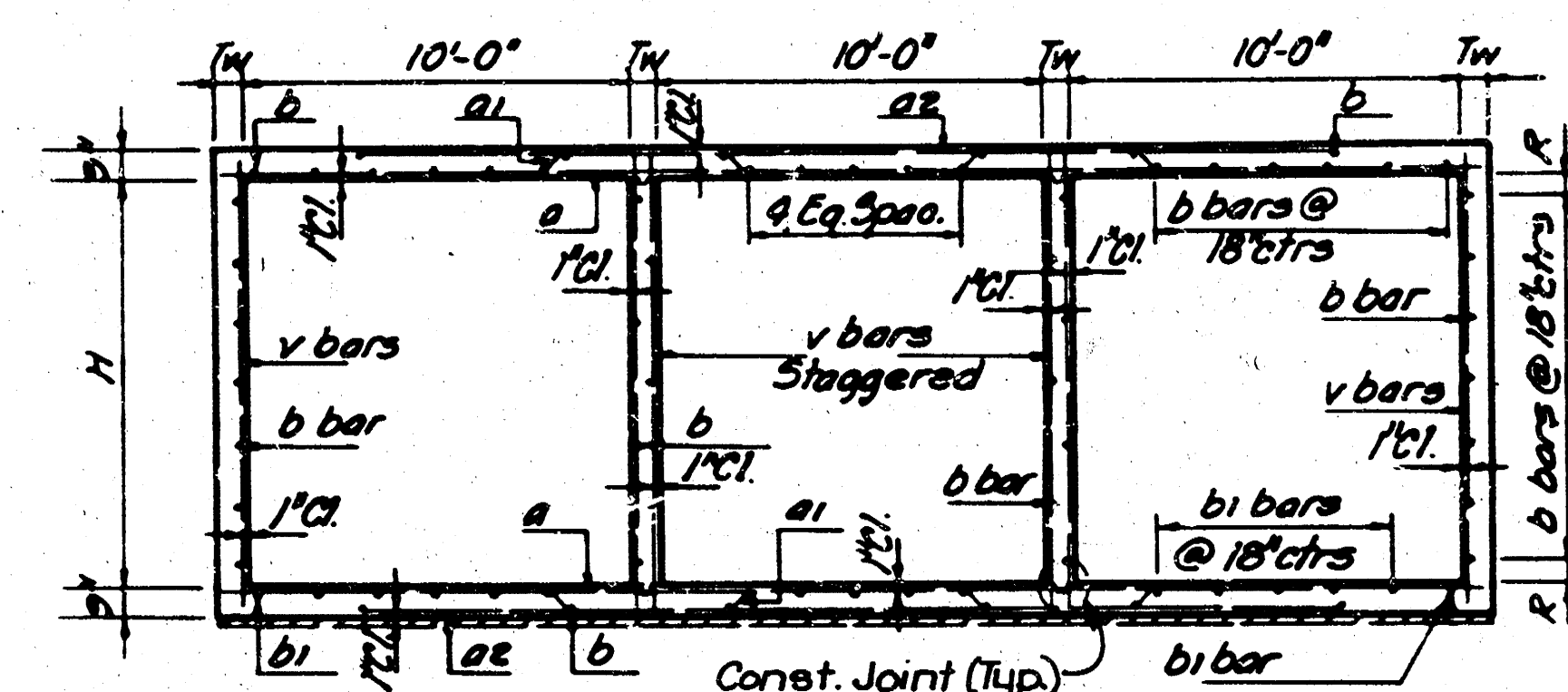
All dimensions are out to out of bars.



HALF END ELEVATION

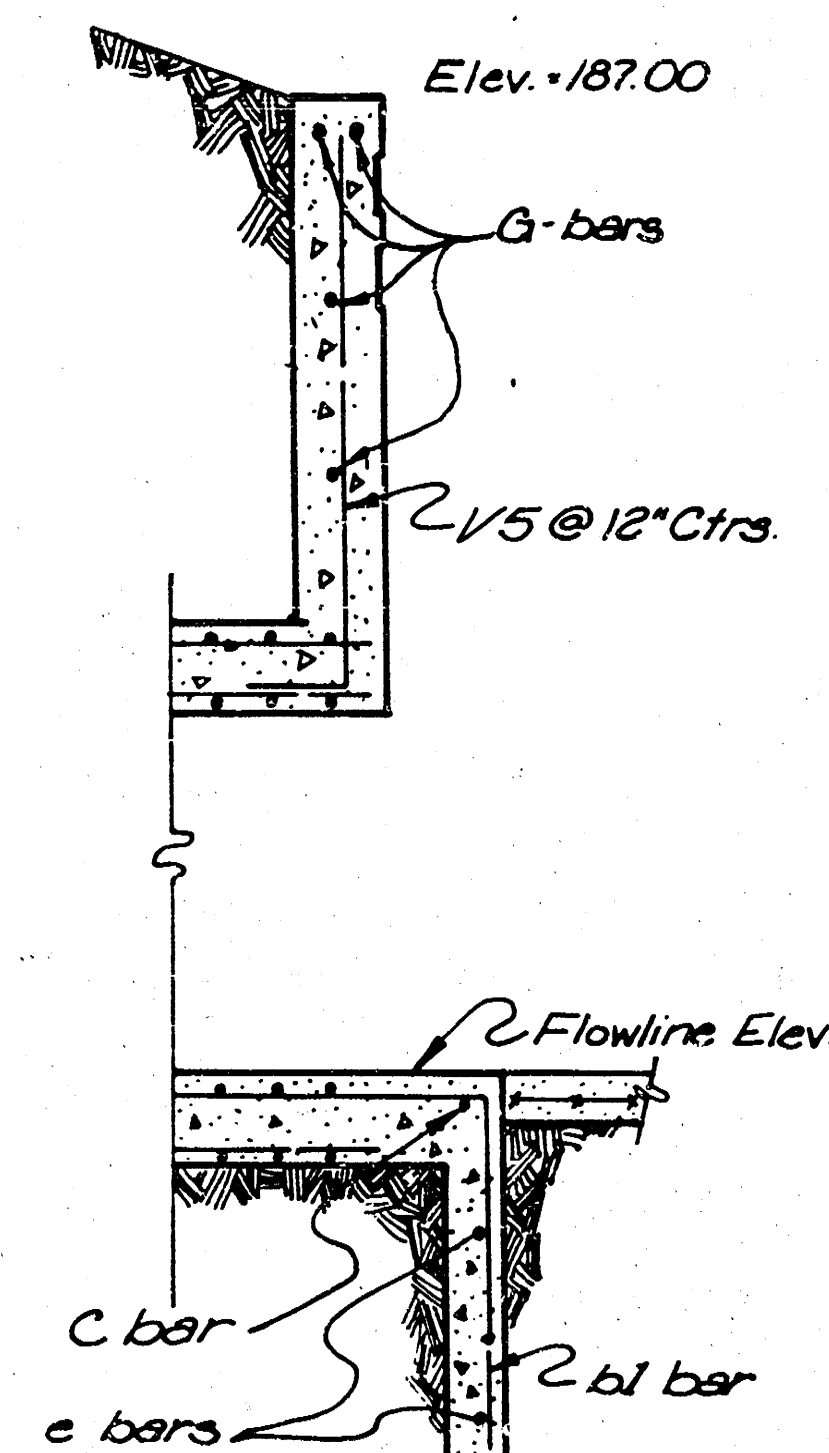


END ELEVATION



HALF BARREL SECTION

GENERAL NOTE
 LOADING: H20-44 AA3HG Specifications 1984 Edition.
 UNIT STRESSES: ft = 4,000 psi; ft = 1,200 psi; ft = 24,000 psi.
 Class A Concrete shall be used throughout. Have all exposed edges with a 3/4" triangular molding unless otherwise noted.
 A Seal Course consisting of 3" of Class A Concrete, shall be constructed. ~~only where specified on the plans or by the Engineer. No reinforcing shall be placed until the Seal Course has gained sufficient strength to permit working upon it without injury.~~
~~Payment for additional quantities resulting from including Seal Course as a change in the original plans, shall be made at the Unit Price and for the various items involved.~~
 Coarse aggregate shall be deposited behind each weep hole to occupy a space extending 15" in all directions above weep hole flowline. This work shall not be paid for directly, but shall be considered part of the excavation work.
 Metal guard rail and hardware is not a part of the bridge.
 construct



TYPICAL HEADWALL SECTION

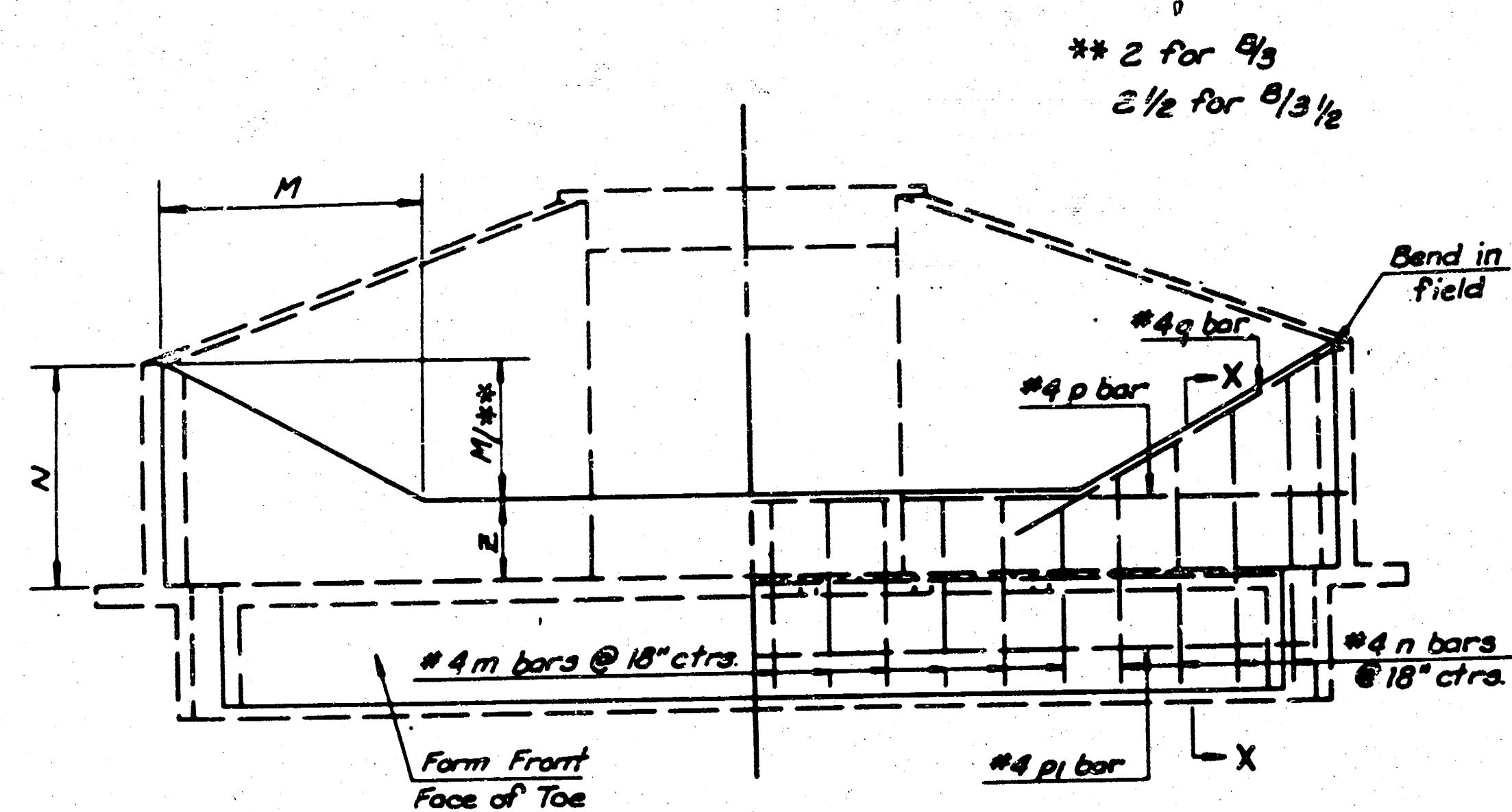
3-63 Corrected Length a bar Sec. 10.19 C.L.M. R.L.A.
 NO. DATE REVISIONS BY APP'D.
 KANSAS DEPARTMENT OF TRANSPORTATION
 BRIDGE NO. STA
 STD. MULTIPLE 10' SPAN CONCRETE BOX
 STA. 84+50
 2 4
 STD. NO. 172-1B
 SHEET NO. OF SCALE APP'D. E.S. EICOCK
 DESIGNED J.M.B. QUANTITIES CEC. TRACED P.E.L.
 DESIGNER C.E.W. DETAILER C.A.L. QUAN. CR. TRACED C.R. A.G.L.

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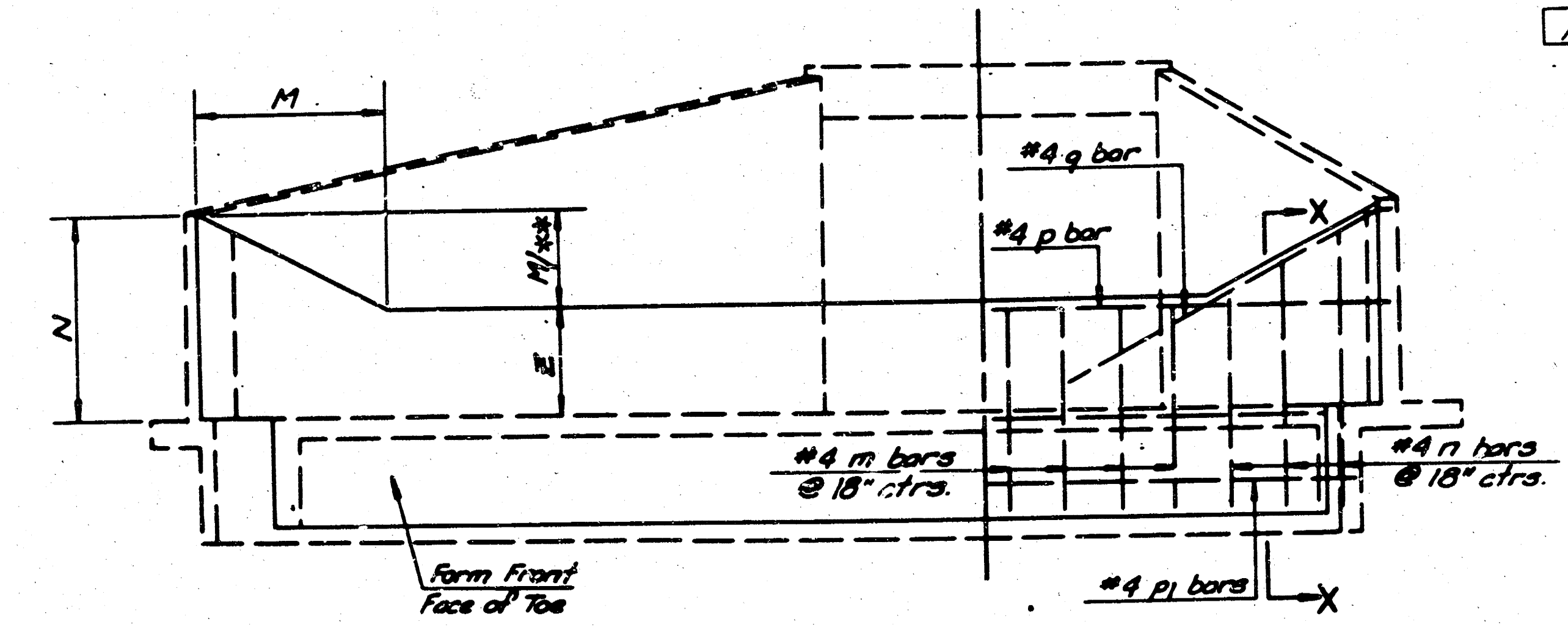
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS		19		

STATION	84+50 Rt. (Cast-in-Place)	B ₁	Skew	Z = 1'-10 1/4"
Letter	N	N	P	Q ₁ Q ₂ K ₁ K ₂ L ₁ L ₂
Dimension	5'-0"	3'-5 3/4"	85'-1 3/8"	11'-0" 11'-0" 0'-6" 0'-6" 1'-5" 1'-5"

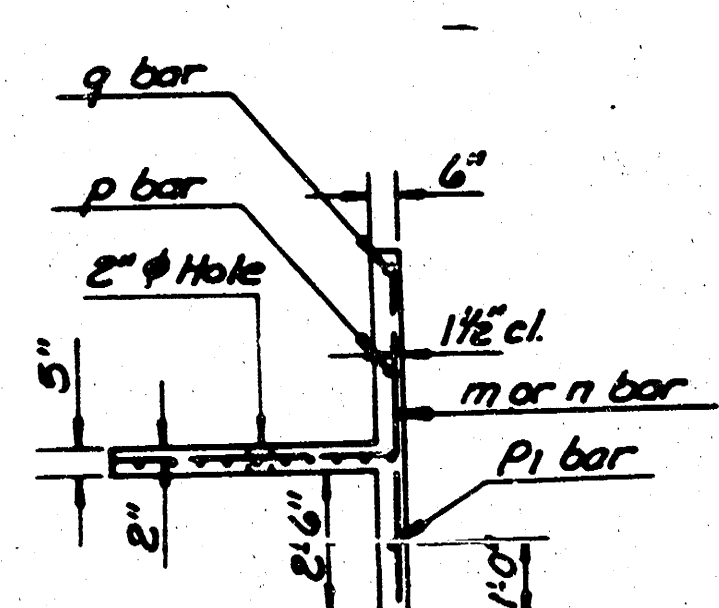
STATION	84+50 Rt. (Precast)	B ₁	Skew	Z = 2'-10 1/4"
Letter	N	N	P	Q ₁ Q ₂ K ₁ K ₂ L ₁ L ₂
Dimension	5'-0"	5'-0"	85'-5 3/4"	11'-0" 11'-0" 0'-6" 0'-6" 1'-5" 1'-5"



ELEVATION AND SECTION



ELEVATION AND SECTION



SECTION X-X

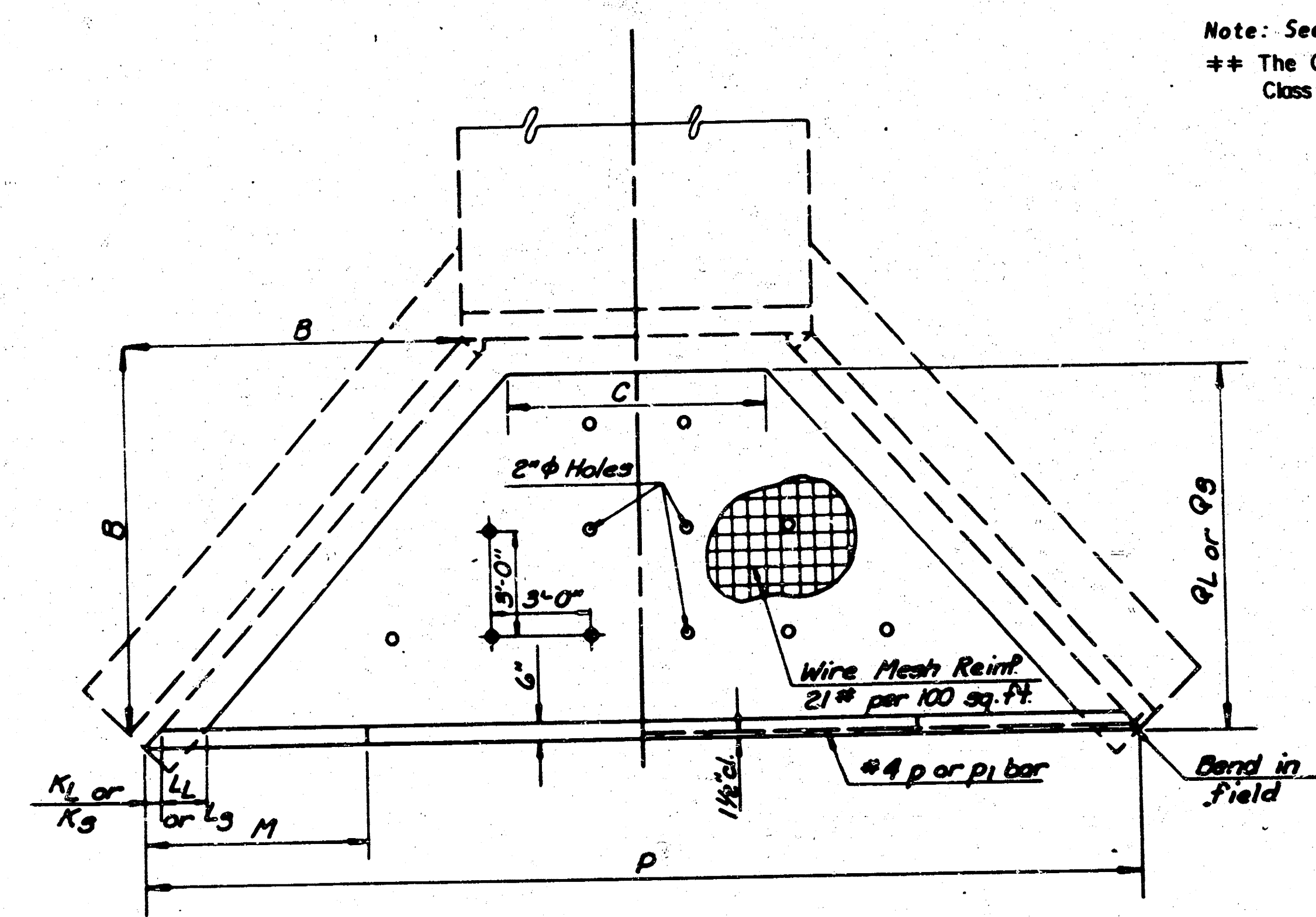
GENERAL NOTES

CONCRETE: Class A Concrete shall be used throughout. ** All exposed edges shall be finished with an edging tool.

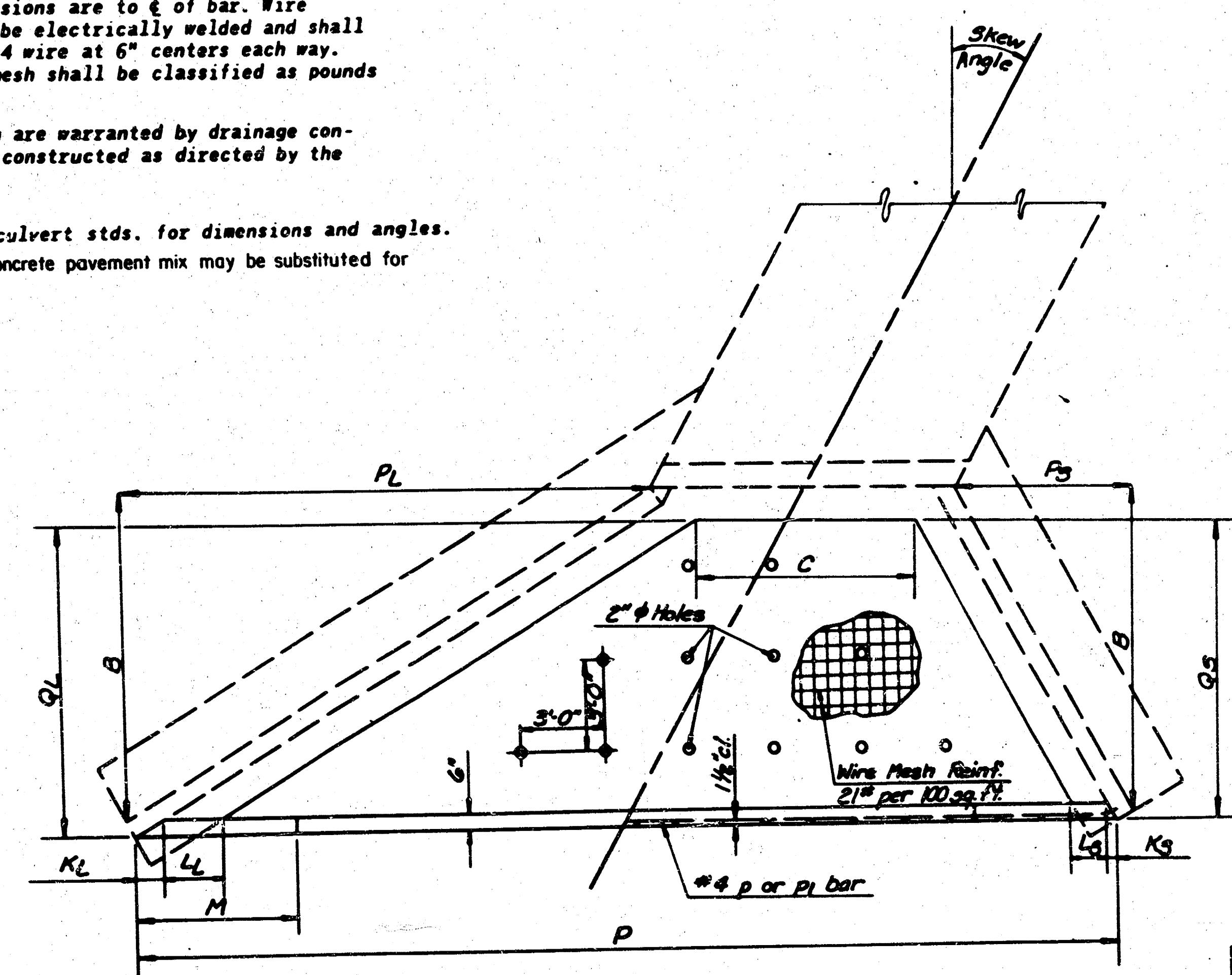
REINFORCING: All dimensions are to c/c of bar. Wire reinforcing mesh shall be electrically welded and shall be composed of No. 14 wire at 6" centers each way. Weight of reinforcing mesh shall be classified as pounds of reinforcing steel.

When holes in the apron are warranted by drainage conditions, they shall be constructed as directed by the Engineer.

Note: See appropriate culvert stds. for dimensions and angles.
 ** The City of Wichita concrete pavement mix may be substituted for Class A Concrete.



PLAN



PLAN - SKEW

STATION	Letter	Dimension	Bar	Number	Length	B ₁	Skew	Z	L ₁	L ₂
84+50 Rt. (Cast-in-Place)	N	5'-0"	m	n*	p	Q ₁	Q ₂	K ₁ K ₂	L ₁	L ₂
84+50 Rt. (Precast)	N	5'-0"	m	n*	p	Q ₁	Q ₂	K ₁ K ₂	L ₁	L ₂
84+50 Rt. (Cast-in-Place)	N	5'-0"	m	n*	p	Q ₁	Q ₂	K ₁ K ₂	L ₁	L ₂
84+50 Rt. (Precast)	N	5'-0"	m	n*	p	Q ₁	Q ₂	K ₁ K ₂	L ₁	L ₂
84+50 Rt. (Cast-in-Place)	N	5'-0"	m	n*	p	Q ₁	Q ₂	K ₁ K ₂	L ₁	L ₂
84+50 Rt. (Precast)	N	5'-0"	m	n*	p	Q ₁	Q ₂	K ₁ K ₂	L ₁	L ₂
84+50 Rt. (Cast-in-Place)	N	5'-0"	m	n*	p	Q ₁	Q ₂	K ₁ K ₂	L ₁	L ₂
84+50 Rt. (Precast)	N	5'-0"	m	n*	p	Q ₁	Q ₂	K ₁ K ₂	L ₁	L ₂
84+50 Rt. (Cast-in-Place)	N	5'-0"	m	n*	p	Q ₁	Q ₂	K ₁ K ₂	L ₁	L ₂
84+50 Rt. (Precast)	N	5'-0"	m	n*	p	Q ₁	Q ₂	K ₁ K ₂	L ₁	L ₂

Quantities include apron and soil saver quantities.
 * n bars are variable, increase by increments of 7" for B₁ 3.5 and 9" for B₁ 3.
 Cut 2 each length.

LIST OF SOIL SAVERS

Station	Culvert Size	Side	Z	Skew
84+50	6'-10 1/2"	Rt.	1'-10 1/4"	—
84+50	6'-10 1/4"	Rt.	2'-10 1/4"	—

DEPARTMENT OF TRANSPORTATION - KANSAS

SOIL SAVER FOR RC CULVERTS

STD. NO. 520.1

DATE: 12/6/76

BY: [Signature]

APPROVED: [Signature]

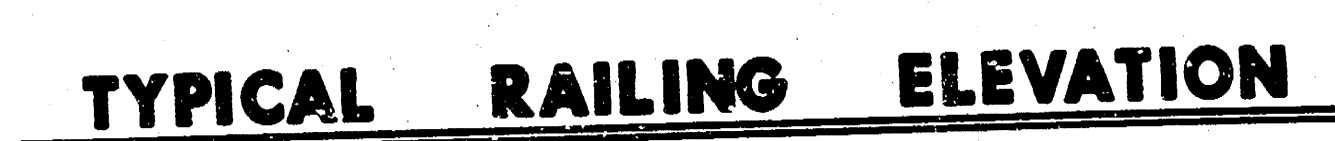
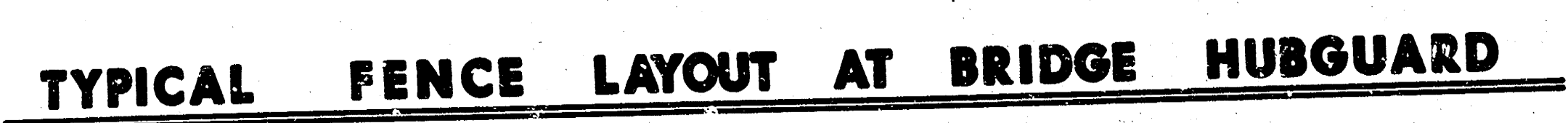
QUANTITIES: []

DETAILS: []

TRACE: []

NOTE: ALL REINFORCING BARS ARE NO. 4 BARS

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	BRIDGE RAILING 4-10X3 R.C.B. BRIDGE NORTH ROCK ROAD WILLOWBEND		Design by _____ Drawn by _____ Checked by _____ Date _____ Job no. _____
	MID-KANSAS ENGINEERING CONSULTANTS PA 3500 NORTH ROCK ROAD BUILDING #800 WICHITA, KANSAS 67226		Sheet 4 of 4

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