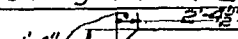




Concrete: _____ 397.2 Cu.Yds.
Wet Excavation: _____ 190. Cu.Yds.
Dry Excavation: _____ 190. Cu.Yds.
Reinforcing Steel: _____ 49,830 #
Structural Steel: _____ 4530 #
Floor Drains: _____ 18 Reg'd.
Pipe Railing: _____ 271 Lin.Ft.
Waterproofing: _____ 2000 Sq.Ft.
Wood Piles: (25'-0" long) _____ 92 Reg'd.
Riprap: _____ 110 Cu.Yds.
Tile Drains: _____ 18 Lin.Ft.
Sheet Lead: _____ 10 Sq.Ft.
Sheet Zinc: _____ 33 Sq.Ft.
Expansion Joint Filler: _____ 4"

General Plan and Pier Details:-----X4203
Superstructure Details:-----X4204
Superstructure Details:-----X4205
P.C. Abutments:-----X4206

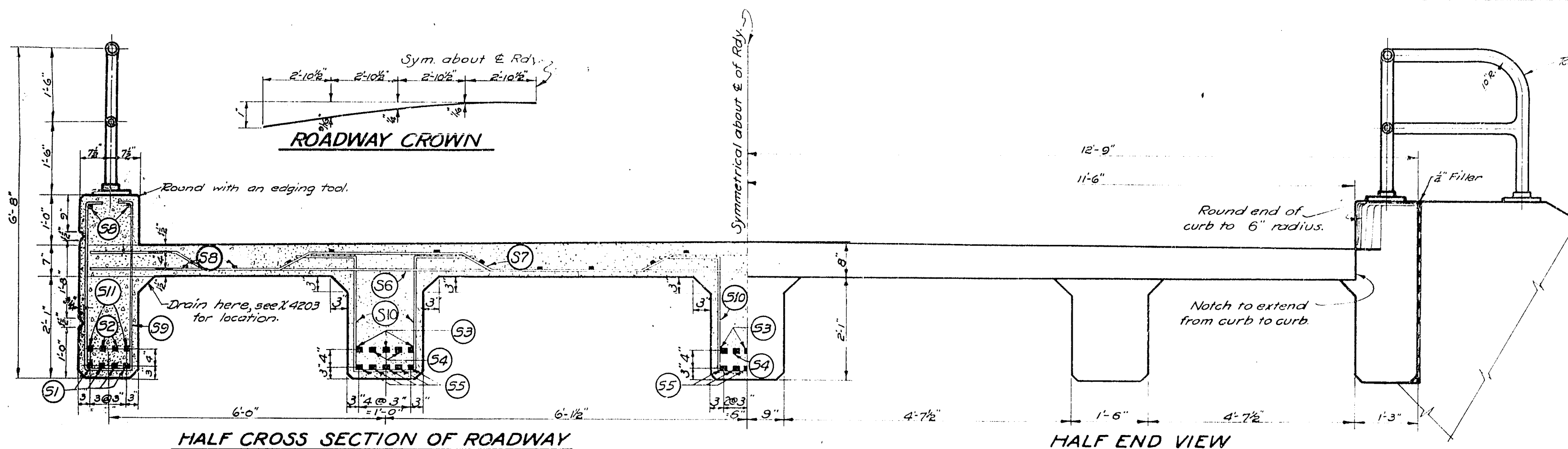


NO.	MARK.	SIZE.	LENGTH.	SPACING.	LOCATION.	DETAIL.
56	P1	1/2"Ø	11'-6"	2'-0" cfs.	Vertical in body.	
12	P2	1/2"Ø	14'-6"	shown.	" " noses.	
48	P3	1/2"Ø	14'-0"	2'-0" cfs.	Horizontal in body.	
68	P4	1/2"Ø	2'-0"	shown.	Dowels for spacing 'P1' & 'P2' bars.	
24	P5	1/2"Ø	8'-6"	2'-0" cfs.	Horizontal in noses.	
60	P6	1/2"Ø	2'-6"	6" cfs.	Transverse in grids.	
60	P7	1/2"Ø	2'-6"	" "	Longitudinal " "	
24	P8	1/2"Ø	5'-3"	" "	Vertical in pilaster.	
8	P9	1/2"Ø	2'-9"	shown.	Horizontal in pilaster.	

See "Special Provisions" for concrete proportions.
Bevel exposed edges of concrete 1".

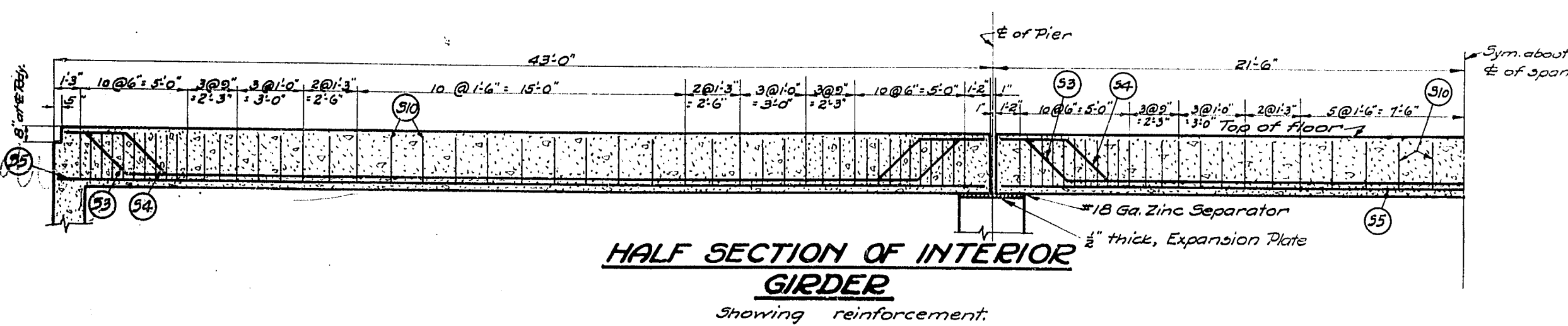
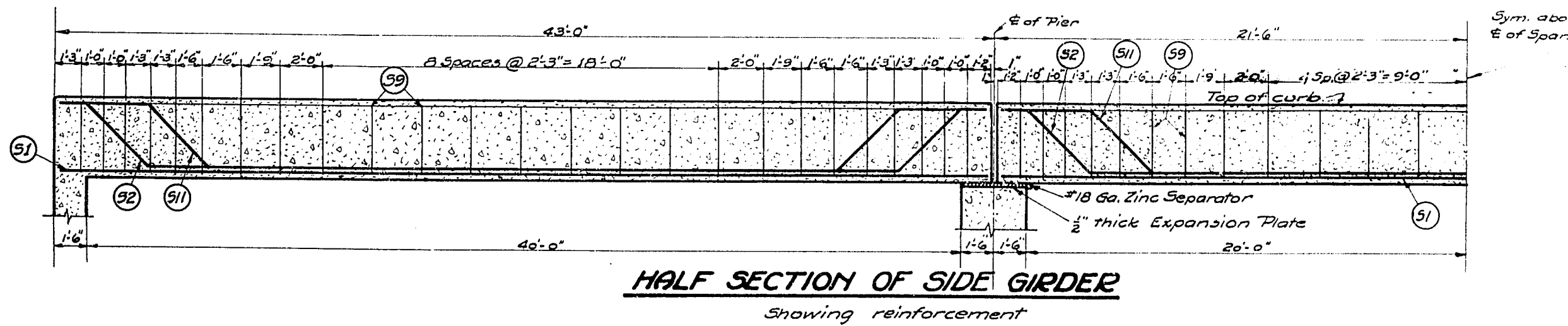
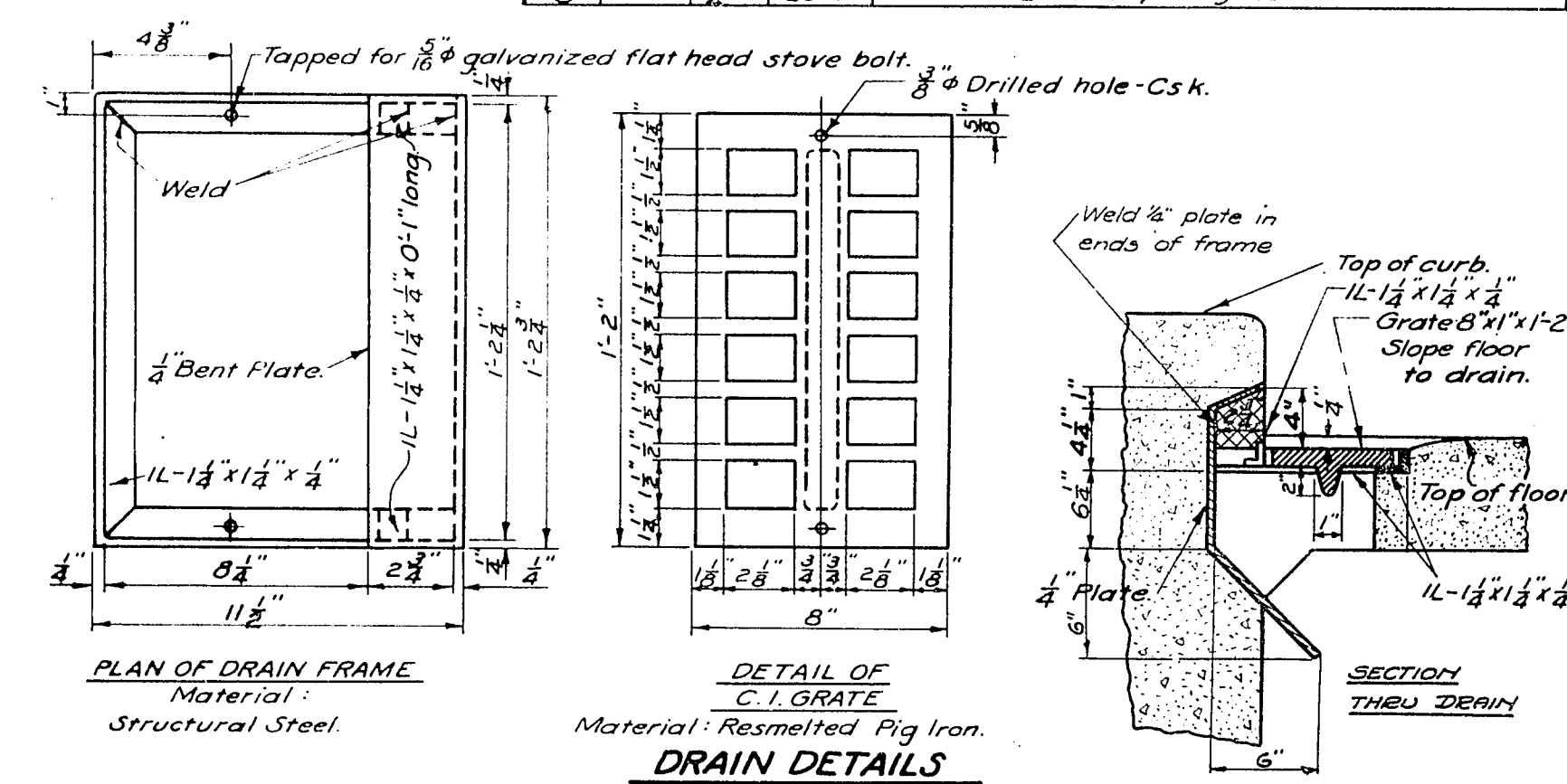
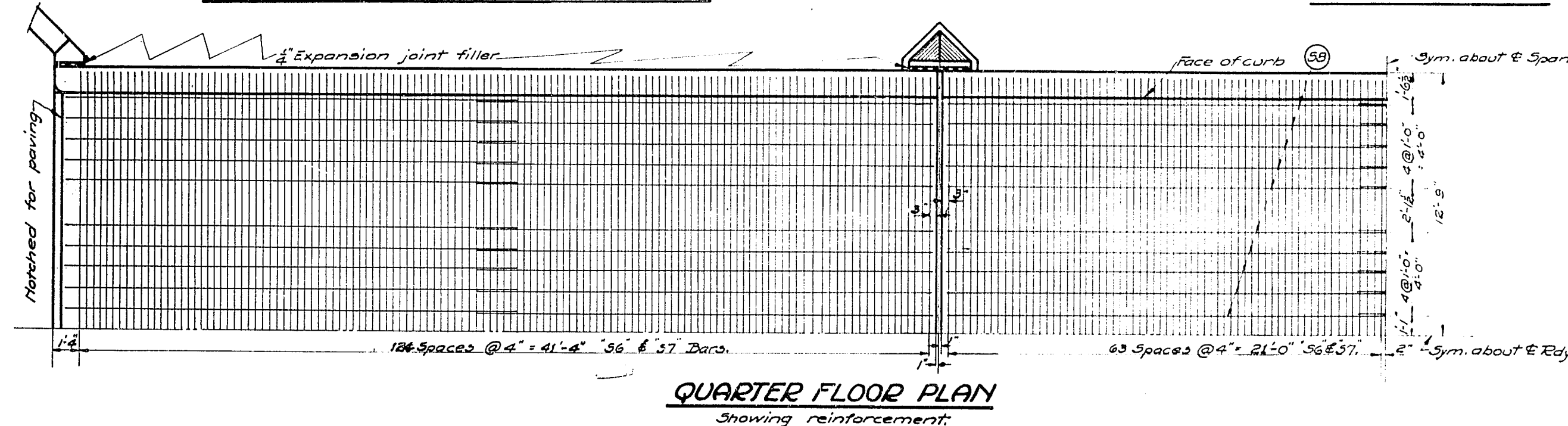
Concrete: _____ 108.4 Cu. Yds.
Reinforcing Steel: _____ 1930 #
Structural Steel: _____ 720 #
Rip Rap: _____ 60 Cu. Yds.
Wet Excavation: _____ 90 Cu. Yds.
Wood Piles: (25' 0" long) _____ 44 Pcs.
Waterproofing: _____ 350 Sq. Ft.
Dry Excavation: _____ 10 Cu. Yds.

STATE HIGHWAY ENGINEER



BILL OF BARS

NO	MARK	SIZE	LENGTH	LOCATION	DETAIL
24	51	1" $\square$	42'-6"	Longitudinal in side girders.	
12	52	1" $\square$	44'-9"	Longitudinal in side girders.	
27	53	1 1/4" $\square$	43'-6"	Longitudinal in interior girders.	
18	54	1 1/4" $\square$	43'-6"	Longitudinal in interior girders.	
45	55	1 1/4" $\square$	42'-6"	Longitudinal in interior girders.	
189	56	1/2" $\square$	25'-0"	Transverse in floor.	
189	57	1/2" $\square$	25'-6"	Transverse in floor.	
144	58	1/2" $\square$	22'-0"	Longitudinal in floor and top of side girder.	
150	59	1/2" $\square$	8'-3"	Side girder stirrups.	
423	510	5/8" ϕ	8'-9"	Interior girder stirrups.	
12	511	1" $\square$	44'-9"	Longitudinal in side girders.	
8	512	3/8" ϕ	25'-0"	Transverse in diaphragms.	

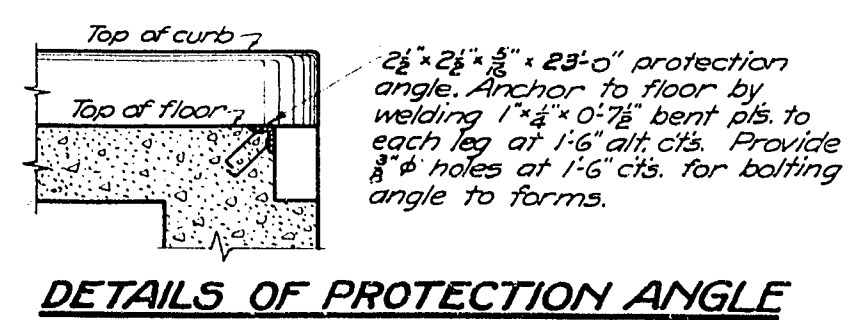


GENERAL NOTES

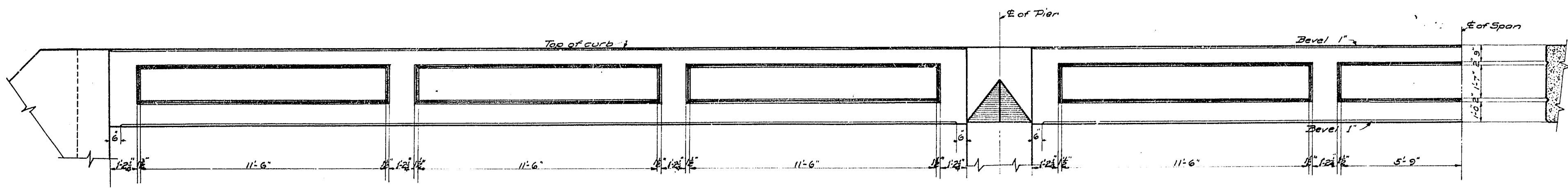
See "Special Provisions" for concrete proportions. Concrete: - 160.6 Cu. Yds.
Reinforcing Steel - 43,700 #
Drains 18 required complete.
Expansion Joint Filler: 1/4"
Structural Steel: - 3810 #
Pipe Railing: - 271 Lin. Ft.
Sheet Lead: - 10 Sq. Ft.
Sheet Zinc: - 33 Sq. Ft.

ESTIMATED QUANTITIES

(2) of (4)



WISCONSIN HIGHWAY COMMISSION
SUPERSTRUCTURE DETAILS
FOR THE
ALBRECHT BRIDGE
TH. OF CLYDE - IOWA CO.
STA. 415+88.00
CORRECT: *G. J. Fisher*
BRIDGE ENGINEER
APPROVED: *W. T. Buelow*
STATE HIGHWAY ENGINEER
Checked: *W. T. Buelow*



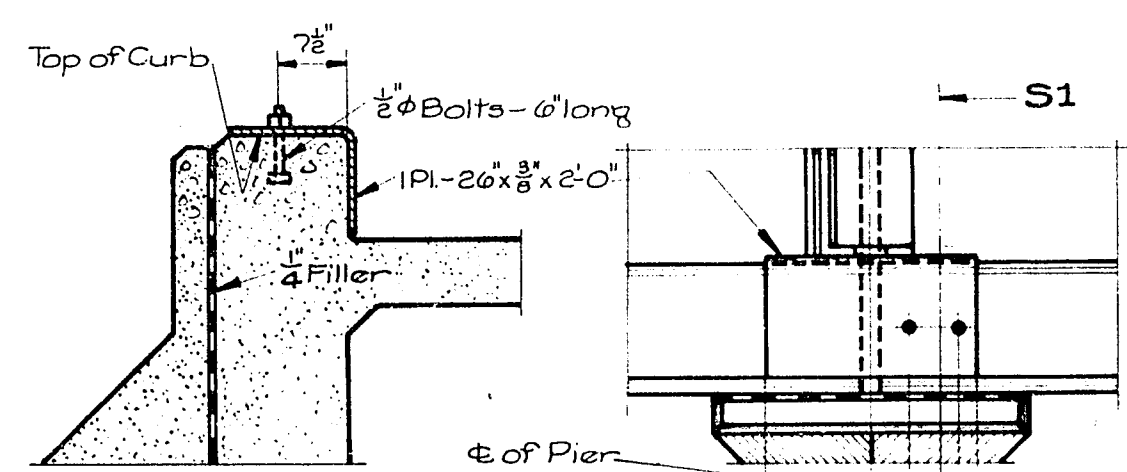
DETAIL OF SIDE GIRDER PANELS

GENERAL NOTES.

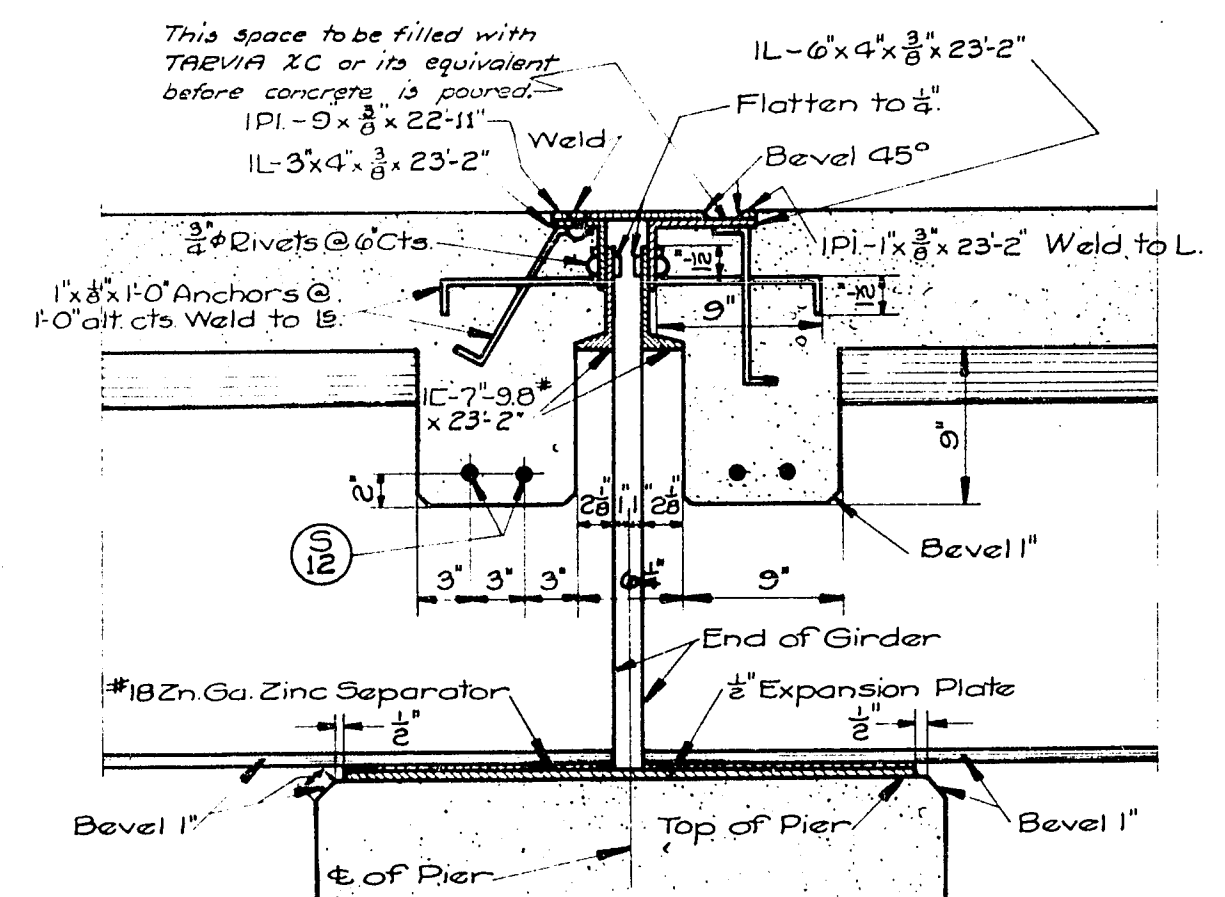
Bend floor steel around drains.

All railing pipe shall be black gas or water pipe. Splicing of the pipe by couplings will not be permitted. All joints shall be concealed in the tees, crosses or Ls. All pipe shall receive one shop coat of red lead and two coats of approved paint after erection.

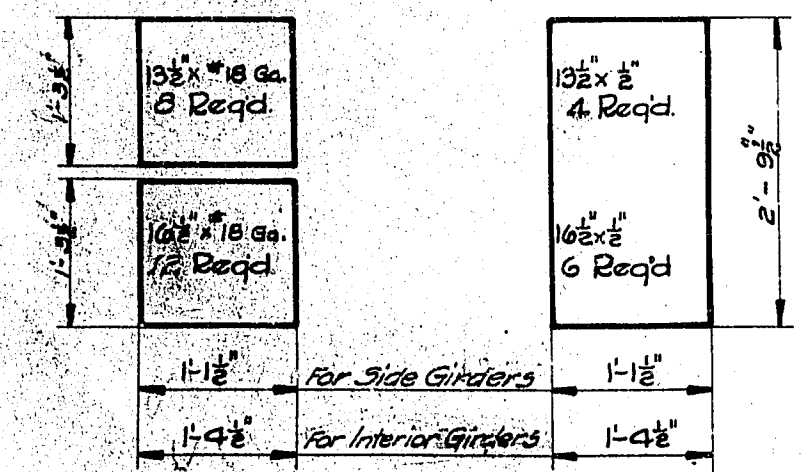
All vertical and top horizontal members shall be 2" pipe and lower horizontals 2" pipe.



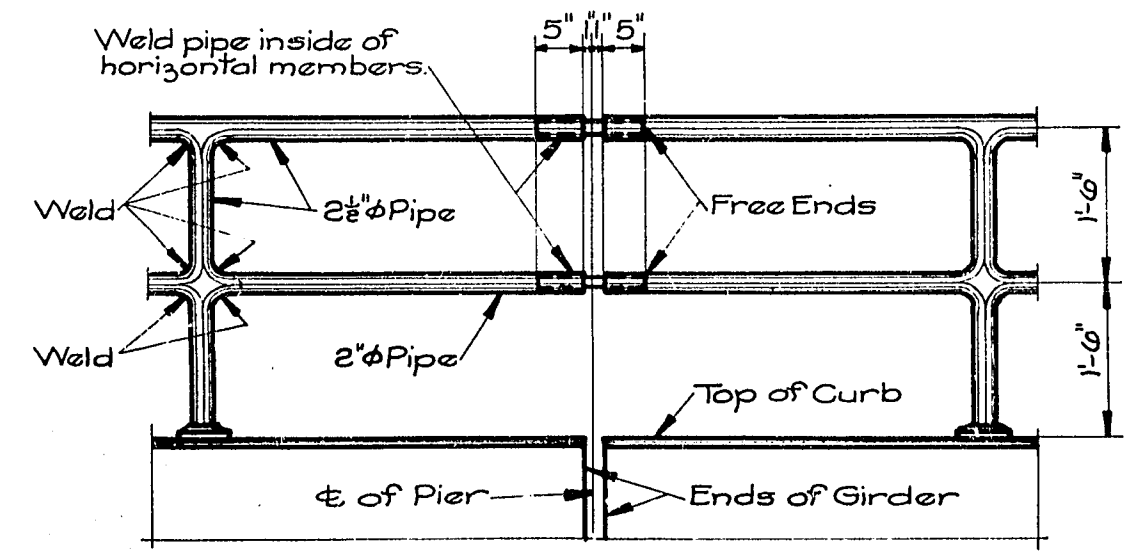
SECTION S1-S1. PLAN.
DETAIL OF CURB PLATES AT PIERS.
4 Required Complete



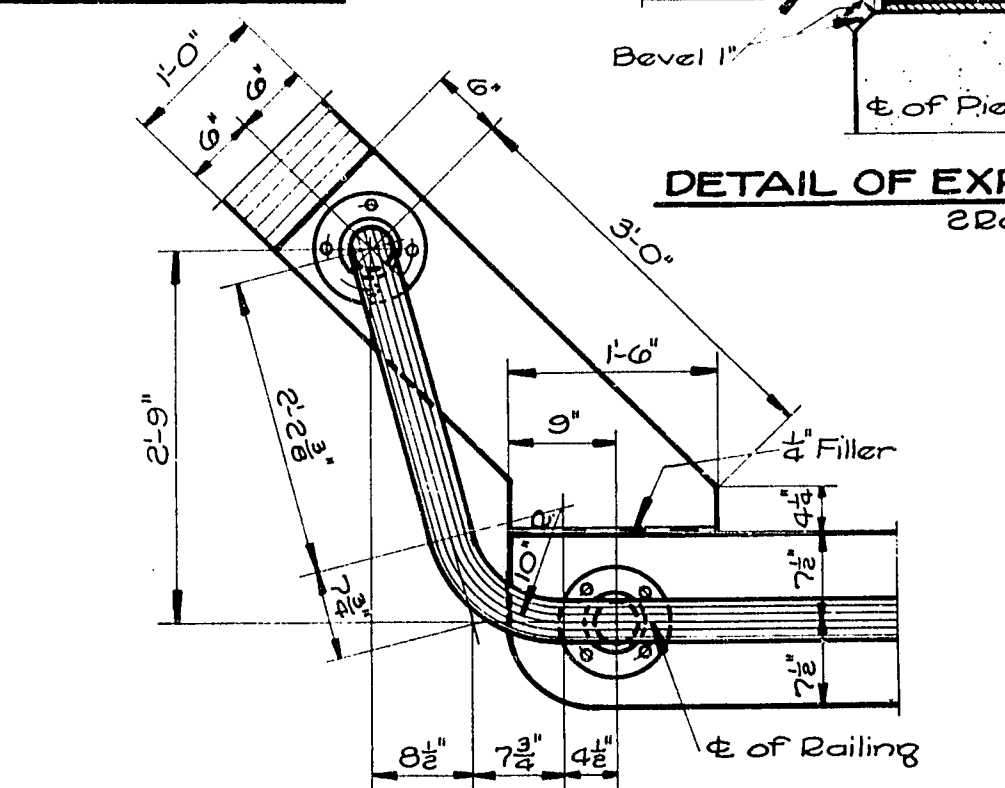
DETAIL OF EXPANSION JOINT OVER PIERS.
22 Required Complete



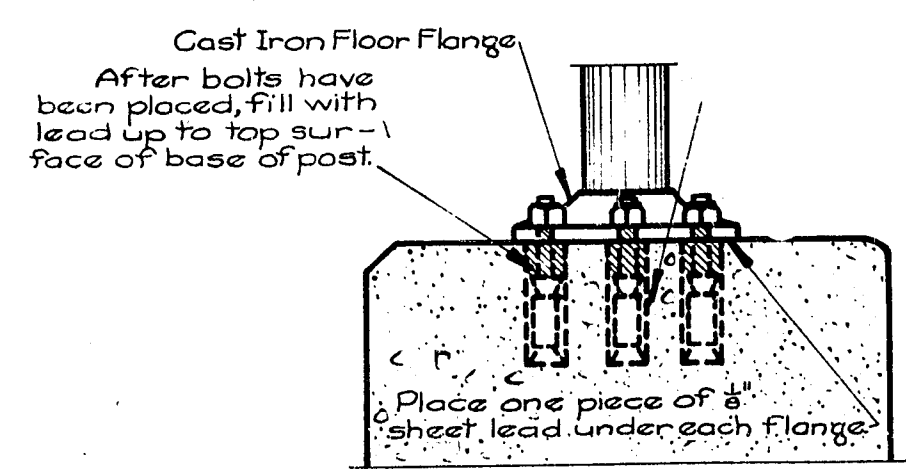
DETAIL OF ZINC SEPARATORS. DETAIL OF EXP. PLATES.



DETAIL OF RAILING EXPANSION.



DETAIL OF RAILING AT ABUTMENTS.



DETAIL OF RAILING CONNECTION.

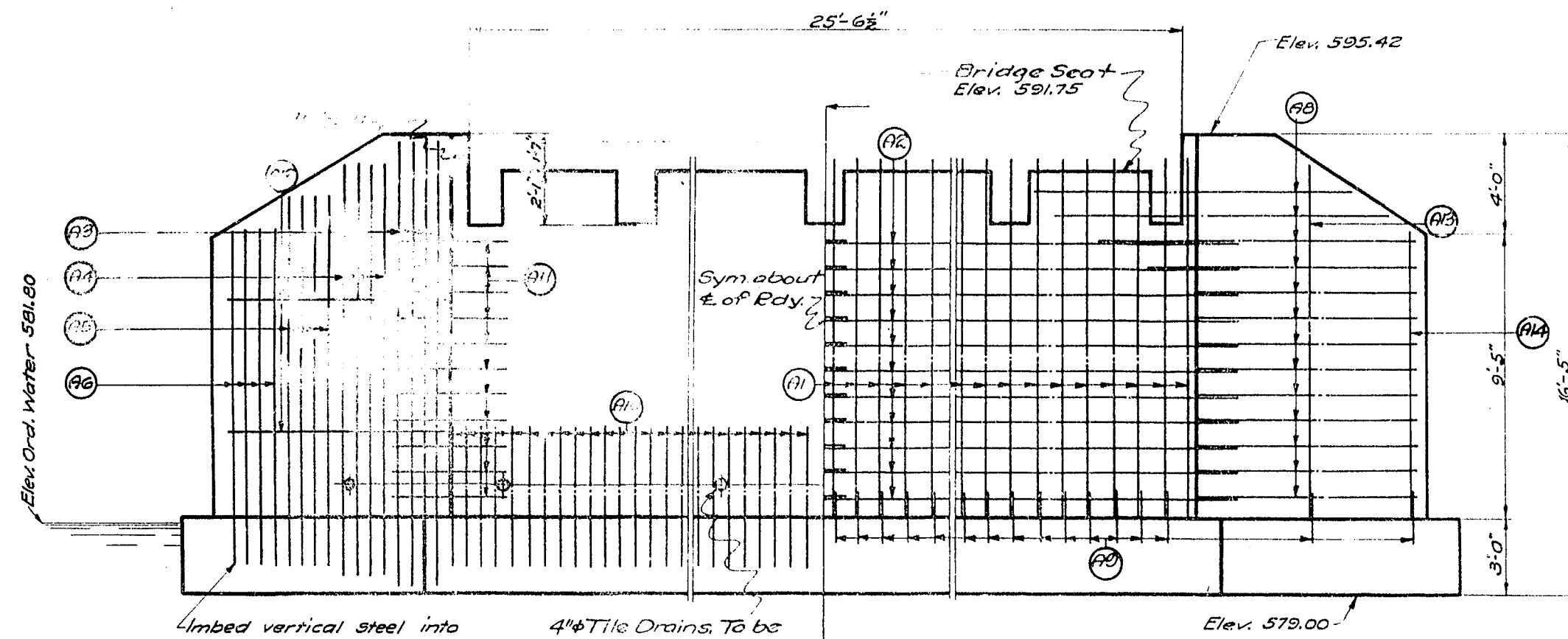
3 of 4

BRIDGE JOB NO. B-9335

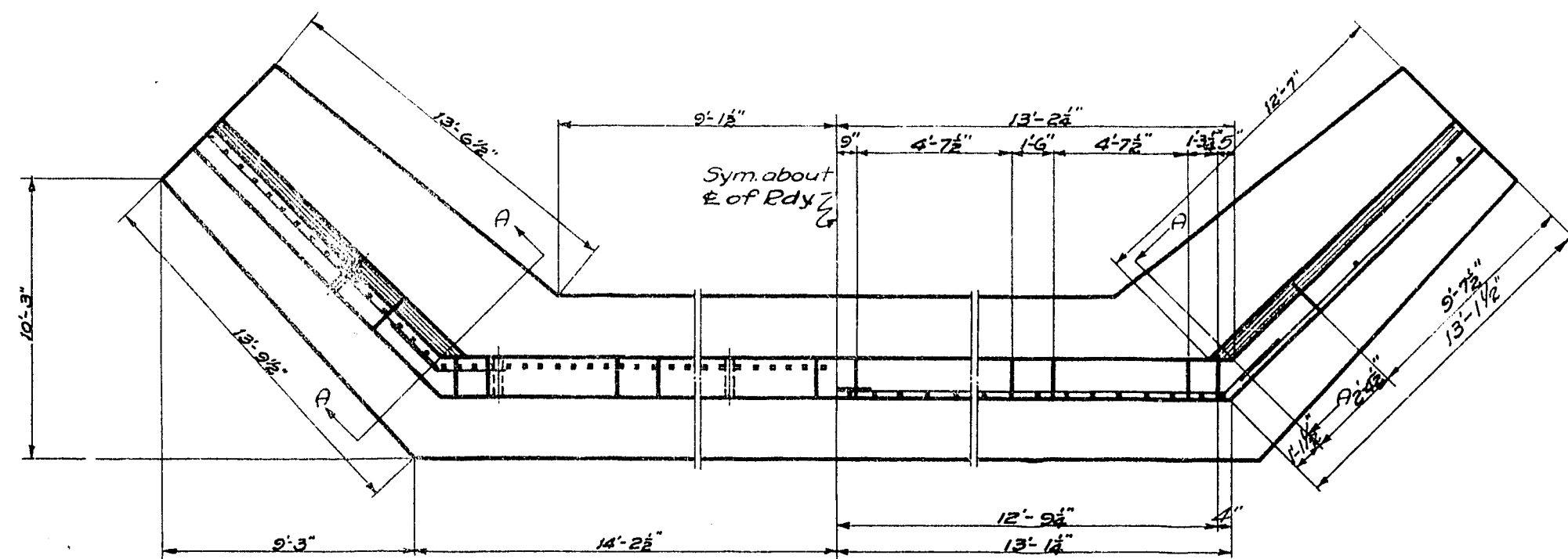
WISCONSIN HIGHWAY COMMISSION
SUPERSTRUCTURE DETAILS
FOR THE
ALBRECHT BRIDGE
TH. OF CLYDE - IOWA CO.
STA. 415+88.00

CORRECT: *G. W. Rind*
BRIDGE ENGINEER

APPROVED: *W. C. Buehler*
STATE HIGHWAY ENGINEER



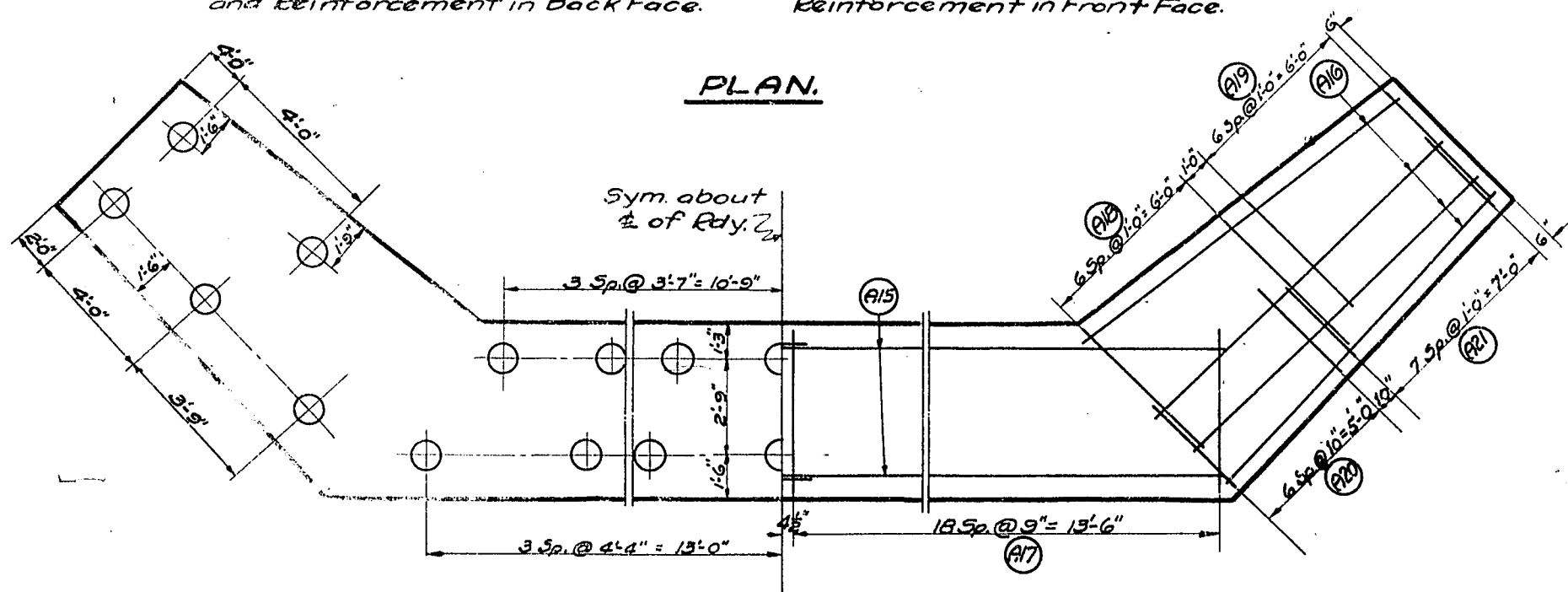
FRONT ELEVATION.



Showing Footing Dimensions, Drains and Reinforcement in Back Face.

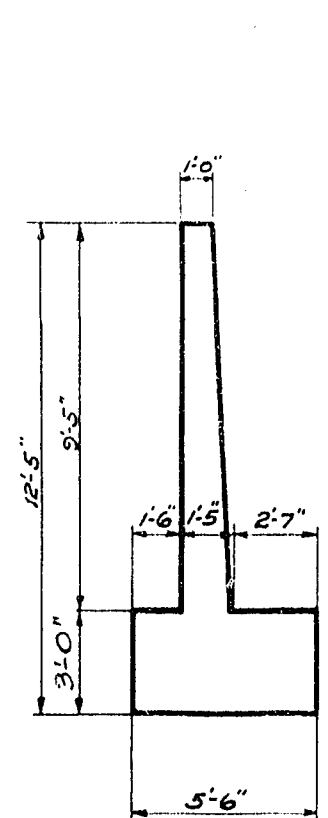
Showing Neatwork Dimensions and Reinforcement in Front Face.

PLAN.

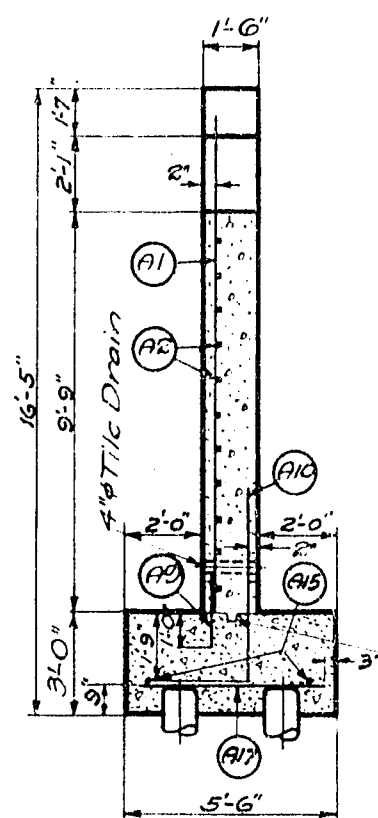


FOOTING PLAN.

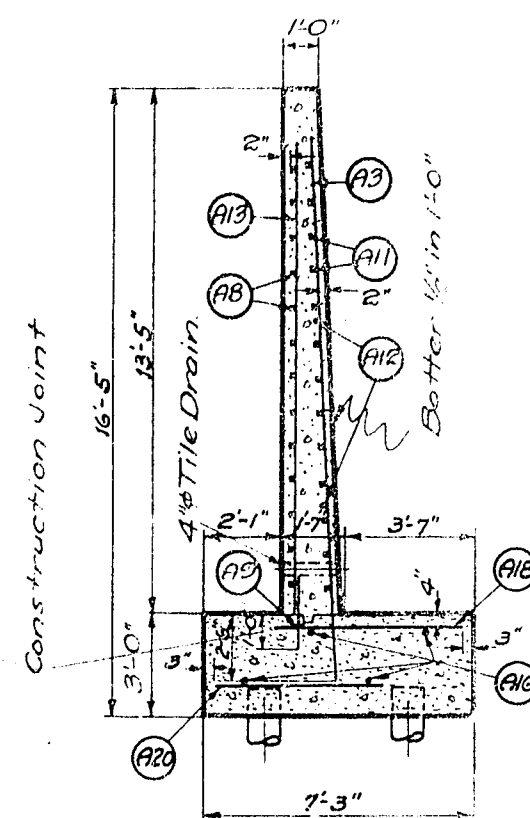
Showing pile spacing and footing reinforcement.



END VIEW OF WINGS.

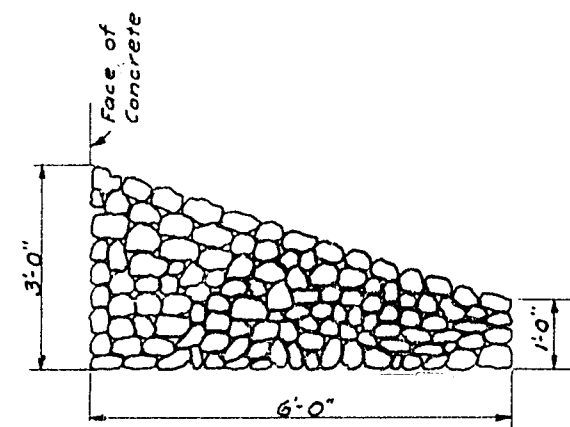


SECTION ON $\frac{1}{2}$ OF R.D.Y.



SECTION A-A.

DETAIL OF CONSTRUCTION JOINT.
See Specifications under "Structuring Concrete."



SECTION THRU RIPRAP

BILL OF MATERIALS.

NO.	MARK	SIZE	LEN.	QTY.	LOCATION
54	A1	1/2"	12'-3"	1.0 cts.	Front Face
40	A2	1/2"	17'-0"	1.0 cts.	Front Face
16	A3	3/4"	15'-6"	1.0 cts.	Back Face
16	A4	5/8"	14'-0"	1.0 cts.	Back Face
16	A5	1/2"	12'-6"	1.0 cts.	Back Face
16	A6	1/2"	11'-0"	1.0 cts.	Back Face
48	A7	1/2"	12'-0"	1.0 cts.	Front Face
62	A8	1/2"	2'-0"	1.0 cts.	Front Face
80	A9	1/2"	6'-0"	8 cts.	Back Face
48	A10	1/2"	5'-0"	1.0 cts.	Back Face
8	A11	1/2"	12'-0"	1.0 cts.	Back Face
4	A12	1/2"	12'-0"	1.0 cts.	Front Face
4	A13	1/2"	12'-0"	1.0 cts.	Front Face
4	A14	1/2"	9'-6"	1.0 cts.	Front Face
8	A15	1/2"	15'-0"	1.0 cts.	Front Face
16	A16	1/2"	13'-6"	1.0 cts.	Front Face
76	A17	1/2"	5'-0"	9 cts.	Front Face
28	A18	1/2"	5'-0"	1'-0 cts.	Front Face
28	A19	1/2"	4'-6"	1'-0 cts.	Front Face
28	A20	1/2"	4'-0"	1'-0 cts.	Front Face
32	A21	1/2"	3'-6"	1'-0 cts.	Front Face

GENERAL NOTES.

See "Special Provisions" for concrete proportions. Bevel exposed edges of concrete 1".

Piles shall be driven to a bearing value of 15 tons per pile.

Front faces of body and wing walls shall be riprapped as shown in "Section thru Riprap."

ESTIMATE OF MATERIALS.

Concrete: 128.2 Cu. Yds.
Reinforcing Steel: 4200 #
Tile Drains: 4" ϕ 18' req'd.
Waterproofing: 1650 sq. ft. req'd.
Dry Excavation: 180 Cu. Yds.
Wet Excavation: 100 Cu. Yds.
Riprap: 50 Cu. Yds.
Wood Piles: (25'-0" long) 48 req'd.

4 of 4

BRIDGE JOB No. 9-9335

WISCONSIN HIGHWAY COMMISSION
REINFORCED CONCRETE ABUTMENTS
FOR THE

ALBRECHT BRIDGE

TH. OF CLYDE - IOWA CO.

STA. 415+88.00

CORRECT: G. H. Smith

BRIDGE ENGINEER

W. B. Buebel

STATE HIGHWAY ENGINEER

APPROVED: 4-13-31

DATE: 4-13-31

BY: G. H. Smith

DATE: 4-13-31

BY: W. B. Buebel

DATE: 4-13-31

BY: G. H. Smith

CULVERT SCHEDULE

NAME OF ROAD Dodgeville Lone Rock WIDTH OF ROADWAY 26 TYPE OF SURFACING Crushed Stone COUNTY Iowa

PROJ. NO. 9408 DIV. JOB NO. 9408

Mile No.	Plan Sheet No.	Station	SIZE			KIND OF CULVERT	TYPE	INLET ENDWALL			DISCH. ENDW.		PLACE CULV.		ELEV. BOT. BBL		FLOW	CONG. STEEL IN IN CULV. CULV.			REMARKS
			Width	Height	Length			Square Slaping- Flared	Finish Above Opening	Slope	Imp. Inlet or Breaker Wall Regd.	Square- Slaping- Flared	Slope	Left From C.	Right From C.	Disch.		Inlet	Left		
1	1	5+00	6'	6'	31	Conc.			1 1/2:1			1 1/2:1					←	323	2890		
1	1	12+30	24"		48'	C.G.S.M.P.											"				
1	1	13+00	18"		22'	"											B				PE. Rt.
1	1	19+00	24"		40'	"											←				
1	1	19+20	18"		22'	"											A				PE. Rt.
1	1	27+16	6'	6'	37	Conc.											←	36.8	3310		
1	1	29+00	18"		30'	C.G.S.M.P.											B				PE. Lt.
1	2	36+00	24"		40'	"											←				Skew L.H.F. 20°
2	2	70+60	18"		22'	"											A				PE. Rt. & Lt.
2	2	75+00	24"		40'	"											→				
2	2	84+00	18"		22'	"											A				PE. Rt.
2	2	93+00	24"		56'	"											←				Skew L.H.F. 45°
2	4	93+50	18"		30'	"											A				Old road.
2	4	98+50	18"		34'	"											A				"
2	4	100+60	36"		46'	"											A				
3	4	110+00	36"		44'	"											"				PE. Lt.
3	4	112+70	18"		22'	"											B				PE. Rt.
3	4	117+00	18"		22'	"											B				PE. Rt.
3	5	136+00	18"		26'	"											B				PE. Rt.
3	5	139+50	18"		30'	"											A				Side Road
3	5	142+50	24"		38'	"											←				
3	5	147+30	18"		26'	"											←				
3	6	153+50	18"		30'	"											B				PE. Rt.
3	6	154+50	24"		42'	"											B				PE. Lt.
3	6	156+00	18"		24'	"											B				Side Road
4	3	162+50	18"		22'	"											A				PE. Rt.
4	3	165+00	24"		44'	"											←				
4	3	172+50	18"		24'	"											B				PE. Rt.
4	3	173+70	18"		26'	"											B				PE. Rt.
4	3	175+50	18"		32'	"											A				Side Road
4	7	181+50	24"		42'	"											←				
4	7	188+00	18"		26'	"											A				PE. Lt.
4	7	191+70	18"		32'	"											A				Side Road
4	7	194+00	24"		42'	"											→				

SUMMARY OF PIPE CULVERTS

CORRUGATED SHEET METAL PIPE (Total Lineal Feet)													CAST IRON PIPE				CONCRETE PIPE			
TYPE	Diam.	Diam.	Diam.	Diam.	Diam.	Diam.	Diam.	Diam.	Diam.	Diam.	Diam.	Diam.	Diam.	Total Lineal Feet	Diam.	Total Lineal Feet	Diam.	Total Lineal Feet	Diam.	Total Lineal Feet
Pure Iron																				
Copper Pure Iron																				
Copper Iron																				
Molybdenum																				
Copper Steel																				

CULVERT SCHEDULE

NAME OF ROAD DODGEVILLE LONE ROCK WIDTH OF ROADWAY 26' TYPE OF SURFACING Crushed Stone COUNTY Iowa

PROJ. NO. 3408 DIV. JOB NO. 3408

Mile No.	Plan Sheet	Station	SIZE			KIND OF CULVERT	TYPE	INLET ENDWALL		DISCH. ENDW.	PLACE CULV.	ELEV. BOT. BBL.	FLOW	CONC. STEEL		REMARKS
			Width	Height	Length			Square Sloping Flared	Finish Above Opening					Open in Stream	Square Sloping Flared	
4	7	202+50	24"	44'		C.G.S.M.P.							→			
4	7	210+00	18"	24'									A			P.E. Rt.
5	8	215+82	24"	38'									→			
5	8	222+81 ⁵	24"	36'									→			
5	8	230+00	24"	40'									→			
5	8	232+79	24"	42'									→			Skew R.H.F. 20°
5	8	235+56	24"	36'									→			
5	8	239+30	18"	30'									A			Side Road
5	9	243+15	24"	36'									→			
5	9	245+67	18"	24'									A			P.E. Lt.
5	9	246+31 ⁵	36"	44'									→			
5	9	252+81	36"	56'									→			
5	9	256+00	36"	66'									→			
5	9	260+79	24"	40'									→			
6	9	265+00	24"	56'									→			
6	9	269+57	24"	48'									→			
6	10	272+66	24"	40'									→			
6	10	281+00	24"	44'									→			Skew R.H.F. 20°
6	10	281+75	18"	22'									A			P.E. Rt.
6	10	294+04	24"	40'									→			
6	11	300+24 ³	24"	38'									→			
6	11	304+71	24"	44'									→			
6	11	308+50	18"	22'									A			
6	11	324+00	24"	38'									→			
7	12	334+00	18"	24'									A			P.E. Rt.
7	12	334+23 ⁵	5'	31.5'		Conc.							→	23.4	2140	P.E. Rt.
7	12	346+00	18"	30'		C.G.S.M.P.							A			
7	12	348+72	48"	42'									→			
7	12	359+00	30"	40'									→			
7	13	373+00	24"	42'									→			
7	13	375+00	18"	30'									B			Side Road
8	13	388+00	24"	40'									→			
8	14	397+00	36"	44'									→			
8	14	403+00	18"	30'									A			P.E. Rt.

SUMMARY OF PIPE CULVERTS

[illegible]

CULVERT SCHEDULE

NAME OF ROAD Dodgeville Lone Rock WIDTH OF ROADWAY 76' TYPE OF SURFACING Crushed Stone COUNTY Iowa PROJ. NO. 9408 DIV. JOB NO. 9408

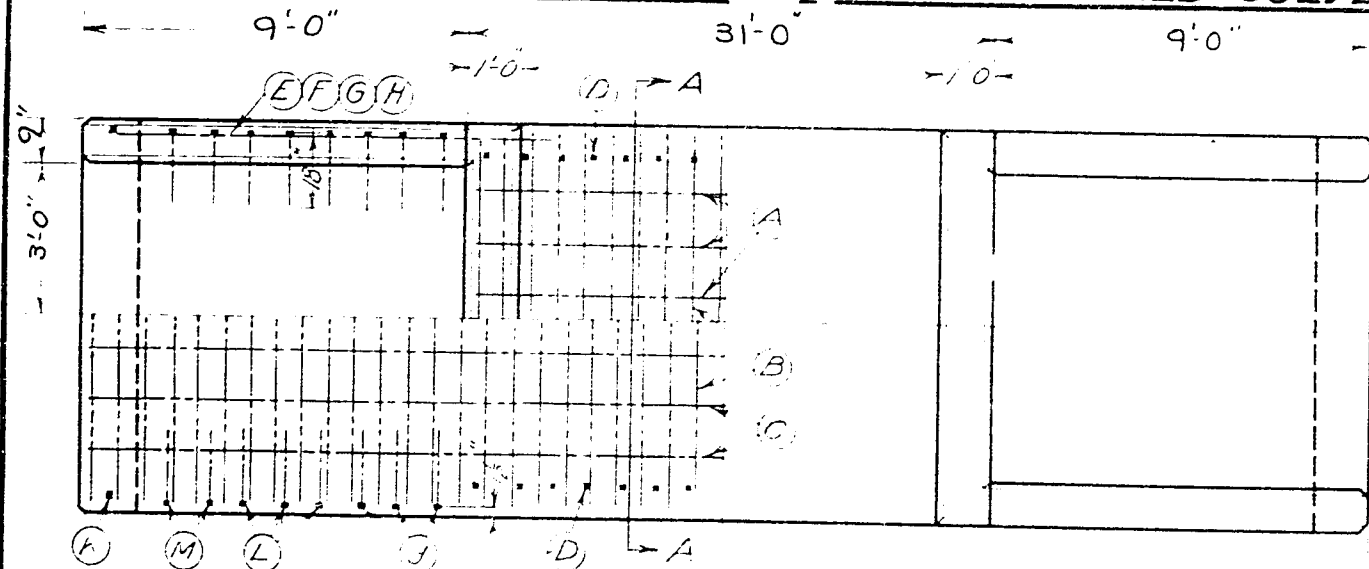
Mile No.	Plan Sheet No.	Station	SIZE			KIND OF CULVERT	TYPE	INLET ENDWALL			DISCH. ENDW.			PLACE CULV.		ELEV. BOT. BBL.		FLOW		CONG. IN CULV.	STEEL IN CULV.	REMARKS
			Width	Height	Length			Square-Finish Sloping-Above Flared	Slope	Drop-Inlet Square-Finish Sloping-Wall Reg'd	Slope	Slope	Slope	Left From C.	Right From C.	Disch.	Inlet	Left	Right			
8	14	407+34	24"		36'	C.G.S.M.P.																
8	15	422+50	18"		30'	"																
8	15	424+50	30"		40'	"																Side Road
8	15	433+00	18"		26'	"																
9	15	446+00	36"		42'	"																P.E. R.S.L.
9	16	462+00	18"		30'	"																
9	16	473+00	24"		36'	"																P.E. L.T.
9	16	475+00	18"		30'	"																
10	17	486+61	24"		40'	"																Side Road Rt.
10	17	493+00	24"		38'	"																
10	17	495+00	18"		24'	"																
10	17	503+00	18"		22'	"																P.E. Rt.
10	17	509+00	24"		42'	"																P.E. Lt.
10	18	521+35	36"		42'	"																
10	18	533+00	3 1/2'	5'	31'	Conc.																
11	19	543+50	30"		40'	C.G.S.M.P.														17.4	1595	
11	19	544+00	18"		22'	"																
11	19	550+00	30"		42'	"																P.E. Lt.
11	19	566+00	3 1/2'	5'	31'	Conc.																
11	20	572+25	30"		42'	C.G.S.M.P.														17.4	1595	
11	20	579+00	24"		36'	"																
11	20	585+00	24"		36'	"																
2	2	59+00	18"		22'	"																P.E. Rt.
2	2	53+00	18"		22'	"																P.E. Lt.

SUMMARY OF PIPE CULVERTS

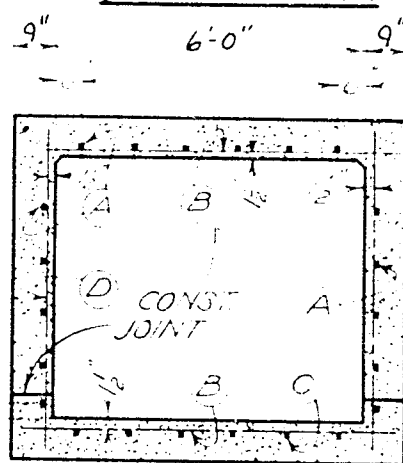
CORRUGATED SHEET METAL PIPE (Total Lineal Feet)												CAST IRON PIPE				CONCRETE PIPE			
TYPE	Diam.	Diam.	Diam.	Diam.	Diam.	Diam.	Diam.	Diam.	Diam.	Diam.	Diam.	Diam.	Total Length	Diam.	Total Length	Diam.	Total Length	Diam.	Total Length
Pure Iron																			
Copper Pure Iron																			
Copper Iron																			
Molybdenum																			
Copper Steel																			

Proj. 9408 — A

1/4 PLAN TOP REINFORCEMENT 1/2 PLAN FINISHED CULVERT



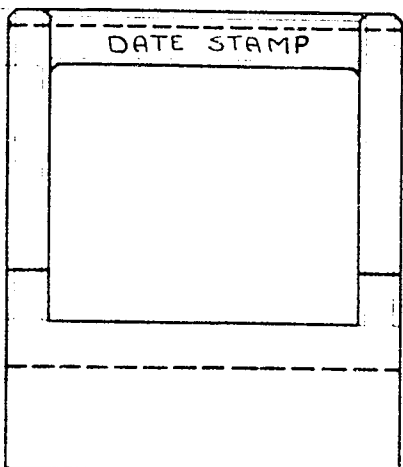
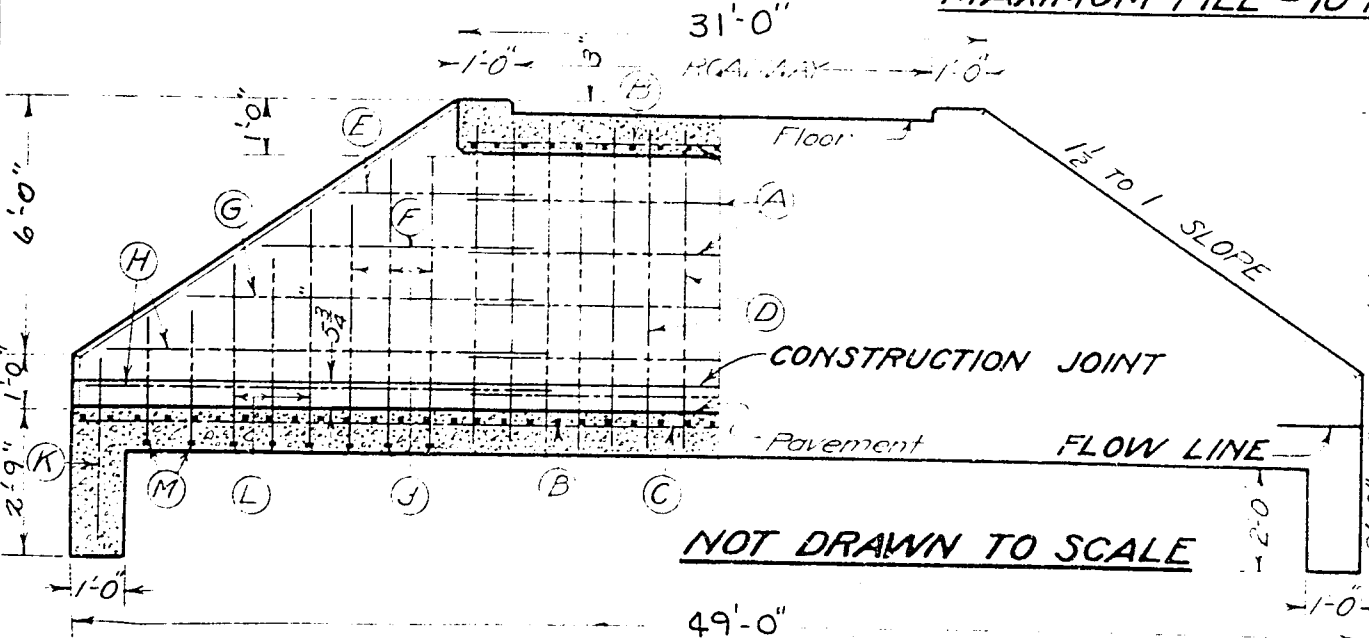
SECTION A-A



SHOWING REINFORCEMENT

1/4 PLAN BOTTOM REINFORCEMENT

MAXIMUM FILL = 10 FEET



END ELEVATION

1/2 TRANSVERSE ELEVATION ON C 1/2 SIDE ELEVATION

GENERAL NOTES.

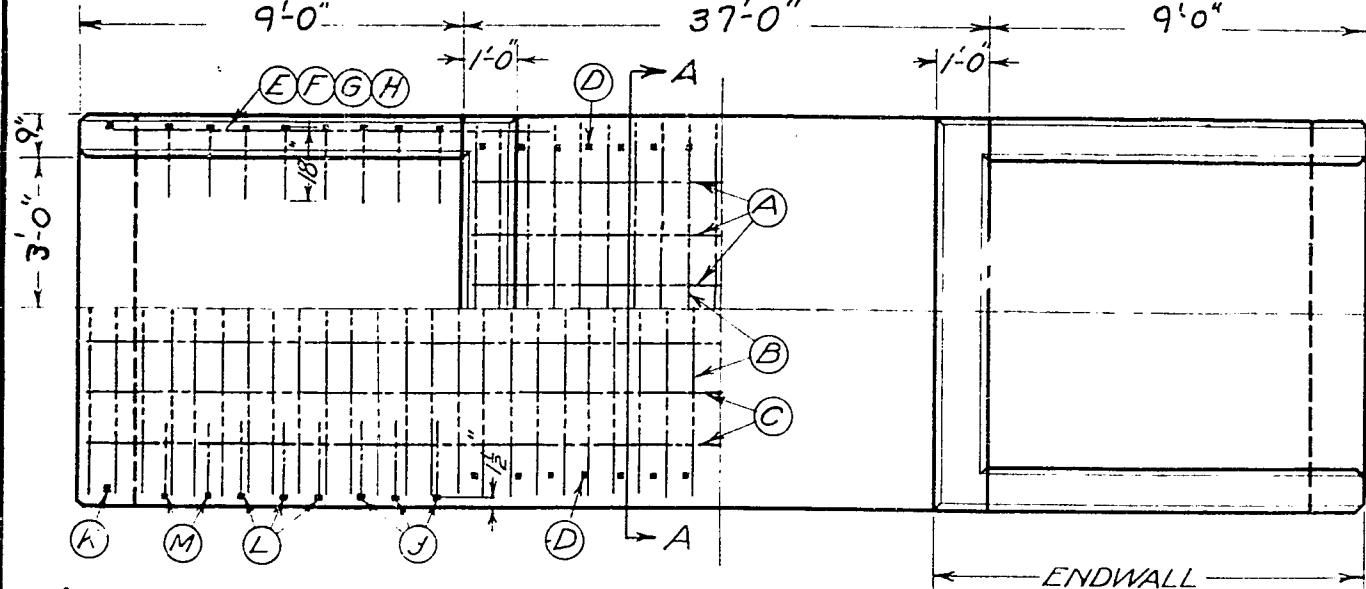
All concrete shall be Class A- proportions. Slope barrel 1/4 inch per foot toward discharge end unless otherwise specified. Bottom to be poured monolithic to construction joint. Bevel all exposed edges

with a triangular strip from a 3/4 x 3/4 piece. Depth of cut-off wall to vary with soil conditions. All reinforcement shall be 1/2 square deformed mechanical bond bars properly supported

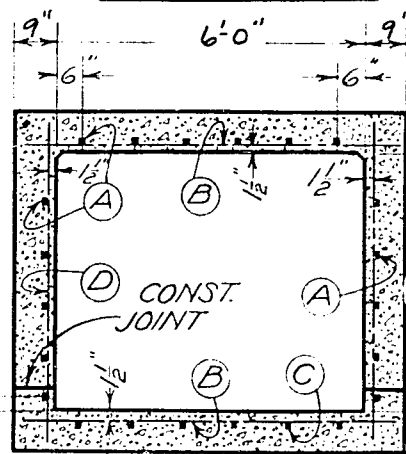
with approved metallic bar spacers. Bars shall lap 40 diameters where spliced and shall be securely wired with #16 wire. Standard specifications of the Wisconsin Highway Commission.

Span in Feet	4x4	5x4	5x5	6x4	6x5	6x6
Length	3'-0"	3'-0"	3'-0"	3'-0"	3'-0"	3'-0"
Weight	30.9	30.9	30.9	30.9	30.9	30.9
Area	24.0	24.0	24.0	24.0	24.0	24.0
Perimeter	48.9"	48.9"	48.9"	48.9"	48.9"	48.9"
Volume	620.0	620.0	620.0	620.0	620.0	620.0
Weight	30.9	30.9	30.9	30.9	30.9	30.9
Area	24.0	24.0	24.0	24.0	24.0	24.0
Perimeter	48.9"	48.9"	48.9"	48.9"	48.9"	48.9"
Volume	620.0	620.0	620.0	620.0	620.0	620.0
Weight	30.9	30.9	30.9	30.9	30.9	30.9
Area	24.0	24.0	24.0	24.0	24.0	24.0
Perimeter	48.9"	48.9"	48.9"	48.9"	48.9"	48.9"
Volume	620.0	620.0	620.0	620.0	620.0	620.0
Weight	30.9	30.9	30.9	30.9	30.9	30.9
Area	24.0	24.0	24.0	24.0	24.0	24.0
Perimeter	48.9"	48.9"	48.9"	48.9"	48.9"	48.9"
Volume	620.0	620.0	620.0	620.0	620.0	620.0
Weight	30.9	30.9	30.9	30.9	30.9	30.9
Area	24.0	24.0	24.0	24.0	24.0	24.0
Perimeter	48.9"	48.9"	48.9"	48.9"	48.9"	48.9"
Volume	620.0	620.0	620.0	620.0	620.0	620.0
Weight	30.9	30.9	30.9	30.9	30.9	30.9
Area	24.0	24.0	24.0	24.0	24.0	24.0
Perimeter	48.9"	48.9"	48.9"	48.9"	48.9"	48.9"
Volume	620.0	620.0	620.0	620.0	620.0	620.0
Weight	30.9	30.9	30.9	30.9	30.9	30.9
Area	24.0	24.0	24.0	24.0	24.0	24.0
Perimeter	48.9"	48.9"	48.9"	48.9"	48.9"	48.9"
Volume	620.0	620.0	620.0	620.0	620.0	620.0
Weight	30.9	30.9	30.9	30.9	30.9	30.9
Area	24.0	24.0	24.0	24.0	24.0	24.0
Perimeter	48.9"	48.9"	48.9"	48.9"	48.9"	48.9"
Volume	620.0	620.0	620.0	620.0	620.0	620.0
Weight	30.9	30.9	30.9	30.9	30.9	30.9
Area	24.0	24.0	24.0	24.0	24.0	24.0
Perimeter	48.9"	48.9"	48.9"	48.9"	48.9"	48.9"
Volume	620.0	620.0	620.0	620.0	620.0	620.0
Weight	30.9	30.9	30.9	30.9	30.9	30.9
Area	24.0	24.0	24.0	24.0	24.0	24.0
Perimeter	48.9"	48.9"	48.9"	48.9"	48.9"	48.9"
Volume	620.0	620.0	620.0	620.0	620.0	620.0
Weight	30.9	30.9	30.9	30.9	30.9	30.9
Area	24.0	24.0	24.0	24.0	24.0	24.0
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Volume	620.0	620.0	620.0	620.0	620.0	620.0
Weight	30.9	30.9	30.9	30.9	30.9	30.9
Area	24.0	24.0	24.0	24.0	24.0	24.0
Perimeter	48.9"	48.9"	48.9"	48.9"	48.9"	48.9"
Volume	620.0	620.0	620.0	620.0	620.0	620.0
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Area	24.0	24.0	24.0	24.0	24.0	24.0
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Volume	620.0	620.0	620.0	620.0	620.0	620.0
Weight	30.9	30.9	30.9	30.9	30.9	30.9
Area	24.0	24.0	24.0	24.0	24.0	24.0
Perimeter	48.9"	48.9"	48.9"	48.9"	48.9"	48.9"
Volume	620.0	620.0	620.0	620.0	620.0	620.0
Weight	30.9	30.9	30.9	30.9	30.9	30.9
Area	24.0	24.0	24.0	24.0	24.0	24.0
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Area	24.0	24.0	24.0	24.0	24.0	24.0
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Weight	30.9	30.9	30.9	30.9	30.9	30.9
Area	24.0	24.0	24.0	24.0	24.0	24.0
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Volume	620.0	620.0	620.0	620.0	620.0	620.0
Weight	30.9	30.9	30.9	30.9	30.9	30.9
Area	24.0	24.0	24.0	24.0	24.0	24.0
Perimeter	48.9"	48.9"	48.9"	48.9"	48.9"	48.9"
Volume	620.0	620.0	620.0	620.0	620.0	620.0
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Perimeter	48.9"	48.9"	48.9"	48.9"	48.9"	48.9"
Volume	620.0	620.0	620.0	620.0	620.0	620.0
Weight	30.9	30.9	30.9	30.9	30.9	30.9
Area	24.0	24.0	24.0	24.0	24.0	24.0
Perimeter	48.9"	48.9"	48.9"	48.9"	48.9"	48.9"
Volume	620.0	620.0	620.0	620.0	620.0	620.0
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Volume	620.0	620.0	620.0	620.0	620.0	620.0
Weight	30.9	30.9	30.9	30.9	30.9	30.9
Area	24.0	24.0	24.0	24.0	24.0	24.0
Perimeter	48.9"	48.9"	48.9"	48.9"	48.9"	48.9"
Volume	620.0	620.0	620.0	620.0	620.0	620.0
Weight	30.9	30.9	30.9	30.9	30.9	30.9
Area	24.0	24.0	24.0	24.0	24.0	24.0
Perimeter	48.9"	48.9"	48.9"	48.9"	48.9"	48.9"
Volume	620.0	620.0	620.0	620.0	620.0	620.0
Weight	30.9	30.9	30.9	30.9	30.9	30.9
Area	24.0	24.0	24.0	24.0	24.0	24.0
Perimeter	48.9"	48.9"	48.9"	48.9"	48.9"	48.9"
Volume	620.0	620.0	620.0	620.0	620.0	620.0
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Area	24.0	24.0	24.0	24.0	24.0	24.0
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Perimeter	48.9"	48.9"	48.9"	48.9"	48.9"	48.9"
Volume	620.0	620.0	620.0	620.0	620.0	620.0
Weight	30.9	30.9	30.9	30.9	30.9	30.9
Area	24.0	24.0	24.0	24.0	24.0	24.0
Perimeter	48.9"	48.9"	48.9"	48.9"	48.9"	48.9"
Volume	620.0	620.0	620.0	620.0	620.0	620.0
Weight	30.9	30.9	30.9	30.9	30.9	30.9
Area	24.0	24.0	24.0	24.0	24.0	24.0
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Volume	620.0	620.0	620.0	620.0	620.0	620.0
Weight	30.9	30.9	30.9	30.9	30.9	30.9
Area	24.0	24.0	24.0	24.0	24.0	24.0
Perimeter	48.9"	48.9"	48.9"	48.9"	48.9"	48.9"
Volume	620.0	620.0	620.0	620.0	620.0	620.0
Weight	30.9	30.9	30.9	30.9	30.9	30.9
Area	24.0	24.0	24.0	24.0	24.0	24.0
Perimeter	48.9"	48.9"	48.9"	48.9"	48.9"	48.9"
Volume	620.0	620.0	620.0	620.0	620.0	620.0
Weight	30.9	30.9	30.9	30.9	30.9	30.9
Area	24.0	24.0	24.0	24.0	24.0	24.0
Perimeter	48.9"	48.9"	48.9"	48.9"	48.9"	48.9"
Volume	620.0	620.0	620.0	620.0	620.0	620.0
Weight	30.9	30.9	30.9	30.9	30.9	30.9
Area	24.0	24.0	24.0	24.0	24.0	24.0
Perimeter	48.9"	48.9"	48.9"			

1/4 PLAN TOP REINFORCEMENT 1/2 PLAN FINISHED CULVERT

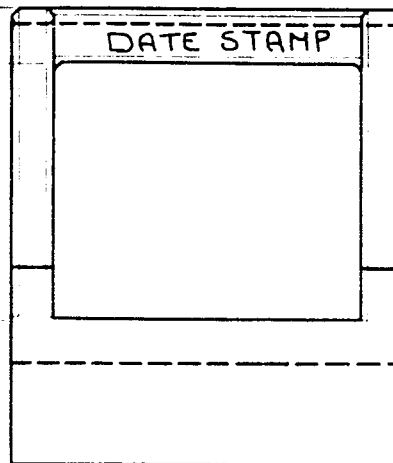
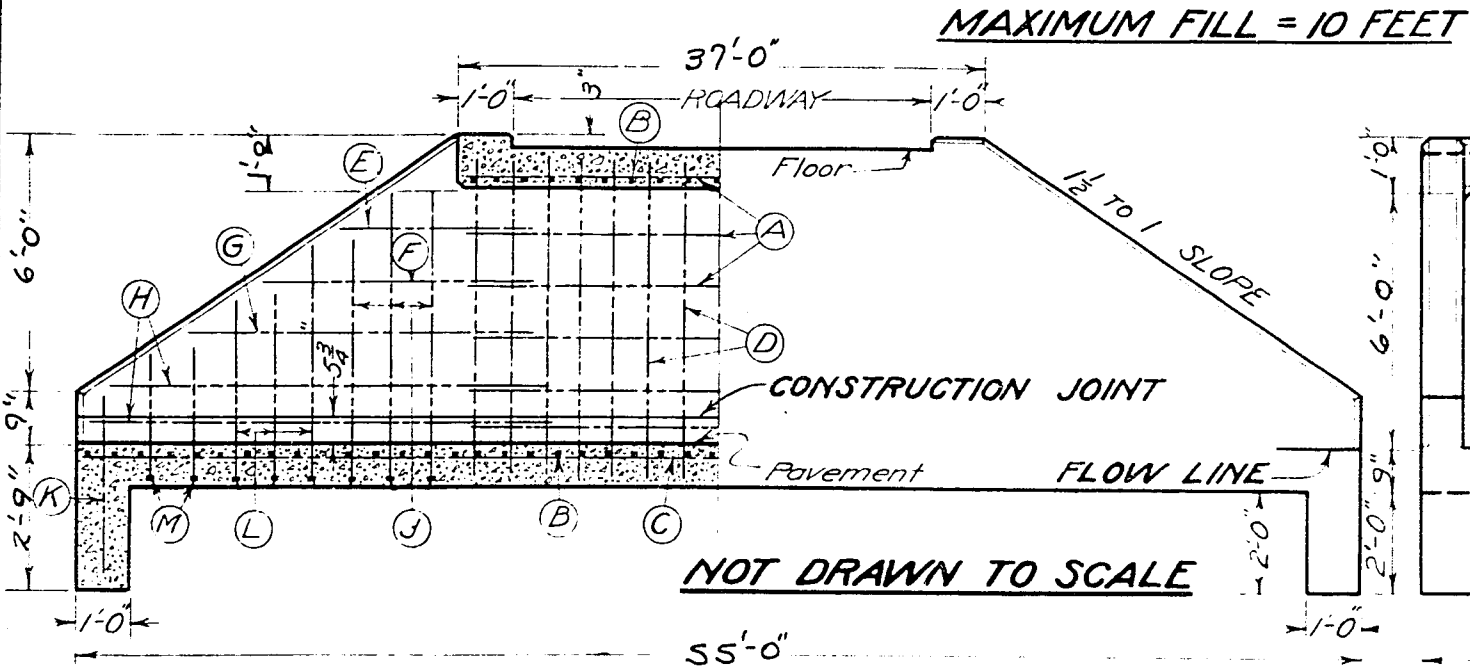


SECTION A-A



SHOWING REINFORCEMENT

1/4 PLAN BOTTOM REINFORCEMENT



END ELEVATION

1/2 TRANSVERSE ELEVATION ON & 1/2 SIDE ELEVATION

GENERAL NOTES.

All concrete shall be Class A- proportions. Slope barrel 1/4 inch per foot toward discharge end unless otherwise specified. Bottom to be poured monolithic to construction joint. Bevel all exposed edges

with a triangular strip from a 3/4 x 3/4 piece. Depth of cut-off wall to vary with soil conditions. All reinforcement shall be 1/2 square deformed mechanical bond bars properly supported

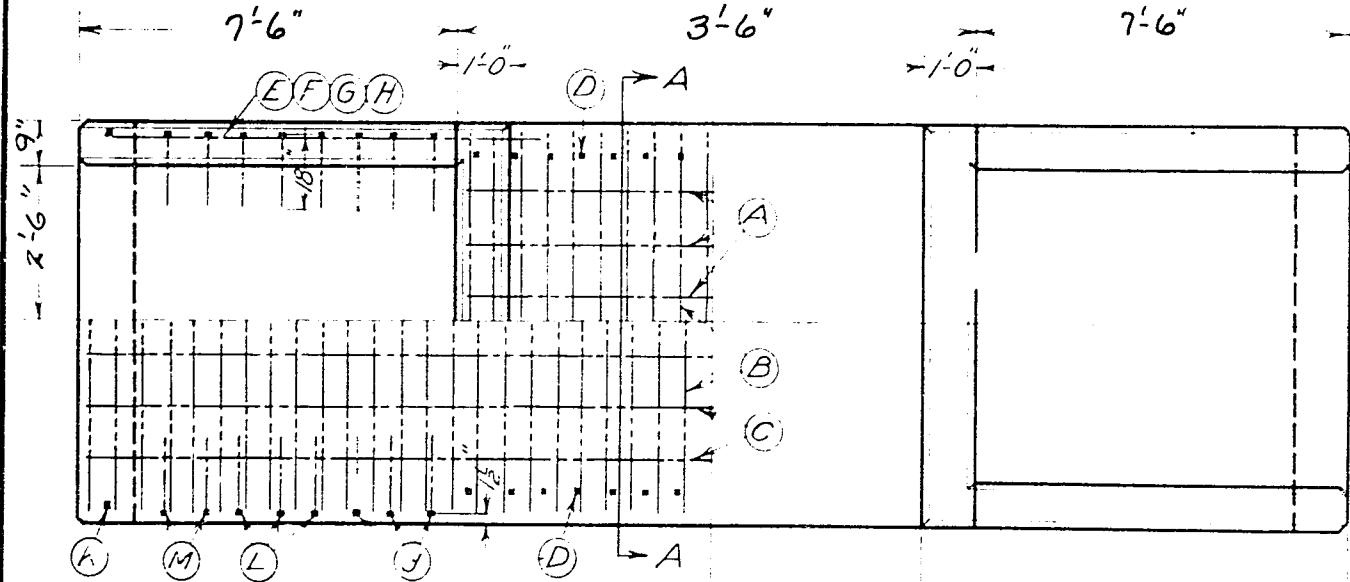
with approved metallic bar spacers. Bars shall lap 40 diameters where spliced and shall be securely wired with #16 wire. Standard specifications of the Wisconsin Highway Commission.

Span & Height	4x4	5x4	5x5	6x4	6x5	6x6
No. & Spacing	12@1'-0"	3@1'-0"	15@1'-0"	14@1'-0"	16@1'-0"	18@1'-0"
Length	36'-9"	27'-6"	36'-9"	36'-9"	36'-9"	36'-9"
No. & Spacing	4'-9"	6'-1"	6'-1"	7'-3"	7'-3"	7'-3"
Length	0'-5"	0'-5"	0'-5"	0'-4"	0'-4"	0'-4"
No. & Spacing	4@1'-0"	5@1'-0"	5@1'-0"	6@1'-0"	6@1'-0"	6@1'-0"
Length	54'-9"	54'-9"	54'-9"	54'-9"	54'-9"	54'-9"
No. & Spacing	1'-9"	5'-1"	6'-1"	5'-3"	6'-3"	7'-3"
Length	1'-0"	4@1'-0"	4@1'-0"	4@1'-0"	4@1'-0"	8@1'-0"
No. & Spacing	4'-0"	4'-0"	4'-0"	4'-0"	4'-0"	4'-6"
No. & Spacing	4@1'-0"	4@1'-0"	4@1'-0"	4@1'-0"	4@1'-0"	8@1'-0"
Length	5'-6"	5'-6"	5'-6"	5'-6"	5'-6"	7'-0"
No. & Spacing	8@1'-0"	8@1'-0"	8@1'-0"	8@1'-0"	8@1'-0"	8@1'-0"
Length	7'-0"	7'-0"	7'-0"	7'-0"	7'-0"	10'-0"
No. & Spacing	0	0	8@1'-0"	0	8@1'-0"	0
Length	8'-6"	8'-6"	8'-6"	8'-6"	8'-6"	8'-6"
No. & Spacing	4@1'-0"	4@1'-0"	8@1'-0"	4@1'-0"	8@1'-0"	12@1'-0"
Length	6'-0"	6'-4"	7'-1"	6'-6"	7'-3"	7'-3"
No. & Spacing	4@1'-0"	4@1'-0"	4@1'-0"	4@1'-0"	4@1'-0"	4@1'-0"
Length	3'-3"	3'-7"	3'-7"	3'-9"	3'-9"	3'-9"
No. & Spacing	8@1'-0"	8@1'-0"	8@1'-0"	8@1'-0"	8@1'-0"	8@1'-0"
Length	4'-9"	5'-1"	5'-1"	5'-3"	5'-3"	5'-3"
No. & Spacing	8@1'-0"	8@1'-0"	8@1'-0"	8@1'-0"	8@1'-0"	8@1'-0"
Length	3'-6"	3'-10"	3'-10"	4'-0"	4'-0"	4'-0"
T	6"	8"	8"	9"	9"	9"
Culverts Conc.						368
Culverts Conc. Lin. Ft. Bbl.	.333	.510	.560	.639	.694	.750
Lbs. Steel						3310
Lbs. Steel per Lin. Ft.	41.05	48.75	52.11	62.90	66.30	69.70
Concrete in Endwall	1.92	2.84	3.53	3.51	4.34	5.25

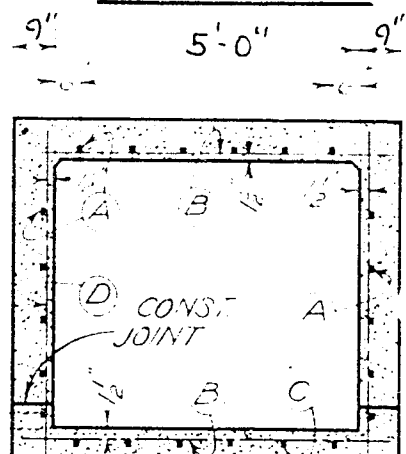
STANDARD DESIGN CONCRETE BOX CULVERT
1 1/2 to 1 SLOPING ENDWALLS
6'x6'x37' STA. 27+16
WISCONSIN HIGHWAY COMMISSION

Corrected: *A. Crane*
Approved: *A. Crane*
Approved: *A. Crane*
9/1/27 E-ST-12-1

1/4 PLAN TOP REINFORCEMENT 1/2 PLAN FINISHED CULVERT

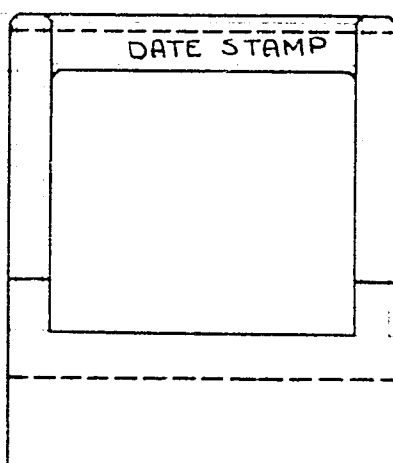
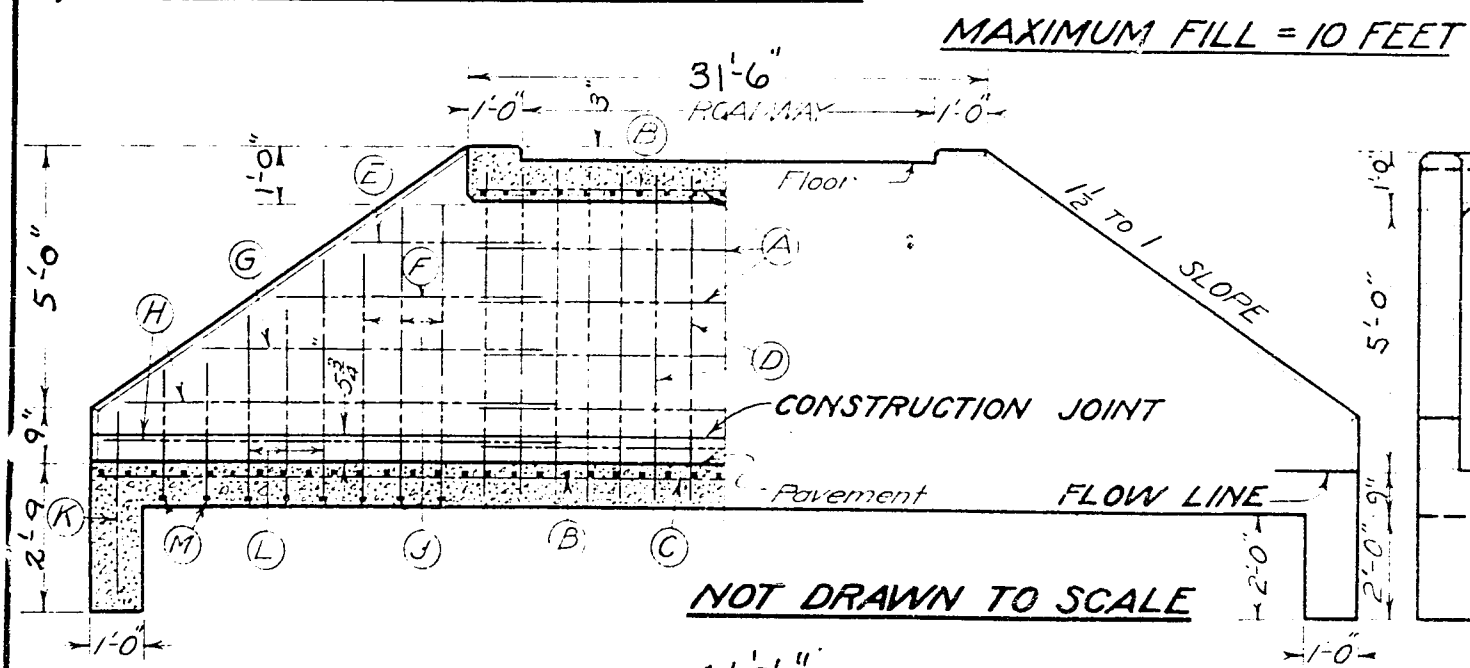


SECTION A-A



SHOWING REINFORCEMENT

1/4 PLAN BOTTOM REINFORCEMENT



END ELEVATION

1/2 TRANSVERSE ELEVATION ON & 1/2 SIDE ELEVATION

GENERAL NOTES.

All concrete shall be Class A- proportions. Slope barrel 1/4 inch per foot toward discharge end unless otherwise specified. Bottom to be poured monolithic to construction joint. Bevel all exposed edges

with a triangular strip from a 3/4 x 3/4 piece. Depth of cut-off wall to vary with soil conditions. All reinforcement shall be 1/2 square deformed mechanical bond bars properly supported

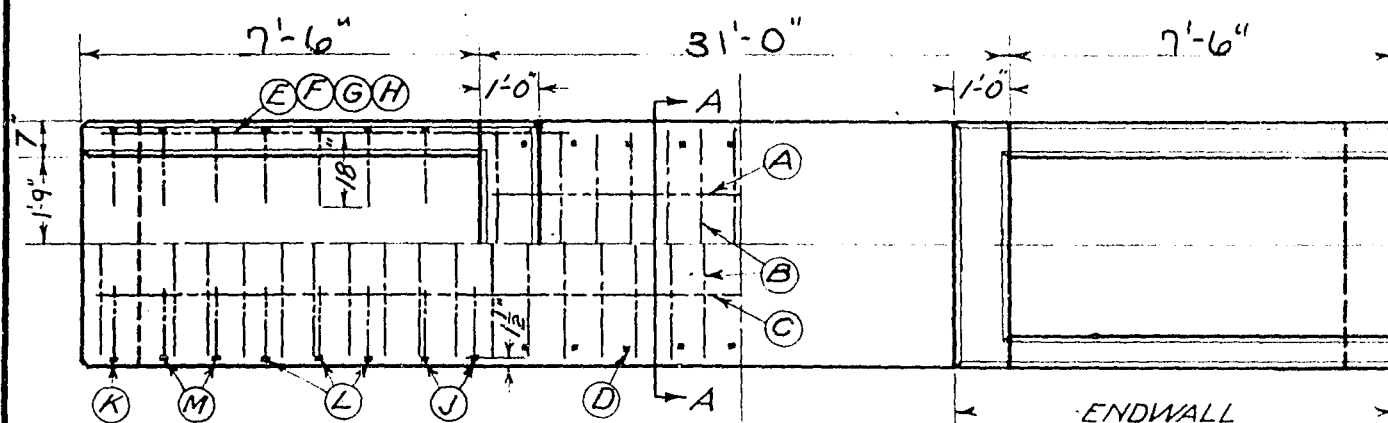
with approved metallic bar spacers. Bars shall lap 40 diameters where spliced and shall be securely wired with #16 wire. Standard specifications of the Wisconsin Highway Commission.

Span & Height	4x4	5x4	5x5	6x4	6x5	6x6
No. & Spacing	12@1'-0"	3@1'-0"	15@1'-0"	14@1'-0"	16@1'-0"	18@1'-0"
Length	31'-5"	27'-6"	31'-5"	31'-5"	31'-5"	31'-5"
No. & Spacing	4'-9"	6'-1"	6'-1"	7'-3"	7'-3"	7'-3"
Length	0'-5"	0'-5"	0'-5"	0'-4"	0'-4"	0'-4"
No. & Spacing	4@1'-0"	5@1'-0"	5@1'-0"	6@1'-0"	6@1'-0"	6@1'-0"
Length	46'-3"	46'-3"	46'-3"	46'-3"	46'-3"	46'-3"
No. & Spacing	1'-9"	5'-1"	6'-1"	5'-3"	6'-3"	7'-3"
Length	1'-0"	4@1'-0"	4@1'-0"	4@1'-0"	4@1'-0"	8@1'-0"
No. & Spacing	4'-0"	4'-0"	4'-0"	4'-0"	4'-0"	4'-6"
No. & Spacing	4@1'-0"	4@1'-0"	4@1'-0"	4@1'-0"	4@1'-0"	8@1'-0"
Length	5'-6"	5'-6"	5'-6"	5'-6"	5'-6"	7'-0"
No. & Spacing	8@1'-0"	8@1'-0"	8@1'-0"	8@1'-0"	8@1'-0"	8@1'-0"
Length	7'-0"	7'-0"	7'-0"	7'-0"	7'-0"	10'-0"
No. & Spacing	0	0	8@1'-0"	0	8@1'-0"	0
Length	8'-6"	8'-6"	8'-6"	8'-6"	8'-6"	8'-6"
No. & Spacing	4@1'-0"	4@1'-0"	8@1'-0"	4@1'-0"	8@1'-0"	12@1'-0"
Length	6'-0"	6'-4"	7'-1"	6'-6"	7'-3"	7'-3"
No. & Spacing	4@1'-0"	4@1'-0"	4@1'-0"	4@1'-0"	4@1'-0"	4@1'-0"
Length	3'-3"	3'-7"	3'-7"	3'-9"	3'-9"	3'-9"
No. & Spacing	8@1'-0"	8@1'-0"	8@1'-0"	8@1'-0"	8@1'-0"	8@1'-0"
Length	4'-9"	5'-1"	5'-1"	5'-3"	5'-3"	5'-3"
No. & Spacing	8@1'-0"	8@1'-0"	8@1'-0"	8@1'-0"	8@1'-0"	8@1'-0"
Length	3'-6"	3'-10"	3'-10"	4'-0"	4'-0"	4'-0"
T	6"	8"	8"	9"	9"	9"
Culverts Conc.						234
Culverts Conc. Lin. Ft. Bbl.	.333	.510	.560	.639	.694	.750
Lbs. Steel						2140
Lbs. Steel per Lin. Ft.	41.05	48.75	52.11	62.90	66.30	69.70
Concrete in Endwall	1.92	2.84	3.53	3.51	4.34	5.25

STANDARD DESIGN CONCRETE BOX CULVERT
1 1/2 to 1 SLOPING ENDWALLS
5'x5'x31'6" STA. 334+29.5
WISCONSIN HIGHWAY COMMISSION

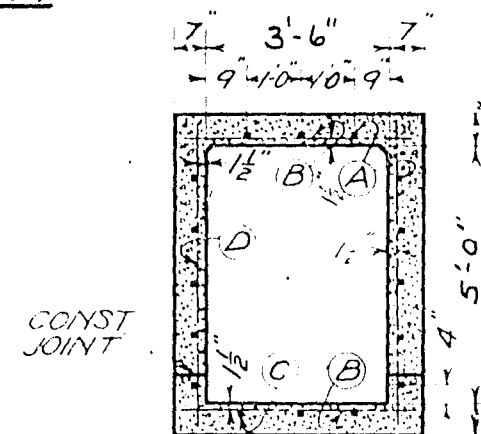
Corrected: *A. Crane*
Approved: *A. Crane*
Approved: *A. Crane*
9/1/27 E-ST-12-1

1/4 PLAN TOP REINFORCEMENT 1/2 PLAN FINISHED CULVERT



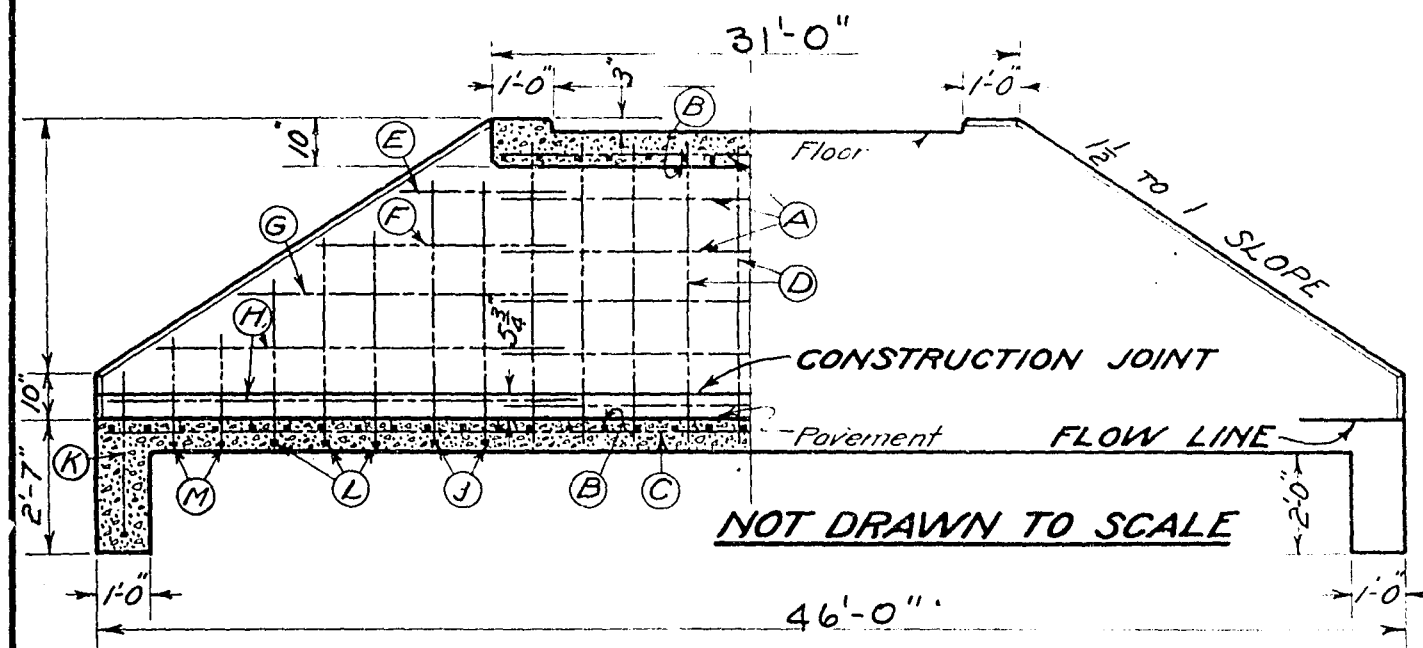
1/4 PLAN BOTTOM REINFORCEMENT

SECTION A-A

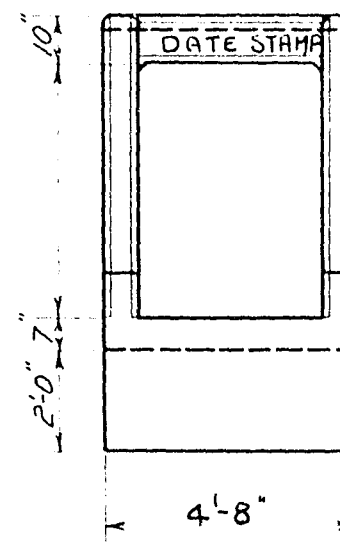


SHOWING REINFORCEMENT

MAXIMUM FILL = 10 FEET



1/2 TRANSVERSE ELEVATION ON 1/2 SIDE ELEVATION



END ELEVATION

Span & Height	3 1/2 x 5	3 1/2 x 6
No. & Spac	3 @ 1'-0"	3 @ 1'-0"
Length	30'-9"	
No. & Spac	154	
Length	4'-5"	4'-5"
No. & Spac	0'-6"	0'-6"
Length	45'-9"	
No. & Spac	62 @ 1'-0"	
Length	5'-11"	6'-11"
No. & Spac	4 @ 1'-0"	8 @ 1'-0"
Length	4'-0"	4'-6"
No. & Spac	4 @ 1'-0"	8 @ 1'-0"
Length	5'-6"	7'-0"
No. & Spac	4 @ 1'-0"	8 @ 1'-0"
Length	7'-0"	10'-0"
No. & Spac	8 @ 1'-0"	0
Length	8'-6"	
No. & Spac	8 @ 1'-0"	12 @ 1'-0"
Length	6'-11"	6'-11"
No. & Spac	4 @ 1'-0"	4 @ 1'-0"
Length	3'-5"	3'-5"
No. & Spac	12 @ 1'-0"	12 @ 1'-0"
Length	4'-11"	4'-11"
No. & Spac	8 @ 1'-0"	8 @ 1'-0"
Length	3'-8"	3'-8"
Concrete in 1 Endwall	2.64	3.246
Cu. Yds. Conc.	17.4	
Cu. Yds. Conc. Lin. Ft. Barrel	418	461
Lbs. Steel	1595	
Lbs. Steel Lin. Ft. Barrel	38.68	42.00

**STANDARD DESIGN
CONCRETE CATTLE PASS
1 1/2 TO 1 SLOPING ENDWALLS
SIZES-3 1/2 x 5 x 31 STA 533+80
566+00**

WISCONSIN HIGHWAY COMMISSION

Correct:- *J. Crane*
PLANNING ENGINEER
Approved:- *CK. Kuyumjian*
DEPUTY STATE HIGHWAY ENG.
Approved:-
STATE HIGHWAY ENGINEER

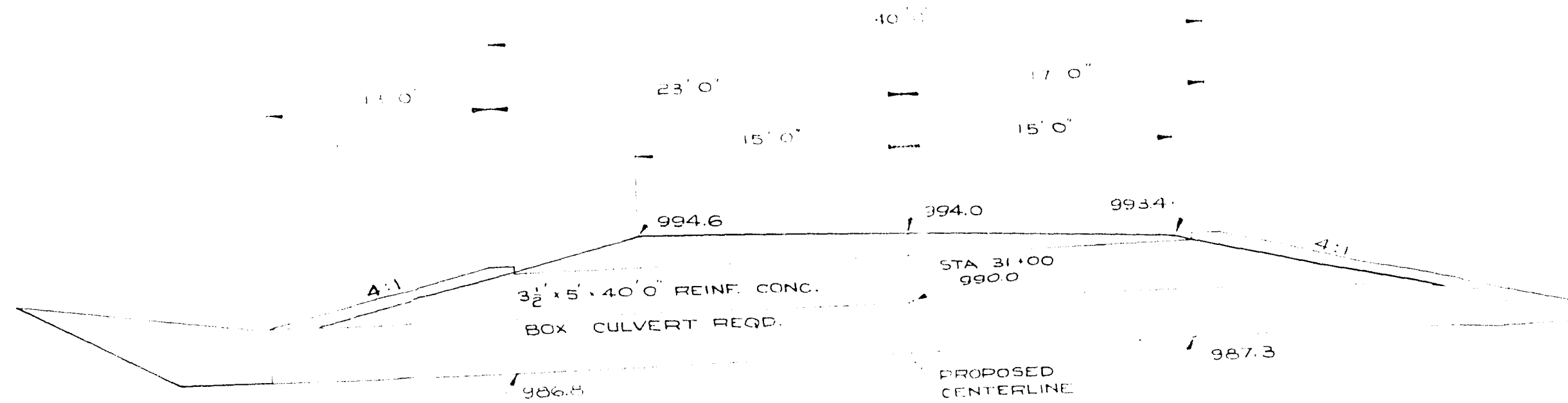
9/1/27. ST-12.1

GENERAL NOTES

All concrete shall be Class proportions. Slope barrel 1/4 inch per foot toward discharge end unless otherwise specified. Bottom to be poured monolithic to construction joint. Bevel all exposed edges.

with a triangular strip from a 3/4 x 3/4 piece. Depth of cut-off wall to vary with soil conditions. All reinforcement shall be 1/2" square deformed mechanical bond bars properly supported

with approved metallic bar spacers. Bars shall lap 40 diameters where spliced and shall be securely wired with #16 wire. Standard specifications of the Wisconsin Highway Commission.



NOTE: TEMPLATE IS SUPERELEVATED
0.05 FT/FT. R.S.L.

CULVERT NO. C 377
DIVISION JOB NO. 9200
SCALE - 1" = 5'

34

346 89

12345

2345

34 5

345

56 3

8989 5

10101456