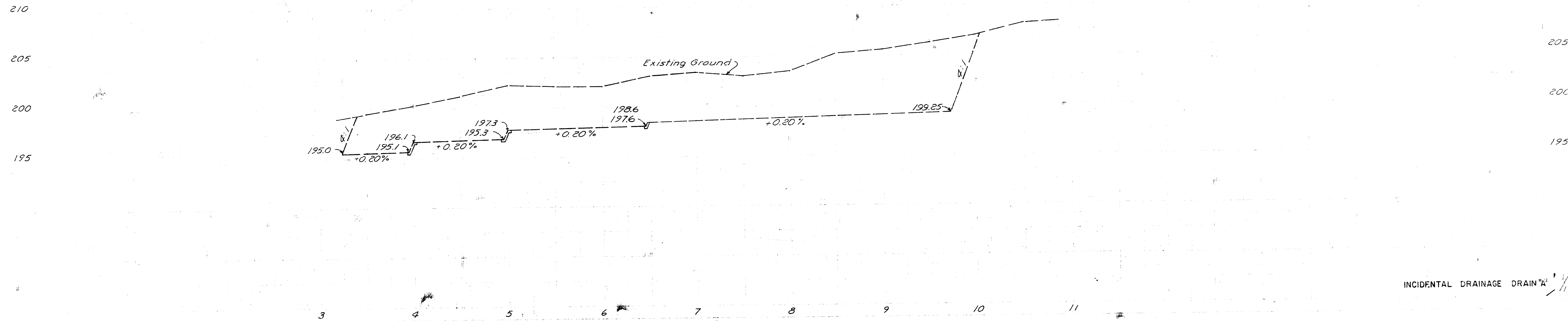
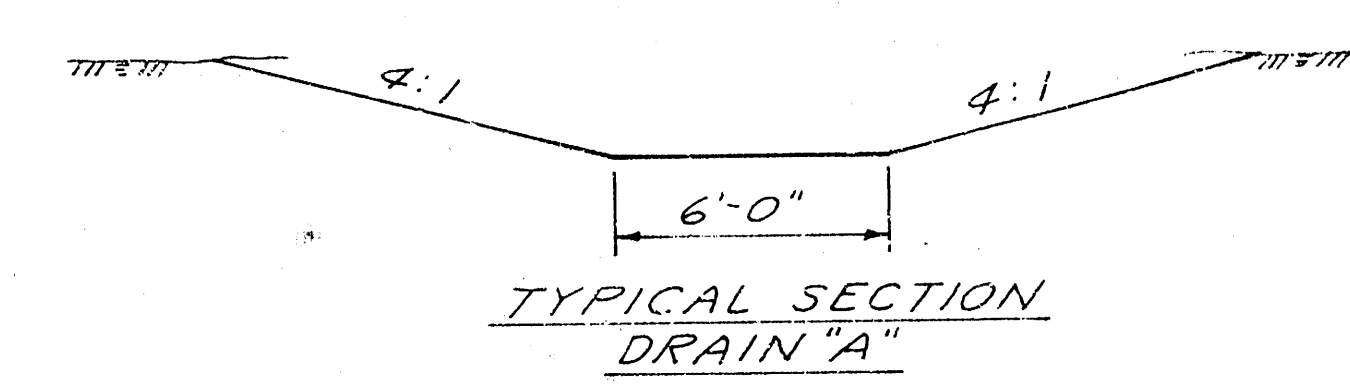
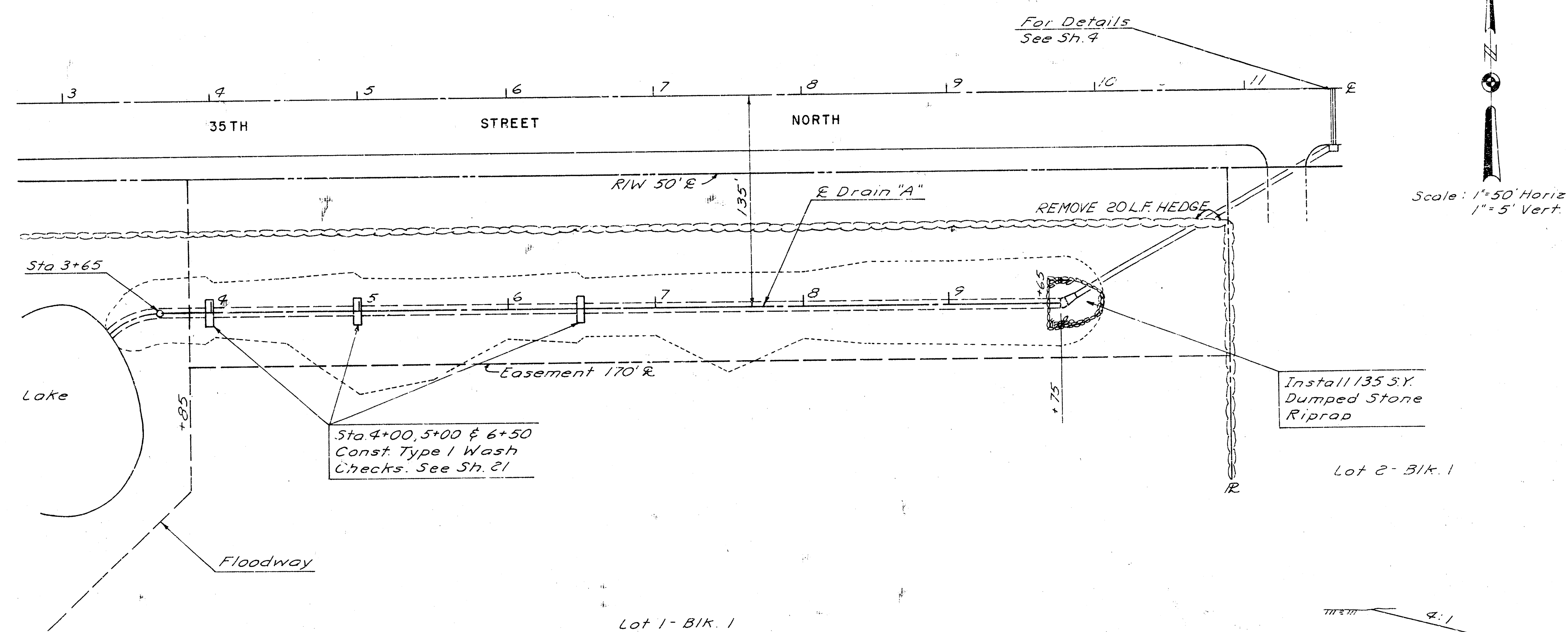
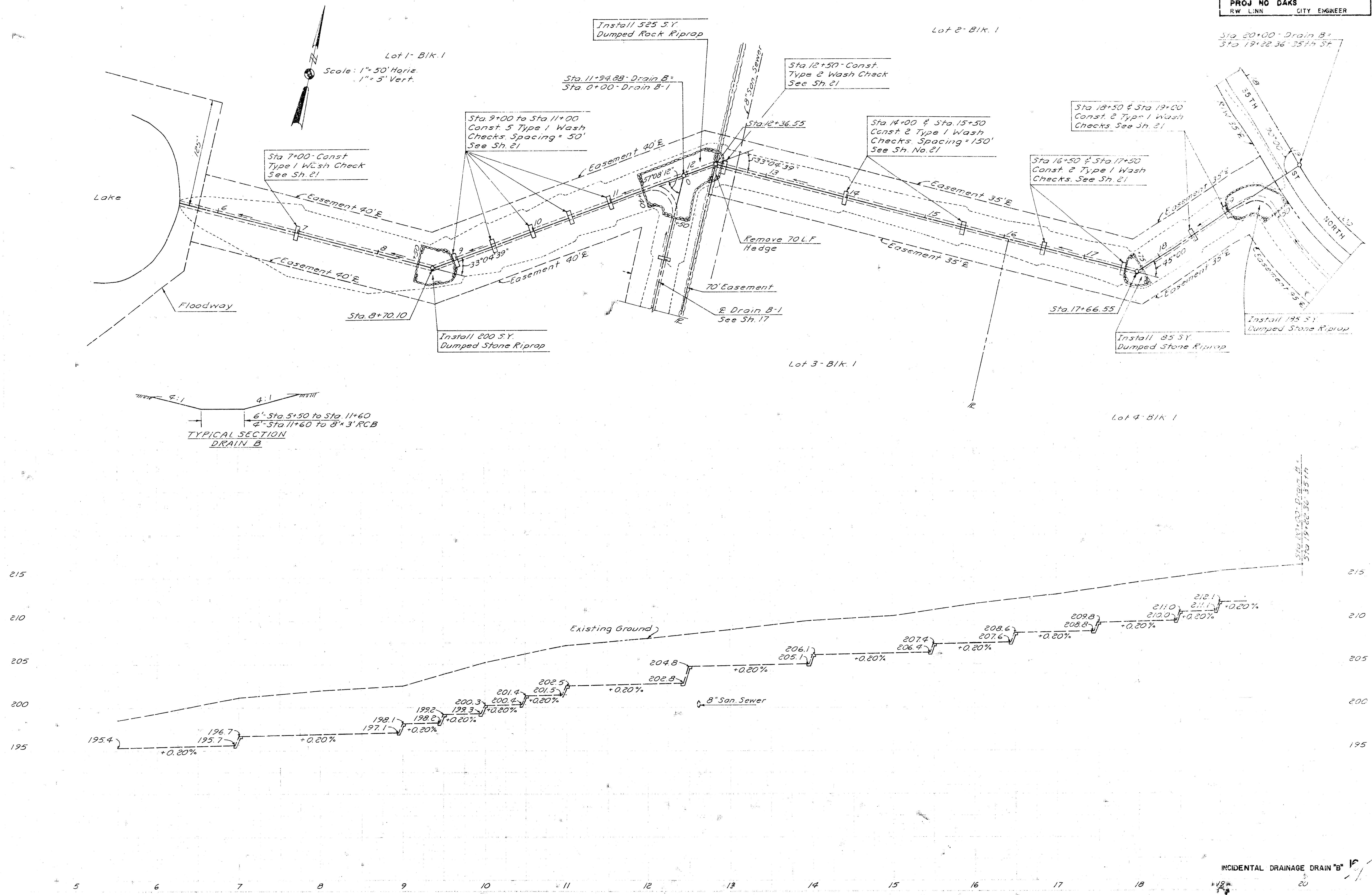
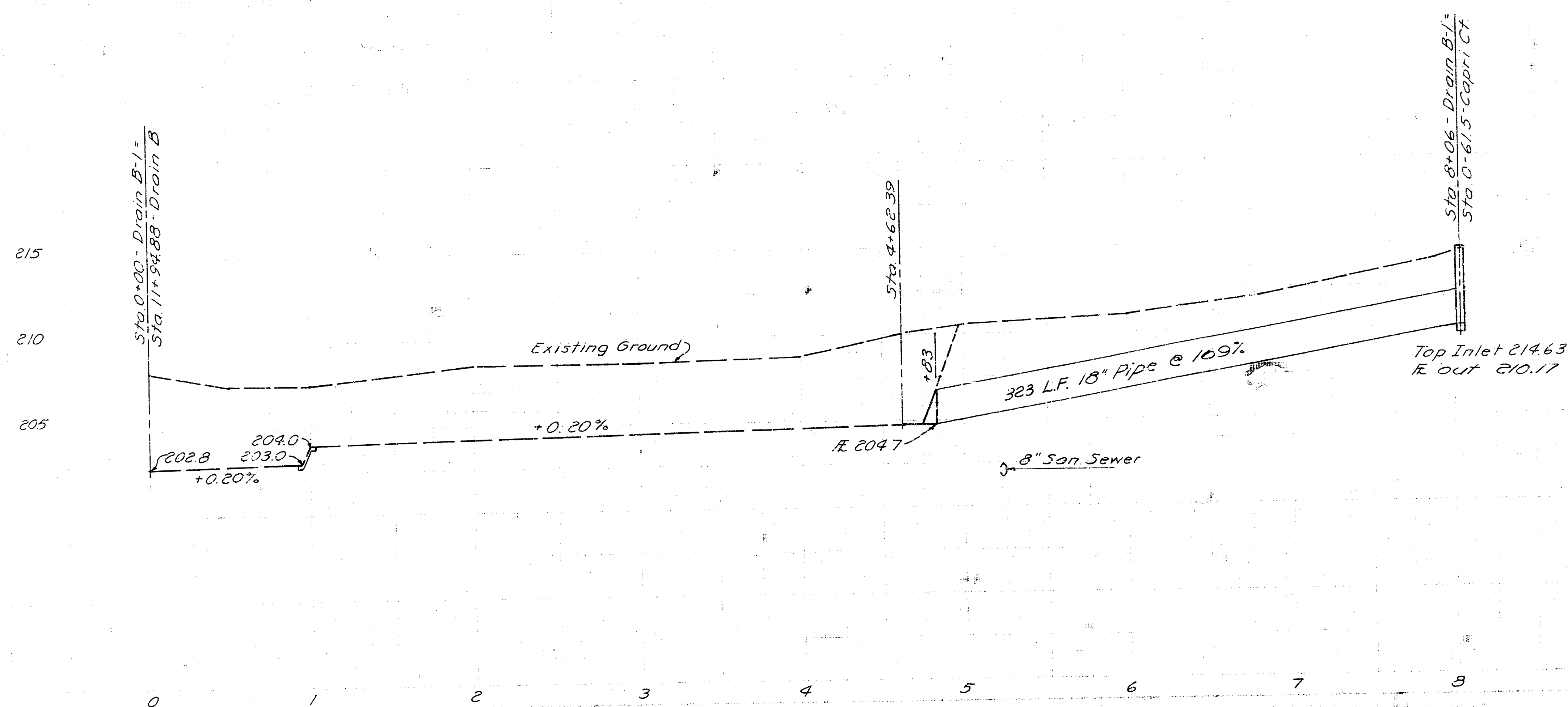
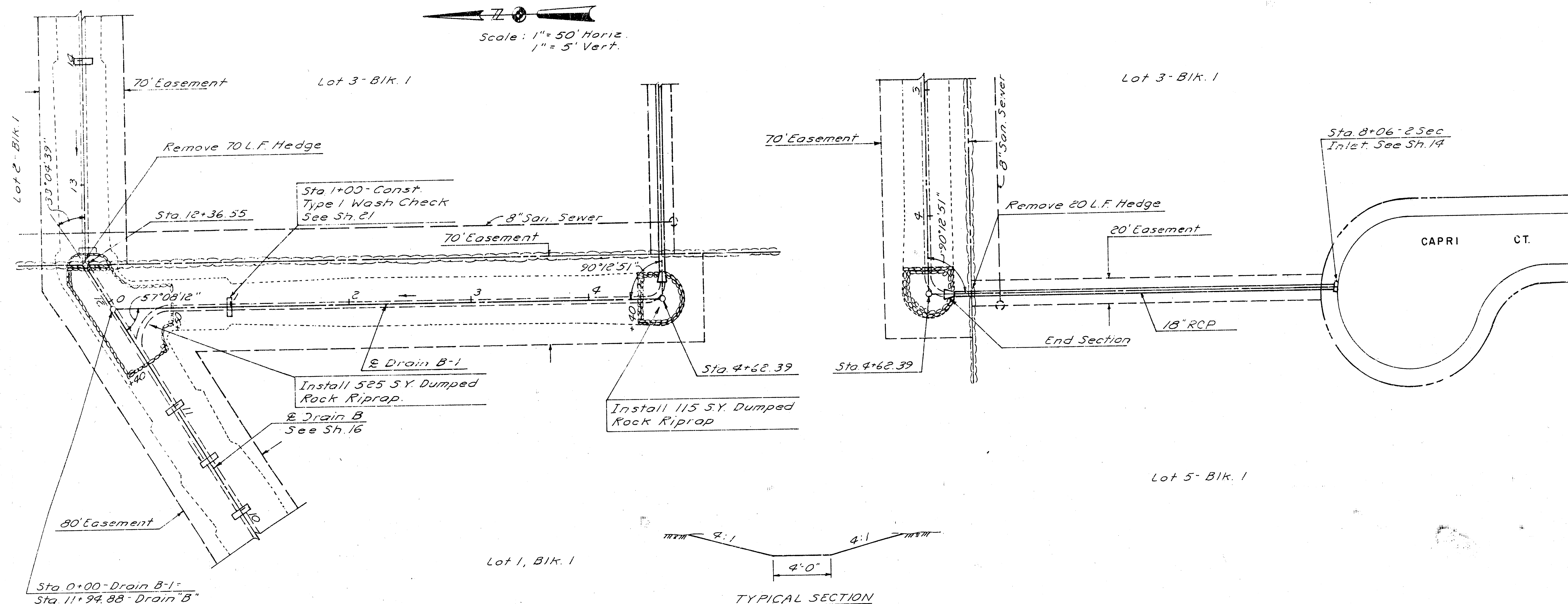


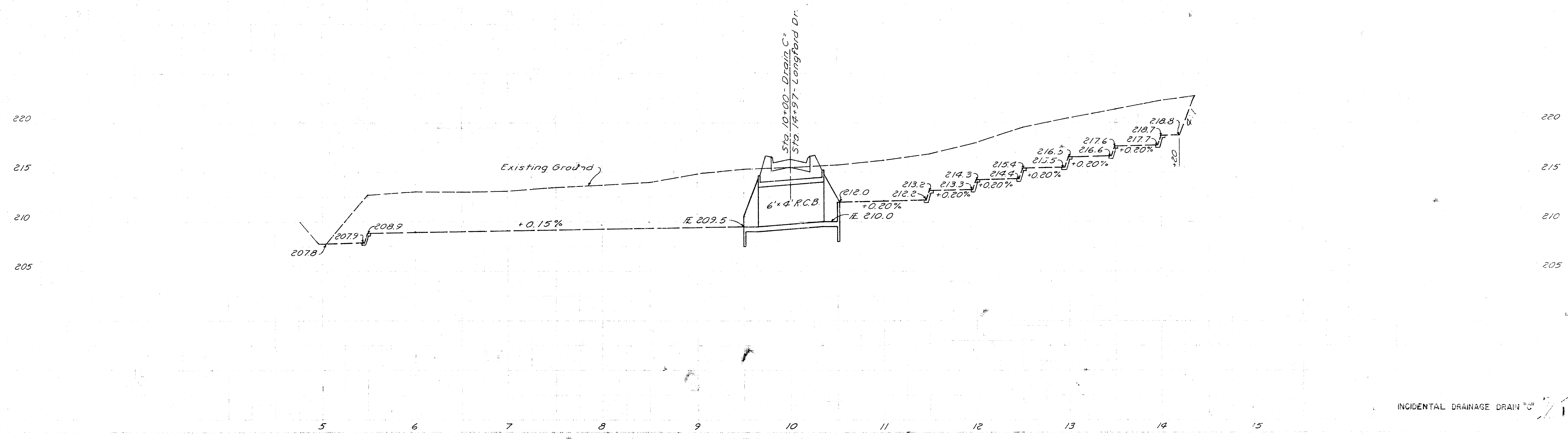
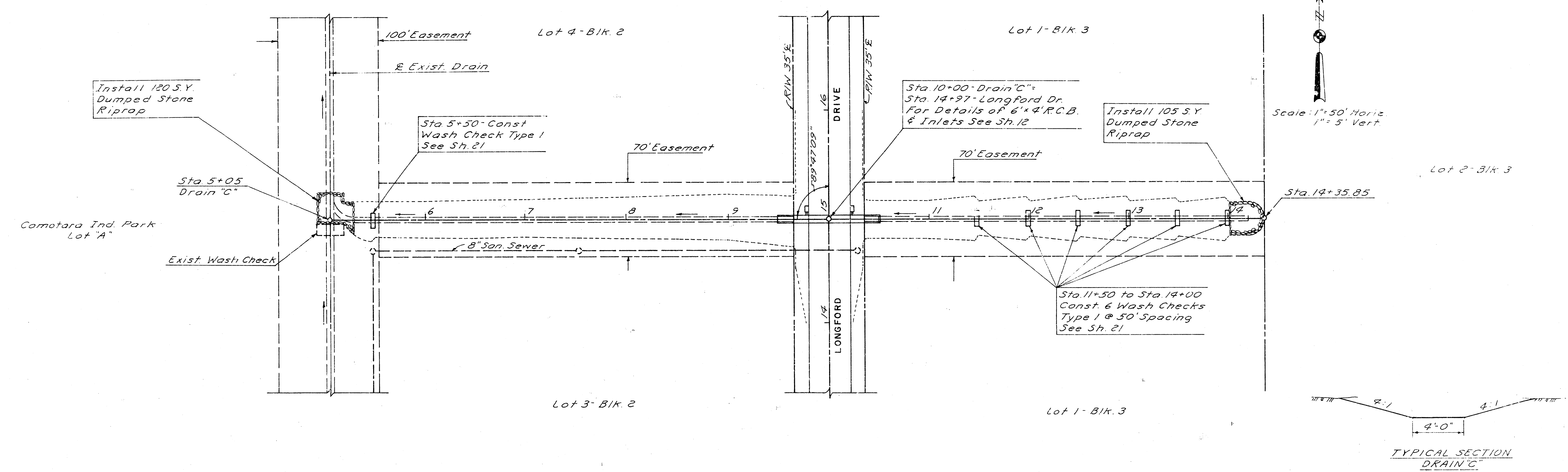
COMOTARA BUSINESS PARK
WICHITA, KS
PROJ NO 04K3
RW LINN DTY ENGINEER

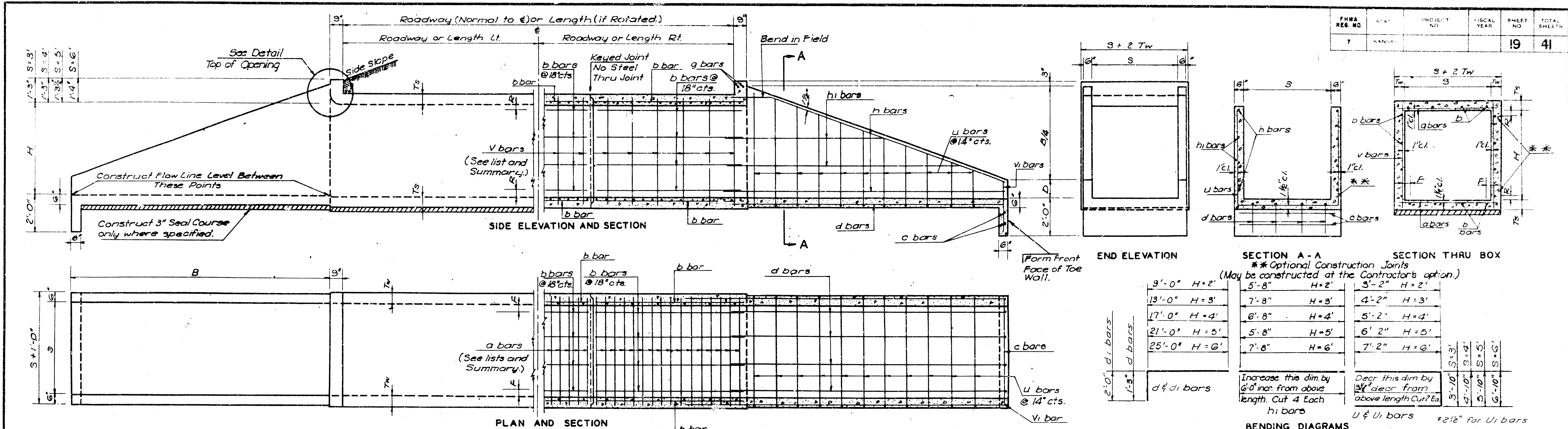


INCIDENTAL DRAINAGE DRAIN "A"









LIST OF BARS AND DIMENSIONS

3' x 2' Hdwl. Conc. (Two) 2.748 C.Y.									
Letter	B	D	F	H	R	S	Ts	Tw	
Dimension	8'-0"	1'-0"	9"	2'-0"	3"	3'-0"	*	6"	
Bar	a	b	c	d	g	h	hi	u	vi
No.	*	*	4	4	4	4	14	*	4
Length	3'-9"	*	3'-10"	3'-3"	3'-9"	9'-0"	*	*	2'-9"

3' x 3' Hdwl. Conc. (Two) 4.578 C.Y.									
Letter	B	D	F	H	R	S	Ts	Tw	
Dimension	8'-0"	1'-0"	9"	3'-0"	9"	3'-0"	*	6"	
Bar	a	b	c	d	g	h	hi	u	vi
No.	*	*	4	4	4	4	20	*	4
Length	3'-9"	*	3'-10"	4'-3"	3'-9"	13'-2"	*	*	2'-9"

4' x 2' Hdwl. Conc. (Two) 3.139 C.Y.									
Letter	B	D	F	H	R	S	Ts	Tw	
Dimension	8'-0"	1'-0"	9"	2'-0"	3"	4'-0"	*	6"	
Bar	a	b	c	d	g	h	hi	u	vi
No.	*	*	4	4	4	4	14	*	4
Length	4'-9"	*	4'-10"	10'-3"	4'-9"	9'-0"	*	*	2'-9"

4' x 3' Hdwl. Conc. (Two) 4.917 C.Y.									
Letter	B	D	F	H	R	S	Ts	Tw	
Dimension	8'-0"	1'-0"	9"	3'-0"	9"	4'-0"	*	6"	
Bar	a	b	c	d	g	h	hi	u	vi
No.	*	*	4	4	4	4	20	*	4
Length	4'-9"	*	4'-10"	10'-3"	4'-9"	13'-2"	*	*	2'-9"

4' x 4' Hdwl. Conc. (Two) 6.991 C.Y.									
Letter	B	D	F	H	R	S	Ts	Tw	
Dimension	8'-0"	1'-0"	9"	4'-0"	9"	4'-0"	*	6"	
Bar	a	b	c	d	g	h	hi	u	vi
No.	*	*	4	4	4	4	20	*	4
Length	4'-9"	*	4'-10"	10'-3"	4'-9"	17'-4"	*	*	2'-9"

5' x 2' Hdwl. Conc. (Two) 3.553 C.Y.									
Letter	B	D	F	H	R	S	Ts	Tw	
Dimension	8'-0"	1'-0"	9"	3'-0"	3"	5'-0"	*	6"	
Bar	a	b	c	d	g	h	hi	u	vi
No.	*	*	4	4	4	4	14	*	4
Length	5'-9"	*	5'-10"	10'-3"	5'-9"	9'-0"	*	*	2'-9"

5' x 3' Hdwl. Conc. (Two) 5.431 C.Y.									
Letter	B	D	F	H	R	S	Ts	Tw	
Dimension	8'-0"	1'-0"	9"	3'-0"	9"	5'-0"	*	6"	
Bar	a	b	c	d	g	h	hi	u	vi
No.	*	*	4	4	4	4	20	*	4
Length	5'-9"	*	5'-10"	10'-3"	5'-9"	13'-2"	*	*	2'-9"

5' x 4' Hdwl. Conc. (Two) 7.726 C.Y.									
Letter	B	D	F	H	R	S	Ts	Tw	
Dimension	8'-0"	1'-0"	9"	4'-0"	9"	5'-0"	*	6"	
Bar	a	b	c	d	g	h	hi	u	vi
No.	*	*	4	4	4	4	20	*	4
Length	5'-9"	*	5'-10"	10'-3"	5'-9"	17'-4"	*	*	2'-9"

5' x 5' Hdwl. Conc. (Two) 10.257 C.Y.									
Letter	B	D	F	H	R	S	Ts	Tw	
Dimension	8'-0"	1'-0"	9"	5'-0"	9"	5'-0"	*	6"	
Bar	a	b	c	d	g	h	hi	u	vi
No.	*	*	4	4	4	4	20	*	4
Length	5'-9"	*	5'-10"	10'-3"	5'-9"	21'-6"	*	*	2'-9"

6' x 2' Hdwl. Conc. (Two) 3.968 C.Y.									
Letter	B	D	F	H	R	S	Ts	Tw	
Dimension	8'-0"	1'-0"	9"	2'-0"	3"	6'-0"	*	6"	
Bar	a	b	c	d	g	h	hi	u	vi
No.	*	*	4	4	4	4	14	*	4
Length	6'-9"	*	6'-10"	10'-3"	6'-9"	9'-0"	*	*	2'-9"

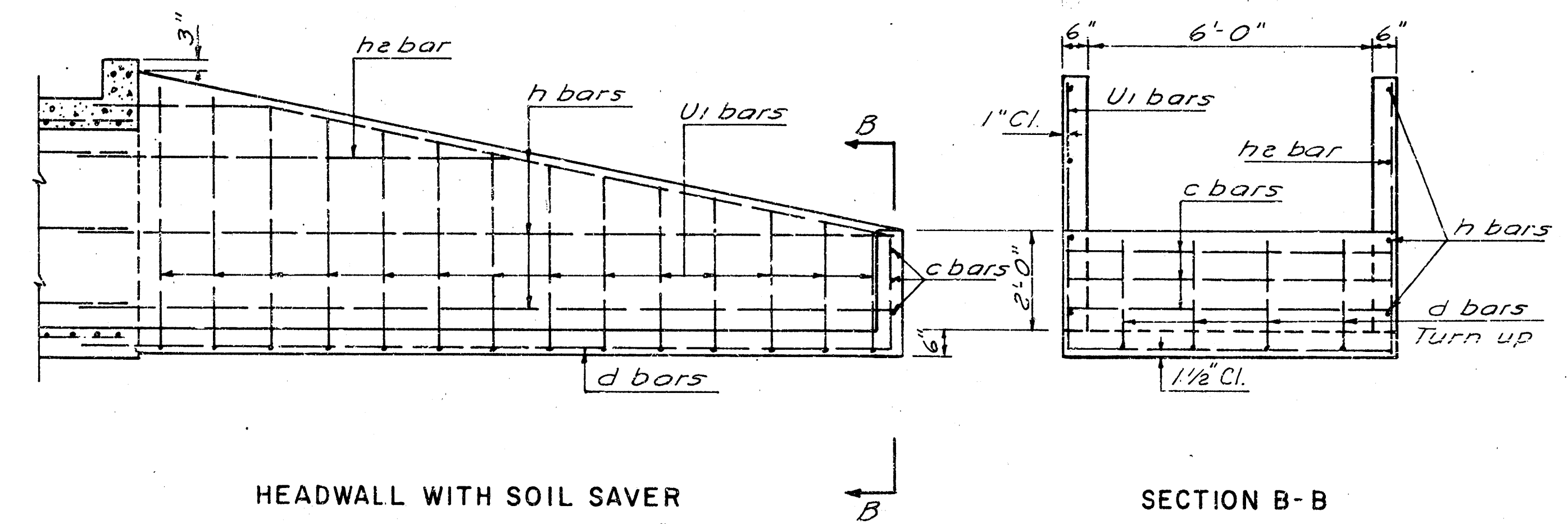
6' x 3' Hdwl. Conc. (Two) 6.067 C.Y.									
Letter	B	D	F	H	R	S	Ts	Tw	
Dimension	8'-0"	1'-0"	9"	3'-0"	9"	6'-0"	*	6"	
Bar	a	b	c	d	g	h	hi	u	vi
No.	*	*	4	4	4	4	20	*	4
Length	6'-9"	*	6'-10"	10'-3"	6'-9"	13'-2"	*	*	2'-9"

6' x 4' Hdwl. Conc. (Two) 8.763 C.Y.									
Letter	B	D	F	H	R	S	Ts	Tw	
Dimension	8'-0"	1'-0"	9"	4'-0"	9"	6'-0"	*	6"	
Bar	a	b	c	d	g	h	hi	u	vi
No.	*	*	4	4	4	4	20	*	4
Length	6'-9"	*	6'-10"	10'-3"	6'-9"	17'-4"	*	*	2'-9"

6' x 5' Hdwl. Conc. (Two) 11.153 C.Y.									
Letter	B	D	F	H	R	S	Ts	Tw	
Dimension	8'-0"	1'-0"	9"	5'-0"	9"	6'-0"	*	6"	
Bar	a	b	c	d	g	h	hi	u	vi
No.	*	*	4	4	4	4	20	*	4
Length	6'-9"	*	6'-10"	10'-3"	6'-9"	21'-6"	*	*	2'-9"

6' x 6' Hdwl. Conc. (Two) 14.144 C.Y.									
Letter	B	D	F	H	R	S	Ts	Tw	
Dimension	8'-0"	1'-0"	9"	6'-0"	9"	6'-0"	*	6"	
Bar	a	b	c	d	g	h	hi	u	vi
No.	*	*	4	4	4	4	20	*	4
Length	6'-9"	*	6'-10"	10'-3"	6'-9"	25'-8"	*	*	2'-9"

* See Culvert Summary for these values. * See Bending Diagrams for these lengths.



CULVERT SUMMARY

Station	Size	Crown Grade Elev.	Flow Line		Horizontal Roadway		Degree of Rotation	Length along Box		No. of Sect.	Section Length	Ts	Tw	"U" Bars	"b" Bars	"v" Bars	Design Fill Ft.	Class A Conc. Cu. Yds.	Reinf. Steel Lbs.
			Lt.	Rt.	Lt.	Rt.		Lt.	Rt.					No. Size Spac.	No. Length	No. Size Spac. Length			
14+97 (Longford Dr.)	6' x 4'	216.35	209.5	210.0	34'3"	34'3"	90°	34'3"	34'3"	2	35'0"	7"	6"	200 5 6"	28 34'9"	36 4 15" 4'11"	10'	47.20	3210

GENERAL NOTES

LOADING: H-20-44 AASHTO Specifications, Edition of 1969.

UNIT STRESSES: $f_c = 1200$ psi; $f_s = 3000$ psi; $f_s = 20,000$ psi.

Class A Concrete shall be used thruout.

Bevel all exposed edges with a $3/4"$ triangular molding, unless otherwise noted.

All dimensions are to center-line of bar unless otherwise noted.

Keyed joint shall be provided as shown on 3', 4', 5' and 6' span culverts which are 40' or more in box length. The number of joints shall be as follows: 40' to 80' - 1 joint; 80' to 120' - 2 joints; 120' to 160' - 3 joints; etc.

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 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 bid for the various items involved.

See Standard No. 671.1 (Woven Wire) or Standard No. 672.1 (Barbed Wire) for details of attachment to culvert wings.

Where Soil Saver is specified, rotate d bars, omit tailwall and construct rear wall on upstream end of culvert, bend vi bars into floor.

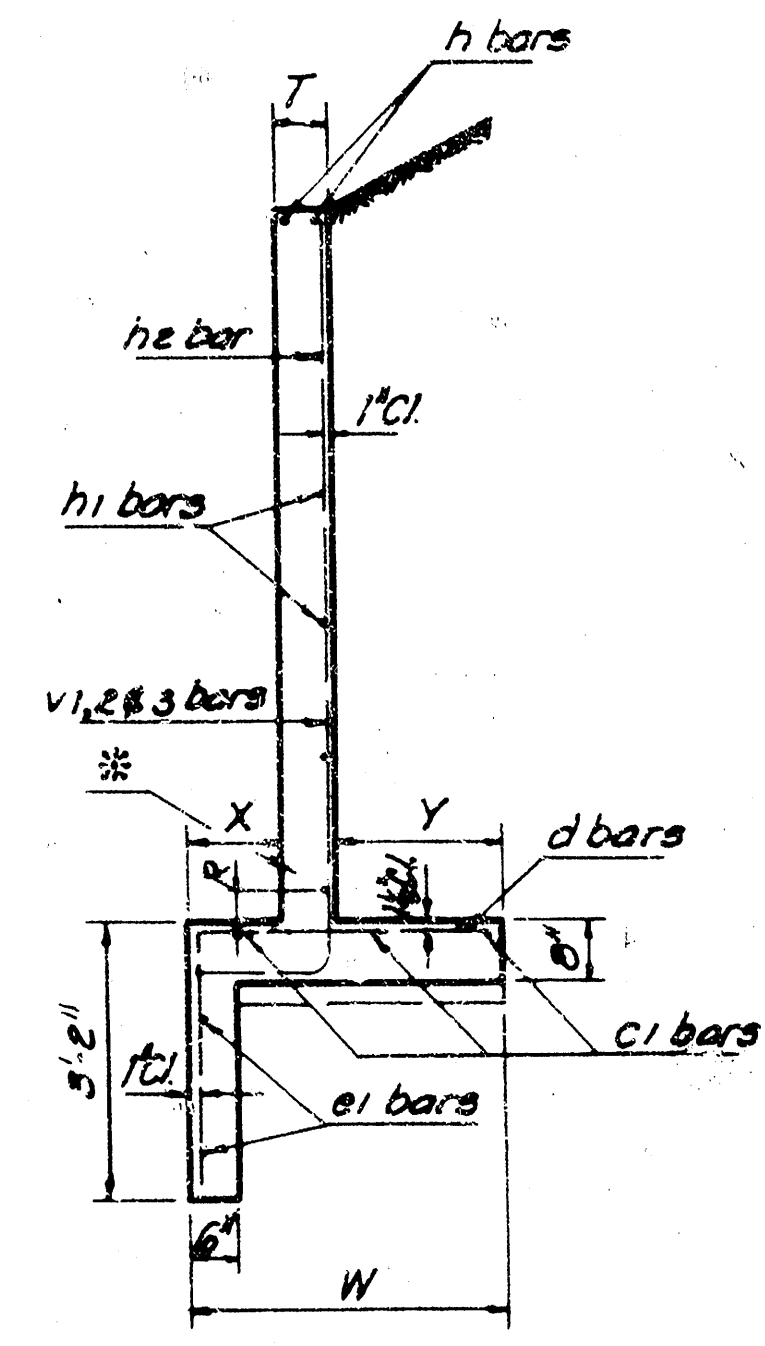


ELEVATION AND SECTION

Note: All keyed joints and v bars shall be placed vertical.



SECTION B-B



SECTION A-A

* Optional Construction Joints
(May be constructed at the Contractor's option.)

PLAN AND SECTION

GENERAL NOTE

LOADING: H20-44 AASHTO Specifications, Edition of 1969.
UNIT STRESSSES: $f'_c=3,000$ p.s.i.; $f'_t=4,000$ p.s.i.; $f_s=20,000$ p.s.i.

Class A Concrete shall be used throughout. Bevel all exposed edges with a $\frac{3}{4}$ " triangular mauling unless otherwise noted.

All dimensions relative to reinforcing steel are to center line of bar unless otherwise noted.

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.

Floating Apron shall be constructed only between downstream wings in locations subject to scour where specified on the Plans or by the Engineer.

Wire reinforcing mesh shall be electrically welded and shall be composed of No. W14 wire at 6" centers each way. Weight of reinforcing mesh shall be classified as pounds of reinforcing steel.

Payment for additional quantities resulting from including Seal Course and or Floating Apron as a change in the original plans, shall be made at the Unit Price bid for the various items involved.

Coarse aggregate shall be deposited behind each weep-hole to occupy a space extending 15" in all directions above the weep-hole flowline. This work shall not be paid for directly, but shall be considered a part of the excavation work.

Keyed joints shall be provided as shown on all culverts where the box length is 40' or more. These joints shall be spaced so as to divide the box into sections of equal length. The number of joints to be used shall be as follows; 40' to 60'-1 joint; 60' to 120'-2 joints; 120' to 160'-3 joints, etc.

The quantities shown in Culvert Summary include Apron and or Soil Saver quantities if they are to be constructed.

See Standard No. G711 (Woven Wire) or Standard No. G712 (Barbed Wire) for details of attachment to culvert wings.

Where Soil Saver is specified, omit toe wall on apron and construct weir wall on upstream end of culvert.

BENDING DIAGRAMS

Design Note: Length $b_1 = b + X + 2 \cdot 10''$

CULVERT SUMMARY

[illegible]

LIST OF BARS AND DIMENSIONS																	
Capri Lane: 20'x75' 8'x3'x70'																	
Apron Steel(One)		15 lbs		Seal Course		5.92 CY		Model Concrete (One)		6.166 CY							
Apron Concrete(One)		11 CY		Apron Seal Course		0.66 CY		Concrete for Ft. of Box		0.555555 CY							
Letter	A	B	C	H	R	T	78	W	X	Y	3or	a	b	c	d	e	f
Dimension	8'3"	5'10"	8'5'9"	3'0"	9"	6"	8"	6"	2'6"	1'0"	1'0"	Space 6'6"16"					
3or	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q
Number	260	32	18	2	12	12	4	4	4	8	8	96	8	12	13	3	
Size	#6	#4	#4	#4	#4	#4	#5	15	#4	#4	#3	#2	#4	#2	#2	#2	
Length	6'5'9"	3'4"	3'9"11"	1'10"10"	5'0"	9'0"	6'3"9"11"	9'3"	9'6"	4'11"5'0"	3'10"	3'8"	1'9"2"				

8' x 4' x																				
Apron Steel (One) 34 Los Seal Course															CY		Hdwl Concrete (One)		3.1176	
Apron Concrete (One) 2553CY Apron Seal Course															CY		Concrete Abr. Flt Box		CY	
Left	A	B	C	H	R	T	TS	TW	W	X	Y	Bar	a	v						
Dimension	103	7-3	59	92	12	40	6'	6'	26'	10'	10'	Space								
Bar	a	b	c	d	e	e	e	e	e	e	e	v	v	v						
Number	12	2	12	44	4	8	4	8	8	3	3		12	12						
Size	#4	#4	#4	#4	#4	#4	#4	#4	#4	#4	#4	#4	#4	#4						
Length				110'	12'	52'	90'	103'	85'	41'	3'	116'	3'	11'	4'					

8'x5'x														
Apron Steel(One)	43 Lbs	Seal Course										CY plain Concrete (Six)	11.662 CY.	
Apron Concrete(One)	3.18 CY	Apron Seal Course										CY Concrete Per Ft. of Box		CY.
Letter	A	B	C	H	R	T	1/5	1/6	W	X	Y	Bar	a	v
Dimension	12	3	5	8	9	9	2 1/2	10	1	1	1	Saddle		
Bar	a	b	c	d	e	f	g	h	i	h	h		v	v
Number		12	8	12	52	4	8	4	12	4			16	12
Size		#3	#4	#4	#4	#4	#4	#5	#4	#4			#6	#6
Length		11'0"	14	5	5'	9'0"	12	8'	15	5	6	7	6'	58"

8'x6'x																				C'Y		Wt'd Concrete (Cm)		15.079 C.Y.	
Apron Steel (Cm)										52 Lbs					Seal Course					C'Y					
Apron Concrete (Cm)										3.615 C.Y.					Apron Seal Course					C'Y					
Letter		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R						
Dimension		14'3"	16'5"	16'2"	16'0"	6'	8'	9'	6'x	3'0"	10'	15'	6"	Space											
Bar		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r						
Number		12			2	12	GO		4	8	4	12	4												
Size		#4			#4	#4	#4	#4	#4	#4	#4	#4	#4	#4	#4	#4	#4	#4	#4						
Length		11'0"			17'3"	5'3"	9'0"	14'3"	9'0"	16'0"	10'0"							7'0" 5'3" 5'6"							

															8'x7x									
Apron Steel(One)					G-3 Lbs Seal Course					CY Hand Concrete (Two)										19.430 CY.				
Apron Concrete(One) 4.630CY					Apron Seal Course					CY Concrete Rein Ft of Box										C.				
Letter		A	B	C	D	H	R	T	W	X	Y	Bar	a	v										
Dimension		16'-5"	11'-5"	5'-6"	4'-2"	7'-8"	6'-7"		5'-5"	7'-0"	1'-8"	Space												
Bar	a	b	d1	c	d	e	a1	g	h	n1	ne	V	v1	ve	v3									
Number			12	1C	G3	4	8	4	16	4			20	16	32									
Size	#4	#4	#4	#4	#4	#4	#5	#5	#4	#4			#4	#4	#4									
Length			14'-0"	10'-6"	6'-1"	8'-11"	16'-3"	8'-10"	18'-5"	17'-7"	8'-10"		8'-1"	6'-5"	3'-5"									

8'x8'x																		
Apron Steel (One)		74 Lbs Seal Course										C.Y. Haul Concrete (Two)		24.583 C.Y.				
Apron Concrete (One)		5.400 C.Y.										Apron Seal Course		C.Y. Concrete For Flat Box		C.Y.		
Letter	A	B	C	H	R	T	Ta	W	X	Y			Bar	a	v			
Dimensions	18'-5"	4'-10 1/2"	5'-3 1/2"	4'-10"	8'-0"	3'-0"	7'-6"		3'-10"	1'-2 1/2"	5'-0"			Space				
Bar	a		b	c	d	e	f	g	h	i	ne		v	vi	ve	vs		
Number			12	2	12	76	4	6	6	16	4		20	20	36			
Size		#6	#4	#4	#4	#4	#4	#4	#5	#5	#4	#4		#4	#4	#4		
Length			110'	22'-0"	6'-0"	8'-0"	18'-3"	9'-0"	20'-3"	19'-5"	15'-3"		3'-1"	7'-0"	4'-0"			

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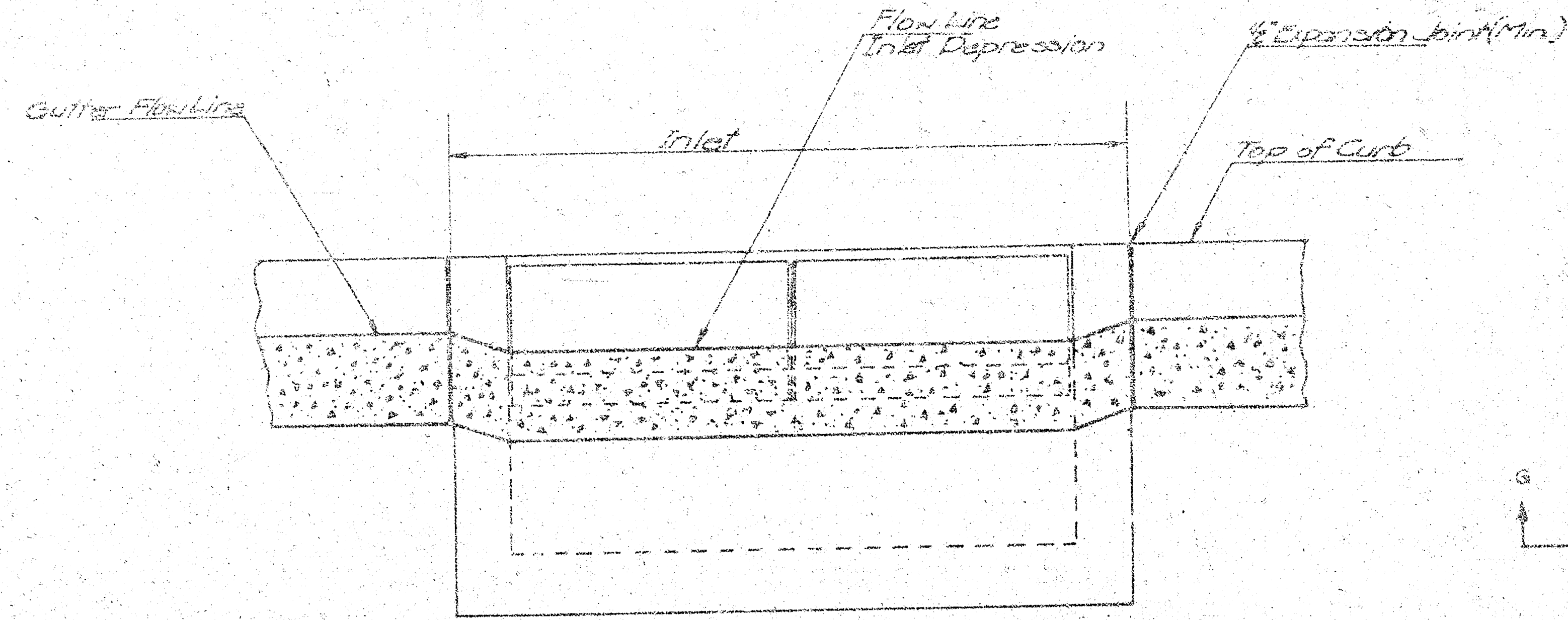
2	9-10-73	Wire Reins. Mesh Changed to W1.4 W.L.H.	K.C.
2	10-27-72	Wire Size AASHO Des. M32-72 W.L.H.	K.C.
1	5-19-72	Removed 12' Uniform Bbl. Sections	W.L.H.
NO.	DATE	REVISIONS	BY

STATE HIGHWAY COMMISSION OF KANSAS

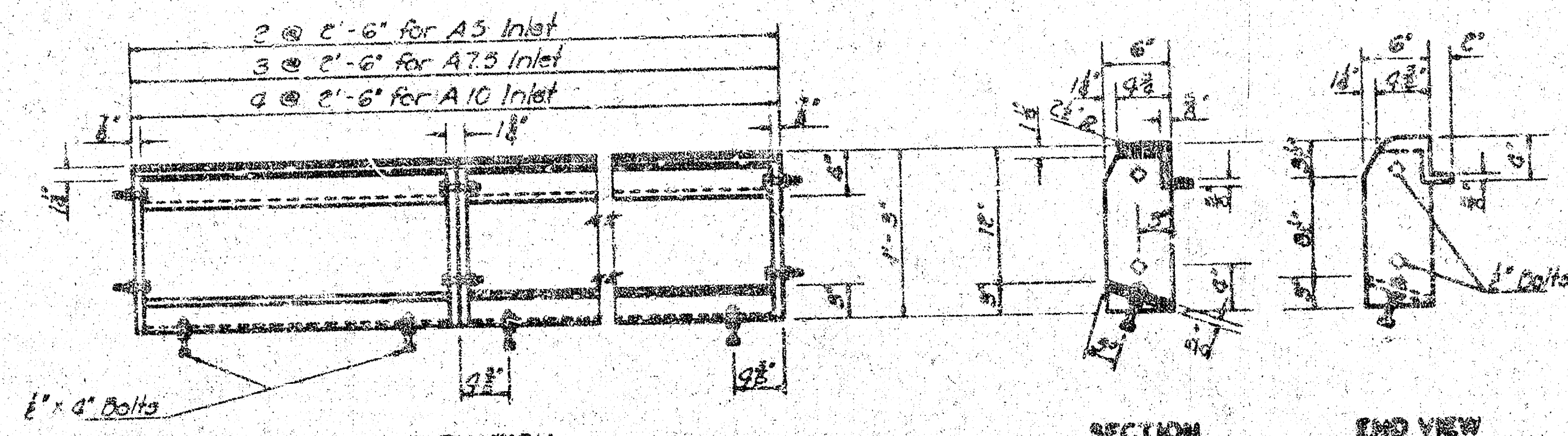
R.C. BOX CULVERT
8 FT. SPAN

STD. NO. 315.2

SHEET NO	OF	SCALE	APP'D <i>H. J. Hancock</i>
DESIGNED <i>Boynton</i>	DETAILED <i>Richards</i>	QUANTITIES <i>Richards</i>	TRACED <i>Boor</i>
DESIGN CK <i>Latham</i>	DETAIL CK <i>Schwartz</i>	QUAN CK <i>Clennon</i>	TRACE CK <i>H</i>

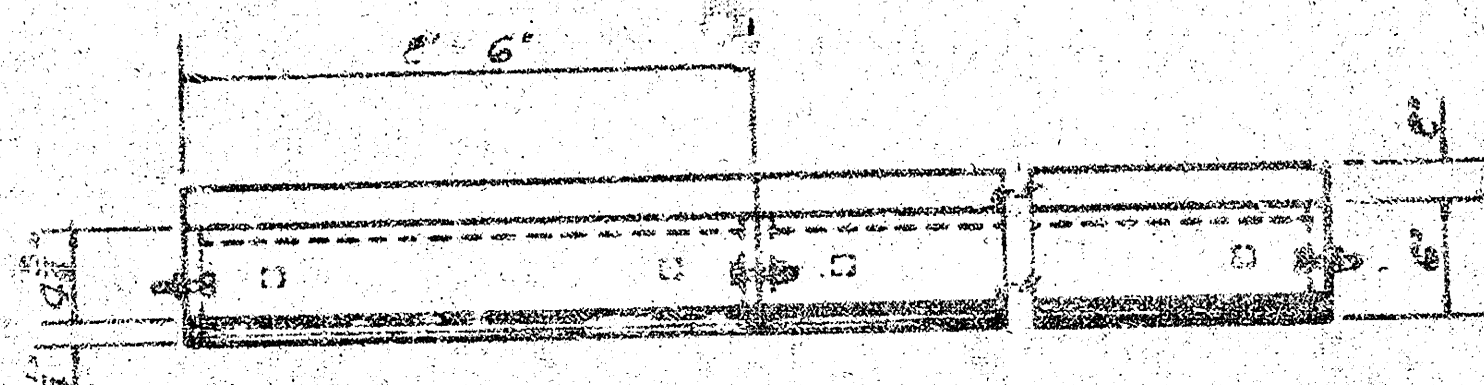


SECTION G-G



ELEVATION

TYPES A5-1, A7.5-1 & A10-1



PLAN

TYPES A5-1, A7.5-1 & A10-1

Weight: 129 Lbs. per 2'-6" section

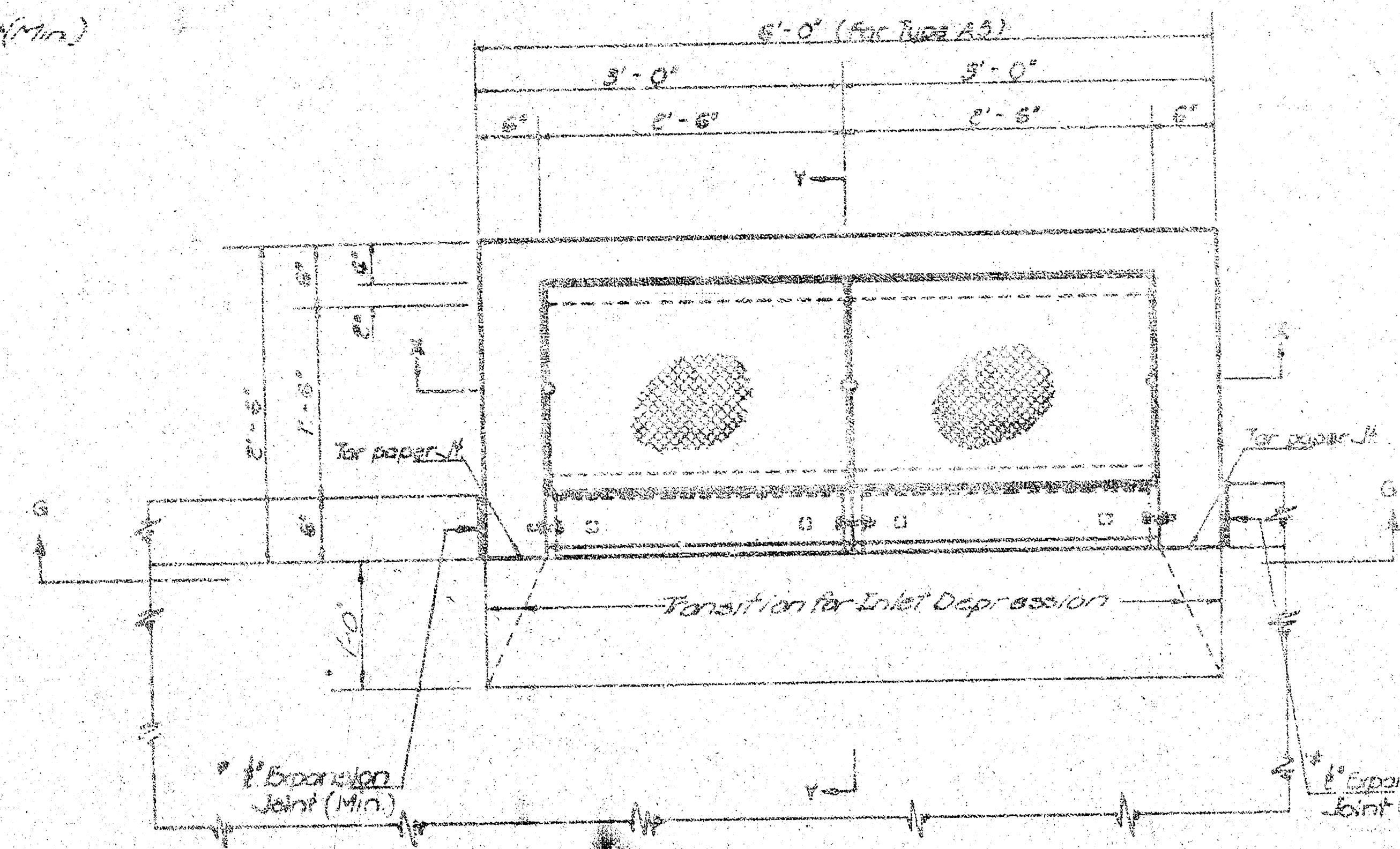
DETAILS OF CURB CASTING (IRON)

NOTE: All bolts and nuts shall be galvanized and meet the requirements of sub-section 1006.14 of the Standard Specifications. All weights of castings are calculated weights with no allowance for fillets, overruns, anchor bars and bolts. Weights of cast iron as shown on this sheet are minimum. Heavier weights of cast iron may be used, but payment for cast iron shall be made on the weight as shown on this sheet. Minor variations of design will be permitted on castings.

Note: All castings shall be gray iron and shall comply with ASTM A-48 Class 25.3.

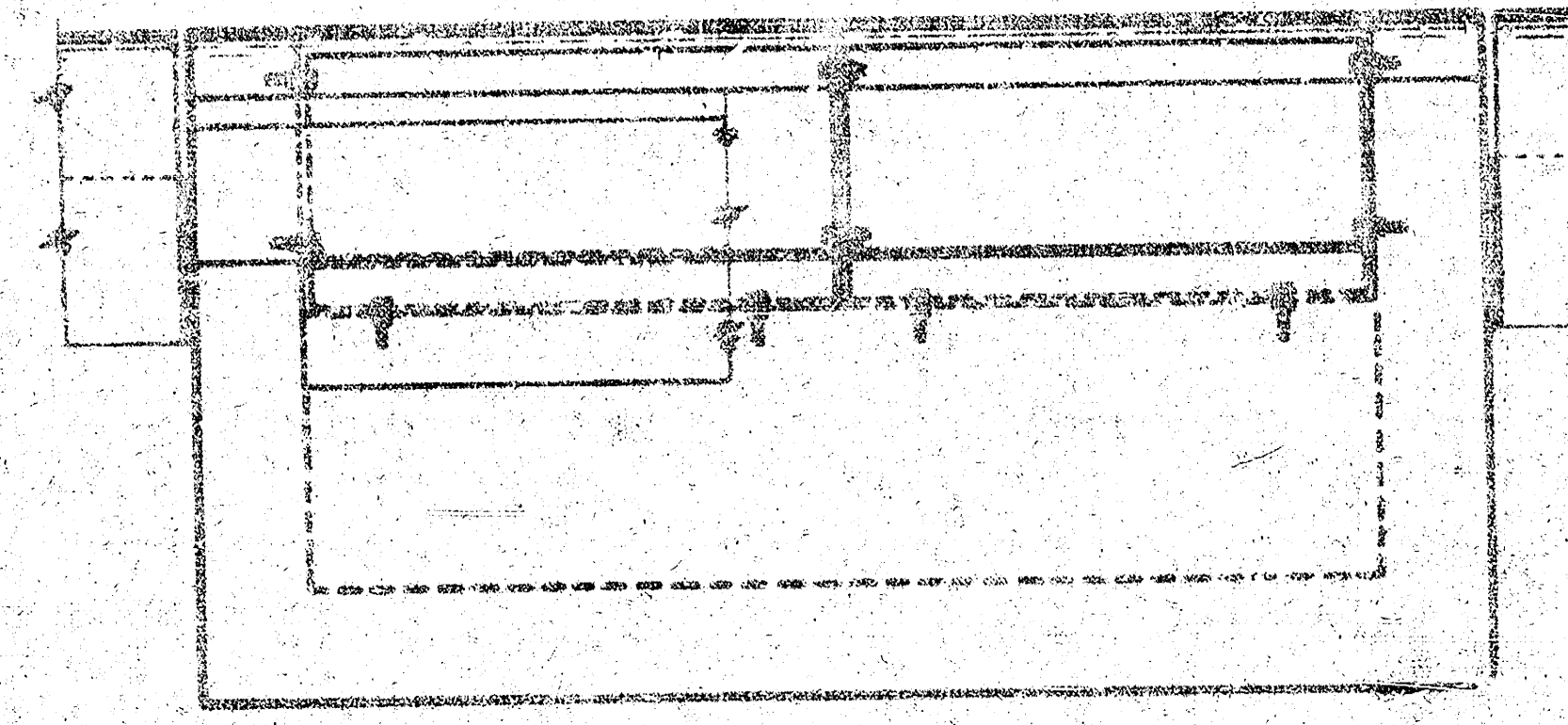
Note: Use Class A Concrete throughout. Bevel all exposed edges with a 3/4" triangular moulding. Reinforcing bars shall be bent around pipe. No deductions in concrete quantities shall be made for pipe openings.

At the contractor's option Class A Concrete (A5) may be used throughout, but payment shall be made as for Class A Concrete miscellaneous. A small opening may be required in the back of the inlet to drain a low area, if ordered by the

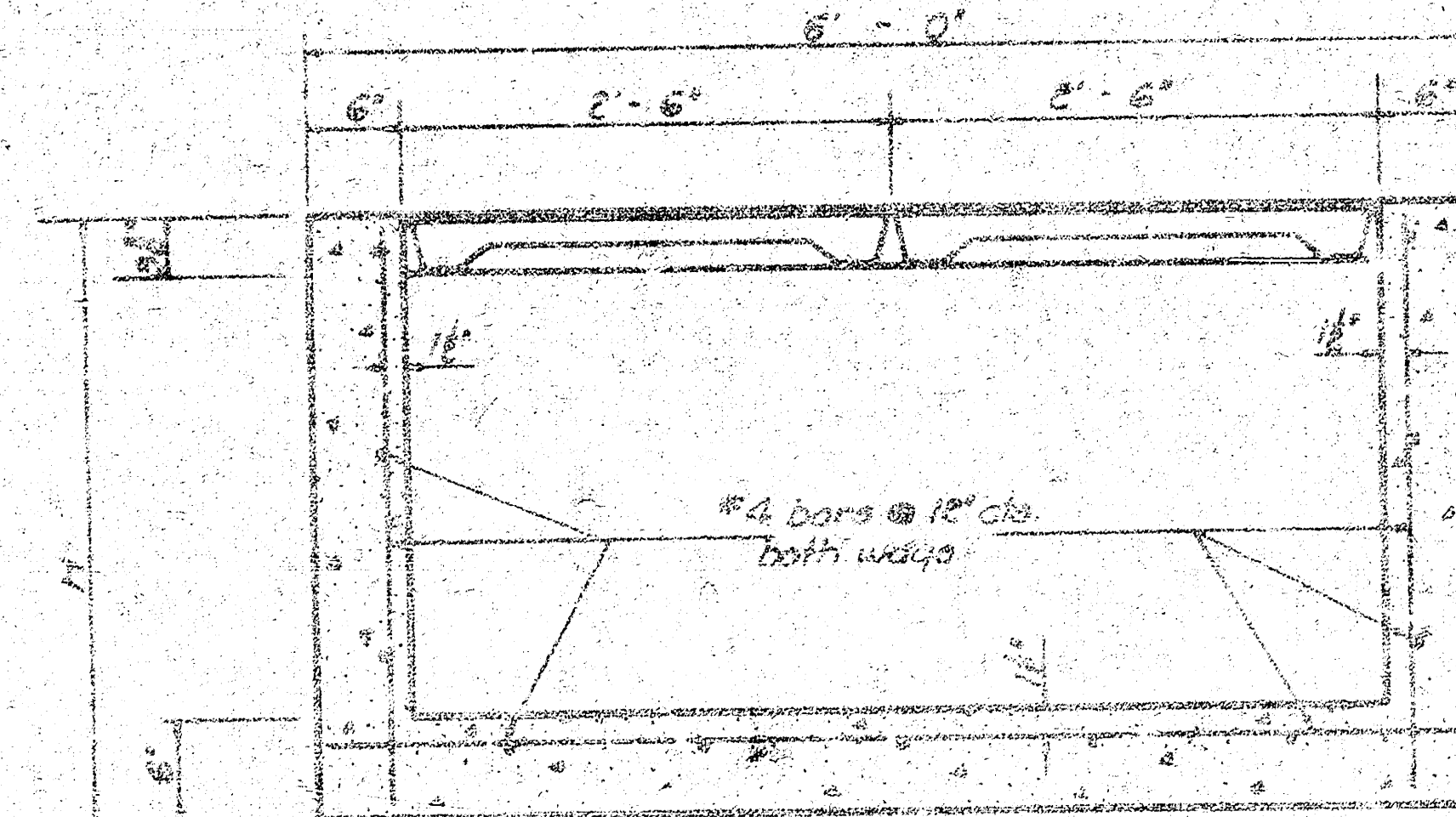


PLAN

* Hot or cold poured joint sealing compound, or Premoulded Exp. Jt. Filler (Non-extruding, Type B).

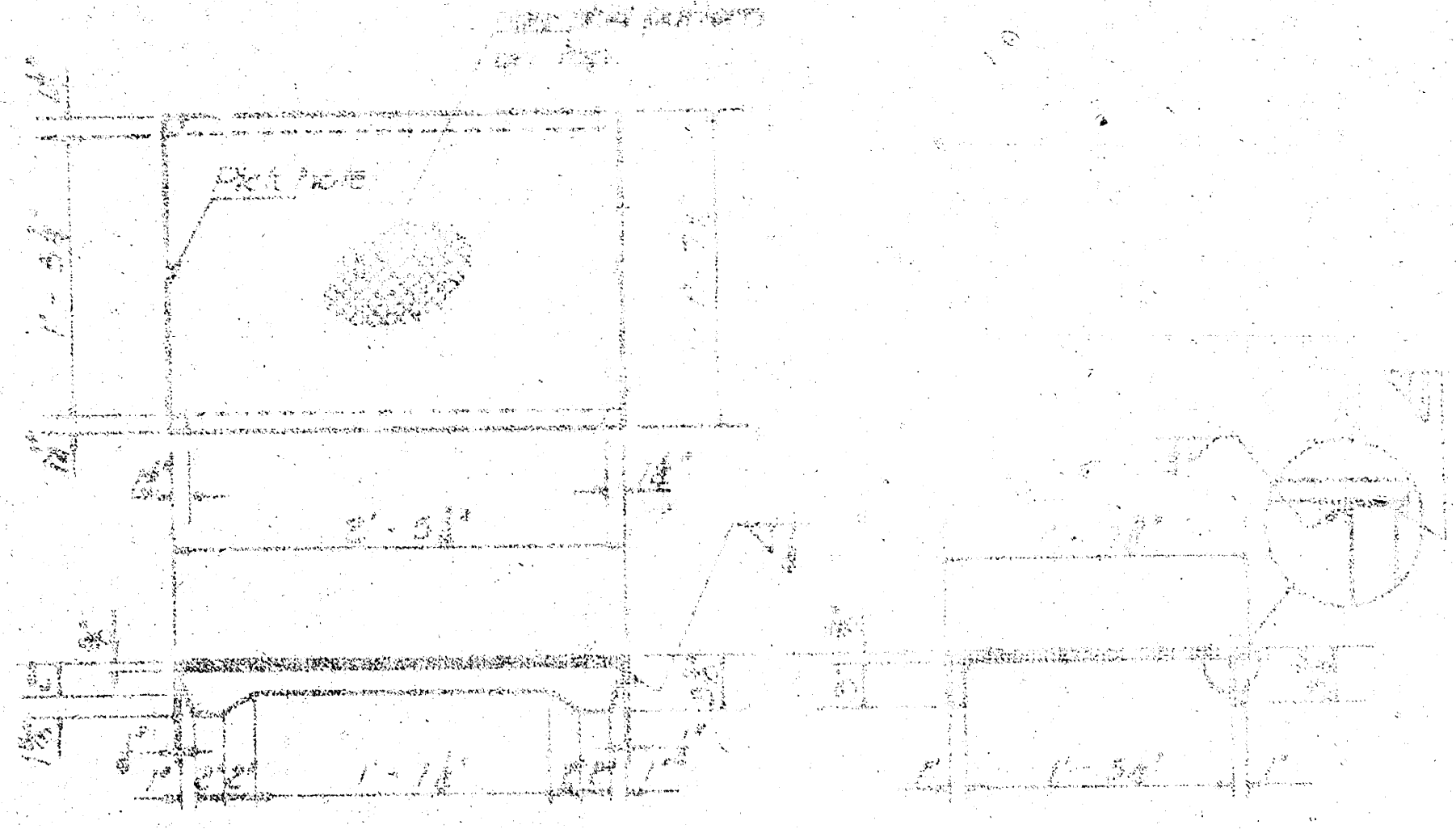


FRONT ELEVATION



SECTION X-X

Engineer. Reinforcing bars will extend through the opening. No deduction in concrete quantities will be made for this opening. When so ordered by the Engineer the top of the inlet shall be sloped slightly to approximately fit the ground line or other conditions. Structural steel cover plate and all exposed cast iron surfaces shall be painted either in the shop or in the field with one coat of a zinc dust paint, followed by two field coats of aluminum paint.

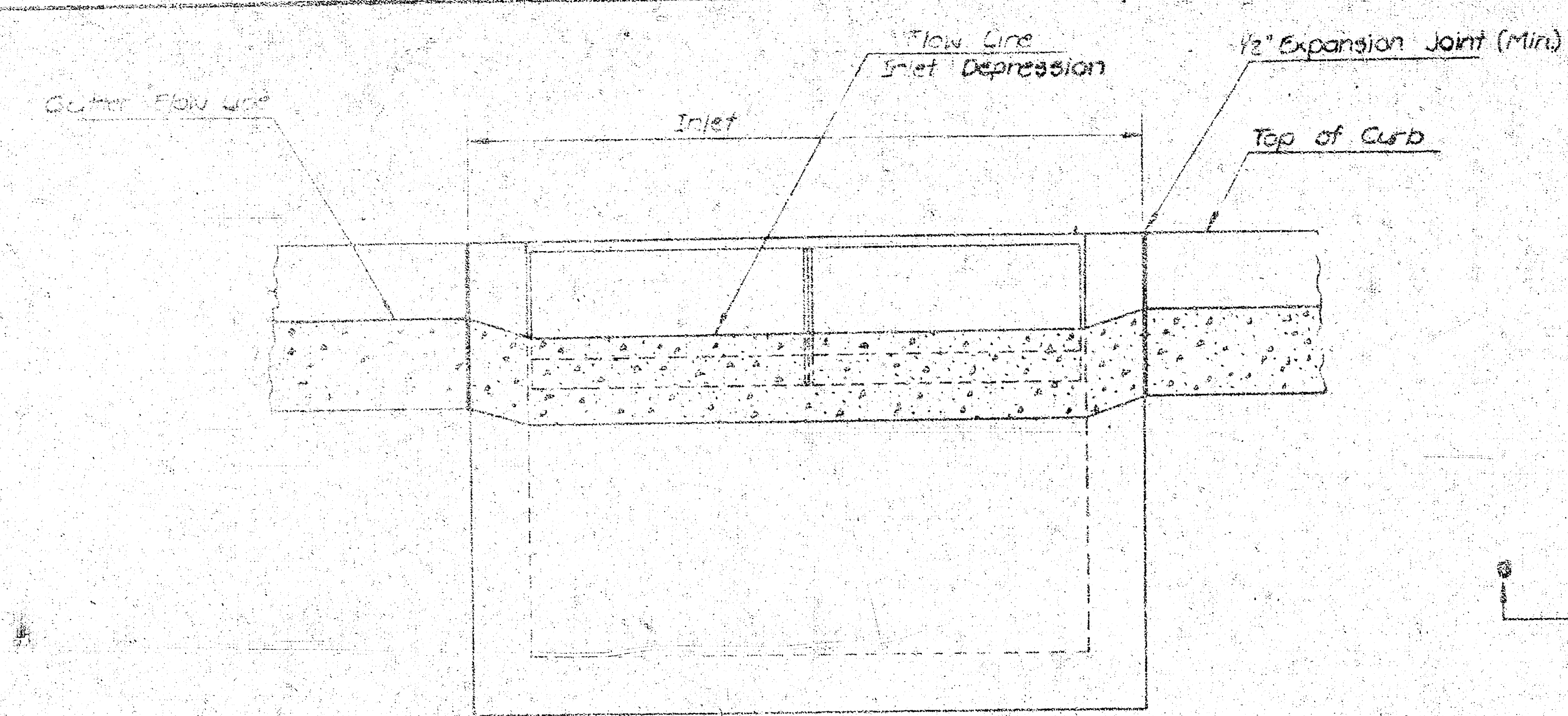


SECTION Y-Y

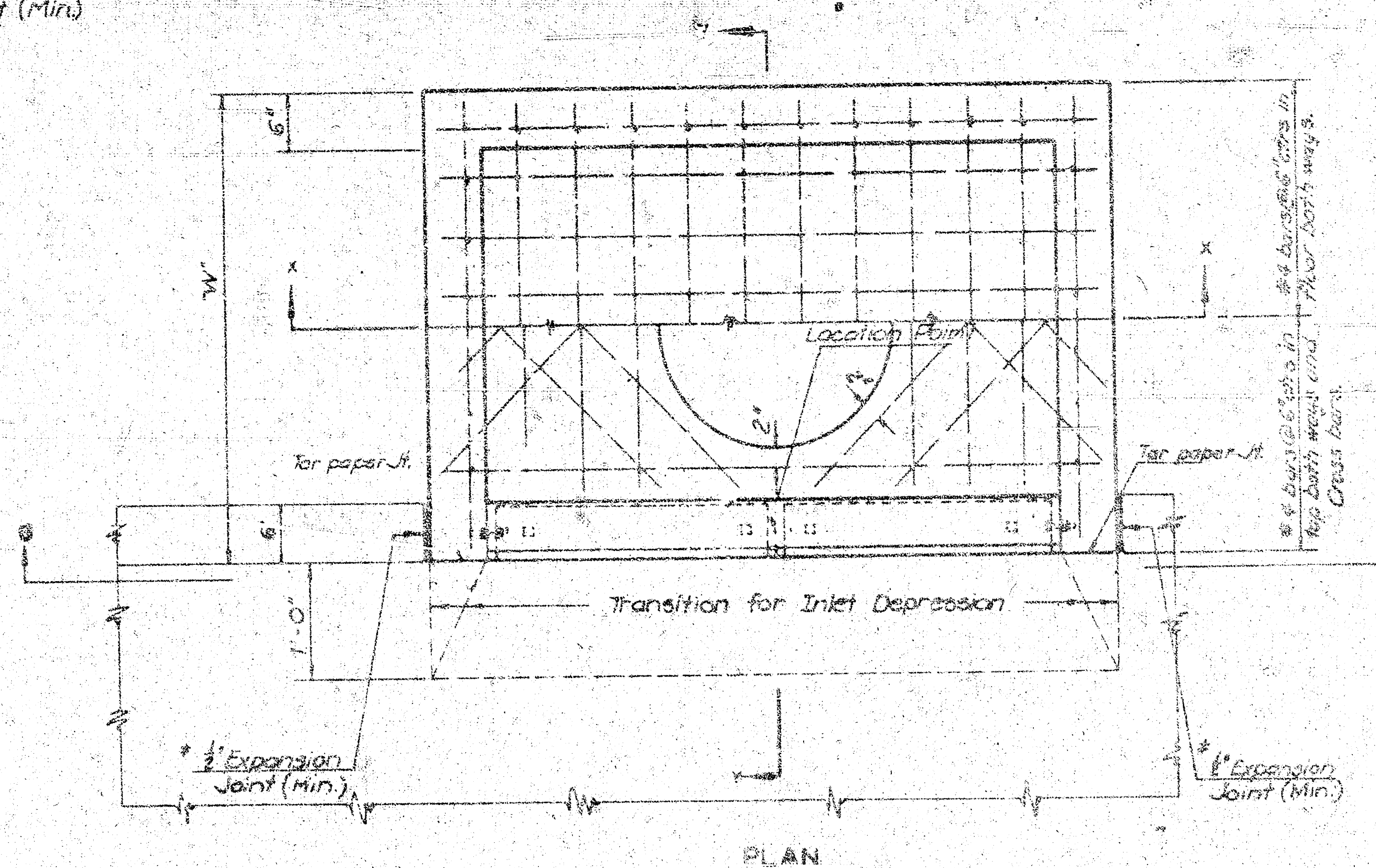
NOTE: See this sheet for shaping of depression at inlet. This work shall be paid for as 'Concrete Movement'. Floor of inlet shall be shaped to conform with 'EXAMPLES' on Reinforced Concrete, Warholes Standard No. 633. Concrete used for shaping shall be unreinforced Class 'A' concrete. No addition in concrete quantities shall be made for shaping floor of inlets.

STATE HIGHWAY COMMISSION OF ILLINOIS

SPECIAL TYPE A CURB INLET



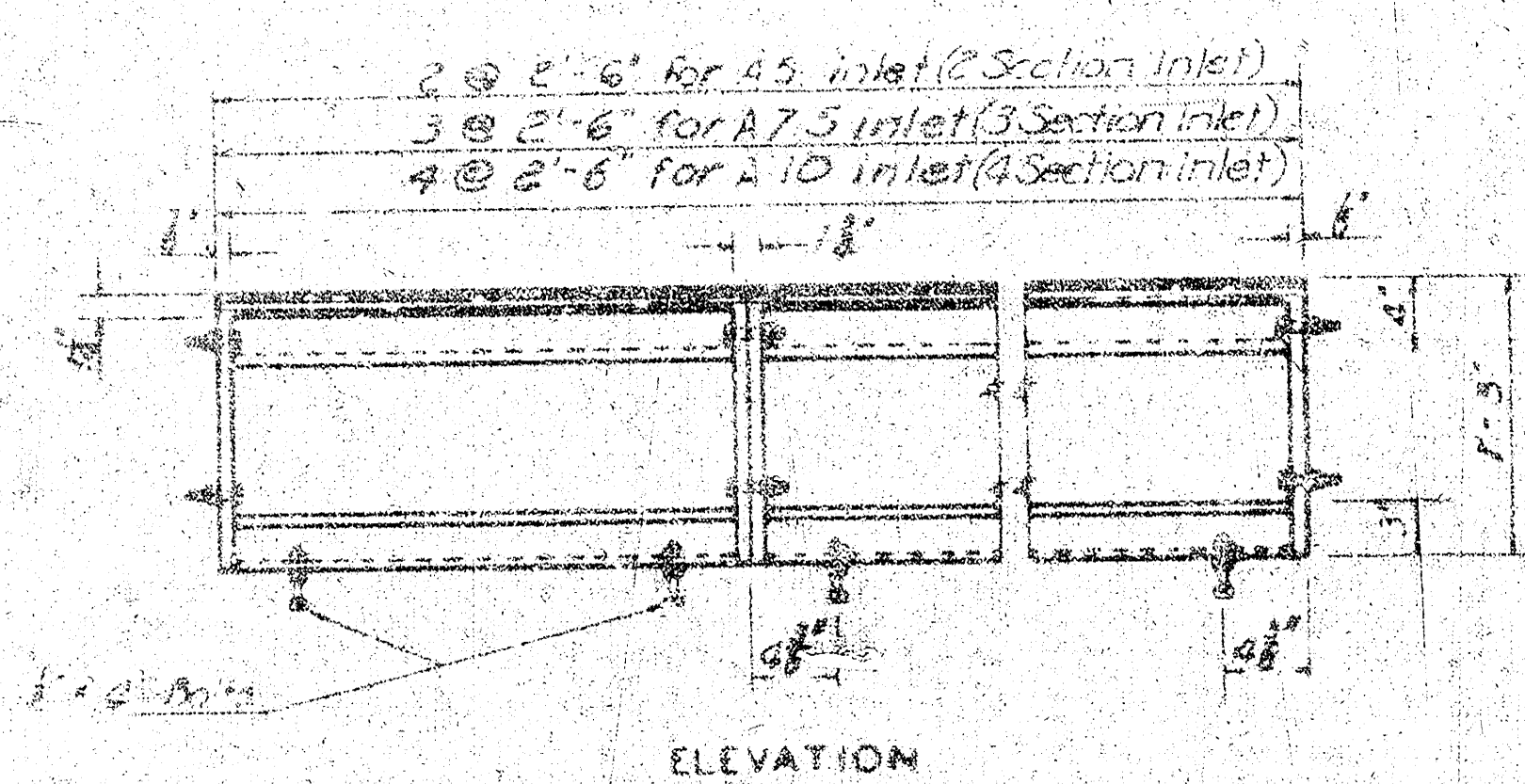
SECTION G-G



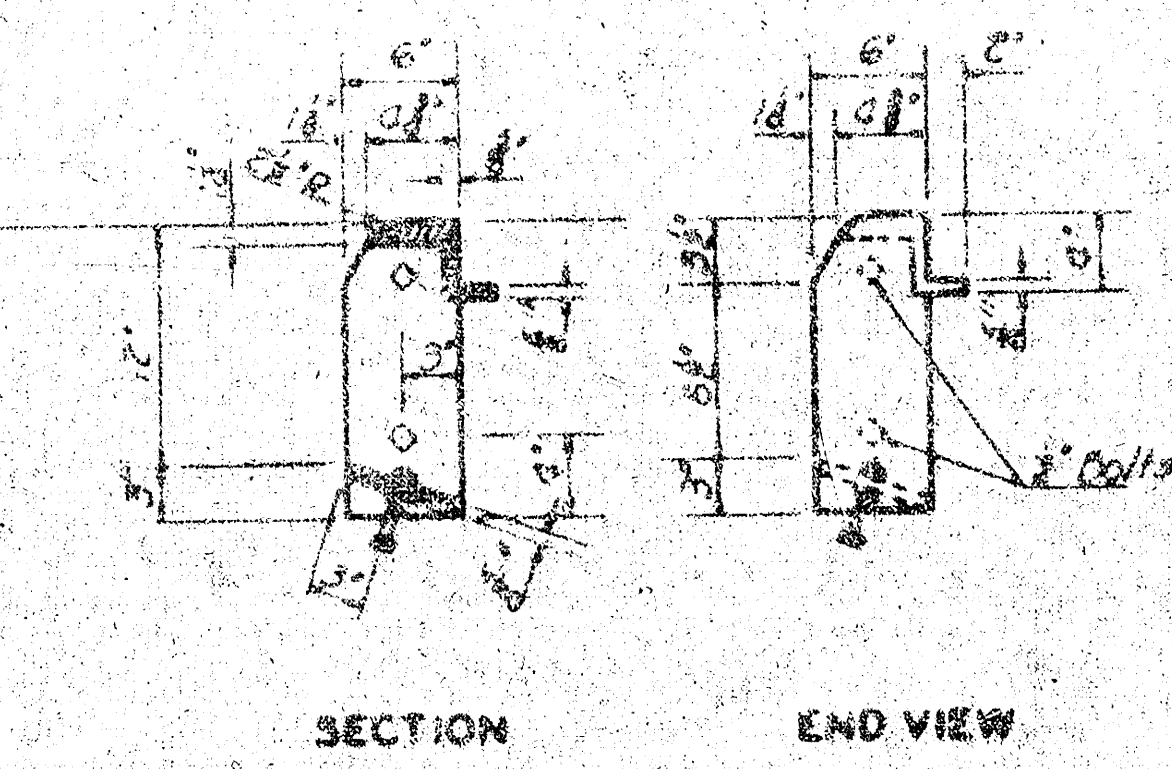
PLAN

Note: Use Class A Concrete throughout. Bevel all exposed edges with a triangular mauling. Reinforcing bars shall be bent around pipe. No deductions in concrete quantities shall be made for pipe openings.

At the contractor's option Class A Concrete (12) may be used throughout, but pavement shall be made as Class A Concrete throughout. A small opening may be required in the curb at the inlet to drain a low area, if approved by the Engineer. Reinforcing bars will extend through the opening. No deduction in concrete quantities will be made for this opening. When so ordered by the Engineer, the top of the inlet shall be sloped slightly to approximate the ground line or other conditions. All exposed cast iron surfaces shall be painted either in the shop or in the field with two coats of a zinc dust paint, followed by two coats of aluminum paint. No substitutions of design will be permitted on castings.

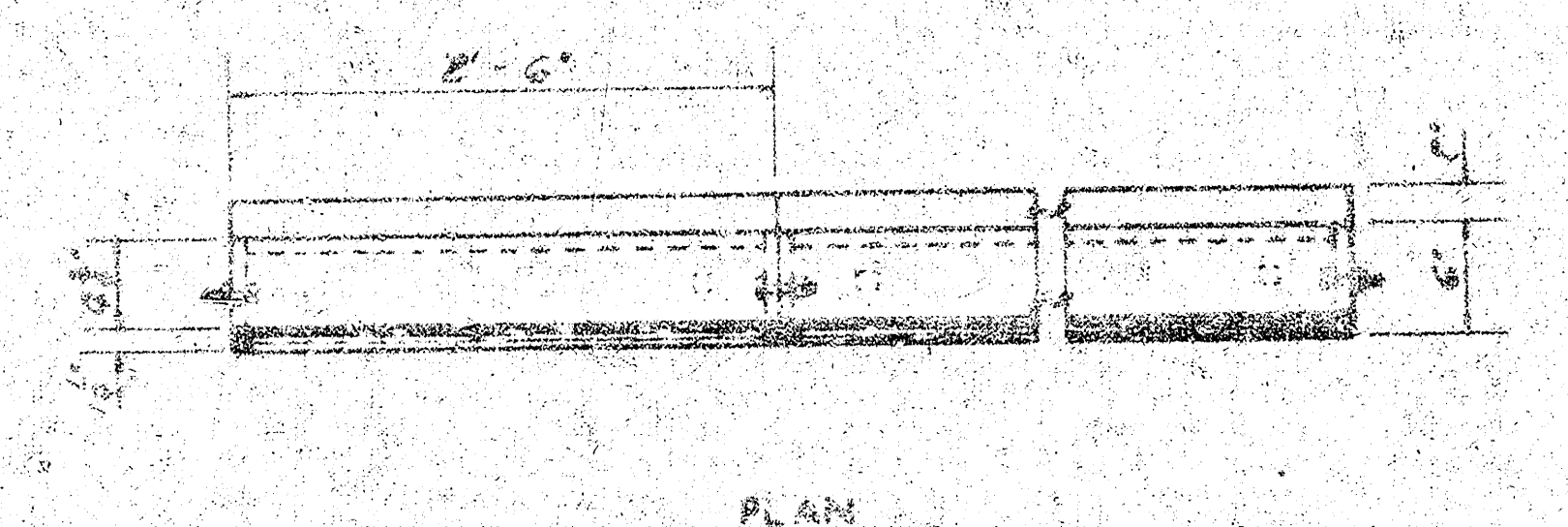


ELEVATION
TYPE A5



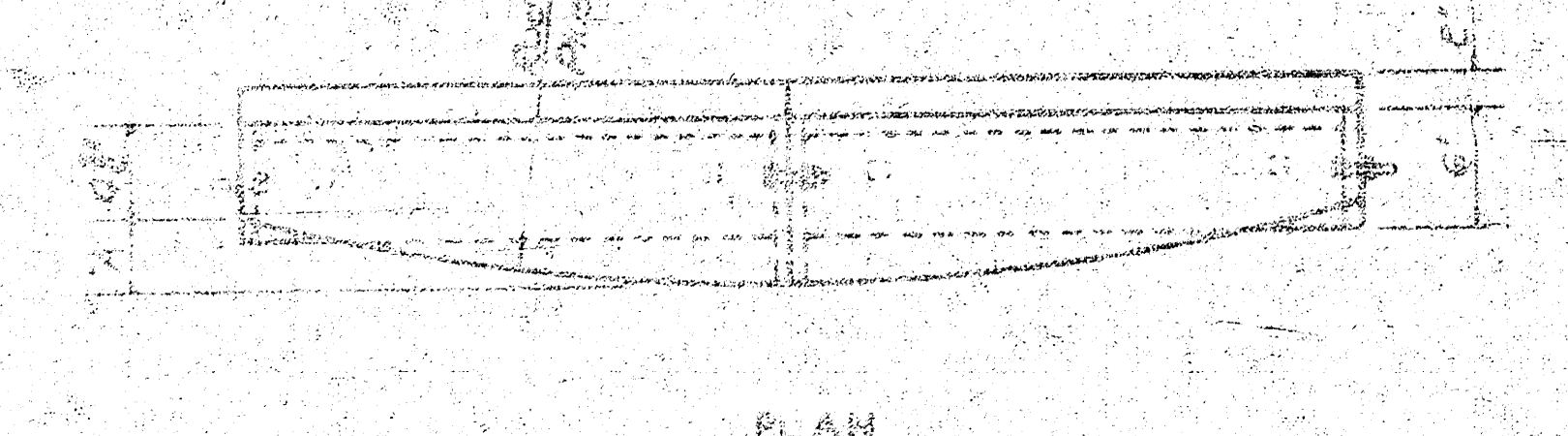
SECTION
TYPE A5-1

END VIEW



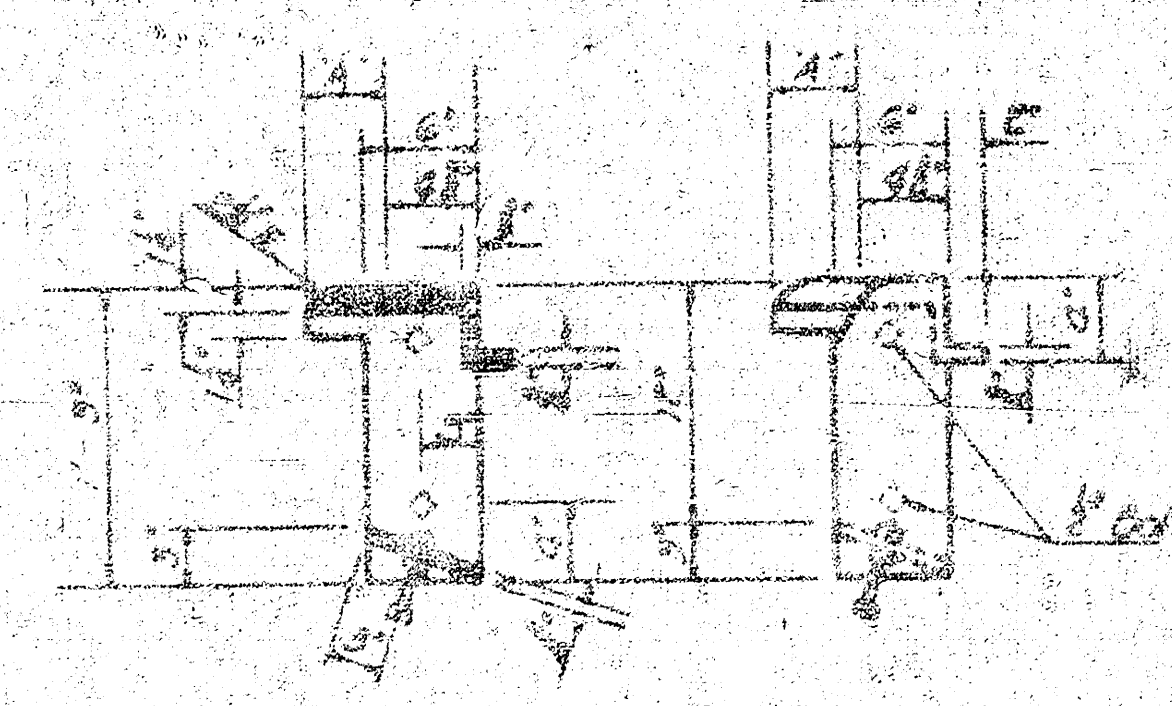
PLAN
TYPE A5-1

Weight: 129 lbs. per 2'-8\"/>



PLAN
TYPE A5-2 SHOWN

Weight: See Tables below.



SECTION AT CENTER
TYPE A5-2

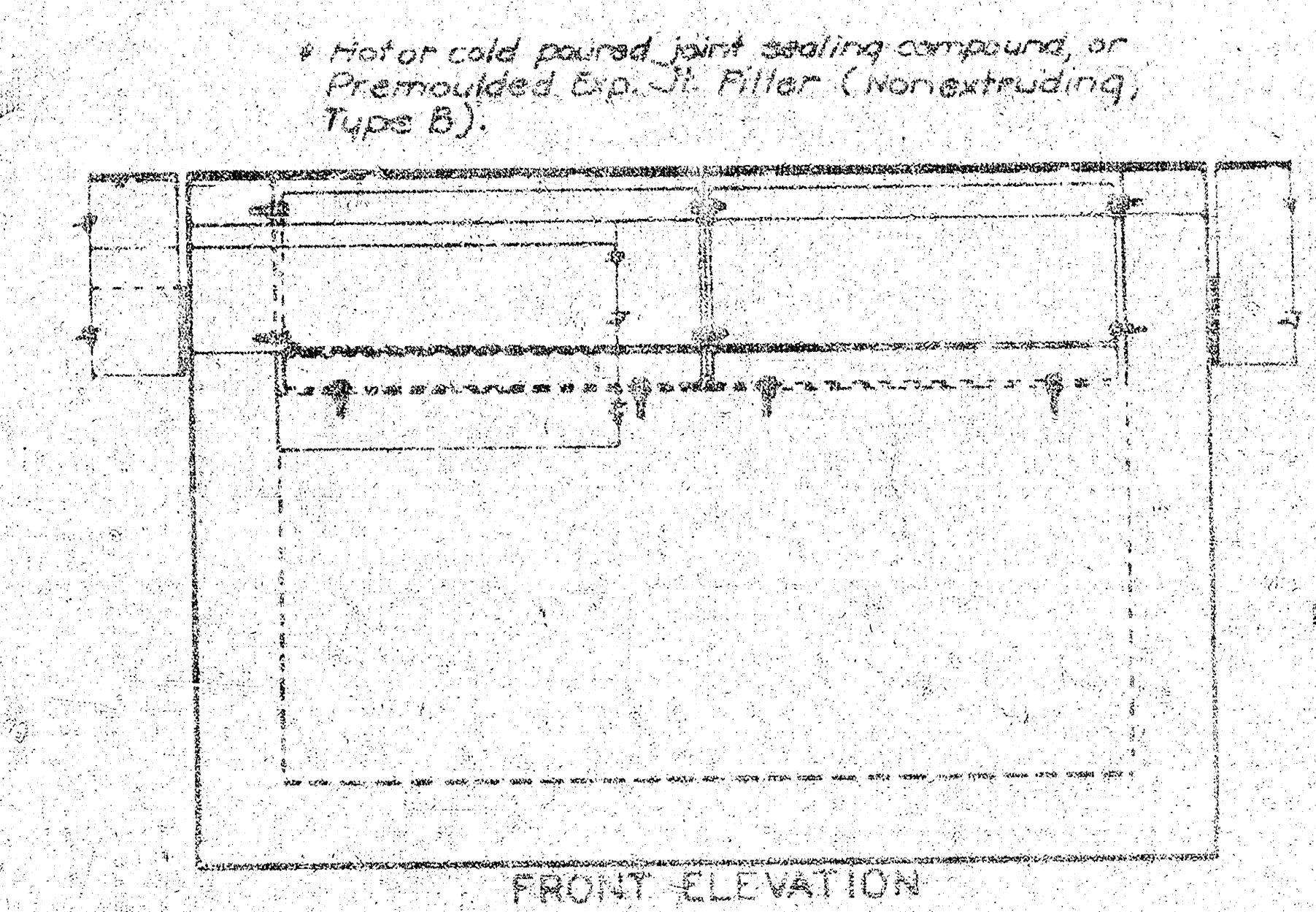
END VIEW

NOTE: All bolts and nuts shall be galvanized and meet the requirements of Sub-section U15-2 of the 1966 Specifications.

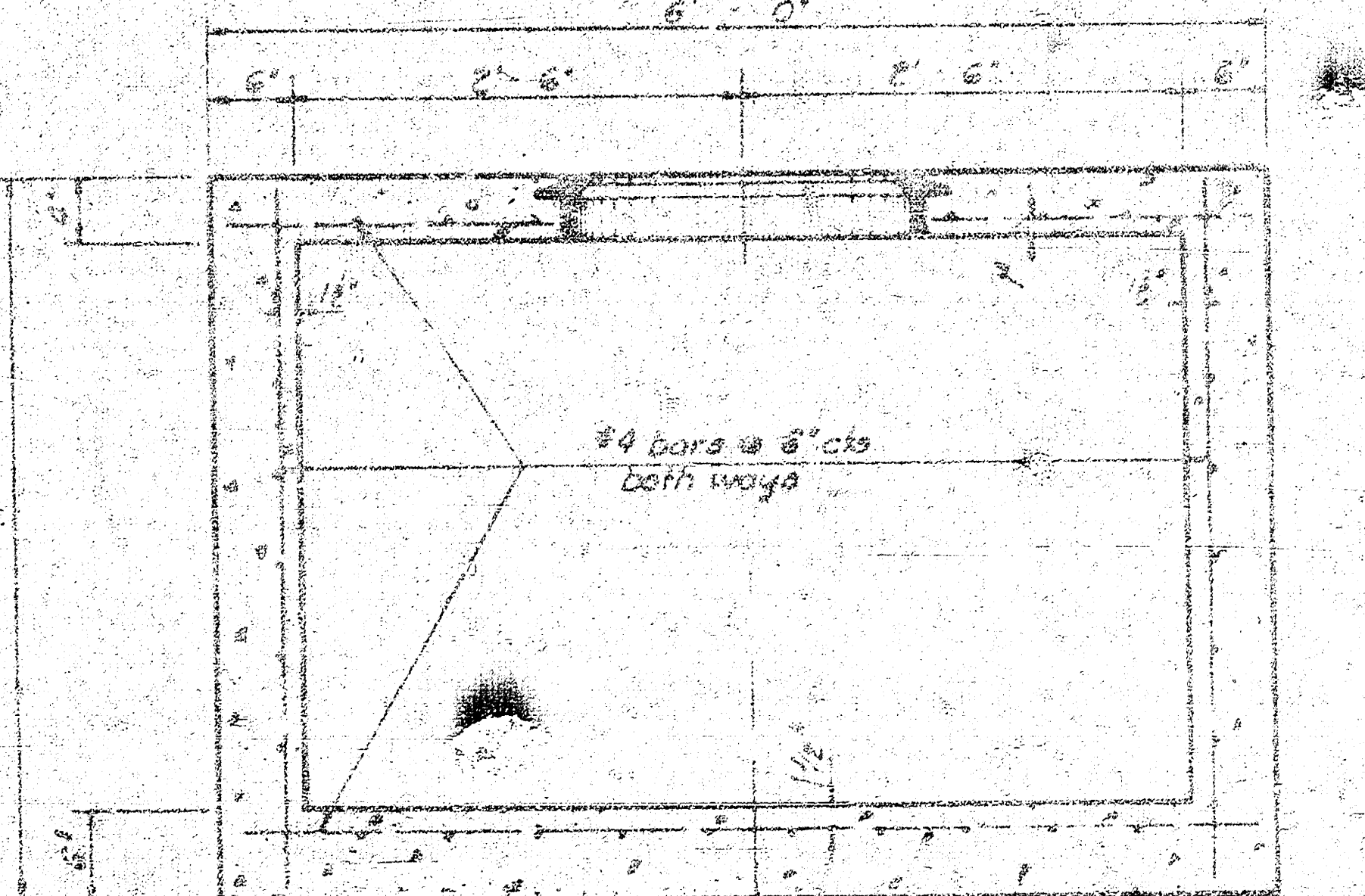
Note: All castings shall be gray iron and shall comply with ASTM A-48 Class 25B.

FOR TYPE A5-2 CASTINGS			
Radius	20'	25'	30'
Wt.	178	187	191
Weight	268	273	274

NOTE: Weights given in tables above are total weights for curb castings only. All weights of castings are calculated weights with no allowance for fillets, overruns, anchor bolts and bolts.



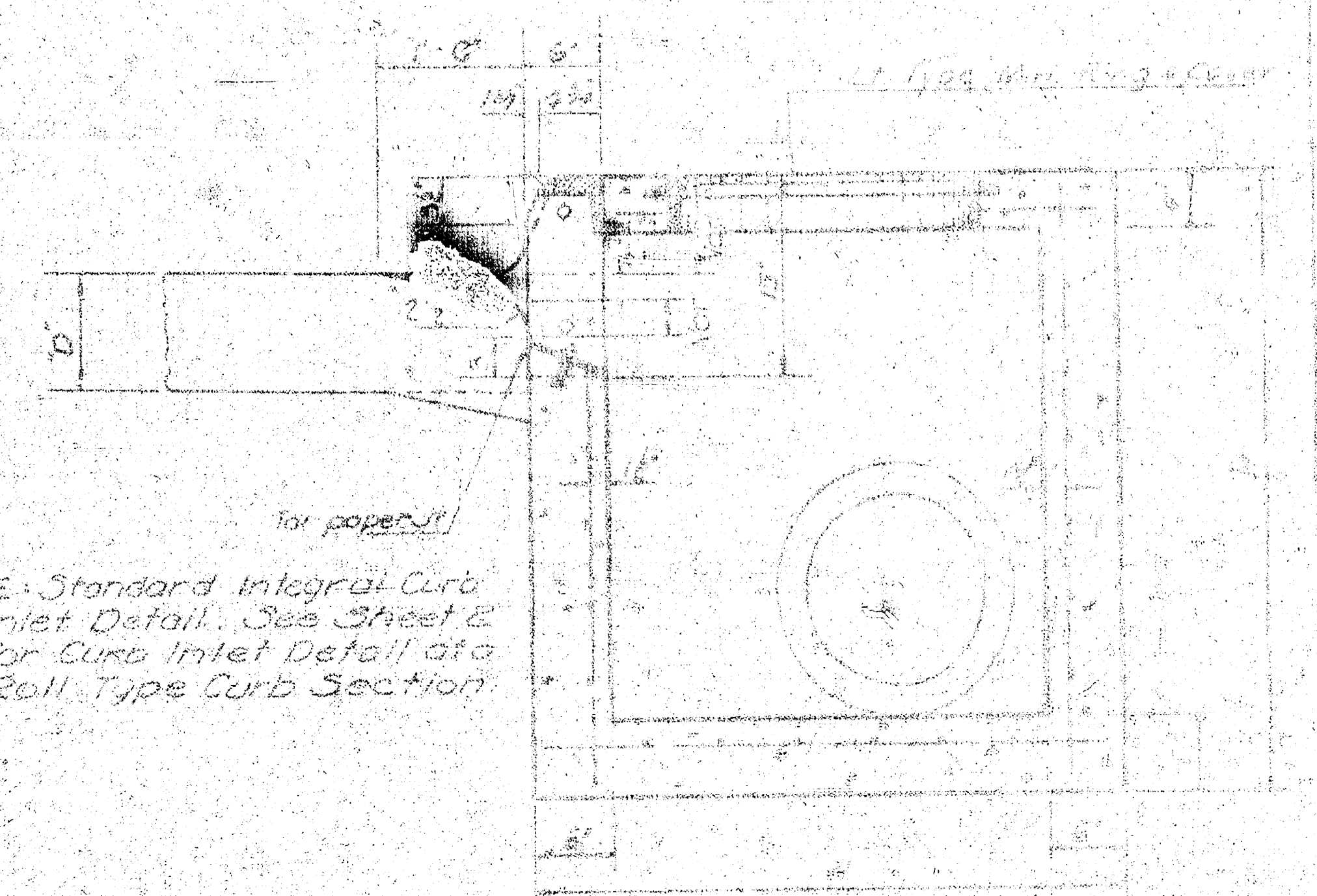
FRONT ELEVATION



SECTION X-X

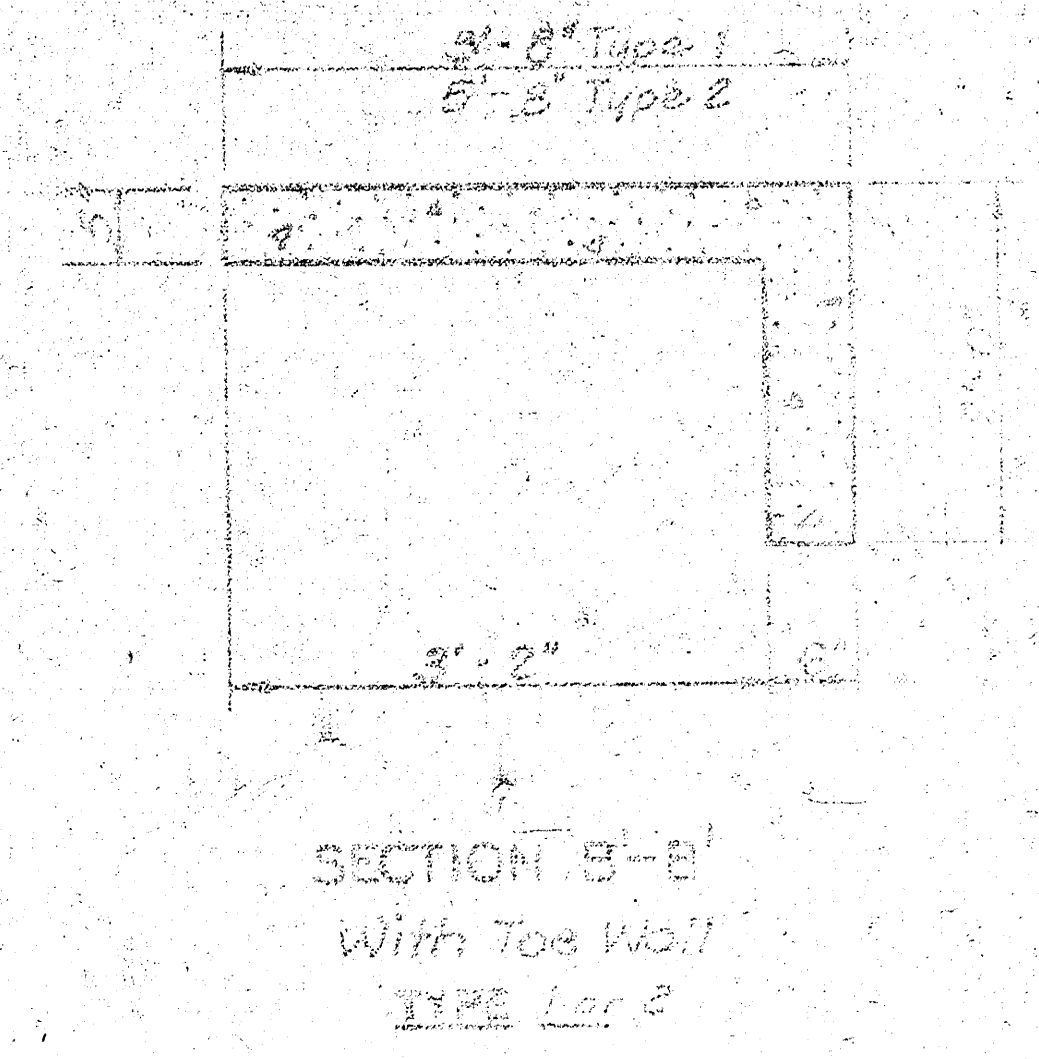
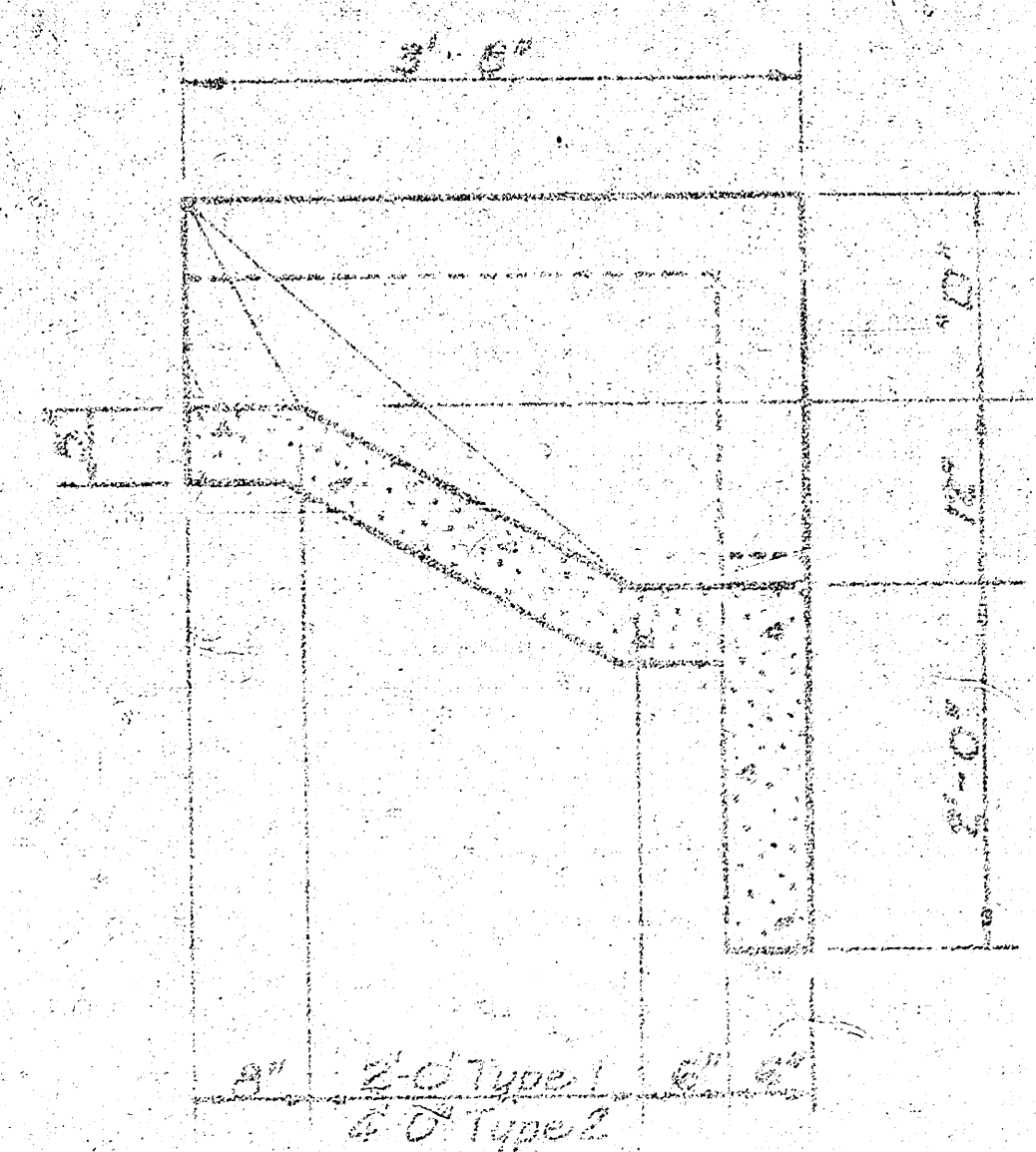
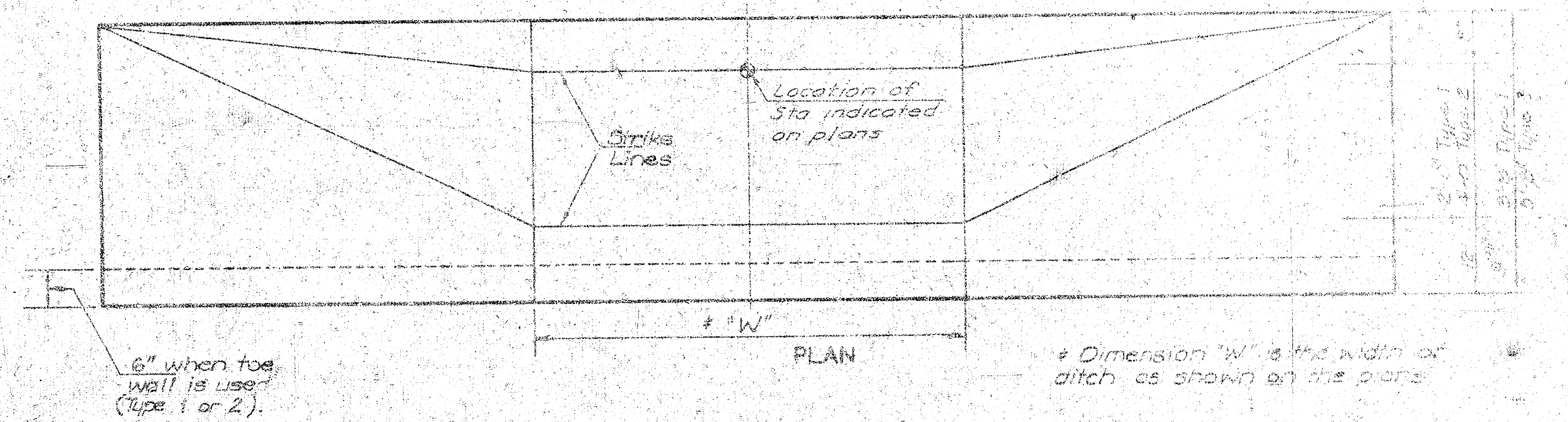
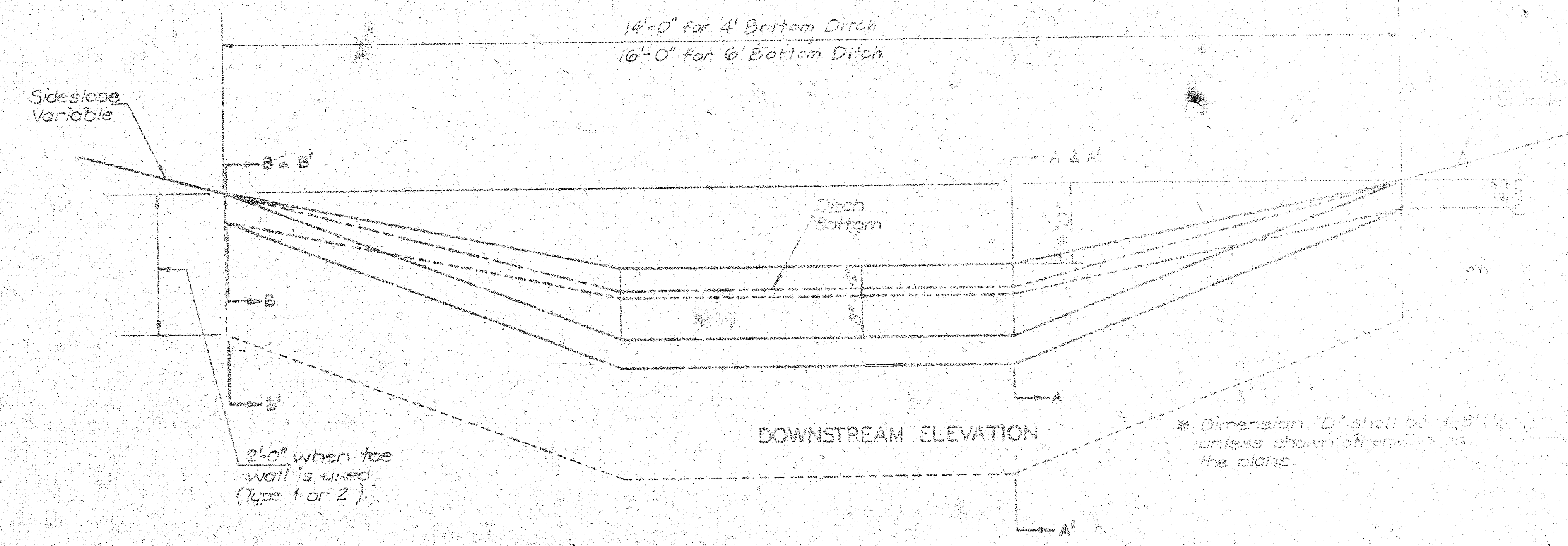
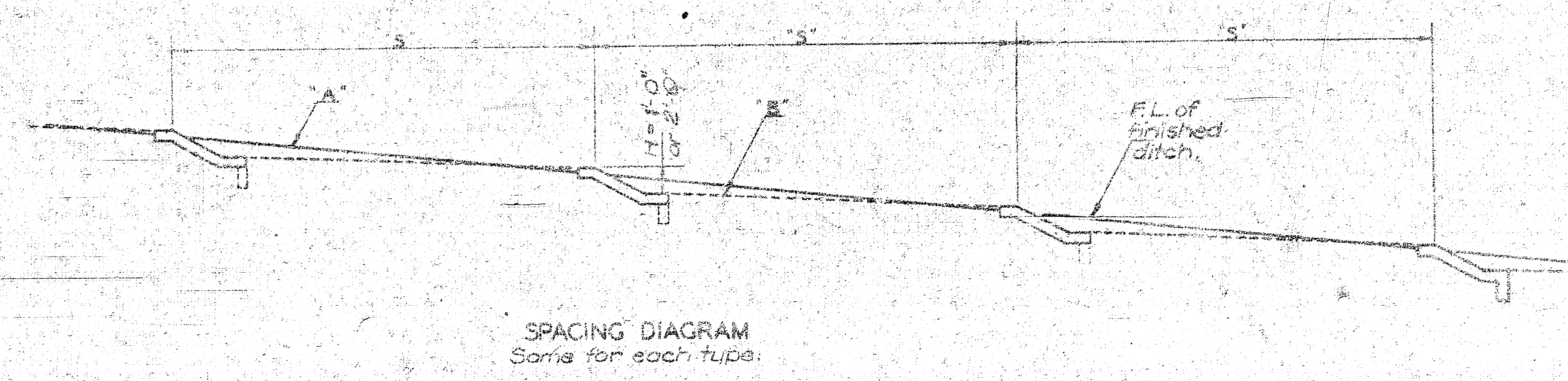
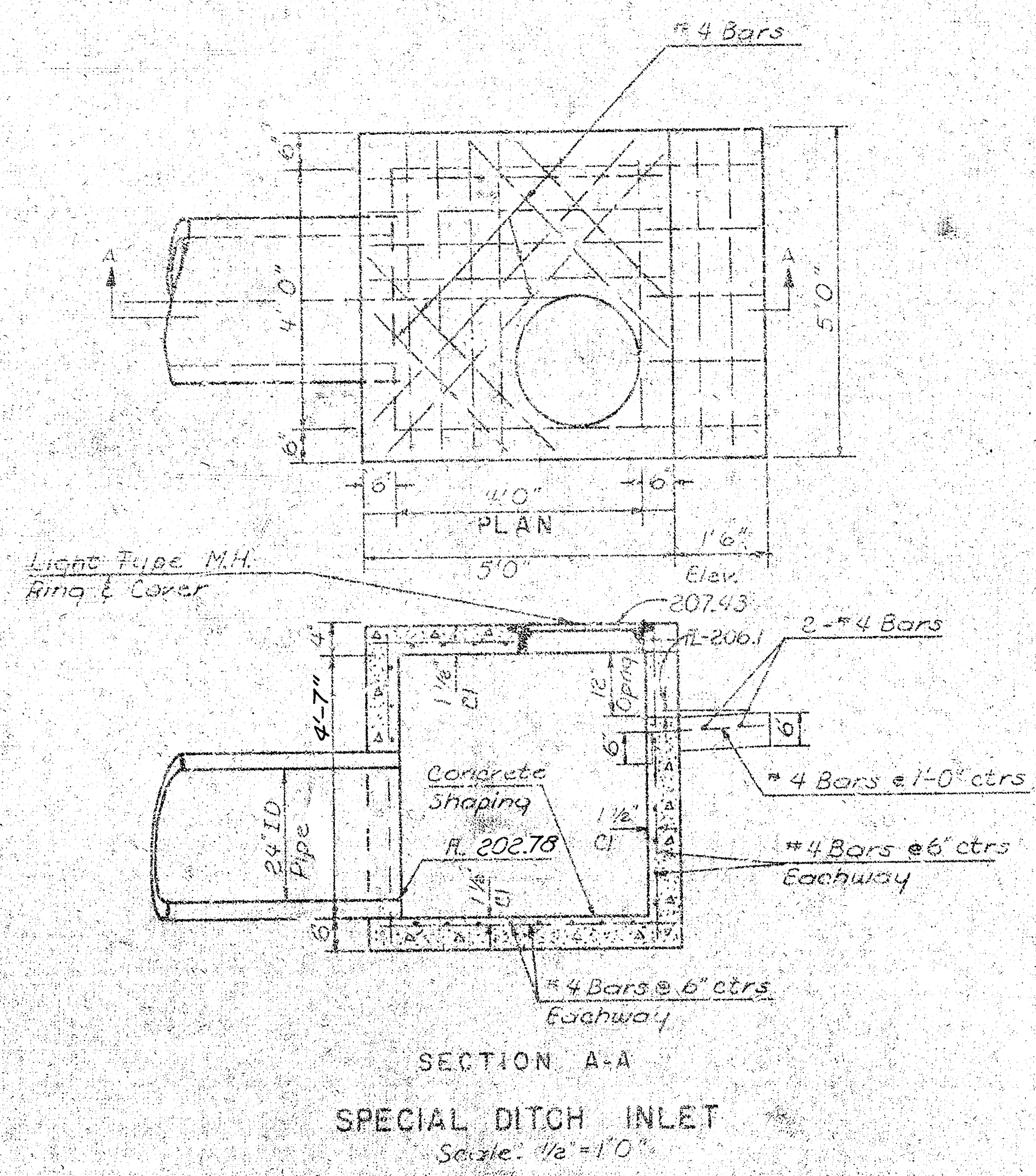
* Hot or cold poured joint sealing compound, or Premoulded Exp. Jt. Filler (nonextruding, Type B).

NOTE: Standard Integral Curb Inlet Detail. See Sheet 2 for Curb Inlet Detail at a Roll Type Curb Section.



SECTION Y-Y

NOTE: See standard inset for Concrete Reinforced Auxiliary Details for shaping gutter approach and leaving inlets. This shaping will be necessary for all inlets, unless otherwise noted on the plans. This work will be paid for as follows: when combined curb & gutter is used, the entire length of the shaped gutter and the curb, together with the concrete under the gutter casting, shall be paid for as 'Combined Curb & Gutter, Type 1', where concrete pavement and edge curb is used the shaped gutter and the edge curb, together with the concrete under the gutter casting, shall be paid for as 'Concrete Pavement' and 'Edge Curb'. See Standard Sheet No. 24 for Details of Manhole Cover and Ring and Coat from Shop. Floor of Inlet Manhole shall be finished to show a 1/2\"/>



STATE HIGHWAY COMMISSION OF KANSAS	
WASH CHECKS TYPE 1 & 2 SPECIAL DITCH INLET	
DESIGN NO.	21
DATE	3/3
DESIGNED BY	SAK
CHECKED BY	
APPROVED BY	

35th St. North - Sta. 11+88 to Sta. 16+79.18 - Lt. Curb
 $\Delta = 54^{\circ}22'46''$ R = To Bk.Cb. T = 281.16' L = 519.45'

Curve Data Based on 547.31'R. $\Delta/2 = 27^{\circ}11'23''$					
Sta.	E Arc	Chord Length 75'Lt.B.C.	Deflection	Total Deflection	
11+88					
12+00	12.00	13.00	0°40'18"	0°40'18"	
12+25	25.00	27.09	1°23'58"	2°04'16"	
12+50	25.00	27.09	1°23'58"	3°28'13"	
12+75	25.00	27.09	1°23'58"	4°52'11"	
13+00	25.00	27.09	1°23'58"	6°16'09"	
13+25	25.00	27.09	1°23'58"	7°40'06"	
13+50	25.00	27.09	1°23'58"	9°04'04"	
13+75	25.00	27.09	1°23'58"	10°28'01"	
14+00	25.00	27.09	1°23'58"	11°51'29"	
14+25	25.00	27.09	1°23'58"	13°15'57"	
14+50	25.00	27.09	1°23'58"	14°39'54"	
14+75	25.00	27.09	1°23'58"	16°03'52"	
15+00	25.00	27.09	1°23'58"	17°27'50"	
15+25	25.00	27.09	1°23'58"	18°51'47"	
15+37	12.00	13.00	0°40'18"	19°32'05"	
15+50	13.00	14.09	0°43'40"	20°15'45"	
15+75	25.00	27.09	1°23'58"	21°39'43"	
16+00	25.00	27.09	1°23'58"	23°03'40"	
16+25	25.00	27.09	1°23'58"	24°27'38"	
16+50	25.00	27.09	1°23'58"	25°51'35"	
16+73.76	23.76	25.75	1°19'48"	27°11'23"	

35th St. North - Sta. 11+88 to Sta. 15+37.16 - Rt. Curb
 $\Delta = 39^{\circ}05'14''$ R = To Bk.Cb. T = 169.08' L = 324.94'

Curve Data Based on 476.31'R. $\Delta/2 = 19^{\circ}32'37''$					
Sta.	E Arc	Chord Length 75'Rt.B.C.	Deflection	Total Deflection	
11+88					
12+00	12.00	10.99	0°40'18"	0°40'18"	
12+25	25.00	22.89	1°23'58"	2°04'16"	
12+50	25.00	22.89	1°23'58"	3°28'13"	
12+75	25.00	22.89	1°23'58"	4°52'11"	
13+00	25.00	22.89	1°23'58"	6°16'09"	
13+25	25.00	22.89	1°23'58"	7°40'06"	
13+50	25.00	22.89	1°23'58"	9°04'04"	
13+75	25.00	22.89	1°23'58"	10°28'01"	
14+00	25.00	22.89	1°23'58"	11°51'29"	
14+25	25.00	22.89	1°23'58"	13°15'57"	
14+50	25.00	22.89	1°23'58"	14°39'54"	
14+75	25.00	22.89	1°23'58"	16°03'52"	
15+00	25.00	22.89	1°23'58"	17°27'50"	
15+25	25.00	22.89	1°23'58"	18°51'47"	
15+37.16	12.16	11.13	0°40'50"	19°32'37"	

35th St. North - Sta. 16+80.96 to Sta. 17+39.97 - Rt. Curb
 $\Delta = 5^{\circ}54'47''$ R = To Bk.Cb. T = 29.59' L = 59.13'

Curve Data Based on 572.96'R. $\Delta/2 = 2^{\circ}57'23.5''$					
Bk.Cb. Sta.	Bk.Cb. Arc	Chord Length 75'Lt.B.C.	Deflection	Total Deflection	
16+80.96					
17+00	19.16	18.90	0°57'29"	0°57'29"	
17+25	25.00	24.67	1°15'00"	2°12'29"	
17+39.97	14.97	14.77	0°44'55"	2°57'23.5"	

35th St. North - Sta. 16+79.18 to Sta. 17+72.58 - Lt. Curb
 $\Delta = 9^{\circ}52'55''$ R = To Bk.Cb. T = 49.53' L = 98.82'

Curve Data Based on 572.96'R. $\Delta/2 = 4^{\circ}56'27.5''$					
Bk.Cb. Sta.	Bk.Cb. Arc	Chord Length 75'Lt.B.C.	Deflection	Total Deflection	
16+73.76					
16+75	1.24	1.22	0°03'43"	0°03'43"	
17+00	25.00	24.67	1°15'00"	1°18'43"	
17+25	25.00	24.67	1°15'00"	2°33'43"	
17+50	25.00	24.67	1°15'00"	3°48'43"	
17+72.58	22.58	22.28	1°07'44"	4°56'27.5"	

35th St. North - Longford Dr. to East
 $\Delta = 8^{\circ}21'04''$ R = 1432.40' T = 104.37' L = 208.78'

Curve Data Based on 1432.40'R. $\Delta/2 = 4^{\circ}10'32''$					
Sta.	E Arc	Chord Length 75'Lt.B.C.	75'Rt.B.C.	Deflection	Total Deflection
1+67.02					
1+75	7.98	7.82	8.13	0°09'35"	0°09'35"
2+00	25.00	24.51	25.44	0°30'00"	0°39'35"
2+25	25.00	24.51	25.44	0°30'00"	1°09'35"
2+50	25.00	24.51	25.44	0°30'00"	1°39'35"
2+75	25.00	24.51	25.44	0°30'00"	2°09'35"
3+00	25.00	24.51	25.44	0°30'00"	2°39'35"
3+25	25.00	24.51	25.44	0°30'00"	3°09'35"
3+50	25.00	24.51	25.44	0°30'00"	3°39'35"
3+75	25.00	24.51	25.44	0°30'00"	4°09'35"
4+00	0.80	0.79	0.79	0°00'57"	4°10'32"

Capri Lane
 $\Delta = 44^{\circ}47'09''$ R = 358.10' T = 147.55' L = 279.91'

Curve Data Based on 358.10'R. $\Delta/2 = 22^{\circ}23'45''$					
Sta.	E Arc	Chord Length 75'Lt.B.C.	75'Rt.B.C.	Deflection	Total Deflection
19+22.36					
19+25	2.64	2.84	2.43	0°12'40"	0°12'40"
19+50	25.00	26.94	23.04	2°00'00"	2°12'40"
19+73.18	23.18	24.98	21.35	1°51'16"	4°03'56"
19+75	1.82	1.96	1.68	0°08'44"	4°12'40"
20+00	25.00	24.98	23.04	2°00'00"	6°12'40"
20+25	25.00	24.98	23.04	2°00'00"	8°12'40"
20+50	25.00	24.98	23.04	2°00'00"	10°12'40"
20+75	25.00	24.98	23.04	2°00'00"	12°12'40"
20+91.53	16.53	17.82	15.22	1°19'21"	13°32'01"
21+00	8.47	9.13	7.81	0°40'39"	14°12'40"
21+25	25.00	24.98	23.04	2°00'00"	16°12'40"
21+50	25.00	24.98	23.04	2°00'00"	18°12'40"
21+75	25.00	24.98	23.04	2°00'00"	20°12'40"
22+00	25.00	24.98	23.04	2°00'00"	22°12'40"
22+02.27	2.27	2.45	2.09	0°10'05"	22°23'45"

Longford Drive
 $\Delta = 62^{\circ}48'51''$ R = 200.00' T = 122.11' L = 219.26'

Curve Data Based on 200.00'R. $\Delta/2 = 31^{\circ}04'25.5''$					
Sta.	E Arc	Chord Length 75'Lt.B.C.	75'Rt.B.C.	Deflection	Total Deflection
3+24.34					
3+25	0.66	0.56	0.75	0°05'40"	0°05'40"
3+50	25.00	21.48	28.48	3°34'52"	3°40'32"
3+75	25.00	21.48	28.48	3°34'52"	7°15'23"
4+00	25.00	21.48	28.48	3°34'52"	10°50'15"
4+25	25.00	21.48	28.48	3°34'52"	14°25'07"
4+50	25.00	21.48	28.48	3°34'52"	17°59'58"
4+60.96	10.96	2.42	12.99	1°34'12"	19°34'10"
4+75	14.04	12.52	15.99	2°00'40"	21°34'50"
5+00	25.00	21.48	28.48	3°34'52"	25°09'41"
5+25	25.00	21.48	28.48	3°34'52"	28°44'33"
5+43.60	18.60	15.98	21.19	2°19'53"	31°24'25.5"

DESIGN	COMOTARA BUSINESS PARK
DR. BY	WICHITA, KANSAS
CK. BY	
DATE	
JOB NO.	
CURVE STAKING INFORMATION	
VAN DOREN-HAZARD-STALLINGS-SCHNACKE ENGINEERS-ARCHITECTS • • • TOPEKA, KANSAS	SHEET 26 OF