

STORM SEWER PLANS FOR WILLOWBEND HEIGHTS PRIVATE PROJECT NO. 468-76-245-80001-000-000-130

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

GENERAL NOTES

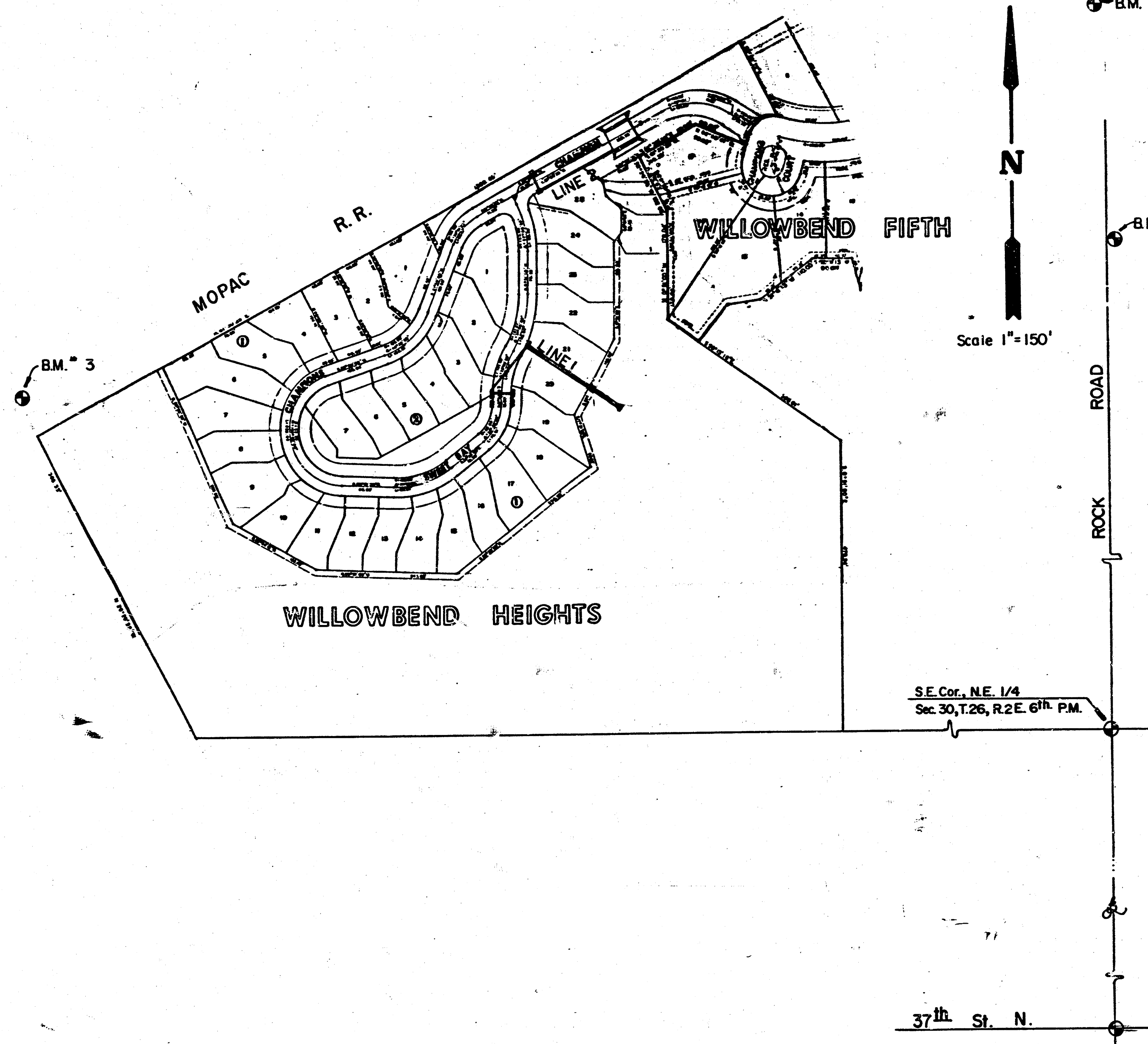
1. THE TOPS OF INLET AS NOTED ON THE PLANS MAY VARY SO AS TO MEET PROPOSED TOP OF CURB ELEVATIONS OR PAVEMENT ELEVATIONS. THE FIELD ENGINEER SHALL LOCATE INLETS AND MANHOLES WITH REFERENCE TO PROPOSED PAVING PLANS OF THE PERTINENT STREETS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR SHALL BE REQUIRED TO RE-ESTABLISH ANY PROPERTY IRONS WHICH ARE DAMAGED OR DESTROYED BY HIS CONSTRUCTION OPERATIONS. SUCH IRONS SHALL BE RE-ESTABLISHED BY A LICENSED LAND SURVEYOR OR A LICENSED PROFESSIONAL ENGINEER IN ACCORDANCE WITH STATE LAWS.
3. CONSTRUCTION OF PIPE OUTLET INTO LAKE MAY REQUIRE LOWERING OF THE EXISTING LAKE INTO WHICH THESE LINES EMPTY OR CONSTRUCTION OF A COFFERDAM. THE PLAN SHEETS SHOWING THESE OUTLETS ALSO SHOW THE SURVEYED WATER LEVEL AND THE DATE OF THE SURVEY. PRESENT WATER LEVELS AND WATER LEVELS AT THE TIME OF CONSTRUCTION MAY VARY FROM THIS SURVEYED WATER LEVEL.
4. UNDERGROUND UTILITY SERVICE LINES AND OVERHEAD UTILITY POLE LINES ARE TO BE ADJUSTED AS NECESSARY BY OTHERS PRIOR TO CONSTRUCTION UNLESS THE PLANS SPECIFICALLY CALL FOR THEIR ADJUSTMENT BY THE CONTRACTOR OR UNLESS THE PLANS SPECIFICALLY IDENTIFY A UTILITY TO BE ADJUSTED BY ITS OWNER DURING CONSTRUCTION. EXISTING UTILITIES AND THEIR LOCATION, AS SHOWN ON THE PLANS, REPRESENT THE BEST INFORMATION OBTAINABLE FOR DESIGN. LOCATION INFORMATION HAS BEEN OBTAINED FROM THE VARIOUS UTILITY COMPANIES AND IS EITHER FROM COMPANY RECORD DRAWINGS OR COMPANY PROVIDED FIELD LOCATIONS. THE CONTRACTOR WILL BE REQUIRED TO WORK AROUND EXISTING UTILITIES WITHIN THE RIGHT OF WAY WHICH DO NOT CONFLICT WITH PROPOSED CONSTRUCTION.

NOTE: NOTIFY THE FOLLOWING COMPANIES PRIOR TO ANY EXCAVATION:

ARKLA GAS COMPANY	942-8350
BELL TELEPHONE COMPANY	1-316-571-2115
CABLEVISION	262-0661
KP&L COMPANY	263-7511
KANSAS GAS & ELECTRIC	264-1141

BENCH MARKS

- B.M. #1 = $\square$ = cut on SW corner of North cart path underpass on Rock Road. Elev. = 188.79
- B.M. #2 = $\square$ = cut on NE corner of Big RCB under Rock Road + 900' N of E Quarter corner section 30, Township 26 South, Range 2 East. Elev. = 186.99
- B.M. #3 = NE cor or RCB under MoPac + 415' Northeastly of the W 1/4 of the NE Quarter, Section 30, Township 26 South, Range 2. Elev. = 185.31



INDEX TO DRAWINGS

Sheet No.	Description
1	Title Sheet
2	Plan & Profile Line 1
3	Plan & Profile Line 2
4-5	Type 1A Curb Inlet Details
6	Type 1 Curb Inlet Details

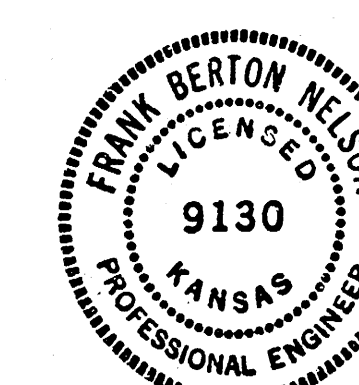
NOTE TO CONTRACTOR

This project will be constructed under the supervision of the CITY ENGINEER and conforming to the SPECIFICATIONS of the CITY OF WICHITA. The CONTRACTOR will pay the City of Wichita for all costs of plan review, inspection and booking per contract.

APPROVED AS NOTED

By CITY ENGINEER OF WICHITA

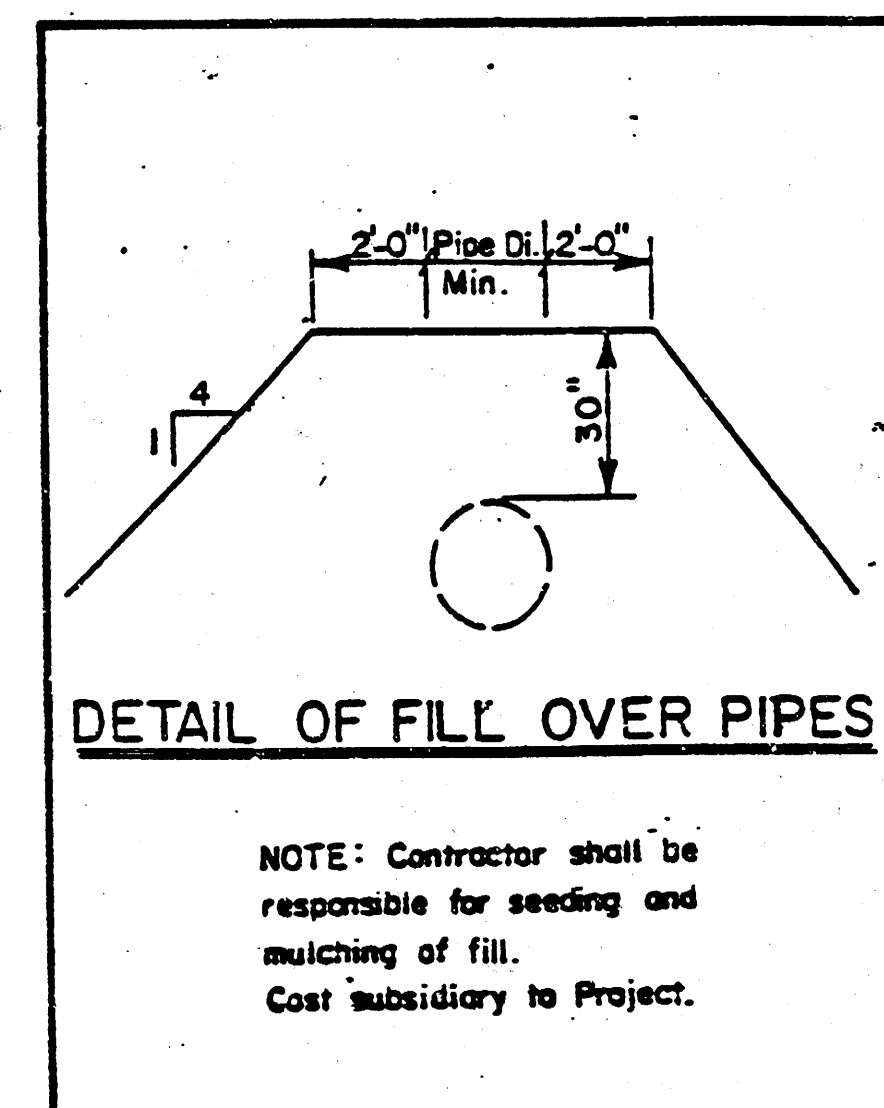
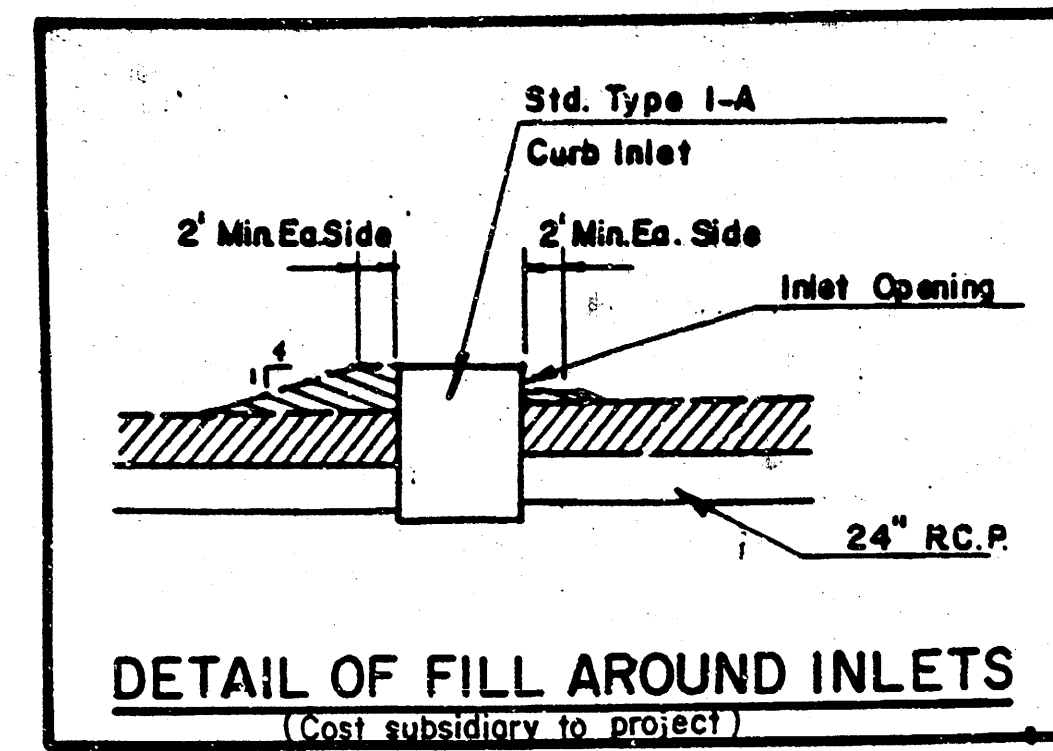
Sanitary Sewers _____
Storm Sewers VRH 10/26/87
Driveway Approaches _____
Water Mains _____
Paving _____



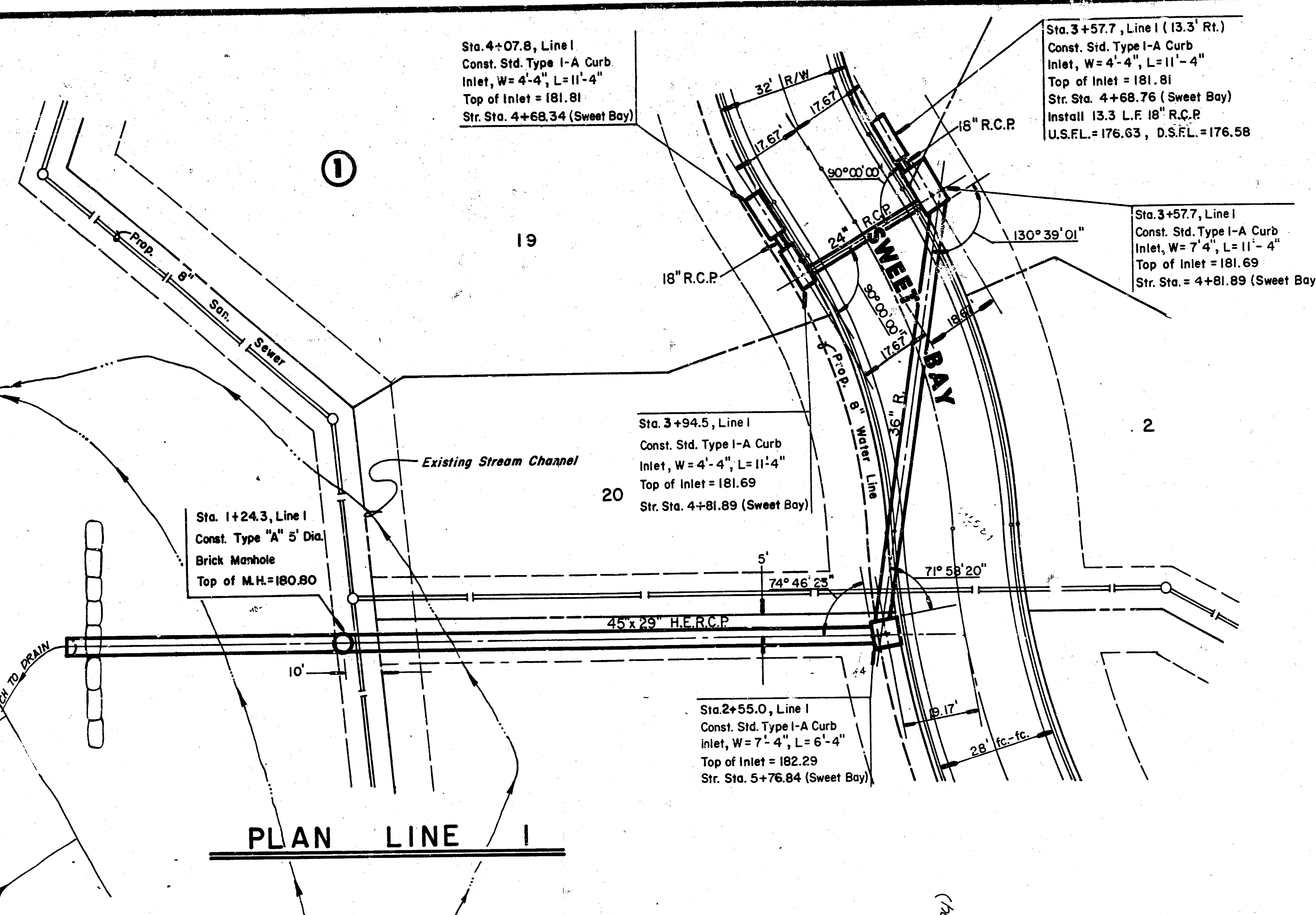
	WILLOWBEND HEIGHTS		Design
	STORM WATER SEWER		Drawn by
	PLANS		Checked by
			Date
		Job no.	
MID-KANSAS ENGINEERING CONSULTANTS PA 3500 NORTH ROCK ROAD BUILDING 1800 WICHITA, KANSAS 67226			Sheet 1 of 6

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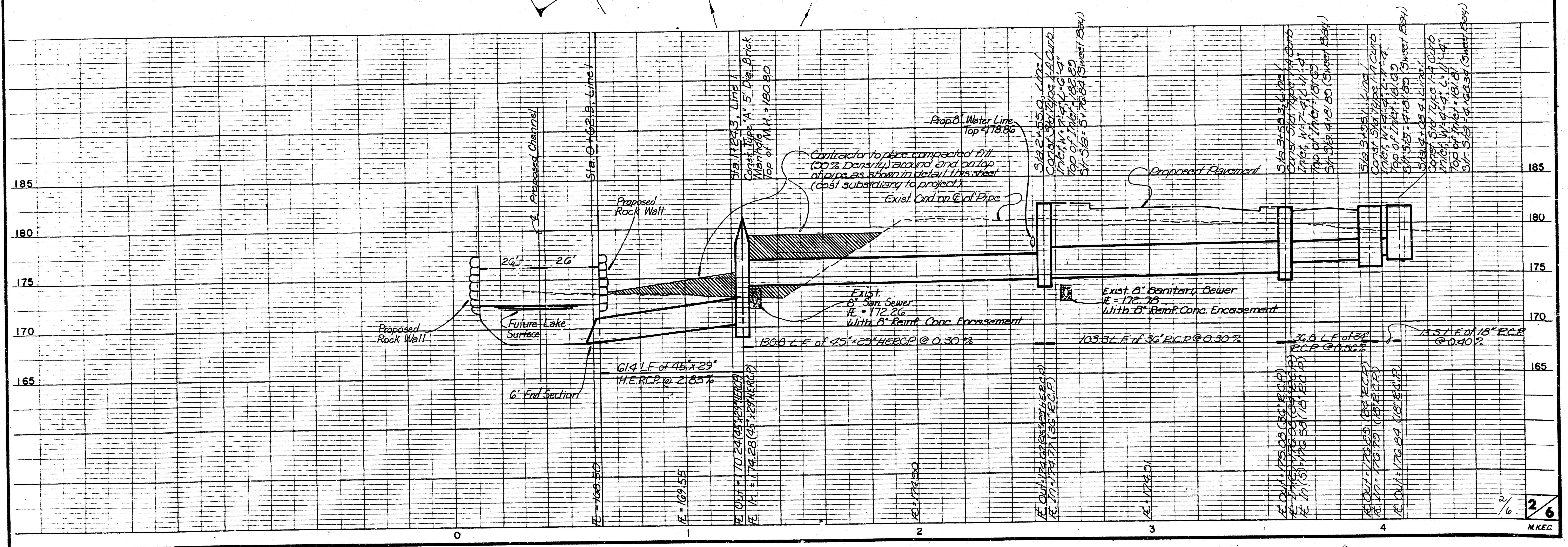
WILLOWBEND HEIGHTS
STORM WATER SEWER PLANS
PROJ. NO. 468-76-245-80001-000-000-130



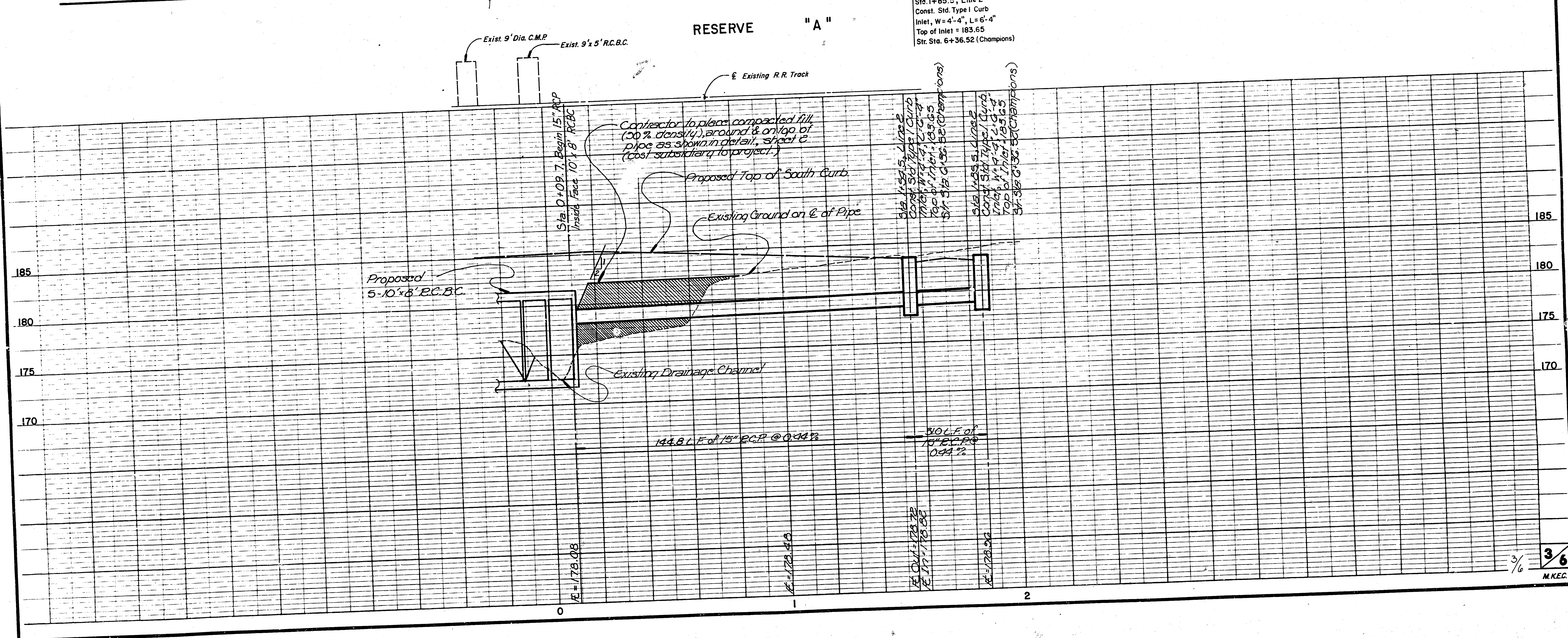
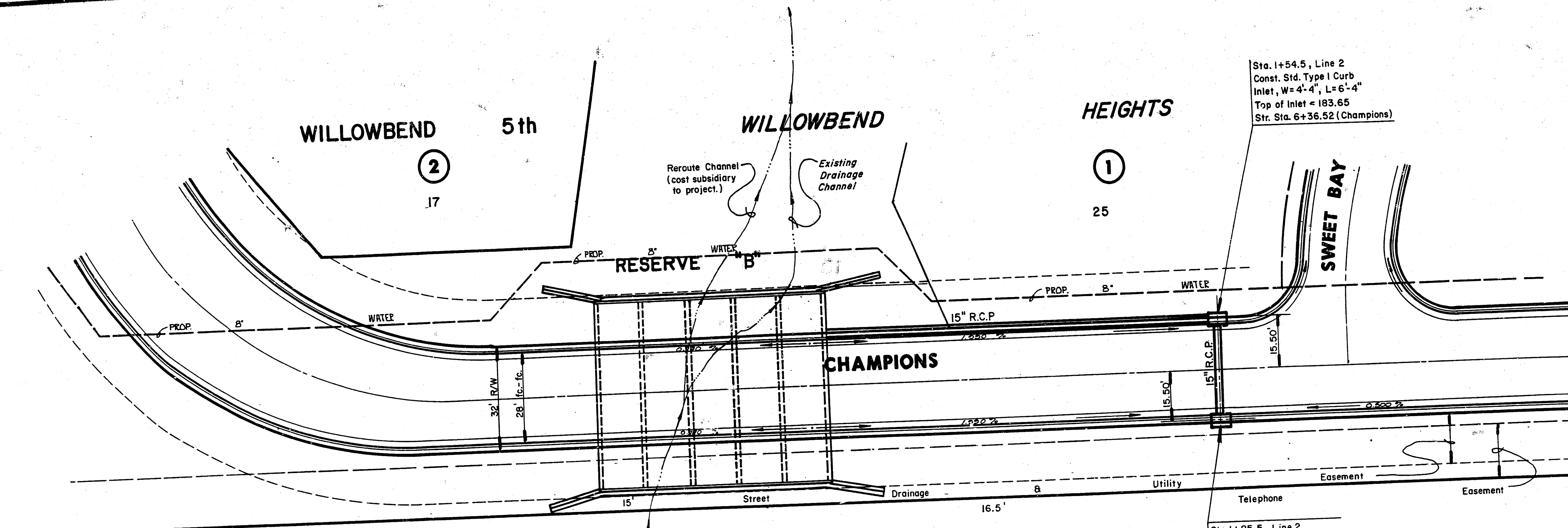
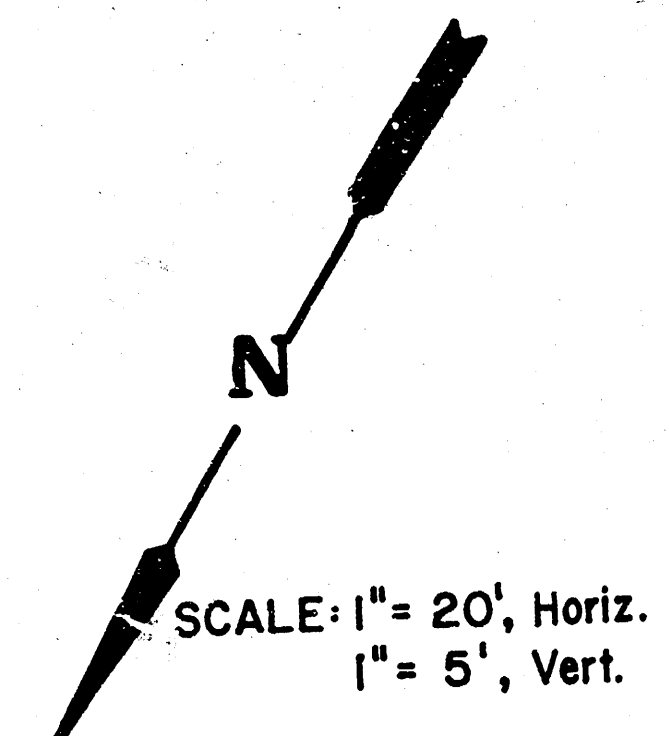
NOTE: Contractor shall be responsible for seeding and mulching of fill.
Cost subsidiary to Project.

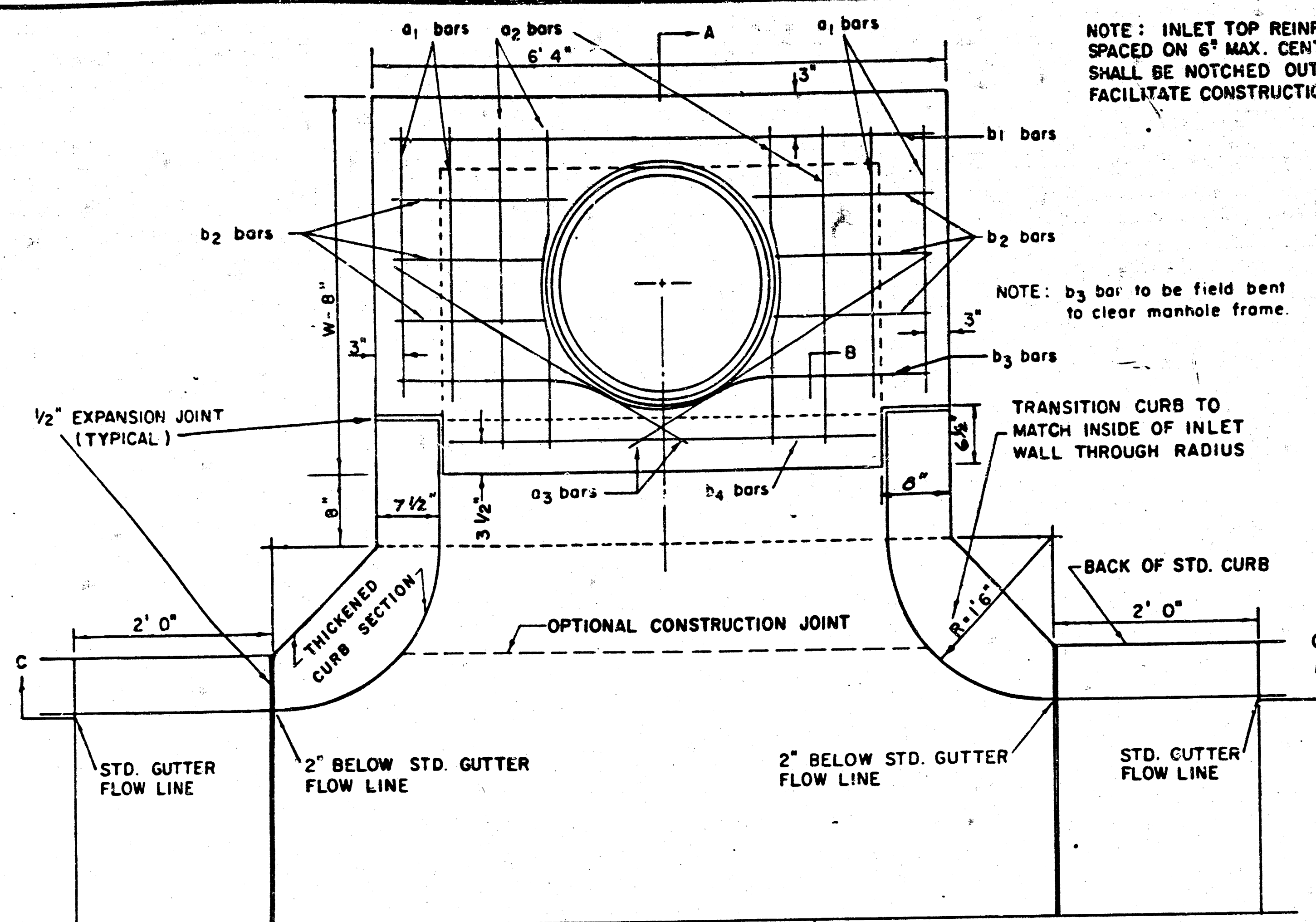


SCALE: 1"=20', Horiz.
1"=5', Vert.



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NOTE: EXPANSION JOINT ONLY IN CURB AREA WITH CONC. PAVEMENT.

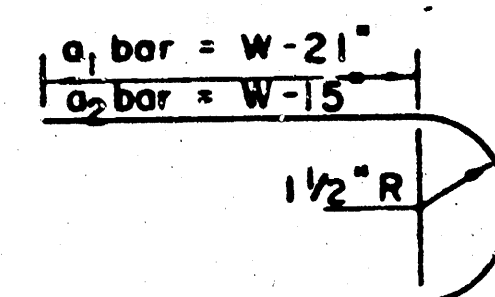
PLAN

STEEL SCHEDULE

BAR	a ₁	a ₂	a ₃	b ₁	b ₂	b ₃	b ₄	WT. LBS.
NUMBER	4	4	2	1	3	5	7	9
SIZE	*4	*4	*4	*4	*4	*4	*4	*6
W=4'4"	5'7"	6'7"	4'0"	6'1"	-	-	-	1'9"
W=5'4"	7'7"	8'7"	5'0"	6'1"	-	-	-	1'9"
W=6'4"	9'7"	10'7"	6'0"	6'1"	-	-	-	1'9"
W=7'4"	11'7"	12'7"	7'0"	6'1"	-	-	-	1'9"
W=8'4"	13'7"	14'7"	8'0"	6'1"	-	-	-	1'9"

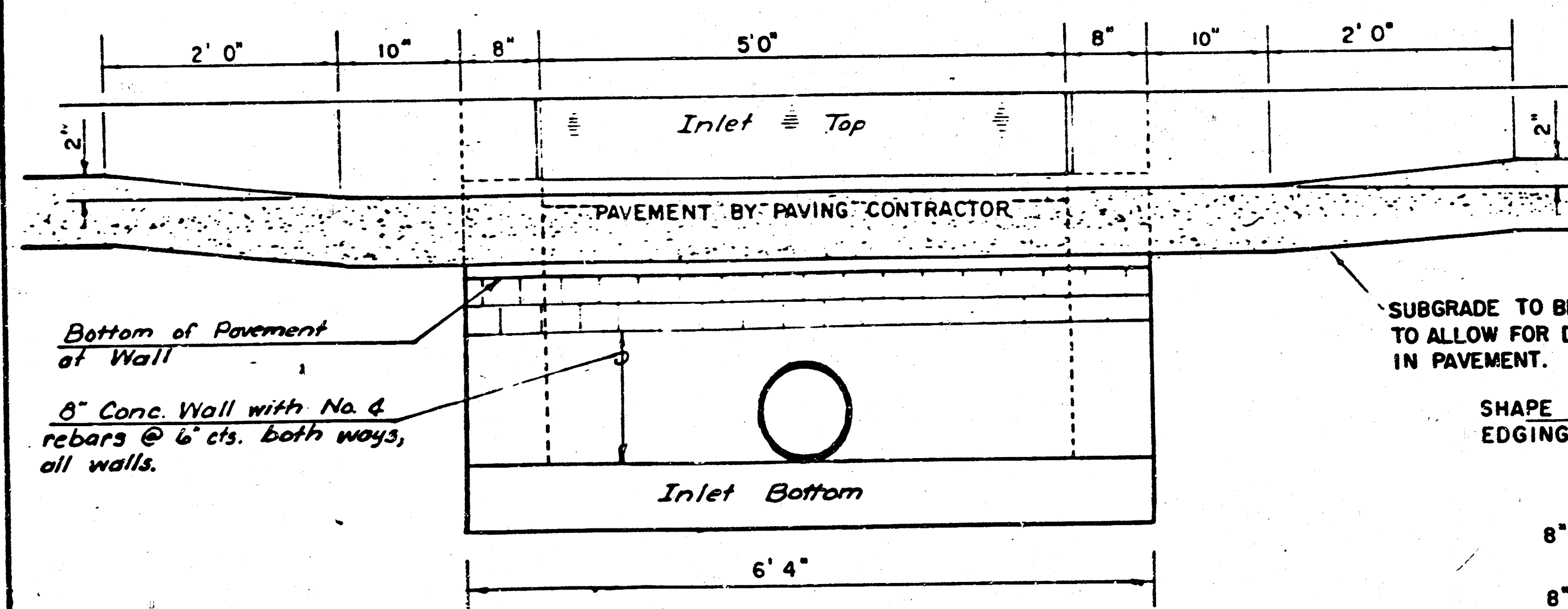
* NOTE: a₃ BARS TO BE PLACED APPROX. 2" BELOW TOP OF INLET COVER

BENDING DIAGRAM

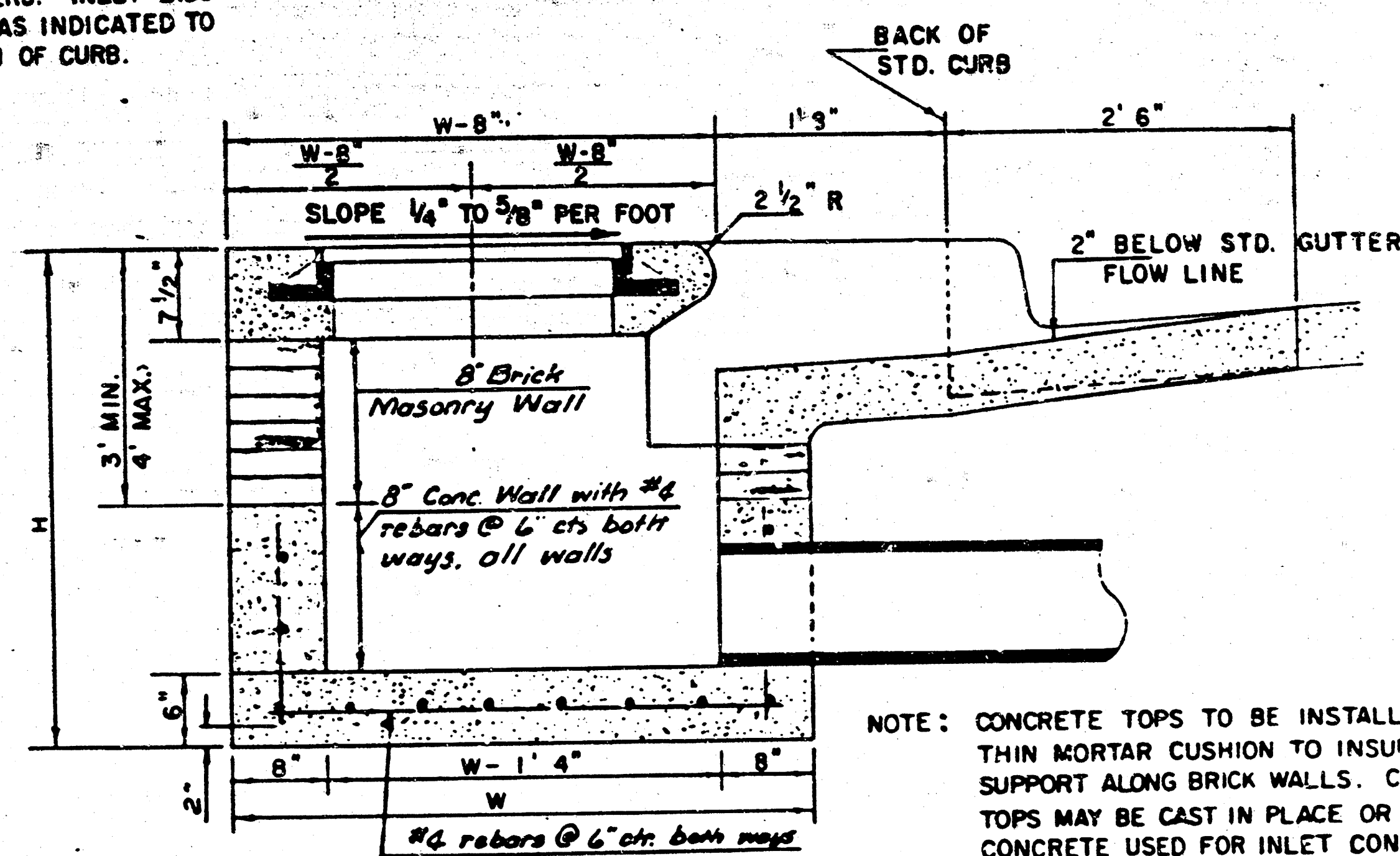


BENDING DIAGRAM

W	PRE-CAST TOP SIZE	PIPE SIZE	CU. YD. CONC.
4' 4"	5' 8" x 6' 4" x 7 1/2"	21" & SMALLER	0.38 ±
5' 4"	6' 8" x 6' 4" x 7 1/2"	24" & 30"	0.51 ±
6' 4"	7' 8" x 6' 4" x 7 1/2"	36" & 42"	0.64 ±
7' 4"	8' 8" x 6' 4" x 7 1/2"	48" & 54"	0.77 ±
8' 4"	9' 8" x 6' 4" x 7 1/2"	60" & 66"	0.90 ±



SECTION C-C



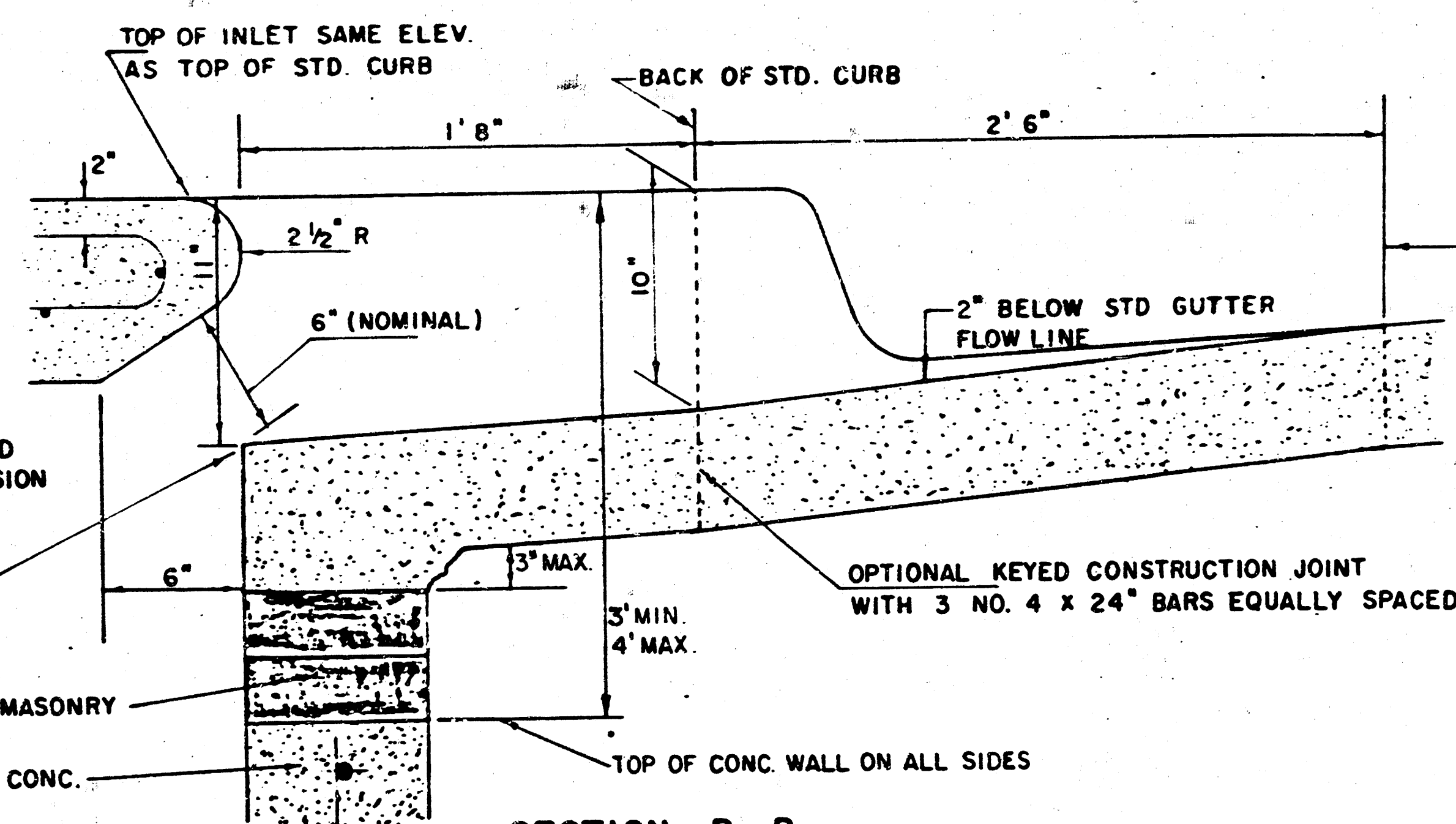
SECTION A-A

NOTE: CONTRACTOR SHALL HAVE THE OPTION OF CONSTRUCTING 8" BRICK MASONRY WALLS BETWEEN THE CONCRETE INLET BASE AND TOP ON THIS INLET WHEN W = 6' 4" AND H = 7' 0" OR LESS.

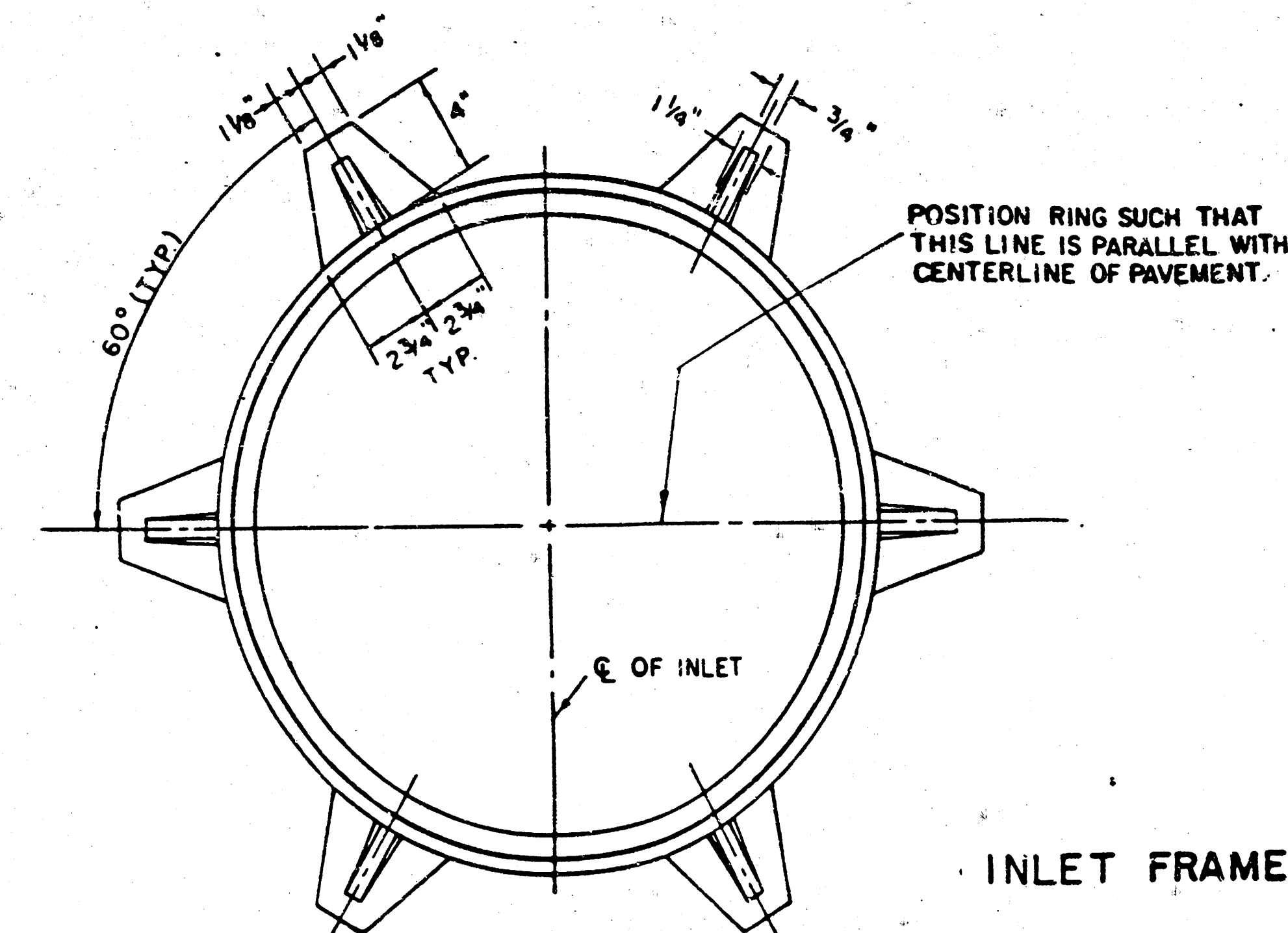
ADDITIONAL CURB AND GUTTER CONSTRUCTION NECESSARY TO CONNECT SET-BACK INLET TO PAVEMENT WILL BE PAID FOR AT THE UNIT PRICE BID FOR EACH INLET HOOKUP.

INLET INVERT SHALL BE SHAPED WITH 8 SACK SAND MIX CONCRETE TO CREATE FLOW CHANNELS AND TO INCREASE HYDRAULIC EFFICIENCY SUCH THAT THE INLET WILL BE SELF-CLEANING BETWEEN ALL INLET AND/OR OUTLET PIPES.

THE ENDS OF ALL PIPES INSTALLED IN INLETS SHALL BE CUT OFF FLUSH WITH THE INSIDE FACE OF THE INLET WALL.

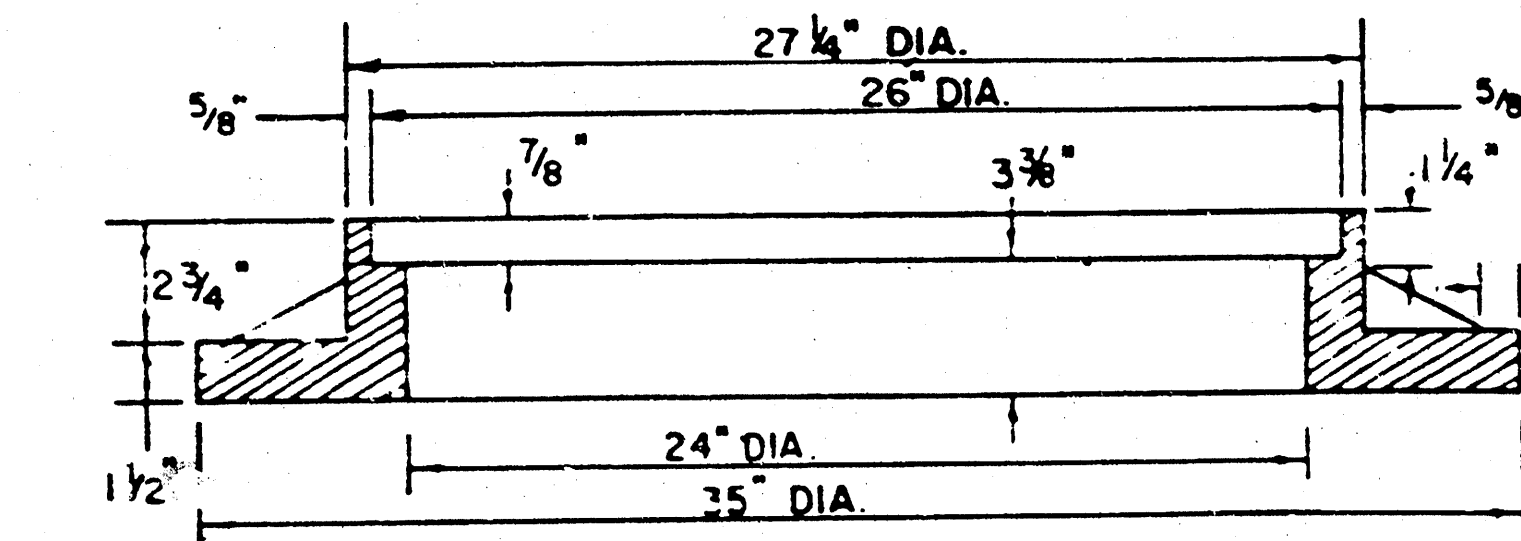


SECTION B-B



INLET FRAME

WEIGHT = 180 LBS.



SEE CITY OF WICHITA STANDARD MANHOLE FRAME AND COVER DETAIL SHEET FOR COVER DETAILS TO BE USED WITH INLET FRAME.

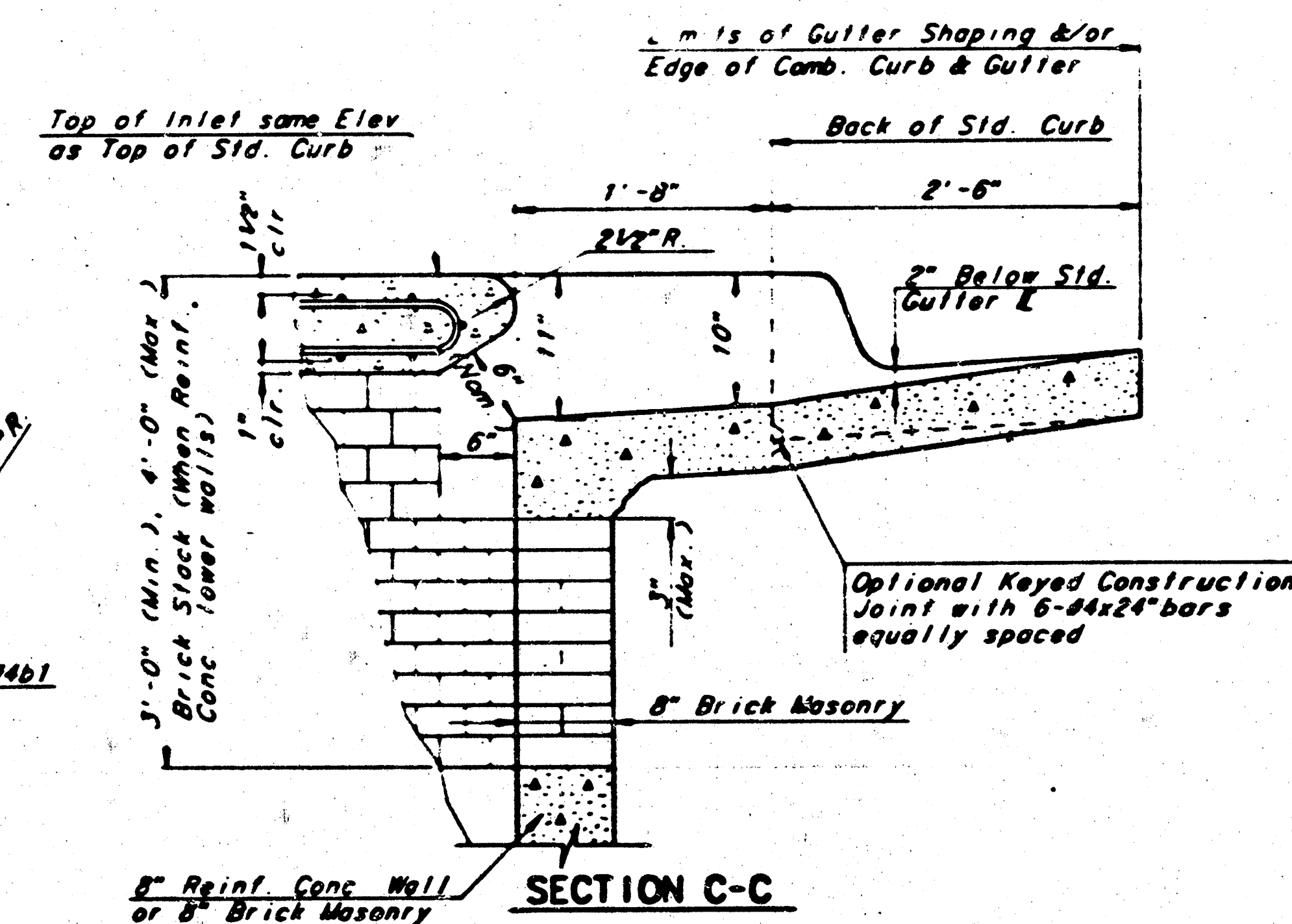
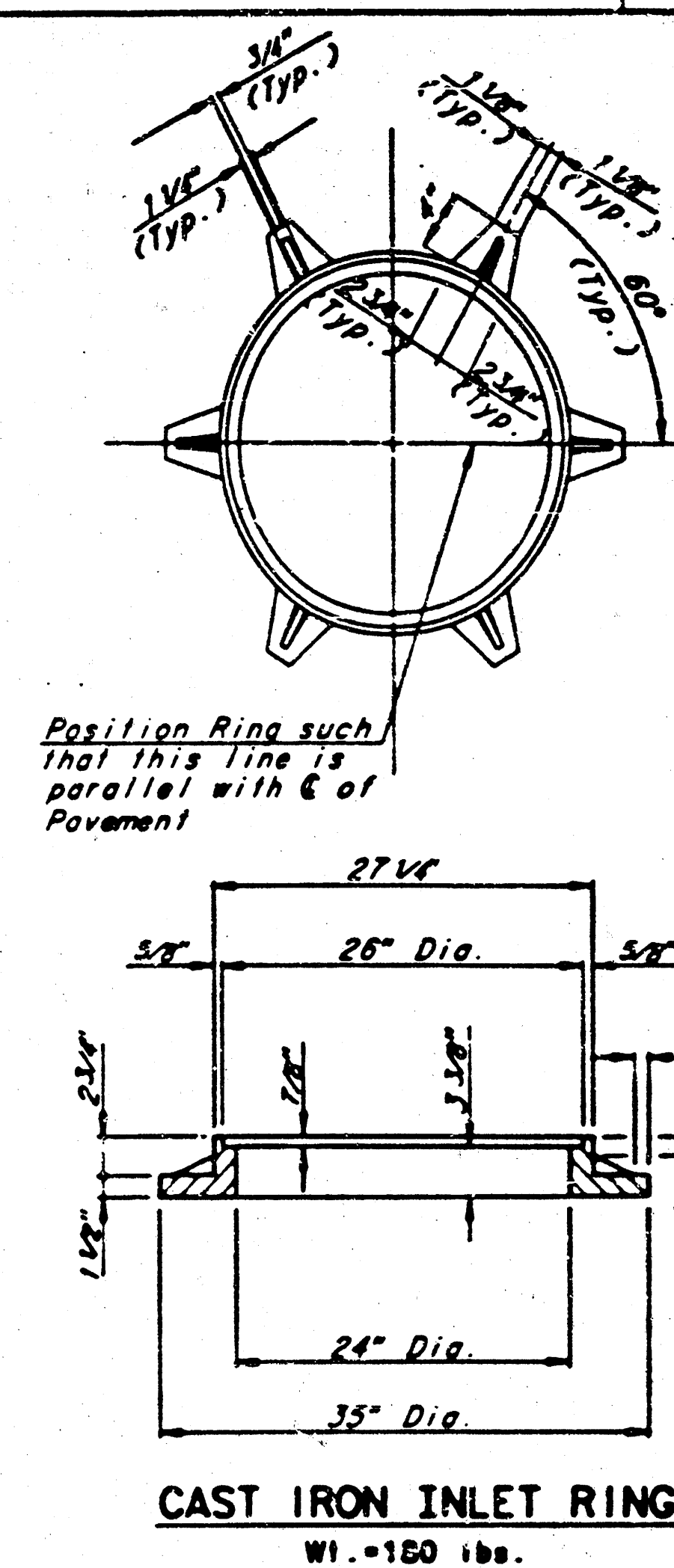
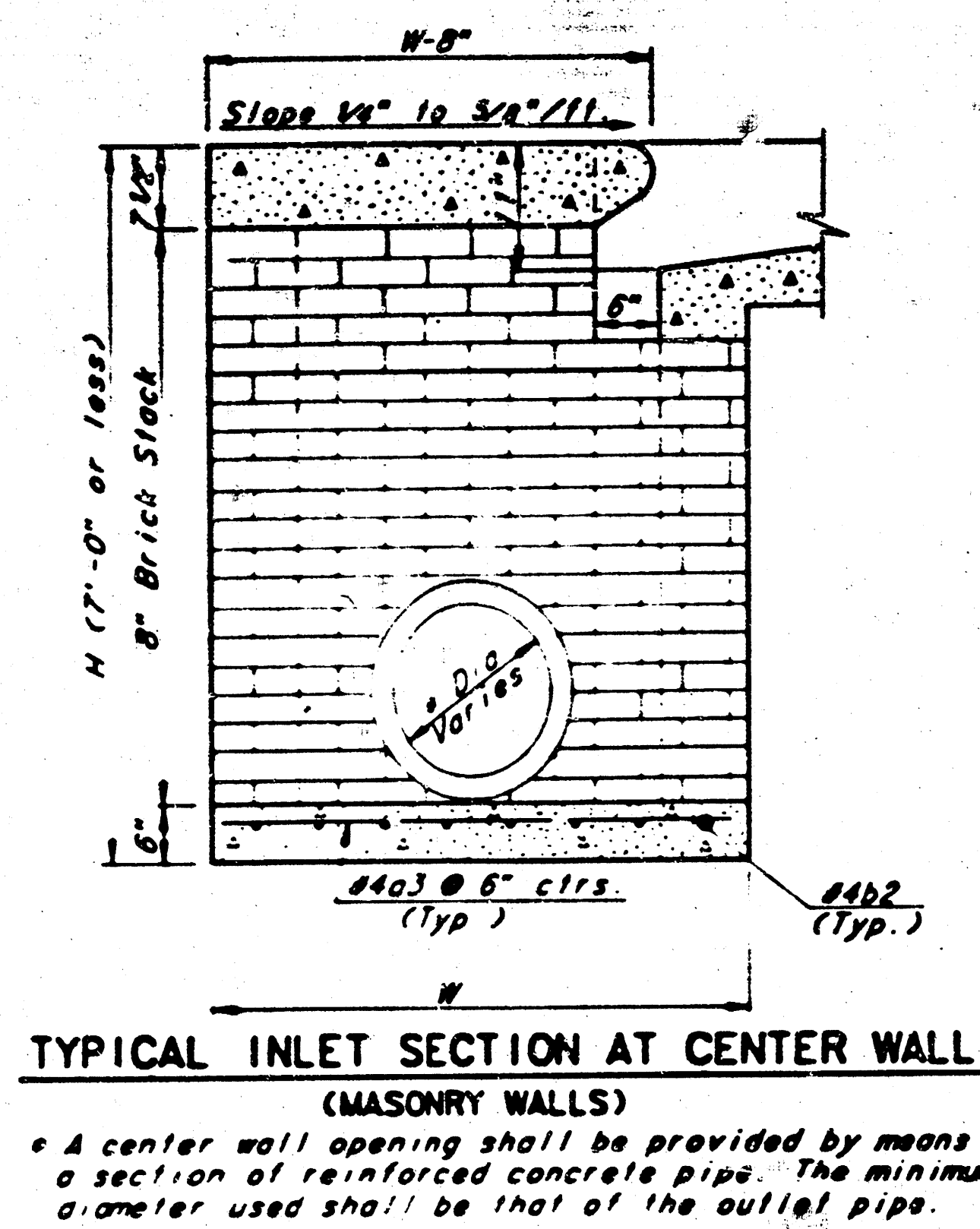
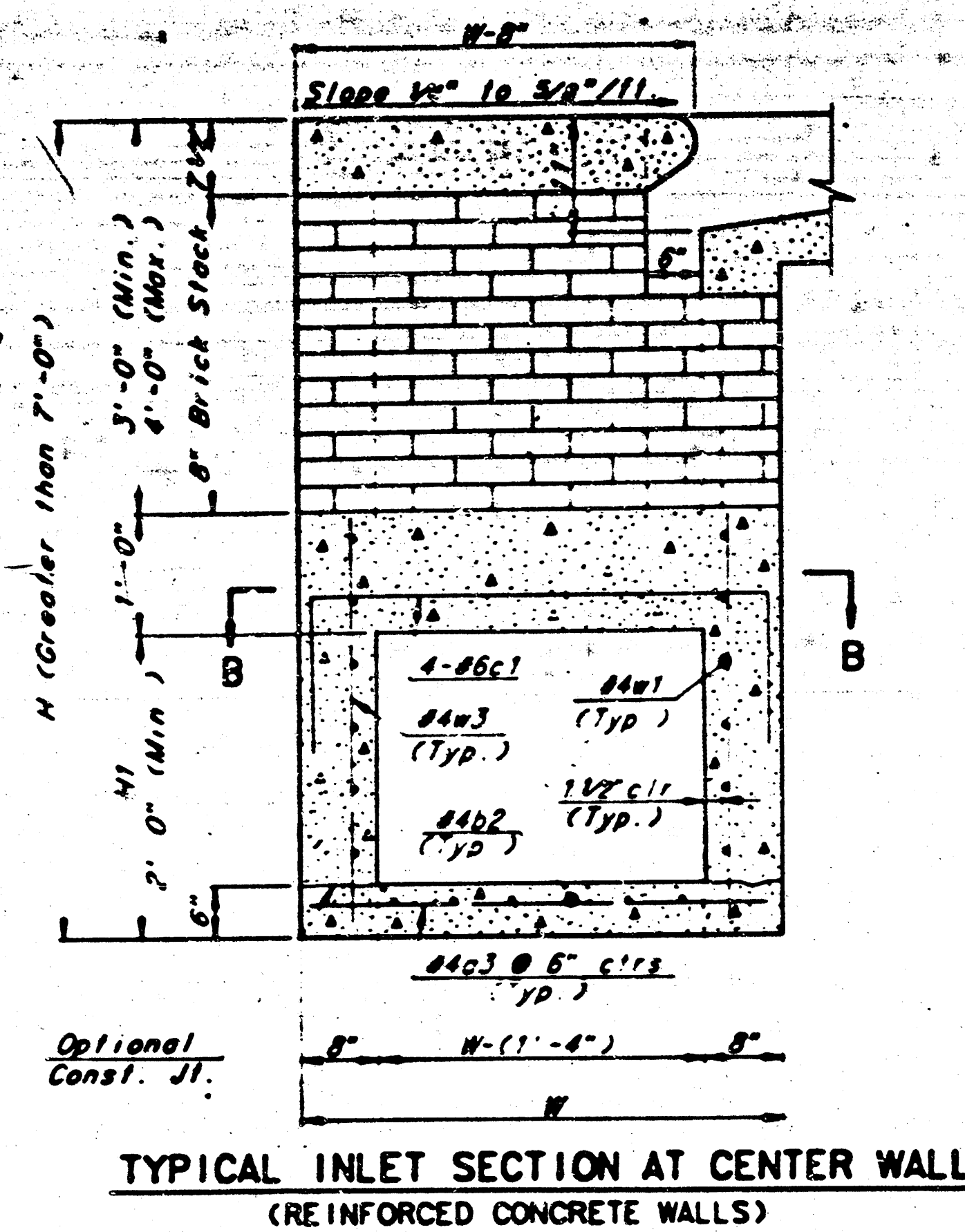
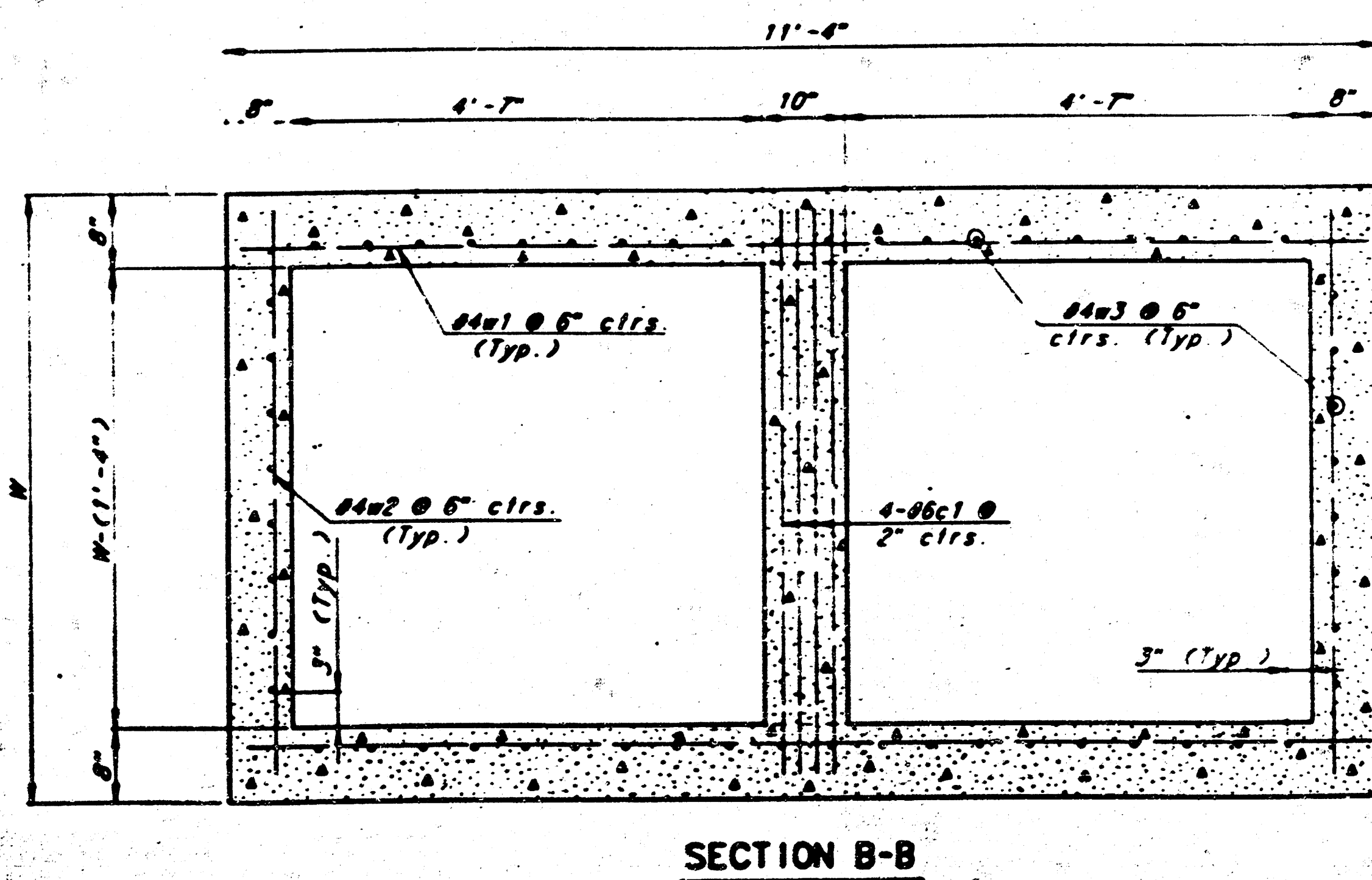
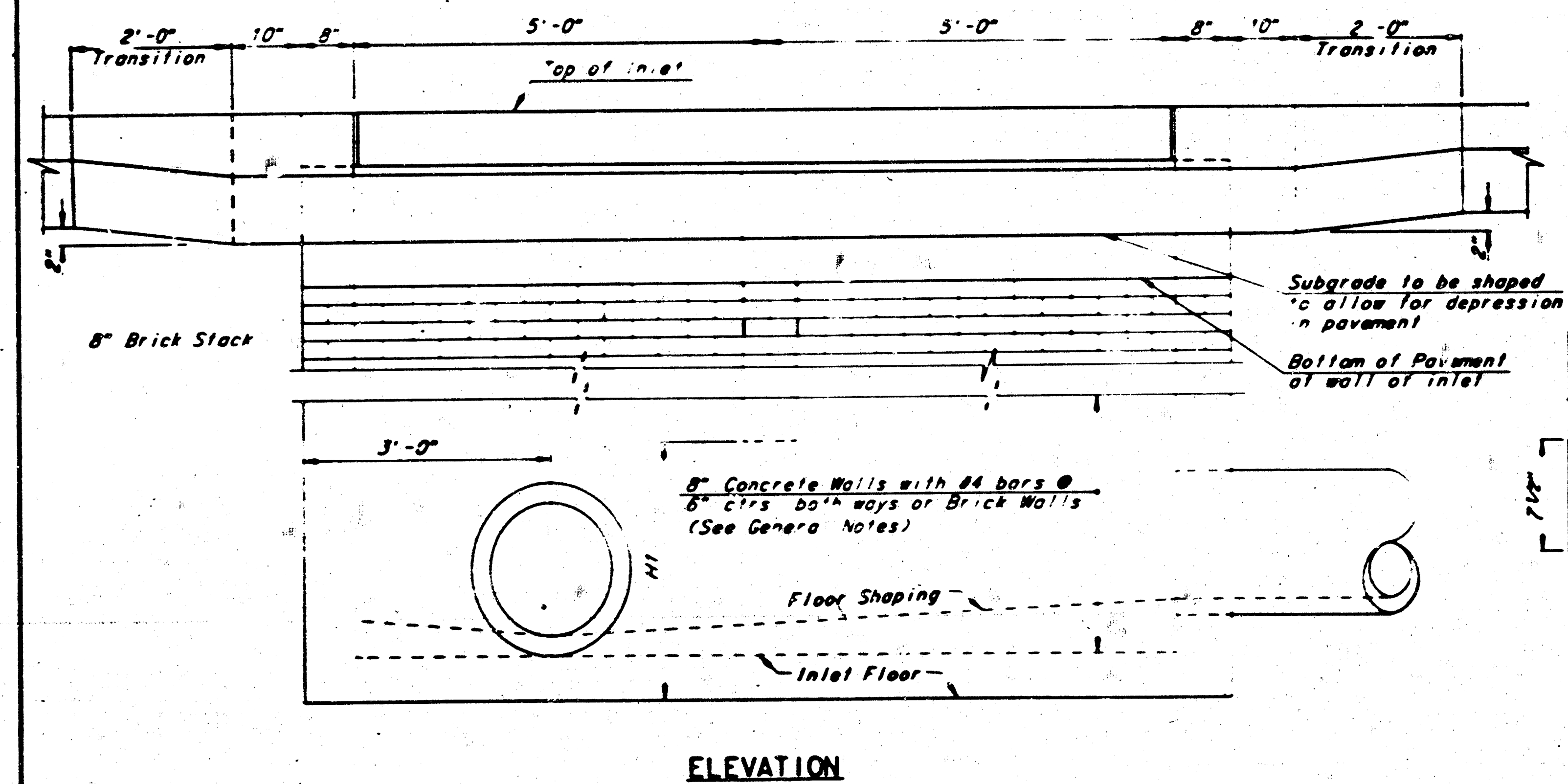
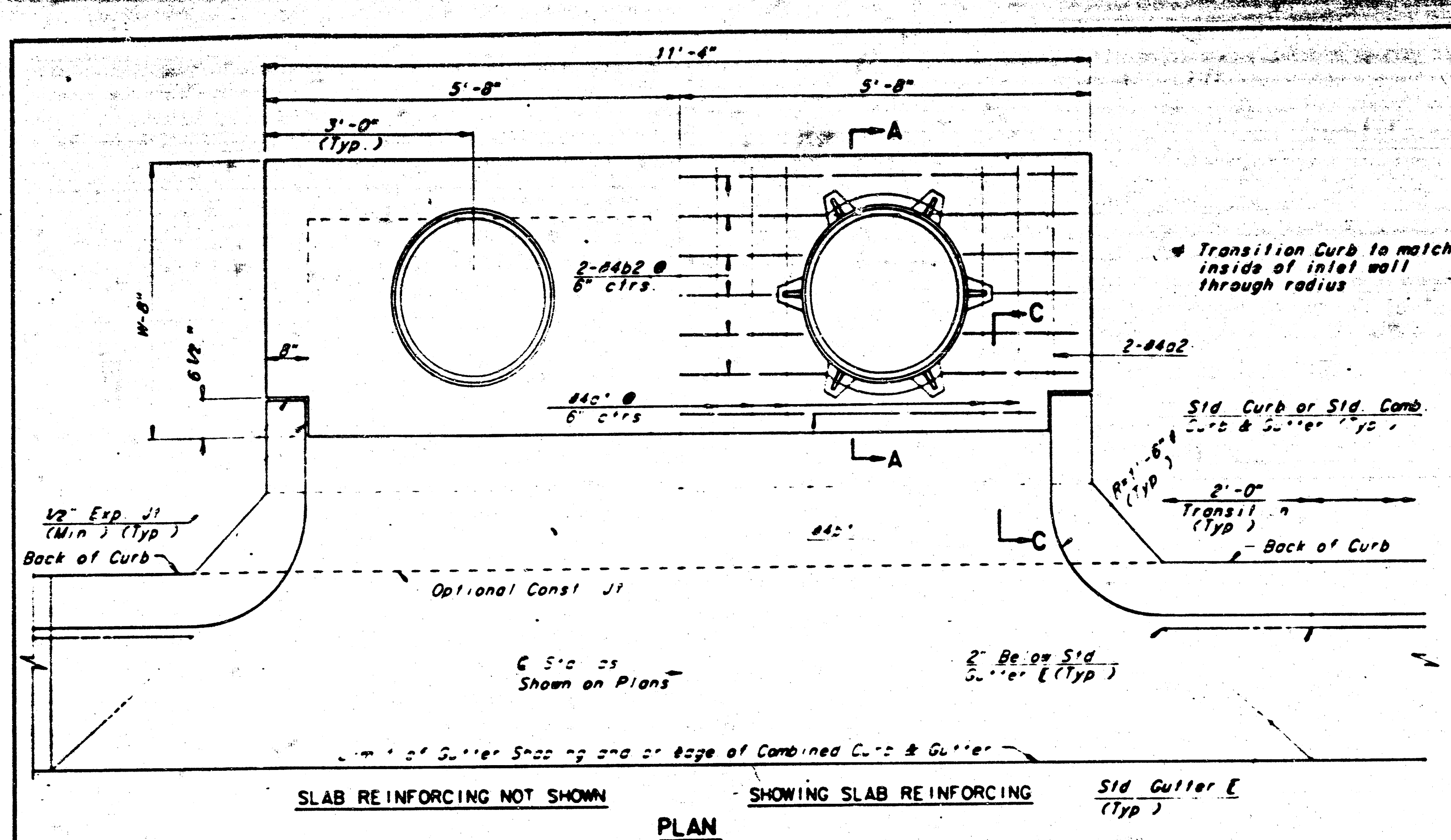
REVISED 12-21-1984

DETAIL STANDARD TYPE IA CURB INLET
CITY OF WICHITA, KANSAS
INLET OPENING = 6" x 5' 0"

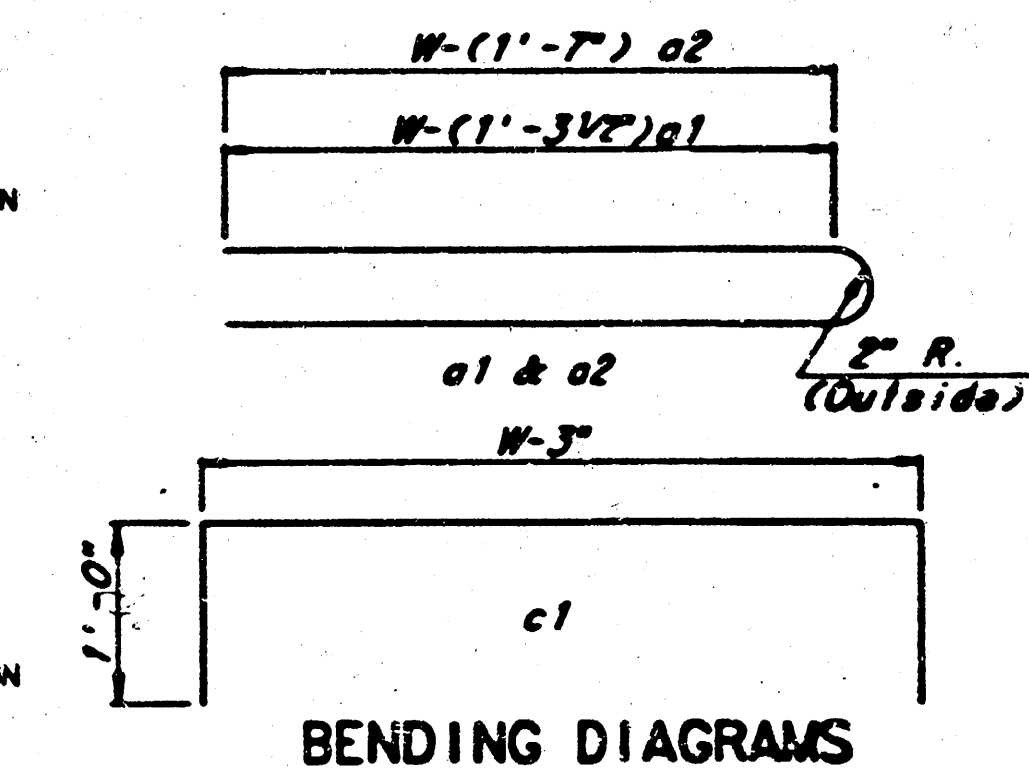
JUNE 1984

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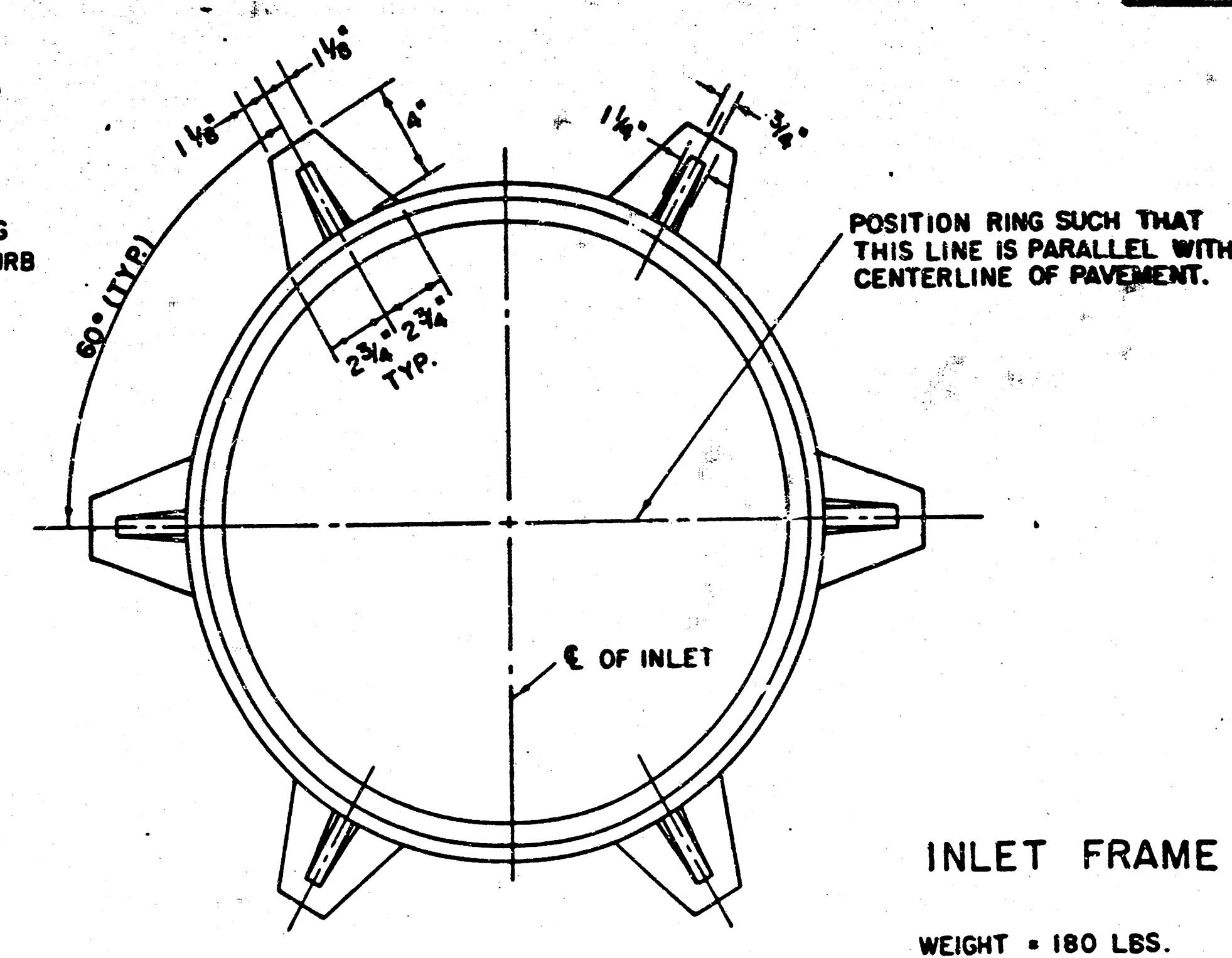
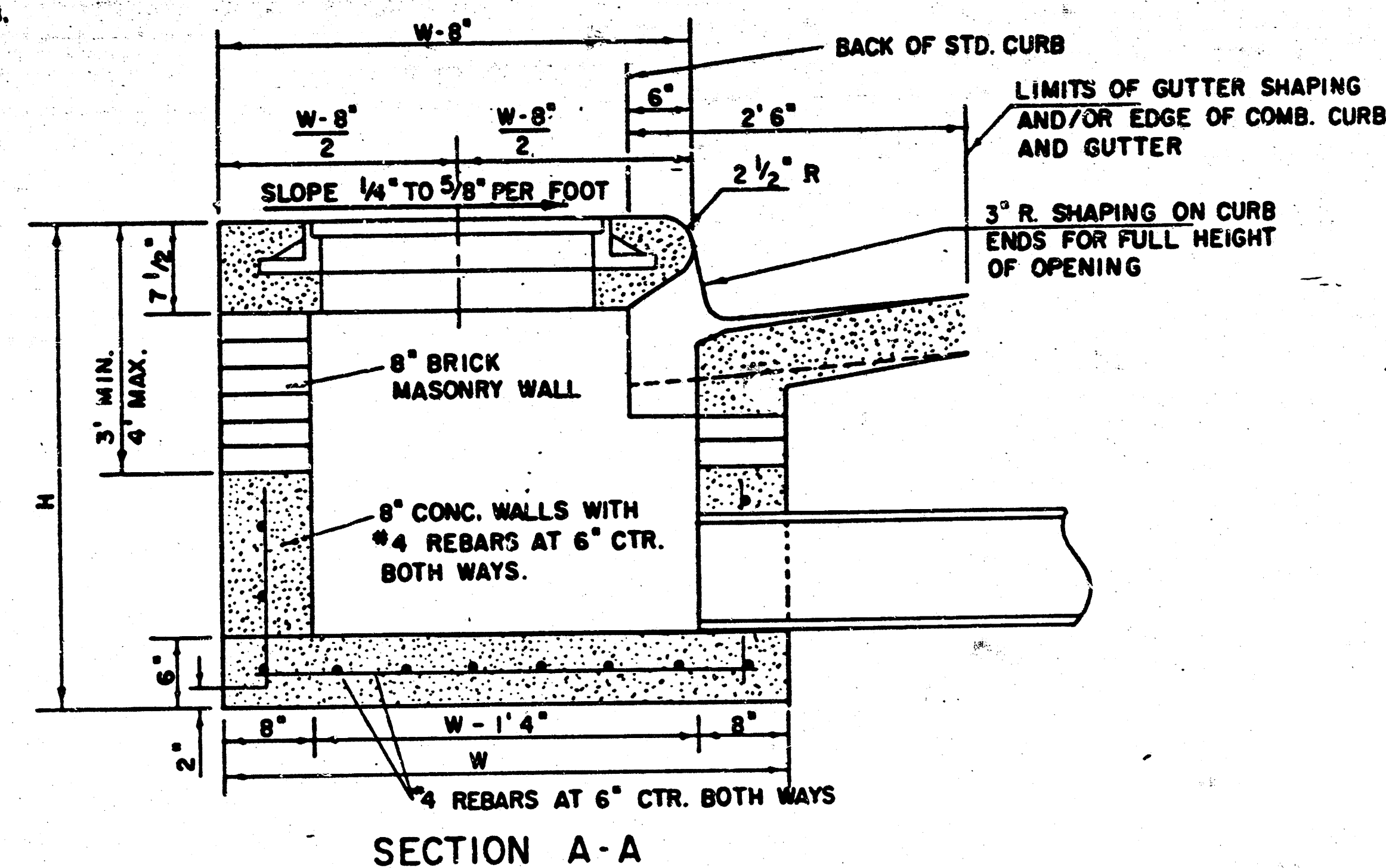
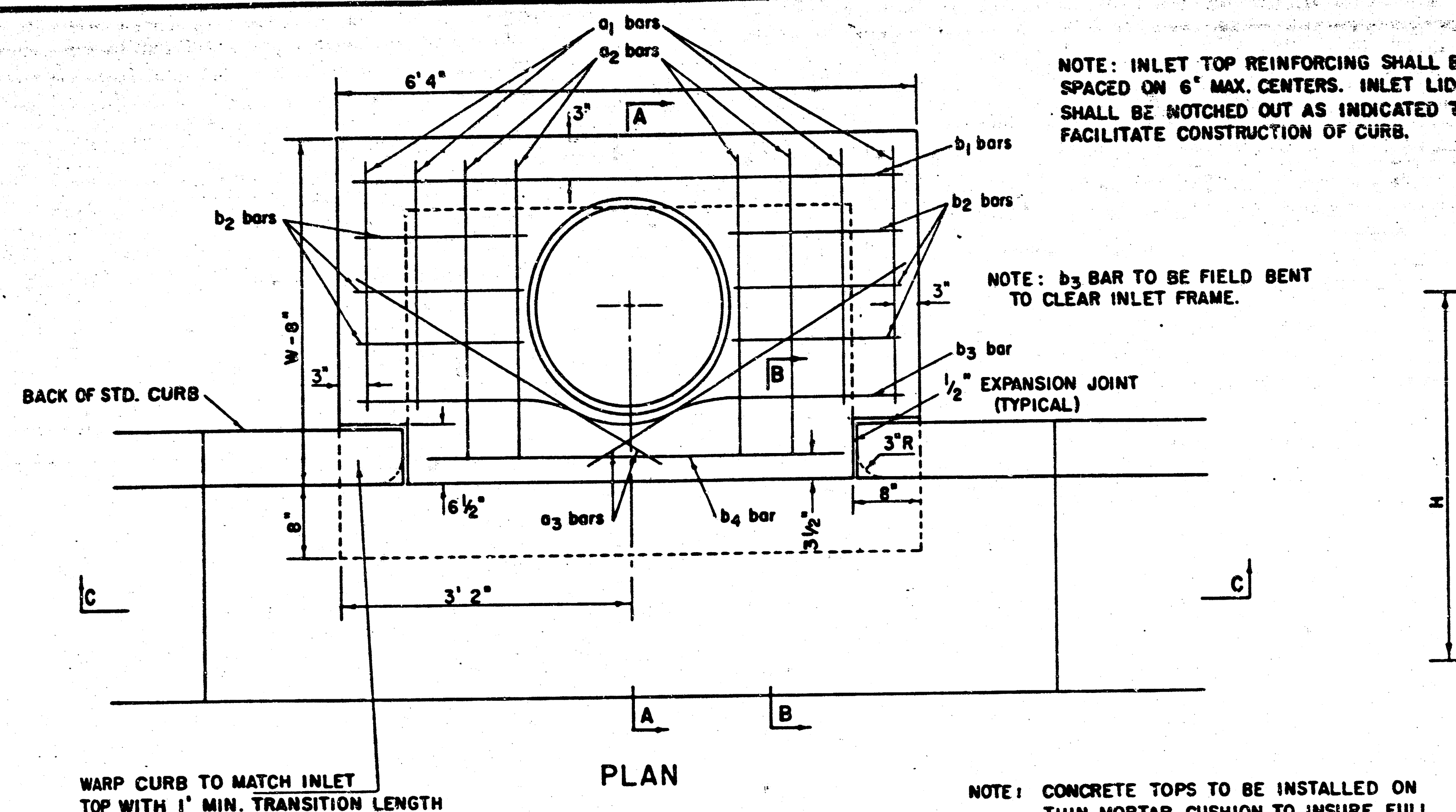
1. THE CONTRACTOR SHALL BE REQUIRED TO CONSTRUCT B" BRICK MASONRY WALLS BETWEEN THE CONCRETE INLET BASE AND TOP ON THIS INLET WHEN W=6" - 4" OR LESS AND W=7" - 0" OR LESS WHEN W IS GREATER THAN 6" - 4" AND IS LESS THAN 7" OF THE OUTSIDE INLET WALLS FROM THE INLET SHALL BE REINFORCED CONSTRUCTION AND THE CENTER WALL SHALL BE OF MASONRY CONSTRUCTION AS SHOWN FOR THE MASONRY WALL OPTION.
2. INLET INVERT SHALL BE SHAPED WITH 8 SACK SAND MIX CONCRETE TO CREATE FLOW CHANNELS AND TO INCREASE HYDRAULIC EFFICIENCY SUCH THAT THE FLOW WILL BE SELF CLEANING BETWEEN ALL INLET AND/OR OUTLET PIPES.
3. CONCRETE TIPS TO BE INSTALLED ON THIN MORTAR CUSHION TO INSURE FULL SUPPORT ALONG BRICK WALLS. CONCRETE TIPS MAY BE CAST IN PLACE OR PRECAST. CONCRETE USED FOR INLET CONSTRUCTION SHALL BE CONCRETE PAVEMENT MIX.
4. INLET TOP REINFORCING SHALL BE SPACED ON 6" MAX CENTERS. INLET LIDS SHALL BE NOTCHED OUT AS INDICATED TO FACILITATE CONSTRUCTION OF REINFORCING BARS IN INLET TOP TO BE FIELD BENT OR CUT TO CLEAR HANDLE RING.
5. THE ENDS OF ALL PIPES INSTALLED IN INLETS SHALL BE CUT OFF FLUSH WITH THE INSIDE FACE OF THE INLET WALL.



STANDARD TYPE 1A
CURB INLET
INLET OPENING = 6" x 10' - 0"

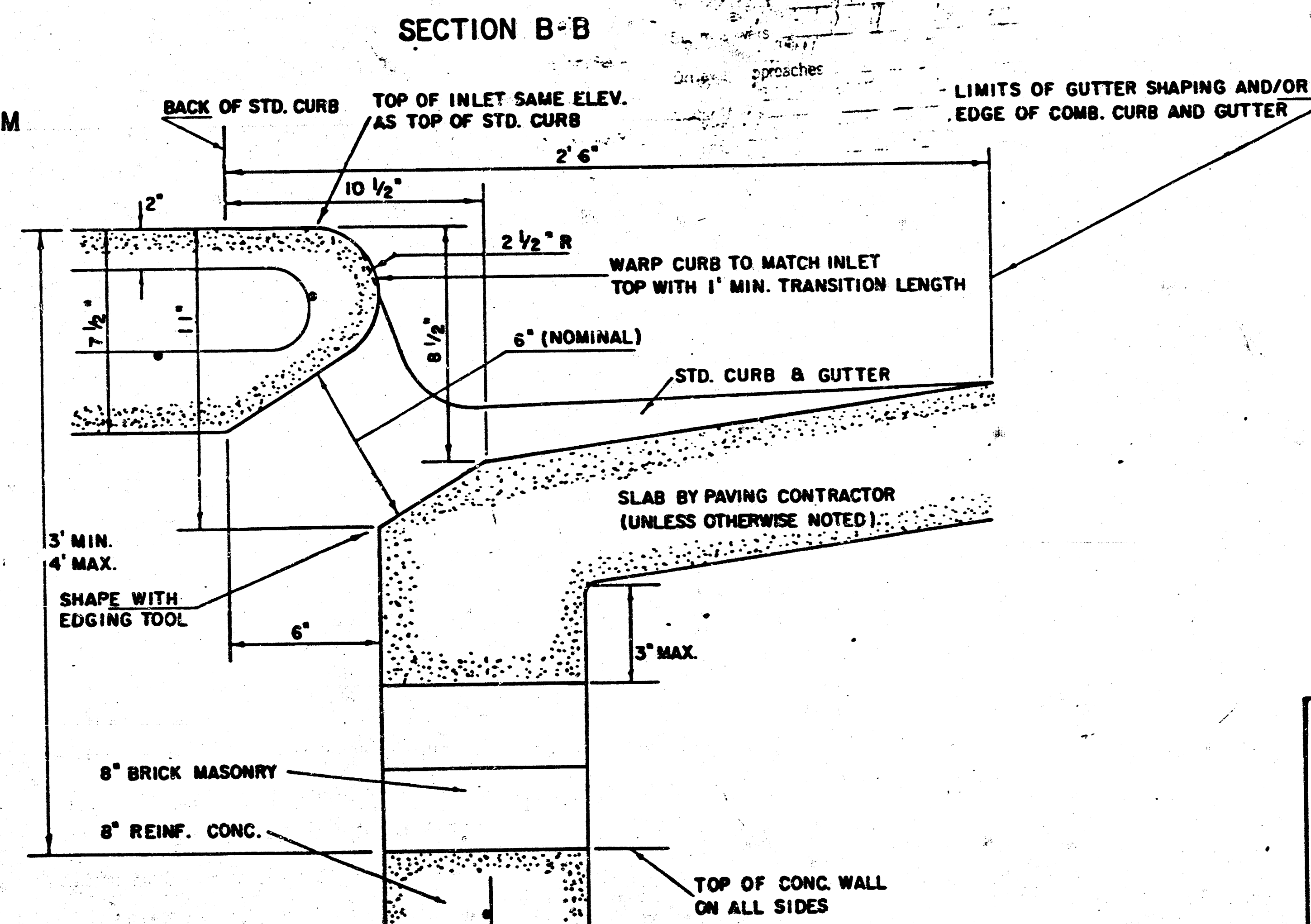
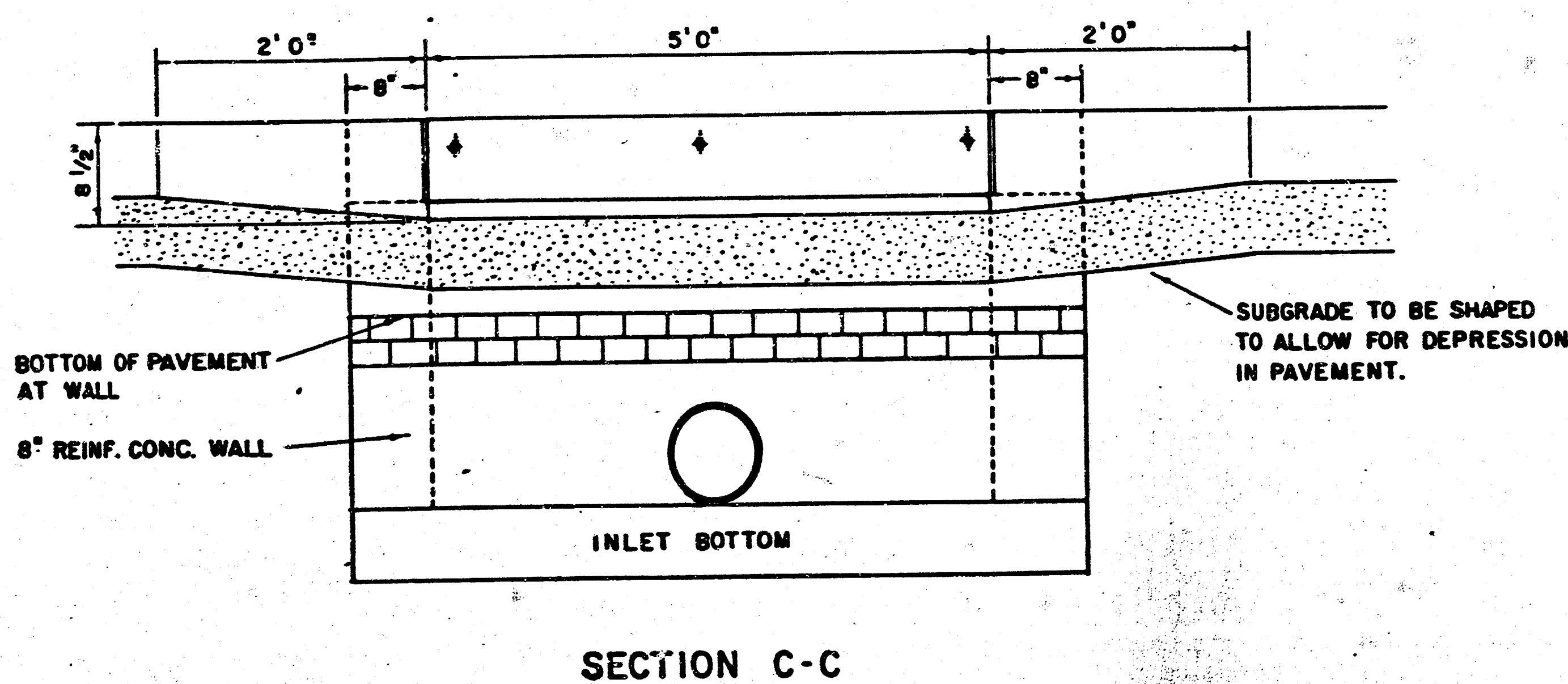
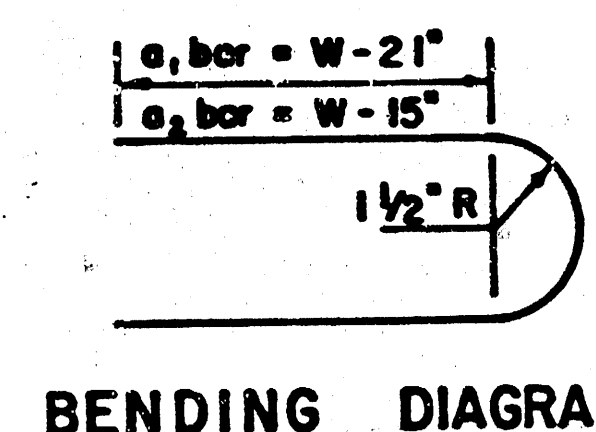
WICHITA, KANSAS			
Designed by	BER, KJS, AND	Classified by	AND
Drawn by	JCP	Date	Mar. 1984

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STEEL SCHEDULE													
BAR	a ₁	a ₂	a ₃	b ₁					b ₂	b ₃	b ₄	WT. LBS.	
NUMBER	4	4	2	1	3	5	7	9	6	1	1		
SIZE	"4	"4	"4	"4	"4	"4	"4	"4	"4	"4	"6		
LENGTH	W-4'4"	5'7"	6'7"	4'0"	6'1"	-	-	-	-	1'9"	6'2"	4'8"	60 ±
	W-5'4"	7'7"	8'7"	5'0"	-	6'1"	-	-	-	1'9"	6'2"	4'8"	81 ±
	W-6'4"	9'7"	10'7"	6'0"	-	-	6'1"	-	-	1'9"	6'2"	4'8"	101 ±
	W-7'4"	11'7"	12'7"	7'0"	-	-	-	6'1"	-	1'9"	6'2"	4'8"	121 ±
	W-8'4"	13'7"	14'7"	8'0"	-	-	-	-	6'1"	1'9"	6'2"	4'8"	141 ±

STANDARD CURB INLET PRECAST TOPS					
W	PRE-CAST TOP SIZE			PIPE SIZE	CJ. YD. CONC.
4' 4"	3' 8"	6' 4"	7 1/2"	21" & SMALLER	0.58 ±
5' 4"	4' 8"	6' 4"	7 1/2"	24" & 30"	0.51 ±
6' 4"	5' 8"	6' 4"	7 1/2"	36" & 42"	0.64 ±
7' 4"	6' 8"	6' 4"	7 1/2"	48" & 54"	0.77 ±
8' 4"	7' 8"	6' 4"	7 1/2"	60" & 66"	0.90 ±



REvised 12-21-1984

DETAIL STANDARD TYPE 1 CURB INLET
CITY OF WICHITA, KANSAS
INLET OPENING = 6" x 5'0"

JUNE 1984

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