

STREETS IN COMOTARA SECOND ADDITION

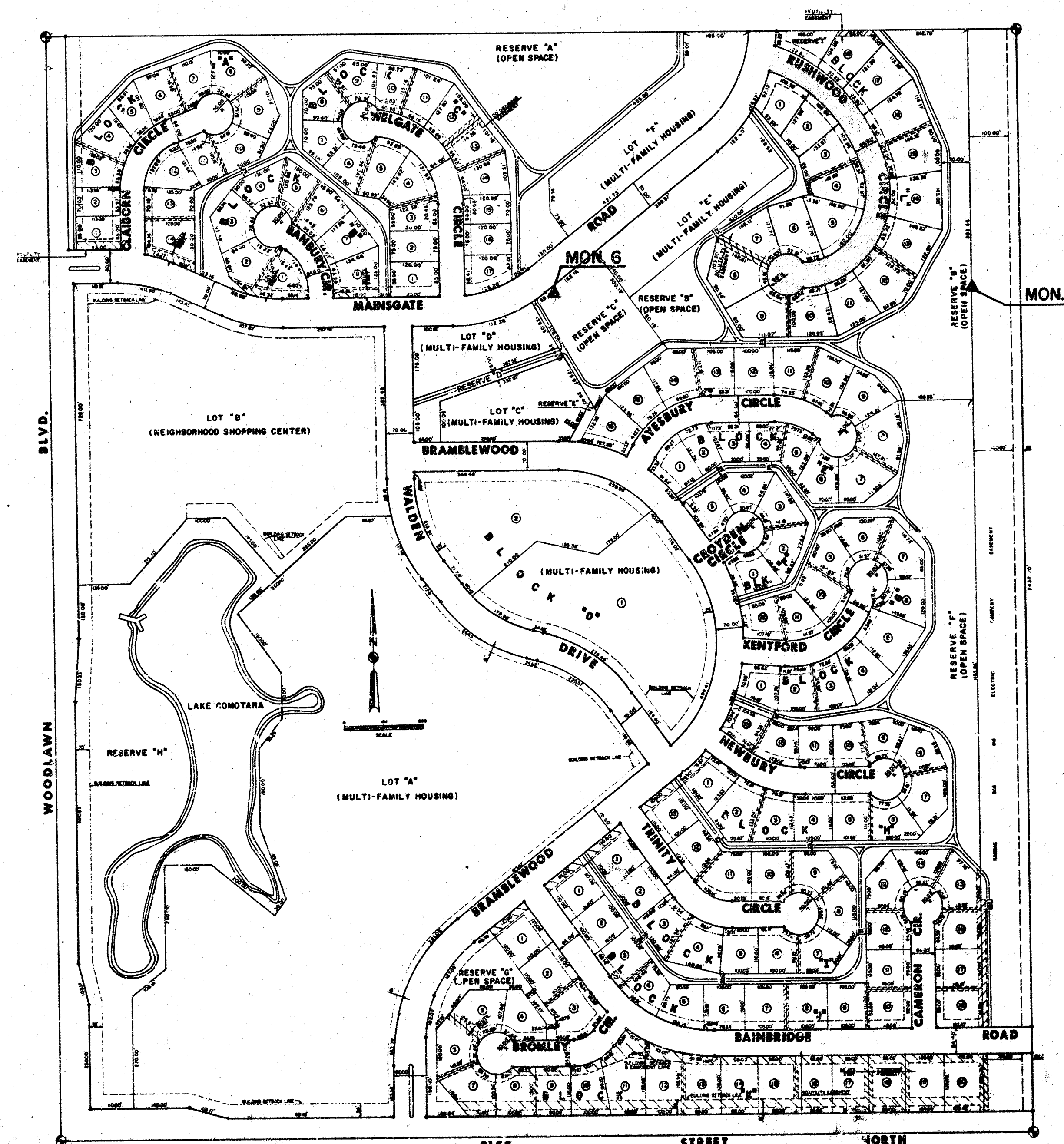
PROJECT NO. DAKS 574088

CITY OF WICHITA, KANSAS
R. W. LINN CITY ENGINEER

RUSHWOOD CIRCLE-S. L.
MAINSGATE ROAD TO &
INCLUDING CUL-DE-SAC

MONUMENT NO.	COORDINATES		ELEVATION
	NORTH	EAST	
5	389,060.76	2,360,628.00	211.23
6	389,079.36	2,359,489.27	190.63

MONUMENTS SHOWN THUS: MON. NO.



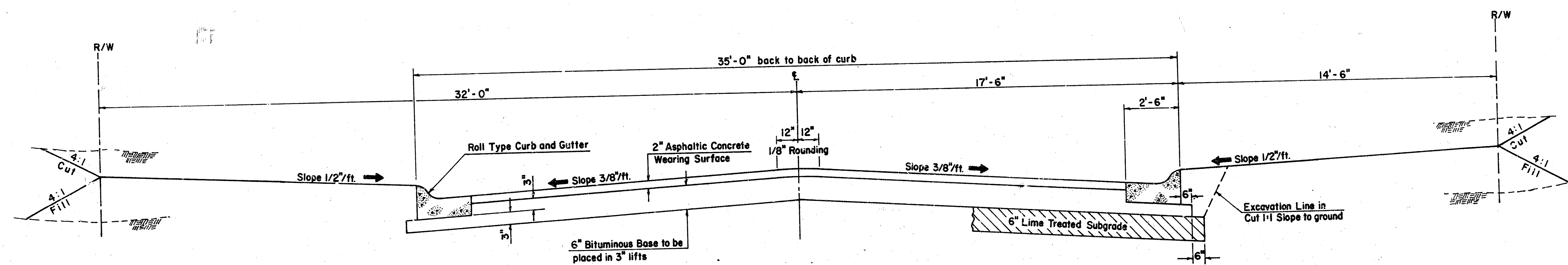
INDEX TO DRAWINGS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	TYPICAL SECTIONS
3-4	PLAN-PROFILE RUSHWOOD CIRCLE
5	SPECIAL TYPE "A" CURB INLET
6	REINFORCED CONCRETE MANHOLE
7-8	GRADING CROSS SECTIONS



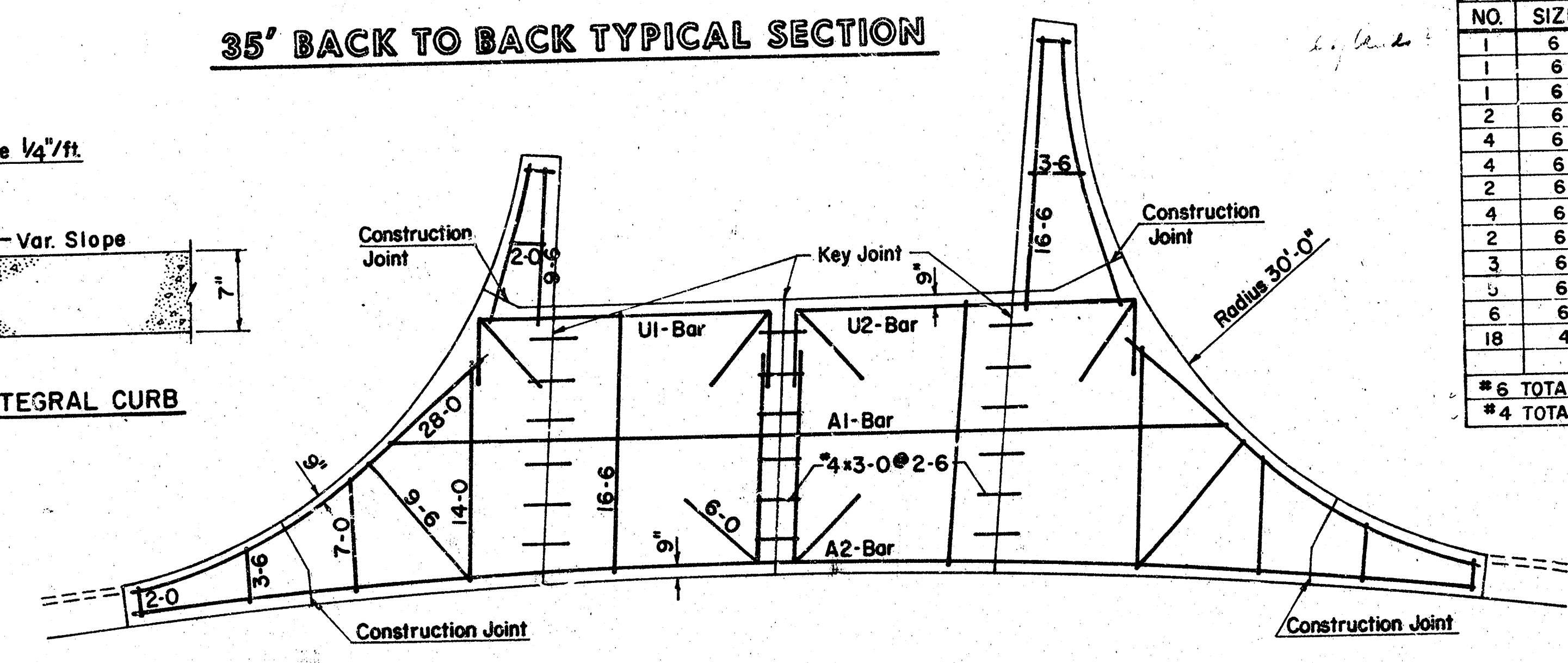
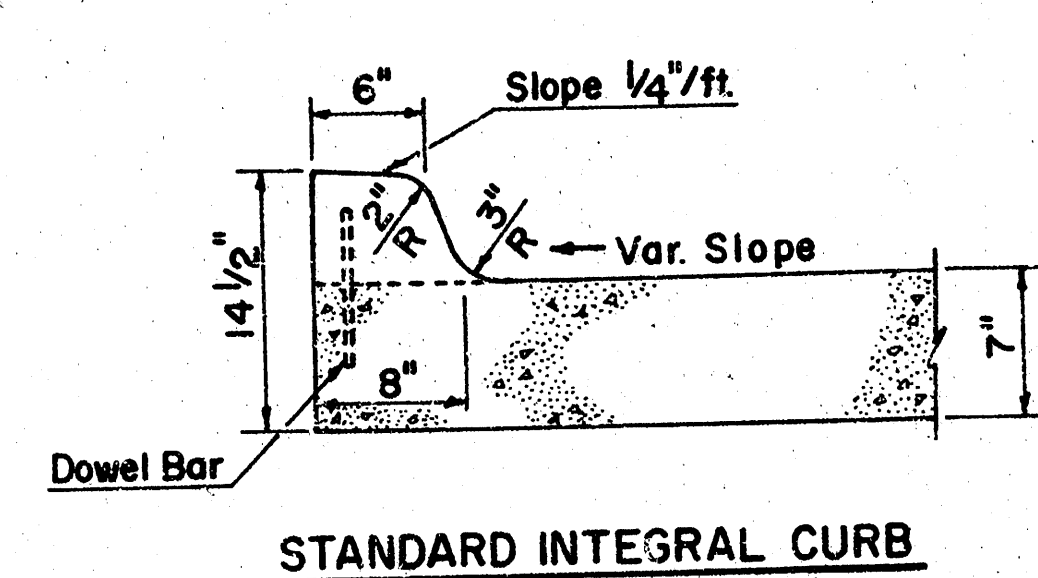
VAN DOREN-HAZARD-STALLINGS
ENGINEERS-ARCHITECTS • WICHITA, KANSAS

SHEET
11
OF 16

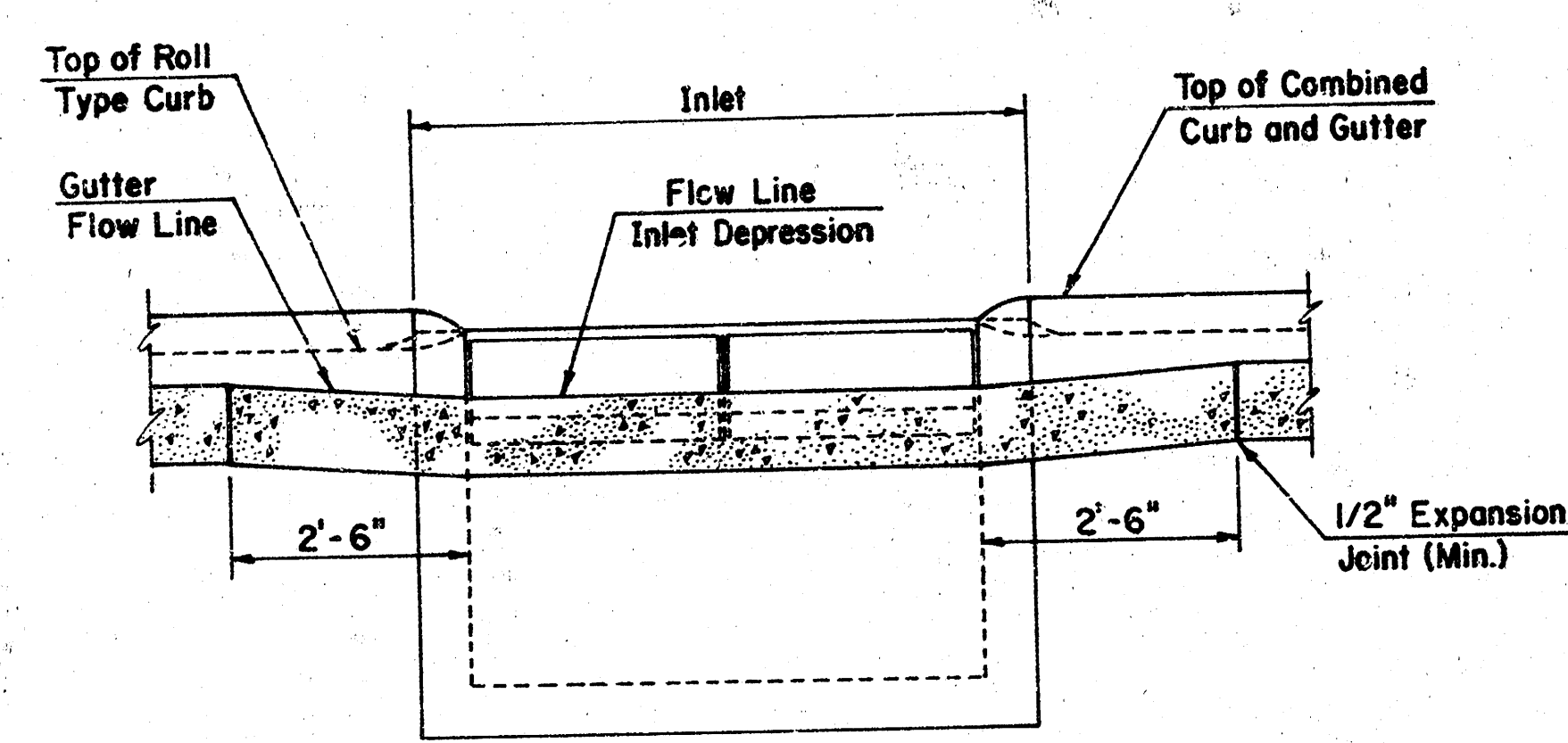


35' BACK TO BACK TYPICAL SECTION

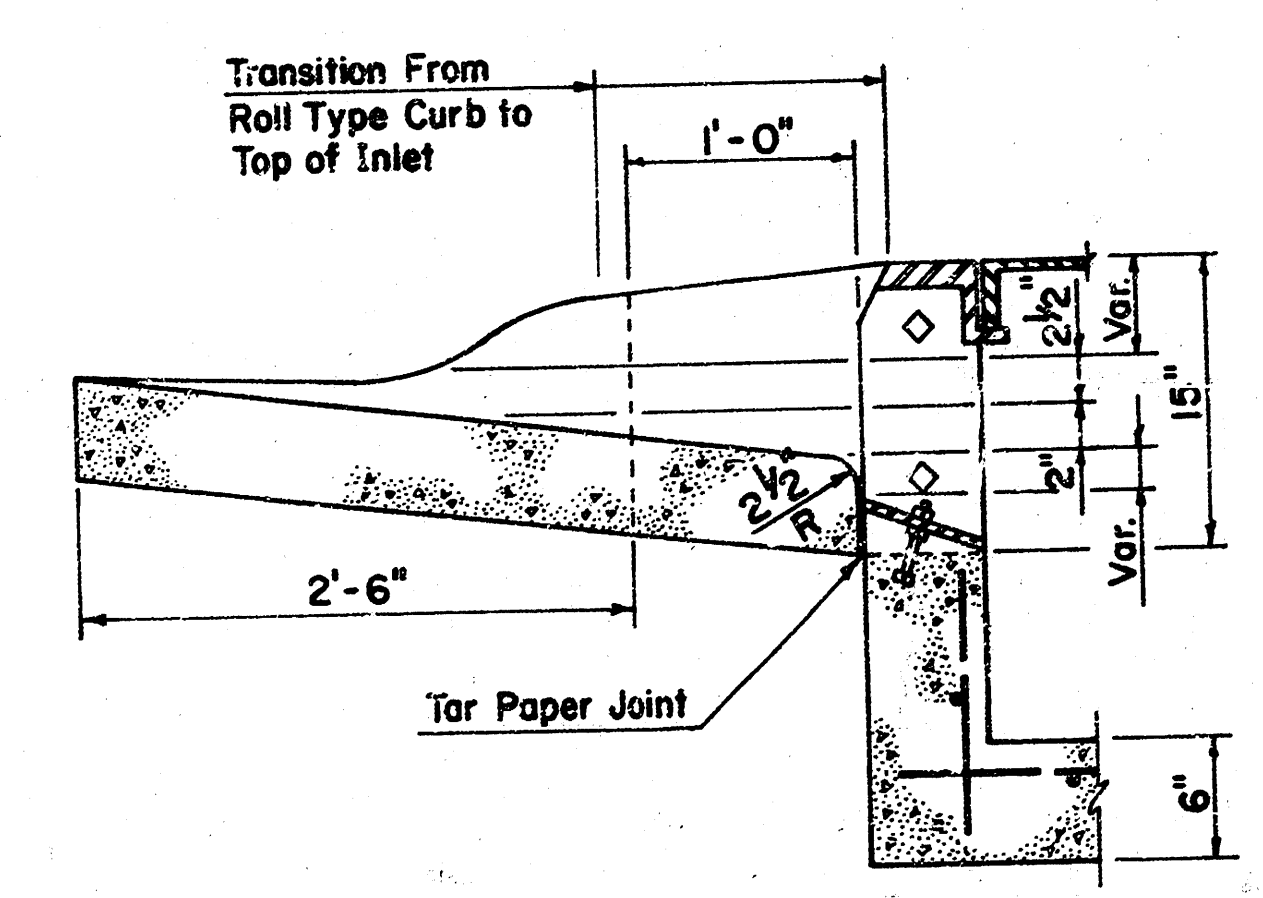
BILL OF MATERIAL				
NO.	SIZE	LENGTH	SHAPE	MARK
1	6	29'-0"	U1-Bar	
1	6	32'-0"	U2-Bar	
1	6	55'-0"	A1-Bar	
2	6	44'-0"	A2-Bar	
4	6	14'-0"	Bar	
4	6	16'-6"	Bar	
2	6	28'-0"	Bar	
4	6	9'-0"	Bar	
2	6	7'-0"	Bar	
3	6	3'-6"	Bar	
3	6	2'-0"	Bar	
6	6	6'-0"	Bar	
18	4	3'-0"	Bar	
# 6 TOTAL		490'-6"		
# 4 TOTAL		54'-0"		



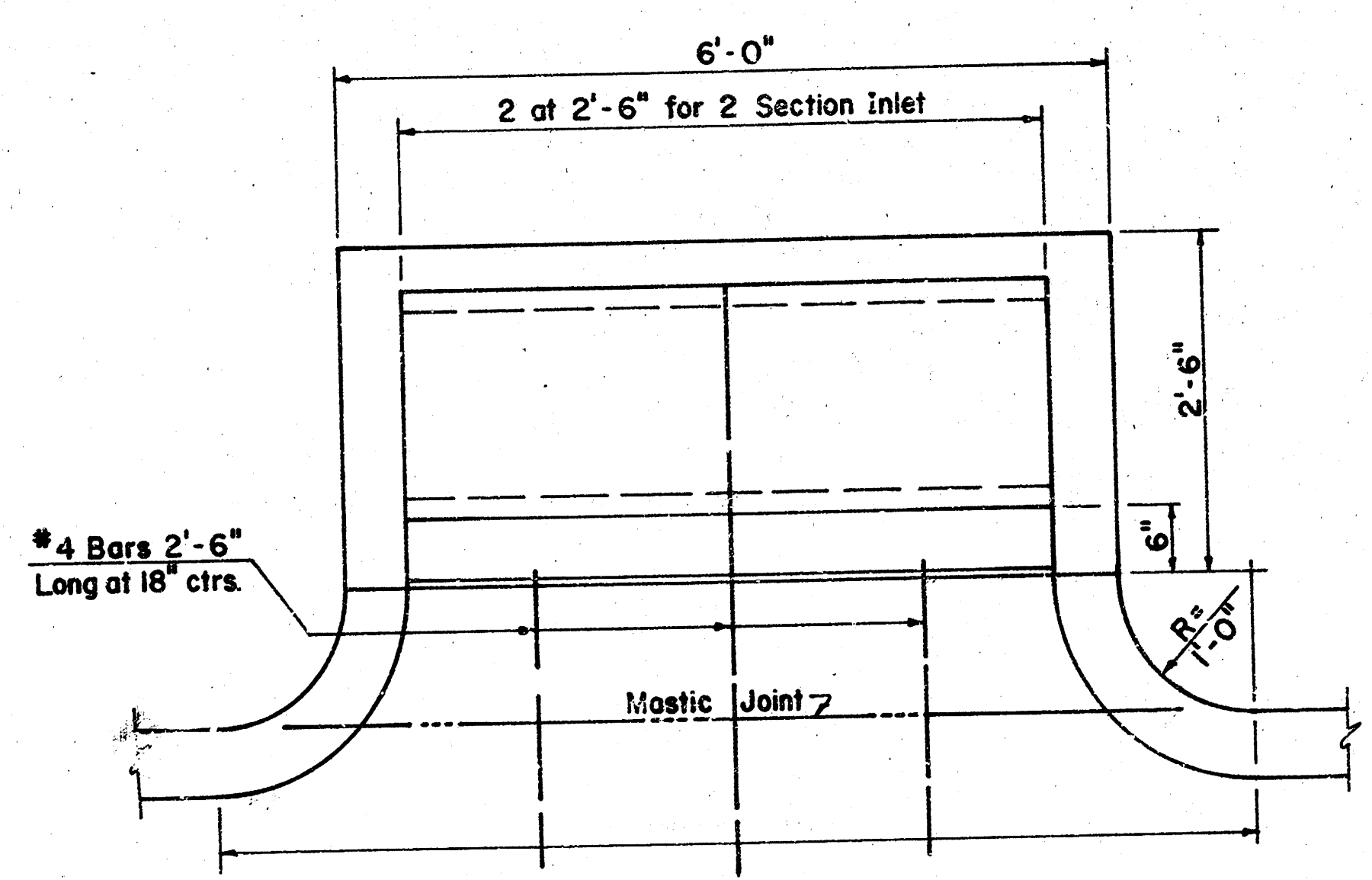
TYPICAL REINFORCING FOR 7" CONCRETE SLAB INTERSECTION



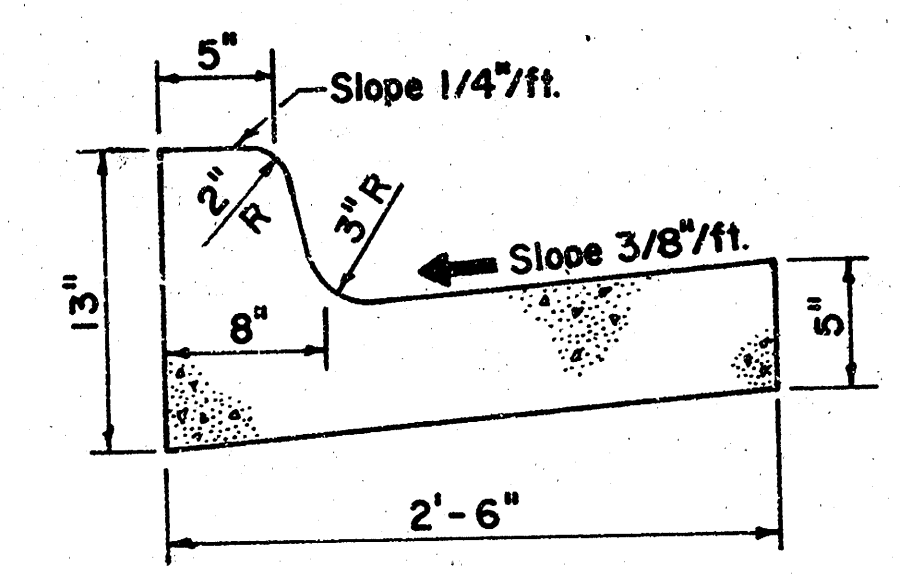
PROFILE THROUGH GUTTER



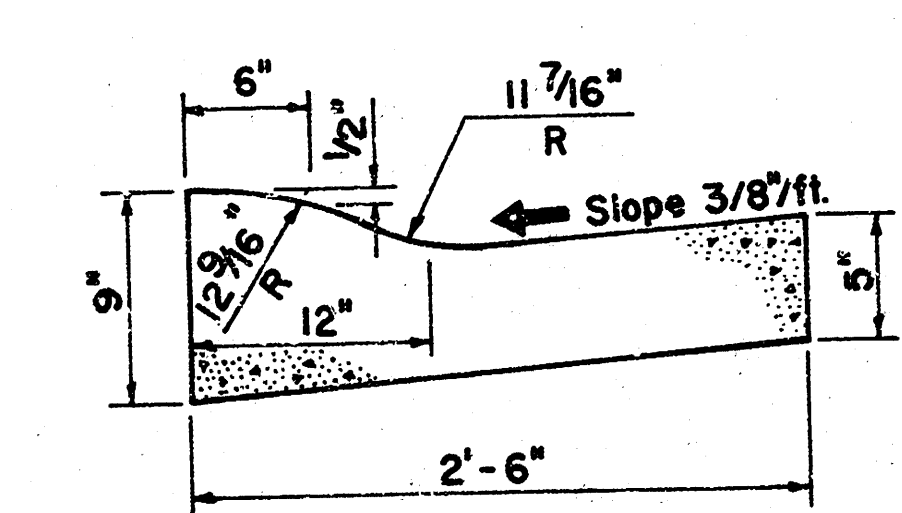
ROLL TYPE CURB SECTION



PLAN



COMBINED CURB & GUTTER



ROLL TYPE CURB & GUTTER

INLET - CURB TRANSITION DETAILS

CONSTRUCTION NOTES

A TACK COAT OF EMULSIFIED ASPHALT (SS-1H) SHALL BE APPLIED AT AN APPROXIMATE RATE OF 0.05 GALLONS PER SQ. YD. BETWEEN LIFTS OF ASPHALTIC MATERIALS WHEN ORDERED BY THE ENGINEER. TACK COAT WILL NOT BE PAID FOR DIRECTLY AND SHALL BE CONSIDERED AS SUBSIDIARY TO PRICE BID FOR ASPHALTIC PAVEMENT. BITUMINOUS BASE AND ASPHALTIC CONCRETE WEARING SURFACE SHALL BE PLACED WITH A LAYDOWN MACHINE HAVING AUTOMATIC ELECTRONIC CONTROLS FOR CROWN AND GRADE. CONSTRUCTION JOINTS IN EACH LIFT SHALL BE STAGGERED A MINIMUM DISTANCE OF 1' WITH JOINTS IN PRECEDING LIFTS AND SUCH THAT A JOINT WILL BE CONSTRUCTED ON THE PAVEMENT CENTERLINE IN THE TOP LIFT.

THE A.C. PAVEMENT BETWEEN THE COMB. CURB & GUTTER SHALL BE PAID AS SQ. YDS. 8" A.C. PAVEMENT (6" BITUMINOUS BASE). THE BITUMINOUS BASE UNDER THE COMB. CURB & GUTTER SHALL BE PAID AS SQ. YDS. 3" BITUMINOUS BASE.

FIELD ENGINEER TO DETERMINE WHICH PORTIONS ARE TO HAVE LIME TREATED SUBGRADE AND WHICH PORTIONS ARE TO BE SUBGRADE MODIFIED.

FIELD ENGINEER TO TAKE NEW ORIGINAL CROSS SECTIONS AFTER STORM SEWER CONTRACTOR COMPLETES WORK.

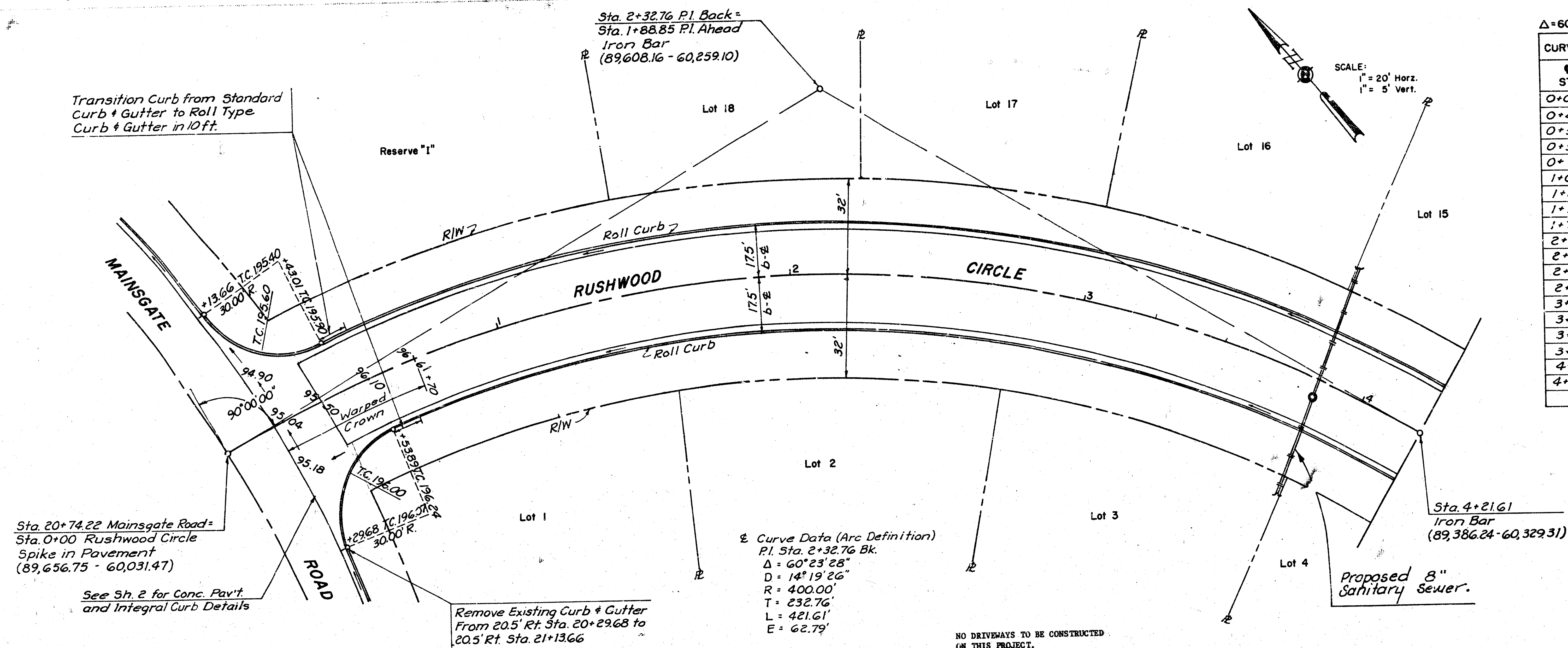
FIELD ENGINEER TO PHASE STORM SEWER CONTRACTOR, SANITARY SEWER CONTRACTOR AND STREET CONTRACTOR TO EXPEDITE CONSTRUCTION AND TO COMPLETE SOME AREAS PRIOR TO BEGINNING WORK AT OTHER LOCATIONS.

CERTAIN MANHOLES, INLETS, STORM SEWER AND SANITARY SEWERS TO BE COMPLETED BEFORE CONSTRUCTION OF STREETS WILL BE PERMITTED TO BEGIN.

ALL EXCESS EXCAVATED MATERIAL FROM THIS PROJECT IS TO BE STOCKPILED AT LOCATIONS DETERMINED BY THE ENGINEER.

ALL STORM SEWER PIPE SHALL BE REINFORCED CONCRETE PIPE.

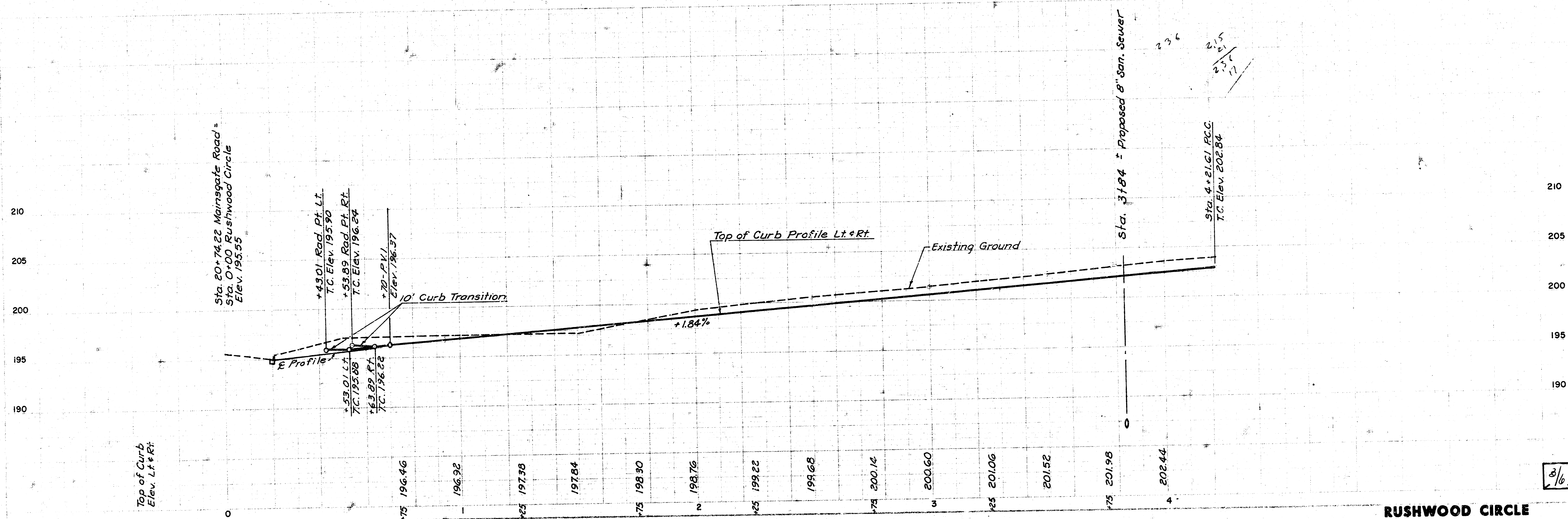
TYPICAL SECTIONS



$\Delta = 60^\circ 23' 28''$ $R = 400'$ $T = 232.76'$ $L = 421.61'$ $LC = 402.36'$

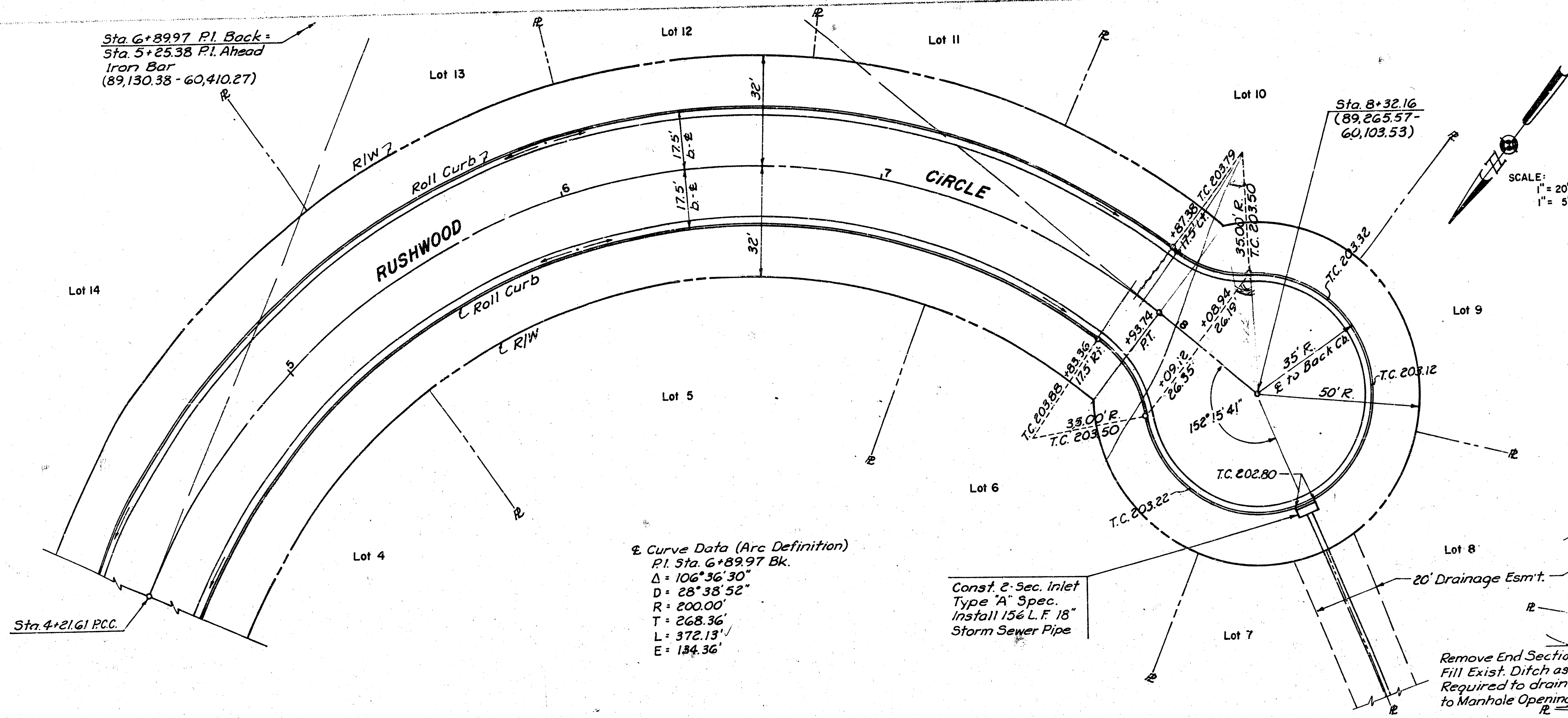
CURVE DATA BASED ON 400.00' RAD $\Delta/2 = 30^\circ 11' 44''$

STA.	E	CHORD LENGTH		DEFLECTION	TOTAL DEFLECTION
		8' Lt. Fe. C.	8' Rt. Fe. C.		
0+00				00° 00' 00"	00° 00' 00"
0+43.01	43.01	45.72	—	3° 04' 46.5"	3° 04' 46.5"
0+50	699	744	—	0° 30' 04.5"	3° 34' 51"
0+53.89	389	—	3.64	0° 16' 40"	3° 51' 31"
0+75	21.11	22.45	19.76	1° 30' 45.5"	5° 22' 16.5"
1+00	25.00	26.59	23.40	1° 47' 26"	7° 09' 42.5"
1+25	25.00	26.59	23.40	1° 47' 26"	8° 57' 08.5"
1+50	25.00	26.59	23.40	1° 47' 26"	10° 44' 34.5"
1+75	25.00	26.59	23.40	1° 47' 26"	12° 32' 00.5"
2+00	25.00	26.59	23.40	1° 47' 26"	14° 19' 26.5"
2+25	25.00	26.59	23.40	1° 47' 26"	16° 06' 52.5"
2+50	25.00	26.59	23.40	1° 47' 26"	17° 54' 18.5"
2+75	25.00	26.59	23.40	1° 47' 26"	19° 41' 44.5"
3+00	25.00	26.59	23.40	1° 47' 26"	21° 29' 10.5"
3+25	25.00	26.59	23.40	1° 47' 26"	23° 16' 36.5"
3+50	25.00	26.59	23.40	1° 47' 26"	25° 04' 02.5"
3+75	25.00	26.59	23.40	1° 47' 26"	26° 51' 28.5"
4+00	25.00	26.59	23.40	1° 47' 26"	28° 38' 54.5"
4+21.61	21.61	22.98	20.22	1° 32' 49.5"	30° 11' 44"



RUSHWOOD CIRCLE

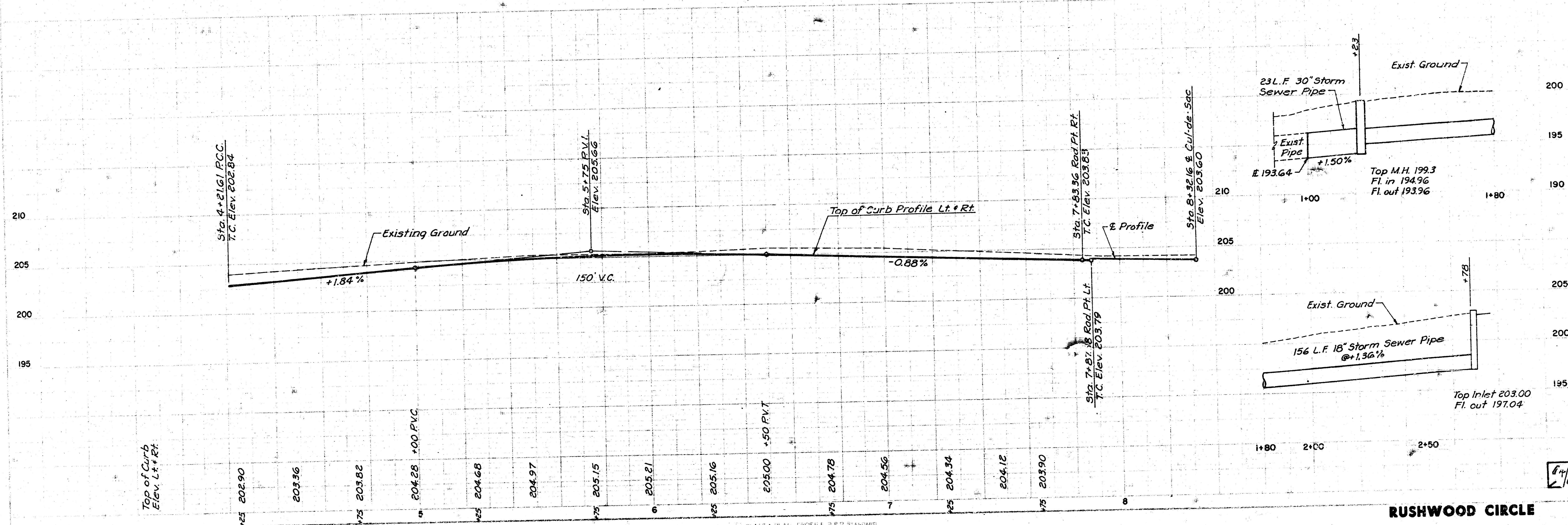
8/63



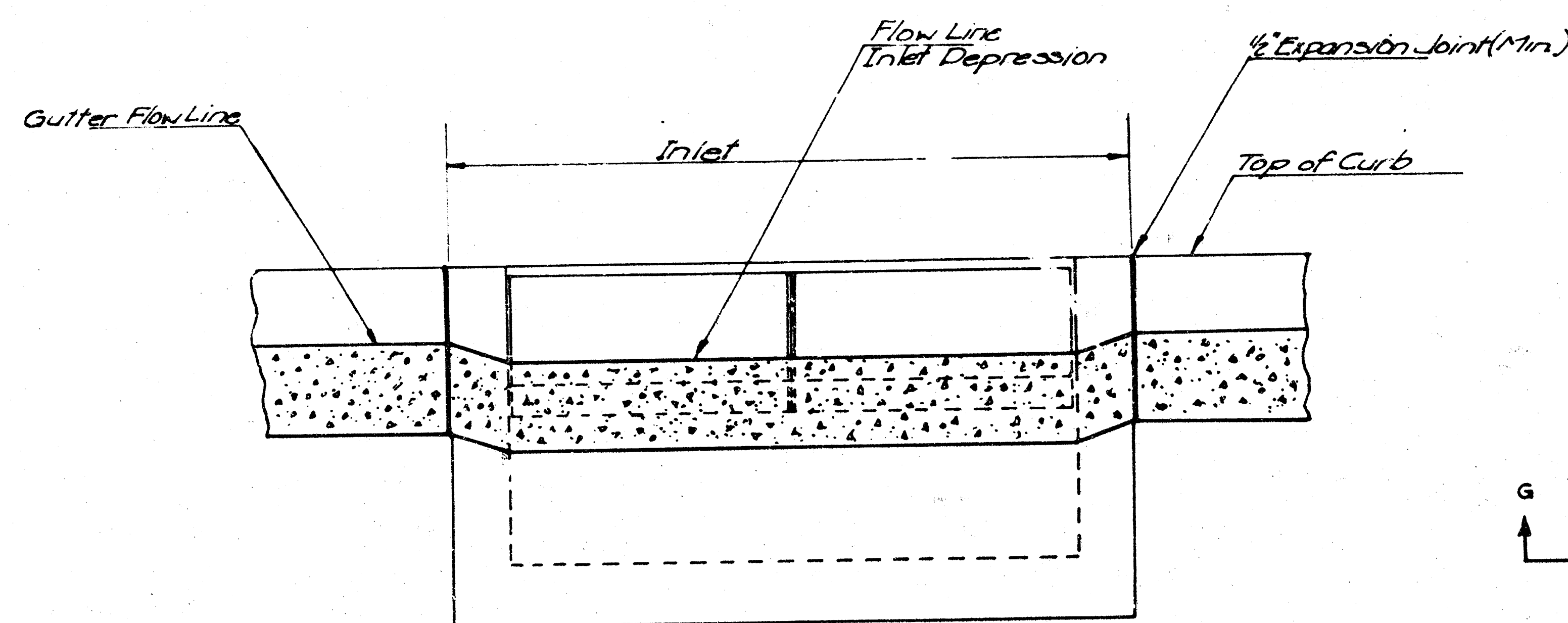
$\Delta = 106^\circ 36' 30''$ $R = 200'$ $T = 268.36'$ $L = 372.13'$ $LC = 320.72'$
 $\Delta/2 = 53^\circ 18' 15''$

CURVE DATA BASED ON 200.00' RAD.

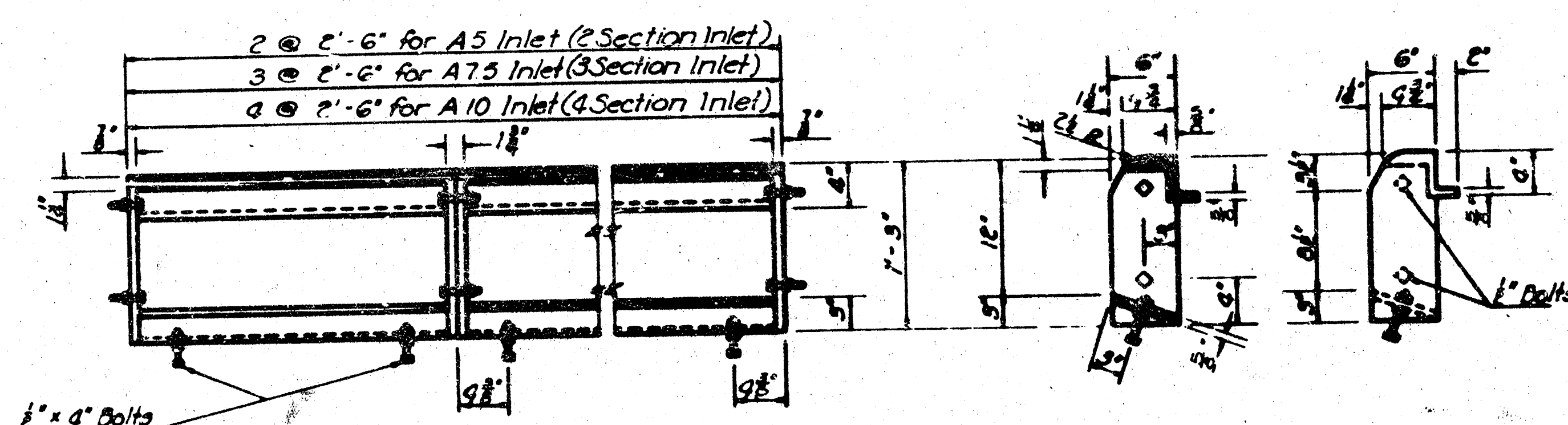
STATION	ARC	CHORD LENGTH	DEFLECTION	TOTAL DEFLECTION
4+21.61				
4+50	28.39	31.98	24.75	4° 04' 05"
4+75	25.00	28.17	21.80	3° 34' 51"
5+00	25.00	28.17	21.80	3° 34' 52"
5+25	25.00	28.17	21.80	3° 34' 51"
5+50	25.00	28.17	21.80	3° 34' 51"
5+75	25.00	28.17	21.80	3° 34' 52"
6+00	25.00	28.17	21.80	3° 34' 51"
6+25	25.00	28.17	21.80	3° 34' 51"
6+50	25.00	28.17	21.80	3° 34' 51"
6+75	25.00	28.17	21.80	3° 34' 51"
7+00	25.00	28.17	21.80	3° 34' 51"
7+25	25.00	28.17	21.80	3° 34' 51"
7+50	25.00	28.17	21.80	3° 34' 52"
7+75	25.00	28.17	21.80	3° 34' 51"
7+83.36	8.36	—	7.30	1° 11' 51"
7+87.38	4.02	4.53	—	0° 34' 33"
7+93.74	6.36	7.17	5.54	0° 54' 40"



FWA REG. NO.	State	Proj. No.	Fiscal Year	Sheet No.	Total Sheets
1	Kansas				

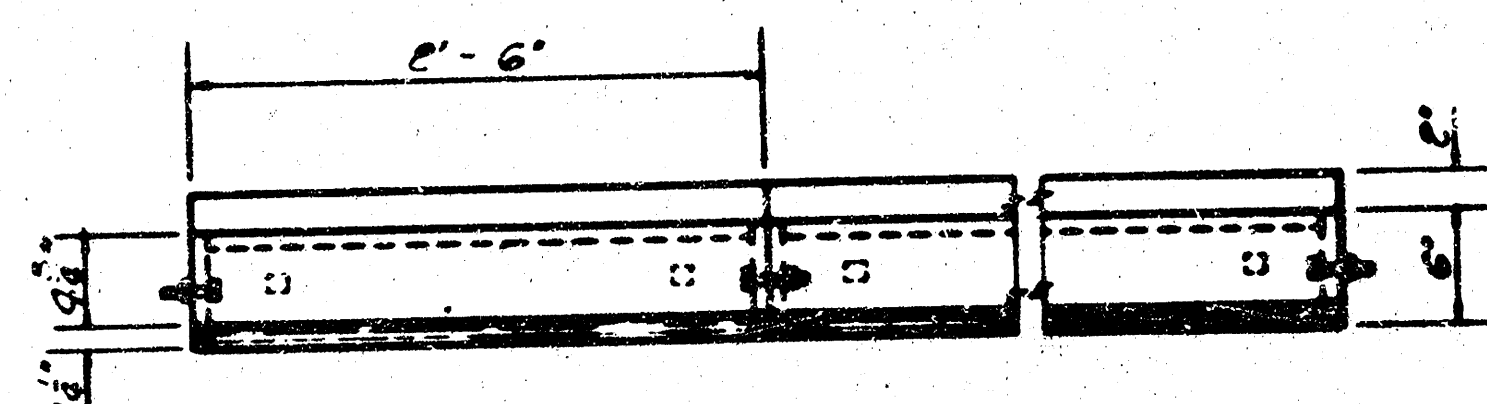


SECTION G-G

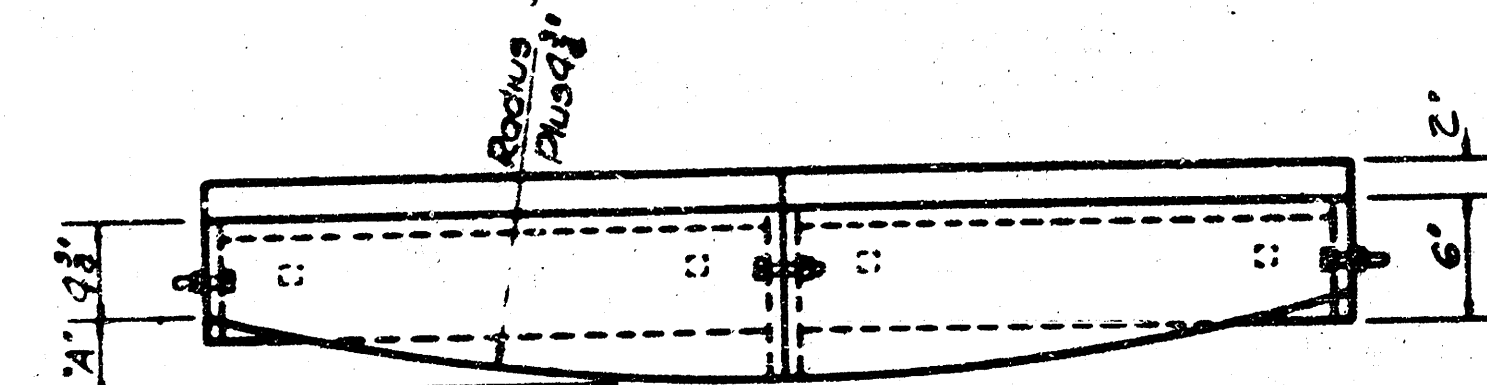


ELEVATION
TYPES A5-1, A75-1 & A10-1

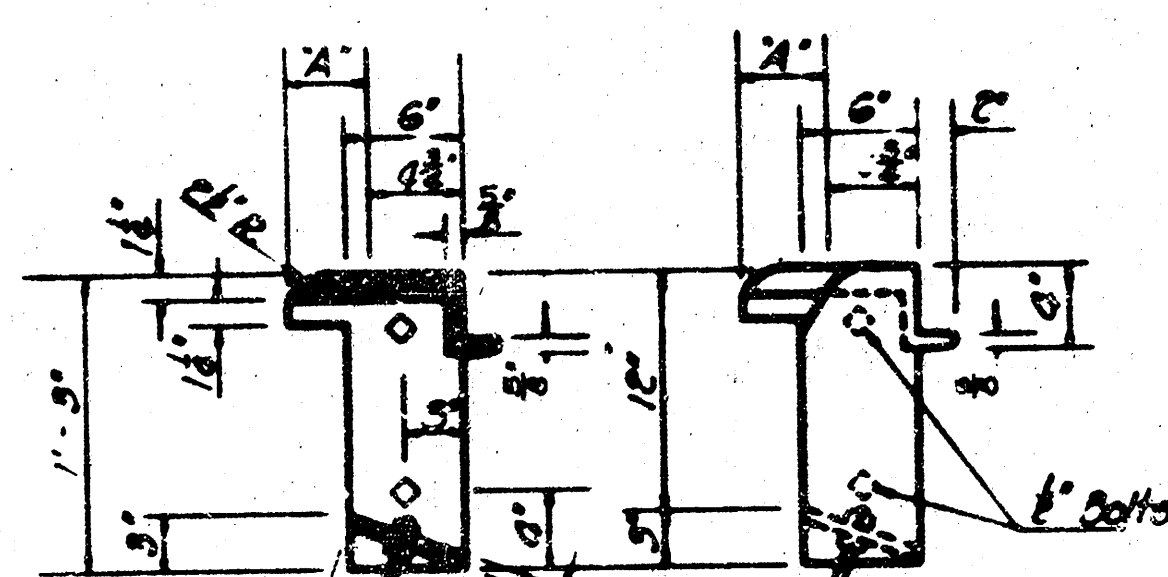
SECTION
TYPES A5-1, A75-1 & A10-1



PLAN
TYPES A5-1, A75-1 & A10-1
Weight = 129 Lbs. per 6\"/>



PLAN
TYPE A5-2 SHOWN
Weight - See Tables below



SECTION AT CENTER
TYPES A5-2, A75-2 & A10-2

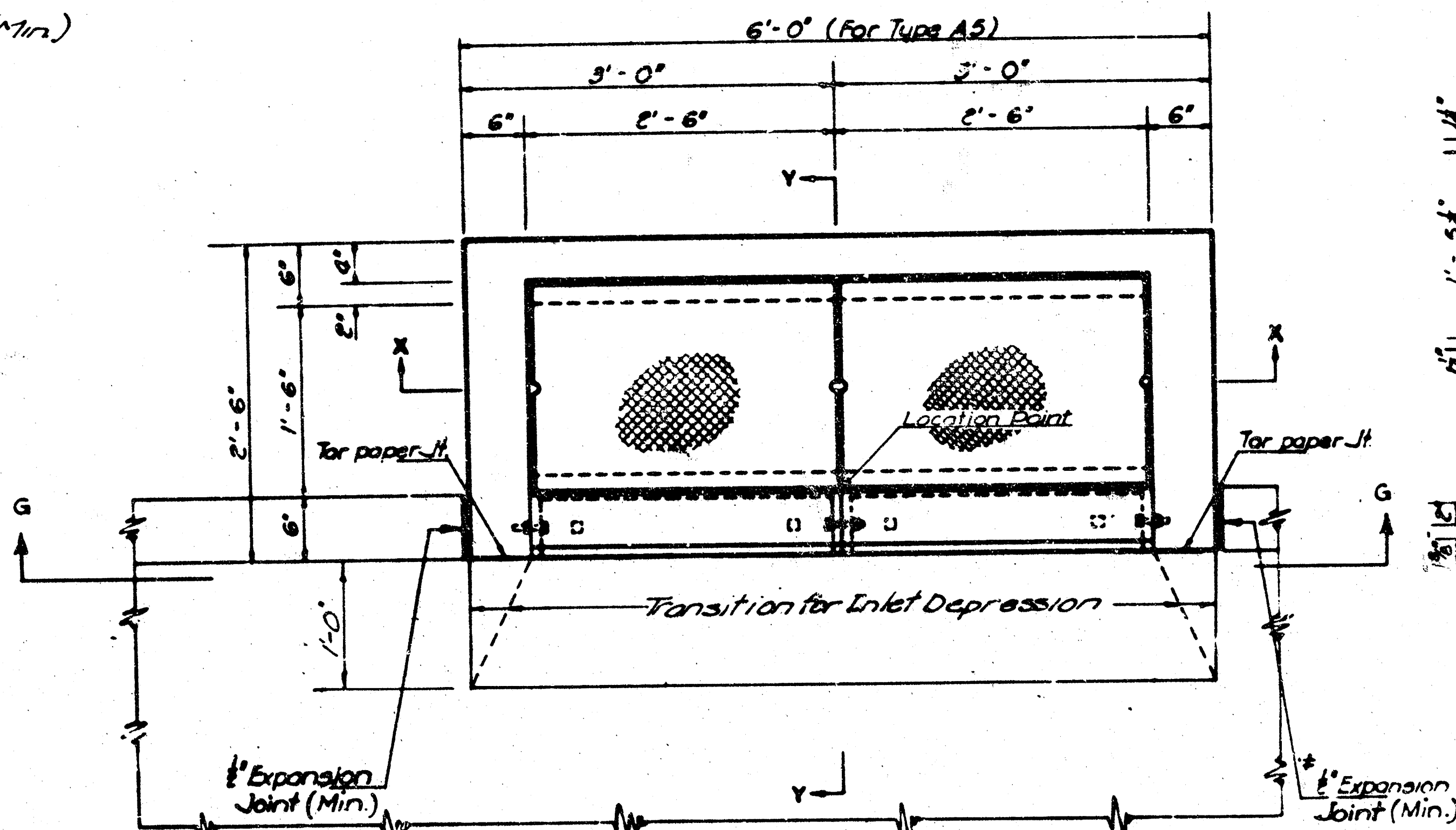
Note: All castings shall be gray iron and shall comply with ASTM A-48 Class 25-3.

FOR TYPE A5-2 CASTINGS				FOR TYPE A75-2 CASTINGS				FOR TYPE A10-2 CASTINGS			
Radius	20"	25"	30"	Radius	20"	25"	30"	Radius	20"	25"	30"
"A"	18"	16"	16"	"A"	24"	28"	28"	"A"	24"	28"	28"
Weight Lbs.	285	270	274	Weight Lbs.	474	455	445	Weight Lbs.	721	680	653

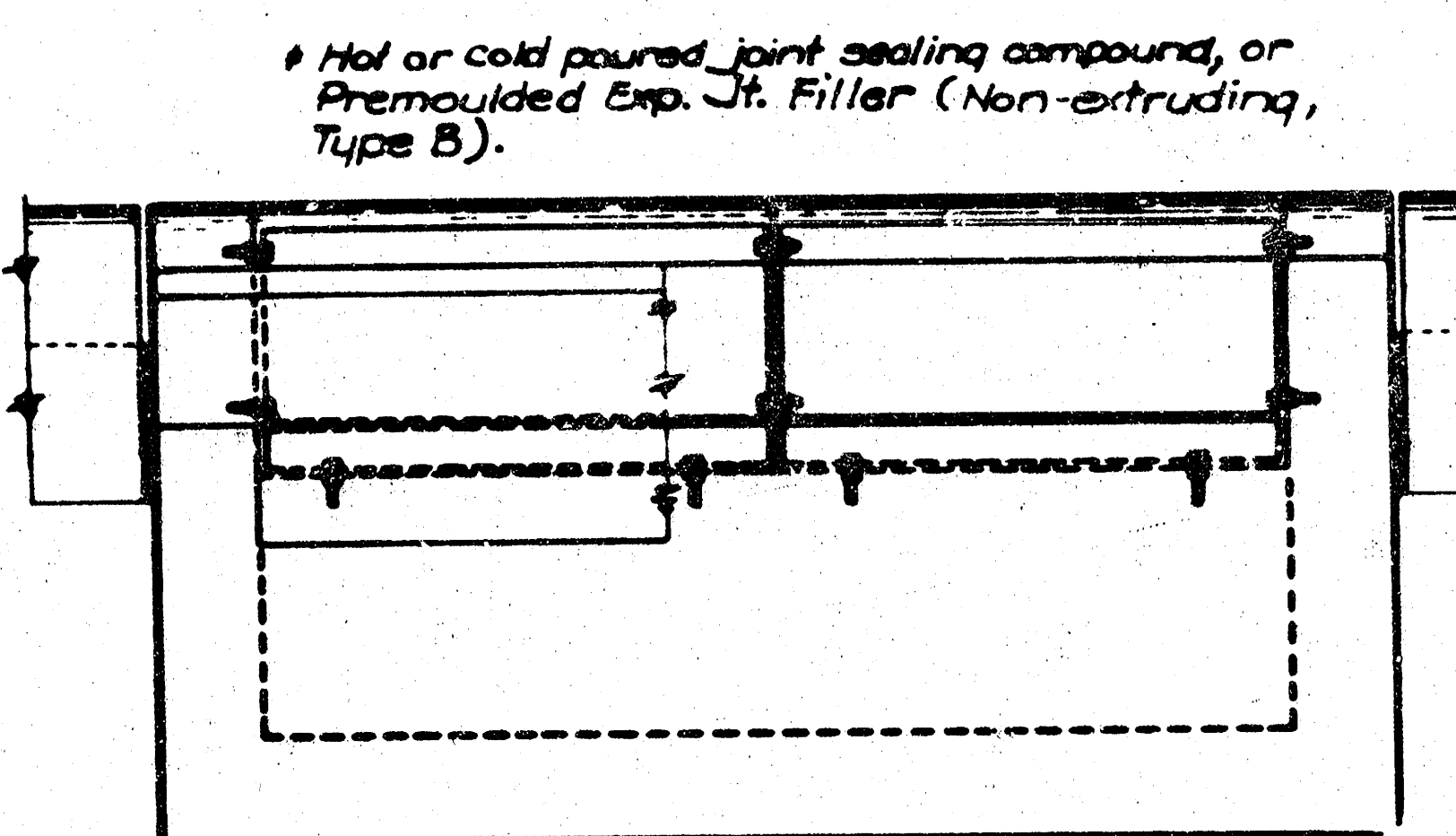
NOTE: Weights given in tables above are total weights for Curb Castings only. All weights of castings are calculated weights with no allowance for fillets, overruns, anchor bars and bolts.

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.

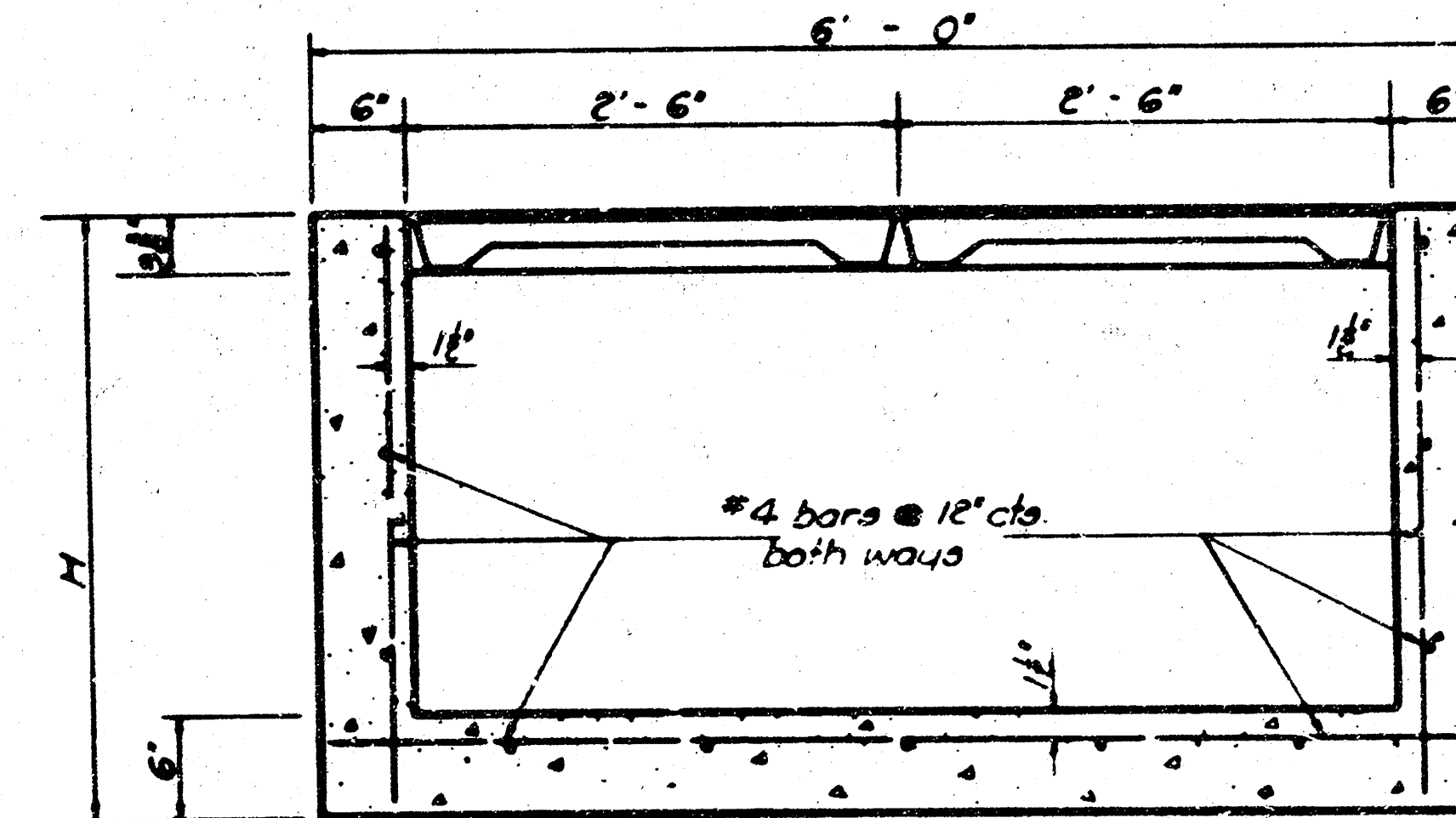
At the contractor's option Class A Concrete (AE) may be used throughout, but payment shall be made as Cu Yds of Class A Concrete miscellaneous. A small opening may be required in the back of the inlet to drain a low area, if ordered by the



PLAN

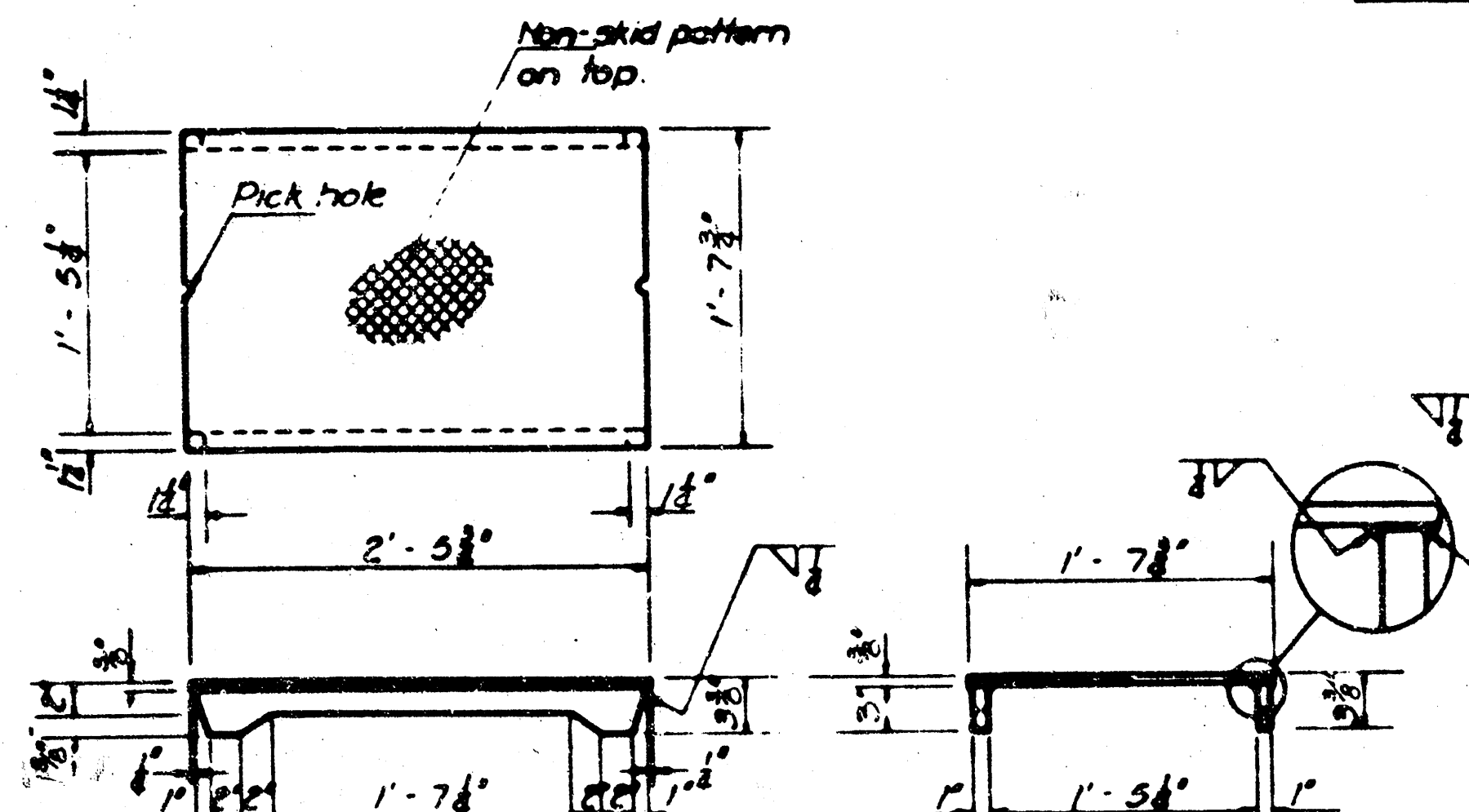


FRONT ELEVATION



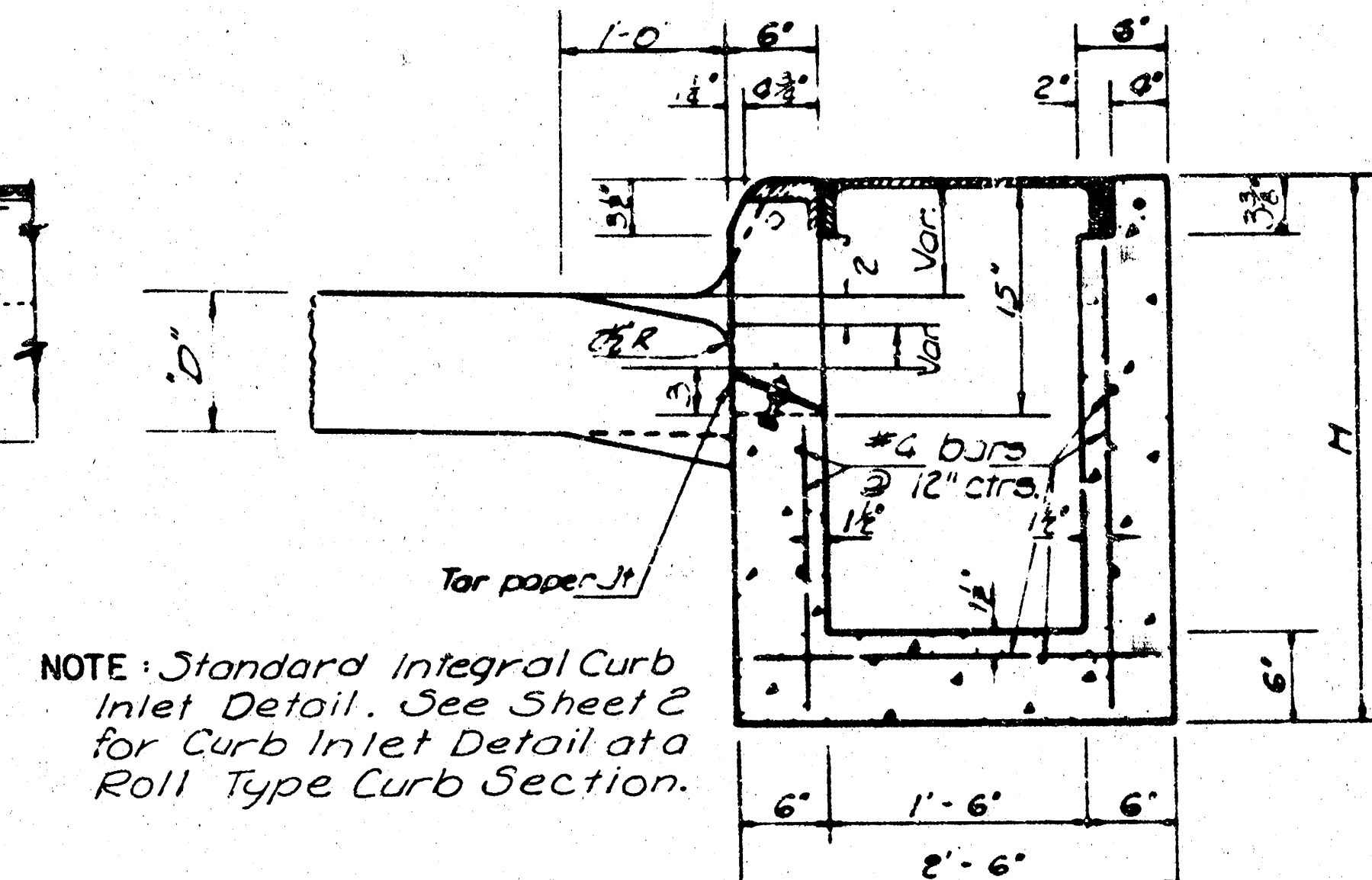
SECTION X-X

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. No substitutions of design will be permitted on casting.



* STRUCTURAL STEEL COVER PLATE
Weight 98 Lbs Each

* Non-skid steel floor plate (Commercial grade), welded to steel (ASTM A-7, A-36, A-242 or A-441) bars



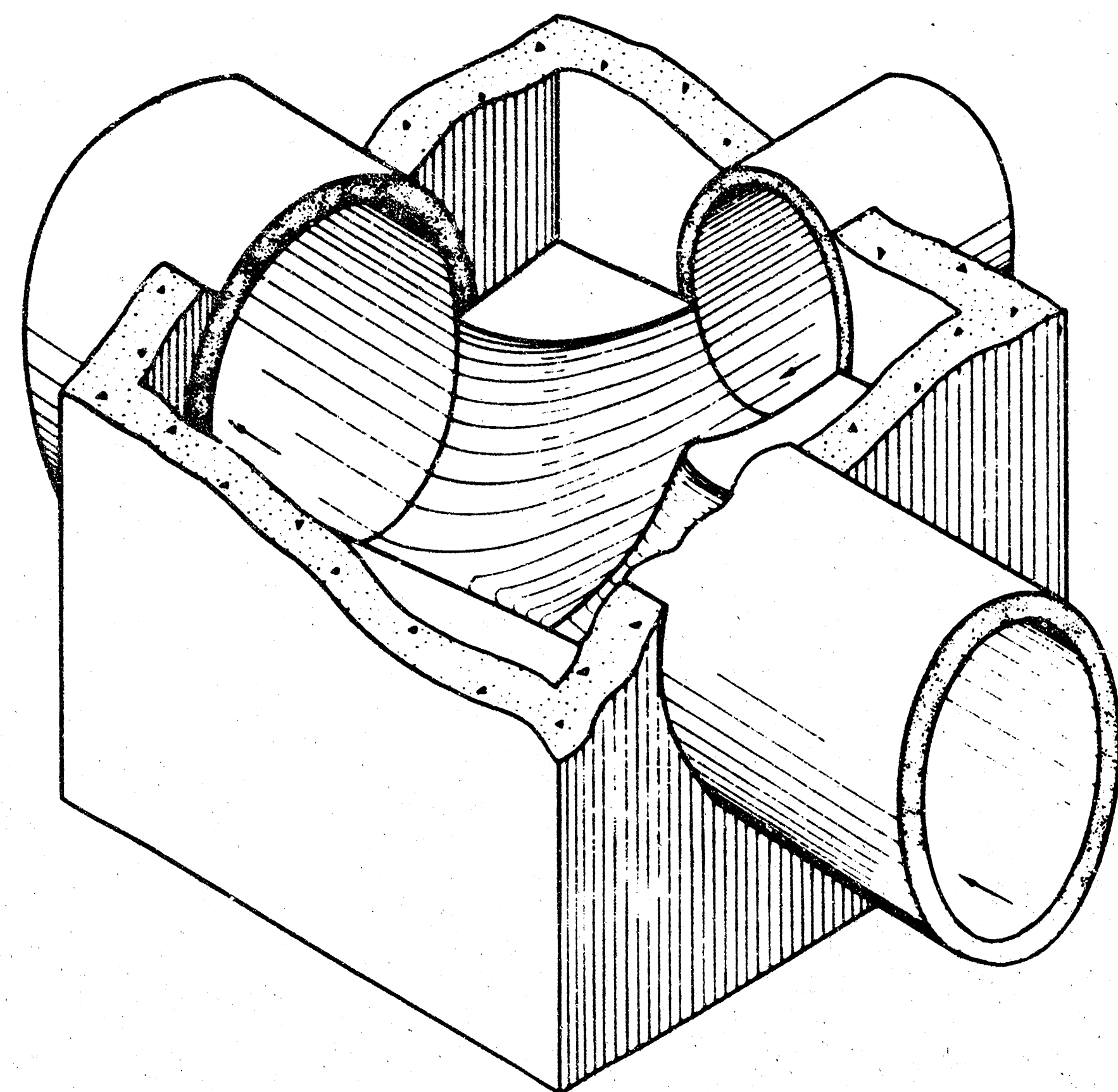
SECTION Y-Y

NOTE: See this sheet for shaping of depression at inlet. This work shall be paid for as "Concrete Pavement". Floor of Inlet shall be shaped as shown in various "EXAMPLES" on Reinforced Concrete Manhole Sheet No. 6. Concrete used for shaping shall be unreinforced Class "A" concrete. No addition in concrete quantities shall be made for shaping floor of Inlets.

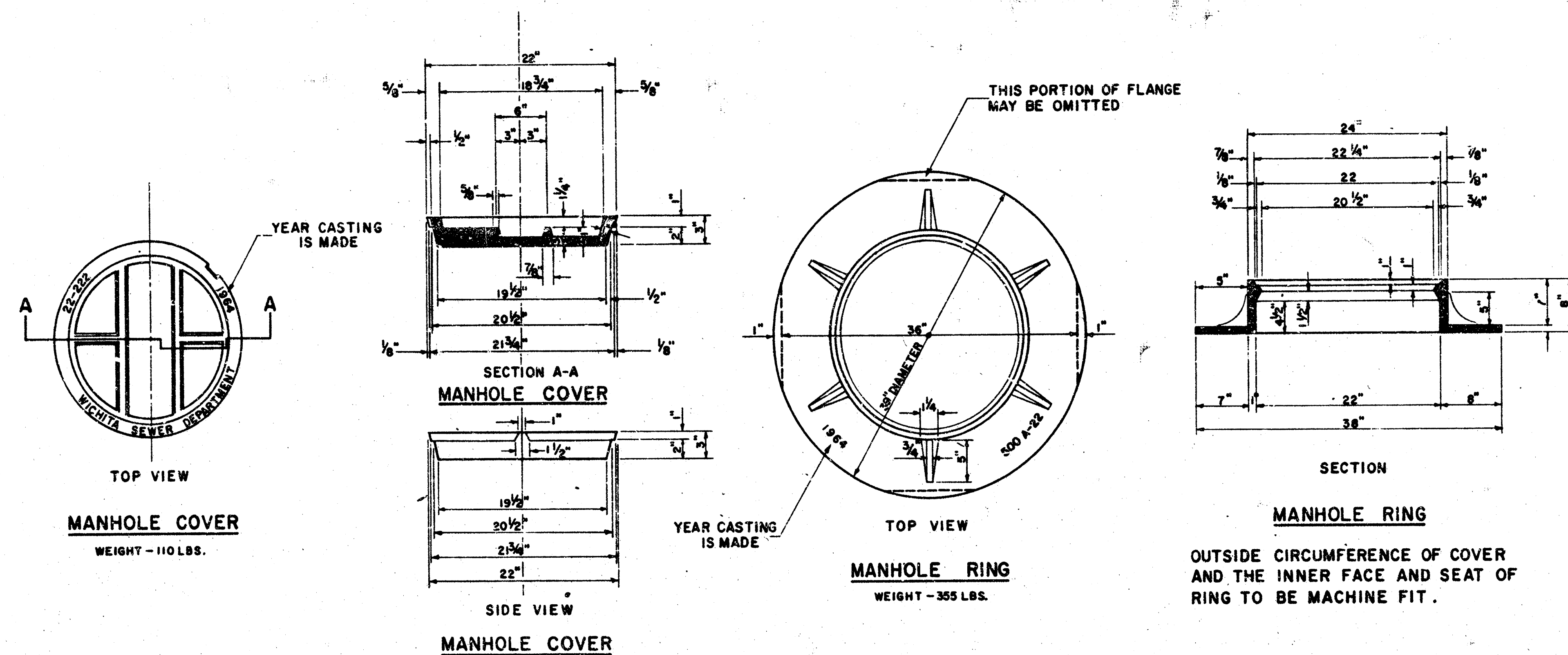
21	3-26-70	Class "A" miscellaneous.	W.L.H.	K.G.L.
20	5-9-69	Added Note on shaping of Floor	W.L.H.	K.G.L.
19	5-67	Added note on casting of opening etc.	A.L.R.	K.G.L.
18	8-66	To conform to 1866 Specs	A.L.R.	K.G.L.
17				

STATE HIGHWAY COMMISSION OF KANSAS
SPECIAL
TYPE "A" CURB INLET
SCALE 1 inch = 1 foot (See 25'-0" x 36'-0" sheet)
DESIGNED BY A.L.R. DATE 9-22-66
CHECKED BY A.L.R. APPROVED BY L.H. HANCOCK DATE 4-23-68

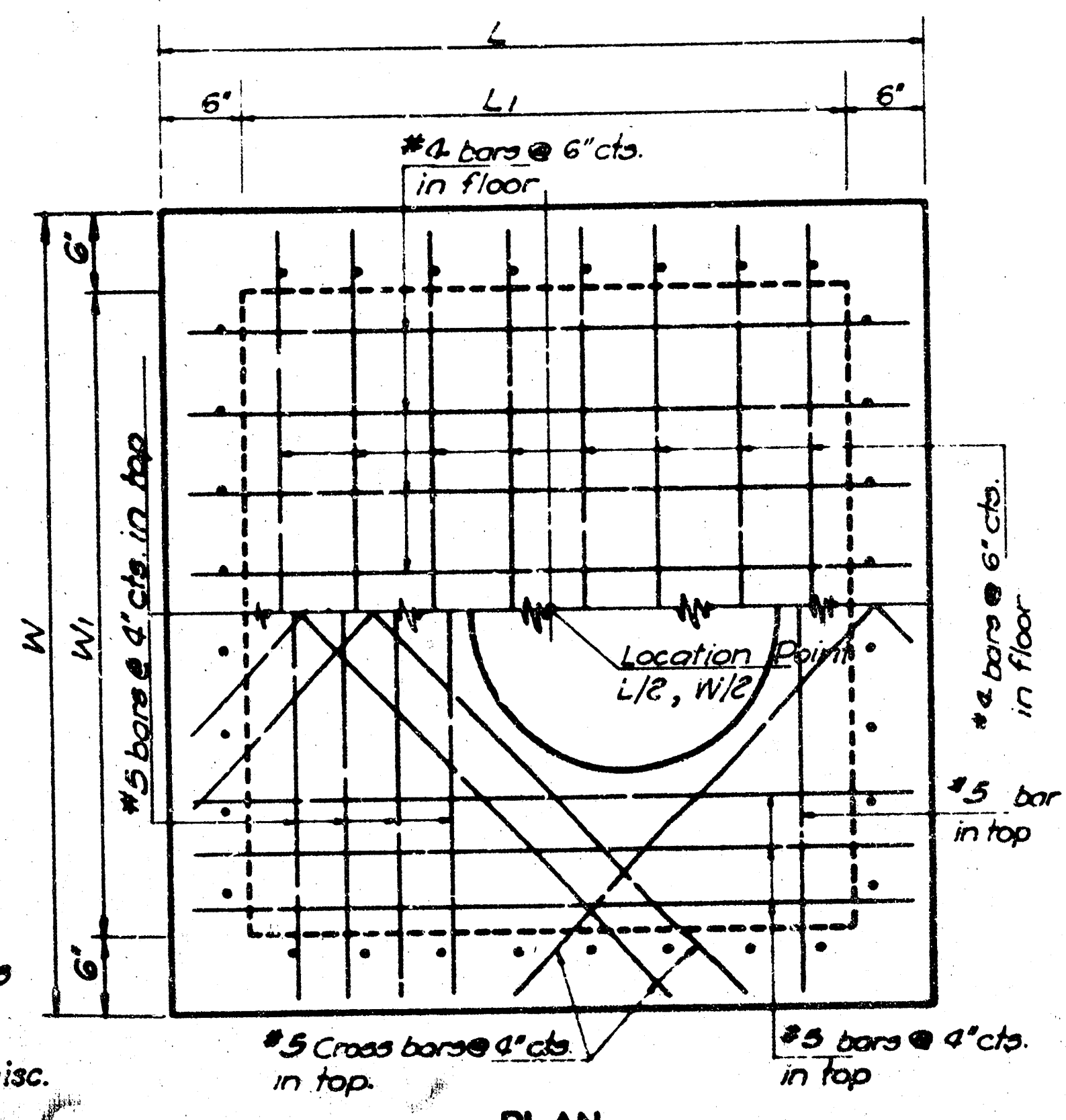
FWMA RES. NO.	Date	Proj. No.	Fiscal Year	Sheet No.	Total Sheets
7	Kansas				



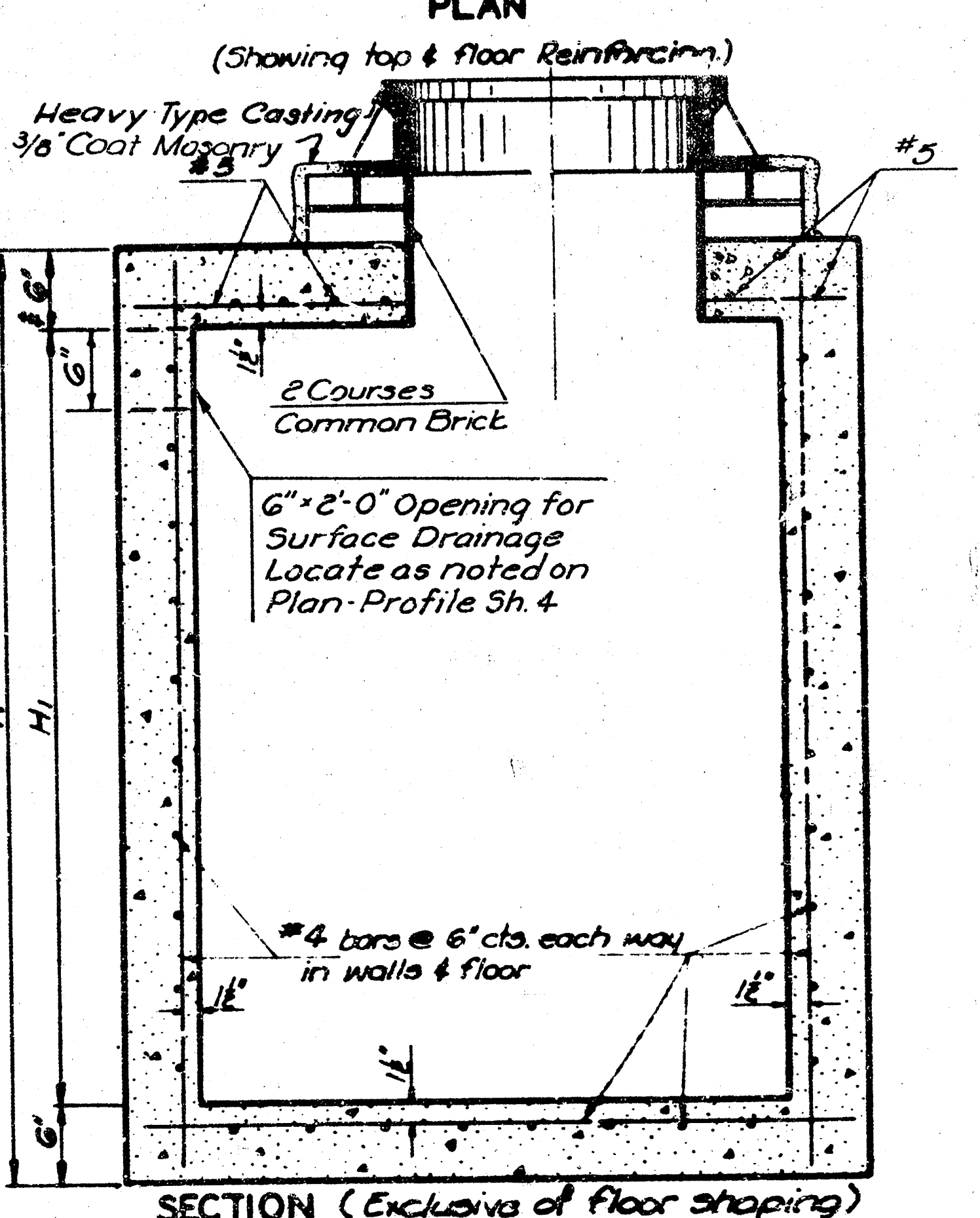
SECTIONAL VIEW (EXAMPLE IV)
Showing Floor Shaping



Where dimension "L" or "W" is greater than 6', use 8" slab thickness.



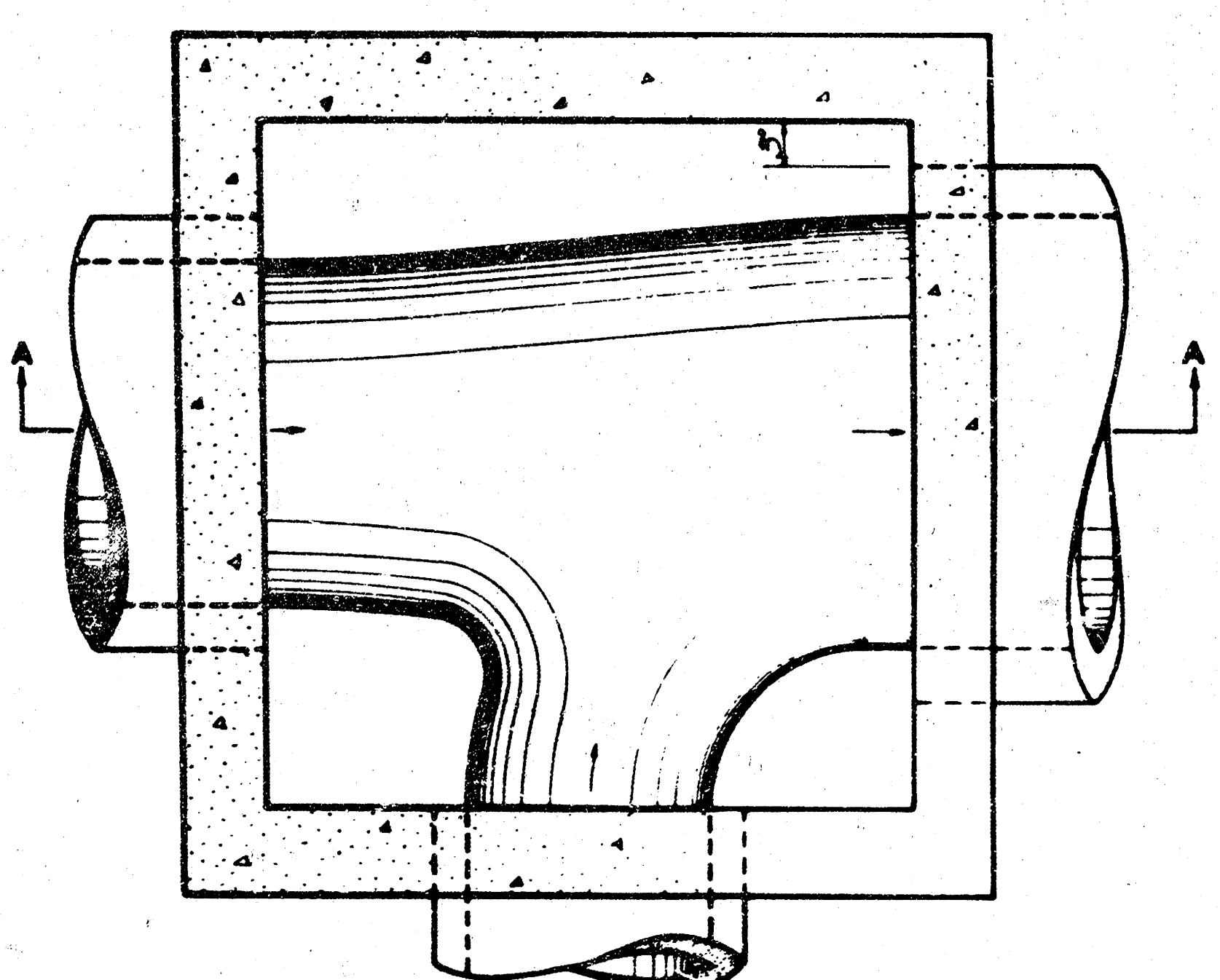
NOTE: Class 'A' concrete to be used thruout. Bevel all exposed edges with a 3" triangular mauling. At the contractor's option Class 'A' concrete (A2) may be used thruout, but payment shall be made as Qu'ts of Class 'A' concrete misc. In general, pipes will enter and leave the manhole at various positions. Where possible bend bars around pipes. Floor of manhole to be shaped as shown in various "EXAMPLES" with unreinforced Class 'A' concrete. Manhole opening and steps, where used, shall be placed to afford easy access to top of shaped invert. Top reinforcing bars to be adjusted accordingly. All castings shall be gray iron and shall comply with ASTM A-48, Class 25-5. All exposed cast iron surfaces (rings & covers) not subjected to traffic, 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. No deductions in concrete quantities shall be made for pipe openings. No additions in concrete quantities shall be made for shaping floor of Manholes. When so ordered by the Engineer, the top of the manhole shall be sloped slightly to approximately fit the ground line or other conditions.



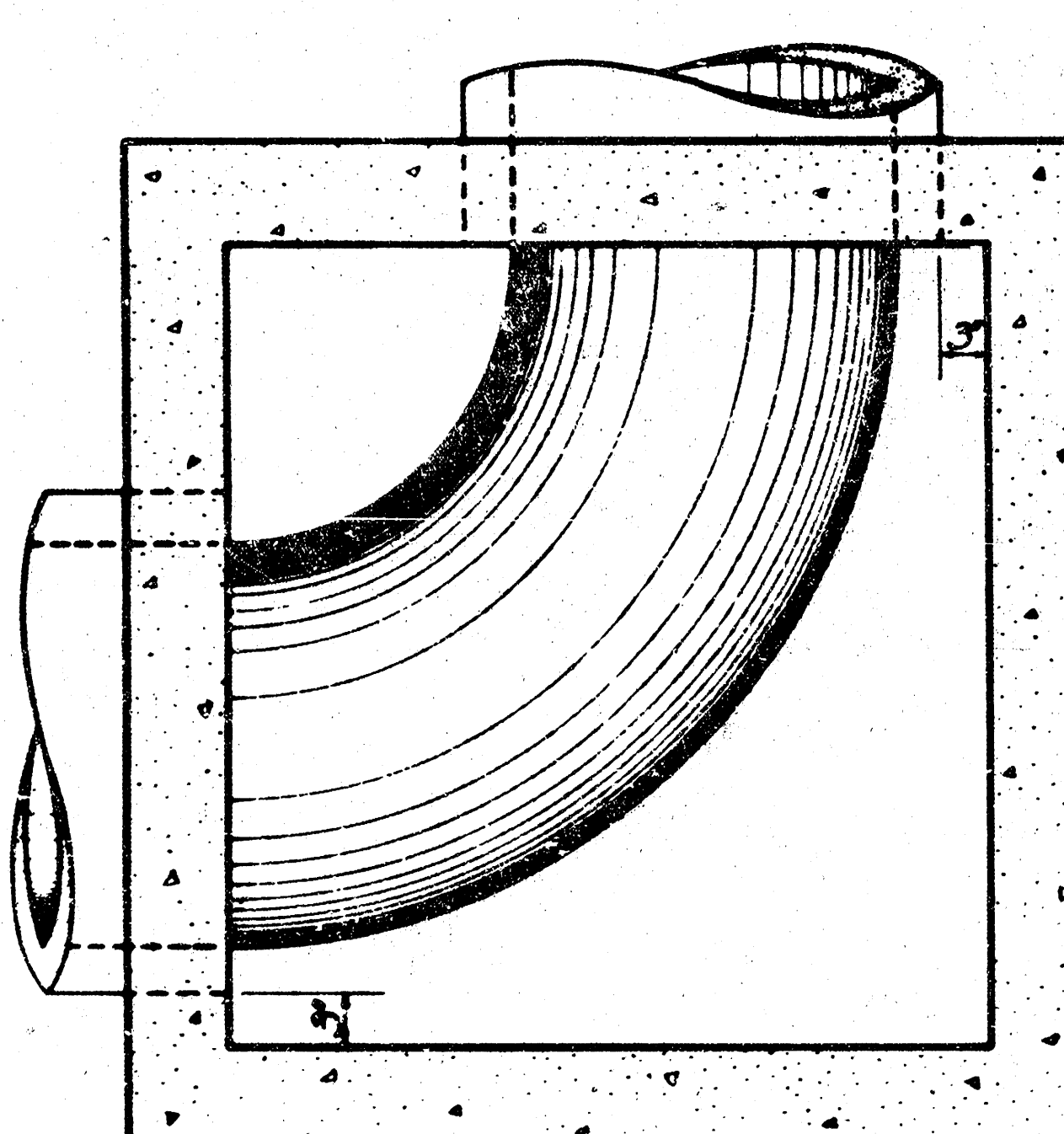
Note: Contractor has the option of using pre-cast manholes, as approved by the engineer (See Special Provision). Payment of quantities shall be on a cast in place basis.

TYPICAL EXAMPLES OF VARIOUS PIPE COMBINATIONS

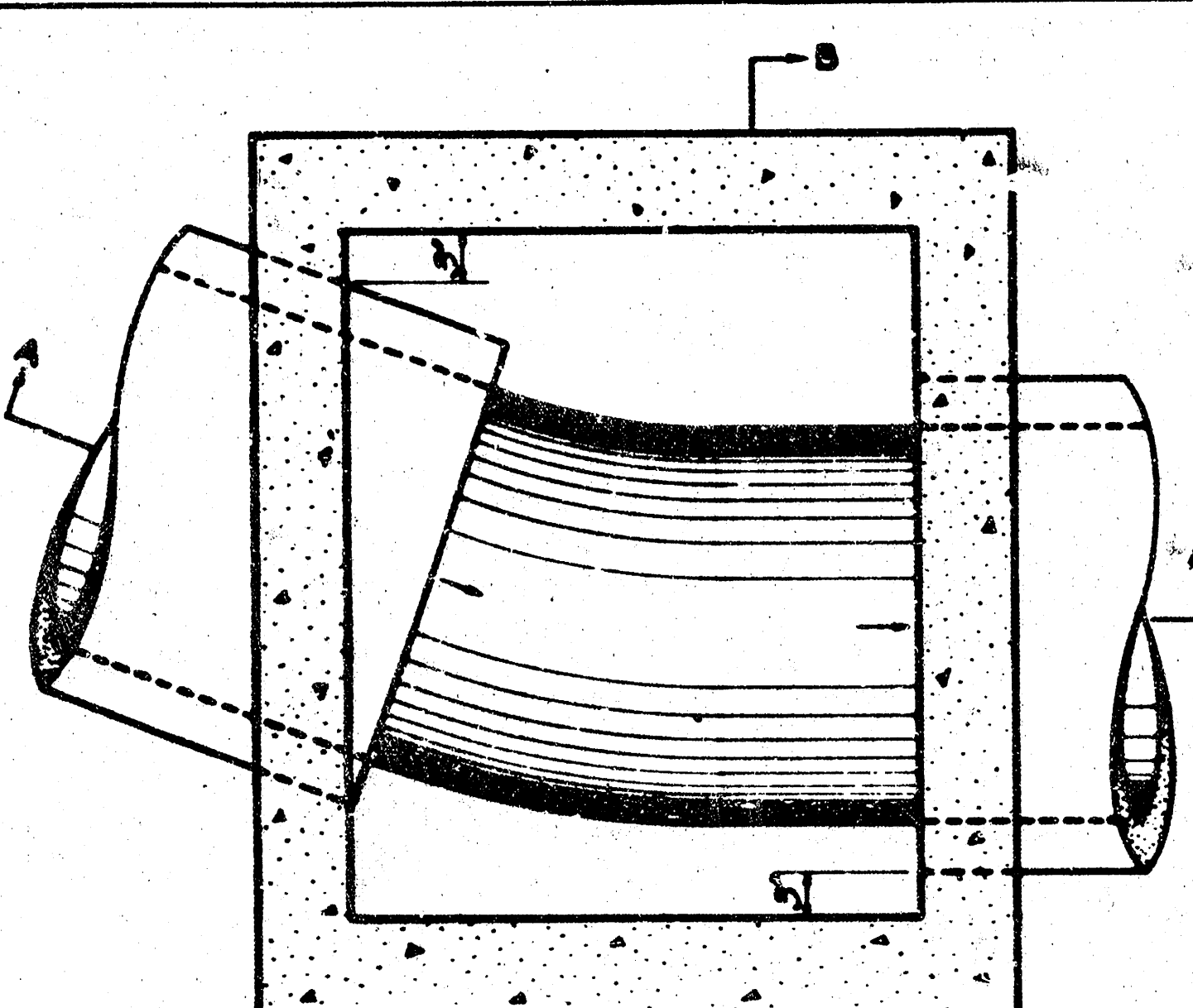
Showing method of shaping floor of manholes to provide increased hydraulic efficiency. For reinforcing & other features see "PLAN" and "SECTION."



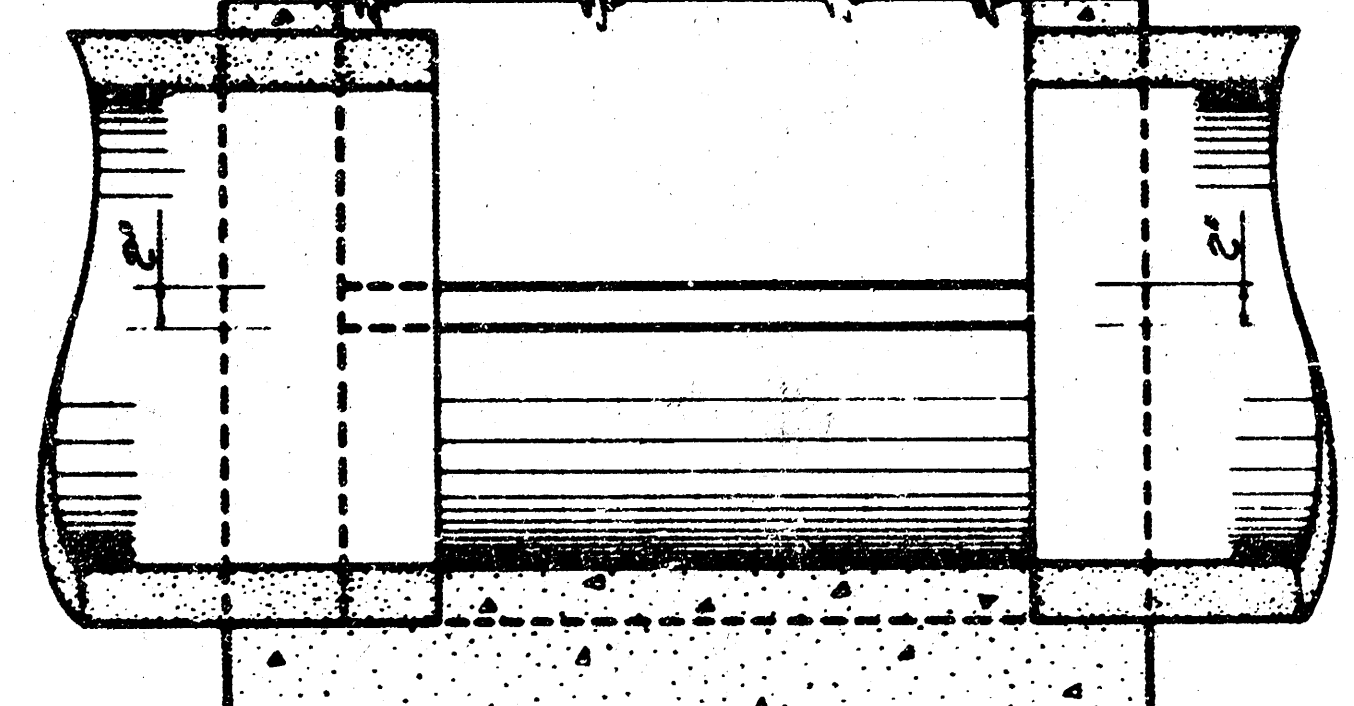
FLOOR PLAN (EXAMPLE IV)



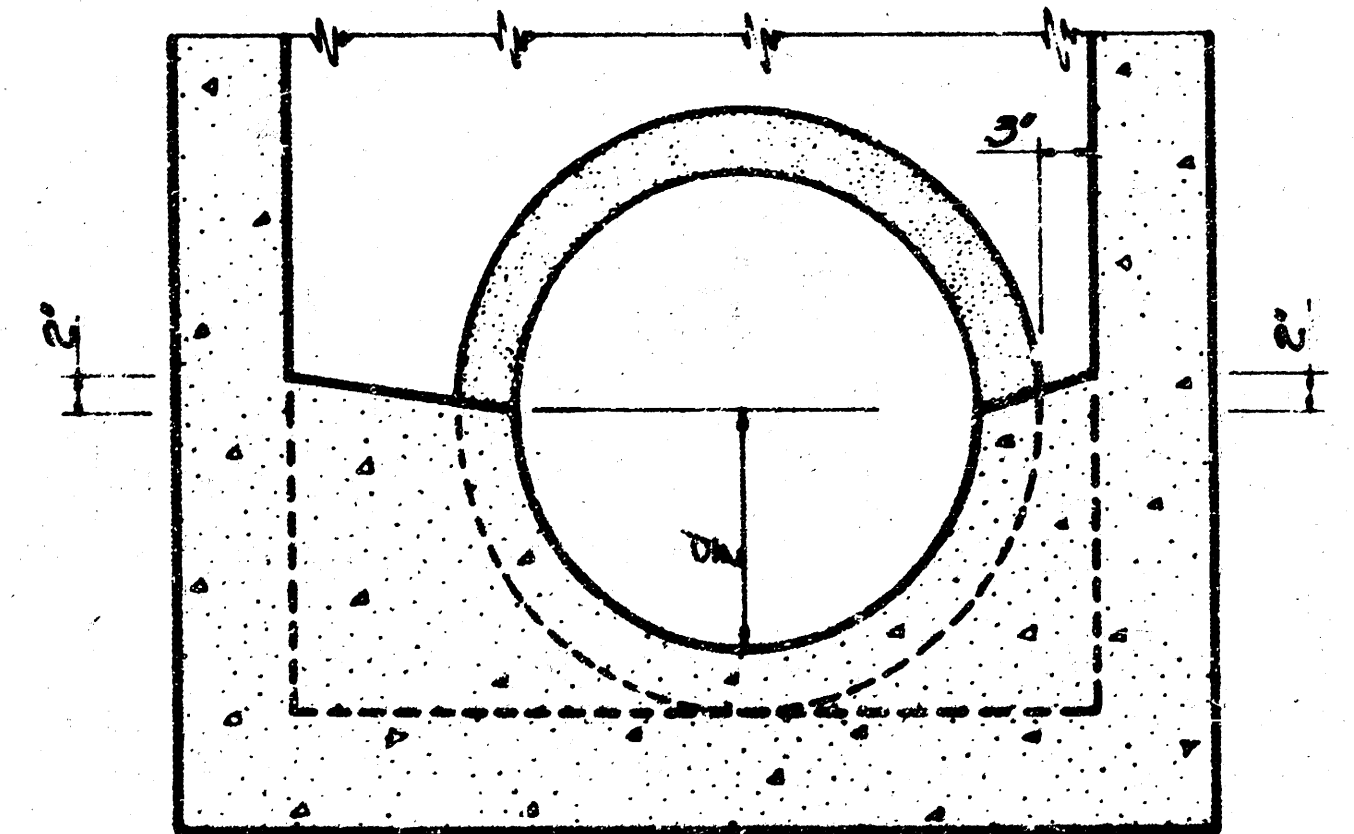
FLOOR PLAN (EXAMPLE II)



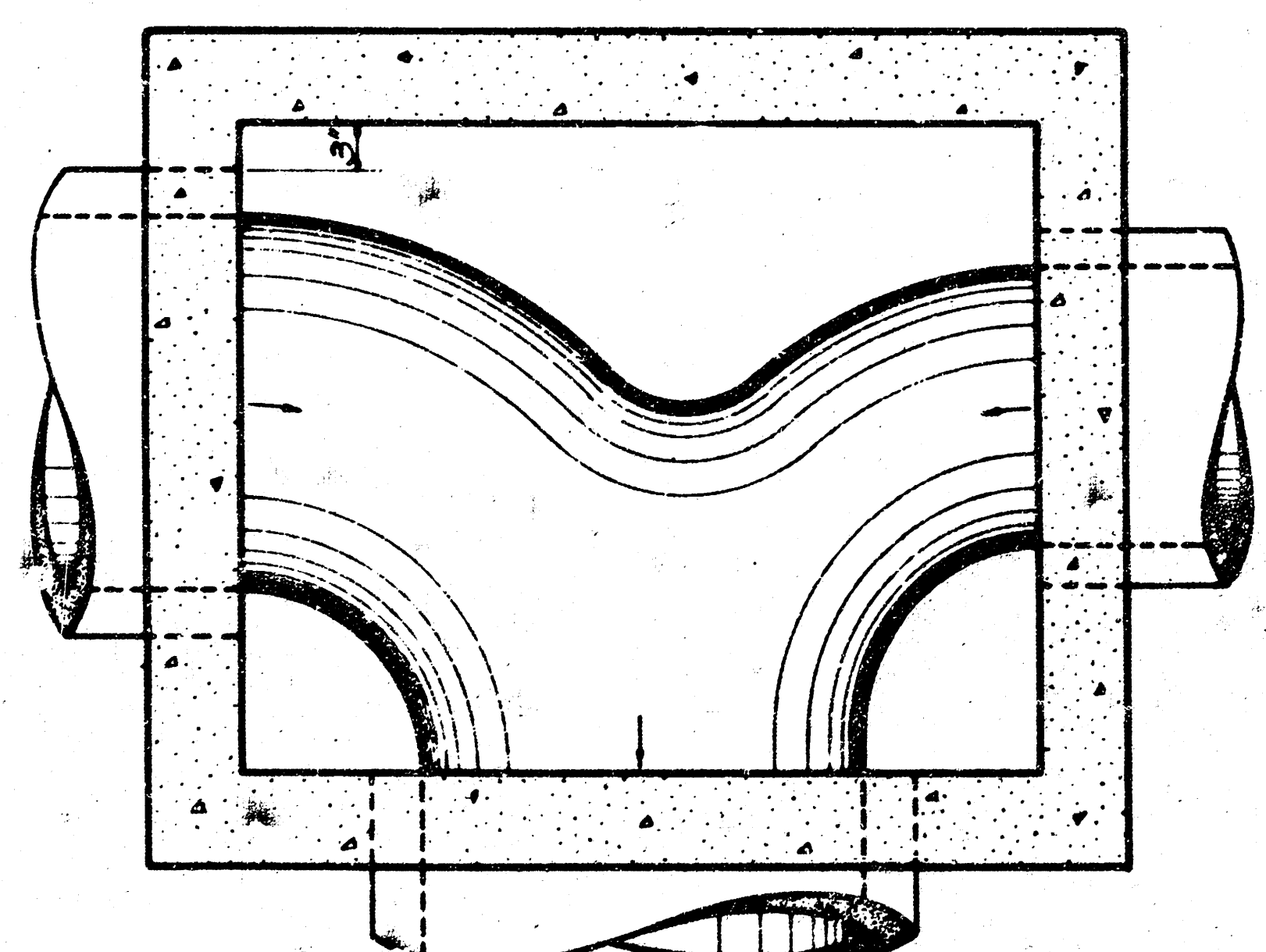
FLOOR PLAN (EXAMPLE I)



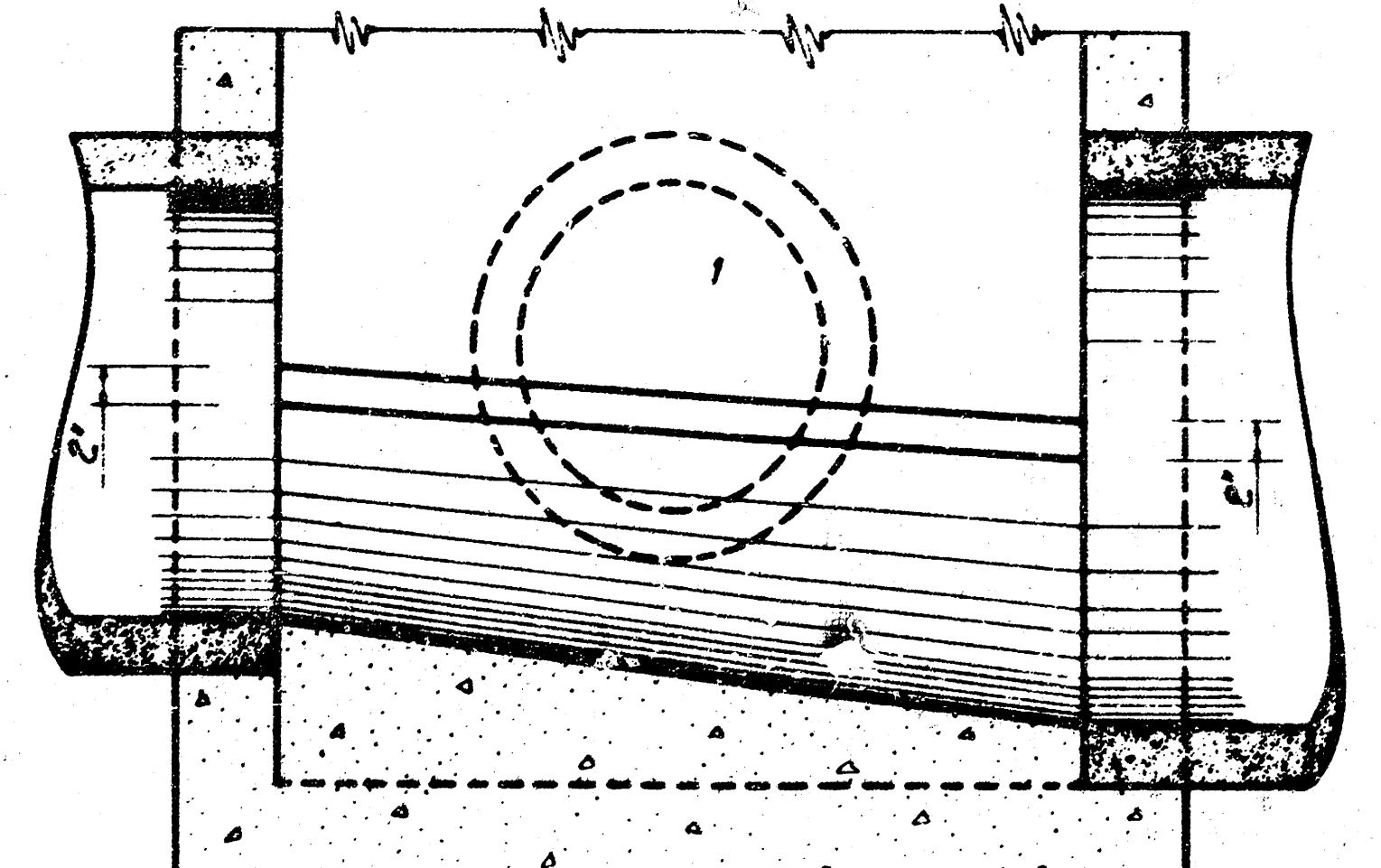
SECTION A-A (EXAMPLE I)



SECTION B-B (EXAMPLE I)



FLOOR PLAN (EXAMPLE III)



SECTION A-A (EXAMPLE IV)

13	4-12-71	Added Pre-Cast Manhole option	K.L.
12	3-26-70	Class "A" miscellaneous	K.L.
NO.	DATE	REVISIONS	BY
STATE HIGHWAY COMMISSION OF KANSAS			
REINFORCED CONCRETE MANHOLE			
STD. NO. 633 SCALE 1/2 inch = 1 foot (For 20' x 36' sheet)			
DESIGNED BY A.E. DATE 3-25-69 DETAIL BY W.A.B. TRACED BY B.A.B.			
CHECKED BY A.L.B. APPROVED BY J.N. DATE 4-5-69			