

**STREET IMPROVEMENTS FOR
HUNTCREST SECOND ADDITION**

COUNTRYSIDE CIRCLE From the E.L. of Cranbrook to and including Cul-de-Sac

PROJECT NUMBER

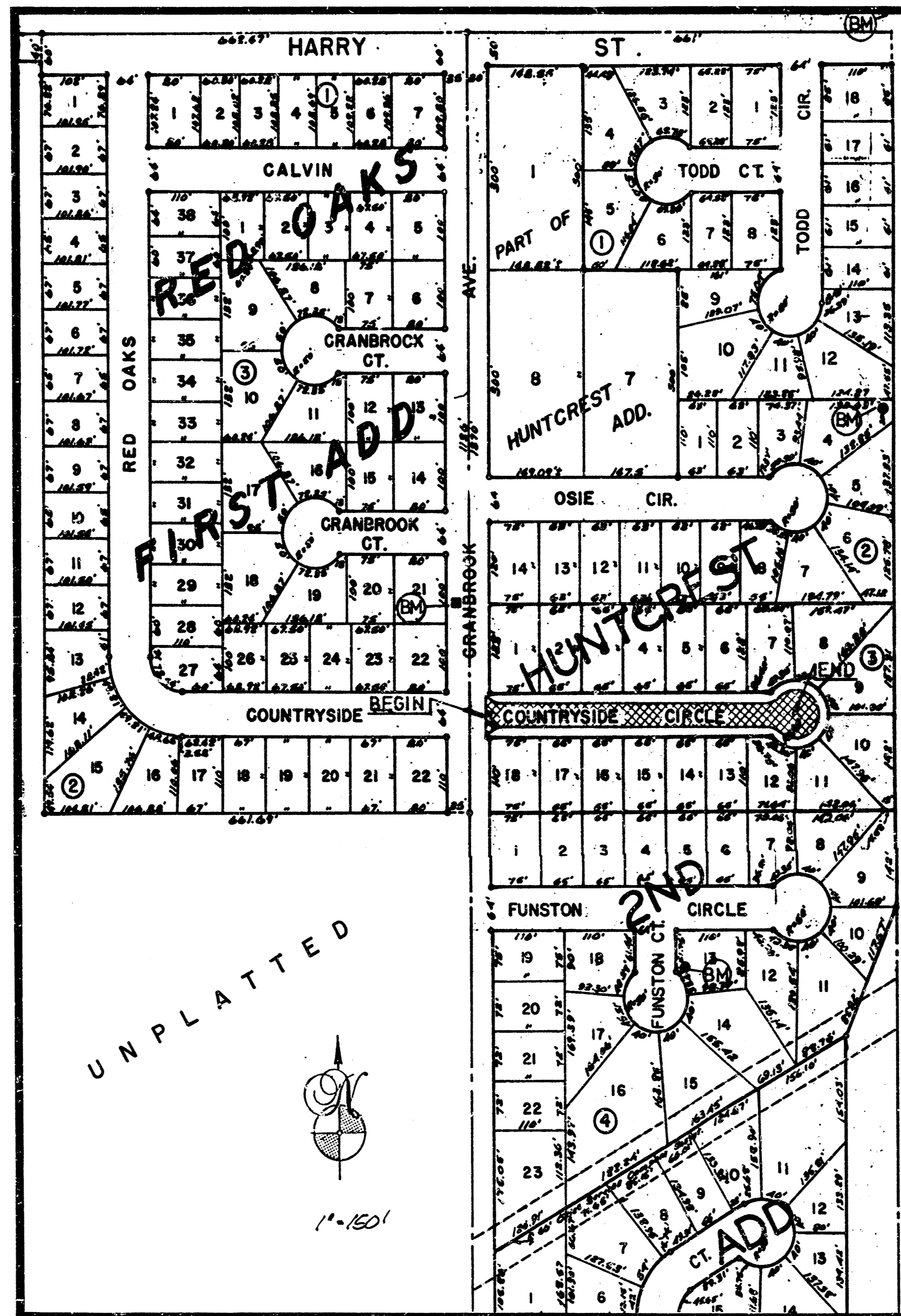
472 76 245 81654 000 000 001

GENERAL NOTES

- Utility service lines, poles, valve boxes, meters, and etcetera 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. The contractor will be required to work around existing utilities within the right-of-way which do not conflict with proposed construction.
- Subble from the removal of miscellaneous structures and excess excavation which is to be wasted shall be disposed of on sites to be provided by the Contractor. These sites shall be approved by the Engineer as to suitability, appearance and site location. Locations that, in the opinion of the Engineer, will leave an unsightly appearance will not be approved.
- No more than 5 drives 18 feet in width, or equivalent combinations thereof, are to be constructed with this project.
- Limits of earthwork shall match existing ground elevations at the right-of-way line unless otherwise noted on the plans with a new finished grade elevation. When a new finished grade elevation is shown, the earthwork shall extend one foot beyond the right-of-way line and then sloped up or down using permissible slopes to match the existing ground surface.
- The Contractor shall be responsible for preserving property irons. The Contractor will 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 in accordance with state laws.
- Trees and shrubs in public right-of-way which are in direct conflict with the proposed new construction shall be removed by the Contractor with the Engineer's approval. Trees and shrubs not in conflict with proposed construction shall be saved and protected from damage. The cost of all such removal shall be included in the lump sum price bid for right-of-way clearing.
- All water main relocation included in this project shall be constructed in accordance with City of Wichita Standard Specifications for Water Main Installations no. 14533.
- The Water Department shall field locate water valves one time during construction when requested by the Contractor. It shall be the Contractor's responsibility to preserve such field locations during the construction process. Water valves, water valve boxes or fire hydrants damaged during construction shall be repaired by the Contractor at his own expense.

BENCHMARKS

- City disc 1/2 mi. E. Webb Road @ 37.5' N, E. Harry St. and 1.0' W. of NE Cor. NW 1/4, Sec. 33, T. 27 S., R. 2 E.
Elev. = 1343.18 USGS / 1156.53 City datum.
- 1/2" bar in conc. N.W. Cor. Lot 4, Blk 2 Huntcrest Second Addn.
Elev. = 157.47 City datum.
- 10' cut in To. W.S. Cranbrook 104(1)S, E(S) Cranbrook Ct. (Lot 21, Blk 3, Red Oaks 1st Addn)
Elev. = 171.60 City datum.
- 1/2" bar in conc. 32.0(1)E and 23.6(1)S E intersection Funston Cir & Funston Ct. (W.S. Lot 3, Block 4, Huntcrest Second Addn)
Elev. = 164.25 City datum.



IMPROVEMENT DISTRICT

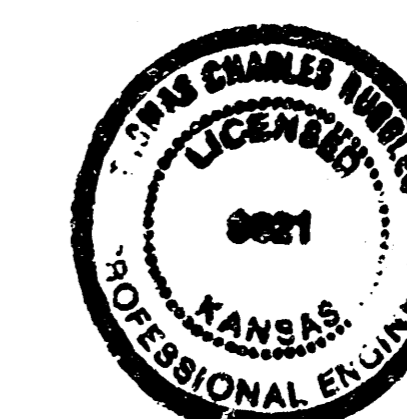
CITY of WICHITA, KANSAS

**MICHAEL E. LINDEBAK
CITY ENGINEER**

INDEX of SHEETS

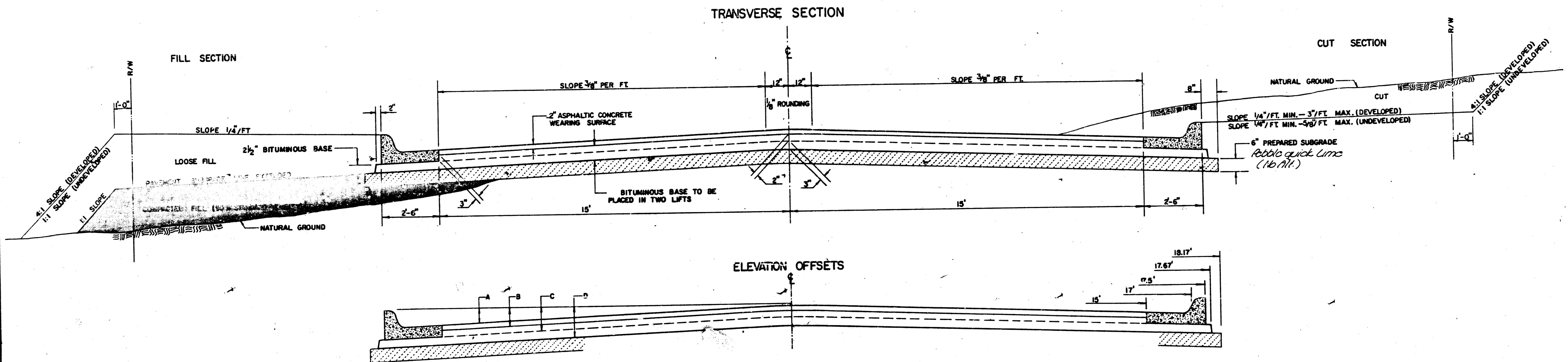
Title Sheet	1
Typical Section (35' to 7'11/2')	2
Plan Sheet	3
Plan Profile - SWS	4
Detail Sheet (Spec. 1A, 1B, 1C, 1D, 1E, 1F, 1G, 1H, 1I, 1J, 1K, 1L, 1M, 1N, 1O, 1P, 1Q, 1R, 1S, 1T, 1U, 1V, 1W, 1X, 1Y, 1Z)	5
Earthwork X-sections	6-7

*AS BUILT
11/08
MG*



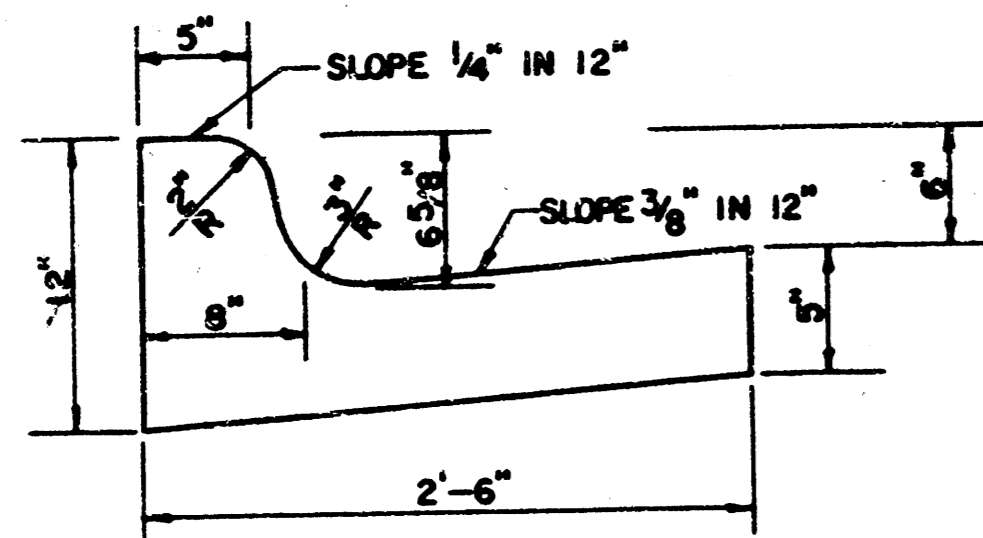
TITLE SHEET		1/1
BAUGHMAN COMPANY, P.A. SURVEYING & ENGINEERING 318/203-7271 • 315 ELLIS • WICHITA, KANSAS 67211		
Design: <i>Rupples</i>	Drawn: <i>Gair</i>	Approved: <i>5 Feb 08</i>
Scale: <i>as noted</i>		

TYPICAL 35' PAVEMENT DETAILS

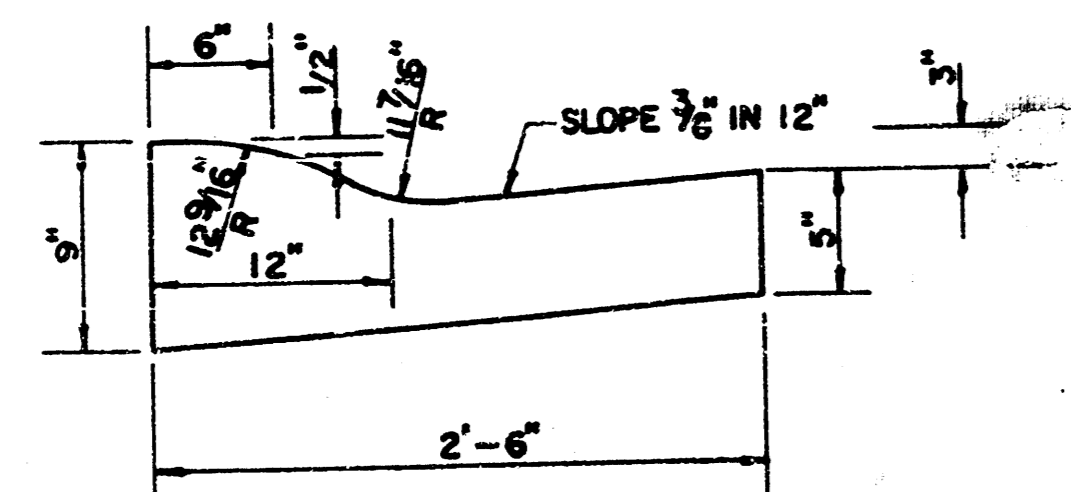


	DISTANCE FROM CENTERLINE (LT. & RT.)												
	0'	2'	4'	6'	8.5'	10'	12'	14'	15'	17'	17.5'	17.67'	18.17'
A: TOP OF CURBS TO TOP OF SURFACE LIFT	0.04	0.08	0.14	0.21	0.29	0.33	0.39	0.46	0.49	—	—	—	—
B: TOP OF CURBS TO TOP OF UPPER BASE LIFT	0.21	0.25	0.31	0.37	0.45	0.50	0.55	0.62	0.65	—	—	—	—
C: TOP OF CURBS TO TOP OF LOWER BASE LIFT	0.37	0.43	0.50	0.57	0.67	0.72	0.79	0.87	0.90	0.98	1.00	1.00	—
D: TOP OF CURBS TO TOP OF SUBGRADE	0.62	0.67	0.74	0.81	0.90	0.95	1.02	1.08	1.12	1.19	1.21	1.21	1.23

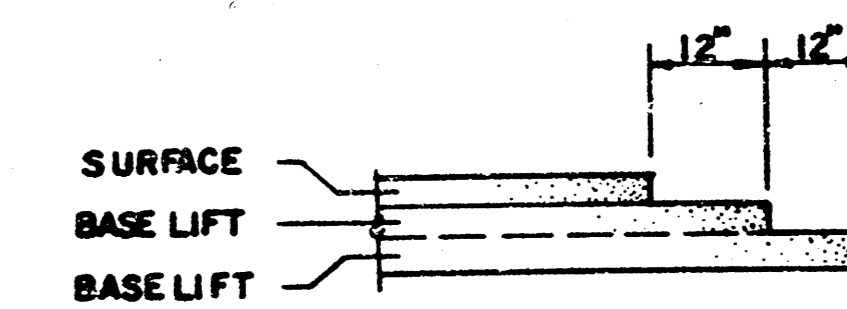
COMBINED CURB & GUTTER



ROLL TYPE COMBINED CURB & GUTTER



TRANSVERSE CONSTRUCTION JOINTS



TRANSVERSE CONSTRUCTION JOINTS SHALL BE CONSTRUCTED IN FLEXIBLE BASE PAVEMENTS AT LOCATIONS WHERE PAVEMENT JOINS EXISTING FLEXIBLE BASE PAVEMENT AS SHOWN BY THE DETAIL. ALL COSTS ASSOCIATED WITH THE CONSTRUCTION OF THE TRANSVERSE JOINT SHALL BE INCLUDED IN THE BID PRICE FOR SQUARE YARDS 7" ASPHALTIC CONCRETE (5" BITUMINOUS BASE).

GENERAL NOTES

- 1) THE ASPHALTIC CONCRETE PAVEMENT BETWEEN THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 7" ASPHALTIC CONCRETE (5" BITUMINOUS BASE).
- 2) THE BITUMINOUS BASE UNDER AND BEHIND THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 2 1/2" BITUMINOUS BASE.
- 3) A TACK COAT OF EMULSIFIED ASPHALT (SC-1H OR CSS-1H) SHALL BE APPLIED AT AN APPROXIMATE RATE OF 0.05 GALLONS PER SQUARE YARD BETWEEN EACH LIFT OF ASPHALTIC MATERIAL.
- 4) BITUMINOUS BASE AND ASPHALTIC CONCRETE WEARING SURFACE SHALL BE PLACED WITH A LAYDOWN MACHINE HAVING AUTOMATIC CONTROLS FOR LINE AND GRADE.
- 5) CONSTRUCTION JOINTS IN EACH LIFT SHALL BE STAGGERED A MINIMUM DISTANCE OF ONE (1) FOOT FROM JOINTS IN PRECEDING LIFTS AND PLACED SO THAT A JOINT WILL BE CONSTRUCTED ON THE CENTERLINE OF THE TOP LIFT.
- 6) CONTRACTOR TO BID ONLY ONE SUBGRADE TREATMENT ALTERNATE WHEN ALTERNATES ARE PROVIDED IN THE PROPOSAL AND CONTRACT. THE ALTERNATE CHOSEN BY THE SUCCESSFUL BIDDER SHALL BE USED IN CONSTRUCTING THIS PROJECT.

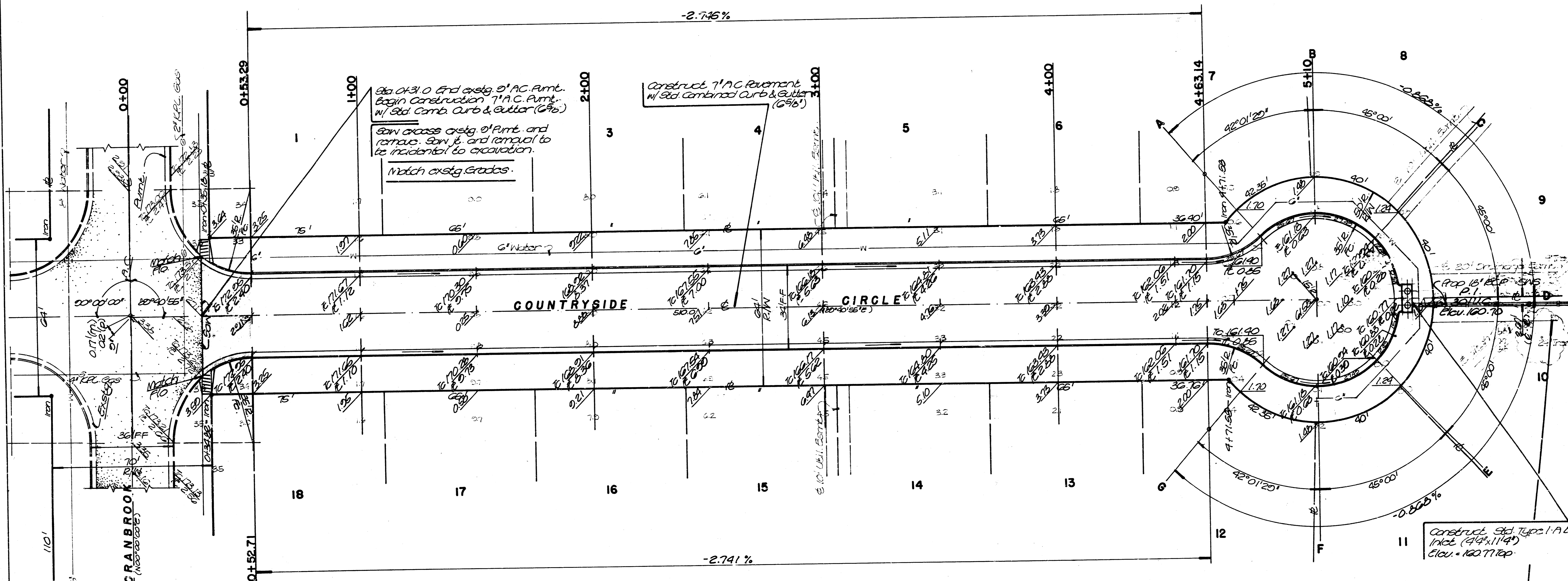
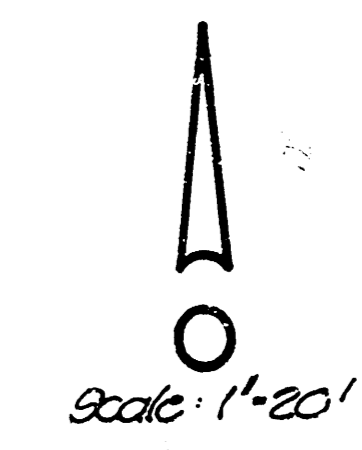
7" RESIDENTIAL ASPHALTIC CONCRETE PAVEMENT w/ 5" BITUMINOUS BASE

BAUGHMAN COMPANY, P.A.
SURVEYING & ENGINEERING
315 ELLIS • WICHITA, KANSAS 67215

Design: C of W Drawn: C of W Date: none Scale: none

Project Number: 472-76-245-81654-000-000-001

HUNTCREST SECOND ³ ADDITION



* NOTE
Sidewalk & Wheelchair ramp
construction E.S. Cranbrook
by 'Others'

* NOTE
Clearing of Right of Way & 20' Drng.
Easement to be paid as lump sum
bid item. (See Note 4, Sht. 1)

3

• INTERSECTION QUANTITIES •

SY	Concrete Pavement	23.6
SY	Asphaltic Conc. Pavement (2" Bituminous Base)	14.1
SY	Bituminous Base	37.6
LF	Combined Curb & Gutter	
LF	Homolithic Edge Curb	
SF	4" Wheelchair Ramp	
SF	4" Walk	
CY	Excavation	
CY	Compacted Fill	
LS	Reinforcing Steel	
SY	Manipulation	101.4
TS	Tons Lime or Cement	
SY	Valley Gtr. Concrete & Asphaltic Conc. Base	

• EARTHWORK QUANTITIES •

Excavation	156 cy	Compacted Fill	96 cy
+ 10%	16	+ 10%	10
Total	172 cy	Total	106 cy
Subgrade Manipulation	2257 sq.		
Borrow Material	1057 cy		

COUNTRYSIDE CIRCLE: From the
E.L. Cranbrook to, and including
C/L de Soc.

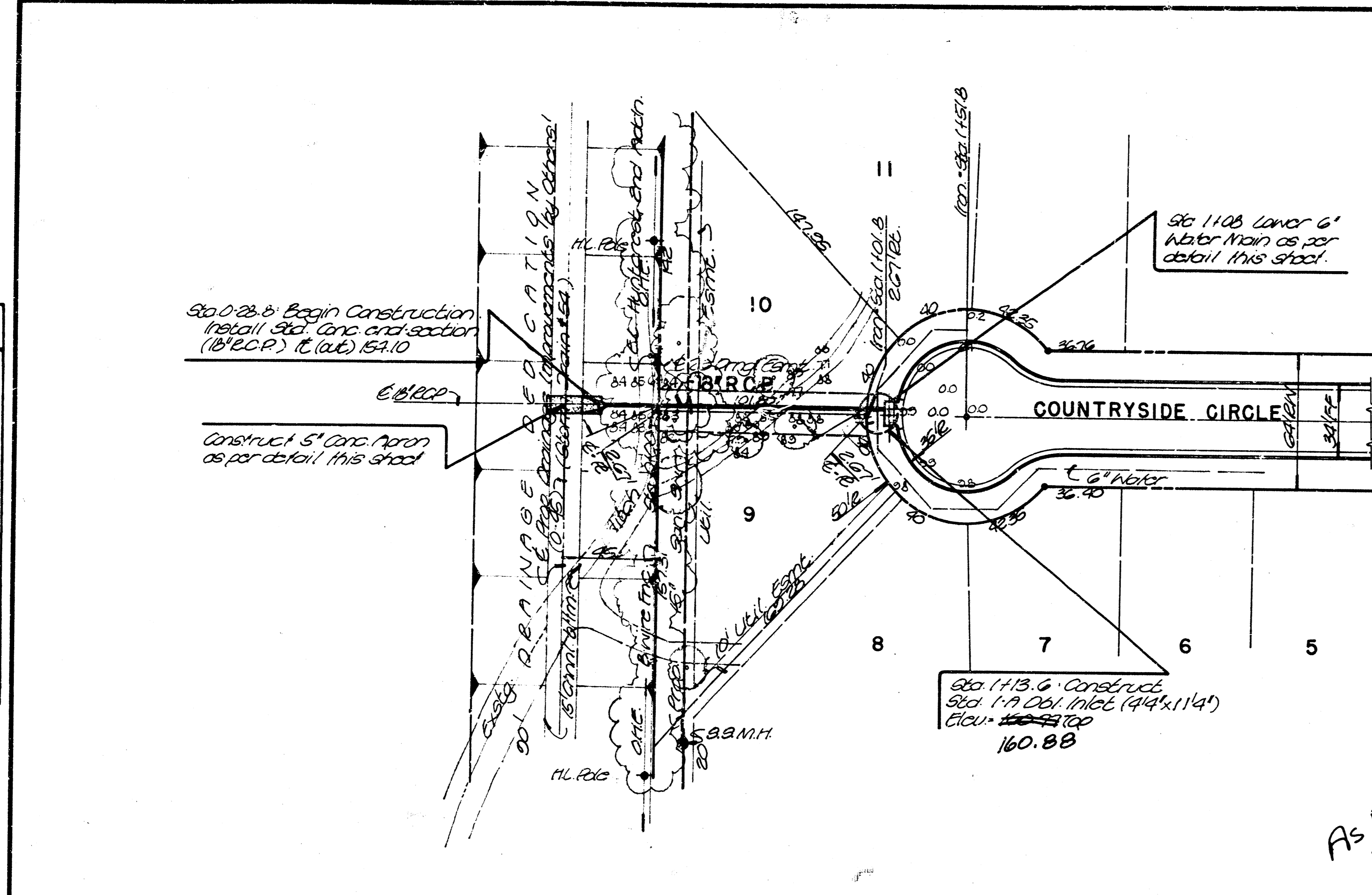
BAUGHMAN COMPANY, P.A.
SURVEYING & ENGINEERING
2150 N. 22ND ST. • 215 S.W. 11TH AVENUE • MIAMI, FLORIDA 33135

Project Number:
472-16-245-B1664-000-000-001

Scale: 1"=20'

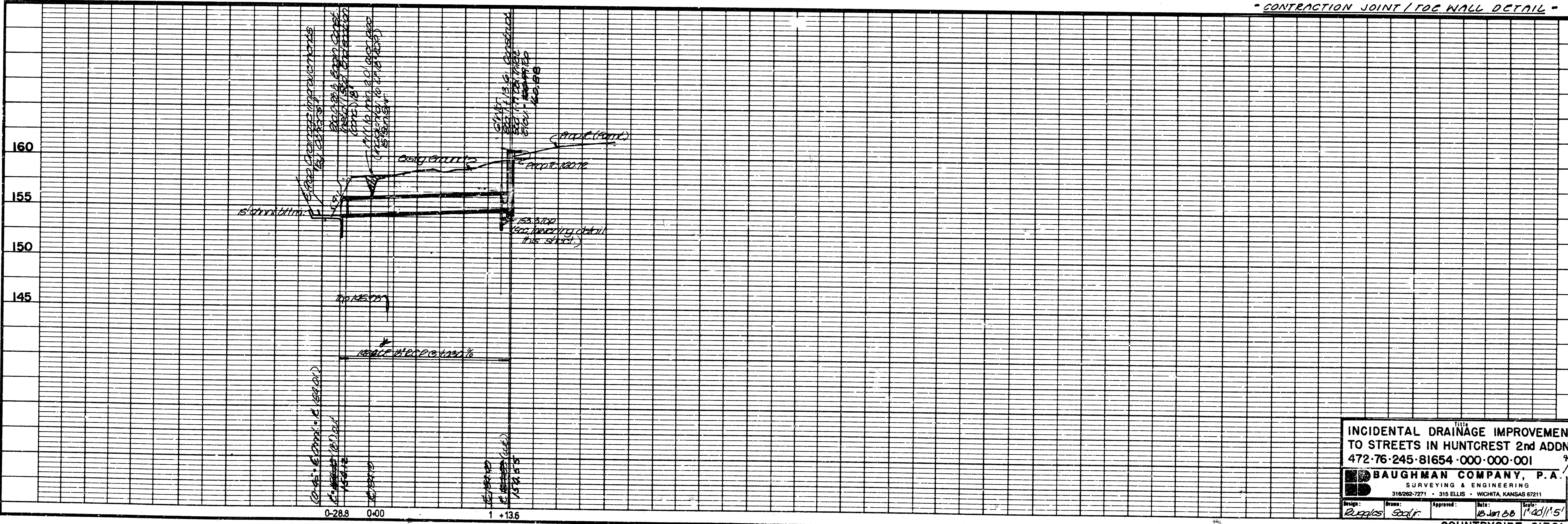
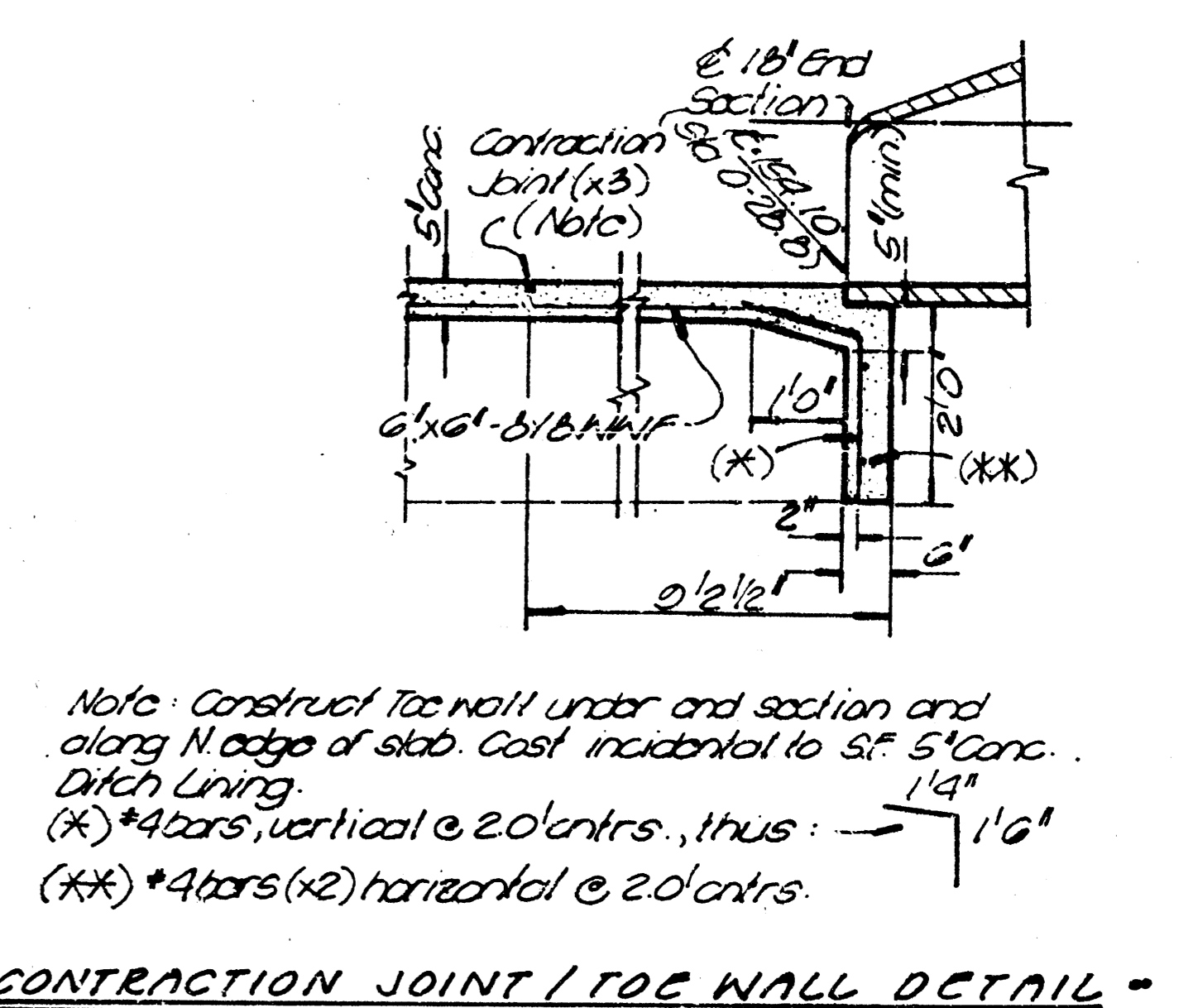
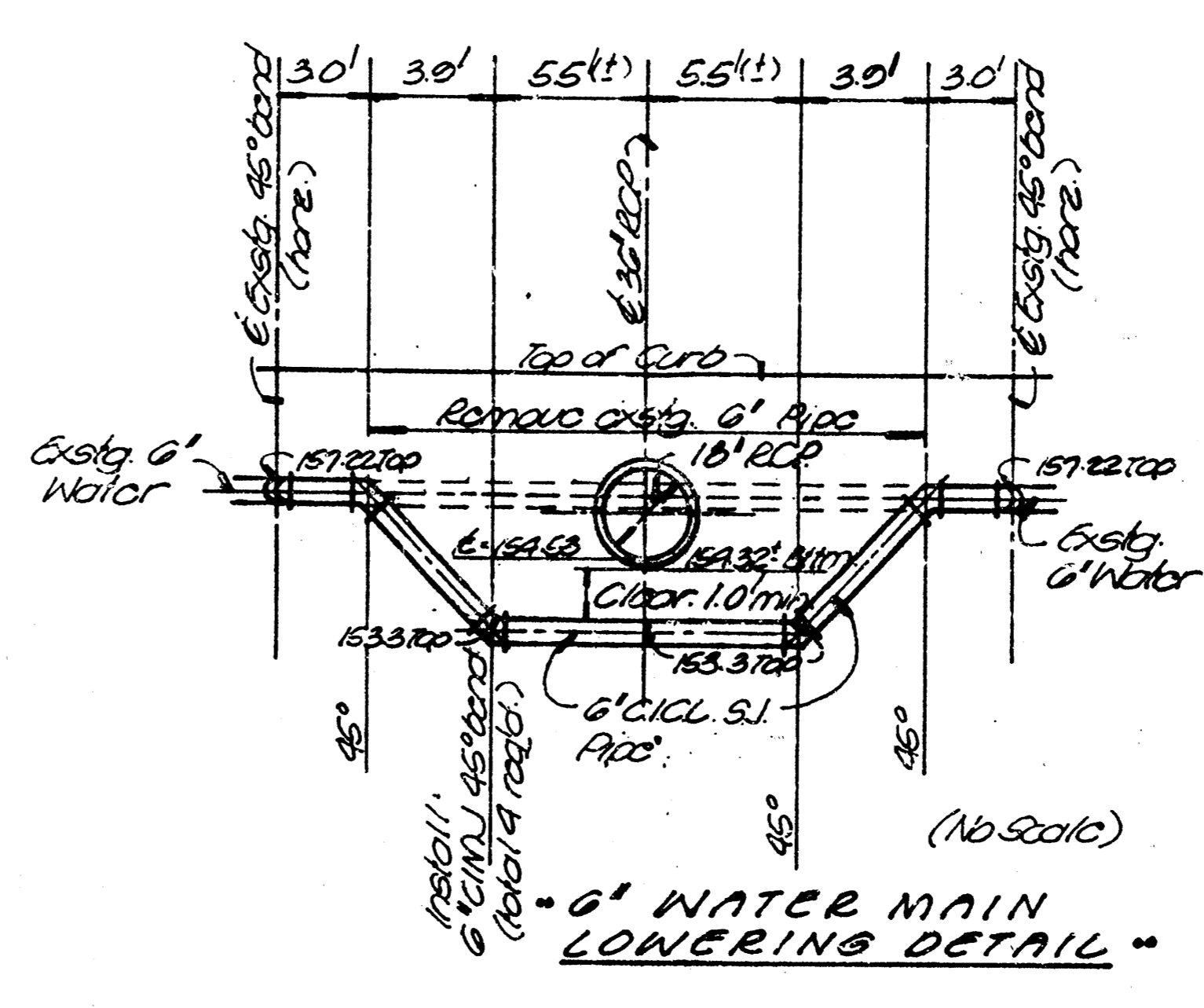
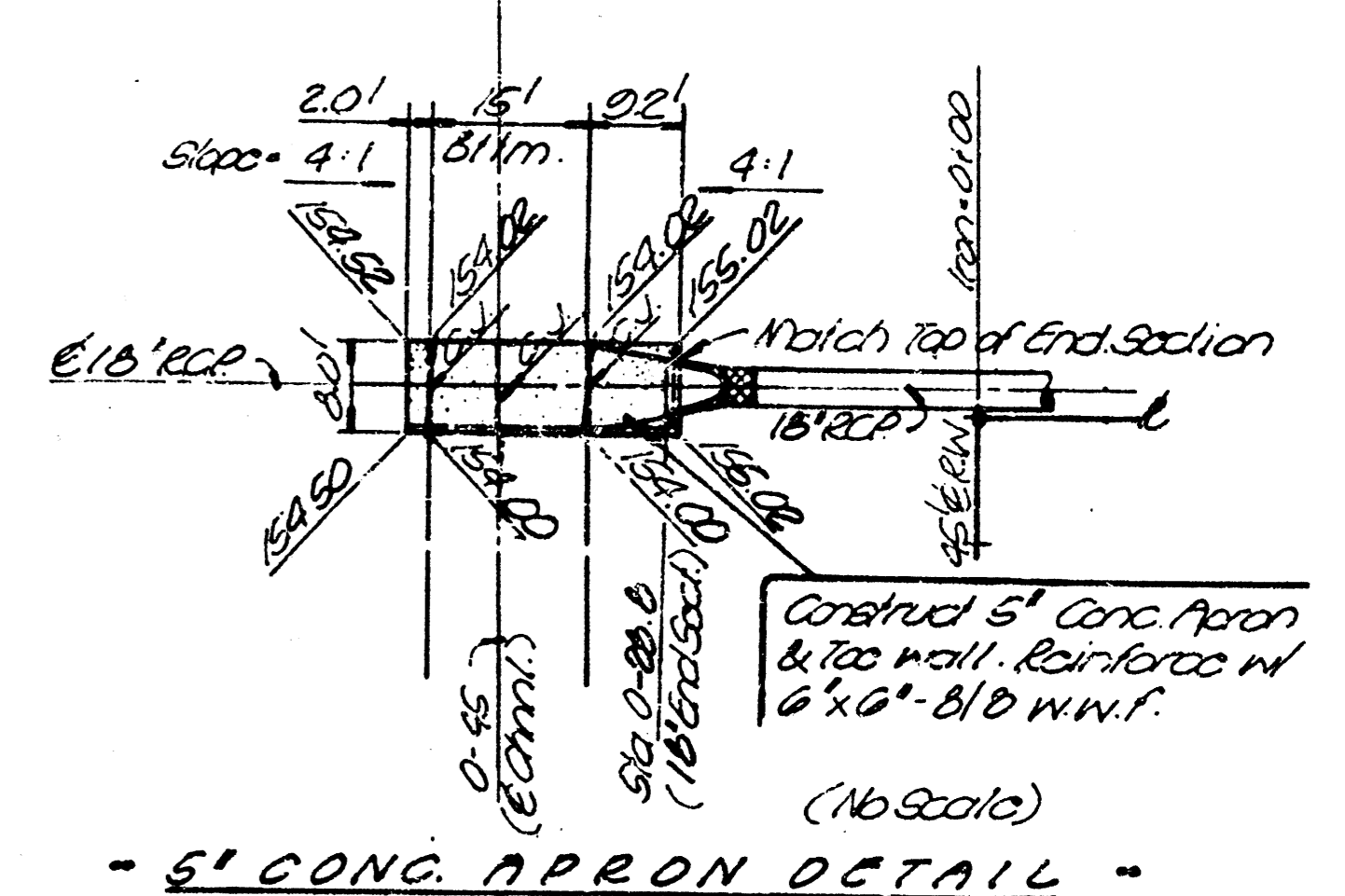
PLAN	DATE
REVISION	
NO. 1	
NO. 2	
NO. 3	
NO. 4	
NO. 5	
NO. 6	
NO. 7	
NO. 8	
NO. 9	
NO. 10	

PROFILE	DATE
REVISION	
NO. 1	
NO. 2	
NO. 3	
NO. 4	
NO. 5	
NO. 6	
NO. 7	
NO. 8	
NO. 9	
NO. 10	



As BUILT
11/88
MS

NOTE: Coordinate construction of storm sewer with Storm Water Drain #21. DO NOT construct storm sewer PRIOR TO COMPLETION of channel earthwork to a point upstream from storm sewer this project.



INCIDENTAL DRAINAGE IMPROVEMENTS TO STREETS IN HUNTCREST 2nd ADDN. 472-76-245-81654-000-000-001

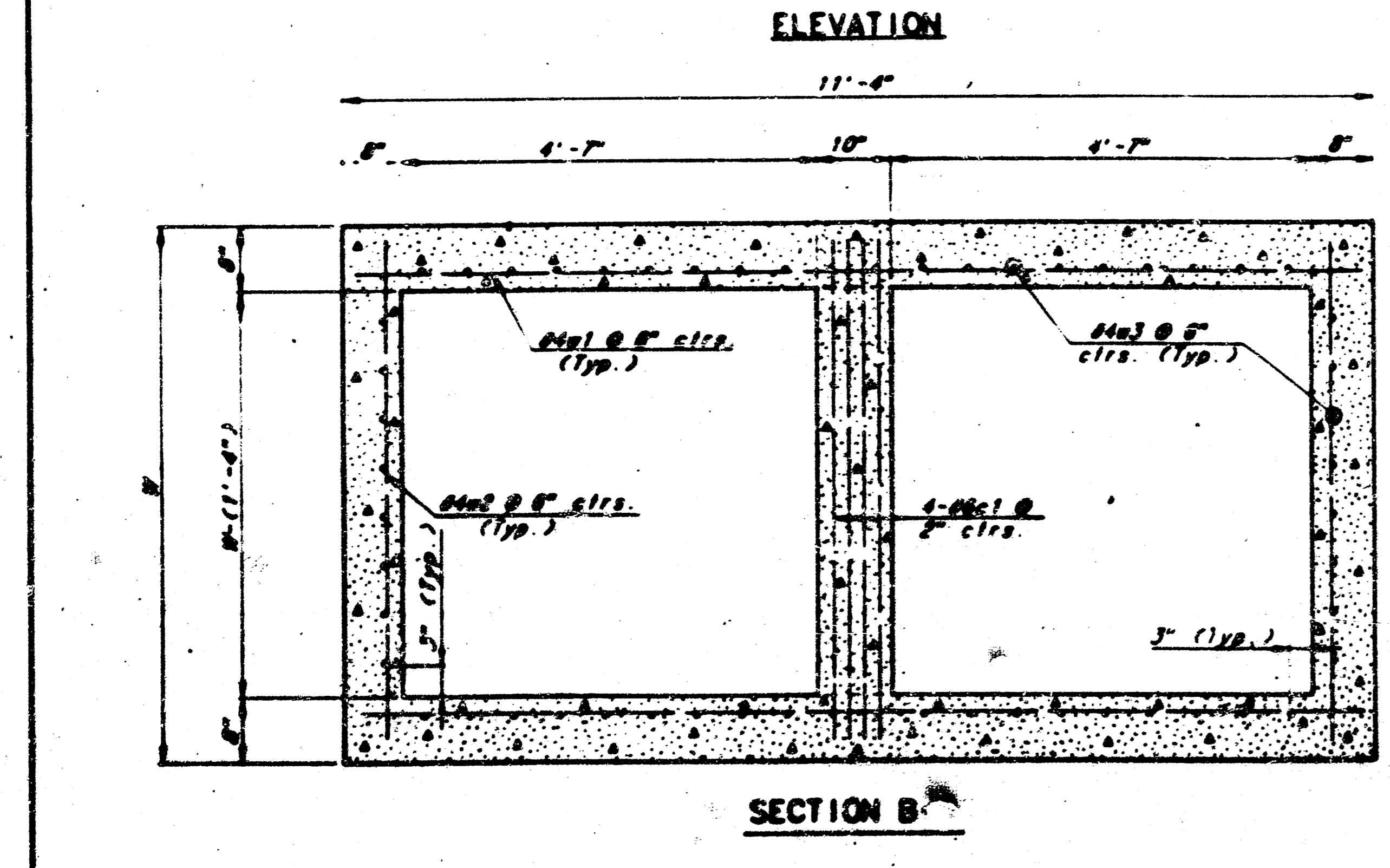
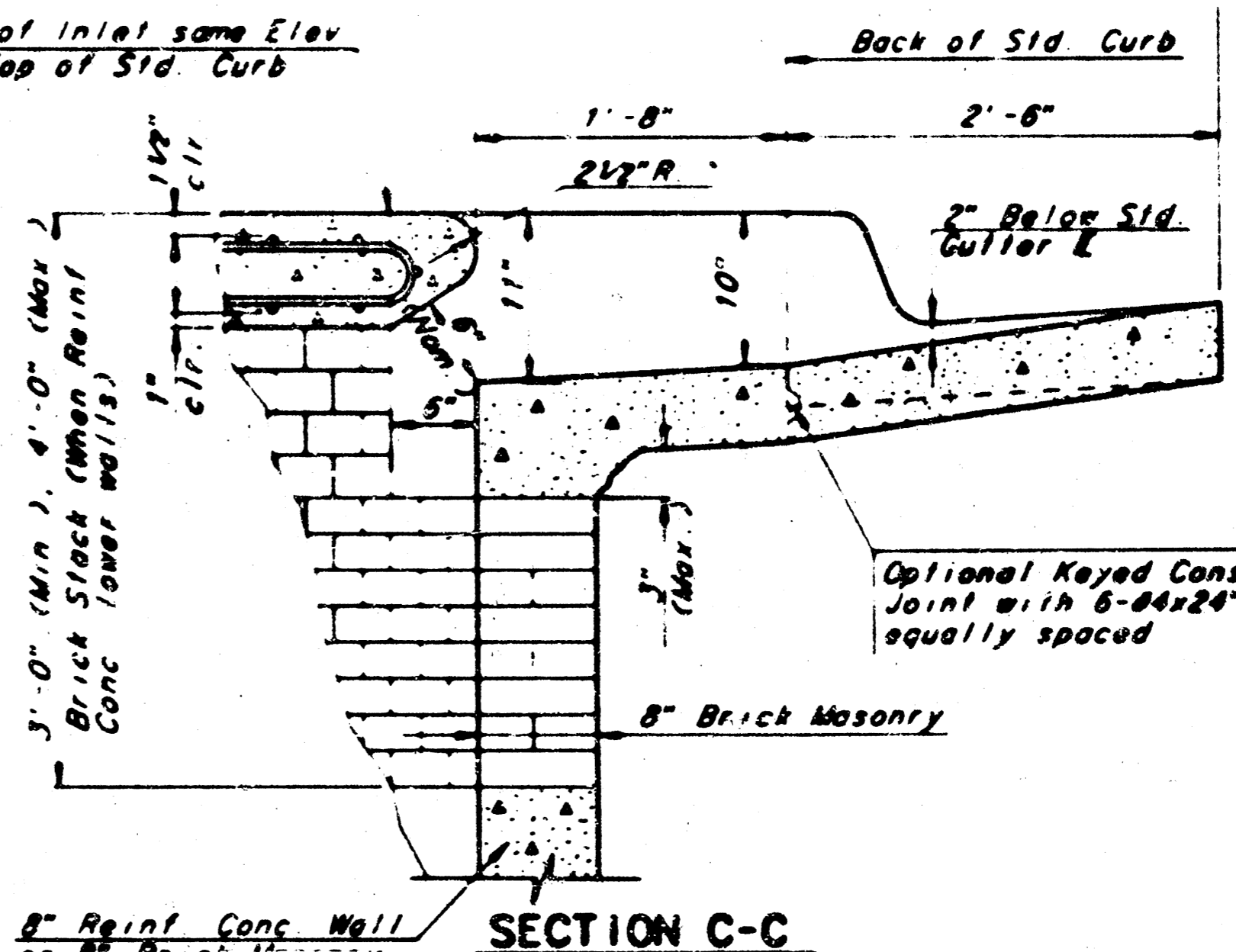
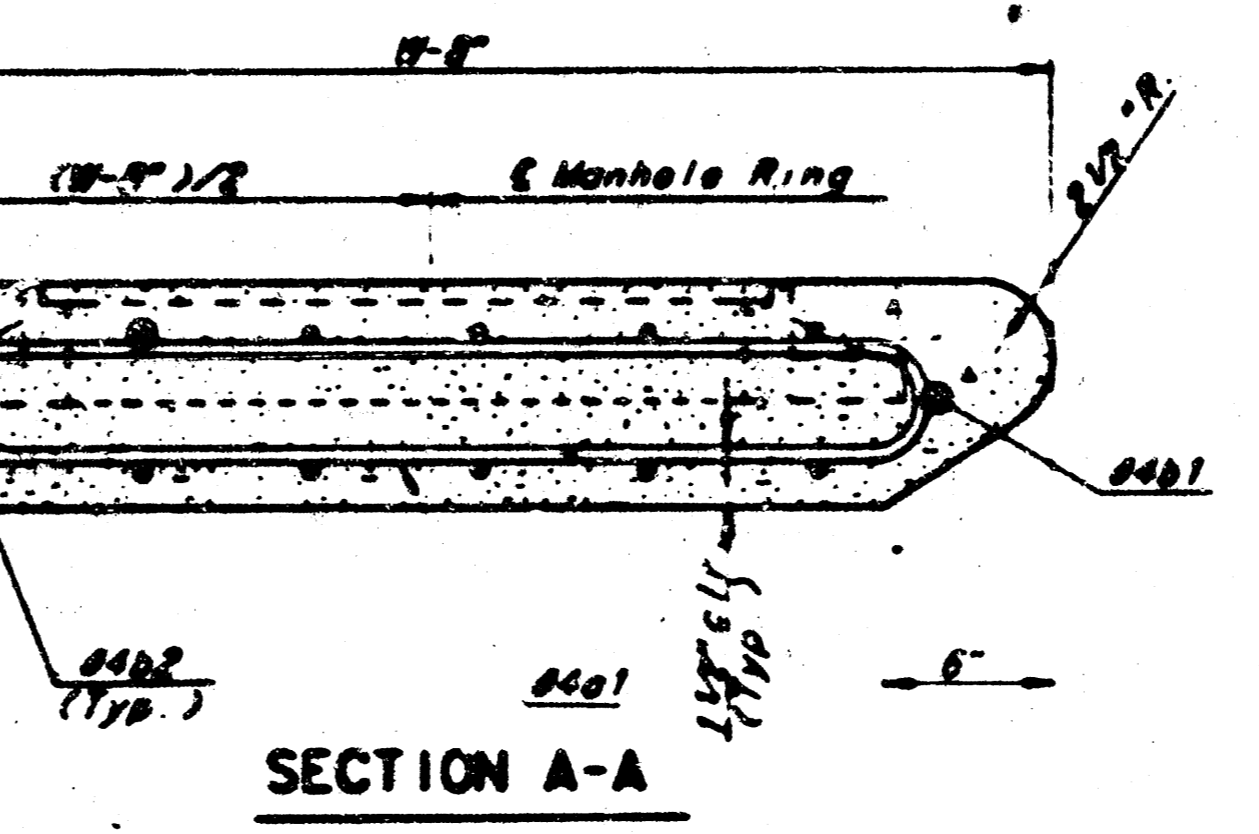
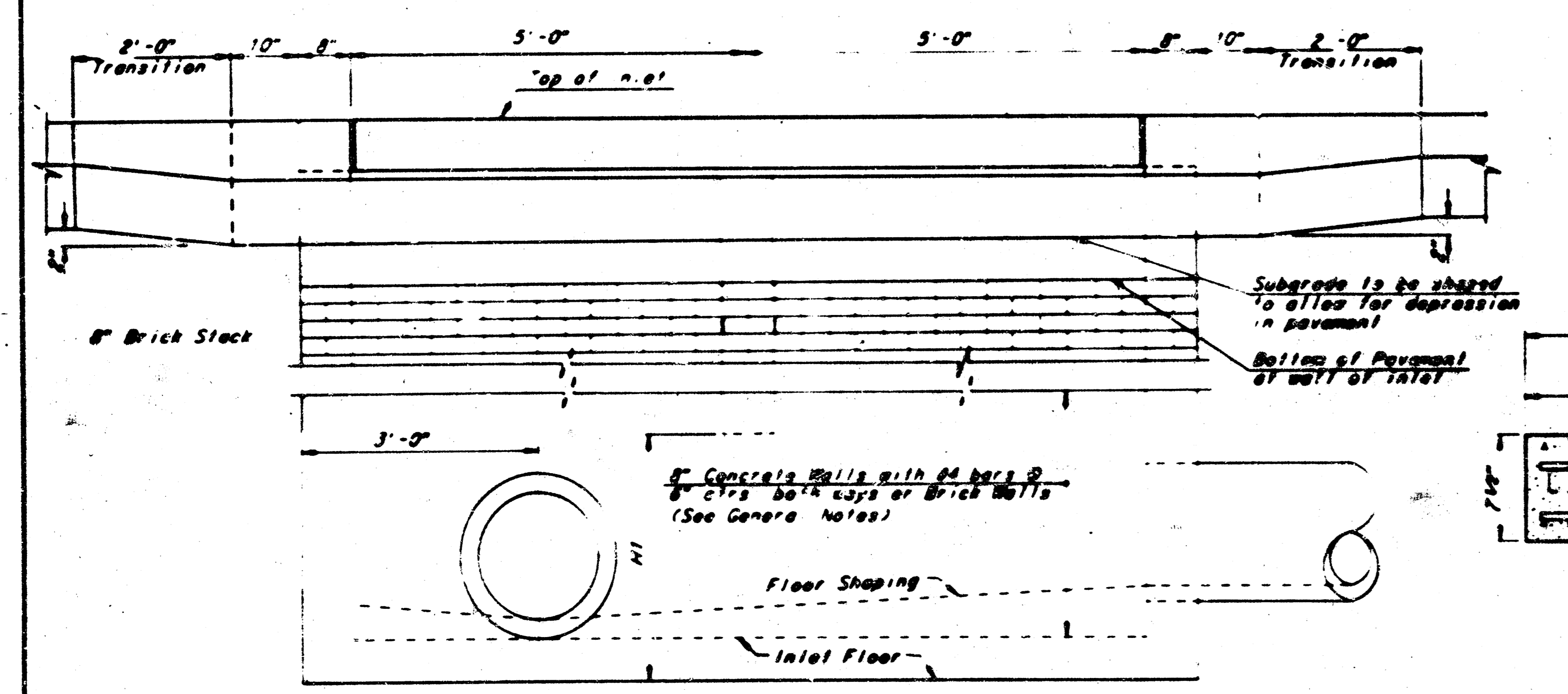
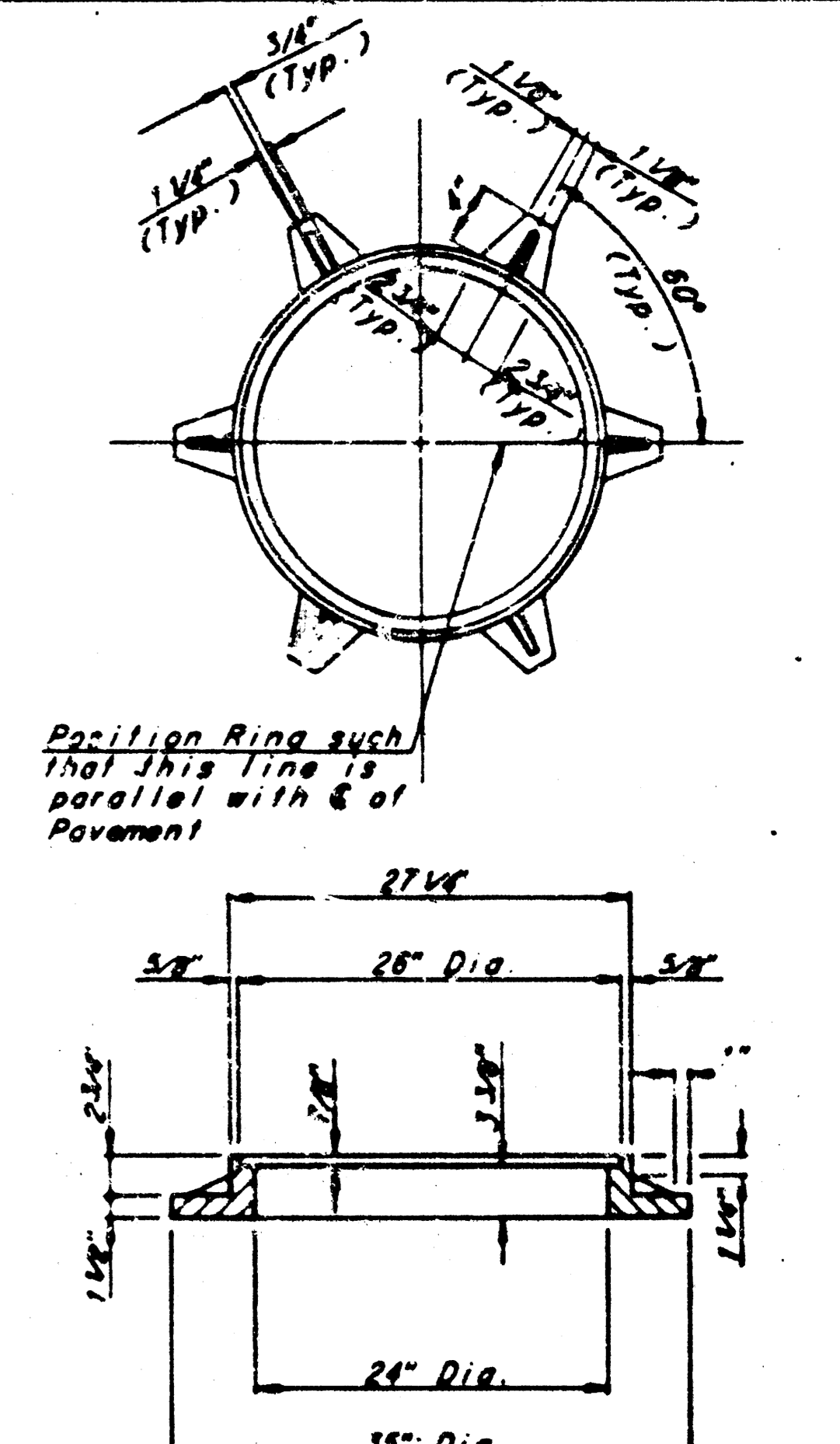
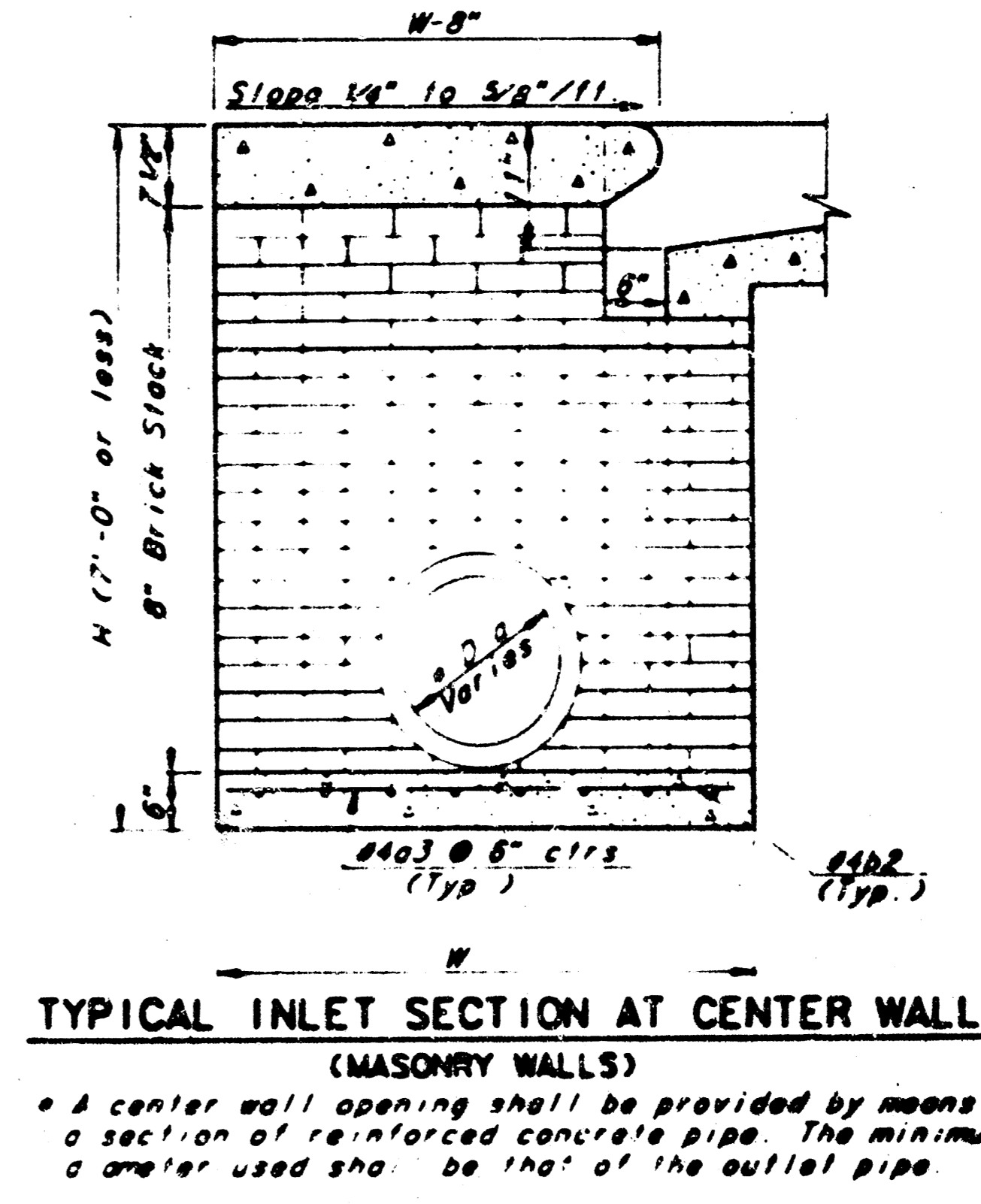
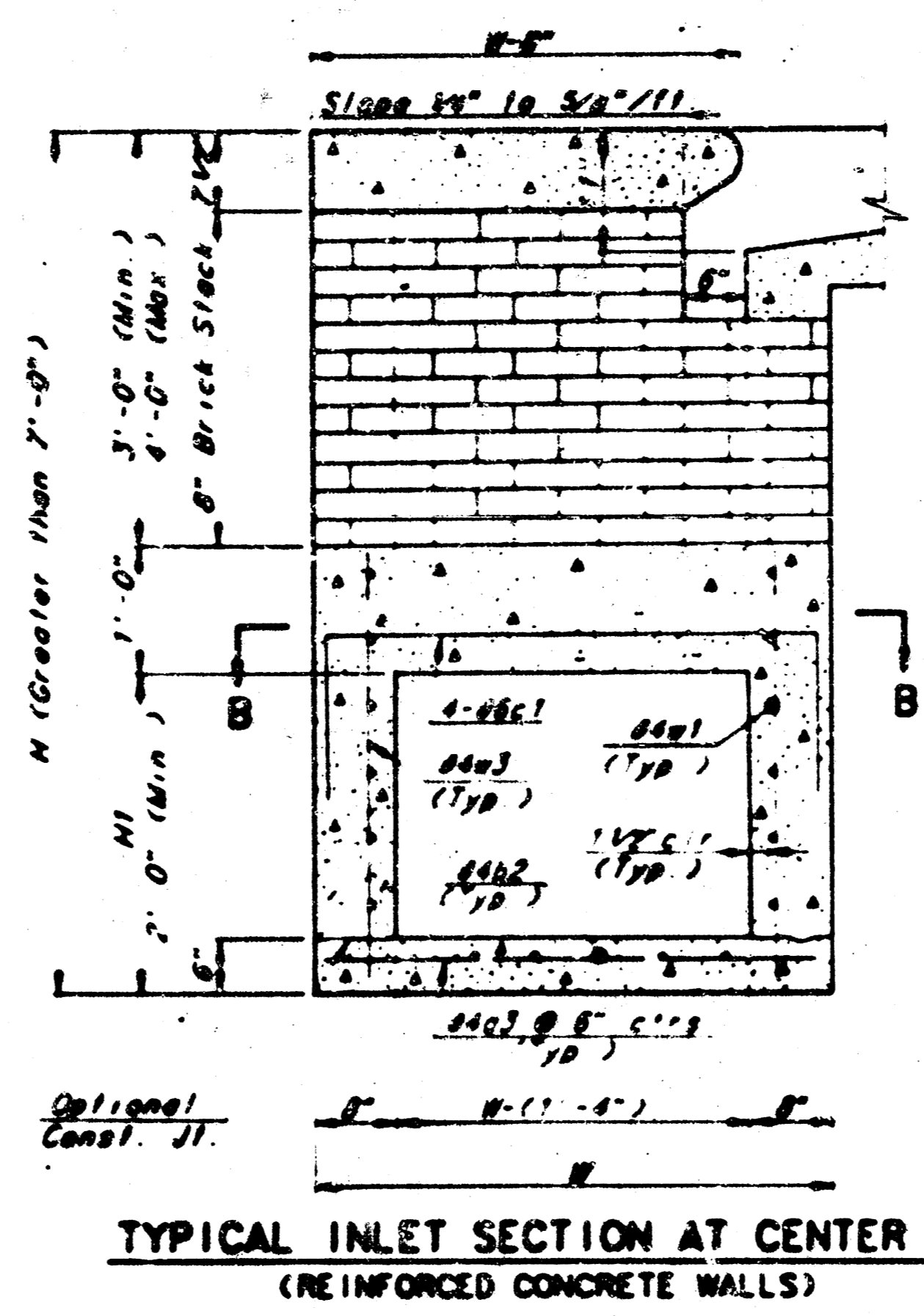
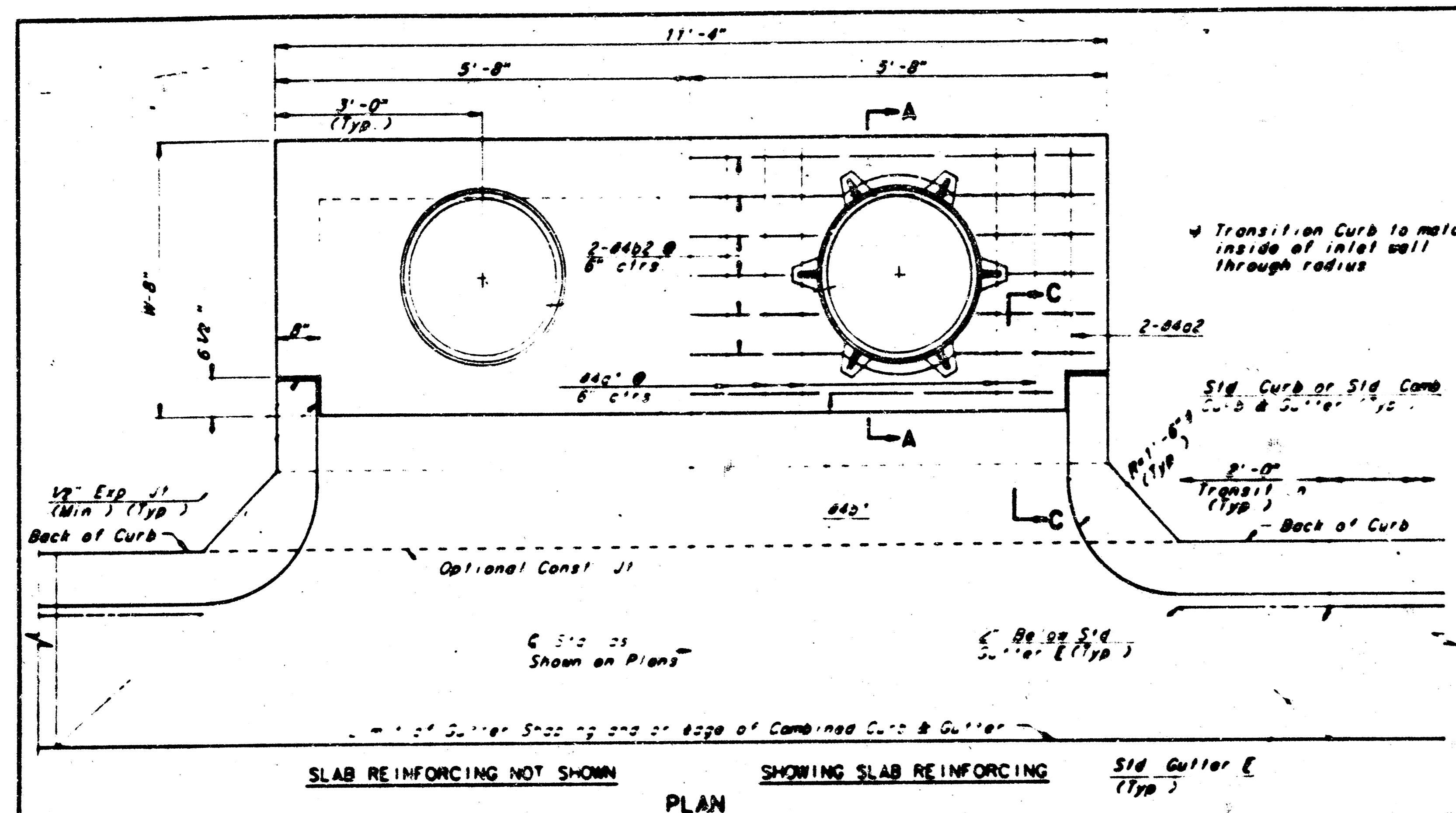
BAUGHMAN COMPANY, P.A. SURVEYING & ENGINEERING

316262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

Design: [] Drawn: [] Approved: [] Date: [] Scale: []

4 of 7

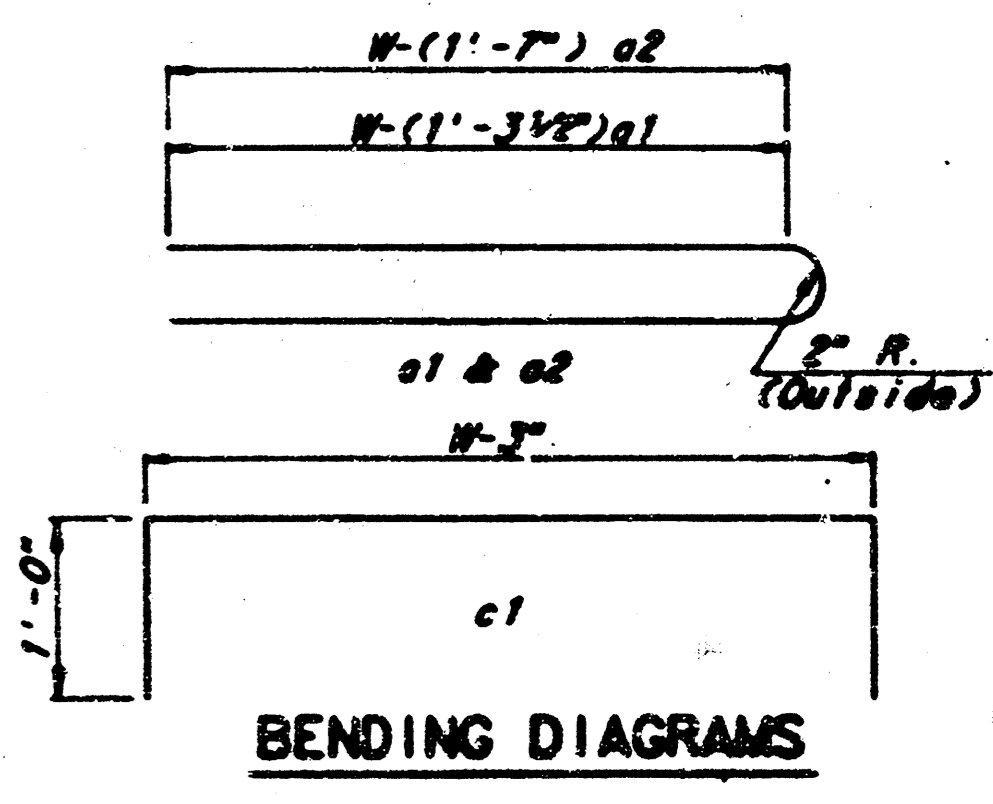
COUNTRYSIDE CIRCLE



SLAB AND FLOOR REINFORCING											
MARK	SIZE	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH
a1	#4	13	8'-7 1/2"	13	8'-7 1/2"	13	10'-7 1/2"	13	12'-7 1/2"	13	14'-7 1/2"
a2	#4	2	8'-0"	2	8'-0"	2	10'-0"	2	12'-0"	2	14'-0"
a3	#4	20	4'-1"	20	5'-1"	20	6'-1"	20	7'-1"	20	8'-1"
b1	#4	1	9'-0"	1	9'-0"	1	9'-0"	1	9'-0"	1	9'-0"
a4	#4	18	11'-1"	24	11'-1"	30	11'-1"	36	11'-1"	42	11'-1"

WALL REINFORCING											
MARK	SIZE	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH
c1	#4	4	8'-7 1/2"	4	7'-7 1/2"	4	8'-7 1/2"	4	9'-7 1/2"	4	10'-7 1/2"
w1	#4	0	11'-1"	0	11'-1"	0	11'-1"	0	11'-1"	0	11'-1"
w2	#4	0	4'-1"	0	5'-1"	0	6'-1"	0	7'-1"	0	8'-1"
w3	#4	0	0	0	0	0	0	0	0	0	0

- GENERAL NOTES**
- THE CONTRACTOR SHALL BE REQUIRED TO CONSTRUCT 8" 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 W IS LESS THAN 7'-0". THE OUTSIDE INLET WALLS BELOW THE BRICK STACK SHALL BE REINFORCED CONCRETE CONSTRUCTION AND THE CENTER WALL SHALL BE OF MASONRY CONSTRUCTION AS SHOWN FOR THE MASONRY WALL OPTION.
 - INLET INVERT SHALL BE SHAPED WITH A 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.
 - CONCRETE TOPS TO BE INSTALLED ON THIN MORTAR CUSHION TO INSURE FULL SUPPORT ALONG BRICK WALLS. CONCRETE TOPS MAY BE CAST IN PLACE OR PRECAST. CONCRETE USED FOR INLET CONSTRUCTION SHALL BE CONCRETE PAVEMENT MIX.
 - INLET TOP REINFORCING SHALL BE SPACED ON 6" MAX. CENTERS. INLET LIDS SHALL BE NOTCHED OUT AS INDICATED TO FACILITATE CONSTRUCTION OF CURB BARS IN INLET TOP TO BE FIELD WENT OR CUT TO CLEAR MANHOLE RINGS.
 - THE ENDS OF ALL PIPES INSTALLED IN INLETS SHALL BE CUT OFF FLUSH WITH THE INSIDE FACE OF THE INLET WALL.



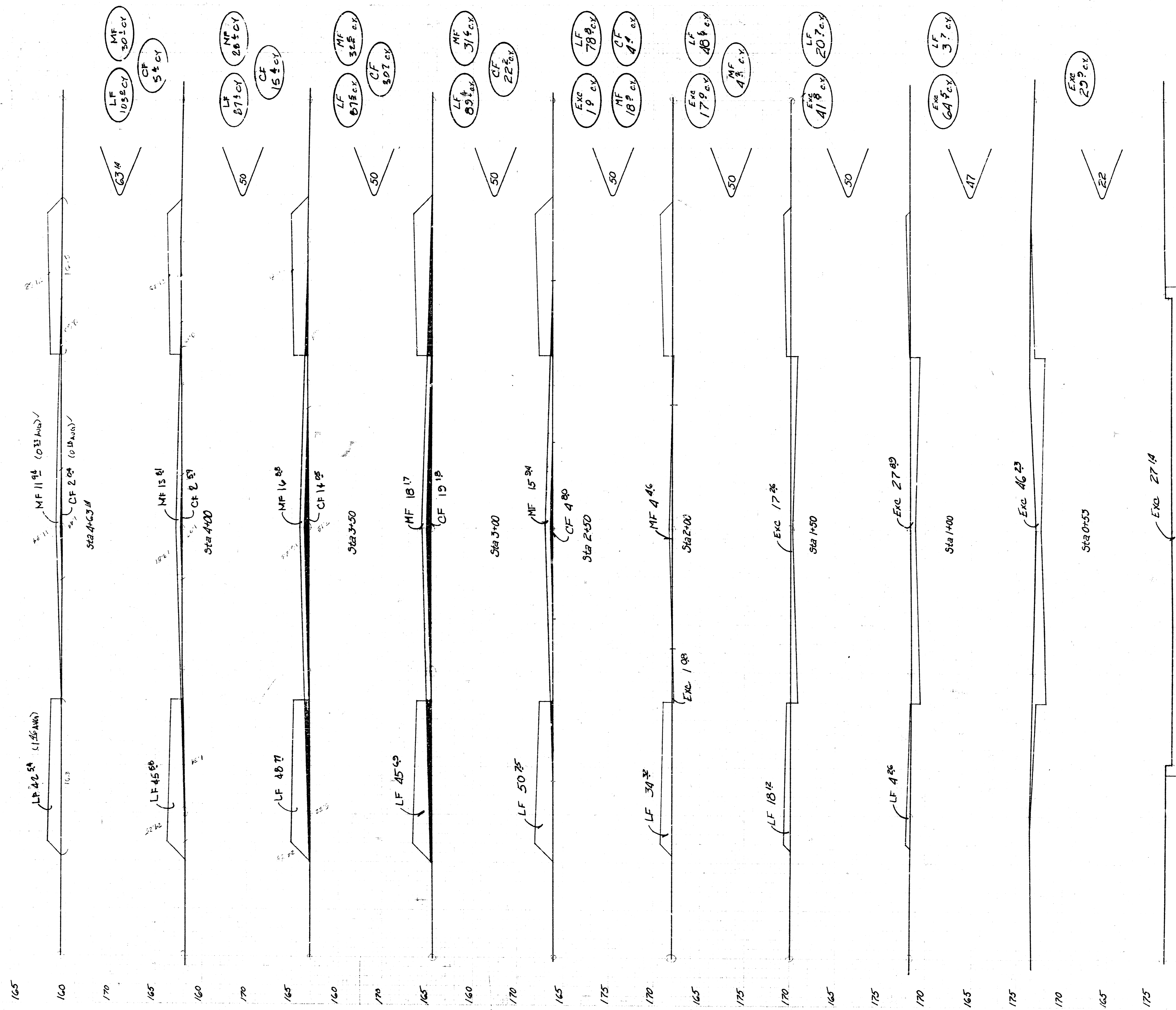
STANDARD TYPE I-A CURB INLET DETAIL
CITY OF WICHITA, KANSAS
Inlet Opening = 6' x 11' 0"

BAUGHMAN COMPANY, P.A.
SURVEYING & ENGINEERING
316266-7271 • 315 ELLIS • WICHITA, KANSAS 67211

Drawn: C of W
Checked: C of W
Date: 12-21-84
Scale: 1/4" = 1'-0"

Project Number: 472-76-245-81654-000-000-001

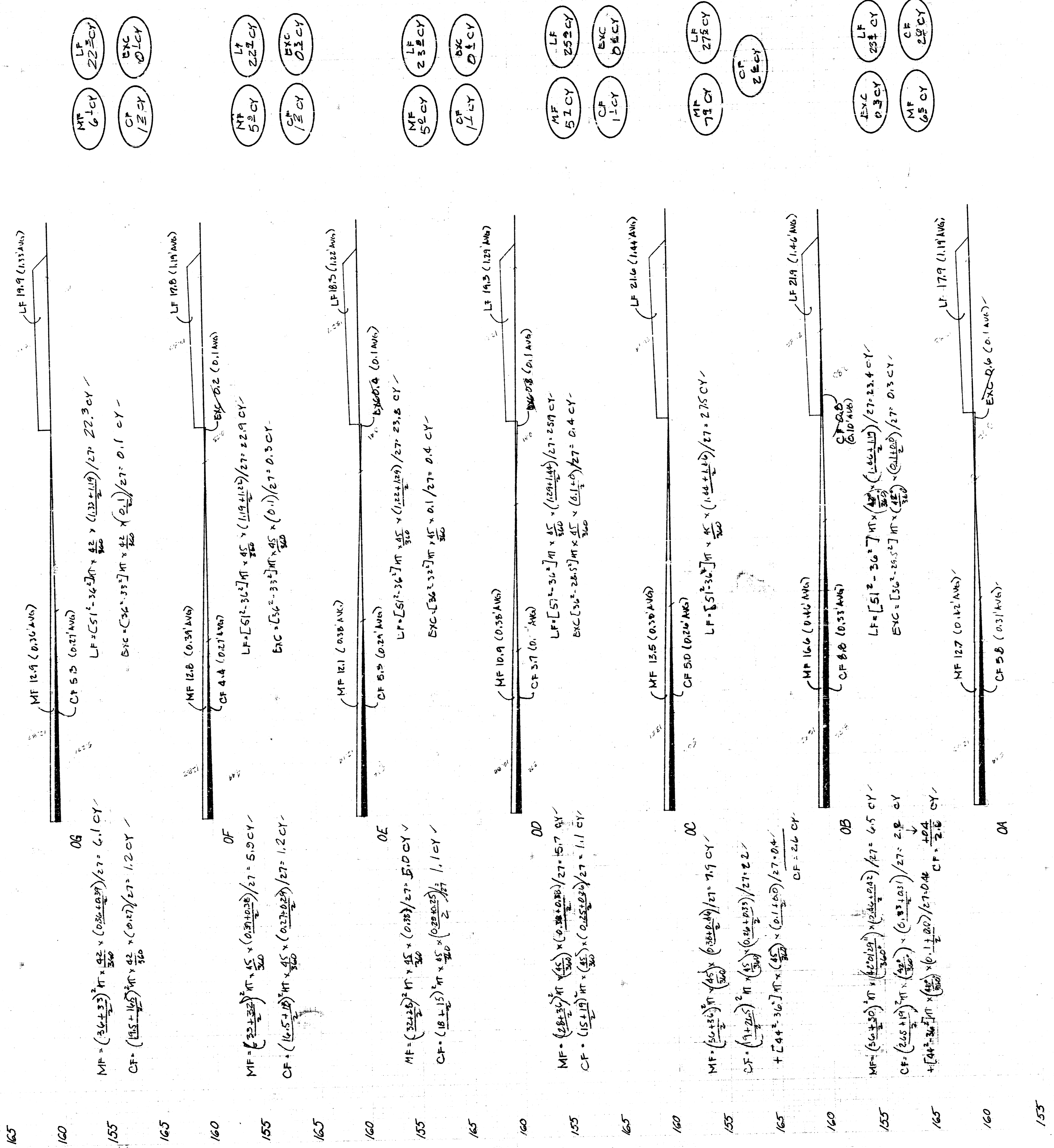
BAZB



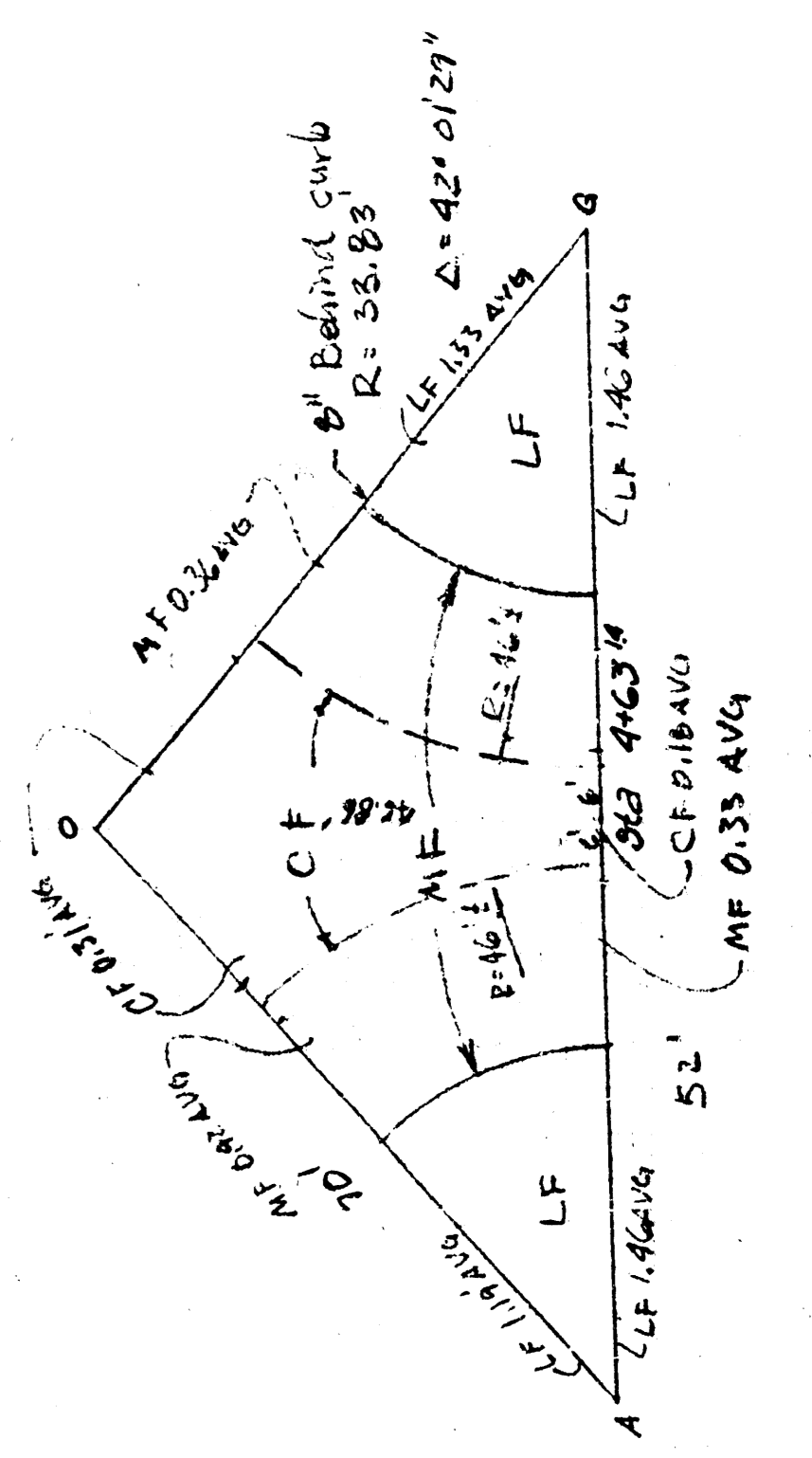
Station	Project Totals	Page Totals
Sta 0+31	156 C.Y. EXCAVATION 96 C.Y. COMPACTED FILL 20.5 C.Y. MANIPULATED FILL 704 C.Y. LOOSE FILL	154 C.Y. EXCAVATION 78 C.Y. COMPACTED FILL 146 C.Y. MANIPULATED FILL 519 C.Y. LOOSE FILL
Sta 0+00	1	1
Sta 1+00	1	1
Sta 2+00	1	1
Sta 3+00	1	1
Sta 4+00	1	1
Sta 5+00	1	1
Sta 6+00	1	1
Sta 7+00	1	1
Sta 8+00	1	1
Sta 9+00	1	1
Sta 10+00	1	1
Sta 11+00	1	1
Sta 12+00	1	1
Sta 13+00	1	1
Sta 14+00	1	1
Sta 15+00	1	1
Sta 16+00	1	1
Sta 17+00	1	1
Sta 18+00	1	1
Sta 19+00	1	1
Sta 20+00	1	1
Sta 21+00	1	1
Sta 22+00	1	1
Sta 23+00	1	1
Sta 24+00	1	1
Sta 25+00	1	1
Sta 26+00	1	1
Sta 27+00	1	1
Sta 28+00	1	1
Sta 29+00	1	1
Sta 30+00	1	1
Sta 31+00	1	1
Sta 32+00	1	1
Sta 33+00	1	1
Sta 34+00	1	1
Sta 35+00	1	1
Sta 36+00	1	1
Sta 37+00	1	1
Sta 38+00	1	1
Sta 39+00	1	1
Sta 40+00	1	1
Sta 41+00	1	1
Sta 42+00	1	1
Sta 43+00	1	1
Sta 44+00	1	1
Sta 45+00	1	1
Sta 46+00	1	1
Sta 47+00	1	1
Sta 48+00	1	1
Sta 49+00	1	1
Sta 50+00	1	1
Sta 51+00	1	1
Sta 52+00	1	1
Sta 53+00	1	1
Sta 54+00	1	1
Sta 55+00	1	1
Sta 56+00	1	1
Sta 57+00	1	1
Sta 58+00	1	1
Sta 59+00	1	1
Sta 60+00	1	1
Sta 61+00	1	1
Sta 62+00	1	1
Sta 63+00	1	1
Sta 64+00	1	1
Sta 65+00	1	1
Sta 66+00	1	1
Sta 67+00	1	1
Sta 68+00	1	1
Sta 69+00	1	1
Sta 70+00	1	1
Sta 71+00	1	1
Sta 72+00	1	1
Sta 73+00	1	1
Sta 74+00	1	1
Sta 75+00	1	1
Sta 76+00	1	1
Sta 77+00	1	1
Sta 78+00	1	1
Sta 79+00	1	1
Sta 80+00	1	1
Sta 81+00	1	1
Sta 82+00	1	1
Sta 83+00	1	1
Sta 84+00	1	1
Sta 85+00	1	1
Sta 86+00	1	1
Sta 87+00	1	1
Sta 88+00	1	1
Sta 89+00	1	1
Sta 90+00	1	1
Sta 91+00	1	1
Sta 92+00	1	1
Sta 93+00	1	1
Sta 94+00	1	1
Sta 95+00	1	1
Sta 96+00	1	1
Sta 97+00	1	1
Sta 98+00	1	1
Sta 99+00	1	1
Sta 100+00	1	1

Borrow
 $Borrow = 1.1 [LF + 12 (MF - CF) - 0.8 EXC]$
 $= 1.1 [704 + 12(20.5 + 16) - 0.8(156)] C.Y.$
 Borrow = 1027 C.Y.

Countryside Circle



IGNORE EXC. THIS AREA
 ASSUMING LF TO ROAD. POINTS 'A' & 'B'
 FILL AREAS SYMMETRICAL ABOUT C (MULTIPLY Δ X 2)
 $LF = 2 \left[\frac{(55.83) \pi \times 45 \times (1.46 + 1.46)}{360} \right] / 27 = 41.2 \text{ CY}$
 $CF = 2 \left[\frac{(40.8 + 35.1) \pi \times 45 \times (0.31 + 0.31)}{360} \right] / 27 = 8.0 \text{ CY}$
 $MF = 2 \left[\frac{(40.8 + 35.1) \pi \times 45 \times (0.42 + 0.42)}{360} \right] / 27 = 21.9 \text{ CY}$



Page Totals

- 2 CY EXCAVATION
- 18 CY COMPACTED FILL
- 50 CY MANIPULATED FILL
- 187 CY LOOSE FILL

Countryside Circle