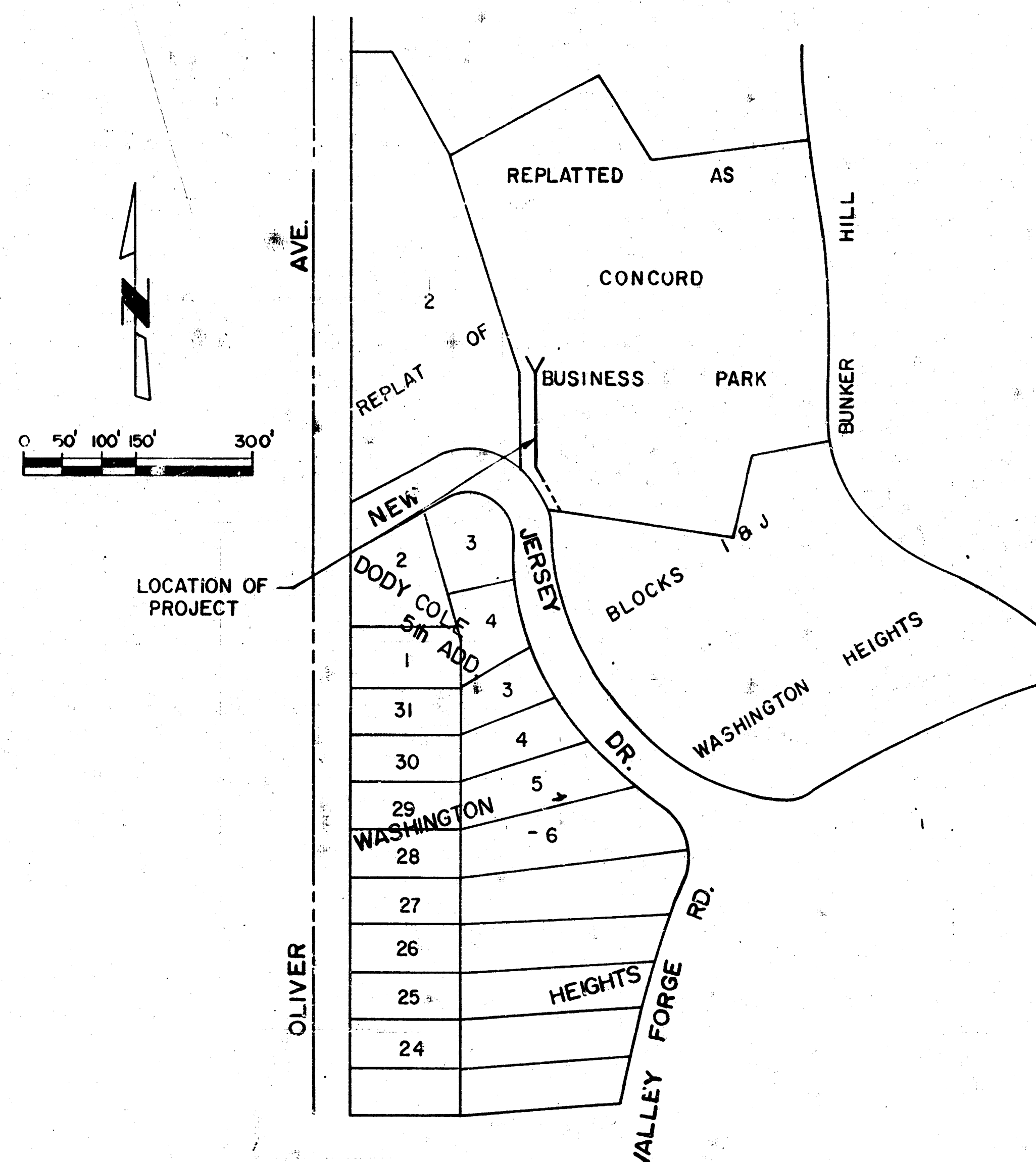


DRAINAGE IMPROVEMENT BOEING WICHITA EMPLOYEES CREDIT UNION

2900 S. OLIVER - 4800 NEW JERSEY
IN

THE CITY OF WICHITA, KANSAS

MICHAEL E. LINDEBAK, P.E. CITY ENGINEER
PRIVATE PROJECT NO. - 274PPS (607861)



DEC., 1990

Booker/Freund
Engineers Architects Planners



NOTE TO CONTRACTOR

INSPECTION AND TESTING FOR THIS PROJECT IS TO BE PROVIDED BY A LICENSED CONSULTING ENGINEERING FIRM UNDER CONTRACT WITH THE OWNER/DEVELOPER. SAID INSPECTION TO BE IN ACCORDANCE WITH THE CITY OF WICHITA STANDARD CONSTRUCTION ENGINEERING PRACTICES AND CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER. NO WORK SHALL BE PERFORMED IN DEDICATED EASEMENTS OR THE PUBLIC RIGHT-OF-WAY BY THE CONTRACTOR WITHOUT SUCH INSPECTION NOR SHALL ANY WORK BE COMMENCED IN DEDICATED EASEMENTS OR PUBLIC RIGHT-OF-WAY WITHOUT WRITTEN AUTHORIZATION BY THE CITY ENGINEER.

APPROVED AS NOTED
By CITY ENGINEER OF WICHITA

Sanitary Sewers _____
Storm Sewers VRH 2/26/91
Driveway Approaches _____
Water Mains _____
Paving _____

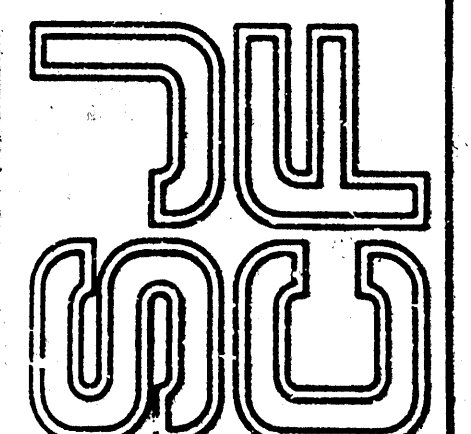
*Booked
2-91
MEG*

As-Built Plan

K-9415

SCHAEFER JOHNSON CONSULTING & ASSOCIATES P.A.

ARCHITECTURE ENGINEERING PLANNING & INTERIOR DESIGN
220 SOUTH HILLSIDE
WICHITA, KANSAS 67211-2167
[316] 684-0171



EAST PARKING LOT EXTENSION
BOEING WICHITA EMPLOYEES CREDIT UNION
WICHITA, KANSAS

REVISIONS

1 of 8

SJCF PROJECT #
2272.00

DATE
JAN. 29, 1991

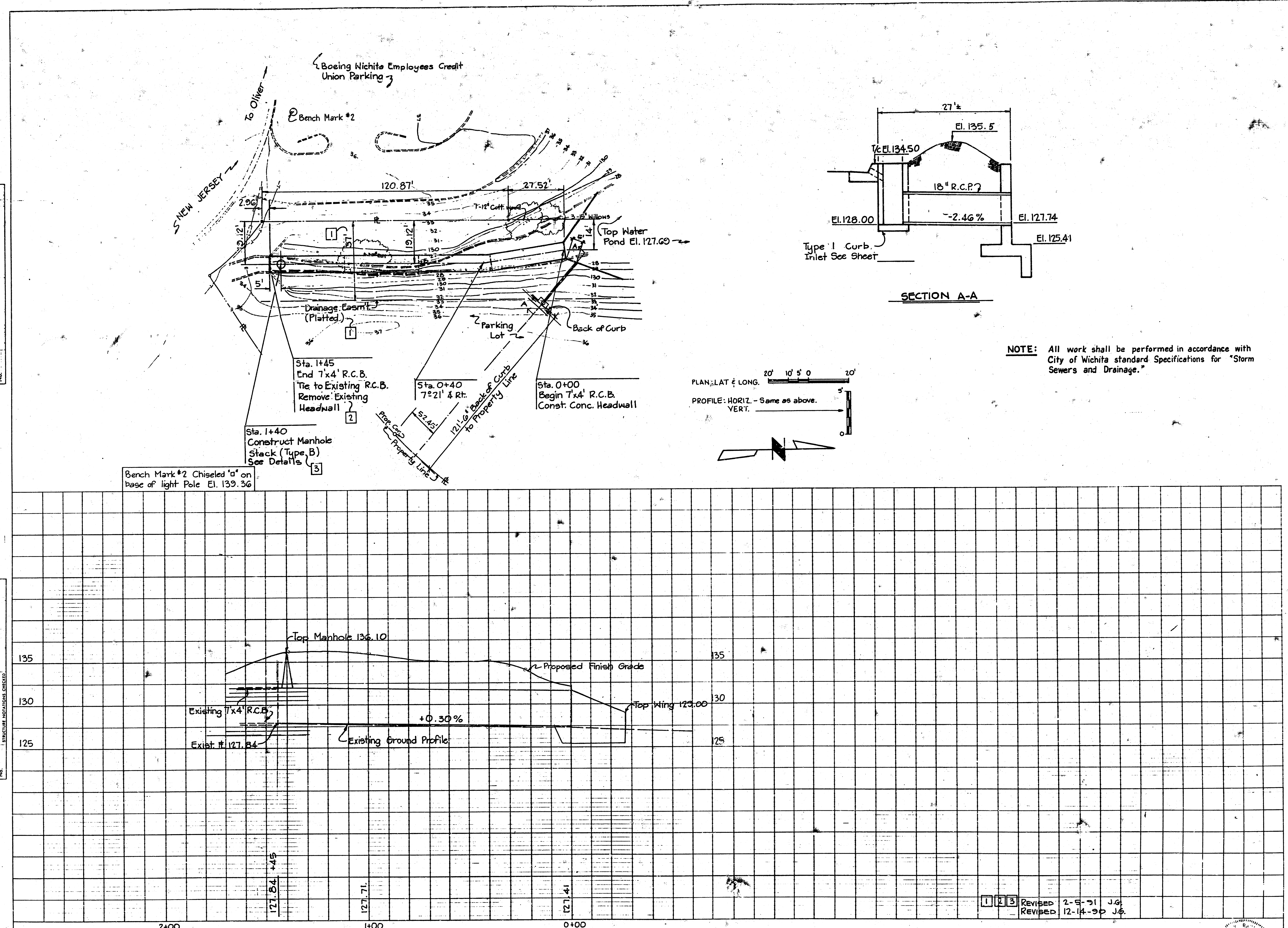
DRAWING SHEET

C1.1

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AVAILABLE COPY

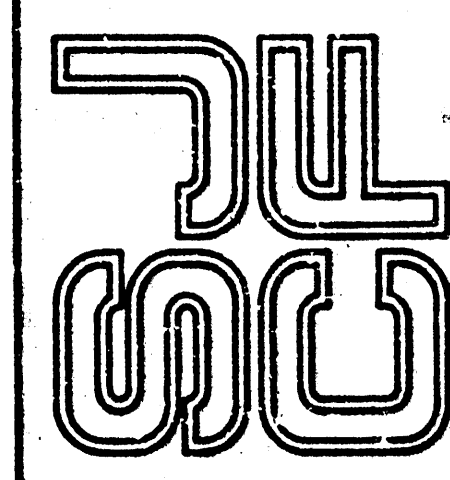
PLAN
 SHEET NO. 1
 NOTE: SEE SHEET 1-1 FOR DIMENSIONS
 1/4" = 1'-0"

PROFILE
 SHEET NO. 1
 NOTE: SEE SHEET 1-1 FOR DIMENSIONS
 1/4" = 1'-0"



1	2	3	REVISED	2-5-91 J.G.
1	2	3	REVISED	12-14-90 J.G.

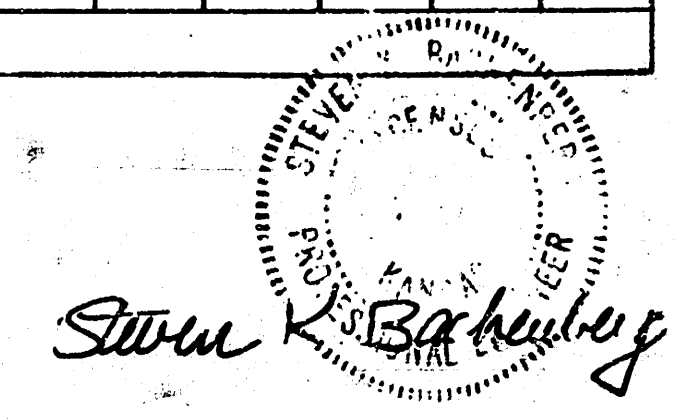
SCHAEFER JOHNSON COX FREY & ASSOCIATES PA



EAST PARKING LOT EXTENSION
BOEING WICHITA EMPLOYEES CREDIT UNION
 WICHITA, KANSAS

REVISIONS	2 of 8
SJCF PROJECT #	2272.00
DATE	JAN. 29, 1991
DRAWING SHEET	C1.2

As-Built Plan

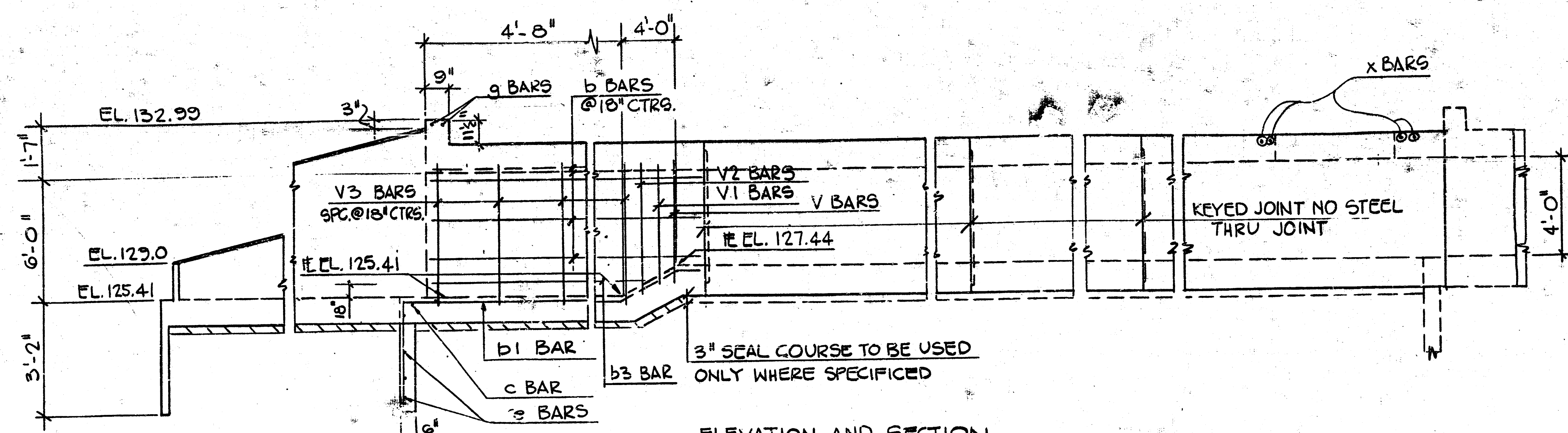


K-9415-0207

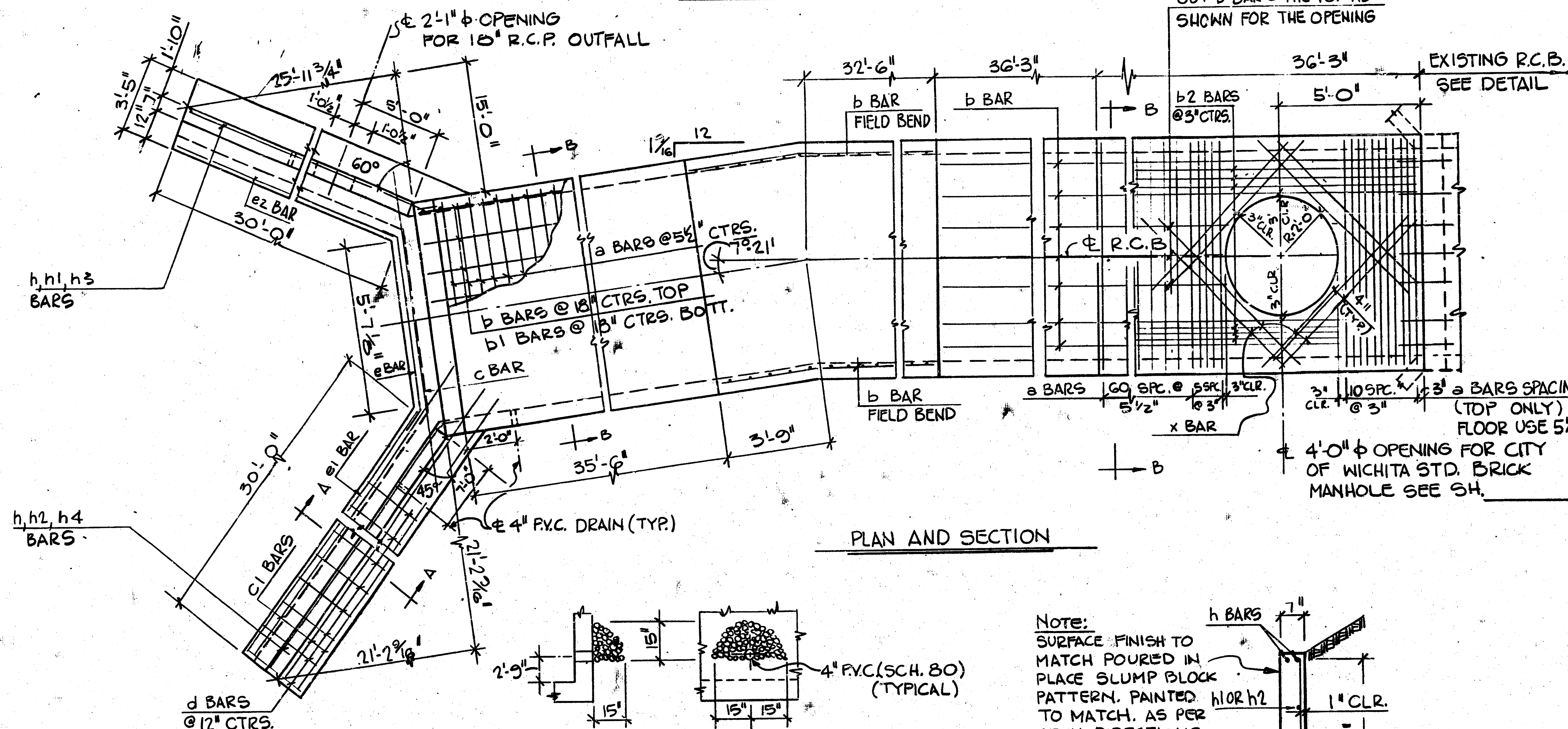
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PROGRESS REVDATE

DRAWING-ID



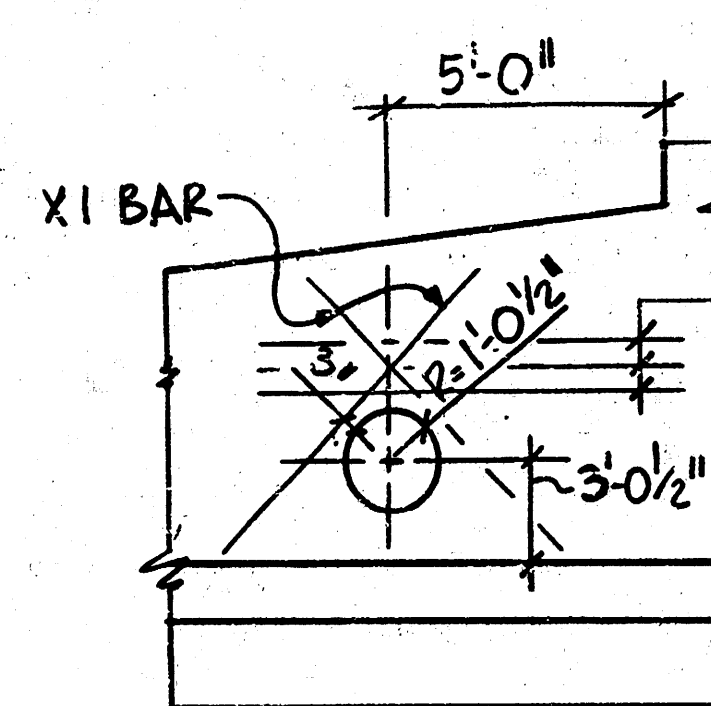
ELEVATION AND SECTION



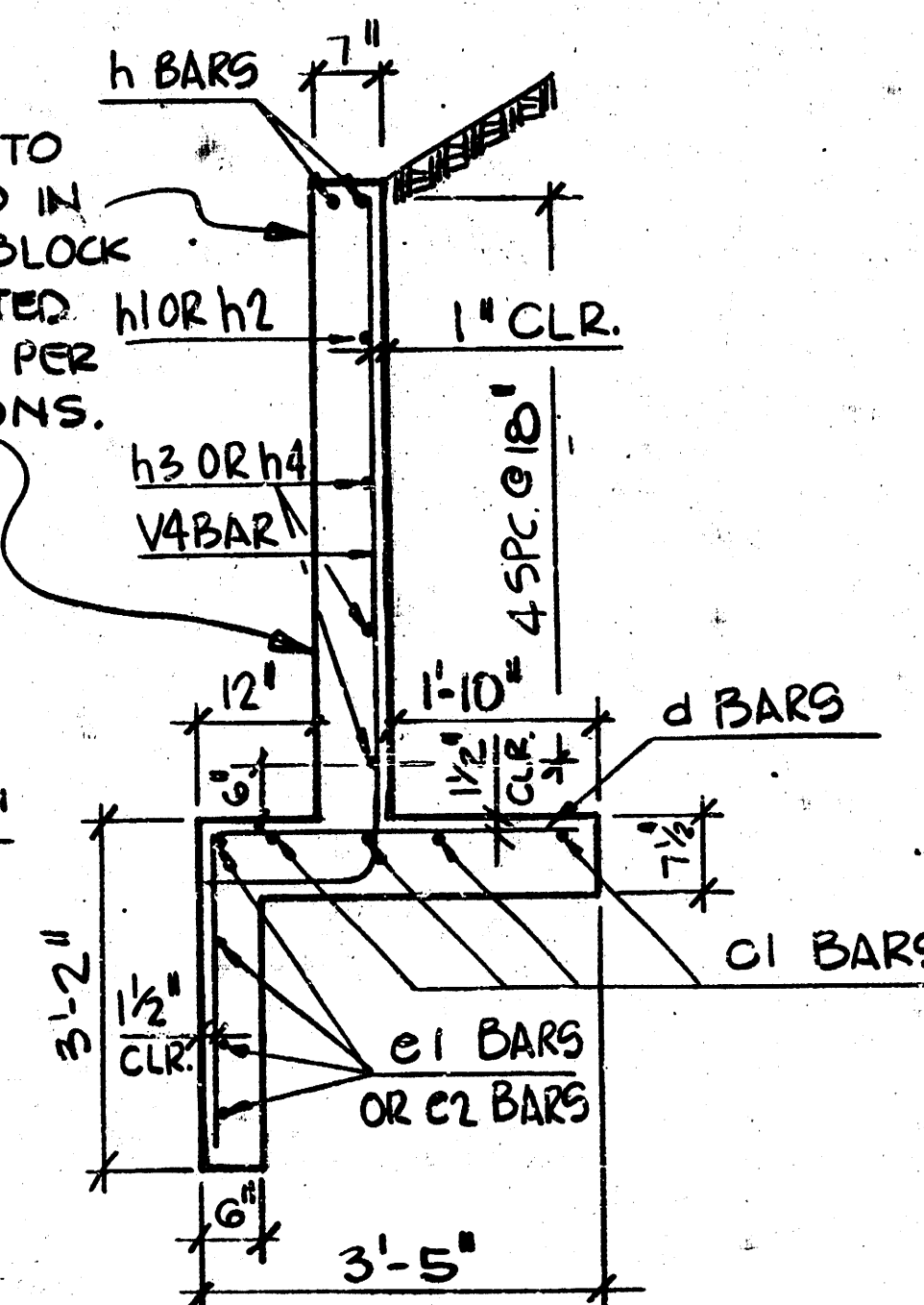
PLAN AND SECTION

DETAIL OF COURSE AGGREGATE AROUND R.V.C. DRAINS

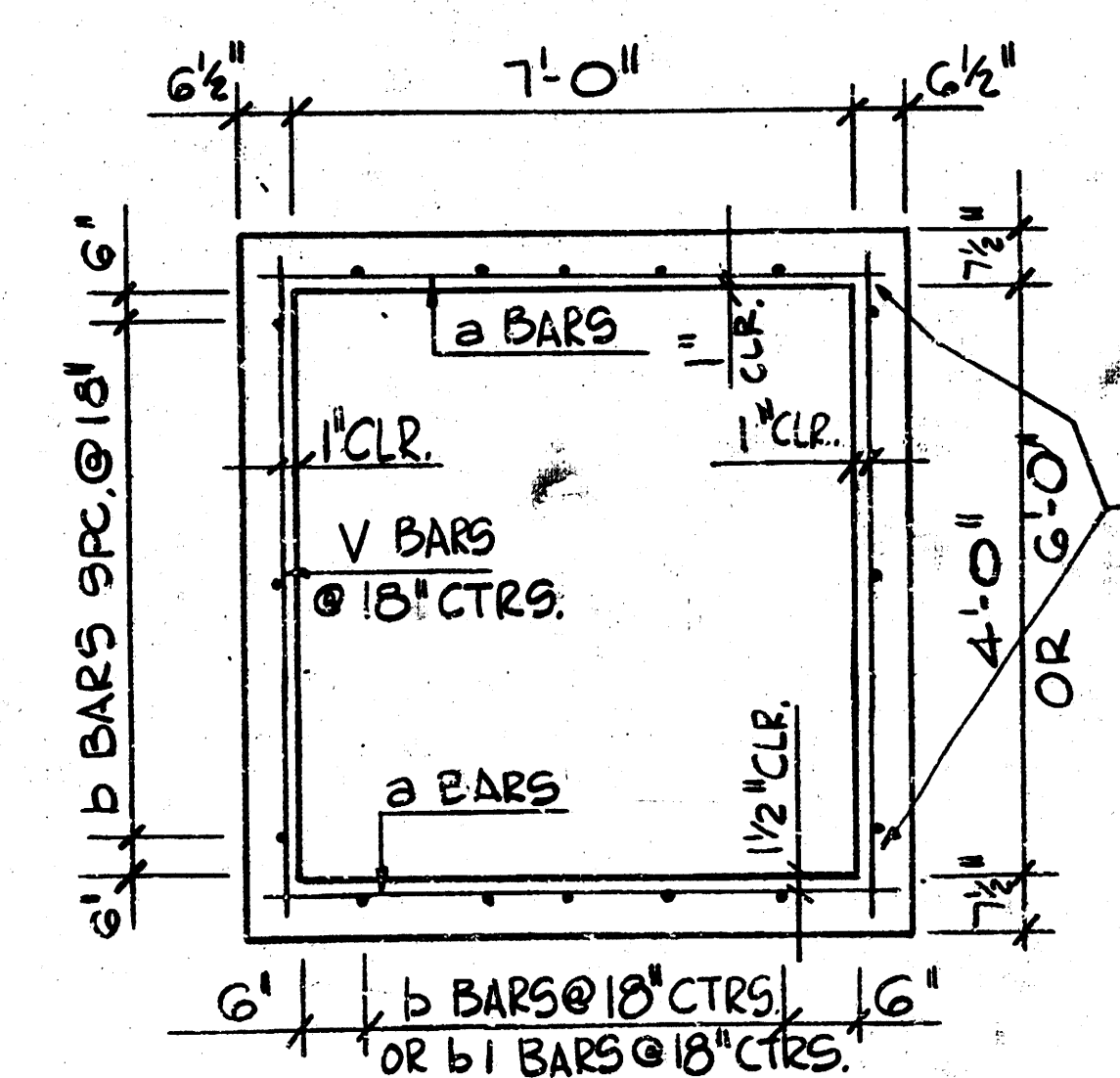
NOTE: SURFACE FINISH TO MATCH POURED IN PLACE SLUMP BLOCK PATTERN. PAINTED TO MATCH. AS PER ARCH. DIRECTIONS.



ELEVATION OF WING AT OUTFALL OF 18" R.C.P.

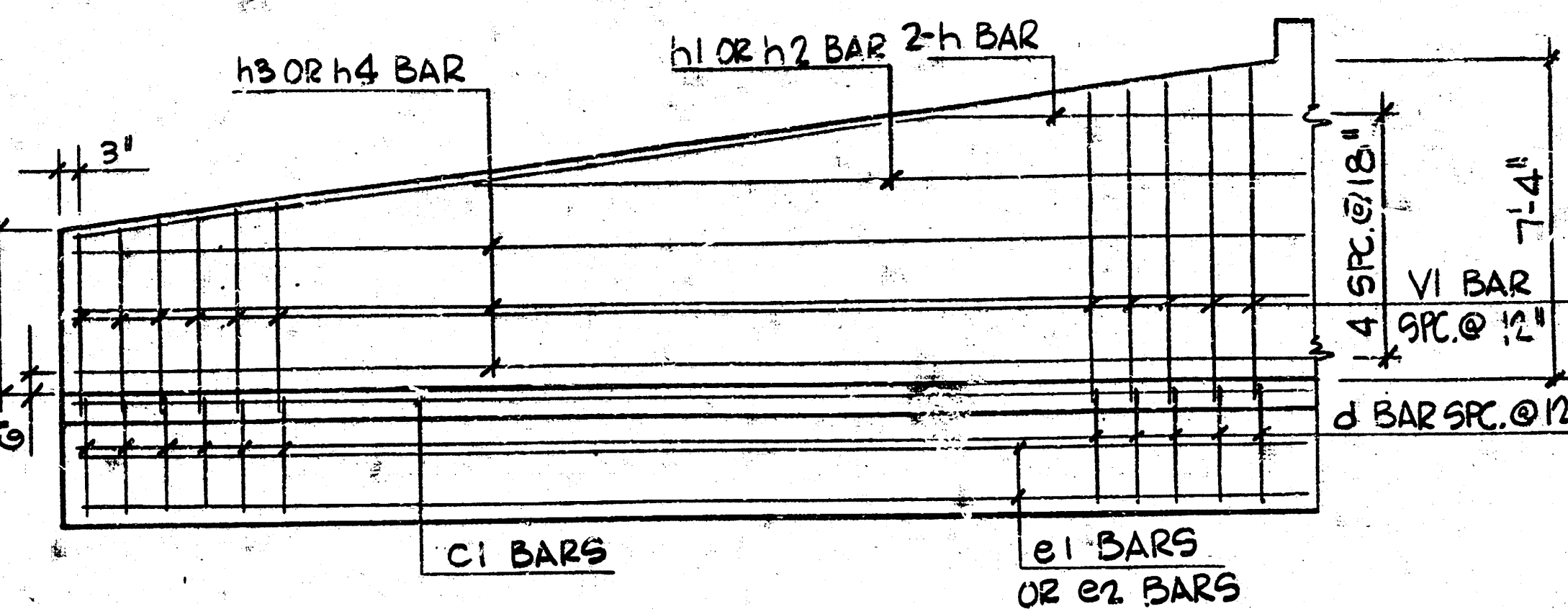


SECTION A-A



SECTION B-B

* OPTIONAL CONSTRUCTION JOINTS (MAY BE CONSTRUCTED AT THE CONTRACTORS OPTION)

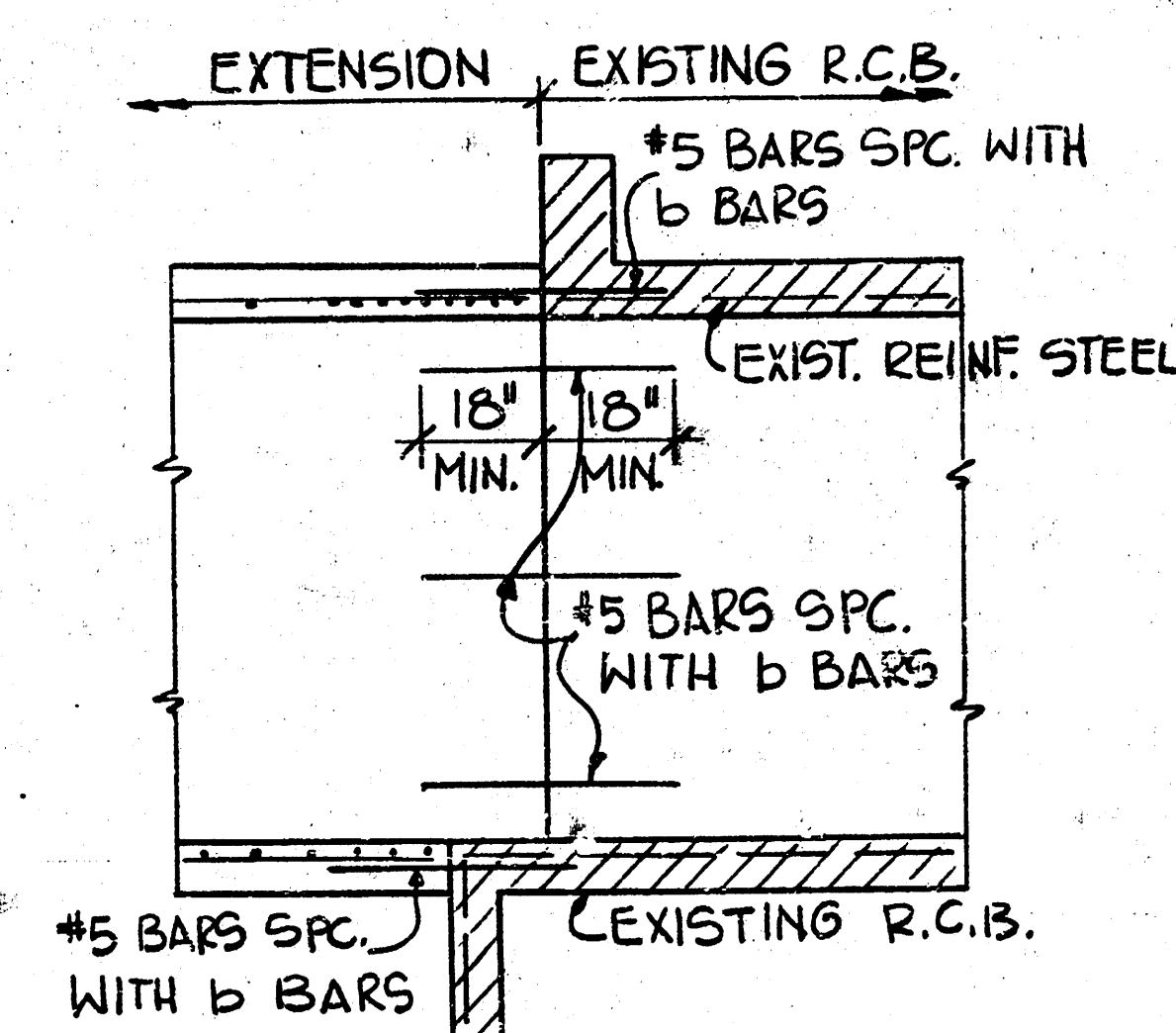


ELEVATION OF WINGS

GENERAL NOTE

LOADING: H20-44 AASHTO Specifications, Edition of 1989.
UNIT STRESSES: $f_c=3,000$ p.s.i.; $f_t=1,200$ p.s.i.; $f_s=20,000$ p.s.i. (Grade 60)
Class A Concrete shall be used throughout. Bevel all exposed edges with a 3/4" triangular molding 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.
Payment for additional quantities resulting from Seal Course 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 weephole to occupy a space extending 15" in all directions above the weephole flowline. This work shall not be paid for directly, but shall be considered a part of the excavation work.
The Contractor may, at his option, substitute No. 4 steel reinforcing bars for the keyed construction joints. Rebars are to be a minimum of 30 inches in length, set so the joint divides the bar equally and these extra rebars will be required in each plane of steel in the culvert. The extra steel required will not be paid for directly but will be considered subsidiary to others items in the contract.

As-Built Plan



TYPICAL DOWELED EXTENSION

SUMMARY OF QUANTITIES														
CLASS A CONCRETE	93.5	C.Y.												
REINFORCING STEEL	8810	lbs.												
FOUNDATION STABILIZATION	1	C.Y.												

MARK	a	b	b1	b2	b3	c	c1	d	e	e1	e2	g	h	h1	h2	h3	h4	v	v1	v2	v3	v4	x	x1	x3
NO. REQ'D.	637	59	5	6	2	1	8	60	4	4	4	2	4	1	1	3	3	188	2	2	8	60	8	2	3
SIZE	5	4	4	4	5	4	4	4	4	4	4	5	5	5	5	5	5	4	5	5	5	5	5	5	5
LENGTH	7'-10"	36'-0"	40'-5"	10'-0"	7'-10"	11'-0"	34'-0"	6'-1"	7'-5"	30'-1"	29'-9"	7'-10"	31'-8"	19'-4"	19'-1"	31'-6"	3'-3"	5'-0"	5'-7"	6'-4"	7'-0"	7'-0"	8'-0"	6'-0"	6'-0"
SHAPE																									

EAST PARKING LOT EXTENSION
BOEING WICHITA EMPLOYEES CREDIT UNION
WICHITA, KANSAS

REVISIONS

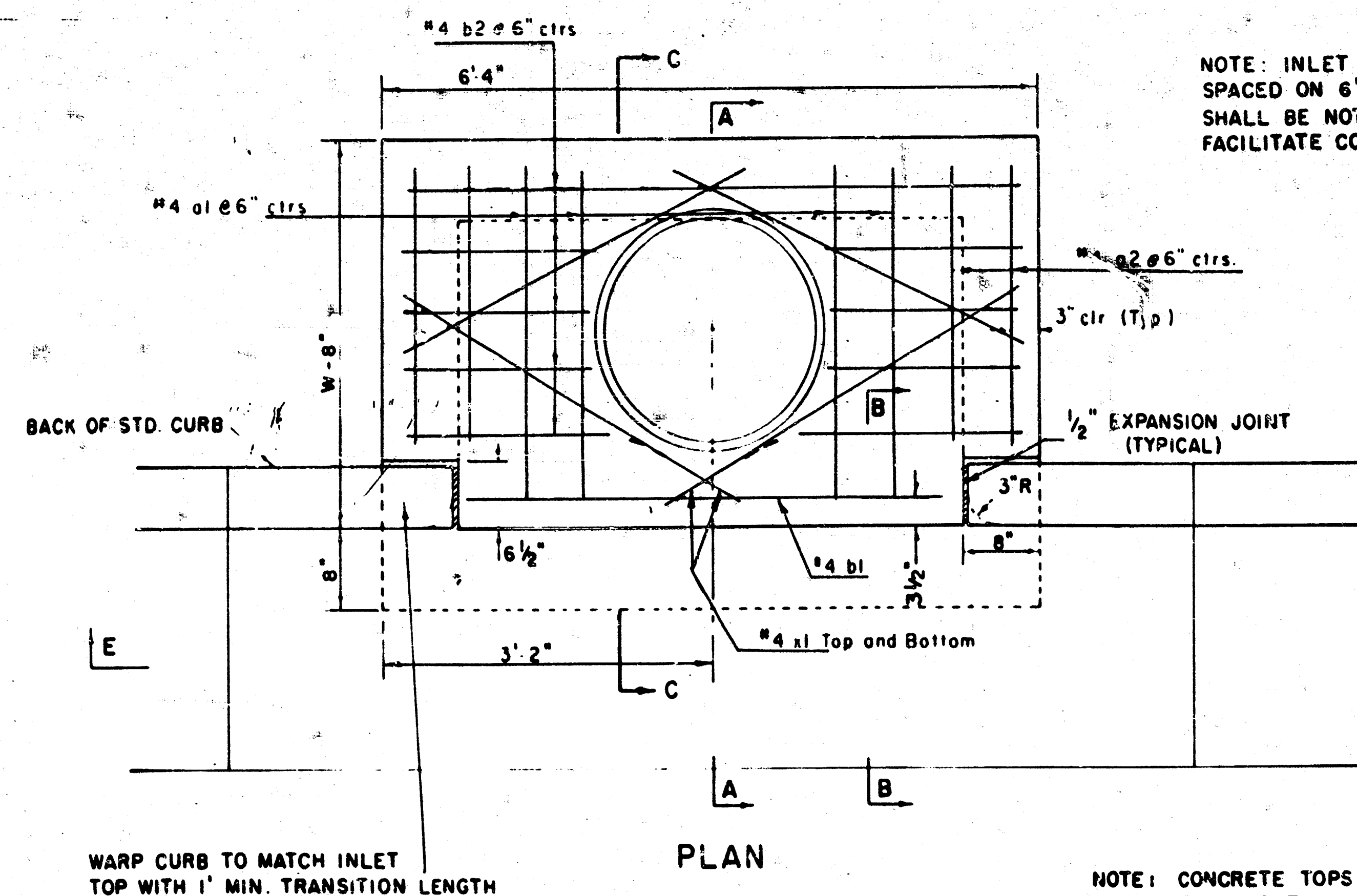
SJCF PROJECT # 2272.00

DATE JAN. 29, 1991

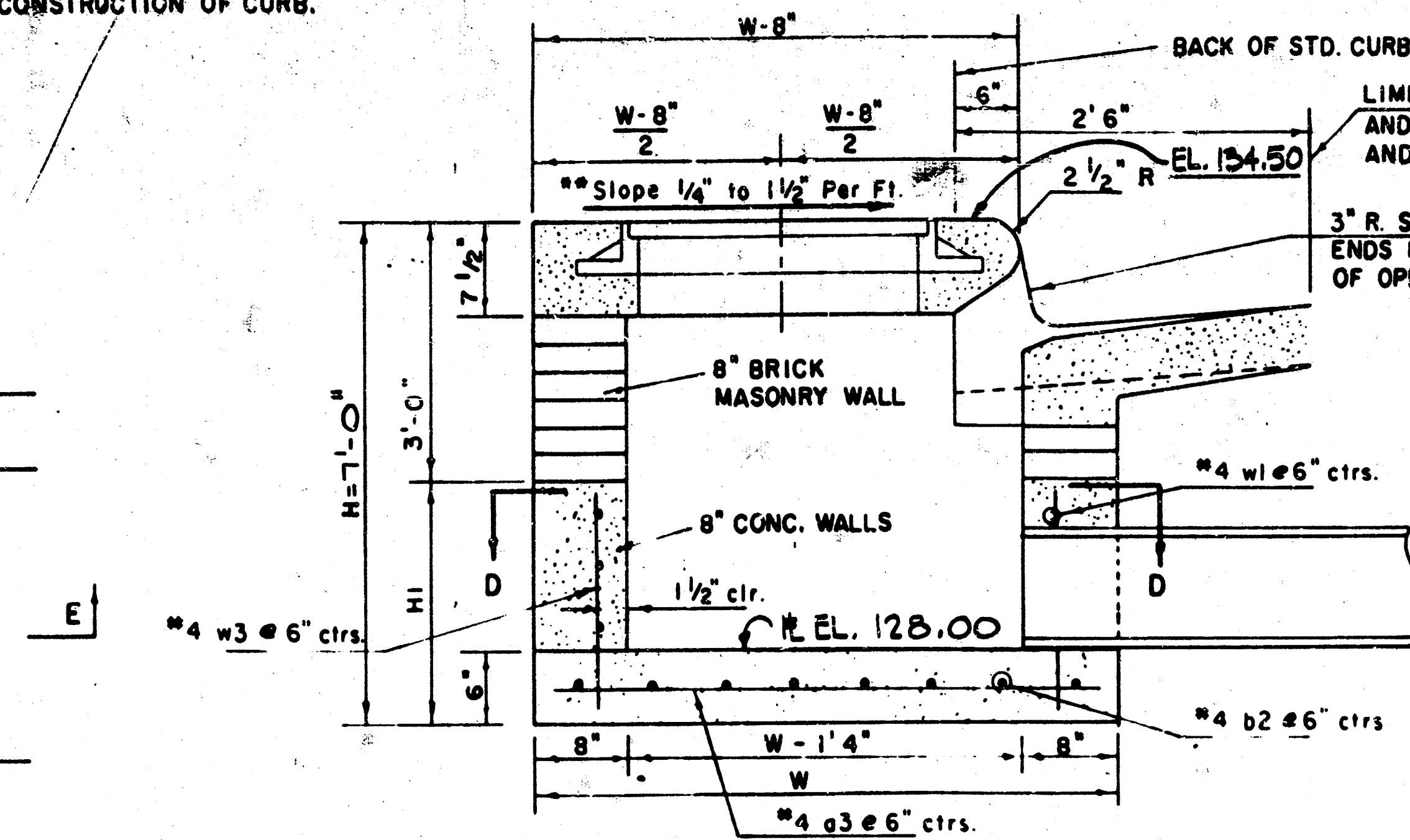
DRAWING SHEET

C1.3

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NOTE: INLET TOP REINFORCING SHALL BE SPACED ON 6\"/>



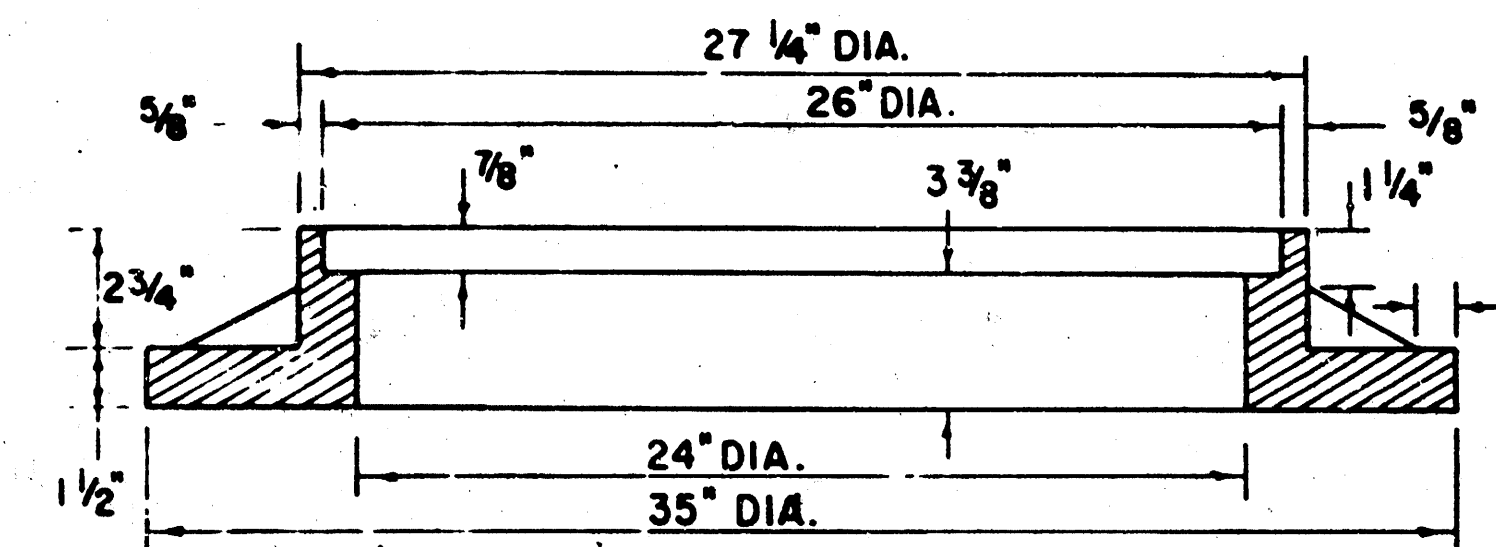
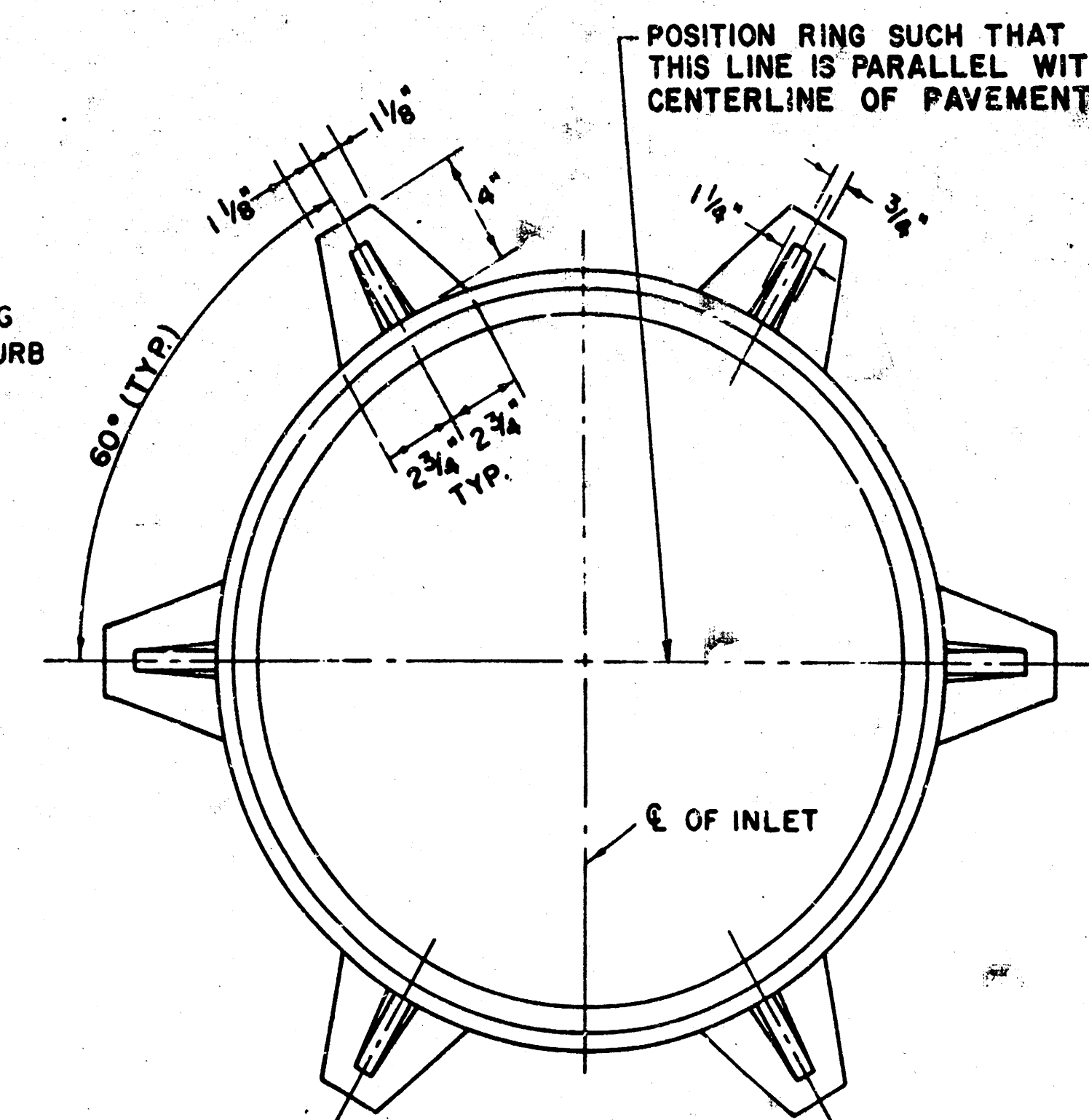
SECTION A-A

**NOTE: Slope of Inlet Tops to match Sidewalk or Parking Slopes within Limits Indicated.

NOTE CONTRACTOR SHALL HAVE THE OPTION OF CONSTRUCTING 8\"/>

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.



INLET FRAME WEIGHT = 180 LBS

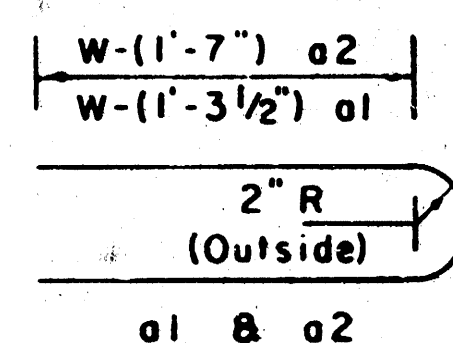
SEE CITY OF WICHITA STANDARD MANHOLE FRAME AND COVER DETAIL SHEET FOR COVER DETAILS TO BE USED WITH INLET FRAME.

PRECAST SLAB AND FLOOR REINFORCING											
		W = 4'-4"		W = 5'-4"		W = 6'-4"		W = 7'-4"		W = 8'-4"	
Mark	Size	No.	Length	No.	Length	No.	Length	No.	Length	No.	Length
a1	#4	6	6'-7"	6	8'-7"	5	10'-7"	6	12'-3"	6	14'-7"
a2	#4	4	6'-0"	4	8'-0"	4	10'-0"	4	12'-0"	4	14'-0"
a3	#4	13	4'-1"	13	5'-1"	13	6'-1"	13	7'-1"	13	8'-1"
b1	#4	1	4'-9"	1	4'-9"	1	4'-9"	1	4'-9"	1	4'-9"
b2	#4	23	6'-1"	29	6'-1"	35	6'-1"	41	6'-1"	47	6'-1"
x1	#4	8	3'-10"	8	4'-2"	8	4'-6"	8	4'-10"	8	5'-2"

REINFORCING											
		W = 4'-4"		W = 6'-4"		W = 7'-4"		W = 8'-4"			
Mark	Size	No.	Length	No.	Length	No.	Length	No.	Length		
w1	#4	1	6'-1"	1	6'-1"	1	6'-1"	1	6'-1"		
w2	#4	1	4'-1"	1	5'-1"	1	6'-1"	1	8'-1"		
w3	#4	32	2	36	2	40	2	44	2	48	2

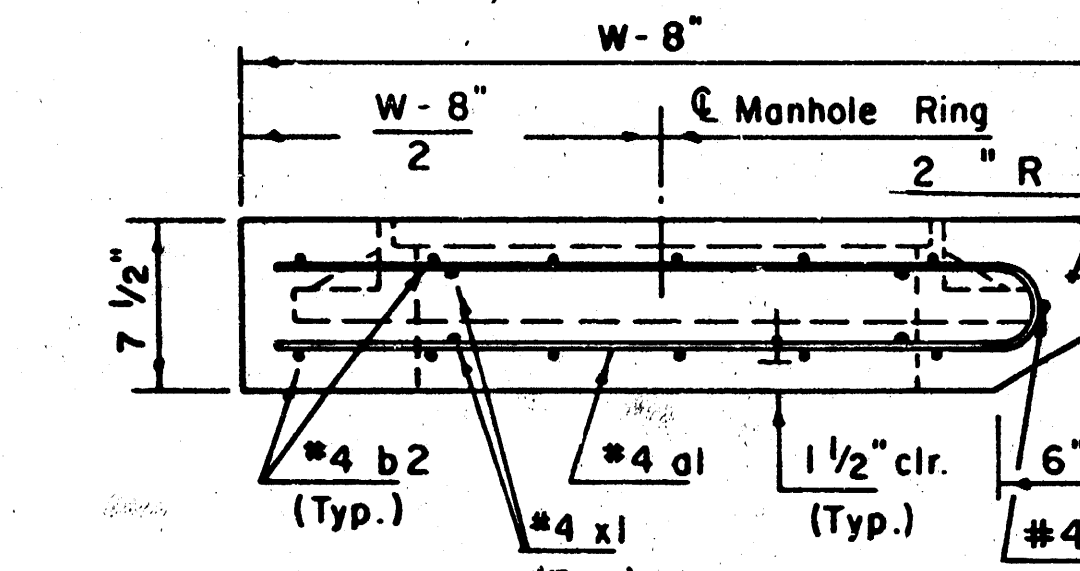
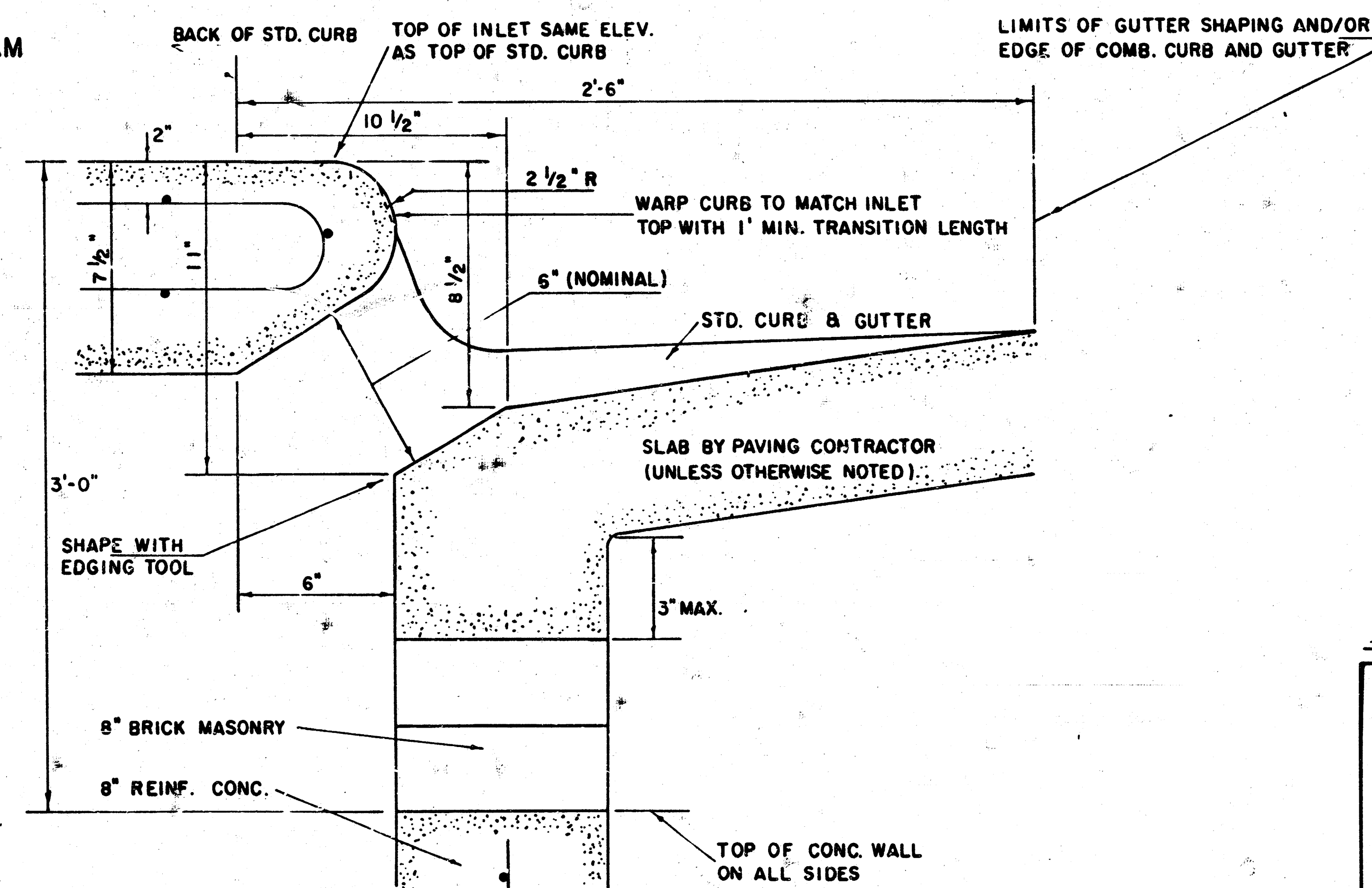
Field bend or cut Reinforcing as required for clearance.
 ① 4(HI-12"); (HI-12") Round down to nearest 0.5"
 ② HI-3"

STANDARD CURB INLET PRECAST TOPS			
W	PRE-CAST TOP SIZE	PIPE SIZE	CU. YD. CONC.
4' 4"	3' 8" 6' 4" 7' 1/2"	21" & SMALLER	0.38 ±
6' 4"	6' 4" 7' 1/2" 8' 0" 8' 6"	24" & 30"	0.91 ±
8' 4"	8' 4" 9' 0" 9' 6" 10' 0"	36" & 42"	0.64 ±
10' 4"	10' 4" 11' 0" 11' 6" 12' 0"	48" & 54"	0.77 ±
12' 4"	12' 4" 13' 0" 13' 6" 14' 0"	60" & 66"	0.90 ±

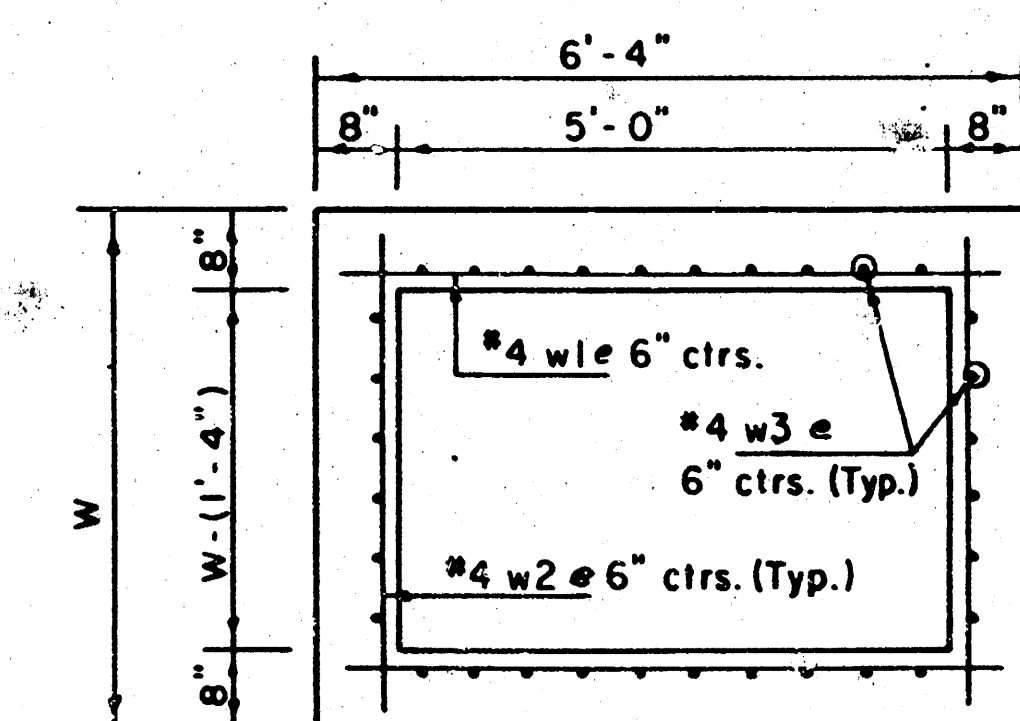


BENDING DIAGRAM

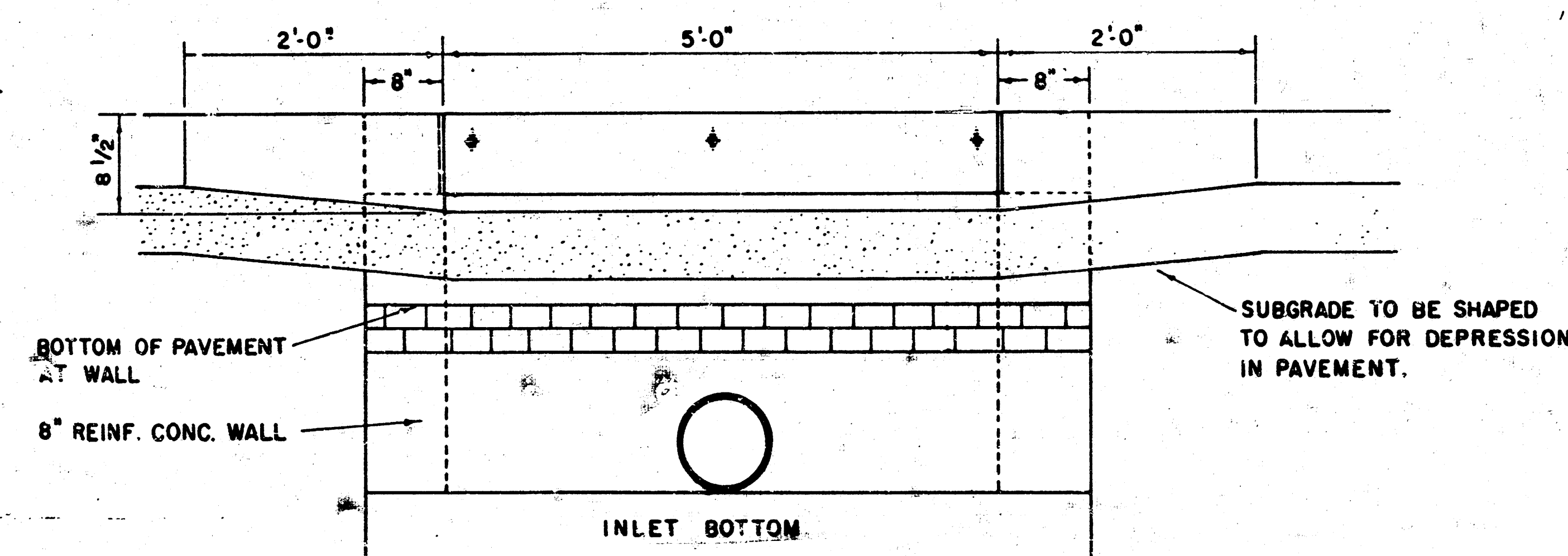
SECTION B-B



SECTION C-C



SECTION D-D



SECTION E-E

As-Built Plan

REVISED 12-21-1984 REVISED 2-15-1989

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

JUNE 1984

REVISIONS

SJCF PROJECT #
 2272.00
 DATE
 JAN. 29, 1991
 DRAWING SHEET

C1.4

EAST PARKING LOT EXTENSION
 BOEING WICHITA EMPLOYEES CREDIT UNION
 WICHITA, KANSAS

SCHAEFER JOHNSON COX FREY & ASSOCIATES PA

ARCHITECTURE ENGINEERING PLANNING & INTERIOR DESIGN
 220 SOUTH HILLSIDE
 WICHITA, KANSAS 67211-2197
 [316] 684-0171

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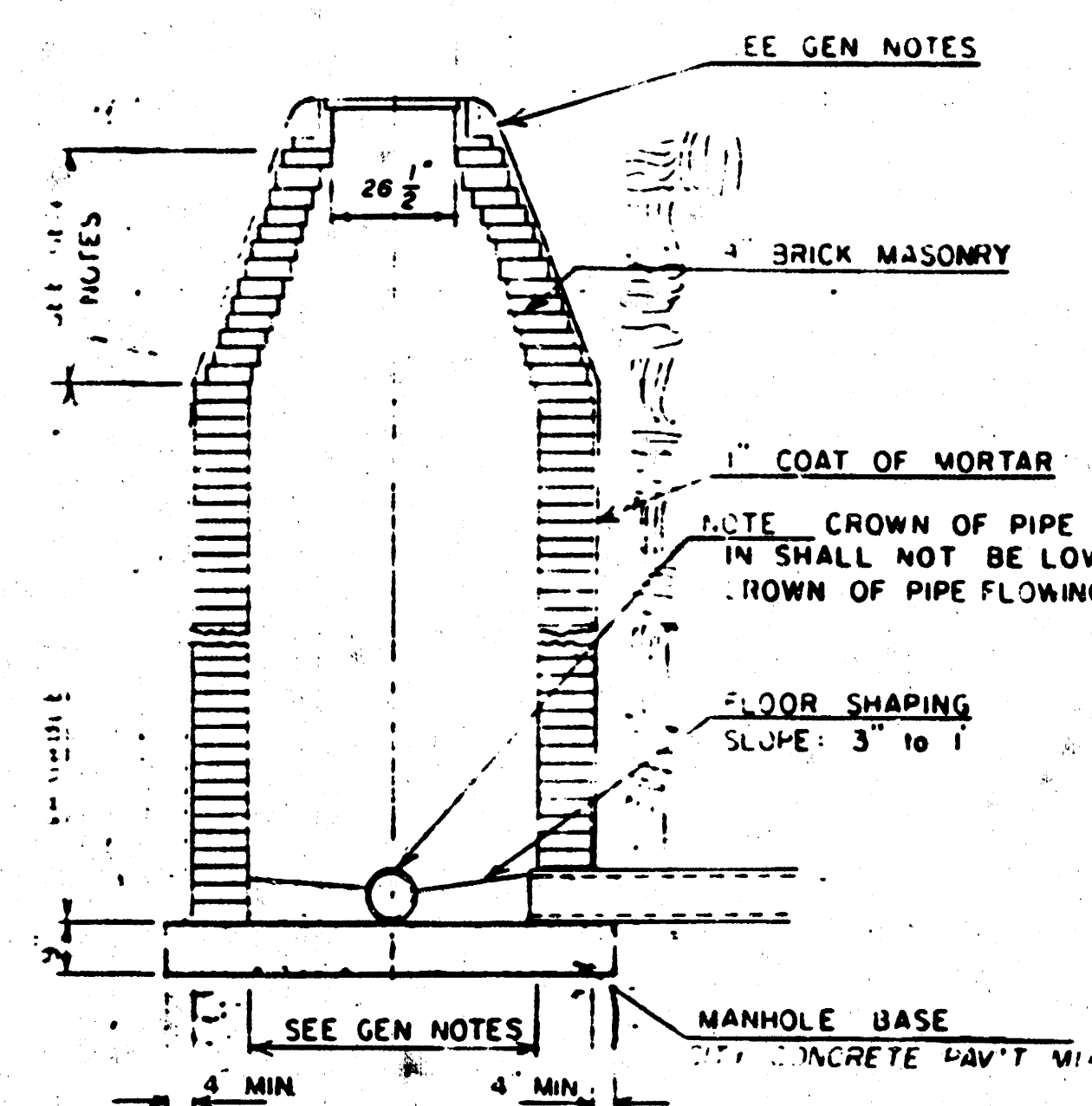
SEWER APPURTENANCES DETAILS

ADOPTED AS STANDARD DESIGN
BY

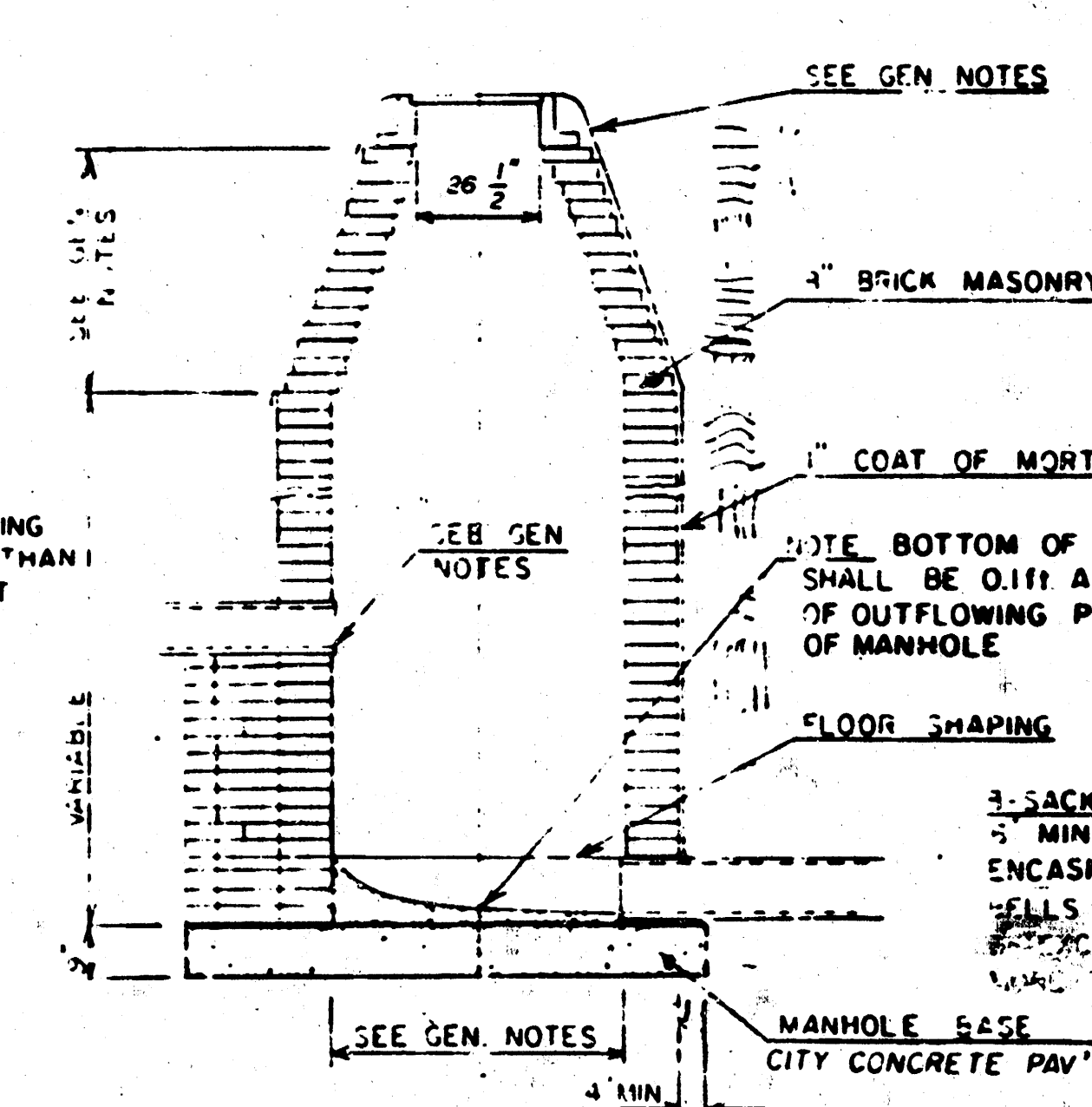
CITY of WICHITA, KANSAS

REVISED SEPTEMBER 1980
REVISED DECEMBER 1981

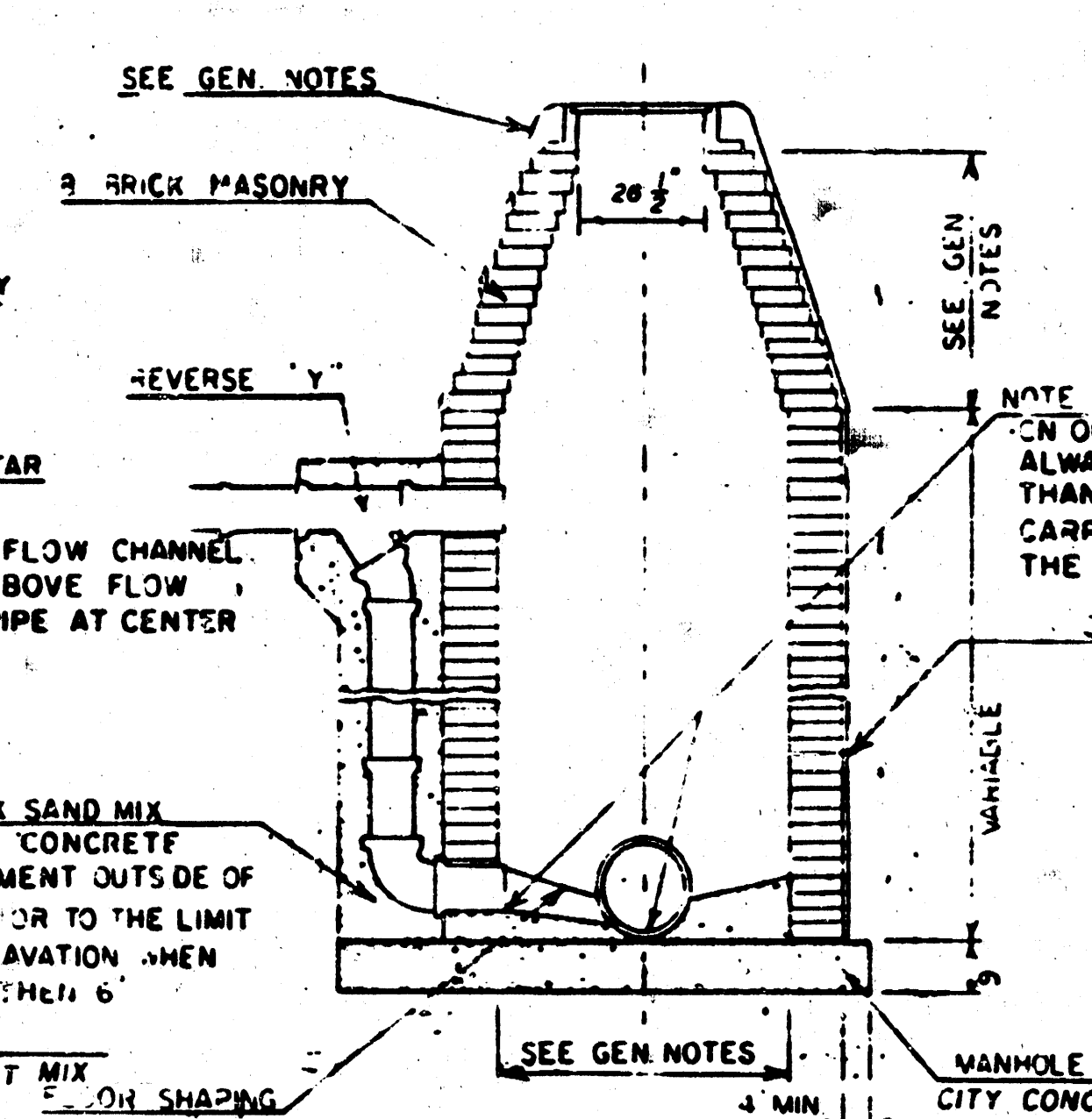
TYPE "A" MANHOLE



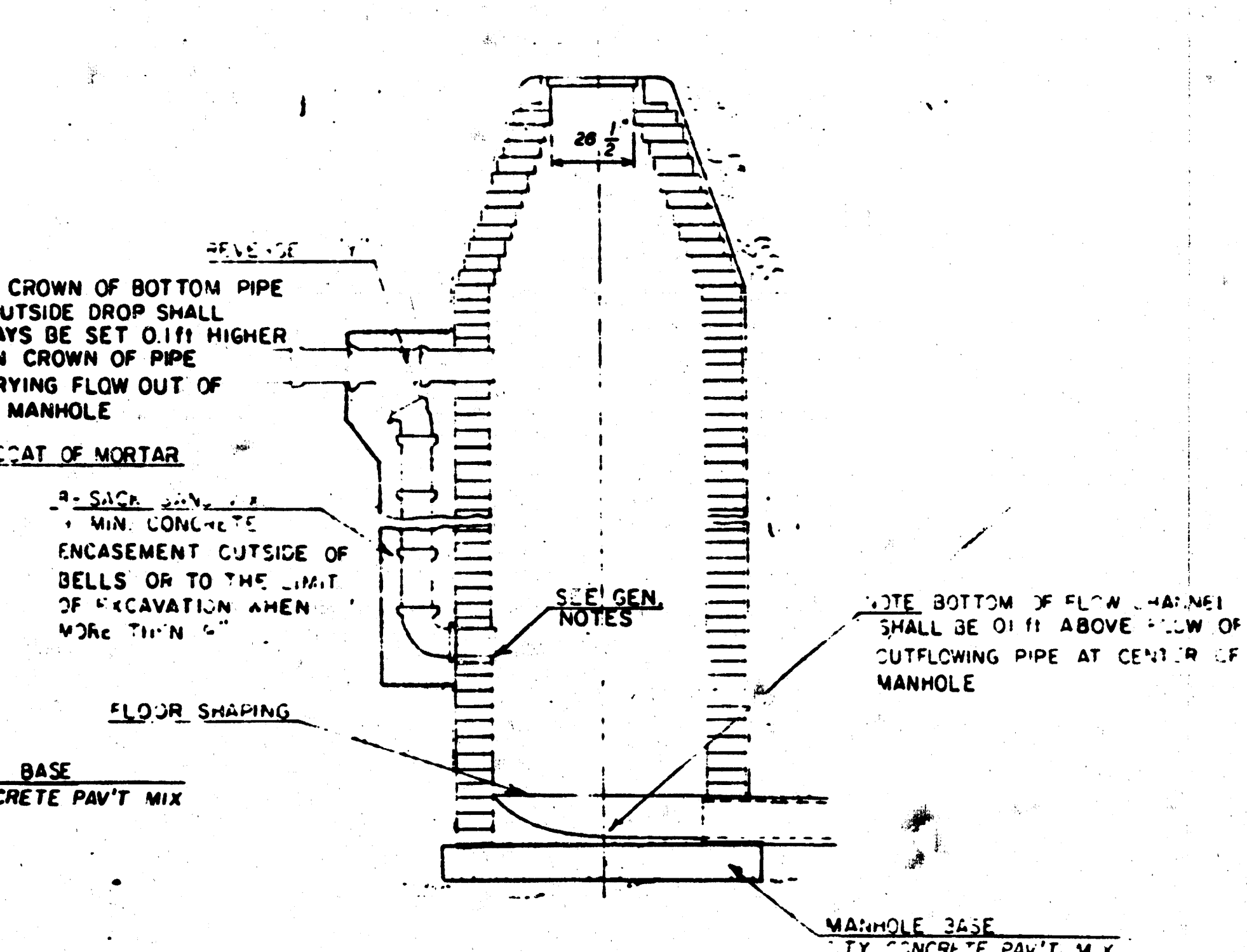
TYPE "A" INSIDE DROP MANHOLE



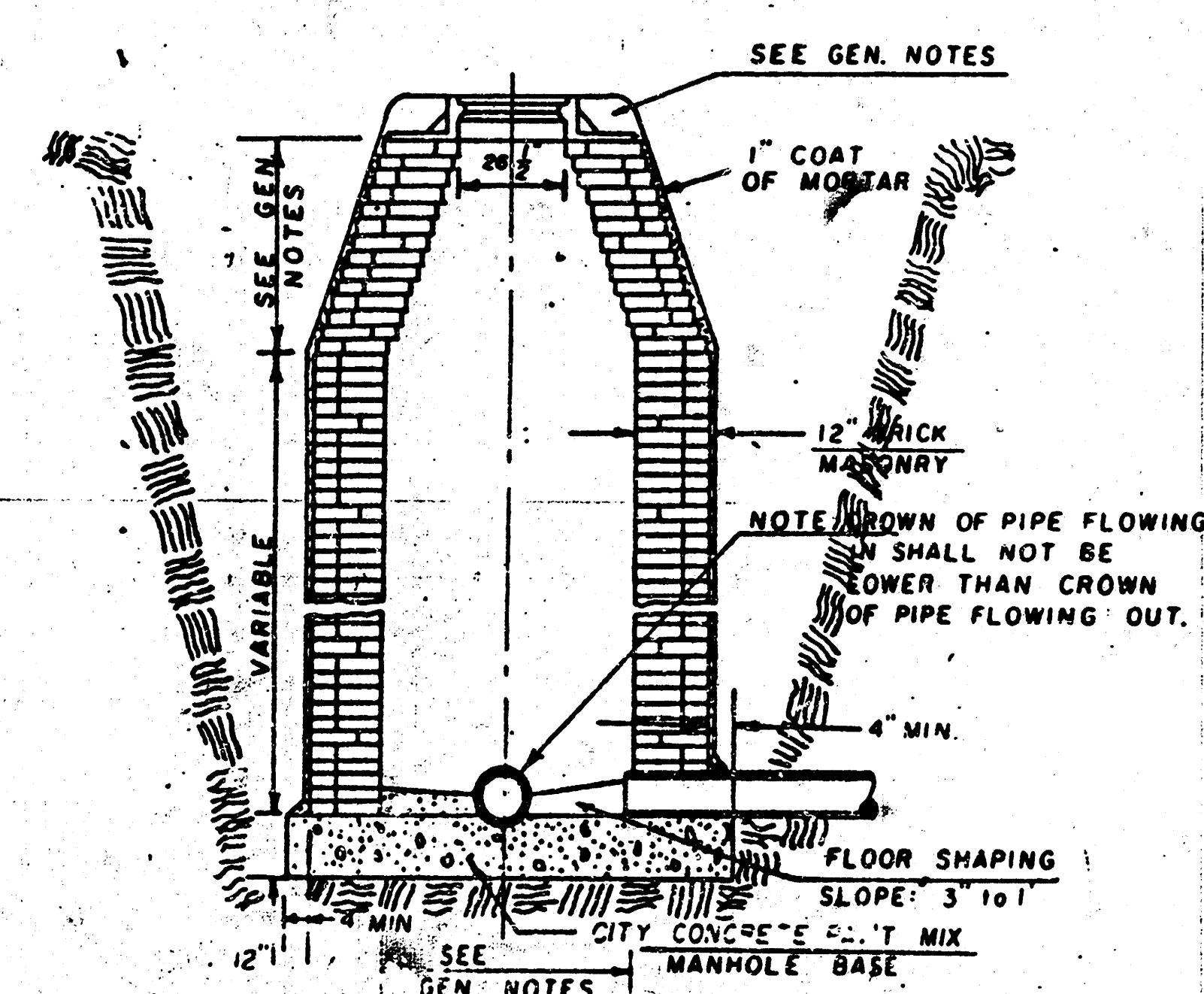
TYPE "A" OUTSIDE DROP MANHOLE



DETAIL OF OUTSIDE DROP
CONSTRUCTED ON EXISTING MANHOLE



TYPE "B" MANHOLE



REINFORCING STEEL SHALL BE INSTALLED IN THE MANHOLE BASES AND SHALL CONSIST OF NO. 4 BARS PLACED ON 6" CENTERS IN BOTH DIRECTIONS. THE MANHOLE BASE REINFORCEMENT SHALL BE PLACED 3" ABOVE THE BOTTOM OF THE MANHOLE BASE. ALL COSTS FOR FURNISHING AND INSTALLING REINFORCING STEEL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.

OPENINGS SHALL BE CUT INTO THE MANHOLE WALL WHEN OUTSIDE DROPS ARE INSTALLED ON EXISTING MANHOLES. THE OPENINGS CUT INTO EXISTING MANHOLES SHALL BE AS SMALL AS PRACTICAL TO FACILITATE INSTALLING AND MAINTAINING THE NEW PIPE IN PLACE. REINFORCING BARS SHALL BE USED WITH THE NEW PIPE AND A R.S.V. COMPOSITE PIPE. THE NEW PIPE SHALL BE MAINTAINED INTO THE EXISTING MANHOLE USING AN APPROVED JOINTING METHOD.

THE FLOORS OF ALL MANHOLES SHALL BE SHAPED WITH FLOW CHANNELS SUCH THAT THE MANHOLES WILL BE SELF-CLEANING AND FREE OF AREAS WHERE SOLIDS COULD BE DEPOSITED AS STAGNANT FLUIDS THROUGH THE MANHOLE FROM THE INLET PIPES TO THE OUTLET PIPES. FLOW CHANNELS SHALL BE FORMED TO MATCH THE BOTTOM VALVES OF THE INFLUENCING PIPES AND THE OUTFLOWING PIPES AS SHOWN BY THE DRAWINGS EXCEPT FOR INSIDE DROP MANHOLES. FLOW CHANNELS FOR INSIDE DROP MANHOLES SHALL HAVE SLOPES OF 3 INCHES PER FOOT IN THE AREAS OUTSIDE OF THE FLOW CHANNELS SLOPED TOWARD THE FLOW CHANNELS. PIPES LAID THROUGH MANHOLES SHALL HAVE THE TOP HALF ADJUSTED TO MEET LINES FOR THE FULL INSIDE DIAMETER OF THE MANHOLE. MANHOLE FLOORS SHALL THEN BE SHAPED AROUND THE BOTTOM HALF OF THE PIPE WHICH FORMS THE FLOW CHANNEL.

PIPES INSTALLED WITHIN THE EXCAVATION MADE FOR THE MANHOLE SHALL BE GRADED WITH CONCRETE TO THE LIMITS OF THE MANHOLE EXCAVATION. WHEN CLAY PIPE IS USED, THE GRADE SHALL EXTEND TO THE FIRST JOINT OUTSIDE THE MANHOLE. THE GRADE SHALL BE ESTABLISHED AT THE CLAY PIPE JOINT BY A MANHOLE WHICH WILL MAINTAIN THE FLEXIBILITY OF THE JOINT. COST OF GRADE WITHIN MANHOLE EXCAVATION IS TO BE PAID BY JOINTS ADJACENT MANHOLE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.

MANHOLE COVER CASTINGS AND MANHOLE FRAME CASTINGS SHALL CONFORM TO THE REQUIREMENTS AS INDICATED IN THE STANDARD SPECIFICATIONS AND AS SHOWN IN THE STANDARD DETAIL DRAWING.

THE VERTICAL DROP IN INSIDE DROP MANHOLES SHALL NOT EXCEED 4" FOR INFLUENCING PIPES SIZED 12" OR SMALLER AND 2" FOR INFLUENCING PIPES LARGER THAN 12". THE CROWN OF INFLUENCING PIPES SHALL NEVER BE SET LOWER THAN THE CROWN OF THE OUTFLOWING PIPES.

STANDARD MANHOLES TYPE "A" AND STANDARD INSIDE DROP MANHOLES TYPE "A" SHALL BE BID AS STANDARD MANHOLES FOR THE TYPE AND DIAMETER INDICATED. OUTSIDE DROP MANHOLES TYPE "A" SHALL BE BID AS STANDARD OUTSIDE DROP MANHOLES FOR THE TYPE AND DIAMETER INDICATED. ALL MANHOLE DIAMETERS WILL BE 4' UNLESS INDICATED OTHERWISE.

SCHAEFER JOHNSON COX FREY & ASSOCIATES PA

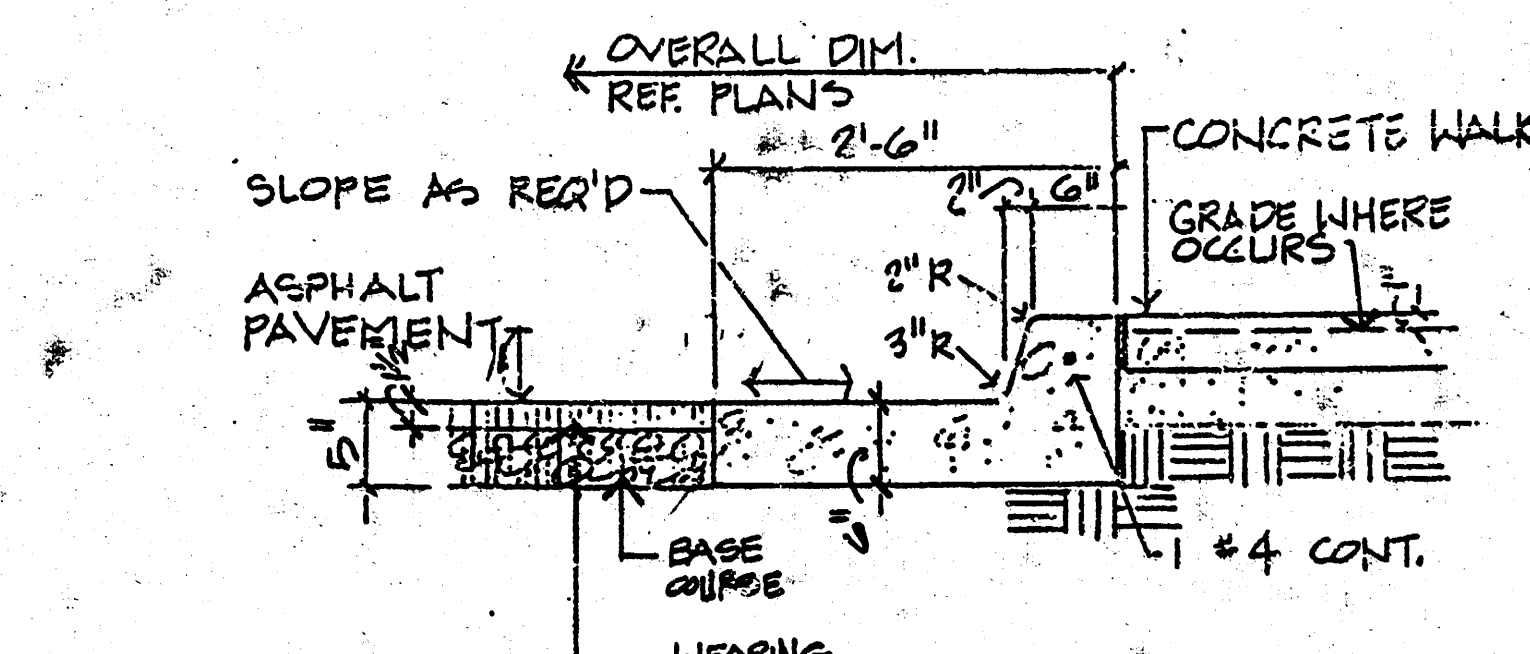
ARCHITECTURE ENGINEERING PLANNING & INTERIOR DESIGN
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[316] 684-0171

EAST PARKING LOT EXTENSION
BOEING WICHITA EMPLOYEES CREDIT UNION
WICHITA, KANSAS

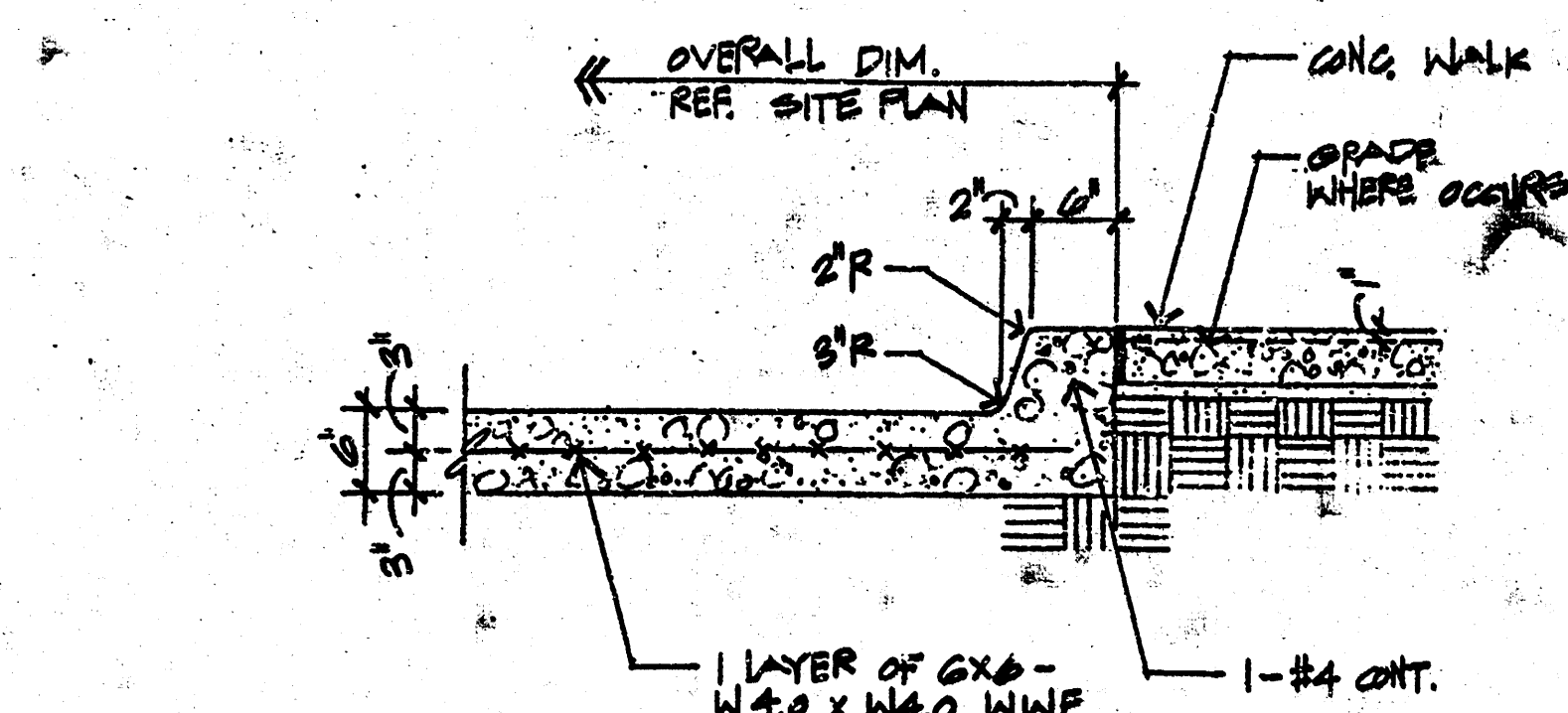
REVISIONS	
SJCF PROJECT #	2272.00
DATE	JAN. 29 1991
DRAWING SHEET	C1.5

As-Built Plan

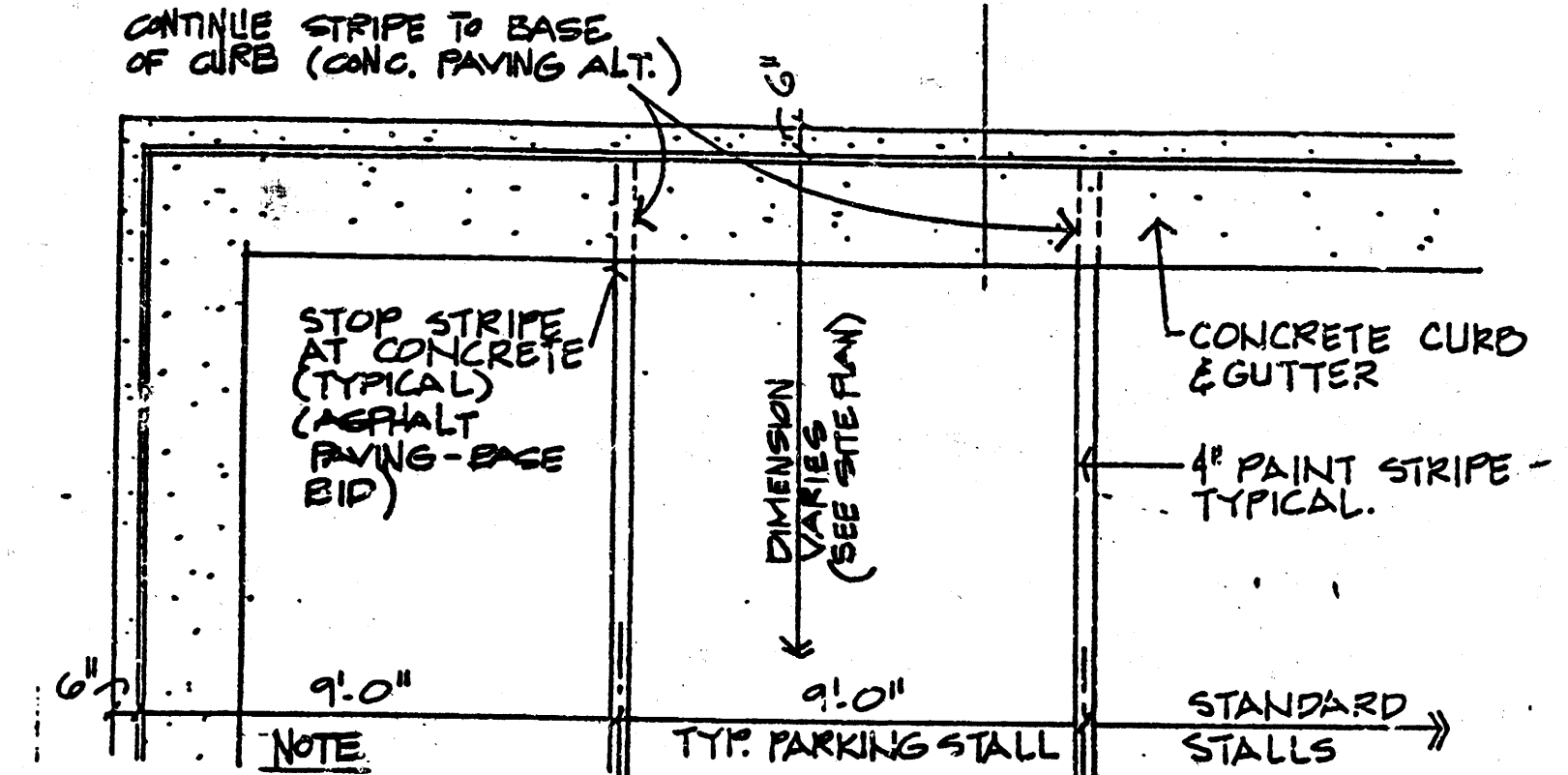
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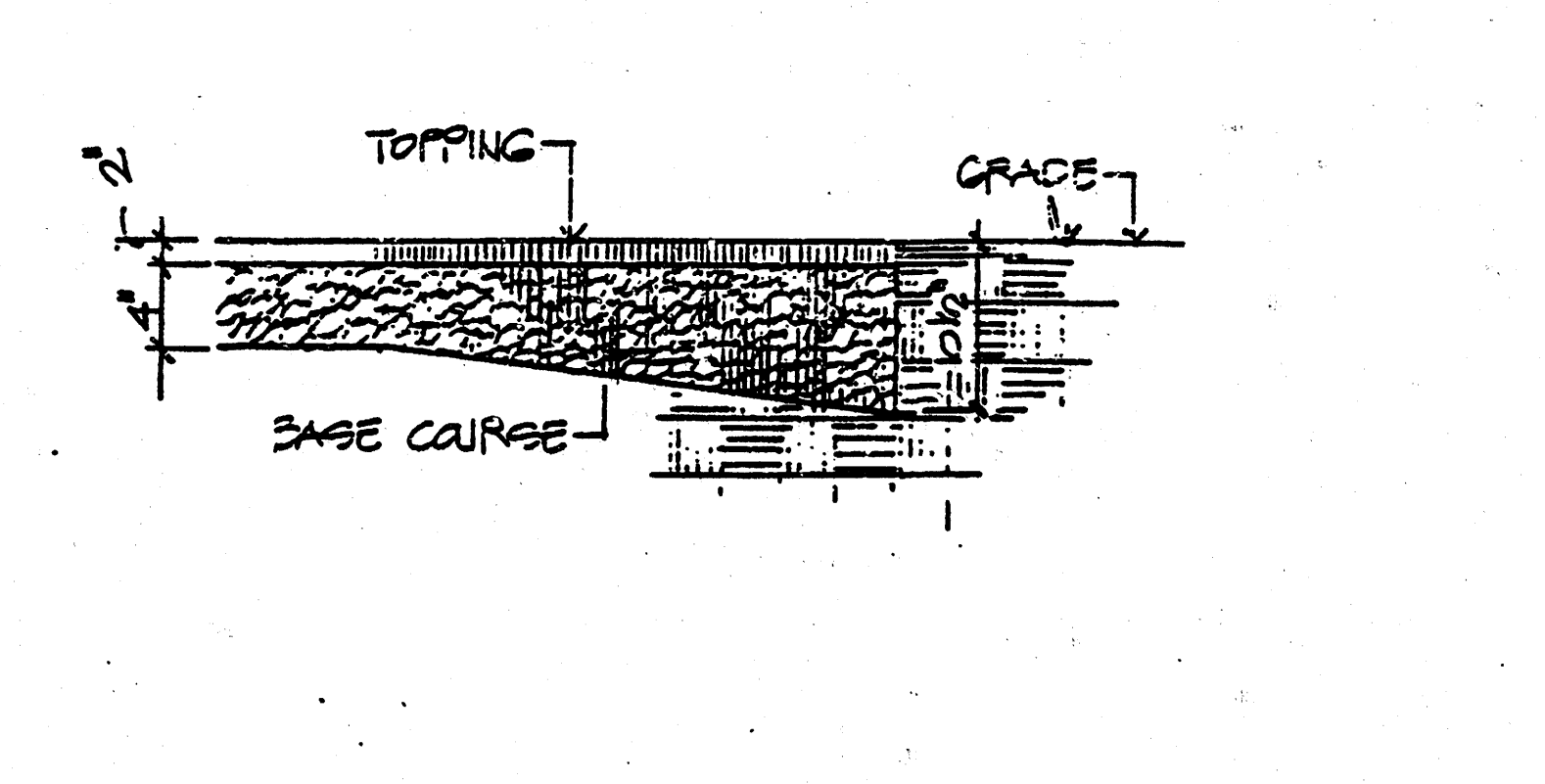
A TYPICAL CURB & GUTTER
3/4"=1'-0"



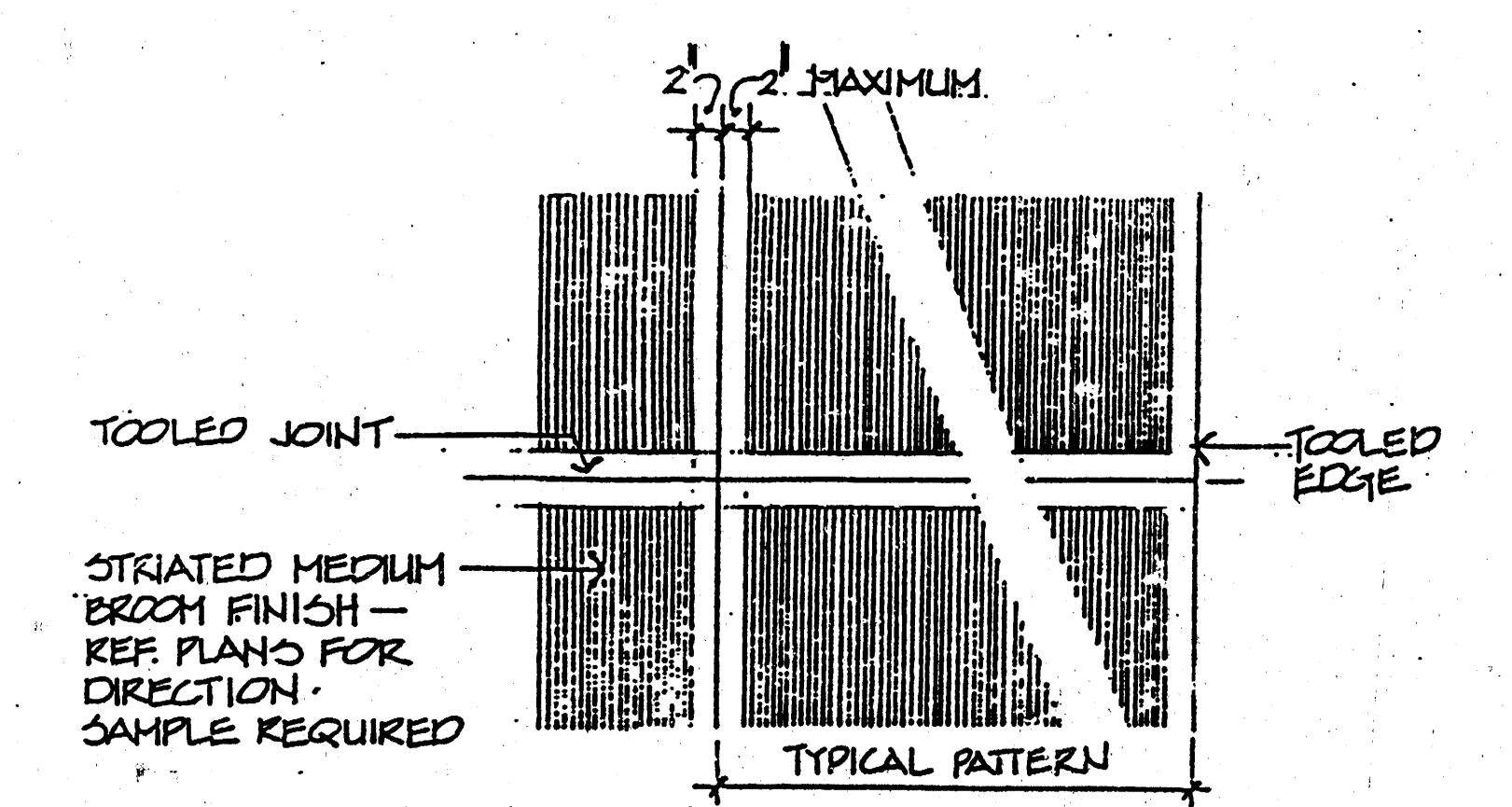
B MONOLITHIC CONC. DRIVE/CURB AND GUTTER
(CONC. PAVING)
3/4"=1'-0"



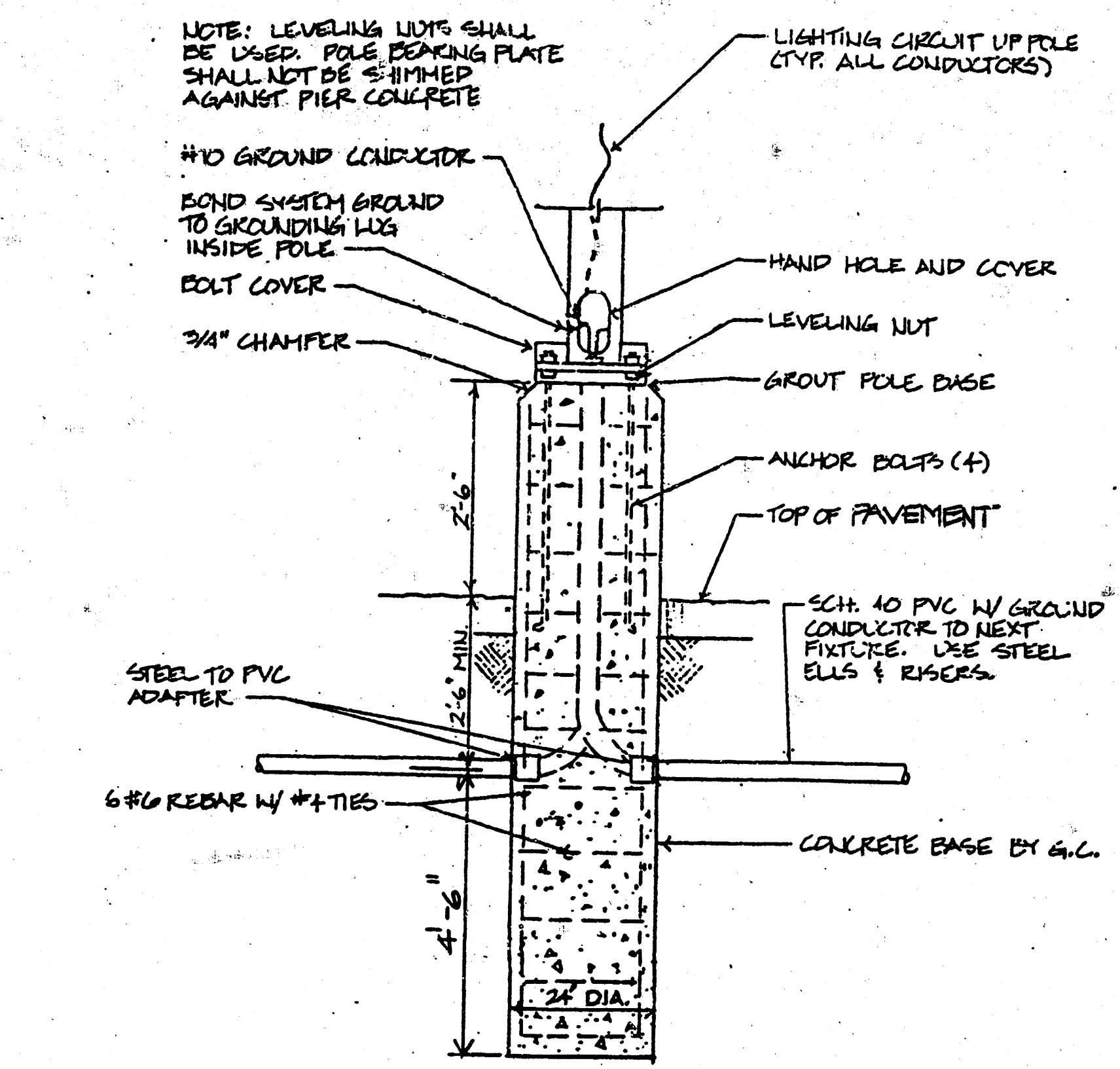
C TYPICAL PARKING STALL
1/4"=1'-0"



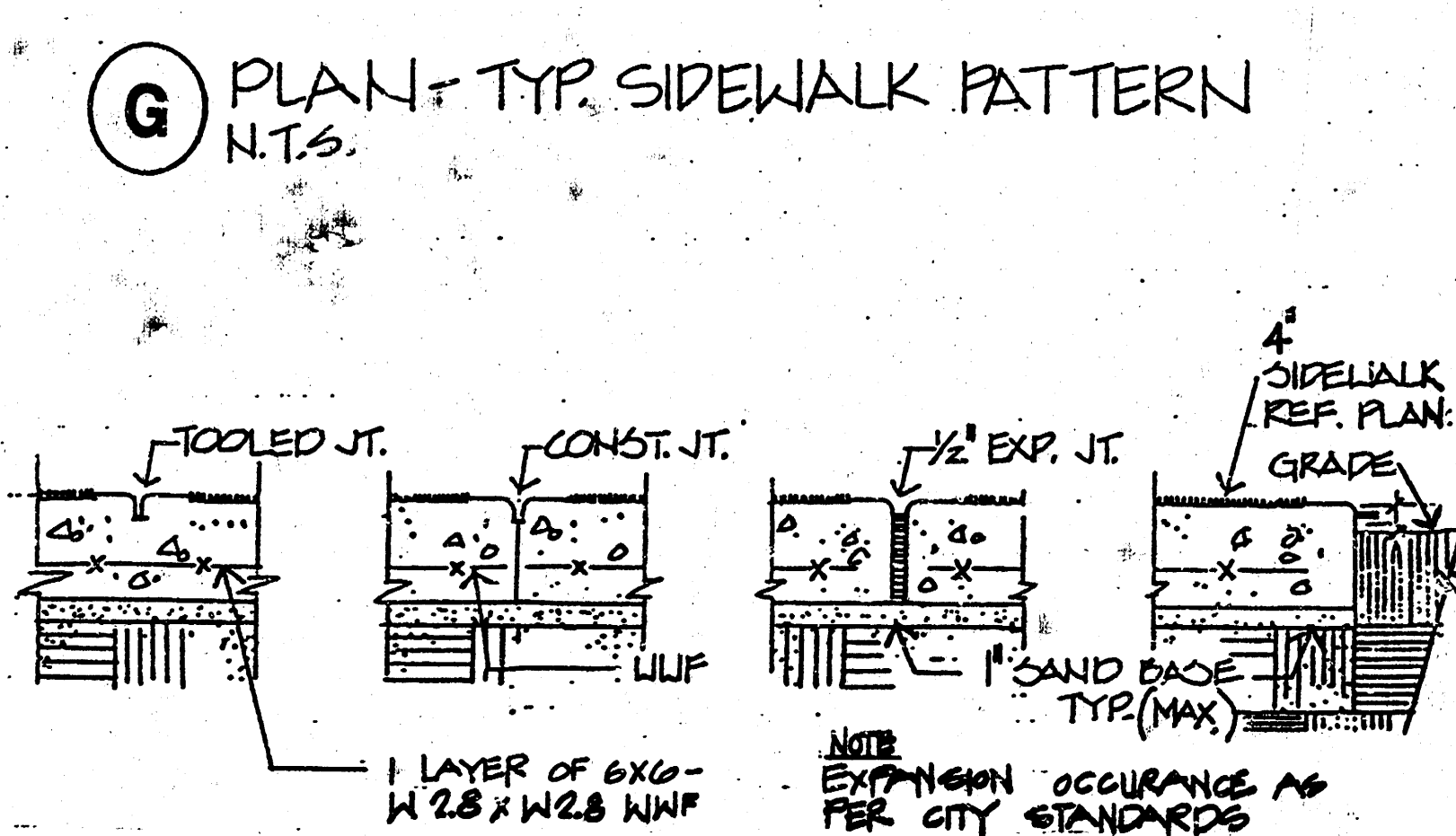
D EDGE OF ASPHALT PAVING
3/4"=1'-0"



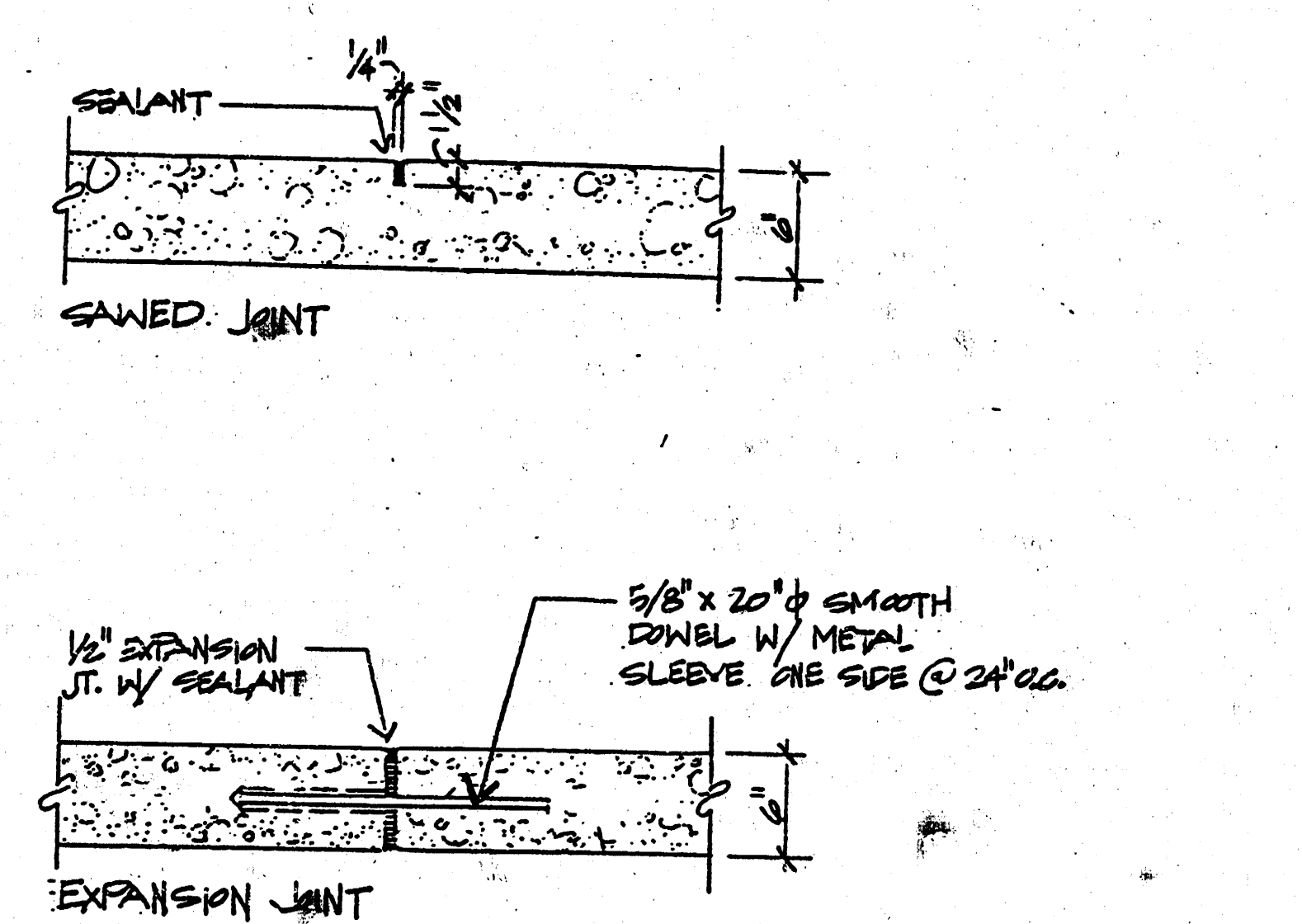
E POLE BASE DETAIL - FIXTURE "S"
N.T.S.



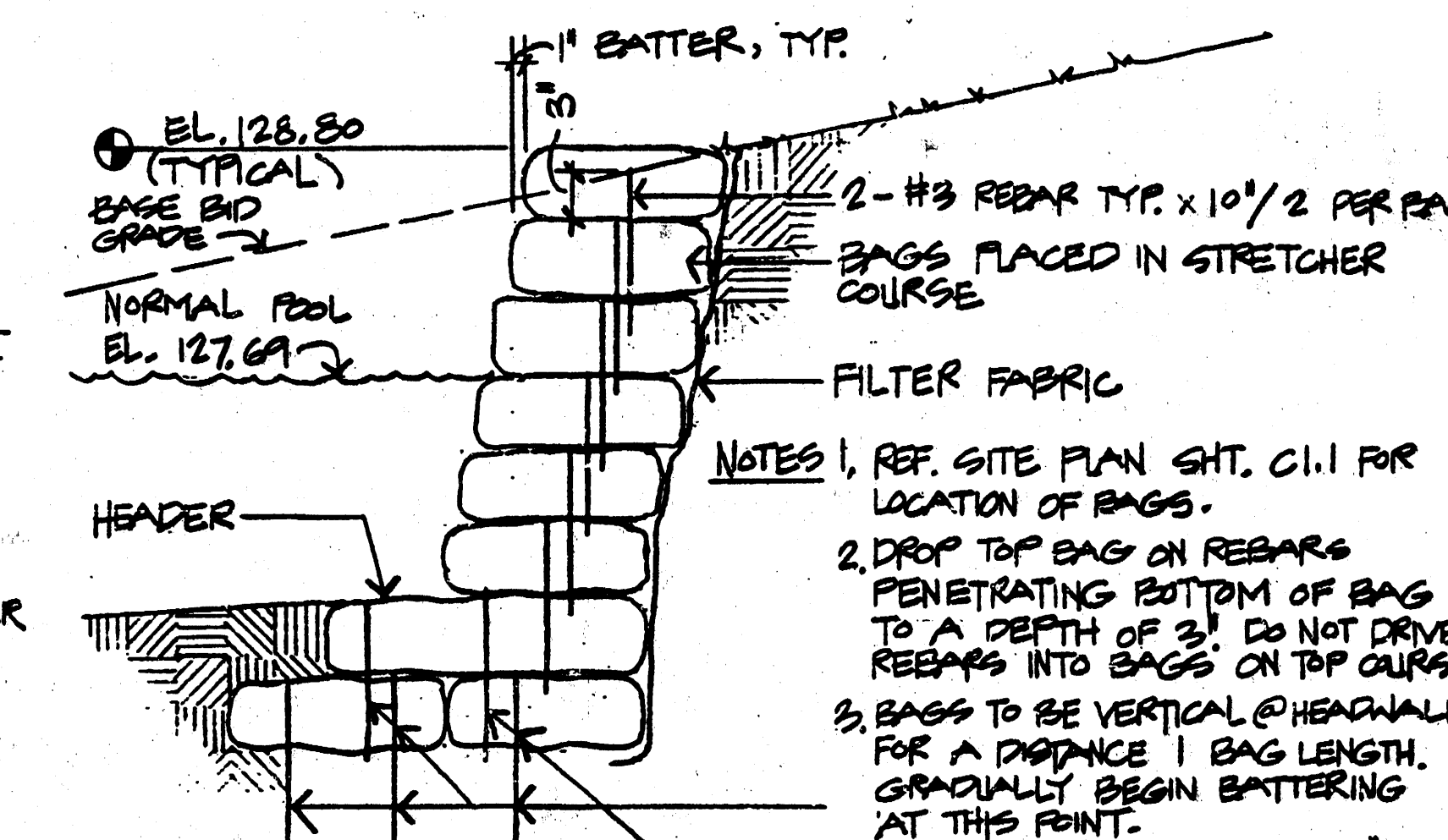
F POLE BASE DETAIL - FIXTURE "Z1"
N.T.S.



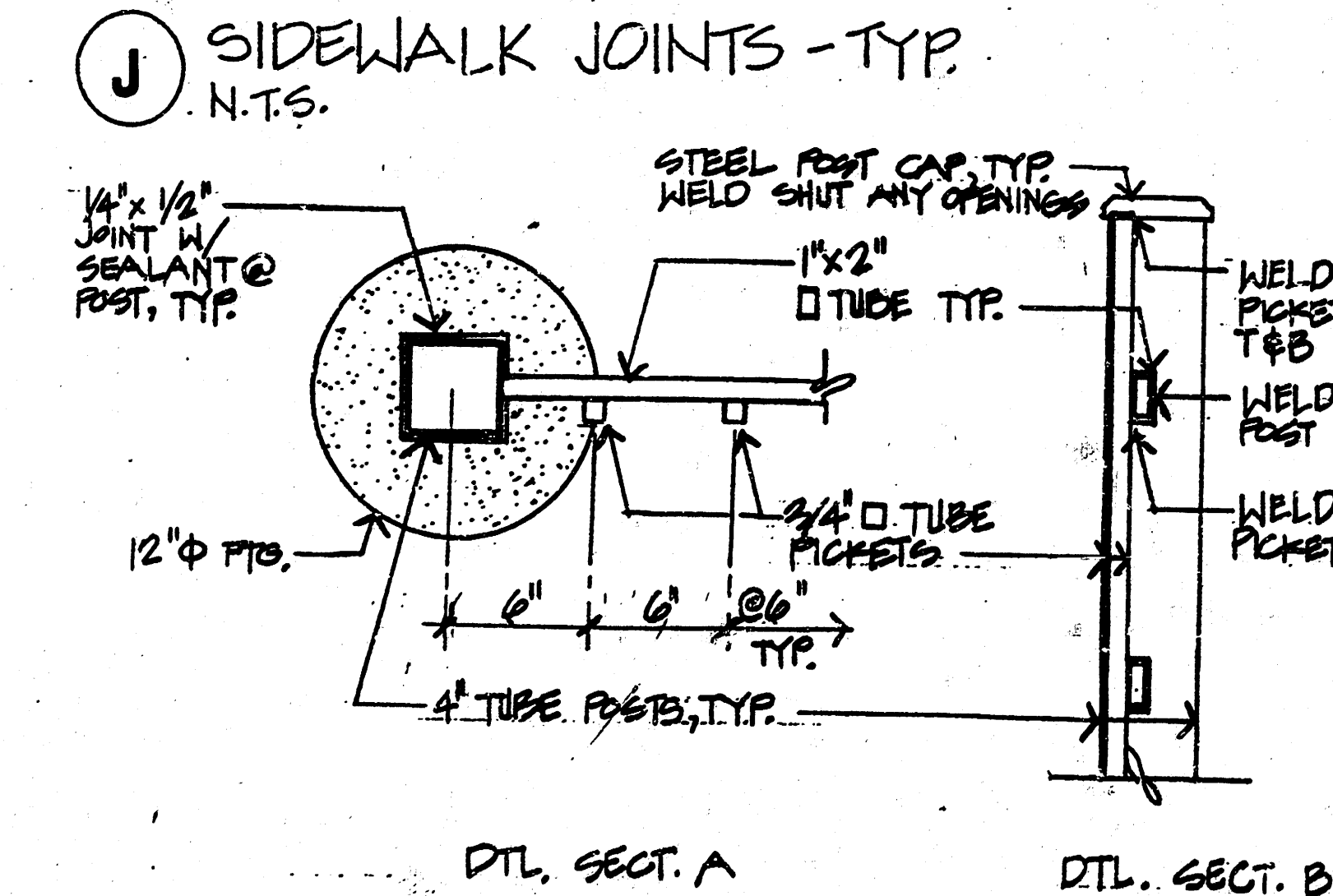
G PLAN - TYP. SIDEWALK PATTERN
N.T.S.



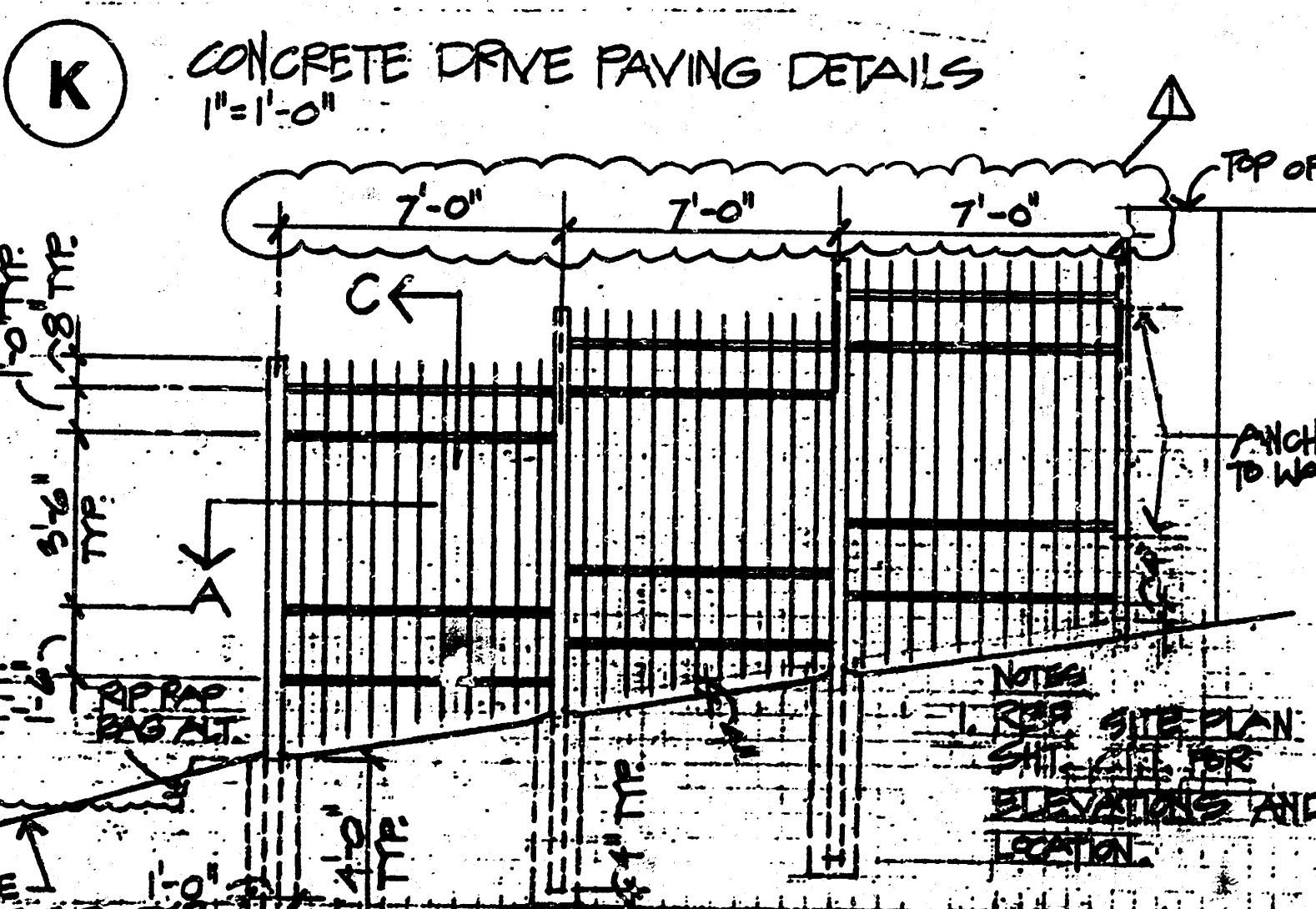
H CONCRETE (SLUMP BLOCK) WALL - PLAN
1/4"=1'-0"



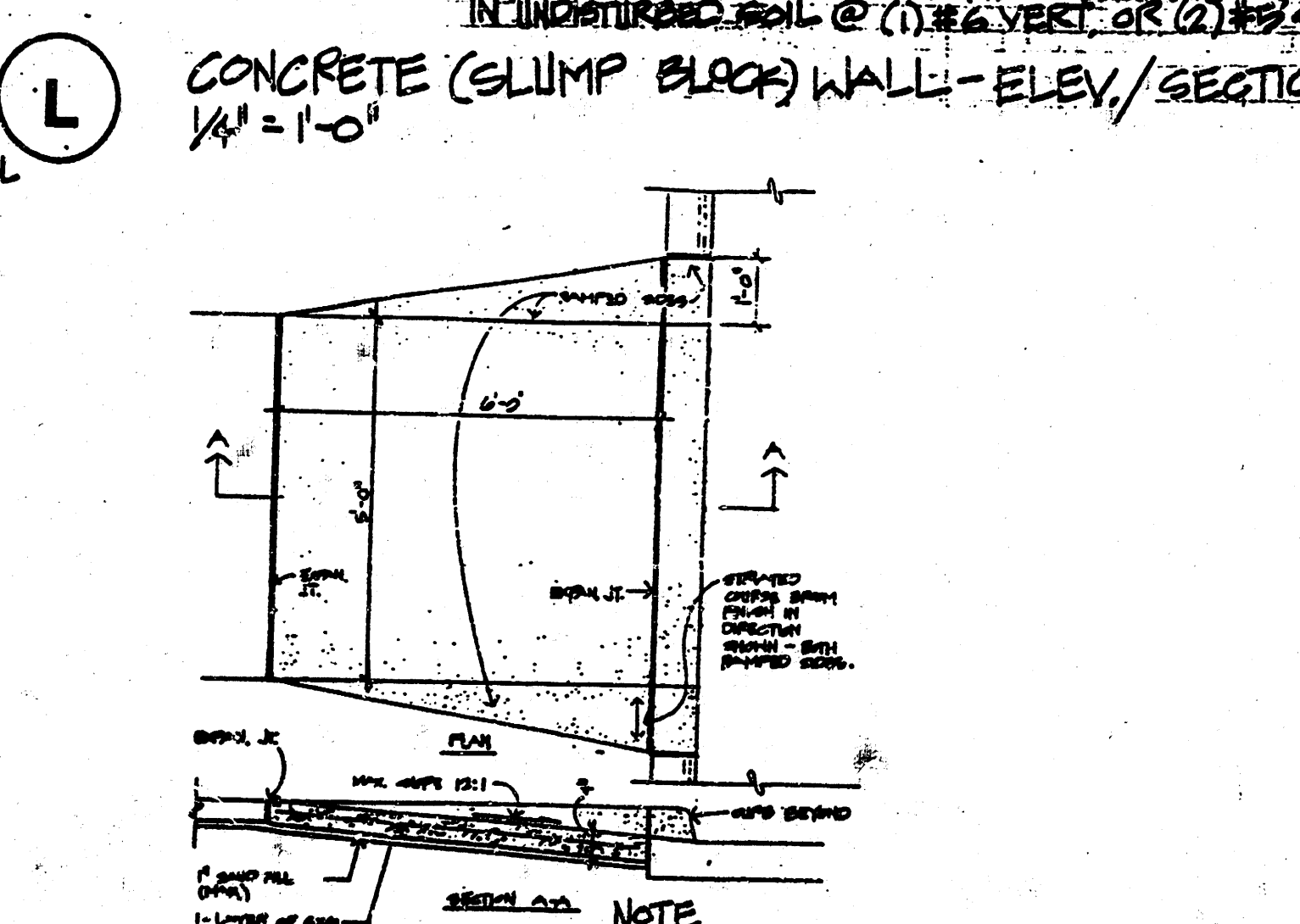
I CONC. RIP RAP BAG BANK STABILIZATION
1"=1'-0"



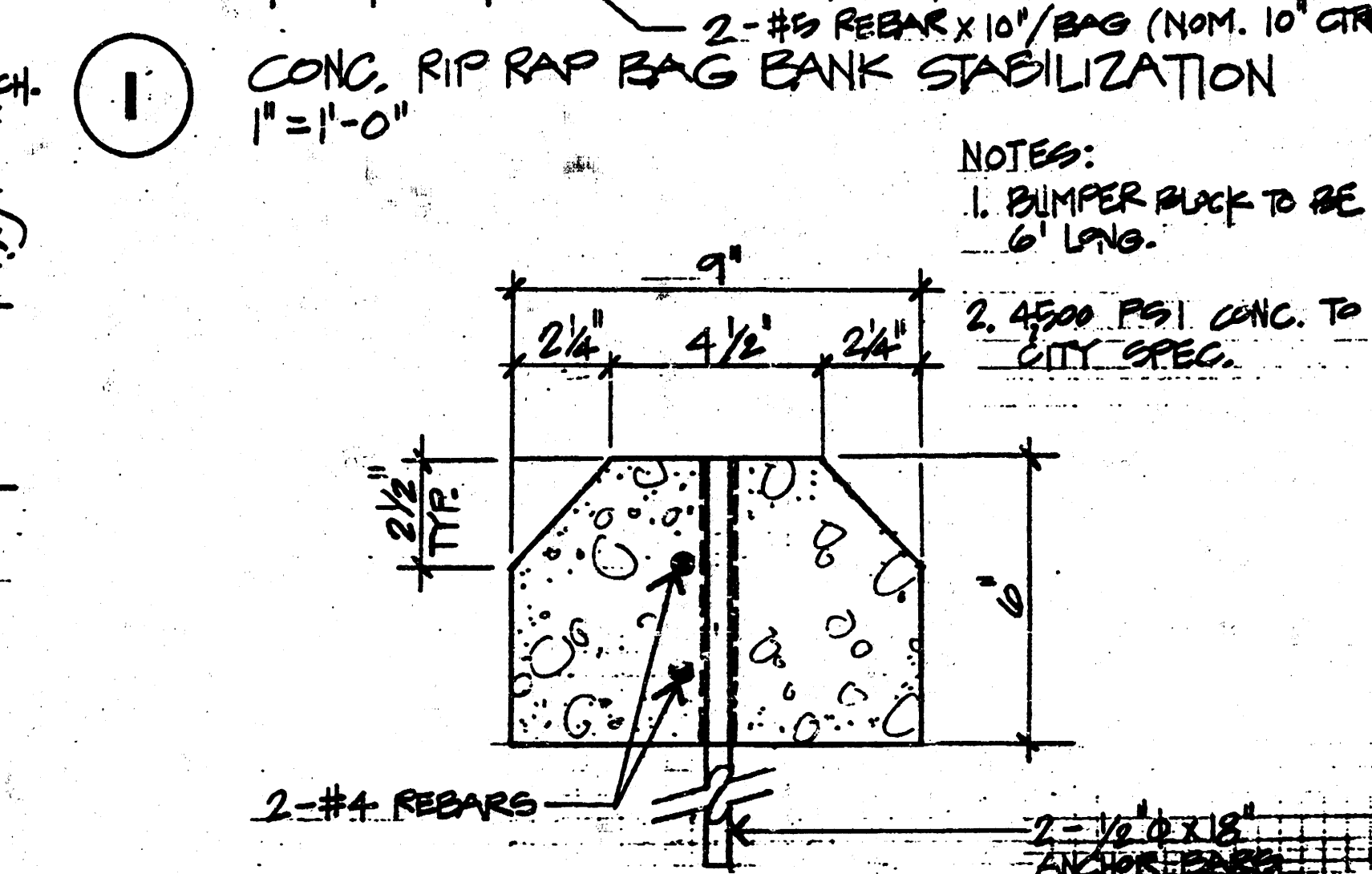
J SIDEWALK JOINTS - TYP.
N.T.S.



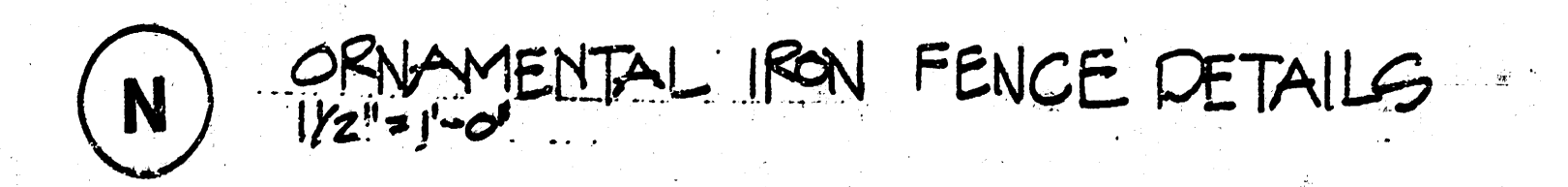
K CONCRETE DRIVE PAVING DETAILS
1"=1'-0"



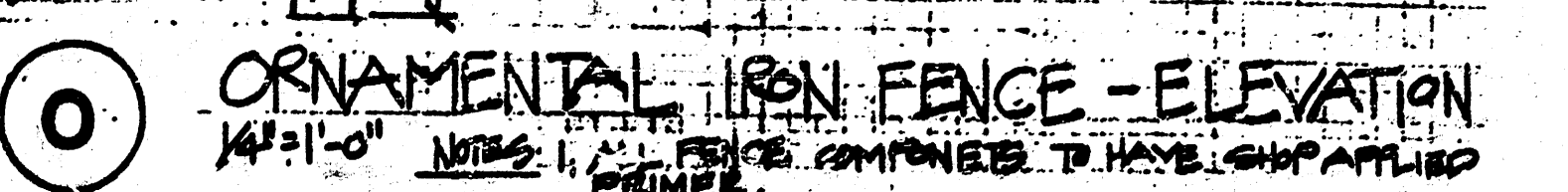
L CONCRETE (SLUMP BLOCK) WALL - ELEV./SECTION
1/4"=1'-0"



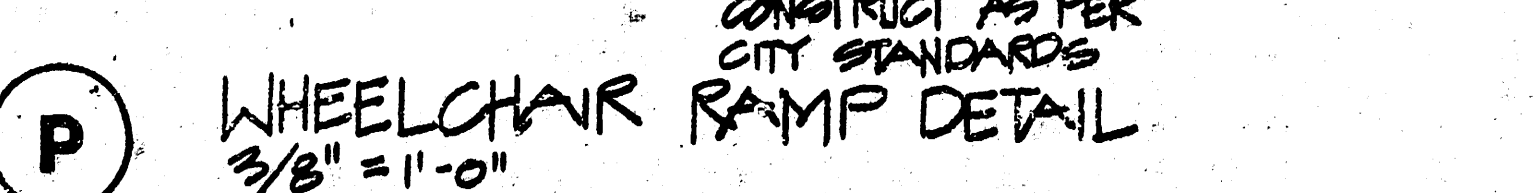
M BLUMBER BLOCK DETAIL
3/8"=1'-0"



N ORNAMENTAL IRON FENCE DETAILS
1/2"=1'-0"



O ORNAMENTAL IRON FENCE - ELEVATION
1/2"=1'-0"

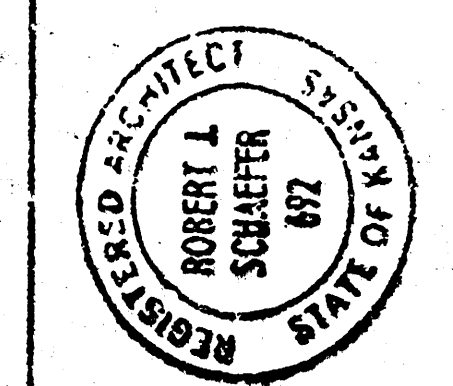


P WHEELCHAIR RAMP DETAIL
3/8"=1'-0"

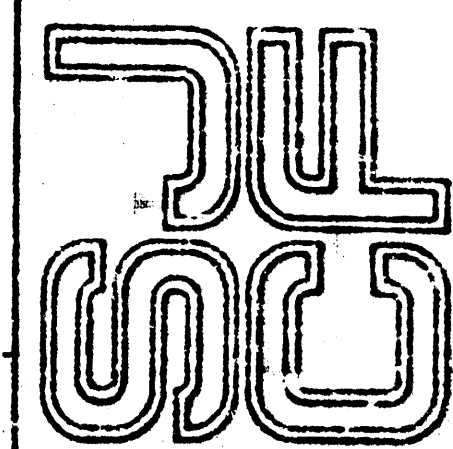
DETAILS

As-Built Plan

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EAST PARKING LOT EXTENSION
BOEING WICHITA EMPLOYEES CREDIT UNION
WICHITA, KANSAS

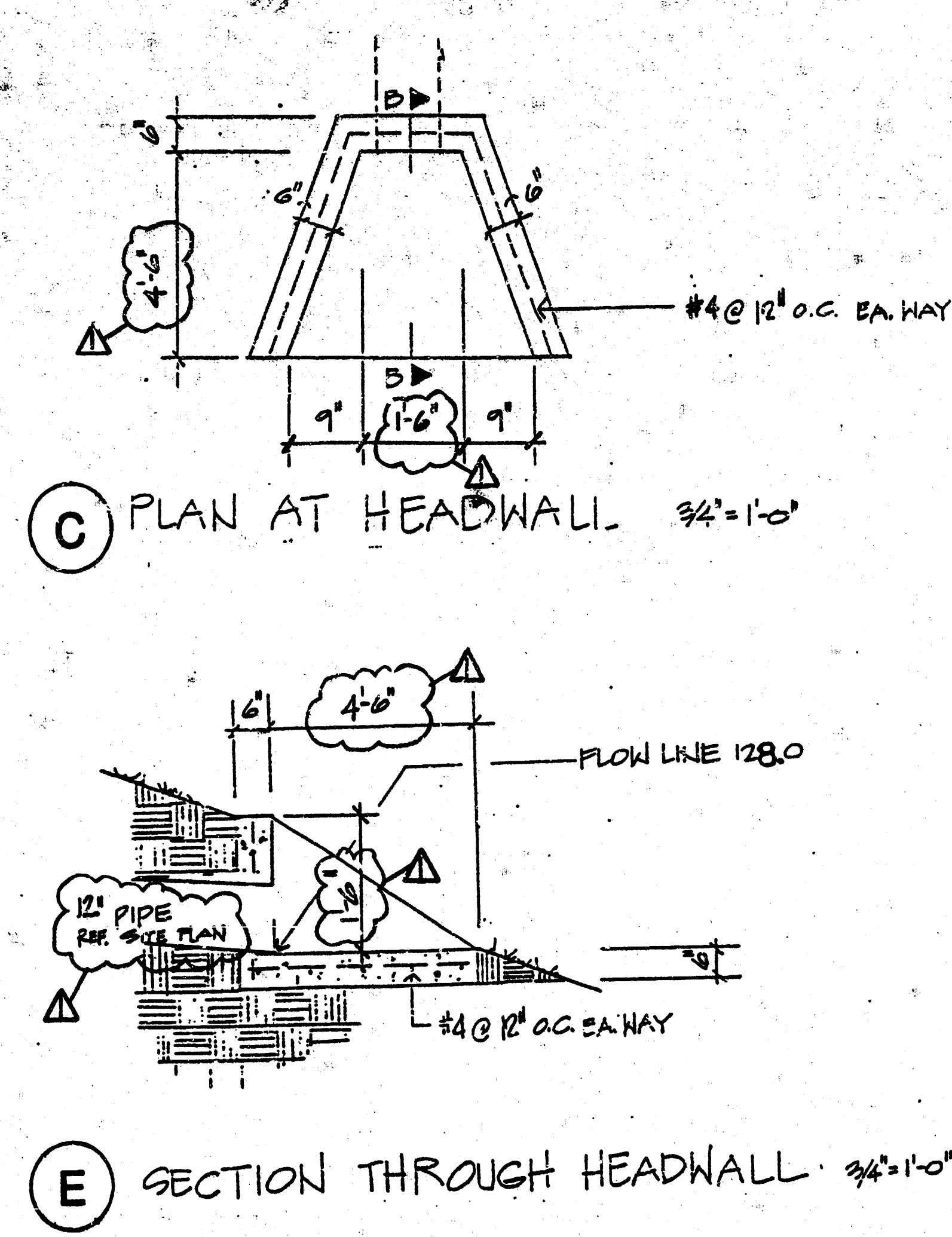
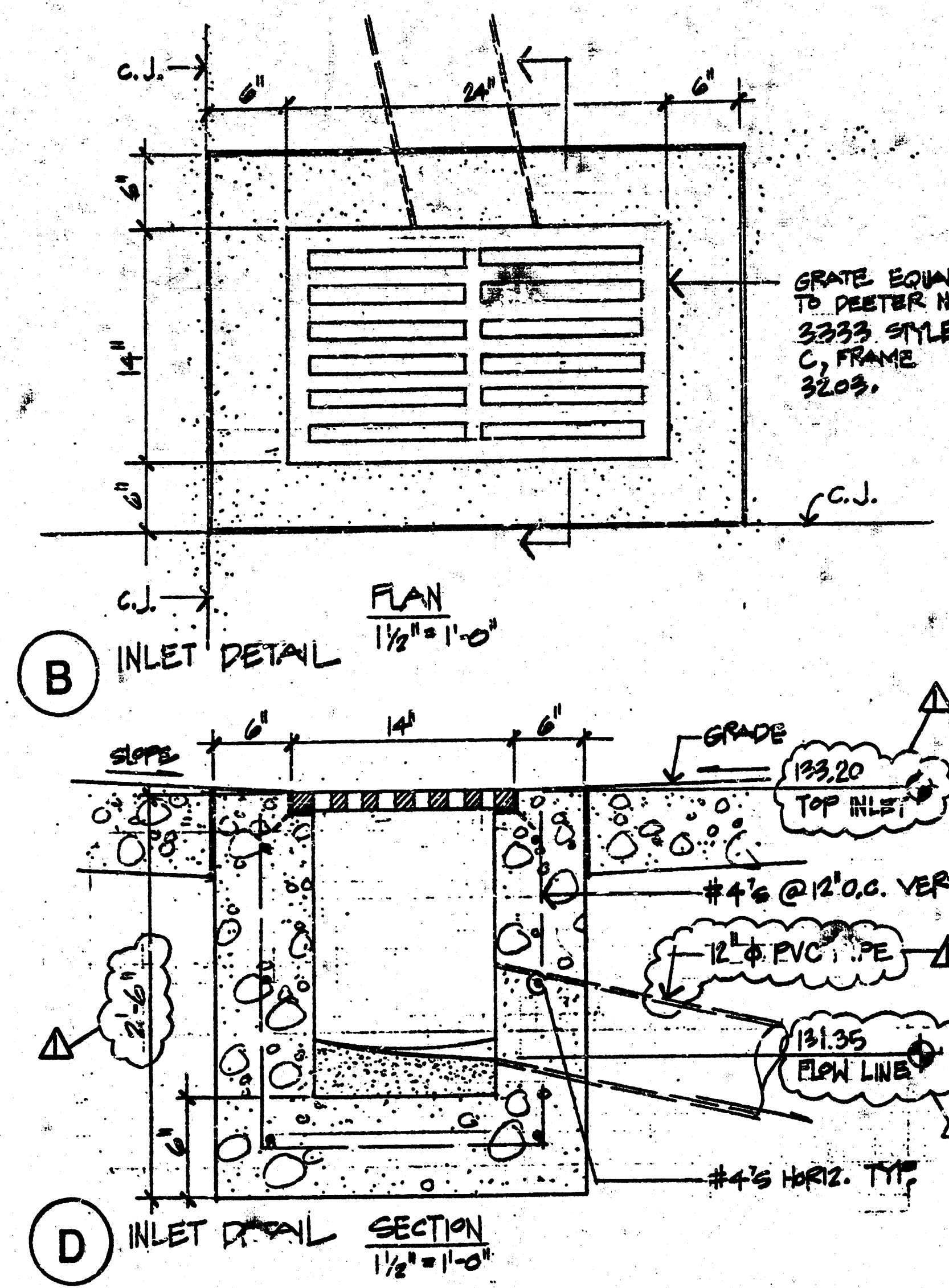
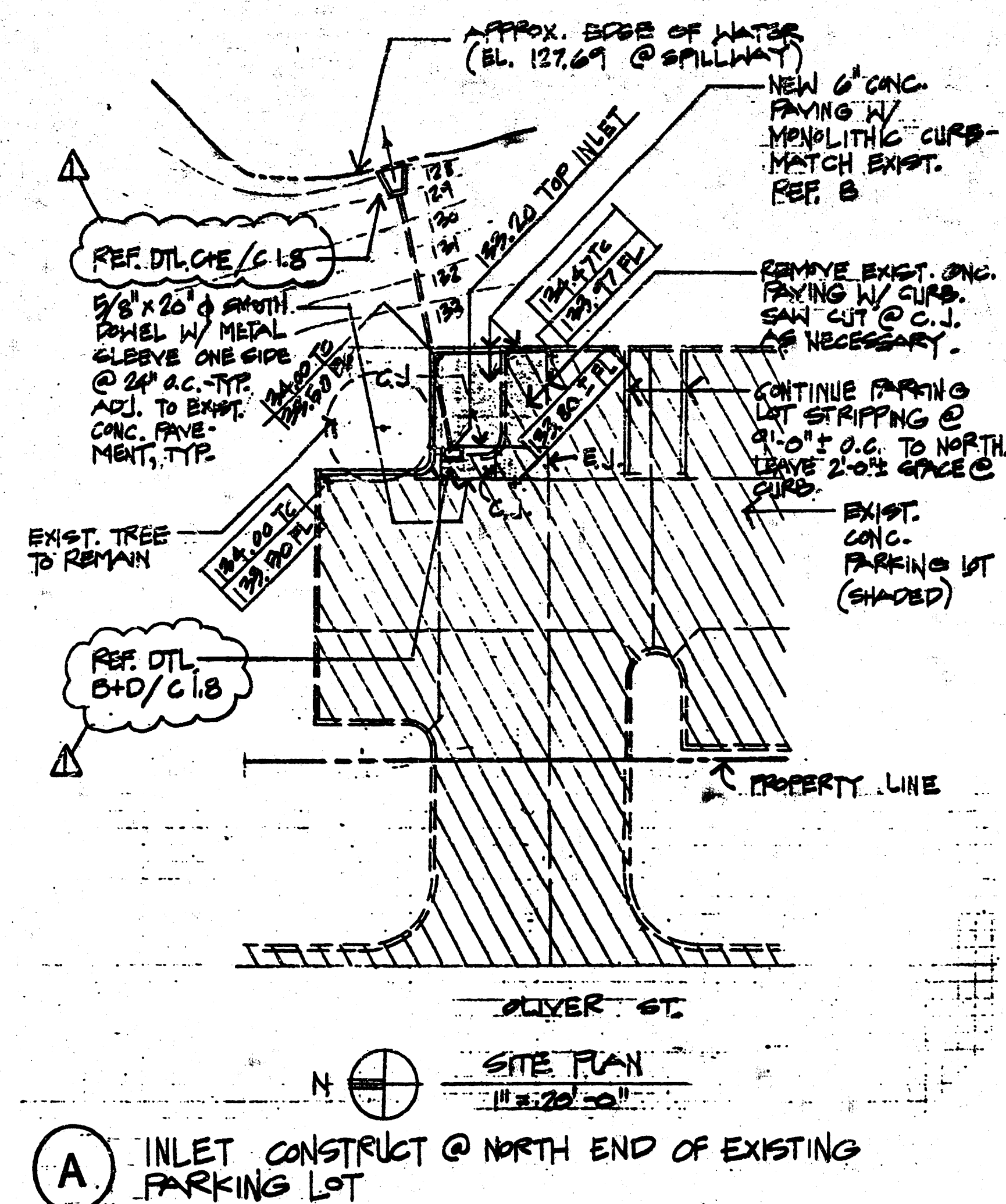
REVISION DATE
2/13/91

PROJECT NO.
2272.00

DATE
29 JANUARY 1991

DRAWING SHEET

C1.7



DETAILS

As-Built Plan

EAST PARKING LOT EXTENSION
BOEING WICHITA EMPLOYEES CREDIT UNION
WICHITA, KANSAS

REVISION DATE
3/15/91

PROJECT NO.
2272.00

DATE
29 JANUARY 1991

DRAWING SHEET

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