

STORM SEWER PLANS FOR EXECUTIVE PARK AT TALLGRASS

S.W.S. NO. 258

PROJECT NO.

468-76-245-8131 2-000-000-001

CITY OF WICHITA, KANSAS
MIKE LINDEBAK, CITY ENGINEER

JANUARY, 1984

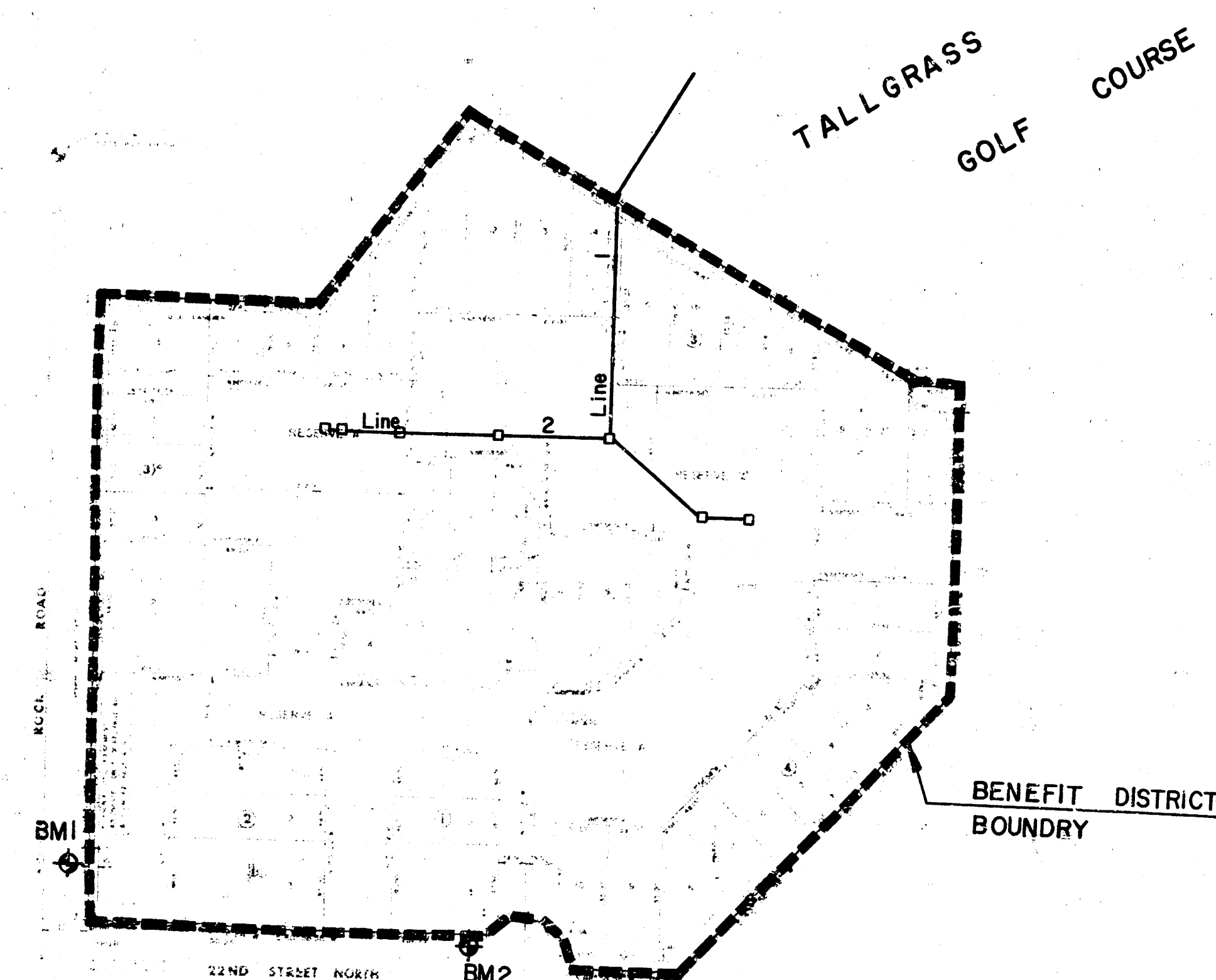
GENERAL NOTES

1. 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.
2. All concrete shall be Standard Paving Mix unless otherwise noted.
3. Contractor shall avoid uncovering existing water lines unless absolutely necessary. Uncovering shall be done only in the presence of a Water Department Engineer.

NOTE TO CONTRACTOR: THE TYPE "A" INLETS TO BE USED ON THIS PROJECT HAVE BEEN REVISED. CONTRACTOR SHOULD FAMILIARIZE HIMSELF WITH THE NEW DETAIL SHEET PRIOR TO SUBMITTING HIS BID.

BENCH MARKS

- BM #1 Spk. Stop in P.P. 50' $\frac{1}{4}$ N. of the N.E. Cor. 22nd St. N. & Rock Road
Elev. = 217.99
- BM #2 " " " Cut on N. Line of 22nd St. N. 15' W. of Prop. Iron on Cul-de-Sac
Elev. = 215.68
- BM #3 City Std. 21st & Rock Road, 45' N. & 48' E. of C.L. Both
Elev. = 214.57

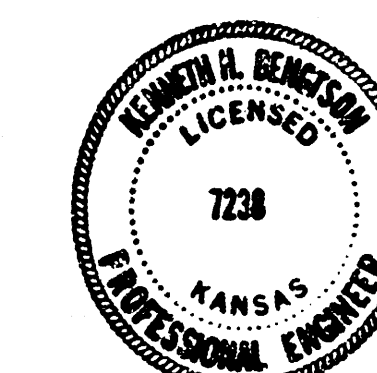
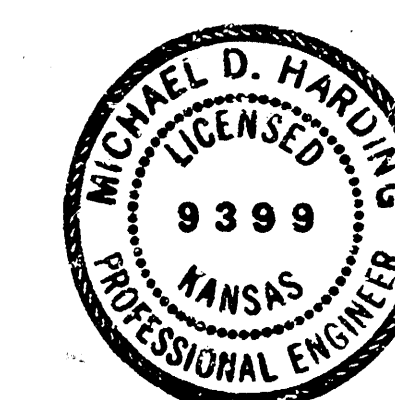


Scale: 1" = 150'

INDEX TO DRAWINGS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	LINE 1
3	LINE 1
4	LINE 2
5	MANHOLE DETAILS
6	DITCH INLET & AREA INLET DETAILS
7	INLET DETAILS
8	FINAL PLAT

As Built Plans
10-8-84
M.R. GREENE



**STORM WATER SEWER
FOR
EXECUTIVE PARK**

MID-KANSAS ENGINEERING CONSULTANTS PA
240 NORTH ROCK ROAD
SUITE 130
WICHITA, KANSAS 67206

662-6561

Design	AMS
Drawn by	AMS
Checked by	KHB
Date	January, 1984
Job No.	

Sheet	1
of	8

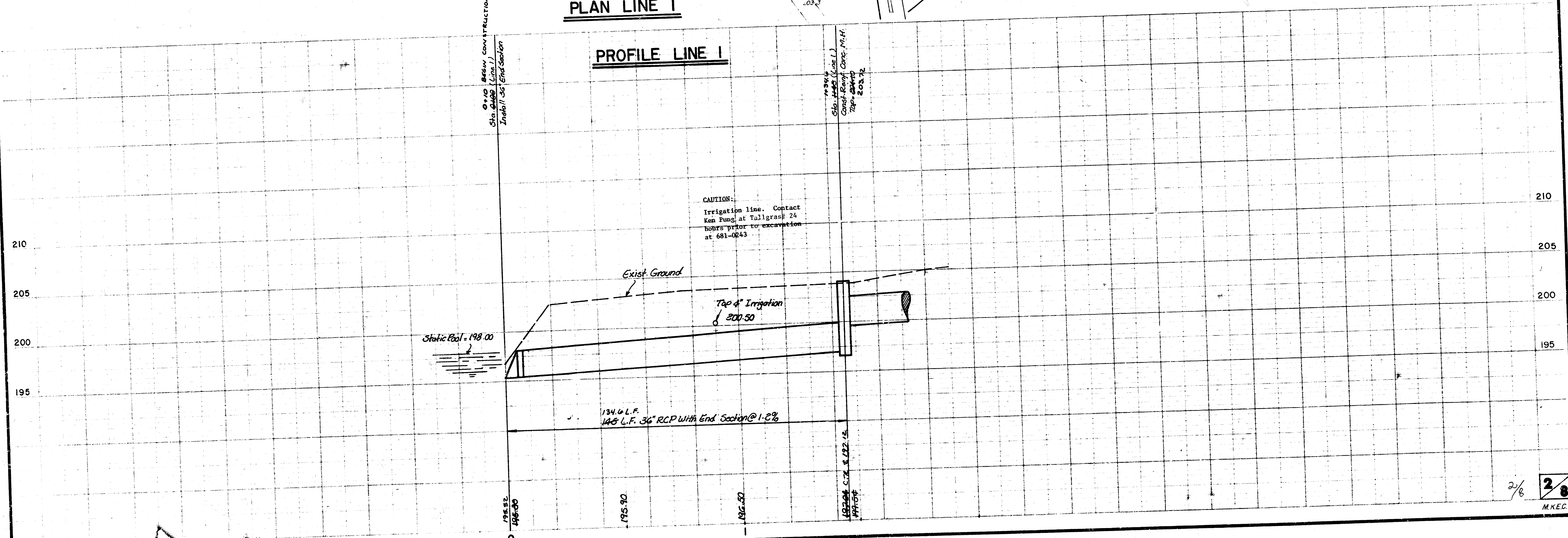
EXECUTIVE PARK AT TALLGRASS
S.W.S. NO. 258
PROJ. NO. 468-76-245-81312-000-000-001

Scale:
1" = 20' Horiz.
1" = 5' Vert.

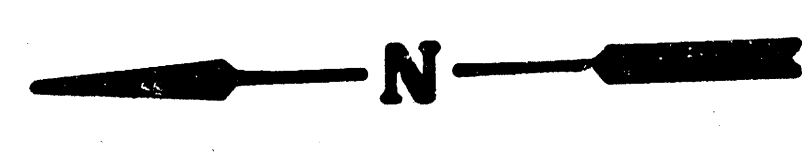
As BUILT PLAN
MCGEE
10-8-84

PLAN LINE 1

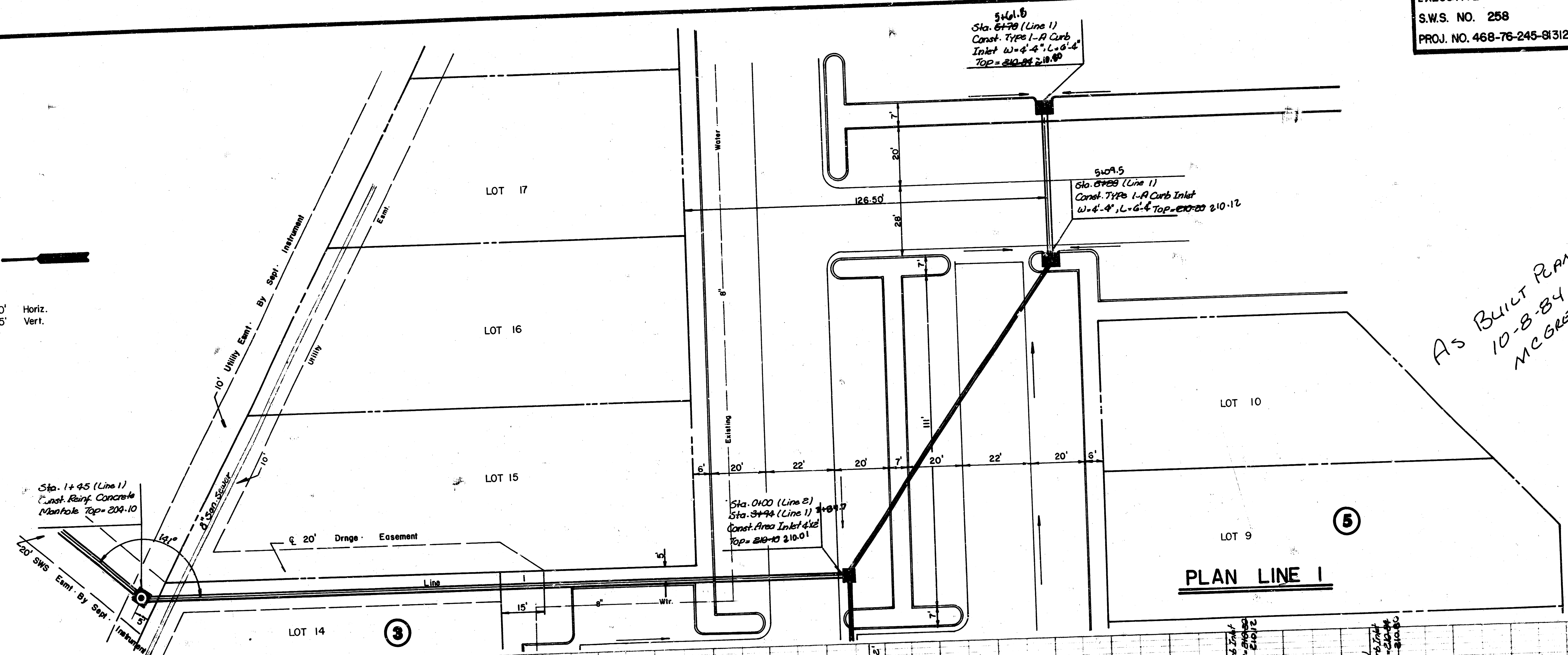
PROFILE LINE 1



EXECUTIVE PARK AT TALL GRASS
 S.W.S. NO. 258
 PROJ. NO. 468-76-245-81312-000-000-00



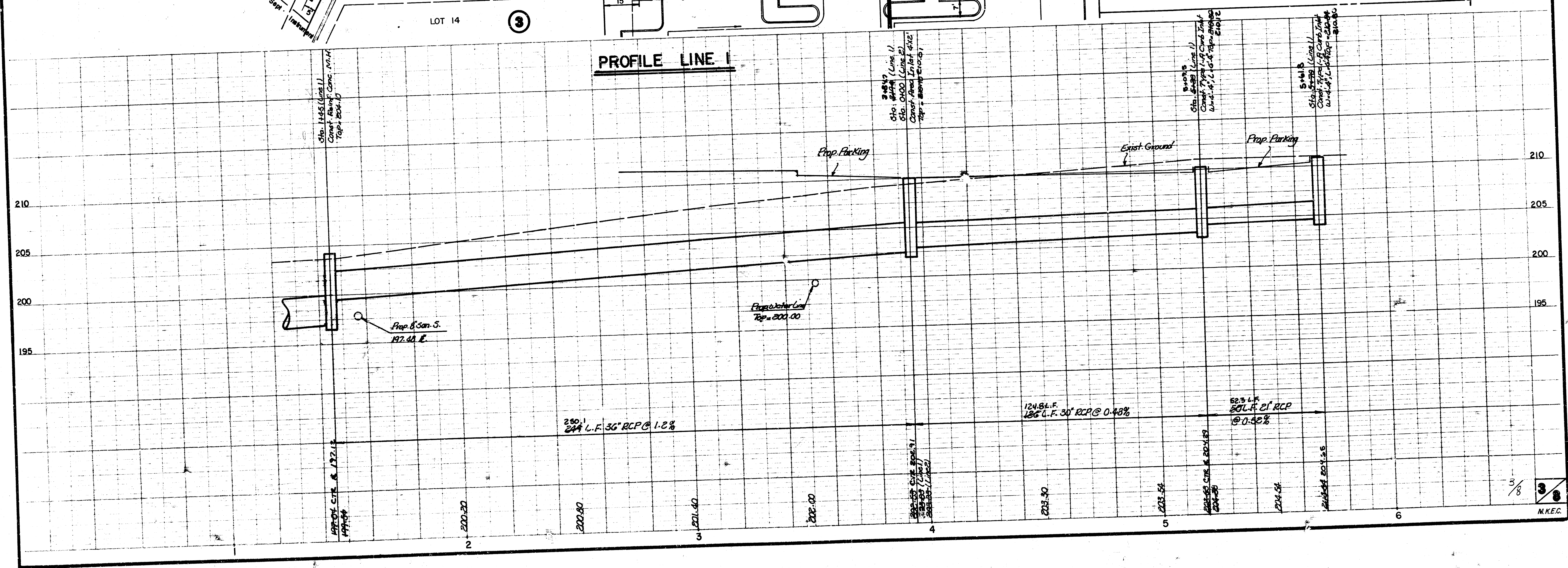
Scale:
 1" = 20' Horiz.
 1" = 5' Vert.



As Built Plan
 10-8-84
 MCGRENE

PLAN LINE 1

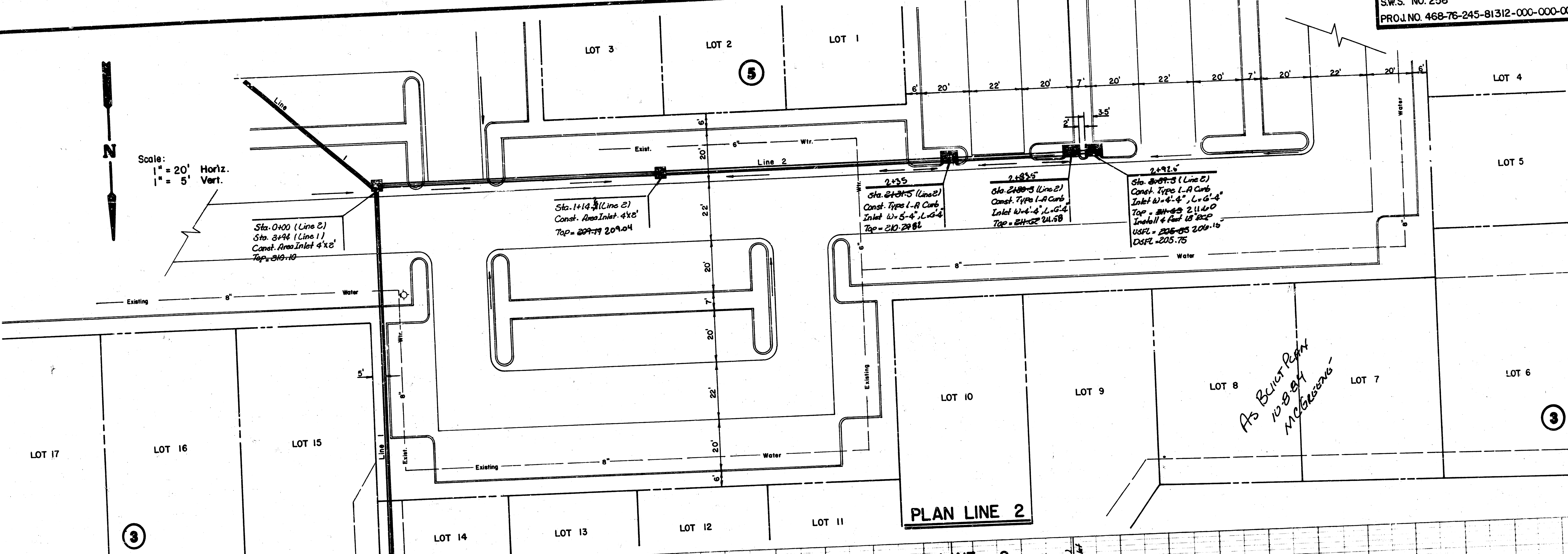
PROFILE LINE 1



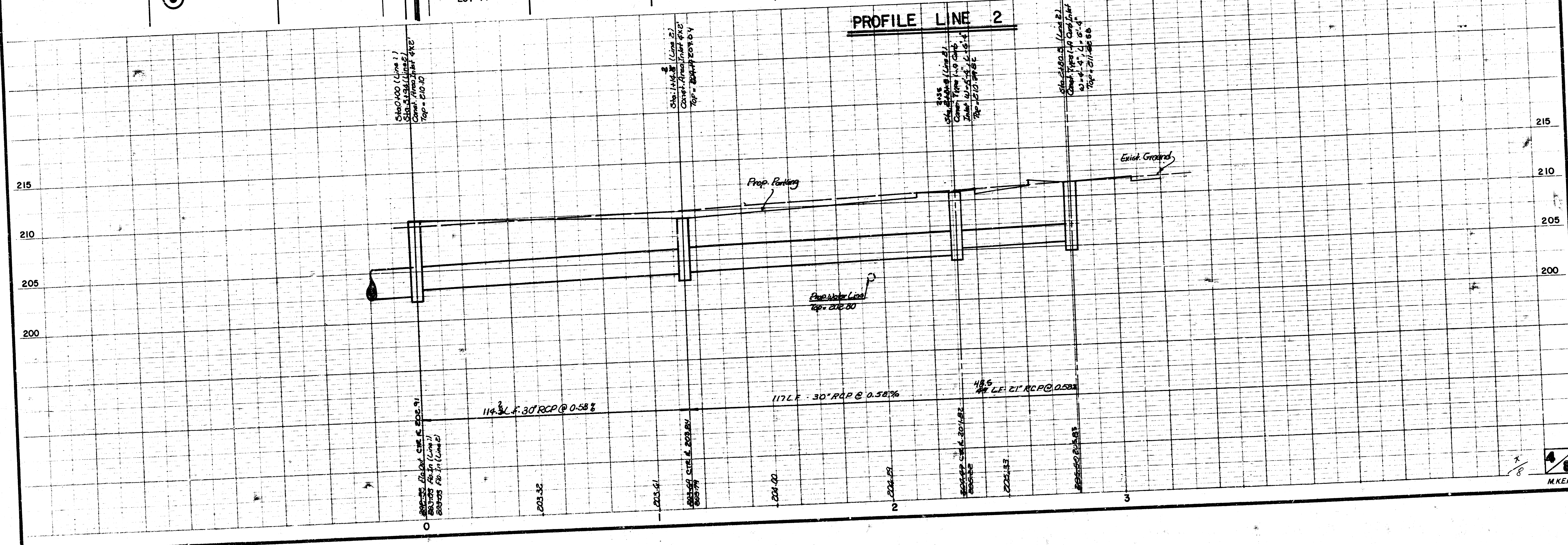
EXECUTIVE PARK AT TALLGRASS
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Scale:
 1" = 20' Horiz.
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PROFILE LINE 2



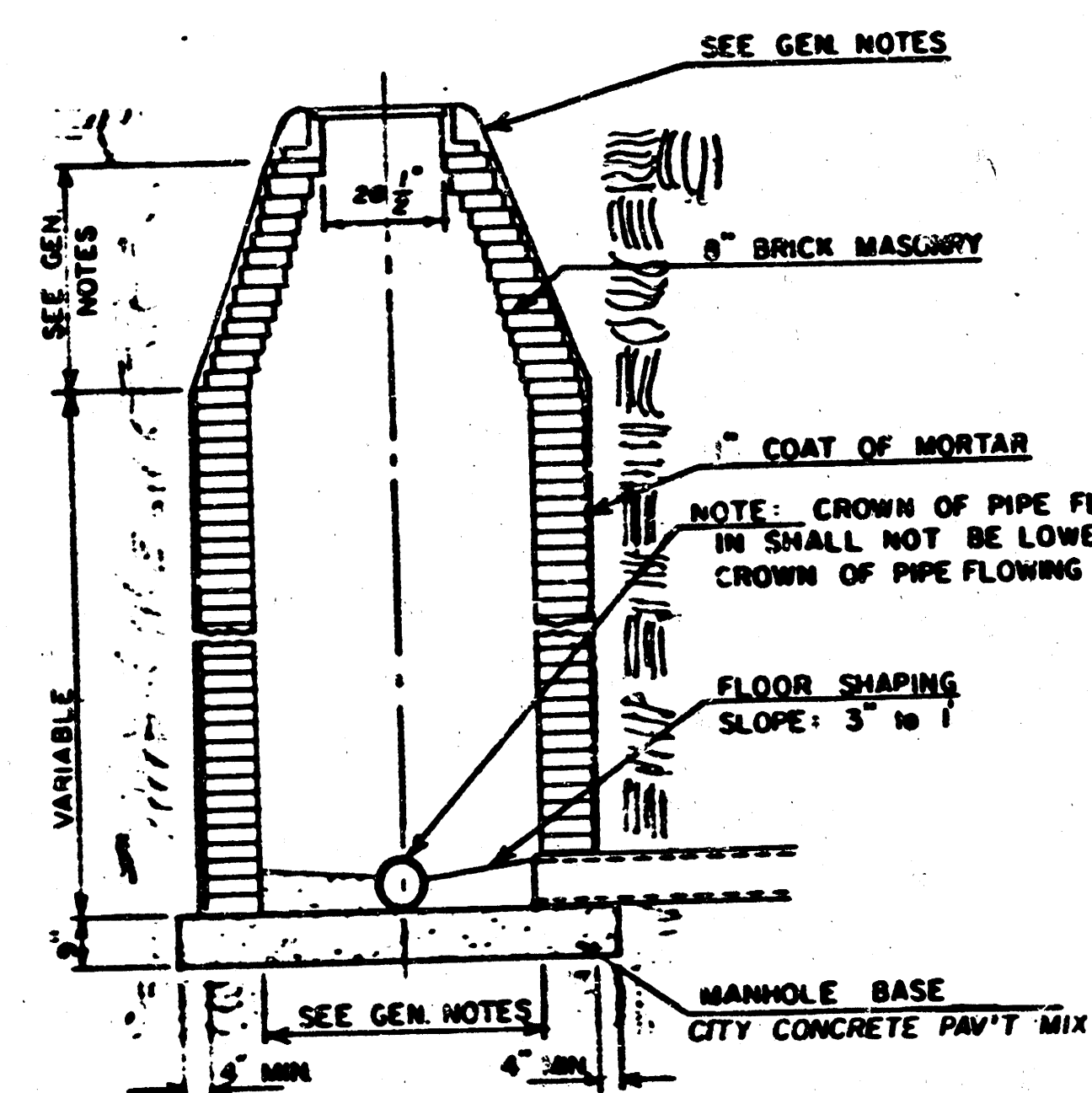
SEWER APPURTENANCES DETAILS

ADOPTED AS STANDARD DESIGN
BY

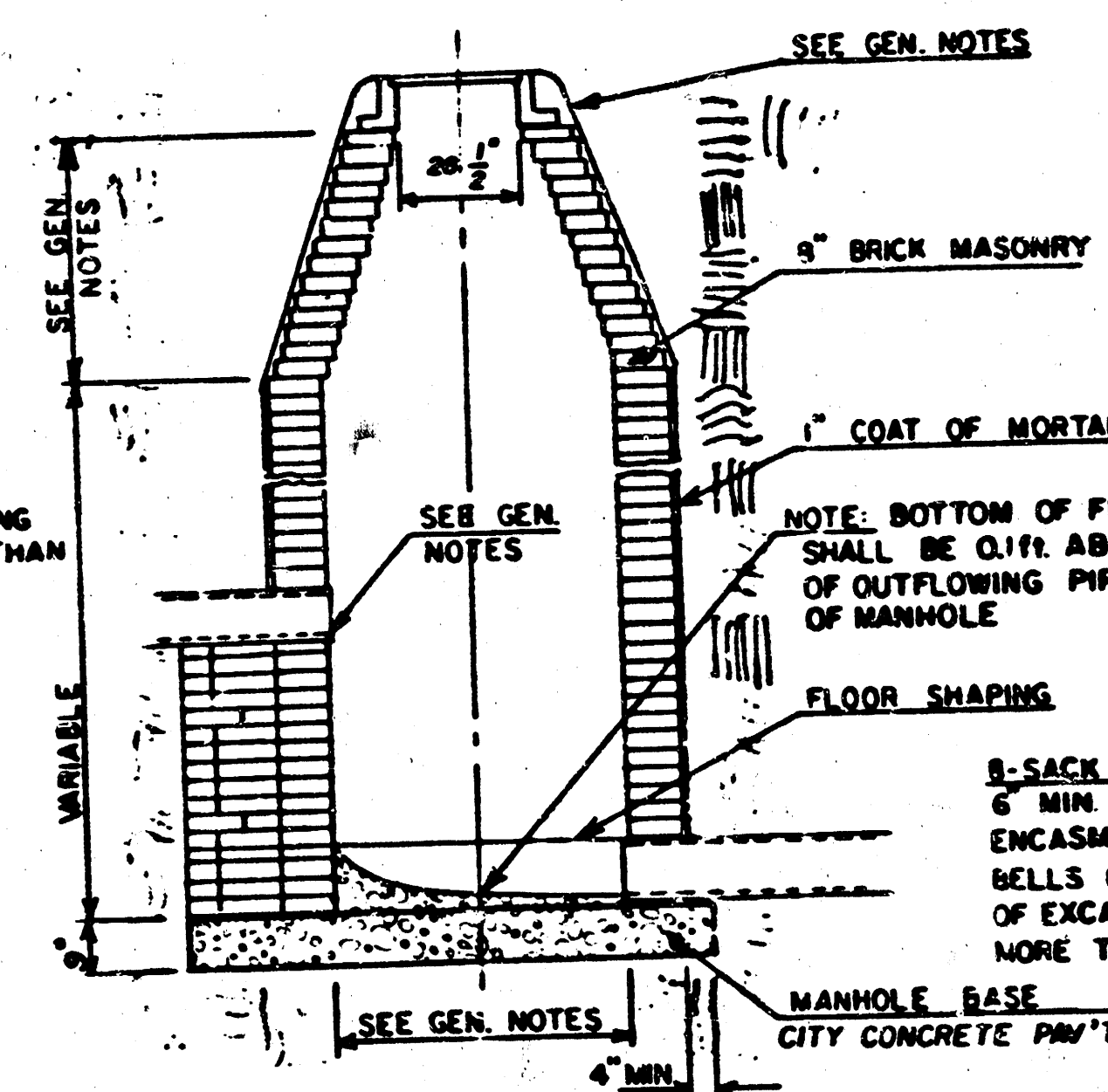
CITY of WICHITA, KANSAS

REVISED SEPTEMBER 1980
REVISED DECEMBER 1981

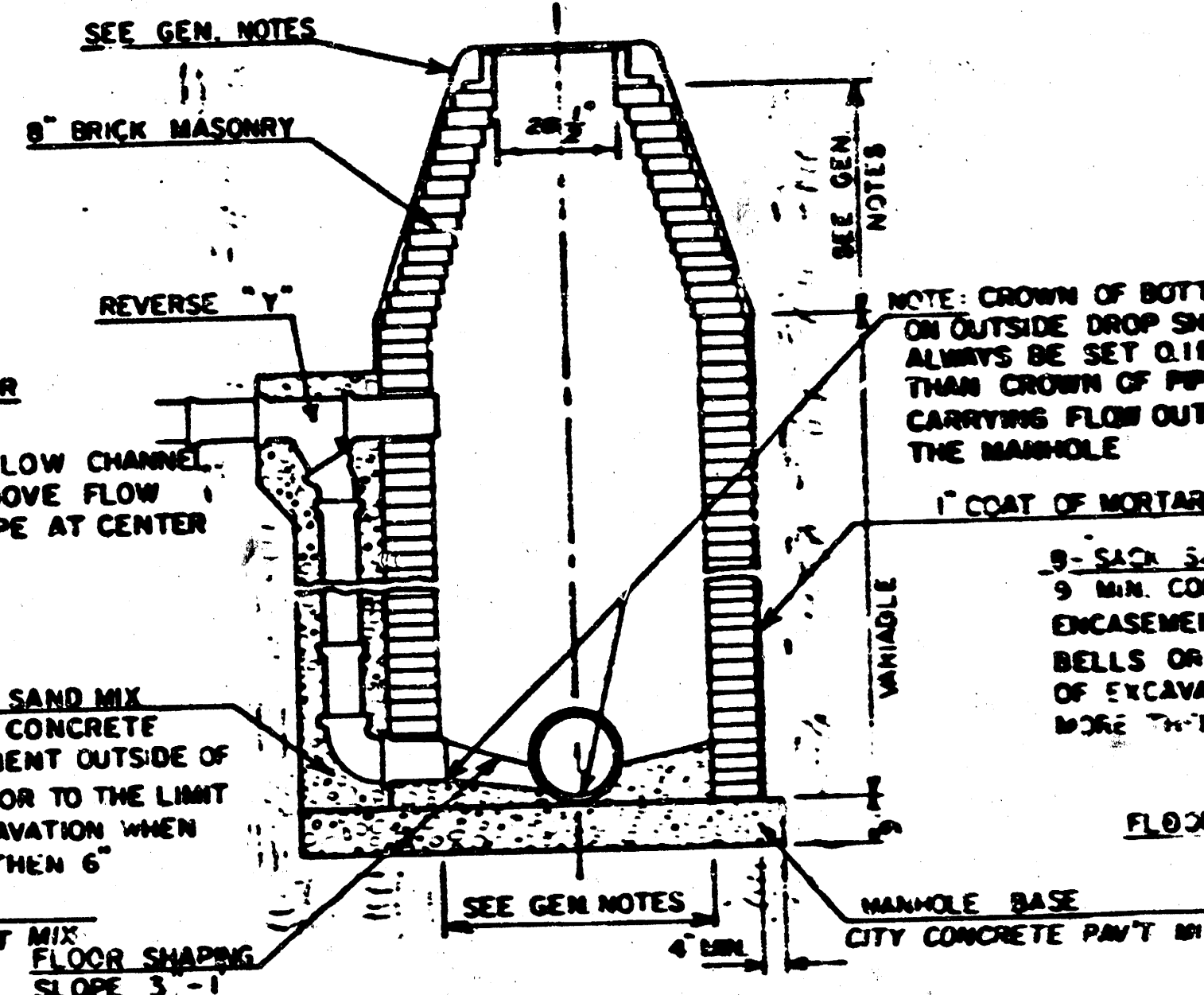
TYPE "A" MANHOLE



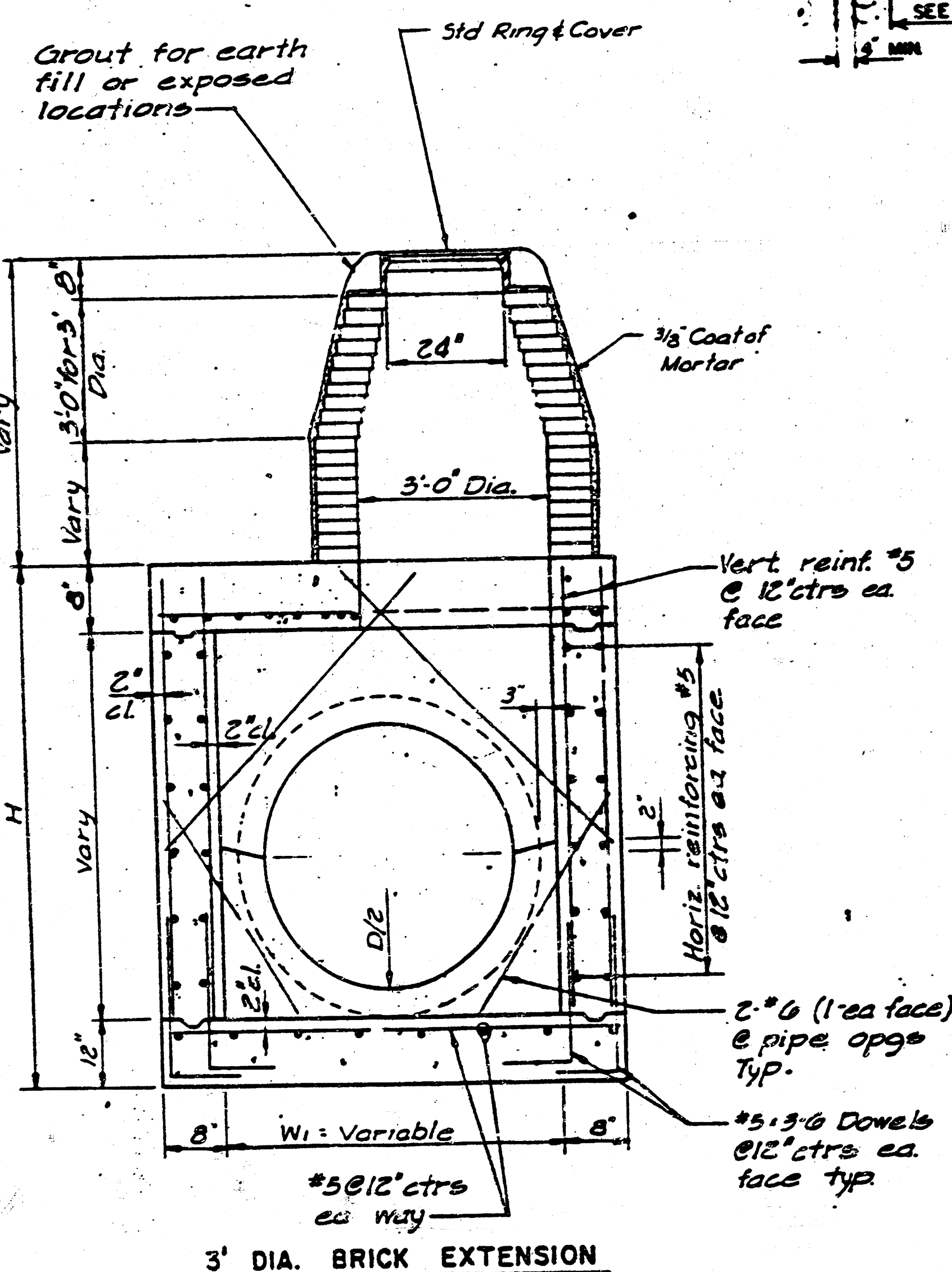
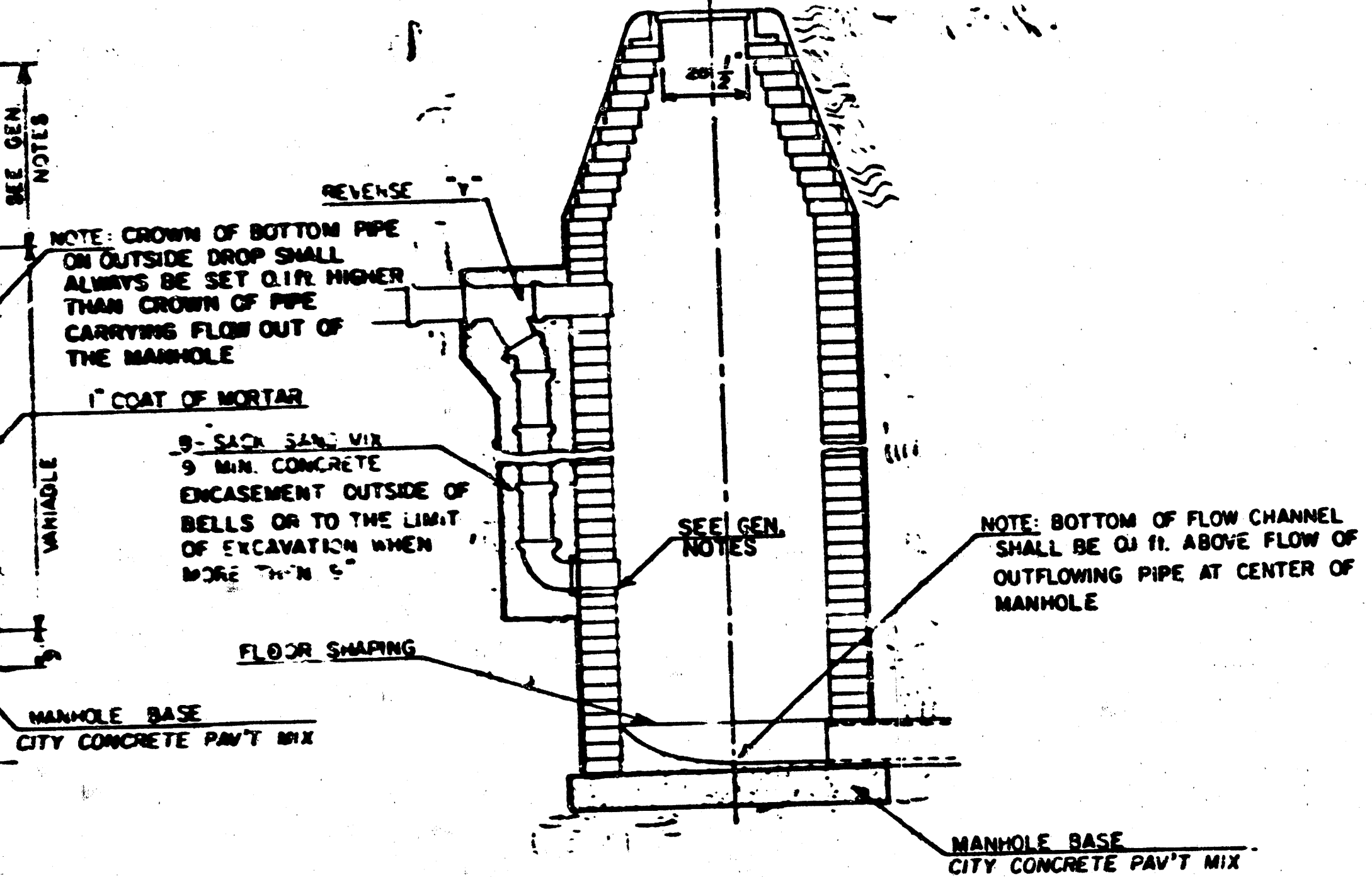
TYPE "A" INSIDE DROP MANHOLE



TYPE "A" OUTSIDE DROP MANHOLE



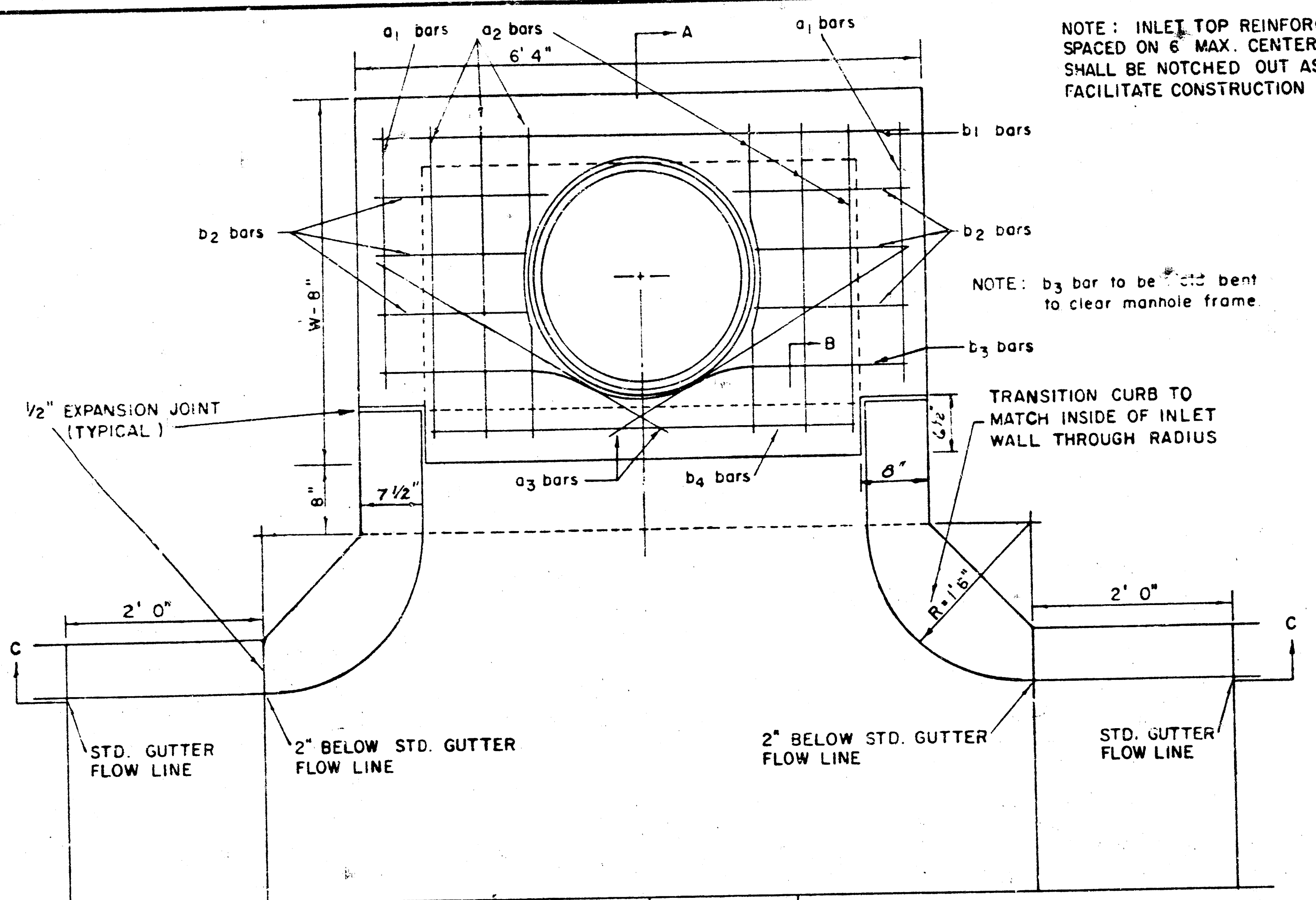
DETAIL OF OUTSIDE DROP
CONSTRUCTED ON EXISTING MANHOLE



REINFORCED CONCRETE MANHOLE

GENERAL NOTES

1. MORTAR USED IN MASONRY CONSTRUCTION SHALL CONTAIN 8 BAGS OF CEMENT PER CUBIC YARD. CONCRETE USED IN MANHOLE BASES SHALL CONFORM TO THE REQUIREMENTS OF CONCRETE FOR CONCRETE PAVEMENT CONSTRUCTION AS SPECIFIED IN THE CITY STANDARD PAVING SPECIFICATIONS USING CITY CONCRETE PAVEMENT MIX WITHOUT AIR ENTRAINING ADMIXTURE. MORTAR SHALL BE PLACED AROUND THE MANHOLE RING AS SHOWN ON THE DRAWINGS WHEN MANHOLES ARE CONSTRUCTED IN UNPAVED AREAS. TYPE "A" MANHOLES CAN BE USED ON SEWERS UP TO 16' IN DEPTH WHEN THE MANHOLE IS NOT LOCATED WITHIN PUBLIC STREET PAVEMENT. MANHOLES CONSTRUCTED WHERE PIPE SIZES ARE SMALLER THAN 24" SHALL HAVE AN INSIDE DIAMETER OF 4'. MANHOLES CONSTRUCTED WHERE PIPE SIZES ARE 24" OR LARGER SHALL HAVE AN INSIDE DIAMETER OF 5'. THE HEIGHT OF THE CORBELS ON 4' DIAMETER MANHOLES SHALL BE 4". MANHOLES HAVING A DIAMETER OF 5' SHALL HAVE CORBELS 6" IN HEIGHT. COMPLETED MANHOLE SHALL BE WITHOUT LEAKS AND WATER TIGHT.
2. REINFORCING STEEL SHALL BE INSTALLED IN THE MANHOLE BASES AND SHALL CONSIST OF NO. 4 BARS PLACED 6" CENTERS IN BOTH DIRECTIONS. THE MANHOLE BASE REINFORCEMENT SHALL BE PLACED 6" 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.
3. OPENINGS SHALL BE CUT INTO THE MANHOLE WALL WHEN OUTSIDE DROPS ARE CONSTRUCTED ON EXISTING MANHOLES. SUCH OPENINGS CUT INTO EXISTING MANHOLES SHALL BE AS SMALL AS PRACTICAL TO FACILITATE INSTALLING AND GROUTING THE NEW PIPE IN PLACE. WATERSTOP GASKETS SHALL BE USED WITH P.V.C. AND A.B.S. COMPOSITE PIPE. THE NEW PIPE SHALL BE GROUTED INTO THE OPENING USING AN APPROVED NONSHRINKING GROUT FOR THE FULL MANHOLE WALL THICKNESS. THE EXTERIOR OF THE COMPLETED CONNECTION SHALL BE SEALED WITH AN APPROVED BITUMINOUS COATING SUCH THAT THE CONNECTION WILL BE WATER TIGHT. FLOOR OF MANHOLE SHALL BE MODIFIED TO FORM NEW FLOW CHANNEL FOR THE NEW CONNECTION AS INDICATED BY THE DRAWING. THE VERTICAL DROP FROM THE LOWER PIPE ON SUCH OUTSIDE DROP CONNECTIONS SHALL NOT EXCEED 4' FOR INFLOWING PIPES SIZED 12" OR SMALLER AND 2' FOR INFLOWING PIPES SIZED LARGER THAN 12", EXCEPT THE CROWN OF THE LOWER PIPE SHALL NEVER BE SET BELOW THE CROWN OF ANY LARGER OUTFLOWING PIPE. THIS WORK, INCLUDING MODIFICATION OF MANHOLE FLOOR, SHALL BE PAID FOR AT THE UNIT PRICE BID FOR OUTSIDE DROP STACK CONSTRUCTED ON EXISTING MANHOLE.
4. THE FLOORS OF ALL MANHOLES SHALL BE SHAPED WITH FLOW CHANNELS SUCH THAT THE MANHOLES WILL BE SELF-CLEANING AND FREE OF AREAS WHERE SOLIDIFICATION COULD BE DEPOSITED AS SEWAGE FLOWS THROUGH THE MANHOLE FROM ALL INLET PIPES TO THE OUTLET PIPE. FLOW CHANNELS SHALL BE FORMED TO MATCH THE BOTTOM HALVES OF THE INFLOWING PIPES AND THE OUTFLOWING PIPE AS SHOWN BY THE DRAWINGS EXCEPT FOR INSIDE DROP MANHOLES. FLOW CHANNELS FOR INSIDE DROP MANHOLES SHALL BE CONSTRUCTED AS INDICATED BY THE DRAWING. MANHOLE FLOORS 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 REMOVED TO NEAT 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.
5. PIPES INSTALLED WITHIN THE EXCAVATION MADE FOR THE MANHOLE SHALL BE CRADLED WITH CONCRETE TO THE LIMITS OF THE MANHOLE EXCAVATION. WHEN CLAY PIPE IS USED, THE CRADLE SHALL EXTEND TO THE FIRST JOINT OUTSIDE THE MANHOLE. THE CRADLE SHALL BE TERMINATED AT THE CLAY PIPE JOINT IN A MANNER WHICH WILL MAINTAIN THE FLEXIBILITY OF THE JOINT. COST OF THE CRADLE WITHIN MANHOLE EXCAVATION OR TO CLAY PIPE JOINTS ADJACENT TO MANHOLE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.
6. 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.
7. THE VERTICAL DROP IN INSIDE DROP MANHOLES SHALL NOT EXCEED 4' FOR INFLOWING PIPES SIZED 12" OR SMALLER AND 2' FOR INFLOWING PIPES LARGER THAN 12". THE CROWNS OF INFLOWING PIPES SHALL NEVER BE SET LOWER THAN THE CROWN OF THE OUTFLOWING PIPE.
8. 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.

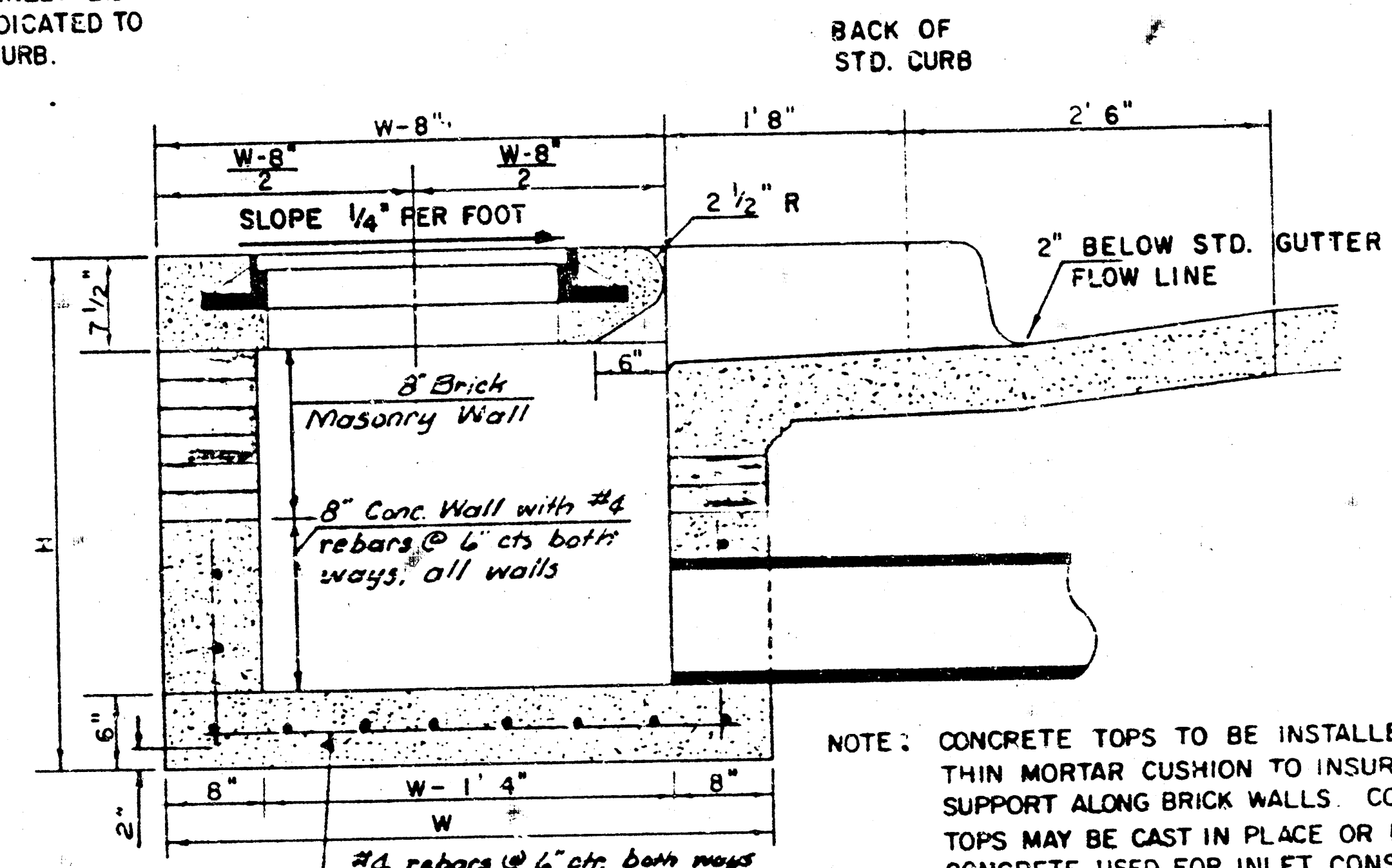


NOTE: INLET TOP REINFORCING SHALL BE SPACED ON 6" MAX. CENTERS. INLET LIDS SHALL BE NOTCHED OUT AS INDICATED TO FACILITATE CONSTRUCTION OF CURB.

NOTE: b3 bar to be bent to clear manhole frame

TRANSITION CURB TO MATCH INSIDE OF INLET WALL THROUGH RADIUS

PLAN



SECTION A-A

NOTE: 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.

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

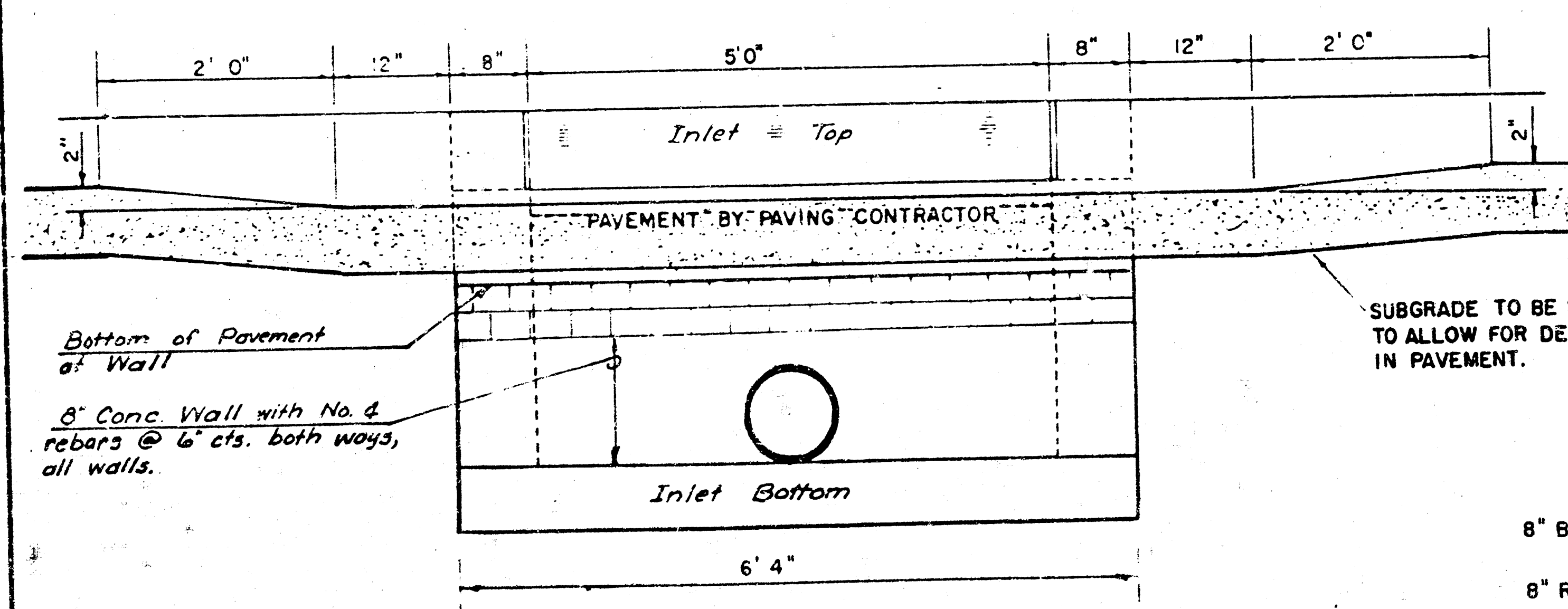
BENDING DIAGRAM

STEEL SCHEDULE

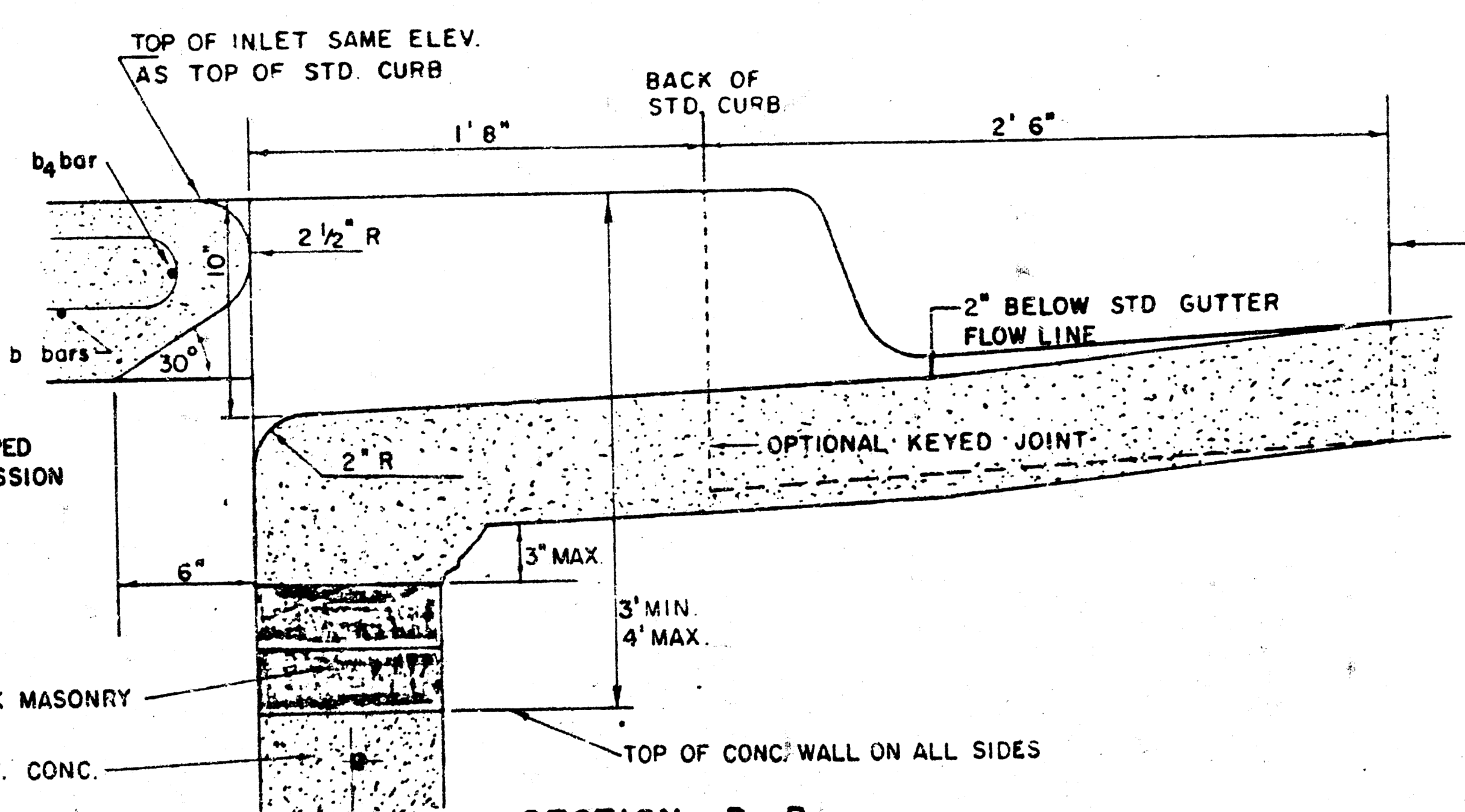
BAR	a1	a2	a3	b1	b2	b3	b4	WT. LBS.
NUMBER	4	4	2	1	3	5	7	9
SIZE	#4	#4	#4	#4	#4	#4	#4	#4
W=4'4"	7'1"	8'3"	4'0"	6'1"	-	-	-	1'9"
W=5'4"	9'1"	10'3"	5'0"	6'1"	-	-	-	1'9"
W=6'4"	11'1"	12'3"	6'0"	6'1"	-	-	-	1'9"
W=7'4"	13'1"	14'3"	7'0"	6'1"	-	-	-	1'9"
W=8'4"	15'1"	16'3"	8'0"	6'1"	-	-	-	1'9"

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

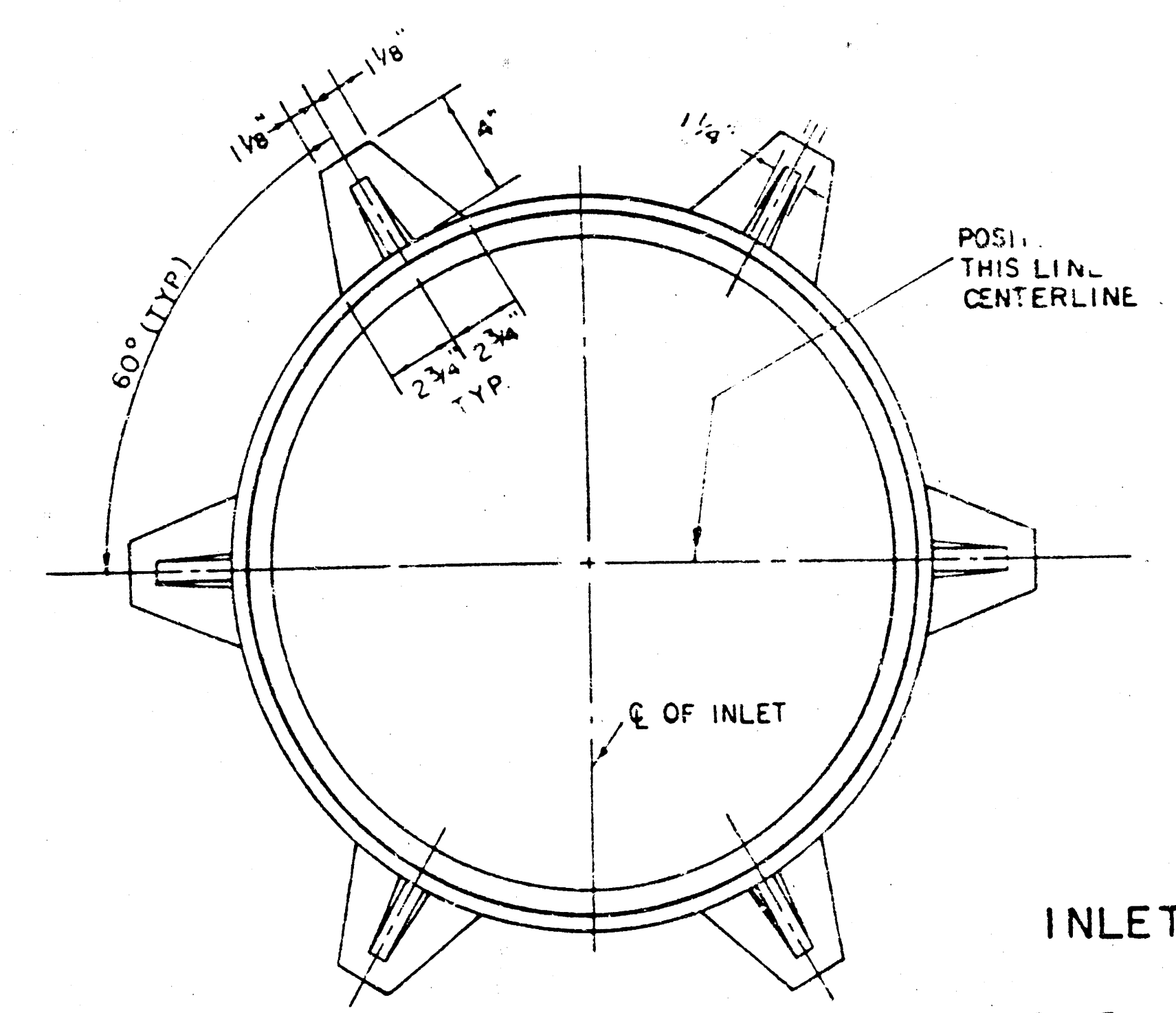
W	PRE-CAST TOP SIZE	PIPE SIZE	CU. YD. CONC.
4'4"	3'8" x 6'4" x 7 1/2"	21" & SMALLER	0.38 ±
5'4"	4'8" x 6'4" x 7 1/2"	24" & 30"	0.51 ±
6'4"	5'8" x 6'4" x 7 1/2"	36" & 42"	0.64 ±
7'4"	6'8" x 6'4" x 7 1/2"	48" & 54"	0.77 ±
8'4"	7'8" x 6'4" x 7 1/2"	60" & 66"	0.90 ±



SECTION C-C



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.

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

MARCH 1984

FINAL PLAT OF
EXECUTIVE PARK AT TALL
AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS

I, Michael D. Harding, a Civil Engineer in Kansas, do hereby certify that I have been in responsible charge of surveying and platting of "Executive Park at Tallgrass", an addition to Wichita, Sedgwick County, Kansas, into lots, blocks and reserves, the same being accurately set forth in the accompanying plat and described as follows:

A tract of land in the southwest quarter of Section 5, Township 27 North, Range 2 East of the 6th P.M., more particularly described as follows:

Beginning at the intersection of the north right-of-way line of 22nd Street North and the east right-of-way line of Rock Road, said point being 875.00 feet north and 50.00 feet east of the southwest corner of said Section 5; thence northerly along the east right-of-way line of said Section 5; thence northerly along the east right-of-way line of Rock Road bearing N 1° 01' 02" W, 436.43 feet; thence S 89° 58' 58" E, 16' 02" W, 555.00 feet; thence S 89° 06' 26" E, 43.28 feet; thence S 0° 33' 34" E, 316.00 feet; thence S 43° 58' 58" W, 407.13 feet; thence S 88° 58' 58" W, 114.91 feet to a point on a curve to the left having a radius of 50.00 feet and a central angle of 134° 56' 47" and a long chord bearing S 49° 57' 34" W, 92.37 feet; thence along said curve bearing S 49° 57' 34" W, 92.37 feet; thence along said curve bearing S 49° 57' 34" W, 92.37 feet to the point of beginning, containing 13.8 acres, more or less. The design element recorded on file 567, page 555, is being used and applied by virtue of K.S.A. 12-32(b). I hereby certify that the details on this plat are correct to the best of my knowledge and belief this 27 day of July 1983.

Michael D. Harding
Michael D. Harding, P.E.
Mid-Kansas Engineering Consultants, P.A.
240 North Rock Road, Suite 130
Wichita, Kansas 67206

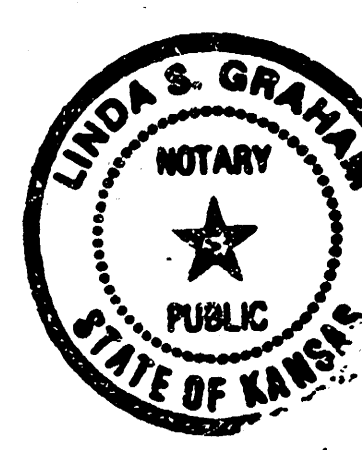
Know all men by these presents that the undersigned property owners of the land as above and forth in the Engineers Certificate have caused the same to be surveyed and platted into lots, blocks and reserves, the same to be known as "Executive Park at Tallgrass", an addition to Wichita, Sedgwick County, Kansas. Easements for construction and maintenance of public utilities and drainage as indicated on the accompanying plat are hereby granted. Reserves are platted for construction and maintenance of public utilities, landscaping and irrigation. Reserve A is also platted for drainage, parking and private drives. Reserve B is also platted for a wall. Reserves C and D are also platted for a wooden fence. The building setbacks shall be in accordance with the Tallgrass Community Unit Plan (C.U.P.-92) as filed in the City of Wichita, Sedgwick County Metropolitan Area Planning Department Office.

Tallgrass Company, a partnership Independence Company
By: *William F. Biner* By: *E.D. Ritchie*
William F. Biner E.D. Ritchie

STATE OF KANSAS
COUNTY OF SEDGWICK ss:

Be it remembered that on this 27th day of July 1983, before me, a Notary Public in and for said State of Kansas, came Tallgrass Company, a partnership by *William F. Biner* and Independence Company by *E.D. Ritchie*, to me personally known to be the same person(s) who executed the foregoing instrument of writing and duly acknowledged the execution of the same. In testimony whereof I have hereunto set my hand and affixed my notarial seal the day and year above written.

Linda S. Graham Notary Public
Linda S. Graham
My Appointment Expires 2-9-86



STATE OF KANSAS
COUNTY OF SEDGWICK ss:

This is to certify that this instrument was filed for record in the Register of Deeds Office at 10:00 A.M. on the 9th day of September, 1983.

Betta F. McCart Register of Deeds
Betta F. McCart

Pat Kattler Deputy
Pat Kattler

This plat of "Executive Park at Tallgrass" has been submitted to and approved by the Wichita-Sedgwick County Metropolitan Area Planning Commission, Wichita, Kansas.

Dated this 30th day of June, 1983.

Wichita-Sedgwick County Metropolitan Area Planning Commission

Robert A. Lakin Chairman
Robert A. Lakin

Robert A. Lakin Secretary
Robert A. Lakin

This plat approved and all dedications shown herein, if any, accepted by the City Commission of the City of Wichita, Kansas this 21st day of August, 1983.

Margaret Wright Mayor
Margaret Wright

Donald C. Cline City Clerk
Donald C. Cline

This plat approved and all dedications shown herein, if any, accepted by the Board of County Commissioners of Sedgwick County, Kansas this 9th day of September, 1983.

James H. Smith Chairman
James H. Smith

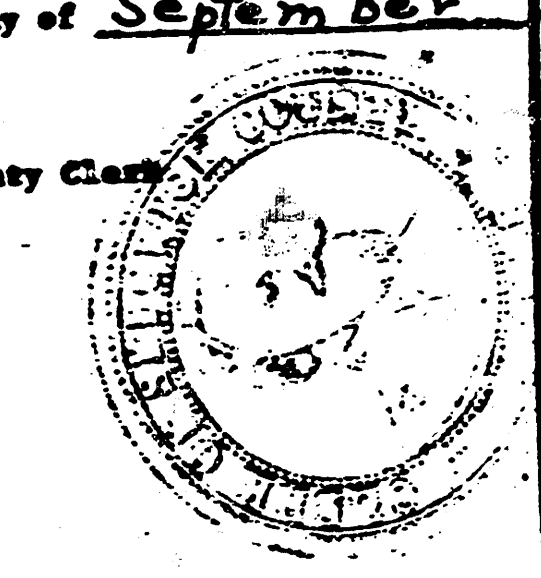
James H. Smith Commissioner
James H. Smith

James H. Smith Commissioner
James H. Smith

Attest: *Dorothy E. White* County Clerk
Dorothy E. White

Entered on transfer record this 9th day of September 1983.

Dorothy E. White County Clerk
Dorothy E. White



SCALE: 1" = 50'
● = Iron
Sdg. Sthls. per CUR (DP-92)

Revised 1-5-84

W/4 Cor. Sec. 5
T27S, R2E, 6th P.M.

SW Cor. Sec. 5
T27S, R2E, 6th P.M.

22ND STREET NORTH