

STORM SEWER PLANS FOR
COTTONWOOD VILLAGE SIXTH
S.W.S. NO. 303
PROJECT NO.
468-76-245-81524-000-000-001

CITY OF WICHITA, KANSAS
MICHAEL E. LINDEBAK, CITY ENGINEER
MARCH, 1987

GENERAL NOTES

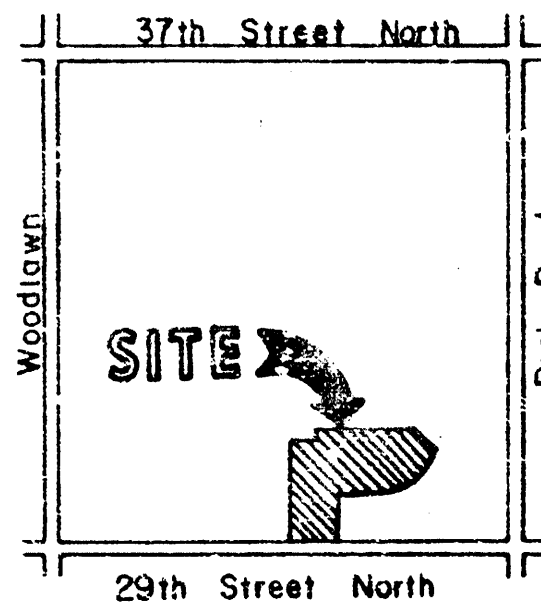
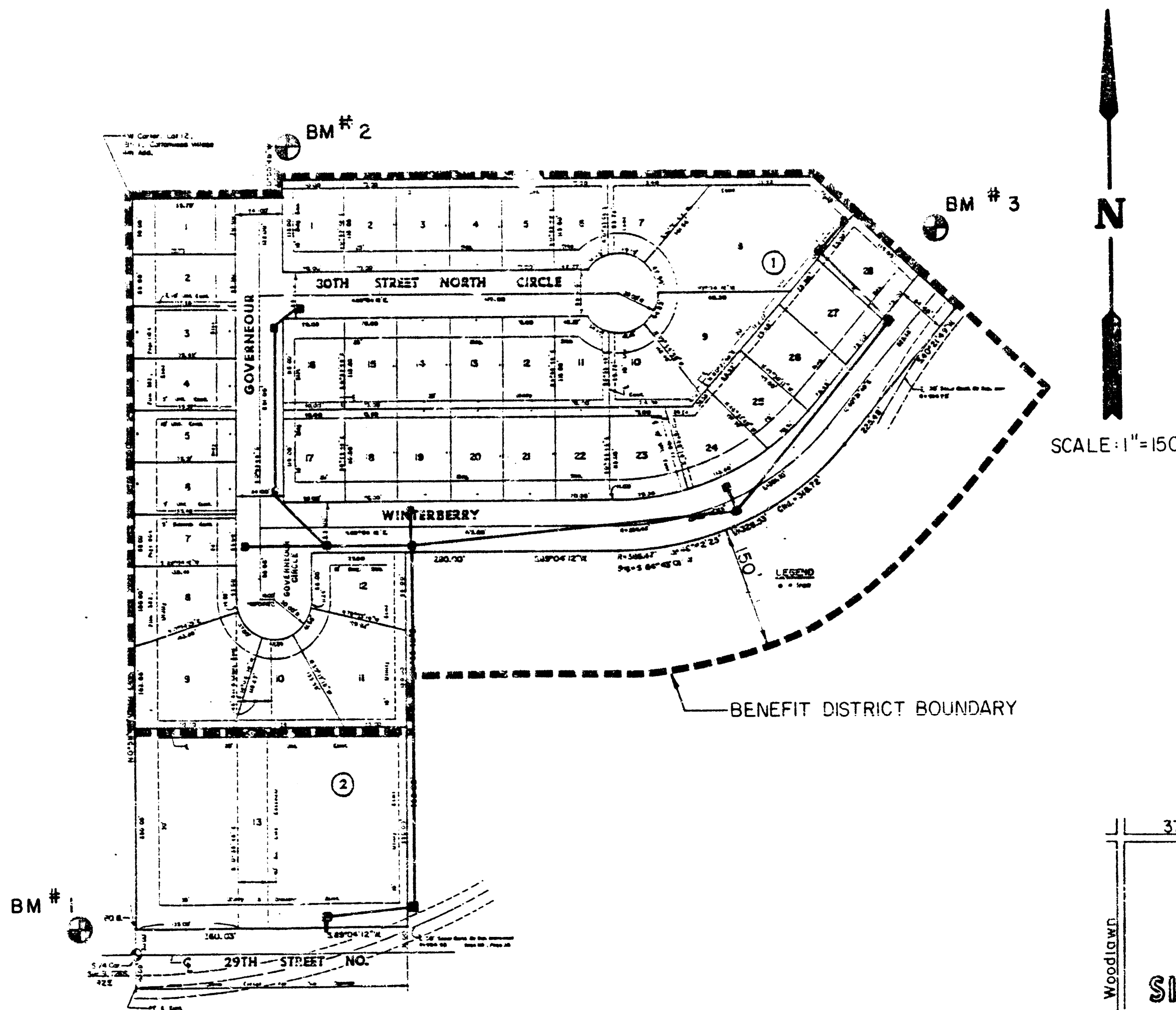
1. THE TOPS OF INLET AND MANHOLE AS NOTED ON THE PLANS MAY VARY SO AS TO MEET PROPOSED TOP OF CURB ELEVATIONS OR PAVEMENT ELEVATIONS. THE FIELD ENGINEER SHALL LOCATE INLETS AND MANHOLES WITH REFERENCE TO PROPOSED PAVING PLANS OF THE PERTINENT STREETS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING 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. CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES OF CONSTRUCTION SCHEDULING.
4. EXISTING UTILITIES AND THEIR LOCATIONS, 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 PLAN LOCATIONS SHOWN ARE NOT GUARANTEED. ADDITIONAL EXISTING UTILITIES MAY ALSO BE ENCOUNTERED.

NOTE: NOTIFY THE FOLLOWING COMPANIES PRIOR TO ANY EXCAVATION:

ARKLA GAS COMPANY	942-3350
BELL TELEPHONE COMPANY	1-316-571-2115
CABLEVISION	262-0661
KITL COMPANY	263-7511
KANSAS GAS & ELECTRIC	264-1141
KANSAS ONE-CALL	1-800-344-7253
CITIES SERVICE	324-0401
KANSAS GAS SUPPLY	1-316-254-7243
CONTINENTAL PIPELINE COMPANY	1-316-681-2081
CO-OP REFINERY PIPELINE	1-316-221-2107

BENCH MARKS

- B.M. #1 City of Wichita Bench Mark Disc. 75' West & 30.3' North of 1/4 Sec. Corner & 55' North & 85' West of Centerline of Pavement, Gouverneur & 29th Street North. Elev. = 182.56
- B.M. #2 "+ " Cut on Curb at South End of Driveway Return, 3122 Gouverneur, Lot 1, Block 1, Cottonwood Village 5th Addition Elev. = 192.34
- B.M. #3 "+ " Cut on Curb at Centerline of Approach Walk, 7500 Winterberry, Lot 32, Block 1, Cottonwood Village 5th Addition. Elev. = 196.93



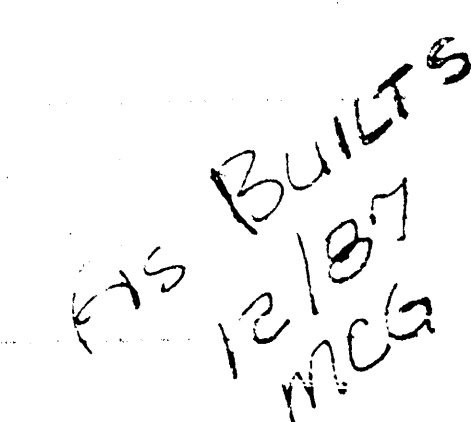
LOCATION MAP

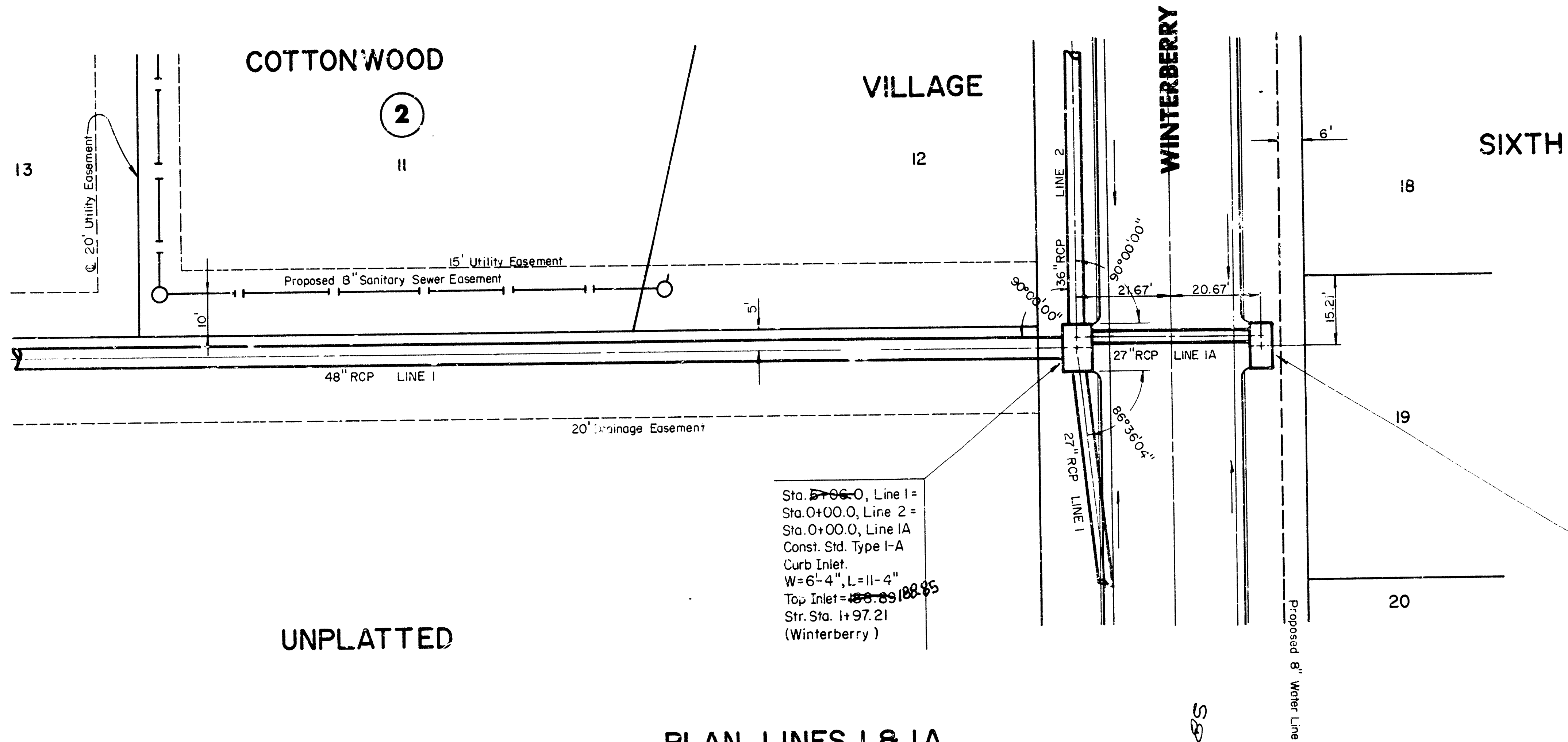
INDEX TO DRAWINGS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	LINE 1
3	LINE 1 & LINE 1A
4	LINE 1 & LINE 1B
5	LINE 1
6	LINE 2
7	LINE 3
8	SPECIAL REINF CONC MANHOLE
9	STANDARD REINF CONC MANHOLE
10	STANDARD SHALLOW MANHOLE
11 - 12	Inlet DETAILS
13	FINAL PLAT

As Built
12/87
MCG

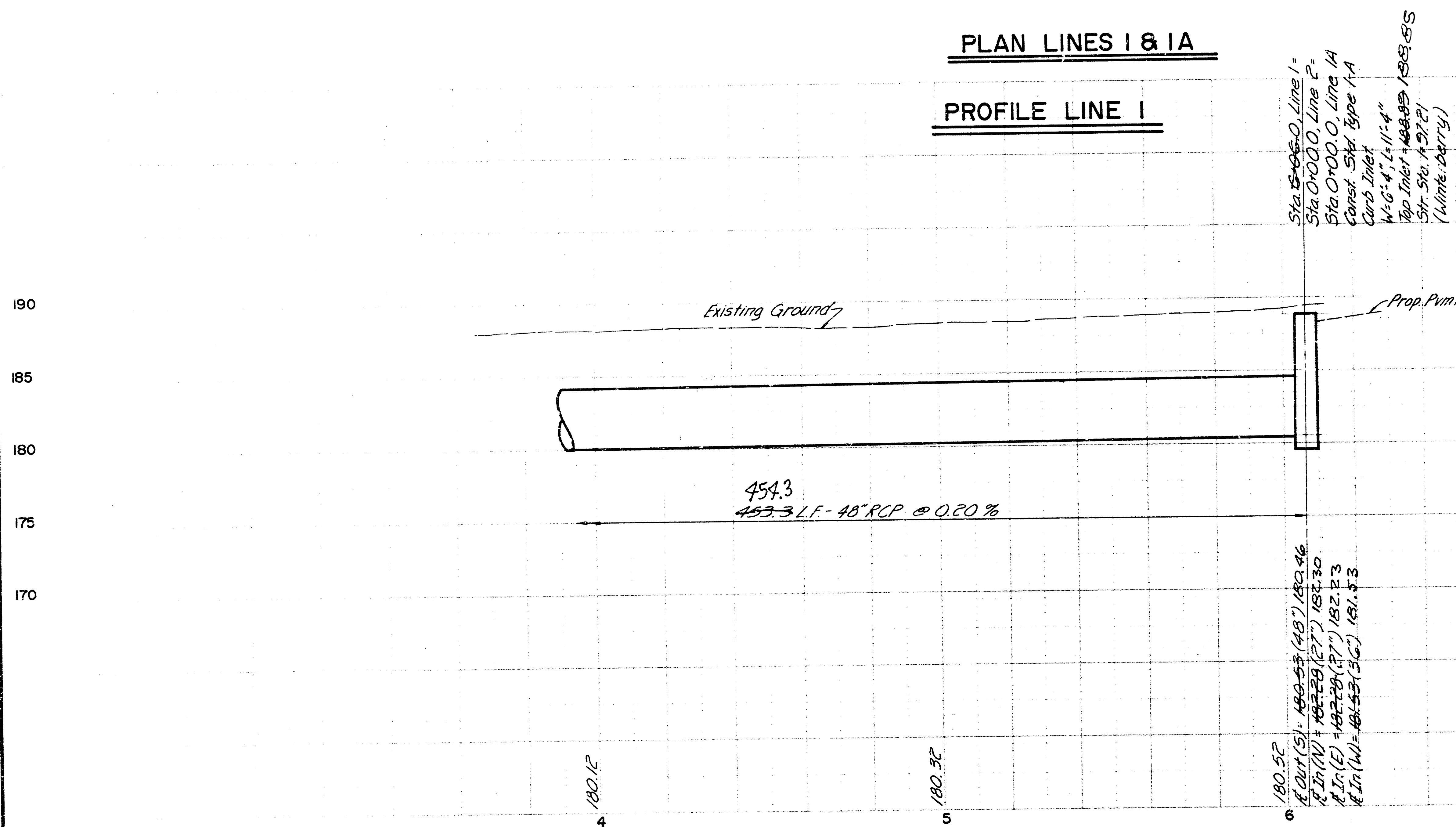
	COTTONWOOD VILLAGE SIXTH STORM WATER SEWER PLANS	R.C.B. S.J.M. MARCH, 1987 NOTE
	MID-KANSAS ENGINEERING CONSULTANTS PA 3500 NORTH ROCK ROAD BUILDING #800 WICHITA, KANSAS 67226	682-6561



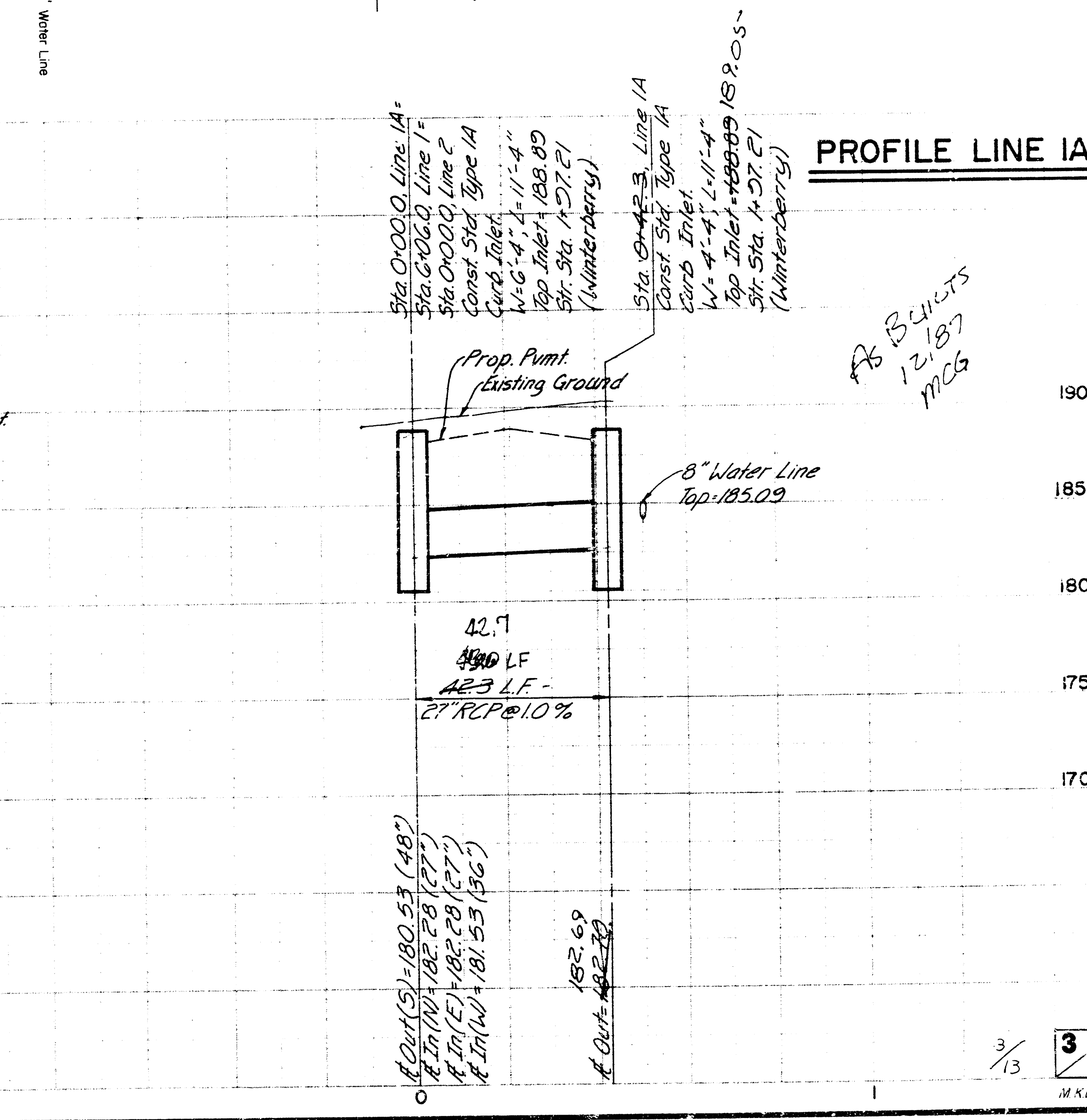


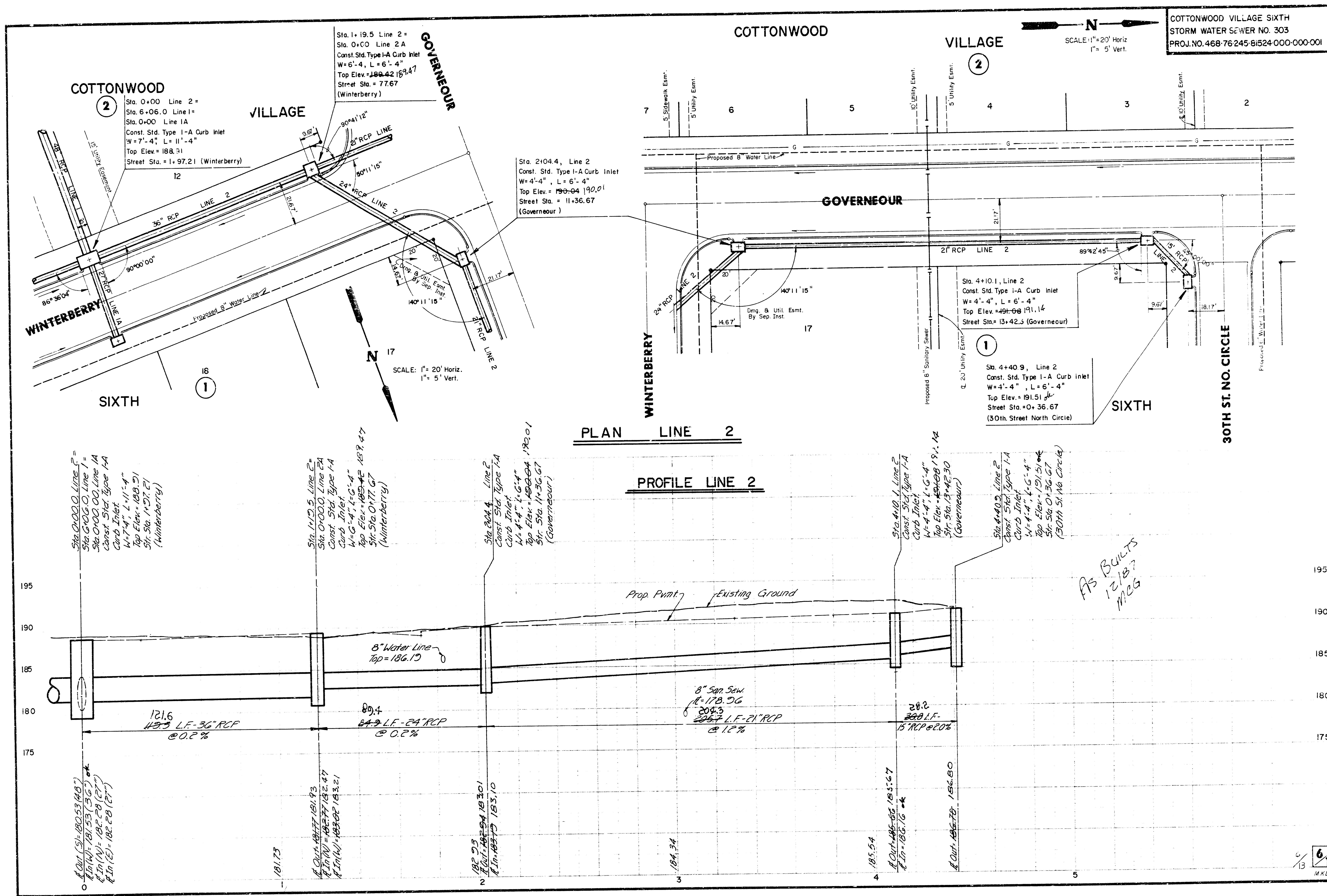
PLAN LINES 1 & 1A

PROFILE LINE 1



PROFILE LINE 1A





COTTONWOOD

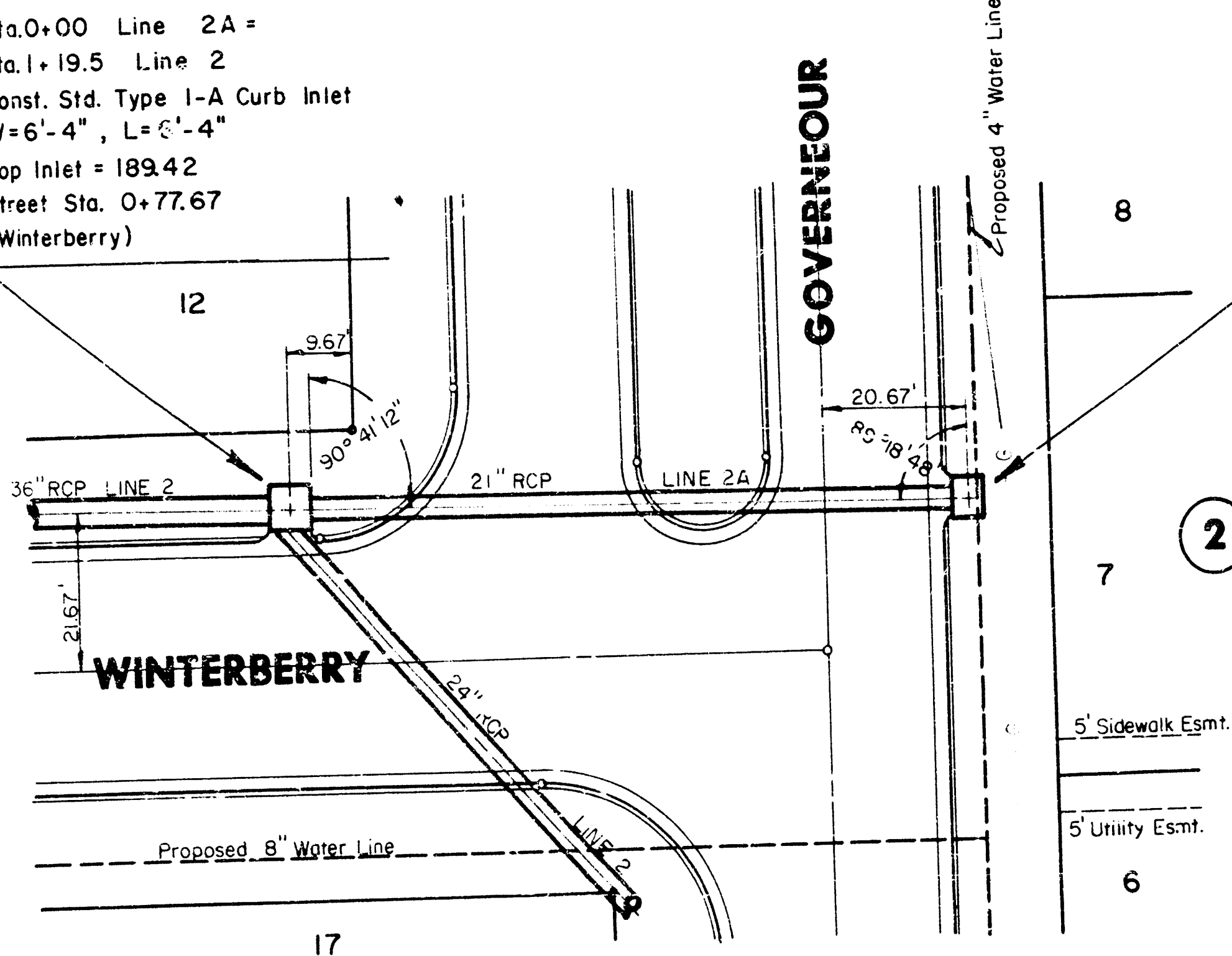
VILLAGE

COTTONWOOD

VILLAGE

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

Sta. 0+00 Line 2A =
Sta. 1+19.5 Line 2
Const. Std. Type I-A Curb Inlet
W=6'-4", L=6'-4"
Top Inlet = 189.42
Street Sta. 0+77.67
(Winterberry)



Sta. 0+98.3 Line 2A
Const. Std. Type I-A Curb Inlet
W=4'-4", L=6'-4"
Top Inlet = 189.78 (189.71)
Street Sta. 10+69.0
(Governor)

Sta. 0+00 Line 3 =
Sta. 13+46.3 Line 1
Const. Std. Type I-A Curb Inlet
W=5'-4", L=6'-4"
Top Inlet = 196.06
Street Sta. 9+27.81
(Winterberry)

Sta. 1+22.8 Line 3
Const. Shallow Type A Manhole
With Deeter #1970 Catch Basin Top &
Std. C. Of Wichita Ring (or approved equal)
Top Elev. = 195.51 (195.43)

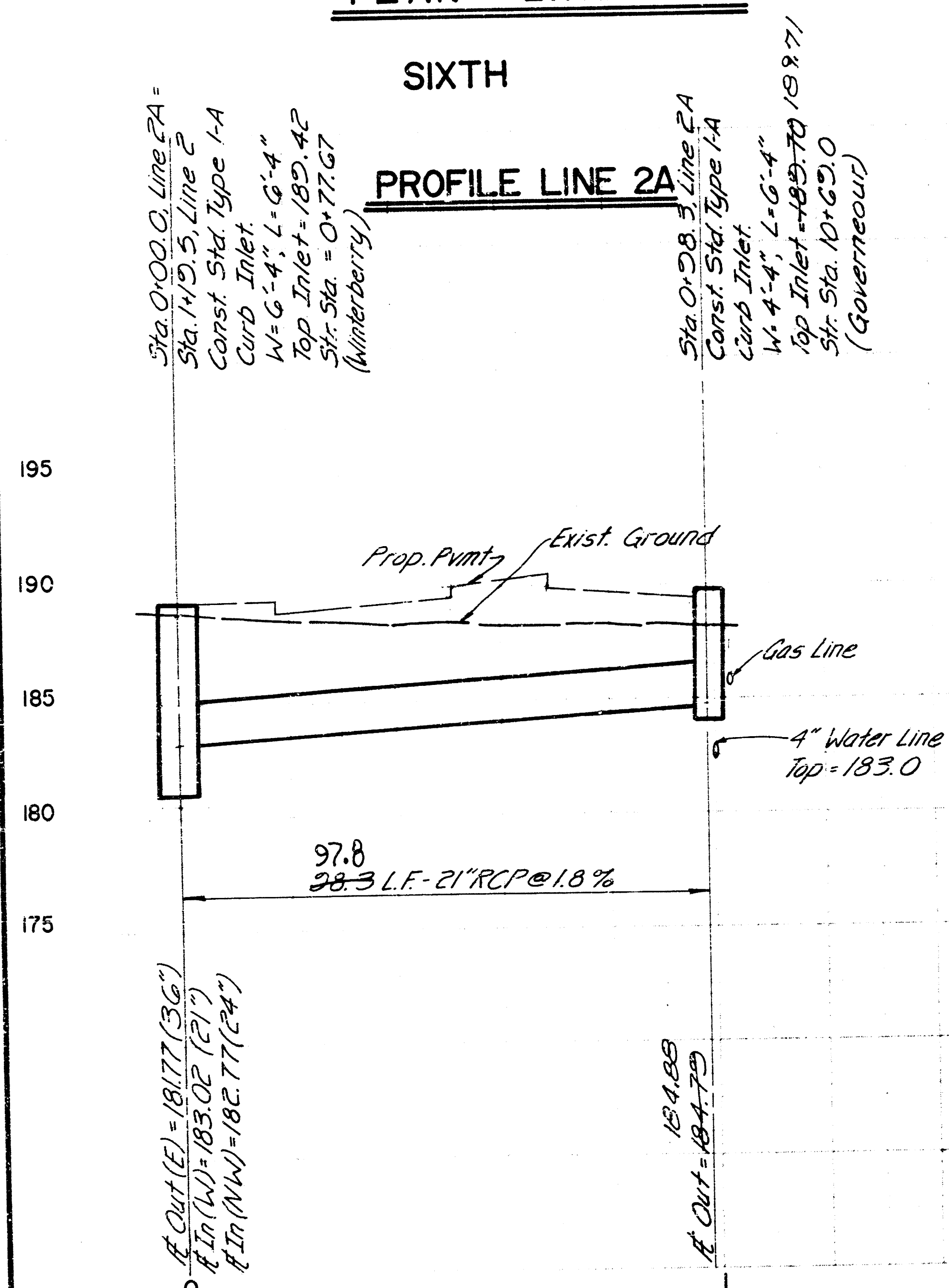
Sta. 1+84.8 Line 3
Const. Shallow Type A Manhole
With Deeter #1970 Catch Basin Top &
Std. City Of Wichita Ring (or approved equal)
Top Elev. = 194.51 (194.4)

PLAN LINE 2A

PLAN LINE 3

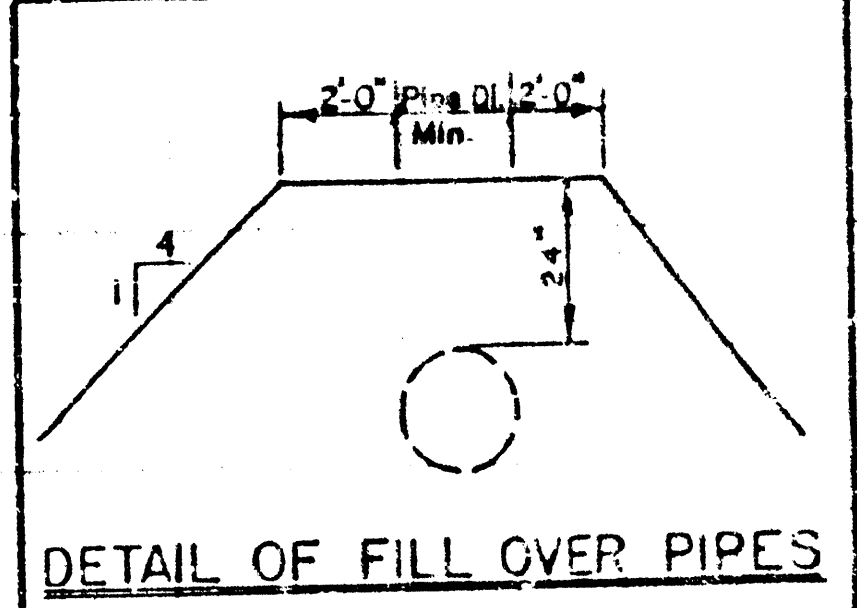
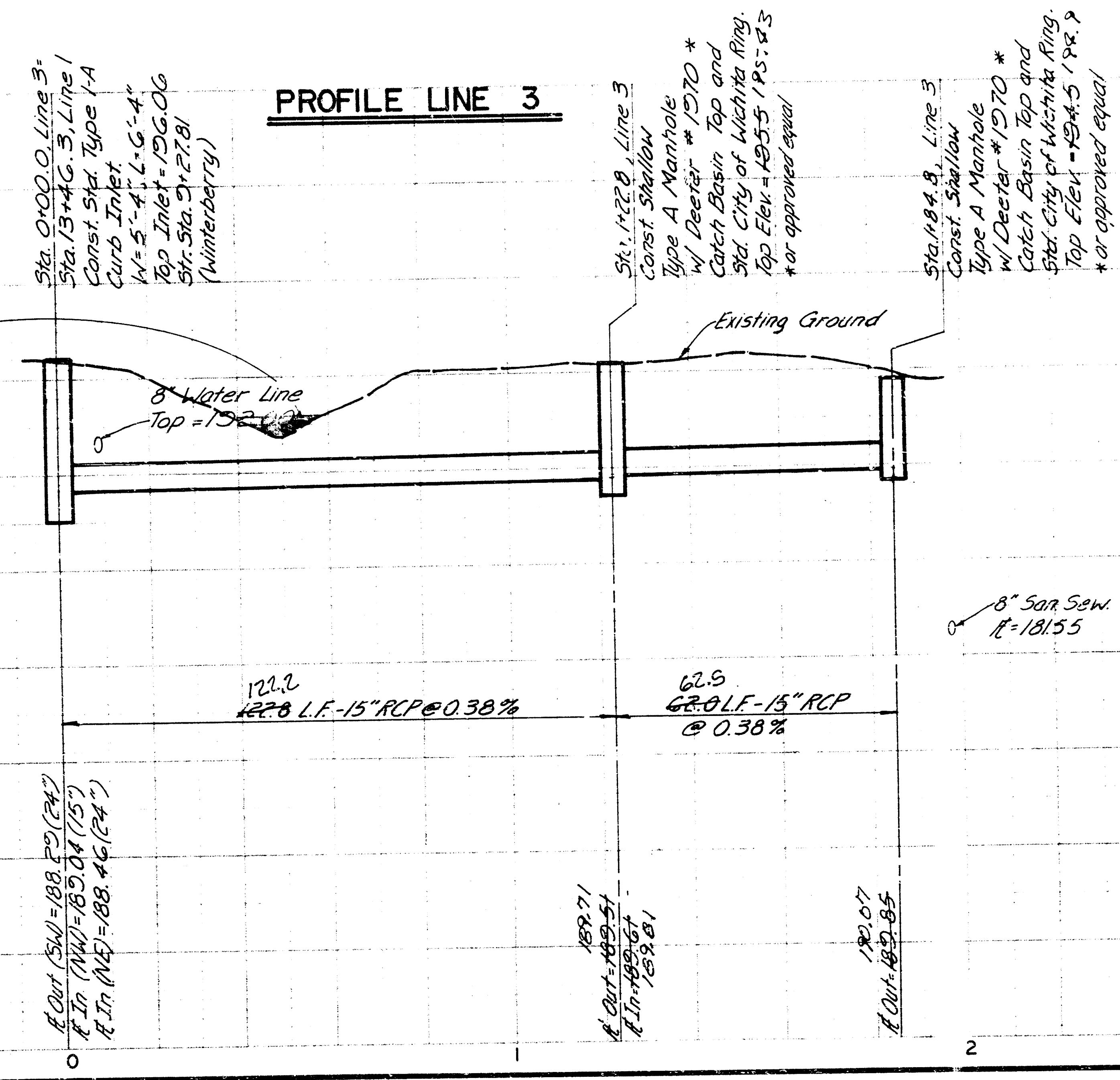
SIXTH

PROFILE LINE 2A

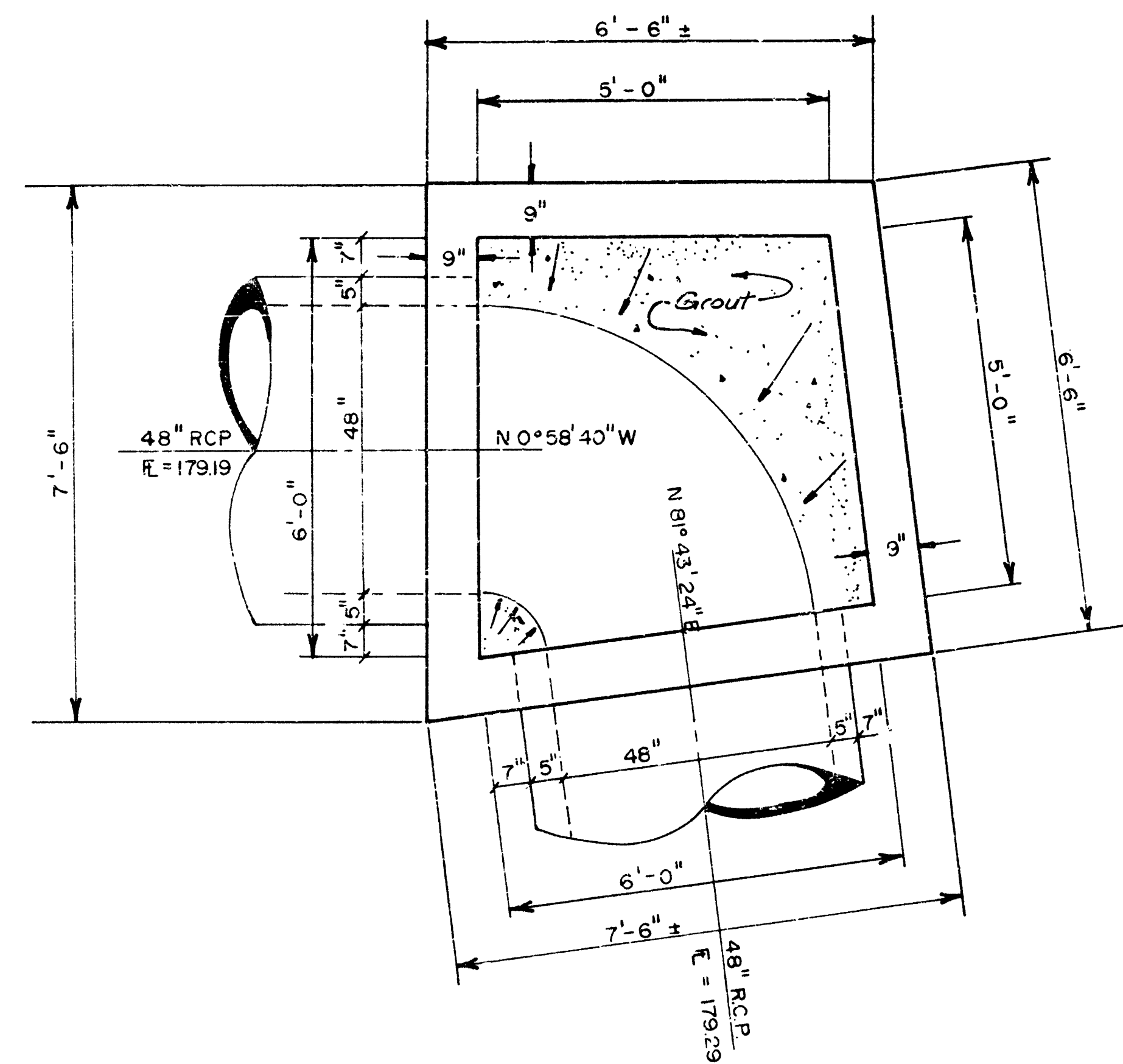


PROFILE LINE 3

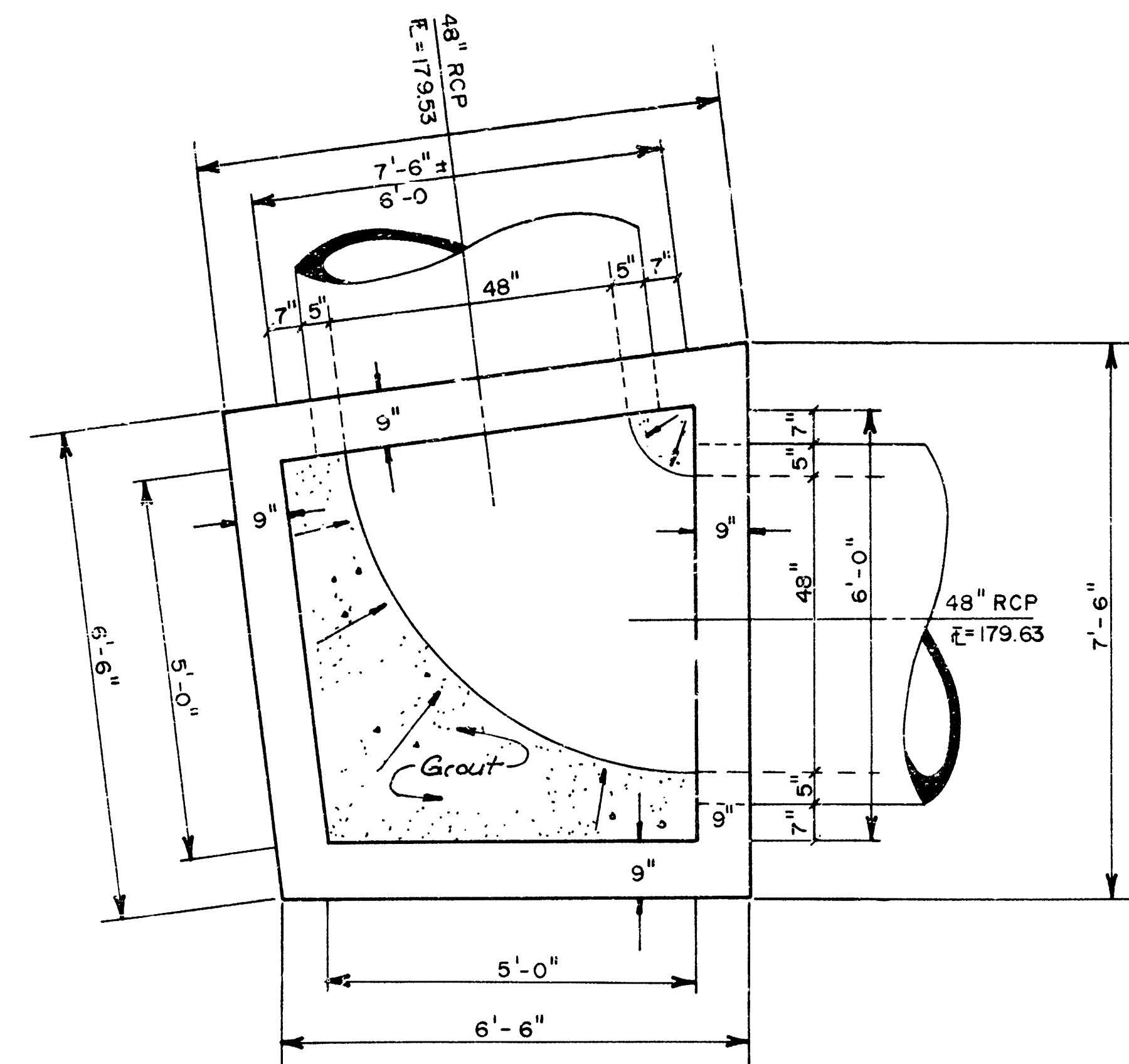
Contractor To Place Compacted
Fill (90% Density) Around And
On Top Of Pipe As Shown In
Detail On This Sheet. Cost
Subsidiary To Project.



AS BUILT
12/87
M.E.G.



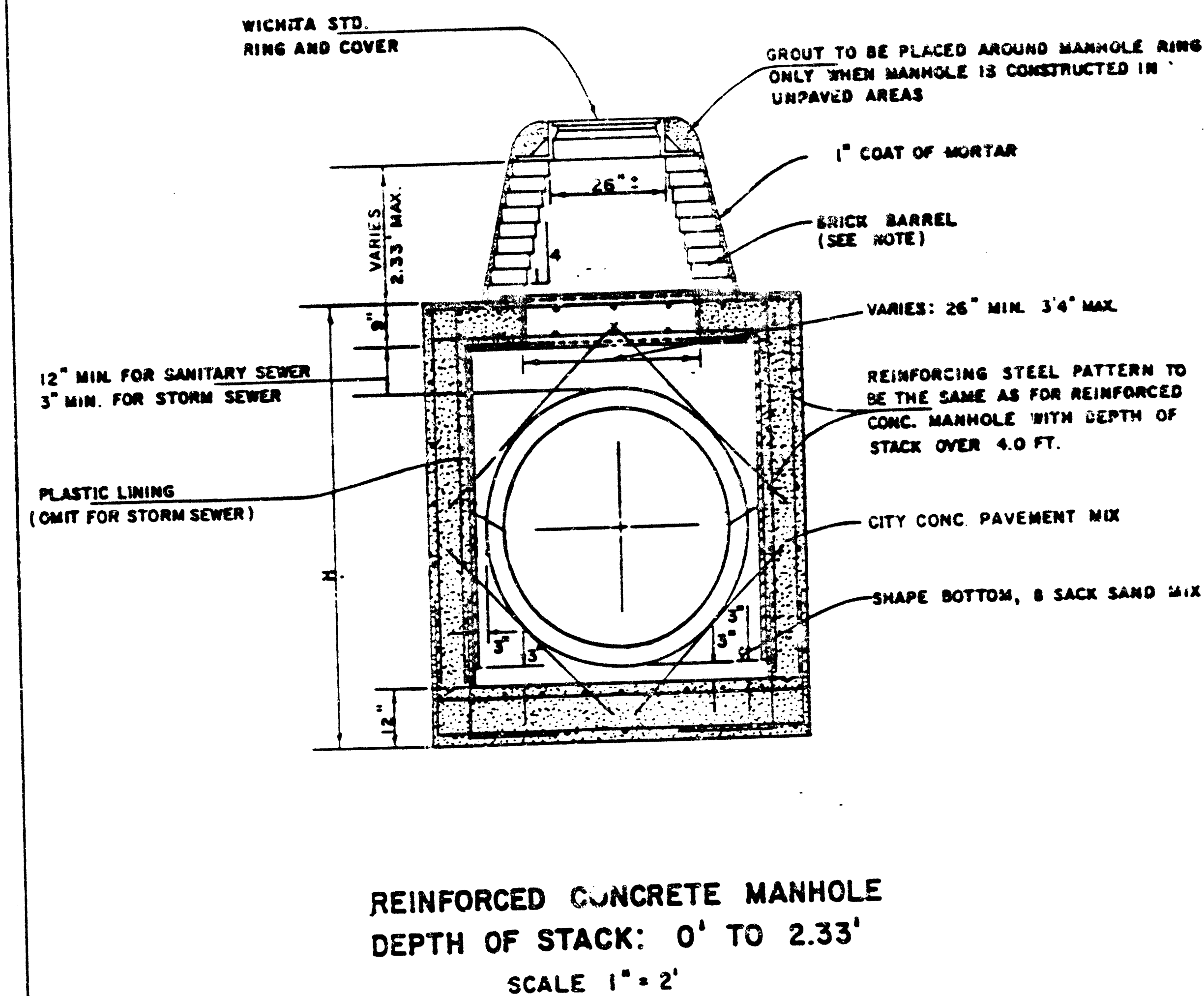
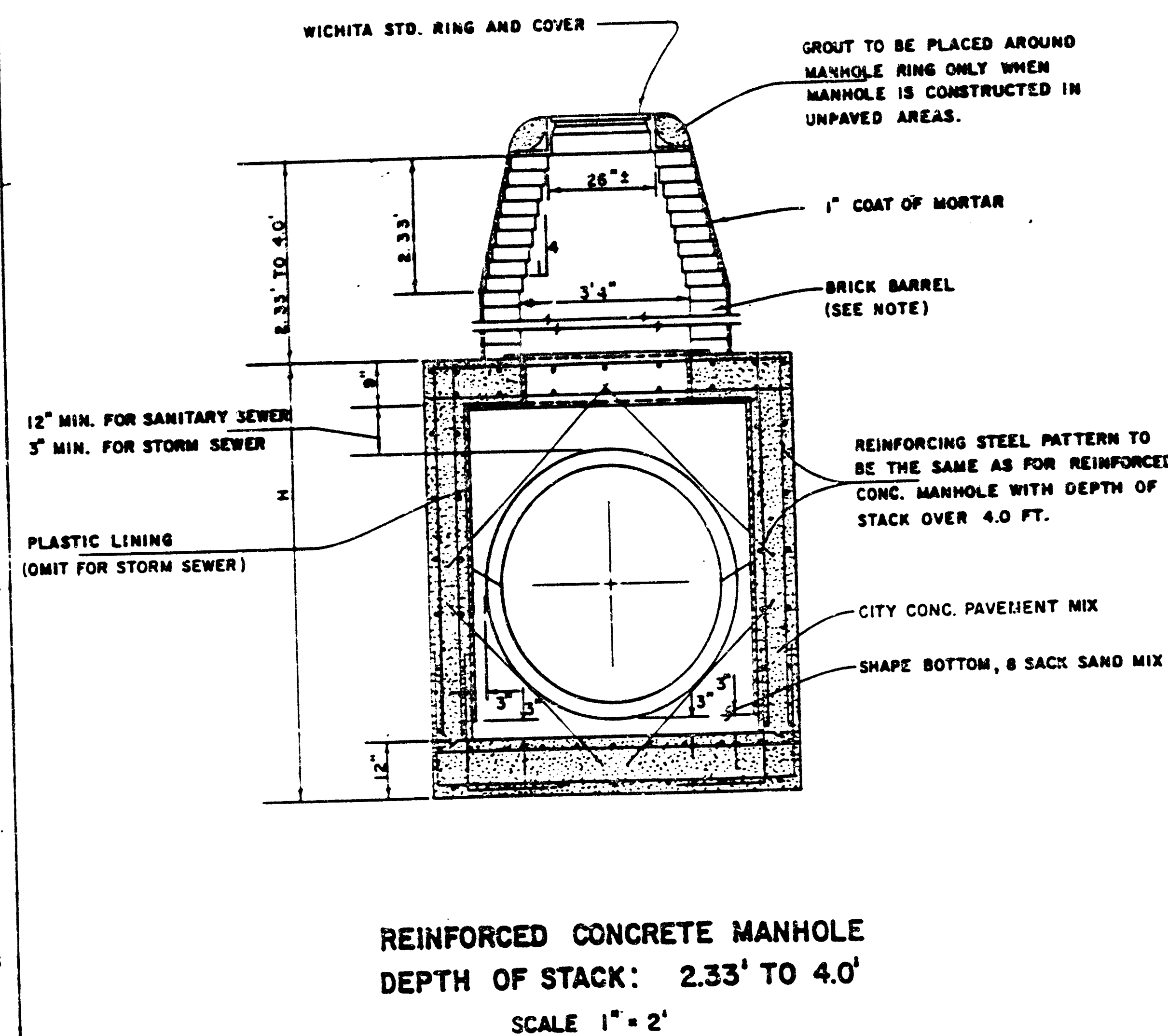
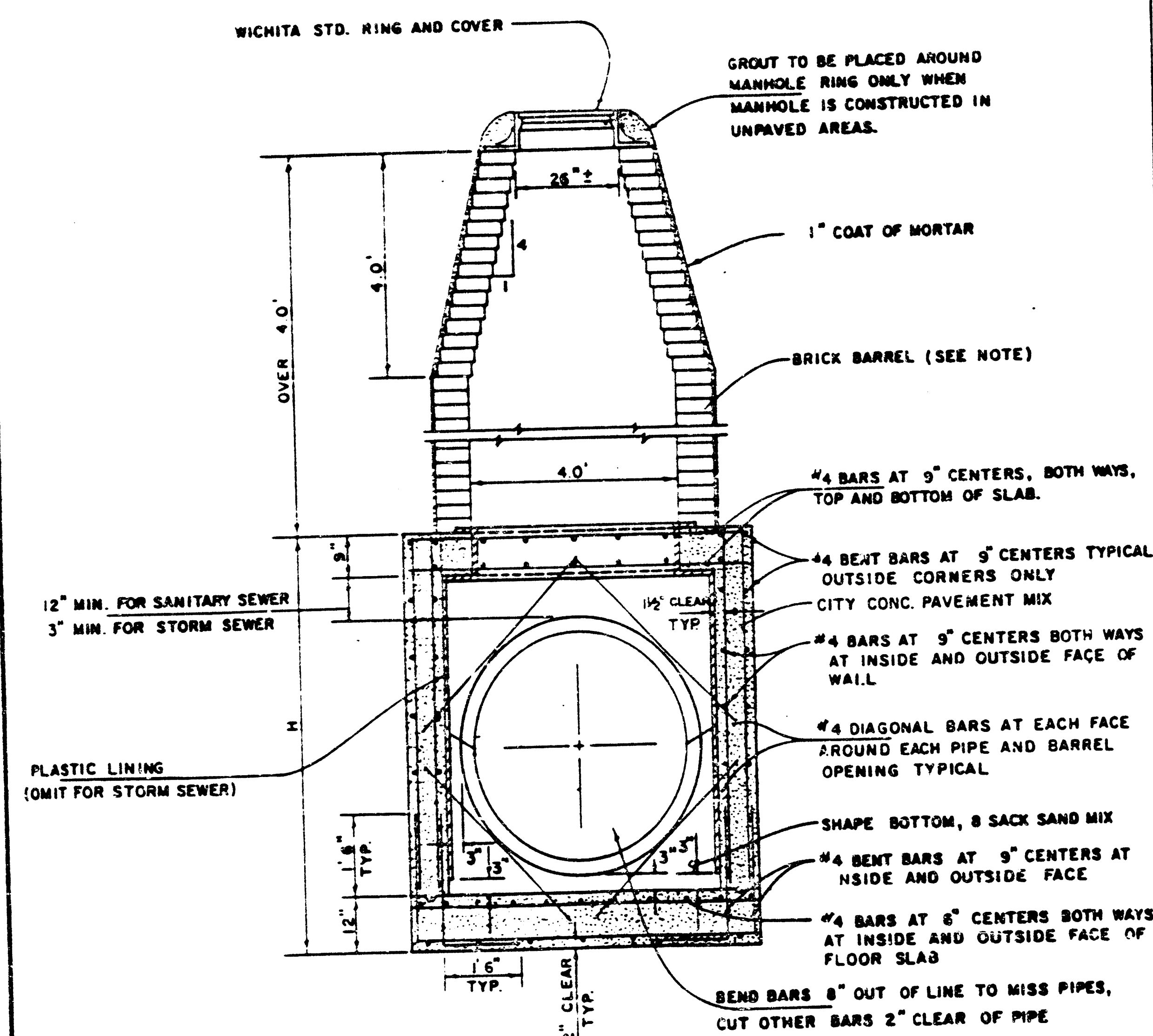
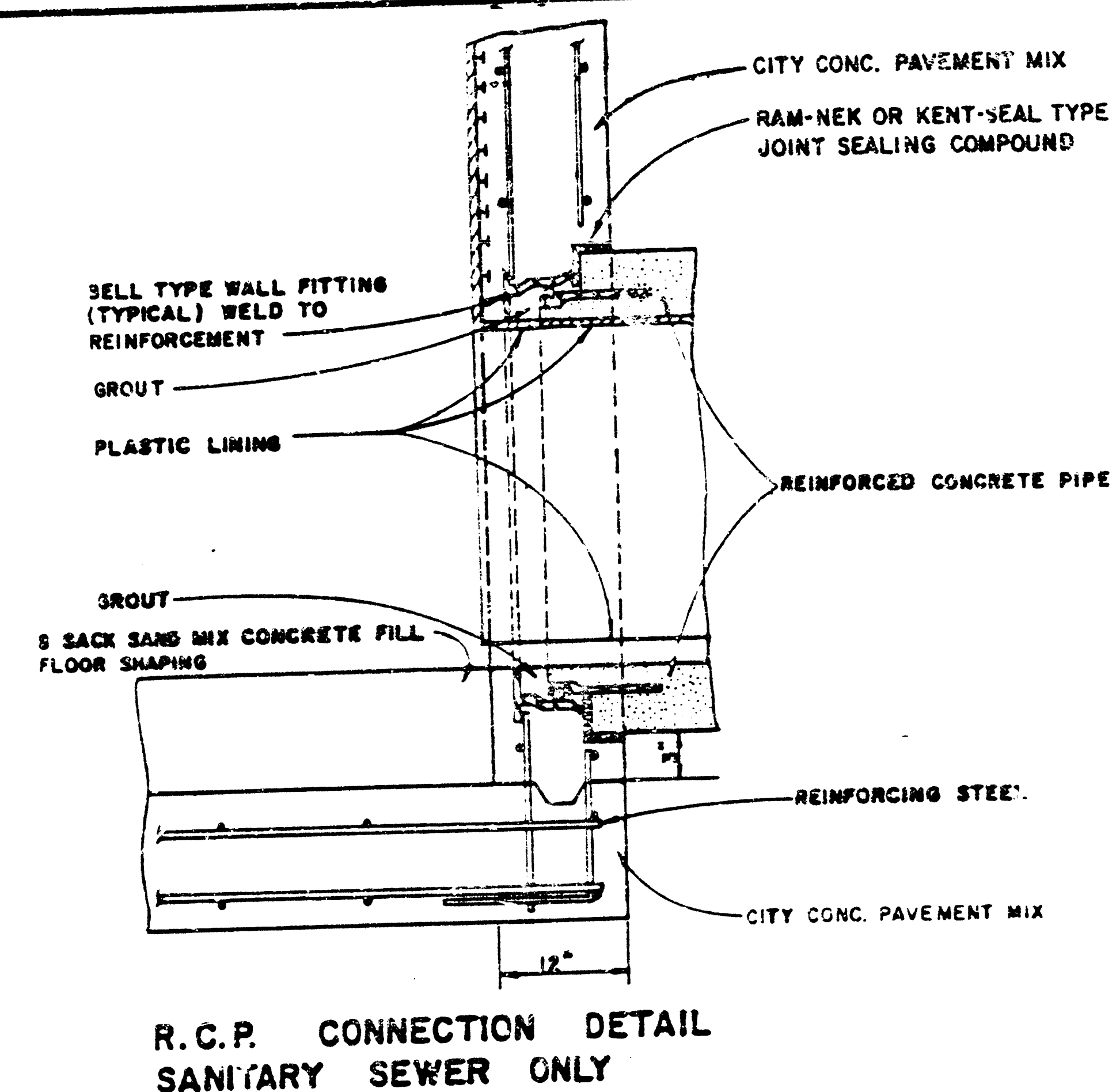
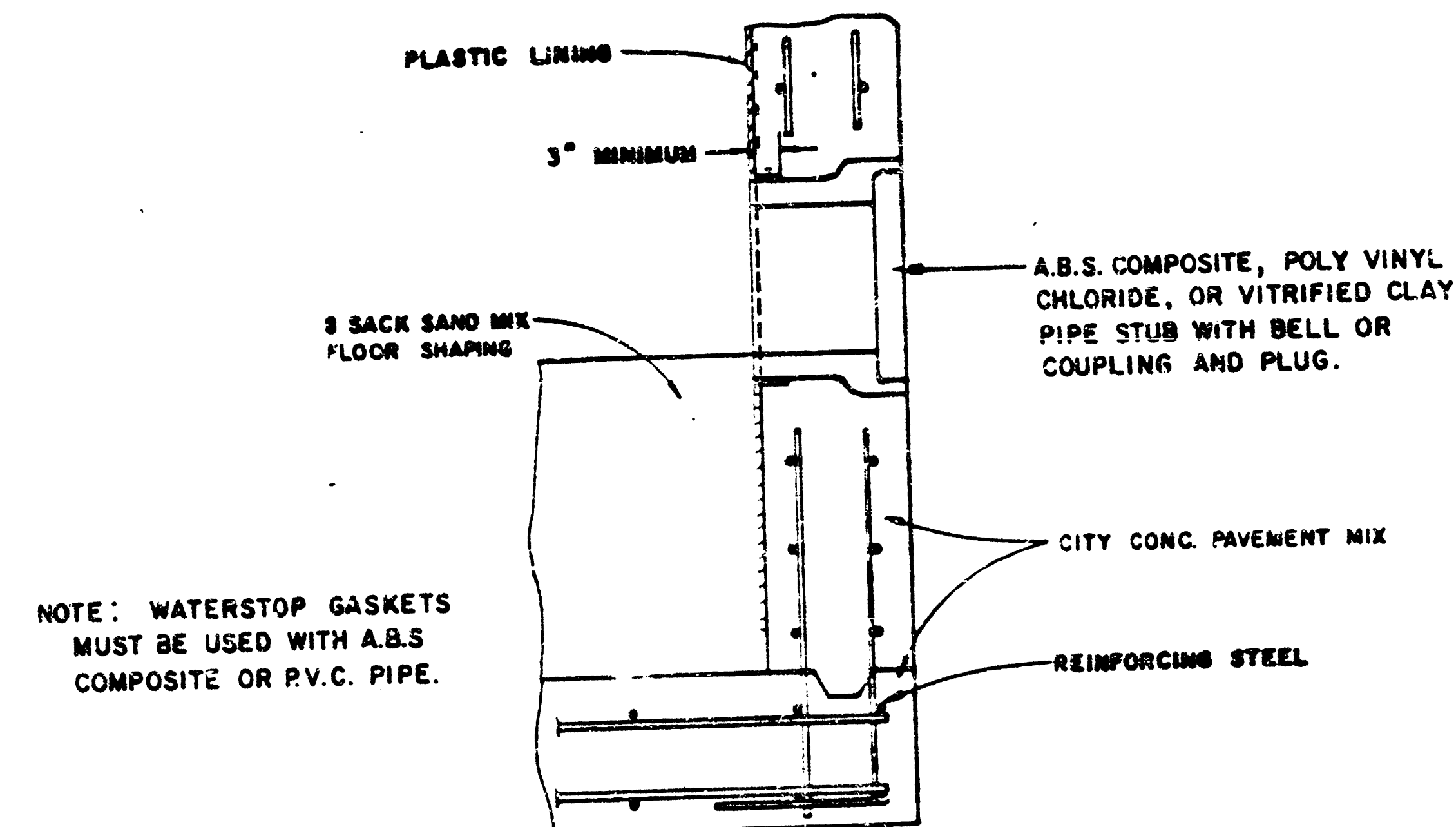
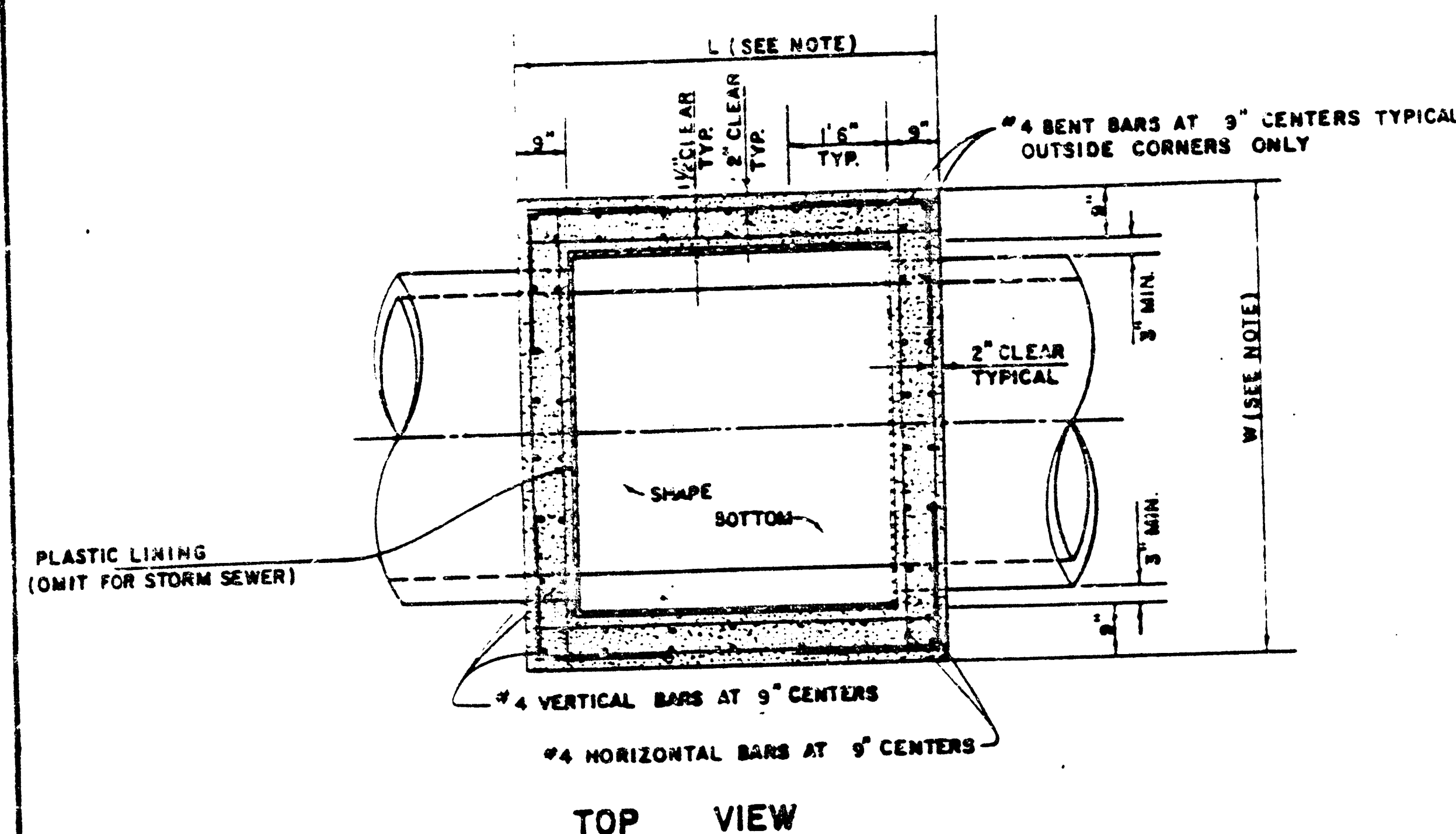
PLAN VIEW
STA. 0+35.4, LINE 1
NO SCALE



PLAN VIEW
STA. 1+52.70, LINE 1
NO SCALE

Note: For Details of these Manholes,
See Standard Manhole Details
on Sheet 2 of 13. This Drawing Shows
Layouts of Manholes Only.

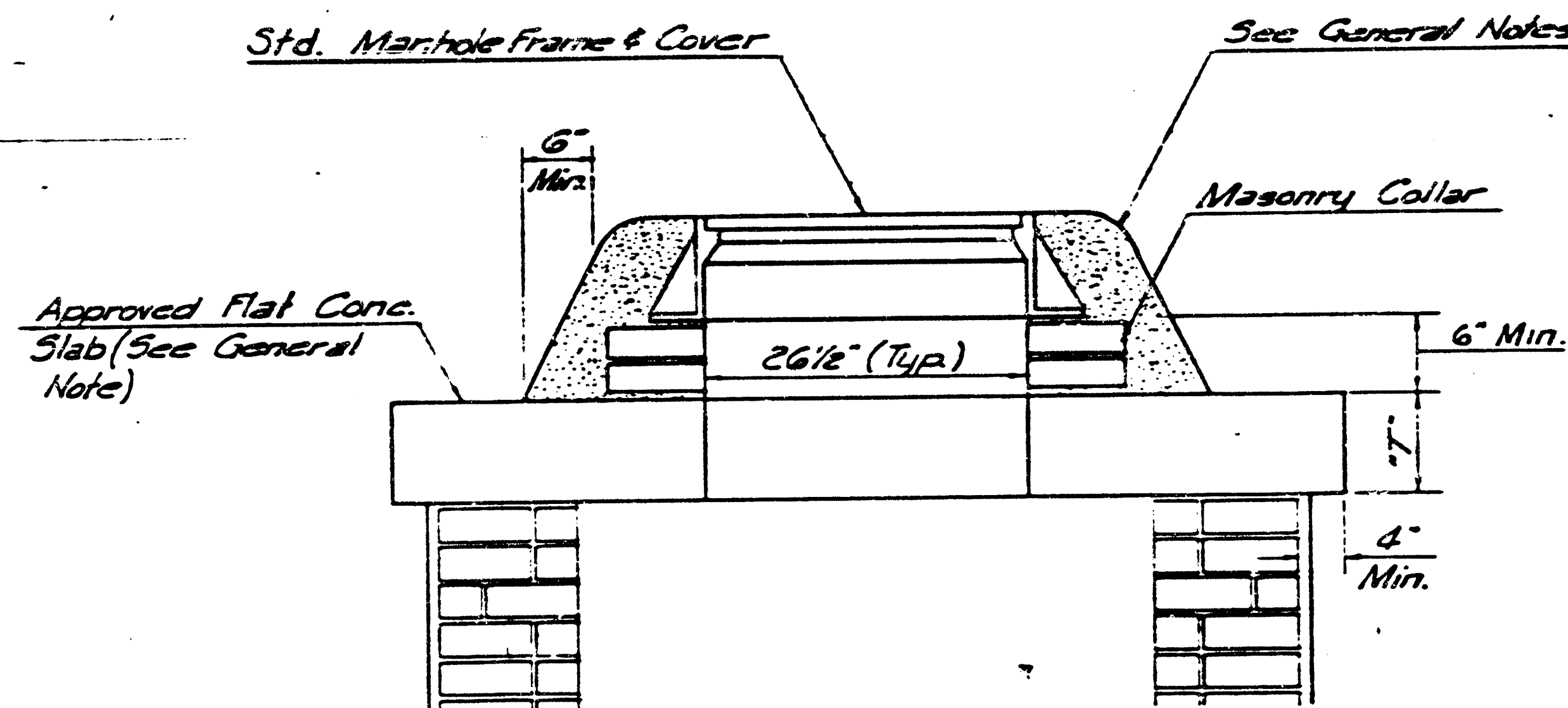
	SPECIAL REINFORCED CONCRETE MANHOLE		DATE: R.C.B. E.C.G. CHECKED BY: DATE: MARCH 2010
	MID-KANSAS ENGINEERING CONSULTANTS PA 3500 NORTH ROCK ROAD BUILDING #800 WICHITA, KANSAS 67226		SHEET 8 / 13 13
	682-6561		13
	13		13



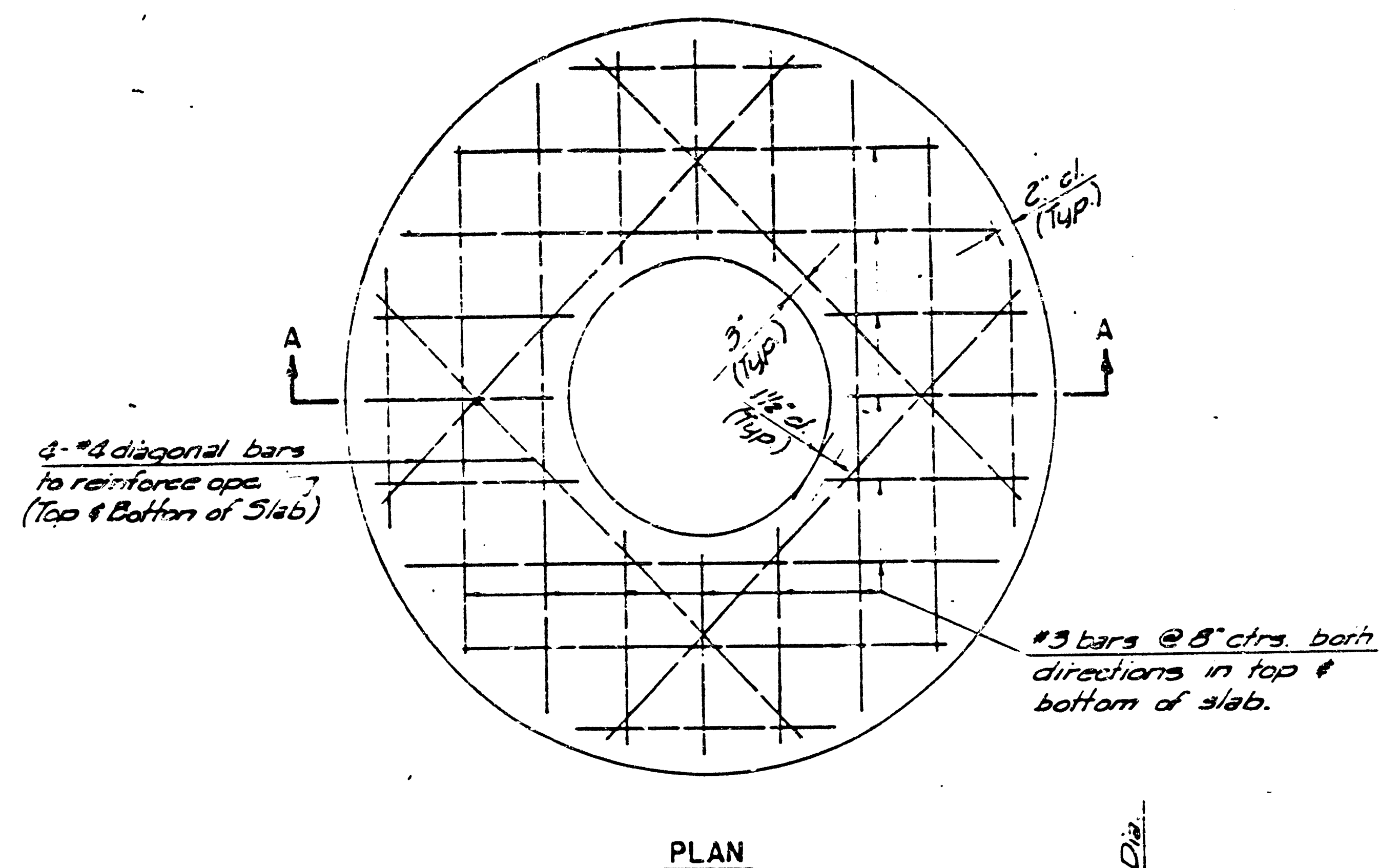
NOTE:
BRICK BARRELS LESS THEN 16' DEEP SHALL HAVE 8" WALLS EXCEPT WHEN LOCATED WITHIN PUBLIC STREET OR ALLEY PAVEMENT THEN THE WALL SHALL BE 12". BRICK BARRELS MORE THEN 16' DEEP SHALL HAVE 12" WALLS. THE "L" AND "W" DIMENSIONS SHALL BE A MINIMUM OF 5' 6" FOR BRICK BARRELS WITH 8" WALLS AND 6' 2" FOR BRICK BARRELS WITH 12" WALLS WHEN THE BRICK BARRELS ARE OVER 4 FT. IN HEIGHT. COMPLETED MANHOLE SHALL BE WITHOUT LEAKS AND WATERTIGHT.

REVISED 1-7-85

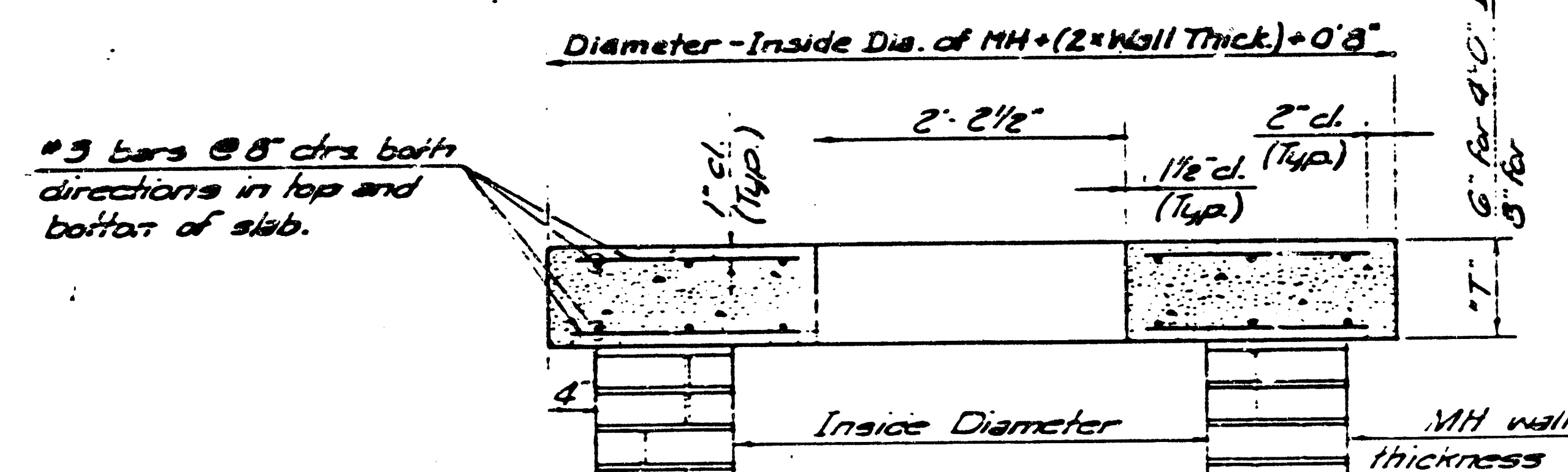
STANDARD DETAILS
REINFORCED CONCRETE MANHOLES
CITY OF WICHITA
FEBRUARY 1984



MASONRY COLLAR DETAIL

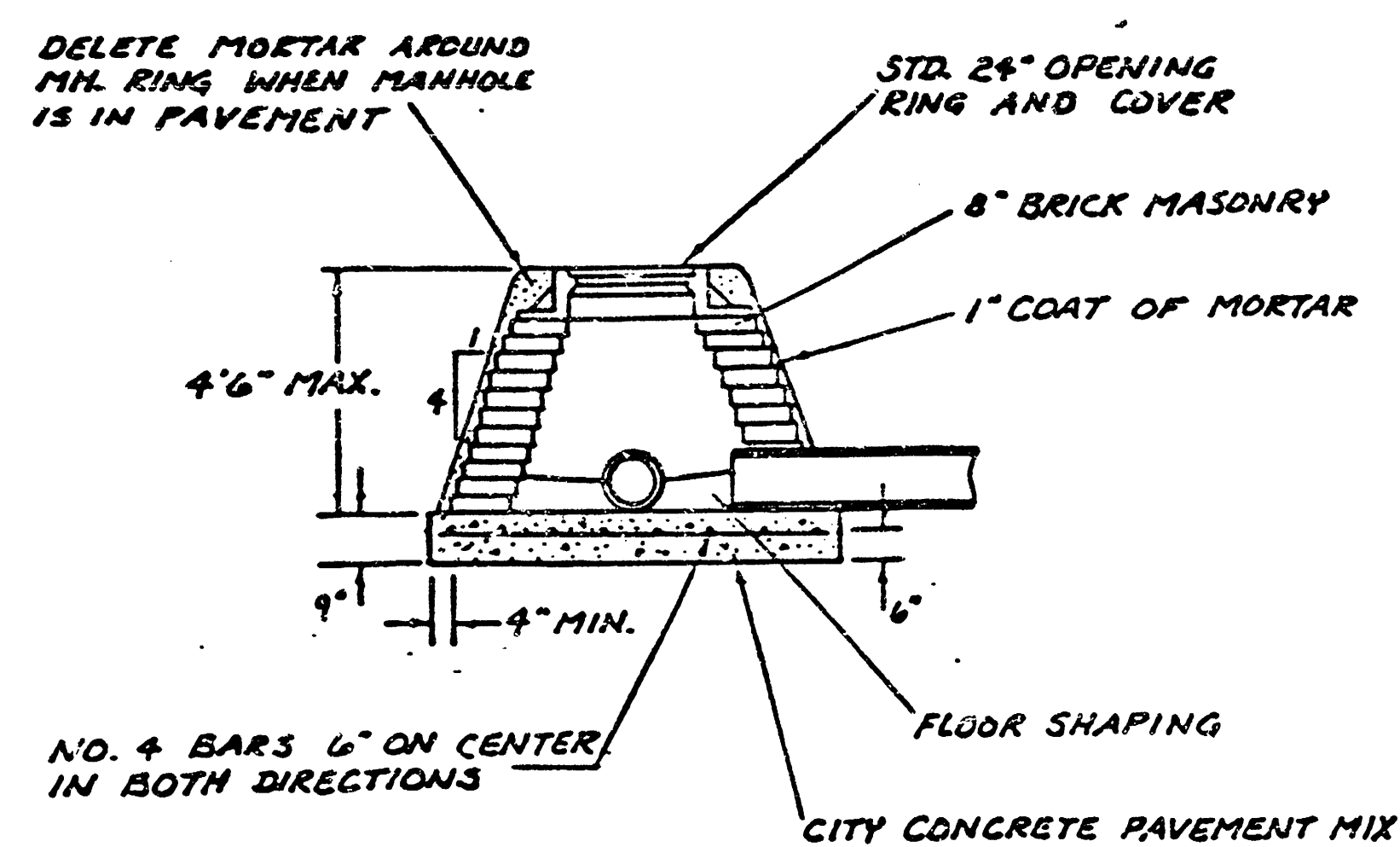


PLAN

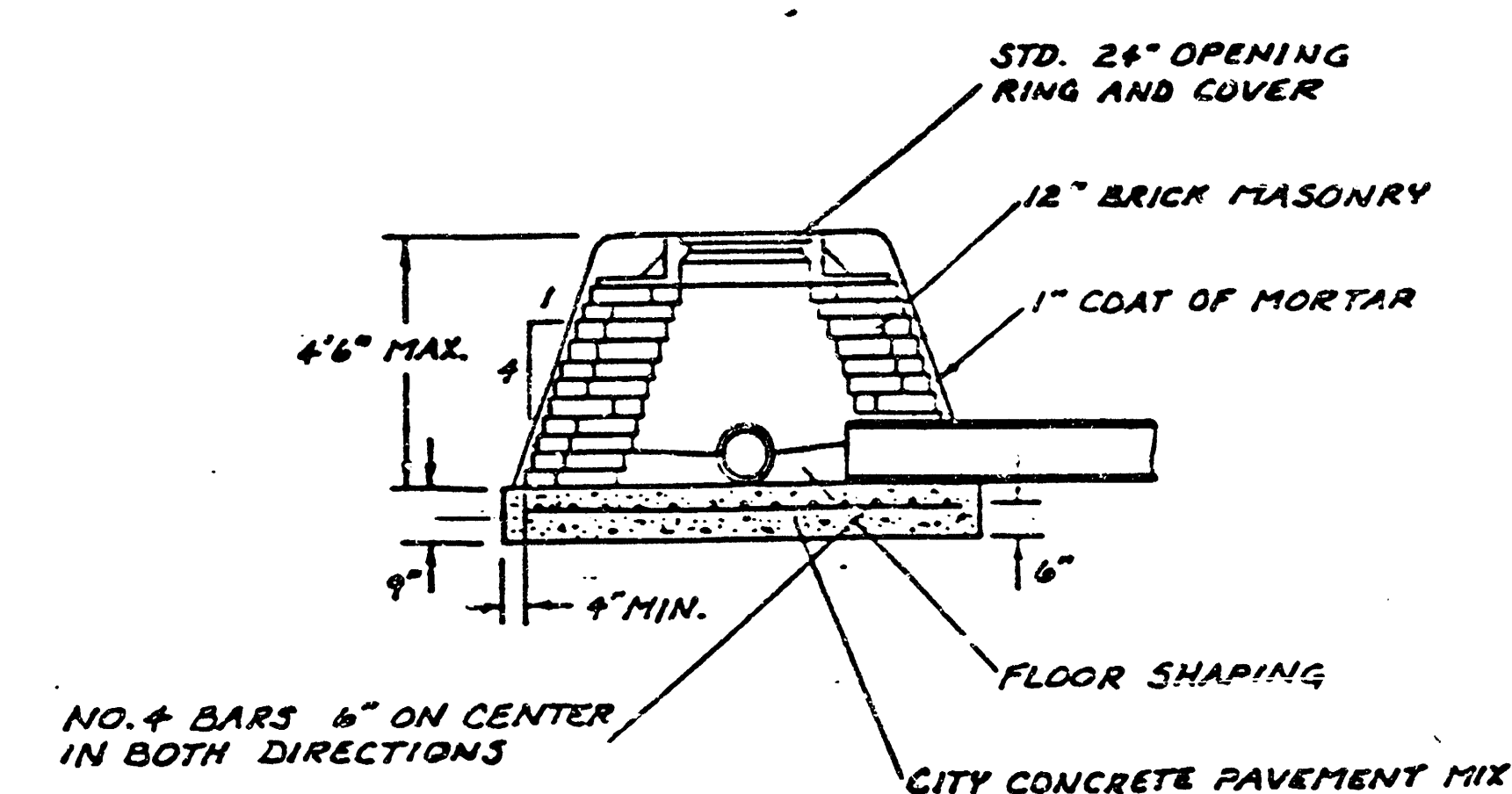


SECTION A-A

FLAT CONCRETE SLAB DETAILS



SPECIAL SHALLOW TYPE 'A' MANHOLE

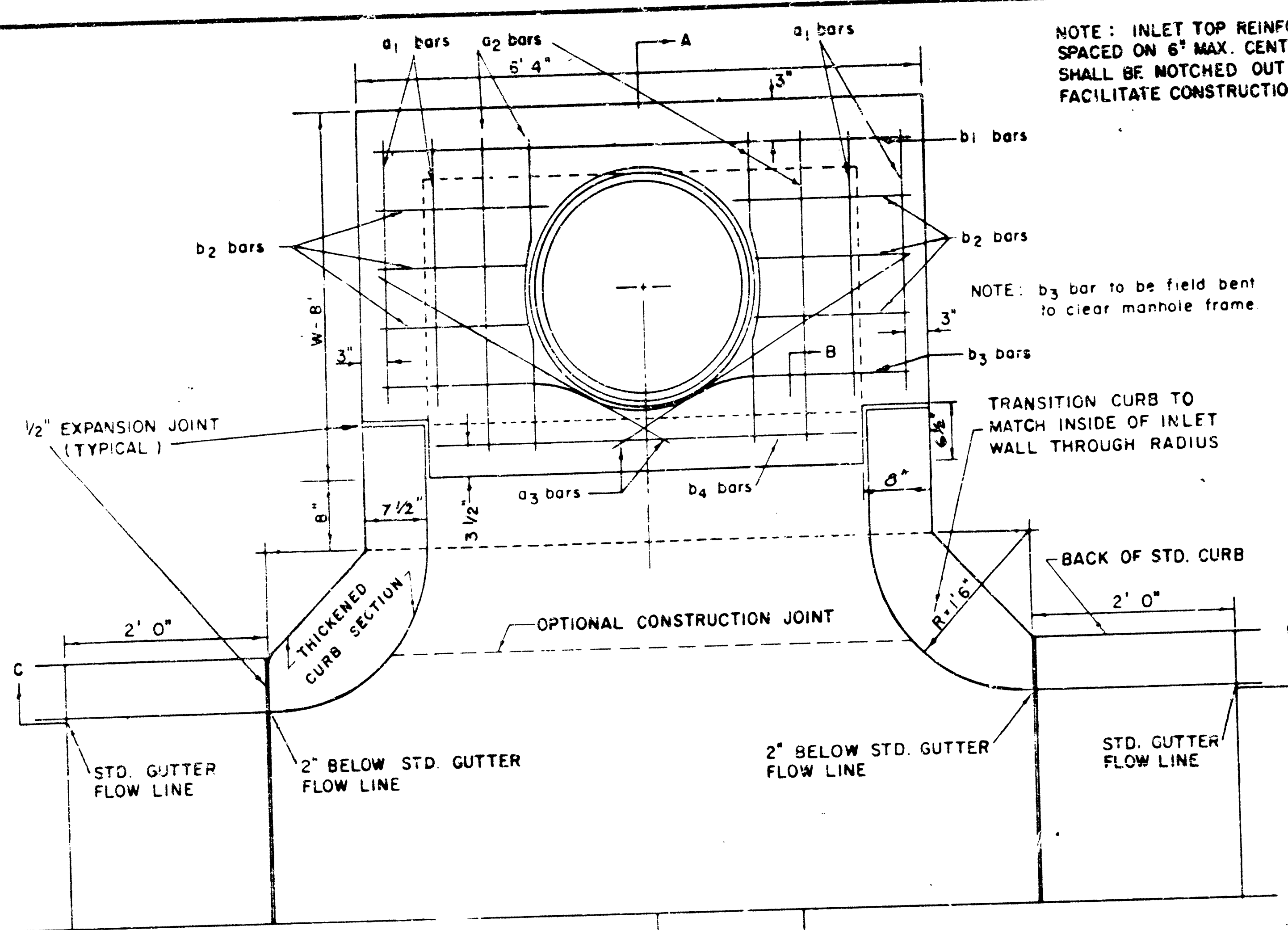


· SPECIAL SHALLOW TYPE 'B' MANHOLE

- GENERAL NOTES

1. MATERIAL USED IN MASHUON 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 CEMENT MIX WITHOUT AIR ENTRAINING ADMIXTURE. MATERIAL SHALL BE PLACED AROUND THE MANHOLE KING AS SHOWN ON THE DRAWINGS WHEN MANHOLES ARE CONSTRUCTED IN UNPAVED AREAS. TYPE "A" SHALLOW MANHOLES CAN BE USED ON SIDEWALKS 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 6". MANHOLES CONSTRUCTED WHERE PIPE SIZES ARE 24" OR LARGER SHALL HAVE AN INSIDE DIAMETER OF 5'. 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 ON 6" CENTERS IN BOTH DIRECTIONS. THE MANHOLE BASE REINFORCING 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. 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 SEWAGE FLOWS THROUGH THE MANHOLE. THE INLET PIPE 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. MANHOLE FLOORS SHALL HAVE SLOPES OF 1/8 INCHES PER FOOT IN THE AREAS OUTSIDE OF THE FLOW CHANNELS TOWARD THE FLOW CHANNELS. PIPES LAID THROUGH MANHOLES SHALL HAVE THE TOP HALF REMOVED TO MATCH THE FLOORS FOR THE 1/2 INSIDE DIAMETER OF THE MANHOLE. MANHOLE FLOORS SHALL THEN BE SHAPED AROUND THE BOTTOM HALF OF THE PIPE WHICH FORMS THE FLOW CHANNEL.
4. PIPES INSTALLED WITHIN THE EXCAVATION MADE FOR THE MANHOLE SHALL BE GRADED WITH CONCRETE TO THE GRADE OF THE MANHOLE EXCAVATION. A 4" 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 CRADLE WITHIN MANHOLE EXCAVATION OR TO CLAY PIPE JOINTS MANAGED TO MANHOLE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.
5. MANHOLE COVER CASTINGS AND MANHOLE FRAME CASTINGS SHALL CONFORM TO THE REQUIREMENTS AS INDICATED IN THE STANDARD SPECIFICATIONS AND IS SHOWN IN THE STANDARD DETAIL DRAWINGS.
6. THE CROWNS OF INFLOWING PIPES SHALL NEVER BE SET LOWER THAN THE CROWN OF THE OUTFLOWING PIPE.
7. STANDARD SHALLOW MANHOLES TYPE "A" AND "B" SHALL BE PAID FOR AT THE UNIT PRICE BID PER EACH FOR THE TYPE AND DIAMETER INDICATED. STANDARD SPECIAL SHALLOW MANHOLE TYPE "B" SHALL BE PAID FOR AT THE UNIT PRICE BID PER EACH FOR THE TYPE INDICATED. ALL STANDARD SHALLOW MANHOLE DIAMETERS WILL BE 4' UNLESS INDICATED OTHERWISE.

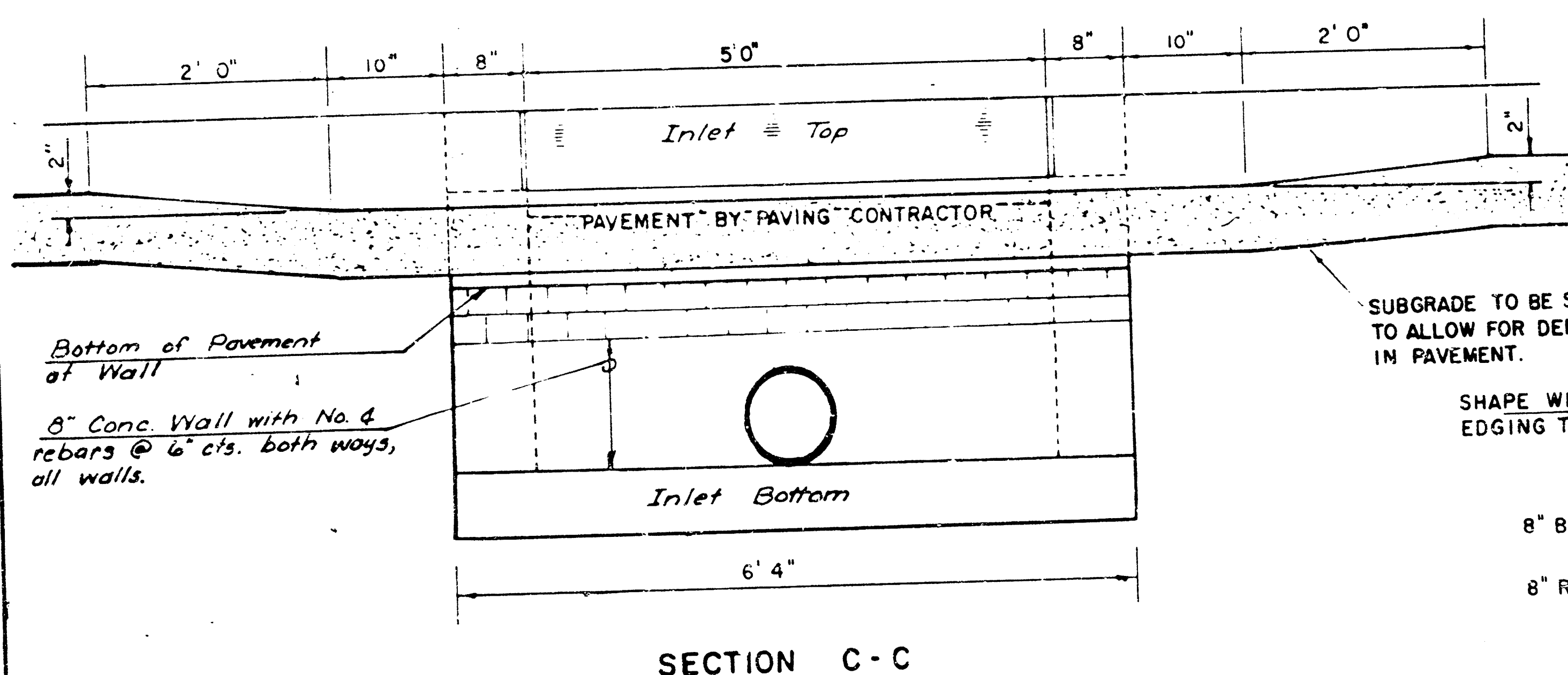
CITY OF WICHITA, KANSAS
STANDARD SHALLOW MANHOLES
TYPE 'A' AND TYPE 'B'



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	
SIZE	#4	#4	#4	#4	#4	#4	#4	
W=4'4"	5'7"	6'7"	4'0"	6'1"	-	-	-	60±
W=5'4"	7'7"	8'7"	5'0"	6'1"	-	-	-	81±
W=6'4"	9'7"	10'7"	6'0"	6'1"	-	-	-	101±
W=7'4"	11'7"	12'7"	7'0"	6'1"	-	-	-	121±
W=8'4"	13'7"	14'7"	8'0"	6'1"	-	-	-	141±

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



BENDING DIAGRAM

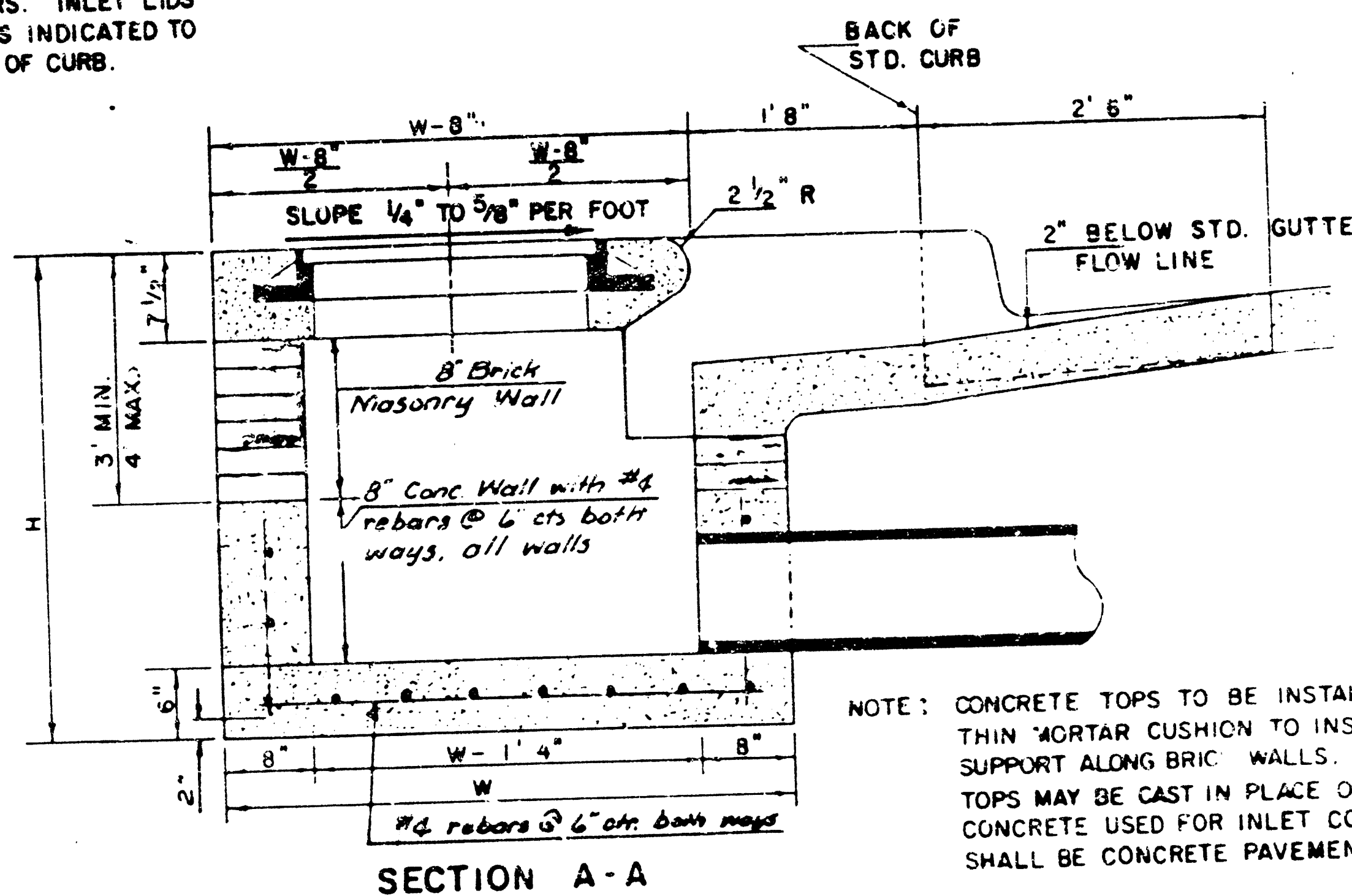
STANDARD CURB INLET PRECAST TOPS

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±

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 field bent to clear manhole frame.

TRANSITION CURB TO MATCH INSIDE OF INLET WALL THROUGH RADIUS



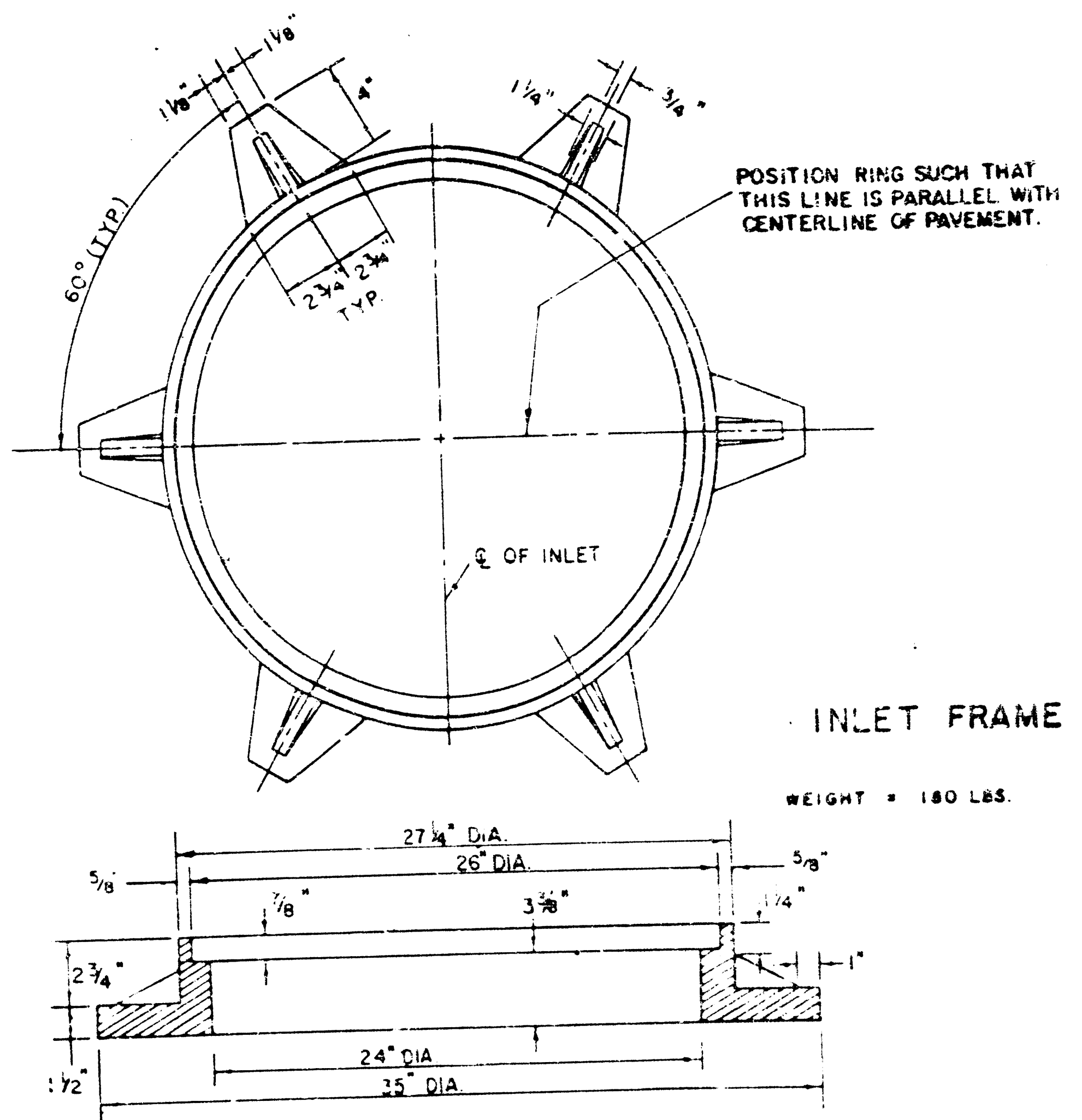
NOTE: CONCRETE TOPS TO BE INSTALLED ON THIN MORTAR CUSHION TO INSURE FULL SUPPORT ALONG BRICK WALLS. CONCRETE TOPS MAY BE CAST IN PLACE OR PRECAST. CONCRETE USED FOR INLET CONSTRUCTION SHALL BE CONCRETE PAVEMENT MIX.

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

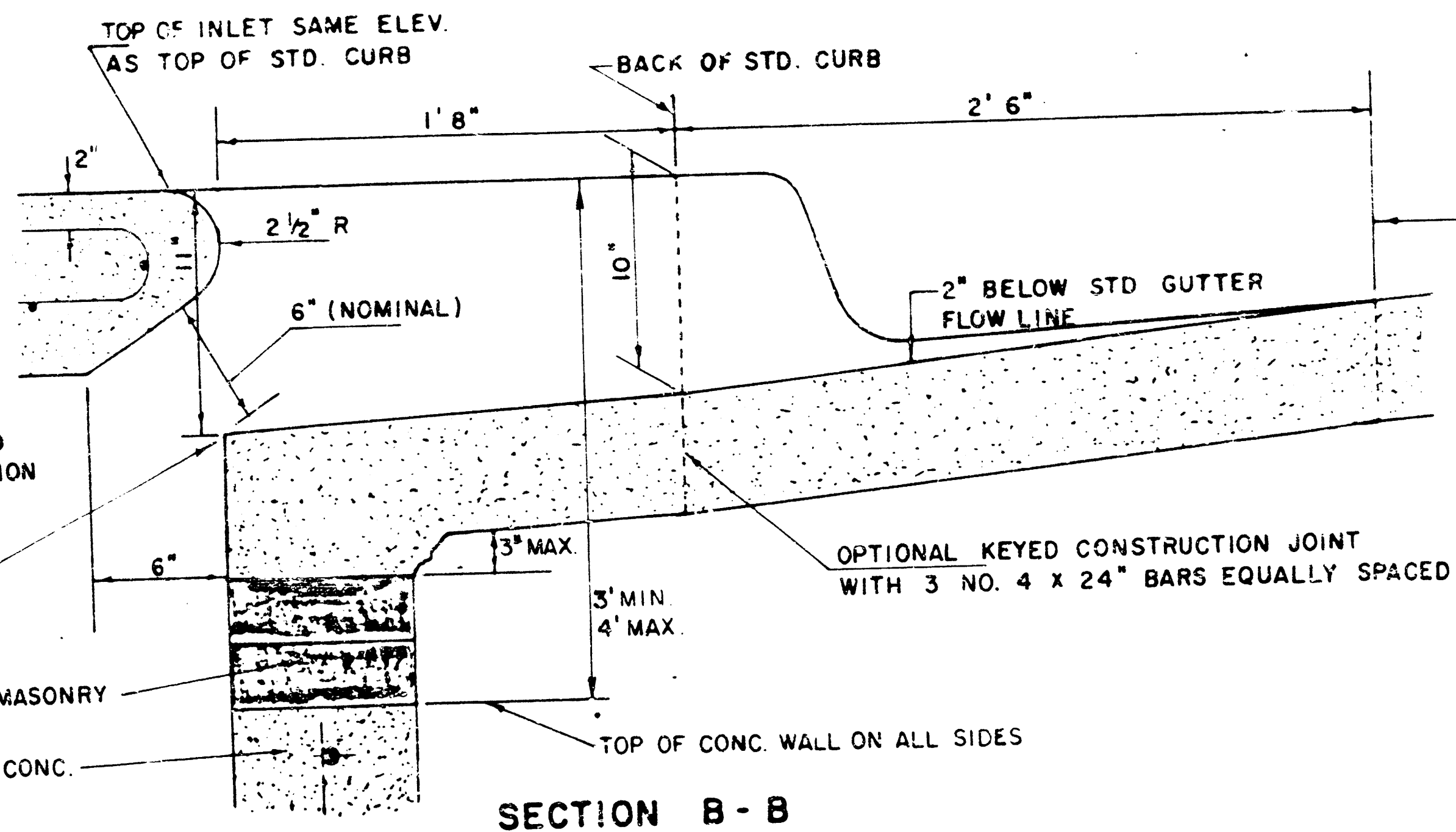
ADDITIONAL CURB AND GUTTER CONSTRUCTION NECESSARY TO CONNECT SET-BACK INLET TO PAVEMENT WILL BE PAID FOR AT THE UNIT PRICE BID FOR EACH INLET HOOKUP.

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.



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

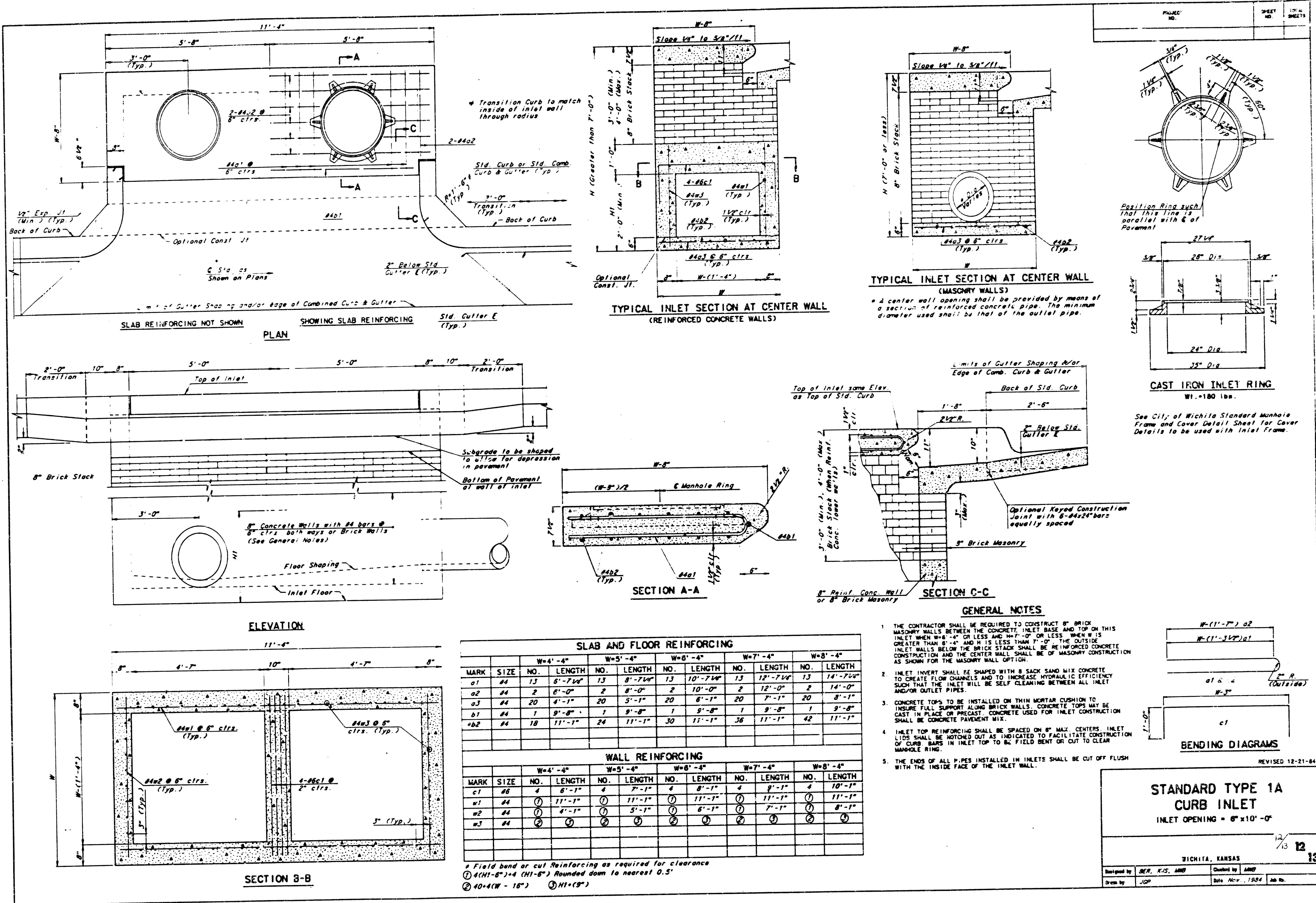


LIMITS OF GUTTER SHAPING AND/OR EDGE OF COMB. CURB AND GUTTER

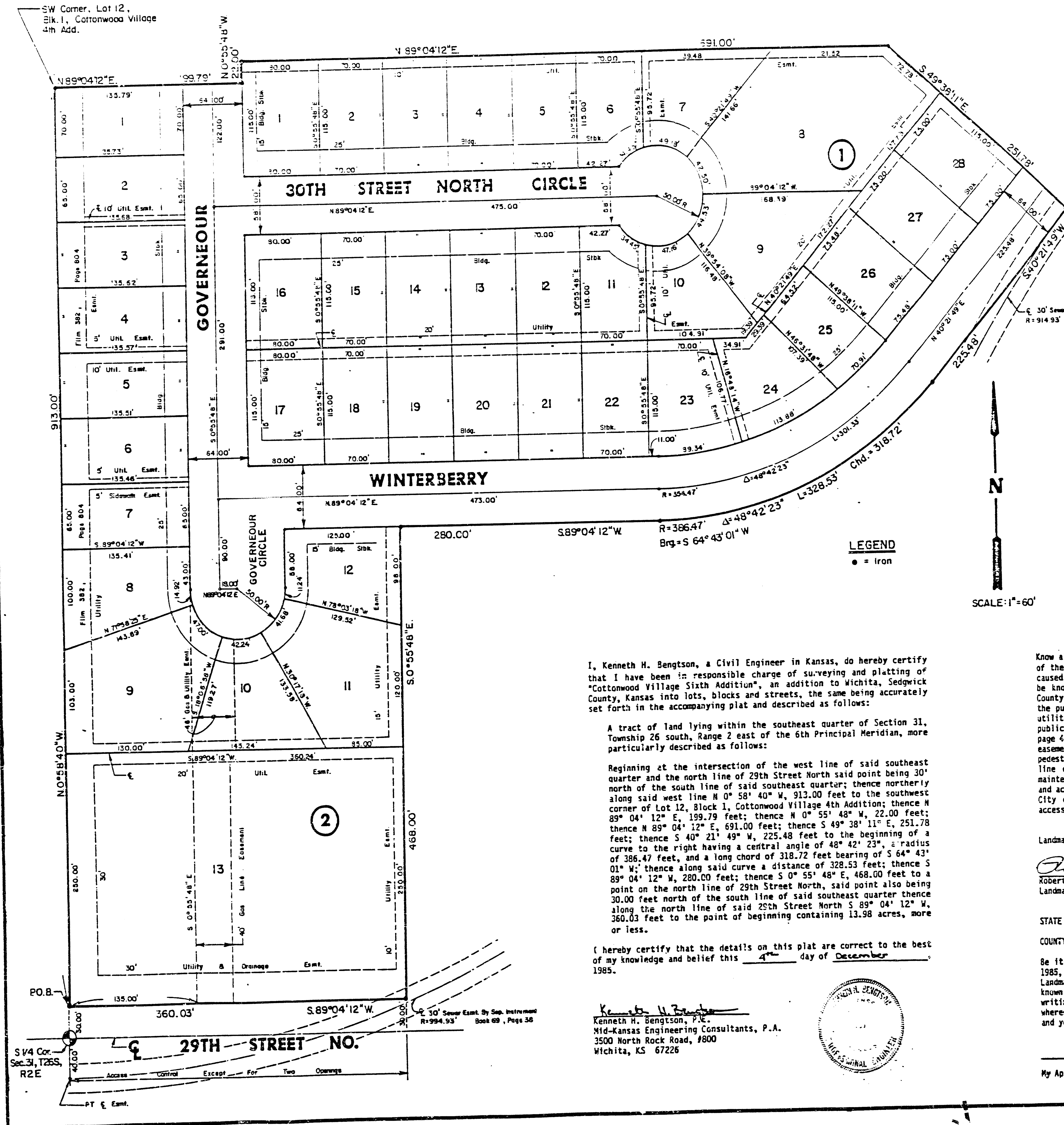
REVISED 12-21-1984

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

JUNE 1964



FINAL PLAT OF COTTONWOOD VILLAGE SIXTH AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS



I, Kenneth H. Bengtson, a Civil Engineer in Kansas, do hereby certify that I have been in responsible charge of surveying and platting of "Cottonwood Village Sixth Addition", an addition to Wichita, Sedgwick County, Kansas into lots, blocks and streets, the same being accurately set forth in the accompanying plat and described as follows:

A tract of land lying within the southeast quarter of Section 31, Township 26 south, Range 2 east of the 6th Principal Meridian, more particularly described as follows:

Beginning at the intersection of the west line of said southeast quarter and the north line of 29th Street North said point being 30' north of the south line of said southeast quarter; thence northerly along said west line N 0° 58' 40" W, 912.00 feet to the southwest corner of Lot 12, Block 1, Cottonwood Village 4th Addition; thence N 89° 04' 12" E, 199.79 feet; thence N 0° 55' 48" W, 22.00 feet; thence N 89° 04' 12" E, 691.00 feet; thence S 49° 38' 11" E, 251.78 feet; thence S 40° 21' 49" W, 225.48 feet to the beginning of a curve to the right having a central angle of 48° 42' 23", a radius of 386.47 feet, and a long chord of 318.72 feet bearing of S 64° 43' 01" W; thence along said curve a distance of 328.53 feet; thence S 89° 04' 12" W, 280.00 feet; thence S 0° 55' 48" E, 468.00 feet to a point on the north line of 29th Street North, said point also being 30.00 feet north of the south line of said southeast quarter thence along the north line of said 29th Street North S 89° 04' 12" W, 360.03 feet to the point of beginning containing 13.98 acres, more or less.

I hereby certify that the details on this plat are correct to the best of my knowledge and belief this 14th day of December, 1985.

Kenneth H. Bengtson
Kenneth H. Bengtson, P.E.
Mid-Kansas Engineering Consultants, P.A.
3500 North Rock Road, #800
Wichita, KS 67226

Know all men by these presents, that we the undersigned property owners of the land as above set forth in the Civil Engineers Certificate have caused the same to be platted into lots, blocks and streets, the same to be known as "Cottonwood Village Sixth Addition" to Wichita, Sedgwick County, Kansas. The streets are hereby dedicated to and for the use of the public. Easements for the construction and maintenance of public utilities and drainage are hereby granted. The existing 40-foot wide public utility easement, granted to provide for a gas line (on file 454, page 476), is being vacated by virtue of K.S.A. 12-512(b). The sidewalk easement is hereby granted to the public for purposes of providing pedestrian access to the property to the west. The 40-foot wide gas line easement in Block 2 is being platted for the construction and maintenance of a public gas line. All abutters rights of access over and across the north line of 29th Street North are hereby granted to the City of Wichita, provided however, that Lot 13, Block 2 shall have access to 29th Street North at two locations.

Landmark Communities, Inc.

Robert R. Fox, President
Landmark Communities, Inc.

STATE OF KANSAS

COUNTY OF SEDGWICK

Be it remembered that on this 14th day of December, 1985, before me, a Notary Public in and for said State and County, came Landmark Communities, Inc. by Robert R. Fox, President, to me personally known to be the same person 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.

Carolyn R. Owen, Notary Public

My Appointment Expires: 5-29-87

we, the Fourth National Bank & Trust, Wichita, Kansas, mortgagees on the above described property do hereby consent to the plat of "Cottonwood Village Sixth Addition".

The Fourth National Bank & Trust, Wichita, Kansas

By: J.D. Newman

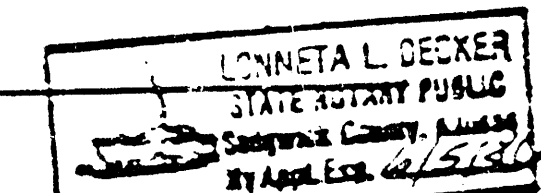
STATE OF KANSAS

COUNTY OF SEDGWICK

Be it remembered that on this 14th day of December, 1985, before me, a Notary Public in and for said State and County, came Fourth National Bank & Trust, Wichita, Kansas, by J.D. Newman, to me personally known to be the same person 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.

Janette D. Decker, Notary Public

My appointment Expires:



This plat of "Cottonwood Village Sixth Addition" has been submitted to and approved by the Wichita-Sedgwick County Metropolitan Area Planning Commission, Wichita, Kansas.

Dated this 14th day of November, 1985

Wichita-Sedgwick County Metropolitan Area Planning Commission

William J. Joppe, Chairman

Michael E. Lindbeck, Secretary

This plat approved and all dedications shown hereon, if any, accepted by the City Commission of the City of Wichita, Kansas this 17th day of December, 1985.

Robert L. Brown, Mayor

Donald L. Glick, City Clerk

Entered on transfer record this 18 day of December, 1985.

Don Wright, County Clerk

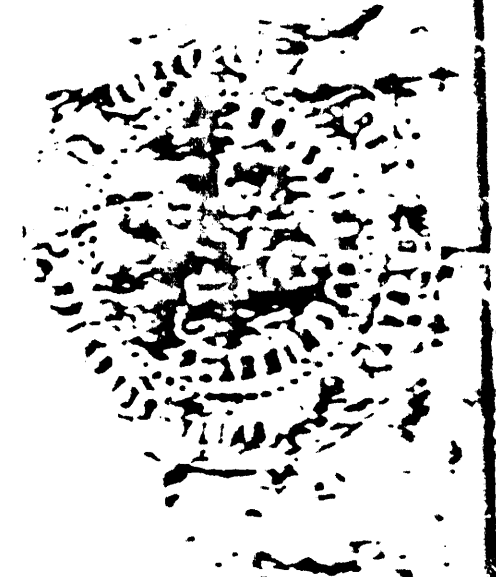
STATE OF KANSAS

SEDGWICK COUNTY

This is to certify that this instrument was filed for record in the Register of Deeds Office at 11:30 AM on the 14th day of December, 1985.

Pat Kettler, Register of Deeds

Ed Hesa, Deputy



A 3-31