STORM WATER SEWER NO. 284

COTTONWOOD GROVE

PROJECT NO.

468·76·245·81447·000·000·001

CITY OF WICHITA, KANSAS

MICHAEL E. LINDEBAK, CITY ENGINEER

MAY , 1985

GENERAL NOTES

1. THE TOPS OF INLETS 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. ALL CONCRETE SHALL BE STANDARD PAVING MIX UNLESS OTHERWISE NOTED.
4. 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.
5. TREES TO BE REMOVED ARE MARKED X . ALL TREES WHICH IN THE OPINION OF THE FIELD ENGINEER CAN BE SAVED, SHALL BE SAVED.
6. CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES OF CONSTRUCTION SCHEDULING.
7. 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	942-8350
BELL TELEPHONE COMPANY	268-2256
CABLEVISION	269-3340
GAS SERVICE COMPANY	263-7511
KANSAS GAS & ELECTRIC	261-6375
KANSAS ONE-CALL	1-800-344-7233

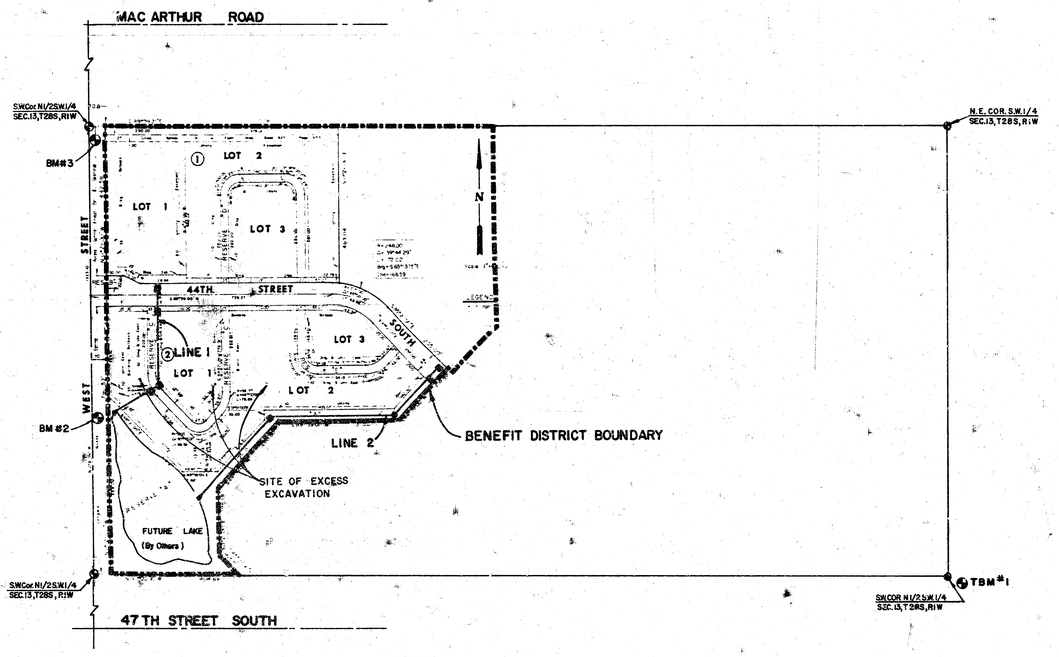
8. DESIREABLE EXCAVATION (TOP SOIL AND FREE FROM VEGETATION) SHALL BE DUMPED ON LOT 1 AND 2, BLOCK 2, COTTONWOOD GROVE. SPREADING OF EXCESS MATERIAL SHALL BE SUBSIDIARY TO THIS PROJECT.
9. STORM WATER SEWER PROJECT TO BE BUILT BEFORE WATER LINE IN 44TH STREET IS BUILT.
10. THE LAKE IN RESERVE "A" IS BEING CONSTRUCTED BY OTHERS. THE CONTRACTOR FOR THIS STORM WATER SEWER PROJECT WILL NOT BE RESPONSIBLE TO INSTALL THE RIP RAP OR DO DITCH REGRADING IF THE LAKE IS IN PLACE AT THE TIME OF THIS PROJECT.

BENCHMARKS

T.B.M. #1 — S.RIM OF EXISTING MANHOLE 5.4' NORTH 9.5' East of S.E. CORNER N ½ S.E. ¼ SECTION 13-28-1W. ELEV. = 93.15 (CITY DATUM)

B.M. #2 — "□" CUT ON CENTERLINE OF E. HUB GUARD, OF RCB + 500' N of S.W. CORNER COTTONWOOD GROVE. ELEV. = 94.19 (CITY DATUM)

B.M. #3 — R.R. SPIKE IN E. FACE OF POWER POLE 40' S. AND E. OF W ¼ CORNER SECTION 13-28-1W. ELEV. = 94.14 (CITY DATUM)



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1	TITLE SHEET
2	LINE 1
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6	TYPE I A CURB INLET
7	DROP INLET DETAILS
8	TYPE "S" SHALLOW MANHOLE
9	FINAL PLAT

As Built Plan
10/16/85
GREENE

KENNETH R. BENGTSON LICENSED 7238 KANSAS PROFESSIONAL ENGINEER

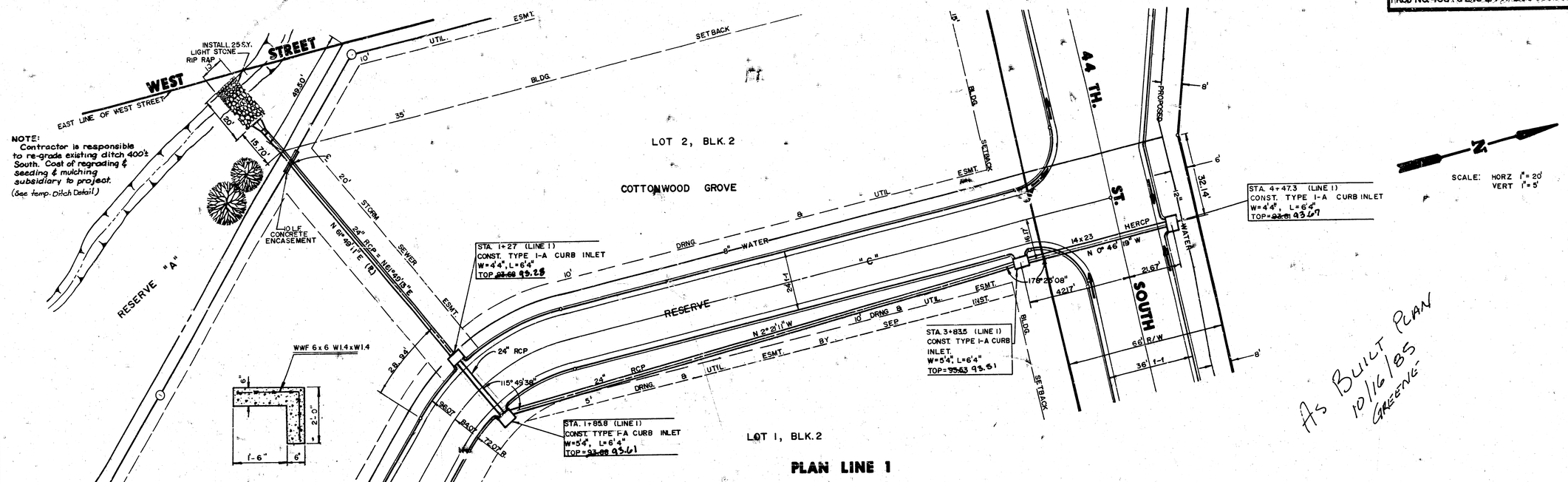
COTTONWOOD GROVE
STORM SEWER PLANS

Design | Drawn by | Checked by | Date | Job no.

MID-KANSAS ENGINEERING CONSULTANTS PA
3500 NORTH ROCK ROAD
BUILDING #600
WICHITA, KANSAS 67226
682-6561

Sheet 1 of 9

COTTONWOOD GROVE
SWS NO. 284
PROJ NO. 468-76-245-6147-000-000-001



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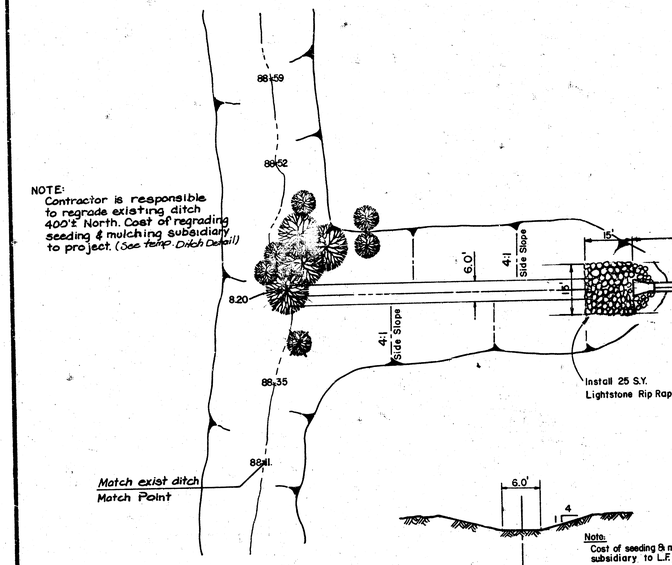
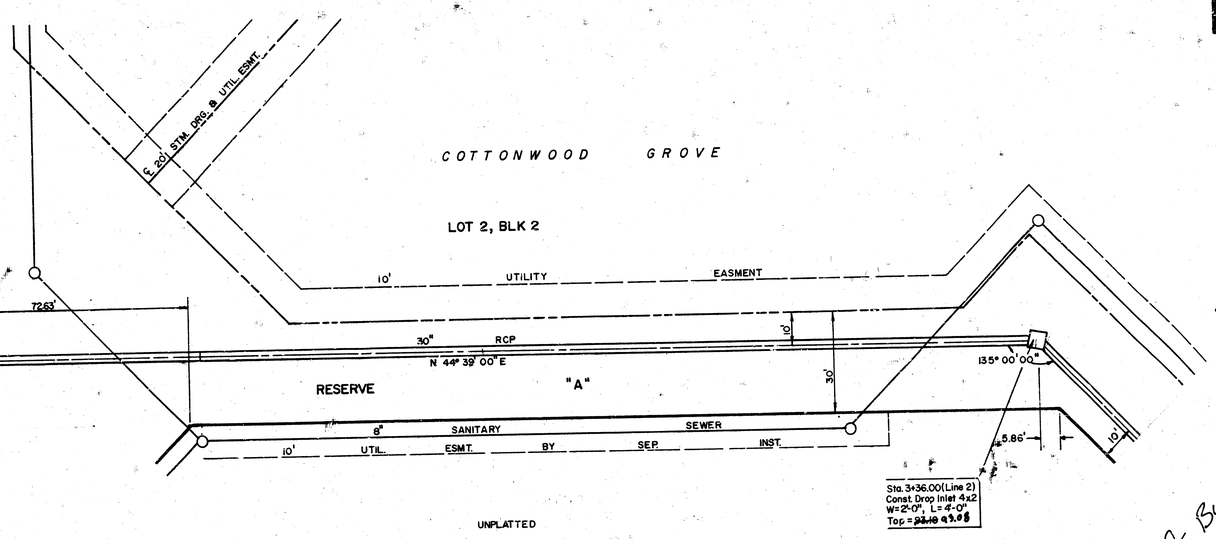
M.K.E.C.

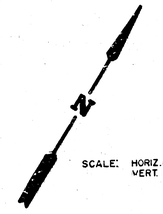
COTTONWOOD GROVE
SWS F.Q 284
PROJ NO. 468-76-245 81447-000-000-001

NOTE:
Contractor is responsible to regrade existing ditch 400'± North. Cost of regrading seeding & mulching subsidiary to project. (See temp. Ditch Detail)



TEMP. DITCH DETAIL



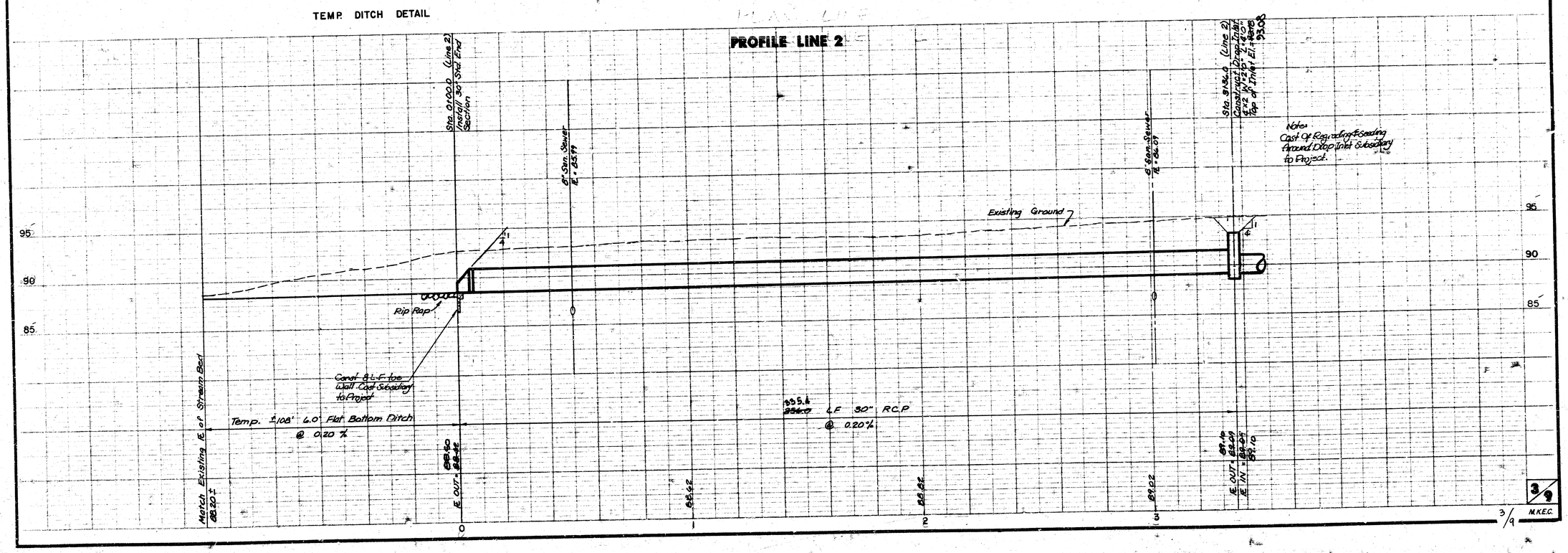


SCALE: HORIZ. 1" = 20'
VERT 1" = 5'

As Built Plan
10/16/85
GREENE

PLAN LINE 2

PROFILE LINE 2



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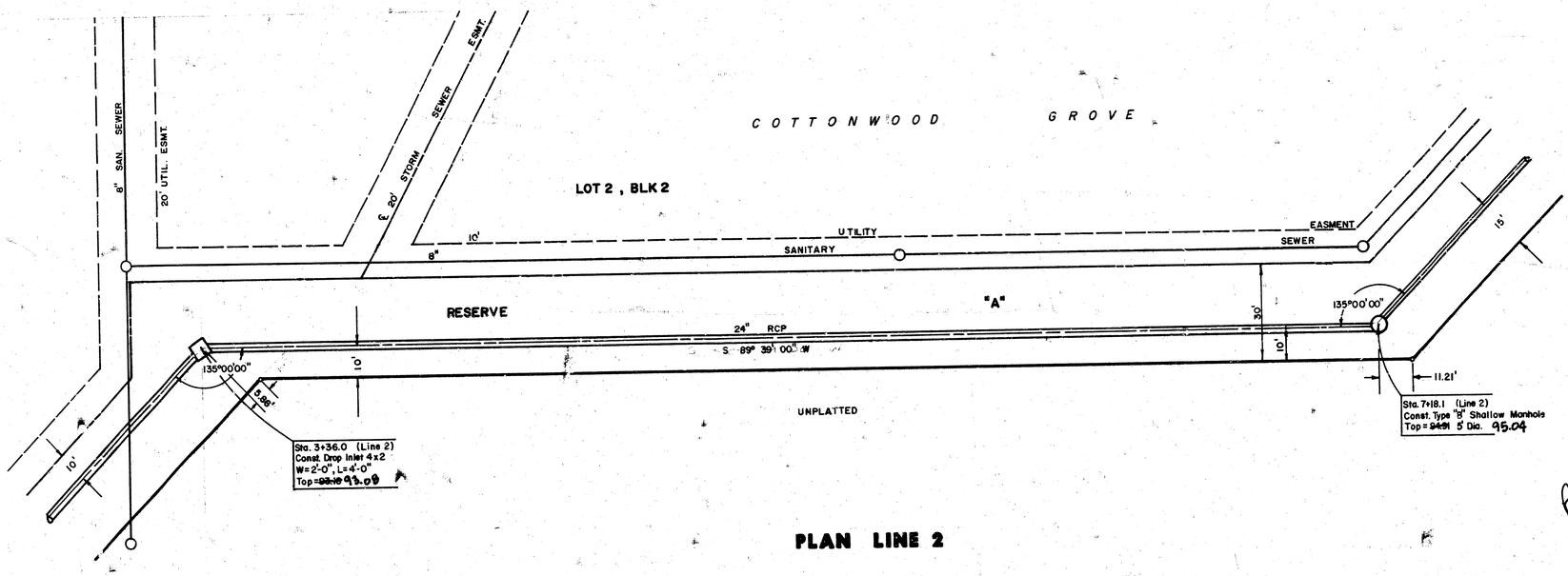
M.K.E.C.

COTTONWOOD GROVE
SWS NO. 284
PROJ NO. 468-75-245 81447-000-000-001



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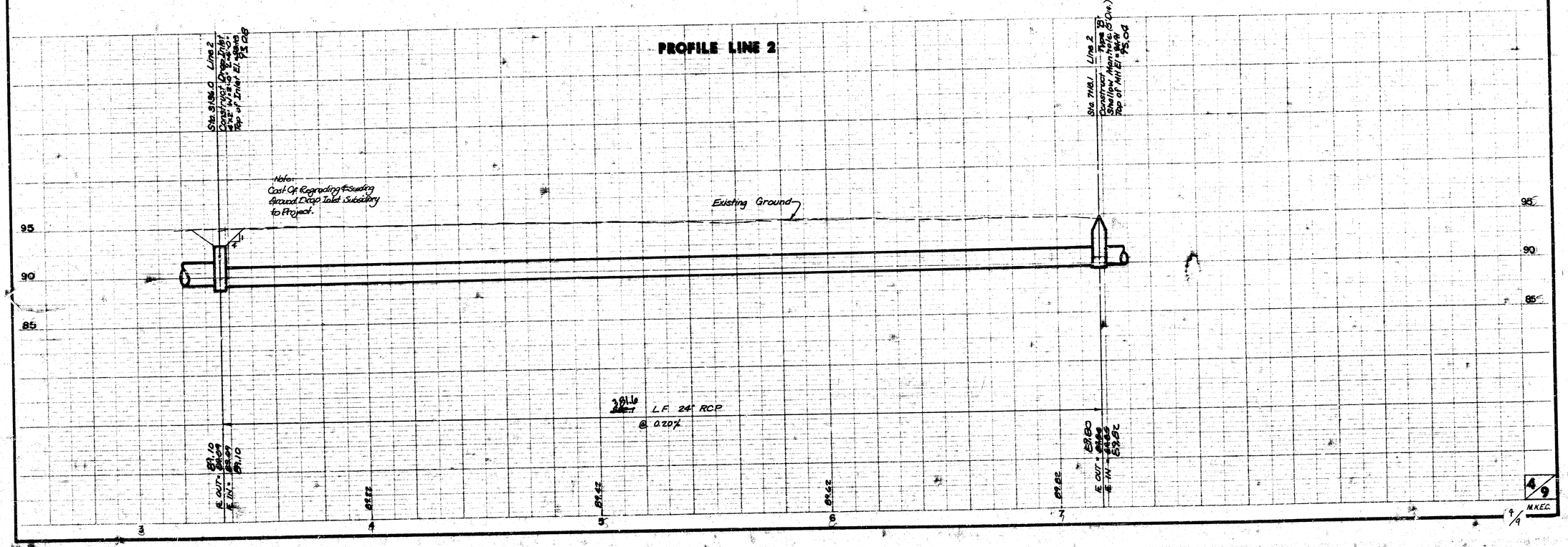
SCALE: HORZ 1"= 20'
VERT 1"= 5'

As Built Plan
10/16/85
Greenville

PLAN LINE 2

PROFILE LINE 2



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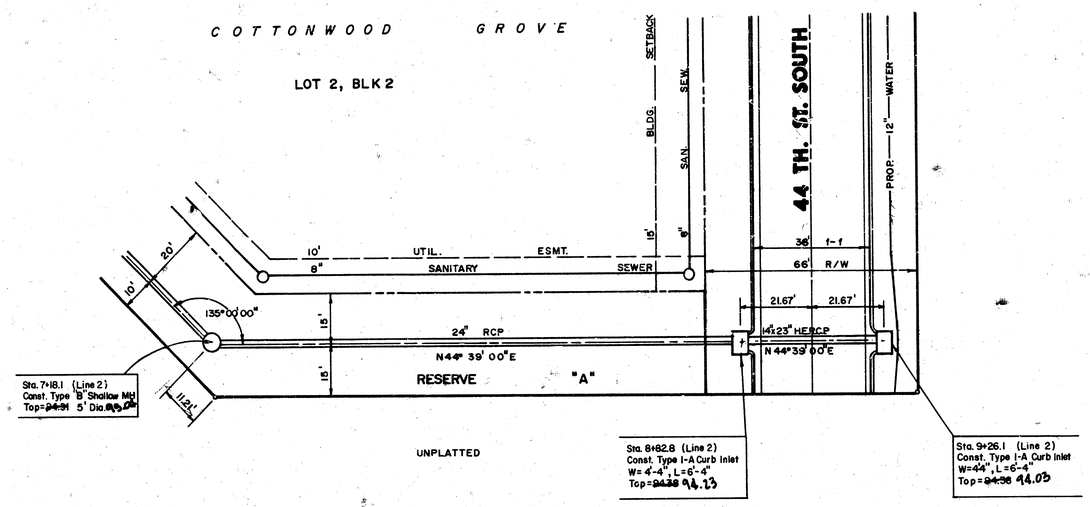
M.K.E.C.

COTTONWOOD GROVE
SWS NO. 284
PROJ NO. 468-76-245-81447-000-000-001

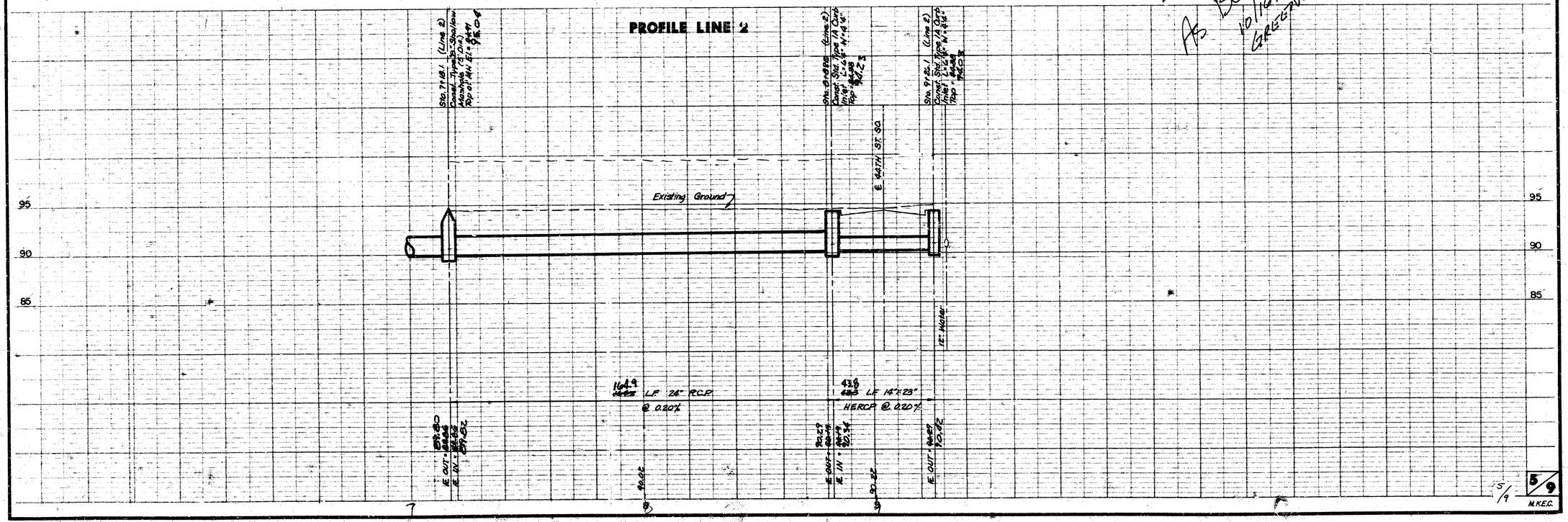
SCALE: HORZ 1" = 20'
VERT 1" = 5'



PLAN LINE 2

As Built Plan
10/16/85
GREENVILLE

PROFILE LINE 2



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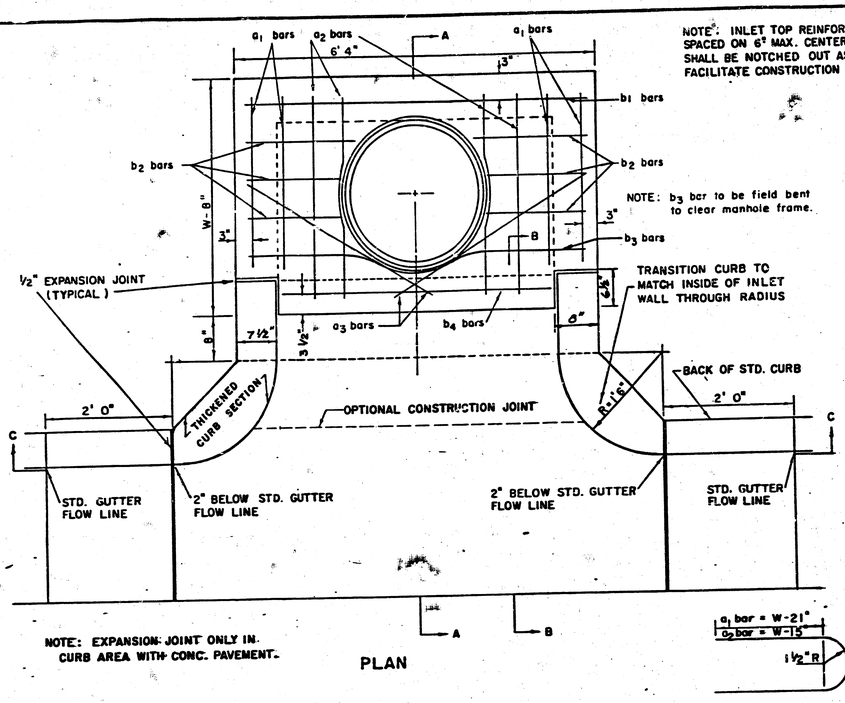
M.K.E.C.

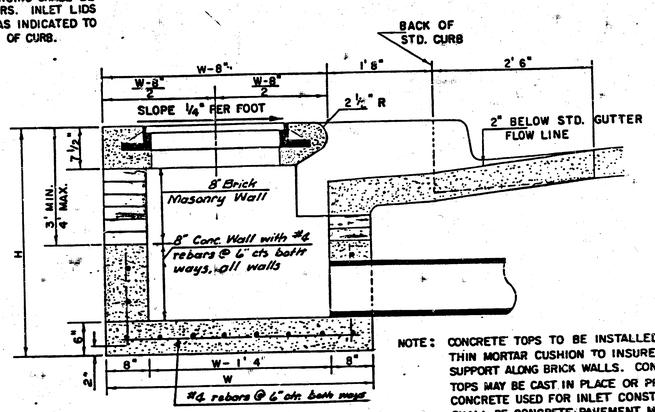


NOTE: EXPANSION JOINT ONLY IN CURB AREA WITH CONC. PAVEMENT.

PLAN

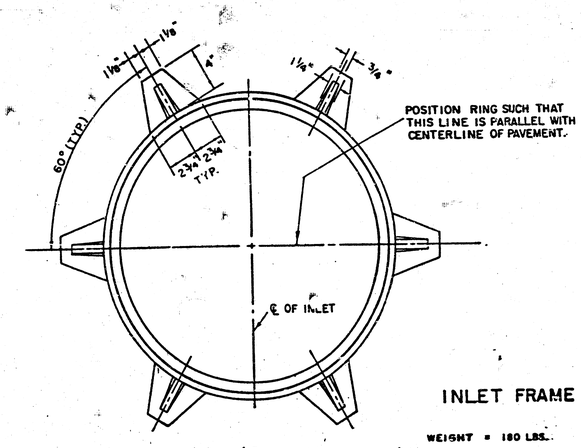
NOTE: INLET TOP REINFORCING SHALL BE SPACED ON 6" MAX. CENTERS. INLET LIDS SHALL BE NOTCHED OUT AS INDICATED TO FACILITATE CONSTRUCTION OF CURB.

NOTE: b_3 bar to be field bent to clear manhole frame.



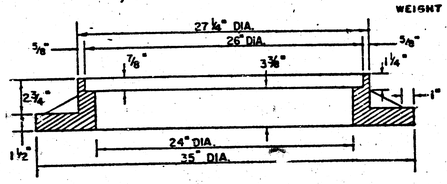
SECTION A-A

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.



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.

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 = 6'6" 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 6 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.

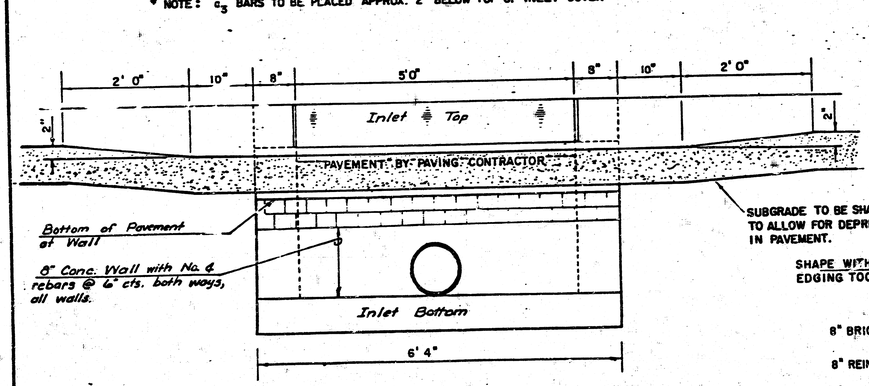
BENDING DIAGRAM

STEEL SCHEDULE

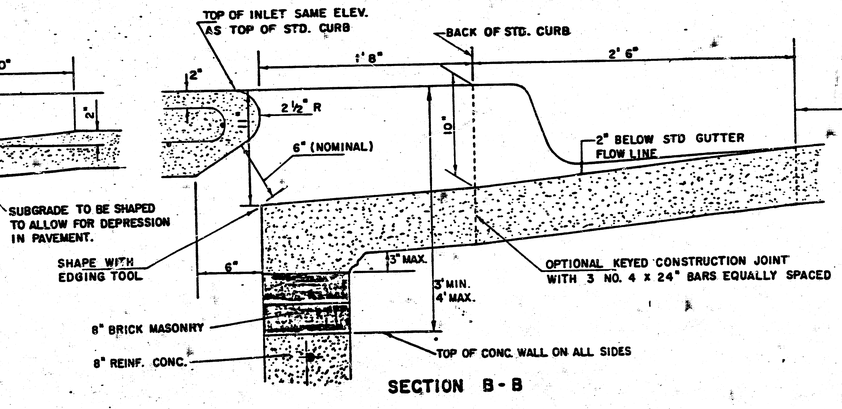
BAR	a_1	a_2	a_3*	b_1 W=4'4"	W=5'4"	W=6'4"	W=7'4"	W=8'4"	b_2	b_3	b_4	WT. LBS.
NUMBER	4	4	2	1	3	5	7	9	6	1	1	
SIZE	#4	#4	#4	#4	#4	#4	#4	#4	#4	#4	#6	
LENGTH W=4'4"	5'7"	6'7"	4'0"	6' 1"	–	–	–	–	1' 9"	6'2"	4'8"	60±
LENGTH W=5'4"	7'7"	8'7"	5'0"	–	6' 1"	–	–	–	1' 9"	6'2"	4'8"	81 ±
LENGTH W=6'4"	9'7"	10'7"	6'0"	–	–	6' 1"	–	–	1' 9"	6'2"	4'8"	101±
LENGTH W=7'4"	11'7"	12'7"	7'0"	–	–	–	6' 1"	–	1' 9"	6'2"	4'8"	121±
LENGTH W=8'4"	13'7"	14'7"	8'0"	–	–	–	–	6' 1"	1' 9"	6'2"	4'8"	141±

* NOTE: a_3 BARS TO BE PLACED APPROX. 2" BELOW TOP OF INLET COVER

STANDARD CURB INLET PRECAST TOPS			
W	PRE-CAST TOP SIZE	PIPE SIZE	CU. YD. CONC.
4' 4"	5'8"x 6'4" x7 1/2"	21" & SMALLER	0.38 ±
5' 4"	6'8"x 6'4" x7 1/2"	24" & 30"	0.51 ±
6' 4"	7'8"x 6'4" x7 1/2"	36" & 42"	0.64 ±
7' 4"	8'8"x 6'4" x7 1/2"	48" & 54"	0.77 ±
8' 4"	9'8"x 6'4" x7 1/2"	60" & 66"	0.90 ±



SECTION C-C



SECTION B-B

DETAIL STANDARD TYPE IA CURB INLET

CITY OF WICHITA, KANSAS

INLET OPENING = 6" x 5' 0"

JUNE 1984

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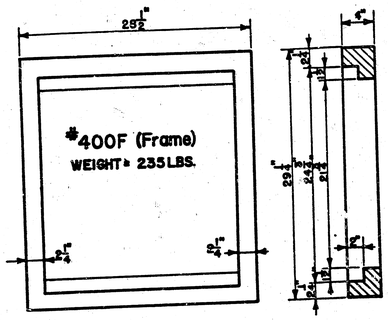
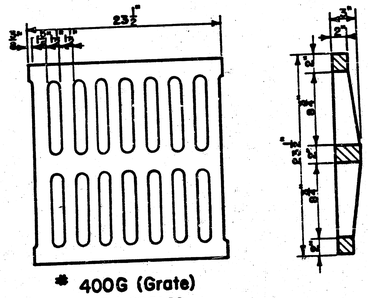
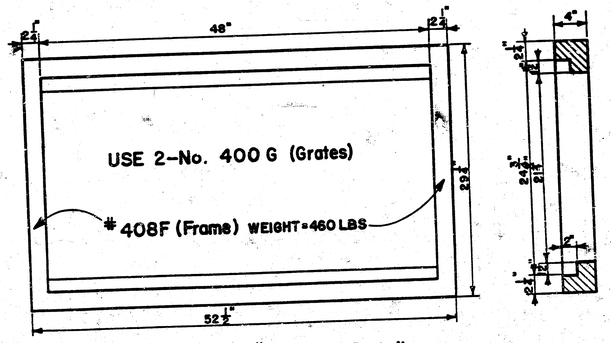
NOTE: Grates shall be imprinted on the top surface with "CITY OF WICHITA" using letters at least 1" in height. Other marking methods may be used only if approved by the engineer.

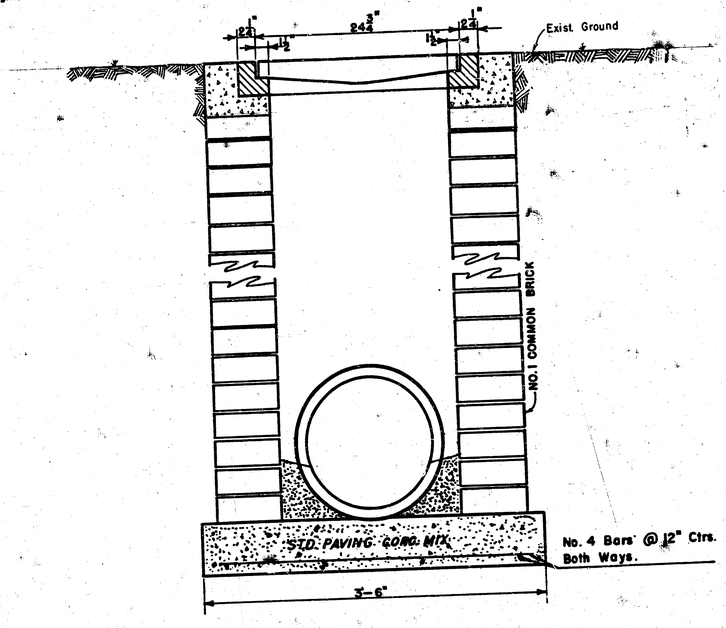


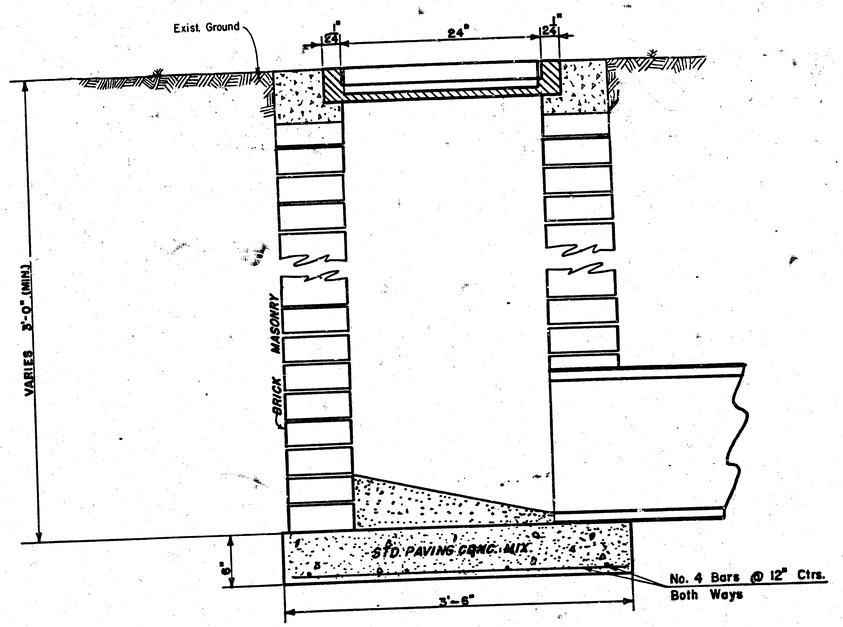


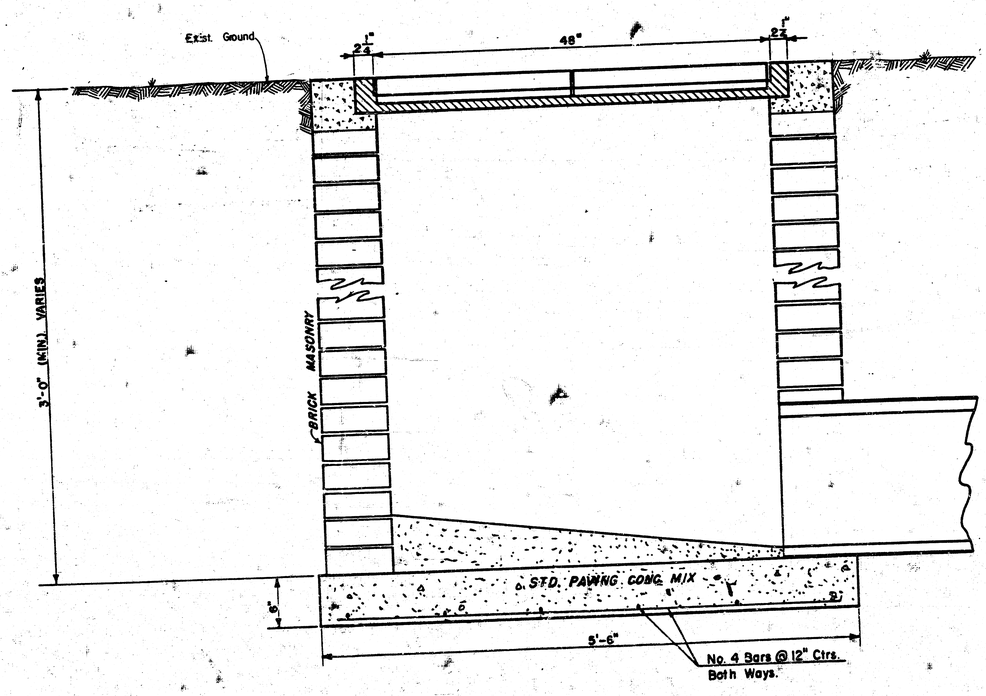
24"x24" Frame & Grate Detail



Double 24"x24" Frame Detail



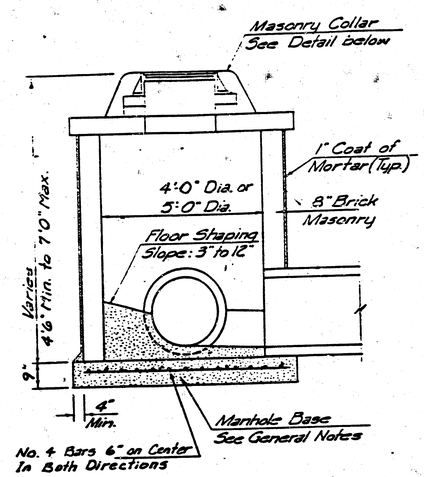




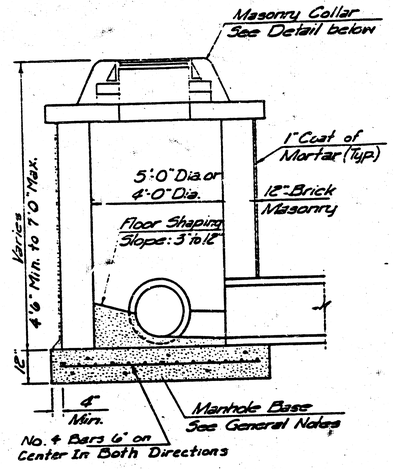
DROP INLET DETAILS

M.E. Lindebak, City Engineer
City of Wichita, Kansas
Project
Project No.
Date:
Scale: 1-1/2" = 1'-0"

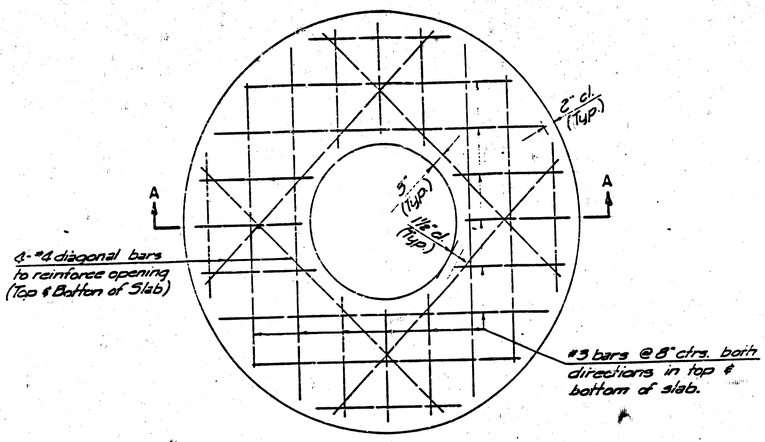
7/9 | 7/9



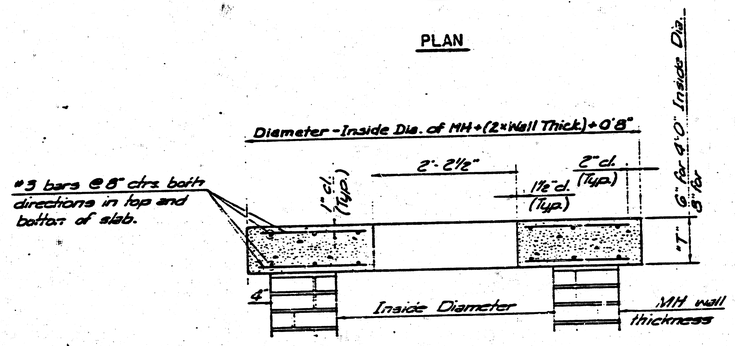
SHALLOW TYPE "A" MANHOLE



SHALLOW TYPE "B" MANHOLE

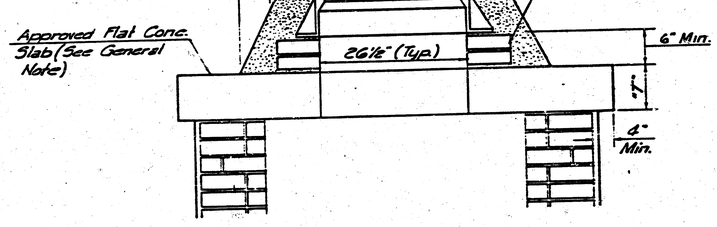


PLAN

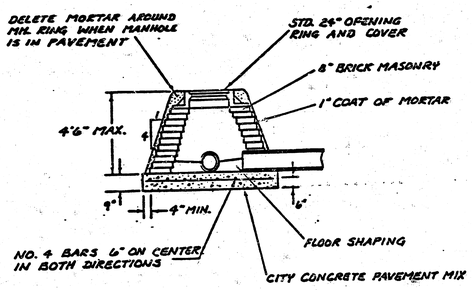


SECTION A-A

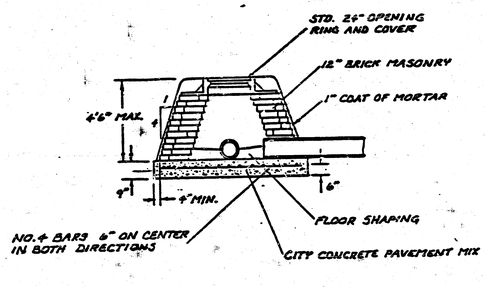
FLAT CONCRETE SLAB DETAILS



MASONRY COLLAR DETAIL



SPECIAL SHALLOW TYPE 'A' MANHOLE



SPECIAL SHALLOW TYPE 'B' MANHOLE

GENERAL NOTES

1. MORTAR USED IN MASONRY CONSTRUCTION SHALL CONTAIN 8 SACKS 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. MORTAR SHALL BE PLACED AROUND THE MANHOLE RING AS SHOWN ON THE DRAWINGS WHEN MANHOLES ARE CONSTRUCTED IN UNPAVED AREAS. TYPE "A" SHALLOW MANHOLES CAN BE USED ON SEWERS 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'. 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 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. 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 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. 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 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.

4. PIPE 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 CRADLE WITHIN MANHOLE EXCAVATION OR TO CLAY PIPE JOINTS ADJACENT 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 AS 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 MANHOLES TYPE "A" AND "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'

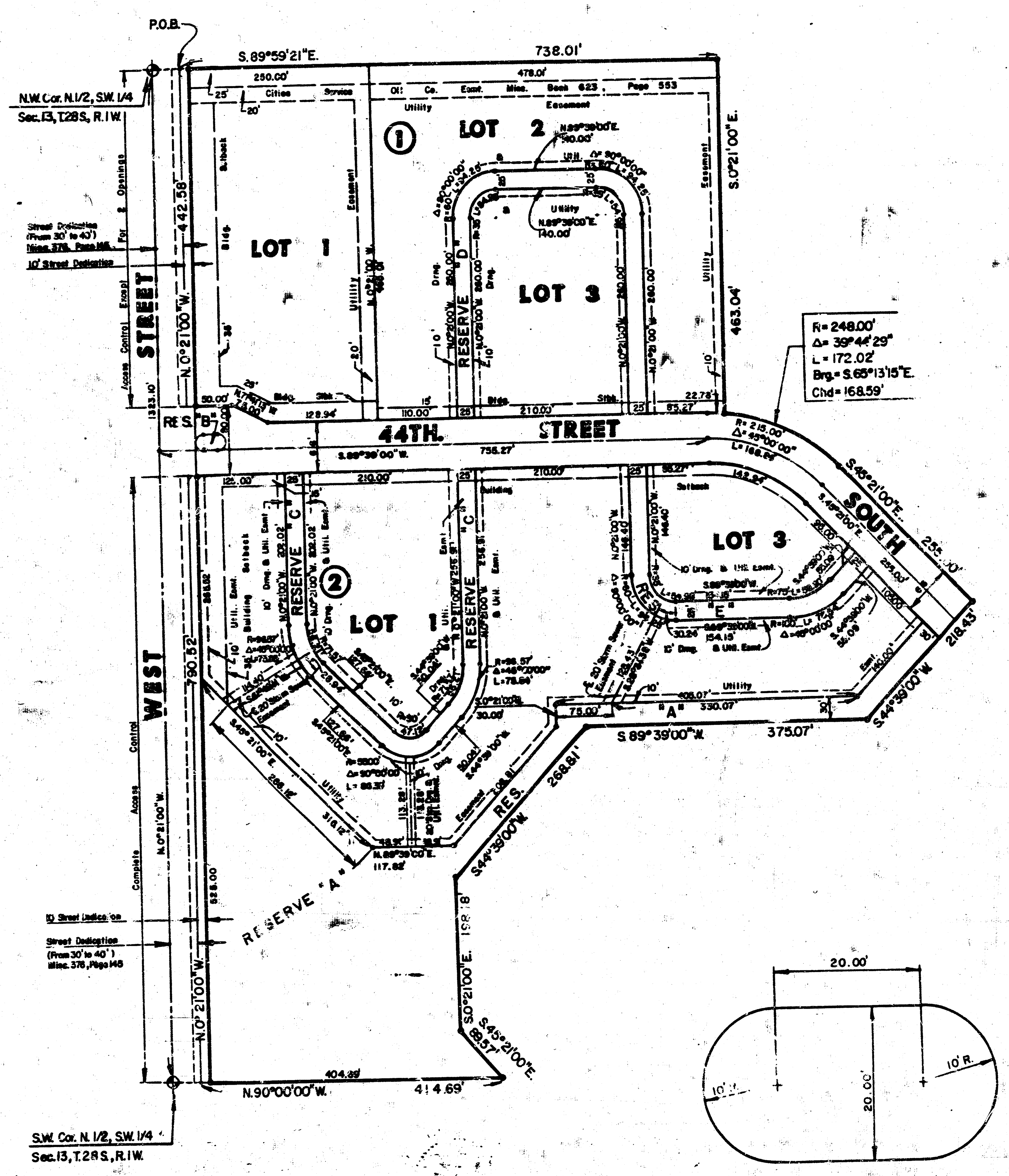
8/9 | 8/9

Designed by		Checked by	
Drawn by		Date	Job No.

FINAL PLAT OF

COTTONWOOD GROVE

AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS



RESERVE "B" DETAIL

I, Michael D. Harding, a Civil Engineer in Kansas, do hereby certify that I have been in responsible charge of surveying and platting of "COTTONWOOD GROVE", an addition to Wichita, Sedgwick County, Kansas, into Lots, Blocks, a Street and Reserves, the same being accurately set forth in the accompanying plat and described herein:

A tract of land in the north half of the southwest quarter of Section 13, Township 28 south, Range 1 west of the 6th Principal Meridian, more particularly described as follows:

Beginning at a point on the north line of said southwest quarter, ~~40.00 feet~~ easterly bearing S 89° 59' 21" E from the northwest corner of the said southwest quarter, thence easterly along the north line of said southwest quarter S 89° 59' 21" E, 738.01 feet; thence S 00° 21' 00" E, 463.04 feet to a point on a curve to the right having a radius of 248.00 feet, a central angle of 39° 44' 29" and a long chord bearing S 65° 13' 15" E, 168.59 feet; thence along said curve 172.02 feet; thence S 45° 21' 00" E, 255.00 feet; thence S 44° 39' 00" W, 218.43 feet; thence S 89° 39' 00" W, 375.07 feet; thence S44°39'00"W., 268.81 feet; thence S00°21'00"E., 198.18 feet; thence S45°21'00"E., 89.57 feet; to a point on the south line of said north half; thence N90°00'00"W, 414.69 feet to a point on the east line of West Street; thence north parallel and 40.00 feet east of the west line of said southwest quarter bearing N00°21'00"W, 1323.10 feet to the point of beginning; containing 20.47 acres, more or less.

I hereby certify that the details of this plat are correct to the best of my knowledge and belief this *11th* day of *February*, 1985.

Michael D. Harding
Michael D. Harding, P.E.
Mid-Kansas Engineering Consultants, P.A.
3500 N. Rock Road, Bldg. 800
Wichita, KS 67226

MICHAEL D. HARDING LICENSED 9398 KANSAS PROFESSIONAL ENGINEER

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 surveyed and platted into Lots, Blocks, a Street and Reserves, the same to be known as "COTTONWOOD GROVE" an addition to Wichita, Sedgwick County, Kansas. Easements for the construction and maintenance of public utilities as indicated on the accompanying plat are hereby granted. Reserve "A" is platted for construction and maintenance of public utilities, drainage, open space, and recreation. Reserve "B" is platted for landscaping, utilities, irrigation, and a median. Reserves "C", "D", and "E" are platted for utilities, drainage, and for access. Reserves are to be owned and maintained by the Owner's Association. All abutters rights of access over and across the east line of West Street to or from Blocks 1 and 2, are hereby granted to the City of Wichita. Except Lot 1, Block 1, shall have access to West Street at 2 locations, as indicated on the accompanying plat. The location of the two openings for Lot 1, Block 1 shall be determined by the Engineer of the City of Wichita.

Amortibanc Investment Company, Inc.

By *Alexander L. Dean*
Alexander L. Dean, President

STATE OF KANSAS
SS:
COUNTY OF SEDGWICK

Be it remembered that on this *19th* day of *Feb.*, 1985, before me, a Notary Public in and for said State and County, came Amortibanc Investment Company, Inc. by Alexander L. Dean, 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.

Janet A. Robinson, Notary Public

My Appointment Expires: *February 22, 1987*

JANET A. ROBINSON NOTARY PUBLIC STATE OF KANSAS MY APPT. EXPIRES 2-22-87

The Wichita-Sedgwick County Metropolitan Area Planning Commission, Wichita, Kansas has received and approved this plat of "COTTONWOOD GROVE".

Dated this *14th* day of *JUNE*, 1984.

Wichita-Sedgwick County Metropolitan Area Planning Commission

James C. Wilson, Chairman
James C. Wilson

Robert A. Lakin, Secretary
Robert A. Lakin

This plat approved and all dedications shown hereon, if any, accepted by the City Commission of the City of Wichita, Kansas, this *19* day of *MARCH*, 1985.

Robert G. Knight, Mayor
Robert G. Knight

Donald C. Gisick, City Clerk
Donald C. Gisick

Entered on transfer record this ______ day of ______________, 1985.

Don Knight, County Clerk

STATE OF KANSAS
SS:
COUNTY OF SEDGWICK

This is to certify that this instrument was filed for record in the Register of Deeds Office at ______ on the __________ day of ______________, 1985.

Pat Kieffer, Register of Deeds

______________________, Deputy
Ed Resa