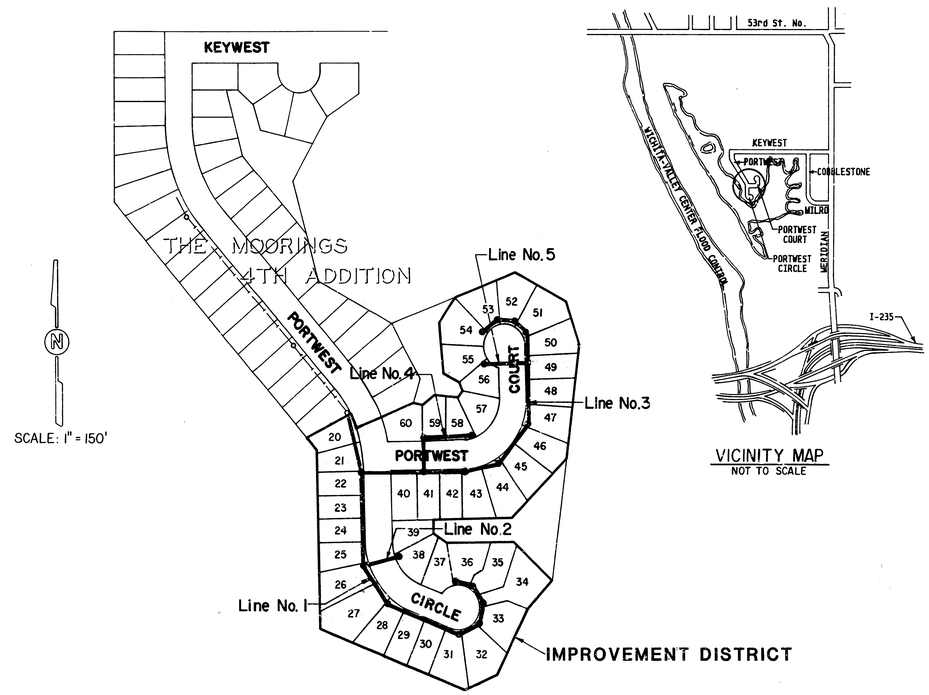
CONSTRUCTION PLANS

LATERAL 63, SANITARY SEWER NO. 23
THE MOORINGS 4TH ADDITION
TO
THE CITY OF WICHITA, KANSAS

MICHAEL E. LINDEBAK, P.E. – CITY ENGINEER

GENERAL NOTES:

1. Underground utility service lines and overhead poles lines 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.
2. Rubble 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.
3. 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 or a licensed professional engineer in accordance with state laws.
4. All manholes on this project to be Standard City of Wichita Manholes Type "P" or "C".



VICINITY MAP
NOT TO SCALE

INDEX

TITLE SHEET	SHEET NO. 1
LINE NO. 1 AND 2	SHEET NO. 2
LINE NO. 3, 4 AND 5	SHEET NO. 3
STANDARD MANHOLE TYPE P & C SHALLOW MANHOLE	SHEET NO. 4
THE MOORINGS 4TH ADDITION PLAT	SHEET NO. 5

BENCH MARKS

(City of Wichita Datum)

1. "+" cut on W. ring at SW Cor. Keywest on Keywest Ct. 401' E. and 5' S. of the NE Cor. Lot 1, Block 1 of The Moorings 3rd Addition. Elev. 142.64
2. "+" cut N. side MH ring at NE Cor. Lot 12, Block 1 of the Moorings 3rd Addition. Elev. 146.00
3. "CH" cut in S. Hdwl. of culvert at 45th Street No. and Meridian. Elev. 141.67
4. "+" cut in N. side MH ring of W. side of Portwest Circle between Lots 19 and 20. Elev. 143.90
5. Railroad Spk. in S. face of power pole N. side Keywest opposite westerly Keywest Court. Elev. 144.85

PROJECT NO. 468-76-245-81762-000-000-001 INDEX # 601369

OCTOBER 1988

PLANS PREPARED BY

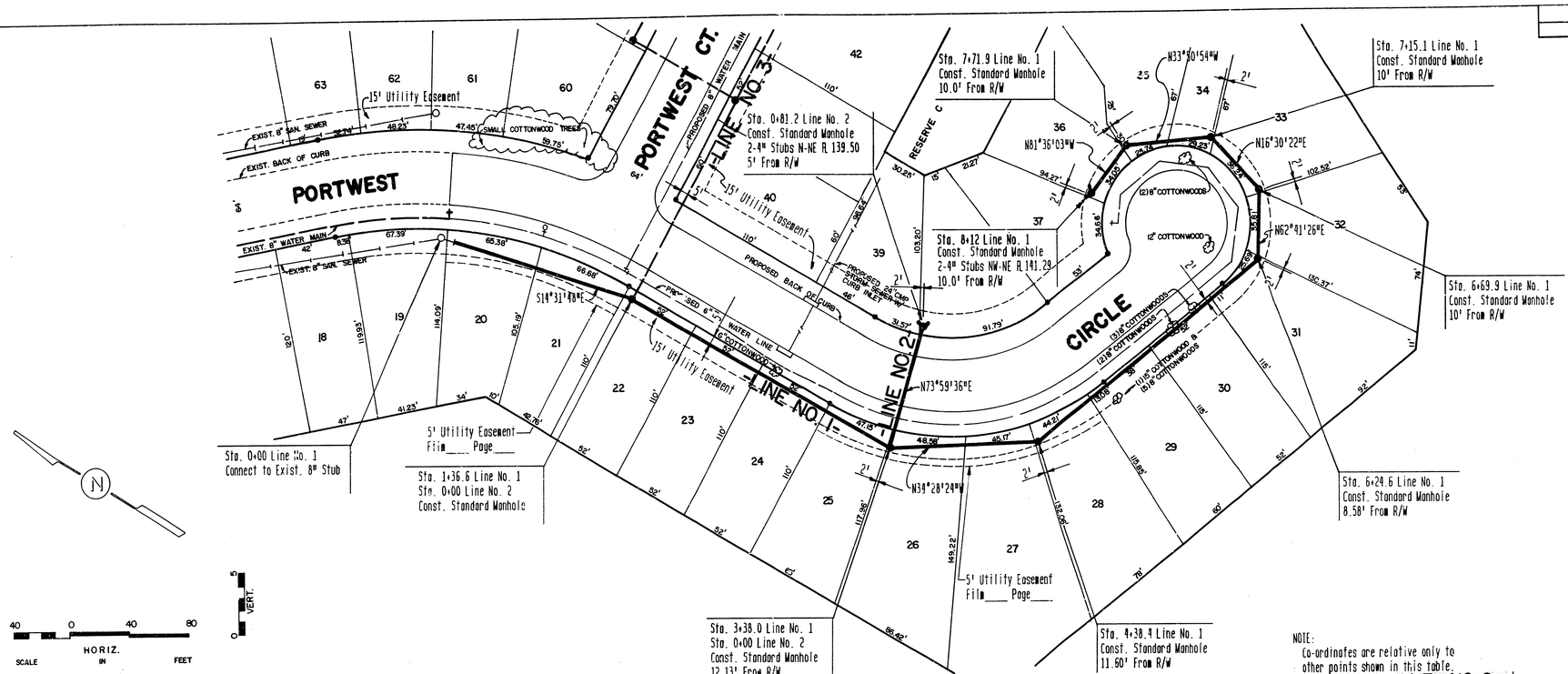
FOE & ASSOCIATES OF KANSAS INC.
CONSULTING ENGINEERS
434 N. Oliver, Suite 110 ■ Wichita, KS 67208 ■ 316/685-4114

BUILT PA
PLAN
3-89
RPL

KENNY E. HILL LICENSED 7690 KANSAS PROFESSIONAL ENGINEER

STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS

PLAN
NOTE BOOK
NO.

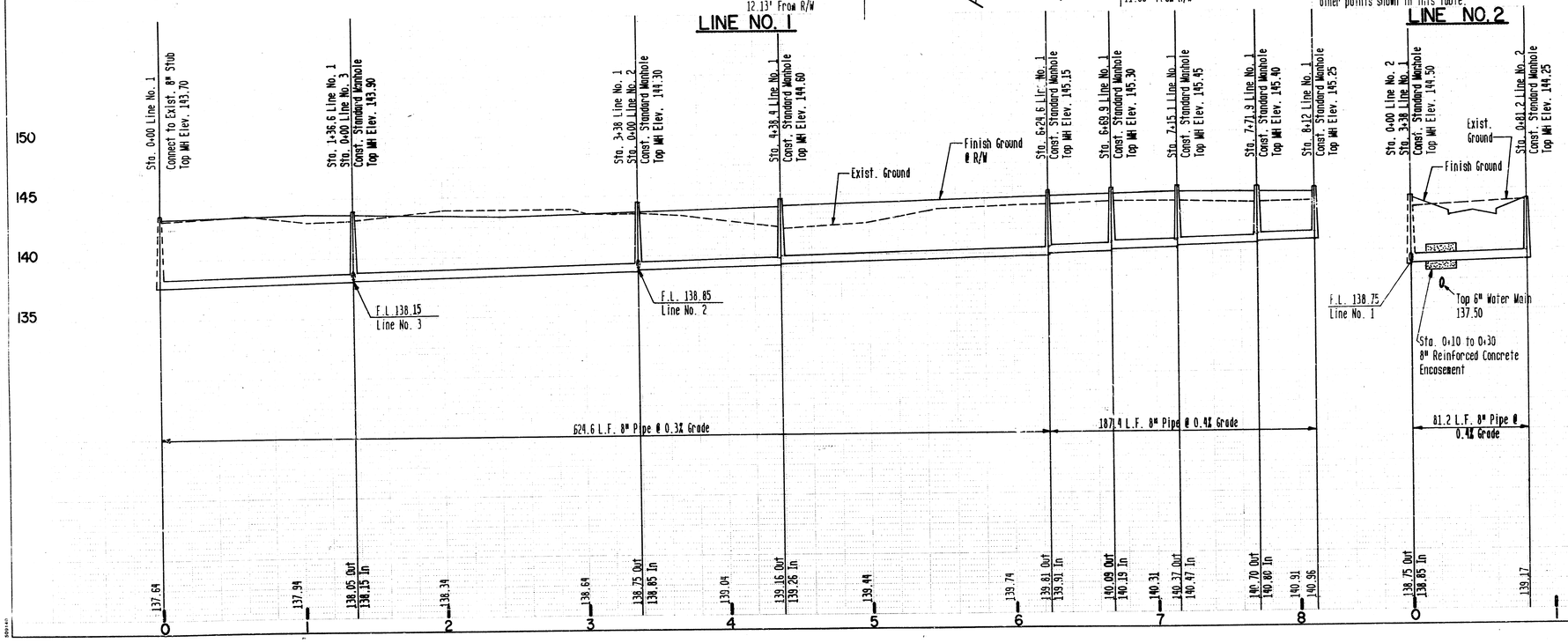


CO-ORDINATE POINT TABLE

N1=0.0000 E1=0.0000	PC CURVE LOT 22
N2=-5.1715 E2=-4.8225	STA 1+26.6
N3=-286.4433 E3=2.2861	STA 3+38.0
N4=-289.2372 E4=59.0523	STA 4+38.4
N5=-335.9772 E5=232.9160	STA 6+24.6
N6=-335.1870 E6=273.1880	STA 6+69.9
N7=-291.8765 E7=286.6163	STA 7+15.1
N8=-244.7176 E8=254.3865	STA 7+71.9
N9=-238.8634 E9=214.7376	STA 8+12.0
N10=-184.8442 E10=88.2872	STA 8+81.2
N11=-149.9899 E11=174.8311	RADIUS POINT
N12=-297.7365 E12=226.3813	CUL DE SAC RADIUS PT
N13=127.8433 E13=-39.8697	STA 0+00 EXIST. MH

NOTE:
Co-ordinates are relative only to other points shown in this table.

PROFILE
NOTE BOOK
NO.



POE & ASSOCIATES OF KANSAS INC.
CONSULTING ENGINEERS
434 N. Oliver Suite 110 ■ Wichita Ks 67208 ■ 316/685-4114

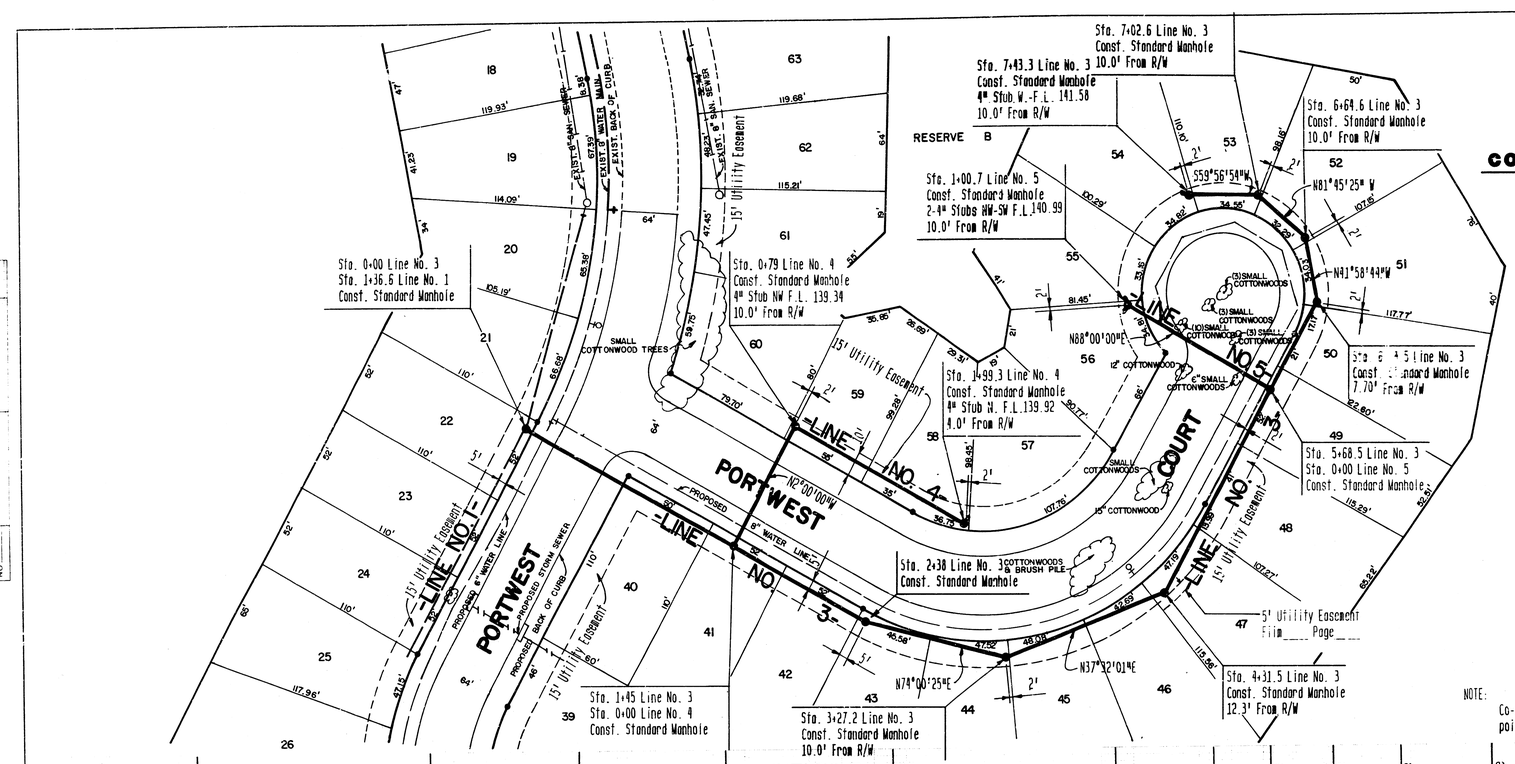
ENGINEER	K.H.
ENG. TECH	
DRAWN BY	T.B.
DATE	OCT. 1988
SHEET	2 OF 5

Lateral 63 - Sanitary Sewer No. 23
The Moorings 4th Addition
CITY OF WICHITA, KANSAS
PROJECT NUMBER
468-76-245-81762-000-000-001

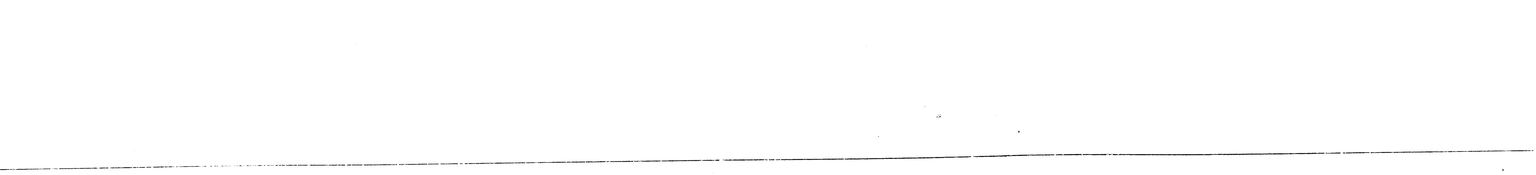
2/5

STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS

PLAN — DATE — NOTE BOOK — NO.



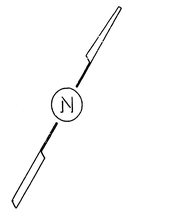
PROFILE — DATE — NOTE BOOK — NO.



CO-ORDINATE POINT TABLE

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N2=75.7862 E2=-95.7684	STA 0+79
N3=79.9843 E3=24.5166	STA 1+99.3
N4=25.5678 E4=85.7847	STA 3+27.2
N5=188.2769 E5=149.3121	STA 4+31.5
N6=245.1286 E6=144.5332	STA 5+68.5
N7=241.6147 E7=43.9872	STA 1+00.7
N8=385.1569 E8=142.4369	STA 6+28.5
N9=331.9400 E9=118.3393	STA 6+64.6
N10=337.3987 E10=88.6588	STA 7+02.6
N11=317.0446 E11=45.4811	STA 7+43.3
N12=278.3573 E12=91.3411	CUL DE SAC RADIUS PT
N13=4.8225 E13=-5.1715	NE COR. LOT 42
N14=68.7835 E14=-7.4858	PC CURVE LOT 58

NOTE:
Co-ordinates are relative only to other points shown in this table.



40 0 40 80
SCALE IN FEET
HORIZ.
5 0
VERT.

POE & ASSOCIATES OF KANSAS INC.
CONSULTING ENGINEERS
434 S. Oliver Suite 110 ■ Wichita, KS 67218 ■ 316-683-4114

ENGINEER	K.H.
ENG. TECH	
DRAWN BY	T.B.
DATE	OCT. 1988
SHEET	3 OF 5

Lateral 63 - Sanitary Sewer No. 23
The Moorings 4th Addition
CITY OF WICHITA, KANSAS
PROJECT NUMBER
468-76-245-81762-000-000-001

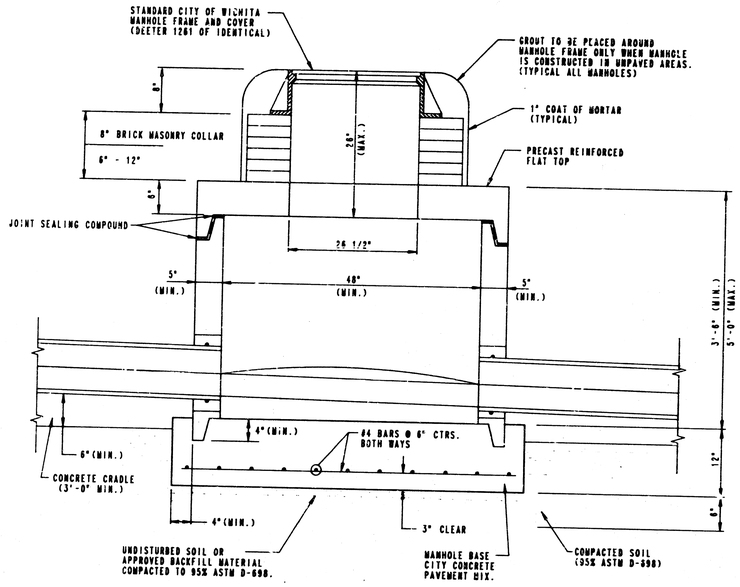
3/5

SEWER APPURTENANCES DETAILS

ADOPTED AS STANDARD DESIGN

BY

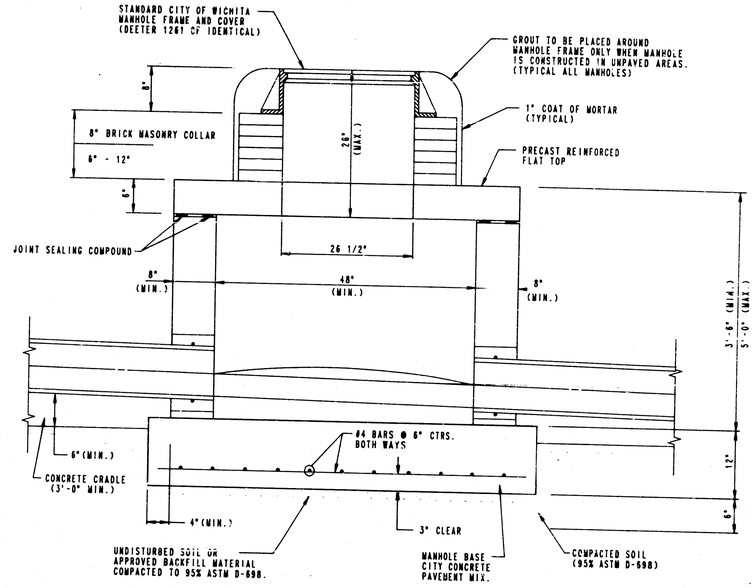
CITY OF WICHITA



TYPE P
SHALLOW MANHOLE
(PRECAST)

PRECAST MANHOLE NOTES

1. ALL PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO THE LATEST REVISION OF A.S.T.M. C478 AS MODIFIED BY THE SPECIFICATIONS.
2. APPROVED FLEXIBLE WATERSTOP GASKETS SHALL BE INSTALLED TO JOIN THE SEWER TO THE MANHOLE WALL WHEN PLASTIC PIPE IS USED. FOR OTHER TYPES OF PIPE THE SEWER SHALL BE GROUTED IN PLACE WITH NON-SHRINK GROUT.
3. NON-SHRINK GROUT SHALL BE NON-METALLIC TYPE.
4. PIPES INSTALLED WITHIN THE EXCAVATION MADE FOR THE MANHOLE SHALL BE CRADLED WITH CONCRETE TO THE LIMITS OF THE MANHOLE EXCAVATION (3" MIN.). WHEN CLAY PIPE IS USED, THE CRADLE SHALL EXTEND TO THE FIRST JOINT OUTSIDE THE MANHOLE (3" MIN.). 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. ALL INSIDE SURFACES OF THE CONCRETE MANHOLE WHICH WOULD BE EXPOSED TO SEWER GAS SHALL BE COATED WITH 2 COATS TNEMEC SERIES 66 HI-BUILD EPOXOLINE, DRY THICKNESS OF 8 MILS (MIN.).
6. EXTERIOR MANHOLE WALLS SHALL BE COATED WITH 1 COAT MOBILARMA 633 BITUMINOUS COATING.
7. JOINT SEALING COMPOUND SHALL BE KENT SEAL NO. 2 OR APPROVED EQUAL.
8. PRECAST MANHOLES SHALL BE SET AT LEAST 4 INCHES INTO THE MANHOLE BASE.
9. TOP OF MANHOLE FLOOR SLAB SHALL BE AT LEAST 3 INCHES BELOW THE FLOW LINE OF THE OUTLET PIPE TO INSURE SUFFICIENT MINIMUM THICKNESS OF SHAPED INVERT.
10. LIFTING HOLES SHALL BE FILLED WITH NON-SHRINK GROUT AND THE INTERIOR SURFACE COATED AS SPECIFIED.
11. 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 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. 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.
12. 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 AT LEAST 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.
13. 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 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.
14. 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.
15. THE CROWNS OF INFLOWING PIPES SHALL NEVER BE SET LOWER THAN THE CROWN OF THE OUTFLOWING PIPE.
16. A BRICK MASONRY COLLAR SHALL BE INSTALLED BETWEEN THE CAST IRON FRAME AND THE PRECAST REINFORCED FLAT TOP. THE COLLAR WILL HAVE 8" WALLS AND A VERTICAL HEIGHT OF 6" MINIMUM AND 18" MAXIMUM. A 1" COAT OF MORTAR WILL BE PLASTERED ON THE OUTSIDE OF THE COLLAR.
17. SHALLOW MANHOLES TYPE "P" SHALL BE BID AS SHALLOW MANHOLES FOR THE TYPE AND DIAMETER INDICATED. ALL MANHOLE DIAMETERS WILL BE 4' UNLESS INDICATED OTHERWISE.



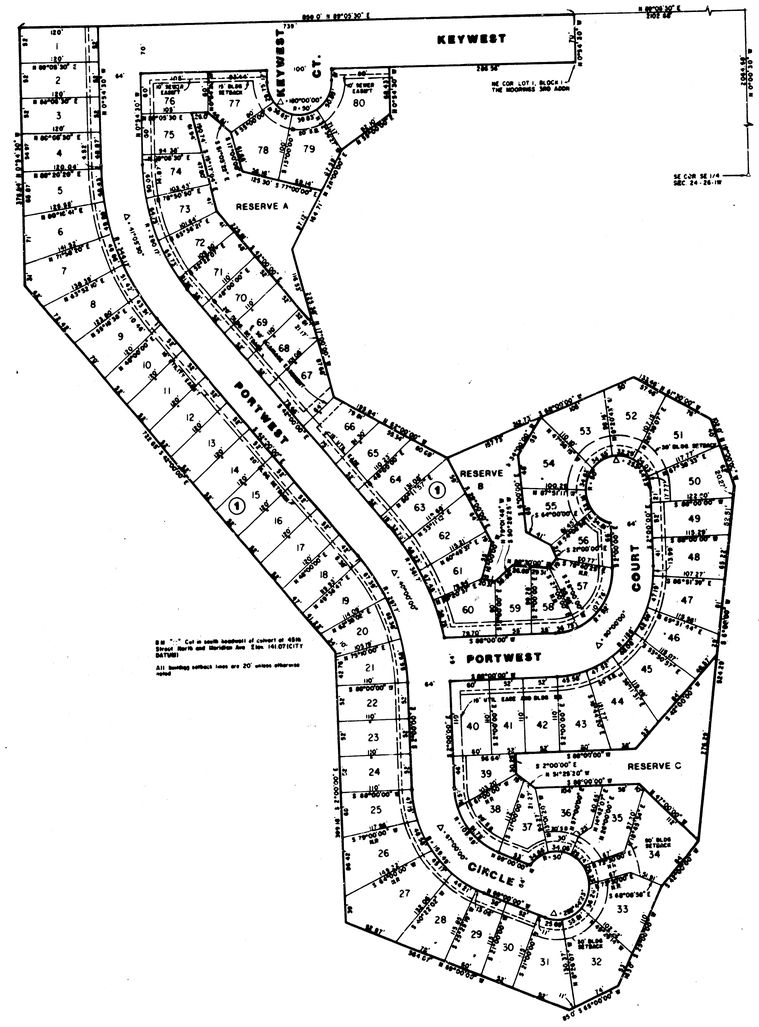
TYPE C
SHALLOW MANHOLE
(CAST-IN-PLACE)

CAST-IN-PLACE MANHOLE NOTES

1. APPROVED FLEXIBLE WATERSTOP GASKETS SHALL BE INSTALLED TO JOIN THE SEWER TO THE MANHOLE WALL WHEN PLASTIC PIPE IS USED. FOR OTHER TYPES OF PIPE THE SEWER SHALL BE GROUTED IN PLACE WITH NON-SHRINK GROUT.
2. NON-SHRINK GROUT SHALL BE NON-METALLIC TYPE.
3. PIPES INSTALLED WITHIN THE EXCAVATION MADE FOR THE MANHOLE SHALL BE CRADLED WITH CONCRETE TO THE LIMITS OF THE MANHOLE EXCAVATION (3" MIN.). WHEN CLAY PIPE IS USED, THE CRADLE SHALL EXTEND TO THE FIRST JOINT OUTSIDE THE MANHOLE (3" MIN.). 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.
4. JOINT SEALING COMPOUND SHALL BE KENT SEAL NO. 2 OR APPROVED EQUAL.
5. TOP OF MANHOLE FLOOR SLAB SHALL BE AT LEAST 3 INCHES BELOW THE FLOW LINE OF THE OUTLET PIPE TO INSURE SUFFICIENT MINIMUM THICKNESS OF SHAPED INVERT.
6. MORTAR USED IN MASONRY CONSTRUCTION SHALL CONTAIN 8 SACKS OF CEMENT PER CUBIC YARD. CONCRETE USED IN MANHOLE WALLS AND 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 "C" MANHOLES CAN BE CONSTRUCTED ONLY WHERE PIPE SIZES ARE 8" OR SMALLER. THE INSIDE DIAMETER OF TYPE "C" MANHOLES SHALL BE 4'. COMPLETED MANHOLE SHALL BE WITHOUT LEAKS AND WATER TIGHT.
7. REINFORCING STEEL SHALL BE INSTALLED IN THE MANHOLE BASE. REINFORCING STEEL SHALL CONSIST OF NO. 4 BARS PLACED ON 6" CENTERS IN BOTH DIRECTIONS. REINFORCING STEEL SHALL BE PLACED AT LEAST 3" ABOVE THE BOTTOM OF THE MANHOLE BASE. COST OF FURNISHING AND INSTALLING REINFORCING STEEL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.
8. 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 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.
9. 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.
10. THE CROWNS OF INFLOWING PIPES SHALL NEVER BE SET LOWER THAN THE CROWN OF THE OUTFLOWING PIPE.
11. A BRICK MASONRY COLLAR SHALL BE INSTALLED BETWEEN THE CAST IRON FRAME AND THE PRECAST REINFORCED FLAT TOP. THE COLLAR WILL HAVE 8" WALLS AND A VERTICAL HEIGHT OF 6" MINIMUM AND 18" MAXIMUM. A 1" COAT OF MORTAR WILL BE PLASTERED ON THE OUTSIDE OF THE COLLAR.
12. SHALLOW MANHOLES TYPE "C" SHALL BE BID AS SHALLOW MANHOLES FOR THE TYPE AND DIAMETER INDICATED. ALL MANHOLE DIAMETERS WILL BE 4' UNLESS INDICATED OTHERWISE.

PROJECT NO. 468-76-245-81762-000-000-001

D 1-35



SCALE 1" = 100'

THE MOORINGS 4TH ADDITION

TO WICHITA, SEDGWICK COUNTY, KANSAS

Deed of Covenants & Restrictions F 927 Pg 758

STATE OF KANSAS }
COUNTY OF SEDGWICK } SS.

We, Kenny E. Hill, and William P. Fox, being duly licensed respectively as a Professional Engineer and Land Surveyor in said County and State, do hereby certify that we have platted and surveyed THE MOORINGS 4th ADDITION to Wichita, Sedgwick County, Kansas, being described as follows:

Commencing at the Southeast Corner of the Southeast Quarter (SE1/4) of Section 24, Township 26 South, Range 1 West of the 6th P.M. Sedgwick County, Kansas; thence N 0°00'30" W for a distance of 2064.68 feet to the Northeast Corner of THE MOORINGS, an addition to Wichita, Sedgwick County, Kansas; thence S 89°05'30" W for a distance of 2102.68 feet to the point of beginning, thence S 0°54'30" E for a distance of 70 feet to the Northeast Corner of Lot 1, Block 1 of THE MOORINGS 3rd ADDITION; thence continuing on the boundary of THE MOORINGS 3rd ADDITION for the next 7 courses S 89°05'30" W for a distance of 286.56 feet; thence S 0°54'30" E for a distance of 68.43 feet; thence S 55°00'00" W for a distance of 92.10 feet; thence S 28°00'00" W for a distance of 164.71 feet; thence S 17°00'00" E for a distance of 225.38 feet; thence S 62°00'00" E for a distance of 195.84 feet; thence N 68°00'00" E for a distance of 312.73 feet; thence S 61°30'00" E for a distance of 133.46 feet; thence S 19°00'00" E for a distance of 102.0 feet; thence S 6°00'00" W for a distance of 524.29 feet; thence S 42°00'00" W for a distance of 84.00 feet; thence S 25°00'00" W for a distance of 163.00 feet; thence S 65°00'00" W for a distance of 85.00 feet; thence N 69°00'00" W for a distance of 364.87 feet; thence N 2°00'00" W for a distance of 399.18 feet; thence N 42°00'00" W for a distance of 722.65 feet; thence N 0°54'30" W for a distance of 378.84 feet; thence N 89°05'30" E for a distance of 859.00 feet to the point of beginning, containing 18.21 acres more or less. The bearing of the East line of said Southeast Quarter (SE1/4) is assumed to be N 0°00'30" W. The accompanying plat is a true and correct exhibit of property surveyed.

Dated this 16TH day of SEPTEMBER, 1987.

Kenny E. Hill, P.E. (SEAL)

William P. Fox, L.S. (SEAL)

KENNY E. HILL LICENSED 7690 KANSAS PROFESSIONAL ENGINEER

WILLIAM P. FOX REGISTERED LS-750 KANSAS LAND SURVEYOR

KNOW ALL MEN BY THESE PRESENTS:

That we, MIBAC, Inc. have caused the land described in the Engineer's Certificate to be platted into lots, a block, streets and reserves. The streets are hereby dedicated to and for the use of the public. Easements are hereby granted as indicated for the construction and maintenance of drainage and utilities. Reserve "A", "B" and "C" are reserved for open space and a lake to be owned and maintained by a lot (or home) owners' association. Development of this property shall be in accordance with The Moorings Community Unit Plan a copy of which is on file in the Metropolitan Area Planning Department.

MIBAC, INC.

C. Bill Bachman

C. Bill Bachman, President

STATE OF KANSAS }
COUNTY OF SEDGWICK } SS.

Be it remembered that on this 16th day of SEPTEMBER, 1987, before me, a Notary Public in and for said County and State, came MIBAC, INC., by Its President, C. Bill Bachman, to me known to be the same person who executed the foregoing instrument duly acknowledged by me. In testimony whereof, I have hereunto set my hand and affixed my Notarial Seal the day and year above written.

Carol S. Barnes (SEAL)
Notary Public CAROL S. BARNES

My Appointment Expires 4-28-88

This Plat of THE MOORINGS 4th ADDITION to Wichita, Sedgwick County, Kansas has been submitted and approved by this WICHITA-SEDGWICK COUNTY METROPOLITAN AREA PLANNING COMMISSION, Wichita, Kansas.

Dated this 20th day of August, 1987

WICHITA SEDGWICK COUNTY METROPOLITAN
AREA PLANNING COMMISSION

Mary Ellen Conlee Vice-Chairman
MARY ELLEN CONLEE

Marvin S. Krout Secretary
Marvin S. Krout (SEAL)

This Plat approved and all dedications shown hereon accepted by the City Council of the City of Wichita, Kansas, this 13TH day of OCT, 1987.

Robert G. Knight, Mayor

Dale E. Rea, Deputy City Clerk (SEAL)

914240

Entered on transfer record this 23rd day of October, 1987.

Don Wright, County Clerk

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 12:30 P.M. on the 23RD day of OCTOBER 1987.

Pat Kettler, Register of Deeds

Ed Rea, Deputy

PROJECT NUMBER: 468-76-245-81762-000-000-001

D 1-35

5/5