CONSTRUCTION PLANS FOR

LATERAL 6, MAIN 15

OF THE

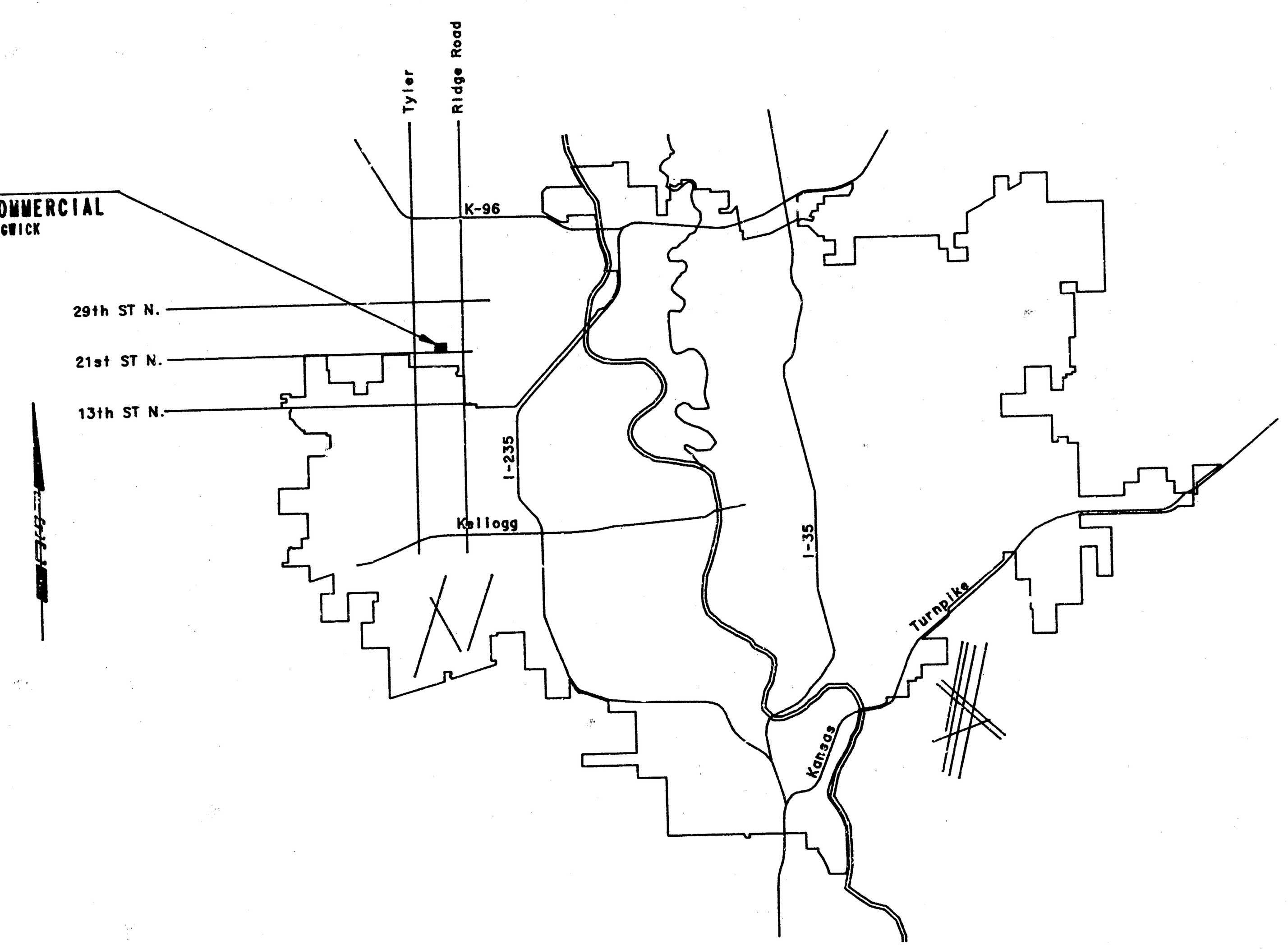
SOUTHWEST INTERCEPTOR SEWER

IN

THE CITY OF WICHITA,

SEDGWICK COUNTY, KANSAS

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



LOCATION MAP

INDEX OF SHEETS

SHEET NO. 1	TITLE SHEET
SHEET NO. 2	KEY MAP
SHEET NO. 3	PLAT
SHEET NO. 4-5	PLAN/PROFILE
SHEET NO. 6	TYPE "D" MANHOLE DETAILS
SHEET NO. 7	TYPE "P" MANHOLE DETAILS
SHEET NO. 8	TYPE "C" MANHOLE DETAILS
SHEET NO. 9	FRAME & COVER DETAIL

Built As Per Plan
10-88
ROL

MICHAEL D. SCHOMAKER
LICENSED
6778
KANSAS
PROFESSIONAL ENGINEER

CITY OF WICHITA PROJECT NO. 468-76-245-81841-000-000-001

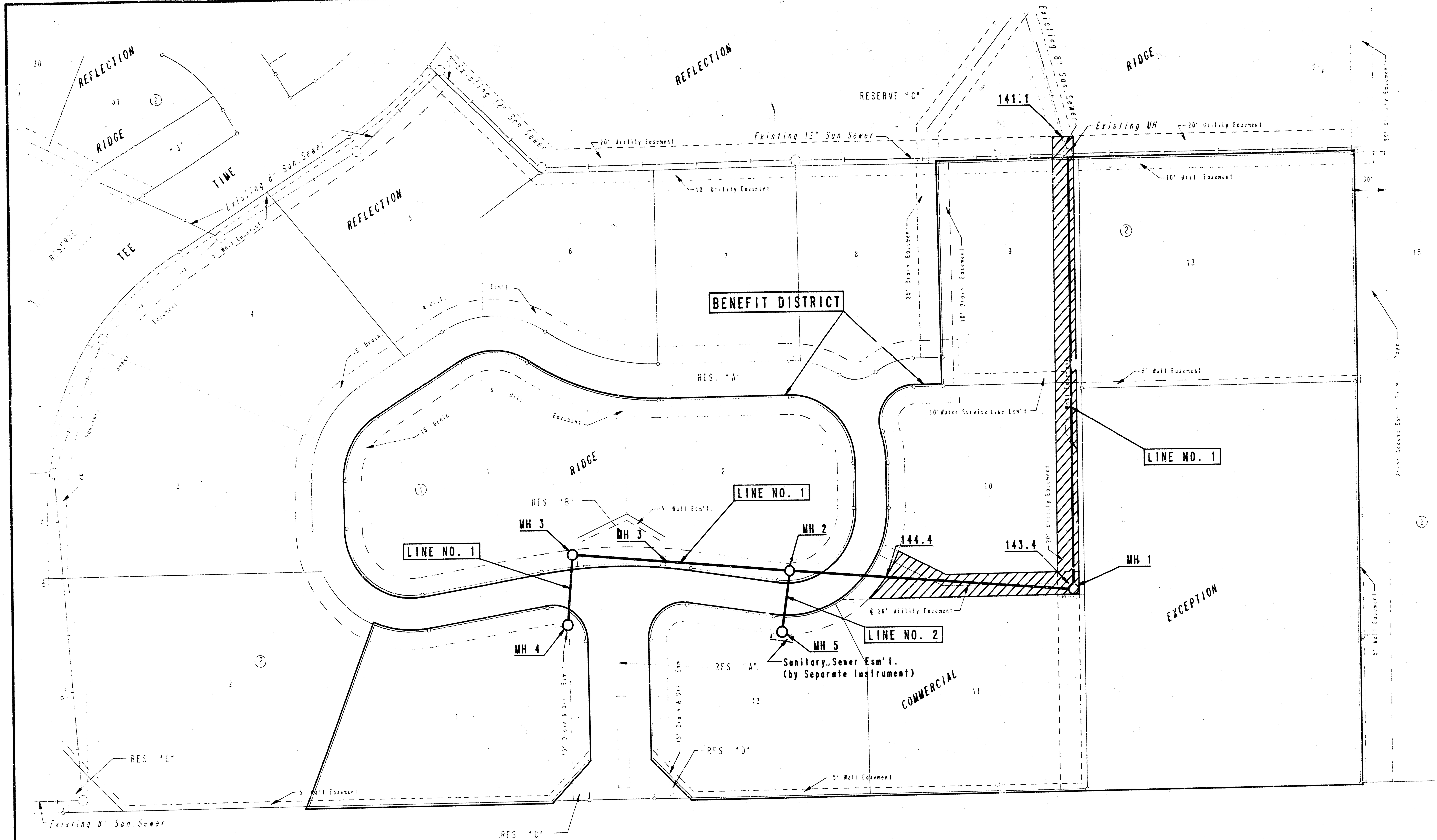
MARCH, 1988

PLANS PREPARED BY

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

ENGINEERS

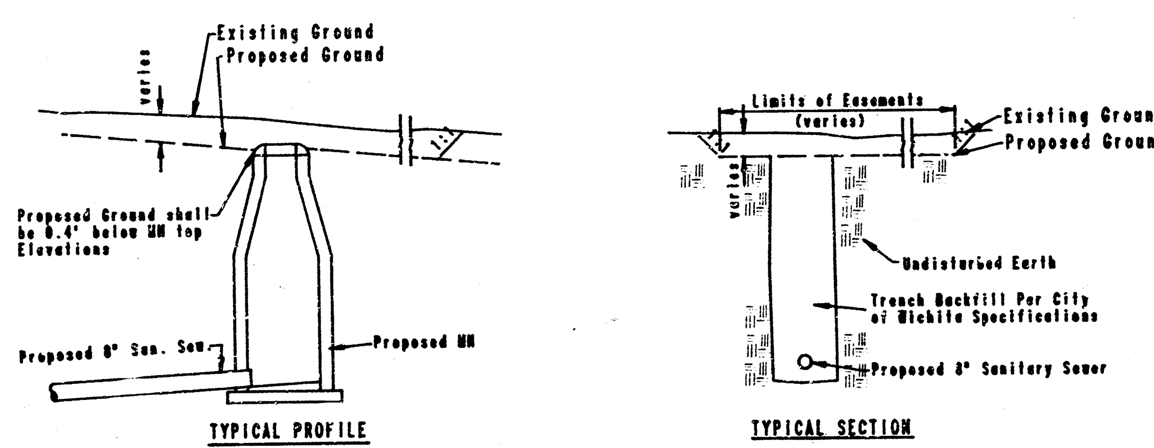
WICHITA, KANSAS



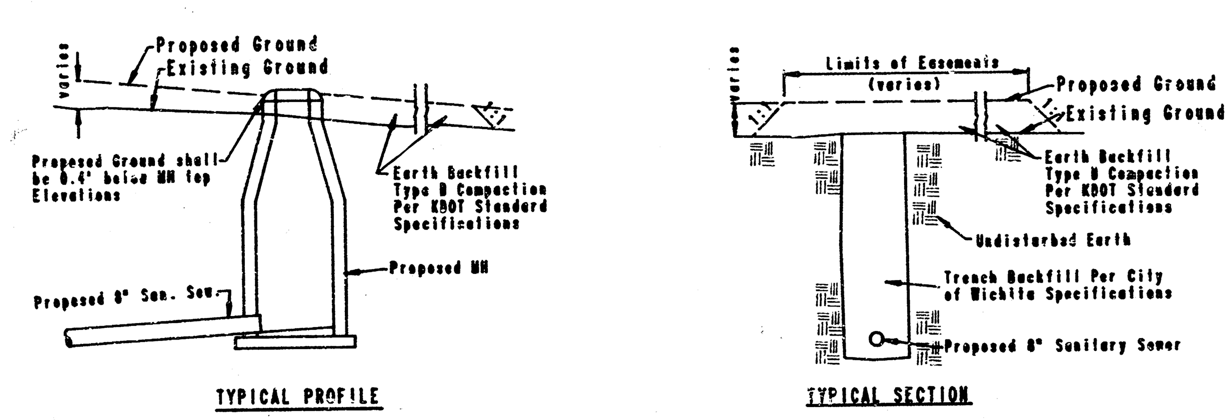
SCALE
1" = 50'

KEY MAP & EASEMENT GRADING

Limits of Area to be Graded



"CUT" SITUATIONS



"FILL" SITUATIONS

GENERAL NOTES

1. ALL CONSTRUCTION AND MATERIALS TO COMPLY WITH CITY OF WICHITA SPECIFICATIONS AND STANDARDS.
2. ALL ELEVATIONS SHOWN ARE CITY OF WICHITA DATUM (USGS-1187.4 = CITY DATUM).
3. THE CONTRACTOR SHALL LIMIT THE EXTENT OF TRENCH TO REMAIN OPEN OVERNIGHT AND WEEKENDS TO LESS THAN 50 FEET.
4. AT LEAST 48 HOURS PRIOR TO BEGINNING EXCAVATION, IF REQUIRED, (EXCLUDING WEEKENDS AND HOLIDAYS), THE CONTRACTOR SHALL CONTACT THE KANSAS ONE-CALL SYSTEM, A UTILITY LOCATION SERVICE, AT (316) 687-2470 TO REQUEST THE FOLLOWING UTILITY COMPANIES TO LOCATE ANY EXISTING LINES WITHIN THE PROJECT AREA: GAS SERVICE COMPANY, K.G.&E., THE WICHITA WATER DEPARTMENT, AIR CAPITAL CABLEVISION, AND THE TELEPHONE COMPANY.
5. UNDERGROUND UTILITY SERVICE LINES AND OVERHEAD UTILITY POLE 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.
6. 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 IN ACCORDANCE WITH STATE LAWS. ALL COSTS FOR THIS WORK SHALL BE SUBSIDIARY TO THE OTHER ITEMS OF WORK.
7. CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM ALL MANHOLE COVERS.
8. CONTRACTOR SHALL GRADE THE EASEMENTS TO THE ELEVATIONS SHOWN ON THE EASEMENT GRADING PLAN. COSTS FOR EASEMENT GRADING SHALL BE SUBSIDIARY TO THE OTHER ITEMS OF WORK.
9. UNLESS OTHERWISE SPECIFIED ON THE PLANS MANHOLES MAY BE TYPE "P", "C", OR "D" MANHOLES. MANHOLES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS AND THE STANDARD DETAIL DRAWINGS.

BENCH MARKS

BM - R.R. Spike in East face of 18" Elm located approximately 230' South of the Southwest corner of Reserve "C" of Tee Time.
Elev.=151.31

BM - R.R. Spike in SW side of Power Pole Located 75' North and 58' East of the Centerline intersection of Ridge Road and 21st Street North.
Elev.=143.30

BM - R.R. Spike in SW face of Light Pole 65' East of the Centerline of Tee Time at 21st Street Right-of-Way.
Elev.=157.78

BM - R.R. Spike in South face of Light Pole at SE Corner of Reflection Ridge Commercial.
Elev.=145.08

MICHAEL D. SCHOMAKER
LICENSED
6778
KANSAS
PROFESSIONAL ENGINEER

No.	Revision	By	Date

LATERAL 6, MAIN 15 OF THE
SOUTHWEST INTERCEPTOR SEWER

KEY MAP AND EASEMENT GRADING

MICHAEL E. LINDEBAK, P.E. - CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-76-245-81841-000-000-001

PROFESSIONAL ENGINEERING CONSULTANTS, P2/9
ENGINEERS
WICHITA, KANSAS

Designed by MDS, CRY	Job No. 34-88047	Sht. 2 of 9
Drawn by TWV	Date MARCH, 1988	

REFLECTION RIDGE COMMERCIAL

AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS

STATE OF KANSAS)
) SS
COUNTY OF SEDGWICK)

I, R.W. LINN, A PROFESSIONAL ENGINEER IN AFORESAID STATE AND COUNTY, DO HEREBY CERTIFY THAT ON THIS 10th DAY OF Feb., 1988, I HAVE BEEN IN RESPONSIBLE CHARGE OF SURVEYING AND PLATTING OF REFLECTION RIDGE COMMERCIAL, AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS, INTO LOTS, BLOCKS, A STREET AND RESERVES, THE SAME BEING A TRACT OF LAND IN THE SE 1/4 OF SECTION 4, TOWNSHIP 27 SOUTH, RANGE 1 WEST OF THE 6TH P.M., AND DESCRIBED AS: COMMENCING AT THE SE CORNER OF SAID SECTION 4; THENCE BEARING N0°00'00"E ALONG THE EAST LINE OF SAID SECTION 4 A DISTANCE OF 1789.62 FEET; THENCE BEARING N90°00'00"W A DISTANCE OF 40.00 FEET TO THE POINT OF BEGINNING; THENCE BEARING S0°00'00"E PARALLEL TO AND 40.00 FEET WEST OF THE EAST LINE OF SAID SECTION 4 A DISTANCE OF 1540.09 FEET; THENCE BEARING S89°19'27"W A DISTANCE OF 35.00 FEET; THENCE BEARING S0°00'00"E A DISTANCE OF 169.99 FEET; THENCE BEARING S89°19'27"W PARALLEL TO AND 80.00 FEET NORTH OF THE SOUTH LINE OF SAID SECTION 4, A DISTANCE OF 574.99 FEET; THENCE BEARING N0°00'00"W A DISTANCE OF 350.00 FEET; THENCE BEARING S89°19'27"W A DISTANCE OF 250.00 FEET; THENCE BEARING S0°00'00"E A DISTANCE OF 350.00 FEET; THENCE BEARING S89°19'27"W PARALLEL TO AND 80.00 FEET NORTH OF THE SOUTH LINE OF SAID SECTION 4 A DISTANCE OF 946.00 FEET; THENCE BEARING N0°40'33"W A DISTANCE OF 100.00 FEET; THENCE BEARING N9°45'58"W A DISTANCE OF 101.27 FEET; THENCE BEARING N0°40'33"W A DISTANCE OF 55.00 FEET TO THE P.C. OF A CURVE TO THE RIGHT HAVING A RADIUS OF 273.00 FEET; THENCE ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 59°00'00" AN ARC DISTANCE OF 281.12 FEET; THENCE BEARING N58°19'27"E A DISTANCE OF 187.00 FEET TO THE P.C. OF A CURVE TO THE LEFT HAVING A RADIUS OF 350.00 FEET; THENCE ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 15°48'33" AN ARC DISTANCE OF 96.57 FEET; THENCE BEARING S47°29'06"E A DISTANCE OF 140.00 FEET; THENCE BEARING N89°19'27"E A DISTANCE OF 748.82 FEET; THENCE BEARING N0°00'00"E A DISTANCE OF 170.00 FEET; THENCE BEARING N31°01'50"E A DISTANCE OF 1163.84 FEET; THENCE BEARING N90°00'00"E A DISTANCE OF 10.00 FEET TO THE POINT OF BEGINNING.

R.W. Linn
R.W. LINN, P.E. LIC. #3684, R L.S. #934
PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

R.W. LINN
LS-934
KANSAS
LAND SURVEYOR

KNOW ALL MEN BY THESE PRESENTS THAT WE, THE UNDERSIGNED PROPERTY OWNERS OF THE LAND, AS ABOVE SET FORTH IN THE ENGINEER'S CERTIFICATE, HAVE CAUSED THE LAND TO BE SURVEYED AND PLATTED INTO LOTS, BLOCKS, A STREET AND RESERVES, THE SAME TO BE KNOWN AS REFLECTION RIDGE COMMERCIAL, AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS. EASEMENTS, AS INDICATED FOR THE CONSTRUCTION AND MAINTENANCE OF STREET, DRAINAGE AND PUBLIC UTILITIES, AS INDICATED IN THIS PLAT, ARE HEREBY GRANTED. THE STREET IS HEREBY DEDICATED TO AND FOR THE USE OF THE PUBLIC. ALL ABUTTERS' RIGHTS OF ACCESS TO AND FROM 21ST STREET NORTH, RIDGE ROAD AND TEE TIME STREET OVER AND ACROSS THE SOUTH AND EAST AND WEST LINES OF BLOCK 2 ARE HEREBY GRANTED TO THE CITY OF WICHITA. PROVIDED, HOWEVER, THAT RESERVE A IN BLOCK 2 SHALL HAVE ACCESS TO 21ST STREET NORTH AT ONE (1) LOCATION SAID LOCATION TO SERVE AS AN ENTRANCE TO A PRIVATE STREET IN SAID RESERVE A; THAT LOT 15, BLOCK 2 SHALL HAVE ACCESS TO 21ST STREET NORTH AT TWO (2) LOCATIONS AND LOT 14, BLOCK 2, SHALL HAVE ACCESS TO THE 21ST STREET NORTH AT ONE (1) LOCATION; THAT LOTS 14, 15 AND 16 IN BLOCK 2 SHALL HAVE ACCESS TO RIDGE ROAD IN THE FOLLOWING MANNER: LOT 14 SHALL HAVE ACCESS AT ONE (1) LOCATION AND LOTS 15 AND 16 SHALL HAVE ACCESS AT THREE (3) LOCATIONS EACH, ALL LOCATIONS TO BE DETERMINED BY THE CITY ENGINEER OF THE CITY OF WICHITA, KANSAS.

THE 5-FOOT WALL EASEMENTS, AS SHOWN, ARE PLATTED FOR THE CONSTRUCTION AND MAINTENANCE OF A PRIVATE WALL. UTILITIES MAY CROSS THE WALL EASEMENTS.

RESERVE A IS PLATTED FOR THE CONSTRUCTION AND MAINTENANCE OF A PRIVATE DRIVE, LANDSCAPING, MEDIANS, DRAINAGE AND UTILITIES. RESERVE B IS PLATTED FOR PROJECT SIGN AND DIRECTORY, FOR FOUNTAINS, LANDSCAPING, ENTRY MONUMENTS, GAZEBOS AND WALLS CONFINED WITHIN EASEMENTS; RESERVES C, D AND E ARE PLATTED FOR LANDSCAPING ENTRY MONUMENTS AND IRRIGATION. RESERVES A THROUGH E INCLUSIVE, SHALL BE SUBJECT TO RESTRICTIVE COVENANTS ESTABLISHED BY THE DECLARATION OF OWNERS ASSOCIATION AGREEMENTS AND SHALL BE OWNED AND MAINTAINED BY THE ONE OR MORE OWNERS' ASSOCIATIONS TO BE FORMED WITHIN REFLECTION RIDGE COMMERCIAL. THAT PORTION OF RICHSTREET ADDITION AND THE SANITARY SEWER EASEMENT ESTABLISHED ON FILM 930, PAGE 670 WITHIN THE ABOVE DESCRIBED TRACT ARE HEREBY VACATED AND REPLATTED BY VIRTUE OF K.S.A. 12-512(b) AMENDED.

OWNER: REFLECTION RIDGE, INC.

BY Reginald V. Boothe
REGINALD V. BOOTHE, PRESIDENT

RICHSTREET REALTY CO., A PARTNERSHIP

Robert D. Richardson
ROBERT D. RICHARDSON, PARTNER

Roger Overstreet
ROGER OVERSTREET, PARTNER

STATE OF KANSAS)
) SS
COUNTY OF SEDGWICK)

BE IT REMEMBERED THAT ON THIS 24th DAY OF February, 1988, BEFORE ME, A NOTARY PUBLIC IN AFORESAID STATE AND COUNTY, CAME REGINALD V. BOOTHE, PRESIDENT, REFLECTION RIDGE, INC., TO ME PERSONALLY KNOWN TO BE THE SAME PERSON WHO EXECUTED THE FOREGOING INSTRUMENT OF WRITING AND DULY ACKNOWLEDGED THE EXECUTION OF SAME FOR AND ON BEHALF AND AS THE ACT AND DEED OF SAID CORPORATION, IN TESTIMONY WHEREOF I HAVE HEREUNTO SET MY HAND AND AFFIXED MY NOTARIAL SEAL THE DAY AND YEAR ABOVE WRITTEN.

Charlene A. Stilwell, NOTARY PUBLIC

MY COMMISSION EXPIRES 11/30/91

CHARLENE A. STILWELL
NOTARY PUBLIC
My Appt. Exp.
STATE OF KANSAS

STATE OF KANSAS)
) SS
COUNTY OF SEDGWICK)

BE IT REMEMBERED THAT ON THIS 24th DAY OF February, 1988, BEFORE ME, A NOTARY PUBLIC IN AFORESAID STATE AND COUNTY, CAME ROBERT D. RICHARDSON, AND ROGER OVERSTREET, ALL OF THE PARTNERS OF RICHSTREET REALTY CO.; A PARTNERSHIP, TO ME PERSONALLY KNOWN TO BE THE SAME PERSONS WHO EXECUTED THE FOREGOING INSTRUMENT OF WRITING AND DULY ACKNOWLEDGED THE EXECUTION OF SAME FOR AND ON BEHALF AND AS THE VOLUNTARY ACT AND DEED OF SAID PARTNERSHIP. IN TESTIMONY WHEREOF I HAVE HEREUNTO SET MY HAND AND AFFIXED MY NOTARIAL SEAL THE DAY AND YEAR ABOVE WRITTEN.

Charlene A. Stilwell, NOTARY PUBLIC

MY COMMISSION EXPIRES: 11/30/91

CHARLENE A. STILWELL
NOTARY PUBLIC
My Appt. Exp.
STATE OF KANSAS

WE, CENTRAL BANK & TRUST COMPANY IN WICHITA, KANSAS, HOLDER OF A MORTGAGE ON A PORTION OF THE ABOVE DESCRIBED PROPERTY, DO HEREBY CONSENT TO THE PLATTING OF REFLECTION RIDGE COMMERCIAL AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS.

BY L.D. Carney Jr Pres
L. D. CARNEY JR., PRESIDENT

STATE OF KANSAS)
) SS
COUNTY OF SEDGWICK)

BE IT REMEMBERED THAT ON THIS 24th DAY OF February, 1988, BEFORE ME, A NOTARY PUBLIC IN AFORESAID STATE AND COUNTY, CAME L.D. CARNEY JR., PRESIDENT, OF CENTRAL BANK & TRUST COMPANY IN WICHITA, KANSAS, TO ME PERSONALLY KNOWN TO BE THE SAME PERSON WHO EXECUTED THE FOREGOING INSTRUMENT OF WRITING AND DULY ACKNOWLEDGE THE EXECUTION OF SAME FOR AND ON BEHALF AND AS THE VOLUNTARY ACT AND DEED OF SAID BANK. IN TESTIMONY WHEREOF I HAVE HEREUNTO SET MY HAND AND AFFIXED MY NOTARIAL SEAL THE DAY AND YEAR ABOVE WRITTEN.

Charlene A. Stilwell, NOTARY PUBLIC

MY COMMISSION EXPIRES: 11/30/91

CHARLENE A. STILWELL
NOTARY PUBLIC
My Appt. Exp.
STATE OF KANSAS

WE, WICHITA STATE BANK IN WICHITA, KANSAS, HOLDER OF A MORTGAGE ON THE ABOVE DESCRIBED PROPERTY, DO HEREBY CONSENT TO THE PLATTING OF REFLECTION RIDGE COMMERCIAL AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS.

BY Gregory K. Wilson Pres
GREGORY K. WILSON, PRESIDENT

THE CITY OF WICHITA
SEDGWICK COUNTY, KS.

STATE OF KANSAS)
) SS
COUNTY OF SEDGWICK)

BE IT REMEMBERED THAT ON THIS 24th DAY OF February, 1988, BEFORE ME, A NOTARY PUBLIC IN AFORESAID STATE AND COUNTY, CAME GREGORY K. WILSON, PRES., OF THE WICHITA STATE BANK IN WICHITA, KANSAS, TO ME PERSONALLY KNOWN TO BE THE SAME PERSON WHO EXECUTED THE FOREGOING INSTRUMENT OF WRITING AND DULY ACKNOWLEDGE THE EXECUTION OF SAME FOR AND ON BEHALF AND AS THE VOLUNTARY ACT AND DEED OF SAID BANK. IN TESTIMONY WHEREOF I HAVE HEREUNTO SET MY HAND AND AFFIXED MY NOTARIAL SEAL THE DAY AND YEAR ABOVE WRITTEN.

Charlene A. Stilwell, NOTARY PUBLIC

MY COMMISSION EXPIRES: 11/30/91

CHARLENE A. STILWELL
NOTARY PUBLIC
My Appt. Exp.
STATE OF KANSAS

WE, NATIONAL BANK OF WICHITA IN WICHITA, KANSAS, HOLDER OF A MORTGAGE ON THE ABOVE DESCRIBED PROPERTY, DO HEREBY CONSENT TO THE PLATTING OF REFLECTION RIDGE COMMERCIAL AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS.

BY M.R. Linnens, Pres.
M.R. LINNENS, PRESIDENT

STATE OF KANSAS)
) SS
COUNTY OF SEDGWICK)

BE IT REMEMBERED THAT ON THIS 24th DAY OF February, 1988, BEFORE ME, A NOTARY PUBLIC IN AFORESAID STATE AND COUNTY, CAME M.R. LINNENS, PRESIDENT, OF NATIONAL BANK OF WICHITA IN WICHITA, KANSAS, TO ME PERSONALLY KNOWN TO BE THE SAME PERSON WHO EXECUTED THE FOREGOING INSTRUMENT OF WRITING AND DULY ACKNOWLEDGE THE EXECUTION OF SAME FOR AND ON BEHALF AND AS THE VOLUNTARY ACT AND DEED OF SAID BANK. IN TESTIMONY WHEREOF I HAVE HEREUNTO SET MY HAND AND AFFIXED MY NOTARIAL SEAL THE DAY AND YEAR ABOVE WRITTEN.

Charlene A. Stilwell, NOTARY PUBLIC

MY COMMISSION EXPIRES: 11/30/91

CHARLENE A. STILWELL
NOTARY PUBLIC
My Appt. Exp.
STATE OF KANSAS

THIS PLAT HAS BEEN SUBMITTED TO AND APPROVED BY THE WICHITA-SEDGWICK COUNTY METROPOLITAN AREA PLANNING COMMISSION, WICHITA, KANSAS. DATED THIS 12th DAY OF November, 1987.

Elton Parsons, ELTON PARSONS, CHAIRMAN

Marvin S. Krout, MARVIN S. KROUT, SECRETARY

THIS PLAT APPROVED AND ALL DEDICATIONS SHOWN HEREON ARE ACCEPTED BY THE CITY COUNCIL OF THE CITY OF WICHITA, KANSAS. DATED THIS 15TH DAY OF MARCH, 1988.

ROBERT G. KNIGHT, MAYOR

DALE E. REA, DEPUTY CITY CLERK

ENTERED ON TRANSFER RECORD THIS 21 DAY OF March, 1988.

Don Wright, DON WRIGHT, COUNTY CLERK

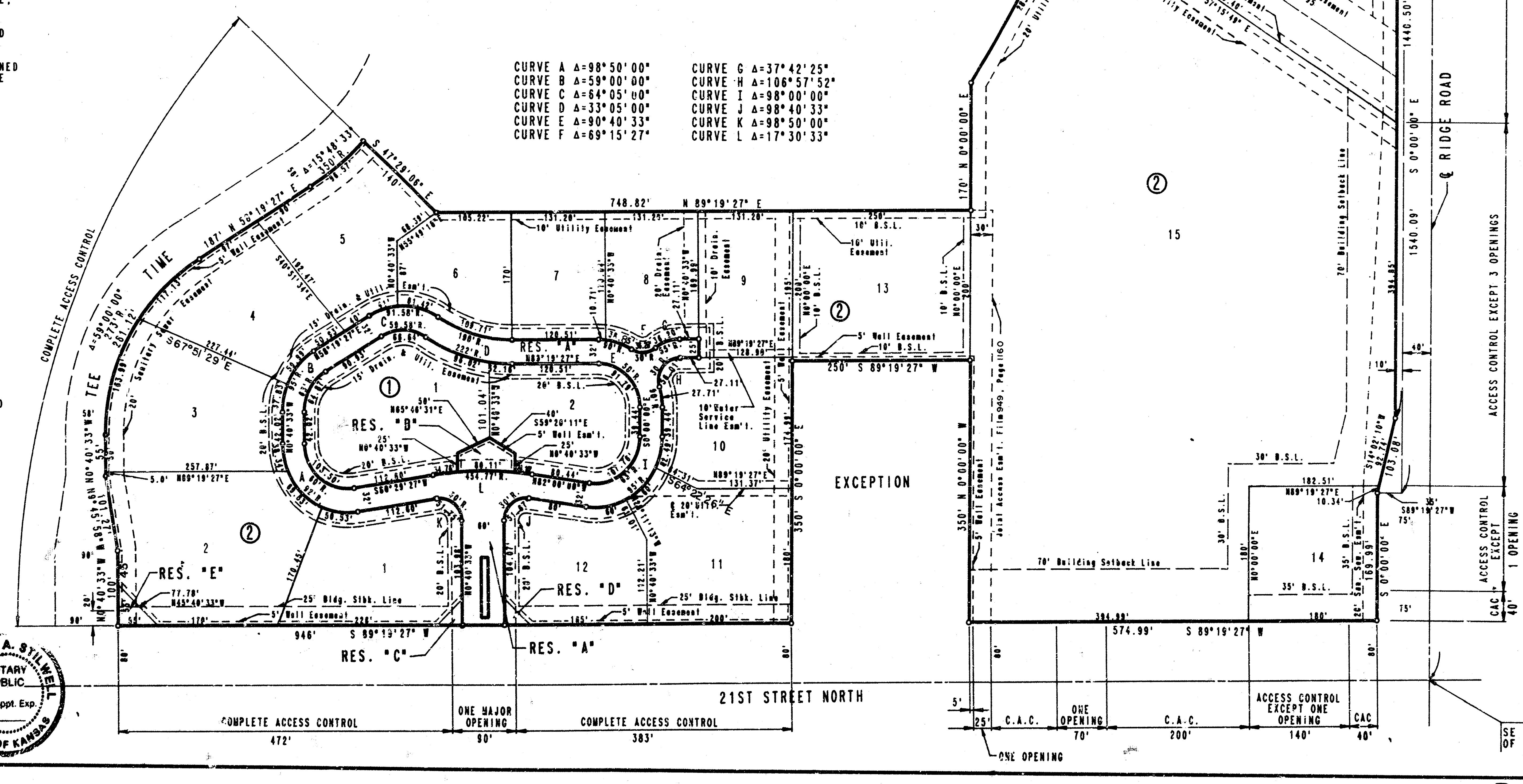
THIS IS TO CERTIFY THAT THIS INSTRUMENT WAS FILED FOR RECORD IN THE REGISTER OF DEEDS OFFICE AT 3:00 P.M. ON THIS 21ST DAY OF MARCH, 1988.

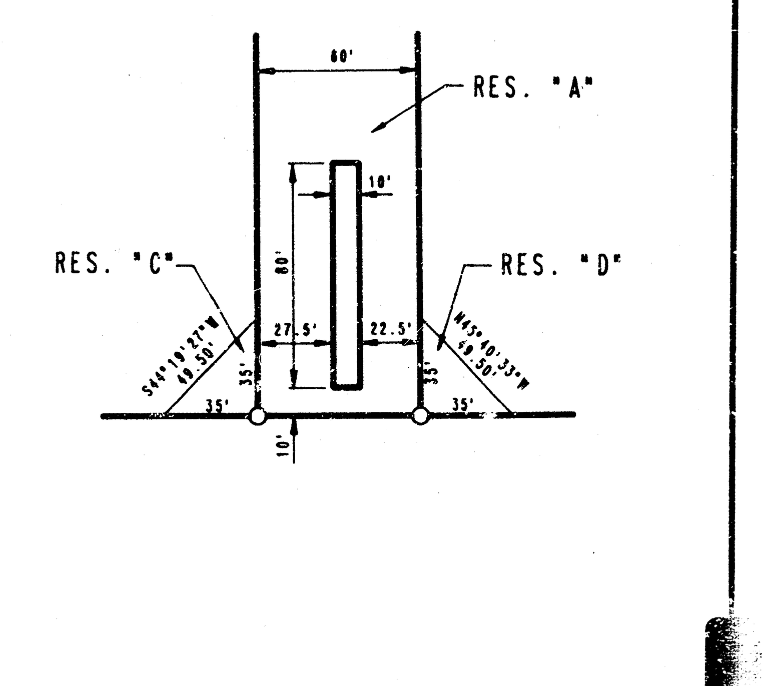
Pat Kettler, PAT KETTLER, REGISTER OF DEEDS

Ed Resa, ED RESA, DEPUTY

#1 93730!

CURVE A Δ=98°50'00"	CURVE G Δ=37°42'25"
CURVE B Δ=59°00'00"	CURVE H Δ=106°57'52"
CURVE C Δ=64°05'00"	CURVE I Δ=98°00'00"
CURVE D Δ=33°05'00"	CURVE J Δ=98°40'33"
CURVE E Δ=90°40'33"	CURVE K Δ=98°50'00"
CURVE F Δ=69°15'27"	CURVE L Δ=17°30'33"



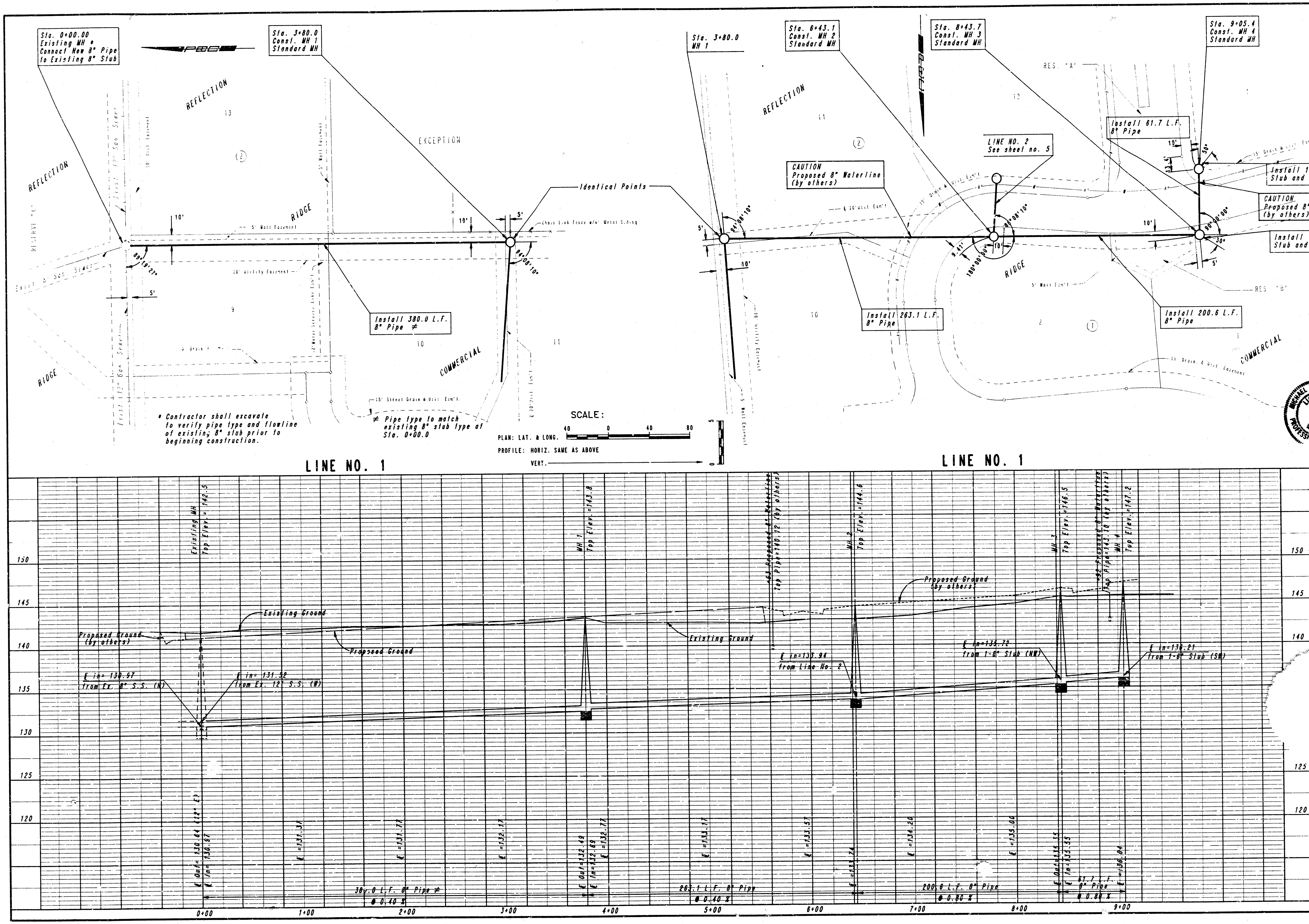


SCALE: 1" = 100'

o = IRON SET
B.S.L.=BUILDING SETBACK LINE

B.M. - NE CORNER RIDGE ROAD AND 21ST STREET NORTH R.R. SPIKE IN SW SIDE OF POWER POLE 75' NORTH AND 58' EAST OF THE CENTERLINE OF RIDGE ROAD AND 21ST STREET NORTH.
ELEV.=1330.70 M.S.L.=143.30 CITY DATUM

3/9



LATERAL 6, MAIN 15 OF THE
SOUTHWEST INTERCEPTOR SEWER

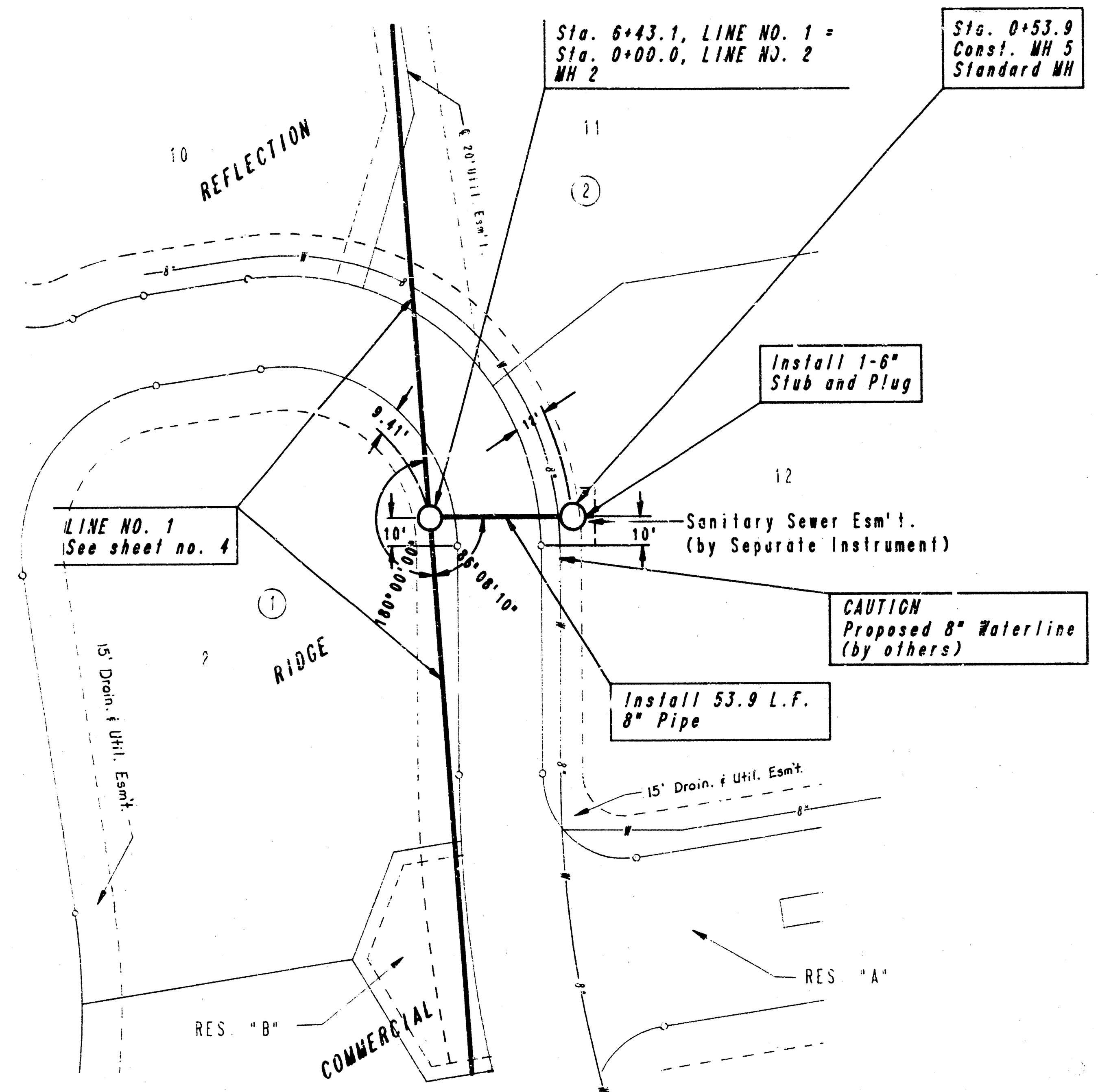
LINE NO. 1

[illegible]HAEL E. LINDEBAK, P.E. - CITY ENGINEER
WICHITA PROJECT NO. 468-76-245-81841-080-000-001

PROFESSIONAL ENGINEERING Co
ENGINEERS
WICHITA, KANSAS

Designed By MDS, CRY | Job N
Drawn By TWV | Date M

4/9



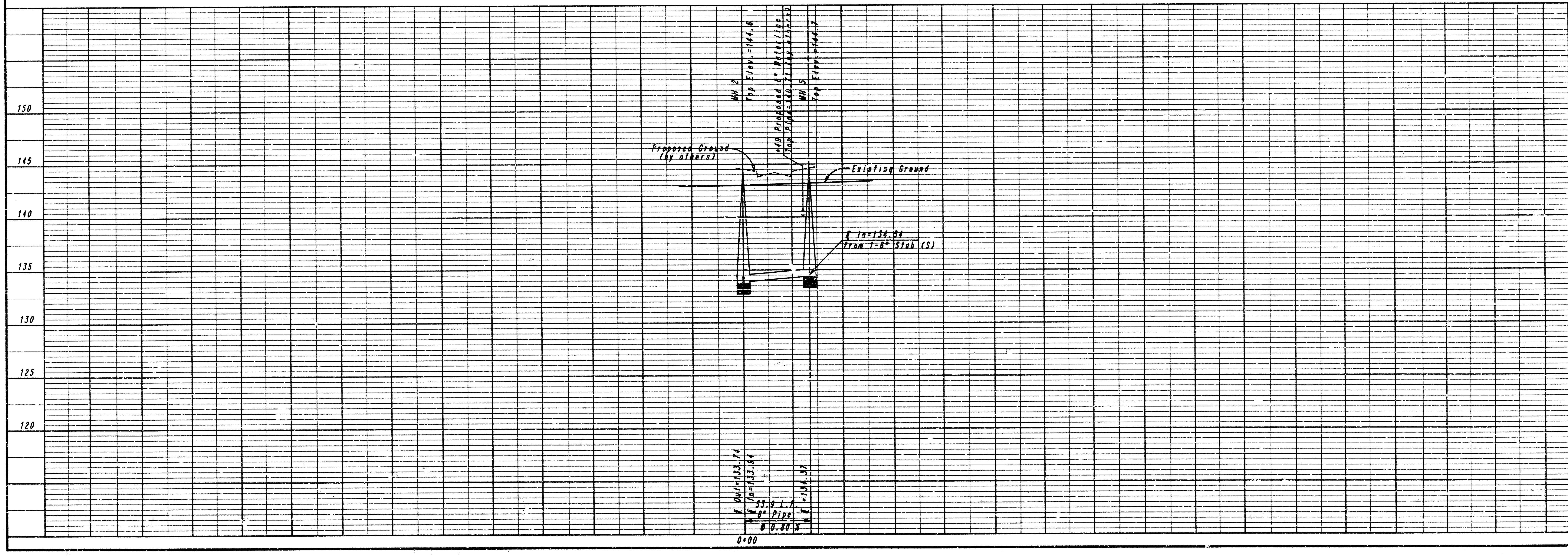
LINE NO. 2

SCALE:

PLAN: LAT. & LONG.

PROFILE: HORIZ. SAME AS ABOVE

VERT.



MICHAEL D. SCHOMAKER
LICENSED
6778
KANSAS
PROFESSIONAL ENGINEER

LATERAL 6, MAIN 15 OF THE
SOUTHWEST INTERCEPTOR SEWER

LINE NO. 2

MICHAEL E. LINDEBAK, P.E. - CITY ENGINEER
CITY OF WICHITA PROJECT NO. 468-78-245-81841-000-000-001

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
ENGINEERS
WICHITA, KANSAS

Designed By MDS, CRY	Job No. 34-88047
Drawn By TWV	Date MARCH, 1988

5/9

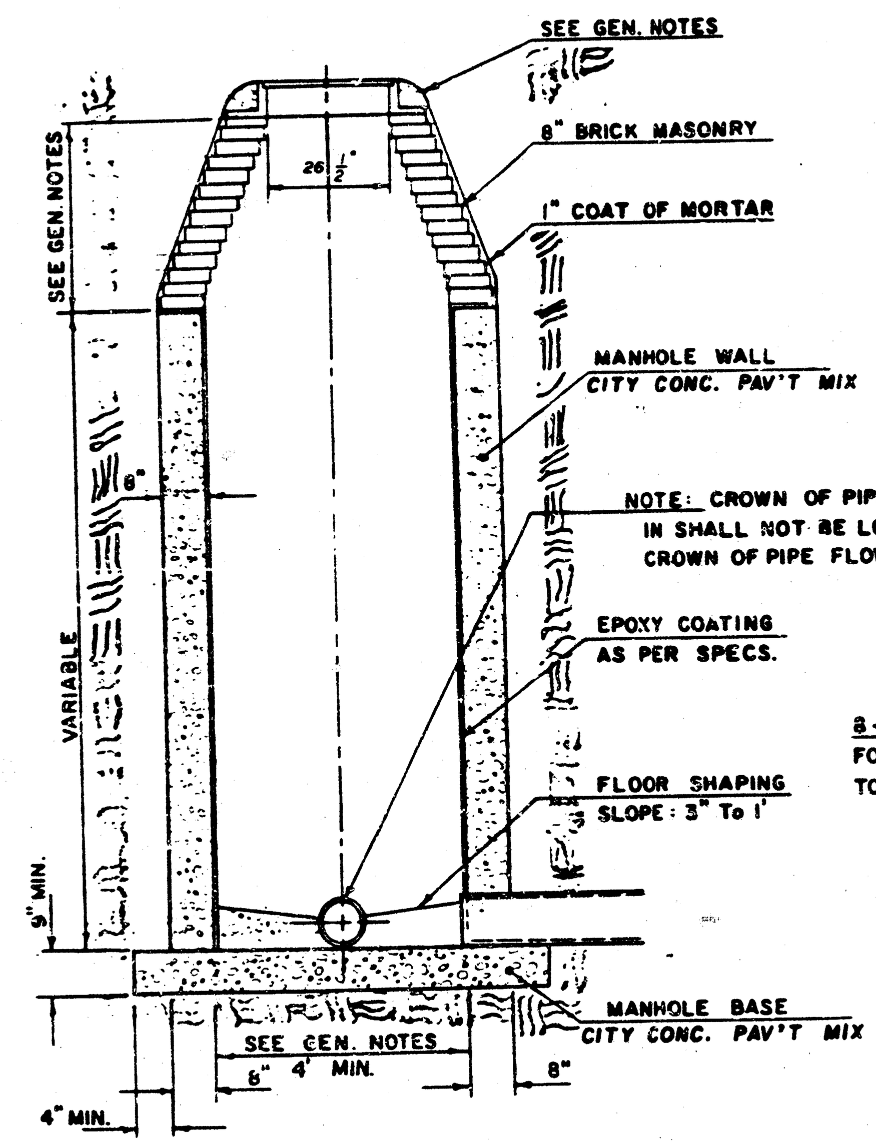
Sheet 5 of 9

SEWER APPURTENANCES DETAILS

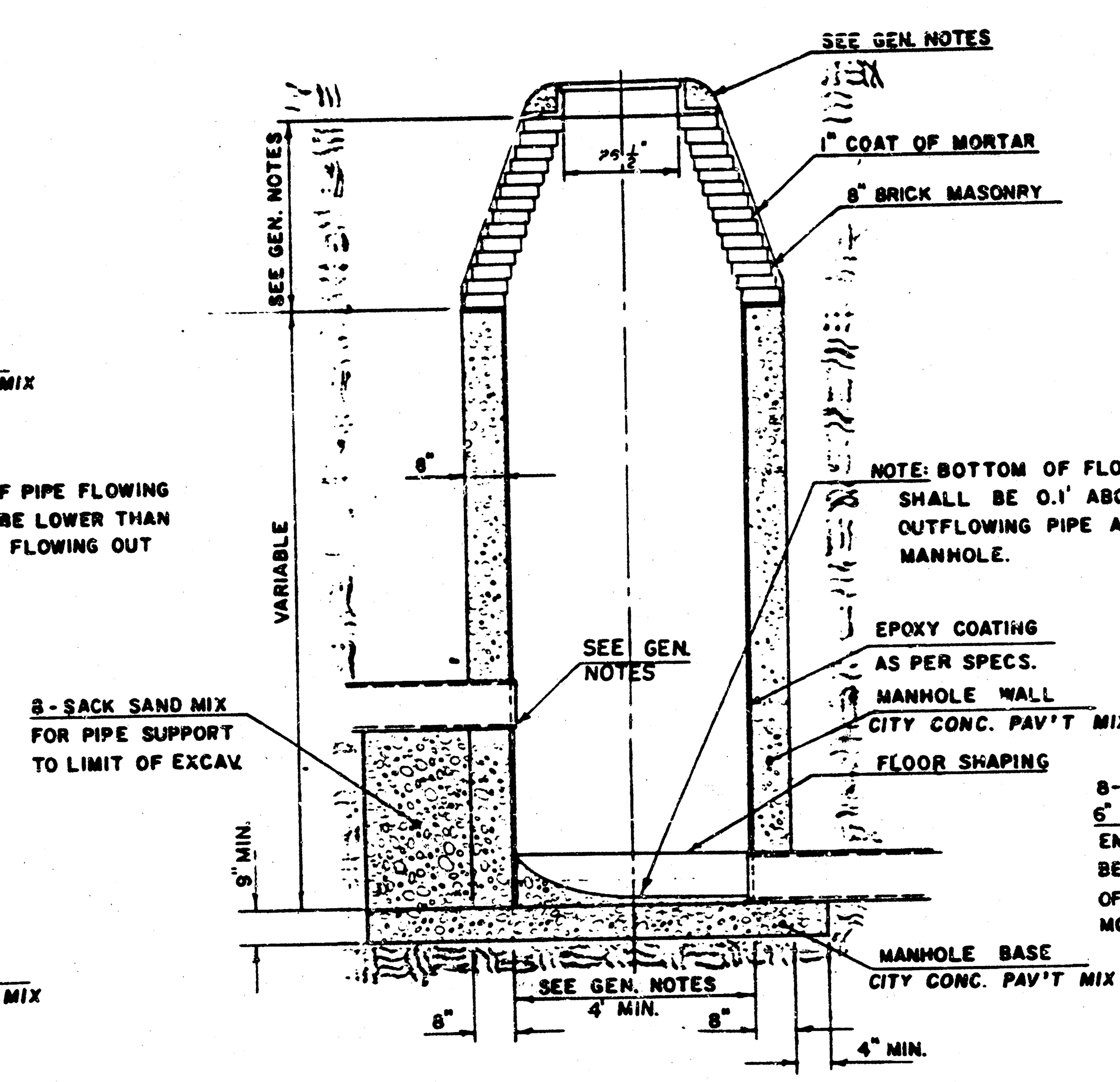
ADOPTED AS STANDARD DESIGN
BY

CITY OF WICHITA, KANSAS

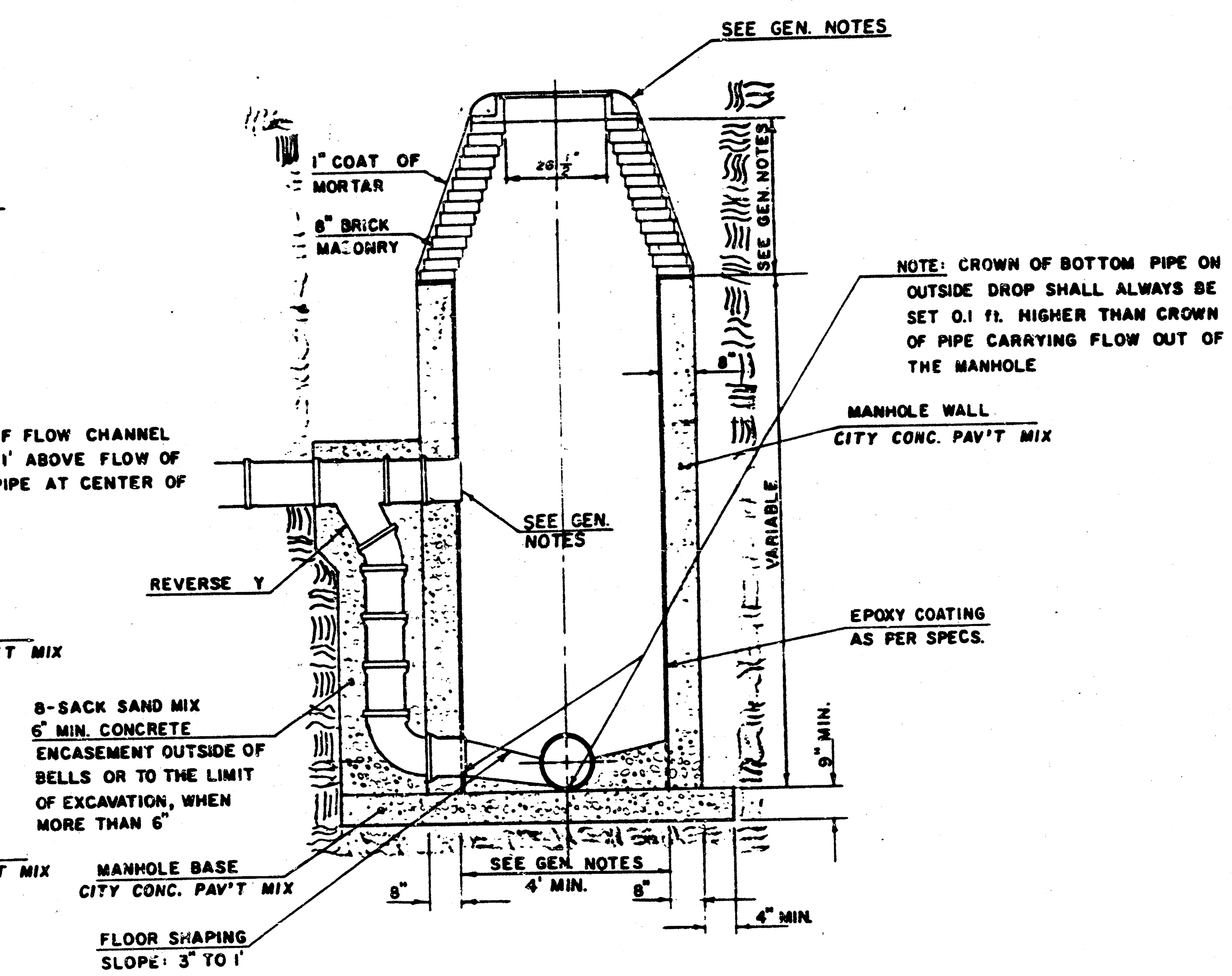
TYPE "D" MANHOLE



TYPE "D" INSIDE DROP MANHOLE



TYPE "D" OUTSIDE DROP MANHOLE



GENERAL NOTES

1. 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.

   ALL INSIDE SURFACES OF THE CONCRETE MANHOLE WALL WHICH WOULD BE EXPOSED TO SEWER GAS SHALL BE PROTECTED BY AN APPROVED EPOXY COATING. TYPE "D" MANHOLES MAY BE USED ON PIPE SIZES 8" TO 36" WHEN THE MANHOLE DEPTH EXCEEDS THE REQUIRED CORBEL HEIGHT BY 1' PLUS THE OUTSIDE DIAMETER OF THE LARGEST PIPE IN THE MANHOLE.

   MANHOLES CONSTRUCTED WHERE PIPE SIZES ARE SMALLER THAN 24" SHALL HAVE A DIAMETER OF 4'. MANHOLES CONSTRUCTED WHERE THE PIPE SIZES ARE 24" OR LARGER SHALL HAVE A 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 BASE. REINFORCING STEEL SHALL CONSIST OF NO. 4 BARS PLACED ON 6" CENTERS IN BOTH DIRECTIONS. REINFORCING STEEL SHALL BE PLACED 6" 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.

3. AN OPENING SHALL BE CUT IN THE MANHOLE WALL FOR THE UPPER INLET PIPE FOR INSIDE AND OUTSIDE DROP MANHOLES. THE UPPER INLET PIPE SHALL BE GROUTED INTO THIS OPENING WITH NON-SHRINK GROUT. THE EXTERIOR OF THIS COMPLETED CONNECTION SHALL BE SEALED WITH AN APPROVED BITUMINOUS COATING SUCH THAT THE CONNECTION WILL BE WATER TIGHT. THE INTERIOR PLASTIC LINING SHALL BE SEALED AROUND THE INLET PIPE OPENING IN SUCH A MANNER THAT WILL EFFECTIVELY MAINTAIN THE INTEGRITY OF THE PROTECTIVE PLASTIC LINER.

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

NOTE: EPOXY COATING ON INTERIOR CONCRETE SURFACES MAY BE DELETED WHEN TYPE "D" MANHOLES ARE CONSTRUCTED ON SEWERS WITH DIAMETERS SMALLER THAN 10".

6/9

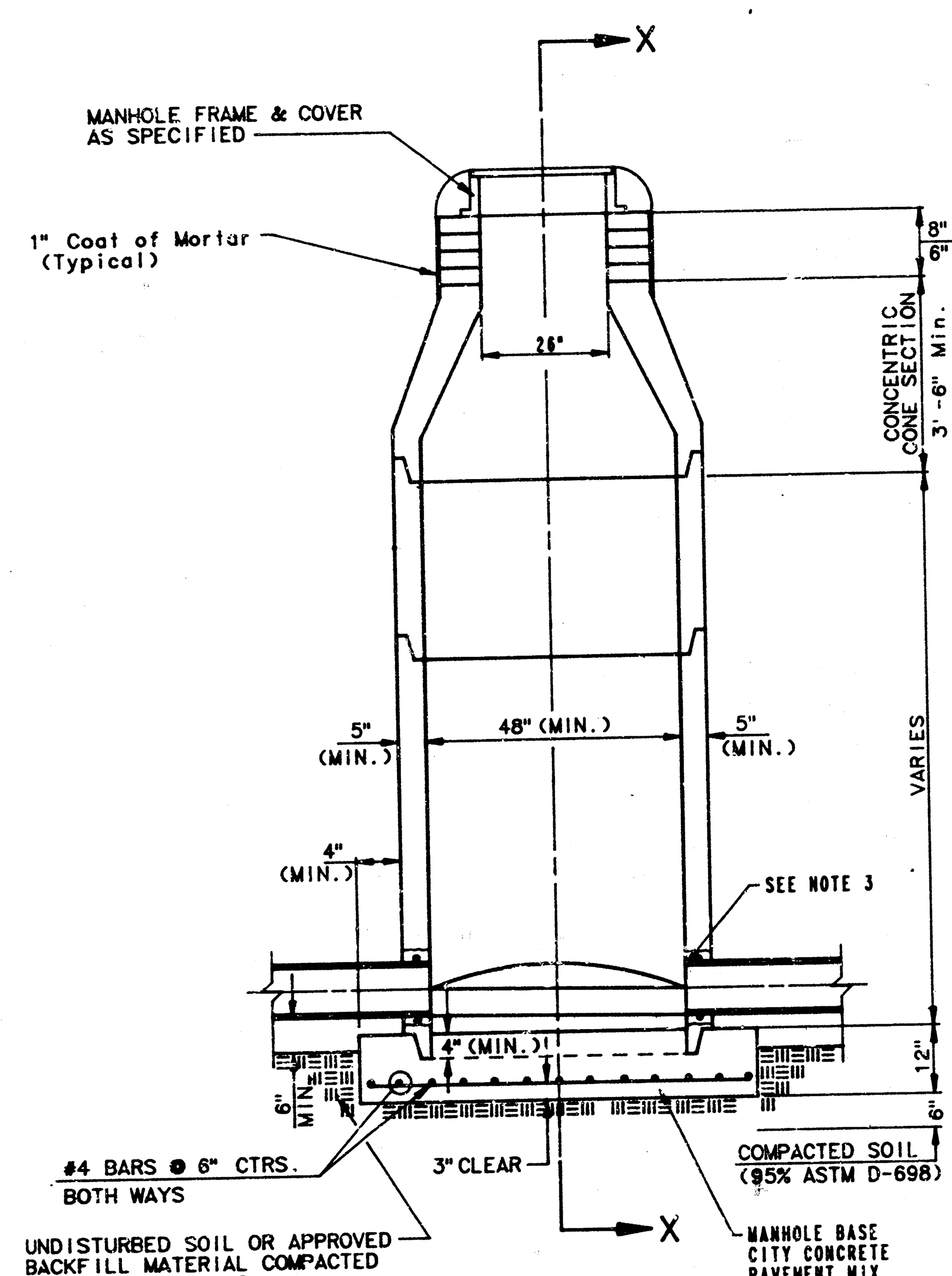
APRIL 1987

SEWER APPURTENANCES DETAILS

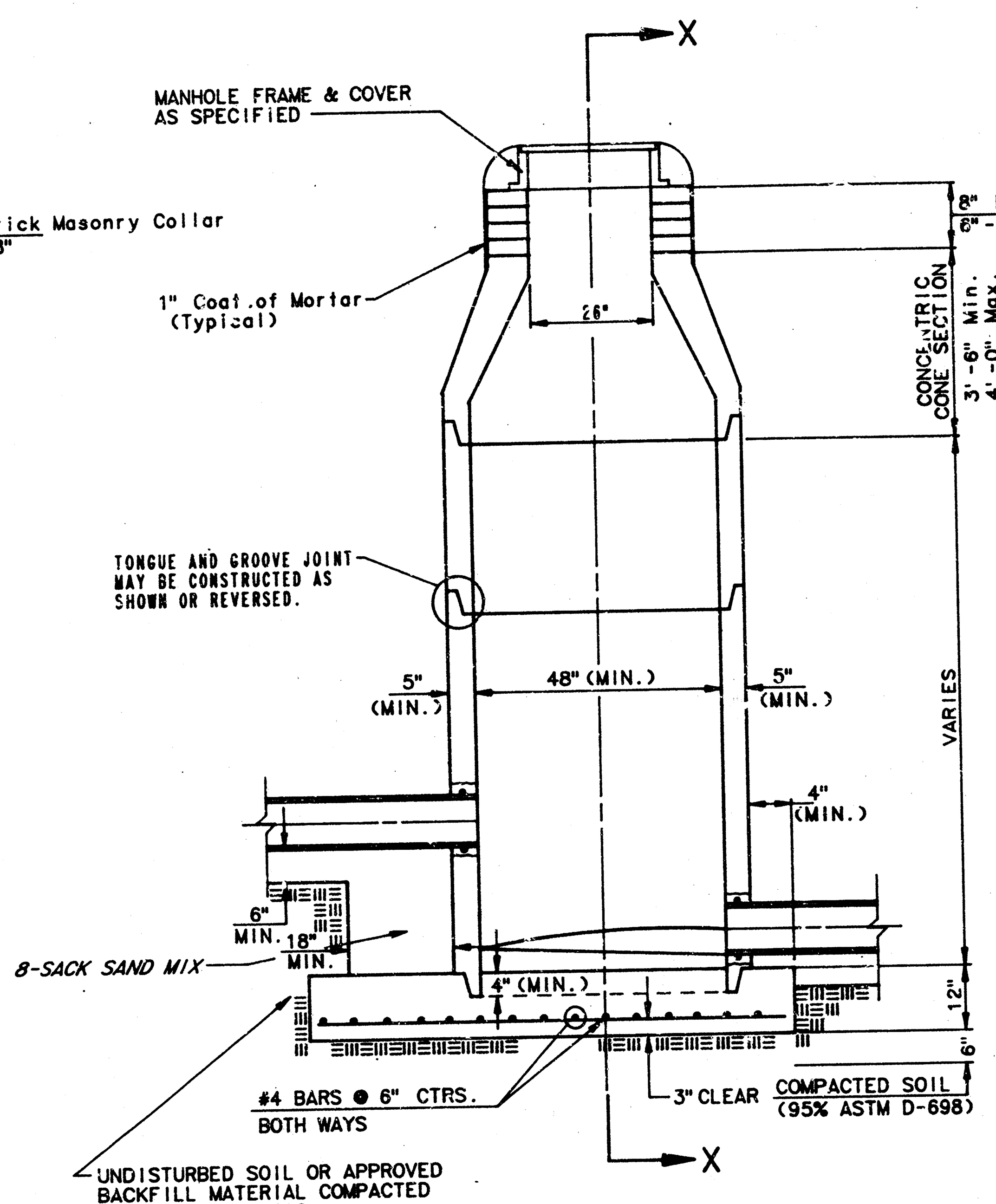
ADOPTED AS STANDARD DESIGN

BY

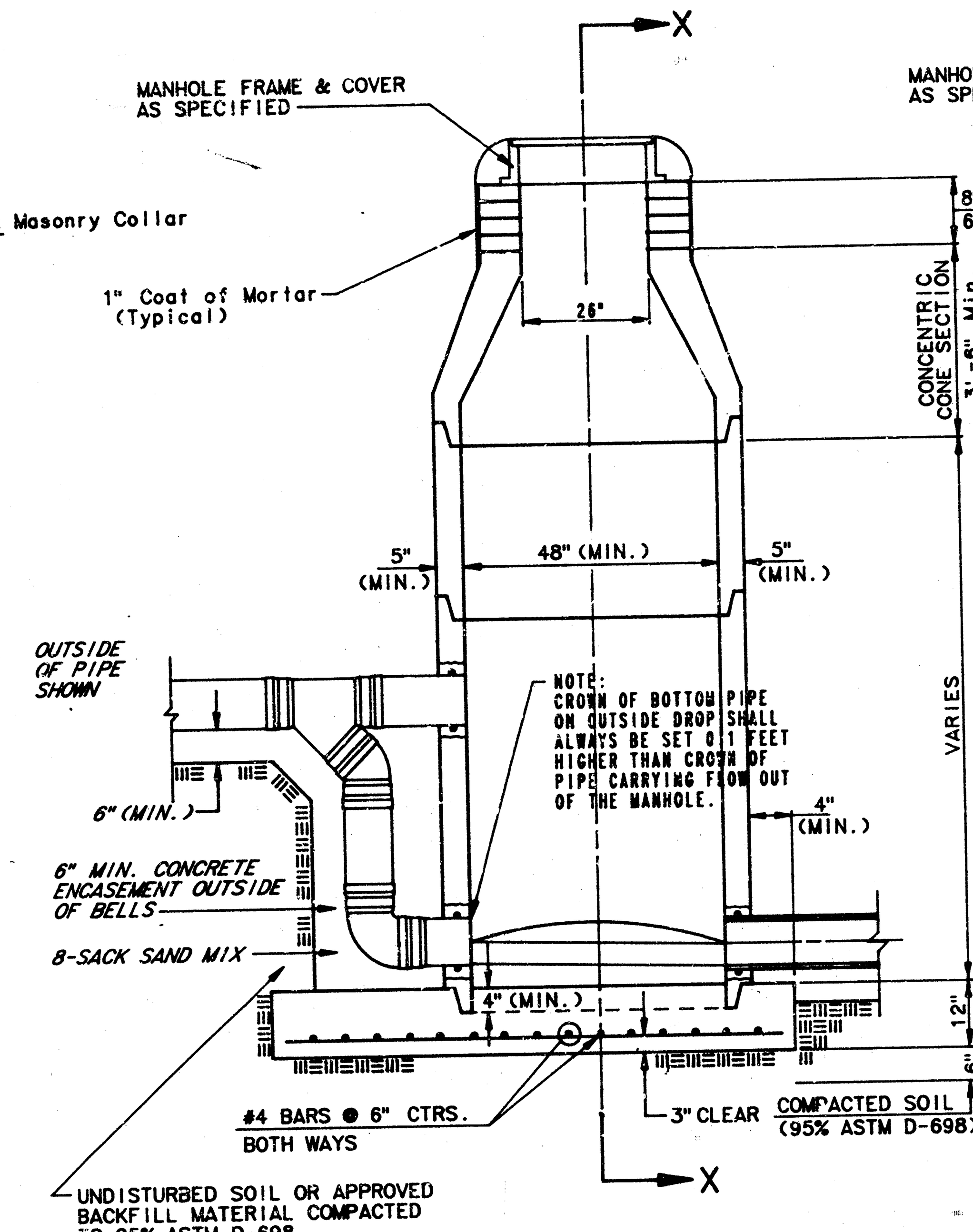
CITY OF WICHITA



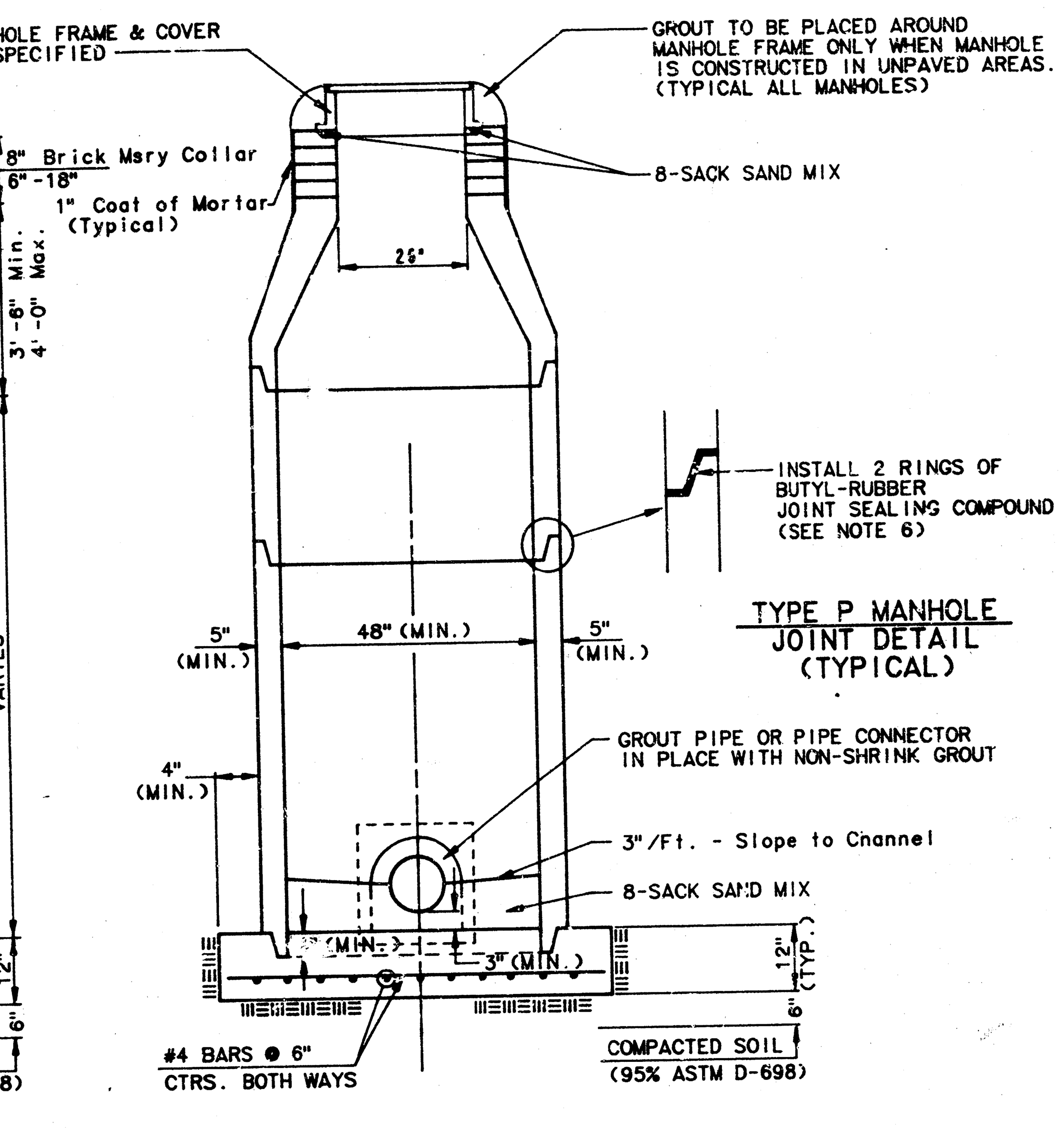
TYPE P
STANDARD MANHOLE



TYPE P
INSIDE DROP MANHOLE



TYPE P
OUTSIDE DROP MANHOLE



SECTION X
(TYPICAL)

GENERAL NOTES

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. NON-SHRINK GROUT SHALL BE NON-METALLIC TYPE.

3. APPROVED FLEXIBLE WATERSTOP GASKETS SHALL BE INSTALLED TO JOIN THE SEWER TO THE MANHOLE WALL WHEN A.B.S. COMPOSITE PIPE OR P.V.C. PIPE IS USED. FOR OTHER TYPES OF PIPE THE SEWER SHALL BE GROUTED IN PLACE WITH NON-SHRINK GROUT. THE SEWER PIPE SHALL BE SUPPORTED WITH CONCRETE ENCASEMENT A MINIMUM OF 3 FEET FROM THE MANHOLE WALL AND TO THE FIRST JOINT FOR V.C.P. SUCH THAT THE JOINT REMAINS FLEXIBLE.

4. 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.)

5. EXTERIOR MANHOLE WALLS SHALL BE COATED WITH 1 COAT MOBILARMA 633 BITUMINUS COATING.

6. JOINT SEALING COMPOUND SHALL BE KENT SEAL NO. 2 OR APPROVED EQUAL.

7. PRECAST MANHOLES SHALL BE SET AT LEAST 4 INCHES INTO THE MANHOLE BASE.

8. 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.

9. LIFTING HOLES SHALL BE FILLED WITH NON-SHRINK GROUT AND THE INTERIOR SURFACE COATED AS SPECIFIED.

10. 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.

11. 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.

12. 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 NONSHRINK 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. THIS WORK, INCLUDING MODIFICATION OF MANHOLE FLOOR, SHALL BE PAID FOR AT THE UNIT PRICE BID FOR OUTSIDE DROP STACK CONSTRUCTED ON EXISTING 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 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.

14. 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 CRADLE WITHIN MANHOLE EXCAVATION OR TO CLAY PIPE JOINTS ADJACENT TO MANHOLE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.

15. 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.

16. 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.

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

18. A BRICK MASONRY COLLAR SHALL BE INSTALLED BETWEEN THE CAST IRON FRAME AND THE CONCENTRIC CONE. 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.

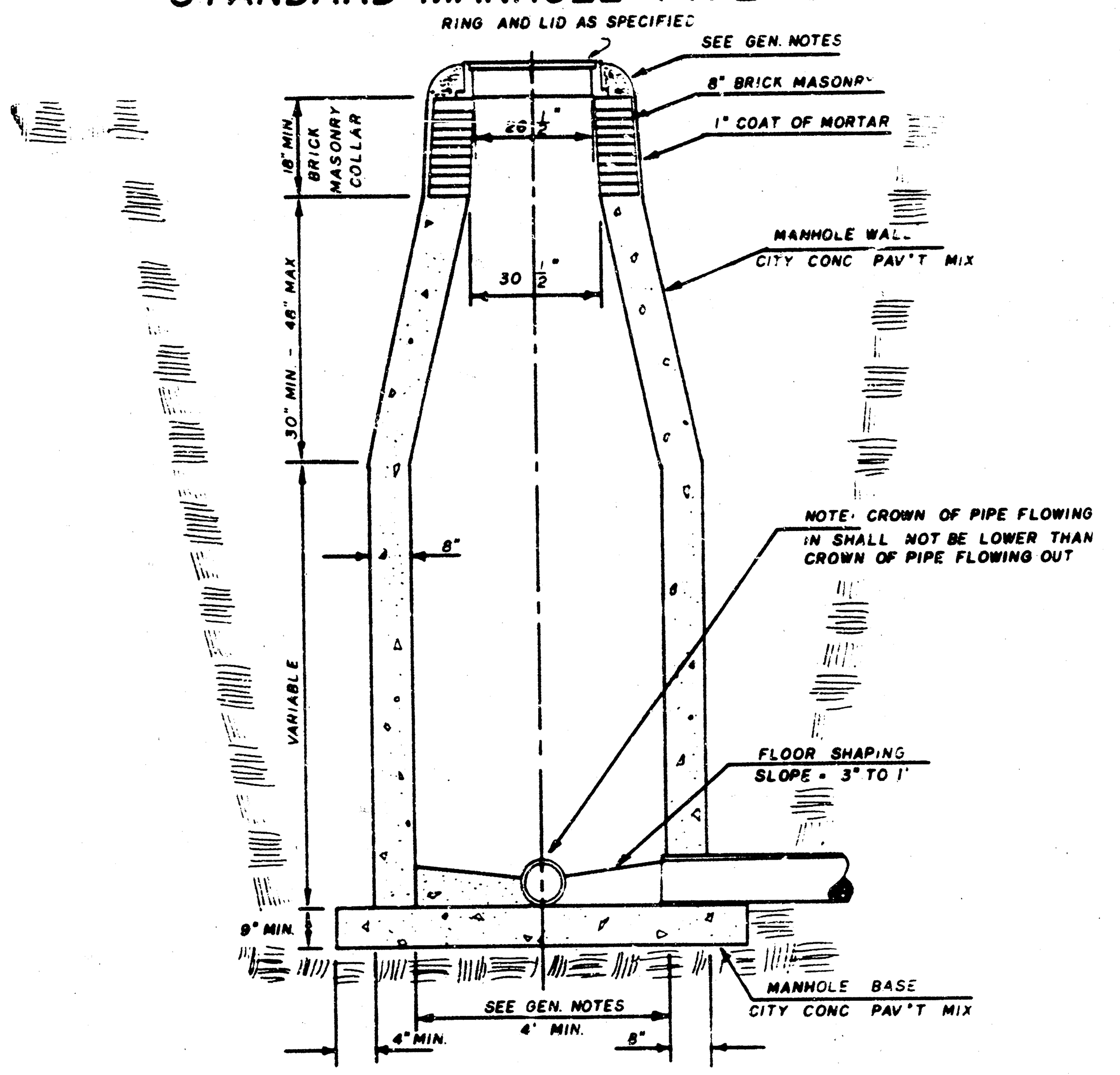
Revised: June 12, 1986

SEWER APPURTENANCES DETAILS

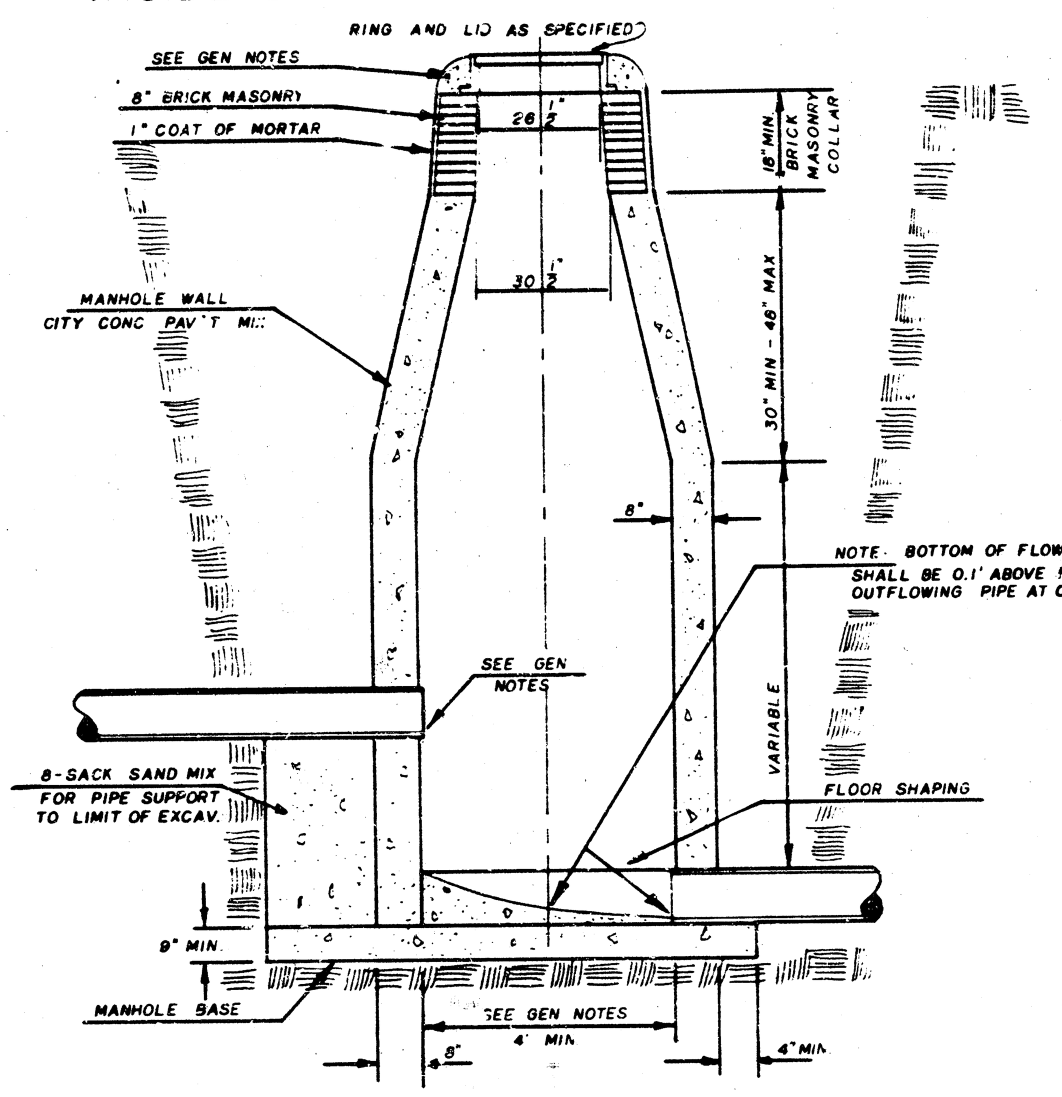
ADOPTED AS STANDARD DESIGN
BY

City of Wichita, Kansas

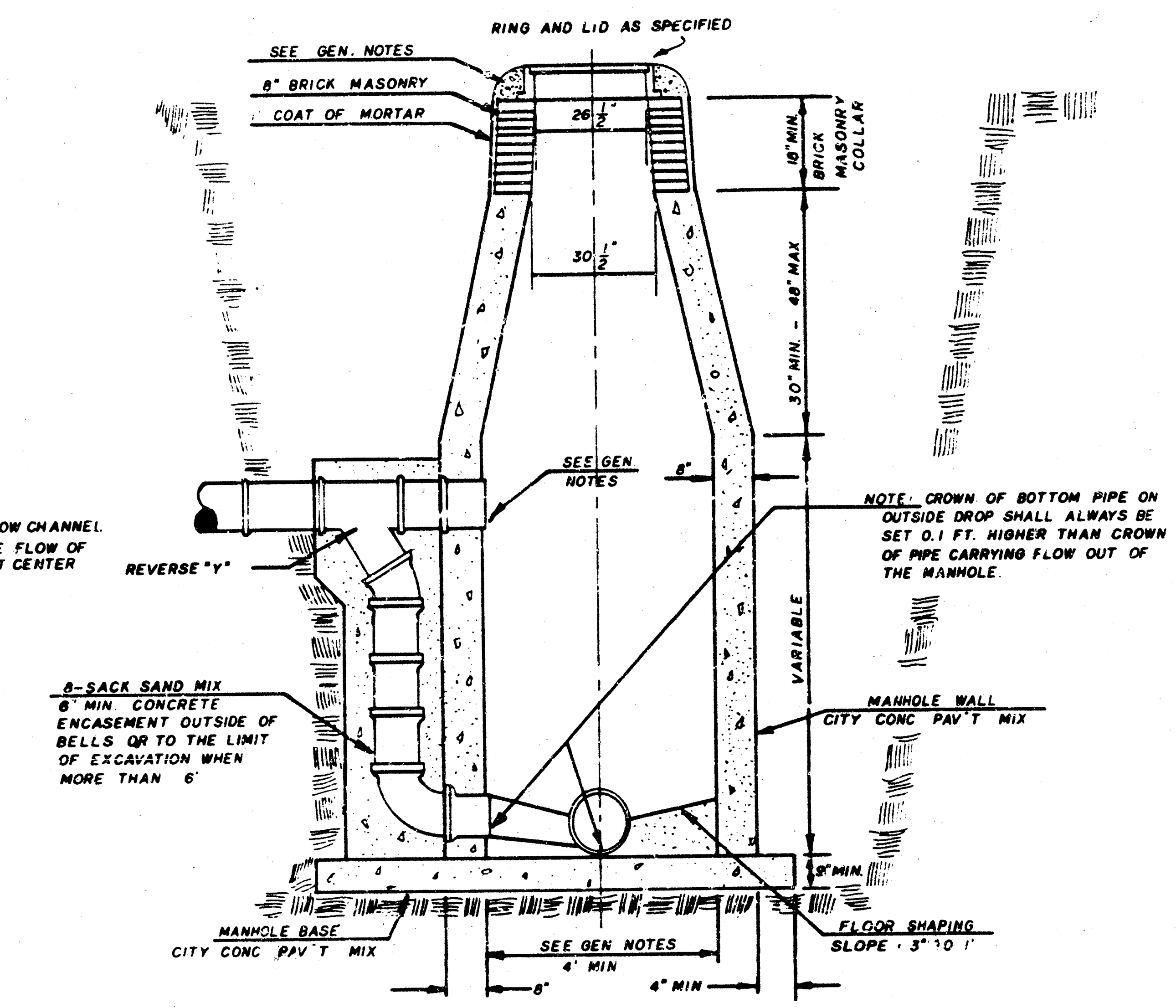
STANDARD MANHOLE TYPE "C"



INSIDE DROP MANHOLE TYPE "C"



OUTSIDE DROP MANHOLE TYPE "C"



GENERAL NOTES

1. 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.

2. 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 6" 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.

3. AN OPENING SHALL BE CUT IN THE MANHOLE WALL FOR THE UPPER INLET PIPE FOR INSIDE AND OUTSIDE DROP MANHOLES. THE UPPER INLET PIPE SHALL BE GROUTED INTO THIS OPENING WITH NON-SHRINK GROUT. THE EXTERIOR OF THIS COMPLETED CONNECTION SHALL BE SEALED WITH AN APPROVED BITUMINOUS COATING SUCH THAT THE CONNECTION WILL BE WATER TIGHT.

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 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 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 CRADLE WITHIN MANHOLE EXCAVATION OR TO CLAY PIPE JOINTS ADJACENT TO MANHOLE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.

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

8/9

JNL JAN. 1982

MANHOLE FRAME AND COVER DETAIL

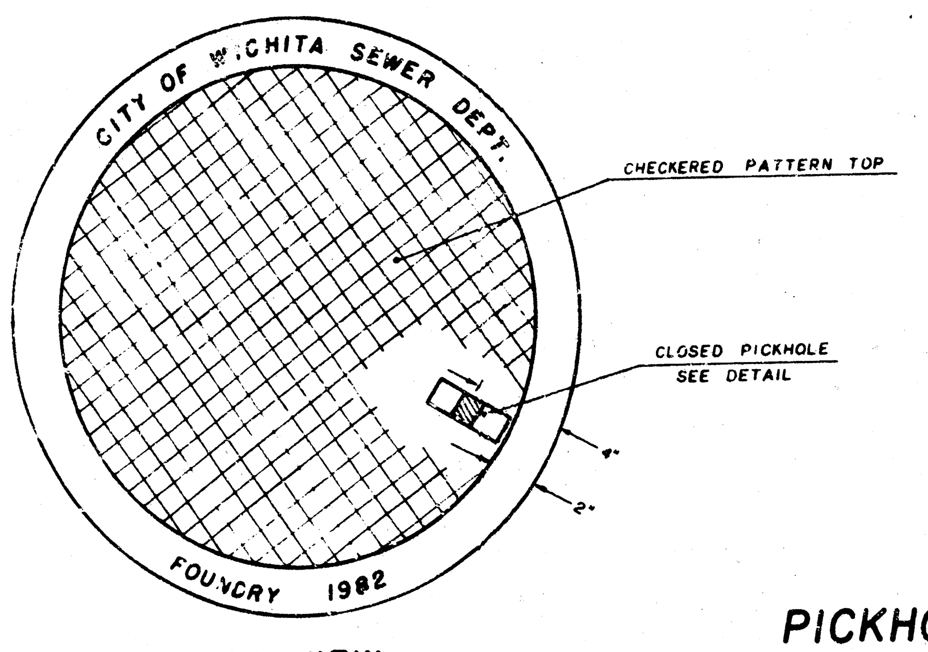
ADOPTED AS STANDARD DESIGN

BY

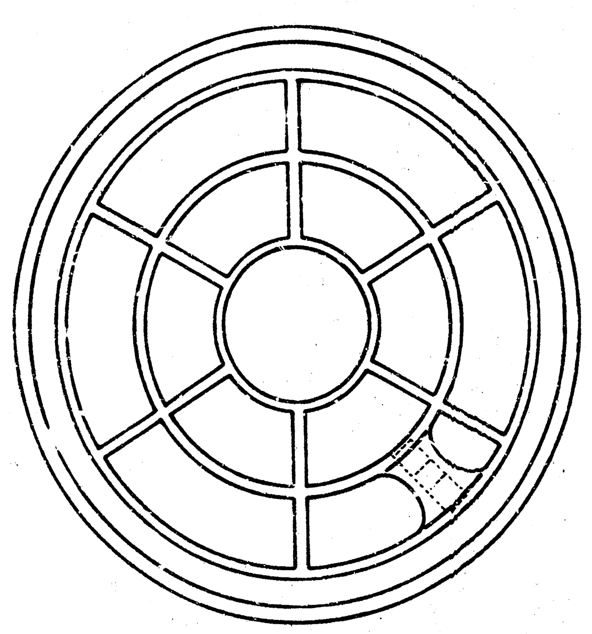
City of Wichita, Kansas

MANHOLE COVER

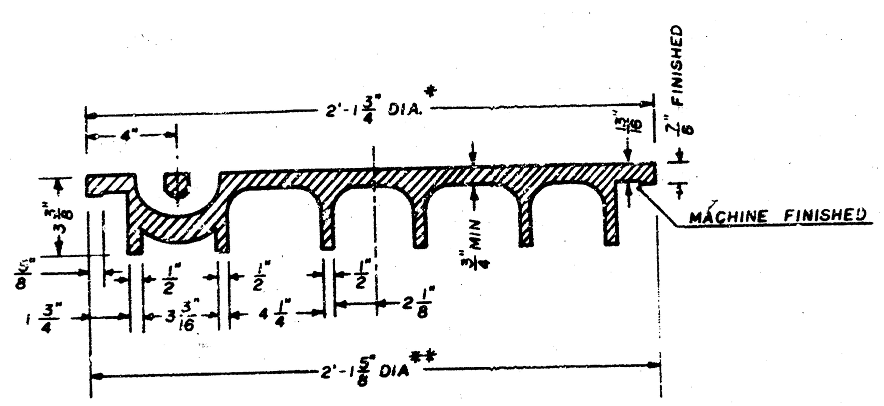
Weight: 180 Lbs.



TOP VIEW



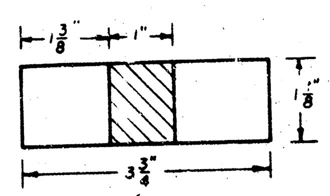
BOTTOM VIEW



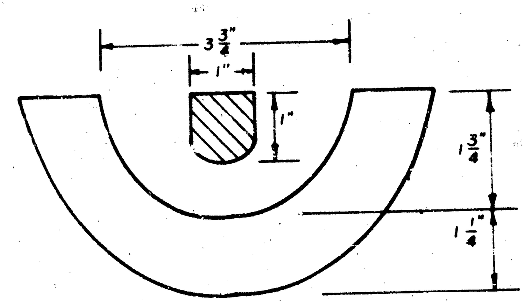
SECTION VIEW

* OUTSIDE DIA TOP OF COVER
** OUTSIDE DIA BOTTOM OF COVER

PICKHOLE DETAIL



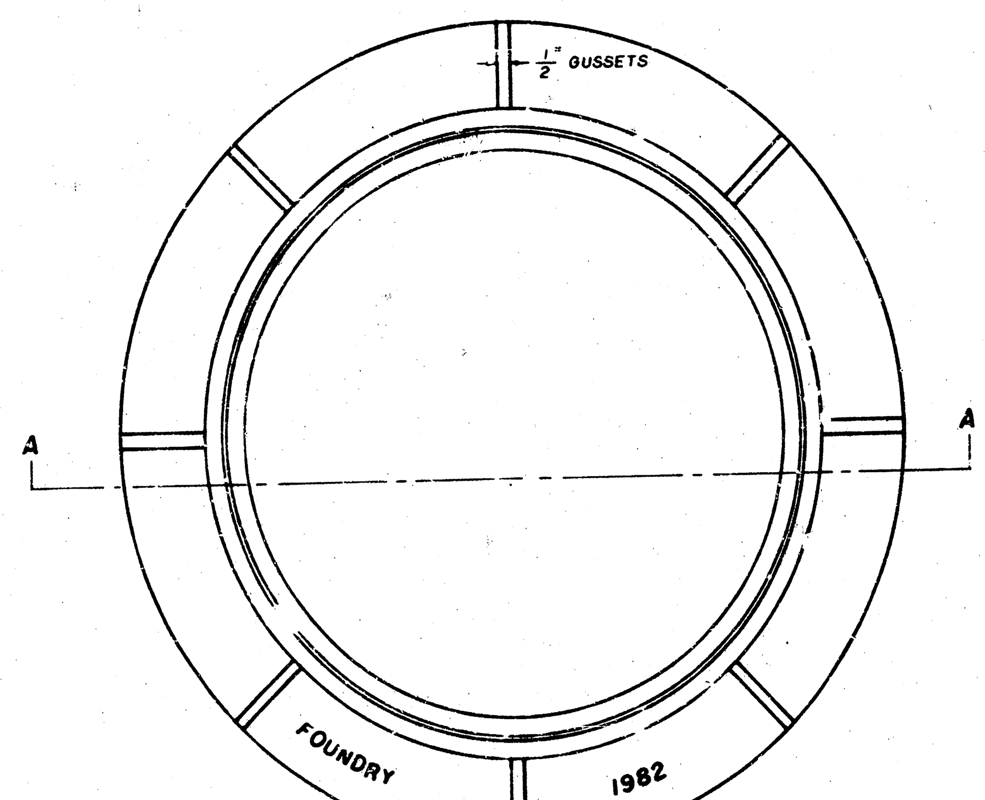
TOP VIEW



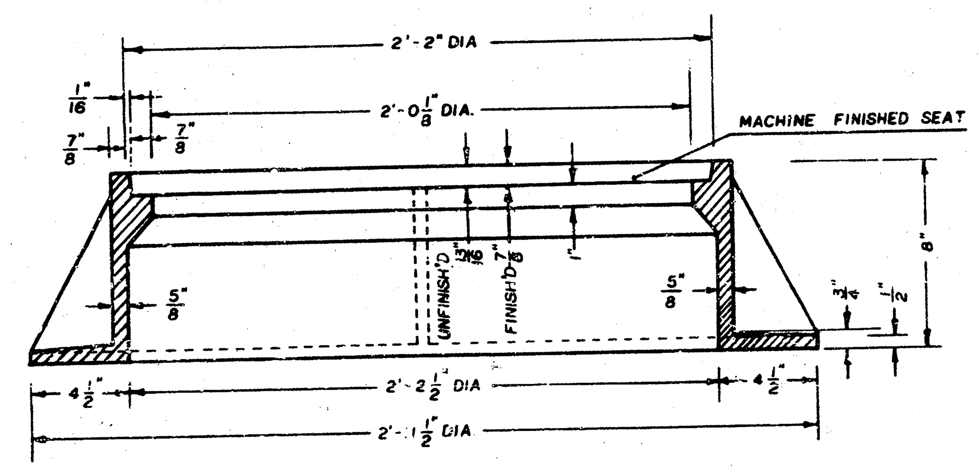
SECTION VIEW

MANHOLE FRAME

Weight: 240 Lbs.



TOP VIEW



SECTION A-A

GENERAL NOTES

1. MANHOLE CASTINGS SHALL BE MANUFACTURED USING GOOD QUALITY GRAY IRON CONFORMING TO CLASS 30 OF A.S.T.M. DESIGNATION A-48. DIMENSIONS AND WEIGHTS SHOWN ON THE DETAILED DRAWINGS SHALL BE CONSIDERED AS MINIMUM REQUIREMENTS AND ANY DEVIATIONS FROM THE DIMENSIONS SHOWN MUST BE SPECIFICALLY APPROVED. THE FINISHED CASTINGS SHALL BE OF UNIFORM QUALITY, FREE FROM BLOWHOLES, POROSITY, HARD SPOTS, SHRINKAGE DISTORTIONS OR OTHER DEFECTS.

2. MANHOLE CASTINGS SHALL BE COATED WITH AN ASPHALT PAINT RESULTING IN A SMOOTH, TOUGH AND TENACIOUS COATING WHICH IS NOT BRITTLE OR TACKY.

3. MANHOLE CASTINGS SHALL BE MANUFACTURED SUCH THAT A COVER MANUFACTURED BY ANY ONE FOUNDRY WILL FIT INTERCHANGEABLY INTO A FRAME MANUFACTURED BY ANOTHER FOUNDRY AND STILL MEET ALLOWABLE CLEARANCES AND NON-ROCKING REQUIREMENTS. THIS WILL REQUIRE MANUFACTURING OF THE MATCHING FACES ON THE COVER AND THE FRAME TO CLOSE TOLERANCES.

4. THE OUTSIDE CIRCUMFERENCE OF THE VERTICAL FACE OF THE COVER AND THE INSIDE CIRCUMFERENCE OF THE VERTICAL FACE IN THE FRAME RECESS SHALL BE MANUFACTURED TO TOLERANCES SUCH THAT THE CLEARANCE BETWEEN THE COVER AND FRAME WILL NOT EXCEED 1/8" AT ANY POINT AROUND THE CIRCUMFERENCE OF THE COVER. THE SEATING SURFACES BETWEEN THE COVER AND FRAME SHALL BE MACHINED SUCH THAT THESE SURFACES SHALL MAKE FULL CONTACT FOR THEIR FULL CIRCUMFERENCE TO PRECLUDE THE COVER FROM ROCKING IN THE FRAME.

5. THE MANHOLE FRAME AND COVER SHALL BE MARKED WITH LETTERING INDICATING THE NAME OF THE MANUFACTURER AND THE YEAR WHEN THE COVER OR FRAME WAS CAST. THE COVER SHALL BE FURTHER IDENTIFIED WITH REGARDS TO OWNERSHIP USING LETTERS AT LEAST 1" IN HEIGHT. THIS IDENTIFICATION SHALL BE "CITY OF WICHITA SEWER DEPARTMENT". THE WORD DEPARTMENT MAY BE ABBREVIATED. THE TEXTURE OF THE TOP SURFACE OF THE COVER SHALL BE MANUFACTURED IN A CHECKERED PATTERN DESIGN AS INDICATED ON THE DRAWINGS. SMOOTH BLOCKOUTS SHALL BE UTILIZED TO HIGHLIGHT THE LETTERING ON THE COVER SURFACE. THE TOTAL AREA OF SMOOTH SURFACE BLOCKOUT SHALL NOT EXCEED THE AREA AS INDICATED ON THE DRAWING. POSITIONING OF SMOOTH BLOCKOUTS AND LETTERING MAY VARY FROM THAT SHOWN ON THE DETAILED DRAWING.

JNL DEC 1981