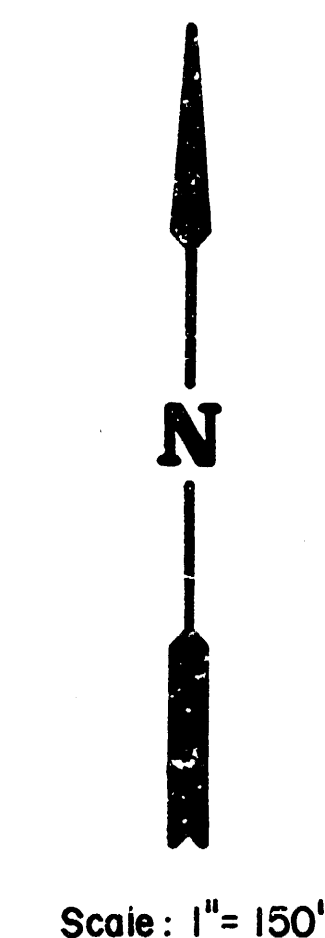
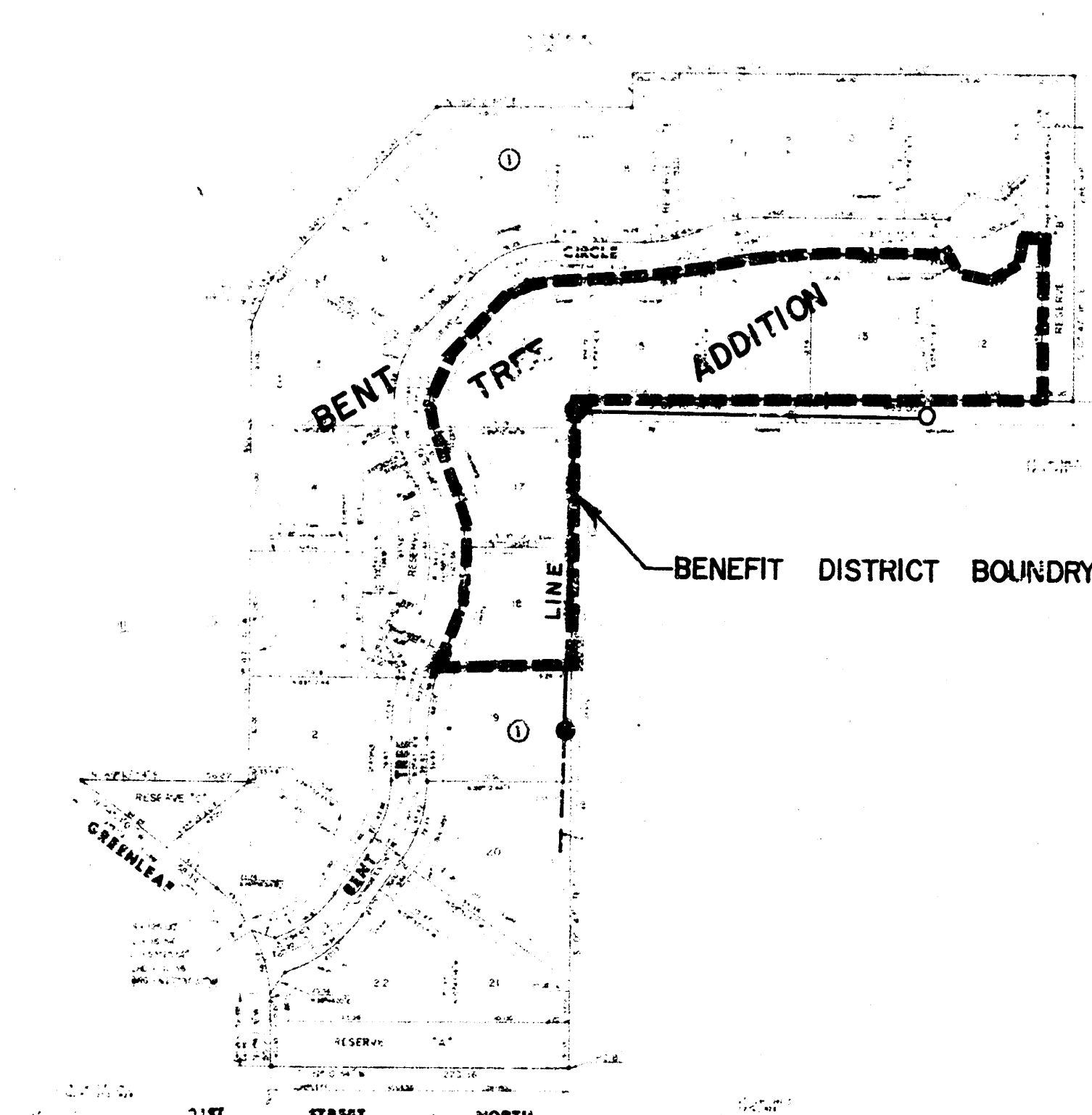


WAR INDUSTRY SEWER LATERAL 29, MAIN 22 BENT TREE PROJECT NO. 468-76-245-81309-000-000-001

CITY OF WICHITA, KANSAS
MIKE LINDEBAK, CITY ENGINEER
NOVEMBER, 1983

GENERAL NOTES

1. RISER PIPE SHALL BE INSTALLED TO SERVE INDIVIDUAL LOTS OR TRACTS IN CONJUNCTION WITH NEW SANITARY SEWER CONSTRUCTION, UNLESS OTHERWISE ORDERED BY THE ENGINEER, BECAUSE OF GROUND WATER, UNSTABLE SOIL OR UNUSUALLY DEEP CONSTRUCTION. RISER LOCATIONS SHALL BE AS APPROVED BY THE PROPERTY OWNER WITH THE CONCURRENCE OF THE ENGINEER. INSTALLATION OF RISERS ON SEWERS DEEAUSE OF UNUSUAL DEPTH WILL BE REQUIRED WHEN THE SEWER IS DEEPER THAN TWELVE FEET (12'). THE CONTRACTOR WILL BE REQUIRED TO FILE WRITTEN DOCUMENTATION WITH THE ENGINEER IN A FORM APPROVED BY THE ENGINEER INDICATING THE LOCATIONS WHERE RISERS ARE TO BE INSTALLED AS REQUESTED BY THE PROPERTY OWNER OR HIS AUTHORIZED REPRESENTATIVE. RISER PIPE CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS AS SHOWN ON THE STANDARD RISER DETAIL SHEET.
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. ALL EXCESS EXCAVATION WILL BE REMOVED FROM THE SITE BY THE CONTRACTOR.

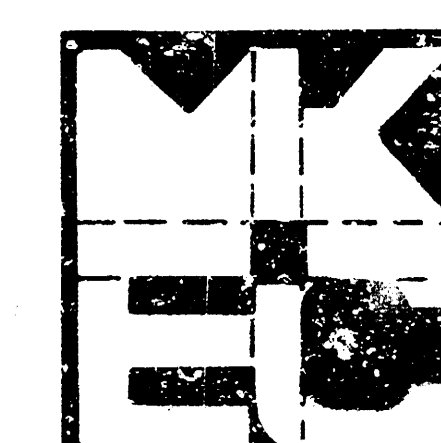
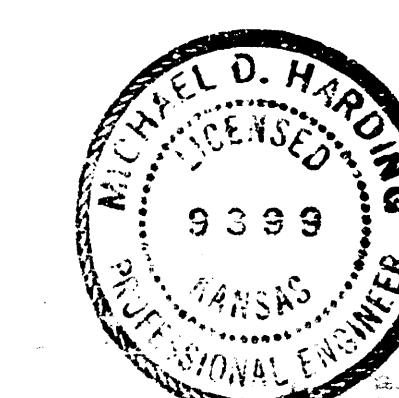


INDEX TO DRAWINGS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	LINE 1
3	MANHOLE DETAILS
4	FINAL PLAT

BENCH MARK

"□" Cut End Curb N.E. Cor. 21st & Greenleaf
Elev. = 206.43



**SANITARY SEWER
EXTENSION
BENT TREE**

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

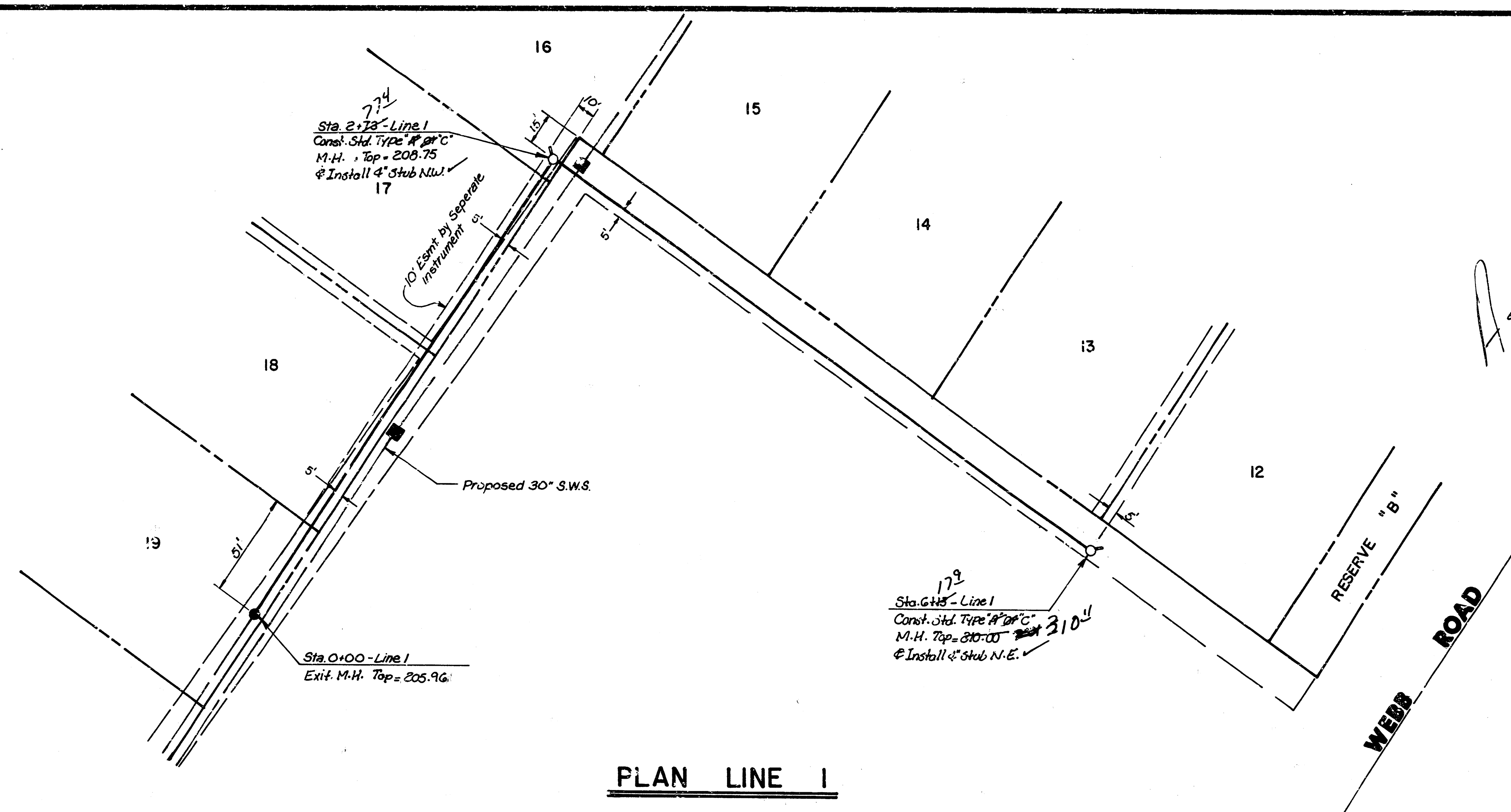
682-6561

Design: AMS
Drawn by: AMS
Checked by: KHB
Date: NOV. 1983
Job no.

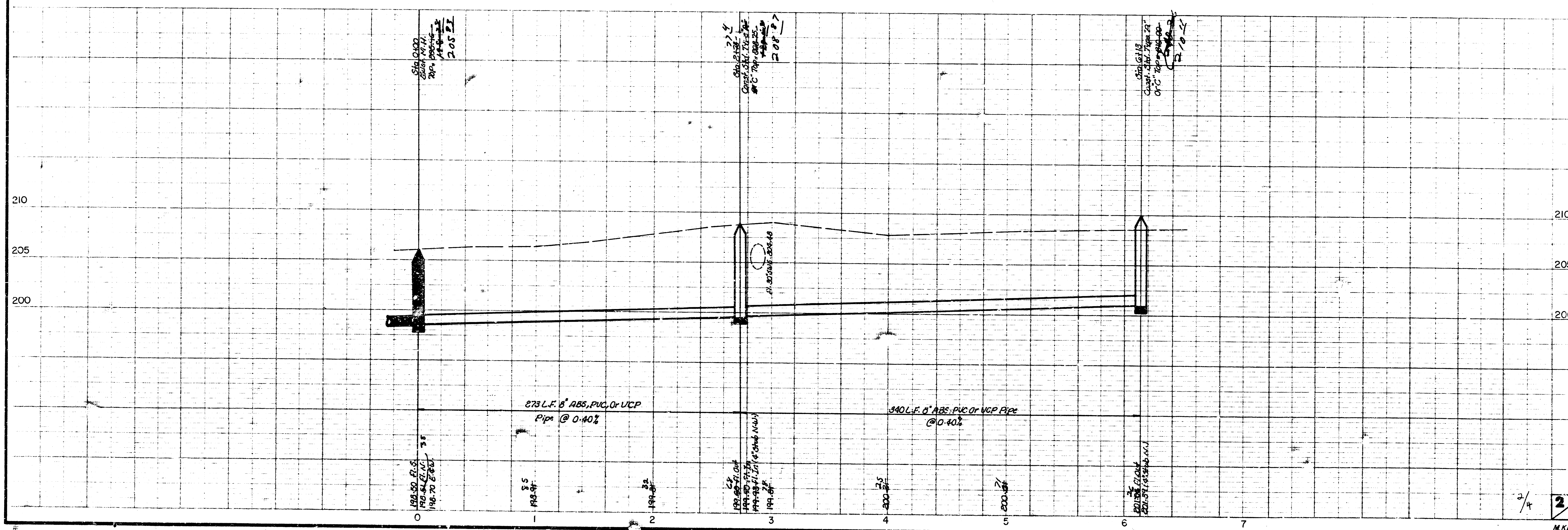
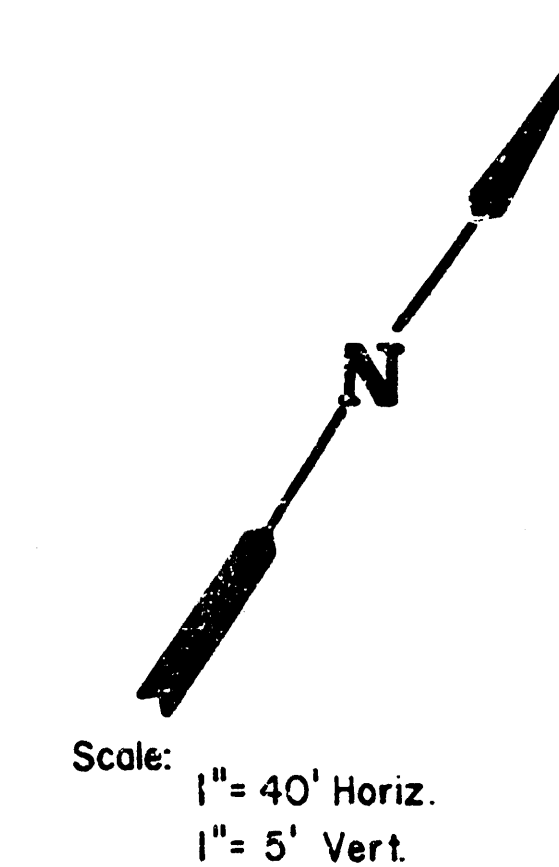
Sheet 1
of 4

FILMED FROM THE BEST

BENT TREE
LAT. 29, MAIN 22, WLS
PROJ. NO 468-76-245-81309-000-000-001



As Built
J.L.
3-84



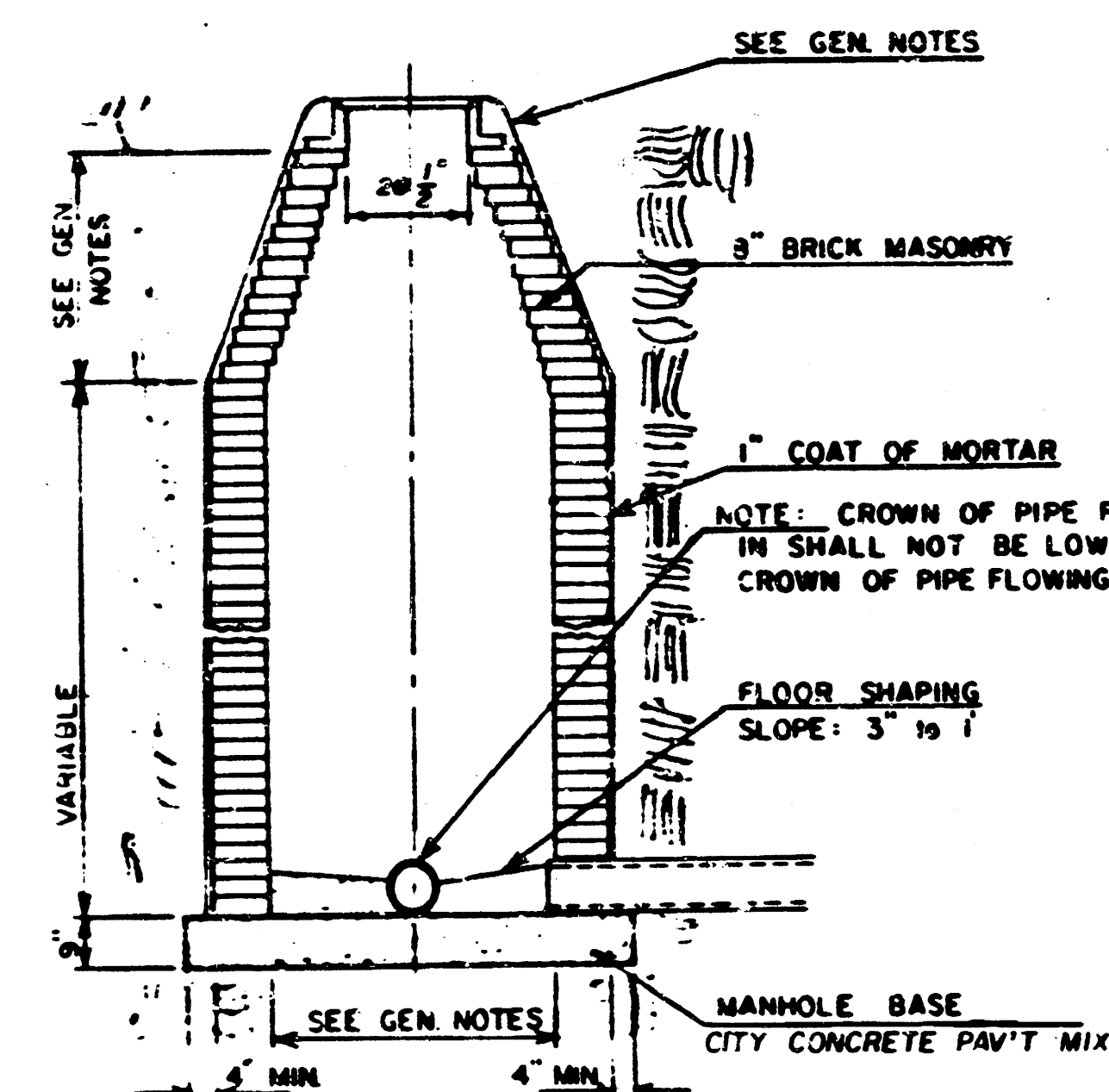
SEWER APPURTENANCES DETAILS

ADOPTED AS STANDARD DESIGN
BY

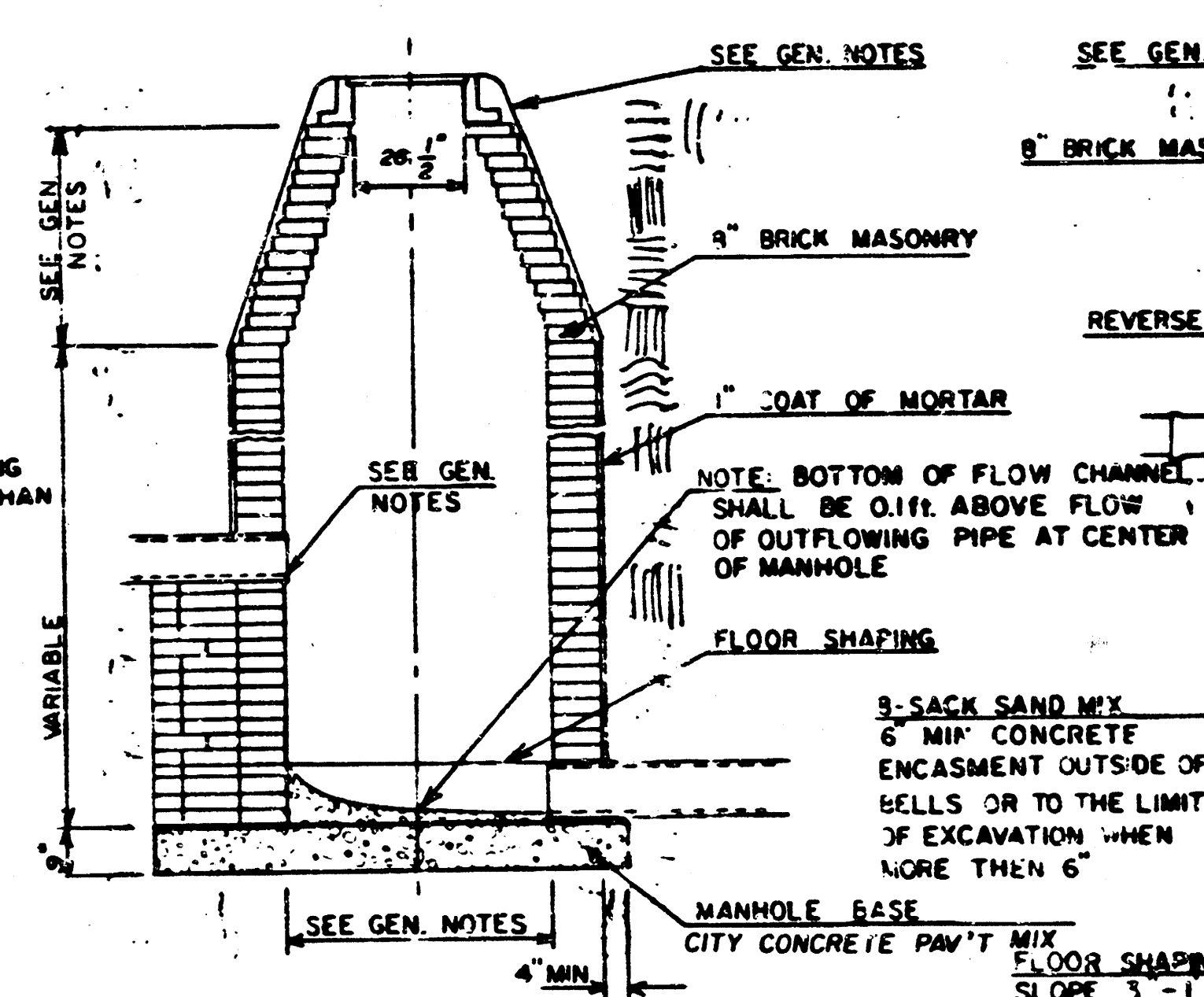
CITY of WICHITA, KANSAS

REVISED SEPTEMBER 1980
REVISED DECEMBER 1981

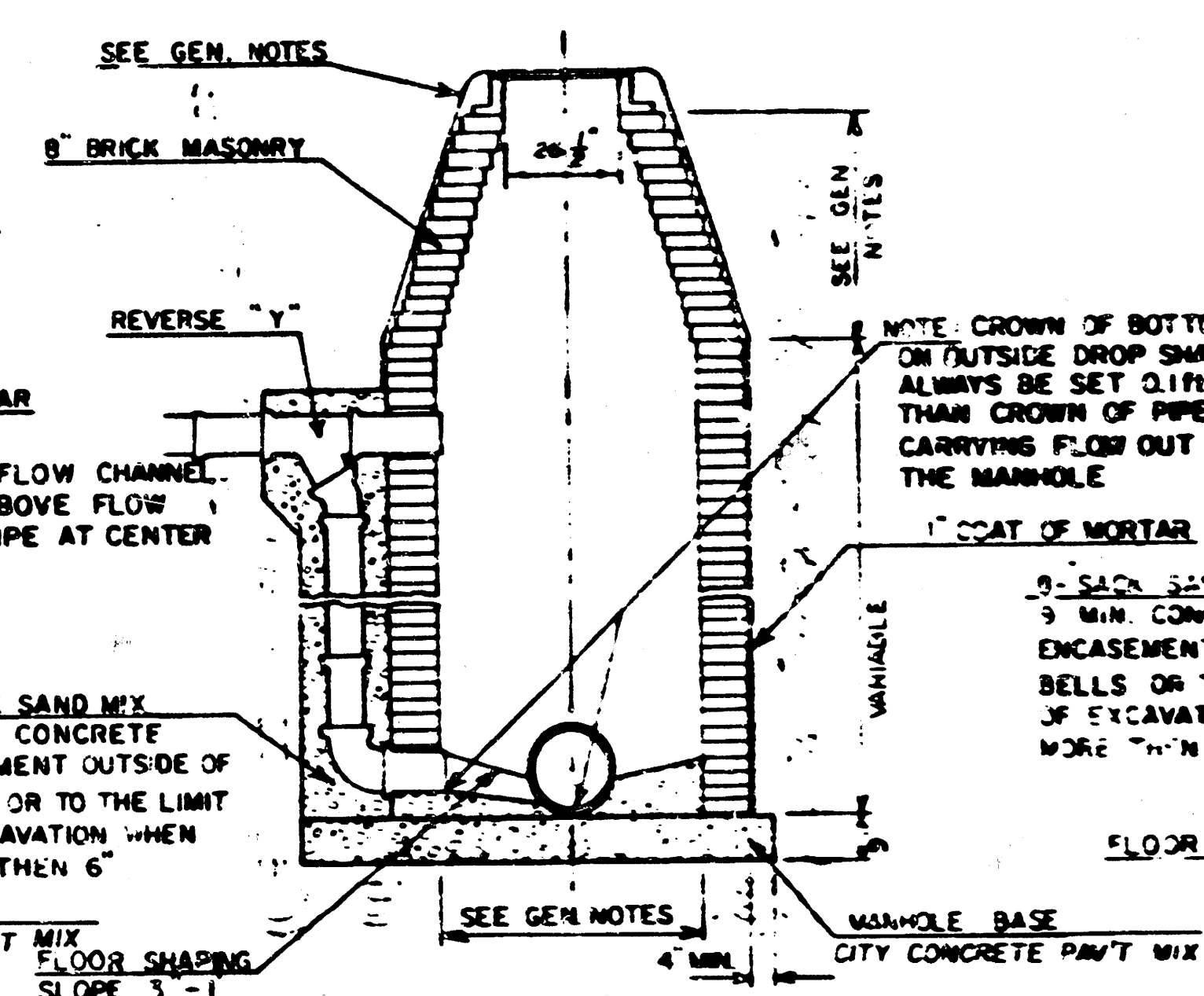
TYPE "A" MANHOLE



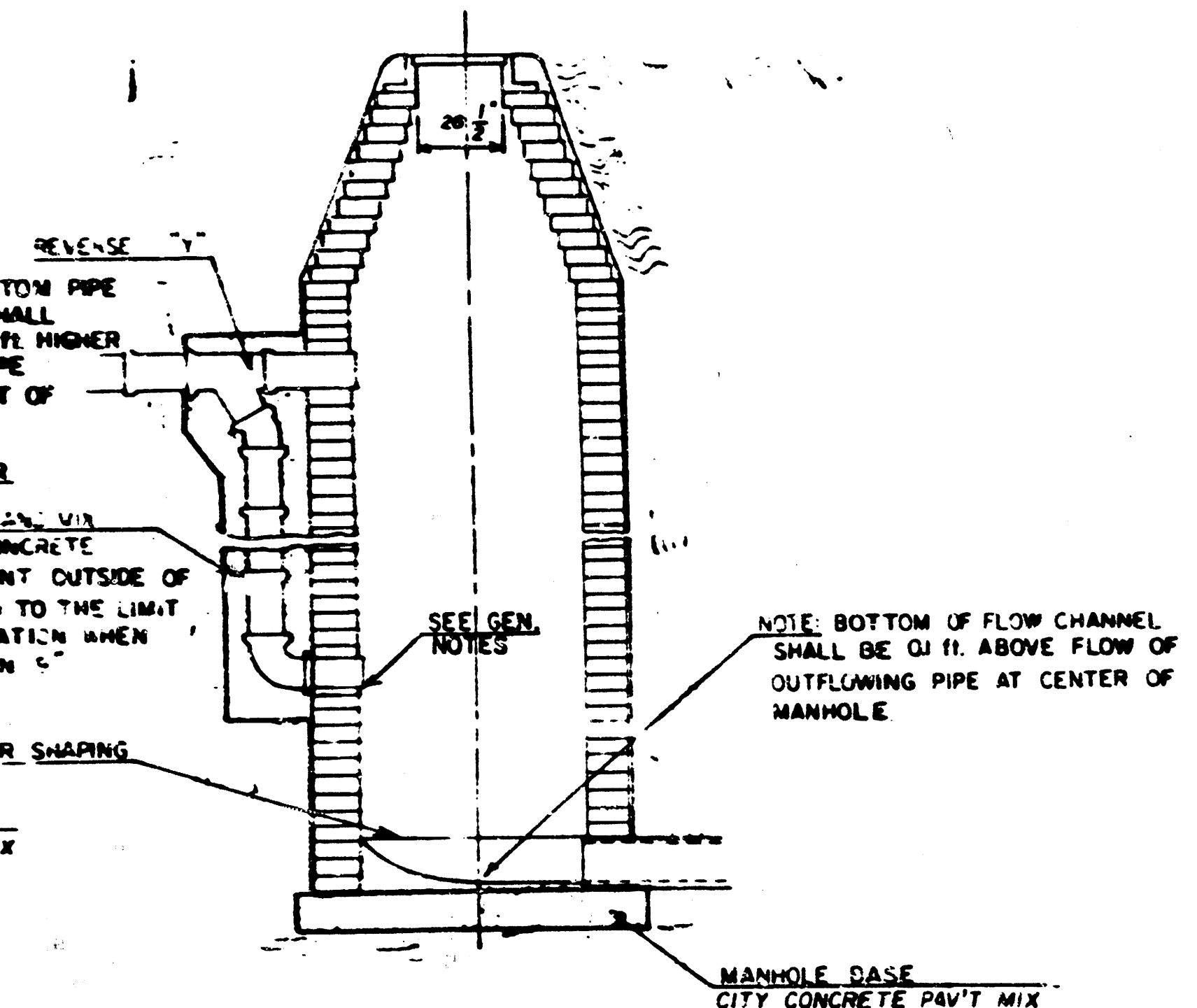
TYPE "A" INSIDE DROP MANHOLE



TYPE "A" OUTSIDE DROP MANHOLE



DETAIL OF OUTSIDE DROP
CONSTRUCTED ON EXISTING MANHOLE

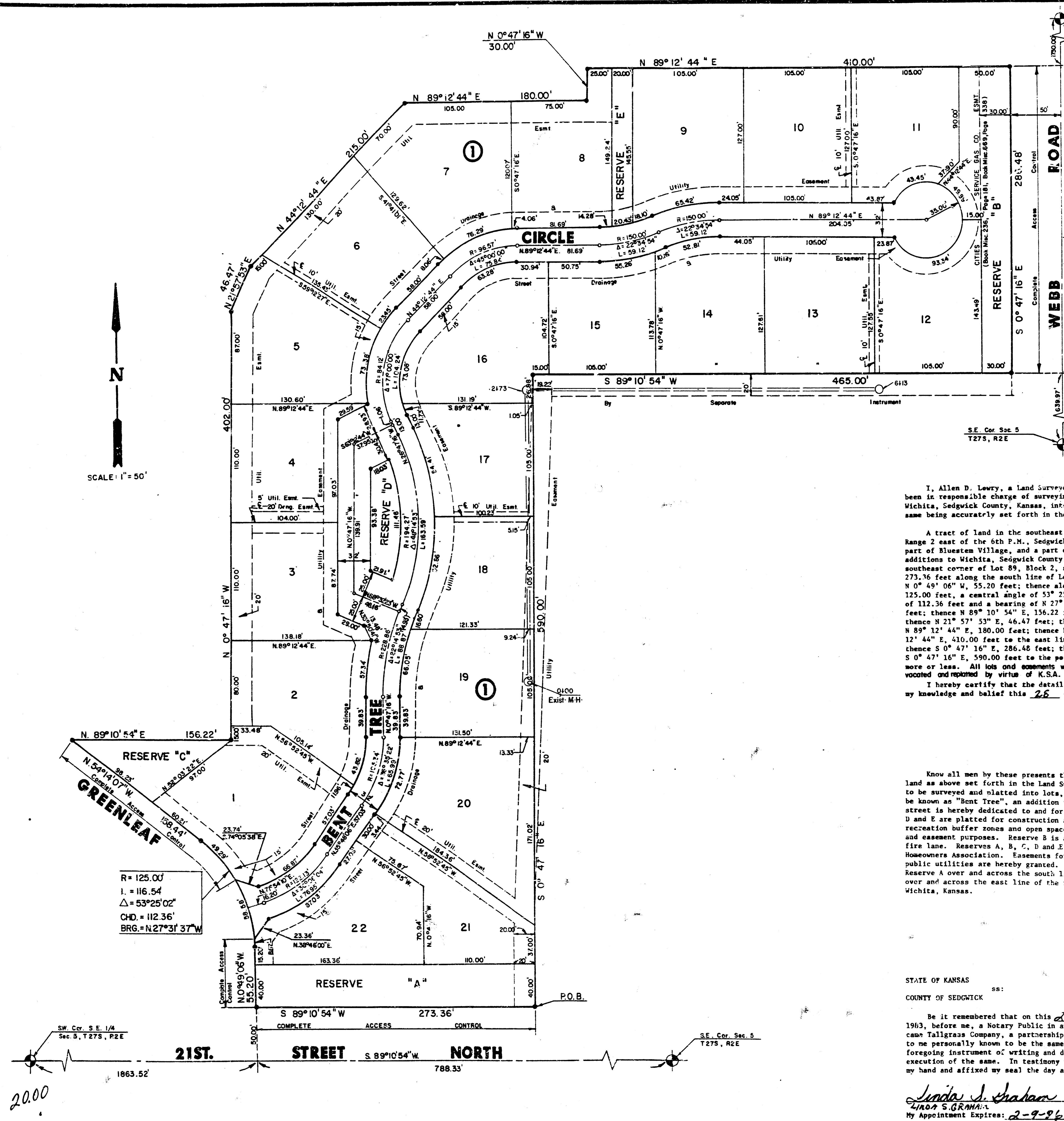


GENERAL NOTES

- 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. TYPE "A" MANHOLES CAN BE USED ON SEWERS UP TO 16' IN DEPTH WHEN THE MANHOLE IS NOT LOCATED WITHIN PUBLIC STREET PAVEMENT. MANHOLES CONSTRUCTED WHERE PIPE SIZES ARE SMALLER THAN 24" SHALL HAVE AN INSIDE DIAMETER OF 4'. MANHOLES CONSTRUCTED WHERE PIPE SIZES ARE 24" OR LARGER SHALL HAVE AN INSIDE DIAMETER OF 5'. THE HEIGHT OF THE CORBELS ON 4' DIAMETER MANHOLES SHALL BE 4'. MANHOLES HAVING A DIAMETER OF 5' SHALL HAVE CORBELS 6' IN HEIGHT. COMPLETED MANHOLE SHALL BE WITHOUT LEAKS AND WATER TIGHT.
- REINFORCING STEEL SHALL BE INSTALLED IN THE MANHOLE BASES AND SHALL CONSIST OF NO. 4 BARS PLACED 6" CENTERS IN BOTH DIRECTIONS. THE MANHOLE BASE REINFORCEMENT SHALL BE PLACED 6" ABOVE THE BOTTOM OF THE MANHOLE BASE. ALL COSTS FOR FURNISHING AND INSTALLING REINFORCING STEEL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.
- 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 CASSETS SHALL BE USED WITH P.V.C. AND A.R.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 BUTYLOUS COATING SUCH THAT THE CONNECTION WILL BE WATER TIGHT. FLOOR OF MANHOLE SHALL BE MODIFIED TO FORM NEW FLOW CHANNEL FOR THE NEW CONNECTION AS INDICATED BY THE DRAWING. THE VERTICAL DROP FROM THE LOWER PIPE ON SUCH OUTSIDE DROP CONNECTIONS SHALL NOT EXCEED 4' FOR INFLOWING PIPES SIZED 12" OR SMALLER AND 2' FOR INFLOWING PIPES SIZED LARGER THAN 12", EXCEPT THE CROWN OF THE LOWER PIPE SHALL NEVER BE SET BELOW THE CROWN OF ANY LARGER OUTFLOWING PIPE. THIS WORK, INCLUDING MODIFICATION OF MANHOLE FLOOR, SHALL BE PAID FOR AT THE UNIT PRICE BID FOR OUTSIDE DROP STACK CONSTRUCTED ON EXISTING MANHOLE.
- THE FLOORS OF ALL MANHOLES SHALL BE SHAPED WITH FLOW CHANNELS SUCH THAT THE MANHOLES WILL BE SELF CLEANING AND FREE OF AREAS WHERE SOLUTION 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 REAT 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.
- PIPES INSTALLED WITHIN THE EXCAVATION MADE FOR THE MANHOLE SHALL BE CRADLED WITH CONCRETE TO THE LIMITS OF THE MANHOLE EXCAVATION. WHEN CLAY PIPE IS USED, THE CRADLE SHALL EXTEND TO THE FIRST JOINT OUTSIDE THE MANHOLE. THE CRADLE SHALL BE TERMINATED AT THE CLAY PIPE JOINT IN A MANNER WHICH WILL MAINTAIN THE FLEXIBILITY OF THE JOINT. COST OF THE CRADLE WITHIN MANHOLE EXCAVATION OR TO CLAY PIPE JOINTS ADJACENT TO MANHOLE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.
- 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.
- 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.
- STANDARD MANHOLES TYPE "A" AND STANDARD INSIDE DROP MANHOLES TYPE "A" SHALL BE BID AS STANDARD MANHOLES FOR THE TYPE AND DIAMETER INDICATED. OUTSIDE DROP MANHOLES TYPE "A" SHALL BE BID AS STANDARD OUTSIDE DROP MANHOLES FOR THE TYPE AND DIAMETER INDICATED. ALL MANHOLE DIAMETERS WILL BE 4' UNLESS INDICATED OTHERWISE.

BENT TREE
LAT. 29, MAIN 22, W.L.S.
PROJ. NO 468-76-245-81309-000-000-001

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AVAILABLE COPY



FINAL PLAT OF
BENT TREE

AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS

STATE OF KANSAS
COUNTY OF SEDGWICK

This is to certify that this instrument was filed for record in the Register of Deeds Office at 2:30 P.M. on the 23rd day of AUGUST, 1983.

Bette F. McCart, Register of Deeds
Bette F. McCart

Pat Kettler, Deputy
Pat Kettler

This plat of "Bent Tree" has been submitted to and approved by the Wichita-Sedgwick County Metropolitan Area Planning Commission, Wichita, Kansas.

Dated this 14th day of July, 1983.

Wichita-Sedgwick County Metropolitan Area Planning Commission

David Bayouth, Chairman
David Bayouth

Robert A. Lakin, Secretary
Robert A. Lakin

This plat approved and all dedications shown herein, if any, accepted by the City Commission of the City of Wichita, Kansas, this 9th day of August, 1983.

Margaret Thrift, Mayor
Margaret Thrift

Donald C. Glick, City Clerk
Donald C. Glick

This plat approved and all dedications shown herein, if any, accepted by the Board of County Commissioners of Sedgwick County, Kansas, this 23rd day of August, 1983.

Jack Spratt, Chairman
Jack Spratt

Donald E. Gregg, Commissioner
Donald E. Gregg

Tom Scott, Commissioner
Tom Scott

Attest: Dorothy K. White, County Clerk
Dorothy K. White

Entered on transfer record this 23rd day of AUGUST, 1983.

Dorothy K. White, County Clerk
Dorothy K. White

I, Allen D. Lowry, a Land Surveyor in Kansas, do hereby certify that I have been in responsible charge of surveying and platting "Bent Tree", an addition to Wichita, Sedgwick County, Kansas, into lots, a block, a street and reserves, the same being accurately set forth in the accompanying plat and described as follows:

A tract of land in the southeast quarter of Section 5, Township 27 south, Range 2 east of the 6th P.M., Sedgwick County, Kansas, including a replat of part of Bluestem Village, and a part of reserve A, Plumthicket Second, both additions to Wichita, Sedgwick County, Kansas, described as beginning at the southeast corner of Lot 89, Block 2, said Bluestem Village; thence S 89° 10' 54" W, 273.36 feet along the south line of Lot 89, Block 2, said Bluestem Village; thence N 0° 47' 16" W, 55.20 feet; thence along a curve to the left having a radius of 125.00 feet, a central angle of 53° 25' 02", a length of 116.54 feet and a chord of 112.36 feet and a bearing of N 27° 31' 37" W; thence N 54° 1' 07" W, 158.44 feet; thence N 89° 10' 54" E, 156.22 feet; thence N 0° 47' 16" W, 402.00 feet; thence N 21° 57' 53" E, 46.47 feet; thence N 44° 12' 44" E, 215.00 feet; thence N 89° 12' 44" E, 180.00 feet; thence N 0° 47' 16" W, 30.00 feet; thence N 89° 12' 44" E, 410.00 feet to the east line of Lot 89, Block 2, said Bluestem Village; thence S 0° 47' 16" E, 286.48 feet; thence S 89° 10' 54" W, 465.00 feet; thence S 0° 47' 16" E, 590.00 feet to the point of beginning, containing 8.60 acres, more or less. All lots and easements within the above described property are being vacated and replatted by virtue of K.S.A. 12-512 (b).

I hereby certify that the details of this plat are correct to the best of my knowledge and belief this 26 day of July, 1983.

Allen D. Lowry
Allen D. Lowry
Mid-Kansas Engineering Consultants, P.A.
240 North Rock Road, Suite 130
Wichita, Kansas 67206

Know all men by these presents that we the undersigned property owners of the land as above set forth in the Land Surveyor's Certificate have caused the same to be surveyed and platted into lots, a block, a street and reserves, the same to be known as "Bent Tree", an addition to Wichita, Sedgwick County, Kansas. The street is hereby dedicated to and for the use of the public. Reserves A, B, C, D and E are platted for construction and maintenance of utilities, drainage, recreation buffer zones and open space. Reserve D is platted for street drainage and easement purposes. Reserve B is also platted for construction of a wall and fire lane. Reserves A, B, C, D and E shall be owned and maintained by the Homeowners Association. Easements for streets, drainage and construction of public utilities are hereby granted. All abutters rights of access to or from Reserve A over and across the south line of the reserve and to or from Reserve B over and across the east line of the reserve are hereby granted to the City of Wichita, Kansas.

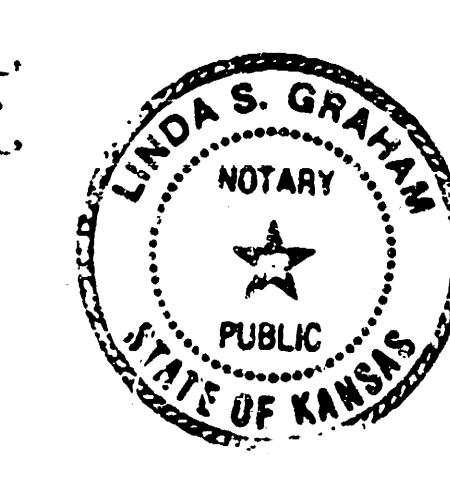
Tallgrass Company, a Partnership
By: Ritchie Enterprises
Managing Partner

By: William F. Binter
William F. Binter

STATE OF KANSAS
COUNTY OF SEDGWICK

Be it remembered that on this 27th day of July, 1983, before me, a Notary Public in and for said State and County, came Tallgrass Company, a partnership by W.F. Binter, 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 seal the day and year above written.

Linda S. Graham, Notary Public
Linda S. Graham
My Appointment Expires: 2-9-84



Anticipation Record F 603 P 908 493