LATERAL 115, MAIN 4, S.S. 23

CITY OF WICHITA, KANSAS

M.E. LINDEBAK CITY ENGINEER

As Built
SHL
7-85

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	PLAN & PROFILE
3-5	STANDARDS

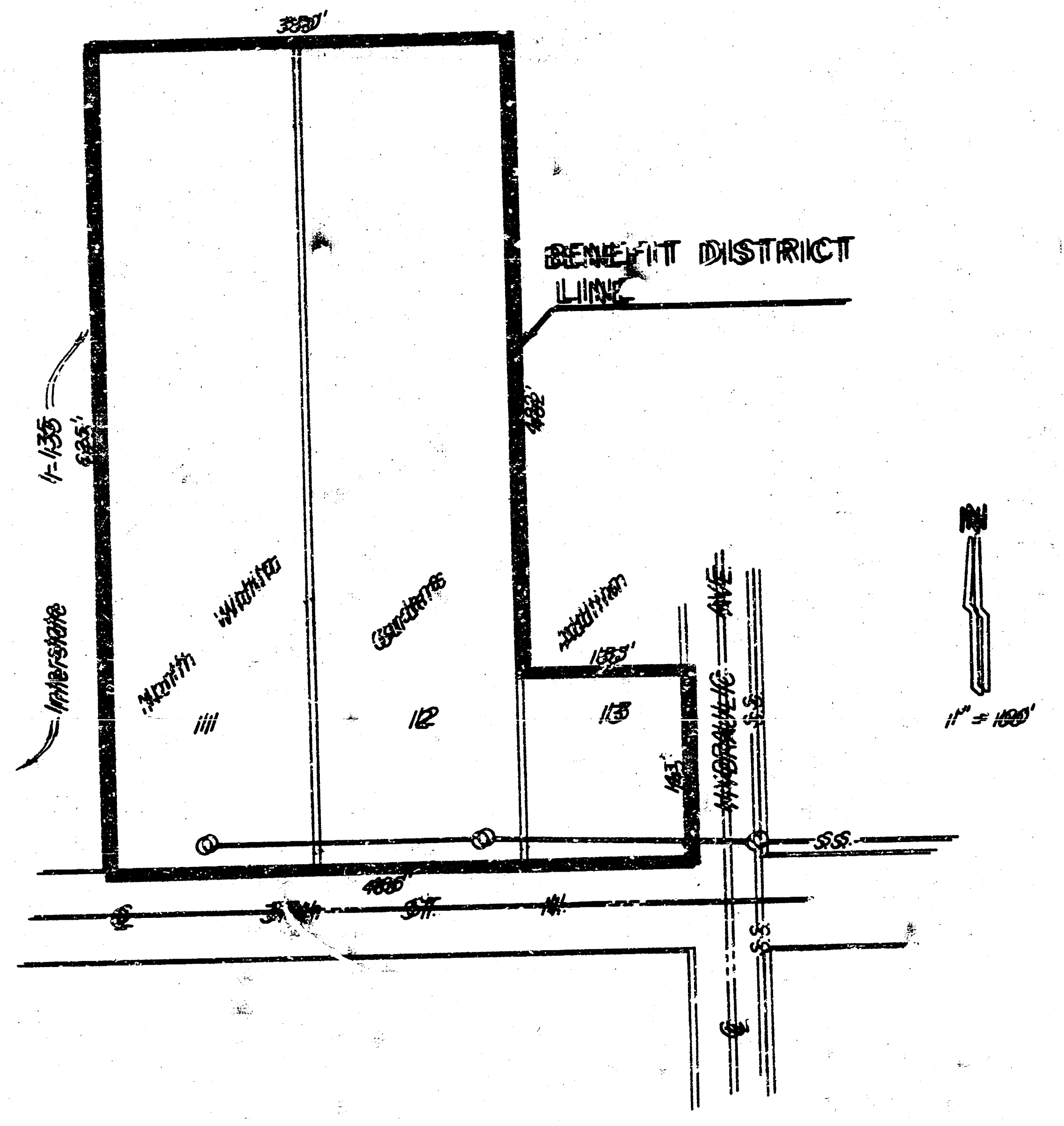
PROJECT NO. 468-76-245-81374-000-000-001

DATE: JANUARY 1985

NOTIFY THE FOLLOWING COMPANIES PRIOR TO ANY TRENCHING.

ARKLA GAS CO.	942-8350
BELL TELEPHONE	263-3087
CABLEVISION	236-6817
GAS SERVICE CO.	263-7511
KANSAS GAS & ELEC.	261-6248
KANSAS ONE-CALL	1-800-DIG-SAFE
CALL BEFORE YOU DIG	1-800-571-215

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.



Location Map

GENERAL NOTES

1. Cost of Sawing Existing Pavement shall be incidental to the bid items Pavement Removed and Replaced.
2. Cost of Removing and Replacing Gravel Drives shall be incidental to the project.

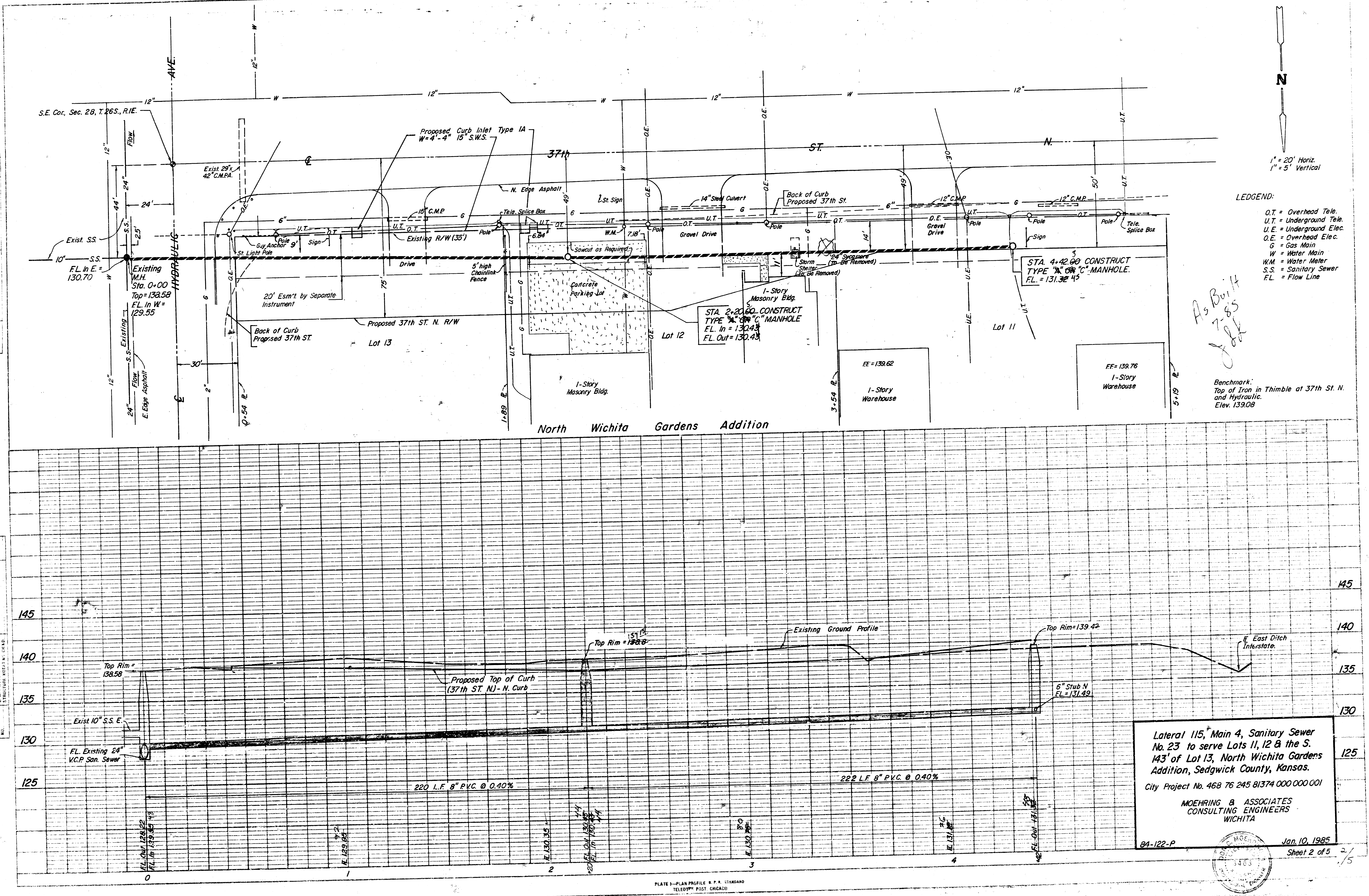
Pavement removal and/or replacement will be measured and paid for on the lineal foot basis as measured along the centerline of the sewer regardless of width, pavement type and/or pavement thickness. Minimum limits of such pavement removal and replacement shall be one foot beyond the limits of the excavation made for the sewer or the structure. Removal and replacement of existing pavement shall conform to the applicable sections of the City of Wichita Standard Specifications.

MOEHRING & ASSOCIATES
CONSULTING ENGINEERS
WICHITA

DON C. MOEHRING II
34658

Sheet 1 of 5

1/5


PLAN
PROFILE
HYDRAULIC AVE.
37th ST. N.
S.E. Cor., Sec. 28, T. 26S., R.1E.
Exist. 29" x 42" C.M.P.A.
Proposed Curb Inlet Type 1A W=4'-4" 15" S.W.S.
N. Edge Asphalt
Back of Curb Proposed 37th St.
14" Steel Culvert
Existing R/W (35')
Tele. Splice Box
Exist. S.S.
F.L. In E. = 130.70
Existing M.H. Sta. 0+00 Top = 138.58 F.L. In W. = 129.55
St. Light Pole
Guy Anchor
Pole
Sign
Drive
5' high Chainlink Fence
Sawcut as Required
Concrete Parking Lot
Gravel Drive
24" Sycamore (To Be Removed)
Storm Shelter (To Be Removed)
STA. 2+20.00 CONSTRUCT TYPE "A" OR "C" MANHOLE F.L. In = 130.43 F.L. Out = 130.43
STA. 4+42.00 CONSTRUCT TYPE "A" OR "C" MANHOLE F.L. = 131.32
20' Esm't. by Separate Instrument
Proposed 37th ST. N. R/W
Back of Curb Proposed 37th ST.
Lot 13
Lot 12
Lot 11
1-Story Masonry Bldg.
1-Story Warehouse
F.F. = 139.62
F.F. = 139.76
E. Edge Asphalt
North Wichita Gardens Addition
Top Rim = 138.58
Top Rim = 139.42
Existing Ground Profile
Proposed Top of Curb (37th ST. N.) - N. Curb
℄ East Ditch Interstate.
Exist 10" S.S.E.
F.L. Existing 24" V.C.P. San. Sewer
6" Stub N F.L. = 131.49
220 L.F. 8" P.V.C. @ 0.40%
222 L.F. 8" P.V.C. @ 0.40%
145
140
135
130
125
0
1
2
3
4

1" = 20' Horiz.
1" = 5' Vertical

LEDGEND:

O.T. = Overhead Tele.
U.T. = Underground Tele.
U.E. = Underground Elec.
O.E. = Overhead Elec.
G = Gas Main
W = Water Main
W.M. = Water Meter
S.S. = Sanitary Sewer
F.L. = Flow Line

As Built
7-85

Benchmark:
Top of Iron in Thimble at 37th St. N. and Hydraulic.
Elev. 139.08

Lateral 115, Main 4, Sanitary Sewer
No. 23 to serve Lots 11, 12 & the S.
143' of Lot 13, North Wichita Gardens
Addition, Sedgwick County, Kansas.

City Project No. 468 76 245 81374 000 000 001

MOEHRING & ASSOCIATES
CONSULTING ENGINEERS
WICHITA

84-122-P
Jan. 10, 1985

3463

Sheet 2 of 5

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PLATE 5—PLAN PROFILE STANDARD
TELEDYNE POST, CHICAGO

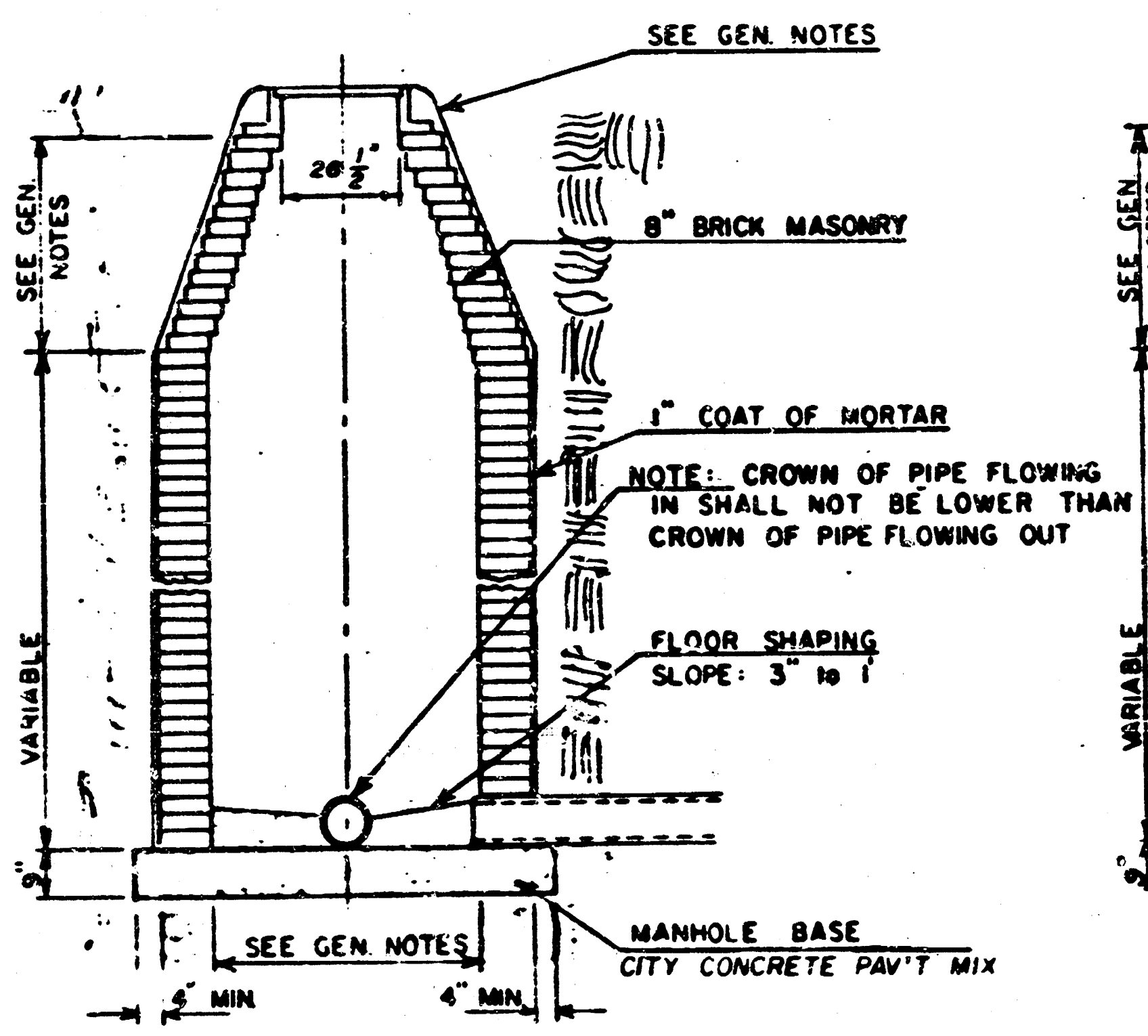
REVISED SEPTEMBER 1980
REVISED DECEMBER 1981

SEWER APPURTENANCES DETAILS

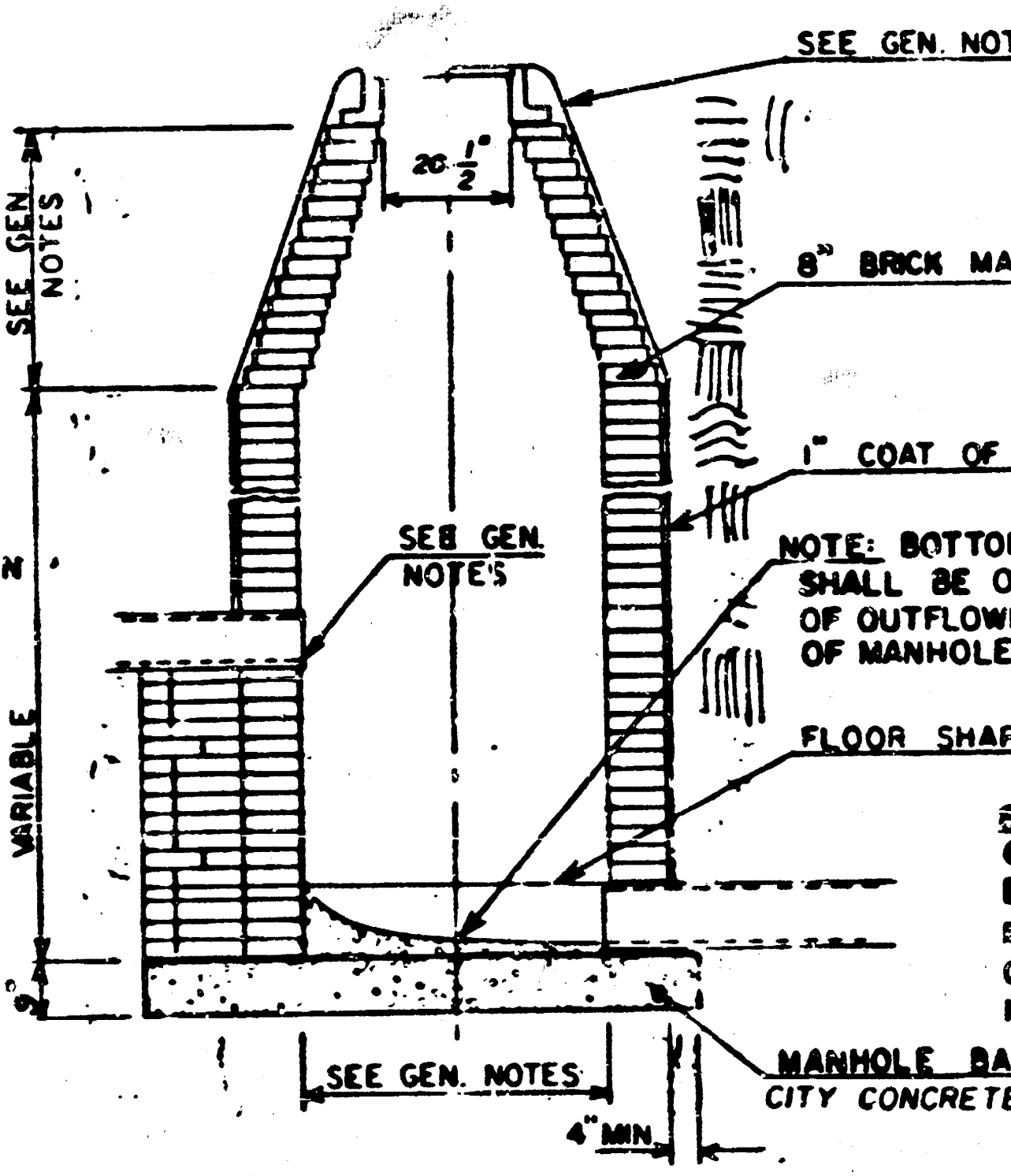
ADOPTED AS STANDARD DESIGN
BY

CITY of WICHITA, KANSAS

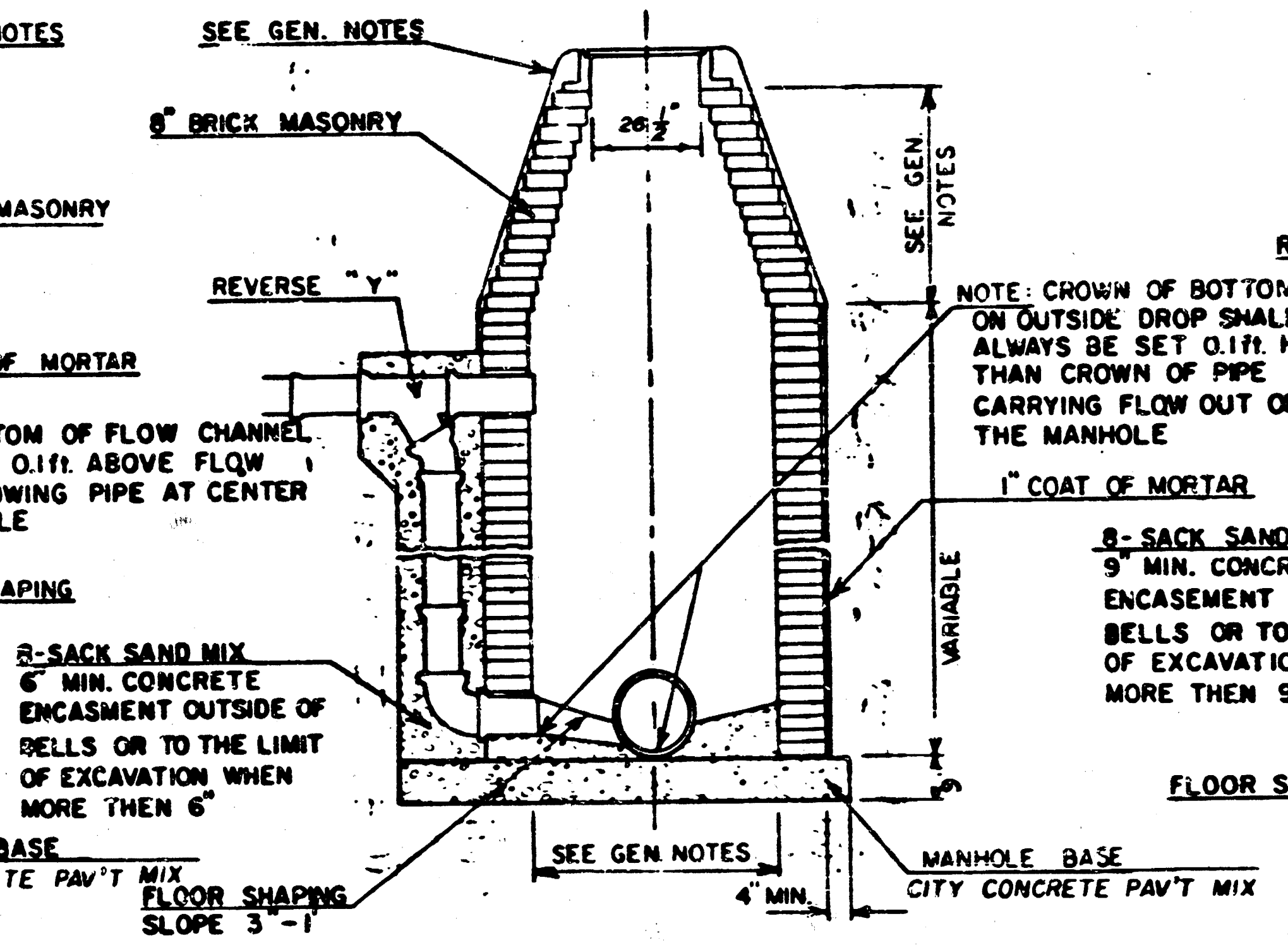
TYPE "A" MANHOLE


SEE GEN. NOTES
26 1/2"
8" BRICK MASONRY
1" COAT OF MORTAR
NOTE: CROWN OF PIPE FLOWING IN SHALL NOT BE LOWER THAN CROWN OF PIPE FLOWING OUT
FLOOR SHAPING SLOPE: 3" to 1'
SEE GEN. NOTES
VARIABLE
9"
SEE GEN. NOTES
4" MIN.
4" MIN.
MANHOLE BASE
CITY CONCRETE PAV'T MIX

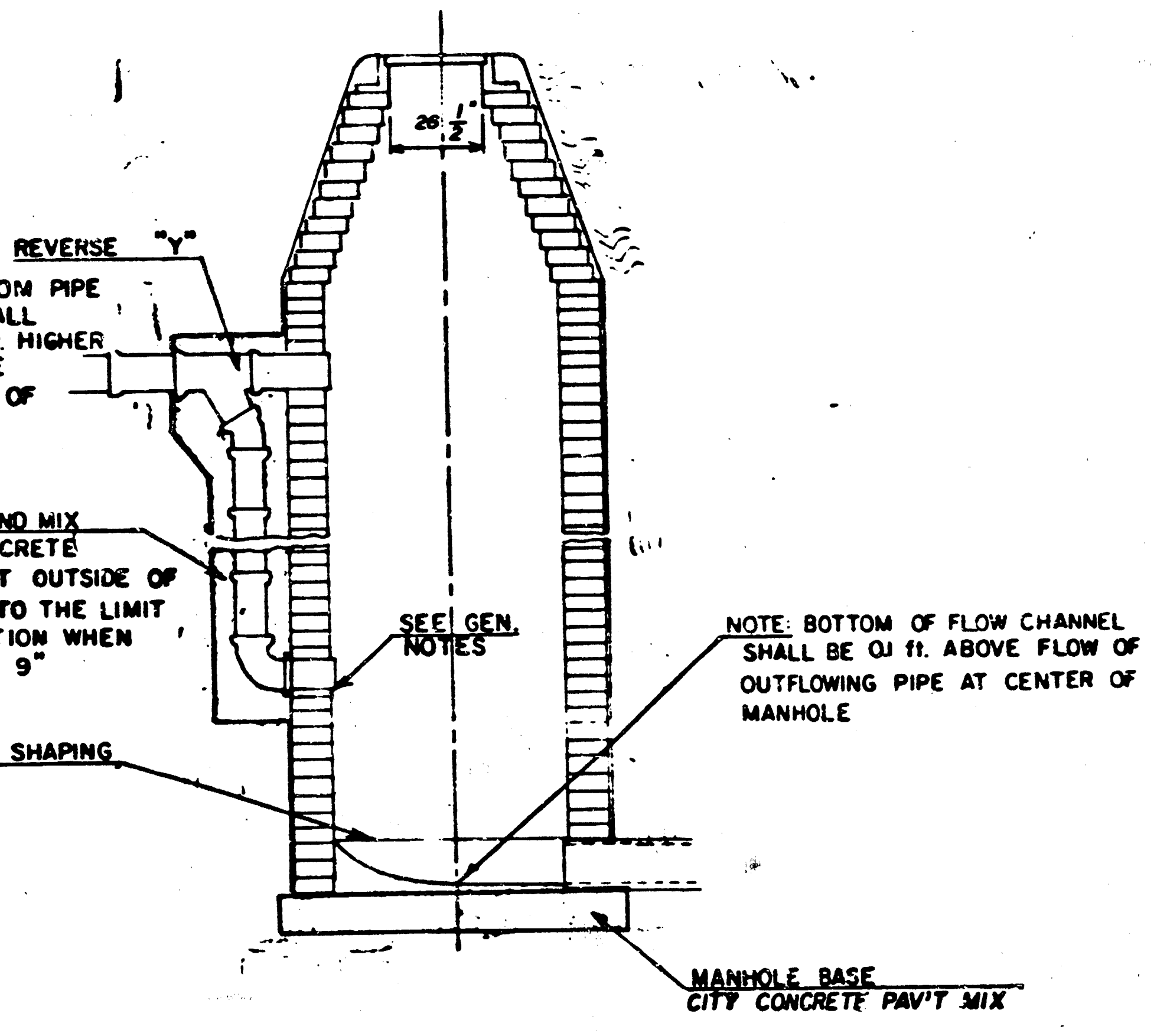
TYPE "A" INSIDE DROP MANHOLE


SEE GEN. NOTES
26 1/2"
8" BRICK MASONRY
1" COAT OF MORTAR
SEE GEN. NOTES
NOTE: BOTTOM OF FLOW CHANNEL SHALL BE 0.1ft. ABOVE FLOW OF OUTFLOWING PIPE AT CENTER OF MANHOLE
FLOOR SHAPING
SEE GEN. NOTES
VARIABLE
9"
SEE GEN. NOTES
4" MIN.
MANHOLE BASE
CITY CONCRETE PAV'T MIX

TYPE "A" OUTSIDE DROP MANHOLE


SEE GEN. NOTES
8" BRICK MASONRY
REVERSE "Y"
26 1/2"
SEE GEN. NOTES
NOTE: CROWN OF BOTTOM PIPE ON OUTSIDE DROP SHALL ALWAYS BE SET 0.1ft. HIGHER THAN CROWN OF PIPE CARRYING FLOW OUT OF THE MANHOLE
1" COAT OF MORTAR
8-SACK SAND MIX 6" MIN. CONCRETE ENCASMENT OUTSIDE OF BELLS OR TO THE LIMIT OF EXCAVATION WHEN MORE THEN 6"
VARIABLE
9"
SEE GEN. NOTES
4" MIN.
MANHOLE BASE
CITY CONCRETE PAV'T MIX
FLOOR SHAPING SLOPE 3"-1'

DETAIL OF OUTSIDE DROP
CONSTRUCTED ON EXISTING MANHOLE


26 1/2"
REVERSE "Y"
8- SACK SAND MIX 9" MIN. CONCRETE ENCASEMENT OUTSIDE OF BELLS OR TO THE LIMIT OF EXCAVATION WHEN MORE THEN 9"
SEE GEN. NOTES
NOTE: BOTTOM OF FLOW CHANNEL SHALL BE 0.1 ft. ABOVE FLOW OF OUTFLOWING PIPE AT CENTER OF MANHOLE
FLOOR SHAPING
MANHOLE BASE
CITY CONCRETE PAV'T MIX

GENERAL NOTES

1. MORTAR USED IN MAS[illegible]TRUCTION SHALL CONTAIN 8 SACKS OF CEMENT PER CUBIC YARD. CONC[illegible]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.

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. 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. 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.

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 "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.

3/5

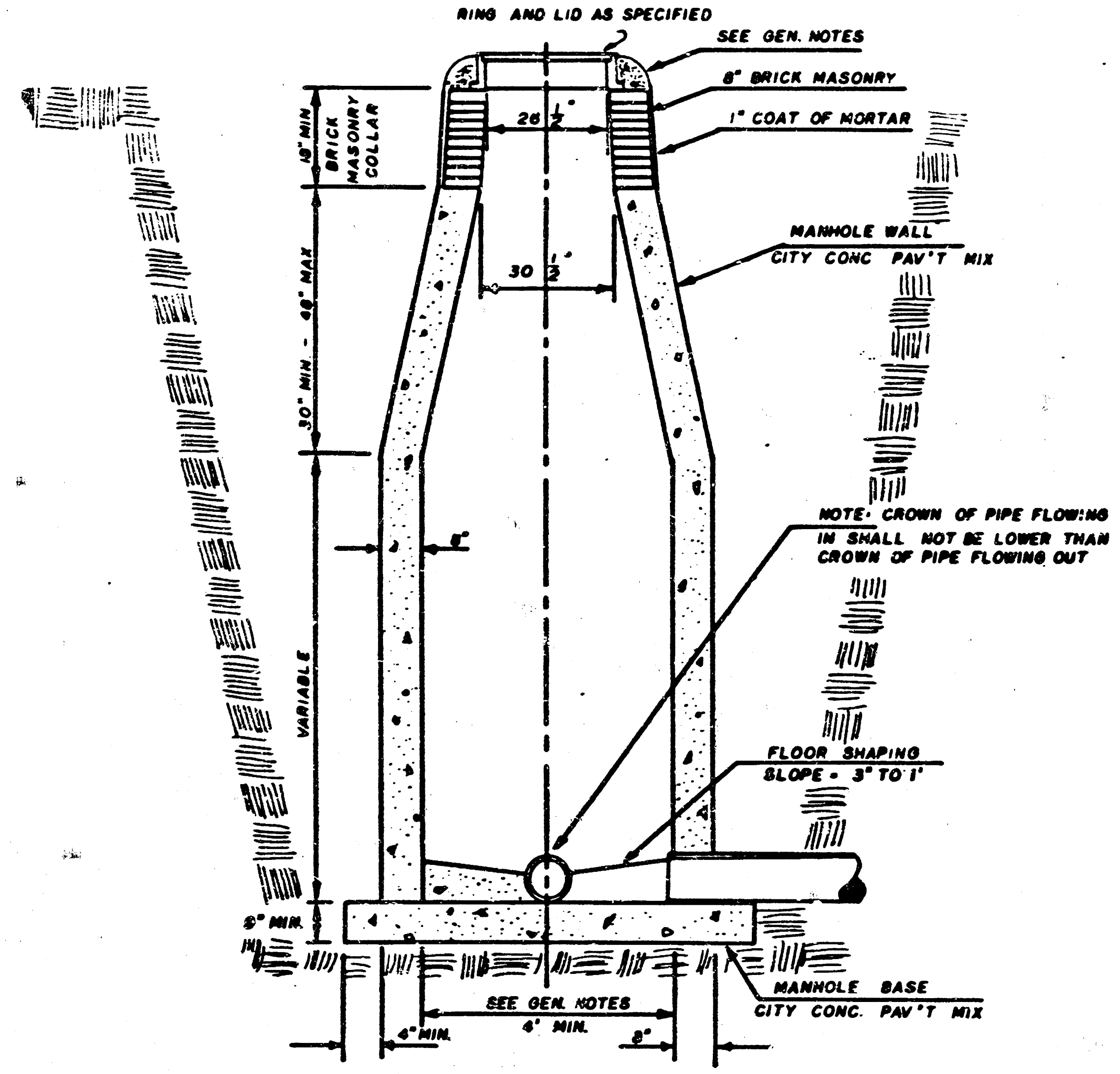
SEWER APPURTENANCES DETAILS

ADOPTED AS STANDARD DESIGN

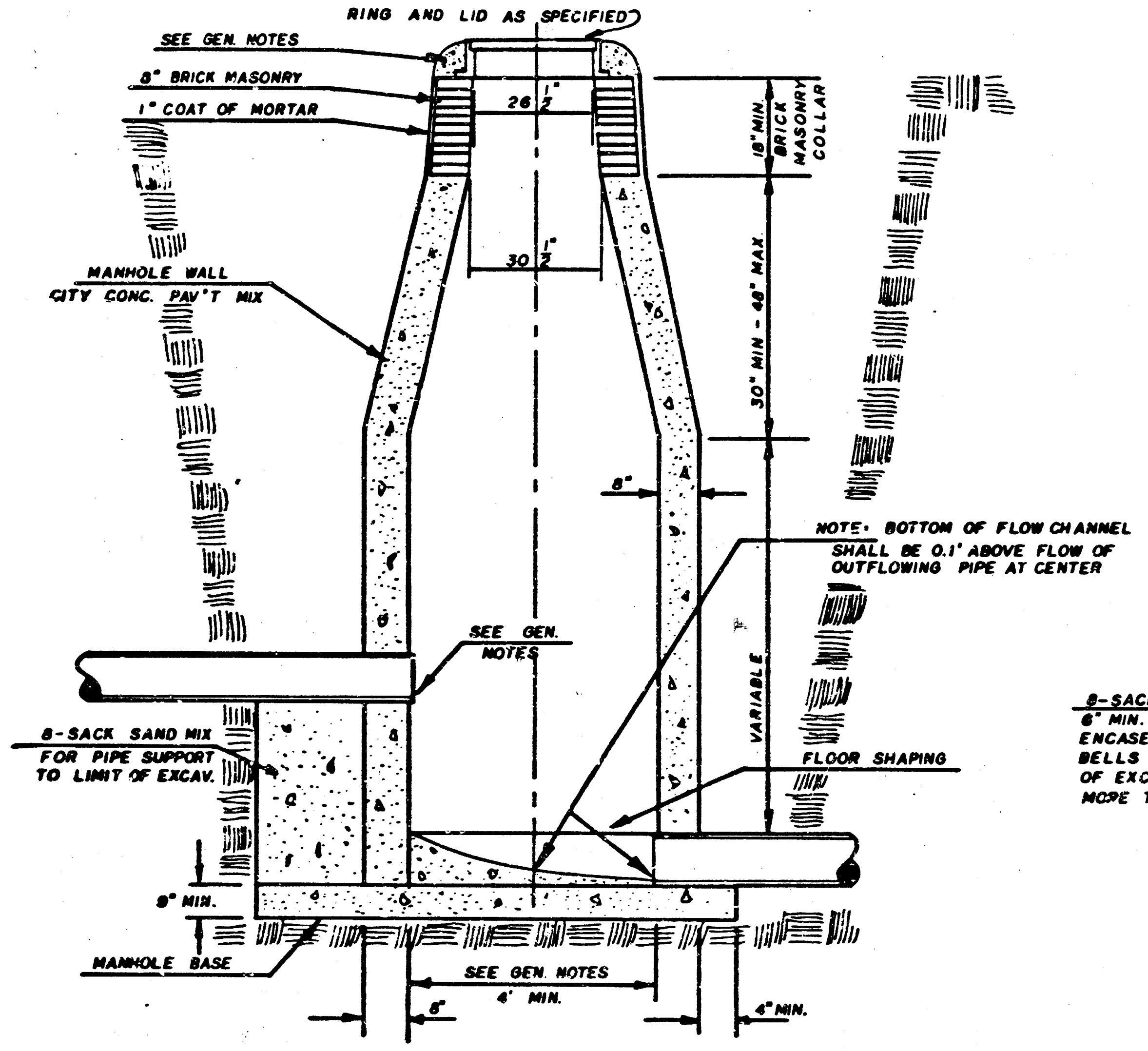
BY

City of Wichita, Kansas

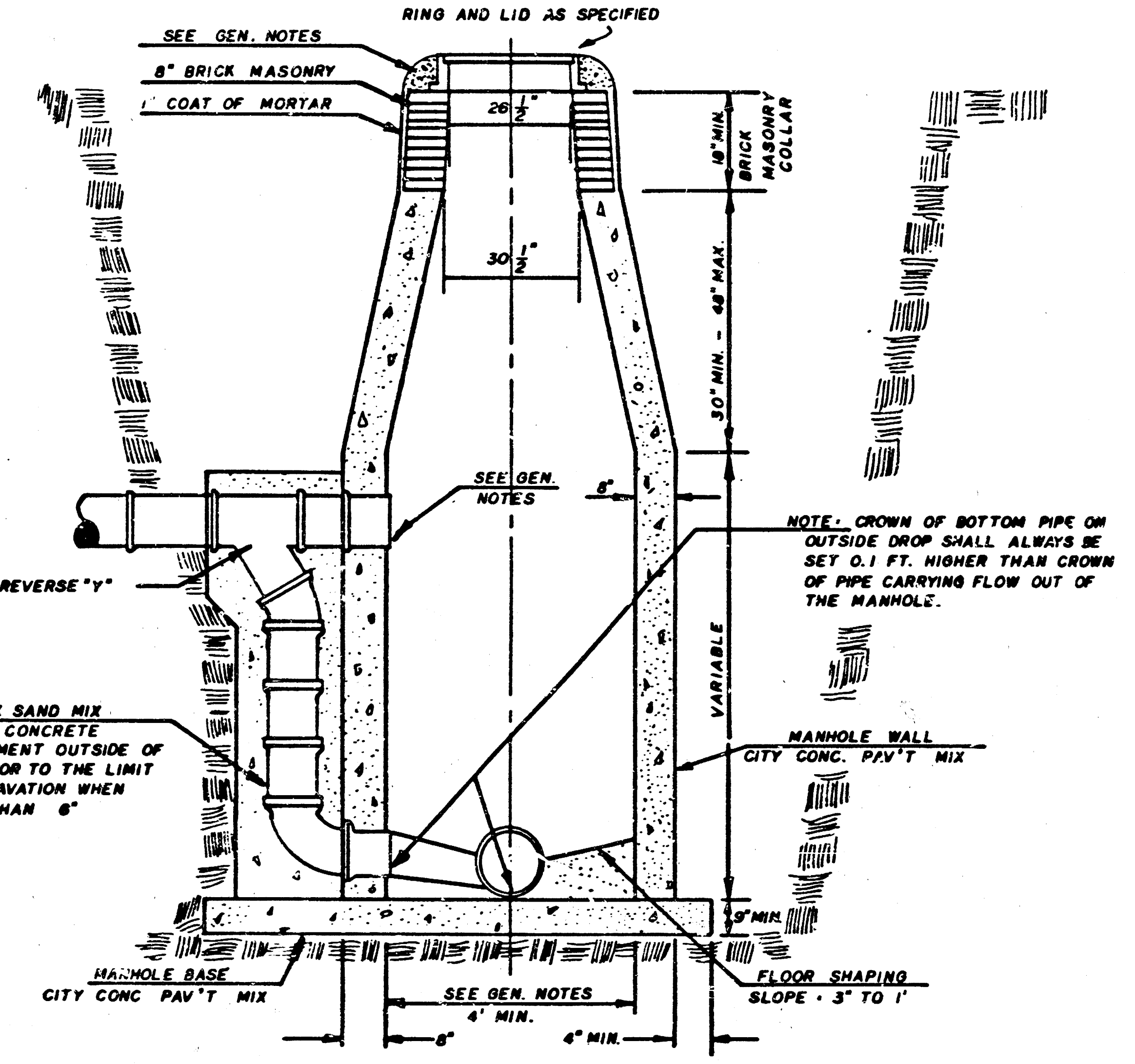
STANDARD MANHOLE TYPE "C"


RING AND LID AS SPECIFIED
SEE GEN. NOTES
8" BRICK MASONRY
1" COAT OF MORTAR
26 1/2"
18" MIN.
BRICK MASONRY COLLAR
30 1/2"
30" MIN. - 48" MAX.
MANHOLE WALL
CITY CONC PAV'T MIX
8"
NOTE: CROWN OF PIPE FLOWING IN SHALL NOT BE LOWER THAN CROWN OF PIPE FLOWING OUT
VARIABLE
FLOOR SHAPING
SLOPE = 3" TO 1'
9" MIN.
MANHOLE BASE
CITY CONC. PAV'T MIX
SEE GEN. NOTES
4' MIN.
4" MIN.
8"

INSIDE DROP MANHOLE TYPE "C"


RING AND LID AS SPECIFIED
SEE GEN. NOTES
8" BRICK MASONRY
1" COAT OF MORTAR
26 1/2"
18" MIN.
BRICK MASONRY COLLAR
30 1/2"
30" MIN. - 48" MAX.
MANHOLE WALL
CITY CONC. PAV'T MIX
8"
NOTE: BOTTOM OF FLOW CHANNEL SHALL BE 0.1' ABOVE FLOW OF OUTFLOWING PIPE AT CENTER
SEE GEN. NOTES
8-SACK SAND MIX
FOR PIPE SUPPORT TO LIMIT OF EXCAV.
VARIABLE
FLOOR SHAPING
9" MIN.
MANHOLE BASE
SEE GEN. NOTES
4' MIN.
8"
4" MIN.

OUTSIDE DROP MANHOLE TYPE "C"


RING AND LID AS SPECIFIED
SEE GEN. NOTES
8" BRICK MASONRY
1" COAT OF MORTAR
26 1/2"
18" MIN.
BRICK MASONRY COLLAR
30 1/2"
30" MIN. - 48" MAX.
SEE GEN. NOTES
8"
REVERSE "Y"
NOTE: CROWN OF BOTTOM PIPE ON OUTSIDE DROP SHALL ALWAYS BE SET 0.1 FT. HIGHER THAN CROWN OF PIPE CARRYING FLOW OUT OF THE MANHOLE.
VARIABLE
8-SACK SAND MIX
6" MIN. CONCRETE ENCASEMENT OUTSIDE OF BELLS OR TO THE LIMIT OF EXCAVATION WHEN MORE THAN 6"
MANHOLE WALL
CITY CONC. PAV'T MIX
9" MIN.
MANHOLE BASE
CITY CONC PAV'T MIX
FLOOR SHAPING
SLOPE = 3" TO 1'
SEE GEN. NOTES
4' MIN.
8"
4" MIN.

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.

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 "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.

JNL JAN. 1982

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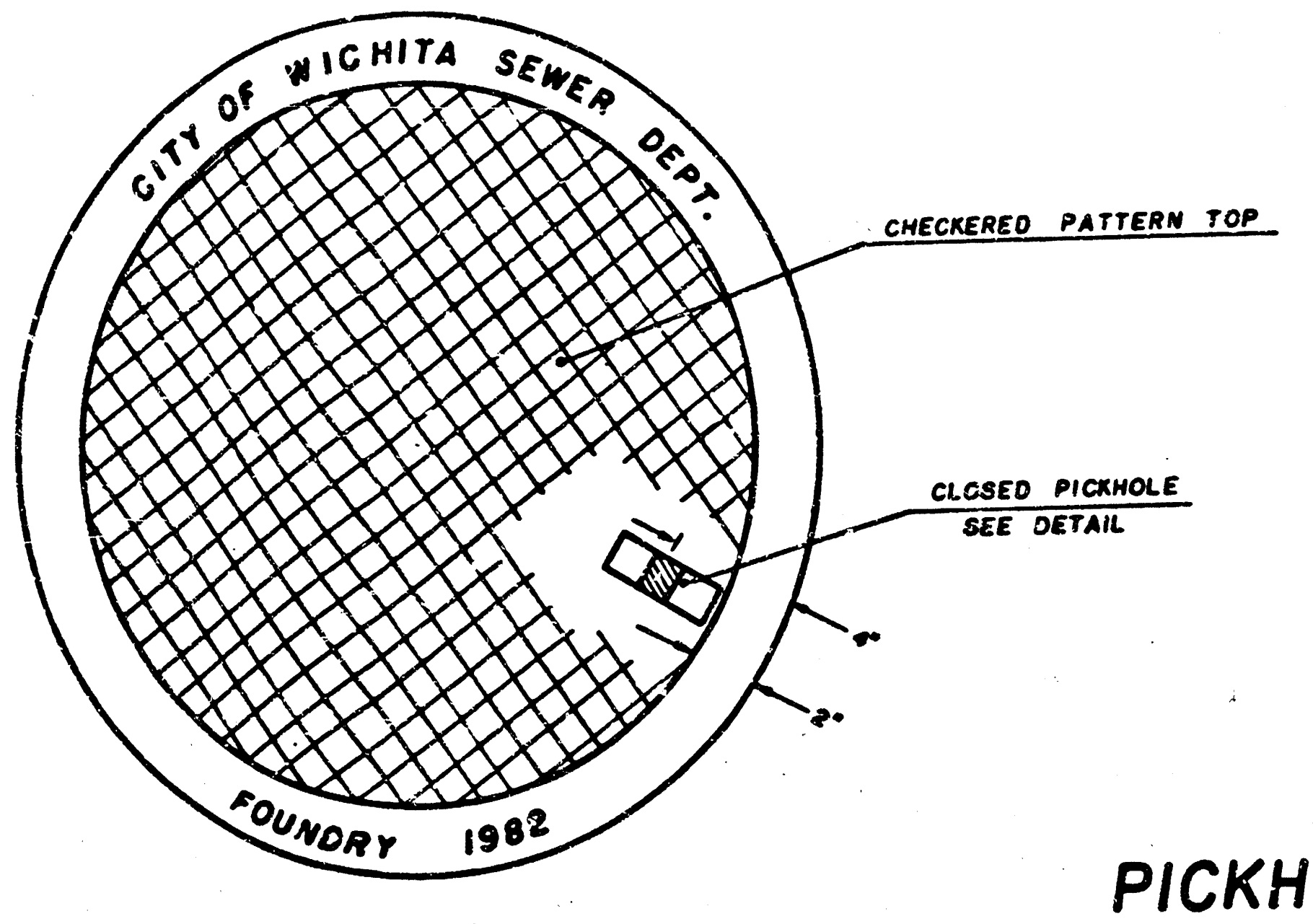
MANHOLE FRAME AND COVER DETAIL

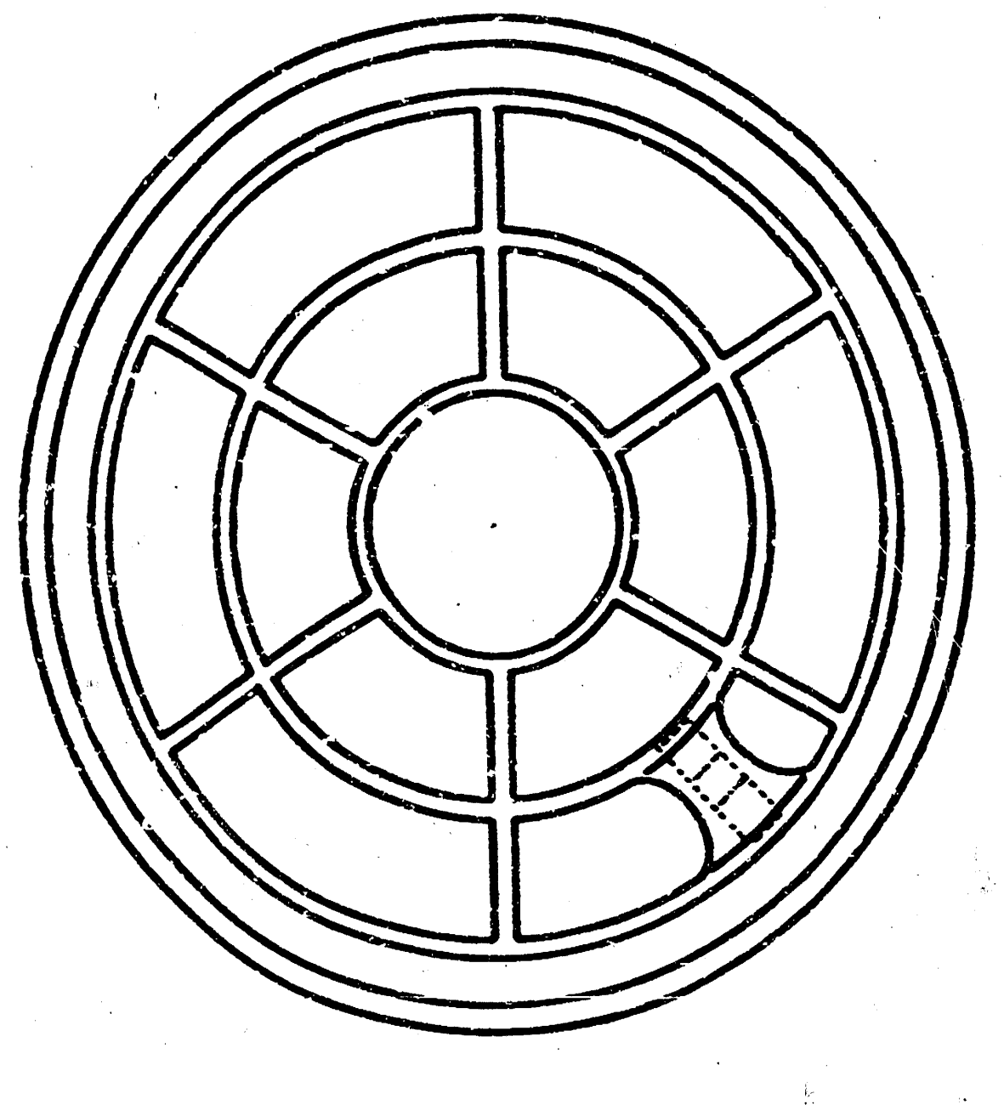
ADOPTED AS STANDARD DESIGN
BY
City of Wichita, Kansas

MANHOLE COVER

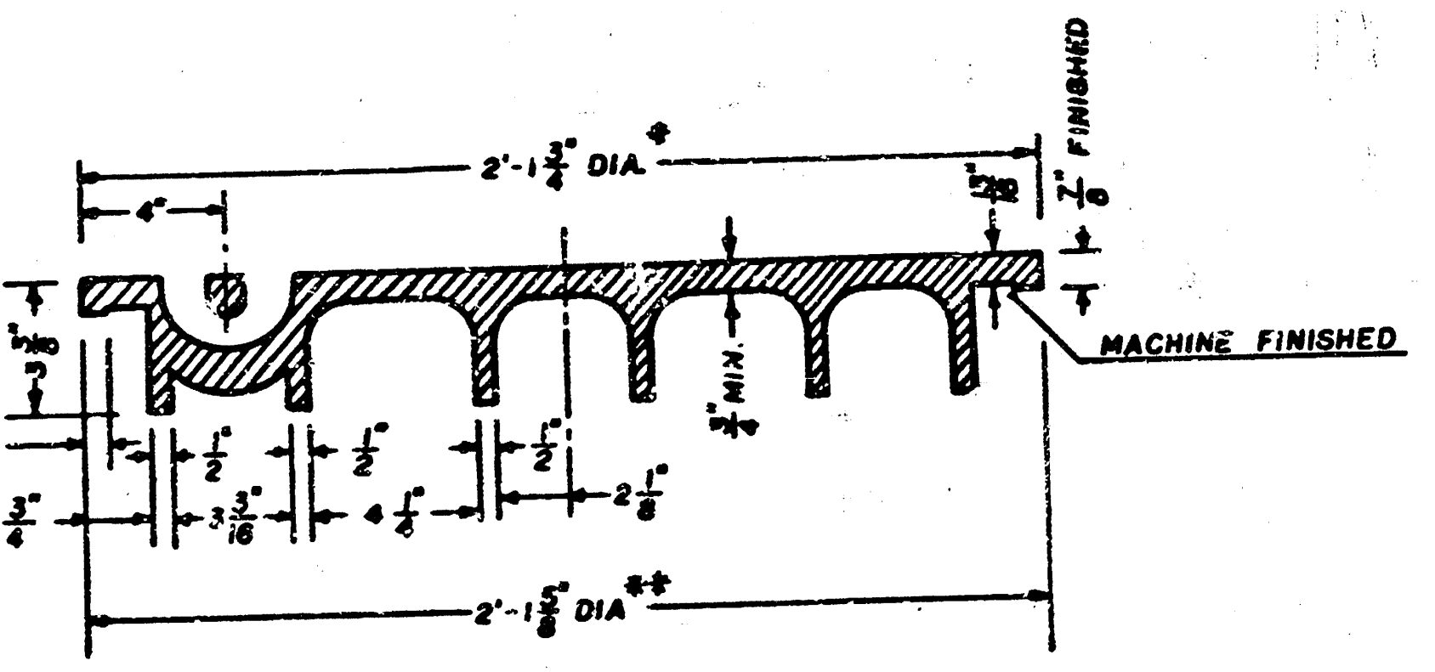
Weight: 180 Lbs.


CITY OF WICHITA SEWER DEPT.
FOUNDRY 1982
CHECKERED PATTERN TOP
CLOSED PICKHOLE SEE DETAIL
4"
2"

TOP VIEW



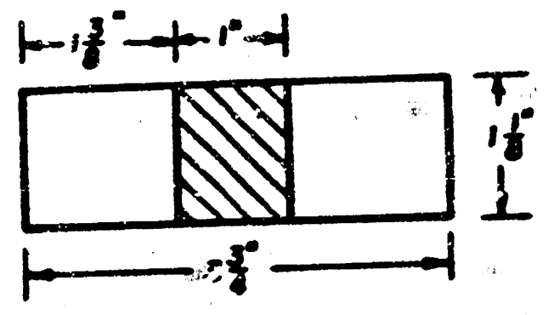
BOTTOM VIEW


2'-1 3/4" DIA.*
4"
7/8"
FINISHED
3/8"
MACHINE FINISHED
1/2" MIN.
5/8"
1/2"
1/2"
1/2"
1 3/4"
3 3/16"
4 1/4"
2 1/8"
2'-1 5/8" DIA.**

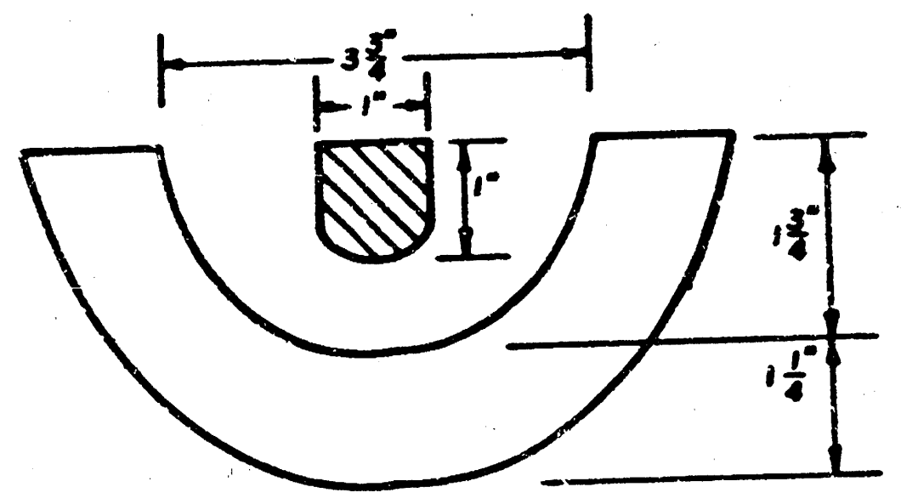
SECTION VIEW

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

PICKHOLE DETAIL


1 3/8"
1"
1 1/8"
3 3/4"

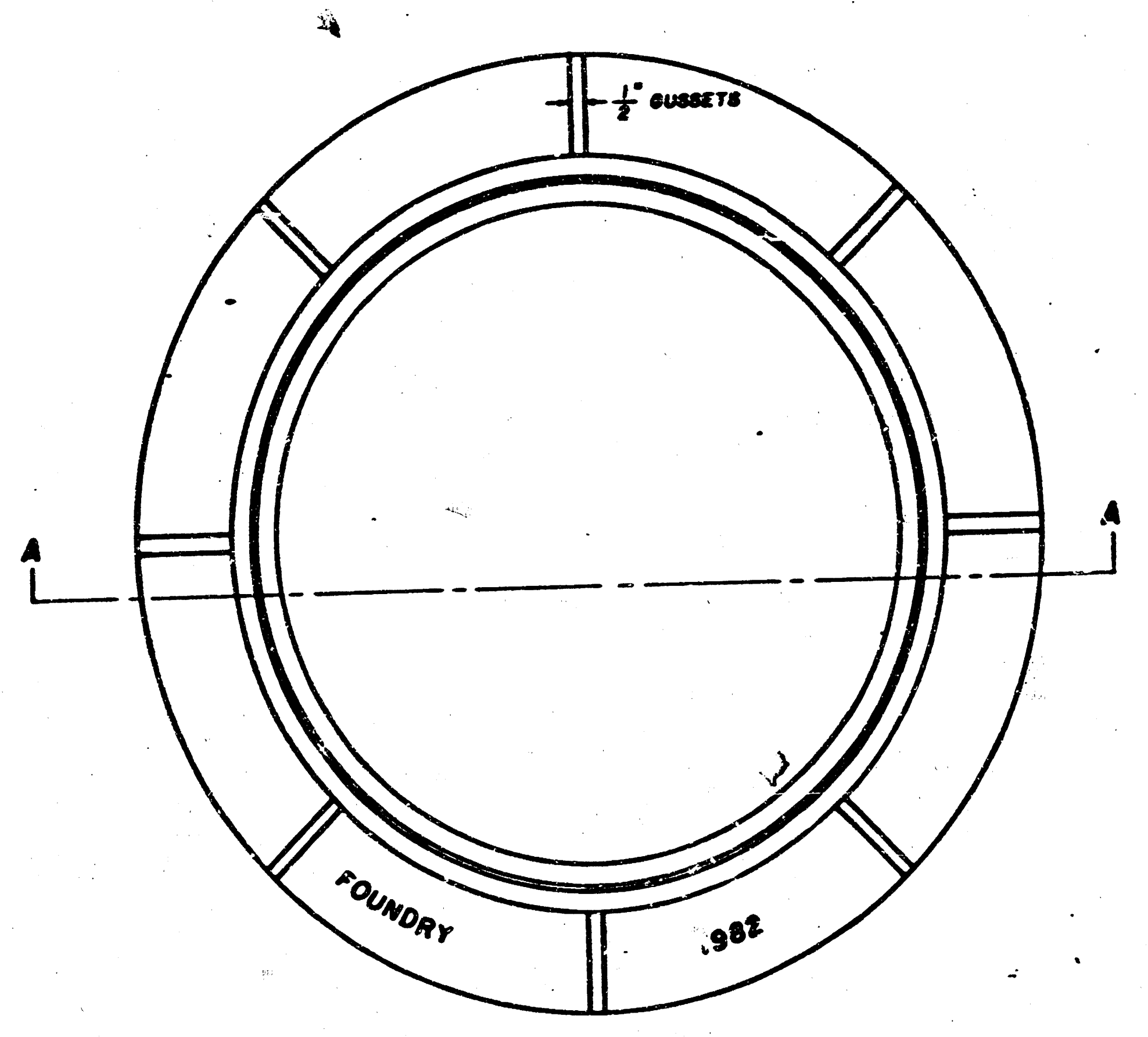
TOP VIEW


3 3/4"
1"
1"
1 3/4"
1 1/4"

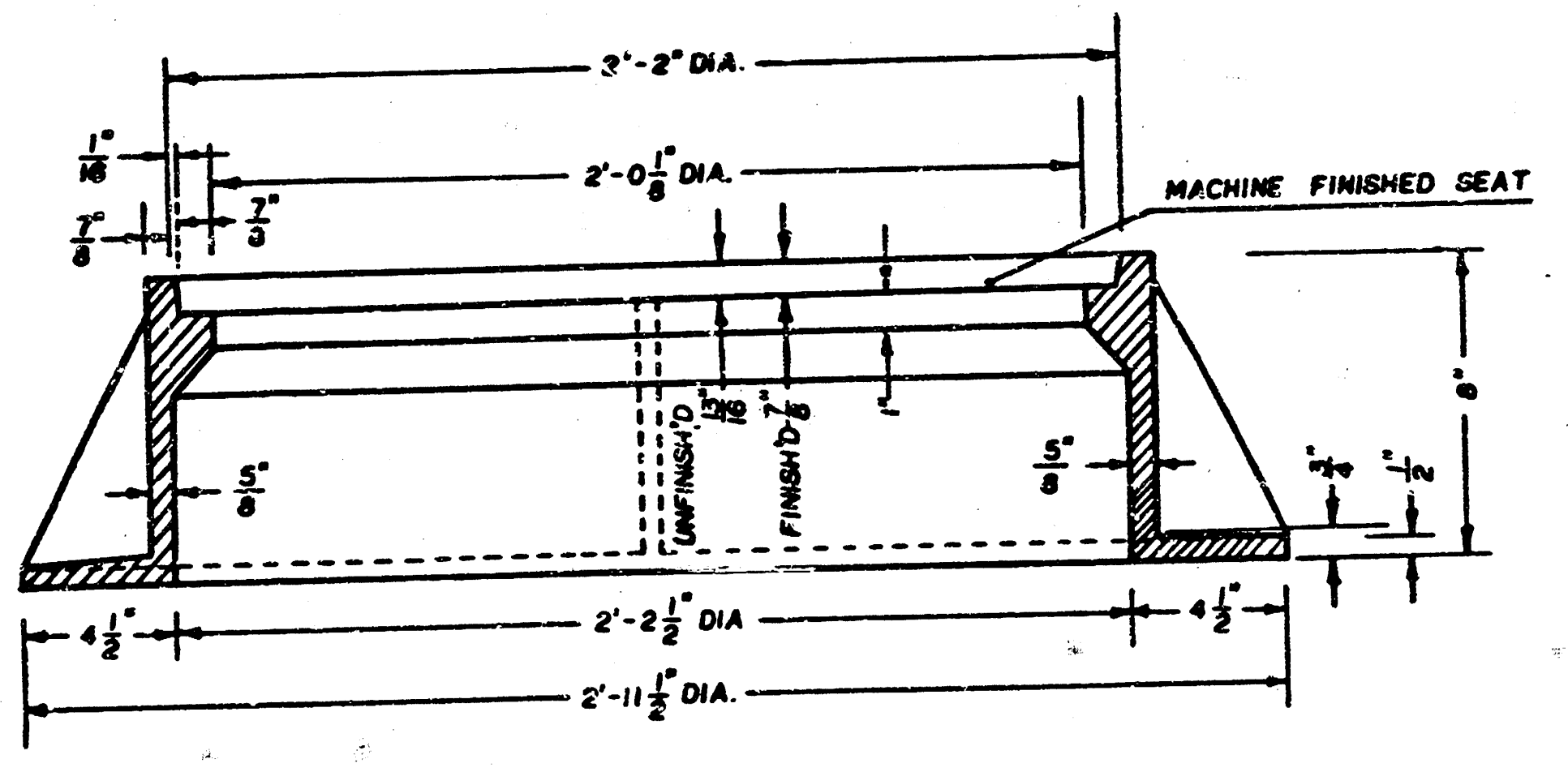
SECTION VIEW

MANHOLE FRAME

Weight: 240 Lbs.


1/2" GUSSETS
A
A
FOUNDRY
.982

TOP VIEW


3'-2" DIA.
2'-0 1/8" DIA.
1/16"
7/8"
7/8"
MACHINE FINISHED SEAT
UNFINISH'D 13/16"
FINISH'D 7/8"
1"
5/8"
5/8"
8"
3/4"
1/2"
4 1/2"
2'-2 1/2" DIA
4 1/2"
2'-11 1/2" DIA.

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 DE-
TAILED 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 CIRCUM-
FERENCE 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.

5/5

JNL DEC. 1981