

Lat. 7, Main 2, C.I.S.
SANITARY SEWER IMPROVEMENTS
to serve
AUBURN HILLS 11TH ADDITION

CITY OF WICHITA, KANSAS

Michael E. Lindebak, P.E. City Engineer

Project Number

468-83296

O.C.A. Number

743879

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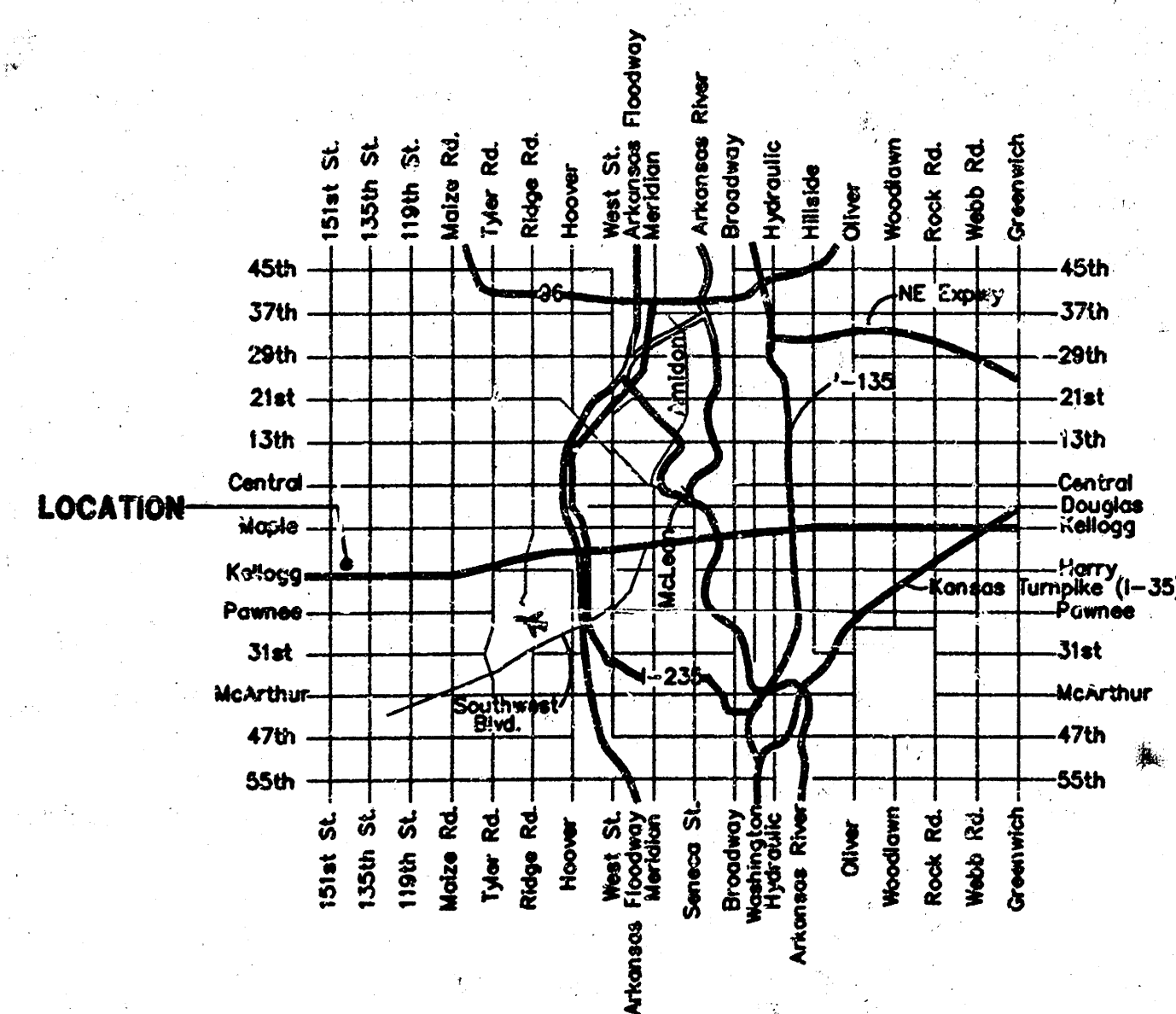
Benchmarks

R.R. Spike in H. Side of Power Pole
780' E. of C 151st. W. & 60' N.
of Section Line on Kellogg.
Elev. = 207.07 (City Datum)

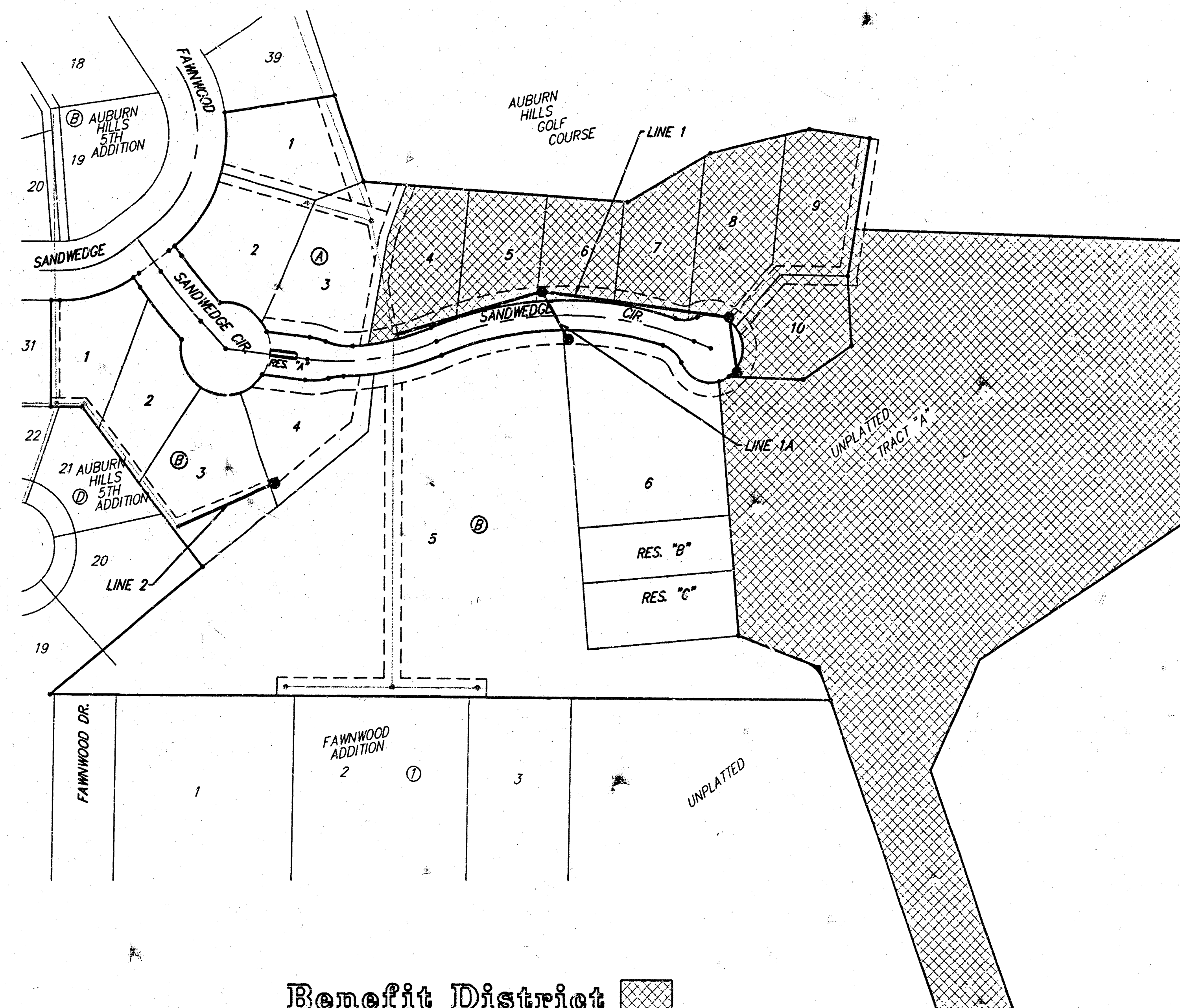
R.R. Spike in Power Pole 493' N. &
30' E. of Section Corner @ 151st. W.
& Kellogg, adjacent to S.S. Lift Station.
Elev. = 207.28 (City Datum)

Top of 1" Iron 12" Deep, W1/4 Cor.,
Sec. 26, Twp. 27-S, R-2-W.
Elev. = 209.13 (City Datum)

" " cut on Top of Curb Adjacent to
Common Lot Line of Lots 16 & 17,
Block B, Auburn Hills 5th Addition
Elev. = 202.65 (City Datum)



Vicinity Map



Benefit District

Scale: 1" = 150'

GENERAL NOTES:

- Contractor will be required to provide notice to utility companies a minimum of twenty-four (24) hours prior to any excavation, as follows:
Kansas One-Call 687-2470
The Contractor must notify the following in case of an emergency:
Cox Communications 262-0661
K.G.E. 383-8600
Kansas Gas Service 383-8600
Peoples Gas Company 1-800-303-0752
Southwestern Bell Telephone Company 1-800-344-7233
City of Wichita Water Dept. 268-4908
City of Wichita Traffic Engineering 269-4446
- 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.
- Trees and shrubs in public right-of-way which are in direct conflict with proposed new construction shall be removed by the Contractor with the Engineer's approval. Trees and shrubs which are not in direct conflict with proposed new construction shall be saved and protected from damage.
- The Contractor shall give all property owners and/or tenants of developed property abutting the construction of this project a minimum of ten (10) days advance notice prior to start of construction.
- 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 in accordance with state laws.



Booked
P-199
R.DL
11/19/01
per P/24

BAUGHMAN COMPANY P.A.
ENGINEERING, SURVEYING, & PLANNING
316-262-7221 • 315 ELLIS • WICHITA, KANSAS 67211

BENCHMARKS:
 R.R. Spike in N. Side of Power Pole
 780' E. of C 151st. W. & 60' N.
 of Section Line on Kellogg.
 Elev. = 202.07 (City Datum)

R.R. Spike in Power Pole 493' N. &
 30' E. of Section Corner @ 151st. W.
 & Kellogg, adjacent to S.S. Lift Station.
 Elev. = 207.28 (City Datum)

Top of 1" Iron 12" Deep, W/4 Cor.,
 Sec. 26, Twp. 21-S, R-2-W.
 Elev. = 209.13 (City Datum)

"□" cut on Top of Curb Adjacent to
 Common Lot Line of Lots 16 & 17,
 Block B, Auburn Hills 5th Addition.
 Elev. = 202.65 (City Datum)

Sta. 0+00, Begin Line 1
 Core into Existing Manhole.
 Extend 8" Line NE. Adjust Rim
 Elevation up 3.78' from 199.92
 to 203.70. Reshape Invert as
 Necessary to Maintain
 Positive Flow. Cost of Coring
 & Reshaping to be Included in
 Bid Item, Standard MH.

Sta. 1+75.1, Line 1 =
 Sta. 0+00, Begin Line 1A
 Construct Standard
 Manhole.
 Top Elev. = 202.10

Sta. 3+93.0, Line 1
 Construct Special Shallow
 Manhole (Type A)
 2-4" Stubs (N&NE)
 Top Elev. = 198.90

Install 53.0 L.F. Concrete
 Encasement from Sta.
 3+96.5 to Sta. 4+48.5
 per City Specs.

Install 37.7 L.F. Flowable
 Fill from Sta. 0+10.7 to
 Sta. 0+48.4 per City
 Specs.

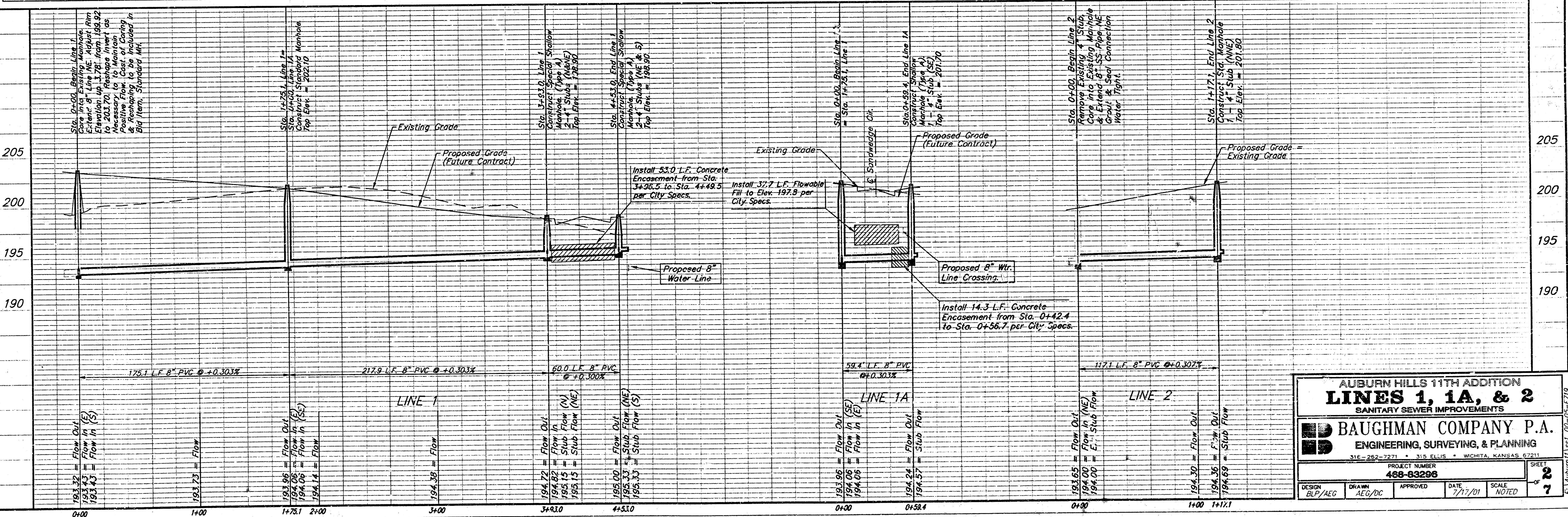
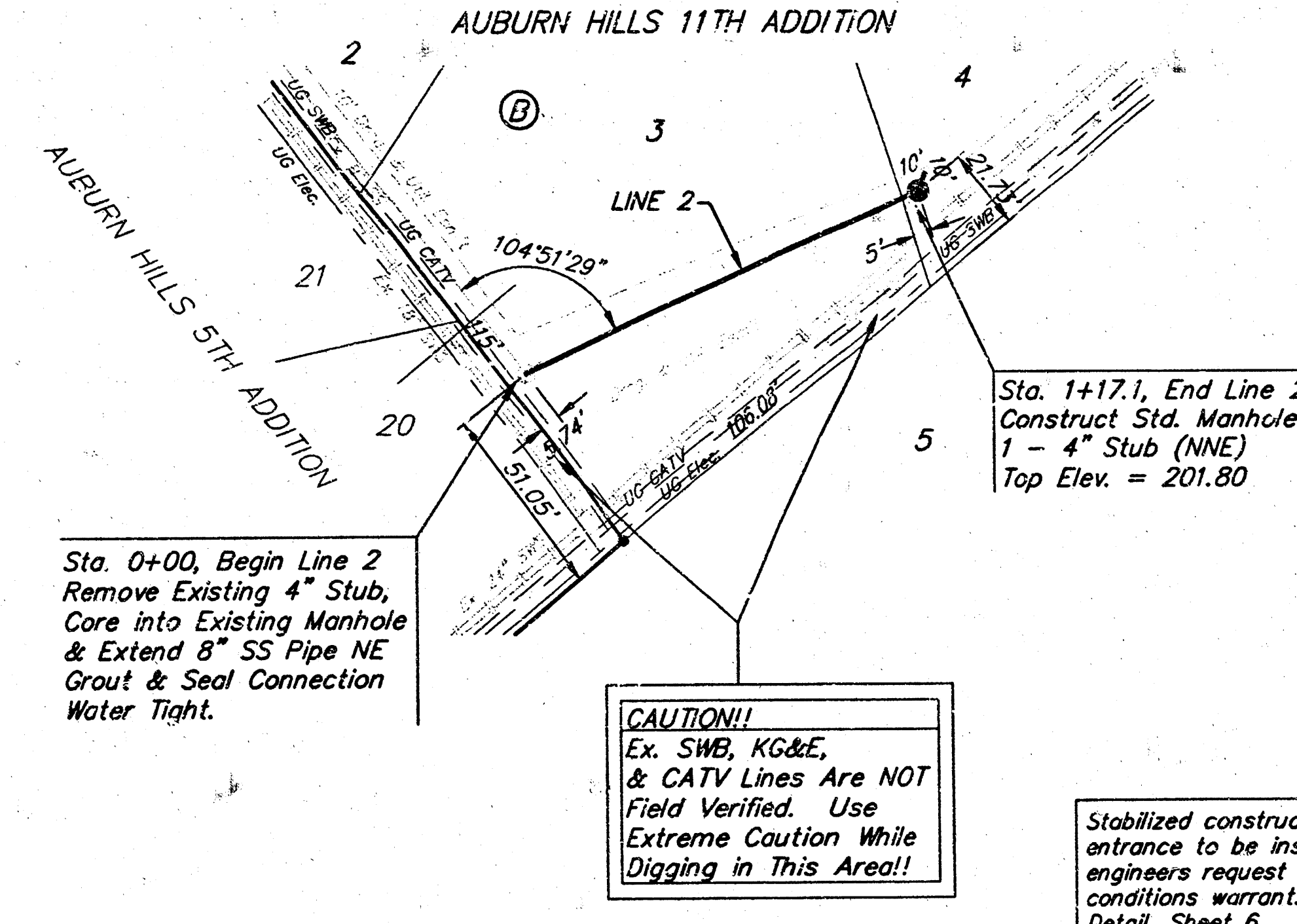
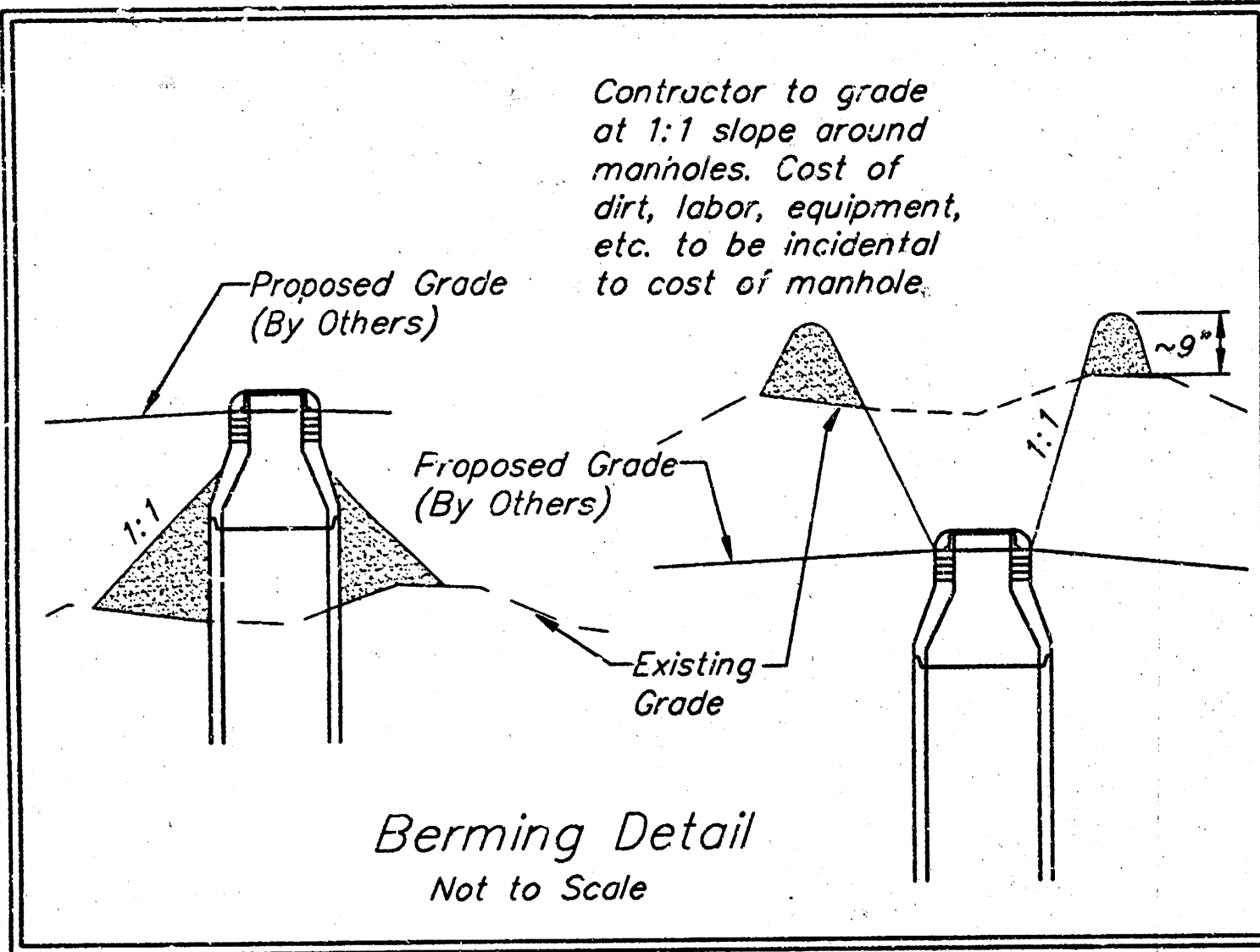
Install 14.3 L.F. Concrete
 Encasement from Sta.
 0+42.4 to Sta. 0+56.7
 per City Specs.

Proposed 8" Wtr.
 Line Crossing.

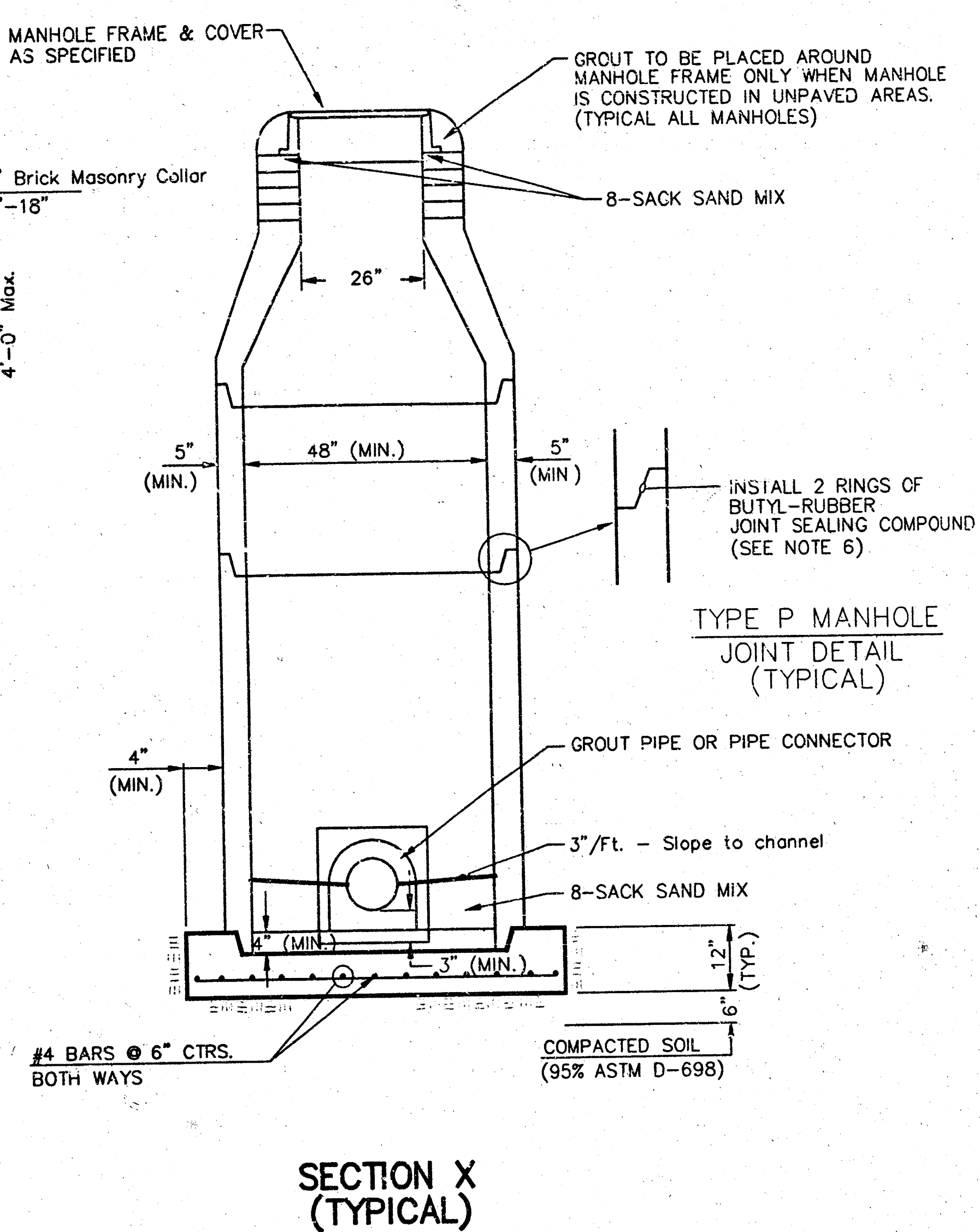
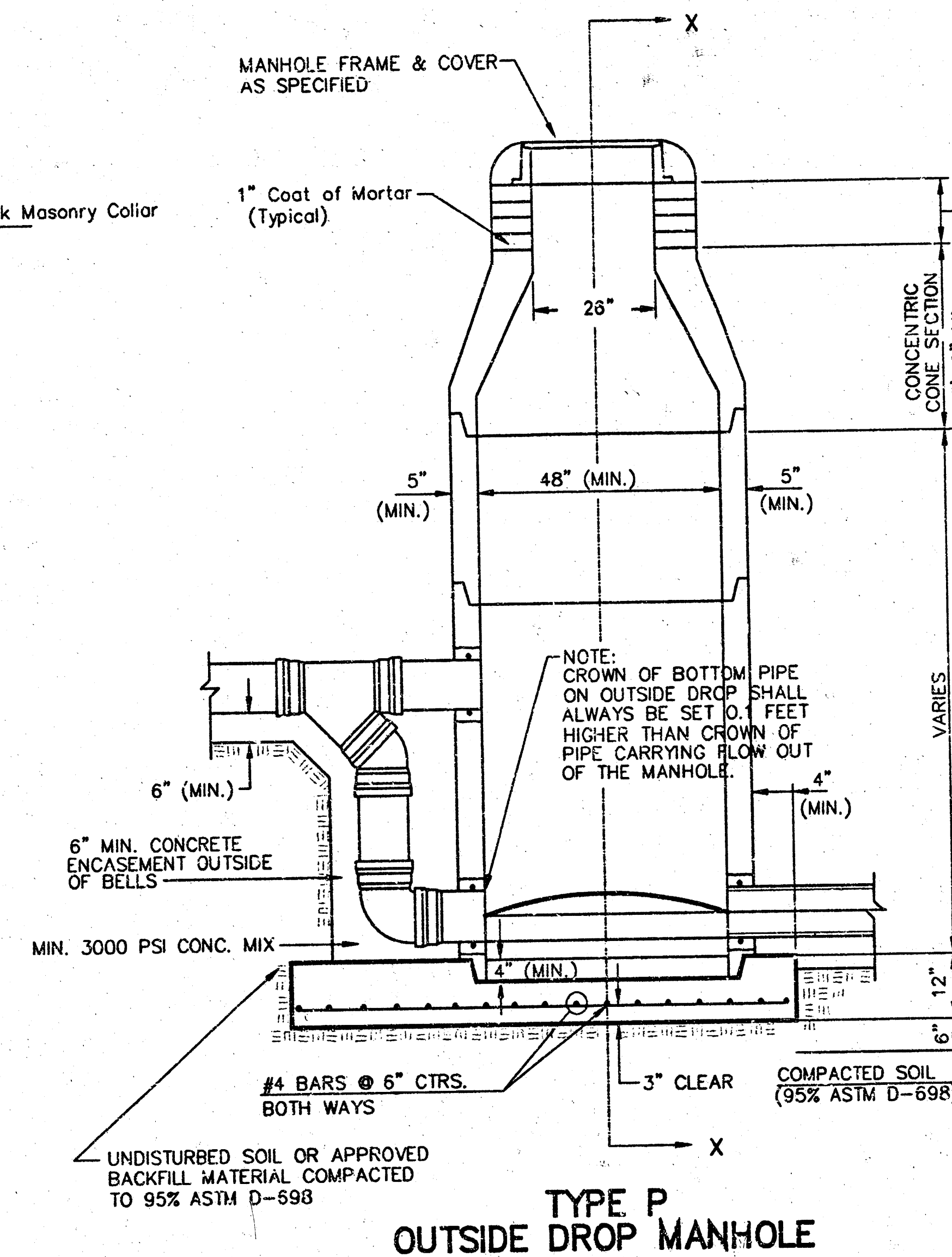
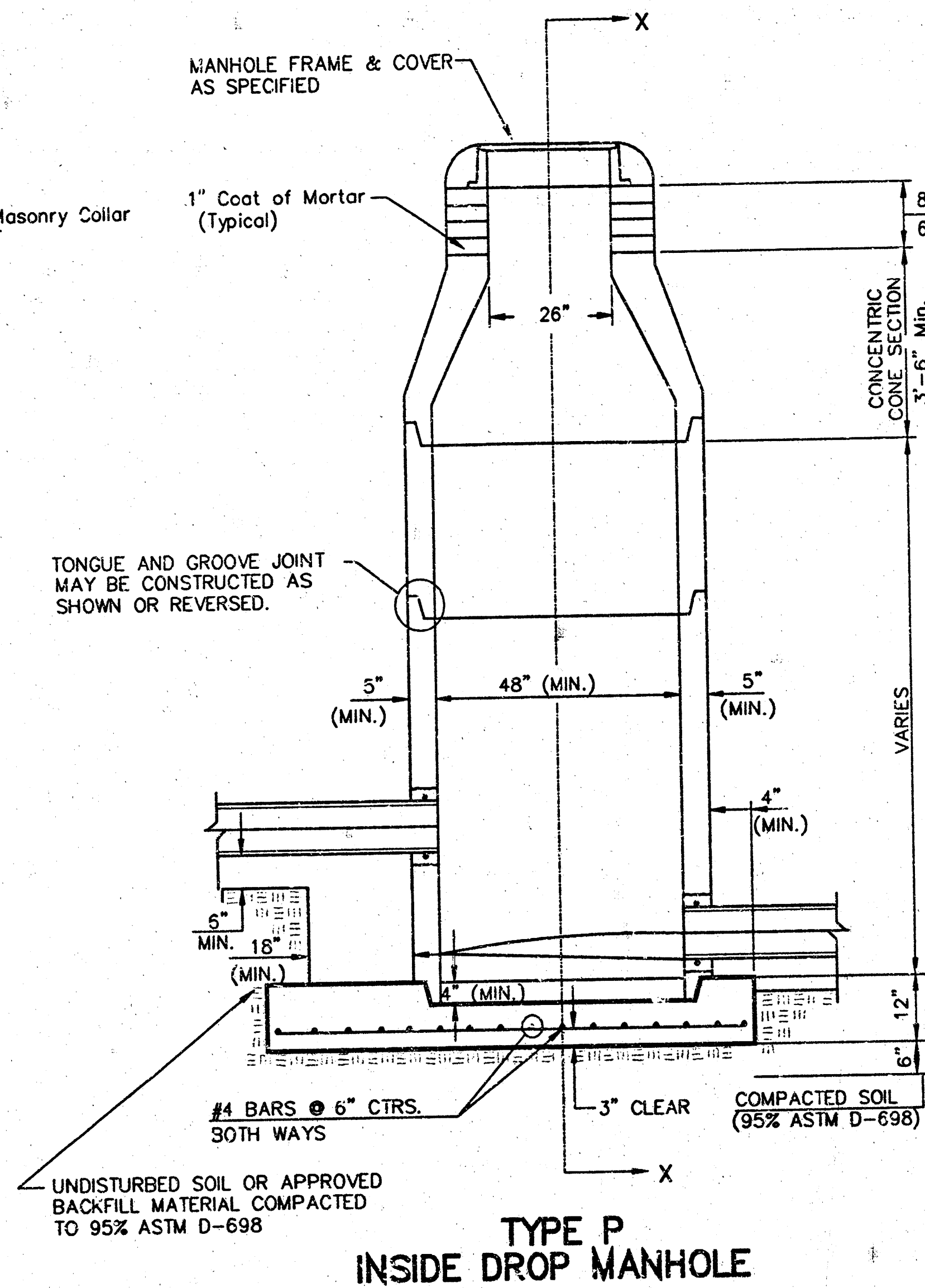
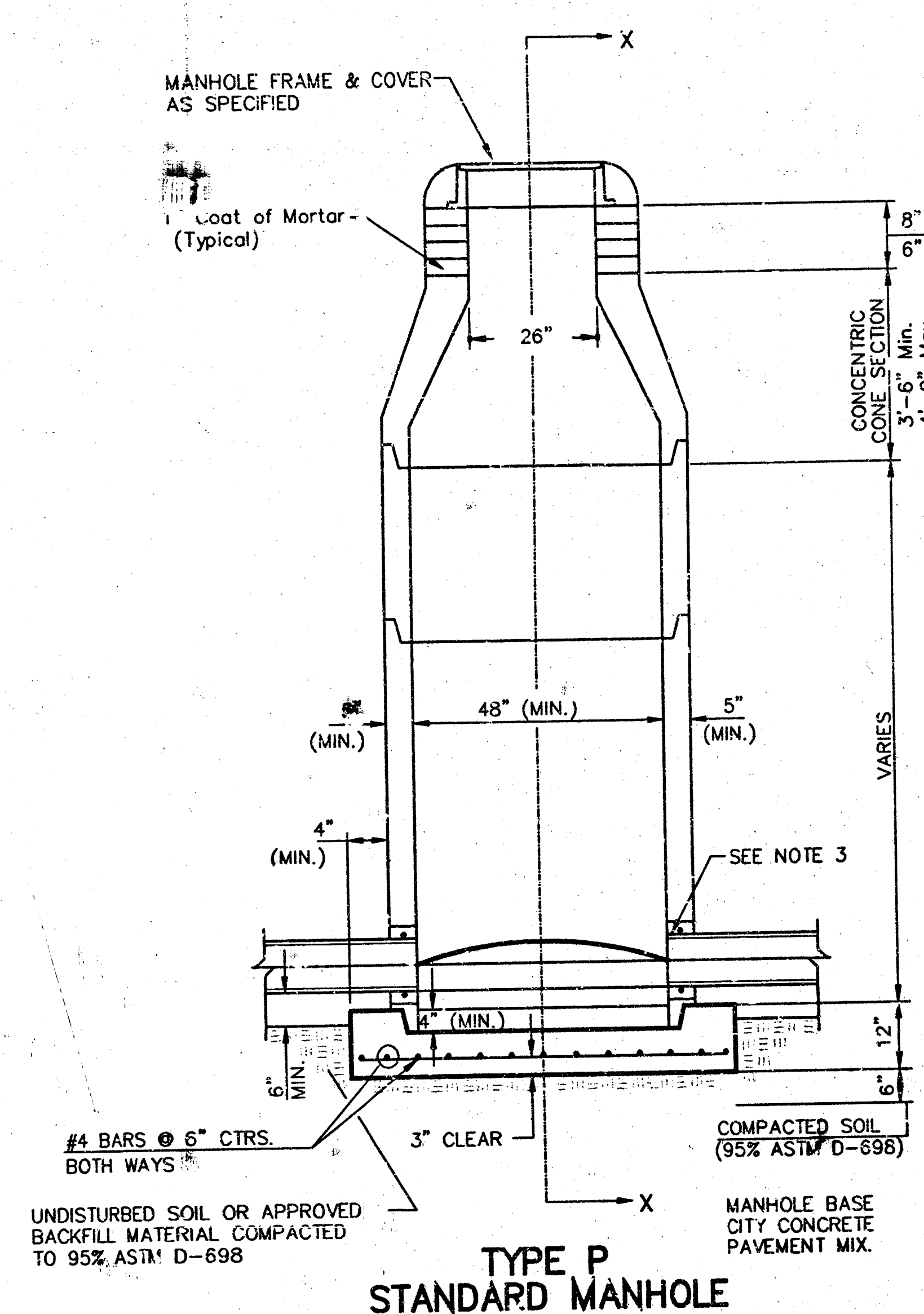
Sta. 0+59.4, End Line 1A
 Construct Shallow
 Manhole (Type A)
 1-4" Stub (SE)
 Top Elev. = 201.70

Sta. 4+53.0, End Line 1
 Construct Special Shallow
 Manhole (Type A)
 2-4" Stubs (NE & S)
 Top Elev. = 198.90

Scale:
 1" = 40' Horizontal
 1" = 5' Vertical
 • = Iron



SEWER APPURTENANCES DETAILS

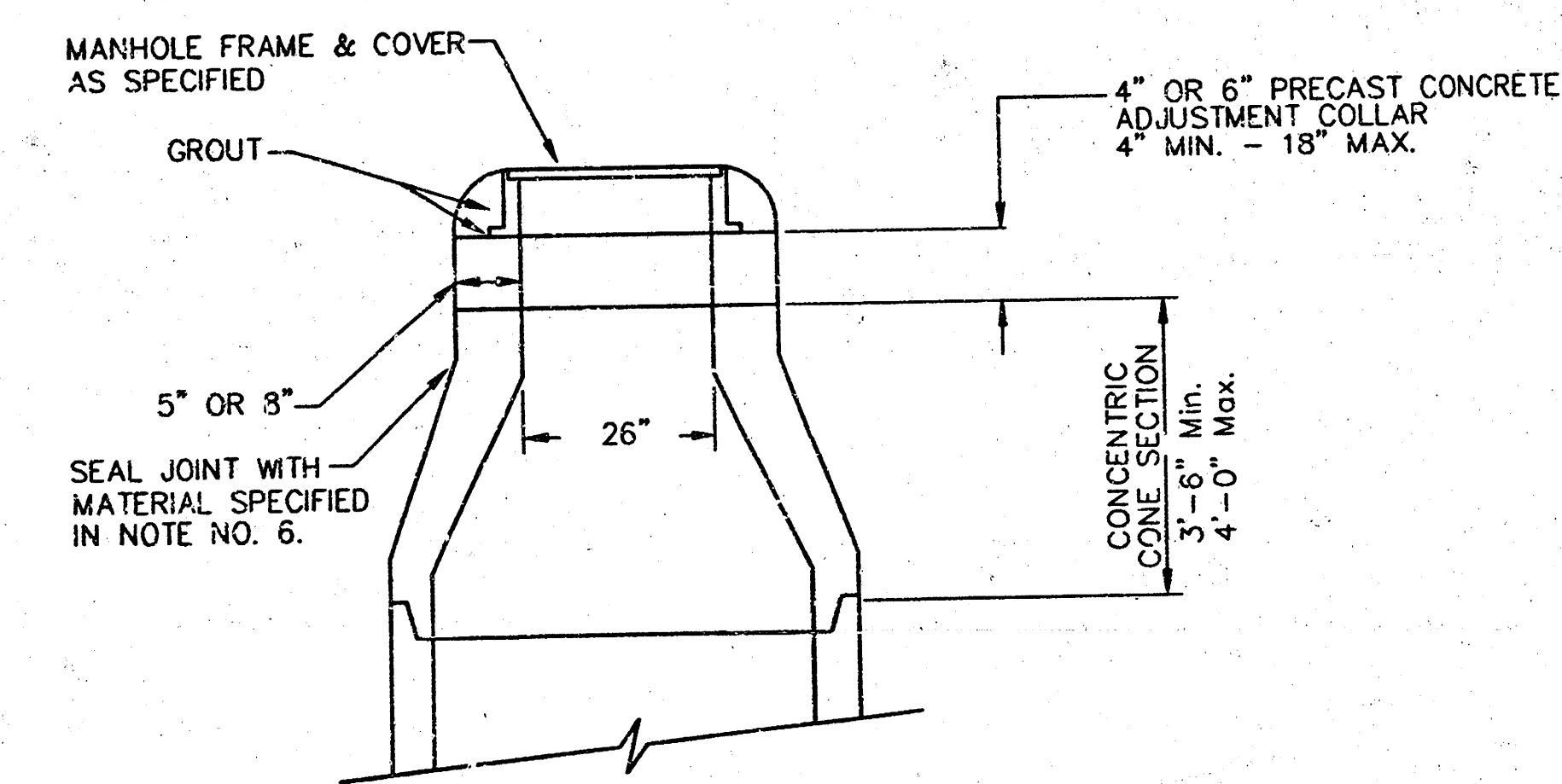


GENERAL NOTES

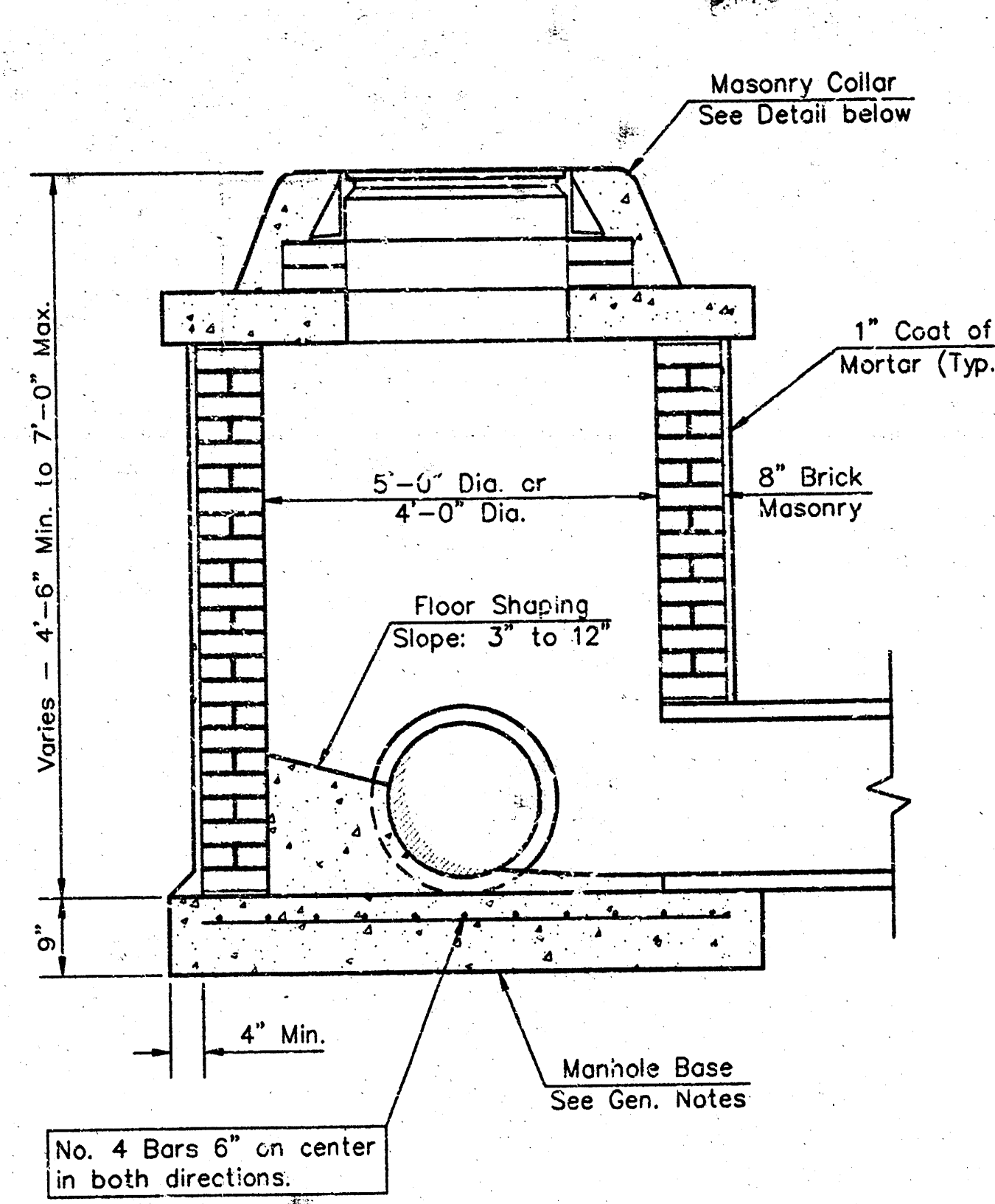
- ALL PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO THE LATEST REVISIONS OF A.S.T.M. C478 AS MODIFIED BY THE SPECIFICATIONS.
- NON-SHRINK GROUT SHALL BE NON-METALLIC TYPE.
- APPROVED FLEXIBLE WATERSTOP GASKETS SHALL BE INSTALLED TO JOIN THE SEWER TO THE MANHOLE WALL WHEN A.B.S. COMPOSITE PIPE OR 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.
- ALL INSIDE SURFACES OF THE CONCRETE MANHOLE WHICH WOULD BE EXPOSED TO SEWER GAS SHALL BE COATED WITH 2 COATS TNEC SERIES 66 HI-BUILD EPOXYLINE, DRY THICKNESS OF 8 MILS (MIN.)
- EXTERIOR MANHOLE WALLS SHALL BE COATED WITH 1 COAT MOBILARMA 633 BITUMINOUS COATING.
- JOINT SEALING COMPOUND SHALL BE KENT SEAL NO. 2 OR APPROVED EQUAL.
- PRECAST MANHOLES SHALL BE SET AT LEAST 4 INCHES INTO THE MANHOLE BASE.
- 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.
- LIFTING HOLES SHALL BE FILLED WITH NON-SHRINK GROUT AND THE INTERIOR SURFACE COATED AS SPECIFIED.
- 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.

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

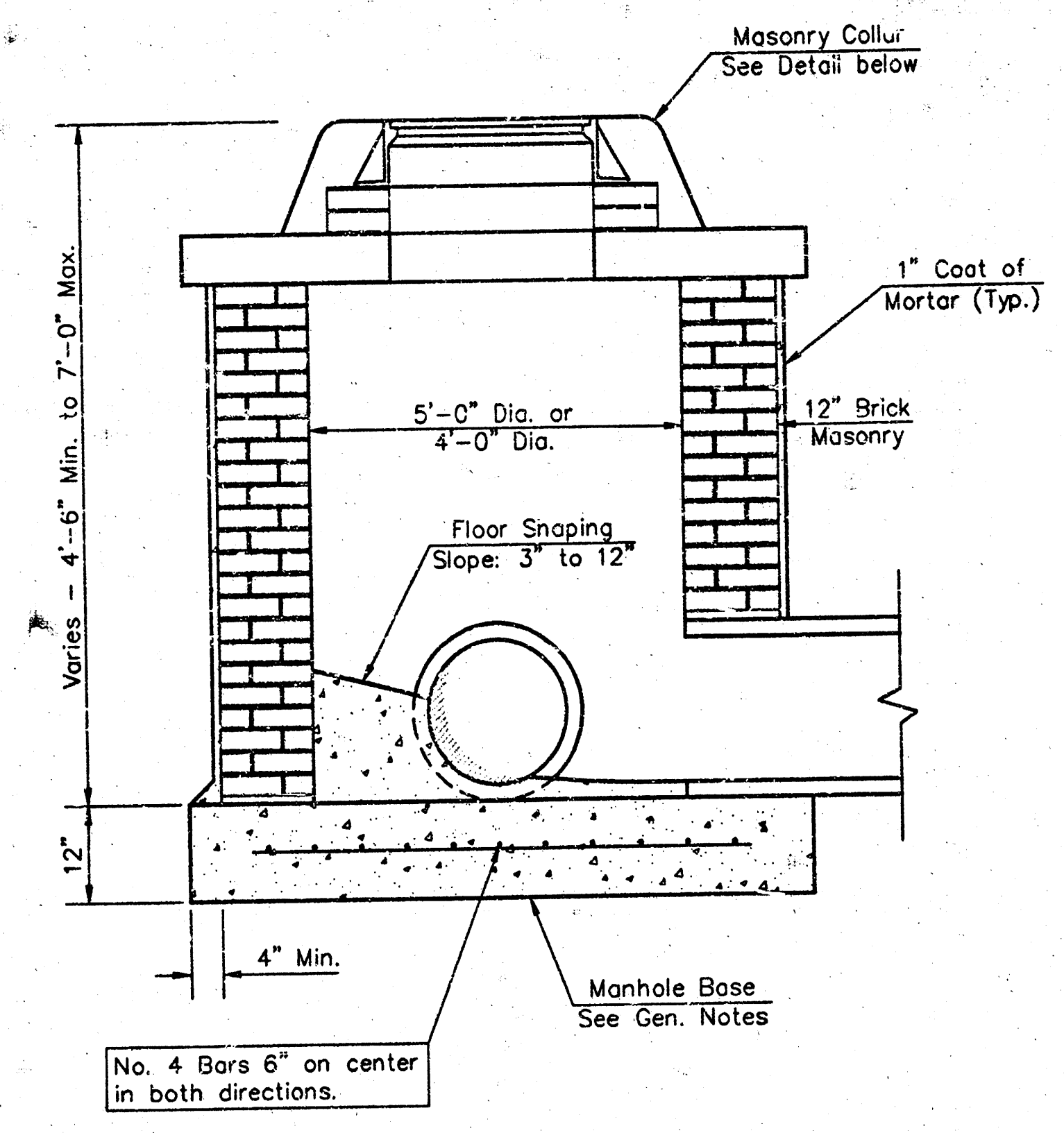
- MANHOLE COVER CASTINGS AND MANHOLE FRAME CASTINGS SHALL CONFORM TO THE REQUIREMENTS AS INDICATED IN THE STANDARD SPECIFICATIONS AND AS SHOWN IN THE STANDARD DETAIL DRAWING.
- THE VERTICAL DROP IN INSIDE DROP MANHOLES SHALL NOT EXCEED 2' FOR INFLOWING PIPES SIZED 12" OR SMALLER AND 2' FOR INFLOWING PIPES LARGER THAN 12". THE CROWNS OF INFLOWING PIPES SHALL NEVER BE SET LOWER THAN THE CROWN OF THE OUTFLOWING PIPE.
- STANDARD MANHOLES 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.
- 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. THE USE OF PRE-CAST CONCRETE SPACERS FOR MANHOLE TOP ADJUSTMENT IS ALSO ALLOWED.



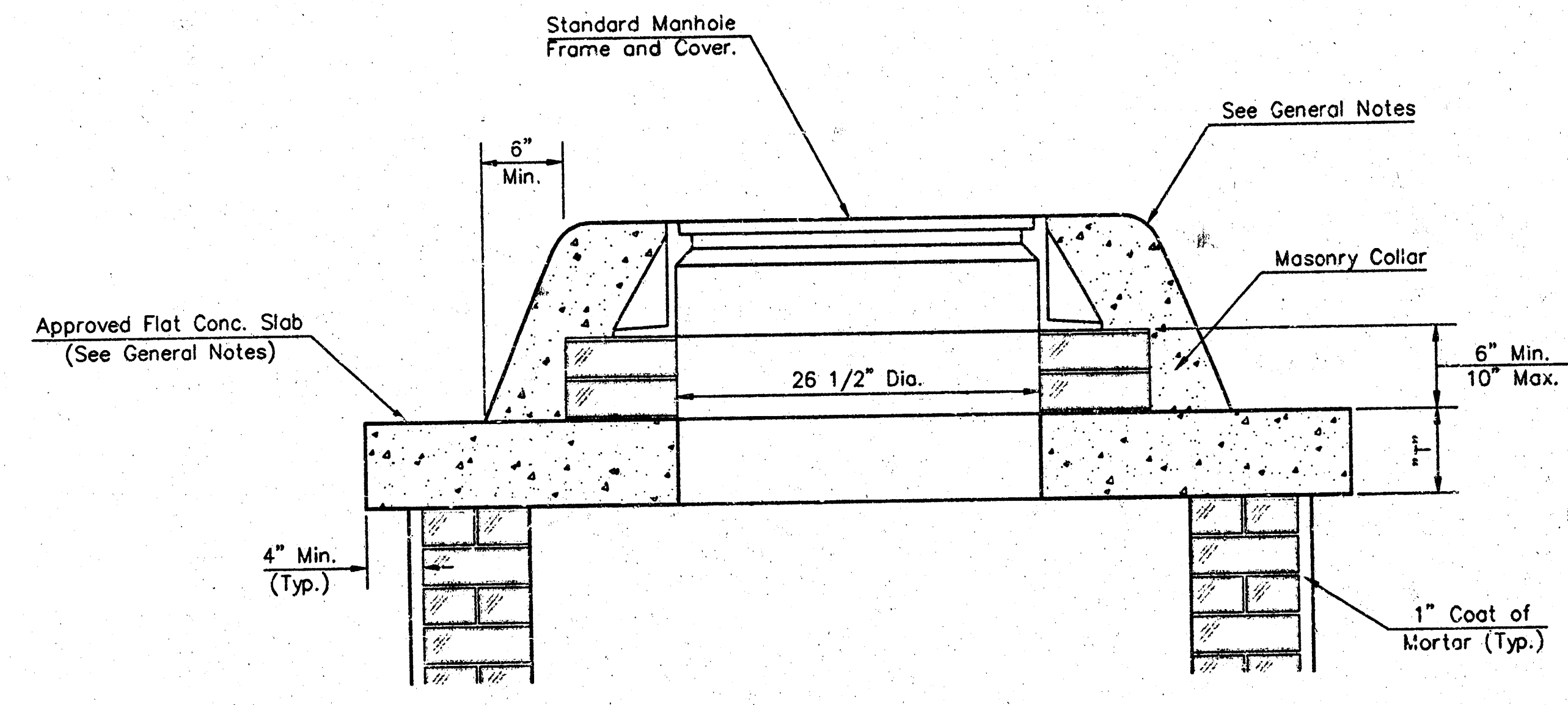
CITY OF WICHITA			
STD. MANHOLE DETAILS			
SEWER APPURTENANCES			
BAUGHMAN COMPANY P.A.			
ENGINEERING, SURVEYING, & PLANNING			
316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67201			
PROJECT NUMBER		SHEET	
488-83286		3	
DESIGN	DRAWN	APPROVED	DATE
STAFF	STAFF	STAFF	7-17-01
SCALE		NONE	



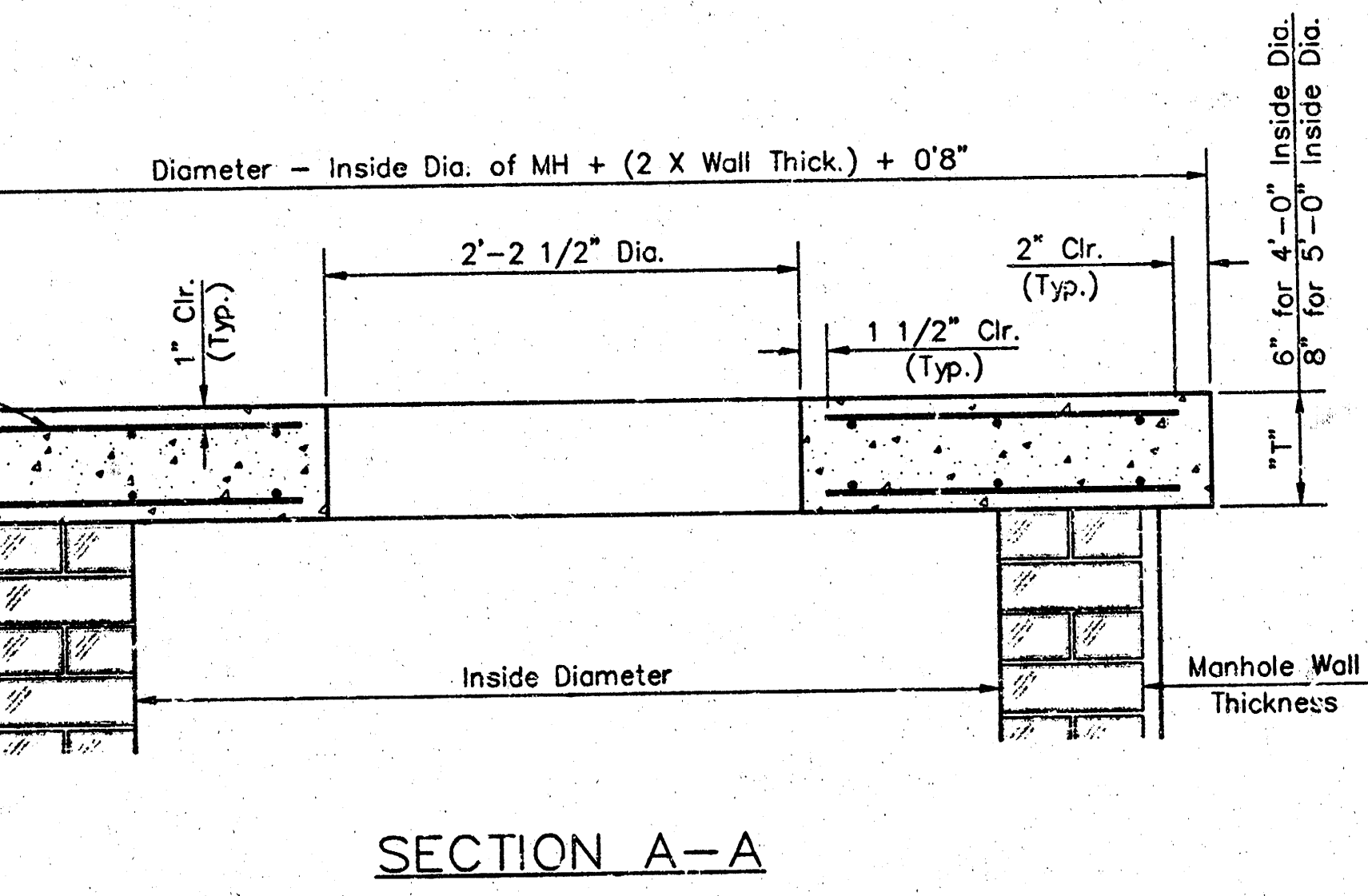
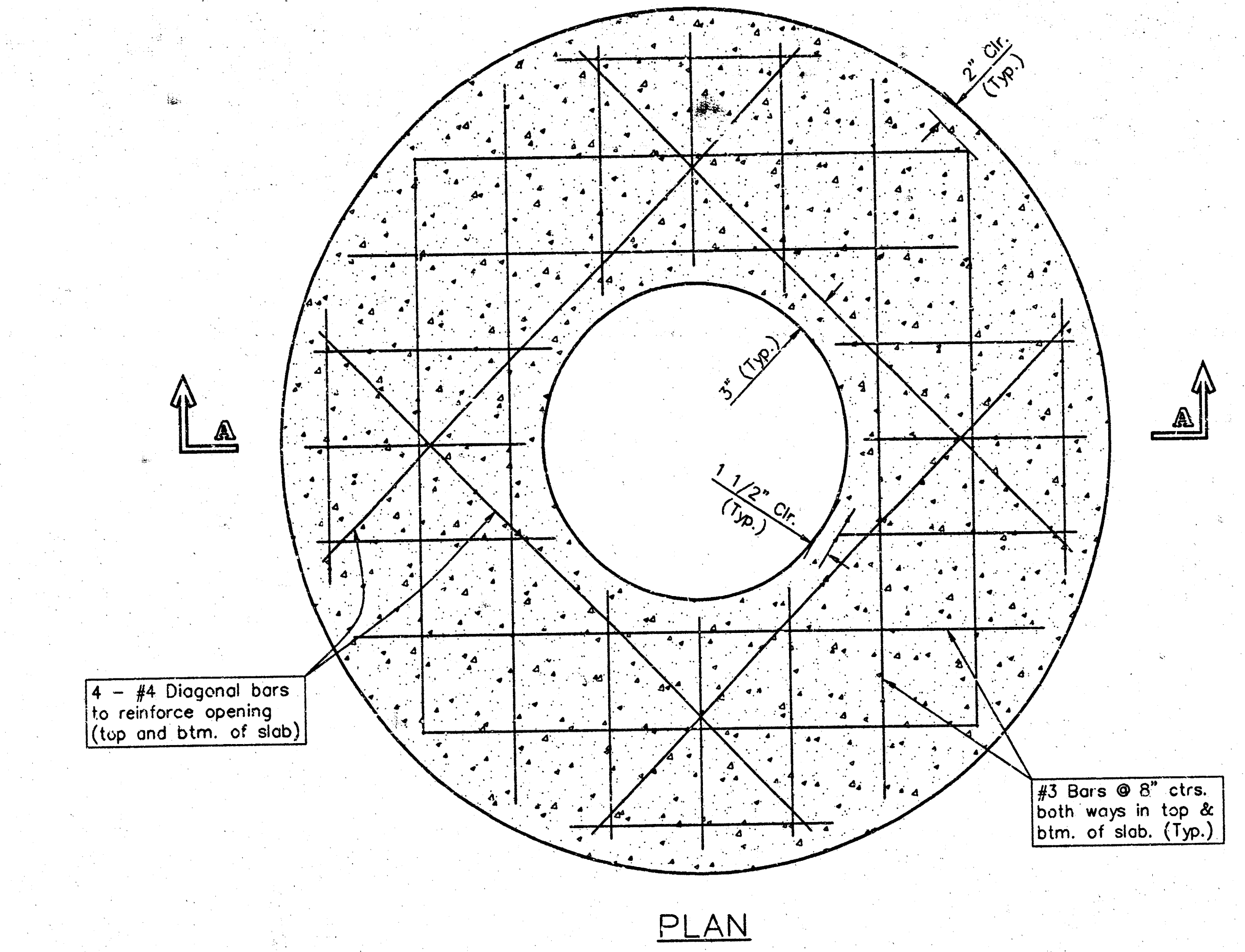
SHALLOW TYPE "A" MANHOLE



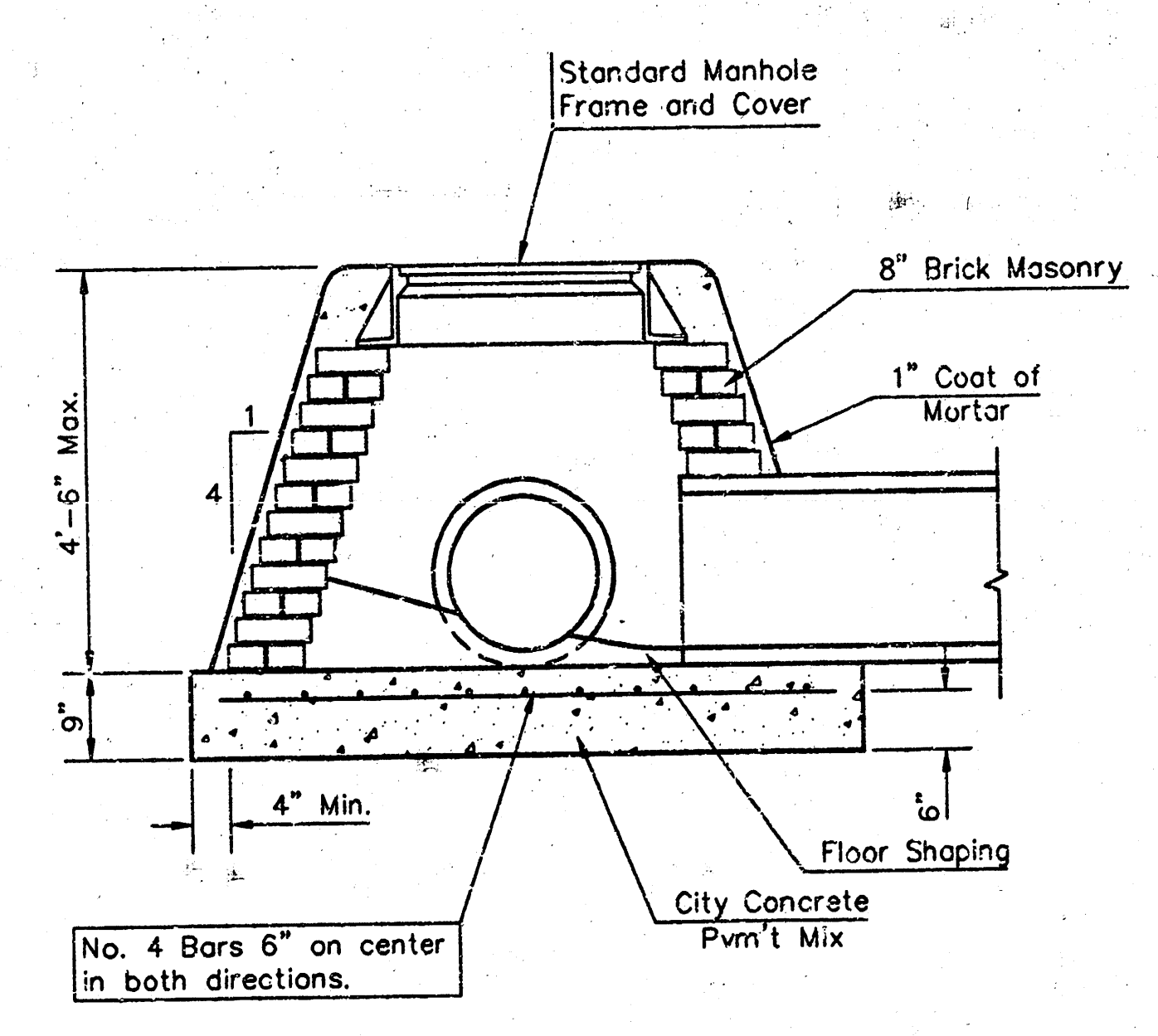
SHALLOW TYPE "B" MANHOLE



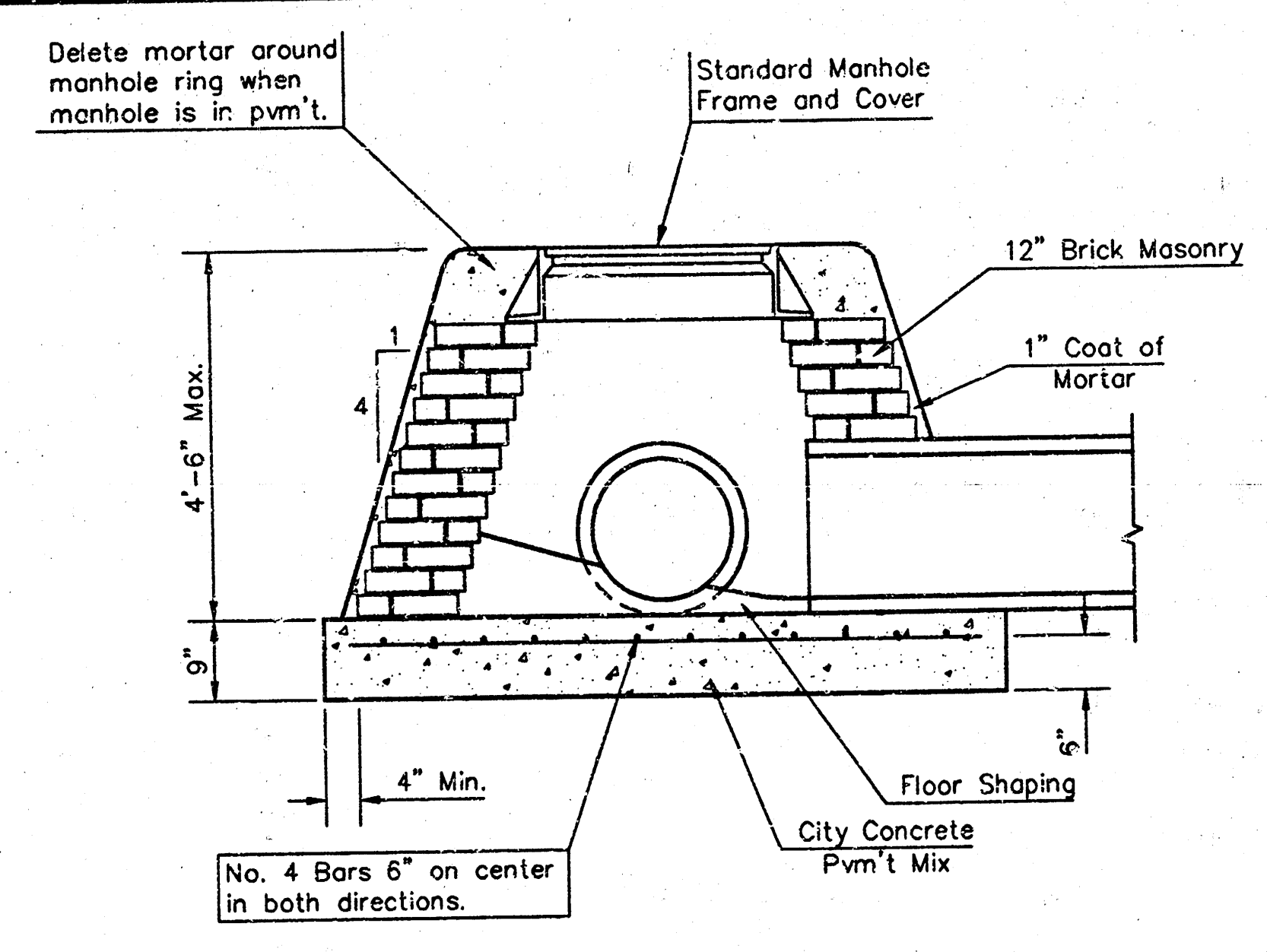
MASONRY COLLAR DETAIL



FLAT CONCRETE SLAB DETAILS



SPECIAL SHALLOW TYPE "A" MANHOLE



SPECIAL SHALLOW TYPE "B" 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 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.
- 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.
- 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.
- 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.
- 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.
- The crowns of inflowing pipes shall never be set lower than the crown of the outflowing pipe.
- 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.
- All brick used in manhole construction shall meet Grade SW of ASTM C652 or C62-87.

CITY OF WICHITA, KANSAS
Std. Manhole Detail
 TYPE "A" AND TYPE "B"

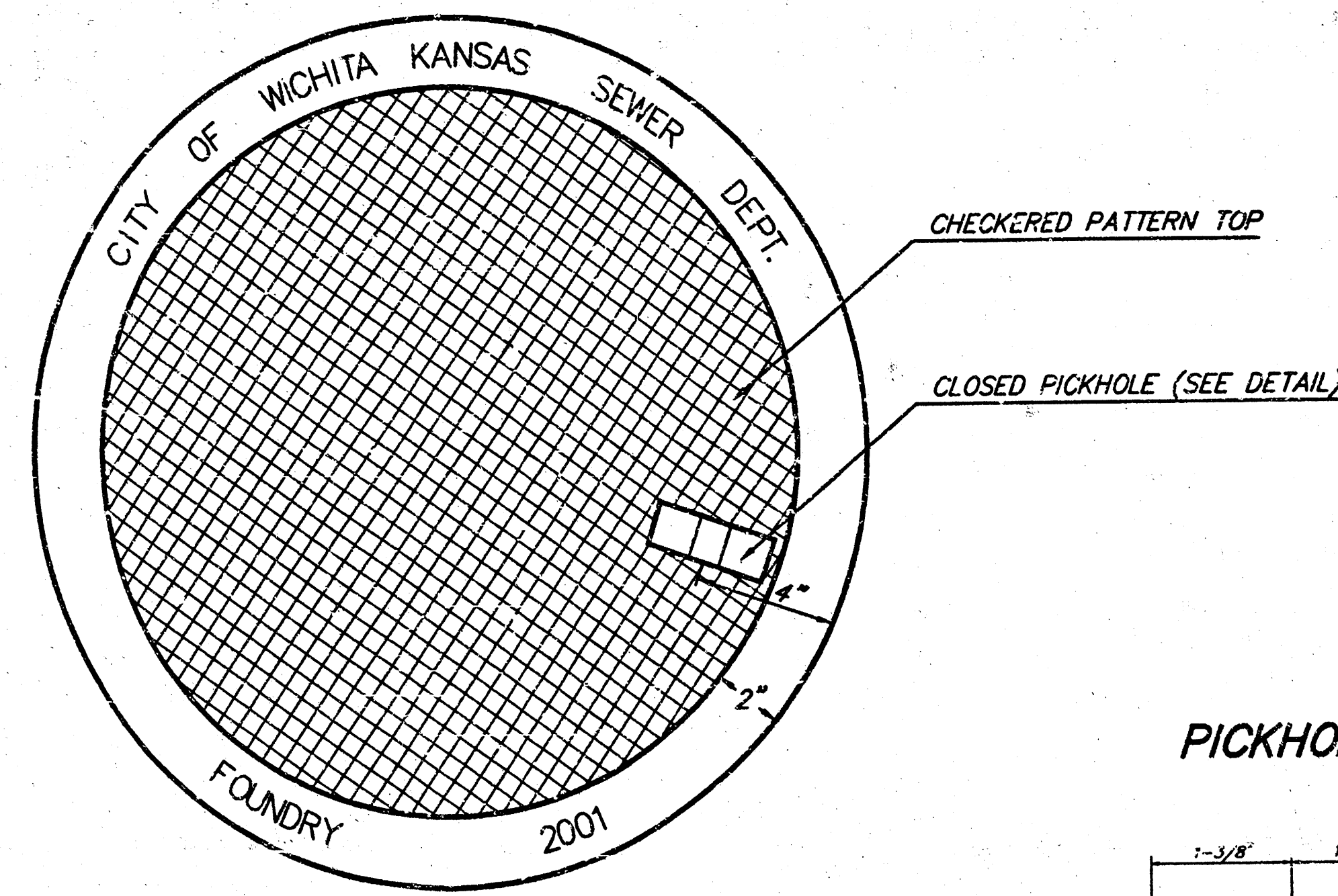
BAUGHMAN COMPANY P.A.
 ENGINEERING, SURVEYING, & PLANNING

316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

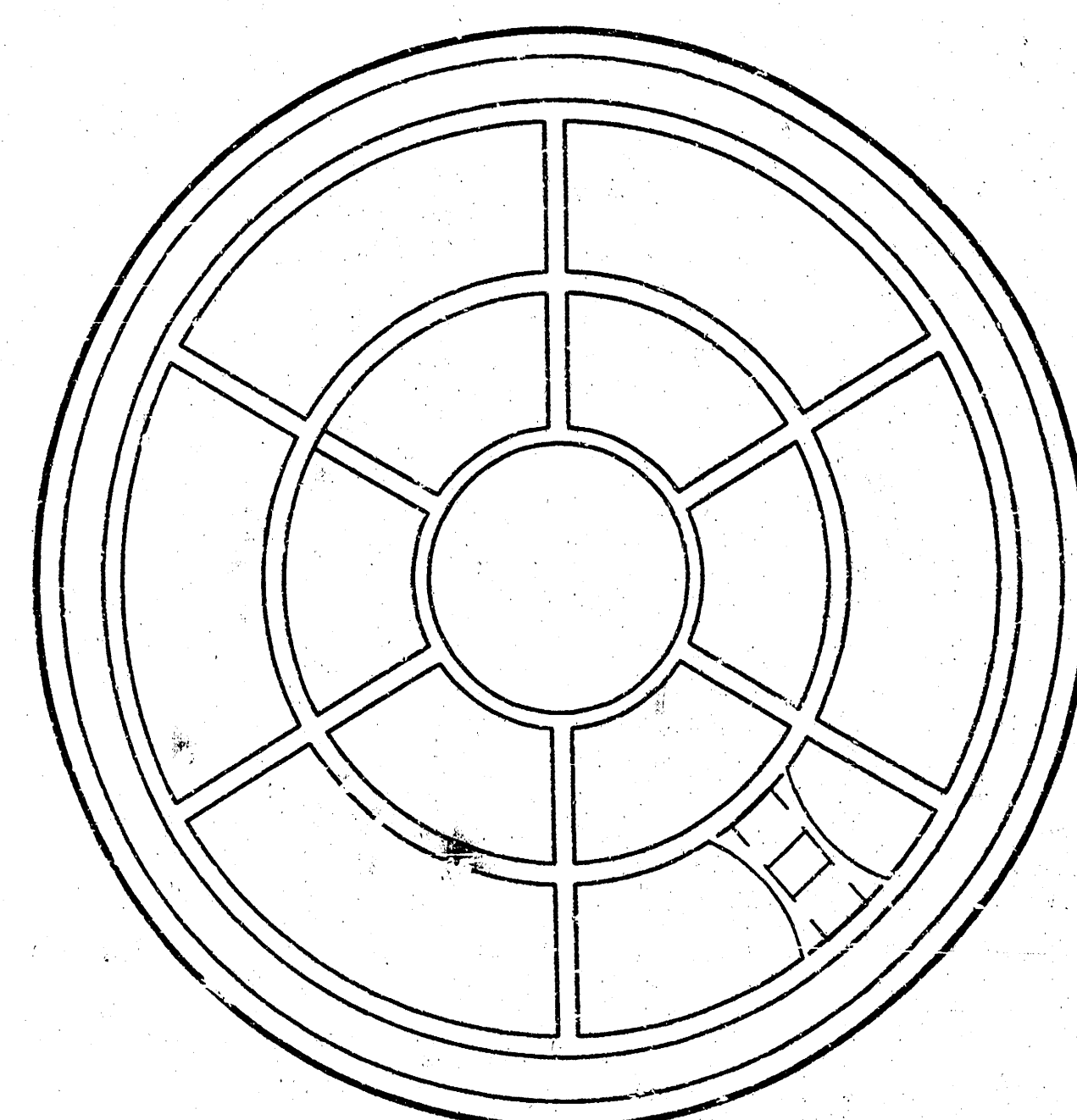
PROJECT NUMBER
488-53296

DESIGN C.O.# DRAWN Staff APPROVED DATE 7-17-01 SCALE NONE SHEET 4 OF 7

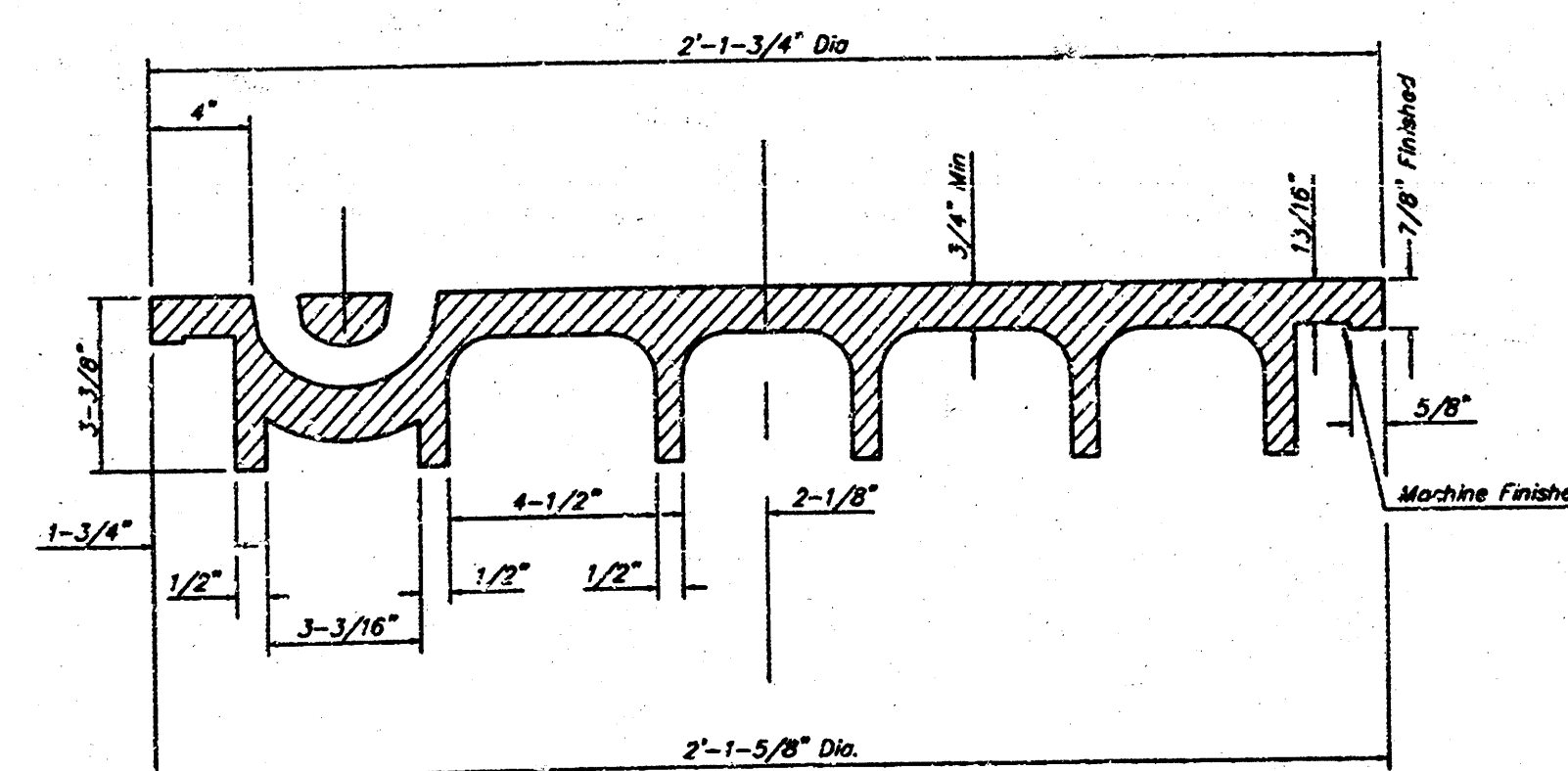
MANHOLE COVER
Weight = 180 Lbs.



TOP VIEW

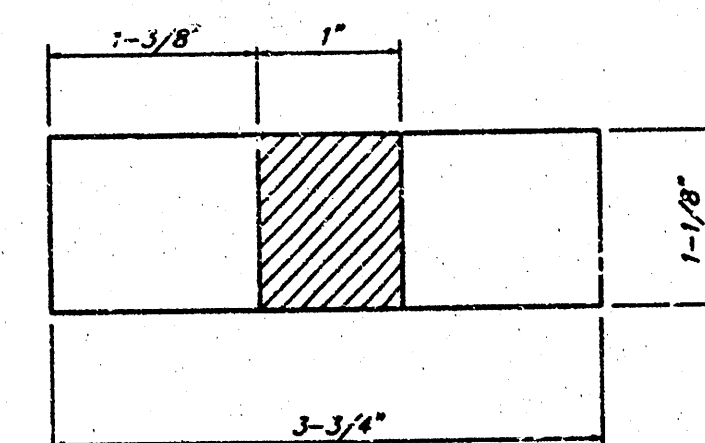


BOTTOM VIEW

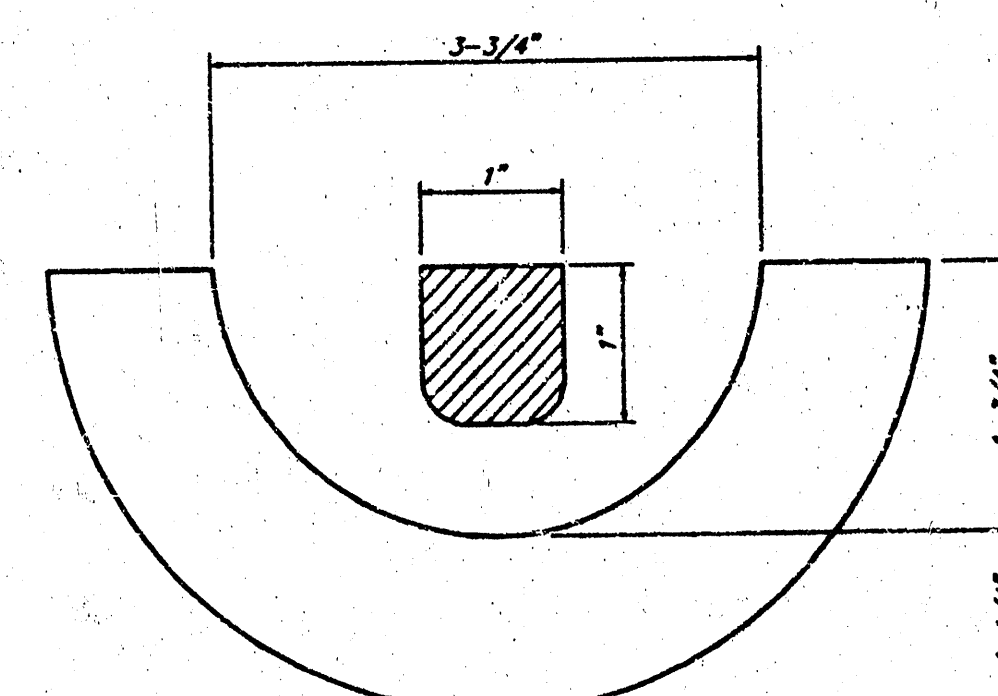


SECTION VIEW

PICKHOLE DETAIL



TOP VIEW

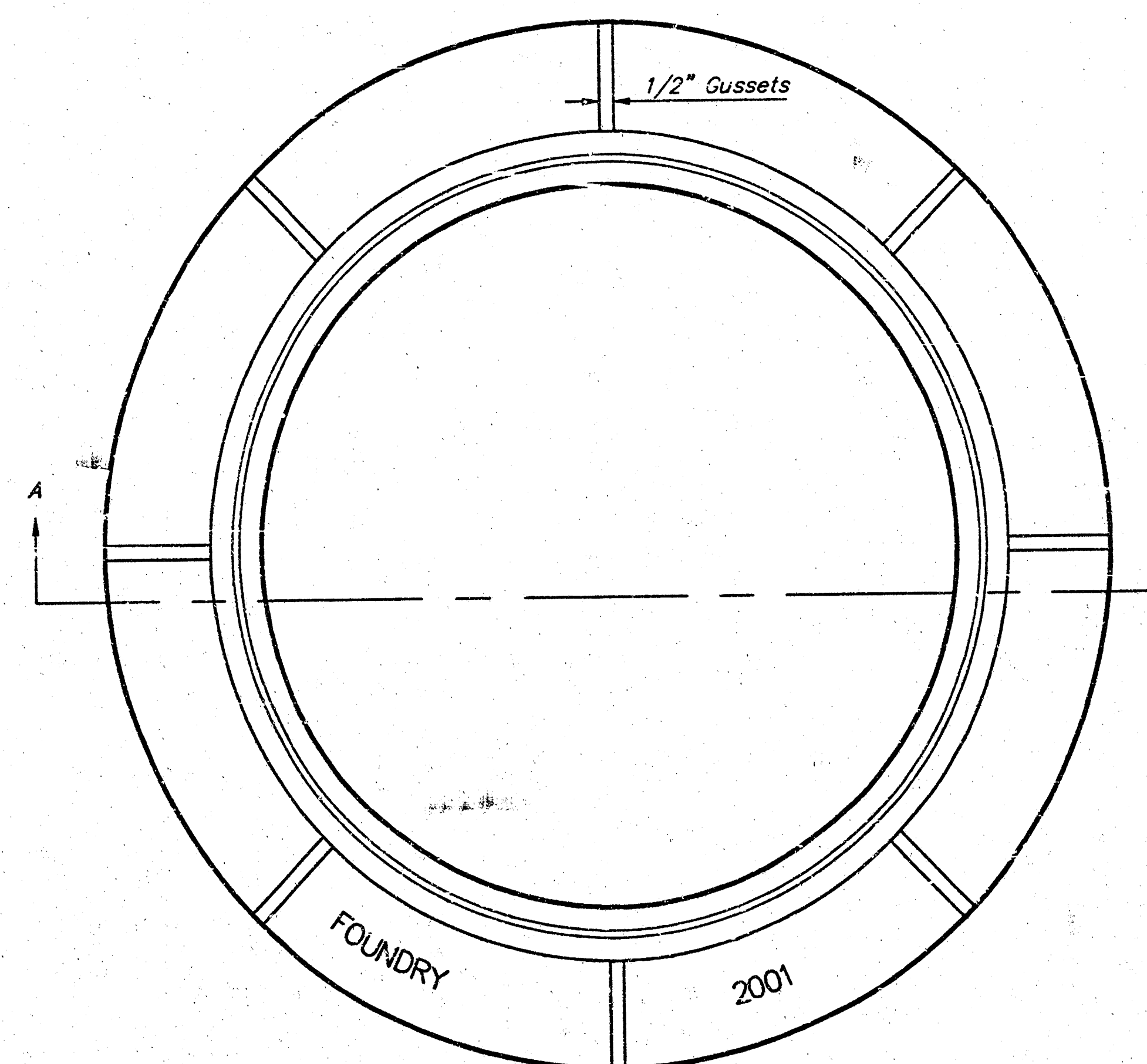


SECTION VIEW

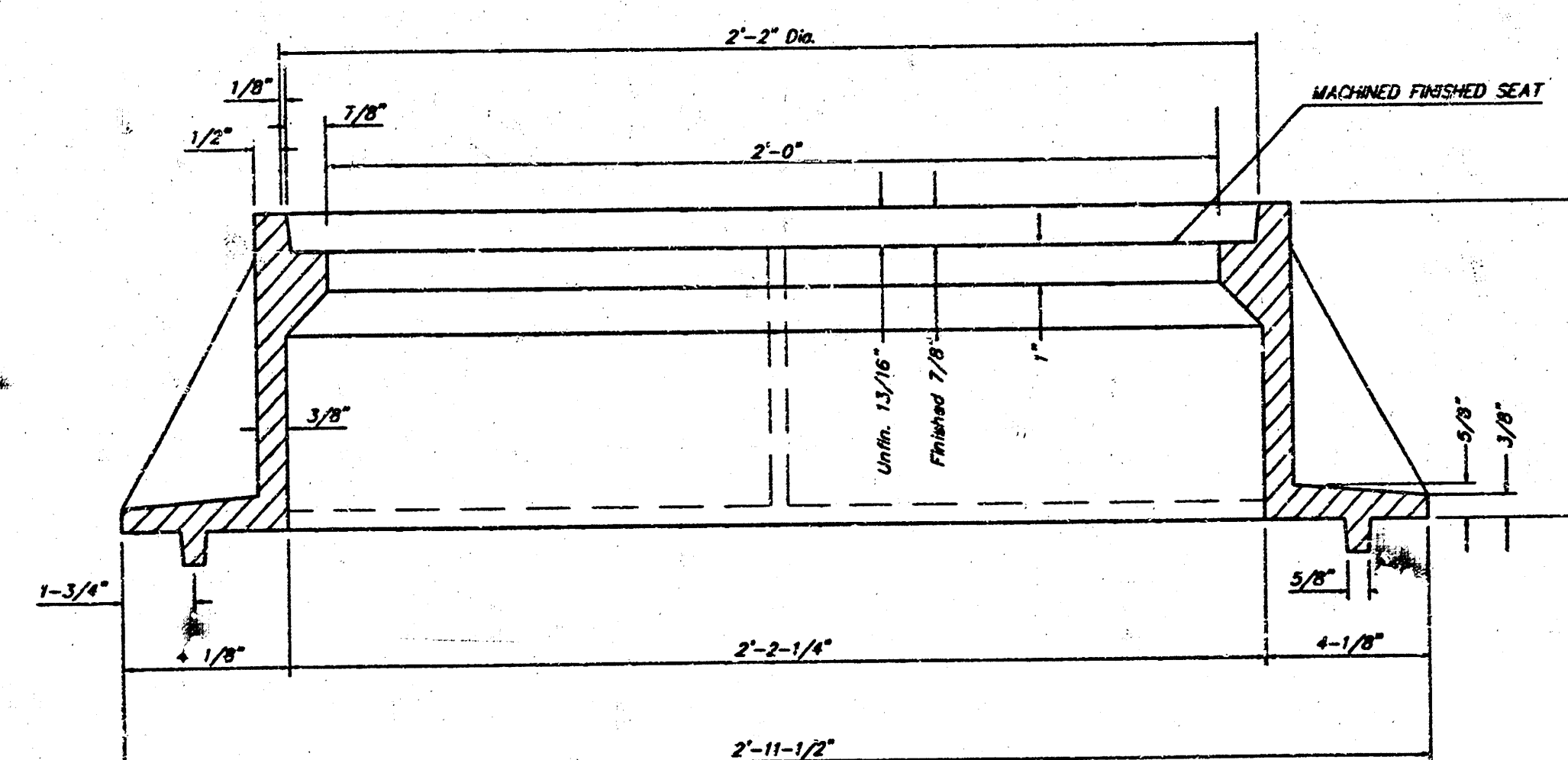
MANHOLE FRAME AND COVER DETAIL

ADOPTED AS STANDARD DESIGN BY
CITY OF WICHITA, KANSAS

MANHOLE FRAME
Weight = 145 Lbs.



TOP VIEW



SECTION A-A

GENERAL NOTES

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.

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

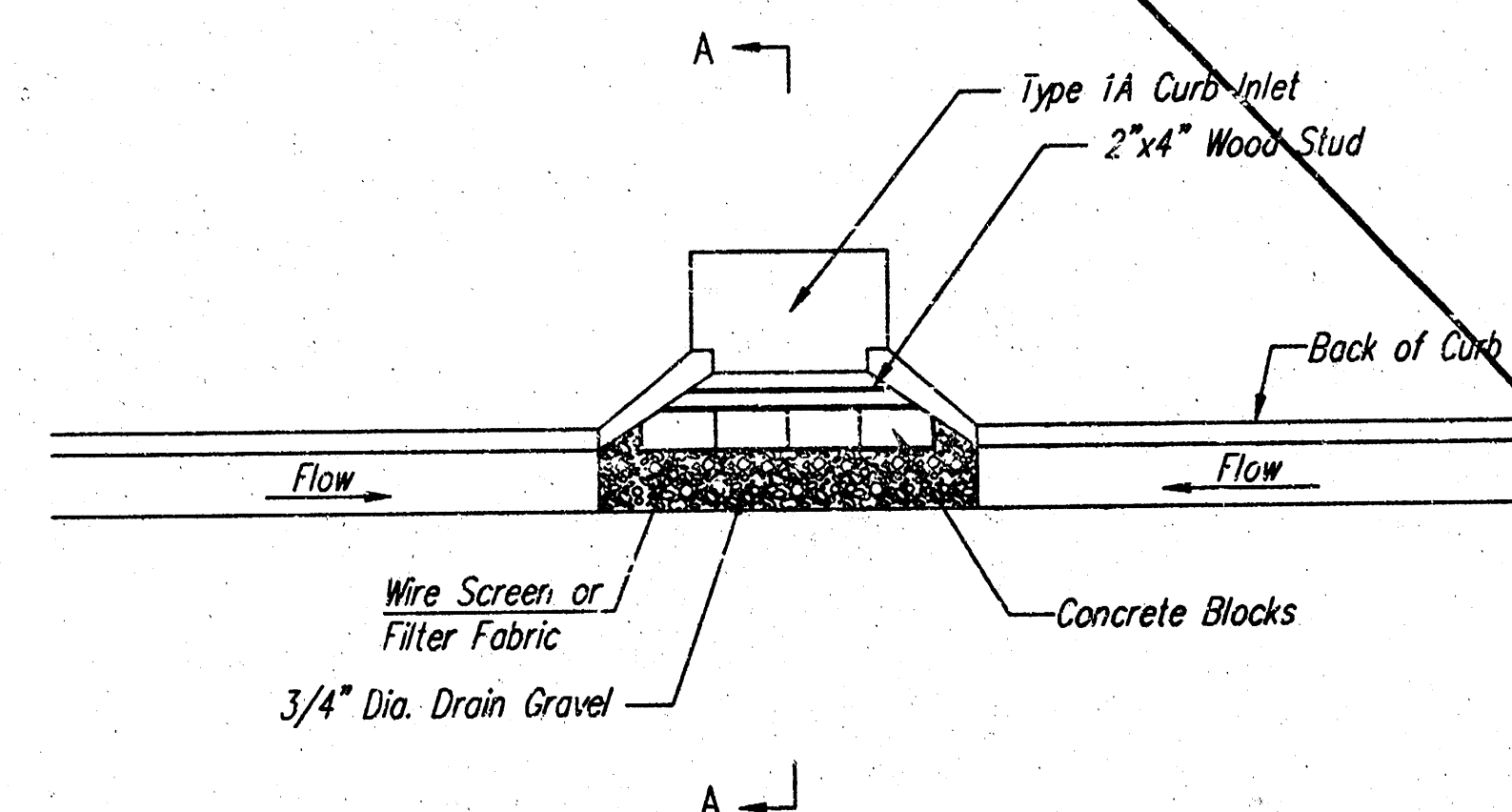
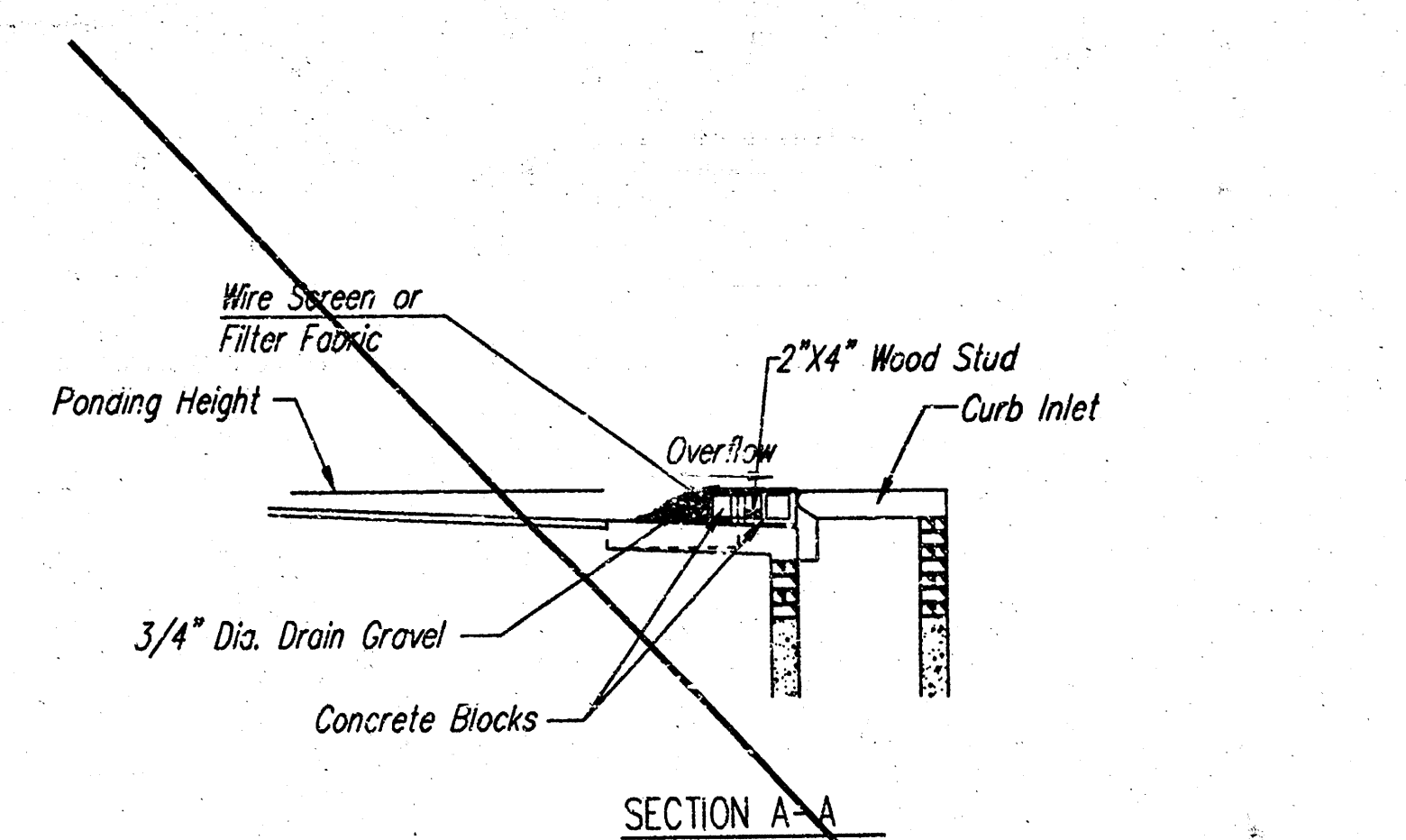
MANHOLE CASTINGS SHALL BE MANUFACTURED SUCH THAT A COVER MANUFACTURED BY ANY ONE FOUNDRY WILL FIT INTERCHANGEABLY INTO A FRAME MANUFACTURED BY ANOTHER FOUNDRY AND STILL MEET ALLOWABLE CLEARANCES AND NON-ROCKING REQUIREMENTS. THIS WILL REQUIRE MANUFACTURING OF THE MATCHING FACES ON THE COVER AND THE FRAME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

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 AS THESE SURFACES SHALL MAKE FULL CONTACT FOR THEIR FULL CIRCUMFERENCE TO PRECLUDE THE COVER FROM ROCKING IN THE FRAME.

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 1/2" INCH 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.

MANHOLE FRAME AND COVER DETAIL			
ADOPTED AS STANDARD DESIGN BY CITY OF WICHITA, KANSAS			
BAUGHMAN COMPANY P.A. ENGINEERING, SURVEYING, & PLANNING			
316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211			
PROJECT NUMBER 468-83286	DATE 7-17-01	SCALE NONE	SHEET 5 OF 7
DRAWN STAFF	APPROVED STAFF		

DSNR: DEP. OPER. DEP. SCALE: 1"=1.00
02-03-06 PM 06-05-2001 02-03-06 PM
02-03-06 PM 06-05-2001 02-03-06 PM



CURB INLET GRAVEL FILTERS (INLET PROTECTION-RESIDENTIAL STREETS ONLY)

NOTE: Other types of curb inlet protection may be approved by the city so long as equal protection is provided.

A gravel inlet filter shall be installed at sump locations on residential streets. This type of protection is not to be used on arterial or collector streets at any time that it would pose an undue traffic hazard.

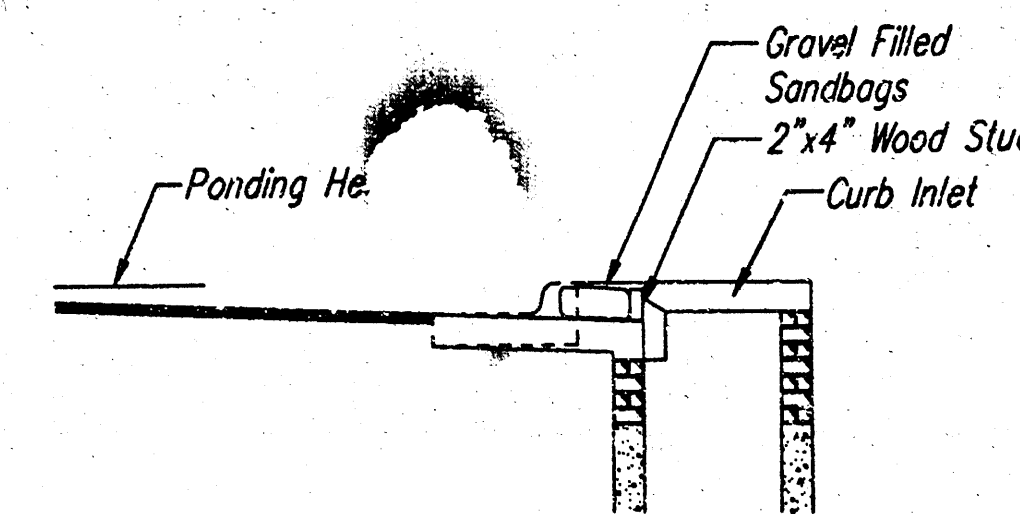
Instructions for Installing:

- STEP 1: Place concrete blocks around the inlet as shown on drawing. Insert 2x4 board as shown.
- STEP 2: Wrap 1/2" mesh wire screen around the concrete blocks.
- STEP 3: Place 1" to 1-1/2" diameter rock around the blocks and wire screen. Be sure the rock extends down from the top of the concrete block.
- STEP 4: To prevent damage to vehicles, signs warning drivers about the structures may be necessary. An alternative installation is the use of gravel bags supported by a 2x4" board to prevent collapsing.

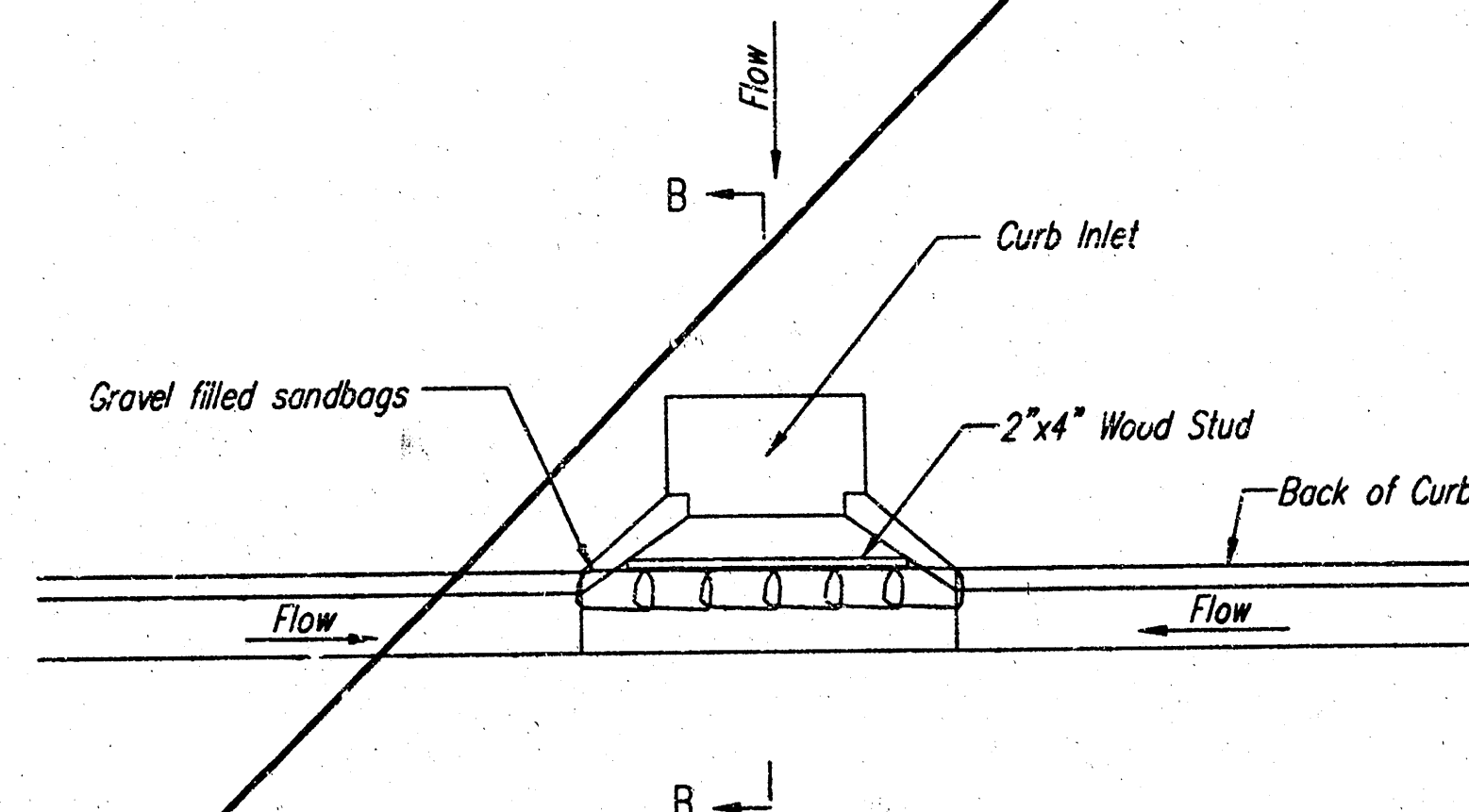
Use of rock with diameters smaller than 1" in the bag may result in clogging of pores and reduce the amount of water flowing into an inlet.

Maintenance:

All curb inlet gravel filters shall be inspected and repaired after each runoff event. Sediment deposits are to be removed once material is within 8 cm (3 inches) of the top of any block. Periodically, the gravel shall be raked to increase infiltration and filtering of runoff waters. Accumulated sediment is to be removed immediately from roads and streets.

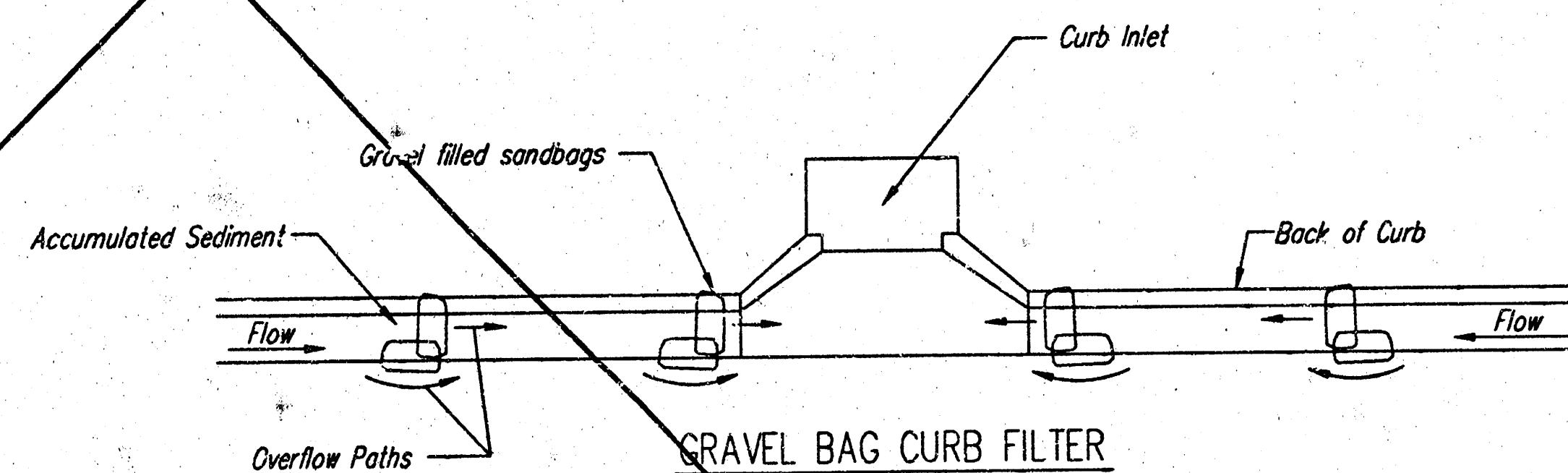


SECTION B-B



CURB INLET SANDBAG FILTERS (INLET PROTECTION)

NOTE: Other types of curb inlet protection may be approved by the City so long as equal protection is provided.



GRAVEL BAG CURB FILTER (INLET PROTECTION)

NOTE: Place two or more sets of bags in a manner that results in maximum support. The flow line bag must be lower than top of curb.

CURB SEDIMENT TRAPS

When inlets are located on streets having a grade (i.e., sump conditions do not exist), installing gravel (or sand) bags in the gutter flow line to create small sediment traps can be considered. Gravel bags are recommended over sand bags to allow for drainage.

If the spacing between bags becomes too large, little sediment may be trapped. Spacing of bags should be completed using the table or graph that illustrates placement distances based upon street slope. When installed in the gutter, bag tops must be lower than the sidewalk.

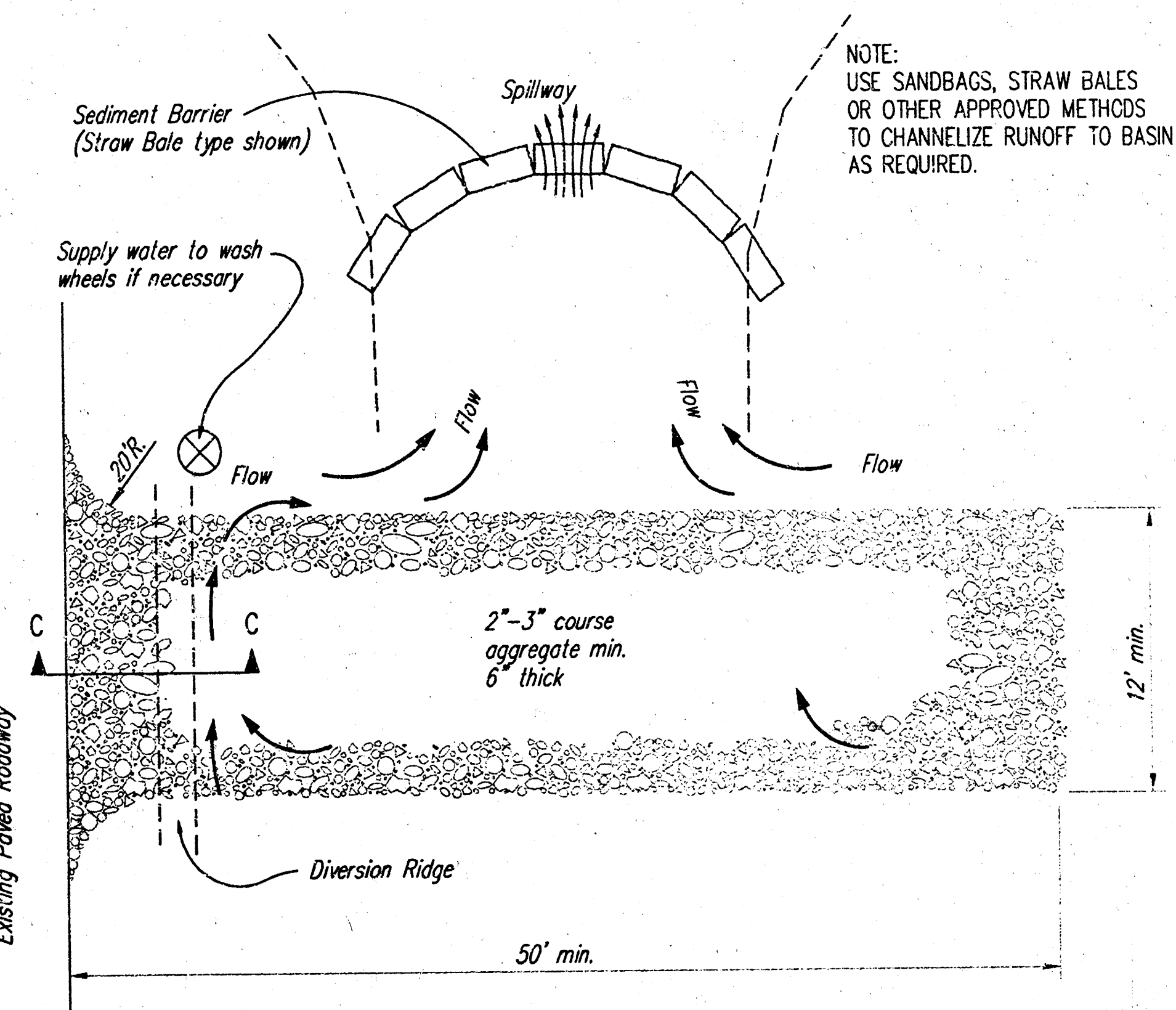
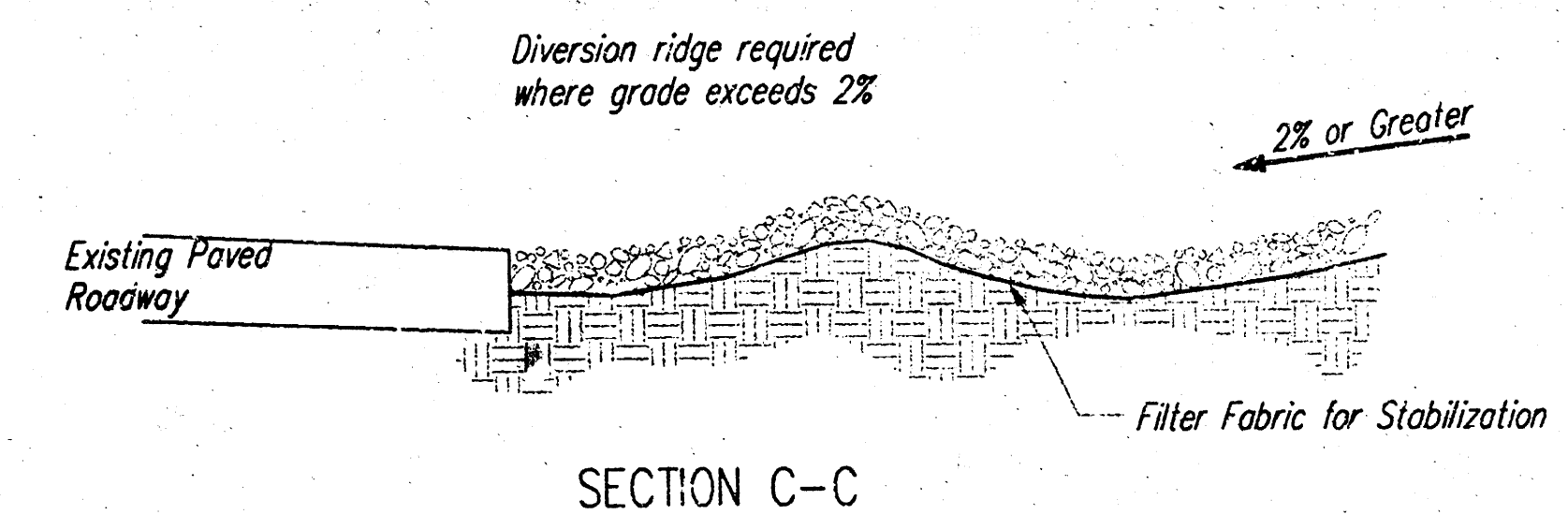
Spacing:

Gravel bags are to be placed according to street grades using the following table or graph that appears below.

GRADE (%)	SPACING (FEET)
0.5	75
1.0	45
2.0	18
3.0	12
4.0	9
5.0	6

Maintenance:

Collected sediment shall be removed after every runoff event. Bags that are destroyed by vehicular traffic or through natural deterioration are to be immediately replaced.



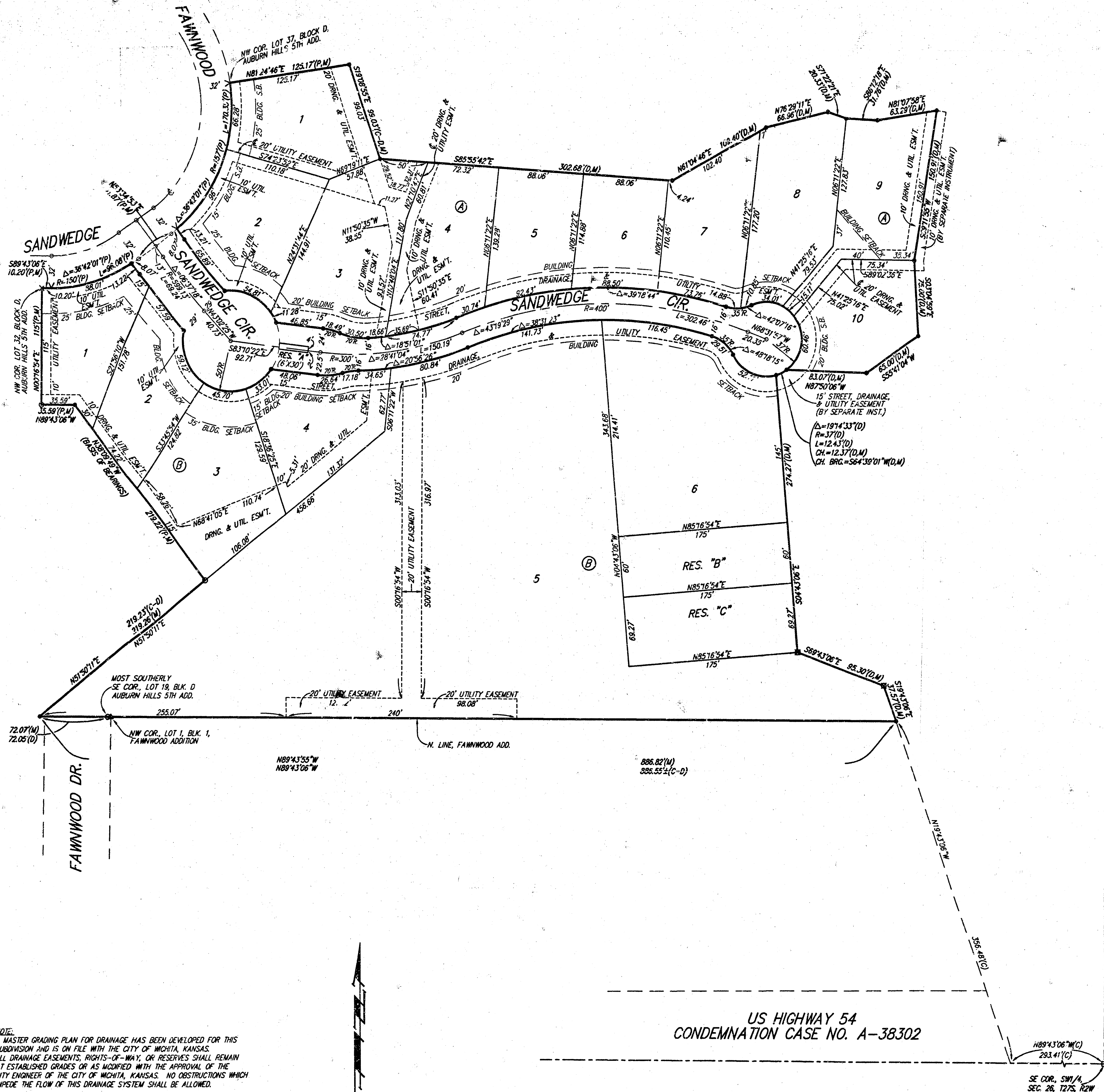
STABILIZED CONSTRUCTION ENTRANCE

NOTES:

1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN, AS SHOWN ABOVE.
4. DRIVE ENTRANCES ONTO RESIDENTIAL LOTS WILL NOT BE REQUIRED TO HAVE THE SEDIMENT BARRIER SHOWN, BUT WHEEL WASHING MAY BE REQUIRED IF STABILIZED ENTRANCE IS NOT SUFFICIENT TO KEEP MUD FROM BEING TRACKED ONTO ADJACENT STREET. ENTRANCE SHALL EXTEND FROM BACK OF CURB TO DWELLING.

	SOIL EROSION BMP DETAILS	
	CHRISTOPHER M. CARRIER, P.E. STORM WATER ENGINEER	
	PROJECT NUMBER 468-83296	DATE 7-17-01
	SHEET 6 OF 7	

AUBURN HILLS 11TH ADDITION WICHITA, SEDGWICK COUNTY, KANSAS



MINIMUM BUILDING PAD ELEVATIONS FOR LOWEST OPENING TO THE STRUCTURES		
LOT	BLOCK	ELEVATION CITY DATUM
1-10	A	200.6

BENCHMARK:
TOP OF 1" IRON, 12" DEEP, W/4 COR.
OFF. 26. TWP. 27. S. R. 2. W.

- #4 REBAR W/ "BAUGHMAN" CAP (SET)
- #4 REBAR W/ "BAUGHMAN" CAP (FOUND)
- #6 REBAR IN THIMBLE (FOUND)
- 1/4" IRON BAR (FOUND)
- CROSS (FOUND)
- "Y" NOTCH (SET)
- #5 IRON ROD (FOUND)

State of Kansas) SS The foregoing instrument acknowledged before me, this _____ day of _____, 2001, by Jay W. Russell, President of Wichita Friends School, Inc., on behalf of the corporation.

State of Kansas) SS The foregoing instrument acknowledged before me, this _____ day of _____, 2001, by James R. Perkins, President of Wichita Friends School, Inc., on behalf of the corporation.

My App't. Exp. _____, Notary Public

State of Kansas) SS

State of Kansas) SS We, Baughman Company, P.A., Surveyors in and for said county and state do hereby certify that we have surveyed and plotted "AUBURN HILLS 11TH ADDITION", Wichita, Sedgwick County, Kansas and that the accompanying plot is a true and correct exhibit of the property surveyed, described as A replat of all of Lots 32 through 38, inclusive, Block D, Auburn Hills 5th Addition, Wichita, Sedgwick County, Kansas together with that part of Sandwedge Cir. lying between said lots TOGETHER with that part of Lots 19 and 20 in said Block D described as follows: Commencing at the most easterly rear corner of said Lot 20; thence S51°50'11"W along the southeast line of said Lot 20, 78.82 feet to the P.C. of a curve in said southeast line and for a point of beginning; thence continuing S51°50'11"W along the previously described course, as extended southwesterly, 140.41 feet to a point on the south line of said Lot 19; thence S89°43'06"E along the south line of said Lot 19, 72.05 feet to the most southerly SE corner of said Lot 19; thence N00°51'54"E, along the east line of said Lot 19, 10.00 feet to the P.C. of a curve to the right; thence northerly and northeasterly along said curve, having a central angle of 50°58'17" and a radius of 100.00 feet, an arc distance of 88.96 feet, (having a chord length of 88.06 feet bearing N28°21'03"E), to the point of beginning. TOGETHER with that part of the SW1/4 of Sec. 26, Twp. 27-S, R-2-W of the 6th P.M., Sedgwick County, Kansas described as follows: Commencing at the SE corner of Kellogg Drive as dedicated in Fawnwood Addition; to Sedgwick County, Kansas; thence north along the east line of said Fawnwood Addition, 266.78 feet to the NE corner of said Fawnwood Addition and for a point of beginning; thence west along the north line of said Fawnwood Addition, 519.00 feet to the most southerly SE corner of Lot 19 in said Auburn Hills 5th Addition; thence N00°51'54"E along the east line of said Lot 19, 10.00 feet to the P.C. of a curve to the right; thence northerly and northeasterly along said curve, having a central angle of 50°58'17" and a radius of 100.00 feet, an arc distance of 88.96 feet, (having a chord length of 88.06 feet bearing N28°21'03"E), to the P.T. of said curve; thence N51°50'11"E along the east line of said Auburn Hills 5th Addition, 279.89 feet to the P.C. of a curve to the left; thence northeasterly and northerly along said curve, having a central angle of 70°58'05" and a radius of 175.00 feet, an arc distance of 216.81 feet, (having a chord length of 203.21 feet bearing N16°20'38"E), to the P.T. of said curve; thence N19°08'55"W, 103.01 feet; thence S85°55'42"E, 302.68 feet; thence N61°04'46"E, 109.40 feet; thence N76°29'11"E, 66.96 feet; thence S71°22'21"E, 20.33 feet; thence S86°12'18"E, 31.76 feet; thence N81°07'58"E, 63.29 feet; thence S09°11'55"W, 150.91 feet; thence S03°04'59"E, 75.00 feet; thence S55°41'04"W, 65.00 feet; thence N87°50'06"W, 83.07 feet to a point on a curve to the right; thence westerly along said curve, having a central angle of 19°43'33" and a radius of 37.00 feet, an arc length of 12.43 feet, (having a chord length of 12.37 feet bearing S64°39'01"W); thence S04°43'06"E, 274.27 feet; thence S69°43'06"E, 95.30 feet; thence S19°43'06"E, 37.57 feet to the intersection with the north line of said Fawnwood Addition, as extended east; thence west along said extended north line, 293.50 feet, more or less, to the point of beginning.

Existing public easements and dedications being vacated by virtue of K.S.A. 12-512(b).
All being situated in the SW1/4, Sec. 26, Twp. 27-S, R-2-W of the 6th P.M., Sedgwick County, Kansas.
Baughman Company, P.A.

Michael G. Conrey, Surveyor

Know all men by these presents that we, the undersigned, have caused the land in the surveyers certificate to be plotted into Lots, Blocks, Streets, and Reserves, to be known as "AUBURN HILLS 11TH ADDITION", Wichita, Sedgwick County, Kansas. The utility easements are hereby granted as indicated for the construction and maintenance of all public utilities. The drainage and utility easements are hereby granted as indicated for drainage purposes and for the construction and maintenance of all public utilities. The drainage easements are hereby granted as indicated for drainage purposes. The street, drainage, and utility easements are hereby granted as indicated for street related purposes, for drainage purposes and for the construction and maintenance of all public utilities. The streets are hereby dedicated to and for the use of the public. Reserve "A" is hereby reserved for streets, utilities, landscaping, berms, open space, and entry monuments. Reserve "A" shall be owned and maintained by the homeowners association for the addition. Reserves "B" and "C" are hereby reserved for lakes, open space, landscaping, drainage purposes, and berms. Reserve "B" shall be owned and maintained by the owner of Lot 6, Block B. Reserve "C" shall be owned and maintained by the owner of Lot 5, Block B. The Minimum Building Pad Elevations for the lowest opening to the structures shall be as indicated on the face of the plot.

West Wichita Development, Inc.
Jay W. Russell, President

Wichita Friends School, Inc.
James R. Perkins, President

Doris M. Rishel Trust u/t/a dated September 14, 2000
Doris M. Rishel, Trustee
Howard A. Rishel, Trustee

This plot of "AUBURN HILLS 11TH ADDITION", Wichita, Sedgwick County, Kansas has been submitted to and approved by the Wichita-Sedgwick County Metropolitan Area Planning Commission, Wichita, Kansas.
Dated this _____ day of _____, 2001.
Wichita-Sedgwick County Metropolitan Area Planning Commission

J. D. Michaels, Acting Chair
Marvin S. Krout, Secretary

This plot approved and all dedications shown hereon accepted by the City Council of the City of Wichita, Kansas, this _____ day of _____, 2001.
At the direction of the City Council

Chris Charches, City Manager
Pat Burnett, City Clerk

Reviewed in accordance with K.S.A. 58-2005 on this _____ day of _____, 2001.

Tricia L. Rubello, L.S. #1246
Deputy County Surveyor
Sedgwick County, Kansas

Entered on transfer record this _____ day of _____, 2001.

Don Brace, County Clerk

State of Kansas) SS This is to certify that this plot has been filed for record in the office of the Register of Deeds, this _____ day of _____, 2001 at _____ o'clock _____ M., and is duly recorded.

Bill Meek, Register of Deeds
Linda Kizzire, Deputy

We the undersigned holders of a mortgage on the above described property, do hereby consent to this plot of "AUBURN HILLS 11TH ADDITION", Wichita, Sedgwick County, Kansas.
Legacy Bank

State of Kansas) SS The foregoing instrument acknowledged before me, this _____ day of _____, 2001, by _____ of Legacy Bank, on behalf of the bank.

My App't. Exp. _____, Notary Public

We the undersigned holders of a mortgage on the above described property, do hereby consent to this plot of "AUBURN HILLS 11TH ADDITION", Wichita, Sedgwick County, Kansas.
Intrust Bank, N.A.

State of Kansas) SS The foregoing instrument acknowledged before me, this _____ day of _____, 2001, by _____ of Intrust Bank, N.A., on behalf of the bank.

My App't. Exp. _____, Notary Public

State of Kansas) SS The foregoing instrument acknowledged before me, this _____ day of _____, 2001, by Curtis Bryant, President of Heartland Friends Meeting of the Religious Society of Friends, Inc., on behalf of the corporation.

18-13-05-10