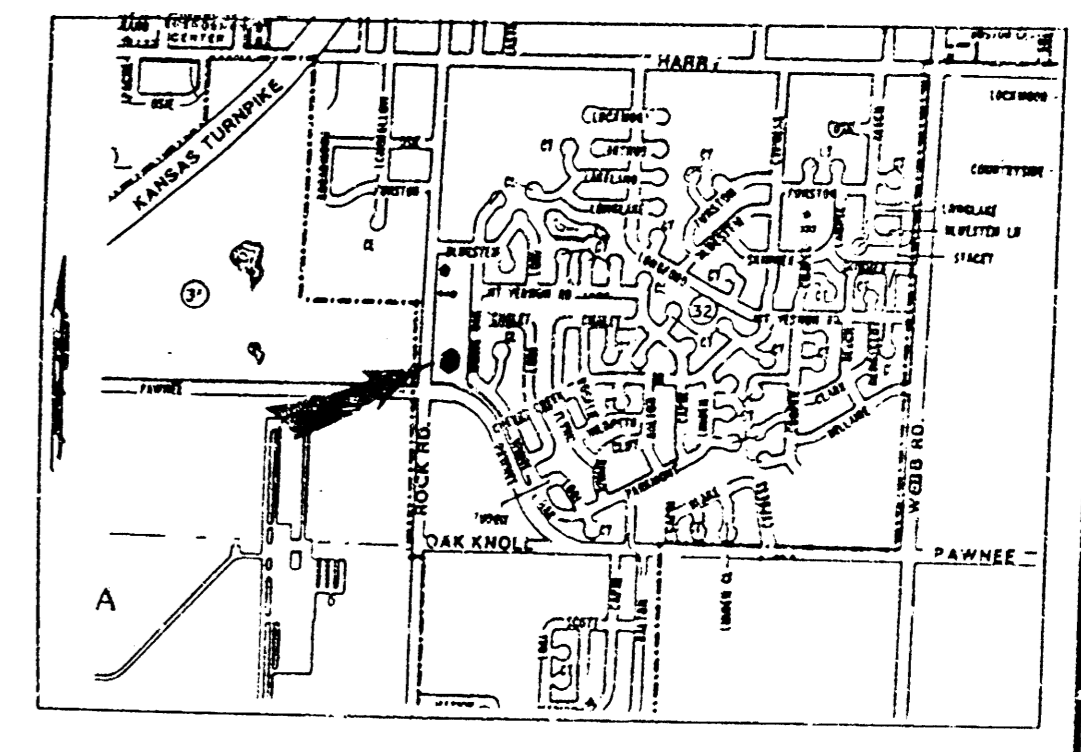
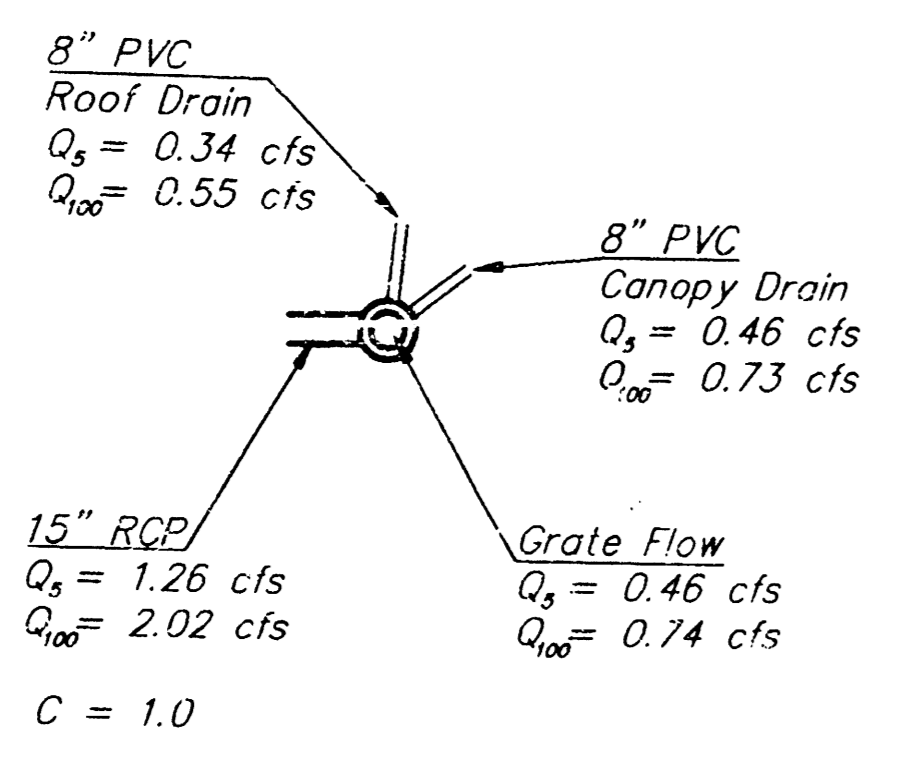


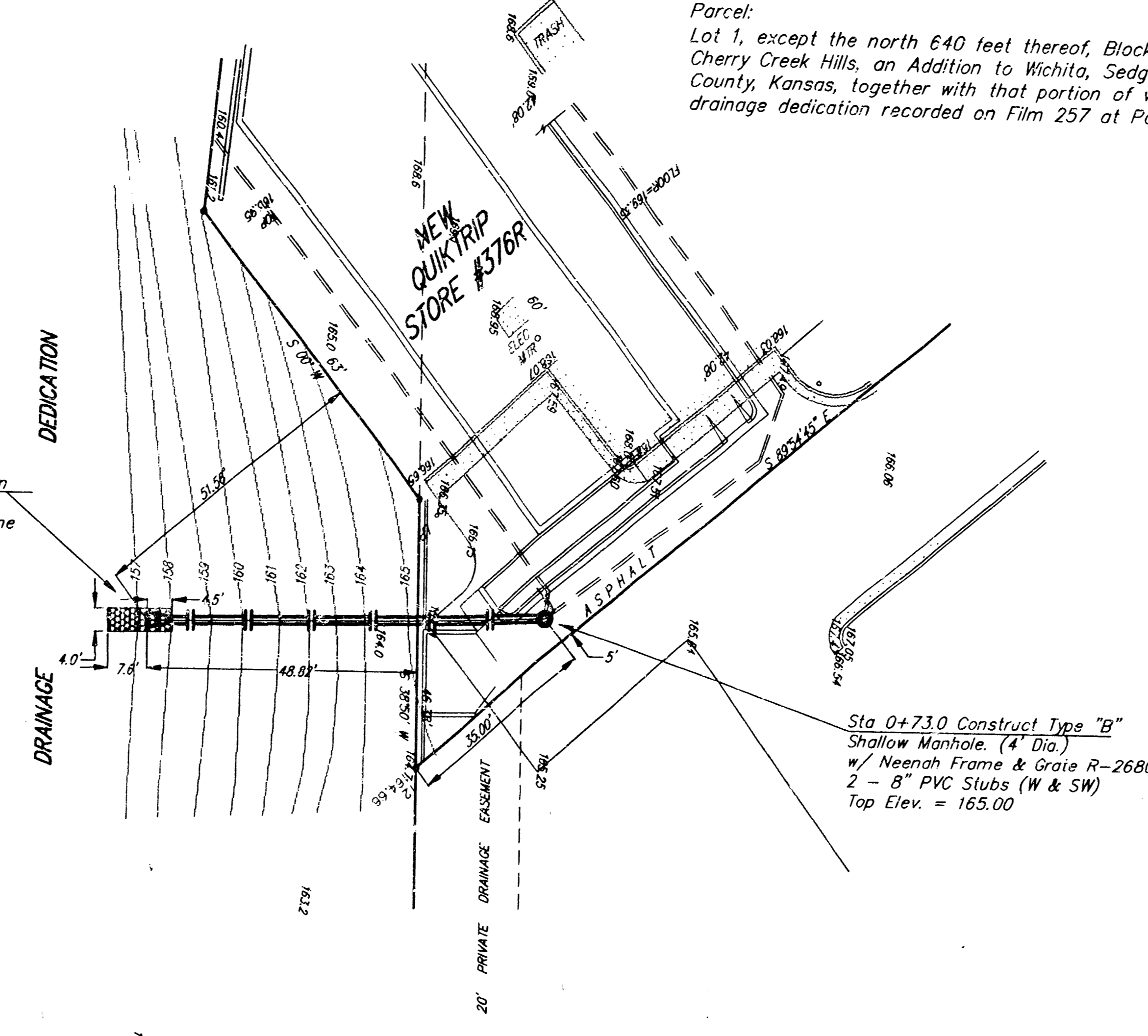
Parcel:  
 Lot 1, except the north 640 feet thereof, Block 1,  
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 County, Kansas, together with that portion of vacated  
 drainage dedication recorded on Film 257 at Page 1152.



Site Location



Sta 0+00 Begin Construction  
 of 15" RCP w/End-section  
 Install 5.4 S.Y. of Light Stone  
 Rip-Rap as Indicated.



SCALE:  
 1" = 20' HORIZONTAL  
 1" = 5' VERTICAL  
 • = IRON

Calculations for grate capacity:  
 $Q = 0.6 \cdot A \cdot \sqrt{2gh}$   
 $Q$  = Flow (cfs)  
 $A$  = Area (ft<sup>2</sup>)  
 $h$  = Depth (ft)  
 $g$  = Gravity (ft/s<sup>2</sup>)  
 Open Area of Grate = 1.1 ft<sup>2</sup>  
 Assume:  $h = 0.2$  ft  
 $Q = 0.6 \cdot 1.1 \cdot \sqrt{2 \cdot 32.2}$   
 $Q = 2.4$  cfs

Contractor to contact KANSAS ONE CALL  
 to order locates in the field

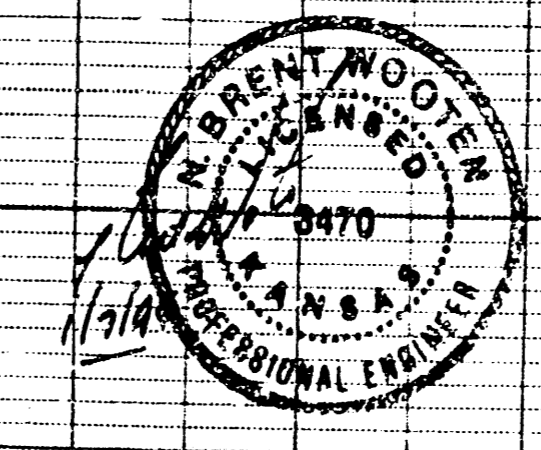
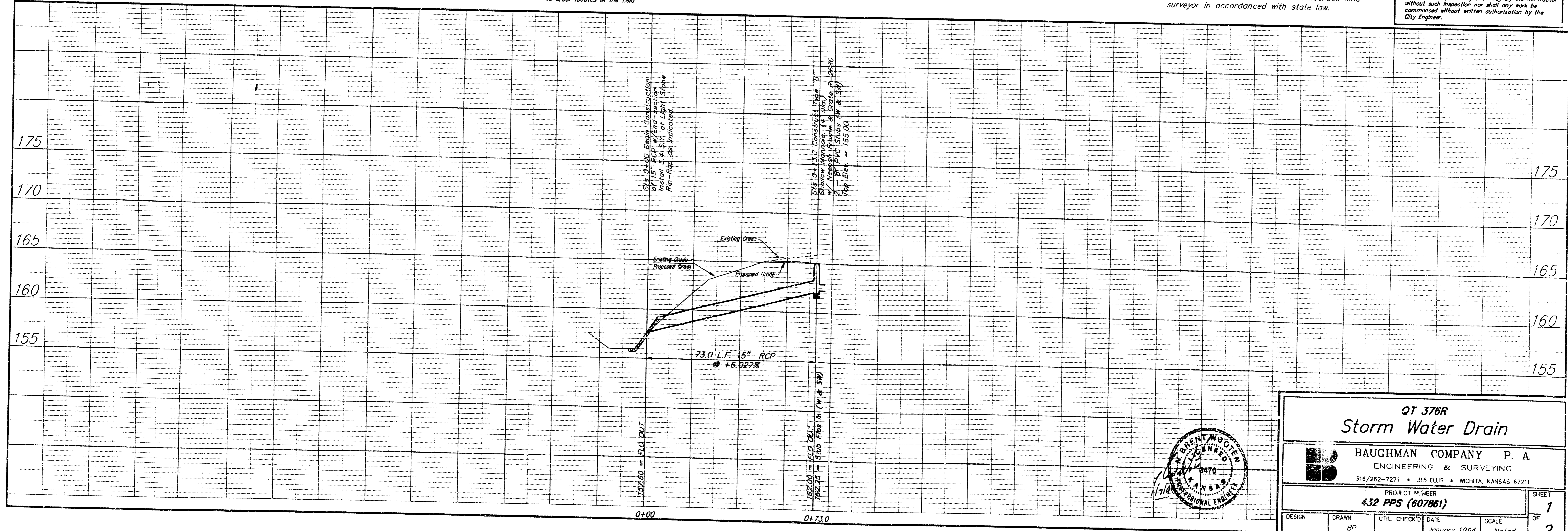
Bench Mark: "□" Cut on Top of curb  
 located 19'S and 1'E of the NW corner  
 of the Described Parcel.  
 Elev = 167.46 City Datum

Note:  
 Remove Pavement only as necessary  
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 Cost.  
 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  
 iron shall be re-established by a licensed land  
 surveyor in accordance with state law.

APPROVED AS NOTED  
 BY CITY ENGINEER OF WICHITA

Sanitary Sewers \_\_\_\_\_  
 Storm Sewers VRH 1/10/94  
 Driveway Approaches \_\_\_\_\_  
 Water Mains \_\_\_\_\_  
 Paving \_\_\_\_\_

NOTE TO CONTRACTORS  
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 without such inspection nor shall any work be  
 commenced without written authorization by the  
 City Engineer.



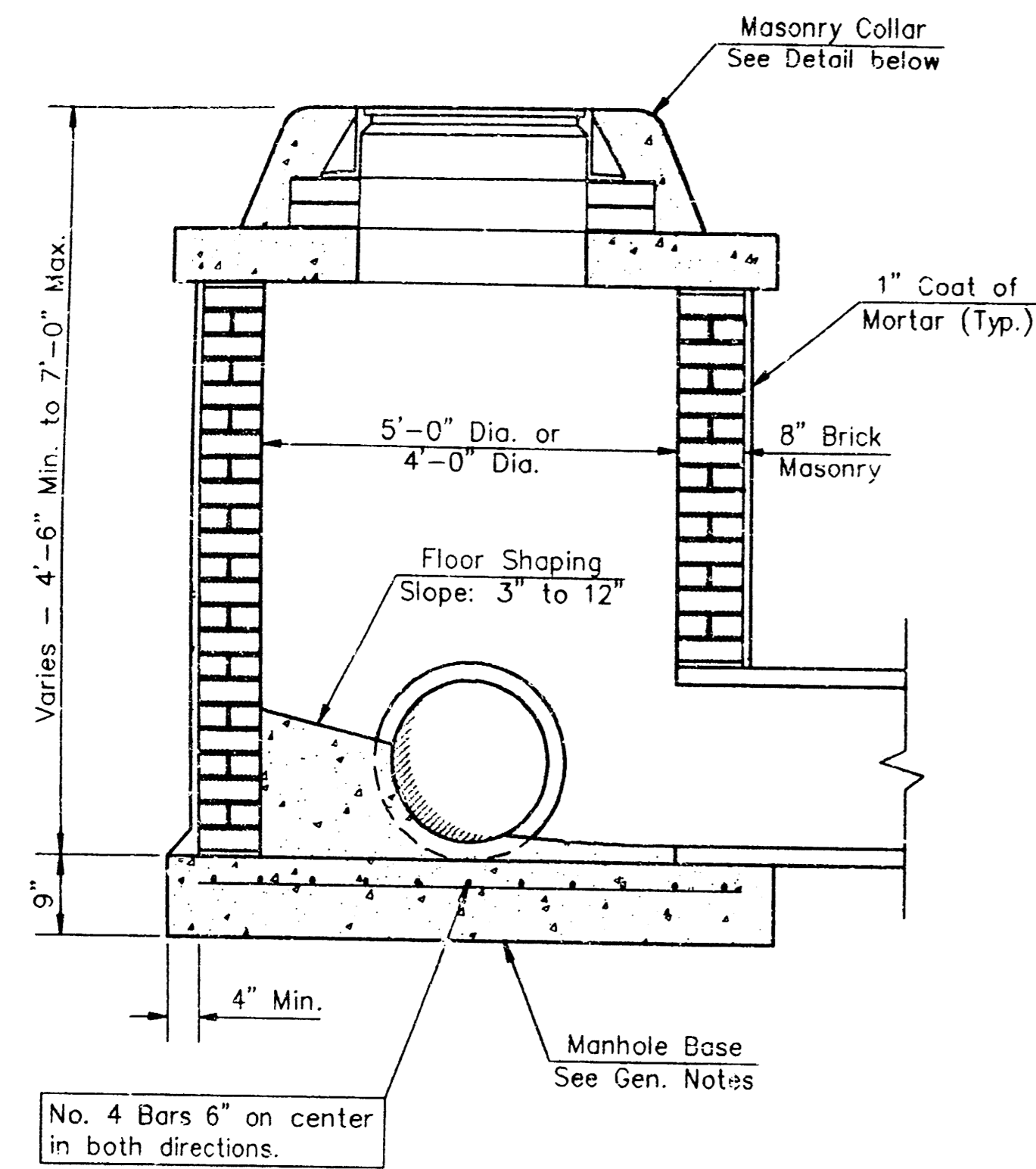
QT 376R  
**Storm Water Drain**

BAUGHMAN COMPANY P. A.  
 ENGINEERING & SURVEYING  
 316/262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

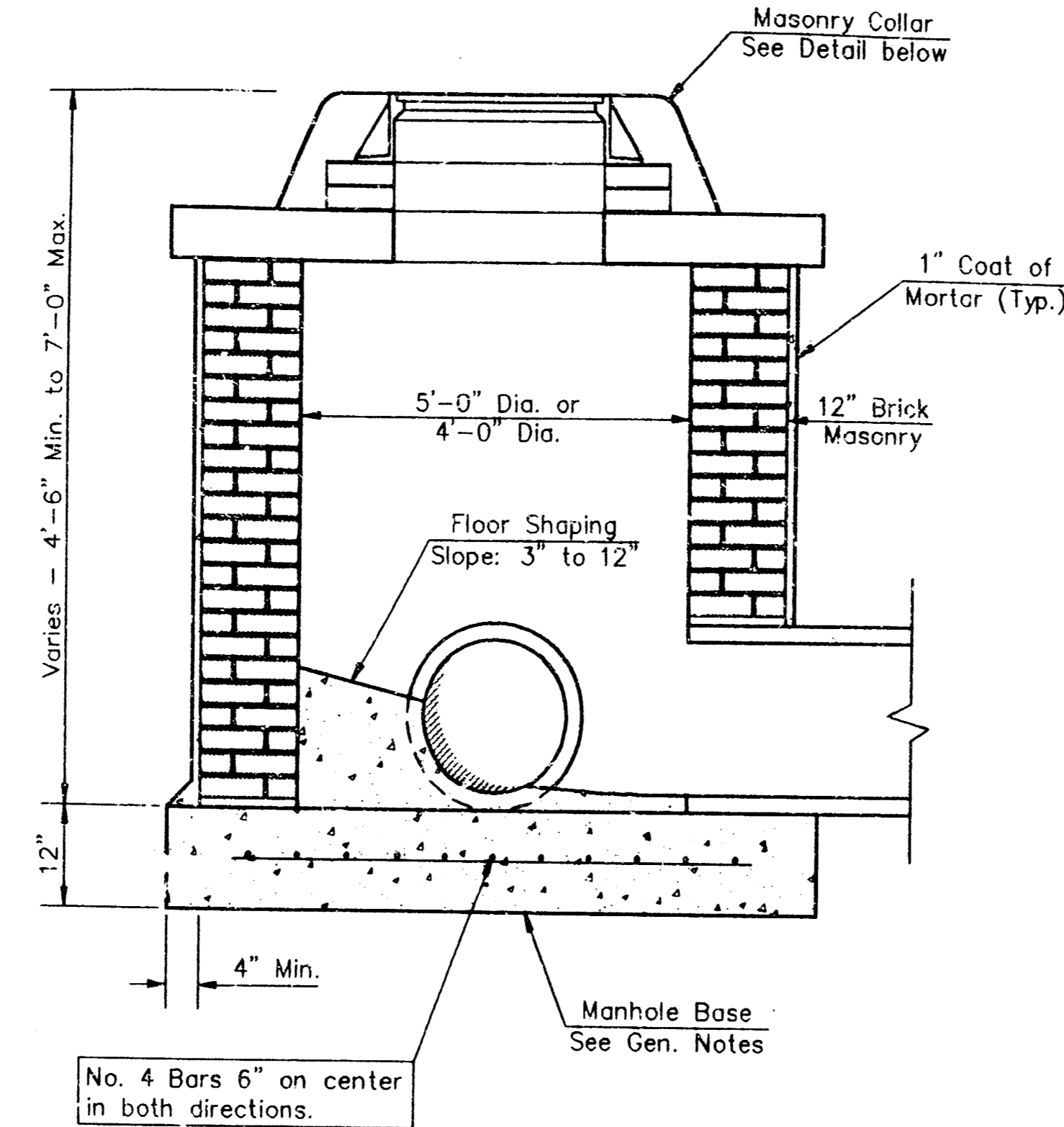
PROJECT NUMBER  
**432 PPS (607861)**

DESIGN DRAWN UTIL CHECKED DATE SCALE  
 DP Noted January 1994

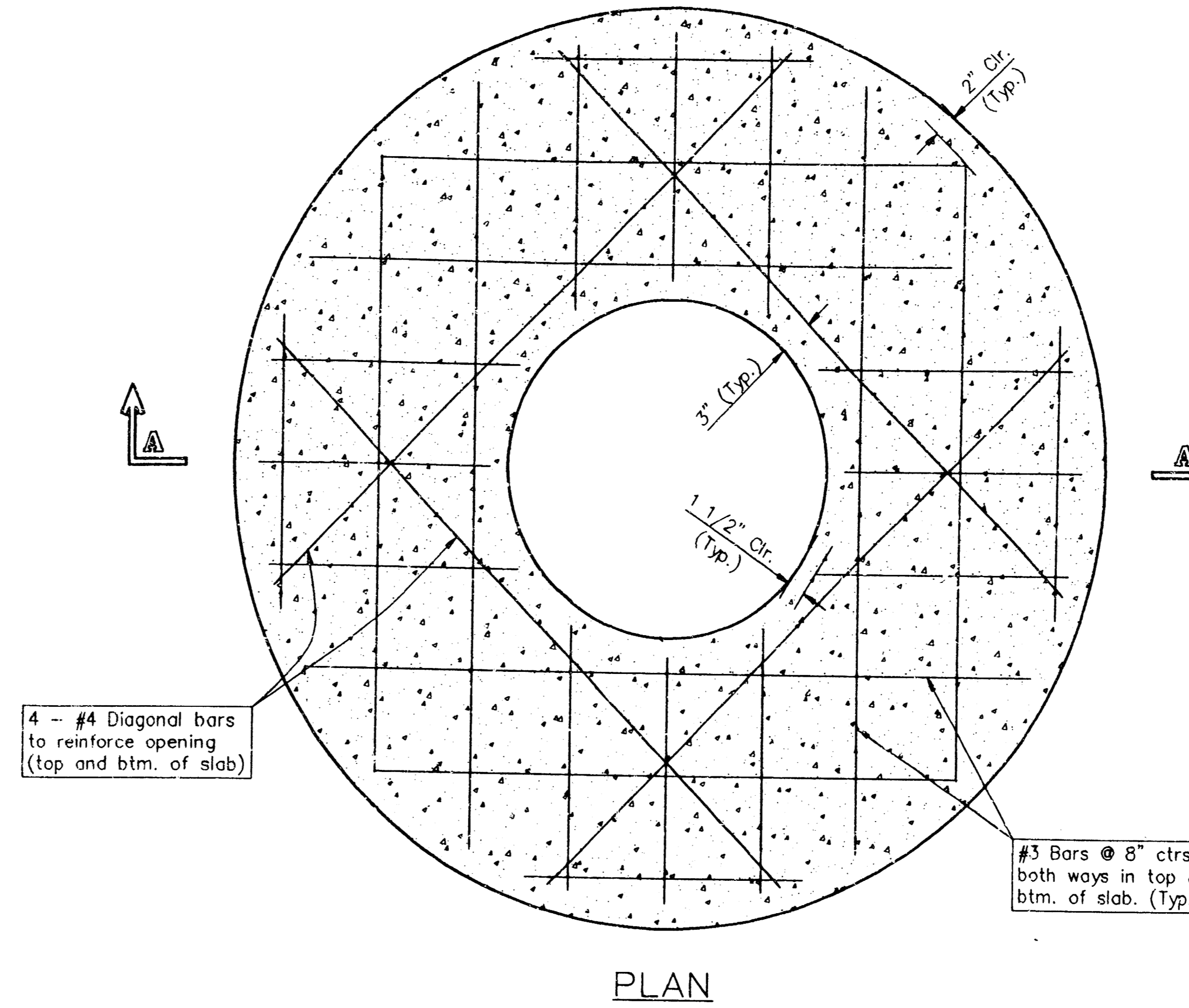
SHEET  
 OF  
 1  
 2



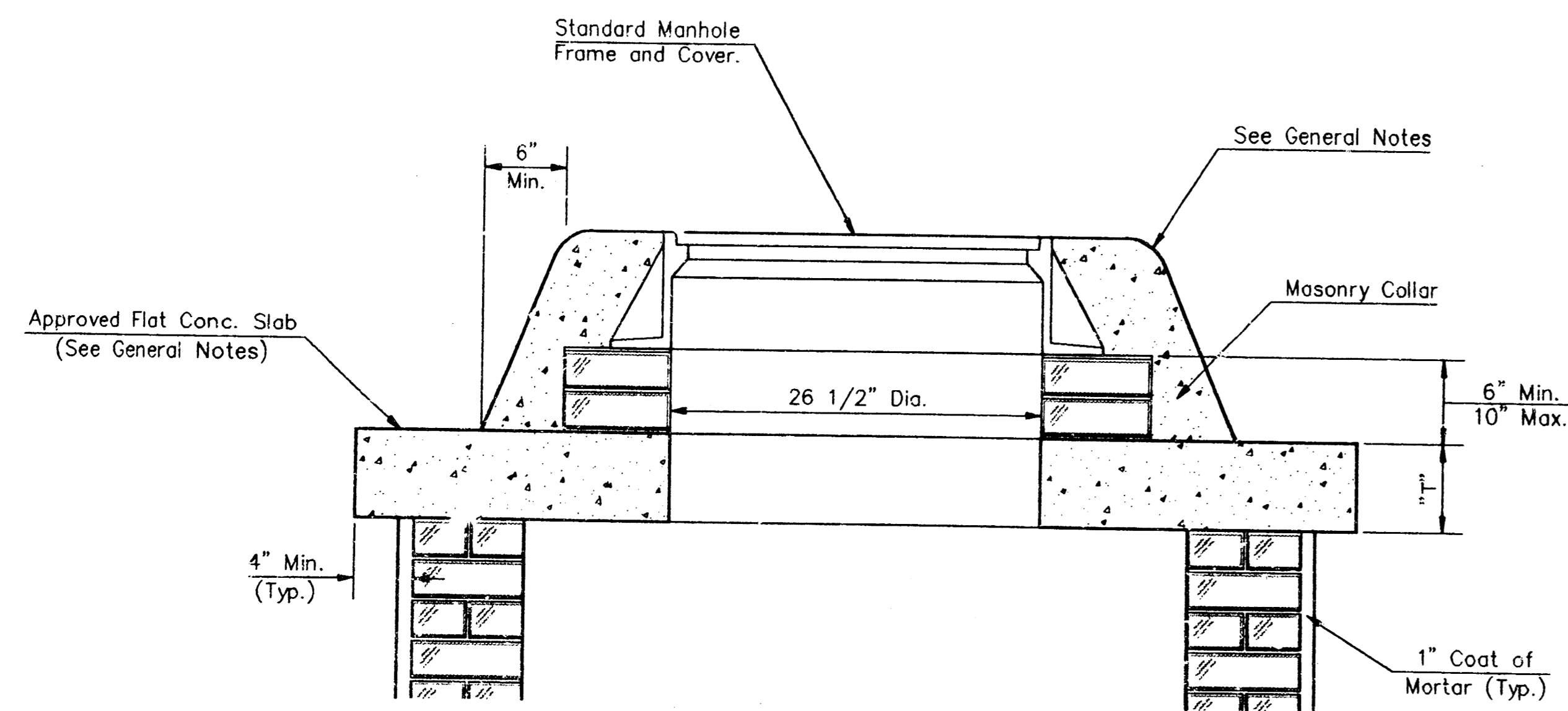
SHALLOW TYPE "A" MANHOLE



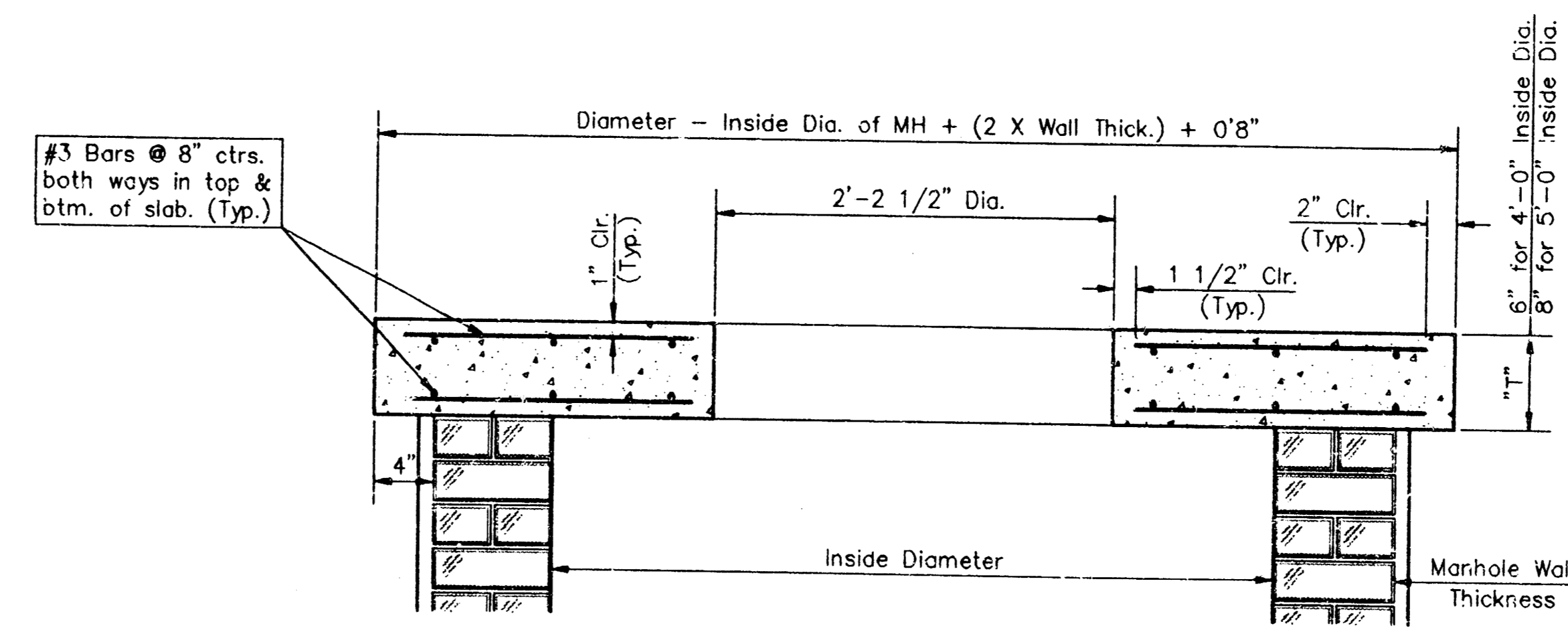
SHALLOW TYPE "B" MANHOLE



PLAN

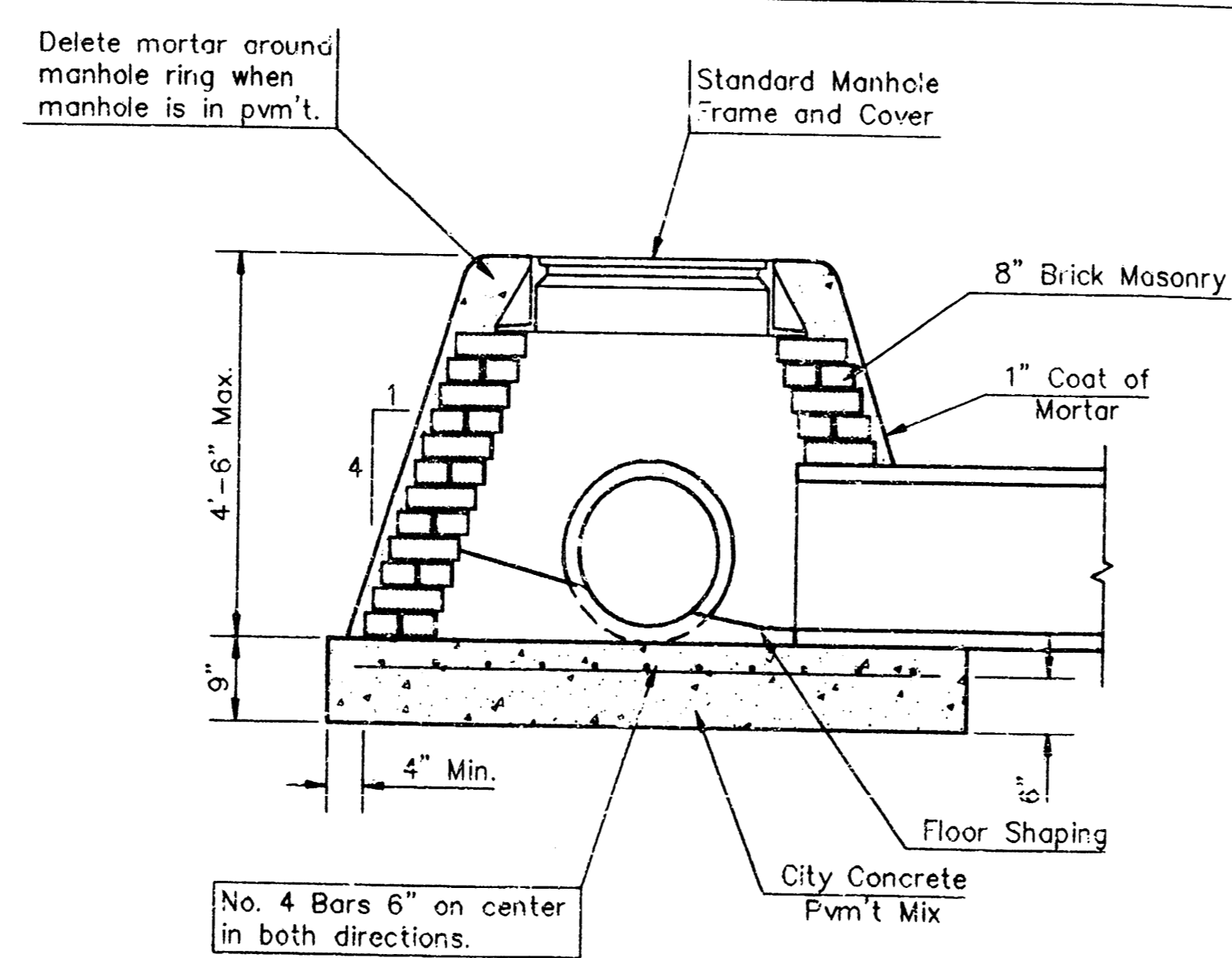


MASONRY COLLAR DETAIL

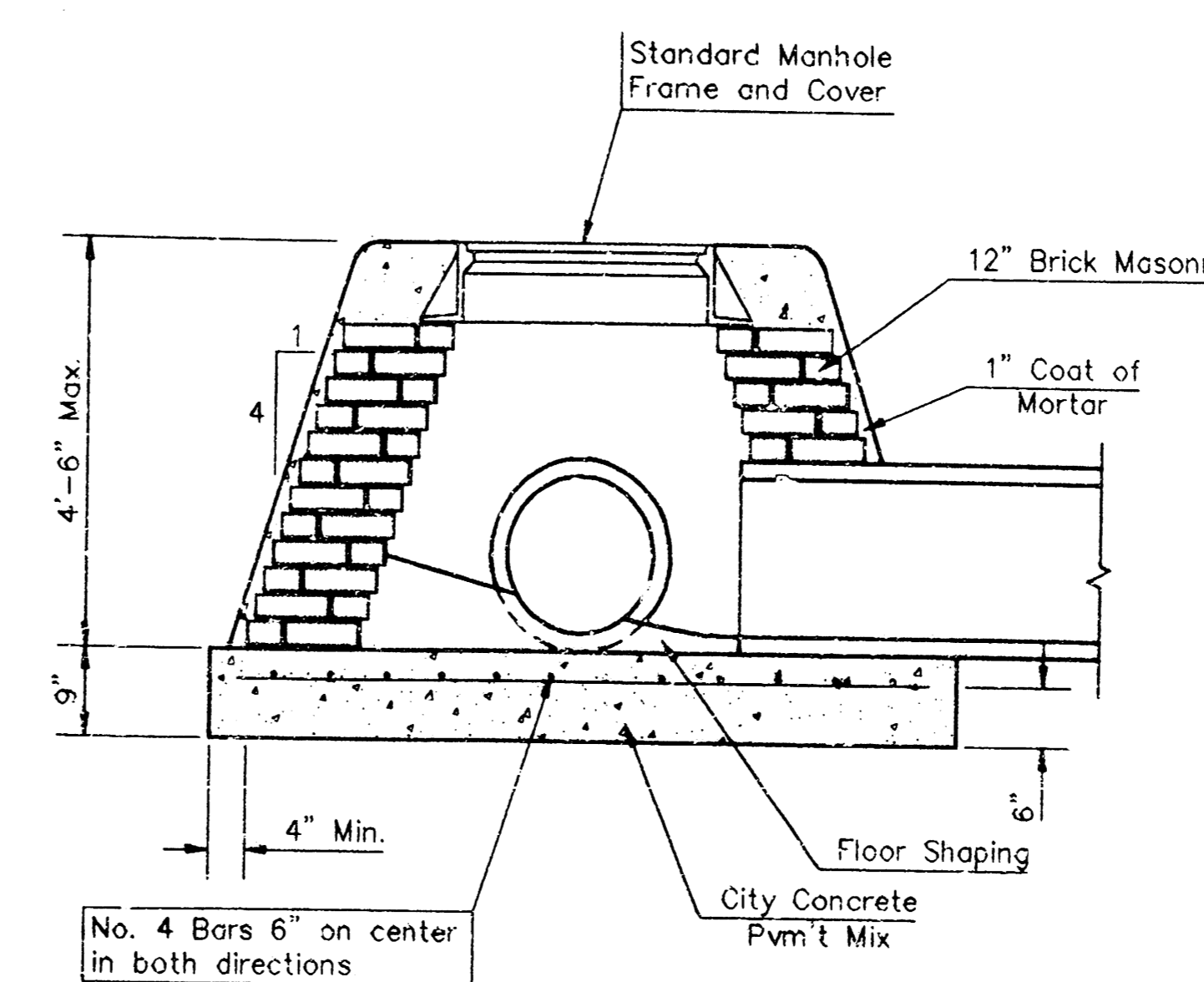


SECTION A-A

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  
STANDARD SHALLOW MANHOLES  
TYPE "A" AND TYPE "B"

PROJECT NUMBER  
432 PPS (607861)

SHEET / OF  
2 / 2

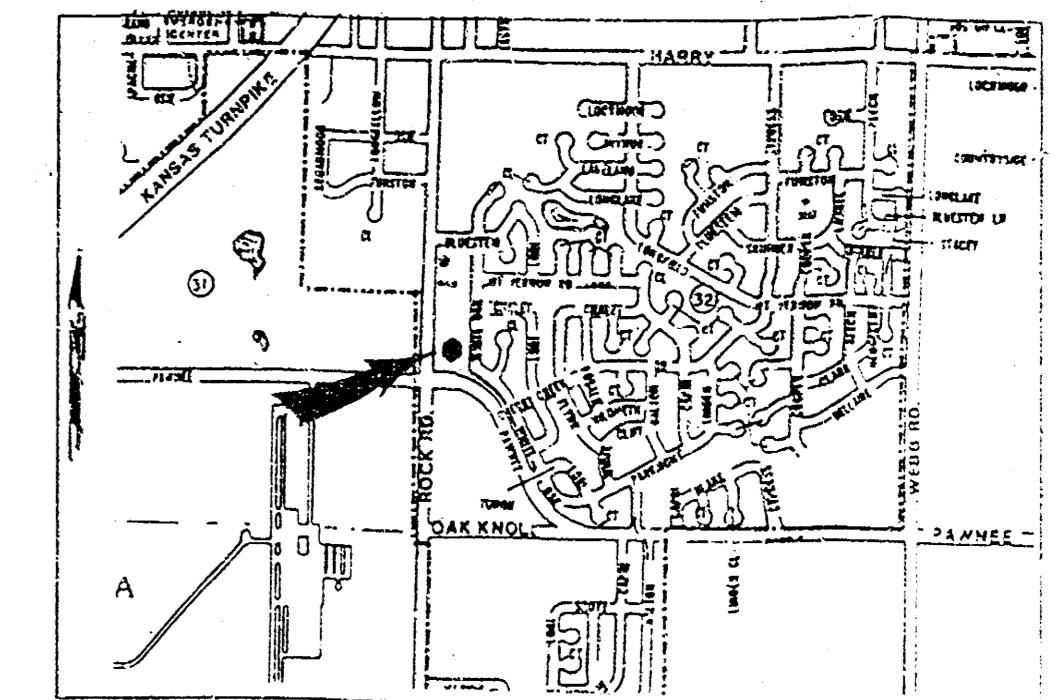


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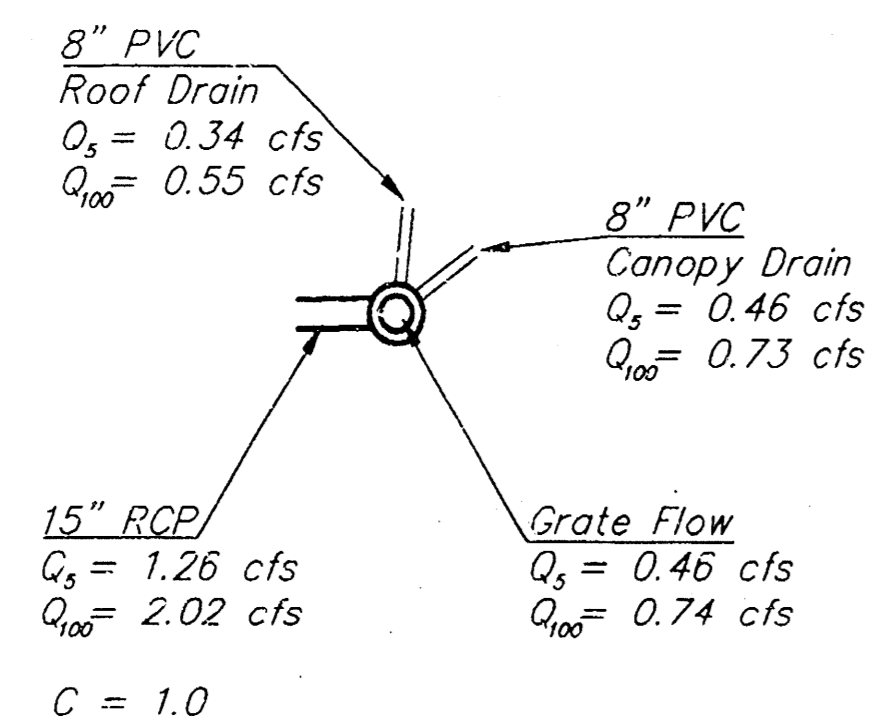
DETAIL/SHMAN.DWG

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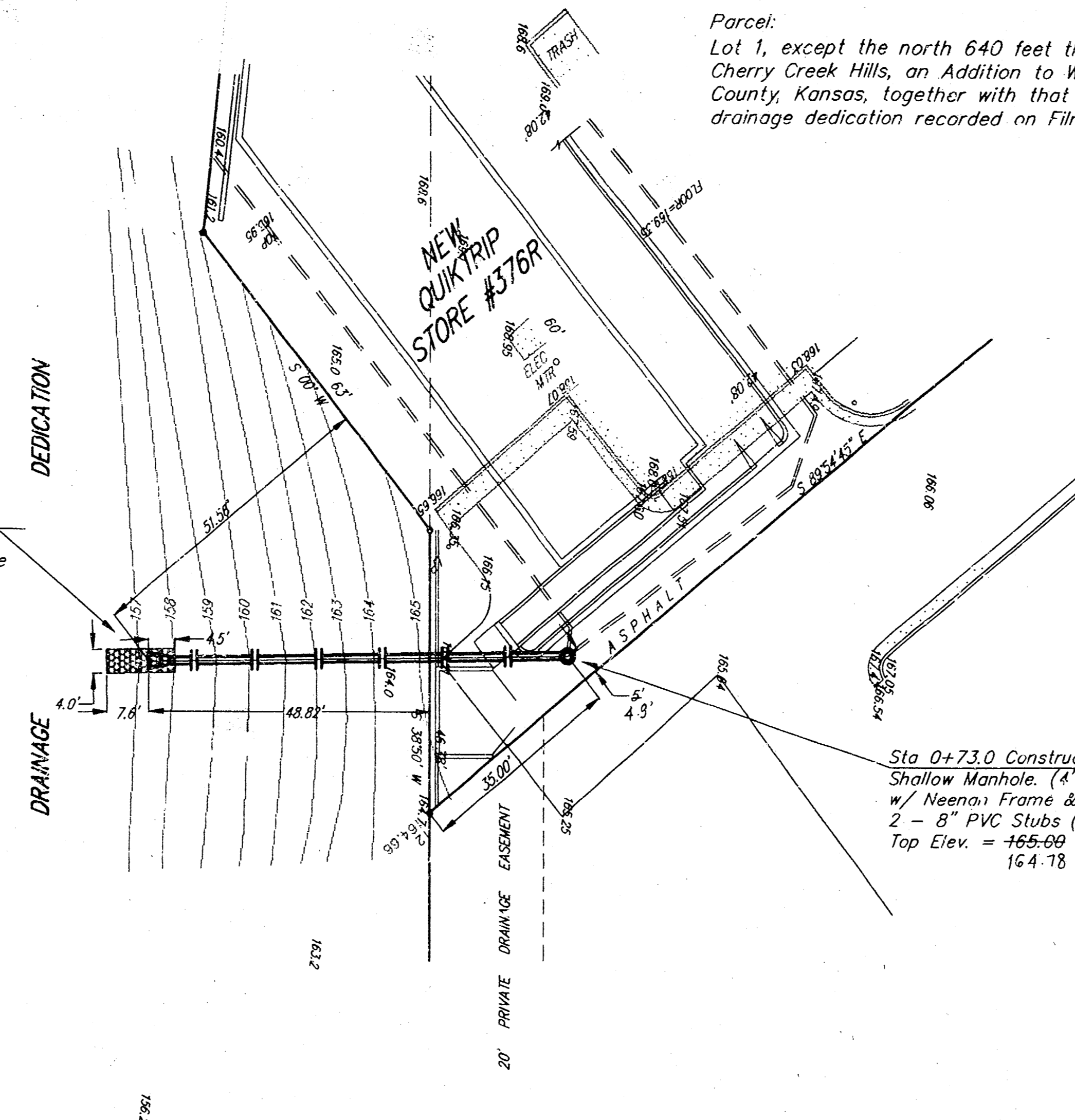
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 Elev = 167.46 City Datum

Sta 0+73.0 Construct Type "B"  
 Shallow Manhole (4' Dia.)  
 w/ Neenah Frame & Grate R-2680  
 2 - 8" PVC Stubs (W & SW)  
 Top Elev. = 165.00  
 164.78

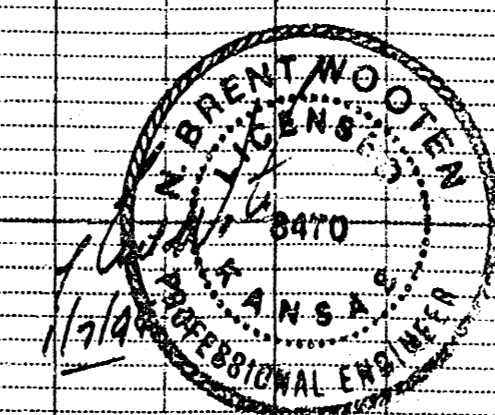
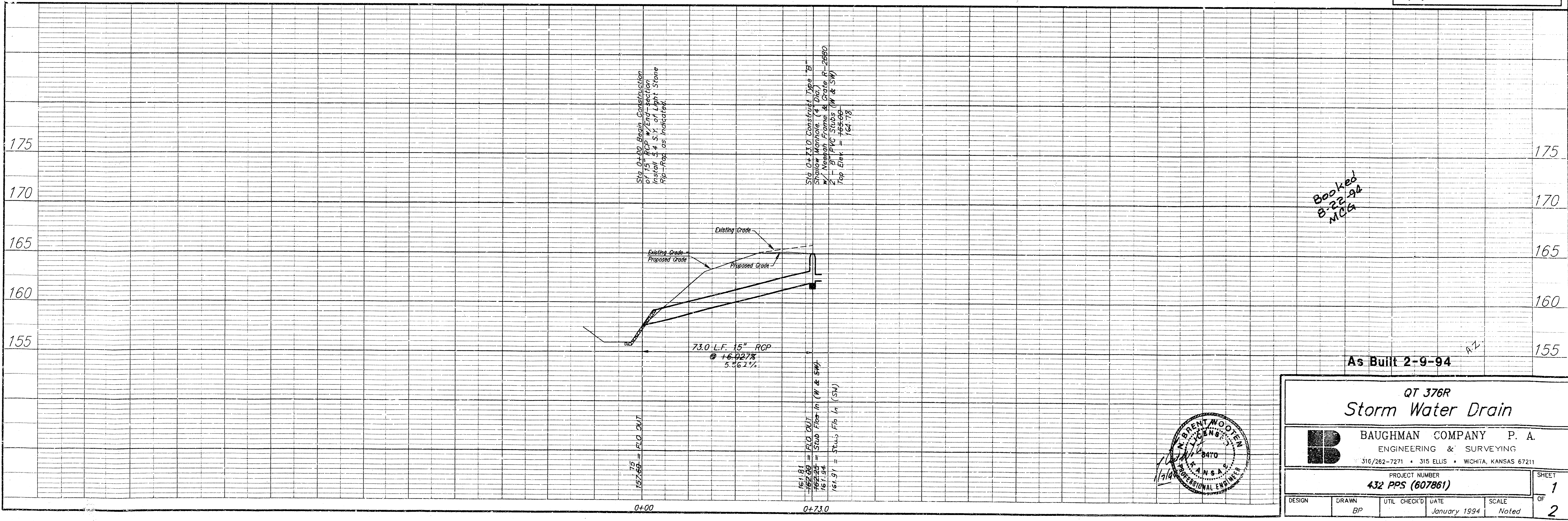
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QT 376R  
 Storm Water Drain

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PROJECT NUMBER  
 432 PPS (607861)

DESIGN DRAWN UTIL CHECK'D DATE SCALE SHEET  
 BP January 1994 Noted 1  
 OF 2

Booked  
 8-22-94  
 MGS