


STORM WATER SEWER LARKSFIELD PLACE PROJECT NO. 468-76-245-81790-000-000-001

CITY OF WICHITA, KANSAS
MICHAEL E. LINDEBAK, CITY ENGINEER
SWS NO. 352

GENERAL NOTES

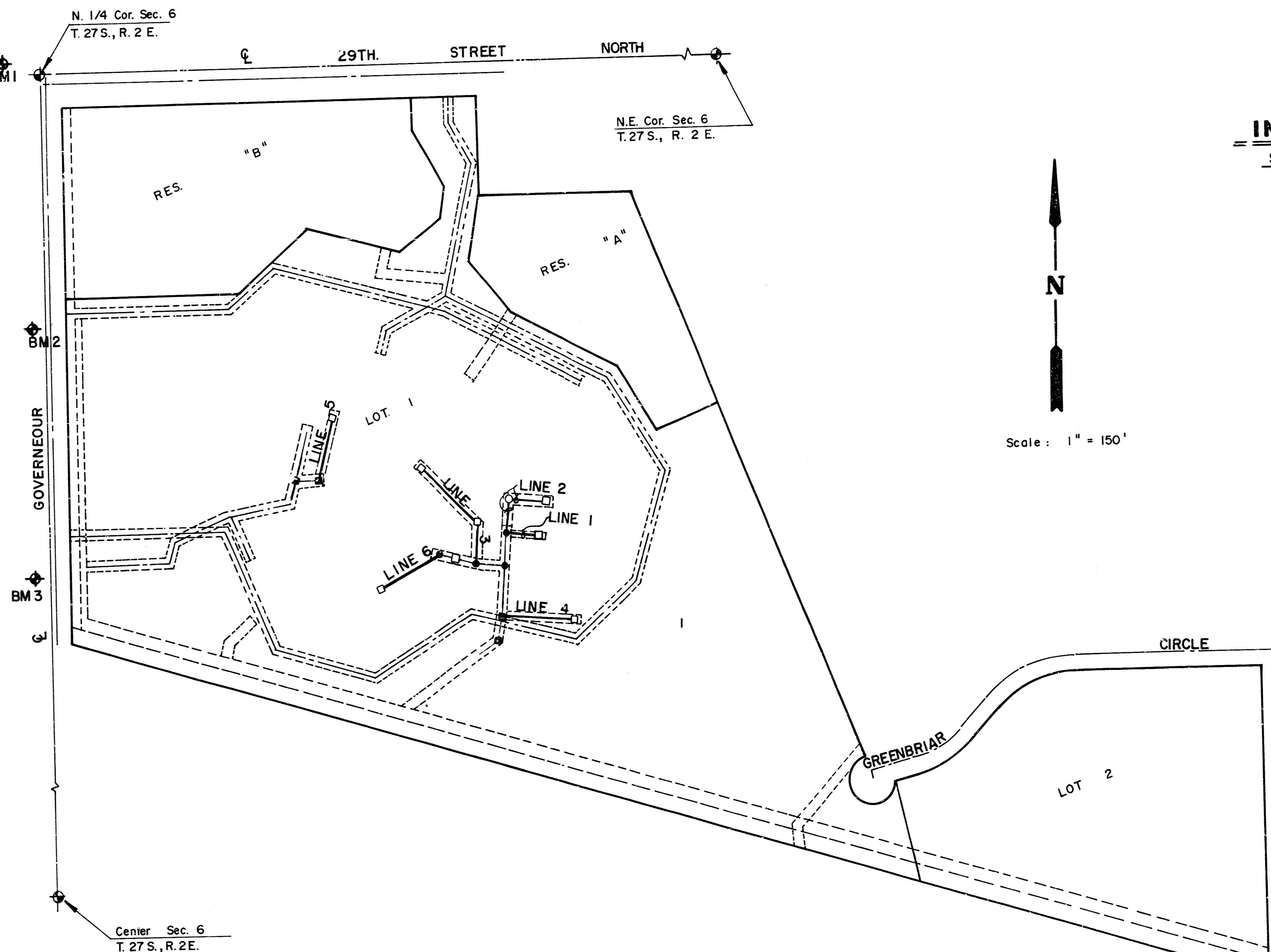
1. ALL CONCRETE SHALL BE STANDARD PAVING MIX UNLESS OTHERWISE NOTED.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR SHALL BE REQUIRED TO RE-ESTABLISH ANY PROPERTY IRONS WHICH ARE DAMAGED OR DESTROYED BY HIS CONSTRUCTION OPERATIONS. SUCH IRONS SHALL BE RE-ESTABLISHED BY A LICENSED LAND SURVEYOR OR A LICENSED PROFESSIONAL ENGINEER IN ACCORDANCE WITH STATE LAWS.
3. TREES TO BE REMOVED ARE MARKED . ALL TREES WHICH IN THE OPINION OF THE FIELD ENGINEER CAN BE SAVED, SHALL BE SAVED.
4. CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES OF CONSTRUCTION SCHEDULING.
5. EXISTING UTILITIES AND THEIR LOCATIONS, AS SHOWN ON THE PLANS, REPRESENT THE BEST INFORMATION OBTAINABLE FOR DESIGN. LOCATION INFORMATION HAS BEEN OBTAINED FROM THE VARIOUS UTILITY COMPANIES AND IS EITHER FROM COMPANY RECORD DRAWINGS OR COMPANY PROVIDED FIELD LOCATIONS. THE PLAN LOCATIONS SHOWN ARE NOT GUARANTEED. ADDITIONAL EXISTING UTILITIES MAY ALSO BE ENCOUNTERED.
6. The cost of breaking into and connecting with existing structures and existing pipe is subsidiary to the bid of sewer line.

NOTE: NOTIFY THE FOLLOWING COMPANIES PRIOR TO ANY EXCAVATION:

ARKLA GAS COMPANY	942-8350
BELL TELEPHONE COMPANY	1-316-571-2115
CABLEVISION	262-0661
KPXL COMPANY	263-7511
KANSAS GAS & ELECTRIC	264-1141
KANSAS ONE-CALL	1-800-344-7233
CITIES SERVICE	524-0491
KANSAS GAS SUPPLY	1-316-254-7243
CONTINENTAL PIPELINE COMPANY	1-316-681-2081
CO-OP REFINERY PIPELINE	1-316-221-2107

BENCH MARKS

- B.M. #1 Governour & 29th Street North, City of Wichita Bench Mark Disc, 75' West and 30.3' North of Quarter Section Corner 55' North and 85' West of Center Line of Pavement Governour and 29th Street North. Elevation 182.566
- B.M. #2 Railroad Spike in West face of West leg of "H" Pole Structure ± 500' South of 29th Street North on the West side of Governour. Elevation 187.676
- B.M. #3 Railroad Spike in West face of West leg of "H" Pole Structure ± 1,000' South of 29th Street North on the West side of Governour. Elevation 191.85



SPECIAL NOTE:
Grading & Lime stabilization of areas disturbed by this construction and the regrading required by the installation of these Storm Drains will be done by the Storm Sewer Contractor. The cost of this work shall be considered subsidiary to this project.

Subsequent to the survey and preparation of this plan much ongoing construction activity has and is taking place. It is the contractors responsibility to contact the utility companies for marking of their lines prior to excavation.






INDEX TO DRAWINGS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	LINE 1 & 2
3	LINE 3 & 4
4	LINE 5 & 6
5	DROP INLET DETAILS
6	MANHOLE DETAILS

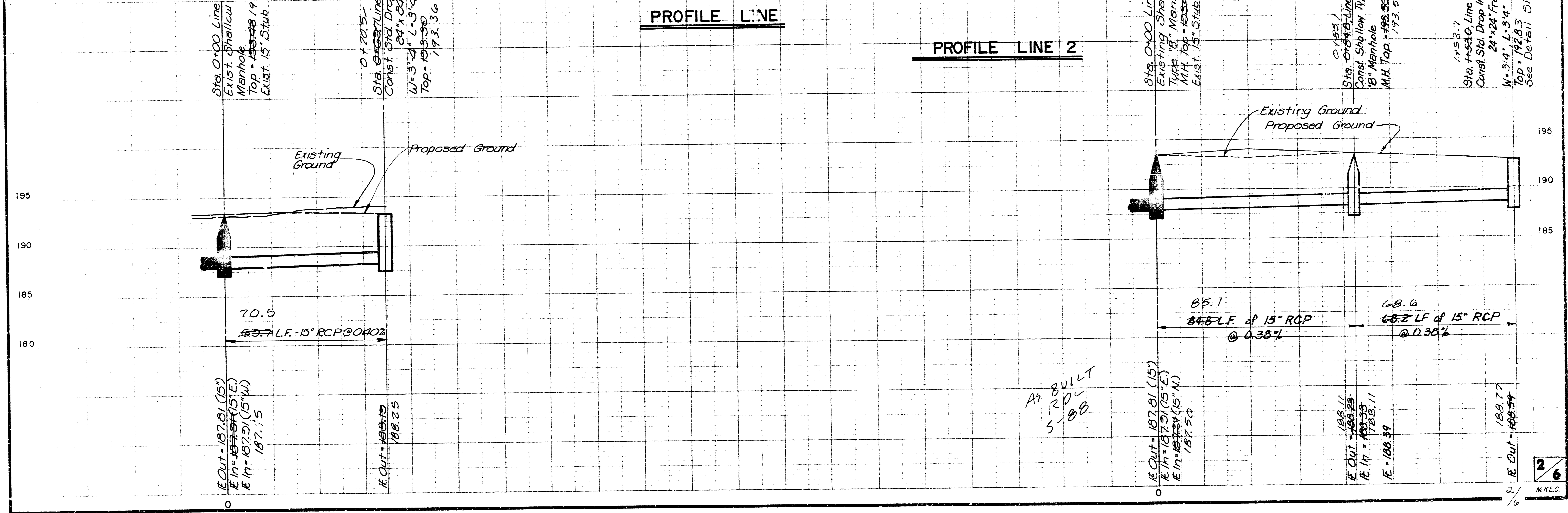
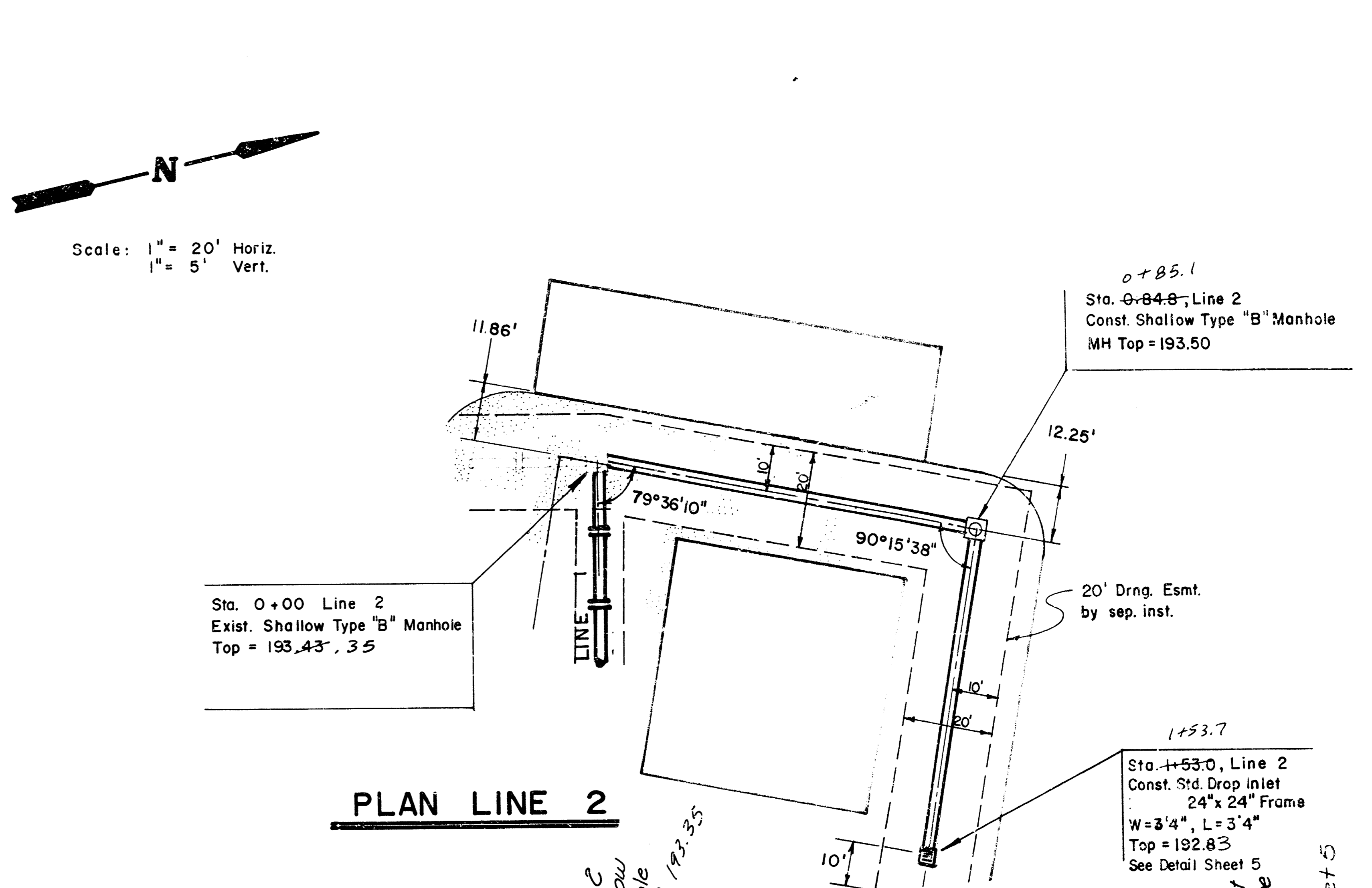
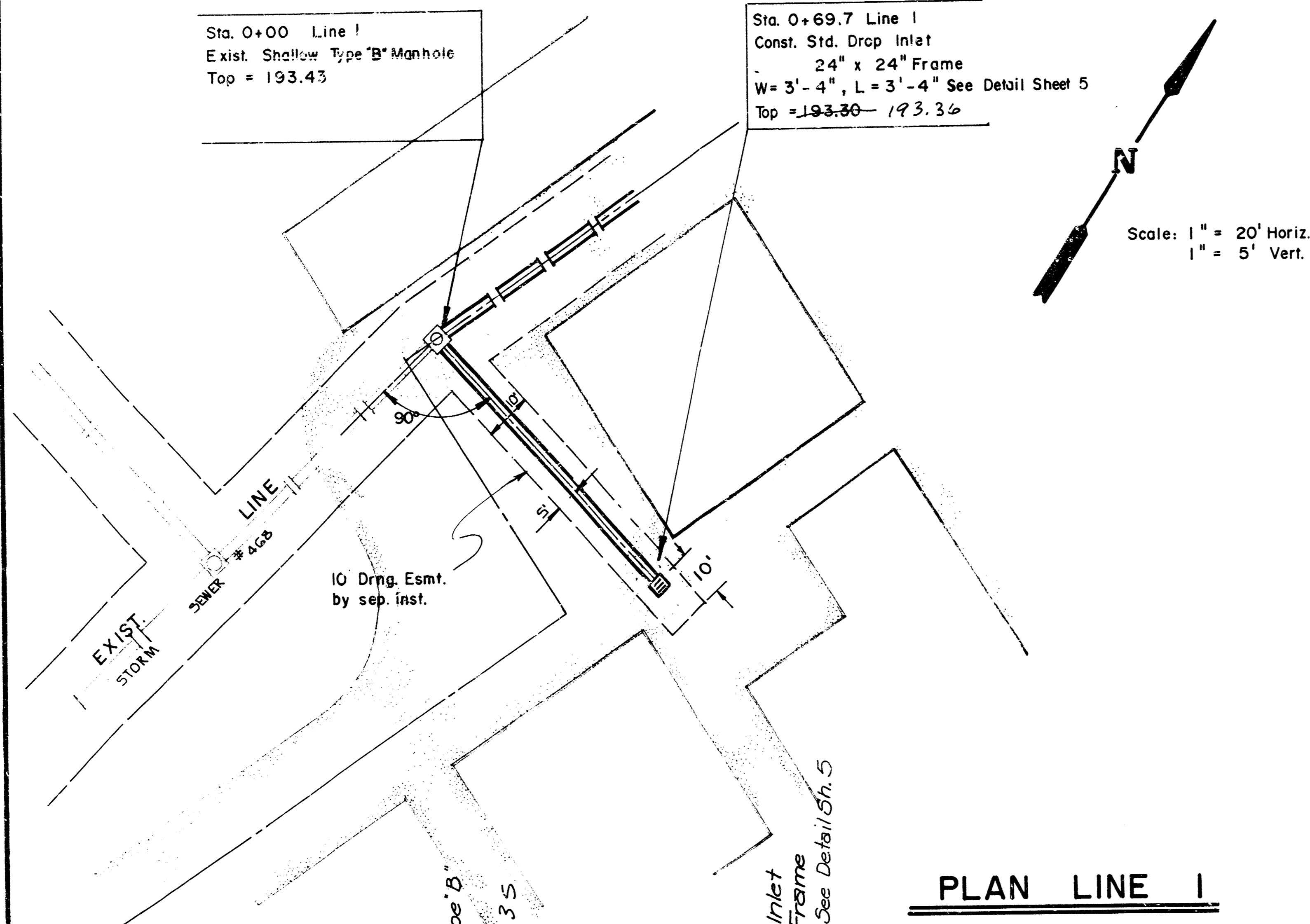


Scale: 1" = 150'

LEGEND

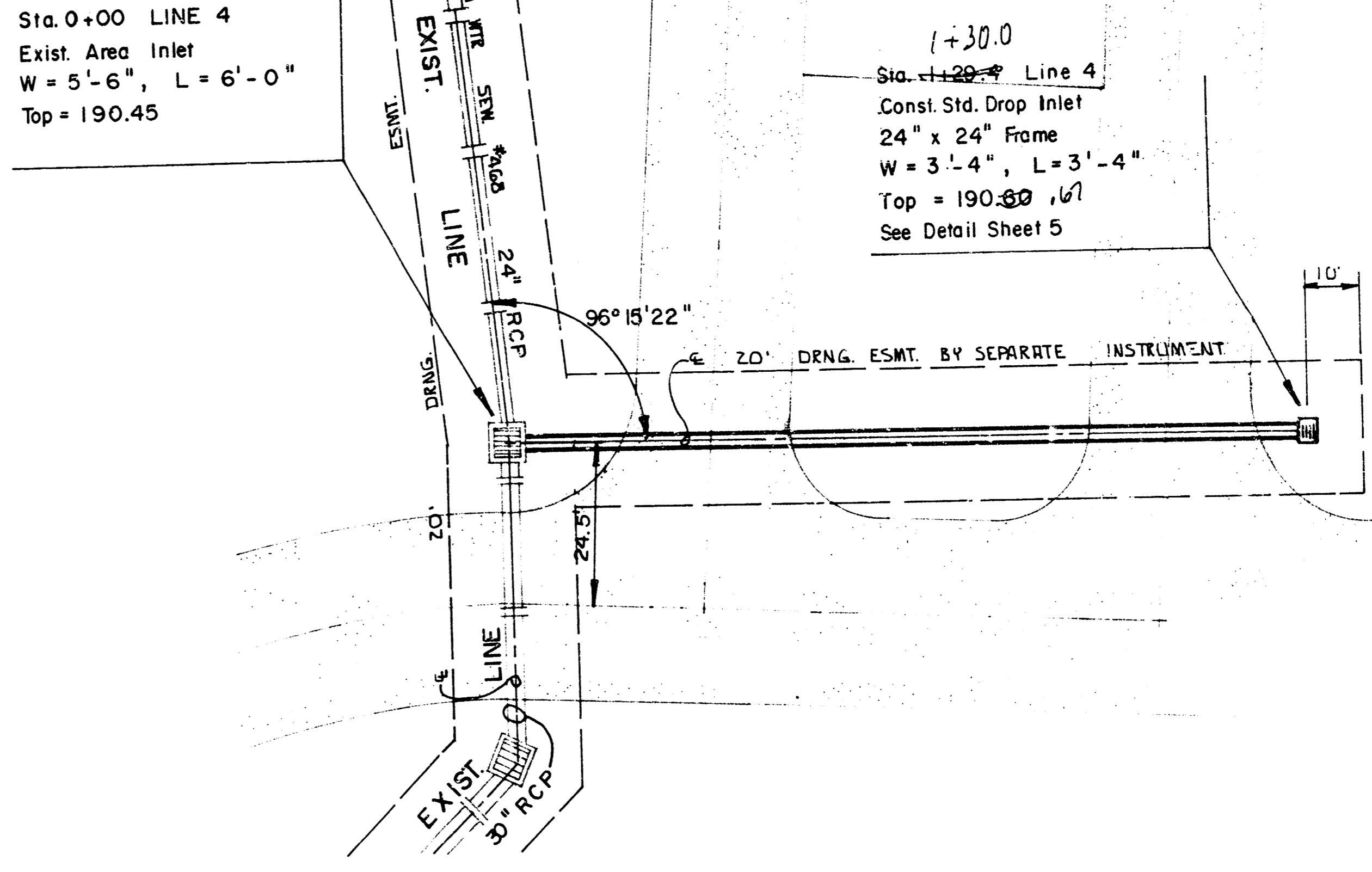
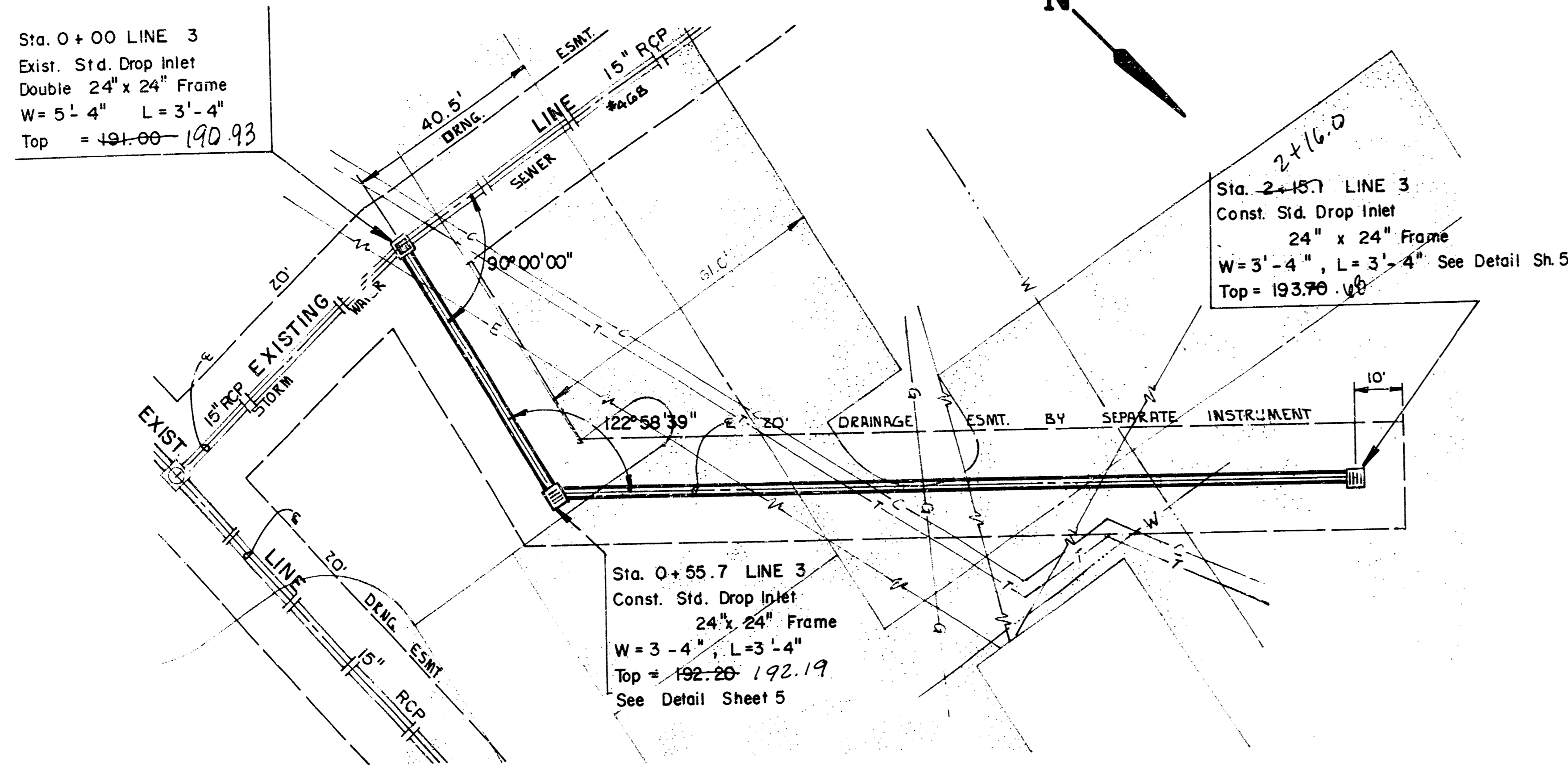
	Electric
	Gas
	Telephone
	Cable
	Water

	LARKSFIELD PLACE	Prepared by RCB
	STORM WATER SEWER PLANS	Checked by DLN
		Date NOV. 1987
MID-KANSAS ENGINEERING CONSULTANTS PA 3500 NORTH ROCK ROAD BUILDING #800 WICHITA, KANSAS 67226		Sheet 1 of 6



As BUILT
 R.O.
 5-88

Scale: 1" = 20' Horiz.
 1" = 5' Vert.



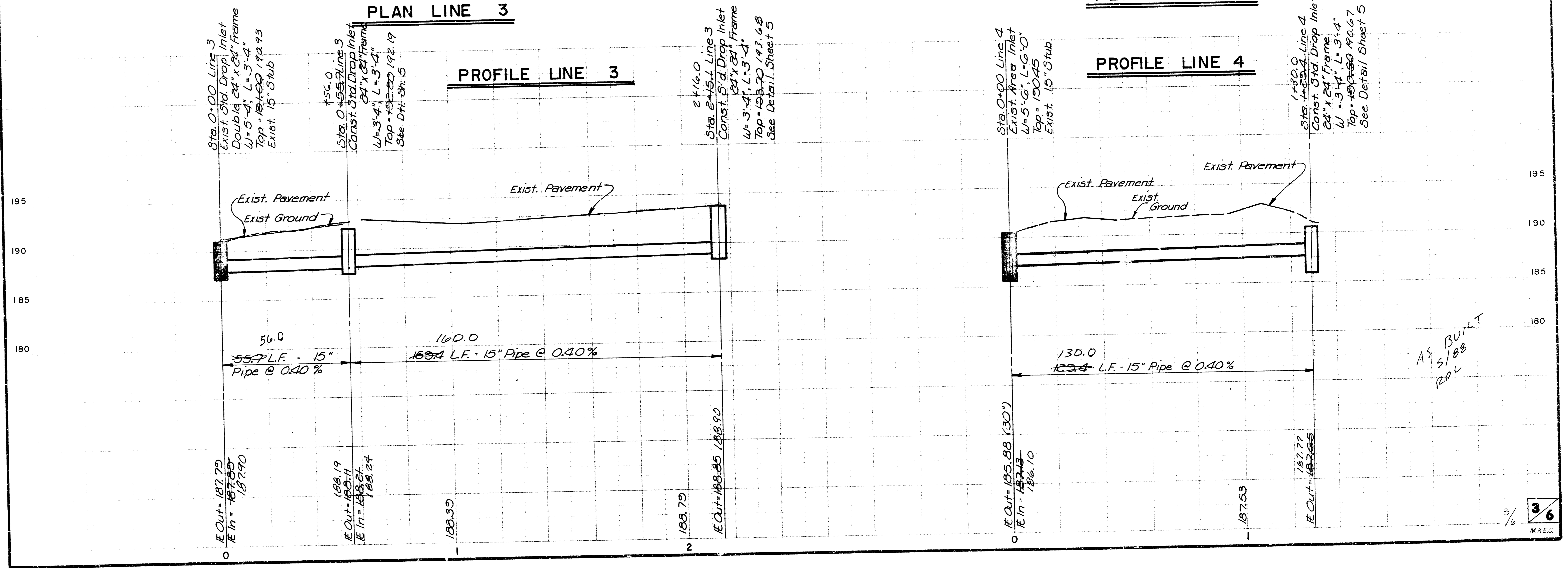
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 1" = 5' Vert.

PLAN LINE 3

PLAN LINE 4

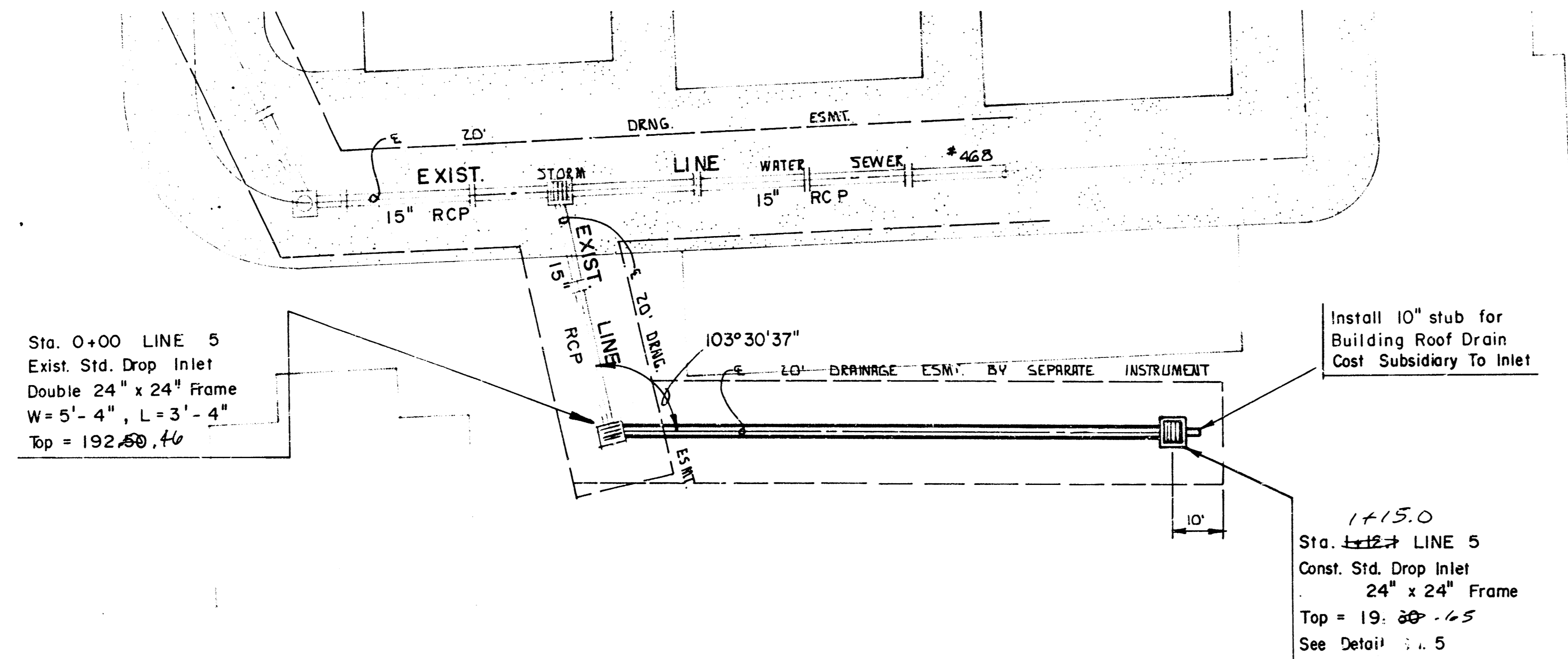
PROFILE LINE 3

PROFILE LINE 4



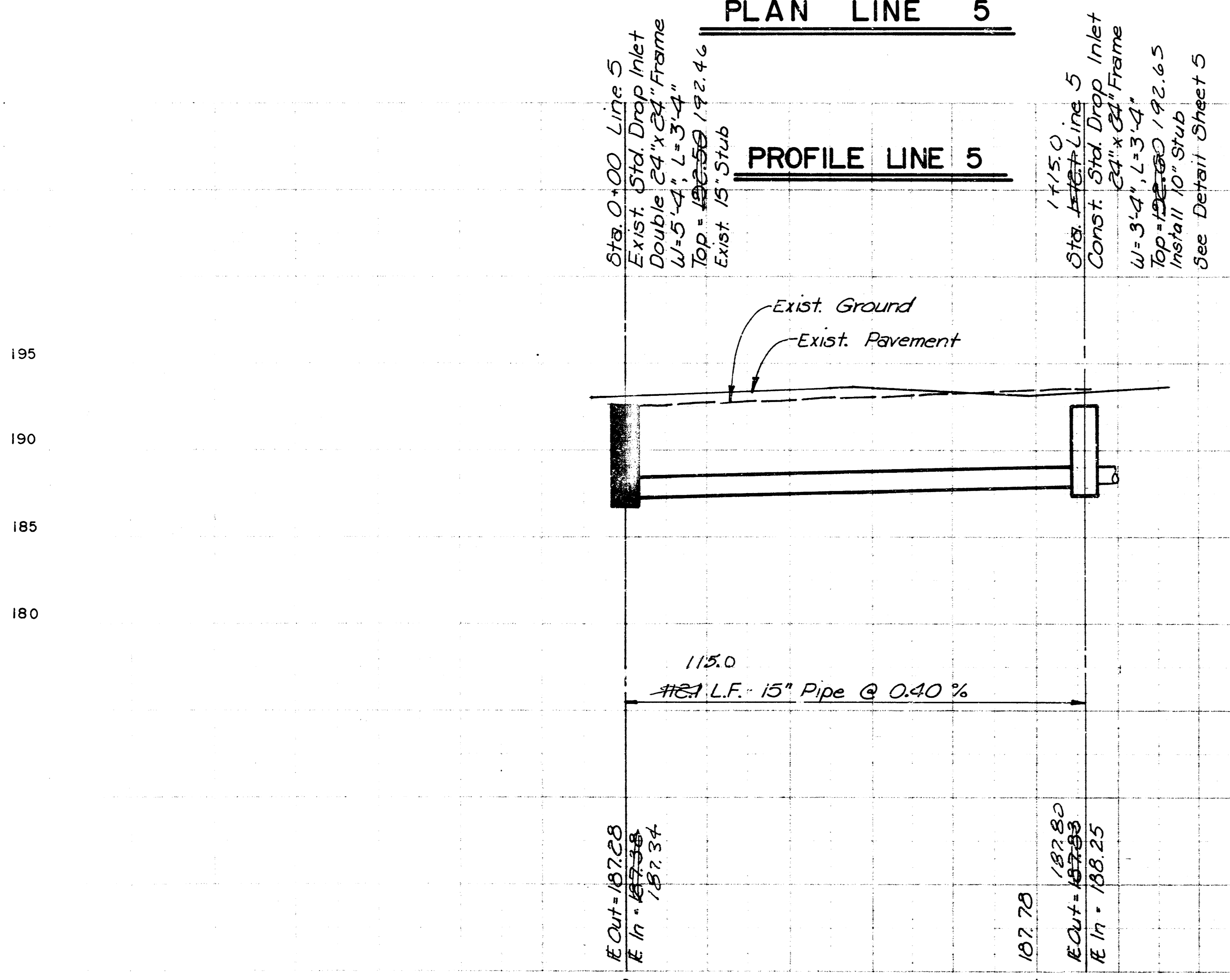
AS BUILT
 5/88
 RCL

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 1" = 5' Vert.

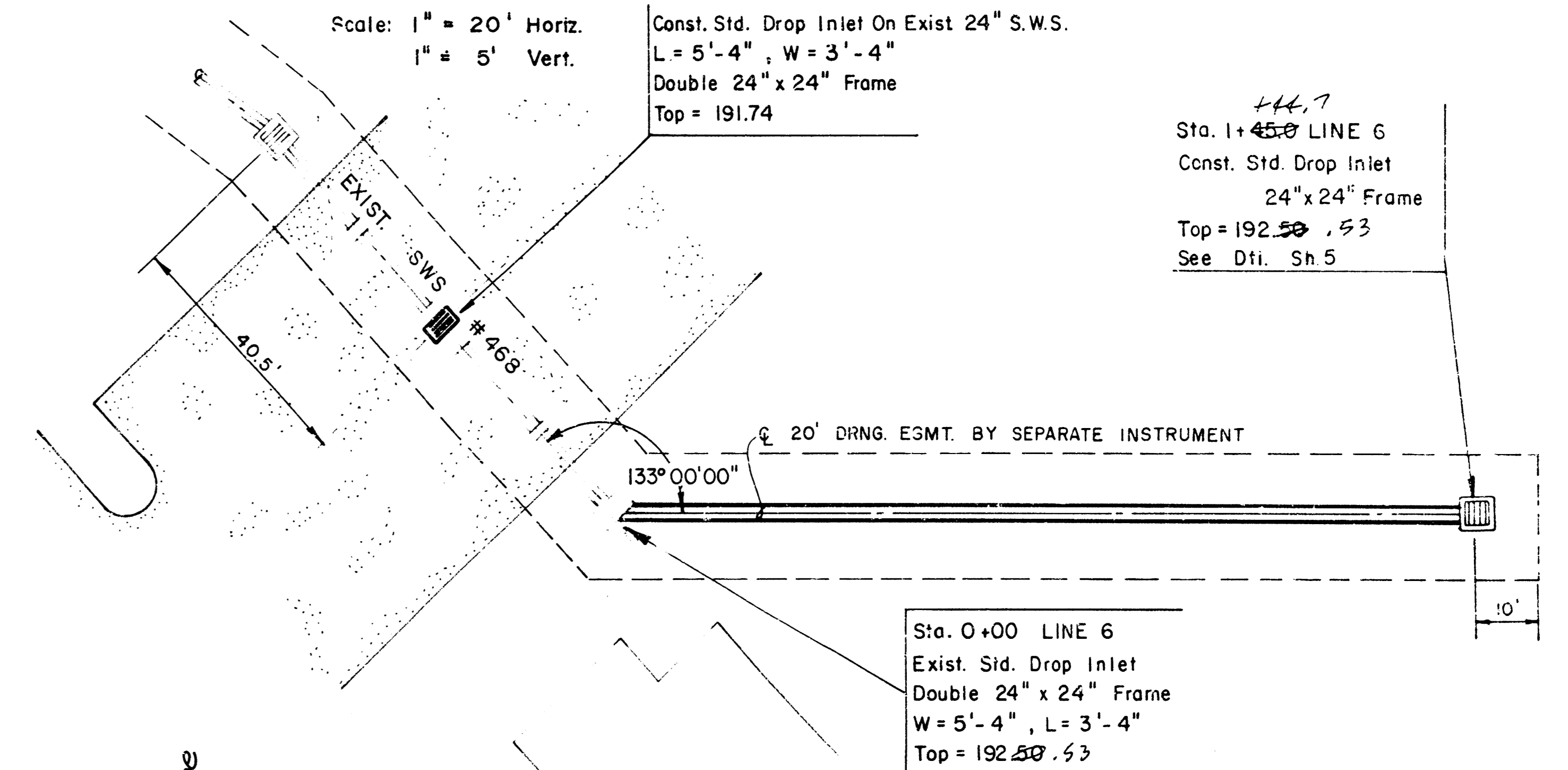


PLAN LINE 5

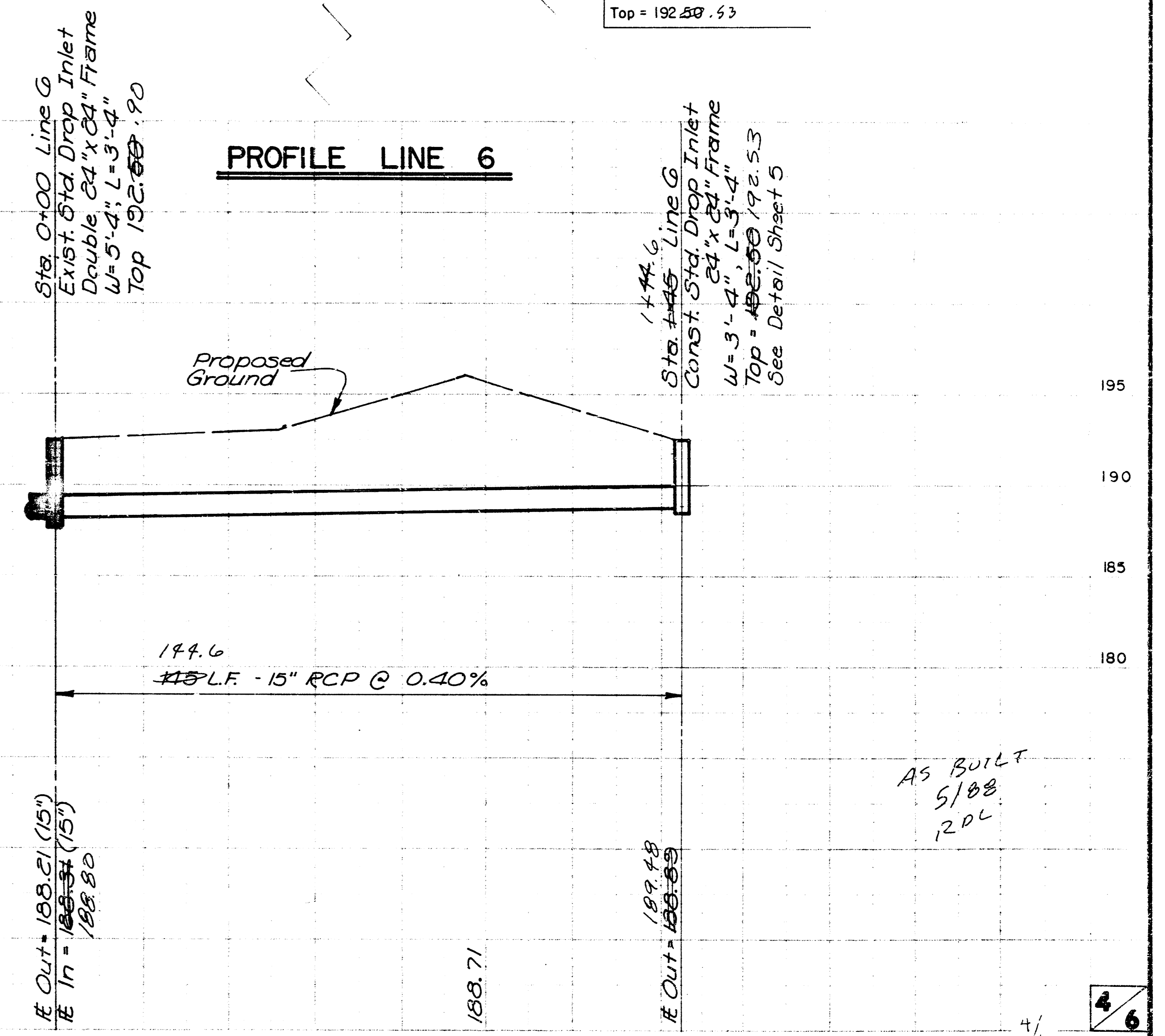
PROFILE LINE 5



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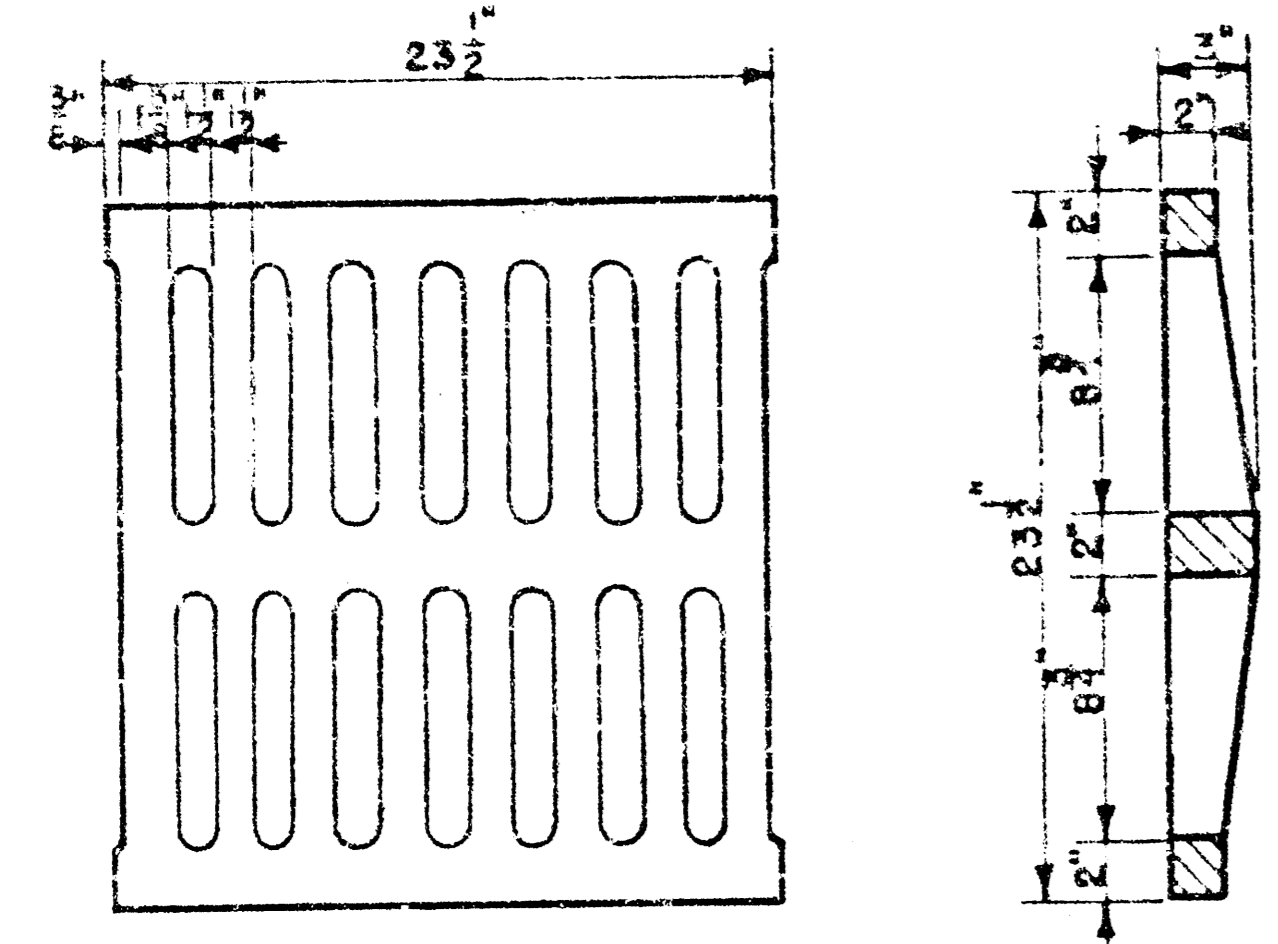
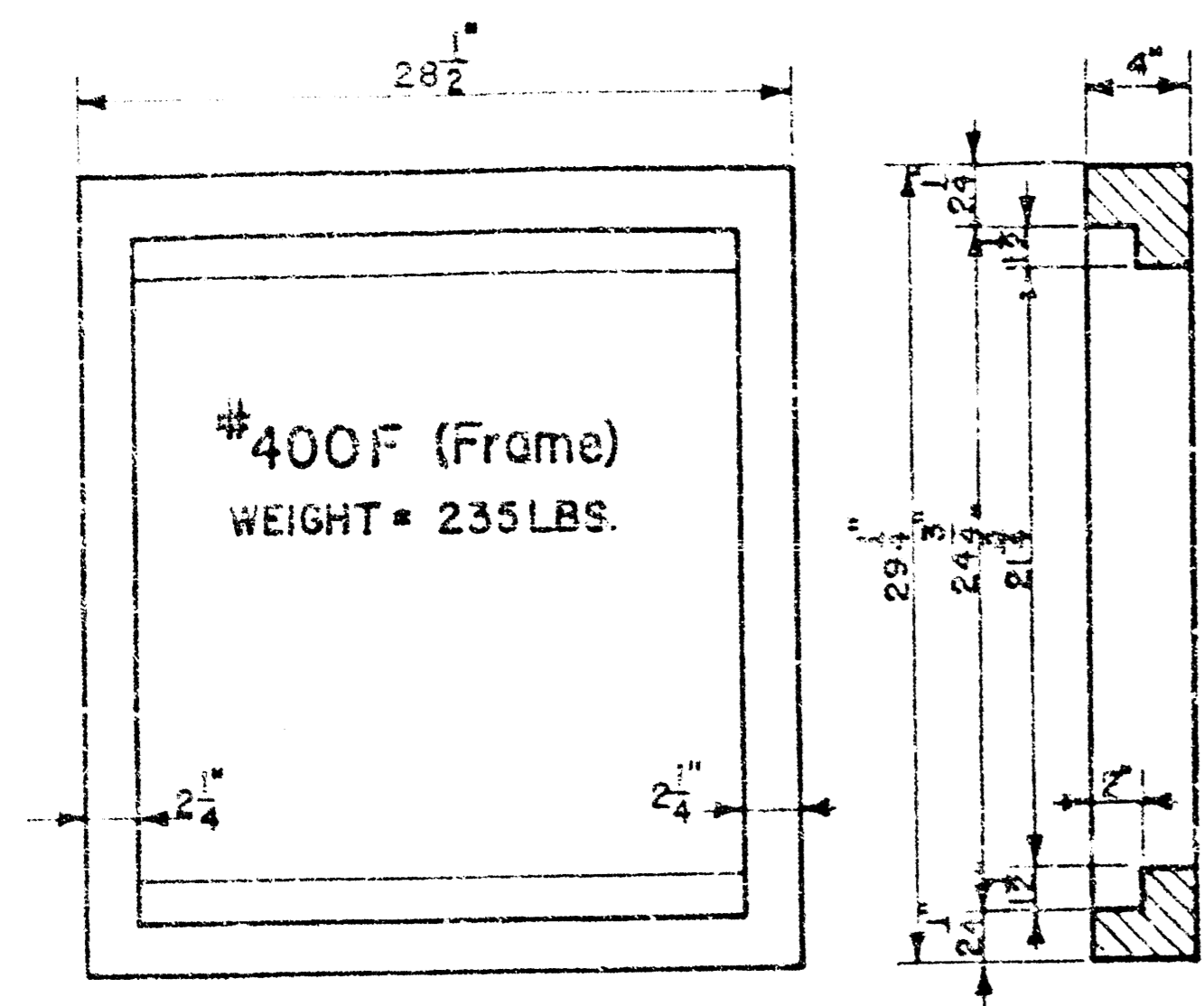


PROFILE LINE 6

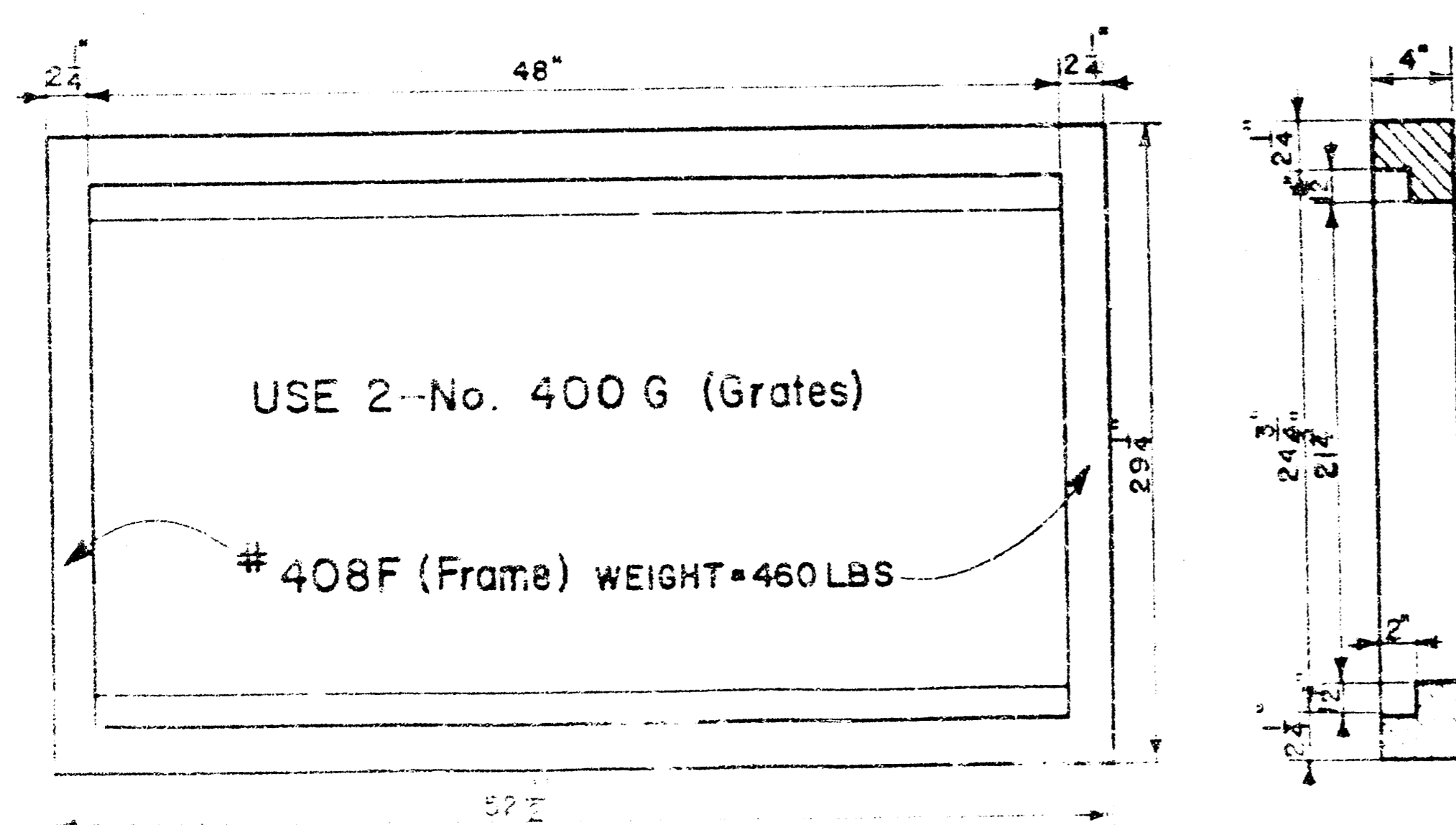


AS BUILT
 5/88
 RDL

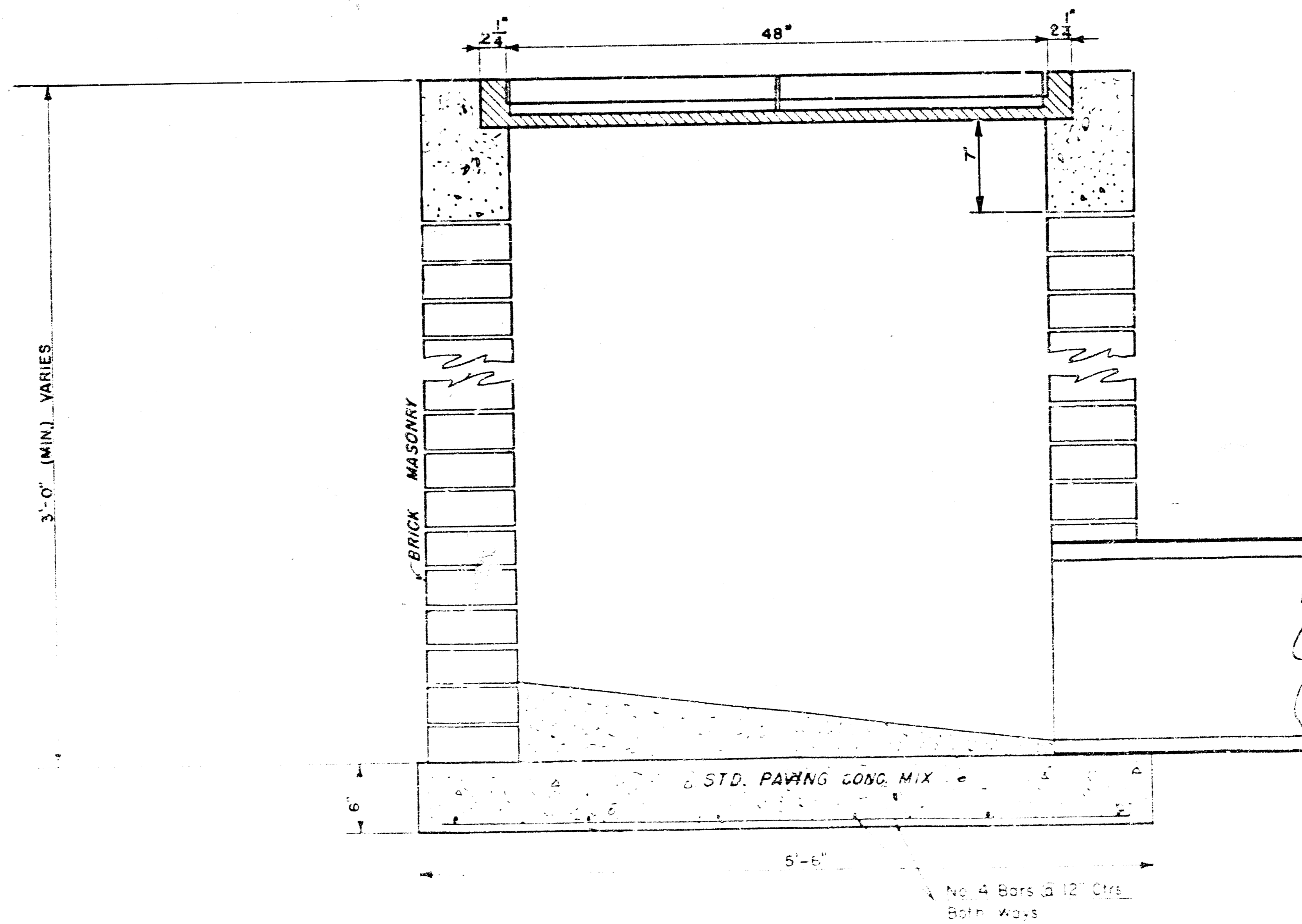
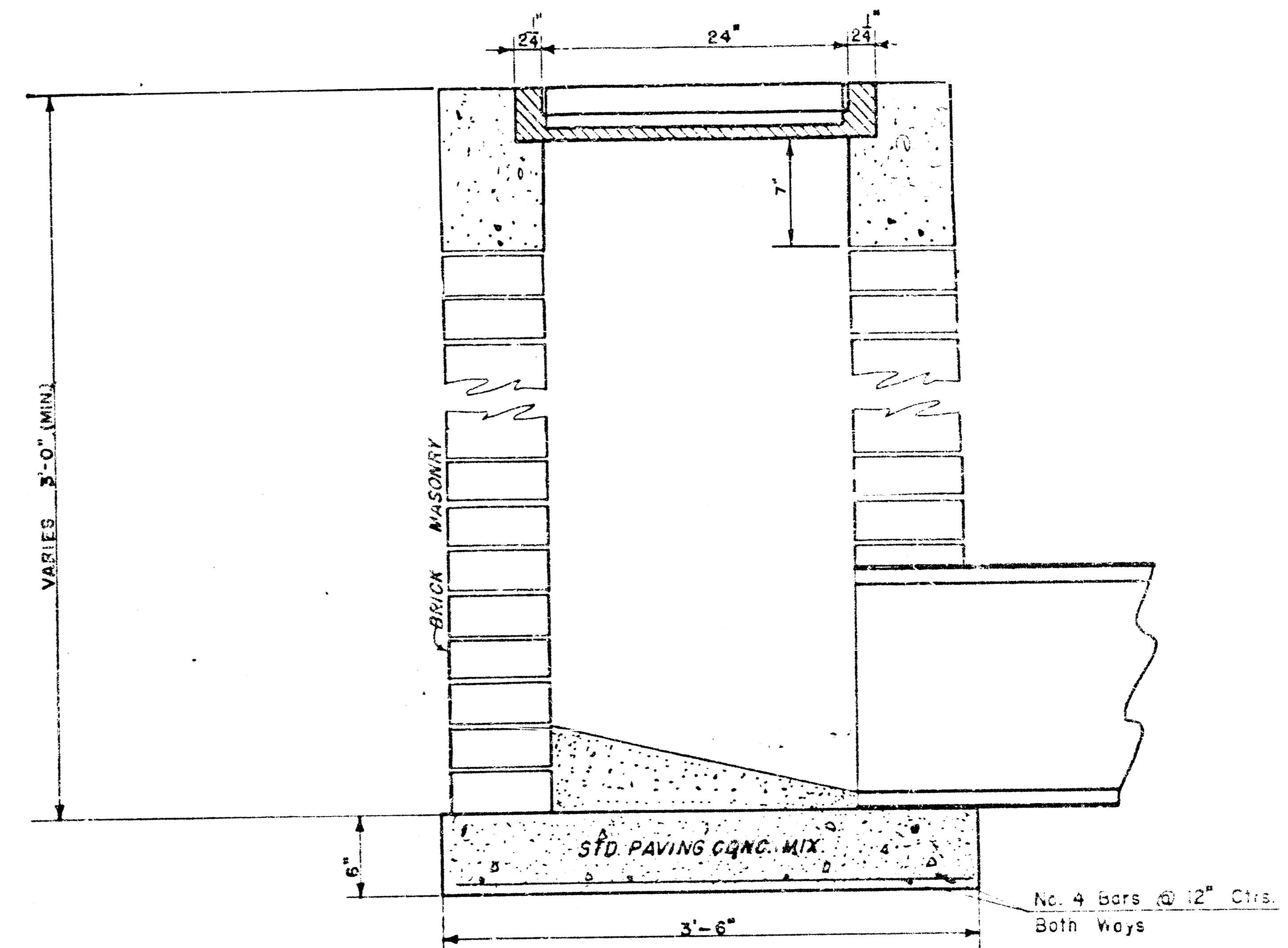
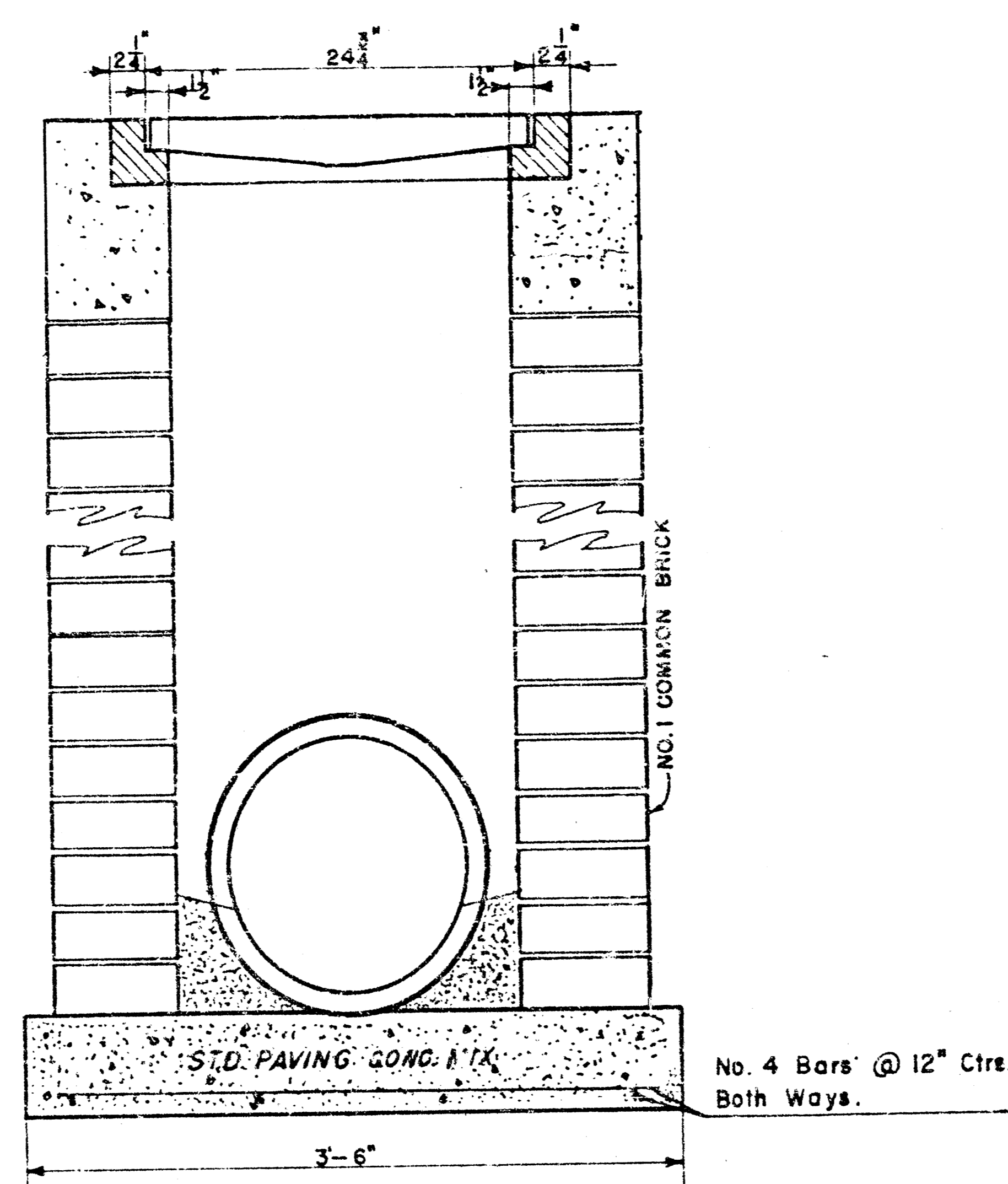
NOTE: Grates shall be imprinted on the top surface with "CITY OF WICHITA" using letters at least 1" in height. Other marking methods may be used only if approved by the engineer.



24"x24" Frame & Grate Detail

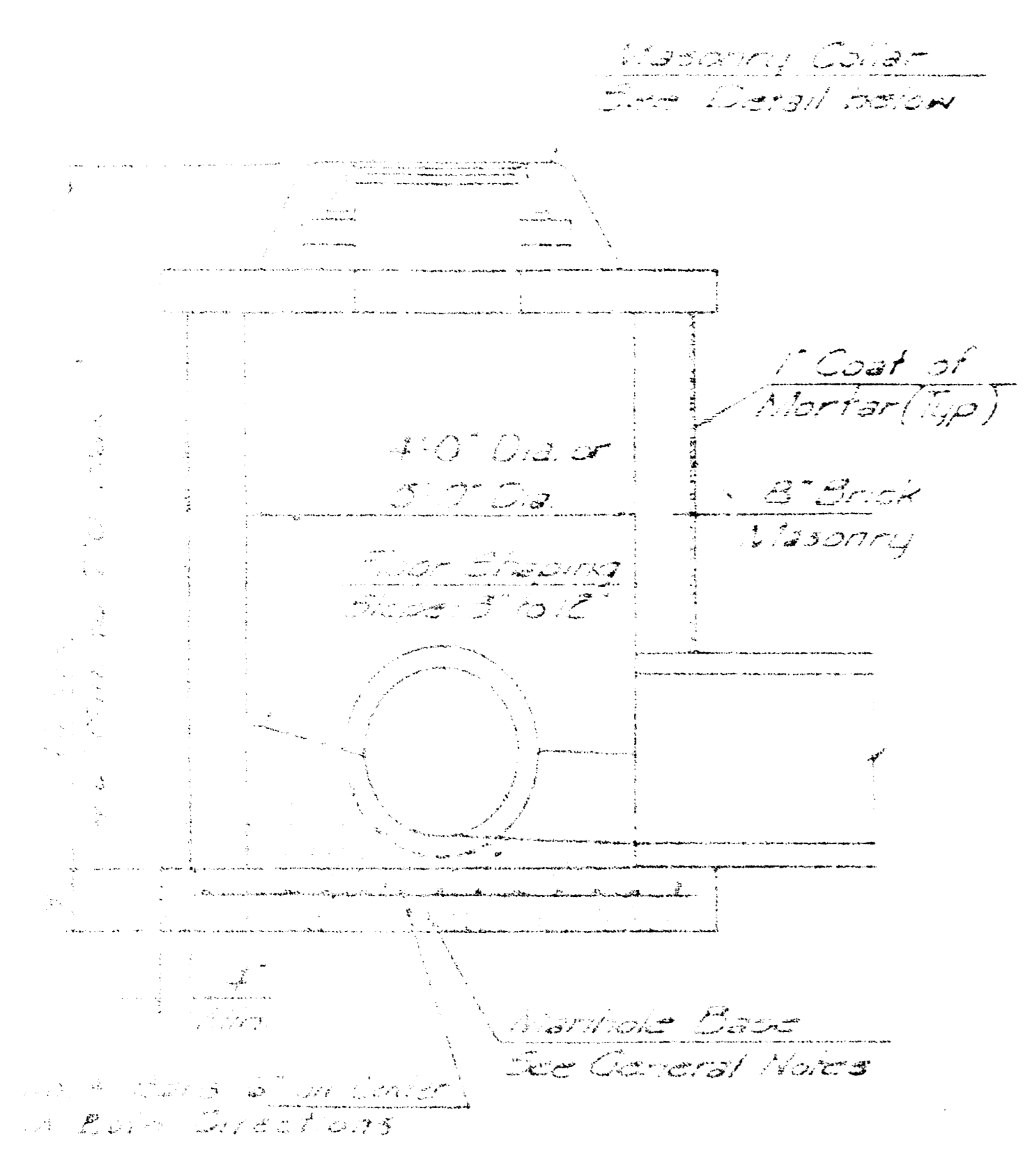


Double 24"x24" Frame Detail

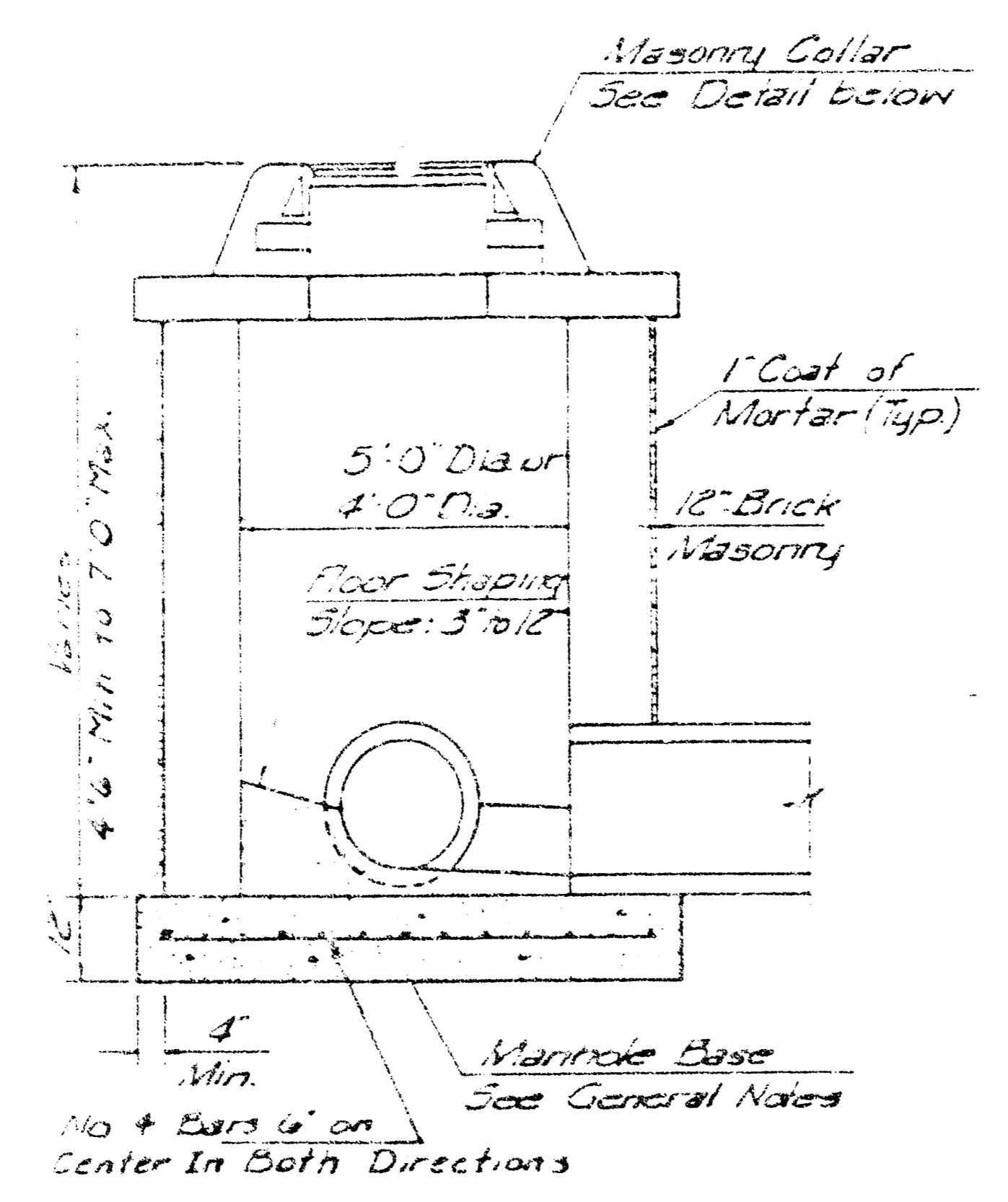


DROP INLET DETAILS

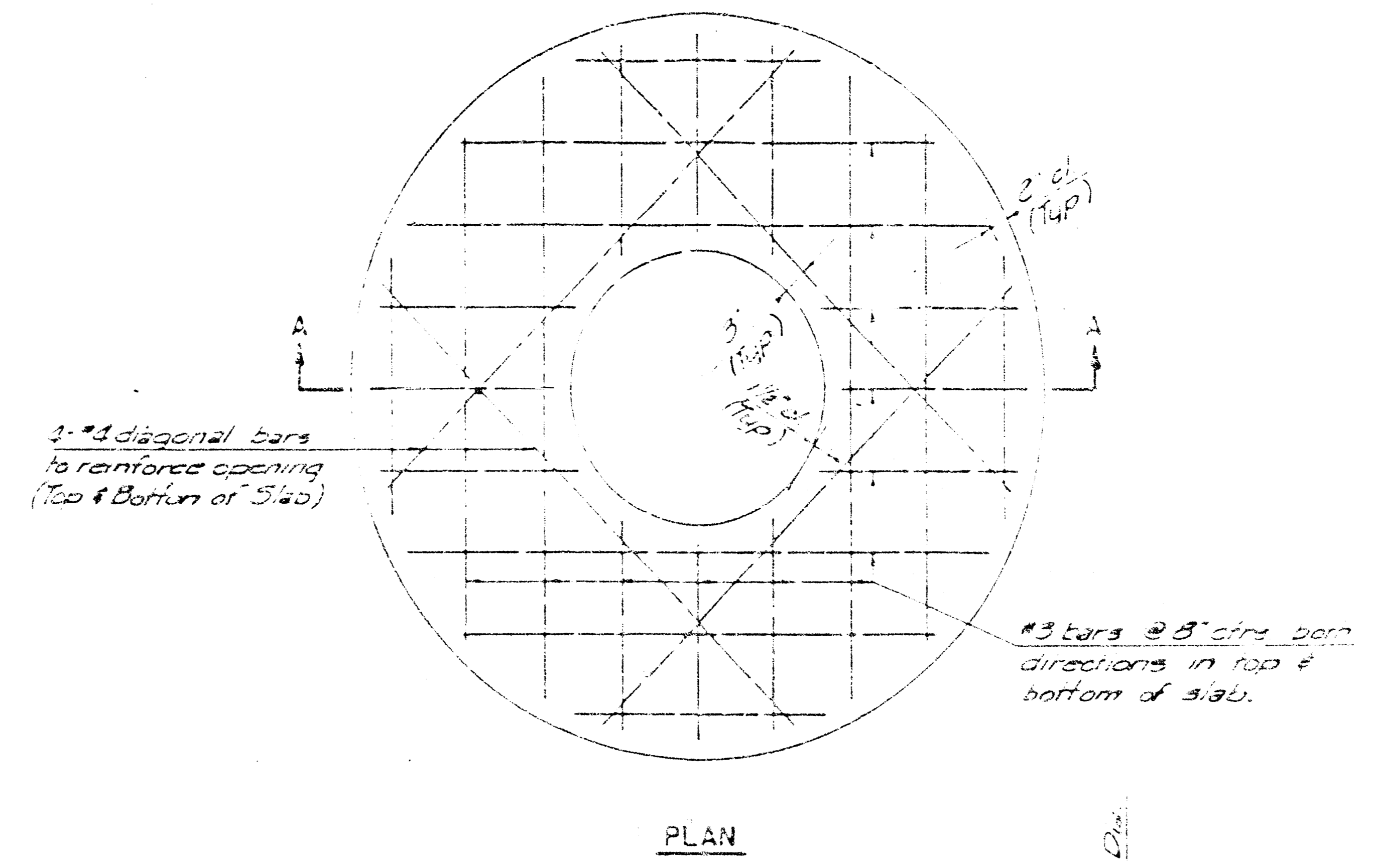
M.E. Lindbak, City Engineer
 City of Wichita, Kansas
 Project 468-76-245-81790-000-000-001
 Project No.
 Date
 SCALE: 1 1/2" = 1'-0"



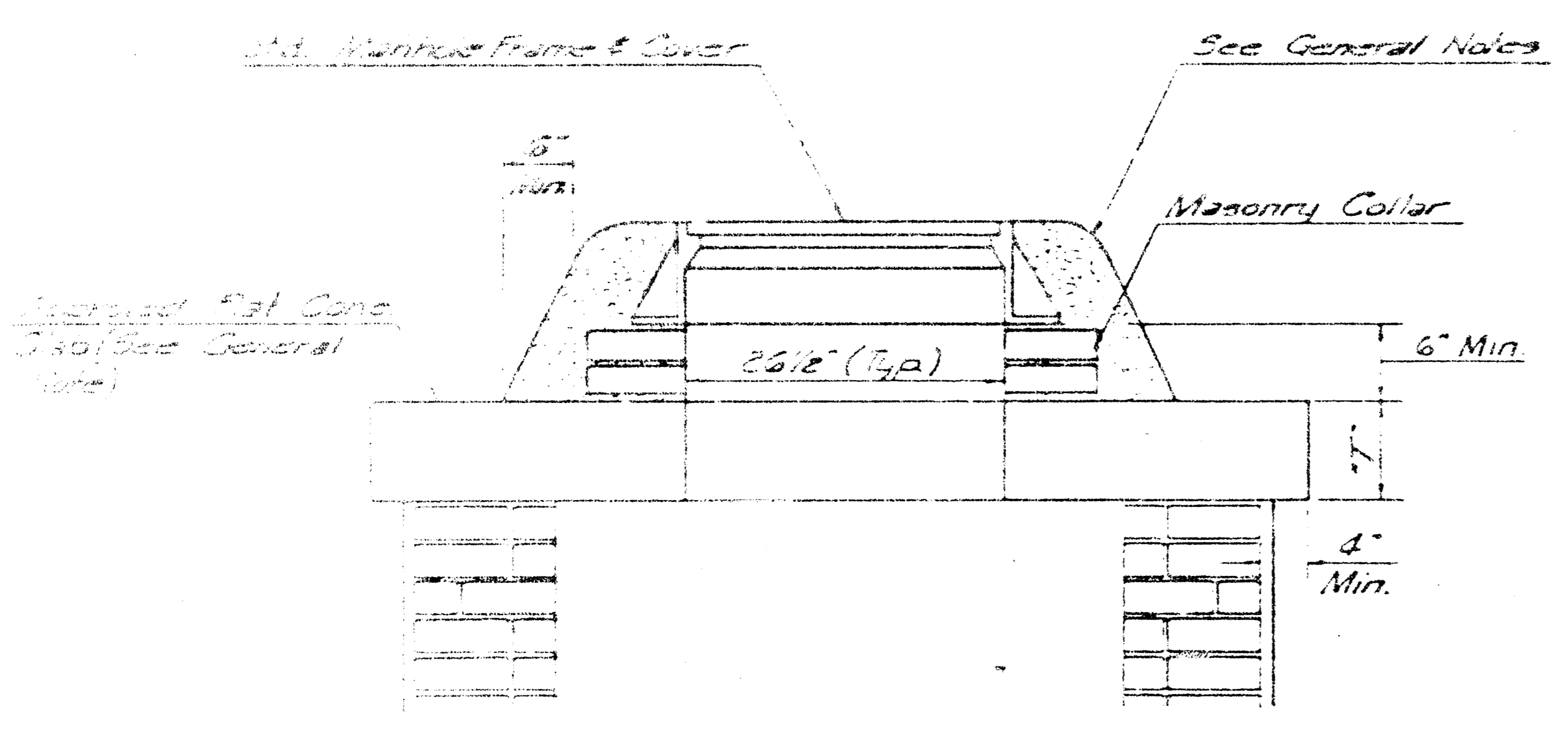
SHALLOW TYPE "A" MANHOLE



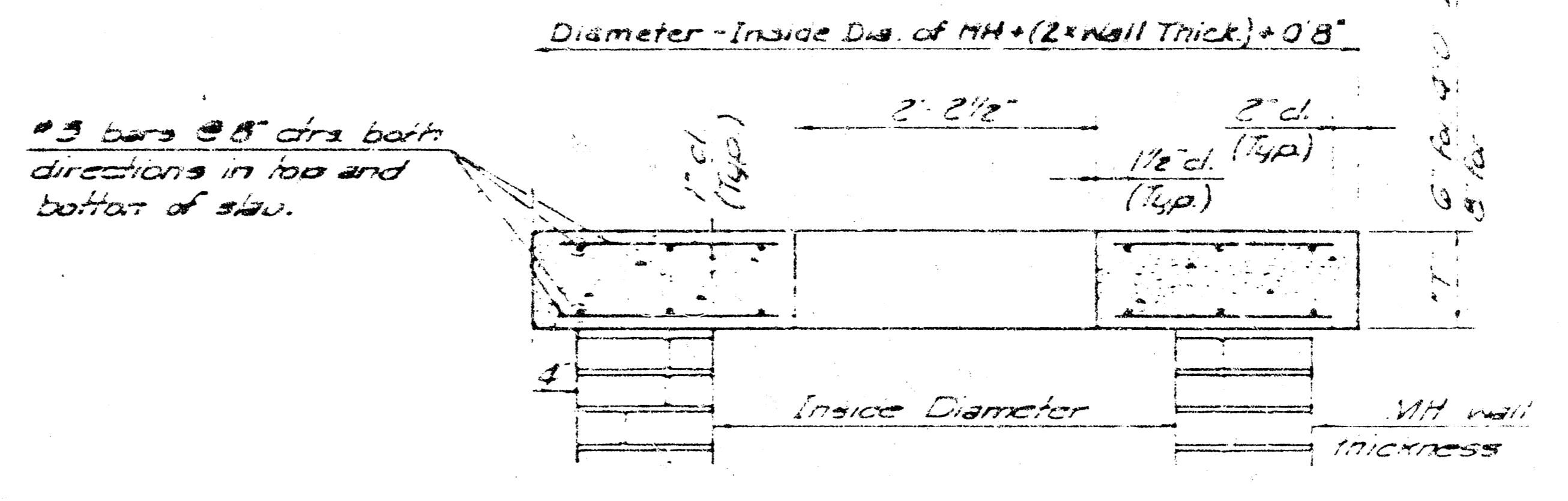
SHALLOW TYPE "B" MANHOLE



PLAN

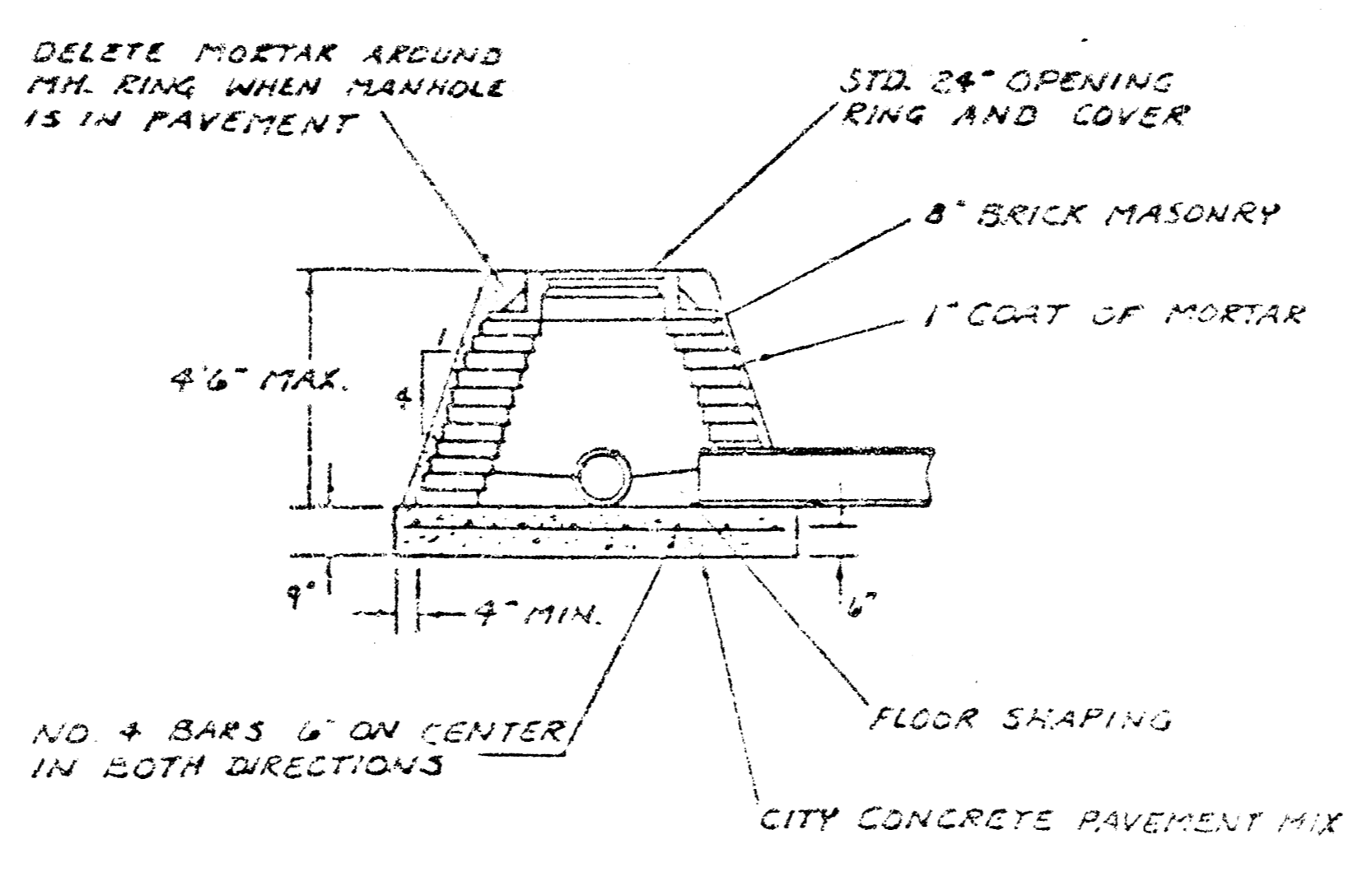


MASONRY COLLAR DETAIL

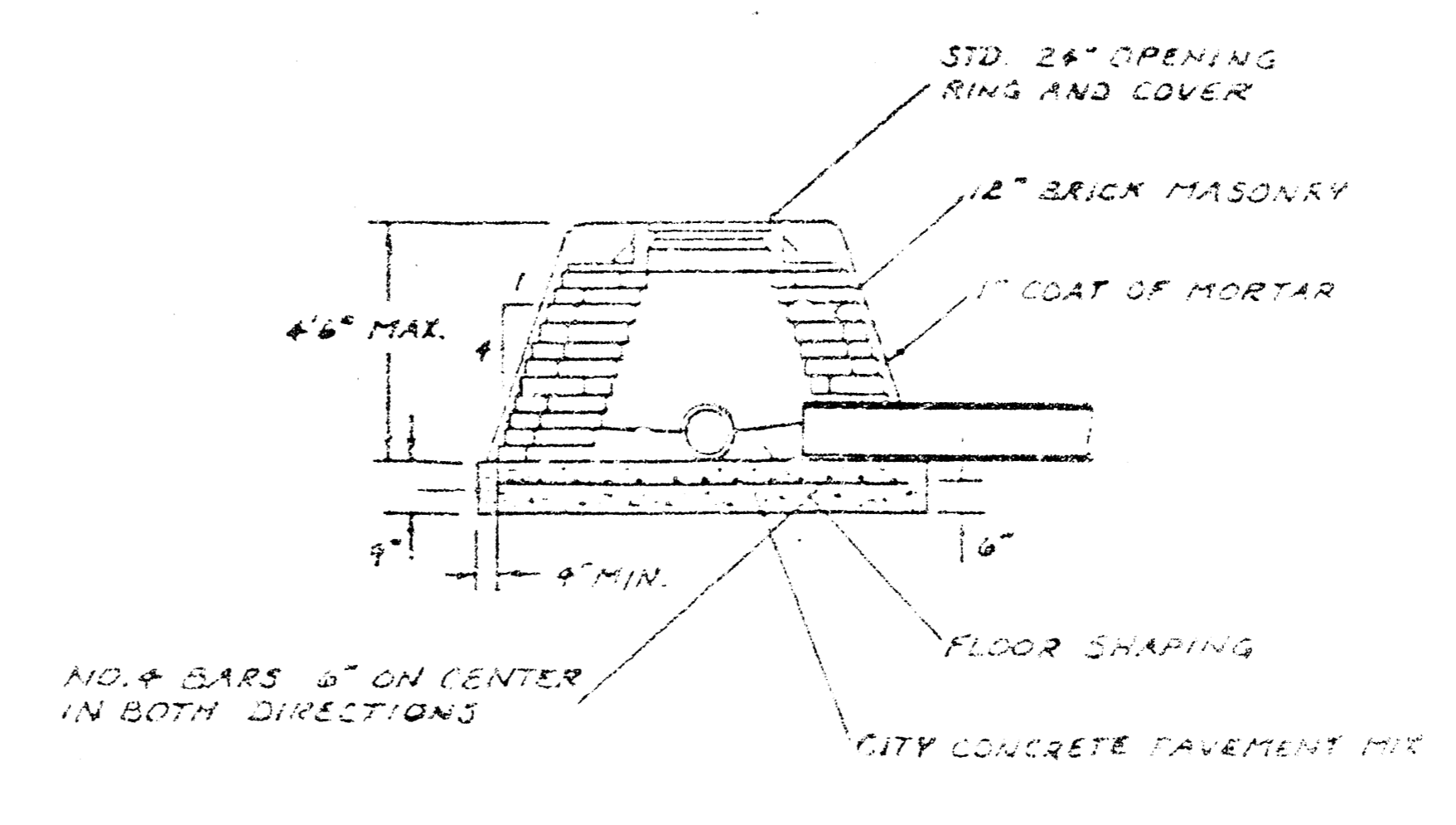


SECTION A-A

FLAT CONCRETE SLAB DETAILS



SPECIAL SHALLOW TYPE "A" MANHOLE



SPECIAL SHALLOW TYPE "B" MANHOLE

- GENERAL NOTES
1. MORTAR USED IN MASONRY CONSTRUCTION SHALL CONTAIN 3 PARTS OF PORTLAND CEMENT TO 1 PART OF SAND. CONCRETE USED IN MANHOLE BASES SHALL CONFORM TO THE SPECIFICATIONS OF CONCRETE FOR CONCRETE PAVEMENT CONSTRUCTION AS SPECIFIED IN THE CITY STANDARD PAVING SPECIFICATIONS USING CITY APPROVED PORTLAND CEMENT WITHOUT AIR ENTRAINING ADJUSTMENTS. MORTAR SHALL BE MIXED USING THE MANHOLE RING AS SHOWN ON THE DRAWINGS WITH MANHOLES AND MANHOLE COVERS IN UNPAVED AREAS. TYPE "A" SHALLOW MANHOLES AND SPECIAL SHALLOW MANHOLES SHALL BE 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 3" COMPRISED MANHOLE BASES WITHOUT LIDS 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 AT LEAST THE BOTTOM OF THE MANHOLE BASE. ALL JOISTS FOR MANHOLES AND INSTALLING REINFORCING STEEL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.
 3. THE FLOORS OF ALL MANHOLES SHALL BE SHAPED WITH A FLOW CHANNELS SUCH THAT THE MANHOLES WILL BE SELF-CLEANING AND FREE OF WEAR AND TEAR. WEAR SHALL BE DEPOSITED AS DEBRIS PLUGS THROUGH THE MANHOLE FROM AND NOT BE PLACED TO THE OUTLET PIPE. FLOW CHANNELS SHALL BE PLACED TO MATCH THE BOTTOM VALVES OF THE INFLUING PIPES AND THE OUTLET PIPE AS SHOWN ON THE DRAWINGS. MANHOLE FLOORS SHALL HAVE SLOPES OF 3 INCHES PER FOOT IN THE AREAS OUTSIDE OF THE FLOW CHANNELS SLANTED TOWARD THE FLOW CHANNELS. PIPES LAID THROUGH MANHOLES SHALL HAVE THE TOP HALF REINFORCED WITH LINES FOR THE FULL INSIDE DIAMETER OF THE MANHOLE. MANHOLE BARS SHALL THEN BE SHAPED AROUND THE BOTTOM HALF OF THE PIPE KEYWAY FORMING THE FLOW CHANNEL.
 4. PIPES INSTALLED WITHIN THE EXCAVATION MADE FOR THE MANHOLE SHALL BE GRADED WITH CONCRETE TO THE LIMITS OF THE MANHOLE EXCAVATION. WHEN CLAY PIPE IS USED, THE GRADE SHALL LIE WITHIN 1/4" OF THE CLAY PIPE JOINT IN A MANNER WHICH WILL MAINTAIN THE PERMEABILITY OF THE JOINT. JOISTS OF GRADE WITHIN MANHOLE EXCAVATION OR TO CLAY PIPE JOISTS INSTALLED IN MANHOLE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.
 5. 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.
 6. THE CROWN OF INFLUING PIPES SHALL NEVER BE SET LOWER THAN THE CROWN OF THE OUTFLUING PIPE.
 7. 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.

CITY OF WICHITA, KANSAS
STANDARD SHALLOW MANHOLES
TYPE "A" AND TYPE "B"

PROJ. NO. 48876 P&S 01/10/10

10 2 4 7