

CITY OF WICHITA, KANSAS  
 MICHAEL E. LINDEBAK, P.E., CITY ENGINEER

# STORM WATER SEWER NO. 431

## FOR OXFORD ADDITION

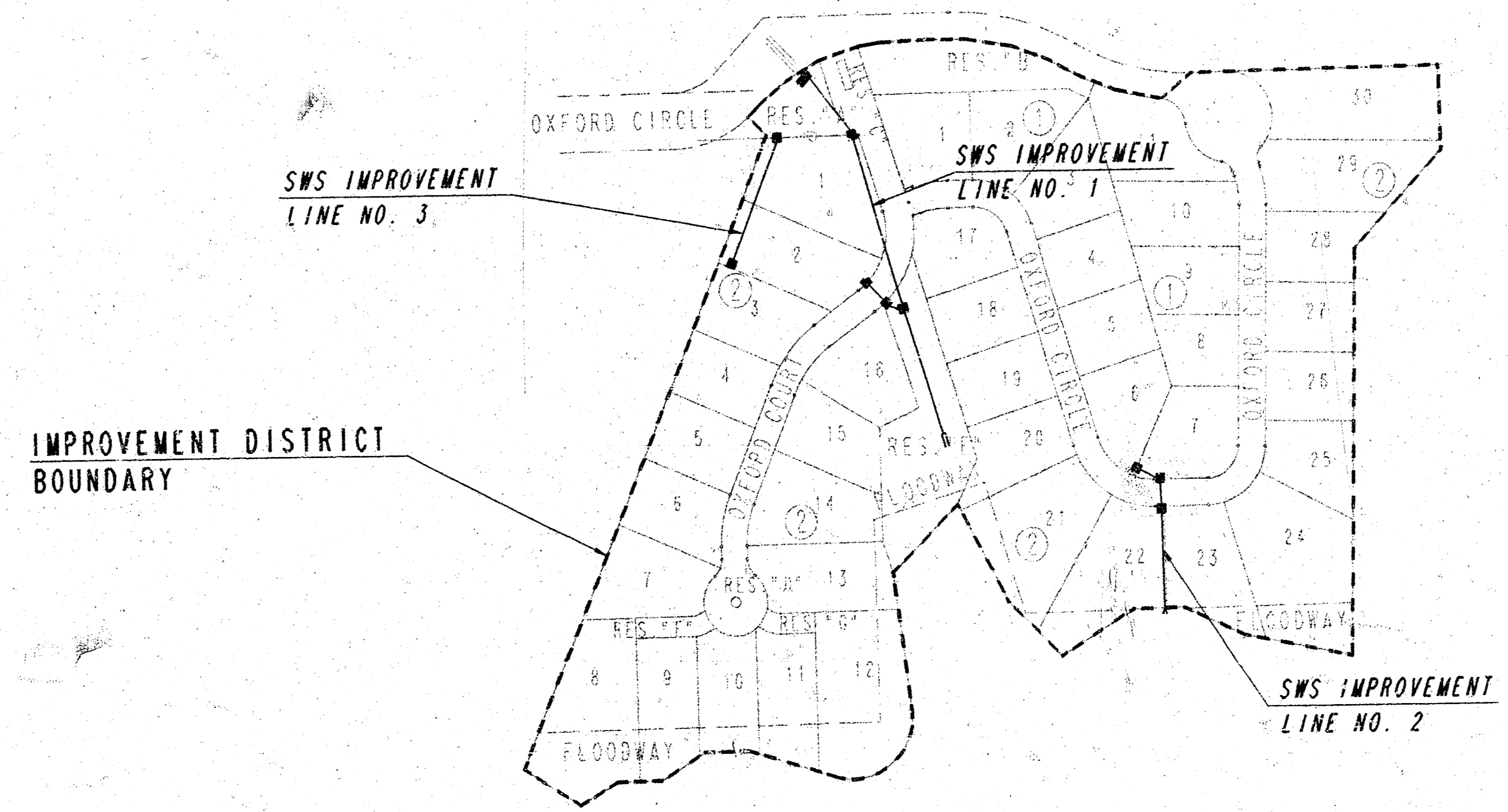
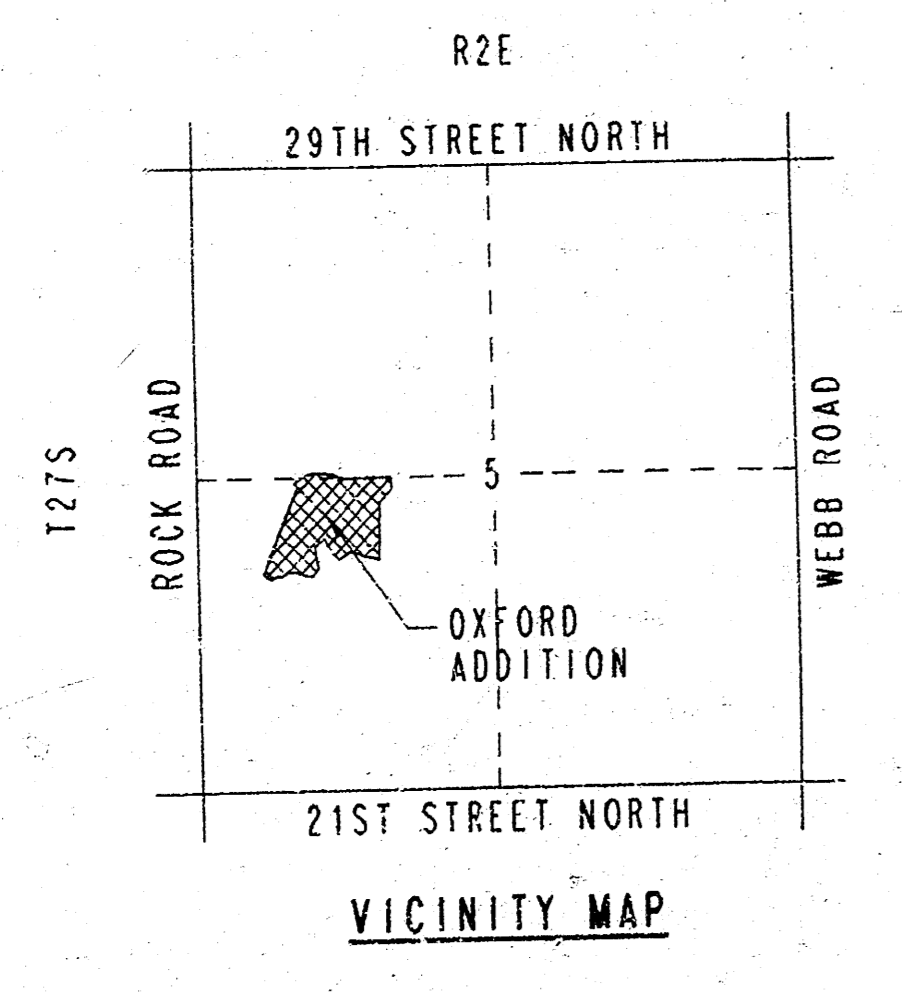
CITY OF WICHITA PROJECT NO. 468-76-245-82202-000-000-001  
 INDEX CODE NO. 750349

**INDEX OF SHEETS**

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2. PLAT
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10. STD. TYPE 1A CURB INLET DETAILS
11. MANHOLE FRAME AND COVER DETAILS

**PROJECT SURVEY CONTROL**

- DATUM BENCH MARK: CHIS. "D" ON WEST SIDE CONC. BASE OF "Y" SHAPED HIGH VOLTAGE ELEC. POLE, 0.5' BELOW GROUND SURFACE, 30' NORTH AND 75' EAST OF W. 1/4 COR. SEC. 5, T27S, R2E. ELEV. +218.63
- BENCH MARK: CHIS. "D" NORTH BACK OF CURB OXFORD CIRCLE AT OXFORD COURT NEAR S.E. CORNER INLET, 110' EAST AND 27' NORTH OF "Y" SHAPED HIGH VOLTAGE ELEC. POLE. ELEV. +205.56
- BENCH MARK: CHIS. "D" ON WEST SIDE CONC. BASE "Y" SHAPED HIGH VOLTAGE ELEC. POLE NORTH OF OXFORD CIRCLE CUL-DE-SAC. ELEV. +208.95
- BENCH MARK: 1-POST AT GROUND LEVEL 16' EAST OF P.C. ON WEST SIDE LOT 6, BLOCK 1. ELEV. +205.20
- BENCH MARK: 7-POST AT GROUND LEVEL 16' EAST OF P.C. ON WEST SIDE LOT 14, BLOCK 2. ELEV. +205.76
- BENCH MARK: 1-POST AT GROUND LEVEL 16' SOUTH OF P.C. ON N.E. SIDE LOT 17, BLOCK 1. ELEV. +205.41



**GENERAL NOTES**

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. EXISTING UTILITIES AND THEIR LOCATION, 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 CONTRACTOR WILL BE REQUIRED TO WORK AROUND EXISTING UTILITIES WITHIN THE RIGHT-OF-WAY WHICH DO NOT CONFLICT WITH PROPOSED CONSTRUCTION.

CONTRACTOR SHALL SATISFY HIMSELF OF SUBSURFACE CONDITIONS PRIOR TO 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.

ALL TREE TRIMMINGS OR TREES REMOVED SHALL BE DISPOSED OF OFF SITE BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

ALL DISPOSAL SITES MUST BE APPROVED BY THE KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT. MATERIAL EITHER STOCKPILED OR DISPOSED OF IN A FLOOD PLAIN WOULD REQUIRE A KANSAS STATE BOARD OF AGRICULTURE PERMIT. ANY MATERIAL DUMPED IN WATERS OF THE UNITED STATES OR WETLANDS IS SUBJECT TO U.S. CORPS OF ENGINEERS PERMITTING REGULATIONS. ANY MATERIAL BURIED OR STOCKPILED BEYOND APPROVED CONSTRUCTION LIMITS WOULD REQUIRE ADDITIONAL ARCHEOLOGICAL INVESTIGATIONS UNLESS BURIED IN A PREVIOUSLY APPROVED BORROW LOCATION.

EXCESS EXCAVATED MATERIAL AND EXCESS TOPSOIL SHALL BE STOCKPILED OR WASTED WITHIN THE PLAT LIMITS. THE CONTRACTOR SHALL CONTACT THE OWNER'S ENGINEER AT 262-2691 FOR INFORMATION PERTAINING TO THE ACCEPTABLE LOCATIONS FOR THE DISPOSITION OF EXCESS MATERIAL. WASTE MATERIAL SHALL BE GRADED SMOOTH AND SLOPED TO DRAIN. THIS WORK SHALL BE CONSIDERED SUBSIDIARY TO "POND AND SWALE GRADING".

CONTRACTOR SHALL PROVIDE A MINIMUM FORTY-EIGHT (48) HOUR ADVANCE NOTICE (EXCLUDING WEEKENDS AND HOLIDAYS) PRIOR TO BEGINNING ANY EXCAVATION, TO KANSAS ONE-CALL SYSTEM, A UTILITY LOCATION SERVICE, AT (316) 887-2470 TO REQUEST THE FOLLOWING UTILITY COMPANIES TO LOCATE ALL EXISTING LINES WITHIN THE PROJECT AREA: KPL/IAS SERVICE, K.C.A.E., SOUTHWESTERN BELL TELEPHONE, MULTIMEDIA CABLEVISION, CITY OF WICHITA SEWER MAINTENANCE AND CITY OF WICHITA WATER DEPARTMENT.

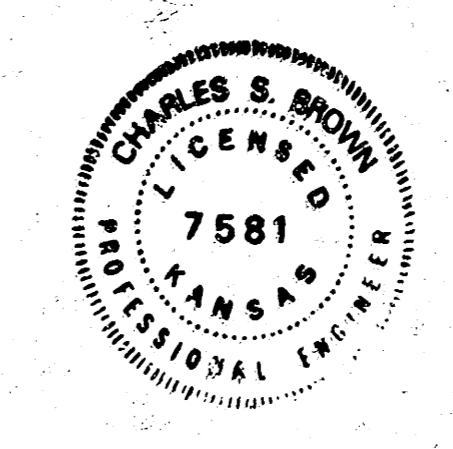
THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR WILL BE REQUIRED TO RE-ESTABLISH ANY PROPERTY IRONS WHICH ARE DAMAGED OR DESTROYED BY HIS CONSTRUCTION OPERATIONS. SUCH IRONS SHALL BE RE-ESTABLISHED BY A LICENSED LAND SURVEYOR IN ACCORDANCE WITH STATE LAW.

THE WATER DEPARTMENT SHALL FIELD LOCATE WATER VALVES ONE TIME DURING CONSTRUCTION WHEN REQUESTED BY THE CONTRACTOR. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PRESERVE SUCH FIELD LOCATIONS DURING THE CONSTRUCTION PROCESS. WATER VALVES, WATER VALVE BOXES OR FIRE HYDRANTS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR AT HIS OWN EXPENSE.

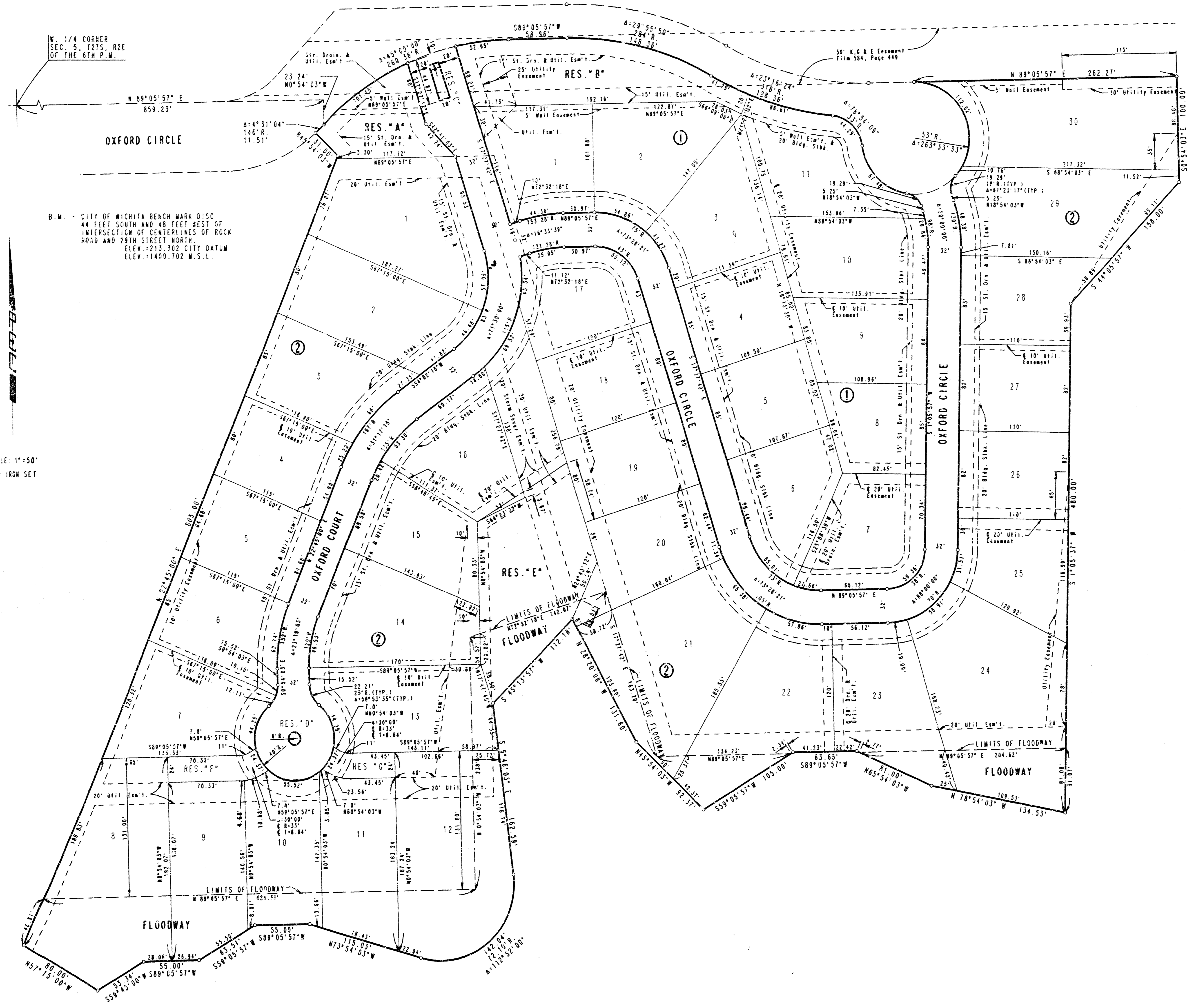
DRAWING NAME: 36-91837-3 TITLE  
 LOCATION: CENTER COORDINATES:  
 DATE: LAST WORKED ON:  
 SPECIAL INSTRUCTIONS:

Booked Per Plan  
 2-2-93

APRIL, 1992  
 PLANS PREPARED BY  
 PROFESSIONAL ENGINEERING CONSULTANTS, P.A.  
 ENGINEERS  
 WICHITA, KANSAS



PROJECT NO.	SHEET NO.	TOTAL SHEETS
468-76-245-82202-000-000-001	2	1



OXFORD ADDITION  
TO WICHITA, SEDGWICK COUNTY, KANSAS

PLAN	SURVEYED	DATE
NOTE BOOK	FILED	
NO.	ALIGNED	CHECKED
	BY	DATE

SCALE: 1"=50'  
O = IRON SET

DRAWING NAME: 32-92049 PLAT  
LOCATION: 84 427  
DATE LAST WORKED ON:  
SPECIAL INSTRUCTIONS:

STORM WATER SEWER NO. 431

**PLAT**

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.  
ENGINEERS  
WICHITA, KANSAS

Designed by	Checked by
Drawn by DEP	Date MAR. 1992 Job No. 92049-3

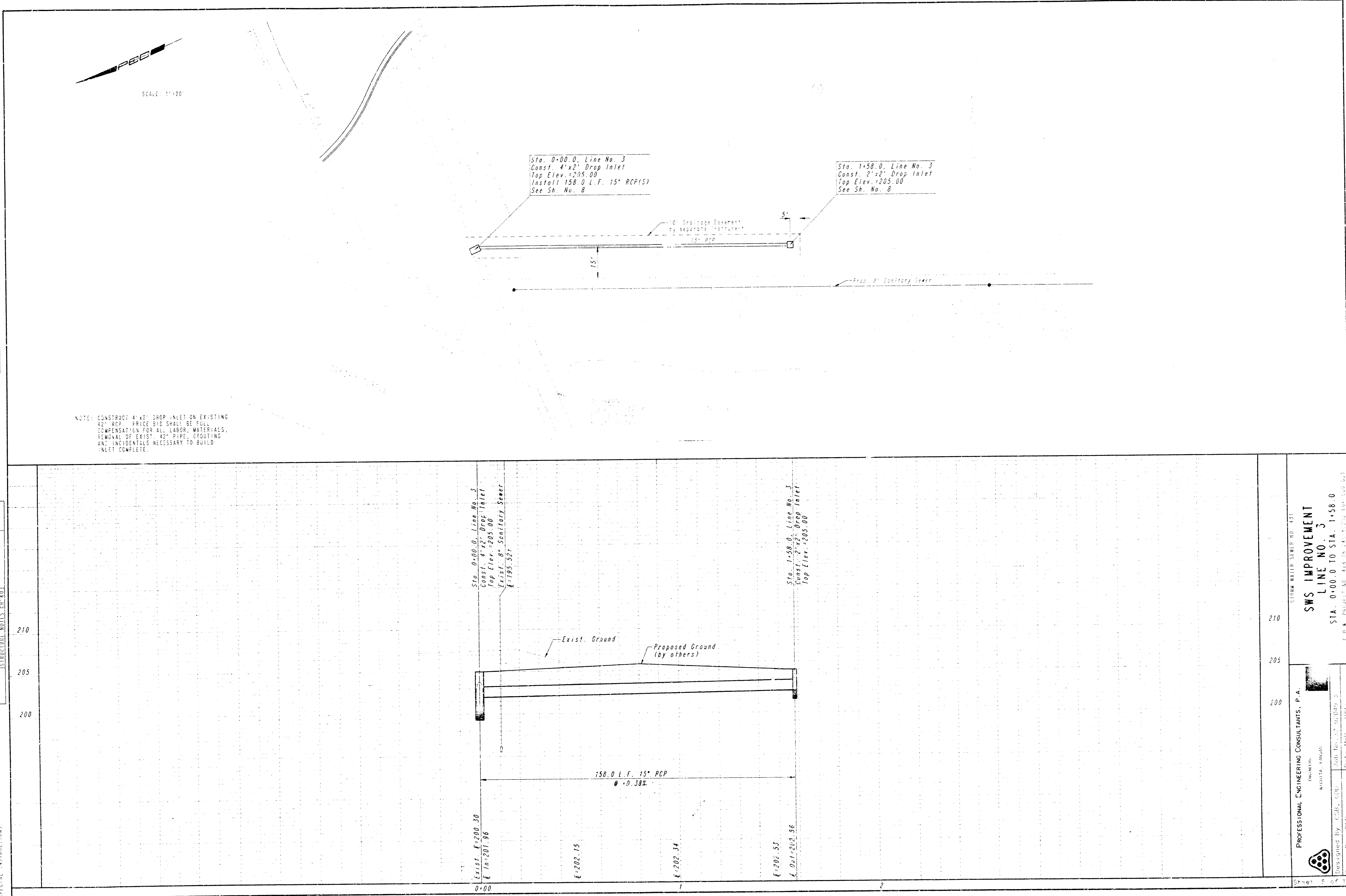




DRAWING NO. 22-92048-SMS-3  
 LOCATION: BA 4117  
 COUNTY: CHARLOTTE  
 DATE L.S.F. WORKED ON:  
 SPECIAL INSTRUCTIONS:

**PROFILE**  
 SURVEYED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 NOTE ROOM RECORDS CHECKED NO. \_\_\_\_\_  
 B.M.'S NOTED \_\_\_\_\_  
 STRUCTURAL NOTES: DE. NO. \_\_\_\_\_

**PLAN**  
 SURVEYED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 NOTE ROOM RECORDS CHECKED NO. \_\_\_\_\_  
 B.M.'S NOTED \_\_\_\_\_  
 STRUCTURAL NOTES: DE. NO. \_\_\_\_\_



NOTE: CONSTRUCT 4"x2" DROP INLET ON EXISTING 42" RCP. PRICE BID SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS, REMOVAL OF EXIST. 42" PIPE, GROUTING AND INCIDENTALS NECESSARY TO BUILD INLET COMPLETE.

Sta. 0+00.0, Line No. 3  
 Const. 4"x2" Drop Inlet  
 Top Elev. = 205.00  
 Install 158.0 L.F. 15" RCP(S)  
 See Sh. No. 8

Sta. 1+58.0, Line No. 3  
 Const. 2"x2" Drop Inlet  
 Top Elev. = 205.00  
 See Sh. No. 8

Sta. 0+00.0, Line No. 3  
 Const. 4"x2" Drop Inlet  
 Top Elev. = 205.00  
 Exist. 8" Sanitary Sewer  
 E=199.32'

Sta. 1+58.0, Line No. 3  
 Const. 2"x2" Drop Inlet  
 Top Elev. = 205.00

Exist. Ground  
 Proposed Ground (by others)

158.0 L.F. 15" RCP  
 θ = 0.38%

E=200.30  
 E In=201.96  
 E=202.15  
 E=202.34  
 E=202.53  
 E Out=203.56

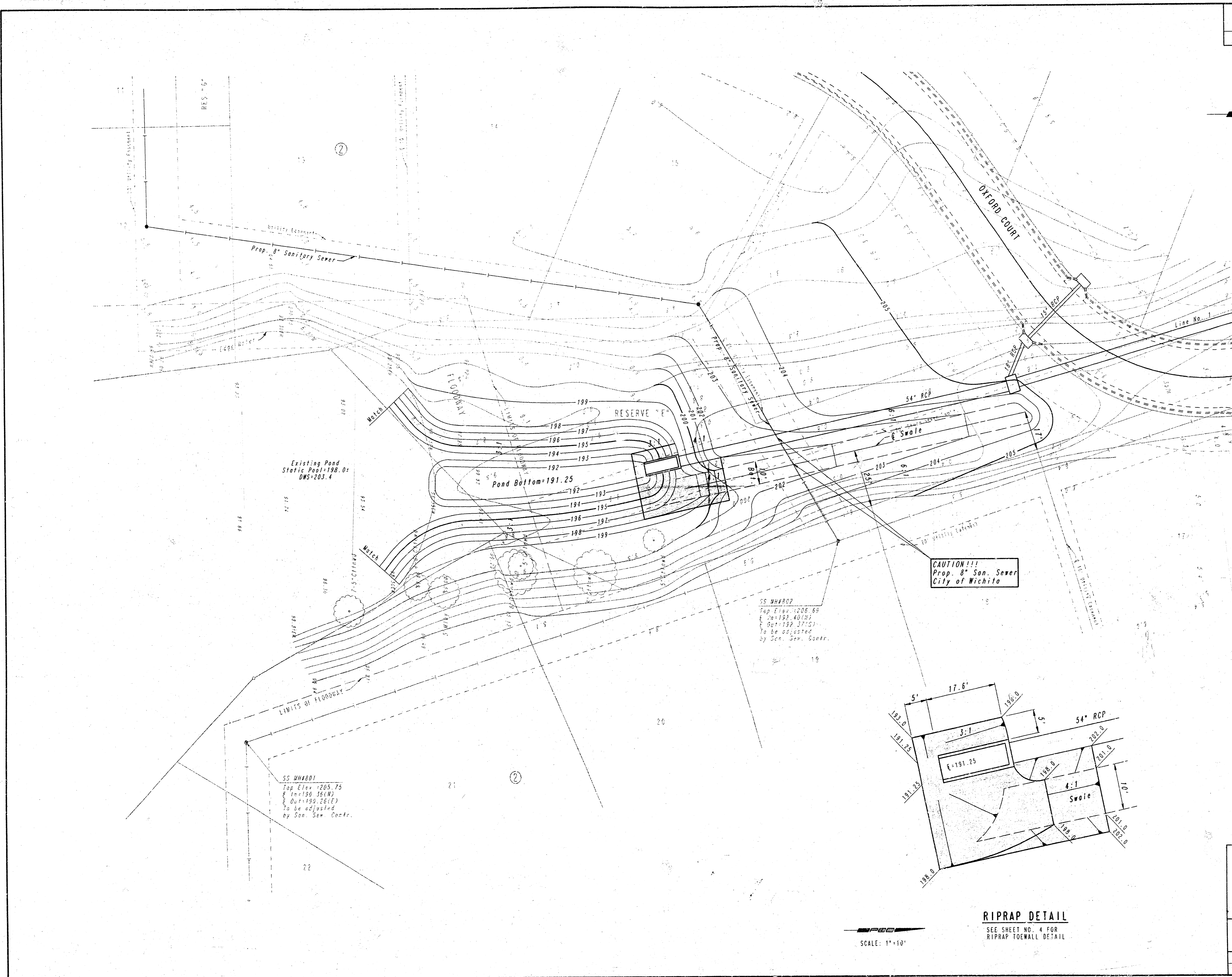
STORM WATER STRIP NO. 431  
**SWS IMPROVEMENT**  
**LINE NO. 3**  
 STA. 0+00.0 TO STA. 1+58.0  
 C.O.W. PROJECT NO. 468 (R. 24) S.W. 100-1528-041

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.  
 ENGINEERS  
 WOLFE, KANGAS  
 400 BIRCHWOOD DRIVE, SUITE 300  
 CHARLOTTE, NORTH CAROLINA 28204  
 Phone: 704-375-1977  
 Fax: 704-375-1978

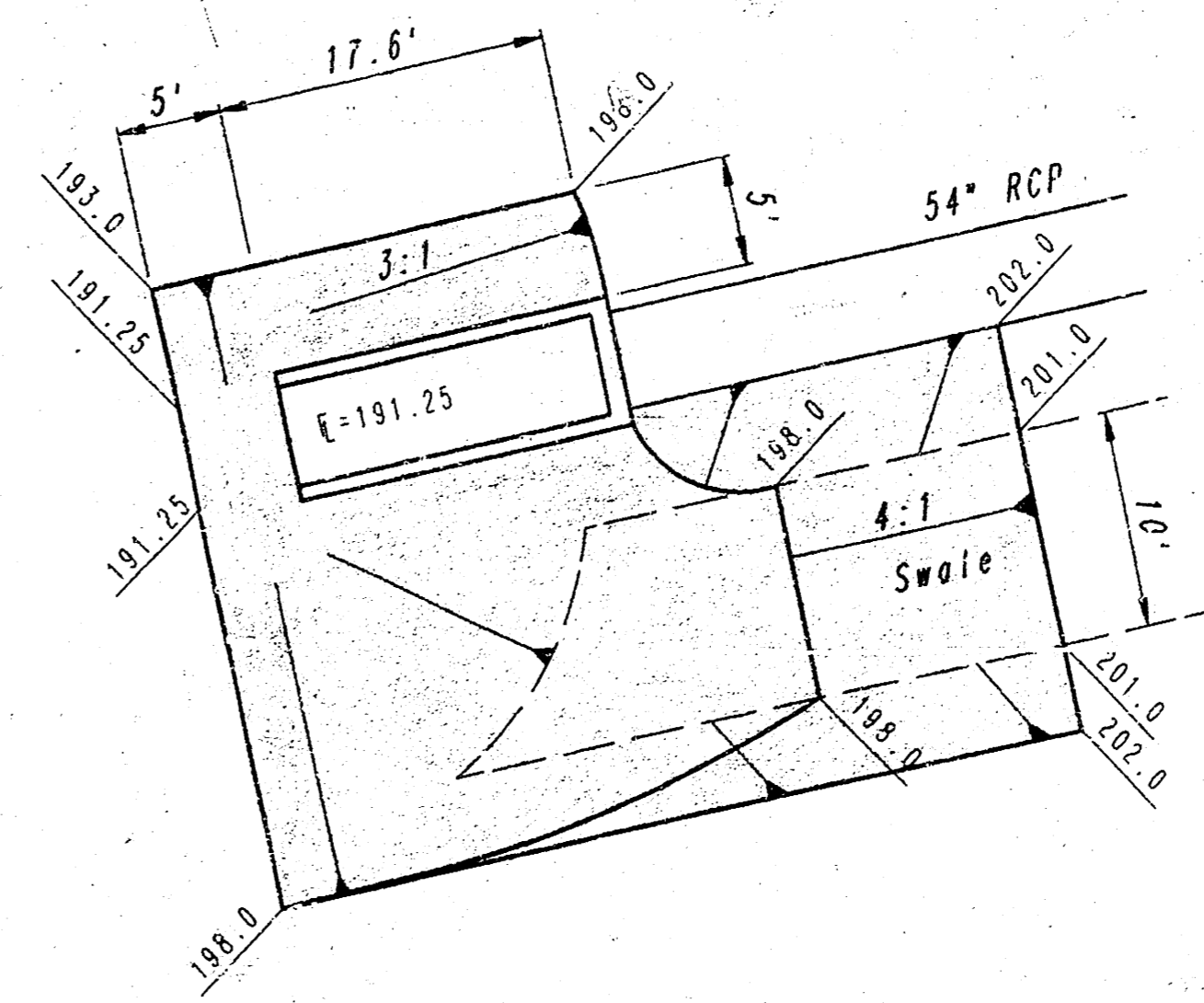
PROJECT NO. 468-76-245-82202-000-000-001	SHEET NO. 5	TOTAL SHEETS 11
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PLAN	SURVEYED	BY	DATE
NOTE BOOK	PILOTTED		
NO.	PLANNED		
	CHECKED		
	BY		
	DATE		

DRAWING NAME: 32-82049-3 SMS 4  
 LOCAL COORDINATES:  
 ROTATION ANGLE:  
 DATE LAST WORKED ON:  
 SPECIAL INSTRUCTIONS:



SCALE: 1"=20'



SCALE: 1"=10'

**NOTES**

POND EXTENSION AND SWALE CONSTRUCTION SHALL BE BID AS LUMP SUM FOR "POND AND SWALE GRADING".

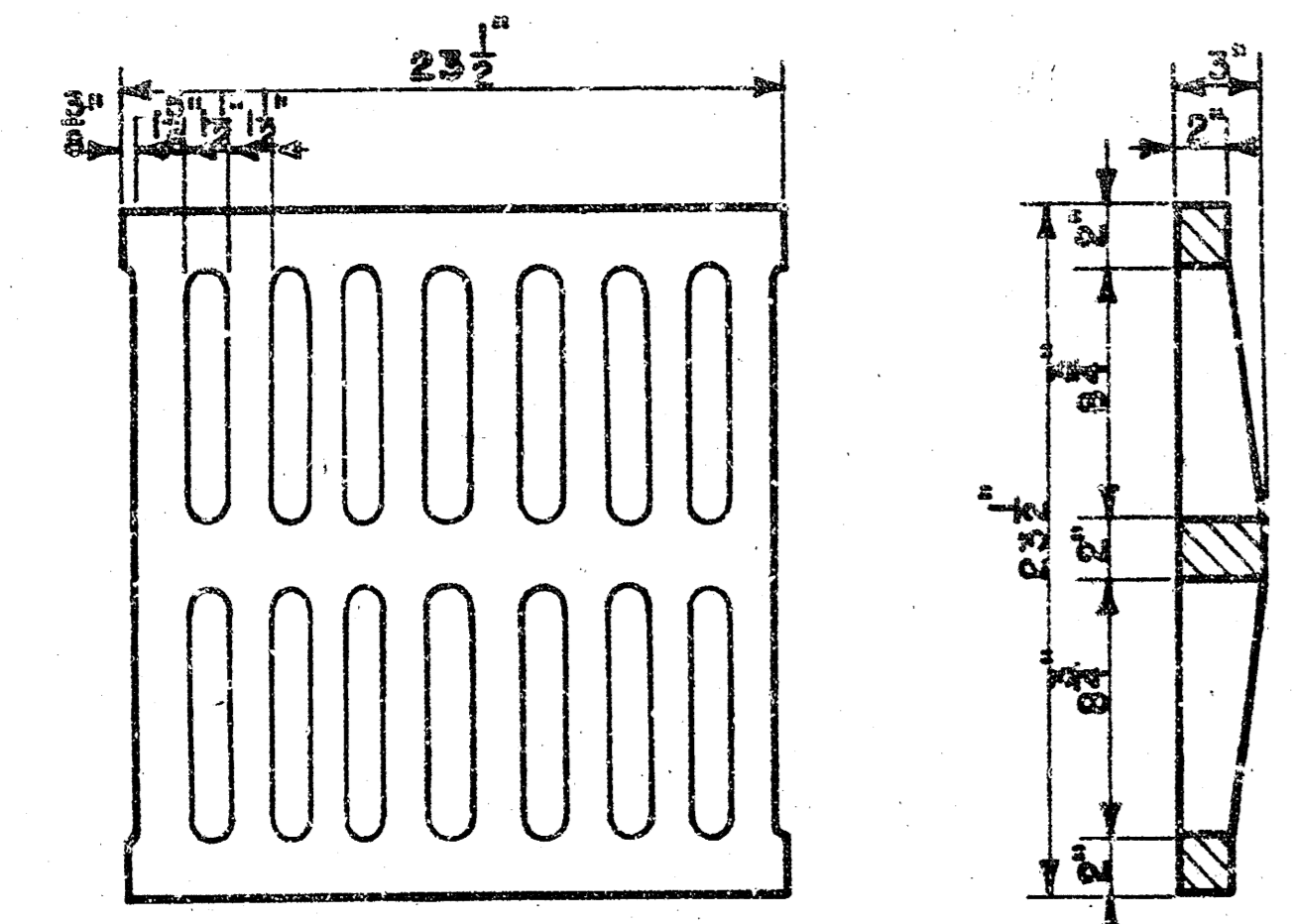
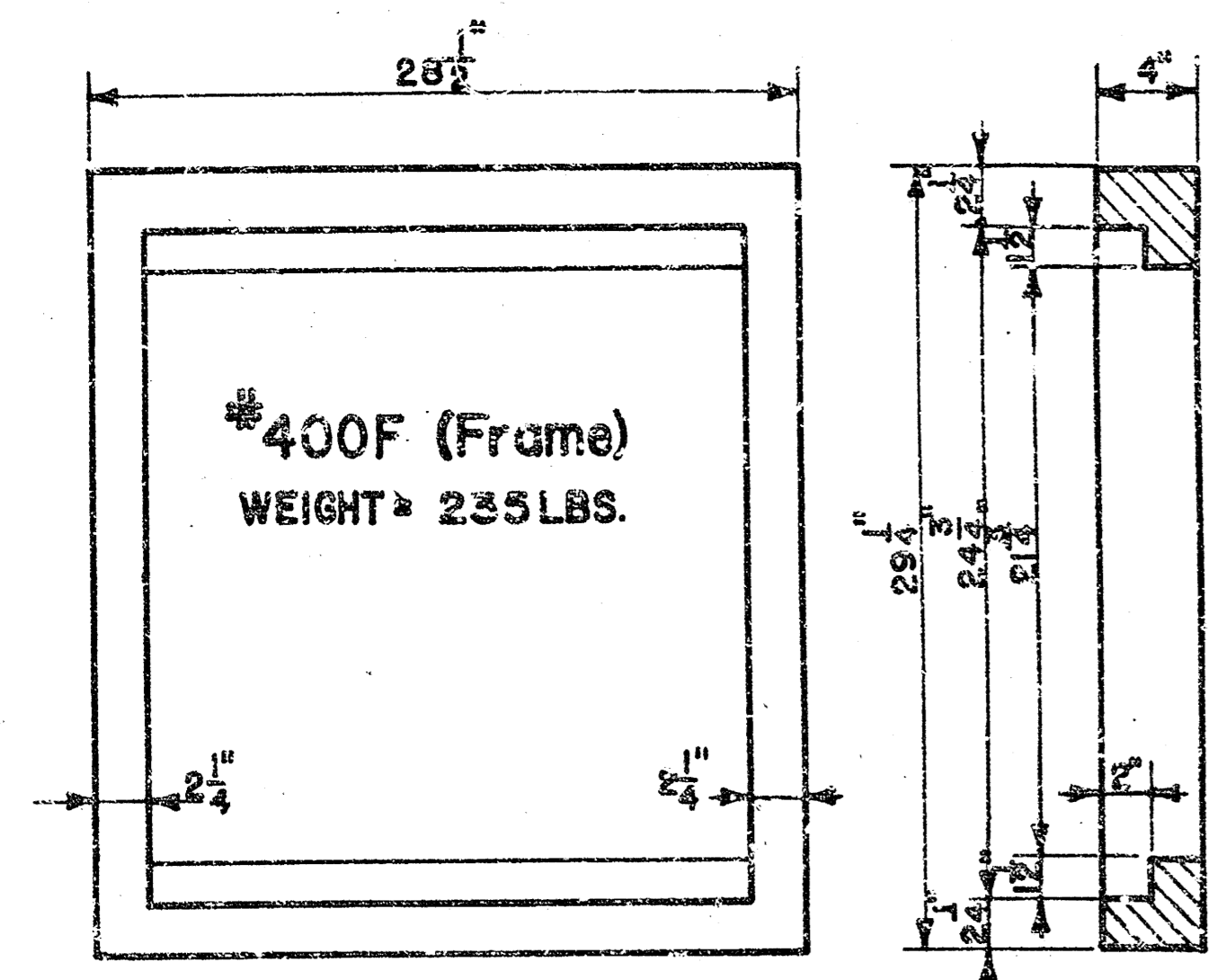
POND AND SWALE SHALL BE SEEDED, MULCHED AND FERTILIZED TO C.O.W. SPECIFICATION ABOVE STATIC POOL ELEV. 198.0'. THIS WORK SHALL BE BID AS LUMP SUM FOR "SEEDING".

CONTRACTOR SHALL CONSTRUCT COFFER DAM, SHEET PILING, ETC. AS REQUIRED TO PROPERLY EXCAVATE THE POND EXPANSION AND TO PROPERLY INSTALL THE HEADWALL AND RIPRAP. LOWERING THE EXISTING POND LEVEL WILL NOT BE ALLOWED.

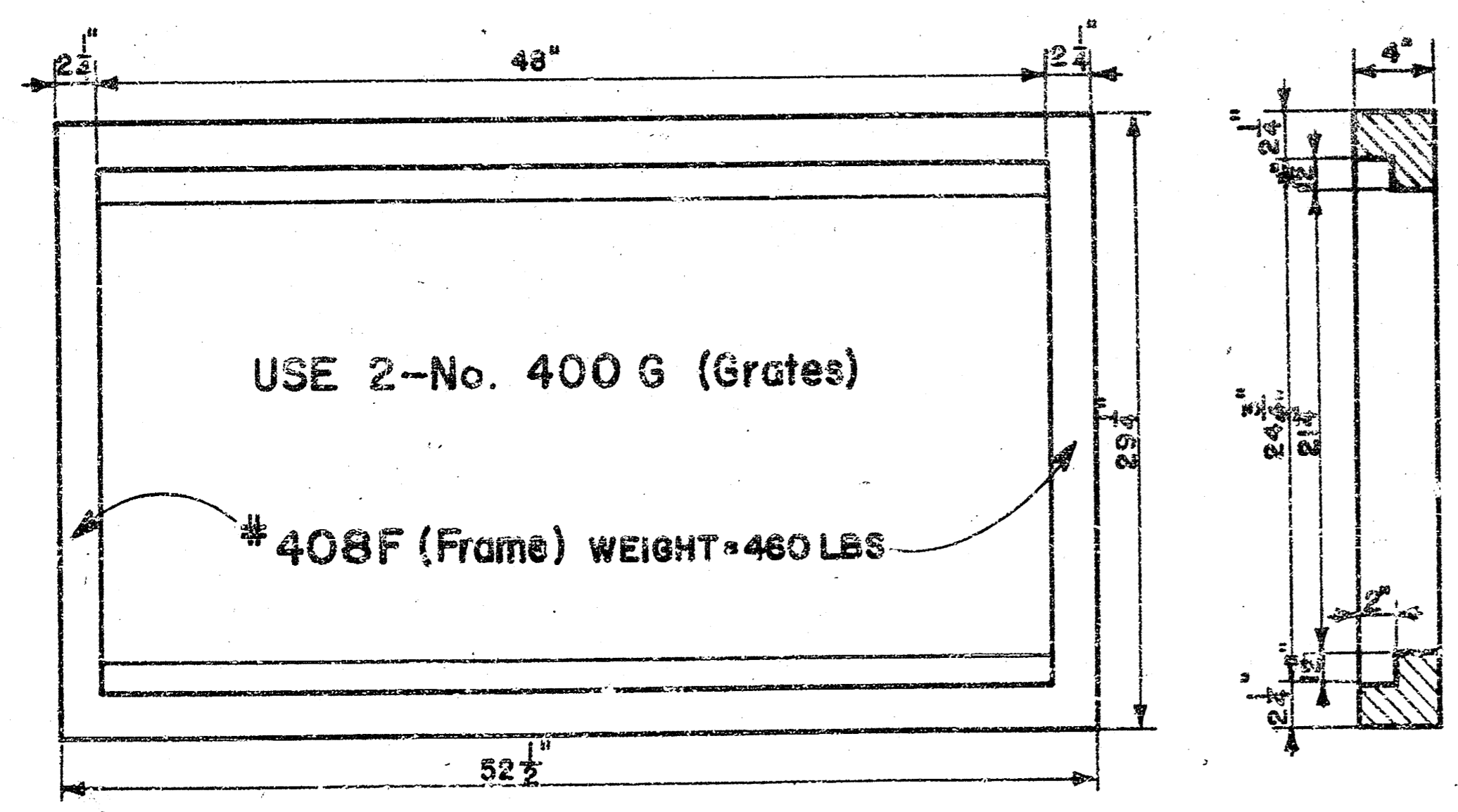
STORM WATER SEWER NO. 431			
<b>POND AND SWALE PLAN</b>			
<b>PROFESSIONAL ENGINEERING CONSULTANTS, P.A.</b> ENGINEERS WICHITA, KANSAS			
Designed by	CSB, GDD	Checked by	
Drawn by	DEP	Date	MAR., 1992 Job No. 92049-3



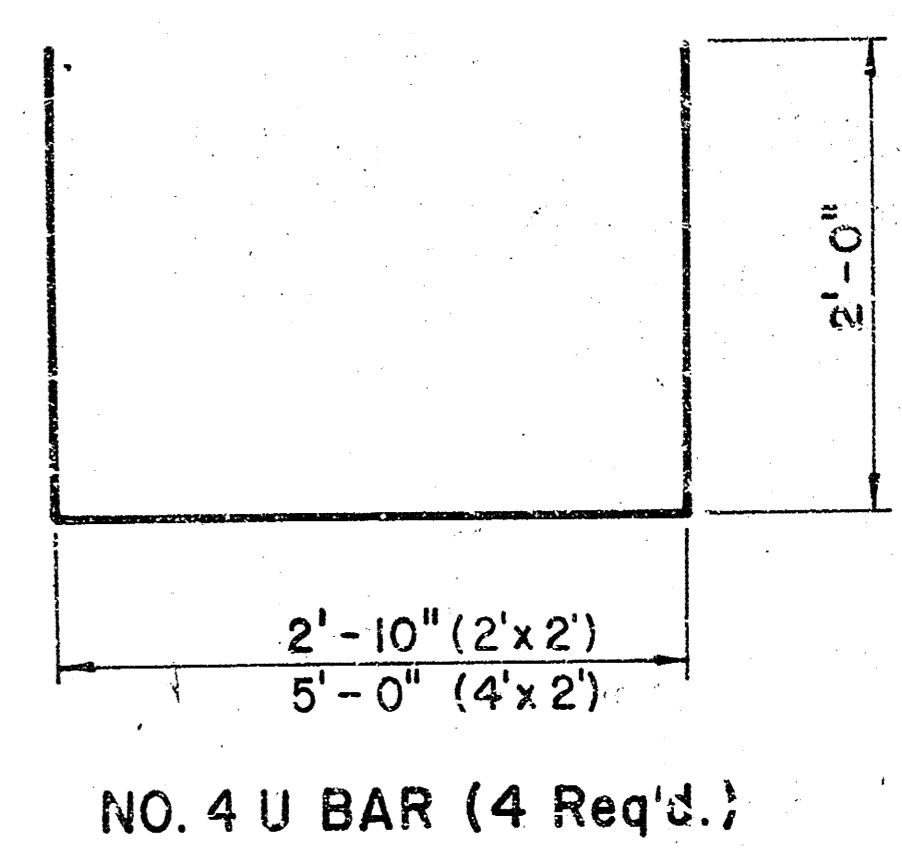
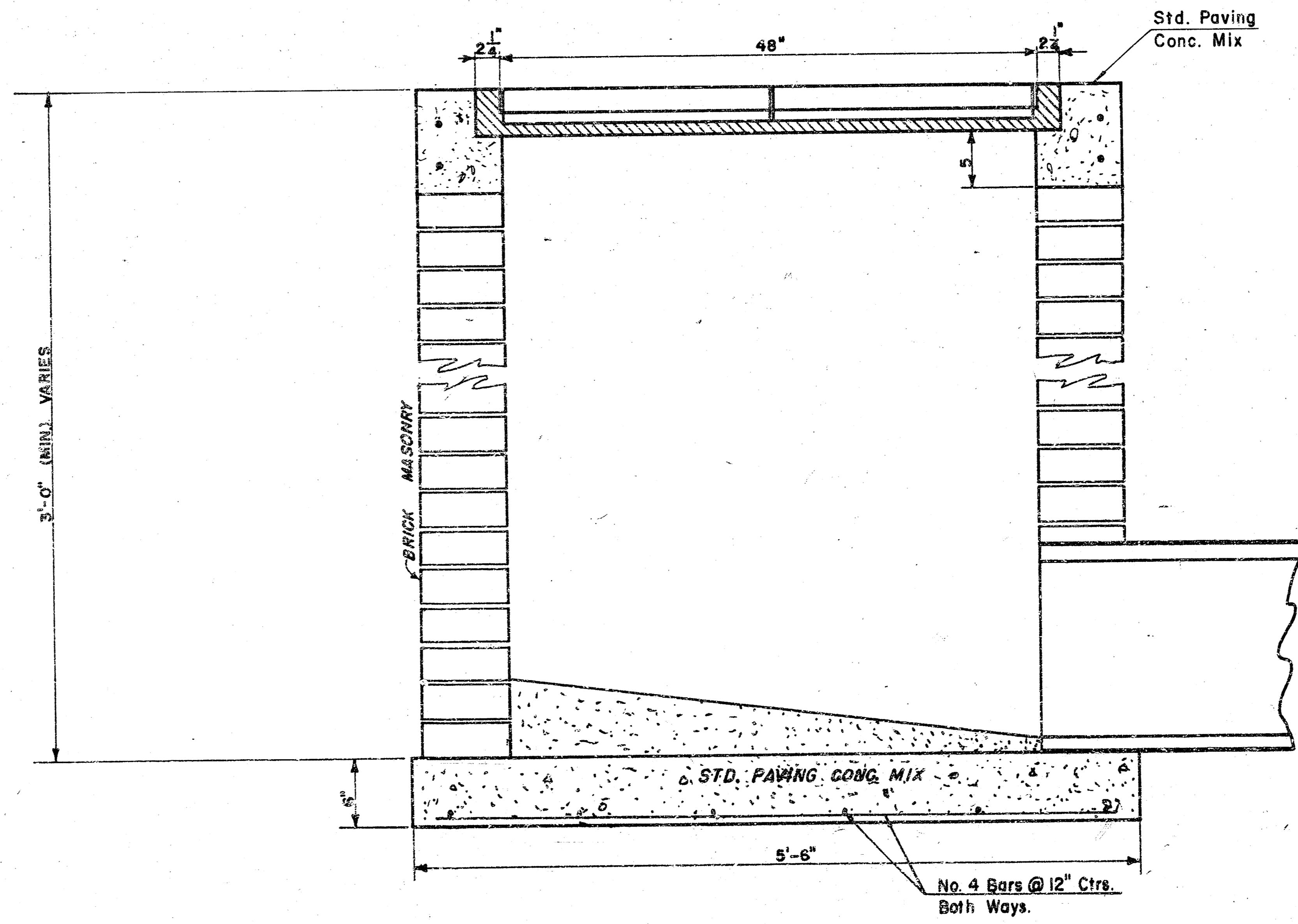
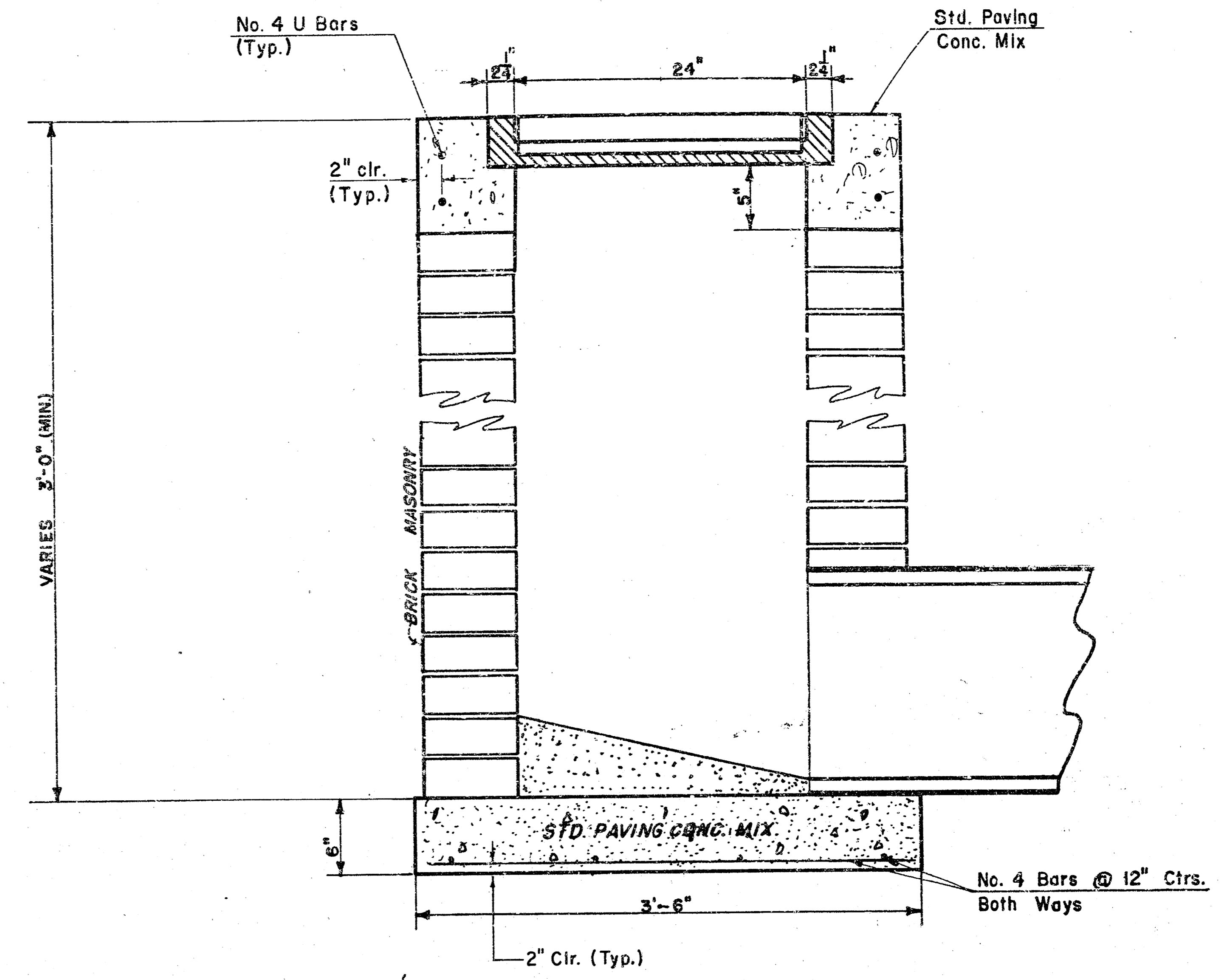
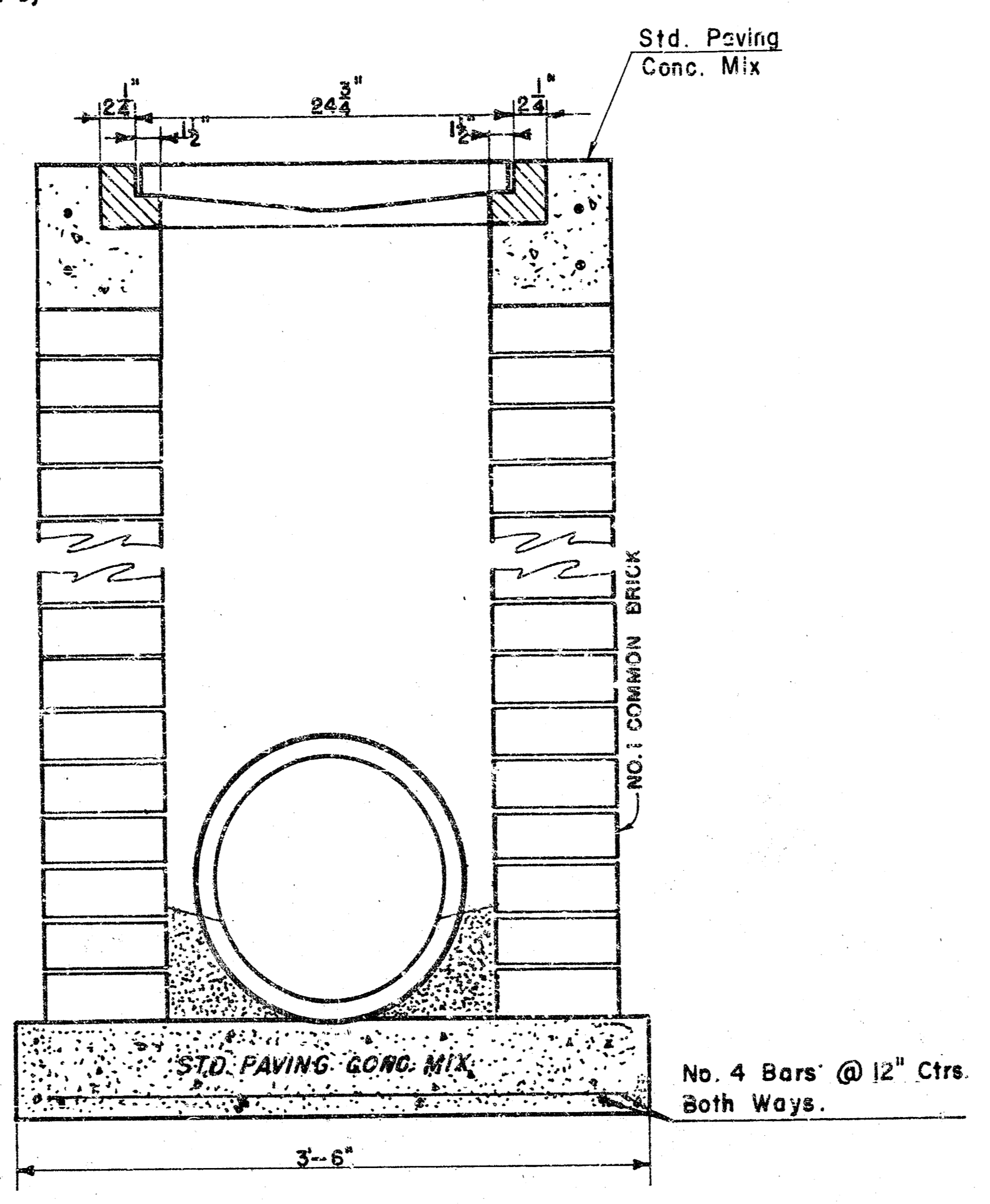
NOTE: Grates shall be imprinted on the top surface with "CITY OF WICHITA" using letters at least 1" in height. Other marking methods may be used only if approved by the engineer.



24"x24" Frame & Grate Detail



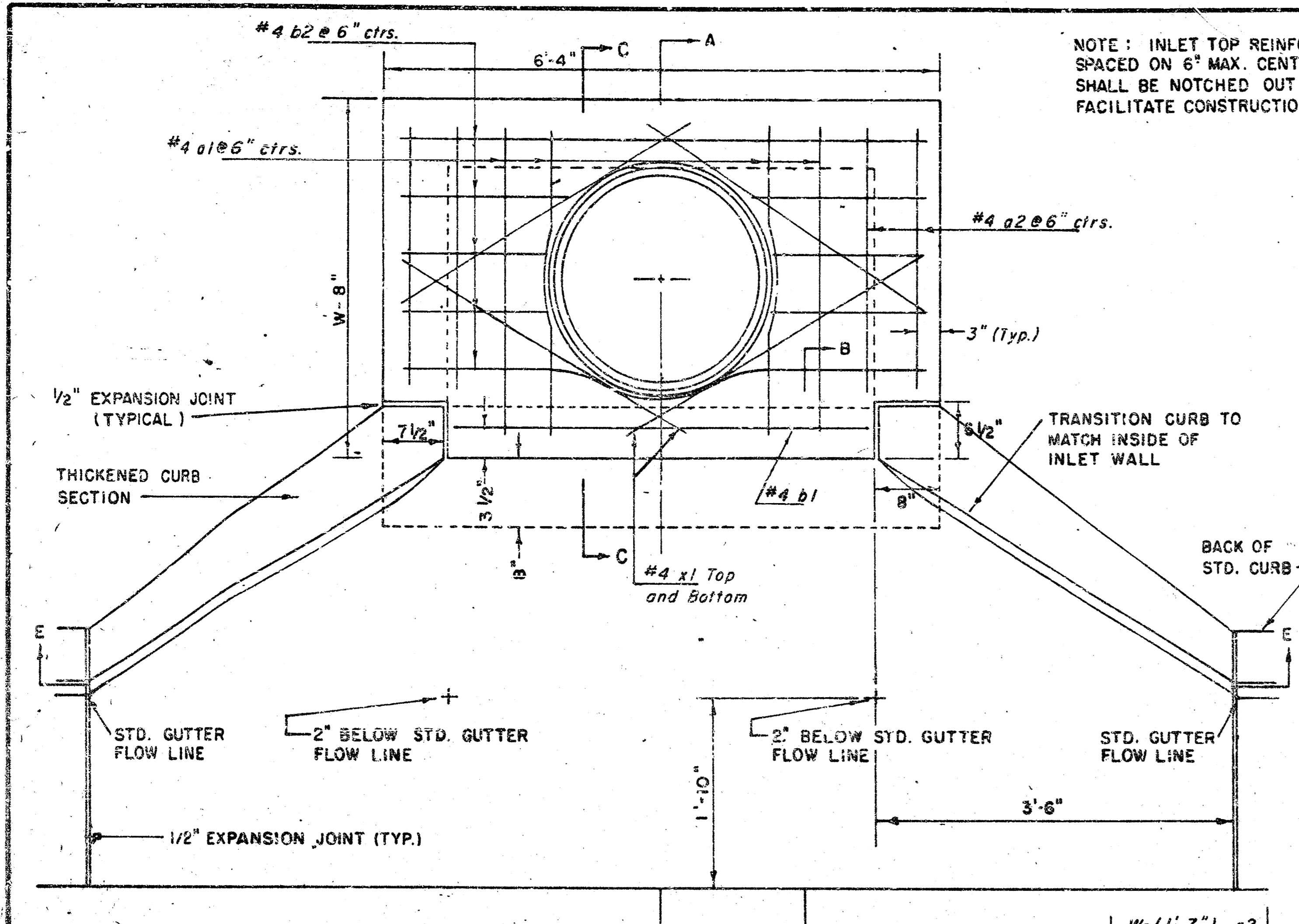
Double 24"x24" Frame Detail



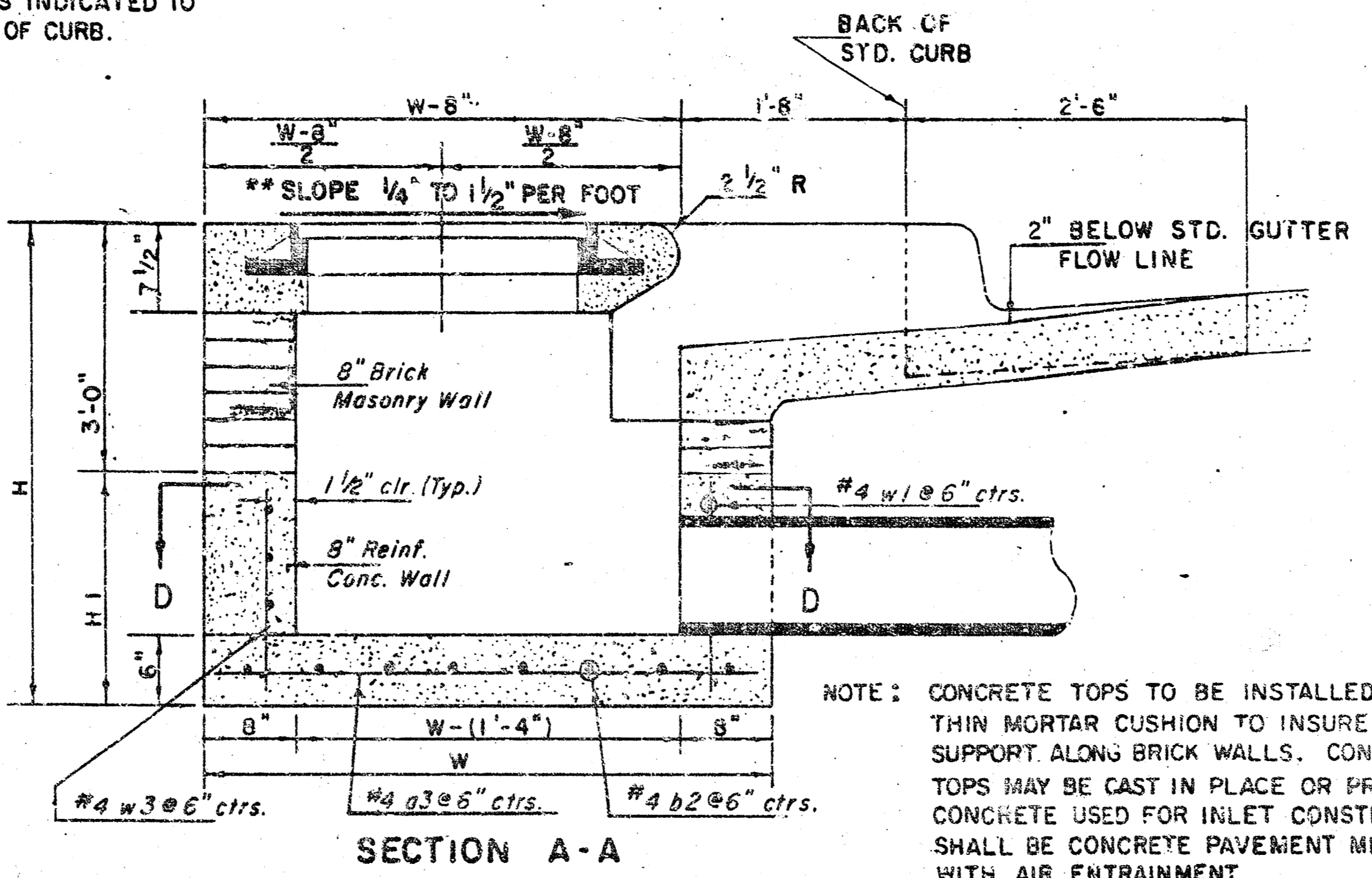
**DROP INLET DETAILS**

M.E. Lindebak, City Engineer  
City of Wichita, Kansas  
Project Oxford Add. S.W.S. No. 431  
Project No. 468-76-245-82202  
Date: April, 1992  
Scale: 1-1/2" = 1'-0"

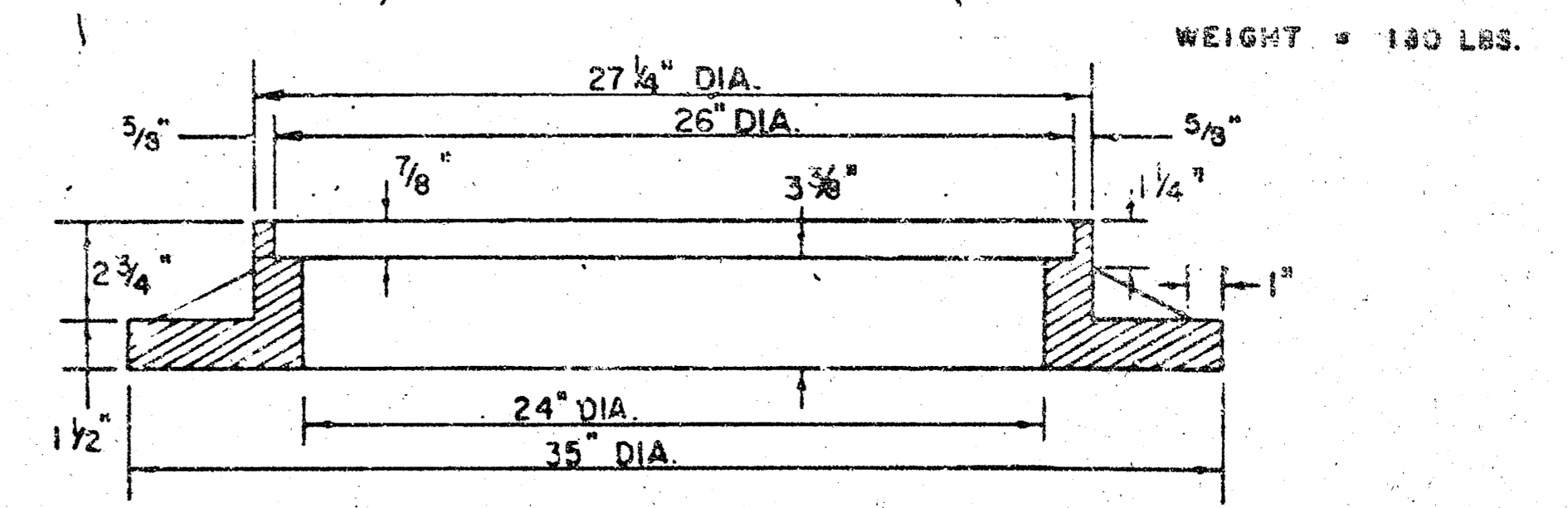
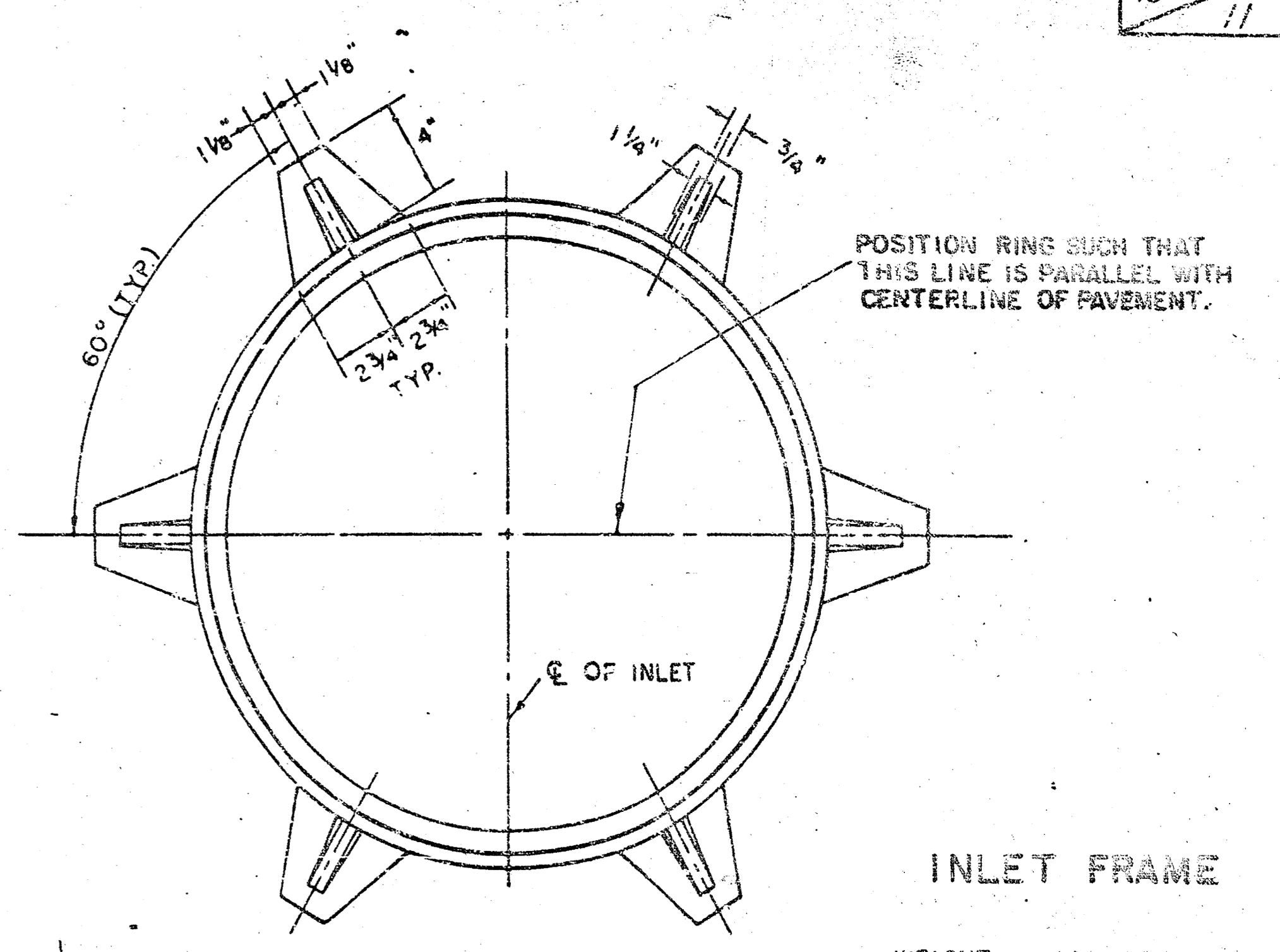




NOTE: INLET TOP REINFORCING SHALL BE SPACED ON 6" MAX. CENTERS. INLET LIDS SHALL BE NOTCHED OUT AS INDICATED TO FACILITATE CONSTRUCTION OF CURB.



NOTE: CONCRETE TOPS TO BE INSTALLED ON THIN MORTAR CUSHION TO INSURE FULL SUPPORT ALONG BRICK WALLS. CONCRETE TOPS MAY BE CAST IN PLACE OR PRECAST. CONCRETE USED FOR INLET CONSTRUCTION SHALL BE CONCRETE PAVEMENT MIX WITH AIR ENTRAINMENT.



SEE CITY OF WICHITA STANDARD MANHOLE FRAME AND COVER DETAIL SHEET FOR COVER DETAILS TO BE USED WITH INLET FRAME.

NOTE: CONTRACTOR SHALL HAVE THE OPTION OF CONSTRUCTING 8" BRICK MASONRY WALLS BETWEEN THE CONCRETE INLET BASE AND TOP ON THIS INLET WHEN H = 6'-4" AND H = 7'-0" OR LESS.

ADDITIONAL CURB AND GUTTER CONSTRUCTION NECESSARY TO CONNECT SET-BACK INLET TO PAVEMENT WILL BE PAID FOR AT THE UNIT PRICE BID FOR EACH INLET HOOKUP.

INLET INVERT SHALL BE SHAPED WITH 8 SACK SAND MIX CONCRETE TO CREATE FLOW CHANNELS AND TO INCREASE HYDRAULIC EFFICIENCY SUCH THAT THE INLET WILL BE SELF CLEANING BETWEEN ALL INLET AND/OR OUTLET PIPES.

THE ENDS OF ALL PIPES INSTALLED IN INLETS SHALL BE CUT OFF FLUSH WITH THE INSIDE FACE OF THE INLET WALL.

\*\*NOTE: Slope of Inlet Tops to match Sidewalk or Parking Slopes within Limits indicated.

STANDARD CURB INLET PRECAST TOPS

W	PRECAST TOP SIZE	PIPE SIZE	CU. YD. CONC.
4' 4"	3' 8" x 6' 4" x 7 1/2"	21" Ø SMALLER	0.38 ±
6' 4"	4' 8" x 6' 4" x 7 1/2"	24" Ø 30"	0.51 ±
6' 4"	5' 8" x 6' 4" x 7 1/2"	36" Ø 42"	0.64 ±
7' 4"	6' 8" x 6' 4" x 7 1/2"	48" Ø 54"	0.77 ±
8' 4"	7' 8" x 6' 4" x 7 1/2"	60" Ø 66"	0.90 ±

PRECAST SLAB AND FLOOR REINFORCING

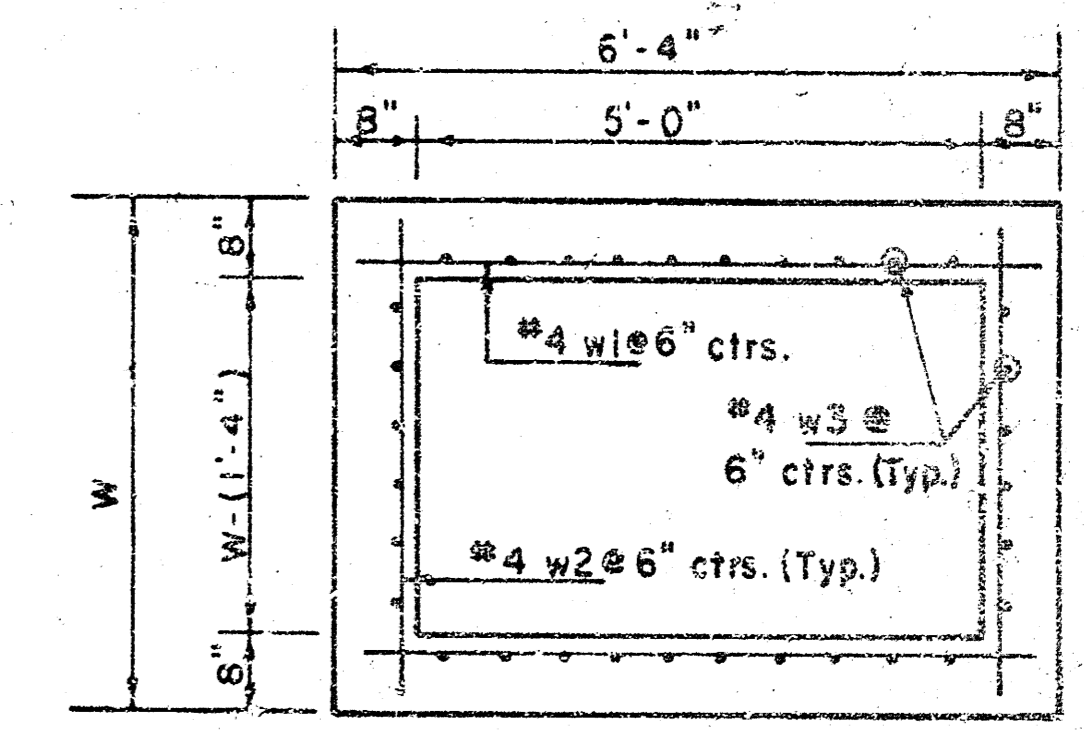
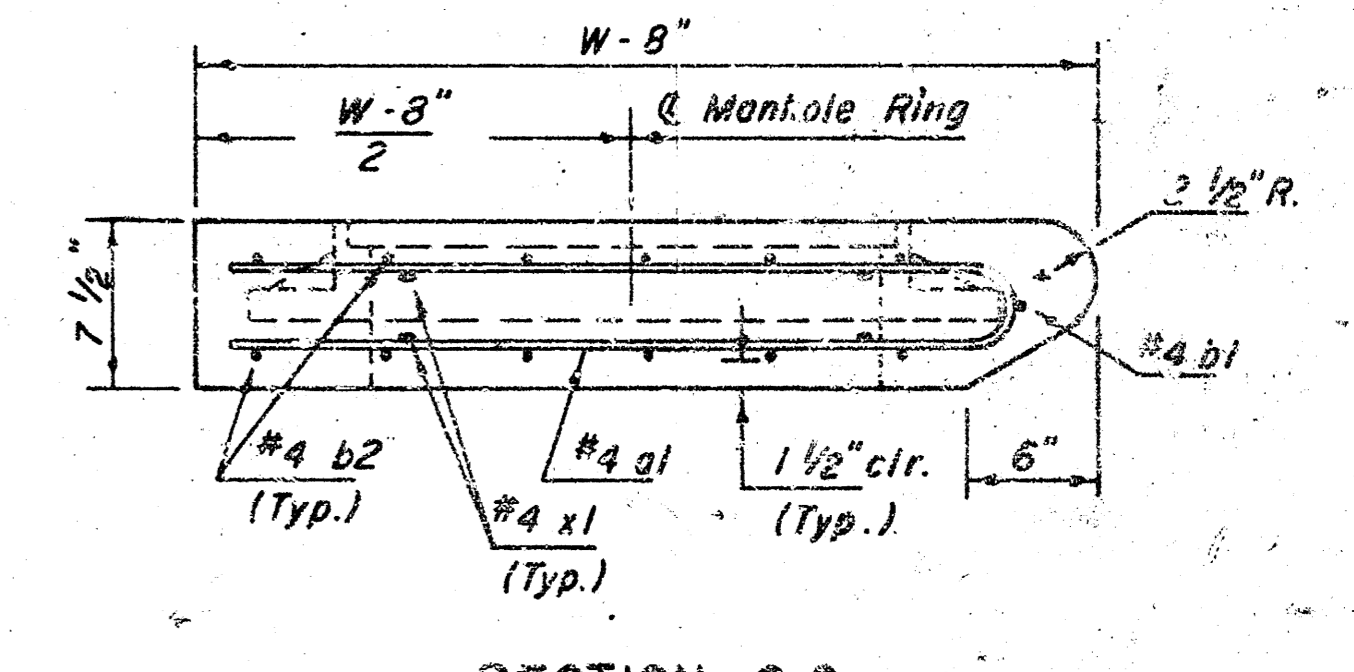
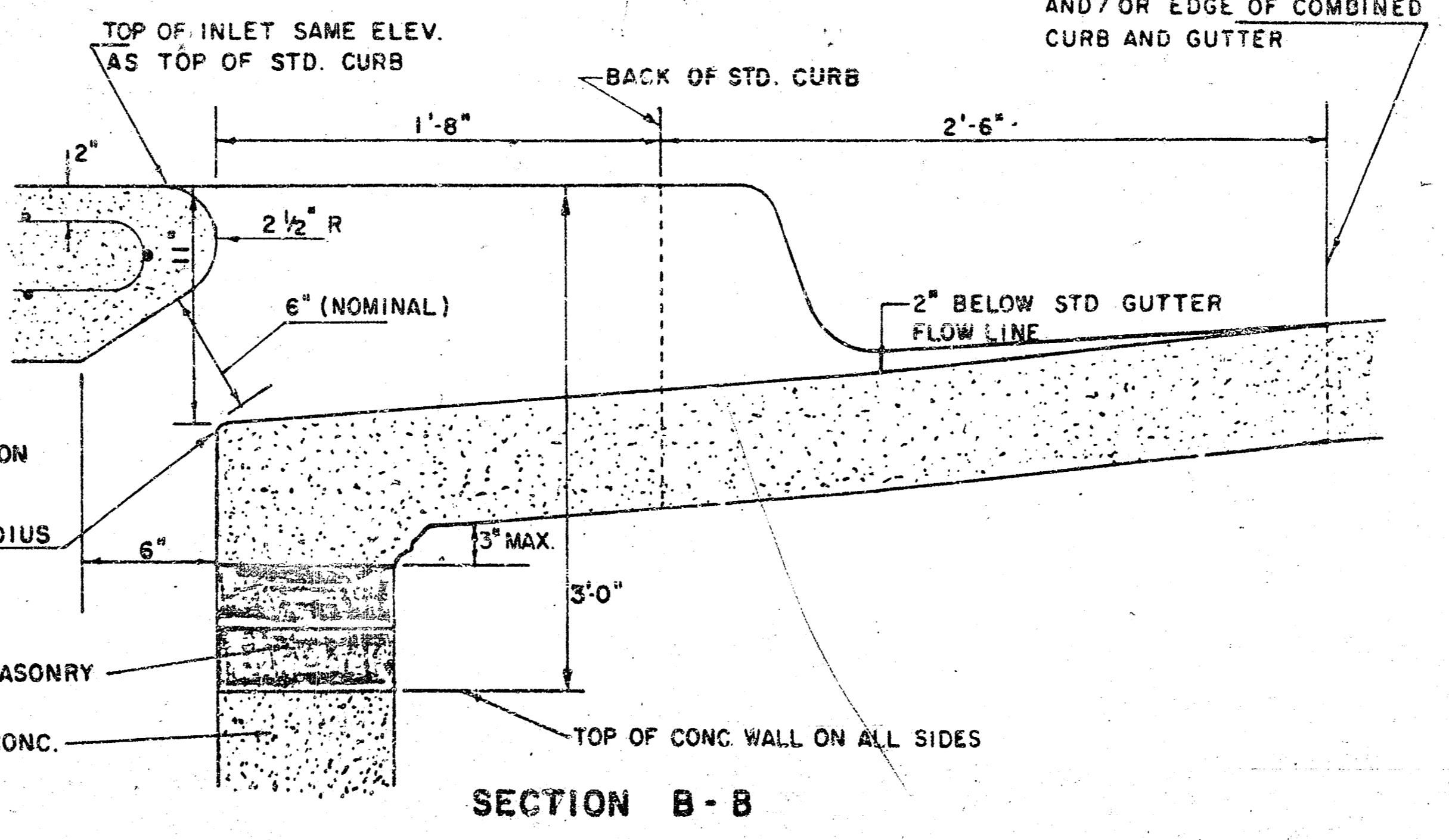
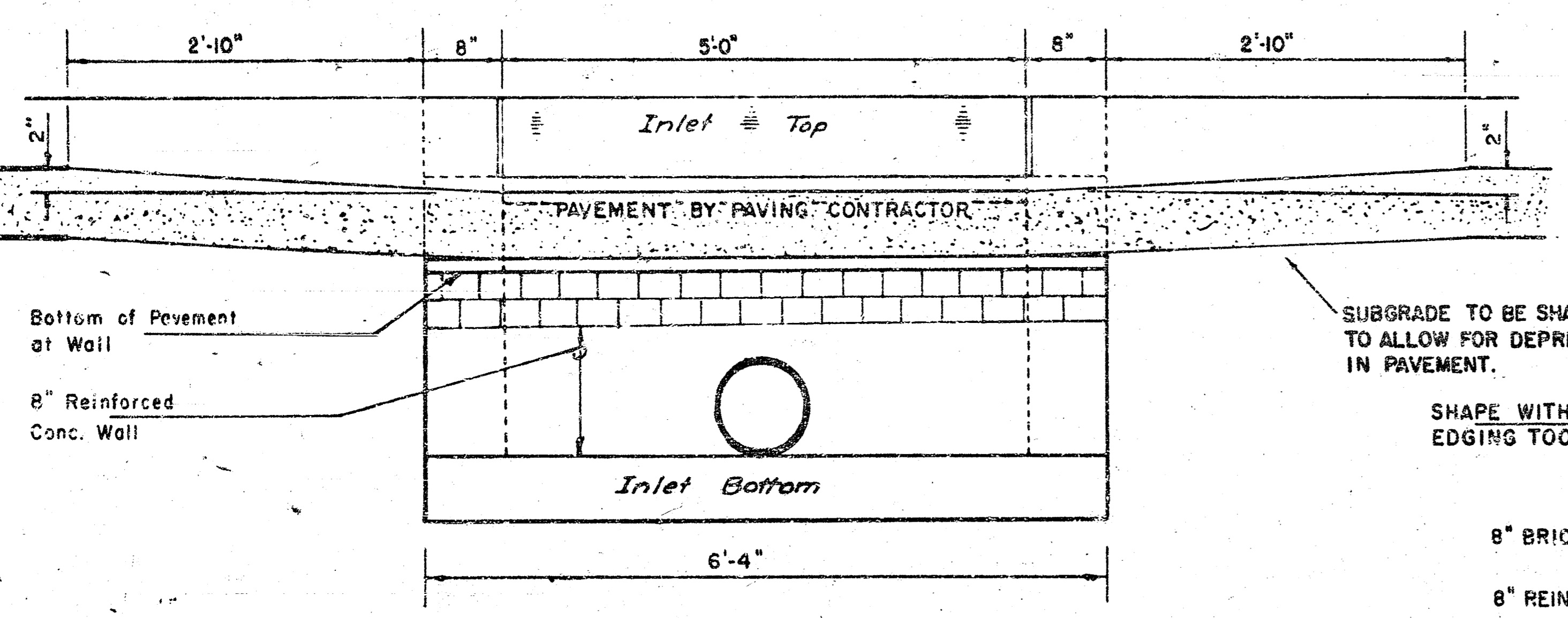
		W=4'-4"		W=5'-4"		W=6'-4"		W=7'-4"		W=8'-4"	
Mark	Size	No.	Length	No.	Length	No.	Length	No.	Length	No.	Length
a1	#4	6	5'-7"	6	8'-7"	6	10'-7"	6	12'-7"	6	14'-7"
a2	#4	4	6'-0"	4	8'-0"	4	10'-0"	4	12'-0"	4	14'-0"
a3	#4	13	4'-1"	13	5'-1"	13	6'-1"	13	7'-1"	13	8'-1"
b1	#4	1	4'-9"	1	4'-9"	1	4'-9"	1	4'-9"	1	4'-9"
b2	#4	23	6'-1"	23	6'-1"	35	6'-1"	41	6'-1"	47	6'-1"
x1	#4	8	3'-10"	8	4'-2"	8	4'-6"	8	4'-10"	8	5'-2"

WALL REINFORCING

		W=4'-4"		W=5'-4"		W=6'-4"		W=7'-4"		W=8'-4"	
Mark	Size	No.	Length	No.	Length	No.	Length	No.	Length	No.	Length
w1	#4	(1)	6'-1"	(1)	6'-1"	(1)	6'-1"	(1)	6'-1"	(1)	6'-1"
w2	#4	(1)	4'-1"	(1)	5'-1"	(1)	6'-1"	(1)	7'-1"	(1)	8'-1"
w3	#4	(2)	36"	(2)	40"	(2)	44"	(2)	48"	(2)	52"

\* Field bend or cut Reinforcing as required for clearance.  
 ① 41(HI-12"), (HI-12") Round down to nearest 0.5"  
 ② HI-3"

BENDING DIAGRAM



REVISED 11-30-1988  
 REVISED 12-31-1984  
 Revised 2-16-1989

DETAIL STANDARD TYPE 1A CURB INLET  
 CITY OF WICHITA, KANSAS  
 INLET OPENING = 6" x 8" Ø

JUNE 1984

