

PRIVATE
STORM WATER SEWER PLANS FOR
CLUBHOUSE VILLAS

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

INDEX CODE 607861

USER CODE 1030 PPS

APPROVED AS NOTED
BY CITY ENGINEER OF WICHITA

STORM WATER SEWERS: 10/16/00

NOTE TO CONTRACTOR

PUBLIC PROPERTY:
INSPECTION AND TESTING FOR THE SEWER LINE IS TO BE PROVIDED BY A LICENSED CONSULTING ENGINEERING FIRM UNDER CONTRACT WITH THE OWNER/DEVELOPER. SAID INSPECTION TO BE IN ACCORDANCE WITH THE CITY OF WICHITA STANDARD CONSTRUCTION ENGINEERING PRACTICES AND CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER. NO WORK SHALL BE PERFORMED IN DEDICATED EASEMENTS OR THE PUBLIC RIGHT-OF-WAY BY THE CONTRACTOR WITHOUT SUCH INSPECTION NOR SHALL ANY WORK BE COMMENCED WITHOUT WRITTEN AUTHORIZATION BY THE CITY ENGINEER. ALL CONSTRUCTION AND MATERIALS SHALL COMPLY WITH THE CITY OF WICHITA SPECIFICATIONS AND STANDARDS (ON FILE AND AVAILABLE IN THE CITY ENGINEER'S OFFICE).

GENERAL NOTES

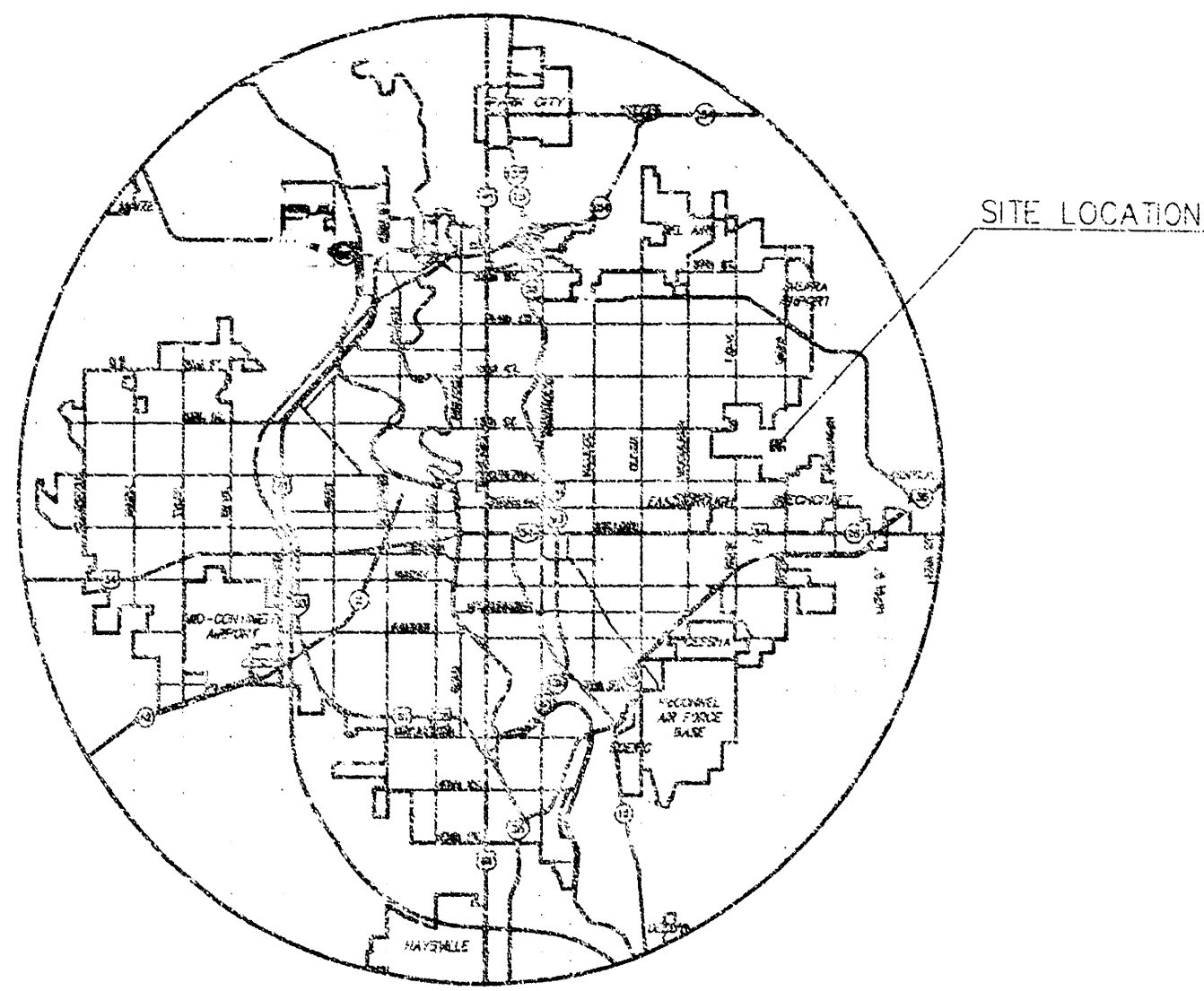
1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR WILL BE REQUIRED TO RE-ESTABLISH ANY PROPERTY IRONS WHICH ARE DAMAGED OR DESTROYED BY HIS/HER CONSTRUCTION OPERATIONS. SUCH IRONS SHALL BE RE-ESTABLISHED BY A LICENSED LAND SURVEYOR IN ACCORDANCE WITH STATE LAWS.
2. 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 PL LOCATIONS SHOWN ARE NOT GUARANTEED. ADDITIONAL EXISTING UTILITIES MAY ALSO BE ENCOUNTERED.
3. CONTRACTOR WILL BE REQUIRED TO PROVIDE A MINIMUM ADVANCE NOTICE OF FORTY-EIGHT (48) HOURS TO UTILITY COMPANIES PRIOR TO STARTING ANY EXCAVATION AS FOLLOWS:

KANSAS ONE-CALL 1-800-344-7233
OR 687-2470 (LOCAL WICHITA)

THE CONTRACTOR MUST NOTIFY THE FOLLOWING IN CASE OF ANY EMERGENCY:

SOUTHWESTERN BELL TELEPHONE COMPANY 1-517-2115
COX COMMUNICATIONS 262-0661
KANSAS GAS & ELECTRIC (ELECTRIC) 264-1141
KANSAS GAS & ELECTRIC (GAS) 832-3180 OR 832-5169
CITY OF WICHITA SEWER MAINTENANCE 266-4908
CITY OF WICHITA WATER DEPARTMENT 268-4908

4. RUBBLE FROM THE REMOVAL OF MISCELLANEOUS STRUCTURES AND EXCESS EXCAVATION WHICH IS TO BE WASTED SHALL BE DISPOSED OF ON SITES TO BE PROVIDED BY THE CONTRACTOR. THESE SITES SHALL BE APPROVED BY THE ENGINEER AS TO SUITABILITY, APPEARANCE AND SITE LOCATION. LOCATIONS THAT, IN THE OPINION OF THE ENGINEER, WILL LEAVE AN UNSIGHTLY APPEARANCE WILL NOT BE APPROVED. 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 ARCHAEOLOGICAL INVESTIGATIONS UNLESS BURIED IN A PREVIOUSLY APPROVED BORROW LOCATION.
5. PRIOR TO LAYING SEWER LINE, THE CONTRACTOR SHALL EXPOSE AND VERIFY THE ELEVATION OF FLOW LINE OF EXISTING LINE AND NOTIFY THE ENGINEER OF ANY DEVIATION FROM THE PLANS.
6. 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.
7. CONTRACTOR SHALL RESEED AND MULCH ALL DISTURBED AREAS. COST SHALL BE SUBSIDIARY TO SITE RESTORATION.
8. CONTRACTOR SHALL PROVIDE TEMPORARY SEDIMENT CONTROL AT ALL INLETS. SUCH CONTROL SHALL BE MAINTAINED UNTIL AND UPON GERMINATION OF SEEDING. ACCEPTABLE MEANS OF CONTROL SHALL BE APPROVED BY ENGINEER.



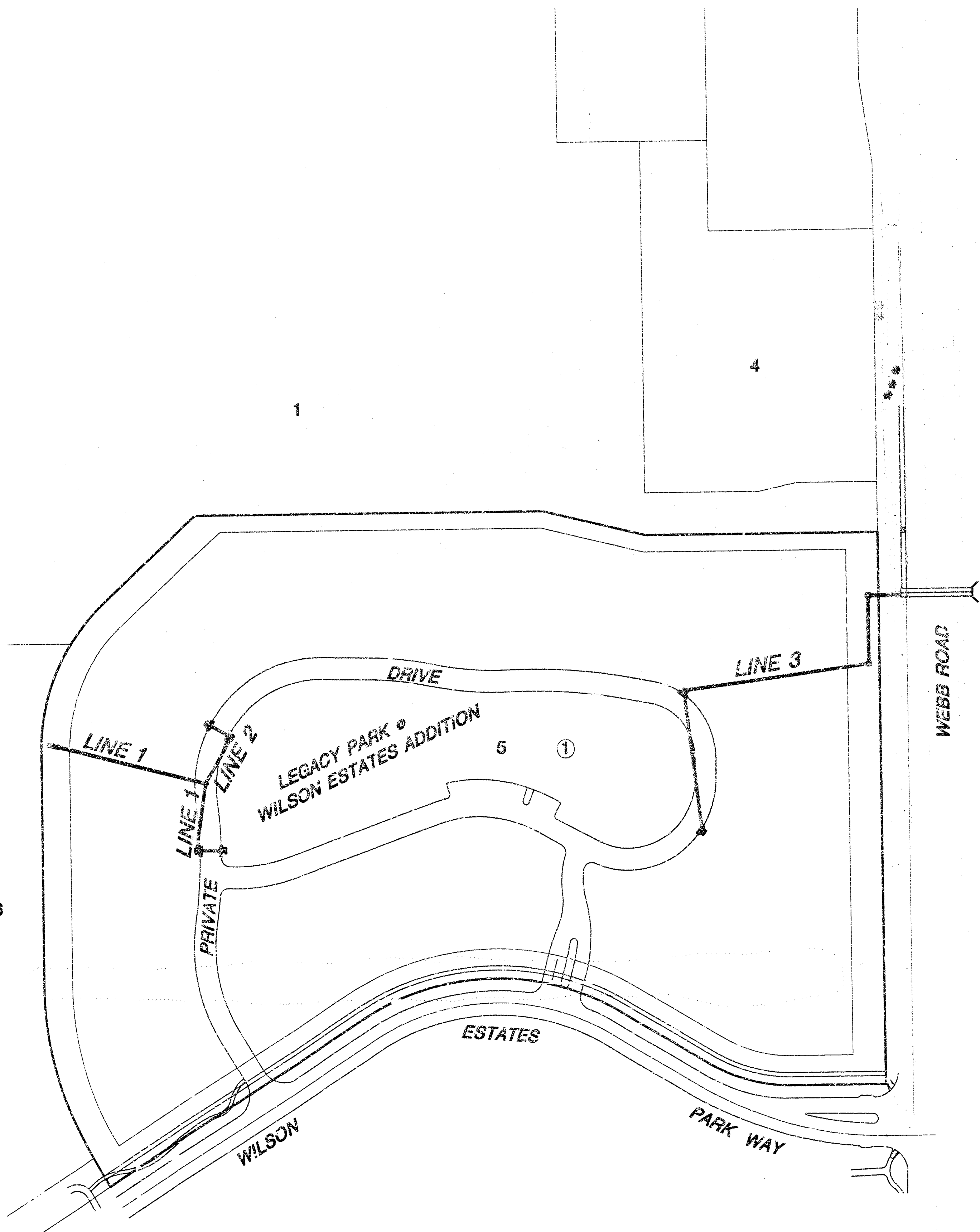
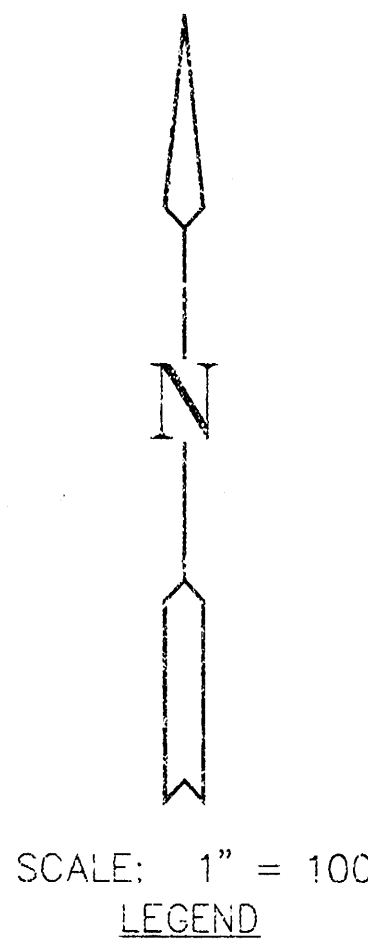
LOCATION MAP

INDEX TO DRAWINGS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2-5	SWS DETAILS
6	EROSION CONTROL DETAILS
7-8	PLAN/PROFILE
9	FINAL PLAT

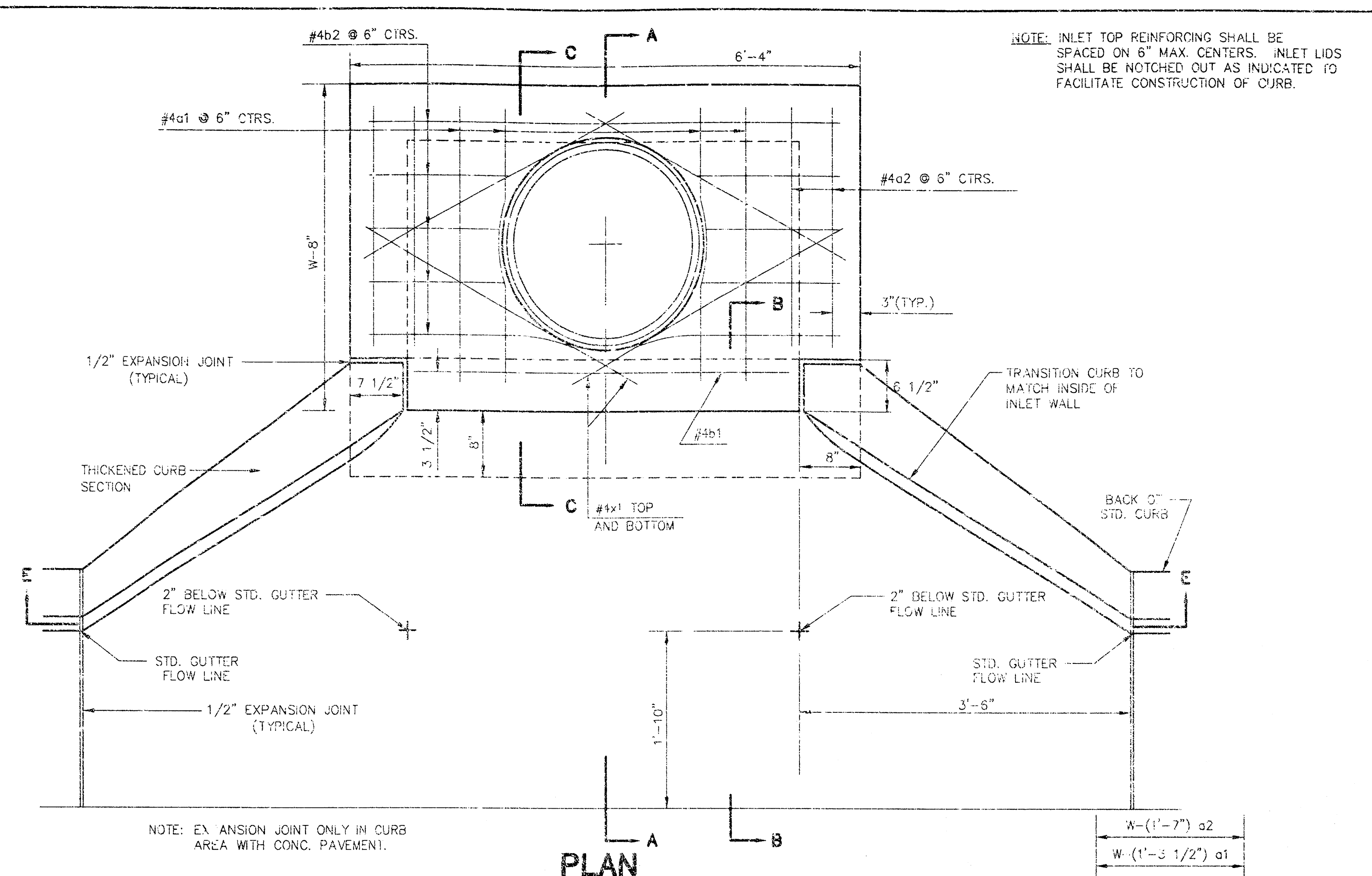
BENCHMARKS

BM #1 CITY OF WICHITA BENCH MARK DISC IN NE CORNER CONCRETE VAULT, 400' WEST OF WEBB ROAD ON NORTH SIDE OF 21ST STREET NORTH. ELEV.=205.70



 M.K.E.C. 411 N. WEBB ROAD WICHITA, KS. 67206 316-684-0600	CLUBHOUSE VILLAS PROJECT NAME	
	STORM WATER SEWER PLANS SHEET TITLE	
DESIGN BY: JTC	DRAWN BY: DAC	CHECKED BY: GJA
DATE: AUGUST 2000	JOB NO.: 99187	SHEET/OF: 1/9

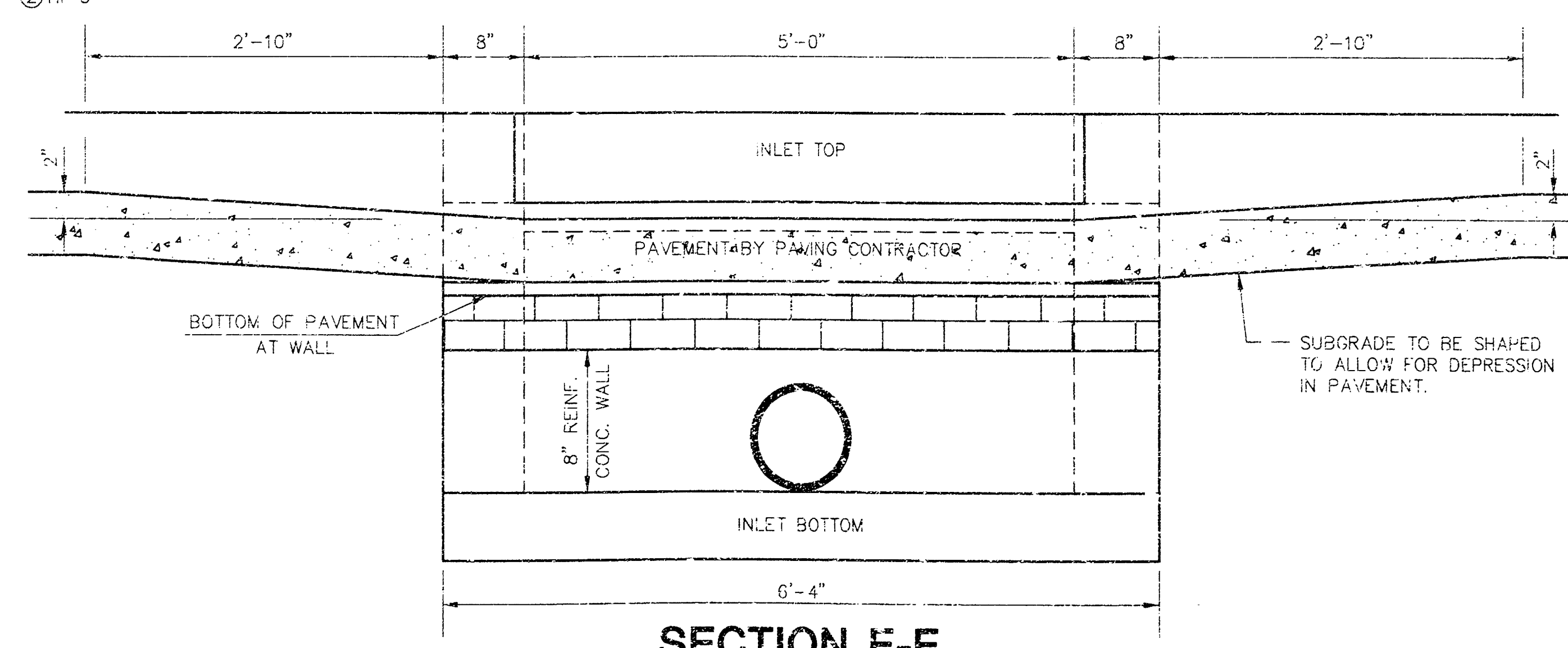
14-08-08-11



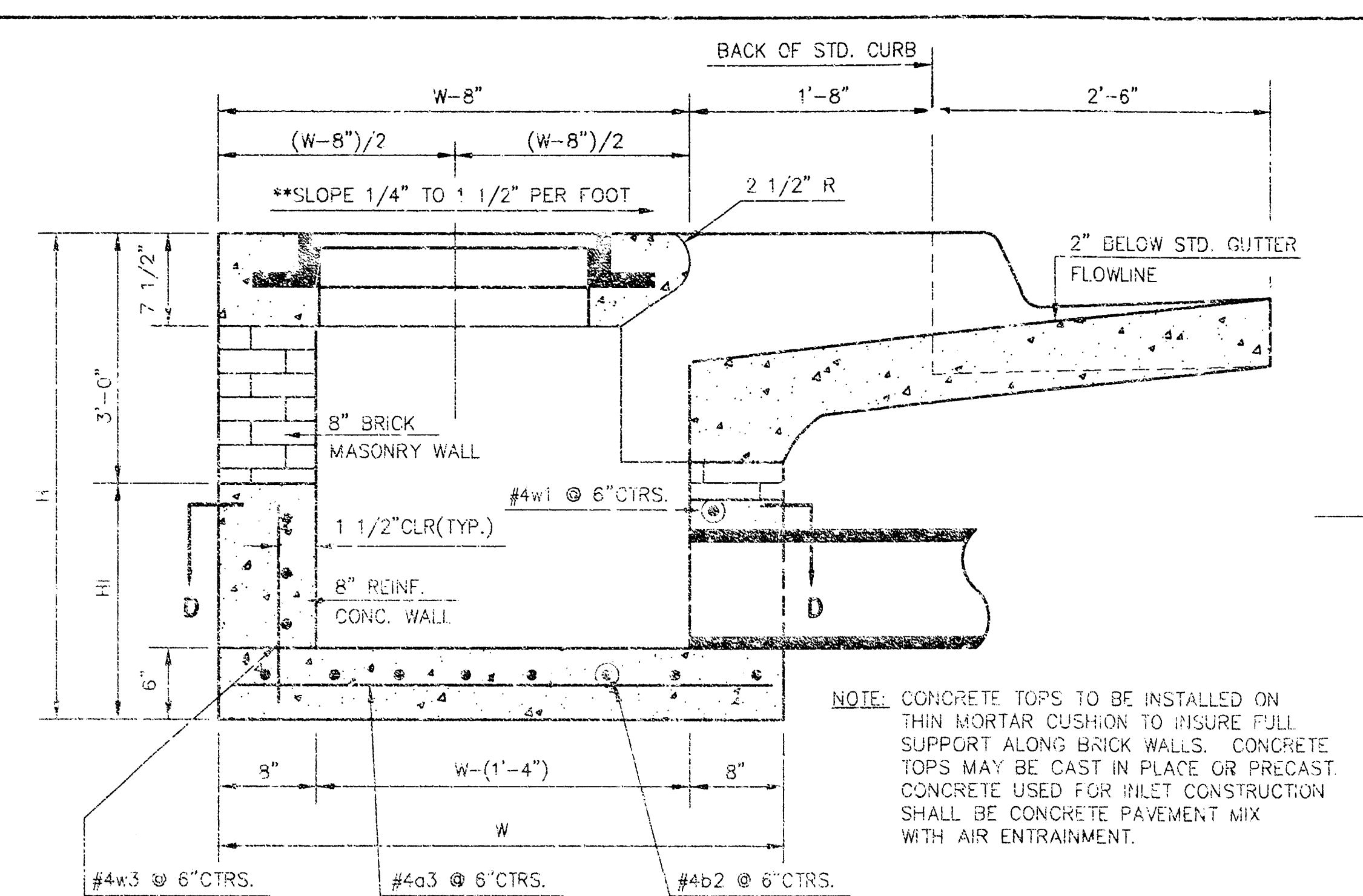
PRECAST SLAB AND FLOOR REINFORCING											
		W=4'-4"		W=5'-4"		W=6'-4"		W=7'-4"		W=8'-4"	
MARK	SIZE	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH
*a1	#4	6	6'-7"	6	8'-7"	6	10'-7"	6	12'-7"	6	14'-7"
a2	#4	4	6'-0"	4	8'-0"	4	10'-0"	4	12'-0"	4	14'-0"
a3	#4	13	4'-1"	13	5'-1"	13	6'-1"	13	7'-1"	13	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'-5"	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	32	②	36	②	40	②	44	②	48	②

* FIELD BEND OR CUT REINFORCING AS REQUIRED FOR CLEARANCE
 ① 4(HI-12"); (HI-12") ROUND DOWN TO NEAREST 0.5"
 ② HI-3"



SECTION E-E



SECTION A-A

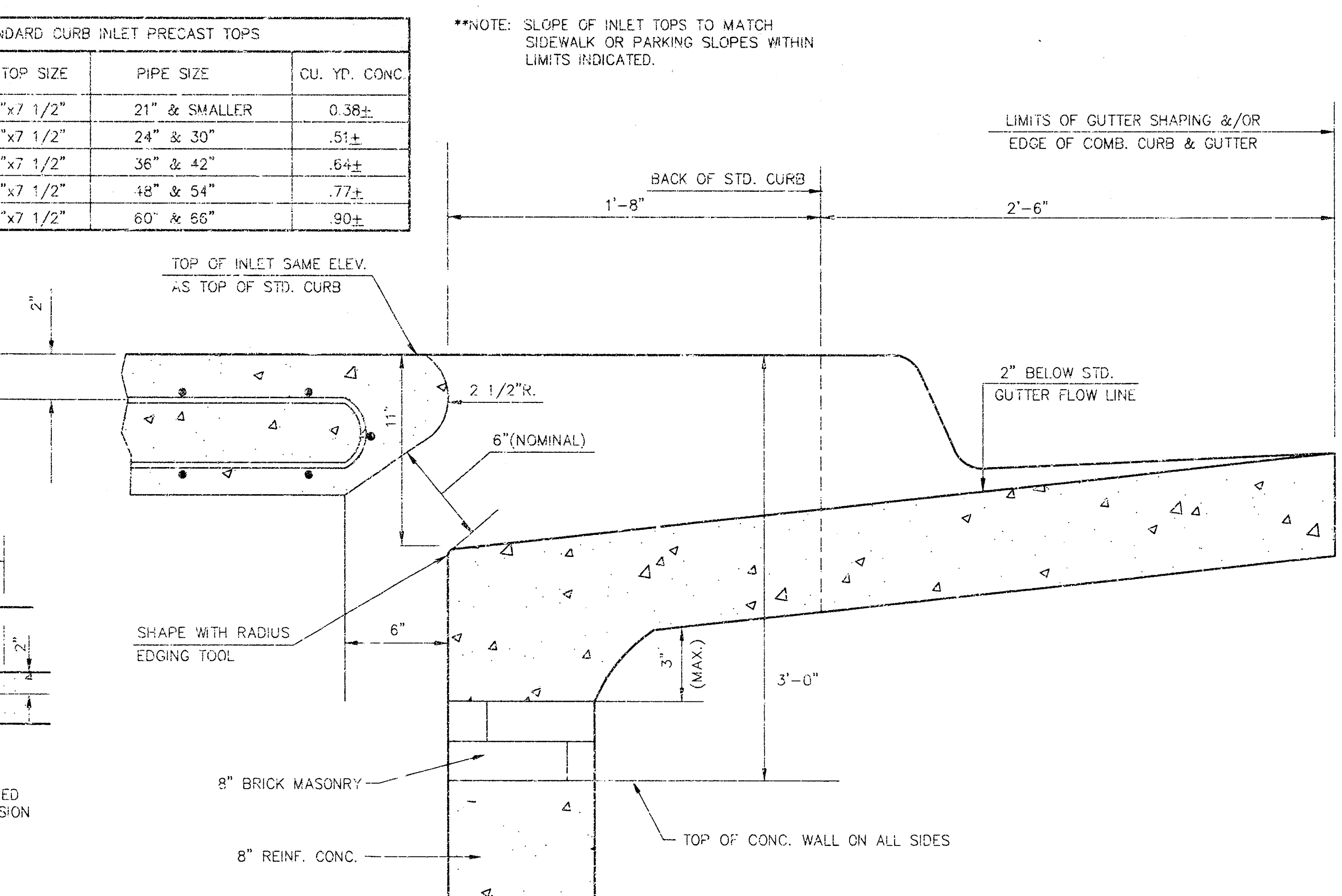
NOTE: CONTRACTOR SHALL HAVE THE OPTION OF CONSTRUCTING 8" BRICK MASONRY WALLS BETWEEN THE CONCRETE INLET BASE AND TOP ON THIS INLET WHEN W=6'-4" AND H=7'-0" OR LESS.

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.

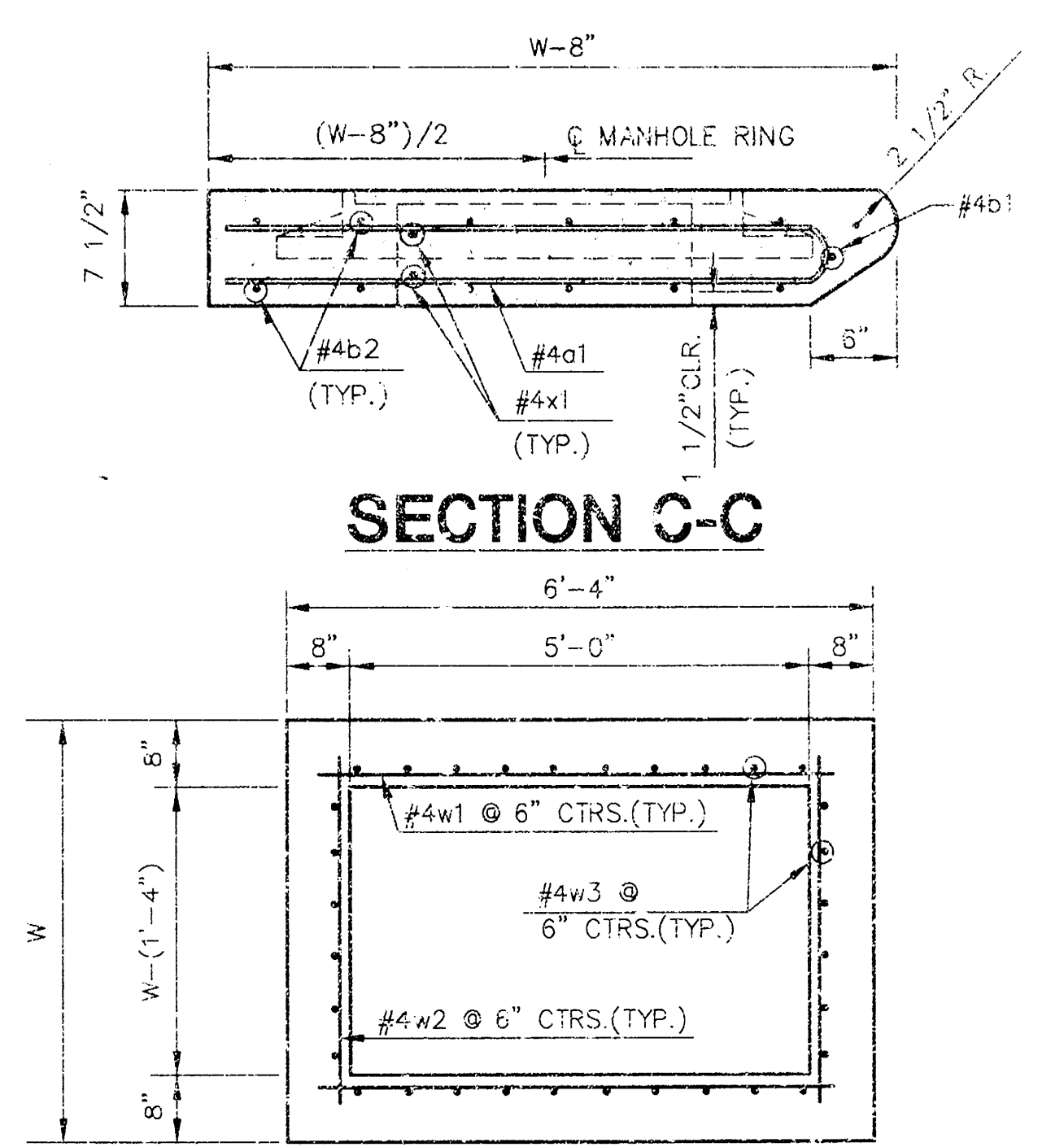
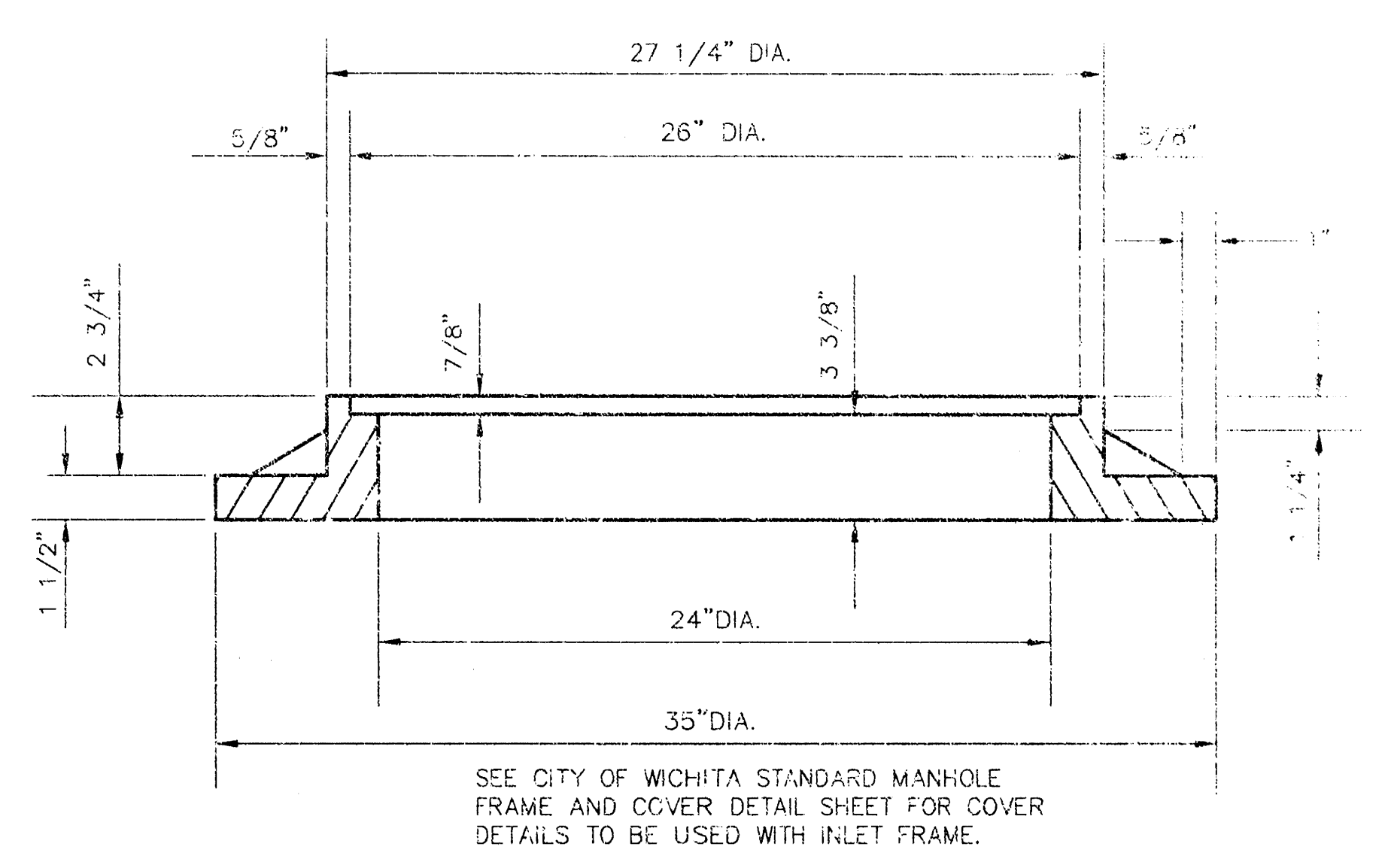
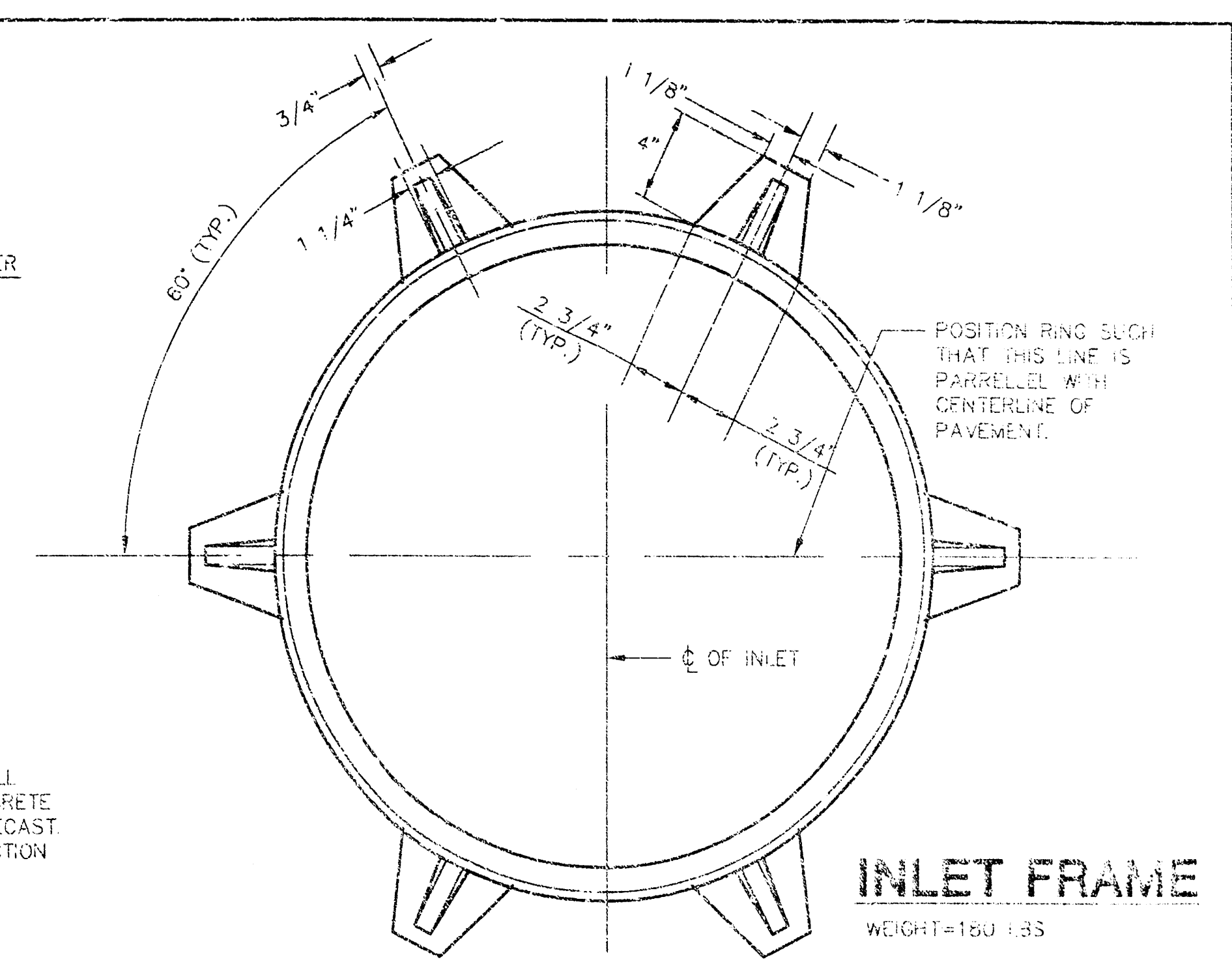
INLET INVERT SHALL BE SHAPED WITH 8 SACK SAND MIX CONCRETE TO CREATE FLOW CHANNELS AND TO INCREASE HYDRAULIC EFFICIENCY SUCH THAT THE INLET WILL BE SELF CLEANING BETWEEN ALL INLET AND/OR OUTLET PIPES.

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.



SECTION B-B



REVISED: 2-18-88 C.O.W.

STANDARD TYPE 1A CURB INLET

INLET OPENING=6"x5'-0"

JUNE 1984

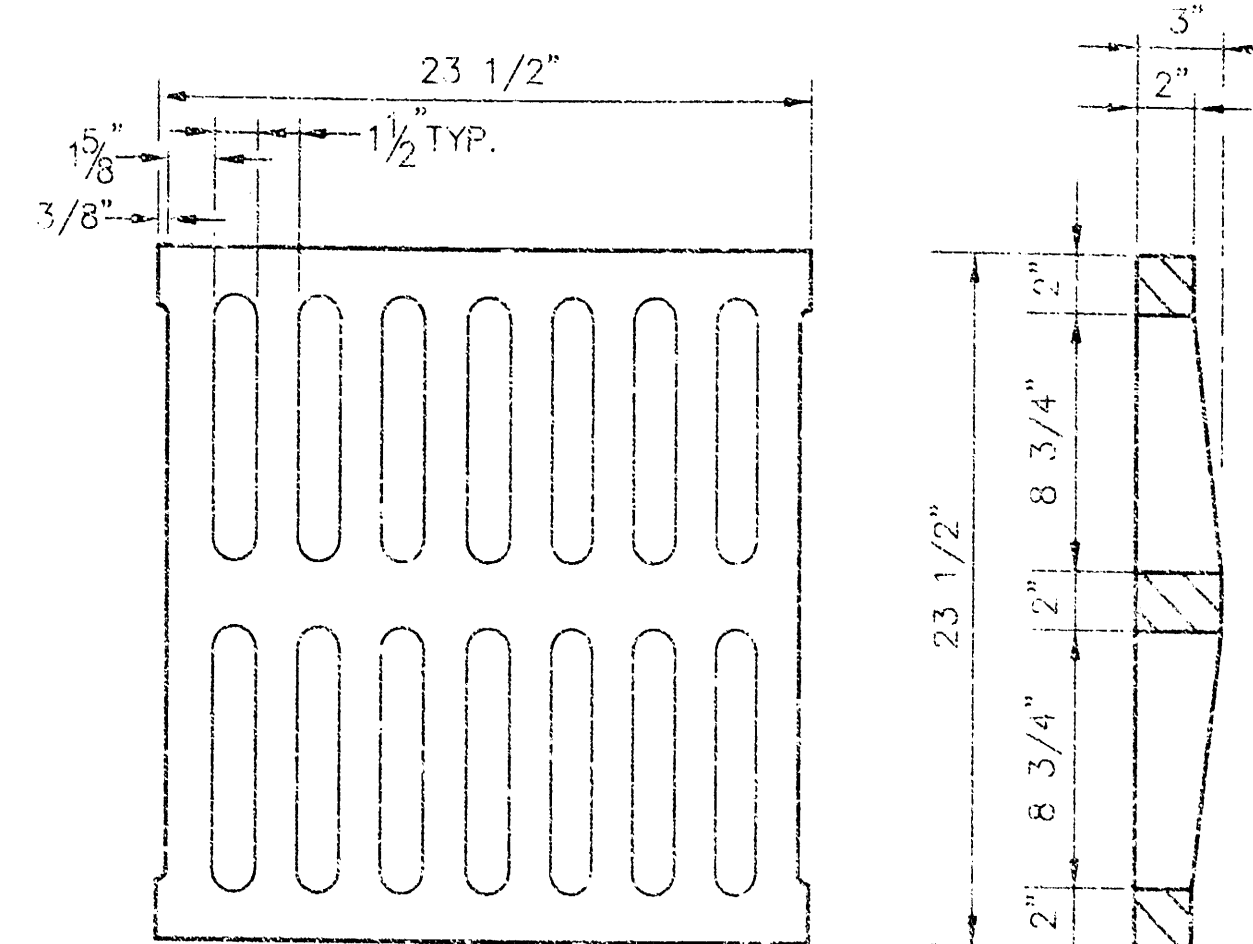
CITY OF WICHITA, KANSAS

2/9

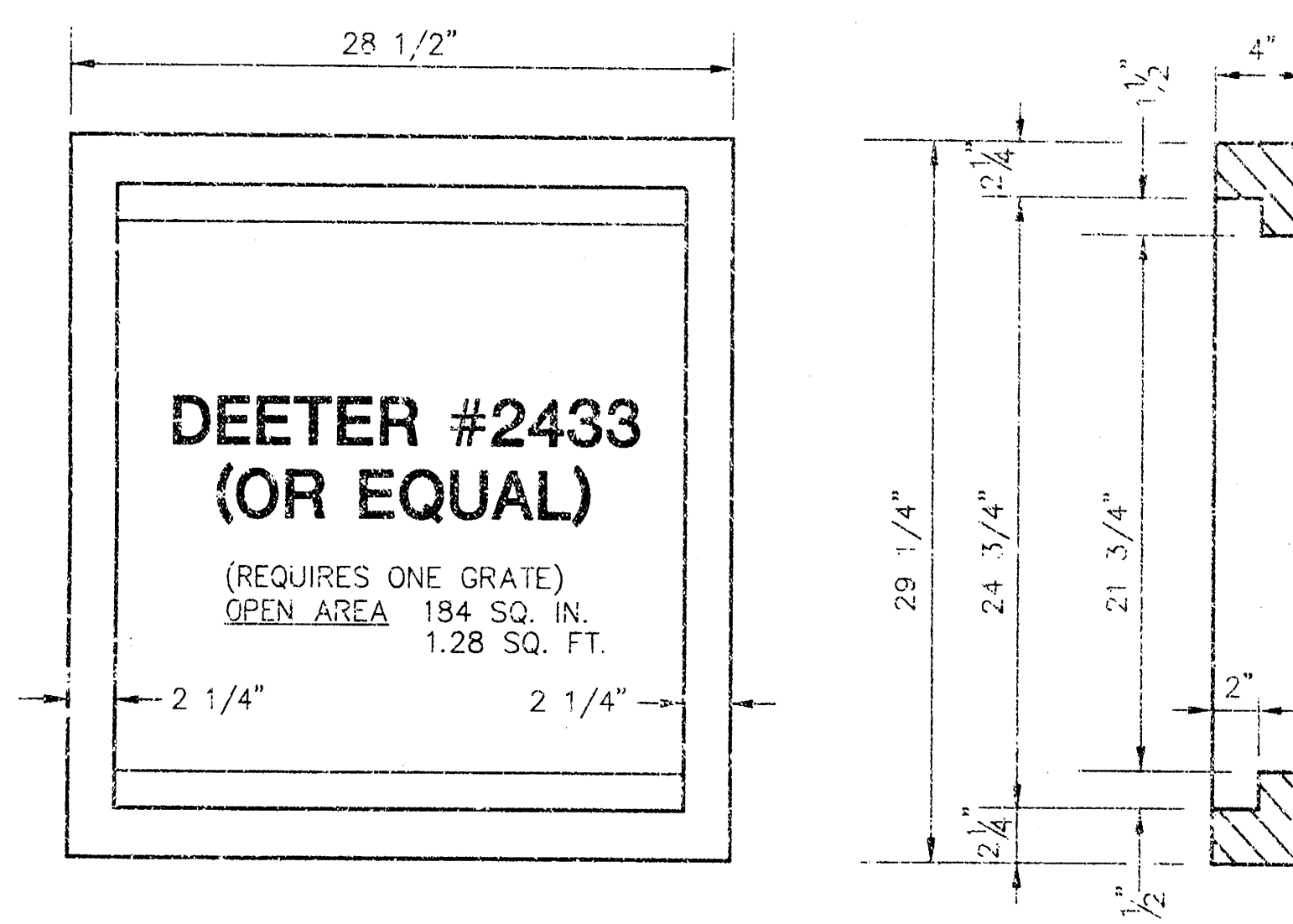
Design C.O.W.	Checked by	Checked by
Drawn by	Date	Date JULY 1996 Job No. 99187DD1

H:\CIVIL\99187DD1.dwg

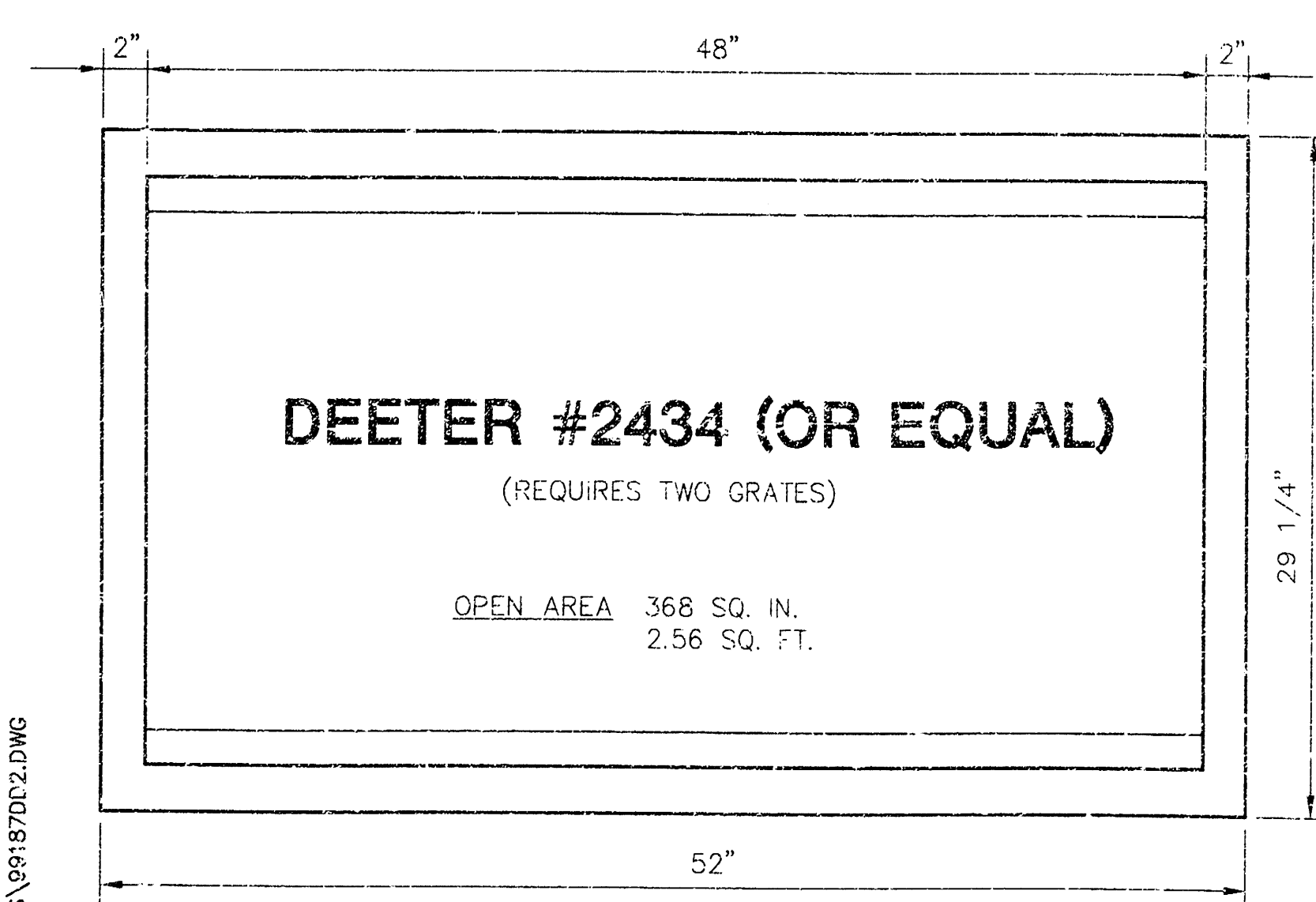
NOTE: GRATES SHALL BE IMPRINTED ON THE TOP SURFACE WITH "CITY OF WICHITA" USING LETTERS AT LEAST 1" IN HEIGHT. OTHER MARKING METHODS MAY BE USED ONLY IF APPROVED BY THE ENGINEER.



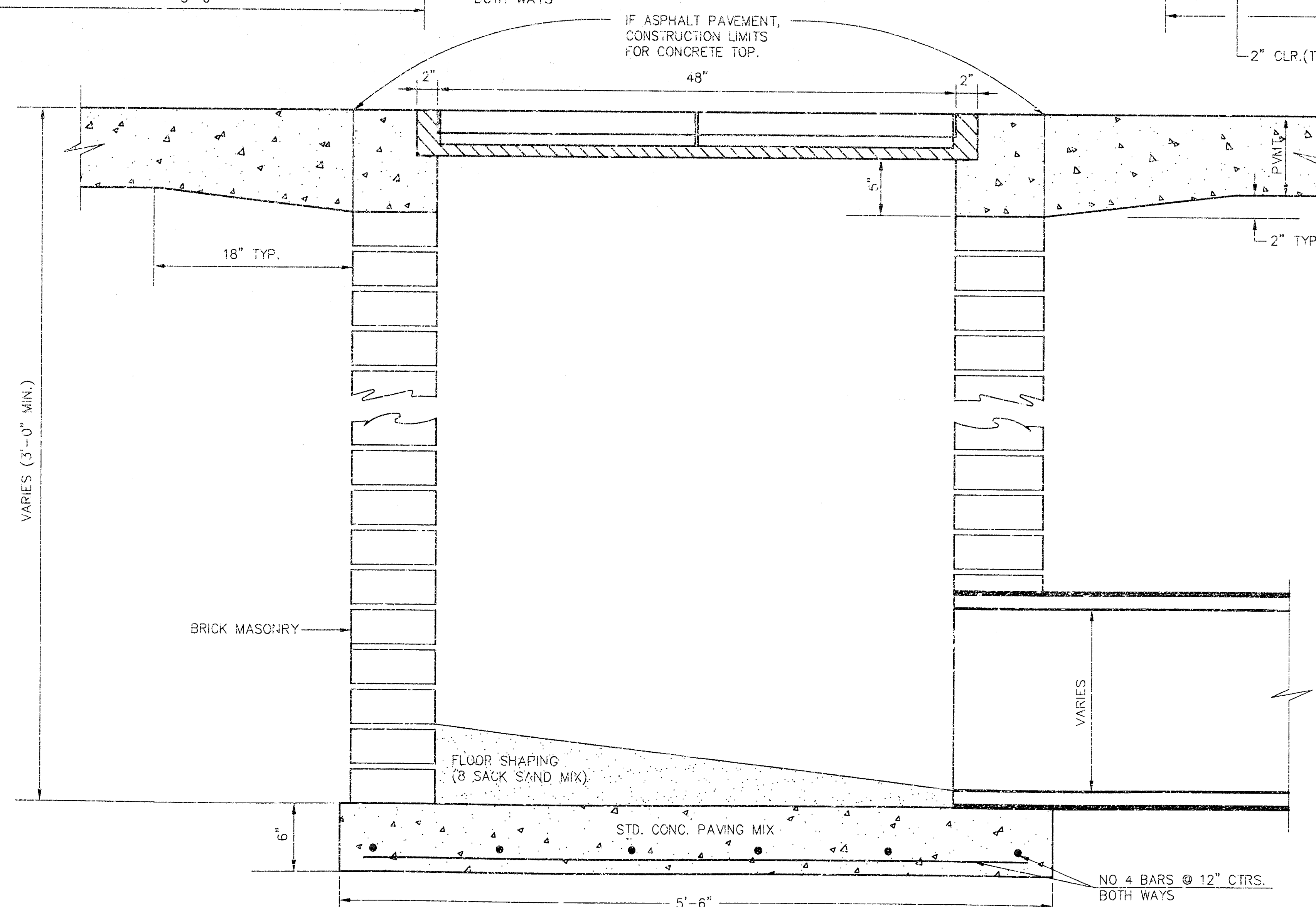
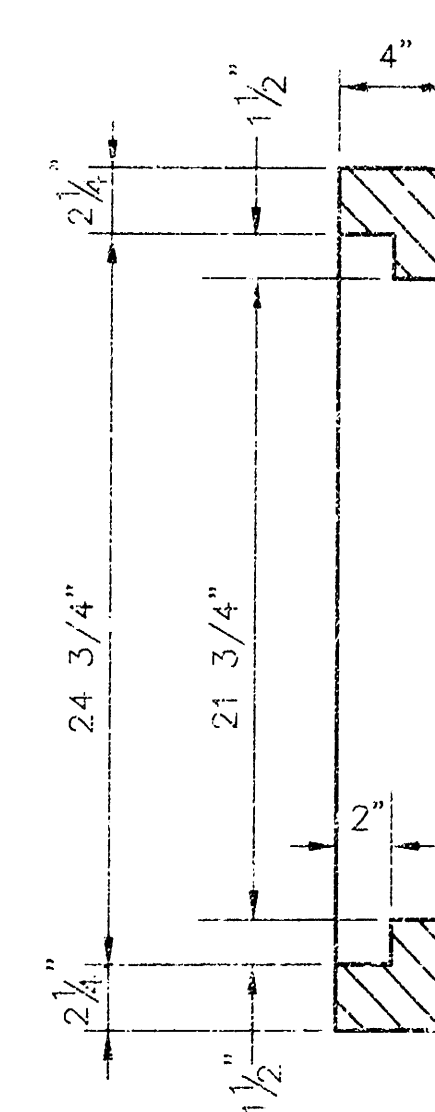
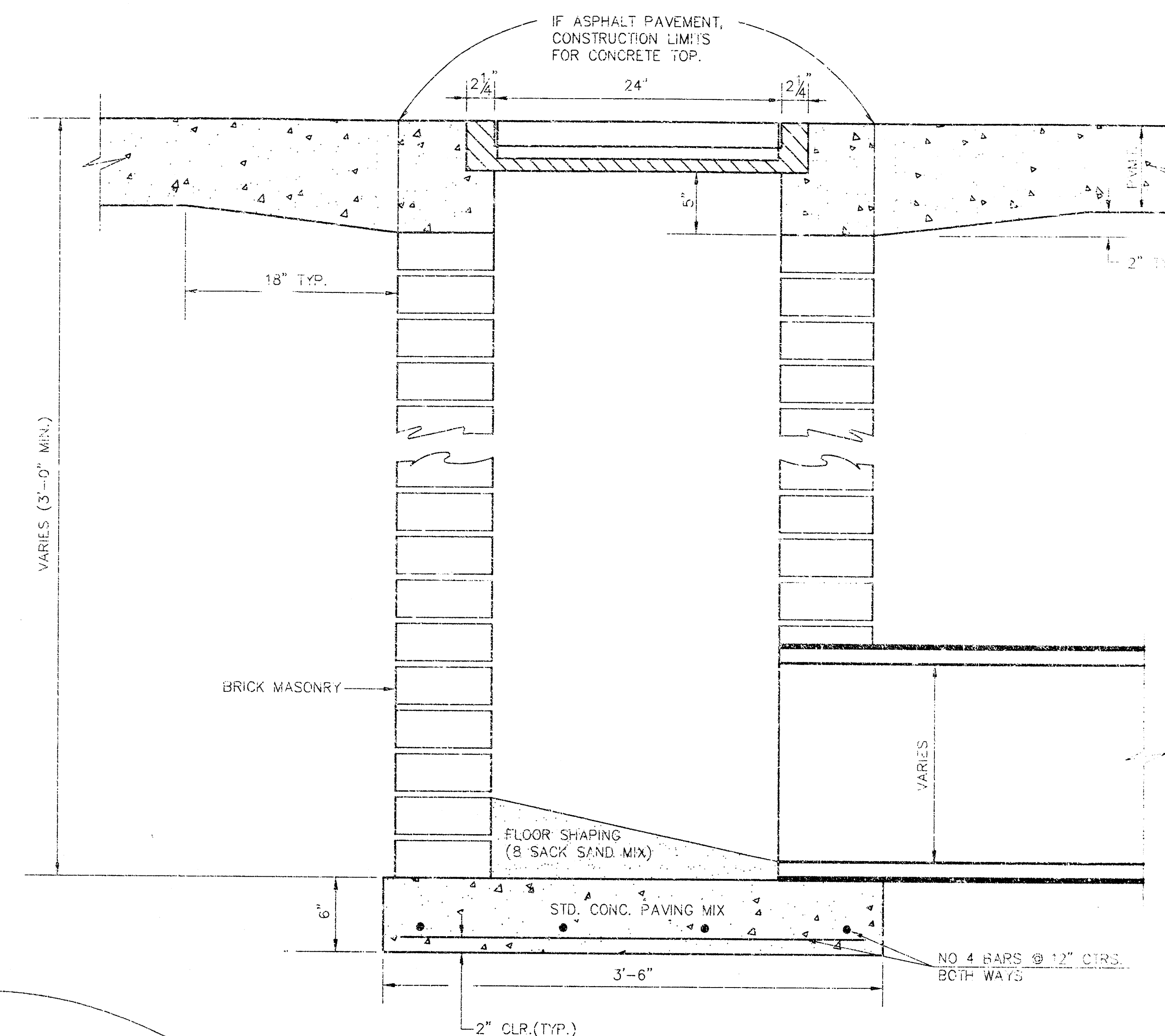
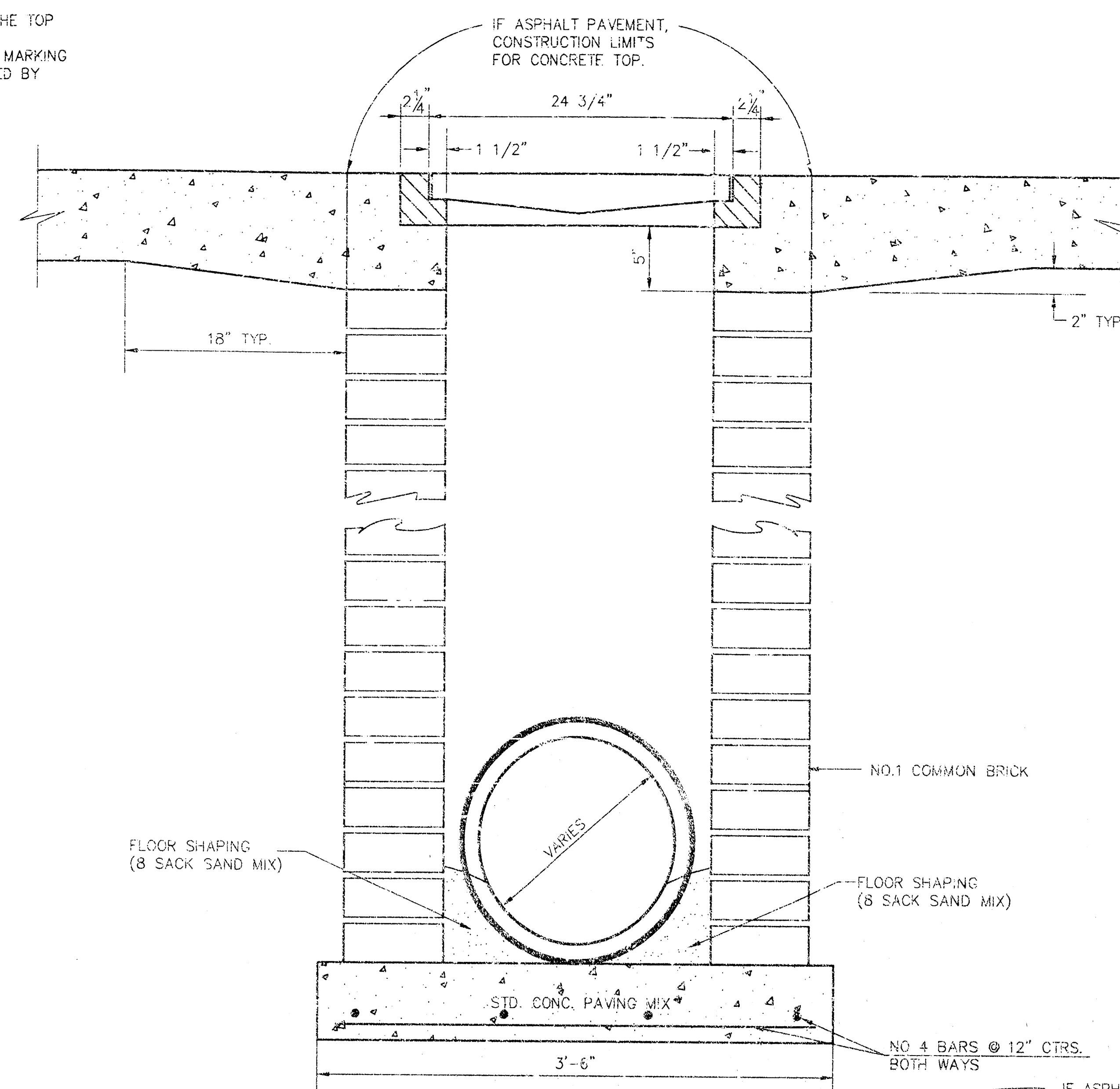
24"x24" GRATE DETAIL



SINGLE 24"x24" FRAME DETAIL



DOUBLE 24"x24" FRAME DETAIL

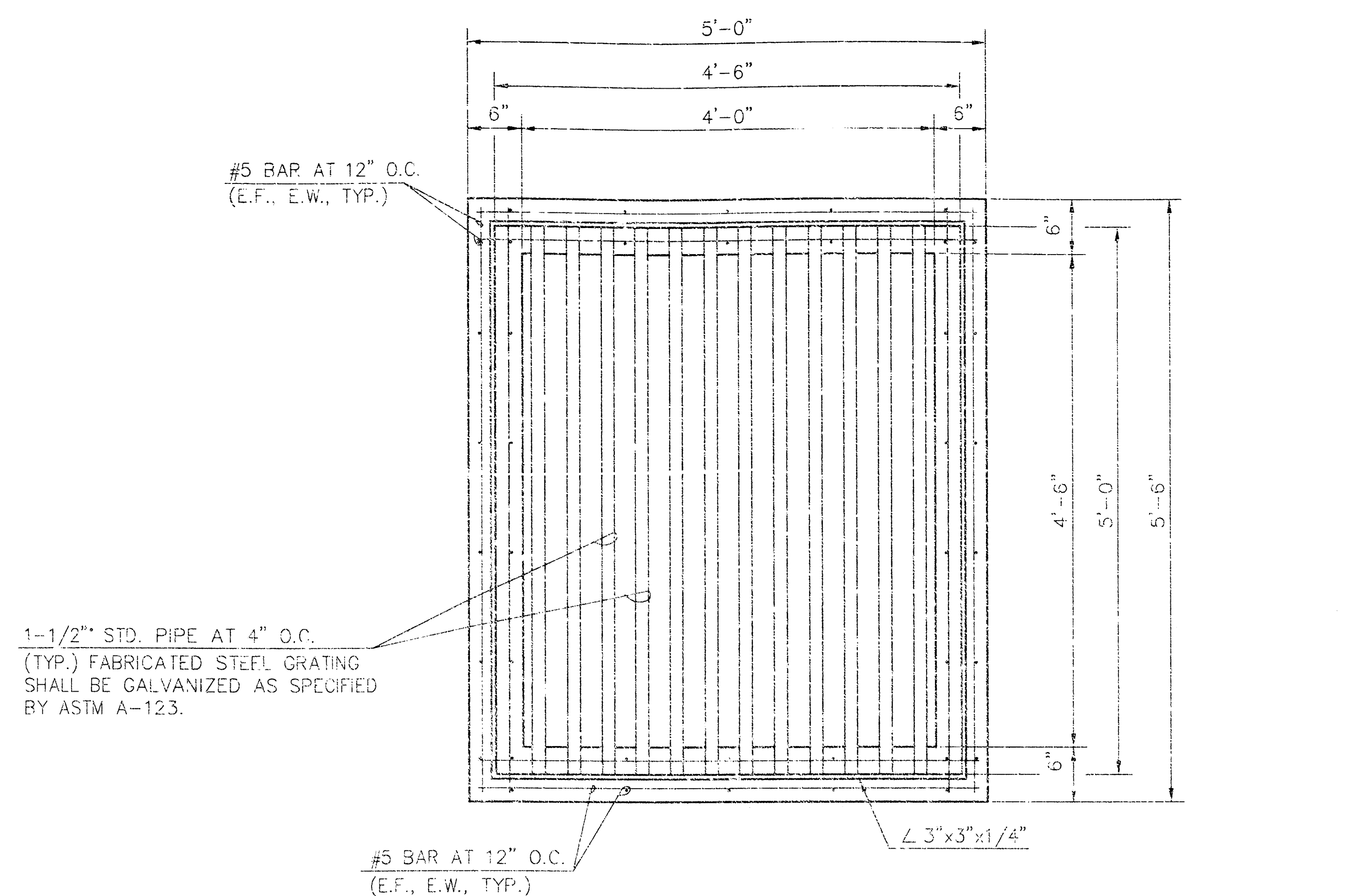


ORIFICE EQUATION		
$Q = C \cdot A \cdot \sqrt{2gh}$ $C = 0.60$		
h (DEPTH)	#2433 (SINGLE)	#2434 (DOUBLE)
0.1	1.95 cfs	3.89 cfs
0.2	2.75 cfs	5.50 cfs
0.3	3.37 cfs	6.74 cfs
0.4	3.89 cfs	7.78 cfs
0.5	4.35 cfs	8.70 cfs
0.6	4.77 cfs	9.53 cfs
0.7	5.15 cfs	10.30 cfs
0.8	5.50 cfs	11.01 cfs
0.9	5.84 cfs	11.67 cfs
1.0	6.15 cfs	12.30 cfs

REVISED: 5-8-90 JNJ

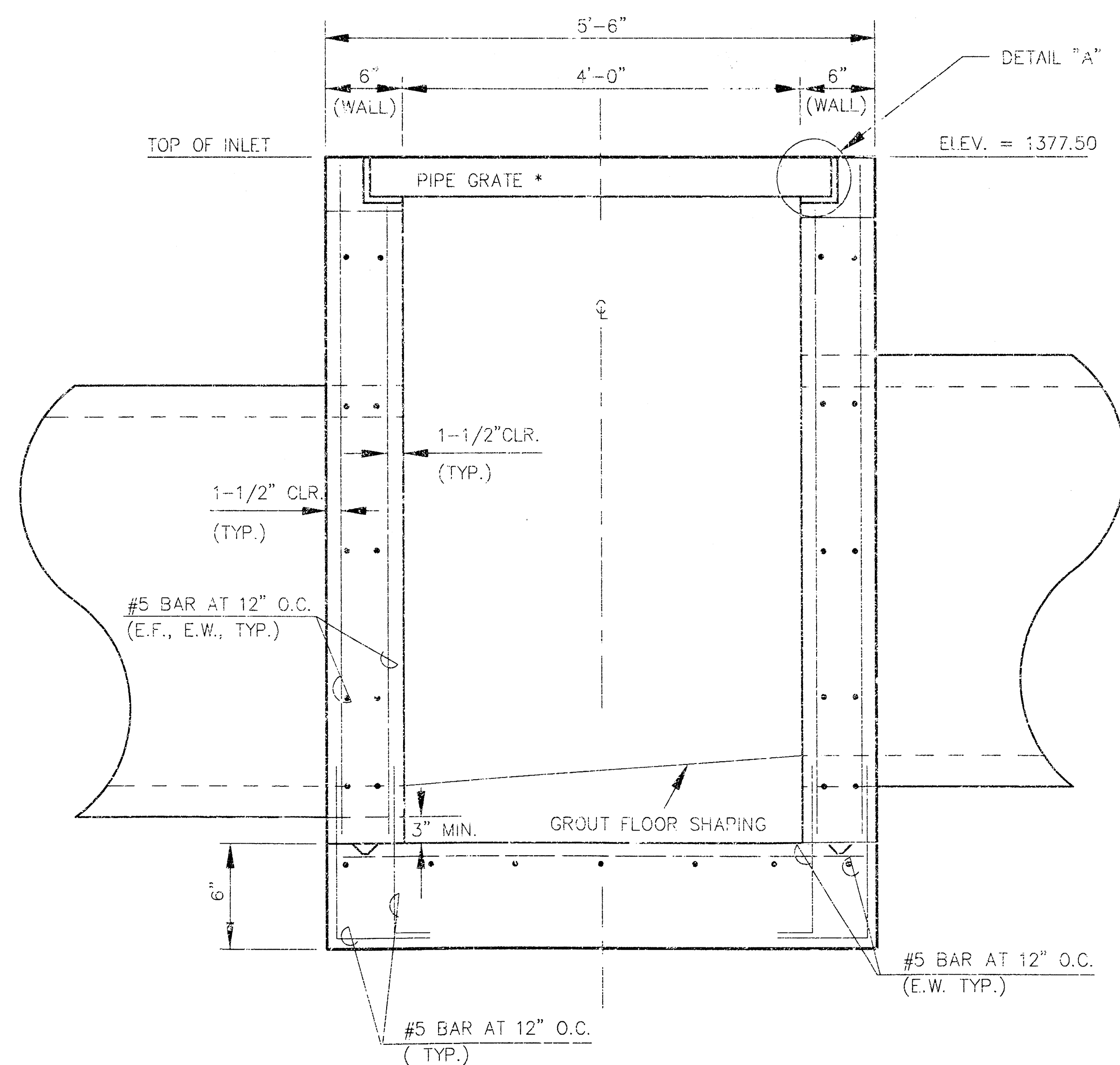
DROP INLET DETAILS

CITY OF WICHITA, KANSAS			
Design C.O.W.	Checked by	Checked by	39
Drawn by	Date	Date: JUNE 2000	Job No. 99187



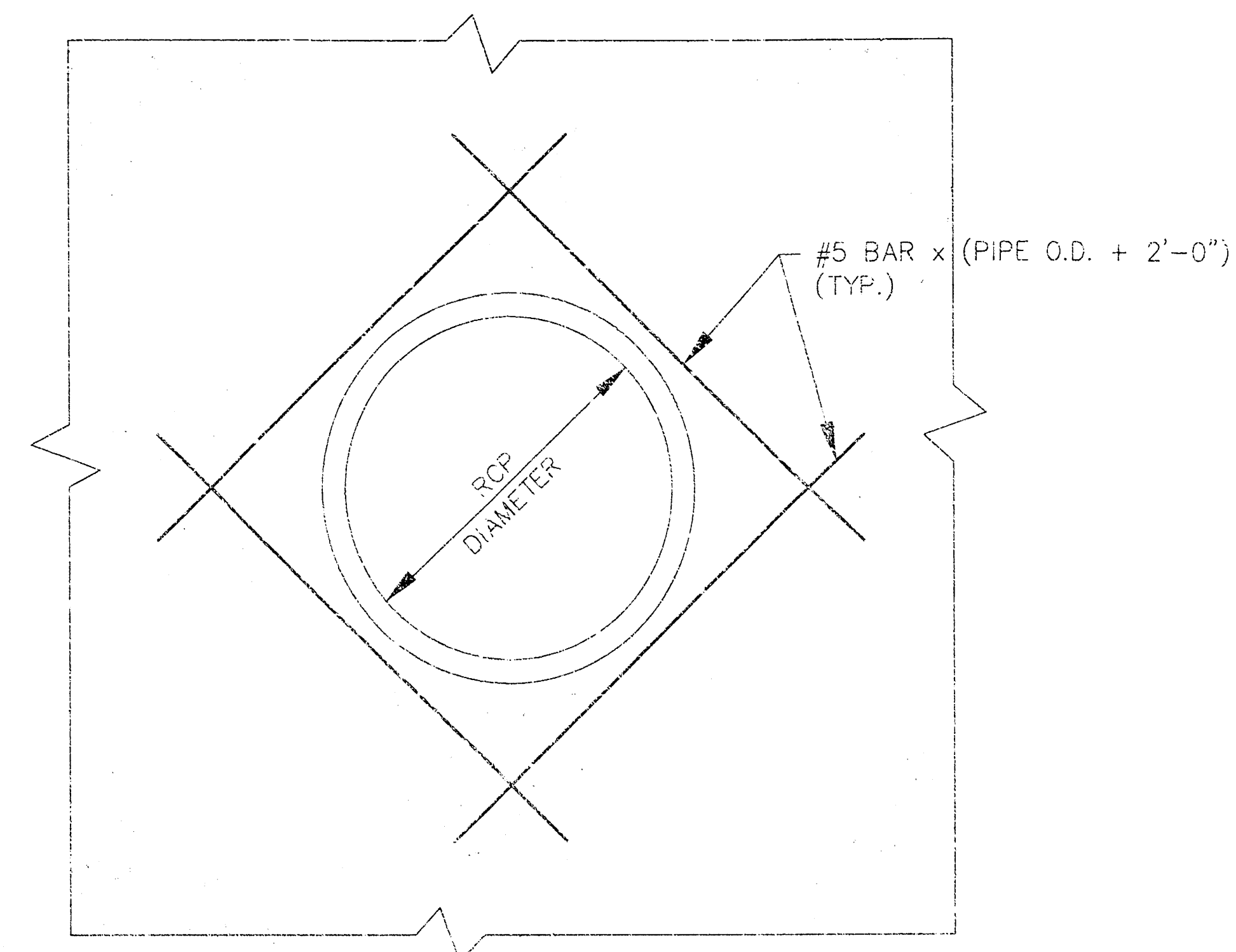
PLAN VIEW

CONTRACTOR MAY SUBSTITUTE 8" BRICK WALL FOR 6" REINFORCED CONCRETE WALL.



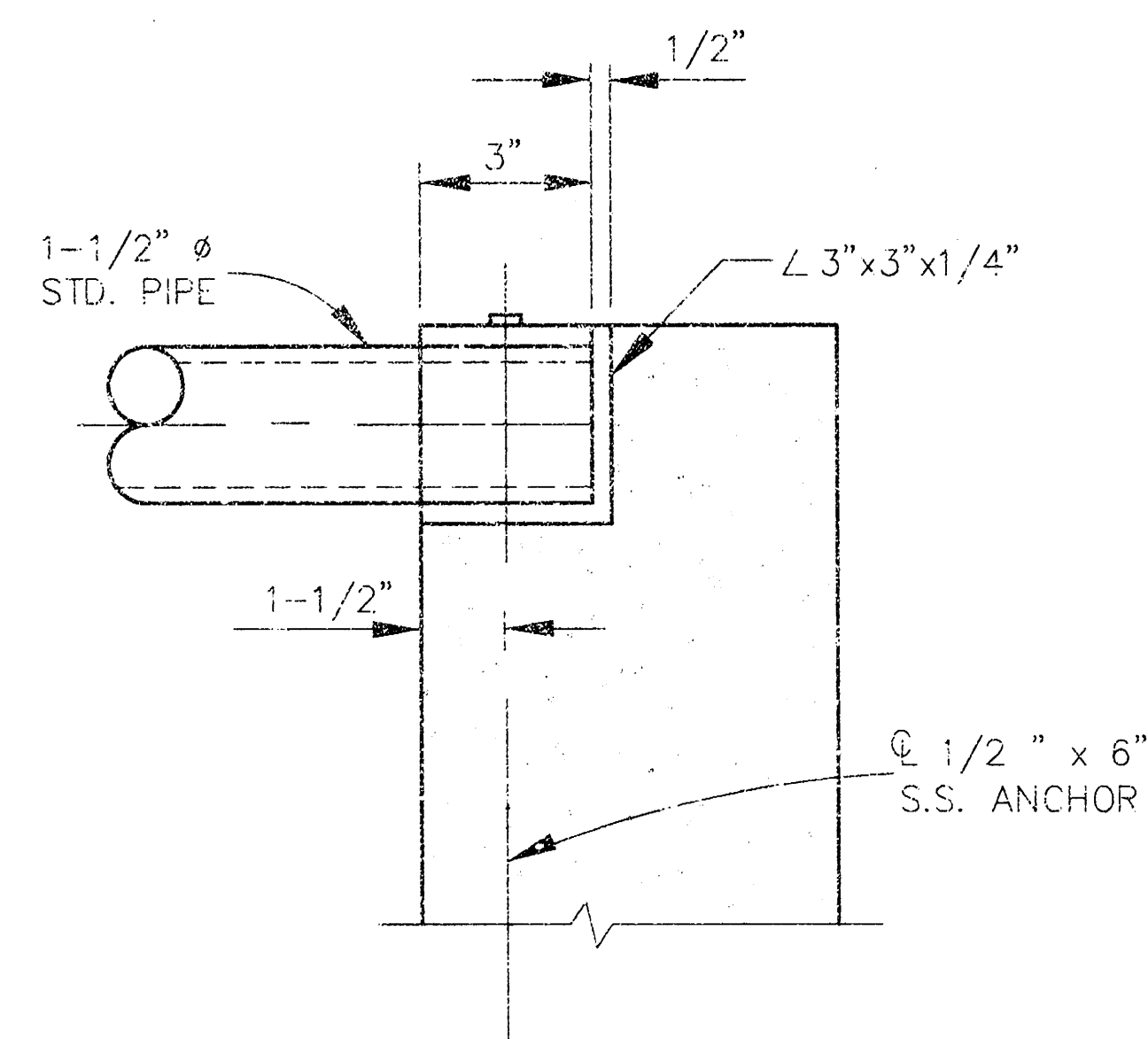
ELEVATION VIEW

REINFORCED CONCRETE AREA INLET



NOTE:
CUT REINFORCING AS REQUIRED TO CLEAR RCP.

TYPICAL REINFORCING AT PIPE



NOTE:
FABRICATED STEEL GRATING SHALL BE GALVANIZED AS SPECIFIED BY ASTM A-123.

DETAIL "A"

MATERIAL SPECS

MORTAR - TYPE "M"
BRICK - ASTM C62 GRADE MW
STEEL - ASTM A36 OR EQUIVALENT
GALV. - ASTM A-123 STD.
CONCRETE - $f'_c = 4,000$ PSI MINIMUM WITH 6 SACKS OF CEMENT PER CUBIC YARD MINIMUM.

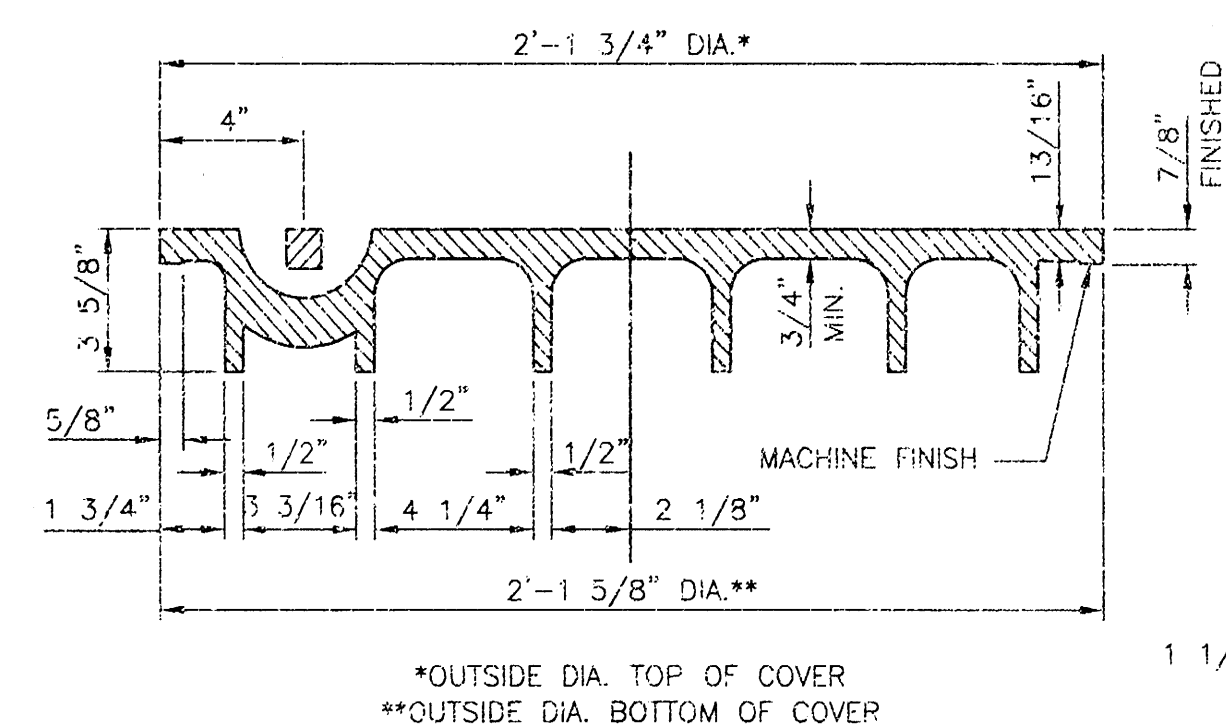
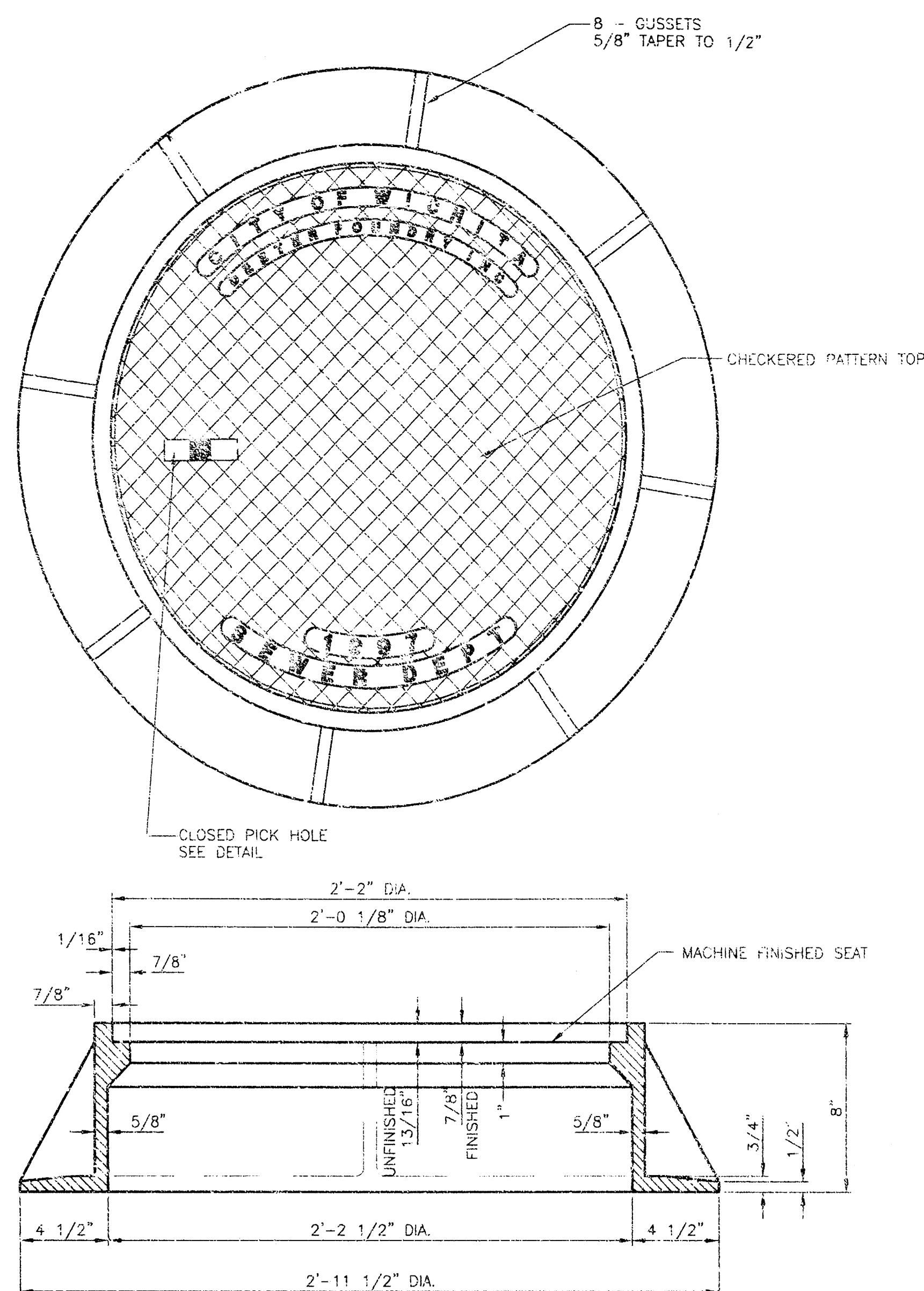
ORIFICE EQUATION				
$Q = C \cdot A \cdot \sqrt{2gh}$				
h (DEPTH)	2g	C	A	Q
0.5	64.4	0.7	8.625	34.3 cfs
1.0	64.4	0.6	8.625	41.5 cfs
2.0	64.4	0.6	8.625	58.7 cfs
2.0	64.4	0.7	8.625	68.5 cfs
3.0	64.4	0.6	8.625	71.9 cfs
4.0	64.4	0.6	8.625	83.1 cfs
5.0	64.4	0.5	8.625	92.9 cfs
6.0	64.4	0.6	8.625	101.7 cfs
7.0	64.4	0.6	8.625	109.9 cfs
8.0	64.4	0.6	8.625	117.5 cfs

MID-KANSAS ENGINEERING
CONSULTANTS, INC.
411 N. WEBB ROAD
WICHITA, KS. 67206
316-684-9600

CLUBHOUSE VILLAS
PROJECT NAME

REINFORCED CONCRETE AREA INLET
SHEET TITLE

DESIGN BY: MKEC
DRAWN BY: MKEC
CHECKED BY: MKEC
DATE: AUGUST 2000
JOB NO.: 99187004
SHEET/OF: 4/9

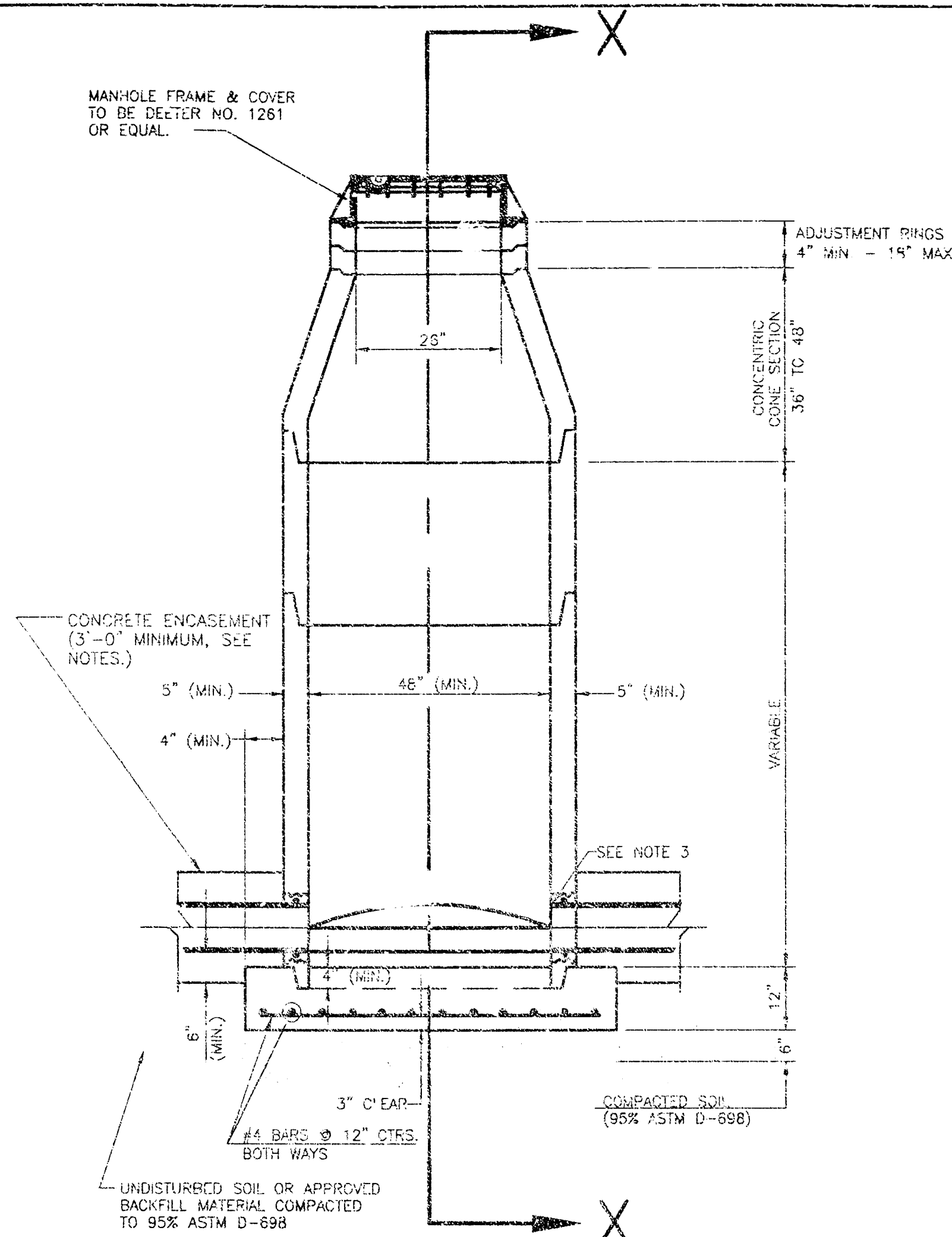
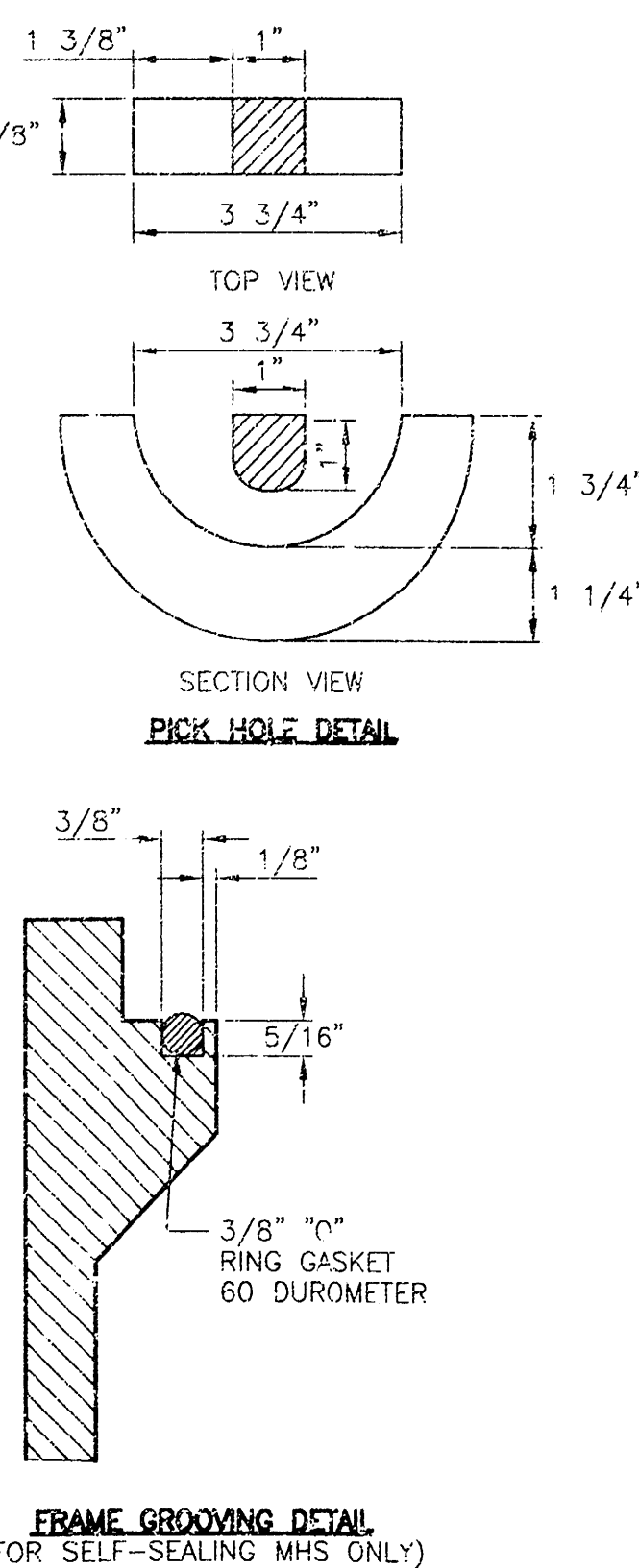


MANHOLE FRAME AND COVER

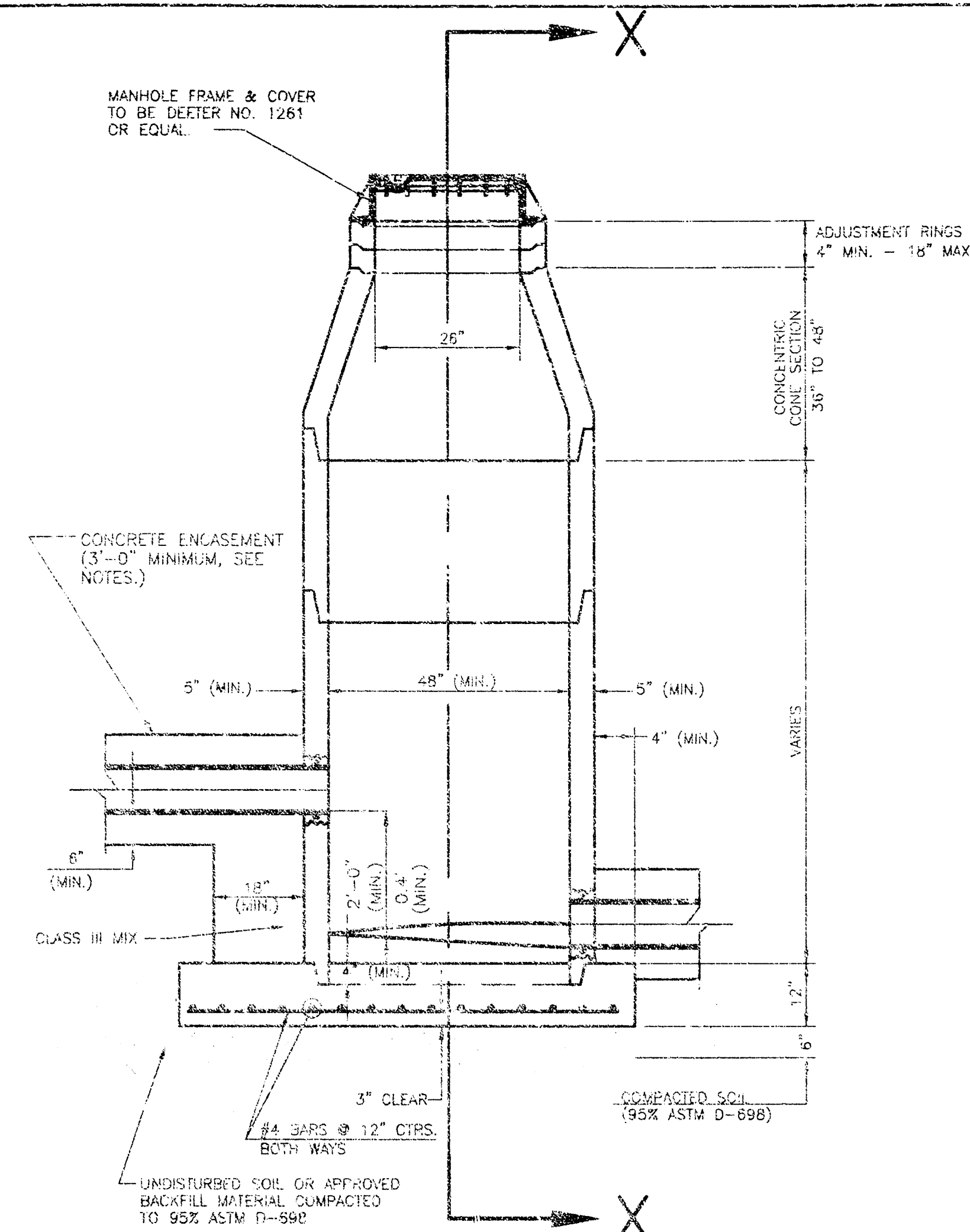
(TOTAL WEIGHT = 430 LBS.)

MANHOLE FRAME AND COVER NOTES

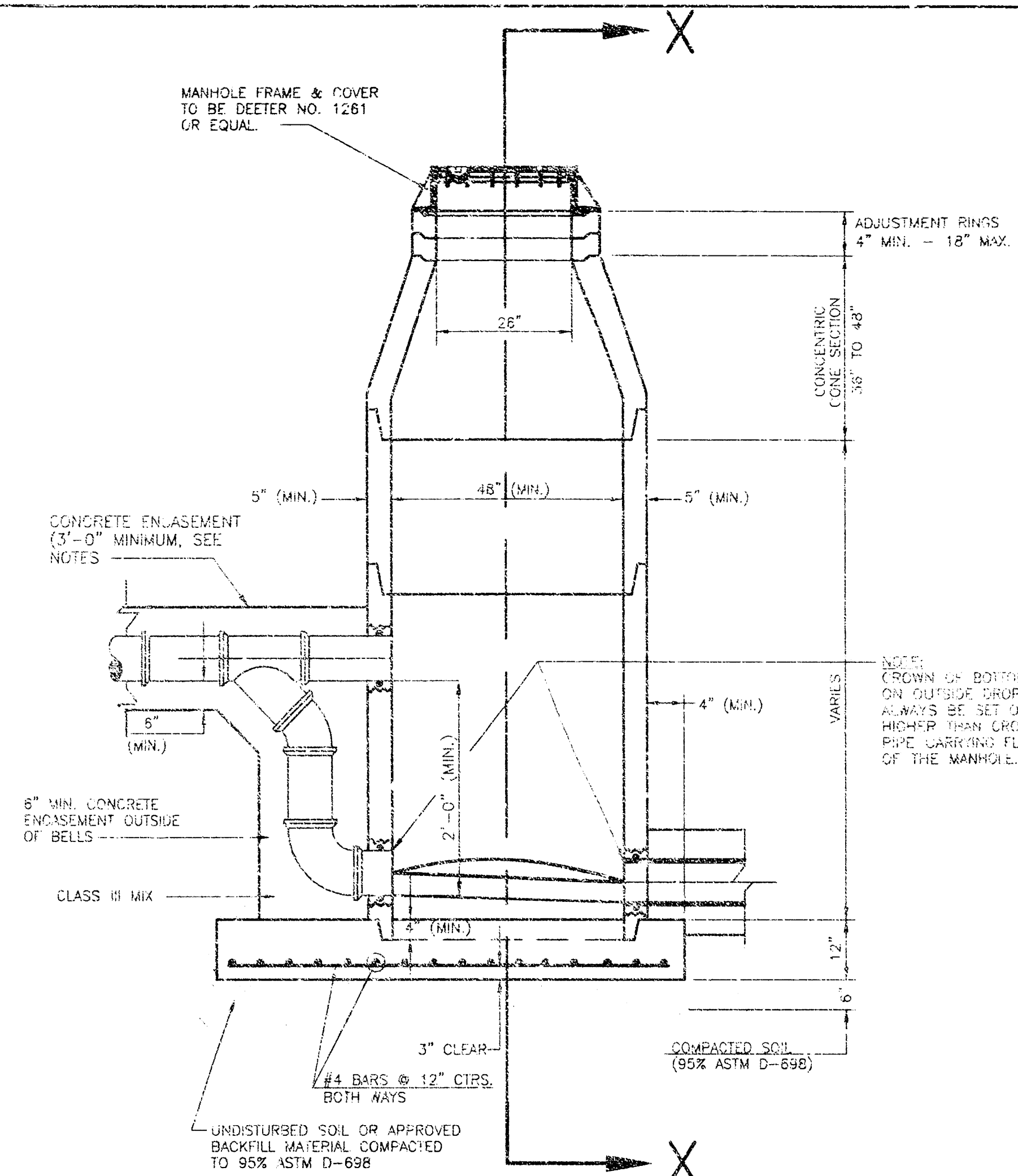
1. CAST IRON MANHOLE FRAME AND COVER SHALL CONFORM TO ASTM A-48, CLASS 30, OR BETTER.
2. THE FRAMES AND COVERS SHALL BE OF A NONSPARKING TYPE OR WITH MACHINED, BEARING SURFACES SO FITTING PARTS WILL NOT RATTLE OR ROCK UNDER TRAFFIC.
3. MANHOLE CASTINGS SHALL BE DEETER FOUNDRY INC. NO. 1261 OR APPROVED EQUAL, UNLESS OTHERWISE SPECIFIED IN THE SPECIAL CONDITIONS. (MINIMUM WT.-430 LBS.) ALL MANHOLE CASTINGS, REGARDLESS OF TYPE, SHALL BE CONFORMING TO THE SUBSIDIARY TO THE UNIT PRICES BID FOR THE VARIOUS MANHOLE TYPES.
4. GRIND ALL BURRS SMOOTH, CLEAN THOROUGHLY, THEN APPLY SHOP COAT OF ASPHALT BASE PAINT.
5. THE MANUFACTURER SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL. PRIOR TO MANUFACTURE, THE ENGINEER SHALL RETAIN THE RIGHT TO REJECT CASTINGS NOT CONFORMING TO THE SPECIFICATIONS OR THE APPROVED SHOP DRAWINGS.
6. WHERE SELF-SEALING MANHOLE FRAMES ARE SPECIFIED ON THE PLANS, THE MANHOLE FRAME SHALL BE FURNISHED WITH AN APPROVED "O" RING GASKET GROOVED INTO THE BEARING SURFACE OF THE MANHOLE FRAME (FOR DETAIL). THE "O" RING GASKET SHALL NOT BE INSTALLED IN THE MANHOLE FRAME UNTIL AFTER FINAL INSPECTION AND ACCEPTANCE OF THE PROJECT BY THE ENGINEER. THE CONTRACTOR SHALL SUPPLY TO THE OWNER ONE (1) REPLACEMENT "O" RING GASKET FOR EACH SELF-SEALING MANHOLE SPECIFIED.



PRECAST STANDARD MANHOLE TYPE 'A'



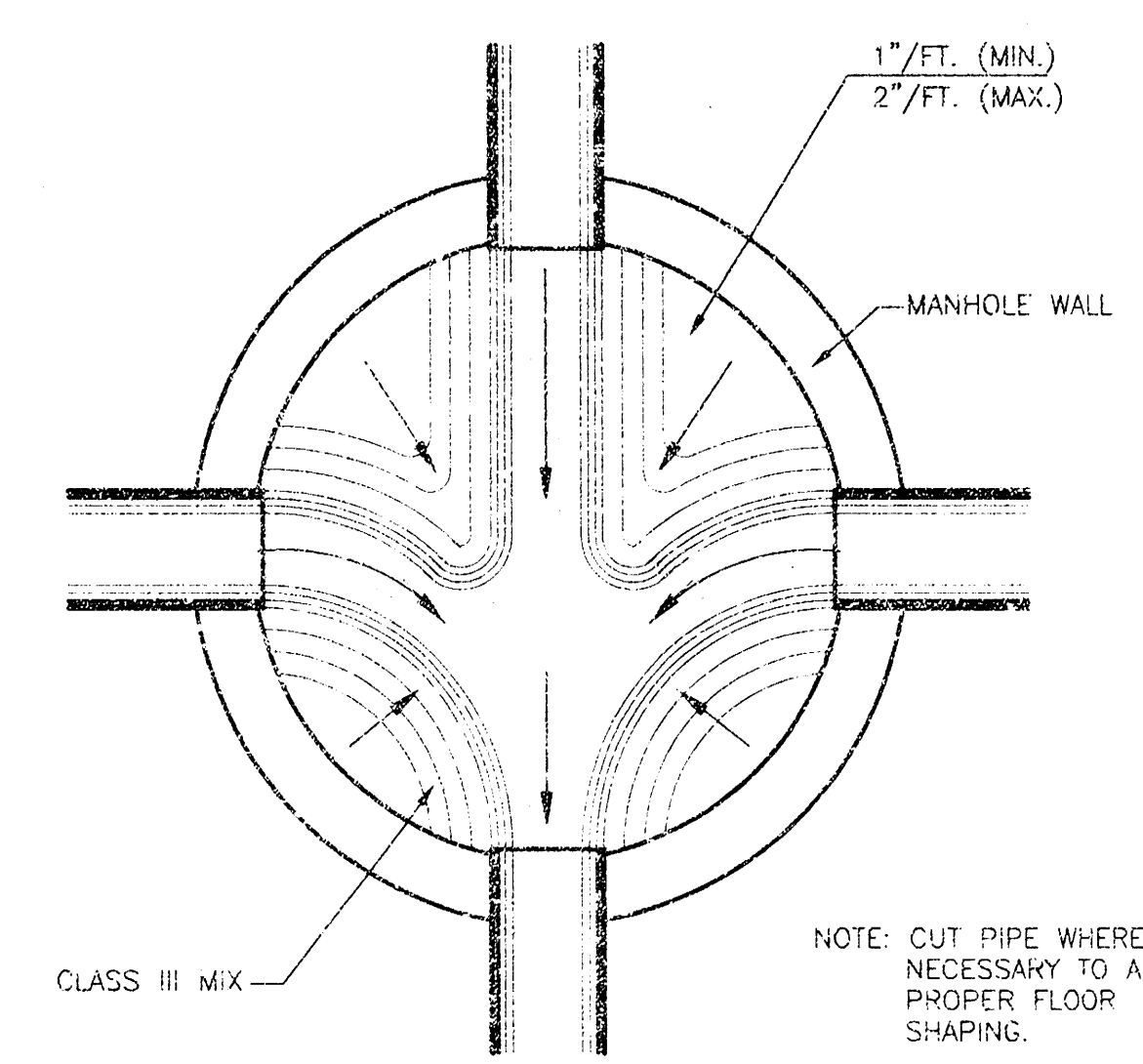
PRECAST INSIDE DROP MANHOLE TYPE 'B'



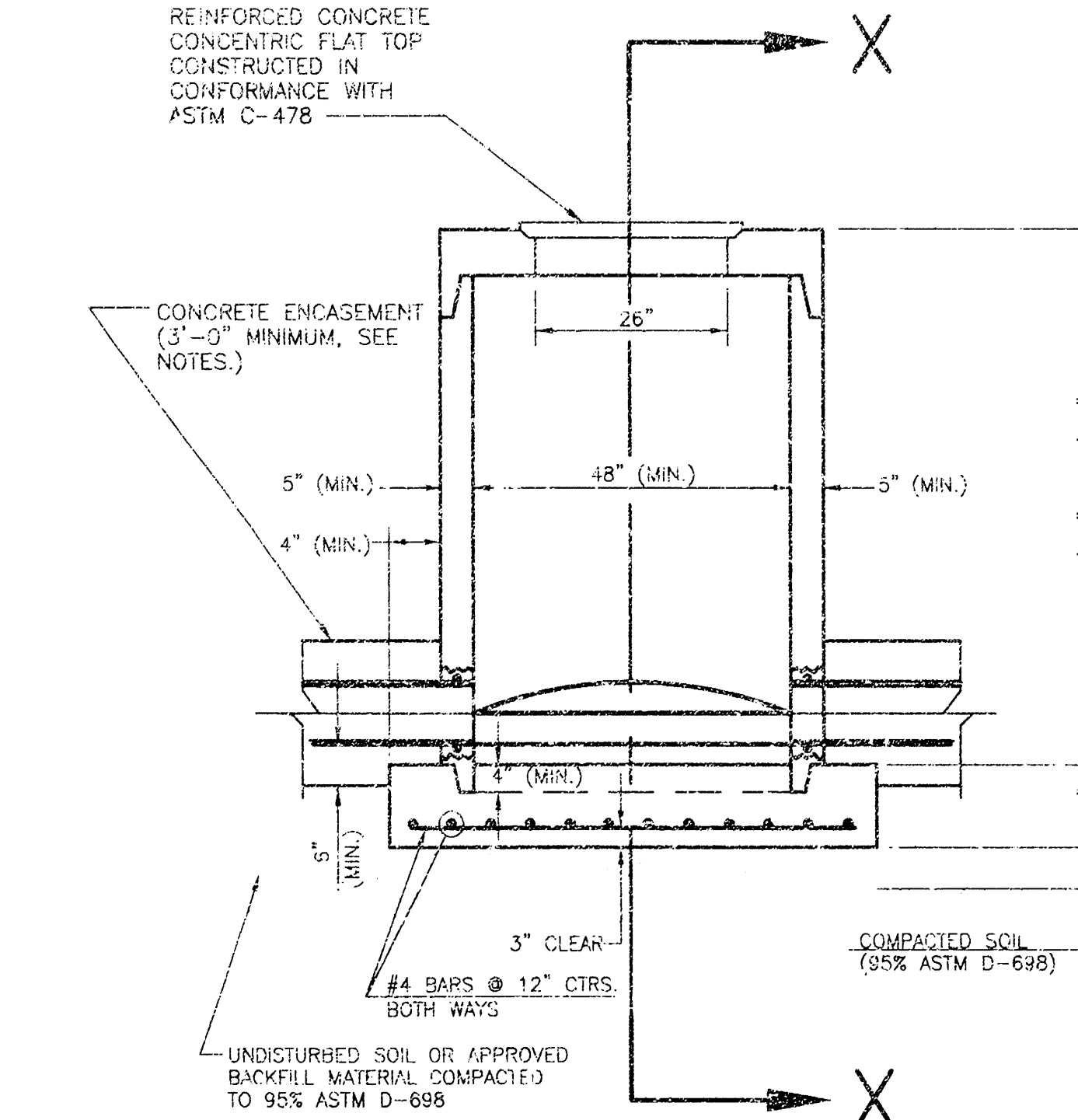
PRECAST OUTSIDE DROP MANHOLE TYPE 'C'

PRECAST MANHOLE NOTES

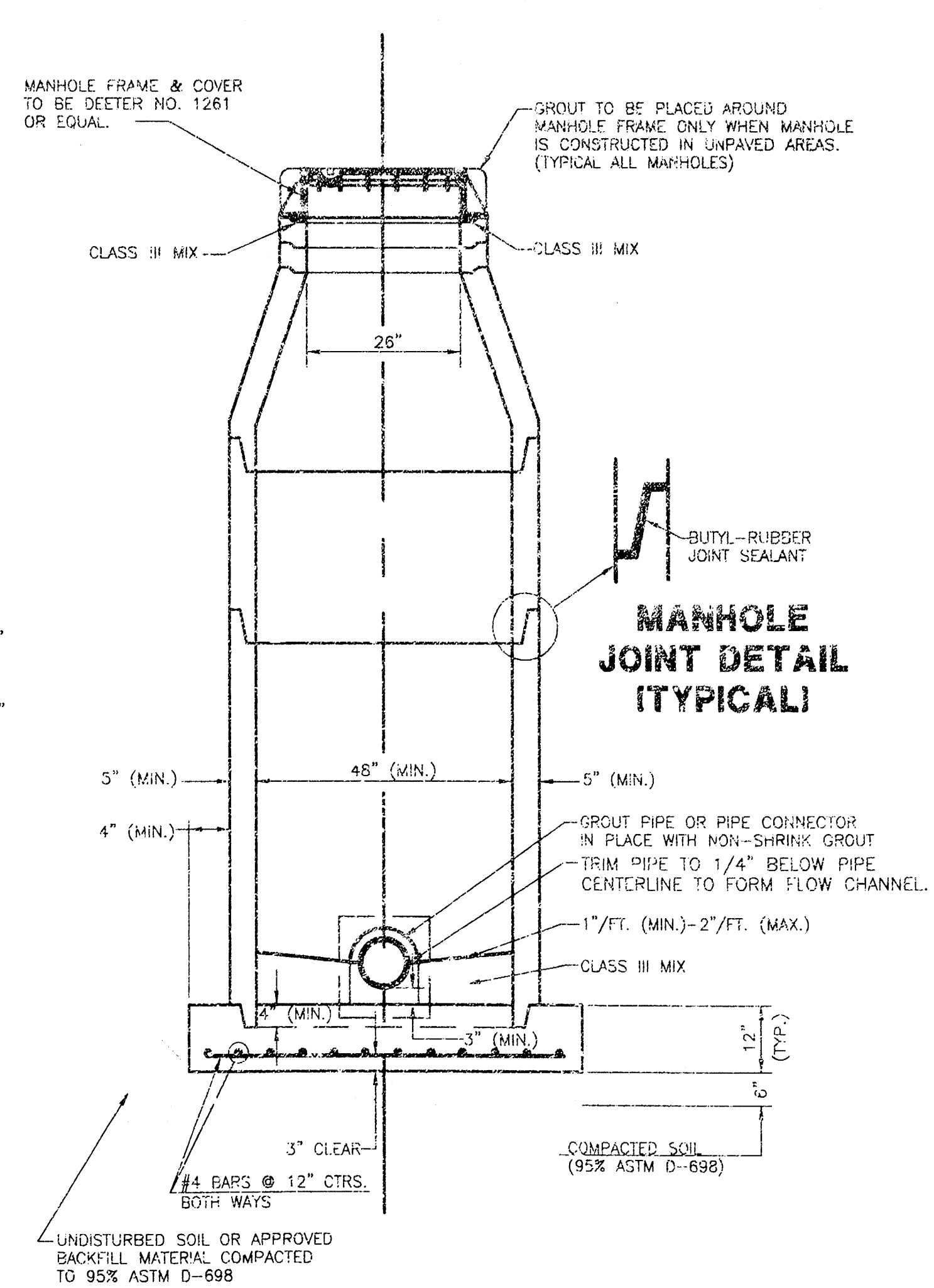
1. IF, IN THE OPINION OF THE ENGINEER, THE MANHOLE SUBGRADE APPEARS UNSTABLE, THE CONTRACTOR WILL HAVE THE OPTION TO COMPACT SUBGRADE AS SHOWN OR INCREASE THE THICKNESS OF THE MANHOLE BASE AS DIRECTED BY THE ENGINEER.
2. STEEL REINFORCING WILL BE REQUIRED IN ALL MANHOLE BASES.
3. APPROVED FLEXIBLE WATERSTOP GASKETS WHICH MEET OR EXCEED THE TEST REQUIREMENTS OF ASTM D-923 SHALL BE INSTALLED TO JOIN THE SEWER TO THE MANHOLE WALL WHEN PLASTIC PIPE IS USED. SEWER PIPE EXTENDING FROM MANHOLES SHALL BE SUPPORTED WITH CONCRETE ENCASEMENT A MINIMUM OF 3 FEET FROM THE MANHOLE WALL.
4. THE MANHOLE FRAME SHALL BE SEATED ON AN APPROVED BUTYL-RUBBER SEALANT TO PROVIDE A WATER-TIGHT SEAL BETWEEN THE MANHOLE ADJUSTMENT RING AND THE MANHOLE FRAME.
5. GASKETED PIPE PLUGS AND CAPS SHALL BE PROVIDED BY THE PIPE SUPPLIER.
6. ALL MANHOLE CONSTRUCTION SHALL BE WATER TIGHT.
7. TOP OF MANHOLE FLAT SLAB SHALL BE AT LEAST 3 INCHES BELOW THE FLOW LINE OF THE OUTLET PIPE TO INSURE SUFFICIENT MINIMUM THICKNESS OF SHAPED INVERT.
8. ALL PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO THE LATEST REVISION OF ASTM C-478 AS MODIFIED BY THE SPECIFICATIONS.
9. CONCRETE FOR MANHOLE BASES SHALL BE CLASS I AS DESCRIBED IN THE SPECIFICATIONS.
10. PRECAST MANHOLES SHALL BE SET AT LEAST 4 INCHES INTO MANHOLE BASE.
11. MANHOLES WITH PIPE SIZES 24" AND LARGER SHALL HAVE 5" INSIDE DIAMETER (MIN.).
12. INSIDE DIAMETER OF FIVE-FOOT DIAMETER PRECAST MANHOLES SHALL REMAIN CONSTANT TO THE LOCATION OF THE REDUCING FLAT TOP WHICH CONNECTS THE FOUR-FOOT DIAMETER CONE SECTION TO THE FIVE-FOOT DIAMETER MANHOLE BARREL.
13. ALL INTERIOR CONCRETE SURFACES ABOVE THE BENCH OF PRECAST MANHOLES SHALL BE COATED WITH 2 COATS OF TNEIC SERIES 66 HI-BUILD EPOXY/OLIO, DRY THICKNESS OF 8 MILS (MIN.).
14. EXTERIOR MANHOLE WALLS SHALL BE COATED WITH 1 COAT VALSPAR HI-BUILD BITUMINOUS COATING 35-45-10, OR TNEIC 46-450 HEAVY TNEICOL, OR APPROVED EQUAL.



TYPICAL MANHOLE FLOOR SHAPING

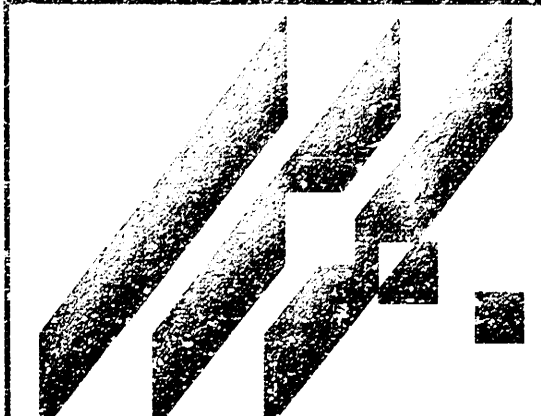


PRECAST SHALLOW MANHOLE TYPE 'D'



SECTION X (TYPICAL)

MANHOLE JOINT DETAIL (TYPICAL)



MID-KANSAS ENGINEERING CONSULTANTS, INC.
411 N. WEBB ROAD
WICHITA, KS. 67206
316-684-9600

CLUBHOUSE VILLAS @
LEGACY PARK WILSON ESTATES ADDITION
PROJECT NAME

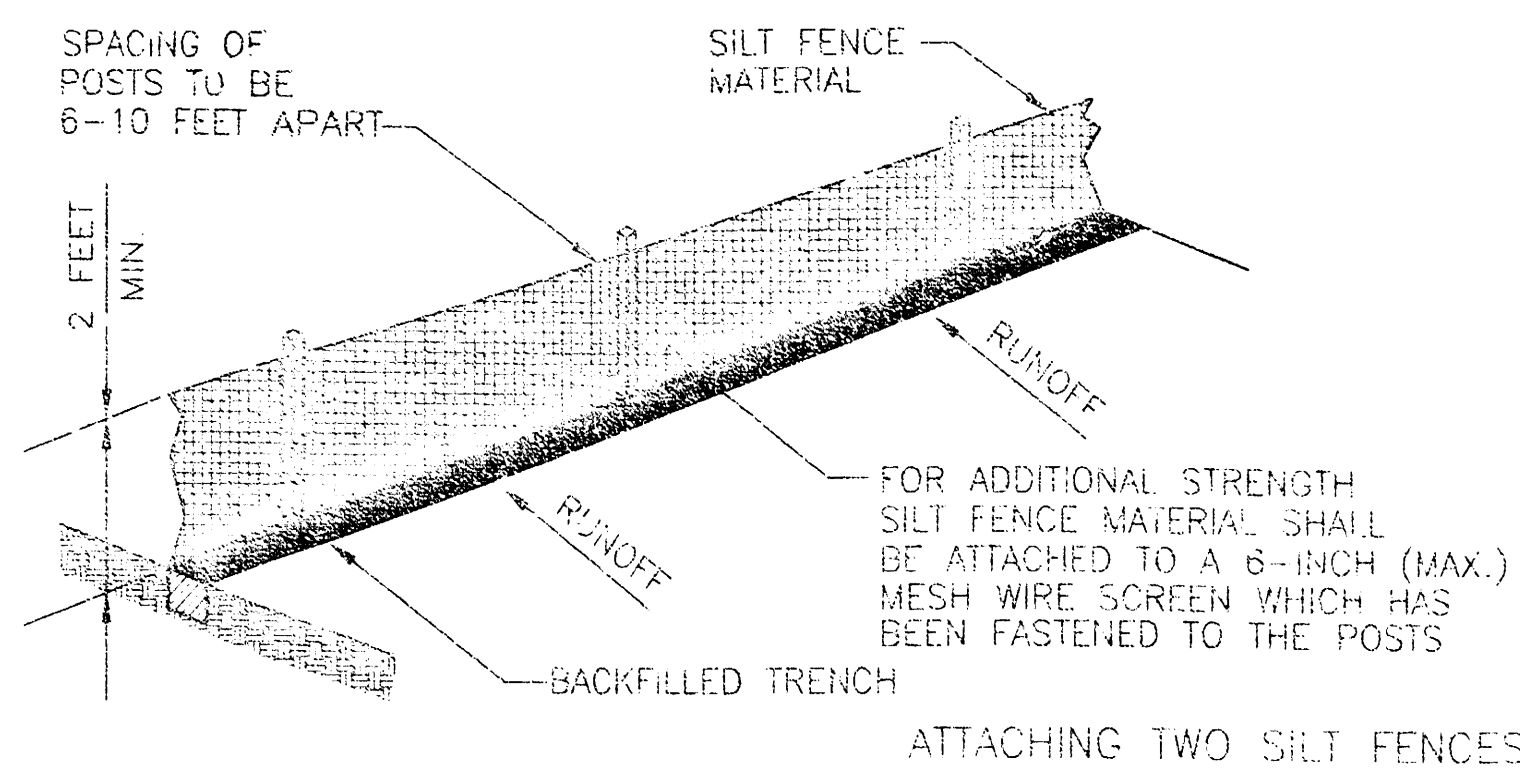
MANHOLE DETAILS

SHEET TITLE

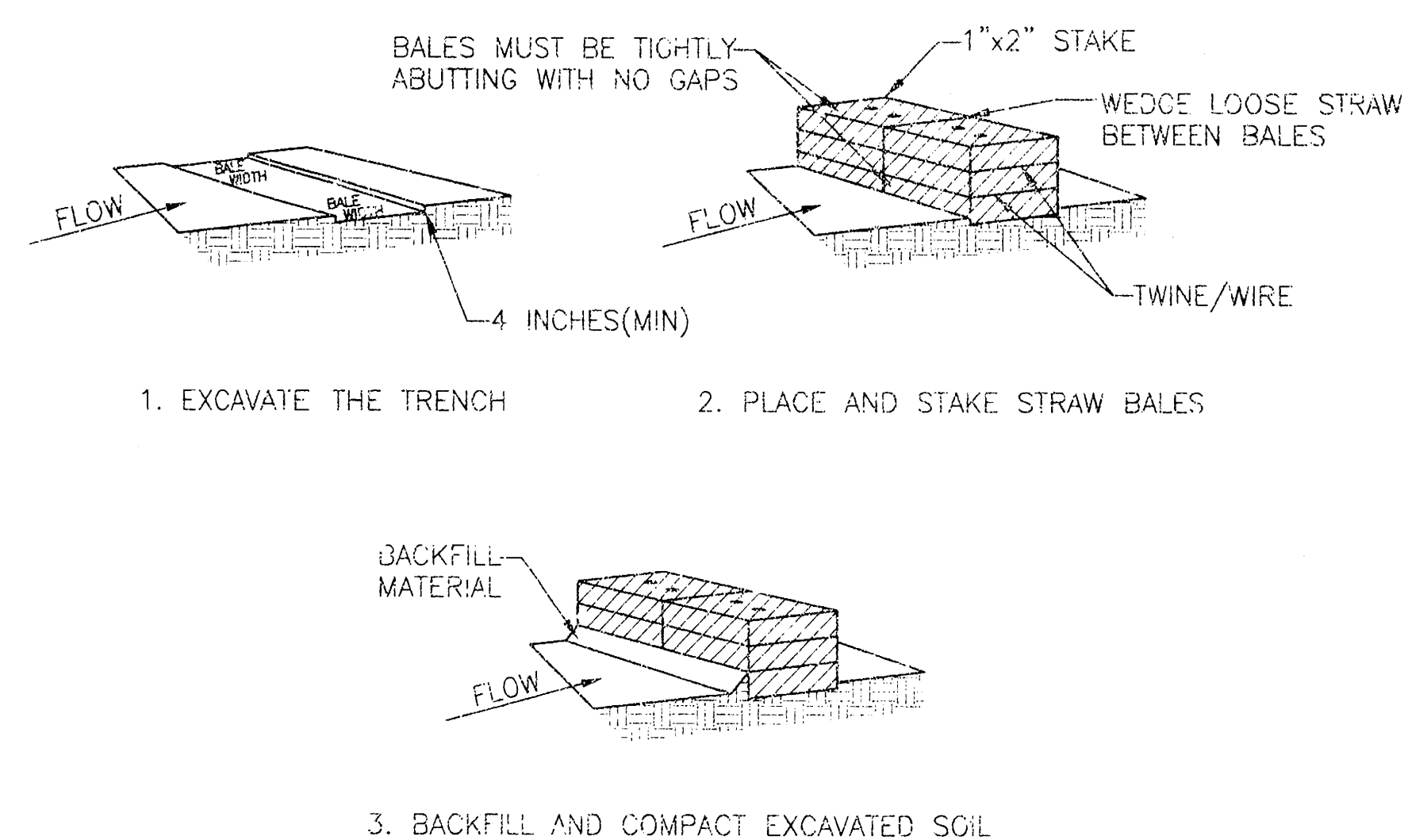
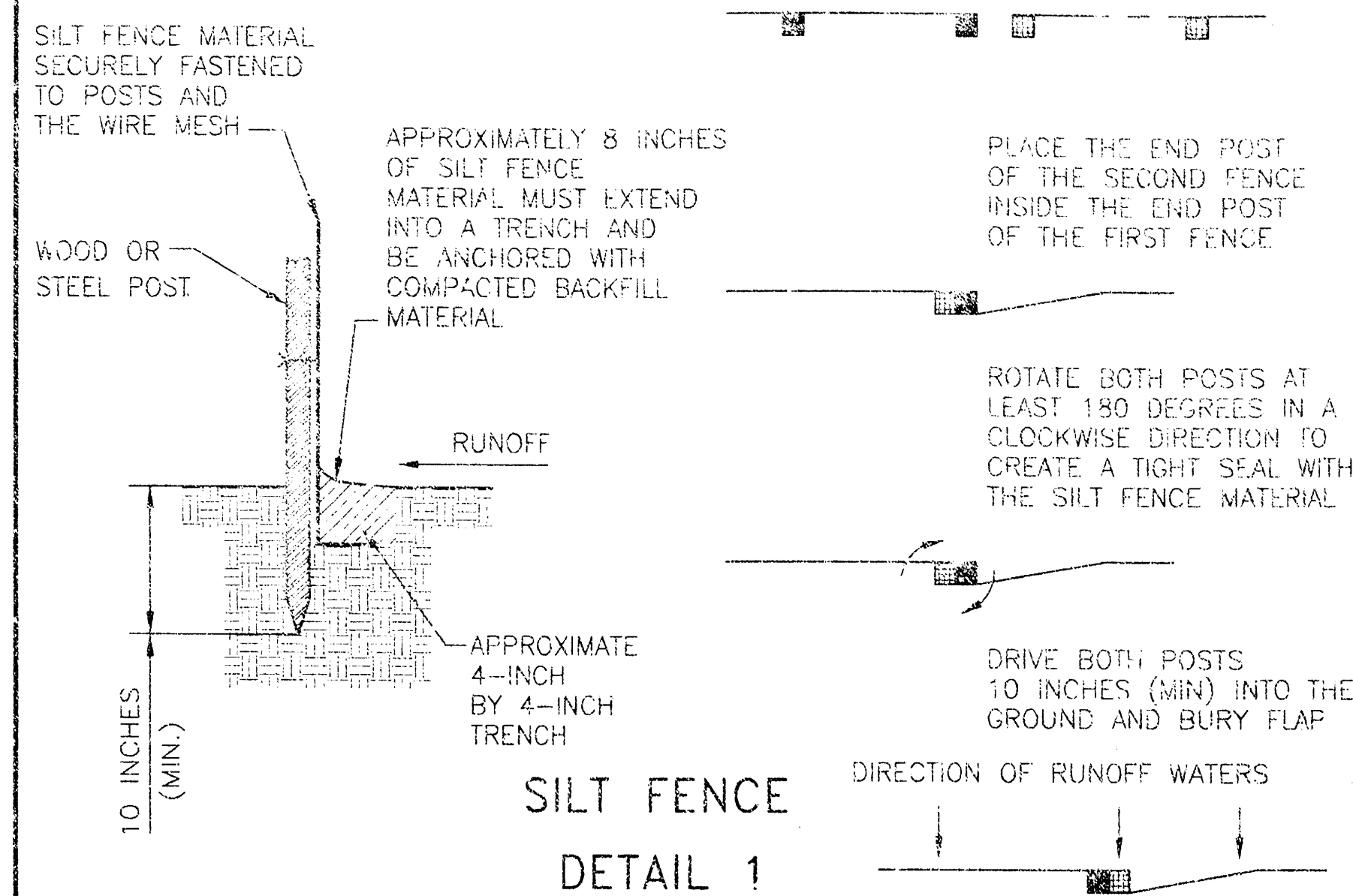
MKEC	MKEC	MKEC
DESIGN BY:	DRAWN BY:	CHECKED BY:
AUGUST 2000	99187	5 / 9
DATE	JOB NO.	SHEET/OF

SILT FENCE MATERIAL SPECIFICATIONS

GRAB TENSILE STRENGTH 100 LBS. MIN. (ASTM D4632)
 MULLEN BURST STRENGTH 300 PSI MIN (ASTM D3786)
 TRAPEZOID TENSILE STRENGTH 60 LBS. MIN. (ASTM D4533)
 WATER FLOW RATE 20 GAL/MIN/SQ.FT. MIN. (ASTM D4491)
 UV STABILITY 70% MIN. (ASTM D4355)



ATTACHING TWO SILT FENCES



CROSS-SECTION OF A PROPERLY INSTALLED STRAW BALE

STRAW BALE DIKES FOR DRAINAGE CHANNELS DETAIL 2

SILT FENCE INSTALLATION

SILT FENCES CAN MINIMIZE SEDIMENT FROM ENTERING STREAMS AND OTHER WATER BODIES. IN ADDITION, THEY SHOULD BE INSTALLED WHERE SEDIMENT FROM SHEET FLOW OR RILL AND GULLY EROSION WILL ENTER DIRECTLY ONTO ADJACENT LANDS.

WHEN USED TO CONTROL SEDIMENT FROM STEEP SLOPES, FILTER FENCES SHOULD BE PLACED AWAY FROM THE TOE OF A SLOPE FOR INCREASED HOLDING CAPACITY.

WHEN INSTALLING, IT IS IMPORTANT THE FABRIC MATERIAL BE ANCHORED INTO A TRENCH AND BACK FILLED.

ATTACHING TWO FILTER FENCES TOGETHER SHOULD BE COMPLETED IN A MANNER ILLUSTRATED IN DETAIL #1. BY WRAPPING THE MATERIAL AS ILLUSTRATED, A TIGHT FIT OF MATERIAL IS CREATED AND THE STRUCTURAL STABILITY OF THE FENCE MAINTAINED.

MAINTENANCE OF SILT FENCES REQUIRES THAT THE FABRIC MUST BE INSPECTED AND NEEDED REPAIRS IMPLEMENTED AFTER EVERY STORM EVENT. SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN MATERIAL REACHES A DEPTH OF ONE-HALF THE FENCE HEIGHT.

GRAVEL FILTERS FOR AREA INLETS

ALL STORM DRAINAGE SYSTEM INLETS SHOULD HAVE FILTERS INSTALLED TO TREAT RUNOFF BEFORE WATER IS DISCHARGED INTO A STREAM.

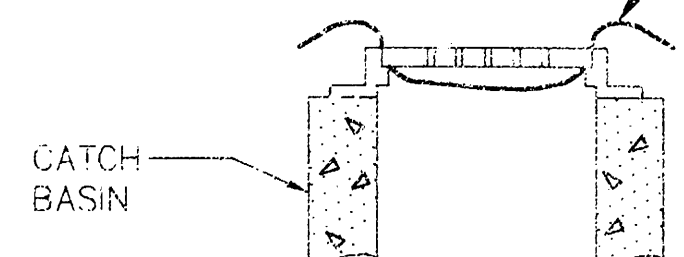
GRAVEL FILTERS CAN BE CONSTRUCTED WITH A COMBINATION OF CONCRETE BLOCKS, 1/2-INCH WIRE SCREEN AND COARSE (APPROX. 3/4-INCH DIAMETER) GRAVEL. AN ALTERNATIVE INSTALLATION CAN BE USE OF GRAVEL BAGS. USE OF GRAVEL SMALLER THAN 3/4-INCHES MAY RESULT IN CLOGGING OF PORES AND REDUCE THE AMOUNT OF WATER FLOWING INTO AN INLET.

GRAVEL FILTERS CAN BE USED IF THE IMMEDIATE AND ADJACENT AREA TO THE DRAIN CONSISTS OF SOIL OR PAVEMENT.

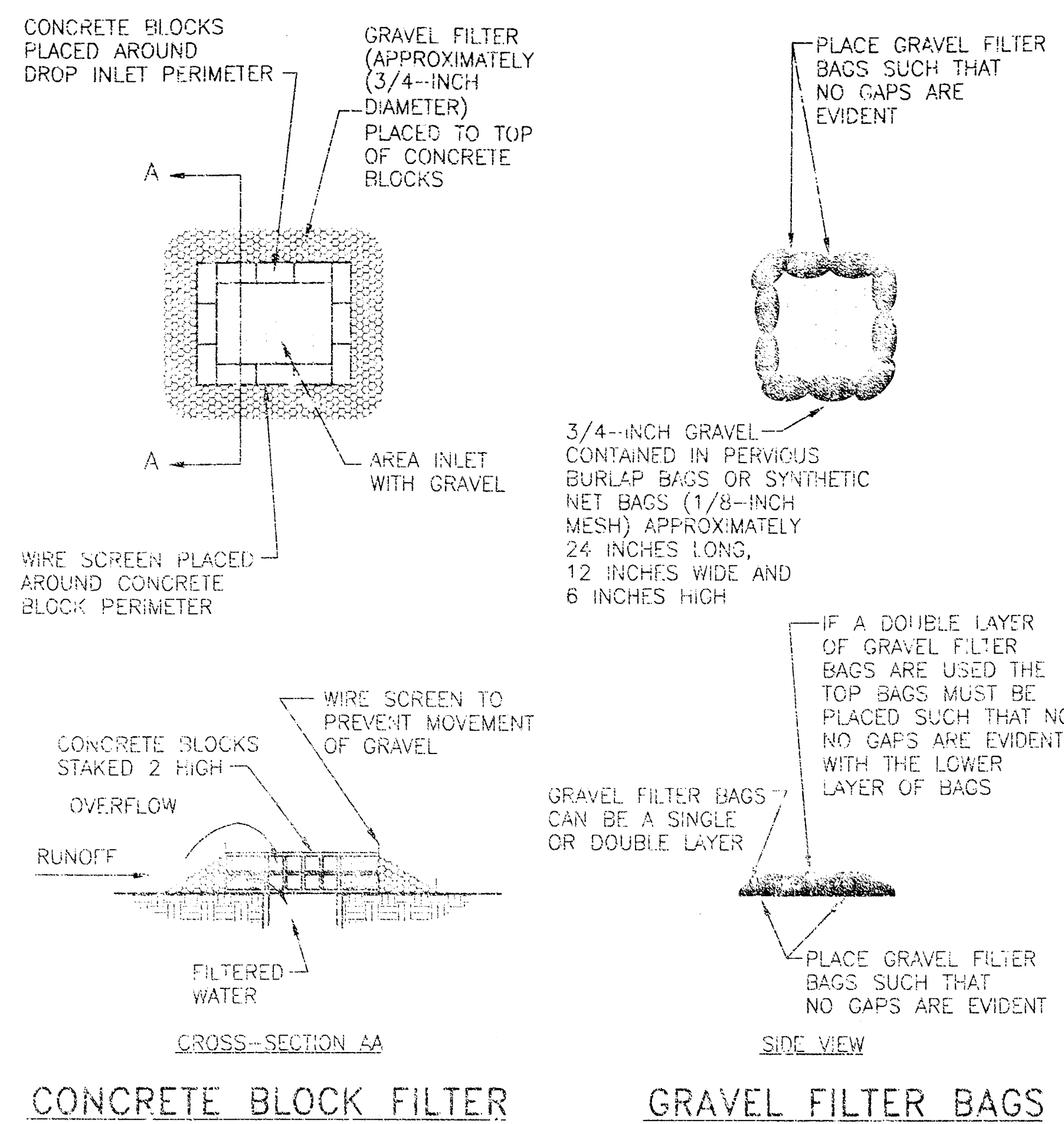
ALL GRAVEL FILTERS INSTALLED AROUND AREA DRAINS SHOULD BE INSPECTED AND REPAIRED AFTER EACH RUNOFF EVENT. SEDIMENT SHOULD BE REMOVED WHEN MATERIAL IS WITHIN TWO INCHES OF THE TOP OF THE FILTER. PERIODICALLY, THE GRAVEL SHOULD BE RAKED TO INCREASE INFILTRATION AND FILTERING OF RUNOFF WATER.

SEDIMENT SHOULD BE REMOVED IMMEDIATELY FROM ANY TRAVELED WAY OF ROADS AND STREETS.

PLACE FILTER FABRIC UNDER GRATE LEAVING 6" EXCESS IN ALL DIRECTIONS

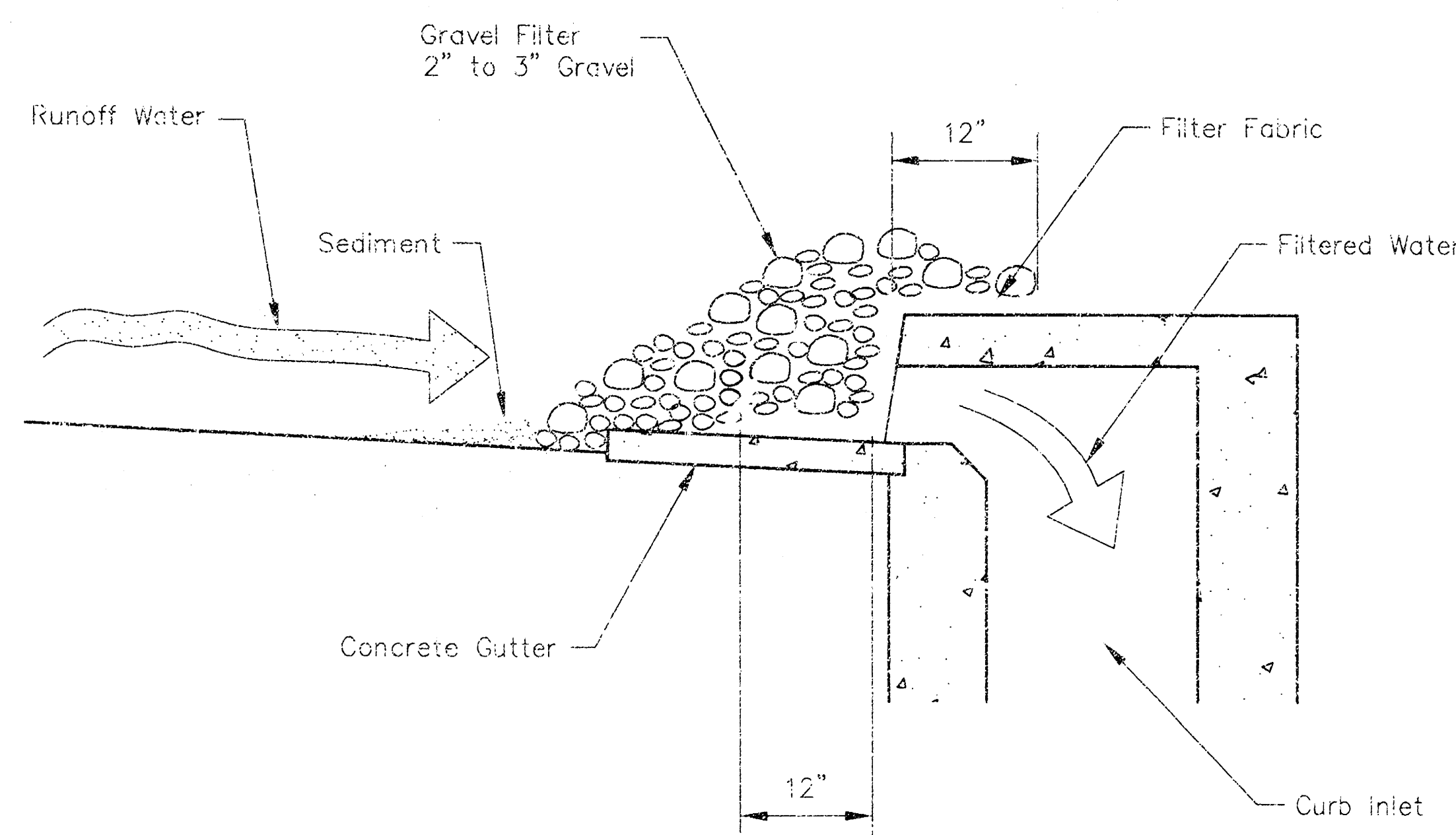


ALTERNATIVE FILTER FOR AREA INLET DETAIL 4

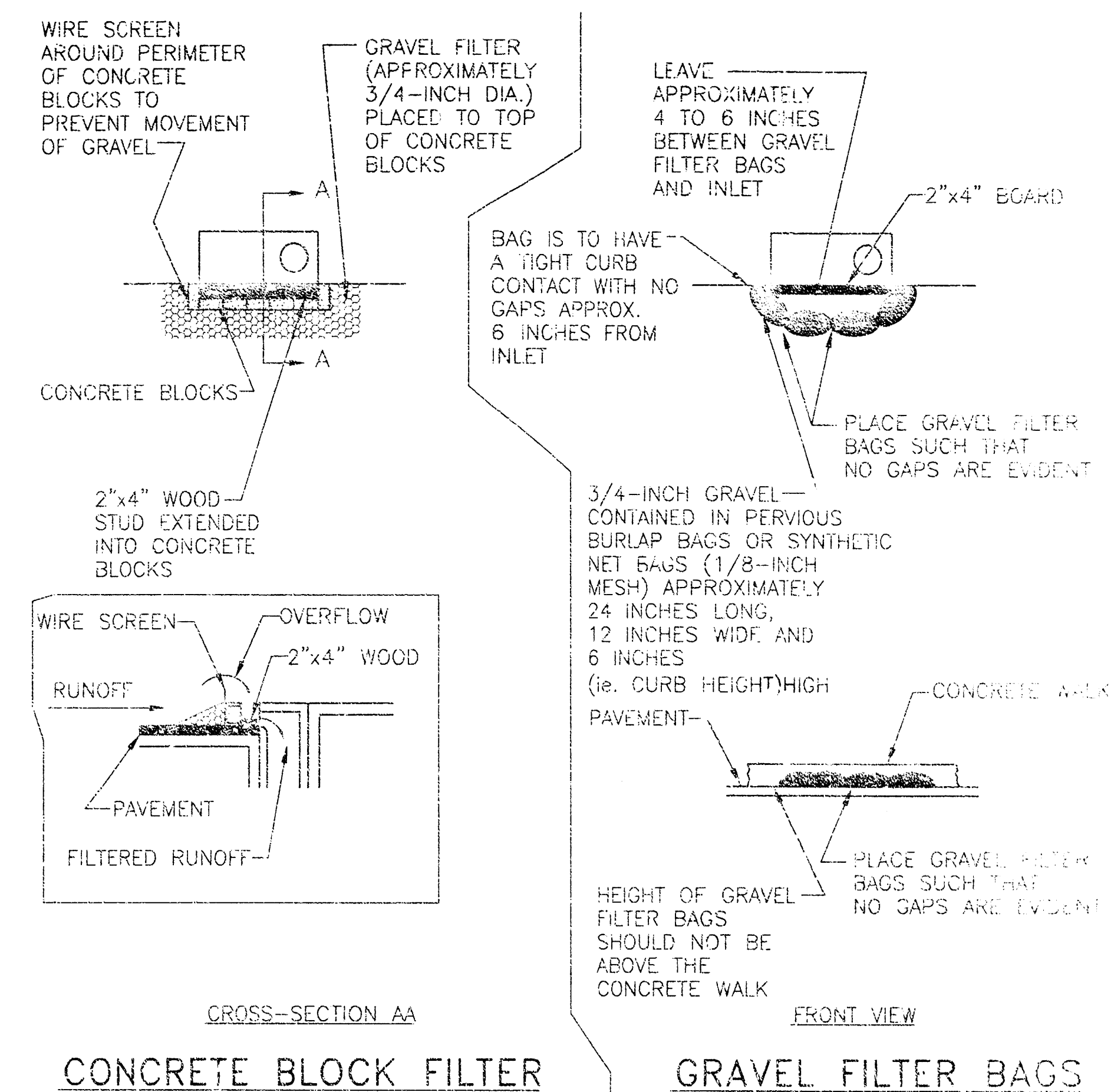


NOTE: GRAVEL FILTERS MAY BE USED ON PAVEMENT OR BARE GROUND

GRAVEL FILTER FOR AREA INLET DETAIL 3



ALTERNATIVE CURB INLET GRAVEL FILTER DETAIL 6



NOTE: GRAVEL FILTERS MAY BE USED ON PAVEMENT OR BARE GROUND

CURB INLET GRAVEL FILTER DETAIL 5

CURB INLET GRAVEL FILTERS

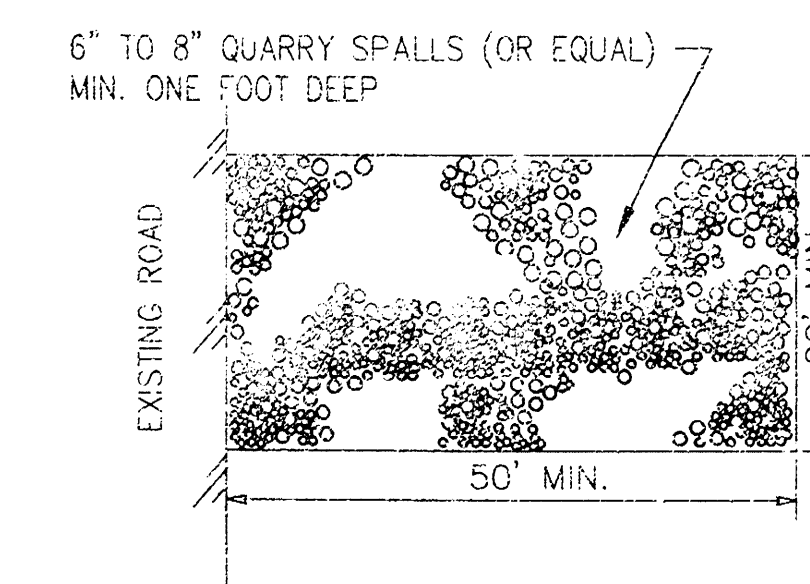
ALL STORM DRAINAGE SYSTEM INLETS SHOULD HAVE FILTERS INSTALLED TO TREAT RUNOFF BEFORE WATER IS DISCHARGED INTO A STREAM.

CURB INLET GRAVEL FILTERS CAN BE CONSTRUCTED WITH A COMBINATION OF CONCRETE BLOCKS, 1/2-INCH WIRE SCREEN, COARSE (APPROX. 3/4-INCH DIAMETER) GRAVEL AND A 2"x4" WOOD BOARD FOR SUPPORT. AN ALTERNATIVE INSTALLATION CAN USE GRAVEL BAGS (NOT IMPERVIOUS SAND BAGS). USE OF GRAVEL SMALLER THAN 3/4 INCHES MAY RESULT IN CLOGGING OF PORES AND REDUCE THE AMOUNT OF WATER FLOWING INTO AN INLET.

GRAVEL FILTERS CAN BE USED IF THE IMMEDIATE AND ADJACENT AREA TO THE DRAIN CONSISTS OF SOIL OR PAVEMENT.

ALL CURB INLET GRAVEL FILTERS SHOULD BE INSPECTED AND REPAIRED AFTER EACH RUNOFF EVENT. SEDIMENT SHOULD BE REMOVED WHEN MATERIAL IS WITHIN TWO INCHES OF THE TOP OF THE FILTER. PERIODICALLY, THE GRAVEL SHOULD BE RAKED TO INCREASE INFILTRATION AND FILTERING OF RUNOFF WATERS.

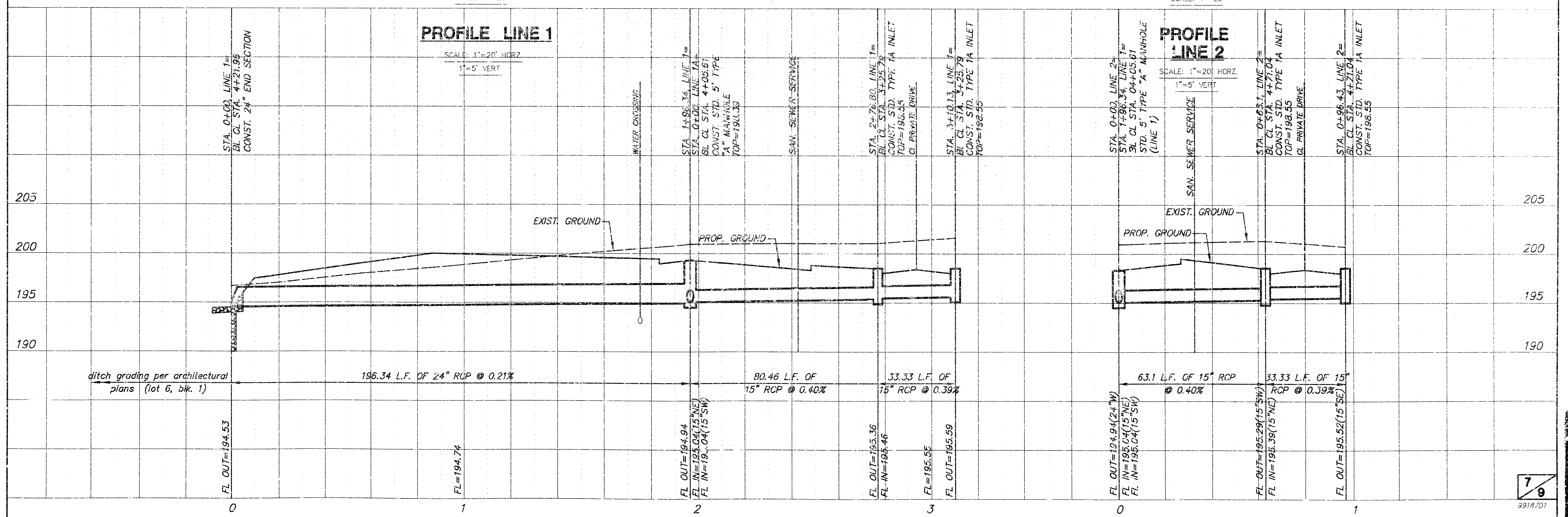
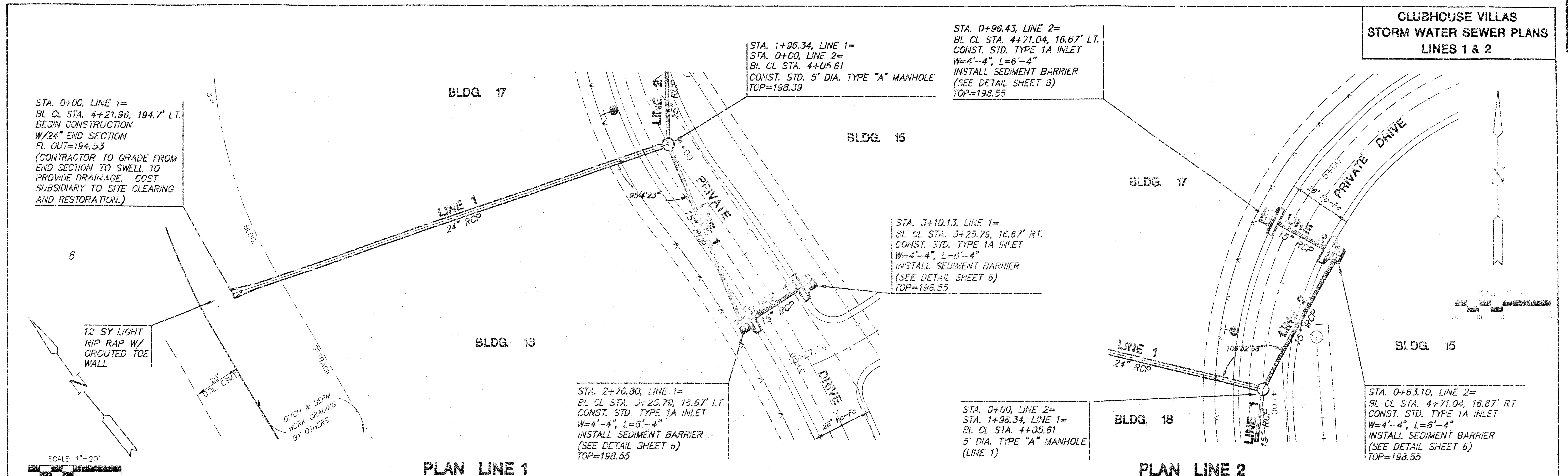
SEDIMENT SHOULD BE REMOVED IMMEDIATELY FROM ANY TRAVELED WAY OF ROADS AND STREETS.



TEMPORARY CONSTRUCTION ENTRANCE/WASH DOWN PAD DETAIL 7

CLUBHOUSE VILLAS
 PROJECT NAME
EROSION CONTROL DETAILS
 DESIGN TITLE
 JTC DESIGN
 DAC DRAWN BY
 GJA
 AUGUST 2000
 CHECKED BY: DATE
 99187
 JOB NO. 6/9
 SHEET/JOF
M.K.E.C.
 411 N WEBB ROAD
 WICHITA, KS. 67206
 316-684-9600

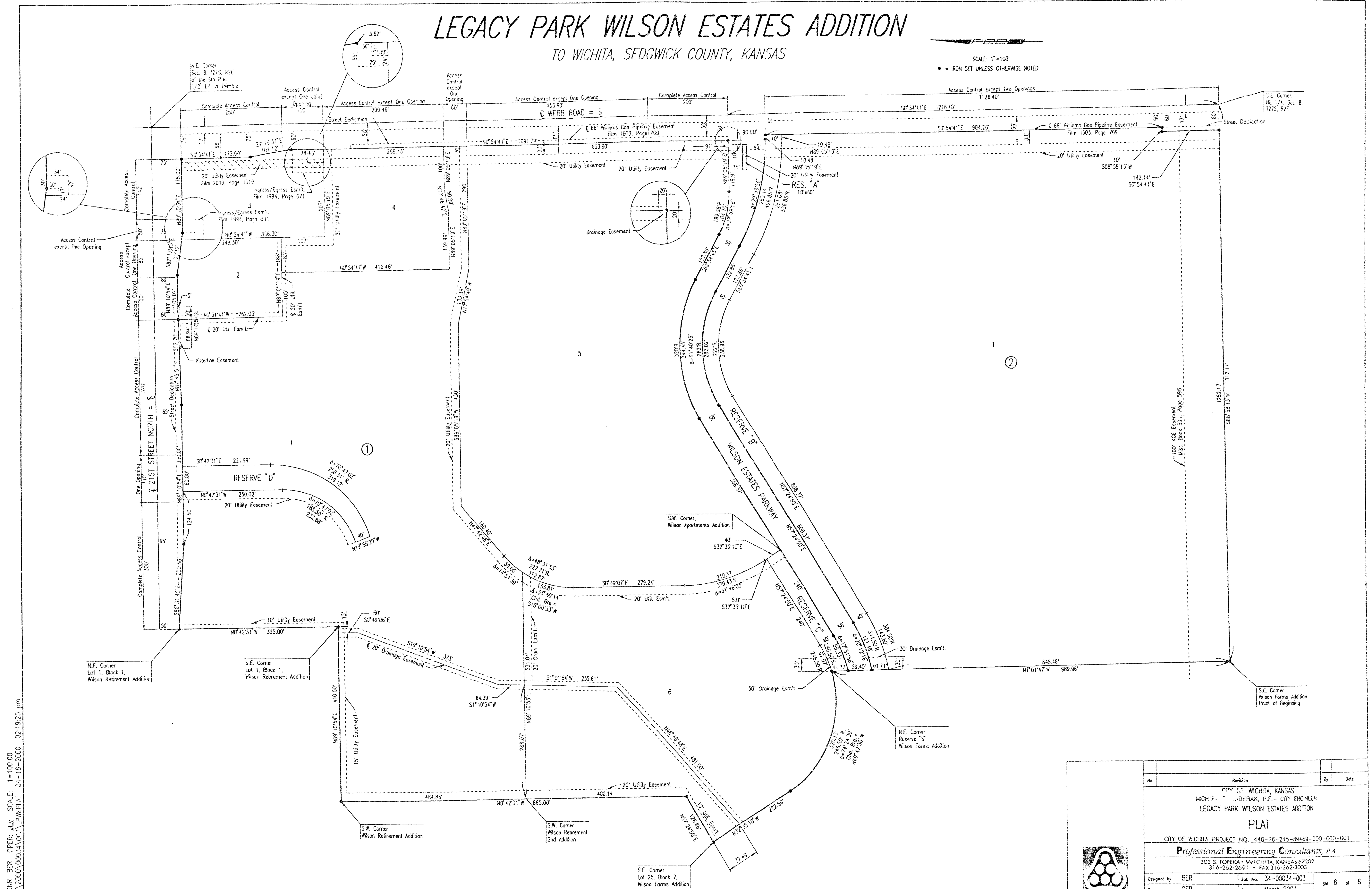
CLUBHOUSE VILLAS
STORM WATER SEWER PLANS
LINES 1 & 2



LEGACY PARK WILSON ESTATES ADDITION

TO WICHITA, SEDGWICK COUNTY, KANSAS

SCALE: 1"=100'
• = IRON SET UNLESS OTHERWISE NOTED



DNAR: BER OPER JLM SCALE: 1"=100.00
Q:\2000\00034\003\LPWELAT 34-18-2000 02:19:25 pm

No.	Revision	By	Date
CITY OF WICHITA, KANSAS WICHITA, KANSAS LEGACY PARK WILSON ESTATES ADDITION PLAT CITY OF WICHITA PROJECT NO. 448-76-215-89469-000-000-001 Professional Engineering Consultants, P.A. 303 S. TOPEKA - WICHITA, KANSAS 67202 316-262-2691 • FAX 316-262-3003			
Designed by	BER	Job No.	34-00034-003
Drawn by	DEP	Date	March 2000
		Sh.	8 of 8

11 40 40 41