

**GENERAL NOTES**

1. LOCAL BUSINESS TRAFFIC GENERATED WITHIN THE PROJECT AREA IS TO BE CARRIED THROUGH CONSTRUCTION.
2. UTILITY SERVICE LINES, POLES, VALVE BOXES, METERS, ETCETERA ARE TO BE 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 PLAN LOCATIONS ARE NOT GUARANTEED AND ADDITIONAL UTILITIES MAY ALSO BE ENCOUNTERED. THE CONTRACTOR WILL BE REQUIRED TO WORK AROUND EXISTING UTILITIES WITHIN THE RIGHT-OF-WAY WHICH DO NOT CONFLICT WITH PROPOSED CONSTRUCTION.
3. 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.
4. ALL DISPOSAL SITES MUST BE APPROVED BY THE KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT. MATERIAL EITHER STOCKPILED OR DISPOSED OF IN A FLOODPLAIN 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. 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 987-2472 (LOCAL WICHITA)
6. THE CONTRACTOR MUST NOTIFY THE FOLLOWING IN CASE OF AN EMERGENCY:  
SOUTHWESTERN BELL TELEPHONE 1-571-2115  
MULTIMEDIA CABLEVISION 282-0661  
K.P.S.L. GAS SERVICE COMPANY 283-7511  
KANSAS GAS & ELECTRIC 284-1141  
ARKLA GAS COMPANY 242-8380 OR 253-8161  
CITY OF WICHITA WATER & SEWER 288-4908  
CITY OF WICHITA SEWER 288-4071
7. THE CONTRACTOR SHALL NOTIFY PIPELINE COMPANIES AT LEAST 24 HOURS IN ADVANCE OF ANY WORK BEING PERFORMED ACROSS AND/OR ADJACENT TO PIPELINES.
8. 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.
9. THE CONTRACTOR SHALL GIVE ALL PROPERTY OWNERS AND/OR TENANTS OF DEVELOPED PROPERTY DIRECTLY ADJUTING THE CONSTRUCTION OF THIS PROJECT A MINIMUM OF TEN(10) DAYS ADVANCE NOTICE PRIOR TO START OF CONSTRUCTION.
10. THE CONTRACTOR MUST EXAMINE THE CONSTRUCTION SITE PRIOR TO BIDDING AND BE SATISFIED AS TO THE WORK SHOWN FOR COMPLETION. AFTER BIDS HAVE BEEN RECEIVED, THE CONTRACTOR SHALL NOT ASSERT THAT THERE WAS A MISUNDERSTANDING OF THE QUANTITIES OF WORK OR OF THE NATURE OF THE WORK TO BE COMPLETED.
11. CONTRACTOR SHALL NOT START WORK ON THE PROJECT UNTIL THE PROJECT INSPECTOR IS ASSIGNED TO THE PROJECT IS PRESENT ON THE SITE. ANY WORK DONE WITHOUT INSPECTION WILL BE REQUIRED TO BE UNCOVERED FOR INSPECTION.
12. CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL IN ACCORDANCE WITH THE CURRENT EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) TO ENSURE A SAFE WORK ZONE FOR THE TRAVELING PUBLIC.
13. EXISTING CONCRETE CURB, PAVEMENT AND SIDEWALK REMOVAL WILL NOT BE PAID FOR DIRECTLY BUT WILL BE CONSIDERED SUBSIDIARY TO THE STORM SEWER CONSTRUCTION. LIMITS OF SUCH PAVEMENT REMOVAL AND REPLACEMENT SHALL BE SAWCUT ONE FOOT BEYOND THE LIMITS OF EXCAVATION MADE FOR THE SEWER OR THE STRUCTURE, EXCEPT WHEN SUCH LIMITS OF REMOVAL ARE WITHIN THREE(3) FEET OF AN EXISTING JOINT THE LIMITS OF THE REMOVAL SHALL BE EXTENDED TO THE EXISTING JOINT.
14. THE CONTRACTOR SHALL FERTILIZE, SEED AND MULCH ALL AREAS WHICH ARE DISTURBED AS A RESULT OF THIS PROJECT IN ACCORDANCE WITH THE CITY OF WICHITA STANDARD SPECIFICATIONS. ALL COSTS TO BE SUBSIDIARY TO THE COST FOR THE STORM SEWER CONSTRUCTION.
15. ALL CONSTRUCTION AND MATERIALS, UNLESS OTHERWISE NOTED, TO COMPLY WITH CITY OF WICHITA SPECIFICATIONS AND STANDARDS.

**INDEX OF SHEETS**

1. Title Sheet
- 2.-3. Storm Sewer Plan-Profile
4. Type 1A Curb Inlet Detail
5. Manhole Frame & Grate
6. Drop Inlet Details

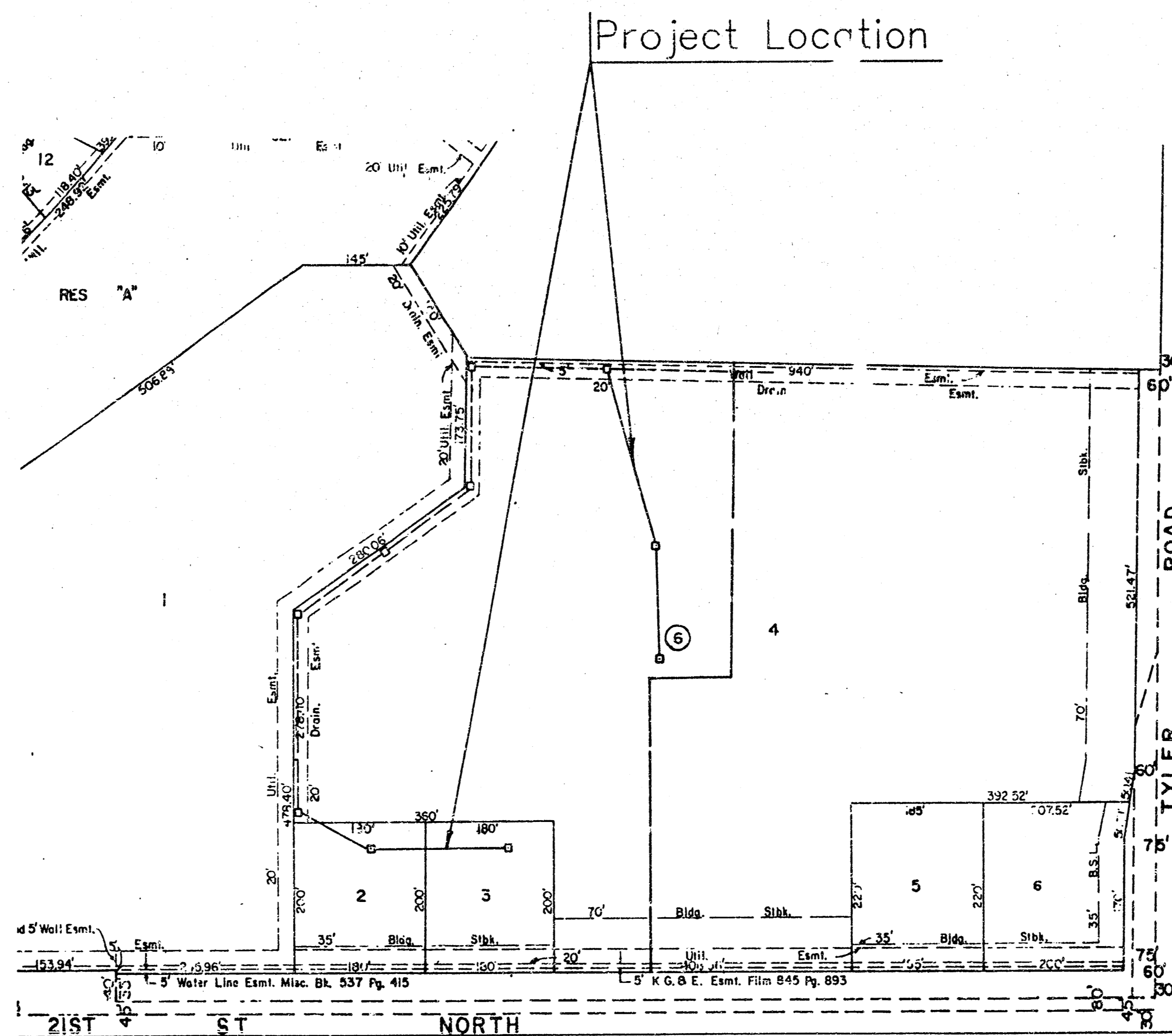
# STORM SEWER INSTALLATION FOR WICHITA WEST THEATRE IN

## LOT 4, BLOCK 6, STERLING FARMS ADDITION WICHITA, SEDGWICK COUNTY, KANSAS

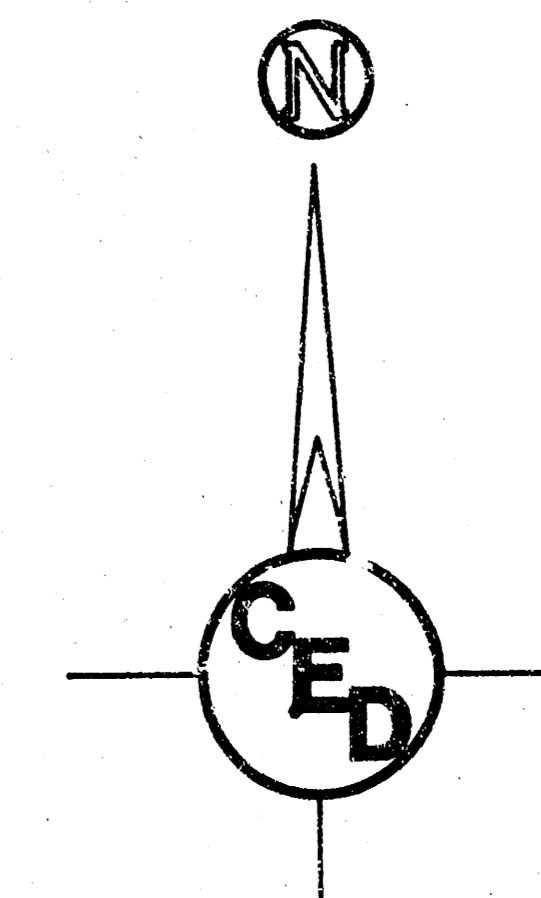
CITY OF WICHITA PRIVATE PROJECT NO. 531 PPS(607861)

MIKE LINDEBAK, P.E., CITY ENGINEER

JANUARY, 1995



Sterling Farms Addition



**LEGEND**

- W = WATER LINE
- SS = SANITARY SEWER
- ⊕ = SANITARY SEWER MANHOLE
- C = GAS LINE
- GM = GAS METER
- TSB = TELEPHONE SPLICE BOX
- UT = UNDERGROUND TELEPHONE
- UE = UNDERGROUND ELECTRIC
- LP = LIGHT POLE
- ⊞ = STORM WATER SEWER INLET
- BM = BENCHMARK
- ⊠ = ELEC. TRANSFORMER
- ± 210.5  
± 209.5 = PROPOSED SPOT ELEVATION

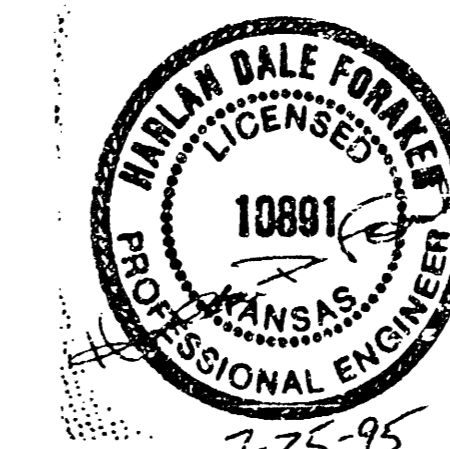
1" = 150'

APPROVED AS NOTED  
By CITY ENGINEER OF WICHITA

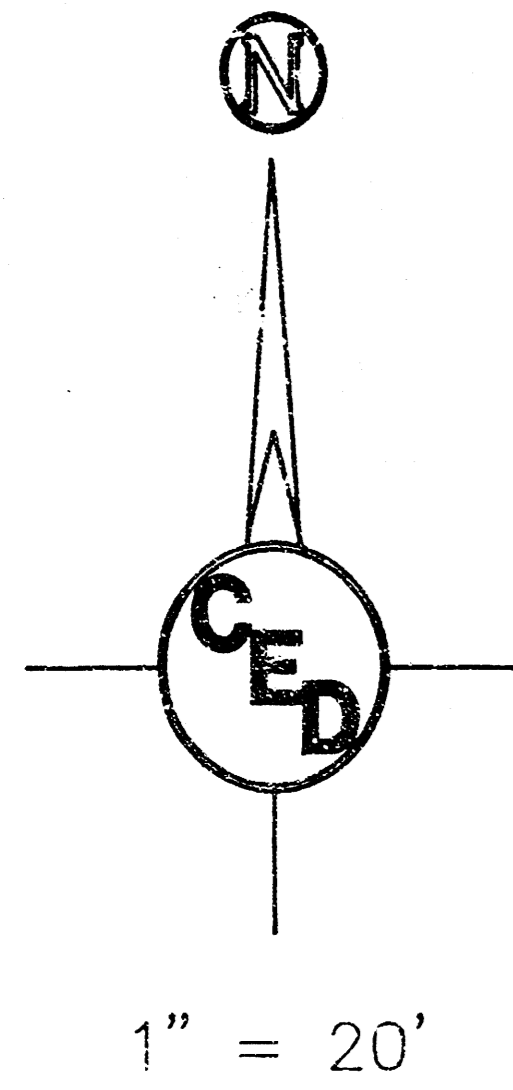
Sanitary Sewers \_\_\_\_\_  
Storm Sewers VRH 7/25/95  
Driveway Approaches \_\_\_\_\_  
Water Mains \_\_\_\_\_  
Paving \_\_\_\_\_

**NOTE TO CONTRACTOR**

INSPECTION AND TESTING FOR THIS PROJECT 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 NGR SHALL ANY WORK BE COMMENCED IN DEDICATED EASEMENTS OR PUBLIC RIGHT-OF-WAY WITHOUT WRITTEN AUTHORIZATION BY THE CITY ENGINEER.



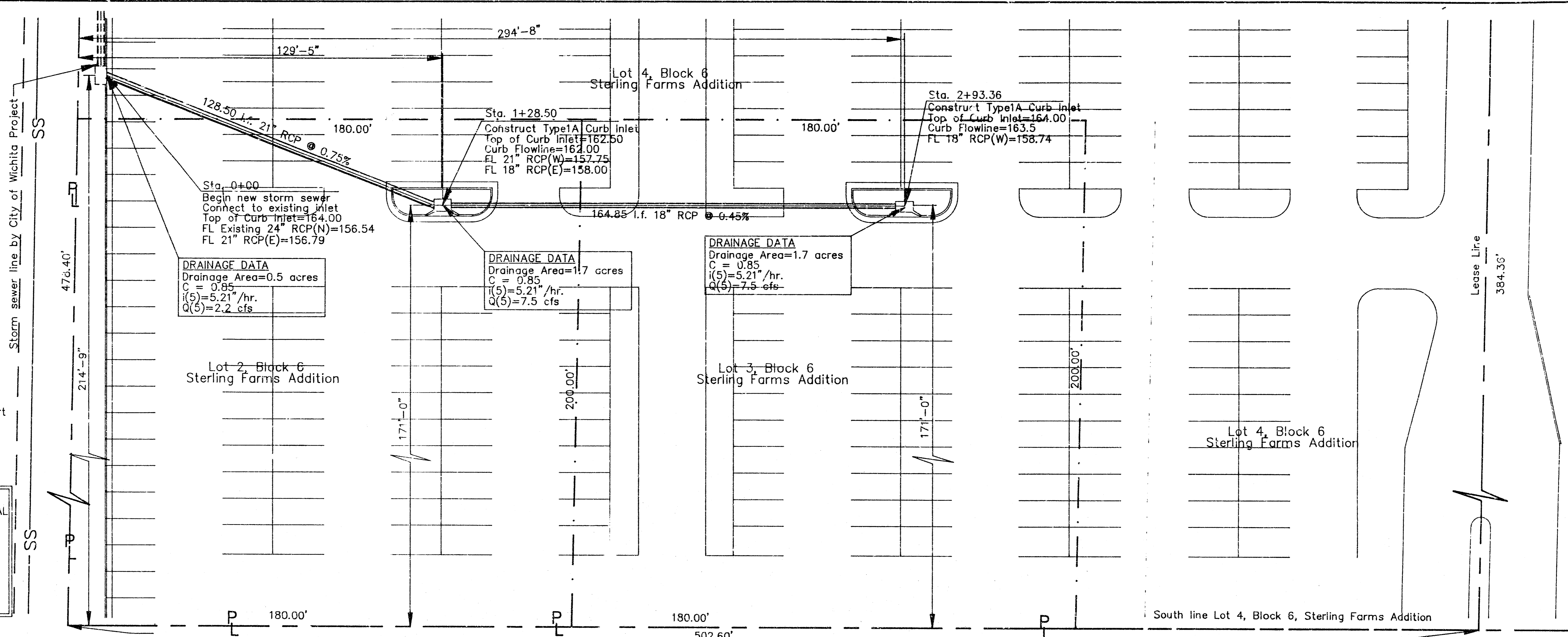
City of Wichita Private Proj. No. 531 PPS(607861)	
<b>CERTIFIED ENGINEERING DESIGN</b>	
<b>CED</b>	1880 E. FIRST, # 119 WICHITA, KANSAS 67214 (316) 262-8808
SHEET 1	TOTAL 6



**BENCHMARK:**  
 City Std. Benchmark Disk 38'W. & 90'S. of intersection of 21st St. North & Tyler Road. Elev.=169.95 City Datum

**BENCHMARK:**  
 Chiseled 'C' @ S.W. Corner of Top Box Culvert Headwall West of Keith. Elev.=161.28 City Datum

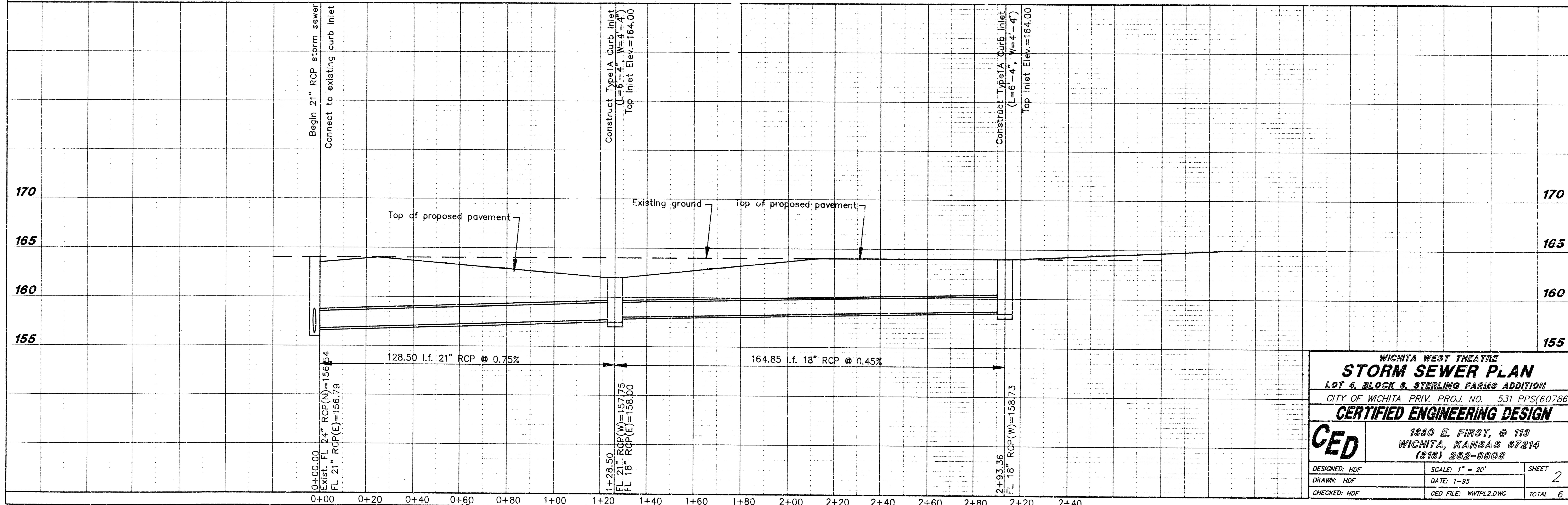
UTILITIES SHOWN REPRESENT THE BEST INFORMATION AVAILABLE FOR DESIGN. ADDITIONAL UTILITIES MAY BE PRESENT ON THIS PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION, DEPTH AND SIZE OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE LIABLE FOR ANY DAMAGE CAUSED BY THE FAILURE TO DO SO.



**DRAINAGE DATA**  
 Drainage Area=0.5 acres  
 C = 0.85  
 i(5)=5.21"/hr.  
 Q(5)=2.2 cfs

**DRAINAGE DATA**  
 Drainage Area=1.7 acres  
 C = 0.85  
 i(5)=5.21"/hr.  
 Q(5)=7.5 cfs

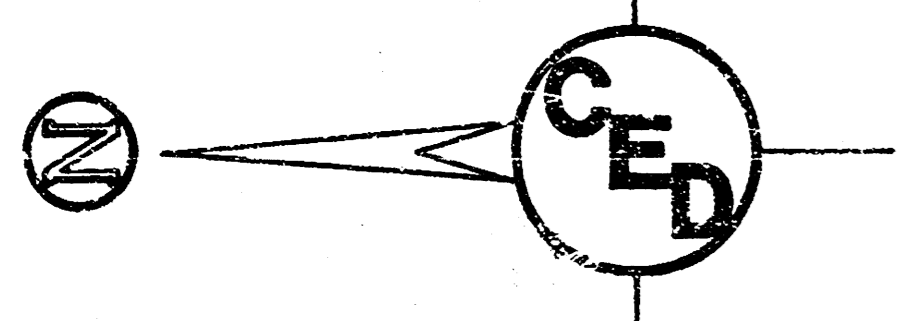
**DRAINAGE DATA**  
 Drainage Area=1.7 acres  
 C = 0.85  
 i(5)=5.21"/hr.  
 Q(5)=7.5 cfs



WICHITA WEST THEATRE  
**STORM SEWER PLAN**  
 LOT 4, BLOCK 6, STERLING FARMS ADDITION  
 CITY OF WICHITA, PROJ. NO. 531 PPS/607861  
**CERTIFIED ENGINEERING DESIGN**

**CED** 1930 E. FIRST, # 119  
 WICHITA, KANSAS 67214  
 (316) 262-8808

DESIGNED: HDF	SCALE: 1" = 20'	SHEET
DRAWN: HDF	DATE: 1-95	2
CHECKED: HDF	CED FILE: WHTPL2.DWG	TOTAL 6

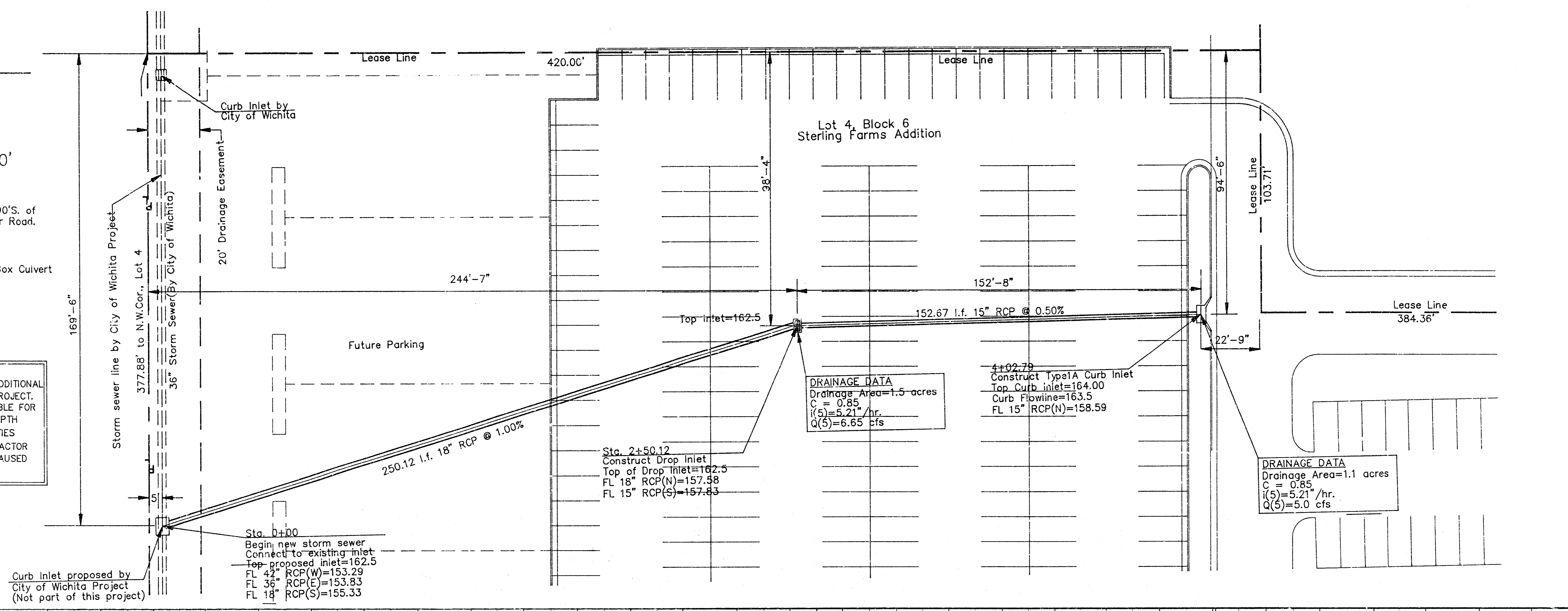


1" = 20'

**BENCHMARK:**  
City Std. Benchmark Disk 38"W. & 90"S. of intersection of 21st St. North & Tyler Road. Elev.=169.95 City Datum

**BENCHMARK:**  
Chiseled '□' @ S.W. Corner of Top Box Culvert Headwall West of Keith. Elev.=161.28 City Datum

UTILITIES SHOWN REPRESENT THE BEST INFORMATION AVAILABLE FOR DESIGN. ADDITIONAL UTILITIES MAY BE PRESENT ON THIS PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION, DEPTH AND SIZE OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE LIABLE FOR ANY DAMAGE CAUSED BY THE FAILURE TO DO SO.



**DRAINAGE DATA**  
Drainage Area=1.5 acres  
C = 0.85  
i(5)=5.21"/hr.  
Q(5)=6.65 cfs

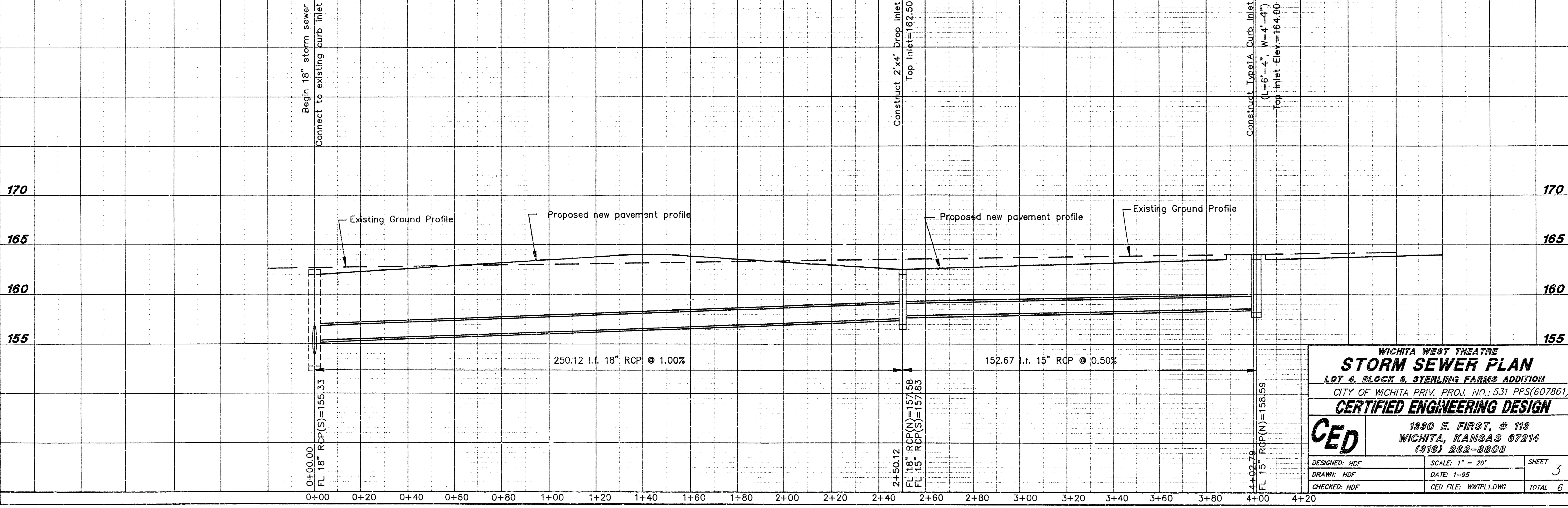
4+02.79  
Construct Type1A Curb Inlet  
Top Curb inlet=164.00  
Curb Flowline=163.5  
FL 15" RCP(N)=158.59

**DRAINAGE DATA**  
Drainage Area=1.1 acres  
C = 0.85  
i(5)=5.21"/hr.  
Q(5)=5.0 cfs

Sta. 2+50.12  
Construct Drop Inlet  
Top of Drop Inlet=162.5  
FL 18" RCP(N)=157.98  
FL 15" RCP(S)=157.83

Sta. 0+00  
Begin new storm sewer  
Connect to existing inlet  
Top proposed inlet=162.5  
FL 42" RCP(W)=153.29  
FL 36" RCP(E)=153.83  
FL 18" RCP(S)=155.33

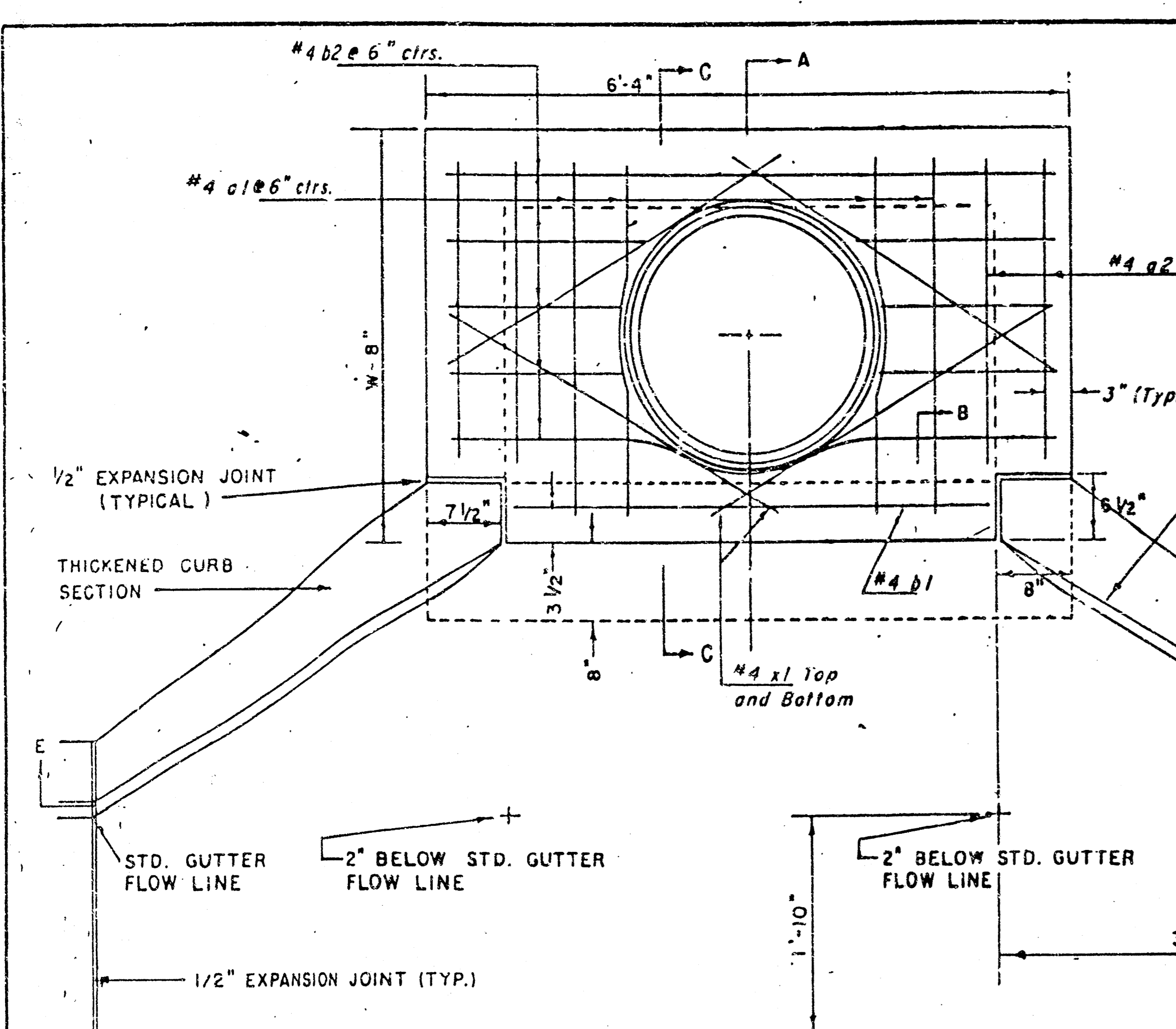
Curb Inlet proposed by City of Wichita Project (Not part of this project)



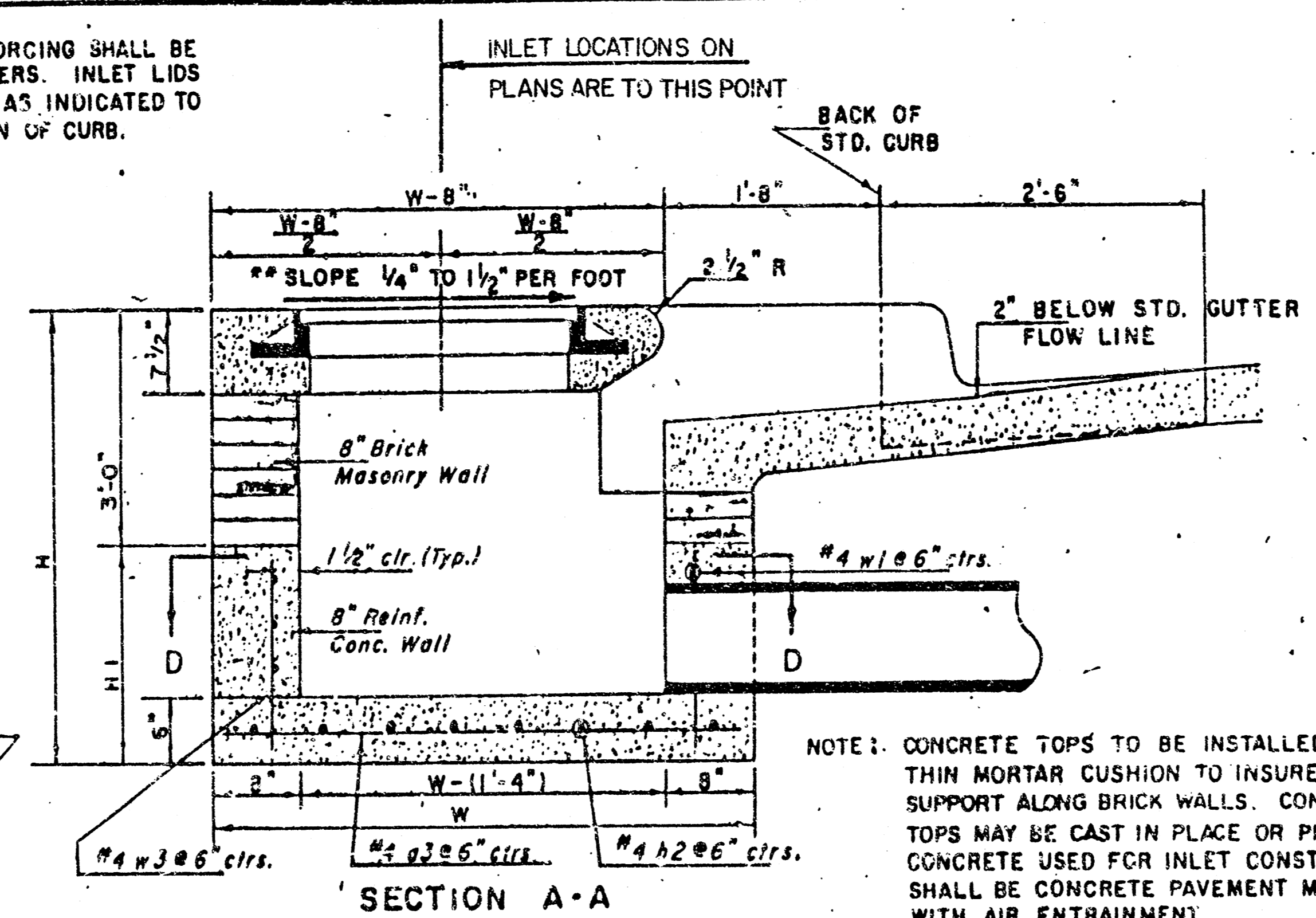
**WICHITA WEST THEATRE**  
**STORM SEWER PLAN**  
LOT 4, BLOCK 6, STERLING FARMS ADDITION  
CITY OF WICHITA PRIV. PROJ. NO.: 531 PPS(607861)  
**CERTIFIED ENGINEERING DESIGN**

**CED** 1930 E. FIRST, # 119  
WICHITA, KANSAS 67214  
(913) 262-8808

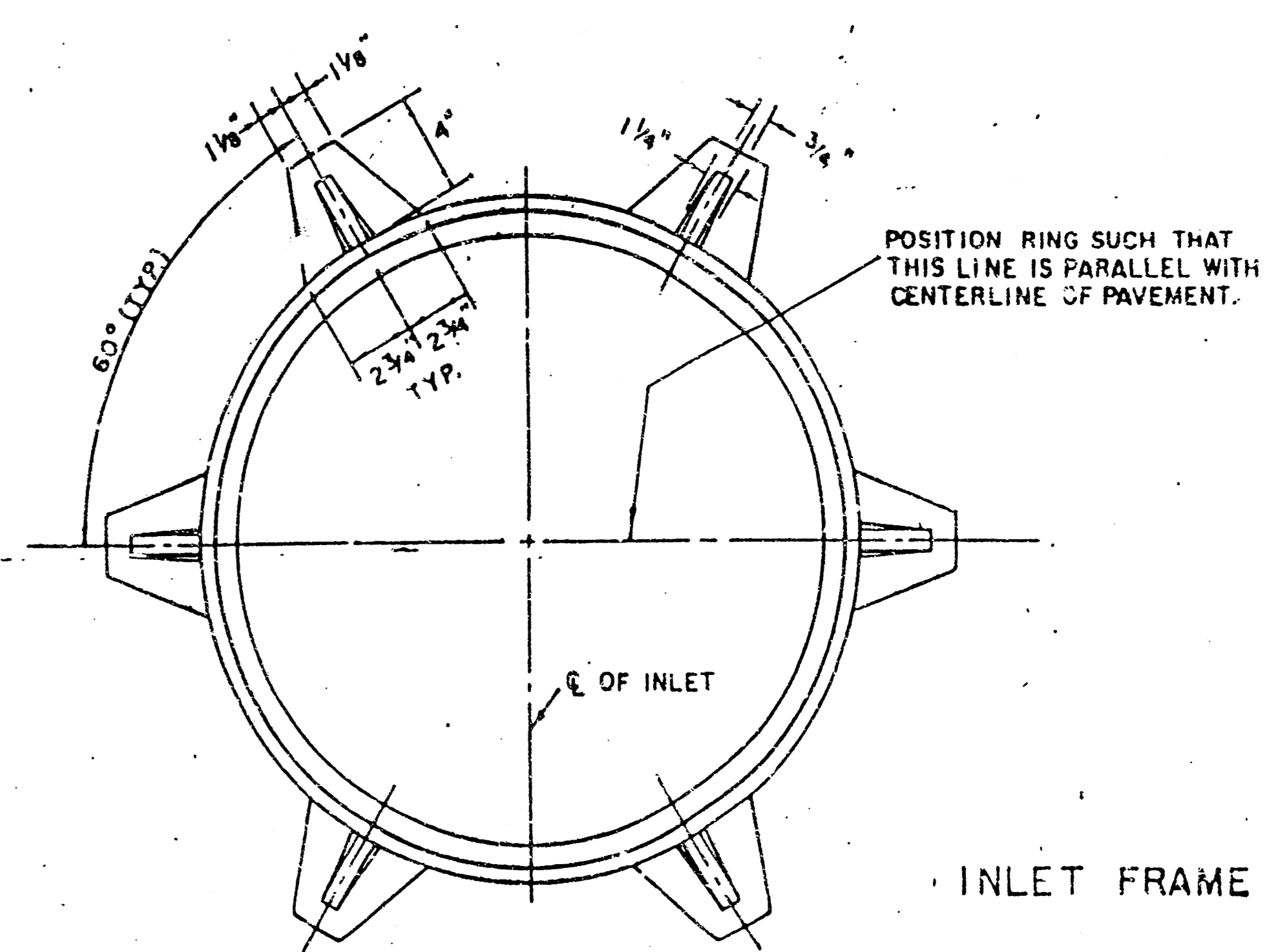
DESIGNED: HDF	SCALE: 1" = 20'	SHEET
DRAWN: HDF	DATE: 1-95	3
CHECKED: HDF	CED FILE: WWTPL1.DWG	TOTAL 6



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.



NOTE: EXPANSION JOINT ONLY IN CURB AREA WITH CONC. PAVEMENT.

PLAN

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.

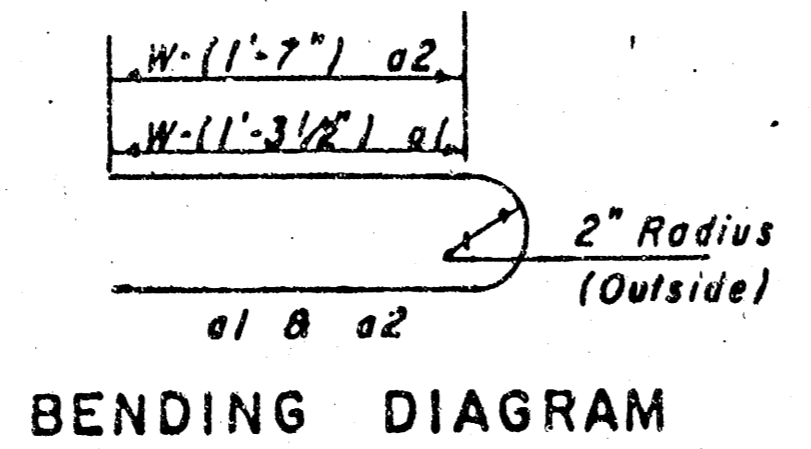
SEE CITY OF WICHITA STANDARD MANHOLE FRAME AND COVER DETAIL SHEET FOR COVER DETAILS TO BE USED WITH INLET FRAME.

PRECAST SLAB AND FLOOR REINFORCING									
Mark	Size	No.	Length	No.	Length	No.	Length	No.	Length
1a1	#4	6	6'-7"	6	8'-7"	6	10'-7"	6	14'-7"
a2	#4	4	6'-0"	4	8'-0"	4	10'-0"	4	14'-0"
a3	#4	13	4'-1"	13	5'-1"	13	6'-1"	13	7'-1"
b1	#4	1	4'-9"	1	4'-9"	1	4'-9"	1	4'-9"
1b2	#4	23	6'-1"	29	6'-1"	35	6'-1"	41	6'-1"
x1	#4	8	3'-10"	8	4'-2"	8	4'-6"	8	5'-2"

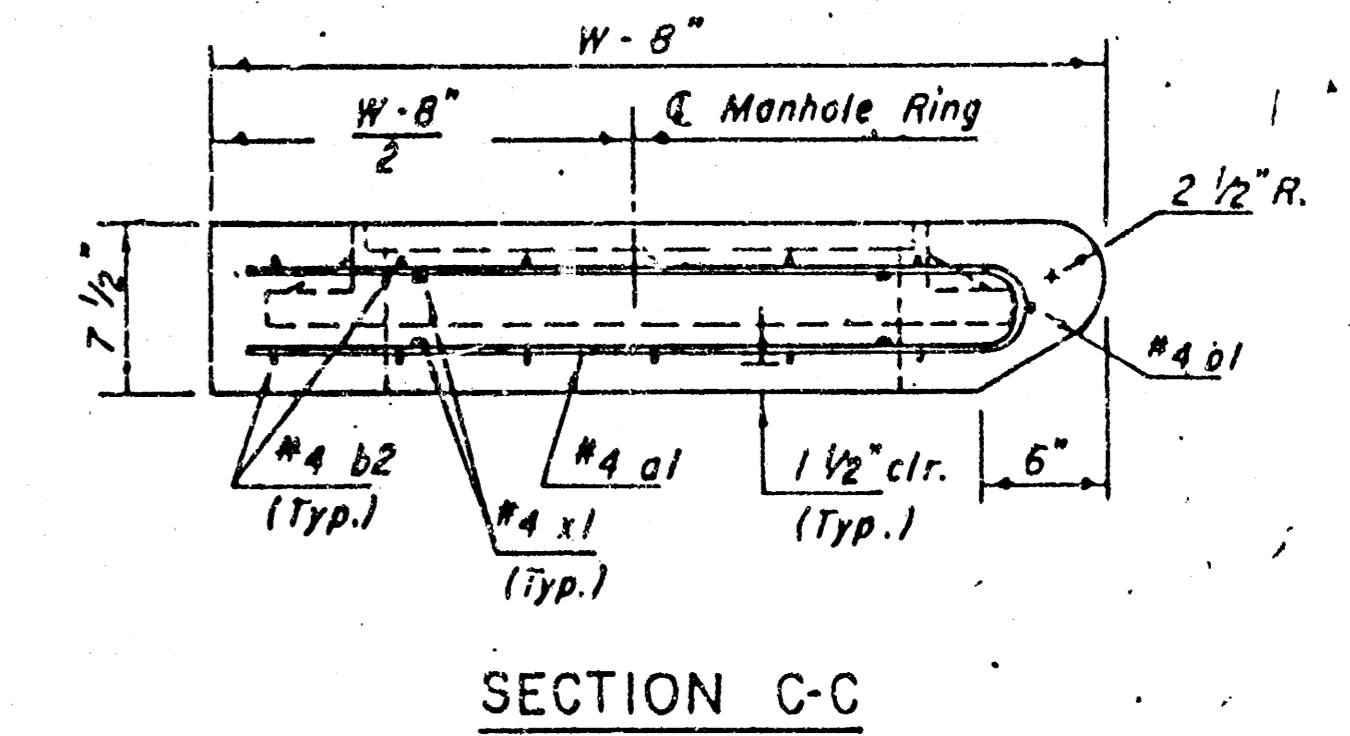
WALL REINFORCING									
Mark	Size	No.	Length	No.	Length	No.	Length	No.	Length
w1	#4	1	6'-1"	1	6'-1"	1	6'-1"	1	6'-1"
w2	#4	1	4'-1"	1	5'-1"	1	6'-1"	1	7'-1"
w3	#4	32	2	36	2	40	2	44	2

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

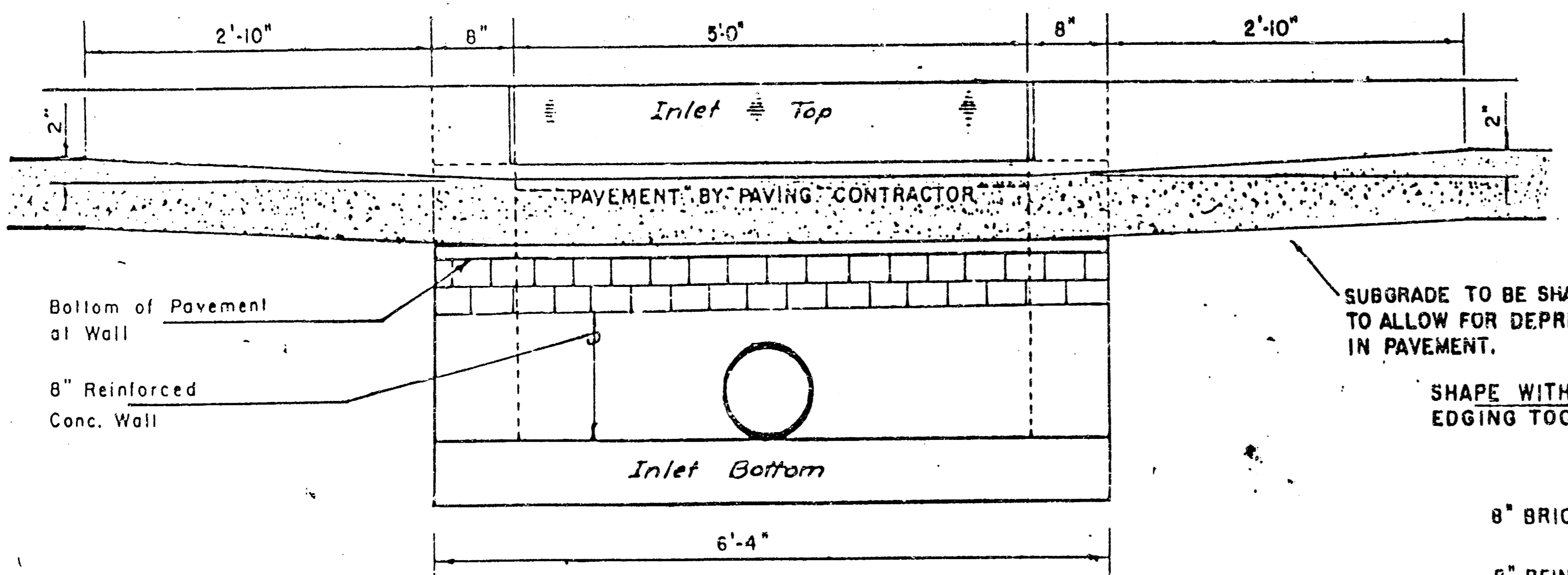


W	PRE-CAST TOP SIZE	PIPE SIZE	CU. YD. CONC.
4'-4"	3'8" x 8'4" x 7 1/2"	21" B SMALLER	0.38 ±
5'-4"	4'8" x 6'4" x 7 1/2"	24" B 30"	0.51 ±
6'-4"	5'8" x 6'4" x 7 1/2"	36" B 42"	0.64 ±
7'-4"	6'8" x 6'4" x 7 1/2"	48" B 54"	0.77 ±
8'-4"	7'8" x 6'4" x 7 1/2"	60" B 66"	0.90 ±

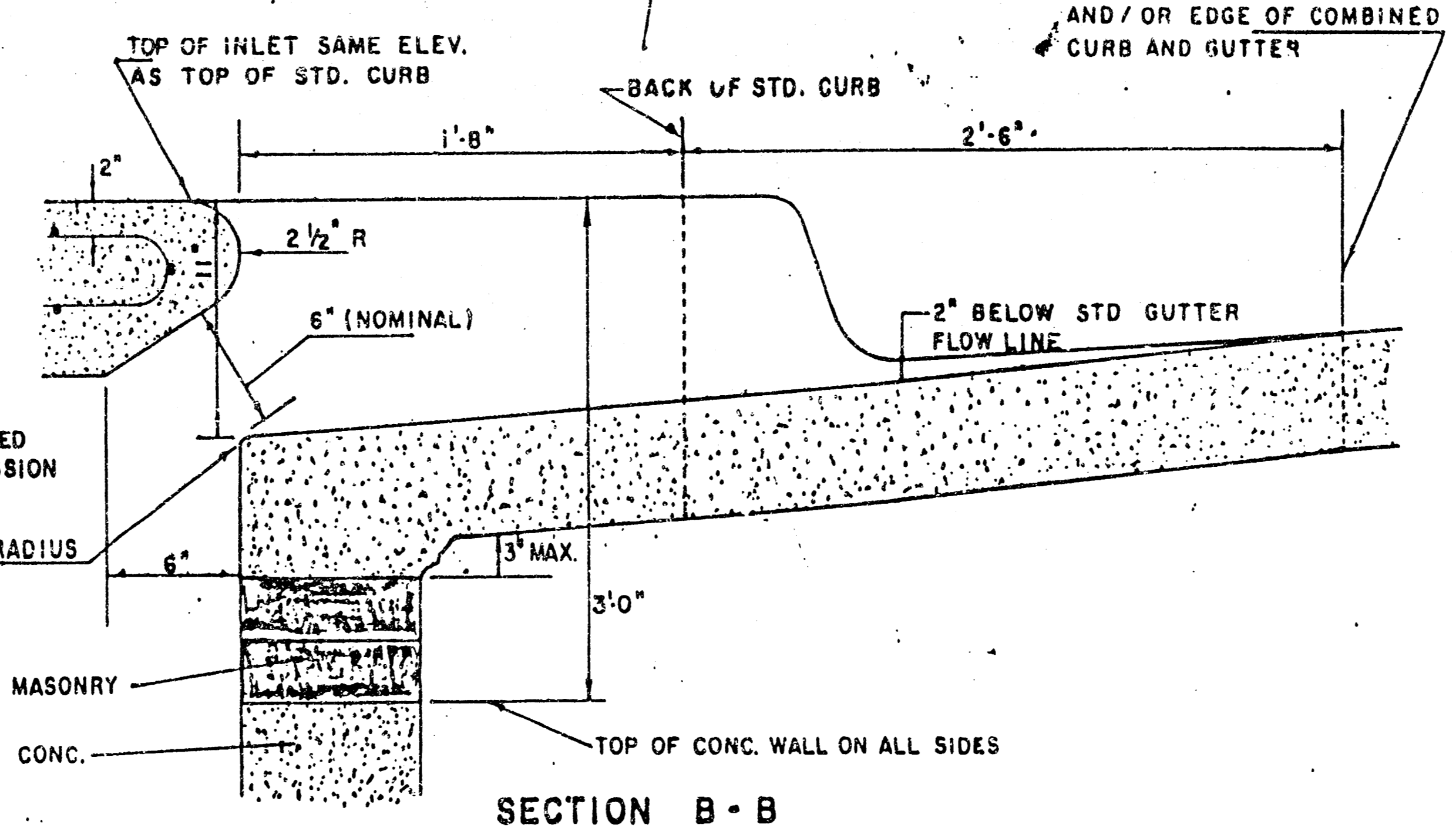
\*\*NOTE: Slope of Inlet Tops to match Sidewalk or Parking Slopes within Limits Indicated.



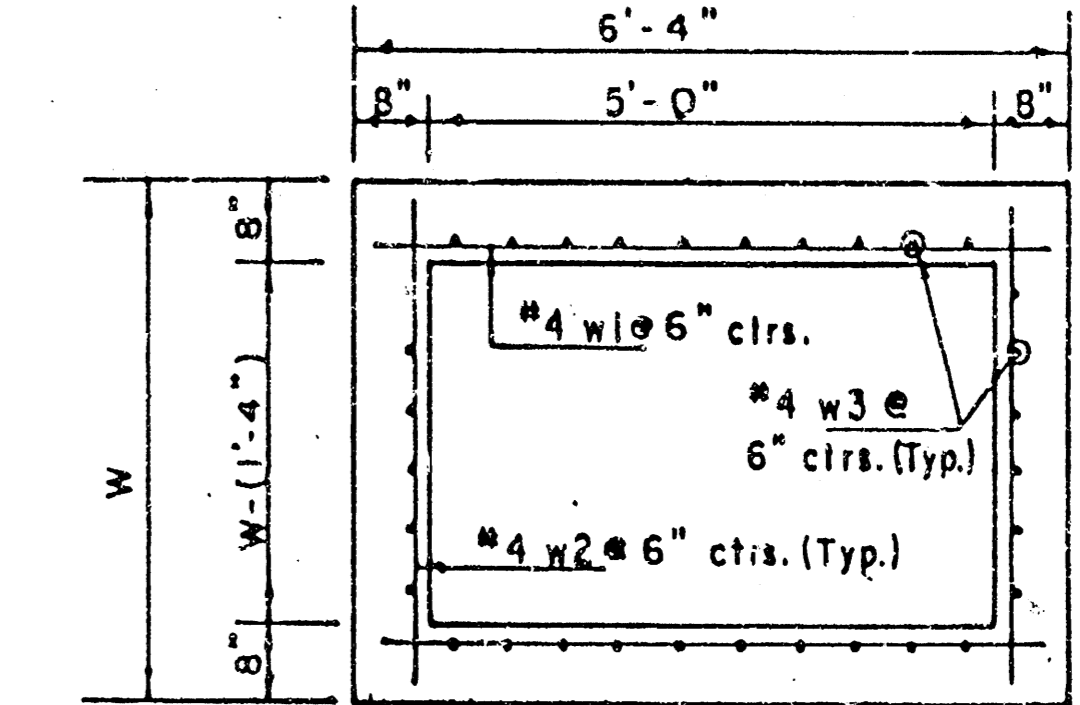
SECTION C-C



SECTION E-E



SECTION B-B



SECTION D-D

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

DETAIL STANDARD TYPE IA CURB INLET  
 CITY OF WICHITA, KANSAS  
 INLET OPENING = 6" x 5' 0"

JUNE 1984

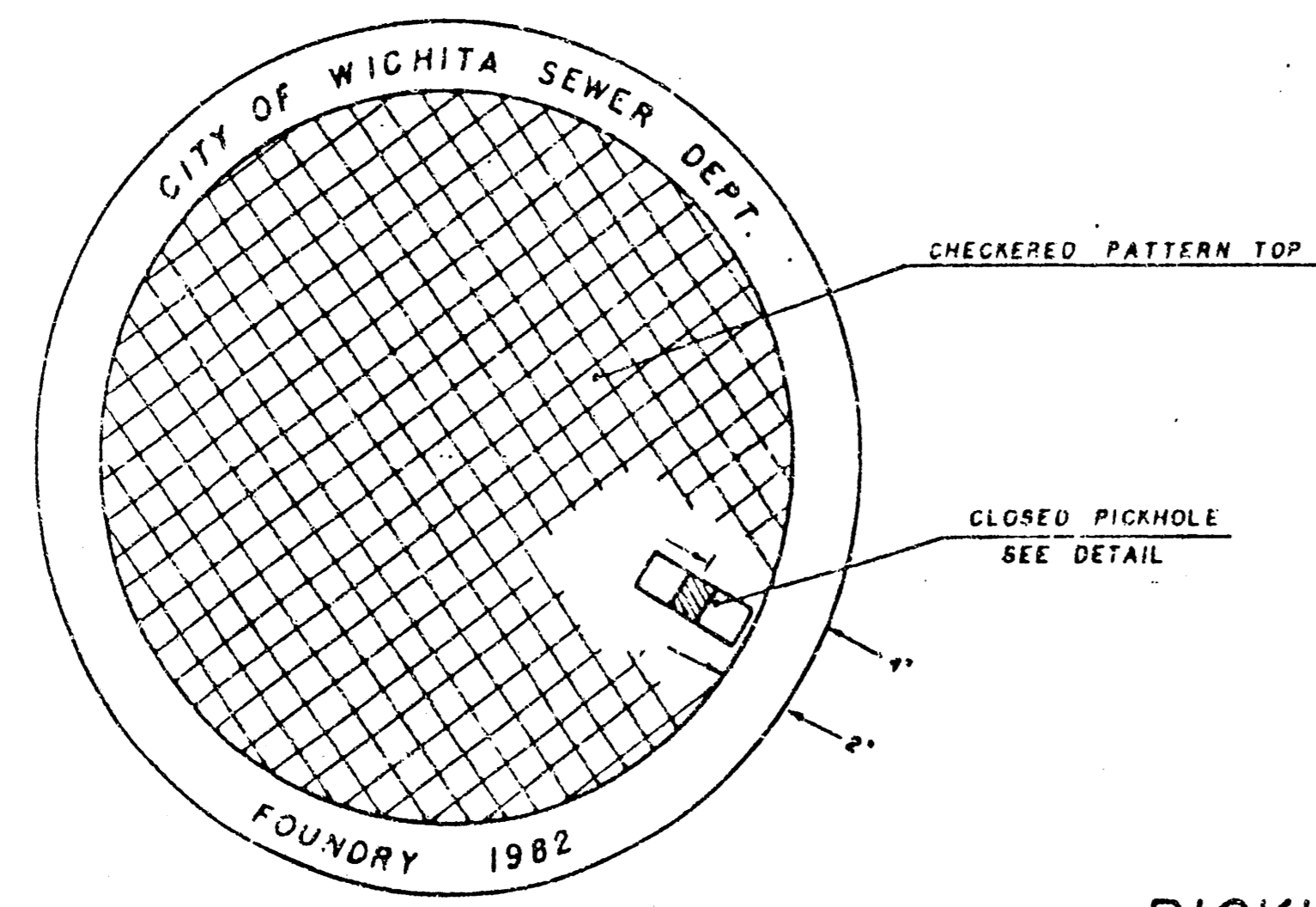
# MANHOLE FRAME AND COVER DETAIL

ADOPTED AS STANDARD DESIGN

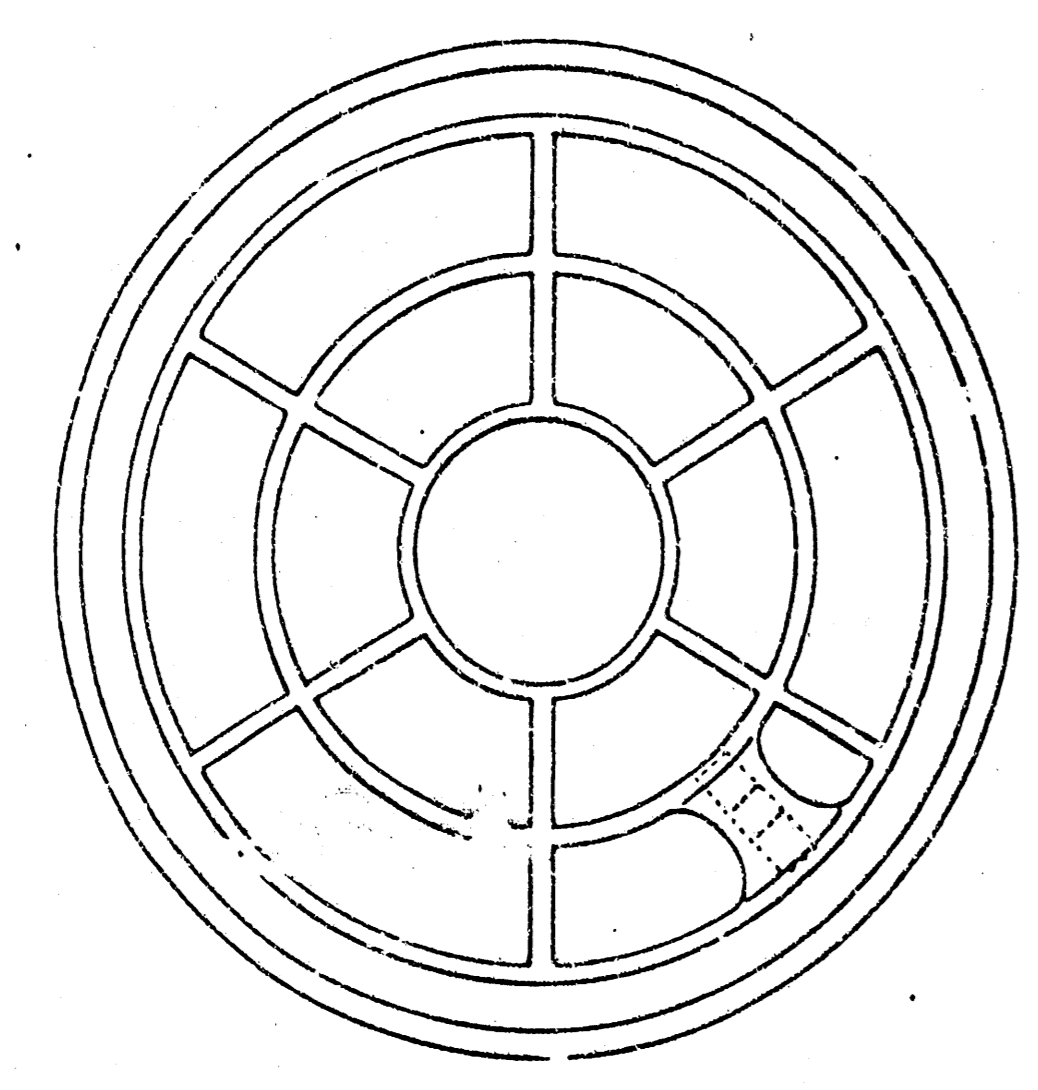
BY

City of Wichita, Kansas

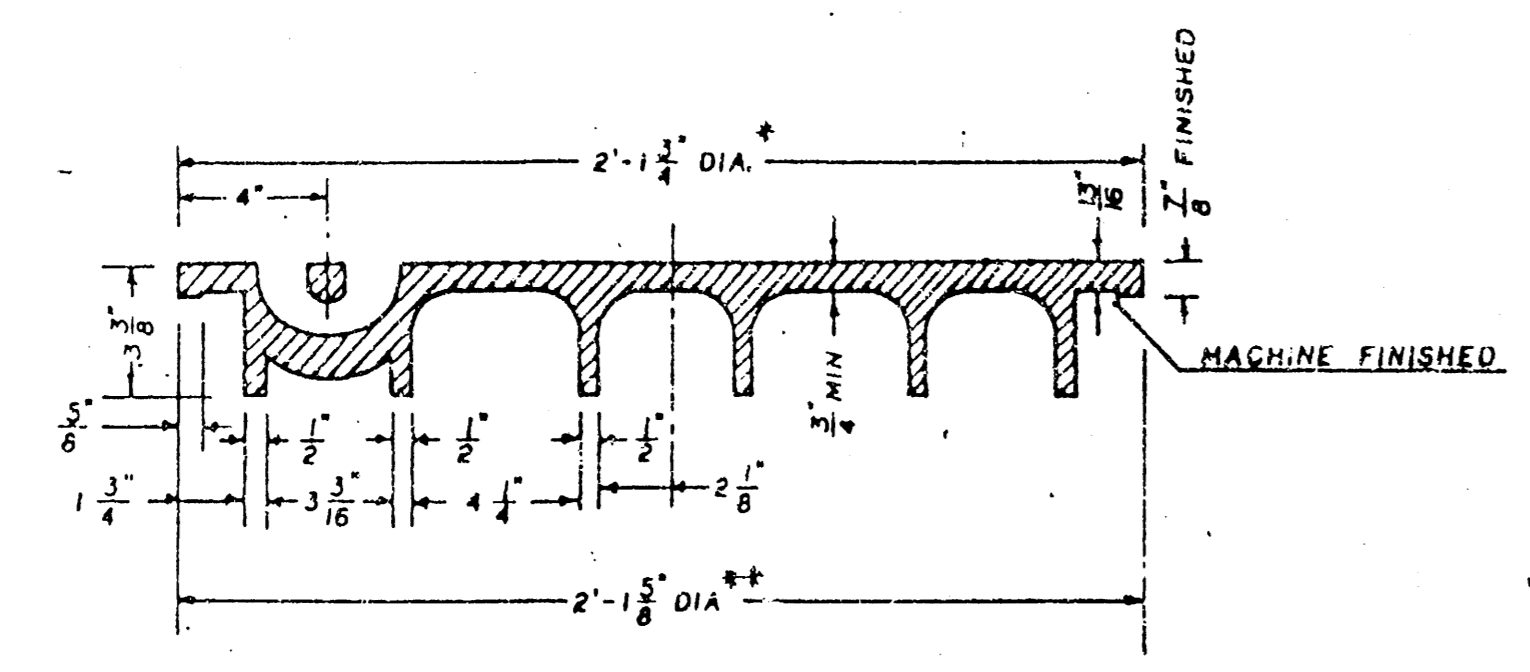
MANHOLE COVER  
Weight: 180 Lbs.



TOP VIEW



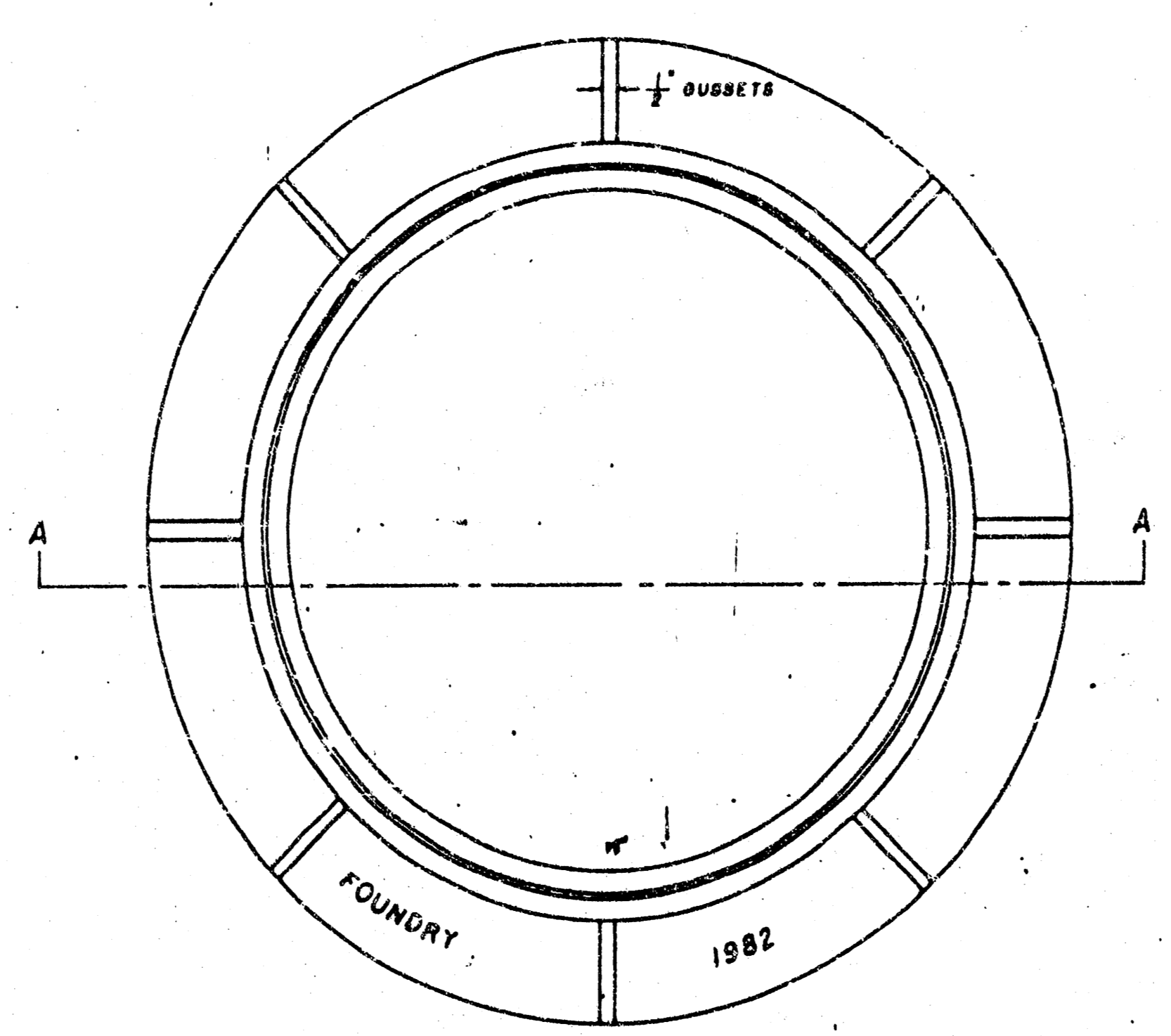
BOTTOM VIEW



SECTION VIEW

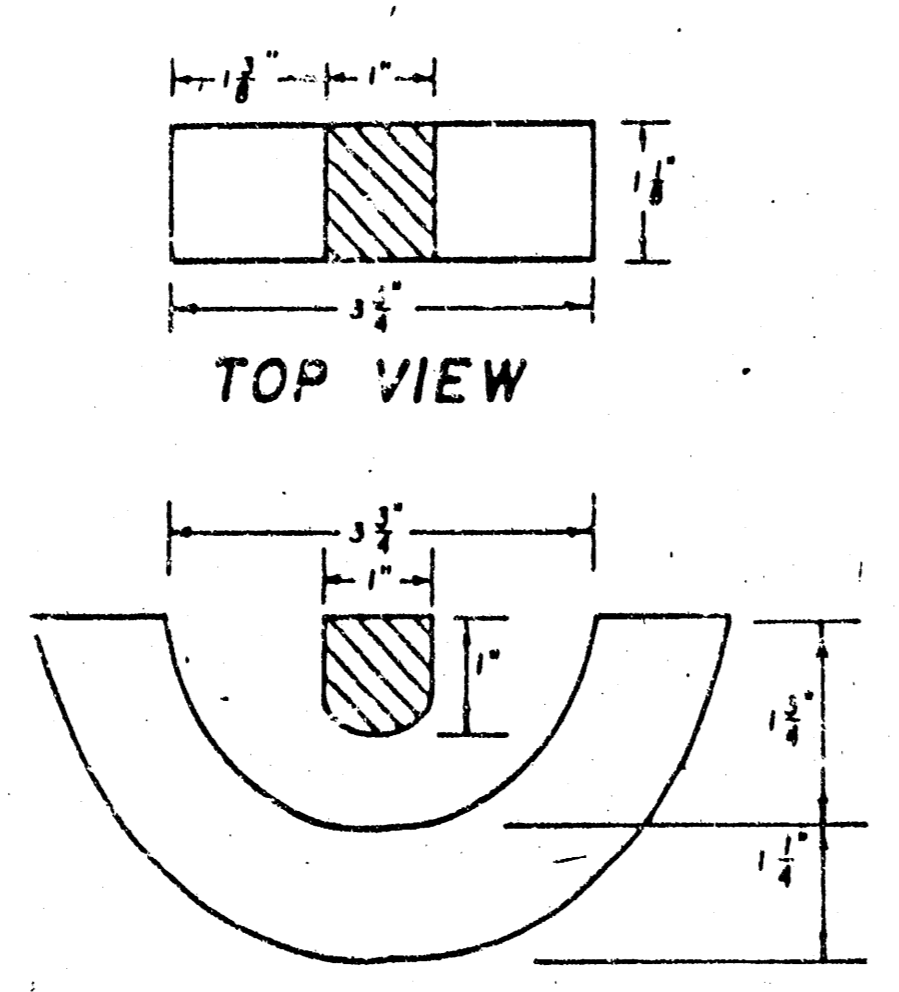
\* OUTSIDE DIA. TOP OF COVER  
\*\* OUTSIDE DIA. BOTTOM OF COVER

MANHOLE FRAME  
Weight: 240 Lbs.

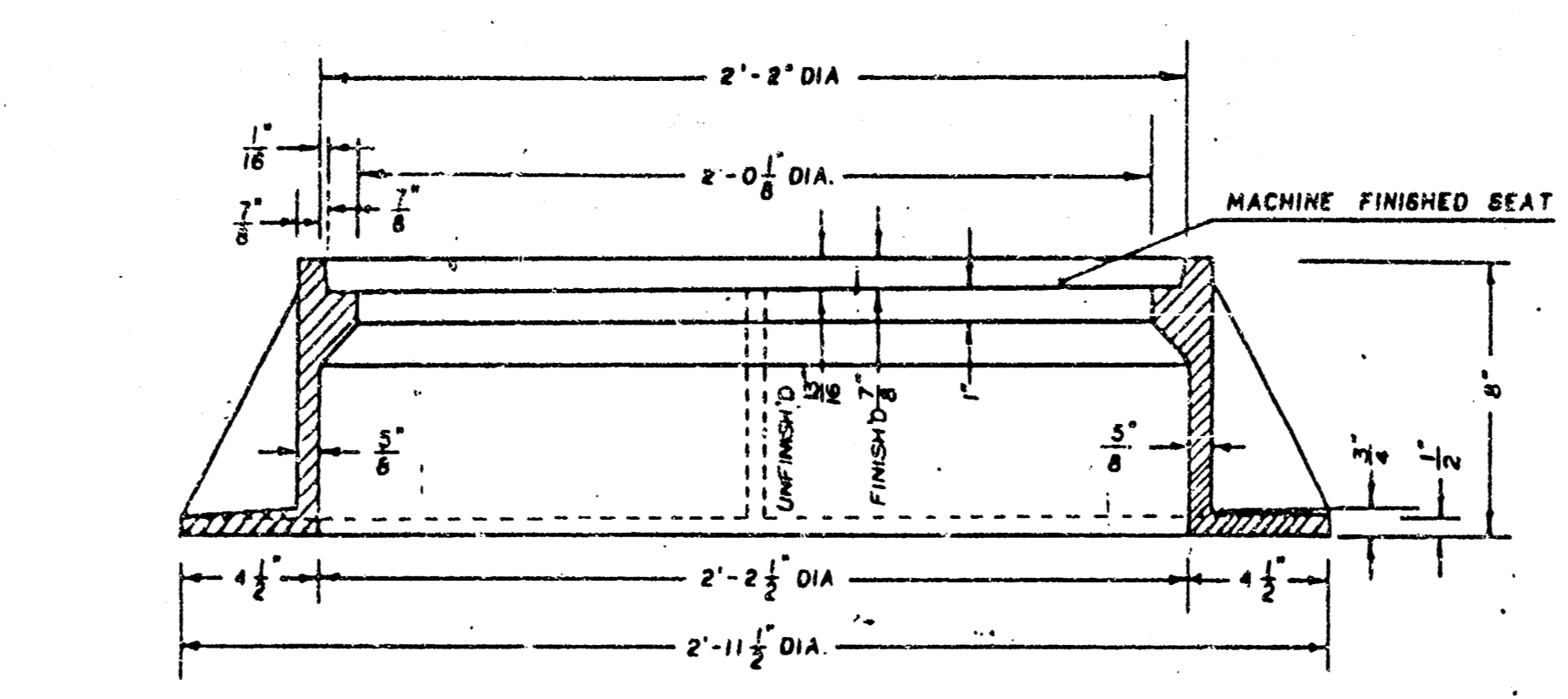


TOP VIEW

PICKHOLE DETAIL



SECTION VIEW

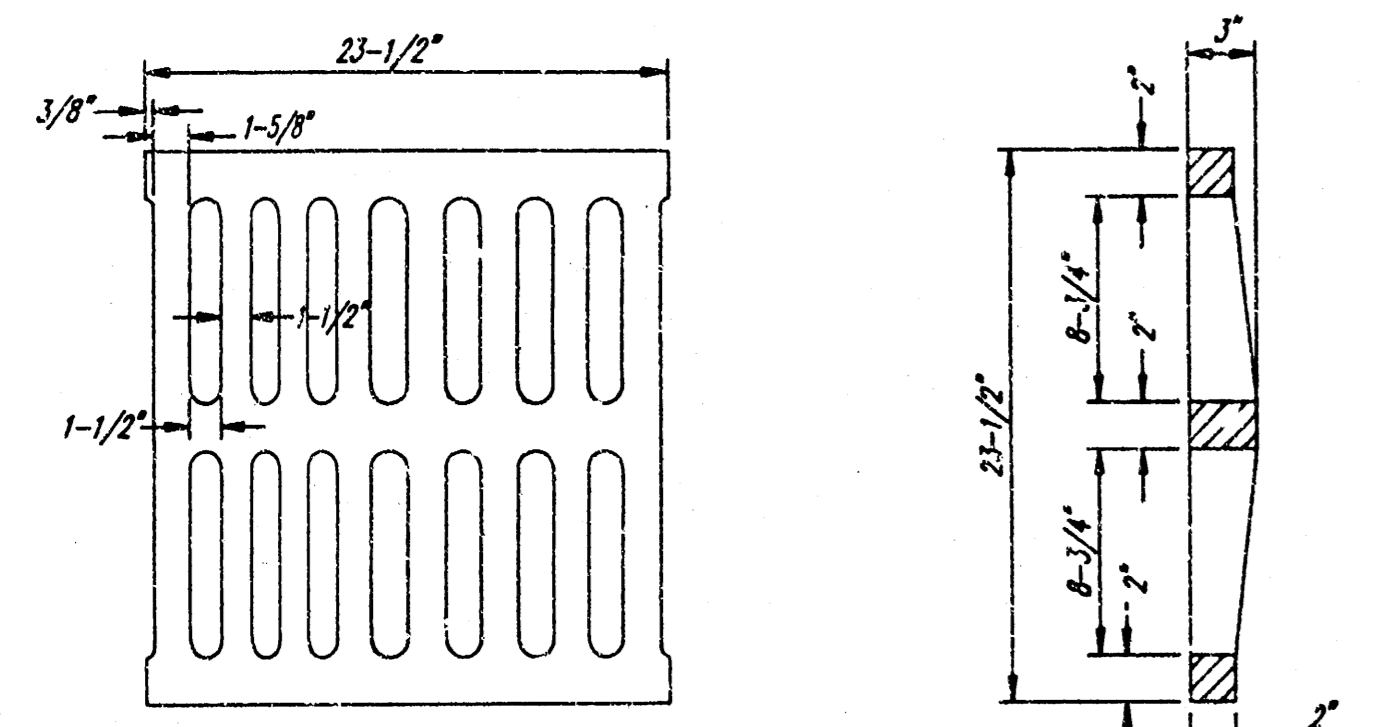
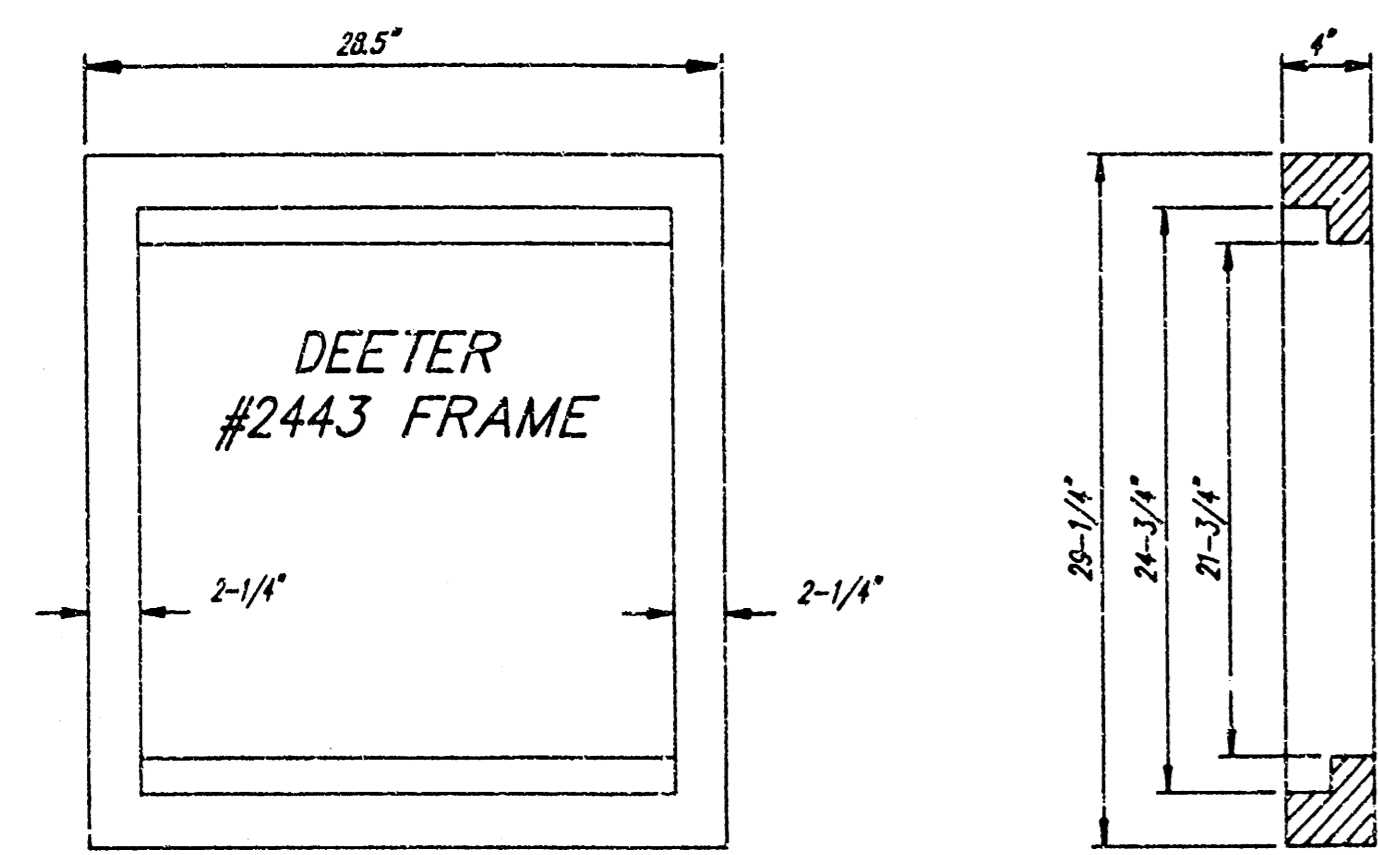


SECTION A-A

GENERAL NOTES

1. 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.
2. 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.
3. 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 THAT THESE SURFACES SHALL MAKE FULL CONTACT FOR THEIR FULL CIRCUMFERENCE TO PRECLUDE THE COVER FROM ROCKING IN THE FRAME.
4. 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 RECORDS TO OWNERSHIP USING LETTERS AT LEAST 1" 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.

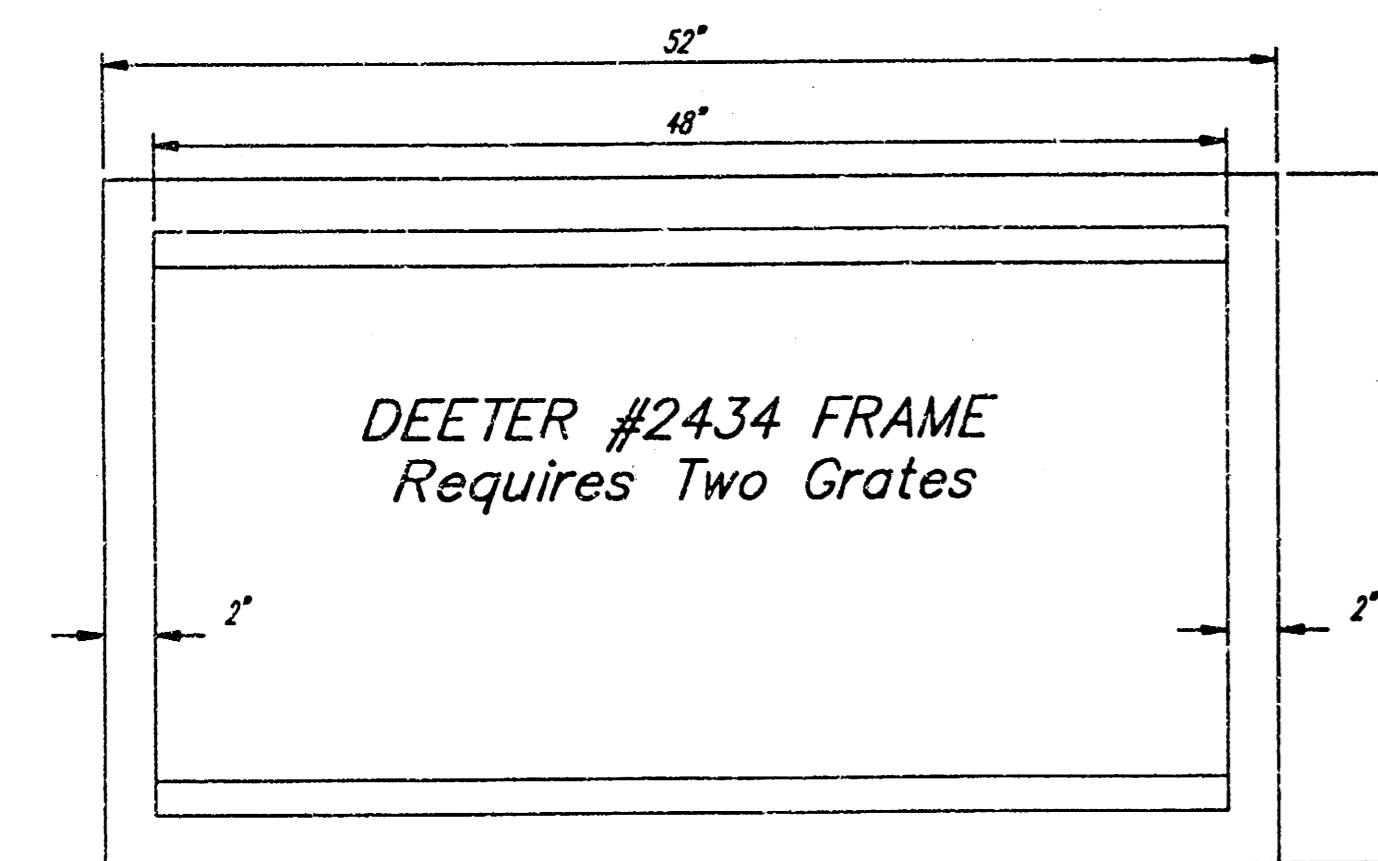
REVISED MAY 1993



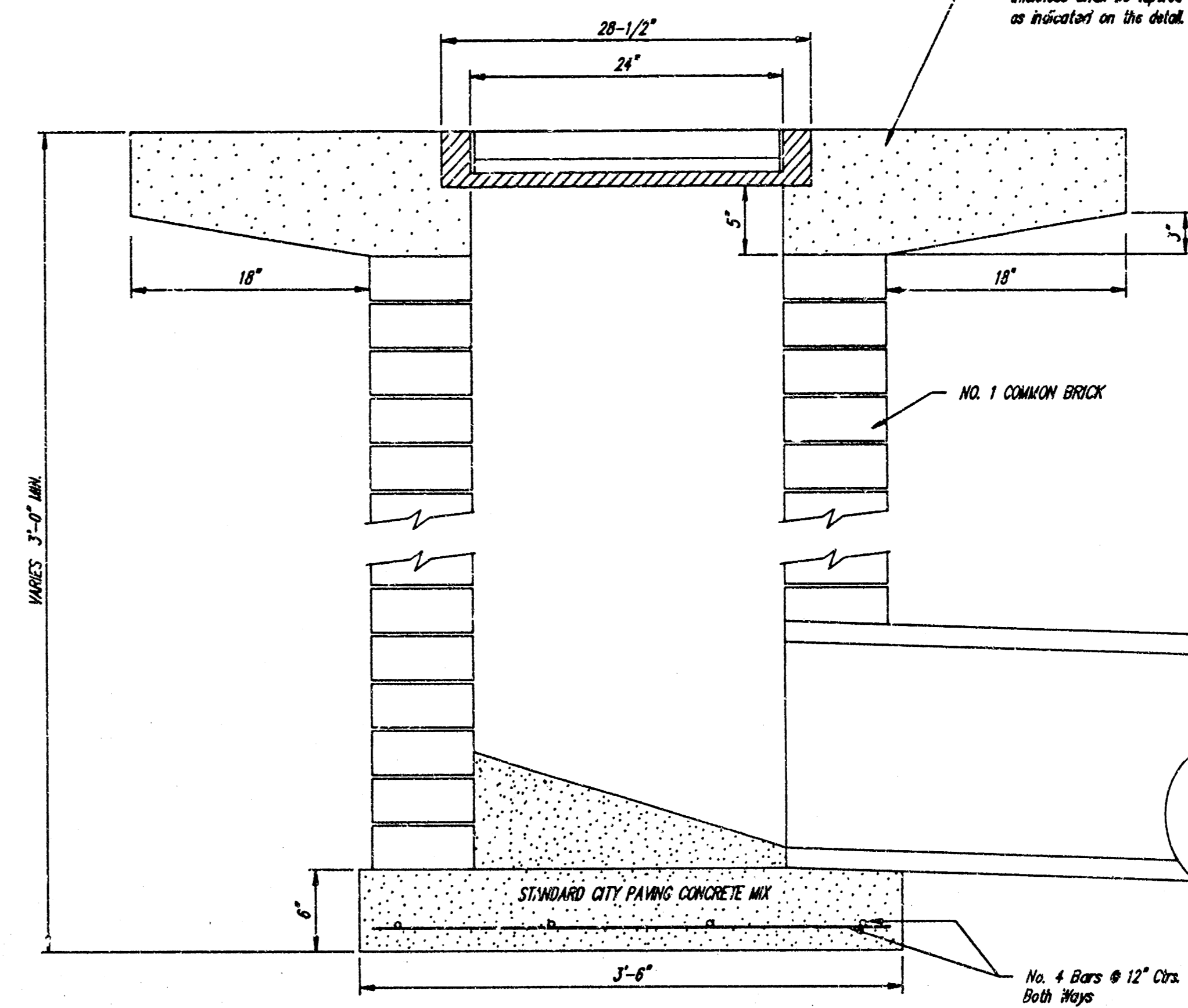
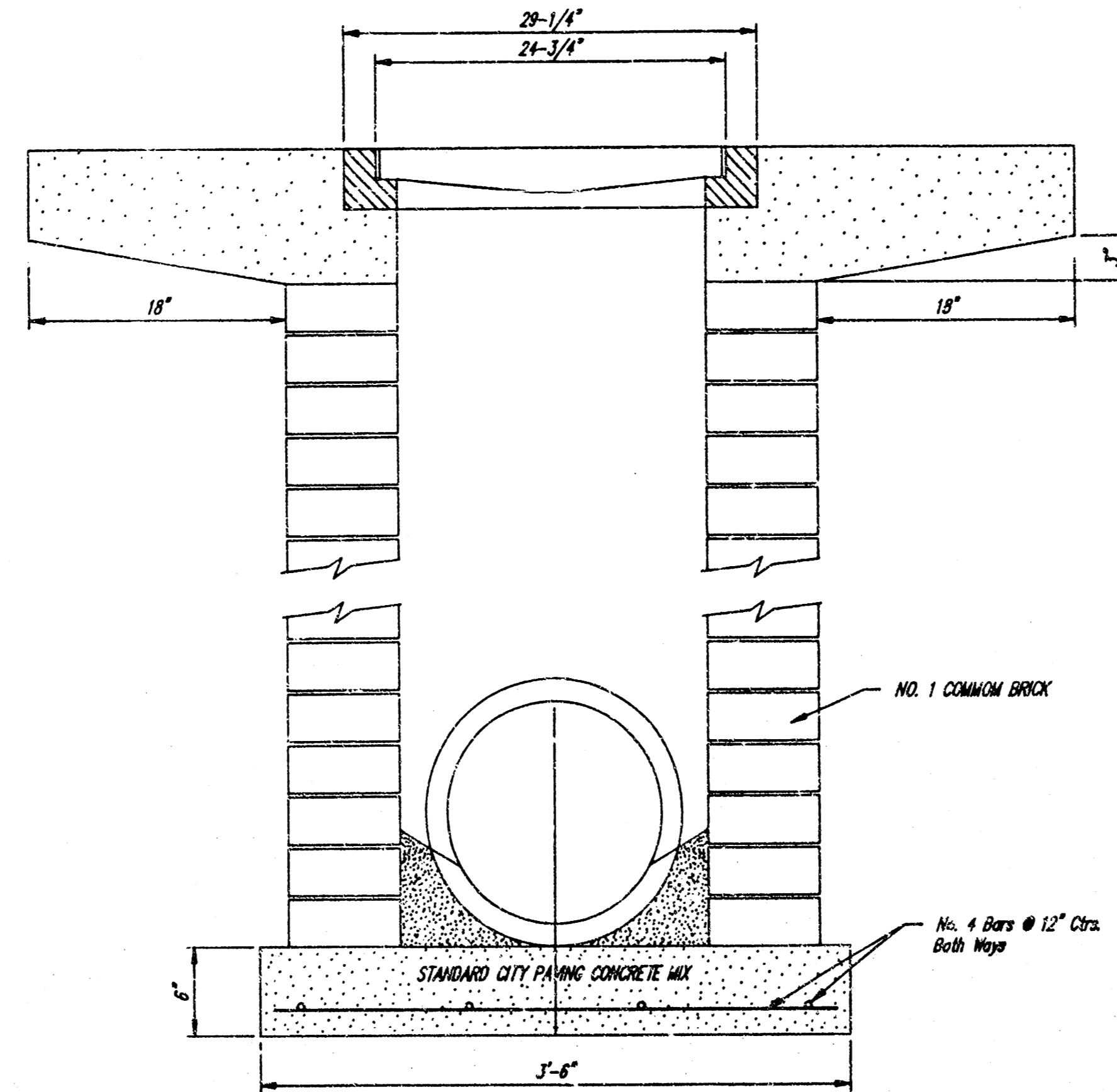
DEETER #2433 GRATE

24" x 24" Frame and Grate Detail

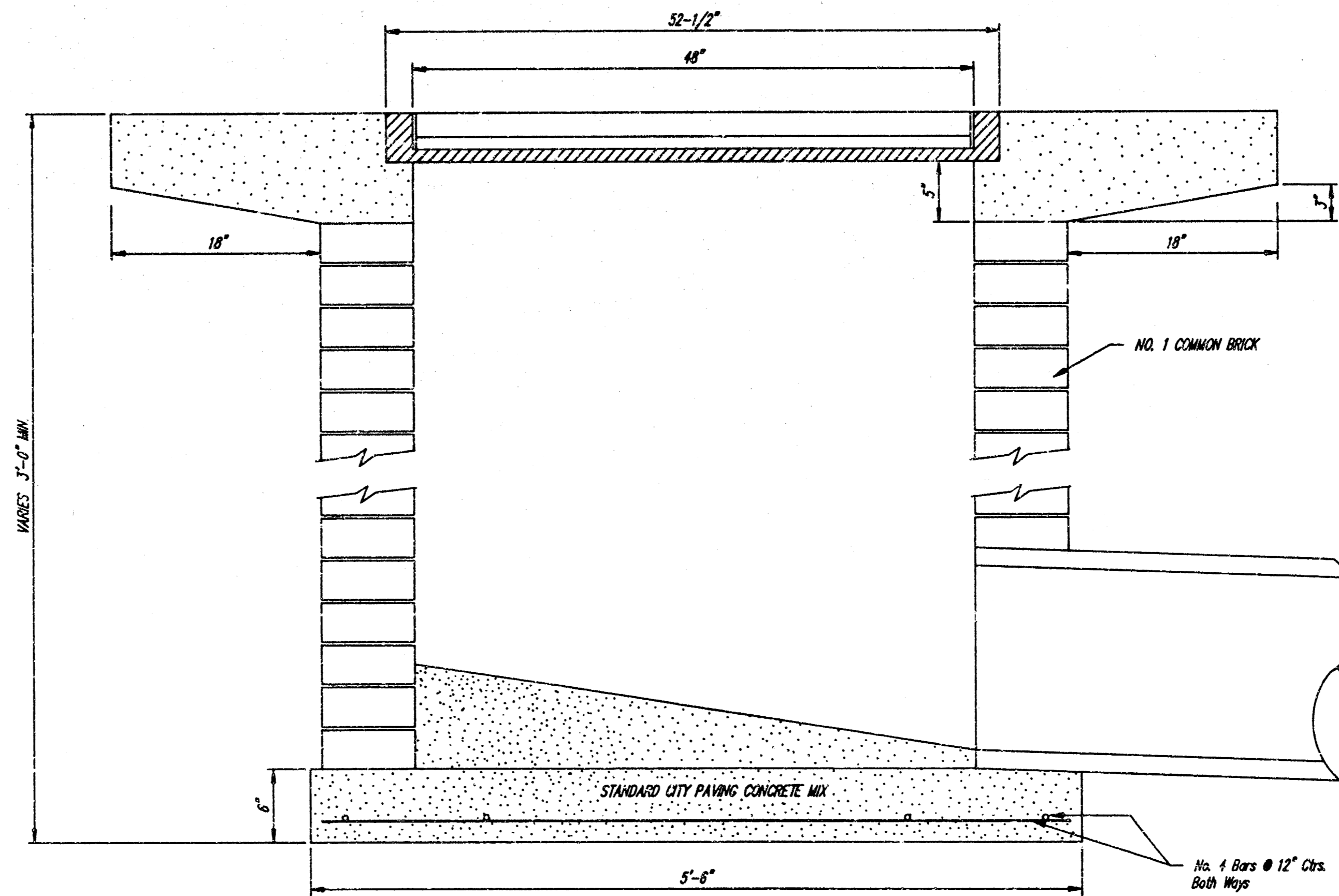
NOTE: Grates shall be imprinted on the top surface with "CITY OF WICHITA" using letters at least 1" in height. Other marking methods may be approved by the engineer.



Double 24" x 24" Frame Detail



Note: Concrete apron shall be constructed around the inlet when inlet is located in an unimproved area. Where the inlet is adjacent to pavement, the pavement thickness shall be tapered to the inlet in 18 inches as indicated on the detail.



WICHITA WEST THEATRE		
<b>DROP INLET DETAIL</b>		
LOT 4, BLOCK 6, STERLING FARMS ADDITION		
CITY OF WICHITA PRIV. PROJ. NO. 531 PPS(607861)		
<b>CERTIFIED ENGINEERING DESIGN</b>		
<b>CED</b>	1930 E. FIRST, # 119	
	WICHITA, KANSAS 67214	
(316) 262-8808		
DESIGNED: HDF	SCALE: NTS	SHEET
DRAWN: HDF	DATE: 1-95	6
CHECKED: HDF	CED FILE: DROPINLT.DWG	TOTAL 6