

STORM WATER SEWER NO. 485

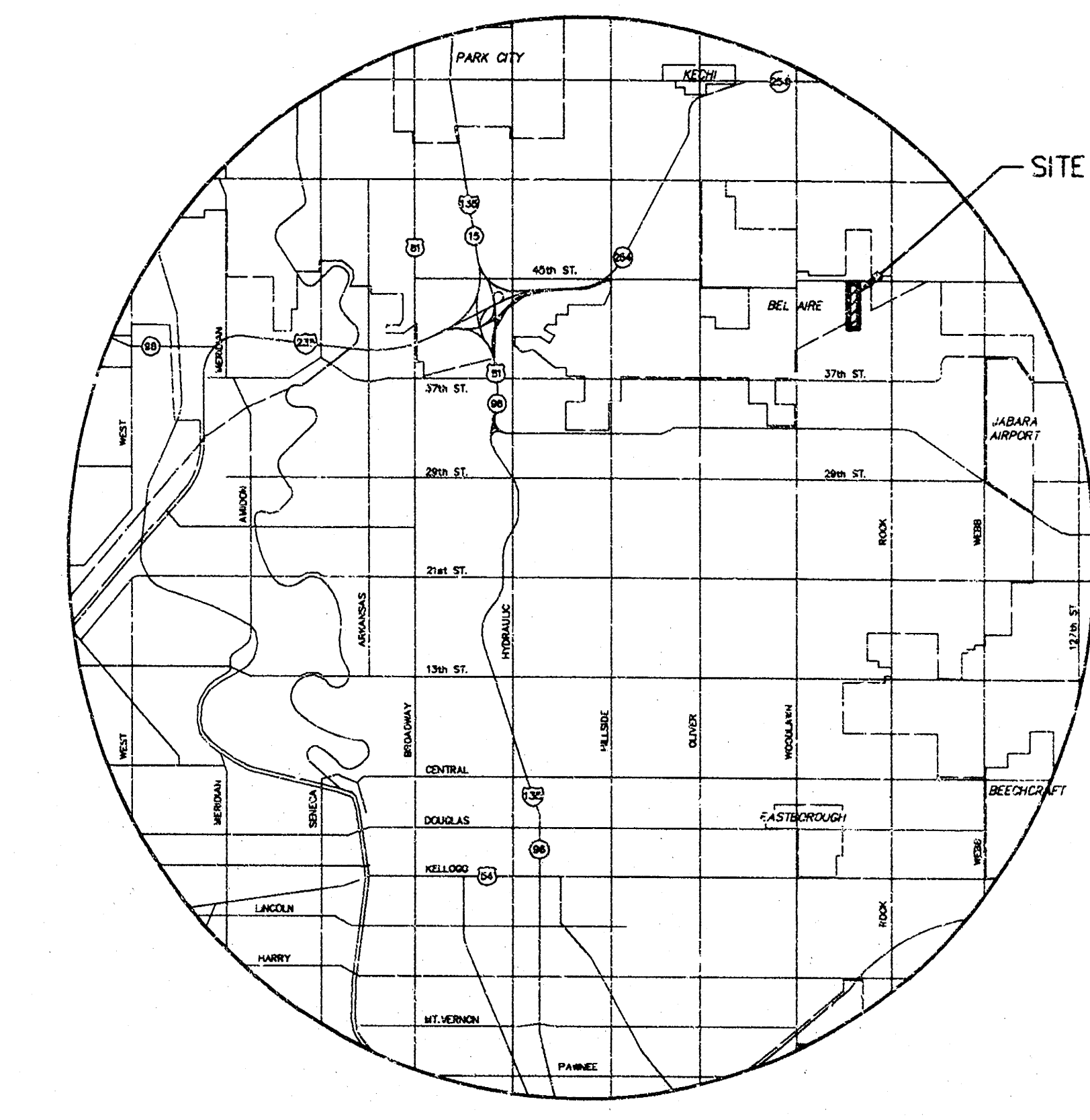
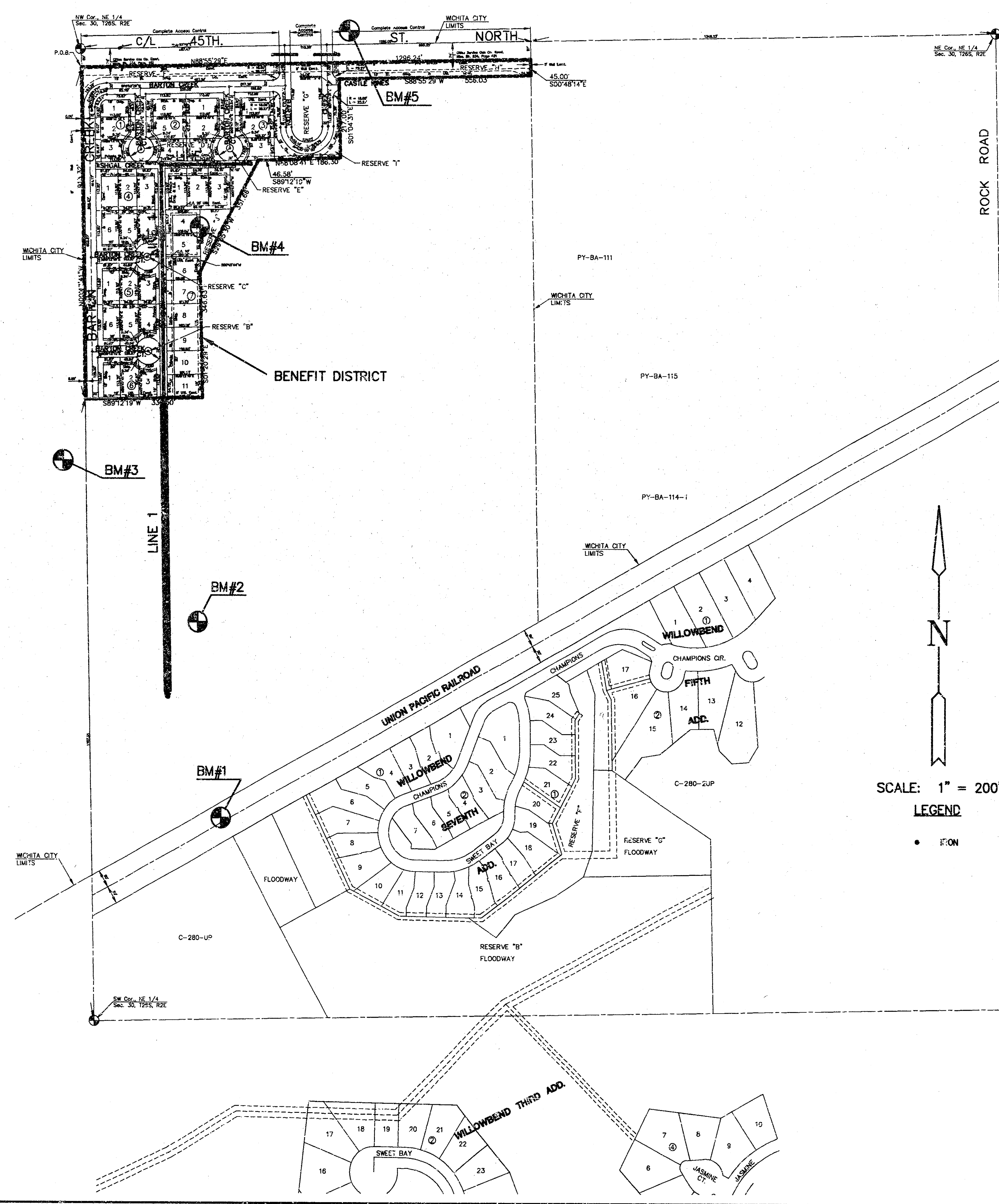
TO SERVE

WILLOWBEND NORTH

AN ADDITION TO THE CITY OF WICHITA
SEDGWICK COUNTY, KANSAS
PROJECT NO. 468-82713
MICHAEL E. LINDEBAK, CITY ENGINEER
INDEX CODE 751008

GENERAL NOTES

- THE TOPS OF INLETS AND MANHOLES AS NOTED ON THE PLANS MAY VARY SO AS TO MEET PROPOSED TOP OF CURB ELEVATIONS OR PAVEMENT ELEVATIONS. THE FIELD ENGINEER SHALL LOCATE INLETS AND MANHOLES WITH REFERENCE TO PROPOSED PAVING PLANS OF THE PERTINENT STREETS.
- ALL CONCRETE SHALL BE STANDARD PAVING MIX UNLESS OTHERWISE NOTED.
- 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 IN ACCORDANCE WITH STATE LAWS.
- TREES TO BE REMOVED ARE MARKED . ALL TREES WHICH IN THE OPINION OF THE FIELD ENGINEER CAN BE SAVED, SHALL BE SAVED.
- CONTRACTOR SHALL NOTIFY UTILITY COMPANIES OF CONSTRUCTION SCHEDULING.
- 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 COMPANIES AND IS EITHER FROM COMPANY UTILITY DRAWINGS OR COMPANY PROVIDED FIELD LOCATIONS. THE PLAN LOCATIONS SHOWN ARE NOT GUARANTEED. ADDITIONAL EXISTING UTILITIES MAY ALSO BE ENCOUNTERED.
- 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 AN EMERGENCY:
SOUTHWESTERN BELL TELEPHONE COMPANY 1-800-734-7590
CABLEVISION 263-2061
K&BZ (GAS & ELECTRIC) 313-8600
CITY OF WICHITA WATER & SEWER MAINTENANCE 268-4908
ARKLA GAS COMPANY 942-8350 OR 263-8161
- 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 DEPARTMENT 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.
- CONTRACTOR SHALL RESEED AND MULCH ALL DISTURBED AREAS. COST SHALL BE CONSIDERED SUBSIDIARY TO SITE RESTORATION.



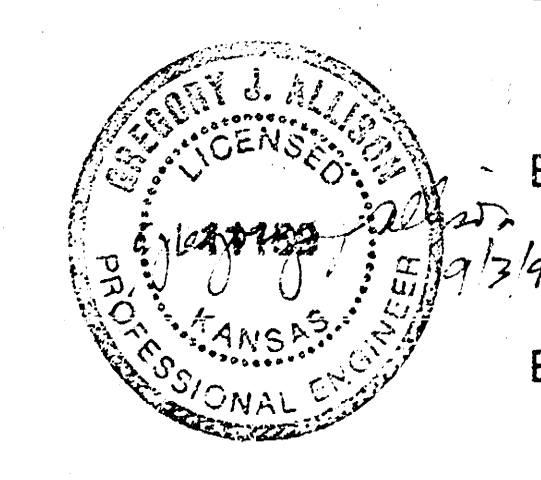
LOCATION MAP

INDEX TO DRAWINGS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2-3	DETAILS
4-7	PLAN & PROFILE LINE 1
8	FINAL PLAT

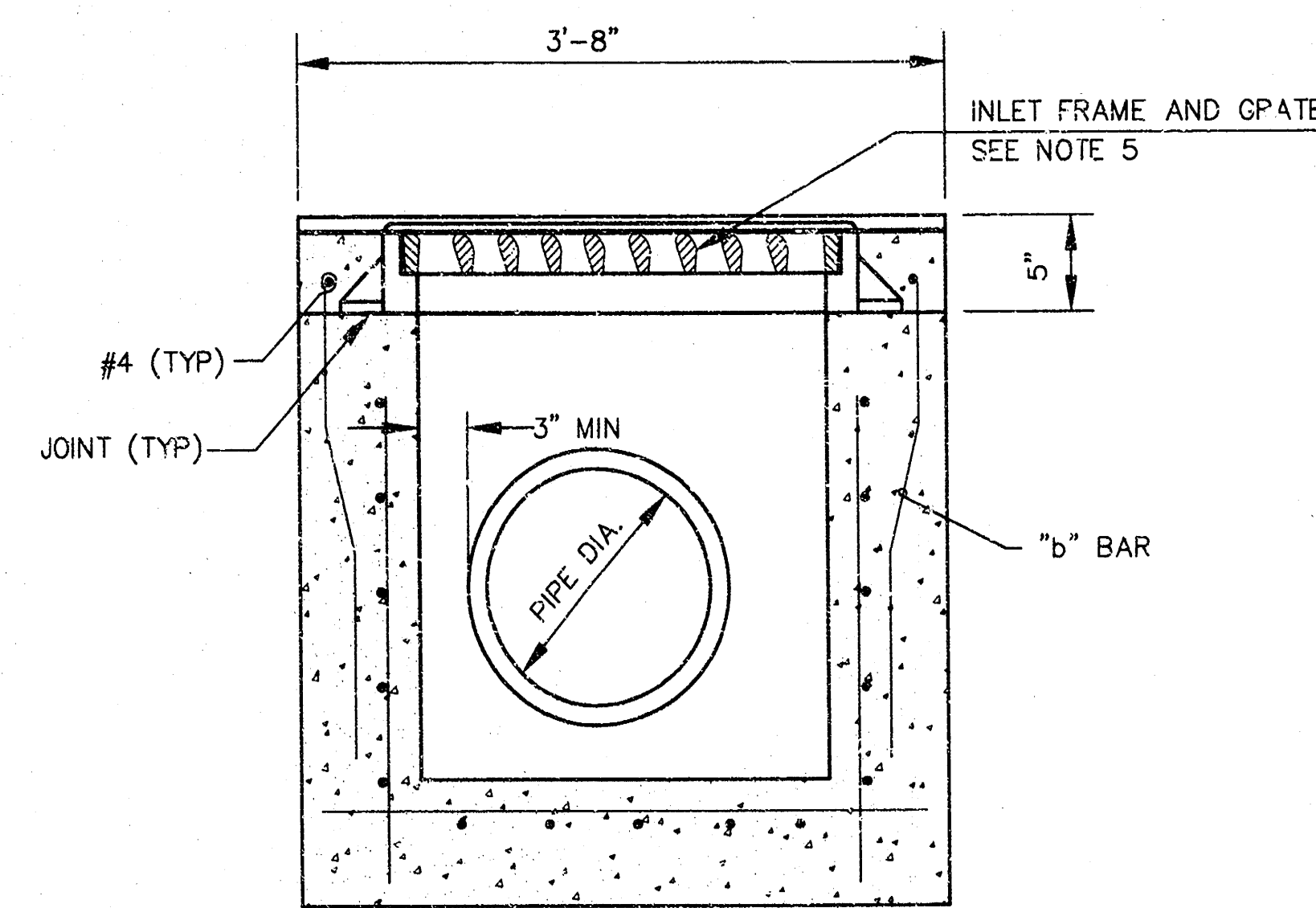
BENCHMARKS

- BM#1 NE COR. OF RCB UNDER UNION PACIFIC RAILROAD, ±420' NE OF INTERSECTION CENTER SEC. LINE & C/L RAILROAD. ELEV. = 185.31
- BM#2 TOP OF "T" POST ±314' EAST OF WEST LINE OF PLAT & ±1579' SOUTH OF 45TH. ST. NO. ELEV.=181.802
- BM#3 RR SPIKE IN E. FACE OF THE EAST HLP WEST OF THE W. LINE OF PLAT ±800' S. OF 45TH. ST. NO. ELEV.=191.487
- BM#4 TOP OF "T" POST ±334' EAST OF WEST LINE OF PLAT & ±496' SOUTH OF 45TH. ST. NO. ELEV.=191.155
- BM#5 RR SPIKE IN S. FACE OF PP NORTH SIDE 45TH. ST. NO. ±600' EAST OF NW CORNER OF PLAT ELEV.=195.398

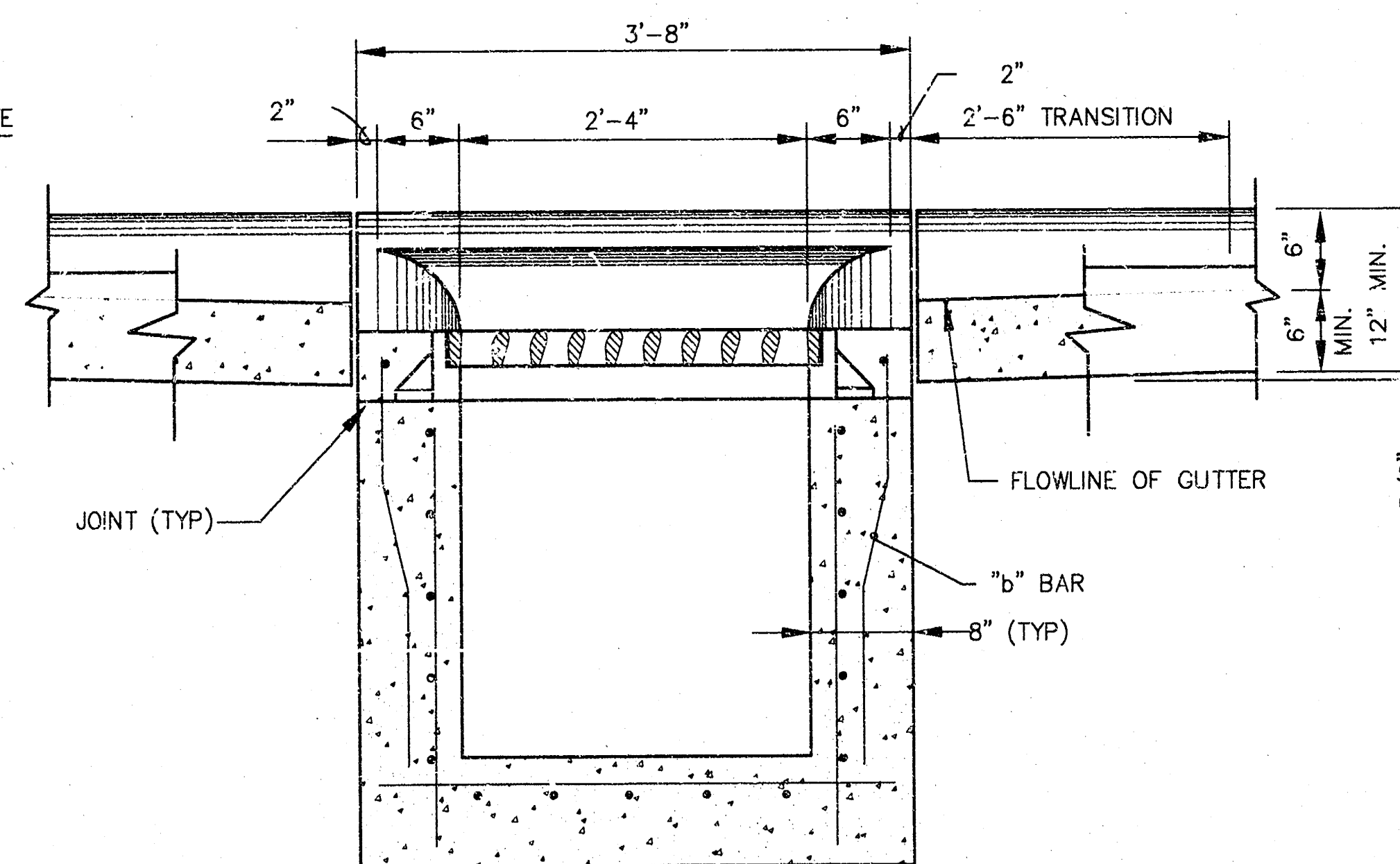


WILLOWBEND NORTH ADDITION			
PROJECT NAME			
STORM WATER SEWER			
SHEET TITLE			
GJA	DESIGN BY:	WVJ	CHECKED BY:
GJA	DESIGNED BY:	WVJ	CHECKED BY:
AUGUST, 1997		96082-DT	1 / 8
DATE		JOB NO.	SHEET OF

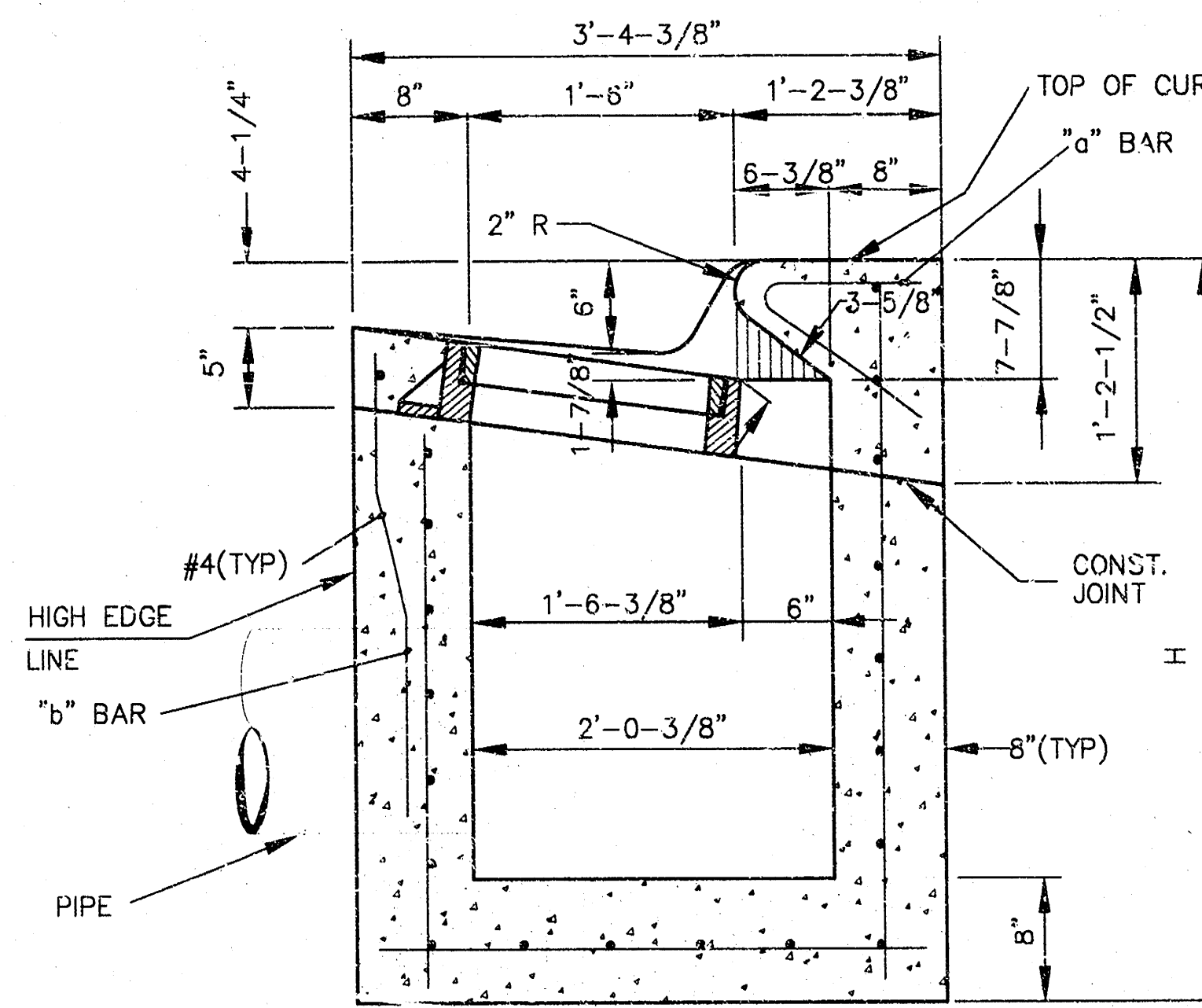
MID-KANSAS ENGINEERING CONSULTANTS, INC.
411 N. WEBB ROAD
WICHITA, KS. 67206
316-684-9600



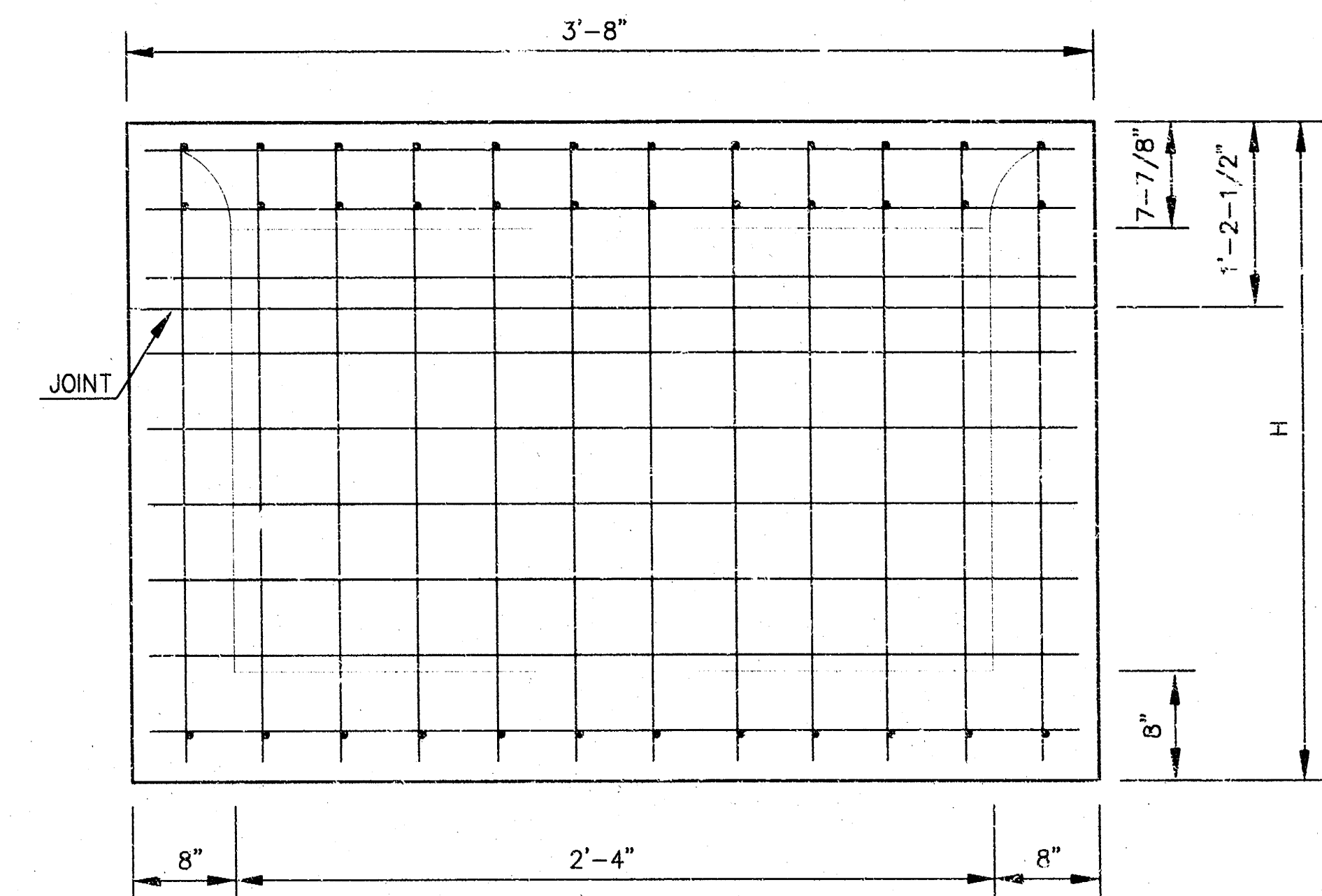
SECTION D - D



SECTION C - C



SECTION A - A



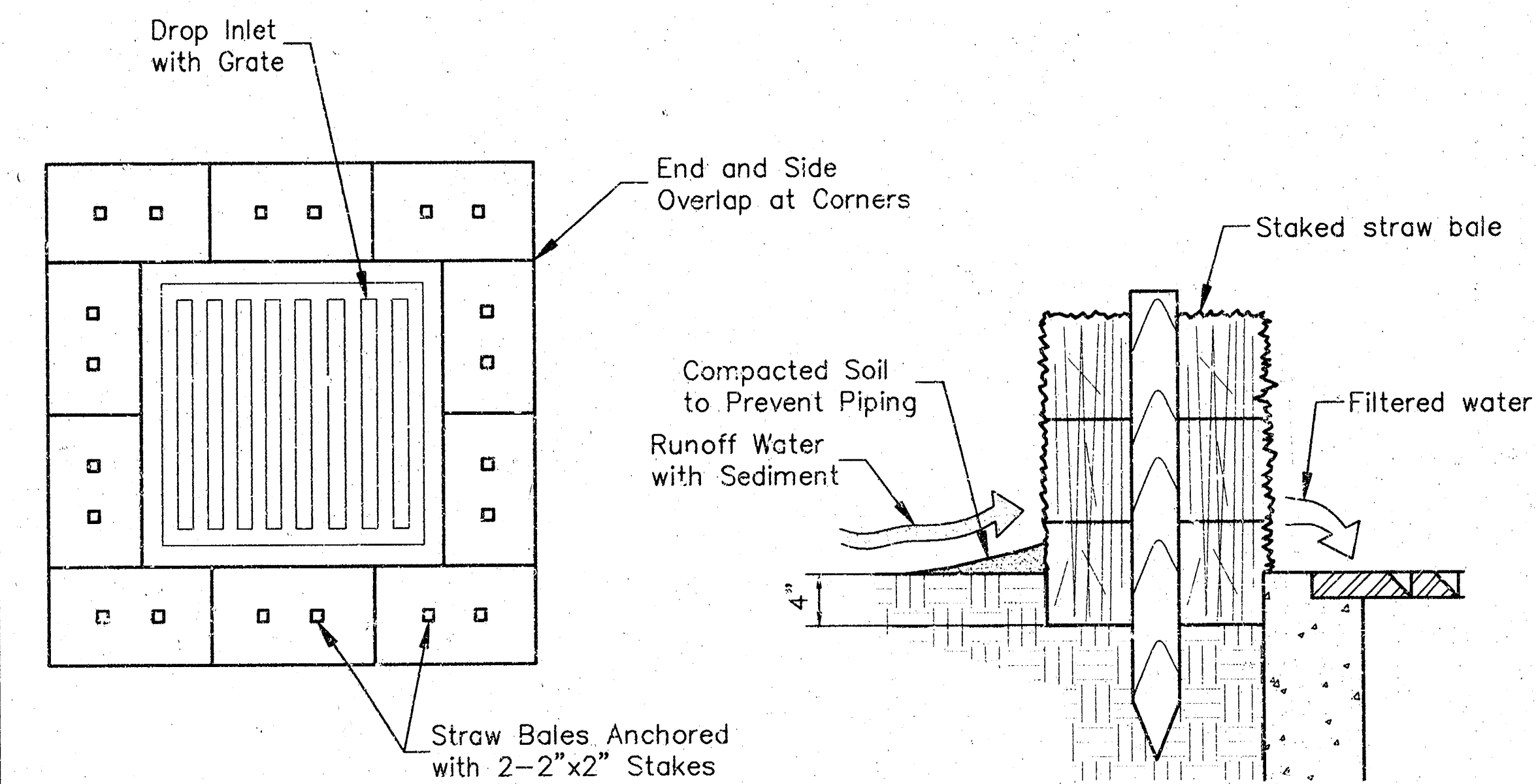
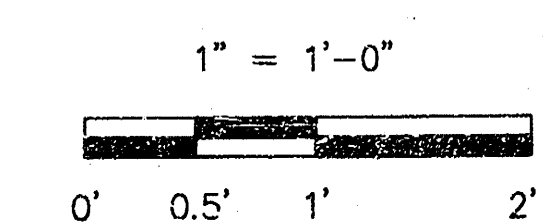
REBAR SIZES, SPACING, AND CLEARANCES PER NOTE 3.

REAR WALL

GENERAL NOTES

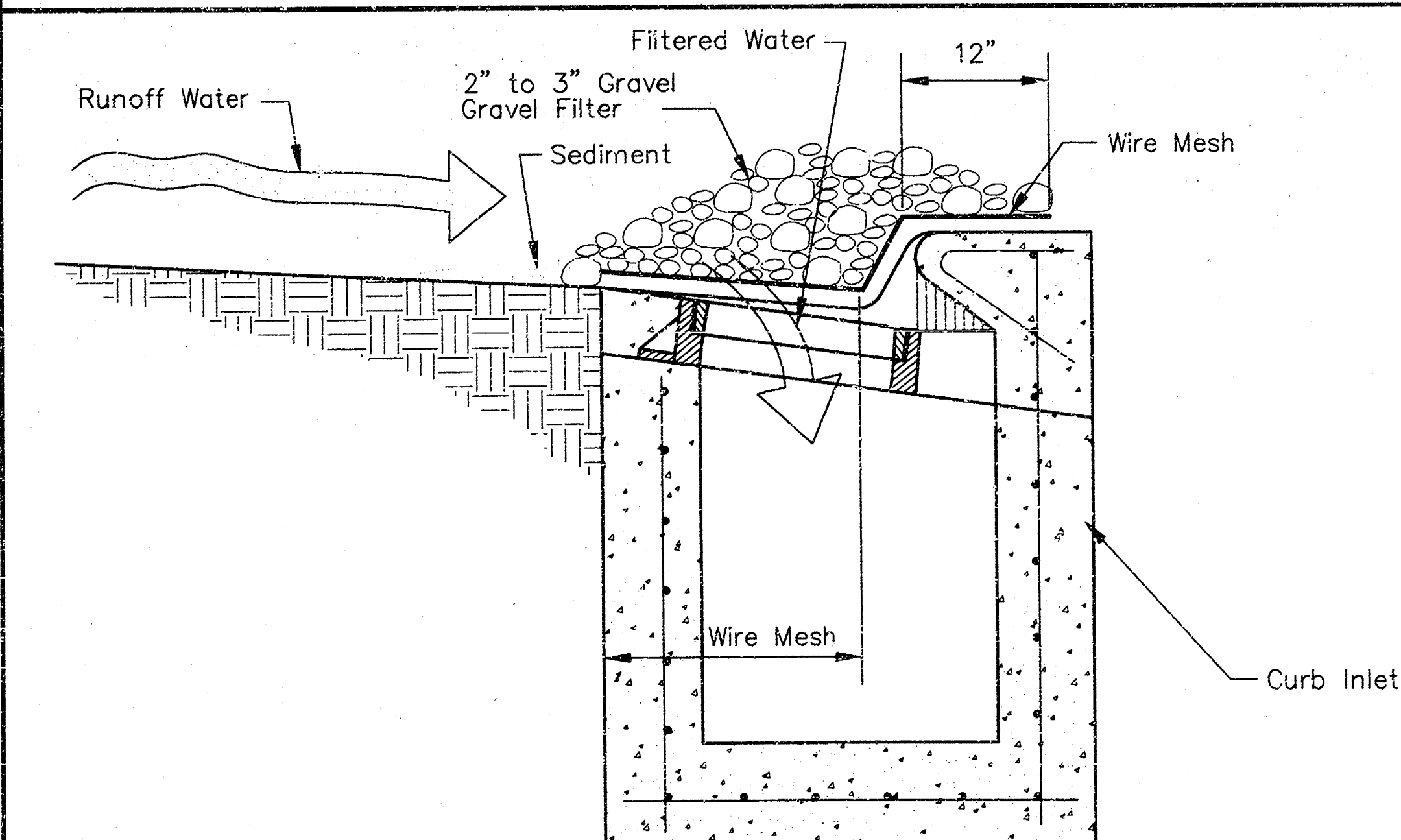
- USE THE CONCRETE MIX SPECIFIED FOR THE CITY OF WICHITA CONCRETE PAVEMENT THROUGHOUT. ALL EXPOSED EDGES SHALL BE FINISHED WITH AN EDGING TOOL.
- INLET INVERT SHALL BE SHAPED WITH 8 SACK MIX CONCRETE TO CREATE FLOW CHANNELS AND TO INCREASE HYDRAULIC EFFICIENCY SUCH THAT THE INLET WILL BE SELF CLEANING BETWEEN ALL INLET AND/OR OUTLET PIPES.
- ALL BARS ARE #4 WITH 6" SPACING AND SHALL HAVE A MINIMUM CLEARANCE OF 1-1/2" UNLESS OTHERWISE NOTED ON THE PLANS.
- NO DEDUCTIONS WILL BE MADE IN PAY LENGTH OF CURB, GUTTER, OR CURB AND GUTTER THROUGH THE INLET AREA.
- USE DEETER 2441 CATCH BASIN INLET FRAMES & STYLE A GRATE OR APPROVED EQUAL. INLET FRAMES TO BE PROOF LOAD TESTED TO 40,000 LBS. ON UNSUPPORTED SIDE.
- REINFORCING BARS SHALL BE CUT OR BENT AROUND PIPES. NO DEDUCTION IN CONCRETE QUANTITIES SHALL BE MADE FOR PIPE OPENINGS.
- THE VANES OF THE GRATE SHALL BE ORIENTED TO INTERCEPT FLOW FROM THE DIRECTION SHOWN BY FLOW ARROWS ON THE PLANS.

SCALE



STRAW BALE DROP INLET SEDIMENT BARRIER

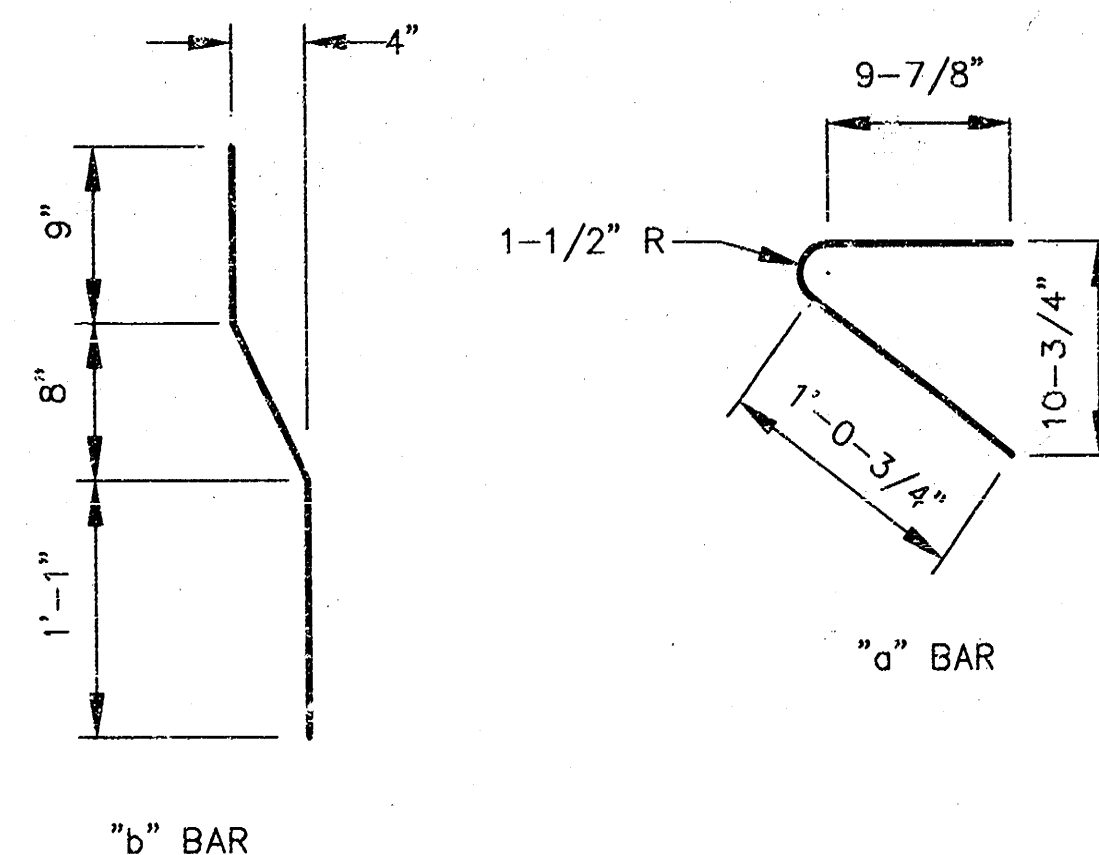
Note: Wedge loose straw between bales to prevent water from flowing between bales.



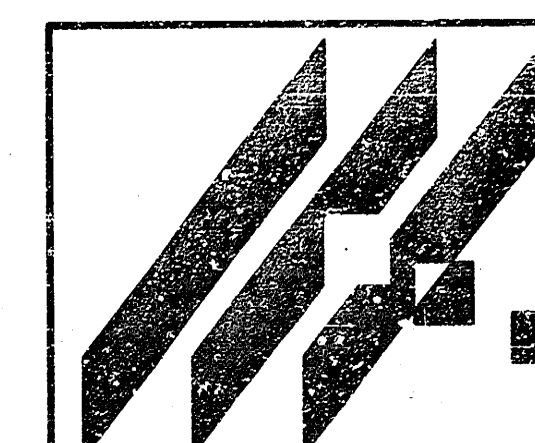
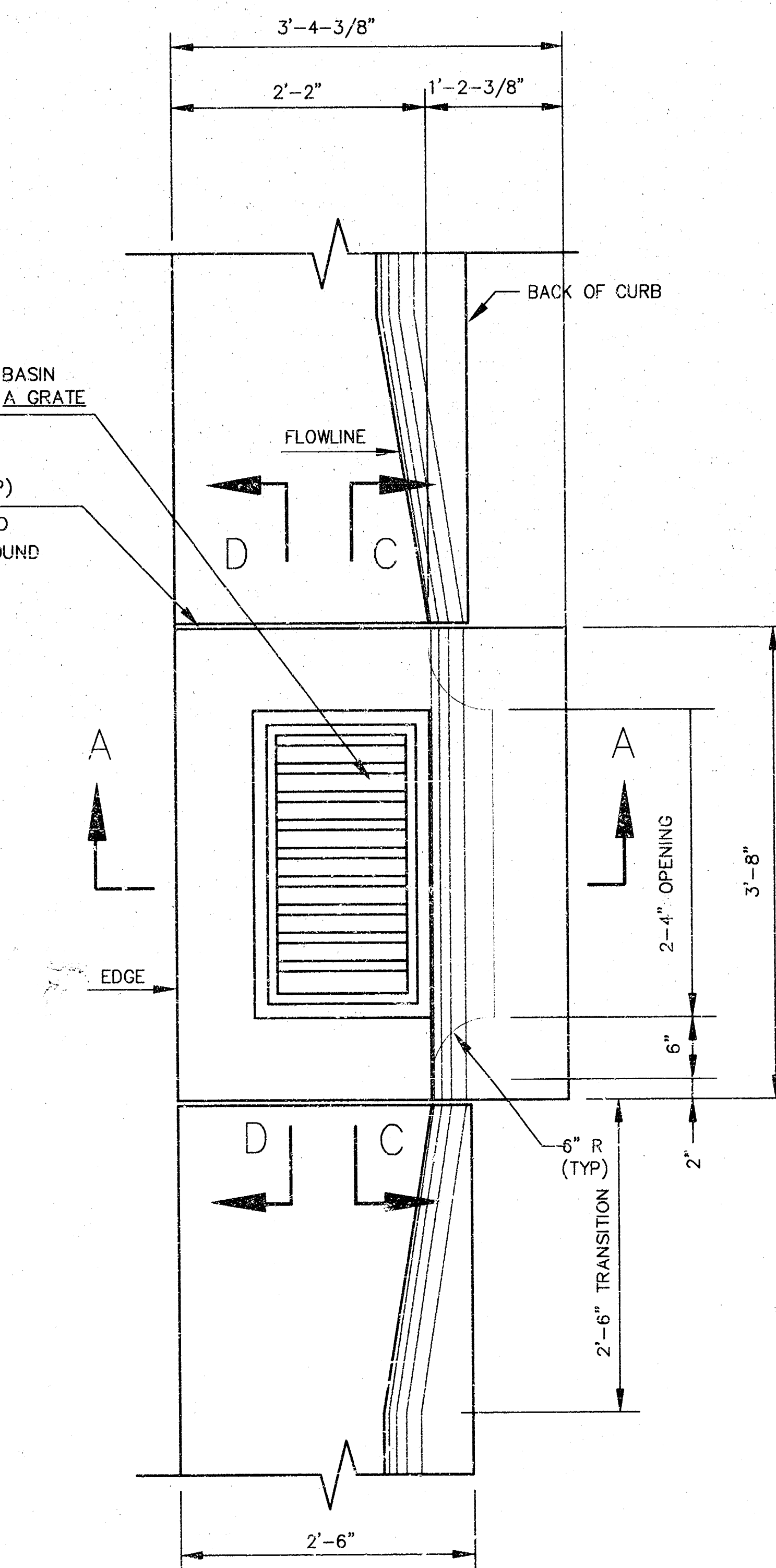
GRAVEL CURB INLET SEDIMENT BARRIER

DEETER #2441 CATCH BASIN INLET GRATE & STYLE A GRATE SEE NOTE 5

1/2" EXP. JOINT (TYP)
HOT OR COLD POURED JOINT SEALING COMPOUND



BENDING DIAGRAM



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

WILLOWBEND NORTH ADDITION
PROJECT NAME

TYPE II CURB INLET
2'-6" COMBINED CURB AND GUTTER

INLET OPENING = 3'-5/8" x 2'-4"

SHEET TITLE

MKEC
DESIGN BY:

SWM
DRAWN BY:

JNU
CHECKED BY:

DATE

96082DD2
JOB NO.

2 / 8
SHEET / OF

Technical drawing of a rectangular plate with two rows of oval holes. The top view shows a width of 23 1/2 inches and a hole pitch of 1 1/2 inches typical. The side view shows a thickness of 2 inches and a total height of 23 1/2 inches. The plate has a 5/8 inch top flange and a 3/8 inch bottom flange.

**DEETER #2433
(OR EQUAL)**

(REQUIRES ONE GRATE)
OPEN AREA 184 SQ. IN.
 1.28 SQ. FT.

28 1/2" 2 1/4" 2 1/4" 29 1/4" 24 3/4" 21 3/4" 4" 2" 1 1/2"

WICHITA, KAN.

2"

48"

2"

29 1/4"

DEETER #2434 (OR EQUAL)

(REQUIRES TWO GRATES)

OPEN AREA 368 SQ. IN.
2.56 SQ. FT.

52"

IF ASPHALT PAVEMENT,
CONSTRUCTION LIMITS
FOR CONCRETE TOP.

24 3/4"

2 1/4"

1 1/2"

5"

2 1/4"

18" TYP.

2" TYP.

NO.1 COMMON BRICK

FLOOR SHAPING
(8 SACK SAND MIX)

VARIES

FLOOR SHAPING
(8 SACK SAND MIX)

STD. CONC. PAVING MIX

3'-6"

NO 4 BARS @ 12" CTRS.
BOTH WAYS

IF ASPHALT PAVEMENT,
CONSTRUCTION LIMITS
FOR CONCRETE TOP.

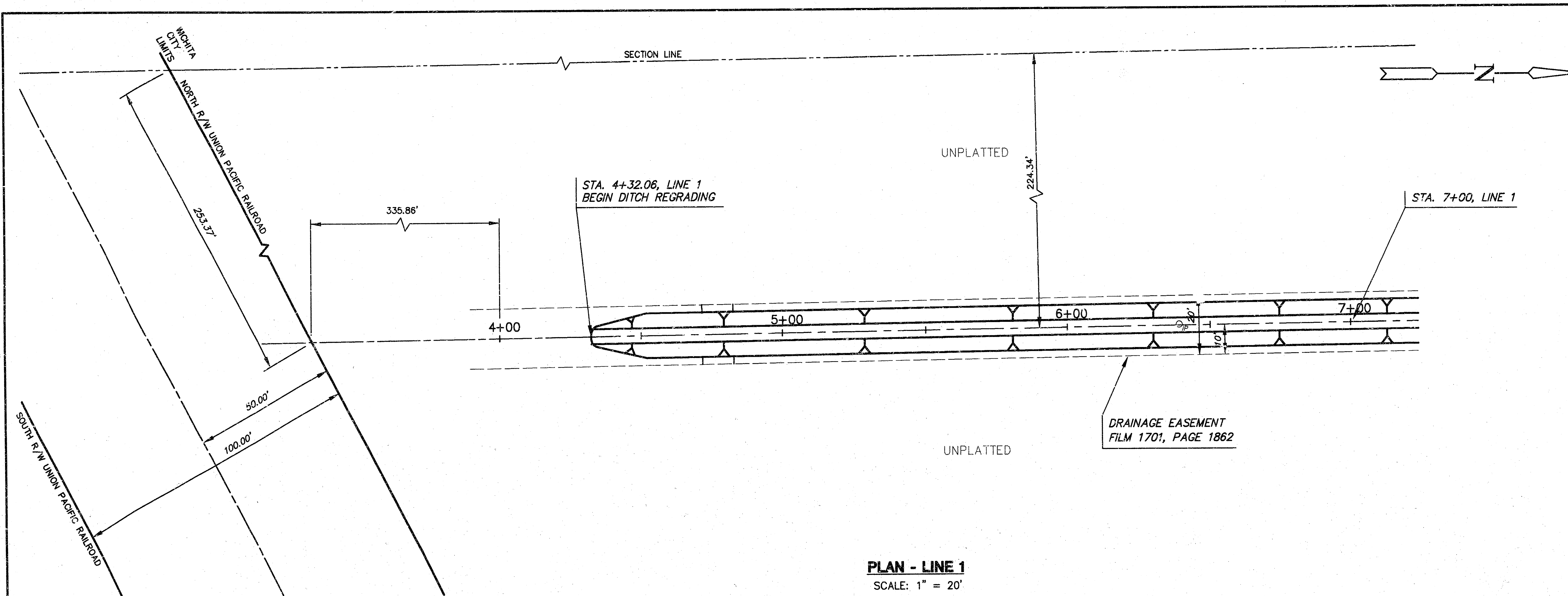
ORIFICE EQUATION		
$Q = C_d A \sqrt{2gh}$		$C = 0.60$
h (DEPTH)	#2433 (SINGLE)	#2434 (DOUBLE)
0.1	1.95 cfs	3.89 cfs
0.2	2.75 cfs	5.50 cfs
0.3	3.37 cfs	6.74 cfs
0.4	3.89 cfs	7.78 cfs
0.5	4.35 cfs	8.70 cfs
0.6	4.77 cfs	9.53 cfs
0.7	5.15 cfs	10.30 cfs
0.8	5.50 cfs	11.01 cfs
0.9	5.84 cfs	11.67 cfs
1.0	6.15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

DROP INLET DETAILS

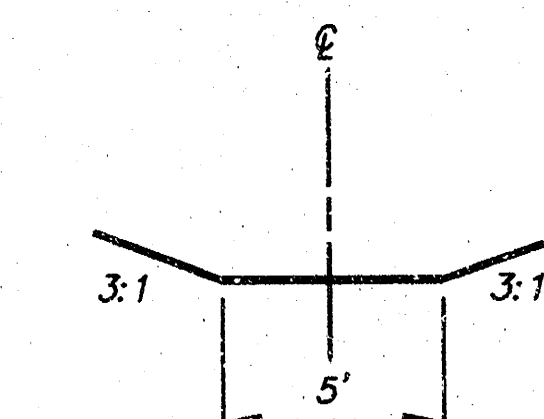
CITY OF WICHITA, KANSAS

Design	C.O.W.	Checked by	Checked by	3 8
Drawn by	Date	Date	Job No.	

**WILLOWBEND NORTH ADDITION
STORM WATER SEWER PLANS
LINE 1 - DITCH**

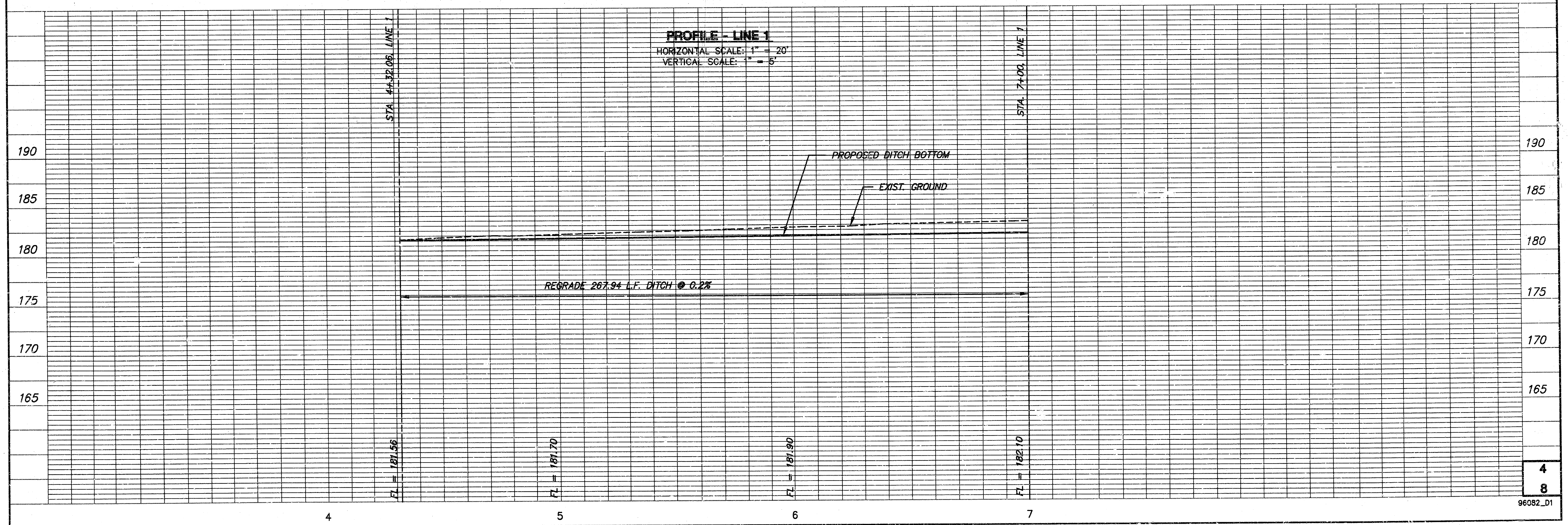


PLAN - LINE 1
SCALE: 1" = 20'



TYPICAL DITCH CROSS SECTION

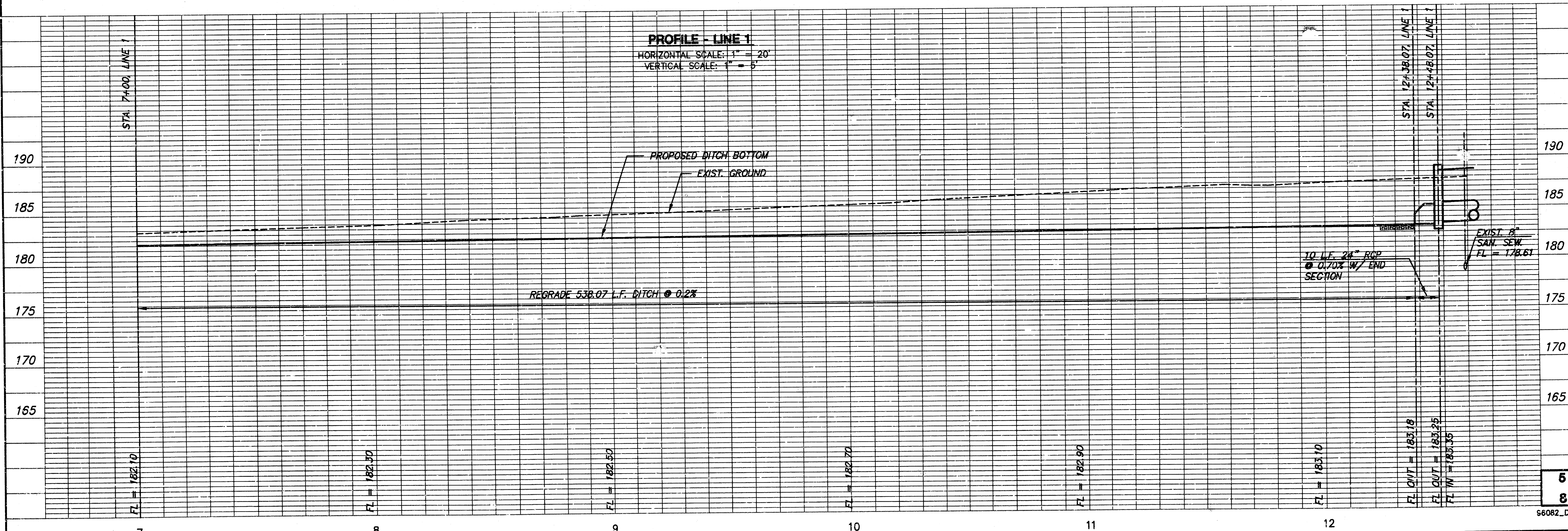
EXCAVATION = 900 C.Y.
(FOR INFORMATION ONLY)
EXCAVATION MAY BE WASTED
ON SITE AS DIRECTED.



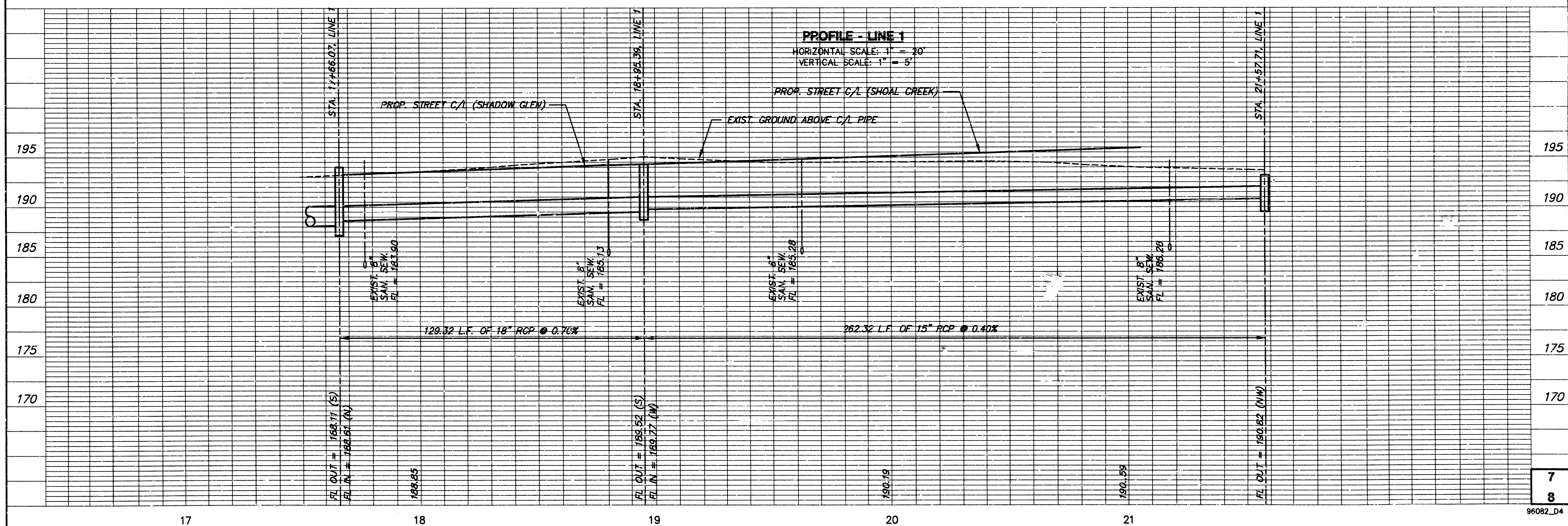
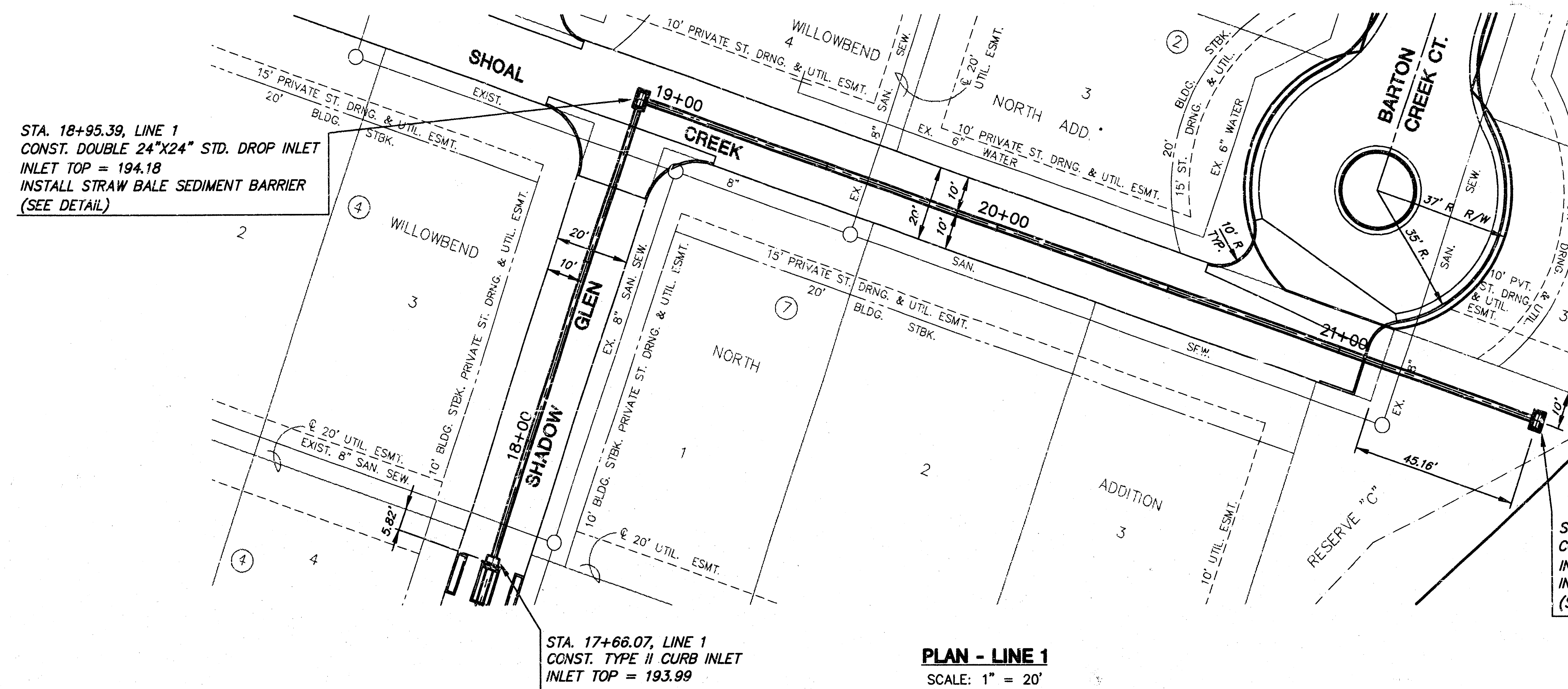
PROFILE - LINE 1
HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 5'

PLAN - LINE 1

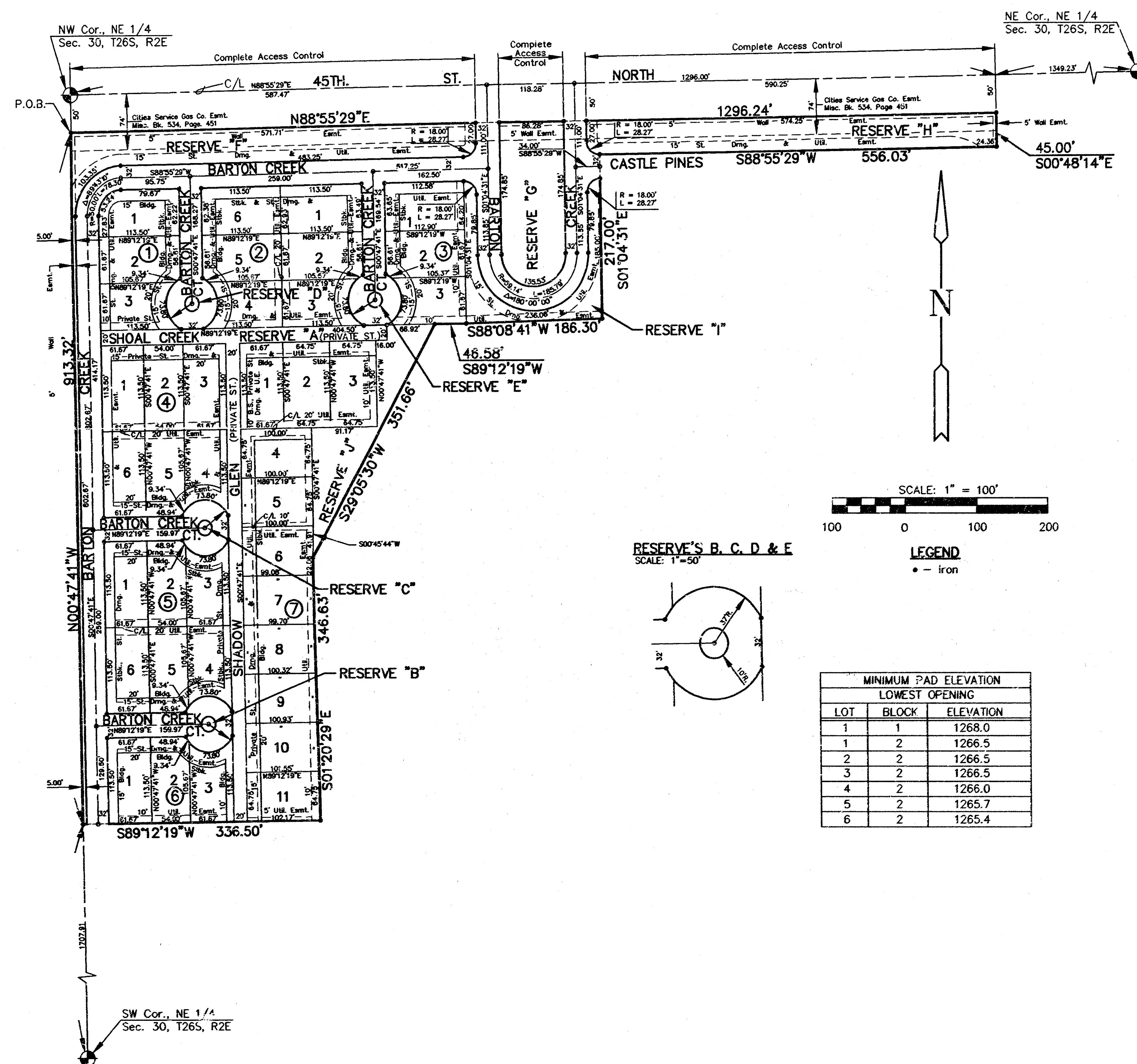
SCALE: 1" = 20'



**WILLOWBEND NORTH ADDITION
STORM WATER SEWER
LINE 1**



FINAL PLAT OF
WILLOWBEND NORTH ADDITION
AN ADDITION TO WICHITA, SEDGWICK COUNTY, KANSAS



I, Kenneth H. Bengtson, a Civil Engineer and Registered Land Surveyor in Kansas, do hereby certify that I have been in responsible charge of surveying and platting of WILLOWBEND NORTH ADDITION, an addition to Wichita, Sedgwick County, Kansas, into lots, blocks, streets, and reserves the same being accurately set forth in the accompanying plat and described herein:

A tract of land lying in the Northeast Quarter, Section 30, Township 26 South, Range 2 East of the 6TH. P.M., Sedgwick County, Kansas, more particularly described as follows:

Beginning at a point on the West line of said Northeast Quarter, said point lying 50 feet South of the North line of said Northeast Quarter; thence N 88° 55' 29" E, 1296.24 feet parallel with said North line; thence S 00° 48' 14" E, 45.00 feet; thence S 88° 55' 29" W, 556.03 feet; thence S 01° 04' 31" E, 217.00 feet; thence S 88° 08' 41" W, 186.30 feet; thence S 89° 12' 19" W, 46.58 feet; thence S 29° 05' 30" W, 351.66 feet; thence S 01° 20' 29" E, 346.63 feet; thence S 89° 12' 19" W, 336.50 feet to a point lying on said West line; thence N 00° 47' 41" W, 913.32 feet along said West line to the point of beginning.

I hereby certify that the details of this plat are correct to the best of my knowledge and belief this ____ day of _____, 1997.

Kenneth H. Bengtson, P.E., R.L.S. #922
Mid-Kansas Engineering Consultants, Inc.
411 North Webb Road
Wichita, KS 67206

Know all men by these presents that we the undersigned property owners of the land as above set forth in the Civil Engineer's and Registered Land Surveyor's Certificate, have caused the same to be surveyed and platted into lots, blocks, streets and reserves the same to be known as "WILLOWBEND NORTH ADDITION", an addition to Sedgwick County, Kansas. The streets are hereby dedicated to and for the use of the public. Easements for the construction and maintenance of streets, utilities and drainage, are hereby granted to the public.

Reserve A is platted for private streets, driveways, emergency vehicle access, utilities, drainage, open space, landscaping, irrigation, and walkways. Reserves B, C, D, and E are platted for open space, landscaping, lighting, irrigation, median, and monuments. Reserves F, G, and H are platted for open space, landscaping, lighting, irrigation, and entry monuments. Reserves I and J are platted for open space, landscaping, lighting, irrigation, and monuments. The reserves shall be owned and maintained by the homeowners association.

All abutters right of access to or from 45th Street North over and across the North line of WILLOWBEND NORTH ADDITION, are hereby granted to the governing body.

The wall easement is platted for the construction and maintenance of a private wall, utilities may cross the wall easement.

J.M.C., INC.

Jerry D. Michaelis, President

STATE OF KANSAS)
ss:
SEDGWICK COUNTY)

BE IT REMEMBERED, that on this ____ day of _____, 1997, before me the undersigned, a Notary Public in and for the County and State aforesaid, came Jerry D. Michaelis, President, J.M.C., Inc., to me personally known to be the same person who executed the foregoing instrument of writing and duly acknowledged the execution of the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year last above written.

Notary Public

My appointment expires: _____

We, State Bank of Colwich, holders of a mortgage on the above described property, do hereby consent to the plat of "WILLOWBEND NORTH ADDITION".

State Bank of Colwich

STATE OF KANSAS)
ss:
SEDGWICK COUNTY)

BE IT REMEMBERED, that on this ____ day of _____, 1997, before me the undersigned, a Notary Public in and for the County and State aforesaid, came Larry Consover, to me personally known to be the same person who executed the foregoing instrument of writing and duly acknowledged the execution of the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year last above written.

Notary Public

My appointment expires: _____

Jerry D. Hoggat

STATE OF KANSAS)
ss:
SEDGWICK COUNTY)

BE IT REMEMBERED, that on this ____ day of _____, 1997, before me the undersigned, a Notary Public in and for the County and State aforesaid, came Jerry D. Hoggat, to me personally known to be the same person who executed the foregoing instrument of writing and duly acknowledged the execution of the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year last above written.

Notary Public

My appointment expires: _____

This plat of "WILLOWBEND NORTH ADDITION", has been submitted to and approved by the Wichita-Sedgwick County Metropolitan Area Planning Commission, Wichita, Kansas.

Dated this ____ day of _____, 1997.

WICHITA-SEDGWICK COUNTY METROPOLITAN PLANNING COMMISSION

_____, Chairman

John C. Frye

_____, Secretary

Marvin S. Krout

This plat approved and all dedications shown thereon, if any, accepted by the City Council of the City of Wichita, Kansas, this ____ day of _____, 1997.

_____, Mayor

Bob Knight

_____, City Clerk

Pat Burnett

Entered on transfer record this ____ day of _____, 1997.

_____, County Clerk

James Alford

STATE OF KANSAS)
ss:
SEDGWICK COUNTY)

This is to certify that this instrument was filed for record in the Register of Deeds office this ____ day of _____, 1997.

_____, Register of Deeds

Larry Consover

_____, Deputy

Michael D. Hurtt