STORMWATER SEWER PLANS FOR
THE WATERFRONT ADDITION, LOT 5
COMMERCE BANK

CITY OF WICHITA, KANSAS

NEIL D. CABLE, P.E., CITY ENGINEER

PRIVATE PROJ. #1356 PPS
OCA #607861

GENERAL NOTES

1. THE TOPS OF INLETS 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 WITH REFERENCE TO PROPOSED PAVING PLANS OF THE PERTINENT STREETS.

2. ALL CONCRETE SHALL BE STANDARD PAVING MIX UNLESS OTHERWISE NOTED.

3. 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.

4. TREES TO BE REMOVED ARE MARKED ☆. ALL TREES WHICH IN THE OPINION OF THE FIELD ENGINEER CAN BE SAVED, SHALL BE SAVED.

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 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.

6 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

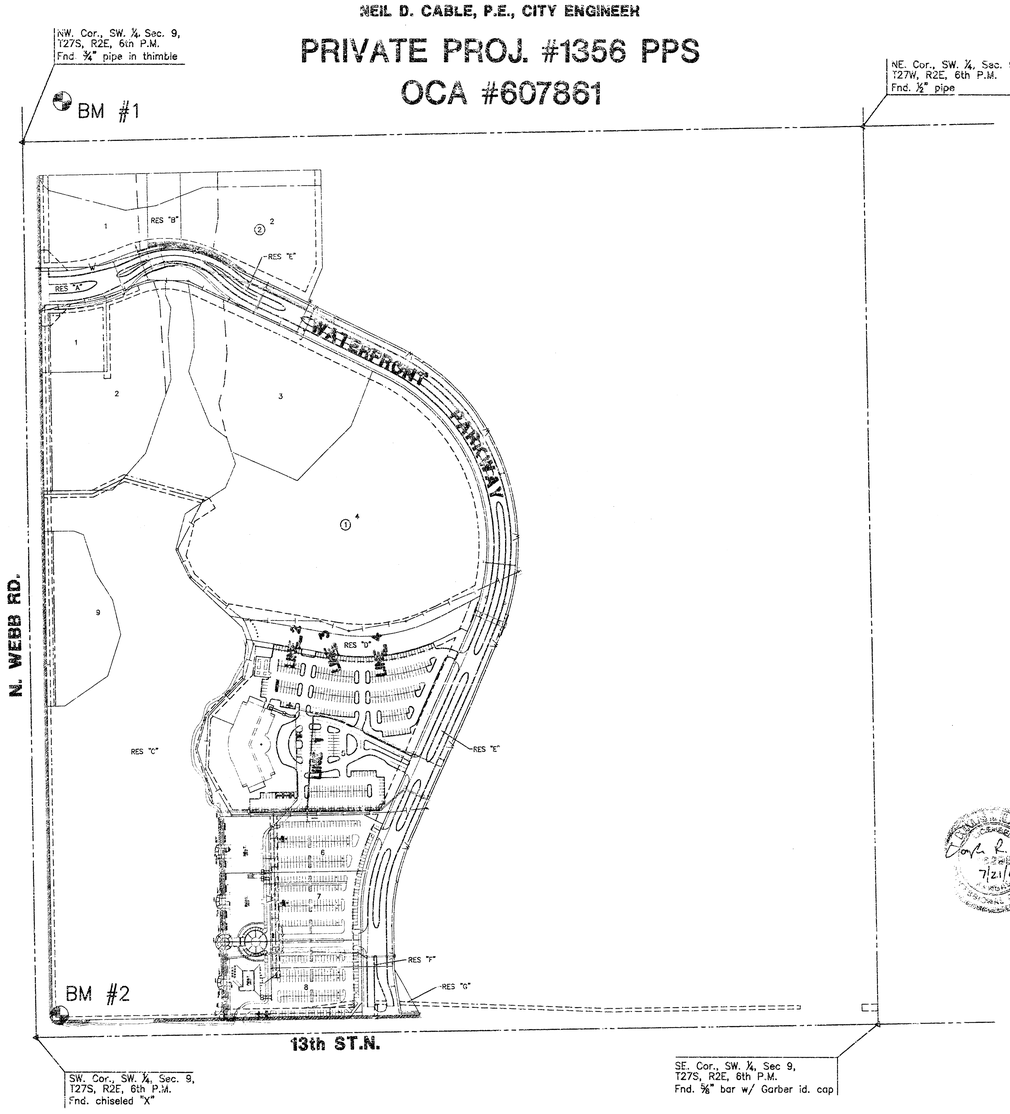
THE CONTRACTOR MUST NOTIFY THE FOLLOWING IN CASE OF AN EMERGENCY:

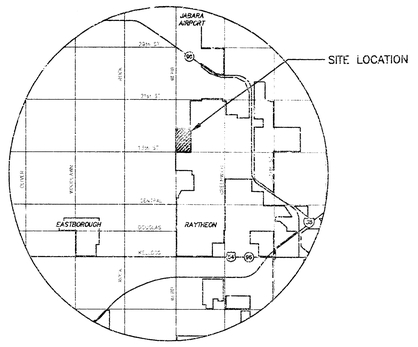
COX COMMUNICATIONS (CABLE):	262-0661
KANSAS GAS SERVICE (GAS):	832-3101
WESTAR (ELECTRIC):	261-6512
AQUILA (GAS):	946-0096
SBC (TELEPHONE):	800-870-8390
CITY OF WICHITA WATER & SEWER:	262-6000

7. UNLESS SHOWN OR STATED OTHERWISE ON THESE DRAWINGS, MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF WICHITA SPECIFICATIONS.

8. 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.

9. SITE RESTORATION AND PREPARATION SHALL BE SUBSIDIARY TO THE PROJECT.





LOCATION MAP

INDEX TO DRAWINGS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2-3	STORM SEWER DETAILS
4-5	STORM SEWER LINES

N

SCALE: 1" = 200'

LEGEND

• IRON

APPROVED AS NOTED

BY CITY ENGINEER OF WICHITA

STORM SEWERS VRH 7/21/03

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 NOR SHALL ANY WORK BE COMMENCED IN DEDICATED EASEMENTS OR PUBLIC RIGHT-OF-WAY WITHOUT WRITTEN AUTHORIZATION BY THE CITY ENGINEER.

7/21/03

AS-BUILT JANUARY 2005

BENCHMARKS

BM#1: Square cut SE. corner headwall 44' N. and 42' E. of W. ¼ cor., Sec. 9, T27S, R2E
ELEV. = 192.73'(City Datum)
1380.13 NGVD

BM#2: Square cut SW. corner signal light pole base NE. corner Webb and 13th.
ELEV. = 185.945'(City Datum)
1373.345' NGVD

MKEC ENGINEERING CONSULTANTS
411 N. WEBB ROAD
WICHITA, KS. 67206
316-684-9600

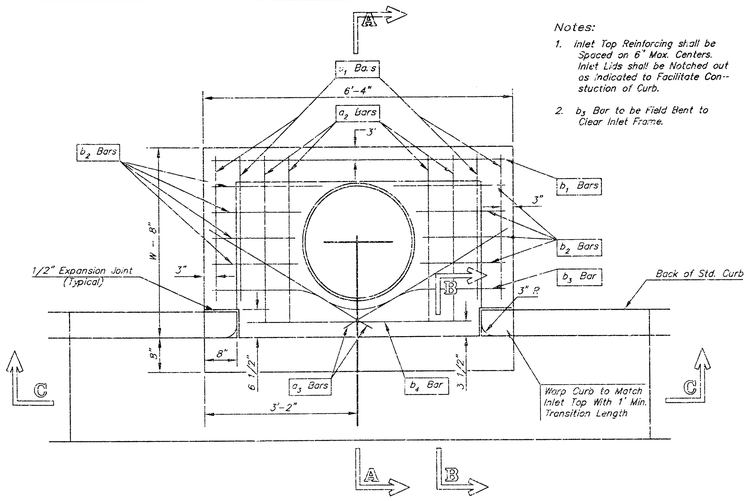
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WATERFRONT ADDITION
COMMERCE BANK
PROJECT NAME

TITLE SHEET
SHEET TITLE

DRK	MKEC	GJA
DESIGN BY:	DRAWN BY:	CHECKED BY:
JULY 2003	02014DT	1 / 5
DATE	DRAWING NAME	SHEET / OF

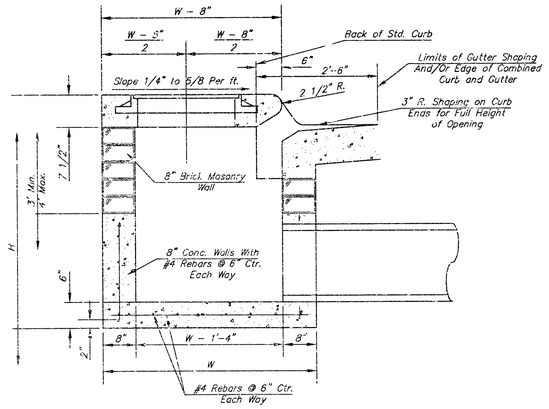
13 14 04 14



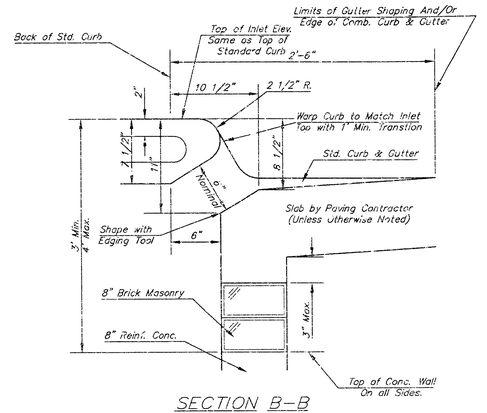
PLAN

Notes:

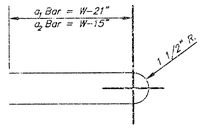
1. Inlet Top Reinforcing shall be Spaced on 6" Max. Centers. Inlet Lids shall be Notched out as Indicated to Facilitate Construction of Curb.
2. b_3 Bar to be Field Bent to Clear Inlet Frame.



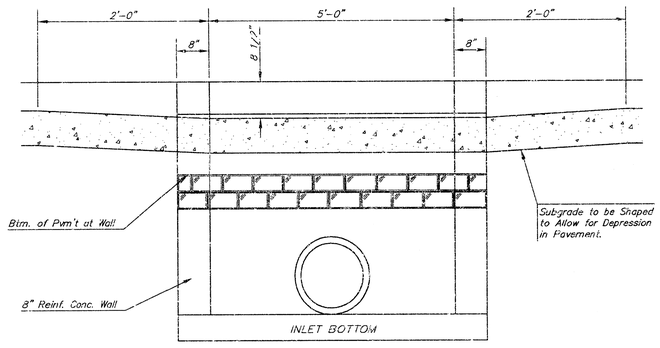
SECTION A–A



SECTION B–B



BENDING DIAGRAM



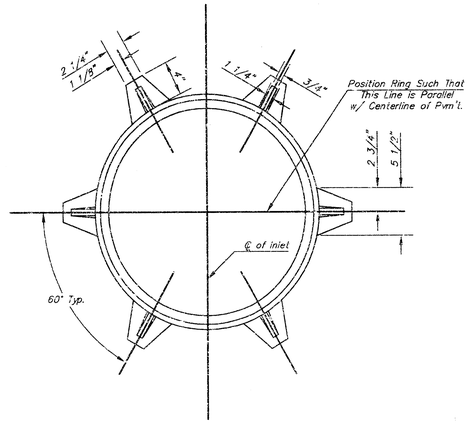
SECTION C–C

STEEL SCHEDULE

BAR		a_1	a_2	a_3	b_1 W=4'-4"	b_1 W=5'-4"	b_1 W=6'-4"	b_1 W=7'-4"	b_1 W=8'-4"	b_2	b_3	b_4	Wt. Lbs.
NUMBER		4	4	2	1	3	5	7	9	6	1	1	
SIZE		#4	#4	#4	#4	#4	#4	#4	#4	#4	#4	#6	
LENGTH	W=4'-4"	5'-7"	6'-7"	4'-0"	6'-1"	–	–	–	–	1'-9"	6'-2"	4'-8"	60±
	W=5'-4"	7'-7"	8'-7"	5'-0"	–	6'-1"	–	–	–	1'-9"	6'-2"	4'-8"	81±
	W=6'-4"	9'-7"	10'-7"	6'-0"	–	–	6'-1"	–	–	1'-9"	6'-2"	4'-8"	101±
	W=7'-4"	11'-7"	12'-7"	7'-0"	–	–	–	6'-1"	–	1'-9"	6'-2"	4'-8"	121±
	W=8'-4"	13'-7"	14'-7"	8'-0"	–	–	–	–	6'-1"	1'-9"	6'-2"	4'-8"	141±

Note: a_2 Bars to be Placed Approx. 2" Below Top of Inlet Cover.

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



WT. = 180 lbs.

MANHOLE RING AND COVER

*See City of Wichita Standard Manhole Ring and Cover Detail Sheet for Cover Details to Be Used With Inlet Frame.

GENERAL NOTES

1. 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.
2. 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.
3. 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.
4. The ends of all pipes installed in inlets shall be cut off flush with the inside face of the inlet wall.

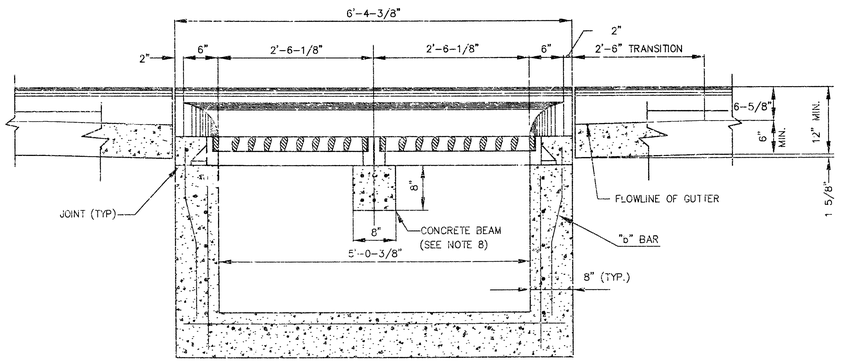
THE CITY OF WICHITA

CITY ENGINEER'S OFFICE
CITY HALL – SEVENTH FLOOR
455 NORTH MAIN STREET
WICHITA, KANSAS 67202
(316) 268-4501
(316) 268-4114 FAX

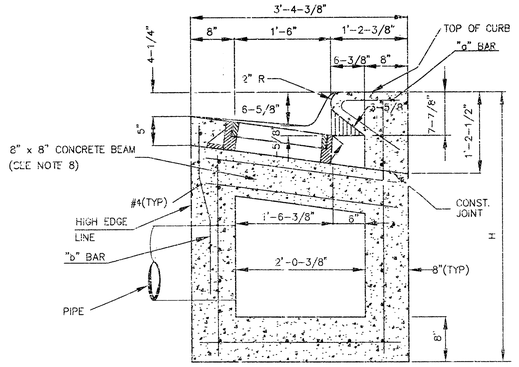
STANDARD TYPE 1 CURB INLET OPENING = 6" x 5'-0"

NEIL D. CABLE, P.E. – CITY ENGINEER

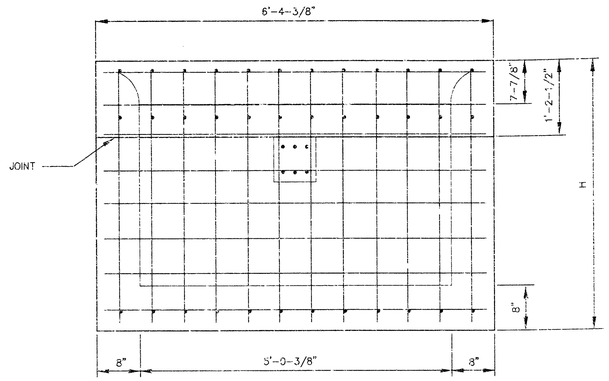
PROJECT NUMBER	INDEX CODE
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DATE: MAR 96	SHEET 2 OF 5



SECTION C - C



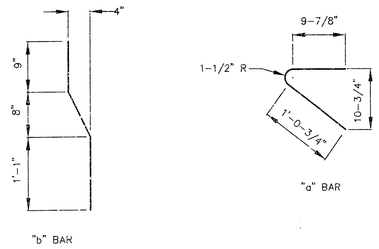
SECTION A - A



REBAR SIZES, SPACING, AND CLEARANCES PER NOTE 3.

REAR WALL

SECTION D - D



BENDING DIAGRAM

GENERAL NOTES

1. USE THE CONCRETE MIX SPECIFIED FOR THE CITY OF WICHITA CONCRETE PAVEMENT THROUGHOUT. ALL EXPOSED EDGES SHALL BE FINISHED WITH AN EDGING TOOL.
2. 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.
3. ALL BARS ARE #4 WITH 6" SPACING AND SHALL HAVE A MINIMUM CLEARANCE OF 1-1/2" UNLESS OTHERWISE NOTED ON THE PLANS.
4. NO DEDUCTIONS WILL BE MADE IN PAY LENGTH OF CURB, GUTTER, OR CURB AND GUTTER THROUGH THE INLET AREA.
5. USE DEETER 2442 & 2443 INLET FRAMES WITH GRATES OR APPROVED EQUAL. INLET FRAMES TO BE PROOF LOAD TESTED TO 40,000 LBS ON UNSUPPORTED SIDE.
6. REINFORCING BARS SHALL BE CUT OR BENT AROUND PIPES. NO DEDUCTION IN CONCRETE QUANTITIES SHALL BE MADE FOR PIPE OPENINGS.
7. THE VANES OF THE GRATE SHALL BE ORIENTED TO INTERCEPT FLOW FROM THE DIRECTION SHOWN BY FLOW ARROWS ON THE PLANS.
8. ALTERNATE: IN LIEU OF CONCRETE BEAM, INSTALL A GALVANIZED STEEL W8x24 BEAM 3' LONG. STEEL AND GALVANIZING SHALL MEET THE REQUIREMENTS OF ASTM A36 AND A123 RESPECTIVELY.

SCALE

1" = 1'-0"

0' 0.5' 1' 2'

DOUBLE TYPE II
CURB INLET

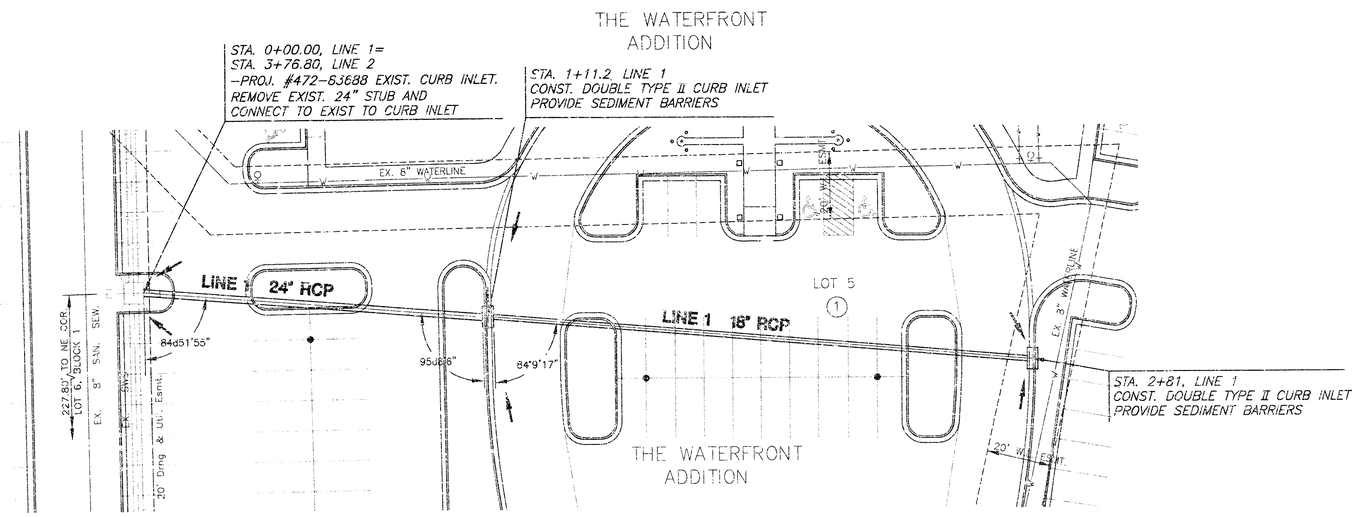
INLET OPENING = 3 5/8" x 5'-0 3/8"

MARCH 1998

CITY OF WICHITA, KANSAS

DESIGNED BY:		CHECKED BY:	
DRAWN BY:	WNJ	PROJ.	SHEET 3 OF 5

WATERFRONT ADDITION
COMMERCE BANK
PLAN & PROFILE
SWS LINE 1



PLAN SWS LINE 1

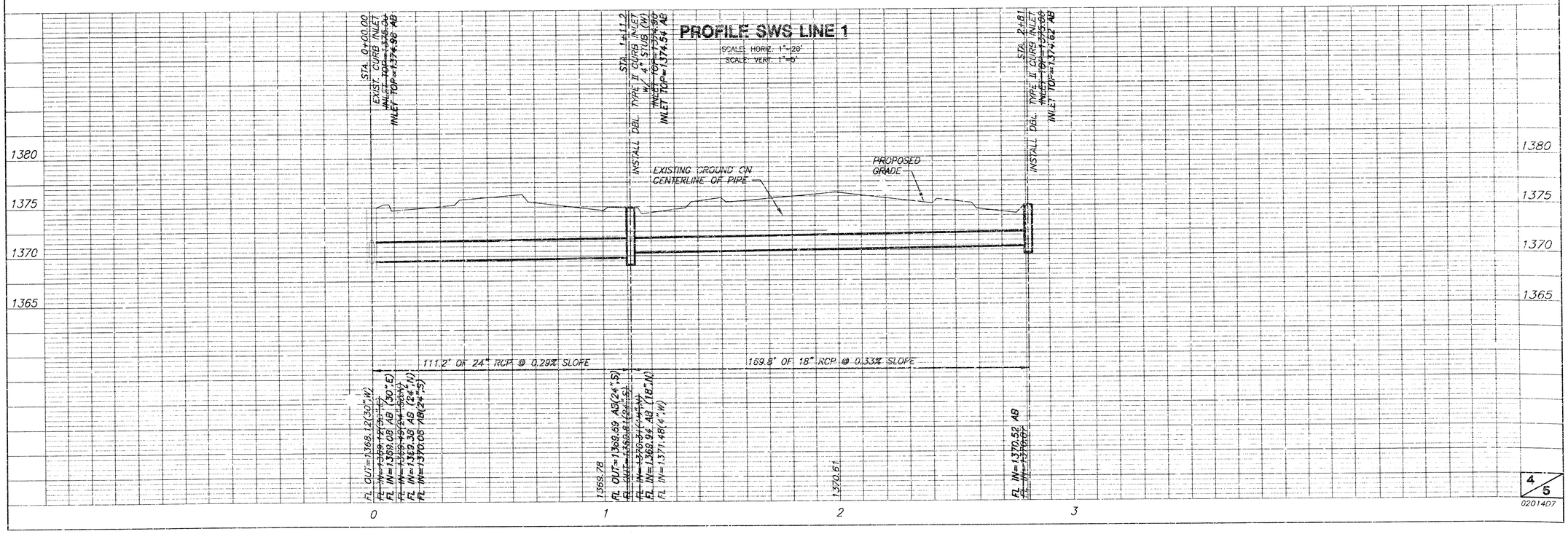
SCALE: 1"=20'

SCALE: 1"=20'
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AS-BUILT JANUARY 2005

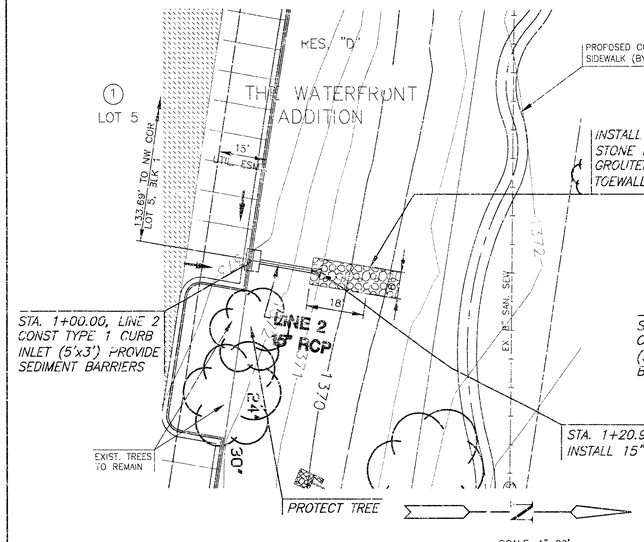
PROFILE SWS LINE 1

SCALE: HORIZ. 1"=20'
SCALE: VERT. 1"=5'



0201407

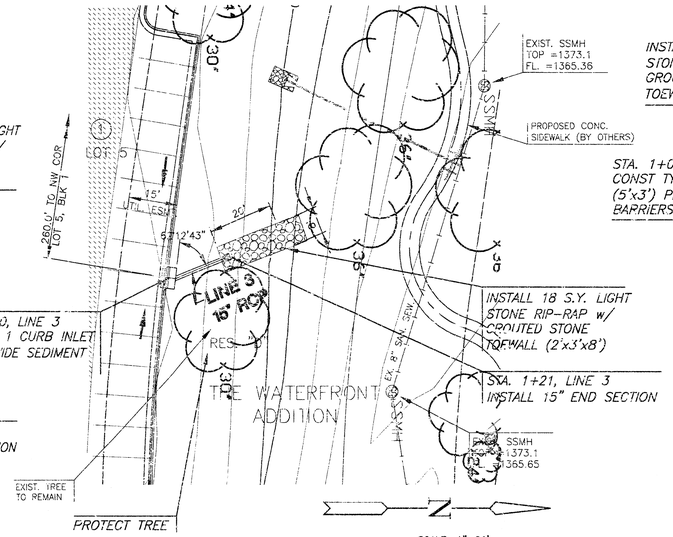
WATERFRONT ADDITION
COMMERCE BANK
PLAN & PROFILE
SWS LINES 2, 3, & 4



SCALE: 1"=20'

PLAN SWS LINE 2

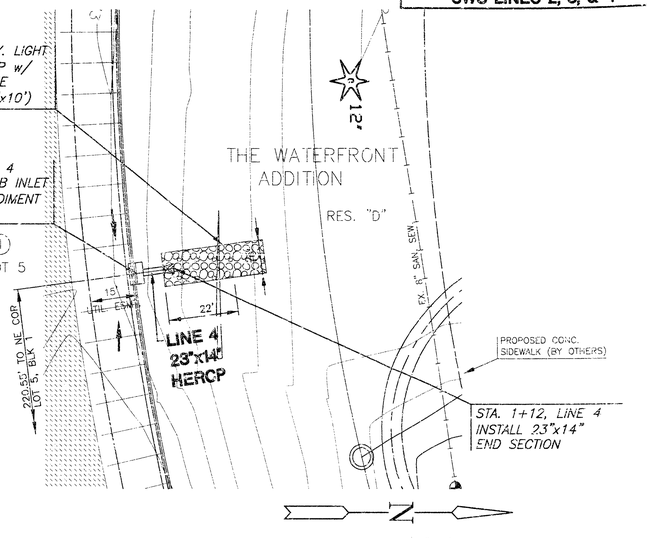
SCALE: 1"=20'



SCALE: 1"=20'

PLAN SWS LINE 3

SCALE: 1"=20'



SCALE: 1"=20'

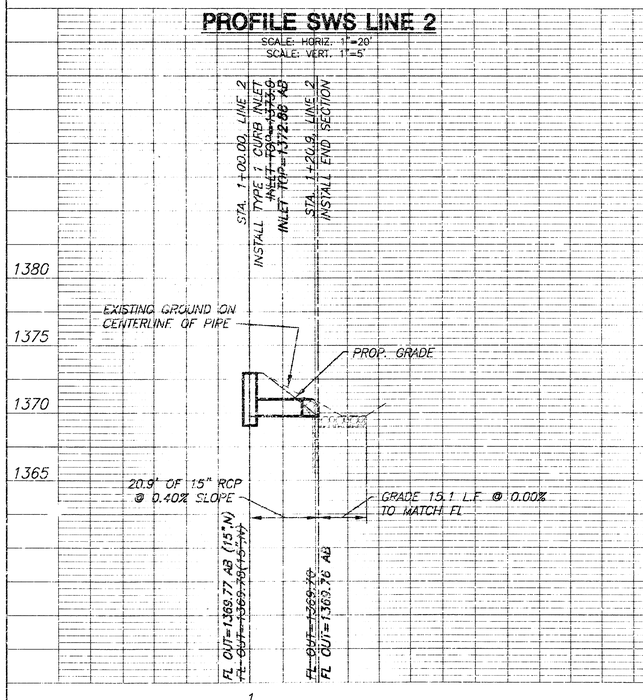
PLAN SWS LINE 4

SCALE: 1"=20'

AS-BUILT JANUARY 2006

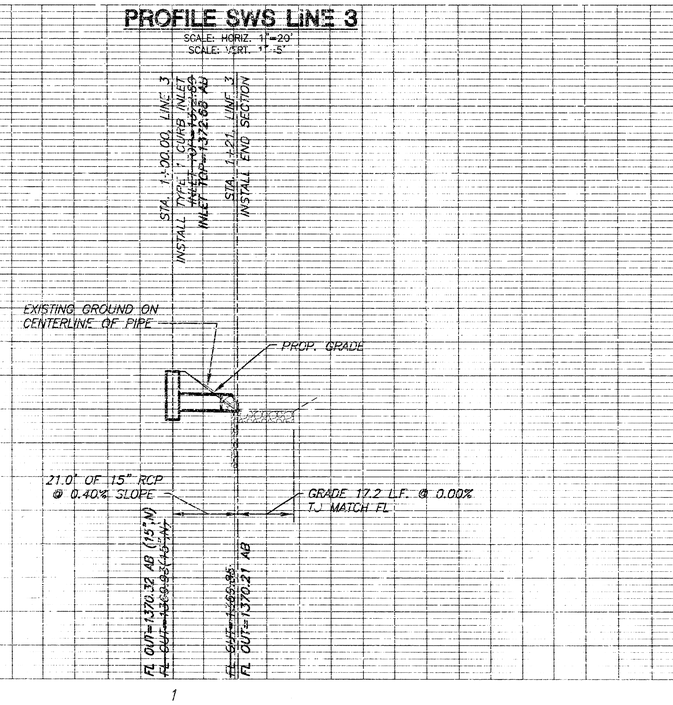
PROFILE SWS LINE 2

SCALE: HORIZ. 1"=20'
SCALE: VERT. 1"=5'



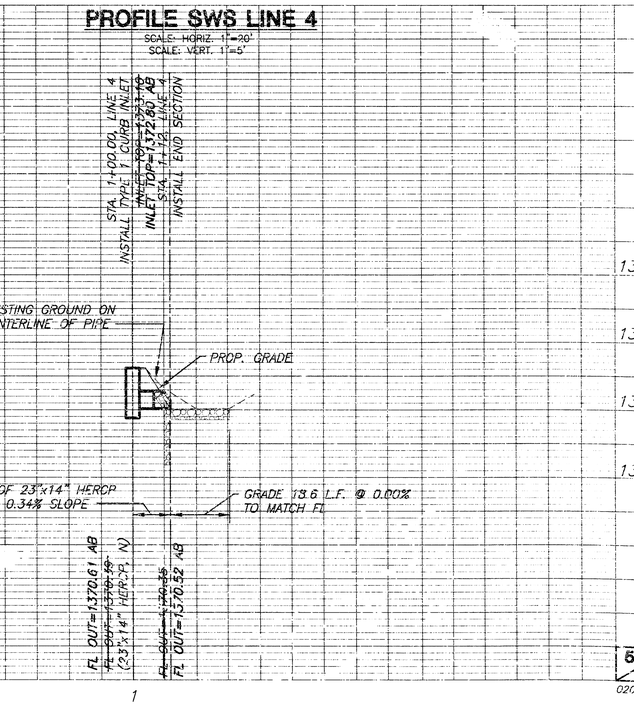
PROFILE SWS LINE 3

SCALE: HORIZ. 1"=20'
SCALE: VERT. 1"=5'



PROFILE SWS LINE 4

SCALE: HORIZ. 1"=20'
SCALE: VERT. 1"=5'



5/5
0201408

P1-P5-P1-81