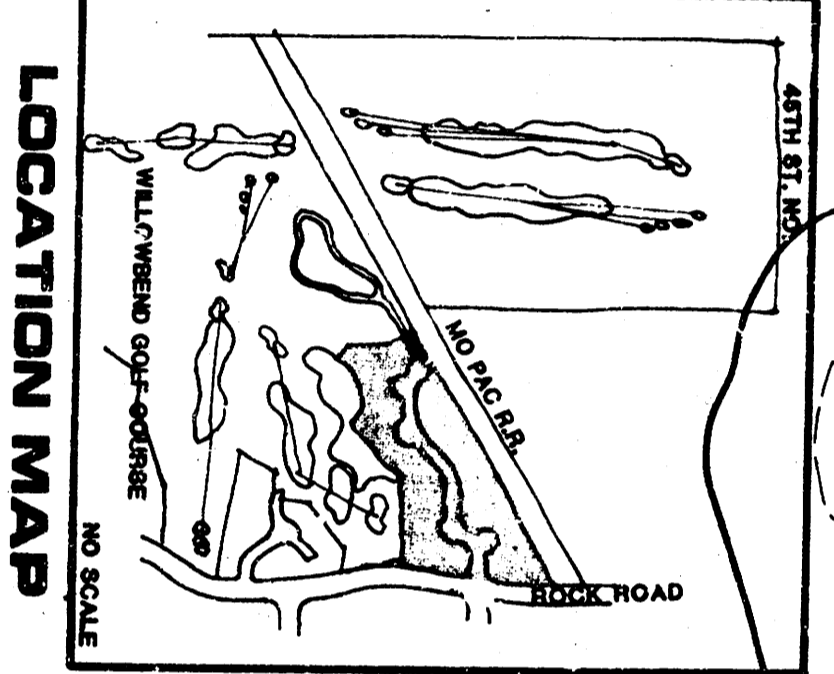
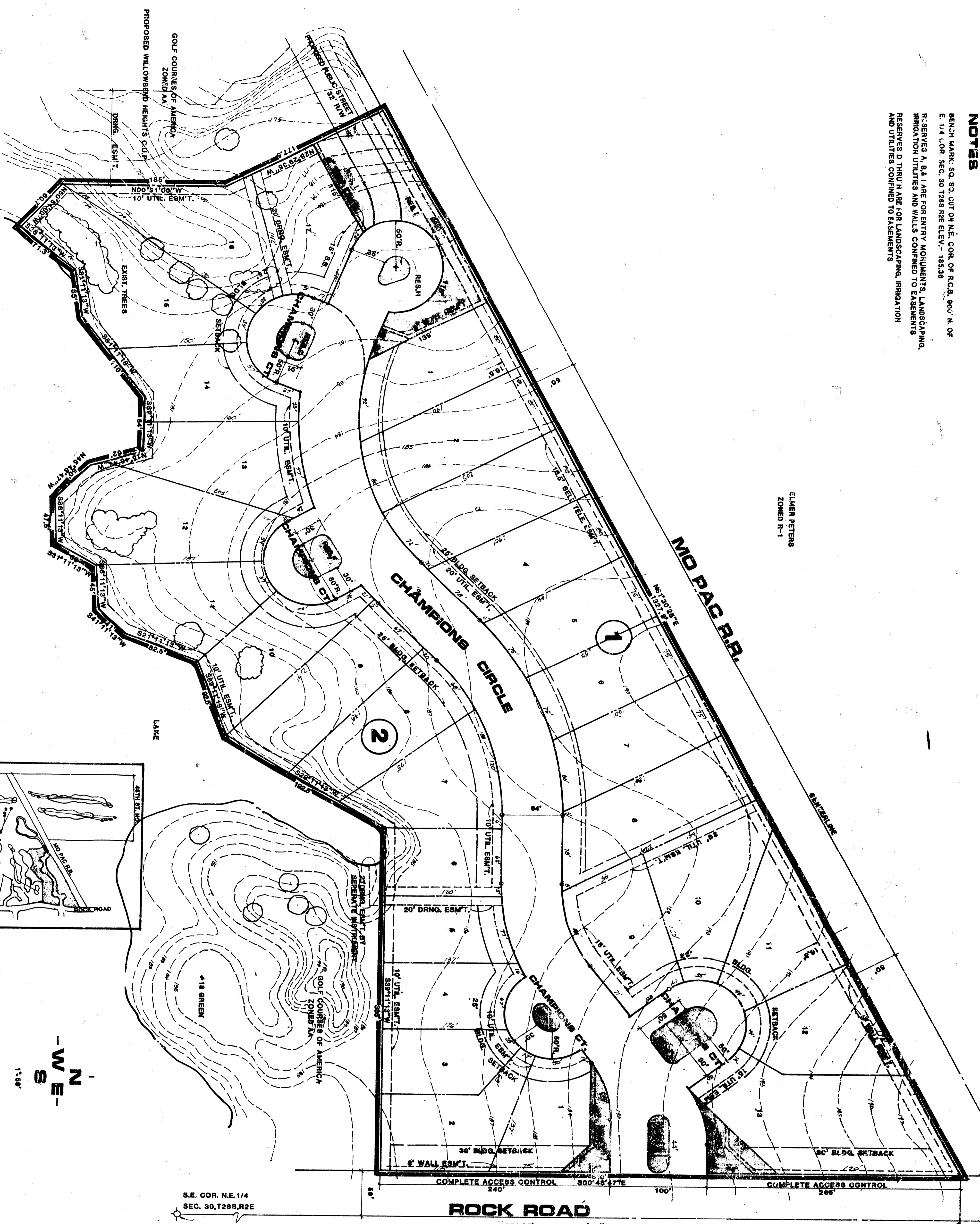


NOTES
 REVISION: 50, 50, CUT ON N.E. COR. OF R.C.B. 900' N. OF E. 1/4 COR. SEC. 30, 1881' N.E. ELEV. - 1033.0
 R. SERVICES A, B & L ARE FOR ENTRY MONUMENTS, LANDSCAPING, IRRIGATION UTILITIES AND WALLS CONFINED TO EASEMENTS RESERVES D THROUGH ARE FOR LANDSCAPING, IRRIGATION AND UTILITIES CONFINED TO EASEMENTS



PRELIMINARY PLAT
WILLOWBEND

OWNER: GOLF COURSES OF AMERICA, 4110 N. TARA CIRCLE WICHITA, KANSAS 67226

WILLOWBEND 2ND
 ZONED AA
5TH

CHAMPIONS

WILLOWBEND 2ND ADD.
 ZONED AA

sheet project sheet title date rev. date
 WILLOWBEND 5TH ADDITION PRELIMINARY PLAT JUNE 15, 1987 JUNE 12, 1987
 of

Bill G. Yung Design
 4012 E. 29TH STREET NORTH, WICHITA, KS 67220
 316-683-6667

October 14, 1987
 Re: Conditional Letter of Map Revision
 East Fork of Chisholm Creek, Wichita, KS

Dear Mr. Lindsey,
 We are submitting the following information for your review for the above referenced project:
 1. Item from Mid-Kansas Engineering Consultants to Mr. Chris Breitenstein, City of Wichita, dated 10/12/87.
 2. Letter from Mr. Chris Breitenstein to your office acknowledging his concurrence with study.
 It is appreciated if you could provide this information. If additional information is needed, please feel free to contact this office.

Very truly yours,
 MID-KANSAS ENGINEERING CONSULTANTS, PA
 John M. White, P.E.

Enclosures
 ccc: Chris Breitenstein, City of Wichita
 Ken Breitenstein, M.E.C., Wichita

WICHITA

October 1, 1987

Mr. Charles A. Lindsey, Chief
 Federal Emergency Management Agency
 Office of Risk Assessment
 Technical Operations Division
 Washington, D.C. 20572

Subject: Conditional Letter of Map Revision

Dear Mr. Lindsey:
 This letter is to acknowledge receipt and concurrence with the Technical Study Report No. 10-87-01, dated 9/29/87, on a portion of the East Fork of Chisholm Creek.

Sincerely,
 Chris A. Lindsey, P.E.
 CIVIL Engineer III

cc: Willowbend Heights Plat File

CONFIRMATION MEMO
 PROJECT: (All enclosed herein)
 TO: Chris Breitenstein, V
 FROM: John M. White, P.E.
 REF: Summary of Hydraulic Review
 MID-KANSAS ENGINEERING CONSULTANTS, P.A.
 4012 E. 29TH STREET NORTH, WICHITA, KANSAS 67220

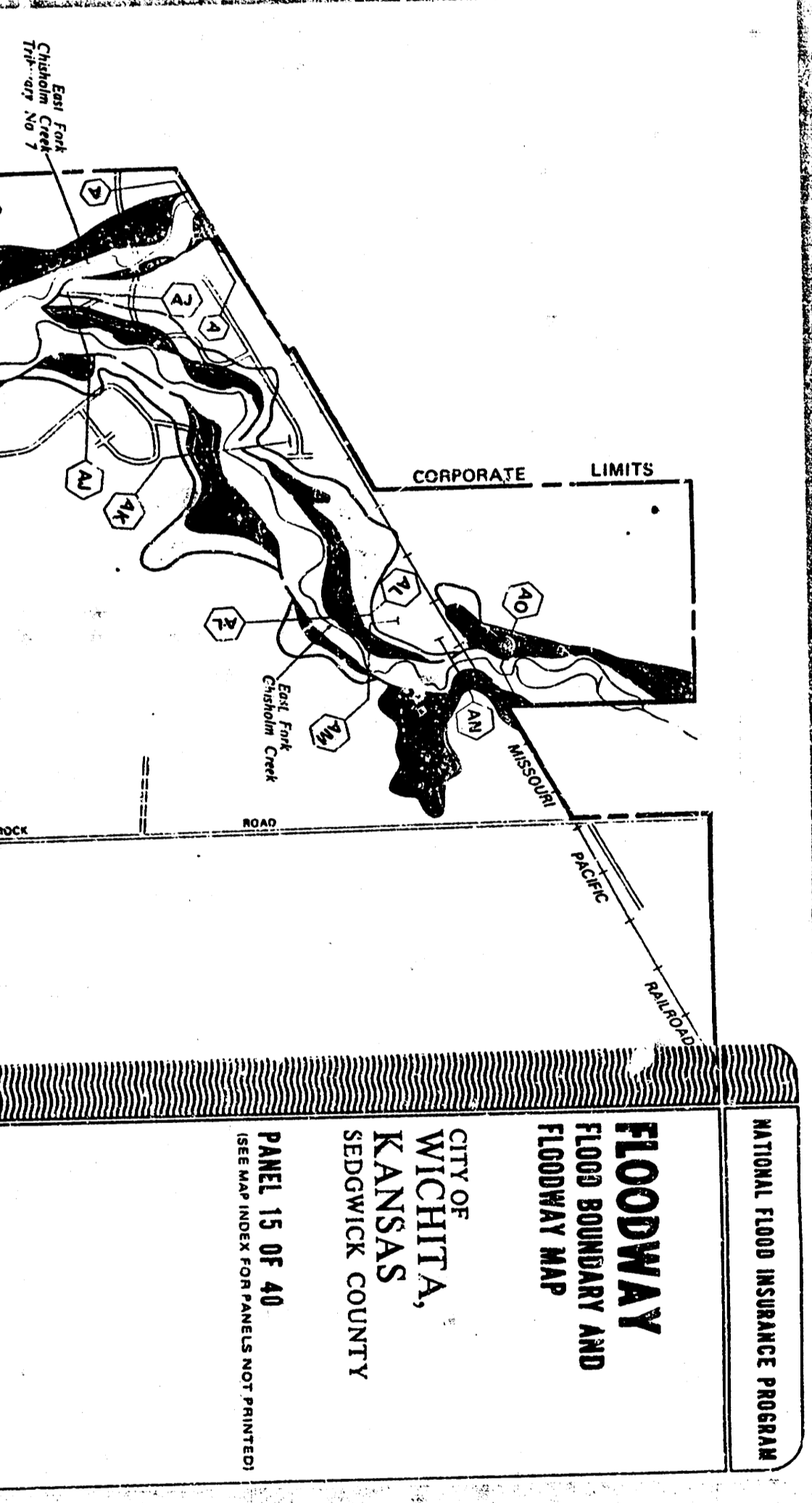


This memo is written to summarize the findings of our hydraulic review of the East Fork of Chisholm Creek in Wichita, Kansas. Our study began north of 37th Street and extended to the downstream end of the Missouri Pacific Railroad. Attached is a copy of the Flood Boundary Map for the 100-year flood. Hydraulic analysis was completed using the HEC2 computer program. Cross section hydraulic profiles were developed for review. The first profile considered existing conditions. For an existing condition, the "w" factor used was relatively low. With these "w" factors, the calculated profile was within 12' side slopes. This model assumed that low areas along the channel were filled to an elevation above the maximum high water. The other surface profiles were developed for review. The first profile considered existing conditions. For an existing condition, the "w" factor used was relatively low. With these "w" factors, the calculated profile was within 12' side slopes. This model assumed that low areas along the channel were filled to an elevation above the maximum high water. The improved channel profile indicates a reduction of about 0.5 feet in of potential variance that would be expected in the method of gathering cross section data.

EAST FORK CHISHOLM CREEK
 WICHITA, KANSAS

MEC SECTION	FEIN	FEIN	100 Year	100 Year
		100 Year	ELEVATION	MEC
50-400	NK	1364.1	1364.10	1364.10
55-540		1364.58	1364.58	1364.58
60-400		1365.04	1365.04	1365.04
64-400		1365.91	1365.91	1365.91
68-400	AL	1366.2	1366.38	1366.38
70-400		1366.75	1366.75	1366.75
72-400		1366.56	1366.56	1366.56
75-400	AM	1367.3	1367.04	1367.04
80-400 (1)	AM	1368.1	1368.91	1368.91

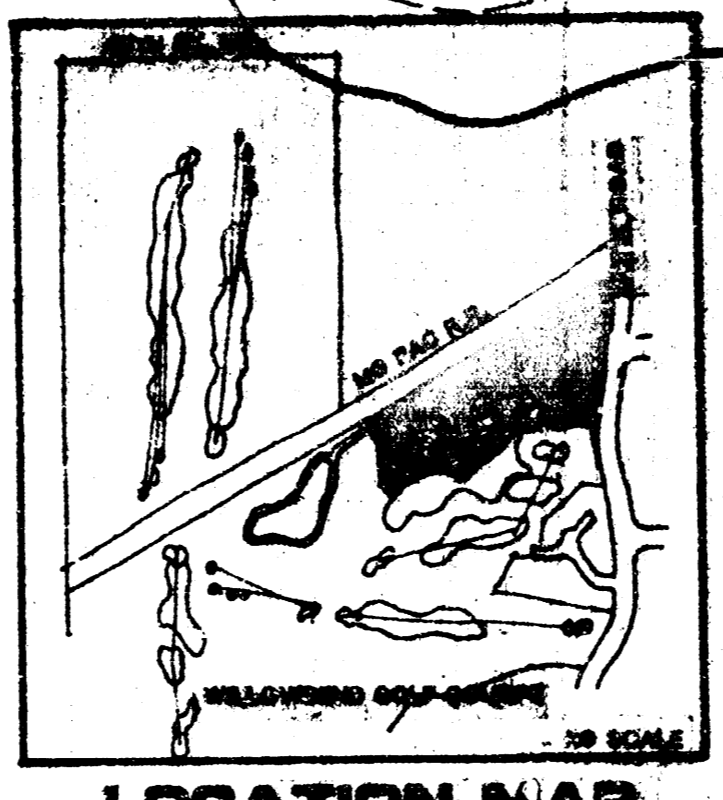
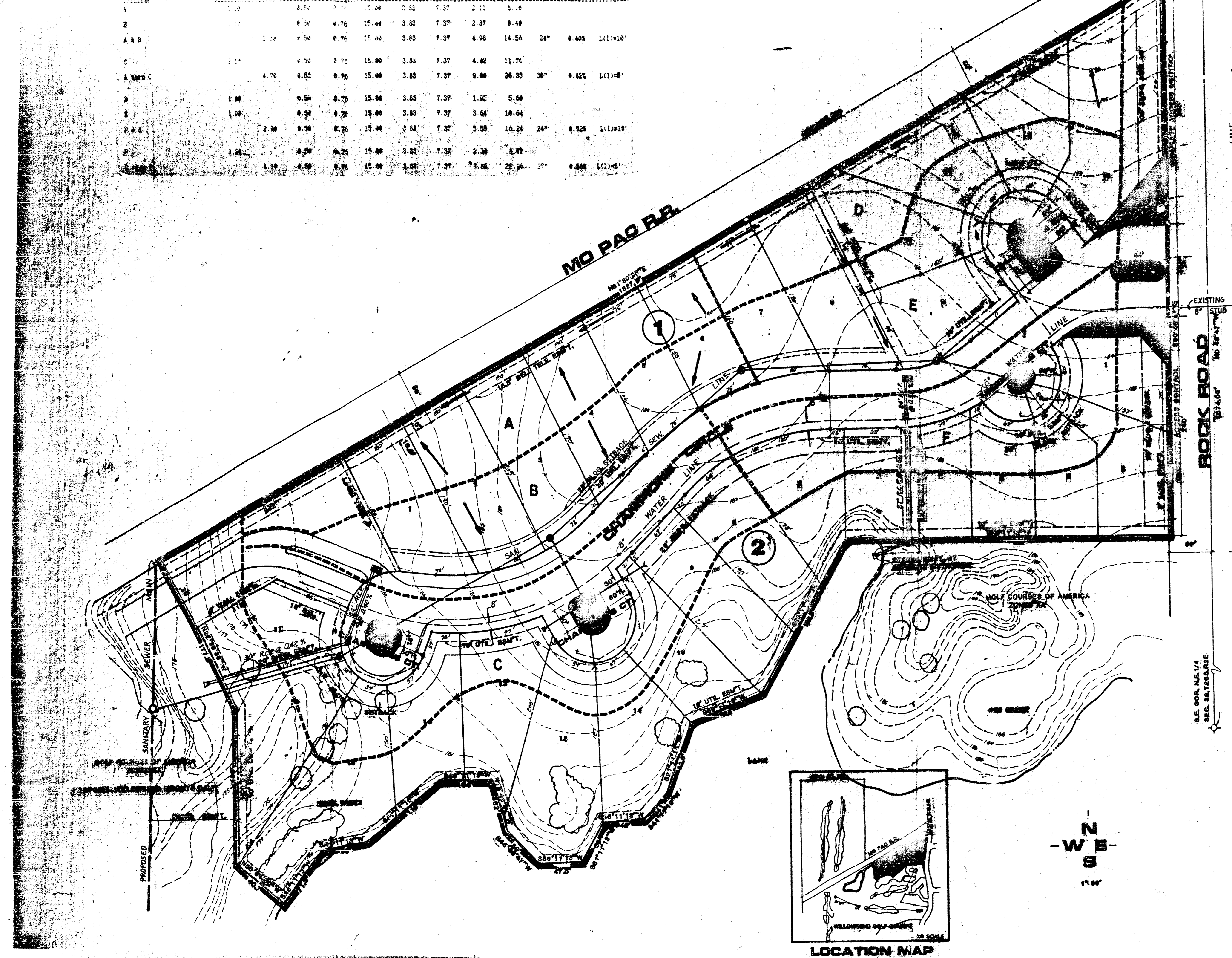
(1) Downstream of Missouri Pacific Railroad



FLOODWAY FLOOD BOUNDARY AND FLOODWAY MAP
 WICHITA, KANSAS
 SEDGWICK COUNTY
 PAGES 15 OF 40
 DRAWN AND CHECKED BY: [Name]
 DATE: [Date]

NO.	DESCRIPTION	DATE
1	DATE PLOTTED	10/1/87
2	DATE CHECKED	10/1/87
3	DATE APPROVED	10/1/87
4	DATE REVISION	
5	DATE REVISION	
6	DATE REVISION	
7	DATE REVISION	
8	DATE REVISION	
9	DATE REVISION	
10	DATE REVISION	

A	1.00	0.50	15.00	3.33	7.37	2.11	0.0
B	1.00	0.75	15.00	3.33	7.37	2.87	0.49
A & B	2.00	0.50	0.75	15.00	3.33	7.37	4.90
C	1.00	0.50	0.75	15.00	3.33	7.37	4.42
A & C	2.00	0.50	0.75	15.00	3.33	7.37	9.40
D	1.00	0.50	0.75	15.00	3.33	7.37	1.50
B & D	2.00	0.50	0.75	15.00	3.33	7.37	3.64
E	1.00	0.50	0.75	15.00	3.33	7.37	5.55
A, B & E	3.00	0.50	0.75	15.00	3.33	7.37	10.24
F	1.00	0.50	0.75	15.00	3.33	7.37	2.38
A, B & F	2.00	0.50	0.75	15.00	3.33	7.37	5.94



DRAINAGE & UTILITY PLAN
WILLOW BEND
 OWNER: GOLF COURSES OF AMERICA, 4110 N. TARA DRIVE, WICHITA, KANSAS 67208

5TH
CHAMPIONS
 WILLIAMS AND ASSOCIATES, INC.
 1101 WEST 10TH STREET, WICHITA, KANSAS 67202
 date: June 21, 1987
 sheet: 3113

STATION	INVERT	OUTLET	PIPE	LENGTH	AREA	PERCENT
1+00	124.00	123.00	18"	100.00	1.00	100.00
1+10	123.00	122.00	18"	100.00	1.00	100.00
1+20	122.00	121.00	18"	100.00	1.00	100.00
1+30	121.00	120.00	18"	100.00	1.00	100.00
1+40	120.00	119.00	18"	100.00	1.00	100.00
1+50	119.00	118.00	18"	100.00	1.00	100.00
1+60	118.00	117.00	18"	100.00	1.00	100.00
1+70	117.00	116.00	18"	100.00	1.00	100.00
1+80	116.00	115.00	18"	100.00	1.00	100.00
1+90	115.00	114.00	18"	100.00	1.00	100.00
2+00	114.00	113.00	18"	100.00	1.00	100.00
2+10	113.00	112.00	18"	100.00	1.00	100.00
2+20	112.00	111.00	18"	100.00	1.00	100.00
2+30	111.00	110.00	18"	100.00	1.00	100.00
2+40	110.00	109.00	18"	100.00	1.00	100.00
2+50	109.00	108.00	18"	100.00	1.00	100.00
2+60	108.00	107.00	18"	100.00	1.00	100.00
2+70	107.00	106.00	18"	100.00	1.00	100.00
2+80	106.00	105.00	18"	100.00	1.00	100.00
2+90	105.00	104.00	18"	100.00	1.00	100.00
3+00	104.00	103.00	18"	100.00	1.00	100.00
3+10	103.00	102.00	18"	100.00	1.00	100.00
3+20	102.00	101.00	18"	100.00	1.00	100.00
3+30	101.00	100.00	18"	100.00	1.00	100.00
3+40	100.00	99.00	18"	100.00	1.00	100.00
3+50	99.00	98.00	18"	100.00	1.00	100.00
3+60	98.00	97.00	18"	100.00	1.00	100.00
3+70	97.00	96.00	18"	100.00	1.00	100.00
3+80	96.00	95.00	18"	100.00	1.00	100.00
3+90	95.00	94.00	18"	100.00	1.00	100.00
4+00	94.00	93.00	18"	100.00	1.00	100.00
4+10	93.00	92.00	18"	100.00	1.00	100.00
4+20	92.00	91.00	18"	100.00	1.00	100.00
4+30	91.00	90.00	18"	100.00	1.00	100.00
4+40	90.00	89.00	18"	100.00	1.00	100.00
4+50	89.00	88.00	18"	100.00	1.00	100.00
4+60	88.00	87.00	18"	100.00	1.00	100.00
4+70	87.00	86.00	18"	100.00	1.00	100.00
4+80	86.00	85.00	18"	100.00	1.00	100.00
4+90	85.00	84.00	18"	100.00	1.00	100.00
5+00	84.00	83.00	18"	100.00	1.00	100.00
5+10	83.00	82.00	18"	100.00	1.00	100.00
5+20	82.00	81.00	18"	100.00	1.00	100.00
5+30	81.00	80.00	18"	100.00	1.00	100.00
5+40	80.00	79.00	18"	100.00	1.00	100.00
5+50	79.00	78.00	18"	100.00	1.00	100.00
5+60	78.00	77.00	18"	100.00	1.00	100.00
5+70	77.00	76.00	18"	100.00	1.00	100.00
5+80	76.00	75.00	18"	100.00	1.00	100.00
5+90	75.00	74.00	18"	100.00	1.00	100.00
6+00	74.00	73.00	18"	100.00	1.00	100.00
6+10	73.00	72.00	18"	100.00	1.00	100.00
6+20	72.00	71.00	18"	100.00	1.00	100.00
6+30	71.00	70.00	18"	100.00	1.00	100.00
6+40	70.00	69.00	18"	100.00	1.00	100.00
6+50	69.00	68.00	18"	100.00	1.00	100.00
6+60	68.00	67.00	18"	100.00	1.00	100.00
6+70	67.00	66.00	18"	100.00	1.00	100.00
6+80	66.00	65.00	18"	100.00	1.00	100.00
6+90	65.00	64.00	18"	100.00	1.00	100.00
7+00	64.00	63.00	18"	100.00	1.00	100.00
7+10	63.00	62.00	18"	100.00	1.00	100.00
7+20	62.00	61.00	18"	100.00	1.00	100.00
7+30	61.00	60.00	18"	100.00	1.00	100.00
7+40	60.00	59.00	18"	100.00	1.00	100.00
7+50	59.00	58.00	18"	100.00	1.00	100.00
7+60	58.00	57.00	18"	100.00	1.00	100.00
7+70	57.00	56.00	18"	100.00	1.00	100.00
7+80	56.00	55.00	18"	100.00	1.00	100.00
7+90	55.00	54.00	18"	100.00	1.00	100.00
8+00	54.00	53.00	18"	100.00	1.00	100.00
8+10	53.00	52.00	18"	100.00	1.00	100.00
8+20	52.00	51.00	18"	100.00	1.00	100.00
8+30	51.00	50.00	18"	100.00	1.00	100.00
8+40	50.00	49.00	18"	100.00	1.00	100.00
8+50	49.00	48.00	18"	100.00	1.00	100.00
8+60	48.00	47.00	18"	100.00	1.00	100.00
8+70	47.00	46.00	18"	100.00	1.00	100.00
8+80	46.00	45.00	18"	100.00	1.00	100.00
8+90	45.00	44.00	18"	100.00	1.00	100.00
9+00	44.00	43.00	18"	100.00	1.00	100.00
9+10	43.00	42.00	18"	100.00	1.00	100.00
9+20	42.00	41.00	18"	100.00	1.00	100.00
9+30	41.00	40.00	18"	100.00	1.00	100.00
9+40	40.00	39.00	18"	100.00	1.00	100.00
9+50	39.00	38.00	18"	100.00	1.00	100.00
9+60	38.00	37.00	18"	100.00	1.00	100.00
9+70	37.00	36.00	18"	100.00	1.00	100.00
9+80	36.00	35.00	18"	100.00	1.00	100.00
9+90	35.00	34.00	18"	100.00	1.00	100.00
10+00	34.00	33.00	18"	100.00	1.00	100.00
10+10	33.00	32.00	18"	100.00	1.00	100.00
10+20	32.00	31.00	18"	100.00	1.00	100.00
10+30	31.00	30.00	18"	100.00	1.00	100.00
10+40	30.00	29.00	18"	100.00	1.00	100.00
10+50	29.00	28.00	18"	100.00	1.00	100.00
10+60	28.00	27.00	18"	100.00	1.00	100.00
10+70	27.00	26.00	18"	100.00	1.00	100.00
10+80	26.00	25.00	18"	100.00	1.00	100.00
10+90	25.00	24.00	18"	100.00	1.00	100.00
11+00	24.00	23.00	18"	100.00	1.00	100.00
11+10	23.00	22.00	18"	100.00	1.00	100.00
11+20	22.00	21.00	18"	100.00	1.00	100.00
11+30	21.00	20.00	18"	100.00	1.00	100.00
11+40	20.00	19.00	18"	100.00	1.00	100.00
11+50	19.00	18.00	18"	100.00	1.00	100.00
11+60	18.00	17.00	18"	100.00	1.00	100.00
11+70	17.00	16.00	18"	100.00	1.00	100.00
11+80	16.00	15.00	18"	100.00	1.00	100.00
11+90	15.00	14.00	18"	100.00	1.00	100.00
12+00	14.00	13.00	18"	100.00	1.00	100.00
12+10	13.00	12.00	18"	100.00	1.00	100.00
12+20	12.00	11.00	18"	100.00	1.00	100.00
12+30	11.00	10.00	18"	100.00	1.00	100.00
12+40	10.00	9.00	18"	100.00	1.00	100.00
12+50	9.00	8.00	18"	100.00	1.00	100.00
12+60	8.00	7.00	18"	100.00	1.00	100.00
12+70	7.00	6.00	18"	100.00	1.00	100.00
12+80	6.00	5.00	18"	100.00	1.00	100.00
12+90	5.00	4.00	18"	100.00	1.00	100.00
13+00	4.00	3.00	18"	100.00	1.00	100.00
13+10	3.00	2.00	18"	100.00	1.00	100.00
13+20	2.00	1.00	18"	100.00	1.00	100.00
13+30	1.00	0.00	18"	100.00	1.00	100.00
13+40	0.00	0.00	18"	100.00	1.00	100.00
13+50	0.00	0.00	18"	100.00	1.00	100.00
13+60	0.00	0.00	18"	100.00	1.00	100.00
13+70	0.00	0.00	18"	100.00	1.00	100.00
13+80	0.00	0.00	18"	100.00	1.00	100.00
13+90	0.00	0.00	18"	100.00	1.00	100.00
14+00	0.00	0.00	18"	100.00	1.00	100.00
14+10	0.00	0.00	18"	100.00	1.00	100.00
14+20	0.00	0.00	18"	100.00	1.00	100.00
14+30						