DRAINAGE ANALYSIS SUMMARY
REGENCY PARK ADDITION

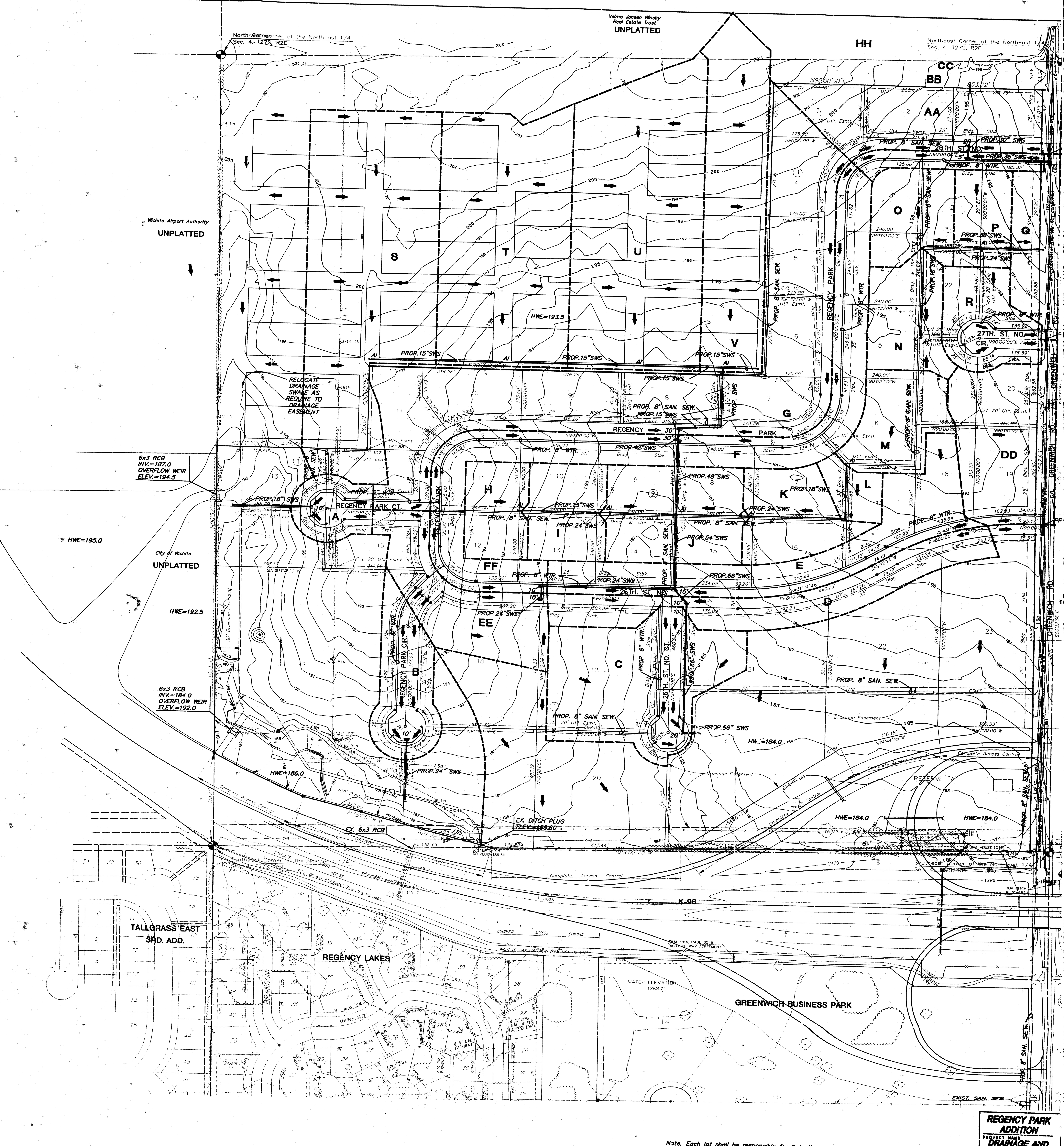
Area ID**	Area ac	C2	C5	C100	Tc2 min	Tc5	Tc100 min	I2* in/hr	I5	I100* in/hr	Q2 cfs	Q5	Q100 cfs	Size ft	Size in	Min Slope %	COMMENTS
A	1.11	0.68	0.69	0.80	15	15	15	3.83	4.56	7.37	2.9	3.5	6.5	10'	18	0.4	100 YR, SUMP
B	2.14	0.68	0.69	0.80	15	15	15	3.83	4.56	7.37	5.6	6.7	12.6	10'	24	0.4	100 YR, SUMP
S	10.39	0.33	0.35	0.55	31	30	22	2.62	3.24	6.26	9.0	11.8	35.8	area inlet	15	0.4	MINIMUM PIPE SIZES DUE TO STORAGE ON SOCCER FIELDS
T	8.20	0.33	0.35	0.55	35	34	25	2.44	3.01	5.9	6.6	8.6	26.6	area inlet			
S + T	18.59	0.33	0.35	0.55	35	34	25	2.44	3.01	5.9	15.0	19.6	60.3		15	0.4	MINIMUM PIPE SIZES DUE TO STORAGE ON SOCCER FIELDS
U	9.50	0.33	0.35	0.55	42	41	30	2.18	2.72	5.4	6.8	9.0	28.2	area inlet			
S + T + U	28.09	0.33	0.35	0.55	42	41	30	2.18	2.72	5.4	20.2	26.7	83.4		15	0.4	MINIMUM PIPE SIZES DUE TO STORAGE ON SOCCER FIELDS
Z	0.00	0.47	0.49	0.65	18	17	15	3.51	4.31	7.37	0.0	0.0	0.0	area inlet	15	0.4	MINIMUM PIPE SIZES DUE TO STORAGE ON SOCCER FIELDS
Y	0.00	0.47	0.49	0.65	19	18	15	3.42	4.2	7.37	0.0	0.0	0.0	area inlet			
Z + Y	0.00	0.47	0.49	0.65	19	18	15	3.42	4.2	7.37	0.0	0.0	0.0		15	0.4	MINIMUM PIPE SIZES DUE TO STORAGE ON SOCCER FIELDS
X	0.00	0.47	0.49	0.65	19	18	15	3.42	4.2	7.37	0.0	0.0	0.0	area inlet			
Z + Y + X	0.00	0.47	0.49	0.65	19	18	15	3.42	4.2	7.37	0.0	0.0	0.0		15	0.4	MINIMUM PIPE SIZES DUE TO STORAGE ON SOCCER FIELDS
W	0.00	0.68	0.69	0.80	15	15	15	3.83	4.56	7.37	0.0	0.0	0.0	area inlet			
Z + Y + X + W	0.00	0.51	0.53	0.68	21	20	15	3.25	4	7.37	0.0	0.0	0.0		15	0.4	MINIMUM PIPE SIZES DUE TO STORAGE ON SOCCER FIELDS
V	4.80	0.45	0.47	0.64	20	19	15	3.33	4.1	7.37	7.2	9.2	22.6	area inlet			
S + T + U + Z + Y + X + W + V	32.89	0.38	0.40	0.58	42	41	30	2.18	2.72	5.4	27.2	35.8	103.0		15	0.4	THROTTLED TO 10 CFS
G	12.90	0.68	0.69	0.80	21	21	18	3.25	4.1	7.37	28.5	36.5	76.1	30"	*******		100 YR, SUMP
S + T + U + Z + Y + X + W + V + G	45.79	0.44	0.46	0.62	45	44	33	2.08	2.61	5.14	41.9	55.0	145.9		42	0.8	100 YR FROM AREA G + 10 CFS FROM SOCCER FIELDS Qdesign = 76.1+10=86.1
F	5.87	0.68	0.69	0.80	21	19	15	3.25	4.1	7.37	11.1	13.9	34.6	30"	*********		100 YR, SUMP
S + T + U + Z + Y + X + W + V + G + F	51.66	0.46	0.50	0.73	28	27	25	2.78	3.43	5.9	77.2	105.9	222.5		48	0.8	100 YR FROM AREA G AND F + 10 CFS FROM SOCCER Qdesisn =86.1+34.6=120.7
H	1.52	0.68	0.69	0.80	15	15	15	3.83	4.56	7.37	4.0	4.8	9.0	area inlet	15	1	5 YR, BYPASS
I	1.88	0.68	0.69	0.80	15	15	15	3.83	4.56	7.37	4.9	5.9	11.1	area inlet			BYPASS
H + I	3.40	0.68	0.69	0.80	15	15	15	3.83	4.56	7.37	8.9	10.7	20.0		24	0.4	5 YR
M	2.15	0.68	0.69	0.80	17	17	15	3.61	4.31	7.37	5.3	6.4	12.7	area inlet	18	0.5	5 YR
L	0.72	0.68	0.69	0.80	15	15	15	3.83	4.56	7.37	1.9	2.3	4.2	area inlet			BYPASS
M + L	2.87	0.68	0.69	0.80	15	15	15	3.83	4.56	7.37	7.5	9.0	16.9		24	0.6	5 YR
K	2.18	0.68	0.69	0.80	16	16	15	3.72	4.43	7.37	5.5	6.7	12.9	area inlet			BYPASS

DRAINAGE ANALYSIS SUMMARY
REGENCY PARK ADDITION

Area ID**	Area ac	C2	C5	C100	Tc2 min	Tc5	Tc100 min	I2* in/hr	I5	I100* in/hr	Q2 cfs	Q5	Q100 cfs	Size ft	Size in	Min Slope %	COMMENTS
M + L + K	5.05	0.68	0.69	0.80	16	16	15	3.72	4.43	7.37	12.8	15.4	29.8		24	0.6	5 YR
J	3.32	0.68	0.69	0.80	15	15	15	3.83	4.56	7.37	8.6	10.4	19.6	area inlet			BYPASS
S + T + U + Z + Y + X + W + V + J + F + H + I + M + L + K + J	63.43	0.51	0.53	0.67	47	46	35	2.02	2.54	5	65.3	85.4	212.5		54	0.6	10 CFS SOCCER, 100 YR G & F, 5 YR ELSEWHERE Qdesign=113.8+10.4+15.4+10.7+150.3
EE	3.11	0.68	0.69	0.80	15	15	15	3.83	4.56	7.37	8.1	9.8	18.3	10	24	0.4	5 YR, BYPASS
FF	1.25	0.68	0.69	0.80	15	15	15	3.83	4.56	7.37	3.3	3.9	7.4	10	15	0.4	5 YR, BYPASS
EE + FF	4.36	0.68	0.69	0.80	29	29	25	3.83	4.56	7.37	11.4	13.7	25.7		24	1.0	5 YR
E	5.73	0.68	0.69	0.80	29	29	25	2.72	3.3	5.9	10.6	13.0	27.0	15'	********		5 YR, BYPASS
S + T + U + Z + Y + X + W + V + G + F + H + I + M + L + K + J + EE + FF + E	73.52	0.53	0.55	0.69	48	47	36	2	2.5	4.93	77.9	101.1	250.1		66	0.4	10 CFS SOCCER, 100 YR G & F, 5 YR ELSEWHERE Qdesign=150.3+14.1+10.2=174.6
D	3.47	0.68	0.69	0.80	19	19	18	3.42	4.1	6.84	8.1	9.8	19.0	10			5 YR BYPASS
S + T + U + Z + Y + X + W + V + G + F + H + I + M + L + K + J + EE + FF + E + D	76.99	0.54	0.56	0.70	48	47	36	2	2.5	4.93	83.1	107.8	265.7		66	0.4	10 CFS SOCCER, 100 YR G & F, 5 YR ELSEWHERE Qdesign=174.6+9.8=184.4
C	5.69	0.68	0.69	0.80	20	19	16	3.33	4	6.53	12.9	15.7	29.7	20			5 YR, OVERFLOW TO SOUTH STORAGE AREA
+ T + U + Z + Y + X + W + V + G + F + H + I + M + L + K + J + EE + FF + E + D +	86.28	0.55	0.57	0.71	49	48	37	1.97	2.47	4.86	93.5	121.5	297.7		66	0.4	10 CFS SOCCER, 100 YR G & F, 5 YR ELSEWHERE Qdesign=164.4+15.7=200.1
AA	3.67	0.68	0.69	0.80	15	15	15	3.83	4.56	7.37	9.6	11.5	21.6	20	30	0.4	100 YR, SUMP
GG	0.86	0.68	0.69	0.80	15	15	15	3.83	4.56	7.37	2.2	2.7	5.1	5			100 YR, SUMP
AA + GG	4.53	0.68	0.69	0.80	16	15	15	3.83	4.56	7.37	11.8	14.3	26.7		36	0.4	100 YR
BB	0.72	0.68	0.69	0.80	15	15	15	3.83	4.56	7.37	1.9	2.3	4.2	5	15	0.4	100 YR, SUMP
CC	0.89	0.68	0.69	0.80	15	15	15	3.83	4.56	7.37	2.3	2.8	5.2	5			100 YR, SUMP
BB + CC	1.61	0.68	0.69	0.80	15	15	15	3.83	4.56	7.37	4.2	5.1	9.5		24	0.4	100 YR
HH	19.87	0.68	0.69	0.80	21	20	15	3.25	4	7.37	43.9	54.8	117.2	X-ROAD			
BB + CC + HH	21.48	0.68	0.69	0.80	21	20	15	3.25	4	7.37	47.5	59.3	126.6		48	1.0	100 YR
AA + GG + HH + BB + CC	26.01	0.68	0.69	0.80	21	20	15	3.25	4	7.37	57.5	71.8	153.4		54	1.0	100 YR
N	2.05	0.68	0.69	0.80	15	15	15	3.83	4.56	7.37	5.3	6.5	12.1	area inlet	18	0.4	5 YR, BYPASS
O	1.93	0.68	0.69	0.80	15	15	15	3.83	4.56	7.37	5.0	6.1	11.4	area inlet			5 YR, BYPASS
N + O	3.98	0.68	0.69	0.80	15	15	15	3.83	4.56	7.37	10.4	12.5	23.5		24	0.4	5 YR
P	1.40	0.68	0.69	0.80	15	15	15	3.83	4.56	7.37	3.6	4.4	8.3	area inlet			100 YR, SUMP
N + O + P	5.26	0.68	0.69	0.80	15	15	15	3.83	4.56	7.37	13.7	16.6	31.0		36	0.4	100 YR FROM ARREA P, 5 YR ELSEWHERE
Q	1.87	0.68	0.69	0.80	16	16	15	3.72	4.43	7.37	4.7	5.7	11.0	X-ROAD			

DRAINAGE ANALYSIS SUMMARY
REGENCY PARK ADDITION

Area ID**	Area ac	C2	C5	C100	Tc2 min	Tc5	Tc100 min	I2* in/hr	I5	I100* in/hr	Q2 cfs	Q5	Q100 cfs	Size ft	Size in	Min Slope %	COMMENTS
R	2.02	0.68	0.69	0.80	15	15	15	3.83	4.56	7.37	5.3	6.4	11.9				
N + O + P + Q + R + AA + GG + HH + BB + CC	35.16	0.68	0.69	0.80	28	27	22	2.78	3.43	6.26	66.5	83.2	176.1		54	1	100 YR
DD	3.97	0.68	0.69	0.80	21	20	17	3.25	4	7	8.8	11.0	22.2				



BENCHMARKS

BM#1 BM Step Spike in West side PP, 1st. pole North of 29th. St. on East side Greenwich Rd. Elev.=201.51

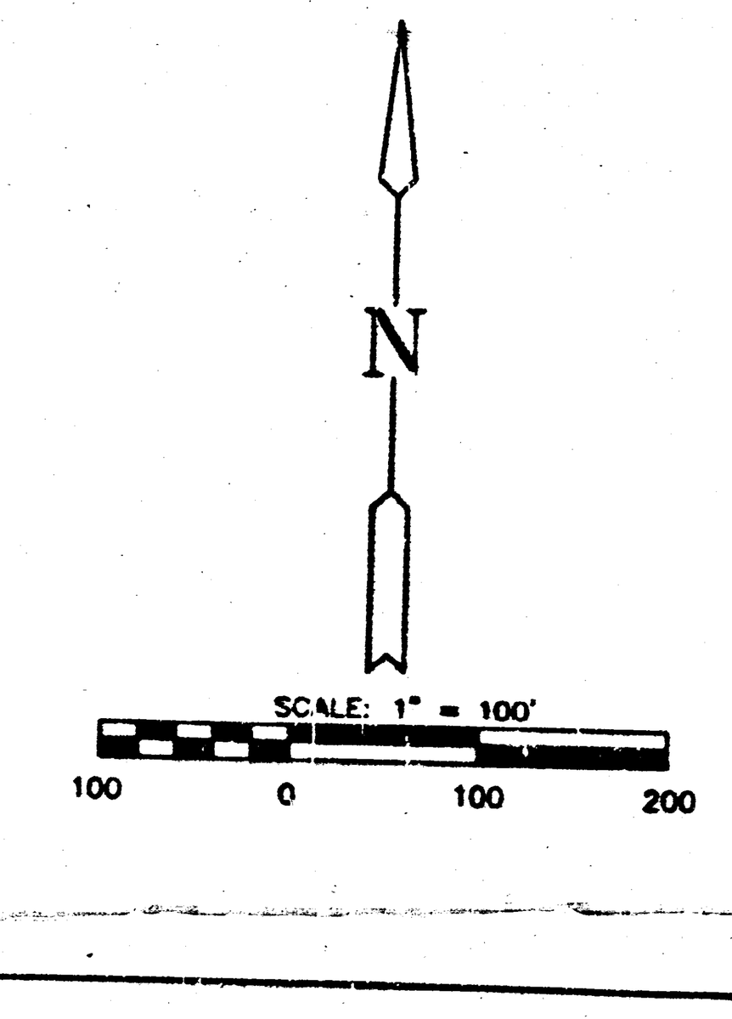
BM#2 BM Step Spike in West side PP, 6th. pole North of K-96 on East side Greenwich Rd. Elev.=192.04

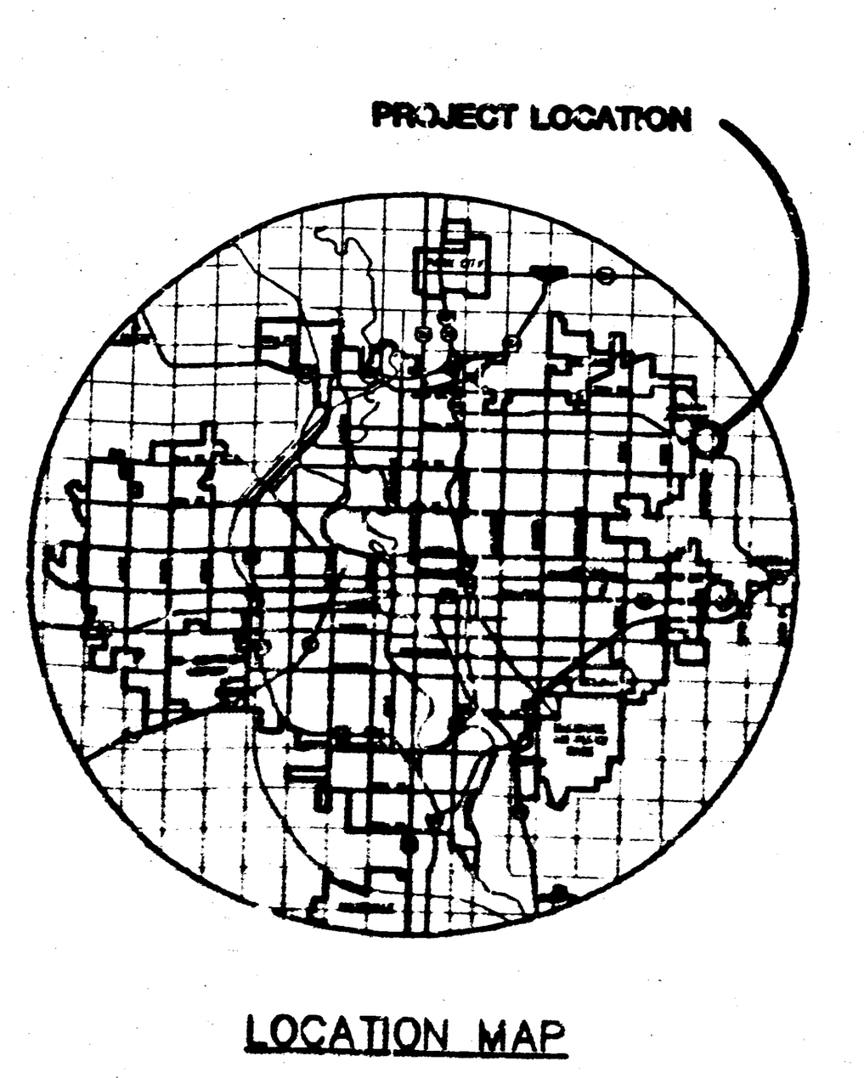
BM#3 BM Step Spike in West side PP, 1st. pole North of K-96 on East side Greenwich Rd. Elev.=184.45

PREPARED FEB., 1997
SURVEYED JAN. 1997
BY MKEC
EXISTING USE-AGRICULTURAL
EXISTING ZONING - SF-20
PROPOSED ZONING - L.I.

MINIMUM PADS AS INDICATED ON DRAINAGE PLAN.

OWNER/DEVELOPER:
RITCHIE ASSOCIATES, INC.
8100 E. 22ND. ST., BLDG 1000
WICHITA, KANSAS 67226





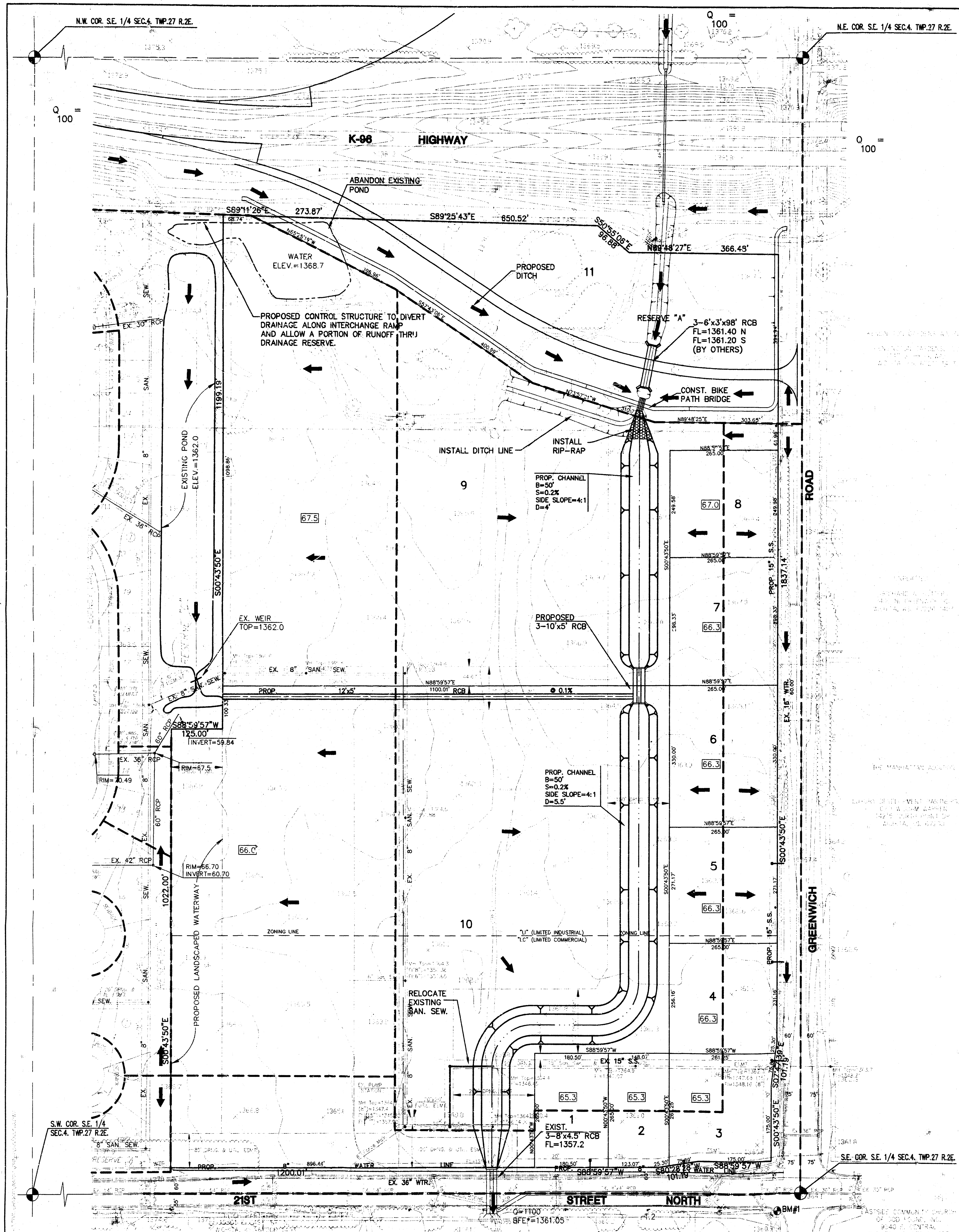
LOCATION MAP

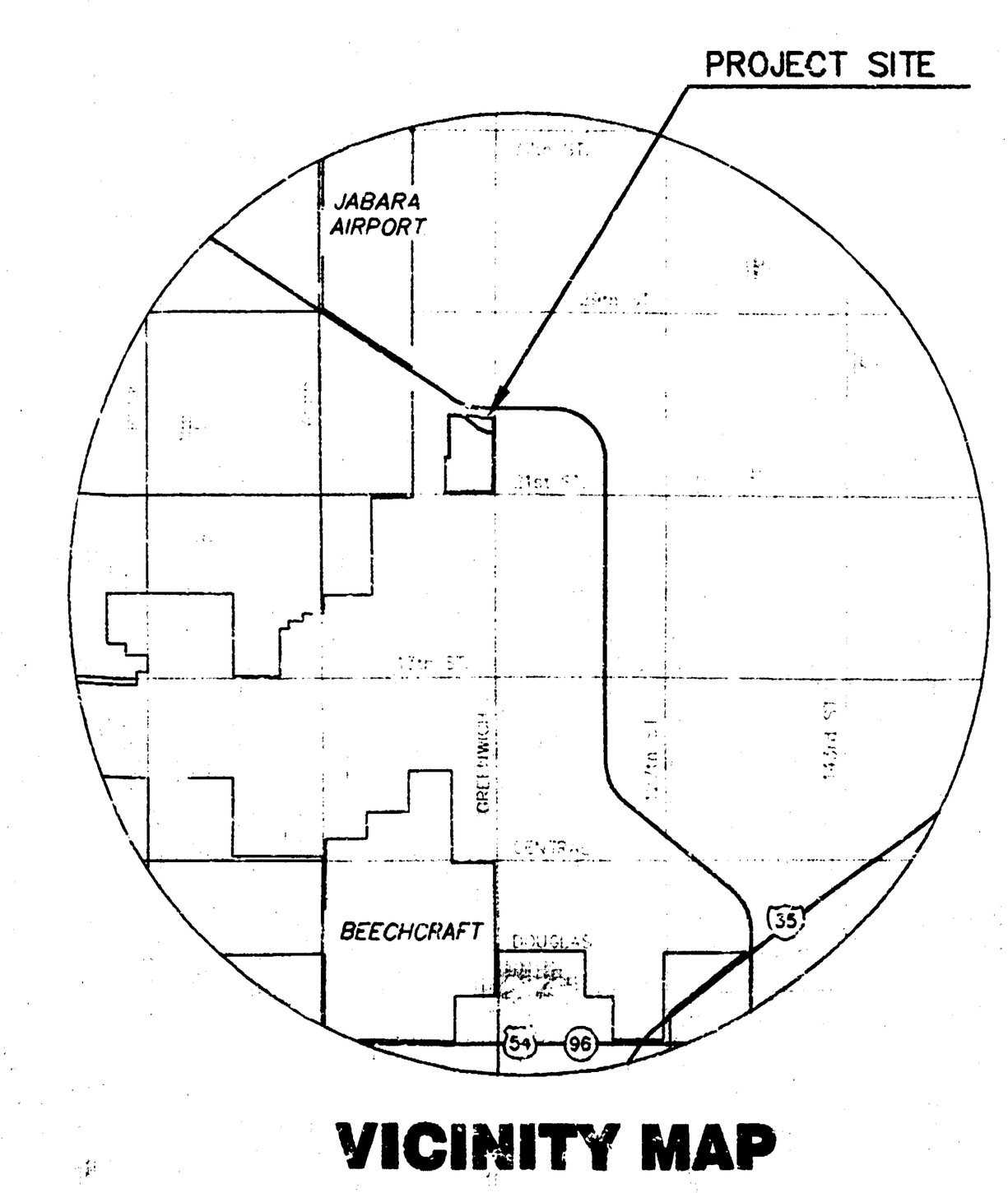
Note: Each lot shall be responsible for Detention of the 100 year-2 hour storm.

Lot	Block	Min. Pad Elev. (City Datum)	Min. Pad Elev. (USGS Datum)
5	1	196.0	1383.4
6	1	194.5	1381.9
7	1	193.0	1380.4
8	1	192.5	1379.9
9	1	192.5	1379.9
10	1	193.0	1380.4
11	1	196.0	1383.4
12	1	195.0	1382.4
13	1	195.0	1382.4
14	1	195.5	1382.9
16	1	195.5	1382.9
17	1	190.0	1377.4
20	1	187.0	1374.4
21	1	187.0	1374.4
22	1	187.0	1374.4
23	1	187.0	1374.4

REGENCY PARK ADDITION
PROJECT NAME
DRAINAGE AND UTILITY PLAN
DESIGN TITLE
GJA/TKM/PAF — DESIGN | BDM — DRAWN BY:
GJA/TKM/PAF — CHECKED BY: | MAR. 1997 — DATE
61040PLN — JOB NO. | 1 / 1 — SHEET/OF

MID-KANSAS ENGINEERING CONSULTANTS, INC.
... ROAD
WICHITA, KS. 67206
316-...





VICINITY MAP

SCALE: 1" = 100'

SURVEY BY - WESTERN AIR
MAP DATE - JUNE 1996

NOTES

1. ZONING: LIMITED INDUSTRIAL - LI
   LIMITED COMMERCIAL - LC
2. LOT MINIMUM PADS AS INDICATED ON DRAINAGE PLAN.
3. RESERVE A IS FOR HIGHWAY, LANDSCAPING, OPEN SPACE DEDICATED TO THE PUBLIC.

BENCHMARK

BM#1
GREENWICH AND 21ST. ST. N. COW, 41' SOUTH AND 58' WEST OF IRON CTR. LINE BOTH. 17.0' SW OF ASPHALT, 14.2' EAST OF FACE P.P. 17.0' WEST OF FACE P.P.

ELEV. = 173.98

LEGEND

66.3	=	MINIMUM PAD
➡	=	FLOW ARROW
– – –	=	DRAINAGE DIVIDES

DRAINAGE & UTILITY PLAN
REGENCY LAKES COMMERCIAL

OWNERS: REGENCY LAKES L.C. % RITCHIE DEVELOPMENT 8100 E. 22ND ST. NORTH, BLDG. 1000 WICHITA, KS. 67226 684-7300
DEVELOPER: GREENWICH 21 LLC % GEORGE LAHAM 150 N. MARKET WICHITA, KANSAS 67201 262-6400

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

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