DRAINAGE PLAN
SHADOW WOODS ADDITION
WICHITA, SEDGWICK COUNTY, KANSAS

CONTRACT PURCHASER/SUBDIVIDER:
Russell Development
ATTN: Joy Russell
12602 W. 13th Street
Wichita, KS 67235
316-722-2417

BENCHMARK:
City of Wichita Benchmark. NE corner of intersection on the headwall.
34.0 ft. or 10.363 m SW to section corner iron
Elevation= 150.29 (City Datum)
1,337.69 (N.G.V.D.29)

Shadow Woods Addition - Rational Method - Q = cIa - tc = 15 min.

Basin	Area	C_2	C_5	C_{100}	I_2 (in/hr)	I_5 (in/hr)	Q_{100} (cfs)
1	0.55	0.44	0.46	0.61	0.9	1.2	2.5
2	1.16	0.44	0.46	0.61	2.0	2.4	5.2
3	0.74	0.44	0.46	0.61	1.2	1.5	3.3
4	0.63	0.44	0.46	0.61	1.1	1.3	2.8
5	0.52	0.44	0.46	0.61	0.9	1.1	2.3
6	0.71	0.44	0.46	0.61	1.2	1.5	3.2
7	2.90	0.44	0.46	0.61	4.9	6.1	13.0
8	1.12	0.44	0.46	0.61	1.9	2.3	5.0
9	1.63	0.44	0.46	0.61	2.7	3.4	7.3
10	2.91	0.44	0.46	0.61	4.9	6.1	13.1
11	2.49	0.44	0.46	0.61	4.2	5.2	11.2
12	2.67	0.44	0.46	0.61	4.5	5.5	12.0
13	1.36	0.44	0.46	0.61	2.3	2.9	6.1
14	1.33	0.44	0.46	0.61	2.2	2.8	6.0
15	2.90	0.44	0.46	0.61	4.9	6.1	13.0
16	1.07	0.44	0.46	0.61	1.8	2.2	4.8
17	3.53	0.44	0.46	0.61	5.9	7.4	15.9
18	0.93	0.44	0.46	0.61	1.6	2.0	4.2
19	0.99	0.44	0.46	0.61	1.7	2.1	4.5
20	1.14	0.44	0.46	0.61	1.9	2.4	5.1
21	2.34	0.44	0.46	0.61	3.9	4.9	10.5
22	5.17	0.44	0.46	0.61	8.7	10.8	23.2
23	0.99	0.44	0.46	0.61	1.7	2.1	4.5
24	0.63	0.44	0.46	0.61	1.1	1.3	2.8
25	0.86	0.44	0.46	0.61	1.4	1.8	3.9
26	0.66	0.44	0.46	0.61	1.1	1.4	3.0
27	1.27	0.44	0.46	0.61	2.1	2.7	5.7
28	0.43	0.44	0.46	0.61	0.7	0.9	1.9
29	1.17	0.44	0.46	0.61	2.0	2.5	5.3
30	0.37	0.44	0.46	0.61	0.6	0.8	1.7
31	1.72	0.44	0.46	0.61	2.9	3.6	7.7
32	0.74	0.44	0.46	0.61	1.2	1.5	3.3
33	1.85	0.44	0.46	0.61	3.1	3.9	8.3
34	1.23	0.44	0.46	0.61	2.1	2.6	5.5
35	0.38	0.44	0.46	0.61	0.6	0.8	1.6
36	0.94	0.43	0.46	0.61	1.6	2.0	4.2
37	1.31	0.44	0.46	0.61	2.2	2.7	5.9
38	1.10	0.44	0.46	0.61	1.9	2.4	5.2
39	0.45	0.44	0.46	0.61	0.8	0.9	2.0
40	3.92	0.44	0.46	0.61	6.5	8.3	17.8
41	7.70	0.67	0.70	0.80	19.5	24.6	45.4
42	1.51	0.44	0.46	0.61	2.5	3.2	6.5
43	1.94	0.44	0.46	0.61	3.3	4.1	8.7

OFFSITE DRAINAGE
D.A. = 852 ac.
T_c = 120 min.
Q_2 = 450 cfs
Q_5 = 670 cfs
Q_{100} = 1,434 cfs

Exist. 20" PVC
FL = 179.08 (IN)
FL = 171.31 (OUT)

EXIST. POND
STATIC W.S. = 172.04

EXIST. POND
STATIC W.S. = 179.08

FEMA - ZONE A FLOOD BOUNDARY

MIDDLE FORK CALFSKIN CREEK

LOWEN, WILLIAM C. REV. TRUST
313 WIND ROSE LAKE DR.
CHANUTE, KS 66720

MESSNER ESTATE
LOT 1
ZONED "SF-5"

13TH STREET NORTH
151ST STREET WEST
145TH STREET WEST
SEC. 24-27S-1W
SITE
MAPLE STREET
VICINITY MAP

● = #4 REBAR W/ "BAUGHMAN" CAP (FOUND)
● = #4 REBAR W/ "BAUGHMAN" CAP (SET)
⊛ = #4 REBAR W/ "TILS" CAP (FOUND)
⊗ = 1" IRON (FOUND)
○ = 1/2" IRON (FOUND)
□ = "P-K" NAIL & SHINER IN STUMP (FOUND)
◇ = BOLT (FOUND)
⊙ = RAILROAD SPIKE (FOUND)
⊞ = 3/4" IRON IN THIMBLE (FOUND)

0 100 200

DATE OF PREPARATION: 10 JUNE 2002
DATE OF TOPOGRAPHY: 12 APRIL 2002
CONTOUR INTERVAL = 1' (ONE FOOT)

NE COR. SE 1/4, SEC. 23, T-27-S, R-2-W, OF THE 6TH P.M.

NW COR. E 1/2, SW 1/4, SEC. 23, T-27-S, R-2-W OF THE 6TH P.M.

SW COR. E 1/2, SW 1/4, SEC. 23, T-27-S, R-2-W OF THE 6TH P.M.

NE COR. SE 1/4, SEC. 23, T-27-S, R-2-W OF THE 6TH P.M.

SE COR. SE 1/4, SEC. 23, T-27-S, R-2-W OF THE 6TH P.M.

Exist. RCBC
FL = 186.25 (IN)
FL = 186.61 (E)

Exist. 4'x4' RCBC
FL = 188.99 (N)
FL = 189.27 (S)

Exist. 12'x3' RCBC
FL = 184.63 (N)
FL = 184.43 (S)
(To Be Plugged)

Exist. 18" CMP
FL = 177.96 (W)

Exist. 10'x3' RCBC

Exist. Ditch Check
FL = 166.68 (in)

Exist. Ditch Check
FL = 161.40 (IN)

Exist. Ditch Check
FL = 158.50 (IN)
FL = 156.50 (Out)

Exist. 5'x3' RCBC
FL = 150.05 (IN)

Exist. 5'x3' RCBC
FL = 150.58 (IN)

PROP. POND
STATIC W.S. = 156.0
D.W.S. = 159.0

PROP. POND
STATIC W.S. = 174.0
D.W.S. = 175.0

Proposed 280 LF Temp. V-Ditch Per Spot Grades. Remove Exist. Ditch Check & Replace w/ New Ditch Check Per Flows.

SAVINA, RICHARD K. & DONNA M.
14901 W. MAPLE
WICHITA, KS 67235-8700

CANFIELD, MAURICE C. ETUX
211 W. UNION AVE.
COLWICH, KS 67030-9780

WOODS, CORETHA E.
14219 W. MAPLE
WICHITA, KS 67235-8738

MILLER, LINDA J.
14119 W. MAPLE
WICHITA, KS 67235-8738

SHULTS, ROMA E. REV. TRUST
14411 W. MAPLE
WICHITA, KS 67235-8742

BAUMGARDNER, JAMES A. & LINDA L.
14411 W. MAPLE
WICHITA, KS 67235-8742

SCHIMMEL, JOHN A. & SHARON A.
14401 W. MAPLE
WICHITA, KS 67215-9809

WATSON, DARREL M. ETUX
14329 W. MAPLE
WICHITA, KS 67235-8740

McCOOL, MARLIN A. & BARBARA J. REV. TRUST
13927 MAPLE
WICHITA, KS 67235-8734

MAPLE HILL ADD.
MAPLE HILL 5TH ADD.
AUBURN HILLS
NINEIRON CT.
12TH ADDITION 7
RIVERSIDE HEALTH SYSTEM ADDITION
AUBURN HILLS COMMERCIAL 2ND ADDITION
DOUGLAS
ANGELA CIR.
BURTON CT.
DUNES
BURTON
RES E ADDITION

ZONED "SF-5"
ZONED "SF-20"
ZONED "L"

06 SEPT 2002

BAUGHMAN COMPANY P.A.
ENGINEERING, SURVEYING, & PLANNING
316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211