

**STAFF REPORT**  
(Preliminary Plat)

**CASE NUMBER:** SUB 2004-133 -- KILLARNEY PLAZA EAST ADDITION

**OWNER/APPLICANT:** Delbry Dev., LLC, Attn: Mike Drumright, 2605 N. Hillcrest, Wichita, KS 67220

**SURVEYOR/ENGINEER:** Savoy Company, P.A., 535 S. Emporia, Suite 104, Wichita, KS 67202

**LOCATION:** North of 29th St. North, West of Rock

**SITE SIZE:** 5.86 acres

**NUMBER OF LOTS**

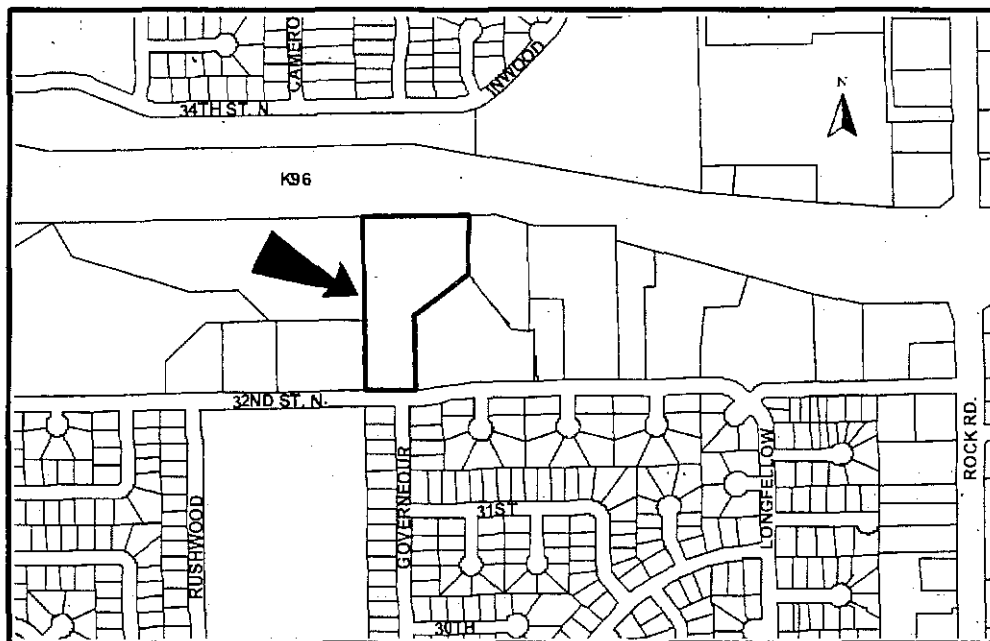
Residential:	13
Office:	
Commercial:	
Industrial:	
Total:	<u>13</u>

**MINIMUM LOT AREA:** 9,906 sq. ft.

**CURRENT ZONING:** MF-18, Multi-Family Residential

**PROPOSED ZONING:** Same

**VICINITY MAP**



**NOTE:** This is a replat of Lot 1, Block 1, in the Killarney Plaza 3rd Addition.

**STAFF COMMENTS:**

- A. The applicant shall guarantee the extension of sanitary sewer and City water to serve the lots being platted. City Engineering needs to comment on the need for other guarantees or easements.
- B. If improvements are guaranteed by petition, a notarized certificate listing the petitions shall be submitted to the Planning Department for recording.
- C. City Engineering needs to comment on the status of the applicant's drainage concept.
- D. Complete access control needs to be platted along the Northeast Expressway. The final plat shall reference the dedication of access control in the plat's text.
- E. The Applicant shall guarantee the paving of the proposed streets.
- F. The final plat shall state in the plat's text the purposes of the proposed reserves as well as the ownership and maintenance responsibilities.
- G. Provisions shall be made for ownership and maintenance of the proposed reserves. The applicant shall either form a lot owners' association prior to recording the plat or shall submit a covenant stating when the association will be formed, when the reserves will be deeded to the association and who is to own and maintain the reserves prior to the association taking over those responsibilities.
- H. For those reserves being platted for drainage purposes, the required covenant which provides for ownership and maintenance of the reserves shall grant, to the City, the authority to maintain the drainage reserves in the event the owner(s) fail to do so. The covenant shall provide for the cost of such maintenance to be charged back to the owner(s) by the governing body.
- I. The applicant shall submit a covenant which provides for three (3) off-street parking spaces per dwelling unit on each lot which abuts a 58-foot street. The covenant shall inventory the affected lots by lot and block number and shall state that the covenant runs with the land and is binding on future owners and assigns.
- J. GIS needs to comment on the plat's street names.
- K. The Applicant is reminded that a platting binder is required with the final plat. Approval of this plat will be subject to submittal of this binder and any relevant conditions found by such a review.
- L. The plat's text shall include language that a drainage plan has been developed for the plat and that all drainage easements, rights-of-way, or reserves shall remain at established grades or as modified with the approval of the applicable City or County Engineer, and unobstructed to allow for the conveyance of stormwater.
- M. The applicant shall install or guarantee the installation of all utilities and facilities that are applicable and described in Article 8 of the MAPC Subdivision Regulations. (Water service and fire hydrants required by Article 8 for fire protection shall be as per the direction and approval of the Chief of the Fire Department.)

**SUB 2004-133 -- One-Step Final Plat of KILLARNEY PLAZA EAST ADDITION**

**November 19, 2004 - Page 3**

- N. The applicant's engineer is advised that the Register of Deeds is requiring the name(s) of the notary public, who acknowledges the signatures on this plat, to be printed beneath the notary's signature.
- O. To receive mail delivery without delay, and to avoid unnecessary expense, the applicant is advised of the necessity to meet with the U.S. Postal Service Growth Management Coordinator (Phone: 316-946-4556) prior to development of the plat so that the type of delivery, and the tentative mailbox locations can be determined.
- P. The applicant is advised that various State and Federal requirements (specifically but not limited to the Army Corps of Engineers, Kanopolis Project Office, Rt. 1, Box 317, Valley Center, KS 67147) for the control of soil and wind erosion and the protection of wetlands may impact how this site can be developed. It is the applicant's responsibility to contact all appropriate agencies to determine any such requirements.
- Q. The owner of the subdivision should note that any construction that results in earthwork activities that will disturb one (1) acre or more of ground cover requires a Federal/State NPDES Storm Water Discharge Permit from the Kansas Department of Health and Environment in Topeka. Also, for projects located within the City of Wichita, erosion and sediment control devices must be used on ALL projects. For projects outside of the City of Wichita, but within the Wichita Metropolitan area, the owner should contact the appropriate governmental jurisdiction concerning erosion and sediment control device requirements.
- R. Perimeter closure computations shall be submitted with the final plat tracing.
- S. Recording of the plat within 30 days after approval by the City Council and/or County Commission.
- T. The representatives from the utility companies should be prepared to comment on the need for any additional utility easements to be platted on this property.
- U. The applicant is reminded that a compact disc (CD) shall be submitted with the final plat tracing to the Planning Department detailing this plat in digital format in AutoCAD, or sent via e-mail to MAPD ([cholloway@wichita.gov](mailto:cholloway@wichita.gov)). This will be used by the City and County GIS Department.

**STAFF REPORT**  
(Final Plat, Preliminary Plat Approved 11/19/04)

**CASE NUMBER:** SUB 2004-133-- KILLARNEY PLAZA EAST ADDITION

**OWNER/APPLICANT:** Delbry Dev., LLC, Attn: Mike Drumright, 2605 N. Hillcrest, Wichita, KS 67220

**SURVEYOR/ENGINEER:** Savoy Company, P.A., 535 S. Emporia, Suite 104, Wichita, KS 67202

**LOCATION:** North of 29th St. North, West of Rock

**SITE SIZE:** 5.86 acres

**NUMBER OF LOTS**

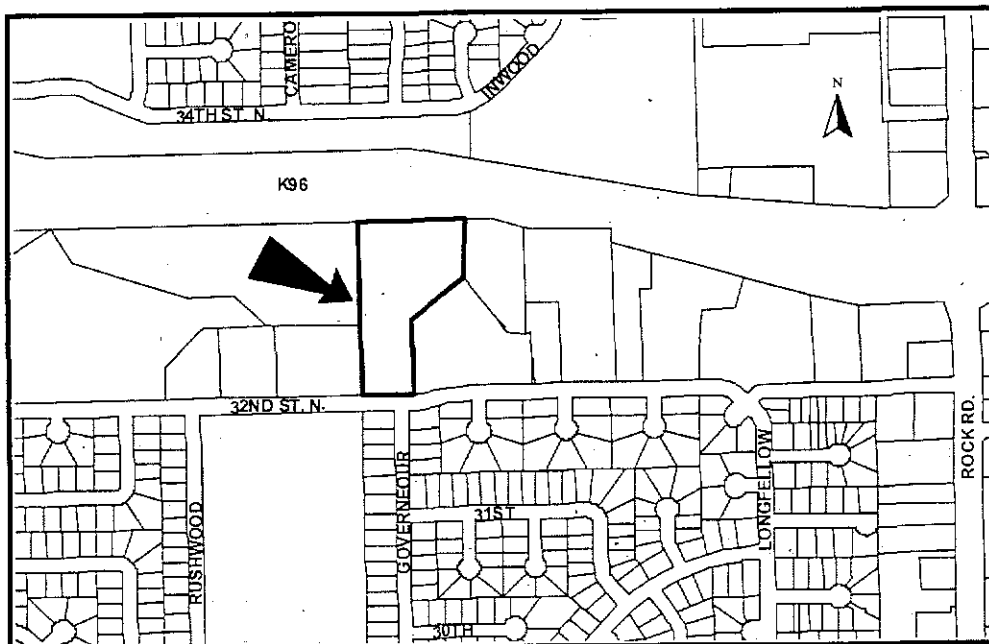
Residential:	13
Office:	
Commercial:	
Industrial:	
Total:	<b>13</b>

**MINIMUM LOT AREA:** 9,906 sq. ft.

**CURRENT ZONING:** MF-18, Multi-Family Residential

**PROPOSED ZONING:** Same

**VICINITY MAP**



**SUB 2004-133 -- Final Plat of KILLARNEY PLAZA EAST ADDITION**  
**February 17, 2005 - Page 2**

**NOTE:** This is a replat of Lot 1, Block 1, in the Killarney Plaza Third Addition.

**STAFF COMMENTS:**

- A. The applicant shall guarantee the extension of sanitary sewer and City water to serve the lots being platted.
- B. If improvements are guaranteed by petition, a notarized certificate listing the petitions shall be submitted to the Planning Department for recording.
- C. City Engineering needs to comment on the status of the applicant's drainage plan.
- D. The Applicant shall guarantee the paving of the proposed streets.
- E. Provisions shall be made for ownership and maintenance of the proposed reserves. The applicant shall either form a lot owners' association prior to recording the plat or shall submit a covenant stating when the association will be formed, when the reserves will be deeded to the association and who is to own and maintain the reserves prior to the association taking over those responsibilities.
- F. For those reserves being platted for drainage purposes, the required covenant that provides for ownership and maintenance of the reserves shall grant, to the City, the authority to maintain the drainage reserves in the event the owner(s) fail to do so. The covenant shall provide for the cost of such maintenance to be charged back to the owner(s) by the governing body.
- G. The applicant shall submit a covenant that provides for three (3) off-street parking spaces per dwelling unit on each lot that abuts a 58-foot street. The covenant shall inventory the affected lots by lot and block number and shall state that the covenant runs with the land and is binding on future owners and assigns.
- H. GIS needs to comment on the plat's street names. "Circle" should be labeled as Cir.
- I. The Lot lines need additional bearings.
- J. The Applicant is reminded that a platting binder is required with the final plat: Approval of this plat will be subject to submittal of this binder and any relevant conditions found by such a review.
- K. The platator's text shall include language that a drainage plan has been developed for the plat and that all drainage easements, rights-of-way, or reserves shall remain at established grades or as modified with the approval of the applicable City or County Engineer, and unobstructed to allow for the conveyance of stormwater.
- L. The applicant shall install or guarantee the installation of all utilities and facilities that are applicable and described in Article 8 of the MAPC Subdivision Regulations. (Water service and fire hydrants required by Article 8 for fire protection shall be as per the direction and approval of the Chief of the Fire Department.)
- M. The applicant's engineer is advised that the Register of Deeds is requiring the name(s) of the notary public, who acknowledges the signatures on this plat, to be printed beneath the notary's signature.

SUB 2004-133 -- Final Plat of KILLARNEY PLAZA EAST ADDITION  
February 17, 2005 - Page 3

- N. To receive mail delivery without delay, and to avoid unnecessary expense, the applicant is advised of the necessity to meet with the U.S. Postal Service Growth Management Coordinator (Phone: 316-946-4556) prior to development of the plat so that the type of delivery, and the tentative mailbox locations can be determined.
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**CERTIFIED ENGINEERING DESIGN, P.A.**

810 W. Douglas, Suite C  
Wichita, KS 67203  
(316) 262-8808 Office  
(316) 262-1669 Fax

**LETTER OF TRANSMITTAL**

DATE: February 16, 2005

TO: Ms. Vicki Huang, P.E.  
Engineering Division  
City of Wichita  
7th Floor, City Hall  
455 North Main  
Wichita, KS 67202

SUBJ: Killarney Plaza

FROM: Harlan D. Foraker, P.E. 

COMMENTS: Attached please find the drainage plan for the above referenced project which is on the agenda for the Thursday, February 17, 2005, Subdivision Committee Meeting. Please review and if you have any questions or comments, please contact me at (316) 262-8808.

Attachments

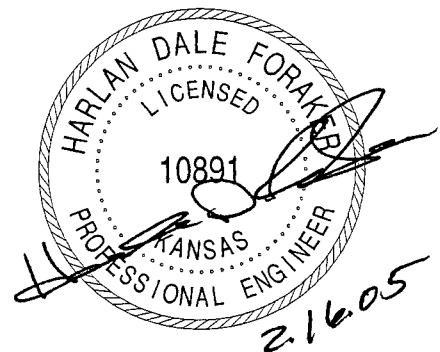
cc: Mark Savoy, Savoy Company, 535 S. Emporia, Suite 104, Wichita, KS 67202

**DRAINAGE CALCULATIONS**  
**FOR**  
**KILLARNEY PLAZA EAST**  
**IN**  
**WICHITA, KANSAS**

**FEBRUARY 16, 2005**

**PREPARED BY:**

**CERTIFIED ENGINEERING DESIGN, P.A.**  
**810 WEST DOUGLAS, SUITE C**  
**WICHITA, KS 67203-6105**  
**(316)262-8808**







PROJECT: <u>KILLARNEY PLAZA EAST</u>	DATE: <u>1-21-05</u>
LOCATION: <u>WICHITA, KS</u>	BY: <u>HOF</u> CKD
CLIENT: _____	JOB NO. _____ SHEET NO. _____ OF _____

D.A. = 38 ac. (South of 32nd St. North)  
 D.A. = 18 ac. (North of 32nd St. North)

SOIL TYPE D SOILS

$C_{100} = 0.75$  (1/3 Area, Type D Soils) for D.A. South of 32nd St. North  
 $C_{100} = 0.83$  (Multi Family Detached Soil Group D) for D.A. North of 32nd St. North  
 $C_{100} = 0.75$  (S. B. L. Areas for Killarney Plaza East)

Time of Concentration  $s = 4/300 = 1.3\%$   
 $T_{SF} = \frac{.007(L)^{.78}}{P^{.5} S^{.4}} = \frac{.007(.24 \cdot 300)^{.78}}{(3.5)^{.5} (.0133)^{.4}} = 0.64 \text{ hr} = 39 \text{ min.}$   
 $T_{unrel} = (1000 + 200 + 400 + 1500) / 1.12 \text{ hr} = 41 \text{ min.}$   $s = (205 - 189) / 2730 = 0.59\%$   
WTD. C FACTOR  $80 \text{ min.}$   $C_{100} = 3.16 \text{ hr}$

$C_{100} = \frac{0.75(38) + 0.83(12) + 0.75(56)}{56} = 0.75$   
Peak Discharge  
 $Q_{100} = 0.75(3.16)(56) = 133 \text{ cfs}$   
UNDEVELOPED  
 $T_{SF} = 39 \text{ min.}$   
 $T_{50} = \frac{2730}{121} = 216 \text{ min.} + 39 \text{ min.} = 255 \text{ min.}$   
 $Q_{100} = 0.65(128)56 = 255 \text{ min.}$   
 $= 46.6 \text{ cfs}$   $C_{100} = 1.28 \text{ hr}$

RETENTION ANALYSIS

STAGE	Area
1366	14
1367	428
1368	2769
1369	7962
1370	13,153
1371	18,465
1372	20,230
1373	57421
1374	—
1375	—

RAINFALL INTENSITY TABLE  
 SEDGWICK COUNTY  
 KANSAS

THIS TABLE CONTAINS AVERAGE RAINFALL INTENSITIES  
 IN INCHES PER HOUR.

DURATION, HR:MIN	RETURN PERIOD						
	1 YR	2 YR	5 YR	10 YR	25 YR	50 YR	100 YR
3:15	0.51	0.66	0.88	1.03	1.24	1.40	1.57
3:30	0.48	0.62	0.83	0.97	1.17	1.32	1.48
3:45	0.45	0.59	0.78	0.92	1.11	1.26	1.40
4:00	0.43	0.56	0.75	0.88	1.06	1.20	1.34
4:15	0.41	0.53	0.71	0.84	1.01	1.14	1.28
4:30	0.40	0.51	0.68	0.80	0.97	1.10	1.22
4:45	0.38	0.49	0.66	0.77	0.93	1.05	1.17
5:00	0.37	0.47	0.63	0.74	0.89	1.01	1.13
5:15	0.36	0.46	0.61	0.72	0.86	0.98	1.09
5:30	0.35	0.44	0.59	0.69	0.83	0.94	1.05
5:45	0.34	0.43	0.57	0.67	0.81	0.91	1.02
6:00	0.33	0.42	0.55	0.65	0.78	0.88	0.98
6:30	0.31	0.39	0.52	0.61	0.73	0.83	0.92
7:00	0.29	0.37	0.49	0.58	0.69	0.78	0.87
7:30	0.28	0.35	0.47	0.55	0.66	0.74	0.83
8:00	0.27	0.34	0.45	0.52	0.62	0.70	0.78
8:30	0.26	0.32	0.43	0.50	0.60	0.67	0.75
9:00	0.25	0.31	0.41	0.47	0.57	0.64	0.71
9:30	0.24	0.30	0.39	0.45	0.54	0.61	0.68
10:00	0.23	0.29	0.38	0.44	0.52	0.59	0.66
10:30	0.22	0.28	0.36	0.42	0.50	0.57	0.63
11:00	0.21	0.27	0.35	0.41	0.48	0.55	0.61
11:30	0.21	0.26	0.34	0.39	0.47	0.53	0.59
12:00	0.20	0.25	0.33	0.38	0.45	0.51	0.57
13:00	0.19	0.24	0.31	0.36	0.42	0.48	0.53
14:00	0.18	0.22	0.29	0.33	0.40	0.45	0.50
15:00	0.17	0.21	0.27	0.32	0.38	0.43	0.47
16:00	0.16	0.20	0.26	0.30	0.36	0.40	0.45
17:00	0.15	0.19	0.25	0.29	0.34	0.39	0.43
18:00	0.15	0.18	0.24	0.27	0.33	0.37	0.41
19:00	0.14	0.18	0.23	0.26	0.31	0.35	0.39
20:00	0.14	0.17	0.22	0.25	0.30	0.34	0.38
21:00	0.13	0.16	0.21	0.24	0.29	0.33	0.36
22:00	0.13	0.16	0.20	0.23	0.28	0.31	0.35
23:00	0.12	0.15	0.20	0.23	0.27	0.30	0.34
24:00	0.12	0.15	0.19	0.22	0.26	0.29	0.32

RAINFALL INTENSITY TABLE  
SEWARD COUNTY  
KANSAS

THIS TABLE CONTAINS AVERAGE RAINFALL INTENSITIES  
IN INCHES PER HOUR.

DURATION, HR:MIN	RETURN PERIOD						
	1 YR	2 YR	5 YR	10 YR	25 YR	50 YR	100 YR
0:05	4.37	5.16	6.28	7.09	8.26	9.17	10.08
0:06	4.04	4.81	5.92	6.71	7.86	8.75	9.64
0:07	3.78	4.53	5.63	6.40	7.52	8.39	9.26
0:08	3.56	4.29	5.37	6.13	7.22	8.07	8.91
0:09	3.37	4.09	5.14	5.88	6.94	7.77	8.59
0:10	3.20	3.90	4.93	5.65	6.68	7.48	8.28
0:11	3.05	3.73	4.74	5.44	6.44	7.21	7.99
0:12	2.92	3.58	4.56	5.24	6.21	6.96	7.71
0:13	2.80	3.44	4.39	5.05	6.00	6.73	7.45
0:14	2.69	3.31	4.24	4.88	5.80	6.51	7.22
0:15	2.59	3.20	4.10	4.73	5.62	6.31	7.00
0:16	2.50	3.09	3.98	4.59	5.46	6.13	6.80
0:17	2.42	3.00	3.86	4.46	5.30	5.96	6.61
0:18	2.34	2.91	3.75	4.34	5.16	5.80	6.44
0:19	2.27	2.83	3.65	4.22	5.03	5.66	6.28
0:20	2.21	2.75	3.56	4.12	4.91	5.52	6.13
0:21	2.15	2.68	3.47	4.02	4.79	5.39	5.99
0:22	2.09	2.61	3.38	3.92	4.68	5.27	5.85
0:23	2.03	2.54	3.31	3.83	4.58	5.15	5.73
0:24	1.98	2.48	3.23	3.75	4.48	5.04	5.61
0:25	1.94	2.43	3.16	3.67	4.38	4.94	5.49
0:26	1.89	2.37	3.09	3.59	4.29	4.84	5.38
0:27	1.85	2.32	3.03	3.52	4.21	4.74	5.27
0:28	1.81	2.27	2.97	3.45	4.13	4.65	5.17
0:29	1.77	2.22	2.91	3.38	4.05	4.56	5.07
0:30	1.73	2.18	2.85	3.32	3.97	4.48	4.98
0:31	1.70	2.14	2.80	3.26	3.90	4.39	4.89
0:32	1.66	2.10	2.75	3.20	3.83	4.32	4.80
0:33	1.63	2.06	2.70	3.14	3.76	4.24	4.72
0:34	1.60	2.02	2.65	3.08	3.69	4.17	4.64
0:35	1.57	1.98	2.60	3.03	3.63	4.10	4.56
0:36	1.54	1.95	2.56	2.98	3.57	4.03	4.48
0:37	1.52	1.92	2.52	2.93	3.51	3.96	4.41
0:38	1.49	1.88	2.48	2.88	3.46	3.90	4.34
0:39	1.47	1.85	2.44	2.84	3.40	3.84	4.27
0:40	1.44	1.82	2.40	2.79	3.35	3.78	4.21
0:41	1.42	1.80	2.36	2.75	3.30	3.72	4.14
0:42	1.40	1.77	2.33	2.71	3.25	3.67	4.08
0:43	1.38	1.74	2.29	2.67	3.20	3.61	4.02
0:44	1.36	1.72	2.26	2.63	3.16	3.56	3.97
0:45	1.34	1.69	2.23	2.59	3.11	3.51	3.91

RAINFALL INTENSITY TABLE  
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0:07	4.38	5.09	6.08	6.80	7.86	8.69	9.52
0:08	4.17	4.87	5.85	6.56	7.60	8.41	9.22
0:09	4.00	4.68	5.63	6.33	7.34	8.14	8.93
0:10	3.84	4.50	5.43	6.11	7.10	7.87	8.64
0:11	3.70	4.34	5.25	5.90	6.86	7.61	8.36
0:12	3.56	4.19	5.07	5.71	6.64	7.36	8.09
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0:14	3.33	3.92	4.76	5.36	6.24	6.92	7.61
0:15	3.22	3.80	4.62	5.21	6.06	6.73	7.40
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0:19	2.85	3.39	4.16	4.71	5.50	6.12	6.74
0:20	2.77	3.30	4.06	4.60	5.38	5.99	6.60
0:21	2.70	3.22	3.97	4.50	5.27	5.87	6.47
0:22	2.63	3.14	3.88	4.41	5.17	5.76	6.35
0:23	2.56	3.07	3.80	4.32	5.07	5.65	6.23
0:24	2.50	3.00	3.72	4.23	4.97	5.54	6.12
0:25	2.44	2.93	3.64	4.15	4.88	5.44	6.01
0:26	2.38	2.87	3.57	4.07	4.79	5.35	5.90
0:27	2.33	2.81	3.50	4.00	4.70	5.26	5.80
0:28	2.27	2.75	3.44	3.92	4.62	5.17	5.71
0:29	2.23	2.69	3.37	3.86	4.54	5.08	5.61
0:30	2.18	2.64	3.31	3.79	4.47	4.99	5.52
0:31	2.14	2.59	3.26	3.72	4.39	4.91	5.43
0:32	2.09	2.54	3.20	3.66	4.32	4.83	5.34
0:33	2.05	2.50	3.14	3.60	4.25	4.76	5.26
0:34	2.02	2.45	3.09	3.54	4.18	4.68	5.18
0:35	1.98	2.41	3.04	3.48	4.12	4.61	5.10
0:36	1.94	2.37	2.99	3.43	4.05	4.54	5.02
0:37	1.91	2.33	2.94	3.38	3.99	4.47	4.95
0:38	1.88	2.29	2.90	3.32	3.93	4.40	4.87
0:39	1.85	2.25	2.85	3.27	3.87	4.34	4.80
0:40	1.82	2.22	2.81	3.23	3.82	4.28	4.73
0:41	1.79	2.18	2.77	3.18	3.76	4.22	4.67
0:42	1.76	2.15	2.73	3.13	3.71	4.16	4.60
0:43	1.73	2.12	2.69	3.09	3.66	4.10	4.54
0:44	1.71	2.09	2.65	3.05	3.61	4.04	4.48
0:45	1.68	2.06	2.62	3.01	3.56	3.99	4.42

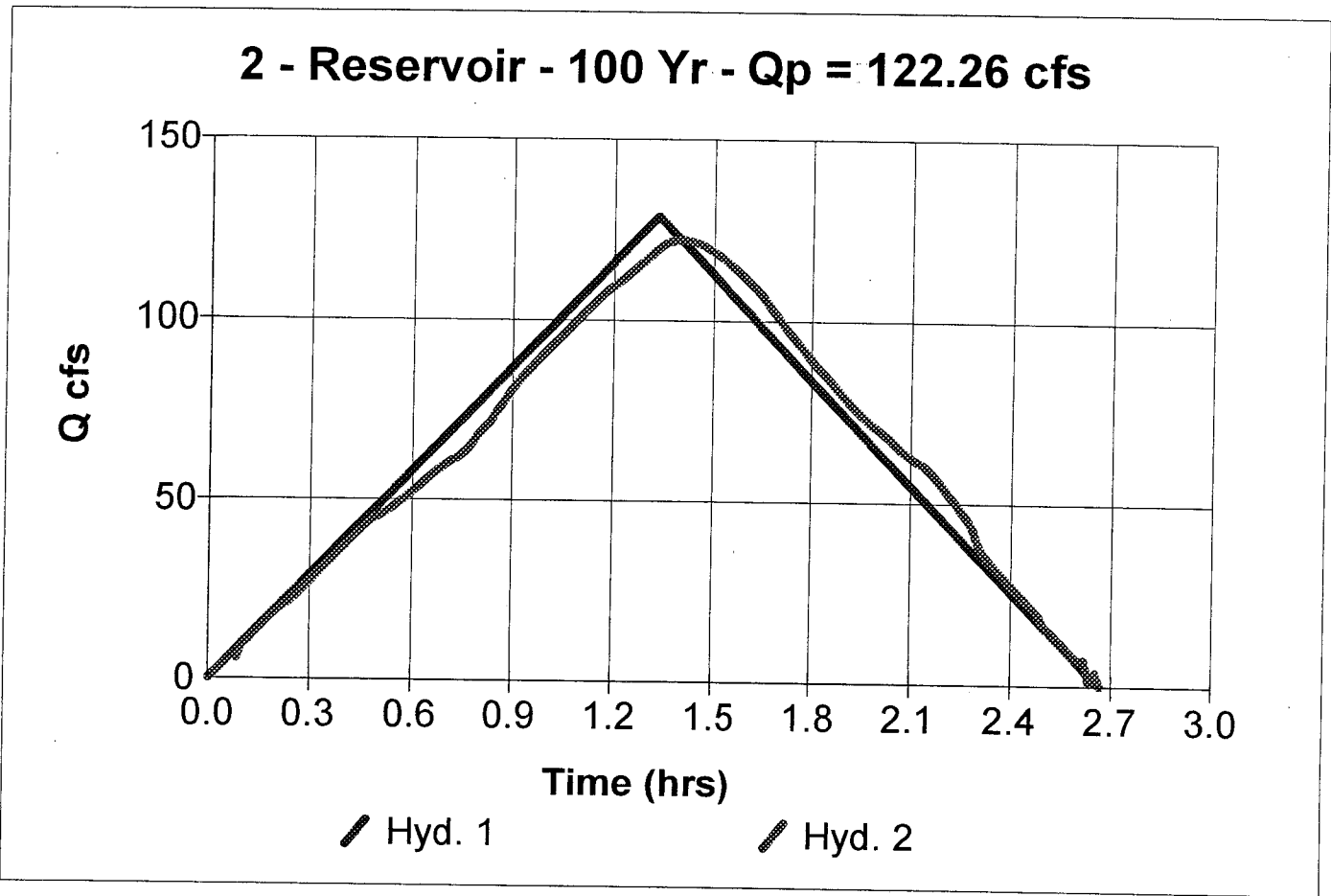
ATTACHMENT E  
DRAINAGE CRITERIA

CITY OF WICHITA, KANSAS

AVERAGE OVERLAND FLOW VELOCITY FOR USE WITH URBANIZED AREAS

Surface Type	VELOCITY IN FEET/SECOND FOR SLOPES IN PERCENT SHOWN																			
	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	20.0
Forest with Heavy Ground Litter or Meadow	0.03	0.04	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.16	0.21	0.28	0.33	0.39	0.46	0.53	0.60	0.72	1.10
Fallow or Minimum Tillage Cultivation	0.06	0.08	0.10	0.12	0.13	0.14	0.16	0.17	0.18	0.19	0.29	0.40	0.51	0.66	0.78	0.91	1.05	1.20	1.44	2.10
Short Grass Pasture or Lawns	0.09	0.13	0.15	0.18	0.20	0.21	0.23	0.25	0.26	0.28	0.45	0.60	0.77	0.96	1.17	1.33	1.50	1.68	1.98	3.20
Almost Bare Ground	0.16	0.22	0.28	0.31	0.35	0.38	0.41	0.44	0.46	0.49	0.70	0.85	1.05	1.26	1.50	1.75	2.03	2.32	2.79	4.40
Grassed Waterway	0.35	0.48	0.58	0.67	0.77	0.84	0.91	0.98	1.05	1.12	1.54	1.82	2.10	2.38	2.78	3.20	3.66	4.14	4.56	7.00
Paved Areas (Sheet Flow) or Shallow Gutter Flow	0.44	0.62	0.77	0.91	1.05	1.12	1.19	1.26	1.33	1.40	2.00	2.55	3.20	3.83	4.41	5.04	5.70	6.00	6.20	9.00





2 - Reservoir - 100 Yr - Max. El. = 1370.34 ft

