



TRANSMITTAL

TO: Scott Lindebak COMPANY: City of Wichita ADDRESS: 7 th Floor City Hall CITY/ STATE: Wichita, KS	FROM: Trevor Kurth DATE: 5-25-06 PROJECT: Slate Creek PROJECT NUMBER:
--	---

RE:
Slate Creek Drainage Plan

VIA: DELIVERY

We are sending you ATTACHED UNDER SEPARATE COVER

PLANS PRINTS SHOP DRAWINGS SAMPLES SPECS
 COPY OF LETTER CHANGE ORDER DISK OTHER


COPIES	DATE	DESCRIPTION
1	5-25-06	Slate Creek Drain Plan

URGENT FOR APPROVAL FOR YOUR INFO FOR REVIEW & COMMENT

APPROVED AS NOTED REVISE AS NOTED REVISE AND RETURN

AS REQUESTED PLEASE REPLY FOR BIDS DUE

NOTES/ COMMENTS:

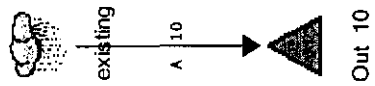
SIGNED: 
Trevor R. Kurth, I.E.

Copy: file

ENGINEERING
SURVEYING
PLANNING
LANDSCAPE
ARCHITECTURE

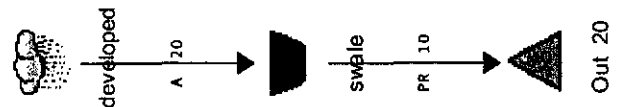
B a u g h m a n
C o m p a n y , P . A .
315 Ellis Street
Wichita, Kansas 67203
P 316.262.7271
F 316.262.0149

AREA = 2.1 ACRES
 CN = 70
 T_c = 15 min



Q₂ = 2.4 cfs
 Q₅ = 4.2
 Q₁₀₀ = 11

AREA = 2.1 ACRES
 T_c = 15 min
 CN = 84



BOTTOM = 1319
 10" PIPE FL 1319
 2' OVERFLOW WEIR @ 1322.5
 Q₂ in = 4.9 cfs
 Q₅ in = 7.1
 Q₁₀₀ in = 15

Q₂ out = 2.3 cfs
 Q₅ out = 3.7
 Q₁₀₀ out = 11.

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MASTER DESIGN STORM SUMMARY

Default Network Design Storm File, ID SEDGWICK.RNQ Sedgwick24

Return Event	Total Depth in	Rainfall Type	RNF File	RNF ID
2y24h	3.5000	Synthetic Curve	SCSTYPES	TypeII 24hr
5y24h	4.5000	Synthetic Curve	SCSTYPES	TypeII 24hr
100y24	7.9000	Synthetic Curve	SCSTYPES	TypeII 24hr

MASTER NETWORK SUMMARY
SCS Unit Hydrograph Method

(*Node=Outfall; +Node=Diversion;)
(Trun= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left&Rt)

Storage Node ID	Return Type	Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond ac-ft
DEVELOPED	AREA	2	.339		12.0500	4.92		
DEVELOPED	AREA	5	.493		12.0500	7.10		
DEVELOPED	AREA	100	1.050		12.0500	14.65		
EXISTING	AREA	2	.176		12.0500	2.41		
EXISTING	AREA	5	.293		12.0500	4.18		
EXISTING	AREA	100	.766		12.0500	11.13		
*OUT 10	JCT	2	.176		12.0500	2.41		
*OUT 10	JCT	5	.293		12.0500	4.18		
*OUT 10	JCT	100	.766		12.0500	11.13		
*OUT 20	JCT	2	.338		12.2500	2.33		
*OUT 20	JCT	5	.492		12.2000	3.68		
*OUT 20	JCT	100	1.049		12.1500	11.03		
SWALE	IN POND	2	.339		12.0500	4.92		
SWALE	IN POND	5	.493		12.0500	7.10		
SWALE	IN POND	100	1.050		12.0500	14.65		
SWALE	OUT POND	2	.338		12.2500	2.33	1320.43	.116
SWALE	OUT POND	5	.492		12.2000	3.68	1321.45	.156
SWALE	OUT POND	100	1.049		12.1500	11.03	1323.54	.271

Type.... Design Storms
Name.... Sedgwick24

File.... C:\HAESTAD\PPKW\RAINFALL\SEDGWICK.RNQ
Title...

JOB TITLE NOT SPECIFIED

Click Project Summary on the File Menu to enter title

DESIGN STORMS SUMMARY

Design Storm File, ID = SEDGWICK.RNQ Sedgwick24

Storm Tag Name = 2y24h

Data Type, File, ID = Synthetic Storm SCSTYPES.RNF TypeII 24hr
Storm Frequency = 2 yr
Total Rainfall Depth= 3.5000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

Storm Tag Name = 5y24h

Description: Sedgwick County 5-yr 24 hour Duration

Data Type, File, ID = Synthetic Storm SCSTYPES.RNF TypeII 24hr
Storm Frequency = 5 yr
Total Rainfall Depth= 4.5000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

Storm Tag Name = 100y24

Description: Sedgwick County 100-yr 24 hour Duration

Data Type, File, ID = Synthetic Storm SCSTYPES.RNF TypeII 24hr
Storm Frequency = 100 yr
Total Rainfall Depth= 7.9000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

Type... Design Storms
Name... Sedgwick24
File... C:\HAESTAD\PPKW\RAINFALL\SEDGWICK.RNQ
Storm... TypeII 24hr Tag: 2y24h

Page 2.02
Event: 2 yr

DESIGN STORMS SUMMARY

Design Storm File, ID = SEDGWICK.RNQ Sedgwick24

Storm Tag Name = 2y24h

Data Type, File, ID = Synthetic Storm SCSTYPES.RNF TypeII 24hr
Storm Frequency = 2 yr
Total Rainfall Depth= 3.5000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

Storm Tag Name = 5y24h
Description: Sedgwick County 5-yr 24 hour Duration

Data Type, File, ID = Synthetic Storm SCSTYPES.RNF TypeII 24hr
Storm Frequency = 5 yr
Total Rainfall Depth= 4.5000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

Storm Tag Name = 100y24
Description: Sedgwick County 100-yr 24 hour Duration

Data Type, File, ID = Synthetic Storm SCSTYPES.RNF TypeII 24hr
Storm Frequency = 100 yr
Total Rainfall Depth= 7.9000 in
Duration Multiplier = 1
Resulting Duration = 24.0000 hrs
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

TIME vs. ELEVATION (ft)

Time hrs	Output Time increment = .0500 hrs				
	Time on left represents time for first value in each row.				
7.7000	1319.00	1319.00	1319.00	1319.00	1319.00
7.9500	1319.00	1319.00	1319.00	1319.00	1319.00
8.2000	1319.00	1319.00	1319.00	1319.00	1319.00
8.4500	1319.00	1319.00	1319.00	1319.00	1319.00
8.7000	1319.00	1319.00	1319.00	1319.01	1319.01
8.9500	1319.01	1319.01	1319.01	1319.01	1319.01
9.2000	1319.01	1319.01	1319.01	1319.01	1319.01
9.4500	1319.01	1319.01	1319.01	1319.01	1319.02
9.7000	1319.02	1319.02	1319.02	1319.02	1319.02
9.9500	1319.02	1319.02	1319.02	1319.02	1319.02
10.2000	1319.03	1319.03	1319.03	1319.03	1319.03
10.4500	1319.03	1319.03	1319.04	1319.04	1319.04
10.7000	1319.04	1319.04	1319.04	1319.05	1319.05
10.9500	1319.05	1319.05	1319.06	1319.06	1319.06
11.2000	1319.07	1319.07	1319.07	1319.08	1319.08
11.4500	1319.09	1319.09	1319.10	1319.11	1319.12
11.7000	1319.13	1319.15	1319.19	1319.23	1319.30
11.9500	1319.39	1319.50	1319.77	1320.01	1320.29
12.2000	1320.42	1320.43	1320.37	1320.28	1320.18
12.4500	1320.08	1319.99	1319.94	1319.89	1319.85
12.7000	1319.80	1319.76	1319.73	1319.69	1319.66
12.9500	1319.64	1319.61	1319.59	1319.57	1319.56
13.2000	1319.54	1319.53	1319.51	1319.50	1319.50
13.4500	1319.49	1319.49	1319.48	1319.48	1319.47
13.7000	1319.47	1319.46	1319.46	1319.45	1319.45
13.9500	1319.44	1319.44	1319.43	1319.43	1319.42
14.2000	1319.41	1319.41	1319.40	1319.40	1319.39
14.4500	1319.39	1319.38	1319.38	1319.37	1319.37
14.7000	1319.37	1319.36	1319.36	1319.35	1319.35
14.9500	1319.34	1319.34	1319.34	1319.33	1319.33
15.2000	1319.32	1319.32	1319.32	1319.31	1319.31
15.4500	1319.30	1319.30	1319.30	1319.29	1319.29
15.7000	1319.29	1319.28	1319.28	1319.28	1319.27
15.9500	1319.27	1319.27	1319.26	1319.26	1319.26
16.2000	1319.25	1319.25	1319.25	1319.24	1319.24
16.4500	1319.24	1319.24	1319.23	1319.23	1319.23
16.7000	1319.23	1319.22	1319.22	1319.22	1319.22
16.9500	1319.21	1319.21	1319.21	1319.21	1319.20
17.2000	1319.20	1319.20	1319.20	1319.20	1319.19
17.4500	1319.19	1319.19	1319.19	1319.19	1319.19
17.7000	1319.18	1319.18	1319.18	1319.18	1319.18
17.9500	1319.17	1319.17	1319.17	1319.17	1319.17
18.2000	1319.17	1319.17	1319.16	1319.16	1319.16
18.4500	1319.16	1319.16	1319.16	1319.16	1319.15
18.7000	1319.15	1319.15	1319.15	1319.15	1319.15

TIME vs. ELEVATION (ft)

Output Time increment = .0500 hrs
 Time on left represents time for first value in each row.

Time hrs					
18.9500	1319.15	1319.15	1319.14	1319.14	1319.14
19.2000	1319.14	1319.14	1319.14	1319.14	1319.14
19.4500	1319.13	1319.13	1319.13	1319.13	1319.13
19.7000	1319.13	1319.13	1319.13	1319.13	1319.12
19.9500	1319.12	1319.12	1319.12	1319.12	1319.12
20.2000	1319.12	1319.12	1319.12	1319.12	1319.11
20.4500	1319.11	1319.11	1319.11	1319.11	1319.11
20.7000	1319.11	1319.11	1319.11	1319.11	1319.11
20.9500	1319.11	1319.11	1319.10	1319.10	1319.10
21.2000	1319.10	1319.10	1319.10	1319.10	1319.10
21.4500	1319.10	1319.10	1319.10	1319.10	1319.10
21.7000	1319.10	1319.10	1319.10	1319.10	1319.09
21.9500	1319.09	1319.09	1319.09	1319.09	1319.09
22.2000	1319.09	1319.09	1319.09	1319.09	1319.09
22.4500	1319.09	1319.09	1319.09	1319.09	1319.09
22.7000	1319.09	1319.09	1319.09	1319.09	1319.09
22.9500	1319.09	1319.09	1319.09	1319.09	1319.09
23.2000	1319.08	1319.08	1319.08	1319.08	1319.08
23.4500	1319.08	1319.08	1319.08	1319.08	1319.08
23.7000	1319.08	1319.08	1319.08	1319.08	1319.08
23.9500	1319.08	1319.08	1319.08	1319.08	1319.08
24.2000	1319.08	1319.08	1319.07	1319.07	1319.07
24.4500	1319.07	1319.07	1319.07	1319.06	1319.06
24.7000	1319.06	1319.06	1319.06	1319.06	1319.05
24.9500	1319.05	1319.05	1319.05	1319.05	1319.05
25.2000	1319.05	1319.04	1319.04	1319.04	1319.04
25.4500	1319.04	1319.04	1319.04	1319.04	1319.04
25.7000	1319.03	1319.03	1319.03	1319.03	1319.03
25.9500	1319.03	1319.03	1319.03	1319.03	1319.03
26.2000	1319.03	1319.03	1319.02	1319.02	1319.02
26.4500	1319.02	1319.02	1319.02	1319.02	1319.02
26.7000	1319.02	1319.02	1319.02	1319.02	1319.02
26.9500	1319.02	1319.02	1319.02	1319.02	1319.02
27.2000	1319.02	1319.01	1319.01	1319.01	1319.01
27.4500	1319.01	1319.01	1319.01	1319.01	1319.01
27.7000	1319.01	1319.01	1319.01	1319.01	1319.01
27.9500	1319.01	1319.01	1319.01	1319.01	1319.01
28.2000	1319.01	1319.01	1319.01	1319.01	1319.01
28.4500	1319.01	1319.01	1319.01	1319.01	1319.01
28.7000	1319.01	1319.01	1319.01	1319.01	1319.01
28.9500	1319.01	1319.01	1319.01	1319.01	1319.01
29.2000	1319.01	1319.01	1319.00	1319.00	1319.00
29.4500	1319.00	1319.00	1319.00	1319.00	1319.00
29.7000	1319.00	1319.00	1319.00	1319.00	1319.00
29.9500	1319.00	1319.00			

TIME vs. ELEVATION (ft)

Time hrs	Output Time increment = .0500 hrs				
	Time on left represents time for first value in each row.				
6.4500	1319.00	1319.00	1319.00	1319.00	1319.00
6.7000	1319.00	1319.00	1319.00	1319.00	1319.00
6.9500	1319.00	1319.00	1319.00	1319.00	1319.00
7.2000	1319.00	1319.00	1319.00	1319.00	1319.00
7.4500	1319.00	1319.00	1319.01	1319.01	1319.01
7.7000	1319.01	1319.01	1319.01	1319.01	1319.01
7.9500	1319.01	1319.01	1319.01	1319.01	1319.01
8.2000	1319.01	1319.01	1319.01	1319.01	1319.01
8.4500	1319.01	1319.02	1319.02	1319.02	1319.02
8.7000	1319.02	1319.02	1319.02	1319.02	1319.02
8.9500	1319.02	1319.02	1319.03	1319.03	1319.03
9.2000	1319.03	1319.03	1319.03	1319.03	1319.03
9.4500	1319.04	1319.04	1319.04	1319.04	1319.04
9.7000	1319.04	1319.04	1319.05	1319.05	1319.05
9.9500	1319.05	1319.05	1319.05	1319.06	1319.06
10.2000	1319.06	1319.06	1319.06	1319.07	1319.07
10.4500	1319.07	1319.07	1319.08	1319.08	1319.08
10.7000	1319.09	1319.09	1319.09	1319.10	1319.10
10.9500	1319.10	1319.11	1319.11	1319.12	1319.12
11.2000	1319.13	1319.13	1319.14	1319.15	1319.15
11.4500	1319.16	1319.17	1319.18	1319.19	1319.21
11.7000	1319.23	1319.27	1319.32	1319.38	1319.48
11.9500	1319.76	1320.18	1320.73	1321.13	1321.36
12.2000	1321.45	1321.43	1321.33	1321.19	1321.04
12.4500	1320.86	1320.69	1320.52	1320.35	1320.20
12.7000	1320.07	1319.98	1319.92	1319.87	1319.83
12.9500	1319.79	1319.76	1319.72	1319.70	1319.67
13.2000	1319.65	1319.63	1319.61	1319.59	1319.58
13.4500	1319.56	1319.55	1319.54	1319.53	1319.52
13.7000	1319.51	1319.50	1319.50	1319.49	1319.49
13.9500	1319.49	1319.48	1319.48	1319.47	1319.47
14.2000	1319.47	1319.46	1319.46	1319.45	1319.45
14.4500	1319.44	1319.44	1319.44	1319.43	1319.43
14.7000	1319.42	1319.42	1319.42	1319.41	1319.41
14.9500	1319.40	1319.40	1319.40	1319.39	1319.39
15.2000	1319.38	1319.38	1319.38	1319.37	1319.37
15.4500	1319.37	1319.36	1319.36	1319.36	1319.35
15.7000	1319.35	1319.35	1319.34	1319.34	1319.33
15.9500	1319.33	1319.33	1319.32	1319.32	1319.32
16.2000	1319.31	1319.31	1319.31	1319.30	1319.30
16.4500	1319.30	1319.30	1319.29	1319.29	1319.29
16.7000	1319.28	1319.28	1319.28	1319.28	1319.27
16.9500	1319.27	1319.27	1319.27	1319.26	1319.26
17.2000	1319.26	1319.26	1319.25	1319.25	1319.25
17.4500	1319.25	1319.24	1319.24	1319.24	1319.24

TIME vs. ELEVATION (ft)

Time hrs	Output Time increment = .0500 hrs				
	Time on left represents time for first value in each row.				
17.7000	1319.24	1319.23	1319.23	1319.23	1319.23
17.9500	1319.23	1319.22	1319.22	1319.22	1319.22
18.2000	1319.22	1319.22	1319.21	1319.21	1319.21
18.4500	1319.21	1319.21	1319.21	1319.20	1319.20
18.7000	1319.20	1319.20	1319.20	1319.20	1319.19
18.9500	1319.19	1319.19	1319.19	1319.19	1319.19
19.2000	1319.19	1319.18	1319.18	1319.18	1319.18
19.4500	1319.18	1319.18	1319.18	1319.17	1319.17
19.7000	1319.17	1319.17	1319.17	1319.17	1319.17
19.9500	1319.16	1319.16	1319.16	1319.16	1319.16
20.2000	1319.16	1319.16	1319.16	1319.15	1319.15
20.4500	1319.15	1319.15	1319.15	1319.15	1319.15
20.7000	1319.15	1319.15	1319.14	1319.14	1319.14
20.9500	1319.14	1319.14	1319.14	1319.14	1319.14
21.2000	1319.14	1319.14	1319.14	1319.13	1319.13
21.4500	1319.13	1319.13	1319.13	1319.13	1319.13
21.7000	1319.13	1319.13	1319.13	1319.13	1319.13
21.9500	1319.13	1319.13	1319.13	1319.12	1319.12
22.2000	1319.12	1319.12	1319.12	1319.12	1319.12
22.4500	1319.12	1319.12	1319.12	1319.12	1319.12
22.7000	1319.12	1319.12	1319.12	1319.12	1319.12
22.9500	1319.12	1319.12	1319.12	1319.12	1319.11
23.2000	1319.11	1319.11	1319.11	1319.11	1319.11
23.4500	1319.11	1319.11	1319.11	1319.11	1319.11
23.7000	1319.11	1319.11	1319.11	1319.11	1319.11
23.9500	1319.11	1319.11	1319.11	1319.11	1319.11
24.2000	1319.10	1319.10	1319.10	1319.10	1319.10
24.4500	1319.09	1319.09	1319.09	1319.09	1319.08
24.7000	1319.08	1319.08	1319.08	1319.07	1319.07
24.9500	1319.07	1319.07	1319.07	1319.06	1319.06
25.2000	1319.06	1319.06	1319.06	1319.06	1319.05
25.4500	1319.05	1319.05	1319.05	1319.05	1319.05
25.7000	1319.05	1319.04	1319.04	1319.04	1319.04
25.9500	1319.04	1319.04	1319.04	1319.04	1319.04
26.2000	1319.03	1319.03	1319.03	1319.03	1319.03
26.4500	1319.03	1319.03	1319.03	1319.03	1319.03
26.7000	1319.03	1319.03	1319.03	1319.02	1319.02
26.9500	1319.02	1319.02	1319.02	1319.02	1319.02
27.2000	1319.02	1319.02	1319.02	1319.02	1319.02
27.4500	1319.02	1319.02	1319.02	1319.02	1319.02
27.7000	1319.02	1319.01	1319.01	1319.01	1319.01
27.9500	1319.01	1319.01	1319.01	1319.01	1319.01
28.2000	1319.01	1319.01	1319.01	1319.01	1319.01
28.4500	1319.01	1319.01	1319.01	1319.01	1319.01
28.7000	1319.01	1319.01	1319.01	1319.01	1319.01
28.9500	1319.01	1319.01	1319.01	1319.01	1319.01

Type.... Time-Elev Page 3.05
 Name.... SWALE OUT Tag: 5y24h Event: 5 yr
 File.... F:\HYDRO\PROJECTS\SLATE CREEK ADDITION\PONDPACK\SLATE_REVISDTK5-24-06.PPW
 Storm... TypeII 24hr Tag: 5y24h

TIME vs. ELEVATION (ft)

Time hrs	Output Time increment = .0500 hrs				
	Time on left represents time for first value in each row.				
29.2000	1319.01	1319.01	1319.01	1319.01	1319.01
29.4500	1319.01	1319.01	1319.01	1319.01	1319.01
29.7000	1319.01	1319.01	1319.01	1319.00	1319.00
29.9500	1319.00	1319.00	1319.00	1319.00	1319.00
30.2000	1319.00	1319.00	1319.00	1319.00	1319.00
30.4500	1319.00	1319.00	1319.00		

TIME vs. ELEVATION (ft)

Time hrs	Output Time increment = .0500 hrs				
	Time on left represents time for first value in each row.				
4.2000	1319.00	1319.00	1319.00	1319.00	1319.00
4.4500	1319.00	1319.00	1319.00	1319.00	1319.00
4.7000	1319.00	1319.00	1319.00	1319.00	1319.00
4.9500	1319.00	1319.01	1319.01	1319.01	1319.01
5.2000	1319.01	1319.01	1319.01	1319.01	1319.01
5.4500	1319.01	1319.01	1319.01	1319.01	1319.01
5.7000	1319.02	1319.02	1319.02	1319.02	1319.02
5.9500	1319.02	1319.02	1319.02	1319.02	1319.02
6.2000	1319.03	1319.03	1319.03	1319.03	1319.03
6.4500	1319.03	1319.03	1319.03	1319.04	1319.04
6.7000	1319.04	1319.04	1319.04	1319.04	1319.04
6.9500	1319.05	1319.05	1319.05	1319.05	1319.05
7.2000	1319.05	1319.05	1319.06	1319.06	1319.06
7.4500	1319.06	1319.06	1319.06	1319.07	1319.07
7.7000	1319.07	1319.07	1319.07	1319.07	1319.08
7.9500	1319.08	1319.08	1319.08	1319.08	1319.09
8.2000	1319.09	1319.09	1319.09	1319.09	1319.10
8.4500	1319.10	1319.10	1319.10	1319.10	1319.11
8.7000	1319.11	1319.11	1319.12	1319.12	1319.12
8.9500	1319.12	1319.13	1319.13	1319.13	1319.14
9.2000	1319.14	1319.14	1319.15	1319.15	1319.16
9.4500	1319.16	1319.16	1319.17	1319.17	1319.17
9.7000	1319.18	1319.18	1319.18	1319.19	1319.19
9.9500	1319.20	1319.20	1319.20	1319.21	1319.21
10.2000	1319.22	1319.22	1319.23	1319.23	1319.24
10.4500	1319.25	1319.25	1319.26	1319.27	1319.27
10.7000	1319.28	1319.29	1319.30	1319.31	1319.32
10.9500	1319.33	1319.34	1319.35	1319.36	1319.37
11.2000	1319.39	1319.40	1319.41	1319.43	1319.45
11.4500	1319.47	1319.49	1319.52	1319.58	1319.66
11.7000	1319.76	1319.91	1320.21	1320.69	1321.25
11.9500	1321.92	1322.61	1323.16	1323.47	1323.54
12.2000	1323.45	1323.27	1323.07	1322.88	1322.69
12.4500	1322.52	1322.35	1322.17	1321.98	1321.77
12.7000	1321.57	1321.36	1321.15	1320.96	1320.77
12.9500	1320.60	1320.45	1320.30	1320.18	1320.08
13.2000	1320.00	1319.95	1319.92	1319.89	1319.86
13.4500	1319.83	1319.80	1319.78	1319.76	1319.74
13.7000	1319.72	1319.71	1319.69	1319.68	1319.67
13.9500	1319.65	1319.64	1319.63	1319.62	1319.61
14.2000	1319.60	1319.59	1319.59	1319.58	1319.57
14.4500	1319.57	1319.56	1319.56	1319.55	1319.55
14.7000	1319.54	1319.54	1319.53	1319.53	1319.53
14.9500	1319.52	1319.52	1319.52	1319.52	1319.51
15.2000	1319.51	1319.51	1319.50	1319.50	1319.50

TIME vs. ELEVATION (ft)

Time hrs	Output Time increment = .0500 hrs				
	Time on left represents time for first value in each row.				
15.4500	1319.50	1319.50	1319.50	1319.49	1319.49
15.7000	1319.49	1319.49	1319.49	1319.48	1319.48
15.9500	1319.48	1319.48	1319.48	1319.47	1319.47
16.2000	1319.47	1319.46	1319.46	1319.46	1319.46
16.4500	1319.45	1319.45	1319.45	1319.45	1319.44
16.7000	1319.44	1319.44	1319.44	1319.43	1319.43
16.9500	1319.43	1319.43	1319.42	1319.42	1319.42
17.2000	1319.42	1319.41	1319.41	1319.41	1319.41
17.4500	1319.40	1319.40	1319.40	1319.40	1319.39
17.7000	1319.39	1319.39	1319.39	1319.39	1319.38
17.9500	1319.38	1319.38	1319.38	1319.37	1319.37
18.2000	1319.37	1319.37	1319.36	1319.36	1319.36
18.4500	1319.36	1319.36	1319.35	1319.35	1319.35
18.7000	1319.35	1319.35	1319.34	1319.34	1319.34
18.9500	1319.34	1319.33	1319.33	1319.33	1319.33
19.2000	1319.33	1319.32	1319.32	1319.32	1319.32
19.4500	1319.32	1319.31	1319.31	1319.31	1319.31
19.7000	1319.30	1319.30	1319.30	1319.30	1319.30
19.9500	1319.29	1319.29	1319.29	1319.29	1319.29
20.2000	1319.28	1319.28	1319.28	1319.28	1319.28
20.4500	1319.27	1319.27	1319.27	1319.27	1319.27
20.7000	1319.27	1319.26	1319.26	1319.26	1319.26
20.9500	1319.26	1319.26	1319.25	1319.25	1319.25
21.2000	1319.25	1319.25	1319.25	1319.25	1319.25
21.4500	1319.24	1319.24	1319.24	1319.24	1319.24
21.7000	1319.24	1319.24	1319.24	1319.23	1319.23
21.9500	1319.23	1319.23	1319.23	1319.23	1319.23
22.2000	1319.23	1319.23	1319.23	1319.22	1319.22
22.4500	1319.22	1319.22	1319.22	1319.22	1319.22
22.7000	1319.22	1319.22	1319.22	1319.22	1319.22
22.9500	1319.22	1319.21	1319.21	1319.21	1319.21
23.2000	1319.21	1319.21	1319.21	1319.21	1319.21
23.4500	1319.21	1319.21	1319.21	1319.21	1319.21
23.7000	1319.20	1319.20	1319.20	1319.20	1319.20
23.9500	1319.20	1319.20	1319.20	1319.20	1319.20
24.2000	1319.19	1319.19	1319.19	1319.18	1319.18
24.4500	1319.17	1319.17	1319.16	1319.16	1319.15
24.7000	1319.15	1319.15	1319.14	1319.14	1319.13
24.9500	1319.13	1319.13	1319.12	1319.12	1319.12
25.2000	1319.11	1319.11	1319.11	1319.10	1319.10
25.4500	1319.10	1319.10	1319.09	1319.09	1319.09
25.7000	1319.09	1319.08	1319.08	1319.08	1319.08
25.9500	1319.07	1319.07	1319.07	1319.07	1319.07
26.2000	1319.06	1319.06	1319.06	1319.06	1319.06
26.4500	1319.06	1319.05	1319.05	1319.05	1319.05
26.7000	1319.05	1319.05	1319.05	1319.04	1319.04

TIME vs. ELEVATION (ft)

Time hrs	Output Time increment = .0500 hrs				
	Time on left represents time for first value in each row.				
26.9500	1319.04	1319.04	1319.04	1319.04	1319.04
27.2000	1319.04	1319.04	1319.04	1319.03	1319.03
27.4500	1319.03	1319.03	1319.03	1319.03	1319.03
27.7000	1319.03	1319.03	1319.03	1319.03	1319.03
27.9500	1319.02	1319.02	1319.02	1319.02	1319.02
28.2000	1319.02	1319.02	1319.02	1319.02	1319.02
28.4500	1319.02	1319.02	1319.02	1319.02	1319.02
28.7000	1319.02	1319.02	1319.02	1319.01	1319.01
28.9500	1319.01	1319.01	1319.01	1319.01	1319.01
29.2000	1319.01	1319.01	1319.01	1319.01	1319.01
29.4500	1319.01	1319.01	1319.01	1319.01	1319.01
29.7000	1319.01	1319.01	1319.01	1319.01	1319.01
29.9500	1319.01	1319.01	1319.01	1319.01	1319.01
30.2000	1319.01	1319.01	1319.01	1319.01	1319.01
30.4500	1319.01	1319.01	1319.01	1319.01	1319.01
30.7000	1319.01	1319.01	1319.01	1319.01	1319.01
30.9500	1319.00	1319.00	1319.00	1319.00	1319.00
31.2000	1319.00	1319.00	1319.00	1319.00	1319.00
31.4500	1319.00	1319.00	1319.00	1319.00	1319.00

File.... F:\HYDRO\PROJECTS\SLATE CREEK ADDITION\PONDPACK\SLATE_REVISED\TK5-24-06.PPW

Elevation (ft)	Planimeter (sq.in)	Area (acres)	A1+A2+sq(r(A1*A2)) (acres)	Volume (ac-ft)	Volume Sum (ac-ft)
1319.00	-----	.2000	.0000	.000	.000
1320.00	-----	.0300	.3075	.102	.102
1321.00	-----	.0400	.1046	.035	.137
1322.00	-----	.0500	.1347	.045	.182
1323.00	-----	.0600	.1648	.055	.237
1324.00	-----	.0700	.1948	.065	.302

POND VOLUME EQUATIONS

* Incremental volume computed by the Conic Method for Reservoir Volumes.

$$\text{Volume} = (1/3) * (\text{EL2}-\text{EL1}) * (\text{Area1} + \text{Area2} + \text{sq.rt.}(\text{Area1}*\text{Area2}))$$

where: EL1, EL2 = Lower and upper elevations of the increment
 Area1, Area2 = Areas computed for EL1, EL2, respectively
 Volume = Incremental volume between EL1 and EL2

REQUESTED POND WS ELEVATIONS:

Min. Elev.= 1319.00 ft
Increment = .50 ft
Max. Elev.= 1324.00 ft

OUTLET CONNECTIVITY

---> Forward Flow Only (UpStream to DnStream)
<--- Reverse Flow Only (DnStream to UpStream)
<---> Forward and Reverse Both Allowed

Structure	No.		Outfall	E1, ft	E2, ft
-----	----		-----	-----	-----
Culvert-Circular	cv	--->	TW	1319.000	1324.000
Weir-Rectangular	wr	--->	TW	1322.500	1324.000
TW SETUP, DS Channel					

OUTLET STRUCTURE INPUT DATA

Structure ID = cv
Structure Type = Culvert-Circular

No. Barrels = 1
Barrel Diameter = .8330 ft
Upstream Invert = 1319.00 ft
Dnstream Invert = 1319.00 ft
Horiz. Length = 20.00 ft
Barrel Length = 20.00 ft
Barrel Slope = .00000 ft/ft

OUTLET CONTROL DATA...

Mannings n = .0130
Ke = .5000 (forward entrance loss)
Kb = .039901 (per ft of full flow)
Kr = .5000 (reverse entrance loss)
HW Convergence = .001 +/- ft

INLET CONTROL DATA...

Equation form = 1
Inlet Control K = .0098
Inlet Control M = 2.0000
Inlet Control c = .03980
Inlet Control Y = .6700
T1 ratio (HW/D) = 1.160
T2 ratio (HW/D) = 1.307
Slope Factor = -.500

Use unsubmerged inlet control Form 1 equ. below T1 elev.
Use submerged inlet control Form 1 equ. above T2 elev.

In transition zone between unsubmerged and submerged inlet control,
interpolate between flows at T1 & T2...

At T1 Elev = 1319.97 ft ---> Flow = 1.74 cfs
At T2 Elev = 1320.09 ft ---> Flow = 1.99 cfs

Type.... Outlet Input Data
Name.... V-NOTCH

Page 5.03

File.... F:\HYDRO\PROJECTS\SLATE CREEK ADDITION\PONDPACK\SLATE_REVISEDTK5-24-06.PPW

OUTLET STRUCTURE INPUT DATA

Structure ID = wr
Structure Type = Weir-Rectangular

of Openings = 1
Crest Elev. = 1322.50 ft
Weir Length = 2.00 ft
Weir Coeff. = 2.600000

Weir TW effects (Use adjustment equation)

Structure ID = TW
Structure Type = TW SETUP, DS Channel

FREE OUTFALL CONDITIONS SPECIFIED

CONVERGENCE TOLERANCES...
Maximum Iterations= 30
Min. TW tolerance = .01 ft
Max. TW tolerance = .01 ft
Min. HW tolerance = .01 ft
Max. HW tolerance = .01 ft
Min. Q tolerance = .10 cfs
Max. Q tolerance = .10 cfs

Index of Starting Page Numbers for ID Names

----- S -----

Sedgwick24... 2.01, 2.02

SWALE... 4.01

SWALE OUT 2y24h... 3.01,
3.03, 3.06

----- V -----

V-NOTCH... 5.01

----- W -----

Watershed... 1.01



TRANSMITTAL

TO: Scott Lindebak	FROM: Trevor Kurth
COMPANY: City of Wichita	DATE: 5-22-06
ADDRESS: 7 th Floor City Hall	PROJECT: Slate Creek
CITY/STATE: Wichita, KS	PROJECT NUMBER:

RE:
Slate Creek Addition

VIA: DELIVERY

We are sending you ATTACHED UNDER SEPARATE COVER

PLANS PRINTS SHOP DRAWINGS SAMPLES SPECS
 COPY OF LETTER CHANGE ORDER DISK OTHER

COPIES	DATE	DESCRIPTION
2	5-22-06	Slate Creek Addition

URGENT FOR APPROVAL FOR YOUR INFO FOR REVIEW & COMMENT

APPROVED, AS NOTED REVISE AS NOTED REVISE AND RETURN

AS REQUESTED PLEASE REPLY FOR BIDS DUE

NOTES/ COMMENTS:

SIGNED: _____

Trevor R. Kurth, I.E.

Copy: file

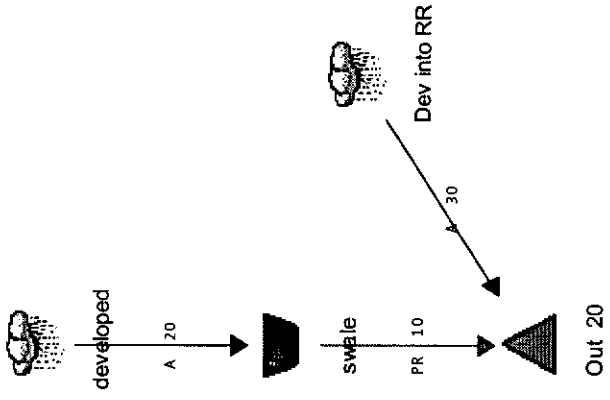
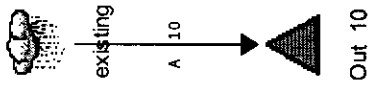
ENGINEERING
SURVEYING
PLANNING
LANDSCAPE
ARCHITECTURE

B a u g h m a n
C o m p a n y , P . A .
315 Ellis Street
Wichita, Kansas 67203
P 316.262.7271
F 316.262.0149

CLOSURE

CLOSURE - SLATE CREEK ADDITION

PT 01	North: 6184.2457	East :	12066.0043
Line	Course: S 00-00-14 W	Length:	254.9800
PT 02	North: 5929.2657	East :	12065.9870
Line	Course: S 44-45-44 W	Length:	35.5000
PT 03	North: 5904.0595	East :	12040.9891
Line	Course: S 89-31-13 W	Length:	178.8300
PT 04	North: 5902.5622	East :	11862.1654
Line	Course: N 39-35-27 W	Length:	202.0600
PT 05	North: 6058.2727	East :	11733.3924
Line	Course: S 50-55-38 W	Length:	24.8600
PT 06	North: 6042.6033	East :	11714.0924
Line	Course: S 39-33-24 E	Length:	181.9900
PT 07	North: 5902.2899	East :	11829.9911
Line	Course: S 89-31-13 W	Length:	64.4100
PT 08	North: 5901.7506	East :	11765.5834
Line	Course: N 39-33-24 W	Length:	360.6900
PT 09	North: 6179.8408	East :	11535.8812
Line	Course: N 89-31-26 E	Length:	530.1400
PT 01	North: 6184.2461	East :	12066.0029



Type... Pond Routed HYG (total out) Page 5.01
 Name... SWALE OUT Tag: 100y24 Event: 100 yr
 File... F:\HYDRO\PROJECTS\SLATE CREEK ADDITION\PONDPACK\SLATE.PPW
 Storm... TypeII 24hr Tag: 100y24

POND ROUTED TOTAL OUTFLOW HYG...

HYG file =
 HYG ID = SWALE OUT
 HYG Tag = 100y24

 Peak Discharge = 4.83 cfs
 Time to Peak = 12.1500 hrs
 HYG Volume = .550 ac-ft

HYDROGRAPH ORDINATES (cfs)
 Output Time increment = .0500 hrs
 Time on left represents time for first value in each row.

Time hrs					
4.2500	.00	.00	.00	.00	.00
4.5000	.00	.00	.00	.00	.01
4.7500	.01	.01	.01	.01	.01
5.0000	.01	.01	.01	.01	.01
5.2500	.01	.02	.02	.02	.02
5.5000	.02	.02	.02	.02	.02
5.7500	.02	.02	.02	.03	.03
6.0000	.03	.03	.03	.03	.03
6.2500	.03	.03	.03	.04	.04
6.5000	.04	.04	.04	.04	.04
6.7500	.04	.04	.05	.05	.05
7.0000	.05	.05	.05	.05	.05
7.2500	.05	.05	.06	.06	.06
7.5000	.06	.06	.06	.06	.06
7.7500	.06	.07	.07	.07	.07
8.0000	.07	.07	.07	.07	.08
8.2500	.08	.08	.08	.08	.09
8.5000	.09	.09	.09	.10	.10
8.7500	.10	.10	.11	.11	.11
9.0000	.12	.12	.12	.13	.13
9.2500	.13	.13	.14	.14	.14
9.5000	.14	.14	.15	.15	.15
9.7500	.15	.15	.16	.16	.17
10.0000	.17	.17	.18	.18	.19
10.2500	.20	.20	.21	.22	.22
10.5000	.23	.24	.25	.26	.26
10.7500	.27	.29	.30	.31	.32
11.0000	.33	.35	.36	.38	.39
11.2500	.41	.44	.46	.50	.53
11.5000	.57	.61	.67	.79	.99
11.7500	1.31	1.56	1.90	2.27	2.63
12.0000	2.95	3.22	4.13	4.83	4.82
12.2500	4.41	3.84	3.29	3.21	3.13

HYDROGRAPH ORDINATES (cfs)						
Time hrs	Output Time increment = .0500 hrs					
	Time on left represents time for first value in each row.					
12.5000	3.02	2.90	2.77	2.62	2.45	
12.7500	2.26	2.05	1.83	1.58	1.37	
13.0000	1.11	.89	.76	.67	.61	
13.2500	.56	.53	.51	.49	.47	
13.5000	.46	.45	.44	.43	.42	
13.7500	.41	.40	.39	.38	.37	
14.0000	.36	.36	.35	.34	.33	
14.2500	.32	.32	.31	.31	.30	
14.5000	.30	.30	.29	.29	.29	
14.7500	.28	.28	.28	.27	.27	
15.0000	.27	.27	.26	.26	.26	
15.2500	.25	.25	.25	.25	.24	
15.5000	.24	.24	.23	.23	.23	
15.7500	.23	.22	.22	.22	.21	
16.0000	.21	.21	.21	.20	.20	
16.2500	.20	.20	.19	.19	.19	
16.5000	.19	.19	.19	.19	.18	
16.7500	.18	.18	.18	.18	.18	
17.0000	.18	.18	.18	.17	.17	
17.2500	.17	.17	.17	.17	.17	
17.5000	.17	.17	.17	.16	.16	
17.7500	.16	.16	.16	.16	.16	
18.0000	.16	.16	.16	.15	.15	
18.2500	.15	.15	.15	.15	.15	
18.5000	.15	.15	.15	.14	.14	
18.7500	.14	.14	.14	.14	.14	
19.0000	.14	.14	.13	.13	.13	
19.2500	.13	.13	.13	.13	.13	
19.5000	.13	.13	.12	.12	.12	
19.7500	.12	.12	.12	.12	.12	
20.0000	.12	.11	.11	.11	.11	
20.2500	.11	.11	.11	.11	.11	
20.5000	.11	.11	.11	.11	.11	
20.7500	.11	.11	.11	.11	.11	
21.0000	.11	.11	.11	.11	.11	
21.2500	.11	.10	.10	.10	.10	
21.5000	.10	.10	.10	.10	.10	
21.7500	.10	.10	.10	.10	.10	
22.0000	.10	.10	.10	.10	.10	
22.2500	.10	.10	.10	.10	.10	
22.5000	.10	.10	.10	.10	.10	
22.7500	.10	.10	.10	.10	.10	
23.0000	.10	.10	.10	.10	.10	
23.2500	.10	.10	.10	.10	.10	
23.5000	.10	.10	.10	.10	.10	
23.7500	.09	.09	.09	.09	.09	
24.0000	.09	.09	.09	.08	.07	

Type.... Pond Routed HYG (total out)

Page 5.03

Name.... SWALE OUT Tag: 100y24

Event: 100 yr

File.... F:\HYDRO\PROJECTS\SLATE CREEK ADDITION\PONDPACK\SLATE.PPW

Storm... TypeII 24hr Tag: 100y24

HYDROGRAPH ORDINATES (cfs)
Output Time increment = .0500 hrs
Time on left represents time for first value in each row.

Time hrs					
24.2500	.06	.05	.04	.03	.02
24.5000	.02	.01	.01	.01	.00
24.7500	.00	.00			