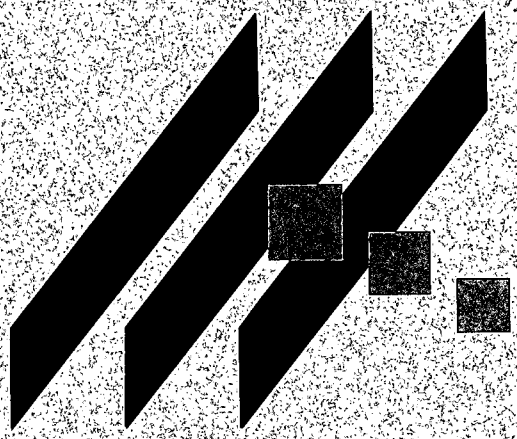
MKEC ENGINEERING CONSULTANTS, INC.



DRAINAGE REPORT

FOR

REED COMMERCIAL ADDITION

APRIL 2002

411 N. WEBB ROAD • WICHITA, KS 67206 • 316.684.9600 • FAX 316.684.5100

Drainage Report for Reed Commercial Addition

Location

The site is located in Sedgwick County, Kansas, on the southeast corner of the 21st Street North and 127th Street East intersection, in the Northwest Quarter of Section 11, T27S, R2E. The dimensions are roughly 1070 feet east to west and 820 feet north to south. The total site area is approximately 20.0 acres.

Soils

According to the NRCS (SCS) Sedgwick County Soil Survey, the drainage watershed is in the Irwin Series (Ic: silty clay loam, 2-6 percent slopes, eroded), and the Rosehill Series (Rd: silty clay, 1-3 percent slopes). The Hydrological Soil Group (HSG) for both soils is "D".

Pre-developed Conditions

Current Development
The site is currently undeveloped agricultural land with a house and several related agricultural buildings in the Northwest corner of the site.

Current Landform and Slope
A pond exists to the east of the site on Fourmile Creek (see Appendix A). The majority of the runoff sheet flows across the site to the existing pond. The remainder of the runoff flows west into the ditch along 127th Street East. Local elevations vary from roughly 1385 feet in northwest corner of the site, to 1357 feet on the northeast corner. Slopes vary from 1.2% to 5.8% across the site.

Current Drainage Conditions
No portion of the site is included in a regulatory floodplain (FBFM Panel 150, Sedgwick County, June 3, 1986). The FBFM shows a flood insurance Zone A approximately 300 feet east of the site along Fourmile Creek, as shown in Appendix B.

Upstream of Site
The site is at the upstream end of the watershed; therefore no runoff enters from offsite.

Current Runoff Characteristics
The pre-developed site is divided into three different watersheds: N, W, and S (as seen on the drawing in Appendix C). The rational method was used to calculate discharge for the areas of concern. Pre-developed discharges are shown in Table 1. Percent impervious varies from 0% to 30% based on the current land use. The spreadsheet in Appendix D displays the area, runoff coefficient (c), time of concentration (t_c), and the flow rate (Q) for each watershed, for the 2, 5, 10, and 100-year events.

Table 1. Pre-developed runoff.

Watershed	2-Year (cfs)	5-Year (cfs)	10-Year (cfs)	100-Year (cfs)
N	5.0	6.8	10.1	20.4
S	9.8	14.2	23.0	56.9
W	2.3	3.4	5.5	13.3

Post-Developed Condition

Proposed Development
The site will be developed as a commercial addition consisting of five lots.

Proposed Landform and Slope
The proposed site will have surface slopes ranging from 1.2% to 4.0%. The ditch along the north side of the site and along the west side of the site will remain unchanged.

Proposed Runoff Characteristics
The pre-developed site is divided into the same three watersheds: N, W, and S (as seen on the drawing in Appendix C). The rational method was used to calculate discharge for the areas of concern. Percent impervious was approximated to be 85% for the commercial development. The spreadsheet in Appendix D displays the area, runoff coefficient (c), time of concentration (t_c), and the flow rate (Q) for each watershed, for the 2, 5, 10, and 100-year events. Post-developed discharges are shown in table 2.

Table 2. Post-developed runoff.

Watershed	2-Year (cfs)	5-Year (cfs)	10-Year (cfs)	100-Year (cfs)
N	11.5	14.1	16.9	25.6
S	38.6	47.2	56.8	86.0
W	8.9	10.8	13.0	19.7

Receiving Waters

Pre- and Post- developed conditions discharge to the pond on Fourmile Creek. The watershed area to the pond on Fourmile Creek is 830 acres. Existing flows through the pond are 1372 cfs. This is based on a 24-hour, 100-year storm, with runoff curve numbers of 81, and time of concentration ranging from 2.3 hours to 29 minutes for the sub-watersheds. The proposed time of concentration for the subject property will decrease from 29 minutes to 20 minutes. The runoff curve number will increase to 95 for proposed conditions. Analysis of the proposed conditions resulted in a flow through the pond of 1385 cfs. This is an increase of 0.9%. Hydrograph calculations for both the existing and proposed conditions are included in Appendix E.

The property to the east and south of the Reed Commercial Addition is expected to be developed as residential in the near future. Upgrades to the existing pond and some additional pond areas will be required to provide detention for this development. Preliminary analysis indicates that detention is available in these ponds to handle the additional 13 cfs produced by the Reed Commercial Addition and the additional runoff created by the surrounding residential development. The upgrades to the ponds should be implemented as part of the future residential development. The effect of the slight increase in runoff will be negligible until the remainder of the property is developed and the ponds are upgraded.

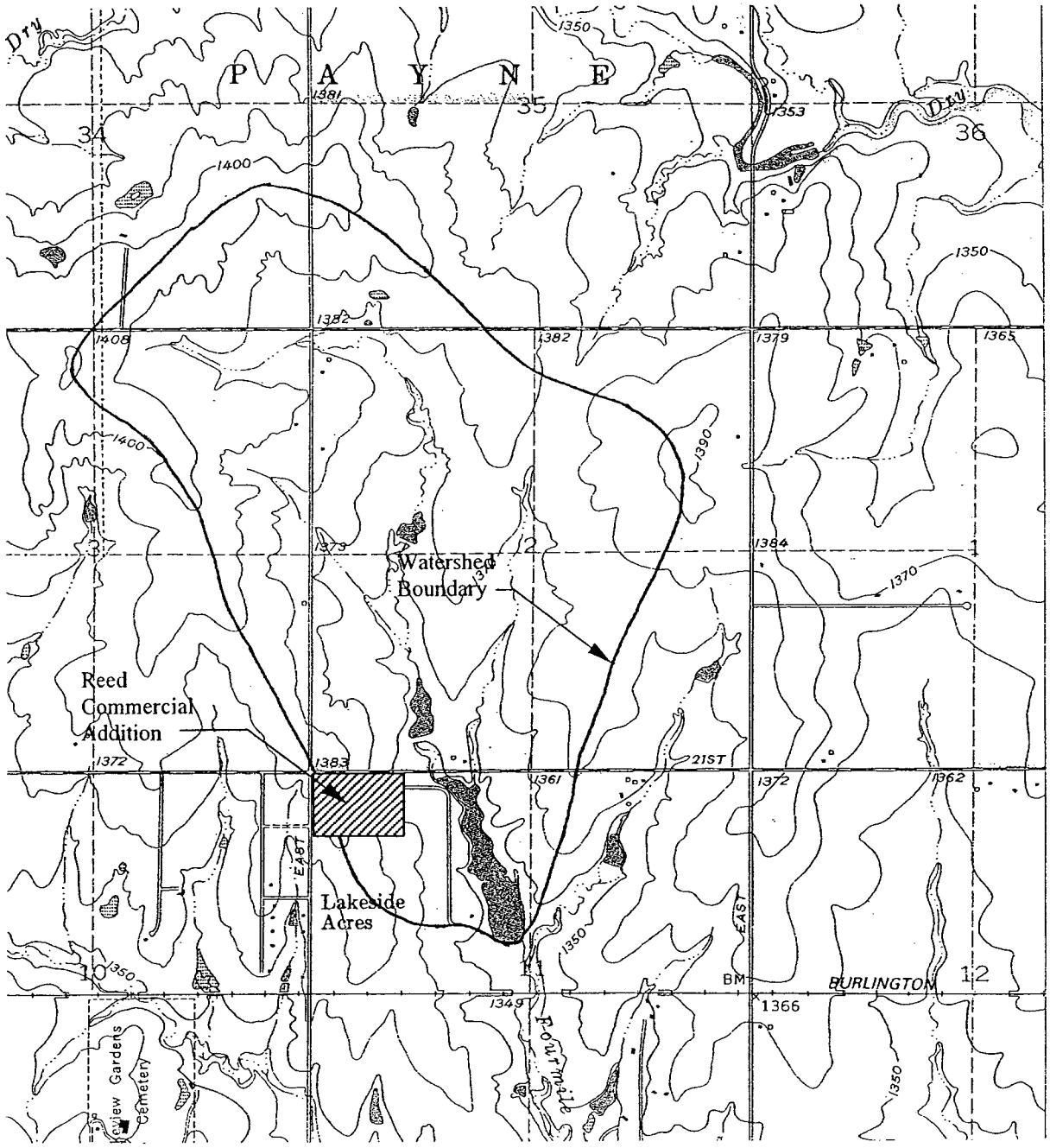
Summary

Development is proposed for all platted areas of this site. The site will be developed into 5 commercial lots known as the Reed Commercial Addition. The site will continue to discharge into the existing pond east of the site. Peak flow rates in the receiving waters will be increased by 0.9% by the additional runoff from this development. Adequate detention is available in the ponds, and should be provided when the areas adjacent to the subject property are developed and the ponds are upgraded. Watershed management may be necessary in the future as the watershed continues to develop, to ensure that peak flow rates in Fourmile Creek are controlled.

Appendix A

ANDOVER QUADRANGLE, Kansas

United States
Department of the Interior
Geological Survey
Co



SCALE 1:24 000

1 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

Appendix B

MKEC ENGINEERING CONSULTANTS, INC.
411 North Webb Road
Wichita, Kansas 67206
316-684-9600 FAX 316-684-5100

LETTER OF TRANSMITTAL

PROJECT: Kansas Veterans Cemetery
Ft. Dodge, Kansas
PROJECT NO: 00094-202

DATE: April 24, 2002

TO: Terry Traylor
Rhoads Construction Co., Inc.
P.O. Box 1633
Dodge City, KS 67801

We are sending you the following items:
__X__ Attached
_____ Under separate cover
__X__ Via Mail

__X__ Drawings _____ Specifications _____ Computer Disk(s)

_____ Maps _____ Petitions _____ Contract

COMMENTS: Enclosed are revised drawings of Road "A". These drawings, numbered C3.0B and C3.1B are to replace previous sheets C3.0A and C3.1A. Also included in this set is a new Curb Inlet Details Sheet C4.3B to replace the Original Contract Document Curb Inlet Detail Sheet. The noted difference of the curb inlet is the depth of the inlet throat.

____ For Your Approval __X__ As Requested

__X__ For Your Use _____ For Your Files

_____ Approved As Noted _____ For Review and Comment

REMARKS:

Signed: Jeff Mah
Jeff Mah, EIT

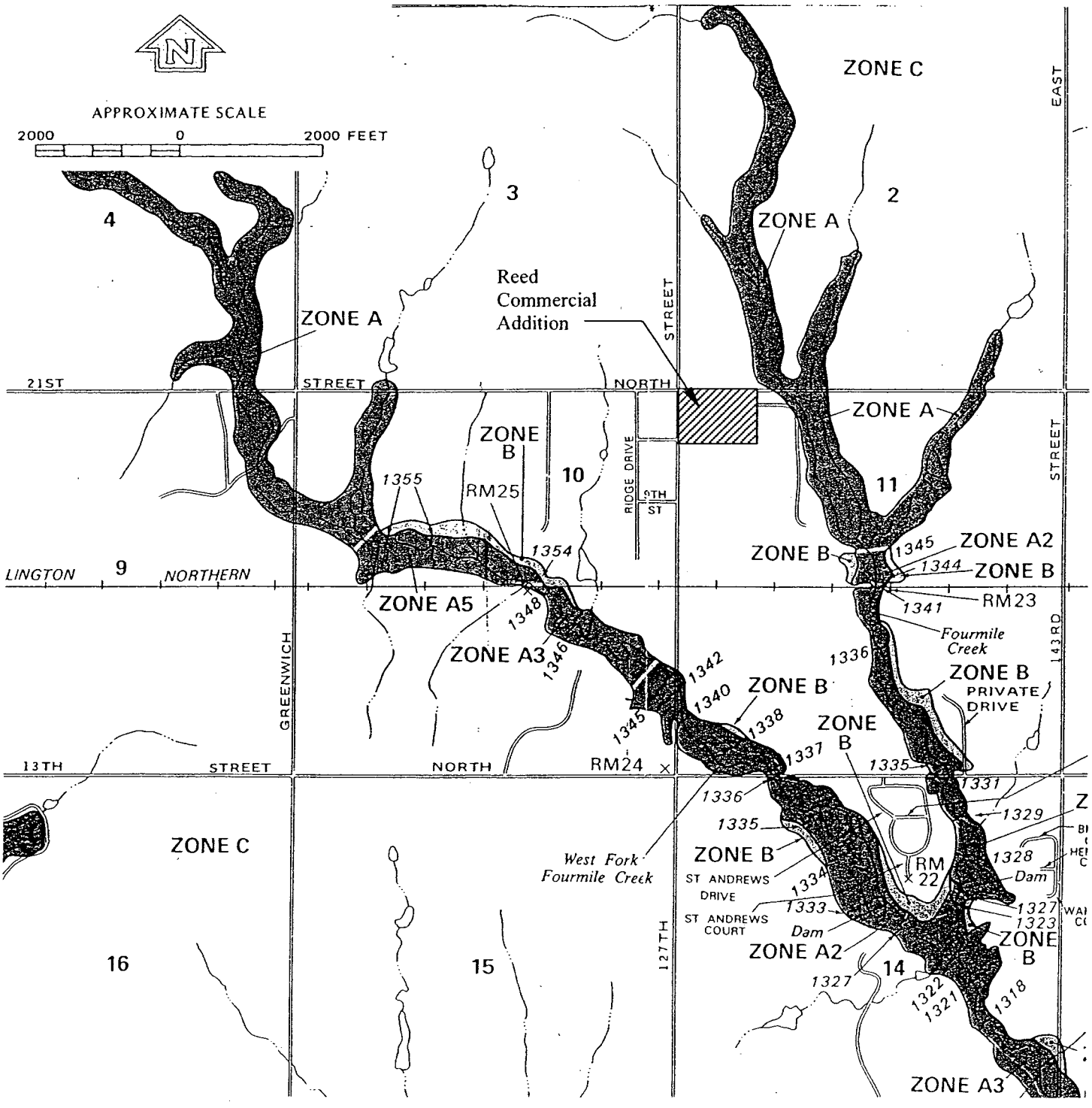
c: Kile Morrison
JM/dm

K:\WP\PROJECT\2000\00094\TR-Traylor@Rhoads.wpd

FIRM
Flood Insurance Rate Map
Federal Emergency Management Agency

Sedgwick County, Kansas (unincorperated areas)
Panel 150 of 300

Community Panel Number 200321 0150 A
Effective Date: June 3, 1986



Appendix C

9/14/01

DRAINAGE ANALYSIS SUMMARY
REED PROPERTY ADDITION

Irwin Silty Clay Loam - Soil Group D; Rosehill Silty Clay - Soil Group D — ***Soil Group D***

Area ID	Area ac	Accum. Area ac	C2	C5	C10	C100	Elev Max	Elev Min	Flow Length	Tc2 Calc	Avg V2	Tc5 Calc	Avg V5	Tc10 Calc	Avg V10	Tc100 Calc	vg V100	Tc2 min	Tc5 min	Tc10 min	Tc100 min	I2 in/hr	I5 in/hr	I10 in/hr	I100 in/hr	Q2 cfs	Q5 cfs	Q10 cfs	Q100 cfs
Pre-Developed Conditions																													
N	3.9		0.46	0.50	0.59	0.73	1385.00	1357.50	1100.00	28.15	0.65	26.39	0.69	22.43	0.82	16.28	1.13	28	26	22	16	2.78	3.50	4.40	7.18	4.99	6.83	10.12	20.44
S	13.1		0.30	0.35	0.45	0.65	1385.00	1360.00	1050.00	34.95	0.50	32.76	0.53	28.39	0.62	19.66	0.89	35	33	28	20	2.48	3.10	3.90	6.68	9.75	14.21	22.99	56.88
W	3.0		0.30	0.35	0.45	0.65	1385.00	1376.00	650.00	32.94	0.33	30.88	0.35	26.76	0.40	18.53	0.58	33	31	27	19	2.57	3.24	4.05	6.84	2.31	3.40	5.47	13.34
Post-Developed Conditions																													
N	3.9		0.77	0.79	0.83	0.89	1385.00	1357.50	1100.00	14.52	1.26	13.64	1.34	11.88	1.54	9.24	1.98	15	15	15	15	3.83	4.56	5.22	7.37	11.50	14.05	16.90	25.58
S	13.1		0.77	0.79	0.83	0.89	1385.00	1360.00	1050.00	14.41	1.21	13.54	1.29	11.79	1.48	9.17	1.91	15	15	15	15	3.83	4.56	5.22	7.37	38.63	47.19	56.76	85.93
W	3.0		0.77	0.79	0.83	0.89	1385.00	1376.00	650.00	13.59	0.80	12.76	0.85	11.12	0.97	8.65	1.25	15	15	15	15	3.83	4.56	5.22	7.37	8.85	10.81	13.00	19.68

win Silty Clay Loam - Soil Group D; Rosehill Silty Clay - Soil Group D

Soil Group D

Appendix D

Appendix E

Hydrograph Summary Report

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to peak (min)	Volume (acft)	Inflow hyd(s)	Maximum elevation (ft)	Maximum storage (acft)	Hydrograph description
1	SCS Runoff	516.16	5	795	144.256	---	------	------	Exist Runoff 01
2	SCS Runoff	233.41	5	755	40.728	---	------	------	Exist. Runoff 02
3	SCS Runoff	268.11	5	760	51.078	---	------	------	Exist. Runoff 03
4	SCS Runoff	319.89	5	780	77.059	---	------	------	Exist. Runoff from East
5	Combine	1200.89	5	780	313.120	1, 2, 3, 4	------	------	Exist. Runoff to Reed Property
6	SCS Runoff	626.40	5	730	63.001	---	------	------	Exist Runoff from Reed Property
7	SCS Runoff	113.13	5	725	9.256	---	------	------	Exist. Runoff from Reed Commercial
8	Combine	1372.38	5	735	385.377	5, 6, 7	------	------	Exist. Runoff to pond

Hydrograph Report

Hydraflow Hydrographs by Intelisolve

Hyd. No. 1

Exist Runoff 01

Hydrograph type	= SCS Runoff	Peak discharge	= 516.16 cfs
Storm frequency	= 100 yrs	Time interval	= 5 min
Drainage area	= 314.00 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 139.5 min
Total precip.	= 7.80 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Hydrograph Volume = 144.256 acft

Hydrograph Discharge Table

Time (hrs)	Outflow (cfs)	Time (hrs)	Outflow (cfs)	Time (hrs)	Outflow (cfs)
11.50	52.72	14.33	355.16	17.17	61.65
11.58	56.67	14.42	338.63	17.25	60.52
11.67	62.30	14.50	321.87	17.33	59.46
11.75	70.65	14.58	304.91	17.42	58.44
11.83	83.80	14.67	287.78	17.50	57.48
11.92	105.03	14.75	270.50	17.58	56.56
12.00	130.46	14.83	253.09	17.67	55.68
12.08	156.68	14.92	235.60	17.75	54.83
12.17	183.58	15.00	218.08	17.83	54.01
12.25	211.02	15.08	200.56	17.92	53.23
12.33	238.87	15.17	183.08	18.00	52.47
12.42	267.00	15.25	165.69	18.08	51.74
12.50	295.33	15.33	148.69		
12.58	323.66	15.42	132.65		
12.67	351.91	15.50	118.22	*...End*	
12.75	380.00	15.58	106.65		
12.83	407.84	15.67	99.96		
12.92	435.32	15.75	95.80		
13.00	461.62	15.83	92.12		
13.08	485.27	15.92	88.86		
13.17	504.57	16.00	85.97		
13.25	516.16 <<	16.08	83.37		
13.33	514.71	16.17	81.00		
13.42	506.44	16.25	78.81		
13.50	496.76	16.33	76.76		
13.58	485.83	16.42	74.84		
13.67	473.81	16.50	73.03		
13.75	460.87	16.58	71.33		
13.83	447.18	16.67	69.72		
13.92	432.90	16.75	68.19		
14.00	418.15	16.83	66.75		
14.08	402.96	16.92	65.37		
14.17	387.37	17.00	64.07		
14.25	371.42	17.08	62.83		

Hydrograph Report

Hydraflow Hydrographs by Intelisolve

Hyd. No. 2

Exist. Runoff 02

Hydrograph type	= SCS Runoff	Peak discharge	= 233.41 cfs
Storm frequency	= 100 yrs	Time interval	= 5 min
Drainage area	= 88.00 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 68.8 min
Total precip.	= 7.80 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Hydrograph Volume = 40.728 acft

Hydrograph Discharge Table

Time (hrs)	Outflow (cfs)	Time (hrs)	Outflow (cfs)
11.50	23.81	14.33	31.86
11.58	26.25	14.42	30.51
11.67	30.24	14.50	29.29
11.75	36.80	14.58	28.18
11.83	48.08	14.67	27.18
11.92	67.23	14.75	26.27
12.00	90.33	14.83	25.45
12.08	113.95	14.92	24.71
12.17	137.92	15.00	24.03
12.25	162.08	15.08	23.41
12.33	185.50		
12.42	206.65		
12.50	223.75	*...End*	
12.58	233.41 <<		
12.67	230.31		
12.75	220.64		
12.83	209.78		
12.92	197.87		
13.00	185.09		
13.08	171.56		
13.17	157.50		
13.25	143.09		
13.33	128.45		
13.42	113.62		
13.50	98.67		
13.58	83.91		
13.67	69.93		
13.75	57.38		
13.83	47.53		
13.92	42.37		
14.00	39.60		
14.08	37.22		
14.17	35.16		
14.25	33.39		

Hydrograph Report

Hydraflow Hydrographs by Intelisolve

Hyd. No. 3

Exist. Runoff 03

Hydrograph type	= SCS Runoff	Peak discharge	= 268.11 cfs
Storm frequency	= 100 yrs	Time interval	= 5 min
Drainage area	= 109.00 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 77 min
Total precip.	= 7.80 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Hydrograph Volume = 51.078 acft

Hydrograph Discharge Table

Time (hrs)	Outflow (cfs)	Time (hrs)	Outflow (cfs)
11.50	27.69	14.33	43.57
11.58	30.37	14.42	41.33
11.67	34.64	14.50	39.39
11.75	41.51	14.58	37.71
11.83	53.06	14.67	36.23
11.92	72.64	14.75	34.90
12.00	96.24	14.83	33.68
12.08	120.41	14.92	32.59
12.17	145.00	15.00	31.60
12.25	169.82	15.08	30.69
12.33	194.72	15.17	29.87
12.42	218.76	15.25	29.10
12.50	240.43	15.33	28.39
12.58	258.00	15.42	27.73
12.67	268.11 <<	15.50	27.12
12.75	265.48		
12.83	256.26		
12.92	245.81	*...End*	
13.00	234.29		
13.08	221.85		
13.17	208.66		
13.25	194.89		
13.33	180.68		
13.42	166.18		
13.50	151.44		
13.58	136.51		
13.67	121.43		
13.75	106.27		
13.83	91.36		
13.92	77.25		
14.00	64.56		
14.08	54.54		
14.17	49.17		
14.25	46.17		

Hydrograph Report

Hyd. No. 4

Exist. Runoff from East

Hydrograph type	= SCS Runoff	Peak discharge	= 319.89 cfs
Storm frequency	= 100 yrs	Time interval	= 5 min
Drainage area	= 168.00 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 115 min
Total precip.	= 7.80 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Hydrograph Volume = 77.059 acft

Hydrograph Discharge Table

Time (hrs)	Outflow (cfs)	Time (hrs)	Outflow (cfs)
11.50	33.02	14.33	150.29
11.58	35.72	14.42	137.05
11.67	39.73	14.50	123.78
11.75	45.85	14.58	110.54
11.83	55.72	14.67	97.57
11.92	71.92	14.75	85.31
12.00	91.39	14.83	74.29
12.08	111.44	14.92	65.50
12.17	131.97	15.00	60.56
12.25	152.92	15.08	57.60
12.33	174.11	15.17	55.03
12.42	195.40	15.25	52.78
12.50	216.65	15.33	50.82
12.58	237.76	15.42	49.10
12.67	258.66	15.50	47.56
12.75	278.68	15.58	46.16
12.83	296.68	15.67	44.85
12.92	311.31	15.75	43.64
13.00	319.89 <<	15.83	42.52
13.08	318.22	15.92	41.46
13.17	311.21	16.00	40.47
13.25	303.13	16.08	39.53
13.33	294.11	16.17	38.64
13.42	284.28	16.25	37.79
13.50	273.77	16.33	36.98
13.58	262.71	16.42	36.21
13.67	251.23	16.50	35.47
13.75	239.43	16.58	34.77
13.83	227.33	16.67	34.09
13.92	214.97	16.75	33.44
14.00	202.36	16.83	32.82
14.08	189.56	16.92	32.22
14.17	176.58		
14.25	163.48		

...End

Hydrograph Report

Hydraflow Hydrographs by Intelisolve

Hyd. No. 5

Exist. Runoff to Reed Property

Hydrograph type = Combine
Storm frequency = 100 yrs
Inflow hyds. = 1, 2, 3, 4

Peak discharge = 1200.89 cfs
Time interval = 5 min

Hydrograph Volume = 313.120 acft

Hydrograph Discharge Table

Time (hrs)	Hyd. 1 + (cfs)	Hyd. 2 + (cfs)	Hyd. 3 + (cfs)	Hyd. 4 = (cfs)	Outflow (cfs)
11.33	46.75	20.51	23.97	29.05	120.27
11.42	49.58	22.06	25.72	30.93	128.29
11.50	52.72	23.81	27.69	33.02	137.24
11.58	56.67	26.25	30.37	35.72	149.02
11.67	62.30	30.24	34.64	39.73	166.90
11.75	70.65	36.80	41.51	45.85	194.82
11.83	83.80	48.08	53.06	55.72	240.65
11.92	105.03	67.23	72.64	71.92	316.82
12.00	130.46	90.33	96.24	91.39	408.42
12.08	156.68	113.95	120.41	111.44	502.49
12.17	183.58	137.92	145.00	131.97	598.48
12.25	211.02	162.08	169.82	152.92	695.85
12.33	238.87	185.50	194.72	174.11	793.20
12.42	267.00	206.65	218.76	195.40	887.81
12.50	295.33	223.75	240.43	216.65	976.16
12.58	323.66	233.41 <<	258.00	237.76	1052.83
12.67	351.91	230.31	268.11 <<	258.66	1109.00
12.75	380.00	220.64	265.48	278.68	1144.80
12.83	407.84	209.78	256.26	296.68	1170.56
12.92	435.32	197.87	245.81	311.31	1190.32
13.00	461.62	185.09	234.29	319.89 <<	1200.89 <<
13.08	485.27	171.56	221.85	318.22	1196.90
13.17	504.57	157.50	208.66	311.21	1181.94
13.25	516.16 <<	143.09	194.89	303.13	1157.27
13.33	514.71	128.45	180.68	294.11	1117.96
13.42	506.44	113.62	166.18	284.28	1070.53
13.50	496.76	98.67	151.44	273.77	1020.64
13.58	485.83	83.91	136.51	262.71	968.96
13.67	473.81	69.93	121.43	251.23	916.41
13.75	460.87	57.38	106.27	239.43	863.95
13.83	447.18	47.53	91.36	227.33	813.40
13.92	432.90	42.37	77.25	214.97	767.49
14.00	418.15	39.60	64.56	202.36	724.68
14.08	402.96	37.22	54.54	189.56	684.28
14.17	387.37	35.16	49.17	176.58	648.27
14.25	371.42	33.39	46.17	163.48	614.45
14.33	355.16	31.86	43.57	150.29	580.87
14.42	338.63	30.51	41.33	137.05	547.51

Continues on next page...

Hydrograph Discharge Table

Time (hrs)	Hyd. 1 + (cfs)	Hyd. 2 + (cfs)	Hyd. 3 + (cfs)	Hyd. 4 = (cfs)	Outflow (cfs)
14.50	321.87	29.29	39.39	123.78	514.34
14.58	304.91	28.18	37.71	110.54	481.34
14.67	287.78	27.18	36.23	97.57	448.75
14.75	270.50	26.27	34.90	85.31	416.97
14.83	253.09	25.45	33.68	74.29	386.50
14.92	235.60	24.71	32.59	65.50	358.39
15.00	218.08	24.03	31.60	60.56	334.26
15.08	200.56	23.41	30.69	57.60	312.27
15.17	183.08	22.84	29.87	55.03	290.82
15.25	165.69	22.31	29.10	52.78	269.89
15.33	148.69	21.83	28.39	50.82	249.74
15.42	132.65	21.37	27.73	49.10	230.86
15.50	118.22	20.94	27.12	47.56	213.83
15.58	106.65	20.52	26.54	46.16	199.87
15.67	99.96	20.13	25.99	44.85	190.93
15.75	95.80	19.75	25.46	43.64	184.65
15.83	92.12	19.37	24.96	42.52	178.97
15.92	88.86	19.01	24.47	41.46	173.80
16.00	85.97	18.64	24.00	40.47	169.07
16.08	83.37	18.27	23.53	39.53	164.70
16.17	81.00	17.91	23.07	38.64	160.62
16.25	78.81	17.55	22.62	37.79	156.78
16.33	76.76	17.20	22.18	36.98	153.12
16.42	74.84	16.86	21.75	36.21	149.65
16.50	73.03	16.53	21.33	35.47	146.36
16.58	71.33	16.22	20.92	34.77	143.23
16.67	69.72	15.92	20.53	34.09	140.26
16.75	68.19	15.64	20.15	33.44	137.43
16.83	66.75	15.38	19.80	32.82	134.75
16.92	65.37	15.14	19.47	32.22	132.21
17.00	64.07	14.91	19.16	31.65	129.79
17.08	62.83	14.70	18.87	31.10	127.50
17.17	61.65	14.51	18.60	30.58	125.33
17.25	60.52	14.32	18.34	30.07	123.26
17.33	59.46	14.15	18.10	29.59	121.30

...End

Hydrograph Report

Hydraflow Hydrographs by Intelisolve

Hyd. No. 6

Exist Runoff from Reed Property

Hydrograph type	= SCS Runoff	Peak discharge	= 626.40 cfs
Storm frequency	= 100 yrs	Time interval	= 5 min
Drainage area	= 132.00 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 29 min
Total precip.	= 7.80 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Hydrograph Volume = 63.001 acft

Hydrograph Discharge Table

Time (hrs)	Outflow (cfs)
11.58	65.57
11.67	85.59
11.75	123.65
11.83	195.13
11.92	319.10
12.00	455.48
12.08	566.41
12.17	626.40 <<
12.25	595.36
12.33	518.85
12.42	436.50
12.50	350.95
12.58	266.83
12.67	189.79
12.75	129.98
12.83	102.87
12.92	92.26
13.00	83.62
13.08	76.63
13.17	71.03
13.25	66.56
13.33	62.93

...End

Hydrograph Report

Hydraflow Hydrographs by Intelisolve

Hyd. No. 7

Exist. Runoff from Reed Commercial

Hydrograph type	= SCS Runoff	Peak discharge	= 113.13 cfs
Storm frequency	= 100 yrs	Time interval	= 5 min
Drainage area	= 20.00 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 24.5 min
Total precip.	= 7.80 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Hydrograph Volume = 9.256 acft

Hydrograph Discharge Table

Time (hrs)	Outflow (cfs)
11.58	11.32
11.67	16.04
11.75	25.48
11.83	42.33
11.92	70.50
12.00	98.66
12.08	113.13 <<
12.17	102.94
12.25	81.17
12.33	59.73
12.42	40.04
12.50	24.78
12.58	18.22
12.67	15.92
12.75	14.03
12.83	12.61
12.92	11.54

...End

Hydrograph Report

Hydraflow Hydrographs by Intelisolve

Hyd. No. 8

Exist. Runoff to pond

Hydrograph type = Combine
Storm frequency = 100 yrs
Inflow hyds. = 5, 6, 7

Peak discharge = 1372.38 cfs
Time interval = 5 min

Hydrograph Volume = 385.377 acft

Hydrograph Discharge Table

Time (hrs)	Hyd. 5 + (cfs)	Hyd. 6 + (cfs)	Hyd. 7 = (cfs)	Outflow (cfs)
11.08	100.93	36.59	5.83	143.36
11.17	106.69	39.10	6.22	152.02
11.25	113.11	42.10	6.72	161.92
11.33	120.27	45.72	7.49	173.48
11.42	128.29	50.55	8.36	187.20
11.50	137.24	56.00	9.32	202.57
11.58	149.02	65.57	11.32	225.91
11.67	166.90	85.59	16.04	268.53
11.75	194.82	123.65	25.48	343.94
11.83	240.65	195.13	42.33	478.12
11.92	316.82	319.10	70.50	706.42
12.00	408.42	455.48	98.66	962.56
12.08	502.49	566.41	113.13 <<	1182.04
12.17	598.48	626.40 <<	102.94	1327.82
12.25	695.85	595.36	81.17	1372.38 <<
12.33	793.20	518.85	59.73	1371.78
12.42	887.81	436.50	40.04	1364.35
12.50	976.16	350.95	24.78	1351.90
12.58	1052.83	266.83	18.22	1337.88
12.67	1109.00	189.79	15.92	1314.70
12.75	1144.80	129.98	14.03	1288.82
12.83	1170.56	102.87	12.61	1286.04
12.92	1190.32	92.26	11.54	1294.12
13.00	1200.89 <<	83.62	10.73	1295.23
13.08	1196.90	76.63	10.08	1283.61
13.17	1181.94	71.03	9.52	1262.49
13.25	1157.27	66.56	9.02	1232.84
13.33	1117.96	62.93	8.58	1189.46
13.42	1070.53	59.81	8.18	1138.52
13.50	1020.64	56.95	7.83	1085.42
13.58	968.96	54.33	7.49	1030.78
13.67	916.41	51.92	7.18	975.51
13.75	863.95	49.71	6.88	920.54
13.83	813.40	47.67	6.61	867.68
13.92	767.49	45.76	6.35	819.60
14.00	724.68	43.94	6.11	774.73
14.08	684.28	42.22	5.87	732.37
14.17	648.27	40.63	5.66	694.56

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Hydrograph Discharge Table

Time (hrs)	Hyd. 5 + (cfs)	Hyd. 6 + (cfs)	Hyd. 7 = (cfs)	Outflow (cfs)
14.25	614.45	39.20	5.48	659.13
14.33	580.87	37.96	5.34	624.17
14.42	547.51	36.91	5.22	589.64
14.50	514.34	36.01	5.12	555.47
14.58	481.34	35.23	5.04	521.61
14.67	448.75	34.54	4.96	488.25
14.75	416.97	33.93	4.87	455.77
14.83	386.50	33.35	4.79	424.65
14.92	358.39	32.79	4.71	395.90
15.00	334.26	32.23	4.63	371.12
15.08	312.27	31.67	4.54	348.48
15.17	290.82	31.10	4.46	326.38
15.25	269.89	30.54	4.38	304.80
15.33	249.74	29.97	4.29	284.00
15.42	230.86	29.41	4.21	264.47
15.50	213.83	28.84	4.13	246.80
15.58	199.87	28.27	4.04	232.18
15.67	190.93	27.70	3.96	222.59
15.75	184.65	27.14	3.88	215.66
15.83	178.97	26.57	3.79	209.33
15.92	173.80	26.00	3.71	203.51
16.00	169.07	25.42	3.62	198.12
16.08	164.70	24.86	3.54	193.11
16.17	160.62	24.32	3.47	188.42
16.25	156.78	23.83	3.40	184.01
16.33	153.12	23.39	3.35	179.87
16.42	149.65	23.02	3.31	175.98
16.50	146.36	22.69	3.27	172.33
16.58	143.23	22.42	3.24	168.89
16.67	140.26	22.17	3.21	165.64
16.75	137.43	21.95	3.18	162.57
16.83	134.75	21.74	3.15	159.65
16.92	132.21	21.54	3.13	156.87
17.00	129.79	21.34	3.10	154.23
17.08	127.50	21.14	3.07	151.70
17.17	125.33	20.93	3.04	149.30
17.25	123.26	20.73	3.01	147.00
17.33	121.30	20.53	2.98	144.80
17.42	119.43	20.32	2.95	142.70
17.50	117.66	20.12	2.92	140.70
17.58	115.97	19.92	2.89	138.77

...End

Hydrograph Summary Report

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to peak (min)	Volume (acft)	Inflow hyd(s)	Maximum elevation (ft)	Maximum storage (acft)	Hydrograph description
1	SCS Runoff	516.16	5	795	144.256	----	------	------	Exist Runoff 01
2	SCS Runoff	233.41	5	755	40.728	----	------	------	Exist. Runoff 02
3	SCS Runoff	268.11	5	760	51.078	----	------	------	Exist. Runoff 03
4	SCS Runoff	319.89	5	780	77.059	----	------	------	Exist. Runoff from East
5	Combine	1200.89	5	780	313.120	1, 2, 3, 4	------	------	Exist. Runoff to Reed Property
6	SCS Runoff	626.40	5	730	63.001	----	------	------	Exist Runoff from Reed Property
7	SCS Runoff	135.14	5	725	12.004	----	------	------	Exist. Runoff from Reed Commercial
8	Combine	1385.45	5	735	388.124	5, 6, 7	------	------	Exist. Runoff to pond

Hydrograph Report

Hydraflow Hydrographs by Intelisolve

Hyd. No. 1

Exist Runoff 01

Hydrograph type	= SCS Runoff	Peak discharge	= 516.16 cfs
Storm frequency	= 100 yrs	Time interval	= 5 min
Drainage area	= 314.00 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 139.5 min
Total precip.	= 7.80 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Hydrograph Volume = 144.256 acft

Hydrograph Discharge Table

Time (hrs)	Outflow (cfs)	Time (hrs)	Outflow (cfs)	Time (hrs)	Outflow (cfs)
11.50	52.72	14.33	355.16	17.17	61.65
11.58	56.67	14.42	338.63	17.25	60.52
11.67	62.30	14.50	321.87	17.33	59.46
11.75	70.65	14.58	304.91	17.42	58.44
11.83	83.80	14.67	287.78	17.50	57.48
11.92	105.03	14.75	270.50	17.58	56.56
12.00	130.46	14.83	253.09	17.67	55.68
12.08	156.68	14.92	235.60	17.75	54.83
12.17	183.58	15.00	218.08	17.83	54.01
12.25	211.02	15.08	200.56	17.92	53.23
12.33	238.87	15.17	183.08	18.00	52.47
12.42	267.00	15.25	165.69	18.08	51.74
12.50	295.33	15.33	148.69		
12.58	323.66	15.42	132.65		
12.67	351.91	15.50	118.22	*...End*	
12.75	380.00	15.58	106.65		
12.83	407.84	15.67	99.96		
12.92	435.32	15.75	95.80		
13.00	461.62	15.83	92.12		
13.08	485.27	15.92	88.86		
13.17	504.57	16.00	85.97		
13.25	516.16 <<	16.08	83.37		
13.33	514.71	16.17	81.00		
13.42	506.44	16.25	78.81		
13.50	496.76	16.33	76.76		
13.58	485.83	16.42	74.84		
13.67	473.81	16.50	73.03		
13.75	460.87	16.58	71.33		
13.83	447.18	16.67	69.72		
13.92	432.90	16.75	68.19		
14.00	418.15	16.83	66.75		
14.08	402.96	16.92	65.37		
14.17	387.37	17.00	64.07		
14.25	371.42	17.08	62.83		

Hydrograph Report

Hydraflow Hydrographs by Intelisolve

Hyd. No. 2

Exist. Runoff 02

Hydrograph type	= SCS Runoff	Peak discharge	= 233.41 cfs
Storm frequency	= 100 yrs	Time interval	= 5 min
Drainage area	= 88.00 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 68.8 min
Total precip.	= 7.80 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Hydrograph Volume = 40.728 acft

Hydrograph Discharge Table

Time (hrs)	Outflow (cfs)	Time (hrs)	Outflow (cfs)
11.50	23.81	14.33	31.86
11.58	26.25	14.42	30.51
11.67	30.24	14.50	29.29
11.75	36.80	14.58	28.18
11.83	48.08	14.67	27.18
11.92	67.23	14.75	26.27
12.00	90.33	14.83	25.45
12.08	113.95	14.92	24.71
12.17	137.92	15.00	24.03
12.25	162.08	15.08	23.41
12.33	185.50		
12.42	206.65		
12.50	223.75	*...End*	
12.58	233.41 <<		
12.67	230.31		
12.75	220.64		
12.83	209.78		
12.92	197.87		
13.00	185.09		
13.08	171.56		
13.17	157.50		
13.25	143.09		
13.33	128.45		
13.42	113.62		
13.50	98.67		
13.58	83.91		
13.67	69.93		
13.75	57.38		
13.83	47.53		
13.92	42.37		
14.00	39.60		
14.08	37.22		
14.17	35.16		
14.25	33.39		

Hydrograph Report

Hydraflow Hydrographs by Intelisolve

Hyd. No. 3

Exist. Runoff 03

Hydrograph type	= SCS Runoff	Peak discharge	= 268.11 cfs
Storm frequency	= 100 yrs	Time interval	= 5 min
Drainage area	= 109.00 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 77 min
Total precip.	= 7.80 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Hydrograph Volume = 51.078 acft

Hydrograph Discharge Table

Time (hrs)	Outflow (cfs)		Time (hrs)	Outflow (cfs)
11.50	27.69		14.33	43.57
11.58	30.37		14.42	41.33
11.67	34.64		14.50	39.39
11.75	41.51		14.58	37.71
11.83	53.06		14.67	36.23
11.92	72.64		14.75	34.90
12.00	96.24		14.83	33.68
12.08	120.41		14.92	32.59
12.17	145.00		15.00	31.60
12.25	169.82		15.08	30.69
12.33	194.72		15.17	29.87
12.42	218.76		15.25	29.10
12.50	240.43		15.33	28.39
12.58	258.00		15.42	27.73
12.67	268.11	<<	15.50	27.12
12.75	265.48			
12.83	256.26			
12.92	245.81		*...End*	
13.00	234.29			
13.08	221.85			
13.17	208.66			
13.25	194.89			
13.33	180.68			
13.42	166.18			
13.50	151.44			
13.58	136.51			
13.67	121.43			
13.75	106.27			
13.83	91.36			
13.92	77.25			
14.00	64.56			
14.08	54.54			
14.17	49.17			
14.25	46.17			

Hydrograph Report

Hydraflow Hydrographs by Intelisolve

Hyd. No. 4

Exist. Runoff from East

Hydrograph type	= SCS Runoff	Peak discharge	= 319.89 cfs
Storm frequency	= 100 yrs	Time interval	= 5 min
Drainage area	= 168.00 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 115 min
Total precip.	= 7.80 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Hydrograph Volume = 77.059 acft

Hydrograph Discharge Table

Time (hrs)	Outflow (cfs)	Time (hrs)	Outflow (cfs)
11.50	33.02	14.33	150.29
11.58	35.72	14.42	137.05
11.67	39.73	14.50	123.78
11.75	45.85	14.58	110.54
11.83	55.72	14.67	97.57
11.92	71.92	14.75	85.31
12.00	91.39	14.83	74.29
12.08	111.44	14.92	65.50
12.17	131.97	15.00	60.56
12.25	152.92	15.08	57.60
12.33	174.11	15.17	55.03
12.42	195.40	15.25	52.78
12.50	216.65	15.33	50.82
12.58	237.76	15.42	49.10
12.67	258.66	15.50	47.56
12.75	278.68	15.58	46.16
12.83	296.68	15.67	44.85
12.92	311.31	15.75	43.64
13.00	319.89 <<	15.83	42.52
13.08	318.22	15.92	41.46
13.17	311.21	16.00	40.47
13.25	303.13	16.08	39.53
13.33	294.11	16.17	38.64
13.42	284.28	16.25	37.79
13.50	273.77	16.33	36.98
13.58	262.71	16.42	36.21
13.67	251.23	16.50	35.47
13.75	239.43	16.58	34.77
13.83	227.33	16.67	34.09
13.92	214.97	16.75	33.44
14.00	202.36	16.83	32.82
14.08	189.56	16.92	32.22
14.17	176.58		
14.25	163.48		

...End

Hydrograph Report

Hydraflow Hydrographs by Intelisolve

Hyd. No. 5

Exist. Runoff to Reed Property

Hydrograph type = Combine
Storm frequency = 100 yrs
Inflow hyds. = 1, 2, 3, 4

Peak discharge = 1200.89 cfs
Time interval = 5 min

Hydrograph Volume = 313.120 acft

Hydrograph Discharge Table

Time (hrs)	Hyd. 1 + (cfs)	Hyd. 2 + (cfs)	Hyd. 3 + (cfs)	Hyd. 4 = (cfs)	Outflow (cfs)
11.33	46.75	20.51	23.97	29.05	120.27
11.42	49.58	22.06	25.72	30.93	128.29
11.50	52.72	23.81	27.69	33.02	137.24
11.58	56.67	26.25	30.37	35.72	149.02
11.67	62.30	30.24	34.64	39.73	166.90
11.75	70.65	36.80	41.51	45.85	194.82
11.83	83.80	48.08	53.06	55.72	240.65
11.92	105.03	67.23	72.64	71.92	316.82
12.00	130.46	90.33	96.24	91.39	408.42
12.08	156.68	113.95	120.41	111.44	502.49
12.17	183.58	137.92	145.00	131.97	598.48
12.25	211.02	162.08	169.82	152.92	695.85
12.33	238.87	185.50	194.72	174.11	793.20
12.42	267.00	206.65	218.76	195.40	887.81
12.50	295.33	223.75	240.43	216.65	976.16
12.58	323.66	233.41 <<	258.00	237.76	1052.83
12.67	351.91	230.31	268.11 <<	258.66	1109.00
12.75	380.00	220.64	265.48	278.68	1144.80
12.83	407.84	209.78	256.26	296.68	1170.56
12.92	435.32	197.87	245.81	311.31	1190.32
13.00	461.62	185.09	234.29	319.89 <<	1200.89 <<
13.08	485.27	171.56	221.85	318.22	1196.90
13.17	504.57	157.50	208.66	311.21	1181.94
13.25	516.16 <<	143.09	194.89	303.13	1157.27
13.33	514.71	128.45	180.68	294.11	1117.96
13.42	506.44	113.62	166.18	284.28	1070.53
13.50	496.76	98.67	151.44	273.77	1020.64
13.58	485.83	83.91	136.51	262.71	968.96
13.67	473.81	69.93	121.43	251.23	916.41
13.75	460.87	57.38	106.27	239.43	863.95
13.83	447.18	47.53	91.36	227.33	813.40
13.92	432.90	42.37	77.25	214.97	767.49
14.00	418.15	39.60	64.56	202.36	724.68
14.08	402.96	37.22	54.54	189.56	684.28
14.17	387.37	35.16	49.17	176.58	648.27
14.25	371.42	33.39	46.17	163.48	614.45
14.33	355.16	31.86	43.57	150.29	580.87
14.42	338.63	30.51	41.33	137.05	547.51

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Hydrograph Discharge Table

Time (hrs)	Hyd. 1 + (cfs)	Hyd. 2 + (cfs)	Hyd. 3 + (cfs)	Hyd. 4 = (cfs)	Outflow (cfs)
14.50	321.87	29.29	39.39	123.78	514.34
14.58	304.91	28.18	37.71	110.54	481.34
14.67	287.78	27.18	36.23	97.57	448.75
14.75	270.50	26.27	34.90	85.31	416.97
14.83	253.09	25.45	33.68	74.29	386.50
14.92	235.60	24.71	32.59	65.50	358.39
15.00	218.08	24.03	31.60	60.56	334.26
15.08	200.56	23.41	30.69	57.60	312.27
15.17	183.08	22.84	29.87	55.03	290.82
15.25	165.69	22.31	29.10	52.78	269.89
15.33	148.69	21.83	28.39	50.82	249.74
15.42	132.65	21.37	27.73	49.10	230.86
15.50	118.22	20.94	27.12	47.56	213.83
15.58	106.65	20.52	26.54	46.16	199.87
15.67	99.96	20.13	25.99	44.85	190.93
15.75	95.80	19.75	25.46	43.64	184.65
15.83	92.12	19.37	24.96	42.52	178.97
15.92	88.86	19.01	24.47	41.46	173.80
16.00	85.97	18.64	24.00	40.47	169.07
16.08	83.37	18.27	23.53	39.53	164.70
16.17	81.00	17.91	23.07	38.64	160.62
16.25	78.81	17.55	22.62	37.79	156.78
16.33	76.76	17.20	22.18	36.98	153.12
16.42	74.84	16.86	21.75	36.21	149.65
16.50	73.03	16.53	21.33	35.47	146.36
16.58	71.33	16.22	20.92	34.77	143.23
16.67	69.72	15.92	20.53	34.09	140.26
16.75	68.19	15.64	20.15	33.44	137.43
16.83	66.75	15.38	19.80	32.82	134.75
16.92	65.37	15.14	19.47	32.22	132.21
17.00	64.07	14.91	19.16	31.65	129.79
17.08	62.83	14.70	18.87	31.10	127.50
17.17	61.65	14.51	18.60	30.58	125.33
17.25	60.52	14.32	18.34	30.07	123.26
17.33	59.46	14.15	18.10	29.59	121.30

...End

Hydrograph Report

Hydraflow Hydrographs by Intelisolve

Hyd. No. 6

Exist Runoff from Reed Property

Hydrograph type	= SCS Runoff	Peak discharge	= 626.40 cfs
Storm frequency	= 100 yrs	Time interval	= 5 min
Drainage area	= 132.00 ac	Curve number	= 81
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 29 min
Total precip.	= 7.80 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Hydrograph Volume = 63.001 acft

Hydrograph Discharge Table

Time (hrs)	Outflow (cfs)
11.58	65.57
11.67	85.59
11.75	123.65
11.83	195.13
11.92	319.10
12.00	455.48
12.08	566.41
12.17	626.40 <<
12.25	595.36
12.33	518.85
12.42	436.50
12.50	350.95
12.58	266.83
12.67	189.79
12.75	129.98
12.83	102.87
12.92	92.26
13.00	83.62
13.08	76.63
13.17	71.03
13.25	66.56
13.33	62.93

...End

Hydrograph Report

Hyd. No. 7

Exist. Runoff from Reed Commercial

Hydrograph type	= SCS Runoff	Peak discharge	= 135.14 cfs
Storm frequency	= 100 yrs	Time interval	= 5 min
Drainage area	= 20.00 ac	Curve number	= 95
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 20 min
Total precip.	= 7.80 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Hydrograph Volume = 12.004 acft

Hydrograph Discharge Table

Time (hrs)	Outflow (cfs)
11.50	14.02
11.58	16.68
11.67	22.96
11.75	35.22
11.83	56.11
11.92	89.11
12.00	120.61
12.08	135.14 <<
12.17	121.04
12.25	94.23
12.33	68.36
12.42	45.09
12.50	27.49
12.58	20.10
12.67	17.52
12.75	15.41
12.83	13.82

...End

Hydrograph Report

Hydraflow Hydrographs by Intelisolve

Hyd. No. 8

Exist. Runoff to pond

Hydrograph type	= Combine	Peak discharge	= 1385.45 cfs
Storm frequency	= 100 yrs	Time interval	= 5 min
Inflow hyds.	= 5, 6, 7		

Hydrograph Volume = 388.124 acft

Hydrograph Discharge Table

Time (hrs)	Hyd. 5 + (cfs)	Hyd. 6 + (cfs)	Hyd. 7 = (cfs)	Outflow (cfs)
11.00	95.72	34.43	9.08	139.23
11.08	100.93	36.59	9.47	146.99
11.17	106.69	39.10	9.95	155.75
11.25	113.11	42.10	10.58	165.79
11.33	120.27	45.72	11.61	177.60
11.42	128.29	50.55	12.77	191.61
11.50	137.24	56.00	14.02	207.27
11.58	149.02	65.57	16.68	231.27
11.67	166.90	85.59	22.96	275.45
11.75	194.82	123.65	35.22	353.68
11.83	240.65	195.13	56.11	491.90
11.92	316.82	319.10	89.11	725.03
12.00	408.42	455.48	120.61	984.50
12.08	502.49	566.41	135.14 <<	1204.05
12.17	598.48	626.40 <<	121.04	1345.92
12.25	695.85	595.36	94.23	1385.45 <<
12.33	793.20	518.85	68.36	1380.40
12.42	887.81	436.50	45.09	1369.40
12.50	976.16	350.95	27.49	1354.61
12.58	1052.83	266.83	20.10	1339.75
12.67	1109.00	189.79	17.52	1316.30
12.75	1144.80	129.98	15.41	1290.20
12.83	1170.56	102.87	13.82	1287.25
12.92	1190.32	92.26	12.63	1295.22
13.00	1200.89 <<	83.62	11.73	1296.23
13.08	1196.90	76.63	11.01	1284.54
13.17	1181.94	71.03	10.38	1263.36
13.25	1157.27	66.56	9.83	1233.66
13.33	1117.96	62.93	9.34	1190.23
13.42	1070.53	59.81	8.90	1139.24
13.50	1020.64	56.95	8.51	1086.10
13.58	968.96	54.33	8.14	1031.43
13.67	916.41	51.92	7.79	976.12
13.75	863.95	49.71	7.47	921.13
13.83	813.40	47.67	7.17	868.23
13.92	767.49	45.76	6.88	820.13
14.00	724.68	43.94	6.61	775.23
14.08	684.28	42.22	6.36	732.86

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Hydrograph Discharge Table

Time (hrs)	Hyd. 5 + (cfs)	Hyd. 6 + (cfs)	Hyd. 7 = (cfs)	Outflow (cfs)
14.17	648.27	40.63	6.12	695.03
14.25	614.45	39.20	5.93	659.58
14.33	580.87	37.96	5.77	624.60
14.42	547.51	36.91	5.64	590.06
14.50	514.34	36.01	5.53	555.88
14.58	481.34	35.23	5.44	522.01
14.67	448.75	34.54	5.35	488.64
14.75	416.97	33.93	5.25	456.16
14.83	386.50	33.35	5.16	425.02
14.92	358.39	32.79	5.07	396.26
15.00	334.26	32.23	4.98	371.47
15.08	312.27	31.67	4.89	348.82
15.17	290.82	31.10	4.80	326.72
15.25	269.89	30.54	4.71	305.13
15.33	249.74	29.97	4.62	284.33
15.42	230.86	29.41	4.53	264.79
15.50	213.83	28.84	4.43	247.11
15.58	199.87	28.27	4.34	232.48
15.67	190.93	27.70	4.25	222.88
15.75	184.65	27.14	4.16	215.95
15.83	178.97	26.57	4.07	209.61
15.92	173.80	26.00	3.98	203.78
16.00	169.07	25.42	3.89	198.38
16.08	164.70	24.86	3.80	193.36
16.17	160.62	24.32	3.72	188.67
16.25	156.78	23.83	3.65	184.25
16.33	153.12	23.39	3.59	180.11
16.42	149.65	23.02	3.55	176.22
16.50	146.36	22.69	3.51	172.56
16.58	143.23	22.42	3.47	169.12
16.67	140.26	22.17	3.44	165.87
16.75	137.43	21.95	3.41	162.79
16.83	134.75	21.74	3.38	159.87
16.92	132.21	21.54	3.34	157.09
17.00	129.79	21.34	3.31	154.44
17.08	127.50	21.14	3.28	151.92
17.17	125.33	20.93	3.25	149.51
17.25	123.26	20.73	3.21	147.20
17.33	121.30	20.53	3.18	145.01
17.42	119.43	20.32	3.15	142.91
17.50	117.66	20.12	3.12	140.90
17.58	115.97	19.92	3.08	138.97

...End