

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

.....  
TIME OF CONCENTRATION CALCULATOR  
.....

-----  
Segment #1: Tc: User Defined

Segment #1 Time: .0800 hrs  
-----

=====  
Total Tc: .0800 hrs  
  
Calculated Tc < Min.Tc:  
Use Minimum Tc...  
Use Tc = .0833 hrs  
=====

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

-----  
Tc Equations used...  
-----

==== User Defined =====

Tc = Value entered by user

Where: Tc = Time of concentration

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

.....  
TIME OF CONCENTRATION CALCULATOR  
.....

-----  
Segment #1: Tc: User Defined

Segment #1 Time: .0800 hrs  
-----

=====  
Total Tc: .0800 hrs

Calculated Tc < Min.Tc:  
Use Minimum Tc...  
Use Tc = .0833 hrs  
=====

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

-----  
Tc Equations used...  
-----

==== User Defined =====

Tc = Value entered by user

Where: Tc = Time of concentration

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.FPW

.....  
TIME OF CONCENTRATION CALCULATOR  
.....

-----  
Segment #1: Tc: User Defined

Segment #1 Time: .0800 hrs

-----  
Total Tc: .0800 hrs

=====  
Calculated Tc < Min.Tc:  
Use Minimum Tc...  
Use Tc = .0833 hrs  
=====

Type.... Tc Calcs  
Name.... SUBAREA B6.4

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

-----  
Tc Equations used...  
-----

==== User Defined =====

Tc = Value entered by user

Where: Tc = Time of concentration

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

.....  
TIME OF CONCENTRATION CALCULATOR  
.....

-----  
Segment #1: Tc: User Defined

Segment #1 Time: .0800 hrs  
-----

=====  
Total Tc: .0800 hrs  
  
Calculated Tc < Min.Tc:  
Use Minimum Tc...  
Use Tc = .0833 hrs  
=====

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

-----  
Tc Equations used...  
-----

==== User Defined =====

Tc = Value entered by user

Where: Tc = Time of concentration



File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

.....  
TIME OF CONCENTRATION CALCULATOR  
.....

-----  
Segment #1: Tc: User Defined

Segment #1 Time: .1500 hrs  
-----

=====  
Total Tc: .1500 hrs  
=====

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

-----  
Tc Equations used...  
-----

==== User Defined =====

Tc = Value entered by user

Where: Tc = Time of concentration

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

.....  
TIME OF CONCENTRATION CALCULATOR  
.....

-----  
Segment #1: Tc: User Defined

Segment #1 Time: .1500 hrs

-----  
Total Tc: .1500 hrs  
=====

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

-----  
Tc Equations used...  
-----

==== User Defined =====

Tc = Value entered by user

Where: Tc = Time of concentration

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

.....  
TIME OF CONCENTRATION CALCULATOR  
.....

-----  
Segment #1: Tc: User Defined

Segment #1 Time: .1500 hrs

-----  
=====  
Total Tc: .1500 hrs  
=====

Type.... Tc Calcs  
Name.... SUBB3.5

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

-----  
Tc Equations used...  
-----

==== User Defined =====

Tc = Value entered by user

Where: Tc = Time of concentration

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

.....  
TIME OF CONCENTRATION CALCULATOR  
.....

-----

Segment #1: Tc: User Defined

Segment #1 Time: .1500 hrs

-----

=====  
Total Tc: .1500 hrs  
=====

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

-----  
Tc Equations used...  
-----

==== User Defined =====

Tc = Value entered by user

Where: Tc = Time of concentration



File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

.....  
TIME OF CONCENTRATION CALCULATOR  
.....

-----  
Segment #1: Tc: User Defined

Segment #1 Time: .0800 hrs

-----  
=====  
Total Tc: .0800 hrs  
Calculated Tc < Min.Tc:  
Use Minimum Tc...  
Use Tc = .0833 hrs  
=====

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

-----  
Tc Equations used...  
-----

==== User Defined =====

Tc = Value entered by user

Where: Tc = Time of concentration

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

.....  
TIME OF CONCENTRATION CALCULATOR  
.....

-----  
Segment #1: Tc: User Defined

Segment #1 Time: .0800 hrs  
-----

=====  
Total Tc: .0800 hrs  
Calculated Tc < Min.Tc:  
Use Minimum Tc...  
Use Tc = .0833 hrs  
=====

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

-----  
Tc Equations used...  
-----

==== User Defined =====

Tc = Value entered by user

Where: Tc = Time of concentration

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

.....  
TIME OF CONCENTRATION CALCULATOR  
.....

-----

Segment #1: Tc: User Defined

Segment #1 Time: .0800 hrs

-----

=====  
Total Tc: .0800 hrs  
Calculated Tc < Min.Tc:  
Use Minimum Tc...  
Use Tc = .0833 hrs  
=====

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

-----  
Tc Equations used...  
-----

==== User Defined =====

Tc = Value entered by user

Where: Tc = Time of concentration

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

.....  
TIME OF CONCENTRATION CALCULATOR  
.....

-----  
Segment #1: Tc: User Defined

Segment #1 Time: .0800 hrs  
-----

=====  
Total Tc: .0800 hrs

Calculated Tc < Min.Tc:  
Use Minimum Tc...  
Use Tc = .0833 hrs  
=====

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

-----  
Tc Equations used...  
-----

==== User Defined =====

Tc = Value entered by user

Where: Tc = Time of concentration



File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

RUNOFF CURVE NUMBER DATA

.....

-----

Soil/Surface Description	CN	Area acres	Impervious Adjustment %C	%UC	Adjusted CN
A12.4	87	1.060			87.00

COMPOSITE AREA & WEIGHTED CN ---> 1.060 87.00 (87)

.....

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

RUNOFF CURVE NUMBER DATA

.....

---

Soil/Surface Description	CN	Area acres	Impervious Adjustment		Adjusted CN
			%C	%UC	
A5.1	71	1.950			71.00
A11.2	87	1.210			87.00

COMPOSITE AREA & WEIGHTED CN --->                    3.160                    77.13 (77)

.....

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

RUNOFF CURVE NUMBER DATA

.....

-----

Soil/Surface Description	CN	Area acres	Impervious Adjustment		Adjusted CN
			%C	%UC	
B3.2&3.1	87	2.210			87.00

COMPOSITE AREA & WEIGHTED CN --->                    2.210                    87.00 (87)

.....

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

RUNOFF CURVE NUMBER DATA

.....

---

Soil/Surface Description	CN	Area acres	Impervious Adjustment		Adjusted CN
			%C	%UC	
B3.7	87	2.490			87.00

COMPOSITE AREA & WEIGHTED CN --->                    2.490                    87.00 (87)  
.....

Type.... Runoff CN-Area  
Name.... SUB B4.5

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

RUNOFF CURVE NUMBER DATA

.....

---

Soil/Surface Description	CN	Area acres	Impervious Adjustment		Adjusted CN
			%C	%UC	
B4.5	71	1.290			71.00

COMPOSITE AREA & WEIGHTED CN --->                    1.290                    71.00 (71)  
.....

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

RUNOFF CURVE NUMBER DATA

.....

-----

Soil/Surface Description	CN	Area acres	Impervious Adjustment		Adjusted CN
			%C	%UC	
12.1 and 12.2	87	5.730			87.00

COMPOSITE AREA & WEIGHTED CN --->                    5.730                    87.00 (87)  
.....

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

RUNOFF CURVE NUMBER DATA

.....

-----

Soil/Surface Description	CN	Area acres	Impervious Adjustment		Adjusted CN
			%C	%UC	
A12.3&B3.8	87	4.710			87.00
A6.1	71	.540			71.00

COMPOSITE AREA & WEIGHTED CN --->                    5.250                    85.35 (85)  
.....

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

RUNOFF CURVE NUMBER DATA

.....

---

Soil/Surface Description	CN	Area acres	Impervious Adjustment		Adjusted CN
			%C	%UC	
A5.2	71	3.170			71.00
A11.1&3&4	87	2.060			87.00

COMPOSITE AREA & WEIGHTED CN --->                    5.230                    77.30 (77)

.....



File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

RUNOFF CURVE NUMBER DATA

.....

---

Soil/Surface Description	CN	Area acres	Impervious Adjustment		Adjusted CN
			%C	%UC	
B4.1	71	2.190			71.00

COMPOSITE AREA & WEIGHTED CN --->                    2.190                    71.00 (71)

.....

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

RUNOFF CURVE NUMBER DATA

.....

---

Soil/Surface Description	CN	Area acres	Impervious Adjustment		Adjusted CN
			%C	%UC	
B5	71	1.500			71.00

COMPOSITE AREA & WEIGHTED CN --->                    1.500                    71.00 (71)  
.....

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

RUNOFF CURVE NUMBER DATA

.....

---

Soil/Surface Description	CN	Area acres	Impervious Adjustment		Adjusted CN
			%C	%UC	
B6.1	71	2.930			71.00

COMPOSITE AREA & WEIGHTED CN --->                    2.930                    71.00 (71)

.....

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

RUNOFF CURVE NUMBER DATA

.....

---

Soil/Surface Description	CN	Area acres	Impervious Adjustment		Adjusted CN
			%C	%UC	
B6.2	71	3.290			71.00

COMPOSITE AREA & WEIGHTED CN --->                    3.290                    71.00 (71)

.....

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

RUNOFF CURVE NUMBER DATA

.....

---

Soil/Surface Description	CN	Area acres	Impervious Adjustment		Adjusted CN
			%C	%UC	
B6.3	71	4.660			71.00

COMPOSITE AREA & WEIGHTED CN --->                    4.660                    71.00 (71)  
.....

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

RUNOFF CURVE NUMBER DATA

.....

-----

Soil/Surface Description	CN	Area acres	Impervious Adjustment		Adjusted CN
			%C	%UC	
B6.4	71	4.870			71.00

COMPOSITE AREA & WEIGHTED CN --->                    4.870                    71.00 (71)

.....

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

RUNOFF CURVE NUMBER DATA

.....

---

Soil/Surface Description	CN	Area acres	Impervious Adjustment		Adjusted CN
			%C	%UC	
B6.5	71	4.780			71.00

COMPOSITE AREA & WEIGHTED CN --->                    4.780                    71.00 (71)

.....

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

RUNOFF CURVE NUMBER DATA

.....

-----

Soil/Surface Description	CN	Area acres	Impervious Adjustment		Adjusted CN
			%C	%UC	
B3.3	87	1.550			87.00

COMPOSITE AREA & WEIGHTED CN --->                    1.550                    87.00 (87)  
.....



File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

RUNOFF CURVE NUMBER DATA

.....

---

Soil/Surface Description	CN	Area acres	Impervious Adjustment		Adjusted CN
			%C	%UC	
B3.4	87	1.610			87.00

COMPOSITE AREA & WEIGHTED CN --->                    1.610                    87.00 (87)  
.....

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

RUNOFF CURVE NUMBER DATA

.....

---

Soil/Surface Description	CN	Area acres	Impervious Adjustment		Adjusted CN
			%C	%UC	
B3.5	87	1.910			87.00

COMPOSITE AREA & WEIGHTED CN --->                    1.910                    87.00 (87)  
.....

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

RUNOFF CURVE NUMBER DATA

.....

---

Soil/Surface Description	CN	Area acres	Impervious Adjustment		Adjusted CN
			%C	%UC	
B3.6	87	2.210			87.00

COMPOSITE AREA & WEIGHTED CN --->                    2.210                    87.00 (87)  
.....

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

RUNOFF CURVE NUMBER DATA

.....

-----

Soil/Surface Description	CN	Area acres	Impervious Adjustment		Adjusted CN
			%C	%UC	
B4.2	71	4.510			71.00

COMPOSITE AREA & WEIGHTED CN ---> 4.510 71.00 (71)

.....

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

RUNOFF CURVE NUMBER DATA

.....

-----

Soil/Surface Description	CN	Area acres	Impervious Adjustment		Adjusted CN
			%C	%UC	
B4.3	71	3.270			71.00

COMPOSITE AREA & WEIGHTED CN --->                    3.270                    71.00 (71)  
.....

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

RUNOFF CURVE NUMBER DATA

.....

-----

Soil/Surface Description	CN	Area acres	Impervious Adjustment		Adjusted CN
			%C	%UC	
B4.4	71	2.580			71.00

COMPOSITE AREA & WEIGHTED CN --->                    2.580                    71.00 (71)

.....

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW

RUNOFF CURVE NUMBER DATA

.....

---

Soil/Surface Description	CN	Area acres	Impervious Adjustment		Adjusted CN
			%C	%UC	
B7.1	71	4.960			71.00

COMPOSITE AREA & WEIGHTED CN --->                    4.960                    71.00 (71)

.....

SUMMARY FOR HYDROGRAPH ADDITION  
 at Node: JUNC 20

HYG Directory: C:\Haestad\PPKW\KIF\

```

=====
Upstream Link ID  Upstream Node ID  HYG file  HYG ID  HYG tag
-----
DD29              JUNC 30              JUNC 30   JUNC 30   25yr
D17               JUNC 80              JUNC 80   JUNC 80   25yr
D31               JUNC 40              JUNC 40   JUNC 40   25yr
D21               SUB B3.7             SUB B3.7   SUB B3.7   25yr
=====
  
```

INFLOWS TO: JUNC 20

```

-----
HYG file  HYG ID  HYG tag  Volume  Peak Time  Peak Flow
          ac-ft  hrs      cfs
-----
          JUNC 30  25yr    1.656   11.9600   27.42
          JUNC 80  25yr    3.962   12.0000   52.43
          JUNC 40  25yr    1.602   11.9600   26.86
          SUB B3.7  25yr    .838    11.9600   13.37
-----
  
```

TOTAL FLOW INTO: JUNC 20

```

-----
HYG file  HYG ID  HYG tag  Volume  Peak Time  Peak Flow
          ac-ft  hrs      cfs
-----
          JUNC 20  25yr    8.058   12.0000   117.68
-----
  
```



Type.... Node: Addition Summary  
 Name.... JUNC 20  
 File.... C:\Haestad\PKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW  
 Storm... TypeII 24hr Tag: 25yr

Page 6.02  
 Event: 25 yr

TOTAL NODE INFLOW...

HYG file =  
 HYG ID = JUNC 20  
 HYG Tag = 25yr

-----  
 Peak Discharge = 117.68 cfs  
 Time to Peak = 12.0000 hrs  
 HYG Volume = 8.058 ac-ft  
 -----

HYDROGRAPH ORDINATES (cfs)  
 Output Time increment = .0400 hrs  
 Time on left represents time for first value in each row.

Time hrs					
4.5200	.00	.00	.01	.01	.01
4.7200	.02	.02	.03	.04	.04
4.9200	.05	.05	.06	.07	.07
5.1200	.08	.09	.09	.10	.11
5.3200	.12	.13	.14	.15	.16
5.5200	.17	.17	.18	.19	.20
5.7200	.21	.22	.23	.24	.25
5.9200	.26	.27	.28	.29	.30
6.1200	.31	.32	.33	.34	.35
6.3200	.36	.37	.38	.39	.40
6.5200	.41	.42	.43	.45	.46
6.7200	.47	.48	.49	.50	.51
6.9200	.52	.53	.54	.56	.57
7.1200	.58	.59	.60	.61	.62
7.3200	.63	.65	.66	.67	.68
7.5200	.69	.70	.72	.73	.74
7.7200	.75	.76	.78	.79	.80
7.9200	.81	.82	.84	.85	.86
8.1200	.88	.90	.92	.94	.97
8.3200	.99	1.02	1.04	1.07	1.10
8.5200	1.13	1.16	1.19	1.22	1.25
8.7200	1.28	1.31	1.34	1.37	1.40
8.9200	1.44	1.47	1.51	1.54	1.57
9.1200	1.60	1.63	1.65	1.67	1.69
9.3200	1.71	1.73	1.75	1.77	1.78
9.5200	1.80	1.82	1.85	1.88	1.92
9.7200	1.96	2.01	2.06	2.11	2.17
9.9200	2.22	2.28	2.34	2.40	2.46
10.1200	2.53	2.60	2.68	2.76	2.85
10.3200	2.93	3.02	3.11	3.20	3.30
10.5200	3.39	3.49	3.60	3.72	3.85
10.7200	3.99	4.13	4.28	4.43	4.59
10.9200	4.75	4.91	5.08	5.25	5.47

HYDROGRAPH ORDINATES (cfs)

Output Time increment = .0400 hrs  
Time on left represents time for first value in each row.

Time hrs					
11.1200	5.70	5.97	6.28	6.60	6.97
11.3200	7.32	7.70	8.09	8.48	8.90
11.5200	9.47	11.25	14.07	18.02	24.35
11.7200	31.45	40.78	51.66	65.54	86.75
11.9200	107.43	117.35	117.68	110.06	90.57
12.1200	70.32	54.90	44.78	37.44	31.81
12.3200	27.56	24.30	21.73	19.64	17.72
12.5200	16.17	14.80	13.63	12.70	11.95
12.7200	11.37	10.86	10.43	10.05	9.68
12.9200	9.37	9.05	8.76	8.50	8.24
13.1200	8.03	7.82	7.64	7.48	7.32
13.3200	7.17	7.02	6.87	6.73	6.58
13.5200	6.45	6.31	6.18	6.06	5.94
13.7200	5.83	5.72	5.62	5.52	5.41
13.9200	5.31	5.21	5.11	5.02	4.93
14.1200	4.85	4.79	4.73	4.68	4.64
14.3200	4.60	4.56	4.52	4.48	4.44
14.5200	4.41	4.37	4.34	4.30	4.27
14.7200	4.23	4.20	4.16	4.13	4.09
14.9200	4.06	4.02	3.99	3.95	3.92
15.1200	3.88	3.85	3.81	3.78	3.74
15.3200	3.71	3.67	3.63	3.60	3.56
15.5200	3.53	3.50	3.46	3.42	3.39
15.7200	3.35	3.32	3.28	3.24	3.21
15.9200	3.18	3.14	3.10	3.07	3.04
16.1200	3.01	2.99	2.97	2.95	2.94
16.3200	2.92	2.91	2.89	2.88	2.87
16.5200	2.86	2.84	2.83	2.82	2.80
16.7200	2.79	2.78	2.76	2.75	2.74
16.9200	2.73	2.72	2.70	2.69	2.68
17.1200	2.67	2.65	2.64	2.63	2.61
17.3200	2.60	2.59	2.58	2.56	2.55
17.5200	2.54	2.53	2.51	2.50	2.49
17.7200	2.48	2.46	2.45	2.44	2.42
17.9200	2.41	2.40	2.39	2.37	2.36
18.1200	2.35	2.34	2.32	2.31	2.30
18.3200	2.29	2.27	2.26	2.25	2.23
18.5200	2.22	2.21	2.19	2.18	2.17
18.7200	2.16	2.14	2.13	2.12	2.10
18.9200	2.09	2.08	2.07	2.05	2.04
19.1200	2.03	2.02	2.00	1.99	1.98
19.3200	1.97	1.95	1.94	1.93	1.91
19.5200	1.90	1.89	1.87	1.86	1.85
19.7200	1.84	1.82	1.81	1.80	1.78
19.9200	1.77	1.76	1.74	1.73	1.72
20.1200	1.71	1.71	1.70	1.70	1.69
20.3200	1.69	1.69	1.68	1.68	1.68

HYDROGRAPH ORDINATES (cfs)

Output Time increment = .0400 hrs

Time hrs	Time on left represents time for first value in each row.				
20.5200	1.67	1.67	1.67	1.66	1.66
20.7200	1.66	1.66	1.66	1.65	1.65
20.9200	1.65	1.65	1.64	1.64	1.64
21.1200	1.64	1.63	1.63	1.63	1.63
21.3200	1.62	1.62	1.62	1.61	1.61
21.5200	1.61	1.61	1.61	1.60	1.60
21.7200	1.60	1.60	1.59	1.59	1.59
21.9200	1.59	1.58	1.58	1.58	1.58
22.1200	1.57	1.57	1.57	1.56	1.56
22.3200	1.56	1.56	1.55	1.55	1.55
22.5200	1.55	1.55	1.54	1.54	1.54
22.7200	1.54	1.53	1.53	1.53	1.52
22.9200	1.52	1.52	1.52	1.51	1.51
23.1200	1.51	1.51	1.50	1.50	1.50
23.3200	1.50	1.50	1.49	1.49	1.49
23.5200	1.49	1.48	1.48	1.48	1.47
23.7200	1.47	1.47	1.47	1.46	1.46
23.9200	1.46	1.46	1.45	1.34	1.03
24.1200	.72	.49	.34	.24	.17
24.3200	.12	.09	.06	.04	.03
24.5200	.02	.02	.01	.01	.01
24.7200	.01	.00	.00	.00	.00
24.9200	.00				

SUMMARY FOR HYDROGRAPH ADDITION  
 at Node: JUNC 30

HYG Directory: C:\Haestad\PPKW\KIF\

```

=====
Upstream Link ID  Upstream Node ID  HYG file      HYG ID        HYG tag
-----
D29A              SUB B4.5        SUB B4.5      SUB B4.5      25yr
D23B              SUBB3.5        SUBB3.5      SUBB3.5      25yr
D23               SUBB3.6        SUBB3.6      SUBB3.6      25yr
=====
  
```

INFLOWS TO: JUNC 30

```

-----
HYG file          HYG ID          HYG tag        Volume      Peak Time     Peak Flow
ac-ft            hrs              cfs
-----
                SUB B4.5        25yr           .269        11.9200       5.04
                SUBB3.5        25yr           .643        11.9600       10.52
                SUBB3.6        25yr           .744        11.9600       12.17
  
```

TOTAL FLOW INTO: JUNC 30

```

-----
HYG file          HYG ID          HYG tag        Volume      Peak Time     Peak Flow
ac-ft            hrs              cfs
-----
                JUNC 30        25yr           1.656       11.9600       27.42
  
```

TOTAL NODE INFLOW...

HYG file =

HYG ID = JUNC 30

HYG Tag = 25yr

Peak Discharge = 27.42 cfs

Time to Peak = 11.9600 hrs

HYG Volume = 1.656 ac-ft

HYDROGRAPH ORDINATES (cfs)

Output Time increment = .0400 hrs

Time on left represents time for first value in each row.

Time hrs					
4.5600	.00	.00	.00	.00	.01
4.7600	.01	.01	.01	.01	.01
4.9600	.02	.02	.02	.02	.02
5.1600	.02	.03	.03	.03	.03
5.3600	.03	.03	.04	.04	.04
5.5600	.04	.04	.05	.05	.05
5.7600	.05	.05	.05	.06	.06
5.9600	.06	.06	.06	.07	.07
6.1600	.07	.07	.07	.08	.08
6.3600	.08	.08	.08	.09	.09
6.5600	.09	.09	.09	.10	.10
6.7600	.10	.10	.10	.11	.11
6.9600	.11	.11	.12	.12	.12
7.1600	.12	.12	.13	.13	.13
7.3600	.13	.14	.14	.14	.14
7.5600	.14	.15	.15	.15	.15
7.7600	.16	.16	.16	.16	.17
7.9600	.17	.17	.17	.18	.18
8.1600	.18	.19	.19	.20	.20
8.3600	.21	.21	.22	.22	.23
8.5600	.24	.24	.25	.25	.26
8.7600	.27	.27	.28	.28	.29
8.9600	.30	.30	.31	.32	.32
9.1600	.33	.33	.34	.34	.34
9.3600	.35	.35	.35	.36	.36
9.5600	.36	.37	.38	.39	.40
9.7600	.41	.42	.43	.44	.45
9.9600	.47	.48	.49	.50	.52
10.1600	.53	.55	.57	.59	.60
10.3600	.62	.64	.66	.68	.70
10.5600	.72	.74	.77	.80	.83
10.7600	.86	.89	.92	.95	.99
10.9600	1.02	1.06	1.09	1.14	1.19

HYDROGRAPH ORDINATES (cfs)  
 Output Time increment = .0400 hrs  
 Time on left represents time for first value in each row.

---

Time hrs					
11.1600	1.25	1.32	1.39	1.47	1.55
11.3600	1.63	1.72	1.80	1.89	2.01
11.5600	2.48	3.21	4.20	5.83	7.55
11.7600	9.83	12.43	15.75	21.05	25.89
11.9600	27.42	26.38	23.42	17.42	11.89
12.1600	8.26	6.37	5.29	4.60	4.16
12.3600	3.80	3.51	3.26	3.00	2.79
12.5600	2.59	2.42	2.30	2.20	2.13
12.7600	2.07	2.01	1.96	1.90	1.85
12.9600	1.79	1.74	1.69	1.64	1.61
13.1600	1.57	1.54	1.51	1.47	1.45
13.3600	1.42	1.39	1.36	1.33	1.30
13.5600	1.28	1.25	1.23	1.20	1.18
13.7600	1.16	1.14	1.12	1.10	1.08
13.9600	1.06	1.04	1.02	1.00	.99
14.1600	.97	.96	.96	.95	.94
14.3600	.93	.93	.92	.91	.91
14.5600	.90	.89	.88	.88	.87
14.7600	.86	.86	.85	.84	.83
14.9600	.83	.82	.81	.80	.80
15.1600	.79	.78	.78	.77	.76
15.3600	.75	.75	.74	.73	.73
15.5600	.72	.71	.70	.69	.69
15.7600	.68	.67	.67	.66	.65
15.9600	.64	.64	.63	.62	.62
16.1600	.61	.61	.61	.61	.60
16.3600	.60	.60	.59	.59	.59
16.5600	.59	.58	.58	.58	.58
16.7600	.57	.57	.57	.57	.56
16.9600	.56	.56	.56	.55	.55
17.1600	.55	.55	.54	.54	.54
17.3600	.54	.53	.53	.53	.52
17.5600	.52	.52	.52	.51	.51
17.7600	.51	.51	.50	.50	.50
17.9600	.50	.49	.49	.49	.49
18.1600	.48	.48	.48	.47	.47
18.3600	.47	.47	.46	.46	.46
18.5600	.46	.45	.45	.45	.45
18.7600	.44	.44	.44	.43	.43
18.9600	.43	.43	.42	.42	.42
19.1600	.42	.41	.41	.41	.41
19.3600	.40	.40	.40	.39	.39
19.5600	.39	.39	.38	.38	.38
19.7600	.38	.37	.37	.37	.37
19.9600	.36	.36	.36	.36	.35
20.1600	.35	.35	.35	.35	.35
20.3600	.35	.35	.35	.35	.35

HYDROGRAPH ORDINATES (cfs)  
Output Time increment = .0400 hrs

Time on left represents time for first value in each row.

---

Time hrs						
20.5600	.35	.35	.35	.35	.34	.34
20.7600	.34	.34	.34	.34	.34	.34
20.9600	.34	.34	.34	.34	.34	.34
21.1600	.34	.34	.34	.34	.34	.34
21.3600	.34	.34	.34	.33	.33	.33
21.5600	.33	.33	.33	.33	.33	.33
21.7600	.33	.33	.33	.33	.33	.33
21.9600	.33	.33	.33	.33	.33	.33
22.1600	.33	.33	.32	.32	.32	.32
22.3600	.32	.32	.32	.32	.32	.32
22.5600	.32	.32	.32	.32	.32	.32
22.7600	.32	.32	.32	.32	.32	.32
22.9600	.32	.31	.31	.31	.31	.31
23.1600	.31	.31	.31	.31	.31	.31
23.3600	.31	.31	.31	.31	.31	.31
23.5600	.31	.31	.31	.31	.31	.31
23.7600	.31	.30	.30	.30	.30	.30
23.9600	.30	.30	.27	.18	.18	.10
24.1600	.05	.03	.01	.01	.01	.00
24.3600	.00					

SUMMARY FOR HYDROGRAPH ADDITION  
 at Node: JUNC 40

HYG Directory: C:\Haestad\PPKW\KIF\

```

=====
Upstream Link ID  Upstream Node ID  HYG file      HYG ID        HYG tag
-----
D25                SUBB3.4        SUBB3.4        SUBB3.4        25yr
D25B               SUBB3.3        SUBB3.3        SUBB3.3        25yr
D31A               SUBB4.4        SUBB4.4        SUBB4.4        25yr
=====
  
```

INFLOWS TO: JUNC 40

```

-----
HYG file          HYG ID          HYG tag          Volume          Peak Time          Peak Flow
                   ac-ft           hrs              cfs
-----
                   SUBB3.4         25yr             .542            11.9600            8.87
                   SUBB3.3         25yr             .522            11.9600            8.54
                   SUBB4.4         25yr             .538            11.9200            10.08
  
```

TOTAL FLOW INTO: JUNC 40

```

-----
HYG file          HYG ID          HYG tag          Volume          Peak Time          Peak Flow
                   ac-ft           hrs              cfs
-----
                   JUNC 40         25yr             1.602           11.9600            26.86
  
```



TOTAL NODE INFLOW...

HYG file =

HYG ID = JUNC 40

HYG Tag = 25yr

-----  
 Peak Discharge = 26.86 cfs

Time to Peak = 11.9600 hrs

HYG Volume = 1.602 ac-ft  
 -----

HYDROGRAPH ORDINATES (cfs)

Output Time increment = .0400 hrs

Time on left represents time for first value in each row.

Time hrs	Time on left represents time for first value in each row.					
4.5600	.00	.00	.00	.00	.00	.00
4.7600	.01	.01	.01	.01	.01	.01
4.9600	.01	.01	.01	.02	.02	.02
5.1600	.02	.02	.02	.02	.02	.02
5.3600	.03	.03	.03	.03	.03	.03
5.5600	.03	.03	.03	.04	.04	.04
5.7600	.04	.04	.04	.04	.04	.04
5.9600	.05	.05	.05	.05	.05	.05
6.1600	.05	.06	.06	.06	.06	.06
6.3600	.06	.06	.06	.07	.07	.07
6.5600	.07	.07	.07	.07	.07	.08
6.7600	.08	.08	.08	.08	.08	.08
6.9600	.09	.09	.09	.09	.09	.09
7.1600	.09	.10	.10	.10	.10	.10
7.3600	.10	.10	.11	.11	.11	.11
7.5600	.11	.11	.11	.12	.12	.12
7.7600	.12	.12	.12	.12	.12	.13
7.9600	.13	.13	.13	.13	.13	.14
8.1600	.14	.14	.15	.15	.15	.16
8.3600	.16	.16	.17	.17	.17	.18
8.5600	.18	.19	.19	.19	.19	.20
8.7600	.20	.21	.21	.22	.22	.22
8.9600	.23	.23	.24	.24	.24	.25
9.1600	.25	.26	.26	.26	.26	.27
9.3600	.27	.27	.28	.28	.28	.29
9.5600	.29	.30	.30	.31	.31	.32
9.7600	.33	.34	.35	.36	.36	.37
9.9600	.38	.39	.40	.42	.42	.43
10.1600	.44	.46	.47	.49	.49	.51
10.3600	.52	.54	.56	.58	.58	.59
10.5600	.61	.64	.66	.69	.69	.71
10.7600	.74	.77	.80	.83	.83	.86
10.9600	.89	.93	.96	1.01	1.01	1.05

HYDROGRAPH ORDINATES (cfs)  
 Output Time increment = .0400 hrs  
 Time on left represents time for first value in each row.

Time hrs					
11.1600	1.11	1.18	1.24	1.32	1.39
11.3600	1.47	1.55	1.62	1.71	1.84
11.5600	2.35	3.04	4.03	5.68	7.29
11.7600	9.67	12.22	15.74	21.47	26.07
11.9600	26.86	25.65	22.31	15.67	10.58
12.1600	7.48	5.91	5.02	4.42	4.05
12.3600	3.71	3.44	3.20	2.93	2.74
12.5600	2.54	2.39	2.27	2.18	2.12
12.7600	2.06	2.00	1.95	1.89	1.84
12.9600	1.79	1.73	1.69	1.64	1.60
13.1600	1.57	1.53	1.51	1.47	1.45
13.3600	1.42	1.39	1.36	1.33	1.31
13.5600	1.28	1.25	1.23	1.20	1.19
13.7600	1.16	1.14	1.12	1.10	1.08
13.9600	1.06	1.04	1.02	1.00	.99
14.1600	.98	.97	.96	.96	.95
14.3600	.94	.93	.93	.92	.91
14.5600	.91	.90	.89	.88	.88
14.7600	.87	.86	.86	.85	.84
14.9600	.83	.83	.82	.81	.81
15.1600	.80	.79	.78	.77	.77
15.3600	.76	.75	.75	.74	.73
15.5600	.72	.72	.71	.70	.70
15.7600	.69	.68	.67	.66	.66
15.9600	.65	.64	.64	.63	.63
16.1600	.62	.62	.62	.61	.61
16.3600	.61	.60	.60	.60	.60
16.5600	.59	.59	.59	.59	.58
16.7600	.58	.58	.58	.57	.57
16.9600	.57	.57	.56	.56	.56
17.1600	.56	.55	.55	.55	.55
17.3600	.54	.54	.54	.53	.53
17.5600	.53	.53	.52	.52	.52
17.7600	.52	.51	.51	.51	.51
17.9600	.50	.50	.50	.49	.49
18.1600	.49	.49	.48	.48	.48
18.3600	.48	.47	.47	.47	.47
18.5600	.46	.46	.46	.45	.45
18.7600	.45	.45	.44	.44	.44
18.9600	.44	.43	.43	.43	.43
19.1600	.42	.42	.42	.41	.41
19.3600	.41	.41	.40	.40	.40
19.5600	.40	.39	.39	.39	.38
19.7600	.38	.38	.38	.37	.37
19.9600	.37	.37	.36	.36	.36
20.1600	.36	.36	.36	.36	.36
20.3600	.36	.35	.35	.35	.35

HYDROGRAPH ORDINATES (cfs)  
Output Time increment = .0400 hrs

Time on left represents time for first value in each row.

Time hrs					
20.5600	.35	.35	.35	.35	.35
20.7600	.35	.35	.35	.35	.35
20.9600	.35	.35	.35	.35	.35
21.1600	.35	.34	.34	.34	.34
21.3600	.34	.34	.34	.34	.34
21.5600	.34	.34	.34	.34	.34
21.7600	.34	.34	.34	.34	.34
21.9600	.33	.33	.33	.33	.33
22.1600	.33	.33	.33	.33	.33
22.3600	.33	.33	.33	.33	.33
22.5600	.33	.33	.33	.33	.32
22.7600	.32	.32	.32	.32	.32
22.9600	.32	.32	.32	.32	.32
23.1600	.32	.32	.32	.32	.32
23.3600	.32	.32	.31	.31	.31
23.5600	.31	.31	.31	.31	.31
23.7600	.31	.31	.31	.31	.31
23.9600	.31	.31	.27	.16	.09
24.1600	.04	.02	.01	.01	.00
24.3600	.00				

Type... Node: Addition Summary Page 6.13  
 Name... JUNC 60 Event: 25 yr  
 File... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_1A.PPW  
 Storm... TypeII 24hr Tag: 25yr

SUMMARY FOR HYDROGRAPH ADDITION  
 at Node: JUNC 60

HYG Directory: C:\Haestad\PPKW\KIF\

```

=====
Upstream Link ID  Upstream Node ID  HYG file      HYG ID        HYG tag
-----
D27                SUB B3.2&3.1      SUB B3.2&3.1  25yr
D33A               SUBB4.3           SUBB4.3       25yr
=====
  
```

INFLOWS TO: JUNC 60

```

-----
HYG file          HYG ID          HYG tag        Volume      Peak Time    Peak Flow
ac-ft            hrs              cfs
-----
                SUB B3.2&3.1    25yr           .744        11.9600     12.17
                SUBB4.3         25yr           .682        11.9200     12.77
  
```

TOTAL FLOW INTO: JUNC 60

```

-----
HYG file          HYG ID          HYG tag        Volume      Peak Time    Peak Flow
ac-ft            hrs              cfs
-----
                JUNC 60         25yr           1.426       11.9600     24.15
  
```

TOTAL NODE INFLOW...  
 HYG file =  
 HYG ID = JUNC 60  
 HYG Tag = 25yr

-----  
 Peak Discharge = 24.15 cfs  
 Time to Peak = 11.9600 hrs  
 HYG Volume = 1.426 ac-ft  
 -----

HYDROGRAPH ORDINATES (cfs)  
 Output Time increment = .0400 hrs  
 Time on left represents time for first value in each row.

Time hrs						
4.5600	.00	.00	.00	.00	.00	.00
4.7600	.00	.00	.01	.01	.01	.01
4.9600	.01	.01	.01	.01	.01	.01
5.1600	.01	.01	.01	.02	.02	.02
5.3600	.02	.02	.02	.02	.02	.02
5.5600	.02	.02	.02	.03	.03	.03
5.7600	.03	.03	.03	.03	.03	.03
5.9600	.03	.03	.03	.04	.04	.04
6.1600	.04	.04	.04	.04	.04	.04
6.3600	.04	.04	.05	.05	.05	.05
6.5600	.05	.05	.05	.05	.05	.05
6.7600	.05	.06	.06	.06	.06	.06
6.9600	.06	.06	.06	.06	.06	.06
7.1600	.07	.07	.07	.07	.07	.07
7.3600	.07	.07	.07	.08	.08	.08
7.5600	.08	.08	.08	.08	.08	.08
7.7600	.08	.08	.09	.09	.09	.09
7.9600	.09	.09	.09	.09	.09	.10
8.1600	.10	.10	.10	.11	.11	.11
8.3600	.11	.11	.12	.12	.12	.12
8.5600	.13	.13	.13	.14	.14	.14
8.7600	.14	.15	.15	.15	.15	.16
8.9600	.16	.16	.17	.17	.17	.17
9.1600	.18	.18	.18	.19	.19	.19
9.3600	.20	.20	.20	.21	.21	.21
9.5600	.21	.22	.22	.23	.23	.24
9.7600	.25	.25	.26	.27	.27	.28
9.9600	.29	.30	.31	.32	.32	.33
10.1600	.34	.35	.37	.38	.38	.39
10.3600	.41	.42	.44	.45	.45	.47
10.5600	.49	.50	.52	.55	.55	.57
10.7600	.59	.62	.64	.67	.67	.70
10.9600	.73	.75	.79	.83	.83	.87

HYDROGRAPH ORDINATES (cfs)  
 Output Time increment = .0400 hrs  
 Time on left represents time for first value in each row.

Time hrs					
11.1600	.92	.98	1.03	1.10	1.16
11.3600	1.23	1.30	1.36	1.44	1.56
11.5600	2.06	2.66	3.57	5.09	6.49
11.7600	8.72	11.02	14.39	19.92	23.96
11.9600	24.15	22.92	19.60	13.09	8.74
12.1600	6.29	5.08	4.40	3.92	3.63
12.3600	3.33	3.09	2.89	2.63	2.47
12.5600	2.29	2.15	2.06	1.98	1.93
12.7600	1.87	1.82	1.78	1.72	1.68
12.9600	1.63	1.58	1.54	1.49	1.46
13.1600	1.43	1.40	1.38	1.35	1.33
13.3600	1.30	1.27	1.25	1.22	1.19
13.5600	1.17	1.15	1.13	1.10	1.09
13.7600	1.07	1.05	1.03	1.01	.99
13.9600	.97	.95	.94	.92	.91
14.1600	.90	.89	.89	.88	.87
14.3600	.86	.86	.85	.85	.84
14.5600	.83	.83	.82	.81	.81
14.7600	.80	.79	.79	.78	.77
14.9600	.77	.76	.75	.75	.74
15.1600	.73	.73	.72	.71	.71
15.3600	.70	.69	.69	.68	.67
15.5600	.67	.66	.65	.65	.64
15.7600	.63	.62	.62	.61	.61
15.9600	.60	.59	.59	.58	.58
16.1600	.57	.57	.57	.56	.56
16.3600	.56	.56	.56	.55	.55
16.5600	.55	.55	.54	.54	.54
16.7600	.54	.53	.53	.53	.53
16.9600	.52	.52	.52	.52	.52
17.1600	.51	.51	.51	.51	.50
17.3600	.50	.50	.50	.49	.49
17.5600	.49	.49	.48	.48	.48
17.7600	.48	.47	.47	.47	.47
17.9600	.46	.46	.46	.46	.45
18.1600	.45	.45	.45	.44	.44
18.3600	.44	.44	.43	.43	.43
18.5600	.43	.42	.42	.42	.42
18.7600	.41	.41	.41	.41	.41
18.9600	.40	.40	.40	.40	.39
19.1600	.39	.39	.39	.38	.38
19.3600	.38	.37	.37	.37	.37
19.5600	.37	.36	.36	.36	.36
19.7600	.35	.35	.35	.35	.34
19.9600	.34	.34	.34	.33	.33
20.1600	.33	.33	.33	.33	.33
20.3600	.33	.33	.33	.33	.33

HYDROGRAPH ORDINATES (cfs)

Output Time increment = .0400 hrs

Time on left represents time for first value in each row.

Time hrs						
20.5600	.33	.33	.33	.33	.33	.33
20.7600	.32	.32	.32	.32	.32	.32
20.9600	.32	.32	.32	.32	.32	.32
21.1600	.32	.32	.32	.32	.32	.32
21.3600	.32	.32	.32	.32	.32	.32
21.5600	.31	.31	.31	.31	.31	.31
21.7600	.31	.31	.31	.31	.31	.31
21.9600	.31	.31	.31	.31	.31	.31
22.1600	.31	.31	.31	.31	.31	.31
22.3600	.31	.30	.30	.30	.30	.30
22.5600	.30	.30	.30	.30	.30	.30
22.7600	.30	.30	.30	.30	.30	.30
22.9600	.30	.30	.30	.30	.30	.30
23.1600	.30	.29	.29	.29	.29	.29
23.3600	.29	.29	.29	.29	.29	.29
23.5600	.29	.29	.29	.29	.29	.29
23.7600	.29	.29	.29	.29	.29	.29
23.9600	.29	.28	.24	.13	.07	.07
24.1600	.03	.02	.01	.00	.00	.00
24.3600	.00					

SUMMARY FOR HYDROGRAPH ADDITION  
 at Node: JUNC 80

HYG Directory: C:\Haestad\PPKW\KIF\

```

=====
Upstream Link ID  Upstream Node ID  HYG file      HYG ID        HYG tag
-----
D35                SUB A12.4      SUB A12.4     SUB A12.4     25yr
D13A               SUB12.1&12.2  SUB12.1&12.2 SUB12.1&12.2 25yr
D17A               SUBA12.36.1B3.8 SUBA12.36.1B3.8 SUBA12.36.1B3.8 25yr
=====
  
```

INFLOWS TO: JUNC 80

```

-----
HYG file      HYG ID        HYG tag      Volume      Peak Time     Peak Flow
ac-ft        hrs           cfs
-----
                SUB A12.4     25yr         .357        12.0800      4.46
                SUB12.1&12.2 25yr         1.928       12.0800     24.12
                SUBA12.36.1B3.8 25yr        1.677       11.9600     27.68
  
```

TOTAL FLOW INTO: JUNC 80

```

-----
HYG file      HYG ID        HYG tag      Volume      Peak Time     Peak Flow
ac-ft        hrs           cfs
-----
                JUNC 80      25yr         3.962       12.0000     52.43
  
```



TOTAL NODE INFLOW...

HYG file =  
 HYG ID = JUNC 80  
 HYG Tag = 25yr

-----  
 Peak Discharge = 52.43 cfs  
 Time to Peak = 12.0000 hrs  
 HYG Volume = 3.962 ac-ft  
 -----

HYDROGRAPH ORDINATES (cfs)

Output Time increment = .0400 hrs

Time on left represents time for first value in each row.

Time hrs	HYDROGRAPH ORDINATES (cfs)					
	Output Time increment = .0400 hrs					
	Time on left represents time for first value in each row.					
4.6000	.00	.00	.00	.00	.01	.01
4.8000	.01	.01	.01	.01	.02	.02
5.0000	.02	.02	.02	.03	.03	.03
5.2000	.03	.04	.04	.05	.05	.05
5.4000	.06	.06	.07	.07	.08	.08
5.6000	.08	.09	.09	.10	.10	.10
5.8000	.11	.11	.12	.12	.13	.13
6.0000	.13	.14	.14	.15	.15	.15
6.2000	.16	.17	.17	.18	.18	.18
6.4000	.19	.19	.20	.20	.21	.21
6.6000	.22	.22	.23	.23	.24	.24
6.8000	.25	.25	.26	.26	.27	.27
7.0000	.28	.28	.29	.29	.30	.30
7.2000	.31	.31	.32	.32	.33	.33
7.4000	.34	.34	.35	.36	.36	.36
7.6000	.37	.38	.38	.39	.39	.39
7.8000	.40	.41	.41	.42	.43	.43
8.0000	.43	.44	.45	.46	.47	.47
8.2000	.48	.49	.50	.51	.53	.53
8.4000	.54	.55	.57	.58	.60	.60
8.6000	.61	.63	.65	.66	.68	.68
8.8000	.70	.71	.73	.75	.77	.77
9.0000	.78	.80	.82	.84	.85	.85
9.2000	.86	.88	.89	.90	.91	.91
9.4000	.92	.92	.93	.94	.95	.95
9.6000	.96	.98	.99	1.01	1.03	1.03
9.8000	1.06	1.08	1.11	1.14	1.16	1.16
10.0000	1.19	1.22	1.25	1.29	1.32	1.32
10.2000	1.36	1.40	1.44	1.48	1.52	1.52
10.4000	1.57	1.61	1.66	1.71	1.76	1.76
10.6000	1.81	1.86	1.93	1.99	2.06	2.06
10.8000	2.13	2.20	2.28	2.36	2.43	2.43
11.0000	2.52	2.60	2.70	2.81	2.93	2.93

HYDROGRAPH ORDINATES (cfs)  
 Output Time increment = .0400 hrs  
 Time on left represents time for first value in each row.

Time hrs					
11.2000	3.07	3.22	3.38	3.55	3.73
11.4000	3.91	4.10	4.30	4.56	5.16
11.6000	6.22	7.70	10.04	12.92	16.56
11.8000	21.06	26.60	34.53	43.39	49.70
12.0000	52.43	52.25	47.72	40.85	34.30
12.2000	28.86	24.21	20.31	17.17	14.82
12.4000	12.99	11.52	10.27	9.23	8.35
12.6000	7.60	6.98	6.47	6.05	5.71
12.8000	5.42	5.17	4.95	4.76	4.58
13.0000	4.42	4.28	4.14	4.02	3.92
13.2000	3.82	3.73	3.64	3.56	3.49
13.4000	3.41	3.34	3.27	3.20	3.13
13.6000	3.06	3.00	2.94	2.89	2.83
13.8000	2.78	2.73	2.67	2.62	2.58
14.0000	2.53	2.48	2.43	2.39	2.36
14.2000	2.32	2.30	2.27	2.25	2.23
14.4000	2.21	2.19	2.17	2.15	2.13
14.6000	2.11	2.10	2.08	2.06	2.05
14.8000	2.03	2.01	1.99	1.98	1.96
15.0000	1.94	1.93	1.91	1.89	1.88
15.2000	1.86	1.84	1.82	1.81	1.79
15.4000	1.77	1.76	1.74	1.72	1.70
15.6000	1.69	1.67	1.65	1.64	1.62
15.8000	1.60	1.58	1.57	1.55	1.53
16.0000	1.52	1.50	1.48	1.47	1.46
16.2000	1.44	1.43	1.43	1.42	1.41
16.4000	1.40	1.40	1.39	1.38	1.38
16.6000	1.37	1.36	1.36	1.35	1.34
16.8000	1.34	1.33	1.33	1.32	1.31
17.0000	1.31	1.30	1.30	1.29	1.28
17.2000	1.28	1.27	1.27	1.26	1.25
17.4000	1.25	1.24	1.23	1.23	1.22
17.6000	1.22	1.21	1.20	1.20	1.19
17.8000	1.19	1.18	1.17	1.17	1.16
18.0000	1.16	1.15	1.14	1.14	1.13
18.2000	1.12	1.12	1.11	1.11	1.10
18.4000	1.09	1.09	1.08	1.08	1.07
18.6000	1.06	1.06	1.05	1.04	1.04
18.8000	1.03	1.03	1.02	1.01	1.01
19.0000	1.00	.99	.99	.98	.98
19.2000	.97	.96	.96	.95	.95
19.4000	.94	.93	.93	.92	.91
19.6000	.91	.90	.90	.89	.88
19.8000	.88	.87	.86	.86	.85
20.0000	.85	.84	.83	.83	.83
20.2000	.82	.82	.82	.81	.81
20.4000	.81	.81	.81	.81	.80

HYDROGRAPH ORDINATES (cfs)  
Output Time increment = .0400 hrs

Time on left represents time for first value in each row.

Time hrs					
20.6000	.80	.80	.80	.80	.80
20.8000	.80	.80	.79	.79	.79
21.0000	.79	.79	.79	.79	.79
21.2000	.78	.78	.78	.78	.78
21.4000	.78	.78	.78	.78	.77
21.6000	.77	.77	.77	.77	.77
21.8000	.77	.76	.76	.76	.76
22.0000	.76	.76	.76	.76	.76
22.2000	.75	.75	.75	.75	.75
22.4000	.75	.75	.75	.74	.74
22.6000	.74	.74	.74	.74	.74
22.8000	.74	.73	.73	.73	.73
23.0000	.73	.73	.73	.73	.73
23.2000	.72	.72	.72	.72	.72
23.4000	.72	.72	.71	.71	.71
23.6000	.71	.71	.71	.71	.71
23.8000	.71	.70	.70	.70	.70
24.0000	.70	.67	.58	.46	.36
24.2000	.28	.21	.15	.11	.08
24.4000	.06	.04	.03	.02	.02
24.6000	.01	.01	.01	.01	.01
24.8000	.00	.00	.00	.00	.00

## Index of Starting Page Numbers for ID Names

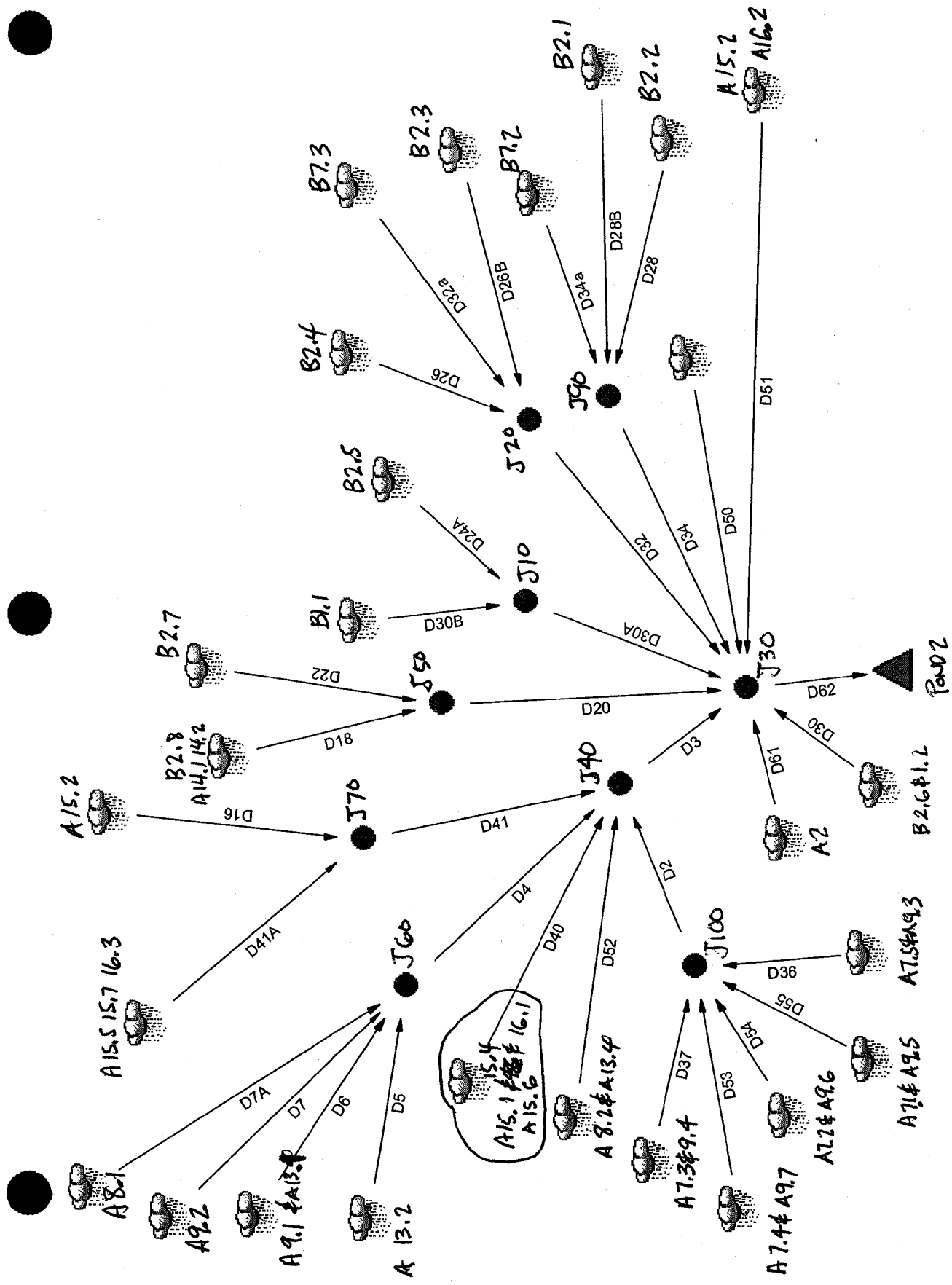
----- K -----

KIF... 2.01

----- S -----

SUB A12.4... 4.01, 5.01  
SUB A5.1+A11.2... 4.03, 5.02  
SUB B3.2&3.1... 4.05, 5.03  
SUB B3.7... 4.07, 5.04  
SUB B4.5... 4.09, 5.05  
SUB12.1&12.2... 4.11, 5.06  
SUBA12.36.1B3.8... 4.13, 5.07  
SUBA5.2A11.1.3.4... 4.15, 5.08  
SUBAREA B4.1... 4.17, 5.09  
SUBAREA B5... 4.19, 5.10  
SUBAREA B6.1... 4.21, 5.11  
SUBAREA B6.2... 4.23, 5.12  
SUBAREA B6.3... 4.25, 5.13  
SUBAREA B6.4... 4.27, 5.14  
SUBAREA B6.5... 4.29, 5.15  
SUBB3.3... 4.31, 5.16  
SUBB3.4... 4.33, 5.17  
SUBB3.5... 4.35, 5.18  
SUBB3.6... 4.37, 5.19  
SUBB4.2... 4.39, 5.20  
SUBB4.3... 4.41, 5.21  
SUBB4.4... 4.43, 5.22  
SUBB7.1... 4.45, 5.23, 3.01, 1.01

**ATTACHMENT 2.2 – DITCH 2 MODEL FOR DITCH FLOWS**



DITCHES 2

=====  
JOB TITLE  
=====

Project Date: 5/3/2004  
Project Engineer: Daniel R. Smith  
Project Title: KIF Lat Exp Interim Operation w/phase2&3 pond  
Project Comments:  
This model analyzes the cond of the expan during operation, while  
Phase 2/3 has a pond. The time of concentration is minimized due  
to the pond.

Table of Contents

\*\*\*\*\* MASTER SUMMARY \*\*\*\*\*

Watershed..... Master Network Summary ..... 1.01

\*\*\*\*\* NETWORK SUMMARIES (DETAILED) \*\*\*\*\*

Watershed..... 25yr  
                   Executive Summary (Links) ..... 2.01

\*\*\*\*\* DESIGN STORMS SUMMARY \*\*\*\*\*

KIF..... Design Storms ..... 3.01

\*\*\*\*\* RAINFALL DATA \*\*\*\*\*

TypeII 24hr.... 25yr  
                   Synthetic Curve ..... 4.01

\*\*\*\*\* TC CALCULATIONS \*\*\*\*\*

A14.1&14.2&B2.8 Tc Calcs ..... 5.01

A15.1.4.6&16.1.. Tc Calcs ..... 5.03

A15.2&A16.2..... Tc Calcs ..... 5.05

A15.5&.7&16.3... Tc Calcs ..... 5.07

A9.2..... Tc Calcs ..... 5.09



## Table of Contents (continued)

B2.2.....	Tc Calcs .....	5.11
SUBA13.2.....	Tc Calcs .....	5.13
SUBA7.1&A9.5....	Tc Calcs .....	5.15
SUBA7.2&A9.6....	Tc Calcs .....	5.17
SUBA7.3&A9.4....	Tc Calcs .....	5.19
SUBA7.4&A9.7....	Tc Calcs .....	5.21
SUBA7.5&A9.3....	Tc Calcs .....	5.23
SUBA8.1.....	Tc Calcs .....	5.25
SUBA8.2&A13.4...	Tc Calcs .....	5.27
SUBA9.1&A13.1...	Tc Calcs .....	5.29
SUBAREA A15.2...	Tc Calcs .....	5.31
SUBAREA A2.....	Tc Calcs .....	5.33
SUBAREA B1.1....	Tc Calcs .....	5.35
SUBAREA B2.1....	Tc Calcs .....	5.37
SUBAREA B2.3....	Tc Calcs .....	5.39
SUBAREA B2.4....	Tc Calcs .....	5.41
SUBAREA B2.5....	Tc Calcs .....	5.43
SUBAREA B7.1....	Tc Calcs .....	5.45
SUBAREA B7.2....	Tc Calcs .....	5.47
SUBAREA B7.3....	Tc Calcs .....	5.49
SUBB2.6&1.2.....	Tc Calcs .....	5.51
SUBB2.7.....	Tc Calcs .....	5.53
***** CN CALCULATIONS *****		
A14.1&14.2&B2.8	Runoff CN-Area .....	6.01

## Table of Contents (continued)

A15.1.4.6&16.1..	Runoff CN-Area .....	6.02
A15.2&A16.2....	Runoff CN-Area .....	6.03
A15.5&.7&16.3...	Runoff CN-Area .....	6.04
A9.2.....	Runoff CN-Area .....	6.05
B2.2.....	Runoff CN-Area .....	6.06
SUBA13.2.....	Runoff CN-Area .....	6.07
SUBA7.1&A9.5....	Runoff CN-Area .....	6.08
SUBA7.2&A9.6....	Runoff CN-Area .....	6.09
SUBA7.3&9.4....	Runoff CN-Area .....	6.10
SUBA7.4&A9.7....	Runoff CN-Area .....	6.11
SUBA7.5&A9.3....	Runoff CN-Area .....	6.12
SUBA8.1.....	Runoff CN-Area .....	6.13
SUBA8.2&A13.4...	Runoff CN-Area .....	6.14
SUBA9.1&A13.1...	Runoff CN-Area .....	6.15
SUBAREA A15.2...	Runoff CN-Area .....	6.16
SUBAREA A2.....	Runoff CN-Area .....	6.17
SUBAREA B1.1....	Runoff CN-Area .....	6.18
SUBAREA B2.1....	Runoff CN-Area .....	6.19
SUBAREA B2.3....	Runoff CN-Area .....	6.20
SUBAREA B2.4....	Runoff CN-Area .....	6.21
SUBAREA B2.5....	Runoff CN-Area .....	6.22
SUBAREA B7.1....	Runoff CN-Area .....	6.23
SUBAREA B7.2....	Runoff CN-Area .....	6.24
SUBAREA B7.3....	Runoff CN-Area .....	6.25

Table of Contents (continued)

SUBB2.6&1.2..... Runoff CN-Area ..... 6.26

SUBB2.7..... Runoff CN-Area ..... 6.27

\*\*\*\*\* HYG ADDITION \*\*\*\*\*

JUNC 10..... 25yr  
Node: Addition Summary ..... 7.01

JUNC 100..... 25yr  
Node: Addition Summary ..... 7.05

JUNC 20..... 25yr  
Node: Addition Summary ..... 7.09

JUNC 30..... 25yr  
Node: Addition Summary ..... 7.13

JUNC 40..... 25yr  
Node: Addition Summary ..... 7.17

JUNC 50..... 25yr  
Node: Addition Summary ..... 7.21

JUNC 60..... 25yr  
Node: Addition Summary ..... 7.25

JUNC 70..... 25yr  
Node: Addition Summary ..... 7.29

JUNC 90..... 25yr  
Node: Addition Summary ..... 7.33

MASTER DESIGN STORM SUMMARY

Network Storm Collection: KIF

Return Event	Total Depth in	Rainfall Type	RNF ID	
2yr	3.2500	Synthetic Curve	TypeII	24hr
10yr	3.6000	Synthetic Curve	TypeII	24hr
25yr	5.5000	Synthetic Curve	TypeII	24hr
100yr	6.5000	Synthetic Curve	TypeII	24hr

ICPM CALCULATION TOLERANCES

Target Convergence= .000 cfs +/-  
 Max. Iterations = 35 loops  
 ICPM Time Step = .0400 hrs  
 Output Time Step = .0400 hrs  
 ICPM Ending Time = 35.0000 hrs

MASTER NETWORK SUMMARY  
 SCS Unit Hydrograph Method

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

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
A14.1&14.2&B2.8	AREA	2	1.493		12.0800	19.05		
A14.1&14.2&B2.8	AREA	10	1.732		12.0800	22.05		
A14.1&14.2&B2.8	AREA	25	3.079		12.0800	38.52		
A14.1&14.2&B2.8	AREA	100	3.808		12.0800	47.19		
A15.1.4.6&16.1	AREA	2	.319		12.0000	5.13		
A15.1.4.6&16.1	AREA	10	.397		12.0000	6.48		
A15.1.4.6&16.1	AREA	25	.880		12.0000	14.70		
A15.1.4.6&16.1	AREA	100	1.163		11.9600	19.44		
A15.2&A16.2	AREA	2	.371		12.0000	6.18		
A15.2&A16.2	AREA	10	.448		12.0000	7.48		
A15.2&A16.2	AREA	25	.906		11.9600	15.18		
A15.2&A16.2	AREA	100	1.166		11.9600	19.50		
A15.5&.7&16.3	AREA	2	.242		12.0000	3.89		
A15.5&.7&16.3	AREA	10	.301		12.0000	4.91		
A15.5&.7&16.3	AREA	25	.667		12.0000	11.15		
A15.5&.7&16.3	AREA	100	.882		11.9600	14.74		
A9.2	AREA	2	.522		12.0800	6.66		
A9.2	AREA	10	.606		12.0800	7.71		
A9.2	AREA	25	1.077		12.0800	13.47		
A9.2	AREA	100	1.332		12.0800	16.50		

Name.... Watershed

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

-----  
ICPM CALCULATION TOLERANCES  
-----

Target Convergence= .000 cfs +/-  
Max. Iterations = 35 loops  
ICPM Time Step = .0400 hrs  
Output Time Step = .0400 hrs  
ICPM Ending Time = 35.0000 hrs  
-----

MASTER NETWORK SUMMARY  
SCS Unit Hydrograph Method

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

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
B2.2	AREA	2	.356		11.9600	5.95		
B2.2	AREA	10	.413		11.9600	6.89		
B2.2	AREA	25	.734		11.9600	12.01		
B2.2	AREA	100	.908		11.9600	14.70		
JUNC 10	JCT	2	.678		11.9200	12.03		
JUNC 10	JCT	10	.796		11.9200	14.16		
JUNC 10	JCT	25	1.478		11.9200	26.22		
JUNC 10	JCT	100	1.855		11.9200	32.72		
JUNC 100	JCT	2	1.816		12.0000	28.90		
JUNC 100	JCT	10	2.191		12.0000	35.08		
JUNC 100	JCT	25	4.443		12.0000	71.14		
JUNC 100	JCT	100	5.719		12.0000	90.98		
JUNC 20	JCT	2	1.066		11.9600	17.87		
JUNC 20	JCT	10	1.249		11.9600	20.97		
JUNC 20	JCT	25	2.309		11.9600	38.40		
JUNC 20	JCT	100	2.894		11.9600	47.77		
JUNC 30	JCT	2	10.659		12.0000	160.17		
JUNC 30	JCT	10	12.655		12.0000	190.71		
JUNC 30	JCT	25	24.420		11.9600	366.27		
JUNC 30	JCT	100	31.011		11.9600	464.59		
JUNC 40	JCT	2	3.981		12.0000	60.34		
JUNC 40	JCT	10	4.793		12.0000	73.22		
JUNC 40	JCT	25	9.661		12.0000	148.56		
JUNC 40	JCT	100	12.427		12.0000	190.16		
JUNC 50	JCT	2	2.037		12.0400	26.53		
JUNC 50	JCT	10	2.362		12.0400	30.69		
JUNC 50	JCT	25	4.200		12.0400	53.56		
JUNC 50	JCT	100	5.195		12.0400	65.59		
JUNC 60	JCT	2	1.200		12.0400	15.76		
JUNC 60	JCT	10	1.419		12.0000	18.73		
JUNC 60	JCT	25	2.701		12.0000	35.92		
JUNC 60	JCT	100	3.415		12.0000	45.25		
JUNC 70	JCT	2	.446		12.0000	7.25		
JUNC 70	JCT	10	.537		12.0000	8.79		
JUNC 70	JCT	25	1.088		11.9600	17.96		
JUNC 70	JCT	100	1.402		11.9600	23.17		

Name.... Watershed

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

ICPM CALCULATION TOLERANCES

-----  
 Target Convergence= .000 cfs +/-  
 Max. Iterations = 35 loops  
 ICPM Time Step = .0400 hrs  
 Output Time Step = .0400 hrs  
 ICPM Ending Time = 35.0000 hrs  
 -----

MASTER NETWORK SUMMARY  
 SCS Unit Hydrograph Method

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

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
JUNC 90	JCT	2	1.014		11.9600	17.06		
JUNC 90	JCT	10	1.201		11.9600	20.28		
JUNC 90	JCT	25	2.298		11.9600	38.75		
JUNC 90	JCT	100	2.912		11.9600	48.83		
*POND 2	T-E	2	10.659		12.0000	160.17	746.00	
*POND 2	T-E	10	12.655		12.0000	190.71	746.00	
*POND 2	T-E	25	24.420		11.9600	366.27	746.00	
*POND 2	T-E	100	31.012		11.9600	464.59	746.00	
SUBA13.2	AREA	2	.255		12.0800	3.25		
SUBA13.2	AREA	10	.295		12.0800	3.76		
SUBA13.2	AREA	25	.525		12.0800	6.57		
SUBA13.2	AREA	100	.649		12.0800	8.05		
SUBA7.1&A9.5	AREA	2	.254		12.0000	4.22		
SUBA7.1&A9.5	AREA	10	.308		12.0000	5.13		
SUBA7.1&A9.5	AREA	25	.632		11.9600	10.59		
SUBA7.1&A9.5	AREA	100	.817		11.9600	13.68		
SUBA7.2&A9.6	AREA	2	.243		11.9600	4.12		
SUBA7.2&A9.6	AREA	10	.297		11.9600	5.11		
SUBA7.2&A9.6	AREA	25	.628		11.9600	11.00		
SUBA7.2&A9.6	AREA	100	.818		11.9600	14.30		
SUBA7.3&9.4	AREA	2	.497		12.0400	7.68		
SUBA7.3&9.4	AREA	10	.595		12.0000	9.24		
SUBA7.3&9.4	AREA	25	1.171		12.0000	18.27		
SUBA7.3&9.4	AREA	100	1.493		12.0000	23.20		
SUBA7.4&A9.7	AREA	2	.221		11.9600	3.86		
SUBA7.4&A9.7	AREA	10	.271		11.9600	4.77		
SUBA7.4&A9.7	AREA	25	.572		11.9200	10.31		
SUBA7.4&A9.7	AREA	100	.746		11.9200	13.48		
SUBA7.5&A9.3	AREA	2	.600		12.0400	9.26		
SUBA7.5&A9.3	AREA	10	.721		12.0000	11.17		
SUBA7.5&A9.3	AREA	25	1.440		12.0000	22.49		
SUBA7.5&A9.3	AREA	100	1.844		12.0000	28.70		
SUBA8.1	AREA	2	.114		11.9600	1.95		
SUBA8.1	AREA	10	.142		11.9600	2.46		
SUBA8.1	AREA	25	.315		11.9200	5.62		
SUBA8.1	AREA	100	.416		11.9200	7.50		

Name.... Watershed

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

ICPM CALCULATION TOLERANCES

-----  
 Target Convergence= .000 cfs +/-  
 Max. Iterations = 35 loops  
 ICPM Time Step = .0400 hrs  
 Output Time Step = .0400 hrs  
 ICPM Ending Time = 35.0000 hrs  
 -----

MASTER NETWORK SUMMARY  
 SCS Unit Hydrograph Method

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

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Opeak hrs	Opeak cfs	Max WSEL ft	Max Pond Storage ac-ft
SUBA8.2&A13.4	AREA	2	.200		11.9200	3.46		
SUBA8.2&A13.4	AREA	10	.248		11.9200	4.42		
SUBA8.2&A13.4	AREA	25	.550		11.9200	10.31		
SUBA8.2&A13.4	AREA	100	.727		11.9200	13.70		
SUBA9.1&A13.1	AREA	2	.309		11.9600	5.43		
SUBA9.1&A13.1	AREA	10	.376		11.9600	6.65		
SUBA9.1&A13.1	AREA	25	.784		11.9200	14.14		
SUBA9.1&A13.1	AREA	100	1.018		11.9200	18.39		
SUBAREA A15.2	AREA	2	.204		11.9600	3.41		
SUBAREA A15.2	AREA	10	.237		11.9600	3.95		
SUBAREA A15.2	AREA	25	.421		11.9600	6.89		
SUBAREA A15.2	AREA	100	.521		11.9600	8.43		
SUBAREA A2	AREA	2	.274		12.1200	3.21		
SUBAREA A2	AREA	10	.340		12.1200	4.09		
SUBAREA A2	AREA	25	.754		12.0800	9.54		
SUBAREA A2	AREA	100	.997		12.0800	12.70		
SUBAREA B1.1	AREA	2	.115		11.9600	1.96		
SUBAREA B1.1	AREA	10	.143		11.9600	2.48		
SUBAREA B1.1	AREA	25	.317		11.9200	5.66		
SUBAREA B1.1	AREA	100	.419		11.9200	7.55		
SUBAREA B2.1	AREA	2	.359		11.9600	6.01		
SUBAREA B2.1	AREA	10	.417		11.9600	6.95		
SUBAREA B2.1	AREA	25	.741		11.9600	12.12		
SUBAREA B2.1	AREA	100	.916		11.9600	14.84		
SUBAREA B2.3	AREA	2	.424		11.9600	7.10		
SUBAREA B2.3	AREA	10	.492		11.9600	8.21		
SUBAREA B2.3	AREA	25	.875		11.9600	14.32		
SUBAREA B2.3	AREA	100	1.083		11.9600	17.54		
SUBAREA B2.4	AREA	2	.480		11.9600	8.03		
SUBAREA B2.4	AREA	10	.557		11.9600	9.29		
SUBAREA B2.4	AREA	25	.990		11.9600	16.20		
SUBAREA B2.4	AREA	100	1.224		11.9600	19.83		
SUBAREA B2.5	AREA	2	.563		11.9200	10.17		
SUBAREA B2.5	AREA	10	.653		11.9200	11.77		
SUBAREA B2.5	AREA	25	1.162		11.9200	20.55		
SUBAREA B2.5	AREA	100	1.437		11.9200	25.17		

-----  
 ICPM CALCULATION TOLERANCES  
 -----

Target Convergence= .000 cfs +/-  
 Max. Iterations = 35 loops  
 ICPM Time Step = .0400 hrs  
 Output Time Step = .0400 hrs  
 ICPM Ending Time = 35.0000 hrs  
 -----

MASTER NETWORK SUMMARY  
 SCS Unit Hydrograph Method

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

Node ID	Type	Return Event	HYG Vol ac-ft	Trun	Qpeak hrs	Qpeak cfs	Max WSEL ft	Max Pond Storage ac-ft
SUBAREA B7.1	AREA	2	.375		11.9600	6.40		
SUBAREA B7.1	AREA	10	.466		11.9600	8.09		
SUBAREA B7.1	AREA	25	1.034		11.9200	18.47		
SUBAREA B7.1	AREA	100	1.367		11.9200	24.62		
SUBAREA B7.2	AREA	2	.299		11.9600	5.10		
SUBAREA B7.2	AREA	10	.371		11.9600	6.44		
SUBAREA B7.2	AREA	25	.823		11.9200	14.71		
SUBAREA B7.2	AREA	100	1.088		11.9200	19.61		
SUBAREA B7.3	AREA	2	.161		11.9600	2.75		
SUBAREA B7.3	AREA	10	.200		11.9600	3.47		
SUBAREA B7.3	AREA	25	.444		11.9200	7.93		
SUBAREA B7.3	AREA	100	.587		11.9200	10.57		
SUBB2.6&1.2	AREA	2	.862		11.9600	14.41		
SUBB2.6&1.2	AREA	10	1.000		11.9600	16.68		
SUBB2.6&1.2	AREA	25	1.778		11.9600	29.09		
SUBB2.6&1.2	AREA	100	2.199		11.9600	35.61		
SUBB2.7	AREA	2	.544		11.9600	9.09		
SUBB2.7	AREA	10	.631		11.9600	10.52		
SUBB2.7	AREA	25	1.121		11.9600	18.34		
SUBB2.7	AREA	100	1.387		11.9600	22.46		



NETWORK SUMMARY -- LINKS  
 (UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)  
 (Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

DEFAULT Design Storm File, ID = KIF

Storm Tag Name = 25yr

-----  
 Data Type, File, ID = Synthetic Storm TypeII 24hr  
 Storm Frequency = 25 yr  
 Total Rainfall Depth= 5.5000 in  
 Duration Multiplier = 1  
 Resulting Duration = 24.0000 hrs  
 Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

-----  
 ICPM CALCULATION TOLERANCES  
 -----

Target Convergence= .000 cfs +/-  
 Max. Iterations = 35 loops  
 ICPM Time Step = .0400 hrs  
 Output Time Step = .0400 hrs  
 ICPM Ending Time = 35.0000 hrs  
 -----

Link ID	Type		HYG Vol ac-ft	Peak Time Trun. hrs	Peak Q cfs	End Points
D16	ADD UN		.421	11.9600	6.89	SUBAREA A15.2
	DL		.421	11.9600	6.89	
	DN		1.088	11.9600	17.96	JUNC 70
D18	ADD UN		3.079	12.0800	38.52	A14.1&14.2&B2.8
	DL		3.079	12.0800	38.52	
	DN		4.200	12.0400	53.56	JUNC 50
D2	ADD UN		4.443	12.0000	71.14	JUNC 100
	DL		4.443	12.0000	71.14	
	DN		9.661	12.0000	148.56	JUNC 40
D20	ADD UN		4.200	12.0400	53.56	JUNC 50
	DL		4.200	12.0400	53.56	
	DN		24.420	11.9600	366.27	JUNC 30
D22	ADD UN		1.121	11.9600	18.34	SUBB2.7
	DL		1.121	11.9600	18.34	
	DN		4.200	12.0400	53.56	JUNC 50

NETWORK SUMMARY -- LINKS  
 (UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)  
 (Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

Link ID	Type		HYG Vol		Peak Time	Peak Q	End Points
			ac-ft	Trun.	hrs	cfs	
D24A	ADD	UN	1.162		11.9200	20.55	SUBAREA B2.5
		DL	1.162		11.9200	20.55	
		DN	1.478		11.9200	26.22	JUNC 10
D26	ADD	UN	.990		11.9600	16.20	SUBAREA B2.4
		DL	.990		11.9600	16.20	
		DN	2.309		11.9600	38.40	JUNC 20
D26B	ADD	UN	.875		11.9600	14.32	SUBAREA B2.3
		DL	.875		11.9600	14.32	
		DN	2.309		11.9600	38.40	JUNC 20
D28	ADD	UN	.734		11.9600	12.01	B2.2
		DL	.734		11.9600	12.01	
		DN	2.298		11.9600	38.75	JUNC 90
D28B	ADD	UN	.741		11.9600	12.12	SUBAREA B2.1
		DL	.741		11.9600	12.12	
		DN	2.298		11.9600	38.75	JUNC 90
D3	ADD	UN	9.661		12.0000	148.56	JUNC 40
		DL	9.661		12.0000	148.56	
		DN	24.420		11.9600	366.27	JUNC 30
D30	ADD	UN	1.778		11.9600	29.09	SUBB2.6&1.2
		DL	1.778		11.9600	29.09	
		DN	24.420		11.9600	366.27	JUNC 30
D30A	ADD	UN	1.478		11.9200	26.22	JUNC 10
		DL	1.478		11.9200	26.22	
		DN	24.420		11.9600	366.27	JUNC 30
D30B	ADD	UN	.317		11.9200	5.66	SUBAREA B1.1
		DL	.317		11.9200	5.66	
		DN	1.478		11.9200	26.22	JUNC 10
D32	ADD	UN	2.309		11.9600	38.40	JUNC 20
		DL	2.309		11.9600	38.40	
		DN	24.420		11.9600	366.27	JUNC 30

NETWORK SUMMARY -- LINKS  
 (UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)  
 (Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

Link ID	Type		HYG Vol ac-ft	Trun.	Peak Time hrs	Peak Q cfs	End Points
D32A	ADD	UN	.444		11.9200	7.93	SUBAREA B7.3
		DL	.444		11.9200	7.93	
		DN	2.309		11.9600	38.40	
D34	ADD	UN	2.298		11.9600	38.75	JUNC 90
		DL	2.298		11.9600	38.75	
		DN	24.420		11.9600	366.27	JUNC 30
D34A	ADD	UN	.823		11.9200	14.71	SUBAREA B7.2
		DL	.823		11.9200	14.71	
		DN	2.298		11.9600	38.75	
D36	ADD	UN	1.440		12.0000	22.49	SUBA7.5&A9.3
		DL	1.440		12.0000	22.49	
		DN	4.443		12.0000	71.14	
D37	ADD	UN	1.171		12.0000	18.27	SUBA7.3&9.4
		DL	1.171		12.0000	18.27	
		DN	4.443		12.0000	71.14	
D4	ADD	UN	2.701		12.0000	35.92	JUNC 60
		DL	2.701		12.0000	35.92	
		DN	9.661		12.0000	148.56	
D40	ADD	UN	.880		12.0000	14.70	A15.1.4.6&16.1
		DL	.880		12.0000	14.70	
		DN	9.661		12.0000	148.56	
D41	ADD	UN	1.088		11.9600	17.96	JUNC 70
		DL	1.088		11.9600	17.96	
		DN	9.661		12.0000	148.56	
D41A	ADD	UN	.667		12.0000	11.15	A15.5&.7&16.3
		DL	.667		12.0000	11.15	
		DN	1.088		11.9600	17.96	
D5	ADD	UN	.525		12.0800	6.57	SUBA13.2
		DL	.525		12.0800	6.57	
		DN	2.701		12.0000	35.92	

NETWORK SUMMARY -- LINKS  
 (UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)  
 (Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

Link ID	Type		HYG Vol ac-ft	Peak Time Trun. hrs	Peak Q cfs	End Points
D50	ADD	UN	1.034	11.9200	18.47	SUBAREA B7.1
		DL	1.034	11.9200	18.47	
		DN	24.420	11.9600	366.27	JUNC 30
D51	ADD	UN	.906	11.9600	15.18	A15.2&A16.2
		DL	.906	11.9600	15.18	
		DN	24.420	11.9600	366.27	JUNC 30
D52	ADD	UN	.550	11.9200	10.31	SUBA8.2&A13.4
		DL	.550	11.9200	10.31	
		DN	9.661	12.0000	148.56	JUNC 40
D53	ADD	UN	.572	11.9200	10.31	SUBA7.4&A9.7
		DL	.572	11.9200	10.31	
		DN	4.443	12.0000	71.14	JUNC 100
D54	ADD	UN	.628	11.9600	11.00	SUBA7.2&A9.6
		DL	.628	11.9600	11.00	
		DN	4.443	12.0000	71.14	JUNC 100
D55	ADD	UN	.632	11.9600	10.59	SUBA7.1&A9.5
		DL	.632	11.9600	10.59	
		DN	4.443	12.0000	71.14	JUNC 100
D6	ADD	UN	.784	11.9200	14.14	SUBA9.1&A13.1
		DL	.784	11.9200	14.14	
		DN	2.701	12.0000	35.92	JUNC 60
D61	ADD	UN	.754	12.0800	9.54	SUBAREA A2
		DL	.754	12.0800	9.54	
		DN	24.420	11.9600	366.27	JUNC 30
D62	ADD	UN	24.420	11.9600	366.27	JUNC 30
		DL	24.420	11.9600	366.27	
		DN	24.420	11.9600	366.27	POND 2
D7	ADD	UN	1.077	12.0800	13.47	A9.2
		DL	1.077	12.0800	13.47	
		DN	2.701	12.0000	35.92	JUNC 60

Type.... Executive Summary (Links) Page 2.05  
 Name.... Watershed Event: 25 yr  
 File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW  
 Storm... TypeII 24hr Tag: 25yr

NETWORK SUMMARY -- LINKS  
 (UN=Upstream Node; DL=DNstream End of Link; DN=DNstream Node)  
 (Trun.= HYG Truncation: Blank=None; L=Left; R=Rt; LR=Left & Rt)

Link ID	Type	HYG Vol		Peak Time	Peak Q	End Points	
		ac-ft	Trun.	hrs	cfs		
D7A	ADD	UN		.315	11.9200	5.62	SUBA8.1
		DL		.315	11.9200	5.62	
		DN		2.701	12.0000	35.92	JUNC 60

File.... C:\Haestad\PPKW\KIF\  
Title... Project Date: 5/3/2004  
Project Engineer: Daniel R. Smith  
Project Title: KIF Lat Exp Interim Operation  
w/phase2&3 pond  
Project Comments:  
This model analyzes the cond of the expan during  
operation, while Phase 2/3 has a pond. The time of  
concentration is minimized due to the pond.

DESIGN STORMS SUMMARY

Design Storm File, ID = KIF

Storm Tag Name = 2yr

-----  
Data Type, File, ID = Synthetic Storm TypeII 24hr  
Storm Frequency = 2 yr  
Total Rainfall Depth= 3.2500 in  
Duration Multiplier = 1  
Resulting Duration = 24.0000 hrs  
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

Storm Tag Name = 10yr

-----  
Data Type, File, ID = Synthetic Storm TypeII 24hr  
Storm Frequency = 10 yr  
Total Rainfall Depth= 3.6000 in  
Duration Multiplier = 1  
Resulting Duration = 24.0000 hrs  
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

Storm Tag Name = 25yr

-----  
Data Type, File, ID = Synthetic Storm TypeII 24hr  
Storm Frequency = 25 yr  
Total Rainfall Depth= 5.5000 in  
Duration Multiplier = 1  
Resulting Duration = 24.0000 hrs  
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

Storm Tag Name = 100yr

-----  
Data Type, File, ID = Synthetic Storm TypeII 24hr  
Storm Frequency = 100 yr  
Total Rainfall Depth= 6.5000 in  
Duration Multiplier = 1  
Resulting Duration = 24.0000 hrs  
Resulting Start Time= .0000 hrs Step= .1000 hrs End= 24.0000 hrs

CUMULATIVE RAINFALL FRACTIONS

Output Time increment = .1000 hrs

Time on left represents time for first value in each row.

---

Time hrs					
.0000	.000	.001	.002	.003	.004
.5000	.005	.006	.007	.008	.009
1.0000	.011	.012	.013	.014	.015
1.5000	.016	.017	.018	.020	.021
2.0000	.022	.023	.024	.026	.027
2.5000	.028	.029	.031	.032	.033
3.0000	.035	.036	.037	.038	.040
3.5000	.041	.042	.044	.045	.047
4.0000	.048	.049	.051	.052	.054
4.5000	.055	.057	.058	.060	.061
5.0000	.063	.065	.066	.068	.070
5.5000	.071	.073	.075	.076	.078
6.0000	.080	.082	.084	.085	.087
6.5000	.089	.091	.093	.095	.097
7.0000	.099	.101	.103	.105	.107
7.5000	.109	.111	.113	.116	.118
8.0000	.120	.122	.125	.127	.130
8.5000	.132	.135	.138	.141	.144
9.0000	.147	.150	.153	.157	.160
9.5000	.163	.166	.170	.173	.177
10.0000	.181	.185	.189	.194	.199
10.5000	.204	.209	.215	.221	.228
11.0000	.235	.243	.251	.261	.271
11.5000	.283	.307	.354	.431	.568
12.0000	.663	.682	.699	.713	.725
12.5000	.735	.743	.751	.759	.766
13.0000	.772	.778	.784	.789	.794
13.5000	.799	.804	.808	.812	.816
14.0000	.820	.824	.827	.831	.834
14.5000	.838	.841	.844	.847	.850
15.0000	.854	.856	.859	.862	.865
15.5000	.868	.870	.873	.875	.878
16.0000	.880	.882	.885	.887	.889
16.5000	.891	.893	.895	.898	.900
17.0000	.902	.904	.906	.908	.910
17.5000	.912	.914	.915	.917	.919
18.0000	.921	.923	.925	.926	.928
18.5000	.930	.931	.933	.935	.936
19.0000	.938	.939	.941	.942	.944
19.5000	.945	.947	.948	.949	.951
20.0000	.952	.953	.955	.956	.957
20.5000	.958	.960	.961	.962	.964
21.0000	.965	.966	.967	.968	.970
21.5000	.971	.972	.973	.975	.976
22.0000	.977	.978	.979	.981	.982
22.5000	.983	.984	.985	.986	.988

Type.... Synthetic Curve  
Name.... TypeII 24hr Tag: 25yr  
File.... C:\Haestad\PPKW\KIF\

CUMULATIVE RAINFALL FRACTIONS

Output Time increment = .1000 hrs

Time on left represents time for first value in each row.

Time hrs					
23.0000	.989	.990	.991	.992	.993
23.5000	.994	.996	.997	.998	.999
24.0000	1.000				



Type.... Tc Calcs  
Name.... A14.1&14.2&B2.8

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

.....  
TIME OF CONCENTRATION CALCULATOR  
.....

-----  
Segment #1: Tc: User Defined

Segment #1 Time: .3300 hrs  
-----

=====  
Total Tc: .3300 hrs  
=====

Type.... Tc Calcs  
Name.... A14.1&14.2&B2.8

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

-----  
Tc Equations used...  
-----

==== User Defined =====

Tc = Value entered by user

Where: Tc = Time of concentration

Type.... Tc Calcs  
Name.... A15.1.4.6&16.1

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

.....  
TIME OF CONCENTRATION CALCULATOR  
.....

-----  
Segment #1: Tc: User Defined

Segment #1 Time: .1500 hrs

=====  
Total Tc: .1500 hrs  
=====

Type.... Tc Calcs  
Name.... A15.1.4.6&16.1

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

-----  
Tc Equations used...  
-----

==== User Defined =====

Tc = Value entered by user

Where: Tc = Time of concentration

Type.... Tc Calcs  
Name.... A15.2&A16.2

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

::  
TIME OF CONCENTRATION CALCULATOR  
::

-----  
Segment #1: Tc: User Defined

Segment #1 Time: .1500 hrs

-----  
=====  
Total Tc: .1500 hrs  
=====

Type.... Tc Calcs  
Name.... A15.2&A16.2

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

-----  
Tc Equations used...  
-----

==== User Defined =====

Tc = Value entered by user

Where: Tc = Time of concentration

Type.... Tc Calcs  
Name.... A15.5&.7&16.3

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

::  
TIME OF CONCENTRATION CALCULATOR  
::

-----  
Segment #1: Tc: User Defined

Segment #1 Time: .1500 hrs  
-----

=====  
Total Tc: .1500 hrs  
=====

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

-----  
Tc Equations used...  
-----

==== User Defined =====

Tc = Value entered by user

Where: Tc = Time of concentration



File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

.....  
TIME OF CONCENTRATION CALCULATOR  
.....

-----  
Segment #1: Tc: User Defined

Segment #1 Time: .3300 hrs

=====  
Total Tc: .3300 hrs  
=====

Type.... Tc Calcs  
Name.... A9.2

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

-----  
Tc Equations used...  
-----

==== User Defined =====

Tc = Value entered by user

Where: Tc = Time of concentration

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

::  
TIME OF CONCENTRATION CALCULATOR  
::

-----  
Segment #1: Tc: User Defined

Segment #1 Time: .1500 hrs

-----  
=====  
Total Tc: .1500 hrs  
=====

Type.... Tc Calcs  
Name.... B2.2

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

-----  
Tc Equations used...  
-----

==== User Defined =====

Tc = Value entered by user

Where: Tc = Time of concentration

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

.....  
TIME OF CONCENTRATION CALCULATOR  
.....

-----  
Segment #1: Tc: User Defined

Segment #1 Time: .3300 hrs  
-----

=====  
Total Tc: .3300 hrs  
=====

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

-----  
Tc Equations used...  
-----

==== User Defined =====

Tc = Value entered by user

Where: Tc = Time of concentration

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

.....  
TIME OF CONCENTRATION CALCULATOR  
.....

-----

Segment #1: Tc: User Defined

Segment #1 Time: .1500 hrs

-----

=====  
Total Tc: .1500 hrs  
=====

Type.... Tc Calcs  
Name.... SUBA7.1&A9.5

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

-----  
Tc Equations used...  
-----

==== User Defined =====

Tc = Value entered by user

Where: Tc = Time of concentration



File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

.....  
TIME OF CONCENTRATION CALCULATOR  
.....

-----  
Segment #1: Tc: User Defined

Segment #1 Time: .1200 hrs

-----  
=====  
Total Tc: .1200 hrs  
=====

Type.... Tc Calcs  
Name.... SUBA7.2&A9.6

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

-----  
Tc Equations used...  
-----

==== User Defined =====

Tc = Value entered by user

Where: Tc = Time of concentration

Type.... Tc Calcs  
Name.... SUBA7.3&9.4

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

.....  
TIME OF CONCENTRATION CALCULATOR  
.....

-----  
Segment #1: Tc: User Defined

Segment #1 Time: .2000 hrs

=====  
Total Tc: .2000 hrs  
=====

Type.... Tc Calcs  
Name.... SUBA7.3&9.4

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

-----  
Tc Equations used...  
-----

==== User Defined =====

Tc = Value entered by user

Where: Tc = Time of concentration

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

.....  
TIME OF CONCENTRATION CALCULATOR  
.....

-----  
Segment #1: Tc: User Defined

Segment #1 Time: .1000 hrs

-----  
=====  
Total Tc: .1000 hrs  
=====

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

-----  
Tc Equations used...  
-----

==== User Defined =====

Tc = Value entered by user

Where: Tc = Time of concentration

Type.... Tc Calcs  
Name.... SUBA7.5&A9.3

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

::  
TIME OF CONCENTRATION CALCULATOR  
::

-----

Segment #1: Tc: User Defined

Segment #1 Time: .2000 hrs

-----

=====  
Total Tc: .2000 hrs  
=====

Type.... Tc Calcs  
Name.... SUBA7.5&A9.3

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

-----  
Tc Equations used...  
-----

==== User Defined =====

Tc = Value entered by user

Where: Tc = Time of concentration



Type.... Tc Calcs  
Name.... SUBA8.1

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

:::  
TIME OF CONCENTRATION CALCULATOR  
:::

-----

Segment #1: Tc: User Defined

Segment #1 Time: .1000 hrs

-----

=====  
Total Tc: .1000 hrs  
=====

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

-----  
Tc Equations used...  
-----

==== User Defined =====

Tc = Value entered by user

Where: Tc = Time of concentration

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

.....  
TIME OF CONCENTRATION CALCULATOR  
.....

-----

Segment #1: Tc: User Defined

Segment #1 Time: .0800 hrs

-----

=====  
Total Tc: .0800 hrs

Calculated Tc < Min.Tc:  
Use Minimum Tc...  
Use Tc = .0833 hrs  
=====

Type.... Tc Calcs  
Name.... SUBA8.2&A13.4

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

-----  
Tc Equations used...  
-----

==== User Defined =====

Tc = Value entered by user

Where: Tc = Time of concentration

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

.....  
TIME OF CONCENTRATION CALCULATOR  
.....

-----

Segment #1: Tc: User Defined

Segment #1 Time: .1000 hrs

-----

=====  
Total Tc: .1000 hrs  
=====

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

-----  
Tc Equations used...  
-----

==== User Defined =====

Tc = Value entered by user

Where: Tc = Time of concentration

Type.... Tc Calcs  
Name.... SUBAREA A15.2

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

.....  
TIME OF CONCENTRATION CALCULATOR  
.....

-----  
Segment #1: Tc: User Defined

Segment #1 Time: .1500 hrs

-----  
=====  
Total Tc: .1500 hrs  
=====

Type.... Tc Calcs  
Name.... SUBAREA A15.2

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

-----  
Tc Equations used...  
-----

==== User Defined =====

Tc = Value entered by user

Where: Tc = Time of concentration



File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

.....  
TIME OF CONCENTRATION CALCULATOR  
.....

-----

Segment #1: Tc: User Defined

Segment #1 Time: .3300 hrs

-----

=====  
Total Tc: .3300 hrs  
=====

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

-----  
Tc Equations used...  
-----

==== User Defined =====

Tc = Value entered by user

Where: Tc = Time of concentration

Type.... Tc Calcs  
Name.... SUBAREA B1.1

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

::  
TIME OF CONCENTRATION CALCULATOR  
::

-----  
Segment #1: Tc: User Defined

Segment #1 Time: .1000 hrs

-----  
=====  
Total Tc: .1000 hrs  
=====

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

-----  
Tc Equations used...  
-----

==== User Defined =====

Tc = Value entered by user

Where: Tc = Time of concentration

Type.... Tc Calcs  
Name.... SUBAREA B2.1

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

.....  
TIME OF CONCENTRATION CALCULATOR  
.....

-----

Segment #1: Tc: User Defined

Segment #1 Time: .1500 hrs

-----

=====  
Total Tc: .1500 hrs  
=====

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

-----  
Tc Equations used...  
-----

==== User Defined =====

Tc = Value entered by user

Where: Tc = Time of concentration

Type.... Tc Calcs  
Name.... SUBAREA B2.3

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

.....  
TIME OF CONCENTRATION CALCULATOR  
.....

-----  
Segment #1: Tc: User Defined

Segment #1 Time: .1500 hrs  
-----

=====  
Total Tc: .1500 hrs  
=====

Type.... Tc Calcs  
Name.... SUBAREA B2.3

Page 5.40

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

-----  
Tc Equations used...  
-----

==== User Defined =====

Tc = Value entered by user

Where: Tc = Time of concentration



File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

.....  
TIME OF CONCENTRATION CALCULATOR  
.....

-----

Segment #1: Tc: User Defined

Segment #1 Time: .1500 hrs

-----

=====  
Total Tc: .1500 hrs  
=====

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

-----  
Tc Equations used...  
-----

==== User Defined =====

Tc = Value entered by user

Where: Tc = Time of concentration

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

.....  
TIME OF CONCENTRATION CALCULATOR  
.....

-----  
Segment #1: Tc: User Defined

Segment #1 Time: .1000 hrs  
-----

=====  
Total Tc: .1000 hrs  
=====

Type.... Tc Calcs  
Name.... SUBAREA B2.5

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

-----  
Tc Equations used...  
-----

==== User Defined =====

Tc = Value entered by user

Where: Tc = Time of concentration

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

.....  
TIME OF CONCENTRATION CALCULATOR  
.....

-----  
Segment #1: Tc: User Defined

Segment #1 Time: .1000 hrs  
-----

=====  
Total Tc: .1000 hrs  
=====

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

-----  
Tc Equations used...  
-----

==== User Defined =====

Tc = Value entered by user

Where: Tc = Time of concentration

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

.....  
TIME OF CONCENTRATION CALCULATOR  
.....

-----  
Segment #1: Tc: User Defined

Segment #1 Time: .1000 hrs  
-----

=====  
Total Tc: .1000 hrs  
=====

File.... C:\Haestad\PPKW\KIF\KIF LAT EXP W\_PHASE2\_DITCHES\_2\_A.PPW

-----  
Tc Equations used...  
-----

==== User Defined =====

Tc = Value entered by user

Where: Tc = Time of concentration