DEVELOPED DRAINAGE BASIN CALCULATIONS

Basin No.: 1

Total Area = 30,031 S.F.
0.69 Acres

Surface									C	N
Structures	1.5	@	3000	=	4,500	S.F. =	0.10	Ac.	0.92	0.02
Pavement				=	3,939	S.F. =	0.09	Ac.	0.92	0.02
Drives	2	@	700	=	1,400	S.F. =	0.03	Ac.	0.92	0.02
Patios	1	@	100	=	100	S.F. =	0.00	Ac.	0.92	0.02
Sidewalks				=	888	S.F. =	0.02	Ac.	0.92	0.02
Lawn (0-2%)		0	S.F.	=			0.00	Ac.	0.15	0.40
Lawn (2-5%)		19,204	S.F.	=			0.44	Ac.	0.25	0.40
Lawn (5-10%)		0	S.F.	=			0.00	Ac.	0.40	0.40
Lawn (>10%)		0	S.F.	=			0.00	Ac.	0.55	0.40
Water		0	S.F.	=			0.00	Ac.	1.00	0.00
Misc.		0	S.F.	=			0.00	Ac.	0.92	0.02

Weighted c =	**0.492**		
Weighted N =	0.263		
Sheet Flow			
L =	225	Ft.	
H =	1.9	Ft.	
S =	0.0085	Ft./Ft.	
t1=	16.93	Minutes	(Min. 5 minutes)
Shallow Concentrated Flow			
L =	0	Ft.	
H =	0.0	Ft.	
S =	#DIV/0!	Ft./Ft.	
v =	2.10	Ft./sec.	(From HERPICC Figure 3.4.5)
t2=	0.00	Minutes	
tc=	16.93	Minutes	
I(10) =	4.349	In./Hr.	
I(25) =	4.855	In./Hr.	
I(50) =		In./Hr.	
I(100) =	5.990	In./Hr.	
Q(10) =	**1.47**	**CFS**	
Q(25) =	**1.65**	**CFS**	
Q(50) =	**0.00**	**CFS**	
Q(100) =	**2.03**	**CFS**	

DEVELOPED DRAINAGE BASIN CALCULATIONS

Basin No.: 2

Total Area = 14,919 S.F.
0.34 Acres

Surface									C	N
Structures	0.75	@	3000	=	2,250	S.F. =	0.05	Ac.	0.92	0.02
Pavement				=	4,372	S.F. =	0.10	Ac.	0.92	0.02
Drives	2	@	700	=	1,400	S.F. =	0.03	Ac.	0.92	0.02
Patios	0	@	100	=	0	S.F. =	0.00	Ac.	0.92	0.02
Sidewalks				=	0	S.F. =	0.00	Ac.	0.92	0.02
Lawn (0-2%)		0	S.F.	=			0.00	Ac.	0.15	0.40
Lawn (2-5%)		6,897	S.F.	=			0.16	Ac.	0.25	0.40
Lawn (5-10%)		0	S.F.	=			0.00	Ac.	0.40	0.40
Lawn (>10%)		0	S.F.	=			0.00	Ac.	0.55	0.40
Woods (>10%)		0	S.F.	=			0.00	Ac.	0.48	0.60
Water		0	S.F.	=			0.00	Ac.	1.00	0.00
Misc.		0	S.F.	=			0.00	Ac.	0.92	0.02

Weighted c =	**0.610**		
Weighted N =	0.196		
Sheet Flow			
L =	223	Ft.	
H =	3.4	Ft.	
S =	0.0153	Ft./Ft.	
t1=	12.79	Minutes	(Min. 5 minutes)
Shallow Concentrated Flow			
L =	0	Ft.	
H =	0.0	Ft.	
S =	#DIV/0!	Ft./Ft.	
v =	3.30	Ft./sec.	(From HERPICC Figure 3.4.5)
t2=	0.00	Minutes	
tc=	12.79	Minutes	
I(10) =	4.897	In./Hr.	
I(25) =	5.427	In./Hr.	
I(50) =		In./Hr.	
I(100) =	6.605	In./Hr.	
Q(10) =	**1.02**	**CFS**	
Q(25) =	**1.13**	**CFS**	
Q(50) =	**0.00**	**CFS**	
Q(100) =	**1.38**	**CFS**	

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DEVELOPED DRAINAGE BASIN CALCULATIONS

Basin No.: 3

Total Area = 39,346 S.F.
0.90 Acres

Surface							C	N
Structures		=	7,576	S.F. =	0.17	Ac.	0.92	0.02
Pavement		=	10,543	S.F. =	0.24	Ac.	0.92	0.02
Drives		=	3,871	S.F. =	0.09	Ac.	0.92	0.02
Patios		=	0	S.F. =	0.00	Ac.	0.92	0.02
Sidewalks		=	2,421	S.F. =	0.06	Ac.	0.92	0.02
Lawn (0-2%)	0 S.F.	=			0.00	Ac.	0.15	0.40
Lawn (2-5%)	14,935 S.F.	=			0.34	Ac.	0.25	0.40
Lawn (5-10%)	0 S.F.	=			0.00	Ac.	0.40	0.40
Lawn (>10%)	0 S.F.	=			0.00	Ac.	0.55	0.40
Water	0 S.F.	=			0.00	Ac.	1.00	0.00
Misc.	0 S.F.	=			0.00	Ac.	0.92	0.02

Weighted c =	**0.666**		
Weighted N =	0.164		
Sheet Flow			
L =	300	Ft.	
H =	3.0	Ft.	
S =	0.0100	Ft./Ft.	
t1=	14.96	Minutes	(Min. 5 minutes)
Shallow Concentrated Flow			
L =	93	Ft.	
H =	0.9	Ft.	
S =	0.0097	Ft./Ft.	
v =	2.00	Ft./sec.	(From HERPICC Figure 3.4.5)
t2=	0.78	Minutes	
tc=	15.74	Minutes	
I(10) =	4.452	In./Hr.	
I(25) =	4.965	In./Hr.	
I(50) =		In./Hr.	
I(100) =	6.116	In./Hr.	
Q(10) =	**2.68**	**CFS**	
Q(25) =	**2.99**	**CFS**	
Q(50) =	**0.00**	**CFS**	
Q(100) =	**3.68**	**CFS**	

DEVELOPED DRAINAGE BASIN CALCULATIONS

Basin No.: 4

Total Area = 22,785 S.F.
0.52 Acres

Surface							C	N
Structures		=	11,316	S.F. =	0.26	Ac.	0.92	0.02
Pavement		=	0	S.F. =	0.00	Ac.	0.92	0.02
Drives		=	0	S.F. =	0.00	Ac.	0.92	0.02
Patios		=	0	S.F. =	0.00	Ac.	0.92	0.02
Sidewalks		=	0	S.F. =	0.00	Ac.	0.92	0.02
Lawn (0-2%)	0 S.F.	=			0.00	Ac.	0.15	0.40
Lawn (2-5%)	0 S.F.	=			0.00	Ac.	0.25	0.40
Lawn (5-10%)	6,346 S.F.	=			0.15	Ac.	0.40	0.40
Lawn (>10%)	5,123 S.F.	=			0.12	Ac.	0.55	0.40
Woods (>10%)	0 S.F.	=			0.00	Ac.	0.48	0.60
Water	0 S.F.	=			0.00	Ac.	1.00	0.00
Misc.	0 S.F.	=			0.00	Ac.	0.92	0.02

Weighted c =	**0.692**		
Weighted N =	0.211		
Sheet Flow			
L =	22	Ft.	
H =	0.5	Ft.	
S =	0.0231	Ft./Ft.	
t1=	5.00	Minutes	(Min. 5 minutes)
Open Channel Flow			
L =	239	Ft.	
H =	2.9	Ft.	
S =	0.0121	Ft./Ft.	
v =	2.40	Ft./sec.	
t2=	1.66	Minutes	
tc=	6.66	Minutes	
I(10) =	6.212	In./Hr.	
I(25) =	6.783	In./Hr.	
I(50) =		In./Hr.	
I(100) =	8.024	In./Hr.	
Q(10) =	**2.25**	**CFS**	
Q(25) =	**2.46**	**CFS**	
Q(50) =	**0.00**	**CFS**	
Q(100) =	**2.90**	**CFS**	

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DEVELOPED DRAINAGE BASIN CALCULATIONS

Basin No.: 5

Total Area = 34,797 S.F.
0.80 Acres

Surface							C	N
Structures			=	5,325	S.F. =	0.12 Ac.	0.92	0.02
Pavement			=	8,884	S.F. =	0.20 Ac.	0.92	0.02
Drives			=	3,171	S.F. =	0.07 Ac.	0.92	0.02
Patios			=	0	S.F. =	0.00 Ac.	0.92	0.02
Sidewalks			=	897	S.F. =	0.02 Ac.	0.92	0.02
Lawn (0-2%)	0	S.F.	=			0.00 Ac.	0.15	0.40
Lawn (2-5%)	16,520	S.F.	=			0.38 Ac.	0.25	0.40
Lawn (5-10%)	0	S.F.	=			0.00 Ac.	0.40	0.40
Lawn (>10%)	0	S.F.	=			0.00 Ac.	0.55	0.40
Water	0	S.F.	=			0.00 Ac.	1.00	0.00
Misc.	0	S.F.	=			0.00 Ac.	0.92	0.02

Weighted c =	**0.602**		
Weighted N =	0.200		
Sheet Flow			
L =	300	Ft.	
H =	3.5	Ft.	
S =	0.0116	Ft./Ft.	
t1=	15.85	Minutes	(Min. 5 minutes)
Shallow Concentrated Flow			
L =	206	Ft.	
H =	6.0	Ft.	
S =	0.0291	Ft./Ft.	
v =	3.40	Ft./sec.	(From HERPICC Figure 3.4.5)
t2=	1.01	Minutes	
tc=	16.86	Minutes	
I(10) =	4.355	In./Hr.	
I(25) =	4.861	In./Hr.	
I(50) =		In./Hr.	
I(100) =	5.998	In./Hr.	
Q(10) =	**2.09**	**CFS**	
Q(25) =	**2.34**	**CFS**	
Q(50) =	**0.00**	**CFS**	
Q(100) =	**2.88**	**CFS**	

DEVELOPED DRAINAGE BASIN CALCULATIONS

Basin No.: 6

Total Area = 48,304 S.F.
1.11 Acres

Surface									C	N
Structures	2.75	@	3000	=	8,250	S.F. =	0.19	Ac.	0.92	0.02
Pavement				=	8,493	S.F. =	0.19	Ac.	0.92	0.02
Drives	5.5	@	700	=	3,850	S.F. =	0.09	Ac.	0.92	0.02
Patios	0	@	100	=	0	S.F. =	0.00	Ac.	0.92	0.02
Sidewalks				=	0	S.F. =	0.00	Ac.	0.92	0.02
Lawn (0-2%)			0 S.F.	=			0.00	Ac.	0.15	0.40
Lawn (2-5%)			27,711 S.F.	=			0.64	Ac.	0.25	0.40
Lawn (5-10%)			0 S.F.	=			0.00	Ac.	0.40	0.40
Lawn (>10%)			0 S.F.	=			0.00	Ac.	0.55	0.40
Woods (>10%)			0 S.F.	=			0.00	Ac.	0.48	0.60
Water			0 S.F.	=			0.00	Ac.	1.00	0.00
Misc.			0 S.F.	=			0.00	Ac.	0.92	0.02

Weighted c =	**0.536**		
Weighted N =	0.238		
Sheet Flow			
L =	300	Ft.	
H =	11.6	Ft.	
S =	0.0385	Ft./Ft.	
t1=	12.99	Minutes	(Min. 5 minutes)
Shallow Concentrated Flow			
L =	234	Ft.	
H =	7.8	Ft.	
S =	0.0333	Ft./Ft.	
v =	3.70	Ft./sec.	(From HERPICC Figure 3.4.5)
t2=	1.05	Minutes	
tc=	14.04	Minutes	
I(10) =	4.681	In./Hr.	
I(25) =	5.204	In./Hr.	
I(50) =		In./Hr.	
I(100) =	6.373	In./Hr.	
Q(10) =	**2.78**	**CFS**	
Q(25) =	**3.09**	**CFS**	
Q(50) =	**0.00**	**CFS**	
Q(100) =	**3.79**	**CFS**	

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DEVELOPED DRAINAGE BASIN CALCULATIONS

Basin No.: 7

Total Area = 23,346 S.F.
0.54 Acres

Surface							C	N
Structures		=	5,328	S.F. =	0.12	Ac.	0.92	0.02
Pavement		=	6,422	S.F. =	0.15	Ac.	0.92	0.02
Drives		=	3,192	S.F. =	0.07	Ac.	0.92	0.02
Patios		=	0	S.F. =	0.00	Ac.	0.92	0.02
Sidewalks		=	168	S.F. =	0.00	Ac.	0.92	0.02
Lawn (0-2%)	0 S.F.	=			0.00	Ac.	0.15	0.40
Lawn (2-5%)	0 S.F.	=			0.00	Ac.	0.25	0.40
Lawn (5-10%)	8,236 S.F.	=			0.19	Ac.	0.40	0.40
Lawn (>10%)	0 S.F.	=			0.00	Ac.	0.55	0.40
Water	0 S.F.	=			0.00	Ac.	1.00	0.00
Misc.	0 S.F.	=			0.00	Ac.	0.92	0.02

Weighted c =	**0.737**		
Weighted N =	0.154		
Sheet Flow			
L =	300	Ft.	
H =	3.4	Ft.	
S =	0.0112	Ft./Ft.	
t1=	14.13	Minutes	(Min. 5 minutes)
Shallow Concentrated Flow			
L =	130	Ft.	
H =	4.1	Ft.	
S =	0.0314	Ft./Ft.	
v =	3.55	Ft./sec.	(From HERPICC Figure 3.4.5)
t2=	0.61	Minutes	
tc=	14.74	Minutes	
I(10) =	4.560	In./Hr.	
I(25) =	5.079	In./Hr.	
I(50) =		In./Hr.	
I(100) =	6.242	In./Hr.	
Q(10) =	**1.80**	**CFS**	
Q(25) =	**2.00**	**CFS**	
Q(50) =	**0.00**	**CFS**	
Q(100) =	**2.46**	**CFS**	

DEVELOPED DRAINAGE BASIN CALCULATIONS

Basin No.: 8

Total Area = 35,241 S.F.
0.81 Acres

Surface							C	N
Structures		=	9,616	S.F. =	0.22	Ac.	0.92	0.02
Pavement		=	6,973	S.F. =	0.16	Ac.	0.92	0.02
Drives		=	5,507	S.F. =	0.13	Ac.	0.92	0.02
Patios		=	0	S.F. =	0.00	Ac.	0.92	0.02
Sidewalks		=	1,143	S.F. =	0.03	Ac.	0.92	0.02
Lawn (0-2%)	0 S.F.	=			0.00	Ac.	0.15	0.40
Lawn (2-5%)	9,502 S.F.	=			0.22	Ac.	0.25	0.40
Lawn (5-10%)	2,500 S.F.	=			0.06	Ac.	0.40	0.40
Lawn (>10%)	0 S.F.	=			0.00	Ac.	0.55	0.40
Woods (>10%)	0 S.F.	=			0.00	Ac.	0.48	0.60
Water	0 S.F.	=			0.00	Ac.	1.00	0.00
Misc.	0 S.F.	=			0.00	Ac.	0.92	0.02

Weighted c =	**0.702**		
Weighted N =	0.149		
Sheet Flow			
L =	300	Ft.	
H =	2.9	Ft.	
S =	0.0097	Ft./Ft.	
t1=	14.42	Minutes	(Min. 5 minutes)
Shallow Concentrated Flow			
L =	206	Ft.	
H =	4.5	Ft.	
S =	0.0220	Ft./Ft.	
v =	3.00	Ft./sec.	
t2=	1.15	Minutes	
tc=	15.56	Minutes	
I(10) =	4.467	In./Hr.	
I(25) =	4.981	In./Hr.	
I(50) =		In./Hr.	
I(100) =	6.135	In./Hr.	
Q(10) =	**2.54**	**CFS**	
Q(25) =	**2.83**	**CFS**	
Q(50) =	**0.00**	**CFS**	
Q(100) =	**3.49**	**CFS**	

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DEVELOPED DRAINAGE BASIN CALCULATIONS

Basin No.: 9

Total Area = 62,292 S.F.
1.43 Acres

Surface									C	N
Structures				=	5,642	S.F. =	0.13	Ac.	0.92	0.02
Pavement				=	0	S.F. =	0.00	Ac.	0.92	0.02
Drives				=	0	S.F. =	0.00	Ac.	0.92	0.02
Patios	1.5	@	100	=	150	S.F. =	0.00	Ac.	0.92	0.02
Sidewalks				=	0	S.F. =	0.00	Ac.	0.92	0.02
Lawn (0-2%)	0	S.F.		=			0.00	Ac.	0.15	0.40
Lawn (2-5%)	0	S.F.		=			0.00	Ac.	0.25	0.40
Lawn (>10%)	38,818	S.F.		=			0.89	Ac.	0.55	0.40
Woods (>10%)	12,000	S.F.		=			0.28	Ac.	0.48	0.60
Water	5,682	S.F.		=			0.13	Ac.	1.00	0.00
Misc.	0	S.F.		=			0.00	Ac.	0.92	0.02

Weighted c =	**0.612**		
Weighted N =	0.367		
Sheet Flow			
L =	153	Ft.	
H =	23.0	Ft.	
S =	0.1503	Ft./Ft.	
t1=	8.44	Minutes	(Min. 5 minutes)
Open Channel Flow			
L =	0	Ft.	
H =	0.0	Ft.	
S =	#DIV/0!	Ft./Ft.	
v =	7.64	Ft./sec.	(From HERPICC Figure 3.4.5)
t2=	0.00	Minutes	
tc=	8.44	Minutes	
I(10) =	5.768	In./Hr.	
I(25) =	6.325	In./Hr.	
I(50) =		In./Hr.	
I(100) =	7.544	In./Hr.	

Q(10) =	**5.05**	**CFS**
Q(25) =	**5.53**	**CFS**
Q(50) =	**0.00**	**CFS**
Q(100) =	**6.60**	**CFS**

REVISED SUBMITTAL
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DEVELOPED DRAINAGE BASIN CALCULATIONS

Basin No.: 10

Total Area = 196,102 S.F.
4.50 Acres

Surface									C	N
Structures	3.5	@	3000	=	10,500	S.F. =	0.24	Ac.	0.92	0.02
Pavement				=	0	S.F. =	0.00	Ac.	0.92	0.02
Drives	2	@	700	=	1,400	S.F. =	0.03	Ac.	0.92	0.02
Patios	5	@	100	=	500	S.F. =	0.01	Ac	0.92	0.02
Sidewalks				=	0	S.F. =	0.00	Ac.	0.92	0.02
Lawn (0-2%)			0	S.F.	=		0.00	Ac.	0.15	0.40
Lawn (2-5%)			10,000	S.F.	=		0.23	Ac.	0.25	0.40
Lawn (>10%)			7,200	S.F.	=		0.17	Ac.	0.55	0.40
Woods (>10%)			166,502	S.F.	=		3.82	Ac.	0.48	0.60
Water			0	S.F.	=		0.00	Ac.	1.00	0.00
Misc.			0	S.F.	=		0.00	Ac.	0.92	0.02

Weighted c =	**0.499**		
Weighted N =	0.546		
Sheet Flow			
L =	300	Ft.	
H =	28.0	Ft.	
S =	0.0933	Ft./Ft.	
t1=	15.56	Minutes	(Min. 5 minutes)
Shallow Concentrated Flow			
L =	166	Ft.	
H =	10.0	Ft.	
S =	0.0602	Ft./Ft.	
v =	4.00	Ft./sec.	(From HERPICC Figure 3.4.5)
t2=	0.69	Minutes	
tc=	16.25	Minutes	
I(10) =	4.407	In./Hr.	
I(25) =	4.917	In./Hr.	
I(50) =		In./Hr.	
I(100) =	6.062	In./Hr.	
Q(10) =	**9.89**	**CFS**	
Q(25) =	**11.04**	**CFS**	
Q(50) =	**0.00**	**CFS**	
Q(100) =	**13.61**	**CFS**	

REVISED SUBMITTAL
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DEVELOPED DRAINAGE BASIN CALCULATIONS

Basin No.: 11

Total Area = 76,731 S.F.
1.76 Acres

Surface									C	N
Structures	1.75	@	3000	=	5,250	S.F. =	0.12	Ac.	0.92	0.02
Pavement				=	0	S.F. =	0.00	Ac.	0.92	0.02
Drives	0	@	700	=	0	S.F. =	0.00	Ac.	0.92	0.02
Patios	3.5	@	100	=	350	S.F. =	0.01	Ac.	0.92	0.02
Sidewalks				=	0	S.F. =	0.00	Ac.	0.92	0.02
Lawn (0-2%)			0 S.F.	=			0.00	Ac.	0.15	0.40
Lawn (2-5%)			0 S.F.	=			0.00	Ac.	0.25	0.40
Lawn (>10%)			10,000 S.F.	=			0.23	Ac.	0.55	0.40
Woods (>10%)			61,131 S.F.	=			1.40	Ac.	0.48	0.60
Water			0 S.F.	=			0.00	Ac.	1.00	0.00
Misc.			0 S.F.	=			0.00	Ac.	0.92	0.02

Weighted c =	**0.521**		
Weighted N =	0.532		
Sheet Flow			
L =	274	Ft.	
H =	28.8	Ft.	
S =	0.1050	Ft./Ft.	
t1=	14.33	Minutes	(Min. 5 minutes)
Shallow Concentrated Flow			
L =	0	Ft.	
H =	0.0	Ft.	
S =	#DIV/0!	Ft./Ft.	
v =	5.30	Ft./sec.	(From HERPICC Figure 3.4.5)
t2=	0.00	Minutes	
tc=	14.33	Minutes	
I(10) =	4.631	In./Hr.	
I(25) =	5.152	In./Hr.	
I(50) =		In./Hr.	
I(100) =	6.319	In./Hr.	
Q(10) =	**4.25**	**CFS**	
Q(25) =	**4.73**	**CFS**	
Q(50) =	**0.00**	**CFS**	
Q(100) =	**5.80**	**CFS**	

DEVELOPED DRAINAGE BASIN CALCULATIONS

Basin No.: 12

Total Area = 165,142 S.F.
3.79 Acres

Surface									C	N
Structures				=	13,816	S.F. =	0.32	Ac.	0.92	0.02
Pavement				=	0	S.F. =	0.00	Ac.	0.92	0.02
Drives				=	0	S.F. =	0.00	Ac.	0.92	0.02
Patios				=	200	S.F. =	0.00	Ac.	0.92	0.02
Sidewalks				=	0	S.F. =	0.00	Ac.	0.92	0.02
Lawn (0-2%)			0 S.F.	=			0.00	Ac.	0.15	0.40
Lawn (2-5%)			2,420 S.F.	=			0.06	Ac.	0.25	0.40
Lawn (5-10%)			10,177 S.F.	=			0.23	Ac.	0.40	0.40
Lawn (>10%)			5,000 S.F.	=			0.11	Ac.	0.55	0.40
Woods (>10%)			133,520 S.F.	=			3.07	Ac.	0.48	0.60
Water			0 S.F.	=			0.00	Ac.	1.00	0.00
Misc.			0 S.F.	=			0.00	Ac.	0.92	0.02

Weighted c =	**0.511**		
Weighted N =	0.529		
Sheet Flow			
L =	256	Ft.	
H =	46.1	Ft.	
S =	0.1801	Ft./Ft.	
t1=	12.22	Minutes	(Min. 5 minutes)
Shallow Concentrated Flow			
L =	0	Ft.	
H =	0.0	Ft.	
S =	#DIV/0!	Ft./Ft.	
v =	3.30	Ft./sec.	(From HERPICC Figure 3.4.5)
t2=	0.00	Minutes	
tc=	12.22	Minutes	
I(10) =	4.996	In./Hr.	
I(25) =	5.529	In./Hr.	
I(50) =		In./Hr.	
I(100) =	6.712	In./Hr.	
Q(10) =	**9.68**	**CFS**	
Q(25) =	**10.71**	**CFS**	
Q(50) =	**0.00**	**CFS**	
Q(100) =	**13.01**	**CFS**	

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DEVELOPED DRAINAGE BASIN CALCULATIONS

Basin No.: 13

Total Area = 4,099 S.F.
0.09 Acres

Surface								C	N
Structures	0	@	3000	=	0 S.F. =	0.00	Ac.	0.92	0.02
Pavement				=	1,478 S.F. =	0.03	Ac.	0.92	0.02
Drives	0	@	700	=	0 S.F. =	0.00	Ac.	0.92	0.02
Patios	0	@	100	=	0 S.F. =	0.00	Ac.	0.92	0.02
Sidewalks				=	0 S.F. =	0.00	Ac.	0.92	0.02
Lawn (0-2%)			0 S.F.	=		0.00	Ac.	0.15	0.40
Lawn (2-5%)			0 S.F.	=		0.00	Ac.	0.25	0.40
Lawn (>10%)			2,621 S.F.	=		0.06	Ac.	0.55	0.40
Woods (>10%)			0 S.F.	=		0.00	Ac.	0.48	0.60
Water			0 S.F.	=		0.00	Ac.	1.00	0.00
Misc.			0 S.F.	=		0.00	Ac.	0.92	0.02

Weighted c =	**0.683**		
Weighted N =	0.263		
Sheet Flow			
L =	15	Ft.	
H =	1.4	Ft.	
S =	0.0940	Ft./Ft.	
t1=	5.00	Minutes	(Min. 5 minutes)
Shallow Concentrated Flow			
L =	0	Ft.	
H =	0.0	Ft.	
S =	#DIV/0!	Ft./Ft.	
v =	2.10	Ft./sec.	
t2=	0.00	Minutes	
tc=	5.00	Minutes	
I(10) =	6.625	In./Hr.	
I(25) =	7.208	In./Hr.	
I(50) =		In./Hr.	
I(100) =	8.469	In./Hr.	
Q(10) =	**0.43**	**CFS**	
Q(25) =	**0.46**	**CFS**	
Q(50) =	**0.00**	**CFS**	
Q(100) =	**0.54**	**CFS**	

DEVELOPED DRAINAGE BASIN CALCULATIONS

Basin No.: 14

Total Area = 18,177 S.F.
0.42 Acres

Surface								C	N
Structures				=	0 S.F. =	0.00	Ac.	0.92	0.02
Pavement				=	1,925 S.F. =	0.04	Ac.	0.92	0.02
Drives				=	0 S.F. =	0.00	Ac.	0.92	0.02
Patios				=	0 S.F. =	0.00	Ac.	0.92	0.02
Sidewalks				=	0 S.F. =	0.00	Ac.	0.92	0.02
Lawn (0-2%)			0 S.F.	=		0.00	Ac.	0.15	0.40
Lawn (2-5%)			2,500 S.F.	=		0.06	Ac.	0.25	0.40
Lawn (5-10%)			6,228 S.F.	=		0.14	Ac.	0.40	0.40
Lawn (>10%)			2,238 S.F.	=		0.05	Ac.	0.55	0.40
Woods (>10%)			0 S.F.	=		0.00	Ac.	0.48	0.60
Water			5,286 S.F.	=		0.12	Ac.	1.00	0.00
Misc.			0 S.F.	=		0.00	Ac.	0.92	0.02

Weighted c =	**0.627**		
Weighted N =	0.243		
Sheet Flow			
L =	46	Ft.	
H =	1.5	Ft.	
S =	0.0326	Ft./Ft.	
t1=	5.68	Minutes	(Min. 5 minutes)
Shallow Concentrated Flow			
L =	0	Ft.	
H =	0.0	Ft.	
S =	#DIV/0!	Ft./Ft.	
v =	3.30	Ft./sec.	(From HERPICC Figure 3.4.5)
t2=	0.00	Minutes	
tc=	5.68	Minutes	
I(10) =	6.455	In./Hr.	
I(25) =	7.033	In./Hr.	
I(50) =		In./Hr.	
I(100) =	8.286	In./Hr.	
Q(10) =	**1.69**	**CFS**	
Q(25) =	**1.84**	**CFS**	
Q(50) =	**0.00**	**CFS**	
Q(100) =	**2.17**	**CFS**	

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DEVELOPED DRAINAGE BASIN CALCULATIONS

Basin No.: OS-1 | Total Area = 15,336 S.F. 0.35 Acres

Surface							C	N
Structures		=	700	S.F. =	0.02	Ac.	0.92	0.02
Pavement		=	7,760	S.F. =	0.18	Ac.	0.92	0.02
Drives		=	752	S.F. =	0.02	Ac.	0.92	0.02
Patios		=	0	S.F. =	0.00	Ac.	0.92	0.02
Sidewalks		=	0	S.F. =	0.00	Ac.	0.92	0.02
Lawn (0-2%)	0 S.F.	=			0.00	Ac.	0.15	0.40
Lawn (2-5%)	0 S.F.	=			0.00	Ac.	0.25	0.40
Lawn (5-10%)	0 S.F.	=			0.00	Ac.	0.40	0.40
Lawn (>10%)	6,124 S.F.	=			0.14	Ac.	0.55	0.40
Water	0 S.F.	=			0.00	Ac.	1.00	0.00
Misc.	0 S.F.	=			0.00	Ac.	0.92	0.02

Weighted c =	**0.772**		
Weighted N =	0.172		
Sheet Flow			
L =	247	Ft.	
H =	17.2	Ft.	
S =	0.0697	Ft./Ft.	
t1=	8.86	Minutes	(Min. 5 minutes)
Shallow Concentrated Flow			
L =	0	Ft.	
H =	0.0	Ft.	
S =	#DIV/0!	Ft./Ft.	
v =	2.10	Ft./sec.	
t2=	0.00	Minutes	
tc=	8.86	Minutes	
I(10) =		In./Hr.	
I(25) =	6.216	In./Hr.	
I(50) =		In./Hr.	
I(100) =	7.431	In./Hr.	
Q(10) =	**0.00**	**CFS**	
Q(25) =	**1.69**	**CFS**	
Q(50) =	**0.00**	**CFS**	
Q(100) =	**2.02**	**CFS**	

DEVELOPED DRAINAGE BASIN CALCULATIONS

Basin No.: OS-2 | Total Area = 2,038 S.F. 0.05 Acres

Surface							C	N
Structures		=	0	S.F. =	0.00	Ac.	0.92	0.02
Pavement		=	0	S.F. =	0.00	Ac.	0.92	0.02
Drives		=	0	S.F. =	0.00	Ac.	0.92	0.02
Patios		=	0	S.F. =	0.00	Ac.	0.92	0.02
Sidewalks		=	0	S.F. =	0.00	Ac.	0.92	0.02
Lawn (0-2%)	0 S.F.	=			0.00	Ac.	0.15	0.40
Lawn (2-5%)	0 S.F.	=			0.00	Ac.	0.25	0.40
Lawn (5-10%)	0 S.F.	=			0.00	Ac.	0.40	0.40
Lawn (>10%)	2,038 S.F.	=			0.05	Ac.	0.55	0.40
Woods (>10%)	0 S.F.	=			0.00	Ac.	0.48	0.60
Water	0 S.F.	=			0.00	Ac.	1.00	0.00
Misc.	0 S.F.	=			0.00	Ac.	0.92	0.02

Weighted c =	**0.550**		
Weighted N =	0.400		
Sheet Flow			
L =	20	Ft.	
H =	2.8	Ft.	
S =	0.1400	Ft./Ft.	
t1=	5.00	Minutes	(Min. 5 minutes)
Shallow Concentrated Flow			
L =	0	Ft.	
H =	0.0	Ft.	
S =	#DIV/0!	Ft./Ft.	
v =	3.30	Ft./sec.	(From HERPICC Figure 3.4.5)
t2=	0.00	Minutes	
tc=	5.00	Minutes	
I(10) =		In./Hr.	
I(25) =	7.208	In./Hr.	
I(50) =		In./Hr.	
I(100) =	8.469	In./Hr.	
Q(10) =	**0.00**	**CFS**	
Q(25) =	**0.19**	**CFS**	
Q(50) =	**0.00**	**CFS**	
Q(100) =	**0.22**	**CFS**	

DEVELOPED DRAINAGE BASIN CALCULATIONS

Basin No.: OS-3

Total Area = 11,459 S.F.
0.26 Acres

Surface								*C*	*N*
Structures			=	1,053	S.F. =	0.02	Ac.	0.92	0.02
Pavement			=	1,273	S.F. =	0.03	Ac.	0.92	0.02
Drives			=	2,326	S.F. =	0.05	Ac.	0.92	0.02
Patios			=	0	S.F. =	0.00	Ac.	0.92	0.02
Sidewalks			=	0	S.F. =	0.00	Ac.	0.92	0.02
Lawn (0-2%)	0	S.F.	=			0.00	Ac.	0.15	0.40
Lawn (2-5%)	0	S.F.	=			0.00	Ac.	0.25	0.40
Lawn (5-10%)	3,204	S.F.	=			0.07	Ac.	0.40	0.40
Lawn (>10%)	3,603	S.F.	=			0.08	Ac.	0.55	0.40
Water	0	S.F.	=			0.00	Ac.	1.00	0.00
Misc.	0	S.F.	=			0.00	Ac.	0.92	0.02

Weighted c =	**0.658**		
Weighted N =	0.246		
Sheet Flow			
L =	97	Ft.	
H =	1.0	Ft.	
S =	0.0099	Ft./Ft.	
t1=	10.68	Minutes	(Min. 5 minutes)
Shallow Concentrated Flow			
L =	0	Ft.	
H =	0.0	Ft.	
S =	#DIV/0!	Ft./Ft.	
v =	2.10	Ft./sec.	
t2=	0.00	Minutes	
tc=	10.68	Minutes	
I(10) =		In./Hr.	
I(25) =	5.803	In./Hr.	
I(50) =		In./Hr.	
I(100) =	6.999	In./Hr.	
Q(10) =	**0.00**	**CFS**	
Q(25) =	**1.00**	**CFS**	
Q(50) =	**0.00**	**CFS**	
Q(100) =	**1.21**	**CFS**	

UNDEVELOPED DRAINAGE BASIN CALCULATIONS

Basin No.: UN-1

Total Area = 274,264 S.F.
6.30 Acres

Surface							C	N
Structures			=	0	S.F. =	0.00 Ac.	0.92	0.02
Drives (Asphalt)			=	0	S.F. =	0.00 Ac.	0.92	0.02
Drives (Gravel)			=	0	S.F. =	0.00 Ac.	0.92	0.15
Pavement			=	0	S.F. =	0.00 Ac.	0.92	0.02
Patios			=	0	S.F. =	0.00 Ac.	0.92	0.02
Sidewalks			=	0	S.F. =	0.00 Ac.	0.92	0.02
Pasture (2-5%)	69,231	S.F.	=			1.59 Ac.	0.24	0.40
Pasture (5-10%)	52,635	S.F.	=			1.21 Ac.	0.36	0.40
Woods (5-10%)	0	S.F.	=			0.00 Ac.	0.36	0.60
Woods (>10%)	152,398	S.F.	=			3.50 Ac.	0.48	0.60
Water	0	S.F.	=			0.00 Ac.	1.00	0.00
Misc.	0	S.F.	=			0.00 Ac.	0.92	0.02

Weighted c =	**0.396**		
Weighted N =	0.511		
Sheet Flow			
L =	300	Ft.	
H =	10.9	Ft.	
S =	0.0363	Ft./Ft.	
t1 =	18.81	Minutes	(Min. 5 minutes)
Shallow Concentrated Flow			
L =	190	Ft.	
H =	37.1	Ft.	
S =	0.1956	Ft./Ft.	
v =	7.25	Ft./sec.	(From HERPICC Figure 3.4.5)
t2=	0.44	Minutes	
Open Channel Flow			
L =	0	Ft.	
H =	0.0	Ft.	
S =	#DIV/0!	Ft./Ft.	
v =	1.15	Ft./sec.	
t3=	0.00	Minutes	
tc =	19.25		
I(10) =	4.150	In./Hr.	
I(25) =	0.000	In./Hr.	
I(50) =	0.000	In./Hr.	
I(100) =	0.000	In./Hr.	
Q(10) =	**10.36**	**CFS**	
Q(25) =	**0.00**	**CFS**	
Q(50) =	**0.00**	**CFS**	
Q(100) =	**0.00**	**CFS**	

UNDEVELOPED DRAINAGE BASIN CALCULATIONS

Basin No.: UN-2

Total Area = 353,380 S.F.
8.11 Acres

Surface									*C*	*N*
Structures			=	0	S.F. =	0.00	Ac.		0.92	0.02
Drives (Asphalt)			=	0	S.F. =	0.00	Ac.		0.92	0.02
Drives (Gravel)			=	0	S.F. =	0.00	Ac.		0.92	0.15
Pavement			=	0	S.F. =	0.00	Ac.		0.92	0.02
Patios			=	0	S.F. =	0.00	Ac.		0.92	0.02
Sidewalks			=	0	S.F. =	0.00	Ac.		0.92	0.02
Pasture (2-5%)	21,314	S.F.	=			0.49	Ac.		0.24	0.40
Pasture (5-10%)	13,200	S.F.	=			0.30	Ac.		0.36	0.40
Pasture (>10%)	26,690	S.F.	=			0.61	Ac.		0.48	0.40
Woods (5-10%)	0	S.F.	=			0.00	Ac.		0.36	0.60
Woods (>10%)	292,176	S.F.	=			6.71	Ac.		0.48	0.60
Water	0	S.F.	=			0.00	Ac.		1.00	0.00
Misc.	0	S.F.	=			0.00	Ac.		0.92	0.02

Weighted c =	**0.461**		
Weighted N =	0.565		
Sheet Flow			
L =	297	Ft.	
H =	32.0	Ft.	
S =	0.1078	Ft./Ft.	
t1 =	15.22	Minutes	(Min. 5 minutes)
Shallow Concentrated Flow			
L =	236	Ft.	
H =	12.0	Ft.	
S =	0.0509	Ft./Ft.	
V =	3.60	Ft./sec.	(From HERPICC Figure 3.4.5)
t2=	1.09	Minutes	
Open Channel Flow			
L =	127	Ft.	
H =	12.0	Ft.	
S =	0.0945	Ft./Ft.	
V =	8.48	Ft./sec.	
t3=	0.25	Minutes	
tc =	16.56		
I(10) =	4.381	In./Hr.	
I(25) =	0.000	In./Hr.	
I(50) =	0.000	In./Hr.	
I(100) =	0.000	In./Hr.	
Q(10) =	**16.39**	**CFS**	
Q(25) =	**0.00**	**CFS**	
Q(50) =	**0.00**	**CFS**	
Q(100) =	**0.00**	**CFS**	

UNDEVELOPED DRAINAGE BASIN CALCULATIONS

Basin No.: UN-3

Total Area = 145,221 S.F.
3.33 Acres

Surface									*C*	*N*
Structures			=	0	S.F. =	0.00	Ac.		0.92	0.02
Drives (Asphalt)			=	0	S.F. =	0.00	Ac.		0.92	0.02
Drives (Gravel)			=	0	S.F. =	0.00	Ac.		0.92	0.15
Pavement			=	5,951	S.F. =	0.14	Ac.		0.92	0.02
Patios			=	0	S.F. =	0.00	Ac.		0.92	0.02
Sidewalks			=	0	S.F. =	0.00	Ac.		0.92	0.02
Pasture (2-5%)	38,042	S.F.	=			0.87	Ac.		0.24	0.40
Pasture (>10%)	0	S.F.	=			0.00	Ac.		0.48	0.40
Woods (5-10%)	0	S.F.	=			0.00	Ac.		0.36	0.60
Woods (>10%)	94,435	S.F.	=			2.17	Ac.		0.48	0.60
Water	6,793	S.F.	=			0.16	Ac.		1.00	0.00
Misc.	0	S.F.	=			0.00	Ac.		0.92	0.02

Weighted c =	**0.459**		
Weighted N =	0.496		
Sheet Flow			
L =	300	Ft.	
H =	25.7	Ft.	
S =	0.0857	Ft./Ft.	
t1 =	15.18	Minutes	(Min. 5 minutes)
Shallow Concentrated Flow			
L =	141	Ft.	
H =	9.6	Ft.	
S =	0.0685	Ft./Ft.	
v =	4.20	Ft./sec.	(From HERPICC Figure 3.4.5)
t2=	0.56	Minutes	
Open Channel Flow			
L =	0	Ft.	
H =	0.0	Ft.	
S =	#DIV/0!	Ft./Ft.	
v =	8.84	Ft./sec.	
t3=	0.00	Minutes	
tc =	15.74		
I(10) =	4.452	In./Hr.	
I(25) =	0.000	In./Hr.	
I(50) =	0.000	In./Hr.	
I(100) =	0.000	In./Hr.	
Q(10) =	**6.82**	**CFS**	
Q(25) =	**0.00**	**CFS**	
Q(50) =	**0.00**	**CFS**	
Q(100) =	**0.00**	**CFS**	

Open Channel Flow Calculations

Swale #: 1

Side slope = 3
Bottom width = 1
Manning's coefficient = 0.035
Slope of channel = 0.0318

Depth (ft)	*Wetted Perimeter (ft)*	*Area (ft^2)*	*Hydraulic Radius (ft)*	*Hydraulic Depth (ft)*	*Flowrate (cfs)*	*Velocity (ft/s)*	*F value*
0.0	1.00	0.00	0.00	0.00	0.00	#DIV/0!	1.0
0.1	1.63	0.13	0.08	0.08	0.18	1.41	1.1
0.2	2.26	0.32	0.14	0.15	0.66	2.06	1.2
0.3	2.58	0.44	0.17	0.18	1.02	2.33	1.3
0.4	3.21	0.72	0.22	0.23	2.00	2.79	1.4
0.5	3.85	1.06	0.27	0.29	3.39	3.21	1.5
0.6	4.48	1.46	0.33	0.34	5.24	3.59	1.6
0.7	5.11	1.92	0.38	0.39	7.57	3.95	1.7
0.8	5.74	2.44	0.42	0.44	10.45	4.29	1.8
0.9	6.38	3.02	0.47	0.49	13.91	4.61	1.9
1.0	7.01	3.66	0.52	0.55	18.00	4.92	2.0

Open Channel Flow Calculations

Swale #: **2**

Side slope = 3
Bottom width = 1
Manning's coefficient = 0.035
Slope of channel = 0.0176

Depth (ft)	*Wetted Perimeter (ft)*	*Area (ft^2)*	*Hydraulic Radius (ft)*	*Hydraulic Depth (ft)*	*Flowrate (cfs)*	*Velocity (ft/s)*	*F value*
0.0	1.00	0.00	0.00	0.00	0.00	#DIV/0!	1.0
0.1	1.63	0.13	0.08	0.08	0.14	1.05	1.1
0.2	2.26	0.32	0.14	0.15	0.49	1.53	1.2
0.3	2.58	0.44	0.17	0.18	0.76	1.73	1.3
0.4	3.21	0.72	0.22	0.23	1.49	2.08	1.4
0.5	3.85	1.06	0.27	0.29	2.53	2.39	1.5
0.6	4.48	1.46	0.33	0.34	3.89	2.67	1.6
0.7	5.11	1.92	0.38	0.39	5.63	2.94	1.7
0.8	5.74	2.44	0.42	0.44	7.77	3.19	1.8
0.9	6.38	3.02	0.47	0.49	10.35	3.43	1.9
1.0	7.01	3.66	0.52	0.55	13.39	3.66	2.0

Open Channel Flow Calculations

Swale #: 3

Side slope = 3
Bottom width = 1
Manning's coefficient = 0.035
Slope of channel = 0.008

Depth (ft)	*Wetted Perimeter (ft)*	*Area (ft^2)*	*Hydraulic Radius (ft)*	*Hydraulic Depth (ft)*	*Flowrate (cfs)*	*Velocity (ft/s)*	*F value*
0.0	1.00	0.00	0.00	0.00	0.00	#DIV/0!	1.0
0.1	1.63	0.13	0.08	0.08	0.09	0.70	1.1
0.2	2.26	0.32	0.14	0.15	0.33	1.03	1.2
0.3	2.58	0.44	0.17	0.18	0.51	1.17	1.3
0.4	3.21	0.72	0.22	0.23	1.01	1.40	1.4
0.5	3.85	1.06	0.27	0.29	1.70	1.61	1.5
0.6	4.48	1.46	0.33	0.34	2.63	1.80	1.6
0.7	5.11	1.92	0.38	0.39	3.80	1.98	1.7
0.8	5.74	2.44	0.42	0.44	5.24	2.15	1.8
0.9	6.38	3.02	0.47	0.49	6.98	2.31	1.9
1.0	7.01	3.66	0.52	0.55	9.03	2.47	2.0

Open Channel Flow Calculations

Swale #: 4

Side slope = 3
Bottom width = 1
Manning's coefficient = 0.035
Slope of channel = 0.0142

Depth (ft)	*Wetted Perimeter (ft)*	*Area (ft^2)*	*Hydraulic Radius (ft)*	*Hydraulic Depth (ft)*	*Flowrate (cfs)*	*Velocity (ft/s)*	*F value*
0.0	1.00	0.00	0.00	0.00	0.00	#DIV/0!	1.0
0.1	1.63	0.13	0.08	0.08	0.12	0.94	1.1
0.2	2.26	0.32	0.14	0.15	0.44	1.38	1.2
0.3	2.58	0.44	0.17	0.18	0.68	1.55	1.3
0.4	3.21	0.72	0.22	0.23	1.34	1.87	1.4
0.5	3.85	1.06	0.27	0.29	2.27	2.15	1.5
0.6	4.48	1.46	0.33	0.34	3.50	2.40	1.6
0.7	5.11	1.92	0.38	0.39	5.06	2.64	1.7
0.8	5.74	2.44	0.42	0.44	6.98	2.86	1.8
0.9	6.38	3.02	0.47	0.49	9.30	3.08	1.9
1.0	7.01	3.66	0.52	0.55	12.03	3.29	2.0

Open Channel Flow Calculations

Swale #: 5

Side slope = 3
Bottom width = 1
Manning's coefficient = 0.035
Slope of channel = 0.025

Depth (ft)	*Wetted Perimeter (ft)*	*Area (ft^2)*	*Hydraulic Radius (ft)*	*Hydraulic Depth (ft)*	*Flowrate (cfs)*	*Velocity (ft/s)*	*F value*
0.0	1.00	0.00	0.00	0.00	0.00	#DIV/0!	1.0
0.1	1.63	0.13	0.08	0.08	0.16	1.25	1.1
0.2	2.26	0.32	0.14	0.15	0.58	1.83	1.2
0.3	2.58	0.44	0.17	0.18	0.90	2.06	1.3
0.4	3.21	0.72	0.22	0.23	1.78	2.48	1.4
0.5	3.85	1.06	0.27	0.29	3.01	2.85	1.5
0.6	4.48	1.46	0.33	0.34	4.64	3.18	1.6
0.7	5.11	1.92	0.38	0.39	6.71	3.50	1.7
0.8	5.74	2.44	0.42	0.44	9.27	3.80	1.8
0.9	6.38	3.02	0.47	0.49	12.34	4.09	1.9
1.0	7.01	3.66	0.52	0.55	15.96	4.36	2.0

Open Channel Flow Calculations

Swale #: 6

Side slope = 3
Bottom width = 1
Manning's coefficient = 0.035
Slope of channel = 0.05

Depth (ft)	Wetted Perimeter (ft)	Area (ft^2)	Hydraulic Radius (ft)	Hydraulic Depth (ft)	Flowrate (cfs)	Velocity (ft/s)	F value
0.0	1.00	0.00	0.00	0.00	0.00	#DIV/0!	1.0
0.1	1.63	0.13	0.08	0.08	0.23	1.76	1.1
0.2	2.26	0.32	0.14	0.15	0.83	2.58	1.2
0.3	2.58	0.44	0.17	0.18	1.28	2.92	1.3
0.4	3.21	0.72	0.22	0.23	2.51	3.50	1.4
0.5	3.85	1.06	0.27	0.29	4.26	4.03	1.5
0.6	4.48	1.46	0.33	0.34	6.56	4.50	1.6
0.7	5.11	1.92	0.38	0.39	9.49	4.95	1.7
0.8	5.74	2.44	0.42	0.44	13.10	5.38	1.8
0.9	6.38	3.02	0.47	0.49	17.44	5.78	1.9
1.0	7.01	3.66	0.52	0.55	22.57	6.17	2.0

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Open Channel Flow Calculations

Swale #: 7

Side slope = 3
Bottom width = 1
Manning's coefficient = 0.035
Slope of channel = 0.1021

Depth (ft)	Wetted Perimeter (ft)	Area (ft^2)	Hydraulic Radius (ft)	Hydraulic Depth (ft)	Flowrate (cfs)	Velocity (ft/s)	F value
0.0	1.00	0.00	0.00	0.00	0.00	#DIV/0!	1.0
0.1	1.63	0.13	0.08	0.08	0.33	2.52	1.1
0.2	2.26	0.32	0.14	0.15	1.18	3.69	1.2
0.3	2.58	0.44	0.17	0.18	1.82	4.17	1.3
0.4	3.21	0.72	0.22	0.23	3.59	5.01	1.4
0.5	3.85	1.06	0.27	0.29	6.08	5.75	1.5
0.6	4.48	1.46	0.33	0.34	9.38	6.44	1.6
0.7	5.11	1.92	0.38	0.39	13.57	7.08	1.7
0.8	5.74	2.44	0.42	0.44	18.73	7.68	1.8
0.9	6.38	3.02	0.47	0.49	24.93	8.26	1.9
1.0	7.01	3.66	0.52	0.55	32.25	8.82	2.0

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Open Channel Flow Calculations

Swale #: 8

Side slope = 3
Bottom width = 1
Manning's coefficient = 0.035
Slope of channel = 0.1509

Depth (ft)	Wetted Perimeter (ft)	Area (ft^2)	Hydraulic Radius (ft)	Hydraulic Depth (ft)	Flowrate (cfs)	Velocity (ft/s)	F value
0.0	1.00	0.00	0.00	0.00	0.00	#DIV/0!	1.0
0.1	1.63	0.13	0.08	0.08	0.40	3.06	1.1
0.2	2.26	0.32	0.14	0.15	1.44	4.49	1.2
0.3	2.58	0.44	0.17	0.18	2.22	5.06	1.3
0.4	3.21	0.72	0.22	0.23	4.37	6.09	1.4
0.5	3.85	1.06	0.27	0.29	7.39	6.99	1.5
0.6	4.48	1.46	0.33	0.34	11.40	7.82	1.6
0.7	5.11	1.92	0.38	0.39	16.50	8.60	1.7
0.8	5.74	2.44	0.42	0.44	22.76	9.34	1.8
0.9	6.38	3.02	0.47	0.49	30.31	10.04	1.9
1.0	7.01	3.66	0.52	0.55	39.21	10.72	2.0

Open Channel Flow Calculations

Swale #: 9

Side slope = 3
Bottom width = 1
Manning's coefficient = 0.035
Slope of channel = 0.0333

Depth (ft)	*Wetted Perimeter (ft)*	*Area (ft^2)*	*Hydraulic Radius (ft)*	*Hydraulic Depth (ft)*	*Flowrate (cfs)*	*Velocity (ft/s)*	*F value*
0.0	1.00	0.00	0.00	0.00	0.00	#DIV/0!	1.0
0.1	1.63	0.13	0.08	0.08	0.19	1.44	1.1
0.2	2.26	0.32	0.14	0.15	0.67	2.11	1.2
0.3	2.58	0.44	0.17	0.18	1.04	2.38	1.3
0.4	3.21	0.72	0.22	0.23	2.05	2.86	1.4
0.5	3.85	1.06	0.27	0.29	3.47	3.28	1.5
0.6	4.48	1.46	0.33	0.34	5.36	3.68	1.6
0.7	5.11	1.92	0.38	0.39	7.75	4.04	1.7
0.8	5.74	2.44	0.42	0.44	10.69	4.39	1.8
0.9	6.38	3.02	0.47	0.49	14.24	4.72	1.9
1.0	7.01	3.66	0.52	0.55	18.42	5.04	2.0

Open Channel Flow Calculations

Swale #: **10**

Side slope = 3
Bottom width = 1
Manning's coefficient = 0.035
Slope of channel = 0.2424

Depth (ft)	*Wetted Perimeter (ft)*	*Area (ft^2)*	*Hydraulic Radius (ft)*	*Hydraulic Depth (ft)*	*Flowrate (cfs)*	*Velocity (ft/s)*	*F value*
0.0	1.00	0.00	0.00	0.00	0.00	#DIV/0!	1.0
0.1	1.63	0.13	0.08	0.08	0.50	3.86	1.1
0.2	2.26	0.32	0.14	0.15	1.82	5.69	1.2
0.3	2.58	0.44	0.17	0.18	2.81	6.42	1.3
0.4	3.21	0.72	0.22	0.23	5.53	7.71	1.4
0.5	3.85	1.06	0.27	0.29	9.37	8.86	1.5
0.6	4.48	1.46	0.33	0.34	14.45	9.92	1.6
0.7	5.11	1.92	0.38	0.39	20.91	10.90	1.7
0.8	5.74	2.44	0.42	0.44	28.85	11.84	1.8
0.9	6.38	3.02	0.47	0.49	38.41	12.73	1.9
1.0	7.01	3.66	0.52	0.55	49.69	13.59	2.0

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Open Channel Flow Calculations

Swale #: 11

Side slope = 4
Bottom width = 10
Manning's coefficient = 0.035
Slope of channel = 0.0096

Depth (ft)	*Wetted Perimeter (ft)*	*Area (ft^2)*	*Hydraulic Radius (ft)*	*Hydraulic Depth (ft)*	*Flowrate (cfs)*	*Velocity (ft/s)*	*F value*
0.0	10.00	0.00	0.00	0.00	0.00	#DIV/0!	1.0
0.1	10.82	1.04	0.10	0.10	0.91	0.87	1.1
0.2	11.65	2.16	0.19	0.19	2.93	1.36	1.2
0.3	12.06	2.75	0.23	0.23	4.28	1.56	1.3
0.4	12.89	3.99	0.31	0.31	7.62	1.91	1.4
0.5	13.71	5.31	0.39	0.39	11.77	2.22	1.5

DRAWING 1