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## Area Listing (all nodes)

Area	CN	Description
(acres)		(subcatchment-numbers)
0.312	96	Gravel surface, HSG B (1S, 2S)
0.958	98	Paved parking & roofs (1S, 2S, 3S)
1.269	98	TOTAL AREA

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## Soil Listing (all nodes)

Area	Soil	Subcatchment
(acres)	Group	Numbers
0.000	HSG A	
0.312	HSG B	1S, 2S
0.000	HSG C	
0.000	HSG D	
0.958	Other	1S, 2S, 3S
1.269		TOTAL AREA

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## Ground Covers (all nodes)

HSG-A	HSG-B	HSG-C	HSG-D	Other	Total	Ground	Subcatchment
 (acres)	(acres)	(acres)	(acres)	(acres)	(acres)	Cover	Numbers
0.000	0.312	0.000	0.000	0.000	0.312	Gravel surface	1S, 2S
0.000	0.000	0.000	0.000	0.958	0.958	Paved parking & roofs	1S, 2S, 3S
0.000	0.312	0.000	0.000	0.958	1.269	TOTAL AREA	

Bayside Bowl Pre Development		Type III	24-hr 1-inch R	ainfall=1.00"
Prepared by {enter your company name	here}		Printe	d 3/23/2015
HydroCAD® 10.00-12 s/n 05121 © 2014 Hyd	roCAD Software Solut	ions LLC		Page 5
Time span=2.00-2 Runoff by SCS TF Reach routing by Dyn-Stor-In	20.00 hrs, dt=0.01 hr R-20 method, UH=S d method - Pond ro	rs, 1801 points CS, Weighted outing by Dyn-	s x 3 I-CN •Stor-Ind method	
Subcatchment1S: building and gravel	Runoff Area=29,376 Flow Length=200' T	6 sf   70.73% In c=6.0 min   CN	npervious Runoff l=97 Runoff=0.55	Depth>0.66" cfs_0.037 af
Subcatchment2S: paved drive/gravel Flow Length=130	Runoff Area=10,478 ' Slope=0.0130 '/' T	3 sf 52.52% In c=6.0 min CN	npervious Runoff I=97 Runoff=0.20	Depth>0.66" cfs_0.013 af
Subcatchment3S: salt storage area	Runoff Area=15,433 Flow Length=267' T	sf 100.00% In c=6.0 min CN	npervious Runoff I=98 Runoff=0.32	Depth>0.75" cfs_0.022 af
Reach A: ANALYSISPOINT A: CB in Alde	r St.		Inflow=0.55 Outflow=0.55	o cfs 0.037 af o cfs 0.037 af
Reach B: ANALYSISPOINT B: CB in Hand	over		Inflow=0.51 Outflow=0.51	cfs 0.035 af cfs 0.035 af

Total Runoff Area = 1.269 acRunoff Volume = 0.073 afAverage Runoff Depth = 0.69"24.55% Pervious = 0.312 ac75.45% Impervious = 0.958 ac

Runoff 0.55 cfs @ 12.09 hrs, Volume= 0.037 af, Depth> 0.66" =

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-20.00 hrs, dt= 0.01 hrs Type III 24-hr 1-inch Rainfall=1.00"

<i>I</i>	Area (sf)	CN	Description						
	20,779	98	98 Paved parking & roofs						
	8,597	96	Gravel surfa	ace, HSG E	3				
	29,376	97	Weighted A	verage					
	8,597		29.27% Pe	rvious Area	l de la constante de				
	20,779		70.73% Imp	pervious Ar	ea				
_				- ·					
Tc	Length	Slope	e Velocity	Capacity	Description				
(min)	(feet)	(ft/ft	) (ft/sec)	(cfs)					
3.2	180	0.0060	0.93		Sheet Flow, A-B gravel				
					Smooth surfaces n= 0.011 P2= 3.00"				
0.1	20	0.0375	5 3.93		Shallow Concentrated Flow, B-C gutter				
					Paved Kv= 20.3 fps				
33	200	Total	Increased t	o minimum	$T_{\rm C} = 6.0  \text{min}$				

lotal, Increased to minimum I c = 6.0 min

#### Summary for Subcatchment 2S: paved drive/gravel parking

Runoff 0.20 cfs @ 12.09 hrs, Volume= 0.013 af, Depth> 0.66" =

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-20.00 hrs, dt= 0.01 hrs Type III 24-hr 1-inch Rainfall=1.00"

	Ai	rea (sf)	CN	Description						
		5,503	98	Paved park	Paved parking & roofs					
		4,975	96	Gravel surfa	ace, HSG E	3				
		10,478	97	Weighted A	verage					
		4,975		47.48% Pe	47.48% Pervious Area					
		5,503		52.52% Imp	pervious Ar	ea				
	Та	المربع مرالم	Clan		Conceitu	Description				
	IC	Length	Slop	e velocity	Capacity	Description				
(	min)	(feet)	(ft/ft	t) (ft/sec)	(cfs)					
	1.8	130	0.013	0 1.18		Sheet Flow, A-B pavement				
						Smooth surfaces n= 0.011 P2= 3.00"				
	10	400	Tatal	المممم مسم ما						

130 Total, Increased to minimum Tc = 6.0 min 1.8

#### Summary for Subcatchment 3S: salt storage area

Runoff 0.32 cfs @ 12.08 hrs, Volume= 0.022 af, Depth> 0.75" =

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-20.00 hrs, dt= 0.01 hrs Type III 24-hr 1-inch Rainfall=1.00"

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A	rea (sf)	CN D	escription		
	15,433	98 P	aved park	ing & roofs	
	15,433	1	00.00% In	npervious A	rea
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.8	122	0.0040	0.73	<b>x</b> <i>t</i>	Sheet Flow, A-B
0.8	145	0.0200	2.87		Smooth surfaces n= 0.011 P2= 3.00" <b>Shallow Concentrated Flow, B-C gutter</b> Paved Kv= 20.3 fps
3.6	267	Total, I	ncreased t	o minimum	Tc = 6.0 min

## Summary for Reach A: ANALYSIS POINT A: CB in Alder St.

Inflow Area	a =	0.674 ac, 7	0.73% Imp	ervious,	Inflow D	epth >	0.6	6" for 1-i	nch event	
Inflow	=	0.55 cfs @	12.09 hrs,	Volume	=	0.037	af			
Outflow	=	0.55 cfs @	12.09 hrs,	Volume	=	0.037	af,	Atten= 0%,	Lag= 0.0 mi	n

Routing by Dyn-Stor-Ind method, Time Span= 2.00-20.00 hrs, dt= 0.01 hrs / 3

## Summary for Reach B: ANALYSIS POINT B: CB in Hanover

Inflow Area	a =	0.595 ac, 8	30.80% Impe	ervious,	Inflow	Depth >	0.7	71" for 1	-inch eve	nt
Inflow	=	0.51 cfs @	12.09 hrs,	Volume	=	0.035	af			
Outflow	=	0.51 cfs @	12.09 hrs,	Volume	=	0.035	af,	Atten= 0%	6, Lag=0	.0 min

Bayside Bowl Pre Development		Type III 24-h	r 2-Year Rainfall=3.00"
Prepared by {enter your company name	e here}		Printed 3/23/2015
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Time span=2.00- Runoff by SCS T Reach routing by Dyn-Stor-Ir	20.00 hrs, dt=0.01 hrs, R-20 method, UH=SCS nd method - Pond routin	1801 points x 3 , Weighted-CN ng by Dyn-Stor	-Ind method
Subcatchment1S: building and gravel	Runoff Area=29,376 sf Flow Length=200' Tc=6	70.73% Imper 6.0 min CN=97	vious Runoff Depth>2.53" Runoff=1.93 cfs 0.142 af
Subcatchment2S: paved drive/gravel Flow Length=130	Runoff Area=10,478 sf 0' Slope=0.0130 '/' Tc=6	52.52% Imper 6.0 min CN=97	vious Runoff Depth>2.53" Runoff=0.69 cfs 0.051 af
Subcatchment3S: salt storage area	Runoff Area=15,433 sf Flow Length=267' Tc=6	100.00% Imper 6.0 min CN=98	vious Runoff Depth>2.64" Runoff=1.03 cfs 0.078 af
Reach A: ANALYSISPOINT A: CB in Alde	er St.		Inflow=1.93 cfs 0.142 af Outflow=1.93 cfs 0.142 af
Reach B: ANALYSISPOINT B: CB in Han	over		Inflow=1.72 cfs 0.128 af Outflow=1.72 cfs 0.128 af

Total Runoff Area = 1.269 acRunoff Volume = 0.270 afAverage Runoff Depth = 2.56"24.55% Pervious = 0.312 ac75.45% Impervious = 0.958 ac

Runoff 1.93 cfs @ 12.08 hrs, Volume= 0.142 af, Depth> 2.53" =

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-20.00 hrs, dt= 0.01 hrs Type III 24-hr 2-Year Rainfall=3.00"

A	rea (sf)	CN	Description		
	20,779	98	Paved park	ing & roofs	
	8,597	96	Gravel surfa	ace, HSG E	3
	29,376	97	Weighted A	verage	
	8,597		29.27% Pe	rvious Area	l de la constante de
	20,779		70.73% Imp	pervious Ar	ea
		_			
Tc	Length	Slope	Velocity	Capacity	Description
<u>(min)</u>	(feet)	(ft/ft)	(ft/sec)	(cfs)	
3.2	180	0.0060	0.93		Sheet Flow, A-B gravel
					Smooth surfaces n= 0.011 P2= 3.00"
0.1	20	0.0375	3.93		Shallow Concentrated Flow, B-C gutter
					Paved Kv= 20.3 fps
33	200	Total	Increased t	o minimum	$T_{\rm C} = 6.0  \text{min}$

lotal, Increased to minimum I c = 6.0 min

#### Summary for Subcatchment 2S: paved drive/gravel parking

Runoff 0.69 cfs @ 12.08 hrs, Volume= 0.051 af, Depth> 2.53" =

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-20.00 hrs, dt= 0.01 hrs Type III 24-hr 2-Year Rainfall=3.00"

	Ai	rea (sf)	CN	Description						
		5,503	98	Paved park	Paved parking & roofs					
		4,975	96	Gravel surfa	ace, HSG E	3				
		10,478	97	Weighted A	verage					
		4,975		47.48% Pe	47.48% Pervious Area					
		5,503		52.52% Imp	pervious Ar	ea				
	Та	المربع مرالم	Clan		Conceitu	Description				
	IC	Length	Slop	e velocity	Capacity	Description				
(	min)	(feet)	(ft/ft	t) (ft/sec)	(cfs)					
	1.8	130	0.013	0 1.18		Sheet Flow, A-B pavement				
						Smooth surfaces n= 0.011 P2= 3.00"				
	1 0	400	Tatal	المممم مسم ما						

130 Total, Increased to minimum Tc = 6.0 min 1.8

#### Summary for Subcatchment 3S: salt storage area

Runoff 1.03 cfs @ 12.08 hrs, Volume= 0.078 af, Depth> 2.64" =

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-20.00 hrs, dt= 0.01 hrs Type III 24-hr 2-Year Rainfall=3.00"

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A	rea (sf)	CN D	escription							
	15,433	98 P	98 Paved parking & roofs							
	15,433	1	00.00% In	npervious A	rea					
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description					
2.8	122	0.0040	0.73	· · · · ·	Sheet Flow, A-B					
0.8	145	0.0200	2.87		Smooth surfaces n= 0.011 P2= 3.00" <b>Shallow Concentrated Flow, B-C gutter</b> Paved Kv= 20.3 fps					
3.6	267	Total, I	Total, Increased to minimum Tc = 6.0 min							

## Summary for Reach A: ANALYSIS POINT A: CB in Alder St.

Inflow Area	a =	0.674 ac, 7	70.73% Impe	ervious,	Inflow D	epth >	2.53	3" for 2-Y	ear event	
Inflow	=	1.93 cfs @	12.08 hrs,	Volume	=	0.142 a	af			
Outflow	=	1.93 cfs @	12.08 hrs,	Volume	=	0.142 a	af, /	Atten= 0%,	Lag= 0.0 r	nin

Routing by Dyn-Stor-Ind method, Time Span= 2.00-20.00 hrs, dt= 0.01 hrs / 3

## Summary for Reach B: ANALYSIS POINT B: CB in Hanover

Inflow Area	a =	0.595 ac,	80.80% Impe	ervious,	Inflow [	Depth >	2.5	59" for 2-1	ear even	t
Inflow	=	1.72 cfs @	12.08 hrs,	Volume	=	0.128	af			
Outflow	=	1.72 cfs @	12.08 hrs,	Volume	=	0.128	af,	Atten= 0%,	Lag= 0.0	) min

Bayside Bowl Pre Development	Type III 24-hr 10-Year Rainfall=4.7	70"
Prepared by {enter your company name here}	Printed 3/23/20	15
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Time span=2.00-20.00 hrs, dt=0.01 l Runoff by SCS TR-20 method, UH= Reach routing by Dyn-Stor-Ind method - Pond	hrs, 1801 points x 3 SCS, Weighted-CN routing by Dyn-Stor-Ind method	
Subcatchment1S: building and gravel Runoff Area=29,3 Flow Length=200'	76 sf 70.73% Impervious Runoff Depth>4.14 Tc=6.0 min CN=97 Runoff=3.07 cfs 0.233	4" af
Subcatchment2S: paved drive/gravel Flow Length=130'Runoff Area=10,4' Slope=0.0130 '/'	78 sf 52.52% Impervious Runoff Depth>4.14 Tc=6.0 min CN=97 Runoff=1.10 cfs 0.083	4" af
Subcatchment3S: salt storage area Runoff Area=15,433 Flow Length=267'	3 sf 100.00% Impervious Runoff Depth>4.23 Tc=6.0 min CN=98 Runoff=1.63 cfs 0.125	5" af
Reach A: ANALYSISPOINT A: CB in Alder St.	Inflow=3.07 cfs 0.233 Outflow=3.07 cfs 0.233	af af
Reach B: ANALYSISPOINT B: CB in Hanover	Inflow=2.72 cfs 0.208 Outflow=2.72 cfs 0.208	af af

Total Runoff Area = 1.269 acRunoff Volume = 0.441 afAverage Runoff Depth = 4.17"24.55% Pervious = 0.312 ac75.45% Impervious = 0.958 ac

Runoff 3.07 cfs @ 12.08 hrs, Volume= 0.233 af, Depth> 4.14" =

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-20.00 hrs, dt= 0.01 hrs Type III 24-hr 10-Year Rainfall=4.70"

	Area (sf)	CN	Description	l	
	20,779	98	Paved park	king & roofs	
	8,597	96	Gravel surf	ace, HSG E	3
	29,376	97	Weighted A	verage	
8,597 29.27% Pervious Area					l de la construcción de la constru
	20,779 70.73% Impervious Are				ea
Ţ	c Length	n Slop	e Velocity	Capacity	Description
(mir	n) (feet	) (ft/f	t) (ft/sec)	(cfs)	
3.	2 180	0.006	0.93		Sheet Flow, A-B gravel
					Smooth surfaces n= 0.011 P2= 3.00"
0.	1 20	0.037	5 3.93		Shallow Concentrated Flow, B-C gutter
					Paved Kv= 20.3 fps
3	3 200	) Total	Increased	to minimum	$T_{\rm C} = 6.0  \text{min}$

lotal, Increased to minimum I c = 6.0 min

#### Summary for Subcatchment 2S: paved drive/gravel parking

Runoff 1.10 cfs @ 12.08 hrs, Volume= 0.083 af, Depth> 4.14" =

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-20.00 hrs, dt= 0.01 hrs Type III 24-hr 10-Year Rainfall=4.70"

_	Ai	rea (sf)	CN	Description							
		5,503	98	Paved park	aved parking & roofs						
_		4,975	96	Gravel surfa	Gravel surface, HSG B						
		10,478	97	Weighted A							
		4,975		47.48% Per	17.48% Pervious Area						
		5,503		52.52% Imp	pervious Ar	ea					
	Тс	Length	Slope	e Velocity	Capacity	Description					
_	(min)	(feet)	(ft/ft	) (ft/sec)	(cfs)						
	1.8	130	0.013	0 1.18		Sheet Flow, A-B pavement					
_						Smooth surfaces n= 0.011 P2= 3.00"					
	4 0	400	Tatal								

130 Total, Increased to minimum Tc = 6.0 min 1.8

#### Summary for Subcatchment 3S: salt storage area

Runoff 1.63 cfs @ 12.08 hrs, Volume= 0.125 af, Depth> 4.25" =

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-20.00 hrs, dt= 0.01 hrs Type III 24-hr 10-Year Rainfall=4.70"

 Type III 24-hr
 10-Year Rainfall=4.70"

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Area	a (sf)	CN D	Description							
15	,433	98 F	98 Paved parking & roofs							
15	,433	1	00.00% In	npervious A	rea					
Tc L (min)	ength (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description					
2.8	122	0.0040	0.73	· · · · ·	Sheet Flow, A-B					
0.8	145	0.0200	2.87		Smooth surfaces n= 0.011 P2= 3.00" <b>Shallow Concentrated Flow, B-C gutter</b> Paved Kv= 20.3 fps					
3.6	267	Total, I	ncreased t	o minimum	Tc = 6.0 min					

## Summary for Reach A: ANALYSIS POINT A: CB in Alder St.

Inflow Area	a =	0.674 ac, 7	0.73% Imp	ervious,	Inflow De	epth > 4.	14" for 10-	Year event
Inflow	=	3.07 cfs @	12.08 hrs,	Volume	=	0.233 af		
Outflow	=	3.07 cfs @	12.08 hrs,	Volume	=	0.233 af,	Atten= 0%,	Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 2.00-20.00 hrs, dt= 0.01 hrs / 3

## Summary for Reach B: ANALYSIS POINT B: CB in Hanover

Inflow Area	a =	0.595 ac, 8	30.80% Impe	ervious,	Inflow D	epth >	4.20	)" for 10-	Year event	t
Inflow	=	2.72 cfs @	12.08 hrs,	Volume	=	0.208 a	af			
Outflow	=	2.72 cfs @	12.08 hrs,	Volume	=	0.208 a	af, A	Atten= 0%,	Lag= 0.0 r	nin

Bayside Bowl Pre Development	Type III 24-hr 25-Year Rainfall=5.50"						
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Time span=2.00-20.00 hrs, dt=0.01 hrs Runoff by SCS TR-20 method, UH=SC Reach routing by Dyn-Stor-Ind method - Pond rou	, 1801 points x 3 S, Weighted-CN ıting by Dyn-Stor-Ind method						
Subcatchment1S: building and gravel Runoff Area=29,376 s Flow Length=200' Tc=	sf 70.73% Impervious Runoff Depth>4.90" =6.0 min CN=97 Runoff=3.61 cfs 0.275 af						
Subcatchment2S: paved drive/gravel Flow Length=130'Runoff Area=10,478 s Slope=0.0130 '/' Tc=	sf 52.52% Impervious Runoff Depth>4.90" =6.0 min CN=97 Runoff=1.29 cfs 0.098 af						
Subcatchment3S: salt storage area Runoff Area=15,433 sf Flow Length=267' Tc=	f 100.00% Impervious Runoff Depth>5.00" =6.0 min CN=98 Runoff=1.91 cfs 0.148 af						
Reach A: ANALYSISPOINT A: CB in Alder St.	Inflow=3.61 cfs 0.275 af Outflow=3.61 cfs 0.275 af						
Reach B: ANALYSISPOINT B: CB in Hanover	Inflow=3.20 cfs 0.246 af Outflow=3.20 cfs 0.246 af						

Total Runoff Area = 1.269 acRunoff Volume = 0.521 afAverage Runoff Depth = 4.93"24.55% Pervious = 0.312 ac75.45% Impervious = 0.958 ac

Runoff 3.61 cfs @ 12.08 hrs, Volume= 0.275 af, Depth> 4.90" =

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-20.00 hrs, dt= 0.01 hrs Type III 24-hr 25-Year Rainfall=5.50"

A	rea (sf)	CN	Description		
	20,779	98	Paved park	ing & roofs	
	8,597	96	Gravel surfa	ace, HSG E	3
	29,376	97	Weighted A	verage	
8,597 29.27% Pervious Area					l de la constante de
20,779 70.73% Impervious Are				pervious Ar	ea
		_			
Tc	Length	Slope	Velocity	Capacity	Description
<u>(min)</u>	(feet)	(ft/ft)	(ft/sec)	(cfs)	
3.2	180	0.0060	0.93		Sheet Flow, A-B gravel
					Smooth surfaces n= 0.011 P2= 3.00"
0.1	20	0.0375	3.93		Shallow Concentrated Flow, B-C gutter
					Paved Kv= 20.3 fps
33	200	Total	Increased t	o minimum	$T_{\rm C} = 6.0  \text{min}$

lotal, Increased to minimum I c = 6.0 min

#### Summary for Subcatchment 2S: paved drive/gravel parking

Runoff 1.29 cfs @ 12.08 hrs, Volume= 0.098 af, Depth> 4.90" =

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-20.00 hrs, dt= 0.01 hrs Type III 24-hr 25-Year Rainfall=5.50"

	Ai	rea (sf)	CN	Description							
		5,503	98	Paved park	aved parking & roofs						
		4,975	96	Gravel surfa	ravel surface, HSG B						
		10,478	97	Weighted A							
		4,975		47.48% Pe	7.48% Pervious Area						
		5,503		52.52% Imp	pervious Ar	ea					
	Та	المربع مرالم	Clan		Conceitu	Description					
	IC	Length	Slop	e velocity	Capacity	Description					
(	min)	(feet)	(ft/ft	t) (ft/sec)	(cfs)						
	1.8	130	0.013	0 1.18		Sheet Flow, A-B pavement					
						Smooth surfaces n= 0.011 P2= 3.00"					
	1 0	400	Tatal	المممم مسم ما							

130 Total, Increased to minimum Tc = 6.0 min 1.8

#### Summary for Subcatchment 3S: salt storage area

Runoff 1.91 cfs @ 12.08 hrs, Volume= 0.148 af, Depth> 5.00" =

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-20.00 hrs, dt= 0.01 hrs Type III 24-hr 25-Year Rainfall=5.50"

 Type III 24-hr
 25-Year Rainfall=5.50"

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Α	rea (sf)	CN E	Description		
	15,433	98 F	aved park	ing & roofs	
	15,433	1	00.00% In	npervious A	rea
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.8	122	0.0040	0.73	· · · · ·	Sheet Flow, A-B
0.8	145	0.0200	2.87		Smooth surfaces n= 0.011 P2= 3.00" <b>Shallow Concentrated Flow, B-C gutter</b> Paved Kv= 20.3 fps
3.6	267	Total, I	ncreased t	o minimum	1 Tc = 6.0 min

## Summary for Reach A: ANALYSIS POINT A: CB in Alder St.

Inflow Area	a =	0.674 ac, 7	70.73% Impe	ervious,	Inflow De	epth > 4	I.90"	for 25-	Year event	
Inflow	=	3.61 cfs @	12.08 hrs,	Volume	=	0.275 a	f			
Outflow	=	3.61 cfs @	12.08 hrs,	Volume	=	0.275 a	f, Atte	n= 0%,	Lag= 0.0 mi	n

Routing by Dyn-Stor-Ind method, Time Span= 2.00-20.00 hrs, dt= 0.01 hrs / 3

## Summary for Reach B: ANALYSIS POINT B: CB in Hanover

Inflow Area	a =	0.595 ac, 8	30.80% Impe	ervious,	Inflow D	)epth >	4.9	6" for 25-	Year even	t
Inflow	=	3.20 cfs @	12.08 hrs,	Volume	=	0.246	af			
Outflow	=	3.20 cfs @	12.08 hrs,	Volume	=	0.246	af,	Atten= 0%,	Lag= 0.0	min

Bayside Bowl Pre Development		Type III 24-hr	100-Year Rainfall=6.70"
Prepared by {enter your company name	here}		Printed 3/23/2015
HydroCAD® 10.00-12 s/n 05121 © 2014 Hydr	OCAD Software Solutio	ons LLC	Page 17
Time span=2.00-2 Runoff by SCS TF Reach routing by Dyn-Stor-Inc	20.00 hrs, dt=0.01 hrs R-20 method, UH=SC d method - Pond rou	a, 1801 points x 3 S, Weighted-CN uting by Dyn-Stor∙	Ind method
Subcatchment1S: building and gravel	Runoff Area=29,376 s Flow Length=200' Tc=	sf 70.73% Imperv =6.0 min CN=97	ious Runoff Depth>6.04" Runoff=4.41 cfs 0.339 af
Subcatchment2S: paved drive/gravel Flow Length=130	Runoff Area=10,478 : ' Slope=0.0130 '/' Tc=	sf 52.52% Imperv =6.0 min CN=97	ious Runoff Depth>6.04" Runoff=1.57 cfs 0.121 af
Subcatchment3S: salt storage area	Runoff Area=15,433 st Flow Length=267' Tc=	f 100.00% Imperv =6.0 min CN=98	ious Runoff Depth>6.14" Runoff=2.33 cfs 0.181 af
Reach A: ANALYSISPOINT A: CB in Alder	r St.		Inflow=4.41 cfs 0.339 af Outflow=4.41 cfs 0.339 af
Reach B: ANALYSISPOINT B: CB in Hand	over		Inflow=3.90 cfs 0.302 af Outflow=3.90 cfs 0.302 af

Total Runoff Area = 1.269 ac Runoff Volume = 0.641 af Average Runoff Depth = 6.06" 24.55% Pervious = 0.312 ac 75.45% Impervious = 0.958 ac

Runoff 4.41 cfs @ 12.08 hrs, Volume= 0.339 af, Depth> 6.04" =

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-20.00 hrs, dt= 0.01 hrs Type III 24-hr 100-Year Rainfall=6.70"

	Area (sf)	CN	Description		
	20,779	98	Paved park	ing & roofs	
	8,597	96	Gravel surf	ace, HSG E	3
	29,376	97	Weighted A	verage	
	8,597		29.27% Pe	rvious Area	l de la construcción de la constru
	20,779	·	70.73% lmp	pervious Ar	ea
_					
Ţ	c Length	Slope	Velocity	Capacity	Description
(mir	) (feet)	(ft/ft)	(ft/sec)	(cts)	
3.	2 180	0.0060	0.93		Sheet Flow, A-B gravel
					Smooth surfaces n= 0.011 P2= 3.00"
0.	1 20	0.0375	3.93		Shallow Concentrated Flow, B-C gutter
					Paved Kv= 20.3 fps
3	3 200	Total	Increased t	to minimum	$T_{\rm C} = 6.0  \text{min}$

lotal, Increased to minimum I c = 6.0 min

#### Summary for Subcatchment 2S: paved drive/gravel parking

Runoff 1.57 cfs @ 12.08 hrs, Volume= 0.121 af, Depth> 6.04" =

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-20.00 hrs, dt= 0.01 hrs Type III 24-hr 100-Year Rainfall=6.70"

	Aı	rea (sf)	CN	Description					
		5,503	98	Paved park	ing & roofs				
_		4,975	96	Gravel surfa	ace, HSG E	3			
		10,478	97	Weighted A	verage				
		4,975 47.48% Pervious Area							
		5,503		52.52% Imp	pervious Ar	ea			
	Tc (min)	Length (feet)	Slop (ft/ft	e Velocity t) (ft/sec)	Capacity (cfs)	Description			
_	1.8	130	0.013	0 1.18	(0.0)	Sheet Flow, A-B pavement Smooth surfaces n= 0.011 P2= 3.00"			
	1 0	120	Total			To 60 min			

130 Total, Increased to minimum Tc = 6.0 min 1.8

#### Summary for Subcatchment 3S: salt storage area

Runoff 2.33 cfs @ 12.08 hrs, Volume= 0.181 af, Depth> 6.14" =

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-20.00 hrs, dt= 0.01 hrs Type III 24-hr 100-Year Rainfall=6.70"

Type III 24-hr 100-Year Rainfall=6.70" Printed 3/23/2015 ns LLC Page 19

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A	rea (sf)	CN D	<b>Description</b>		
	15,433	98 F	aved park	ing & roofs	
	15,433	1	00.00% In	npervious A	rea
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.8	122	0.0040	0.73	<b>x</b> <i>t</i>	Sheet Flow, A-B
0.8	145	0.0200	2.87		Smooth surfaces n= 0.011 P2= 3.00" <b>Shallow Concentrated Flow, B-C gutter</b> Paved Kv= 20.3 fps
3.6	267	Total, I	ncreased t	o minimum	Tc = 6.0 min

# Summary for Reach A: ANALYSIS POINT A: CB in Alder St.

Inflow Area	a =	0.674 ac, 7	0.73% Imp	ervious,	Inflow D	epth > 6	5.04	" for 100	)-Year event
Inflow	=	4.41 cfs @	12.08 hrs,	Volume	=	0.339 a	ſ		
Outflow	=	4.41 cfs @	12.08 hrs,	Volume	=	0.339 a	lf, A	Atten= 0%,	Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 2.00-20.00 hrs, dt= 0.01 hrs / 3

## Summary for Reach B: ANALYSIS POINT B: CB in Hanover

Inflow Area	a =	0.595 ac, 8	30.80% Impe	ervious,	Inflow De	pth > 6.	10" for 10	0-Year event
Inflow	=	3.90 cfs @	12.08 hrs,	Volume	=	0.302 af		
Outflow	=	3.90 cfs @	12.08 hrs,	Volume	=	0.302 af,	Atten= 0%	Lag= 0.0 min