

TR55 Tc Worksheet

Hydraflow Hydrographs by Intellisolve v9.22

Hyd. No. 2

Pre-Dev HW-2

<u>Description</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>Totals</u>
Sheet Flow				
Manning's n-value	= 0.240	0.011	0.011	
Flow length (ft)	= 65.0	0.0	0.0	
Two-year 24-hr precip. (in)	= 3.30	0.00	0.00	
Land slope (%)	= 2.30	0.00	0.00	
Travel Time (min)	= 9.41	+ 0.00	+ 0.00	= 9.41
Shallow Concentrated Flow				
Flow length (ft)	= 190.00	0.00	0.00	
Watercourse slope (%)	= 1.25	0.00	0.00	
Surface description	= Unpaved	Paved	Paved	
Average velocity (ft/s)	= 1.80	0.00	0.00	
Travel Time (min)	= 1.76	+ 0.00	+ 0.00	= 1.76
Channel Flow				
X sectional flow area (sqft)	= 0.00	0.00	0.00	
Wetted perimeter (ft)	= 0.00	0.00	0.00	
Channel slope (%)	= 0.00	0.00	0.00	
Manning's n-value	= 0.015	0.015	0.015	
Velocity (ft/s)	= 0.00	0.00	0.00	
Flow length (ft)	= 0.0	0.0	0.0	
Travel Time (min)	= 0.00	+ 0.00	+ 0.00	= 0.00
Total Travel Time, Tc				11.17 min

TR55 Tc Worksheet

Hydraflow Hydrographs by Intellisolve v9.22

Hyd. No. 4

Post-Dev HW-2

<u>Description</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>Totals</u>
Sheet Flow				
Manning's n-value	= 0.240	0.011	0.011	
Flow length (ft)	= 75.0	0.0	0.0	
Two-year 24-hr precip. (in)	= 3.50	0.00	0.00	
Land slope (%)	= 8.00	0.00	0.00	
Travel Time (min)	= 6.23	+	0.00	+
				0.00
				= 6.23
Shallow Concentrated Flow				
Flow length (ft)	= 220.00	0.00	0.00	
Watercourse slope (%)	= 0.90	0.00	0.00	
Surface description	= Unpaved	Paved	Paved	
Average velocity (ft/s)	= 1.53	0.00	0.00	
Travel Time (min)	= 2.40	+	0.00	+
				0.00
				= 2.40
Channel Flow				
X sectional flow area (sqft)	= 0.00	0.00	0.00	
Wetted perimeter (ft)	= 0.00	0.00	0.00	
Channel slope (%)	= 0.00	0.00	0.00	
Manning's n-value	= 0.015	0.015	0.015	
Velocity (ft/s)	= 0.00	0.00	0.00	
Flow length (ft)	= 0.0	0.0	0.0	
Travel Time (min)	= 0.00	+	0.00	+
				0.00
				= 0.00
Total Travel Time, Tc				8.62 min

Watershed Model Schematic

Hydraflow Hydrographs by Intelisolve v9.22

1 - Pre-Dev HW-1



2 - Pre-Dev HW-2



3 - Post-Dev HW-1



4 - Post-Dev HW-2



Hydrograph Return Period Recap

Hydraflow Hydrographs by Intellisolve v9.22

Hyd. No.	Hydrograph type (origin)	Inflow Hyd(s)	Peak Outflow (cfs)								Hydrograph description
			1-Yr	2-Yr	3-Yr	5-Yr	10-Yr	25-Yr	50-Yr	100-Yr	
1	Rational	—	0.027	0.031	0.000	0.036	0.040	0.045	0.051	0.055	Pre-Dev HW-1
2	Rational	—	1.066	1.240	0.000	1.458	1.691	1.964	2.207	2.506	Pre-Dev HW-2
3	Rational	—	0.020	0.023	0.000	0.026	0.029	0.033	0.037	0.040	Post-Dev HW-1
4	Rational	—	1.021	1.185	0.000	1.391	1.599	1.847	2.071	2.321	Post-Dev HW-2

Hydrograph Summary Report

Hydraflow Hydrographs by Intellisolve v9.22

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph description
1	Rational	0.027	1	5	8	---	---	---	Pre-Dev HW-1
2	Rational	1.066	1	11	704	---	---	---	Pre-Dev HW-2
3	Rational	0.020	1	5	6	---	---	---	Post-Dev HW-1
4	Rational	1.021	1	9	552	---	---	---	Post-Dev HW-2
Elcon Recycling Channel.gpw					Return Period: 1 Year			Thursday, Apr 18, 2019	

Hydrograph Report

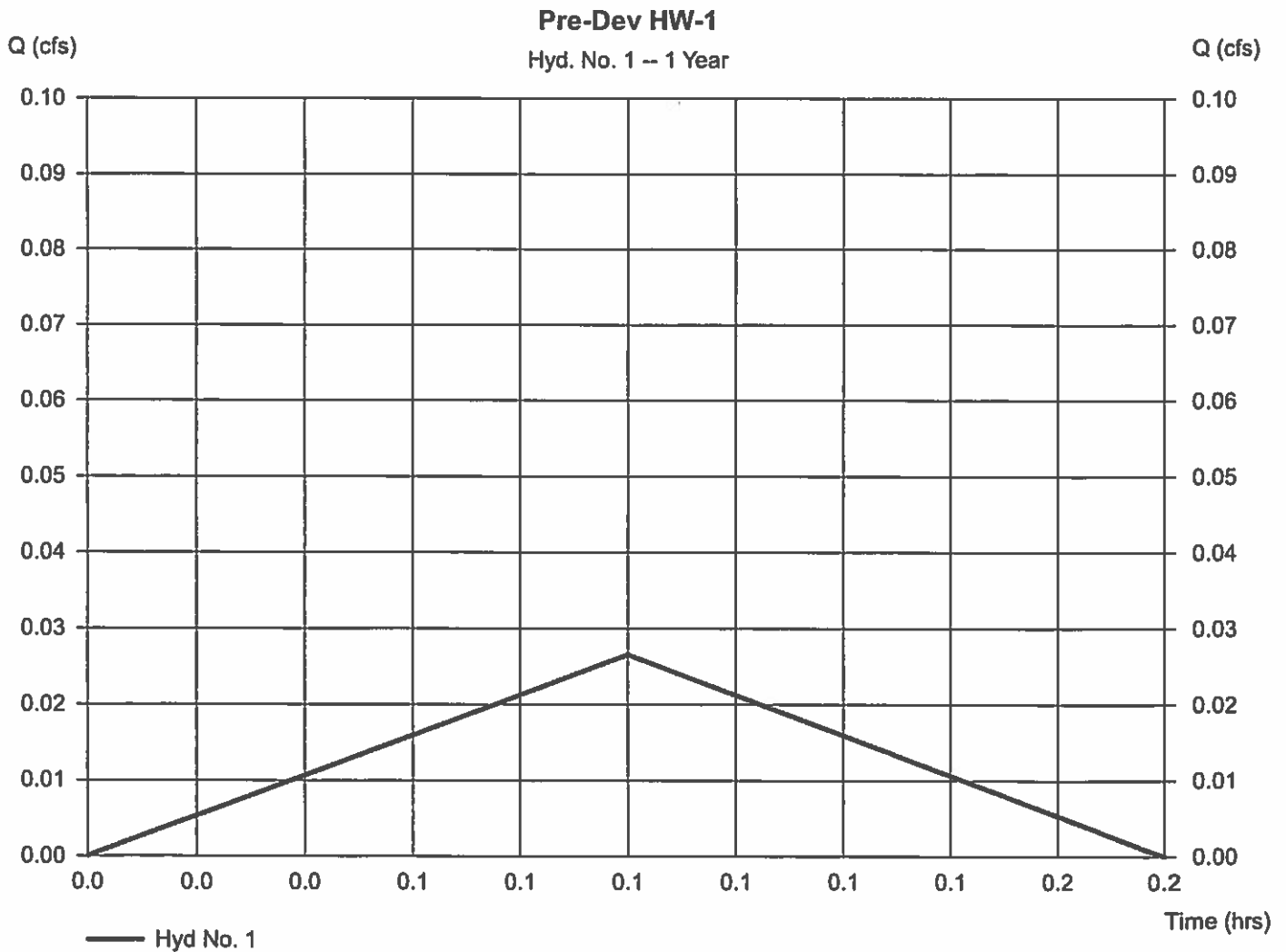
Hydraflow Hydrographs by Intelisolve v9.22

Thursday, Apr 18, 2019

Hyd. No. 1

Pre-Dev HW-1

Hydrograph type	= Rational	Peak discharge	= 0.027 cfs
Storm frequency	= 1 yrs	Time to peak	= 0.08 hrs
Time interval	= 1 min	Hyd. volume	= 8 cuft
Drainage area	= 0.019 ac	Runoff coeff.	= 0.35
Intensity	= 3.994 in/hr	Tc by User	= 5.00 min
IDF Curve	= PennDOT IDF Curve Region 5.IDF	Asc/Rec limb fact	= 1/1



Hydrograph Report

Hydraflow Hydrographs by Intellisolve v9.22

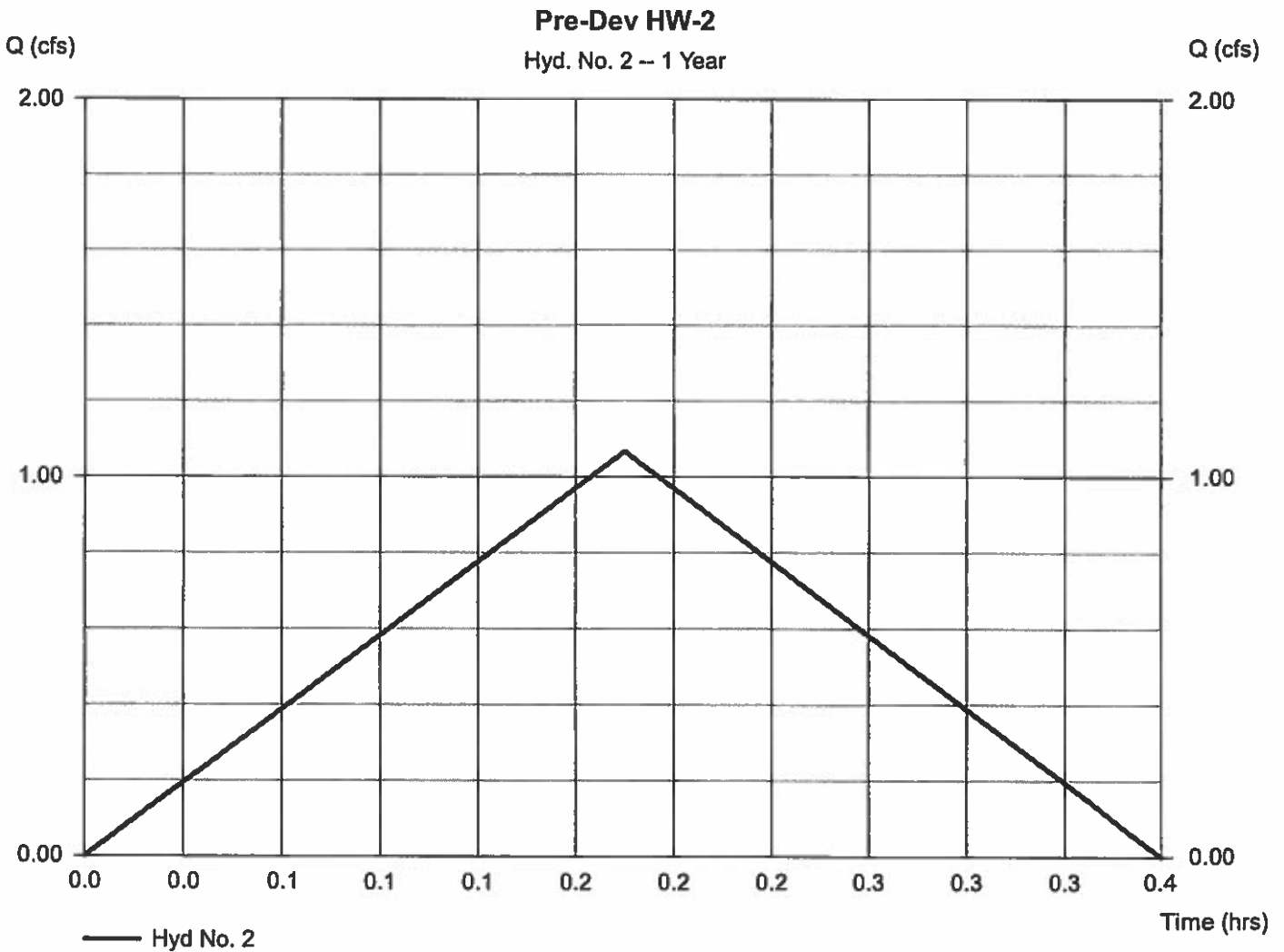
Thursday, Apr 18, 2019

Hyd. No. 2

Pre-Dev HW-2

Hydrograph type = Rational
Storm frequency = 1 yrs
Time interval = 1 min
Drainage area = 1.044 ac
Intensity = 2.917 in/hr
IDF Curve = PennDOT IDF Curve Region 5.IDF

Peak discharge = 1.066 cfs
Time to peak = 0.18 hrs
Hyd. volume = 704 cuft
Runoff coeff. = 0.35
Tc by TR55 = 11.00 min
Asc/Rec limb fact = 1/1



Hydrograph Report

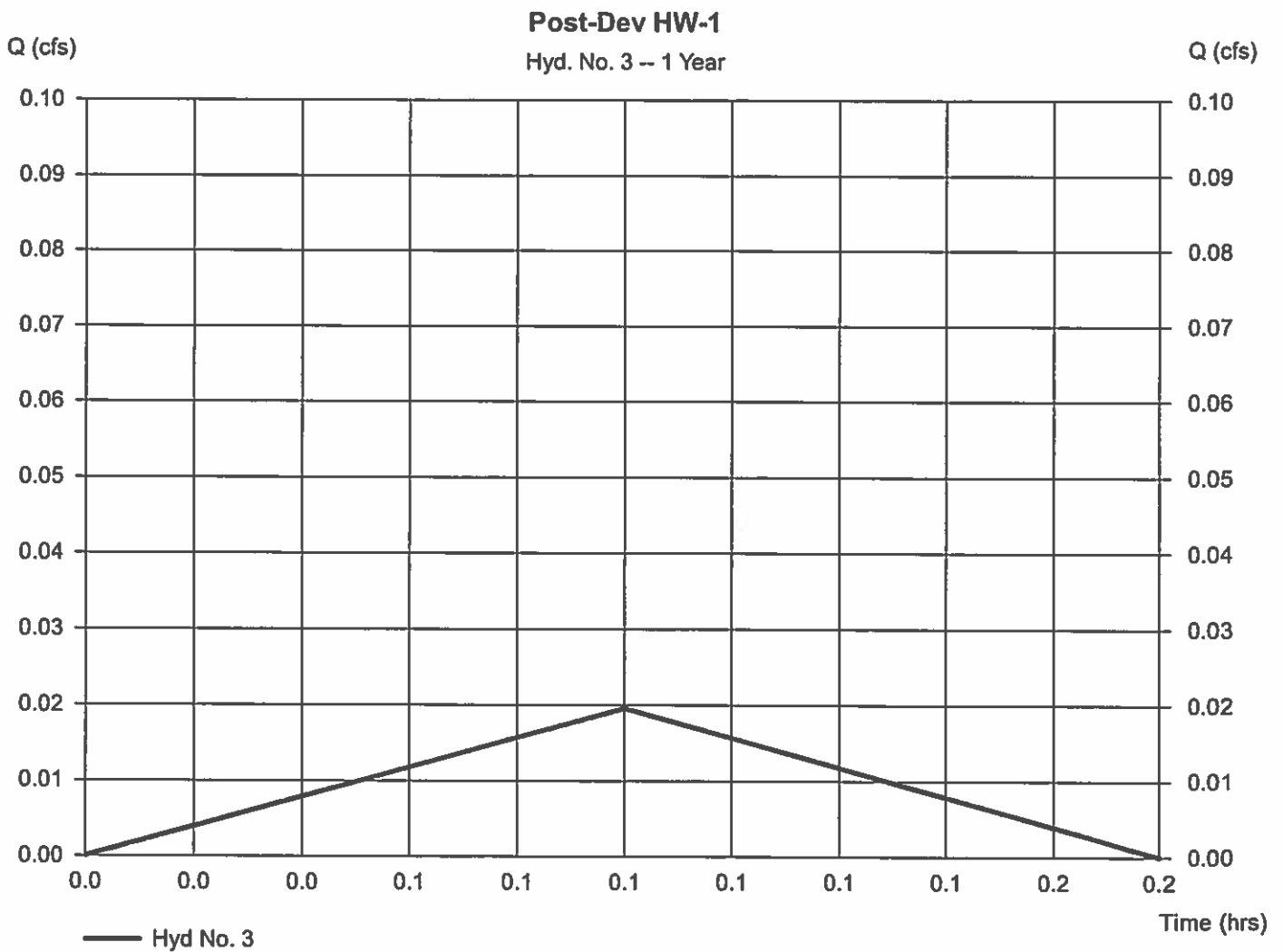
Hydraflow Hydrographs by Intellisolve v9.22

Thursday, Apr 18, 2019

Hyd. No. 3

Post-Dev HW-1

Hydrograph type	= Rational	Peak discharge	= 0.020 cfs
Storm frequency	= 1 yrs	Time to peak	= 0.08 hrs
Time interval	= 1 min	Hyd. volume	= 6 cuft
Drainage area	= 0.014 ac	Runoff coeff.	= 0.35
Intensity	= 3.994 in/hr	Tc by User	= 5.00 min
IDF Curve	= PennDOT IDF Curve Region 5.IDF	Asc/Rec limb fact	= 1/1



Hydrograph Report

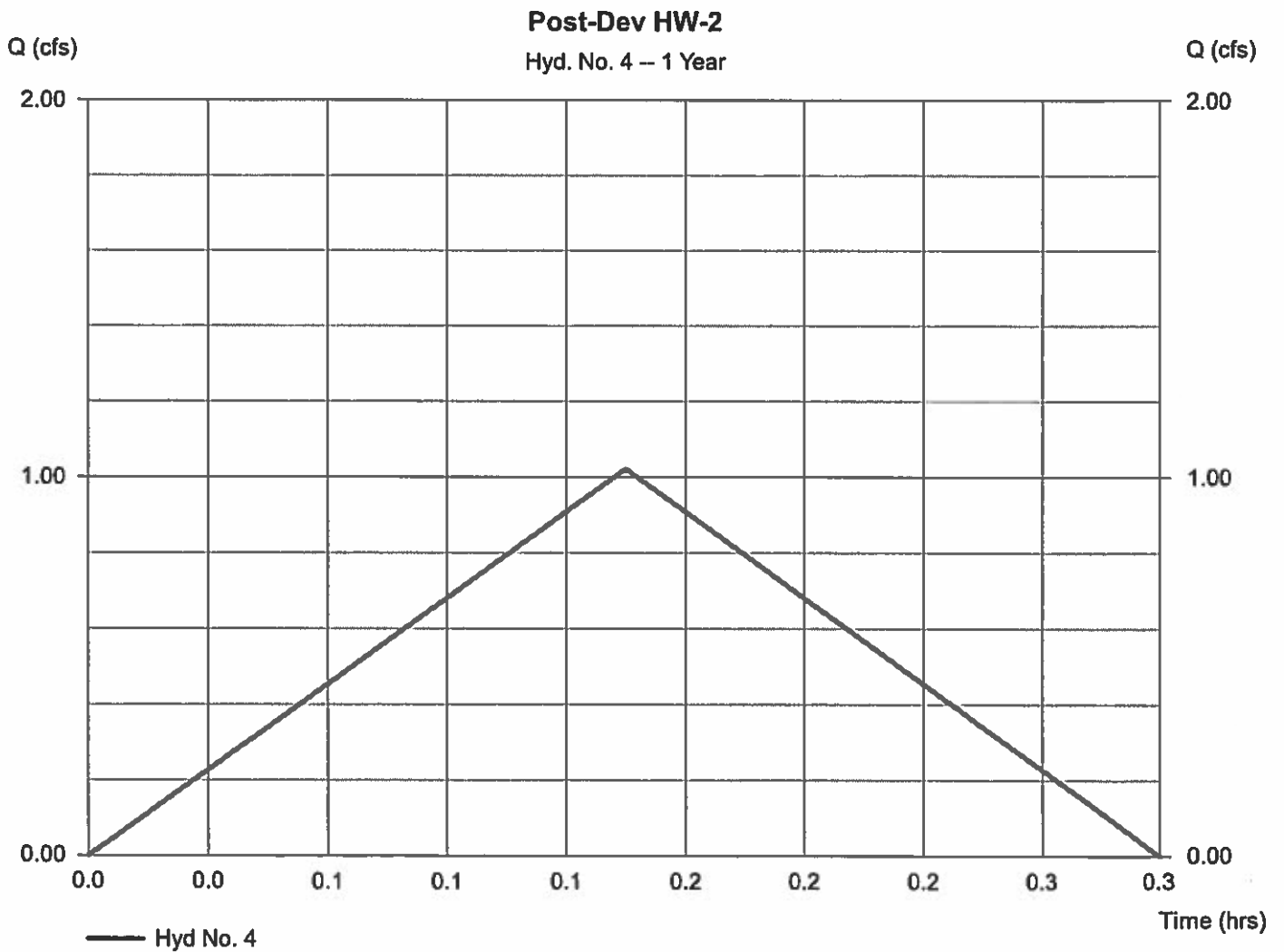
Hydraflow Hydrographs by Intelisolve v9.22

Thursday, Apr 18, 2019

Hyd. No. 4

Post-Dev HW-2

Hydrograph type	= Rational	Peak discharge	= 1.021 cfs
Storm frequency	= 1 yrs	Time to peak	= 0.15 hrs
Time interval	= 1 min	Hyd. volume	= 552 cuft
Drainage area	= 0.914 ac	Runoff coeff.	= 0.35
Intensity	= 3.193 in/hr	Tc by TR55	= 9.00 min
IDF Curve	= PennDOT IDF Curve Region 5.IDF	Asc/Rec limb fact	= 1/1



Hydrograph Summary Report

Hydraflow Hydrographs by Intellisolve v9.22

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph description
1	Rational	0.031	1	5	9	---	----	----	Pre-Dev HW-1
2	Rational	1.240	1	11	819	---	----	----	Pre-Dev HW-2
3	Rational	0.023	1	5	7	---	----	----	Post-Dev HW-1
4	Rational	1.185	1	9	640	---	----	----	Post-Dev HW-2
Elcon Recycling Channel.gpw					Return Period: 2 Year			Thursday, Apr 18, 2019	

Hydrograph Report

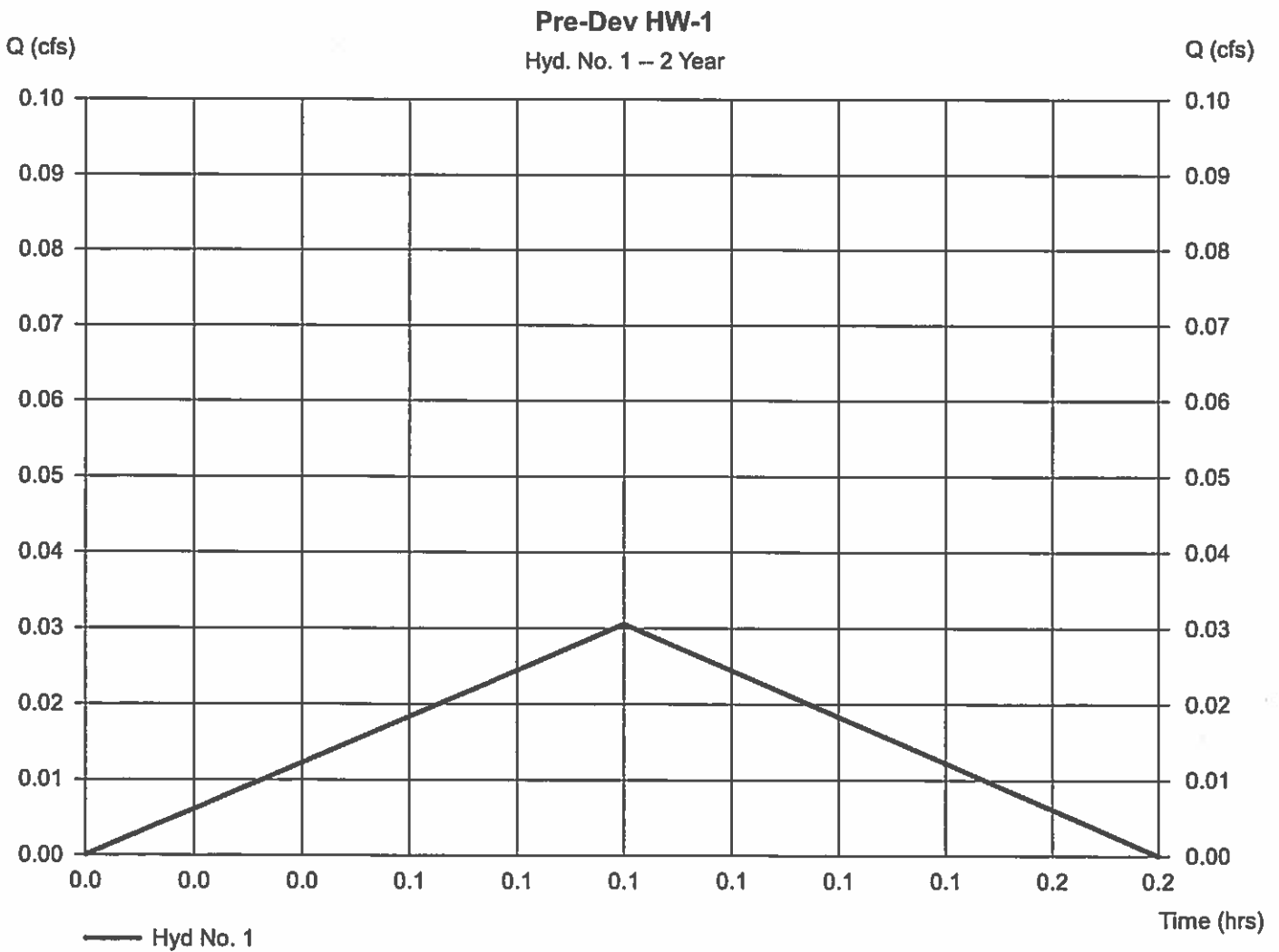
Hydraflow Hydrographs by Intellsolve v9.22

Thursday, Apr 18, 2019

Hyd. No. 1

Pre-Dev HW-1

Hydrograph type	= Rational	Peak discharge	= 0.031 cfs
Storm frequency	= 2 yrs	Time to peak	= 0.08 hrs
Time interval	= 1 min	Hyd. volume	= 9 cuft
Drainage area	= 0.019 ac	Runoff coeff.	= 0.35
Intensity	= 4.596 in/hr	Tc by User	= 5.00 min
IDF Curve	= PennDOT IDF Curve Region 5.IDF	Asc/Rec limb fact	= 1/1



Hydrograph Report

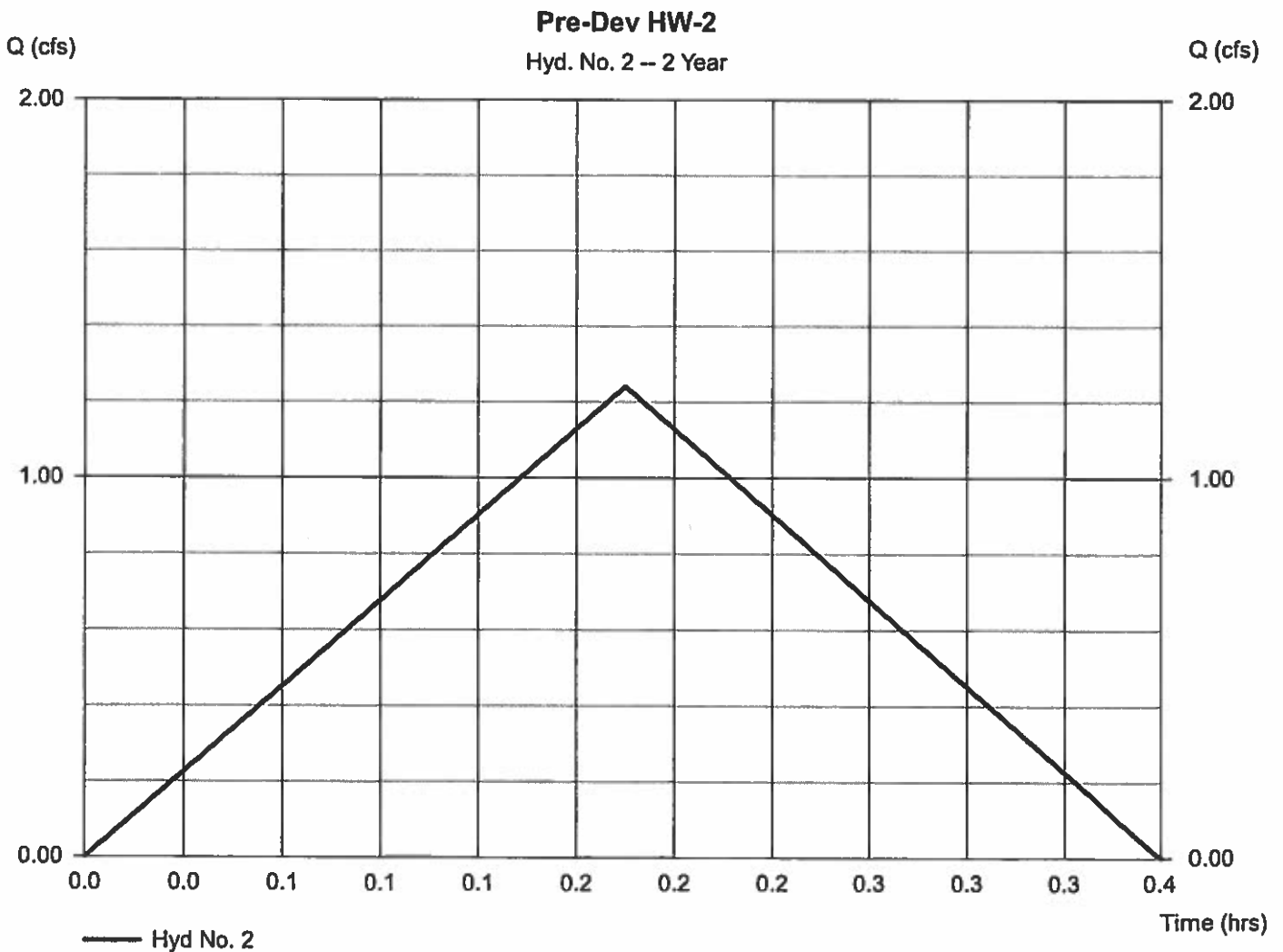
Hydraflow Hydrographs by Intelisolve v9.22

Thursday, Apr 18, 2019

Hyd. No. 2

Pre-Dev HW-2

Hydrograph type	= Rational	Peak discharge	= 1.240 cfs
Storm frequency	= 2 yrs	Time to peak	= 0.18 hrs
Time interval	= 1 min	Hyd. volume	= 819 cuft
Drainage area	= 1,044 ac	Runoff coeff.	= 0.35
Intensity	= 3.394 in/hr	Tc by TR55	= 11.00 min
IDF Curve	= PennDOT IDF Curve Region 5.IDF	Asc/Rec limb fact	= 1/1



Hydrograph Report

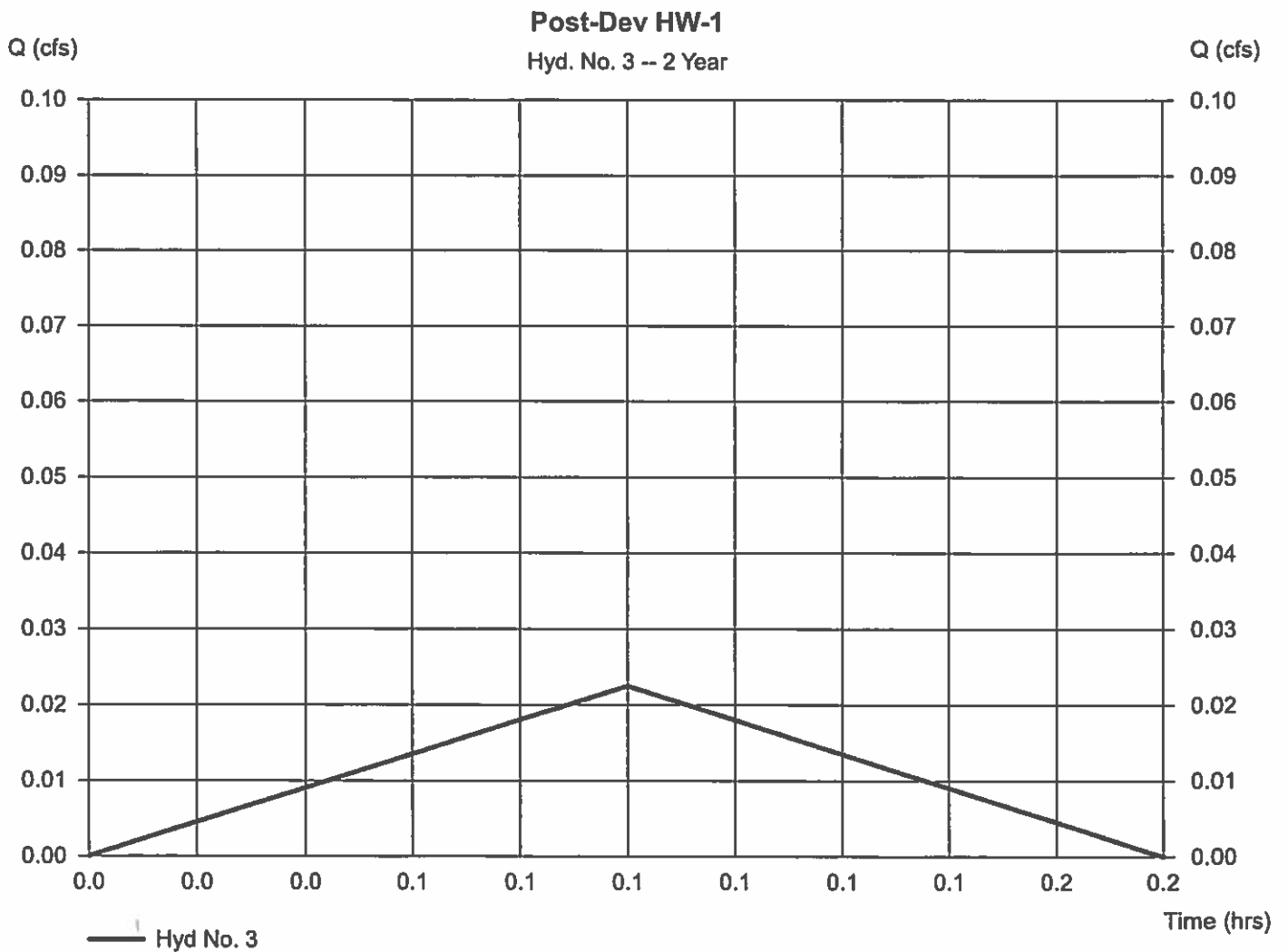
Hydraflow Hydrographs by Intelisolve v9.22

Thursday, Apr 18, 2019

Hyd. No. 3

Post-Dev HW-1

Hydrograph type	= Rational	Peak discharge	= 0.023 cfs
Storm frequency	= 2 yrs	Time to peak	= 0.08 hrs
Time interval	= 1 min	Hyd. volume	= 7 cuft
Drainage area	= 0.014 ac	Runoff coeff.	= 0.35
Intensity	= 4.596 in/hr	Tc by User	= 5.00 min
IDF Curve	= PennDOT IDF Curve Region 5.IDF	Asc/Rec limb fact	= 1/1



Hydrograph Report

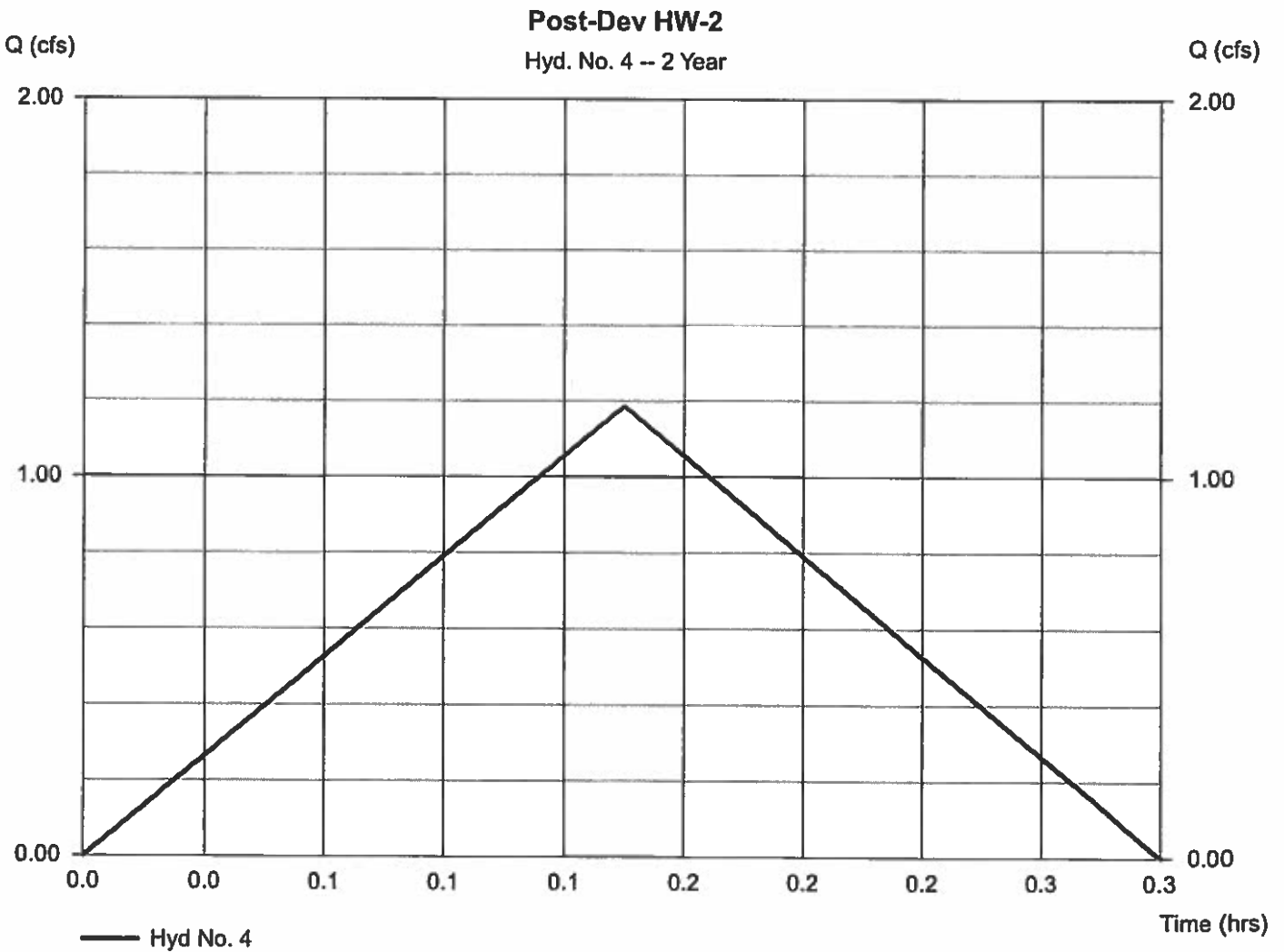
Hydraflow Hydrographs by Intellisolve v9.22

Thursday, Apr 18, 2019

Hyd. No. 4

Post-Dev HW-2

Hydrograph type	= Rational	Peak discharge	= 1.185 cfs
Storm frequency	= 2 yrs	Time to peak	= 0.15 hrs
Time interval	= 1 min	Hyd. volume	= 640 cuft
Drainage area	= 0.914 ac	Runoff coeff.	= 0.35
Intensity	= 3.705 in/hr	Tc by TR55	= 9.00 min
IDF Curve	= PennDOT IDF Curve Region 5.IDF	Asc/Rec limb fact	= 1/1



Hydrograph Summary Report

Hydraflow Hydrographs by Intellisolve v9.22

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time Interval (min)	Time to peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph description	
1	Rational	0.036	1	5	11	—	----	—	Pre-Dev HW-1	
2	Rational	1.458	1	11	962	—	----	—	Pre-Dev HW-2	
3	Rational	0.026	1	5	8	—	----	—	Post-Dev HW-1	
4	Rational	1.391	1	9	751	—	----	—	Post-Dev HW-2	
Elcon Recycling Channel.gpw					Return Period: 5 Year			Thursday, Apr 18, 2019		

Hydrograph Report

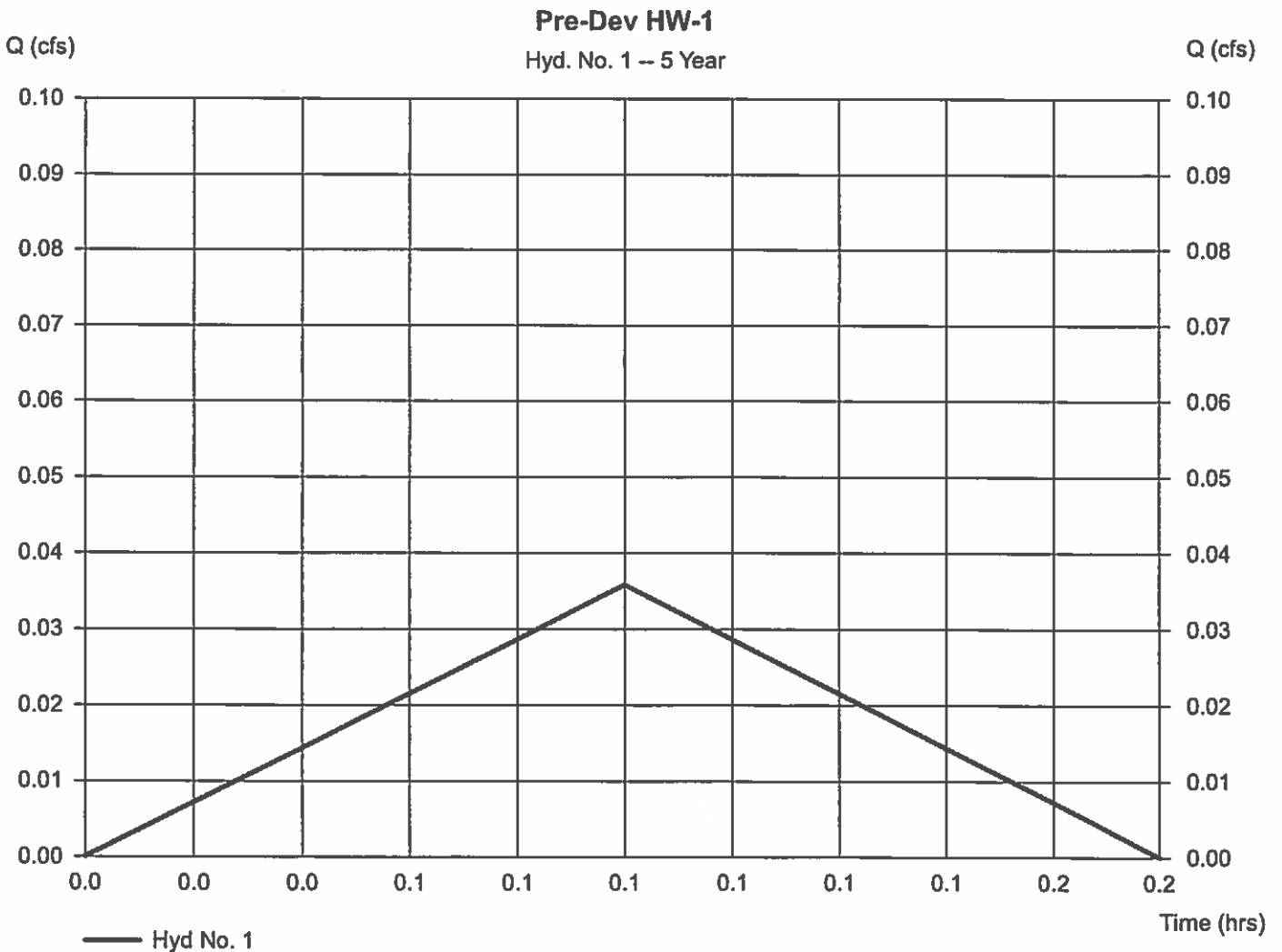
Hydraflow Hydrographs by Intellsolve v9.22

Thursday, Apr 18, 2019

Hyd. No. 1

Pre-Dev HW-1

Hydrograph type	= Rational	Peak discharge	= 0.036 cfs
Storm frequency	= 5 yrs	Time to peak	= 0.08 hrs
Time interval	= 1 min	Hyd. volume	= 11 cuft
Drainage area	= 0.019 ac	Runoff coeff.	= 0.35
Intensity	= 5.390 in/hr	Tc by User	= 5.00 min
IDF Curve	= PennDOT IDF Curve Region 5.IDF	Asc/Rec limb fact	= 1/1



Hydrograph Report

Hydraflow Hydrographs by Intellisolve v9.22

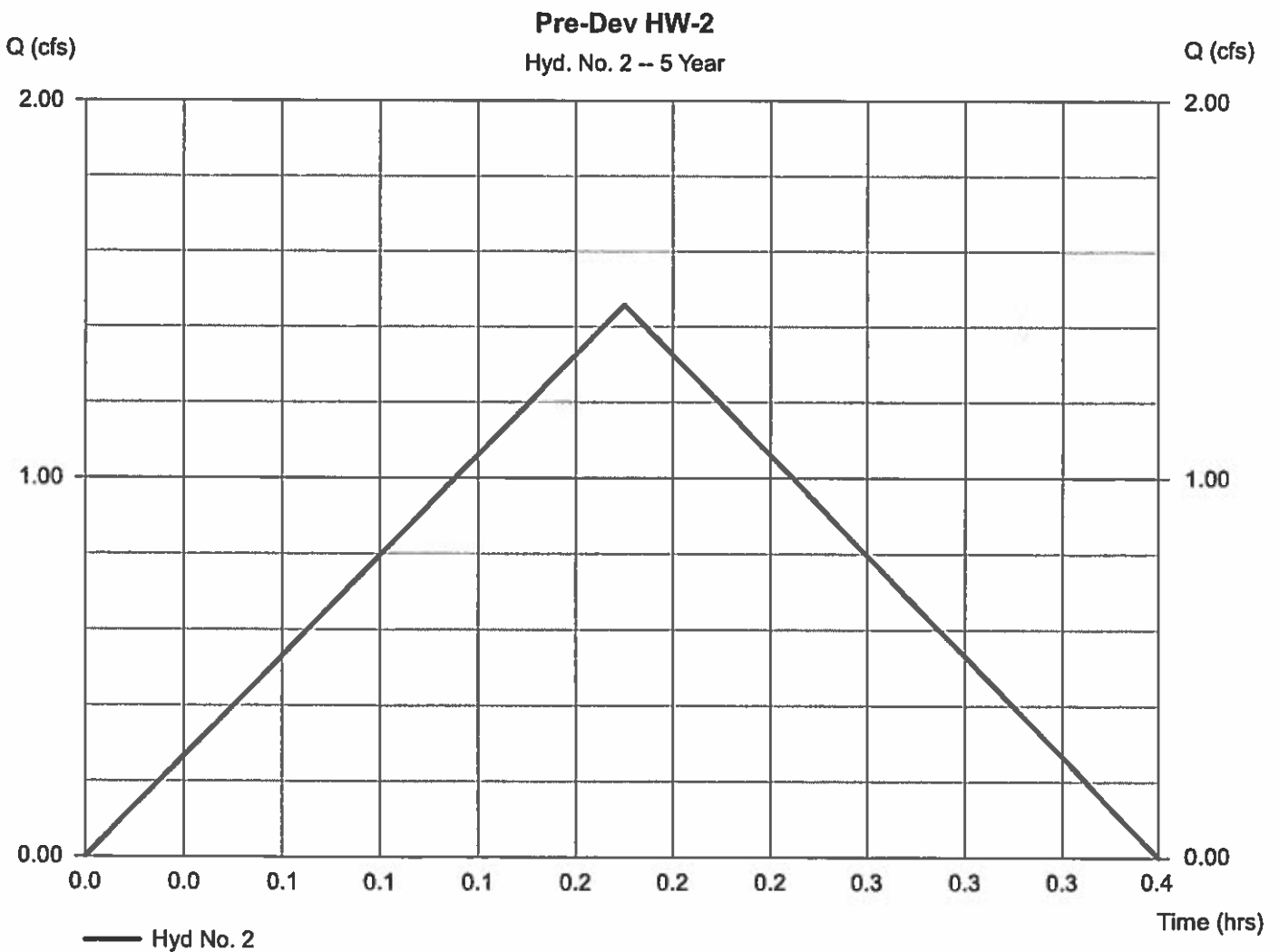
Thursday, Apr 18, 2019

Hyd. No. 2

Pre-Dev HW-2

Hydrograph type = Rational
Storm frequency = 5 yrs
Time interval = 1 min
Drainage area = 1.044 ac
Intensity = 3.990 in/hr
IDF Curve = PennDOT IDF Curve Region 5.IDF

Peak discharge = 1.458 cfs
Time to peak = 0.18 hrs
Hyd. volume = 962 cuft
Runoff coeff. = 0.35
Tc by TR55 = 11.00 min
Asc/Rec limb fact = 1/1



Hydrograph Report

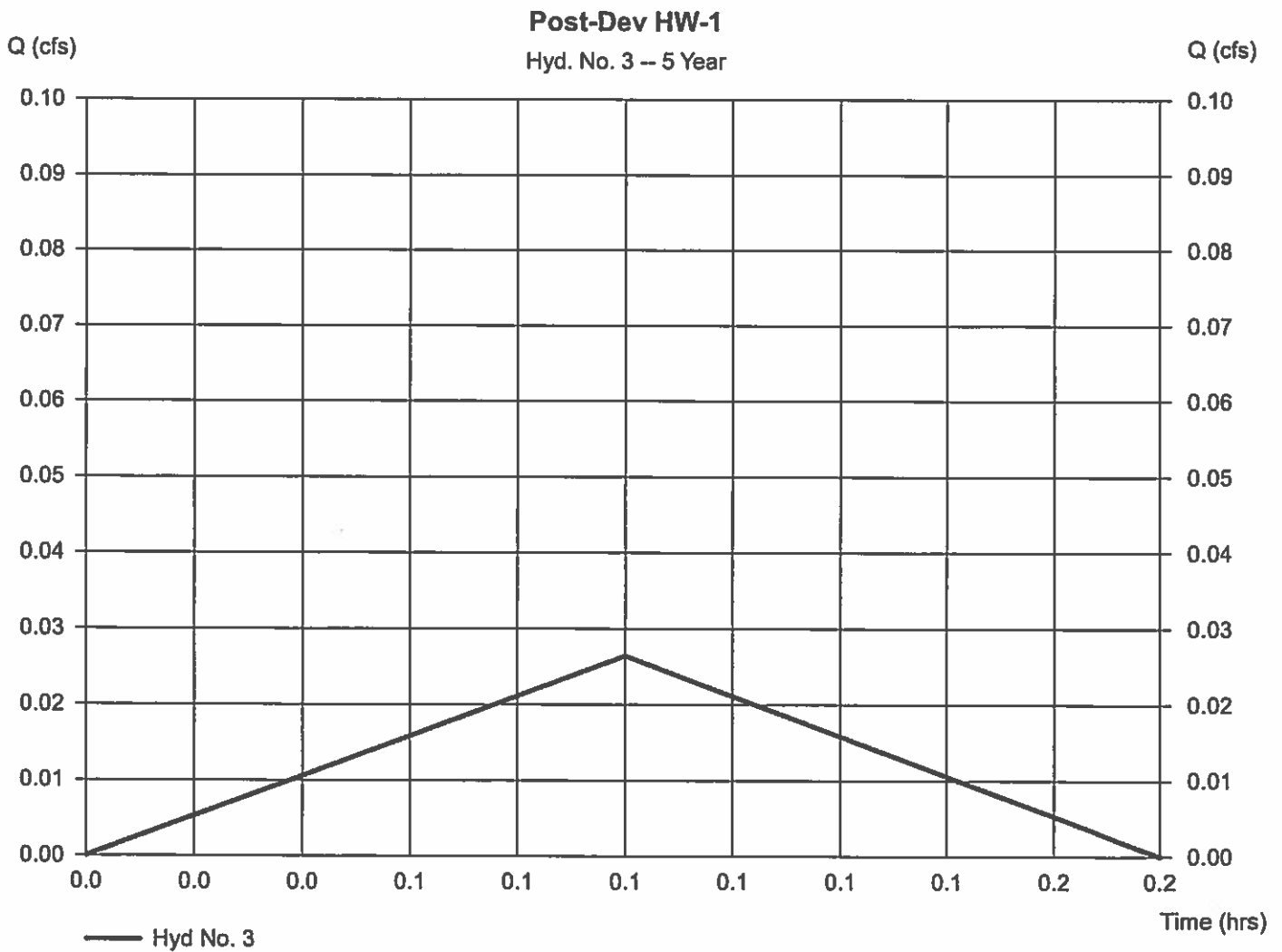
Hydraflow Hydrographs by Intellisolve v9.22

Thursday, Apr 18, 2019

Hyd. No. 3

Post-Dev HW-1

Hydrograph type	= Rational	Peak discharge	= 0.026 cfs
Storm frequency	= 5 yrs	Time to peak	= 0.08 hrs
Time interval	= 1 min	Hyd. volume	= 8 cuft
Drainage area	= 0.014 ac	Runoff coeff.	= 0.35
Intensity	= 5.390 in/hr	Tc by User	= 5.00 min
IDF Curve	= PennDOT IDF Curve Region 5.IDF	Asc/Rec limb fact	= 1/1



Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.22

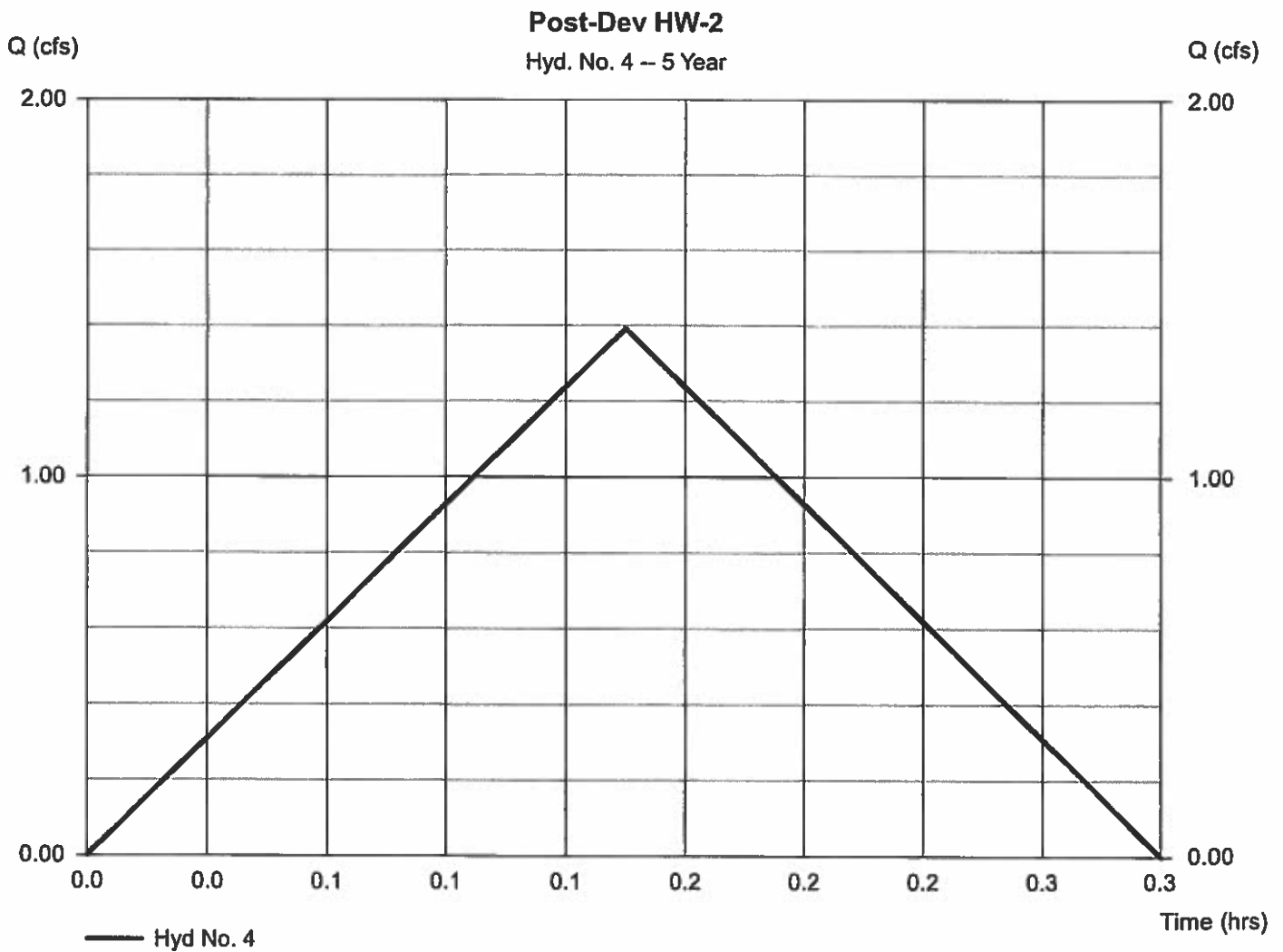
Thursday, Apr 18, 2019

Hyd. No. 4

Post-Dev HW-2

Hydrograph type = Rational
Storm frequency = 5 yrs
Time interval = 1 min
Drainage area = 0.914 ac
Intensity = 4.348 in/hr
IDF Curve = PennDOT IDF Curve Region 5.IDF

Peak discharge = 1.391 cfs
Time to peak = 0.15 hrs
Hyd. volume = 751 cuft
Runoff coeff. = 0.35
Tc by TR55 = 9.00 min
Asc/Rec limb fact = 1/1



Hydrograph Summary Report

Hydraflow Hydrographs by Intellisolve v9.22

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph description
1	Rational	0.040	1	5	12	---	---	----	Pre-Dev HW-1
2	Rational	1.691	1	11	1,116	---	---	----	Pre-Dev HW-2
3	Rational	0.029	1	5	9	---	---	----	Post-Dev HW-1
4	Rational	1.599	1	9	864	---	---	----	Post-Dev HW-2
Elcon Recycling Channel.gpw					Return Period: 10 Year			Thursday, Apr 18, 2019	

Hydrograph Report

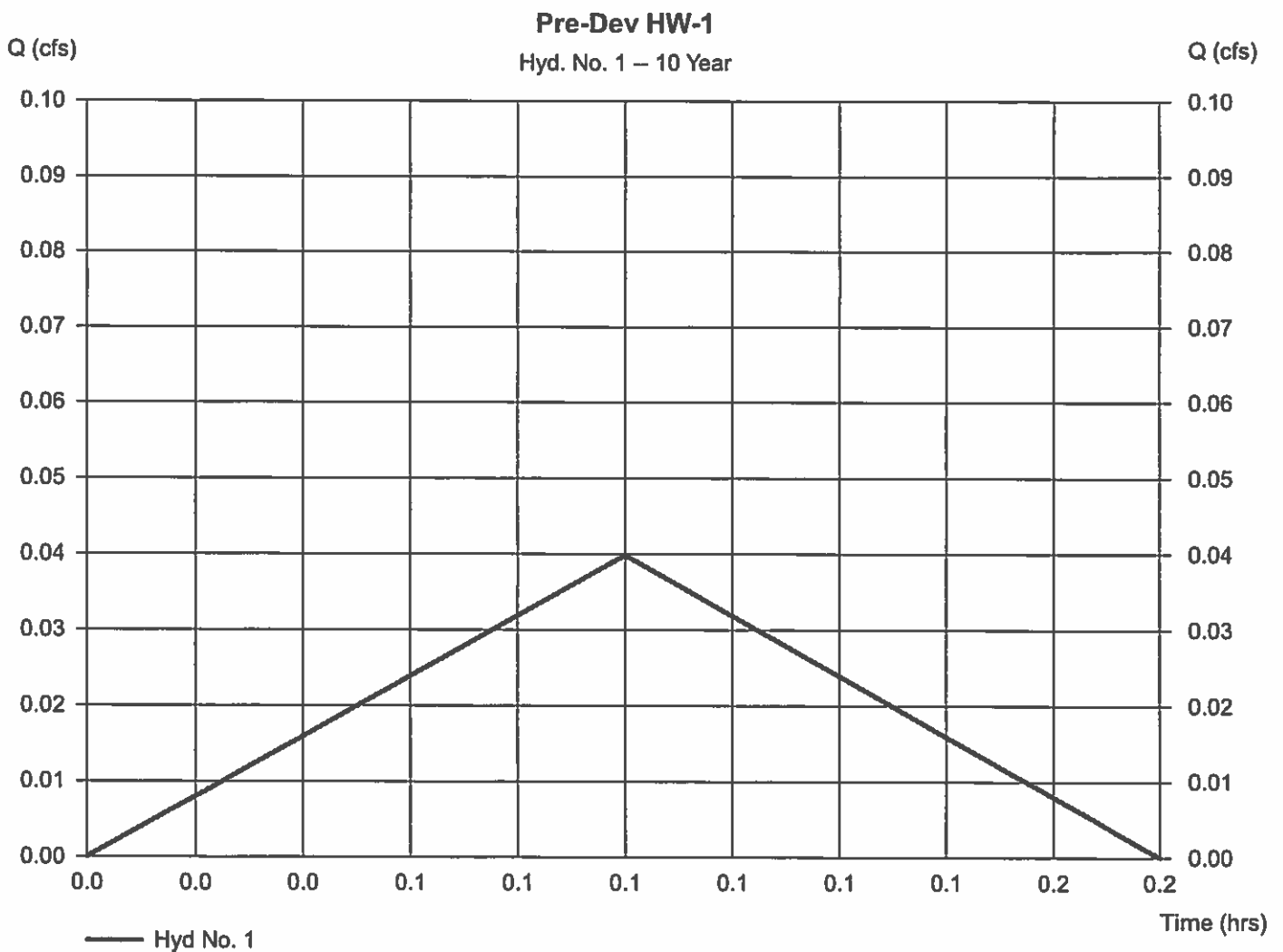
Hydraflow Hydrographs by Intelisolve v9.22

Thursday, Apr 18, 2019

Hyd. No. 1

Pre-Dev HW-1

Hydrograph type	= Rational	Peak discharge	= 0.040 cfs
Storm frequency	= 10 yrs	Time to peak	= 0.08 hrs
Time interval	= 1 min	Hyd. volume	= 12 cuft
Drainage area	= 0.019 ac	Runoff coeff.	= 0.35
Intensity	= 5.990 in/hr	Tc by User	= 5.00 min
IDF Curve	= PennDOT IDF Curve Region 5.IDF	Asc/Rec limb fact	= 1/1



Hydrograph Report

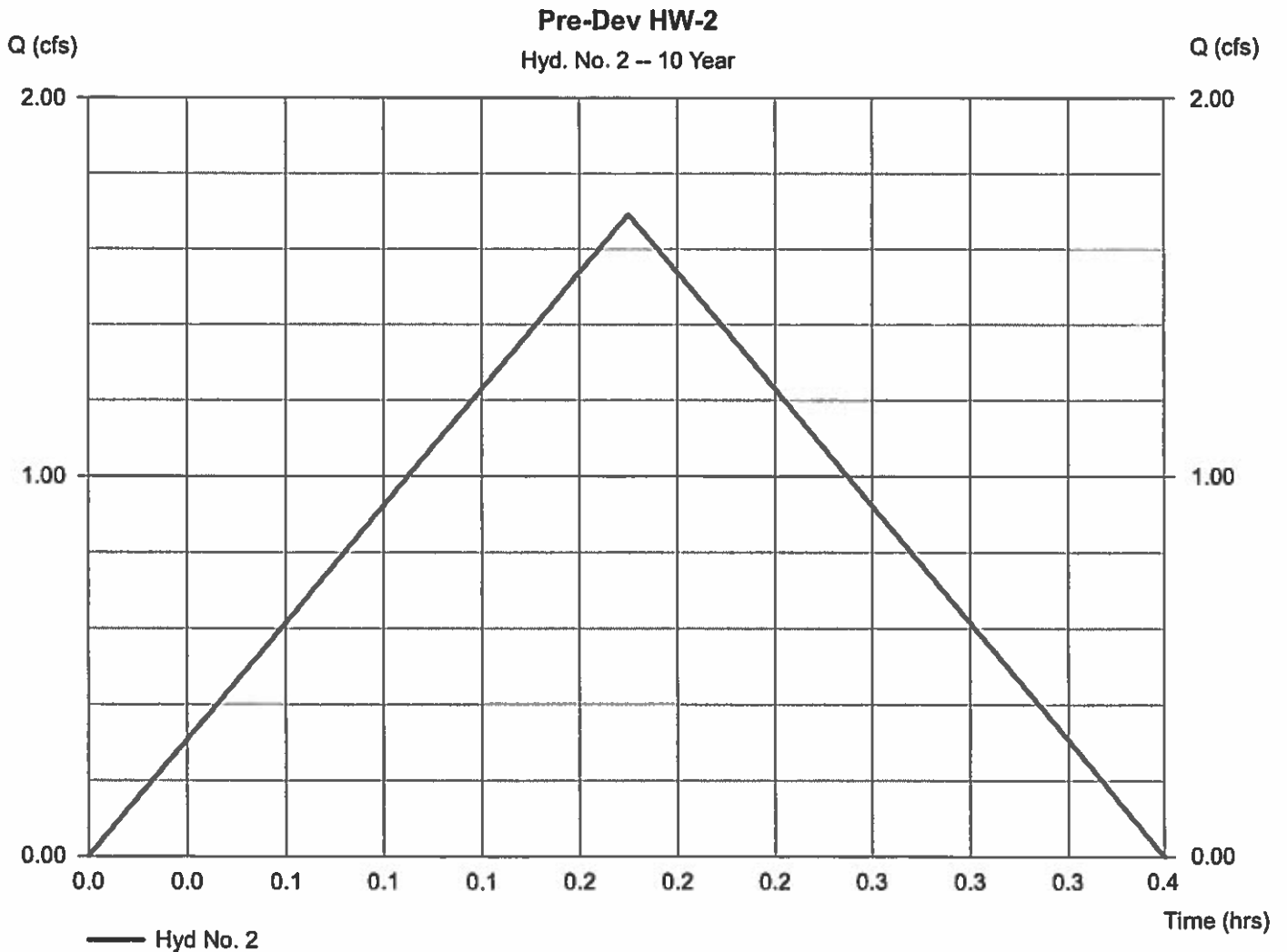
Hydraflow Hydrographs by Intellisolve v9.22

Thursday, Apr 18, 2019

Hyd. No. 2

Pre-Dev HW-2

Hydrograph type	= Rational	Peak discharge	= 1.691 cfs
Storm frequency	= 10 yrs	Time to peak	= 0.18 hrs
Time interval	= 1 min	Hyd. volume	= 1,116 cuft
Drainage area	= 1,044 ac	Runoff coeff.	= 0.35
Intensity	= 4.628 in/hr	Tc by TR55	= 11.00 min
IDF Curve	= PennDOT IDF Curve Region 5.IDF	Asc/Rec limb fact	= 1/1



Hydrograph Report

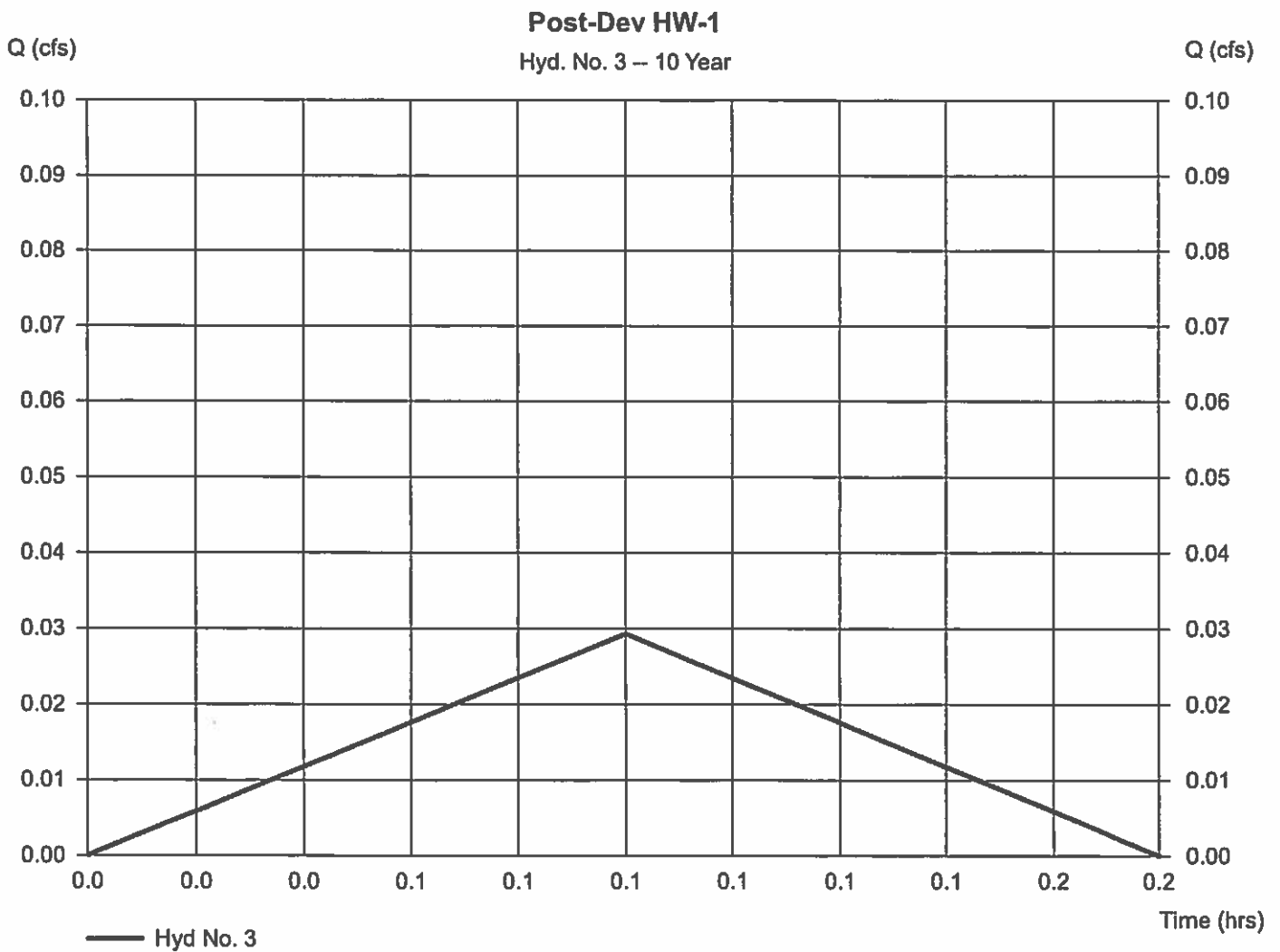
Hydraflow Hydrographs by Intelisolve v9.22

Thursday, Apr 18, 2019

Hyd. No. 3

Post-Dev HW-1

Hydrograph type	= Rational	Peak discharge	= 0.029 cfs
Storm frequency	= 10 yrs	Time to peak	= 0.08 hrs
Time interval	= 1 min	Hyd. volume	= 9 cuft
Drainage area	= 0.014 ac	Runoff coeff.	= 0.35
Intensity	= 5.990 in/hr	Tc by User	= 5.00 min
IDF Curve	= PennDOT IDF Curve Region 5.IDF	Asc/Rec limb fact	= 1/1



Hydrograph Report

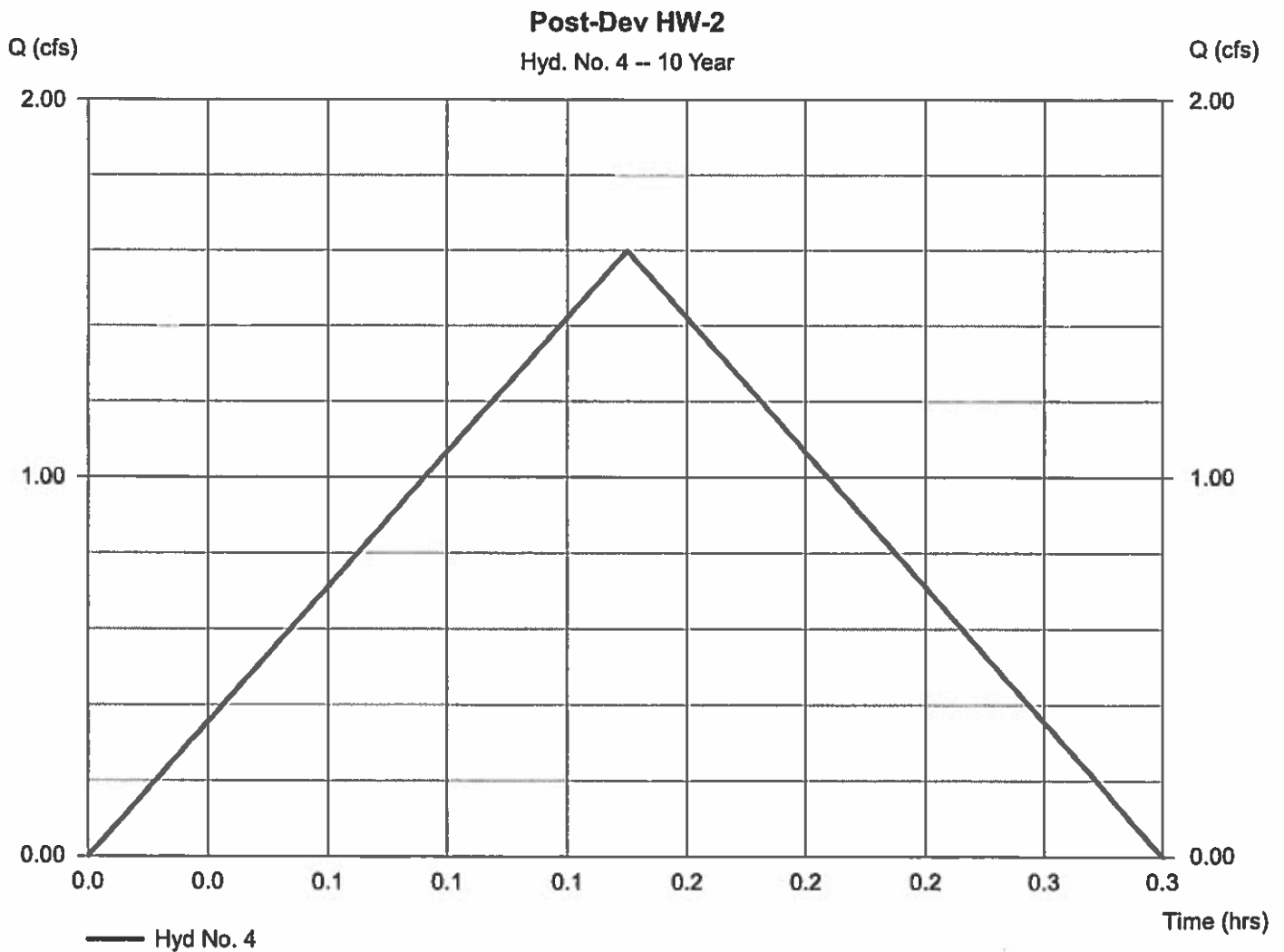
Hydraflow Hydrographs by Intellisolve v9.22

Thursday, Apr 18, 2019

Hyd. No. 4

Post-Dev HW-2

Hydrograph type	= Rational	Peak discharge	= 1.599 cfs
Storm frequency	= 10 yrs	Time to peak	= 0.15 hrs
Time interval	= 1 min	Hyd. volume	= 864 cuft
Drainage area	= 0.914 ac	Runoff coeff.	= 0.35
Intensity	= 4.999 in/hr	Tc by TR55	= 9.00 min
IDF Curve	= PennDOT IDF Curve Region 5.IDF	Asc/Rec limb fact	= 1/1



Hydrograph Report

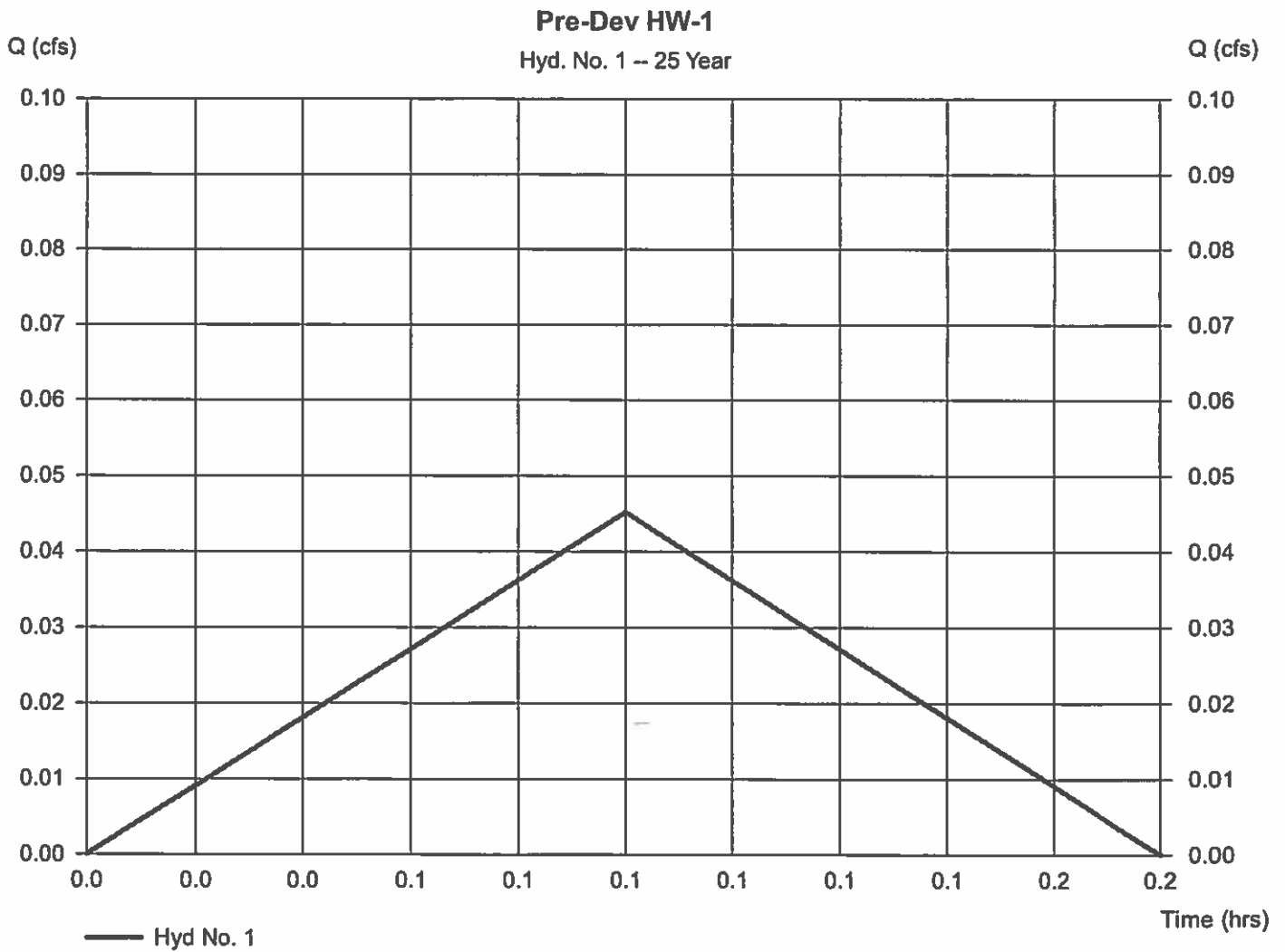
Hydraflow Hydrographs by Intelisolve v9.22

Thursday, Apr 18, 2019

Hyd. No. 1

Pre-Dev HW-1

Hydrograph type	= Rational	Peak discharge	= 0.045 cfs
Storm frequency	= 25 yrs	Time to peak	= 0.08 hrs
Time interval	= 1 min	Hyd. volume	= 14 cuft
Drainage area	= 0.019 ac	Runoff coeff.	= 0.35
Intensity	= 6.796 in/hr	Tc by User	= 5.00 min
IDF Curve	= PennDOT IDF Curve Region 5.IDF	Asc/Rec limb fact	= 1/1



Hydrograph Report

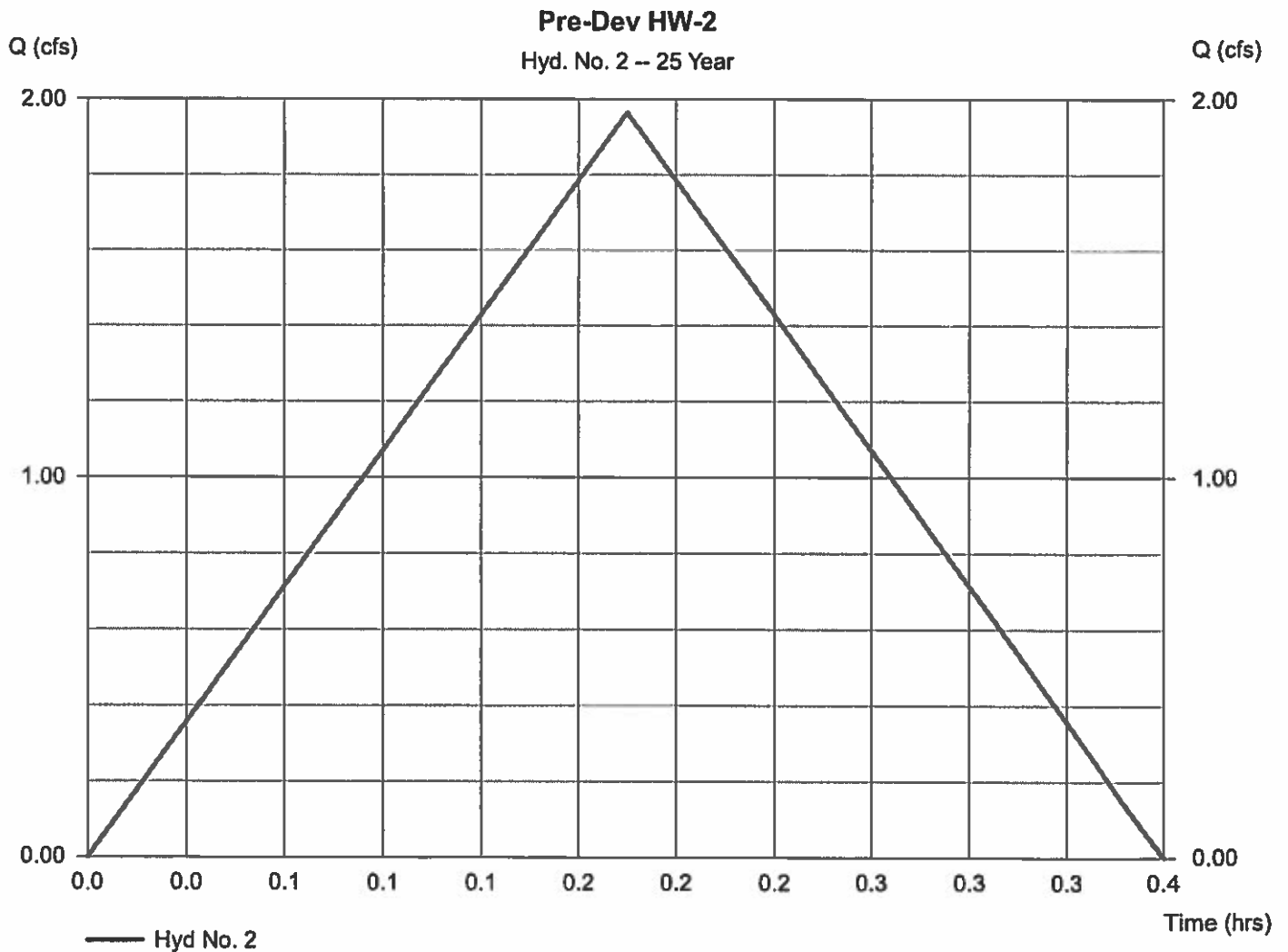
Hydraflow Hydrographs by Intellisolve v9.22

Thursday, Apr 18, 2019

Hyd. No. 2

Pre-Dev HW-2

Hydrograph type	= Rational	Peak discharge	= 1.964 cfs
Storm frequency	= 25 yrs	Time to peak	= 0.18 hrs
Time interval	= 1 min	Hyd. volume	= 1,296 cuft
Drainage area	= 1.044 ac	Runoff coeff.	= 0.35
Intensity	= 5.375 in/hr	Tc by TR55	= 11.00 min
IDF Curve	= PennDOT IDF Curve Region 5.IDF	Asc/Rec limb fact	= 1/1



Hydrograph Report

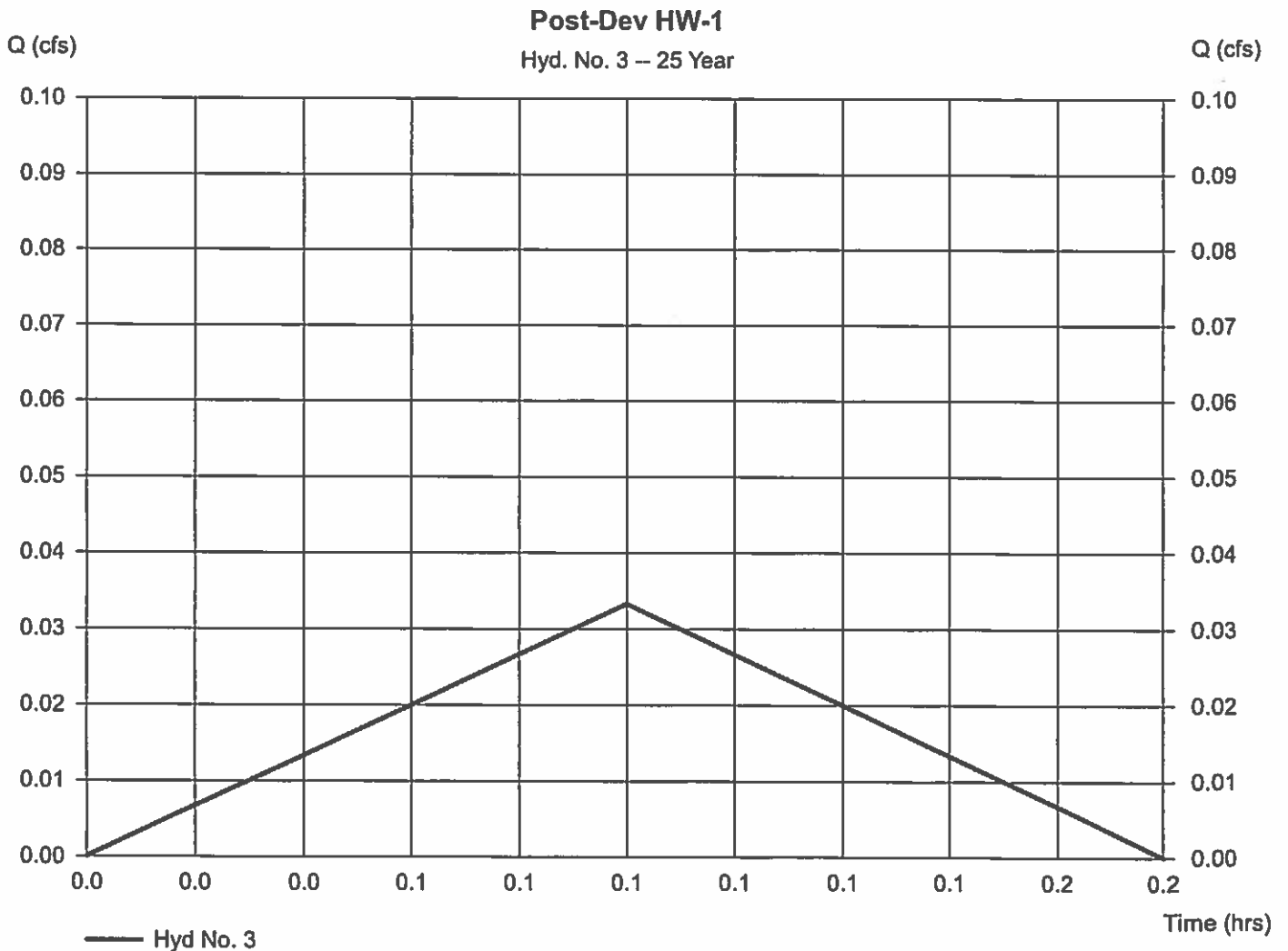
Hydraflow Hydrographs by Intellisolve v9.22

Thursday, Apr 18, 2019

Hyd. No. 3

Post-Dev HW-1

Hydrograph type	= Rational	Peak discharge	= 0.033 cfs
Storm frequency	= 25 yrs	Time to peak	= 0.08 hrs
Time interval	= 1 min	Hyd. volume	= 10 cuft
Drainage area	= 0.014 ac	Runoff coeff.	= 0.35
Intensity	= 6.796 in/hr	Tc by User	= 5.00 min
IDF Curve	= PennDOT IDF Curve Region 5.IDF	Asc/Rec limb fact	= 1/1



Hydrograph Report

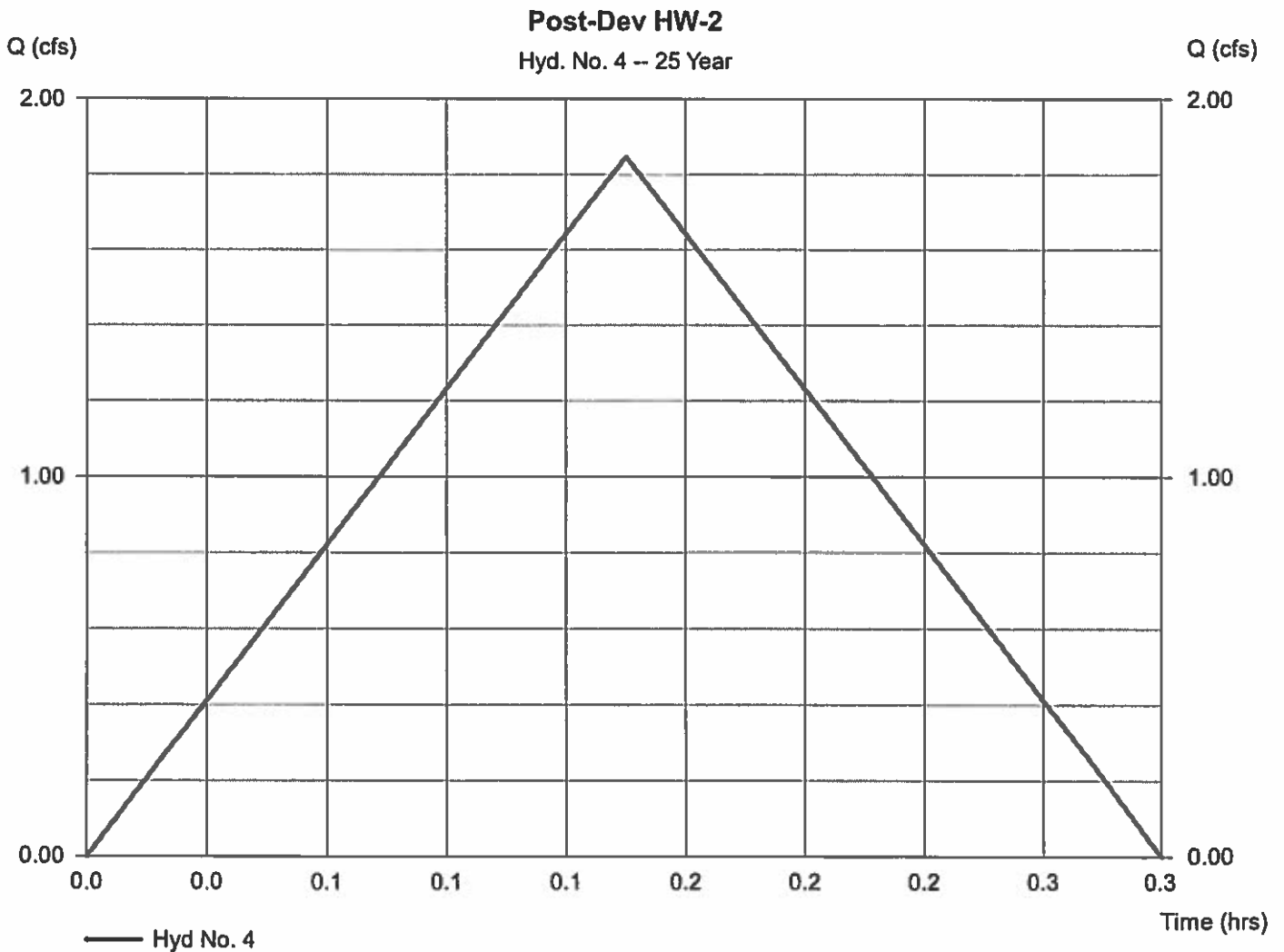
Hydraflow Hydrographs by Intellisolve v9.22

Thursday, Apr 18, 2019

Hyd. No. 4

Post-Dev HW-2

Hydrograph type	= Rational	Peak discharge	= 1.847 cfs
Storm frequency	= 25 yrs	Time to peak	= 0.15 hrs
Time interval	= 1 min	Hyd. volume	= 997 cuft
Drainage area	= 0.914 ac	Runoff coeff.	= 0.35
Intensity	= 5.773 in/hr	Tc by TR55	= 9.00 min
IDF Curve	= PennDOT IDF Curve Region 5.IDF	Asc/Rec limb fact	= 1/1



Hydrograph Summary Report

Hydraflow Hydrographs by Intellisolve v9.22

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph description
1	Rational	0.051	1	5	15	—	----	----	Pre-Dev HW-1
2	Rational	2.207	1	11	1,456	—	----	----	Pre-Dev HW-2
3	Rational	0.037	1	5	11	—	----	----	Post-Dev HW-1
4	Rational	2.071	1	9	1,118	—	----	----	Post-Dev HW-2
Elcon Recycling Channel.gpw					Return Period: 50 Year			Thursday, Apr 18, 2019	

Hydrograph Report

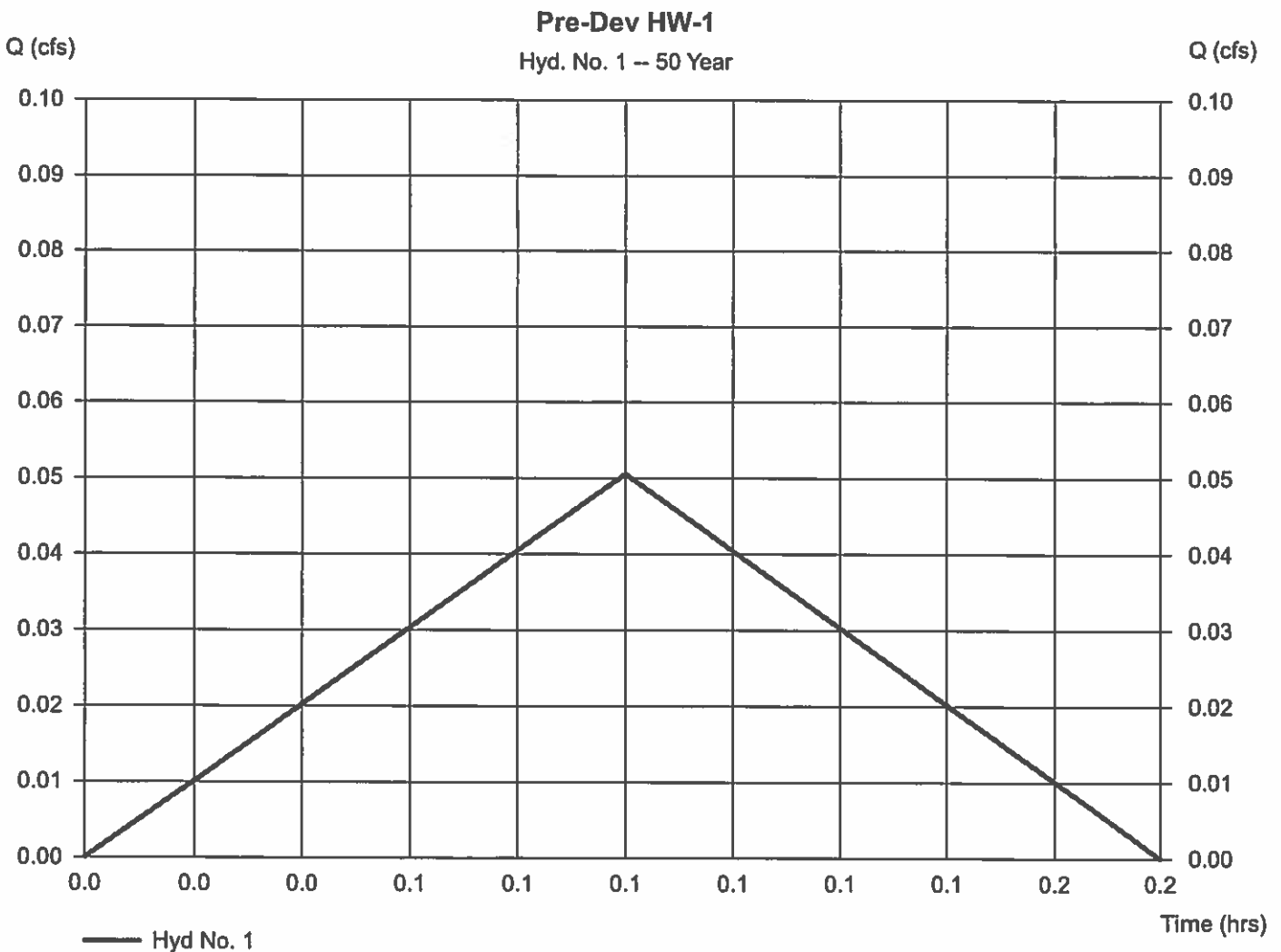
Hydraflow Hydrographs by Intelisolve v9.22

Thursday, Apr 18, 2019

Hyd. No. 1

Pre-Dev HW-1

Hydrograph type	= Rational	Peak discharge	= 0.051 cfs
Storm frequency	= 50 yrs	Time to peak	= 0.08 hrs
Time interval	= 1 min	Hyd. volume	= 15 cuft
Drainage area	= 0.019 ac	Runoff coeff.	= 0.35
Intensity	= 7.598 in/hr	Tc by User	= 5.00 min
IDF Curve	= PennDOT IDF Curve Region 5.IDF	Asc/Rec limb fact	= 1/1



Hydrograph Report

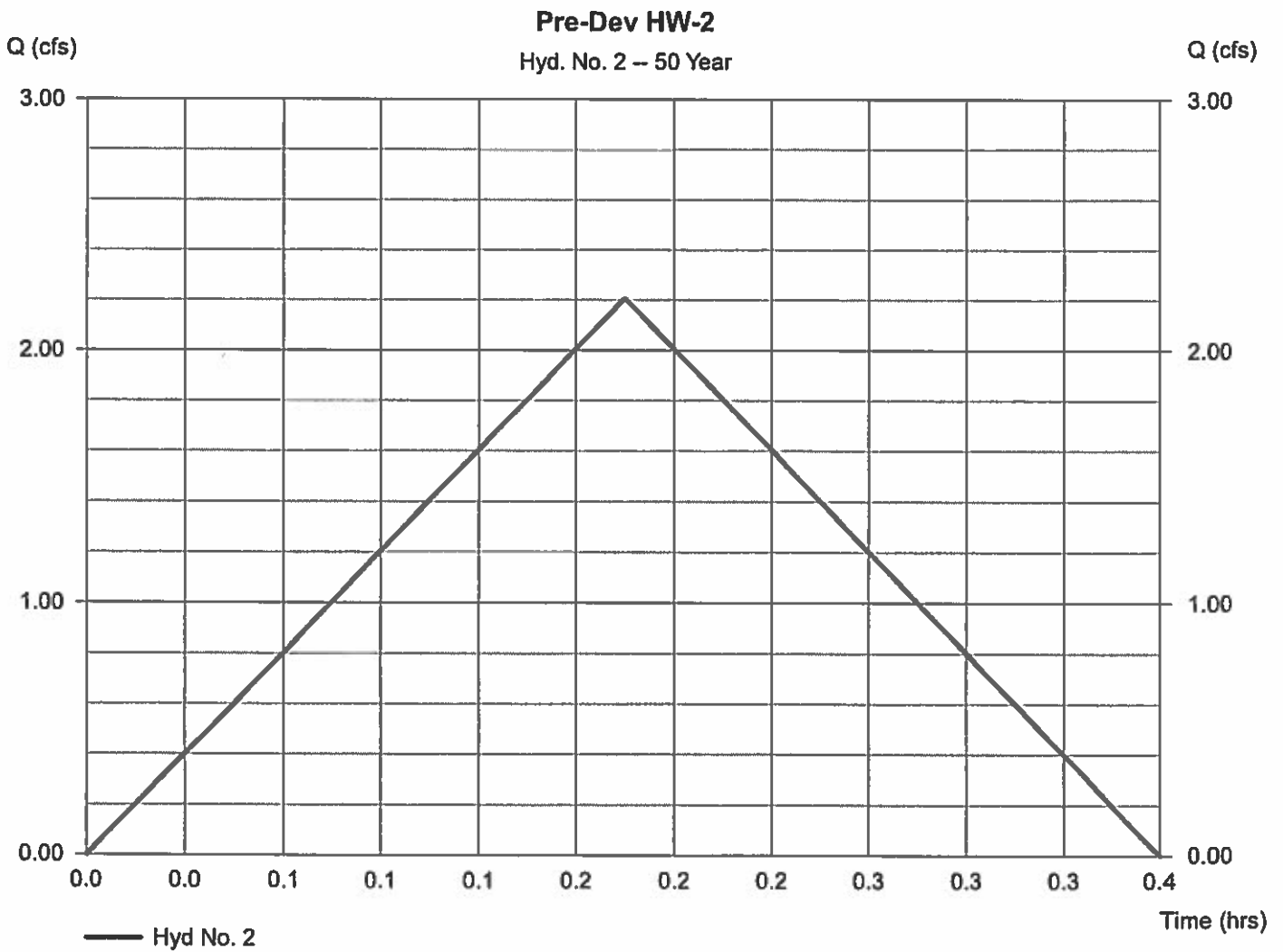
Hydraflow Hydrographs by Intellisolve v9.22

Thursday, Apr 18, 2019

Hyd. No. 2

Pre-Dev HW-2

Hydrograph type	= Rational	Peak discharge	= 2.207 cfs
Storm frequency	= 50 yrs	Time to peak	= 0.18 hrs
Time interval	= 1 min	Hyd. volume	= 1,456 cuft
Drainage area	= 1.044 ac	Runoff coeff.	= 0.35
Intensity	= 6.039 in/hr	Tc by TR55	= 11.00 min
IDF Curve	= PennDOT IDF Curve Region 5.IDF	Asc/Rec limb fact	= 1/1



Hydrograph Report

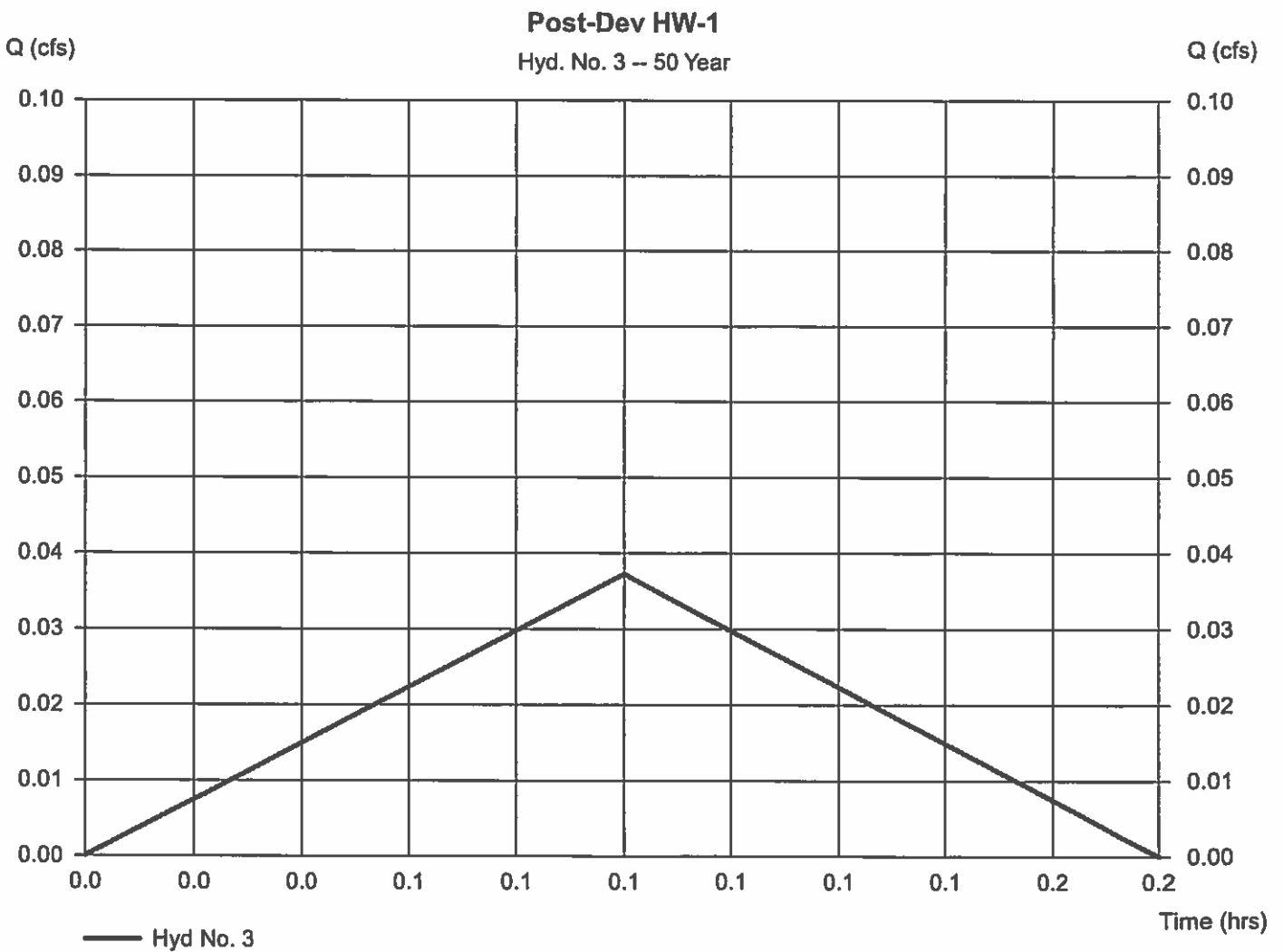
Hydraflow Hydrographs by Intellisolve v9.22

Thursday, Apr 18, 2019

Hyd. No. 3

Post-Dev HW-1

Hydrograph type	= Rational	Peak discharge	= 0.037 cfs
Storm frequency	= 50 yrs	Time to peak	= 0.08 hrs
Time interval	= 1 min	Hyd. volume	= 11 cuft
Drainage area	= 0.014 ac	Runoff coeff.	= 0.35
Intensity	= 7.598 in/hr	Tc by User	= 5.00 min
IDF Curve	= PennDOT IDF Curve Region 5.IDF	Asc/Rec limb fact	= 1/1



Hydrograph Report

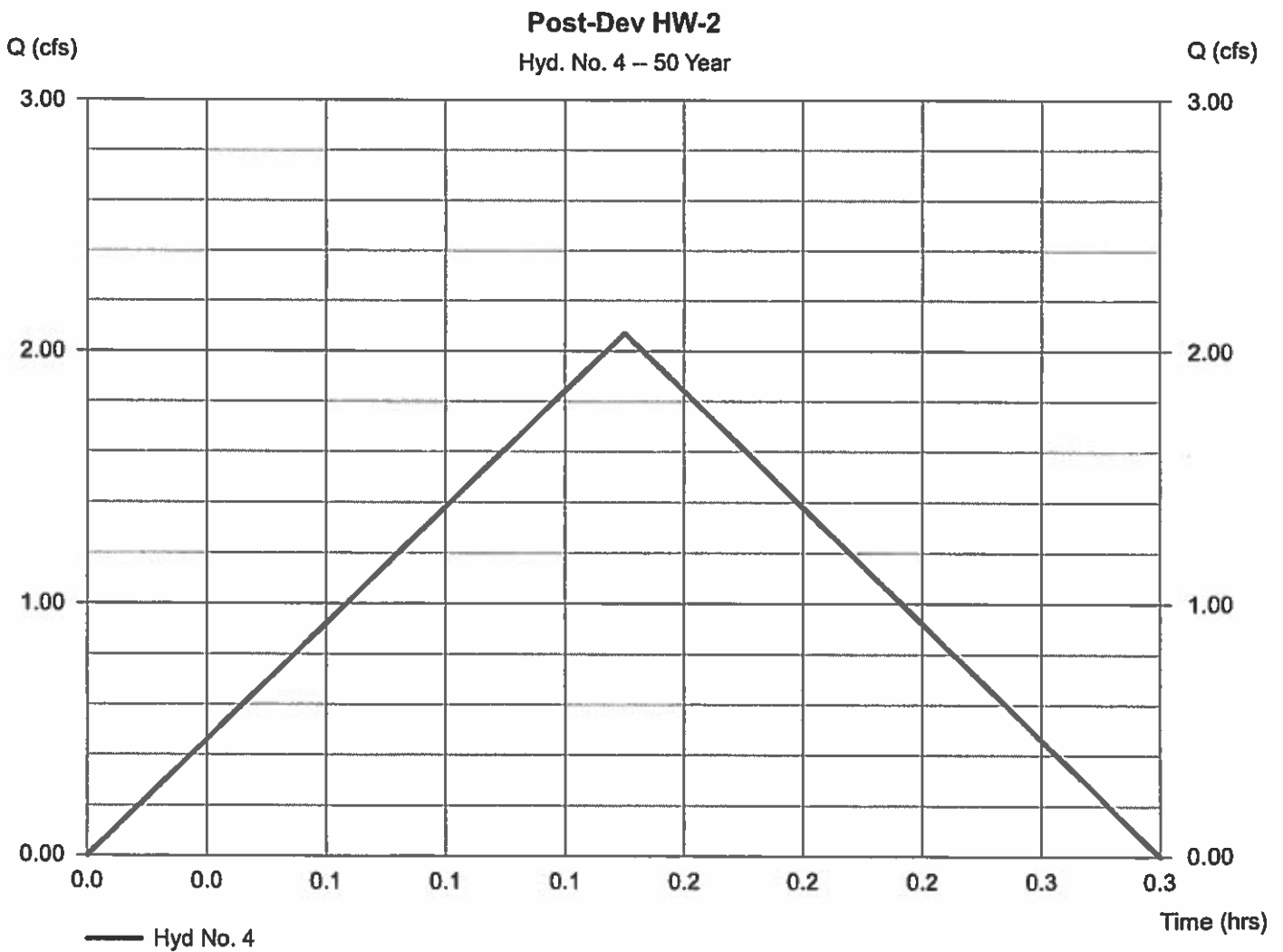
Hydraflow Hydrographs by Intellisolve v9.22

Thursday, Apr 18, 2019

Hyd. No. 4

Post-Dev HW-2

Hydrograph type	= Rational	Peak discharge	= 2.071 cfs
Storm frequency	= 50 yrs	Time to peak	= 0.15 hrs
Time interval	= 1 min	Hyd. volume	= 1,118 cuft
Drainage area	= 0.914 ac	Runoff coeff.	= 0.35
Intensity	= 6.473 in/hr	Tc by TR55	= 9.00 min
IDF Curve	= PennDOT IDF Curve Region 5.IDF	Asc/Rec limb fact	= 1/1



Hydrograph Summary Report

Hydraflow Hydrographs by Intelisolve v9.22

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph description
1	Rational	0.055	1	5	16	---	---	---	Pre-Dev HW-1
2	Rational	2.506	1	11	1,654	---	---	---	Pre-Dev HW-2
3	Rational	0.040	1	5	12	---	---	---	Post-Dev HW-1
4	Rational	2.321	1	9	1,253	---	---	---	Post-Dev HW-2
Elcon Recycling Channel.gpw					Return Period: 100 Year			Thursday, Apr 18, 2019	

Hydrograph Report

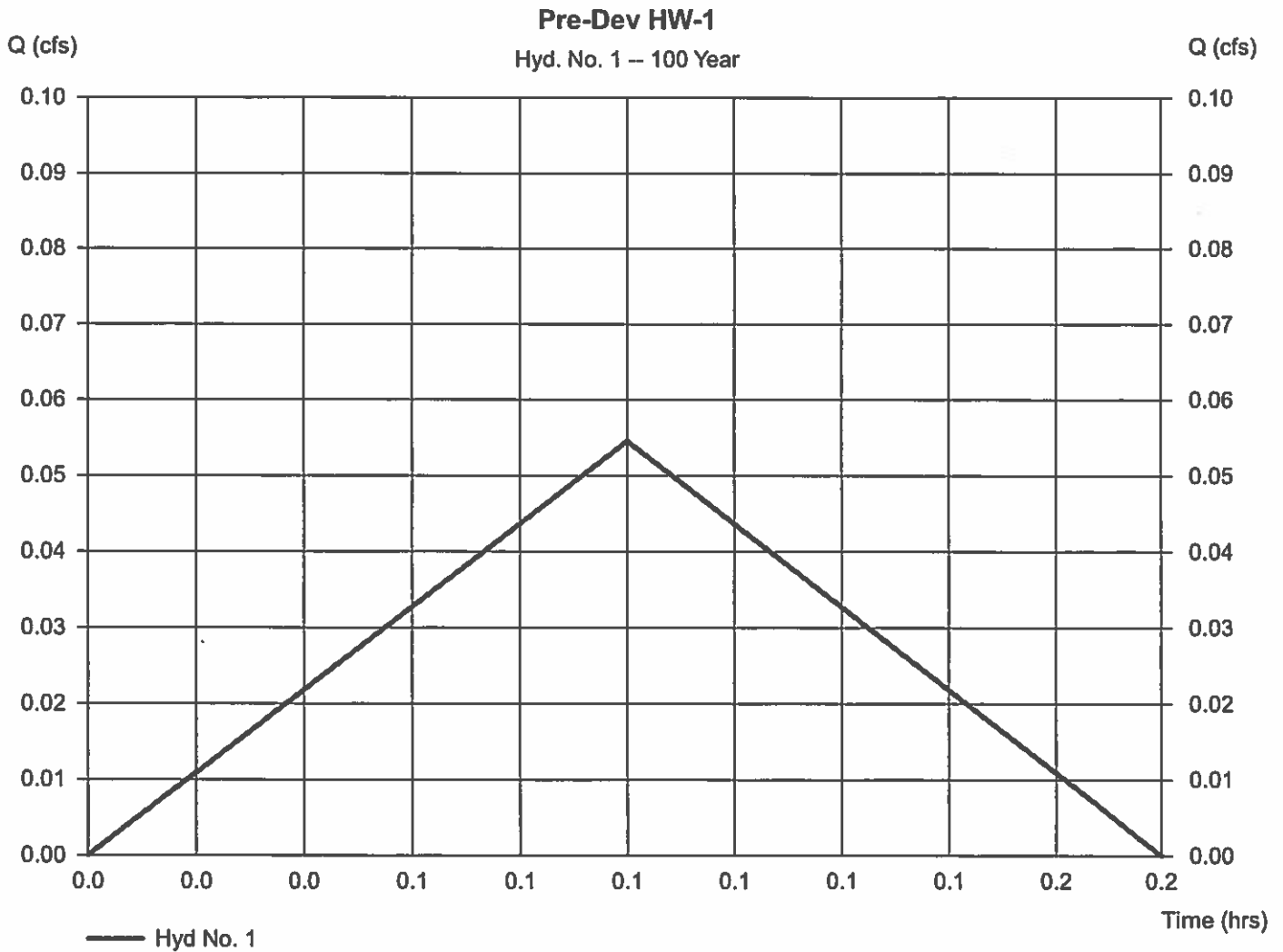
Hydraflow Hydrographs by Intellisolve v9.22

Thursday, Apr 18, 2019

Hyd. No. 1

Pre-Dev HW-1

Hydrograph type	= Rational	Peak discharge	= 0.055 cfs
Storm frequency	= 100 yrs	Time to peak	= 0.08 hrs
Time interval	= 1 min	Hyd. volume	= 16 cuft
Drainage area	= 0.019 ac	Runoff coeff.	= 0.35
Intensity	= 8.198 in/hr	Tc by User	= 5.00 min
IDF Curve	= PennDOT IDF Curve Region 5.IDF	Asc/Rec limb fact	= 1/1



Hydrograph Report

Hydraflow Hydrographs by Intellisolve v9.22

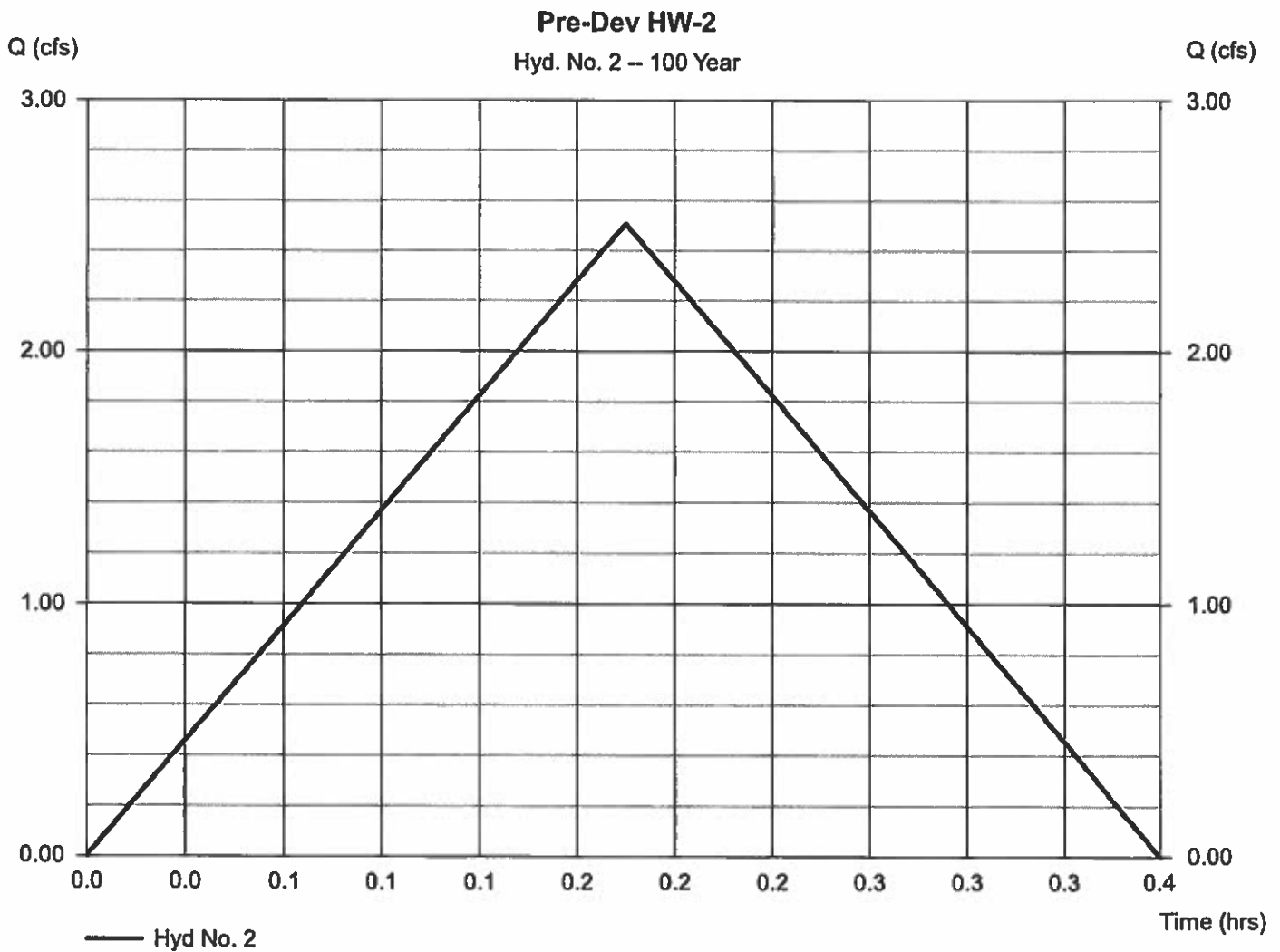
Thursday, Apr 18, 2019

Hyd. No. 2

Pre-Dev HW-2

Hydrograph type = Rational
Storm frequency = 100 yrs
Time interval = 1 min
Drainage area = 1.044 ac
Intensity = 6.858 in/hr
IDF Curve = PennDOT IDF Curve Region 5.IDF

Peak discharge = 2.506 cfs
Time to peak = 0.18 hrs
Hyd. volume = 1,654 cuft
Runoff coeff. = 0.35
Tc by TR55 = 11.00 min
Asc/Rec limb fact = 1/1



Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.22

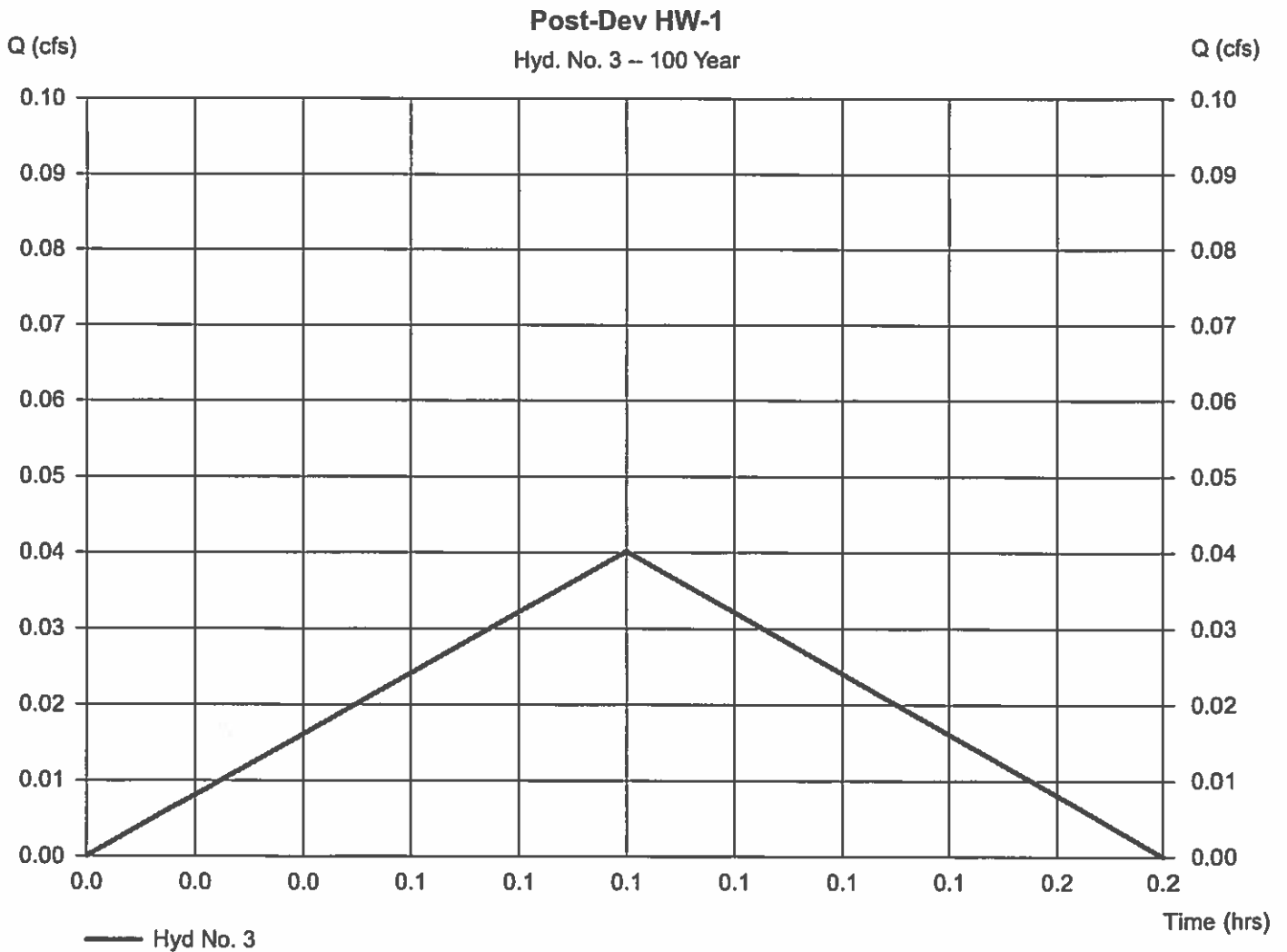
Thursday, Apr 18, 2019

Hyd. No. 3

Post-Dev HW-1

Hydrograph type = Rational
Storm frequency = 100 yrs
Time interval = 1 min
Drainage area = 0.014 ac
Intensity = 8.198 in/hr
IDF Curve = PennDOT IDF Curve Region 5.IDF

Peak discharge = 0.040 cfs
Time to peak = 0.08 hrs
Hyd. volume = 12 cuft
Runoff coeff. = 0.35
Tc by User = 5.00 min
Asc/Rec limb fact = 1/1



Hydrograph Report

Hydraflow Hydrographs by Intellisolve v9.22

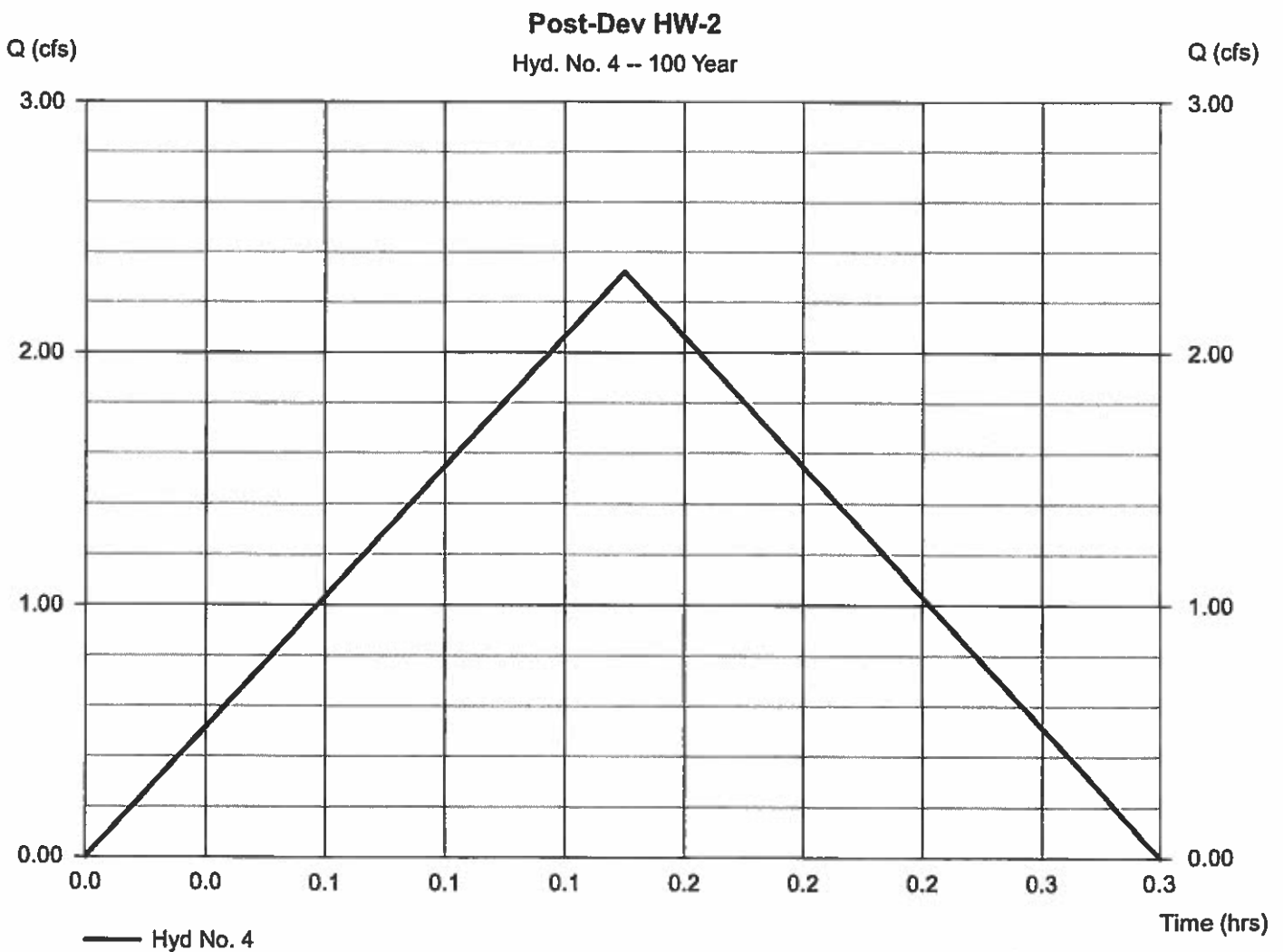
Thursday, Apr 18, 2019

Hyd. No. 4

Post-Dev HW-2

Hydrograph type = Rational
Storm frequency = 100 yrs
Time interval = 1 min
Drainage area = 0.914 ac
Intensity = 7.254 in/hr
IDF Curve = PennDOT IDF Curve Region 5.IDF

Peak discharge = 2.321 cfs
Time to peak = 0.15 hrs
Hyd. volume = 1,253 cuft
Runoff coeff. = 0.35
Tc by TR55 = 9.00 min
Asc/Rec limb fact = 1/1



DRAINAGE AREA PLANS