ATTACHMENT E

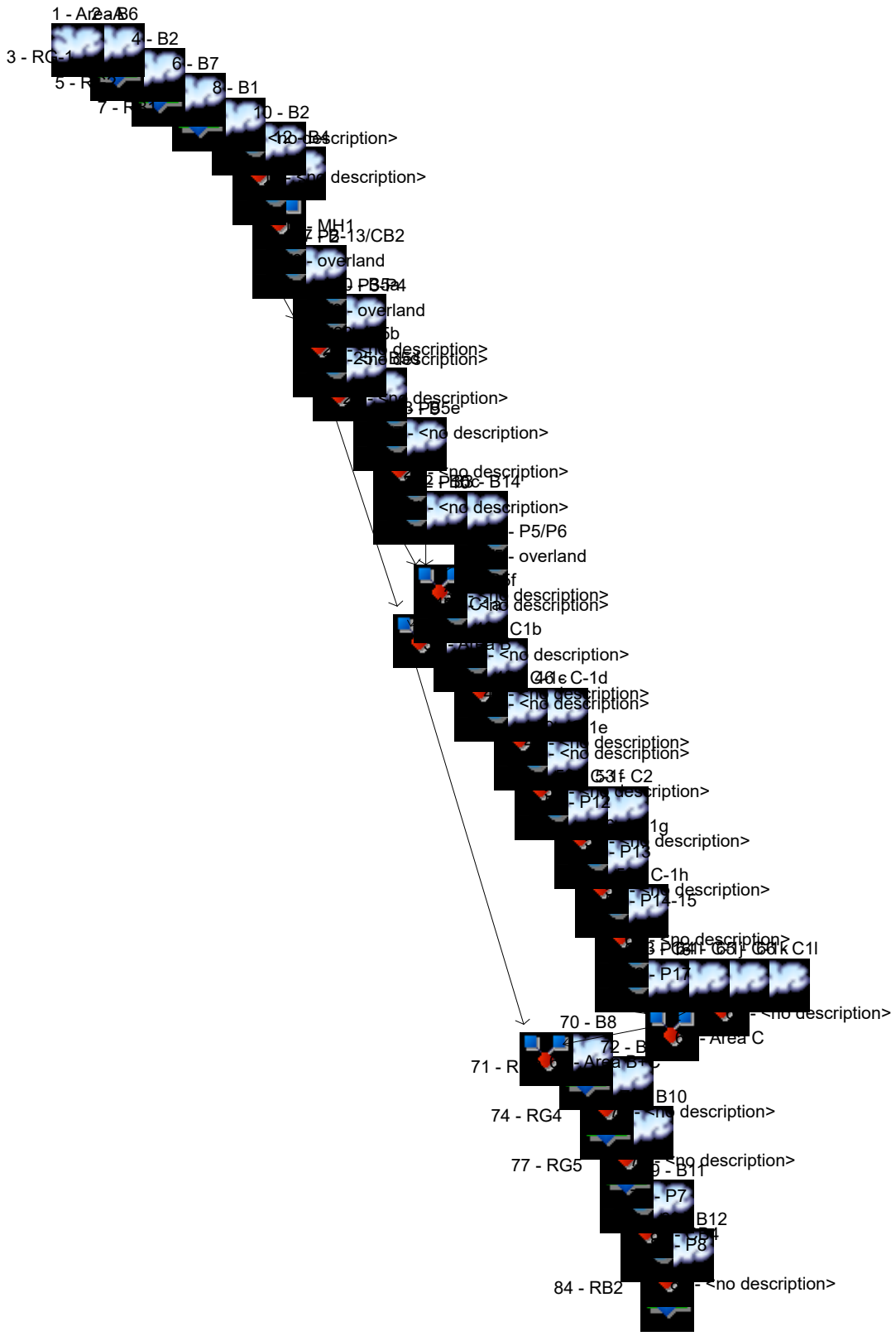
Post Development Hydrograph

1” Rain Event

05-04-2020

Watershed Model Schematic

Hydraflow Hydrographs by Intelisolve v9.23



Hydrograph Report

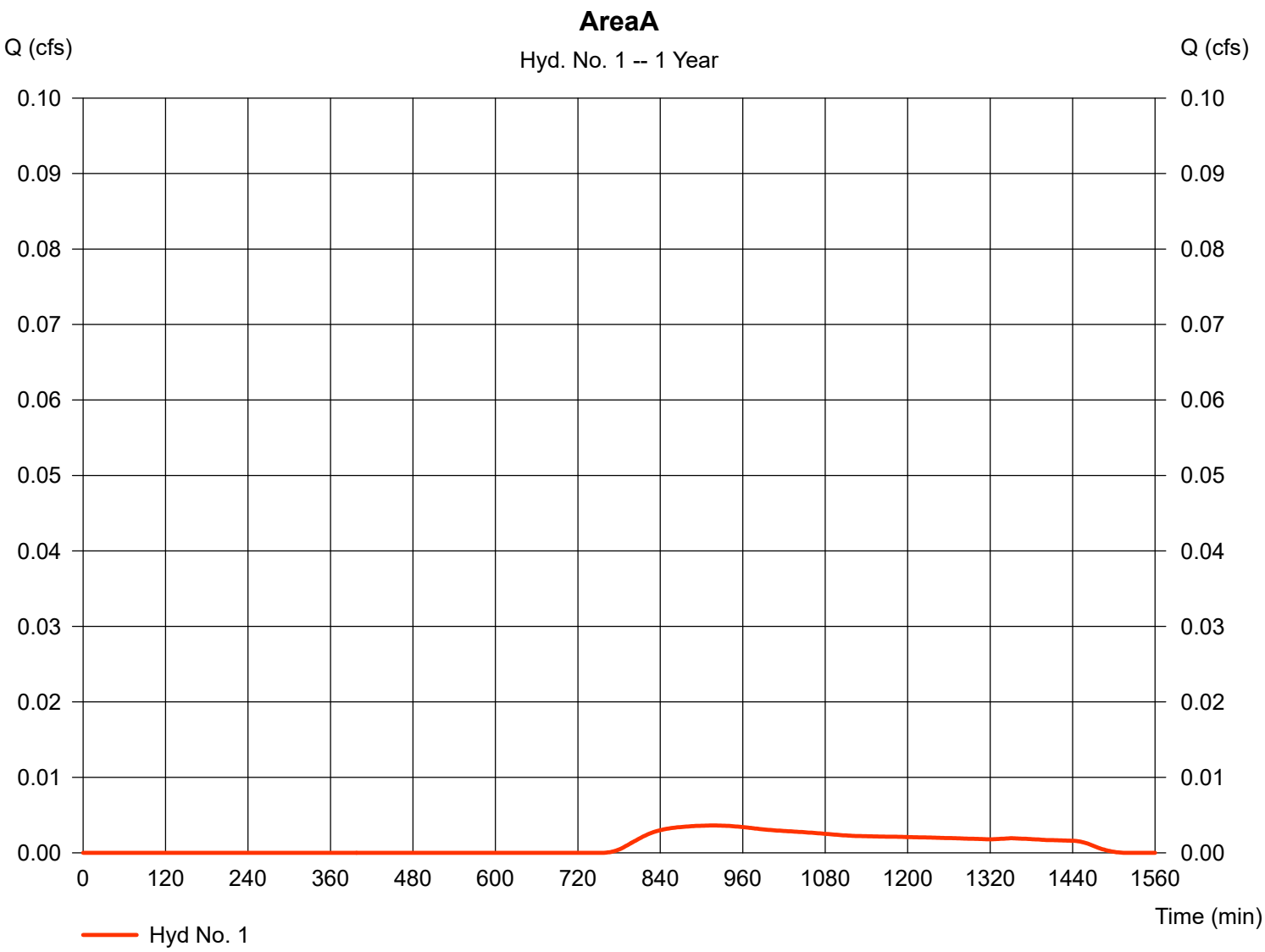
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 1

AreaA

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.004 cfs
Storm frequency	=	1 yrs	Time to peak	=	918 min
Time interval	=	2 min	Hyd. volume	=	99 cuft
Drainage area	=	1.180 ac	Curve number	=	74*
Basin Slope	=	2.8 %	Hydraulic length	=	425 ft
Tc method	=	TR55	Time of conc. (Tc)	=	49.70 min
Total precip.	=	1.00 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

* Composite (Area/CN) = [(0.040 x 98) + (0.820 x 73) + (0.320 x 74)] / 1.180



TR55 Tc Worksheet

Hydraflow Hydrographs by Intelisolve v9.23

Hyd. No. 1

AreaA

Description		A		B		C		Totals
Sheet Flow								
Manning's n-value	=	0.240		0.240		0.240		
Flow length (ft)	=	270.0		50.0		105.0		
Two-year 24-hr precip. (in)	=	3.45		3.45		3.45		
Land slope (%)	=	2.03		8.00		1.80		
Travel Time (min)	**=**	**30.24**	**+**	**4.53**	**+**	**14.91**	**=**	**49.68**
Shallow Concentrated Flow								
Flow length (ft)	=	0.00		0.00		0.00		
Watercourse slope (%)	=	0.00		0.00		0.00		
Surface description	=	Paved		Paved		Paved		
Average velocity (ft/s)	=	0.00		0.00		0.00		
Travel Time (min)	**=**	**0.00**	**+**	**0.00**	**+**	**0.00**	**=**	**0.00**
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 ..... 49.70 min

Hydrograph Report

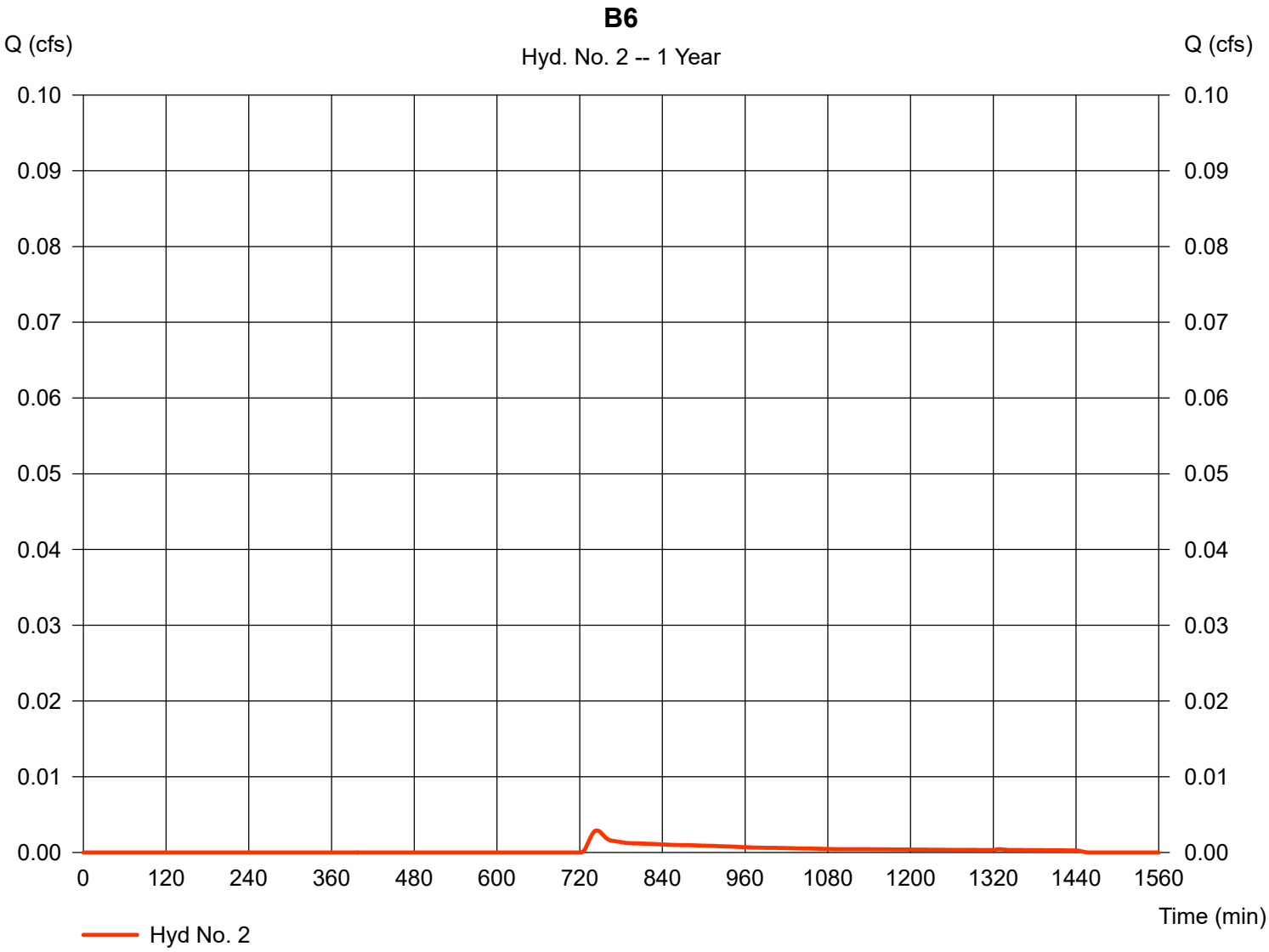
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 2

B6

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.003 cfs
Storm frequency	=	1 yrs	Time to peak	=	744 min
Time interval	=	2 min	Hyd. volume	=	29 cuft
Drainage area	=	0.110 ac	Curve number	=	79*
Basin Slope	=	5.5 %	Hydraulic length	=	40 ft
Tc method	=	USER	Time of conc. (Tc)	=	10.00 min
Total precip.	=	1.00 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

* Composite (Area/CN) = [(0.020 x 98) + (0.010 x 87) + (0.080 x 74)] / 0.110



Hydrograph Report

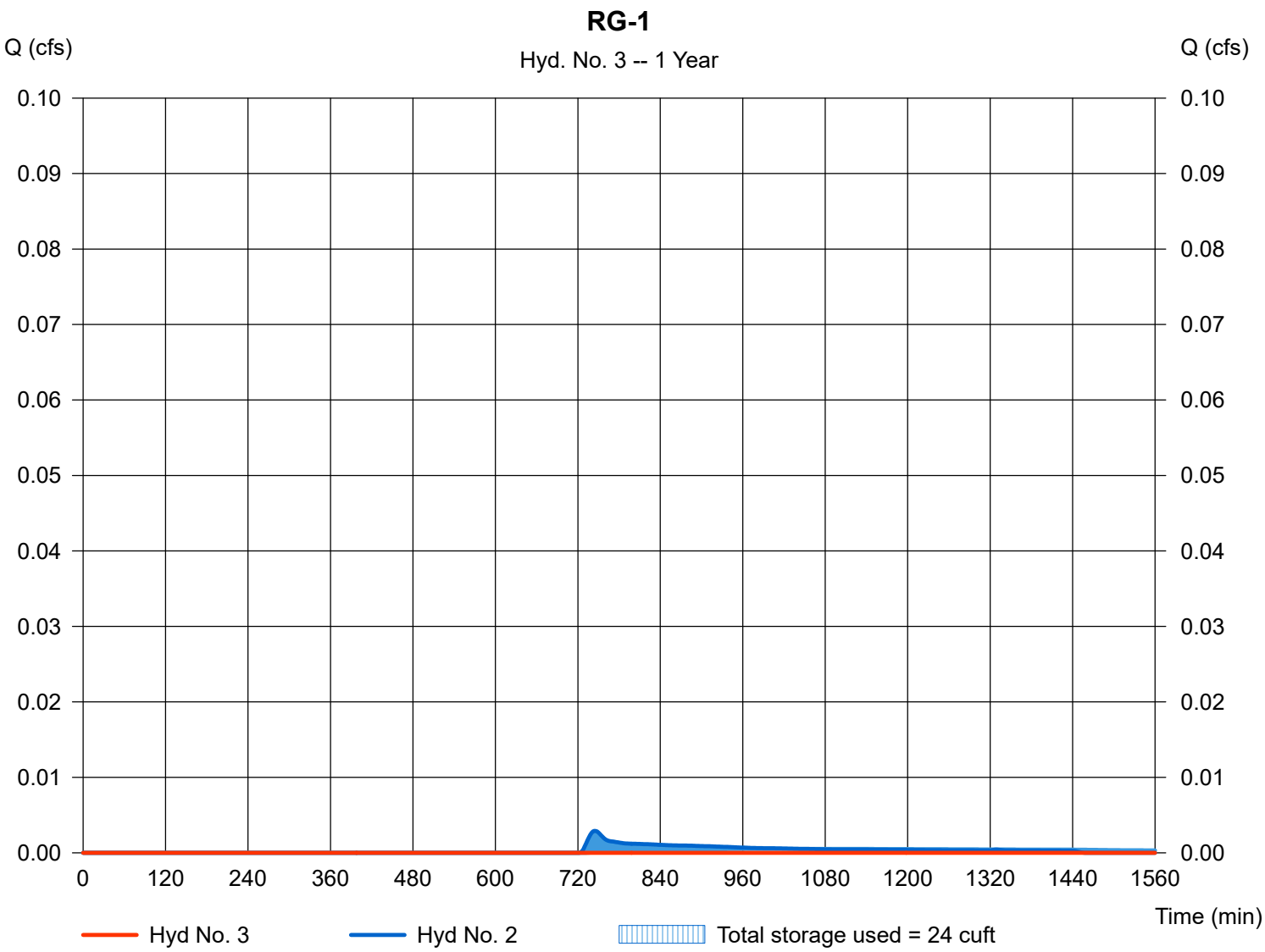
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 3

RG-1

Hydrograph type	=	Reservoir	Peak discharge	=	0.000 cfs
Storm frequency	=	1 yrs	Time to peak	=	n/a
Time interval	=	2 min	Hyd. volume	=	0 cuft
Inflow hyd. No.	=	2 - B6	Max. Elevation	=	55.11 ft
Reservoir name	=	RG-1	Max. Storage	=	24 cuft

Storage Indication method used. Exfiltration extracted from Outflow.



Pond Report

Hydraflow Hydrographs by Intelisolve v9.23 — Monday, May 4, 2020

Pond No. 2 - RG-1

Pond Data

Contours - User-defined contour areas. Average end area method used for volume calculation. Begining Elevation = 55.10 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	55.10	2,333	0	0
0.40	55.50	2,605	988	988
0.90	56.00	2,989	1,399	2,386
1.40	56.50	3,327	1,579	3,965
1.60	56.70	3,478	680	4,646

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	Inactive	Inactive	Inactive	0.00
Span (in)	= 0.00	0.00	0.00	0.00
No. Barrels	= 1	1	0	0
Invert El. (ft)	= 0.00	0.00	0.00	0.00
Length (ft)	= 0.00	0.00	0.00	0.00
Slope (%)	= 0.00	0.00	0.00	n/a
N-Value	= .013	.013	.013	n/a
Orifice Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	Yes	No	No

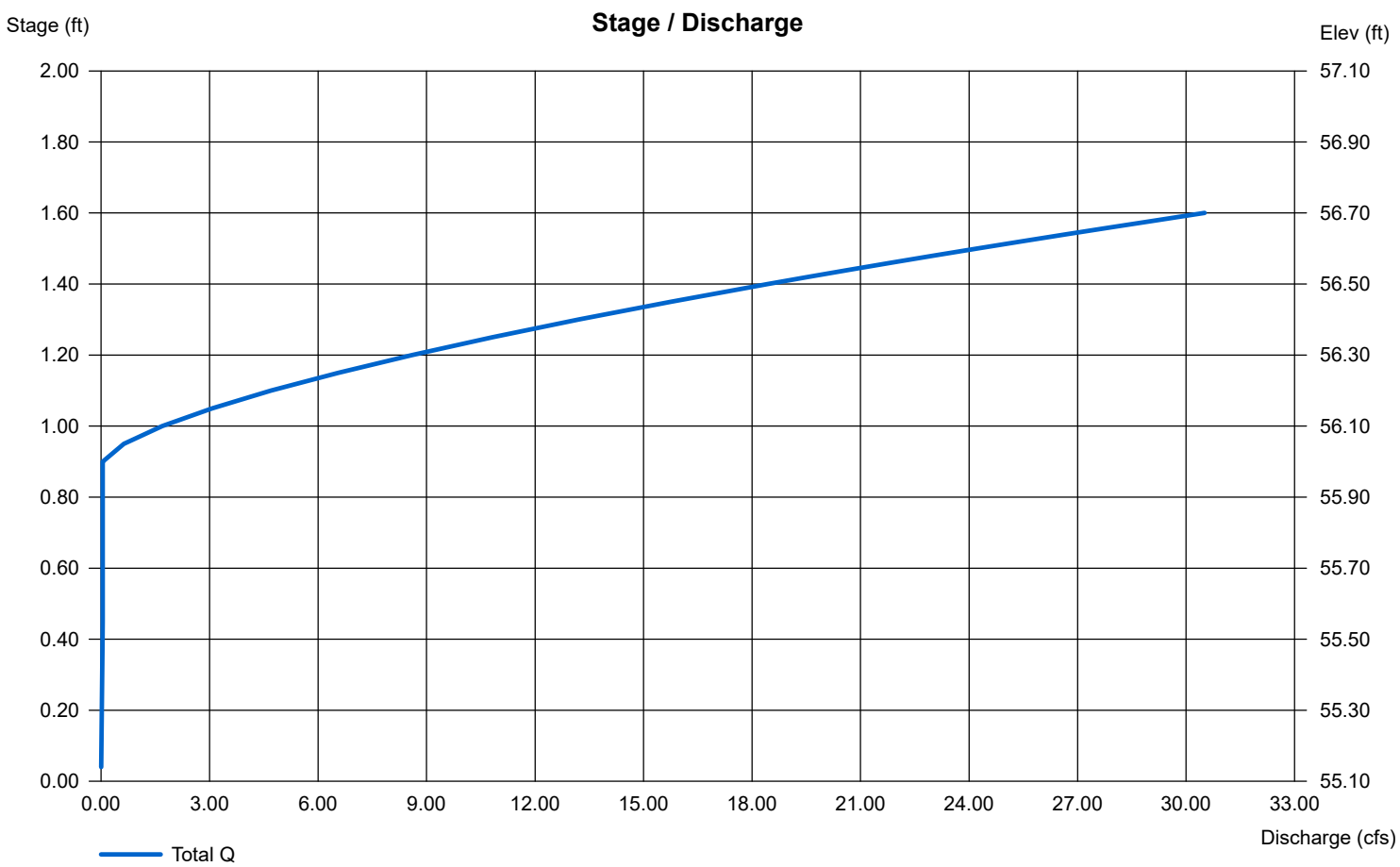
Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 20.00	0.00	0.00	0.00
Crest El. (ft)	= 56.00	0.00	0.00	0.00
Weir Coeff.	= 2.60	3.33	3.33	3.33
Weir Type	= Broad	---	---	---
Multi-Stage	= No	No	No	No

Exfil.(in/hr) = 0.690 (by Contour)

TW Elev. (ft) = 0.00

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).



Hydrograph Report

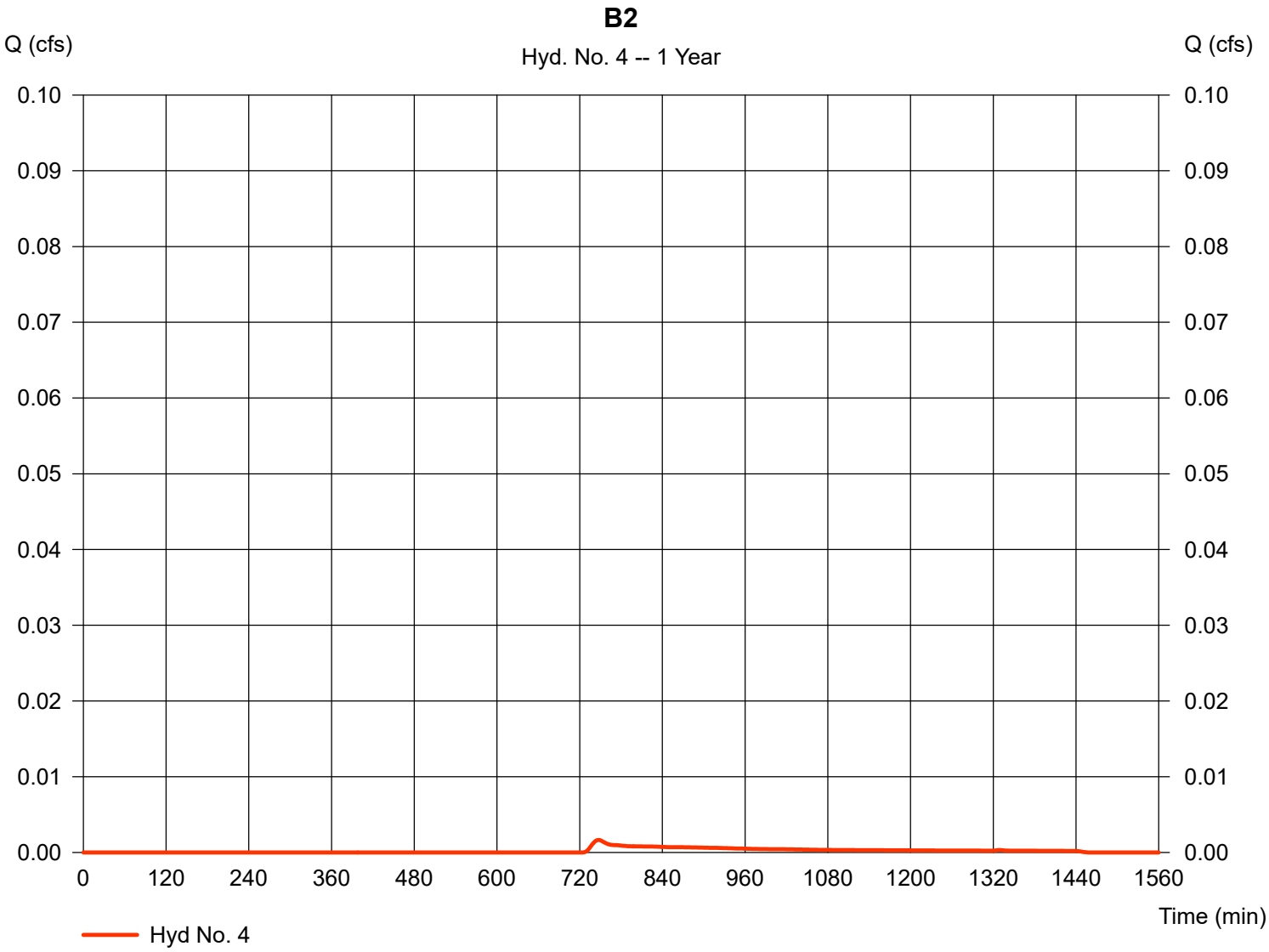
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 4

B2

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.002 cfs
Storm frequency	=	1 yrs	Time to peak	=	748 min
Time interval	=	2 min	Hyd. volume	=	20 cuft
Drainage area	=	0.090 ac	Curve number	=	78*
Basin Slope	=	4.9 %	Hydraulic length	=	35 ft
Tc method	=	USER	Time of conc. (Tc)	=	10.00 min
Total precip.	=	1.00 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

* Composite (Area/CN) = [(0.010 x 98) + (0.010 x 87) + (0.070 x 74)] / 0.090



Hydrograph Report

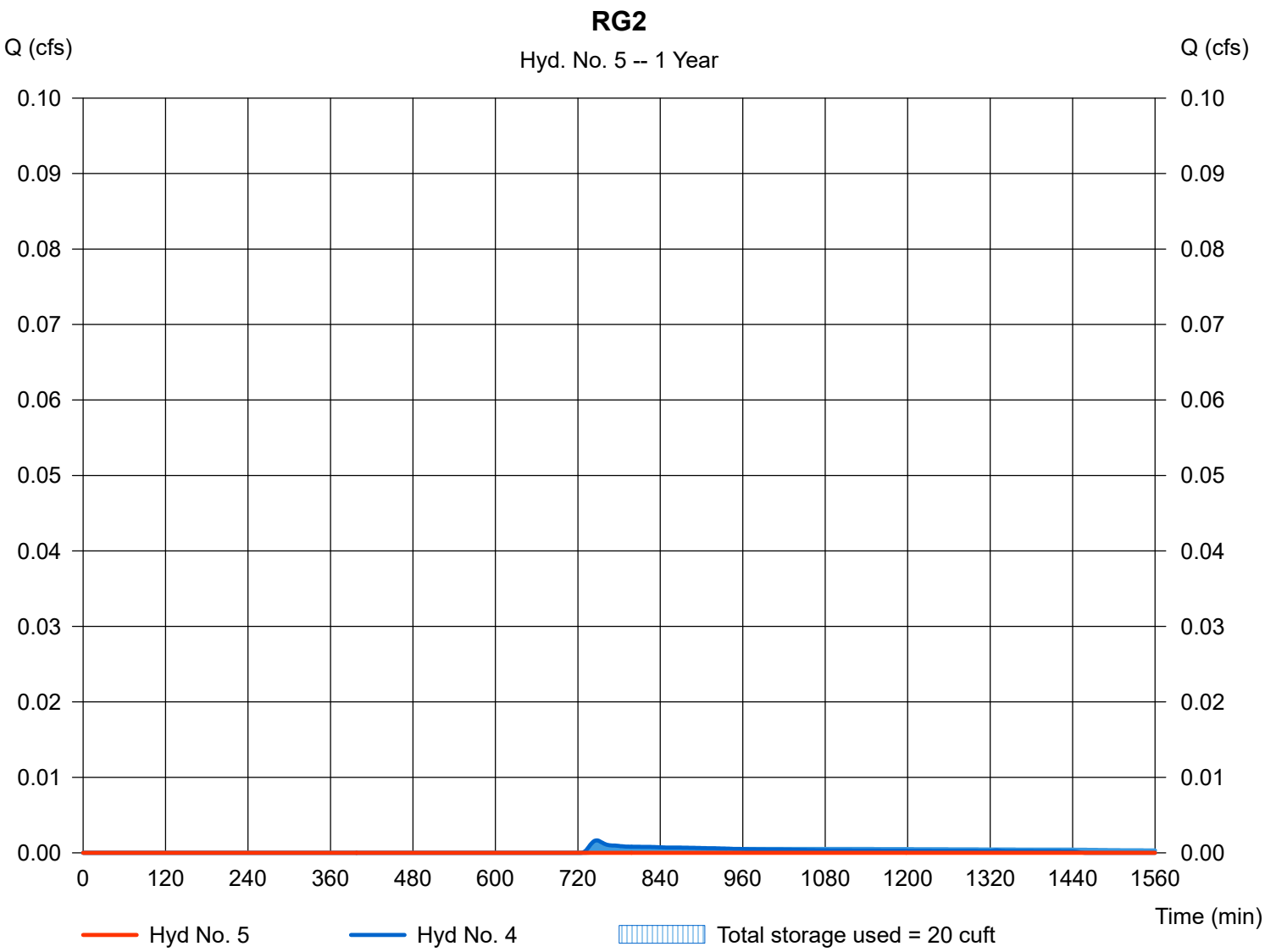
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 5

RG2

Hydrograph type	= Reservoir	Peak discharge	= 0.000 cfs
Storm frequency	= 1 yrs	Time to peak	= n/a
Time interval	= 2 min	Hyd. volume	= 0 cuft
Inflow hyd. No.	= 4 - B2	Max. Elevation	= 54.51 ft
Reservoir name	= RG-2	Max. Storage	= 20 cuft

Storage Indication method used. Exfiltration extracted from Outflow.



Pond Report

Hydraflow Hydrographs by Intelisolve v9.23 — Monday, May 4, 2020

Pond No. 4 - RG-2

Pond Data

Contours - User-defined contour areas. Conic method used for volume calculation. Begining Elevation = 54.50 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	54.50	1,826	0	0
0.50	55.00	2,092	979	979
1.00	55.50	2,374	1,116	2,094
1.50	56.00	2,689	1,265	3,359
1.70	56.20	2,979	566	3,926

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	Inactive	0.00	0.00	0.00
Span (in)	= 0.00	0.00	0.00	0.00
No. Barrels	= 1	0	0	0
Invert El. (ft)	= 0.00	0.00	0.00	0.00
Length (ft)	= 0.00	0.00	0.00	0.00
Slope (%)	= 0.00	0.00	0.00	n/a
N-Value	= .013	.013	.013	n/a
Orifice Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	No	No	No

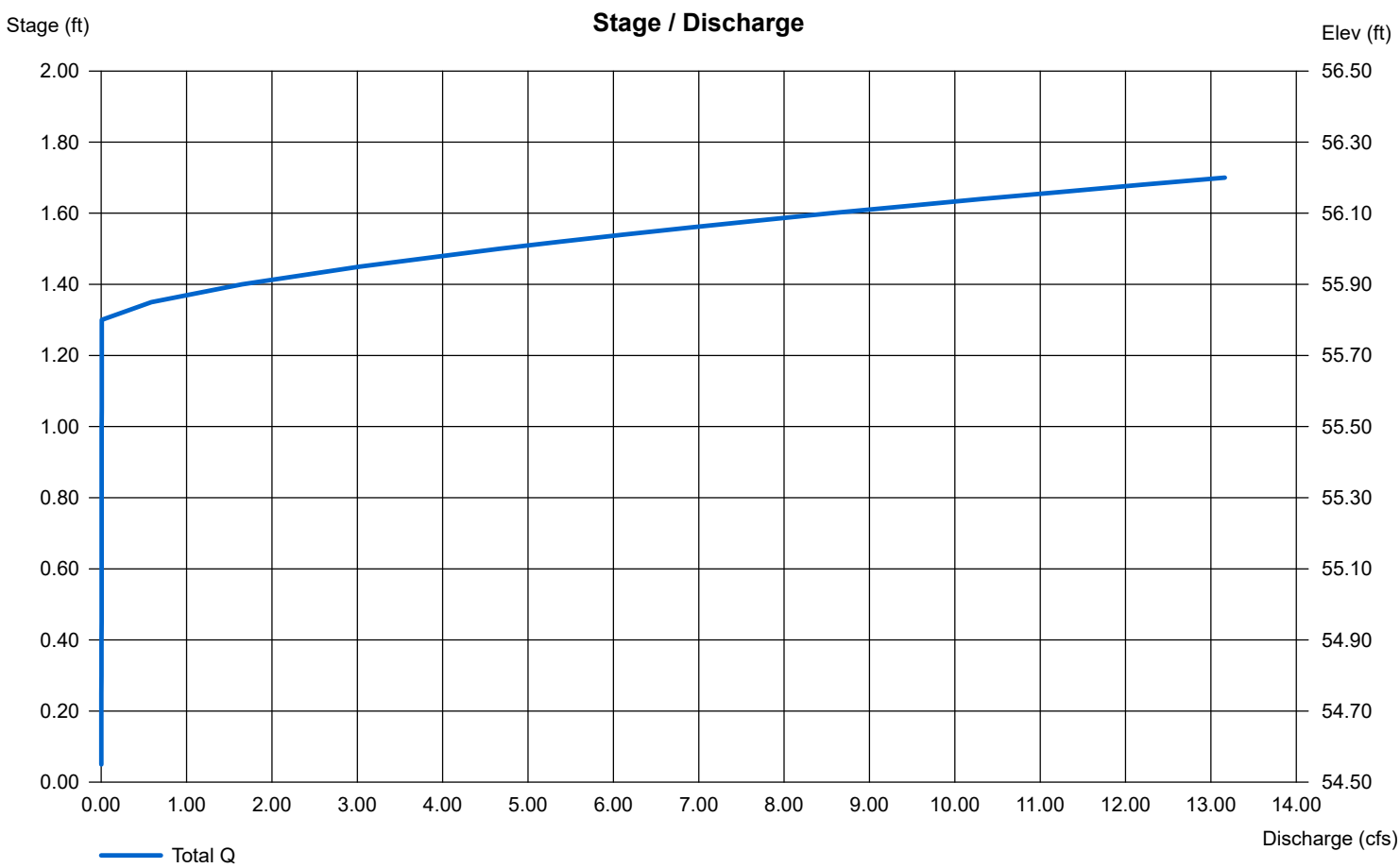
Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 20.00	0.00	0.00	0.00
Crest El. (ft)	= 55.80	0.00	0.00	0.00
Weir Coeff.	= 2.60	3.33	3.33	3.33
Weir Type	= Broad	---	---	---
Multi-Stage	= No	No	No	No

Exfil.(in/hr) = 0.110 (by Contour)

TW Elev. (ft) = 0.00

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).



Hydrograph Report

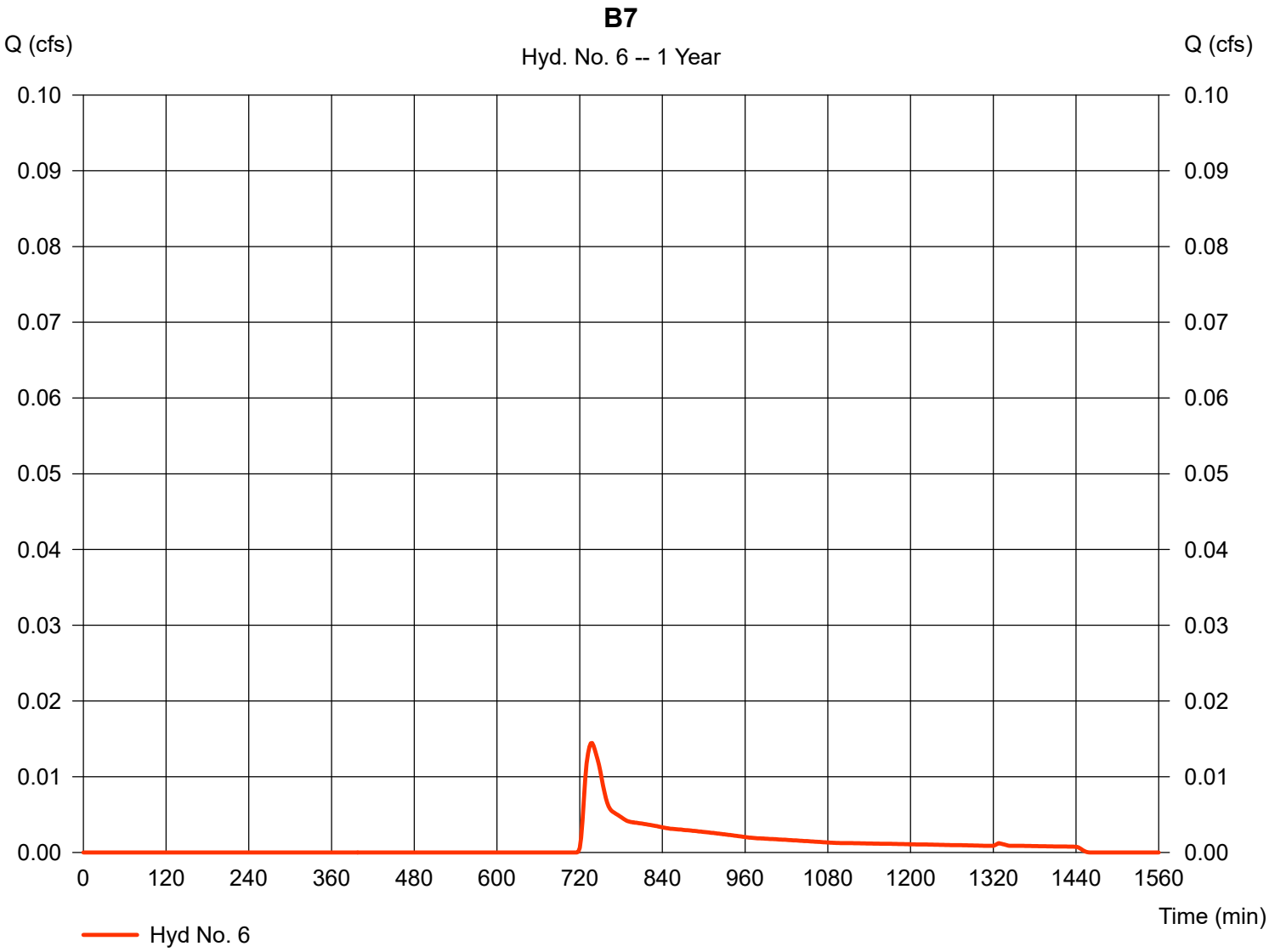
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 6

B7

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.014 cfs
Storm frequency	=	1 yrs	Time to peak	=	738 min
Time interval	=	2 min	Hyd. volume	=	98 cuft
Drainage area	=	0.230 ac	Curve number	=	82*
Basin Slope	=	2.8 %	Hydraulic length	=	58 ft
Tc method	=	USER	Time of conc. (Tc)	=	10.00 min
Total precip.	=	1.00 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

* Composite (Area/CN) = [(0.060 x 98) + (0.030 x 89) + (0.140 x 74)] / 0.230



Hydrograph Report

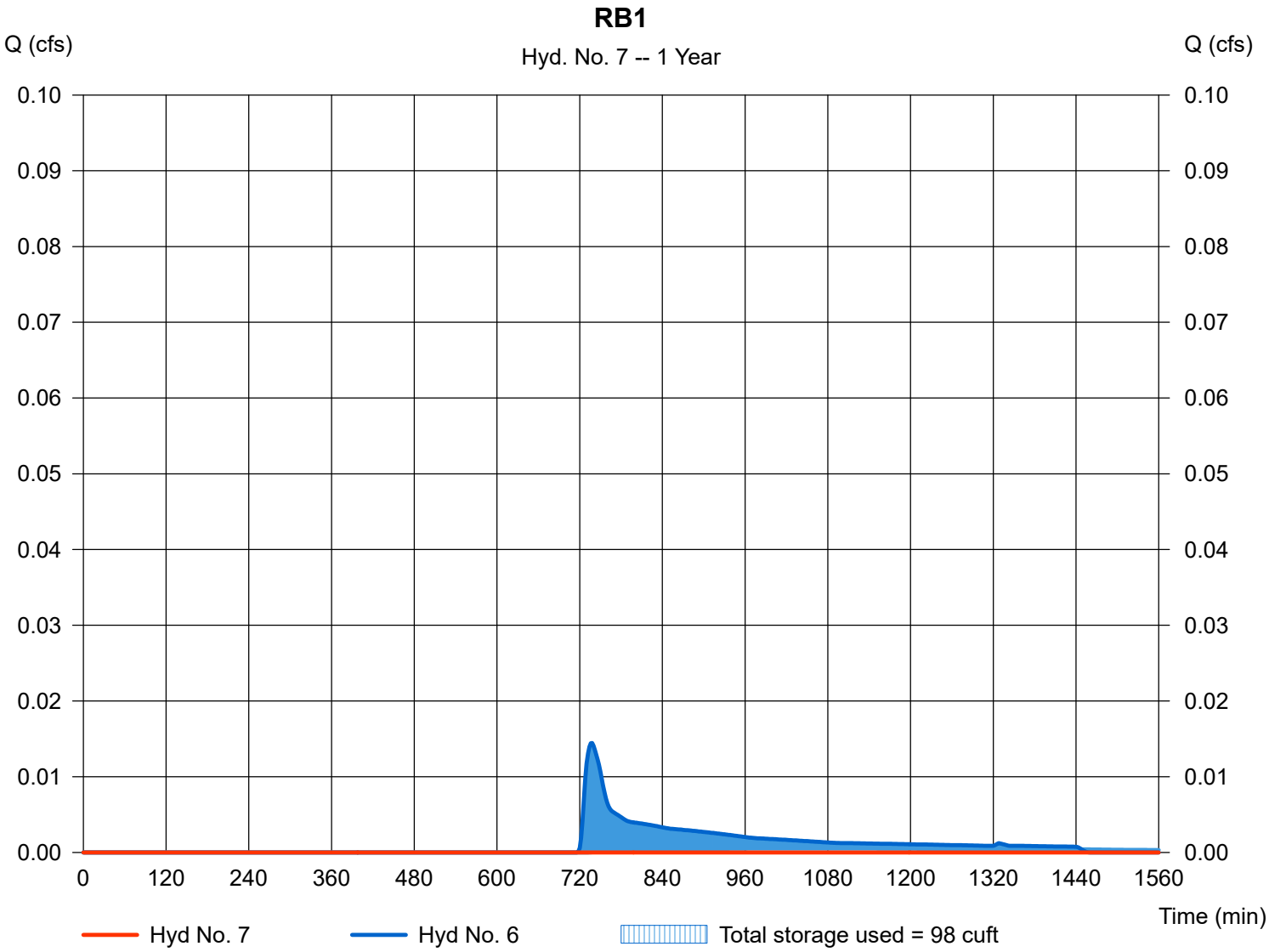
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 7

RB1

Hydrograph type	= Reservoir	Peak discharge	= 0.000 cfs
Storm frequency	= 1 yrs	Time to peak	= n/a
Time interval	= 2 min	Hyd. volume	= 0 cuft
Inflow hyd. No.	= 6 - B7	Max. Elevation	= 54.02 ft
Reservoir name	= RB-1	Max. Storage	= 98 cuft

Storage Indication method used. Exfiltration extracted from Outflow.



Pond Report

Hydraflow Hydrographs by Intelisolve v9.23 — Monday, May 4, 2020

Pond No. 1 - RB-1

Pond Data

Contours - User-defined contour areas. Conic method used for volume calculation. Begining Elevation = 54.00 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	54.00	3,616	0	0
1.00	55.00	4,381	3,992	3,992
1.50	55.50	4,785	2,291	6,283
2.00	56.00	5,203	2,496	8,779

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	Inactive	Inactive	Inactive	Inactive
Span (in)	= 0.00	0.00	0.00	0.00
No. Barrels	= 2	0	0	0
Invert El. (ft)	= 53.80	0.00	0.00	0.00
Length (ft)	= 30.00	0.00	0.00	0.00
Slope (%)	= 0.50	0.00	0.00	n/a
N-Value	= .013	.013	.013	n/a
Orifice Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	No	No	No

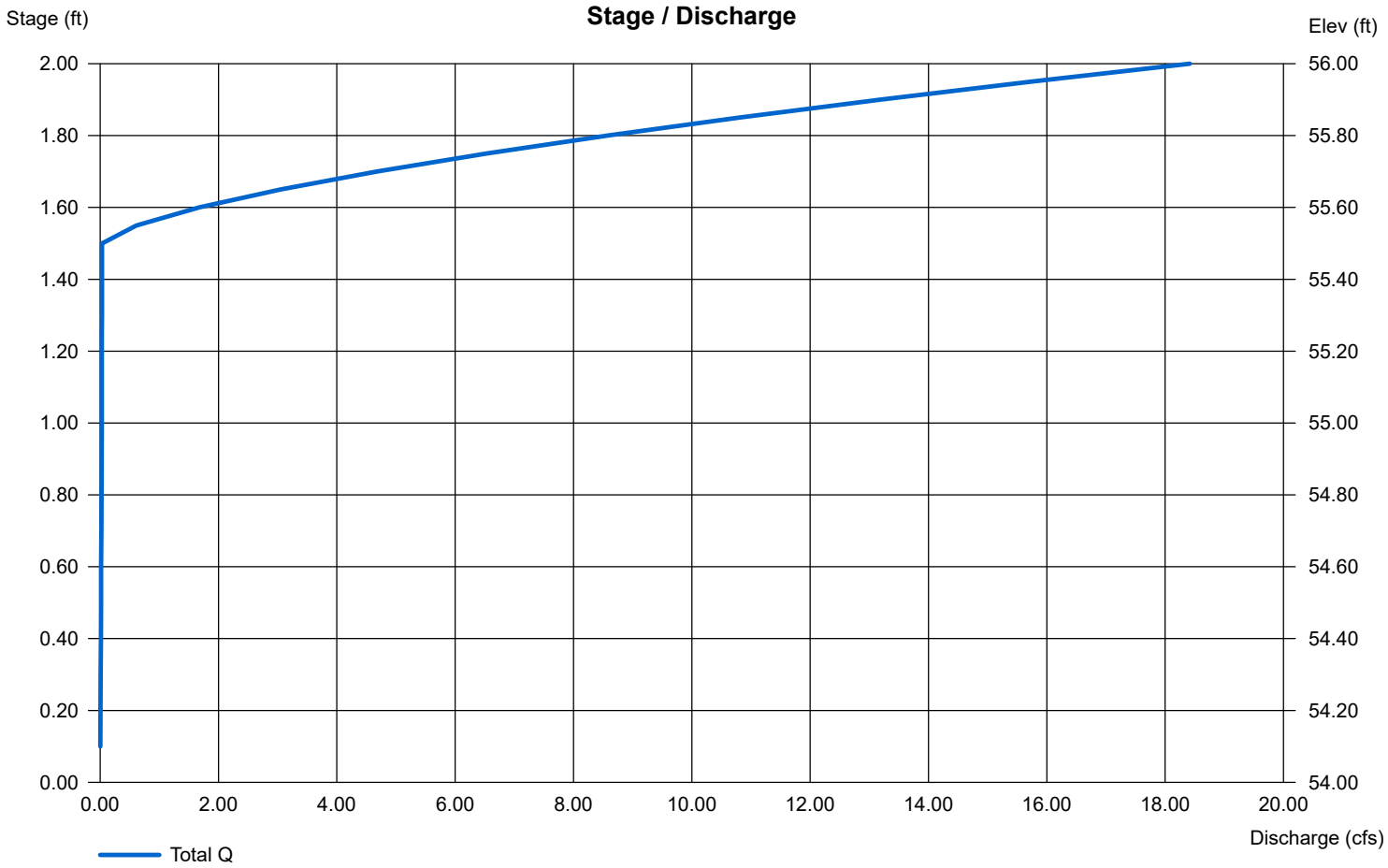
Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 20.00	Inactive	Inactive	Inactive
Crest El. (ft)	= 55.50	0.00	0.00	0.00
Weir Coeff.	= 2.60	3.33	3.33	3.33
Weir Type	= Broad	---	---	---
Multi-Stage	= No	No	No	No

Exfil.(in/hr) = 0.280 (by Contour)

TW Elev. (ft) = 0.00

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).



Hydrograph Report

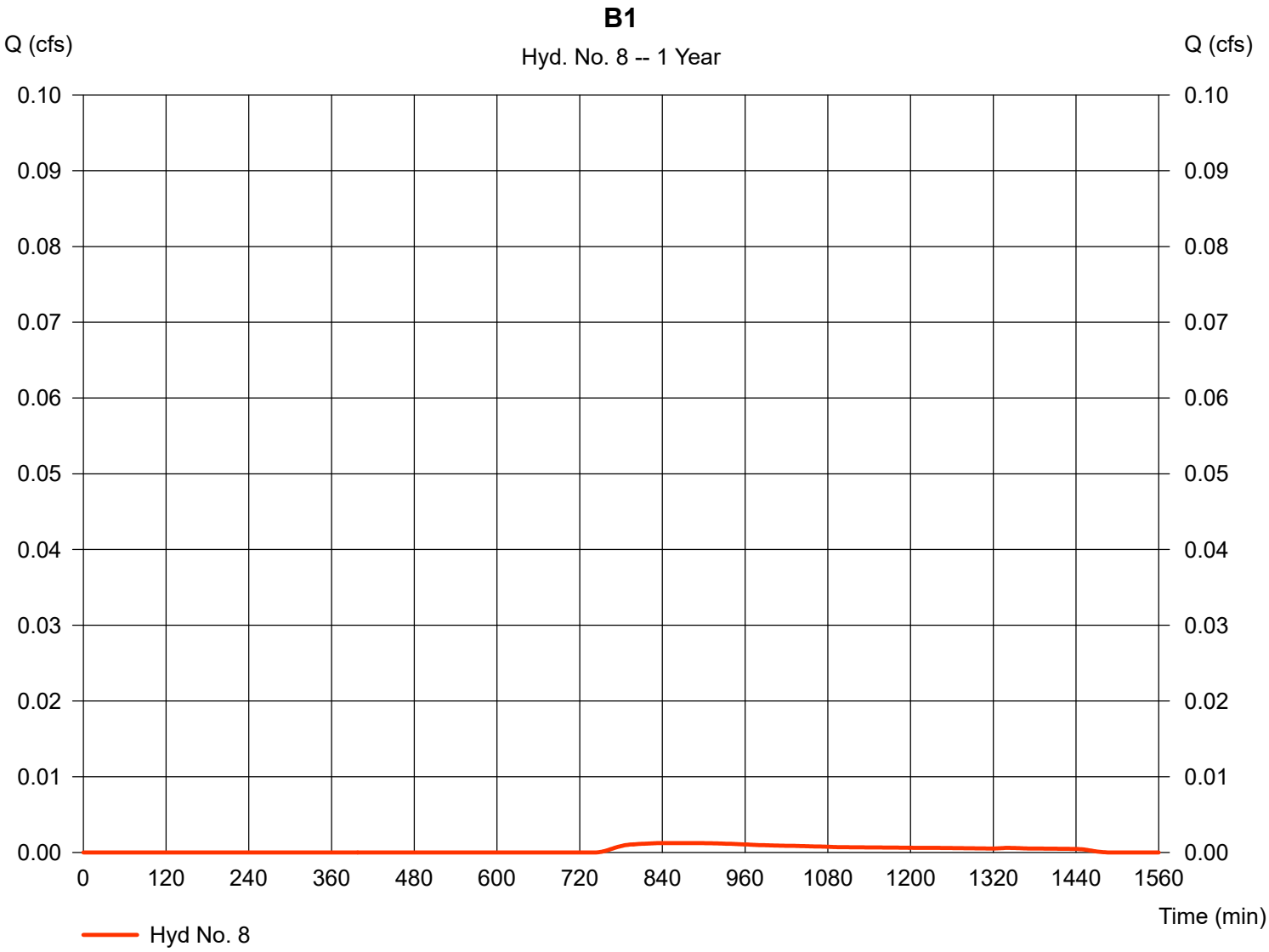
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 8

B1

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.001 cfs
Storm frequency	=	1 yrs	Time to peak	=	846 min
Time interval	=	2 min	Hyd. volume	=	33 cuft
Drainage area	=	0.300 ac	Curve number	=	75*
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	TR55	Time of conc. (Tc)	=	32.00 min
Total precip.	=	1.00 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

* Composite (Area/CN) = [(0.254 x 74) + (0.042 x 79) + (0.001 x 98)] / 0.300



TR55 Tc Worksheet

Hyd. No. 8

B1

Description		A		B		C		Totals
Sheet Flow								
Manning's n-value	=	0.170		0.170		0.240		
Flow length (ft)	=	140.0		128.0		30.0		
Two-year 24-hr precip. (in)	=	3.45		3.45		3.45		
Land slope (%)	=	2.50		1.20		4.00		
Travel Time (min)	**=**	**12.49**	**+**	**15.59**	**+**	**3.98**	**=**	**32.05**
Shallow Concentrated Flow								
Flow length (ft)	=	0.00		0.00		0.00		
Watercourse slope (%)	=	0.00		0.00		0.00		
Surface description	=	Paved		Paved		Paved		
Average velocity (ft/s)	=	0.00		0.00		0.00		
Travel Time (min)	**=**	**0.00**	**+**	**0.00**	**+**	**0.00**	**=**	**0.00**
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 ..... 32.00 min

Hydrograph Report

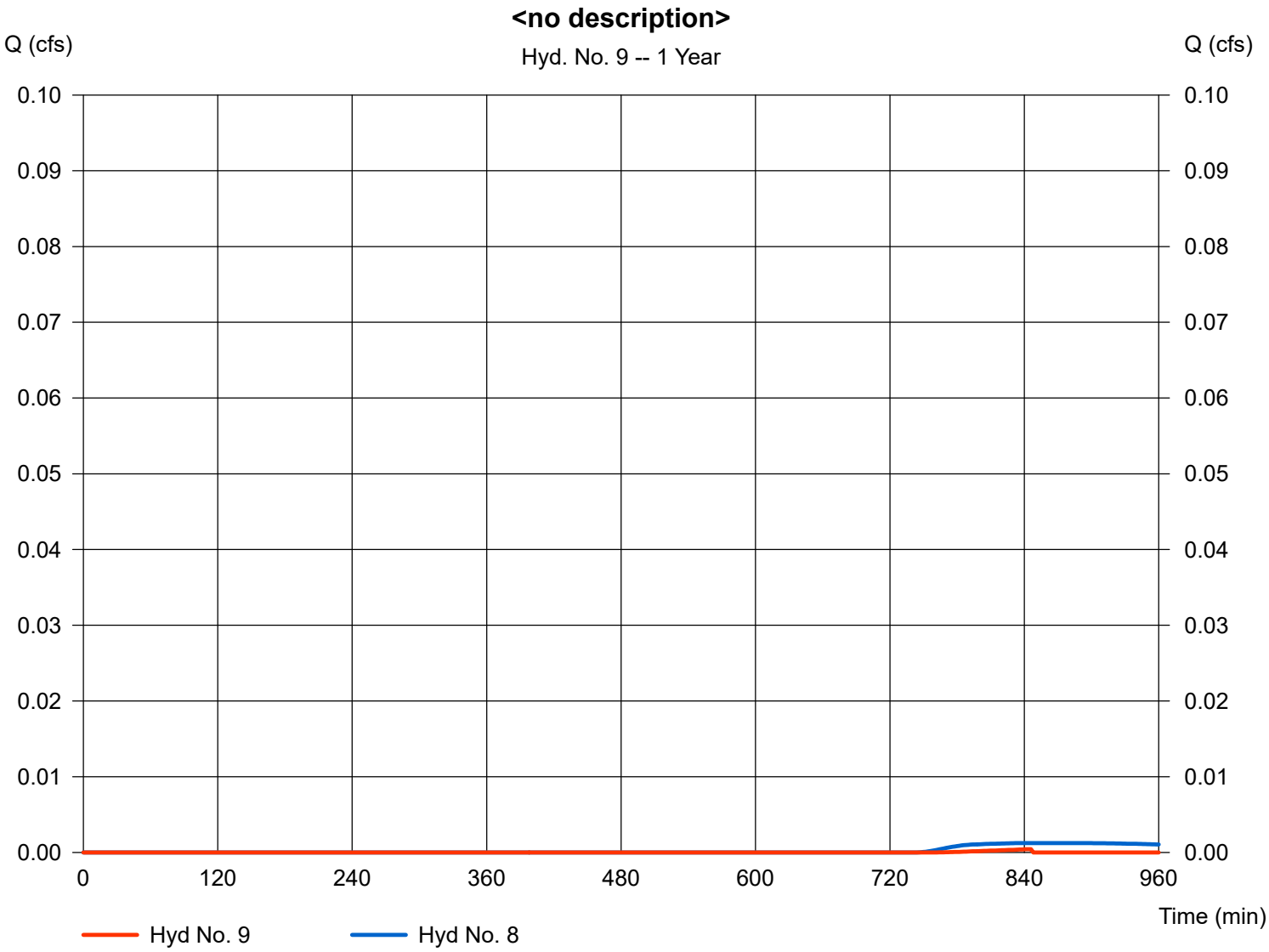
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 9

<no description>

Hydrograph type	=	Reach	Peak discharge	=	0.000 cfs
Storm frequency	=	1 yrs	Time to peak	=	846 min
Time interval	=	2 min	Hyd. volume	=	1 cuft
Inflow hyd. No.	=	8 - B1	Section type	=	Rectangular
Reach length	=	208.0 ft	Channel slope	=	1.4 %
Manning's n	=	0.200	Bottom width	=	50.0 ft
Side slope	=	0.0:1	Max. depth	=	0.5 ft
Rating curve x	=	0.065	Rating curve m	=	1.663
Ave. velocity	=	0.01 ft/s	Routing coeff.	=	0.0128

Modified Att-Kin routing method used.



Hydrograph Report

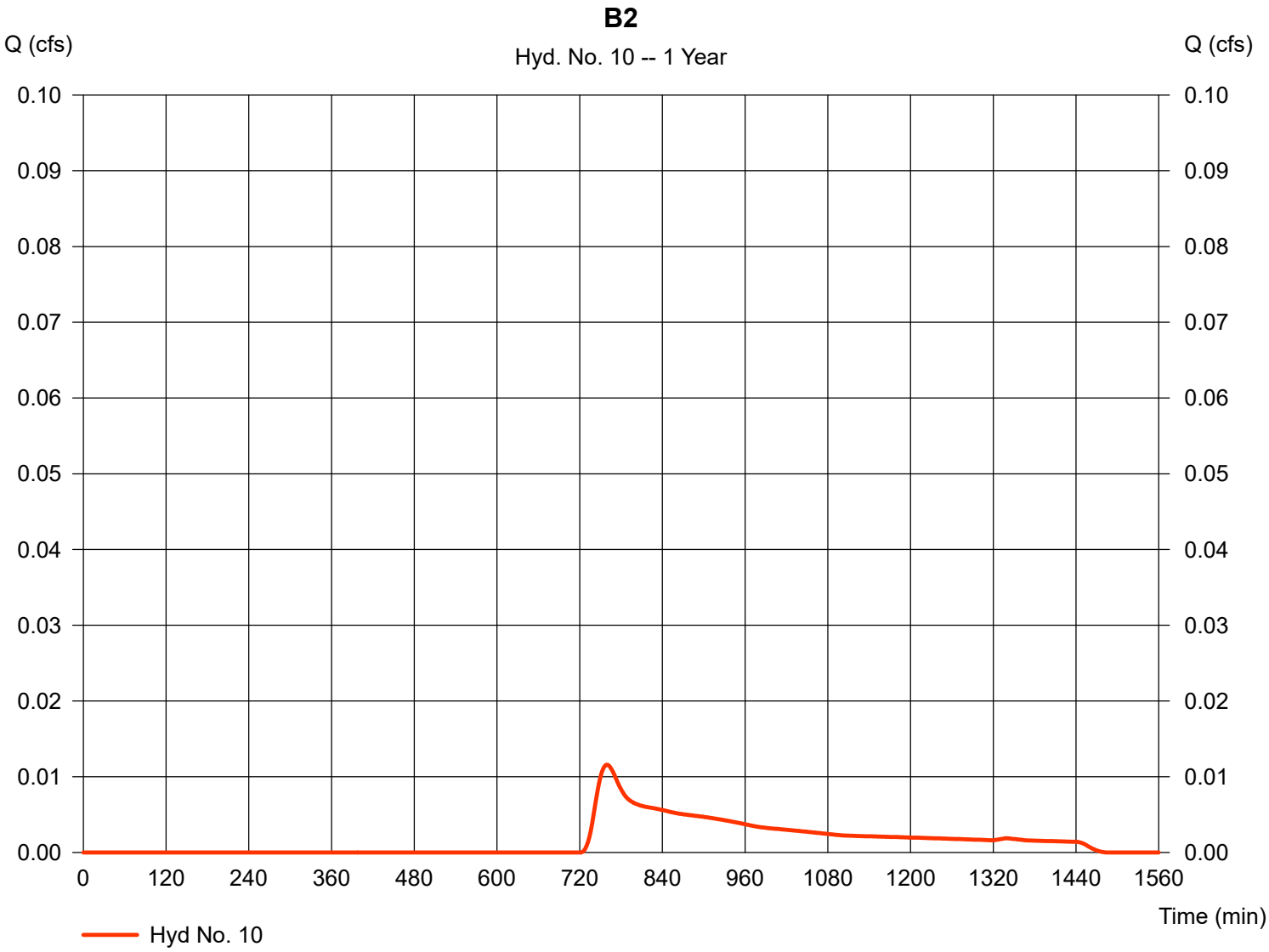
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 10

B2

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.012 cfs
Storm frequency	=	1 yrs	Time to peak	=	760 min
Time interval	=	2 min	Hyd. volume	=	145 cuft
Drainage area	=	0.570 ac	Curve number	=	79*
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	TR55	Time of conc. (Tc)	=	29.70 min
Total precip.	=	1.00 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

* Composite (Area/CN) = [(0.024 x 98) + (0.020 x 89) + (0.220 x 79) + (0.256 x 74) + (0.050 x 87)] / 0.570



TR55 Tc Worksheet

Hydraflow Hydrographs by Intelisolve v9.23

Hyd. No. 10

B2

Description		A		B		C		Totals
Sheet Flow								
Manning's n-value	=	0.170		0.020		0.240		
Flow length (ft)	=	129.0		32.0		68.0		
Two-year 24-hr precip. (in)	=	3.45		3.45		3.45		
Land slope (%)	=	0.70		1.30		2.40		
Travel Time (min)	**=**	**19.46**	**+**	**0.90**	**+**	**9.38**	**=**	**29.74**
Shallow Concentrated Flow								
Flow length (ft)	=	0.00		0.00		0.00		
Watercourse slope (%)	=	0.00		0.00		0.00		
Surface description	=	Paved		Paved		Paved		
Average velocity (ft/s)	=	0.00		0.00		0.00		
Travel Time (min)	**=**	**0.00**	**+**	**0.00**	**+**	**0.00**	**=**	**0.00**
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 ..... 29.70 min

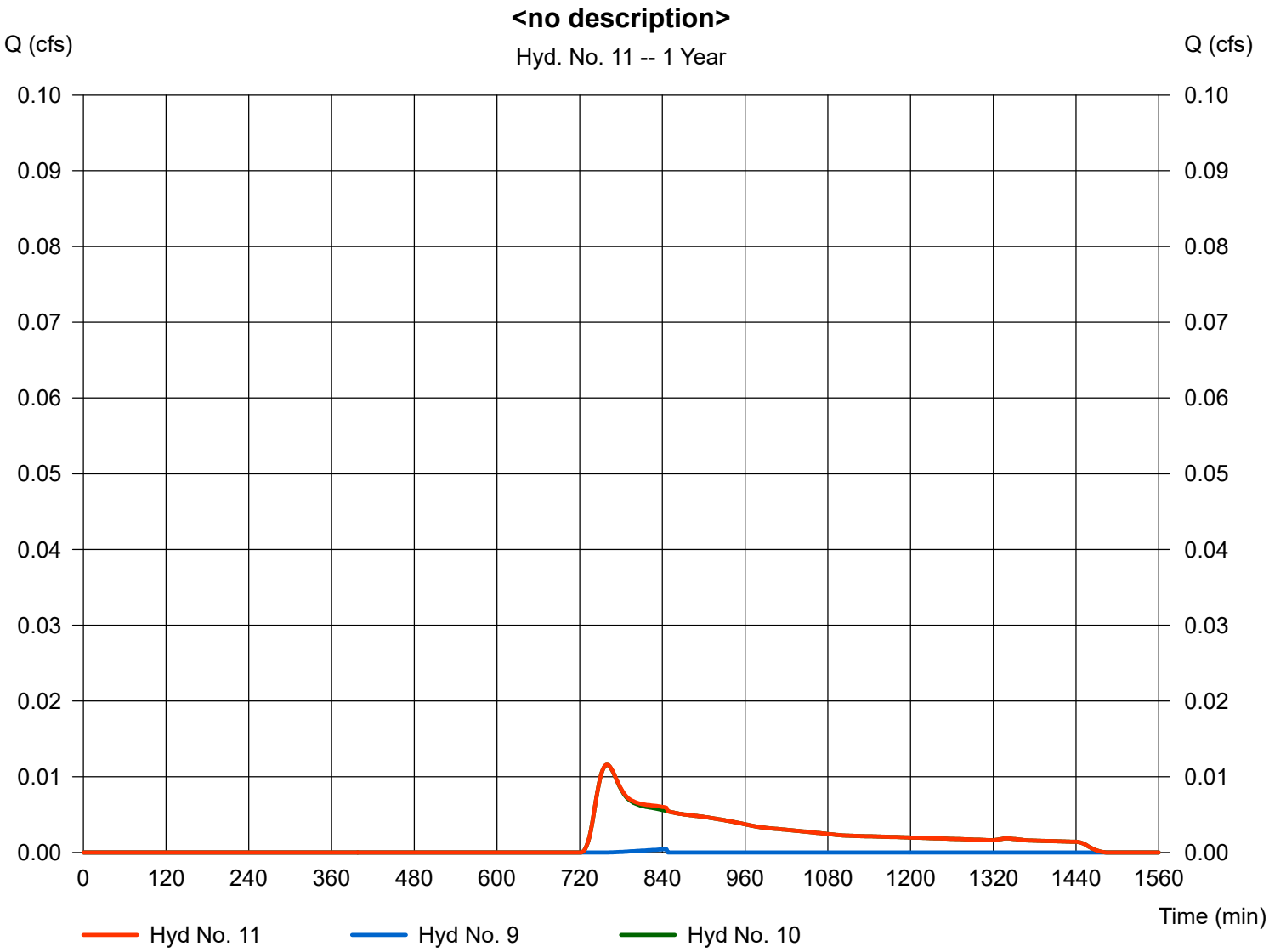
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 11

<no description>

Hydrograph type	=	Combine	Peak discharge	=	0.012 cfs
Storm frequency	=	1 yrs	Time to peak	=	760 min
Time interval	=	2 min	Hyd. volume	=	146 cuft
Inflow hyds.	=	9, 10	Contrib. drain. area	=	0.570 ac



Hydrograph Report

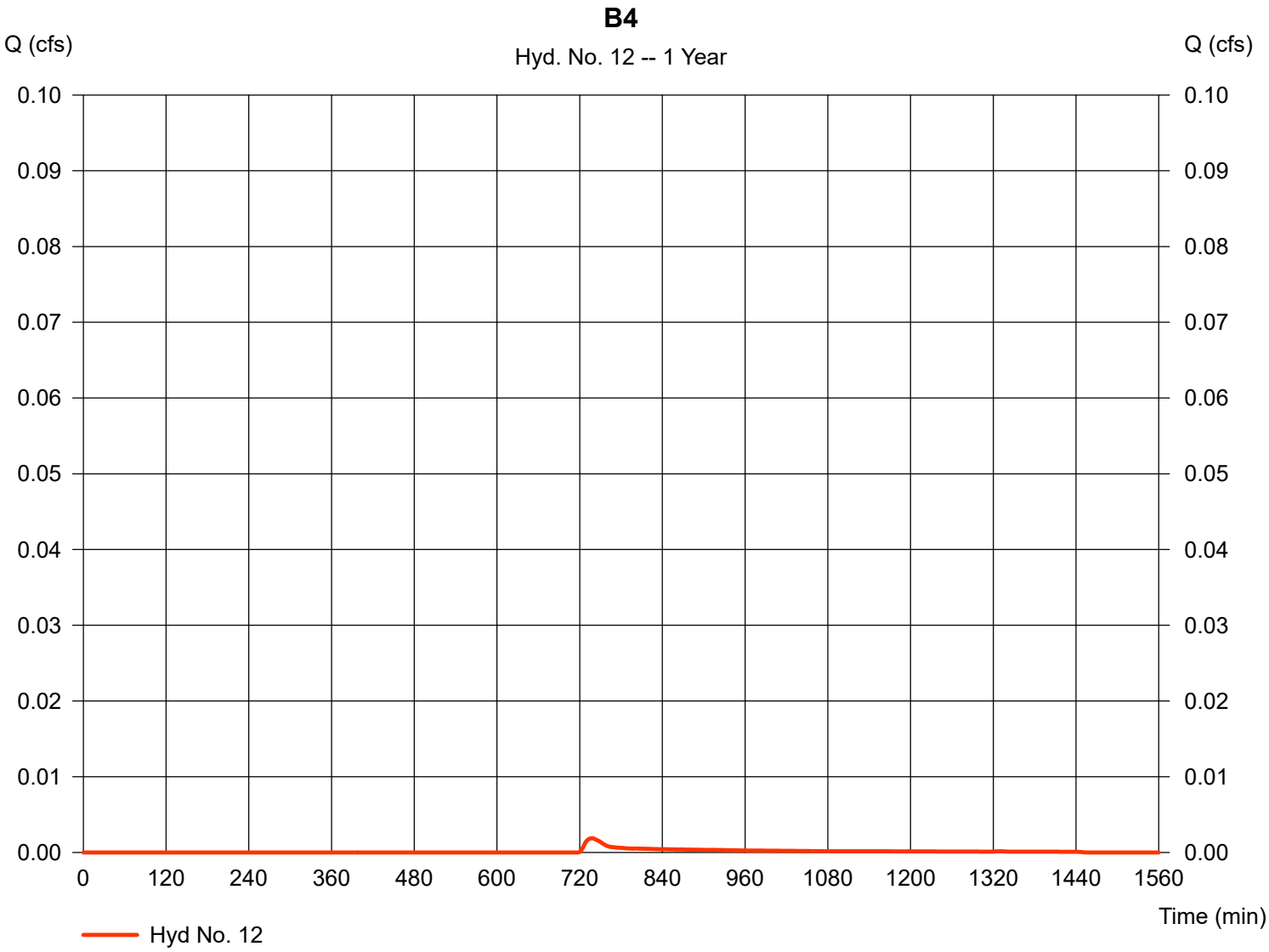
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 12

B4

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.002 cfs
Storm frequency	=	1 yrs	Time to peak	=	738 min
Time interval	=	2 min	Hyd. volume	=	13 cuft
Drainage area	=	0.030 ac	Curve number	=	82*
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	USER	Time of conc. (Tc)	=	10.00 min
Total precip.	=	1.00 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

* Composite (Area/CN) = [(0.010 x 98) + (0.020 x 74)] / 0.030



Hydrograph Report

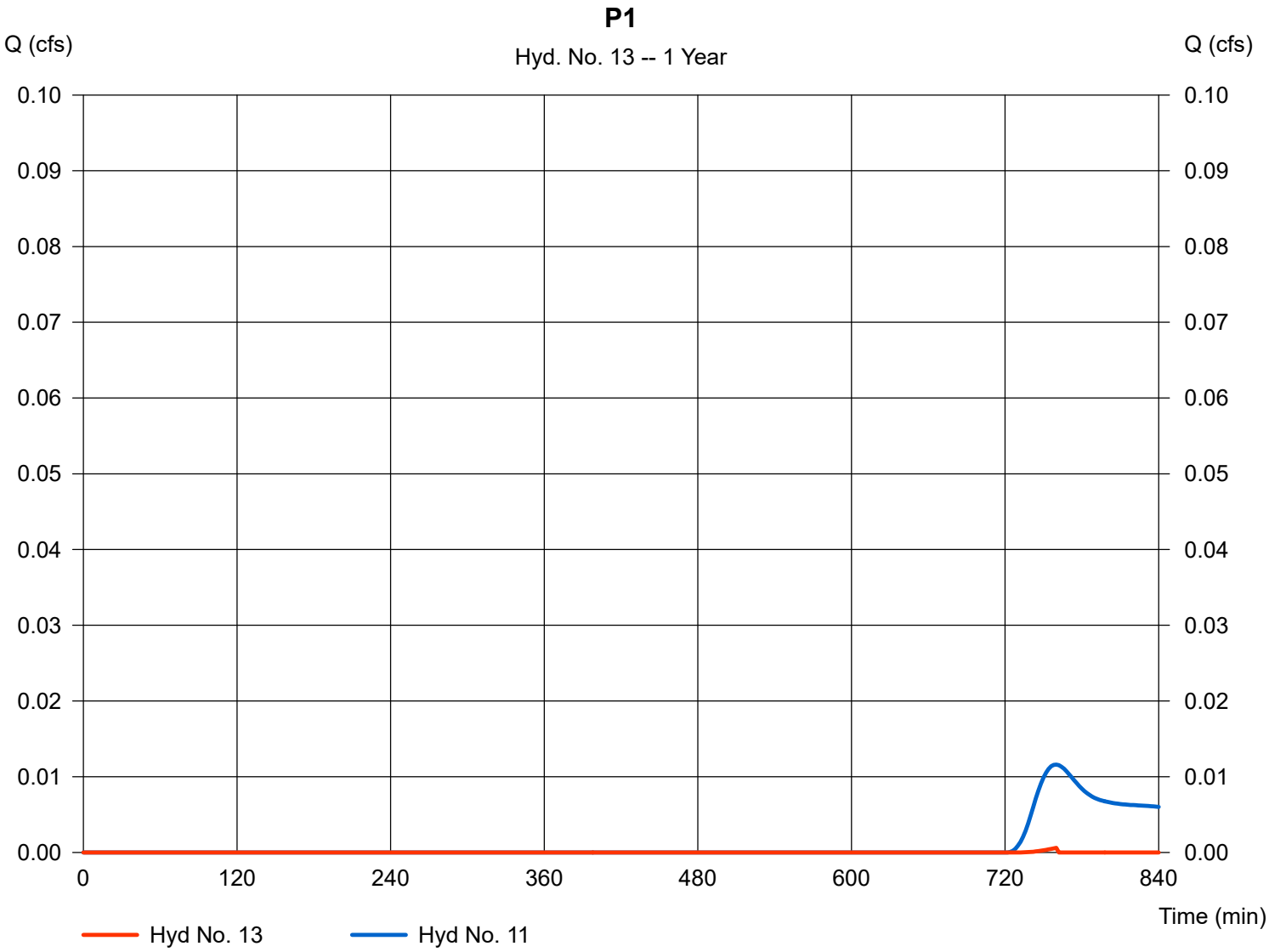
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 13

P1

Hydrograph type	=	Reach	Peak discharge	=	0.001 cfs
Storm frequency	=	1 yrs	Time to peak	=	760 min
Time interval	=	2 min	Hyd. volume	=	0 cuft
Inflow hyd. No.	=	11 - <no description>	Section type	=	Circular
Reach length	=	90.0 ft	Channel slope	=	4.0 %
Manning's n	=	0.009	Bottom width	=	2.0 ft
Side slope	=	0.0:1	Max. depth	=	0.0 ft
Rating curve x	=	20.055	Rating curve m	=	1.250
Ave. velocity	=	0.00 ft/s	Routing coeff.	=	0.0061

Modified Att-Kin routing method used.



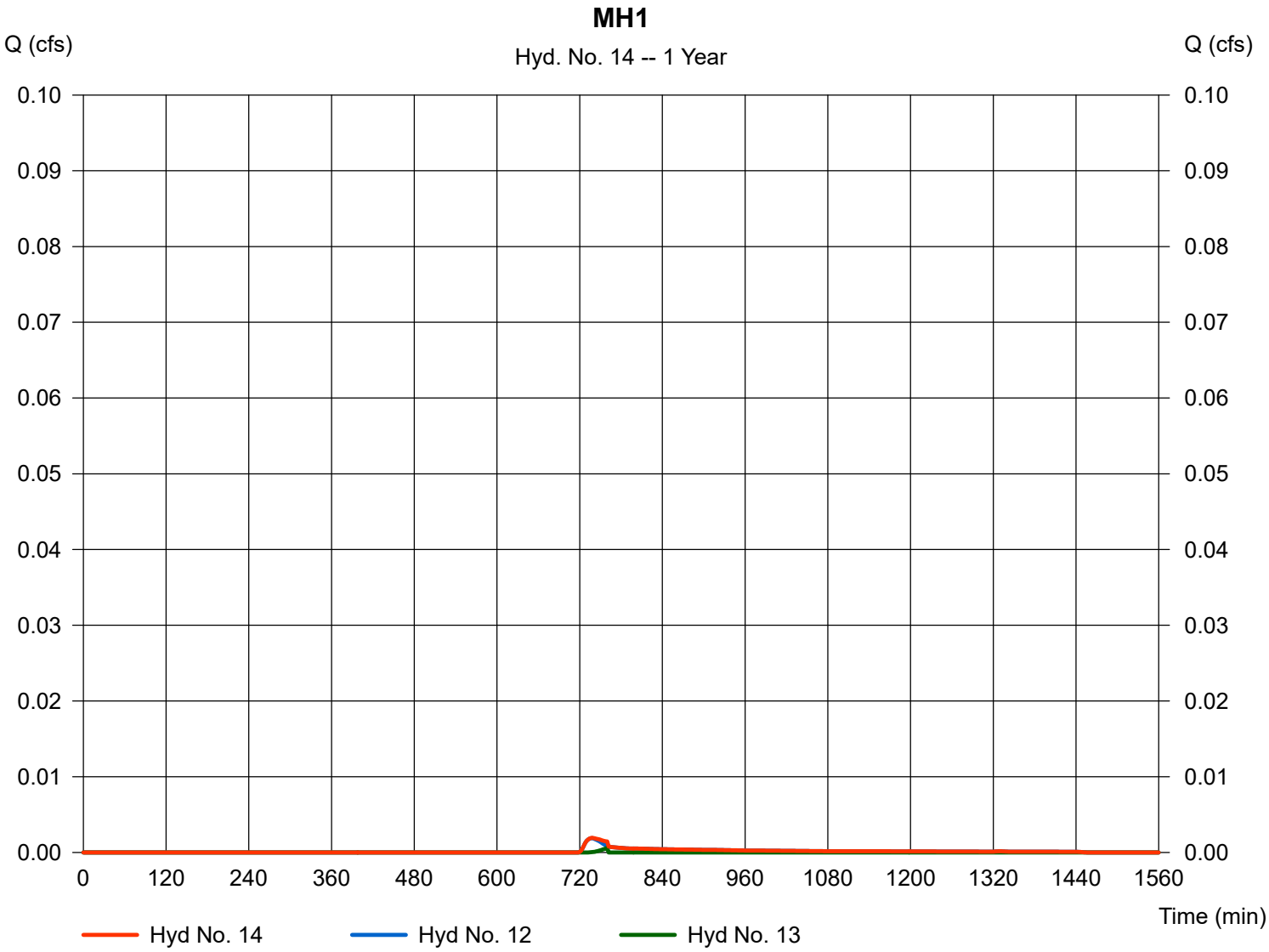
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 14

MH1

Hydrograph type	= Combine	Peak discharge	= 0.002 cfs
Storm frequency	= 1 yrs	Time to peak	= 738 min
Time interval	= 2 min	Hyd. volume	= 13 cuft
Inflow hyds.	= 12, 13	Contrib. drain. area	= 0.030 ac



Hydrograph Report

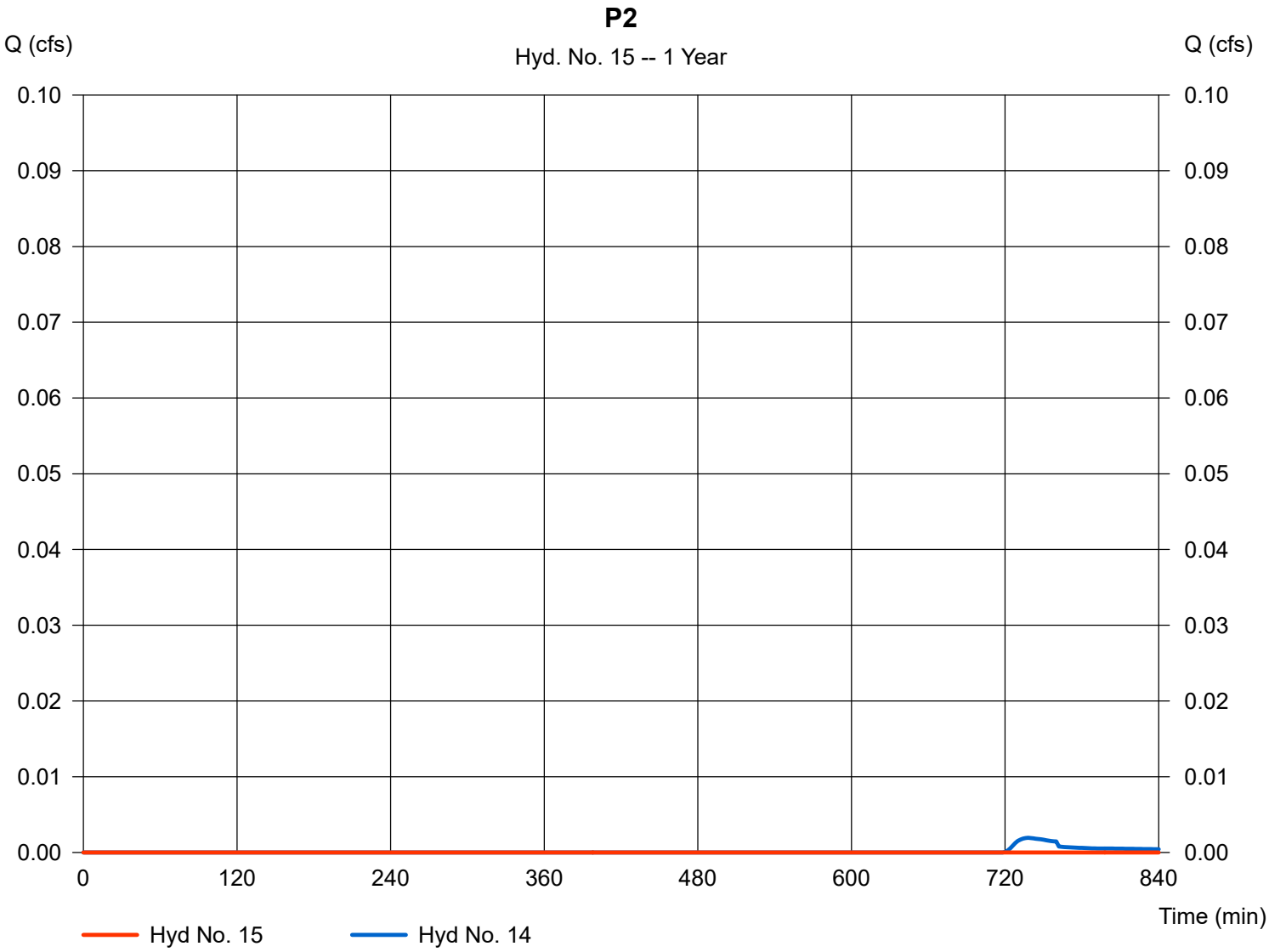
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 15

P2

Hydrograph type	= Reach	Peak discharge	= 0.000 cfs
Storm frequency	= 1 yrs	Time to peak	= 738 min
Time interval	= 2 min	Hyd. volume	= 0 cuft
Inflow hyd. No.	= 14 - MH1	Section type	= Circular
Reach length	= 100.0 ft	Channel slope	= 1.6 %
Manning's n	= 0.009	Bottom width	= 2.0 ft
Side slope	= 0.0:1	Max. depth	= 0.0 ft
Rating curve x	= 12.684	Rating curve m	= 1.250
Ave. velocity	= 0.00 ft/s	Routing coeff.	= 0.0009

Modified Att-Kin routing method used.



Hydrograph Report

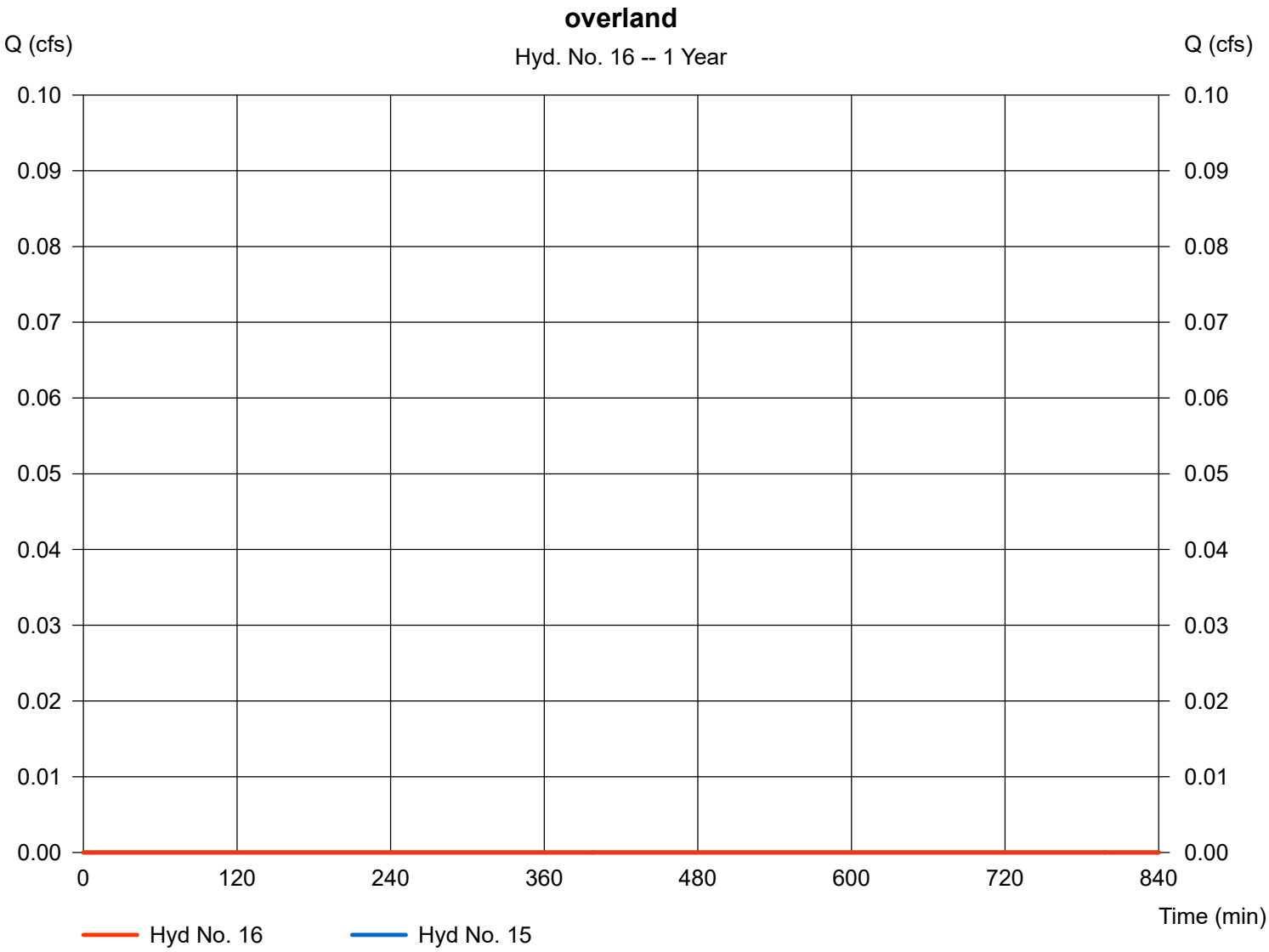
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 16

overland

Hydrograph type	=	Reach	Peak discharge	=	0.000 cfs
Storm frequency	=	1 yrs	Time to peak	=	738 min
Time interval	=	2 min	Hyd. volume	=	0 cuft
Inflow hyd. No.	=	15 - P2	Section type	=	Rectangular
Reach length	=	156.0 ft	Channel slope	=	2.1 %
Manning's n	=	0.400	Bottom width	=	50.0 ft
Side slope	=	0.0:1	Max. depth	=	0.5 ft
Rating curve x	=	0.040	Rating curve m	=	1.663
Ave. velocity	=	0.00 ft/s	Routing coeff.	=	0.0000

Modified Att-Kin routing method used.



Hydrograph Report

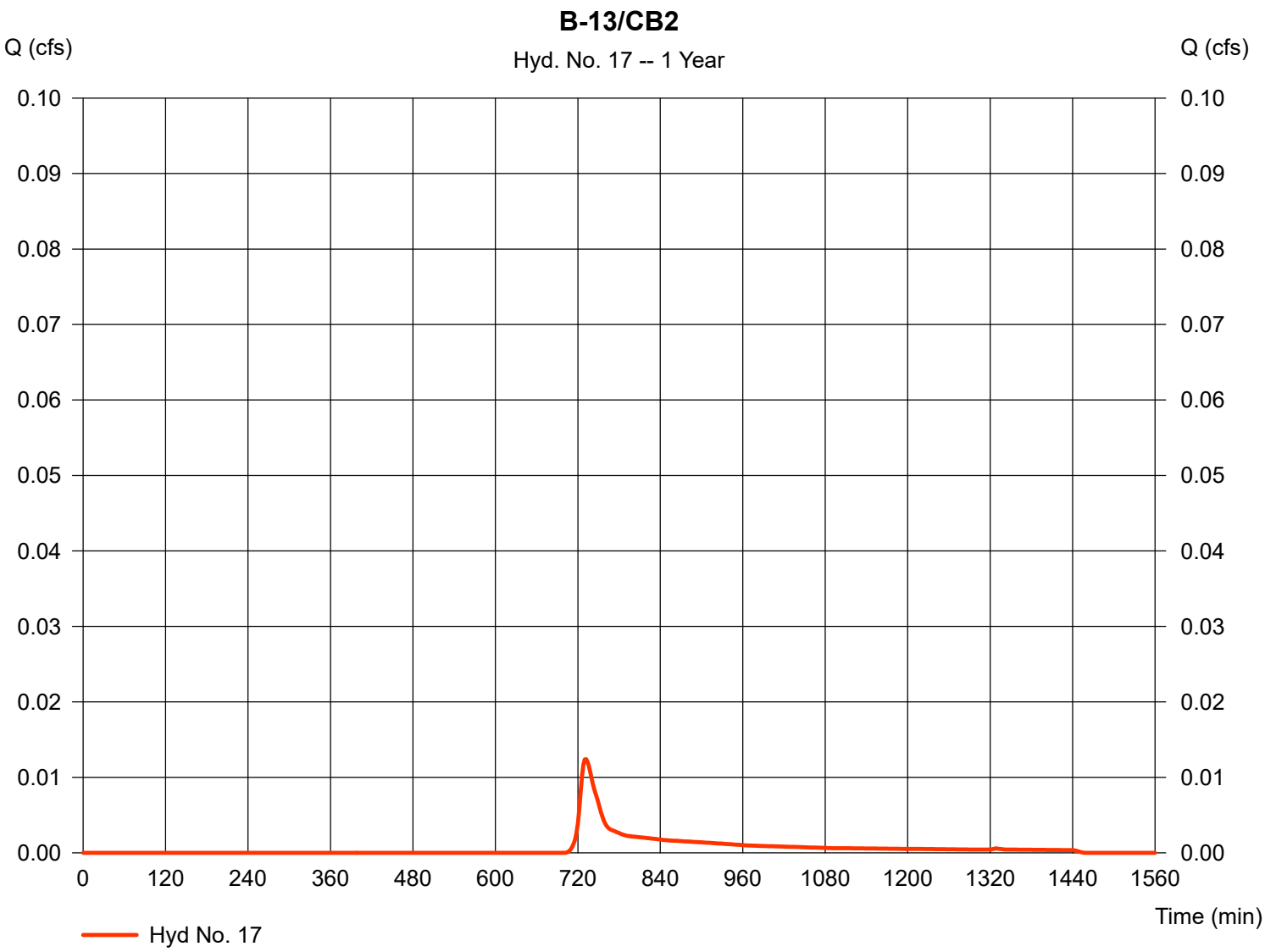
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 17

B-13/CB2

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.012 cfs
Storm frequency	=	1 yrs	Time to peak	=	732 min
Time interval	=	2 min	Hyd. volume	=	59 cuft
Drainage area	=	0.080 ac	Curve number	=	86*
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	USER	Time of conc. (Tc)	=	10.00 min
Total precip.	=	1.00 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

* Composite (Area/CN) = [(0.040 x 74) + (0.040 x 98)] / 0.080



Hydrograph Report

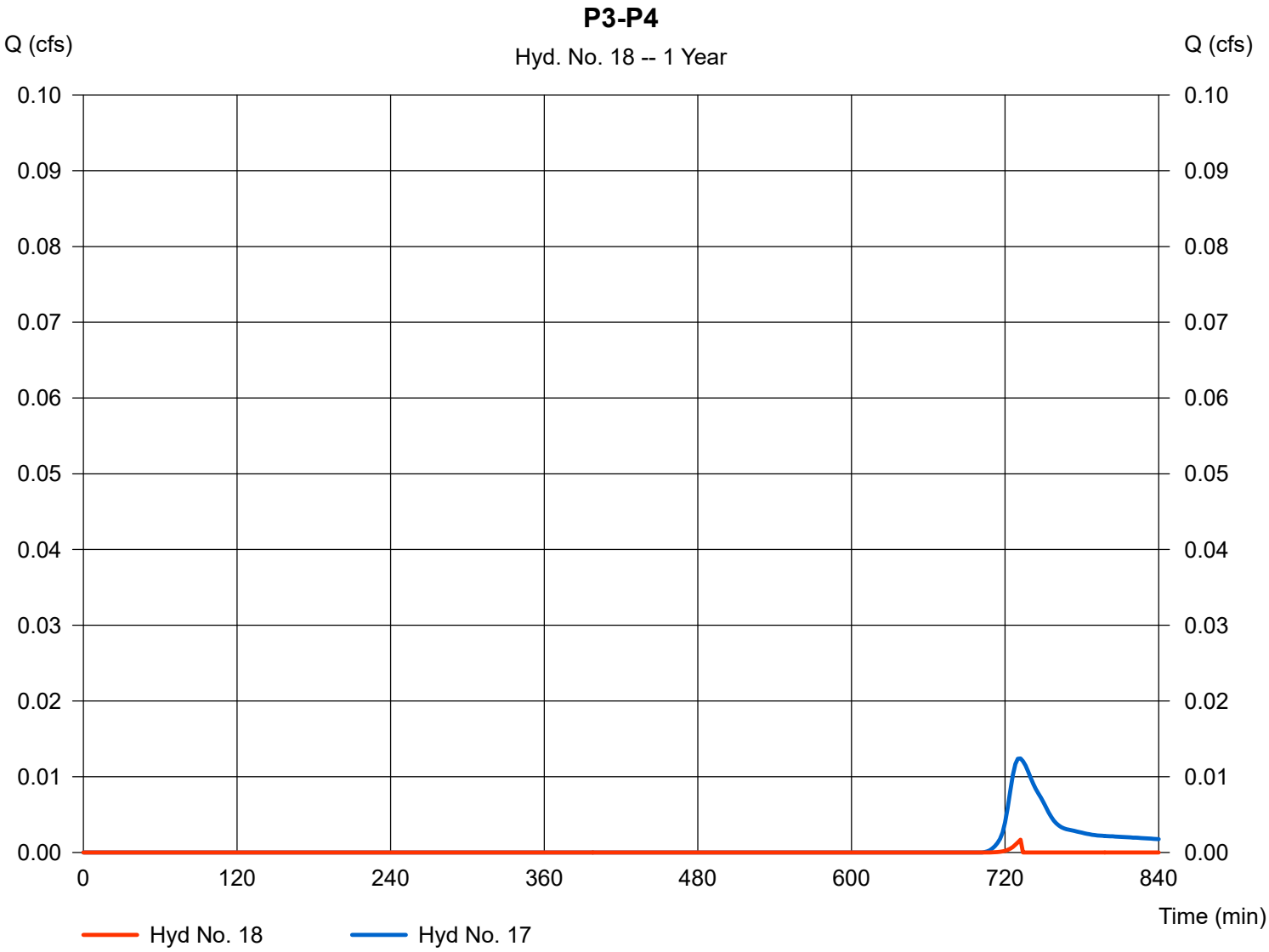
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 18

P3-P4

Hydrograph type	=	Reach	Peak discharge	=	0.002 cfs
Storm frequency	=	1 yrs	Time to peak	=	732 min
Time interval	=	2 min	Hyd. volume	=	1 cuft
Inflow hyd. No.	=	17 - B-13/CB2	Section type	=	Circular
Reach length	=	34.0 ft	Channel slope	=	2.0 %
Manning's n	=	0.009	Bottom width	=	1.5 ft
Side slope	=	0.0:1	Max. depth	=	0.0 ft
Rating curve x	=	13.517	Rating curve m	=	1.250
Ave. velocity	=	0.01 ft/s	Routing coeff.	=	0.0305

Modified Att-Kin routing method used.



Hydrograph Report

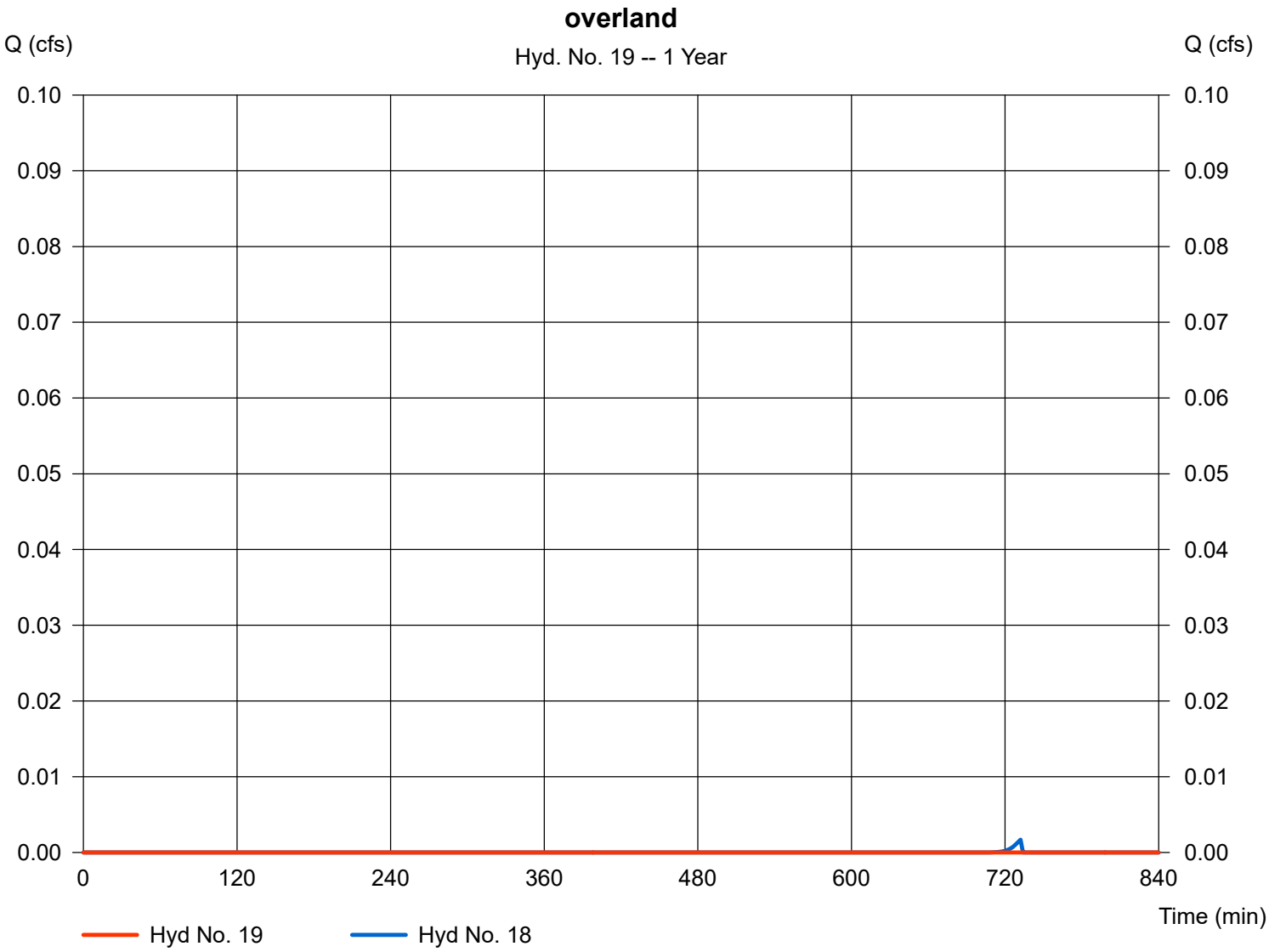
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 19

overland

Hydrograph type	=	Reach	Peak discharge	=	0.000 cfs
Storm frequency	=	1 yrs	Time to peak	=	732 min
Time interval	=	2 min	Hyd. volume	=	0 cuft
Inflow hyd. No.	=	18 - P3-P4	Section type	=	Rectangular
Reach length	=	157.0 ft	Channel slope	=	2.0 %
Manning's n	=	0.400	Bottom width	=	50.0 ft
Side slope	=	0.0:1	Max. depth	=	0.5 ft
Rating curve x	=	0.039	Rating curve m	=	1.663
Ave. velocity	=	0.00 ft/s	Routing coeff.	=	0.0014

Modified Att-Kin routing method used.



Hydrograph Report

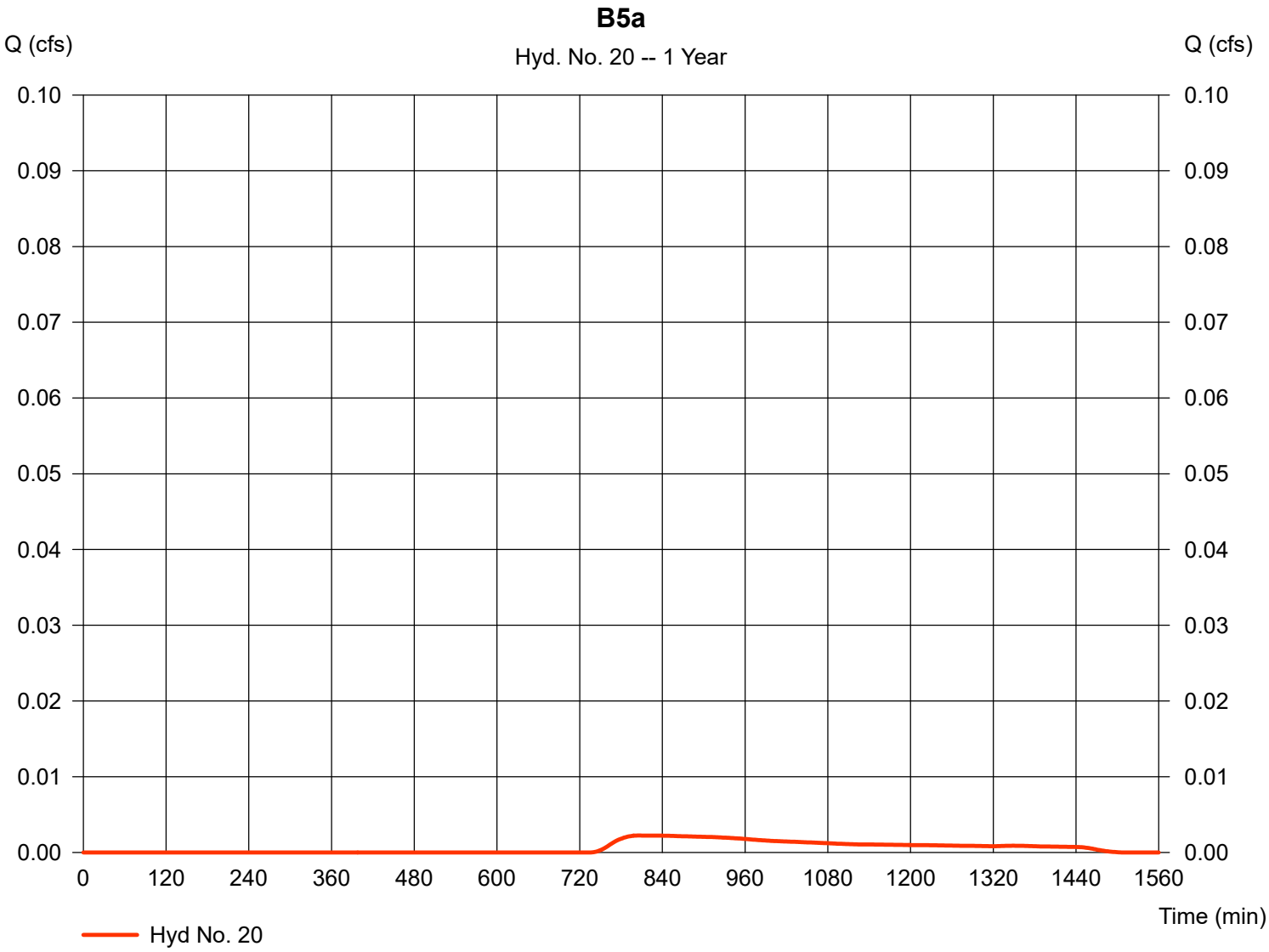
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 20

B5a

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.002 cfs
Storm frequency	=	1 yrs	Time to peak	=	806 min
Time interval	=	2 min	Hyd. volume	=	57 cuft
Drainage area	=	0.410 ac	Curve number	=	76*
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	TR55	Time of conc. (Tc)	=	44.10 min
Total precip.	=	1.00 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

* Composite (Area/CN) = [(0.020 x 74) + (0.050 x 87) + (0.320 x 73) + (0.020 x 98)] / 0.410



TR55 Tc Worksheet

Hyd. No. 20

B5a

Description		A		B		C		Totals
Sheet Flow								
Manning's n-value	=	0.240		0.240		0.170		
Flow length (ft)	=	120.0		115.0		45.0		
Two-year 24-hr precip. (in)	=	3.45		3.45		3.45		
Land slope (%)	=	1.30		1.10		4.40		
Travel Time (min)	**=**	**18.89**	**+**	**19.52**	**+**	**4.02**	**=**	**42.43**
Shallow Concentrated Flow								
Flow length (ft)	=	145.00		0.00		0.00		
Watercourse slope (%)	=	0.80		0.00		0.00		
Surface description	=	Unpaved		Paved		Paved		
Average velocity (ft/s)	=	1.44		0.00		0.00		
Travel Time (min)	**=**	**1.67**	**+**	**0.00**	**+**	**0.00**	**=**	**1.67**
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 ..... 44.10 min

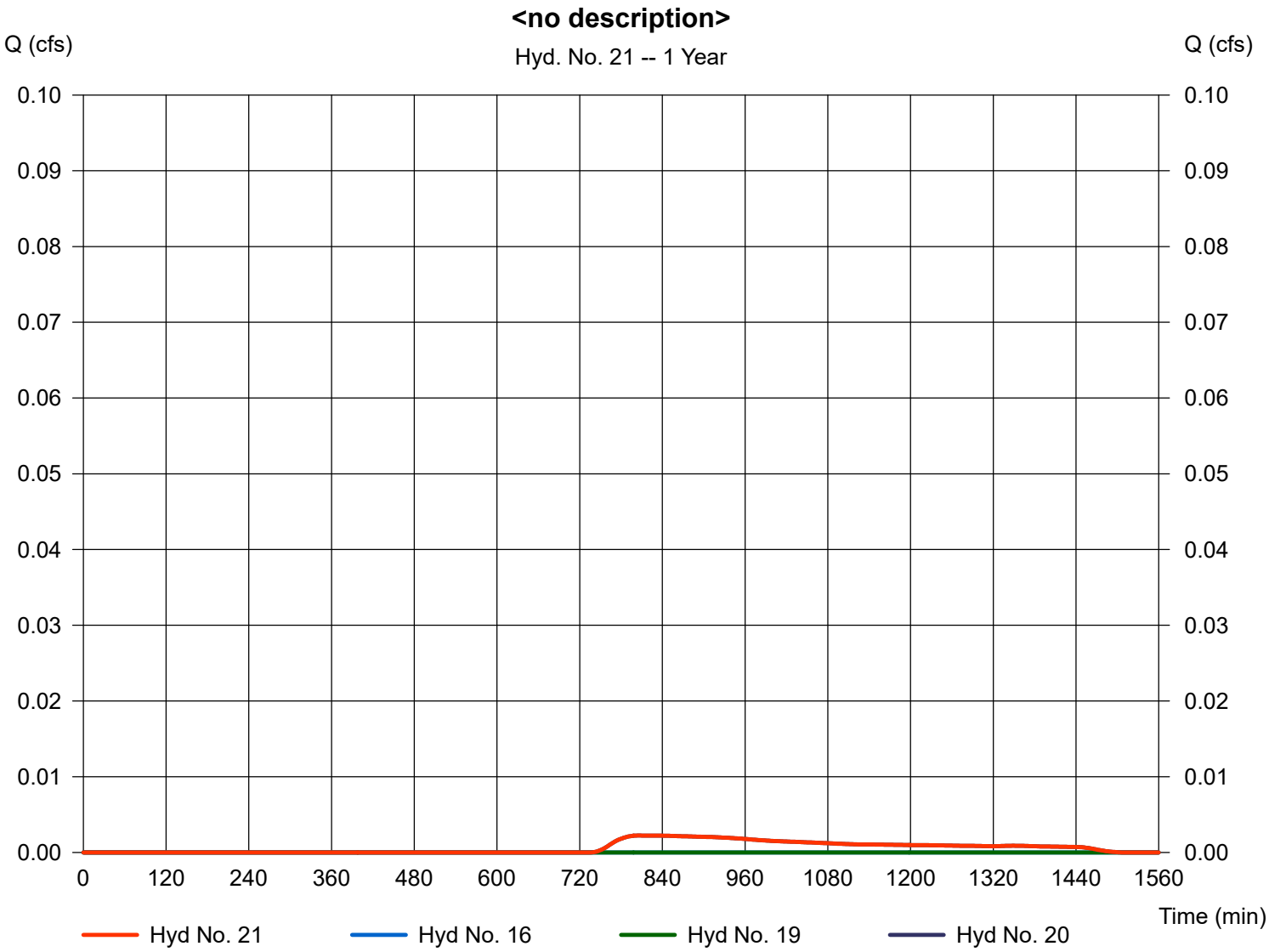
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 21

<no description>

Hydrograph type	=	Combine	Peak discharge	=	0.002 cfs
Storm frequency	=	1 yrs	Time to peak	=	806 min
Time interval	=	2 min	Hyd. volume	=	57 cuft
Inflow hyds.	=	16, 19, 20	Contrib. drain. area	=	0.410 ac



Hydrograph Report

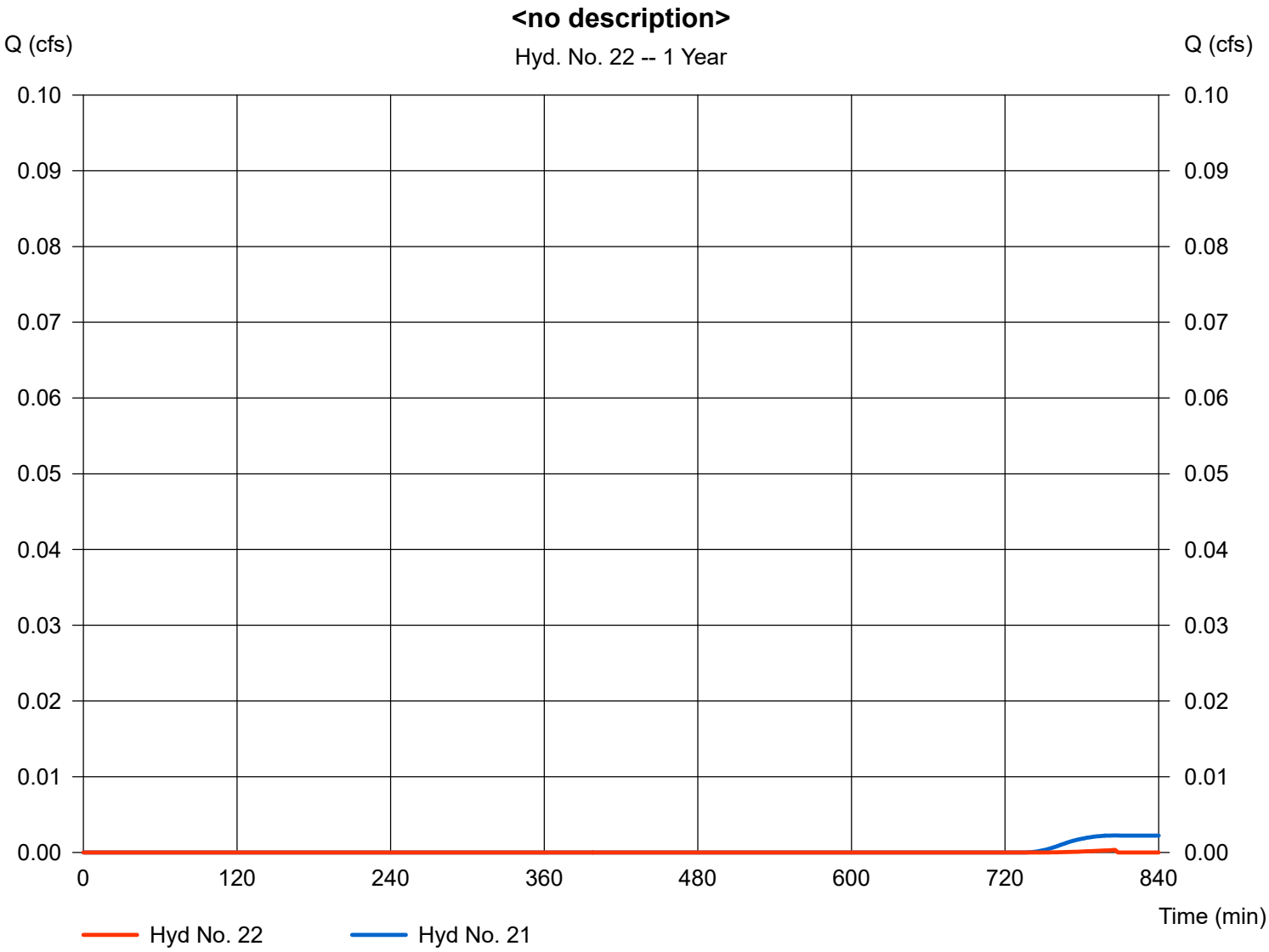
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 22

<no description>

Hydrograph type	= Reach	Peak discharge	= 0.000 cfs
Storm frequency	= 1 yrs	Time to peak	= 806 min
Time interval	= 2 min	Hyd. volume	= 0 cuft
Inflow hyd. No.	= 21 - <no description>	Section type	= Rectangular
Reach length	= 266.0 ft	Channel slope	= 1.0 %
Manning's n	= 0.400	Bottom width	= 40.0 ft
Side slope	= 0.0:1	Max. depth	= 0.5 ft
Rating curve x	= 0.032	Rating curve m	= 1.662
Ave. velocity	= 0.01 ft/s	Routing coeff.	= 0.0083

Modified Att-Kin routing method used.



Hydrograph Report

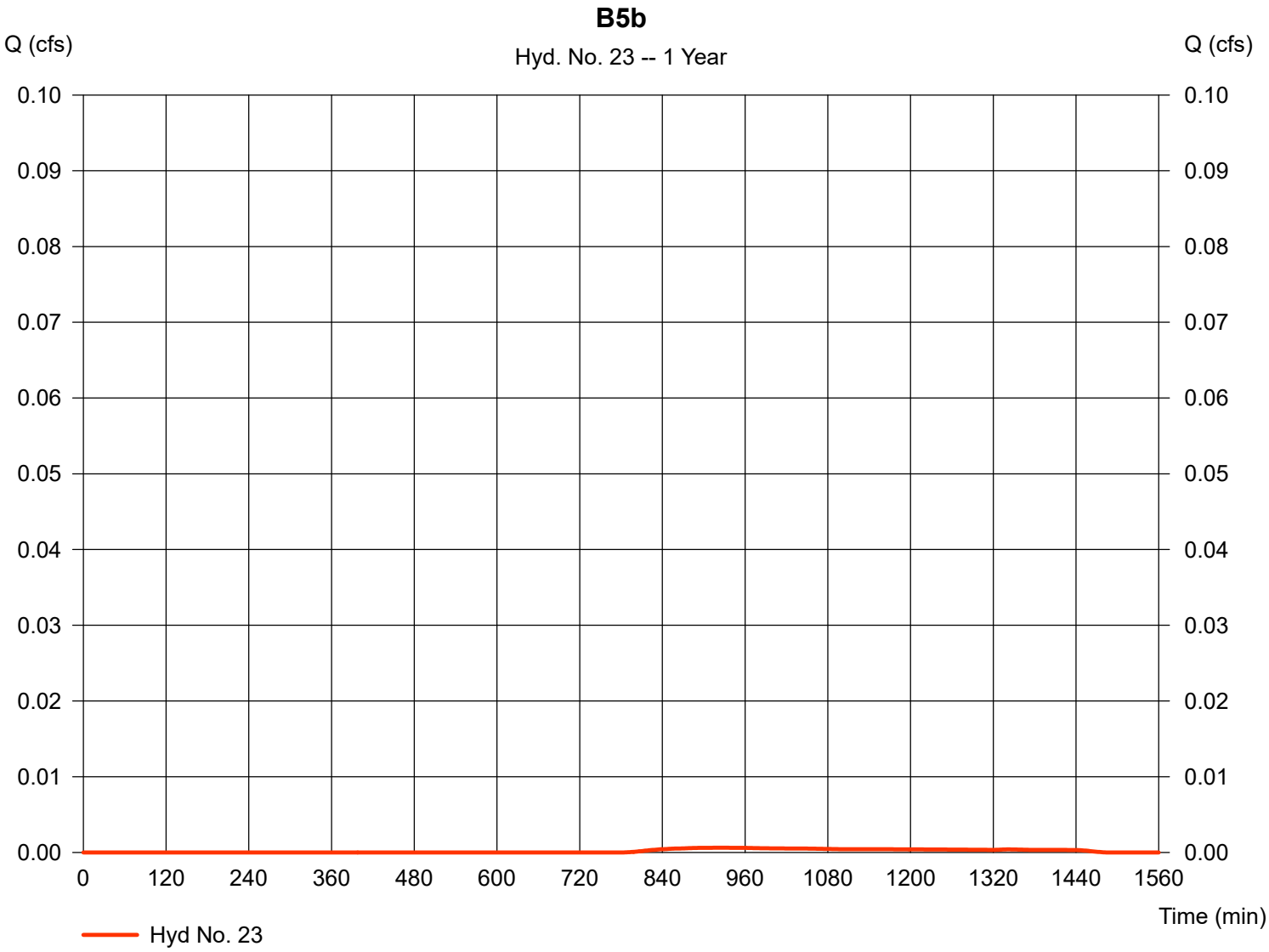
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 23

B5b

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.001 cfs
Storm frequency	=	1 yrs	Time to peak	=	926 min
Time interval	=	2 min	Hyd. volume	=	18 cuft
Drainage area	=	0.280 ac	Curve number	=	73*
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	TR55	Time of conc. (Tc)	=	30.60 min
Total precip.	=	1.00 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

* Composite (Area/CN) = [(0.280 x 73) + (0.004 x 87)] / 0.280



TR55 Tc Worksheet

Hyd. No. 23

B5b

Description		A		B		C		Totals
Sheet Flow								
Manning's n-value	=	0.400		0.011		0.011		
Flow length (ft)	=	126.0		0.0		0.0		
Two-year 24-hr precip. (in)	=	3.45		0.00		0.00		
Land slope (%)	=	1.40		0.00		0.00		
Travel Time (min)	**=**	**28.70**	**+**	**0.00**	**+**	**0.00**	**=**	**28.70**
Shallow Concentrated Flow								
Flow length (ft)	=	140.00		0.00		0.00		
Watercourse slope (%)	=	0.60		0.00		0.00		
Surface description	=	Unpaved		Paved		Paved		
Average velocity (ft/s)	=	1.25		0.00		0.00		
Travel Time (min)	**=**	**1.87**	**+**	**0.00**	**+**	**0.00**	**=**	**1.87**
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 ..... 30.60 min

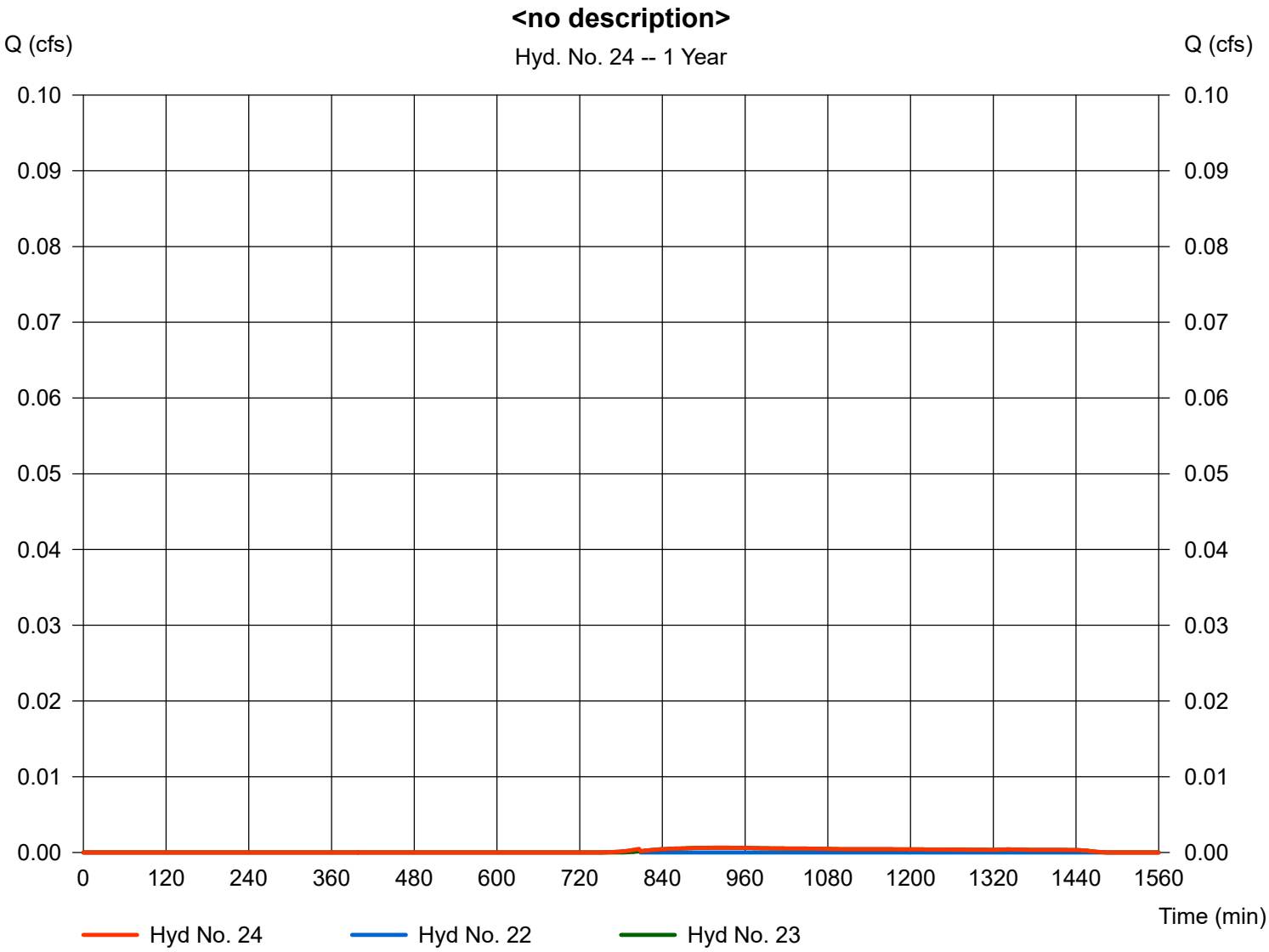
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 24

<no description>

Hydrograph type	=	Combine	Peak discharge	=	0.001 cfs
Storm frequency	=	1 yrs	Time to peak	=	926 min
Time interval	=	2 min	Hyd. volume	=	18 cuft
Inflow hyds.	=	22, 23	Contrib. drain. area	=	0.280 ac



Hydrograph Report

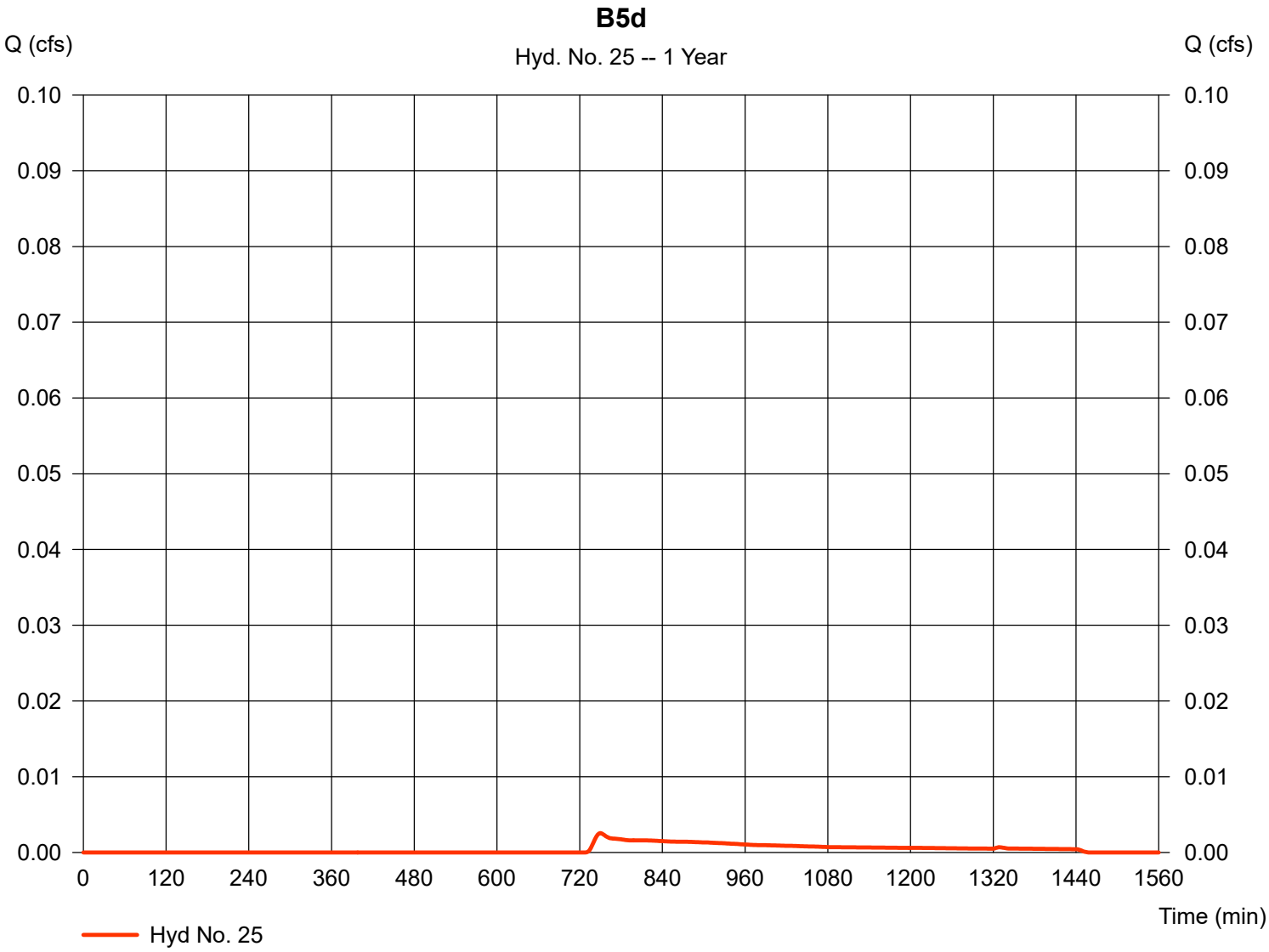
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 25

B5d

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.003 cfs
Storm frequency	=	1 yrs	Time to peak	=	750 min
Time interval	=	2 min	Hyd. volume	=	39 cuft
Drainage area	=	0.220 ac	Curve number	=	77*
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	USER	Time of conc. (Tc)	=	10.00 min
Total precip.	=	1.00 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

* Composite (Area/CN) = [(0.030 x 98) + (0.190 x 74)] / 0.220



Hydrograph Report

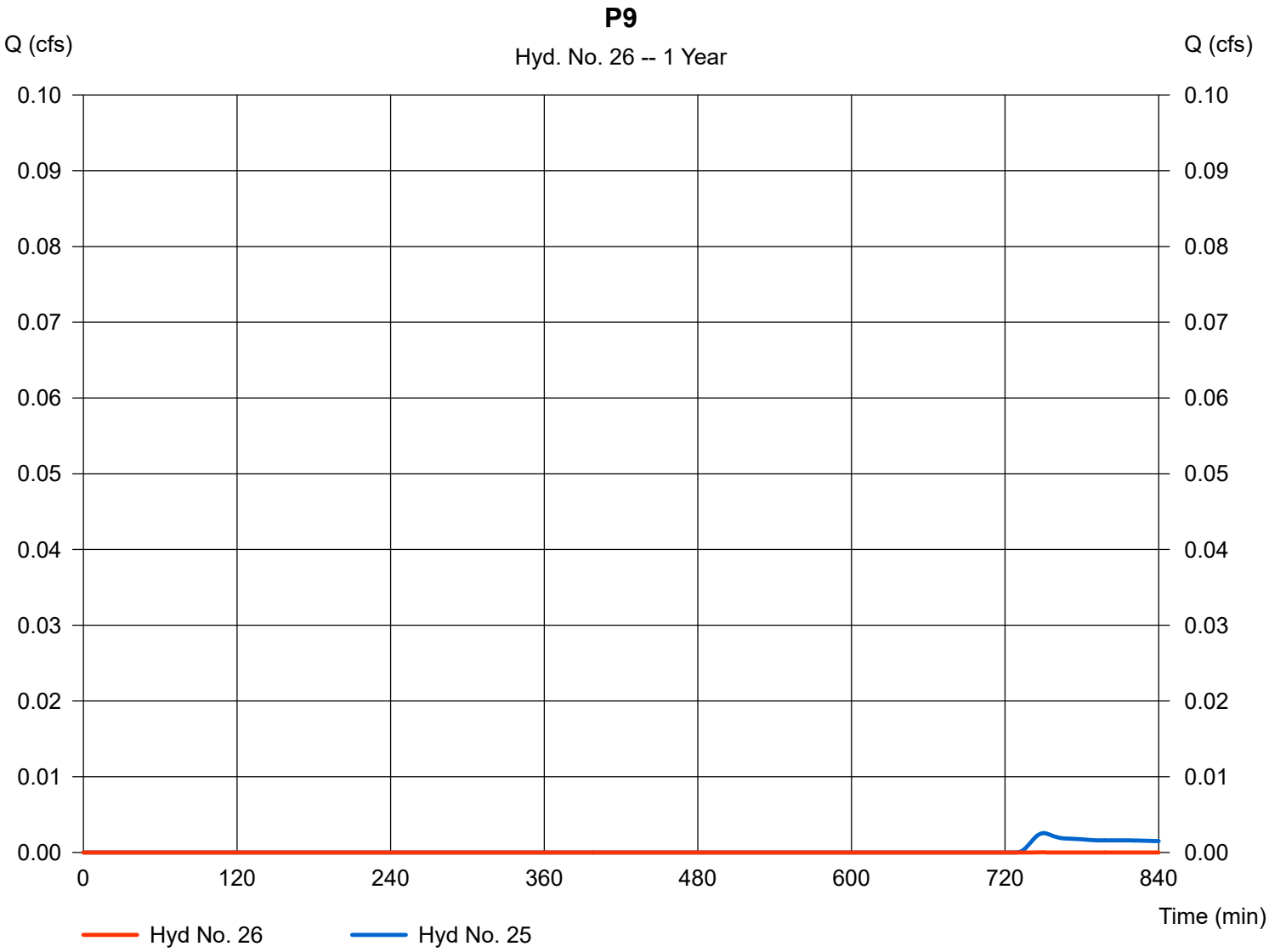
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 26

P9

Hydrograph type	=	Reach	Peak discharge	=	0.000 cfs
Storm frequency	=	1 yrs	Time to peak	=	750 min
Time interval	=	2 min	Hyd. volume	=	0 cuft
Inflow hyd. No.	=	25 - B5d	Section type	=	Circular
Reach length	=	45.0 ft	Channel slope	=	0.5 %
Manning's n	=	0.009	Bottom width	=	2.0 ft
Side slope	=	0.0:1	Max. depth	=	0.0 ft
Rating curve x	=	7.091	Rating curve m	=	1.250
Ave. velocity	=	0.00 ft/s	Routing coeff.	=	0.0027

Modified Att-Kin routing method used.



Hydrograph Report

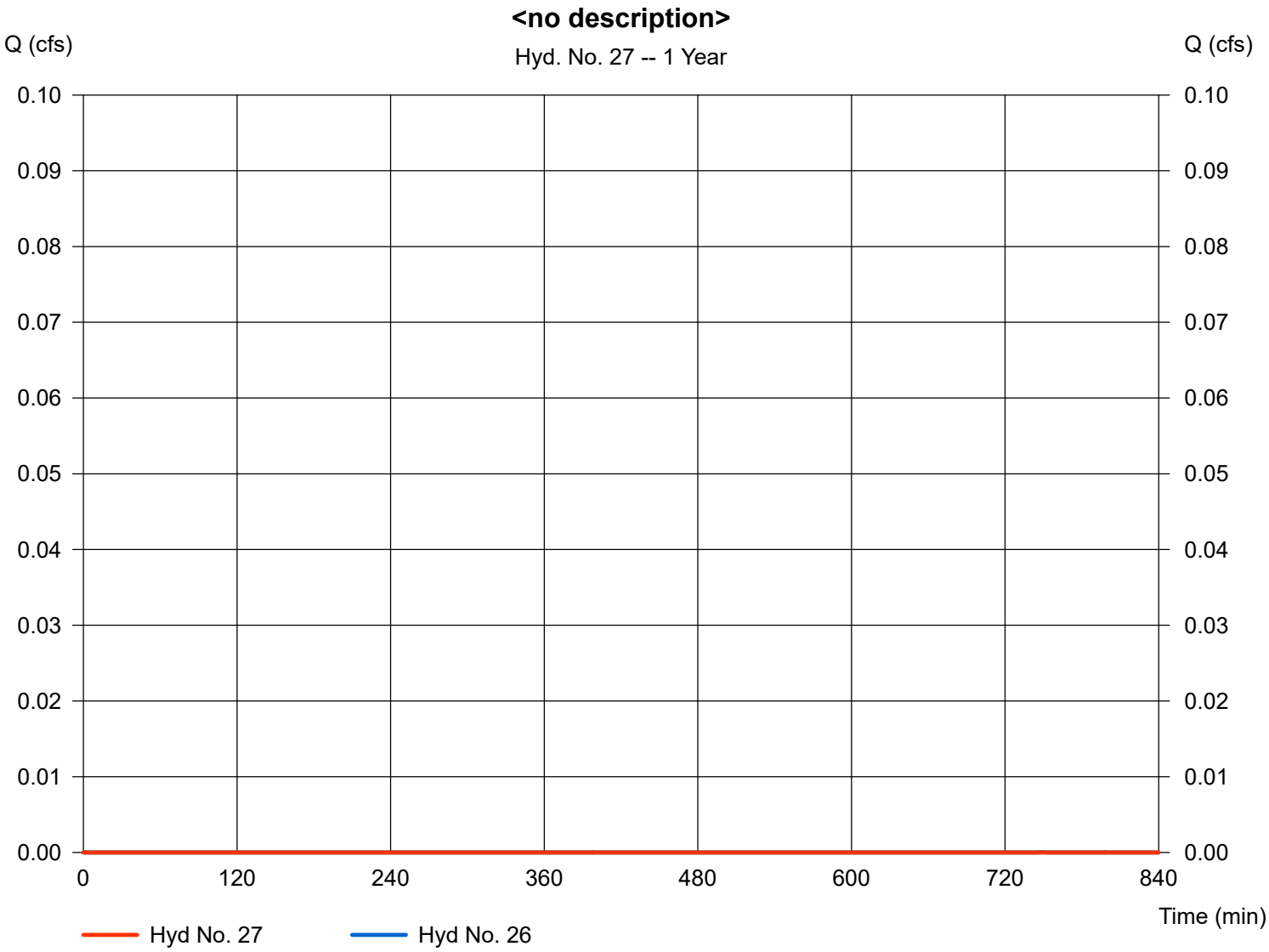
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 27

<no description>

Hydrograph type	= Reach	Peak discharge	= 0.000 cfs
Storm frequency	= 1 yrs	Time to peak	= 750 min
Time interval	= 2 min	Hyd. volume	= 0 cuft
Inflow hyd. No.	= 26 - P9	Section type	= Trapezoidal
Reach length	= 98.0 ft	Channel slope	= 4.1 %
Manning's n	= 0.200	Bottom width	= 20.0 ft
Side slope	= 4.0:1	Max. depth	= 0.5 ft
Rating curve x	= 0.205	Rating curve m	= 1.259
Ave. velocity	= 0.02 ft/s	Routing coeff.	= 0.0307

Modified Att-Kin routing method used.



Hydrograph Report

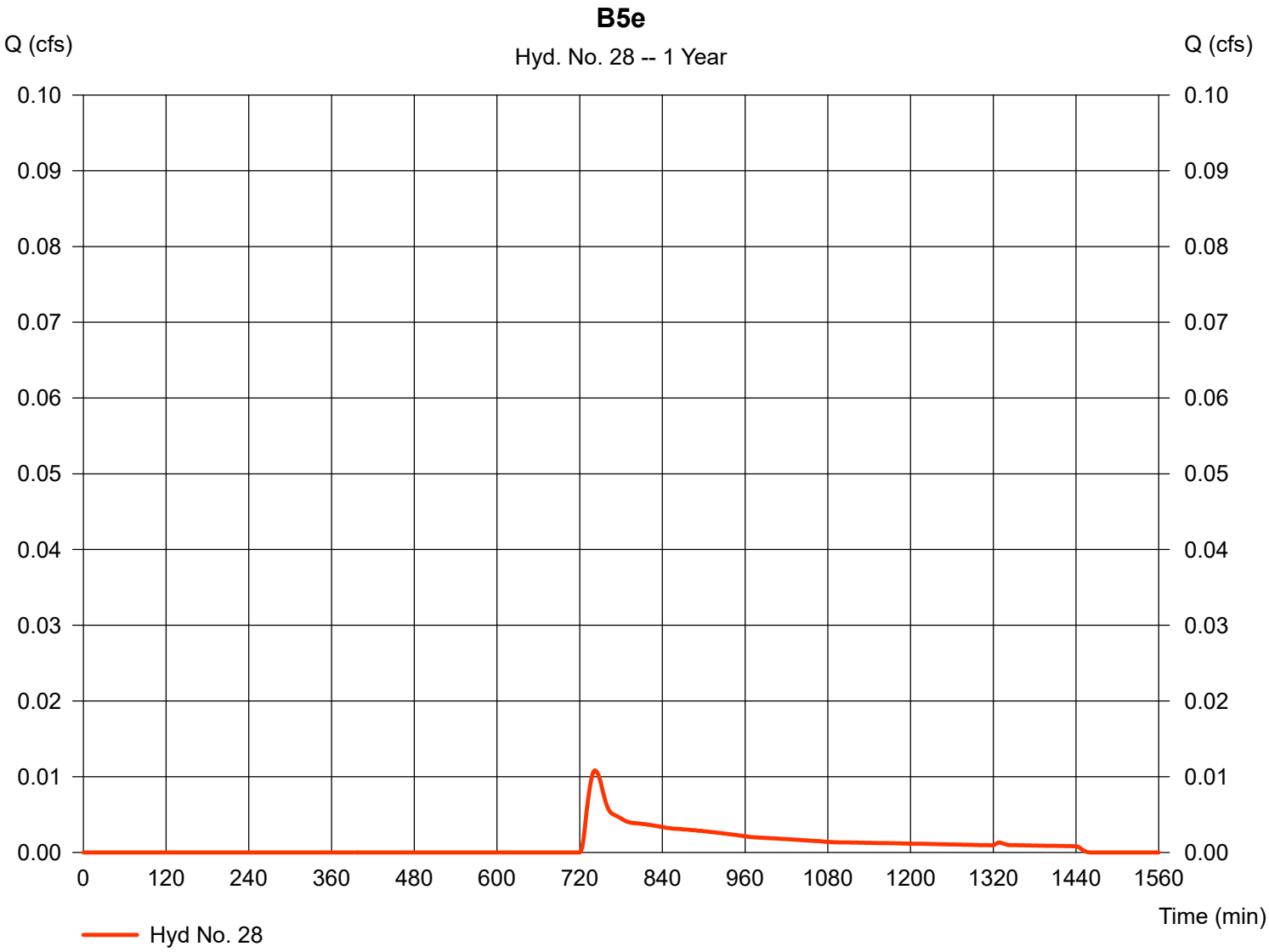
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 28

B5e

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.011 cfs
Storm frequency	=	1 yrs	Time to peak	=	742 min
Time interval	=	2 min	Hyd. volume	=	94 cuft
Drainage area	=	0.300 ac	Curve number	=	80*
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	TR55	Time of conc. (Tc)	=	10.10 min
Total precip.	=	1.00 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

* Composite (Area/CN) = [(0.028 x 87) + (0.276 x 79)] / 0.300



TR55 Tc Worksheet

Hydraflow Hydrographs by Intelisolve v9.23

Hyd. No. 28

B5e

Description		A		B		C		Totals
Sheet Flow								
Manning's n-value	=	0.240		0.011		0.011		
Flow length (ft)	=	98.0		0.0		0.0		
Two-year 24-hr precip. (in)	=	3.45		0.00		0.00		
Land slope (%)	=	4.10		0.00		0.00		
Travel Time (min)	**=**	**10.15**	**+**	**0.00**	**+**	**0.00**	**=**	**10.15**
Shallow Concentrated Flow								
Flow length (ft)	=	0.00		0.00		0.00		
Watercourse slope (%)	=	0.00		0.00		0.00		
Surface description	=	Paved		Paved		Paved		
Average velocity (ft/s)	=	0.00		0.00		0.00		
Travel Time (min)	**=**	**0.00**	**+**	**0.00**	**+**	**0.00**	**=**	**0.00**
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 ..... 10.10 min

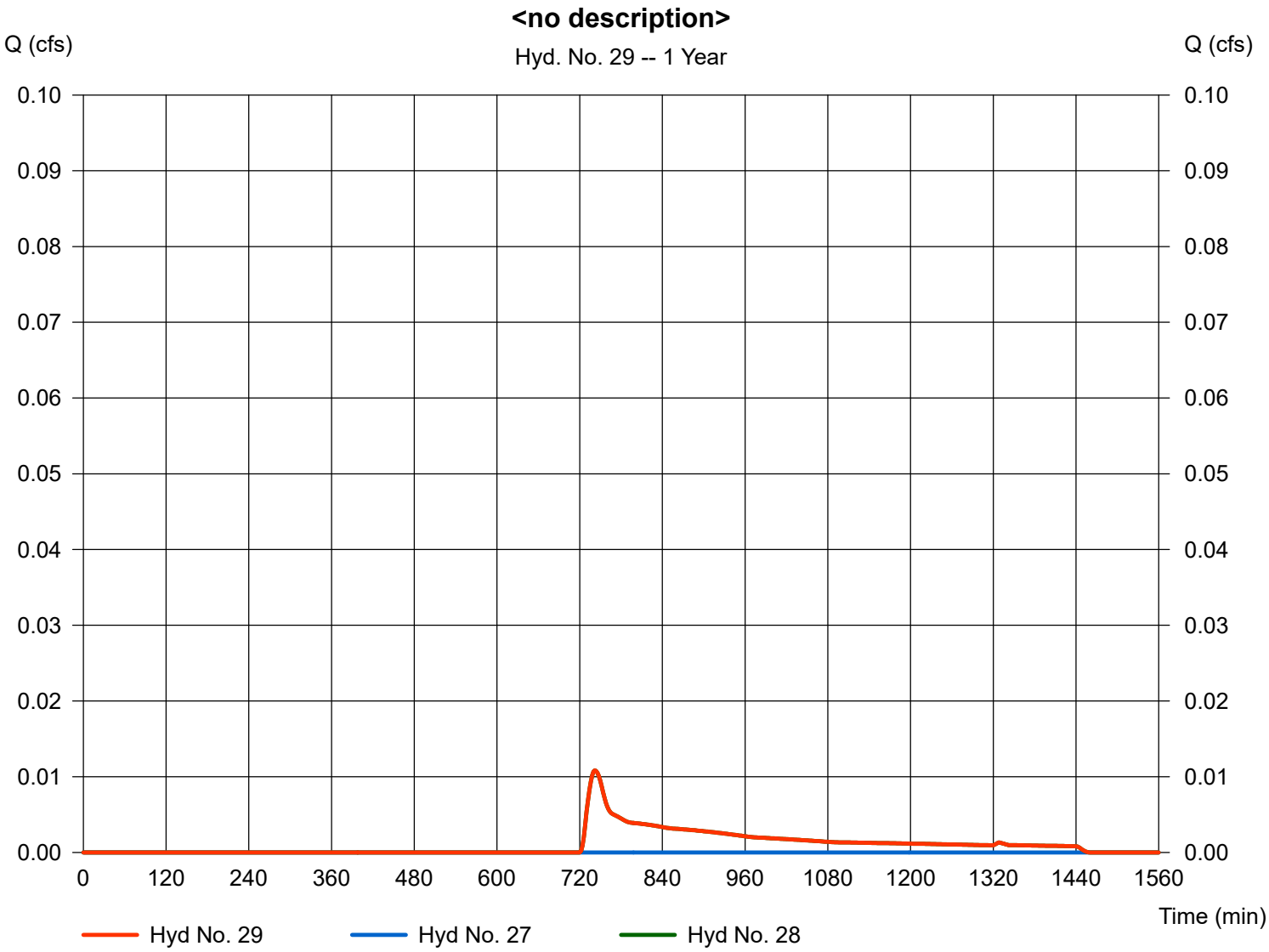
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 29

<no description>

Hydrograph type	=	Combine	Peak discharge	=	0.011 cfs
Storm frequency	=	1 yrs	Time to peak	=	742 min
Time interval	=	2 min	Hyd. volume	=	94 cuft
Inflow hyds.	=	27, 28	Contrib. drain. area	=	0.300 ac



Hydrograph Report

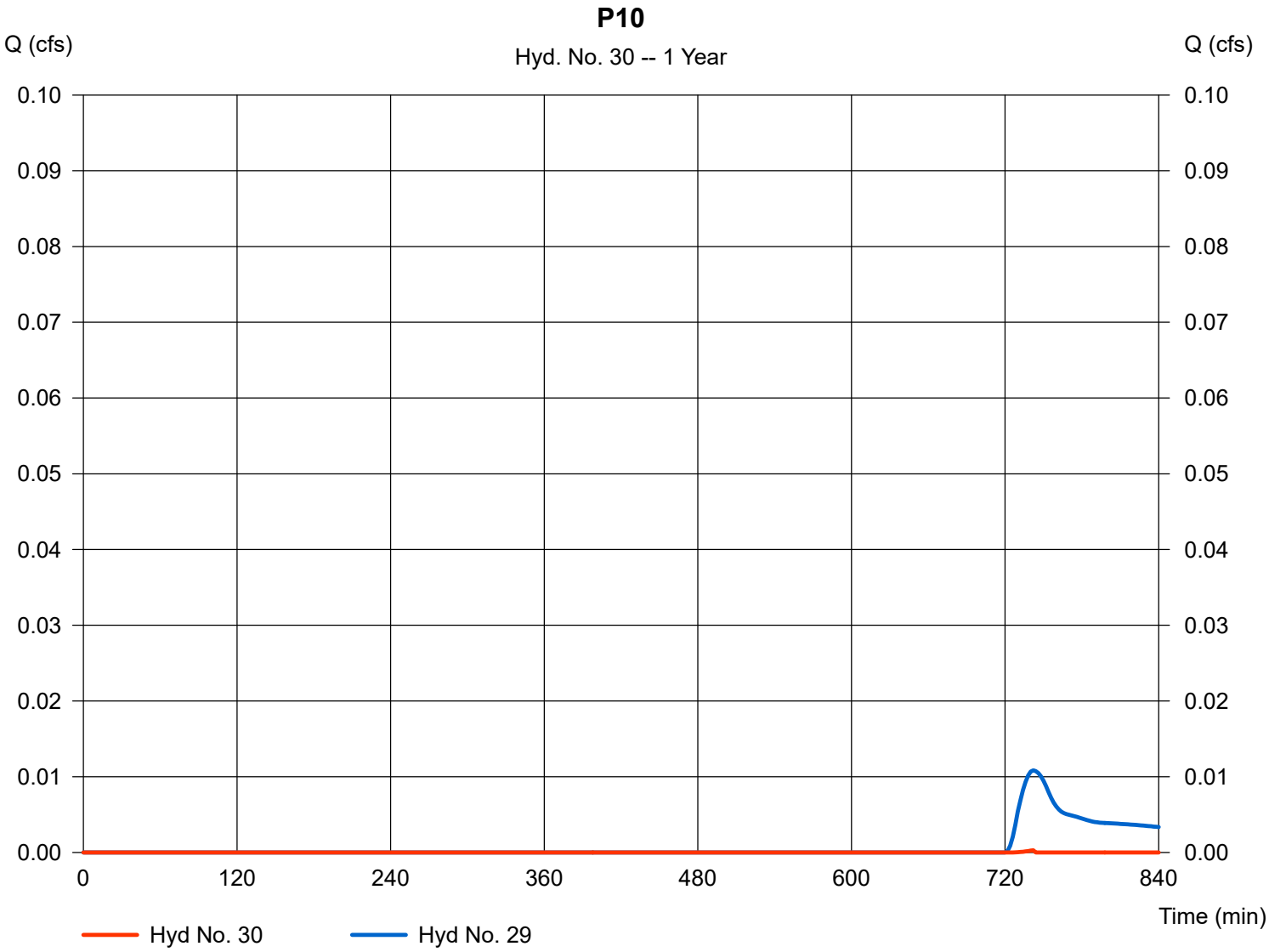
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 30

P10

Hydrograph type	= Reach	Peak discharge	= 0.000 cfs
Storm frequency	= 1 yrs	Time to peak	= 742 min
Time interval	= 2 min	Hyd. volume	= 0 cuft
Inflow hyd. No.	= 29 - <no description>	Section type	= Circular
Reach length	= 100.0 ft	Channel slope	= 0.5 %
Manning's n	= 0.009	Bottom width	= 2.0 ft
Side slope	= 0.0:1	Max. depth	= 0.0 ft
Rating curve x	= 7.091	Rating curve m	= 1.250
Ave. velocity	= 0.00 ft/s	Routing coeff.	= 0.0052

Modified Att-Kin routing method used.



Hydrograph Report

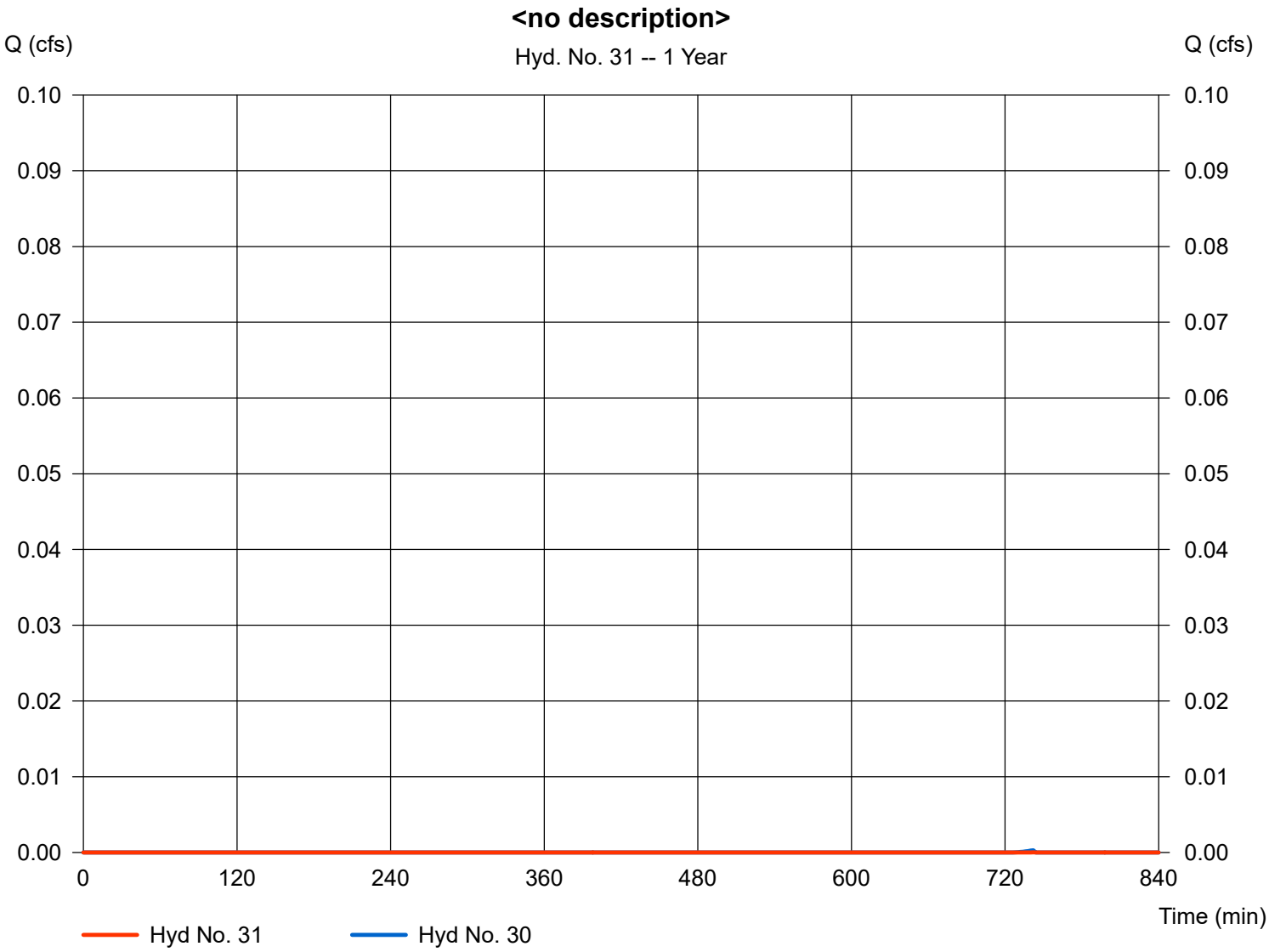
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 31

<no description>

Hydrograph type	=	Reach	Peak discharge	=	0.000 cfs
Storm frequency	=	1 yrs	Time to peak	=	742 min
Time interval	=	2 min	Hyd. volume	=	0 cuft
Inflow hyd. No.	=	30 - P10	Section type	=	Trapezoidal
Reach length	=	90.0 ft	Channel slope	=	2.0 %
Manning's n	=	0.200	Bottom width	=	30.0 ft
Side slope	=	4.0:1	Max. depth	=	0.5 ft
Rating curve x	=	0.109	Rating curve m	=	1.318
Ave. velocity	=	0.01 ft/s	Routing coeff.	=	0.0236

Modified Att-Kin routing method used.



Hydrograph Report

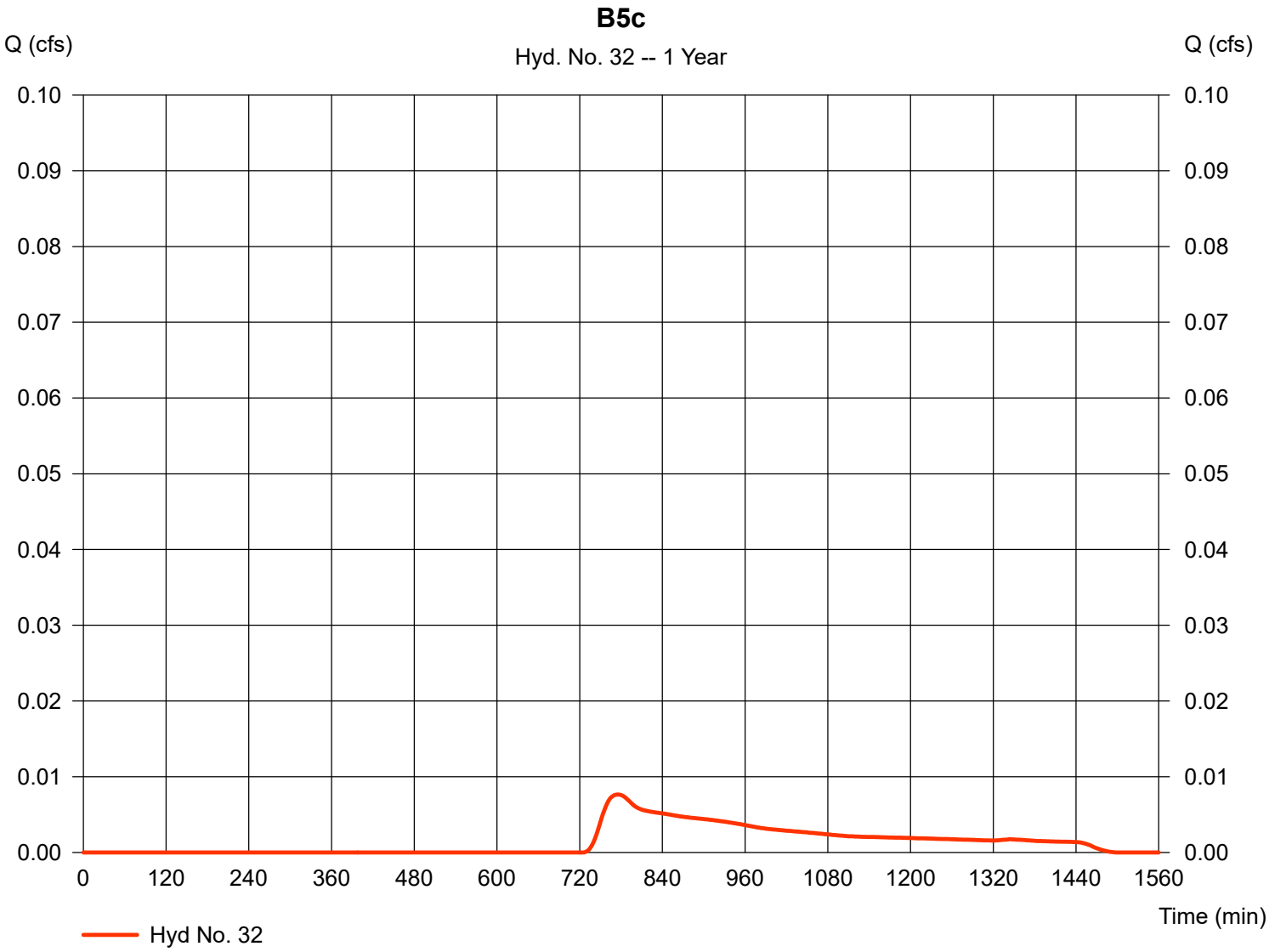
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 32

B5c

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.008 cfs
Storm frequency	=	1 yrs	Time to peak	=	776 min
Time interval	=	2 min	Hyd. volume	=	129 cuft
Drainage area	=	0.610 ac	Curve number	=	78*
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	TR55	Time of conc. (Tc)	=	37.40 min
Total precip.	=	1.00 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

* Composite (Area/CN) = [(0.040 x 98) + (0.070 x 87) + (0.030 x 89) + (0.010 x 74) + (0.440 x 73)] / 0.610



TR55 Tc Worksheet

Hyd. No. 32

B5c

Description		A		B		C		Totals
Sheet Flow								
Manning's n-value	=	0.400		0.400		0.240		
Flow length (ft)	=	47.0		58.0		126.0		
Two-year 24-hr precip. (in)	=	3.45		3.45		3.45		
Land slope (%)	=	14.90		1.70		1.60		
Travel Time (min)	**=**	**5.06**	**+**	**14.27**	**+**	**18.08**	**=**	**37.42**
Shallow Concentrated Flow								
Flow length (ft)	=	0.00		0.00		0.00		
Watercourse slope (%)	=	0.00		0.00		0.00		
Surface description	=	Paved		Paved		Paved		
Average velocity (ft/s)	=	0.00		0.00		0.00		
Travel Time (min)	**=**	**0.00**	**+**	**0.00**	**+**	**0.00**	**=**	**0.00**
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 ..... 37.40 min

Hydrograph Report

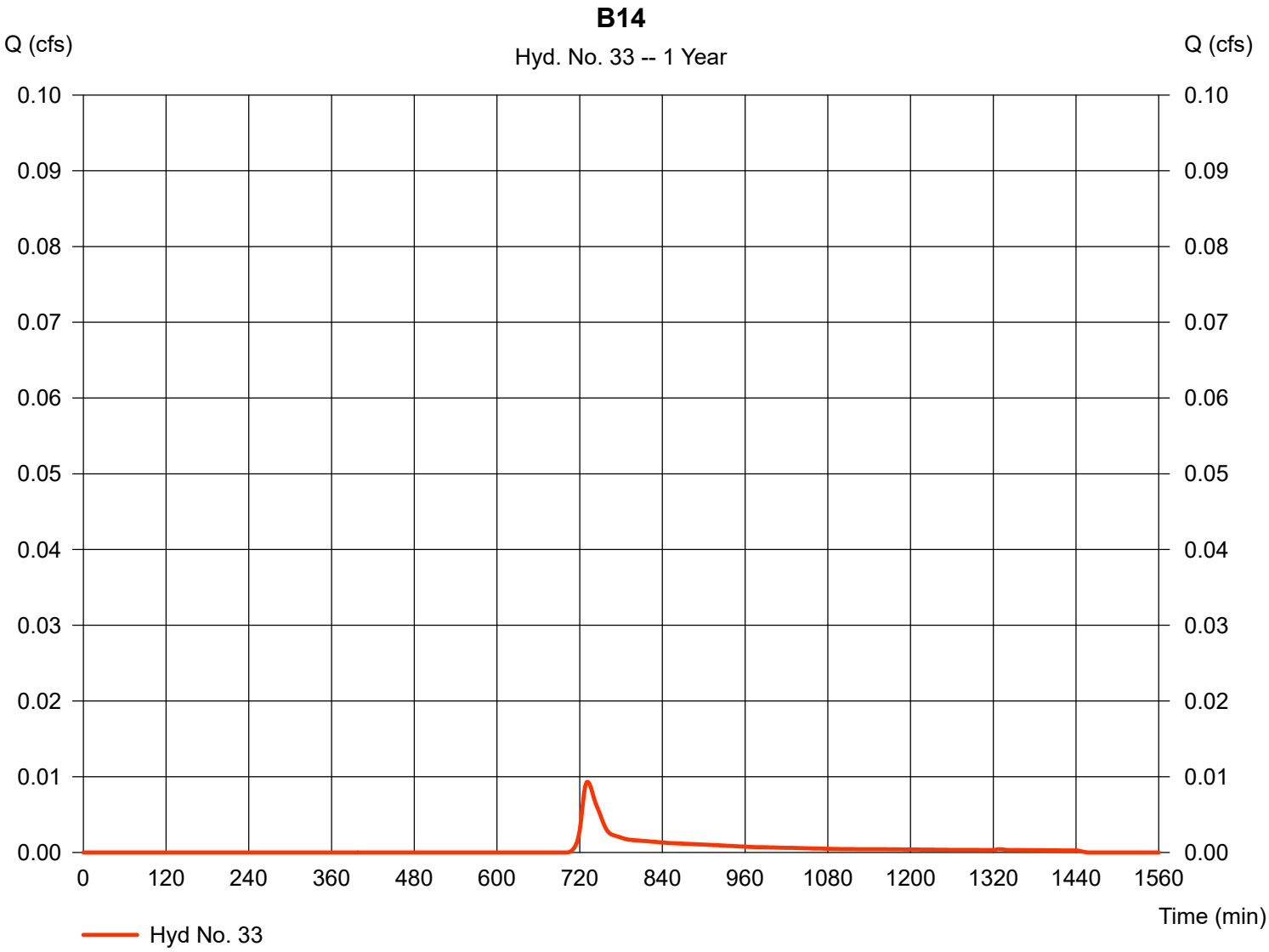
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 33

B14

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.009 cfs
Storm frequency	=	1 yrs	Time to peak	=	732 min
Time interval	=	2 min	Hyd. volume	=	44 cuft
Drainage area	=	0.060 ac	Curve number	=	86*
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	USER	Time of conc. (Tc)	=	10.00 min
Total precip.	=	1.00 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

* Composite (Area/CN) = [(0.030 x 98) + (0.030 x 74)] / 0.060



Hydrograph Report

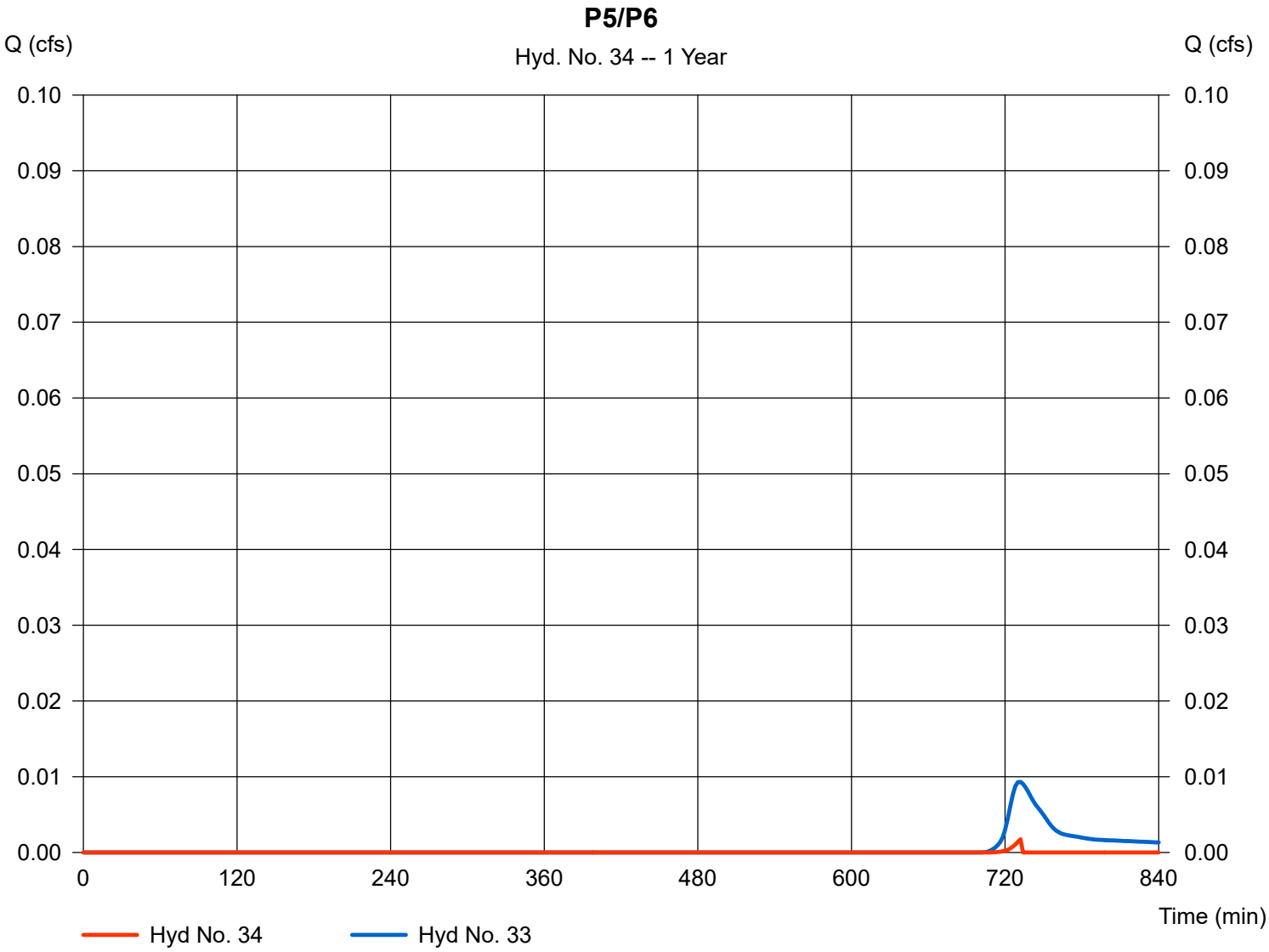
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 34

P5/P6

Hydrograph type	= Reach	Peak discharge	= 0.002 cfs
Storm frequency	= 1 yrs	Time to peak	= 732 min
Time interval	= 2 min	Hyd. volume	= 1 cuft
Inflow hyd. No.	= 33 - B14	Section type	= Circular
Reach length	= 40.0 ft	Channel slope	= 0.5 %
Manning's n	= 0.009	Bottom width	= 1.0 ft
Side slope	= 0.0:1	Max. depth	= 0.0 ft
Rating curve x	= 6.317	Rating curve m	= 1.250
Ave. velocity	= 0.01 ft/s	Routing coeff.	= 0.0435

Modified Att-Kin routing method used.



Hydrograph Report

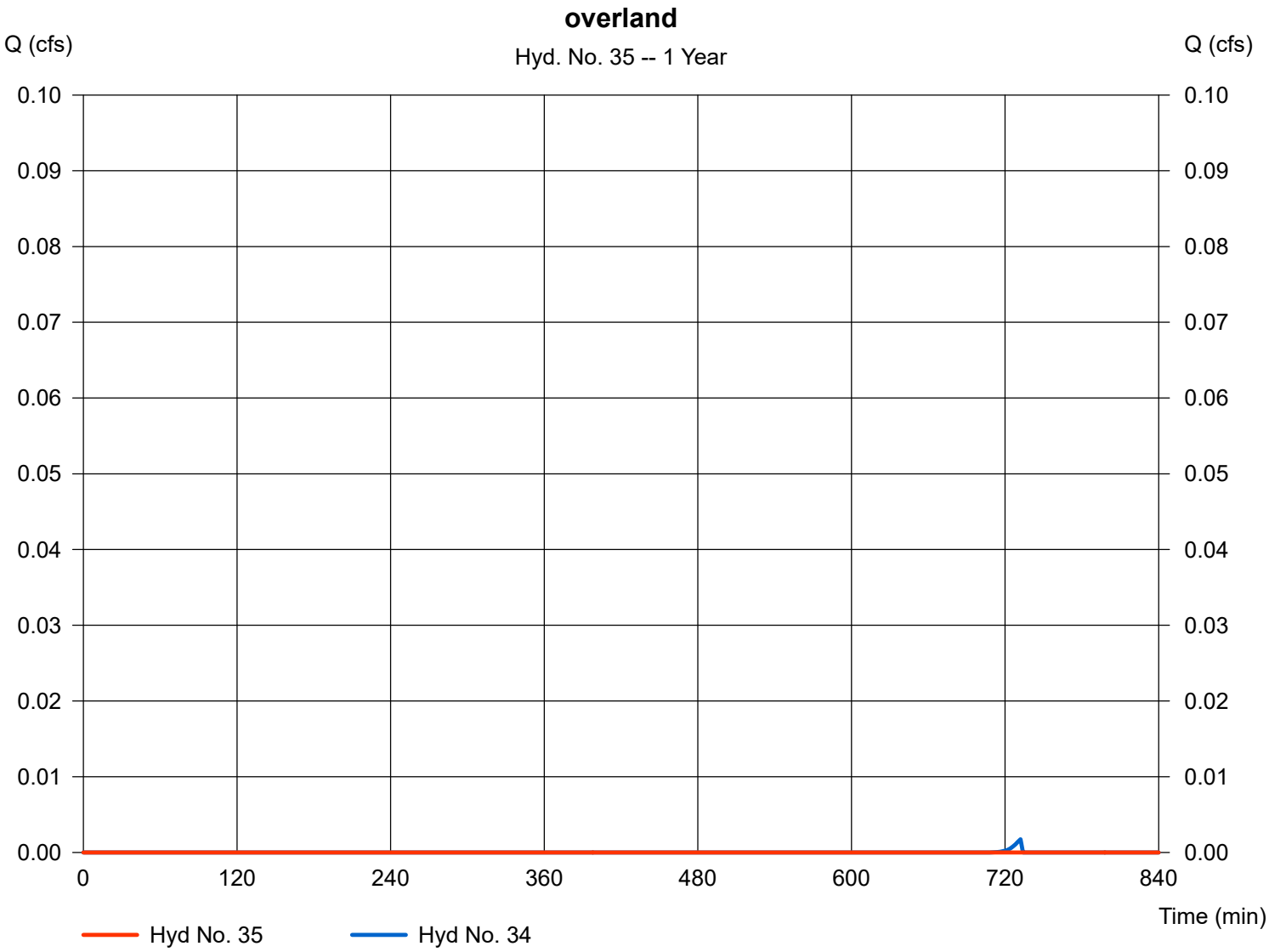
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 35

overland

Hydrograph type	=	Reach	Peak discharge	=	0.000 cfs
Storm frequency	=	1 yrs	Time to peak	=	732 min
Time interval	=	2 min	Hyd. volume	=	0 cuft
Inflow hyd. No.	=	34 - P5/P6	Section type	=	Rectangular
Reach length	=	183.0 ft	Channel slope	=	2.2 %
Manning's n	=	0.300	Bottom width	=	30.0 ft
Side slope	=	0.0:1	Max. depth	=	1.0 ft
Rating curve x	=	0.076	Rating curve m	=	1.654
Ave. velocity	=	0.00 ft/s	Routing coeff.	=	0.0023

Modified Att-Kin routing method used.



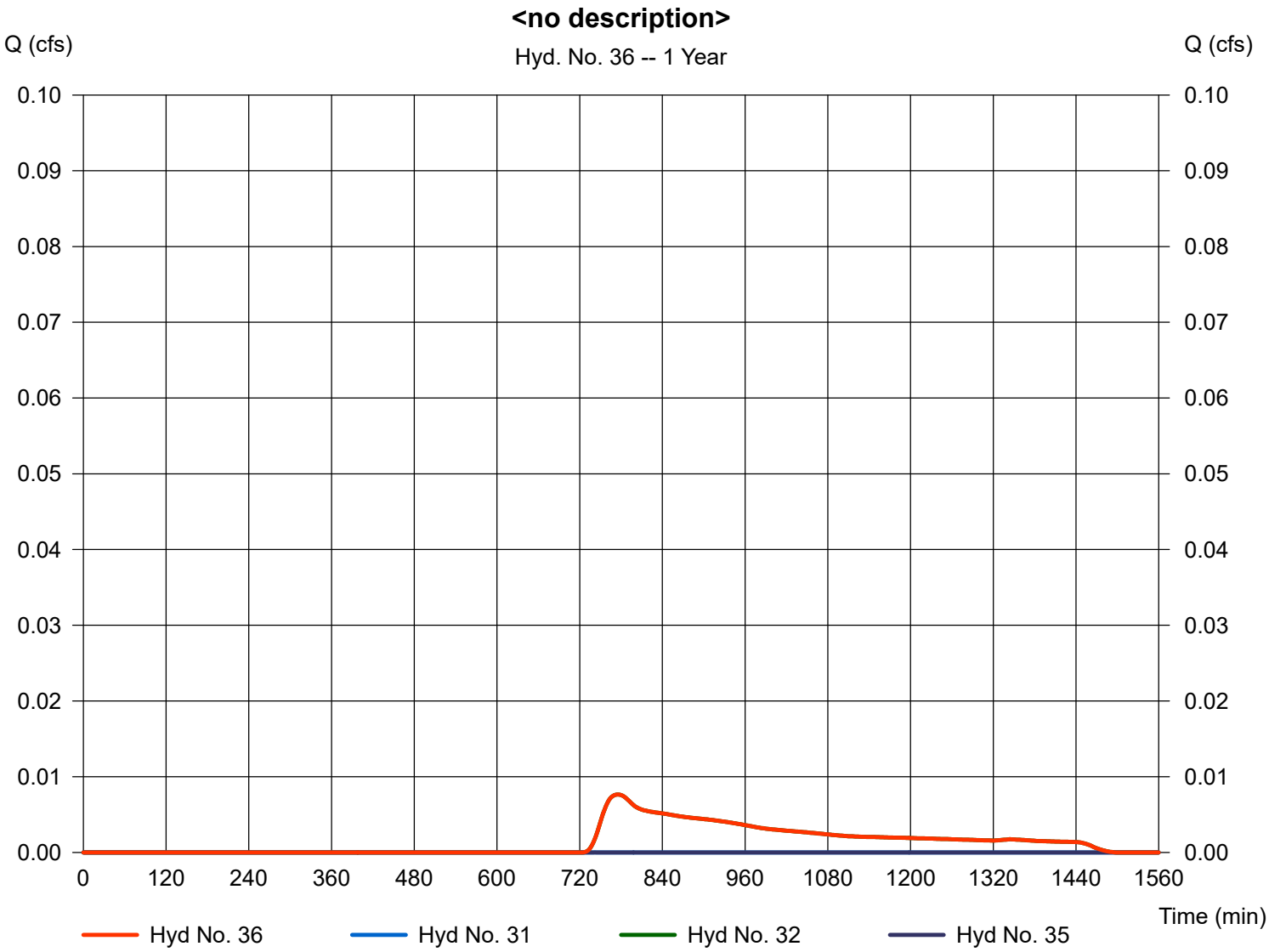
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 36

<no description>

Hydrograph type	=	Combine	Peak discharge	=	0.008 cfs
Storm frequency	=	1 yrs	Time to peak	=	776 min
Time interval	=	2 min	Hyd. volume	=	129 cuft
Inflow hyds.	=	31, 32, 35	Contrib. drain. area	=	0.610 ac



Hydrograph Report

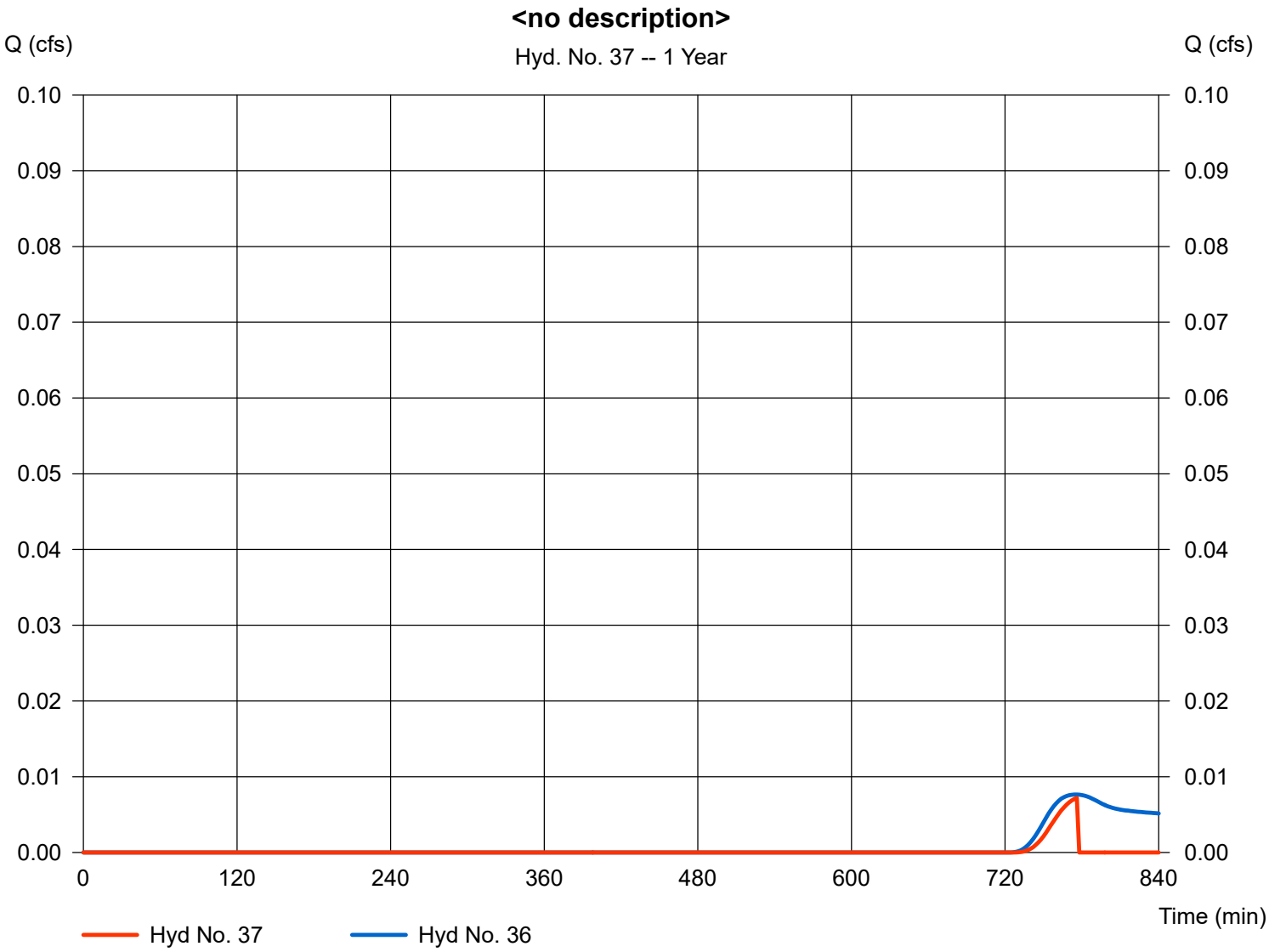
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 37

<no description>

Hydrograph type	= Reach	Peak discharge	= 0.007 cfs
Storm frequency	= 1 yrs	Time to peak	= 776 min
Time interval	= 2 min	Hyd. volume	= 9 cuft
Inflow hyd. No.	= 36 - <no description>	Section type	= Trapezoidal
Reach length	= 35.0 ft	Channel slope	= 2.5 %
Manning's n	= 0.200	Bottom width	= 30.0 ft
Side slope	= 5.0:1	Max. depth	= 0.5 ft
Rating curve x	= 0.122	Rating curve m	= 1.269
Ave. velocity	= 0.07 ft/s	Routing coeff.	= 0.2569

Modified Att-Kin routing method used.



Hydrograph Report

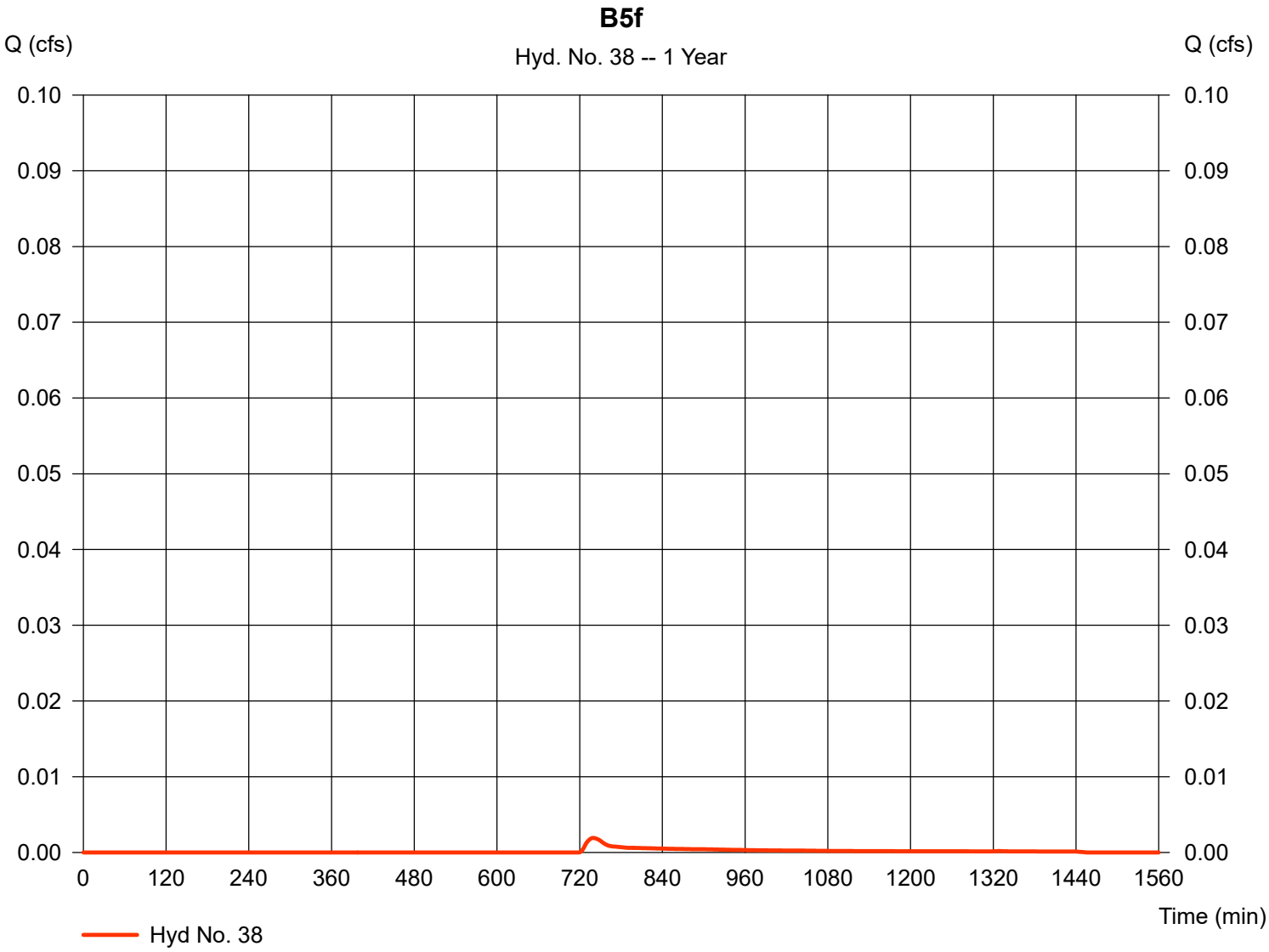
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 38

B5f

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.002 cfs
Storm frequency	=	1 yrs	Time to peak	=	740 min
Time interval	=	2 min	Hyd. volume	=	15 cuft
Drainage area	=	0.040 ac	Curve number	=	81*
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	USER	Time of conc. (Tc)	=	10.00 min
Total precip.	=	1.00 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

* Composite (Area/CN) = [(0.035 x 79) + (0.009 x 87)] / 0.040



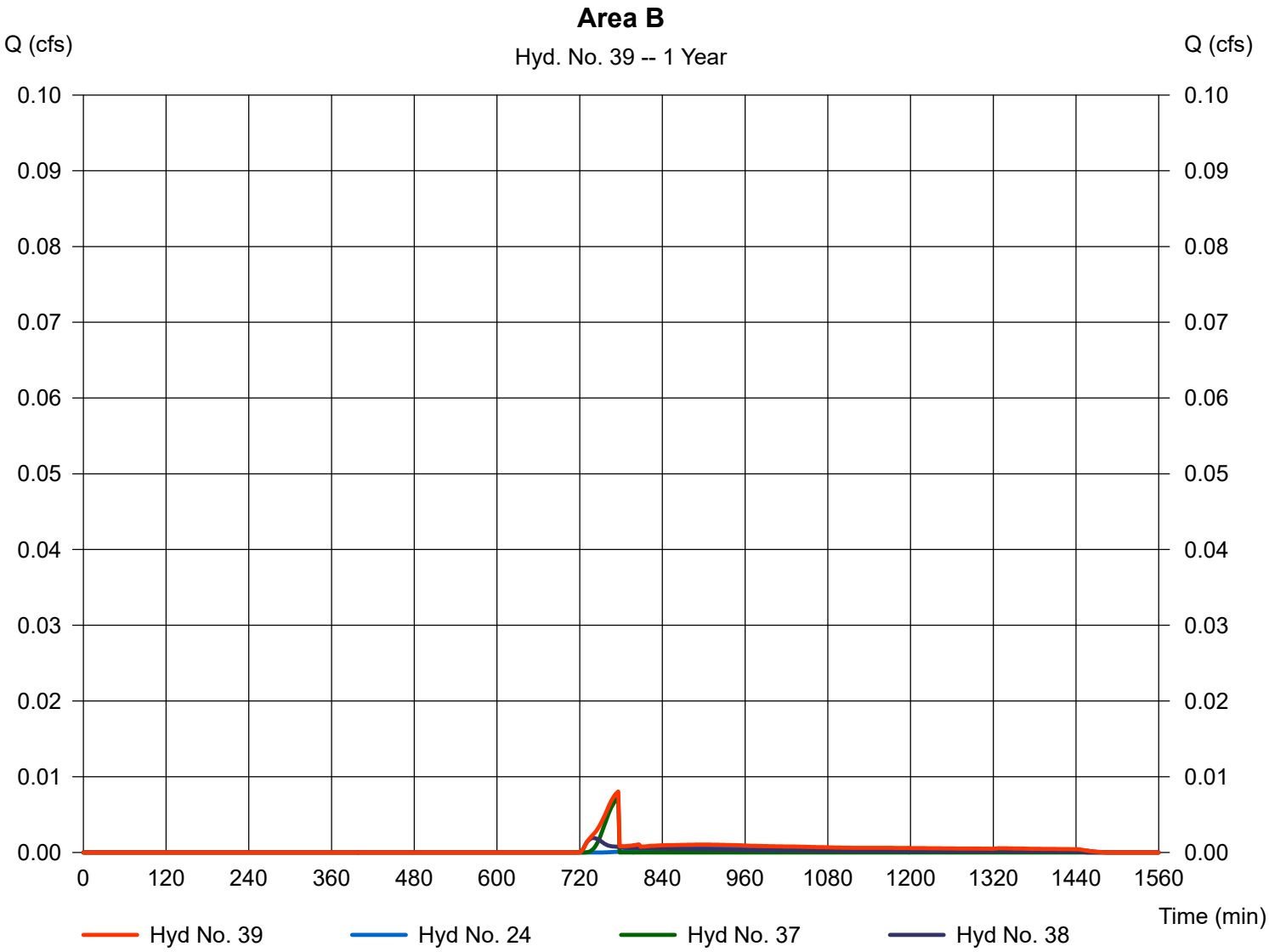
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 39

Area B

Hydrograph type	=	Combine	Peak discharge	=	0.008 cfs
Storm frequency	=	1 yrs	Time to peak	=	776 min
Time interval	=	2 min	Hyd. volume	=	42 cuft
Inflow hyds.	=	24, 37, 38	Contrib. drain. area	=	0.040 ac



Hydrograph Report

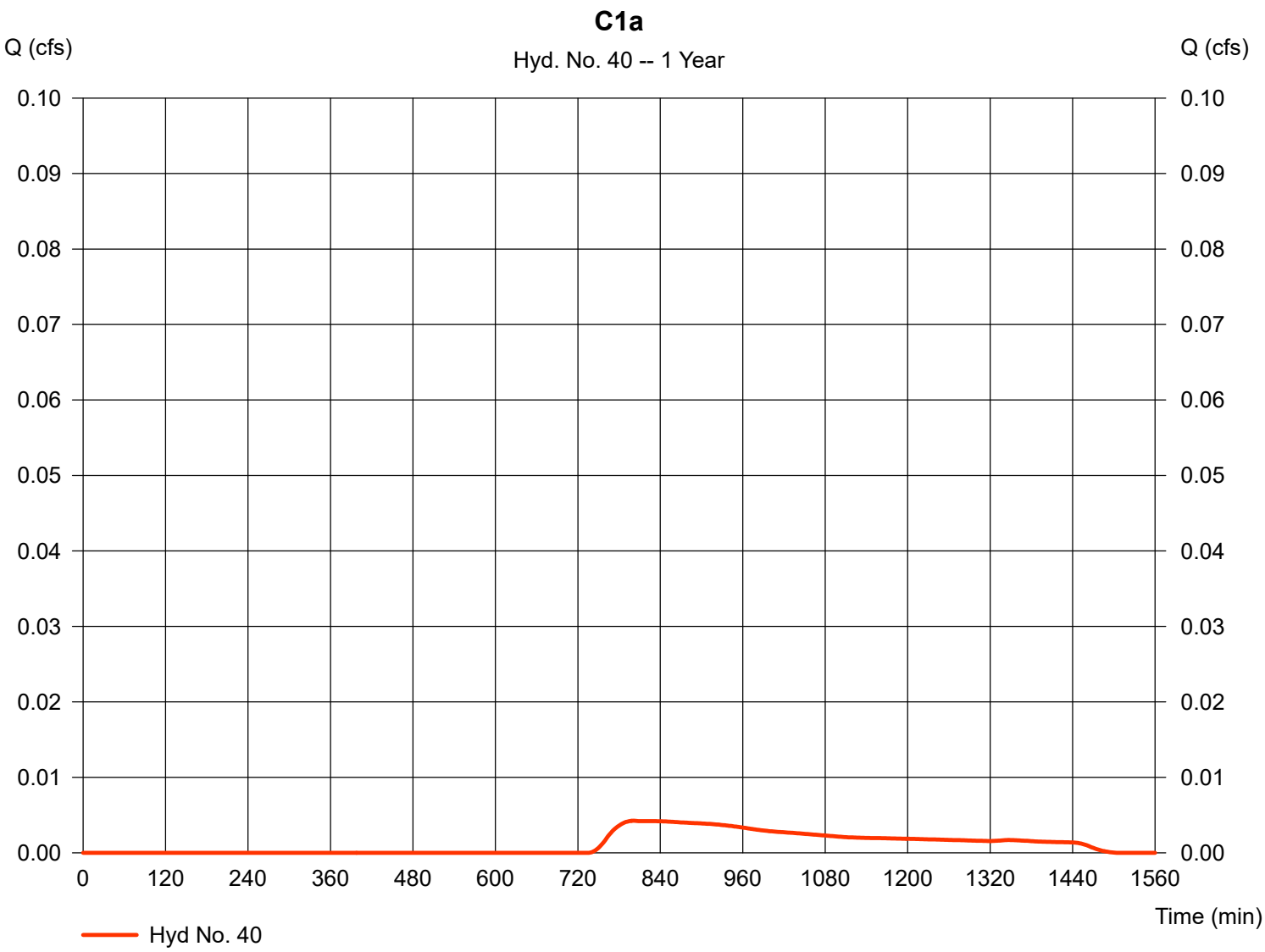
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 40

C1a

Hydrograph type	= SCS Runoff	Peak discharge	= 0.004 cfs
Storm frequency	= 1 yrs	Time to peak	= 800 min
Time interval	= 2 min	Hyd. volume	= 107 cuft
Drainage area	= 0.760 ac	Curve number	= 76*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 42.00 min
Total precip.	= 1.00 in	Distribution	= Type III
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(0.670 x 74) + (0.040 x 98) + (0.040 x 89) + (0.010 x 79)] / 0.760



TR55 Tc Worksheet

Hyd. No. 40

C1a

Description		A		B		C		Totals
Sheet Flow								
Manning's n-value	=	0.170		0.170		0.170		
Flow length (ft)	=	119.0		118.0		115.0		
Two-year 24-hr precip. (in)	=	3.45		3.45		3.45		
Land slope (%)	=	2.50		0.80		1.30		
Travel Time (min)	**=**	**10.96**	**+**	**17.18**	**+**	**13.86**	**=**	**42.00**
Shallow Concentrated Flow								
Flow length (ft)	=	0.00		0.00		0.00		
Watercourse slope (%)	=	0.00		0.00		0.00		
Surface description	=	Paved		Paved		Paved		
Average velocity (ft/s)	=	0.00		0.00		0.00		
Travel Time (min)	**=**	**0.00**	**+**	**0.00**	**+**	**0.00**	**=**	**0.00**
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 ..... 42.00 min

Hydrograph Report

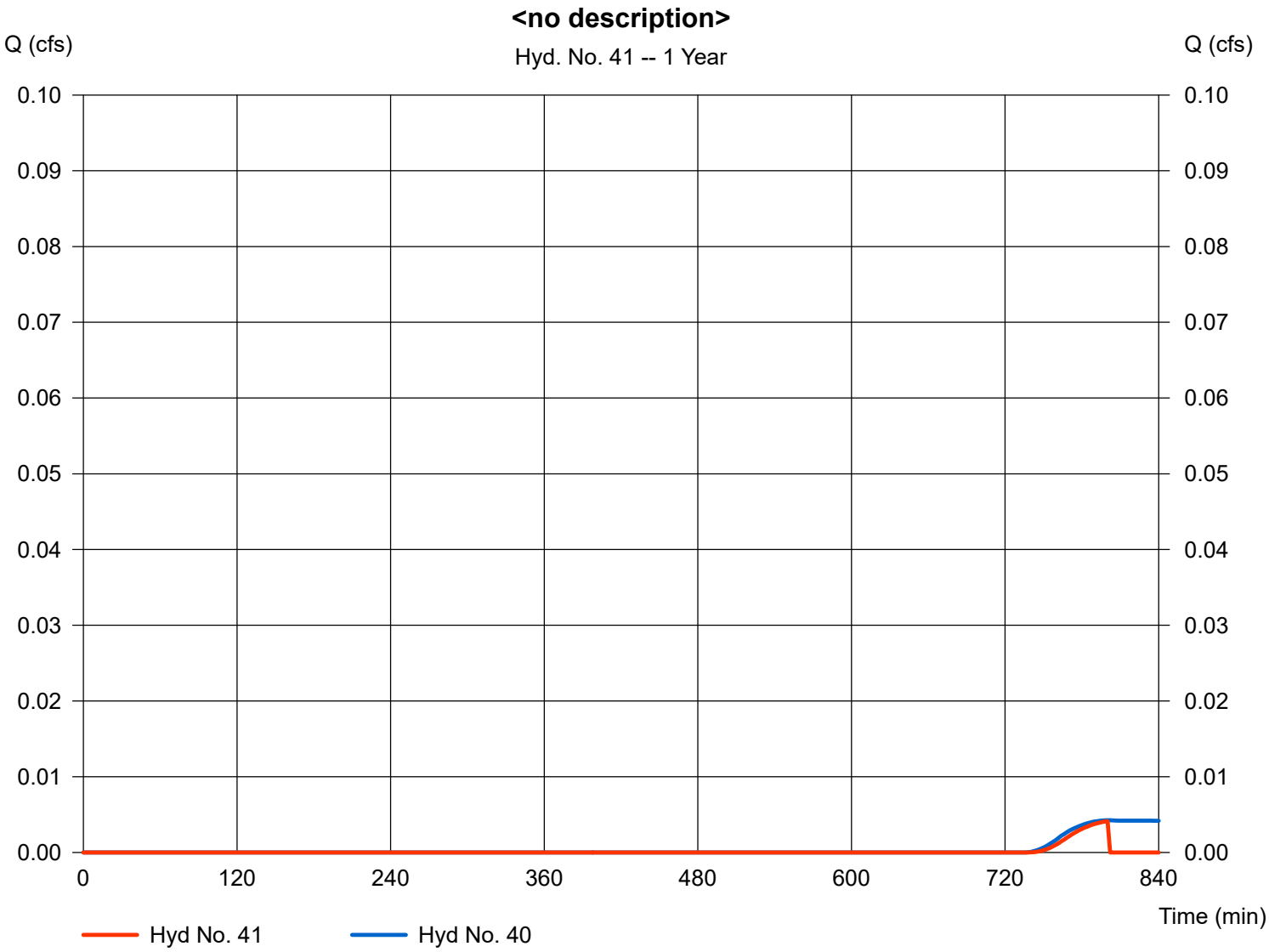
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 41

<no description>

Hydrograph type	= Reach	Peak discharge	= 0.004 cfs
Storm frequency	= 1 yrs	Time to peak	= 800 min
Time interval	= 2 min	Hyd. volume	= 8 cuft
Inflow hyd. No.	= 40 - C1a	Section type	= Trapezoidal
Reach length	= 91.0 ft	Channel slope	= 0.9 %
Manning's n	= 0.023	Bottom width	= 30.0 ft
Side slope	= 5.0:1	Max. depth	= 0.5 ft
Rating curve x	= 0.636	Rating curve m	= 1.269
Ave. velocity	= 0.22 ft/s	Routing coeff.	= 0.3106

Modified Att-Kin routing method used.



Hydrograph Report

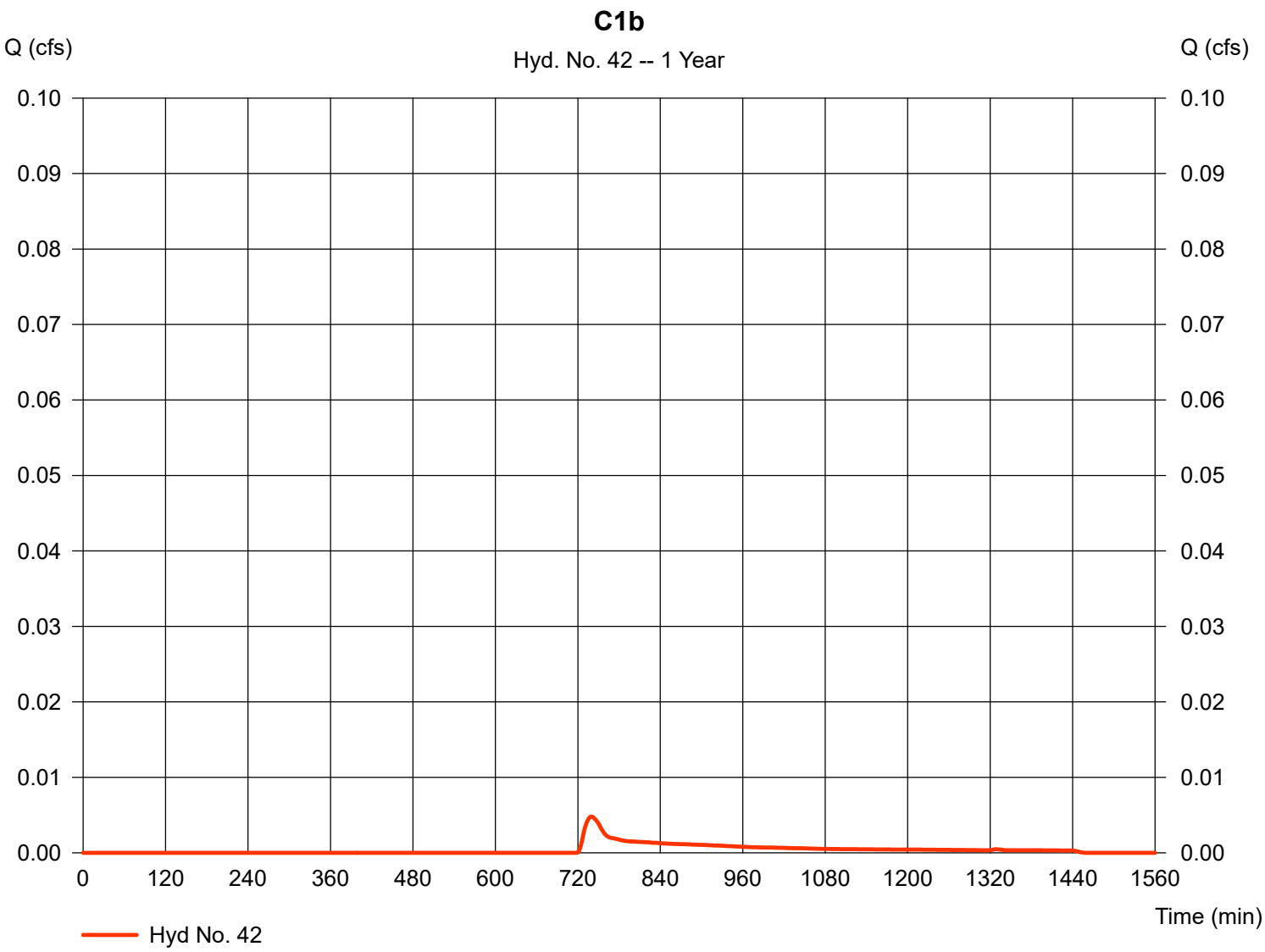
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 42

C1b

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.005 cfs
Storm frequency	=	1 yrs	Time to peak	=	740 min
Time interval	=	2 min	Hyd. volume	=	37 cuft
Drainage area	=	0.100 ac	Curve number	=	81*
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	USER	Time of conc. (Tc)	=	10.00 min
Total precip.	=	1.00 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

* Composite (Area/CN) = [(0.040 x 89) + (0.027 x 79) + (0.037 x 74)] / 0.100



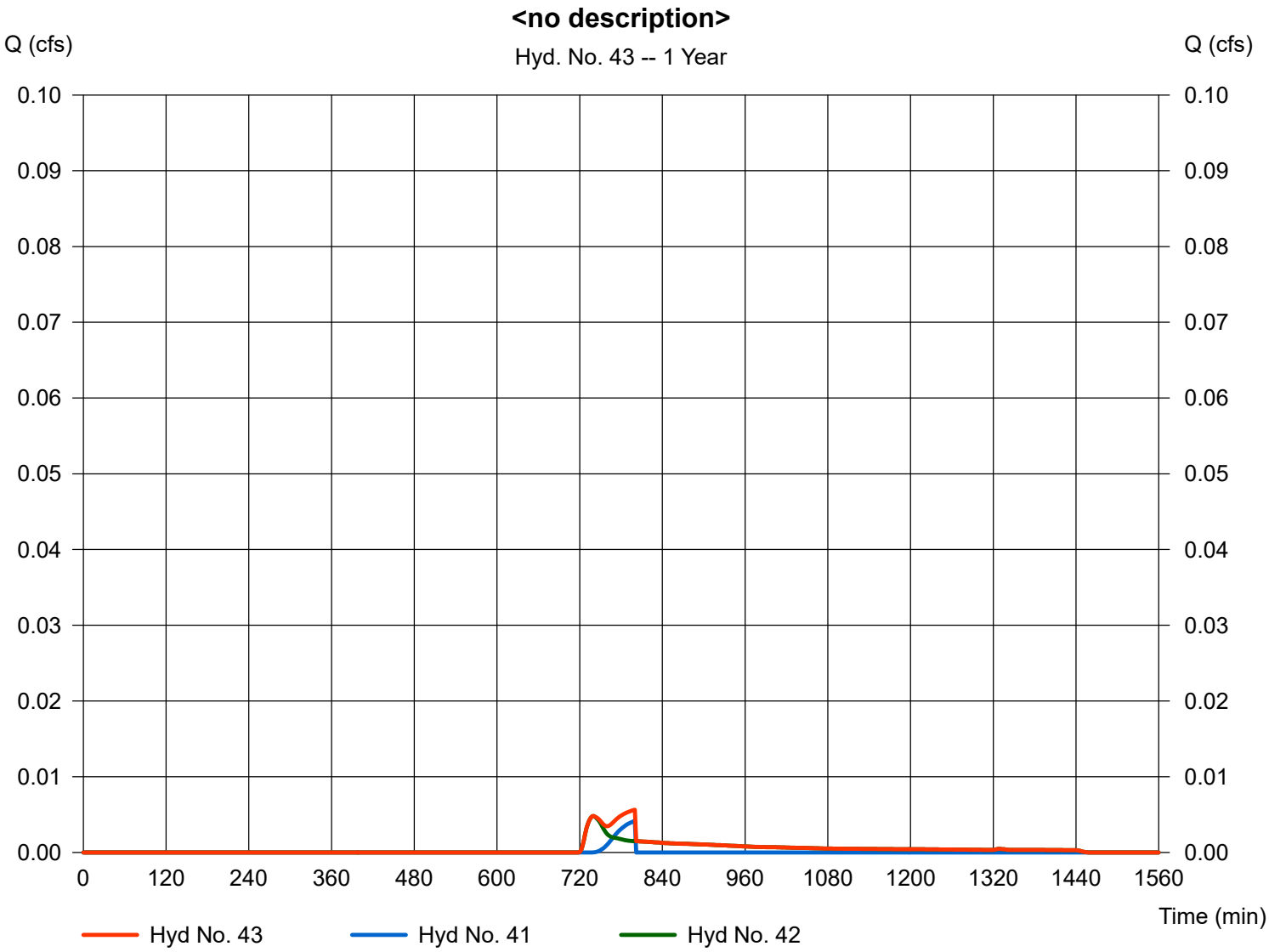
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 43

<no description>

Hydrograph type	= Combine	Peak discharge	= 0.006 cfs
Storm frequency	= 1 yrs	Time to peak	= 800 min
Time interval	= 2 min	Hyd. volume	= 44 cuft
Inflow hyds.	= 41, 42	Contrib. drain. area	= 0.100 ac



Hydrograph Report

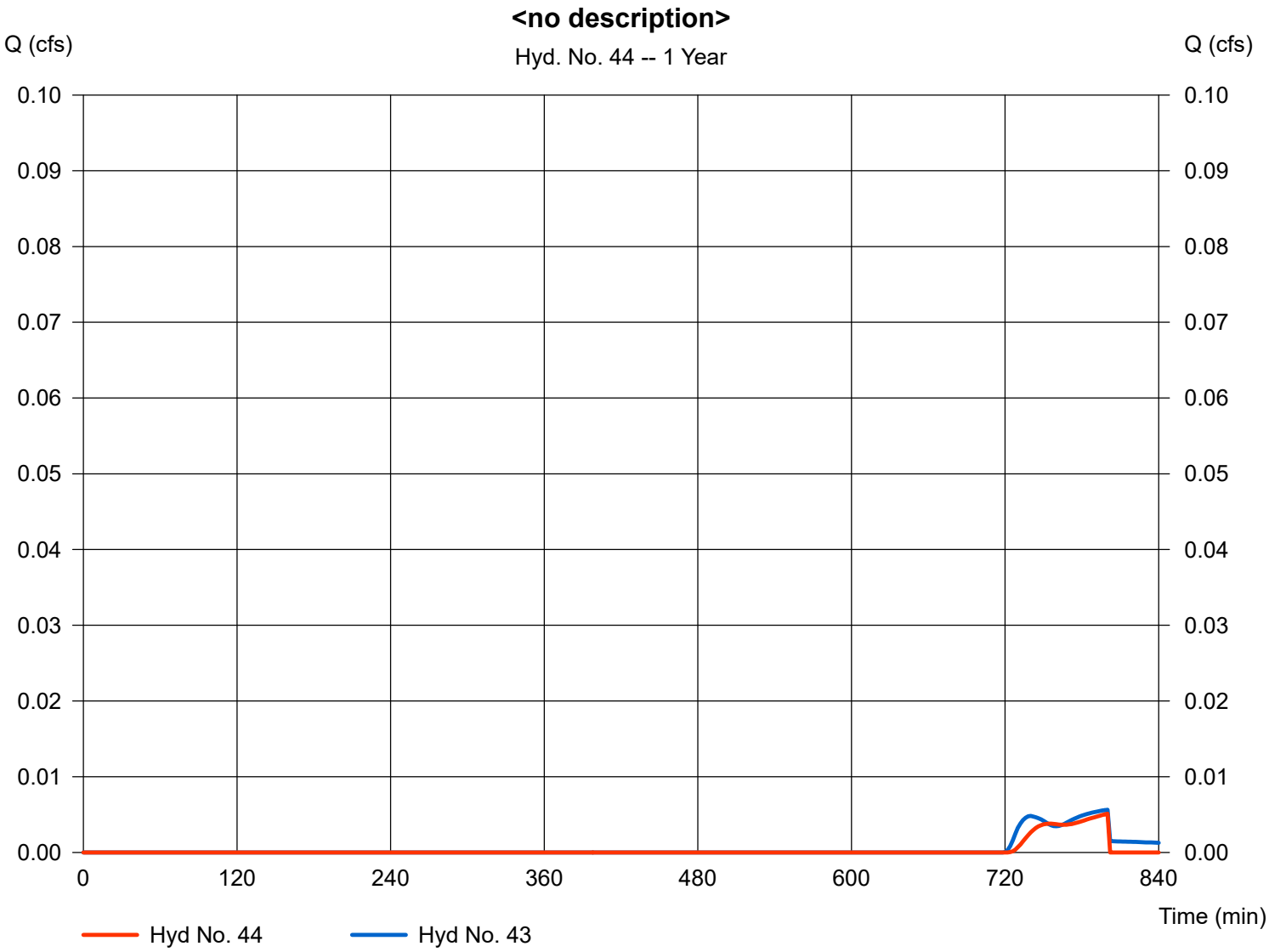
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 44

<no description>

Hydrograph type	= Reach	Peak discharge	= 0.005 cfs
Storm frequency	= 1 yrs	Time to peak	= 800 min
Time interval	= 2 min	Hyd. volume	= 16 cuft
Inflow hyd. No.	= 43 - <no description>	Section type	= Trapezoidal
Reach length	= 338.0 ft	Channel slope	= 1.7 %
Manning's n	= 0.200	Bottom width	= 5.0 ft
Side slope	= 3.0:1	Max. depth	= 0.5 ft
Rating curve x	= 0.332	Rating curve m	= 0.912
Ave. velocity	= 0.49 ft/s	Routing coeff.	= 0.1474

Modified Att-Kin routing method used.



Hydrograph Report

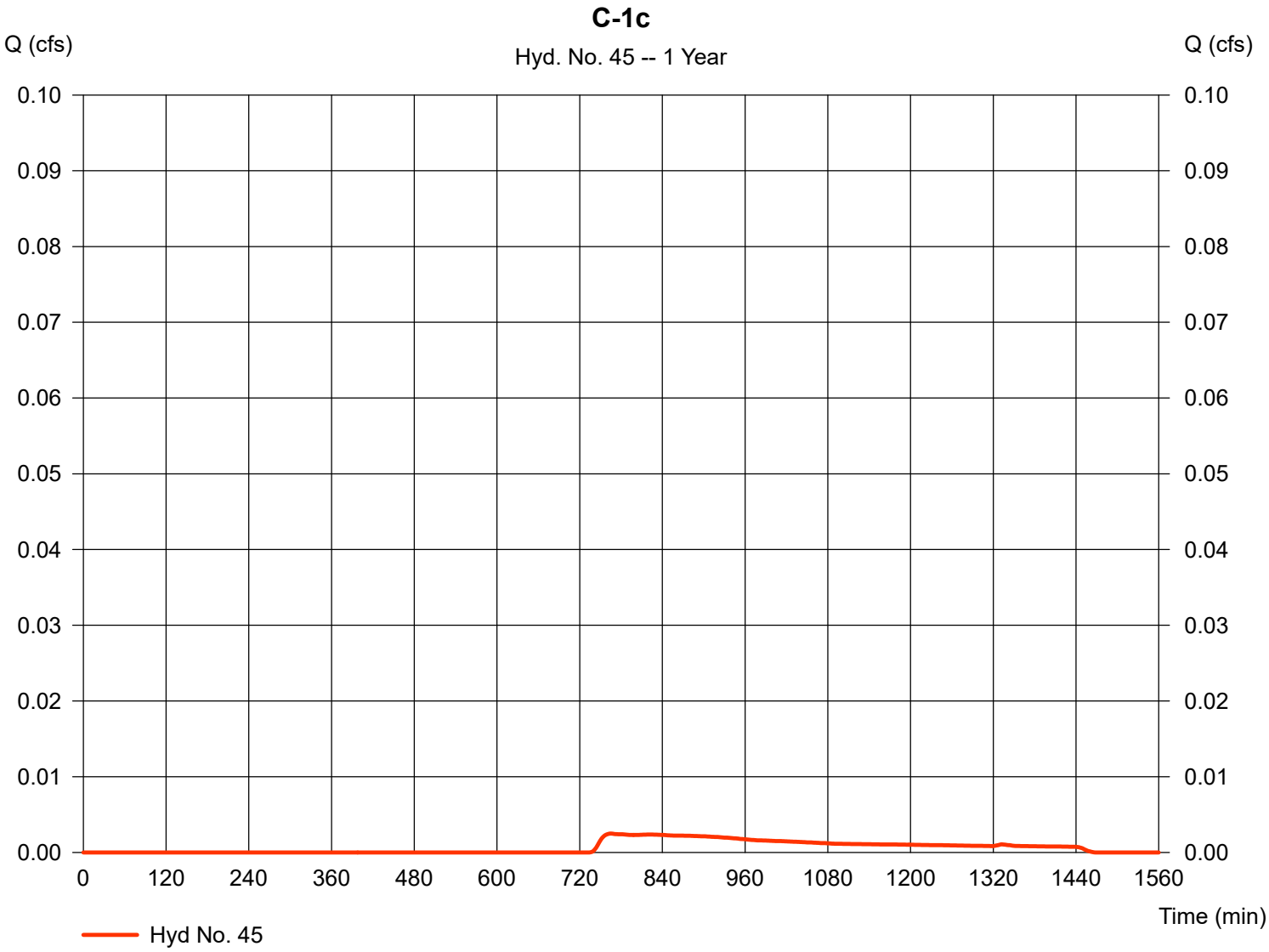
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 45

C-1c

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.002 cfs
Storm frequency	=	1 yrs	Time to peak	=	764 min
Time interval	=	2 min	Hyd. volume	=	60 cuft
Drainage area	=	0.430 ac	Curve number	=	76*
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	TR55	Time of conc. (Tc)	=	17.50 min
Total precip.	=	1.00 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

* Composite (Area/CN) = [(0.142 x 74) + (0.135 x 79) + (0.080 x 77) + (0.060 x 87)] / 0.430



TR55 Tc Worksheet

Hydraflow Hydrographs by Intelisolve v9.23

Hyd. No. 45

C-1c

Description		A		B		C		Totals
Sheet Flow								
Manning's n-value	=	0.170		0.011		0.011		
Flow length (ft)	=	78.0		0.0		0.0		
Two-year 24-hr precip. (in)	=	3.45		0.00		0.00		
Land slope (%)	=	2.20		0.00		0.00		
Travel Time (min)	**=**	**8.23**	**+**	**0.00**	**+**	**0.00**	**=**	**8.23**
Shallow Concentrated Flow								
Flow length (ft)	=	0.00		0.00		0.00		
Watercourse slope (%)	=	0.00		0.00		0.00		
Surface description	=	Paved		Paved		Paved		
Average velocity (ft/s)	=	0.00		0.00		0.00		
Travel Time (min)	**=**	**0.00**	**+**	**0.00**	**+**	**0.00**	**=**	**0.00**
Channel Flow								
X sectional flow area (sqft)	=	3.50		3.50		0.00		
Wetted perimeter (ft)	=	12.00		12.00		0.00		
Channel slope (%)	=	2.10		1.10		0.00		
Manning's n-value	=	0.170		0.170		0.015		
Velocity (ft/s)	=	0.56		0.40		0.00		
Flow length (ft)	=	130.0		130.0		0.0		
Travel Time (min)	**=**	**3.89**	**+**	**5.38**	**+**	**0.00**	**=**	**9.28**

Total Travel Time, Tc ..... 17.50 min

Hydrograph Report

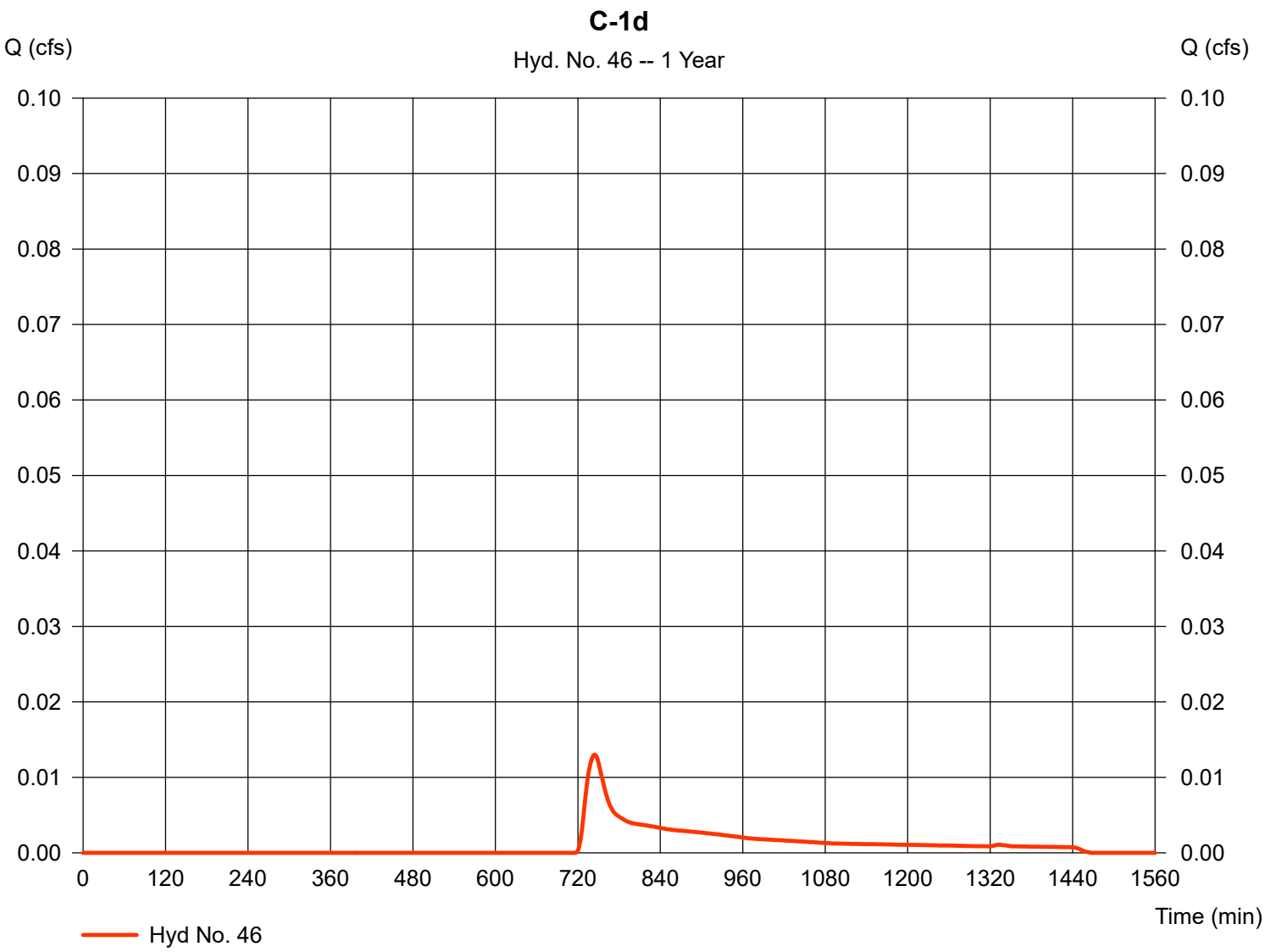
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 46

C-1d

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.013 cfs
Storm frequency	=	1 yrs	Time to peak	=	744 min
Time interval	=	2 min	Hyd. volume	=	95 cuft
Drainage area	=	0.230 ac	Curve number	=	82*
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	TR55	Time of conc. (Tc)	=	16.80 min
Total precip.	=	1.00 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

* Composite (Area/CN) = [(0.070 x 77) + (0.090 x 74) + (0.070 x 98)] / 0.230



TR55 Tc Worksheet

Hydraflow Hydrographs by Intelisolve v9.23

Hyd. No. 46

C-1d

Description		A		B		C		Totals
Sheet Flow								
Manning's n-value	=	0.170		0.240		0.011		
Flow length (ft)	=	107.0		25.0		0.0		
Two-year 24-hr precip. (in)	=	3.45		3.45		0.00		
Land slope (%)	=	0.90		24.00		0.00		
Travel Time (min)	**=**	**15.15**	**+**	**1.68**	**+**	**0.00**	**=**	**16.83**
Shallow Concentrated Flow								
Flow length (ft)	=	0.00		0.00		0.00		
Watercourse slope (%)	=	0.00		0.00		0.00		
Surface description	=	Paved		Paved		Paved		
Average velocity (ft/s)	=	0.00		0.00		0.00		
Travel Time (min)	**=**	**0.00**	**+**	**0.00**	**+**	**0.00**	**=**	**0.00**
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 ..... 16.80 min

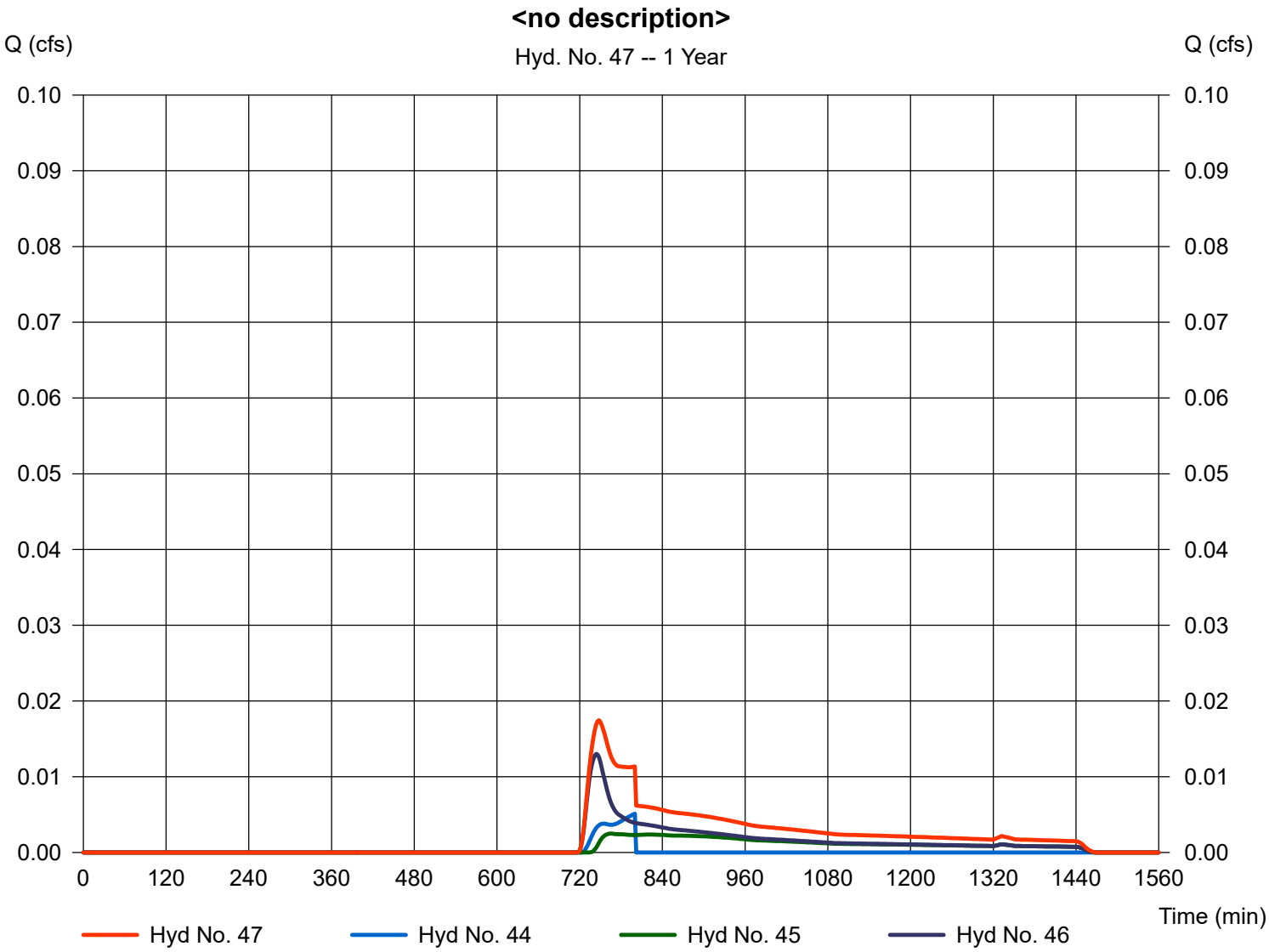
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 47

<no description>

Hydrograph type	= Combine	Peak discharge	= 0.017 cfs
Storm frequency	= 1 yrs	Time to peak	= 748 min
Time interval	= 2 min	Hyd. volume	= 171 cuft
Inflow hyds.	= 44, 45, 46	Contrib. drain. area	= 0.660 ac



Hydrograph Report

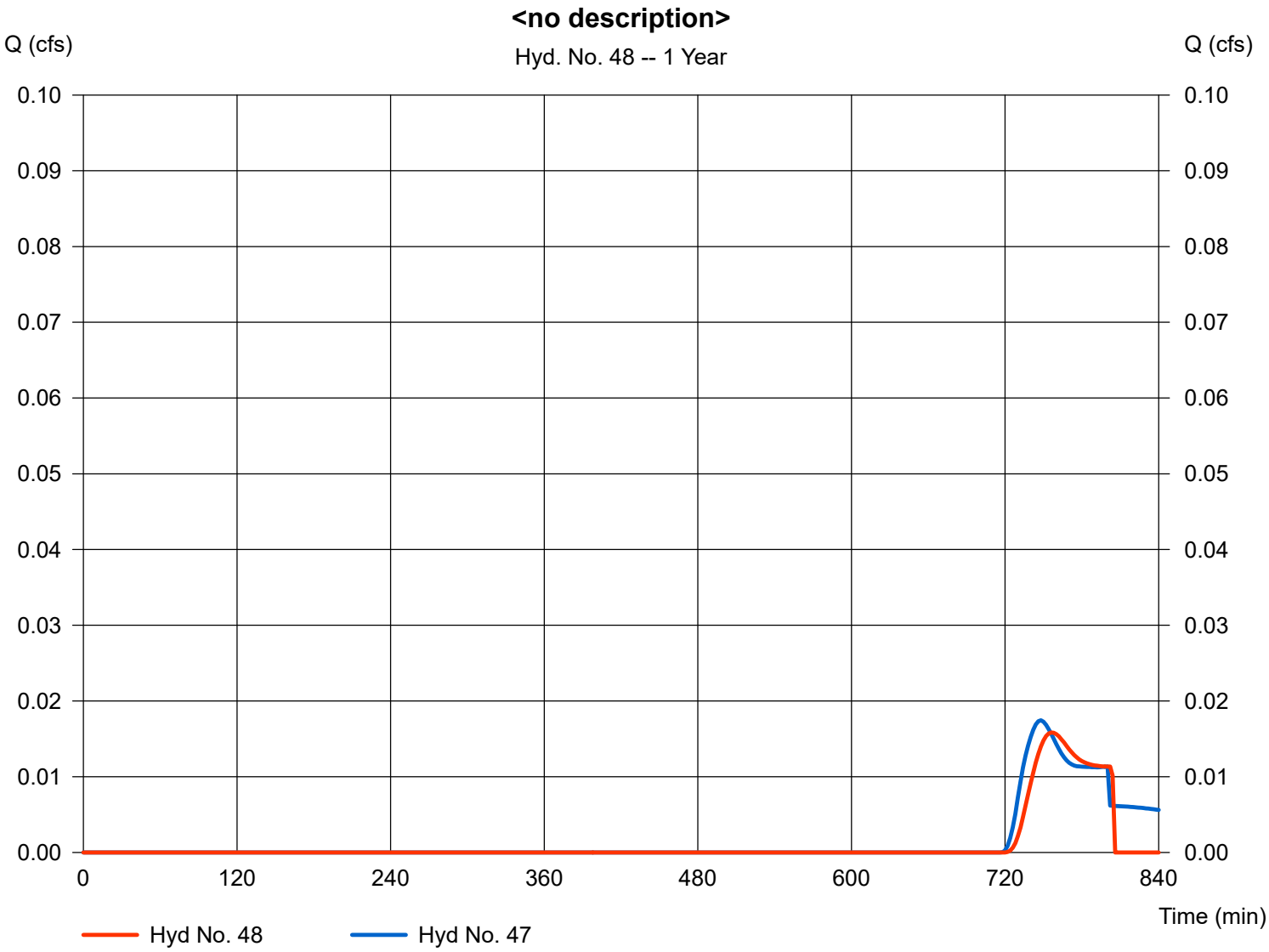
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 48

<no description>

Hydrograph type	= Reach	Peak discharge	= 0.016 cfs
Storm frequency	= 1 yrs	Time to peak	= 756 min
Time interval	= 2 min	Hyd. volume	= 54 cuft
Inflow hyd. No.	= 47 - <no description>	Section type	= Trapezoidal
Reach length	= 145.0 ft	Channel slope	= 3.0 %
Manning's n	= 0.200	Bottom width	= 5.0 ft
Side slope	= 3.0:1	Max. depth	= 1.0 ft
Rating curve x	= 0.441	Rating curve m	= 1.190
Ave. velocity	= 0.26 ft/s	Routing coeff.	= 0.2297

Modified Att-Kin routing method used.



Hydrograph Report

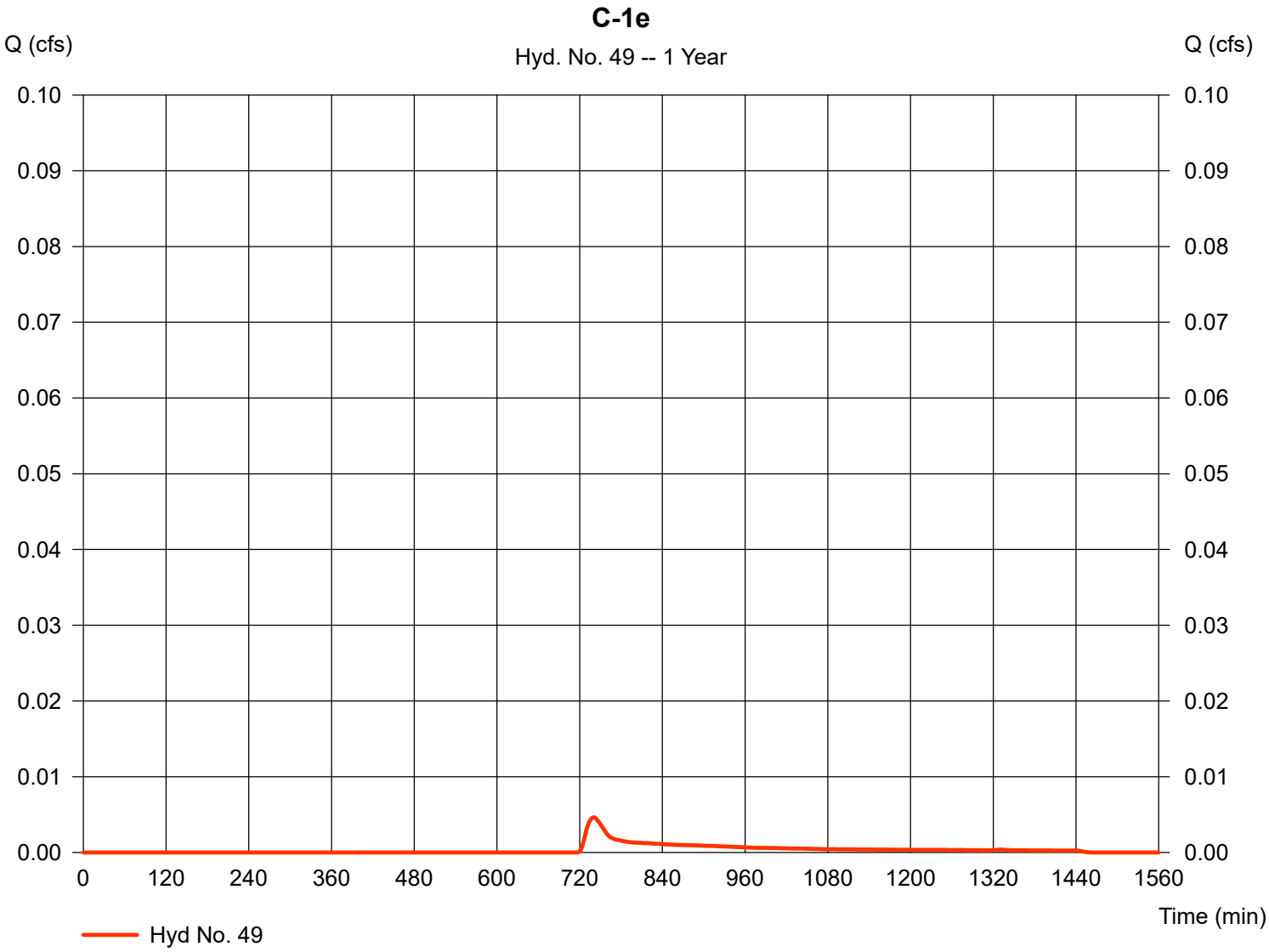
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 49

C-1e

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.005 cfs
Storm frequency	=	1 yrs	Time to peak	=	740 min
Time interval	=	2 min	Hyd. volume	=	32 cuft
Drainage area	=	0.080 ac	Curve number	=	82*
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	TR55	Time of conc. (Tc)	=	14.80 min
Total precip.	=	1.00 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

* Composite (Area/CN) = [(0.020 x 79) + (0.020 x 74) + (0.020 x 87) + (0.010 x 77) + (0.010 x 98)] / 0.080



TR55 Tc Worksheet

Hydraflow Hydrographs by Intelisolve v9.23

Hyd. No. 49

C-1e

Description		A		B		C		Totals
Sheet Flow								
Manning's n-value	=	0.170		0.170		0.011		
Flow length (ft)	=	35.0		114.0		0.0		
Two-year 24-hr precip. (in)	=	3.45		3.45		0.00		
Land slope (%)	=	10.60		3.70		0.00		
Travel Time (min)	**=**	**2.31**	**+**	**9.06**	**+**	**0.00**	**=**	**11.37**
Shallow Concentrated Flow								
Flow length (ft)	=	0.00		0.00		0.00		
Watercourse slope (%)	=	0.00		0.00		0.00		
Surface description	=	Paved		Paved		Paved		
Average velocity (ft/s)	=	0.00		0.00		0.00		
Travel Time (min)	**=**	**0.00**	**+**	**0.00**	**+**	**0.00**	**=**	**0.00**
Channel Flow								
X sectional flow area (sqft)	=	3.50		0.00		0.00		
Wetted perimeter (ft)	=	12.00		0.00		0.00		
Channel slope (%)	=	3.30		0.00		0.00		
Manning's n-value	=	0.200		0.015		0.015		
Velocity (ft/s)	=	0.59		0.00		0.00		
Flow length (ft)	=	123.0		0.0		0.0		
Travel Time (min)	**=**	**3.46**	**+**	**0.00**	**+**	**0.00**	**=**	**3.46**

Total Travel Time, Tc ..... 14.80 min

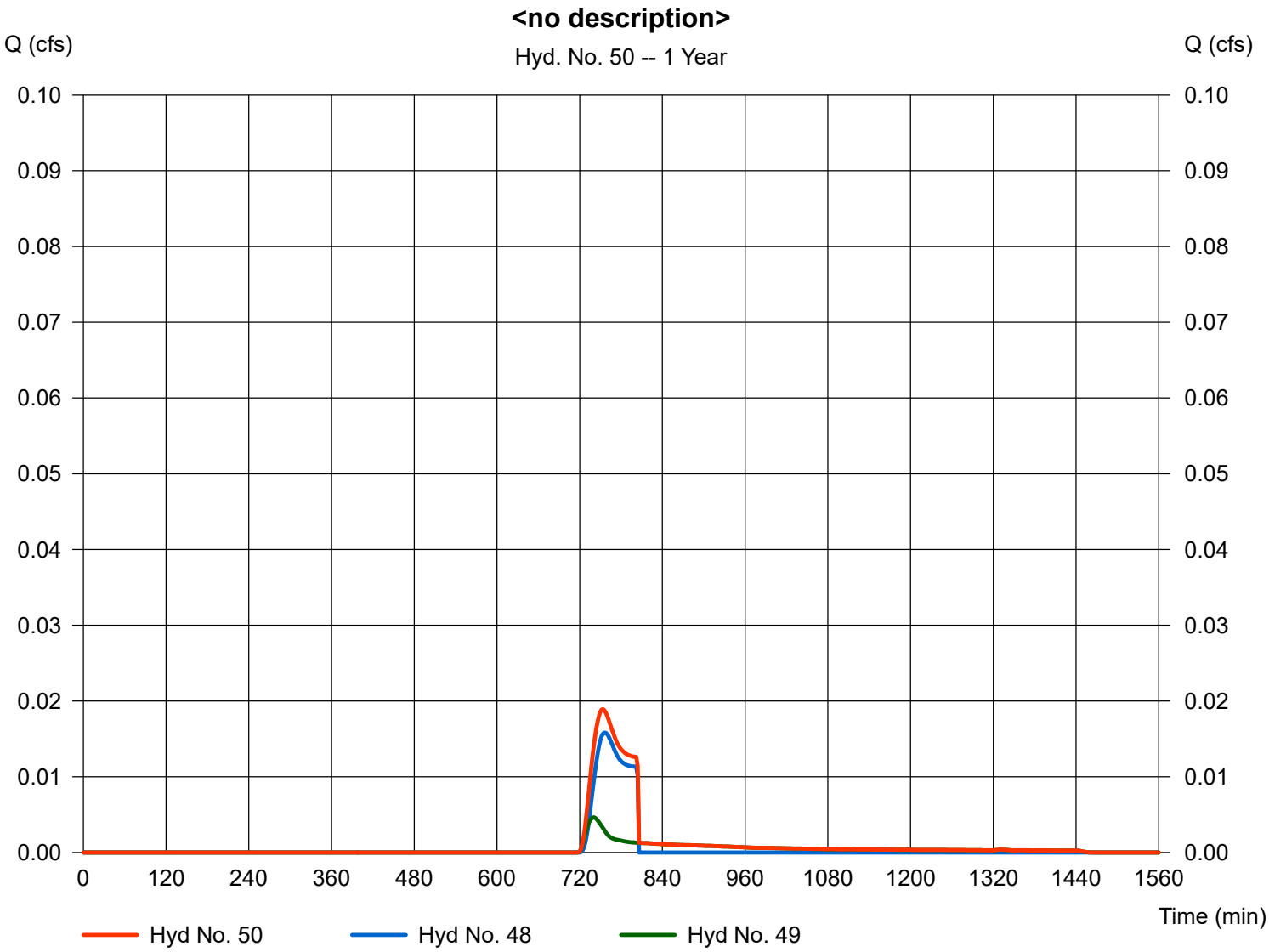
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 50

<no description>

Hydrograph type	=	Combine	Peak discharge	=	0.019 cfs
Storm frequency	=	1 yrs	Time to peak	=	754 min
Time interval	=	2 min	Hyd. volume	=	86 cuft
Inflow hyds.	=	48, 49	Contrib. drain. area	=	0.080 ac



Hydrograph Report

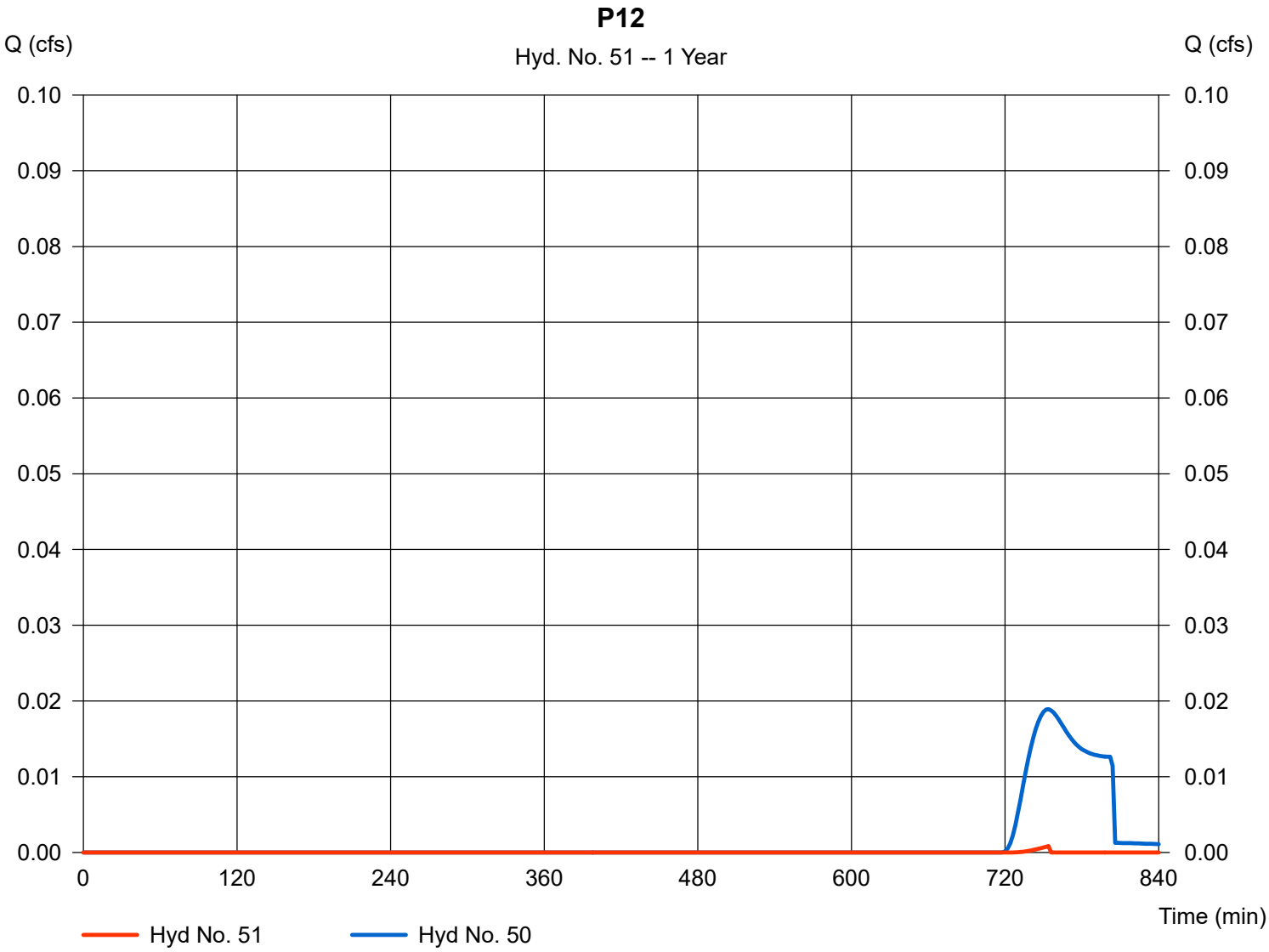
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 51

P12

Hydrograph type	= Reach	Peak discharge	= 0.001 cfs
Storm frequency	= 1 yrs	Time to peak	= 754 min
Time interval	= 2 min	Hyd. volume	= 1 cuft
Inflow hyd. No.	= 50 - <no description>	Section type	= Circular
Reach length	= 175.0 ft	Channel slope	= 1.9 %
Manning's n	= 0.009	Bottom width	= 2.0 ft
Side slope	= 0.0:1	Max. depth	= 0.0 ft
Rating curve x	= 13.822	Rating curve m	= 1.250
Ave. velocity	= 0.01 ft/s	Routing coeff.	= 0.0051

Modified Att-Kin routing method used.



Hydrograph Report

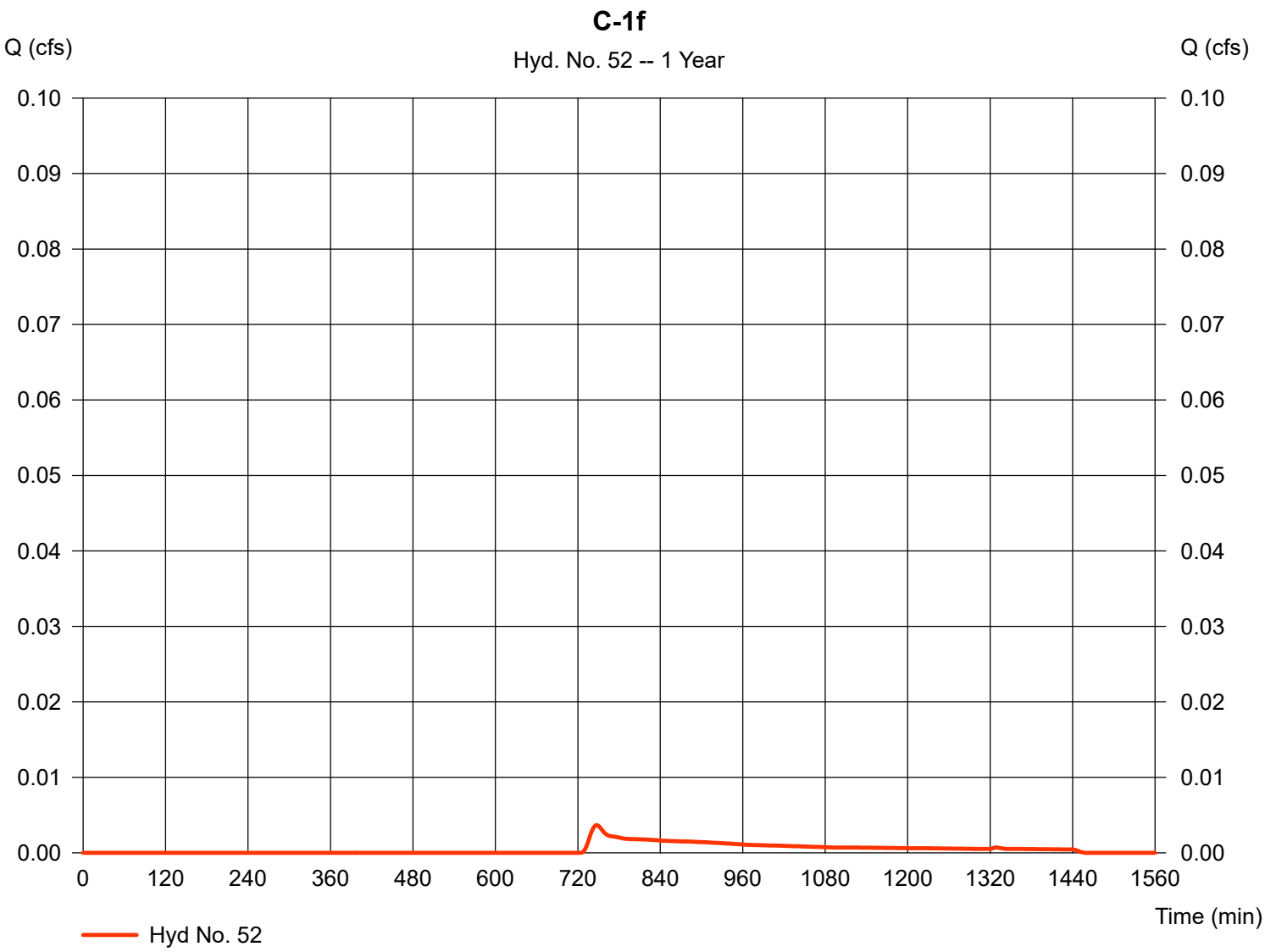
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 52

C-1f

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.004 cfs
Storm frequency	=	1 yrs	Time to peak	=	748 min
Time interval	=	2 min	Hyd. volume	=	44 cuft
Drainage area	=	0.200 ac	Curve number	=	78*
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	TR55	Time of conc. (Tc)	=	12.40 min
Total precip.	=	1.00 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

* Composite (Area/CN) = [(0.032 x 79) + (0.040 x 87) + (0.002 x 75) + (0.002 x 98) + (0.123 x 74)] / 0.200



TR55 Tc Worksheet

Hydraflow Hydrographs by Intelisolve v9.23

Hyd. No. 52

C-1f

Description		A		B		C		Totals
Sheet Flow								
Manning's n-value	=	0.240		0.020		0.240		
Flow length (ft)	=	62.0		70.0		30.0		
Two-year 24-hr precip. (in)	=	3.45		3.45		3.45		
Land slope (%)	=	7.10		1.60		2.00		
Travel Time (min)	**=**	**5.65**	**+**	**1.55**	**+**	**5.25**	**=**	**12.44**
Shallow Concentrated Flow								
Flow length (ft)	=	0.00		0.00		0.00		
Watercourse slope (%)	=	0.00		0.00		0.00		
Surface description	=	Paved		Paved		Paved		
Average velocity (ft/s)	=	0.00		0.00		0.00		
Travel Time (min)	**=**	**0.00**	**+**	**0.00**	**+**	**0.00**	**=**	**0.00**
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 ..... 12.40 min

Hydrograph Report

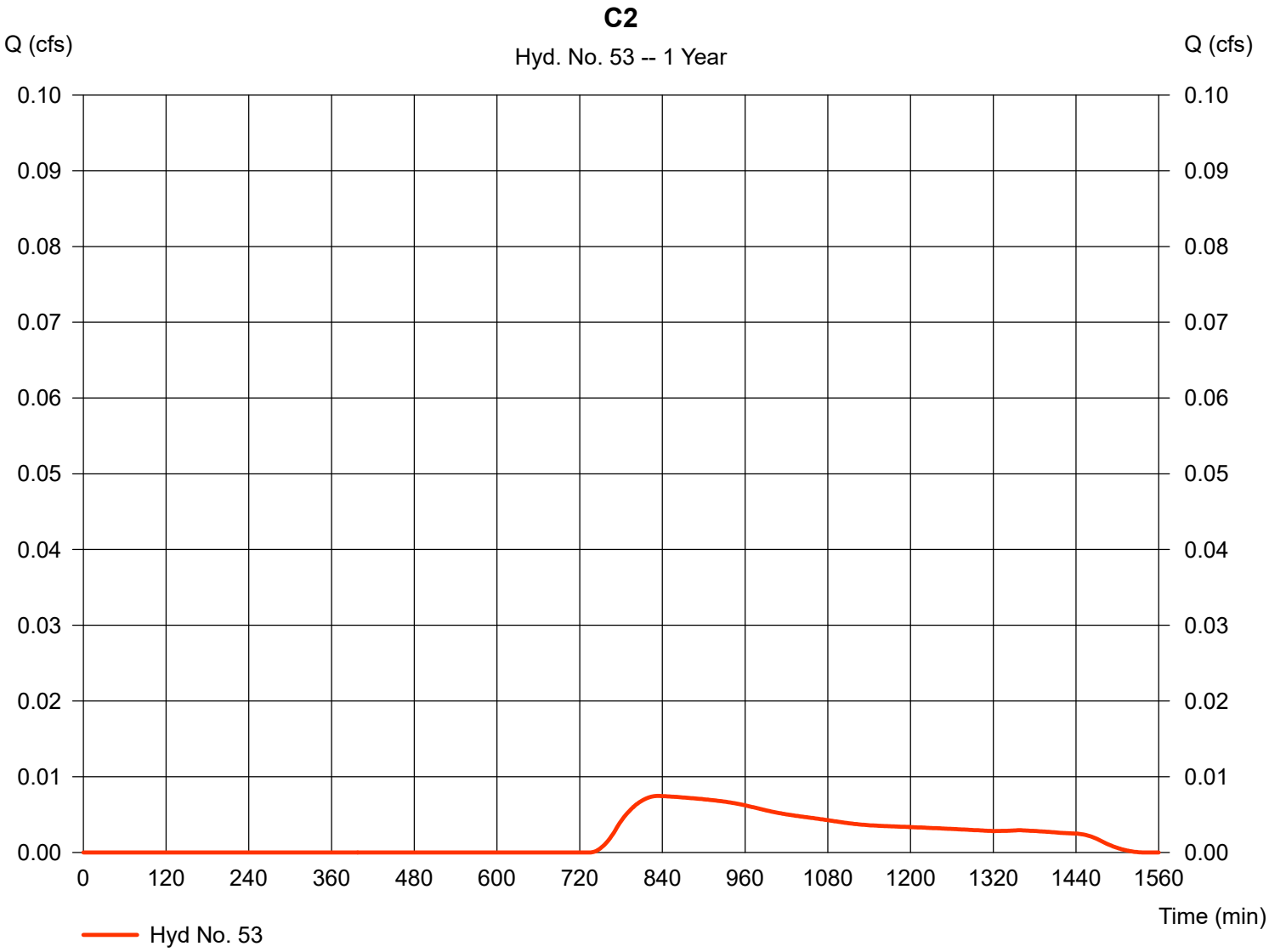
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 53

C2

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.007 cfs
Storm frequency	=	1 yrs	Time to peak	=	834 min
Time interval	=	2 min	Hyd. volume	=	190 cuft
Drainage area	=	1.350 ac	Curve number	=	76*
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	TR55	Time of conc. (Tc)	=	61.70 min
Total precip.	=	1.00 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

* Composite (Area/CN) = [(0.006 x 98) + (1.000 x 77) + (0.320 x 74) + (0.027 x 73)] / 1.350



TR55 Tc Worksheet

Hydraflow Hydrographs by Intelisolve v9.23

Hyd. No. 53

C2

Description		A		B		C		Totals
Sheet Flow								
Manning's n-value	=	0.170		0.800		0.011		
Flow length (ft)	=	115.0		115.0		0.0		
Two-year 24-hr precip. (in)	=	3.45		3.45		0.00		
Land slope (%)	=	1.30		1.30		0.00		
Travel Time (min)	**=**	**13.86**	**+**	**47.84**	**+**	**0.00**	**=**	**61.70**
Shallow Concentrated Flow								
Flow length (ft)	=	0.00		0.00		0.00		
Watercourse slope (%)	=	0.00		0.00		0.00		
Surface description	=	Paved		Paved		Paved		
Average velocity (ft/s)	=	0.00		0.00		0.00		
Travel Time (min)	**=**	**0.00**	**+**	**0.00**	**+**	**0.00**	**=**	**0.00**
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 ..... 61.70 min

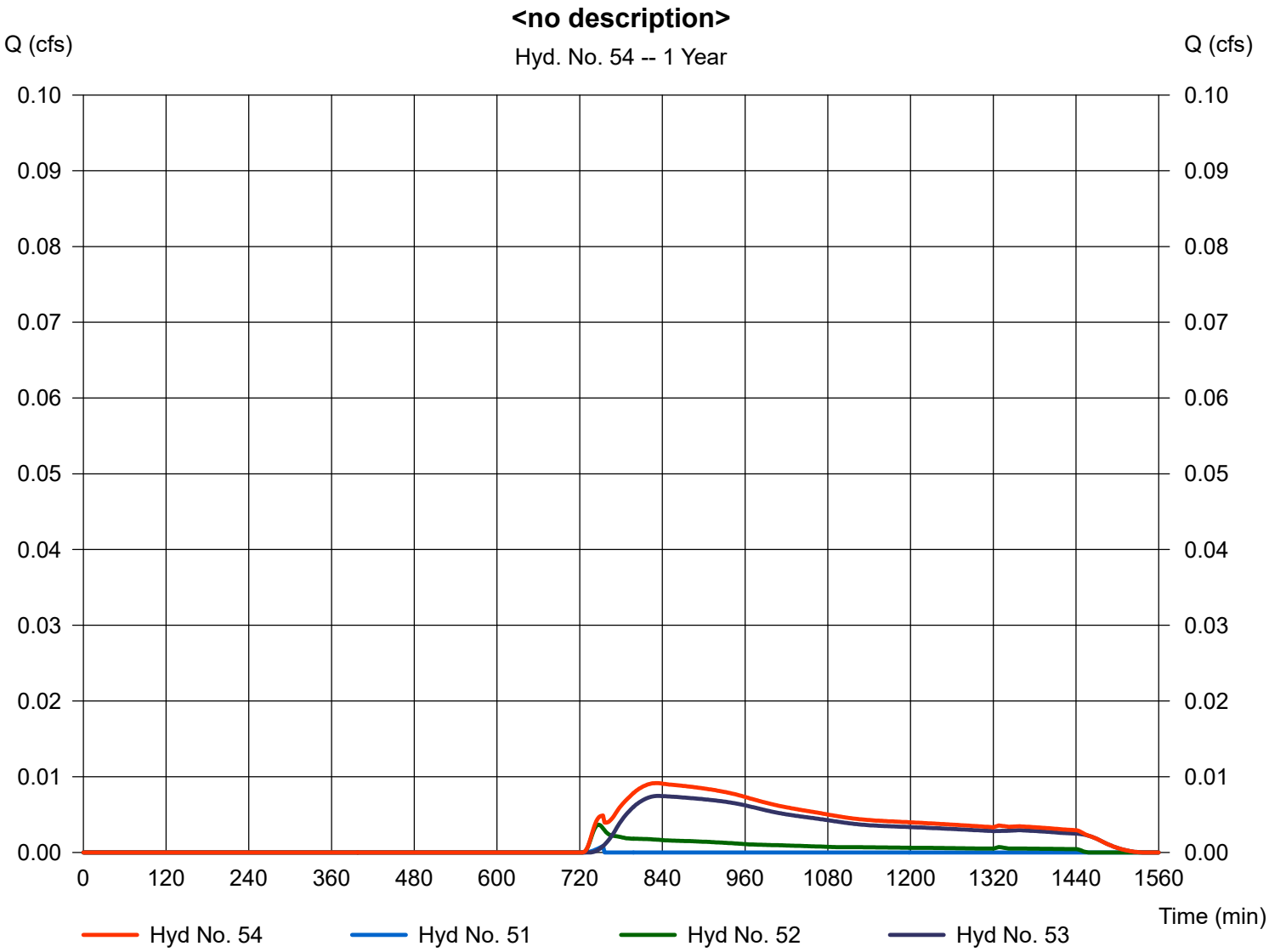
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 54

<no description>

Hydrograph type	=	Combine	Peak discharge	=	0.009 cfs
Storm frequency	=	1 yrs	Time to peak	=	832 min
Time interval	=	2 min	Hyd. volume	=	234 cuft
Inflow hyds.	=	51, 52, 53	Contrib. drain. area	=	1.550 ac



Hydrograph Report

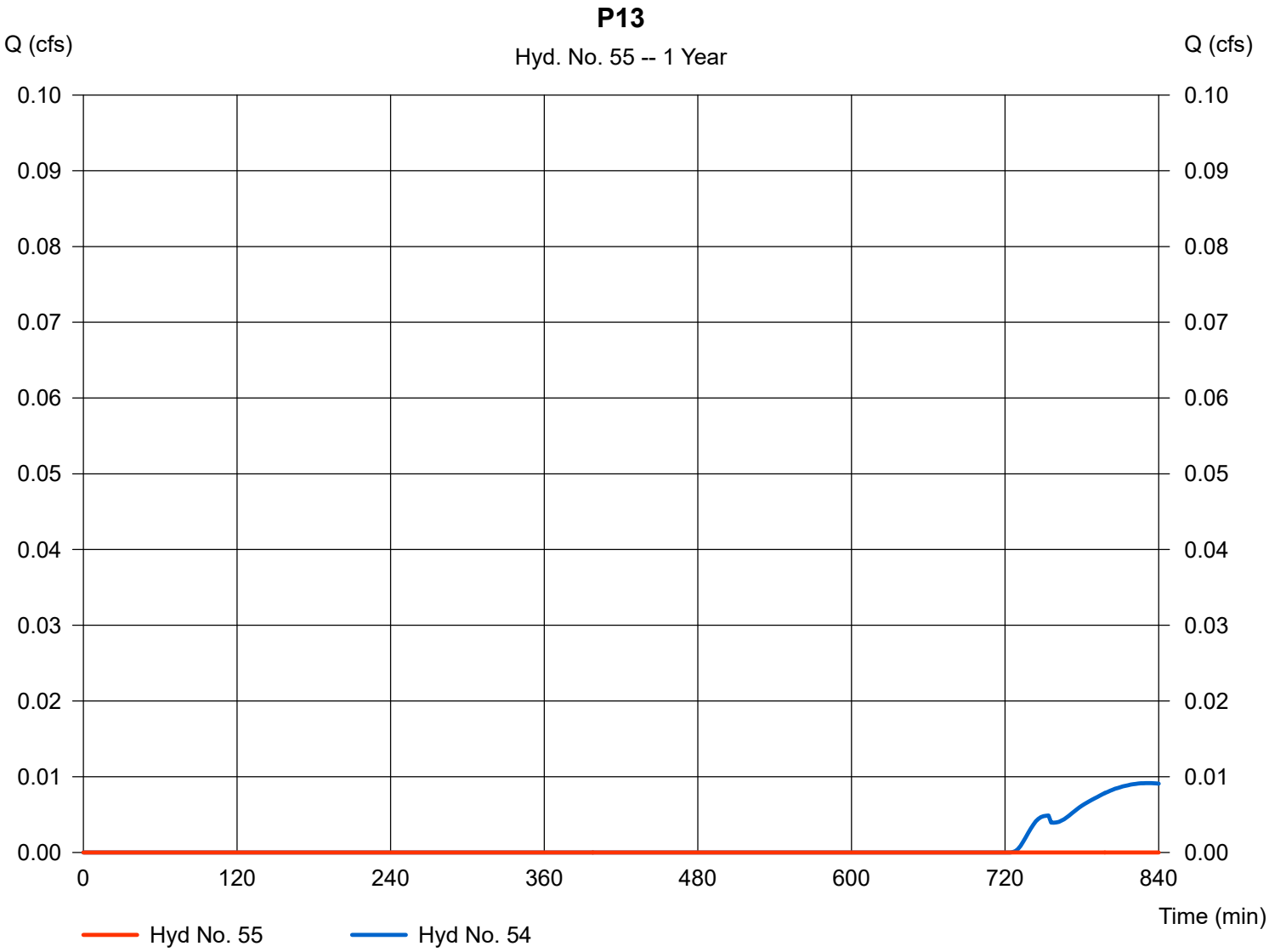
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 55

P13

Hydrograph type	= Reach	Peak discharge	= 0.000 cfs
Storm frequency	= 1 yrs	Time to peak	= 832 min
Time interval	= 2 min	Hyd. volume	= 0 cuft
Inflow hyd. No.	= 54 - <no description>	Section type	= Circular
Reach length	= 120.0 ft	Channel slope	= 1.9 %
Manning's n	= 0.009	Bottom width	= 24.0 ft
Side slope	= 0.0:1	Max. depth	= 0.0 ft
Rating curve x	= 20.916	Rating curve m	= 1.250
Ave. velocity	= 0.00 ft/s	Routing coeff.	= 0.0000

Modified Att-Kin routing method used.



Hydrograph Report

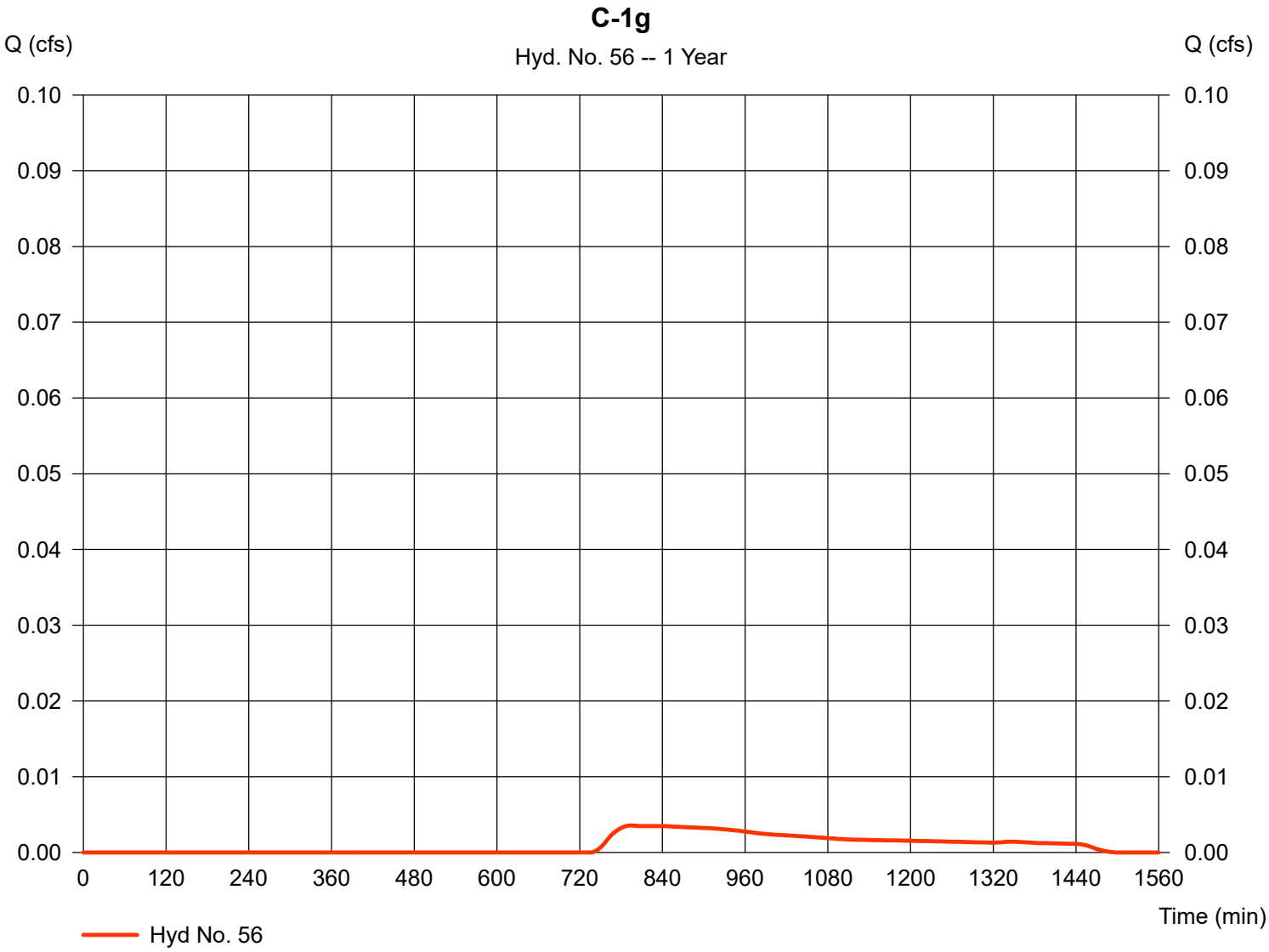
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 56

C-1g

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.004 cfs
Storm frequency	=	1 yrs	Time to peak	=	796 min
Time interval	=	2 min	Hyd. volume	=	89 cuft
Drainage area	=	0.640 ac	Curve number	=	76*
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	TR55	Time of conc. (Tc)	=	38.50 min
Total precip.	=	1.00 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

* Composite (Area/CN) = [(0.190 x 74) + (0.390 x 77) + (0.040 x 77) + (0.020 x 87)] / 0.640



TR55 Tc Worksheet

Hyd. No. 56

C-1g

Description		A		B		C		Totals
Sheet Flow								
Manning's n-value	=	0.020		0.240		0.170		
Flow length (ft)	=	8.0		161.0		62.0		
Two-year 24-hr precip. (in)	=	3.45		3.45		3.45		
Land slope (%)	=	0.50		0.60		5.30		
Travel Time (min)	**=**	**0.43**	**+**	**32.56**	**+**	**4.82**	**=**	**37.81**
Shallow Concentrated Flow								
Flow length (ft)	=	66.00		0.00		0.00		
Watercourse slope (%)	=	1.00		0.00		0.00		
Surface description	=	Unpaved		Paved		Paved		
Average velocity (ft/s)	=	1.61		0.00		0.00		
Travel Time (min)	**=**	**0.68**	**+**	**0.00**	**+**	**0.00**	**=**	**0.68**
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 ..... 38.50 min

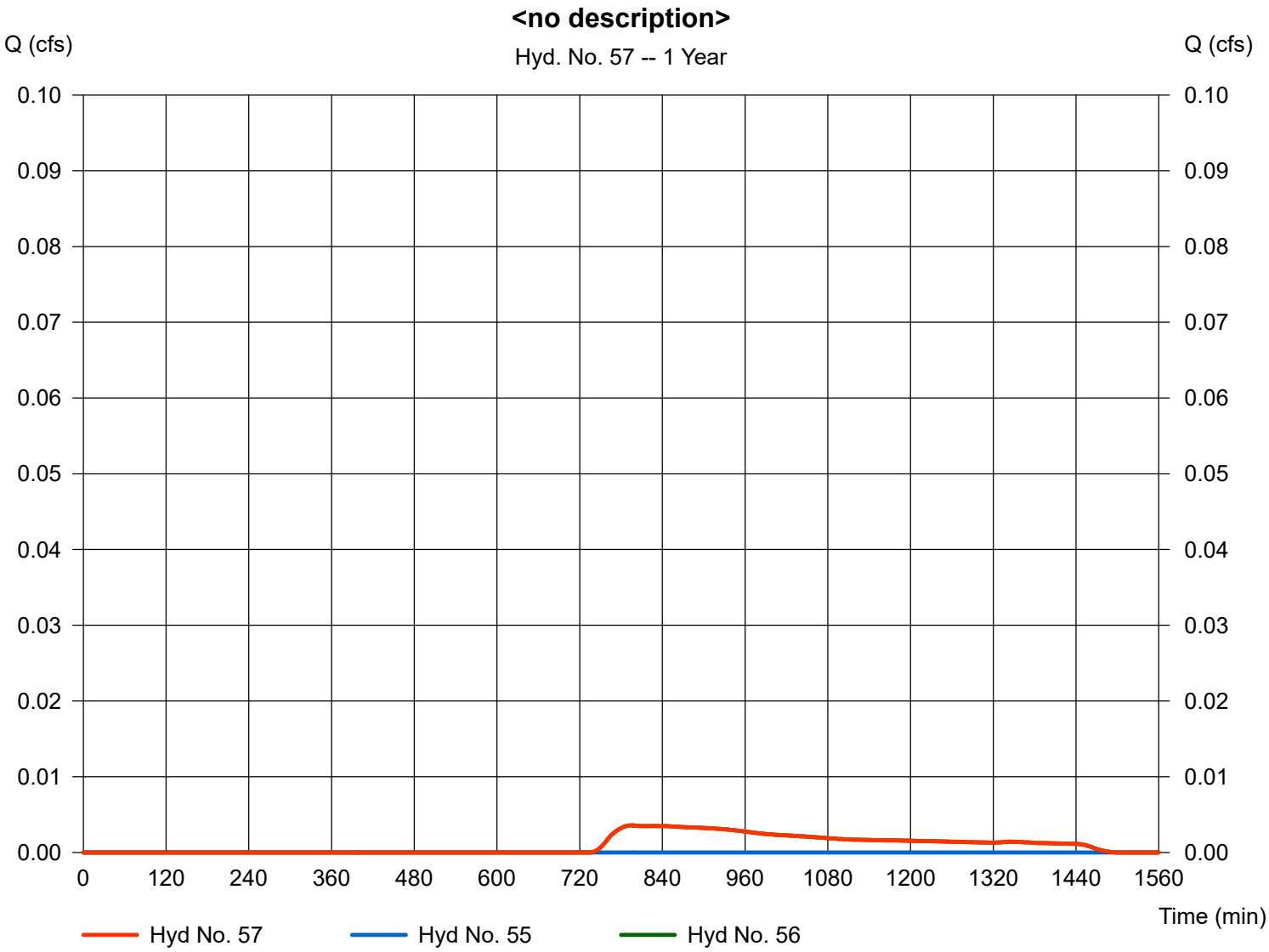
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 57

<no description>

Hydrograph type	=	Combine	Peak discharge	=	0.004 cfs
Storm frequency	=	1 yrs	Time to peak	=	796 min
Time interval	=	2 min	Hyd. volume	=	89 cuft
Inflow hyds.	=	55, 56	Contrib. drain. area	=	0.640 ac



Hydrograph Report

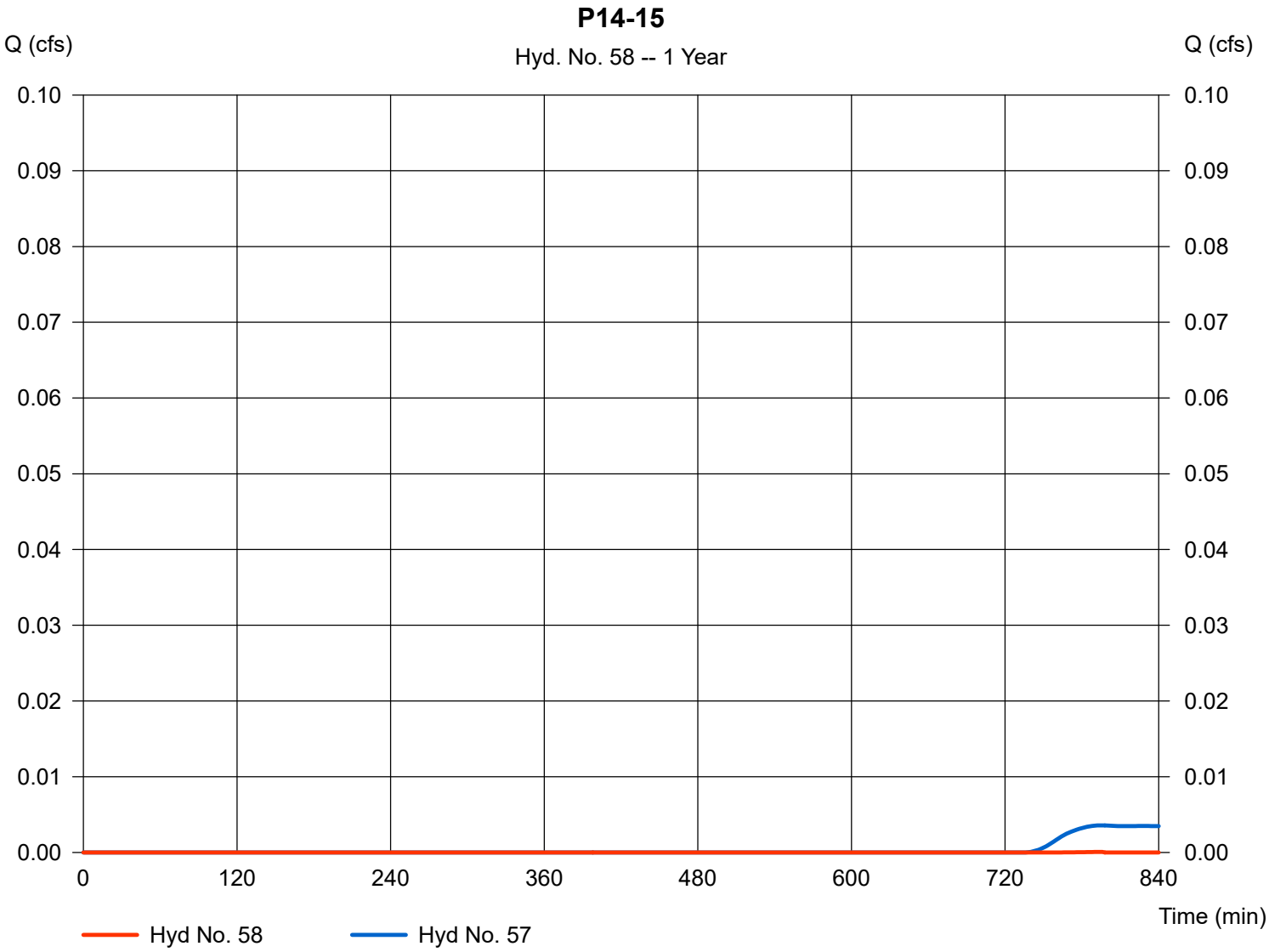
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 58

P14-15

Hydrograph type	= Reach	Peak discharge	= 0.000 cfs
Storm frequency	= 1 yrs	Time to peak	= 796 min
Time interval	= 2 min	Hyd. volume	= 0 cuft
Inflow hyd. No.	= 57 - <no description>	Section type	= Circular
Reach length	= 136.0 ft	Channel slope	= 1.9 %
Manning's n	= 0.009	Bottom width	= 2.0 ft
Side slope	= 0.0:1	Max. depth	= 0.0 ft
Rating curve x	= 13.822	Rating curve m	= 1.250
Ave. velocity	= 0.00 ft/s	Routing coeff.	= 0.0013

Modified Att-Kin routing method used.



Hydrograph Report

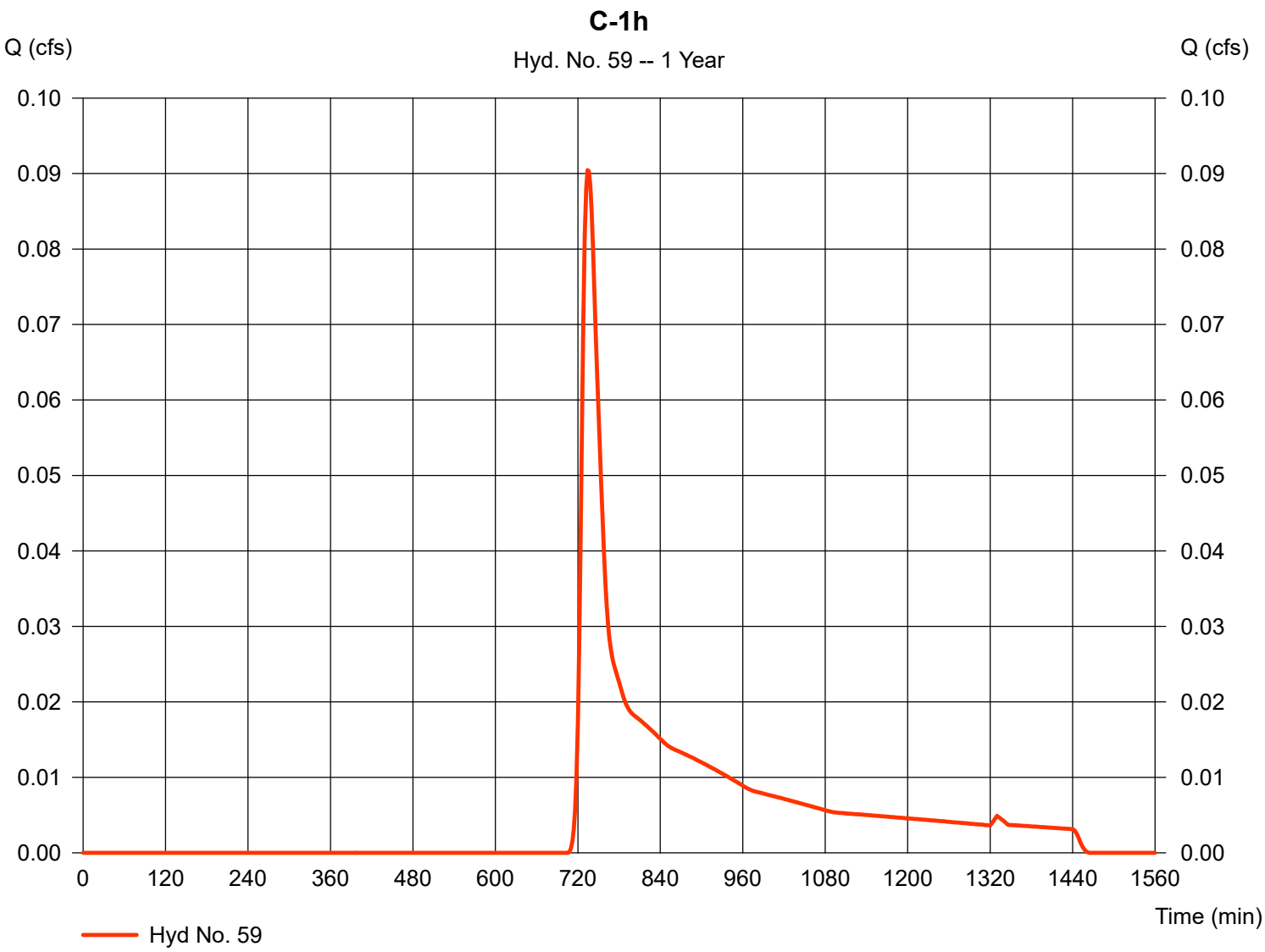
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 59

C-1h

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.090 cfs
Storm frequency	=	1 yrs	Time to peak	=	734 min
Time interval	=	2 min	Hyd. volume	=	485 cuft
Drainage area	=	0.790 ac	Curve number	=	85*
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	TR55	Time of conc. (Tc)	=	13.70 min
Total precip.	=	1.00 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

* Composite (Area/CN) = [(0.333 x 98) + (0.214 x 74) + (0.173 x 77) + (0.069 x 75)] / 0.790



TR55 Tc Worksheet

Hydraflow Hydrographs by Intelisolve v9.23

Hyd. No. 59

C-1h

Description		A		B		C		Totals
Sheet Flow								
Manning's n-value	=	0.170		0.400		0.016		
Flow length (ft)	=	59.0		32.6		113.0		
Two-year 24-hr precip. (in)	=	3.45		3.45		3.45		
Land slope (%)	=	6.00		3.40		0.80		
Travel Time (min)	**=**	**4.41**	**+**	**6.82**	**+**	**2.51**	**=**	**13.74**
Shallow Concentrated Flow								
Flow length (ft)	=	0.00		0.00		0.00		
Watercourse slope (%)	=	0.00		0.00		0.00		
Surface description	=	Paved		Paved		Paved		
Average velocity (ft/s)	=	0.00		0.00		0.00		
Travel Time (min)	**=**	**0.00**	**+**	**0.00**	**+**	**0.00**	**=**	**0.00**
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 ..... 13.70 min

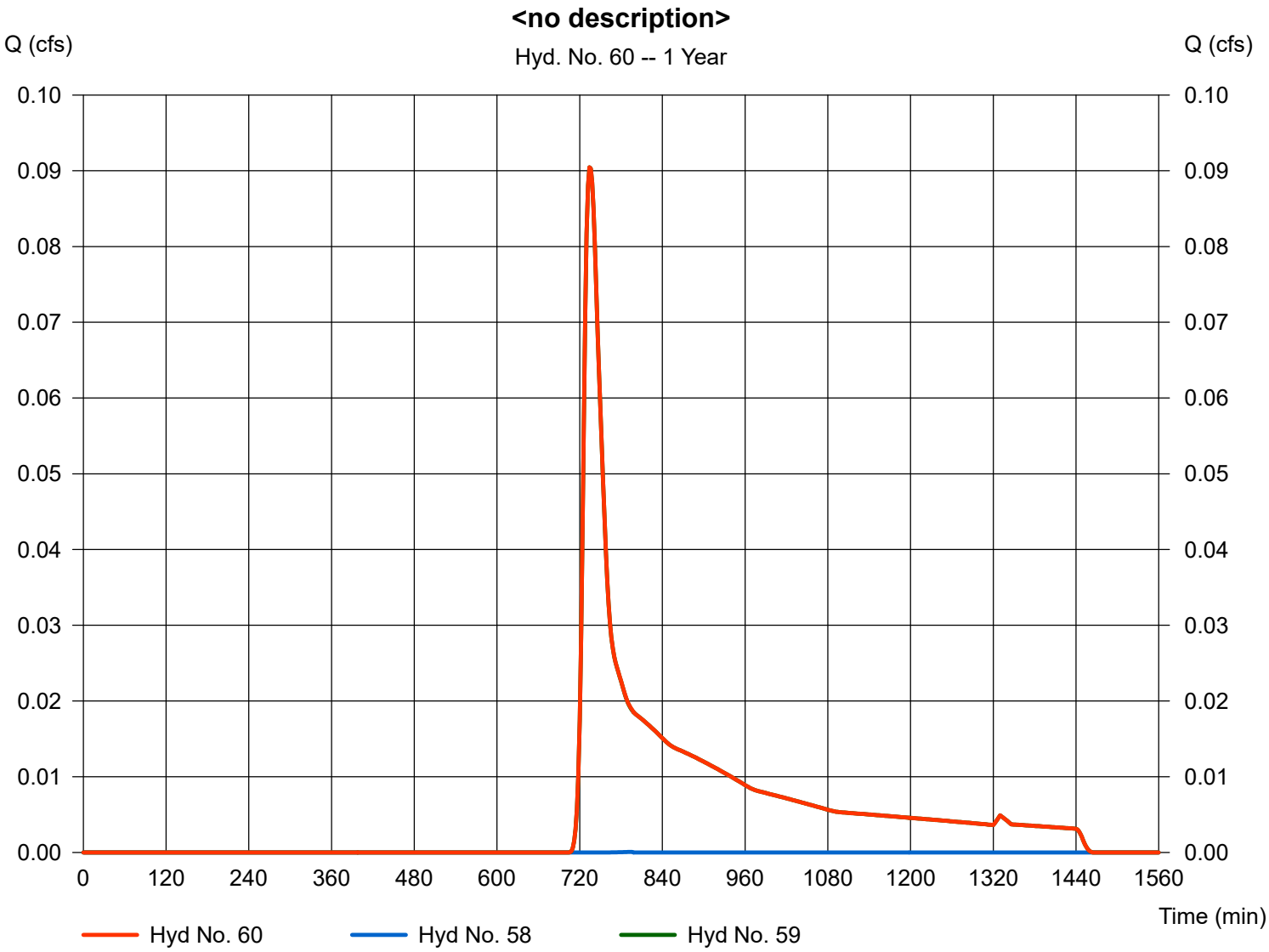
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 60

<no description>

Hydrograph type	=	Combine	Peak discharge	=	0.090 cfs
Storm frequency	=	1 yrs	Time to peak	=	734 min
Time interval	=	2 min	Hyd. volume	=	485 cuft
Inflow hyds.	=	58, 59	Contrib. drain. area	=	0.790 ac



Hydrograph Report

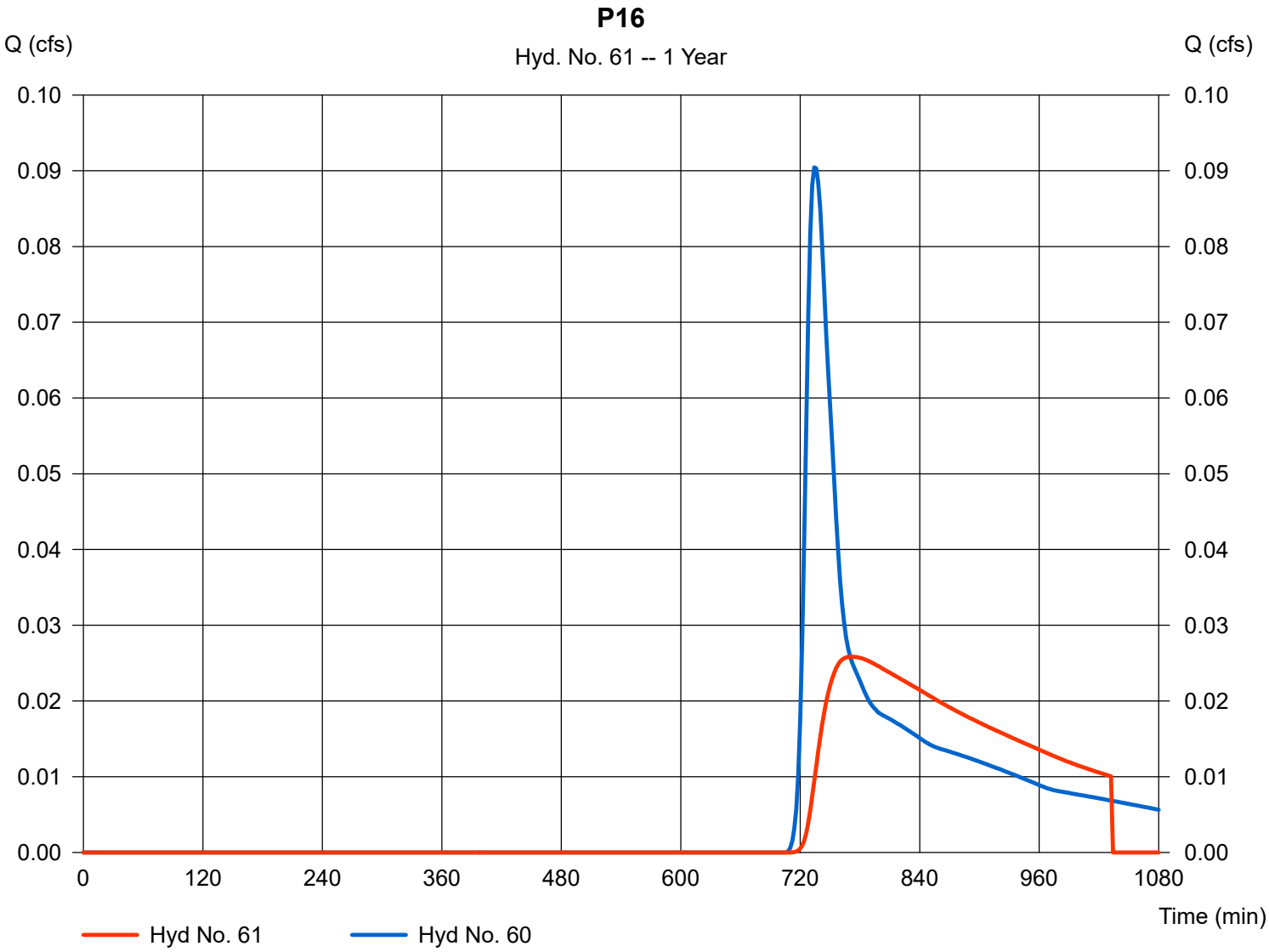
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 61

P16

Hydrograph type	=	Reach	Peak discharge	=	0.026 cfs
Storm frequency	=	1 yrs	Time to peak	=	772 min
Time interval	=	2 min	Hyd. volume	=	325 cuft
Inflow hyd. No.	=	60 - <no description>	Section type	=	Circular
Reach length	=	174.0 ft	Channel slope	=	1.9 %
Manning's n	=	0.009	Bottom width	=	2.0 ft
Side slope	=	0.0:1	Max. depth	=	0.0 ft
Rating curve x	=	13.822	Rating curve m	=	1.250
Ave. velocity	=	0.03 ft/s	Routing coeff.	=	0.0245

Modified Att-Kin routing method used.



Hydrograph Report

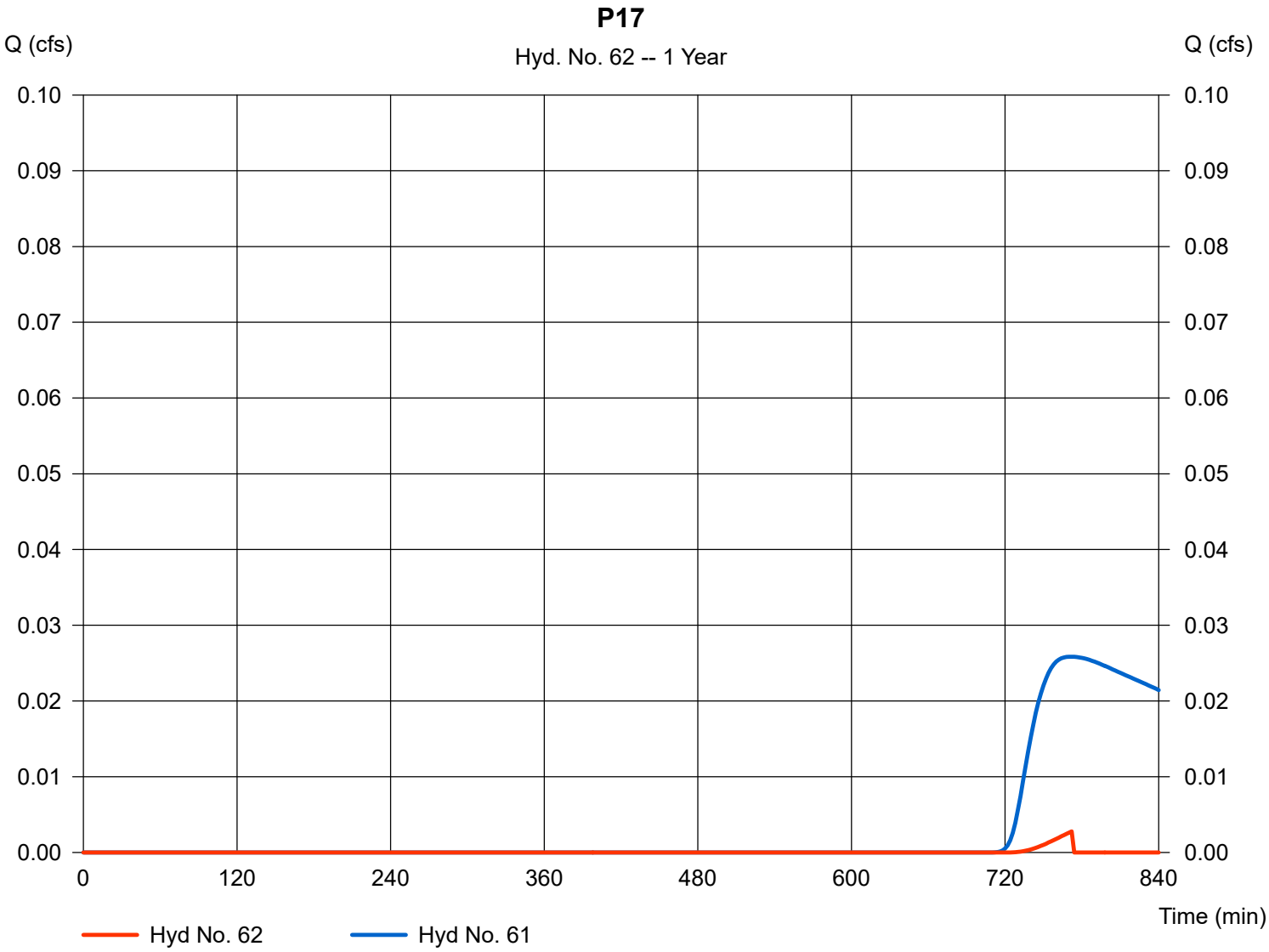
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 62

P17

Hydrograph type	= Reach	Peak discharge	= 0.003 cfs
Storm frequency	= 1 yrs	Time to peak	= 772 min
Time interval	= 2 min	Hyd. volume	= 3 cuft
Inflow hyd. No.	= 61 - P16	Section type	= Circular
Reach length	= 175.0 ft	Channel slope	= 1.9 %
Manning's n	= 0.009	Bottom width	= 2.0 ft
Side slope	= 0.0:1	Max. depth	= 0.0 ft
Rating curve x	= 13.822	Rating curve m	= 1.250
Ave. velocity	= 0.01 ft/s	Routing coeff.	= 0.0070

Modified Att-Kin routing method used.



Hydrograph Report

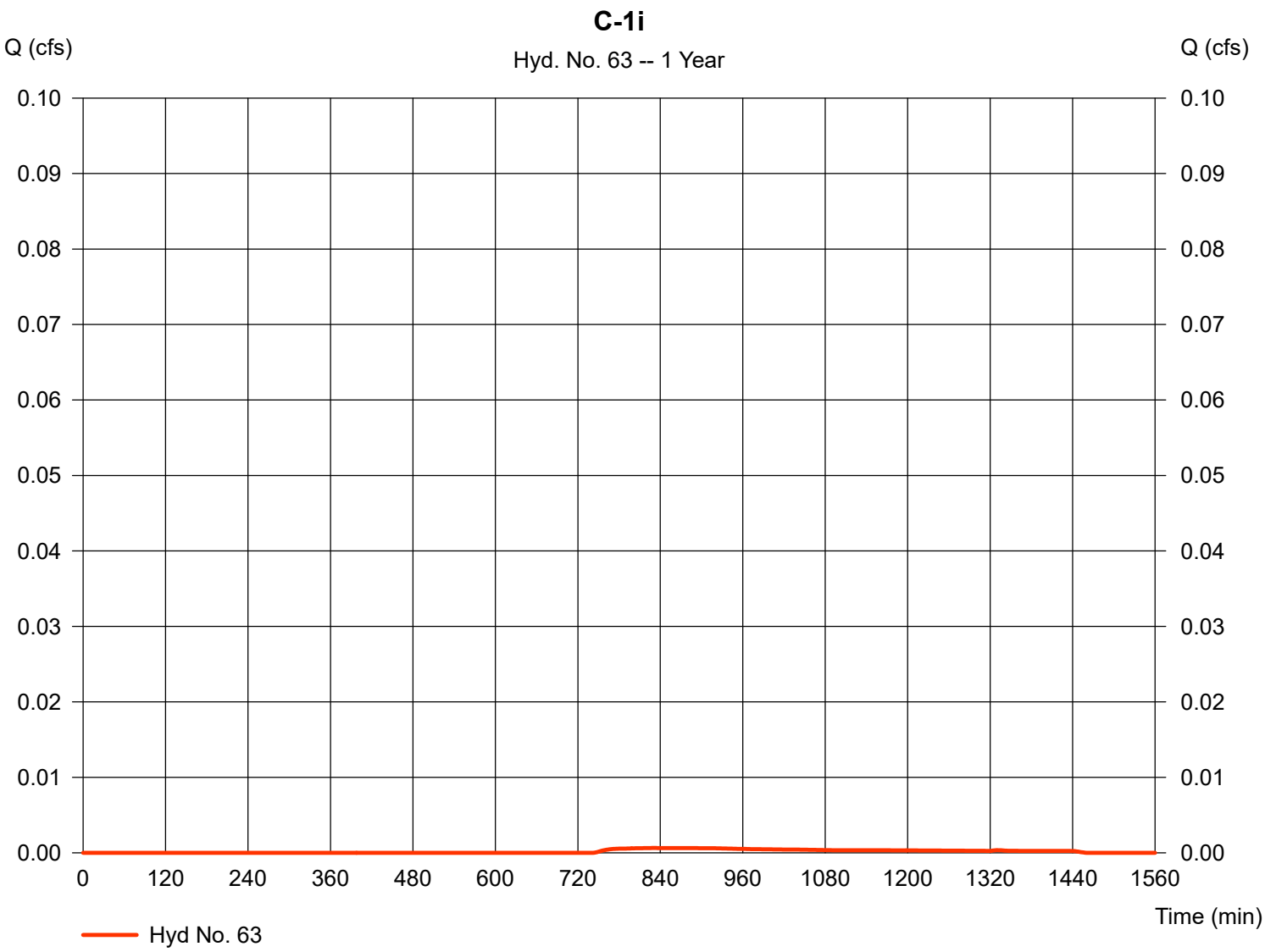
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 63

C-1i

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.001 cfs
Storm frequency	=	1 yrs	Time to peak	=	832 min
Time interval	=	2 min	Hyd. volume	=	17 cuft
Drainage area	=	0.160 ac	Curve number	=	75*
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	TR55	Time of conc. (Tc)	=	15.70 min
Total precip.	=	1.00 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

* Composite (Area/CN) = [(0.160 x 75)] / 0.160



TR55 Tc Worksheet

Hydraflow Hydrographs by Intelisolve v9.23

Hyd. No. 63

C-1i

Description		A		B		C		Totals
Sheet Flow								
Manning's n-value	=	0.300		0.011		0.011		
Flow length (ft)	=	121.0		0.0		0.0		
Two-year 24-hr precip. (in)	=	3.45		0.00		0.00		
Land slope (%)	=	3.30		0.00		0.00		
Travel Time (min)	**=**	**15.66**	**+**	**0.00**	**+**	**0.00**	**=**	**15.66**
Shallow Concentrated Flow								
Flow length (ft)	=	0.00		0.00		0.00		
Watercourse slope (%)	=	0.00		0.00		0.00		
Surface description	=	Paved		Paved		Paved		
Average velocity (ft/s)	=	0.00		0.00		0.00		
Travel Time (min)	**=**	**0.00**	**+**	**0.00**	**+**	**0.00**	**=**	**0.00**
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 ..... 15.70 min

Hydrograph Report

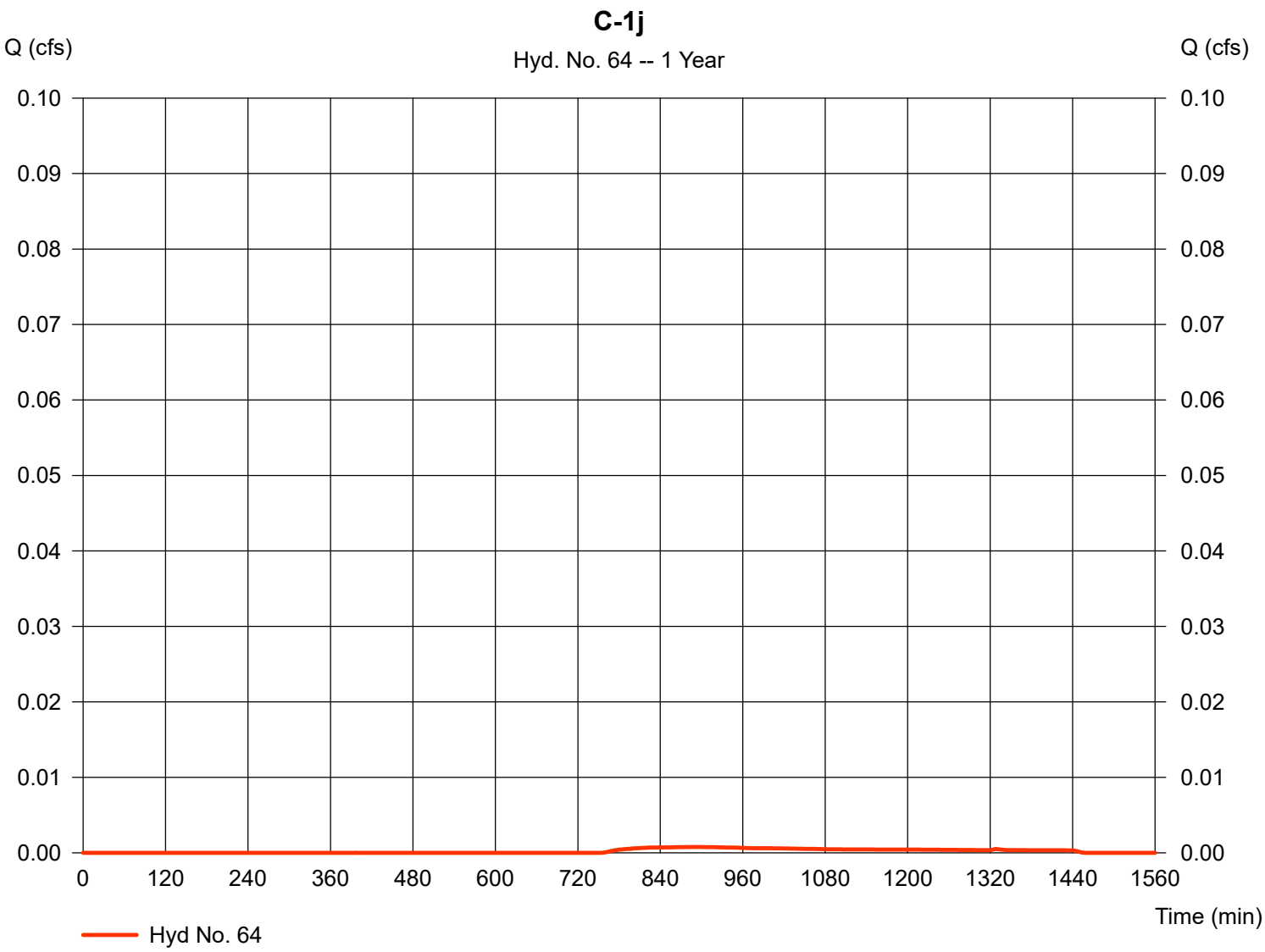
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 64

C-1j

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.001 cfs
Storm frequency	=	1 yrs	Time to peak	=	890 min
Time interval	=	2 min	Hyd. volume	=	21 cuft
Drainage area	=	0.240 ac	Curve number	=	74*
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	TR55	Time of conc. (Tc)	=	10.50 min
Total precip.	=	1.00 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

* Composite (Area/CN) = [(0.240 x 74)] / 0.240



TR55 Tc Worksheet

Hyd. No. 64

C-1j

Description		A		B		C		Totals
Sheet Flow								
Manning's n-value	=	0.240		0.170		0.011		
Flow length (ft)	=	29.0		66.0		0.0		
Two-year 24-hr precip. (in)	=	3.45		3.45		0.00		
Land slope (%)	=	3.40		3.80		0.00		
Travel Time (min)	**=**	**4.13**	**+**	**5.79**	**+**	**0.00**	**=**	**9.92**
Shallow Concentrated Flow								
Flow length (ft)	=	91.00		0.00		0.00		
Watercourse slope (%)	=	2.70		0.00		0.00		
Surface description	=	Unpaved		Paved		Paved		
Average velocity (ft/s)	=	2.65		0.00		0.00		
Travel Time (min)	**=**	**0.57**	**+**	**0.00**	**+**	**0.00**	**=**	**0.57**
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 ..... 10.50 min

Hydrograph Report

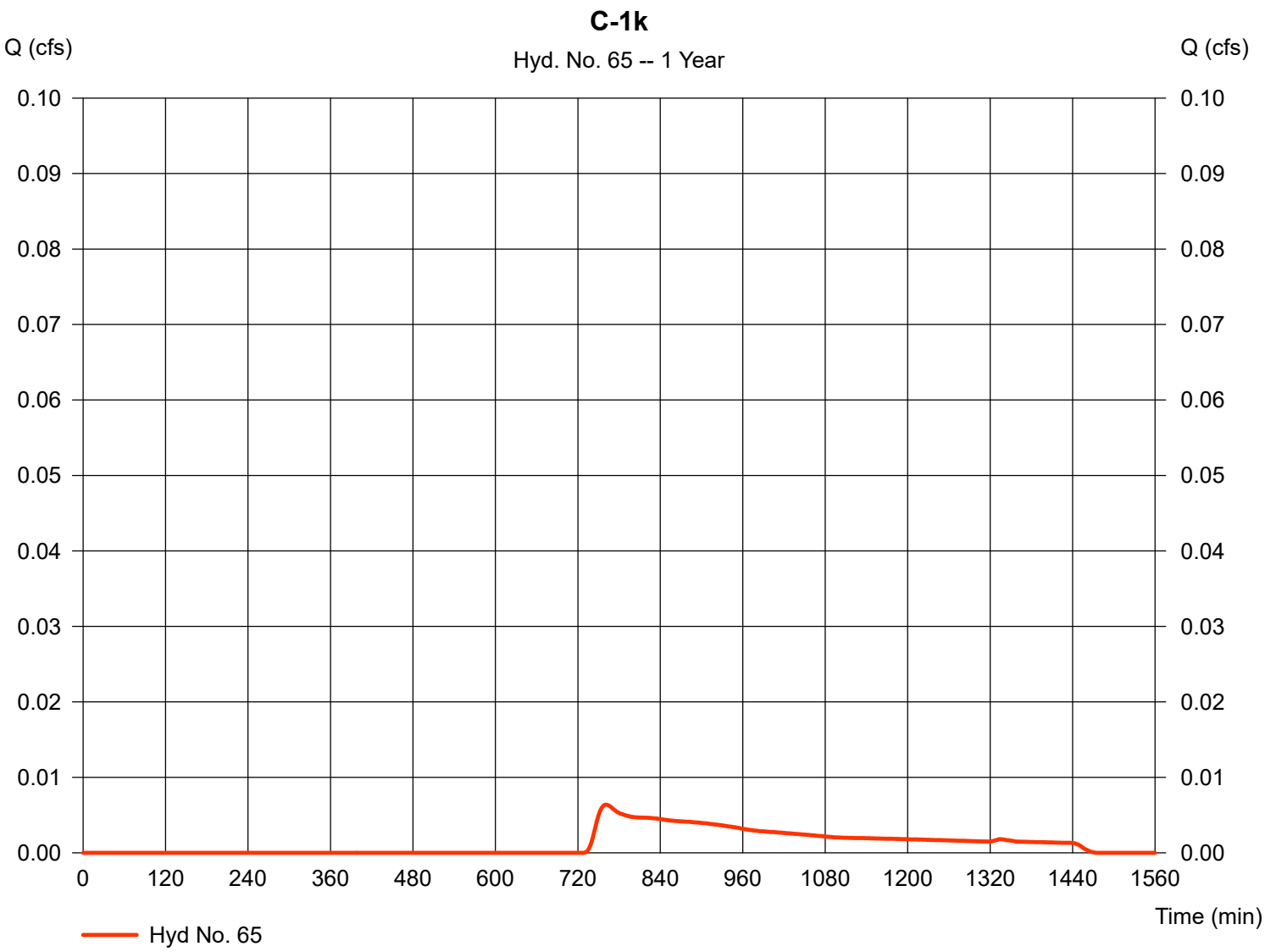
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 65

C-1k

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.006 cfs
Storm frequency	=	1 yrs	Time to peak	=	762 min
Time interval	=	2 min	Hyd. volume	=	115 cuft
Drainage area	=	0.650 ac	Curve number	=	77*
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	TR55	Time of conc. (Tc)	=	21.50 min
Total precip.	=	1.00 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

* Composite (Area/CN) = [(0.206 x 74) + (0.160 x 77) + (0.030 x 87) + (0.250 x 79)] / 0.650



TR55 Tc Worksheet

Hydraflow Hydrographs by Intelisolve v9.23

Hyd. No. 65

C-1k

Description		A		B		C		Totals
Sheet Flow								
Manning's n-value	=	0.020		0.240		0.170		
Flow length (ft)	=	16.0		70.0		163.0		
Two-year 24-hr precip. (in)	=	3.45		3.45		3.45		
Land slope (%)	=	0.50		3.50		3.40		
Travel Time (min)	**=**	**0.76**	**+**	**8.26**	**+**	**12.47**	**=**	**21.49**
Shallow Concentrated Flow								
Flow length (ft)	=	0.00		0.00		0.00		
Watercourse slope (%)	=	0.00		0.00		0.00		
Surface description	=	Paved		Paved		Paved		
Average velocity (ft/s)	=	0.00		0.00		0.00		
Travel Time (min)	**=**	**0.00**	**+**	**0.00**	**+**	**0.00**	**=**	**0.00**
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 ..... 21.50 min

Hydrograph Report

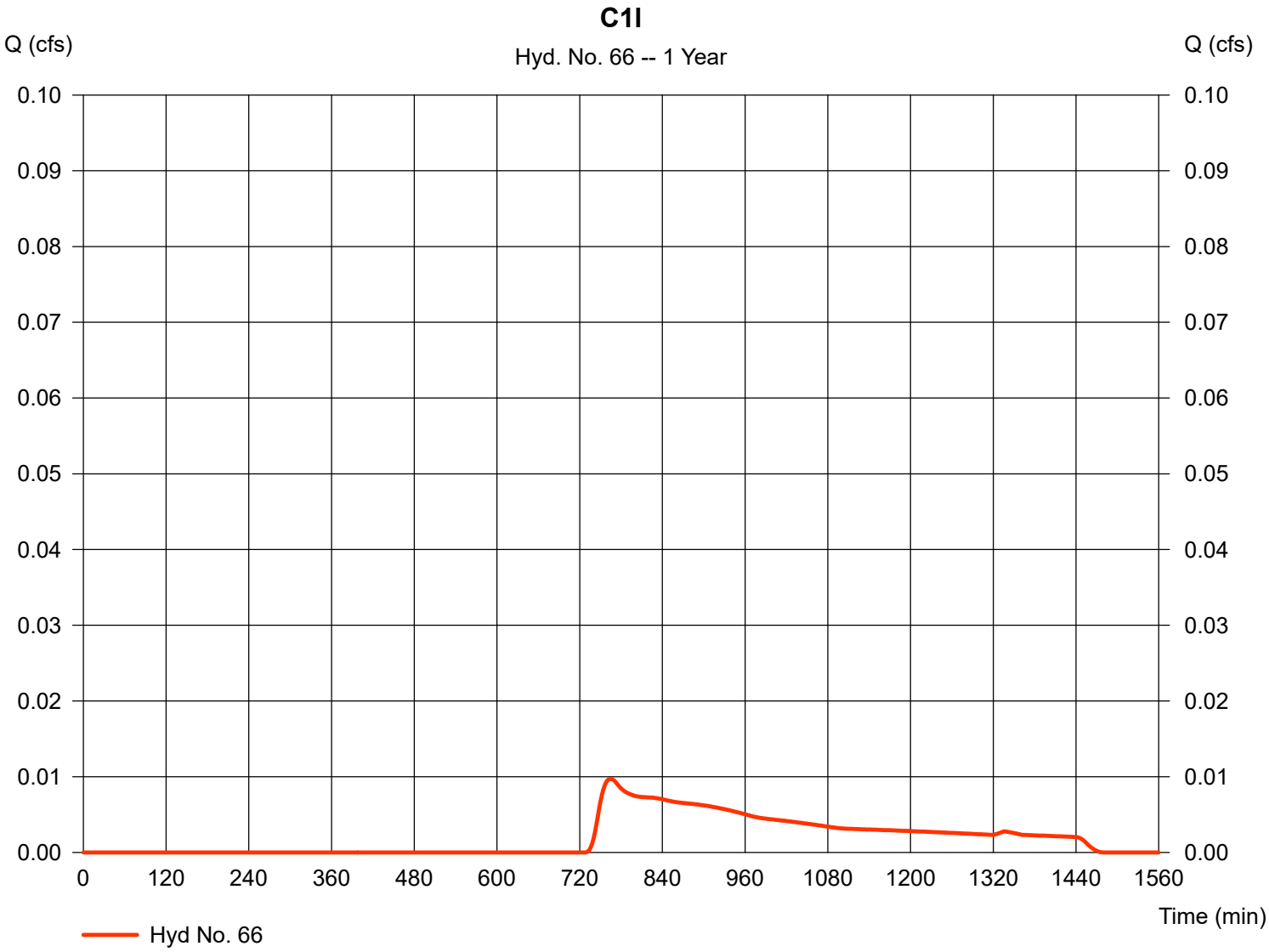
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 66

C1I

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.010 cfs
Storm frequency	=	1 yrs	Time to peak	=	764 min
Time interval	=	2 min	Hyd. volume	=	179 cuft
Drainage area	=	1.050 ac	Curve number	=	77*
Basin Slope	=	0.0 %	Hydraulic length	=	0 ft
Tc method	=	TR55	Time of conc. (Tc)	=	23.50 min
Total precip.	=	1.00 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

* Composite (Area/CN) = [(0.326 x 74) + (0.137 x 73) + (0.100 x 87) + (0.491 x 79)] / 1.050



TR55 Tc Worksheet

Hydraflow Hydrographs by Intelisolve v9.23

Hyd. No. 66

C1I

Description		A		B		C		Totals
Sheet Flow								
Manning's n-value	=	0.240		0.011		0.240		
Flow length (ft)	=	77.0		22.0		149.0		
Two-year 24-hr precip. (in)	=	3.45		3.45		3.45		
Land slope (%)	=	4.50		0.50		4.20		
Travel Time (min)	**=**	**8.06**	**+**	**0.61**	**+**	**14.05**	**=**	**22.72**
Shallow Concentrated Flow								
Flow length (ft)	=	94.00		0.00		0.00		
Watercourse slope (%)	=	1.50		0.00		0.00		
Surface description	=	Unpaved		Paved		Paved		
Average velocity (ft/s)	=	1.98		0.00		0.00		
Travel Time (min)	**=**	**0.79**	**+**	**0.00**	**+**	**0.00**	**=**	**0.79**
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 ..... 23.50 min

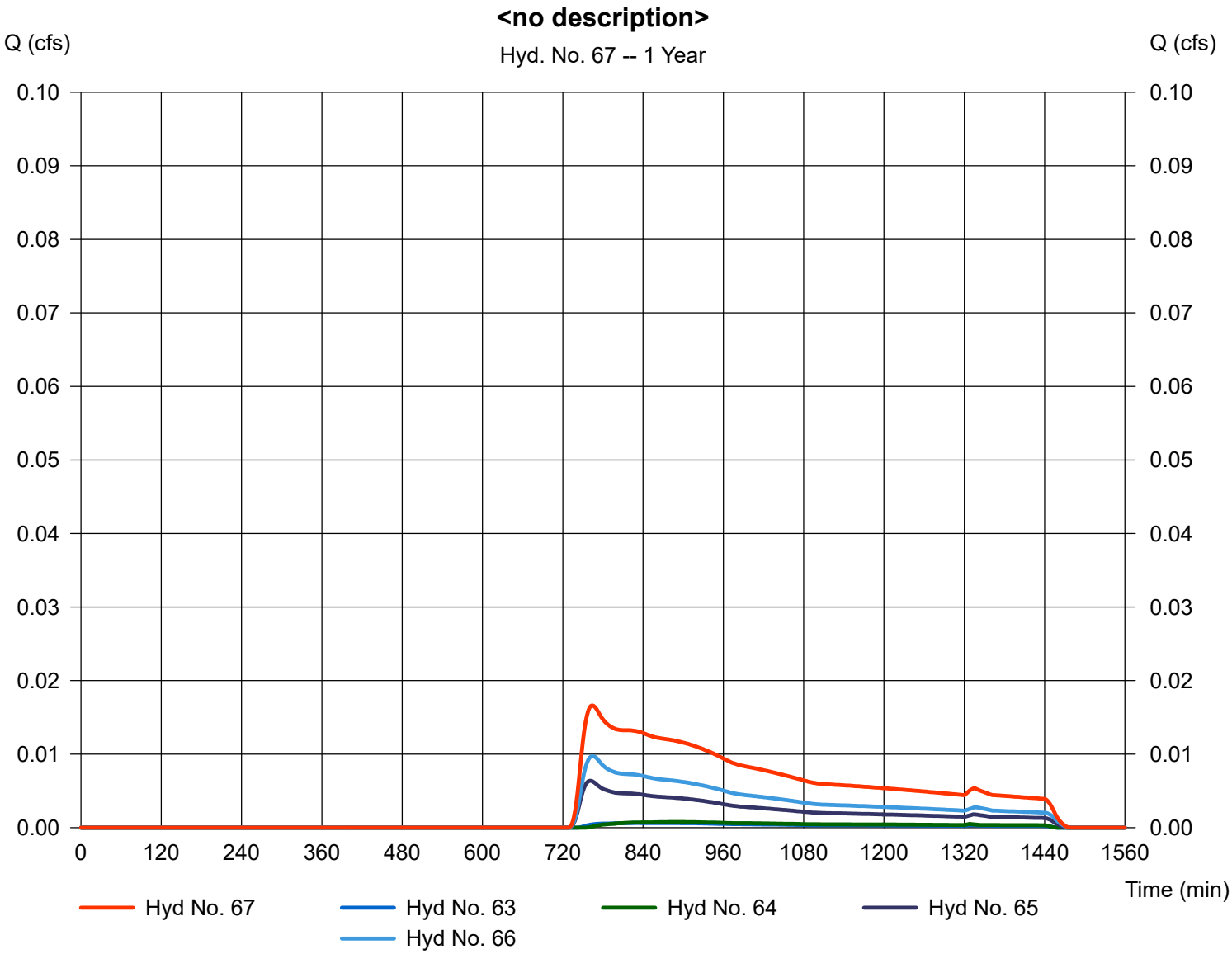
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 67

<no description>

Hydrograph type	=	Combine	Peak discharge	=	0.017 cfs
Storm frequency	=	1 yrs	Time to peak	=	764 min
Time interval	=	2 min	Hyd. volume	=	332 cuft
Inflow hyds.	=	63, 64, 65, 66	Contrib. drain. area	=	2.100 ac



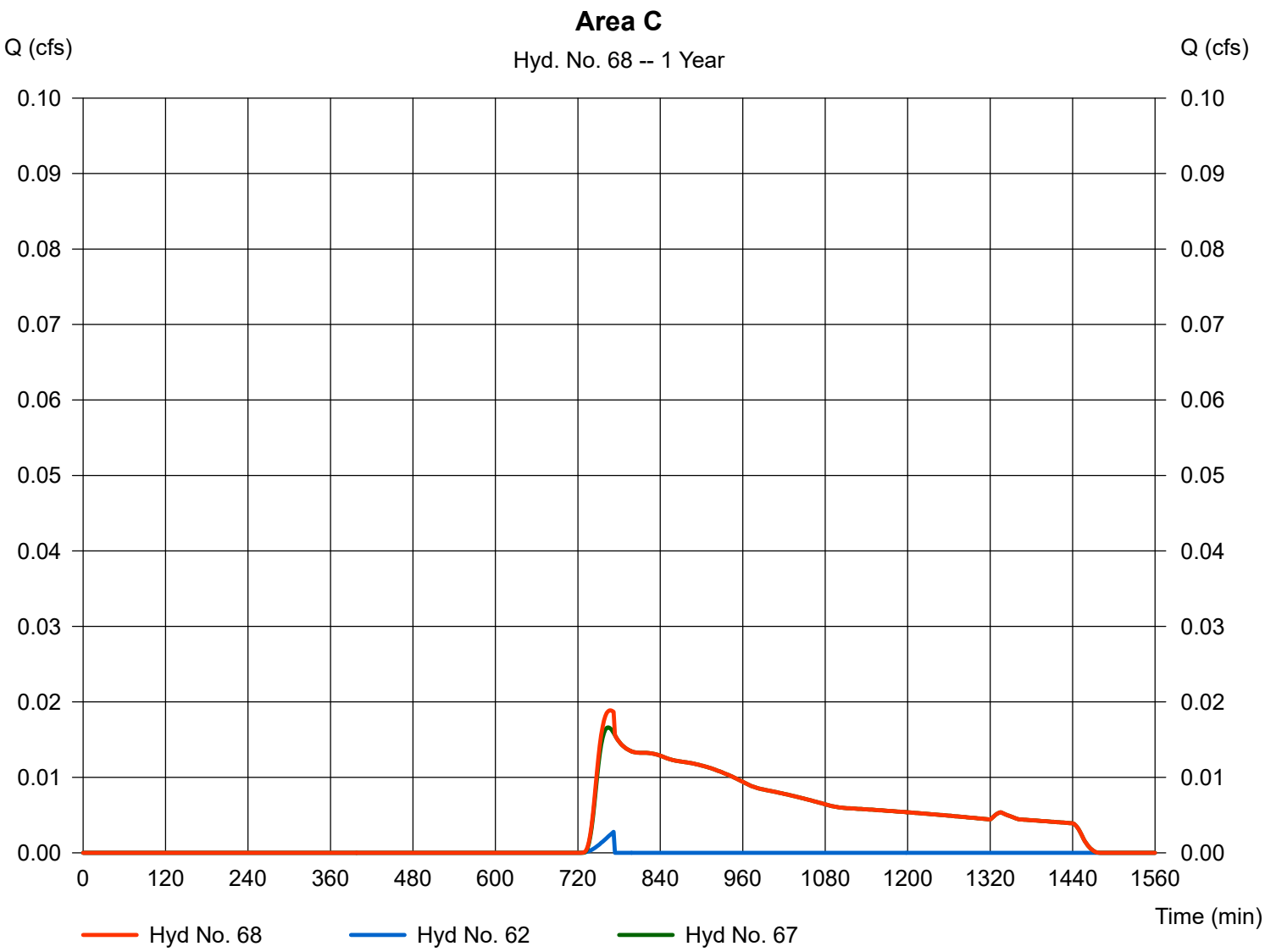
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 68

Area C

Hydrograph type	=	Combine	Peak discharge	=	0.019 cfs
Storm frequency	=	1 yrs	Time to peak	=	768 min
Time interval	=	2 min	Hyd. volume	=	335 cuft
Inflow hyds.	=	62, 67	Contrib. drain. area	=	0.000 ac



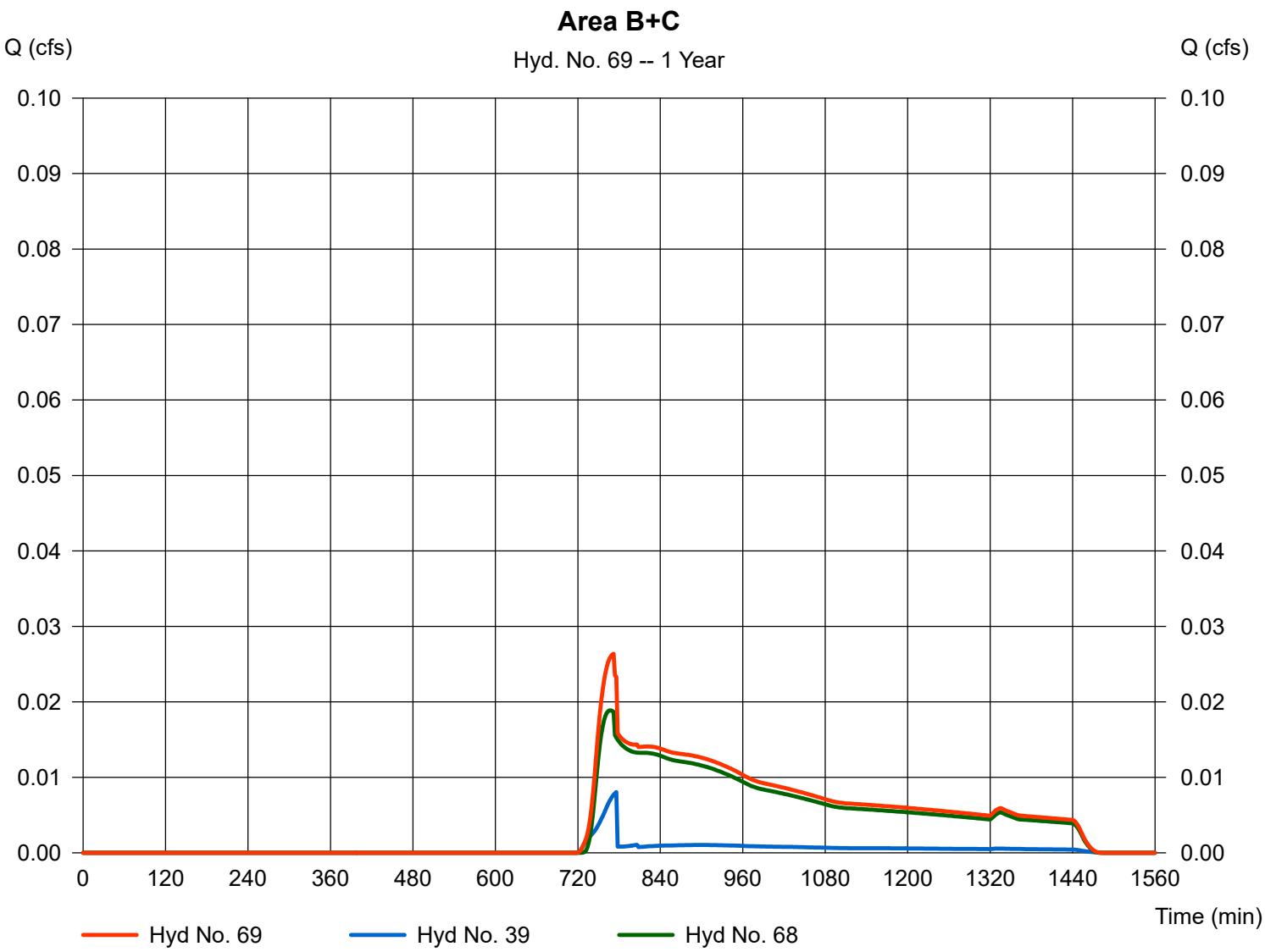
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 69

Area B+C

Hydrograph type	=	Combine	Peak discharge	=	0.026 cfs
Storm frequency	=	1 yrs	Time to peak	=	772 min
Time interval	=	2 min	Hyd. volume	=	377 cuft
Inflow hyds.	=	39, 68	Contrib. drain. area	=	0.000 ac



Hydrograph Report

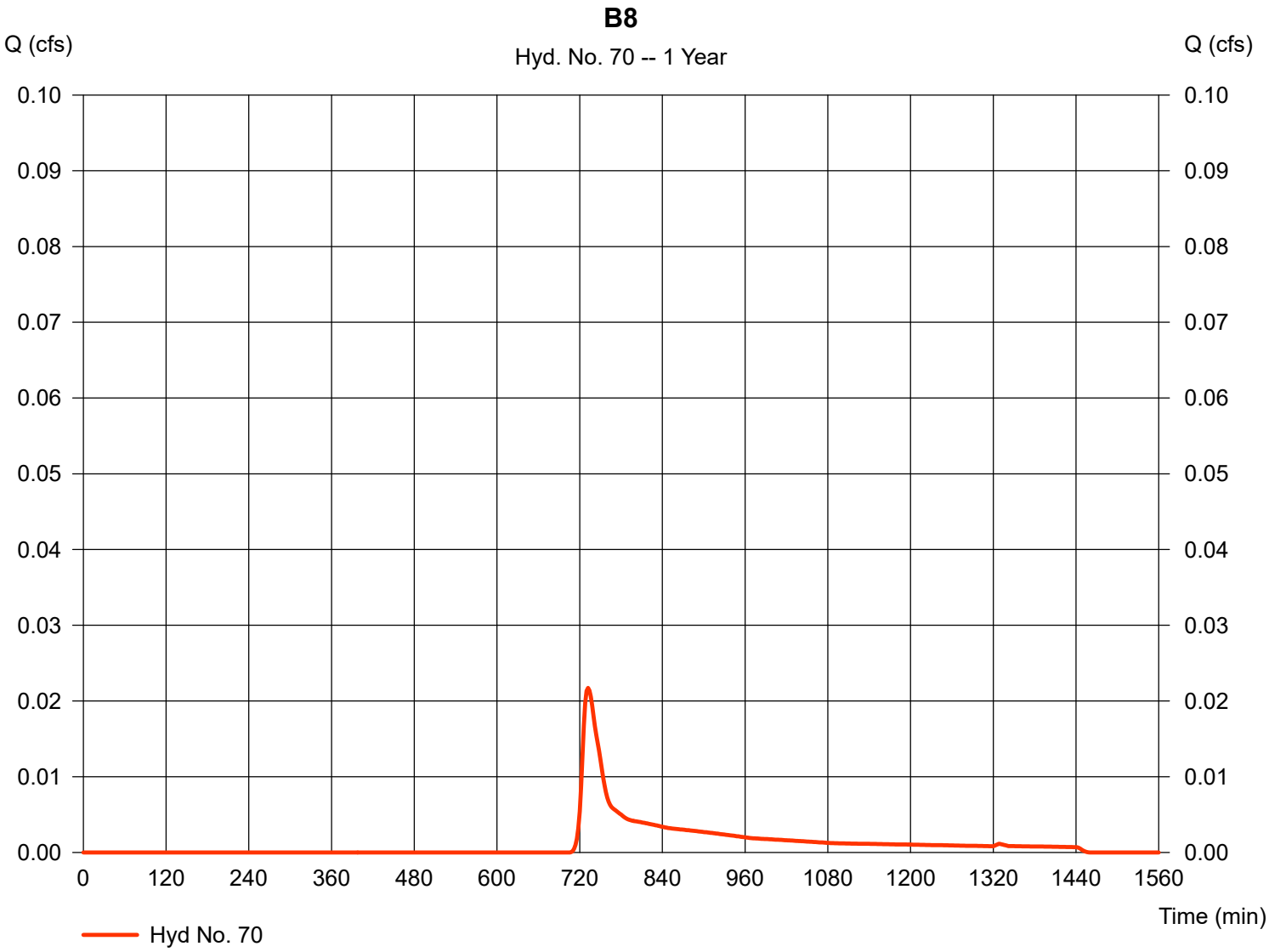
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 70

B8

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.022 cfs
Storm frequency	=	1 yrs	Time to peak	=	732 min
Time interval	=	2 min	Hyd. volume	=	110 cuft
Drainage area	=	0.170 ac	Curve number	=	85*
Basin Slope	=	2.6 %	Hydraulic length	=	61 ft
Tc method	=	USER	Time of conc. (Tc)	=	10.00 min
Total precip.	=	1.00 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

* Composite (Area/CN) = [(0.090 x 74) + (0.080 x 98)] / 0.170



Hydrograph Report

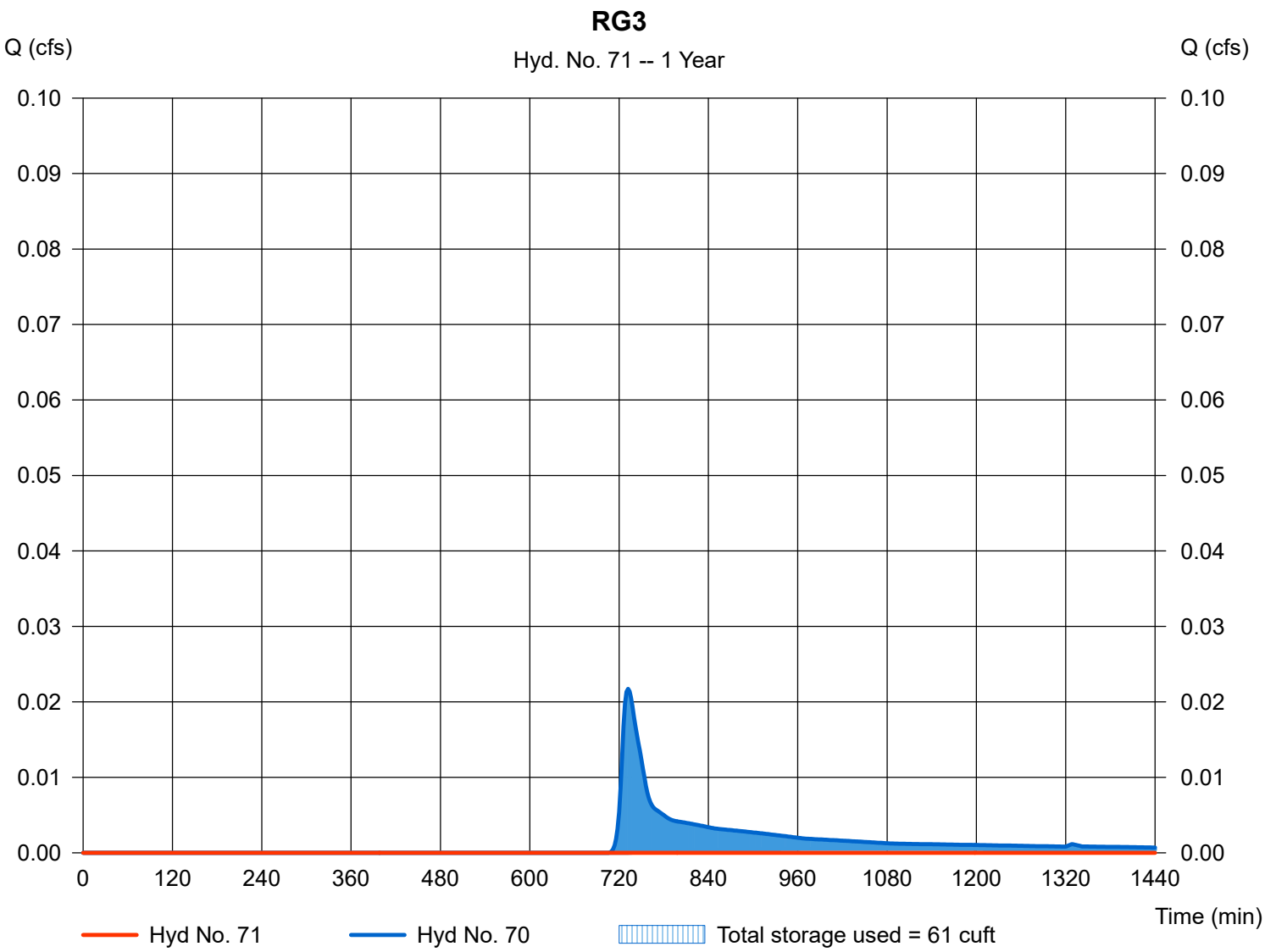
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 71

RG3

Hydrograph type	=	Reservoir	Peak discharge	=	0.000 cfs
Storm frequency	=	1 yrs	Time to peak	=	808 min
Time interval	=	2 min	Hyd. volume	=	0 cuft
Inflow hyd. No.	=	70 - B8	Max. Elevation	=	52.74 ft
Reservoir name	=	RG-3	Max. Storage	=	61 cuft

Storage Indication method used. Exfiltration extracted from Outflow.



Pond Report

Hydraflow Hydrographs by Intelisolve v9.23 — Monday, May 4, 2020

Pond No. 5 - RG-3

Pond Data

Contours - User-defined contour areas. Conic method used for volume calculation. Begining Elevation = 52.70 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	52.70	1,440	0	0
0.30	53.00	1,600	456	456
1.30	54.00	2,175	1,880	2,336
1.80	54.50	2,484	1,164	3,499
2.30	55.00	2,806	1,322	4,821
2.50	55.20	2,914	572	5,393

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	Inactive	0.00	0.00	0.00
Span (in)	= 0.00	0.00	0.00	0.00
No. Barrels	= 1	0	0	0
Invert El. (ft)	= 0.00	0.00	0.00	0.00
Length (ft)	= 0.00	0.00	0.00	0.00
Slope (%)	= 0.00	0.00	0.00	n/a
N-Value	= .013	.013	.013	n/a
Orifice Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	No	No	No

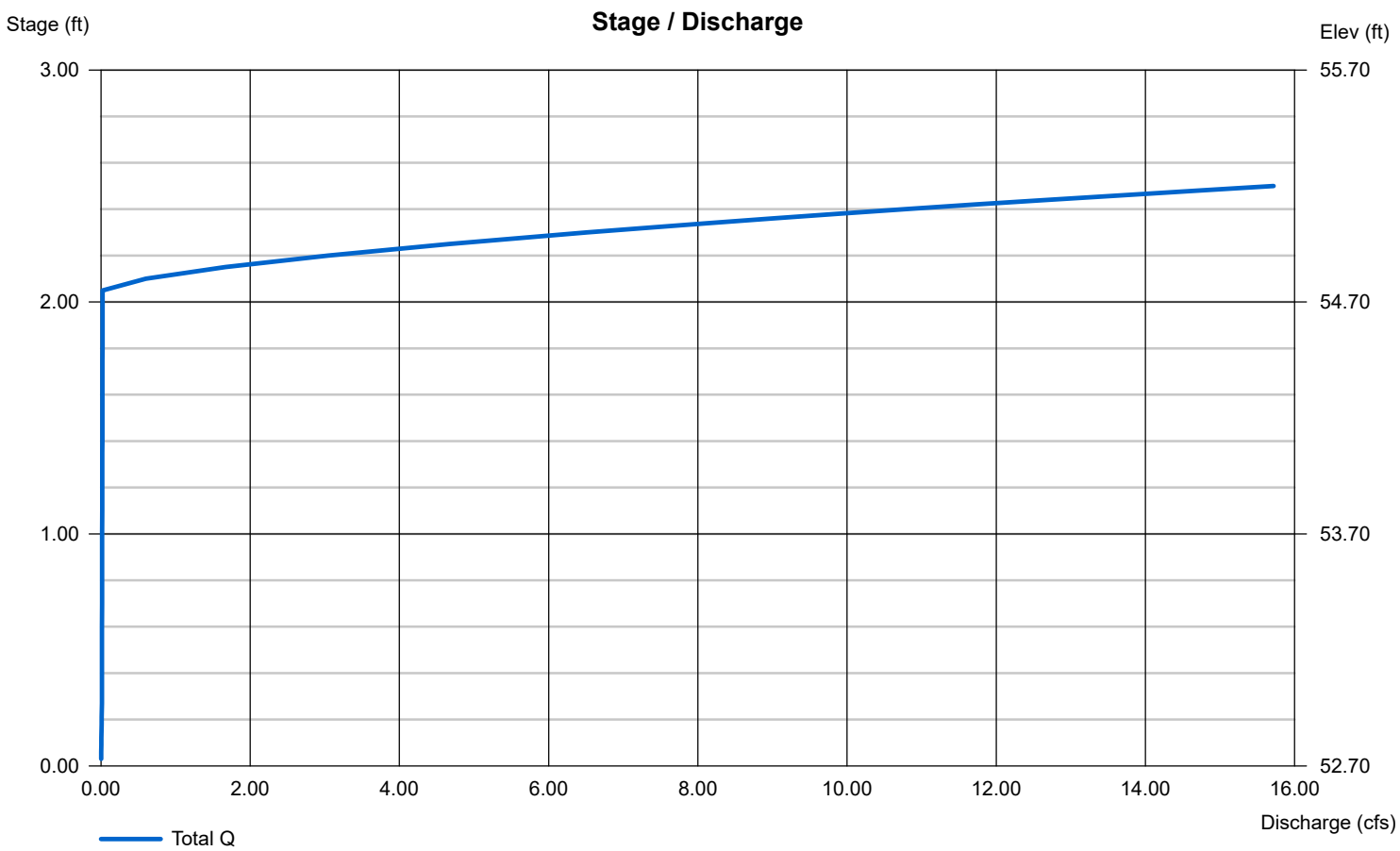
Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 20.00	0.00	0.00	0.00
Crest El. (ft)	= 54.75	0.00	0.00	0.00
Weir Coeff.	= 2.60	3.33	3.33	3.33
Weir Type	= Broad	---	---	---
Multi-Stage	= No	No	No	No

Exfil.(in/hr) = 0.330 (by Contour)

TW Elev. (ft) = 0.00

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).



Hydrograph Report

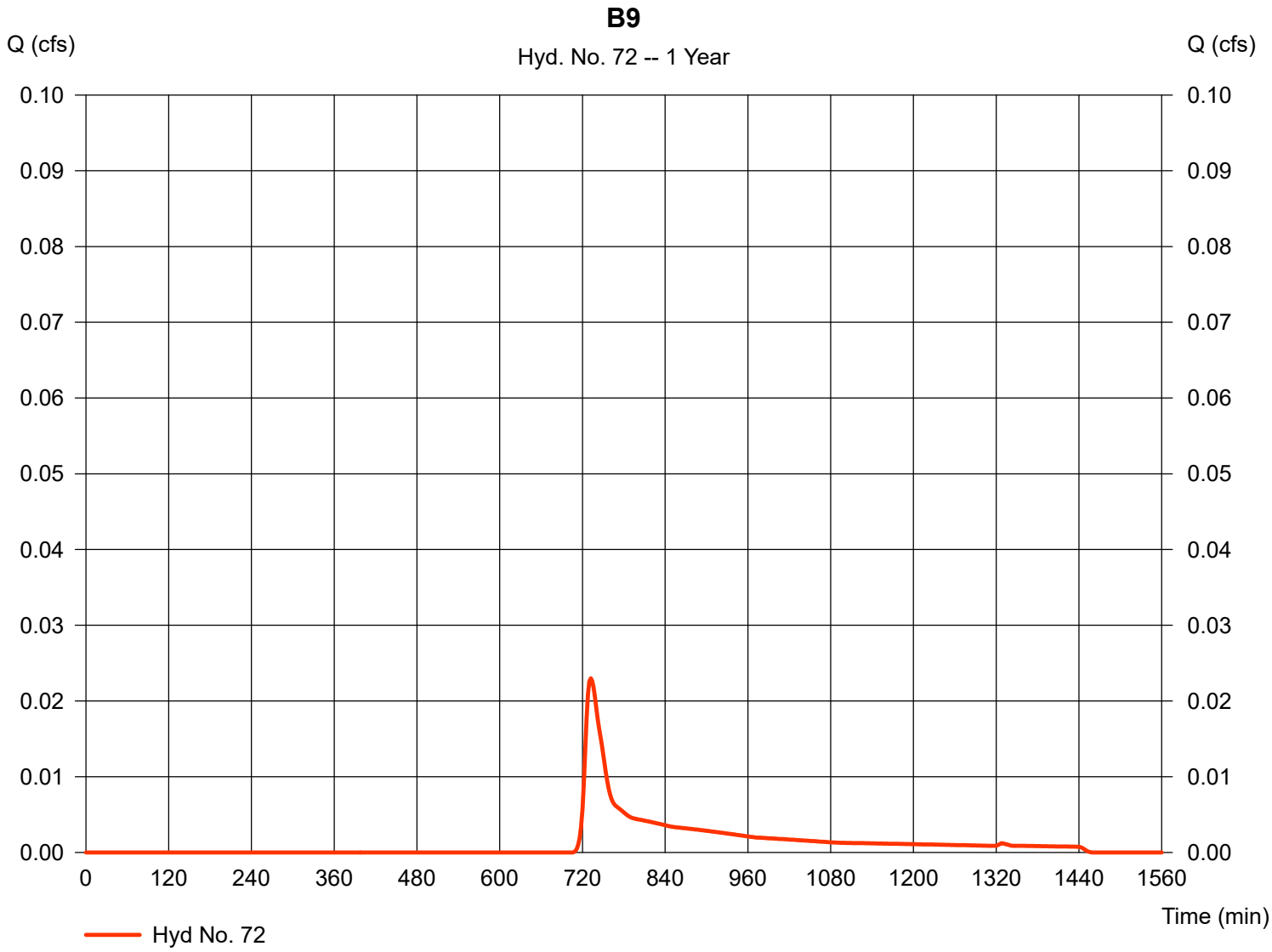
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 72

B9

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.023 cfs
Storm frequency	=	1 yrs	Time to peak	=	732 min
Time interval	=	2 min	Hyd. volume	=	117 cuft
Drainage area	=	0.180 ac	Curve number	=	85*
Basin Slope	=	3.2 %	Hydraulic length	=	98 ft
Tc method	=	USER	Time of conc. (Tc)	=	10.00 min
Total precip.	=	1.00 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

* Composite (Area/CN) = [(0.050 x 98) + (0.080 x 74) + (0.050 x 89)] / 0.180



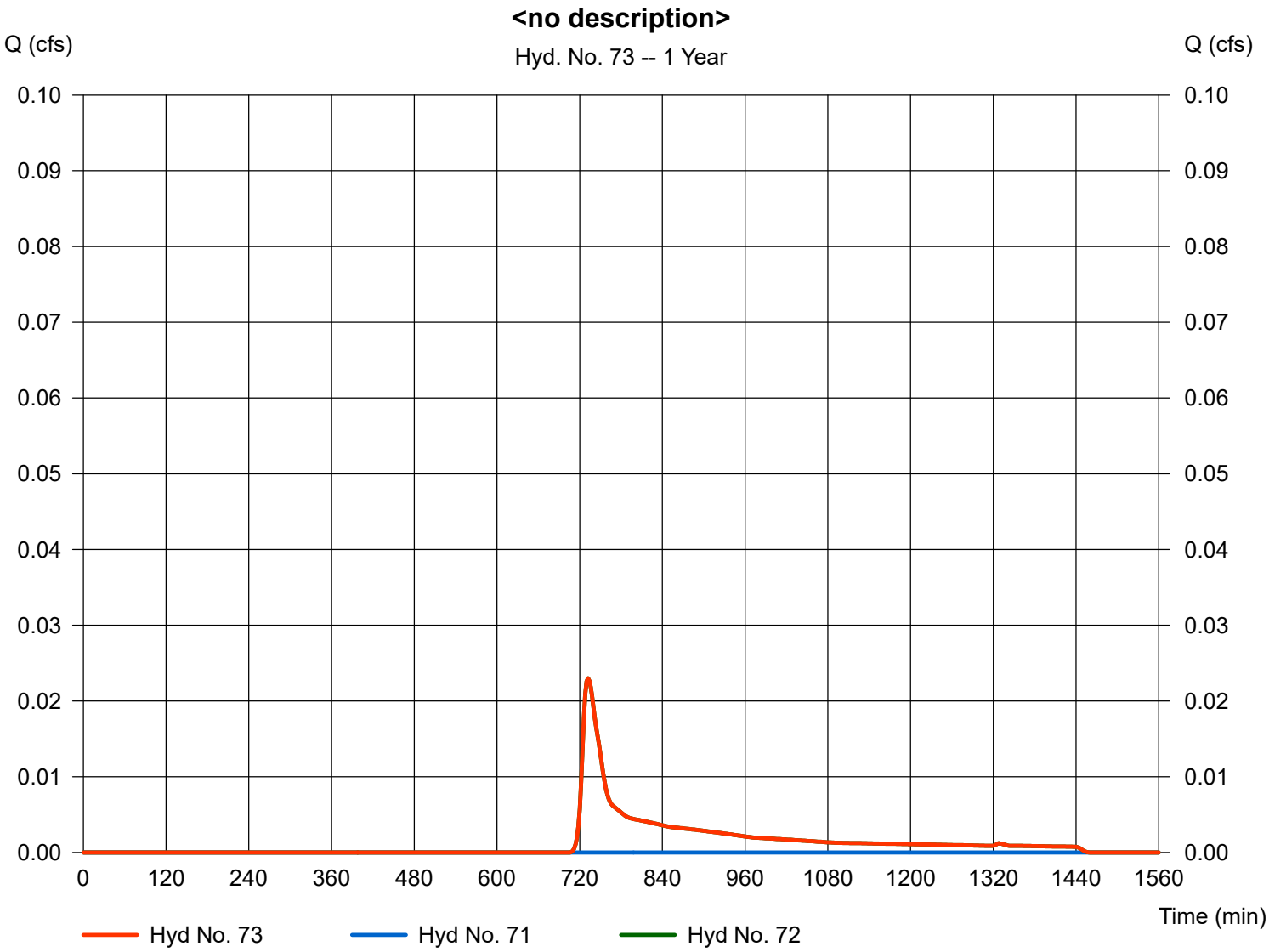
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 73

<no description>

Hydrograph type	=	Combine	Peak discharge	=	0.023 cfs
Storm frequency	=	1 yrs	Time to peak	=	732 min
Time interval	=	2 min	Hyd. volume	=	117 cuft
Inflow hyds.	=	71, 72	Contrib. drain. area	=	0.180 ac



Hydrograph Report

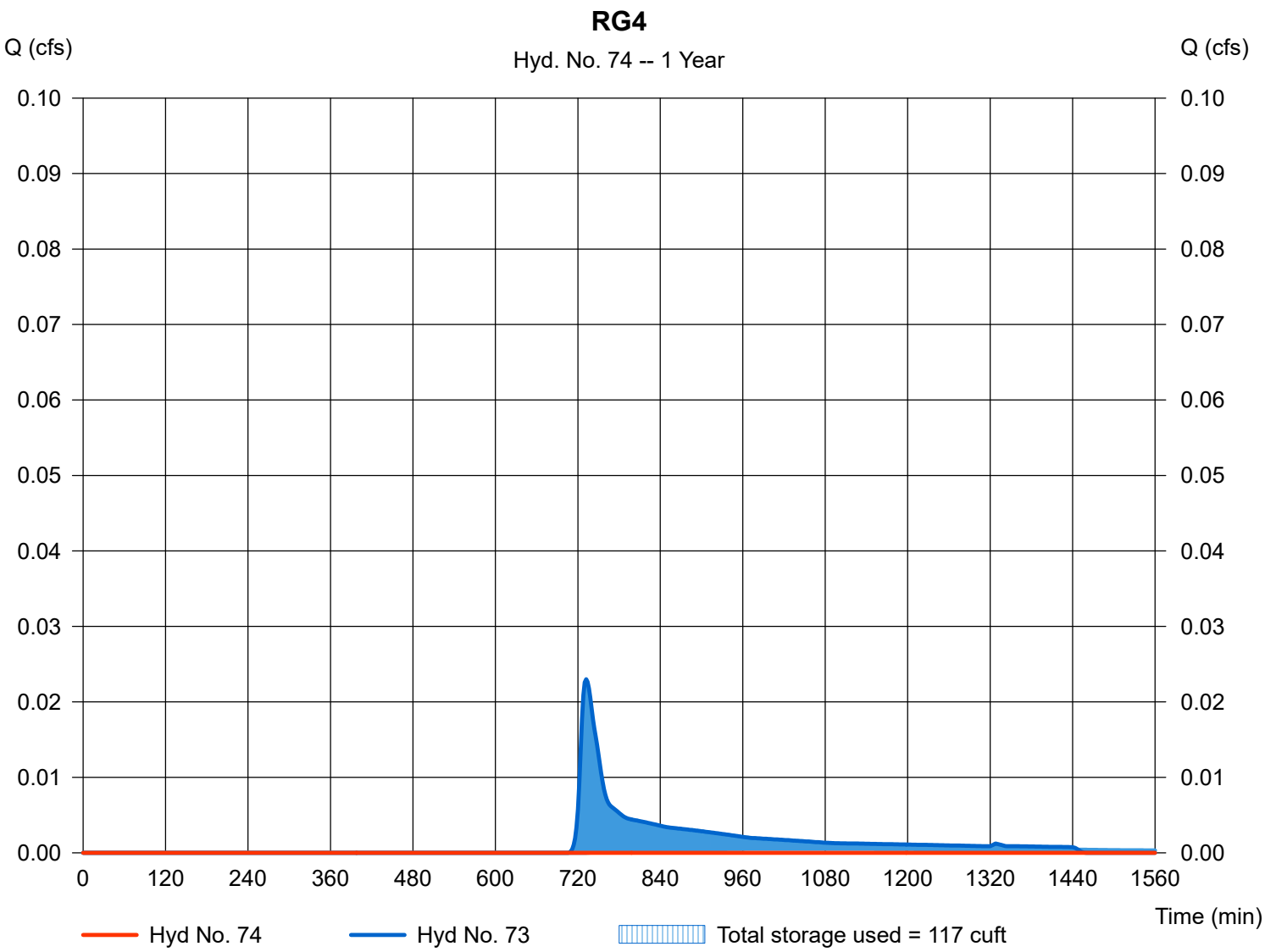
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 74

RG4

Hydrograph type	=	Reservoir	Peak discharge	=	0.000 cfs
Storm frequency	=	1 yrs	Time to peak	=	n/a
Time interval	=	2 min	Hyd. volume	=	0 cuft
Inflow hyd. No.	=	73 - <no description>	Max. Elevation	=	52.37 ft
Reservoir name	=	RG4	Max. Storage	=	117 cuft

Storage Indication method used. Exfiltration extracted from Outflow.



Pond Report

Hydraflow Hydrographs by Intelisolve v9.23 — Monday, May 4, 2020

Pond No. 6 - RG4

Pond Data

Contours - User-defined contour areas. Conic method used for volume calculation. Begining Elevation = 52.30 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	52.30	1,452	0	0
0.70	53.00	1,776	1,128	1,128
1.20	53.50	2,027	950	2,078
1.70	54.00	2,287	1,078	3,155
2.00	54.30	2,614	735	3,890

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	Inactive	0.00	0.00	0.00
Span (in)	= 0.00	0.00	0.00	0.00
No. Barrels	= 1	0	0	0
Invert El. (ft)	= 0.00	0.00	0.00	0.00
Length (ft)	= 0.00	0.00	0.00	0.00
Slope (%)	= 0.50	0.00	0.00	n/a
N-Value	= .013	.013	.013	n/a
Orifice Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	No	No	No

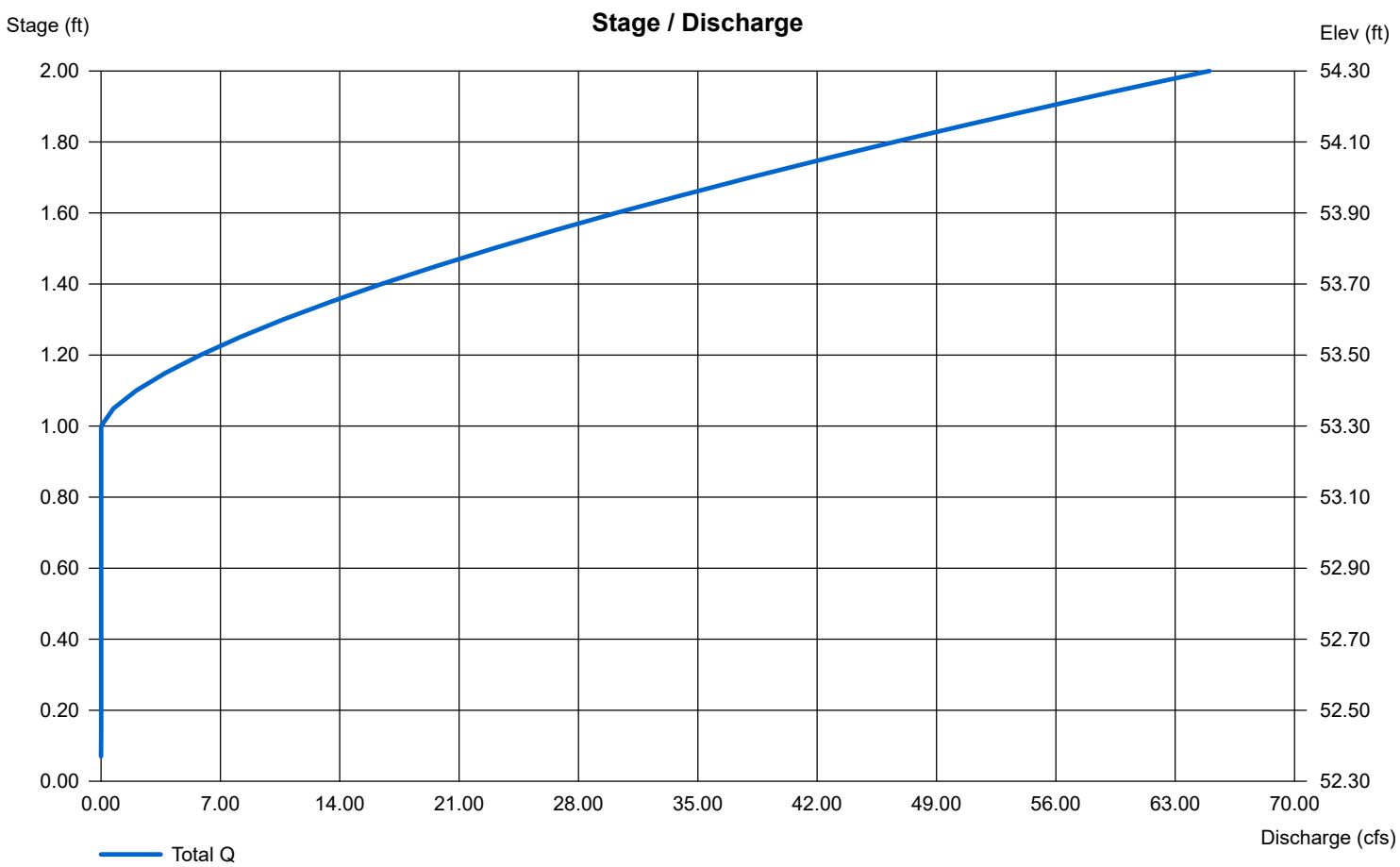
Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 25.00	0.00	0.00	0.00
Crest El. (ft)	= 53.30	0.00	0.00	0.00
Weir Coeff.	= 2.60	3.33	3.33	3.33
Weir Type	= Broad	---	---	---
Multi-Stage	= No	No	No	No

Exfil.(in/hr) = 0.180 (by Contour)

TW Elev. (ft) = 0.00

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).



Hydrograph Report

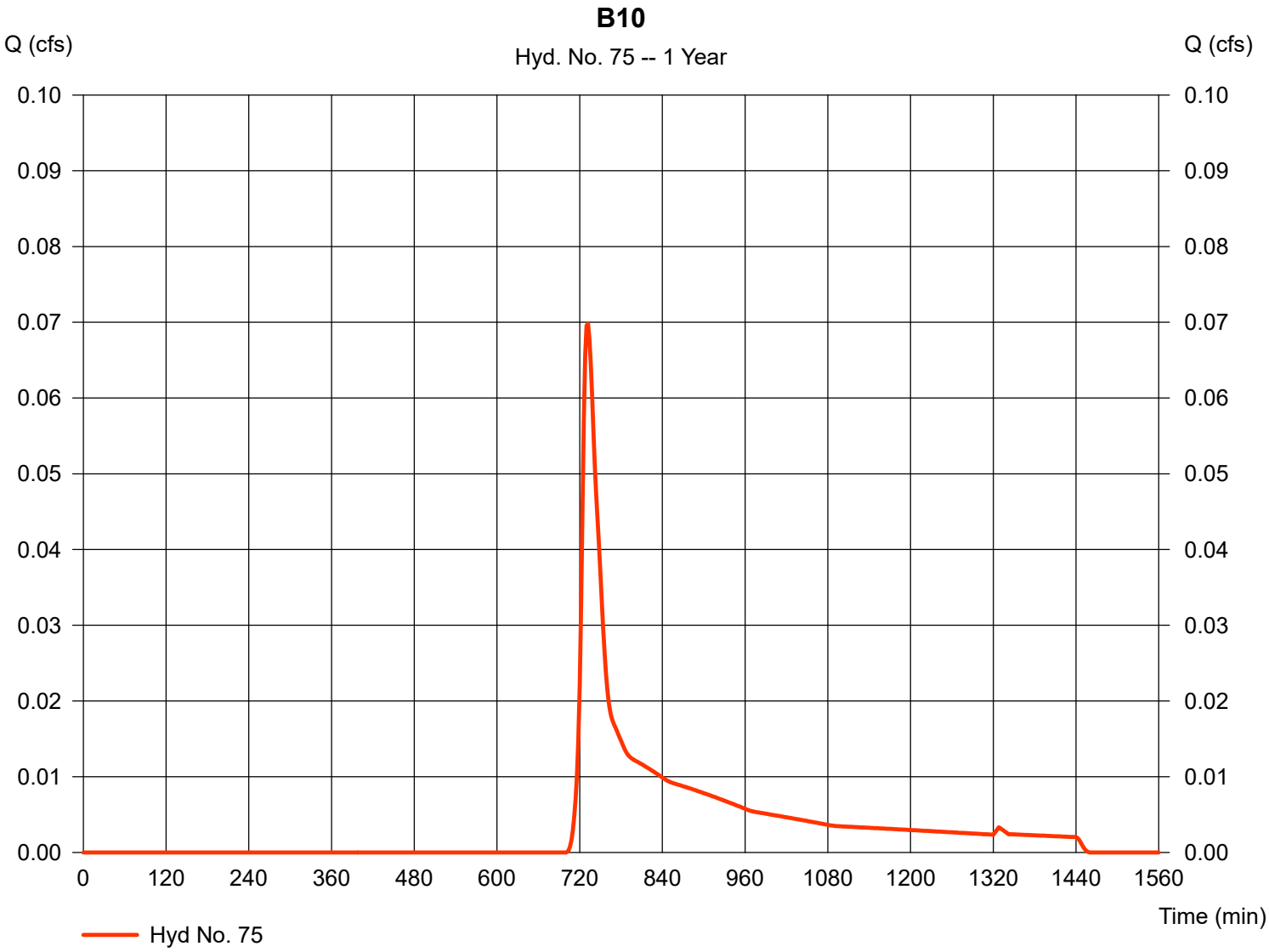
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 75

B10

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.070 cfs
Storm frequency	=	1 yrs	Time to peak	=	732 min
Time interval	=	2 min	Hyd. volume	=	333 cuft
Drainage area	=	0.450 ac	Curve number	=	86*
Basin Slope	=	1.2 %	Hydraulic length	=	75 ft
Tc method	=	USER	Time of conc. (Tc)	=	10.00 min
Total precip.	=	1.00 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

* Composite (Area/CN) = [(0.170 x 74) + (0.150 x 98) + (0.130 x 89)] / 0.450



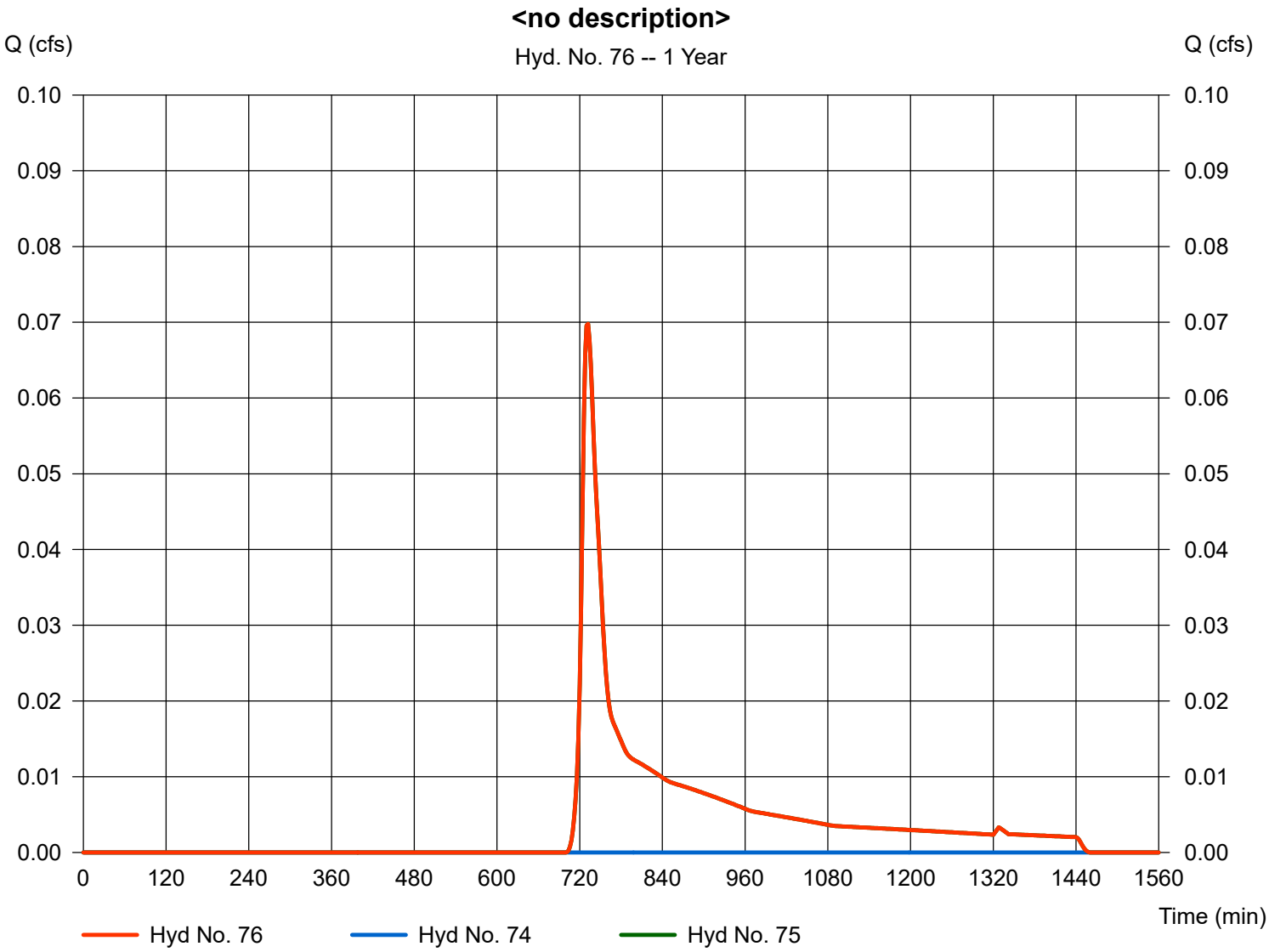
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 76

<no description>

Hydrograph type	=	Combine	Peak discharge	=	0.070 cfs
Storm frequency	=	1 yrs	Time to peak	=	732 min
Time interval	=	2 min	Hyd. volume	=	333 cuft
Inflow hyds.	=	74, 75	Contrib. drain. area	=	0.450 ac



Hydrograph Report

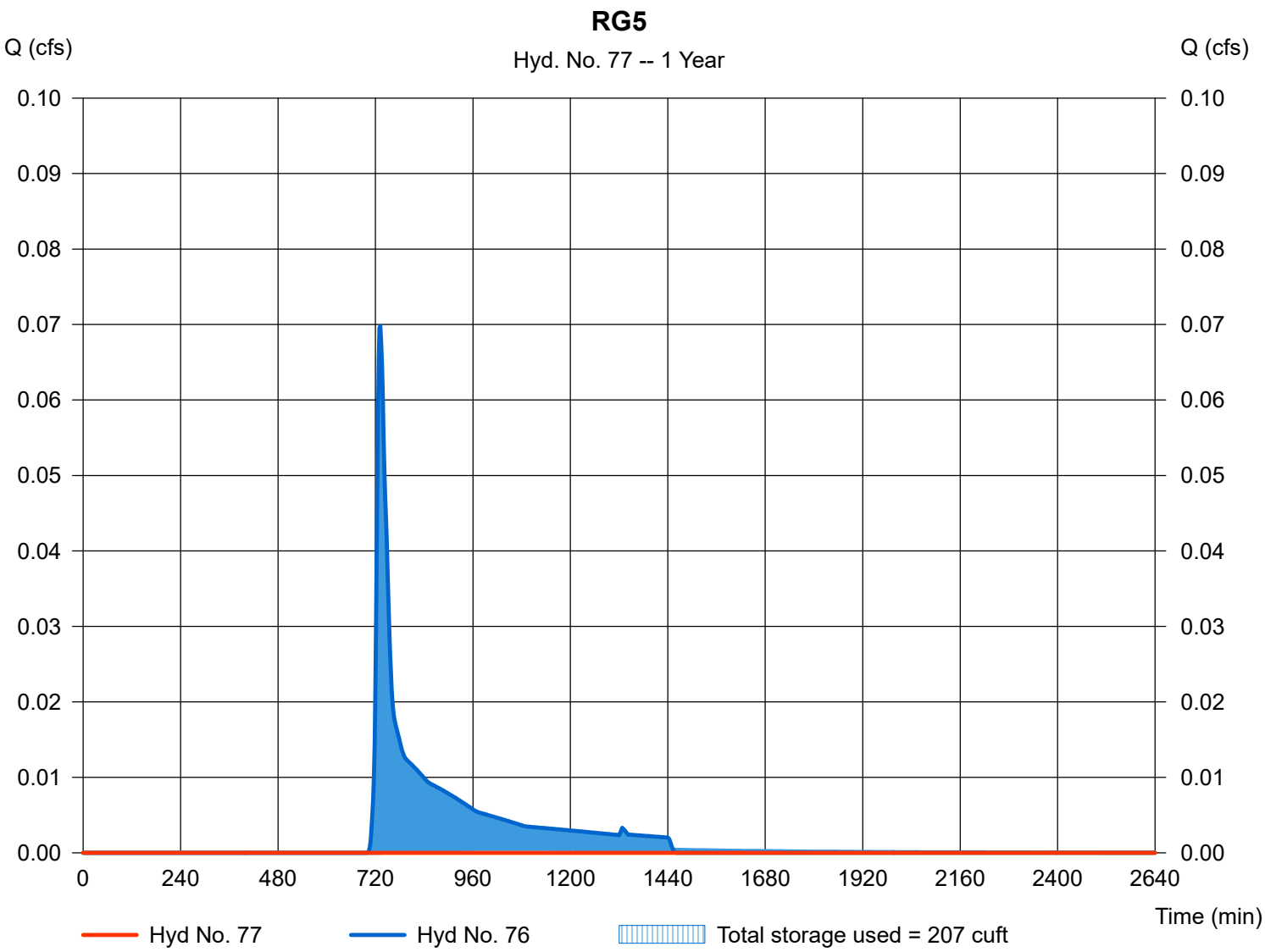
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 77

RG5

Hydrograph type	= Reservoir	Peak discharge	= 0.000 cfs
Storm frequency	= 1 yrs	Time to peak	= 1054 min
Time interval	= 2 min	Hyd. volume	= 0 cuft
Inflow hyd. No.	= 76 - <no description>	Max. Elevation	= 51.55 ft
Reservoir name	= RG5	Max. Storage	= 207 cuft

Storage Indication method used. Exfiltration extracted from Outflow.



Pond Report

Hydraflow Hydrographs by Intelisolve v9.23 — Monday, May 4, 2020

Pond No. 7 - RG5

Pond Data

Contours - User-defined contour areas. Conic method used for volume calculation. Begining Elevation = 51.50 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	51.50	3,847	0	0
0.50	52.00	4,210	2,013	2,013
1.50	53.00	4,980	4,589	6,603
2.10	53.60	5,468	3,133	9,735

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 18.00	Inactive	0.00	0.00
Span (in)	= 18.00	3.00	0.00	0.00
No. Barrels	= 1	1	0	0
Invert El. (ft)	= 48.00	50.50	0.00	0.00
Length (ft)	= 35.00	1.00	0.00	0.00
Slope (%)	= 0.50	0.50	0.00	n/a
N-Value	= .013	.013	.013	n/a
Orifice Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	Yes	No	No

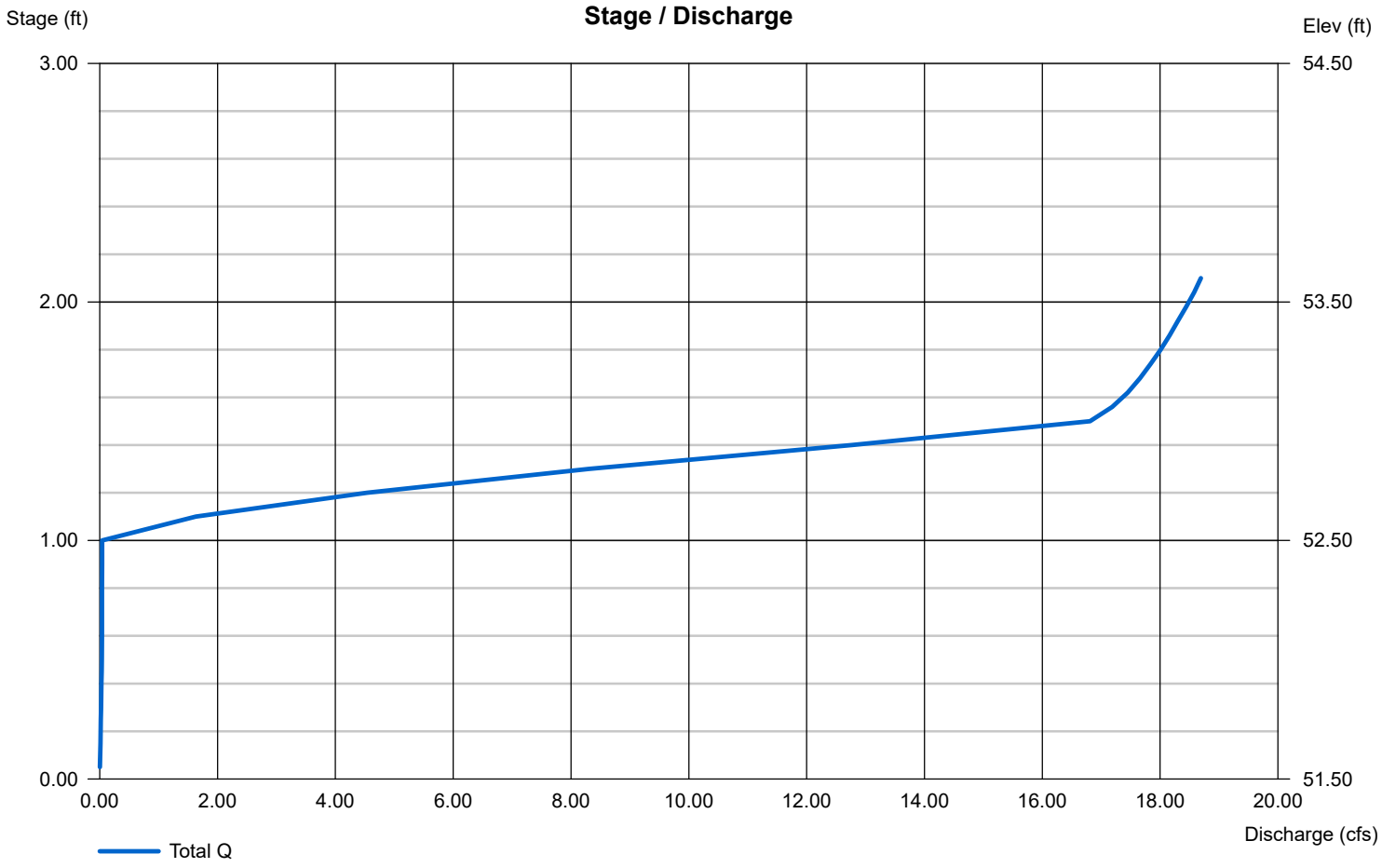
Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 15.10	0.00	0.00	0.00
Crest El. (ft)	= 52.50	0.00	0.00	0.00
Weir Coeff.	= 3.33	3.33	3.33	3.33
Weir Type	= Riser	---	---	---
Multi-Stage	= Yes	No	No	No

Exfil.(in/hr) = 0.370 (by Contour)

TW Elev. (ft) = 0.00

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).



Hydrograph Report

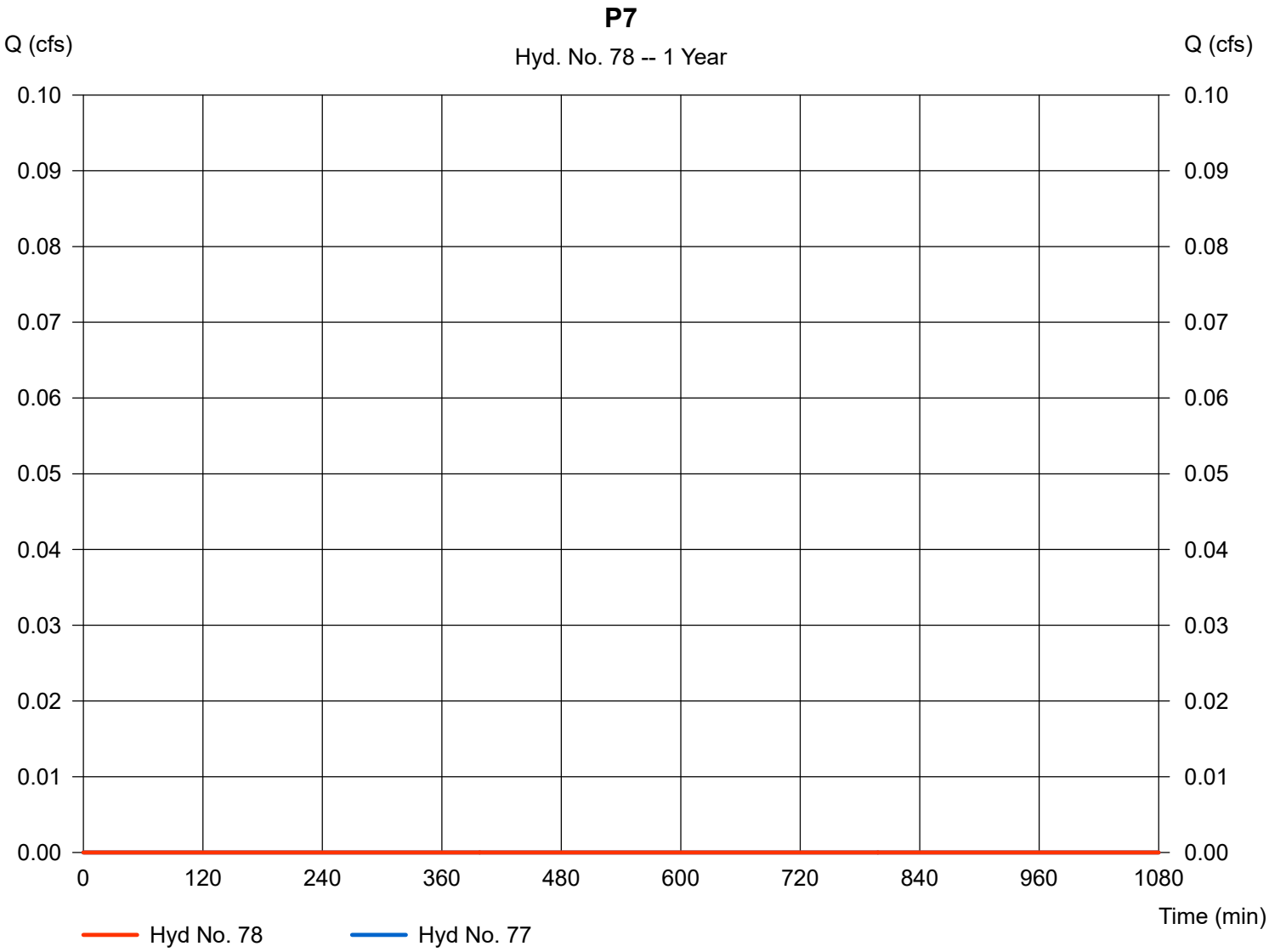
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 78

P7

Hydrograph type	=	Reach	Peak discharge	=	0.000 cfs
Storm frequency	=	1 yrs	Time to peak	=	1054 min
Time interval	=	2 min	Hyd. volume	=	0 cuft
Inflow hyd. No.	=	77 - RG5	Section type	=	Circular
Reach length	=	100.0 ft	Channel slope	=	1.0 %
Manning's n	=	0.009	Bottom width	=	2.0 ft
Side slope	=	0.0:1	Max. depth	=	0.0 ft
Rating curve x	=	10.028	Rating curve m	=	1.250
Ave. velocity	=	0.00 ft/s	Routing coeff.	=	0.0000

Modified Att-Kin routing method used.



Hydrograph Report

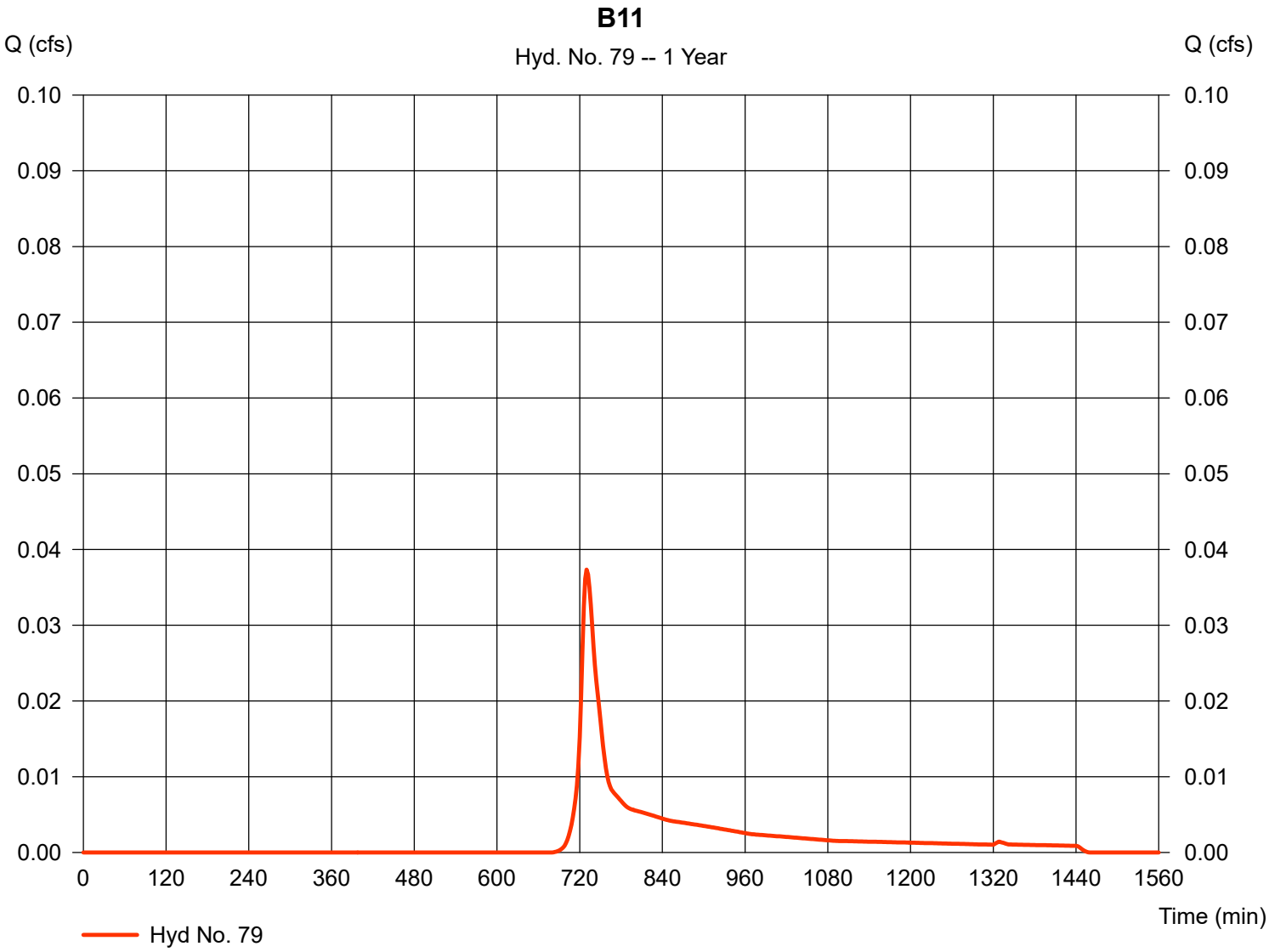
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 79

B11

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.037 cfs
Storm frequency	=	1 yrs	Time to peak	=	730 min
Time interval	=	2 min	Hyd. volume	=	161 cuft
Drainage area	=	0.170 ac	Curve number	=	88*
Basin Slope	=	3.2 %	Hydraulic length	=	93 ft
Tc method	=	USER	Time of conc. (Tc)	=	10.00 min
Total precip.	=	1.00 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

* Composite (Area/CN) = [(0.100 x 98) + (0.070 x 74)] / 0.170



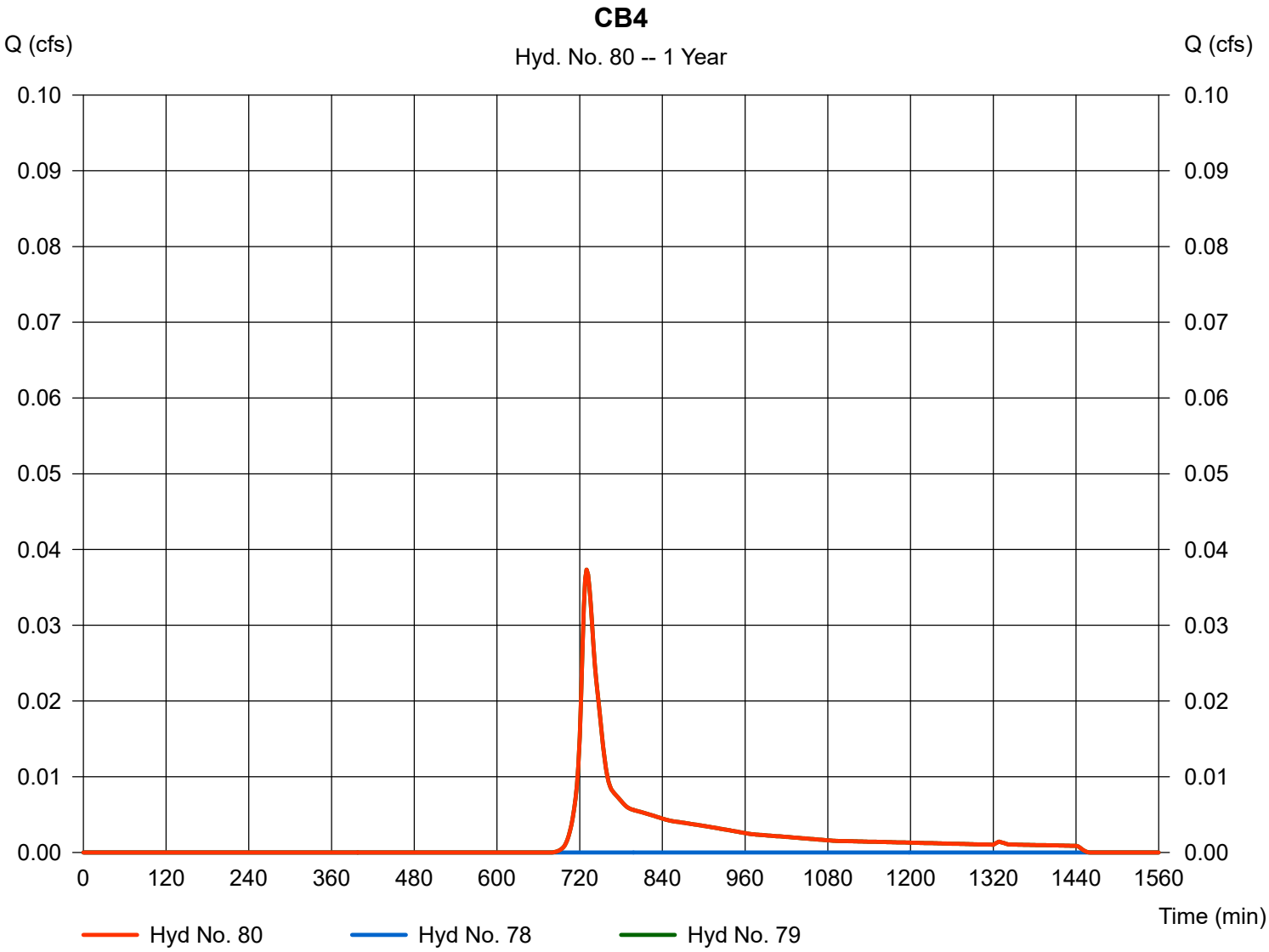
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 80

CB4

Hydrograph type	=	Combine	Peak discharge	=	0.037 cfs
Storm frequency	=	1 yrs	Time to peak	=	730 min
Time interval	=	2 min	Hyd. volume	=	161 cuft
Inflow hyds.	=	78, 79	Contrib. drain. area	=	0.170 ac



Hydrograph Report

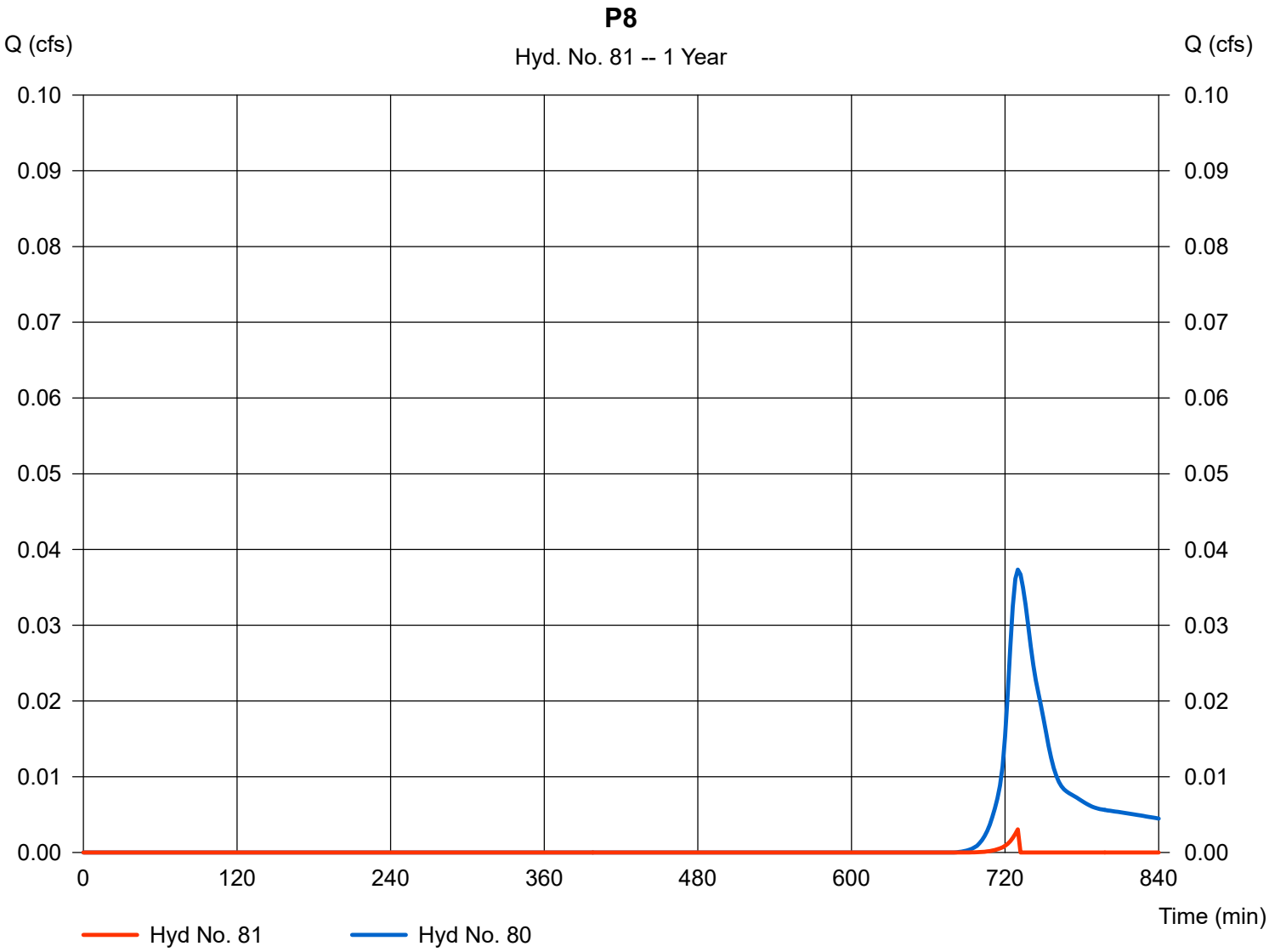
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 81

P8

Hydrograph type	=	Reach	Peak discharge	=	0.003 cfs
Storm frequency	=	1 yrs	Time to peak	=	730 min
Time interval	=	2 min	Hyd. volume	=	2 cuft
Inflow hyd. No.	=	80 - CB4	Section type	=	Circular
Reach length	=	100.0 ft	Channel slope	=	1.0 %
Manning's n	=	0.009	Bottom width	=	2.0 ft
Side slope	=	0.0:1	Max. depth	=	0.0 ft
Rating curve x	=	10.028	Rating curve m	=	1.250
Ave. velocity	=	0.01 ft/s	Routing coeff.	=	0.0177

Modified Att-Kin routing method used.



Hydrograph Report

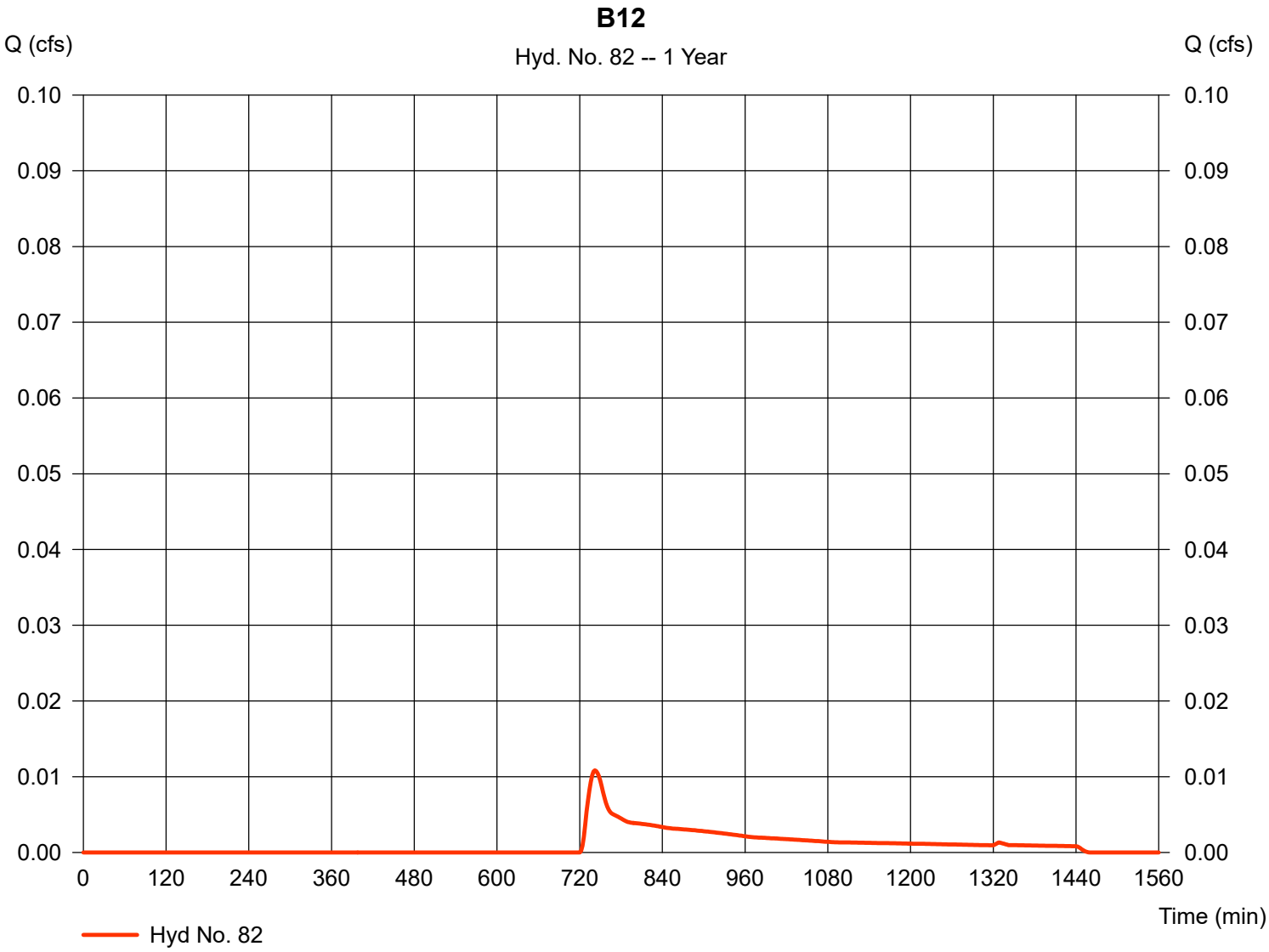
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 82

B12

Hydrograph type	=	SCS Runoff	Peak discharge	=	0.011 cfs
Storm frequency	=	1 yrs	Time to peak	=	742 min
Time interval	=	2 min	Hyd. volume	=	94 cuft
Drainage area	=	0.300 ac	Curve number	=	80*
Basin Slope	=	2.6 %	Hydraulic length	=	97 ft
Tc method	=	USER	Time of conc. (Tc)	=	10.00 min
Total precip.	=	1.00 in	Distribution	=	Type III
Storm duration	=	24 hrs	Shape factor	=	484

* Composite (Area/CN) = [(0.070 x 98) + (0.230 x 74)] / 0.300



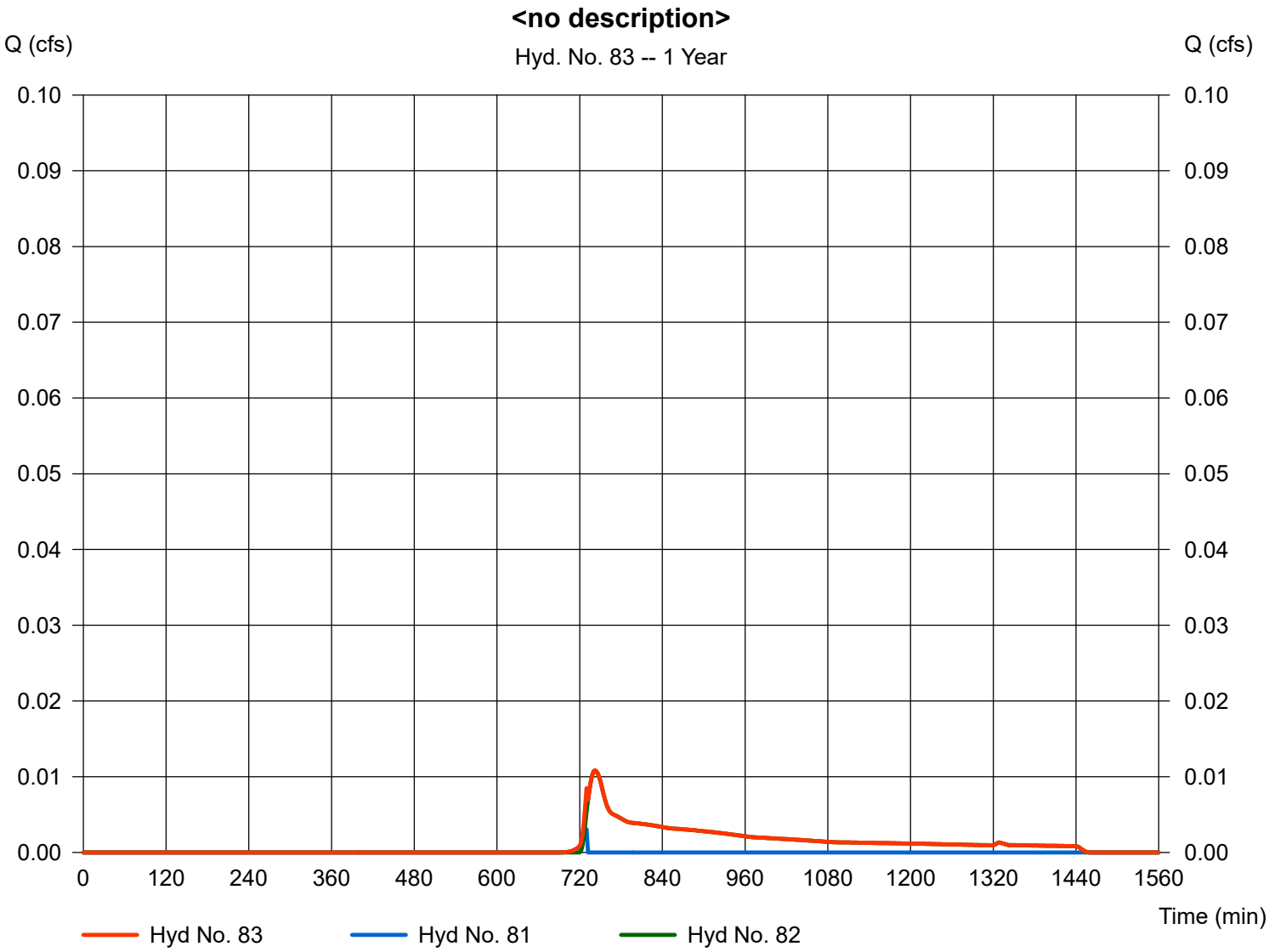
Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 83

<no description>

Hydrograph type	=	Combine	Peak discharge	=	0.011 cfs
Storm frequency	=	1 yrs	Time to peak	=	742 min
Time interval	=	2 min	Hyd. volume	=	95 cuft
Inflow hyds.	=	81, 82	Contrib. drain. area	=	0.300 ac



Hydrograph Report

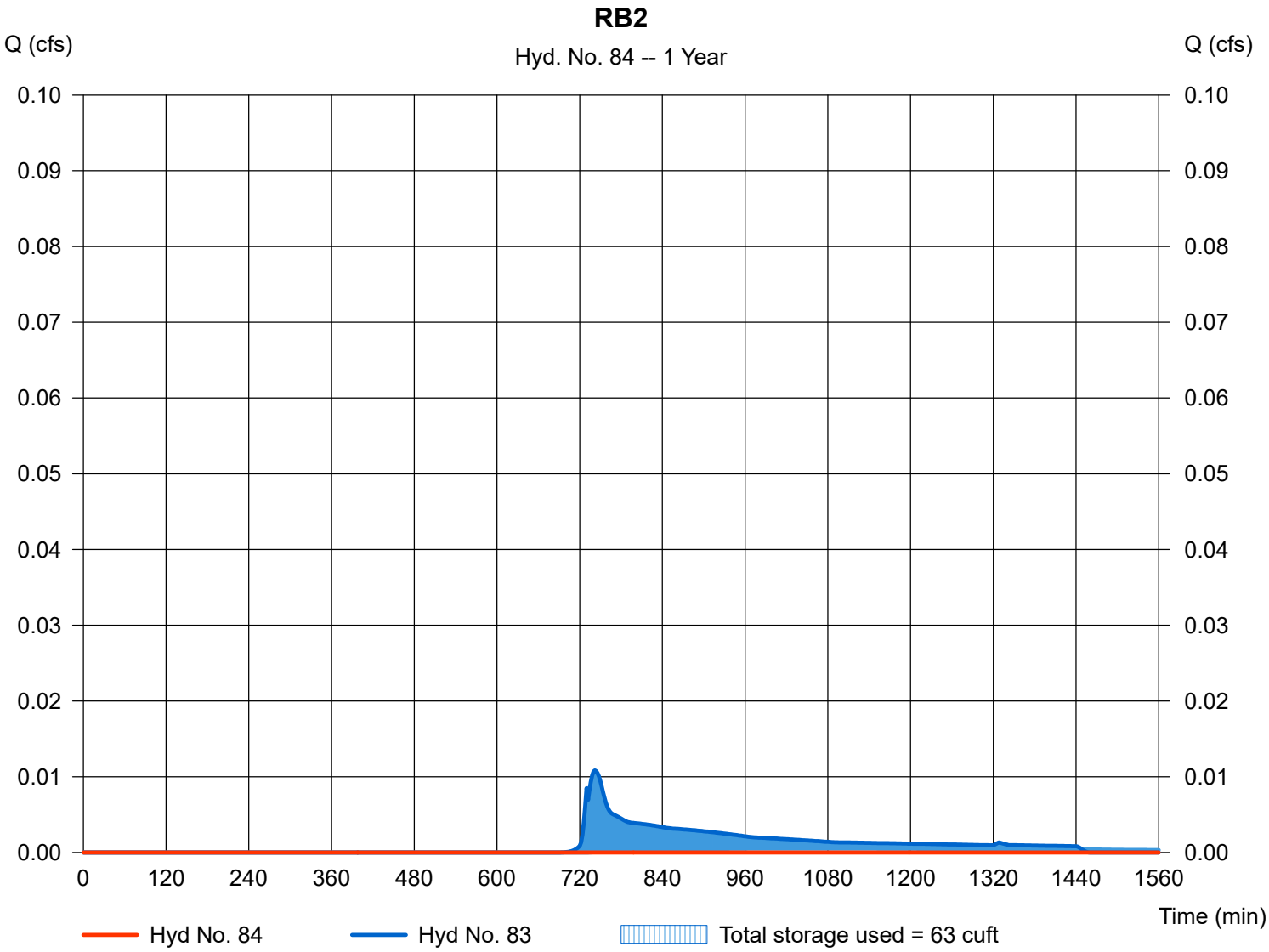
Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Hyd. No. 84

RB2

Hydrograph type	=	Reservoir	Peak discharge	=	0.000 cfs
Storm frequency	=	1 yrs	Time to peak	=	n/a
Time interval	=	2 min	Hyd. volume	=	0 cuft
Inflow hyd. No.	=	83 - <no description>	Max. Elevation	=	49.61 ft
Reservoir name	=	RB-2	Max. Storage	=	63 cuft

Storage Indication method used. Exfiltration extracted from Outflow.



Pond Report

Hydraflow Hydrographs by Intelisolve v9.23 Monday, May 4, 2020

Pond No. 9 - RB-2

Pond Data

Contours - User-defined contour areas. Conic method used for volume calculation. Begining Elevation = 49.60 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	49.60	5,771	0	0
0.40	50.00	6,201	2,394	2,394
1.40	51.00	7,298	6,741	9,135
1.90	51.50	7,813	3,777	12,912
2.40	52.00	8,371	4,045	16,956
2.80	52.40	8,772	3,428	20,384

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	Inactive	Inactive	0.00	0.00
Span (in)	= 18.00	3.00	0.00	0.00
No. Barrels	= 1	1	0	0
Invert El. (ft)	= 48.00	50.50	0.00	0.00
Length (ft)	= 75.00	1.00	0.00	0.00
Slope (%)	= 0.05	0.00	0.00	n/a
N-Value	= .013	.013	.013	n/a
Orifice Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	Yes	No	No

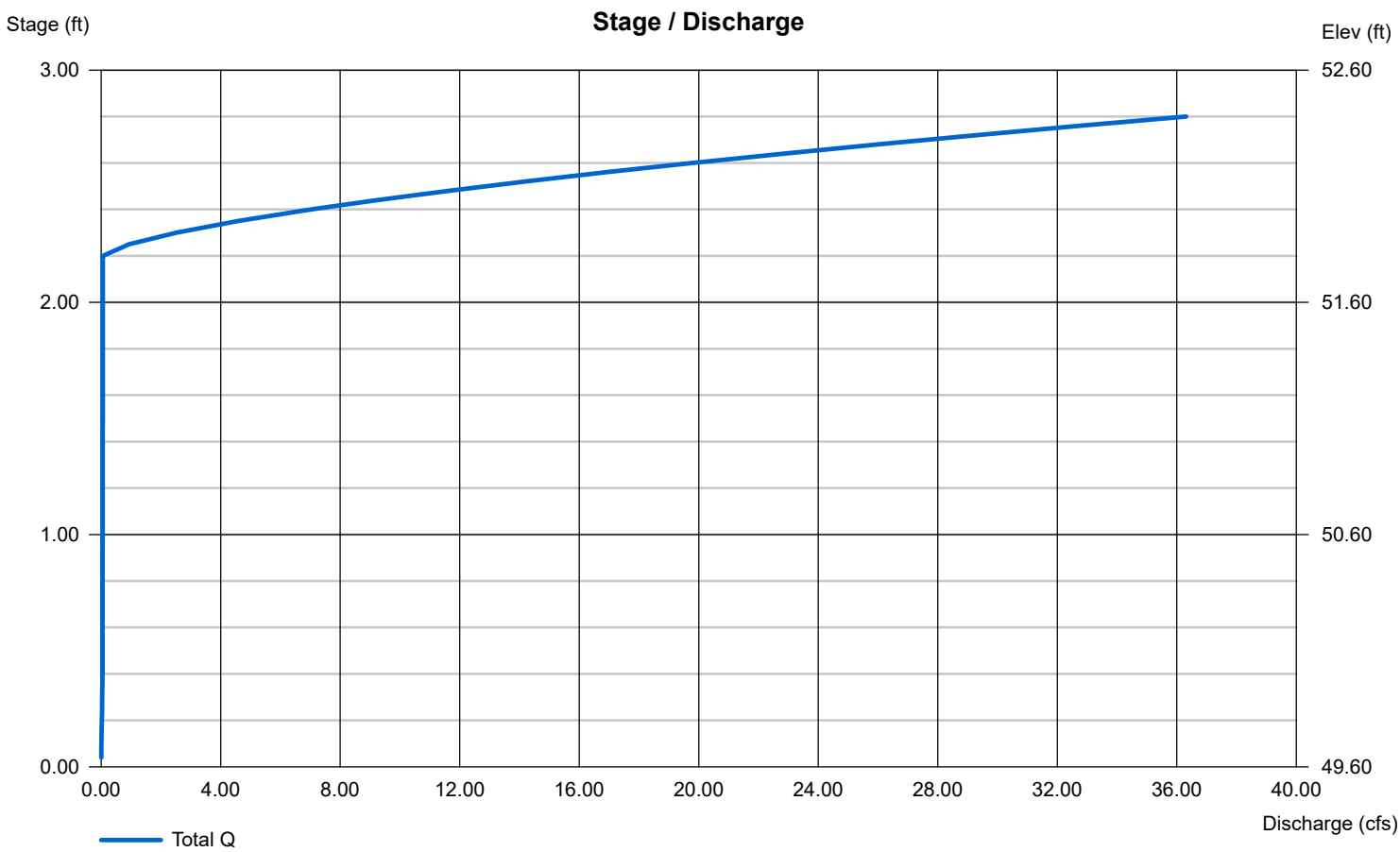
Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 30.00	0.00	0.00	0.00
Crest El. (ft)	= 51.80	0.00	0.00	0.00
Weir Coeff.	= 2.60	3.33	3.33	3.33
Weir Type	= Broad	---	---	---
Multi-Stage	= No	No	No	No

Exfil.(in/hr) = 0.300 (by Contour)

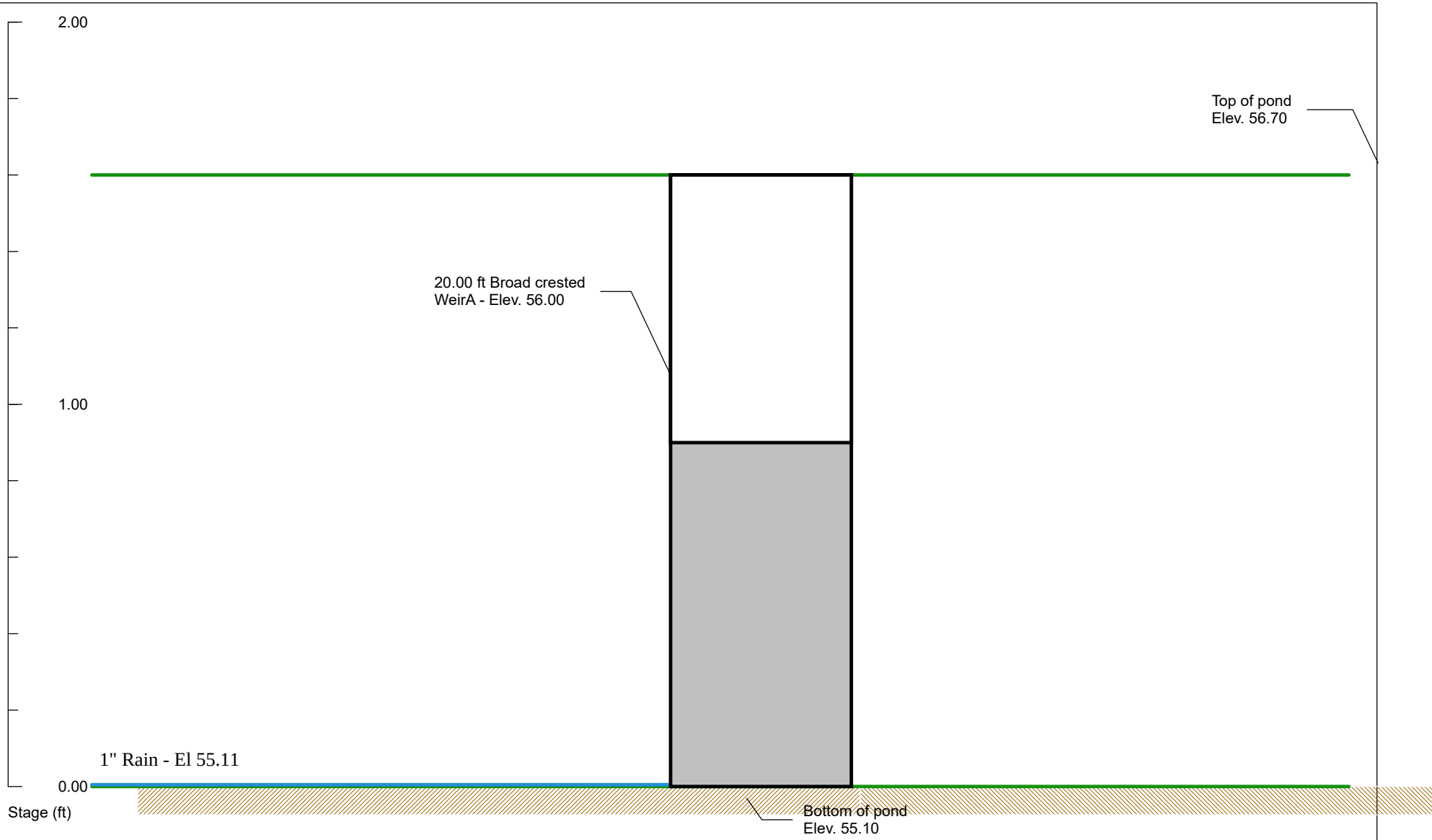
TW Elev. (ft) = 0.00

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).



Pond No. 2 - RG-1

Hydraflow Hydrographs by Intelisolve v9.23



Section
NTS

1-yr

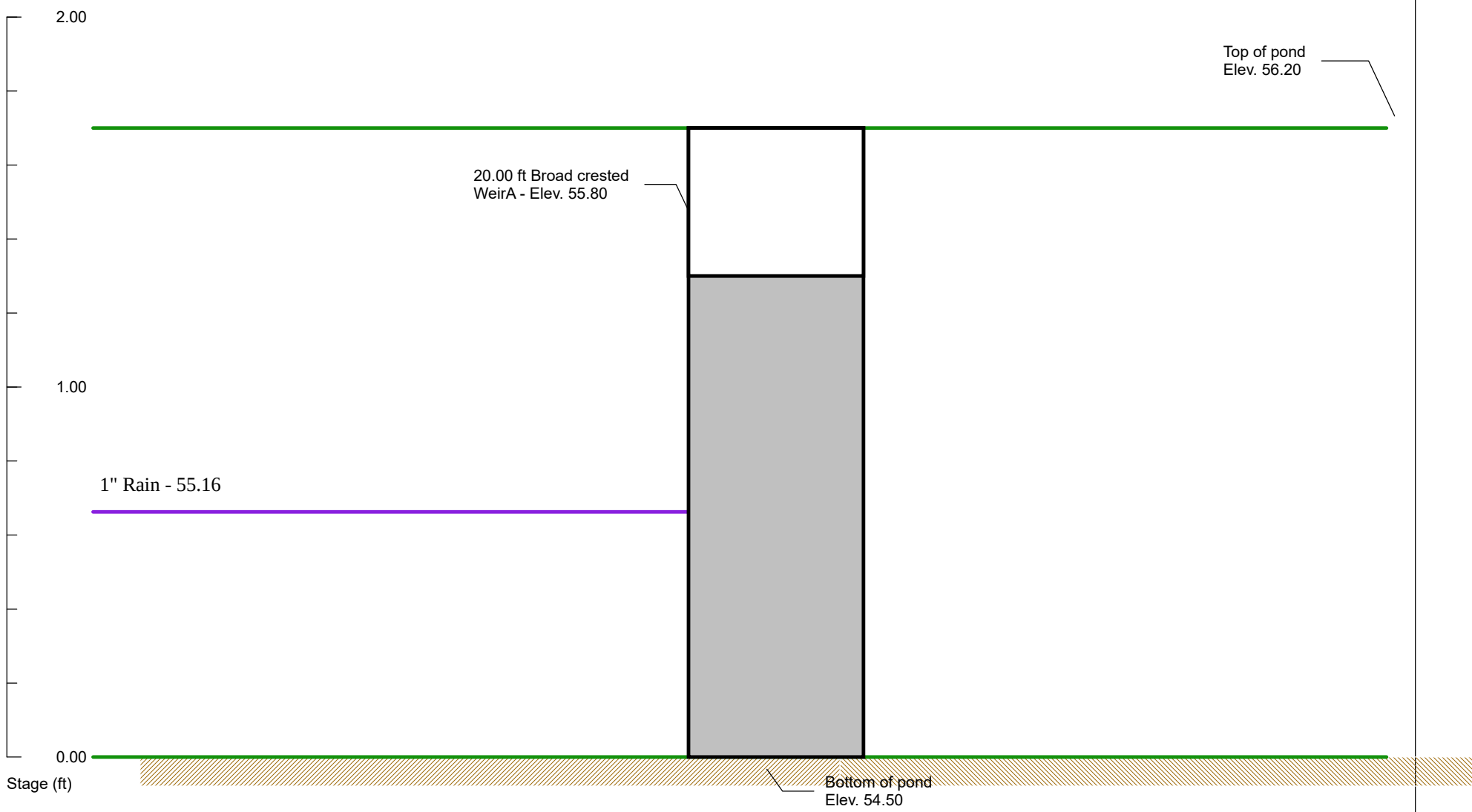
Project: D.V.PostDevelF-R2a-1-inch.gpw

Sunday, May 3, 2020

Inflow hydrograph = 2, SCS Runoff - B6

Pond No. 4 - RG-2

Hydraflow Hydrographs by Intelisolve v9.23



Section
NTS

50-yr

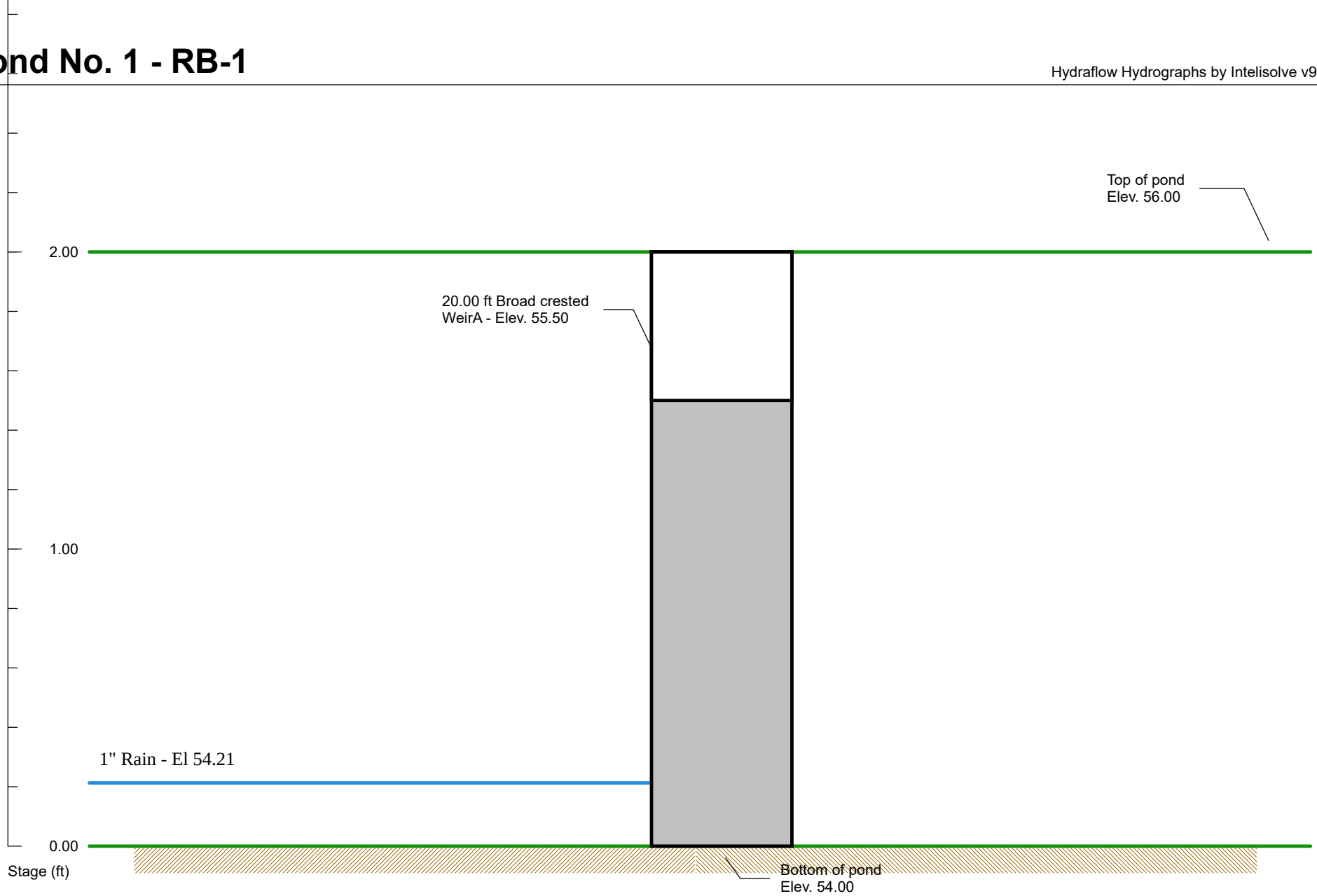
Project: D.V.PostDevelF-R2a-1-inch.gpw

Sunday, May 3, 2020

Inflow hydrograph = 4. SCS Runoff - B2

Pond No. 1 - RB-1

Hydraflow Hydrographs by Intelisolve v9.23



Section
NTS

1-yr

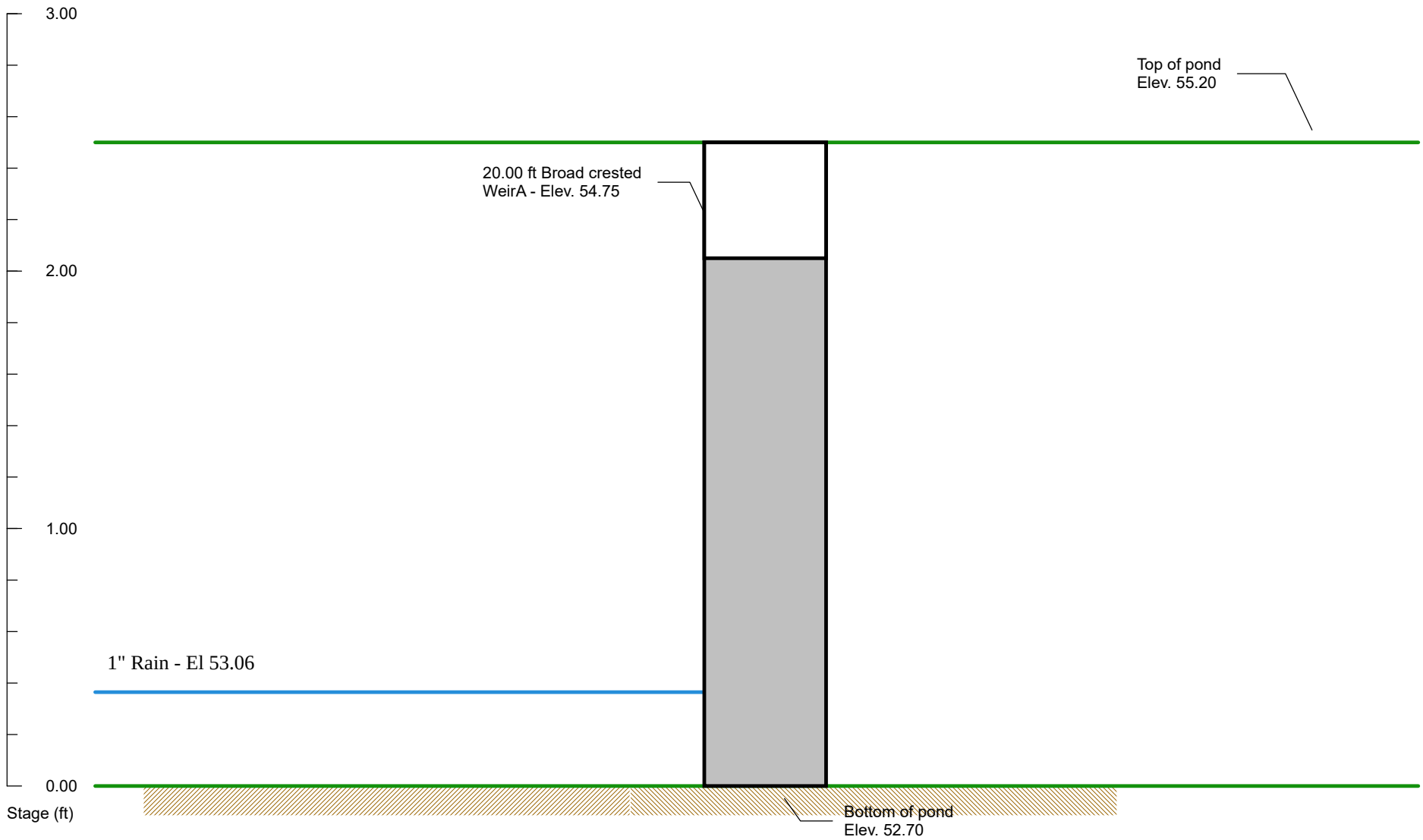
Project: D.V.PostDevelF-R2a-1-inch.gpw

Sunday, May 3, 2020

Inflow hydrograph = 6. SCS Runoff - B7

Pond No. 5 - RG-3

Hydraflow Hydrographs by Intelisolve v9.23



Section
NTS

1-yr

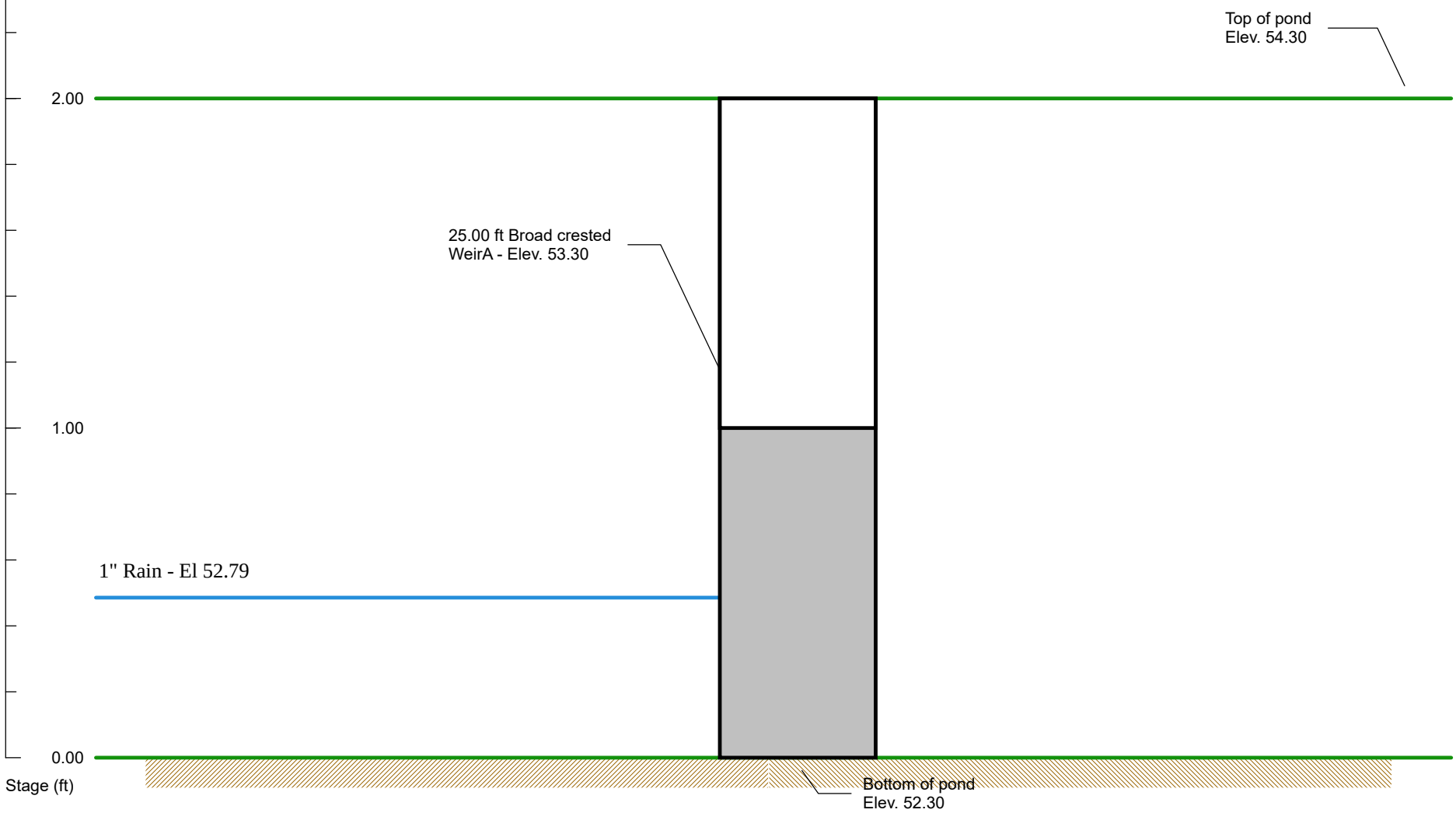
Project: D.V.PostDevelF-R2a-1-inch.gpw

Sunday, May 3, 2020

Inflow hydrograph = 70, SCS Runoff - B8

Pond No. 6 - RG4

Hydraflow Hydrographs by Intelisolve v9.23



Section
NTS

1-yr

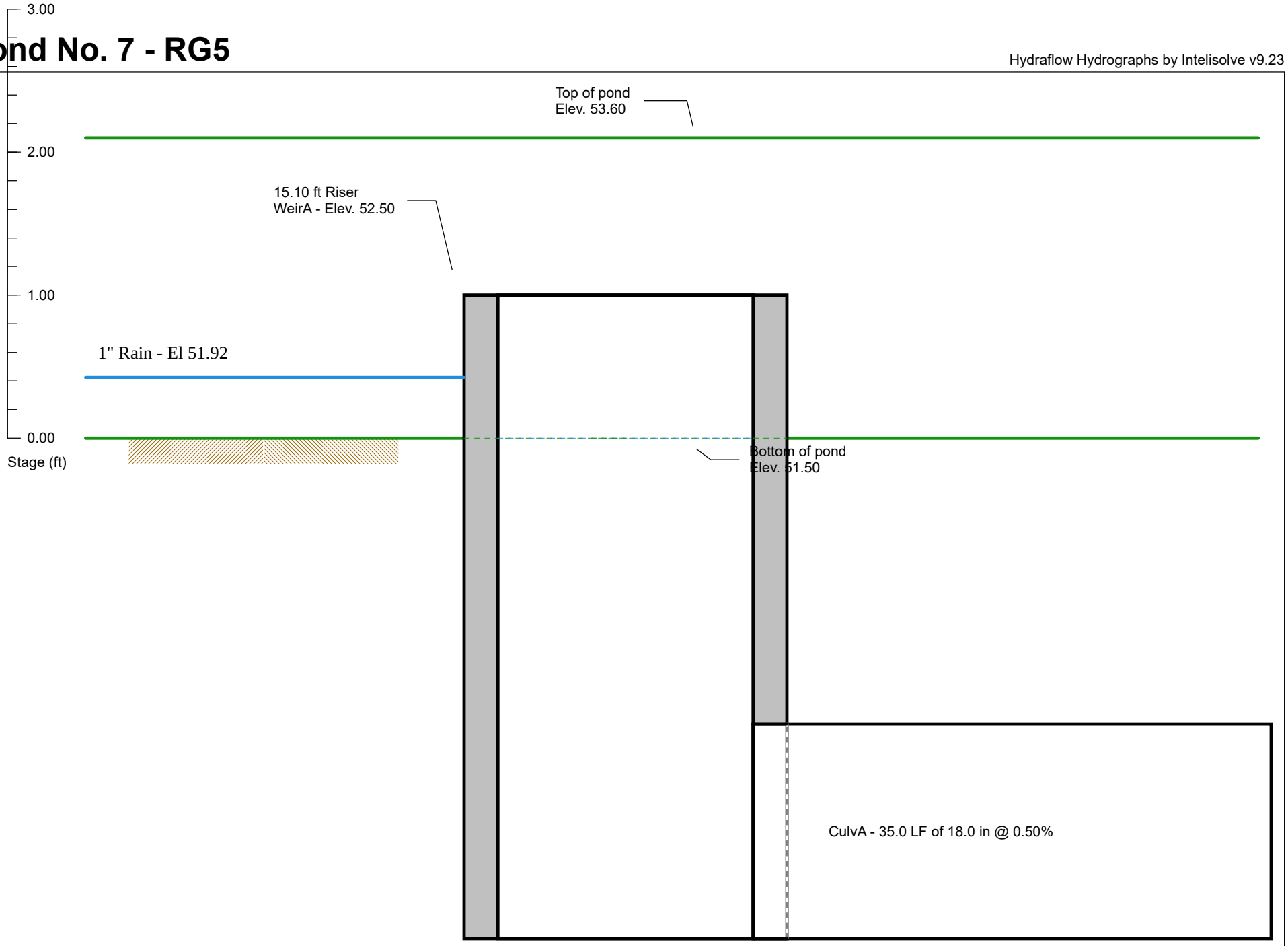
Project: D.V.PostDevelF-R2a-1-inch.gpw

Sunday, May 3, 2020

Inflow hydrograph = 73. Combine - <no description>

Pond No. 7 - RG5

Hydraflow Hydrographs by Intelisolve v9.23



Section
NTS

1-yr

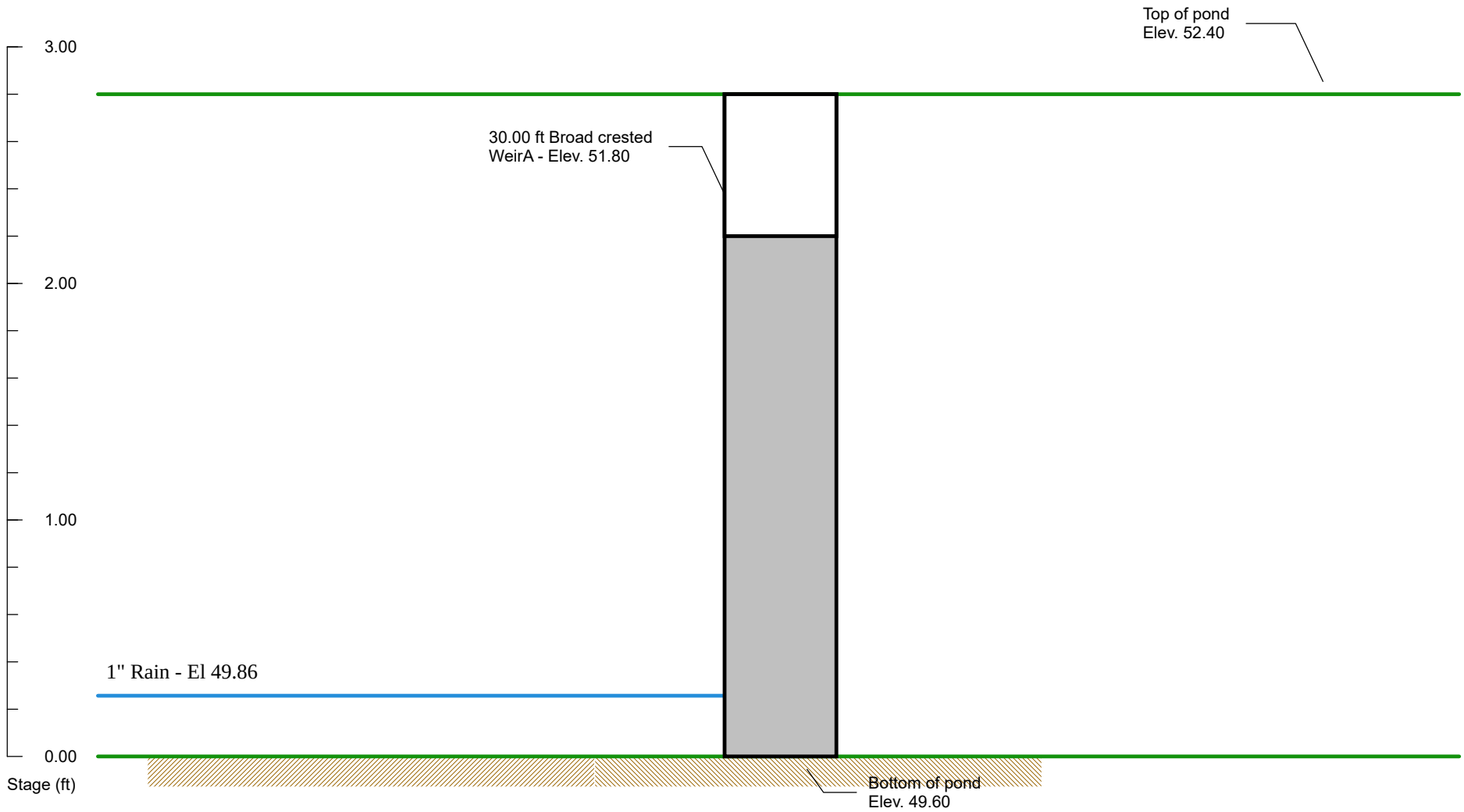
Project: D.V.PostDevelF-R2a-1-inch.gpw

Sunday, May 3, 2020

Inflow hydrograph = 76, Combine - <no description>

Pond No. 9 - RB-2

Hydraflow Hydrographs by Intelisolve v9.23



Section
NTS

1-yr

Project: D.V.PostDevelF-R2a-1-inch.gpw

Sunday, May 3, 2020

Inflow hydrograph = 83, Combine - <no description>