PCSM PLAN NARRATIVE & CALCULATIONS

201 S. Spring Mill Road

Radnor Township, Delaware County
Plan Prepared For: Top Notch Custom Homes, LLC

Date: January 3, 2025

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Plan Prepared By:
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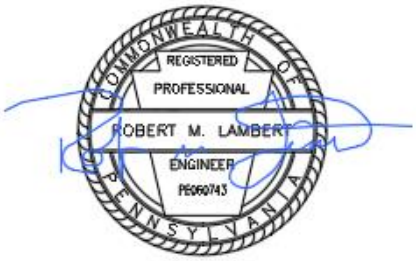

NARRATIVE

The Owner/Applicant, Top Notch Custom Homes, LLC, proposes to subdivide a vacant lot and construct two single family dwellings. Stormwater design is based on capturing the proposed roof area through roof drains and various yard drains. This captured stormwater will be treated by a stormwater infiltration basin BMP. The project site is located within District B-2 of the Darby-Cobbs Creek Watershed.

The stormwater system has been designed utilizing the rational method. Rational coefficients when applicable have been used per Appendix F in the Radnor Township Stormwater Ordinance.

During construction erosion and sediment control is accomplished through limited disturbance, immediate stabilization, and silt barriers.

TABLE A-1

EVENT: **RADNOR STORMWATER MANAGEMENT** DATE: **1/3/2025**

BY: **AMM**

LOCATION: **201 S. Spring Mill Rd - Subdivision Plan** REVISED:

STORMWATER COMPLIANCE SUMMARY

Hydrograph Description	Peak Outflow (cfs) 1-Yr	2-Yr	5-Yr	10-Yr	25-Yr	50-Yr	100-Yr	COMMENTS
	PROJECT AREA ANALYSIS							
RELEASE District	District B2- Darby Cobbs	2YR POST<=1YR PRE; 5<=2;10<=5;25<=5;50<=10;100<=100						
PRE-DEV + COMPENSATORY	0.847	1.008	1.182	1.302	1.447	1.544	1.639	Hydrograph #11
ALLOWABLE DISCHARGE	-	0.847	1.008	1.182	1.182	1.302	1.639	
BASIN DISCHARGE & BYPASS	-	0.817	0.958	1.056	1.174	1.252	1.421	Hydrograph #27
PASS/ FAIL	-	PASS	PASS	PASS	PASS	PASS	PASS	

Required Water Quality Volume		
2-Year Pre-Development Volume	1856 cf	Hydrograph #3
2-Year Post-Development Volume	2703 cf	Hydrograph #7
Required Water Quality Volume	**847 cf**	
Provided Volume Below Lowest Orifice	**2551 cf**	

Dewatering Calculation		
Dead Storage Volume Provided	1370	CF
Design Infiltration Rate*	2.25	IN/HR
Basin Footprint	716	SF
Basin Dewatering Time	**10**	HRS

*Refer to Infiltration Testing Results Prepared by Del Val

Dewatering Calculation		
Dead Storage Volume Provided	1898	CF
Design Infiltration Rate*	1.125	IN/HR
Basin Footprint	1002	SF
Basin Dewatering Time	**20**	HRS

*Refer to Infiltration Testing Results Prepared by Del Val

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dvs@delvalseptics.com
www.delvalseptics.com

PA # 108248

PERCOLATION REPORT

Client:
Location: 201 South Spring Mill Road (TP2)
Municipality: Radnor County: Delaware
Date: 12-3-24 Degrees: 40 Rain: No
On-Site Septic System: Storm Water Testing: X
Falling Head Testing: Double Ring Testing: X

Hole #	Depth	Water	Time	PS1	PS2	1	2	3	4	5	6	7	8
#1	5		30			1	1	.75	.75				
#2	6		30			1.5	1.5	1.5	1.5				
#3													
#4													
#5													
#6													

Final Reading	
#1	.75
#2	1.5
#3	
#4	
#5	
#6	

Inches / Hour	
#1	1.5
#2	3.0
#3	
#4	
#5	
#6	

NOTES
No Limiting Zone Clear to 8’
0-5 Top Soil
5-49 Silty Clay Loam 7.5YR 4/6
49-96 Silt Loam 7.5YR 4/6

RUN RATE=	2.25

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PA # 108248

PERCOLATION REPORT

Client:
Location: 201 South Spring Mill Road (TP3)
Municipality: Radnor County: Delaware
Date: 12-3-24 Degrees: 40 Rain: No
On-Site Septic System: Storm Water Testing: X
Falling Head Testing: Double Ring Testing: X

Hole #	Depth	Water	Time	PS1	PS2	1	2	3	4	5	6	7	8
#1	6		10	2.25	2	.75	.75	.75	.75				
#2													
#3													
#4													
#5													
#6													

Final Reading	
#1	.75
#2	
#3	
#4	
#5	
#6	

Inches / Hour	
#1	4.5
#2	
#3	
#4	
#5	
#6	

NOTES
No Limiting Zone Clear to 8’
0-5 Top Soil
5-49 Silty Clay Loam 7.5YR 4/6
49-96 Silt Loam 7.5YR 4/6

RUN RATE=	4.5

Hydrograph Return Period Recap

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No.	Hydrograph type (origin)	Inflow hyd(s)	Peak Outflow (cfs)								Hydrograph Description
			1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr	
1	Rational	------	1.486	1.768	-------	2.073	2.283	2.538	2.708	2.874	WQv Calc Pre-Dev (Meadow)
2	Combine	1	1.486	1.768	-------	2.073	2.283	2.538	2.708	2.874	WQv Calc Total Pre-Dev
4	Rational	------	0.910	1.083	-------	1.270	1.399	1.555	1.659	1.761	WQv Calc Uncontrolled Post-Dev (Im
5	Rational	------	1.253	1.491	-------	1.748	1.926	2.141	2.284	2.424	WQv Calc Uncontrolled Post-Dev (Pe
6	Combine	4, 5	2.163	2.574	-------	3.018	3.324	3.695	3.943	4.185	WQv Calc Total Post-Dev
8	Rational	------	0.267	0.318	-------	0.373	0.411	0.457	0.487	0.517	Pre-Development (Meadow)
9	Rational	------	0.281	0.335	-------	0.392	0.432	0.481	0.513	0.544	Compensatory (Imp.)
10	Rational	------	0.298	0.355	-------	0.416	0.459	0.510	0.544	0.577	Compensatory (Perv.)
11	Combine	8, 9, 10	0.847	1.008	-------	1.182	1.302	1.447	1.544	1.639	Pre-Development Total
13	Rational	------	0.393	0.468	-------	0.548	0.604	0.671	0.716	0.760	Imp. to Infiltration Basin #1
14	Rational	------	0.301	0.358	-------	0.419	0.462	0.513	0.548	0.581	Lawn to Infiltration Basin #1
15	Combine	13, 14	0.694	0.825	-------	0.968	1.066	1.185	1.264	1.342	Total to Infiltration Basin #1
16	Reservoir	15	0.000	0.000	-------	0.000	0.000	0.000	0.006	0.079	Infiltration Bed #1
18	Rational	------	0.323	0.384	-------	0.450	0.496	0.551	0.588	0.624	Imp. to Infiltration Basin #2
19	Rational	------	0.445	0.530	-------	0.621	0.685	0.761	0.812	0.862	Lawn to Infiltration Basin #2
20	Combine	9, 10, 18, 19	1.348	1.604	-------	1.880	2.071	2.302	2.456	2.607	Total to Infiltration Bed #2
21	Reservoir	20	0.000	0.000	-------	0.184	0.407	0.592	0.706	0.805	Infiltration Bed #2
23	Rational	------	0.186	0.222	-------	0.260	0.286	0.318	0.339	0.360	Bypass (Imp.)
24	Rational	------	0.501	0.596	-------	0.699	0.770	0.856	0.913	0.969	Bypass (Perv)
25	Combine	23, 24	0.687	0.817	-------	0.958	1.056	1.174	1.252	1.329	Total Bypass
27	Combine	16, 21, 25,	0.687	0.817	-------	0.958	1.056	1.174	1.252	1.421	Total Post-Development

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

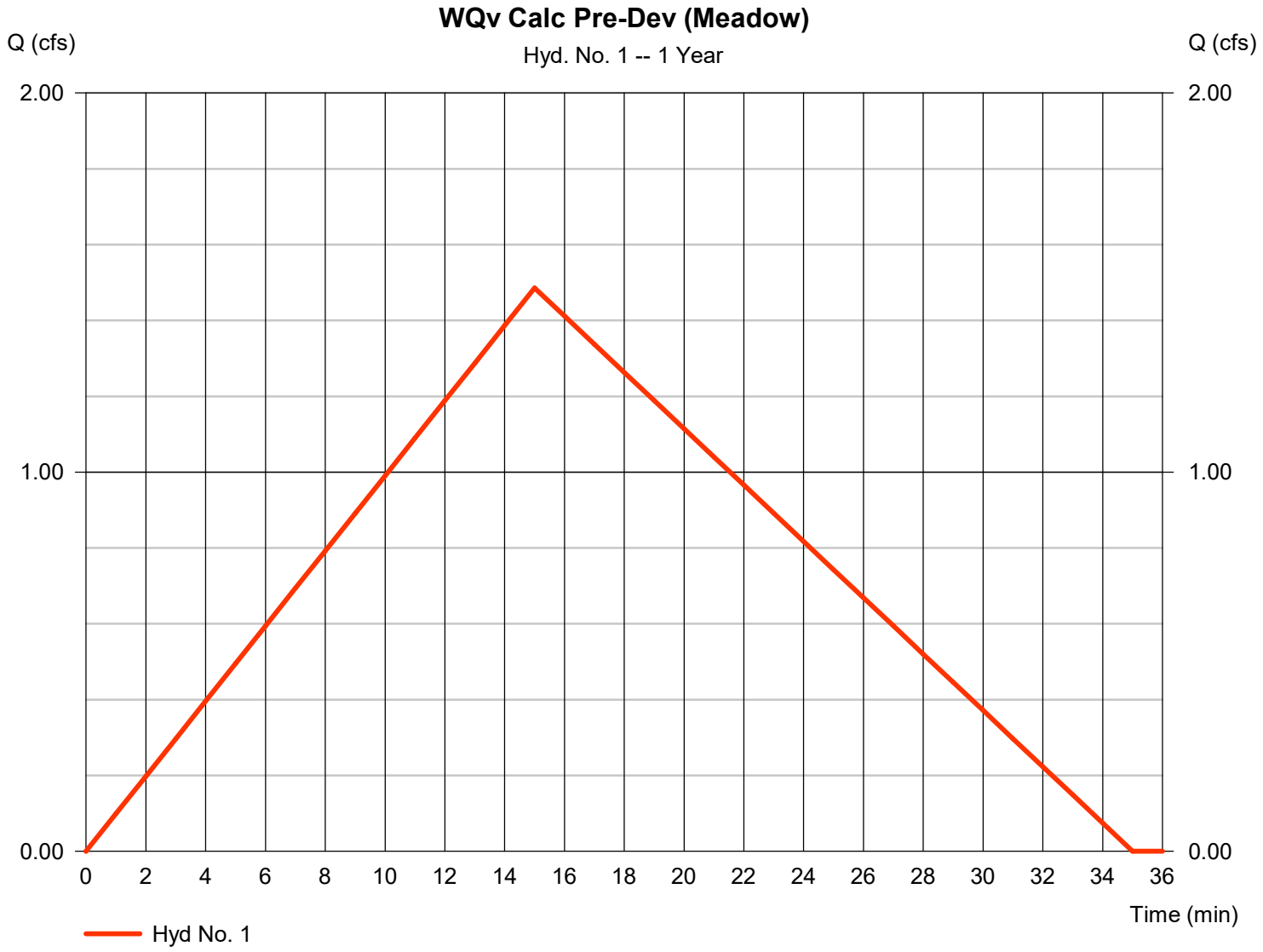
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	1.486	1	15	1,560	------	------	------	WQv Calc Pre-Dev (Meadow)
2	Combine	1.486	1	15	1,560	1	------	------	WQv Calc Total Pre-Dev
4	Rational	0.910	1	15	956	------	------	------	WQv Calc Uncontrolled Post-Dev (Im
5	Rational	1.253	1	15	1,316	------	------	------	WQv Calc Uncontrolled Post-Dev (Pe
6	Combine	2.163	1	15	2,272	4, 5	------	------	WQv Calc Total Post-Dev
8	Rational	0.267	1	15	281	------	------	------	Pre-Development (Meadow)
9	Rational	0.281	1	15	295	------	------	------	Compensatory (Imp.)
10	Rational	0.298	1	15	313	------	------	------	Compensatory (Perv.)
11	Combine	0.847	1	15	890	8, 9, 10	------	------	Pre-Development Total
13	Rational	0.393	1	15	413	------	------	------	Imp. to Infiltration Basin #1
14	Rational	0.301	1	15	316	------	------	------	Lawn to Infiltration Basin #1
15	Combine	0.694	1	15	728	13, 14	------	------	Total to Infiltration Basin #1
16	Reservoir	0.000	1	n/a	0	15	371.91	624	Infiltration Bed #1
18	Rational	0.323	1	15	339	------	------	------	Imp. to Infiltration Basin #2
19	Rational	0.445	1	15	468	------	------	------	Lawn to Infiltration Basin #2
20	Combine	1.348	1	15	1,415	9, 10, 18, 19	------	------	Total to Infiltration Bed #2
21	Reservoir	0.000	1	n/a	0	20	375.55	1,330	Infiltration Bed #2
23	Rational	0.186	1	15	195	------	------	------	Bypass (Imp.)
24	Rational	0.501	1	15	526	------	------	------	Bypass (Perv)
25	Combine	0.687	1	15	721	23, 24	------	------	Total Bypass
27	Combine	0.687	1	15	721	16, 21, 25,	------	------	Total Post-Development

Hydrograph Report

Hyd. No. 1

WQv Calc Pre-Dev (Meadow)

Hydrograph type	=	Rational	Peak discharge	=	1.486 cfs
Storm frequency	=	1 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	1,560 cuft
Drainage area	=	0.808 ac	Runoff coeff.	=	0.44
Intensity	=	4.179 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

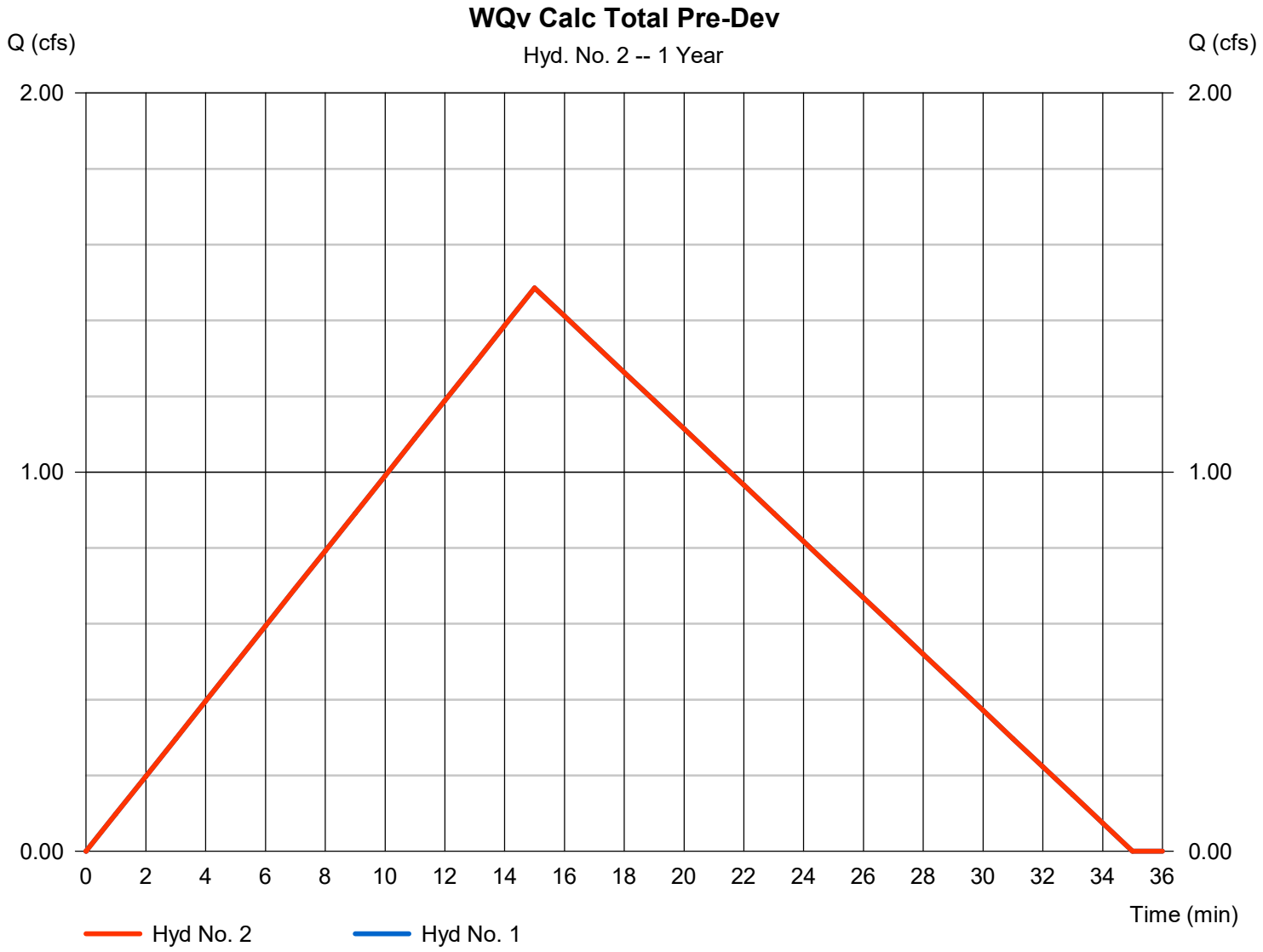


Hydrograph Report

Hyd. No. 2

WQv Calc Total Pre-Dev

Hydrograph type	= Combine	Peak discharge	= 1.486 cfs
Storm frequency	= 1 yrs	Time to peak	= 15 min
Time interval	= 1 min	Hyd. volume	= 1,560 cuft
Inflow hyds.	= 1	Contrib. drain. area	= 0.808 ac

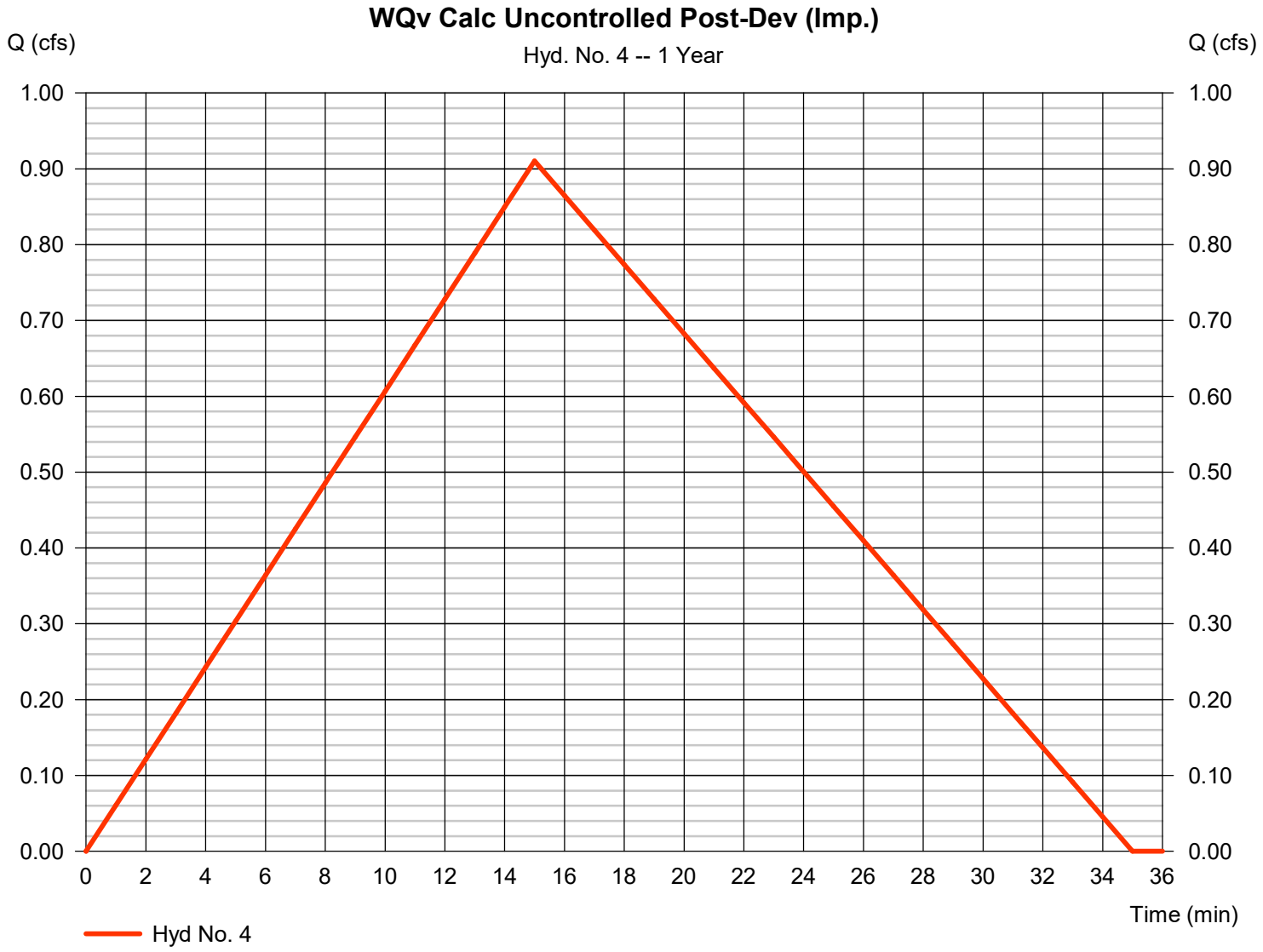


Hydrograph Report

Hyd. No. 4

WQv Calc Uncontrolled Post-Dev (Imp.)

Hydrograph type	=	Rational	Peak discharge	=	0.910 cfs
Storm frequency	=	1 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	956 cuft
Drainage area	=	0.220 ac	Runoff coeff.	=	0.99
Intensity	=	4.179 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

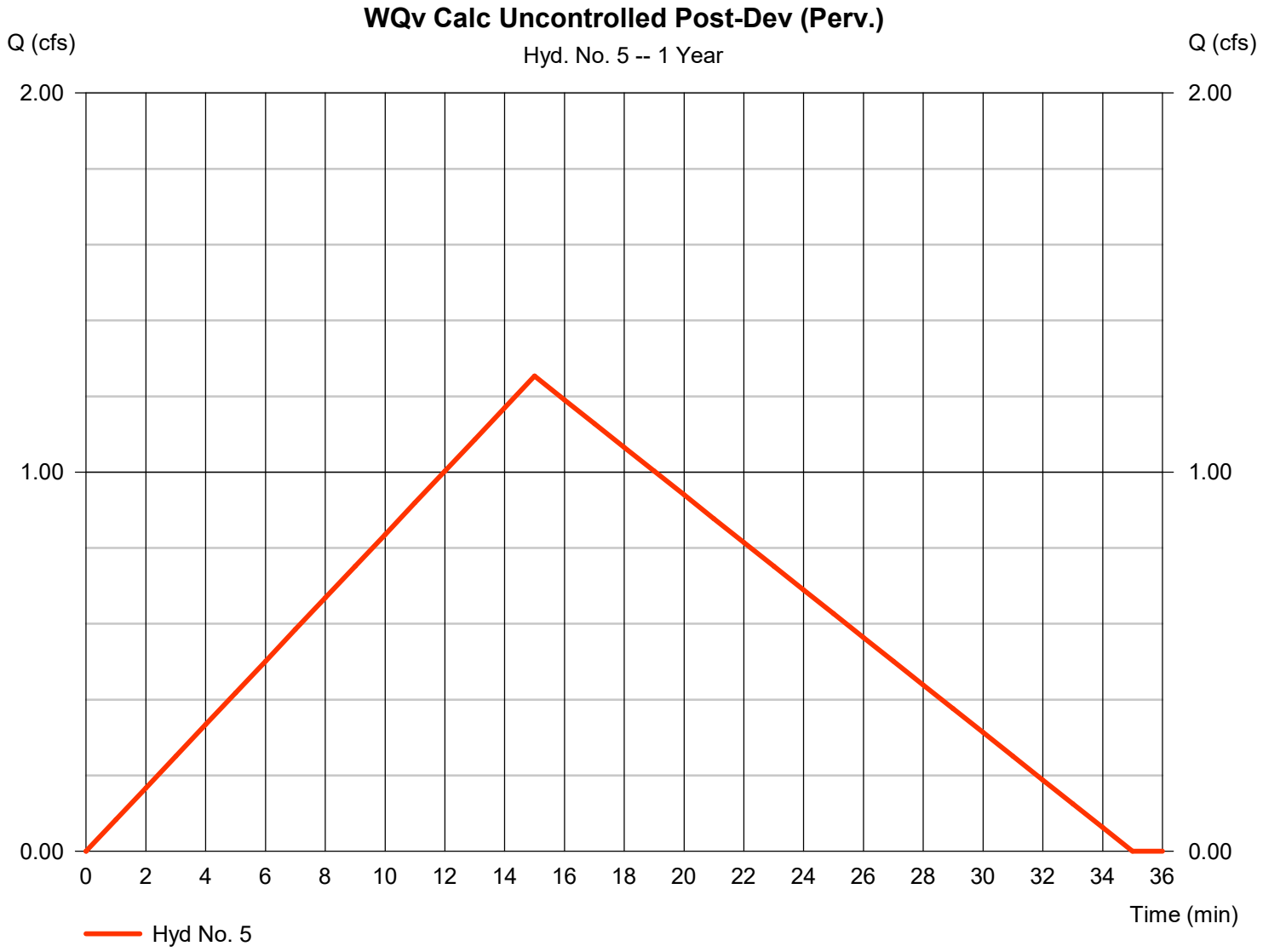


Hydrograph Report

Hyd. No. 5

WQv Calc Uncontrolled Post-Dev (Perv.)

Hydrograph type	=	Rational	Peak discharge	=	1.253 cfs
Storm frequency	=	1 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	1,316 cuft
Drainage area	=	0.588 ac	Runoff coeff.	=	0.51
Intensity	=	4.179 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

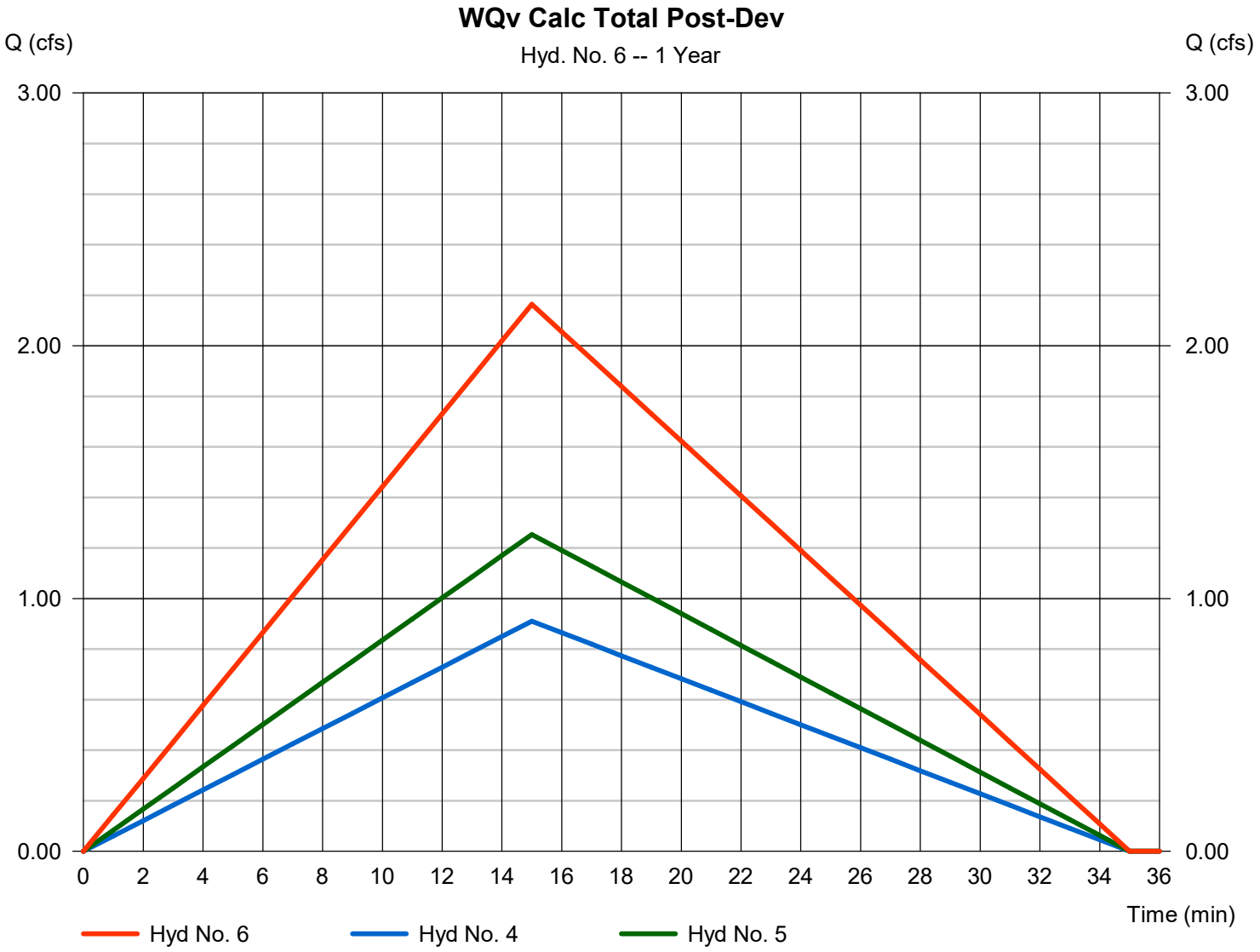


Hydrograph Report

Hyd. No. 6

WQv Calc Total Post-Dev

Hydrograph type	= Combine	Peak discharge	= 2.163 cfs
Storm frequency	= 1 yrs	Time to peak	= 15 min
Time interval	= 1 min	Hyd. volume	= 2,272 cuft
Inflow hyds.	= 4, 5	Contrib. drain. area	= 0.808 ac



Hydrograph Report

Hyd. No. 8

Pre-Development (Meadow)

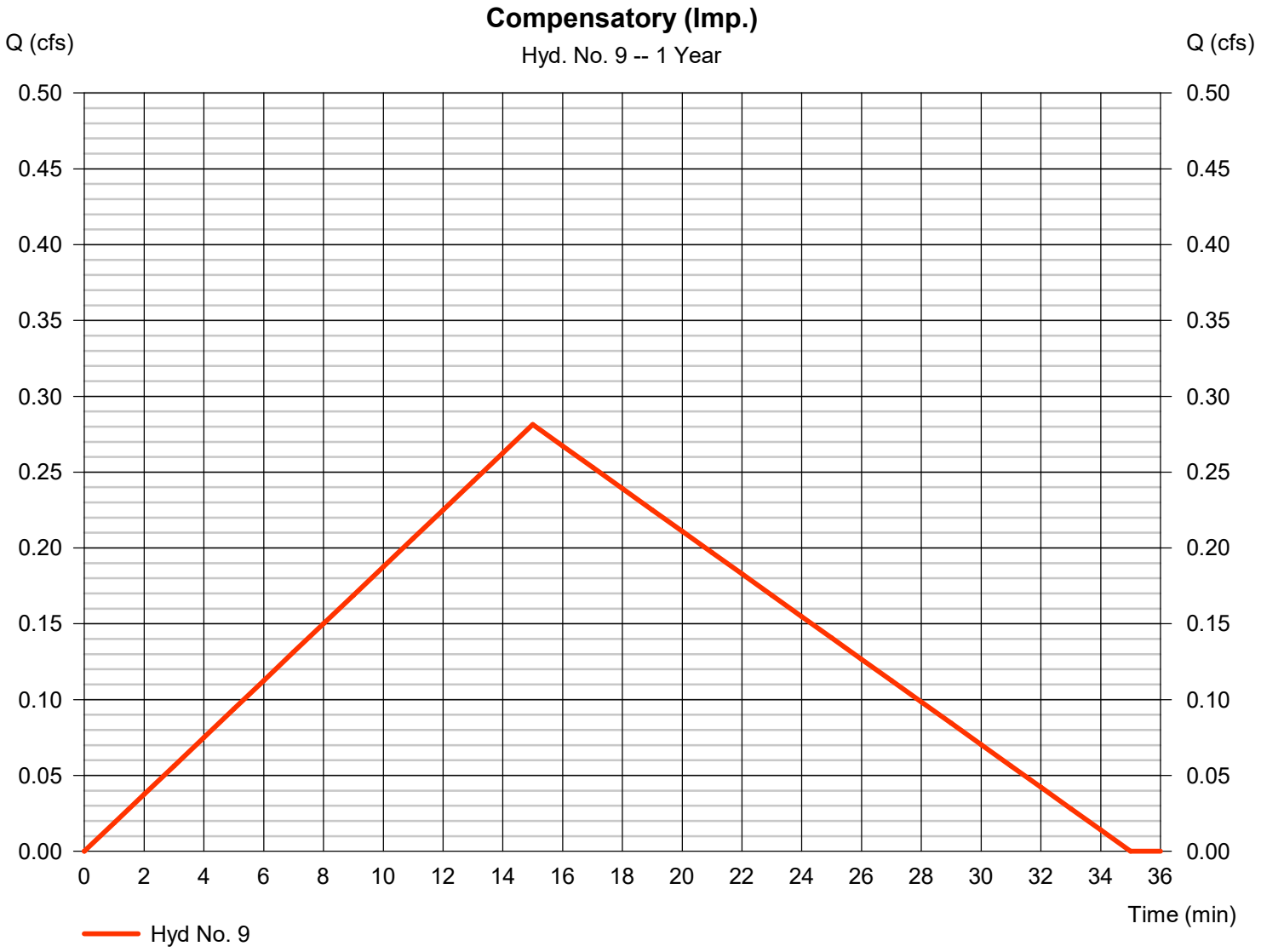
Hydrograph type	=	Rational	Peak discharge	=	0.267 cfs
Storm frequency	=	1 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	281 cuft
Drainage area	=	0.320 ac	Runoff coeff.	=	0.2
Intensity	=	4.179 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

Hydrograph Report

Hyd. No. 9

Compensatory (Imp.)

Hydrograph type	=	Rational	Peak discharge	=	0.281 cfs
Storm frequency	=	1 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	295 cuft
Drainage area	=	0.068 ac	Runoff coeff.	=	0.99
Intensity	=	4.179 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

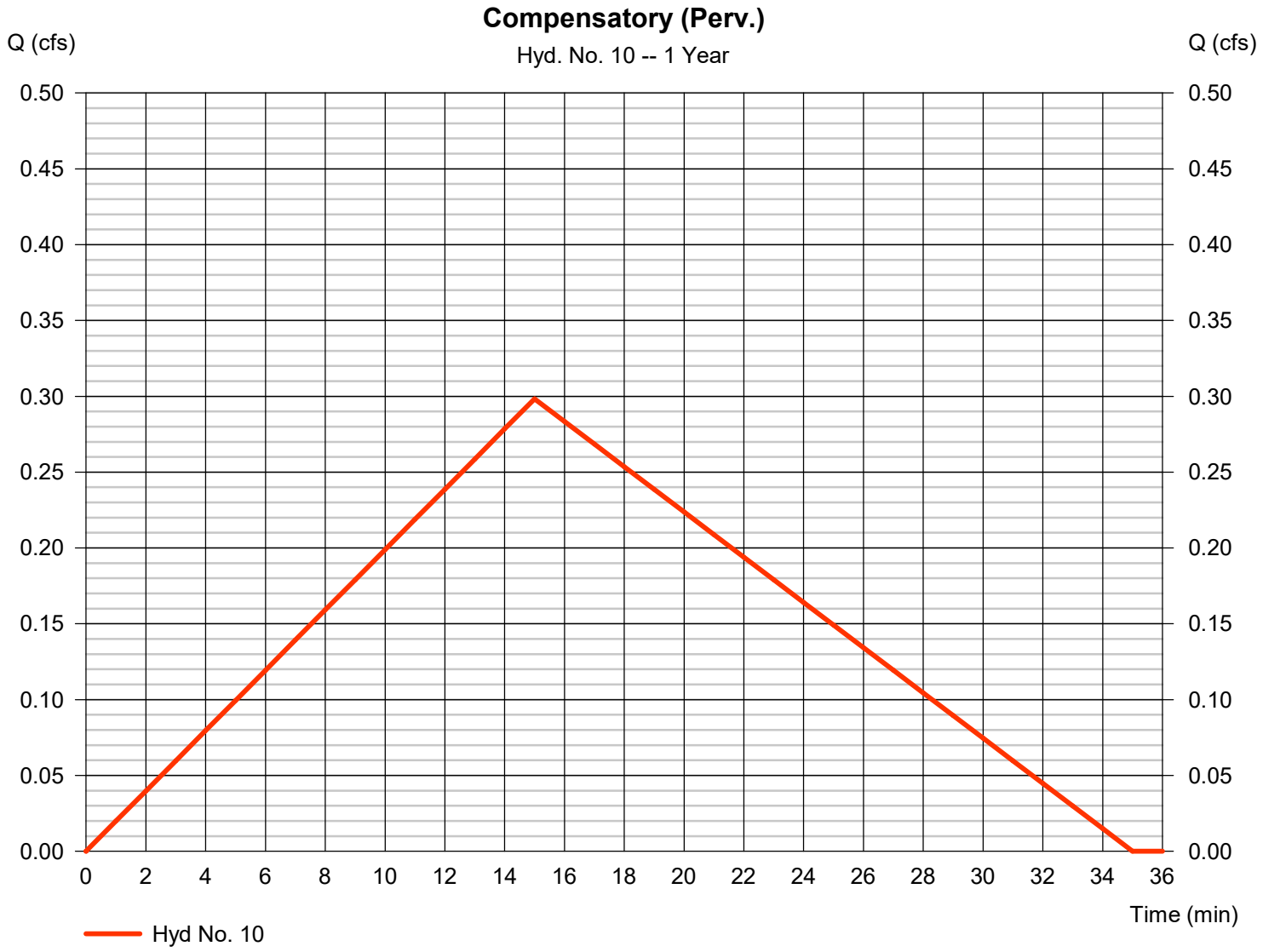


Hydrograph Report

Hyd. No. 10

Compensatory (Perv.)

Hydrograph type	=	Rational	Peak discharge	=	0.298 cfs
Storm frequency	=	1 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	313 cuft
Drainage area	=	0.140 ac	Runoff coeff.	=	0.51
Intensity	=	4.179 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

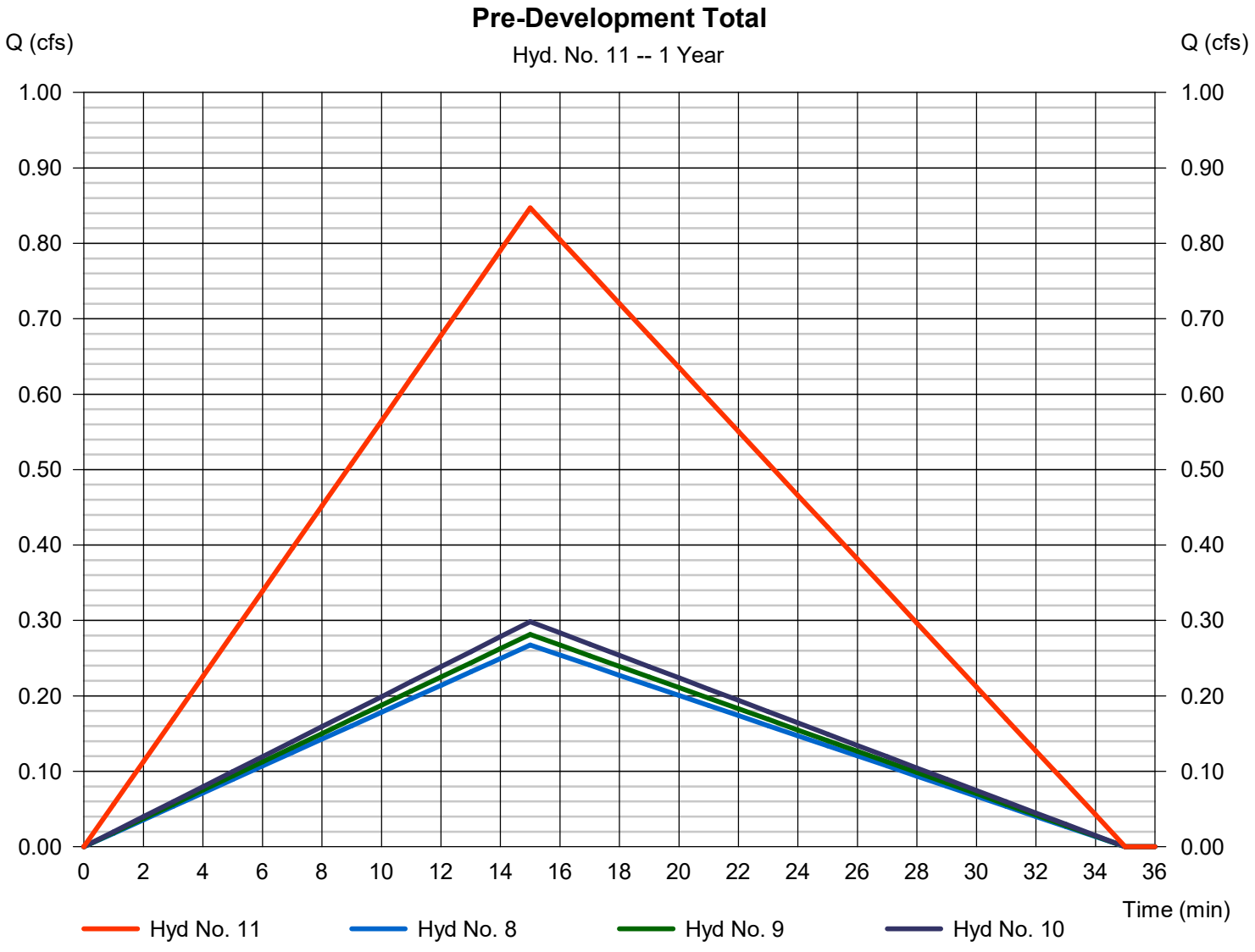


Hydrograph Report

Hyd. No. 11

Pre-Development Total

Hydrograph type	= Combine	Peak discharge	= 0.847 cfs
Storm frequency	= 1 yrs	Time to peak	= 15 min
Time interval	= 1 min	Hyd. volume	= 890 cuft
Inflow hyds.	= 8, 9, 10	Contrib. drain. area	= 0.528 ac

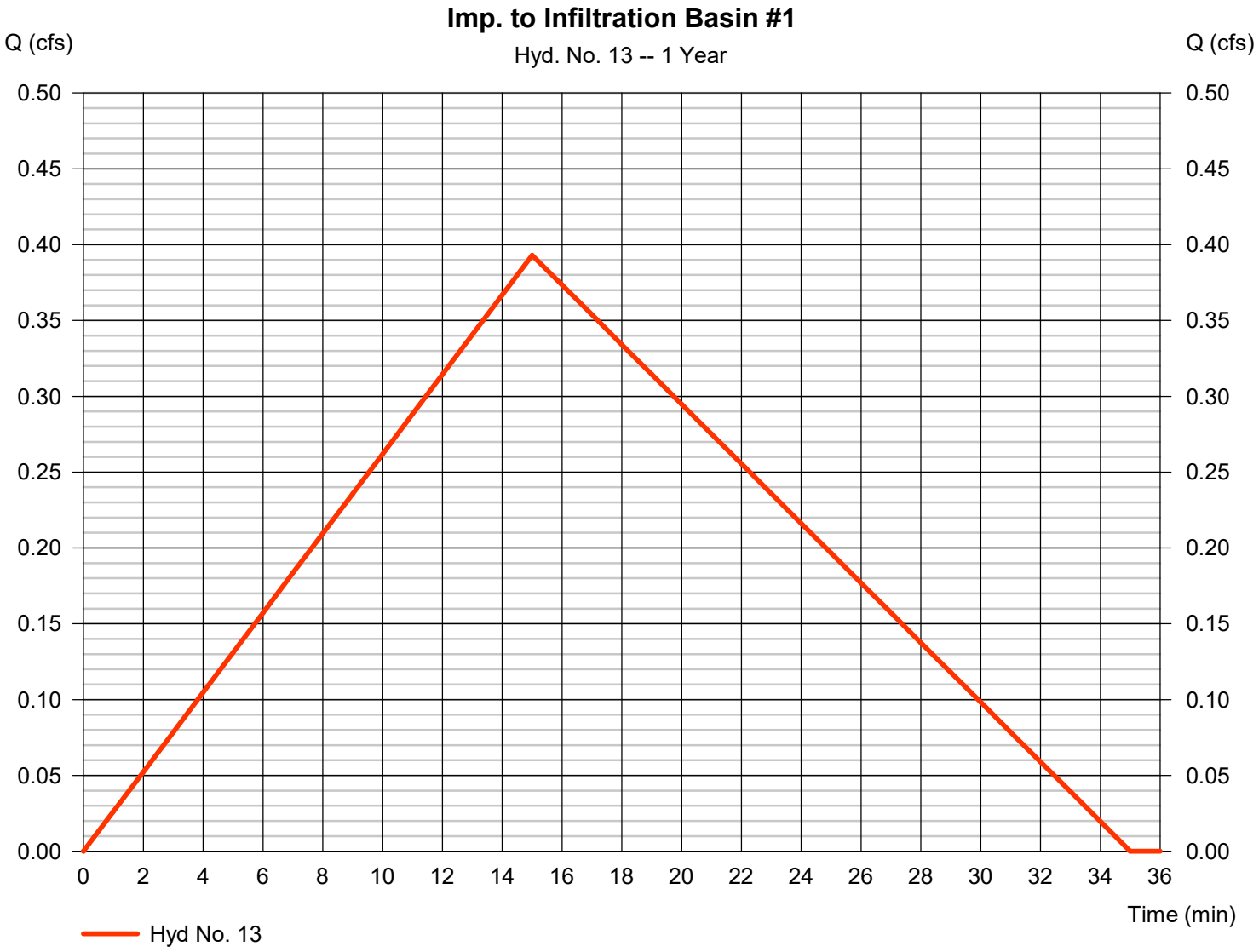


Hydrograph Report

Hyd. No. 13

Imp. to Infiltration Basin #1

Hydrograph type	=	Rational	Peak discharge	=	0.393 cfs
Storm frequency	=	1 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	413 cuft
Drainage area	=	0.095 ac	Runoff coeff.	=	0.99
Intensity	=	4.179 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4



Hydrograph Report

Hyd. No. 14

Lawn to Infiltration Basin #1

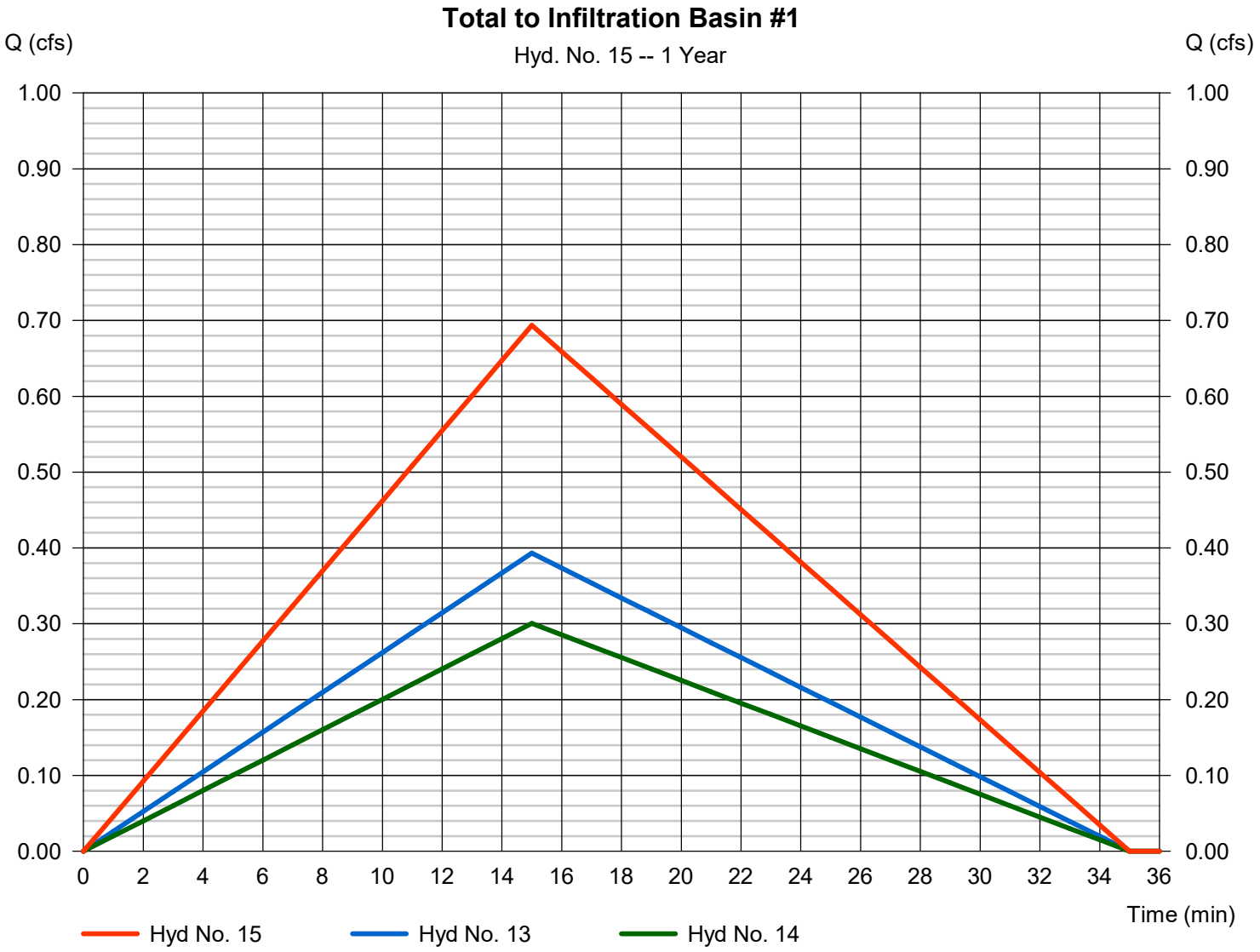
Hydrograph type	=	Rational	Peak discharge	=	0.301 cfs
Storm frequency	=	1 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	316 cuft
Drainage area	=	0.141 ac	Runoff coeff.	=	0.51
Intensity	=	4.179 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

Hydrograph Report

Hyd. No. 15

Total to Infiltration Basin #1

Hydrograph type	=	Combine	Peak discharge	=	0.694 cfs
Storm frequency	=	1 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	728 cuft
Inflow hyds.	=	13, 14	Contrib. drain. area	=	0.236 ac



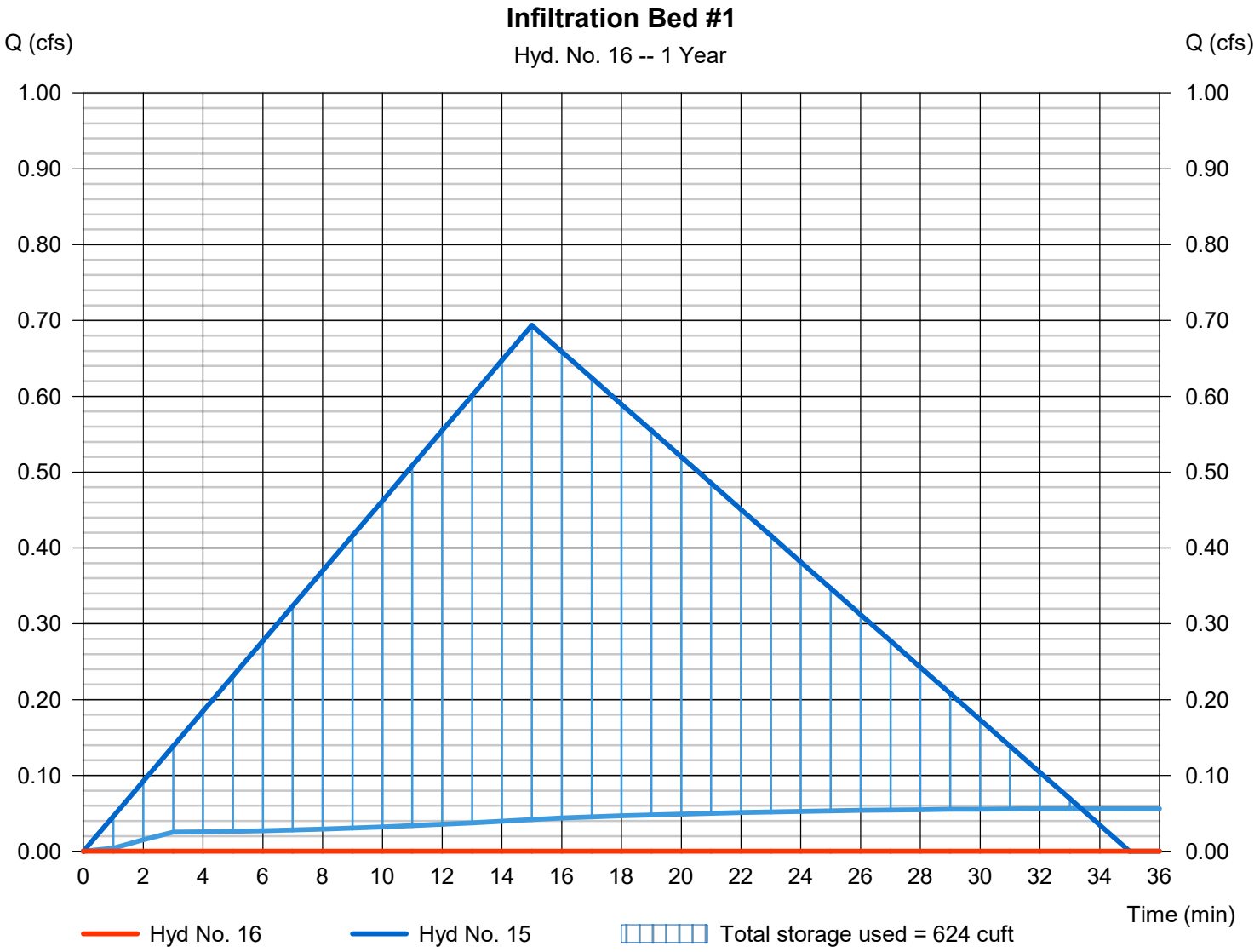
Hydrograph Report

Hyd. No. 16

Infiltration Bed #1

Hydrograph type	=	Reservoir	Peak discharge	=	0.000 cfs
Storm frequency	=	1 yrs	Time to peak	=	n/a
Time interval	=	1 min	Hyd. volume	=	0 cuft
Inflow hyd. No.	=	15 - Total to Infiltration Basin #1	Max. Elevation	=	371.91 ft
Reservoir name	=	Infiltration Bed #1	Max. Storage	=	624 cuft

Storage Indication method used. Exfiltration extracted from Outflow.



Pond Report

Pond No. 1 - Infiltration Bed #1

Pond Data

UG Chambers -Invert elev. = 371.50 ft, Rise x Span = 2.00 x 2.00 ft, Barrel Len = 30.00 ft, No. Barrels = 5, Slope = 0.00%, Headers = Yes
Encasement -Invert elev. = 370.00 ft, Width = 3.92 ft, Height = 4.00 ft, Voids = 40.00%

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	370.00	n/a	0	0
0.40	370.40	n/a	119	119
0.80	370.80	n/a	119	237
1.20	371.20	n/a	119	356
1.60	371.60	n/a	125	481
2.00	372.00	n/a	182	663
2.40	372.40	n/a	205	868
2.80	372.80	n/a	208	1,076
3.20	373.20	n/a	196	1,273
3.60	373.60	n/a	152	1,425
4.00	374.00	n/a	119	1,544

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 6.00	0.00	0.00	0.00
Span (in)	= 6.00	0.00	0.00	0.00
No. Barrels	= 1	1	0	0
Invert El. (ft)	= 373.00	0.00	0.00	0.00
Length (ft)	= 65.00	0.00	0.00	0.00
Slope (%)	= 6.00	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)	= 0.00	0.00	0.00	0.00
Crest El. (ft)	= 0.00	0.00	0.00	0.00
Weir Coeff.	= 3.33	3.33	3.33	3.33
Weir Type	= ---	---	---	---
Multi-Stage	= No	No	No	No

Exfil.(in/hr) = 2.250 (by Wet area)
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).

Stage / Storage / Discharge Table

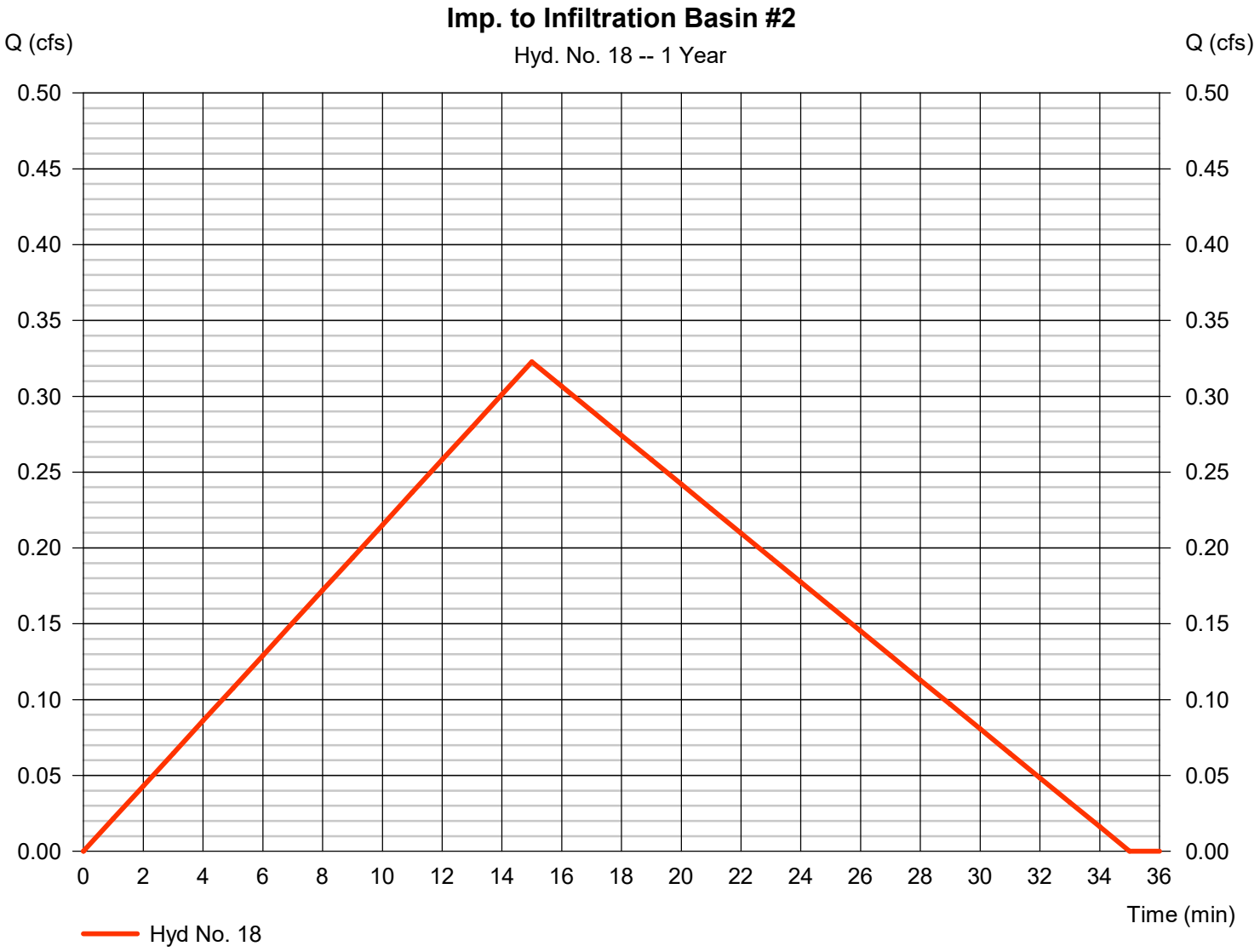
Stage ft	Storage cuft	Elevation ft	Clv A cfs	Clv B cfs	Clv C cfs	PrfRsr cfs	Wr A cfs	Wr B cfs	Wr C cfs	Wr D cfs	Exfil cfs	User cfs	Total cfs
0.00	0	370.00	0.00	---	---	---	---	---	---	---	0.000	---	0.000
0.40	119	370.40	0.00	---	---	---	---	---	---	---	0.042	---	0.042
0.80	237	370.80	0.00	---	---	---	---	---	---	---	0.049	---	0.049
1.20	356	371.20	0.00	---	---	---	---	---	---	---	0.056	---	0.056
1.60	481	371.60	0.00	---	---	---	---	---	---	---	0.063	---	0.063
2.00	663	372.00	0.00	---	---	---	---	---	---	---	0.070	---	0.070
2.40	868	372.40	0.00	---	---	---	---	---	---	---	0.077	---	0.077
2.80	1,076	372.80	0.00	---	---	---	---	---	---	---	0.084	---	0.084
3.20	1,273	373.20	0.11 ic	---	---	---	---	---	---	---	0.091	---	0.203
3.60	1,425	373.60	0.56 ic	---	---	---	---	---	---	---	0.098	---	0.657
4.00	1,544	374.00	0.82 ic	---	---	---	---	---	---	---	0.105	---	0.924

Hydrograph Report

Hyd. No. 18

Imp. to Infiltration Basin #2

Hydrograph type	=	Rational	Peak discharge	=	0.323 cfs
Storm frequency	=	1 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	339 cuft
Drainage area	=	0.078 ac	Runoff coeff.	=	0.99
Intensity	=	4.179 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4



Hydrograph Report

Hyd. No. 19

Lawn to Infiltration Basin #2

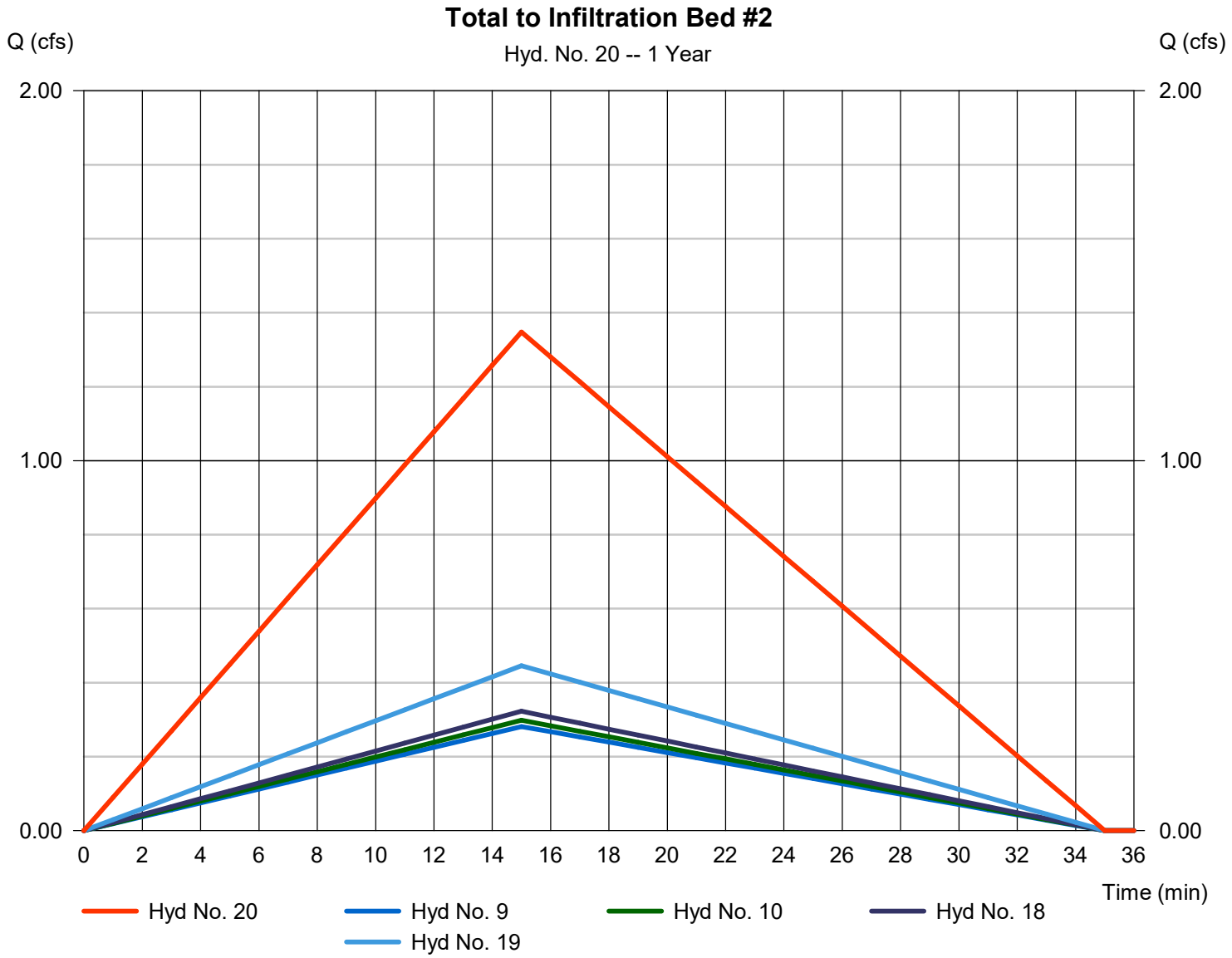
Hydrograph type	= Rational	Peak discharge	= 0.445 cfs
Storm frequency	= 1 yrs	Time to peak	= 15 min
Time interval	= 1 min	Hyd. volume	= 468 cuft
Drainage area	= 0.209 ac	Runoff coeff.	= 0.51
Intensity	= 4.179 in/hr	Tc by User	= 5.00 min
IDF Curve	= Radnor.IDF	Asc/Rec limb fact	= 3/4

Hydrograph Report

Hyd. No. 20

Total to Infiltration Bed #2

Hydrograph type	=	Combine	Peak discharge	=	1.348 cfs
Storm frequency	=	1 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	1,415 cuft
Inflow hyds.	=	9, 10, 18, 19	Contrib. drain. area	=	0.495 ac



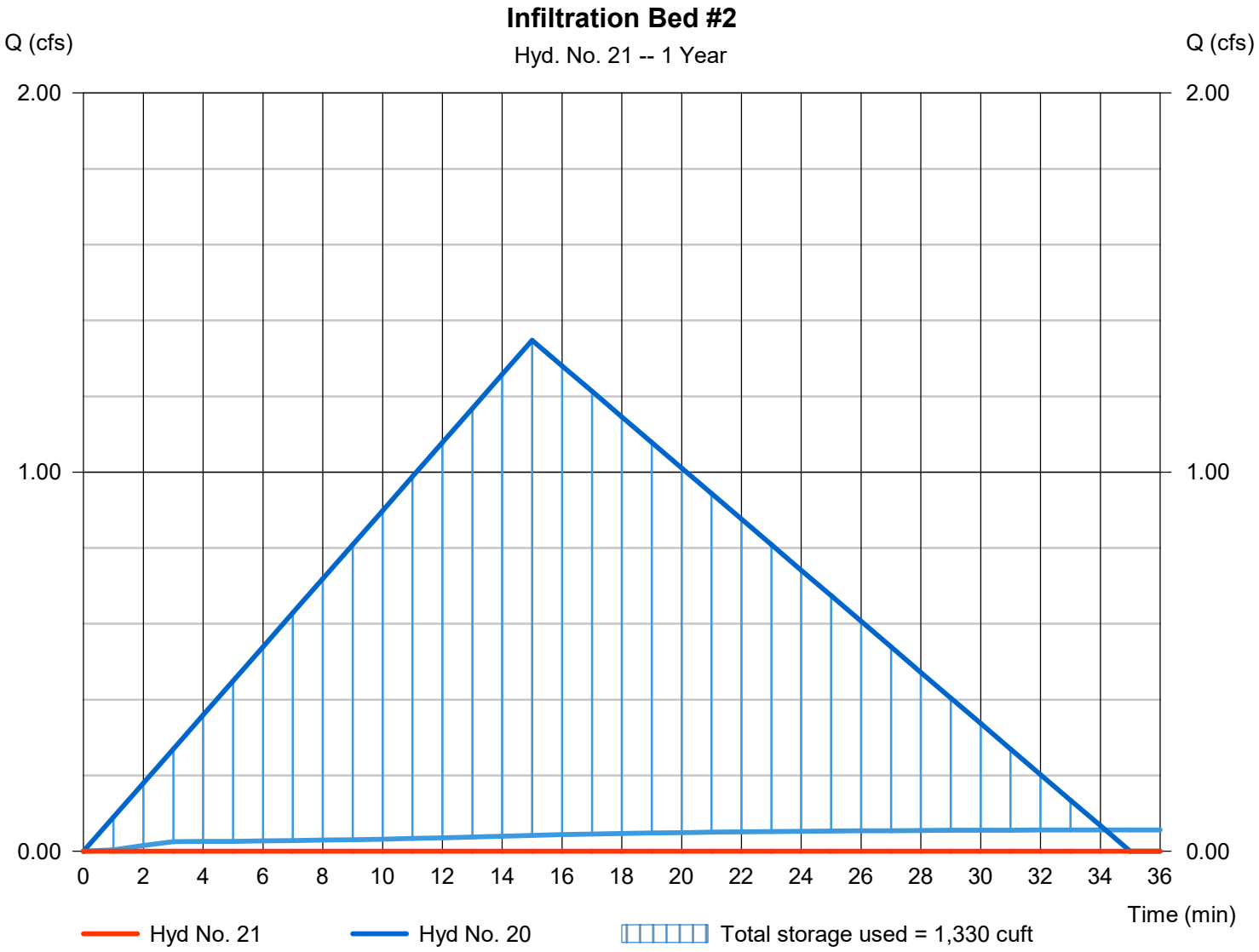
Hydrograph Report

Hyd. No. 21

Infiltration Bed #2

Hydrograph type	=	Reservoir	Peak discharge	=	0.000 cfs
Storm frequency	=	1 yrs	Time to peak	=	n/a
Time interval	=	1 min	Hyd. volume	=	0 cuft
Inflow hyd. No.	=	20 - Total to Infiltration Bed #2	Max. Elevation	=	375.55 ft
Reservoir name	=	Infiltration Bed #2	Max. Storage	=	1,330 cuft

Storage Indication method used. Exfiltration extracted from Outflow.



Pond Report

Pond No. 2 - Infiltration Bed #2

Pond Data

UG Chambers -Invert elev. = 374.50 ft, Rise x Span = 2.00 x 2.00 ft, Barrel Len = 30.00 ft, No. Barrels = 7, Slope = 0.00%, Headers = Yes
Encasement -Invert elev. = 373.00 ft, Width = 3.94 ft, Height = 4.00 ft, Voids = 40.00%

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	373.00	n/a	0	0
0.40	373.40	n/a	167	167
0.80	373.80	n/a	167	334
1.20	374.20	n/a	167	502
1.60	374.60	n/a	177	678
2.00	375.00	n/a	256	934
2.40	375.40	n/a	288	1,221
2.80	375.80	n/a	293	1,514
3.20	376.20	n/a	276	1,790
3.60	376.60	n/a	214	2,005
4.00	377.00	n/a	167	2,172

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 6.00	0.00	0.00	0.00
Span (in)	= 6.00	0.00	0.00	0.00
No. Barrels	= 1	1	0	0
Invert El. (ft)	= 376.00	0.00	0.00	0.00
Length (ft)	= 65.00	0.00	0.00	0.00
Slope (%)	= 6.00	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)	= 0.00	0.00	0.00	0.00
Crest El. (ft)	= 0.00	0.00	0.00	0.00
Weir Coeff.	= 3.33	3.33	3.33	3.33
Weir Type	= ---	---	---	---
Multi-Stage	= No	No	No	No

Exfil.(in/hr) = 1.130 (by Wet area)
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).

Stage / Storage / Discharge Table

Stage ft	Storage cuft	Elevation ft	Clv A cfs	Clv B cfs	Clv C cfs	PrfRsr cfs	Wr A cfs	Wr B cfs	Wr C cfs	Wr D cfs	Exfil cfs	User cfs	Total cfs
0.00	0	373.00	0.00	---	---	---	---	---	---	---	0.000	---	0.000
0.40	167	373.40	0.00	---	---	---	---	---	---	---	0.029	---	0.029
0.80	334	373.80	0.00	---	---	---	---	---	---	---	0.034	---	0.034
1.20	502	374.20	0.00	---	---	---	---	---	---	---	0.039	---	0.039
1.60	678	374.60	0.00	---	---	---	---	---	---	---	0.044	---	0.044
2.00	934	375.00	0.00	---	---	---	---	---	---	---	0.049	---	0.049
2.40	1,221	375.40	0.00	---	---	---	---	---	---	---	0.054	---	0.054
2.80	1,514	375.80	0.00	---	---	---	---	---	---	---	0.059	---	0.059
3.20	1,790	376.20	0.11 ic	---	---	---	---	---	---	---	0.064	---	0.176
3.60	2,005	376.60	0.56 ic	---	---	---	---	---	---	---	0.069	---	0.628
4.00	2,172	377.00	0.82 ic	---	---	---	---	---	---	---	0.074	---	0.893

Hydrograph Report

Hyd. No. 23

Bypass (Imp.)

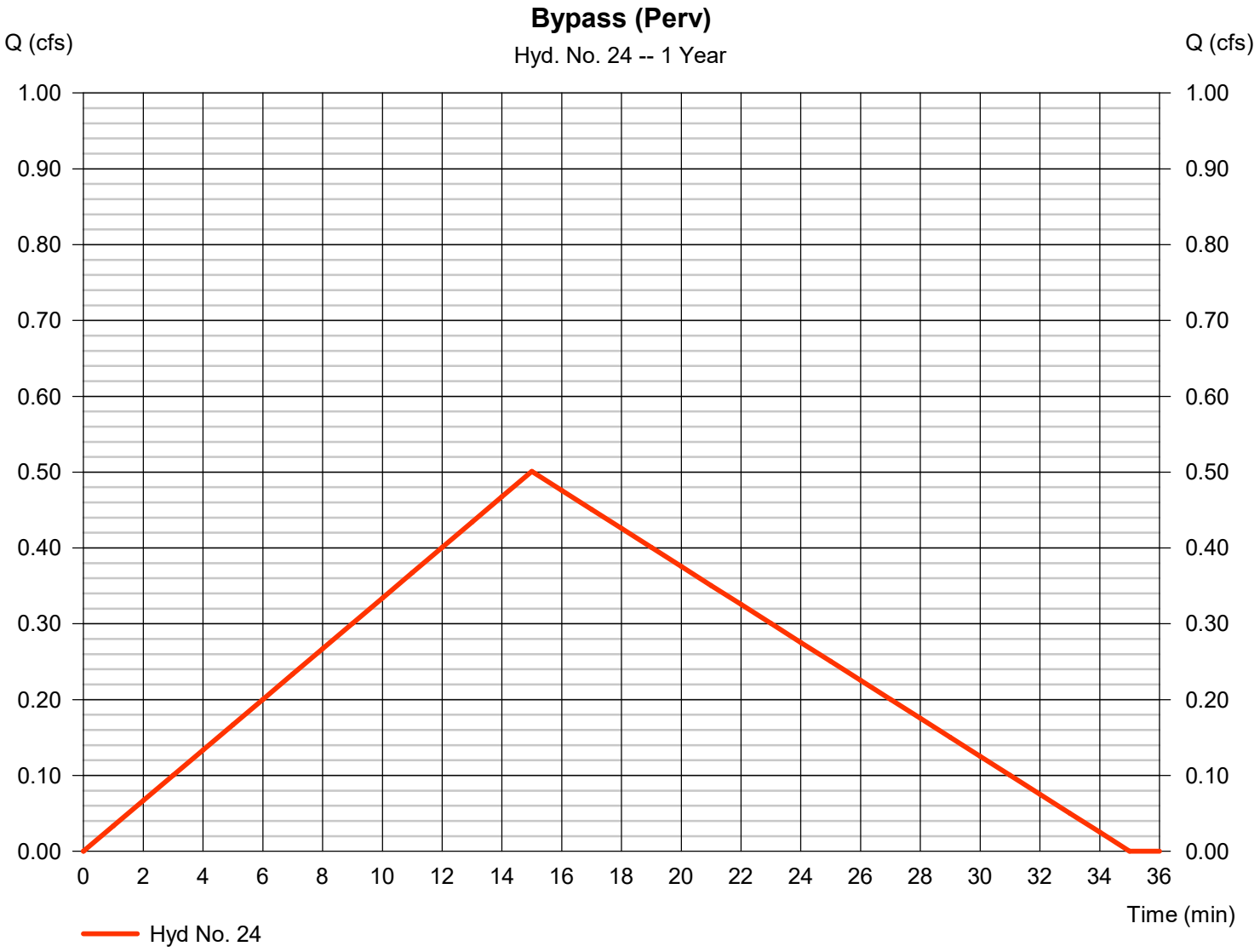
Hydrograph type	=	Rational	Peak discharge	=	0.186 cfs
Storm frequency	=	1 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	195 cuft
Drainage area	=	0.045 ac	Runoff coeff.	=	0.99
Intensity	=	4.179 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

Hydrograph Report

Hyd. No. 24

Bypass (Perv)

Hydrograph type	=	Rational	Peak discharge	=	0.501 cfs
Storm frequency	=	1 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	526 cuft
Drainage area	=	0.235 ac	Runoff coeff.	=	0.51
Intensity	=	4.179 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

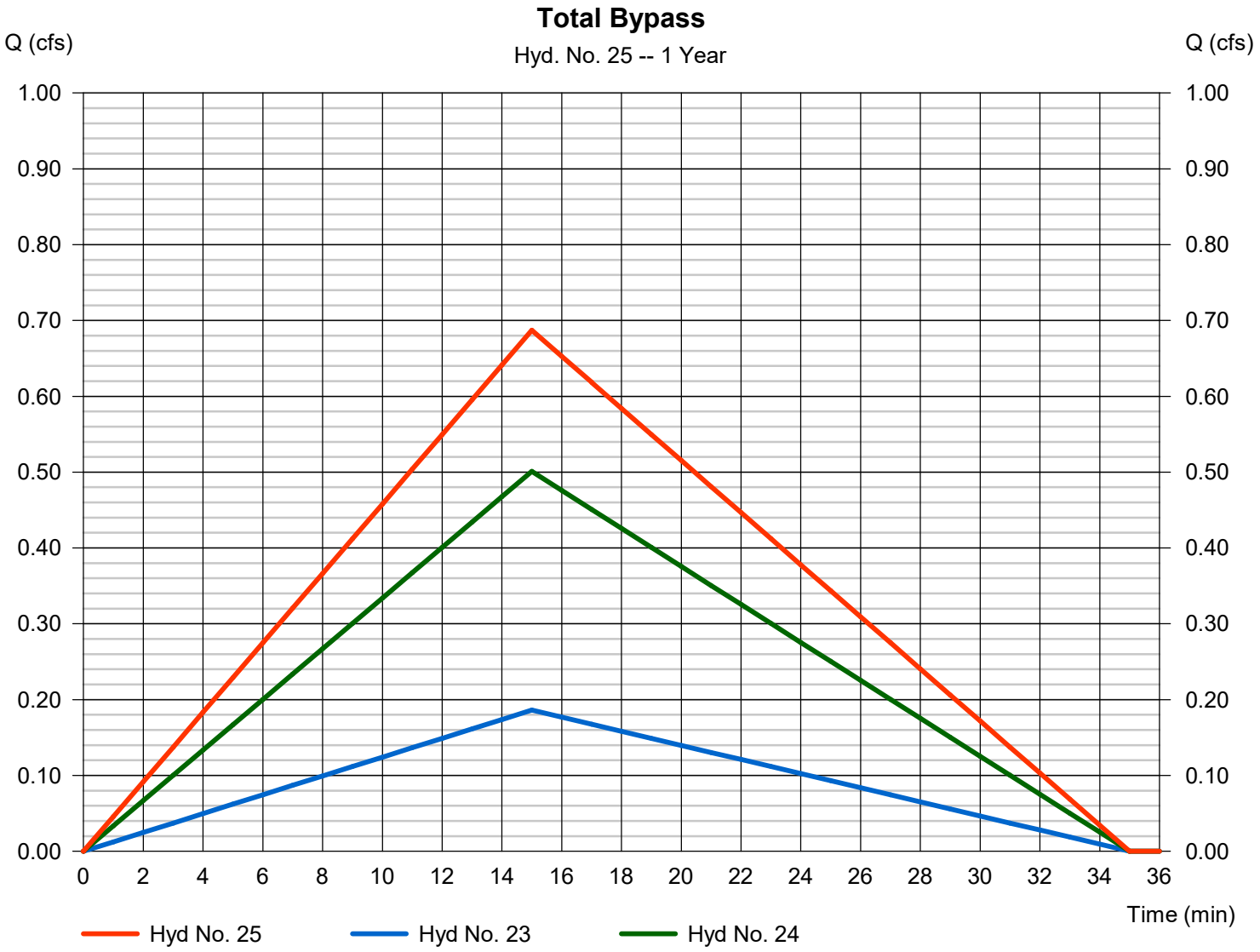


Hydrograph Report

Hyd. No. 25

Total Bypass

Hydrograph type	= Combine	Peak discharge	= 0.687 cfs
Storm frequency	= 1 yrs	Time to peak	= 15 min
Time interval	= 1 min	Hyd. volume	= 721 cuft
Inflow hyds.	= 23, 24	Contrib. drain. area	= 0.280 ac

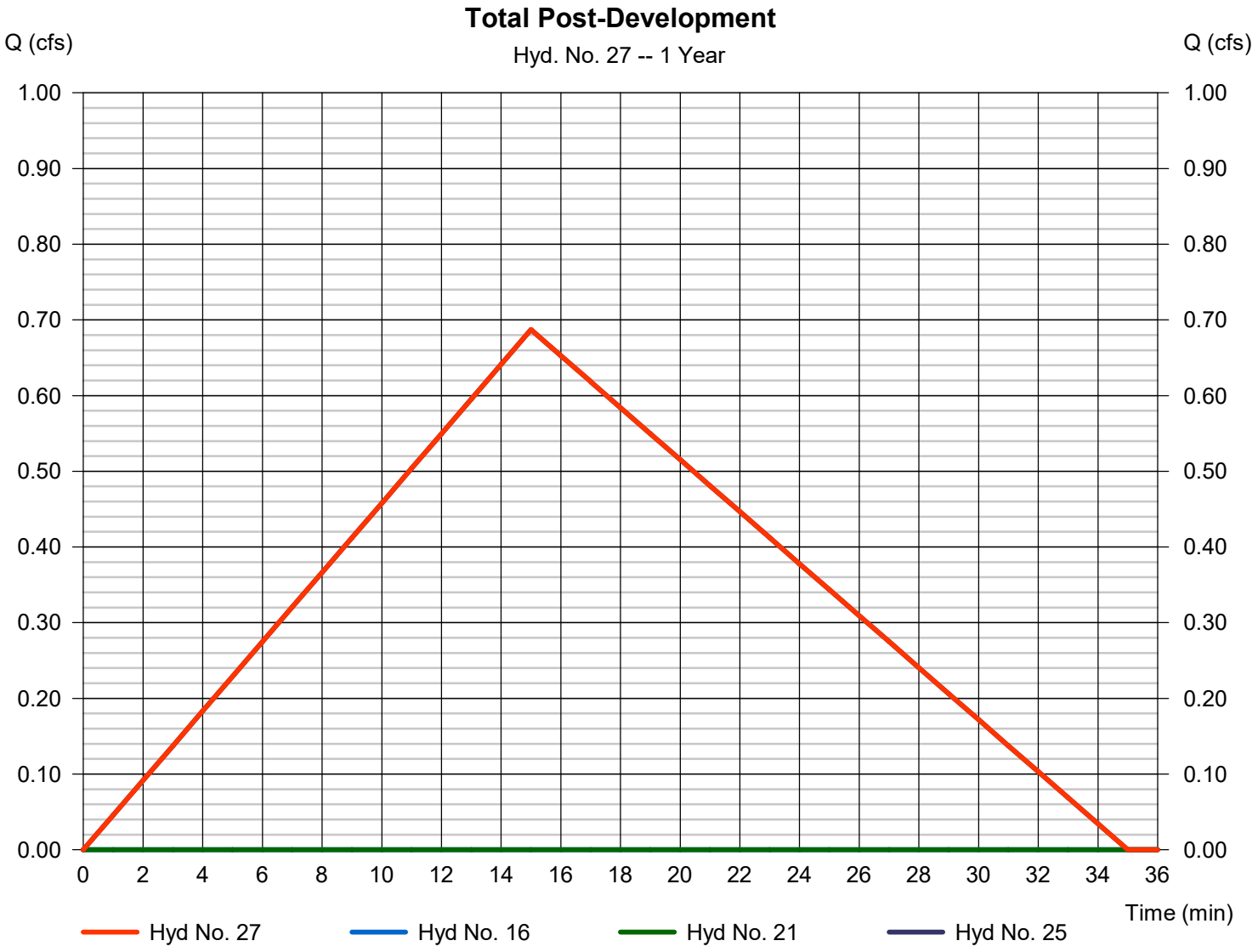


Hydrograph Report

Hyd. No. 27

Total Post-Development

Hydrograph type	= Combine	Peak discharge	= 0.687 cfs
Storm frequency	= 1 yrs	Time to peak	= 15 min
Time interval	= 1 min	Hyd. volume	= 721 cuft
Inflow hyds.	= 16, 21, 25	Contrib. drain. area	= 0.000 ac



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

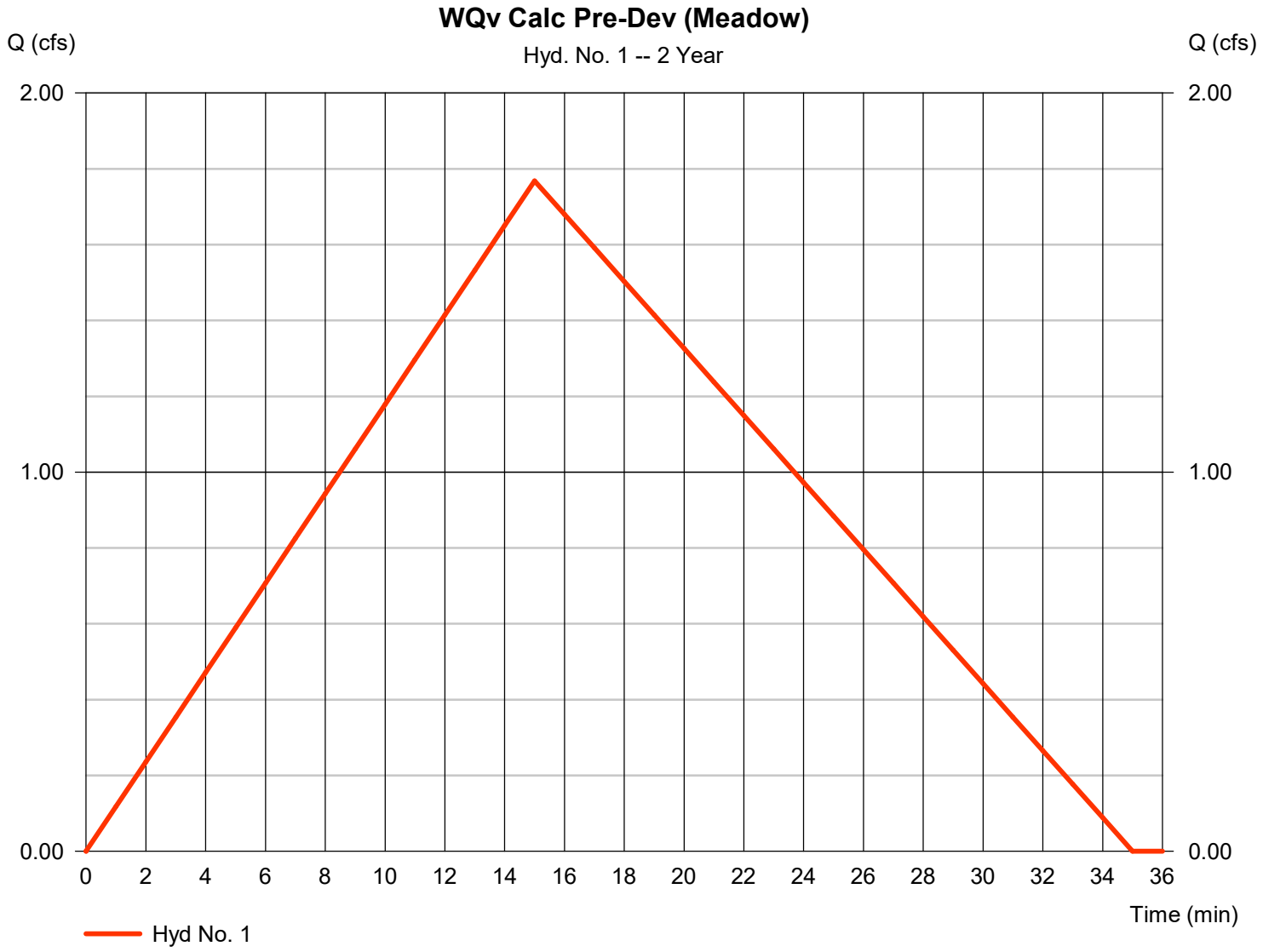
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	1.768	1	15	1,856	------	------	------	WQv Calc Pre-Dev (Meadow)
2	Combine	1.768	1	15	1,856	1	------	------	WQv Calc Total Pre-Dev
4	Rational	1.083	1	15	1,137	------	------	------	WQv Calc Uncontrolled Post-Dev (Im
5	Rational	1.491	1	15	1,566	------	------	------	WQv Calc Uncontrolled Post-Dev (Pe
6	Combine	2.574	1	15	2,703	4, 5	------	------	WQv Calc Total Post-Dev
8	Rational	0.318	1	15	334	------	------	------	Pre-Development (Meadow)
9	Rational	0.335	1	15	351	------	------	------	Compensatory (Imp.)
10	Rational	0.355	1	15	373	------	------	------	Compensatory (Perv.)
11	Combine	1.008	1	15	1,058	8, 9, 10	------	------	Pre-Development Total
13	Rational	0.468	1	15	491	------	------	------	Imp. to Infiltration Basin #1
14	Rational	0.358	1	15	375	------	------	------	Lawn to Infiltration Basin #1
15	Combine	0.825	1	15	867	13, 14	------	------	Total to Infiltration Basin #1
16	Reservoir	0.000	1	n/a	0	15	372.18	755	Infiltration Bed #1
18	Rational	0.384	1	15	403	------	------	------	Imp. to Infiltration Basin #2
19	Rational	0.530	1	15	557	------	------	------	Lawn to Infiltration Basin #2
20	Combine	1.604	1	15	1,684	9, 10, 18, 19	------	------	Total to Infiltration Bed #2
21	Reservoir	0.000	1	n/a	0	20	375.91	1,593	Infiltration Bed #2
23	Rational	0.222	1	15	233	------	------	------	Bypass (Imp.)
24	Rational	0.596	1	15	626	------	------	------	Bypass (Perv)
25	Combine	0.817	1	15	858	23, 24	------	------	Total Bypass
27	Combine	0.817	1	15	858	16, 21, 25,	------	------	Total Post-Development

Hydrograph Report

Hyd. No. 1

WQv Calc Pre-Dev (Meadow)

Hydrograph type	= Rational	Peak discharge	= 1.768 cfs
Storm frequency	= 2 yrs	Time to peak	= 15 min
Time interval	= 1 min	Hyd. volume	= 1,856 cuft
Drainage area	= 0.808 ac	Runoff coeff.	= 0.44
Intensity	= 4.973 in/hr	Tc by User	= 5.00 min
IDF Curve	= Radnor.IDF	Asc/Rec limb fact	= 3/4

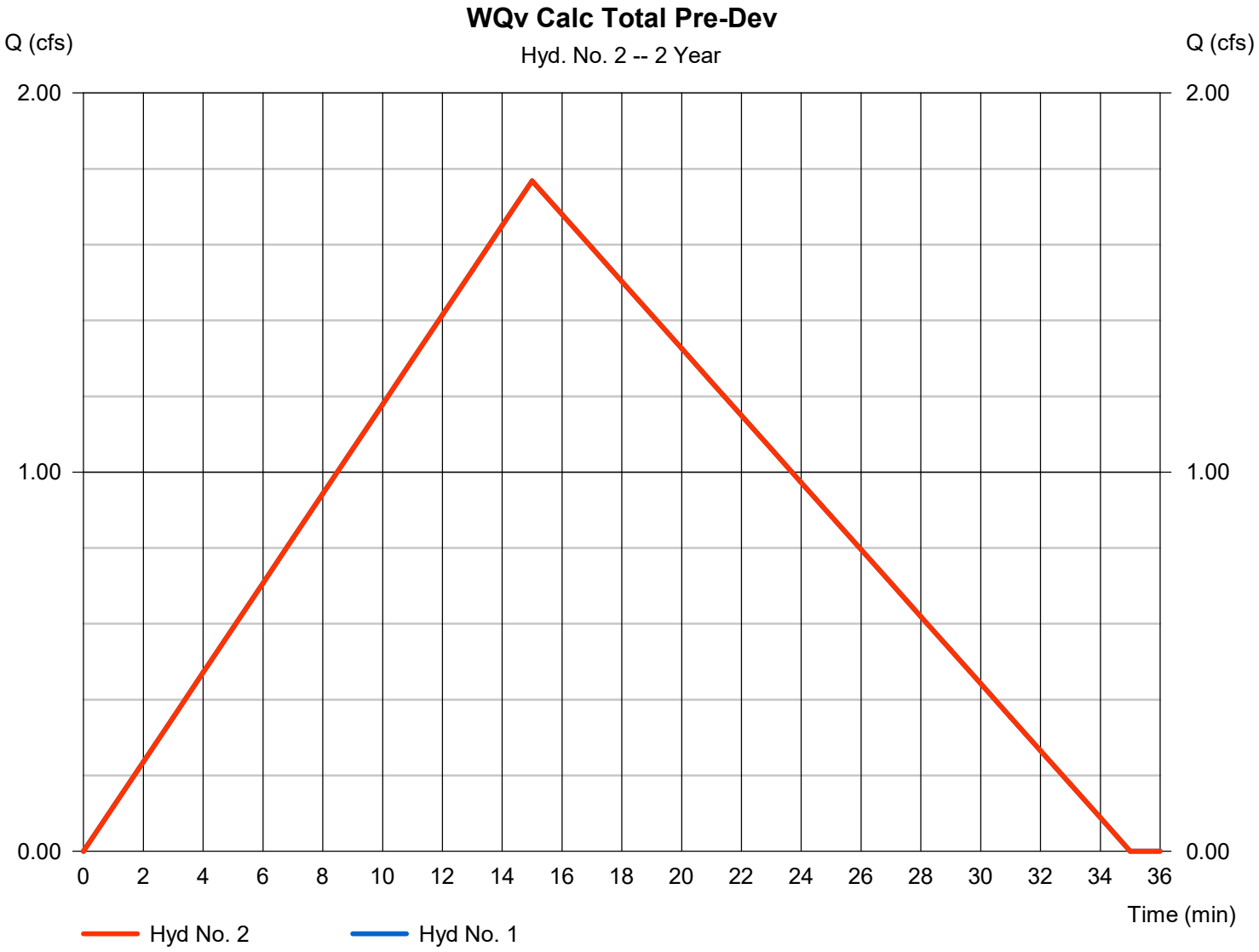


Hydrograph Report

Hyd. No. 2

WQv Calc Total Pre-Dev

Hydrograph type	= Combine	Peak discharge	= 1.768 cfs
Storm frequency	= 2 yrs	Time to peak	= 15 min
Time interval	= 1 min	Hyd. volume	= 1,856 cuft
Inflow hyds.	= 1	Contrib. drain. area	= 0.808 ac

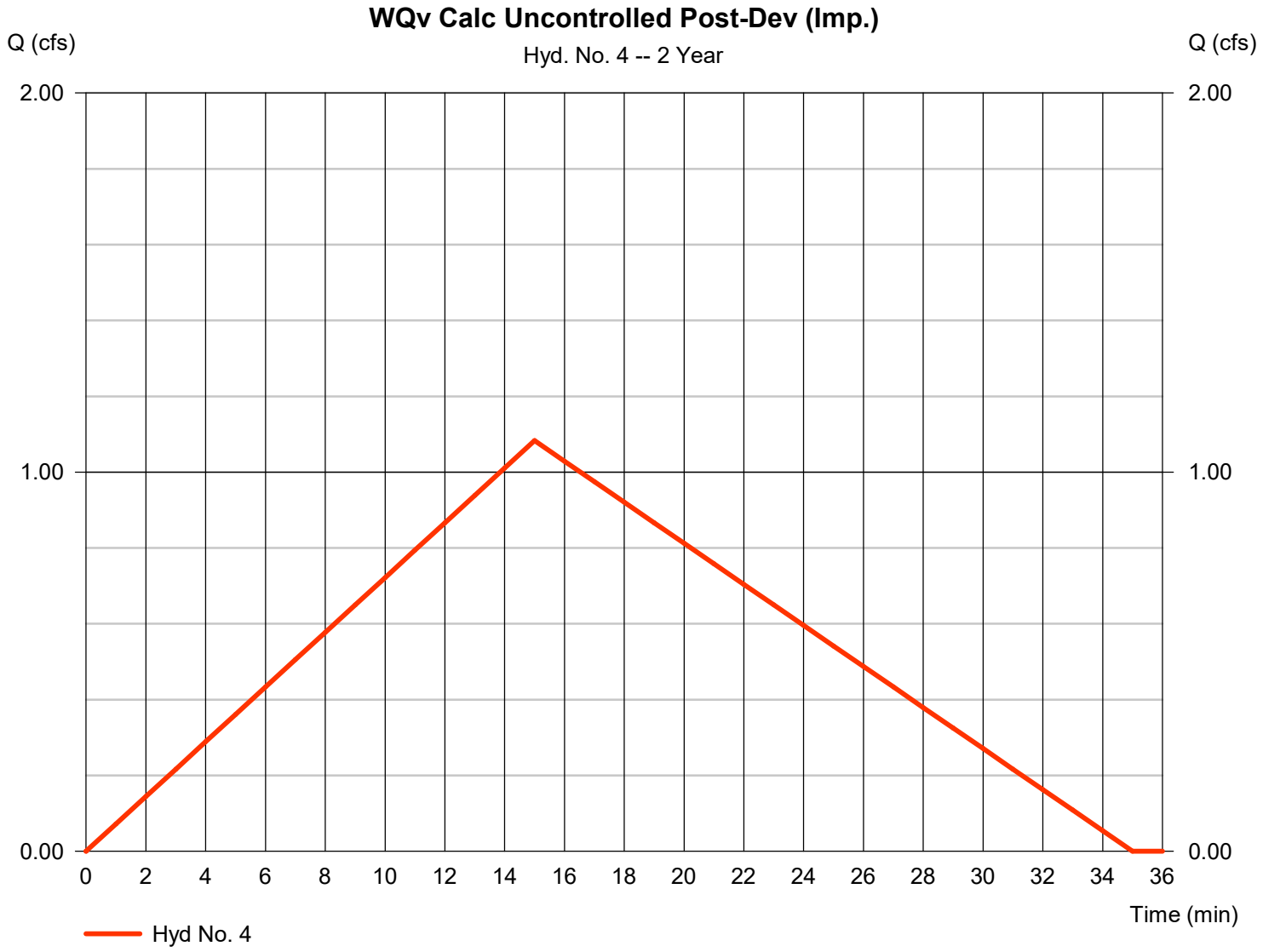


Hydrograph Report

Hyd. No. 4

WQv Calc Uncontrolled Post-Dev (Imp.)

Hydrograph type	=	Rational	Peak discharge	=	1.083 cfs
Storm frequency	=	2 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	1,137 cuft
Drainage area	=	0.220 ac	Runoff coeff.	=	0.99
Intensity	=	4.973 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

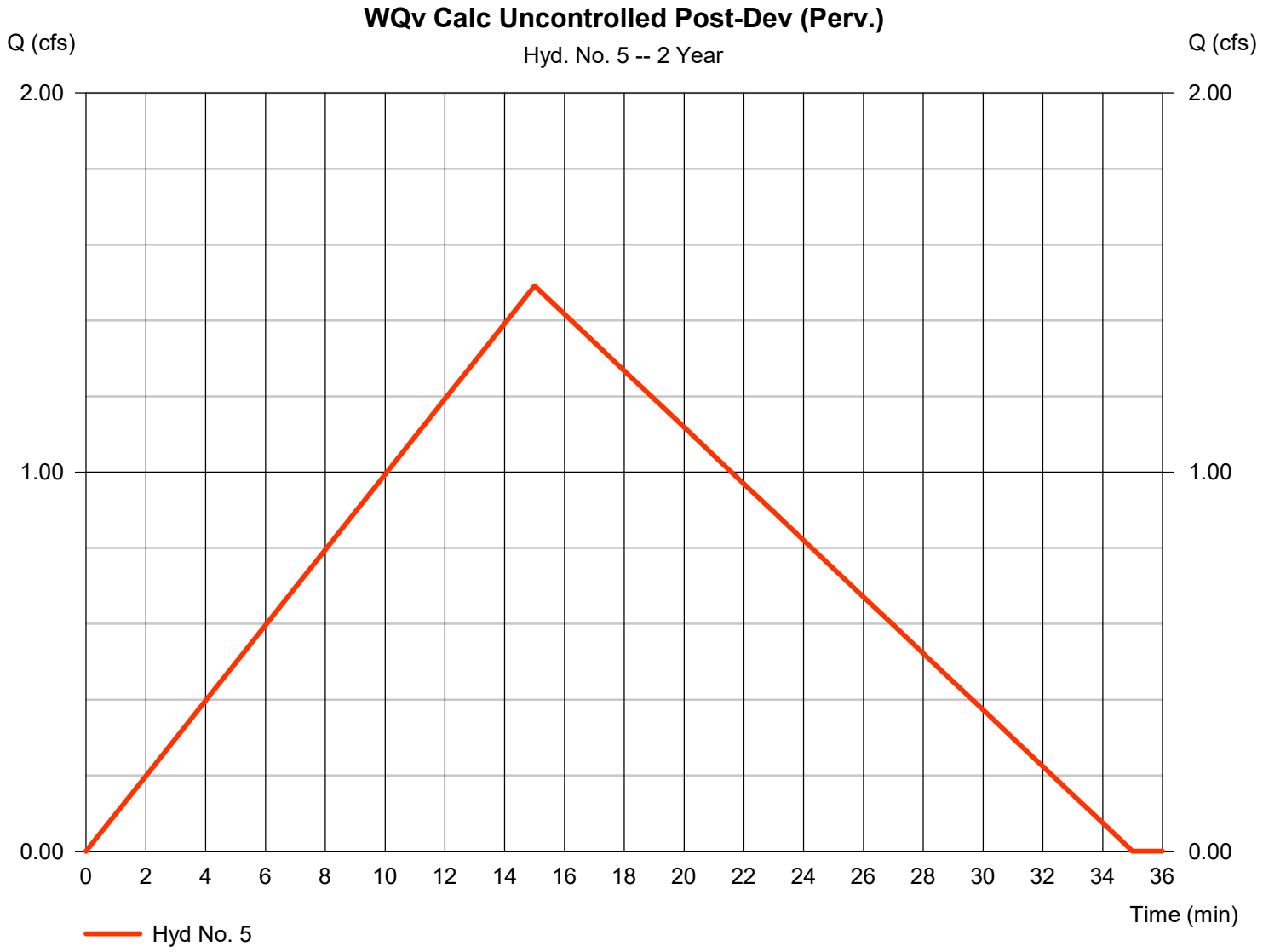


Hydrograph Report

Hyd. No. 5

WQv Calc Uncontrolled Post-Dev (Perv.)

Hydrograph type	=	Rational	Peak discharge	=	1.491 cfs
Storm frequency	=	2 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	1,566 cuft
Drainage area	=	0.588 ac	Runoff coeff.	=	0.51
Intensity	=	4.973 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

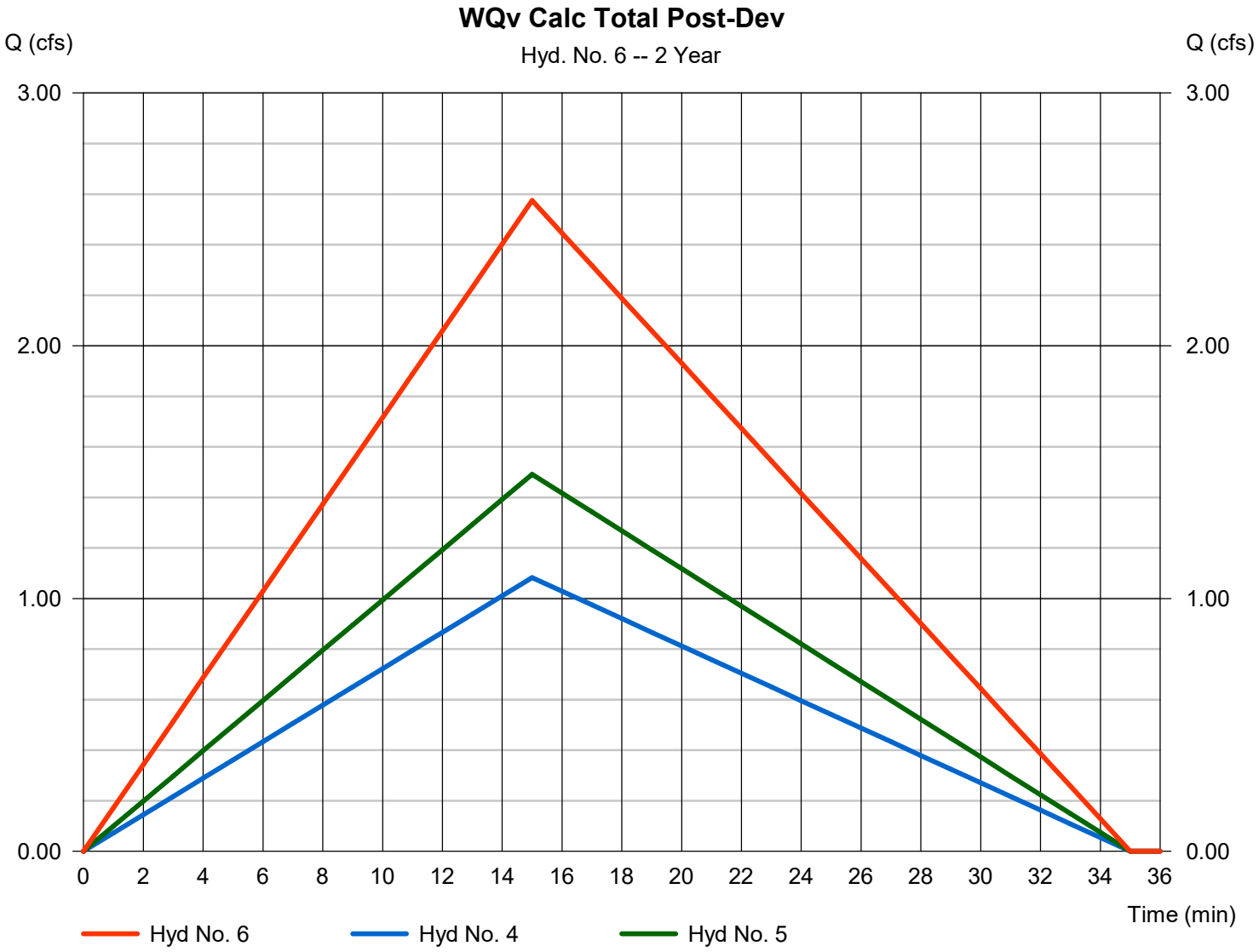


Hydrograph Report

Hyd. No. 6

WQv Calc Total Post-Dev

Hydrograph type	= Combine	Peak discharge	= 2.574 cfs
Storm frequency	= 2 yrs	Time to peak	= 15 min
Time interval	= 1 min	Hyd. volume	= 2,703 cuft
Inflow hyds.	= 4, 5	Contrib. drain. area	= 0.808 ac



Hydrograph Report

Hyd. No. 8

Pre-Development (Meadow)

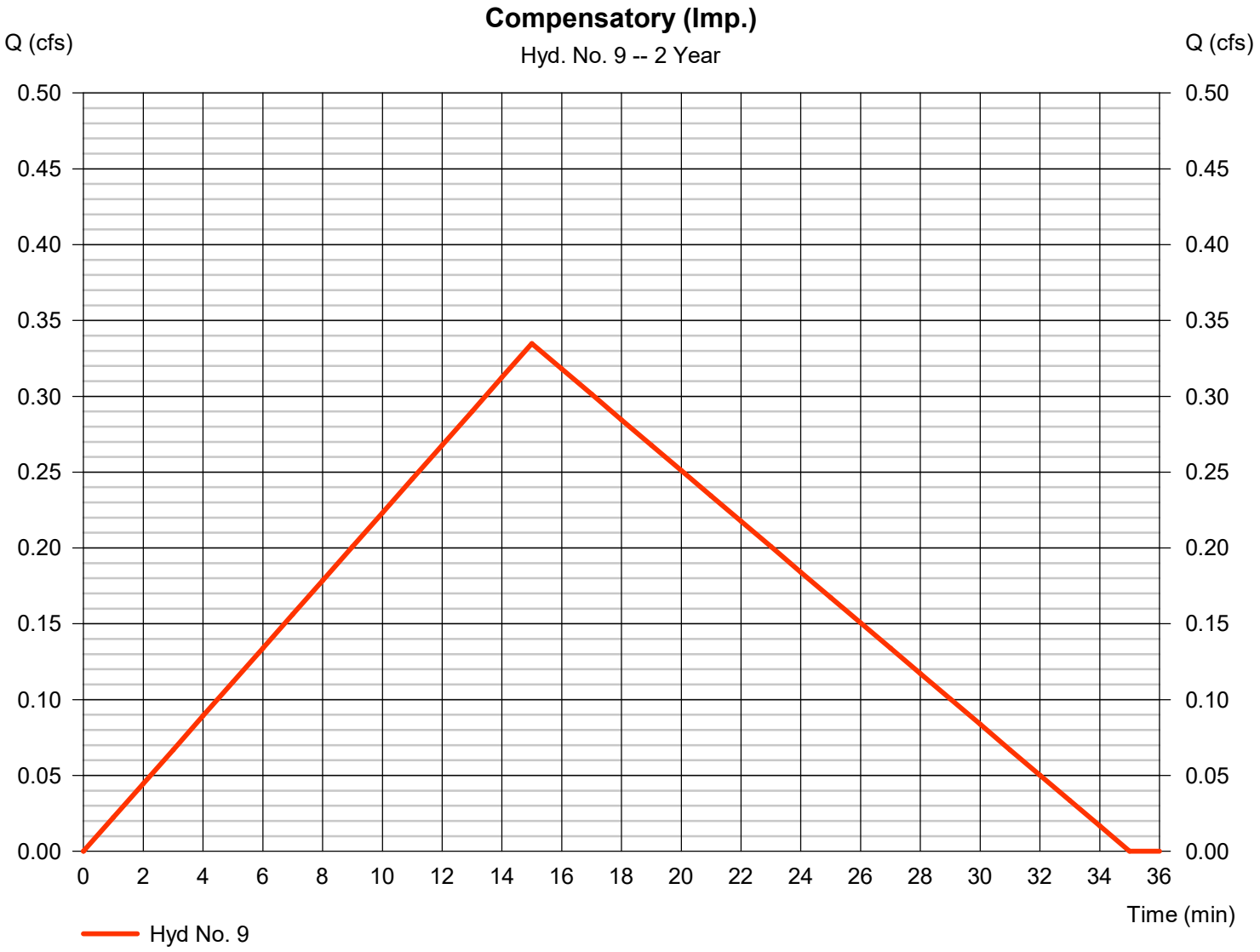
Hydrograph type	=	Rational	Peak discharge	=	0.318 cfs
Storm frequency	=	2 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	334 cuft
Drainage area	=	0.320 ac	Runoff coeff.	=	0.2
Intensity	=	4.973 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

Hydrograph Report

Hyd. No. 9

Compensatory (Imp.)

Hydrograph type	=	Rational	Peak discharge	=	0.335 cfs
Storm frequency	=	2 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	351 cuft
Drainage area	=	0.068 ac	Runoff coeff.	=	0.99
Intensity	=	4.973 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

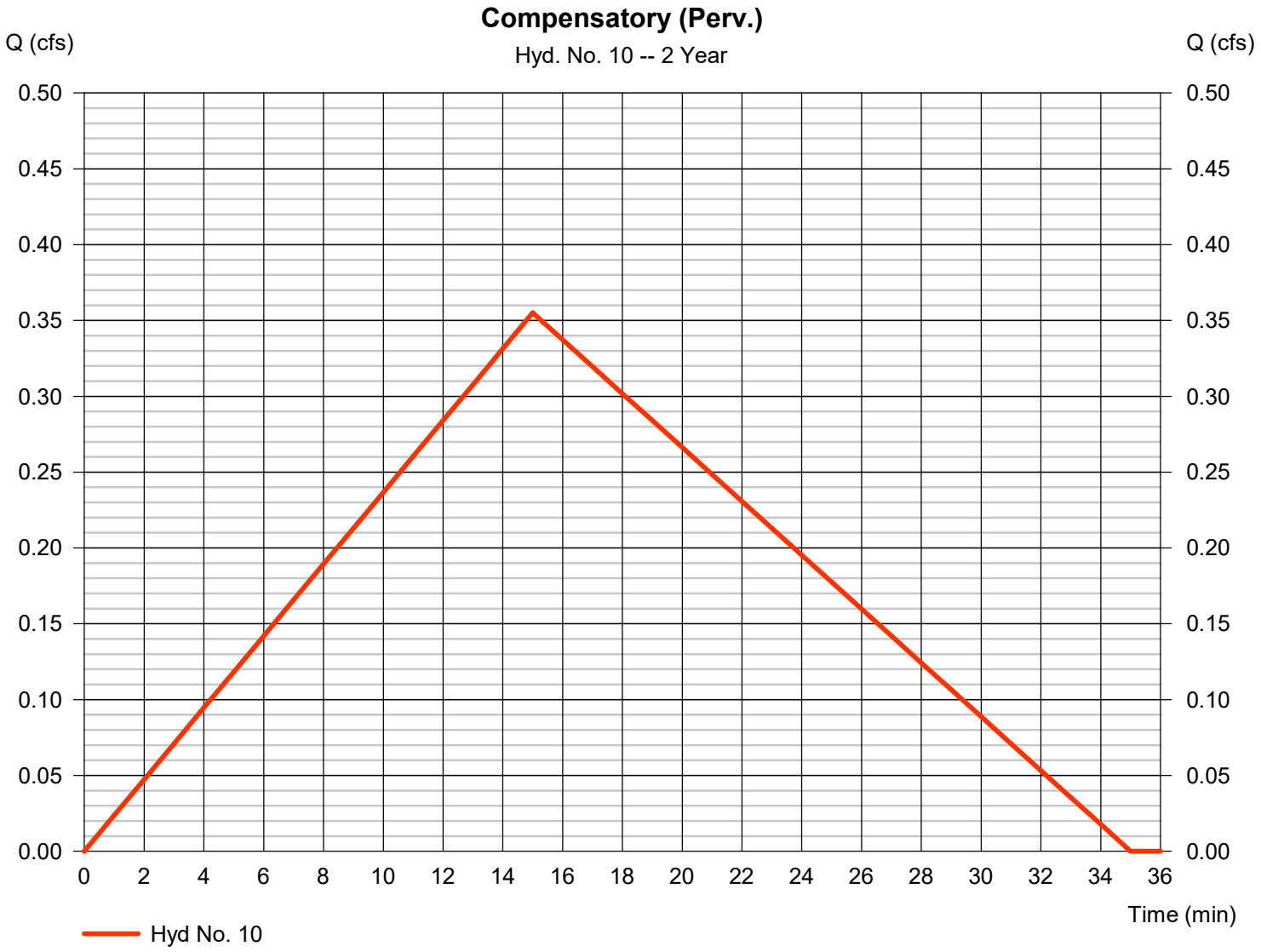


Hydrograph Report

Hyd. No. 10

Compensatory (Perv.)

Hydrograph type	=	Rational	Peak discharge	=	0.355 cfs
Storm frequency	=	2 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	373 cuft
Drainage area	=	0.140 ac	Runoff coeff.	=	0.51
Intensity	=	4.973 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

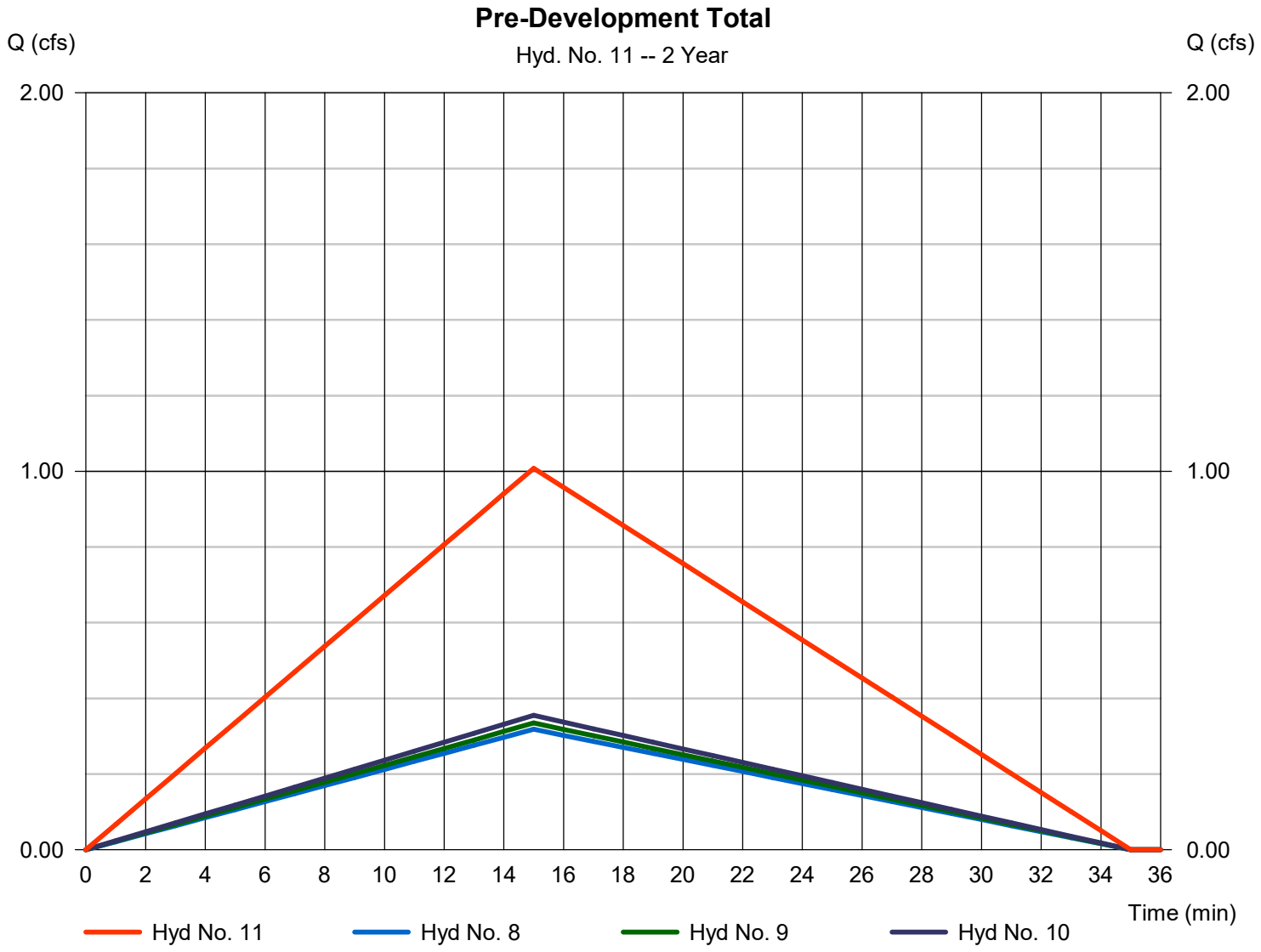


Hydrograph Report

Hyd. No. 11

Pre-Development Total

Hydrograph type	= Combine	Peak discharge	= 1.008 cfs
Storm frequency	= 2 yrs	Time to peak	= 15 min
Time interval	= 1 min	Hyd. volume	= 1,058 cuft
Inflow hyds.	= 8, 9, 10	Contrib. drain. area	= 0.528 ac

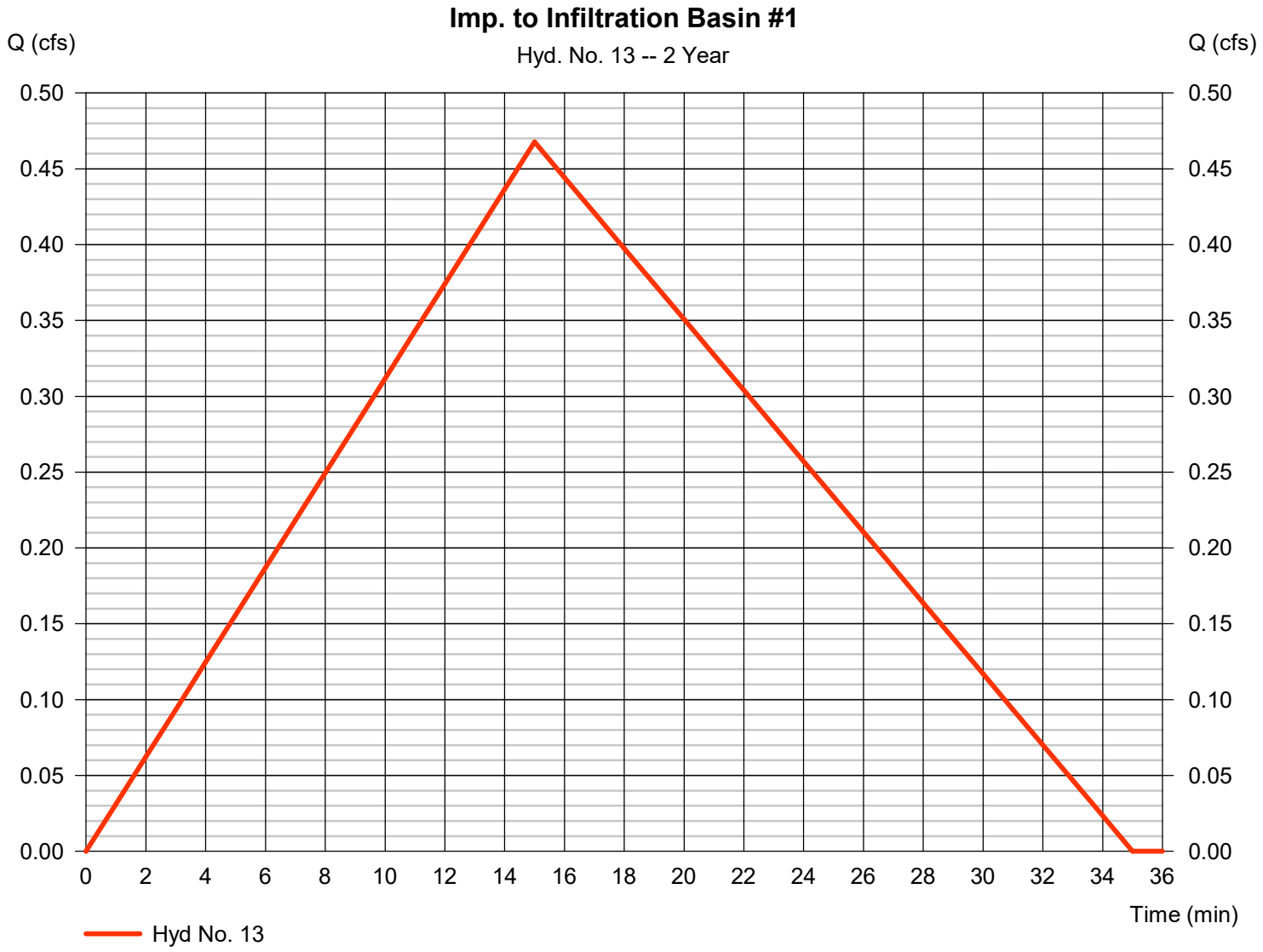


Hydrograph Report

Hyd. No. 13

Imp. to Infiltration Basin #1

Hydrograph type	=	Rational	Peak discharge	=	0.468 cfs
Storm frequency	=	2 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	491 cuft
Drainage area	=	0.095 ac	Runoff coeff.	=	0.99
Intensity	=	4.973 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4



Hydrograph Report

Hyd. No. 14

Lawn to Infiltration Basin #1

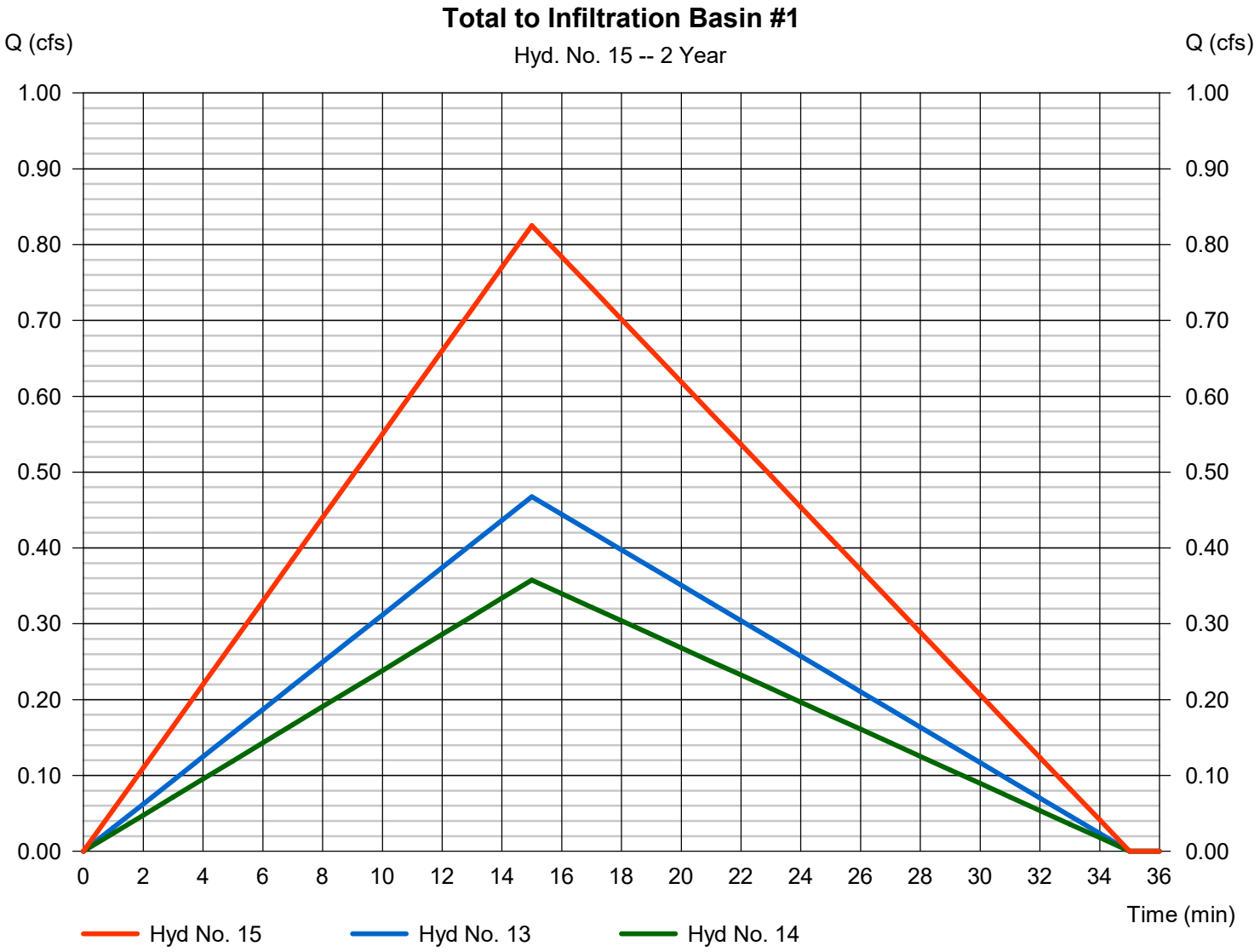
Hydrograph type	=	Rational	Peak discharge	=	0.358 cfs
Storm frequency	=	2 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	375 cuft
Drainage area	=	0.141 ac	Runoff coeff.	=	0.51
Intensity	=	4.973 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

Hydrograph Report

Hyd. No. 15

Total to Infiltration Basin #1

Hydrograph type	=	Combine	Peak discharge	=	0.825 cfs
Storm frequency	=	2 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	867 cuft
Inflow hyds.	=	13, 14	Contrib. drain. area	=	0.236 ac



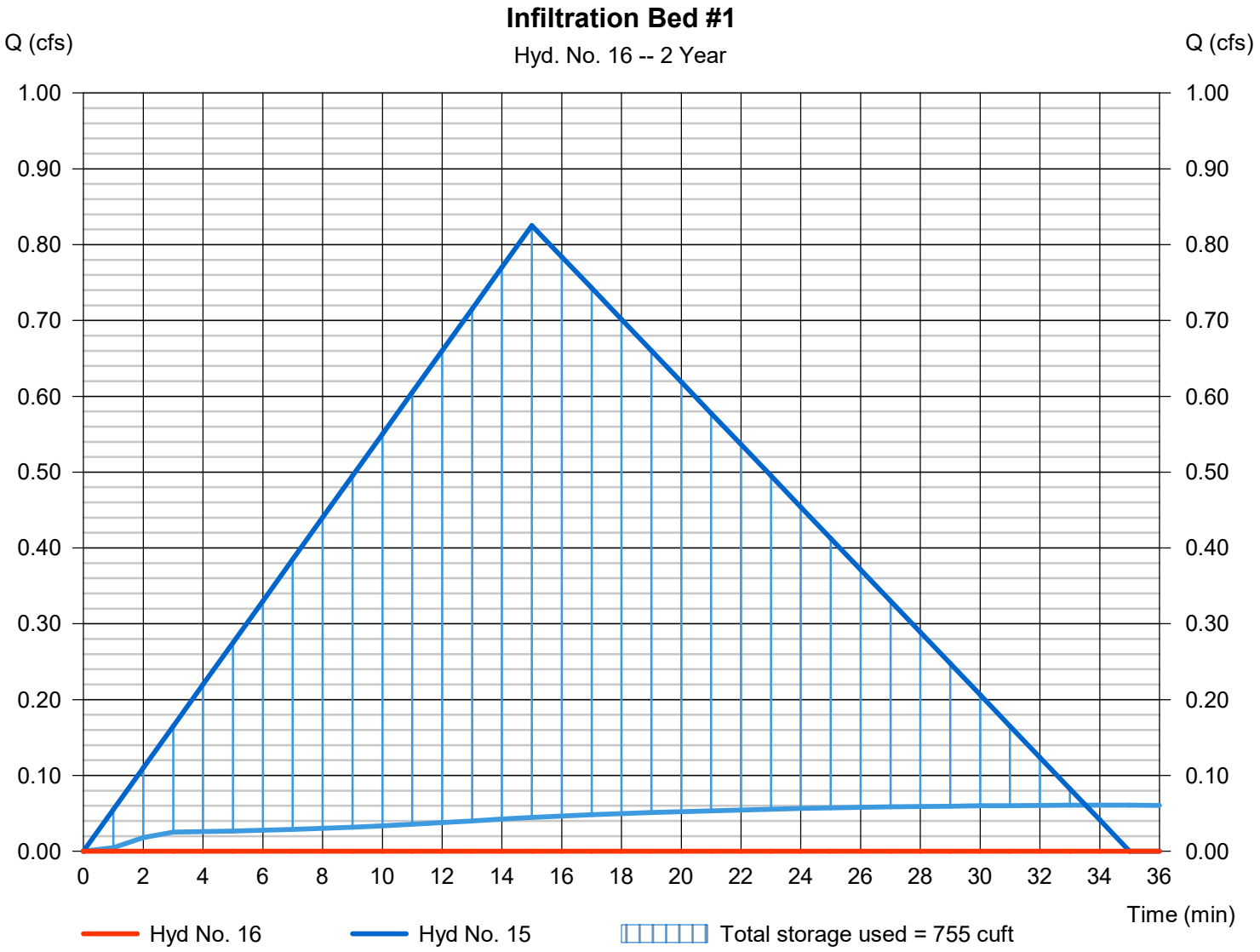
Hydrograph Report

Hyd. No. 16

Infiltration Bed #1

Hydrograph type	=	Reservoir	Peak discharge	=	0.000 cfs
Storm frequency	=	2 yrs	Time to peak	=	n/a
Time interval	=	1 min	Hyd. volume	=	0 cuft
Inflow hyd. No.	=	15 - Total to Infiltration Basin #1	Max. Elevation	=	372.18 ft
Reservoir name	=	Infiltration Bed #1	Max. Storage	=	755 cuft

Storage Indication method used. Exfiltration extracted from Outflow.

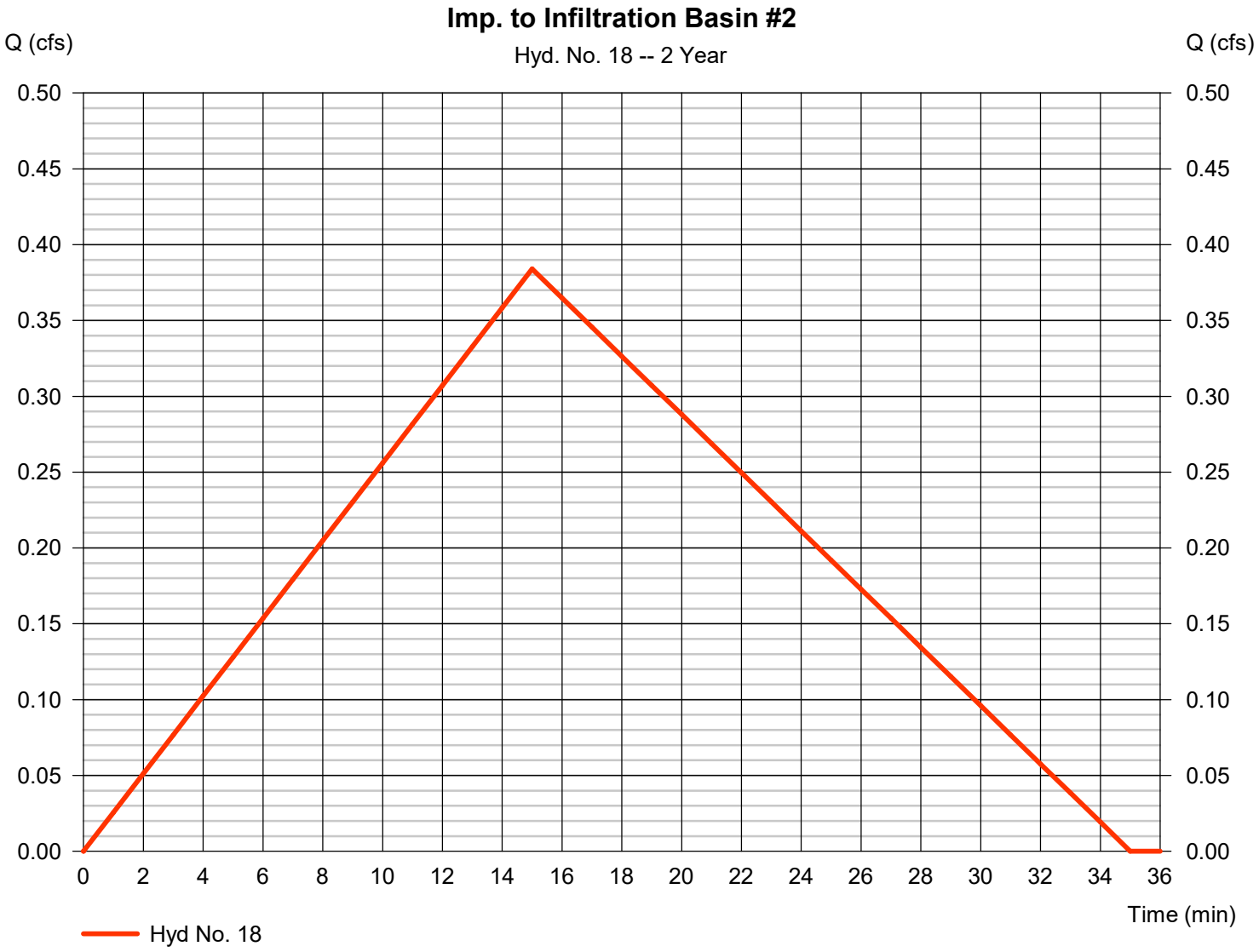


Hydrograph Report

Hyd. No. 18

Imp. to Infiltration Basin #2

Hydrograph type	=	Rational	Peak discharge	=	0.384 cfs
Storm frequency	=	2 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	403 cuft
Drainage area	=	0.078 ac	Runoff coeff.	=	0.99
Intensity	=	4.973 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4



Hydrograph Report

Hyd. No. 19

Lawn to Infiltration Basin #2

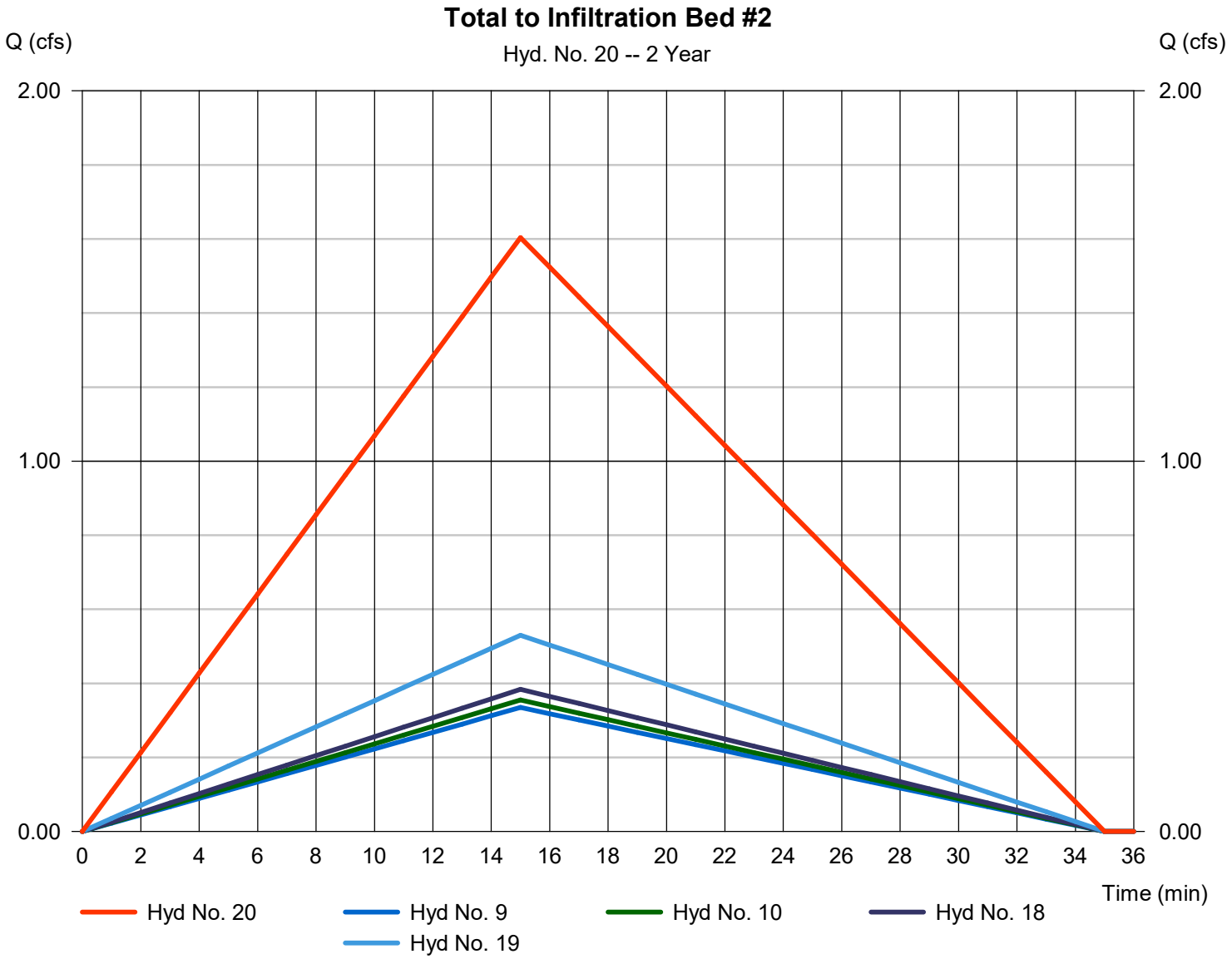
Hydrograph type	=	Rational	Peak discharge	=	0.530 cfs
Storm frequency	=	2 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	557 cuft
Drainage area	=	0.209 ac	Runoff coeff.	=	0.51
Intensity	=	4.973 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

Hydrograph Report

Hyd. No. 20

Total to Infiltration Bed #2

Hydrograph type	=	Combine	Peak discharge	=	1.604 cfs
Storm frequency	=	2 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	1,684 cuft
Inflow hyds.	=	9, 10, 18, 19	Contrib. drain. area	=	0.495 ac



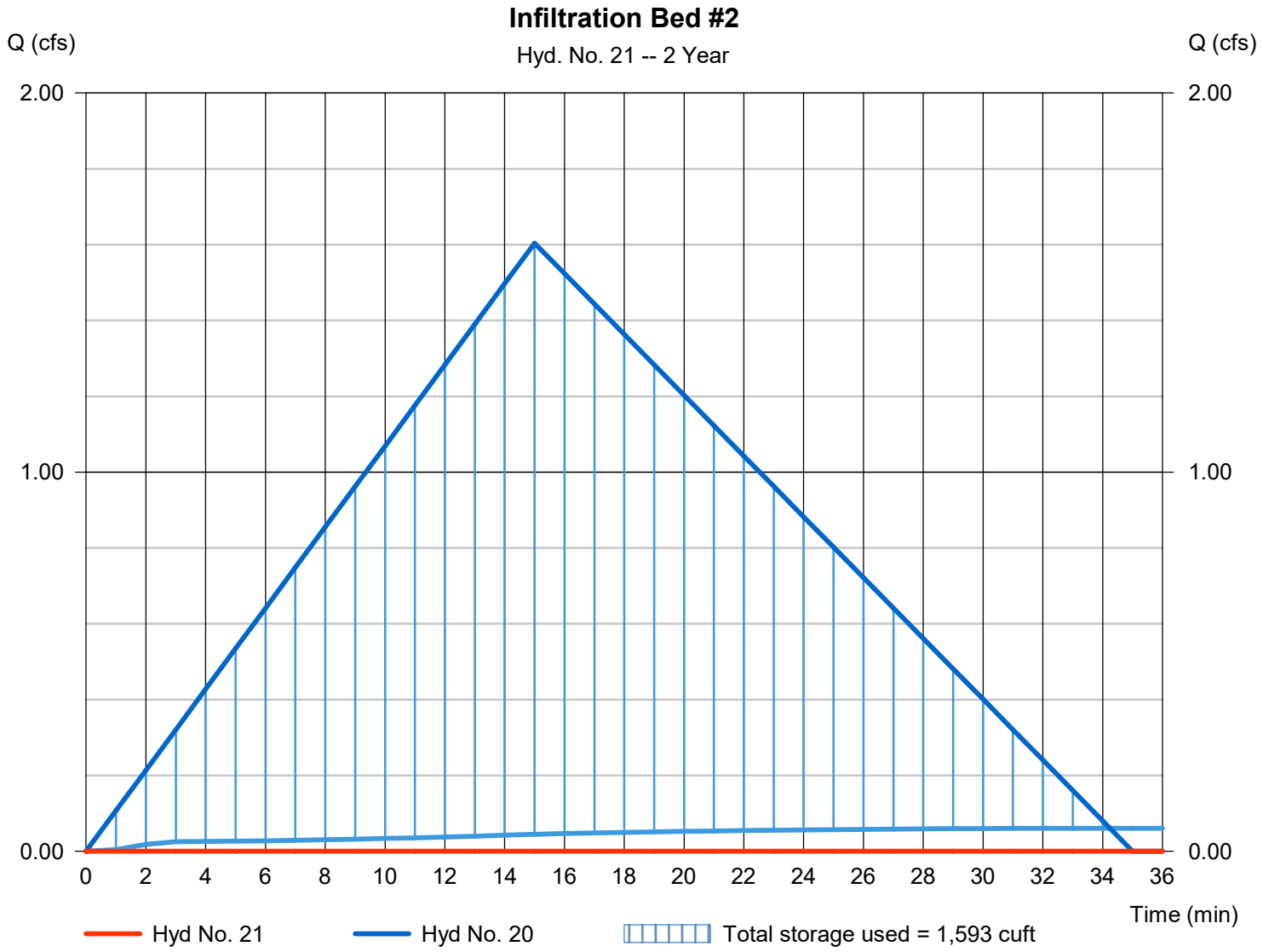
Hydrograph Report

Hyd. No. 21

Infiltration Bed #2

Hydrograph type	=	Reservoir	Peak discharge	=	0.000 cfs
Storm frequency	=	2 yrs	Time to peak	=	n/a
Time interval	=	1 min	Hyd. volume	=	0 cuft
Inflow hyd. No.	=	20 - Total to Infiltration Bed #2	Max. Elevation	=	375.91 ft
Reservoir name	=	Infiltration Bed #2	Max. Storage	=	1,593 cuft

Storage Indication method used. Exfiltration extracted from Outflow.



Hydrograph Report

Hyd. No. 23

Bypass (Imp.)

Hydrograph type	=	Rational	Peak discharge	=	0.222 cfs
Storm frequency	=	2 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	233 cuft
Drainage area	=	0.045 ac	Runoff coeff.	=	0.99
Intensity	=	4.973 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

Hydrograph Report

Hyd. No. 24

Bypass (Perv)

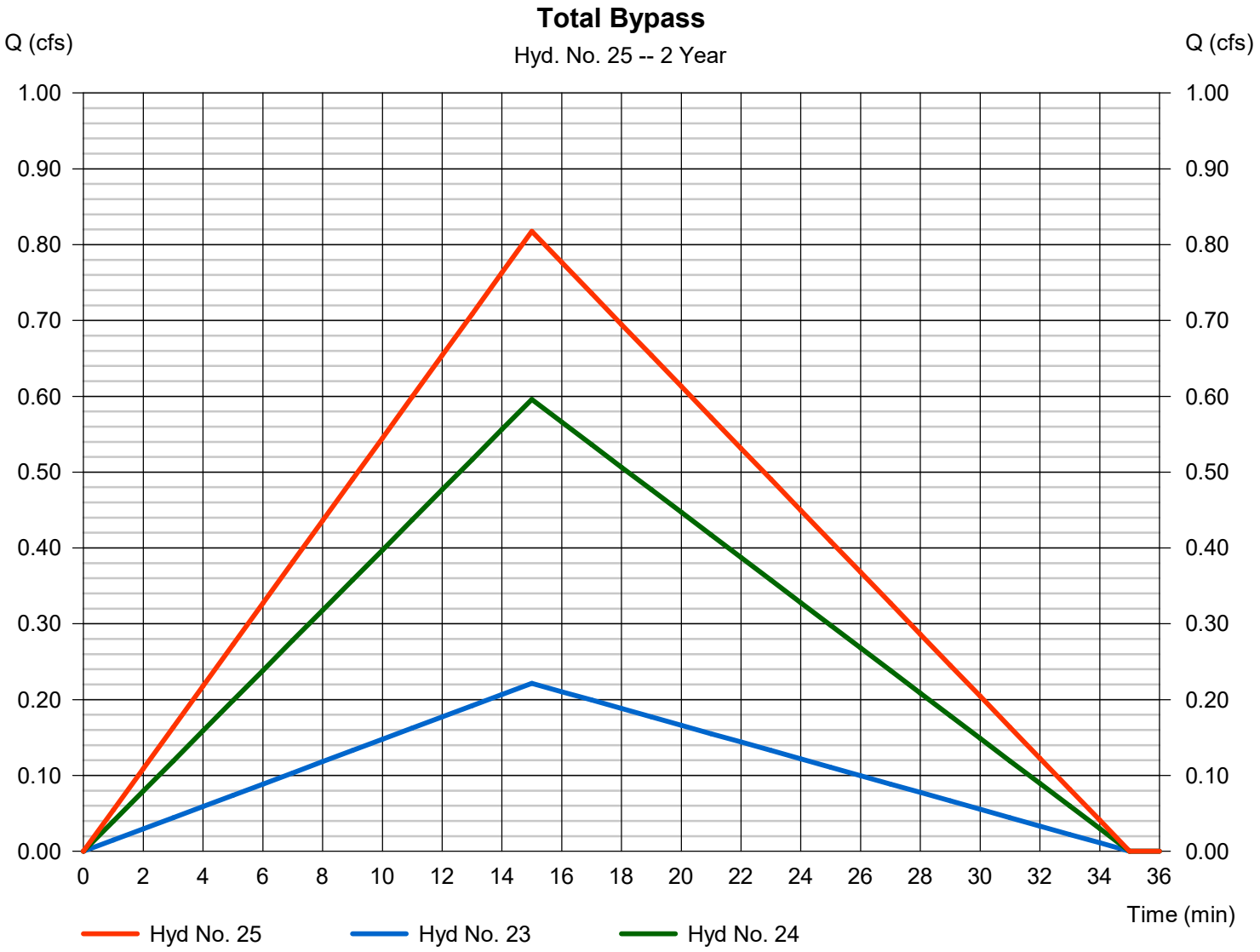
Hydrograph type	=	Rational	Peak discharge	=	0.596 cfs
Storm frequency	=	2 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	626 cuft
Drainage area	=	0.235 ac	Runoff coeff.	=	0.51
Intensity	=	4.973 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

Hydrograph Report

Hyd. No. 25

Total Bypass

Hydrograph type	= Combine	Peak discharge	= 0.817 cfs
Storm frequency	= 2 yrs	Time to peak	= 15 min
Time interval	= 1 min	Hyd. volume	= 858 cuft
Inflow hyds.	= 23, 24	Contrib. drain. area	= 0.280 ac

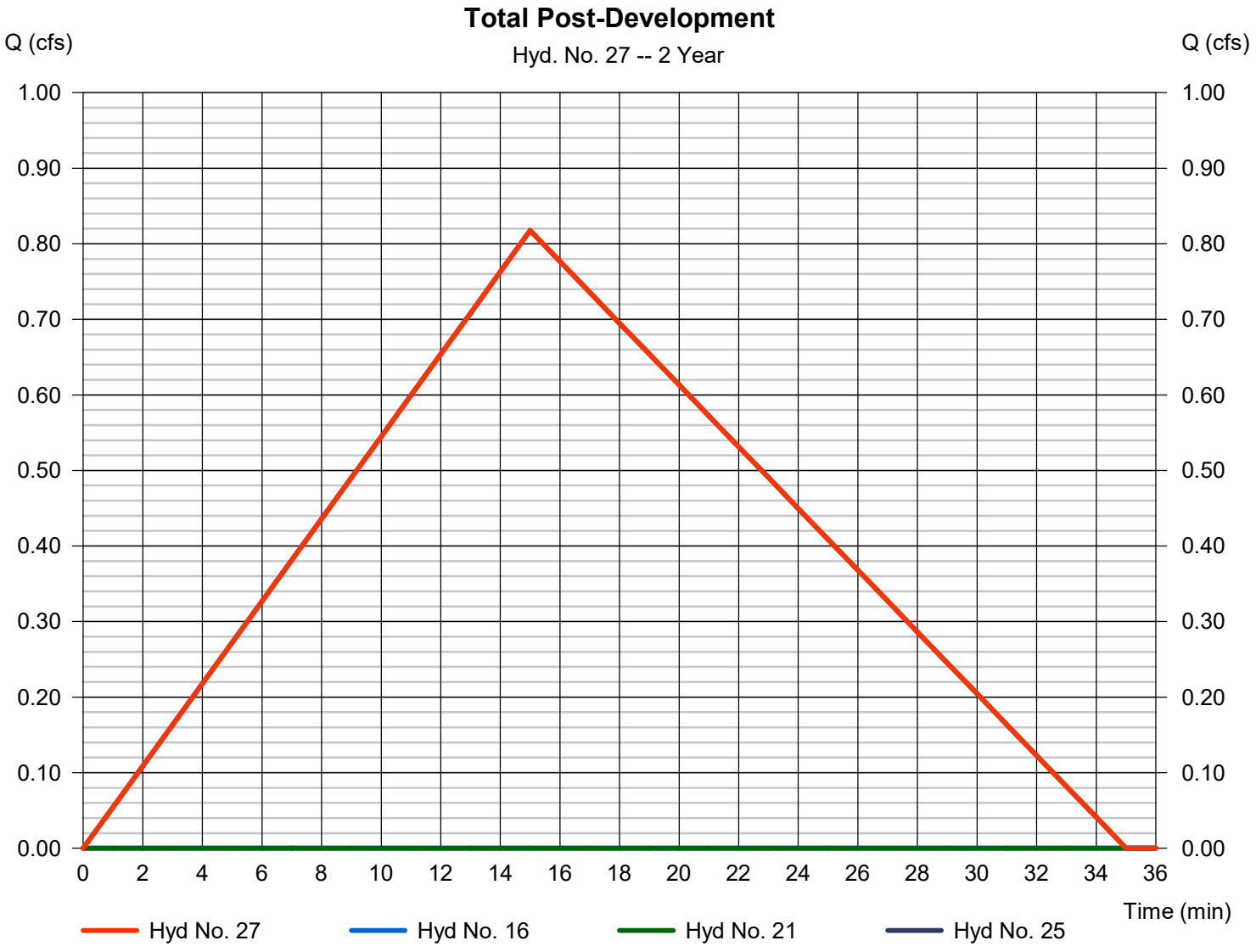


Hydrograph Report

Hyd. No. 27

Total Post-Development

Hydrograph type	=	Combine	Peak discharge	=	0.817 cfs
Storm frequency	=	2 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	858 cuft
Inflow hyds.	=	16, 21, 25	Contrib. drain. area	=	0.000 ac



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

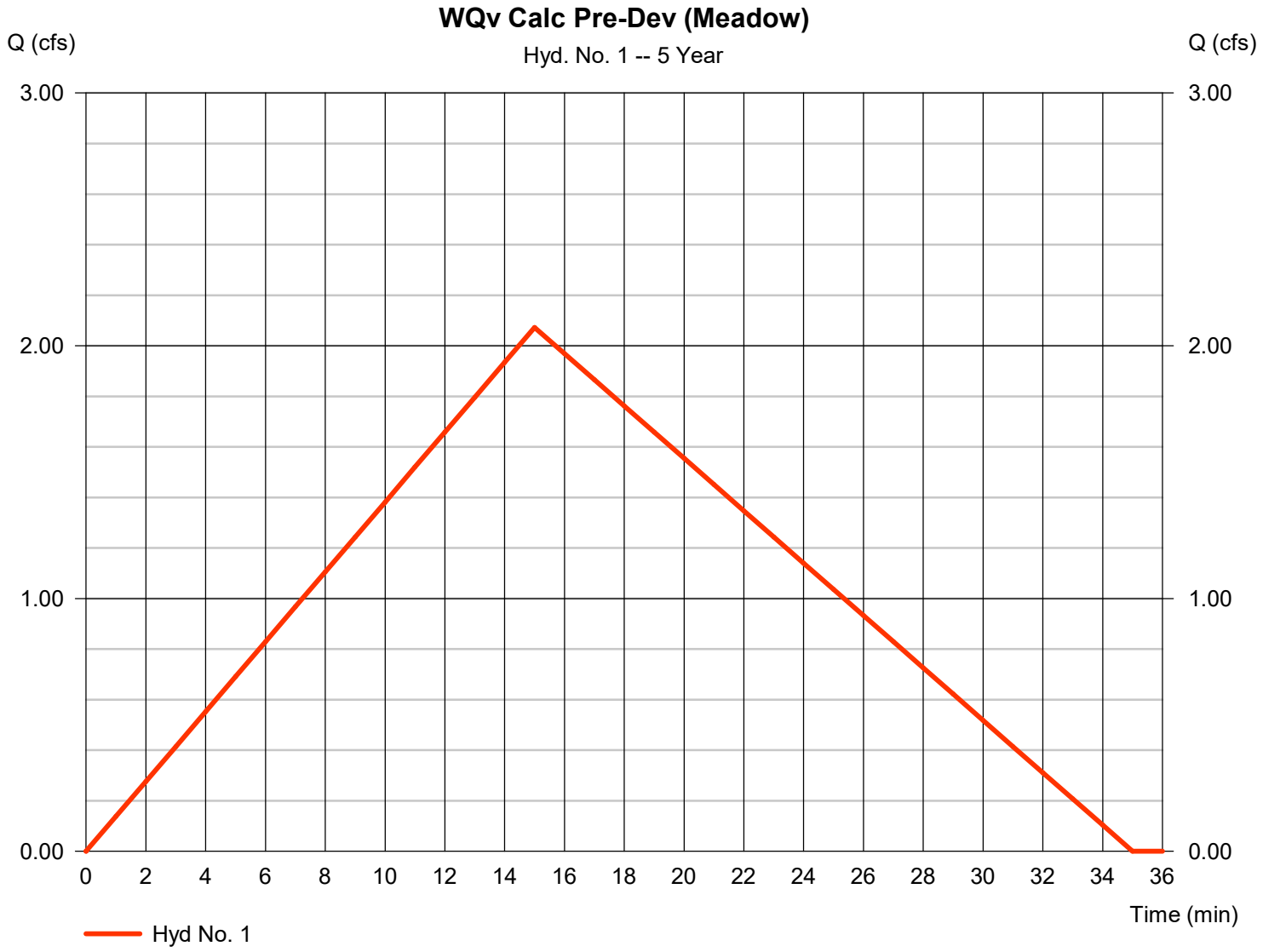
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	2.073	1	15	2,176	------	------	------	WQv Calc Pre-Dev (Meadow)
2	Combine	2.073	1	15	2,176	1	------	------	WQv Calc Total Pre-Dev
4	Rational	1.270	1	15	1,333	------	------	------	WQv Calc Uncontrolled Post-Dev (Im
5	Rational	1.748	1	15	1,836	------	------	------	WQv Calc Uncontrolled Post-Dev (Pe
6	Combine	3.018	1	15	3,169	4, 5	------	------	WQv Calc Total Post-Dev
8	Rational	0.373	1	15	392	------	------	------	Pre-Development (Meadow)
9	Rational	0.392	1	15	412	------	------	------	Compensatory (Imp.)
10	Rational	0.416	1	15	437	------	------	------	Compensatory (Perv.)
11	Combine	1.182	1	15	1,241	8, 9, 10	------	------	Pre-Development Total
13	Rational	0.548	1	15	576	------	------	------	Imp. to Infiltration Basin #1
14	Rational	0.419	1	15	440	------	------	------	Lawn to Infiltration Basin #1
15	Combine	0.968	1	15	1,016	13, 14	------	------	Total to Infiltration Basin #1
16	Reservoir	0.000	1	n/a	0	15	372.46	898	Infiltration Bed #1
18	Rational	0.450	1	15	473	------	------	------	Imp. to Infiltration Basin #2
19	Rational	0.621	1	15	652	------	------	------	Lawn to Infiltration Basin #2
20	Combine	1.880	1	15	1,974	9, 10, 18, 19	------	------	Total to Infiltration Bed #2
21	Reservoir	0.184	1	32	124	20	376.26	1,824	Infiltration Bed #2
23	Rational	0.260	1	15	273	------	------	------	Bypass (Imp.)
24	Rational	0.699	1	15	734	------	------	------	Bypass (Perv)
25	Combine	0.958	1	15	1,006	23, 24	------	------	Total Bypass
27	Combine	0.958	1	15	1,130	16, 21, 25,	------	------	Total Post-Development

Hydrograph Report

Hyd. No. 1

WQv Calc Pre-Dev (Meadow)

Hydrograph type	=	Rational	Peak discharge	=	2.073 cfs
Storm frequency	=	5 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	2,176 cuft
Drainage area	=	0.808 ac	Runoff coeff.	=	0.44
Intensity	=	5.830 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

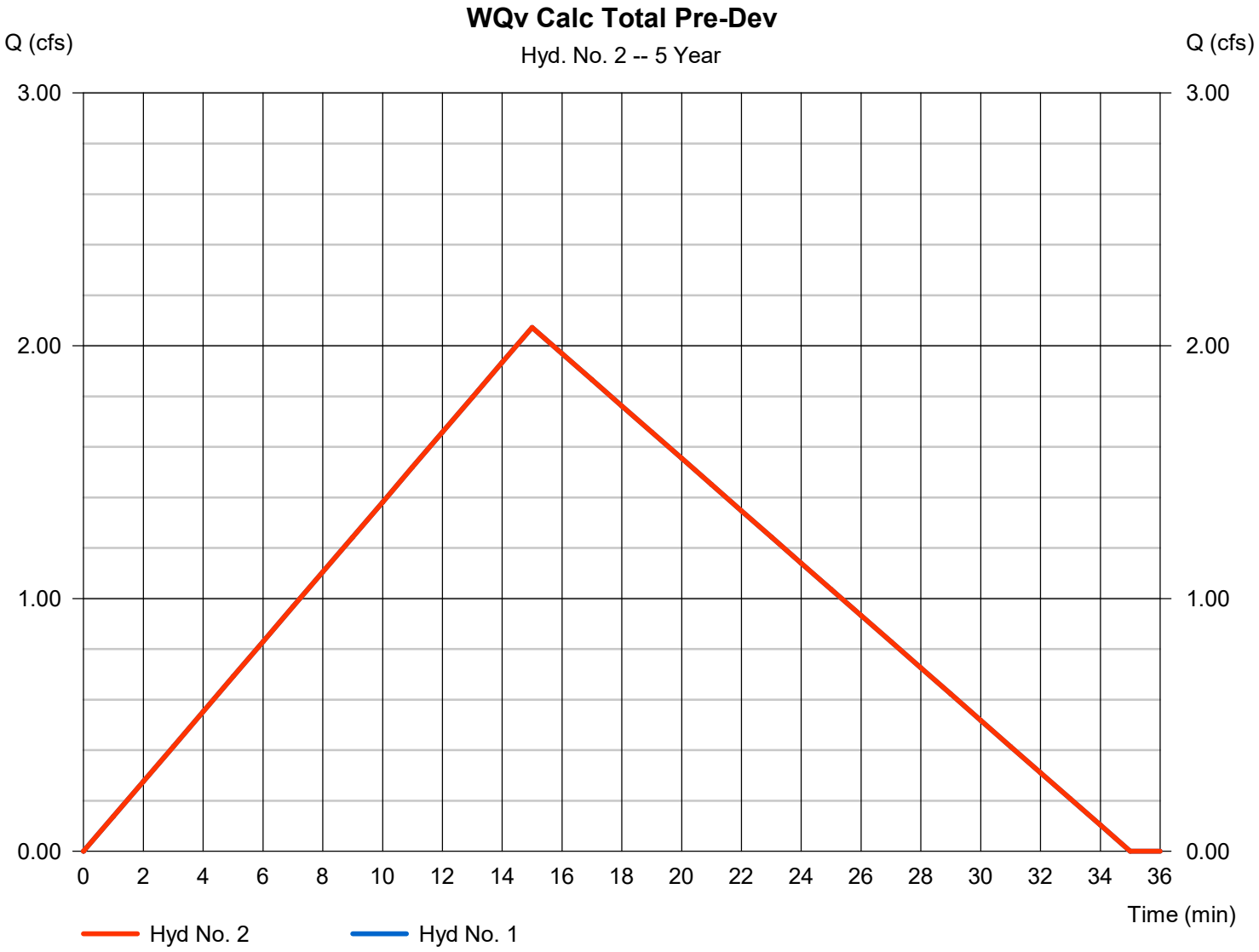


Hydrograph Report

Hyd. No. 2

WQv Calc Total Pre-Dev

Hydrograph type	= Combine	Peak discharge	= 2.073 cfs
Storm frequency	= 5 yrs	Time to peak	= 15 min
Time interval	= 1 min	Hyd. volume	= 2,176 cuft
Inflow hyds.	= 1	Contrib. drain. area	= 0.808 ac

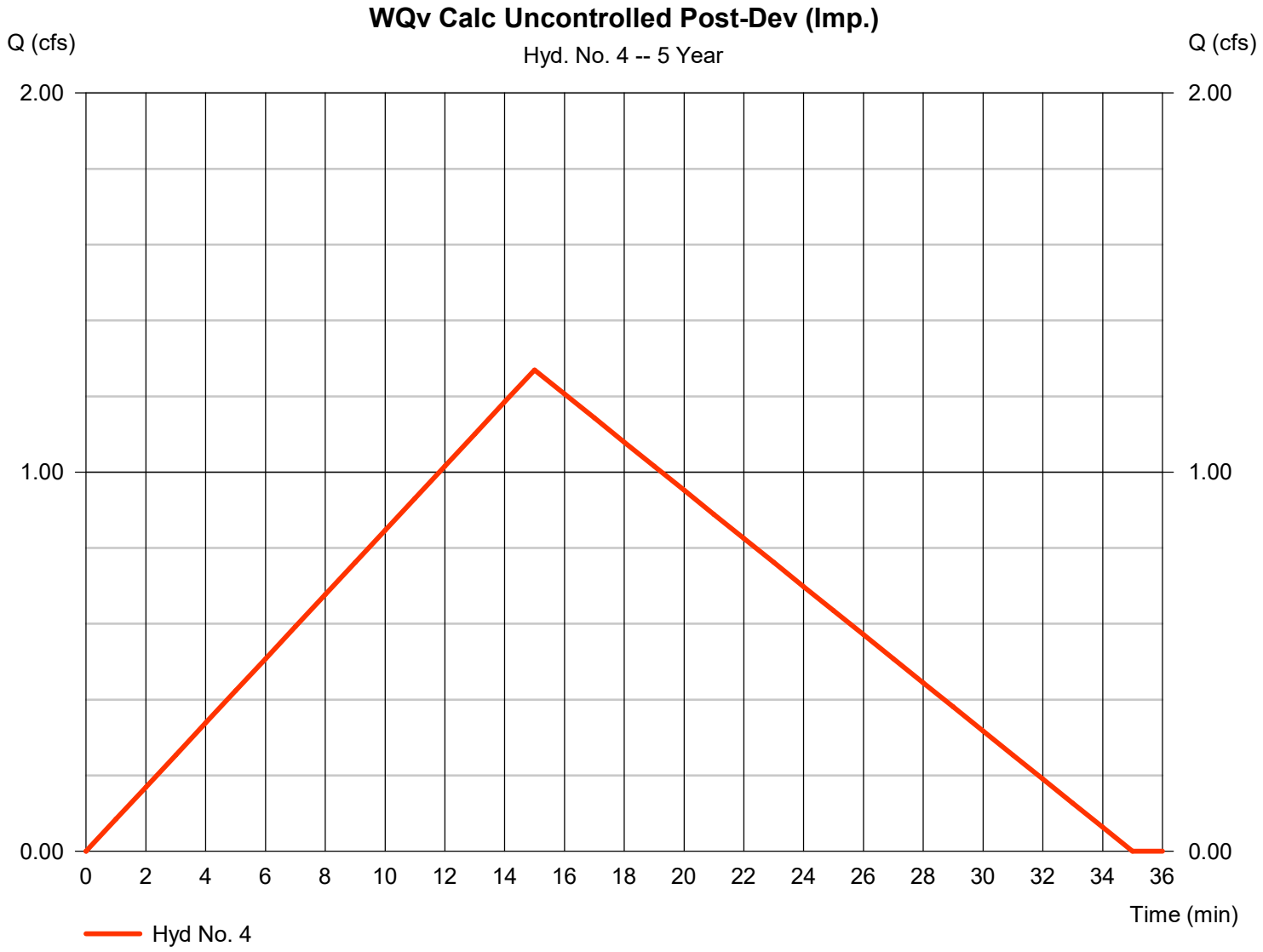


Hydrograph Report

Hyd. No. 4

WQv Calc Uncontrolled Post-Dev (Imp.)

Hydrograph type	=	Rational	Peak discharge	=	1.270 cfs
Storm frequency	=	5 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	1,333 cuft
Drainage area	=	0.220 ac	Runoff coeff.	=	0.99
Intensity	=	5.830 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

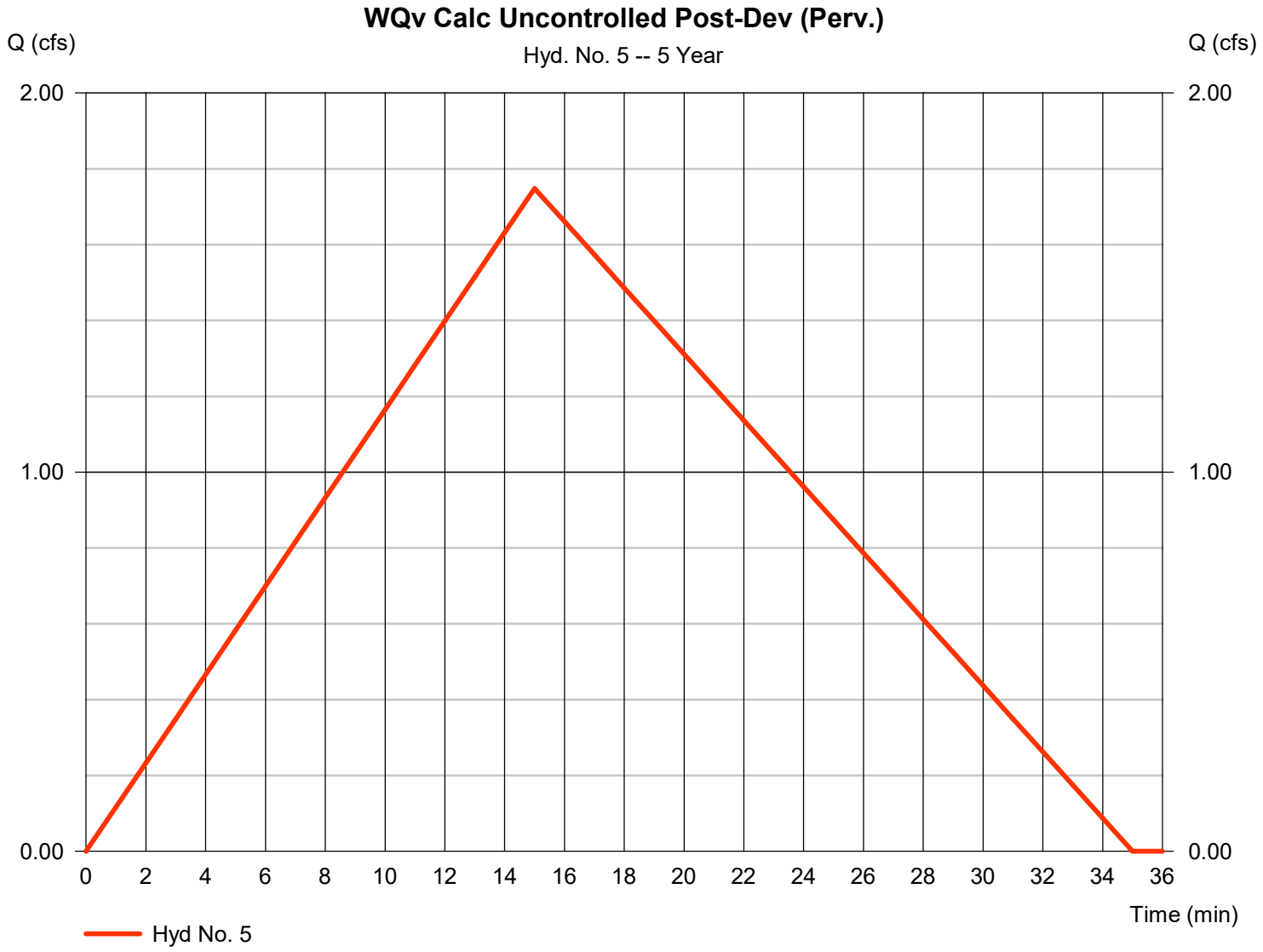


Hydrograph Report

Hyd. No. 5

WQv Calc Uncontrolled Post-Dev (Perv.)

Hydrograph type	=	Rational	Peak discharge	=	1.748 cfs
Storm frequency	=	5 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	1,836 cuft
Drainage area	=	0.588 ac	Runoff coeff.	=	0.51
Intensity	=	5.830 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

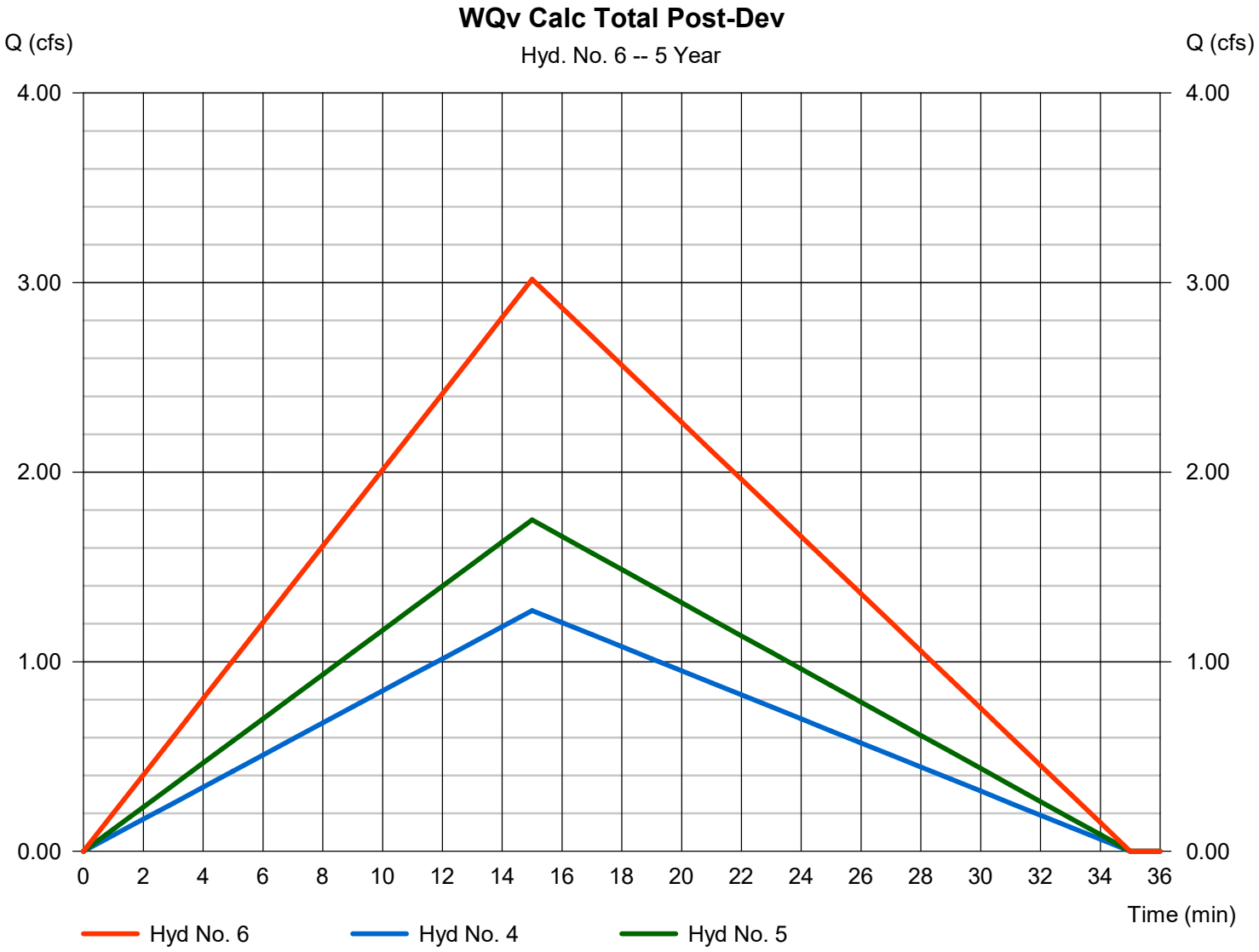


Hydrograph Report

Hyd. No. 6

WQv Calc Total Post-Dev

Hydrograph type	= Combine	Peak discharge	= 3.018 cfs
Storm frequency	= 5 yrs	Time to peak	= 15 min
Time interval	= 1 min	Hyd. volume	= 3,169 cuft
Inflow hyds.	= 4, 5	Contrib. drain. area	= 0.808 ac



Hydrograph Report

Hyd. No. 8

Pre-Development (Meadow)

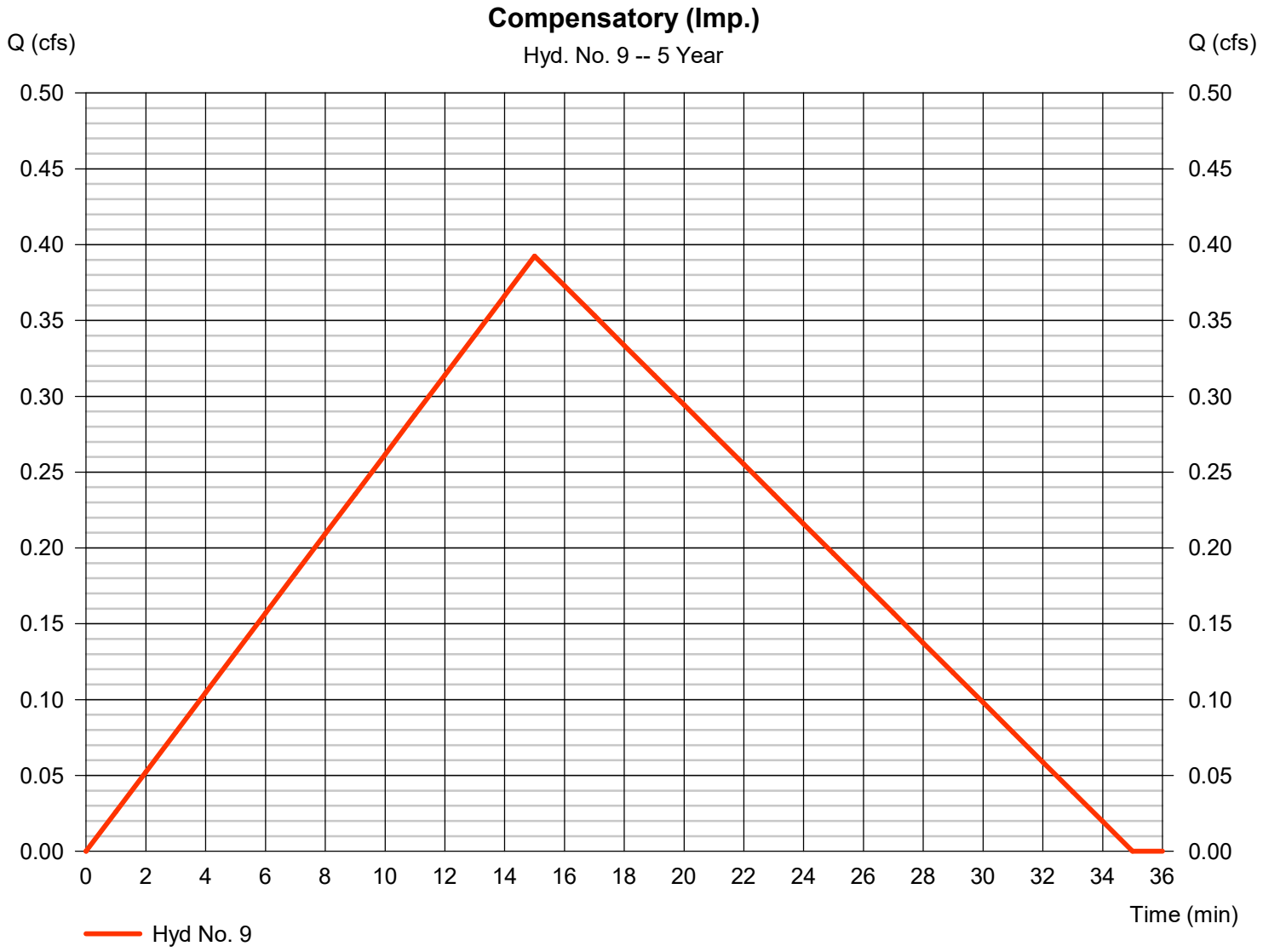
Hydrograph type	=	Rational	Peak discharge	=	0.373 cfs
Storm frequency	=	5 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	392 cuft
Drainage area	=	0.320 ac	Runoff coeff.	=	0.2
Intensity	=	5.830 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

Hydrograph Report

Hyd. No. 9

Compensatory (Imp.)

Hydrograph type	=	Rational	Peak discharge	=	0.392 cfs
Storm frequency	=	5 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	412 cuft
Drainage area	=	0.068 ac	Runoff coeff.	=	0.99
Intensity	=	5.830 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

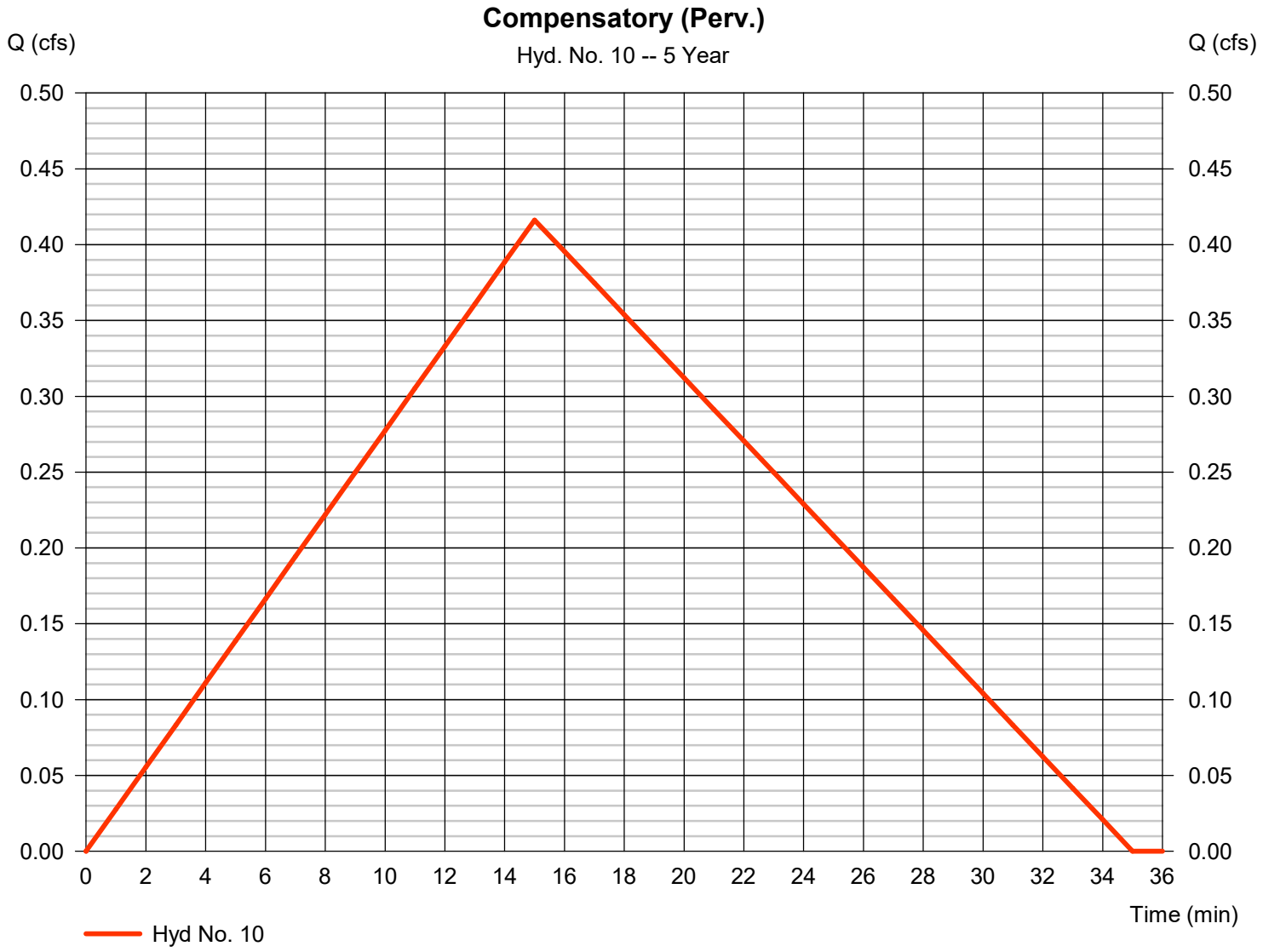


Hydrograph Report

Hyd. No. 10

Compensatory (Perv.)

Hydrograph type	=	Rational	Peak discharge	=	0.416 cfs
Storm frequency	=	5 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	437 cuft
Drainage area	=	0.140 ac	Runoff coeff.	=	0.51
Intensity	=	5.830 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

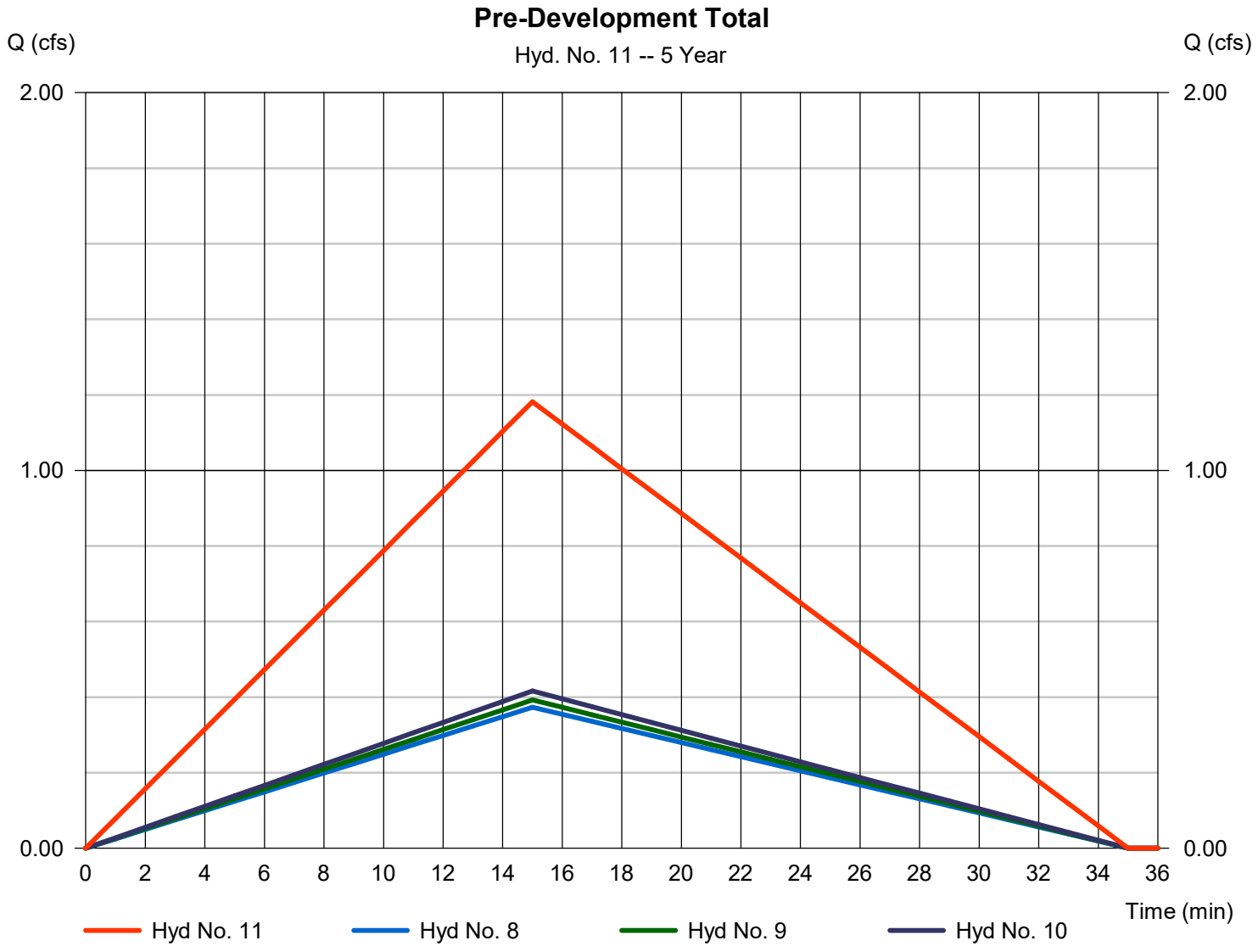


Hydrograph Report

Hyd. No. 11

Pre-Development Total

Hydrograph type	= Combine	Peak discharge	= 1.182 cfs
Storm frequency	= 5 yrs	Time to peak	= 15 min
Time interval	= 1 min	Hyd. volume	= 1,241 cuft
Inflow hyds.	= 8, 9, 10	Contrib. drain. area	= 0.528 ac

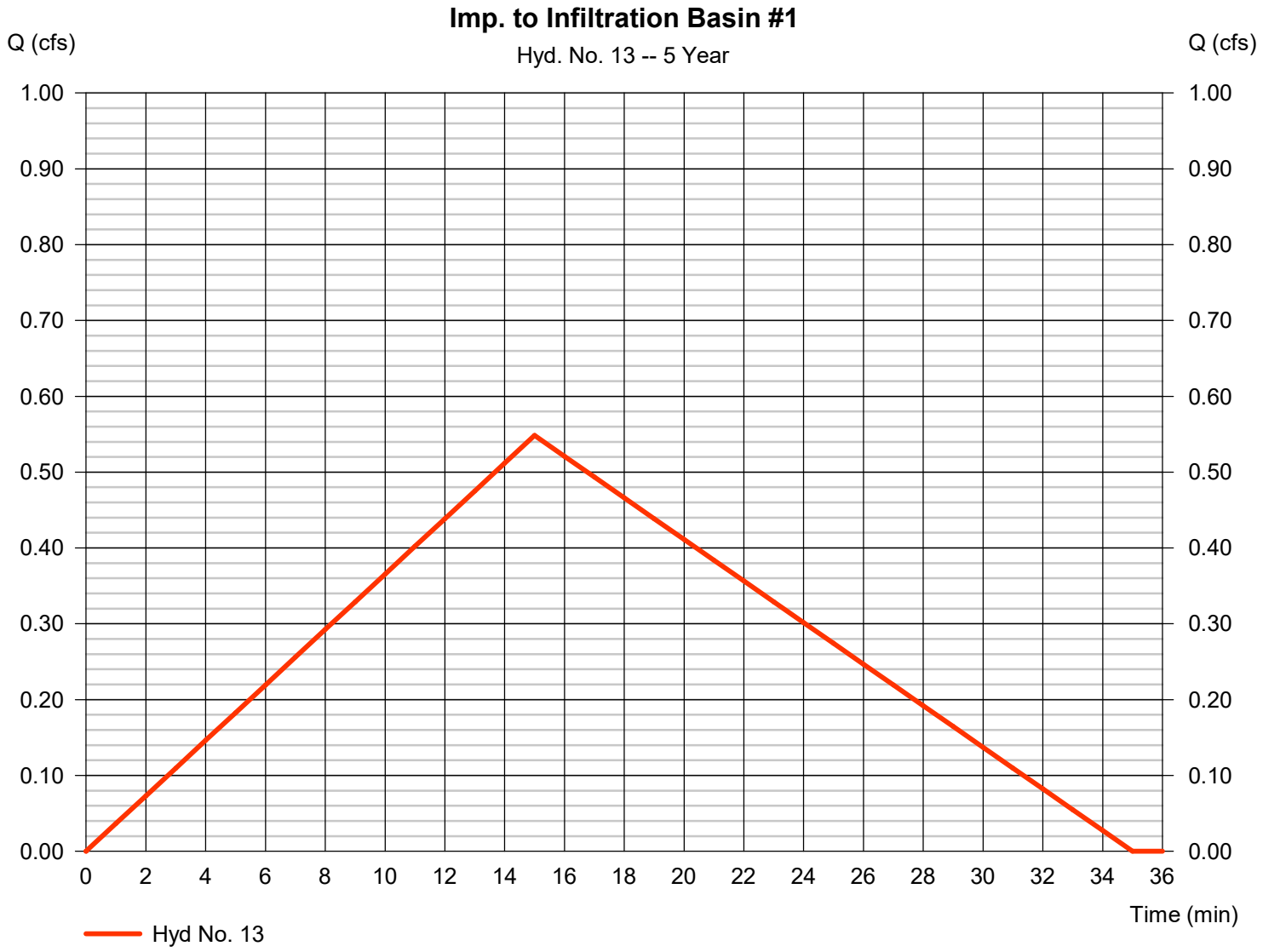


Hydrograph Report

Hyd. No. 13

Imp. to Infiltration Basin #1

Hydrograph type	=	Rational	Peak discharge	=	0.548 cfs
Storm frequency	=	5 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	576 cuft
Drainage area	=	0.095 ac	Runoff coeff.	=	0.99
Intensity	=	5.830 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

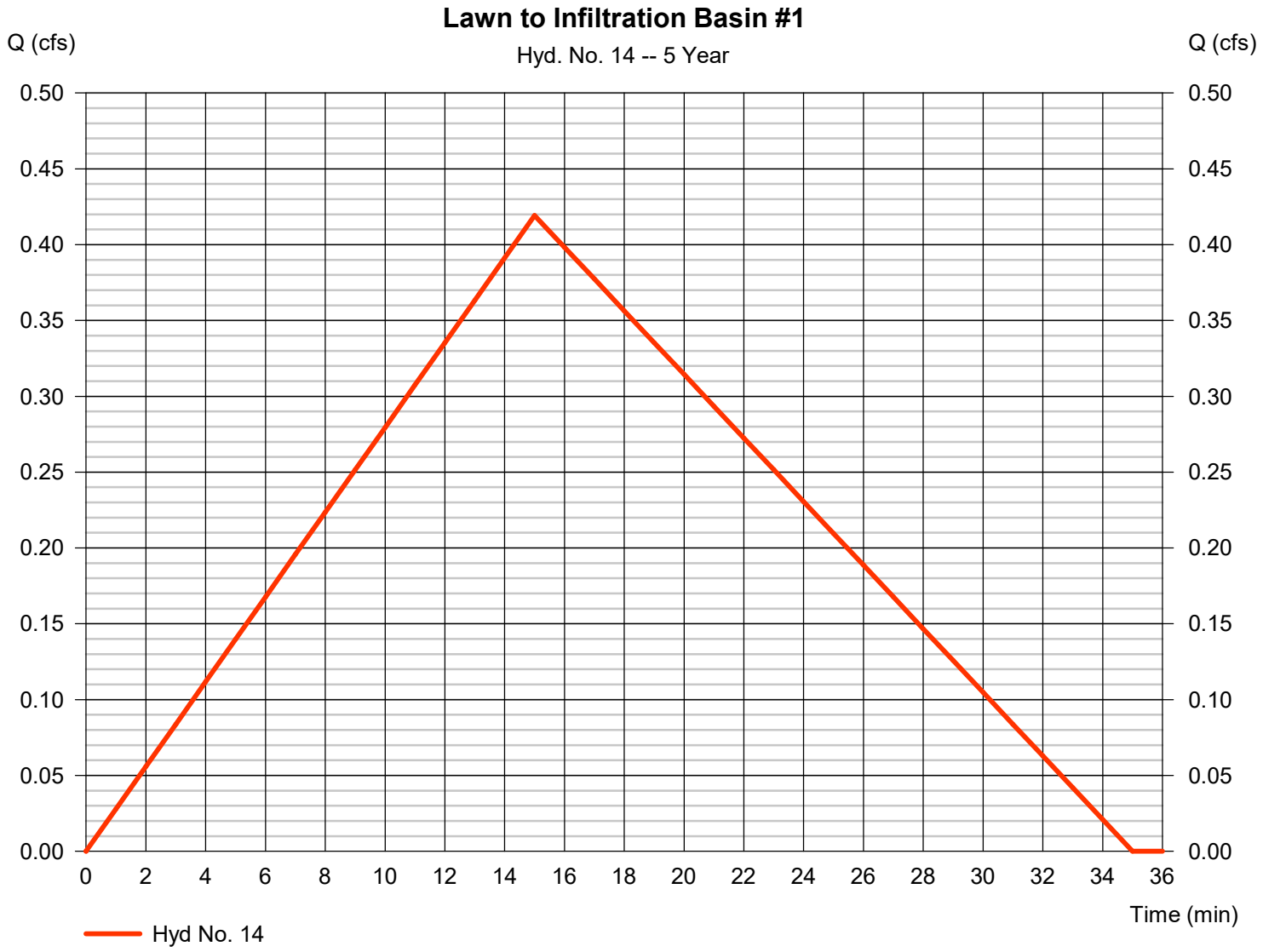


Hydrograph Report

Hyd. No. 14

Lawn to Infiltration Basin #1

Hydrograph type	=	Rational	Peak discharge	=	0.419 cfs
Storm frequency	=	5 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	440 cuft
Drainage area	=	0.141 ac	Runoff coeff.	=	0.51
Intensity	=	5.830 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

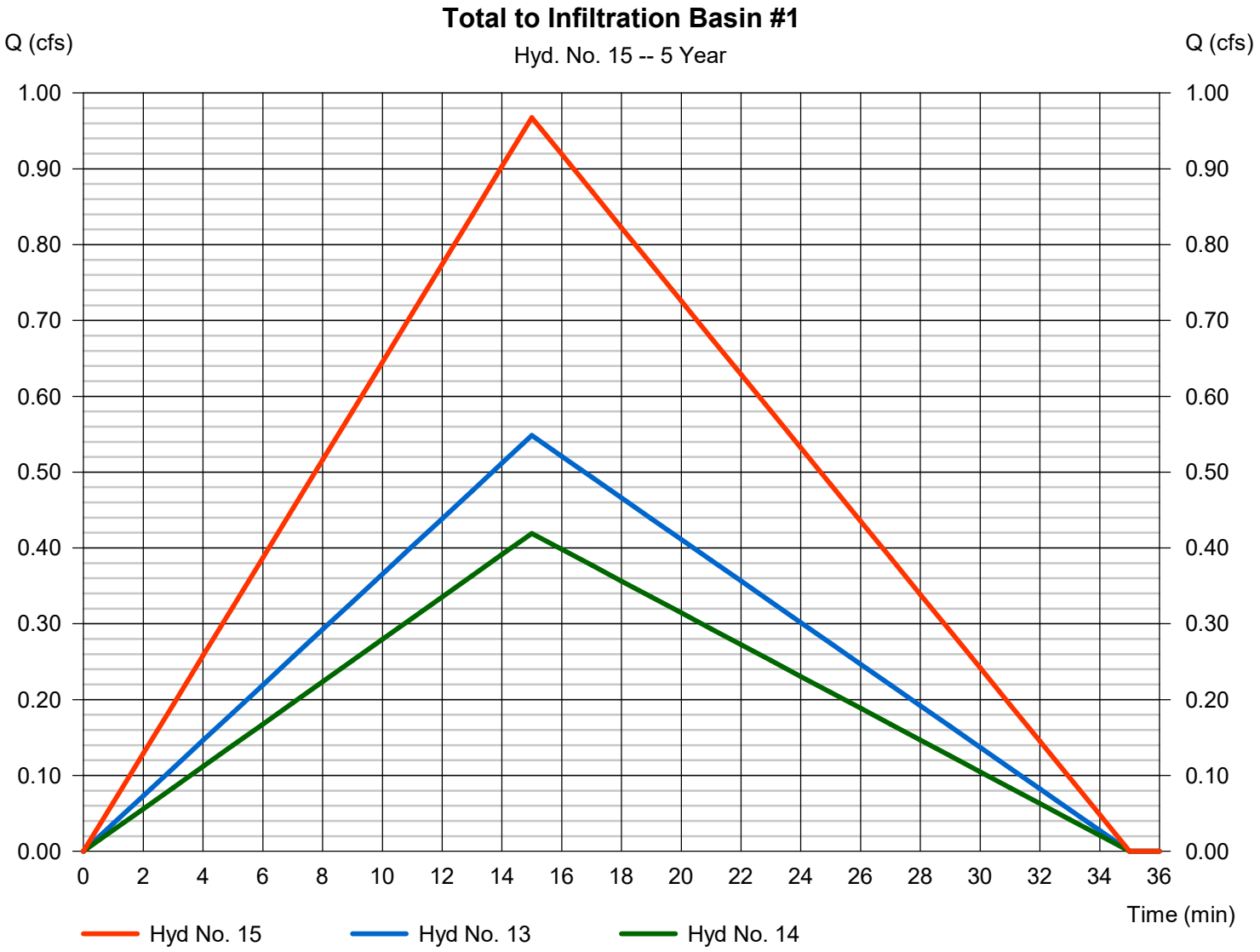


Hydrograph Report

Hyd. No. 15

Total to Infiltration Basin #1

Hydrograph type	=	Combine	Peak discharge	=	0.968 cfs
Storm frequency	=	5 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	1,016 cuft
Inflow hyds.	=	13, 14	Contrib. drain. area	=	0.236 ac



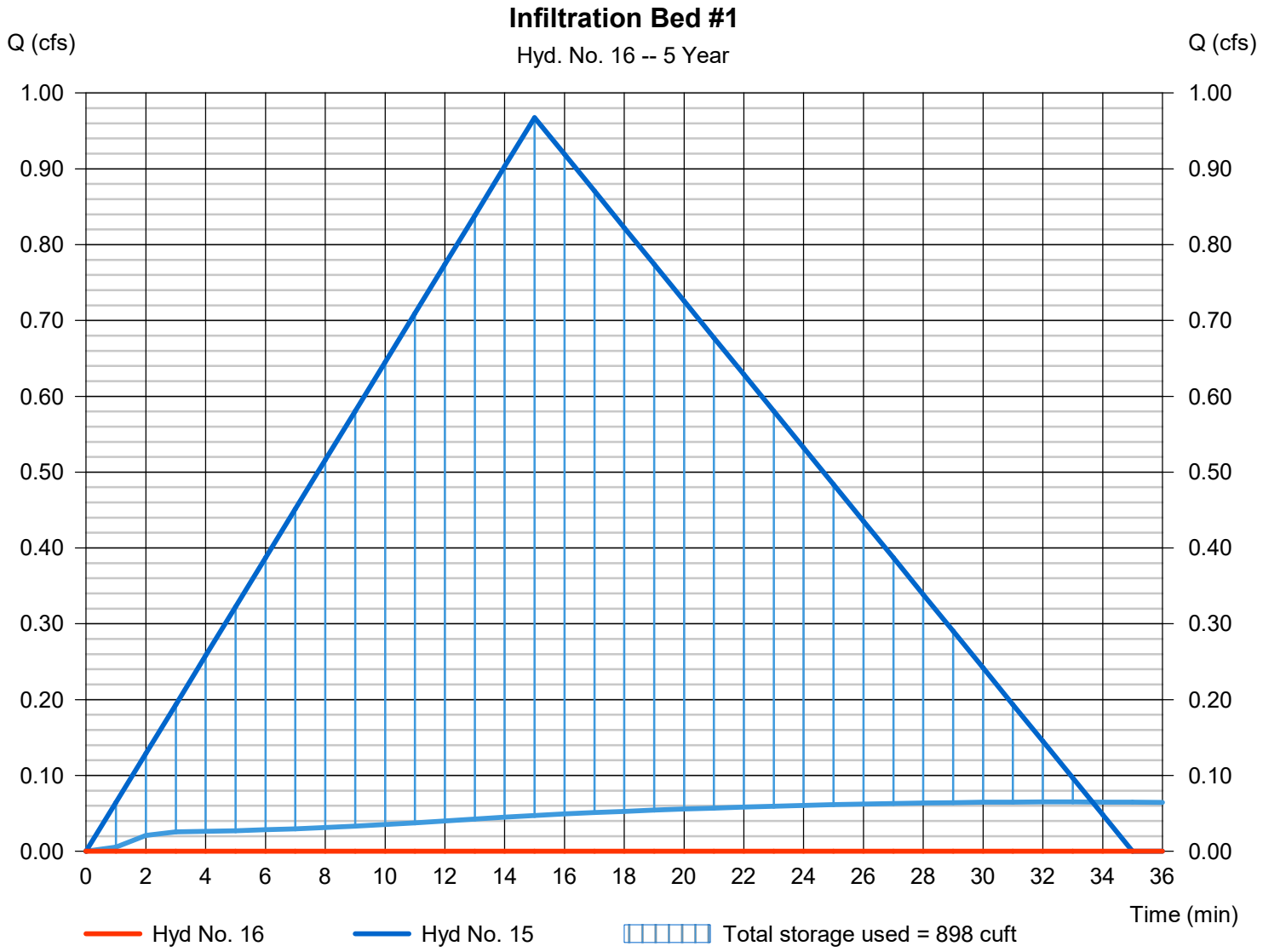
Hydrograph Report

Hyd. No. 16

Infiltration Bed #1

Hydrograph type	=	Reservoir	Peak discharge	=	0.000 cfs
Storm frequency	=	5 yrs	Time to peak	=	n/a
Time interval	=	1 min	Hyd. volume	=	0 cuft
Inflow hyd. No.	=	15 - Total to Infiltration Basin #1	Max. Elevation	=	372.46 ft
Reservoir name	=	Infiltration Bed #1	Max. Storage	=	898 cuft

Storage Indication method used. Exfiltration extracted from Outflow.

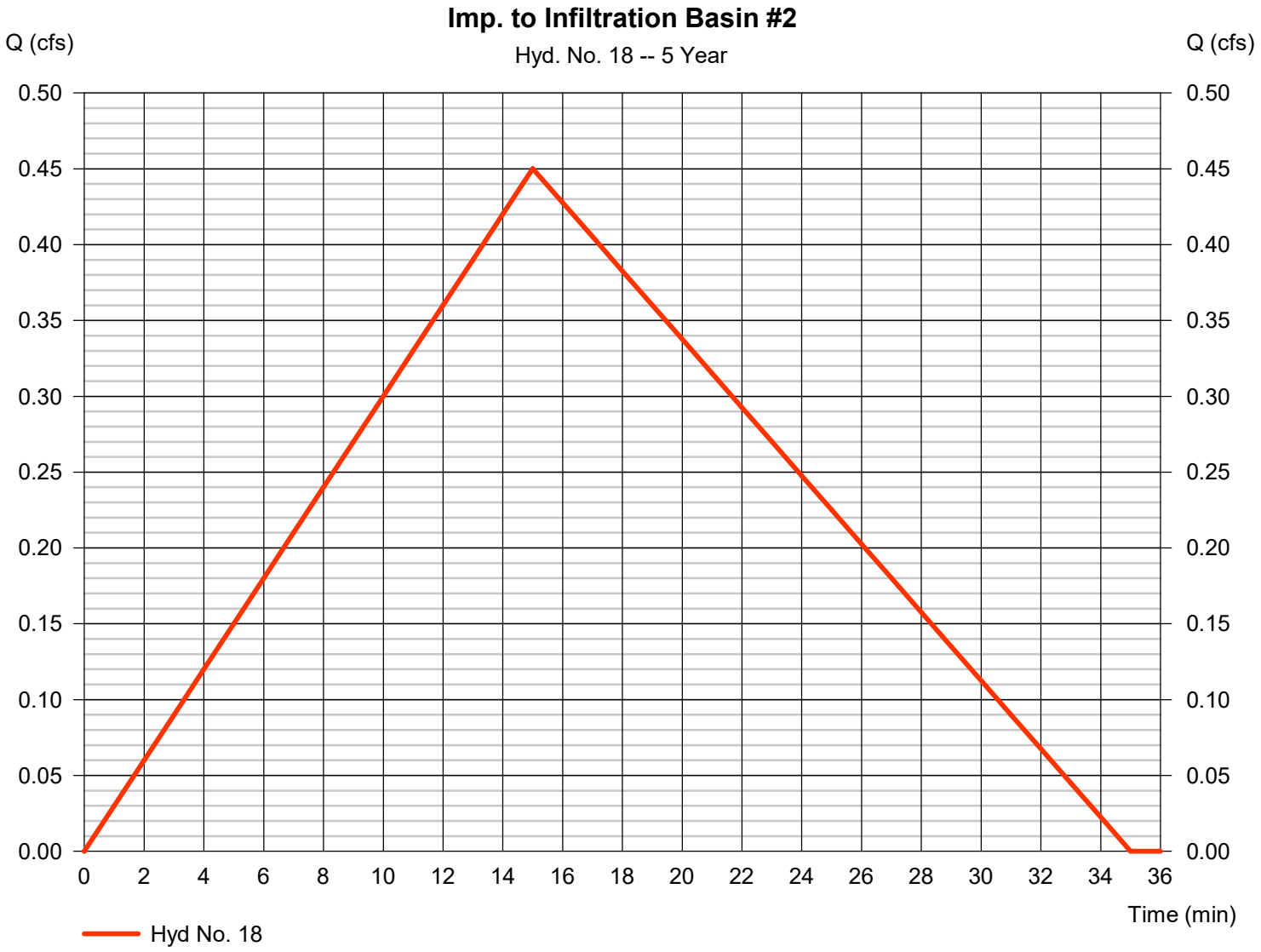


Hydrograph Report

Hyd. No. 18

Imp. to Infiltration Basin #2

Hydrograph type	=	Rational	Peak discharge	=	0.450 cfs
Storm frequency	=	5 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	473 cuft
Drainage area	=	0.078 ac	Runoff coeff.	=	0.99
Intensity	=	5.830 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4



Hydrograph Report

Hyd. No. 19

Lawn to Infiltration Basin #2

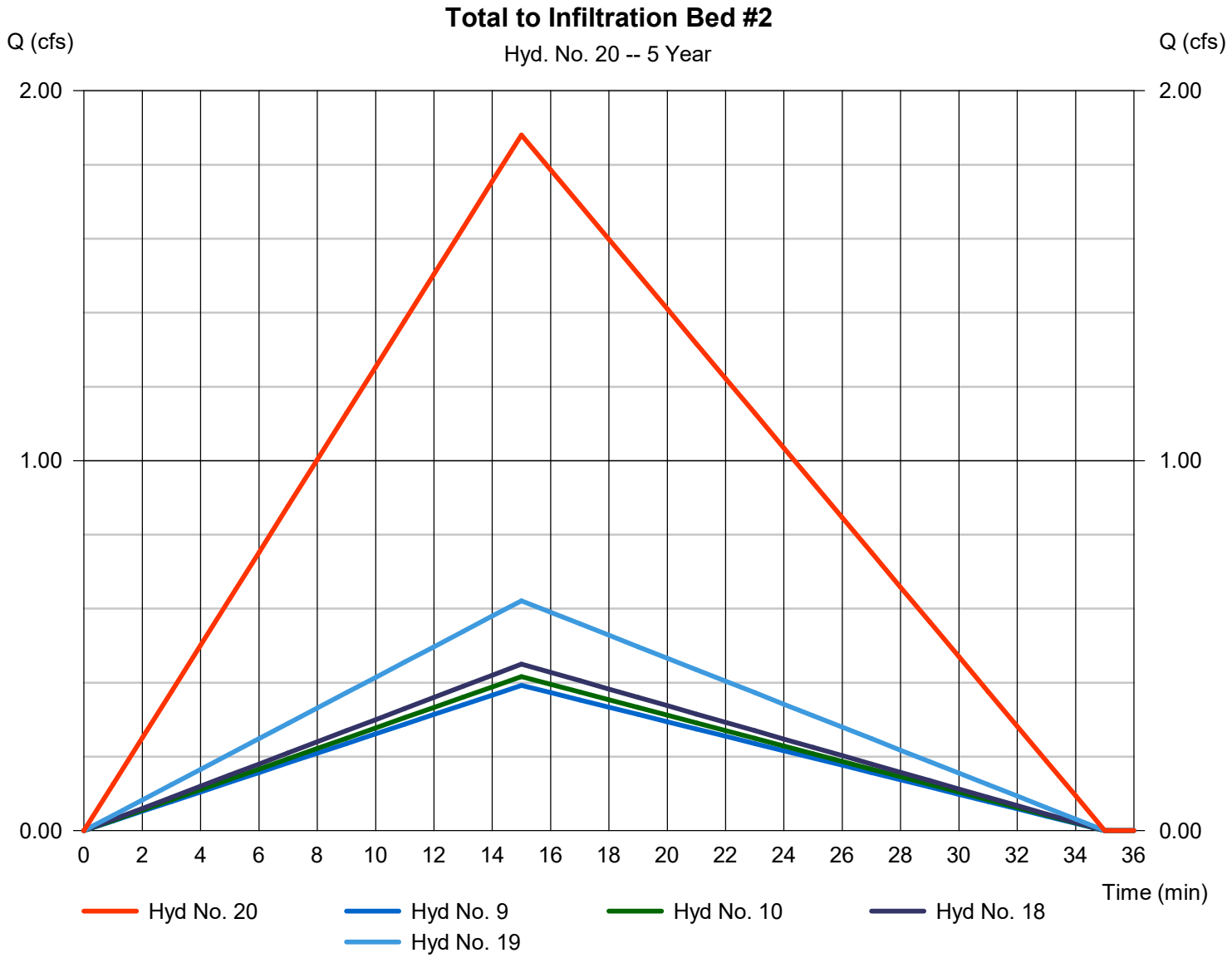
Hydrograph type	=	Rational	Peak discharge	=	0.621 cfs
Storm frequency	=	5 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	652 cuft
Drainage area	=	0.209 ac	Runoff coeff.	=	0.51
Intensity	=	5.830 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

Hydrograph Report

Hyd. No. 20

Total to Infiltration Bed #2

Hydrograph type	= Combine	Peak discharge	= 1.880 cfs
Storm frequency	= 5 yrs	Time to peak	= 15 min
Time interval	= 1 min	Hyd. volume	= 1,974 cuft
Inflow hyds.	= 9, 10, 18, 19	Contrib. drain. area	= 0.495 ac



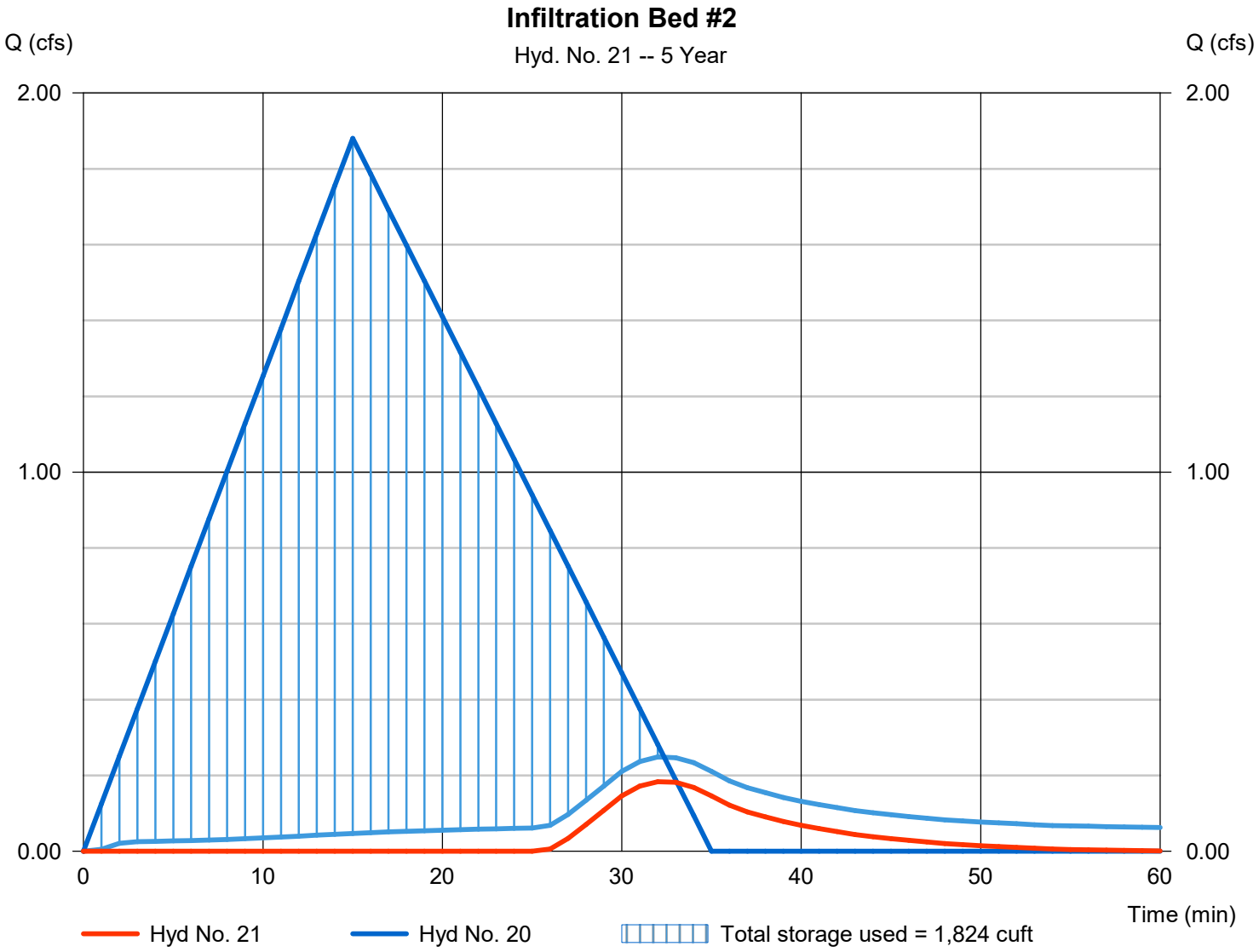
Hydrograph Report

Hyd. No. 21

Infiltration Bed #2

Hydrograph type	=	Reservoir	Peak discharge	=	0.184 cfs
Storm frequency	=	5 yrs	Time to peak	=	32 min
Time interval	=	1 min	Hyd. volume	=	124 cuft
Inflow hyd. No.	=	20 - Total to Infiltration Bed #2	Max. Elevation	=	376.26 ft
Reservoir name	=	Infiltration Bed #2	Max. Storage	=	1,824 cuft

Storage Indication method used. Exfiltration extracted from Outflow.



Hydrograph Report

Hyd. No. 23

Bypass (Imp.)

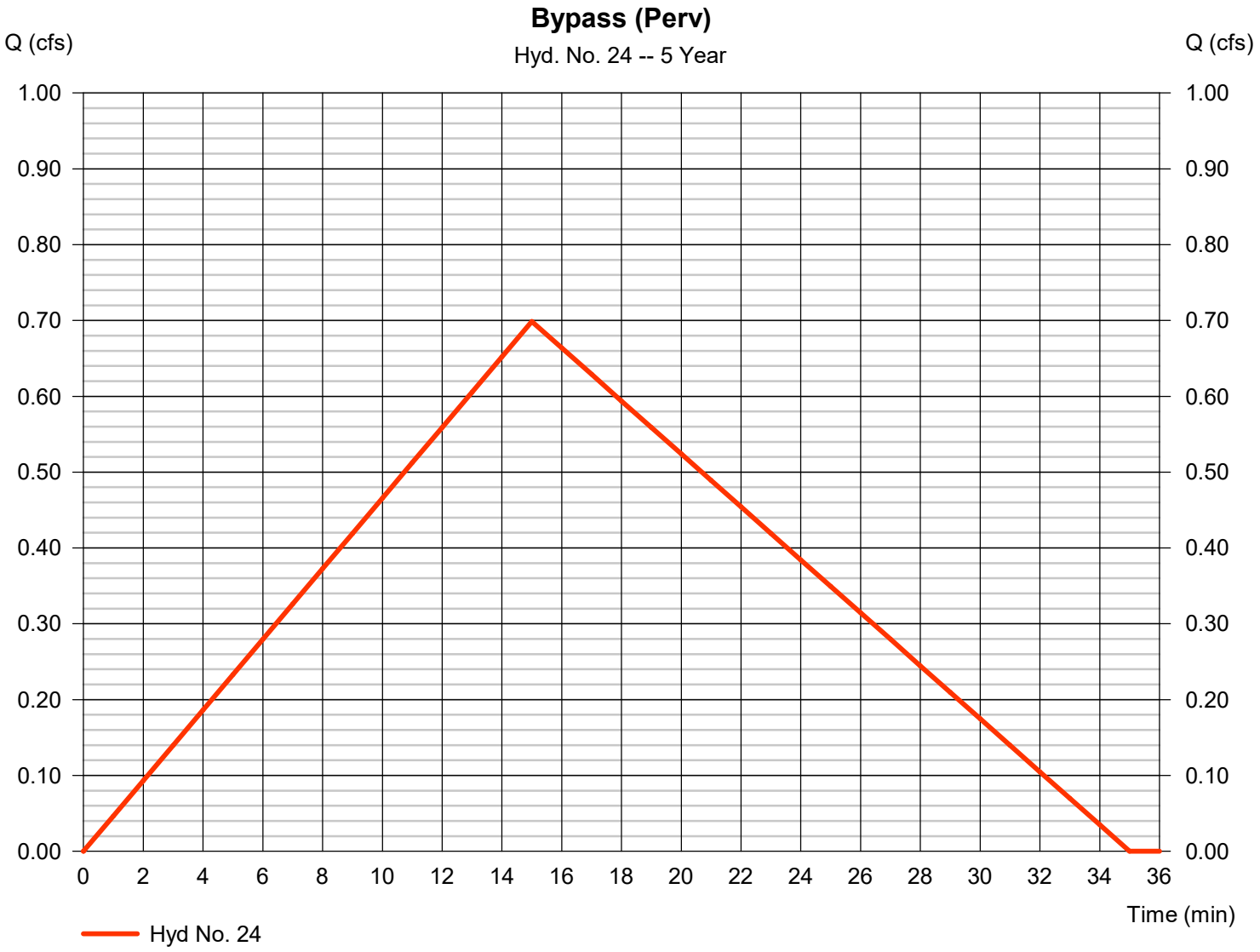
Hydrograph type	=	Rational	Peak discharge	=	0.260 cfs
Storm frequency	=	5 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	273 cuft
Drainage area	=	0.045 ac	Runoff coeff.	=	0.99
Intensity	=	5.830 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

Hydrograph Report

Hyd. No. 24

Bypass (Perv)

Hydrograph type	=	Rational	Peak discharge	=	0.699 cfs
Storm frequency	=	5 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	734 cuft
Drainage area	=	0.235 ac	Runoff coeff.	=	0.51
Intensity	=	5.830 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

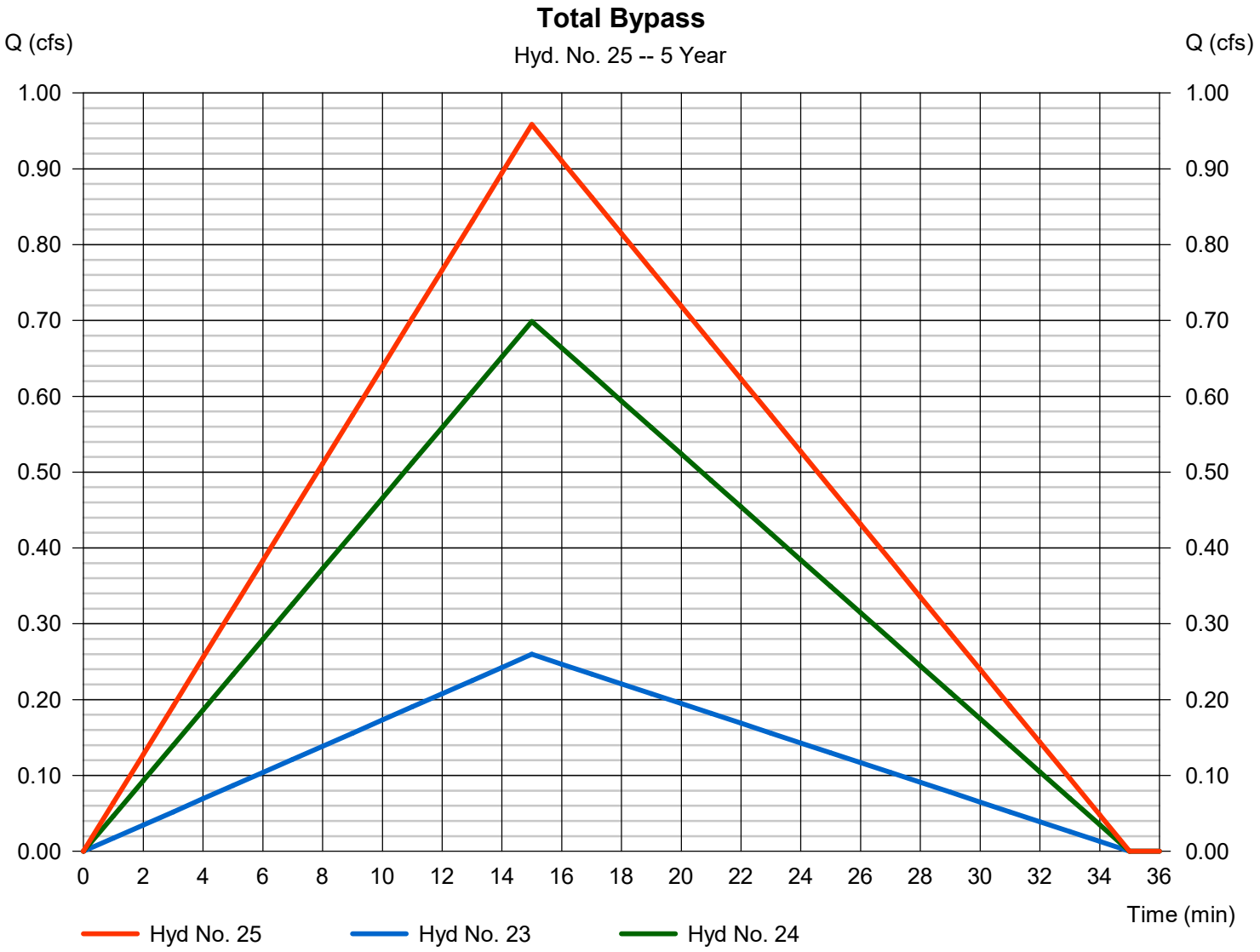


Hydrograph Report

Hyd. No. 25

Total Bypass

Hydrograph type	= Combine	Peak discharge	= 0.958 cfs
Storm frequency	= 5 yrs	Time to peak	= 15 min
Time interval	= 1 min	Hyd. volume	= 1,006 cuft
Inflow hyds.	= 23, 24	Contrib. drain. area	= 0.280 ac

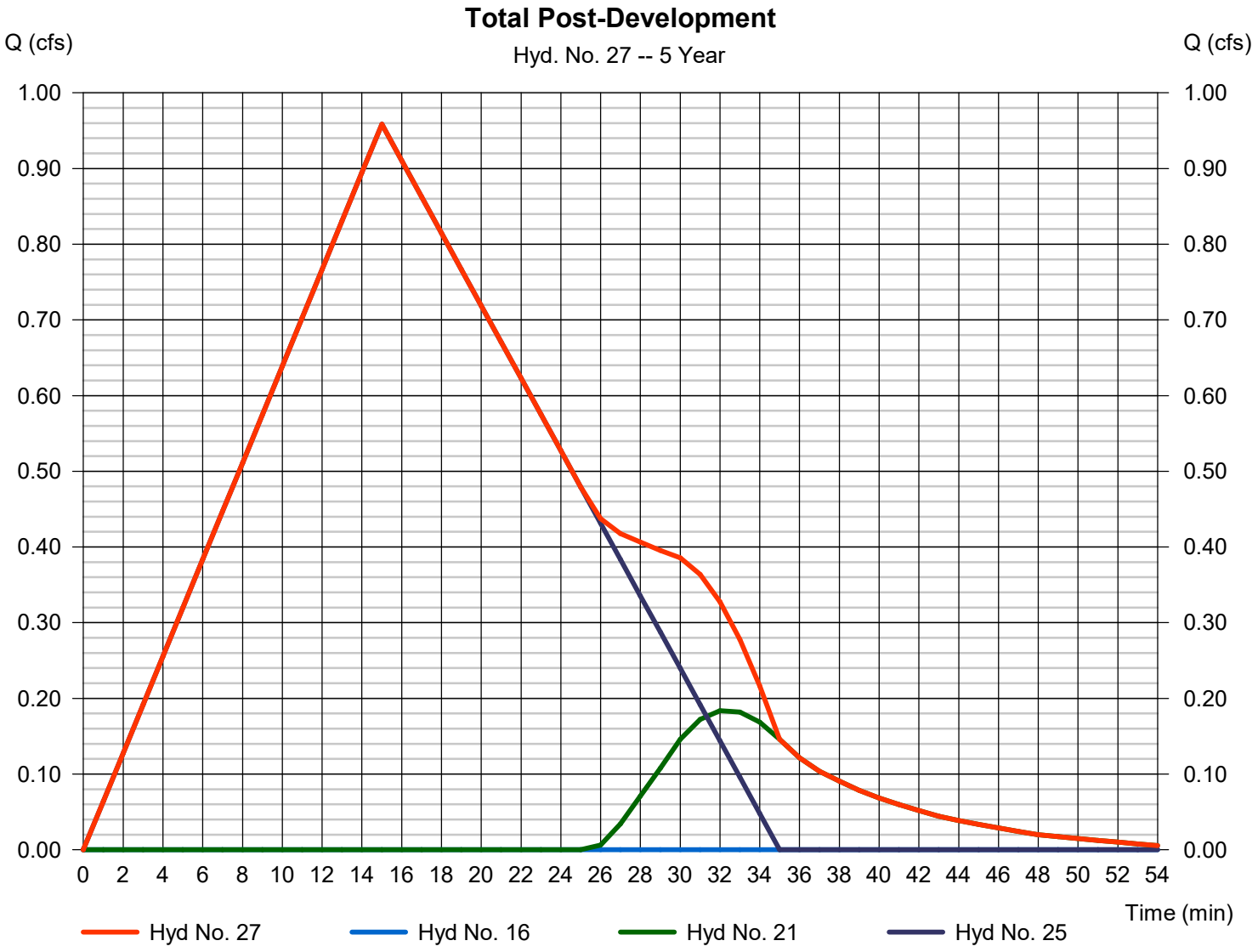


Hydrograph Report

Hyd. No. 27

Total Post-Development

Hydrograph type	=	Combine	Peak discharge	=	0.958 cfs
Storm frequency	=	5 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	1,130 cuft
Inflow hyds.	=	16, 21, 25	Contrib. drain. area	=	0.000 ac



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

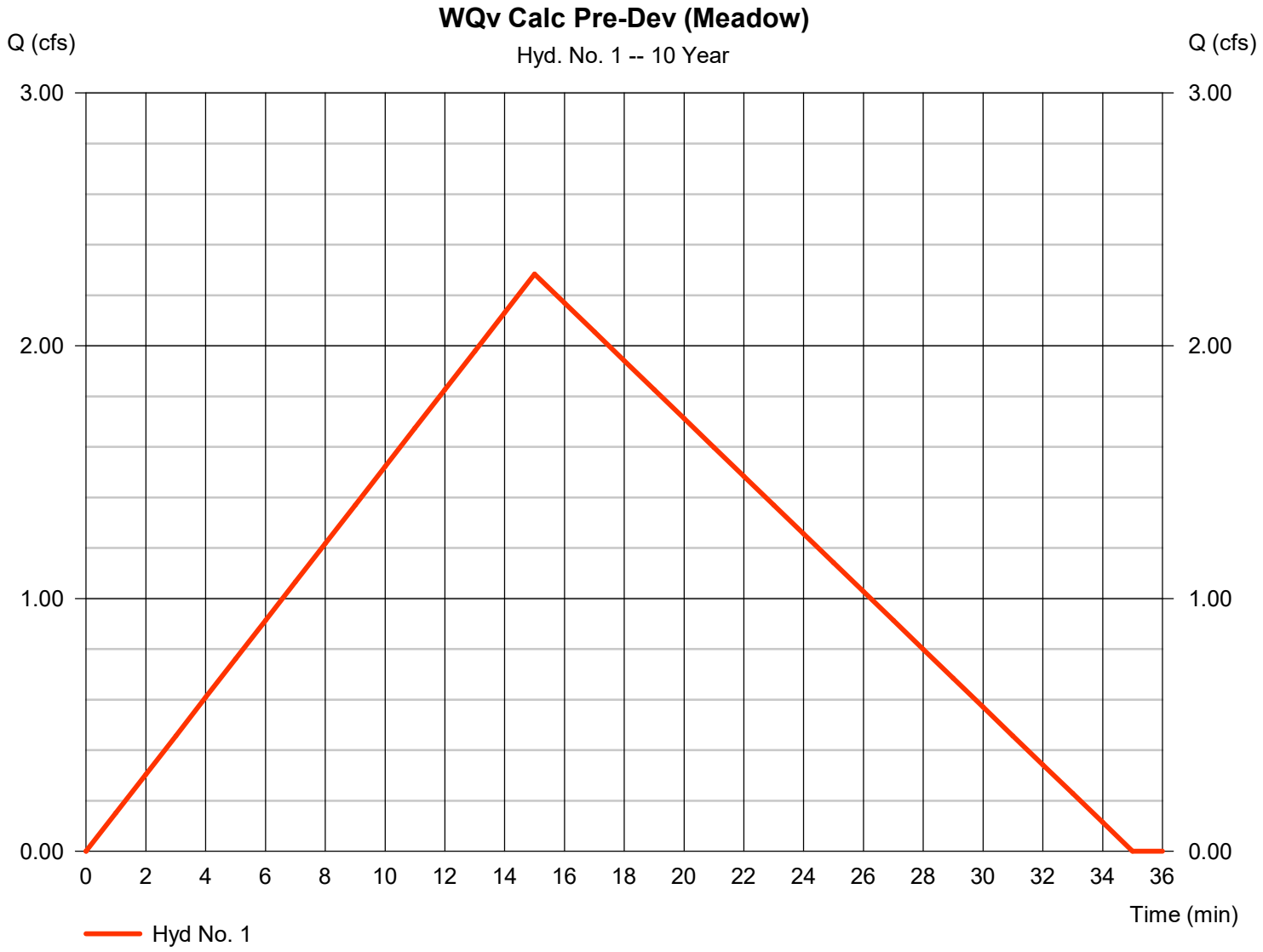
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	2.283	1	15	2,397	------	------	------	WQv Calc Pre-Dev (Meadow)
2	Combine	2.283	1	15	2,397	1	------	------	WQv Calc Total Pre-Dev
4	Rational	1.399	1	15	1,469	------	------	------	WQv Calc Uncontrolled Post-Dev (Im
5	Rational	1.926	1	15	2,022	------	------	------	WQv Calc Uncontrolled Post-Dev (Pe
6	Combine	3.324	1	15	3,491	4, 5	------	------	WQv Calc Total Post-Dev
8	Rational	0.411	1	15	432	------	------	------	Pre-Development (Meadow)
9	Rational	0.432	1	15	454	------	------	------	Compensatory (Imp.)
10	Rational	0.459	1	15	481	------	------	------	Compensatory (Perv.)
11	Combine	1.302	1	15	1,367	8, 9, 10	------	------	Pre-Development Total
13	Rational	0.604	1	15	634	------	------	------	Imp. to Infiltration Basin #1
14	Rational	0.462	1	15	485	------	------	------	Lawn to Infiltration Basin #1
15	Combine	1.066	1	15	1,119	13, 14	------	------	Total to Infiltration Basin #1
16	Reservoir	0.000	1	n/a	0	15	372.65	996	Infiltration Bed #1
18	Rational	0.496	1	15	521	------	------	------	Imp. to Infiltration Basin #2
19	Rational	0.685	1	15	719	------	------	------	Lawn to Infiltration Basin #2
20	Combine	2.071	1	15	2,175	9, 10, 18, 19	------	------	Total to Infiltration Bed #2
21	Reservoir	0.407	1	30	307	20	376.43	1,916	Infiltration Bed #2
23	Rational	0.286	1	15	300	------	------	------	Bypass (Imp.)
24	Rational	0.770	1	15	808	------	------	------	Bypass (Perv)
25	Combine	1.056	1	15	1,109	23, 24	------	------	Total Bypass
27	Combine	1.056	1	15	1,416	16, 21, 25,	------	------	Total Post-Development

Hydrograph Report

Hyd. No. 1

WQv Calc Pre-Dev (Meadow)

Hydrograph type	=	Rational	Peak discharge	=	2.283 cfs
Storm frequency	=	10 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	2,397 cuft
Drainage area	=	0.808 ac	Runoff coeff.	=	0.44
Intensity	=	6.422 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

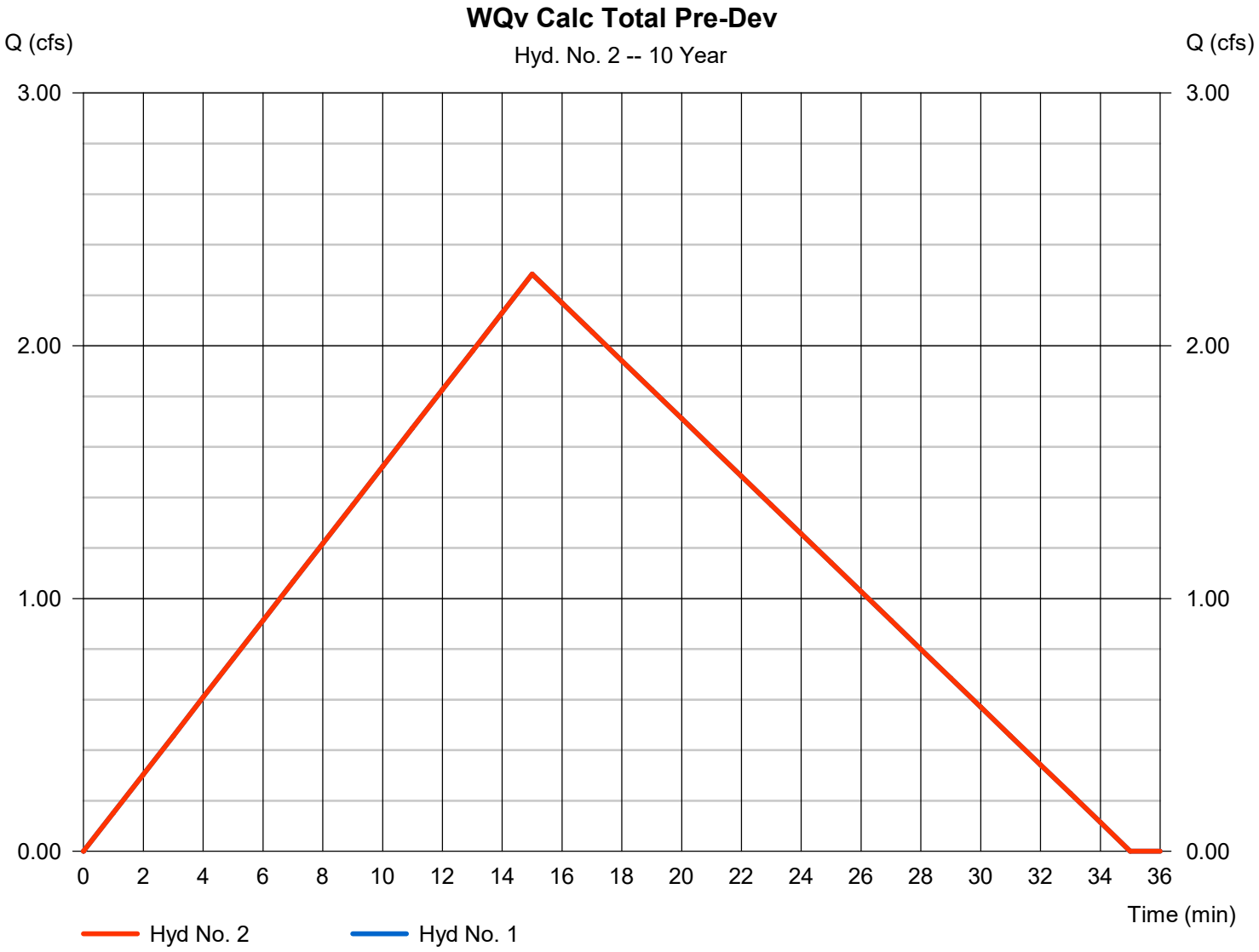


Hydrograph Report

Hyd. No. 2

WQv Calc Total Pre-Dev

Hydrograph type	= Combine	Peak discharge	= 2.283 cfs
Storm frequency	= 10 yrs	Time to peak	= 15 min
Time interval	= 1 min	Hyd. volume	= 2,397 cuft
Inflow hyds.	= 1	Contrib. drain. area	= 0.808 ac

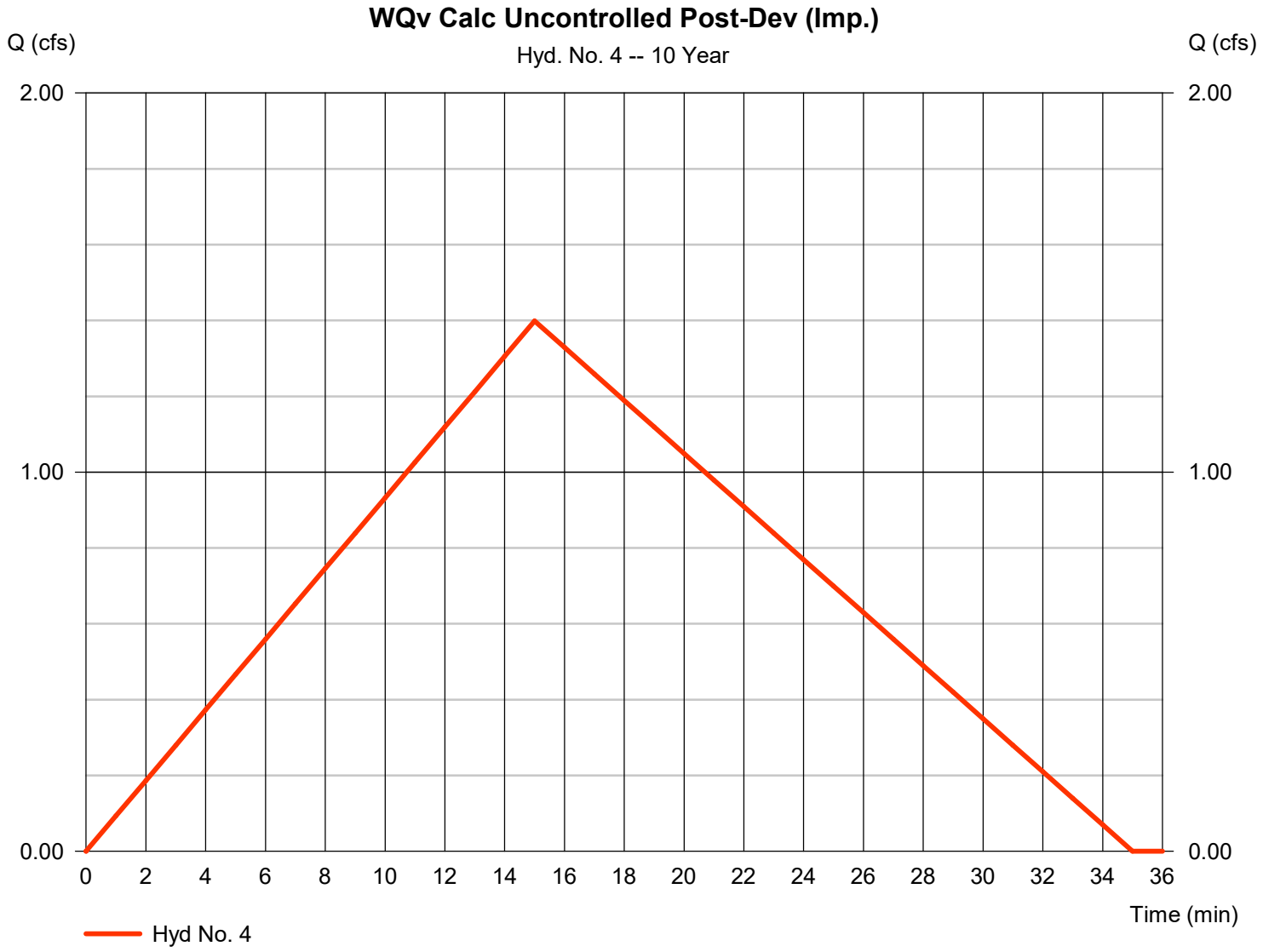


Hydrograph Report

Hyd. No. 4

WQv Calc Uncontrolled Post-Dev (Imp.)

Hydrograph type	=	Rational	Peak discharge	=	1.399 cfs
Storm frequency	=	10 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	1,469 cuft
Drainage area	=	0.220 ac	Runoff coeff.	=	0.99
Intensity	=	6.422 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

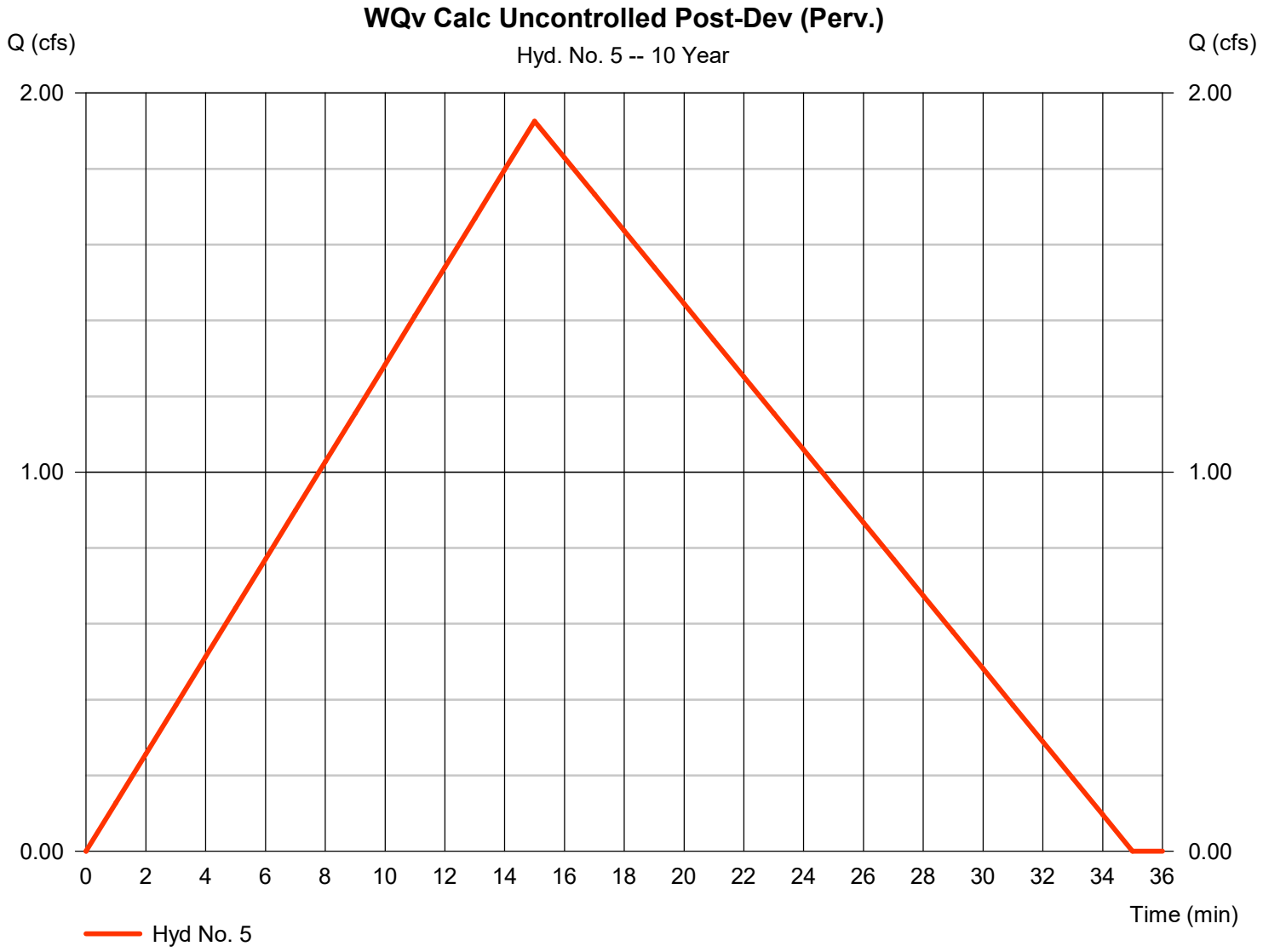


Hydrograph Report

Hyd. No. 5

WQv Calc Uncontrolled Post-Dev (Perv.)

Hydrograph type	=	Rational	Peak discharge	=	1.926 cfs
Storm frequency	=	10 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	2,022 cuft
Drainage area	=	0.588 ac	Runoff coeff.	=	0.51
Intensity	=	6.422 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

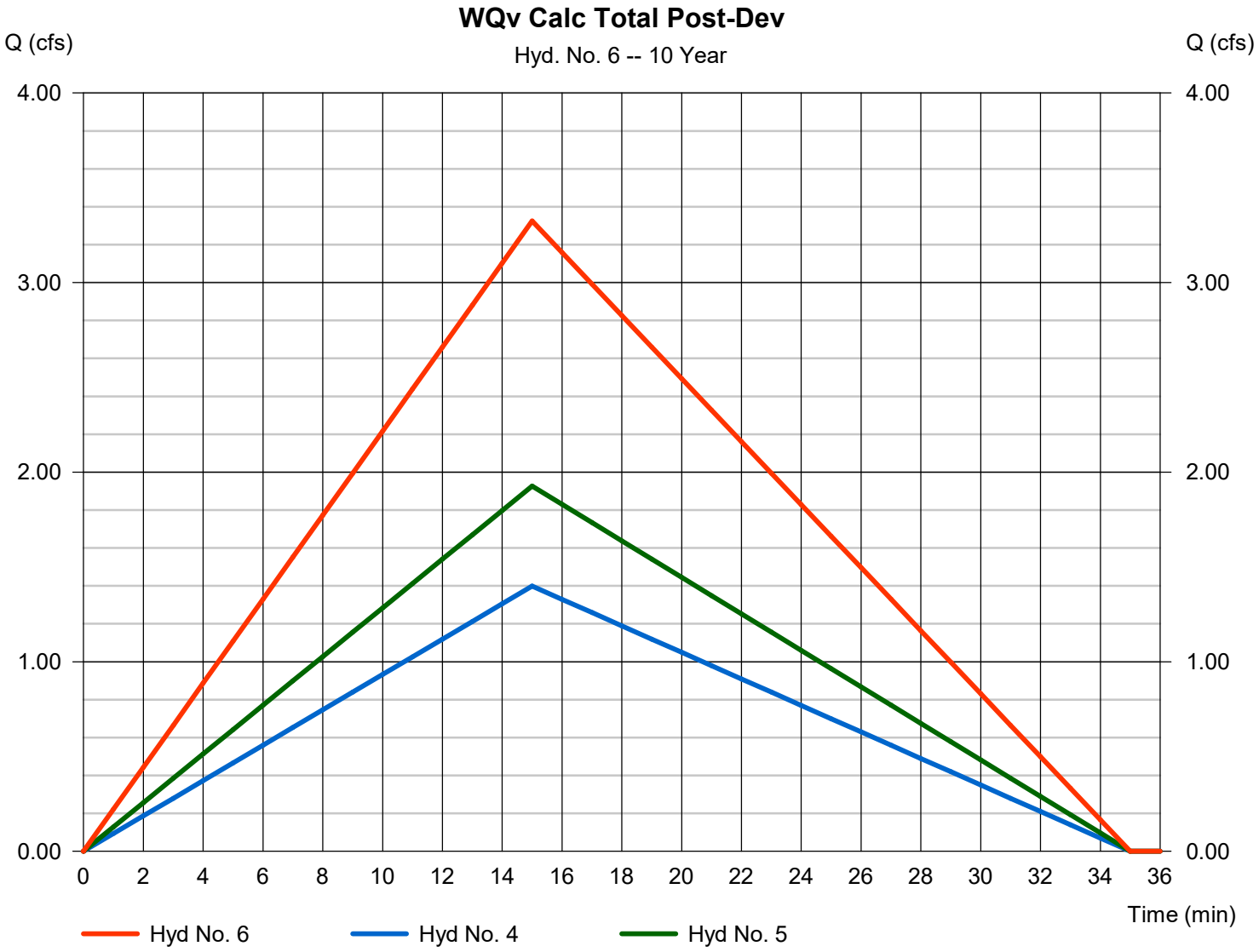


Hydrograph Report

Hyd. No. 6

WQv Calc Total Post-Dev

Hydrograph type	= Combine	Peak discharge	= 3.324 cfs
Storm frequency	= 10 yrs	Time to peak	= 15 min
Time interval	= 1 min	Hyd. volume	= 3,491 cuft
Inflow hyds.	= 4, 5	Contrib. drain. area	= 0.808 ac

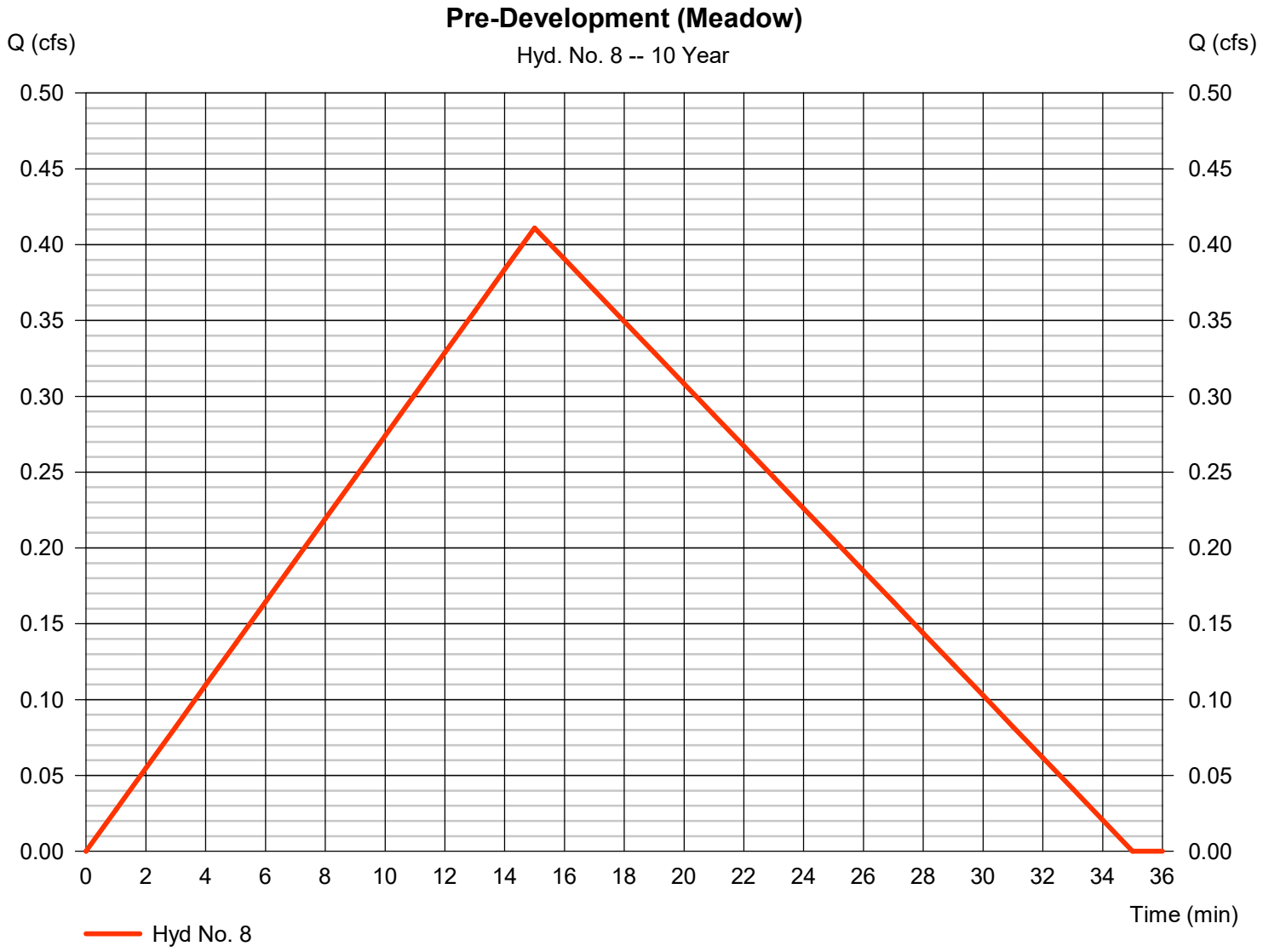


Hydrograph Report

Hyd. No. 8

Pre-Development (Meadow)

Hydrograph type	=	Rational	Peak discharge	=	0.411 cfs
Storm frequency	=	10 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	432 cuft
Drainage area	=	0.320 ac	Runoff coeff.	=	0.2
Intensity	=	6.422 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

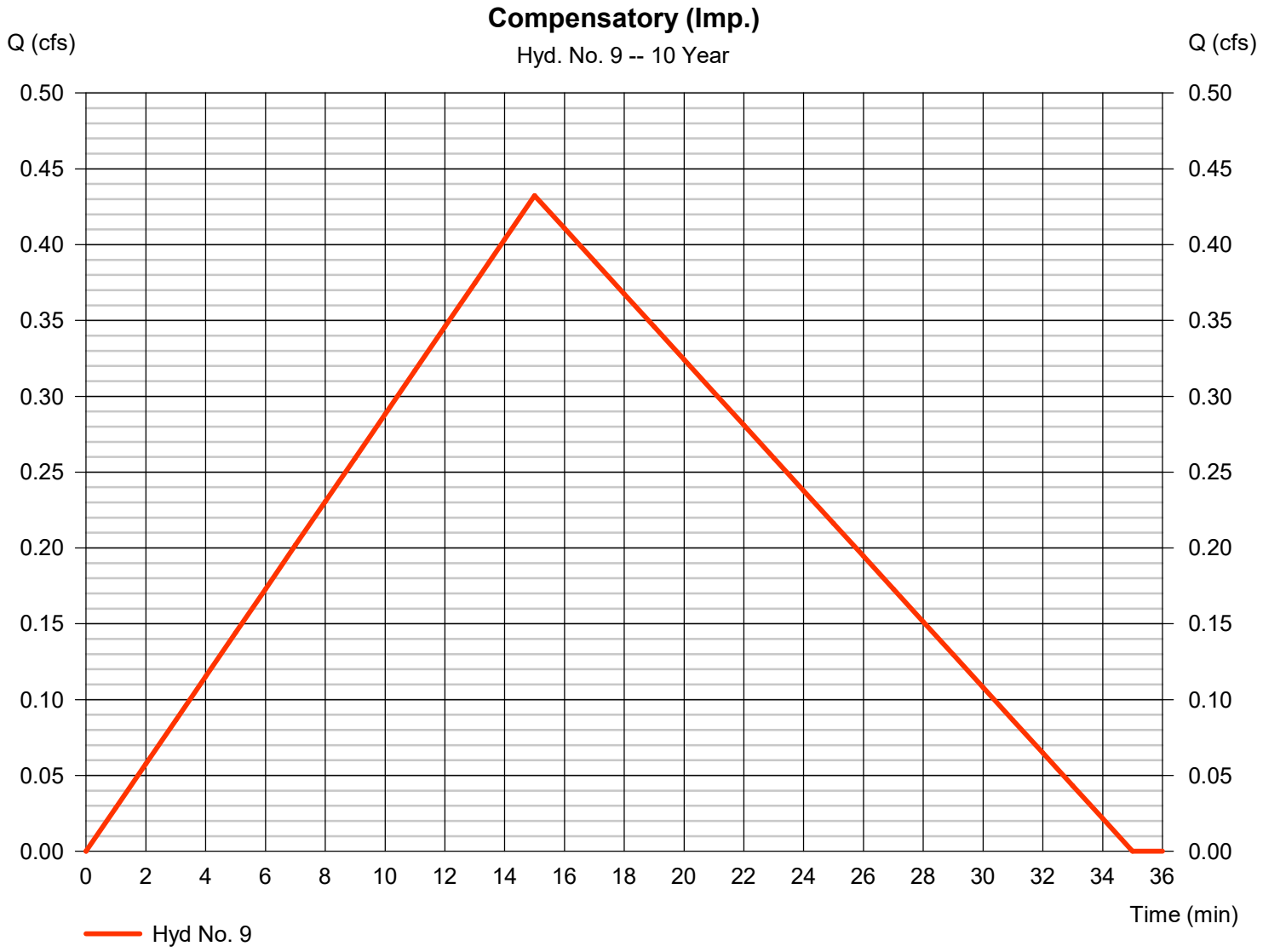


Hydrograph Report

Hyd. No. 9

Compensatory (Imp.)

Hydrograph type	=	Rational	Peak discharge	=	0.432 cfs
Storm frequency	=	10 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	454 cuft
Drainage area	=	0.068 ac	Runoff coeff.	=	0.99
Intensity	=	6.422 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

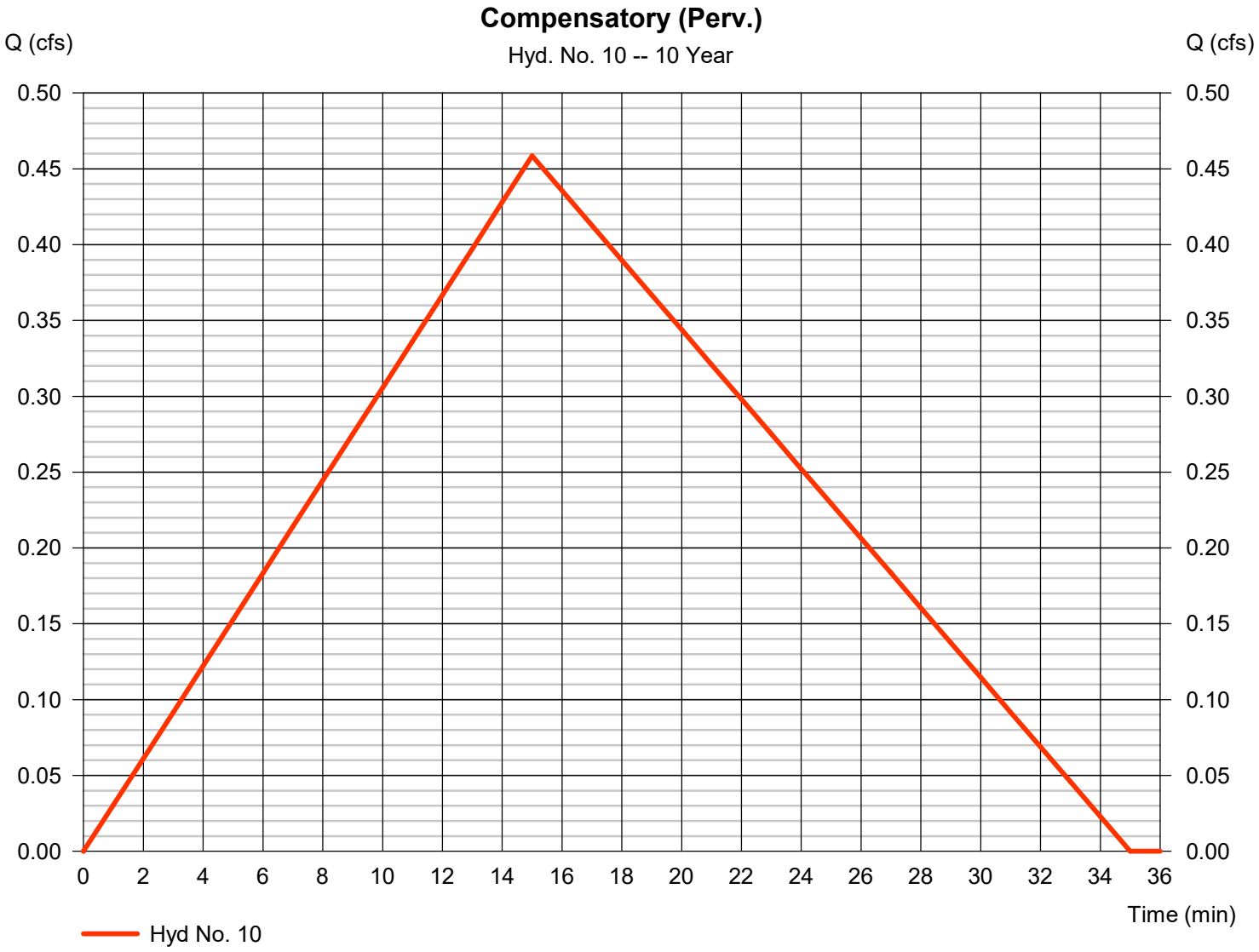


Hydrograph Report

Hyd. No. 10

Compensatory (Perv.)

Hydrograph type	=	Rational	Peak discharge	=	0.459 cfs
Storm frequency	=	10 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	481 cuft
Drainage area	=	0.140 ac	Runoff coeff.	=	0.51
Intensity	=	6.422 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

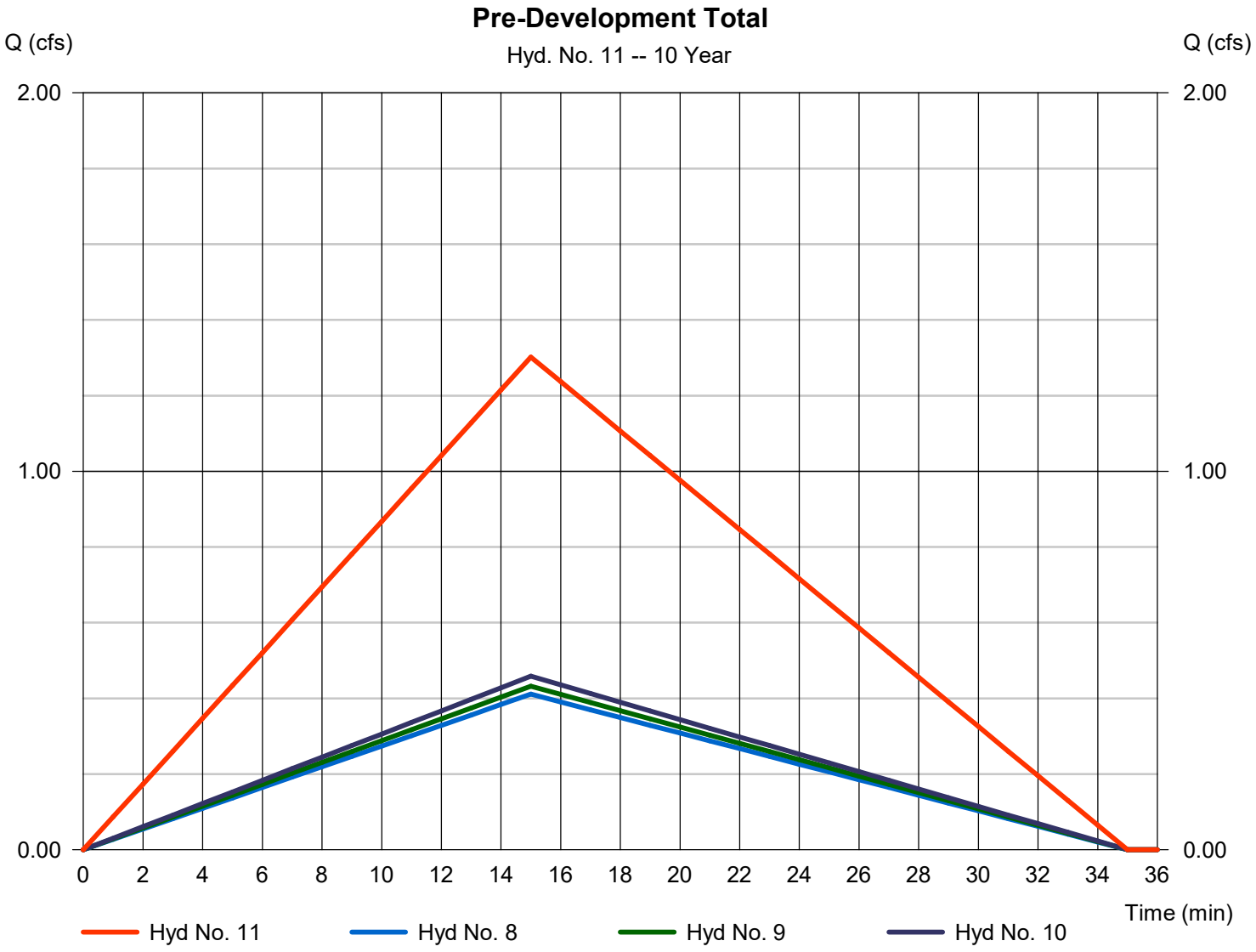


Hydrograph Report

Hyd. No. 11

Pre-Development Total

Hydrograph type	= Combine	Peak discharge	= 1.302 cfs
Storm frequency	= 10 yrs	Time to peak	= 15 min
Time interval	= 1 min	Hyd. volume	= 1,367 cuft
Inflow hyds.	= 8, 9, 10	Contrib. drain. area	= 0.528 ac

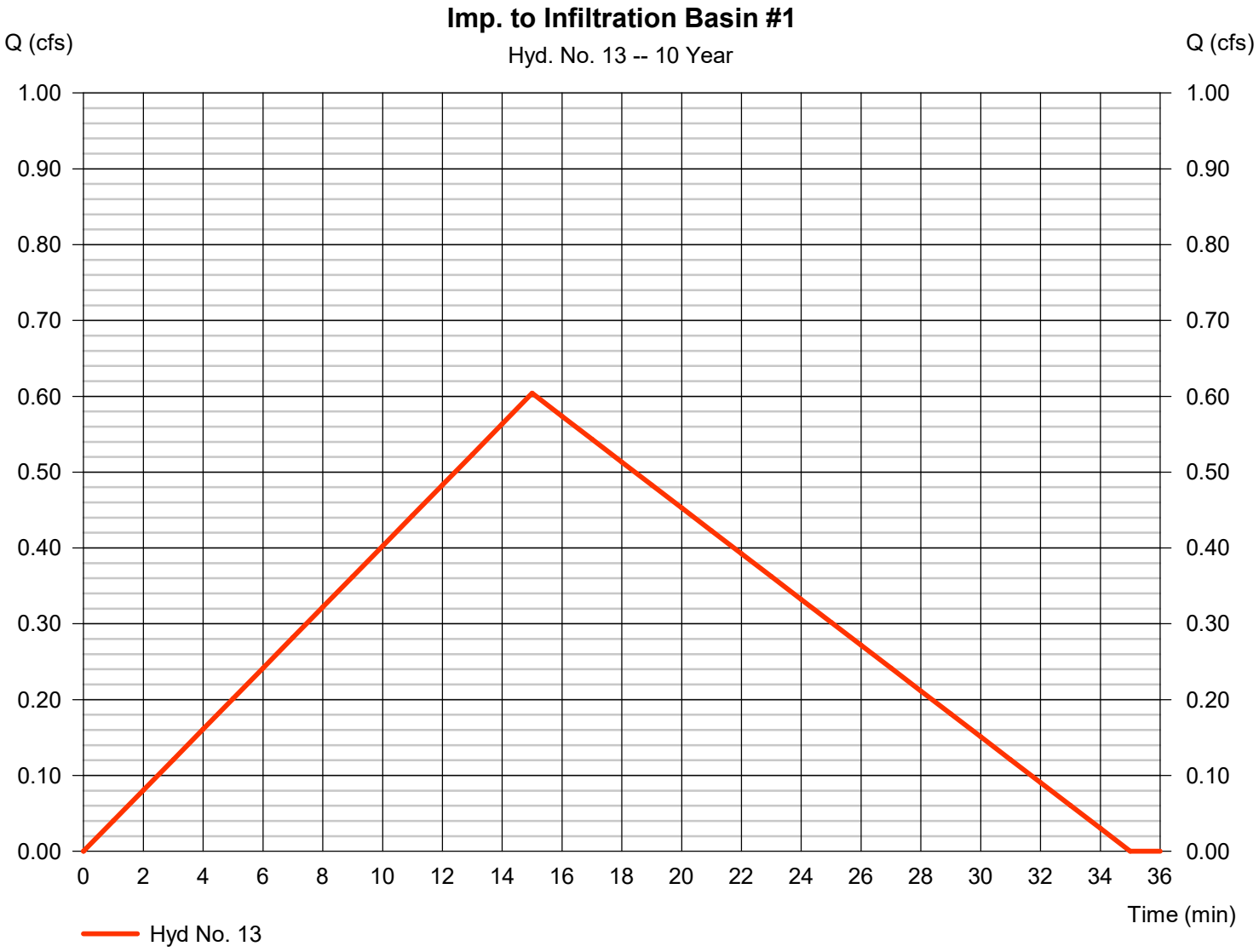


Hydrograph Report

Hyd. No. 13

Imp. to Infiltration Basin #1

Hydrograph type	=	Rational	Peak discharge	=	0.604 cfs
Storm frequency	=	10 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	634 cuft
Drainage area	=	0.095 ac	Runoff coeff.	=	0.99
Intensity	=	6.422 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

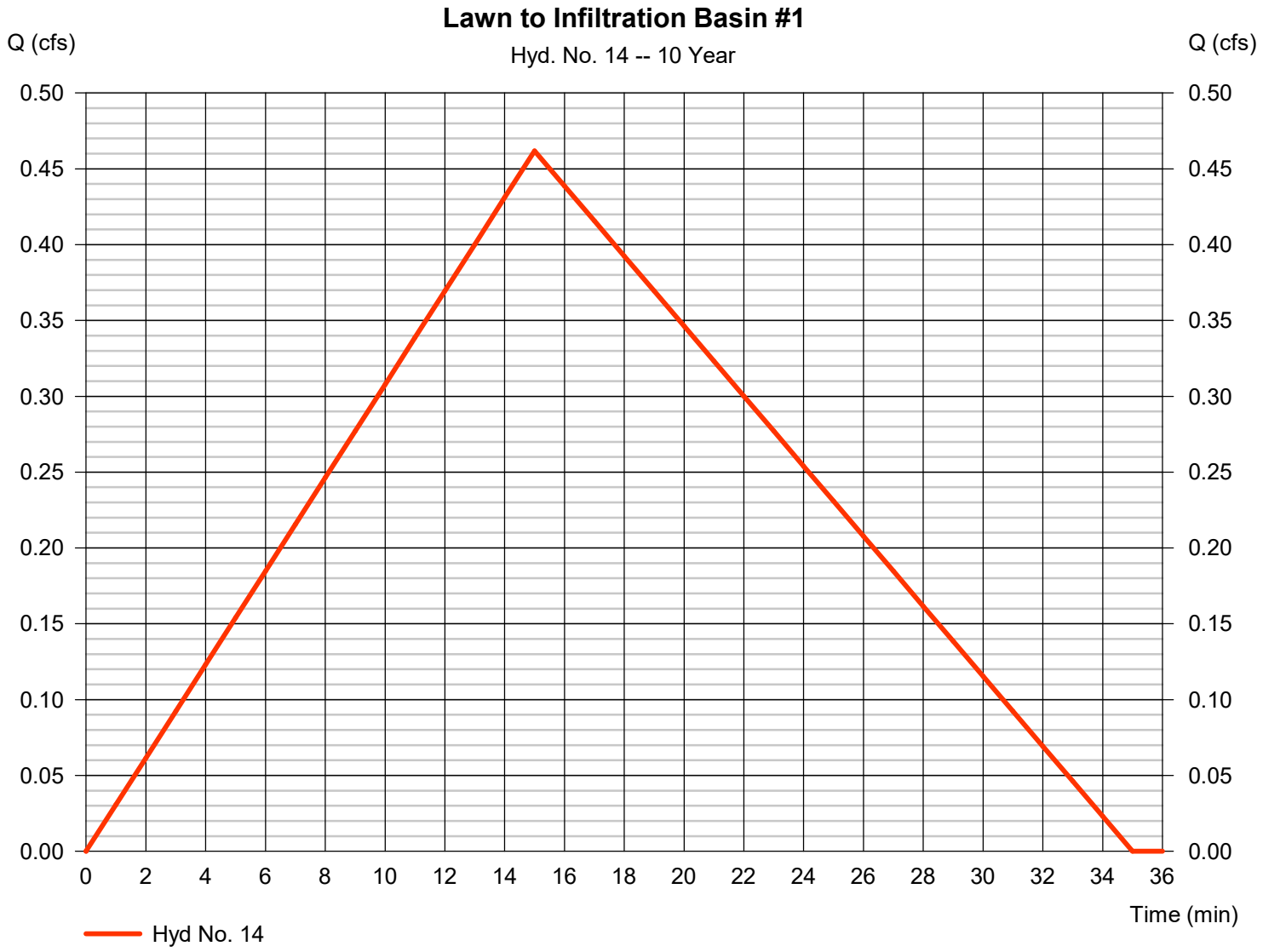


Hydrograph Report

Hyd. No. 14

Lawn to Infiltration Basin #1

Hydrograph type	=	Rational	Peak discharge	=	0.462 cfs
Storm frequency	=	10 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	485 cuft
Drainage area	=	0.141 ac	Runoff coeff.	=	0.51
Intensity	=	6.422 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

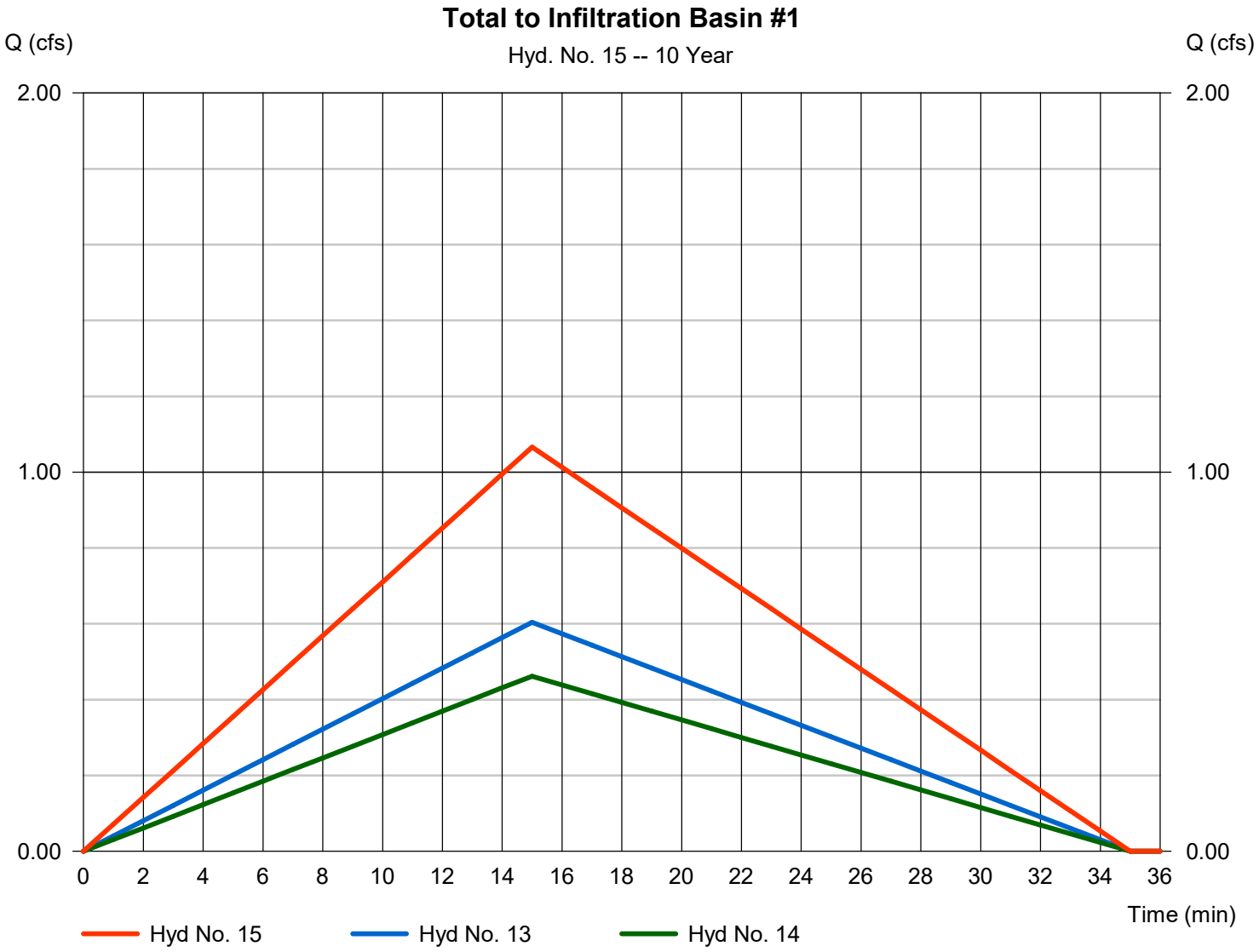


Hydrograph Report

Hyd. No. 15

Total to Infiltration Basin #1

Hydrograph type	=	Combine	Peak discharge	=	1.066 cfs
Storm frequency	=	10 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	1,119 cuft
Inflow hyds.	=	13, 14	Contrib. drain. area	=	0.236 ac



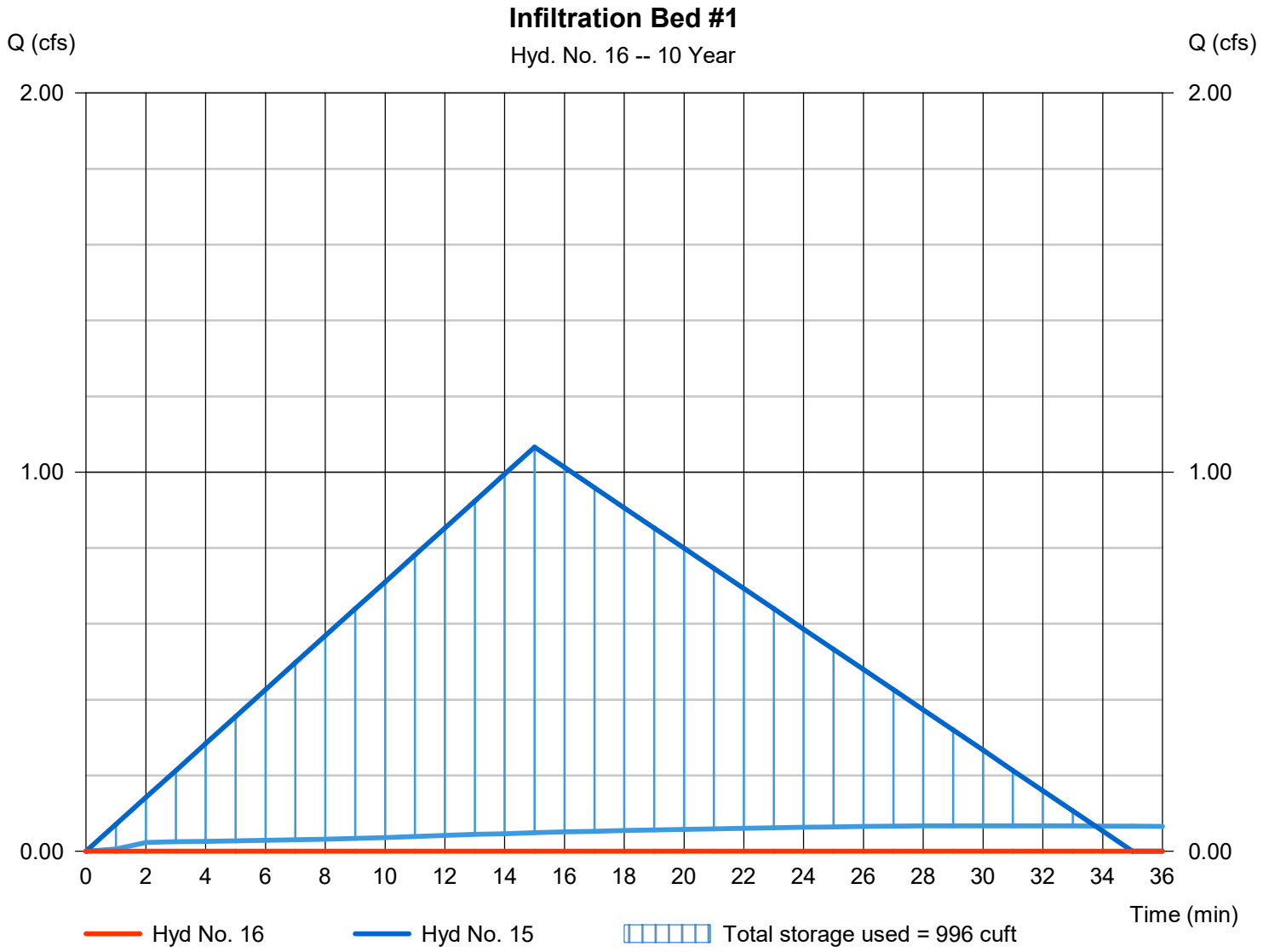
Hydrograph Report

Hyd. No. 16

Infiltration Bed #1

Hydrograph type	=	Reservoir	Peak discharge	=	0.000 cfs
Storm frequency	=	10 yrs	Time to peak	=	n/a
Time interval	=	1 min	Hyd. volume	=	0 cuft
Inflow hyd. No.	=	15 - Total to Infiltration Basin #1	Max. Elevation	=	372.65 ft
Reservoir name	=	Infiltration Bed #1	Max. Storage	=	996 cuft

Storage Indication method used. Exfiltration extracted from Outflow.

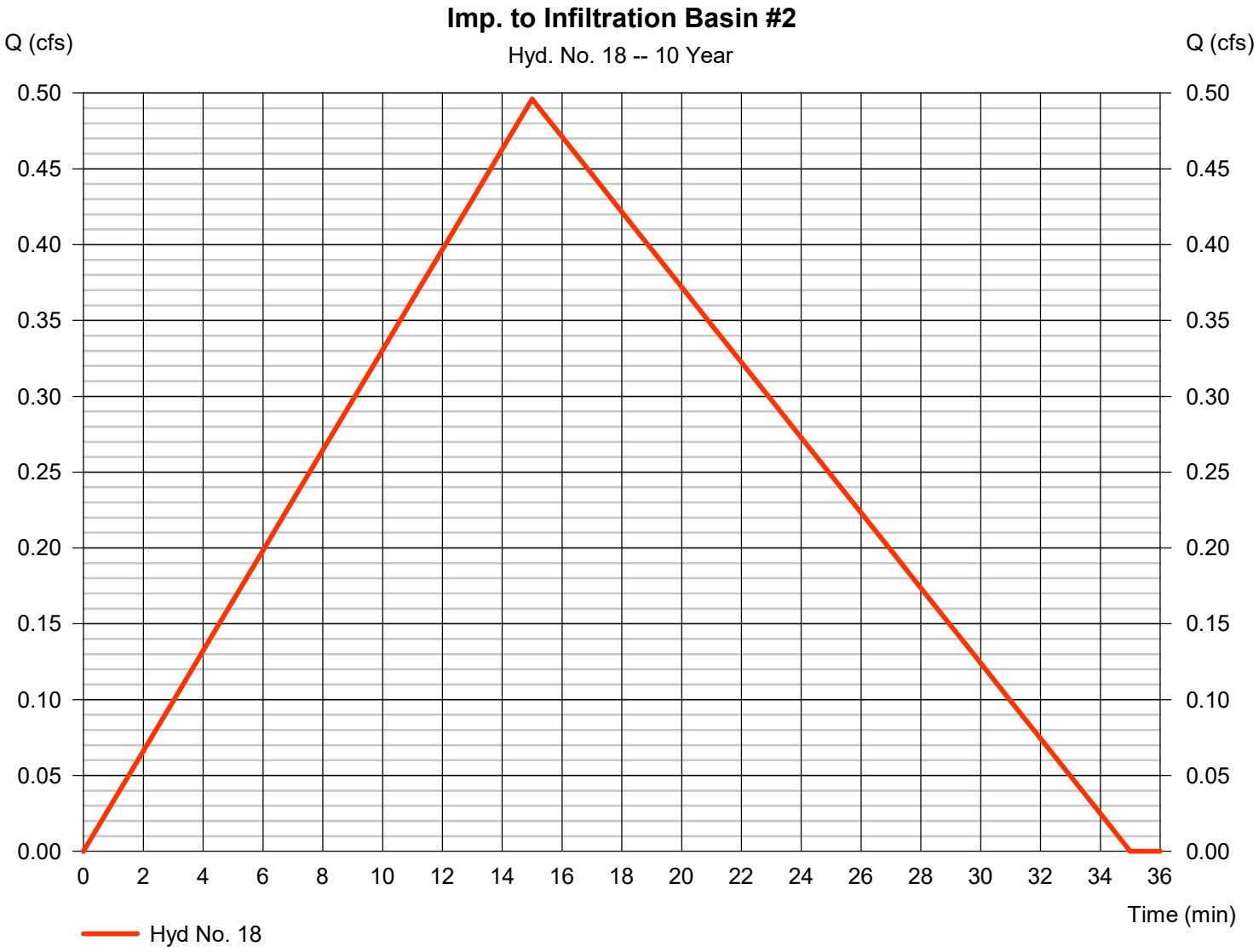


Hydrograph Report

Hyd. No. 18

Imp. to Infiltration Basin #2

Hydrograph type	=	Rational	Peak discharge	=	0.496 cfs
Storm frequency	=	10 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	521 cuft
Drainage area	=	0.078 ac	Runoff coeff.	=	0.99
Intensity	=	6.422 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

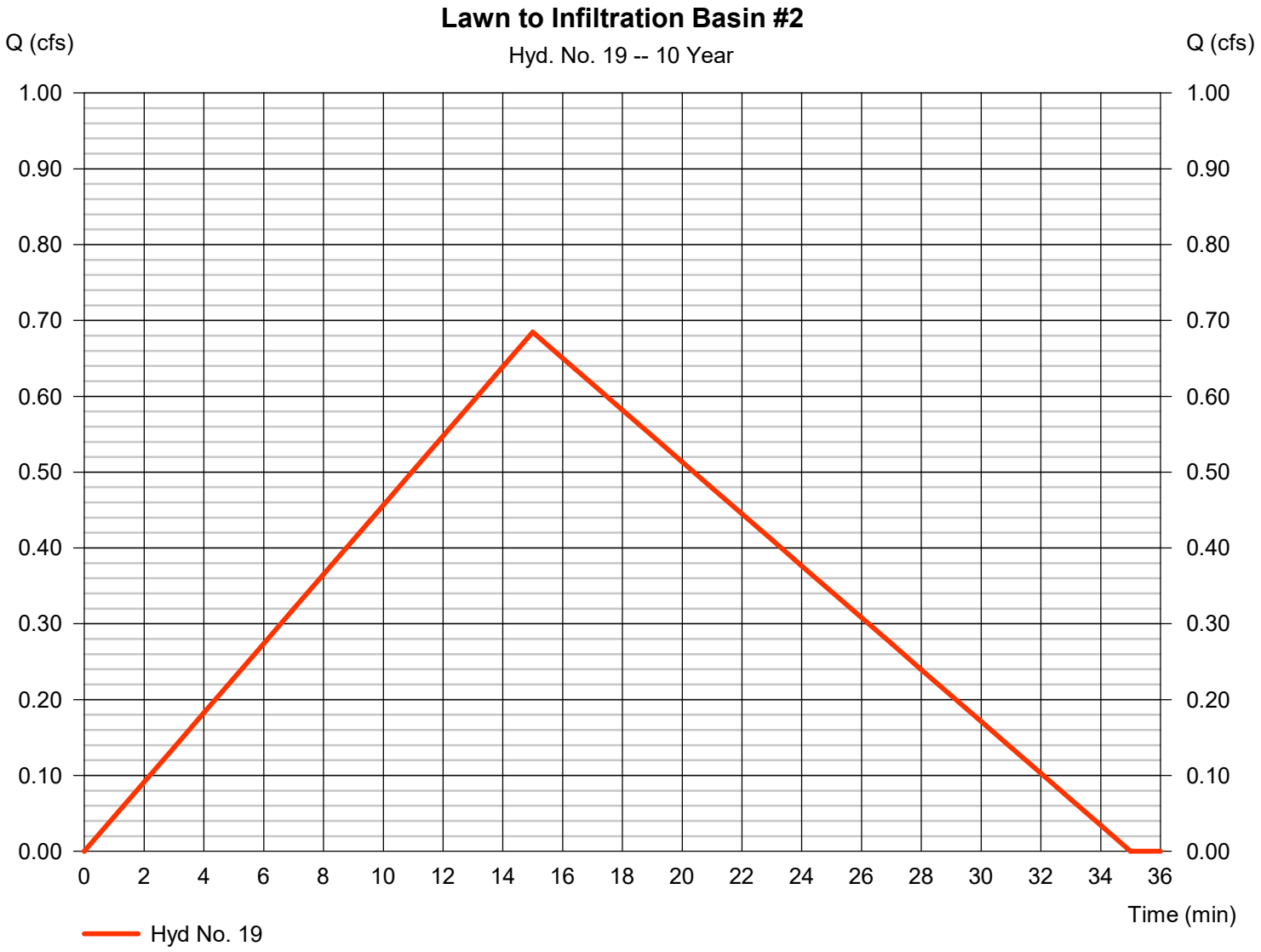


Hydrograph Report

Hyd. No. 19

Lawn to Infiltration Basin #2

Hydrograph type	=	Rational	Peak discharge	=	0.685 cfs
Storm frequency	=	10 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	719 cuft
Drainage area	=	0.209 ac	Runoff coeff.	=	0.51
Intensity	=	6.422 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

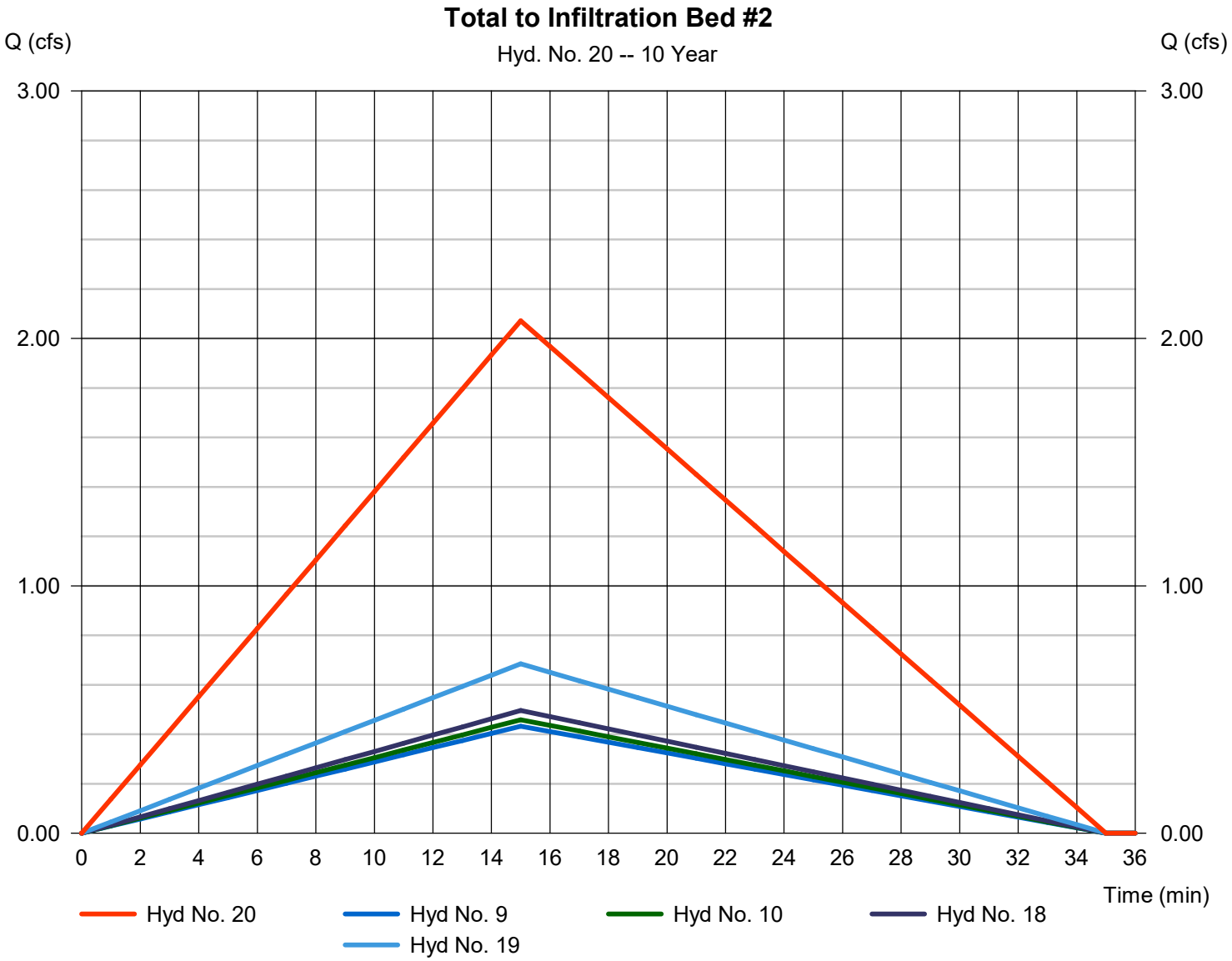


Hydrograph Report

Hyd. No. 20

Total to Infiltration Bed #2

Hydrograph type	= Combine	Peak discharge	= 2.071 cfs
Storm frequency	= 10 yrs	Time to peak	= 15 min
Time interval	= 1 min	Hyd. volume	= 2,175 cuft
Inflow hyds.	= 9, 10, 18, 19	Contrib. drain. area	= 0.495 ac



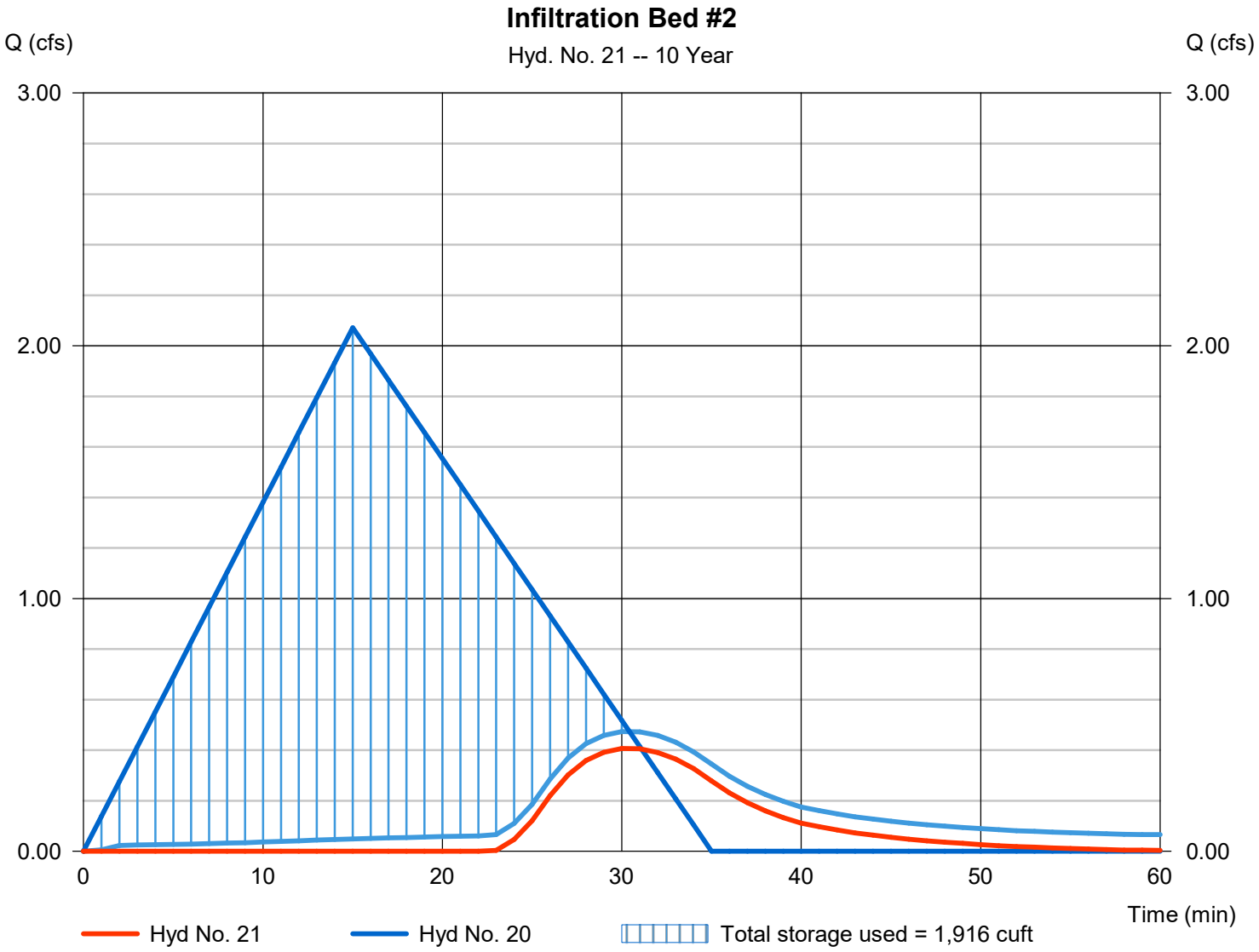
Hydrograph Report

Hyd. No. 21

Infiltration Bed #2

Hydrograph type	=	Reservoir	Peak discharge	=	0.407 cfs
Storm frequency	=	10 yrs	Time to peak	=	30 min
Time interval	=	1 min	Hyd. volume	=	307 cuft
Inflow hyd. No.	=	20 - Total to Infiltration Bed #2	Max. Elevation	=	376.43 ft
Reservoir name	=	Infiltration Bed #2	Max. Storage	=	1,916 cuft

Storage Indication method used. Exfiltration extracted from Outflow.

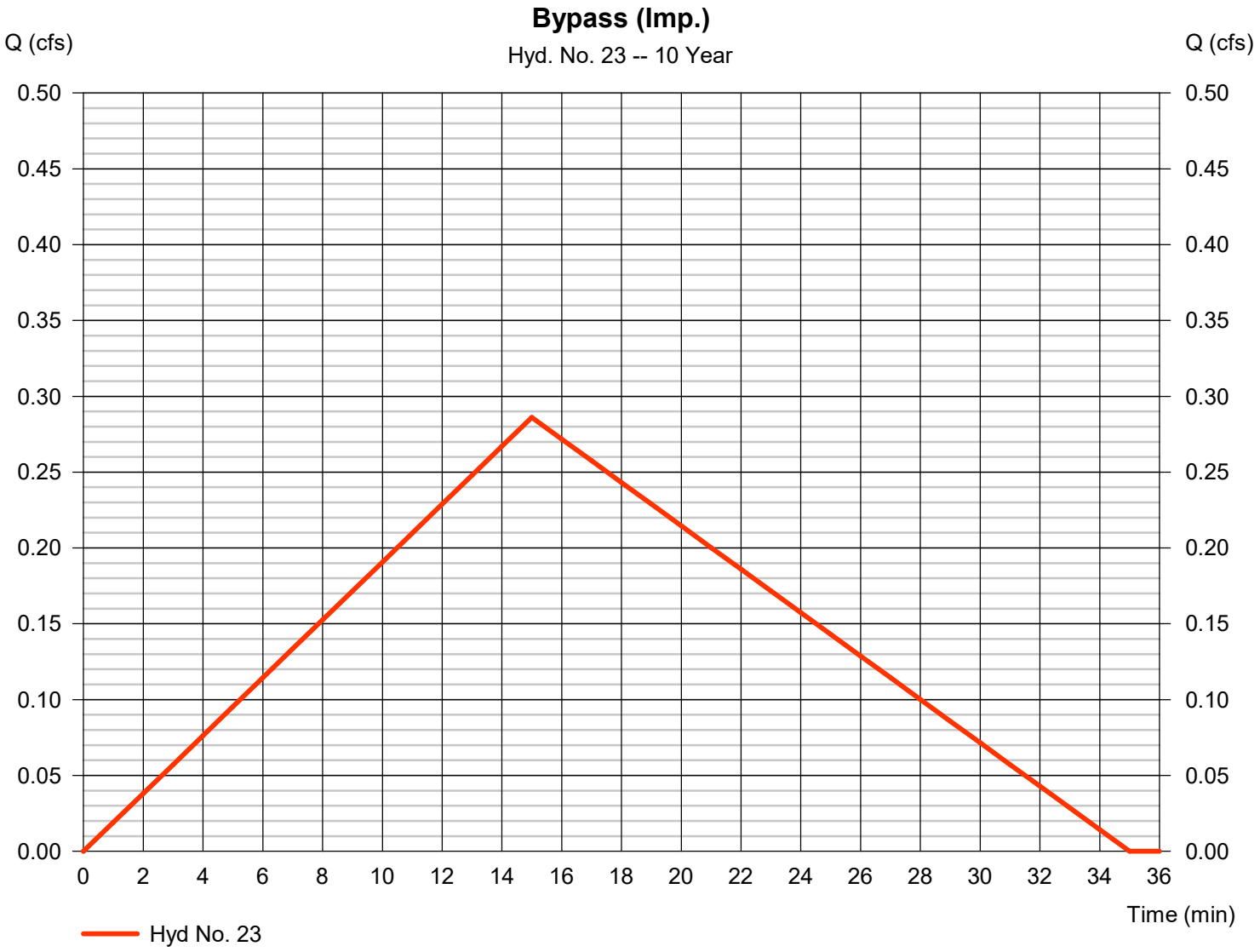


Hydrograph Report

Hyd. No. 23

Bypass (Imp.)

Hydrograph type	=	Rational	Peak discharge	=	0.286 cfs
Storm frequency	=	10 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	300 cuft
Drainage area	=	0.045 ac	Runoff coeff.	=	0.99
Intensity	=	6.422 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4



Hydrograph Report

Hyd. No. 24

Bypass (Perv)

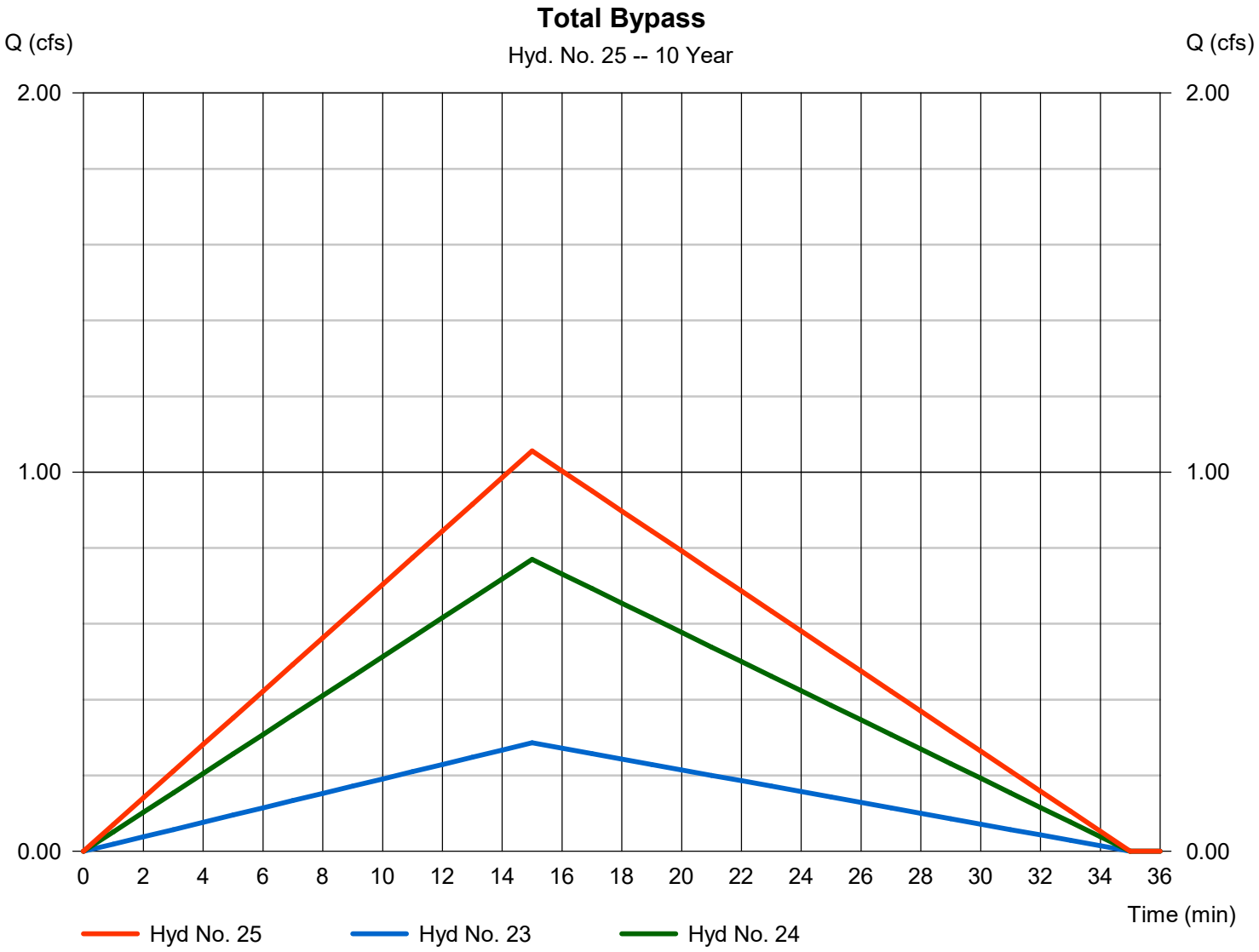
Hydrograph type	=	Rational	Peak discharge	=	0.770 cfs
Storm frequency	=	10 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	808 cuft
Drainage area	=	0.235 ac	Runoff coeff.	=	0.51
Intensity	=	6.422 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

Hydrograph Report

Hyd. No. 25

Total Bypass

Hydrograph type	= Combine	Peak discharge	= 1.056 cfs
Storm frequency	= 10 yrs	Time to peak	= 15 min
Time interval	= 1 min	Hyd. volume	= 1,109 cuft
Inflow hyds.	= 23, 24	Contrib. drain. area	= 0.280 ac

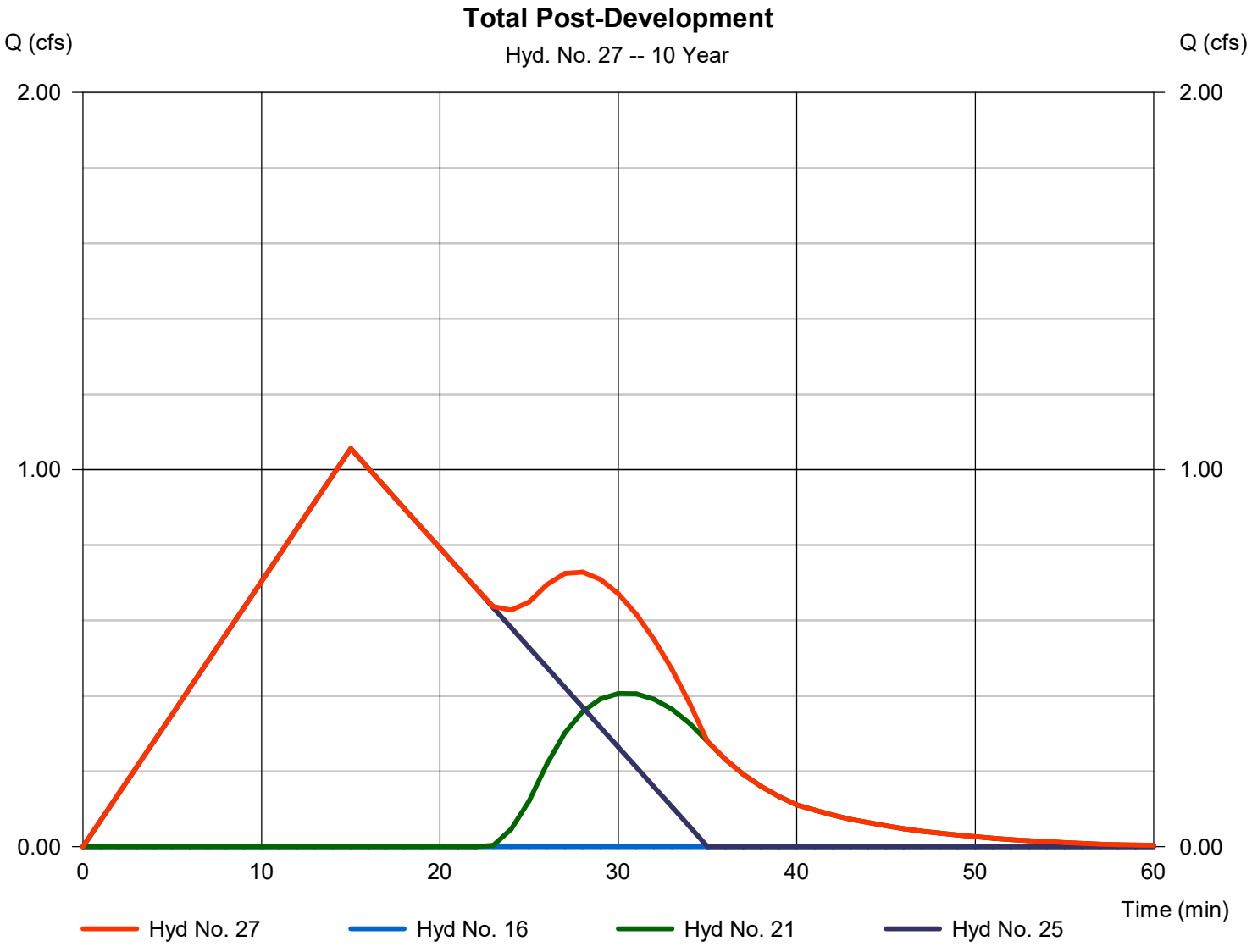


Hydrograph Report

Hyd. No. 27

Total Post-Development

Hydrograph type	=	Combine	Peak discharge	=	1.056 cfs
Storm frequency	=	10 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	1,416 cuft
Inflow hyds.	=	16, 21, 25	Contrib. drain. area	=	0.000 ac



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

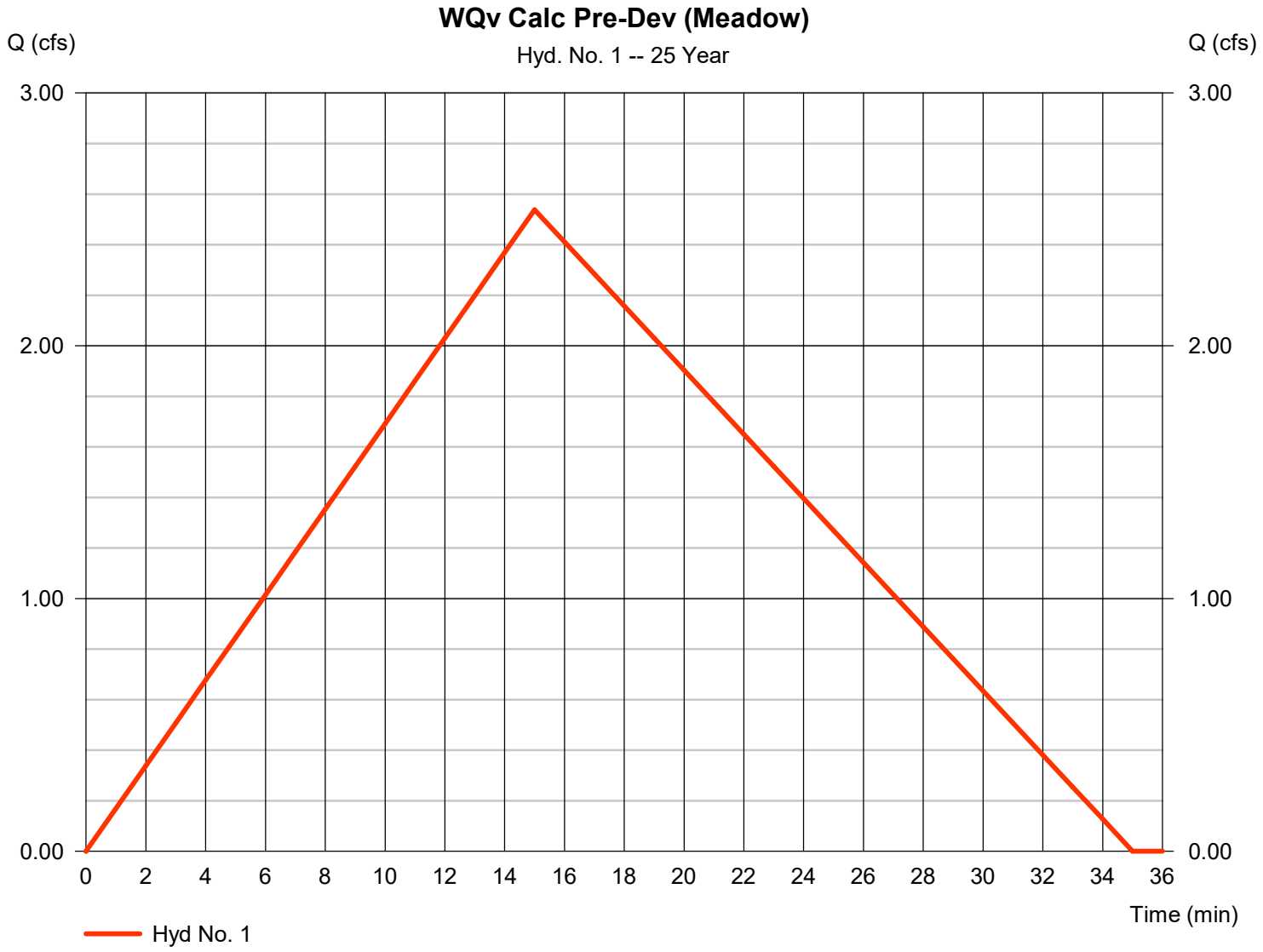
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	2.538	1	15	2,665	------	------	------	WQv Calc Pre-Dev (Meadow)
2	Combine	2.538	1	15	2,665	1	------	------	WQv Calc Total Pre-Dev
4	Rational	1.555	1	15	1,632	------	------	------	WQv Calc Uncontrolled Post-Dev (Im
5	Rational	2.141	1	15	2,248	------	------	------	WQv Calc Uncontrolled Post-Dev (Pe
6	Combine	3.695	1	15	3,880	4, 5	------	------	WQv Calc Total Post-Dev
8	Rational	0.457	1	15	480	------	------	------	Pre-Development (Meadow)
9	Rational	0.481	1	15	505	------	------	------	Compensatory (Imp.)
10	Rational	0.510	1	15	535	------	------	------	Compensatory (Perv.)
11	Combine	1.447	1	15	1,519	8, 9, 10	------	------	Pre-Development Total
13	Rational	0.671	1	15	705	------	------	------	Imp. to Infiltration Basin #1
14	Rational	0.513	1	15	539	------	------	------	Lawn to Infiltration Basin #1
15	Combine	1.185	1	15	1,244	13, 14	------	------	Total to Infiltration Basin #1
16	Reservoir	0.000	1	n/a	0	15	372.88	1,116	Infiltration Bed #1
18	Rational	0.551	1	15	579	------	------	------	Imp. to Infiltration Basin #2
19	Rational	0.761	1	15	799	------	------	------	Lawn to Infiltration Basin #2
20	Combine	2.302	1	15	2,417	9, 10, 18, 19	------	------	Total to Infiltration Bed #2
21	Reservoir	0.592	1	29	535	20	376.64	2,022	Infiltration Bed #2
23	Rational	0.318	1	15	334	------	------	------	Bypass (Imp.)
24	Rational	0.856	1	15	898	------	------	------	Bypass (Perv)
25	Combine	1.174	1	15	1,232	23, 24	------	------	Total Bypass
27	Combine	1.174	1	15	1,768	16, 21, 25,	------	------	Total Post-Development

Hydrograph Report

Hyd. No. 1

WQv Calc Pre-Dev (Meadow)

Hydrograph type	=	Rational	Peak discharge	=	2.538 cfs
Storm frequency	=	25 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	2,665 cuft
Drainage area	=	0.808 ac	Runoff coeff.	=	0.44
Intensity	=	7.138 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

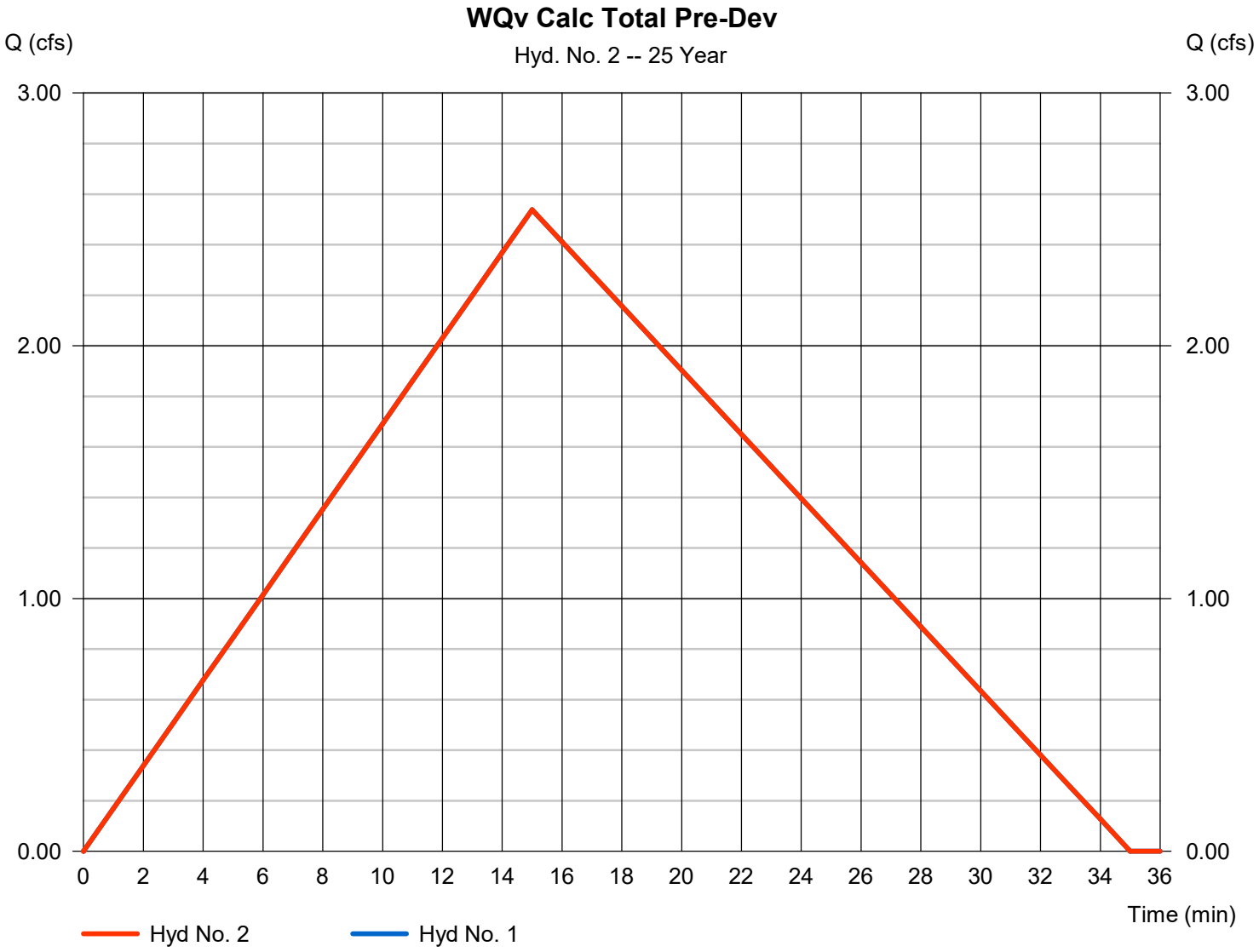


Hydrograph Report

Hyd. No. 2

WQv Calc Total Pre-Dev

Hydrograph type	= Combine	Peak discharge	= 2.538 cfs
Storm frequency	= 25 yrs	Time to peak	= 15 min
Time interval	= 1 min	Hyd. volume	= 2,665 cuft
Inflow hyds.	= 1	Contrib. drain. area	= 0.808 ac

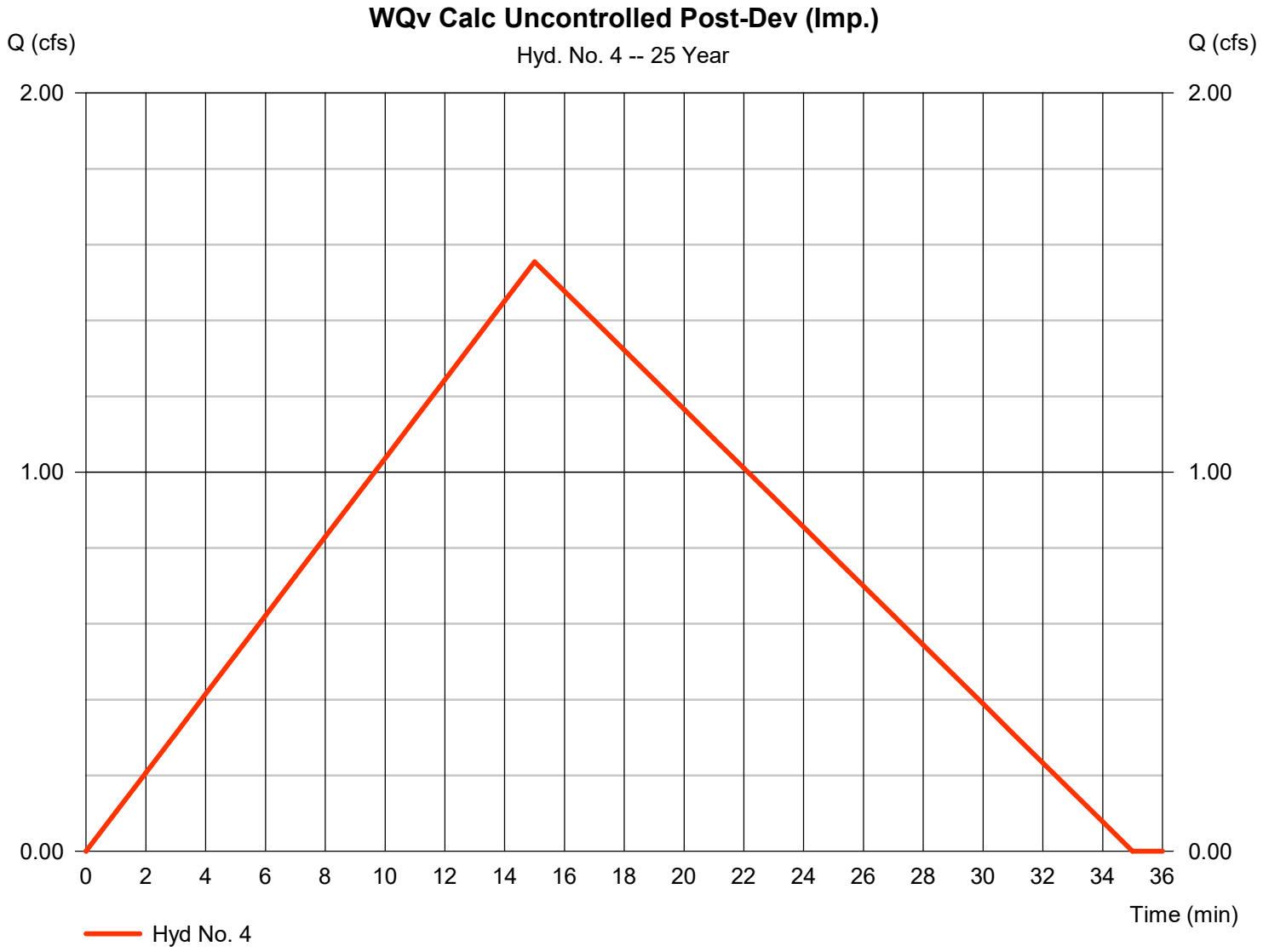


Hydrograph Report

Hyd. No. 4

WQv Calc Uncontrolled Post-Dev (Imp.)

Hydrograph type	=	Rational	Peak discharge	=	1.555 cfs
Storm frequency	=	25 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	1,632 cuft
Drainage area	=	0.220 ac	Runoff coeff.	=	0.99
Intensity	=	7.138 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

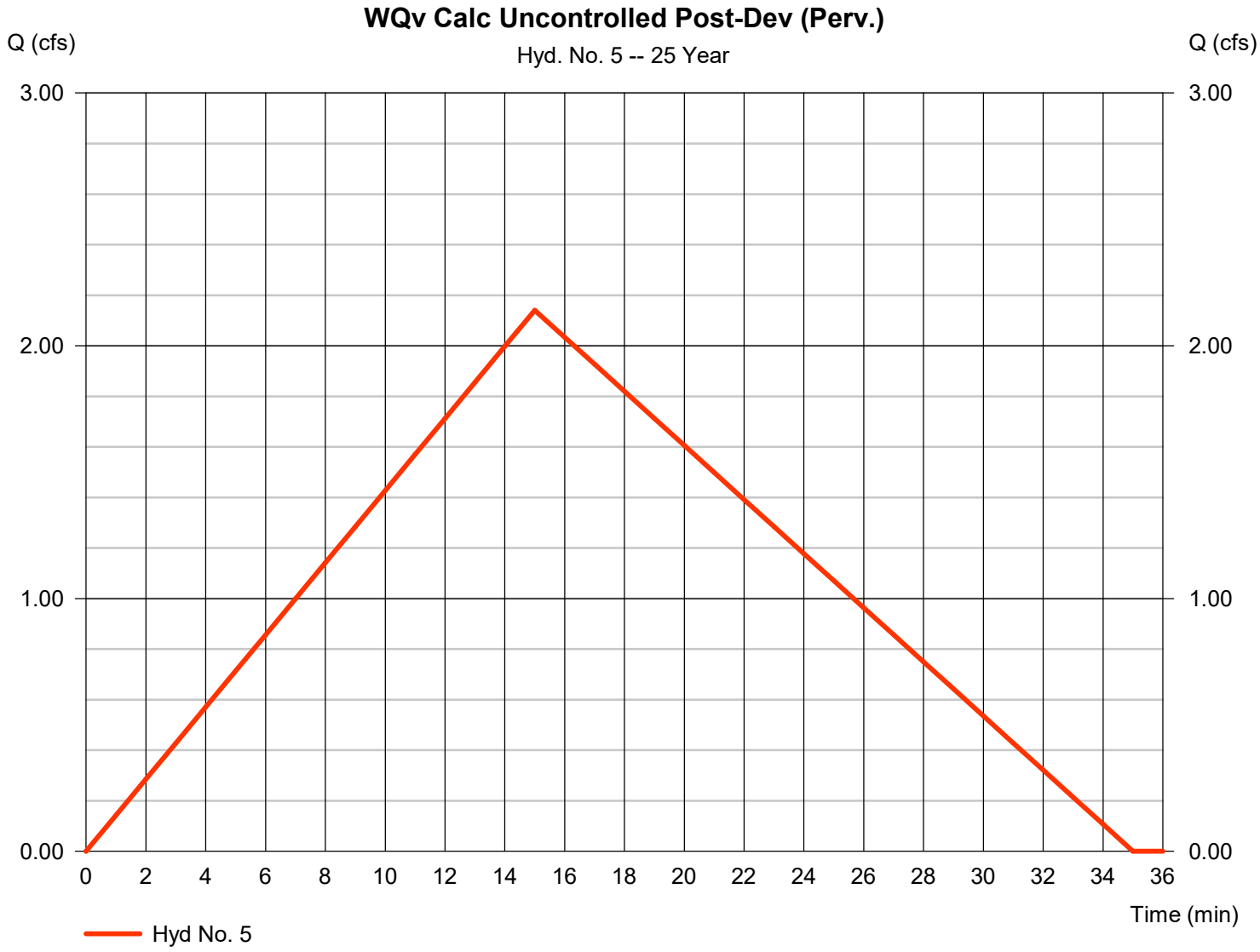


Hydrograph Report

Hyd. No. 5

WQv Calc Uncontrolled Post-Dev (Perv.)

Hydrograph type	=	Rational	Peak discharge	=	2.141 cfs
Storm frequency	=	25 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	2,248 cuft
Drainage area	=	0.588 ac	Runoff coeff.	=	0.51
Intensity	=	7.138 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

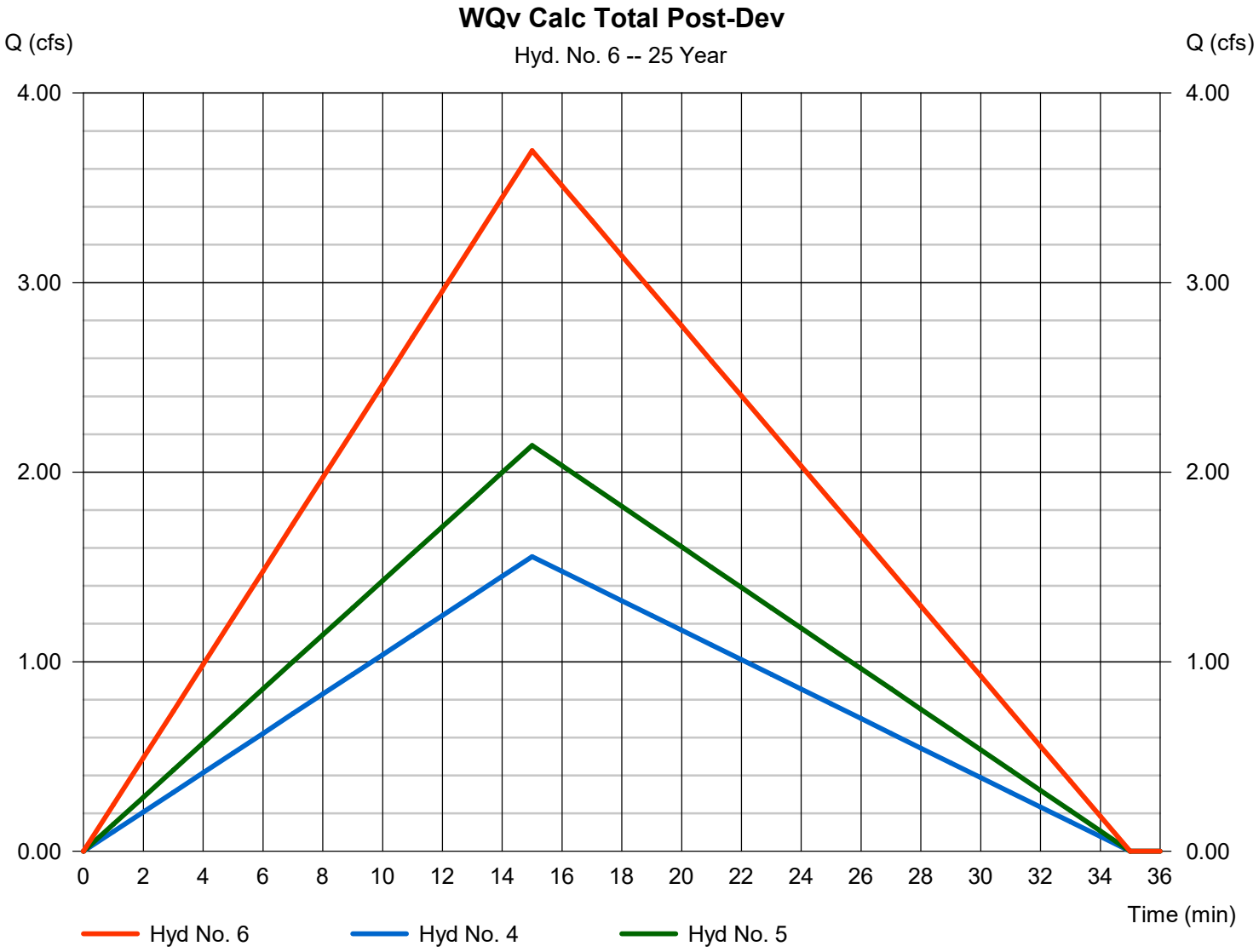


Hydrograph Report

Hyd. No. 6

WQv Calc Total Post-Dev

Hydrograph type	= Combine	Peak discharge	= 3.695 cfs
Storm frequency	= 25 yrs	Time to peak	= 15 min
Time interval	= 1 min	Hyd. volume	= 3,880 cuft
Inflow hyds.	= 4, 5	Contrib. drain. area	= 0.808 ac



Hydrograph Report

Hyd. No. 8

Pre-Development (Meadow)

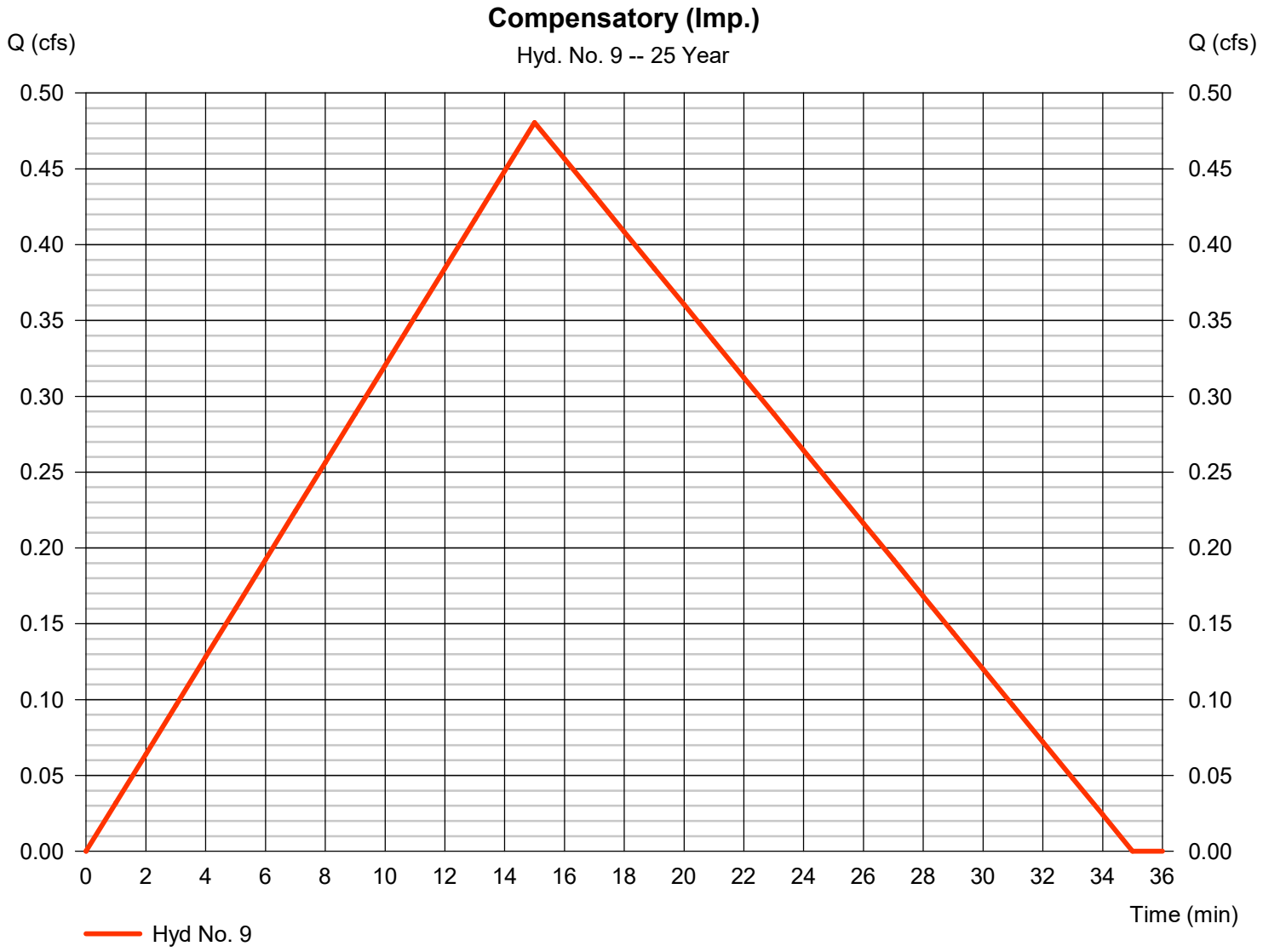
Hydrograph type	=	Rational	Peak discharge	=	0.457 cfs
Storm frequency	=	25 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	480 cuft
Drainage area	=	0.320 ac	Runoff coeff.	=	0.2
Intensity	=	7.138 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

Hydrograph Report

Hyd. No. 9

Compensatory (Imp.)

Hydrograph type	=	Rational	Peak discharge	=	0.481 cfs
Storm frequency	=	25 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	505 cuft
Drainage area	=	0.068 ac	Runoff coeff.	=	0.99
Intensity	=	7.138 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

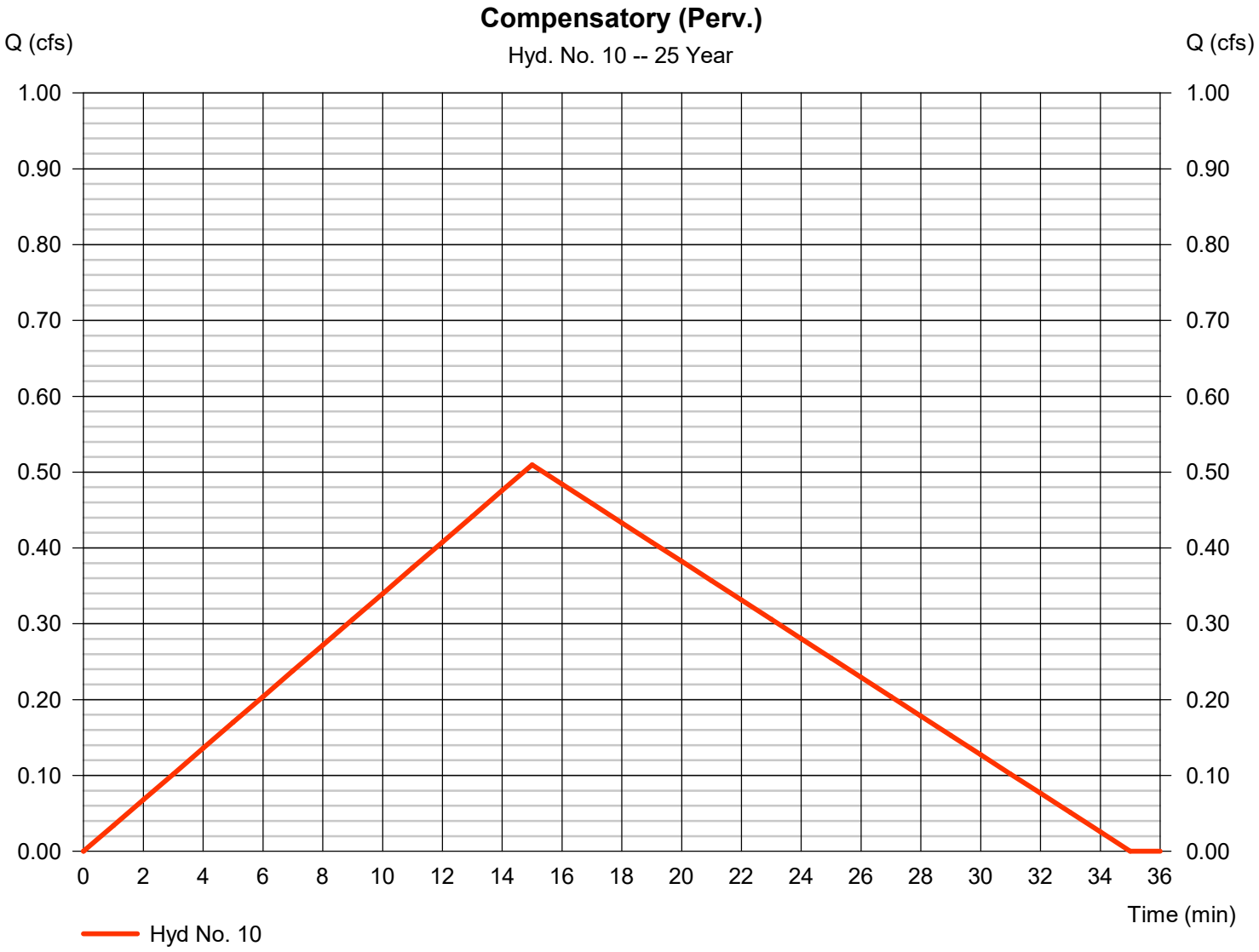


Hydrograph Report

Hyd. No. 10

Compensatory (Perv.)

Hydrograph type	=	Rational	Peak discharge	=	0.510 cfs
Storm frequency	=	25 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	535 cuft
Drainage area	=	0.140 ac	Runoff coeff.	=	0.51
Intensity	=	7.138 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

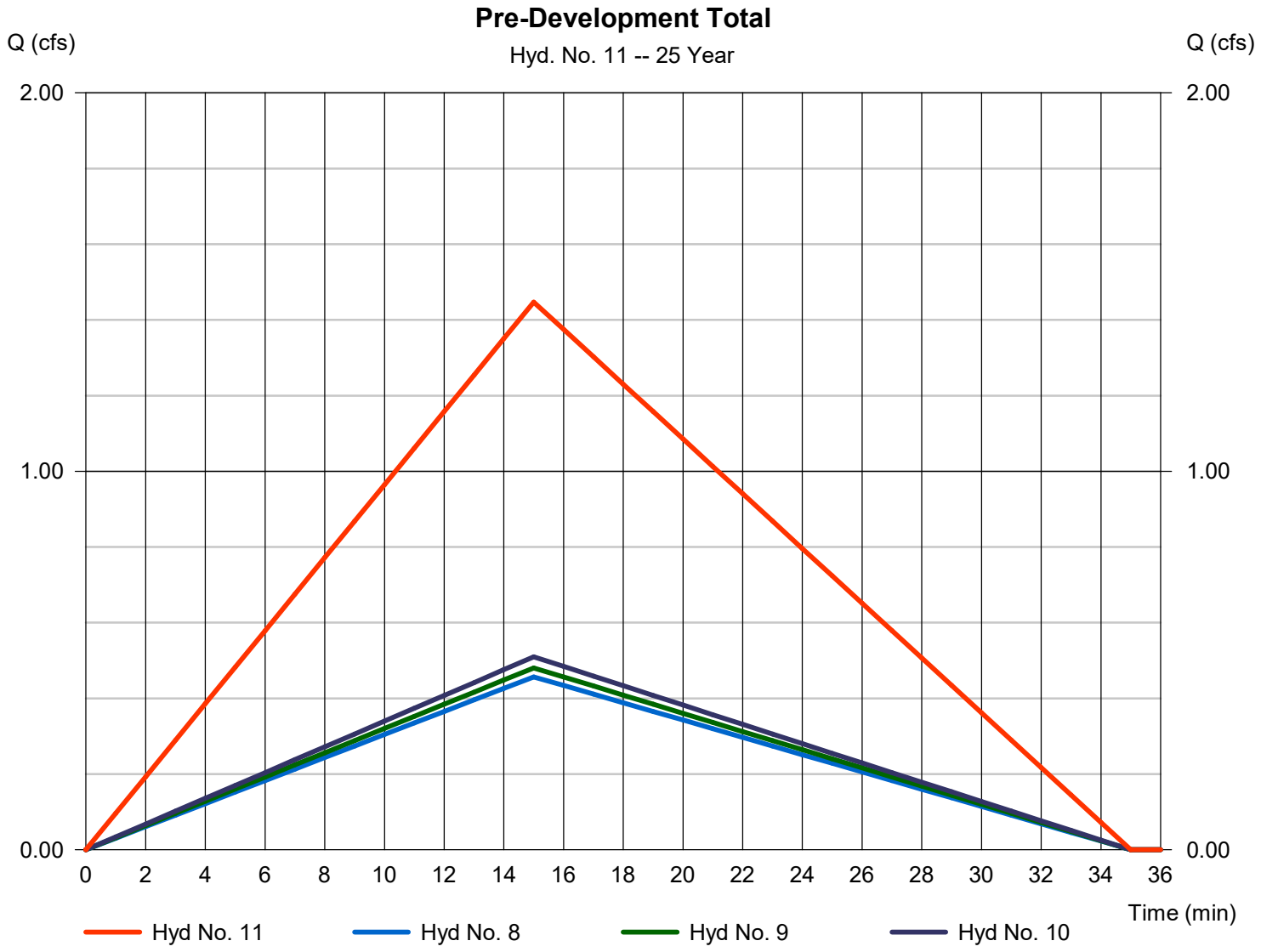


Hydrograph Report

Hyd. No. 11

Pre-Development Total

Hydrograph type	= Combine	Peak discharge	= 1.447 cfs
Storm frequency	= 25 yrs	Time to peak	= 15 min
Time interval	= 1 min	Hyd. volume	= 1,519 cuft
Inflow hyds.	= 8, 9, 10	Contrib. drain. area	= 0.528 ac

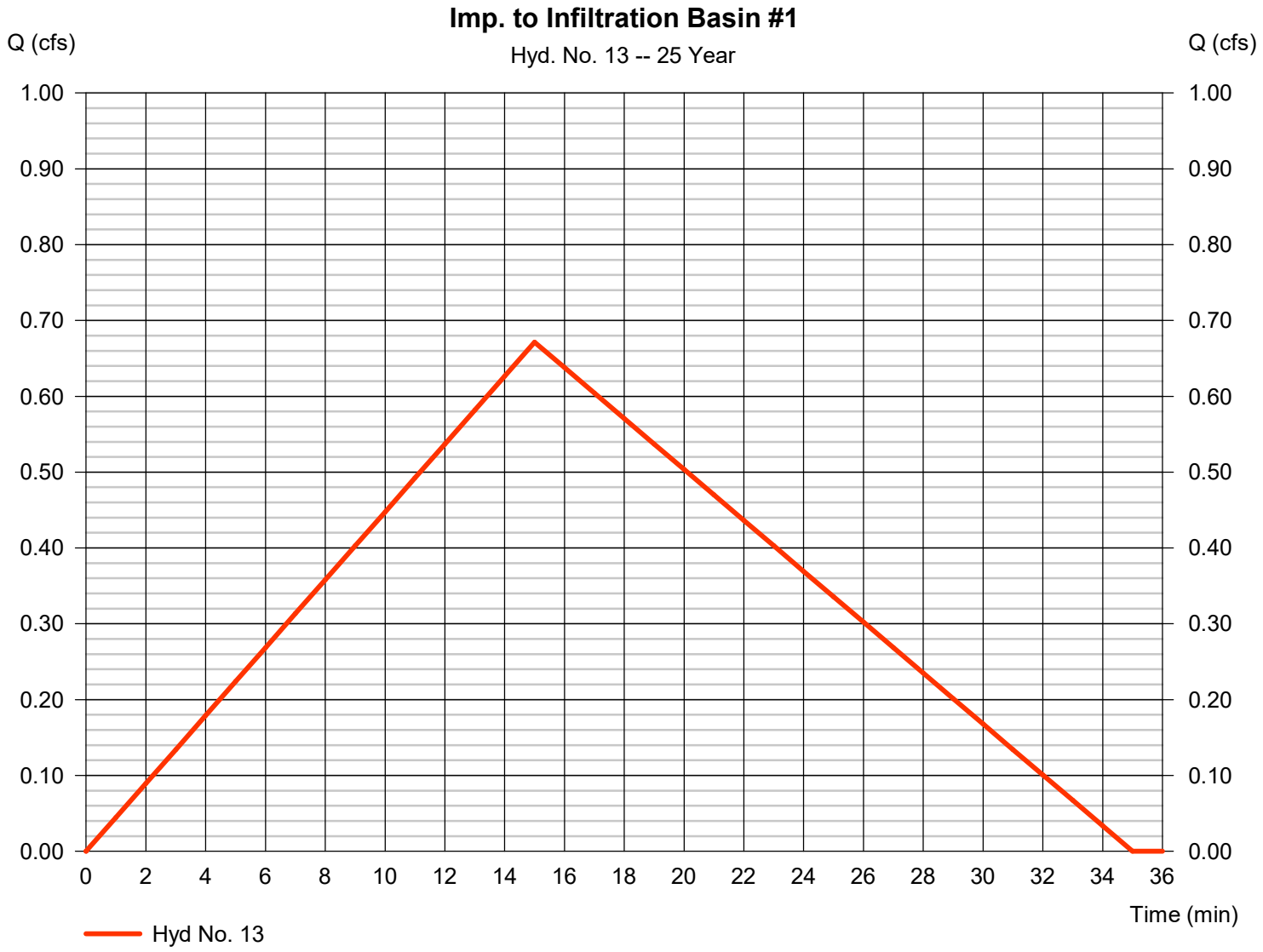


Hydrograph Report

Hyd. No. 13

Imp. to Infiltration Basin #1

Hydrograph type	=	Rational	Peak discharge	=	0.671 cfs
Storm frequency	=	25 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	705 cuft
Drainage area	=	0.095 ac	Runoff coeff.	=	0.99
Intensity	=	7.138 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4



Hydrograph Report

Hyd. No. 14

Lawn to Infiltration Basin #1

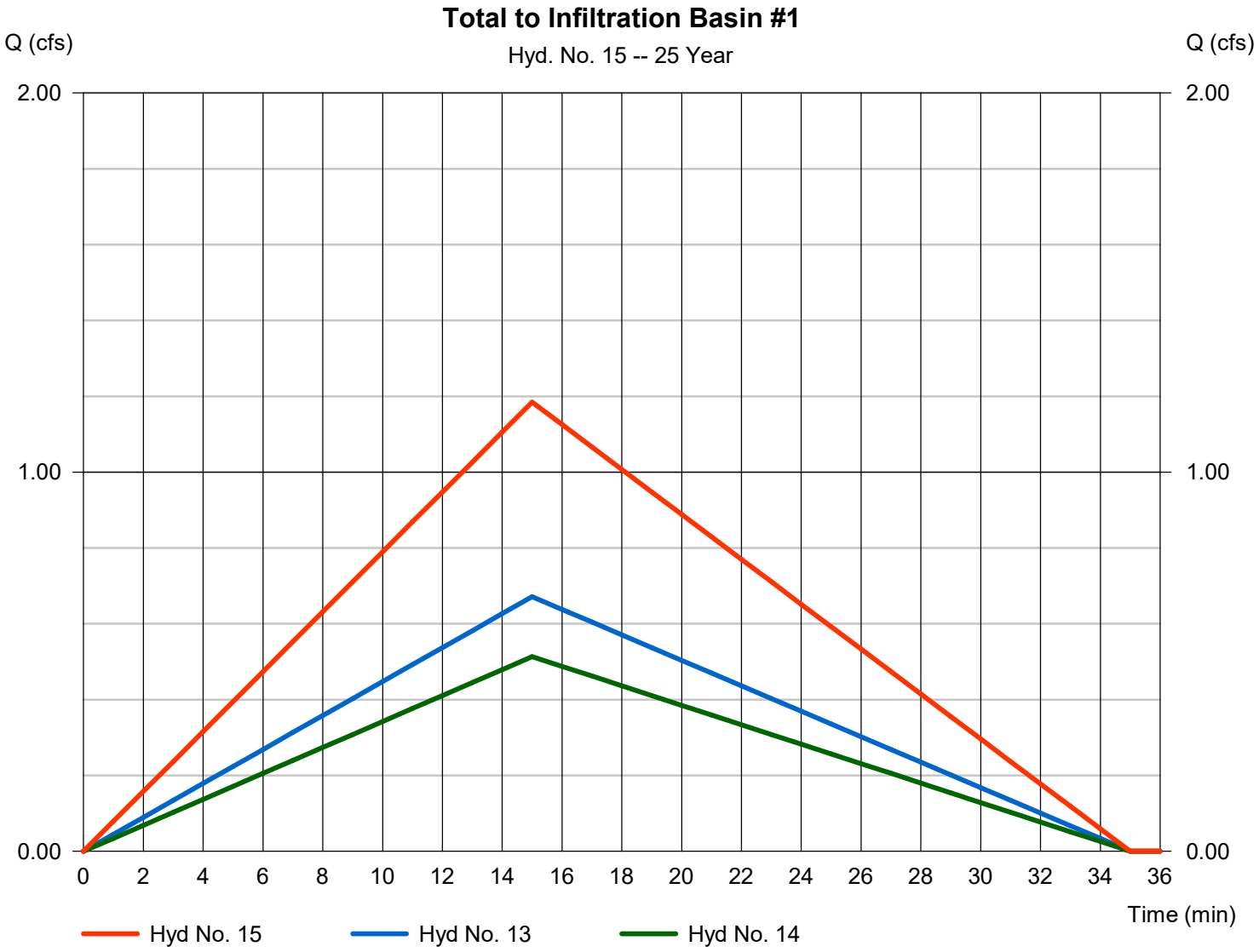
Hydrograph type	=	Rational	Peak discharge	=	0.513 cfs
Storm frequency	=	25 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	539 cuft
Drainage area	=	0.141 ac	Runoff coeff.	=	0.51
Intensity	=	7.138 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

Hydrograph Report

Hyd. No. 15

Total to Infiltration Basin #1

Hydrograph type	=	Combine	Peak discharge	=	1.185 cfs
Storm frequency	=	25 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	1,244 cuft
Inflow hyds.	=	13, 14	Contrib. drain. area	=	0.236 ac



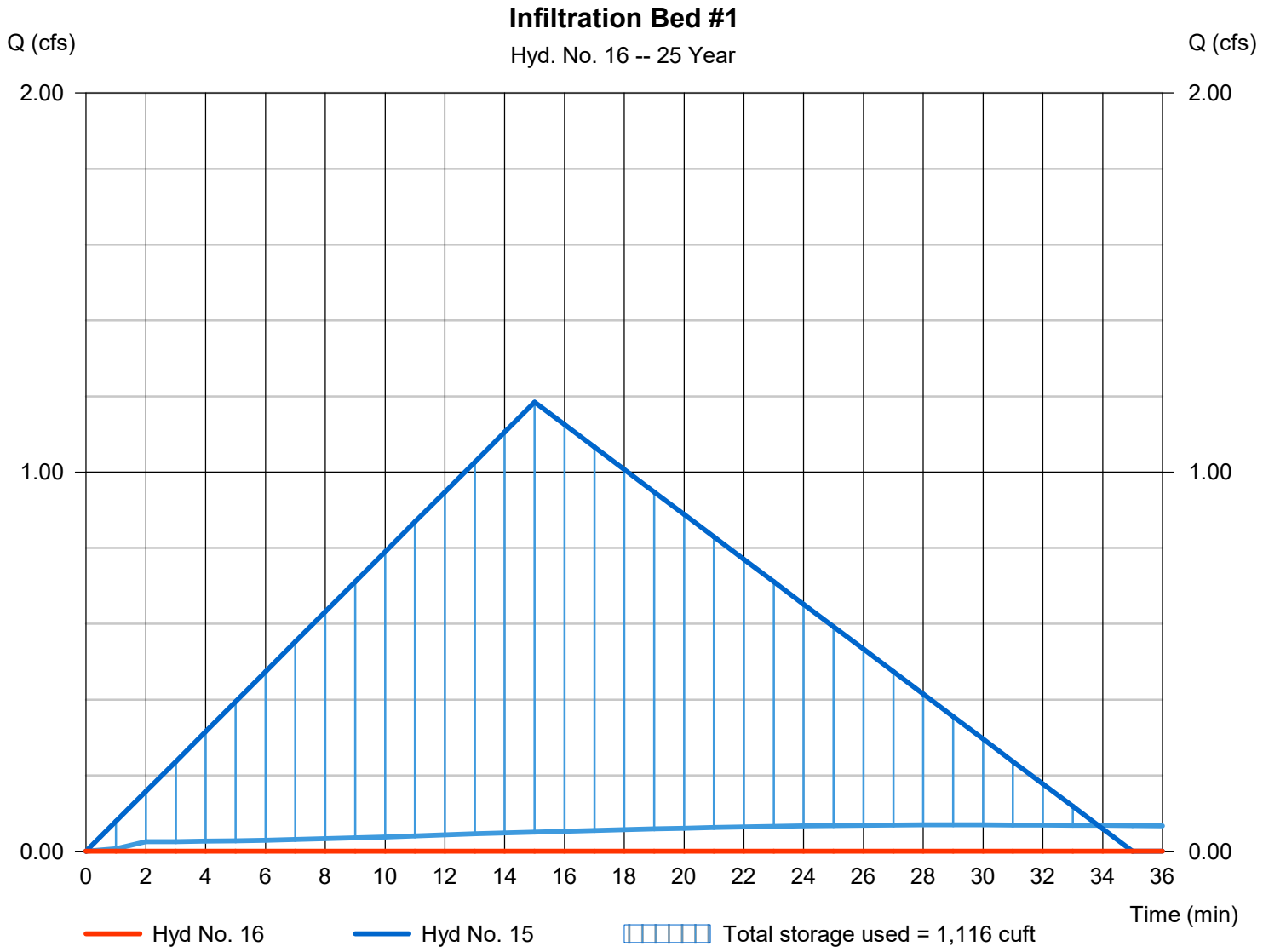
Hydrograph Report

Hyd. No. 16

Infiltration Bed #1

Hydrograph type	=	Reservoir	Peak discharge	=	0.000 cfs
Storm frequency	=	25 yrs	Time to peak	=	n/a
Time interval	=	1 min	Hyd. volume	=	0 cuft
Inflow hyd. No.	=	15 - Total to Infiltration Basin #1	Max. Elevation	=	372.88 ft
Reservoir name	=	Infiltration Bed #1	Max. Storage	=	1,116 cuft

Storage Indication method used. Exfiltration extracted from Outflow.

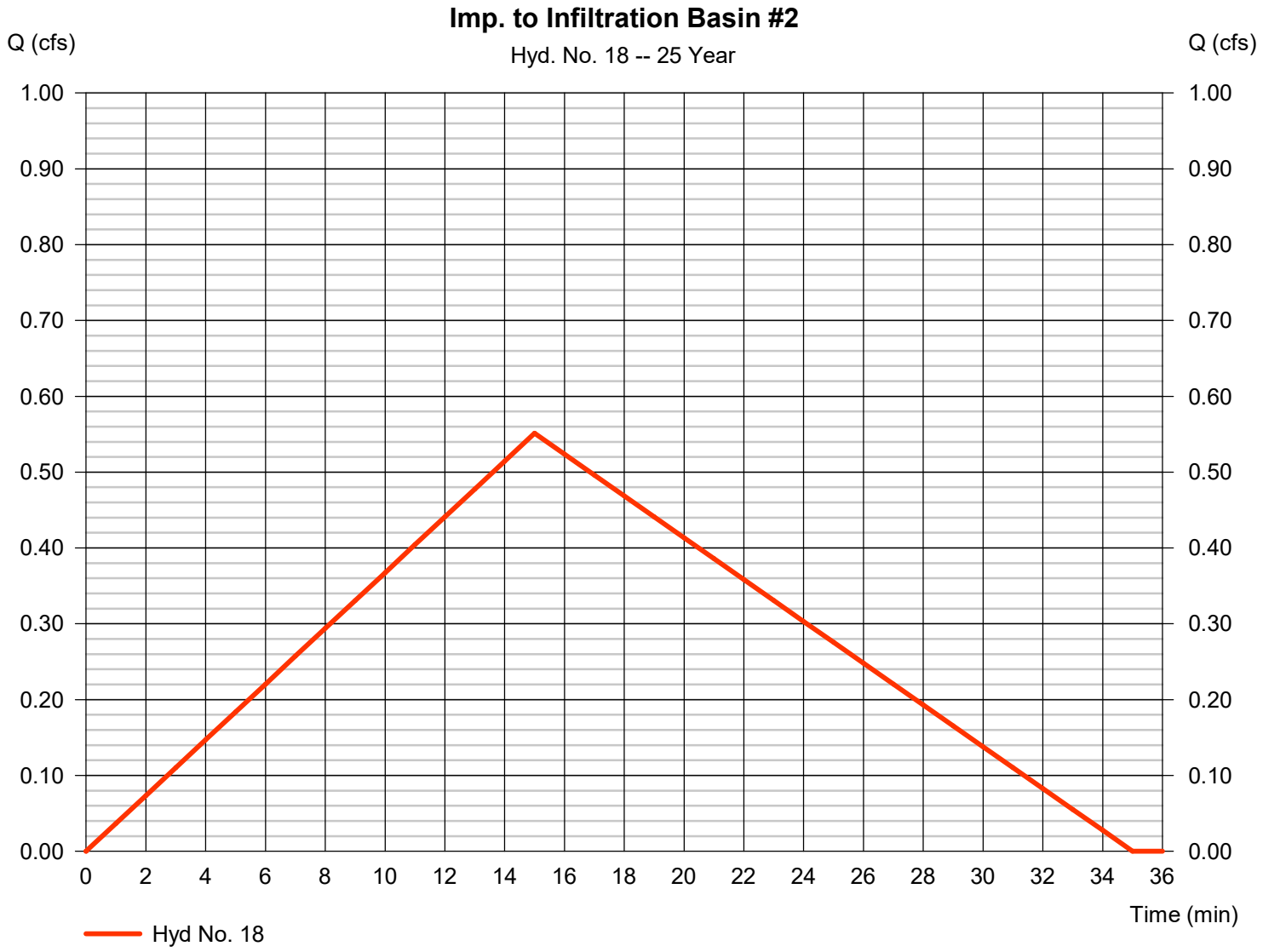


Hydrograph Report

Hyd. No. 18

Imp. to Infiltration Basin #2

Hydrograph type	=	Rational	Peak discharge	=	0.551 cfs
Storm frequency	=	25 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	579 cuft
Drainage area	=	0.078 ac	Runoff coeff.	=	0.99
Intensity	=	7.138 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4



Hydrograph Report

Hyd. No. 19

Lawn to Infiltration Basin #2

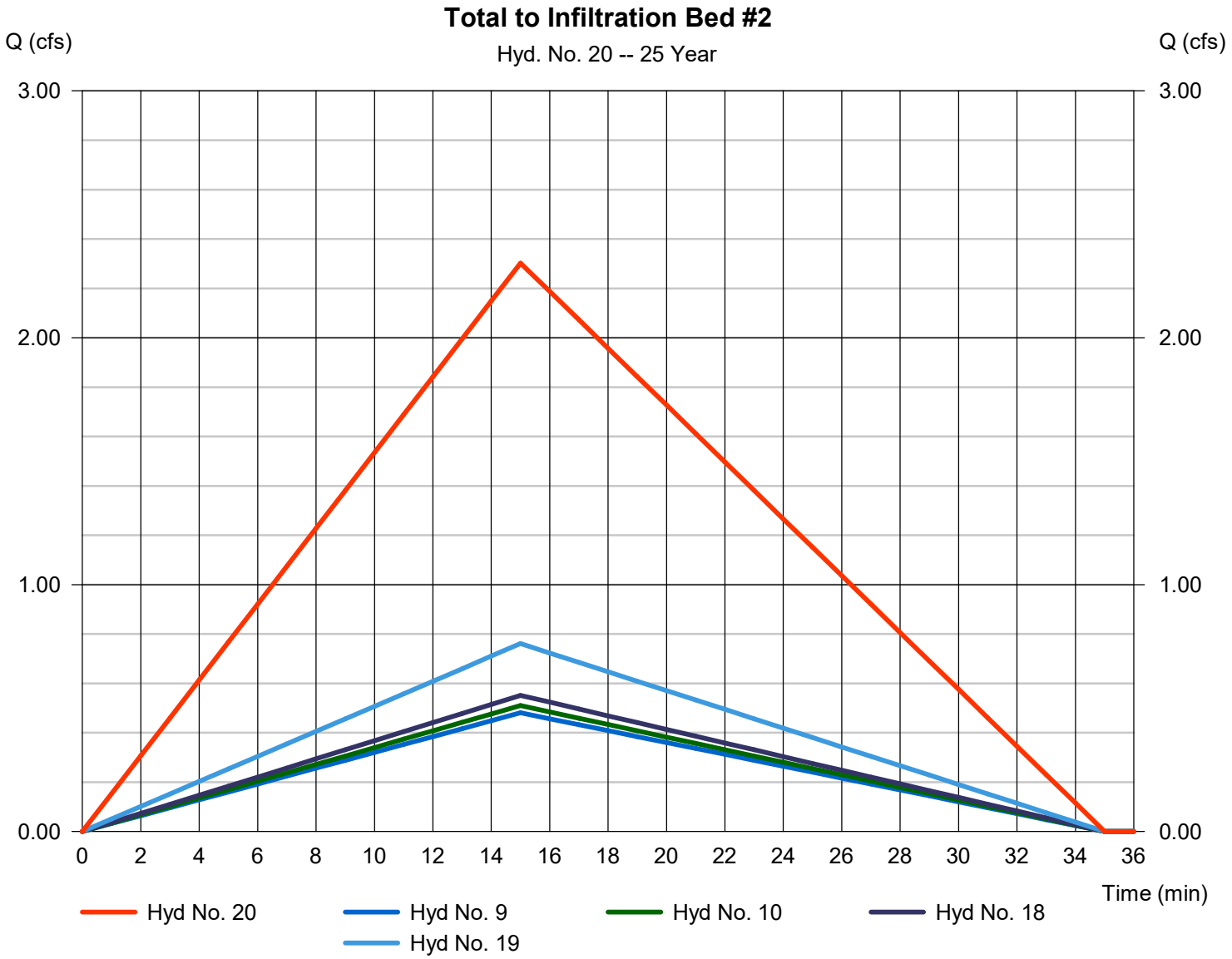
Hydrograph type	=	Rational	Peak discharge	=	0.761 cfs
Storm frequency	=	25 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	799 cuft
Drainage area	=	0.209 ac	Runoff coeff.	=	0.51
Intensity	=	7.138 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

Hydrograph Report

Hyd. No. 20

Total to Infiltration Bed #2

Hydrograph type	=	Combine	Peak discharge	=	2.302 cfs
Storm frequency	=	25 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	2,417 cuft
Inflow hyds.	=	9, 10, 18, 19	Contrib. drain. area	=	0.495 ac



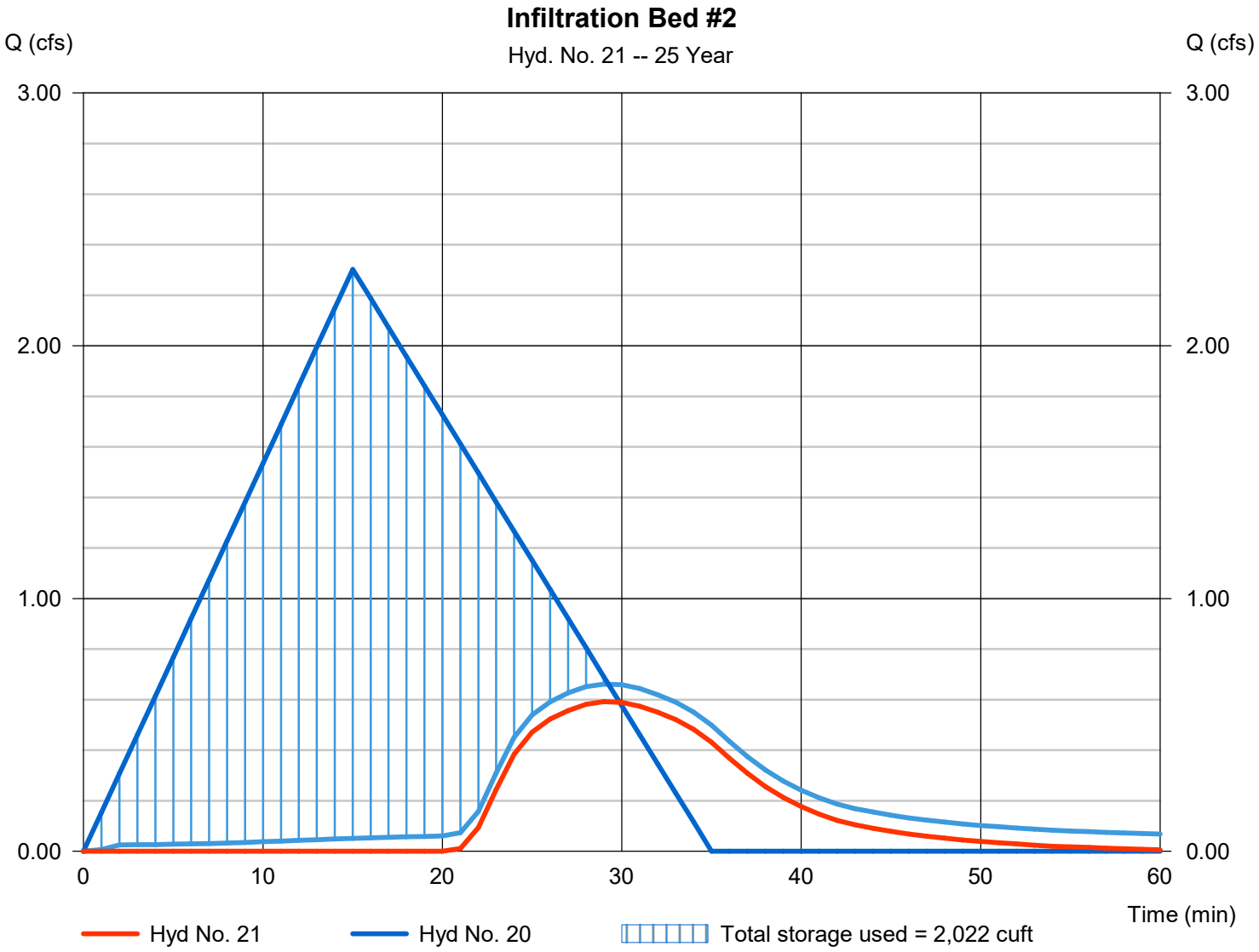
Hydrograph Report

Hyd. No. 21

Infiltration Bed #2

Hydrograph type	=	Reservoir	Peak discharge	=	0.592 cfs
Storm frequency	=	25 yrs	Time to peak	=	29 min
Time interval	=	1 min	Hyd. volume	=	535 cuft
Inflow hyd. No.	=	20 - Total to Infiltration Bed #2	Max. Elevation	=	376.64 ft
Reservoir name	=	Infiltration Bed #2	Max. Storage	=	2,022 cuft

Storage Indication method used. Exfiltration extracted from Outflow.



Hydrograph Report

Hyd. No. 23

Bypass (Imp.)

Hydrograph type	=	Rational	Peak discharge	=	0.318 cfs
Storm frequency	=	25 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	334 cuft
Drainage area	=	0.045 ac	Runoff coeff.	=	0.99
Intensity	=	7.138 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

Hydrograph Report

Hyd. No. 24

Bypass (Perv)

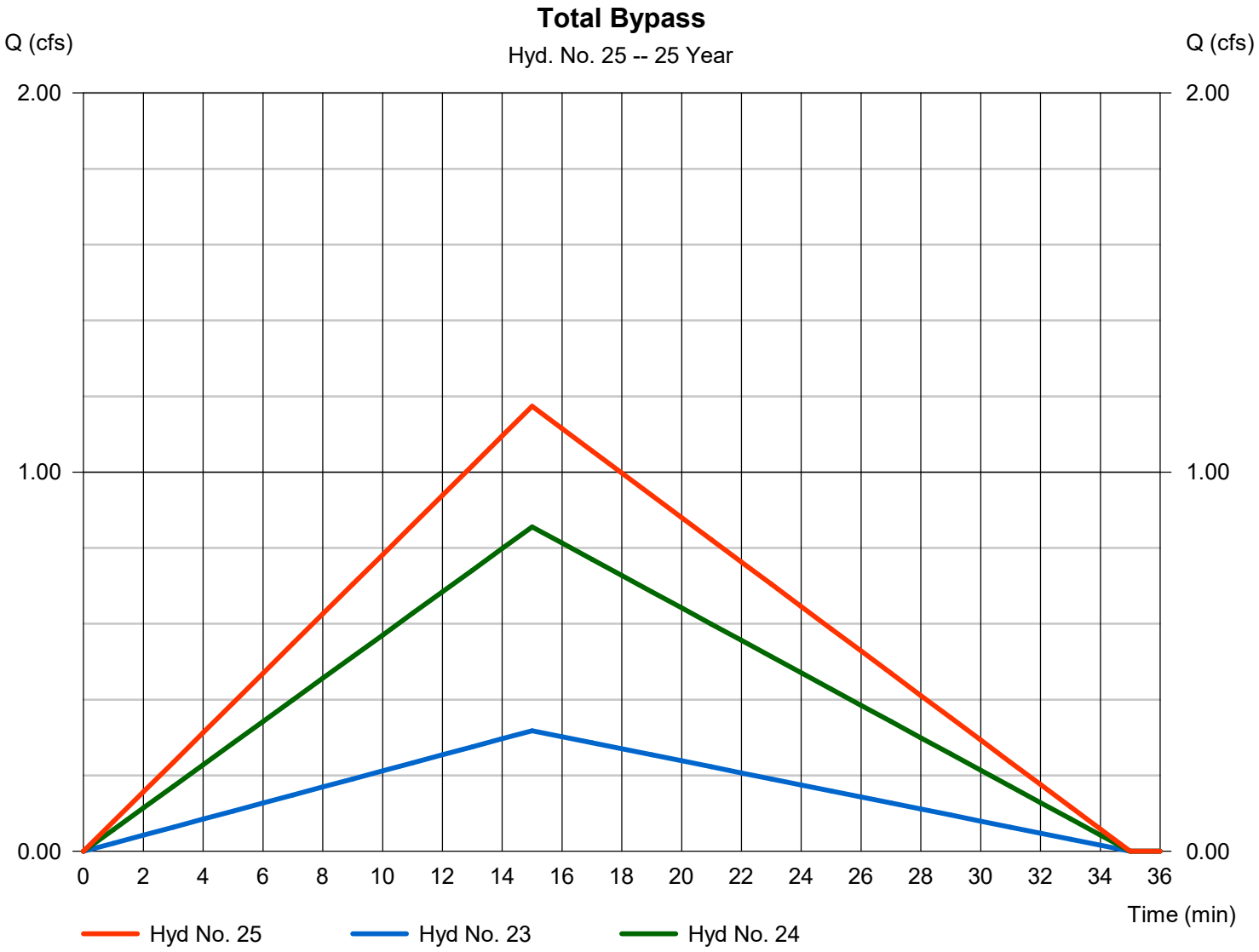
Hydrograph type	=	Rational	Peak discharge	=	0.856 cfs
Storm frequency	=	25 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	898 cuft
Drainage area	=	0.235 ac	Runoff coeff.	=	0.51
Intensity	=	7.138 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

Hydrograph Report

Hyd. No. 25

Total Bypass

Hydrograph type	=	Combine	Peak discharge	=	1.174 cfs
Storm frequency	=	25 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	1,232 cuft
Inflow hyds.	=	23, 24	Contrib. drain. area	=	0.280 ac

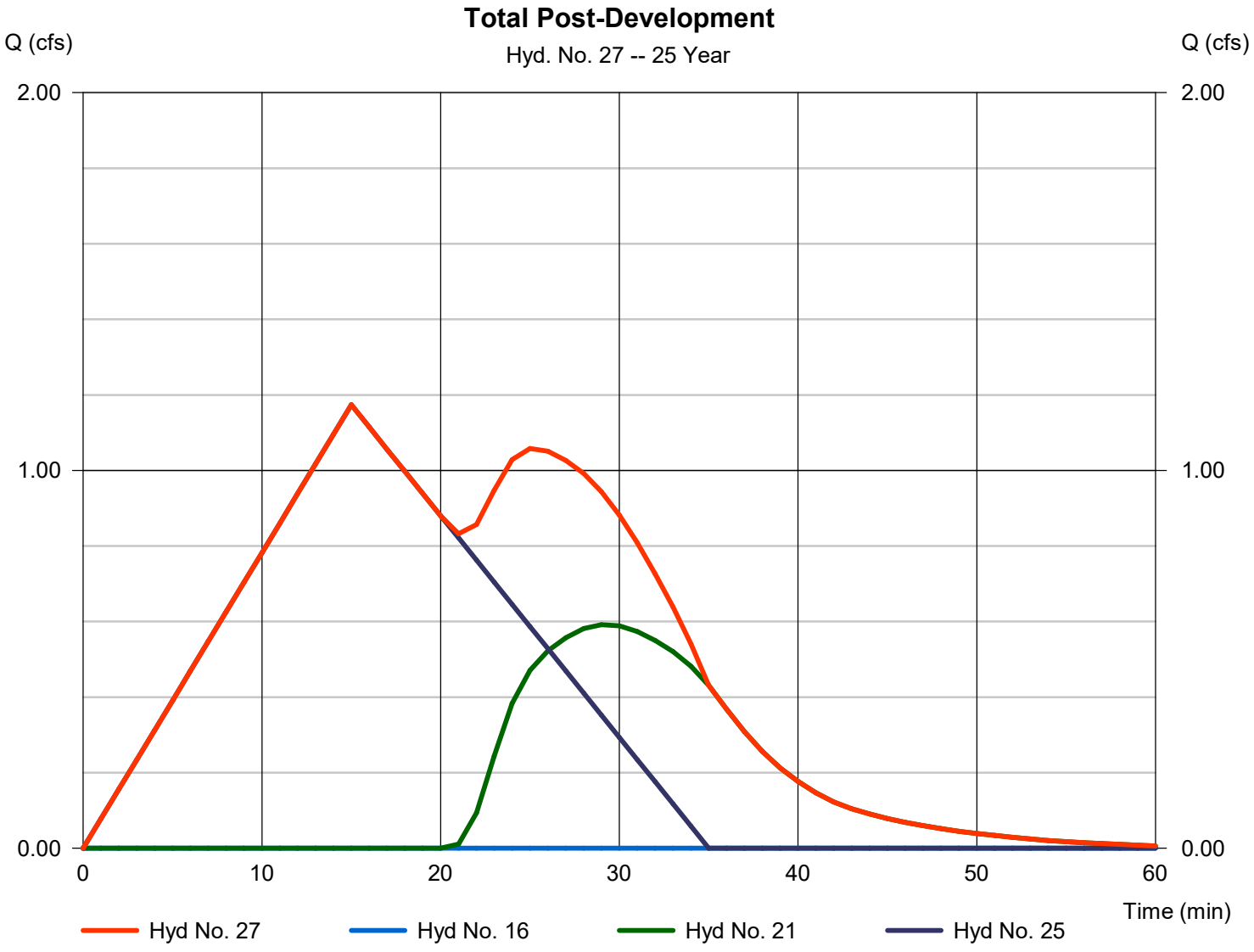


Hydrograph Report

Hyd. No. 27

Total Post-Development

Hydrograph type	=	Combine	Peak discharge	=	1.174 cfs
Storm frequency	=	25 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	1,768 cuft
Inflow hyds.	=	16, 21, 25	Contrib. drain. area	=	0.000 ac



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

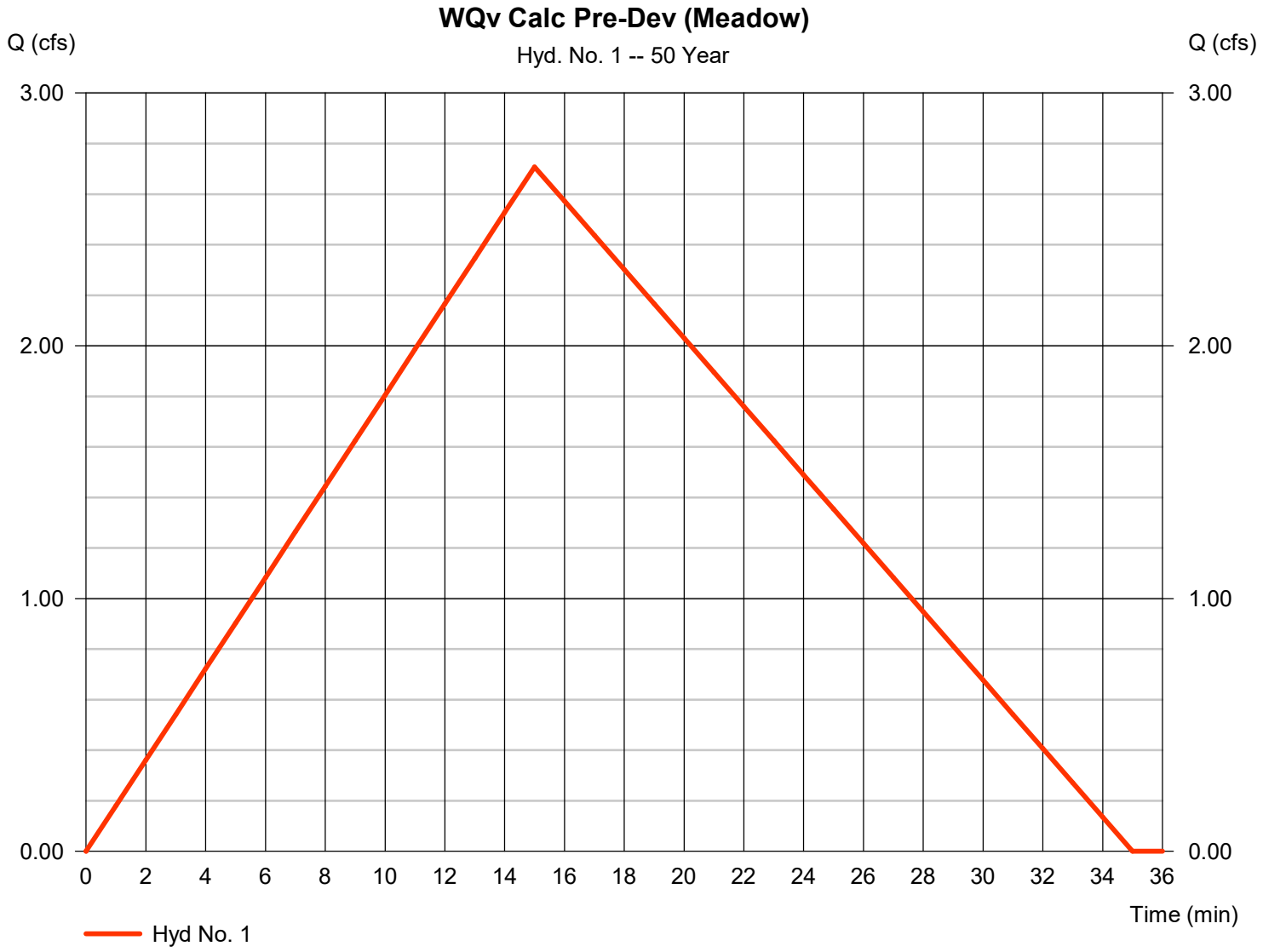
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	2.708	1	15	2,843	------	------	------	WQv Calc Pre-Dev (Meadow)
2	Combine	2.708	1	15	2,843	1	------	------	WQv Calc Total Pre-Dev
4	Rational	1.659	1	15	1,742	------	------	------	WQv Calc Uncontrolled Post-Dev (Im
5	Rational	2.284	1	15	2,398	------	------	------	WQv Calc Uncontrolled Post-Dev (Pe
6	Combine	3.943	1	15	4,140	4, 5	------	------	WQv Calc Total Post-Dev
8	Rational	0.487	1	15	512	------	------	------	Pre-Development (Meadow)
9	Rational	0.513	1	15	538	------	------	------	Compensatory (Imp.)
10	Rational	0.544	1	15	571	------	------	------	Compensatory (Perv.)
11	Combine	1.544	1	15	1,621	8, 9, 10	------	------	Pre-Development Total
13	Rational	0.716	1	15	752	------	------	------	Imp. to Infiltration Basin #1
14	Rational	0.548	1	15	575	------	------	------	Lawn to Infiltration Basin #1
15	Combine	1.264	1	15	1,327	13, 14	------	------	Total to Infiltration Basin #1
16	Reservoir	0.006	1	34	2	15	373.04	1,195	Infiltration Bed #1
18	Rational	0.588	1	15	618	------	------	------	Imp. to Infiltration Basin #2
19	Rational	0.812	1	15	852	------	------	------	Lawn to Infiltration Basin #2
20	Combine	2.456	1	15	2,579	9, 10, 18, 19	------	------	Total to Infiltration Bed #2
21	Reservoir	0.706	1	29	689	20	376.81	2,091	Infiltration Bed #2
23	Rational	0.339	1	15	356	------	------	------	Bypass (Imp.)
24	Rational	0.913	1	15	958	------	------	------	Bypass (Perv)
25	Combine	1.252	1	15	1,315	23, 24	------	------	Total Bypass
27	Combine	1.252	1	15	2,005	16, 21, 25,	------	------	Total Post-Development

Hydrograph Report

Hyd. No. 1

WQv Calc Pre-Dev (Meadow)

Hydrograph type	=	Rational	Peak discharge	=	2.708 cfs
Storm frequency	=	50 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	2,843 cuft
Drainage area	=	0.808 ac	Runoff coeff.	=	0.44
Intensity	=	7.616 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

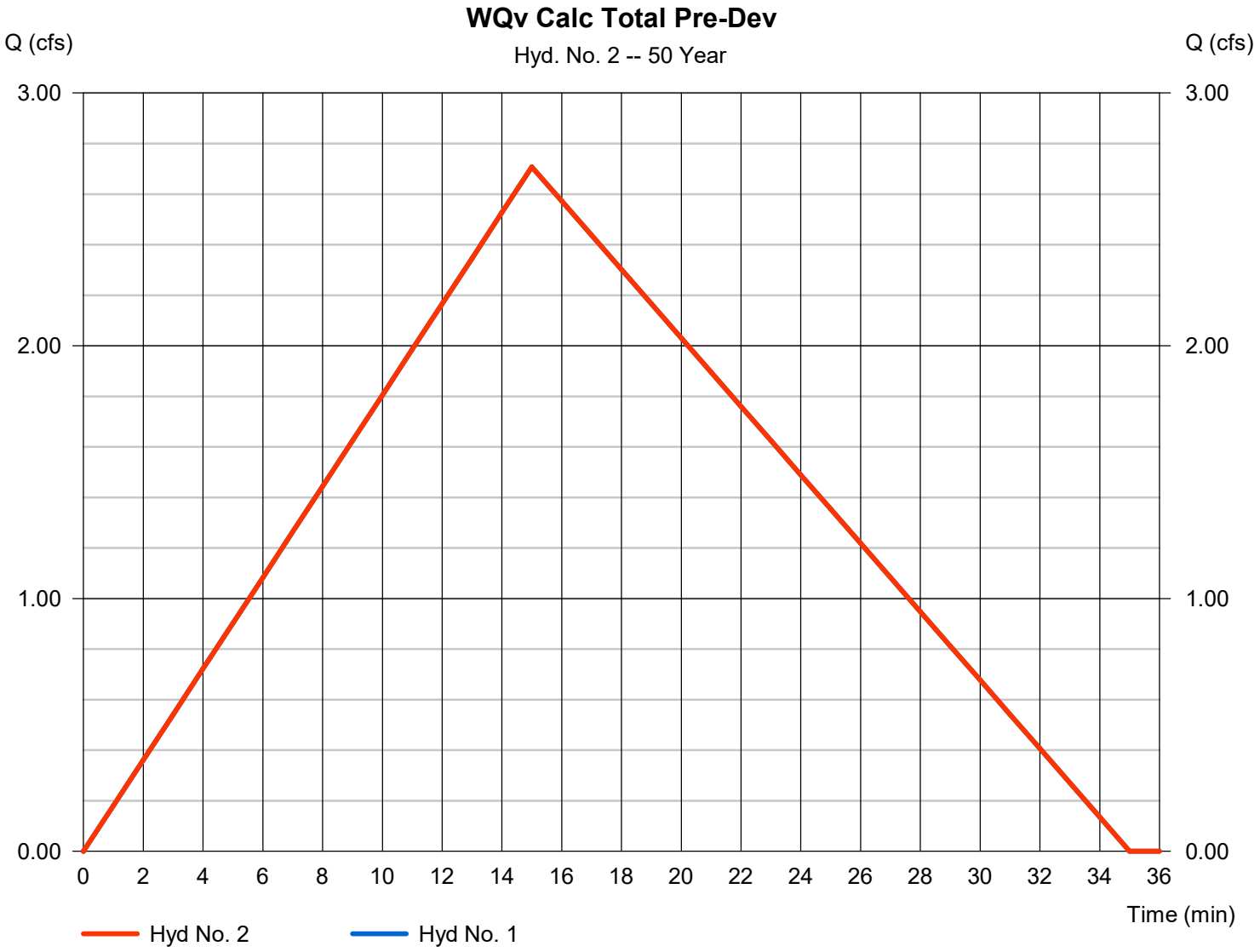


Hydrograph Report

Hyd. No. 2

WQv Calc Total Pre-Dev

Hydrograph type	= Combine	Peak discharge	= 2.708 cfs
Storm frequency	= 50 yrs	Time to peak	= 15 min
Time interval	= 1 min	Hyd. volume	= 2,843 cuft
Inflow hyds.	= 1	Contrib. drain. area	= 0.808 ac

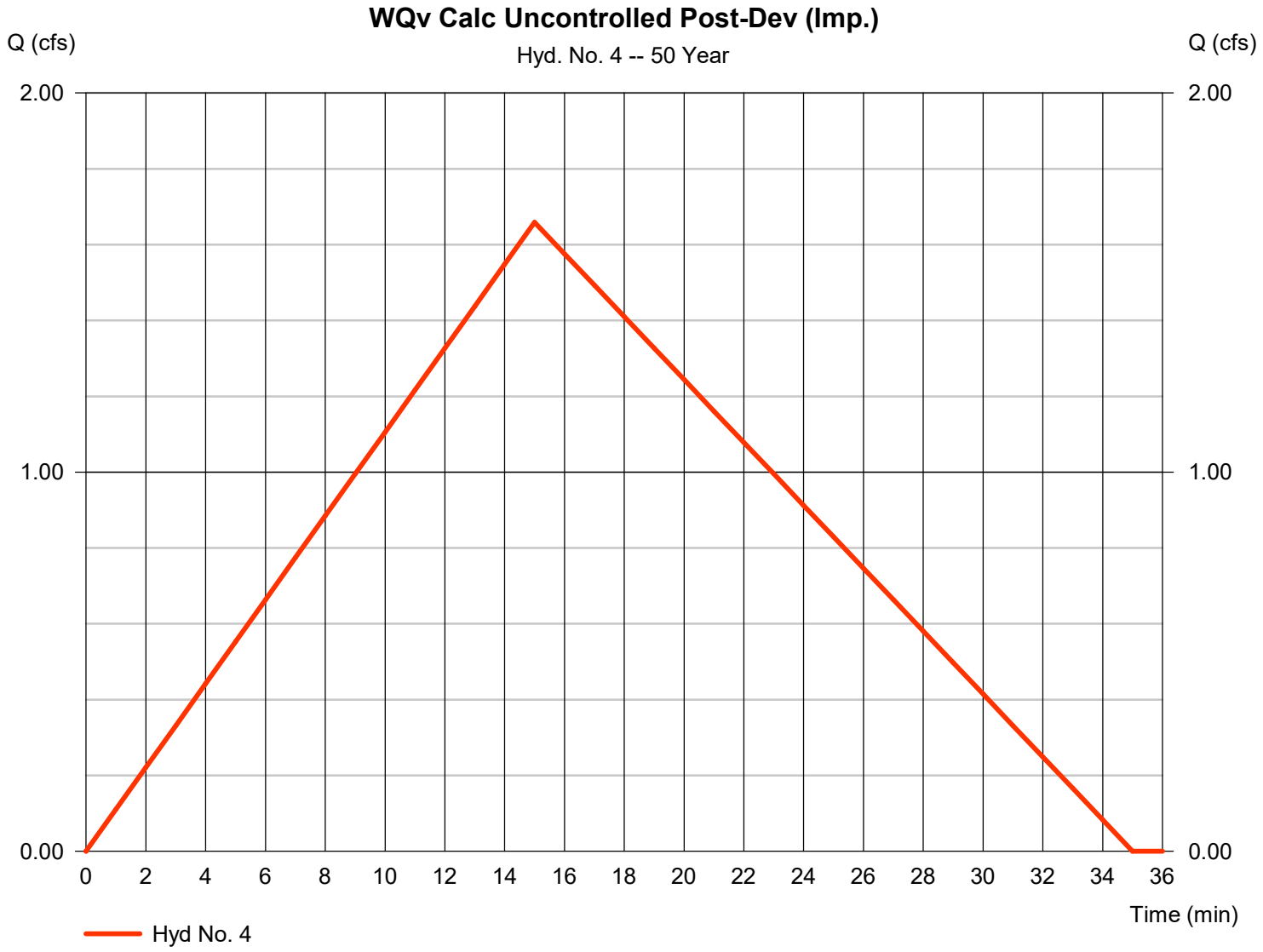


Hydrograph Report

Hyd. No. 4

WQv Calc Uncontrolled Post-Dev (Imp.)

Hydrograph type	=	Rational	Peak discharge	=	1.659 cfs
Storm frequency	=	50 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	1,742 cuft
Drainage area	=	0.220 ac	Runoff coeff.	=	0.99
Intensity	=	7.616 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

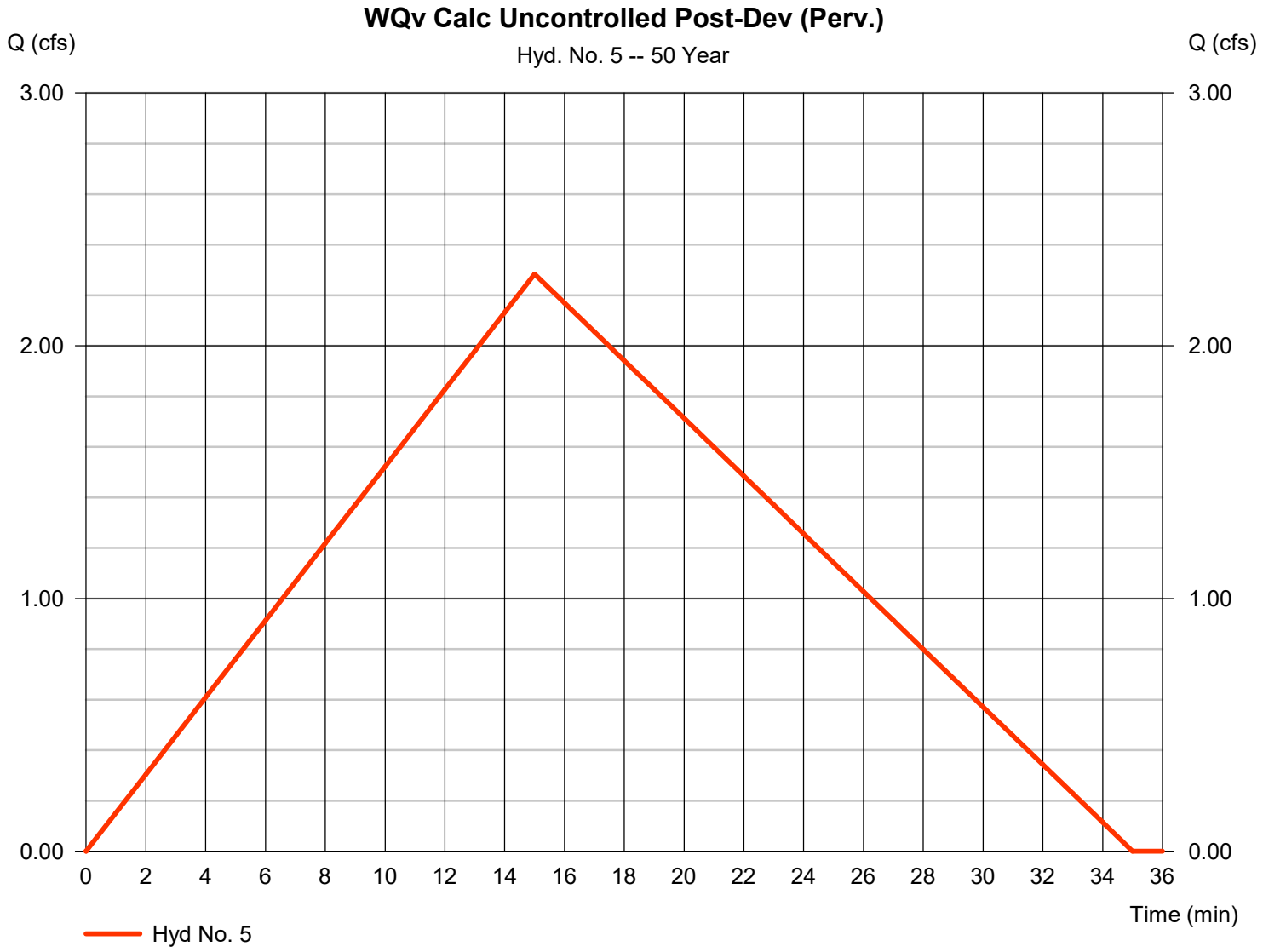


Hydrograph Report

Hyd. No. 5

WQv Calc Uncontrolled Post-Dev (Perv.)

Hydrograph type	=	Rational	Peak discharge	=	2.284 cfs
Storm frequency	=	50 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	2,398 cuft
Drainage area	=	0.588 ac	Runoff coeff.	=	0.51
Intensity	=	7.616 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

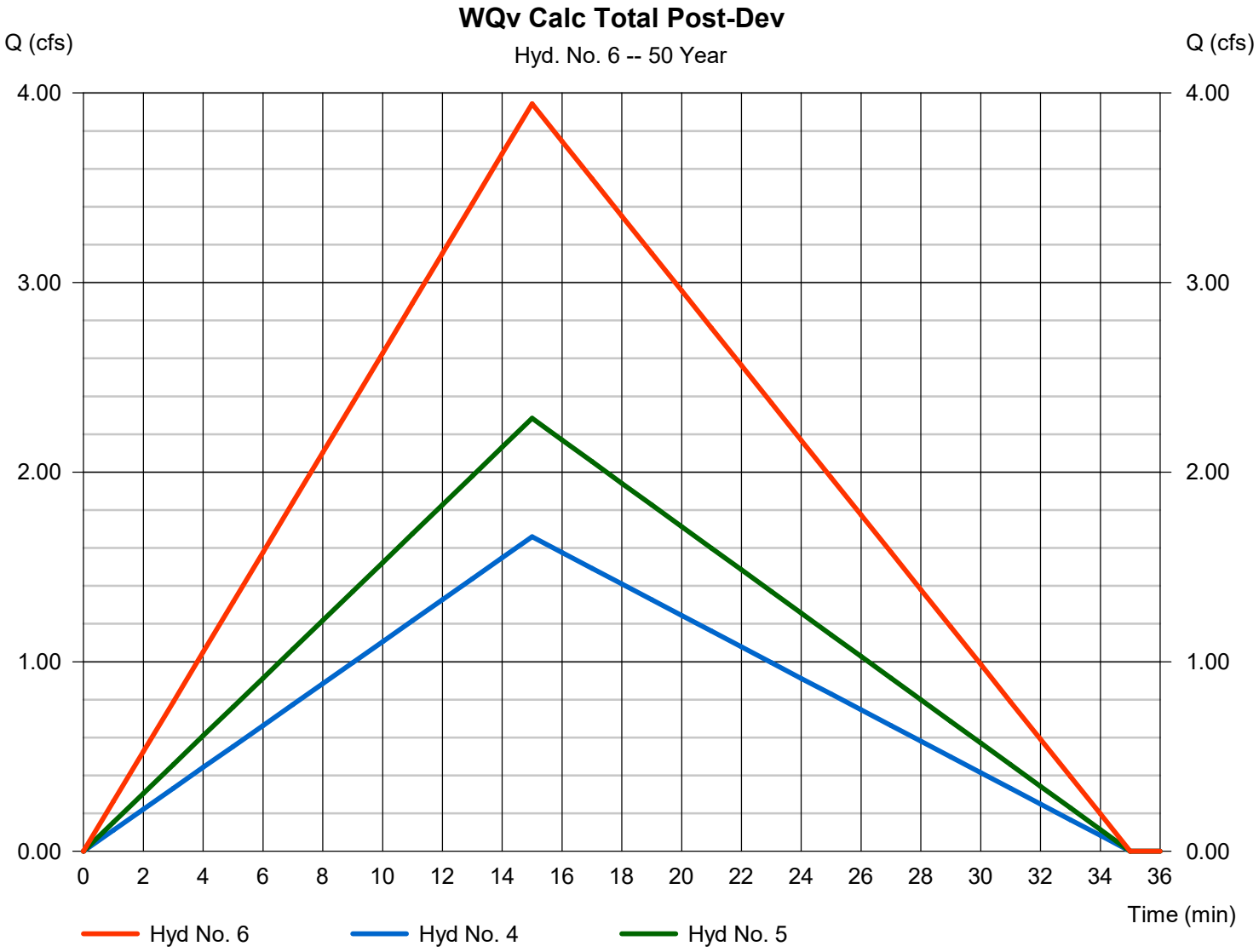


Hydrograph Report

Hyd. No. 6

WQv Calc Total Post-Dev

Hydrograph type	=	Combine	Peak discharge	=	3.943 cfs
Storm frequency	=	50 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	4,140 cuft
Inflow hyds.	=	4, 5	Contrib. drain. area	=	0.808 ac

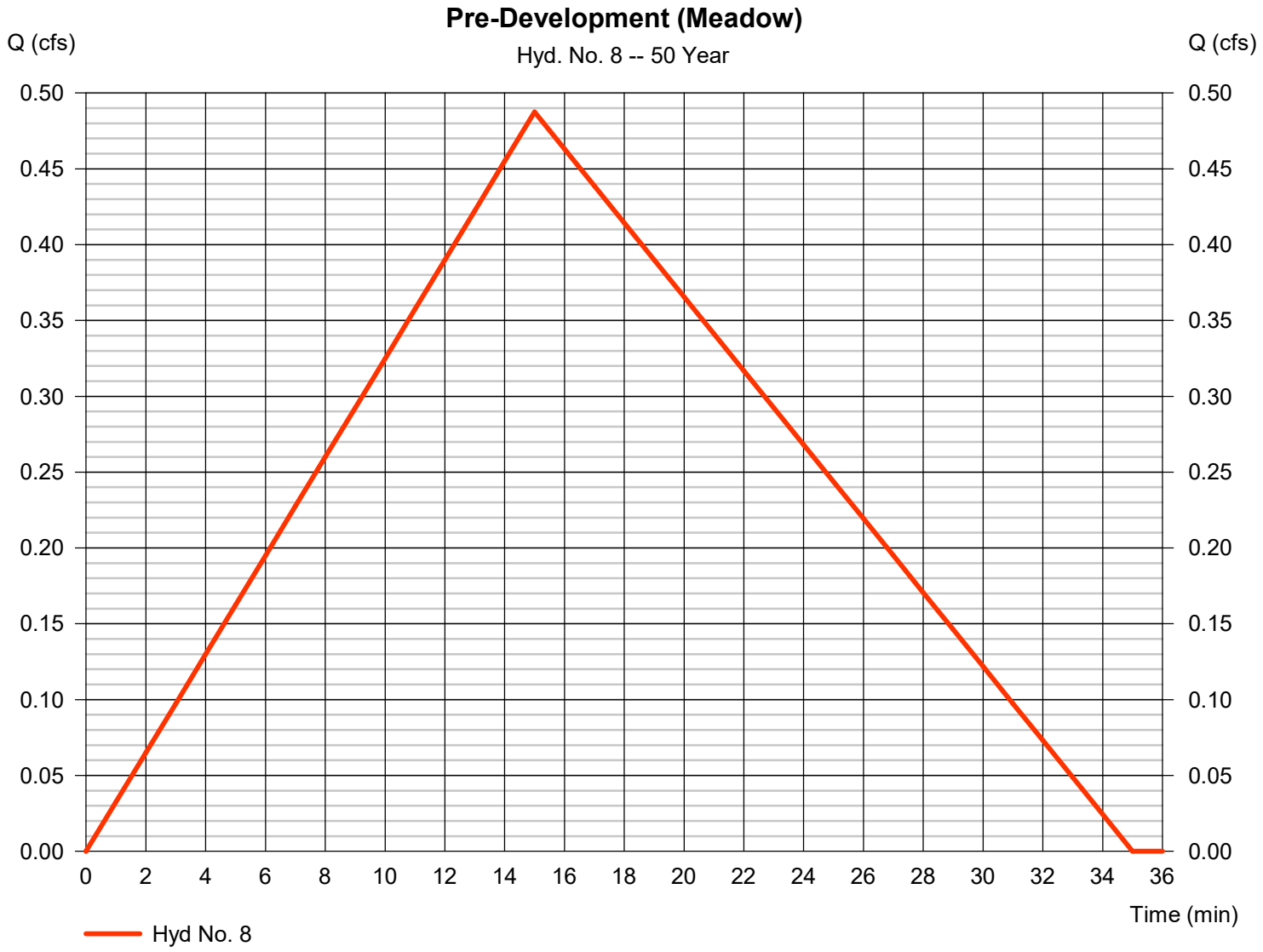


Hydrograph Report

Hyd. No. 8

Pre-Development (Meadow)

Hydrograph type	=	Rational	Peak discharge	=	0.487 cfs
Storm frequency	=	50 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	512 cuft
Drainage area	=	0.320 ac	Runoff coeff.	=	0.2
Intensity	=	7.616 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

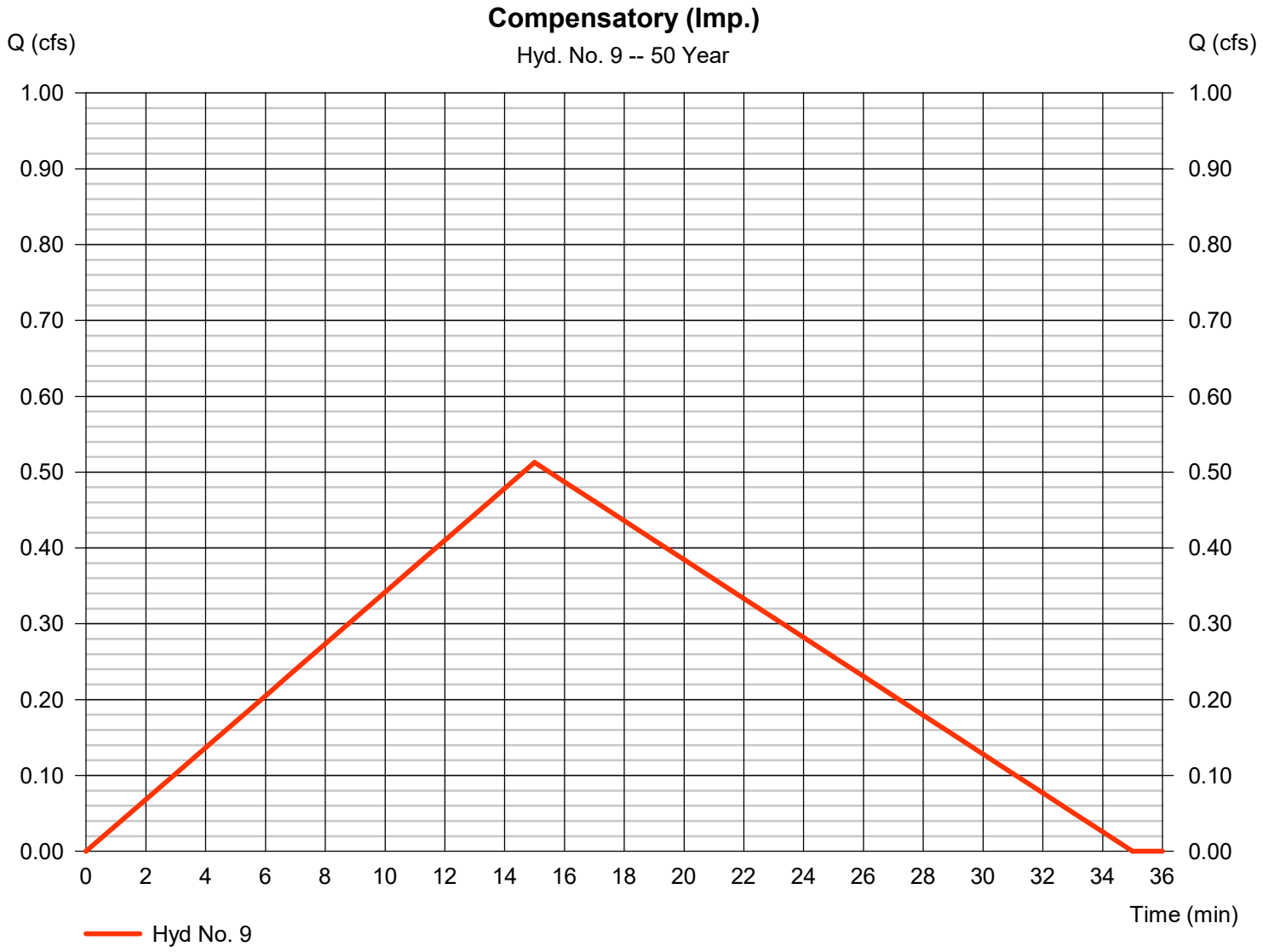


Hydrograph Report

Hyd. No. 9

Compensatory (Imp.)

Hydrograph type	=	Rational	Peak discharge	=	0.513 cfs
Storm frequency	=	50 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	538 cuft
Drainage area	=	0.068 ac	Runoff coeff.	=	0.99
Intensity	=	7.616 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

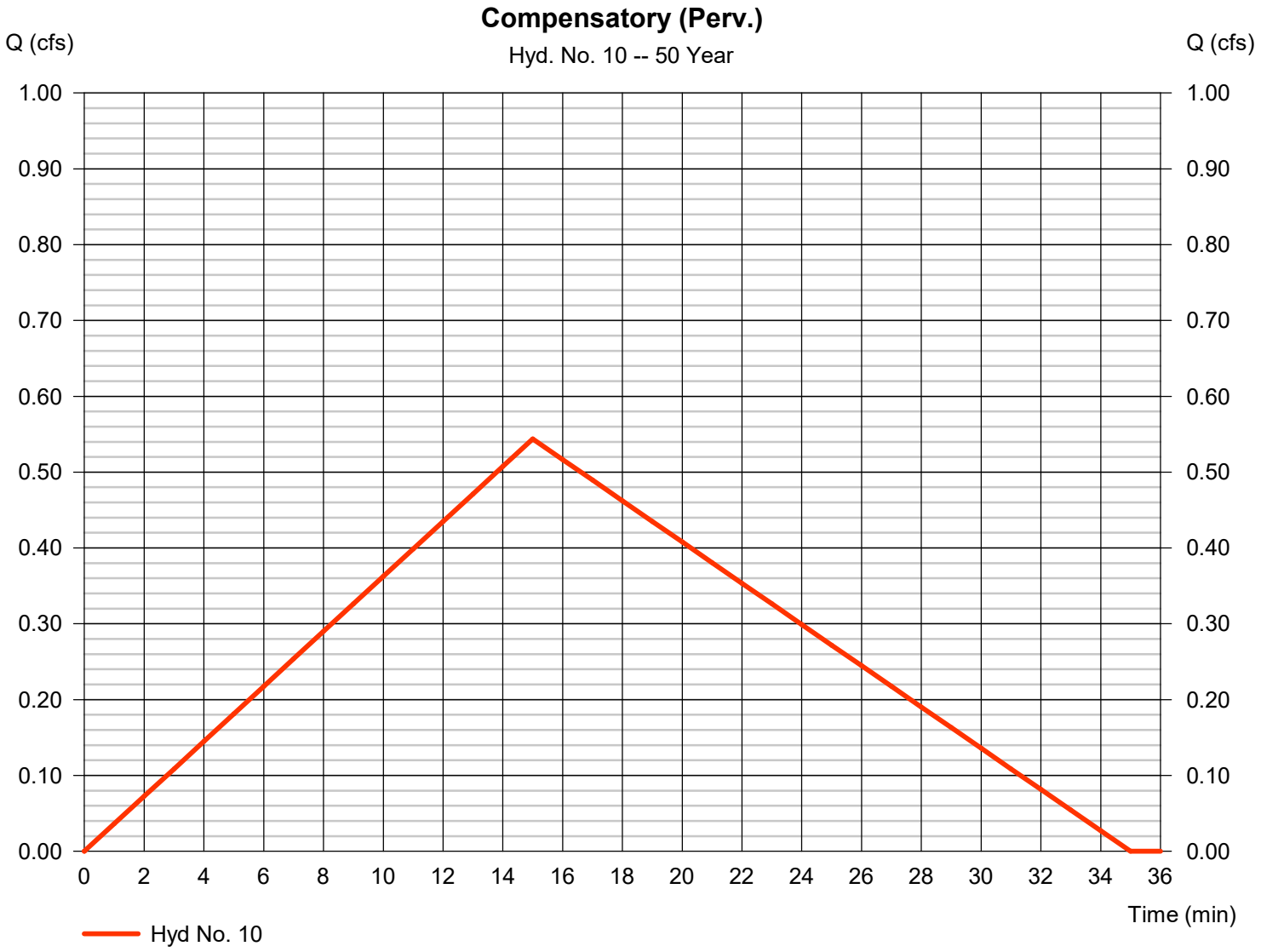


Hydrograph Report

Hyd. No. 10

Compensatory (Perv.)

Hydrograph type	=	Rational	Peak discharge	=	0.544 cfs
Storm frequency	=	50 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	571 cuft
Drainage area	=	0.140 ac	Runoff coeff.	=	0.51
Intensity	=	7.616 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

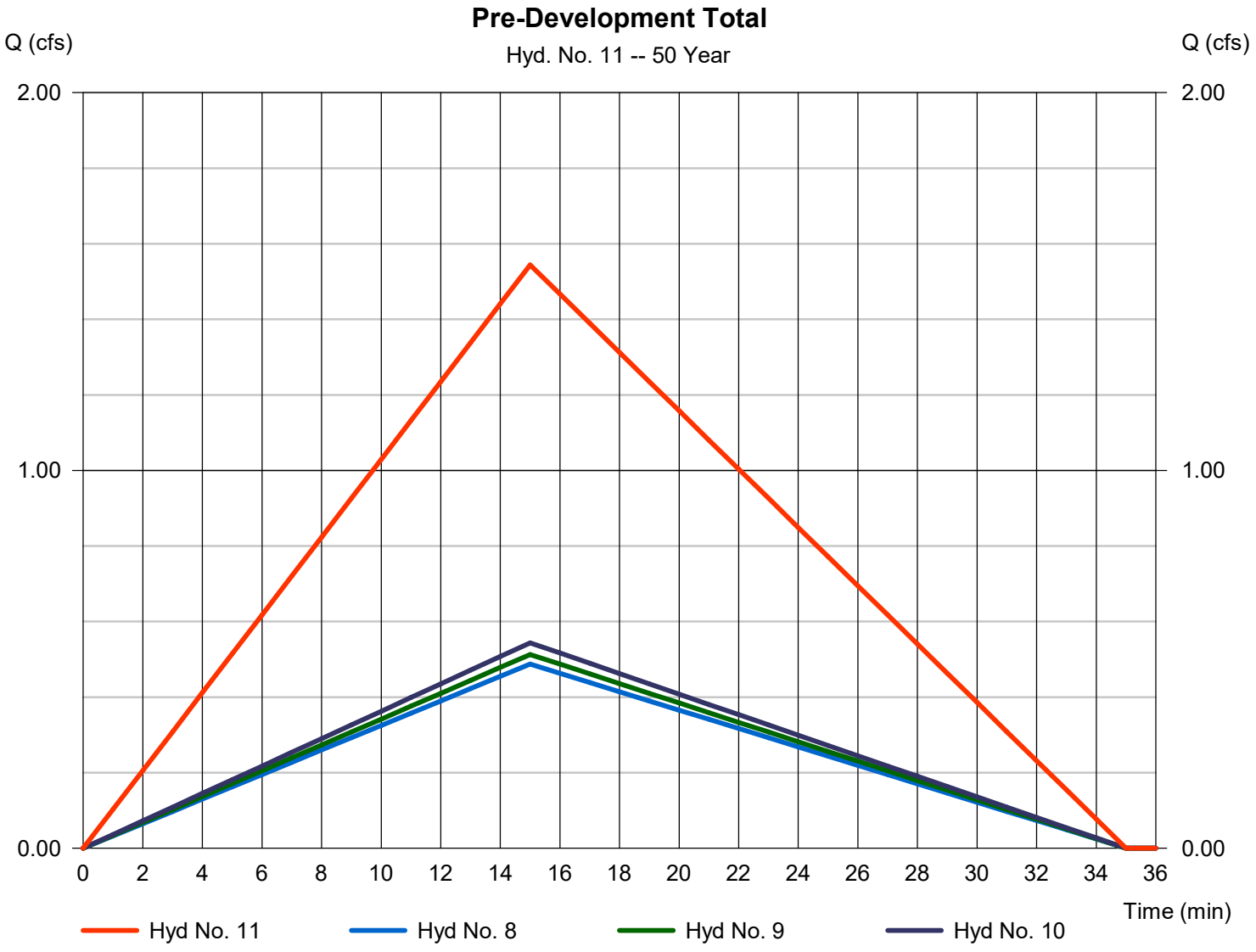


Hydrograph Report

Hyd. No. 11

Pre-Development Total

Hydrograph type	=	Combine	Peak discharge	=	1.544 cfs
Storm frequency	=	50 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	1,621 cuft
Inflow hyds.	=	8, 9, 10	Contrib. drain. area	=	0.528 ac

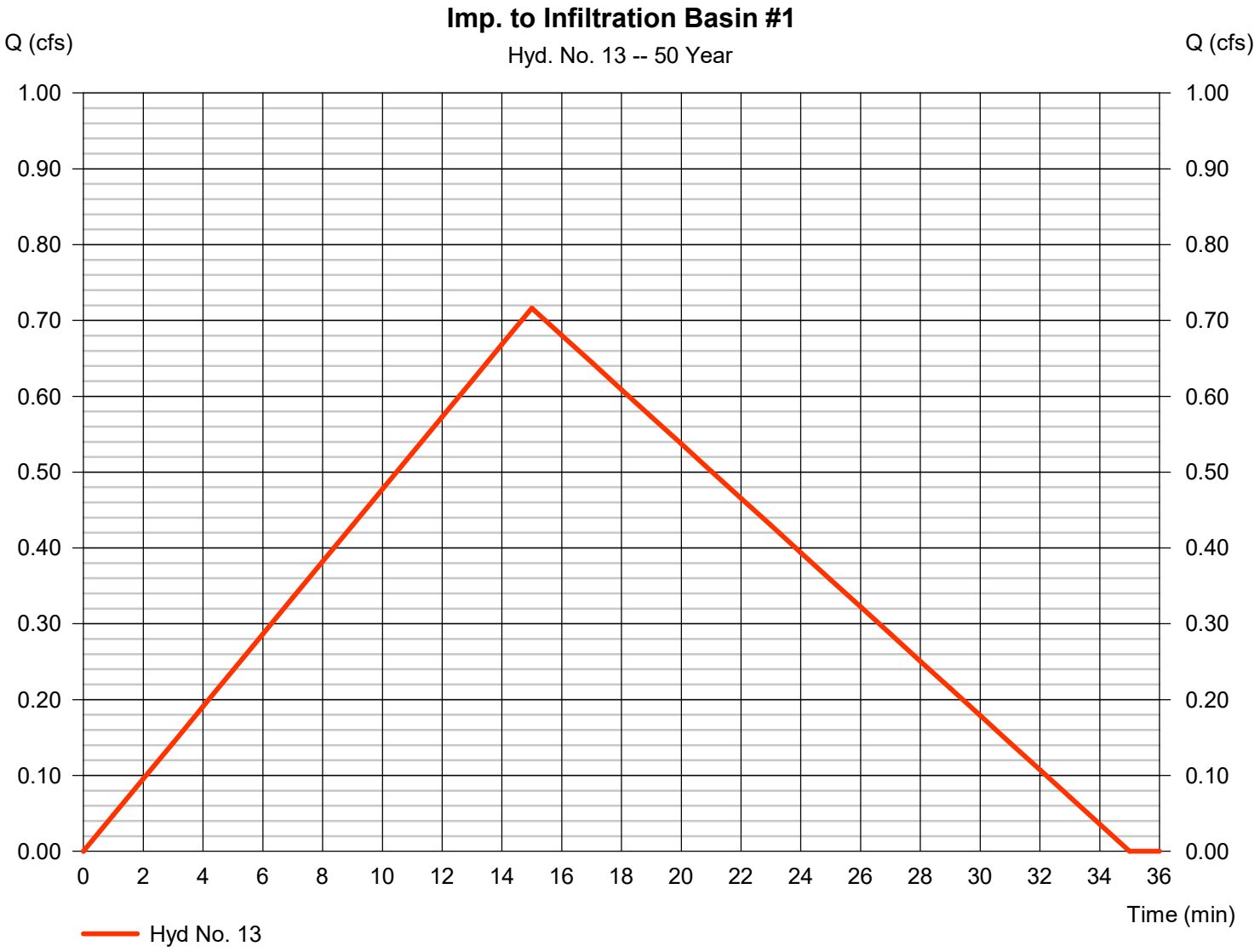


Hydrograph Report

Hyd. No. 13

Imp. to Infiltration Basin #1

Hydrograph type	=	Rational	Peak discharge	=	0.716 cfs
Storm frequency	=	50 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	752 cuft
Drainage area	=	0.095 ac	Runoff coeff.	=	0.99
Intensity	=	7.616 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4



Hydrograph Report

Hyd. No. 14

Lawn to Infiltration Basin #1

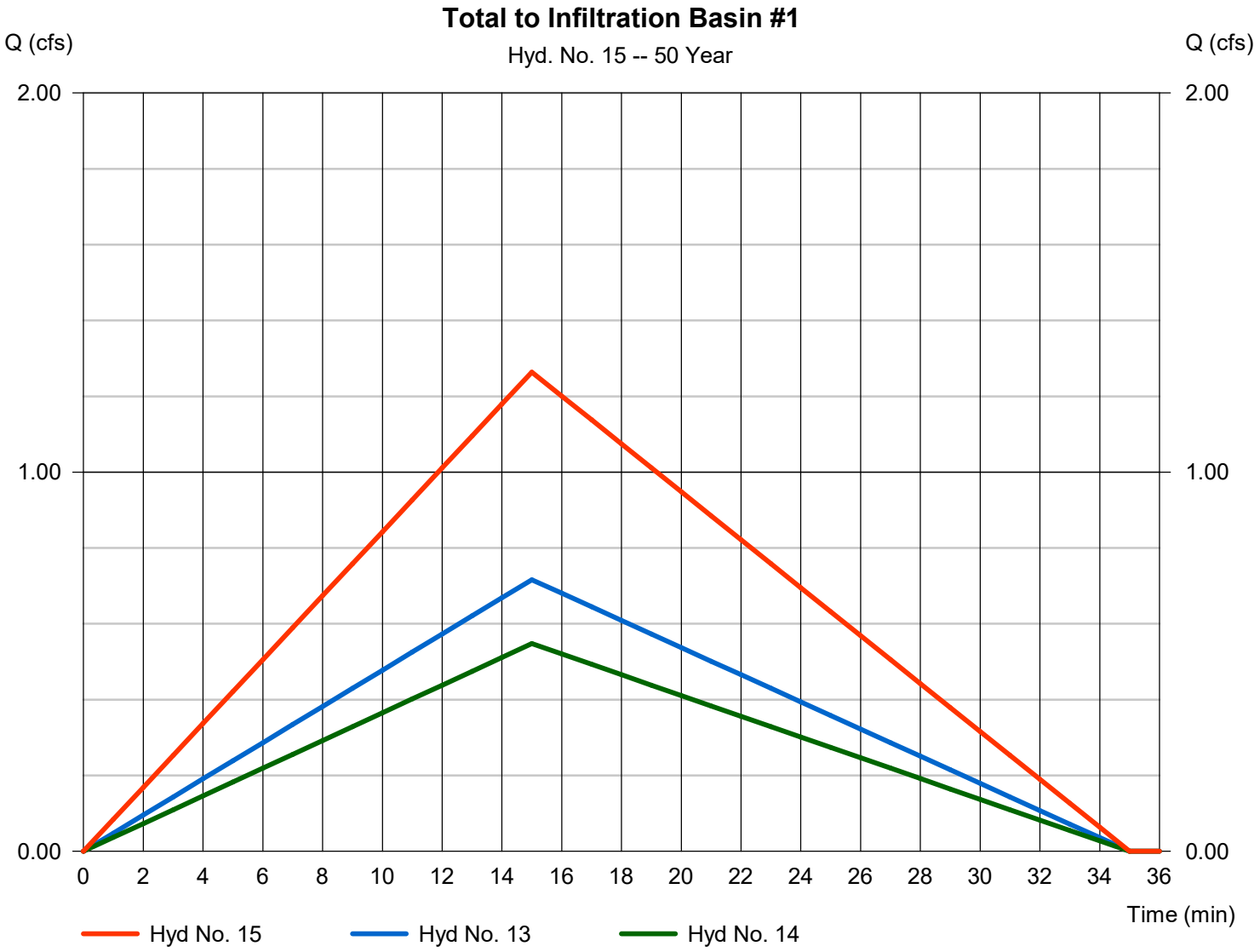
Hydrograph type	=	Rational	Peak discharge	=	0.548 cfs
Storm frequency	=	50 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	575 cuft
Drainage area	=	0.141 ac	Runoff coeff.	=	0.51
Intensity	=	7.616 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

Hydrograph Report

Hyd. No. 15

Total to Infiltration Basin #1

Hydrograph type	=	Combine	Peak discharge	=	1.264 cfs
Storm frequency	=	50 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	1,327 cuft
Inflow hyds.	=	13, 14	Contrib. drain. area	=	0.236 ac



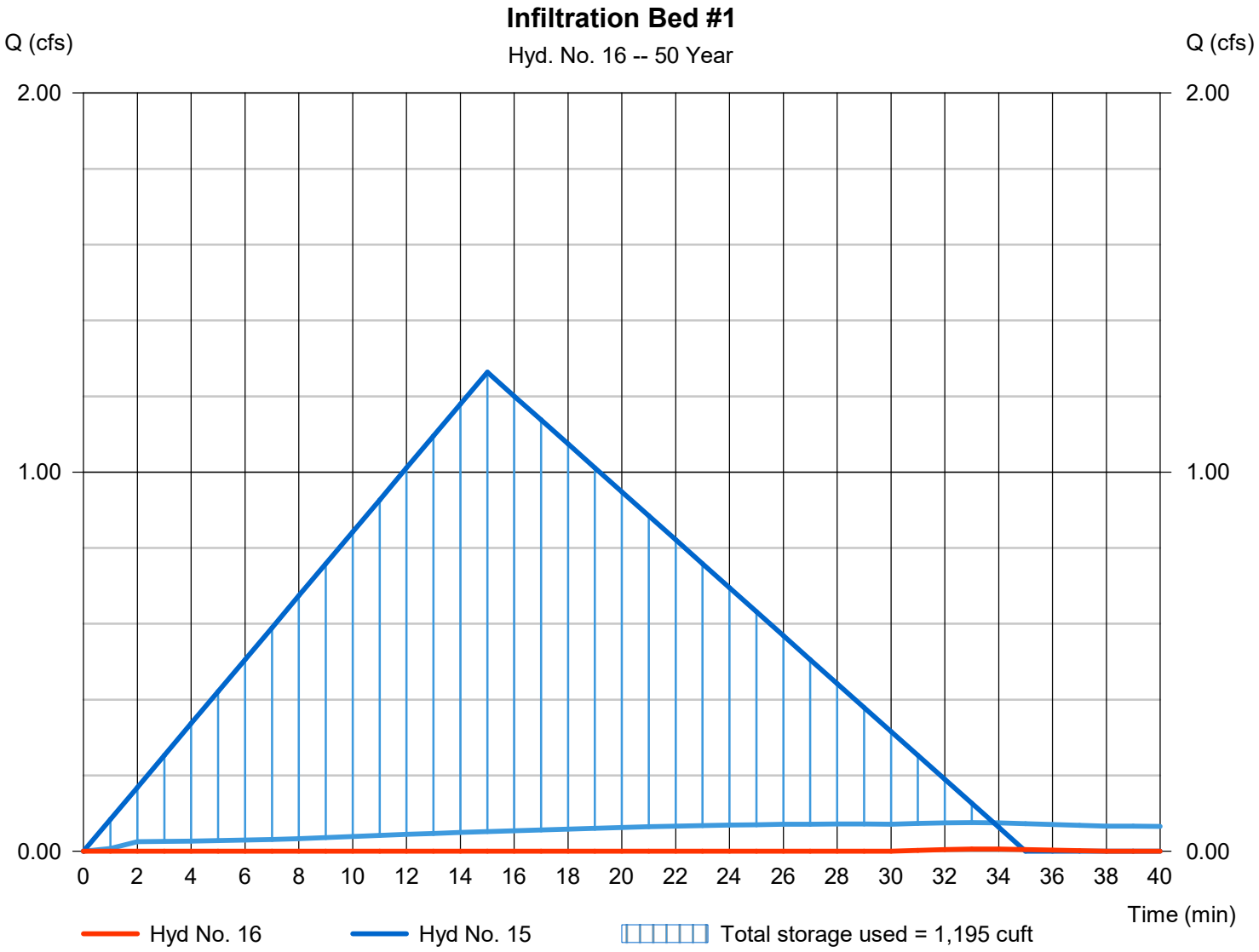
Hydrograph Report

Hyd. No. 16

Infiltration Bed #1

Hydrograph type	=	Reservoir	Peak discharge	=	0.006 cfs
Storm frequency	=	50 yrs	Time to peak	=	34 min
Time interval	=	1 min	Hyd. volume	=	2 cuft
Inflow hyd. No.	=	15 - Total to Infiltration Basin #1	Max. Elevation	=	373.04 ft
Reservoir name	=	Infiltration Bed #1	Max. Storage	=	1,195 cuft

Storage Indication method used. Exfiltration extracted from Outflow.

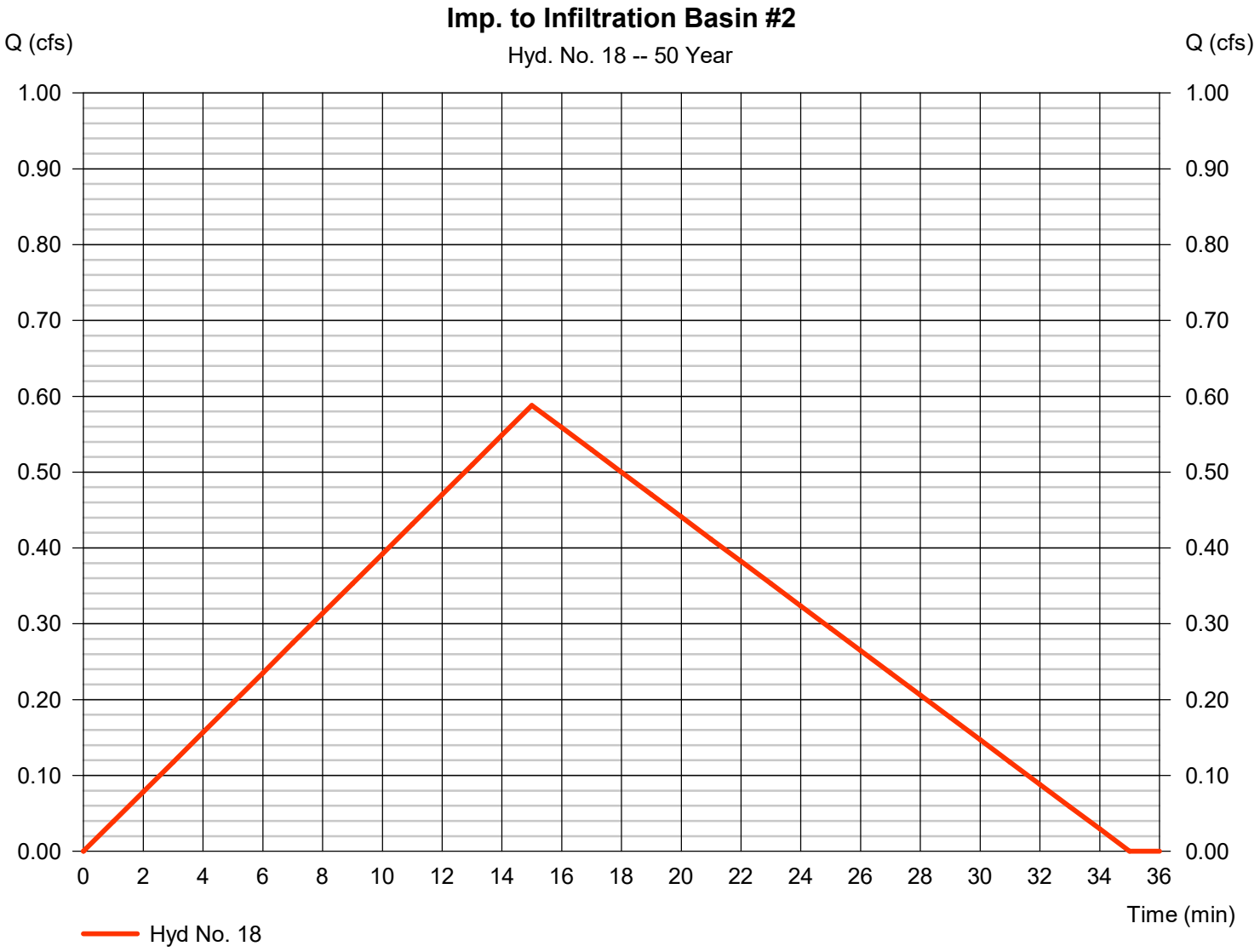


Hydrograph Report

Hyd. No. 18

Imp. to Infiltration Basin #2

Hydrograph type	=	Rational	Peak discharge	=	0.588 cfs
Storm frequency	=	50 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	618 cuft
Drainage area	=	0.078 ac	Runoff coeff.	=	0.99
Intensity	=	7.616 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

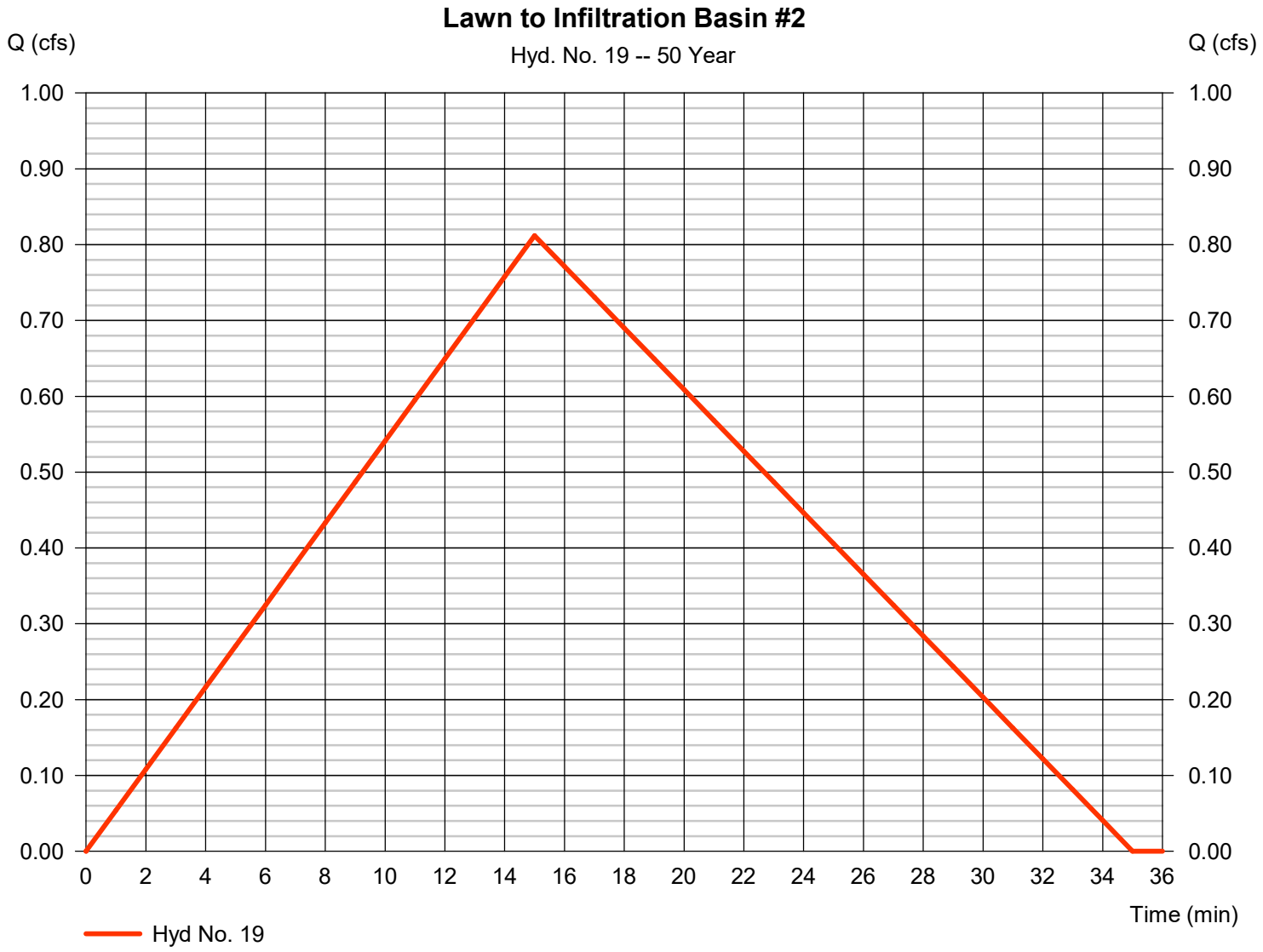


Hydrograph Report

Hyd. No. 19

Lawn to Infiltration Basin #2

Hydrograph type	=	Rational	Peak discharge	=	0.812 cfs
Storm frequency	=	50 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	852 cuft
Drainage area	=	0.209 ac	Runoff coeff.	=	0.51
Intensity	=	7.616 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

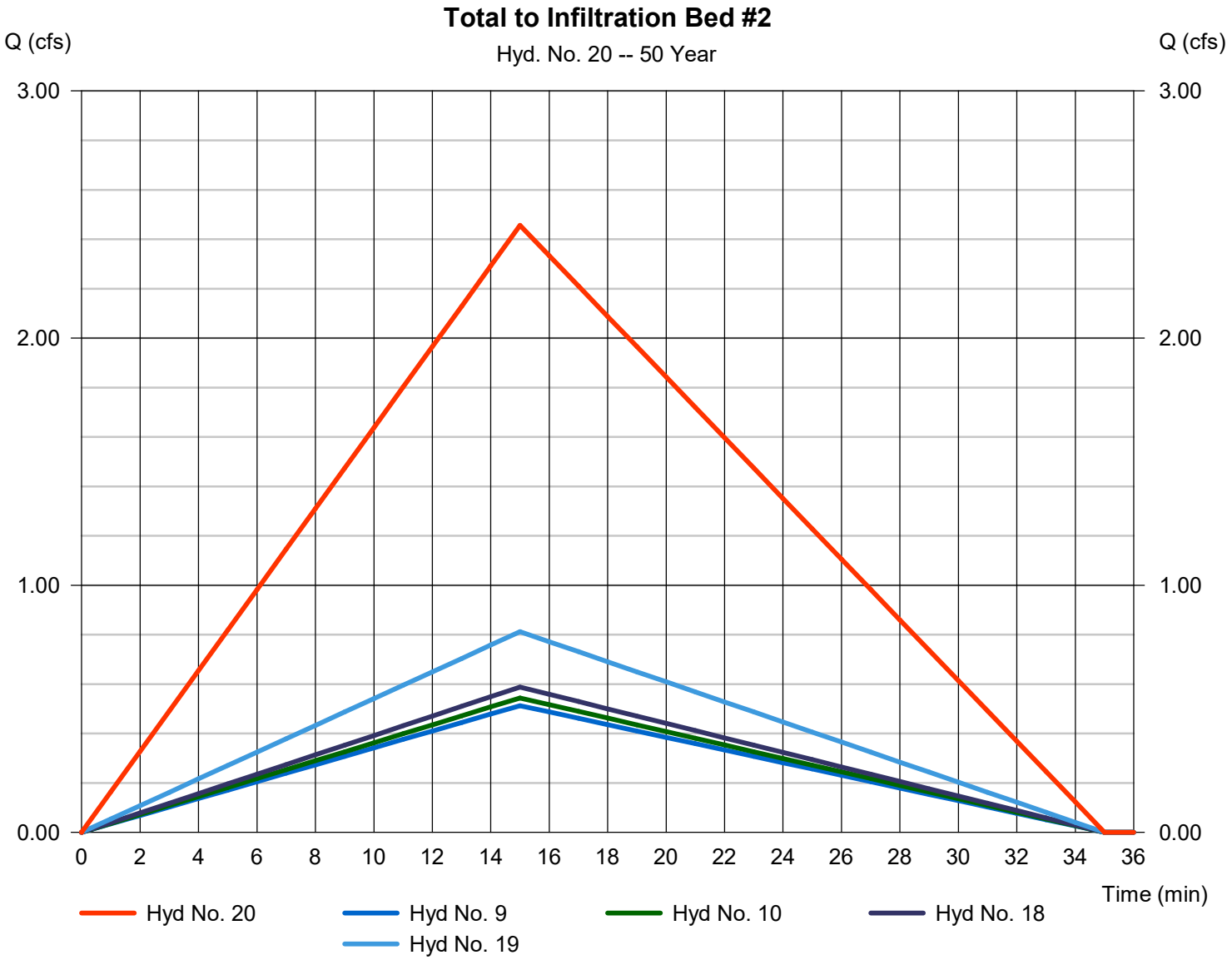


Hydrograph Report

Hyd. No. 20

Total to Infiltration Bed #2

Hydrograph type	=	Combine	Peak discharge	=	2.456 cfs
Storm frequency	=	50 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	2,579 cuft
Inflow hyds.	=	9, 10, 18, 19	Contrib. drain. area	=	0.495 ac



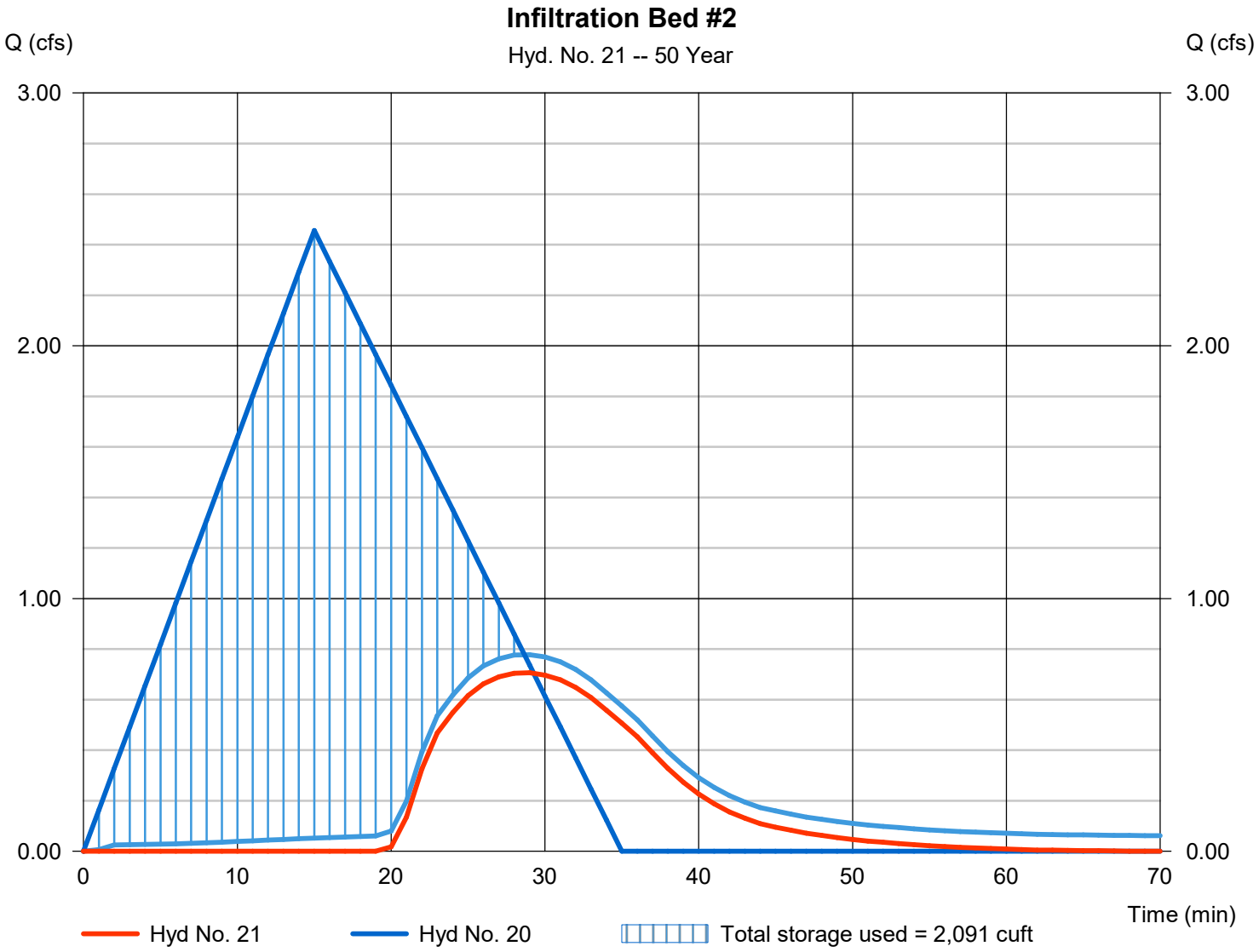
Hydrograph Report

Hyd. No. 21

Infiltration Bed #2

Hydrograph type	=	Reservoir	Peak discharge	=	0.706 cfs
Storm frequency	=	50 yrs	Time to peak	=	29 min
Time interval	=	1 min	Hyd. volume	=	689 cuft
Inflow hyd. No.	=	20 - Total to Infiltration Bed #2	Max. Elevation	=	376.81 ft
Reservoir name	=	Infiltration Bed #2	Max. Storage	=	2,091 cuft

Storage Indication method used. Exfiltration extracted from Outflow.

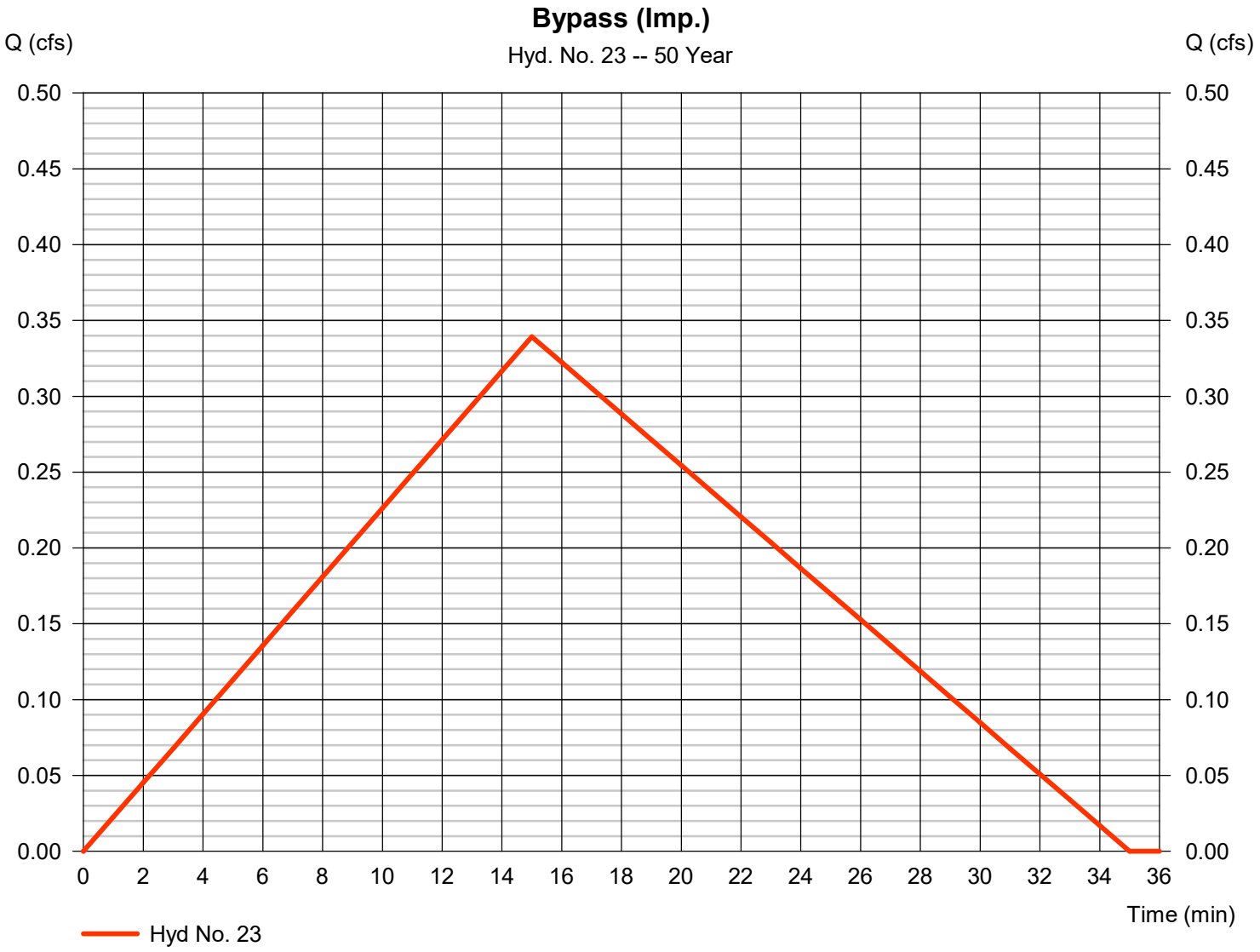


Hydrograph Report

Hyd. No. 23

Bypass (Imp.)

Hydrograph type	=	Rational	Peak discharge	=	0.339 cfs
Storm frequency	=	50 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	356 cuft
Drainage area	=	0.045 ac	Runoff coeff.	=	0.99
Intensity	=	7.616 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

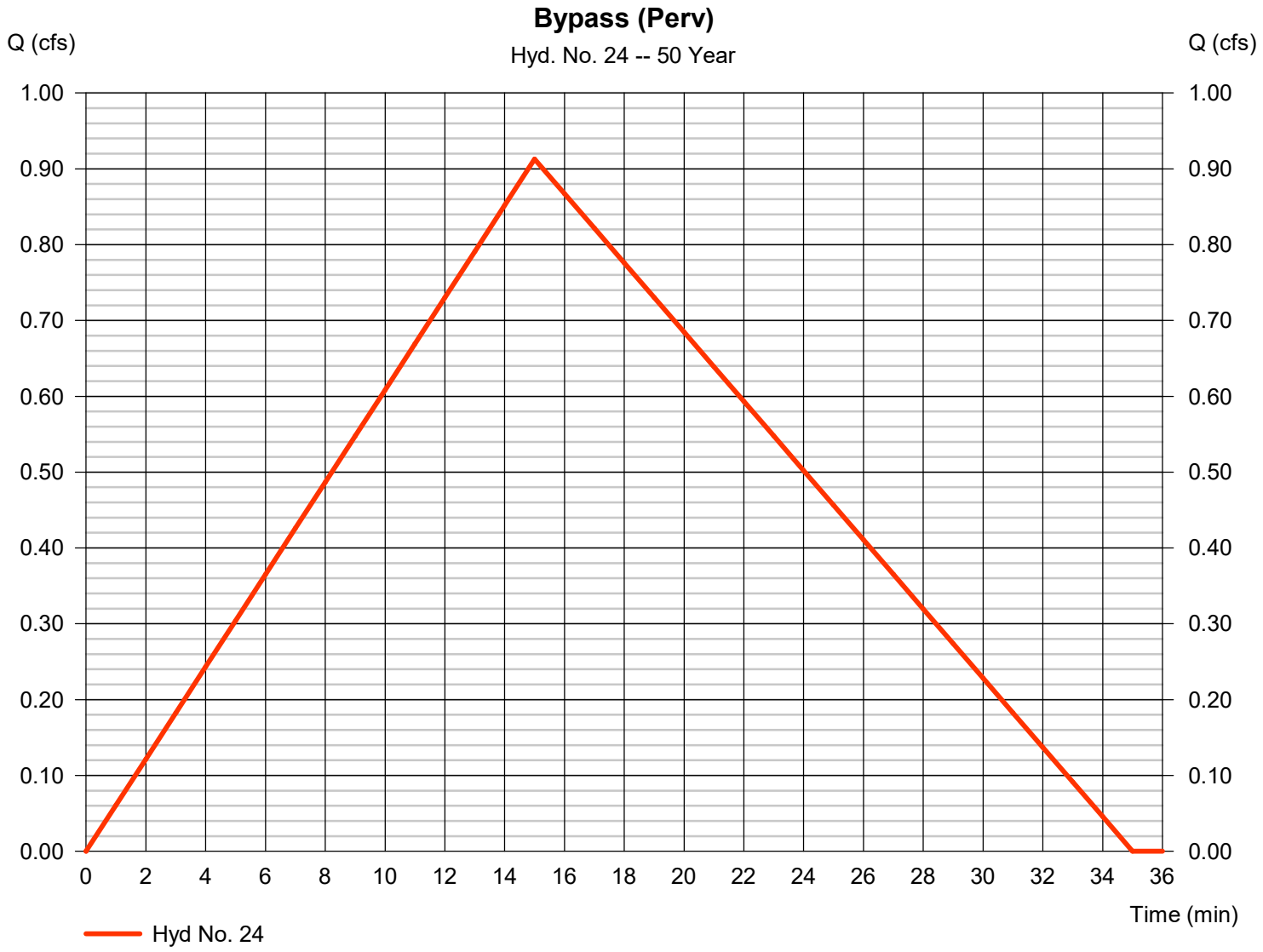


Hydrograph Report

Hyd. No. 24

Bypass (Perv)

Hydrograph type	=	Rational	Peak discharge	=	0.913 cfs
Storm frequency	=	50 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	958 cuft
Drainage area	=	0.235 ac	Runoff coeff.	=	0.51
Intensity	=	7.616 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

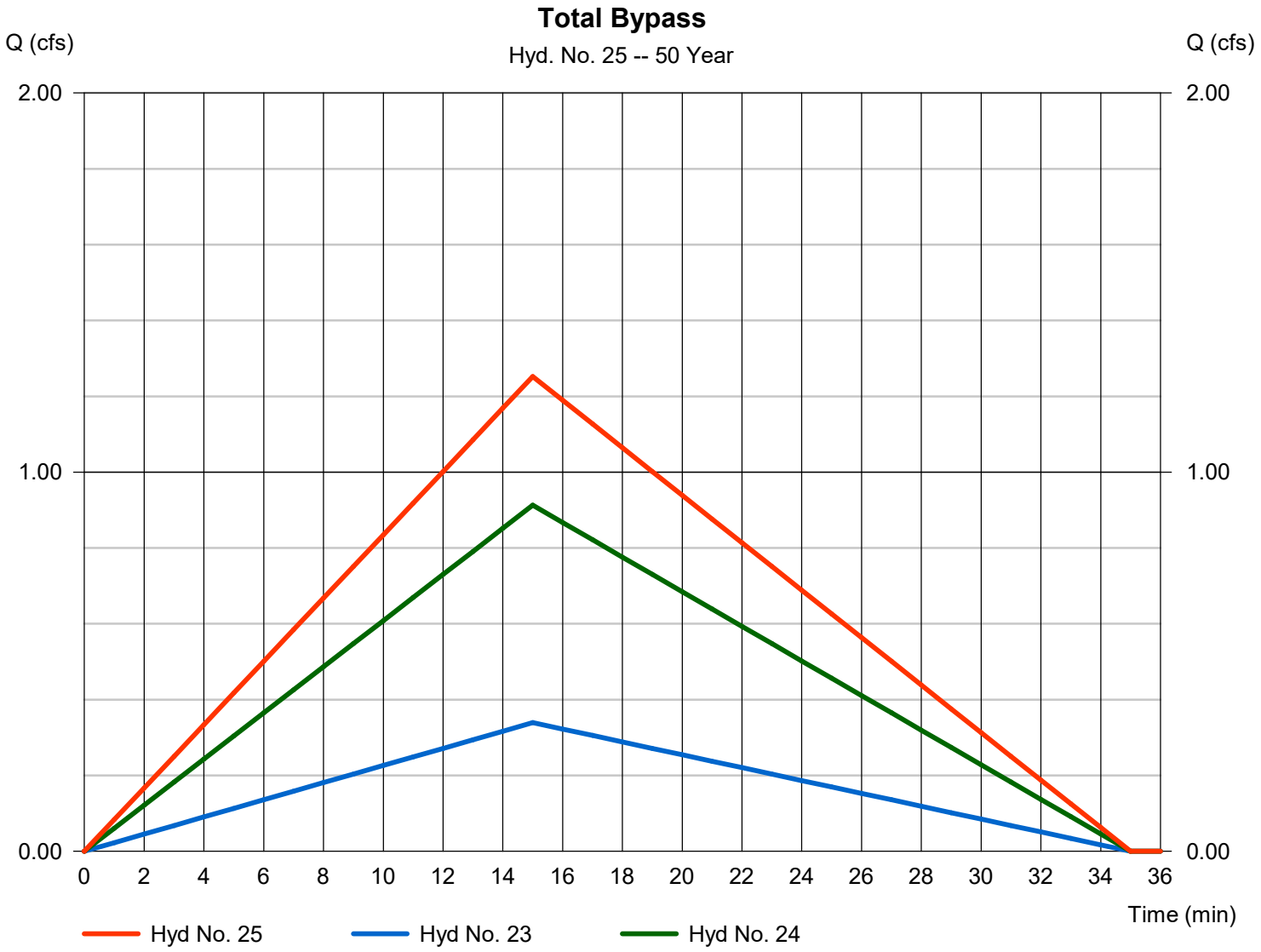


Hydrograph Report

Hyd. No. 25

Total Bypass

Hydrograph type	=	Combine	Peak discharge	=	1.252 cfs
Storm frequency	=	50 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	1,315 cuft
Inflow hyds.	=	23, 24	Contrib. drain. area	=	0.280 ac

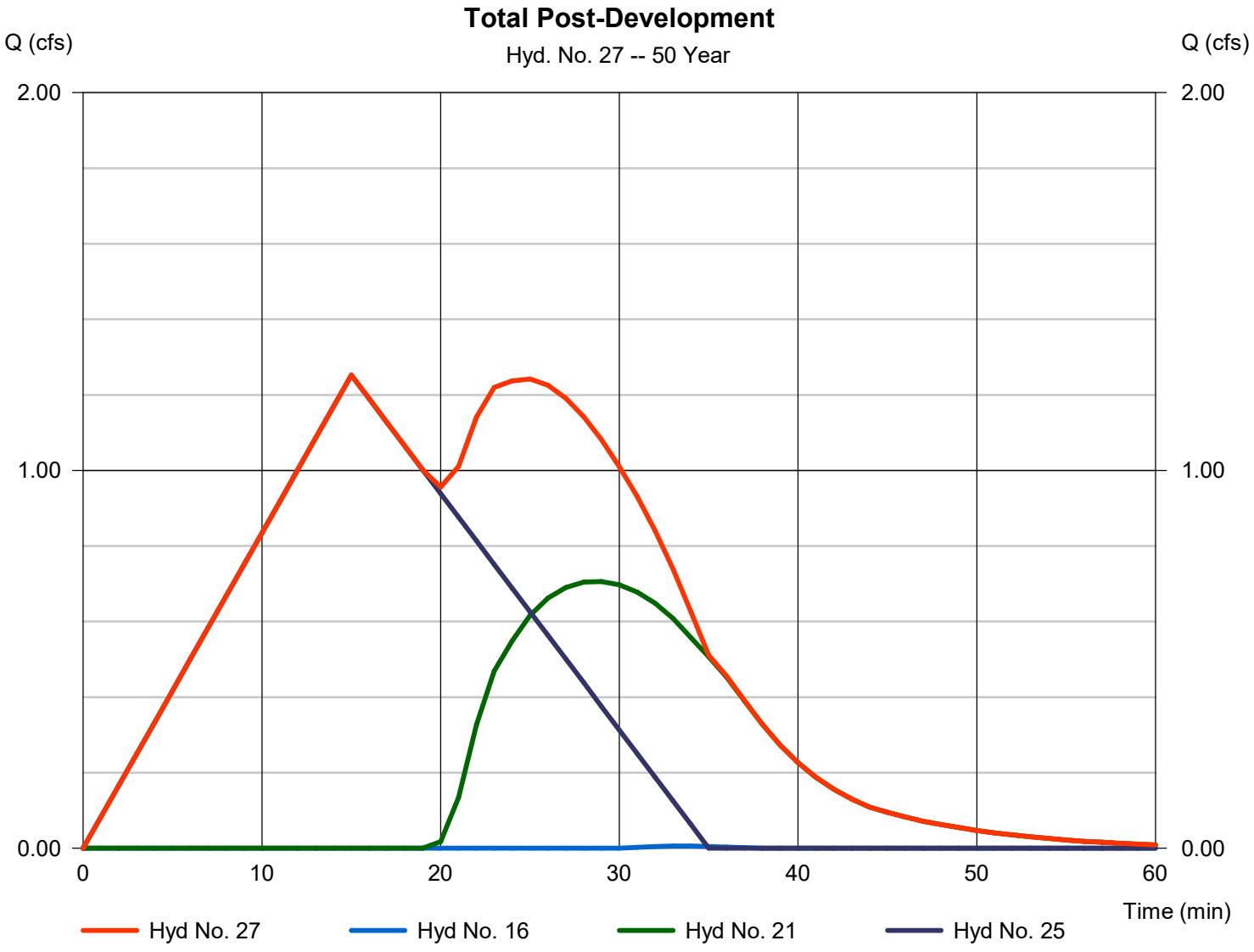


Hydrograph Report

Hyd. No. 27

Total Post-Development

Hydrograph type	=	Combine	Peak discharge	=	1.252 cfs
Storm frequency	=	50 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	2,005 cuft
Inflow hyds.	=	16, 21, 25	Contrib. drain. area	=	0.000 ac



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

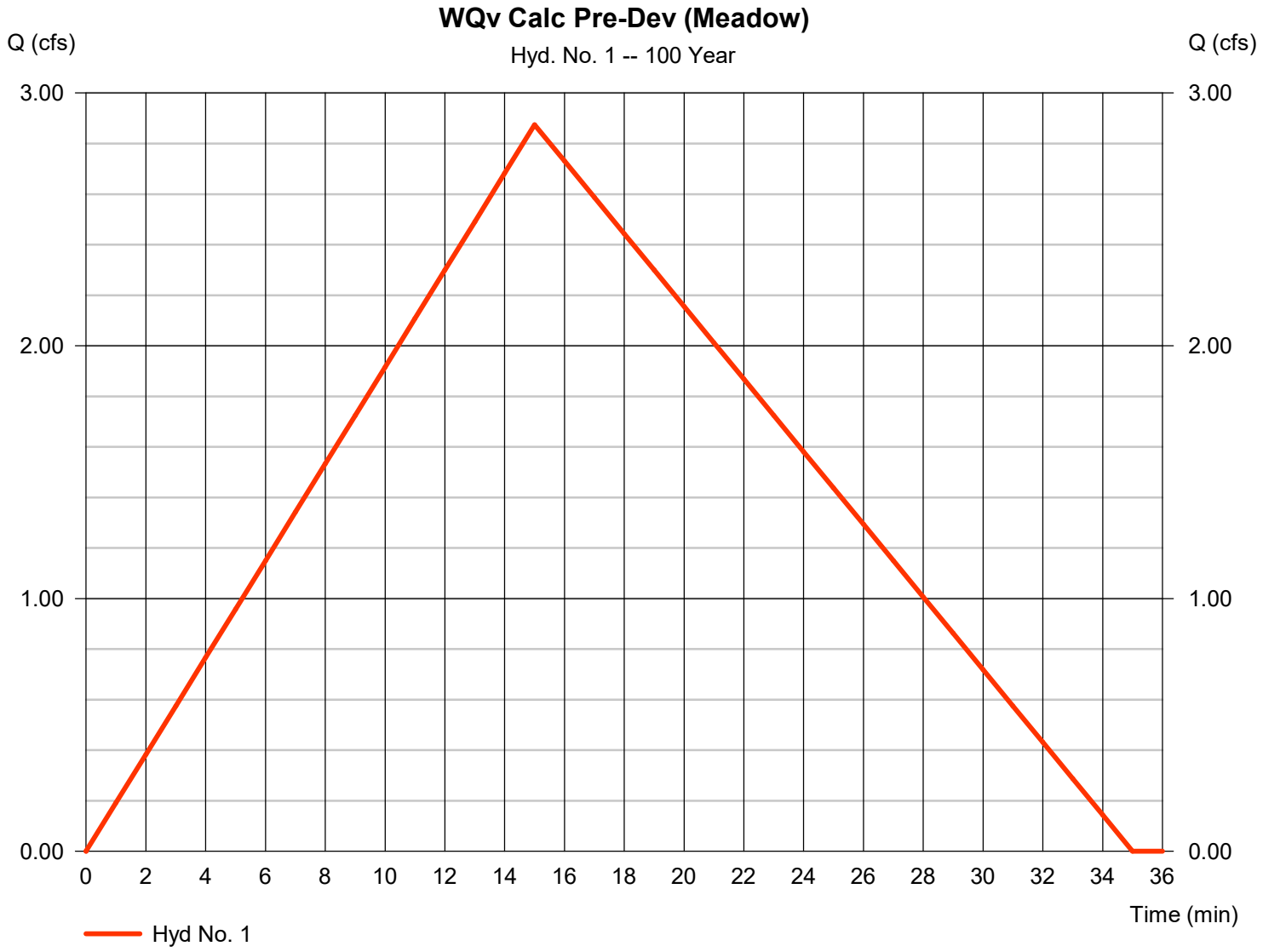
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	2.874	1	15	3,018	------	------	------	WQv Calc Pre-Dev (Meadow)
2	Combine	2.874	1	15	3,018	1	------	------	WQv Calc Total Pre-Dev
4	Rational	1.761	1	15	1,849	------	------	------	WQv Calc Uncontrolled Post-Dev (Im
5	Rational	2.424	1	15	2,546	------	------	------	WQv Calc Uncontrolled Post-Dev (Pe
6	Combine	4.185	1	15	4,394	4, 5	------	------	WQv Calc Total Post-Dev
8	Rational	0.517	1	15	543	------	------	------	Pre-Development (Meadow)
9	Rational	0.544	1	15	571	------	------	------	Compensatory (Imp.)
10	Rational	0.577	1	15	606	------	------	------	Compensatory (Perv.)
11	Combine	1.639	1	15	1,721	8, 9, 10	------	------	Pre-Development Total
13	Rational	0.760	1	15	798	------	------	------	Imp. to Infiltration Basin #1
14	Rational	0.581	1	15	610	------	------	------	Lawn to Infiltration Basin #1
15	Combine	1.342	1	15	1,409	13, 14	------	------	Total to Infiltration Basin #1
16	Reservoir	0.079	1	32	39	15	373.17	1,256	Infiltration Bed #1
18	Rational	0.624	1	15	655	------	------	------	Imp. to Infiltration Basin #2
19	Rational	0.862	1	15	905	------	------	------	Lawn to Infiltration Basin #2
20	Combine	2.607	1	15	2,738	9, 10, 18, 19	------	------	Total to Infiltration Bed #2
21	Reservoir	0.805	1	28	840	20	376.98	2,161	Infiltration Bed #2
23	Rational	0.360	1	15	378	------	------	------	Bypass (Imp.)
24	Rational	0.969	1	15	1,017	------	------	------	Bypass (Perv)
25	Combine	1.329	1	15	1,396	23, 24	------	------	Total Bypass
27	Combine	1.421	1	24	2,274	16, 21, 25,	------	------	Total Post-Development

Hydrograph Report

Hyd. No. 1

WQv Calc Pre-Dev (Meadow)

Hydrograph type	=	Rational	Peak discharge	=	2.874 cfs
Storm frequency	=	100 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	3,018 cuft
Drainage area	=	0.808 ac	Runoff coeff.	=	0.44
Intensity	=	8.084 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

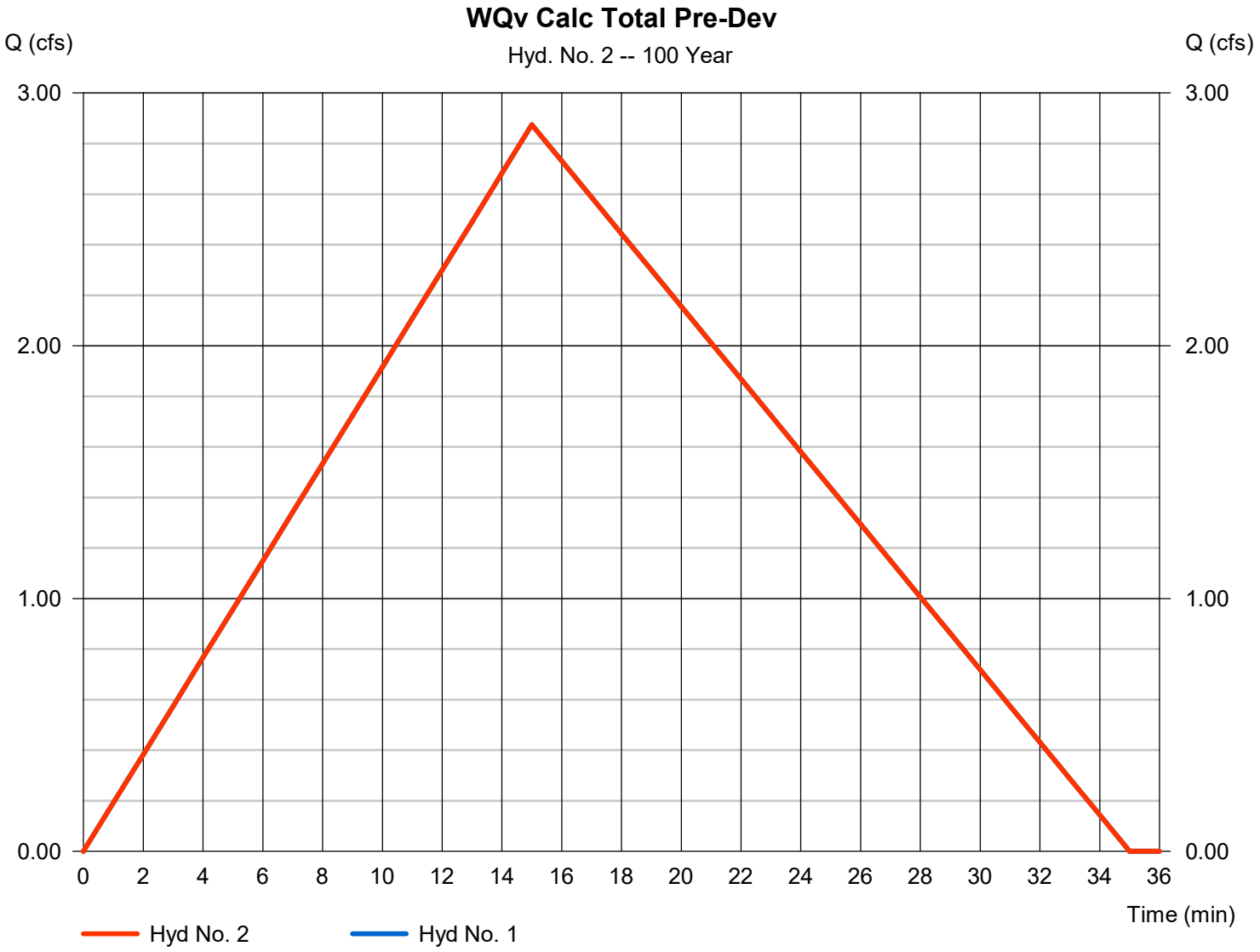


Hydrograph Report

Hyd. No. 2

WQv Calc Total Pre-Dev

Hydrograph type	= Combine	Peak discharge	= 2.874 cfs
Storm frequency	= 100 yrs	Time to peak	= 15 min
Time interval	= 1 min	Hyd. volume	= 3,018 cuft
Inflow hyds.	= 1	Contrib. drain. area	= 0.808 ac

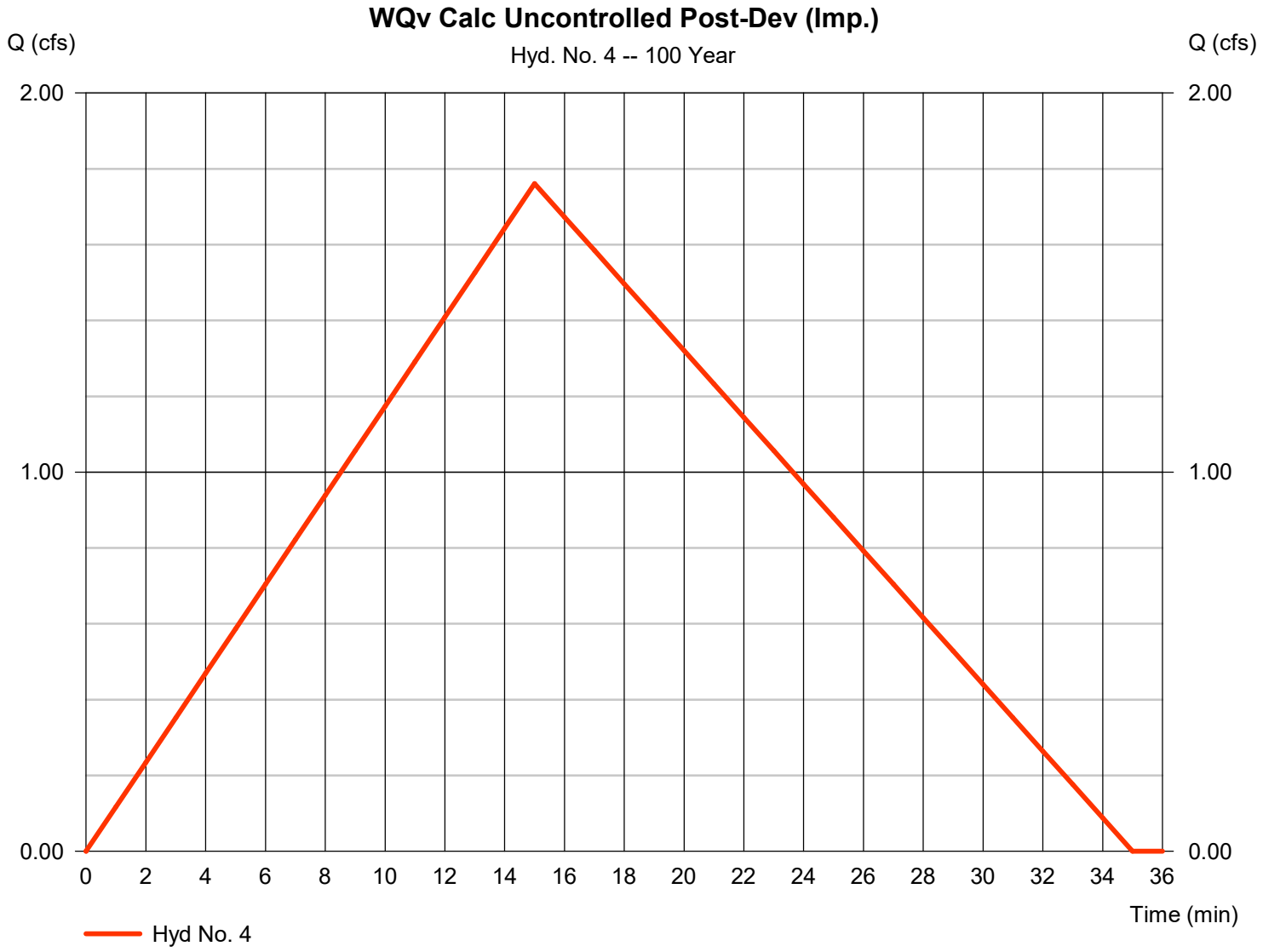


Hydrograph Report

Hyd. No. 4

WQv Calc Uncontrolled Post-Dev (Imp.)

Hydrograph type	=	Rational	Peak discharge	=	1.761 cfs
Storm frequency	=	100 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	1,849 cuft
Drainage area	=	0.220 ac	Runoff coeff.	=	0.99
Intensity	=	8.084 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

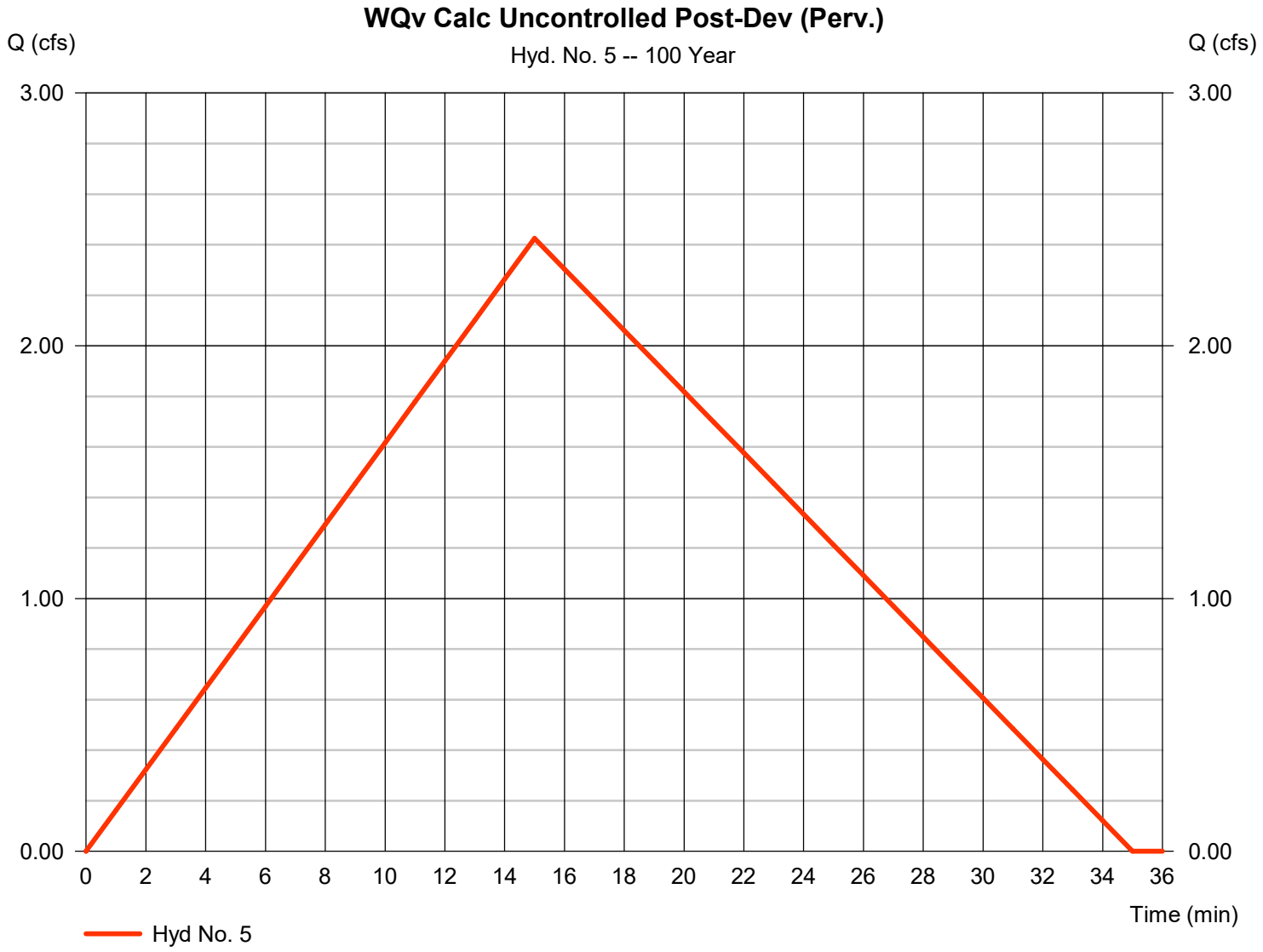


Hydrograph Report

Hyd. No. 5

WQv Calc Uncontrolled Post-Dev (Perv.)

Hydrograph type	=	Rational	Peak discharge	=	2.424 cfs
Storm frequency	=	100 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	2,546 cuft
Drainage area	=	0.588 ac	Runoff coeff.	=	0.51
Intensity	=	8.084 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

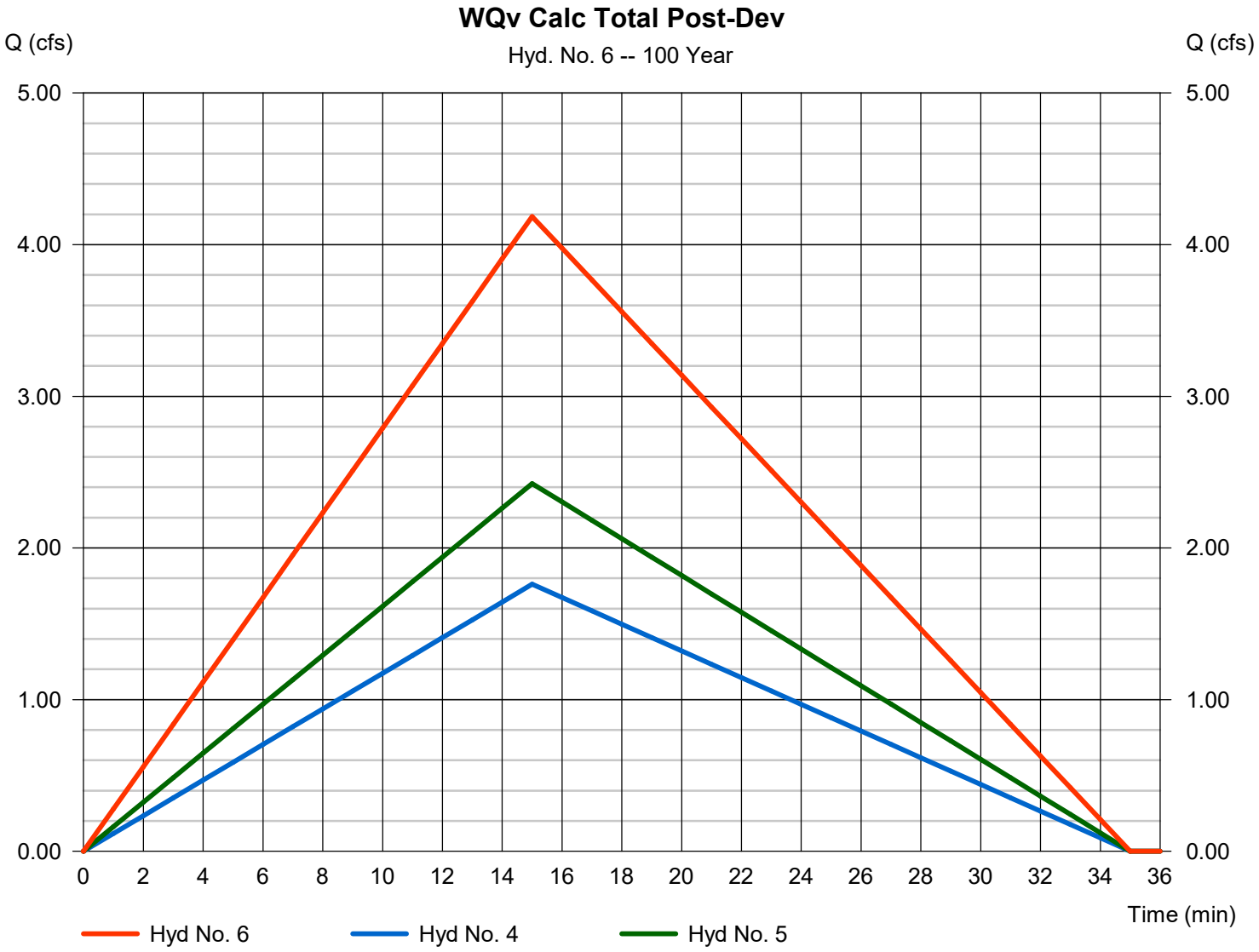


Hydrograph Report

Hyd. No. 6

WQv Calc Total Post-Dev

Hydrograph type	= Combine	Peak discharge	= 4.185 cfs
Storm frequency	= 100 yrs	Time to peak	= 15 min
Time interval	= 1 min	Hyd. volume	= 4,394 cuft
Inflow hyds.	= 4, 5	Contrib. drain. area	= 0.808 ac

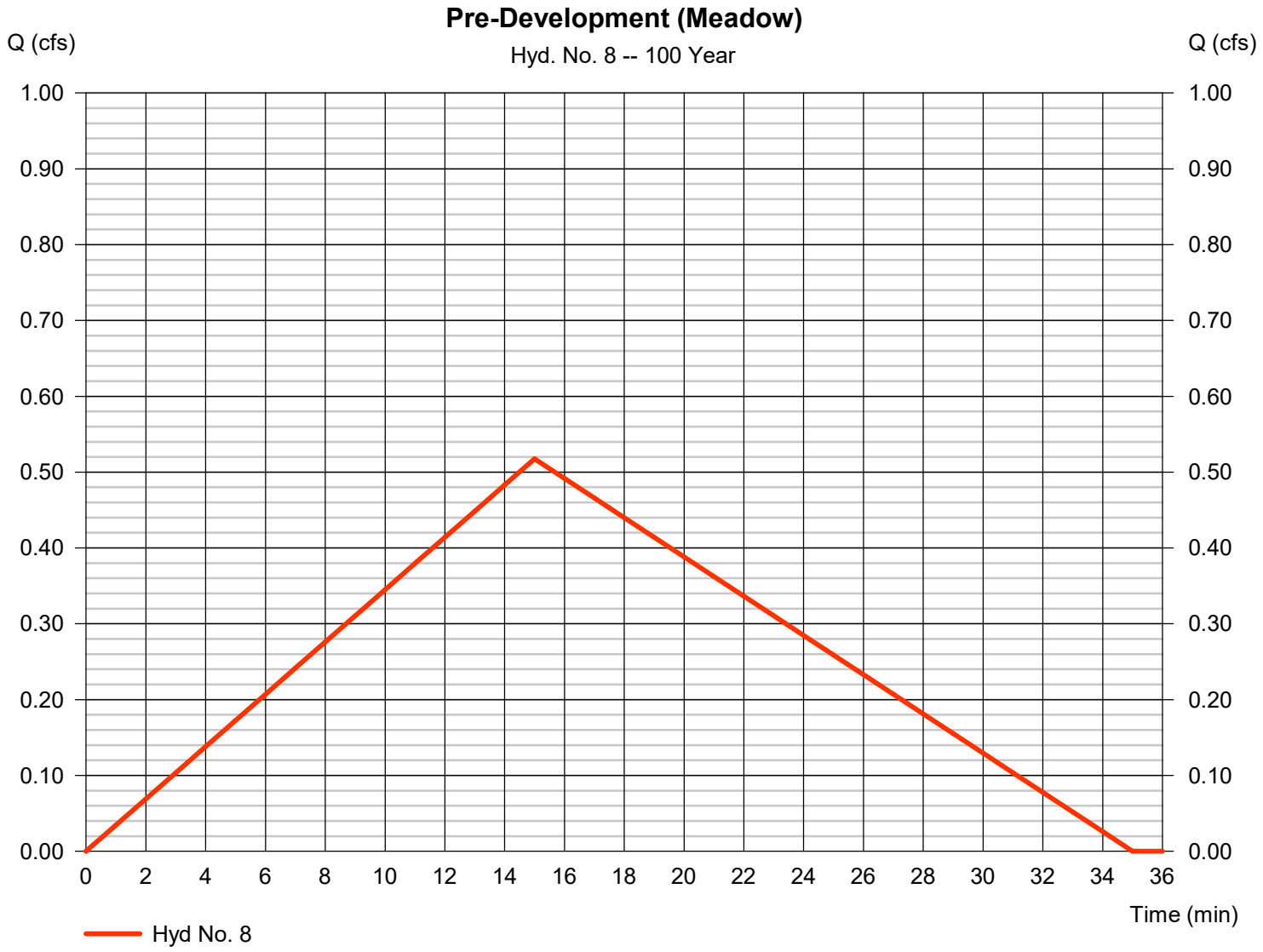


Hydrograph Report

Hyd. No. 8

Pre-Development (Meadow)

Hydrograph type	=	Rational	Peak discharge	=	0.517 cfs
Storm frequency	=	100 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	543 cuft
Drainage area	=	0.320 ac	Runoff coeff.	=	0.2
Intensity	=	8.084 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

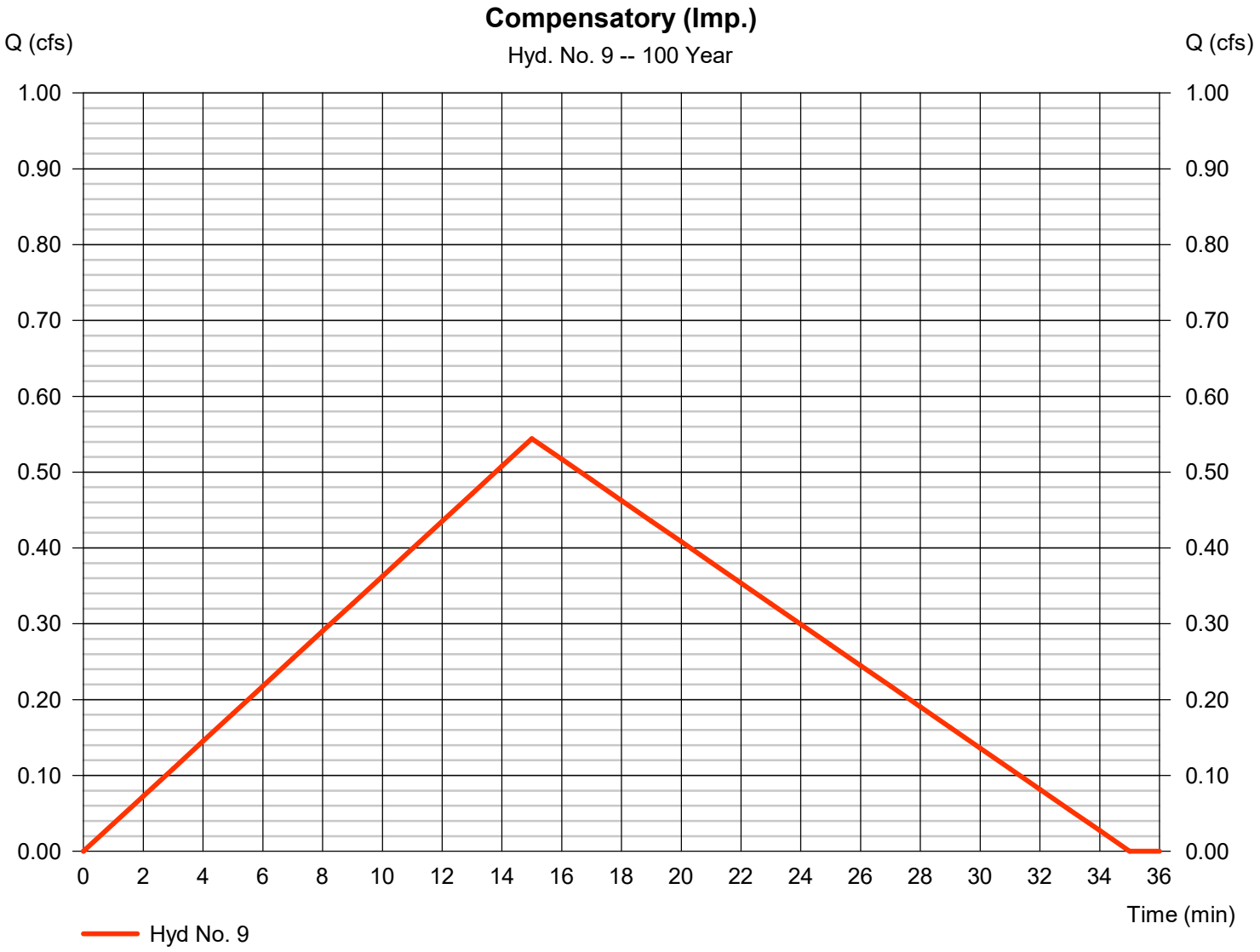


Hydrograph Report

Hyd. No. 9

Compensatory (Imp.)

Hydrograph type	=	Rational	Peak discharge	=	0.544 cfs
Storm frequency	=	100 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	571 cuft
Drainage area	=	0.068 ac	Runoff coeff.	=	0.99
Intensity	=	8.084 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

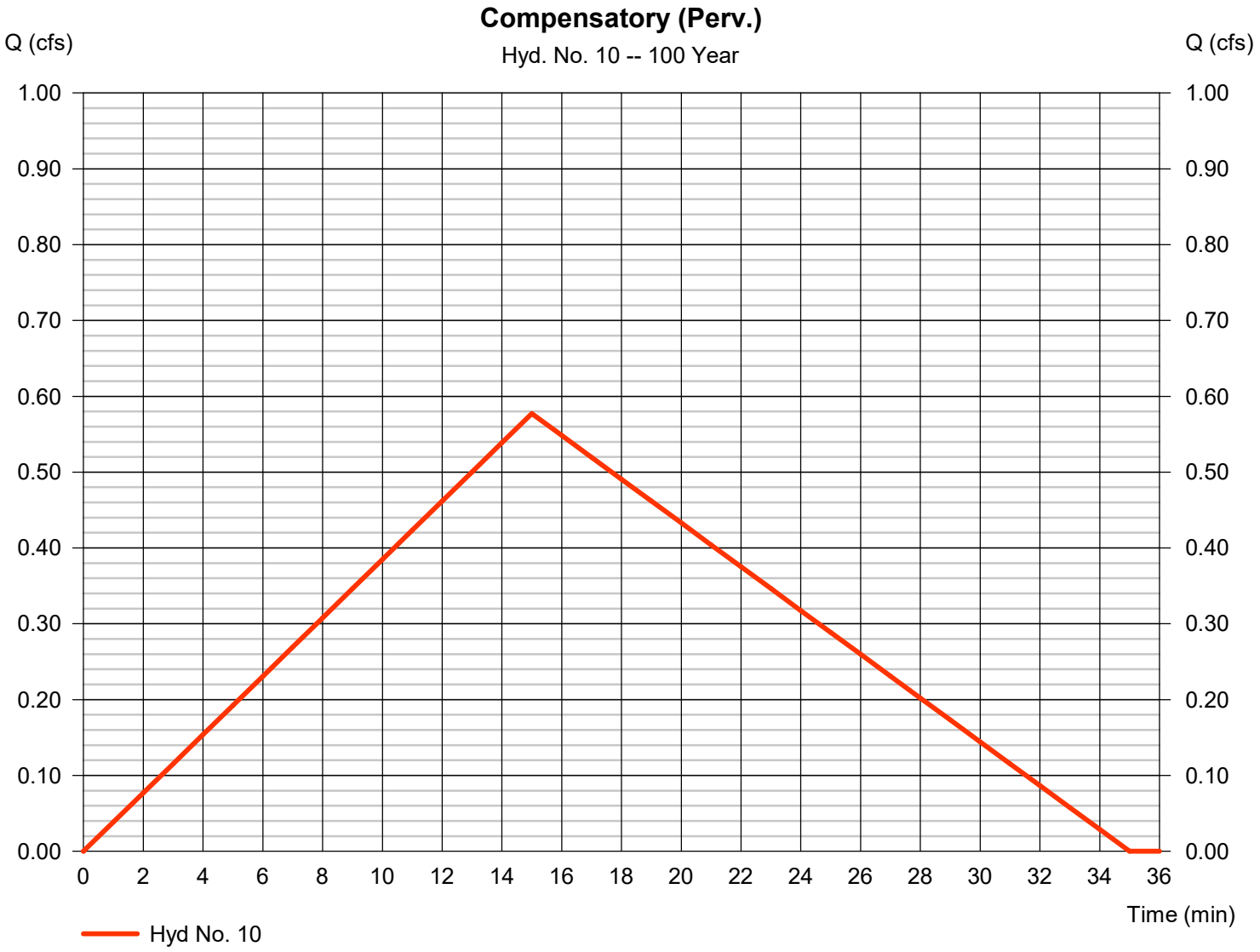


Hydrograph Report

Hyd. No. 10

Compensatory (Perv.)

Hydrograph type	=	Rational	Peak discharge	=	0.577 cfs
Storm frequency	=	100 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	606 cuft
Drainage area	=	0.140 ac	Runoff coeff.	=	0.51
Intensity	=	8.084 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

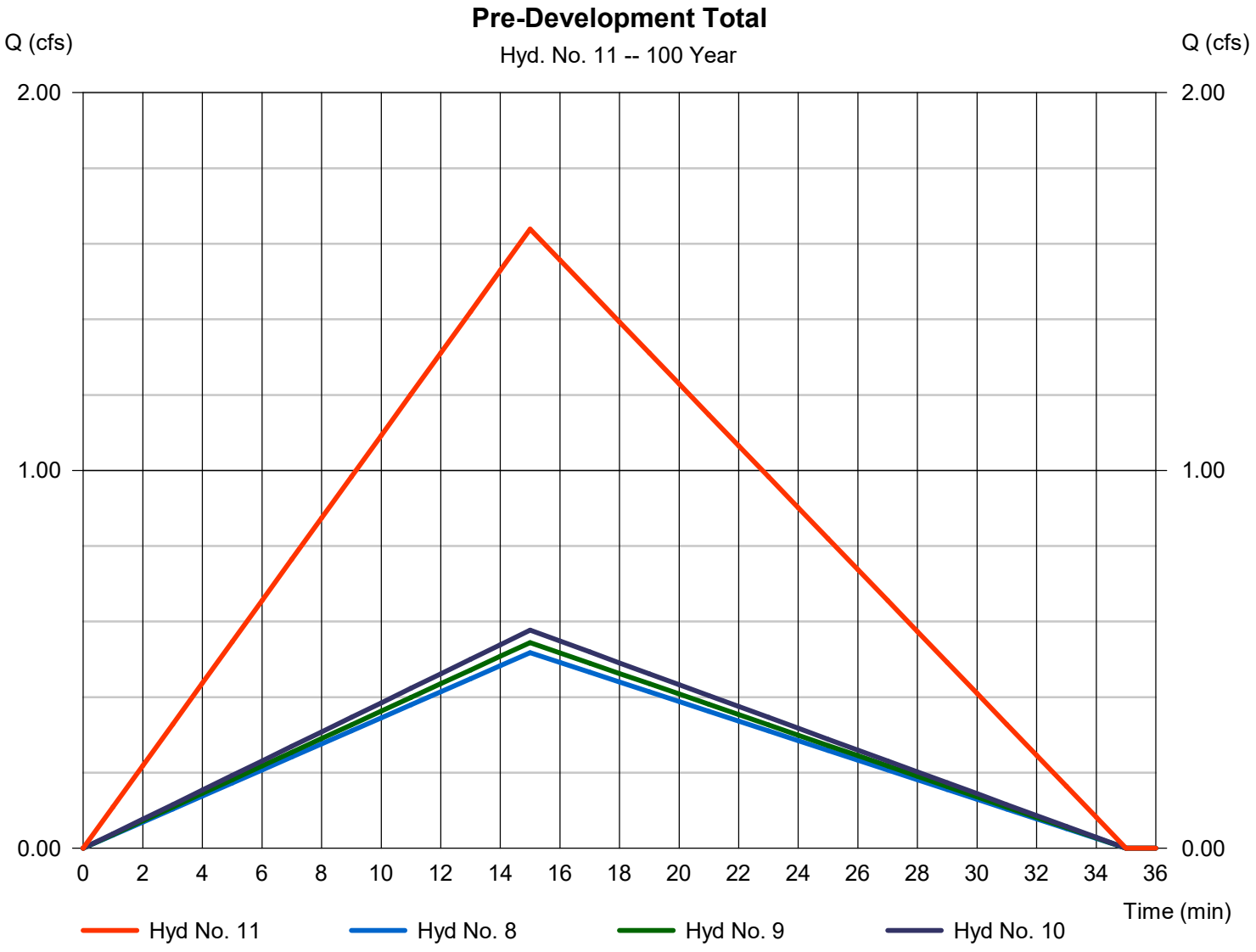


Hydrograph Report

Hyd. No. 11

Pre-Development Total

Hydrograph type	= Combine	Peak discharge	= 1.639 cfs
Storm frequency	= 100 yrs	Time to peak	= 15 min
Time interval	= 1 min	Hyd. volume	= 1,721 cuft
Inflow hyds.	= 8, 9, 10	Contrib. drain. area	= 0.528 ac

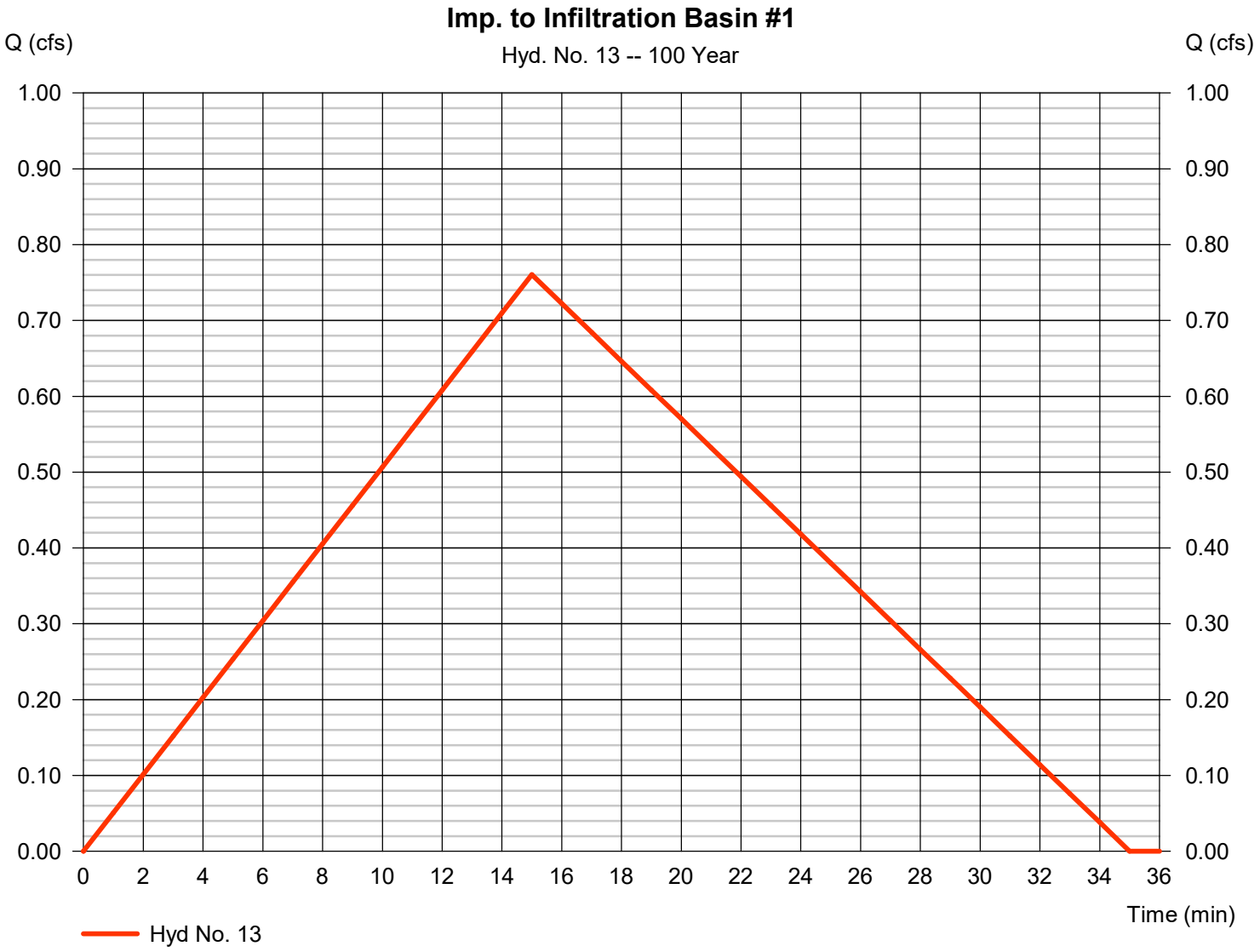


Hydrograph Report

Hyd. No. 13

Imp. to Infiltration Basin #1

Hydrograph type	=	Rational	Peak discharge	=	0.760 cfs
Storm frequency	=	100 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	798 cuft
Drainage area	=	0.095 ac	Runoff coeff.	=	0.99
Intensity	=	8.084 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

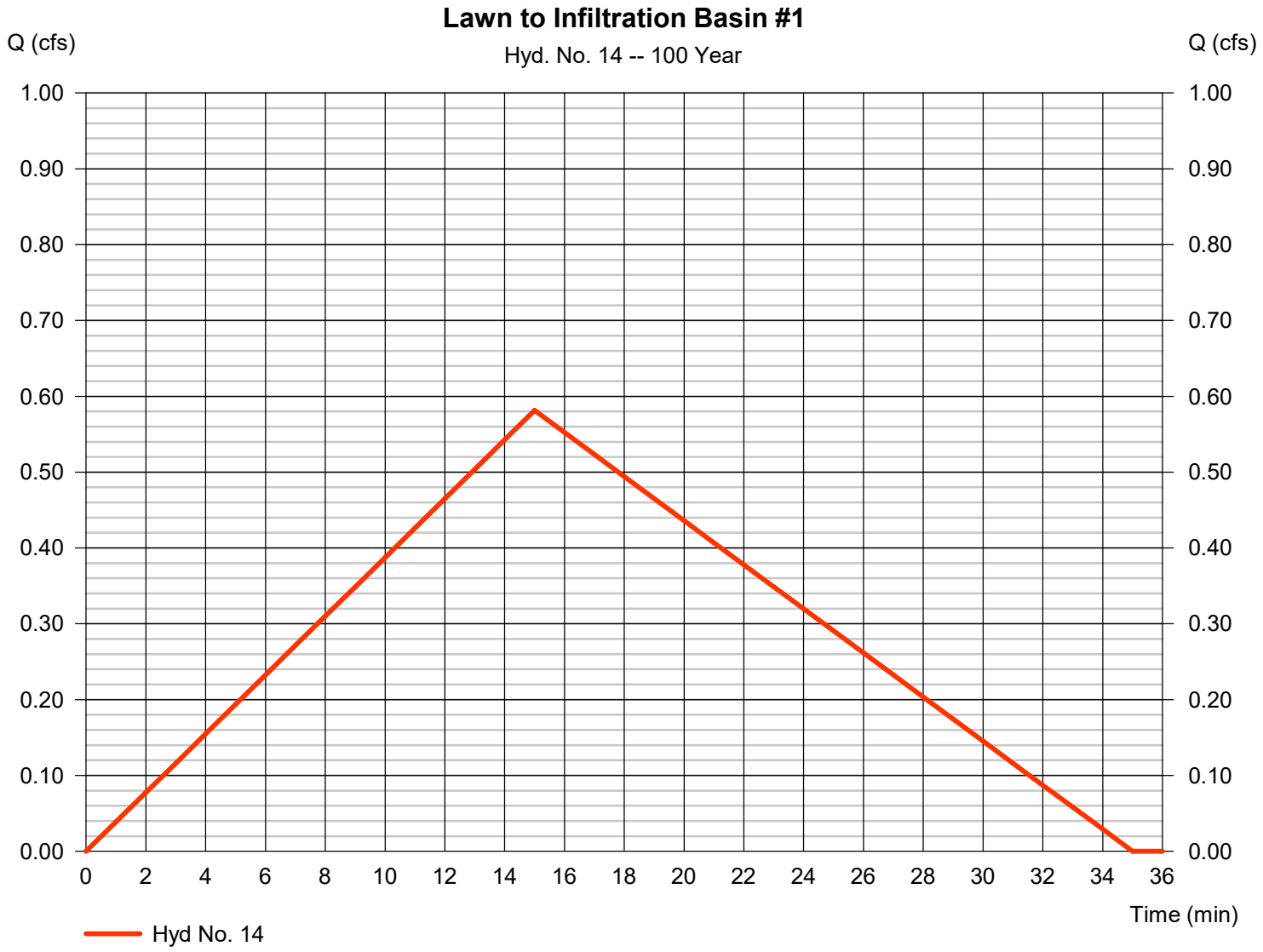


Hydrograph Report

Hyd. No. 14

Lawn to Infiltration Basin #1

Hydrograph type	=	Rational	Peak discharge	=	0.581 cfs
Storm frequency	=	100 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	610 cuft
Drainage area	=	0.141 ac	Runoff coeff.	=	0.51
Intensity	=	8.084 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

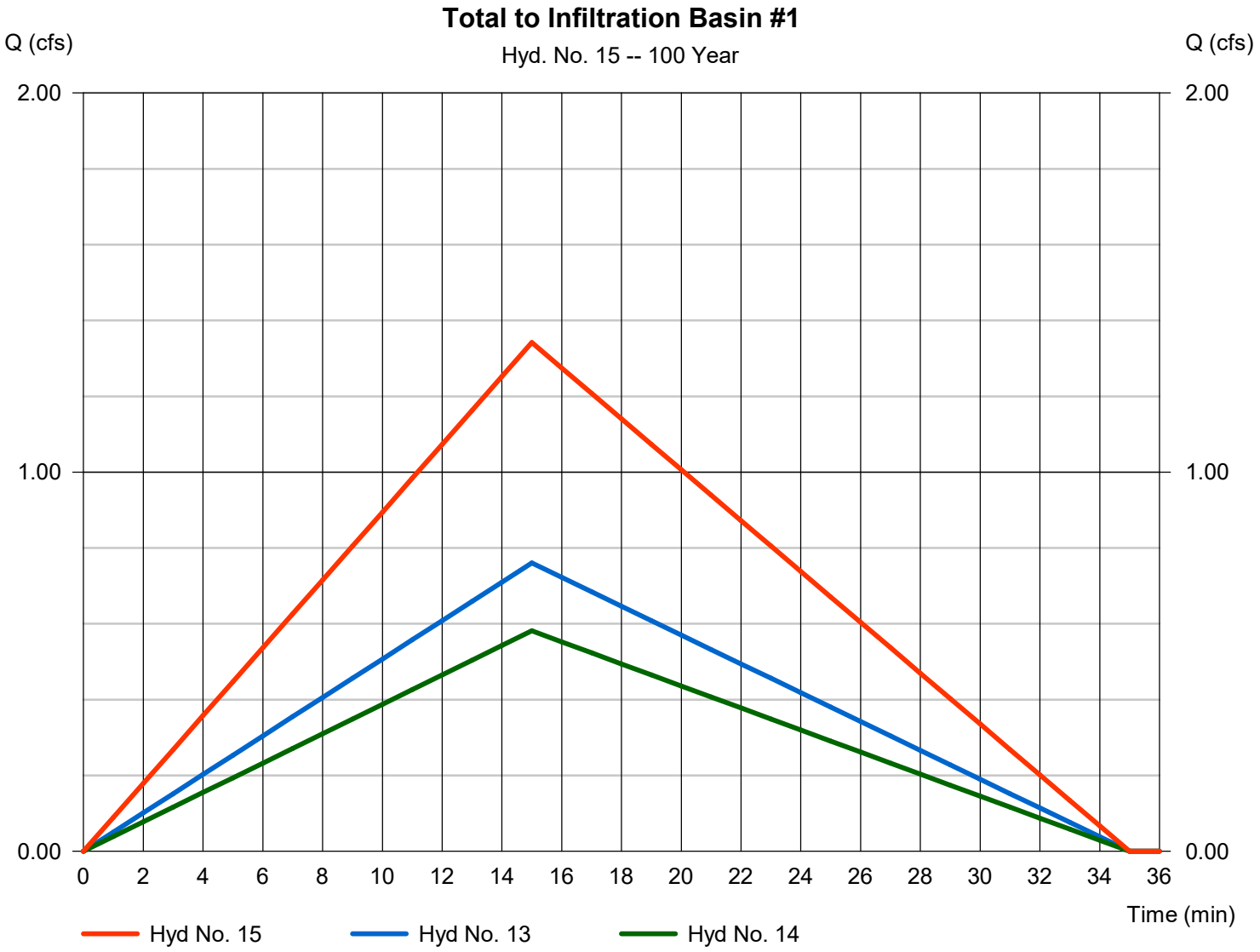


Hydrograph Report

Hyd. No. 15

Total to Infiltration Basin #1

Hydrograph type	=	Combine	Peak discharge	=	1.342 cfs
Storm frequency	=	100 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	1,409 cuft
Inflow hyds.	=	13, 14	Contrib. drain. area	=	0.236 ac



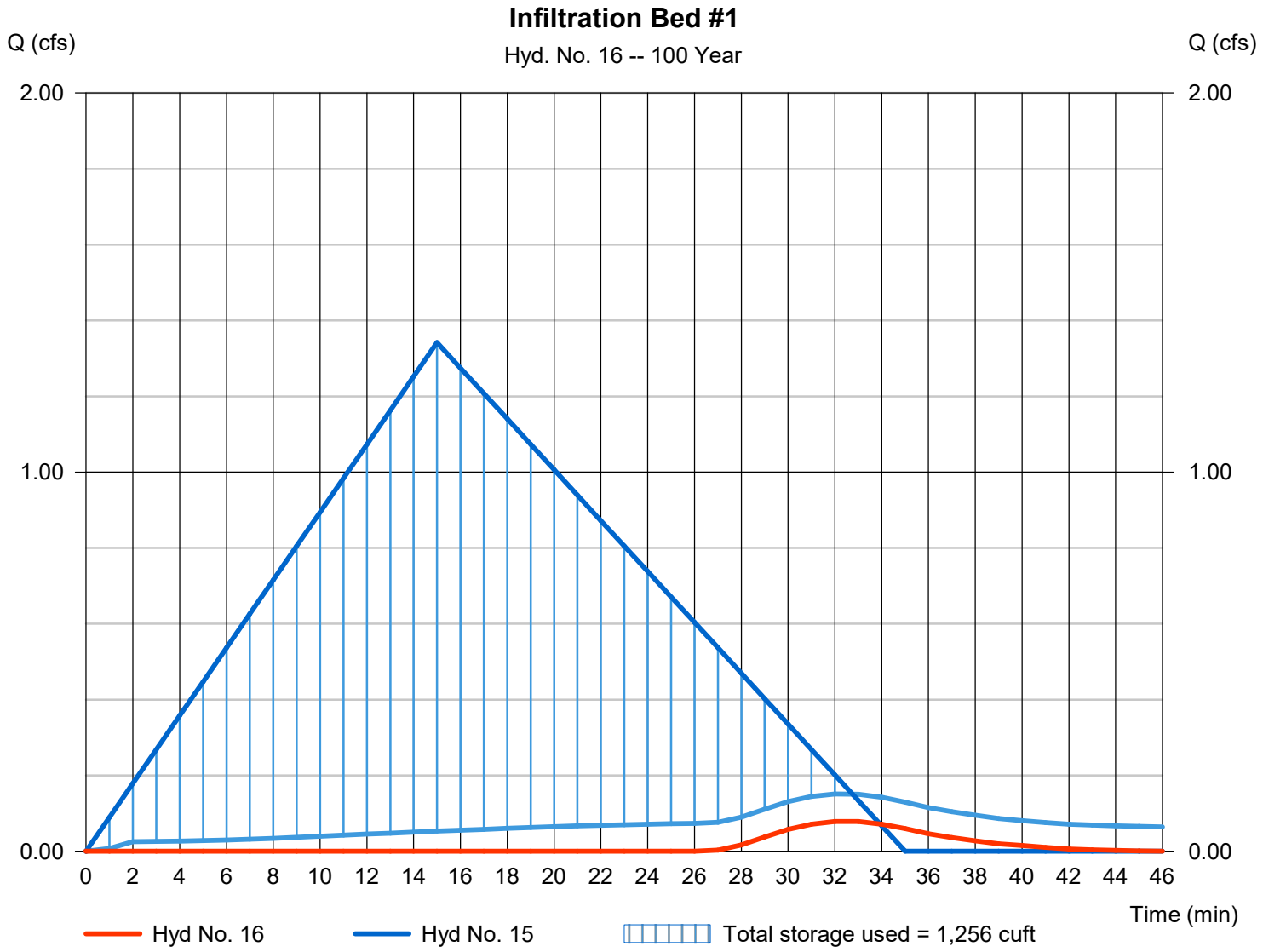
Hydrograph Report

Hyd. No. 16

Infiltration Bed #1

Hydrograph type	=	Reservoir	Peak discharge	=	0.079 cfs
Storm frequency	=	100 yrs	Time to peak	=	32 min
Time interval	=	1 min	Hyd. volume	=	39 cuft
Inflow hyd. No.	=	15 - Total to Infiltration Basin #1	Max. Elevation	=	373.17 ft
Reservoir name	=	Infiltration Bed #1	Max. Storage	=	1,256 cuft

Storage Indication method used. Exfiltration extracted from Outflow.

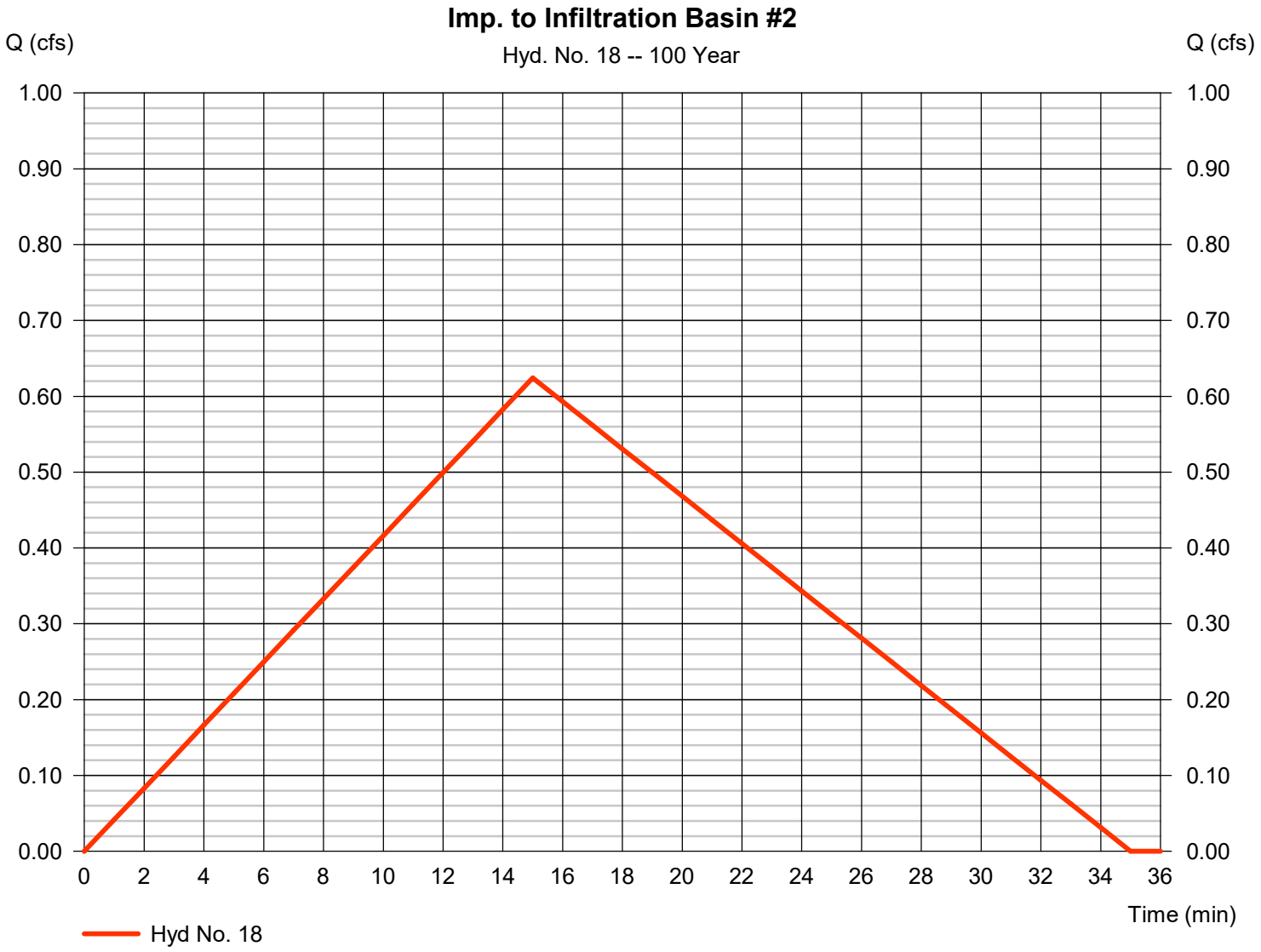


Hydrograph Report

Hyd. No. 18

Imp. to Infiltration Basin #2

Hydrograph type	=	Rational	Peak discharge	=	0.624 cfs
Storm frequency	=	100 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	655 cuft
Drainage area	=	0.078 ac	Runoff coeff.	=	0.99
Intensity	=	8.084 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

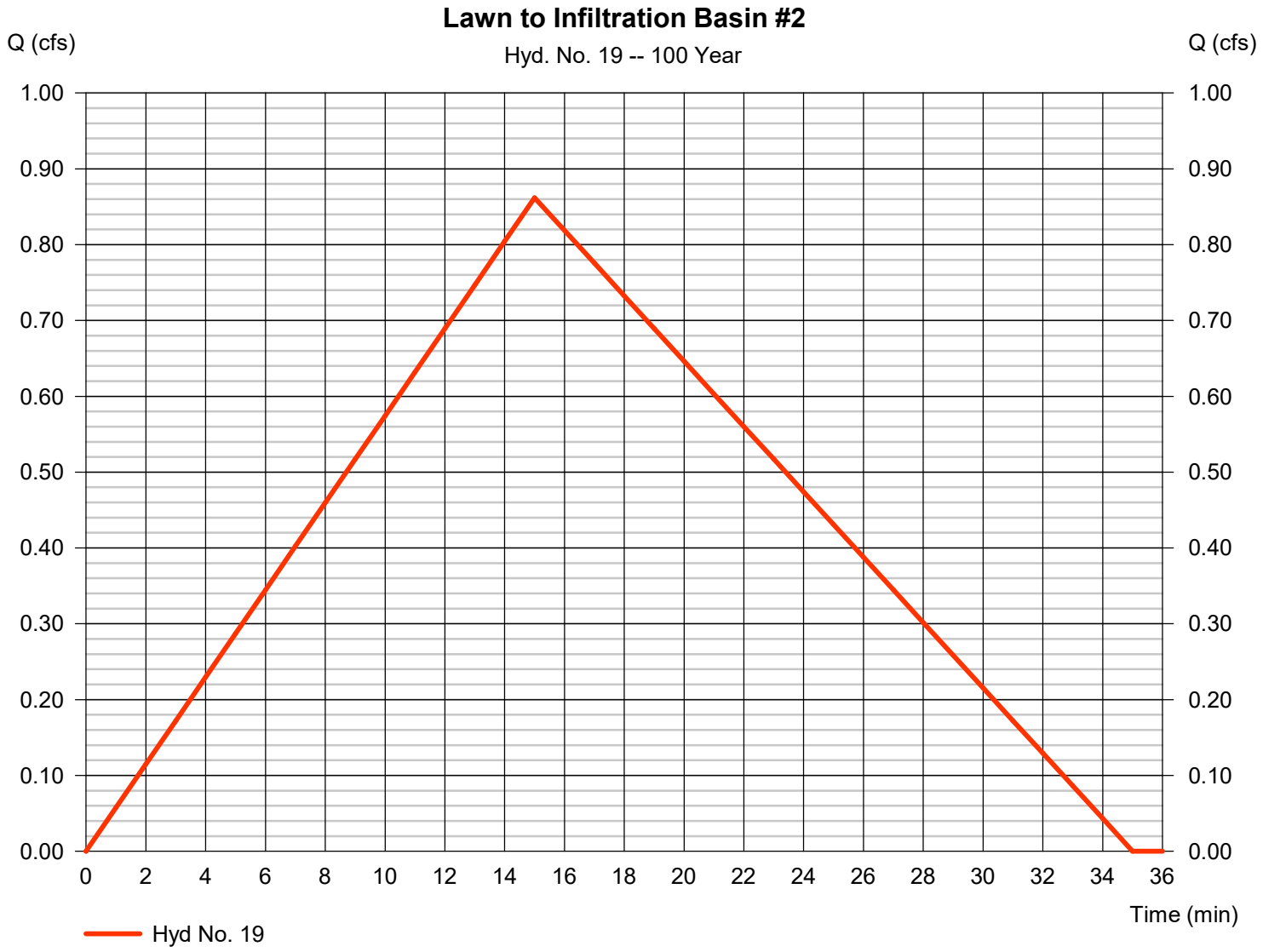


Hydrograph Report

Hyd. No. 19

Lawn to Infiltration Basin #2

Hydrograph type	=	Rational	Peak discharge	=	0.862 cfs
Storm frequency	=	100 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	905 cuft
Drainage area	=	0.209 ac	Runoff coeff.	=	0.51
Intensity	=	8.084 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

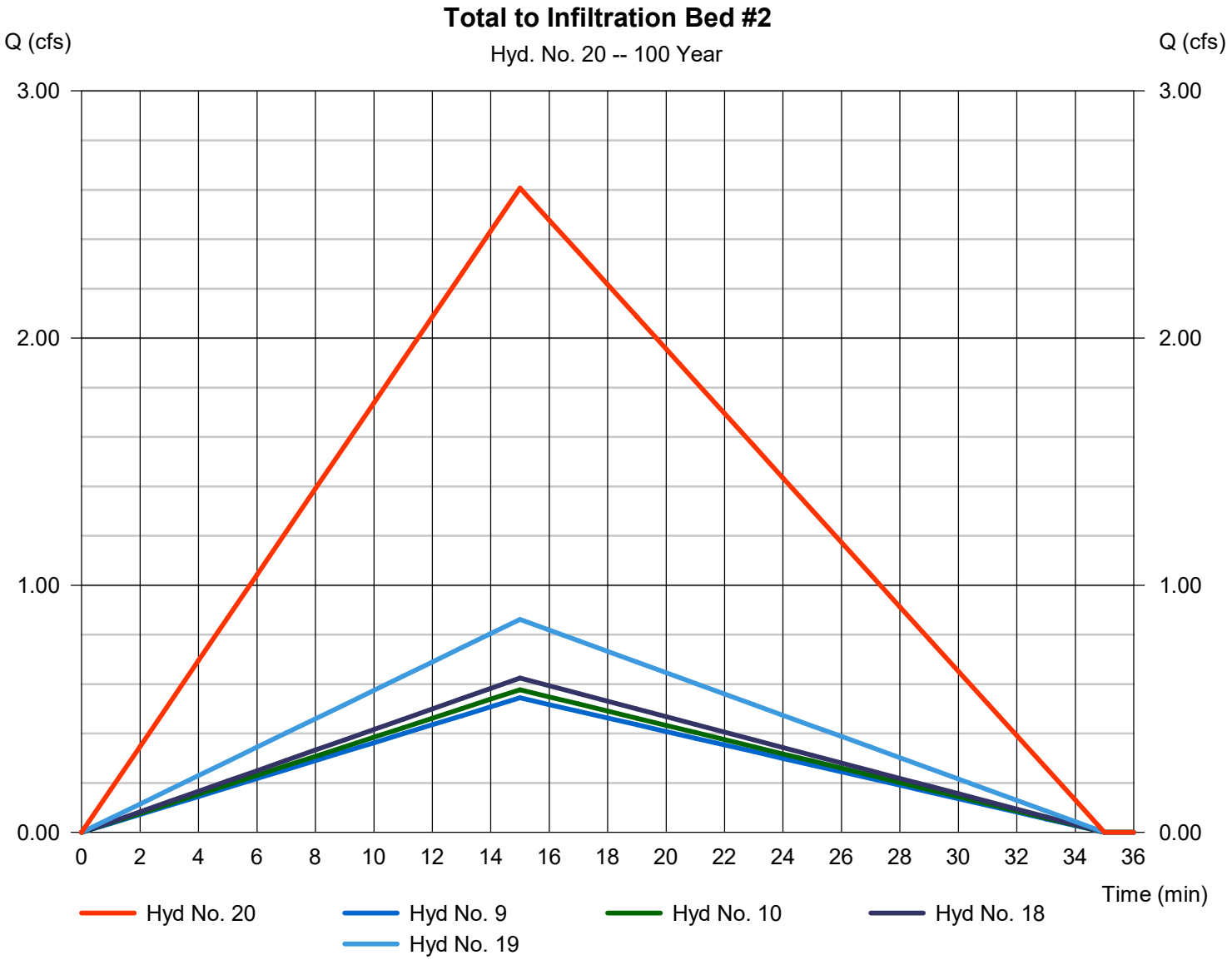


Hydrograph Report

Hyd. No. 20

Total to Infiltration Bed #2

Hydrograph type	=	Combine	Peak discharge	=	2.607 cfs
Storm frequency	=	100 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	2,738 cuft
Inflow hyds.	=	9, 10, 18, 19	Contrib. drain. area	=	0.495 ac



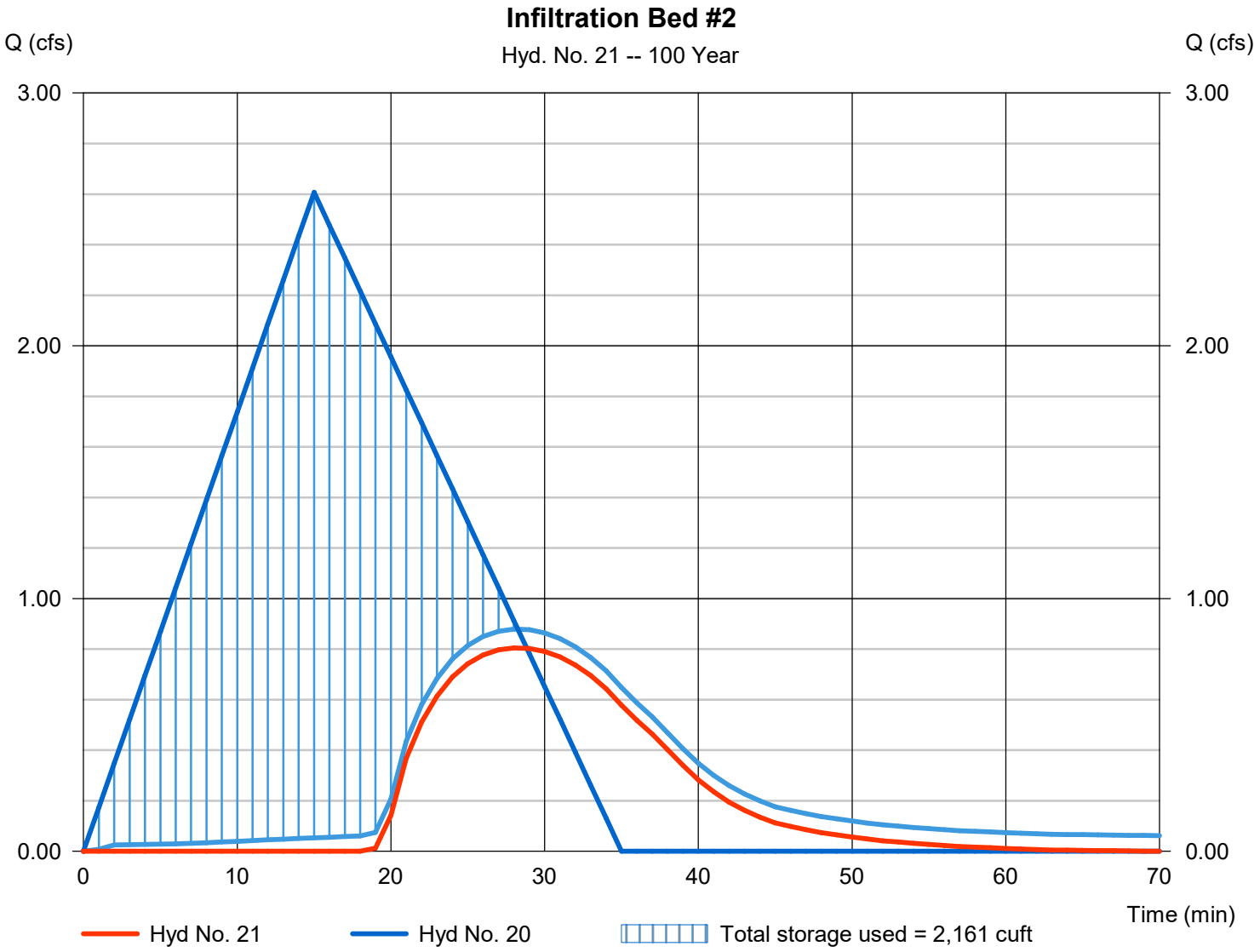
Hydrograph Report

Hyd. No. 21

Infiltration Bed #2

Hydrograph type	=	Reservoir	Peak discharge	=	0.805 cfs
Storm frequency	=	100 yrs	Time to peak	=	28 min
Time interval	=	1 min	Hyd. volume	=	840 cuft
Inflow hyd. No.	=	20 - Total to Infiltration Bed #2	Max. Elevation	=	376.98 ft
Reservoir name	=	Infiltration Bed #2	Max. Storage	=	2,161 cuft

Storage Indication method used. Exfiltration extracted from Outflow.



Hydrograph Report

Hyd. No. 23

Bypass (Imp.)

Hydrograph type	=	Rational	Peak discharge	=	0.360 cfs
Storm frequency	=	100 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	378 cuft
Drainage area	=	0.045 ac	Runoff coeff.	=	0.99
Intensity	=	8.084 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

Hydrograph Report

Hyd. No. 24

Bypass (Perv)

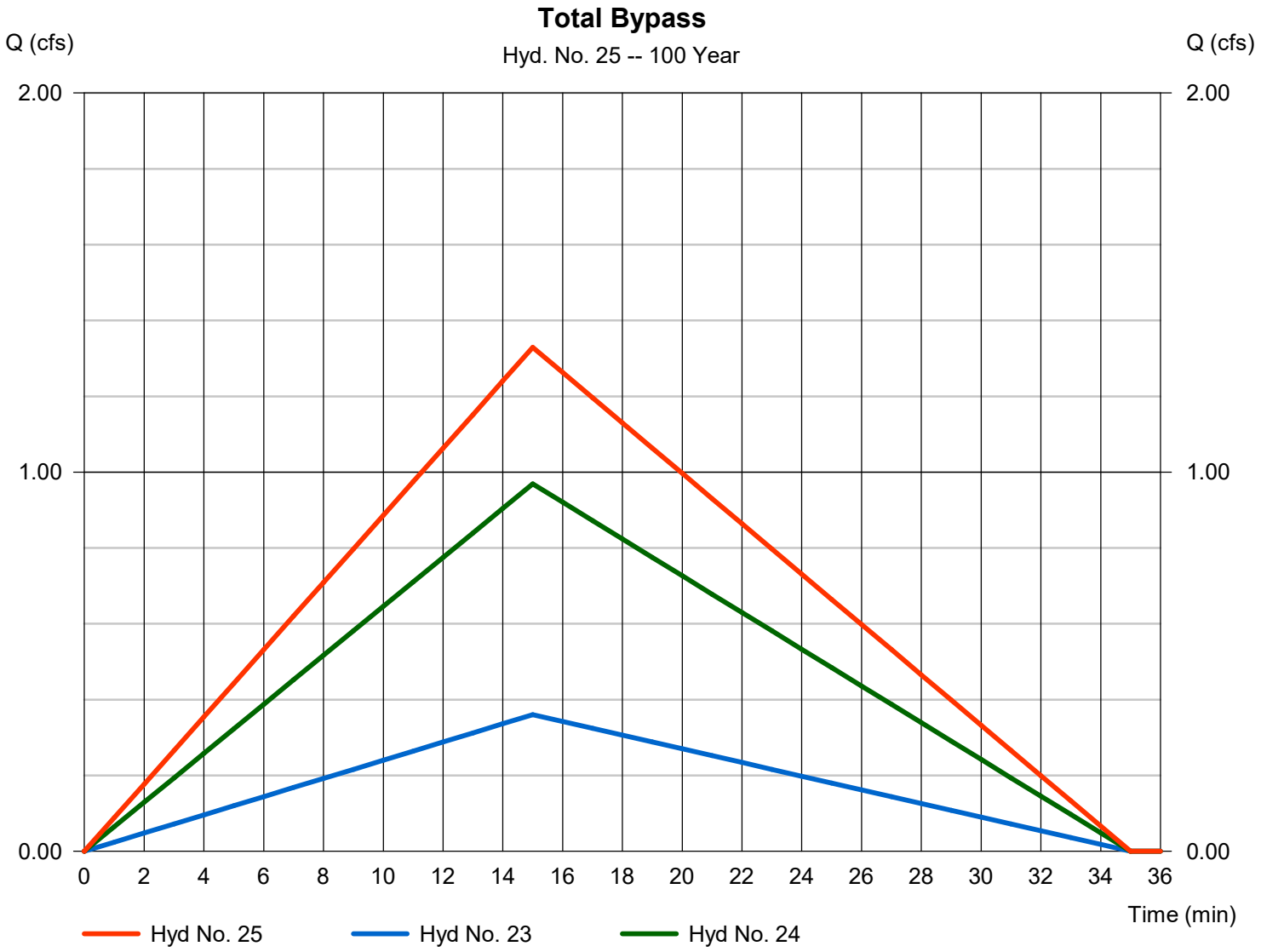
Hydrograph type	=	Rational	Peak discharge	=	0.969 cfs
Storm frequency	=	100 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	1,017 cuft
Drainage area	=	0.235 ac	Runoff coeff.	=	0.51
Intensity	=	8.084 in/hr	Tc by User	=	5.00 min
IDF Curve	=	Radnor.IDF	Asc/Rec limb fact	=	3/4

Hydrograph Report

Hyd. No. 25

Total Bypass

Hydrograph type	=	Combine	Peak discharge	=	1.329 cfs
Storm frequency	=	100 yrs	Time to peak	=	15 min
Time interval	=	1 min	Hyd. volume	=	1,396 cuft
Inflow hyds.	=	23, 24	Contrib. drain. area	=	0.280 ac



Hydrograph Report

Hyd. No. 27

Total Post-Development

Hydrograph type	=	Combine	Peak discharge	=	1.421 cfs
Storm frequency	=	100 yrs	Time to peak	=	24 min
Time interval	=	1 min	Hyd. volume	=	2,274 cuft
Inflow hyds.	=	16, 21, 25	Contrib. drain. area	=	0.000 ac