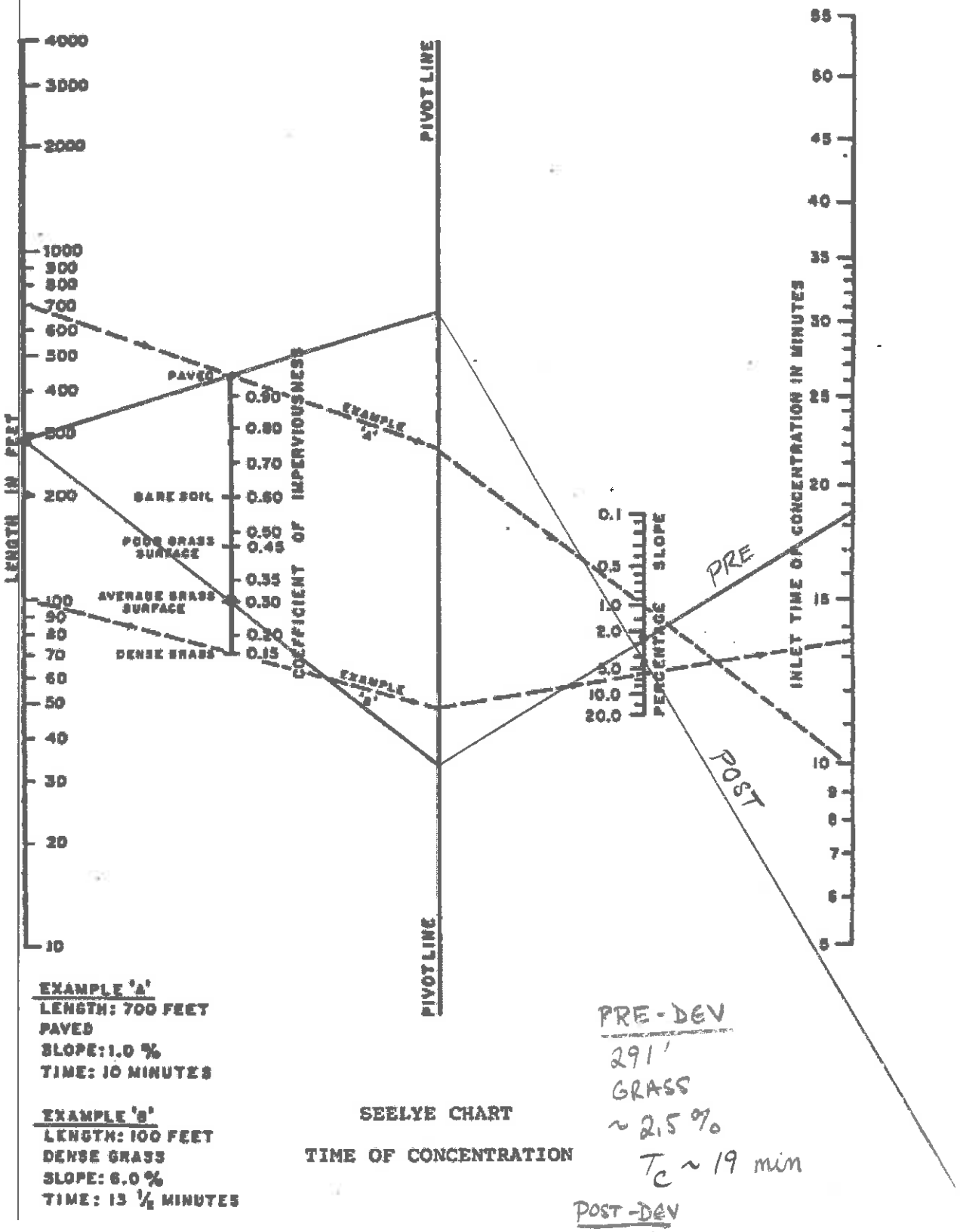
APPENDIX D, TABLE D-4



EXAMPLE 'A'
LENGTH: 700 FEET
PAVED
SLOPE: 1.0 %
TIME: 10 MINUTES

EXAMPLE 'B'
LENGTH: 100 FEET
DENSE GRASS
SLOPE: 6.0 %
TIME: 13 ½ MINUTES

SEELYE CHART

TIME OF CONCENTRATION

PRE-DEV
291'
GRASS
~ 2.5 %
T_c ~ 19 min

POST-DEV
201'
PAVED
~ 4.5 %
T_c ~ 5 min

17 110
Skyline Ross
9/8/17

Teresa Barnes
barnest@bceo.org

LOT AREA (USE AS DRAINAGE AREA) = 39259 ft² (0.901 Ac)

Ex slope ~ 2.5 % 291' C ~ .3
From Table D-4 $T_{c_{PRE}}$ ~ 19 min

PR. slope ~ 4.0 % 201' C ~ .9
$T_{c_{POST}}$ ~ 5 min (10 minute minimum

area green = 5779 ft²

→ impervious = 39259 - 5779 = 33480 ft² (85 % impervious)

$$C_{POST} = \frac{(.3 \times 5779 + .9 \times 33480)}{39259} = 0.81$$

1 year 24 hour depth ~ 2.4" (2 year = 2.8" which matches Greene County)

$$Q = \frac{(P - 0.2S)^2}{P + 0.8S} \quad \text{(inches)} \qquad S = \frac{1000}{CN} - 10$$

$CN_{PRE} = 74$
$CN_{POST} = 98$

$$Q_{PRE} = \frac{(2.4 - 0.2 * 3.5135)^2}{2.4 + 0.8 * 3.5135}$$

$$= 0.55"$$

$$S_{PRE} = \frac{1000}{74} - 10 = 3.5135$$

$$S_{POST} = \frac{1000}{98} - 10 = 0.2041$$

$$Q_{POST} = \frac{(2.4 - 0.2 * 0.2041)^2}{2.4 + 0.8 * 0.2041}$$

$$= 2.17"$$

$$V_{PRE} = 0.55 \text{ inches} \cdot \frac{ft}{12 in} \cdot 39259 ft^2 = 1799 ft^3$$

$$V_{POST} = 2.17 \cdot \frac{1}{12} \cdot 39259 = 7099 ft^3$$

$$\% \text{ INC} = \frac{7099 - 1799}{1799} \times 100 = 295 \%$$

↳ CRITICAL STORM = 50 year

Water Quality Calculation- *Skyline Ross Twp*

Post Developed Properties	Area (sf)	Area (acres)
Total	39259	0.90
Pervious	5779	0.13
Impervious	33480	0.77

WQv "C" = $0.858i^3 - 0.78i^2 + 0.774i + 0.04$

where i = impervious area ratio	0.8528
Total Area=	0.9013
WQv C =	0.6649

Water Quality Volume (WQv) Required

Precipitation	0.75	in
Area, A	0.9013	acres
WQv req=WQv C * 0.75 * A/12	0.0375	acre-feet
	1631.55	cubic feet
Add 20% for sedimentation	**1958**	**cubic feet**

Orifice Sizing Flow Rate (Q)= 0.011 cfs

Using Extended Detention with volume/48 hr*1 hr/60min *1 min/60 sec
48 hour draw down
Q=0.6 *A * sqrt (2 g h)
solve for area, convert to orifice diameter
where h= elevation at WQv minus invert

WQv elevation=	563.25	
orifice invert elevation=	561.15	
head(h)=	2.1	ft
A=	0.0016	ft
Radius	0.0227	ft
Diameter =	**0.546**	**in**

Project: **Skyline Ross Twp**

Chamber Model -	SC-740	
Units -	Imperial	Click Here for Metric
Number of chambers -	4	
Voids in the stone (porosity) -	30	
Base of Stone Elevation -	40	%
Amount of Stone Above Chambers -	561.70	ft
Amount of Stone Below Chambers -	6	in
Area of system -	6	in
	1400	sf Min. Area - 1014 sf min. area

☑ Include Perimeter Stone in Calculations

StormTech SC-740 Cumulative Storage Volumes

Height of System *(inches)*	Incremental Single Chamber *(cubic feet)*	Incremental Total Chamber *(cubic feet)*	Incremental Stone *(cubic feet)*	Incremental Ch & St *(cubic feet)*	Cumulative Chamber *(cubic feet)*	Elevation *(feet)*
42	0.00	0.00	46.67	46.67	2787.12	565.20
41	0.00	0.00	46.67	46.67	2740.45	565.12
40	0.00	0.00	46.67	46.67	2693.78	565.03
39	0.00	0.00	46.67	46.67	2647.12	564.95
38	0.00	0.00	46.67	46.67	2600.45	564.87
37	0.00	0.00	46.67	46.67	2553.78	564.78
36	0.05	1.65	46.01	47.66	2507.12	564.70
35	0.16	4.89	44.71	49.60	2459.46	564.62
34	0.28	8.46	43.28	51.74	2409.86	564.53
33	0.60	18.12	39.42	57.54	2358.12	564.45
32	0.80	24.05	37.05	61.10	2300.58	564.37
31	0.95	28.52	35.26	63.78	2239.48	564.28
30	1.07	32.24	33.77	66.01	2175.70	564.20
29	1.18	35.41	32.50	67.92	2109.70	564.12
28	1.27	37.97	31.48	69.45	2041.78	564.03
27	1.36	40.65	30.41	71.06	1972.33	563.95
26	1.45	43.62	29.22	72.84	1901.27	563.87
25	1.52	45.74	28.37	74.11	1828.43	563.78
24	1.58	47.47	27.68	75.15	1754.32	563.70
23	1.64	49.27	26.96	76.23	1679.17	563.62
22	1.70	50.99	26.27	77.26	1602.95	563.53
21	1.75	52.59	25.63	78.22	1525.69	563.45
20	1.80	54.08	25.03	79.12	1447.47	563.37
19	1.85	55.65	24.41	80.06	1368.35	563.28
18	1.89	56.79	23.95	80.74	1288.29	563.20
17	1.93	58.02	23.46	81.48	1207.55	563.12
16	1.97	59.25	22.97	82.22	1126.07	563.03
15	2.01	60.30	22.55	82.85	1043.86	562.95
14	2.04	61.35	22.13	83.48	961.01	562.87
13	2.07	62.25	21.77	84.02	877.54	562.78
12	2.10	63.15	21.41	84.56	793.52	562.70
11	2.13	63.95	21.09	85.04	708.96	562.62
10	2.15	64.62	20.82	85.44	623.93	562.53
9	2.18	65.31	20.54	85.85	538.49	562.45
8	2.20	65.95	20.29	86.24	452.64	562.37
7	2.21	66.22	20.18	86.40	366.40	562.28
6	0.00	0.00	46.67	46.67	280.00	562.20
5	0.00	0.00	46.67	46.67	233.33	562.12
4	0.00	0.00	46.67	46.67	186.67	562.03
3	0.00	0.00	46.67	46.67	140.00	561.95
2	0.00	0.00	46.67	46.67	93.33	561.87
1	0.00	0.00	46.67	46.67	46.67	561.78

Hydrograph Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2016 by Autodesk, Inc. v10.5 Thursday, 09 / 14 / 2017

Hyd. No. 1

Pre-Developed

Hydrograph type	= Rational	Peak discharge	= 0.655 cfs
Storm frequency	= 1 yrs	Time to peak	= 0.32 hrs
Time interval	= 1 min	Hyd. volume	= 747 cuft
Drainage area	= 0.901 ac	Runoff coeff.	= 0.3
Intensity	= 2.424 in/hr	Tc by User	= 19.00 min
IDF Curve	= butler county.IDF	Asc/Rec limb fact	= 1/1

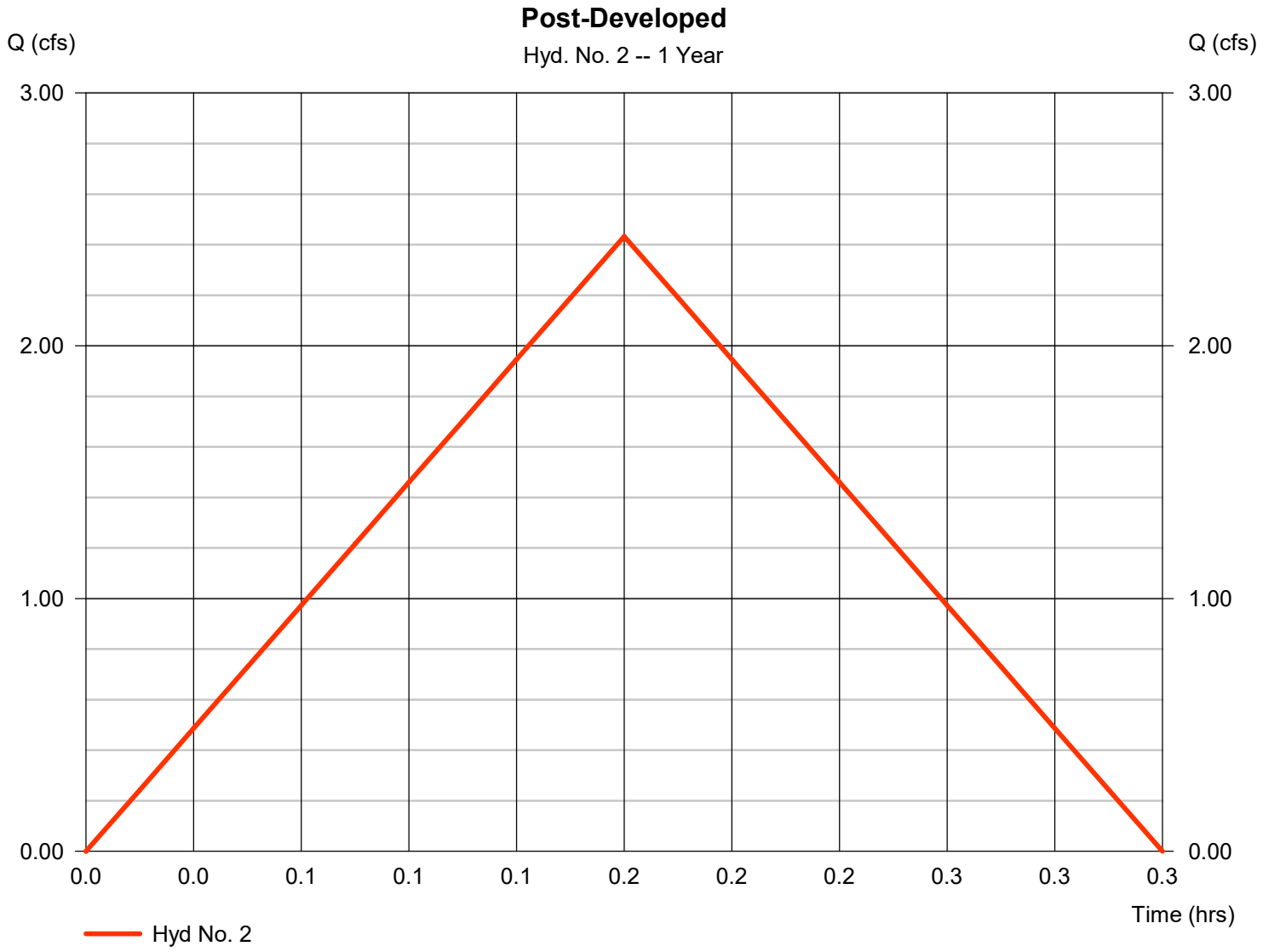
Hydrograph Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2016 by Autodesk, Inc. v10.5 Thursday, 09 / 14 / 2017

Hyd. No. 2

Post-Developed

Hydrograph type	= Rational	Peak discharge	= 2.433 cfs
Storm frequency	= 1 yrs	Time to peak	= 0.17 hrs
Time interval	= 1 min	Hyd. volume	= 1,460 cuft
Drainage area	= 0.901 ac	Runoff coeff.	= 0.81
Intensity	= 3.333 in/hr	Tc by User	= 10.00 min
IDF Curve	= butler county.IDF	Asc/Rec limb fact	= 1/1



Hydrograph Report

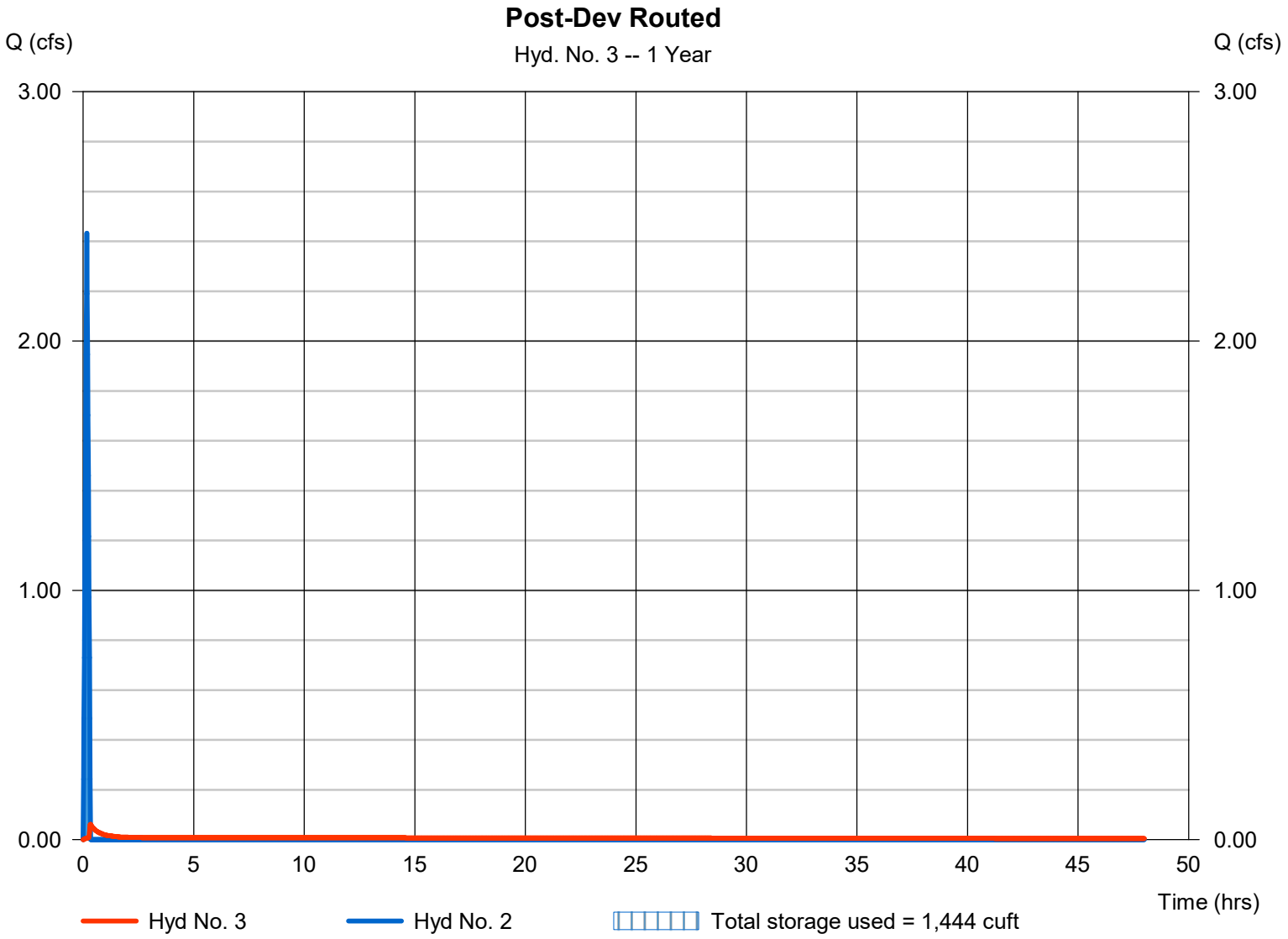
Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2016 by Autodesk, Inc. v10.5 Thursday, 09 / 14 / 2017

Hyd. No. 3

Post-Dev Routed

Hydrograph type	= Reservoir	Peak discharge	= 0.062 cfs
Storm frequency	= 1 yrs	Time to peak	= 0.33 hrs
Time interval	= 1 min	Hyd. volume	= 1,198 cuft
Inflow hyd. No.	= 2 - Post-Developed	Max. Elevation	= 563.40 ft
Reservoir name	= UG Chambers	Max. Storage	= 1,444 cuft

Storage Indication method used.



Pond Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2016 by Autodesk, Inc. v10.5 — Thursday, 09 / 14 / 2017

Pond No. 1 - UG Chambers

Pond Data

UG Chambers -Invert elev. = 562.20 ft, Rise x Span = 2.50 x 4.25 ft, Barrel Len = 7.12 ft, No. Barrels = 30, Slope = 0.00%, Headers = No
Encasement -Invert elev. = 561.70 ft, Width = 5.25 ft, Height = 3.50 ft, Voids = 46.85%

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	561.70	n/a	0	0
0.35	562.05	n/a	184	184
0.70	562.40	n/a	280	464
1.05	562.75	n/a	351	815
1.40	563.10	n/a	345	1,160
1.75	563.45	n/a	336	1,497
2.10	563.80	n/a	322	1,819
2.45	564.15	n/a	302	2,122
2.80	564.50	n/a	272	2,393
3.15	564.85	n/a	209	2,603
3.50	565.20	n/a	184	2,787

Culvert / Orifice Structures

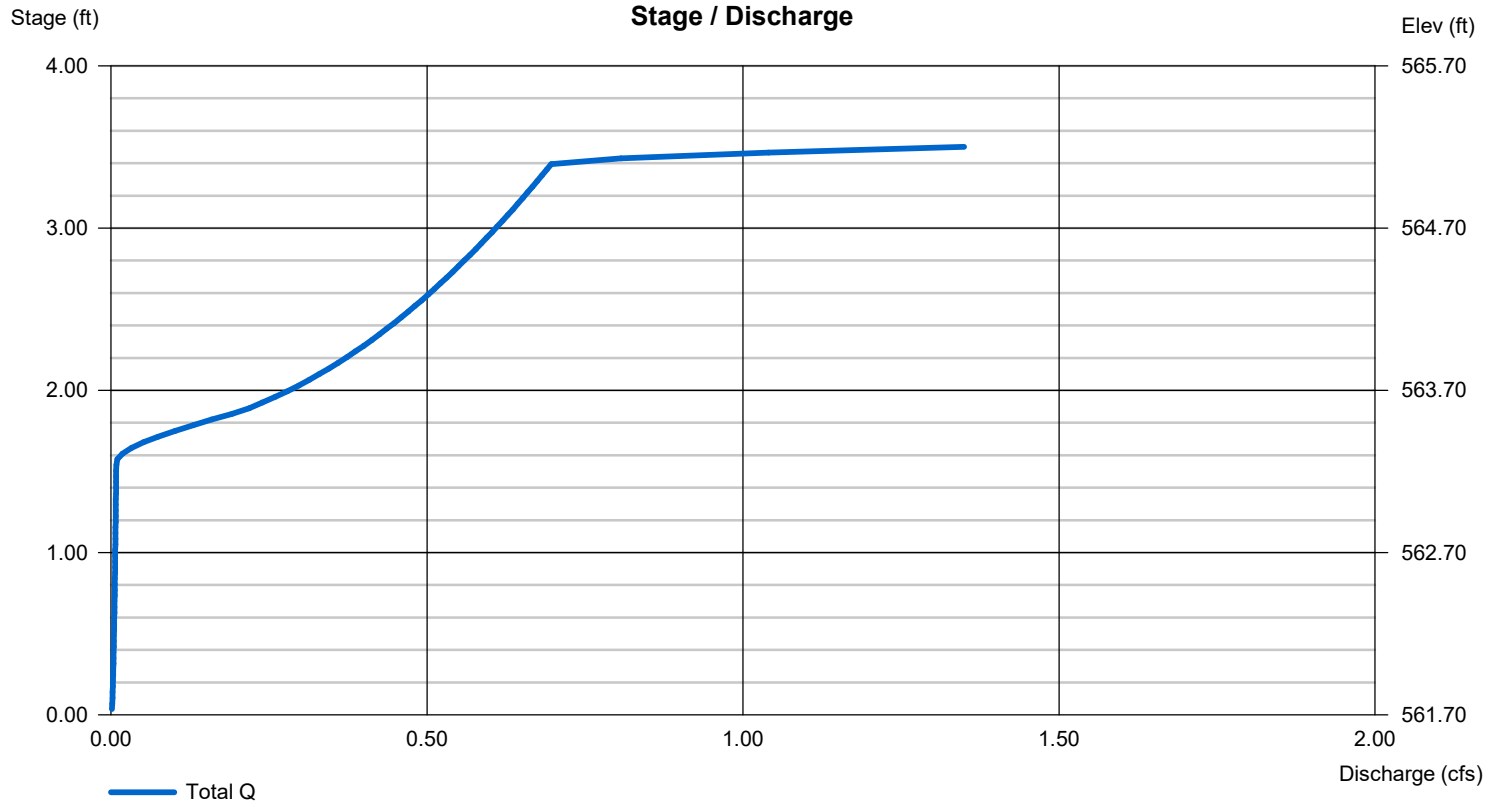
	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 12.00	0.50	4.50	0.00
Span (in)	= 12.00	0.50	4.50	0.00
No. Barrels	= 1	1	1	0
Invert El. (ft)	= 561.15	561.15	563.25	0.00
Length (ft)	= 10.00	0.50	0.50	0.00
Slope (%)	= 1.00	0.00	0.00	n/a
N-Value	= .013	.013	.013	n/a
Orifice Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	Yes	Yes	No

Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 6.00	0.00	0.00	0.00
Crest El. (ft)	= 565.10	0.00	0.00	0.00
Weir Coeff.	= 3.33	3.33	3.33	3.33
Weir Type	= Rect	---	---	---
Multi-Stage	= Yes	No	No	No

Exfil.(in/hr) = 0.000 (by Contour)
TW Elev. (ft) = 0.00

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



Hydrograph Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2016 by Autodesk, Inc. v10.5 Thursday, 09 / 14 / 2017

Hyd. No. 1

Pre-Developed

Hydrograph type	= Rational	Peak discharge	= 0.796 cfs
Storm frequency	= 2 yrs	Time to peak	= 0.32 hrs
Time interval	= 1 min	Hyd. volume	= 907 cuft
Drainage area	= 0.901 ac	Runoff coeff.	= 0.3
Intensity	= 2.944 in/hr	Tc by User	= 19.00 min
IDF Curve	= butler county.IDF	Asc/Rec limb fact	= 1/1

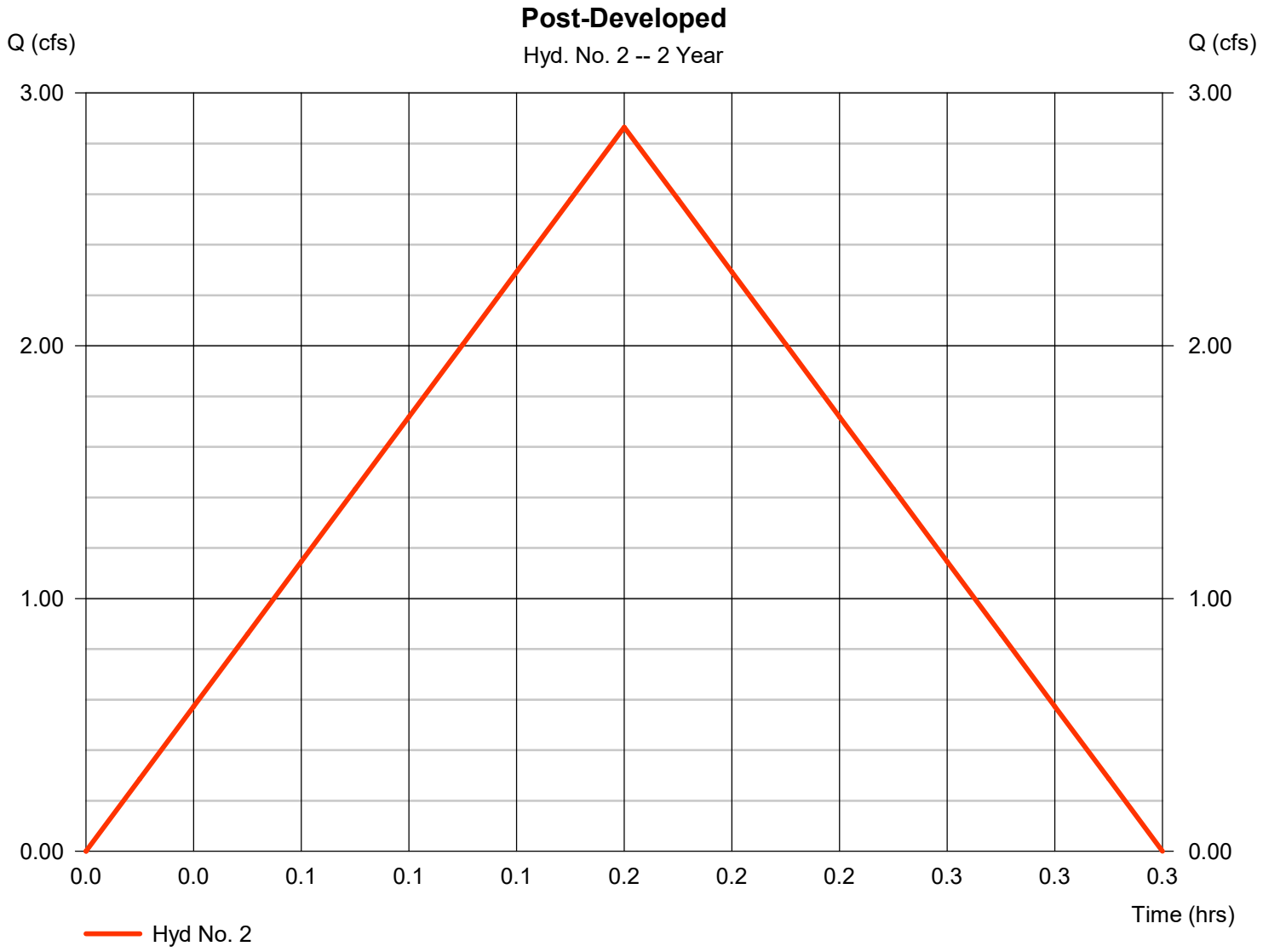
Hydrograph Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2016 by Autodesk, Inc. v10.5 Thursday, 09 / 14 / 2017

Hyd. No. 2

Post-Developed

Hydrograph type	= Rational	Peak discharge	= 2.865 cfs
Storm frequency	= 2 yrs	Time to peak	= 0.17 hrs
Time interval	= 1 min	Hyd. volume	= 1,719 cuft
Drainage area	= 0.901 ac	Runoff coeff.	= 0.81
Intensity	= 3.926 in/hr	Tc by User	= 10.00 min
IDF Curve	= butler county.IDF	Asc/Rec limb fact	= 1/1



Hydrograph Report

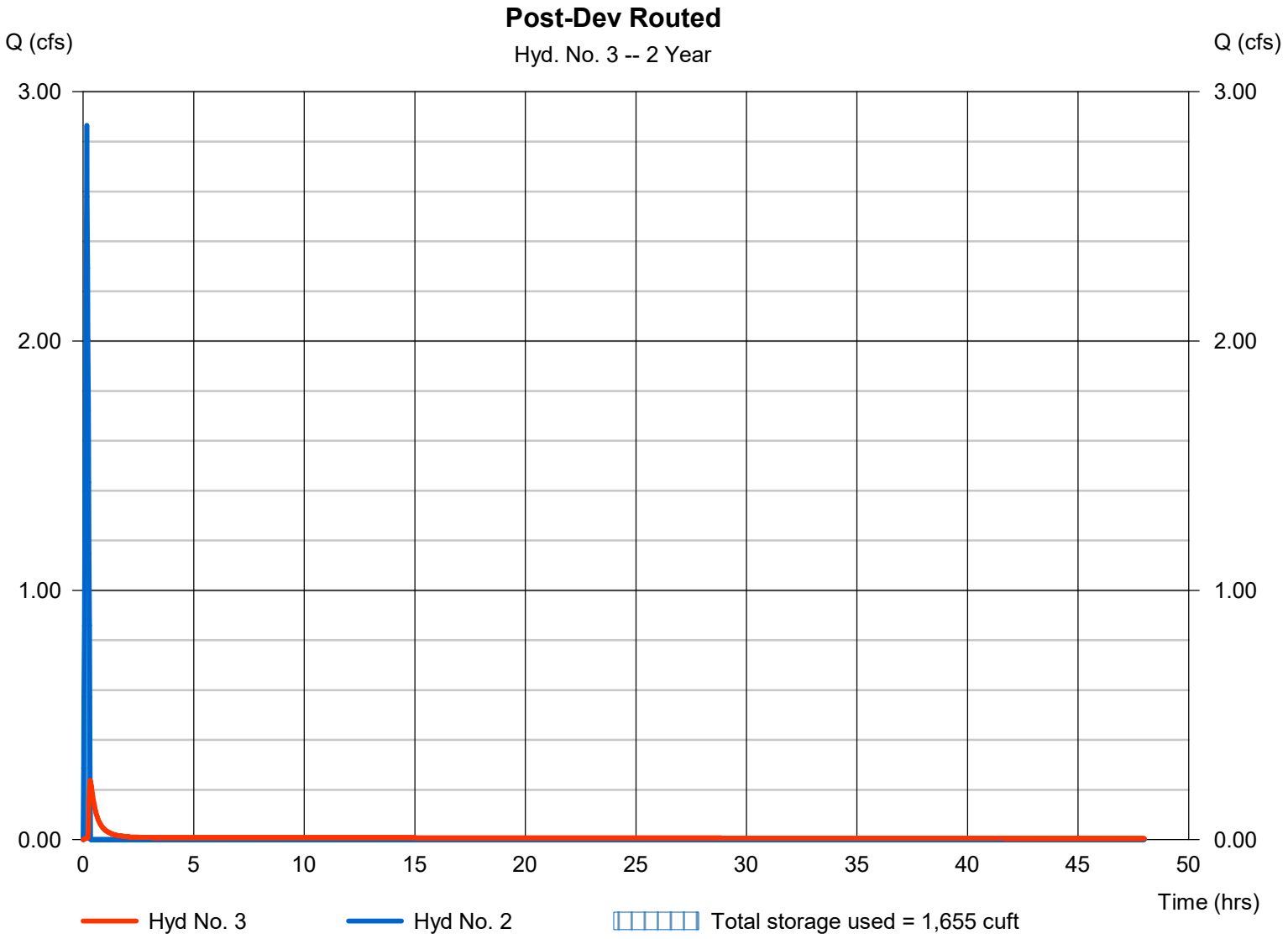
Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2016 by Autodesk, Inc. v10.5 Thursday, 09 / 14 / 2017

Hyd. No. 3

Post-Dev Routed

Hydrograph type	= Reservoir	Peak discharge	= 0.238 cfs
Storm frequency	= 2 yrs	Time to peak	= 0.32 hrs
Time interval	= 1 min	Hyd. volume	= 1,450 cuft
Inflow hyd. No.	= 2 - Post-Developed	Max. Elevation	= 563.62 ft
Reservoir name	= UG Chambers	Max. Storage	= 1,655 cuft

Storage Indication method used.



Hydrograph Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2016 by Autodesk, Inc. v10.5 Thursday, 09 / 14 / 2017

Hyd. No. 1

Pre-Developed

Hydrograph type	= Rational	Peak discharge	= 0.932 cfs
Storm frequency	= 5 yrs	Time to peak	= 0.32 hrs
Time interval	= 1 min	Hyd. volume	= 1,062 cuft
Drainage area	= 0.901 ac	Runoff coeff.	= 0.3
Intensity	= 3.447 in/hr	Tc by User	= 19.00 min
IDF Curve	= butler county.IDF	Asc/Rec limb fact	= 1/1

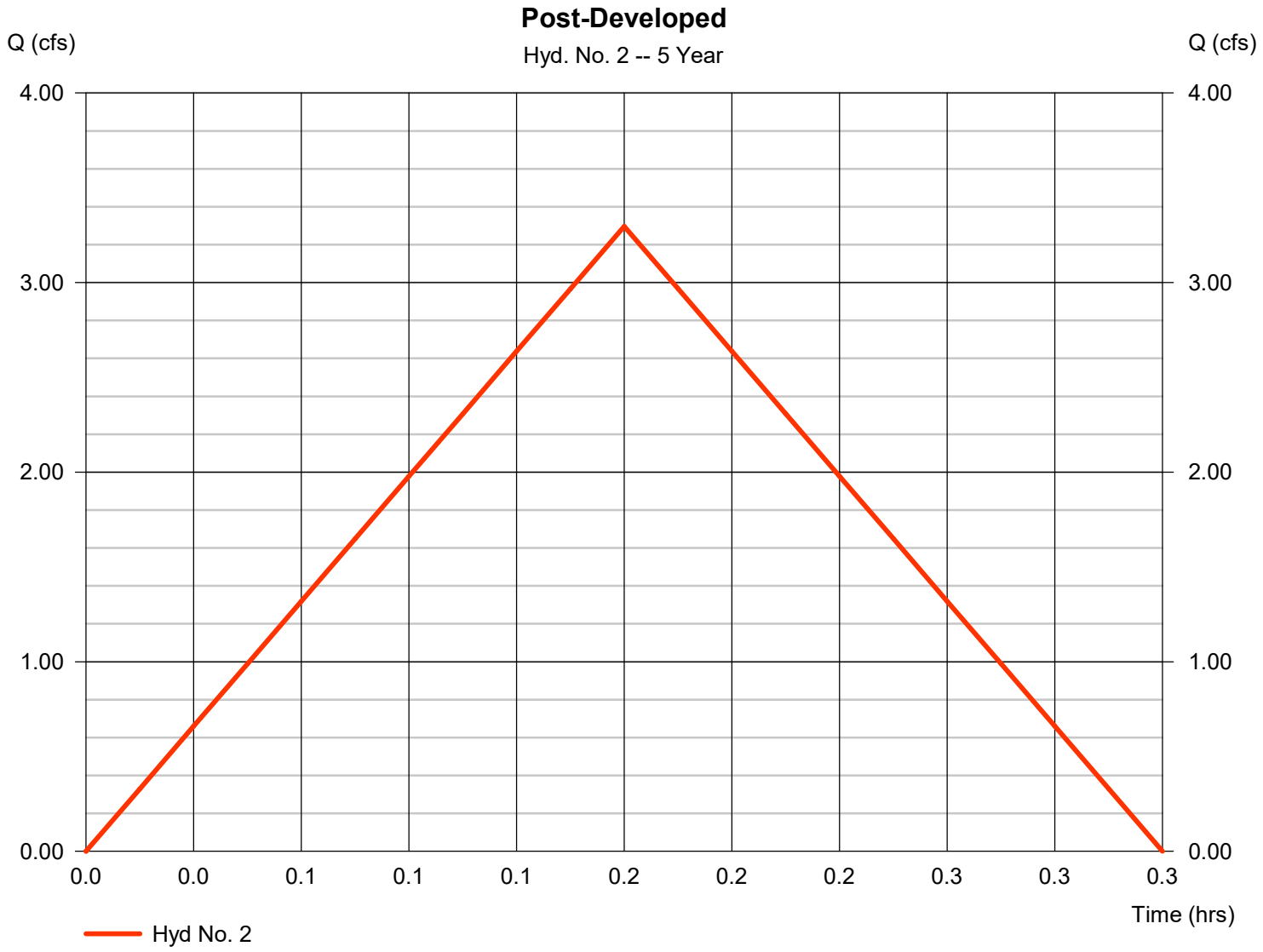
Hydrograph Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2016 by Autodesk, Inc. v10.5 Thursday, 09 / 14 / 2017

Hyd. No. 2

Post-Developed

Hydrograph type	= Rational	Peak discharge	= 3.297 cfs
Storm frequency	= 5 yrs	Time to peak	= 0.17 hrs
Time interval	= 1 min	Hyd. volume	= 1,978 cuft
Drainage area	= 0.901 ac	Runoff coeff.	= 0.81
Intensity	= 4.517 in/hr	Tc by User	= 10.00 min
IDF Curve	= butler county.IDF	Asc/Rec limb fact	= 1/1



Hydrograph Report

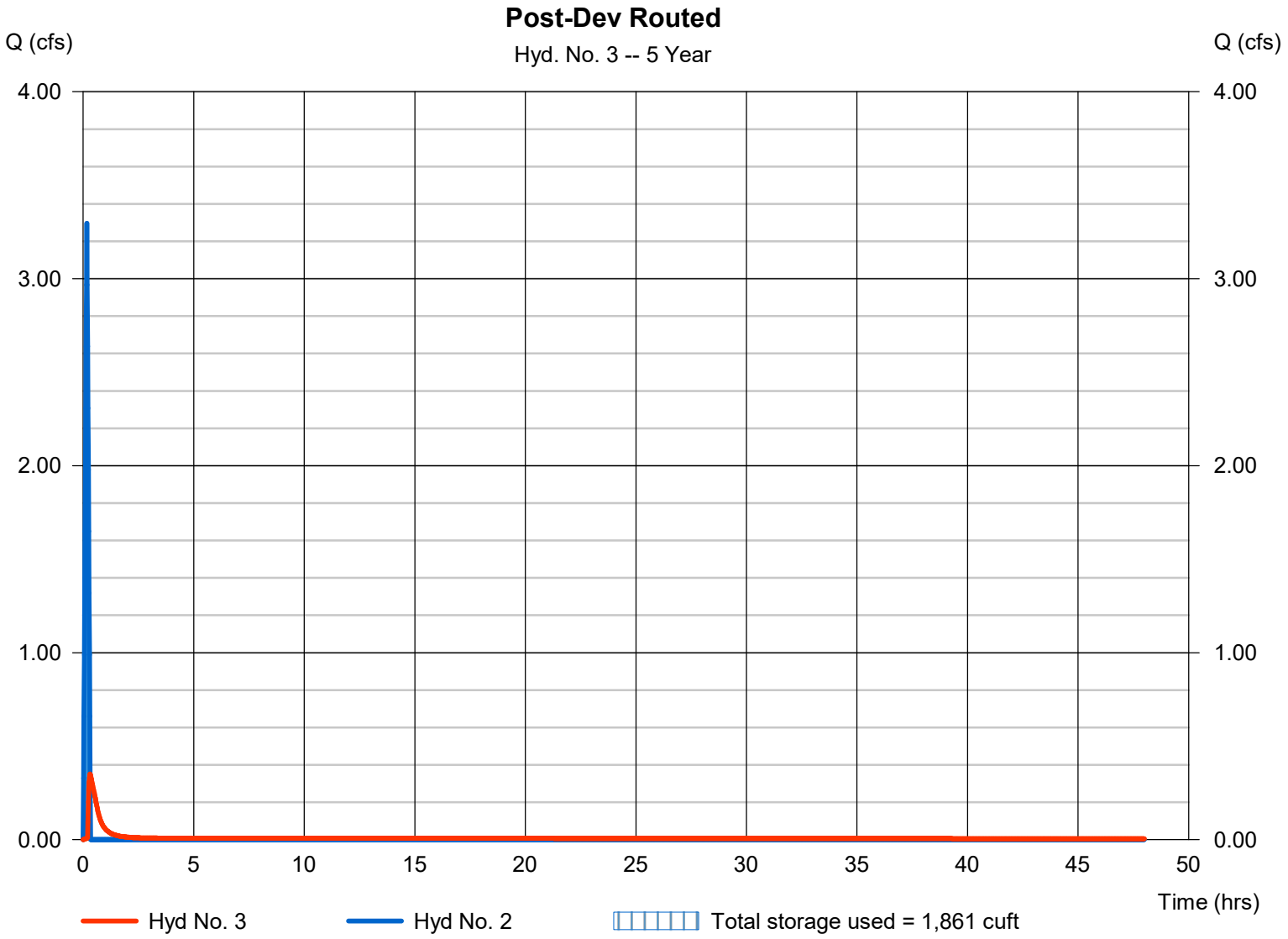
Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2016 by Autodesk, Inc. v10.5 Thursday, 09 / 14 / 2017

Hyd. No. 3

Post-Dev Routed

Hydrograph type	= Reservoir	Peak discharge	= 0.350 cfs
Storm frequency	= 5 yrs	Time to peak	= 0.32 hrs
Time interval	= 1 min	Hyd. volume	= 1,706 cuft
Inflow hyd. No.	= 2 - Post-Developed	Max. Elevation	= 563.85 ft
Reservoir name	= UG Chambers	Max. Storage	= 1,861 cuft

Storage Indication method used.



Hydrograph Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2016 by Autodesk, Inc. v10.5 Thursday, 09 / 14 / 2017

Hyd. No. 1

Pre-Developed

Hydrograph type	= Rational	Peak discharge	= 1.094 cfs
Storm frequency	= 10 yrs	Time to peak	= 0.32 hrs
Time interval	= 1 min	Hyd. volume	= 1,247 cuft
Drainage area	= 0.901 ac	Runoff coeff.	= 0.3
Intensity	= 4.048 in/hr	Tc by User	= 19.00 min
IDF Curve	= butler county.IDF	Asc/Rec limb fact	= 1/1

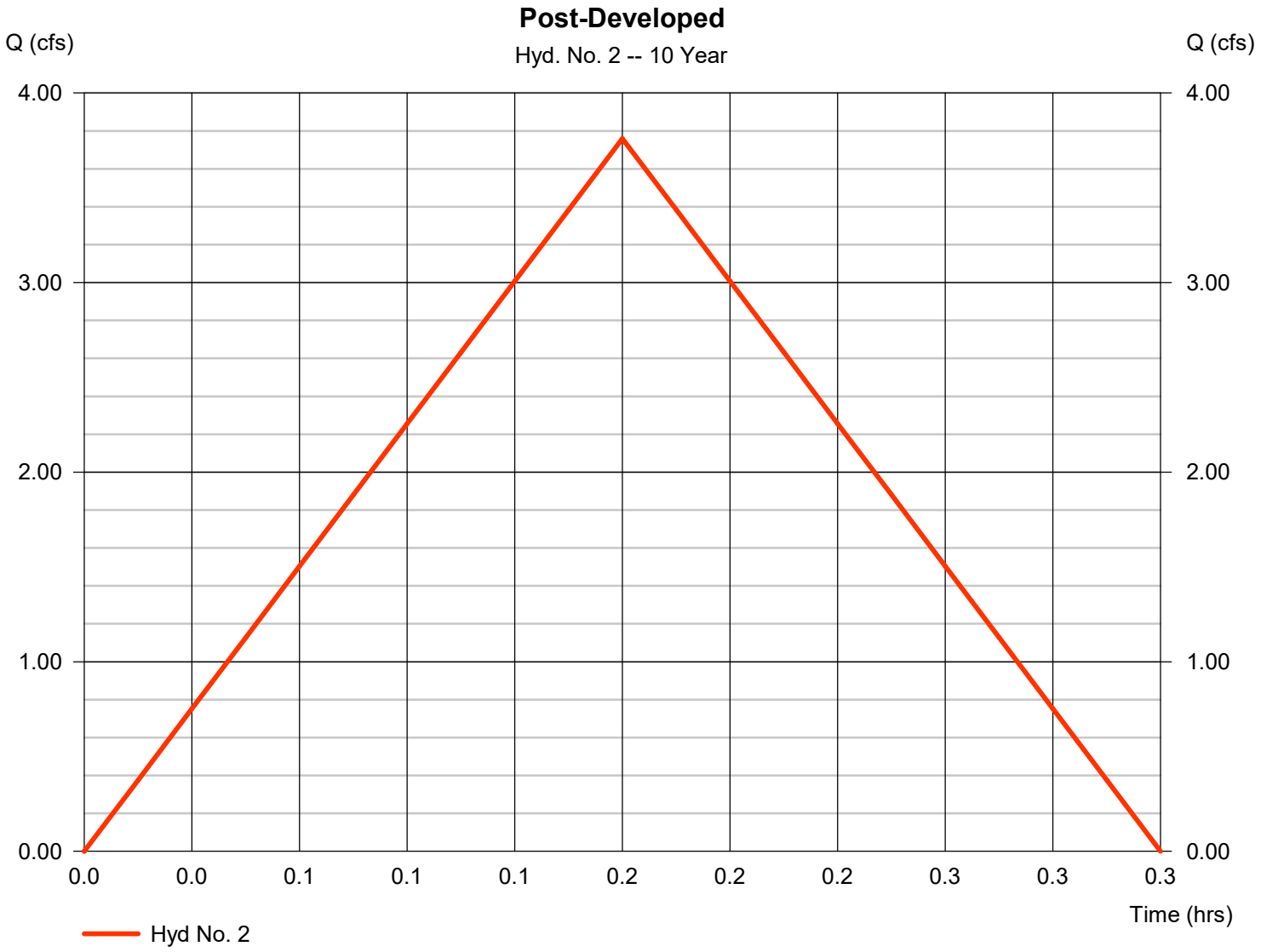
Hydrograph Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2016 by Autodesk, Inc. v10.5 Thursday, 09 / 14 / 2017

Hyd. No. 2

Post-Developed

Hydrograph type	= Rational	Peak discharge	= 3.760 cfs
Storm frequency	= 10 yrs	Time to peak	= 0.17 hrs
Time interval	= 1 min	Hyd. volume	= 2,256 cuft
Drainage area	= 0.901 ac	Runoff coeff.	= 0.81
Intensity	= 5.152 in/hr	Tc by User	= 10.00 min
IDF Curve	= butler county.IDF	Asc/Rec limb fact	= 1/1



Hydrograph Report

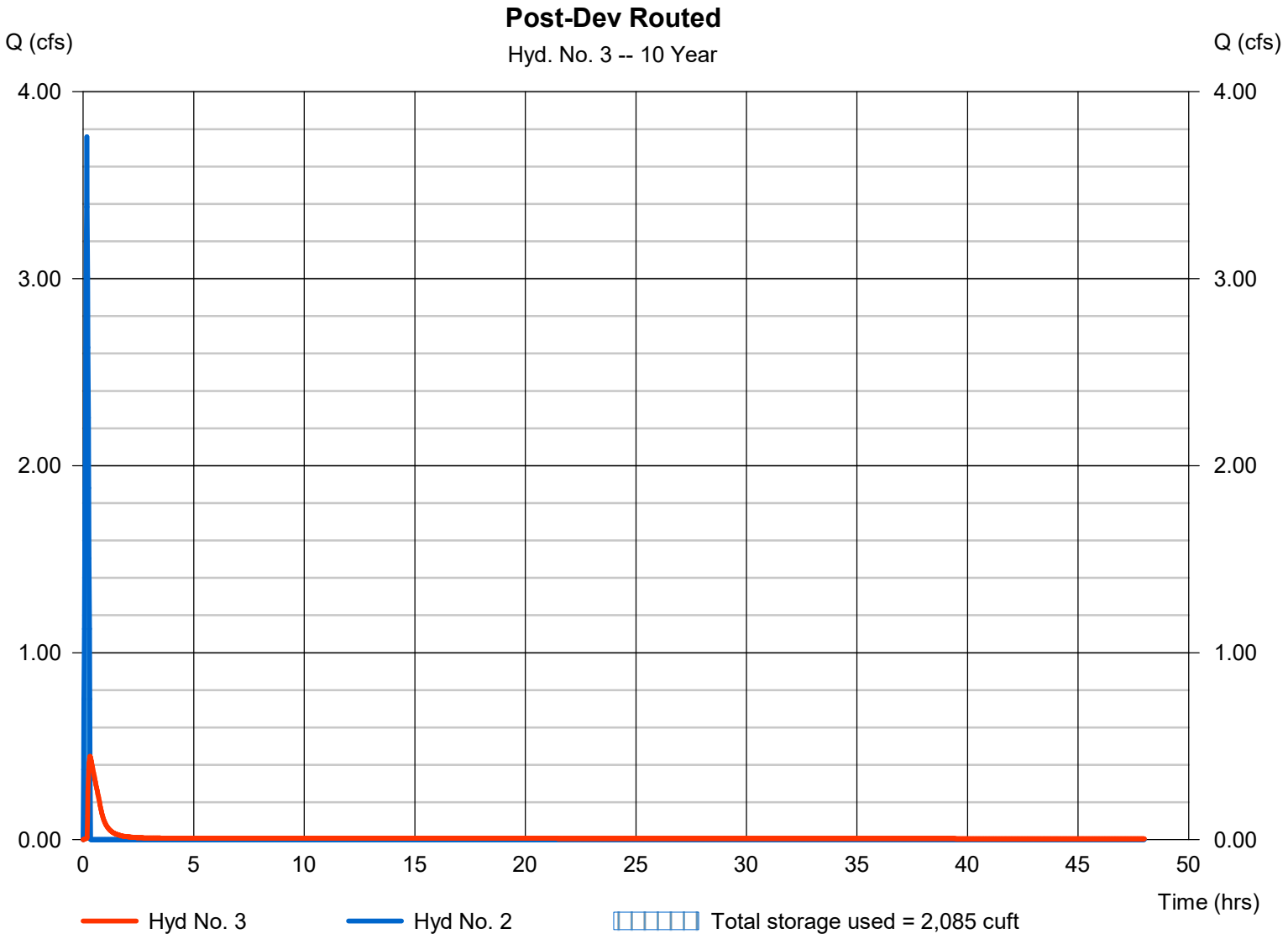
Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2016 by Autodesk, Inc. v10.5 Thursday, 09 / 14 / 2017

Hyd. No. 3

Post-Dev Routed

Hydrograph type	= Reservoir	Peak discharge	= 0.446 cfs
Storm frequency	= 10 yrs	Time to peak	= 0.32 hrs
Time interval	= 1 min	Hyd. volume	= 1,981 cuft
Inflow hyd. No.	= 2 - Post-Developed	Max. Elevation	= 564.11 ft
Reservoir name	= UG Chambers	Max. Storage	= 2,085 cuft

Storage Indication method used.



Hydrograph Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2016 by Autodesk, Inc. v10.5 Thursday, 09 / 14 / 2017

Hyd. No. 1

Pre-Developed

Hydrograph type	= Rational	Peak discharge	= 1.269 cfs
Storm frequency	= 25 yrs	Time to peak	= 0.32 hrs
Time interval	= 1 min	Hyd. volume	= 1,446 cuft
Drainage area	= 0.901 ac	Runoff coeff.	= 0.3
Intensity	= 4.694 in/hr	Tc by User	= 19.00 min
IDF Curve	= butler county.IDF	Asc/Rec limb fact	= 1/1

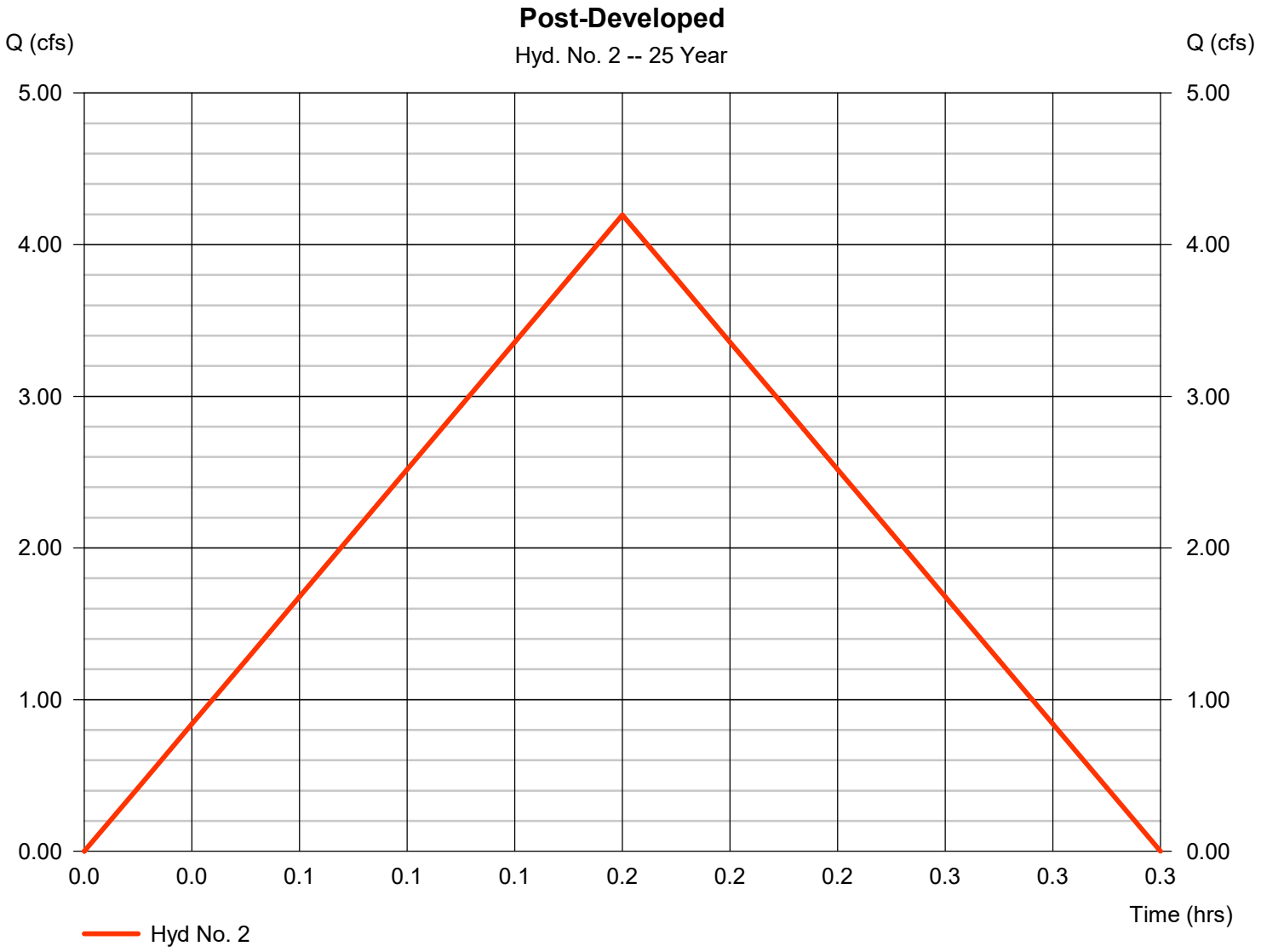
Hydrograph Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2016 by Autodesk, Inc. v10.5 Thursday, 09 / 14 / 2017

Hyd. No. 2

Post-Developed

Hydrograph type	= Rational	Peak discharge	= 4.196 cfs
Storm frequency	= 25 yrs	Time to peak	= 0.17 hrs
Time interval	= 1 min	Hyd. volume	= 2,518 cuft
Drainage area	= 0.901 ac	Runoff coeff.	= 0.81
Intensity	= 5.750 in/hr	Tc by User	= 10.00 min
IDF Curve	= butler county.IDF	Asc/Rec limb fact	= 1/1



Hydrograph Report

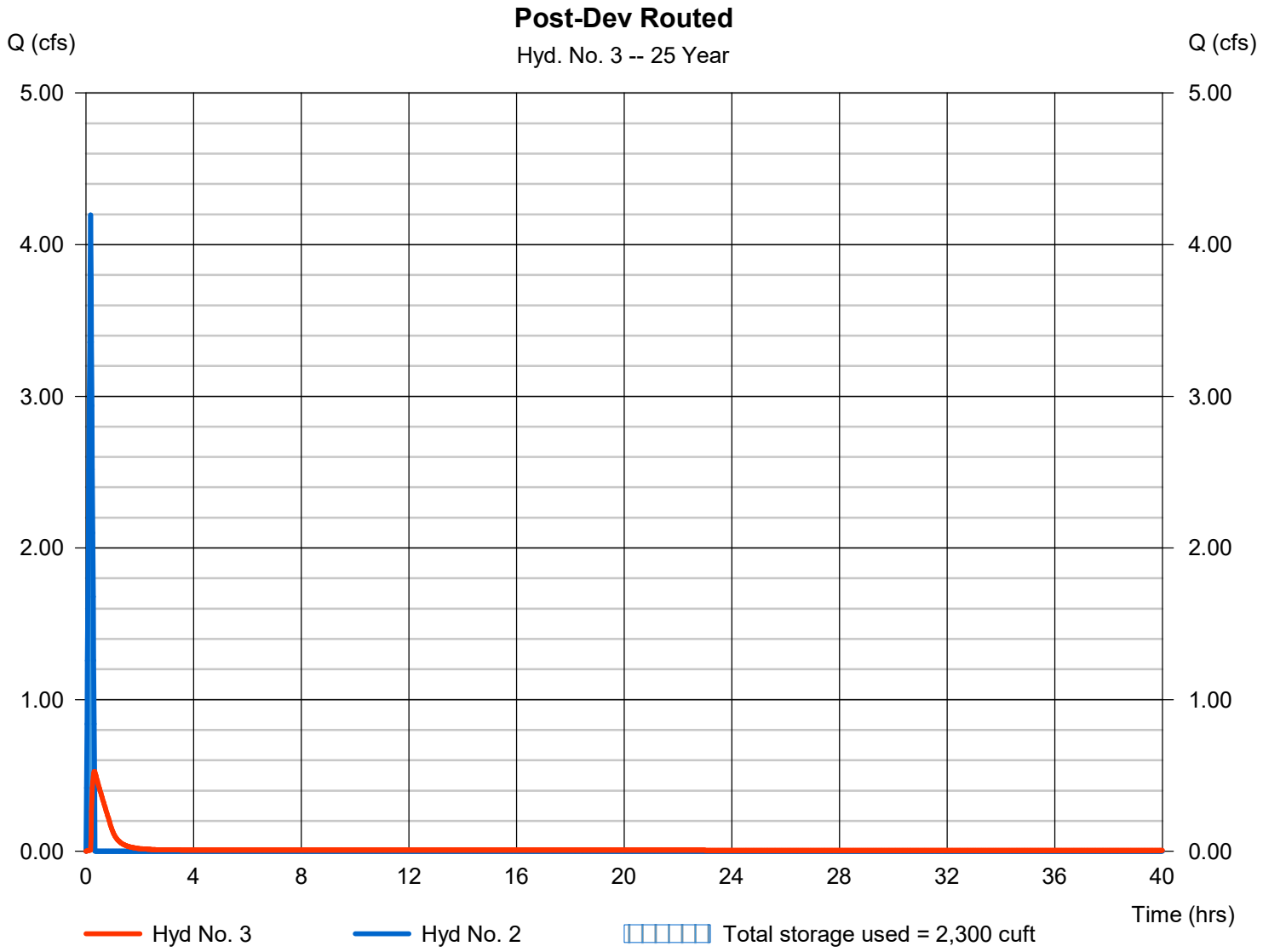
Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2016 by Autodesk, Inc. v10.5 Thursday, 09 / 14 / 2017

Hyd. No. 3

Post-Dev Routed

Hydrograph type	= Reservoir	Peak discharge	= 0.527 cfs
Storm frequency	= 25 yrs	Time to peak	= 0.32 hrs
Time interval	= 1 min	Hyd. volume	= 2,242 cuft
Inflow hyd. No.	= 2 - Post-Developed	Max. Elevation	= 564.38 ft
Reservoir name	= UG Chambers	Max. Storage	= 2,300 cuft

Storage Indication method used.



Hydrograph Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2016 by Autodesk, Inc. v10.5 Thursday, 09 / 14 / 2017

Hyd. No. 1

Pre-Developed

Hydrograph type	= Rational	Peak discharge	= 1.469 cfs
Storm frequency	= 50 yrs	Time to peak	= 0.32 hrs
Time interval	= 1 min	Hyd. volume	= 1,675 cuft
Drainage area	= 0.901 ac	Runoff coeff.	= 0.3
Intensity	= 5.435 in/hr	Tc by User	= 19.00 min
IDF Curve	= butler county.IDF	Asc/Rec limb fact	= 1/1

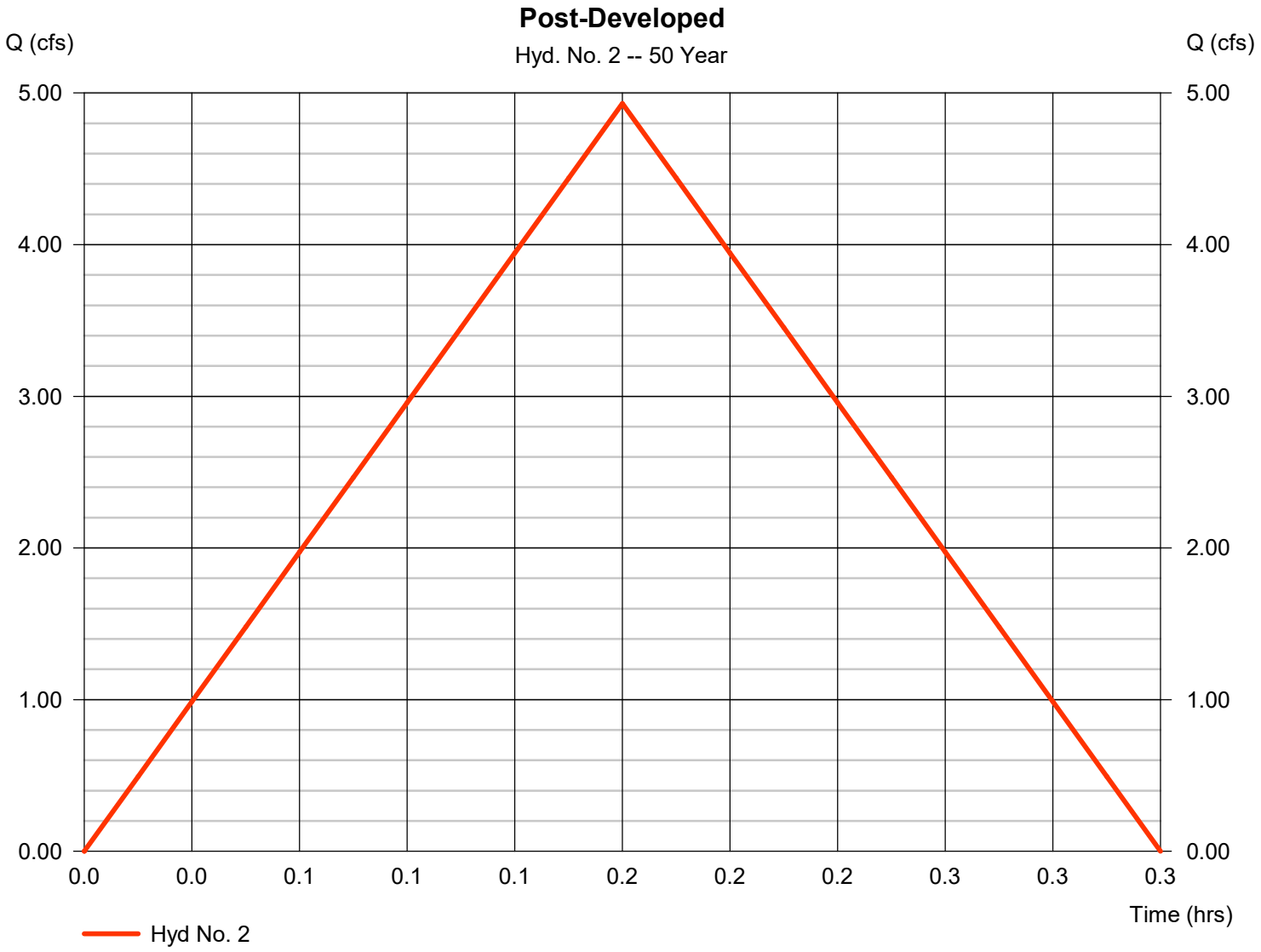
Hydrograph Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2016 by Autodesk, Inc. v10.5 Thursday, 09 / 14 / 2017

Hyd. No. 2

Post-Developed

Hydrograph type	= Rational	Peak discharge	= 4.931 cfs
Storm frequency	= 50 yrs	Time to peak	= 0.17 hrs
Time interval	= 1 min	Hyd. volume	= 2,959 cuft
Drainage area	= 0.901 ac	Runoff coeff.	= 0.81
Intensity	= 6.757 in/hr	Tc by User	= 10.00 min
IDF Curve	= butler county.IDF	Asc/Rec limb fact	= 1/1



Hydrograph Report

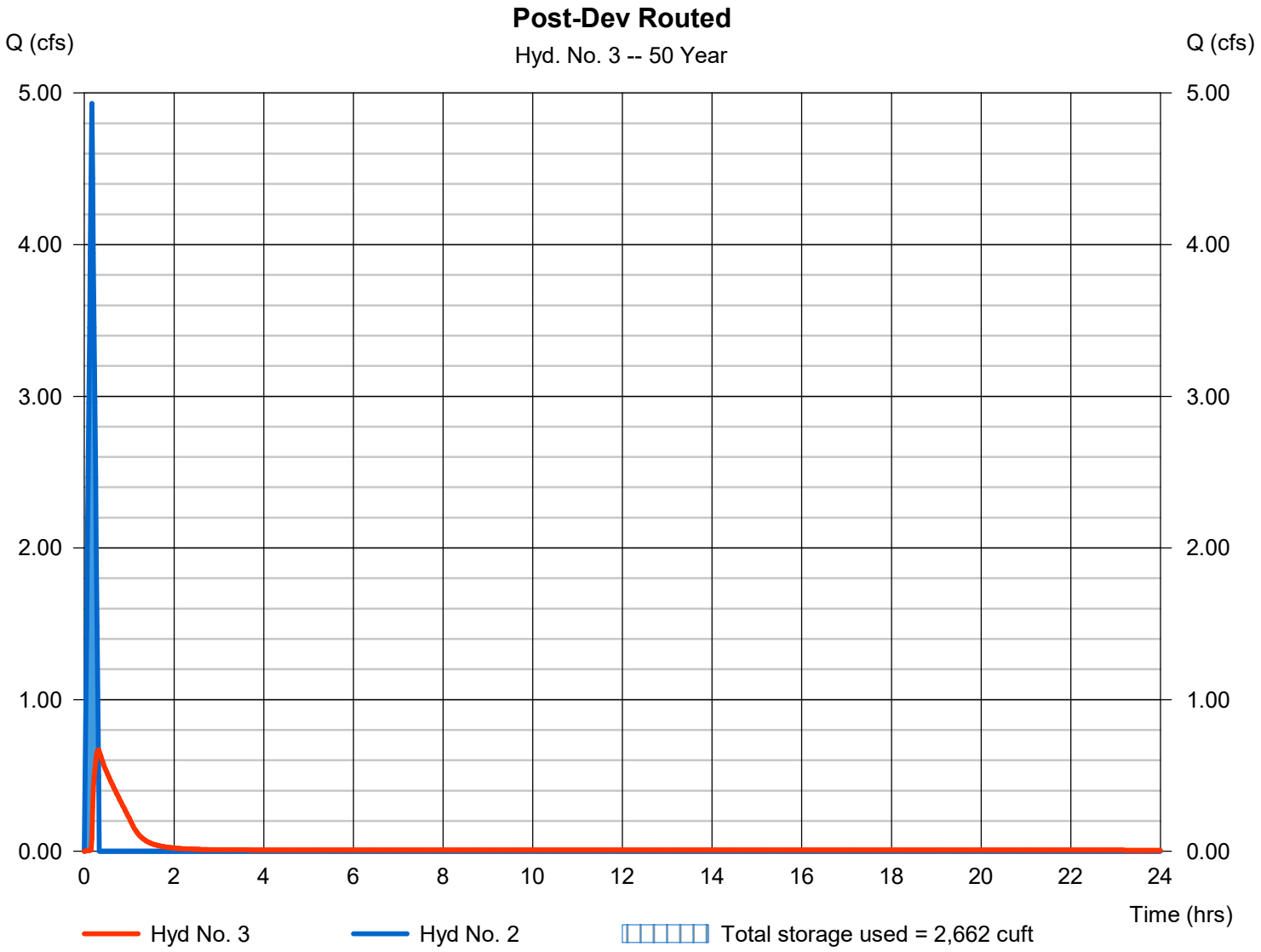
Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2016 by Autodesk, Inc. v10.5 Thursday, 09 / 14 / 2017

Hyd. No. 3

Post-Dev Routed

Hydrograph type	=	Reservoir	Peak discharge	=	0.668 cfs
Storm frequency	=	50 yrs	Time to peak	=	0.32 hrs
Time interval	=	1 min	Hyd. volume	=	2,680 cuft
Inflow hyd. No.	=	2 - Post-Developed	Max. Elevation	=	564.97 ft
Reservoir name	=	UG Chambers	Max. Storage	=	2,662 cuft

Storage Indication method used.



Hydrograph Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2016 by Autodesk, Inc. v10.5 Thursday, 09 / 14 / 2017

Hyd. No. 1

Pre-Developed

Hydrograph type	= Rational	Peak discharge	= 1.568 cfs
Storm frequency	= 100 yrs	Time to peak	= 0.32 hrs
Time interval	= 1 min	Hyd. volume	= 1,787 cuft
Drainage area	= 0.901 ac	Runoff coeff.	= 0.3
Intensity	= 5.800 in/hr	Tc by User	= 19.00 min
IDF Curve	= butler county.IDF	Asc/Rec limb fact	= 1/1

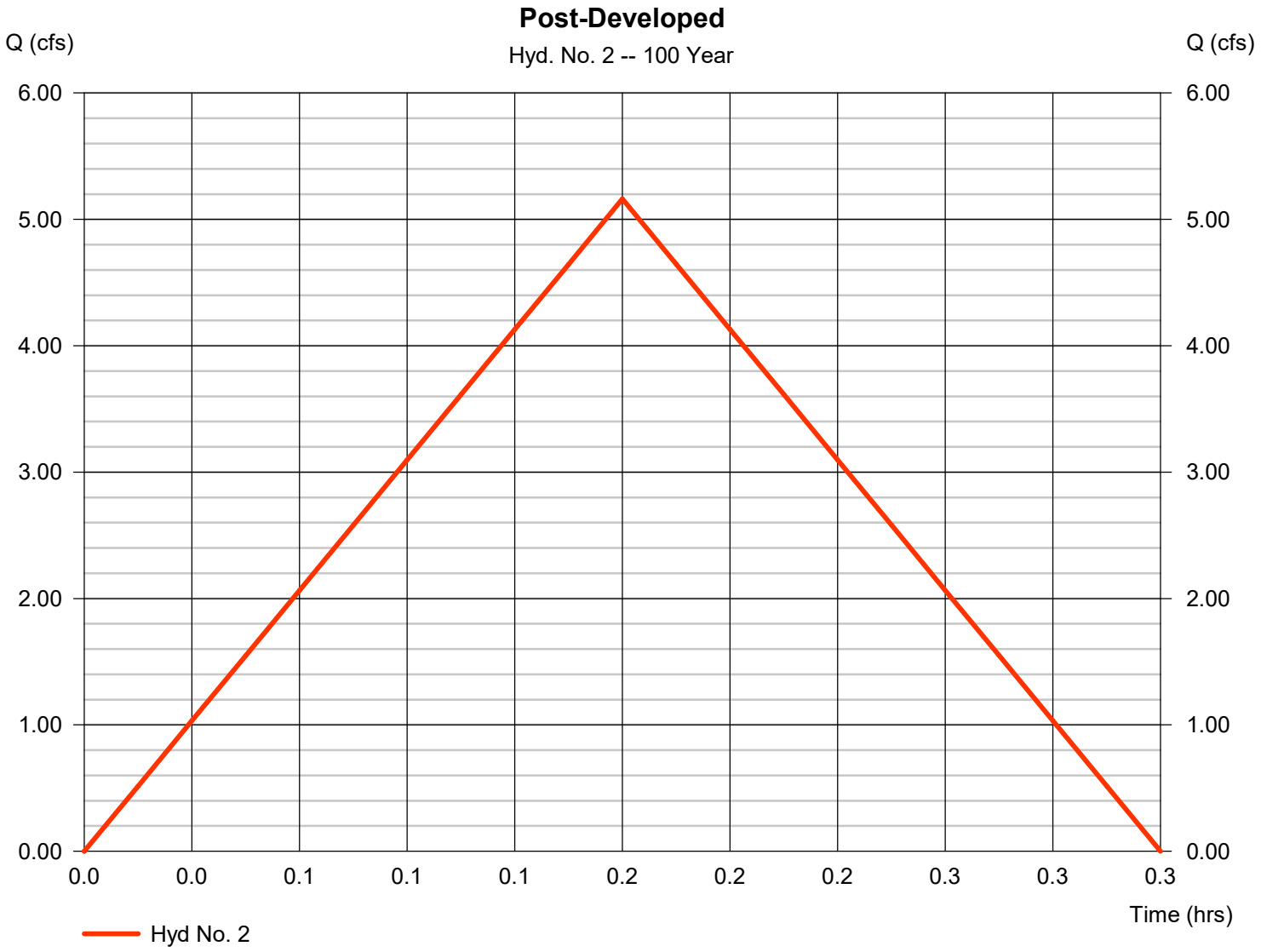
Hydrograph Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2016 by Autodesk, Inc. v10.5 Thursday, 09 / 14 / 2017

Hyd. No. 2

Post-Developed

Hydrograph type	= Rational	Peak discharge	= 5.162 cfs
Storm frequency	= 100 yrs	Time to peak	= 0.17 hrs
Time interval	= 1 min	Hyd. volume	= 3,097 cuft
Drainage area	= 0.901 ac	Runoff coeff.	= 0.81
Intensity	= 7.073 in/hr	Tc by User	= 10.00 min
IDF Curve	= butler county.IDF	Asc/Rec limb fact	= 1/1



Hydrograph Report

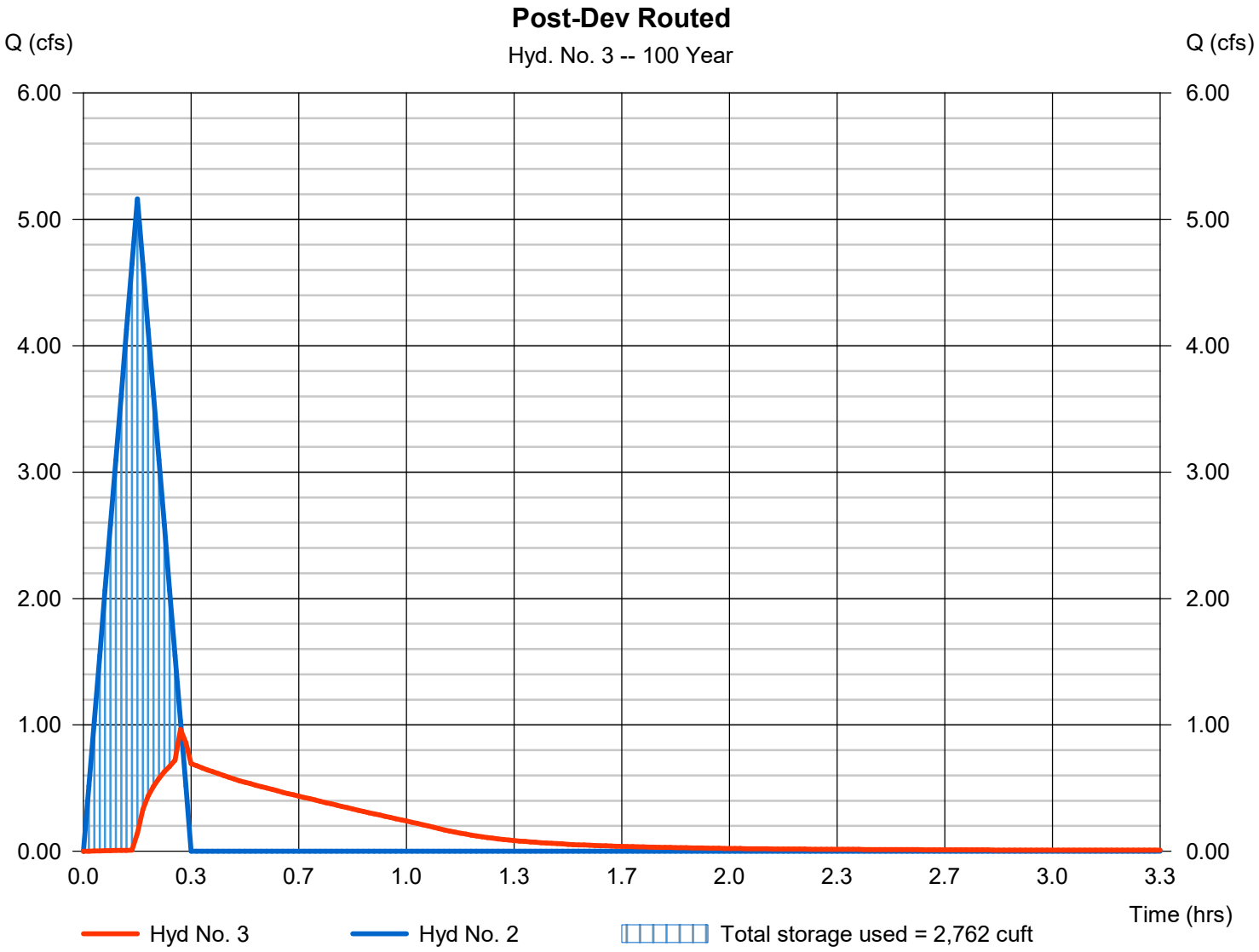
Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2016 by Autodesk, Inc. v10.5 Thursday, 09 / 14 / 2017

Hyd. No. 3

Post-Dev Routed

Hydrograph type	= Reservoir	Peak discharge	= 0.965 cfs
Storm frequency	= 100 yrs	Time to peak	= 0.30 hrs
Time interval	= 1 min	Hyd. volume	= 2,818 cuft
Inflow hyd. No.	= 2 - Post-Developed	Max. Elevation	= 565.16 ft
Reservoir name	= UG Chambers	Max. Storage	= 2,762 cuft

Storage Indication method used.



Hydraflow Rainfall Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2016 by Autodesk, Inc. v10.5 Thursday, 09 / 14 / 2017

Return Period (Yrs)	Intensity-Duration-Frequency Equation Coefficients (FHA)			
	B	D	E	(N/A)
1	80.0000	14.0000	1.0000	--------
2	106.0000	17.0000	1.0000	--------
3	0.0000	0.0000	1.0000	--------
5	131.0000	19.0000	1.0000	--------
10	170.0000	23.0000	1.0000	--------
25	230.0000	30.0000	1.0000	--------
50	250.0000	27.0000	1.0000	--------
100	290.0000	31.0000	1.0000	--------

File name: butler county.IDF

Intensity = B / (Tc + D)^E

Return Period (Yrs)	Intensity Values (in/hr)											
	5 min	10	15	20	25	30	35	40	45	50	55	60
1	4.21	3.33	2.76	2.35	2.05	1.82	1.63	1.48	1.36	1.25	1.16	1.08
2	4.82	3.93	3.31	2.86	2.52	2.26	2.04	1.86	1.71	1.58	1.47	1.38
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	5.46	4.52	3.85	3.36	2.98	2.67	2.43	2.22	2.05	1.90	1.77	1.66
10	6.07	5.15	4.47	3.95	3.54	3.21	2.93	2.70	2.50	2.33	2.18	2.05
25	6.57	5.75	5.11	4.60	4.18	3.83	3.54	3.29	3.07	2.88	2.71	2.56
50	7.81	6.76	5.95	5.32	4.81	4.39	4.03	3.73	3.47	3.25	3.05	2.87
100	8.06	7.07	6.30	5.69	5.18	4.75	4.39	4.08	3.82	3.58	3.37	3.19

Tc = time in minutes. Values may exceed 60.

Precip. file name: S:\Land Projects 2008\Warren County GIS\Hydro\Warren County-total rainfall.pcp

Storm Distribution	Rainfall Precipitation Table (in)							
	1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr
SCS 24-hour	2.40	2.80	0.00	3.30	4.25	5.77	6.80	7.95
SCS 6-Hr	0.00	1.80	0.00	0.00	2.60	0.00	0.00	4.00
Huff-1st	0.00	1.55	0.00	2.75	4.00	5.38	6.50	8.00
Huff-2nd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-3rd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-4th	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-Indy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Custom	0.00	1.75	0.00	2.80	3.90	5.25	6.00	7.10