

Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.22

Tuesday, Oct 13, 2020

Hyd. No. 1

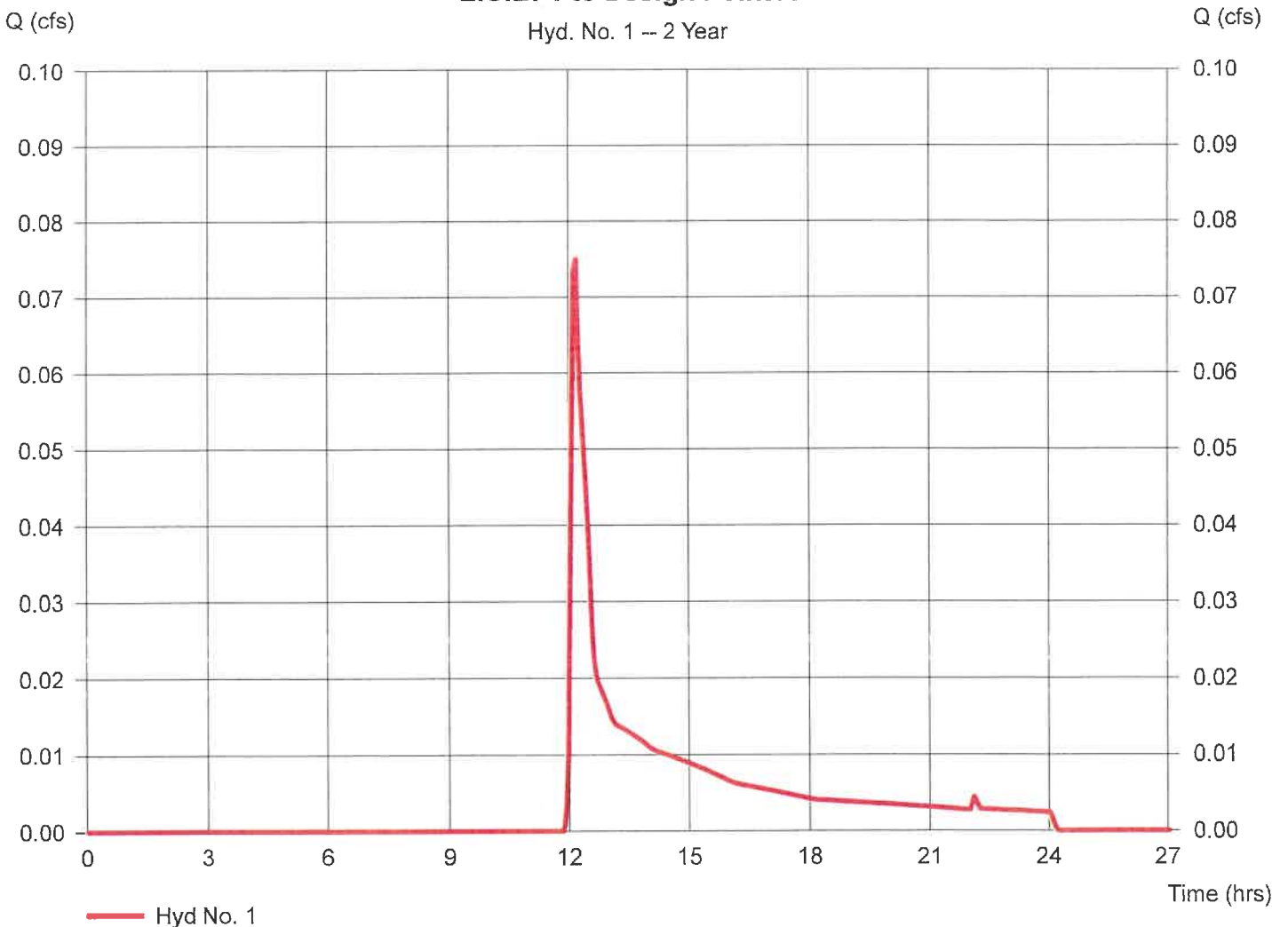
E.C.B.-1 to Design Point A

Hydrograph type = SCS Runoff
 Storm frequency = 2 yrs
 Time interval = 3 min
 Drainage area = 0.198 ac
 Basin Slope = 2.4 %
 Tc method = LAG
 Total precip. = 3.32 in
 Storm duration = 24 hrs

Peak discharge = 0.075 cfs
 Time to peak = 12.15 hrs
 Hyd. volume = 357 cuft
 Curve number = 61.9
 Hydraulic length = 143 ft
 Time of conc. (Tc) = 7.10 min
 Distribution = Type III
 Shape factor = 484

E.C.B.-1 to Design Point A

Hyd. No. 1 -- 2 Year



Hydrograph Report

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Hyd. No. 2

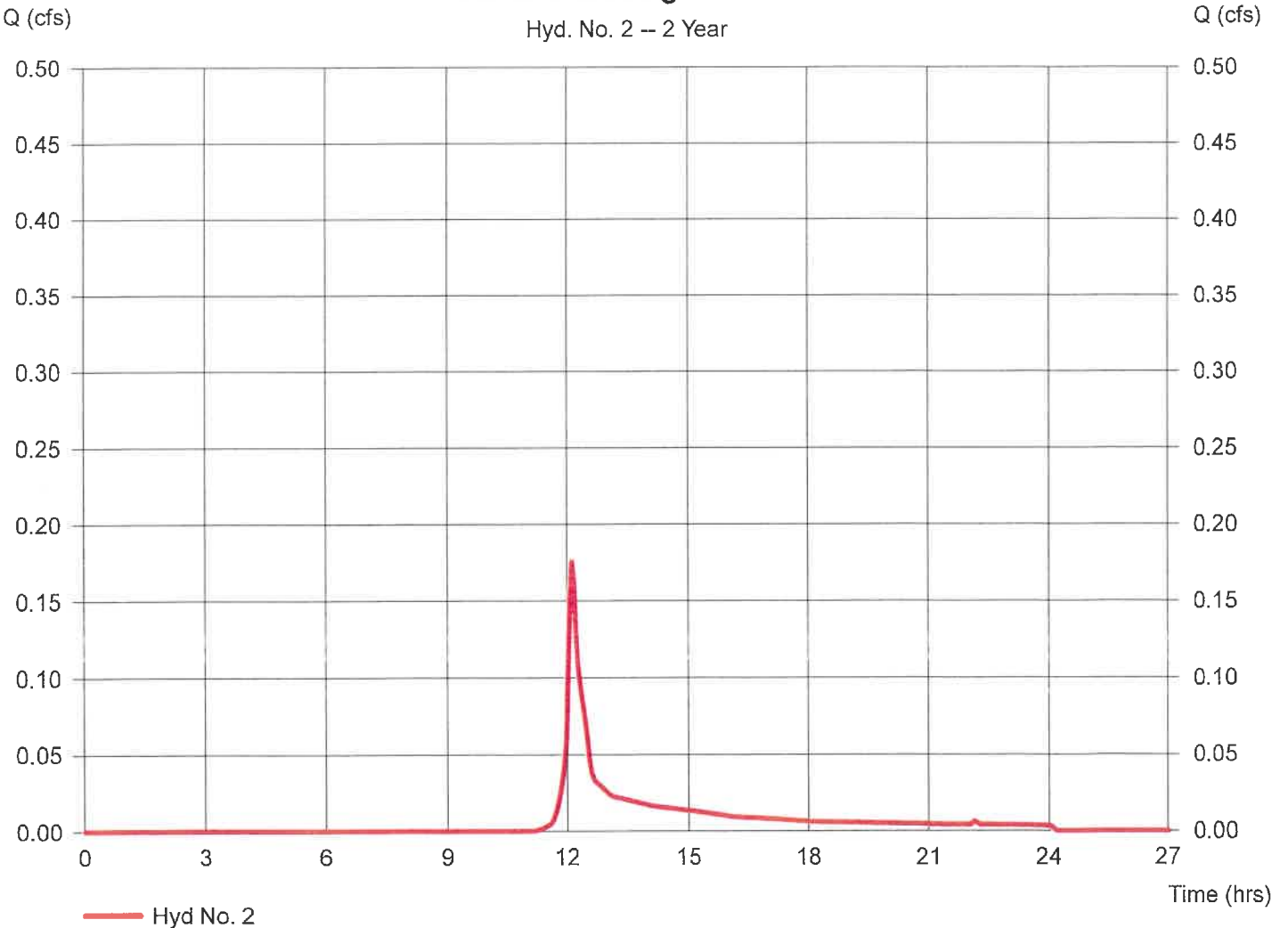
E.C.B.-2 to Design Point B

Hydrograph type = SCS Runoff
 Storm frequency = 2 yrs
 Time interval = 3 min
 Drainage area = 0.204 ac
 Basin Slope = 2.5 %
 Tc method = LAG
 Total precip. = 3.32 in
 Storm duration = 24 hrs

Peak discharge = 0.176 cfs
 Time to peak = 12.10 hrs
 Hyd. volume = 638 cuft
 Curve number = 70.4
 Hydraulic length = 145 ft
 Time of conc. (Tc) = 5.60 min
 Distribution = Type III
 Shape factor = 484

E.C.B.-2 to Design Point B

Hyd. No. 2 -- 2 Year



Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.22

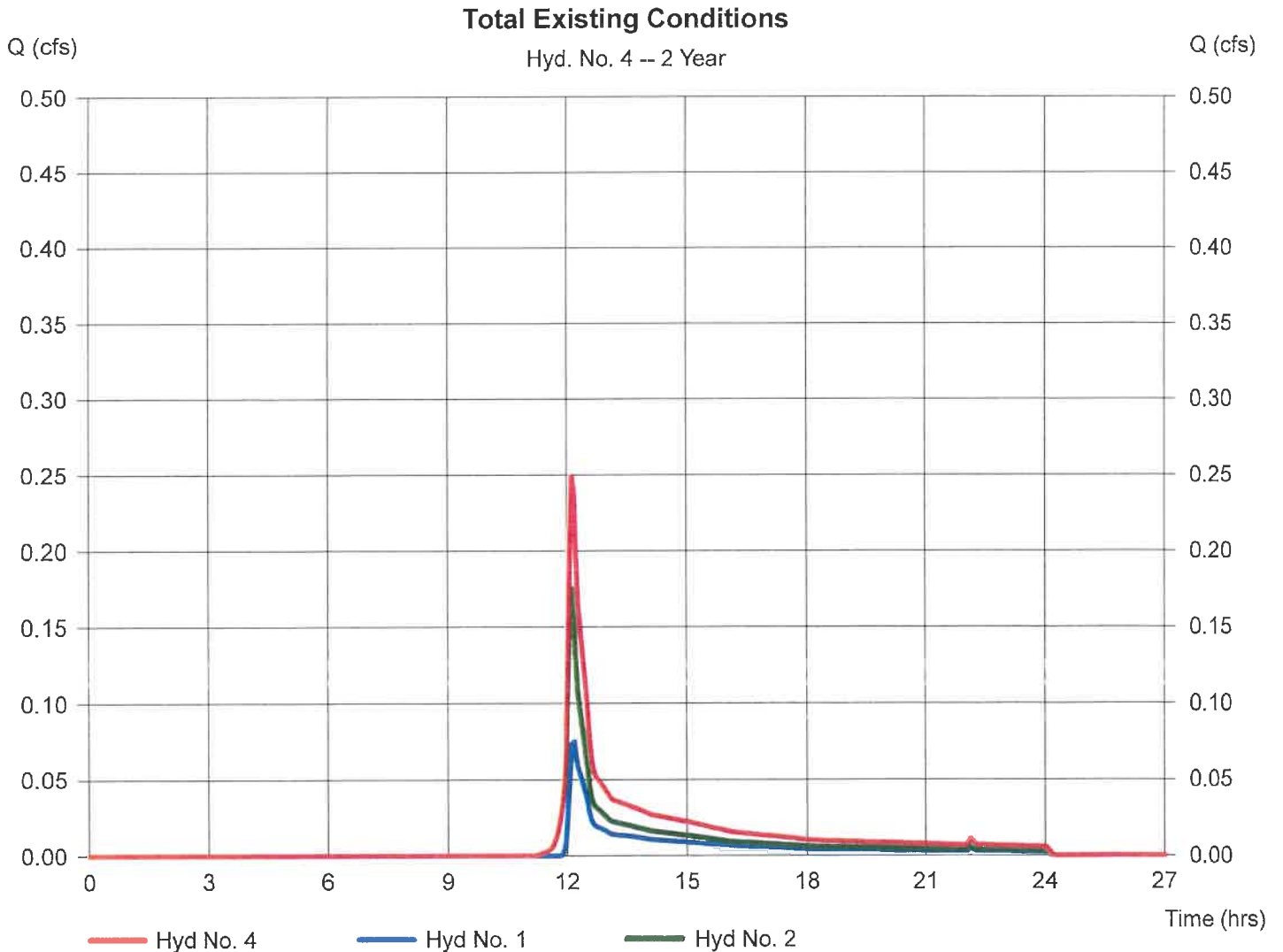
Tuesday, Oct 13, 2020

Hyd. No. 4

Total Existing Conditions

Hydrograph type = Combine
Storm frequency = 2 yrs
Time interval = 3 min
Inflow hyds. = 1, 2

Peak discharge = 0.249 cfs
Time to peak = 12.10 hrs
Hyd. volume = 995 cuft
Contrib. drain. area = 0.402 ac



Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.22

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Hyd. No. 6

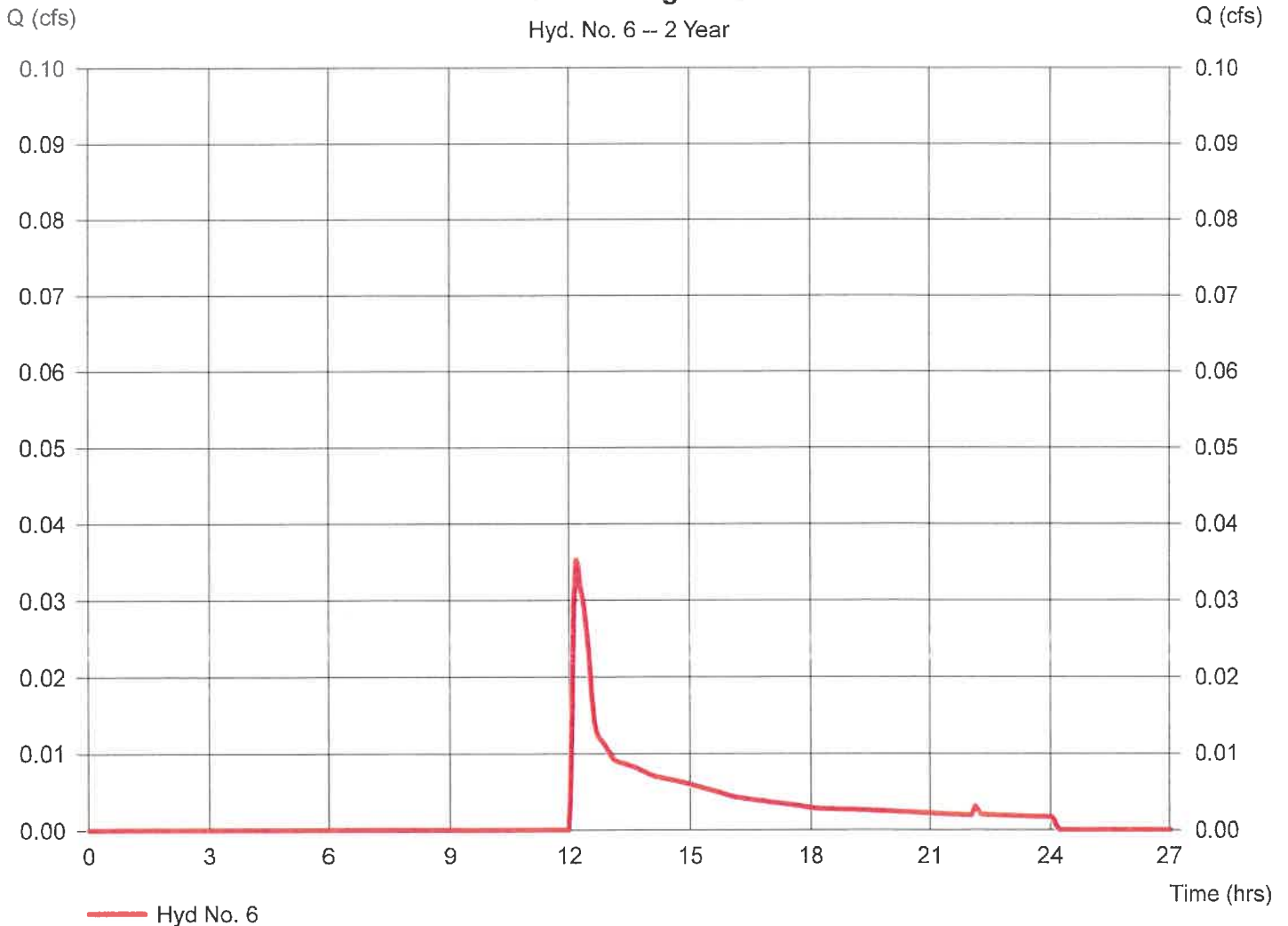
P.D.B.-1 to Design Point A

Hydrograph type = SCS Runoff
 Storm frequency = 2 yrs
 Time interval = 3 min
 Drainage area = 0.166 ac
 Basin Slope = 2.3 %
 Tc method = LAG
 Total precip. = 3.32 in
 Storm duration = 24 hrs

Peak discharge = 0.035 cfs
 Time to peak = 12.15 hrs
 Hyd. volume = 219 cuft
 Curve number = 58.1
 Hydraulic length = 150 ft
 Time of conc. (Tc) = 8.30 min
 Distribution = Type III
 Shape factor = 484

P.D.B.-1 to Design Point A

Hyd. No. 6 -- 2 Year



Hydrograph Report

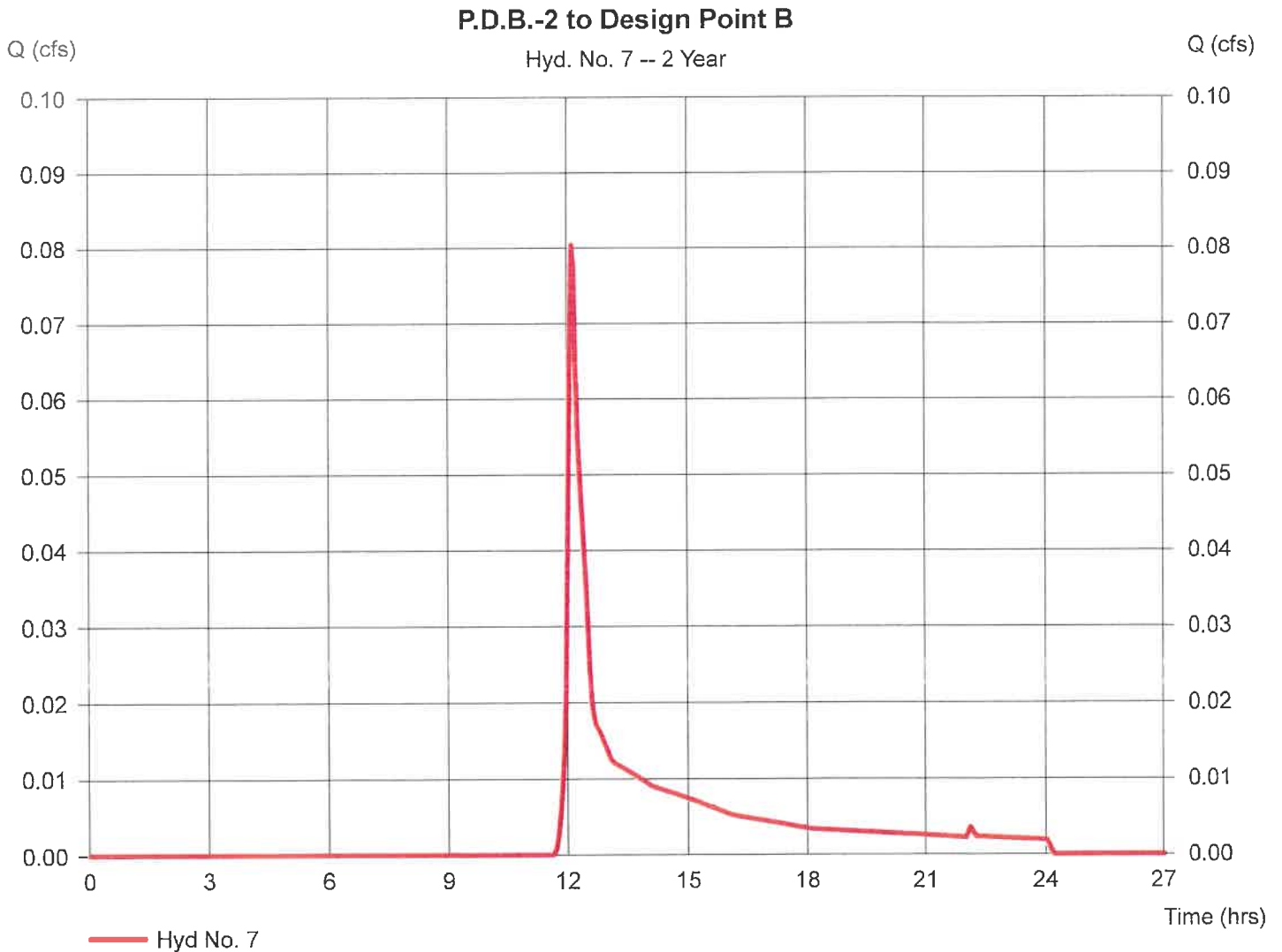
Hydraflow Hydrographs by Intelisolve v9.22

Tuesday, Oct 13, 2020

Hyd. No. 7

P.D.B.-2 to Design Point B

Hydrograph type	= SCS Runoff	Peak discharge	= 0.080 cfs
Storm frequency	= 2 yrs	Time to peak	= 12.10 hrs
Time interval	= 3 min	Hyd. volume	= 324 cuft
Drainage area	= 0.136 ac	Curve number	= 65.9
Basin Slope	= 2.1 %	Hydraulic length	= 163 ft
Tc method	= LAG	Time of conc. (Tc)	= 7.60 min
Total precip.	= 3.32 in	Distribution	= Type III
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.22

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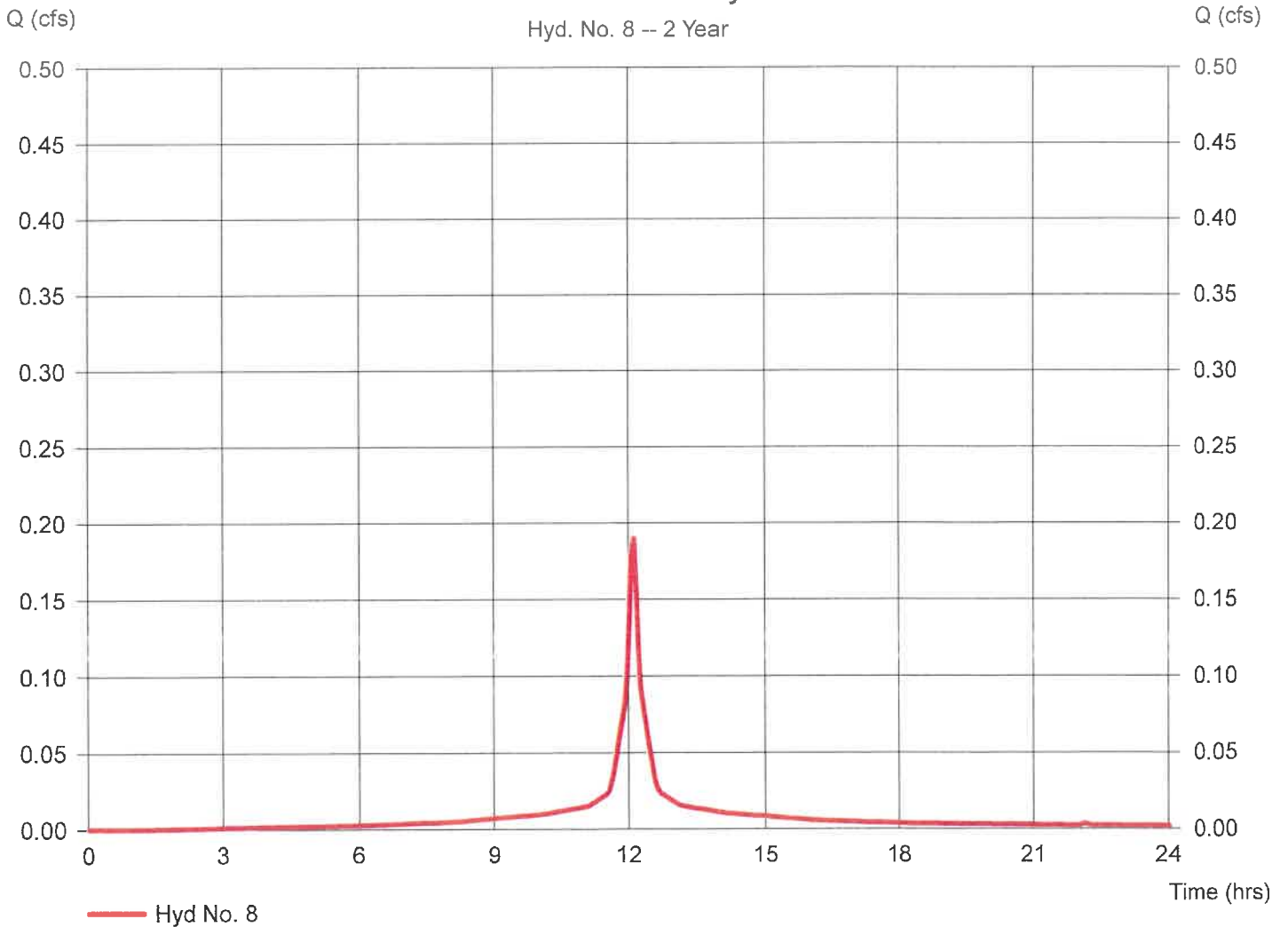
Hyd. No. 8

P.D.B.-3 to Infiltration System 1

Hydrograph type	= SCS Runoff	Peak discharge	= 0.190 cfs
Storm frequency	= 2 yrs	Time to peak	= 12.10 hrs
Time interval	= 3 min	Hyd. volume	= 714 cuft
Drainage area	= 0.068 ac	Curve number	= 98
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.32 in	Distribution	= Type III
Storm duration	= 24 hrs	Shape factor	= 484

P.D.B.-3 to Infiltration System 1

Hyd. No. 8 -- 2 Year



Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.22

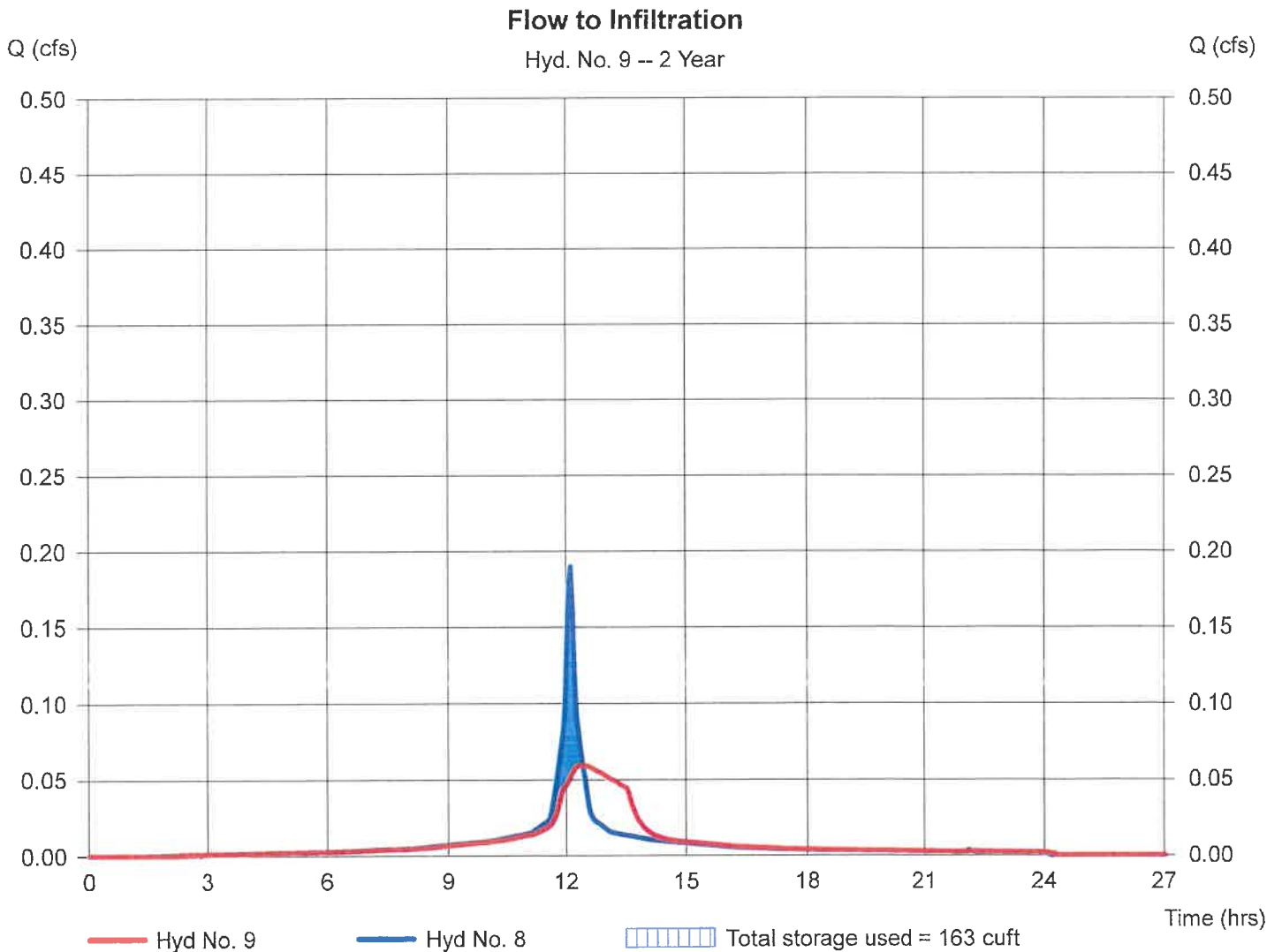
Tuesday, Oct 13, 2020

Hyd. No. 9

Flow to Infiltration

Hydrograph type	= Reservoir	Peak discharge	= 0.059 cfs
Storm frequency	= 2 yrs	Time to peak	= 12.40 hrs
Time interval	= 3 min	Hyd. volume	= 714 cuft
Inflow hyd. No.	= 8 - P.D.B.-3 to Infiltration System 1	Max. Elevation	= 139.63 ft
Reservoir name	= Infiltration System 1	Max. Storage	= 163 cuft

Storage Indication method used. Outflow includes exfiltration.



Pond Report

Hydraflow Hydrographs by Intelisolve v9.22

Tuesday, Oct 13, 2020

Pond No. 1 - Infiltration System 1

Pond Data

Trapezoid - Bottom L x W = 24.0 x 8.5 ft, Side slope = 0.00:1, Bottom elev. = 138.00 ft, Depth = 4.00 ft, Voids = 49.00%

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	138.00	204	0	0
0.40	138.40	204	40	40
0.80	138.80	204	40	80
1.20	139.20	204	40	120
1.60	139.60	204	40	160
2.00	140.00	204	40	200
2.40	140.40	204	40	240
2.80	140.80	204	40	280
3.20	141.20	204	40	320
3.60	141.60	204	40	360
4.00	142.00	204	40	400

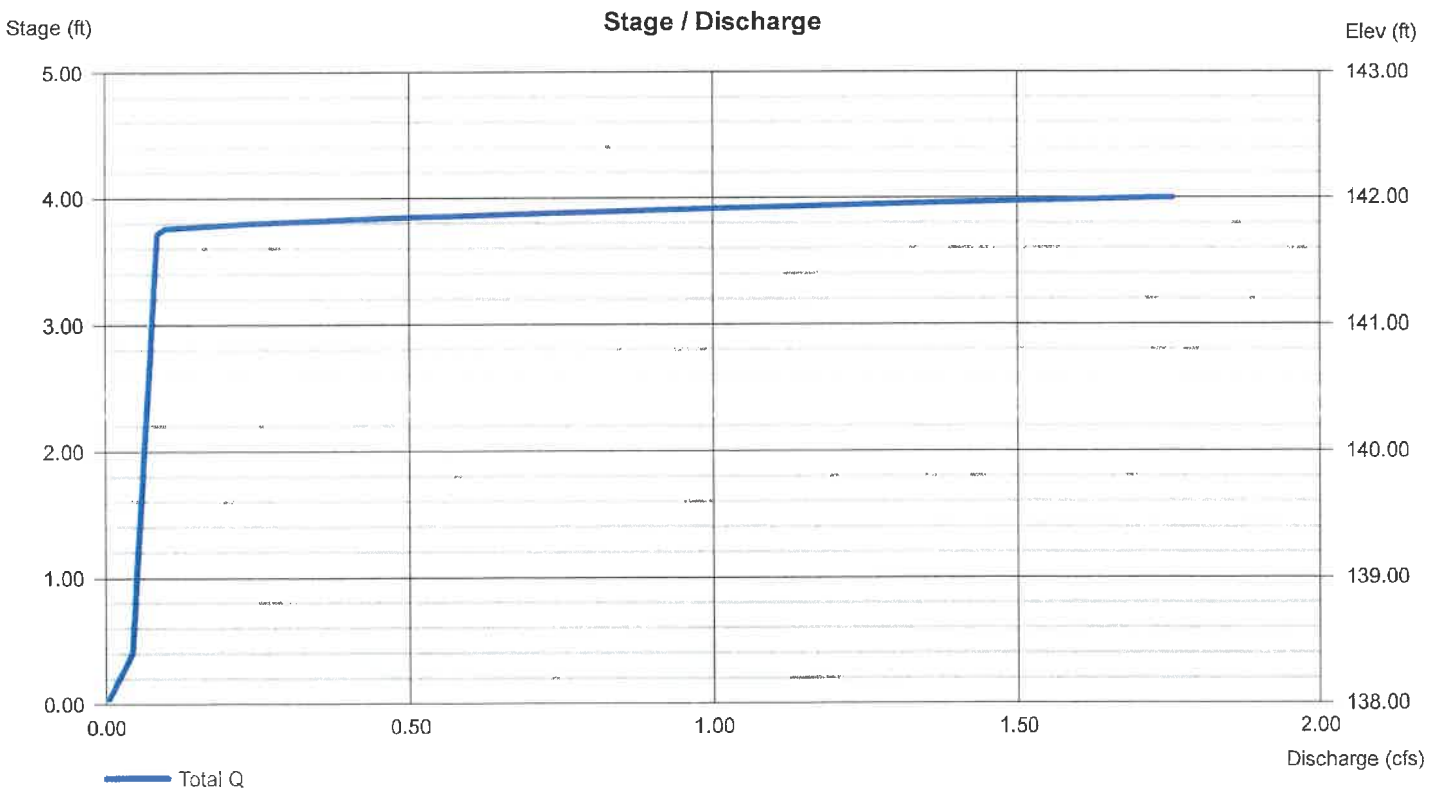
Culvert / Orifice Structures

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

Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 4.00	0.00	0.00	0.00
Crest El. (ft)	= 141.75	0.00	0.00	0.00
Weir Coeff.	= 3.33	3.33	3.33	3.33
Weir Type	= Rect	---	---	---
Multi-Stage	= No	No	No	No
Exfil.(in/hr)	= 8.270 (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).



Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.22

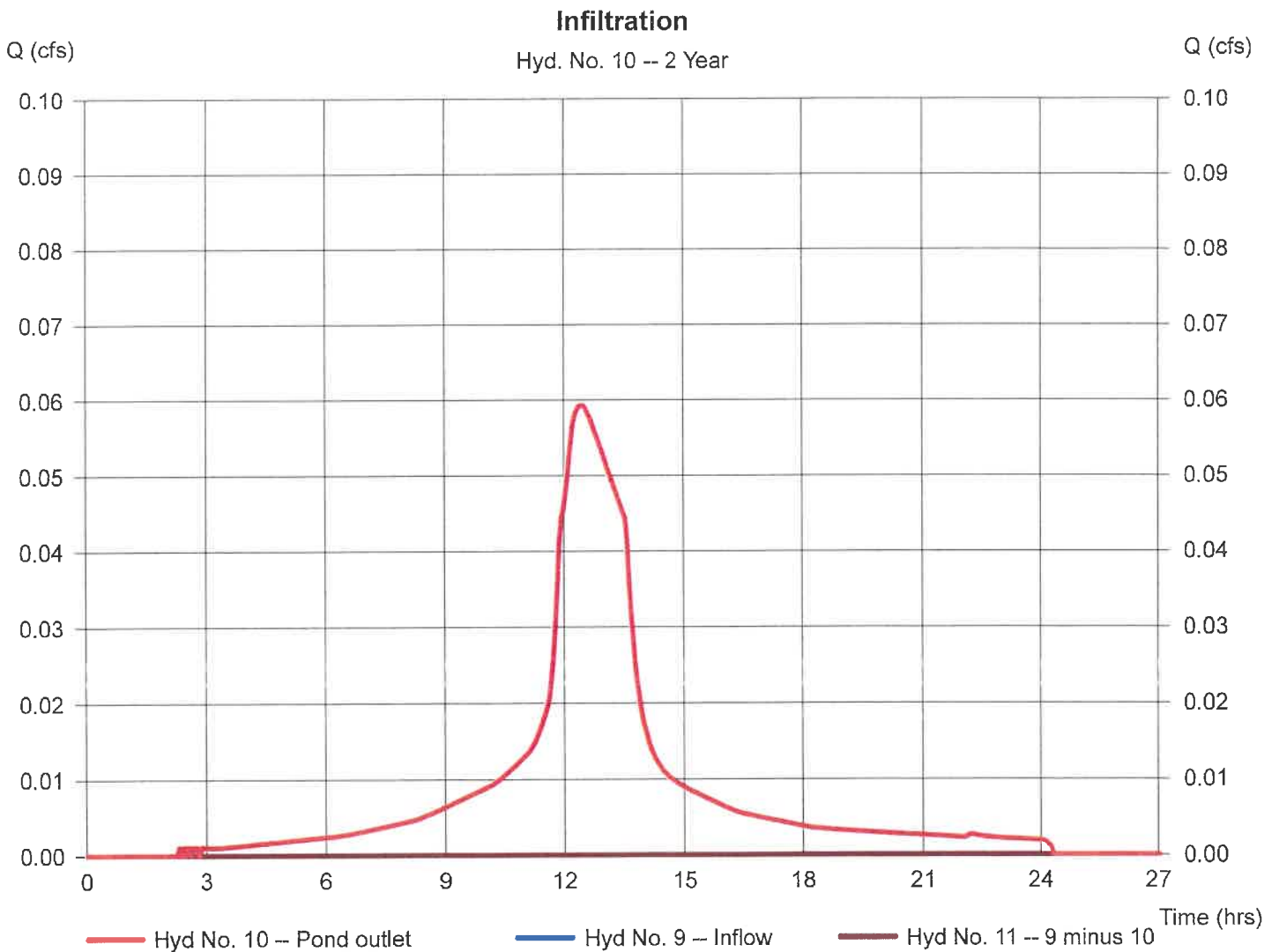
Tuesday, Oct 13, 2020

Hyd. No. 10

Infiltration

Hydrograph type = Diversion1
Storm frequency = 2 yrs
Time interval = 3 min
Inflow hydrograph = 9 - Flow to Infiltration
Diversion method = Pond - Infiltration System 1

Peak discharge = 0.059 cfs
Time to peak = 12.40 hrs
Hyd. volume = 714 cuft
2nd diverted hyd. = 11
Pond structure = Exfiltration



Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.22

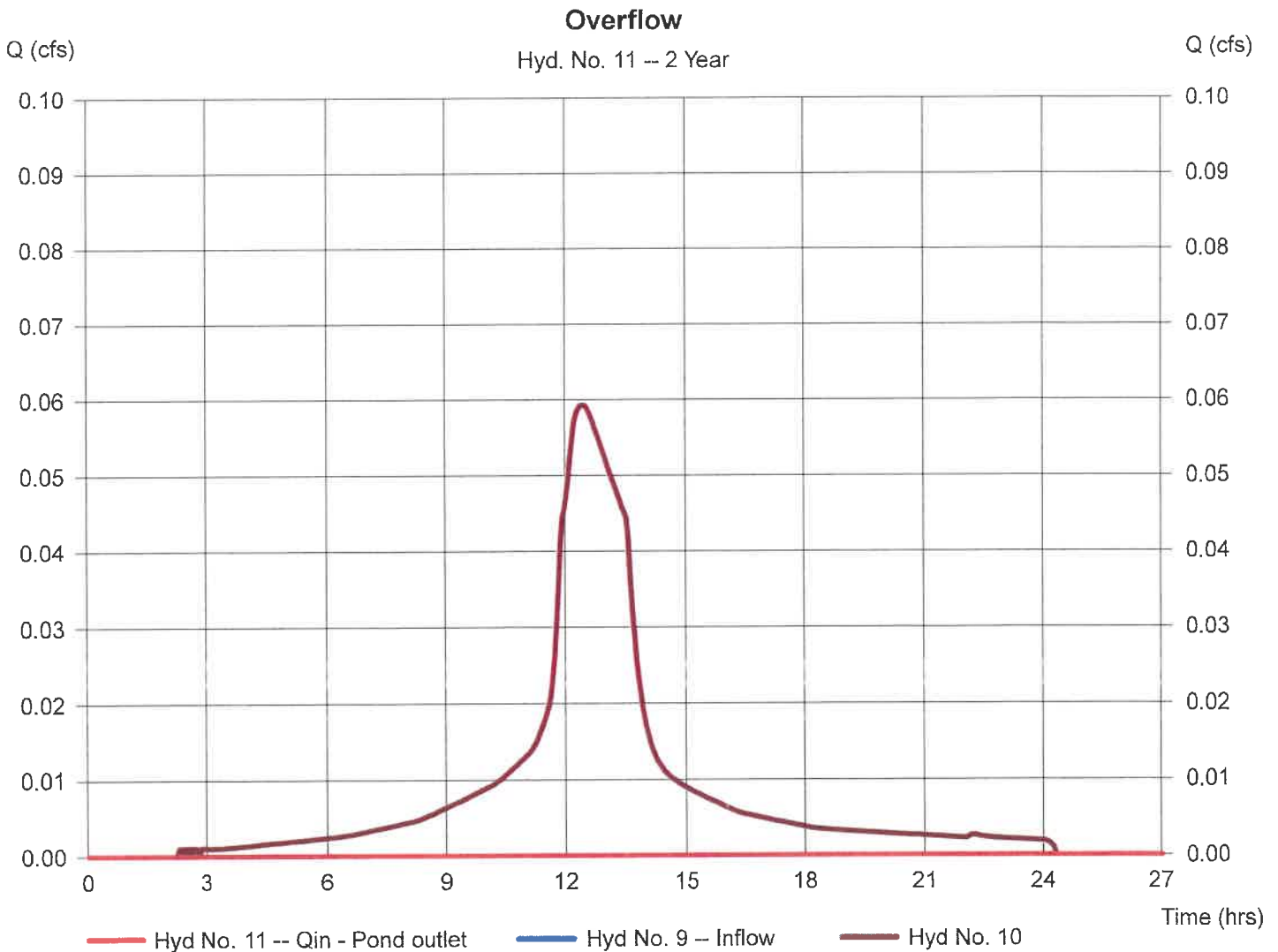
Tuesday, Oct 13, 2020

Hyd. No. 11

Overflow

Hydrograph type = Diversion2
Storm frequency = 2 yrs
Time interval = 3 min
Inflow hydrograph = 9 - Flow to Infiltration
Diversion method = Pond - Infiltration System 1

Peak discharge = 0.000 cfs
Time to peak = 11.75 hrs
Hyd. volume = 0 cuft
2nd diverted hyd. = 10
Pond structure = Exfiltration



Hydrograph Report

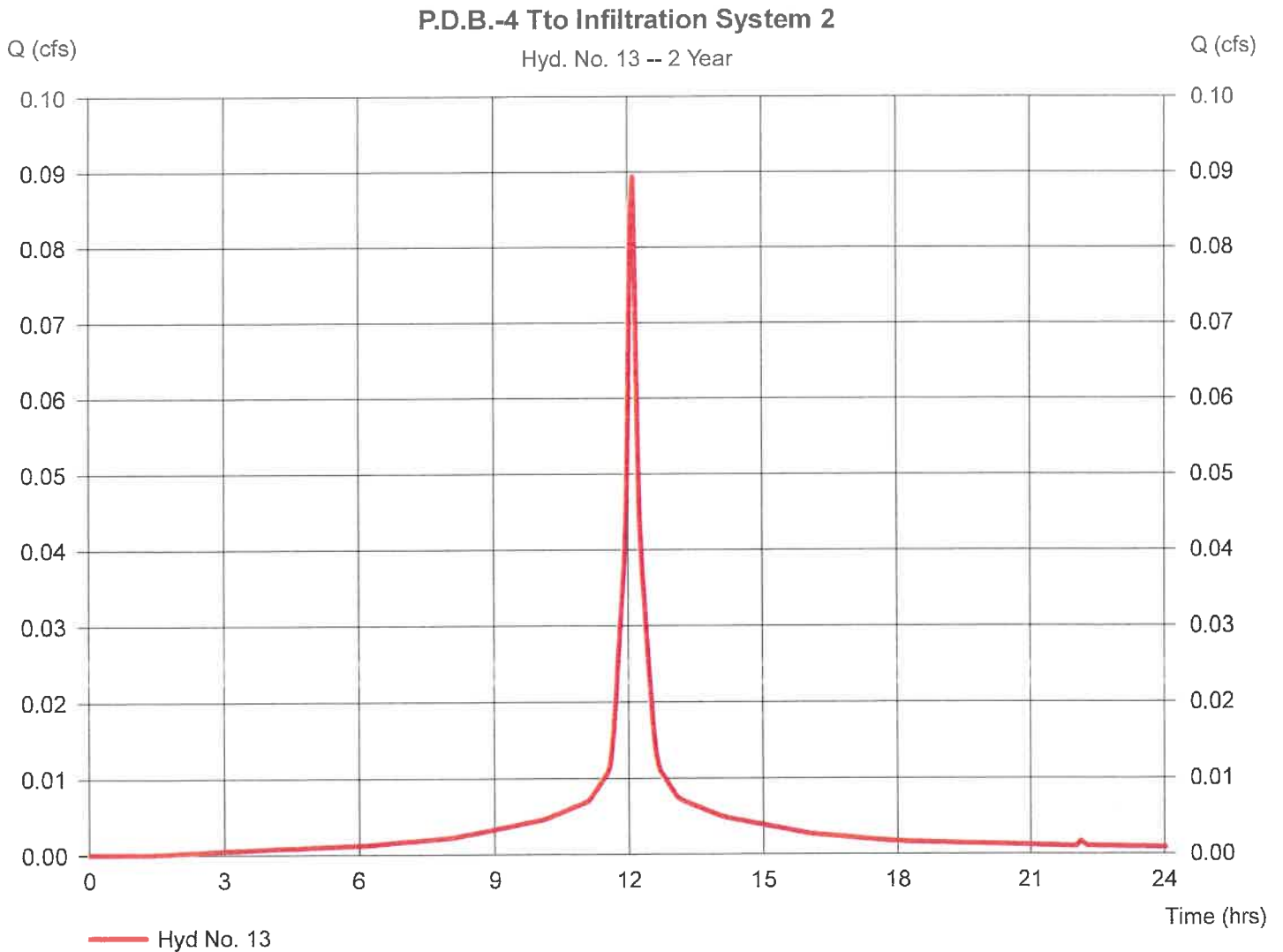
Hydraflow Hydrographs by Intelisolve v9.22

Tuesday, Oct 13, 2020

Hyd. No. 13

P.D.B.-4 Tto Infiltration System 2

Hydrograph type	= SCS Runoff	Peak discharge	= 0.089 cfs
Storm frequency	= 2 yrs	Time to peak	= 12.10 hrs
Time interval	= 3 min	Hyd. volume	= 336 cuft
Drainage area	= 0.032 ac	Curve number	= 98
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= USER	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.32 in	Distribution	= Type III
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.22

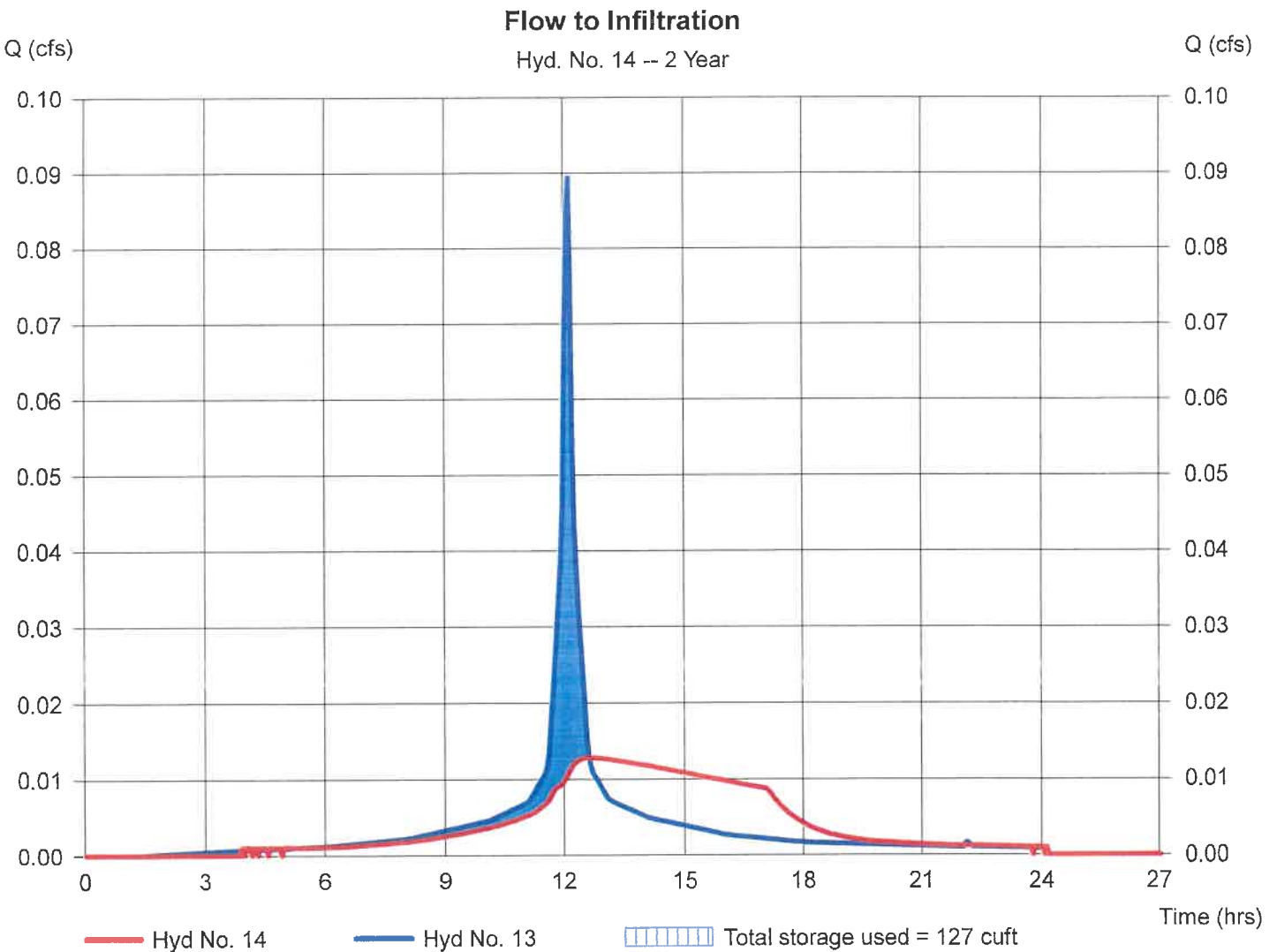
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Hyd. No. 14

Flow to Infiltration

Hydrograph type	= Reservoir	Peak discharge	= 0.013 cfs
Storm frequency	= 2 yrs	Time to peak	= 12.60 hrs
Time interval	= 3 min	Hyd. volume	= 333 cuft
Inflow hyd. No.	= 13 - P.D.B.-4 Tto Infiltration System 2	Max. Elevation	= 138.91 ft
Reservoir name	= Infiltration System 2	Max. Storage	= 127 cuft

Storage Indication method used. Outflow includes exfiltration.



Pond Report

Hydraflow Hydrographs by Intelisolve v9.22

Tuesday, Oct 13, 2020

Pond No. 2 - Infiltration System 2

Pond Data

Trapezoid - Bottom L x W = 16.0 x 8.5 ft, Side slope = 0.00:1, Bottom elev. = 137.00 ft, Depth = 4.00 ft, Voids = 49.00%

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	137.00	136	0	0
0.40	137.40	136	27	27
0.80	137.80	136	27	53
1.20	138.20	136	27	80
1.60	138.60	136	27	107
2.00	139.00	136	27	133
2.40	139.40	136	27	160
2.80	139.80	136	27	187
3.20	140.20	136	27	213
3.60	140.60	136	27	240
4.00	141.00	136	27	267

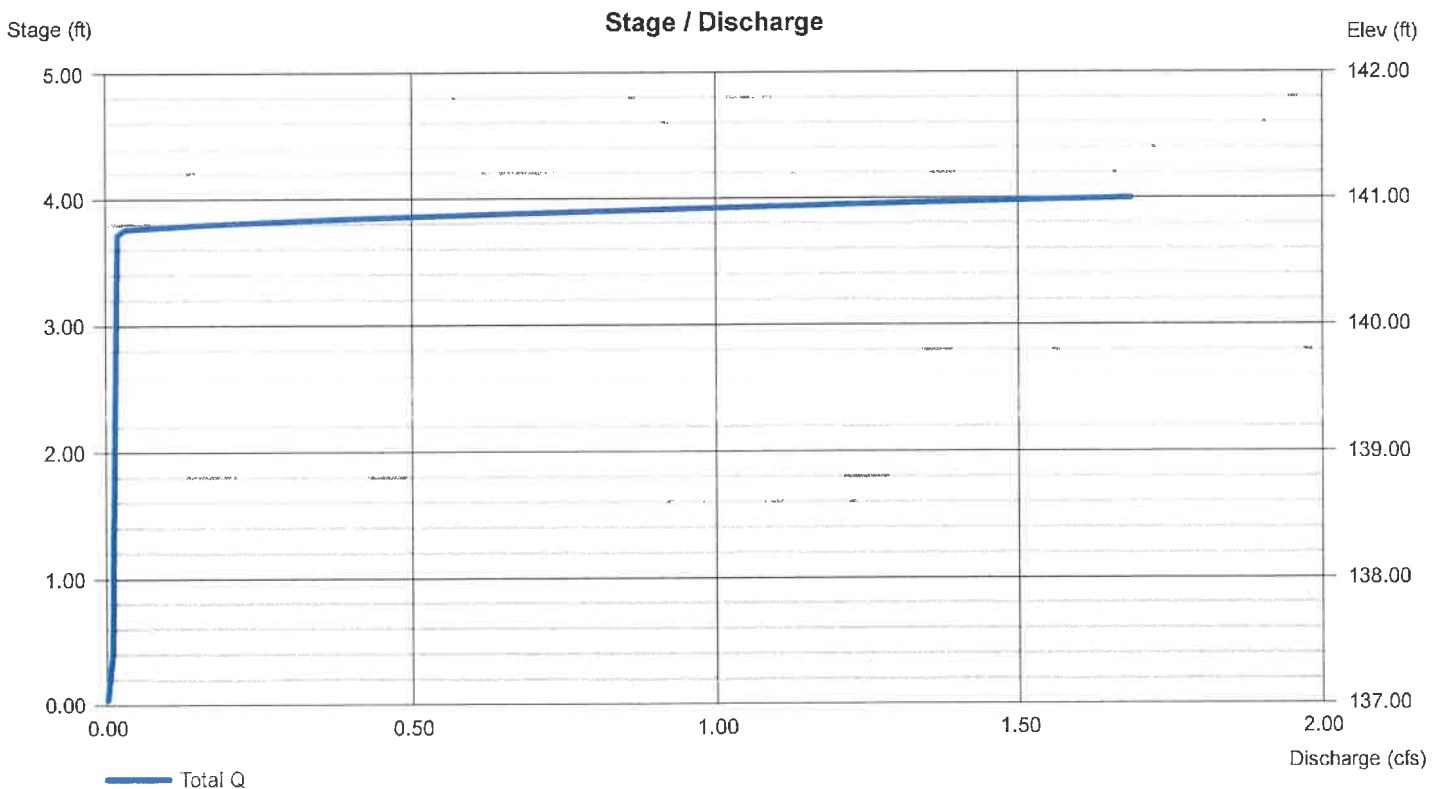
Culvert / Orifice Structures

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

Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 4.00	0.00	0.00	0.00
Crest El. (ft)	= 140.75	0.00	0.00	0.00
Weir Coeff.	= 3.33	3.33	3.33	3.33
Weir Type	= Rect	---	---	---
Multi-Stage	= No	No	No	No
Exfil.(in/hr)	= 2.410 (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).



Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.22

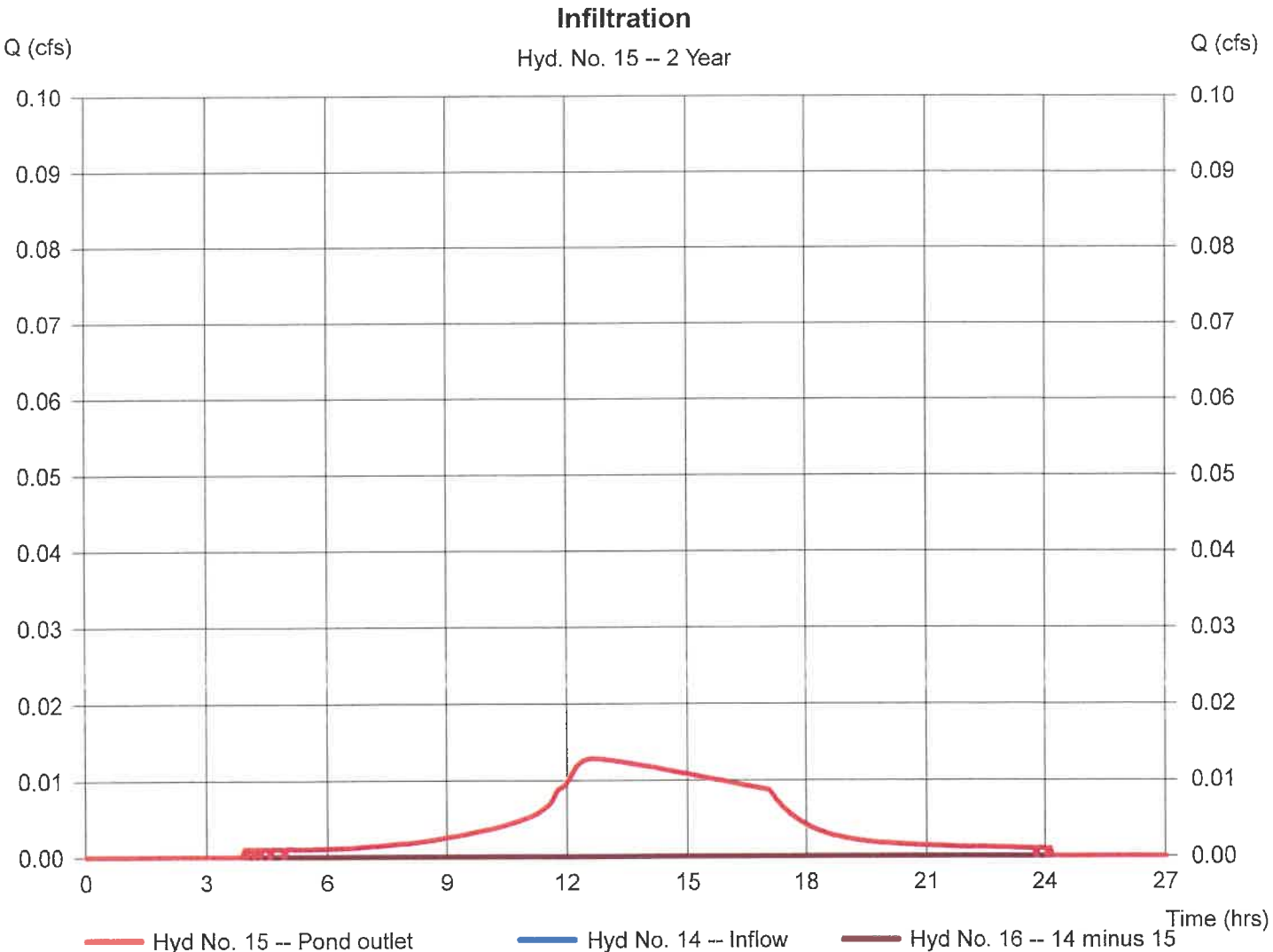
Tuesday, Oct 13, 2020

Hyd. No. 15

Infiltration

Hydrograph type = Diversion1
Storm frequency = 2 yrs
Time interval = 3 min
Inflow hydrograph = 14 - Flow to Infiltration
Diversion method = Pond - Infiltration System 2

Peak discharge = 0.013 cfs
Time to peak = 12.60 hrs
Hyd. volume = 333 cuft
2nd diverted hyd. = 16
Pond structure = Exfiltration



Hydrograph Report

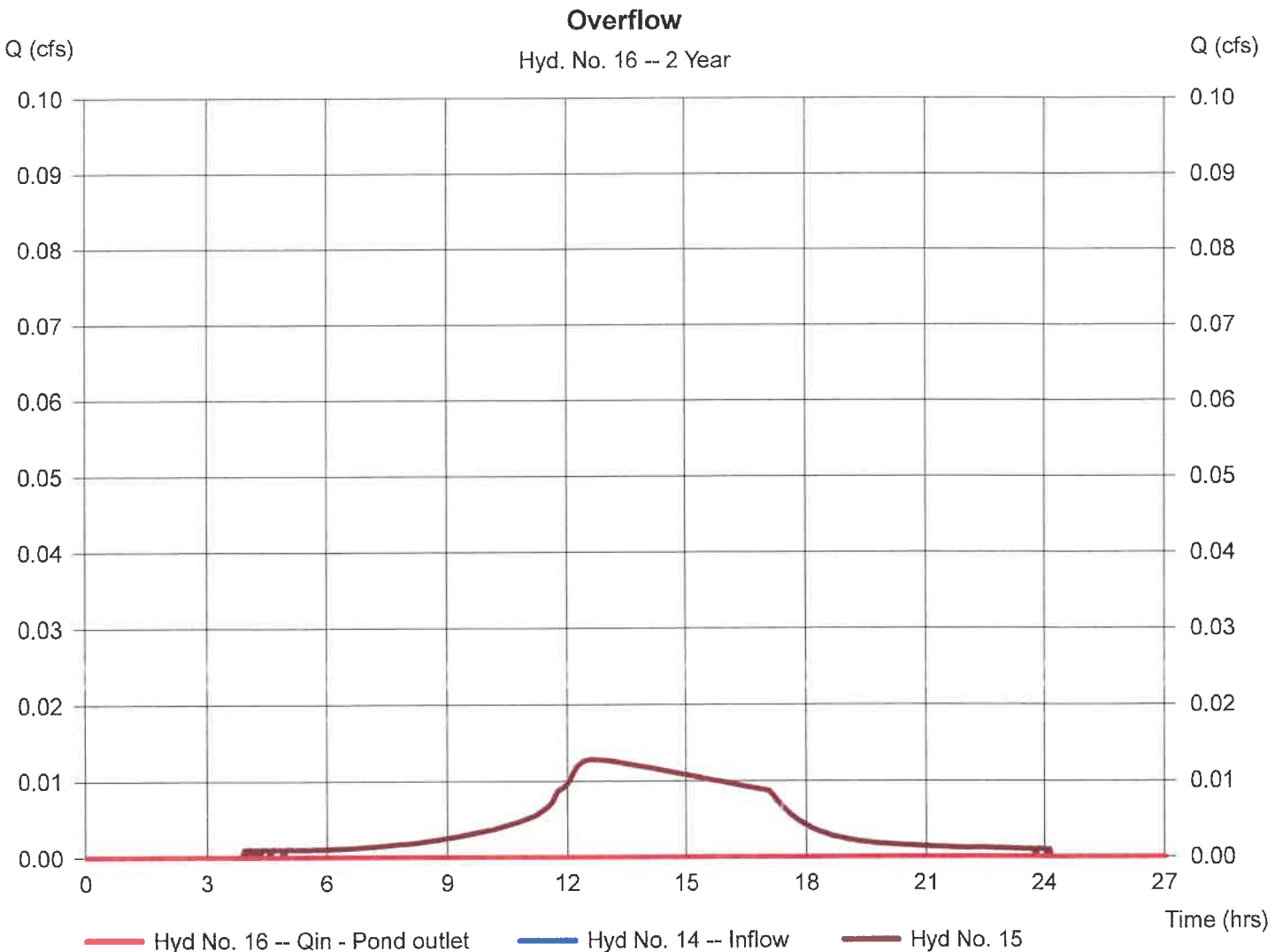
Hydraflow Hydrographs by Intelisolve v9.22

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Hyd. No. 16

Overflow

Hydrograph type	= Diversion2	Peak discharge	= 0.000 cfs
Storm frequency	= 2 yrs	Time to peak	= 17.35 hrs
Time interval	= 3 min	Hyd. volume	= 0 cuft
Inflow hydrograph	= 14 - Flow to Infiltration	2nd diverted hyd.	= 15
Diversion method	= Pond - Infiltration System 2	Pond structure	= Exfiltration



Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.22

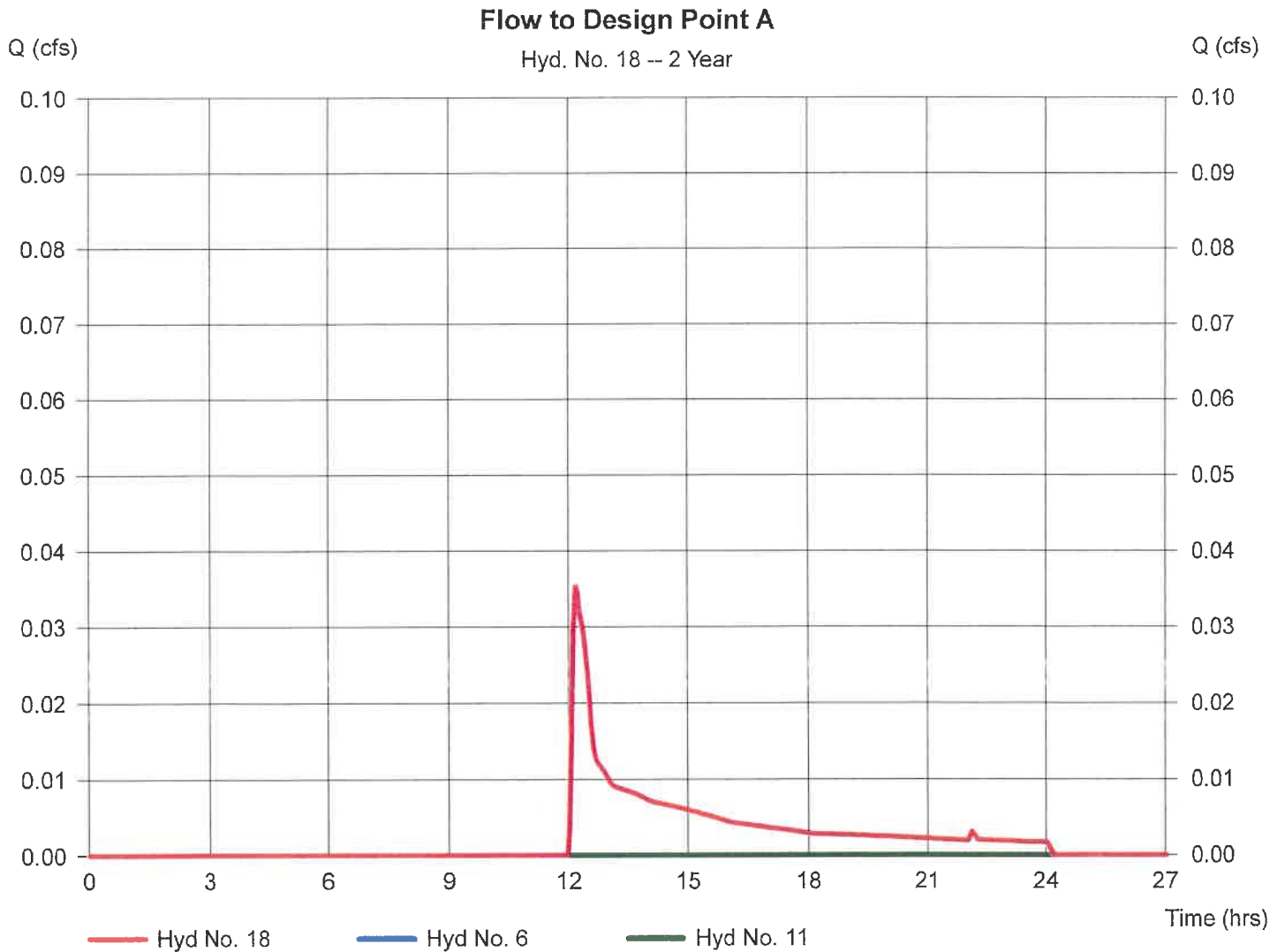
Tuesday, Oct 13, 2020

Hyd. No. 18

Flow to Design Point A

Hydrograph type = Combine
Storm frequency = 2 yrs
Time interval = 3 min
Inflow hyds. = 6, 11

Peak discharge = 0.035 cfs
Time to peak = 12.15 hrs
Hyd. volume = 219 cuft
Contrib. drain. area = 0.166 ac



Hydrograph Report

Hydraflow Hydrographs by Intelisolve v9.22

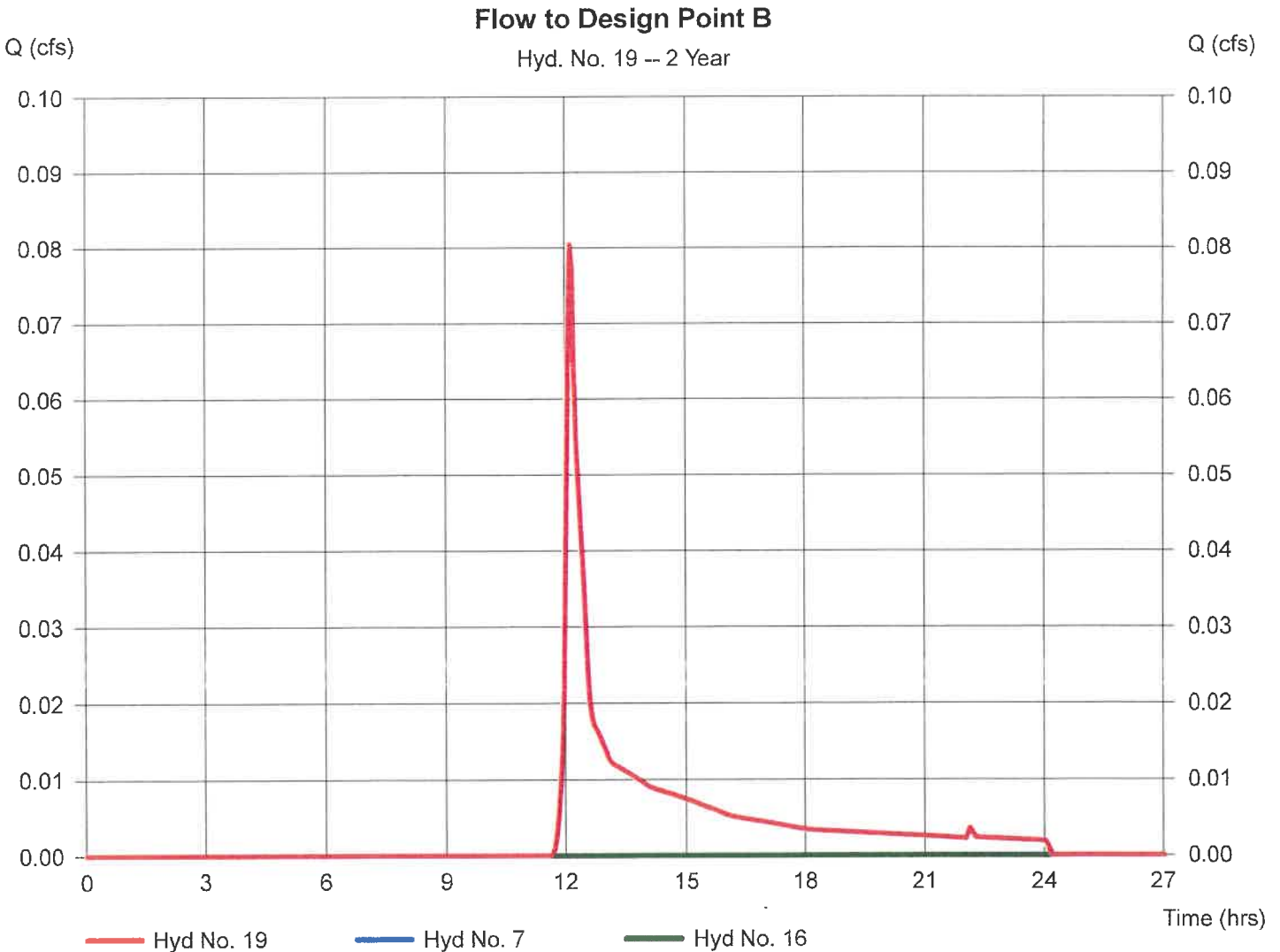
Tuesday, Oct 13, 2020

Hyd. No. 19

Flow to Design Point B

Hydrograph type = Combine
Storm frequency = 2 yrs
Time interval = 3 min
Inflow hyds. = 7, 16

Peak discharge = 0.080 cfs
Time to peak = 12.10 hrs
Hyd. volume = 324 cuft
Contrib. drain. area = 0.136 ac



Hydrograph Report

Hydraflow Hydrographs by Intellisolve v9.22

Tuesday, Oct 13, 2020

Hyd. No. 20

Total Proposed Flow

Hydrograph type = Combine
Storm frequency = 2 yrs
Time interval = 3 min
Inflow hyds. = 6, 7, 11, 16

Peak discharge = 0.112 cfs
Time to peak = 12.15 hrs
Hyd. volume = 543 cuft
Contrib. drain. area = 0.302 ac

