

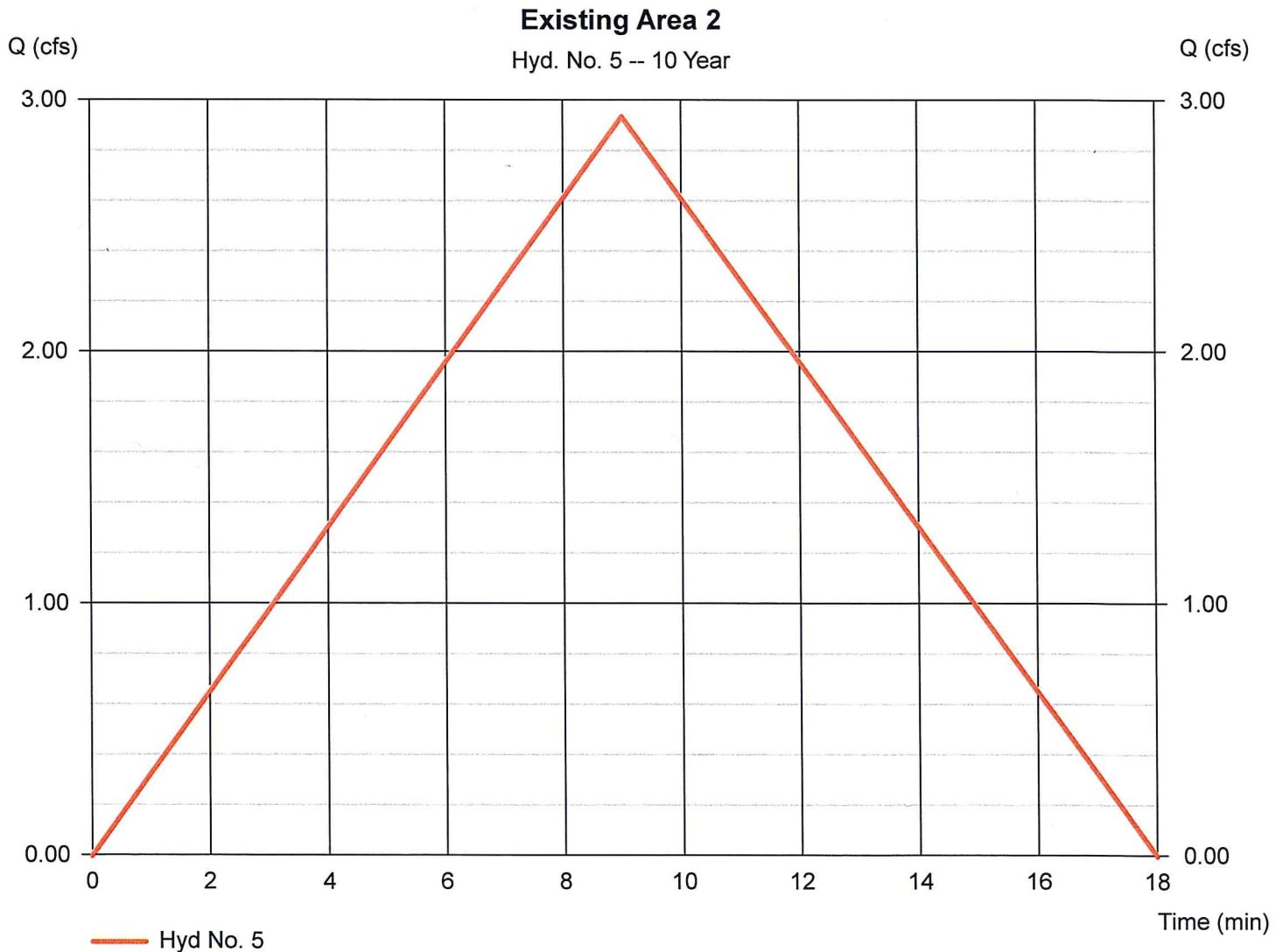
# Hydrograph Report

## Hyd. No. 5

### Existing Area 2

Hydrograph type = Rational  
Storm frequency = 10 yrs  
Time interval = 1 min  
Drainage area = 2.640 ac  
Intensity = 5.567 in/hr  
IDF Curve = GSD-60 NOAA.IDF

Peak discharge = 2.940 cfs  
Time to peak = 9 min  
Hyd. volume = 1,587 cuft  
Runoff coeff. = 0.2  
Tc by TR55 = 9.00 min  
Asc/Rec limb fact = 1/1



# Hydrograph Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2009 by Autodesk, Inc. v6.066

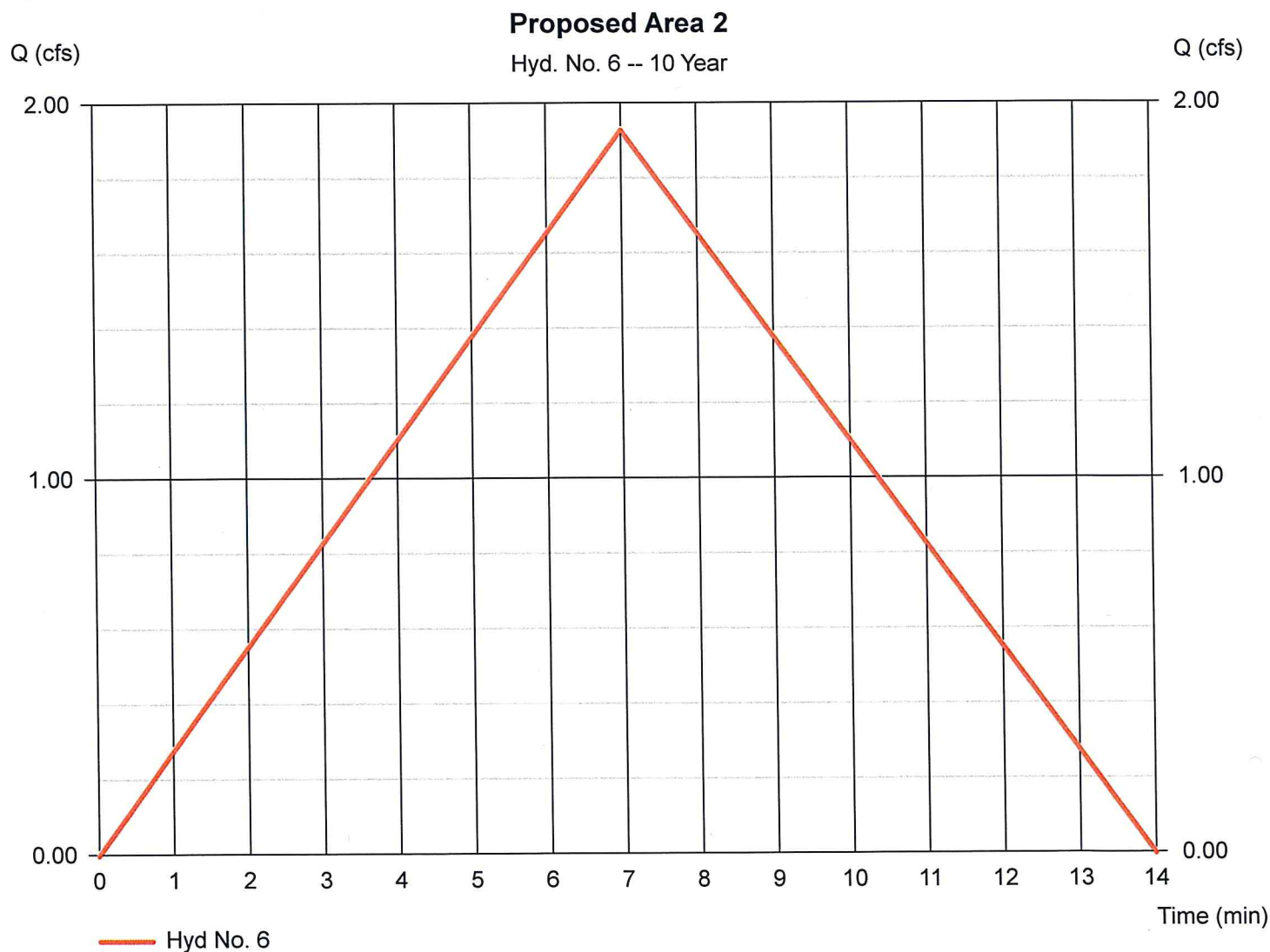
Thursday, May 9, 2024

## Hyd. No. 6

### Proposed Area 2

Hydrograph type = Rational  
 Storm frequency = 10 yrs  
 Time interval = 1 min  
 Drainage area = 1.540 ac  
 Intensity = 6.270 in/hr  
 IDF Curve = GSD-60 NOAA.IDF

Peak discharge = 1.931 cfs  
 Time to peak = 7 min  
 Hyd. volume = 811 cuft  
 Runoff coeff. = 0.2  
 Tc by User = 7.00 min  
 Asc/Rec limb fact = 1/1



# Hydrograph Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2009 by Autodesk, Inc. v6.066

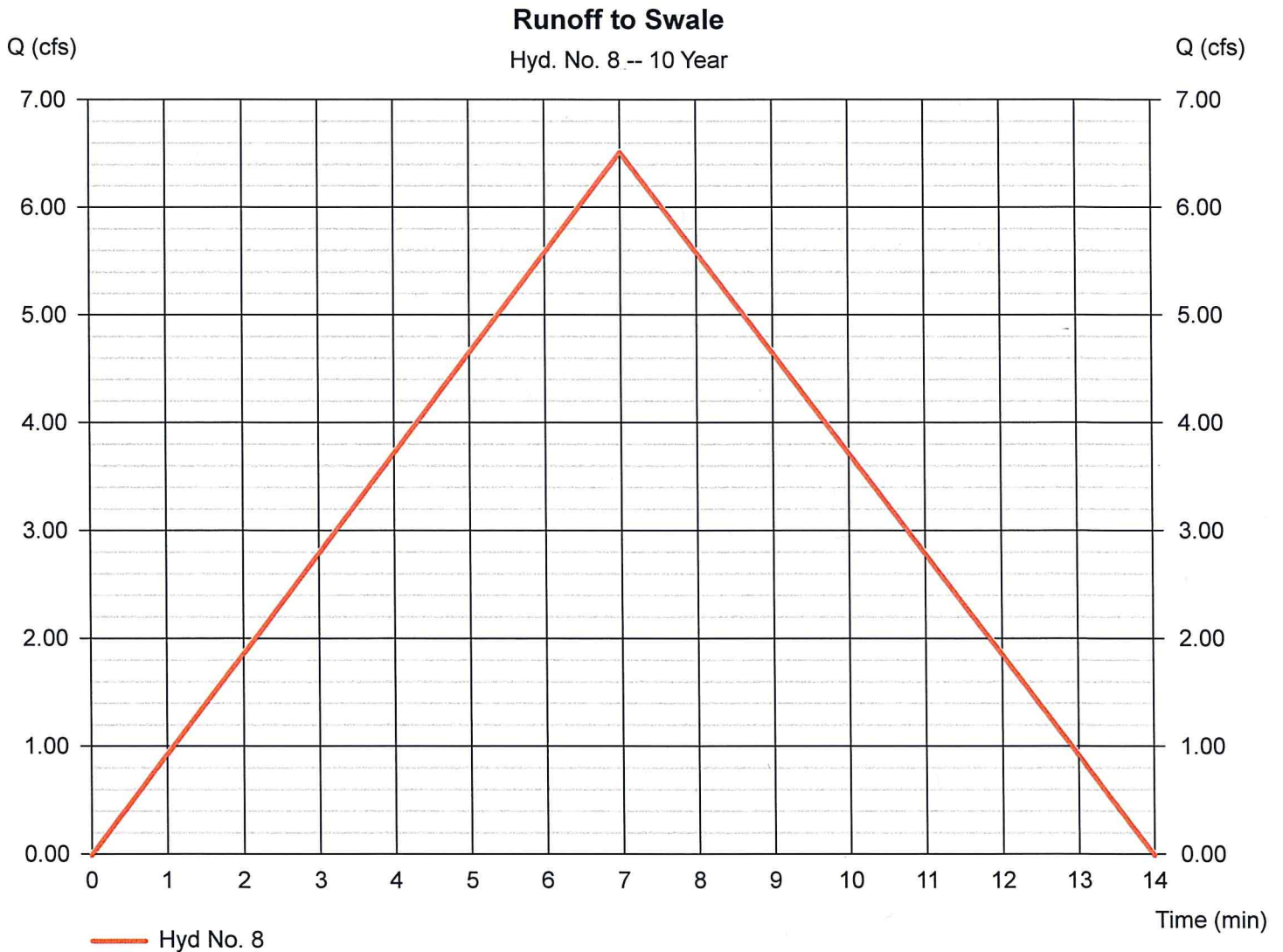
Thursday, May 9, 2024

## Hyd. No. 8

Runoff to Swale

Hydrograph type = Rational  
Storm frequency = 10 yrs  
Time interval = 1 min  
Drainage area = 1.300 ac  
Intensity = 6.270 in/hr  
IDF Curve = GSD-60 NOAA.IDF

Peak discharge = 6.520 cfs  
Time to peak = 7 min  
Hyd. volume = 2,739 cuft  
Runoff coeff. = 0.8  
Tc by User = 7.00 min  
Asc/Rec limb fact = 1/1



# Hydrograph Summary Report

Hydratlow Hydrographs Extension for AutoCAD® Civil 3D® 2009 by Autodesk, Inc. v6.066

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	5.998	1	9	3,239	----	----	----	Existing Area 1
2	Rational	21.90	1	9	11,826	----	----	----	Proposed Area 1
3	Reservoir(i)	8.140	1	16	7,311	2	207.16	9,726	forebay
4	Reservoir	2.686	1	26	7,297	3	206.63	4,118	Water Quality Basin
5	Rational	3.543	1	9	1,913	----	----	----	Existing Area 2
6	Rational	2.326	1	7	977	----	----	----	Proposed Area 2
8	Rational	7.855	1	7	3,299	----	----	----	Runoff to Swale
GSD 69 - Drainage Calculations - V1.gpw					Return Period: 25 Year			Thursday, May 9, 2024	

# Hydrograph Report

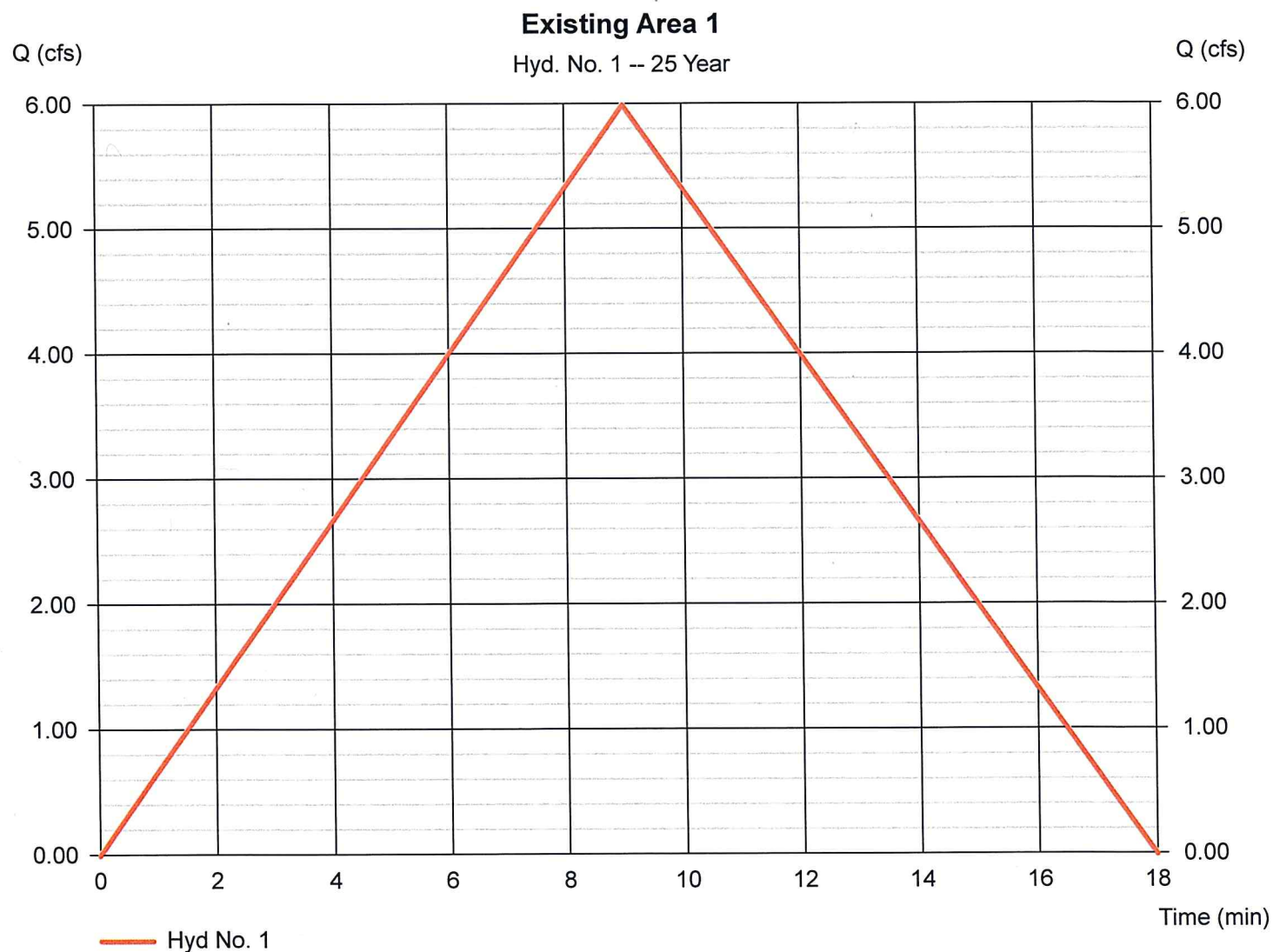
Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2009 by Autodesk, Inc. v6.066

Thursday, May 9, 2024

## Hyd. No. 1

### Existing Area 1

Hydrograph type	= Rational	Peak discharge	= 5.998 cfs
Storm frequency	= 25 yrs	Time to peak	= 9 min
Time interval	= 1 min	Hyd. volume	= 3,239 cuft
Drainage area	= 2.980 ac	Runoff coeff.	= 0.3
Intensity	= 6.710 in/hr	Tc by TR55	= 9.00 min
IDF Curve	= GSD-60 NOAA.IDF	Asc/Rec limb fact	= 1/1



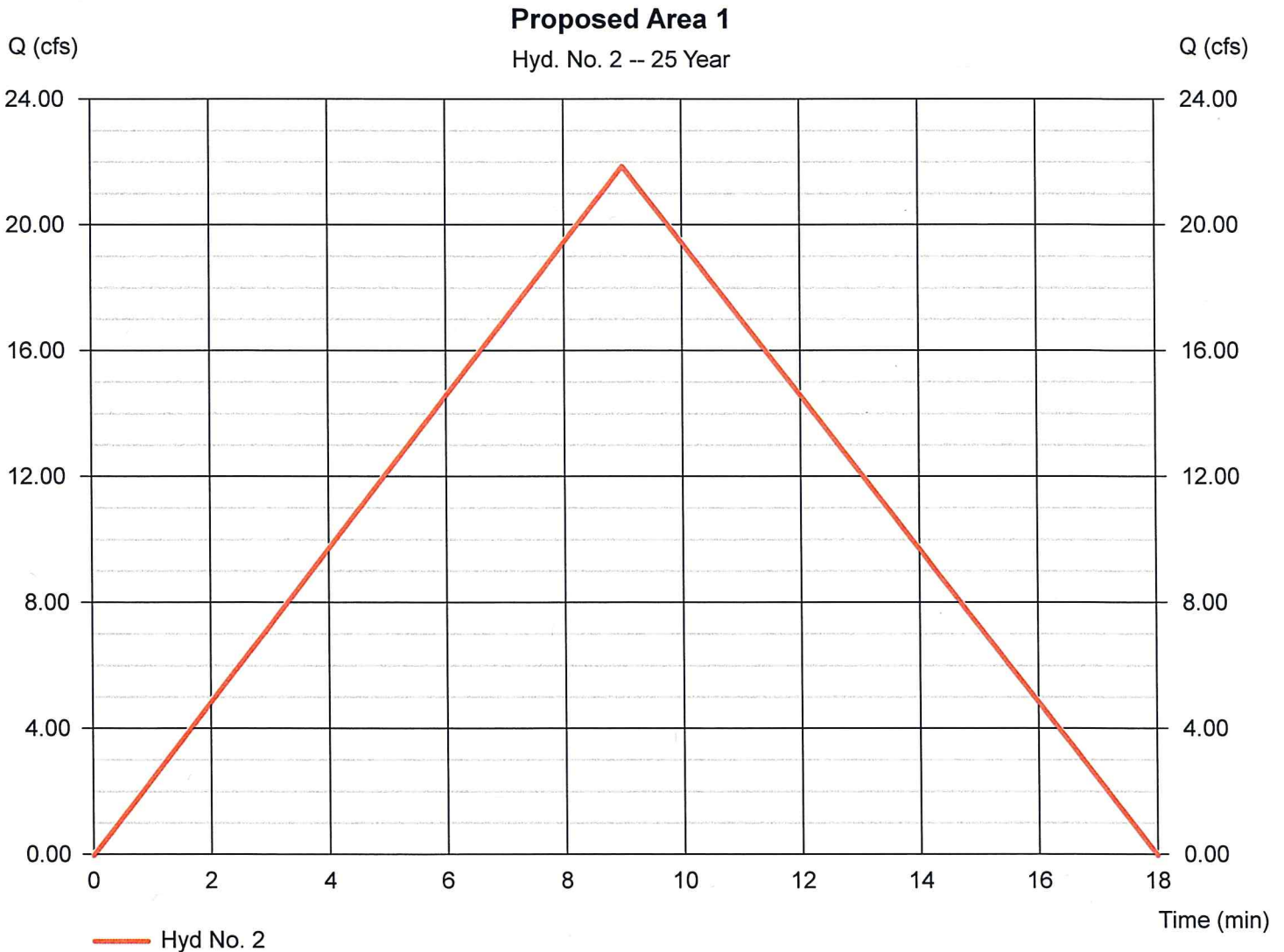
# Hydrograph Report

## Hyd. No. 2

### Proposed Area 1

Hydrograph type = Rational  
Storm frequency = 25 yrs  
Time interval = 1 min  
Drainage area = 4.080 ac  
Intensity = 6.710 in/hr  
IDF Curve = GSD-60 NOAA.IDF

Peak discharge = 21.90 cfs  
Time to peak = 9 min  
Hyd. volume = 11,826 cuft  
Runoff coeff. = 0.8  
Tc by TR55 = 9.00 min  
Asc/Rec limb fact = 1/1



# Hydrograph Report

## Hyd. No. 3

forebay

Hydrograph type = Reservoir (Interconnected)  
 Storm frequency = 25 yrs  
 Time interval = 1 min

Peak discharge = 8.140 cfs  
 Time to peak = 16 min  
 Hyd. volume = 7,311 cuft

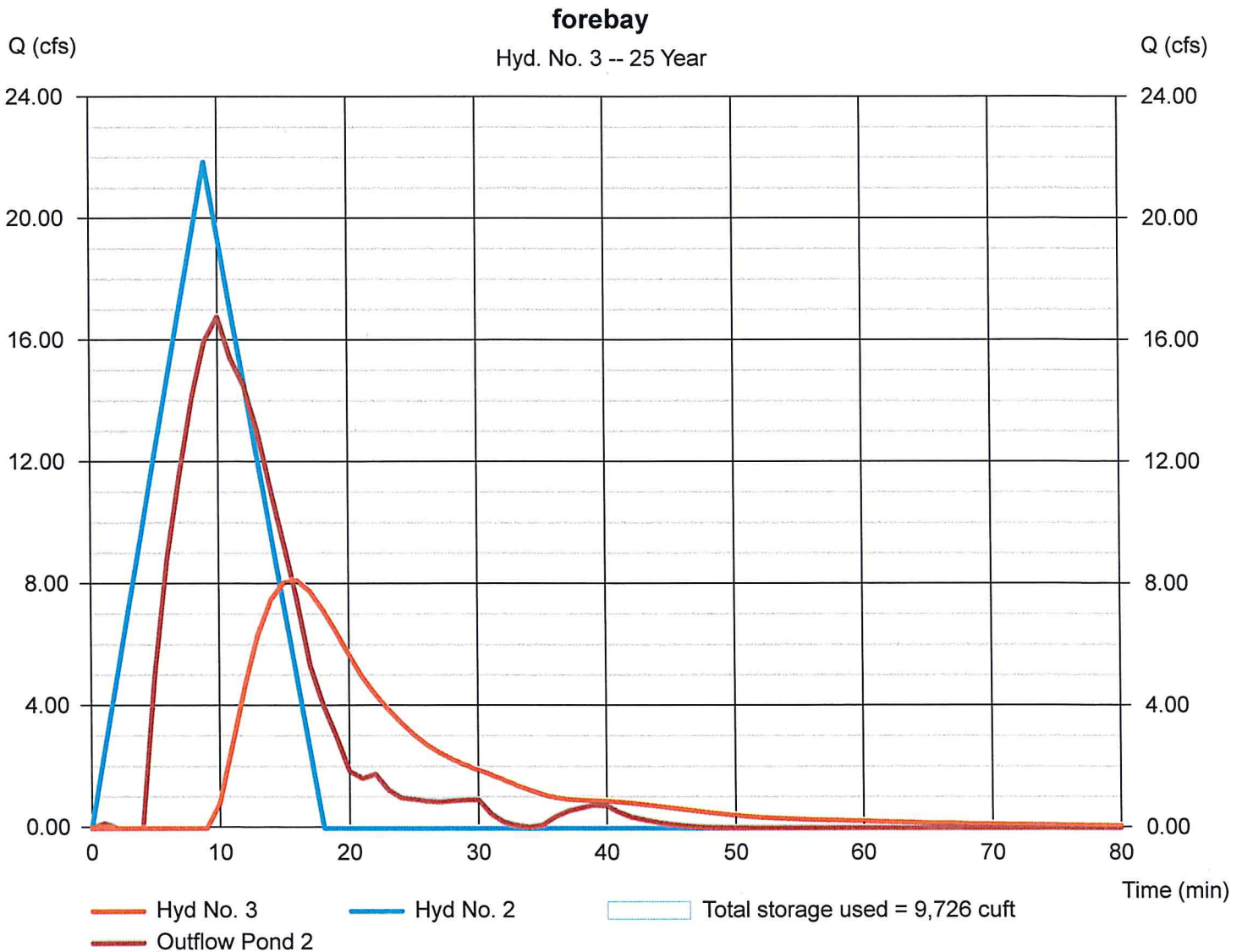
### Upper Pond

Pond name = forebay  
 Inflow hyd. = 2 --Proposed Area 1  
 Max. Elevation = 207.16 ft  
 Max. Storage = 3,399 cuft

### Lower Pond

Pond name = Pond 1  
 Other Inflow hyd. = None  
 Max. Elevation = 206.91 ft  
 Max. Storage = 6,327 cuft

Interconnected Pond Routing. Storage Indication method used.



# Hydrograph Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2009 by Autodesk, Inc. v6.066

Thursday, May 9, 2024

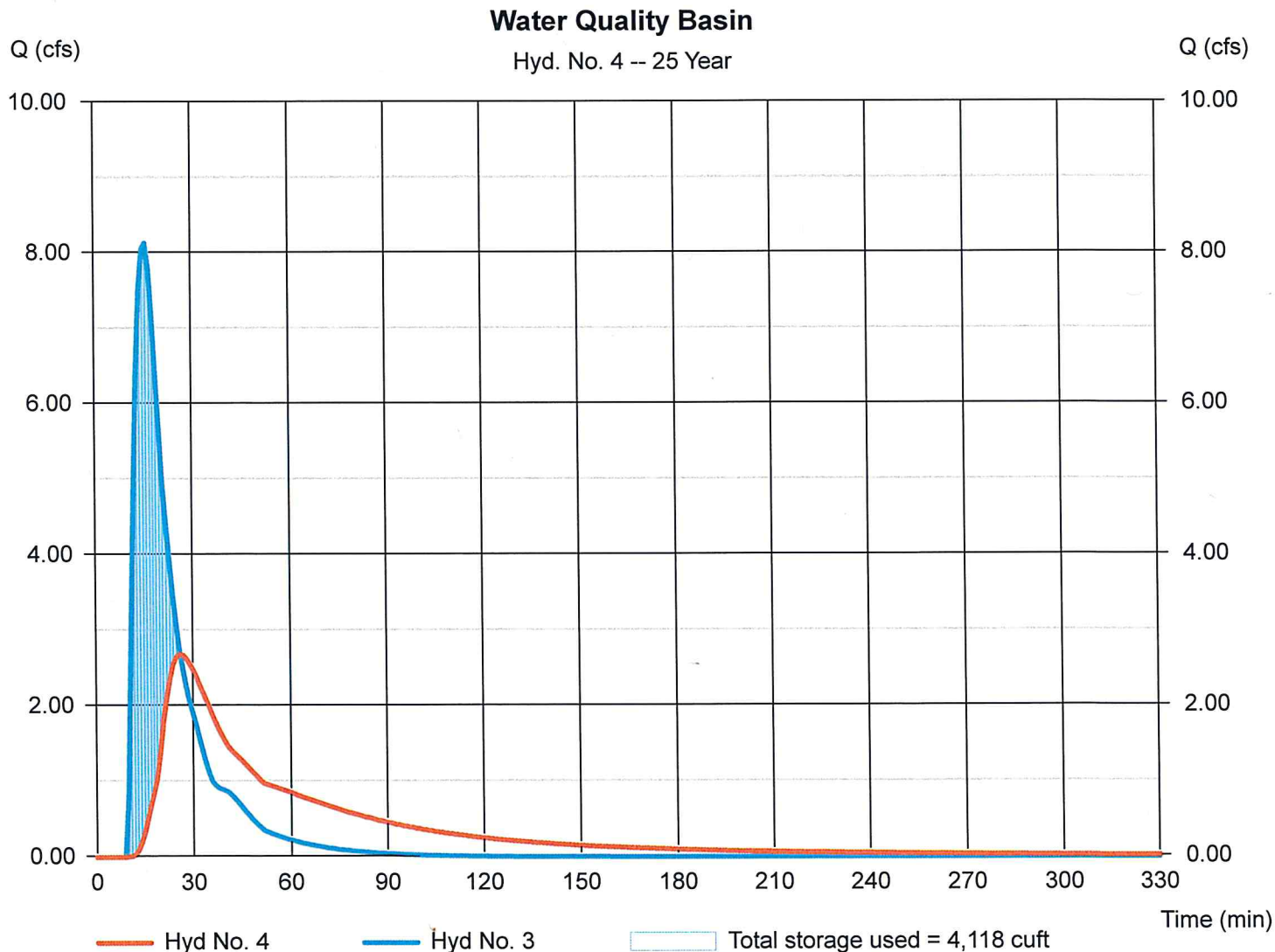
## Hyd. No. 4

### Water Quality Basin

Hydrograph type = Reservoir  
 Storm frequency = 25 yrs  
 Time interval = 1 min  
 Inflow hyd. No. = 3 - forebay  
 Reservoir name = Pond 1

Peak discharge = 2.686 cfs  
 Time to peak = 26 min  
 Hyd. volume = 7,297 cuft  
 Max. Elevation = 206.63 ft  
 Max. Storage = 4,118 cuft

Storage Indication method used.





# Hydrograph Report

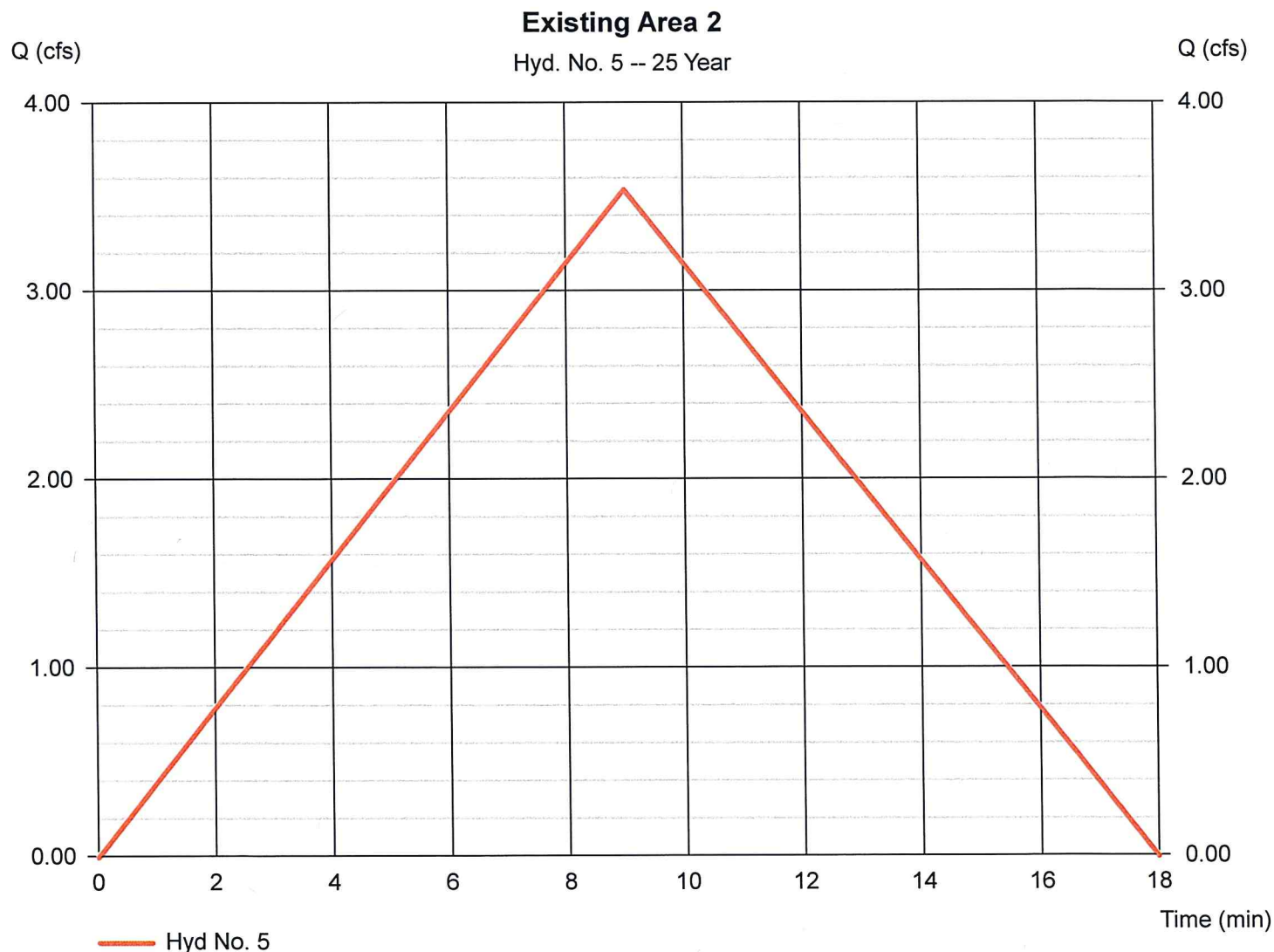
Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2009 by Autodesk, Inc. v6.066

Thursday, May 9, 2024

## Hyd. No. 5

Existing Area 2

Hydrograph type	= Rational	Peak discharge	= 3.543 cfs
Storm frequency	= 25 yrs	Time to peak	= 9 min
Time interval	= 1 min	Hyd. volume	= 1,913 cuft
Drainage area	= 2.640 ac	Runoff coeff.	= 0.2
Intensity	= 6.710 in/hr	Tc by TR55	= 9.00 min
IDF Curve	= GSD-60 NOAA.IDF	Asc/Rec limb fact	= 1/1

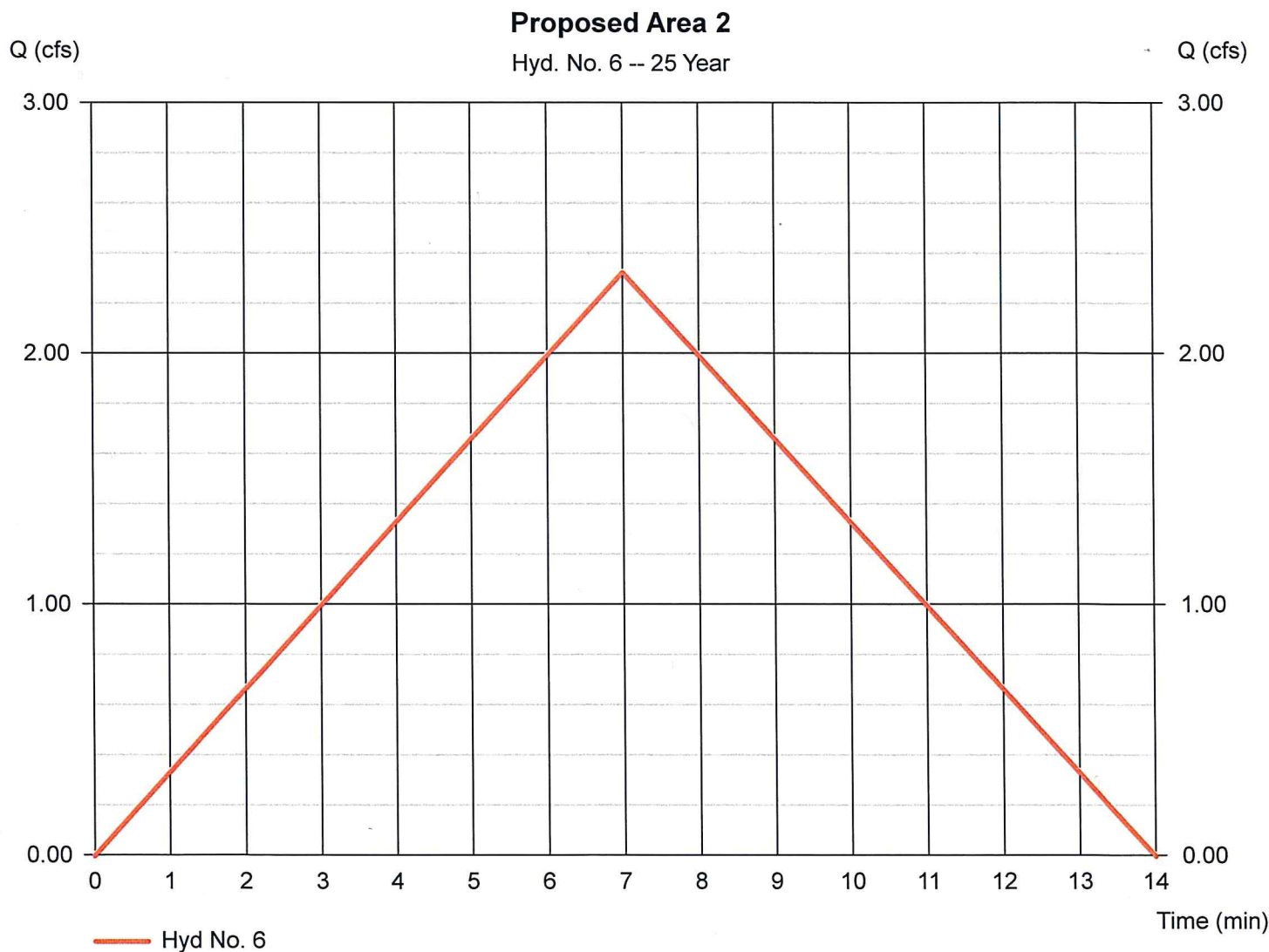


# Hydrograph Report

## Hyd. No. 6

### Proposed Area 2

Hydrograph type	= Rational	Peak discharge	= 2.326 cfs
Storm frequency	= 25 yrs	Time to peak	= 7 min
Time interval	= 1 min	Hyd. volume	= 977 cuft
Drainage area	= 1.540 ac	Runoff coeff.	= 0.2
Intensity	= 7.553 in/hr	Tc by User	= 7.00 min
IDF Curve	= GSD-60 NOAA.IDF	Asc/Rec limb fact	= 1/1



# Hydrograph Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2009 by Autodesk, Inc. v6.066

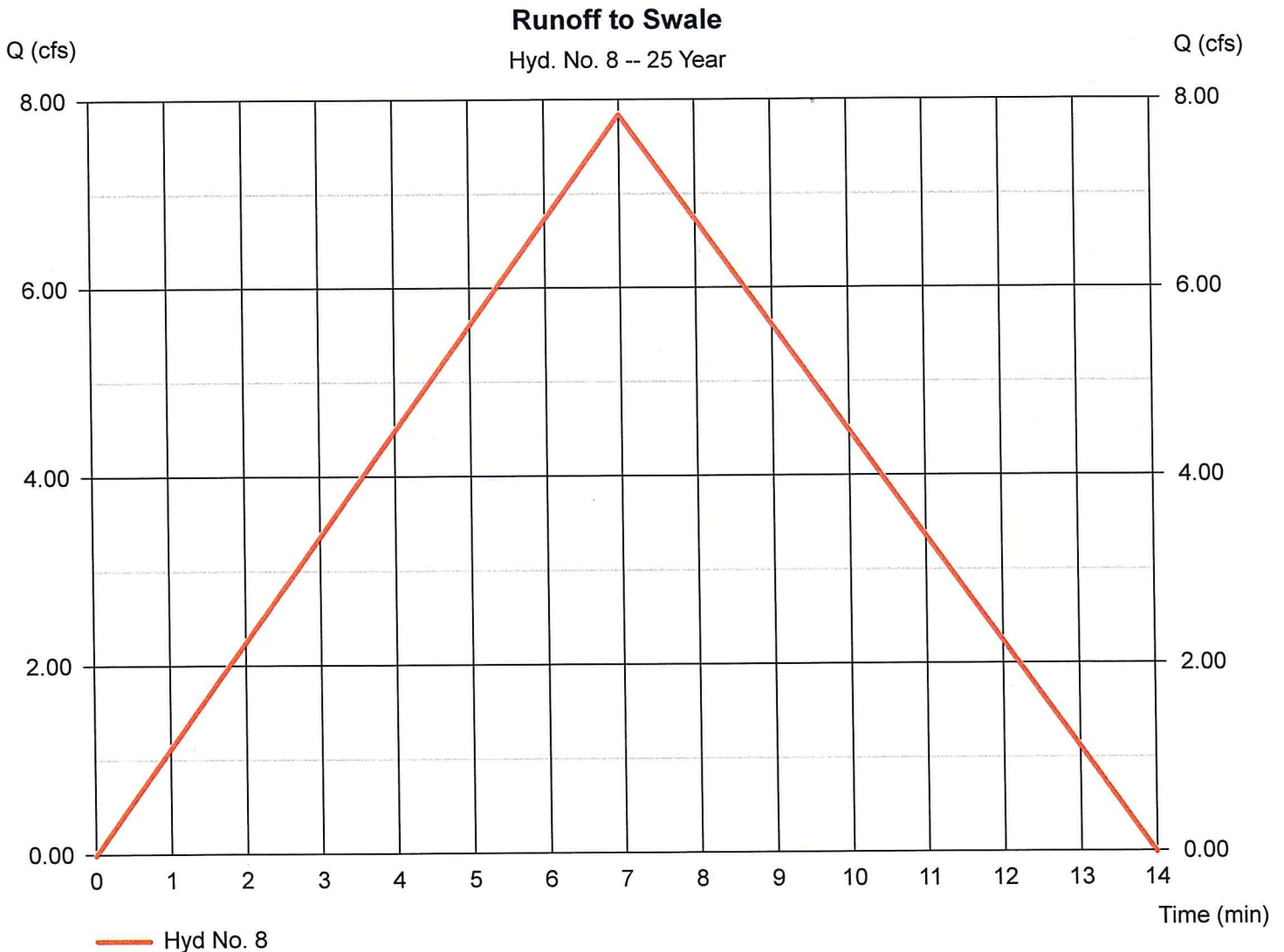
Thursday, May 9, 2024

## Hyd. No. 8

### Runoff to Swale

Hydrograph type = Rational  
 Storm frequency = 25 yrs  
 Time interval = 1 min  
 Drainage area = 1.300 ac  
 Intensity = 7.553 in/hr  
 IDF Curve = GSD-60 NOAA.IDF

Peak discharge = 7.855 cfs  
 Time to peak = 7 min  
 Hyd. volume = 3,299 cuft  
 Runoff coeff. = 0.8  
 Tc by User = 7.00 min  
 Asc/Rec limb fact = 1/1



# Hydrograph Summary Report

Hydratlow Hydrographs Extension for AutoCAD® Civil 3D® 2009 by Autodesk, Inc. v6.066

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	6.752	1	9	3,646	-----	-----	-----	Existing Area 1
2	Rational	24.65	1	9	13,311	-----	-----	-----	Proposed Area 1
3	Reservoir(i)	10.14	1	15	8,792	2	207.24	10,556	forebay
4	Reservoir	4.056	1	24	8,778	3	206.69	4,634	Water Quality Basin
5	Rational	3.987	1	9	2,153	-----	-----	-----	Existing Area 2
6	Rational	2.619	1	7	1,100	-----	-----	-----	Proposed Area 2
8	Rational	8.844	1	7	3,715	-----	-----	-----	Runoff to Swale
GSD 69 - Drainage Calculations - V1.gpw					Return Period: 50 Year			Thursday, May 9, 2024	

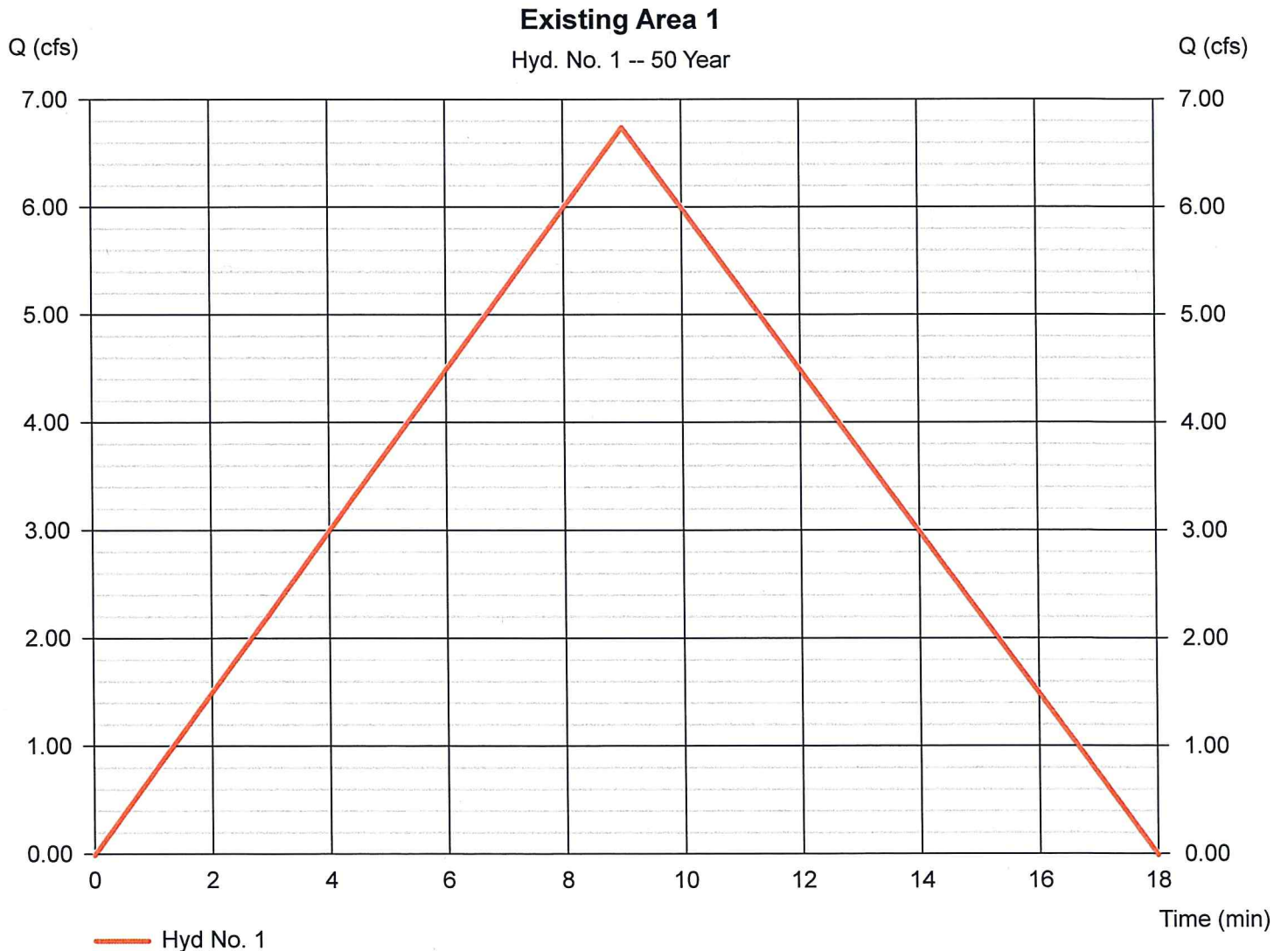
# Hydrograph Report

## Hyd. No. 1

### Existing Area 1

Hydrograph type = Rational  
Storm frequency = 50 yrs  
Time interval = 1 min  
Drainage area = 2.980 ac  
Intensity = 7.552 in/hr  
IDF Curve = GSD-60 NOAA.IDF

Peak discharge = 6.752 cfs  
Time to peak = 9 min  
Hyd. volume = 3,646 cuft  
Runoff coeff. = 0.3  
Tc by TR55 = 9.00 min  
Asc/Rec limb fact = 1/1



# Hydrograph Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2009 by Autodesk, Inc. v6.066

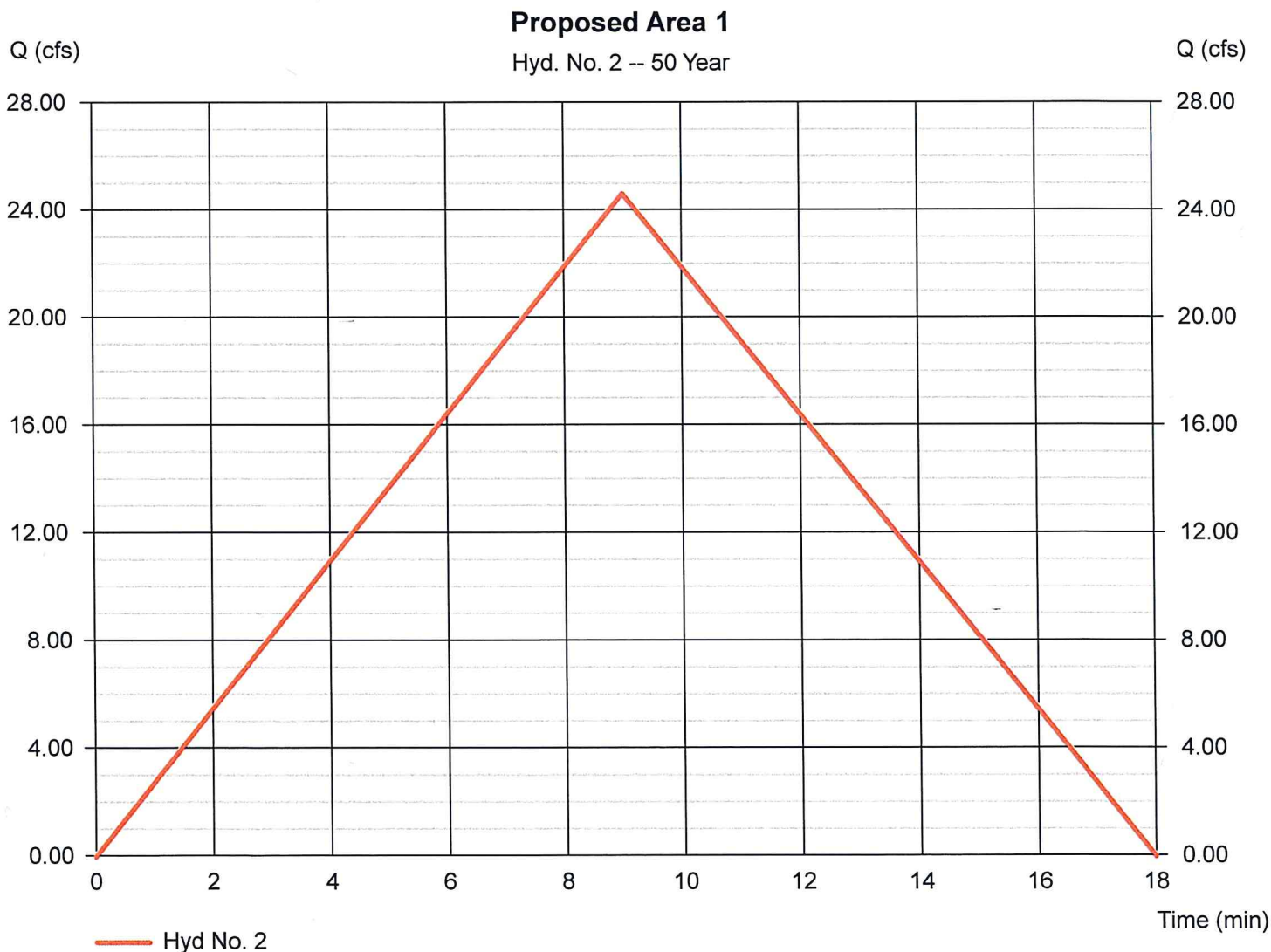
Thursday, May 9, 2024

## Hyd. No. 2

### Proposed Area 1

Hydrograph type = Rational  
 Storm frequency = 50 yrs  
 Time interval = 1 min  
 Drainage area = 4.080 ac  
 Intensity = 7.552 in/hr  
 IDF Curve = GSD-60 NOAA.IDF

Peak discharge = 24.65 cfs  
 Time to peak = 9 min  
 Hyd. volume = 13,311 cuft  
 Runoff coeff. = 0.8  
 Tc by TR55 = 9.00 min  
 Asc/Rec limb fact = 1/1



# Hydrograph Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2009 by Autodesk, Inc. v6.066

Thursday, May 9, 2024

## Hyd. No. 3

forebay

Hydrograph type = Reservoir (Interconnected)  
 Storm frequency = 50 yrs  
 Time interval = 1 min

Peak discharge = 10.14 cfs  
 Time to peak = 15 min  
 Hyd. volume = 8,792 cuft

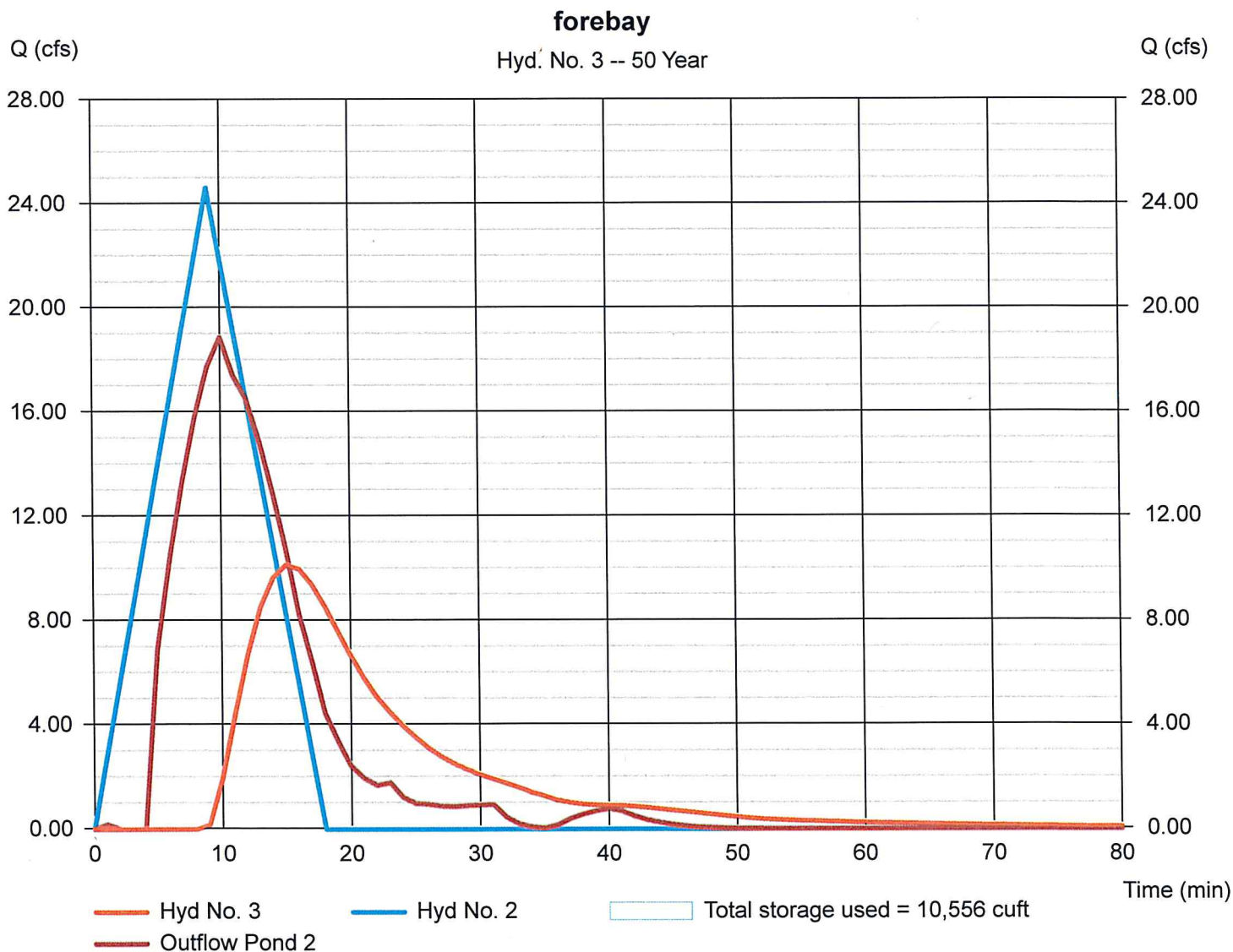
### Upper Pond

Pond name = forebay  
 Inflow hyd. = 2 - Proposed Area 1  
 Max. Elevation = 207.24 ft  
 Max. Storage = 3,728 cuft

### Lower Pond

Pond name = Pond 1  
 Other Inflow hyd. = None  
 Max. Elevation = 206.97 ft  
 Max. Storage = 6,828 cuft

Interconnected Pond Routing. Storage Indication method used.



# Hydrograph Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2009 by Autodesk, Inc. v6.066

Thursday, May 9, 2024

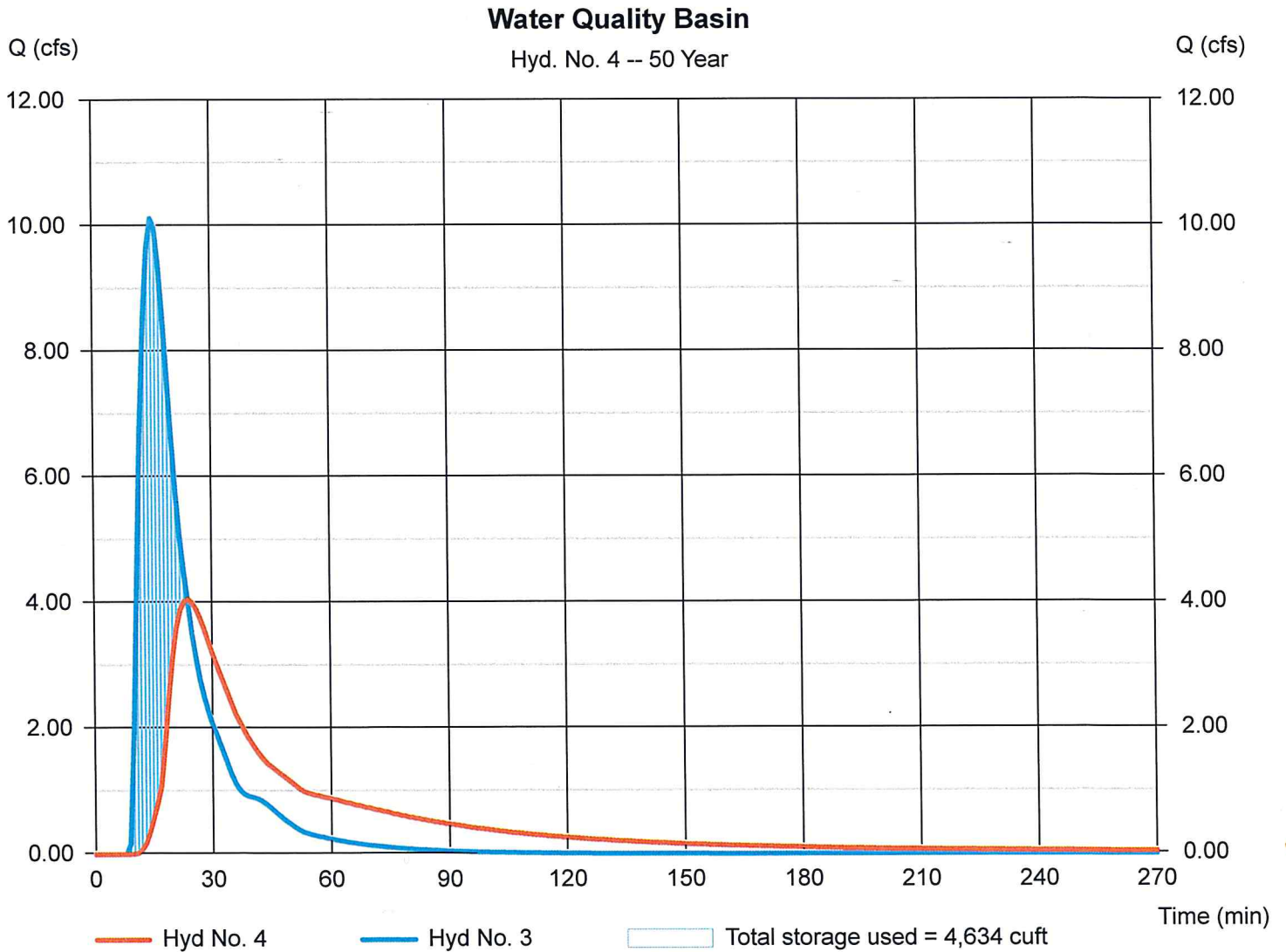
## Hyd. No. 4

### Water Quality Basin

Hydrograph type = Reservoir  
 Storm frequency = 50 yrs  
 Time interval = 1 min  
 Inflow hyd. No. = 3 - forebay  
 Reservoir name = Pond 1

Peak discharge = 4.056 cfs  
 Time to peak = 24 min  
 Hyd. volume = 8,778 cuft  
 Max. Elevation = 206.69 ft  
 Max. Storage = 4,634 cuft

Storage Indication method used.





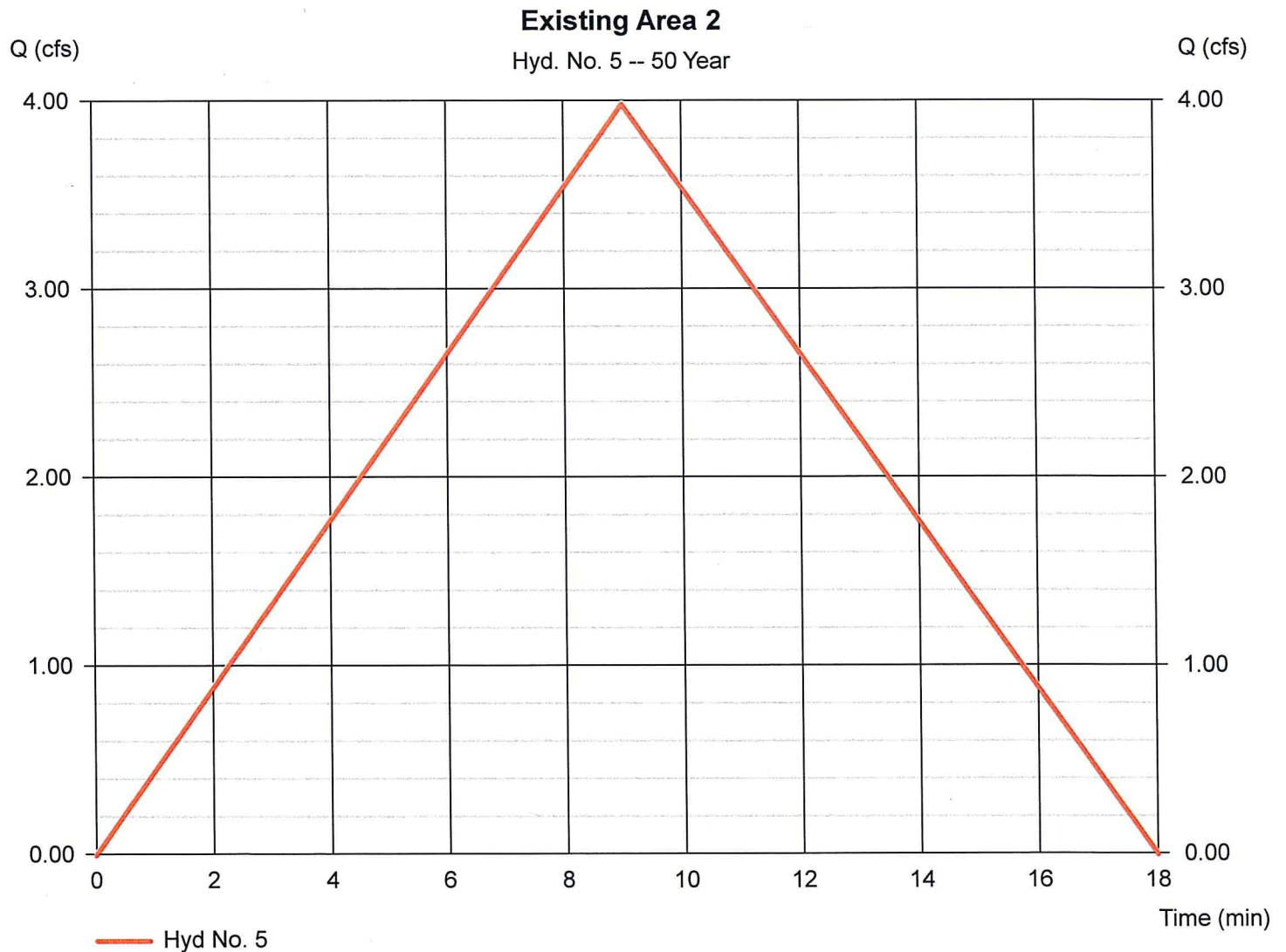
# Hydrograph Report

## Hyd. No. 5

### Existing Area 2

Hydrograph type = Rational  
Storm frequency = 50 yrs  
Time interval = 1 min  
Drainage area = 2.640 ac  
Intensity = 7.552 in/hr  
IDF Curve = GSD-60 NOAA.IDF

Peak discharge = 3.987 cfs  
Time to peak = 9 min  
Hyd. volume = 2,153 cuft  
Runoff coeff. = 0.2  
Tc by TR55 = 9.00 min  
Asc/Rec limb fact = 1/1



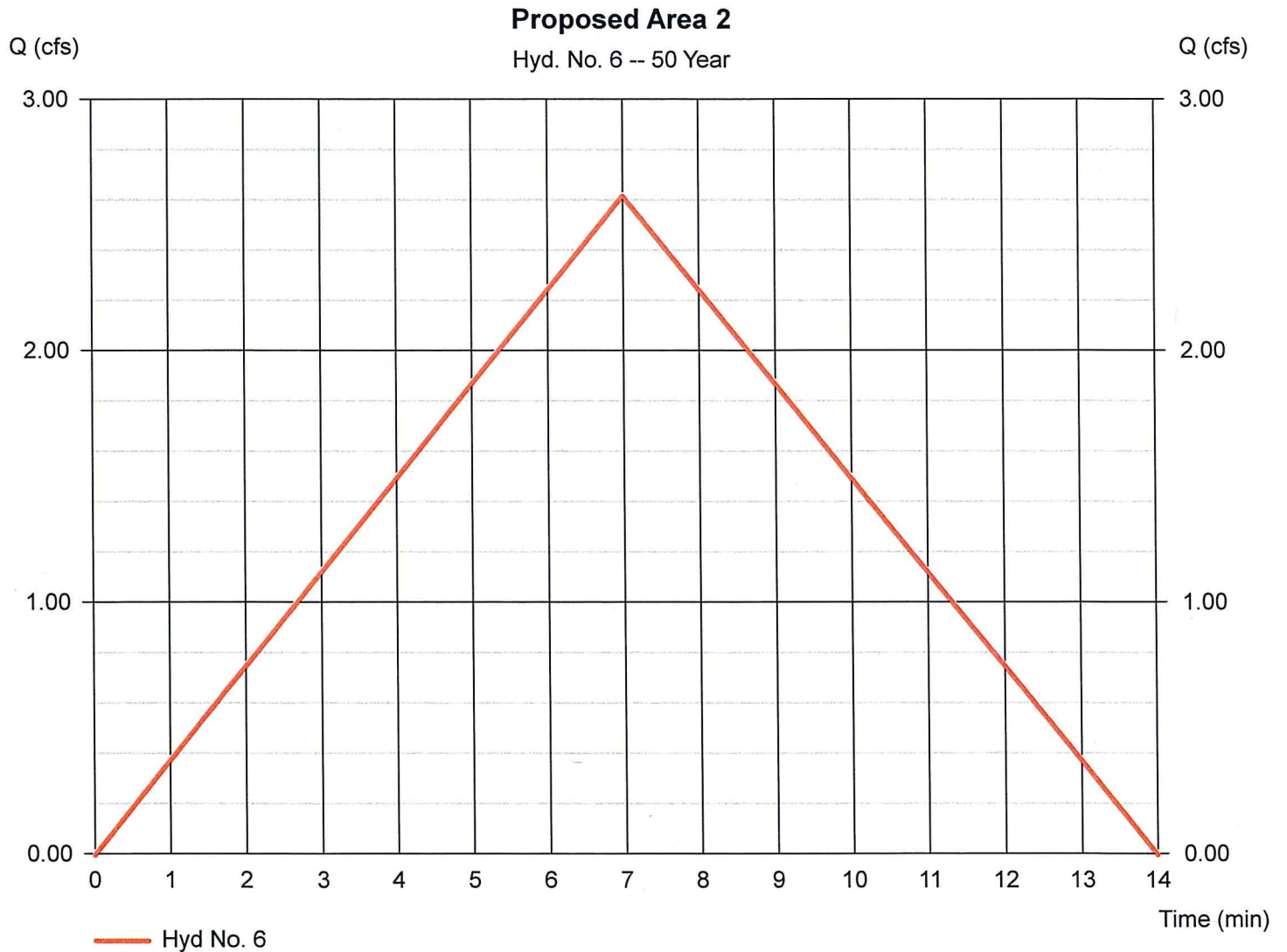
# Hydrograph Report

## Hyd. No. 6

### Proposed Area 2

Hydrograph type = Rational  
Storm frequency = 50 yrs  
Time interval = 1 min  
Drainage area = 1.540 ac  
Intensity = 8.504 in/hr  
IDF Curve = GSD-60 NOAA.IDF

Peak discharge = 2.619 cfs  
Time to peak = 7 min  
Hyd. volume = 1,100 cuft  
Runoff coeff. = 0.2  
Tc by User = 7.00 min  
Asc/Rec limb fact = 1/1



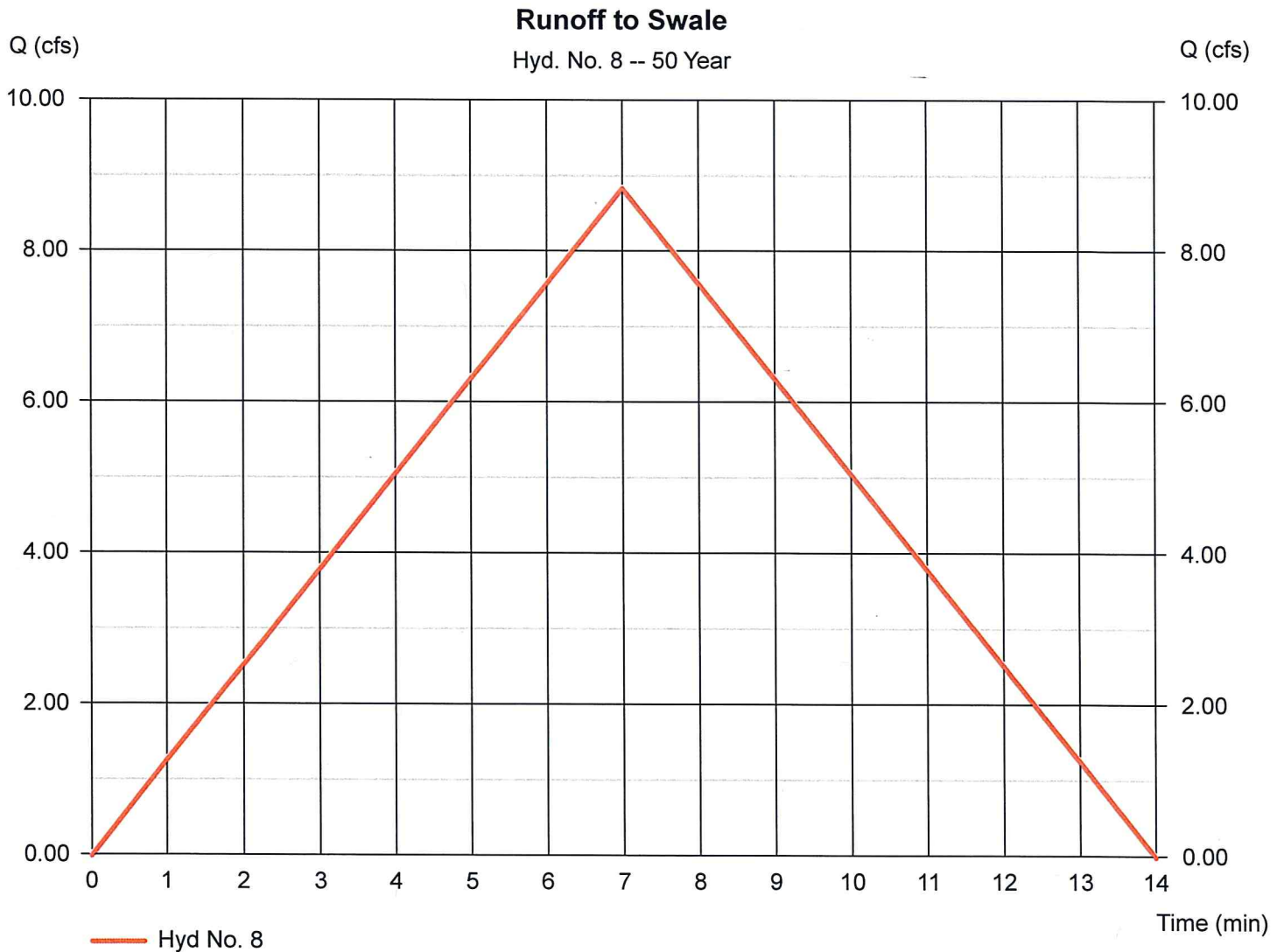
# Hydrograph Report

## Hyd. No. 8

### Runoff to Swale

Hydrograph type = Rational  
Storm frequency = 50 yrs  
Time interval = 1 min  
Drainage area = 1.300 ac  
Intensity = 8.504 in/hr  
IDF Curve = GSD-60 NOAA.IDF

Peak discharge = 8.844 cfs  
Time to peak = 7 min  
Hyd. volume = 3,715 cuft  
Runoff coeff. = 0.8  
Tc by User = 7.00 min  
Asc/Rec limb fact = 1/1



# Hydrograph Summary Report

Hydratlow Hydrographs Extension for AutoCAD® Civil 3D® 2009 by Autodesk, Inc. v6.066

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	7.558	1	9	4,081	-----	-----	-----	Existing Area 1
2	Rational	27.59	1	9	14,900	-----	-----	-----	Proposed Area 1
3	Reservoir(i)	12.11	1	15	10,378	2	207.33	11,409	forebay
4	Reservoir	5.677	1	22	10,364	3	206.76	5,151	Water Quality Basin
5	Rational	4.464	1	9	2,410	-----	-----	-----	Existing Area 2
6	Rational	2.933	1	7	1,232	-----	-----	-----	Proposed Area 2
8	Rational	9.904	1	7	4,160	-----	-----	-----	Runoff to Swale
GSD 69 - Drainage Calculations - V1.gpw					Return Period: 100 Year			Thursday, May 9, 2024	

# Hydrograph Report

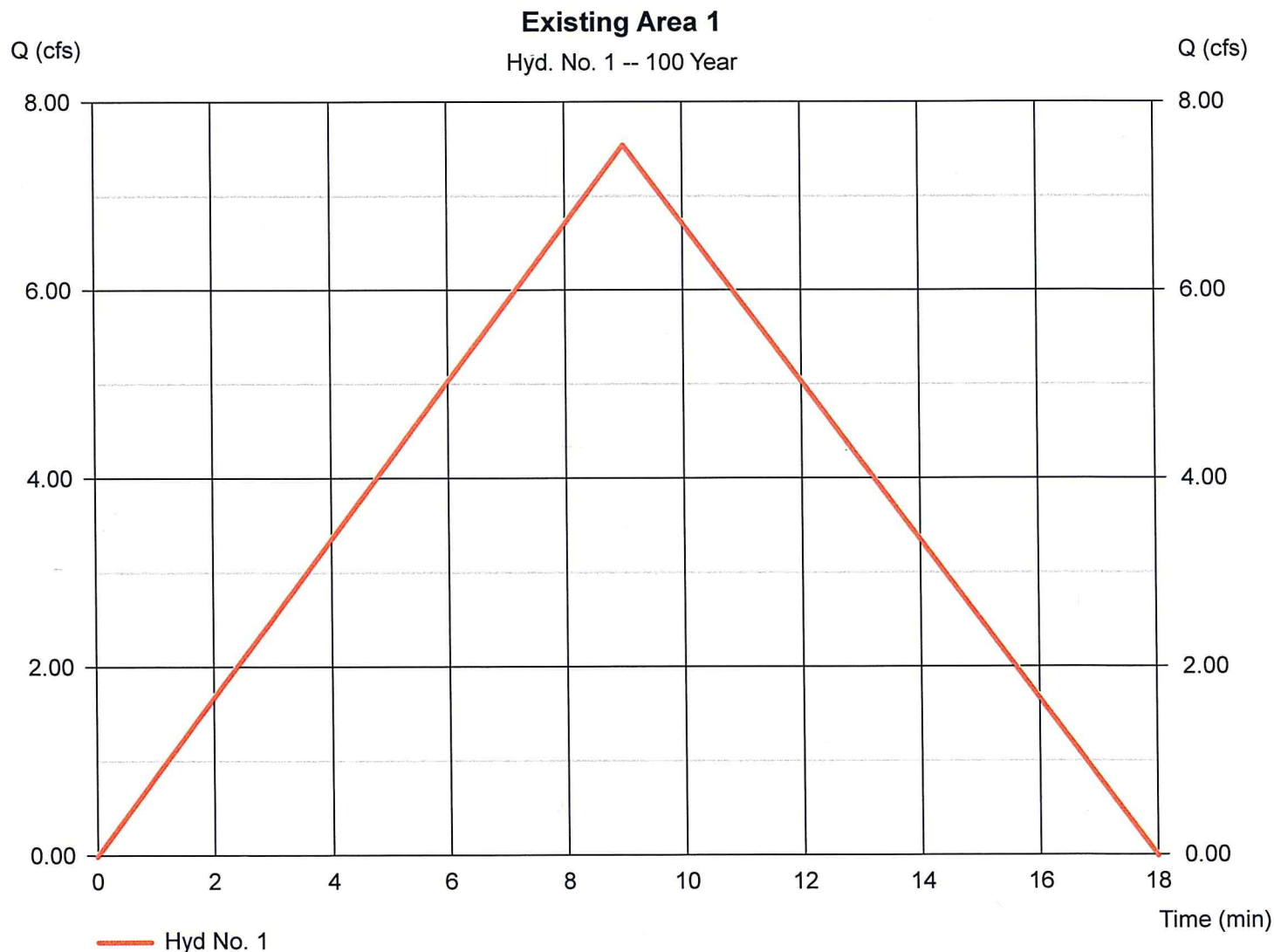
Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2009 by Autodesk, Inc. v6.066

Thursday, May 9, 2024

## Hyd. No. 1

### Existing Area 1

Hydrograph type	= Rational	Peak discharge	= 7.558 cfs
Storm frequency	= 100 yrs	Time to peak	= 9 min
Time interval	= 1 min	Hyd. volume	= 4,081 cuft
Drainage area	= 2.980 ac	Runoff coeff.	= 0.3
Intensity	= 8.454 in/hr	Tc by TR55	= 9.00 min
IDF Curve	= GSD-60 NOAA.IDF	Asc/Rec limb fact	= 1/1



# Hydrograph Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2009 by Autodesk, Inc. v6.066

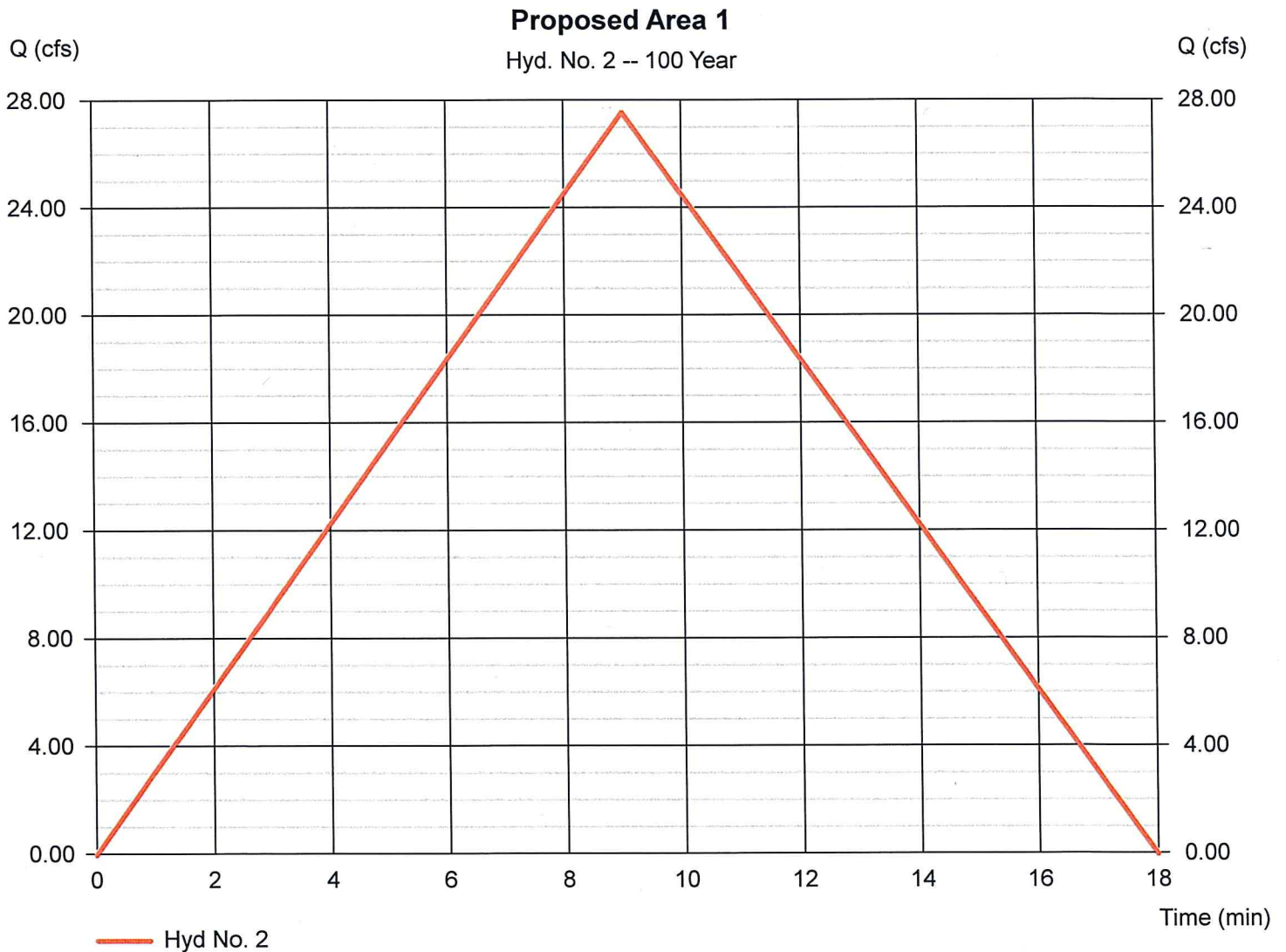
Thursday, May 9, 2024

## Hyd. No. 2

### Proposed Area 1

Hydrograph type = Rational  
 Storm frequency = 100 yrs  
 Time interval = 1 min  
 Drainage area = 4.080 ac  
 Intensity = 8.454 in/hr  
 IDF Curve = GSD-60 NOAA.IDF

Peak discharge = 27.59 cfs  
 Time to peak = 9 min  
 Hyd. volume = 14,900 cuft  
 Runoff coeff. = 0.8  
 Tc by TR55 = 9.00 min  
 Asc/Rec limb fact = 1/1



# Hydrograph Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2009 by Autodesk, Inc. v6.066

Thursday, May 9, 2024

## Hyd. No. 3

forebay

Hydrograph type = Reservoir (Interconnected)  
 Storm frequency = 100 yrs  
 Time interval = 1 min

Peak discharge = 12.11 cfs  
 Time to peak = 15 min  
 Hyd. volume = 10,378 cuft

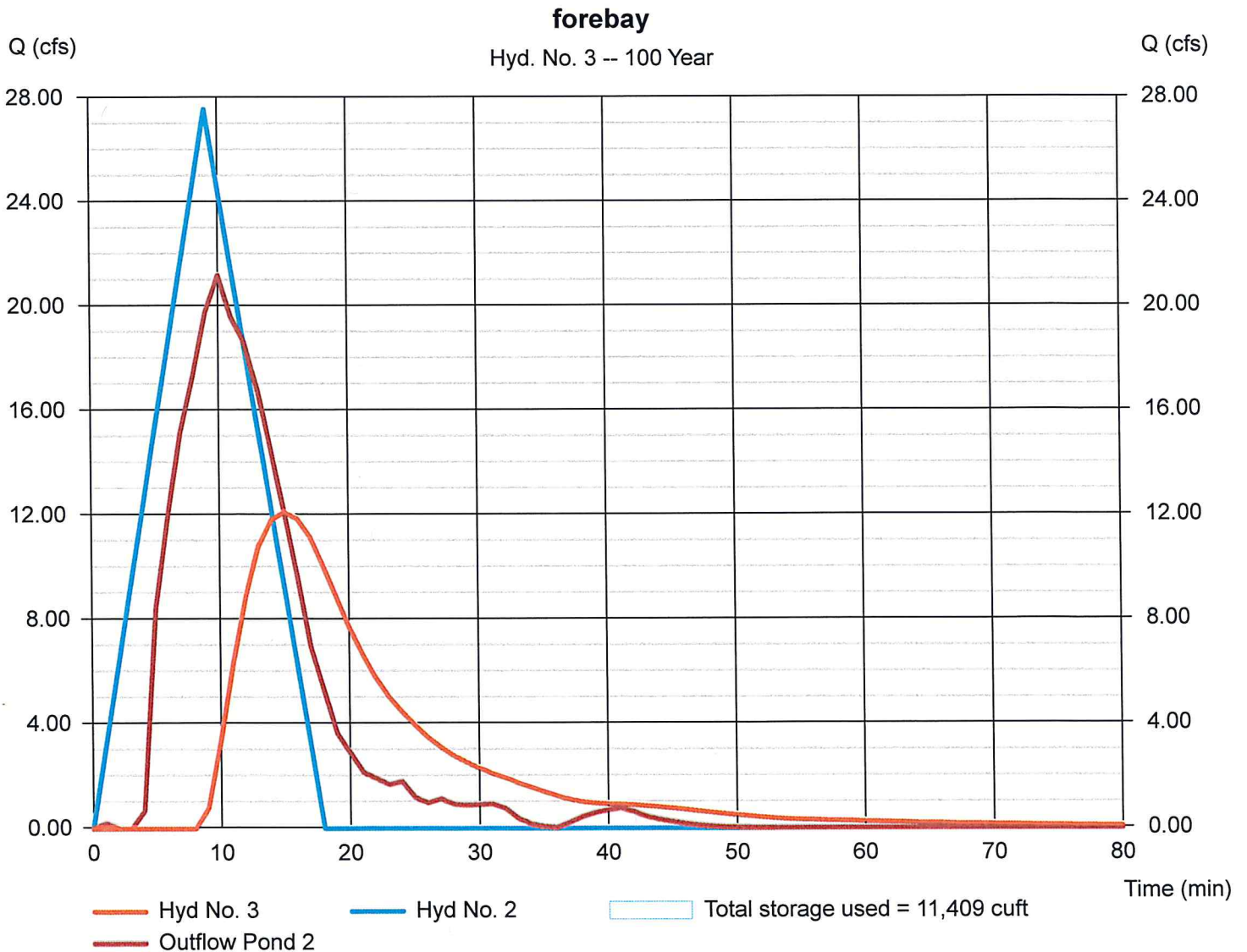
### Upper Pond

Pond name = forebay  
 Inflow hyd. = 2 - Proposed Area 1  
 Max. Elevation = 207.33 ft  
 Max. Storage = 4,071 cuft

### Lower Pond

Pond name = Pond 1  
 Other Inflow hyd. = None  
 Max. Elevation = 207.03 ft  
 Max. Storage = 7,338 cuft

Interconnected Pond Routing. Storage Indication method used.



# Hydrograph Report

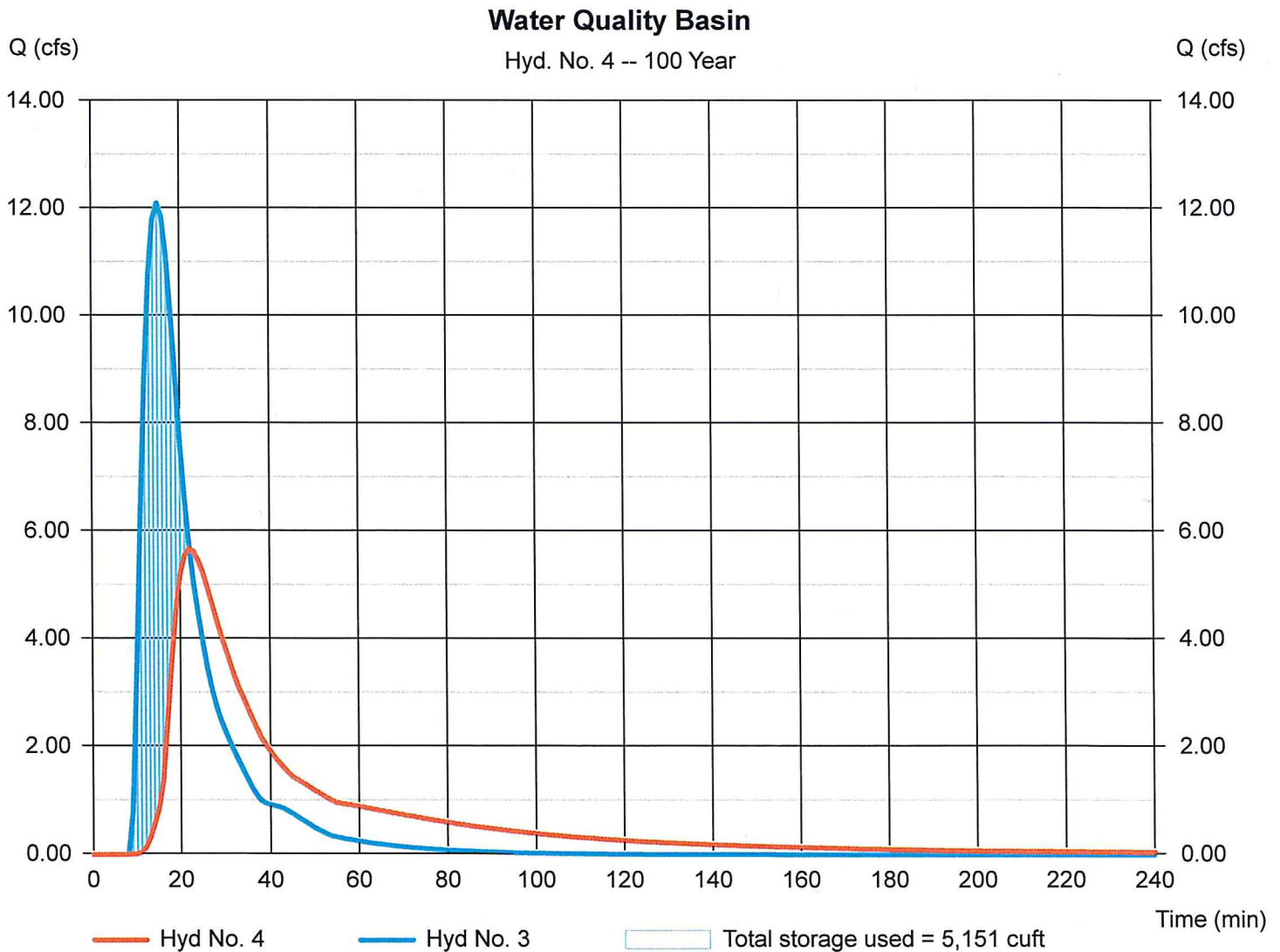
## Hyd. No. 4

### Water Quality Basin

Hydrograph type = Reservoir  
Storm frequency = 100 yrs  
Time interval = 1 min  
Inflow hyd. No. = 3 - forebay  
Reservoir name = Pond 1

Peak discharge = 5.677 cfs  
Time to peak = 22 min  
Hyd. volume = 10,364 cuft  
Max. Elevation = 206.76 ft  
Max. Storage = 5,151 cuft

Storage Indication method used.





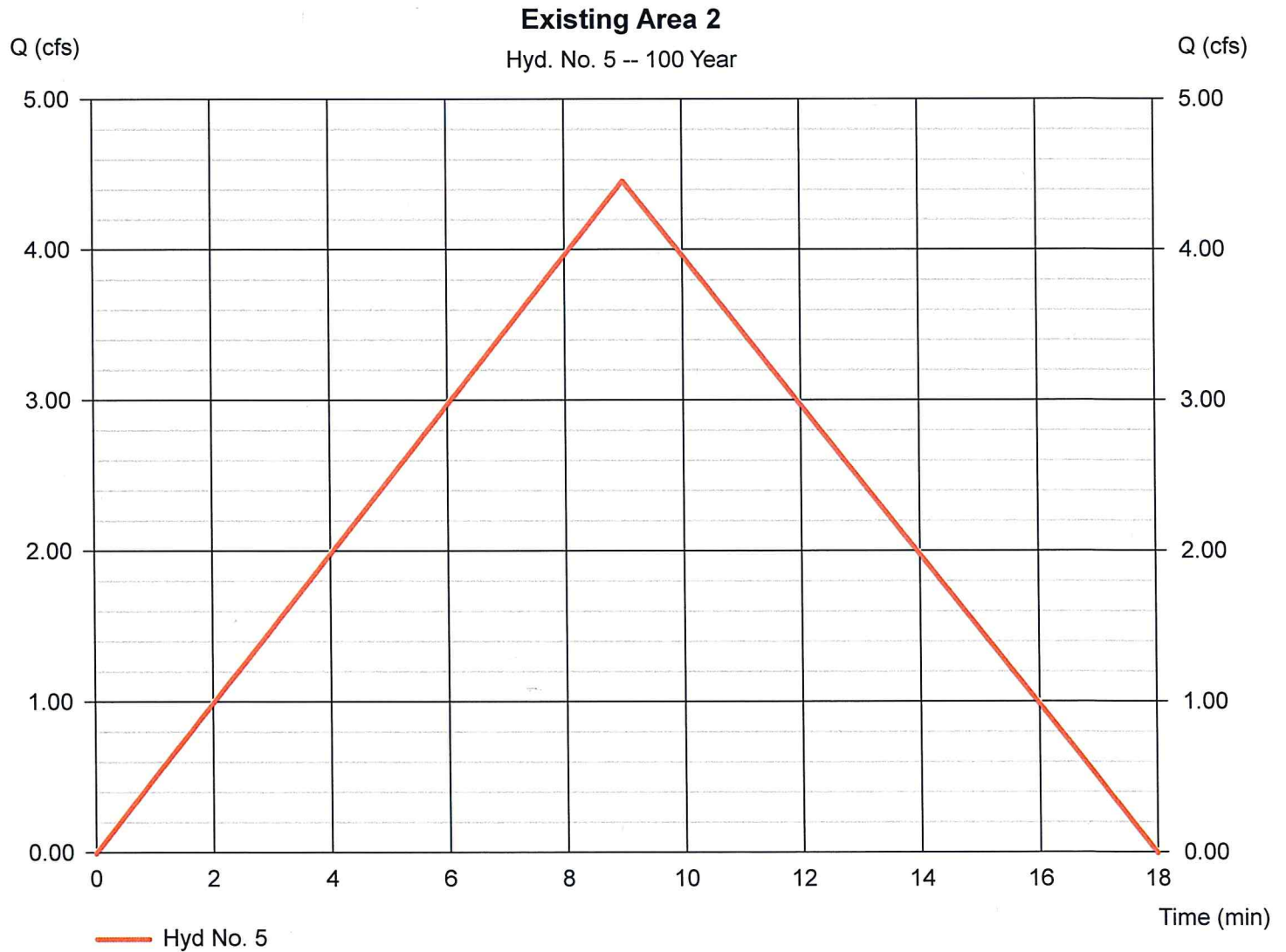
# Hydrograph Report

## Hyd. No. 5

### Existing Area 2

Hydrograph type = Rational  
Storm frequency = 100 yrs  
Time interval = 1 min  
Drainage area = 2.640 ac  
Intensity = 8.454 in/hr  
IDF Curve = GSD-60 NOAA.IDF

Peak discharge = 4.464 cfs  
Time to peak = 9 min  
Hyd. volume = 2,410 cuft  
Runoff coeff. = 0.2  
Tc by TR55 = 9.00 min  
Asc/Rec limb fact = 1/1



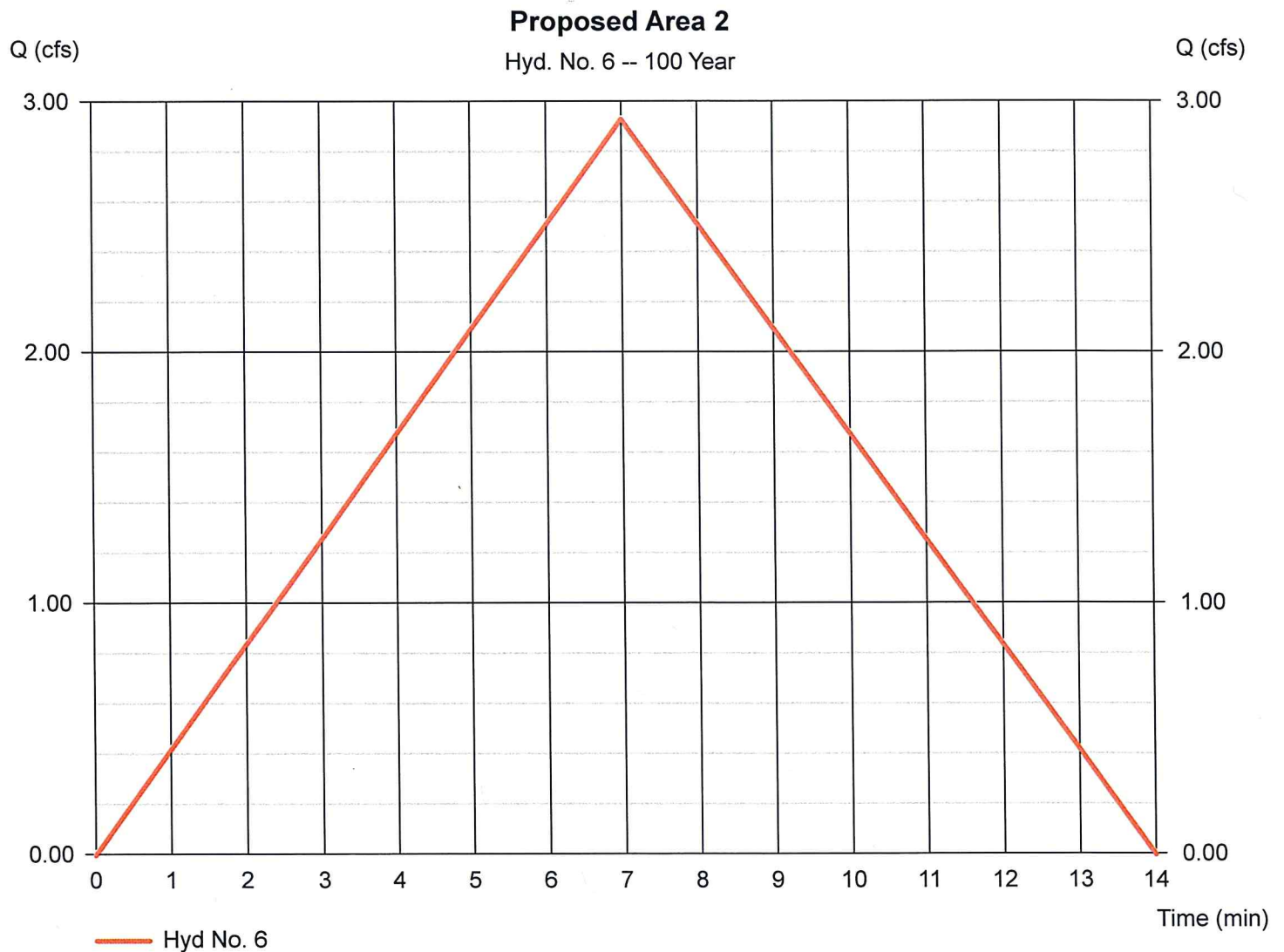
# Hydrograph Report

## Hyd. No. 6

### Proposed Area 2

Hydrograph type = Rational  
Storm frequency = 100 yrs  
Time interval = 1 min  
Drainage area = 1.540 ac  
Intensity = 9.523 in/hr  
IDF Curve = GSD-60 NOAA.IDF

Peak discharge = 2.933 cfs  
Time to peak = 7 min  
Hyd. volume = 1,232 cuft  
Runoff coeff. = 0.2  
Tc by User = 7.00 min  
Asc/Rec limb fact = 1/1



# Hydrograph Report

## Hyd. No. 8

### Runoff to Swale

Hydrograph type = Rational  
Storm frequency = 100 yrs  
Time interval = 1 min  
Drainage area = 1.300 ac  
Intensity = 9.523 in/hr  
IDF Curve = GSD-60 NOAA.IDF

Peak discharge = 9.904 cfs  
Time to peak = 7 min  
Hyd. volume = 4,160 cuft  
Runoff coeff. = 0.8  
Tc by User = 7.00 min  
Asc/Rec limb fact = 1/1

