PERIODIC RUN-ON AND RUN-OFF CONTROL PLAN
391-3-4-.10(5) and 40 C.F.R. § 257.81
PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR) LANDFILL NO. 4
(LANDFILL 4)
GEORGIA POWER COMPANY

The Federal CCR Rule, and, for Existing CCR Landfills where applicable, the Georgia CCR Rule (391-3-4-.10) require the owner or operator of an existing or new CCR landfill or any lateral expansion of a CCR landfill to prepare a run-on and run-off control system plan to document how these control systems have been designed and constructed to meet the applicable requirements of this section of the Rule. *See* 40 C.F.R. § 257.81; Ga. Comp. R. & Regs. r. 391.3-4-.10(5)(a). In addition, the Rules require periodic run-on and run-off control system plans every five years. *See* 40 C.F.R. § 257.81(c)(4); Ga. Comp. R. & Regs. r. 391.3-4-.10(5)(a). The previous Periodic Run-on and Run-off Control System Plan was placed in the Operating Record on October 15, 2021.

The Plant McIntosh Landfill 4 is located on Georgia Power's Plant McIntosh property in Effingham County, east of Rincon, Georgia. Landfill 4 is comprised of Cell 1 and Cell 2A. Cell 1 closure is complete with final cover in place. Cell 2A became operational in 2016. Cell 2A consists of a storage cell, a leachate pond, a sedimentation pond, and a clear pool. Cell 2A final cover construction was completed April 29, 2022, and an Interim Closure Construction Certification Report was submitted to the Georgia Environmental Protection Division (EPD) on March 17, 2023. Completion of interim closure was acknowledged by the EPD in correspondence dated December 11, 2023.

The stormwater flows have been calculated using the Natural Resources Conservation Service (NRCS) method, also known as the Soil Conservation Service (SCS method), using a 25-year, 24-hour storm event. The stormwater detention system has been designed in accordance with the Georgia Soil and Water Conservation Commission requirements as well as other local, city, and government codes.

Runoff curve number data was determined using 2.1.5-1 from the Georgia Stormwater Management Manual. Appendix B from the TR-55 was used to determine the rainfall distribution methodology. Precipitation values were determined from National Oceanic and Atmospheric Administration (NOAA) Atlas 14 for the 25-yr design storm event. The NRCS provides information on soil characteristics and hydrologic groups. The predominant soil types found on the site are Leefield loamy sand and Pelham loamy sand. It was determined that the hydrological group "B" should be used to best reflect the characteristics of the soils on site. This information was placed into Hydraflow Hydrographs 2019 and used to generate appropriate precipitation curves, runoff curve numbers, and storm basin runoff values.

Landfill 4 Cell 1 and Cell 2A are designed and constructed with perimeter berms and drainage ditches surrounding the cells that prevent stormwater run-on during the peak discharge of a 24-hr, 25-yr storm. Within Cell 2A, the leachate pond collects and controls the anticipated amount of leachate generated from the leachate collection system over a period of 7 to 10 days as well as the quantity of rainfall from a 24-hr, 100-yr storm event that falls directly into the leachate pond. For the purposes of the run-off calculations, the drainage area for the leachate pond is not included. Stormwater run-off from Cell 1 is routed through a detention pond that discharges into the Cell 2A sedimentation pond. Stormwater run-off from Cell 2A is routed through the sedimentation pond. The sedimentation pond discharges through the clear pool to a tributary stream of Lockner Creek. The sedimentation pond and clear pool are designed to handle the run-off from a 24-hr, 25-yr storm. This plan is supported by appropriate engineering calculations, a summary of which is attached.

The facility is operated subject to and in accordance with § 257.3-3 of EPA's regulations.

I hereby certify that the run-on and run-off control system plan meets the requirements of 40 C.F.R. § 257.81.

10/13/2026

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GEORGIA REGISTERED PROFESSIONAL ENGINEER GARY H. McWHORTER

Run-on and Run-off Control System Plan for Landfills:
Calculation Summary

for

Plant McIntosh CCR Landfill No. 4

Prepared by:

Southern Company Services
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Originator: Jacob Brown 10/13/26
Jacob L. Brown Date

Reviewer: Jim W. Minor 10/13/26
Jim W. Minor Date

Approval: Gary H McWhorter 10/13/26
Gary H. McWhorter Date

1.0 Purpose of Calculation

The purpose of this report is to demonstrate the run-on and run-off controls of the subject CCR landfill in order to prepare a run-on and run-off control system plan as required by the United States Environmental Protection Agency's (EPA) final rule for Disposal of CCR from Electric Utilities (40 CFR 257.81) and the Georgia Environmental Protection Division's (EPD) Georgia CCR Rule (391-3-4-.10).

2.0 Summary of Conclusions

2.1 Site Overview

The Plant McIntosh CCR Landfill No. 4 is located on Plant McIntosh property approximately 9 miles east of Rincon, Georgia and 27 miles north of Savannah, Georgia. The total area occupied by the CCR Landfill No. 4 is 35.87 acres and is comprised of two cells, Cell 1 and Cell 2A, a wheel wash pond, a leachate pond, a detention pond, a sedimentation pond, and a clear pool.

Run-off from the cells is directed through perimeter ditches located inside each cell's perimeter dike. Runoff from the western half of Cell 1 drains to the wheel wash pond where it is retained and subsequently discharged to the detention pond through four 24" diameter culvert pipes. During landfill operations, runoff stored in the wheel wash pond was pumped for use in washing construction vehicles and equipment used to transport and place CCR materials. Since closure and final cover installation have been completed, pumping operations have ceased and the pond now discharges through the existing outlet culvert.

Runoff from the eastern half of Cell 1 also drains to the detention pond which discharges to the sedimentation pond shared by the two cells through a 48" diameter riser and 30" diameter pipe. Flow from the perimeter ditches of Cell 2A discharge directly into the sedimentation pond via three 30" diameter culverts.

The sedimentation pond is hydraulically connected to a clear pool by two 60" diameter risers and two 42" diameter pipes. Stormwater from the clear pool is discharged through a single 60" diameter riser and 42" diameter pipe. Discharge from the clear pool flows to the east towards a tributary stream of Lockner Creek.

The existing leachate pond is not equipped with a principal spillway designed to control runoff from a 25-year, 24-hour storm. Therefore, it is not included in the calculation.

An overview of Landfill No. 4 is provided in Table 1 below.

Table 1 - Landfill site characteristics

Description	Cell 1	Wheel Wash Pond	Detention Pond	Cell 2A	Sedimentation Pond	Clear Pool	Leachate Pond
Size (Acres)	9.65	1.40	5.83	12.24	2.57	1.28	2.81
Outlet Type	Perimeter Ditch	Four 24" Culverts	48" Riser connected to a 30" pipe	Three 30" culverts	Two 60" Risers connected to two 42" pipes	60" Riser connected to a 42" pipe	None
Outlets To	Wheel Wash Pond/ Detention Pond	Detention Pond	Sedimentation Pond	Sedimentation Pond	Clear Pool	Ditch	None

2.2 Run-on Control System Plan

There is no stormwater run-on into the facility because it is contained within earthen berms that prevent stormwater from the surrounding area to enter the CCR facility Run-off Control System Plan.

A hydrologic and hydraulic model was developed for the Plant McIntosh CCR Landfill to determine the hydraulic capacity of Landfill No. 4. The design storm for the purposes of run-off control system plans is the 24-hour, 25-year rainfall event. The results of routing the design storm event through the landfill are presented in Table 2 below:

Table 2 - Flood Routing Results for Plant McIntosh CCR Landfill Cell 2A

Cell 2A	Normal Pool El (ft)	Top of Embankment El (ft)	Peak Water Surface El (ft)	Freeboard* (ft)	Peak Inflow (cfs)	Peak Outflow (cfs)
Detention Pond	42.0	51.0	44.28	6.72	51.90	0.15
Sediment Pond	36.5	45.0	39.64	5.36	46.86	3.12
Clear Pool	35.0	44.0	39.70	4.30	5.18	0.00**

*Freeboard is measured from the top of embankment to the peak water surface elevation

**The peak outflow is negligible because the riser is perforated with 0.5" holes that are covered by filter stone which drains the clear pool slowly. The elevation of the clear pool does not reach the elevation of the primary spillway during the design storm.

3.0 Methodology

3.1 HYDROLOGIC ANALYSES

The design storm for all run-on/run-off analyses is a 24-hour, 25-year rainfall event. A summary of the design storm parameters and rainfall distribution methodology for these calculations is summarized below in Table 3.

Table 3 - Plant McIntosh CCR Landfill Cell 2A Design Storm Distribution

Return Frequency (years)	Storm Duration (hours)	Rainfall Total (Inches)	Rainfall Source	Storm Distribution
25	24	8.10	NOAA Atlas 14	SCS Type III

The drainage areas for the Plant McIntosh CCR Landfill No. 4 were delineated based on LiDAR data acquired for the Plant in December 2025. Run-off characteristics were developed based on the Soil Conservation Service (SCS) methodologies as outlined in TR-55. A composite SCS curve number for each drainage area was developed based on methods prescribed in TR-55. Soil types were obtained from the Natural Resources Conservation Service. Land use areas were delineated based on aerial photography. Time of Concentration and Lag Time calculations were also developed based on methodologies prescribed in TR-55.

A table of the pertinent basin characteristics of the landfill is provided below in Table 4.

Table 4 - Landfill Hydrologic Information

Basin	**Area (acres)**	**Hydraulic Curve Number, CN**	**Time of Concentration (minutes)**
Cell 1 East	4.72	65	9.4
Cell 1 West	4.43	66	9.1
Cell 1 East Ditch	0.50	66	5.0
Wheel Wash Pond	1.40	66	5.0
Detention Pond	5.83	62	5.0
Cell 2A West Ditch	6.93	66	18.5
Cell 2A East Ditch	5.31	66	17.2
Sediment Pond	2.57	64	5.0
Clear Pool	1.28	62	5.0

Peak runoff flows were calculated by importing the characteristics developed above into a hydrologic model with the Hydraflow Hydrographs Extension for AutoCAD Civil 3D 2025. The resulting hydrographs were combined to determine a peak runoff from the cell into the pond network.

3.2 HYDRAULIC ANALYSES

Storage capacity for the landfill was determined by developing stage-storage relationships for the wheel wash pond, detention pond, sediment pond and clear pool utilizing contour data.

The wheel wash pond has a bottom elevation of 42.0 feet and an assumed normal pool elevation of 55.0 feet. The outfall consists of four 24-inch hdpe culvert pipes. The culvert pipes are 71.5 feet in length and is sloped at 2.8%. The pipe daylights in the detention pond.

The detention pond has a bottom elevation of 42.0 feet and consists of a single spillway to control discharge into the sediment pond. The spillway consists of a 48-inch riser connected to a 30-inch diameter hdpe pipe. The riser is perforated with 0.5" holes to allow for low flow during storm events up to a 25-year storm. The top of the riser functions as a sharp-crested weir with a crest elevation of 46.0 feet and a crest length of 12.57 feet. The 30-inch hdpe pipe is 124 feet in length and is sloped at 0.81%. The pipe daylights in the sediment pond that is shared with Cell 2A.

The sediment pond has a normal pool level of 36.50-feet and consists of a primary spillway to control discharge. The primary spillway consists of two 60-inch risers connected to two 42-inch diameter hdpe pipes. Similar to the detention pond, the risers are perforated with 0.5" holes to allow for low flow during storm events up to a 25-year storm. The top of the riser functions as a sharp-crested weir with crest a elevation at 39.50 feet and a crest length of 15.71 feet each. The 42-inch hdpe pipes are 62 feet in length, are sloped at 0.5%, and daylight in the clear pool.

The clear pool consists of a primary spillway and an auxiliary spillway to control discharge. The primary spillway consists of a 60-inch riser connected to a 42-inch diameter hdpe pipe. The riser is perforated with 0.5" holes to allow for low flow during storm events up to a 25-year storm. The top of the riser functions as a sharp-crested weir with a crest elevation at 41.0 feet and a crest length of 15.71 feet. The 42-inch hdpe pipe is 80 feet in length, is sloped at 1.0%, and daylights to an existing ditch. The auxiliary spillway is a concrete trapezoidal weir that is 20' wide with 6:1 side slopes sloped at 1% with a crest elevation of 42.5. A summary of the auxiliary spillway information is presented below in Table 5.

Table 5 – Clear Pool Auxiliary Spillway Attribute Table

Spillway Component	US Invert El (ft)	DS Invert El (ft)	Dimension (ft)	Slope (%)	Length (ft)	Spillway Capacity (cfs)
Auxiliary	42.5	42.25	20' span 2.5' rise	1.0%	25	541.8

Based on the spillway attributes described above, the data was inserted into Hydraflow Hydrographs to determine the pond performance during the design storm. Results are shown in Table 2.

4.0 SUPPORTING INFORMATION

4.1 CURVE NUMBER

BASIN	LAND COVER TYPE	CURVE NUMVER	AREA (ACRES)
Cell 1 East	Grass	61	4.03
	Gravel	85	0.69
	Concrete	98	0
Cell 1 West	Grass	61	3.56
	Gravel	85	0.87
	Concrete	98	0
Cell 1 East Ditch	Grass	61	0.39
	Gravel	85	0.11
	Concrete	98	0
Detention Pond	Grass	61	5.56
	Gravel	85	0.22
	Concrete	98	0.05
Wheel Wash Pond	Grass	61	1.11
	Gravel	85	0.30
	Concrete	98	0.005
Cell 2A West Ditch	Grass	61	5.59
	Gravel	85	1.34
	Concrete	98	0
Cell 2A East Ditch	Grass	61	4.29
	Gravel	85	1.02
	Concrete	98	0
Sediment Pond	Grass	61	2.29
	Gravel	85	0.14
	Concrete	98	0.14
Clear Pool	Grass	61	1.22
	Gravel	85	0.05
	Concrete	98	0.003

4.2 STAGE-STORAGE TABLES

Stage Storage Table 1: Wheel Wash Pond

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	42.00	9,547	0	0
1.00	43.00	10,895	10,213	10,213
2.00	44.00	12,290	11,584	21,797
3.00	45.00	13,730	13,002	34,799
4.00	46.00	15,216	14,465	49,264
5.00	47.00	16,749	15,975	65,239
6.00	48.00	18,331	17,532	82,771
7.00	49.00	19,959	19,137	101,909
8.00	50.00	21,627	20,785	122,694
9.00	51.00	23,333	22,472	145,166
10.00	52.00	25,077	24,197	169,364
11.00	53.00	26,860	25,961	195,324
12.00	54.00	28,680	27,762	223,087
13.00	55.00	29,957	29,313	252,400
14.00	56.00	31,623	30,783	283,183
15.00	57.00	33,527	32,567	315,750

Stage Storage Table 2: Detention Pond

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	42.00	51,037	0	0
1.00	43.00	89,460	69,349	69,349
2.00	44.00	137,302	112,519	181,868
3.00	45.00	164,099	150,487	332,354
4.00	46.00	170,019	167,034	499,388
5.00	47.00	174,889	172,431	671,819
6.00	48.00	179,893	177,367	849,187
7.00	49.00	184,893	182,370	1,031,556
8.00	50.00	189,825	187,334	1,218,890
9.00	51.00	197,229	193,496	1,412,386

Stage Storage Table 3: Sediment Pond

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	36.00	44,308	0	0
1.00	37.00	46,825	45,556	45,556
2.00	38.00	50,797	48,793	94,349
3.00	39.00	53,897	52,334	146,683
4.00	40.00	56,847	55,360	202,043
5.00	41.00	59,763	58,293	260,336
6.00	42.00	62,619	61,179	321,515
7.00	43.00	65,432	64,014	385,529
8.00	44.00	68,260	66,834	452,364
9.00	45.00	71,506	69,870	522,233

Stage Storage Table 4: Clear Pool

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	35.00	13,529	0	0
1.00	36.00	17,165	15,309	15,309
2.00	37.00	19,173	18,158	33,467
3.00	38.00	20,638	19,899	53,366
4.00	39.00	22,151	21,388	74,754
5.00	40.00	23,762	22,949	97,704
6.00	41.00	25,456	24,602	122,306
7.00	42.00	27,184	26,313	148,618
8.00	43.00	29,104	28,136	176,754
9.00	44.00	31,073	30,080	206,834

4.3 TIME OF CONCENTRATION

Cell 1 East Drainage Area

Time of Concentration = 9.4 Min

Sheet Flow

Manning's n-Value = 0.15 (Short Grass)

Flow Length = 188 LF

Land Slope = (101.25-63.25)/188 = 0.2021 = 20.21%

Channel Flow

Grass Lined 2' Wide Ditch with 1.5:1 Side Slopes and 4' Deep

Cross Sectional Area = 5.08 SF

Wetted Perimeter = 6.65 LF

Channel Slope = (63.25-56.26)/871 = 0.0080 = 0.80%

Manning's n-Value = 0. 030 (Vegetal Lining)

Flow Length = 871 LF

Cell 1 East Ditch Drainage Area

Time of Concentration = 5.0 Min

Channelized Flow

Grass Lined 2' Wide Ditch with 1.5:1 Side Slopes and 4' Deep

Cross Sectional Area = 5.14 SF

Wetted Perimeter = 6.69 LF

Channel Slope = (55.88-49.00)/808 = 0.0085 = 0.85%

Manning's n-Value = 0. 030 (Vegetal Lining)

Flow Length = 808 LF

Shallow Concentrated

Flow Length = 18 LF

Watercourse Slope = (49.00-42.00)/18 = 0.3889 = 38.89%

Surface is Unpaved

Cell 1 West Drainage Area

Time of Concentration = 9.1 Min

- Sheet Flow
  - Manning's n-Value = 0.15 (Short Grass)
  - Flow Length = 187 LF
  - Land Slope = (101.25-63.25)/187 = 0.2032 = 20.32%
- Channel Flow
  - Grass Lined 2' Wide Ditch with 1.5:1 Side Slopes and 4' Deep
  - Cross Sectional Area = 5.08 SF
  - Wetted Perimeter = 6.65 LF
  - Channel Slope = (63.25-57.22)/750 = 0.0084 = 0.80%
  - Manning's n-Value = 0.030 (Vegetal Lining)
  - Flow Length = 750 LF
- Channel Flow
  - 24" RCP Culvert
  - Cross Sectional Area = 2.7 SF
  - Wetted Perimeter = 4.21 LF
  - Channel Slope = (57.22-56.88)/45 = 0.0075 = 0.75%
  - Manning's n-Value = 0.0125
  - Flow Length = 45
- Channel Flow
  - 30" RCP Culvert
  - Cross Sectional Area = 4.43 SF
  - Wetted Perimeter = 5.54 LF
  - Channel Slope = (56.47-56.07)/53 = 0.0075 = 0.75%
  - Manning's n-Value = 0.0125
  - Flow Length = 53

Wheel Wash Pond Drainage Area

Time of Concentration = 5.0 Min (See Map 2)

- Sheet Flow
  - Manning's n-Value = 0.15 (Short Grass) (See Table 2)
  - Flow Length = 47 LF
  - Land Slope = (59.14-58.10)/47 = 0.0221 = 2.21%
- Shallow Concentrated
  - Flow Length = 53 LF
  - Watercourse Slope = (58.10-42.00)/53 = 0.3037 = 30.37%
  - Surface is Unpaved

The resulting calculated Time of Concentration was less than 1.0 minute. A minimum time of 5.0 minutes was used.

Detention Pond

Time of Concentration = 5.0 Min

Sheet Flow

Manning's n-Value = 0.15 (Short Grass)

Flow Length = 35 LF

Land Slope = (62.07-61.01)/35 = 0.0303 = 3.03%

Shallow Concentrated

Flow Length = 43 LF

Watercourse Slope = (61.01-45.92)/43 = 0.3509 = 35.09%

Surface is Unpaved

The resulting calculated Time of Concentration was less than 1.0 minute. A minimum time of 5.0 minutes was used.

Cell 2A West Ditch

Time of Concentration = 18.50 Min

Sheet Flow

Manning's n-Value = 0.15 (Short Grass)

Flow Length = 219 LF

Land Slope = (76.36-69.64)/219 = 0.03068 = 3.07%

Shallow Concentrated

Flow Length = 67 LF

Watercourse Slope = (69.64-61.13)/67 = 0.1270 = 12.70%

Surface is Unpaved

Channel Flow

Grass Lined 4' Wide Ditch with 2:1 Side Slopes and 4' Deep

Cross Sectional Area = 9.42 SF

Wetted Perimeter = 10.22 LF

Channel Slope = (61.13-46.40)/1622 = 0.0091 = 0.91%

Manning's n-Value = 0. 030 (Vegetal Lining)

Flow Length = 1622 LF

Cell 2A East Ditch

Time of Concentration = 17.20 Min

Sheet Flow

Manning's n-Value = 0.15 (Short Grass)

Flow Length = 208 LF

Land Slope = (76.36-69.24)/208 = 0.0342 = 3.42%

Shallow Concentrated

Flow Length = 72 LF

Watercourse Slope = (69.24-61.05)/72 = 0.1138 = 11.38%

Surface is Unpaved

Channel Flow

Grass Lined 4’ Wide Ditch with 2:1 Side Slopes and 4’ Deep
Cross Sectional Area = 9.42 SF
Wetted Perimeter = 10.22 LF
Channel Slope = (61.05-46.40)/1564 = 0.0094 = 0.94%
Manning’s n-Value = 0. 030 (Vegetal Lining)
Flow Length = 1564 LF

Sediment Pond

Time of Concentration = 5.0 Min

Sheet Flow

Manning’s n-Value = 0.15 (Short Grass)
Flow Length = 27 LF
Land Slope = (52.34-51.54)/27 = 0.0296 = 2.96% Shallow Concentrated
Flow Length = 85 LF
Watercourse Slope = (51.54-37)/85 = 0.1710 = 17.10%
Surface is Unpaved

The resulting calculated Time of Concentration was less than 1.0 minute. A minimum time of 5.0 minutes was used.

Clear Pool

Time of Concentration = 5.0 Min

Sheet Flow

Manning’s n-Value = 0.15 (Short Grass)
Flow Length = 20 LF
Land Slope = (53.57-52.69)/20 = 0.044 = 4.40%

Shallow Concentrated

Flow Length = 98 LF
Watercourse Slope = (52.69-36.00)/98 = 0.170 = 17.0%
Surface is Unpaved

The resulting calculated Time of Concentration was less than 1.0 minute. A minimum time of 5.0 minutes was used.

4.4 RESULTS

Hydrograph Report

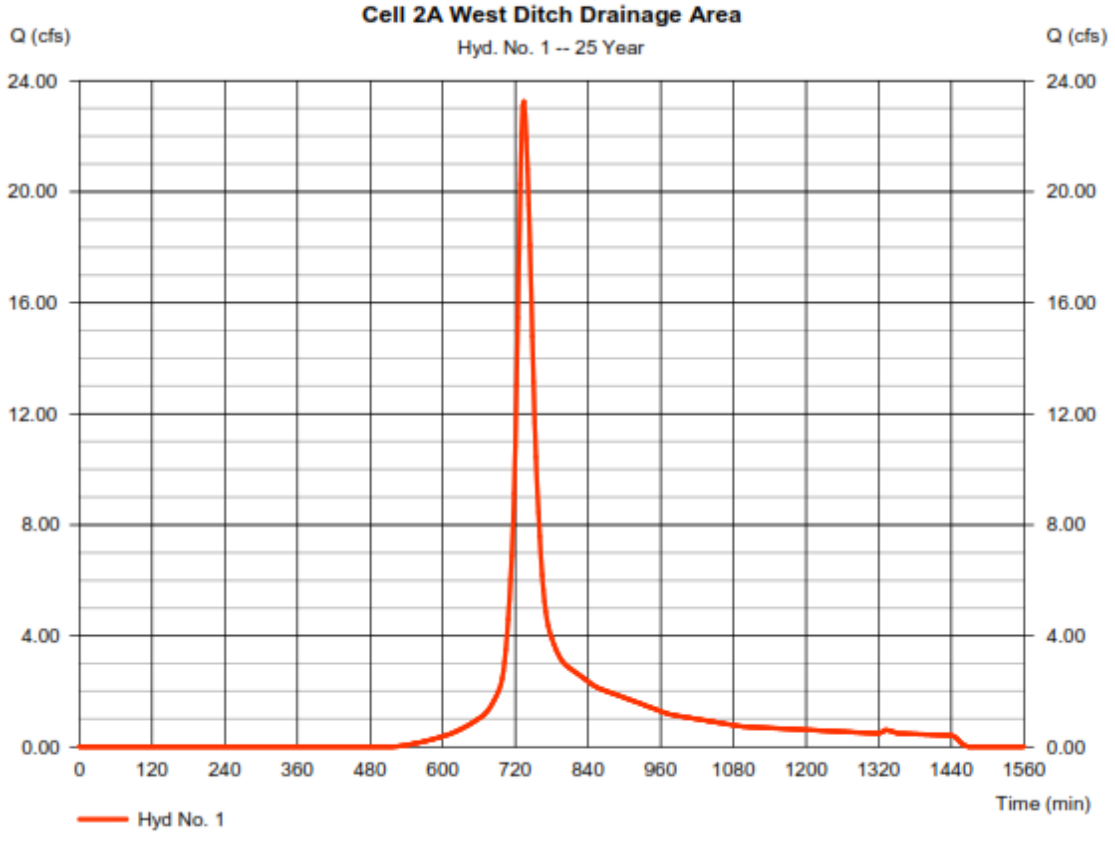
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025 — Wednesday, 09 / 23 / 2026

Hyd. No. 1

Cell 2A West Ditch Drainage Area

Hydrograph type	= SCS Runoff	Peak discharge	= 23.26 cfs
Storm frequency	= 25 yrs	Time to peak	= 734 min
Time interval	= 2 min	Hyd. volume	= 102,879 cuft
Drainage area	= 6.930 ac	Curve number	= 66*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 18.49 min
Total precip.	= 8.10 in	Distribution	= Type III
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(5.590 x 61) + (1.340 x 55)] / 6.930



Hydrograph 1: Cell 2A West Ditch

Hydrograph Report

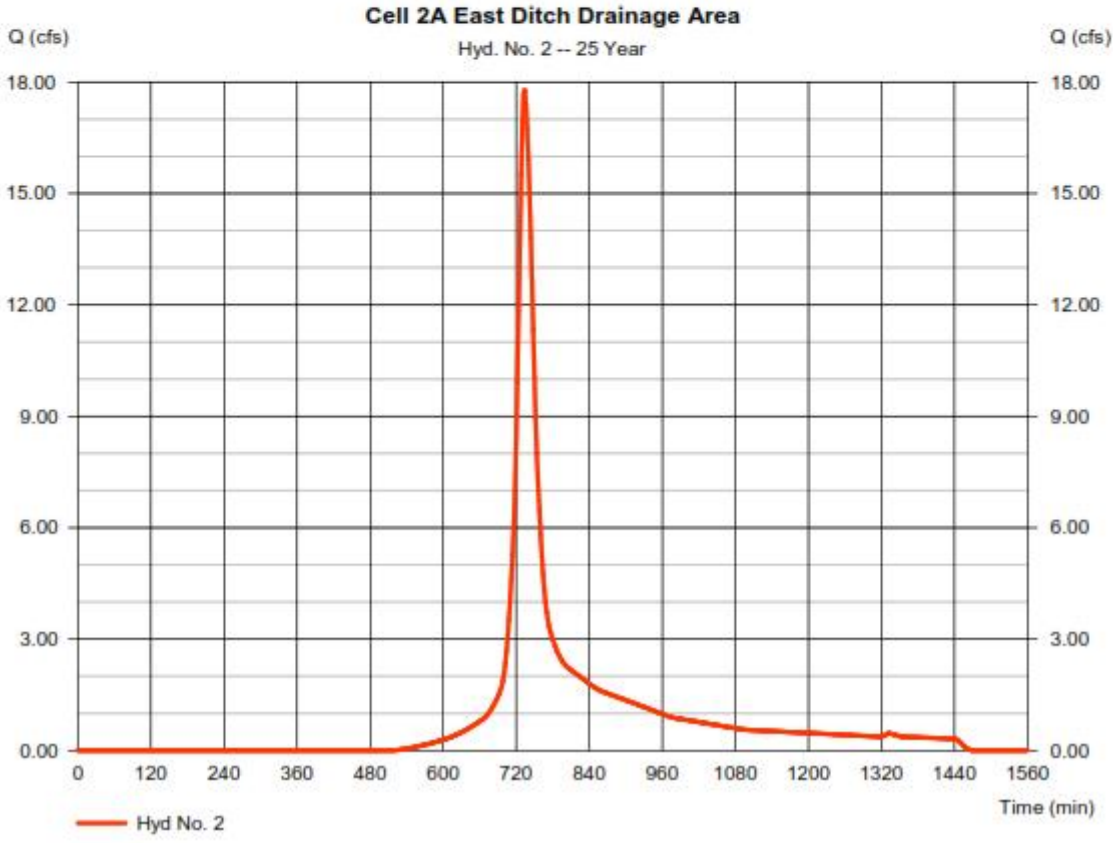
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025 — Wednesday, 09 / 23 / 2026

Hyd. No. 2

Cell 2A East Ditch Drainage Area

Hydrograph type	= SCS Runoff	Peak discharge	= 17.79 cfs
Storm frequency	= 25 yrs	Time to peak	= 734 min
Time interval	= 2 min	Hyd. volume	= 78,681 cuft
Drainage area	= 5.300 ac	Curve number	= 66*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 17.20 min
Total precip.	= 8.10 in	Distribution	= Type III
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(4.290 x 61) + (1.010 x 55)] / 5.300



Hydrograph 2: Cell 2A East Ditch

Hydrograph Report

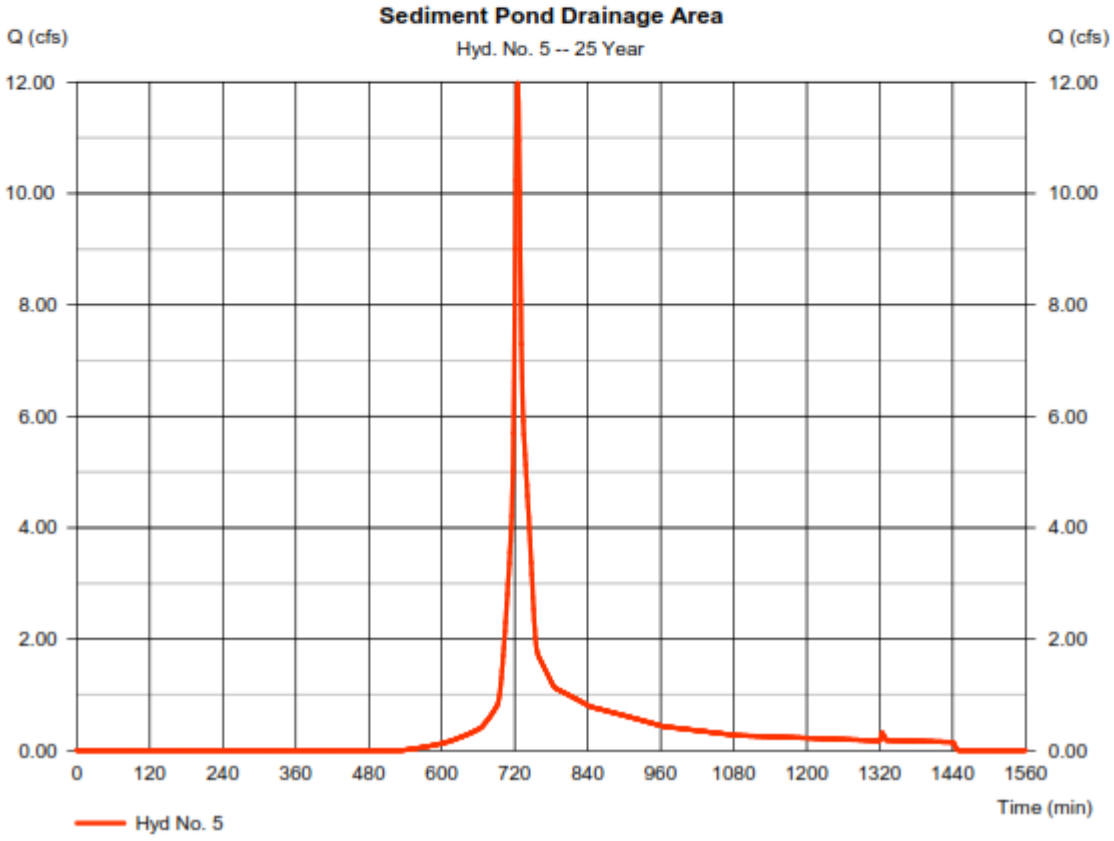
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025 — Wednesday, 09 / 23 / 2026

Hyd. No. 5

Sediment Pond Drainage Area

Hydrograph type	= SCS Runoff	Peak discharge	= 11.98 cfs
Storm frequency	= 25 yrs	Time to peak	= 725 min
Time interval	= 1 min	Hyd. volume	= 37,002 cuft
Drainage area	= 2.560 ac	Curve number	= 64*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 8.10 in	Distribution	= Type III
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(2.250 x 61) + (0.140 x 55) + (0.140 x 95)] / 2.560



Hydrograph 5: Sediment Pond Drainage Area

Hydrograph Report

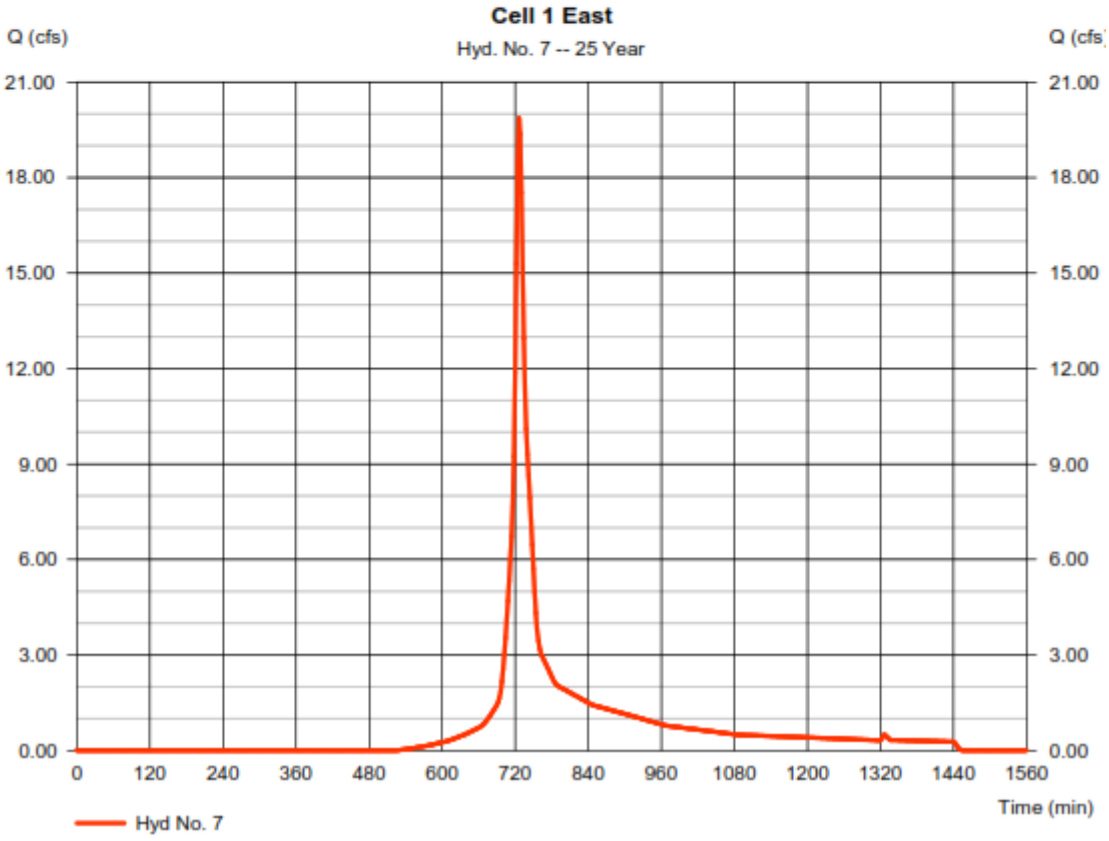
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025 Wednesday, 09 / 23 / 2026

Hyd. No. 7

Cell 1 East

Hydrograph type	= SCS Runoff	Peak discharge	= 19.87 cfs
Storm frequency	= 25 yrs	Time to peak	= 726 min
Time interval	= 2 min	Hyd. volume	= 68,110 cuft
Drainage area	= 4.720 ac	Curve number	= 65*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 9.40 min
Total precip.	= 8.10 in	Distribution	= Type III
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(4.030 x 61) + (0.690 x 55)] / 4.720



Hydrograph 7: Cell 1 East Drainage Area

Hydrograph Report

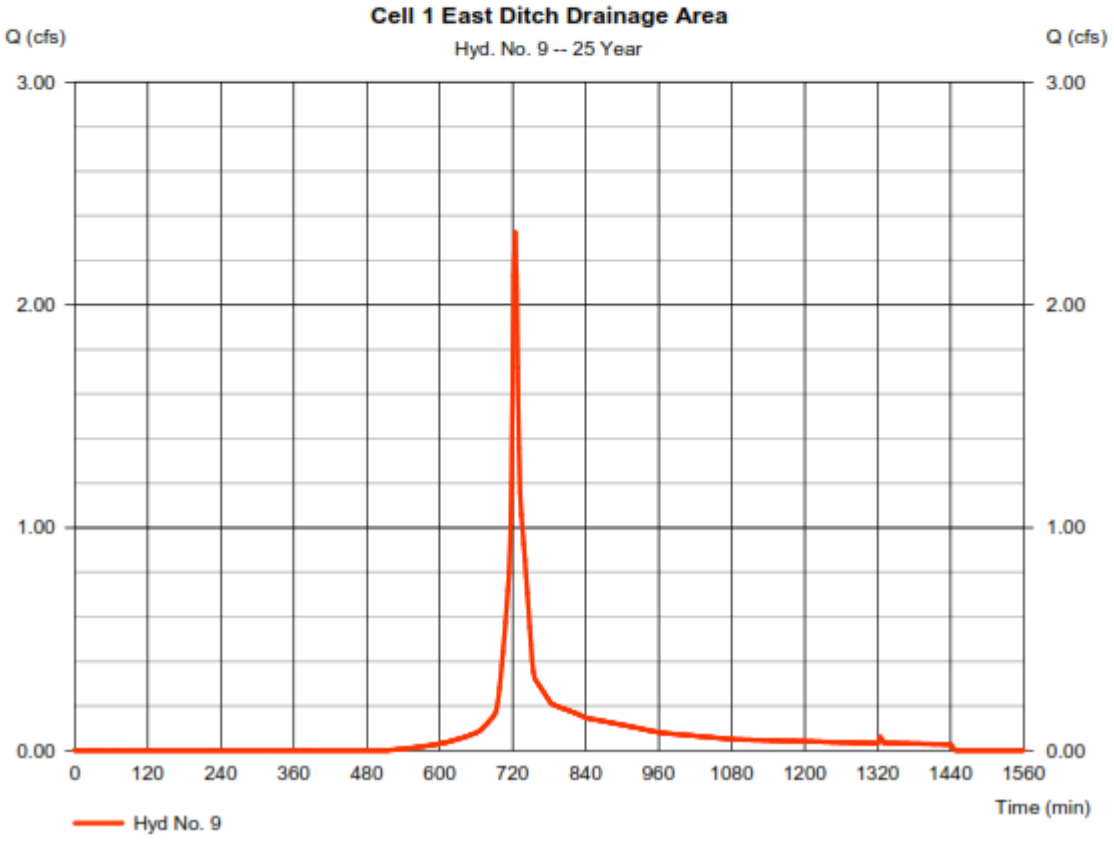
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025 — Wednesday, 09 / 23 / 2026

Hyd. No. 9

Cell 1 East Ditch Drainage Area

Hydrograph type	= SCS Runoff	Peak discharge	= 2.326 cfs
Storm frequency	= 25 yrs	Time to peak	= 724 min
Time interval	= 2 min	Hyd. volume	= 6,959 cuft
Drainage area	= 0.500 ac	Curve number	= 66*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 8.10 in	Distribution	= Type III
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(0.390 x 61) + (0.110 x 55)] / 0.500



Hydrograph 9: Cell 1 East Ditch Drainage Area

Hydrograph Report

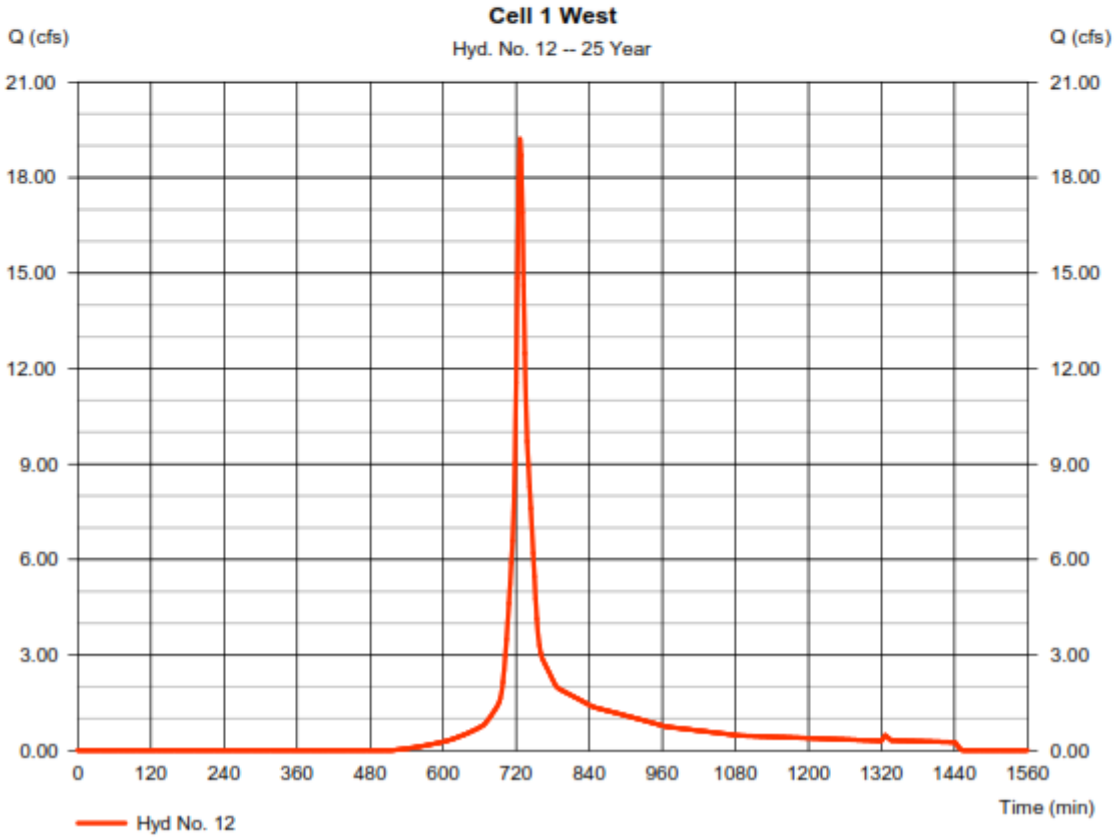
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025 Wednesday, 09 / 23 / 2026

Hyd. No. 12

Cell 1 West

Hydrograph type	= SCS Runoff	Peak discharge	= 19.22 cfs
Storm frequency	= 25 yrs	Time to peak	= 726 min
Time interval	= 2 min	Hyd. volume	= 65,765 cuft
Drainage area	= 4.430 ac	Curve number	= 66*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 9.10 min
Total precip.	= 8.10 in	Distribution	= Type III
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(3.560 x 61) + (0.870 x 55)] / 4.430



Hydrograph 12: Cell 1 West Drainage Area

Hydrograph Report

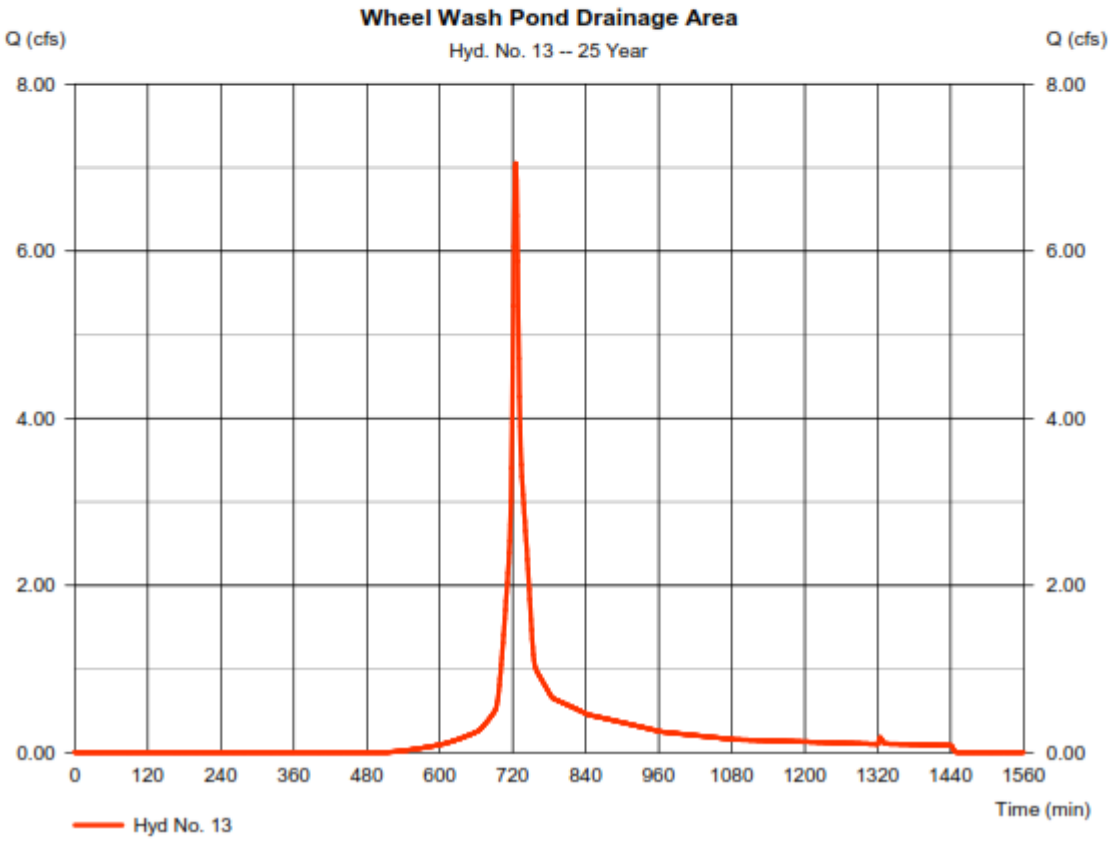
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025 — Wednesday, 09 / 23 / 2026

Hyd. No. 13

Wheel Wash Pond Drainage Area

Hydrograph type	= SCS Runoff	Peak discharge	= 7.052 cfs
Storm frequency	= 25 yrs	Time to peak	= 725 min
Time interval	= 1 min	Hyd. volume	= 21,739 cuft
Drainage area	= 1.420 ac	Curve number	= 66*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 8.10 in	Distribution	= Type III
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(1.110 x 61) + (0.300 x 55) + (0.005 x 98)] / 1.420



Hydrograph 13: Wheel Wash Pond Drainage Area

Hydrograph Report

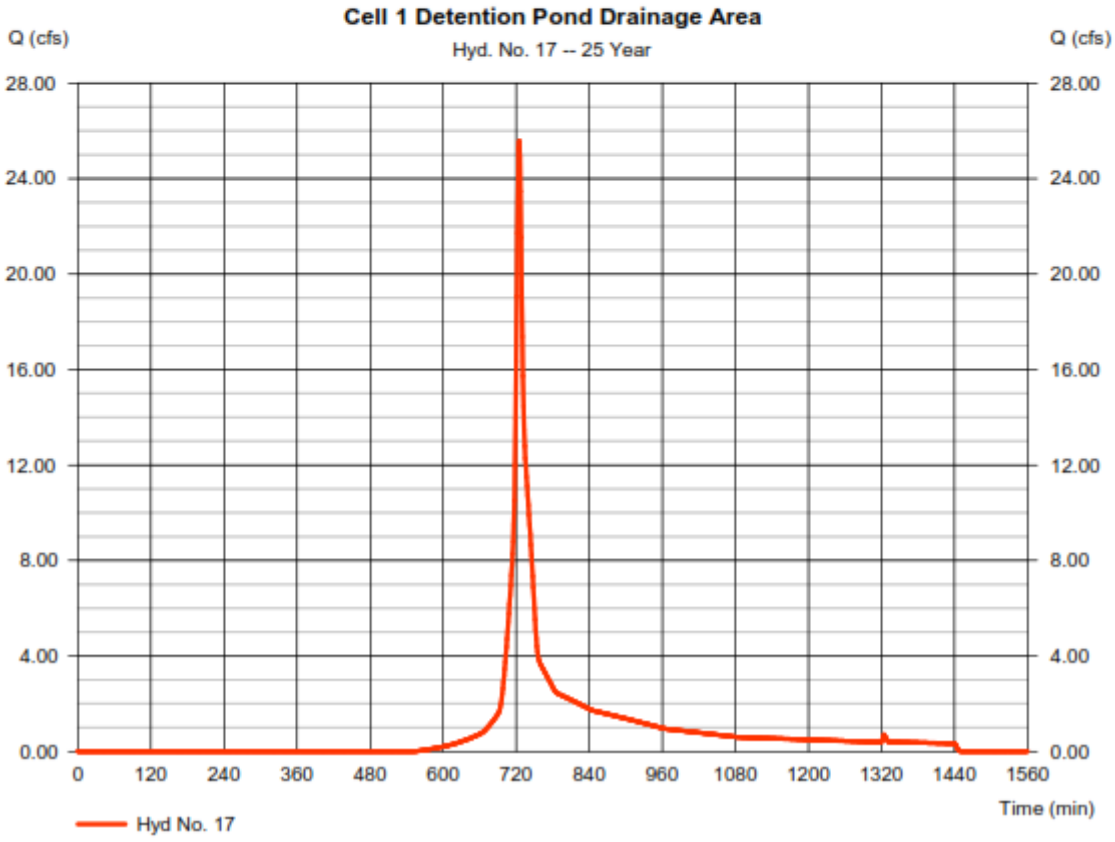
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025 — Wednesday, 09 / 23 / 2026

Hyd. No. 17

Cell 1 Detention Pond Drainage Area

Hydrograph type	= SCS Runoff	Peak discharge	= 25.58 cfs
Storm frequency	= 25 yrs	Time to peak	= 725 min
Time interval	= 1 min	Hyd. volume	= 79,311 cuft
Drainage area	= 5.830 ac	Curve number	= 62*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 8.10 in	Distribution	= Type III
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(5.560 x 61) + (0.220 x 55) + (0.050 x 98)] / 5.830



Hydrograph 17: Cell 1 Detention Pond Drainage Area

Hydrograph Report

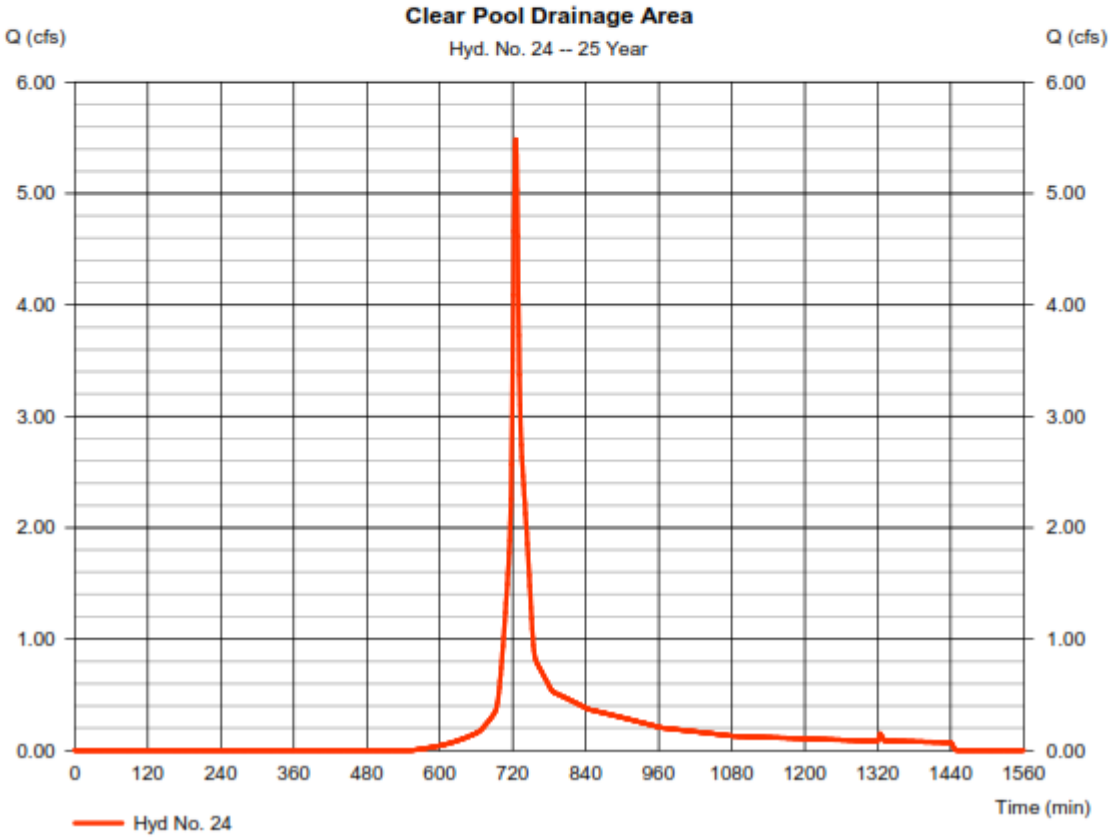
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025 Wednesday, 09 / 23 / 2026

Hyd. No. 24

Clear Pool Drainage Area

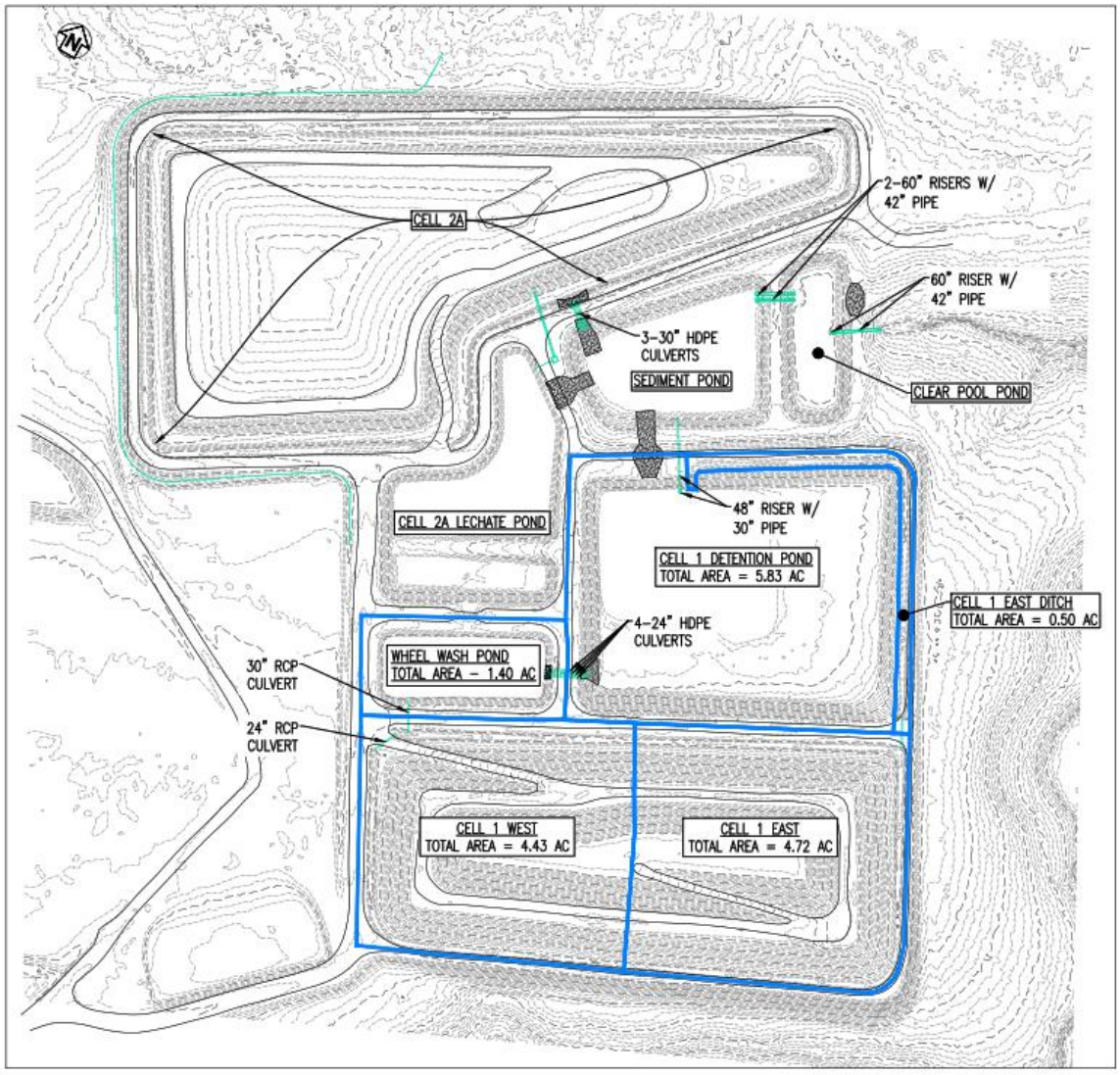
Hydrograph type	= SCS Runoff	Peak discharge	= 5.485 cfs
Storm frequency	= 25 yrs	Time to peak	= 725 min
Time interval	= 1 min	Hyd. volume	= 17,005 cuft
Drainage area	= 1.250 ac	Curve number	= 62*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 8.10 in	Distribution	= Type III
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(1.220 x 61) + (0.030 x 55) + (0.003 x 95)] / 1.250

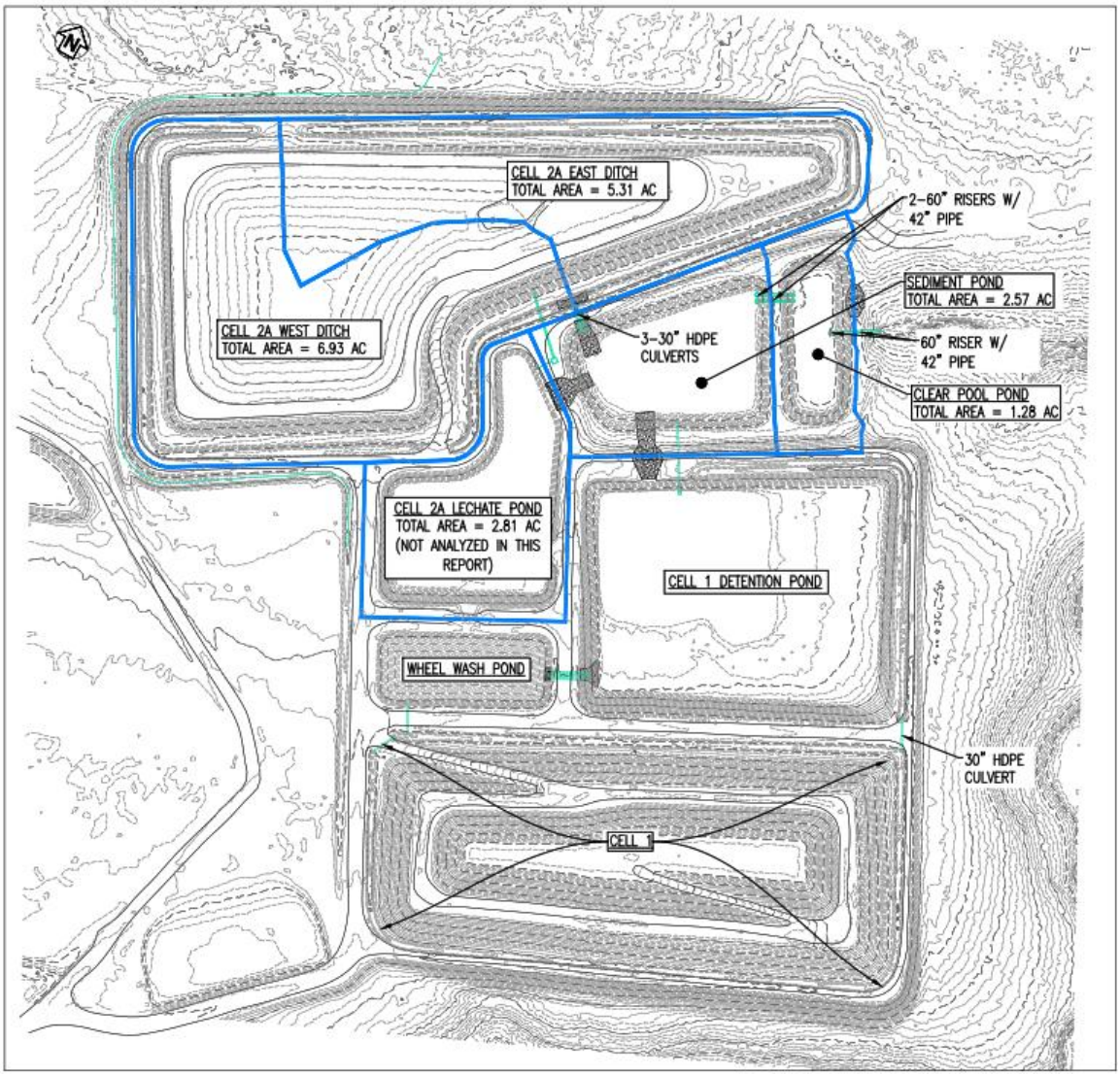


Hydrograph 24: Clear Pool Drainage Area

4.5 DRAINAGE BASINS



Cell 1 Drainage Areas



Cell 2A Drainage Areas