solutions and action

Interstate Power and Light Company
Sixth Street Generating Station
CCR Surface Impoundment Inflow Design Flood Control Plan
154.018.028.007.001
Report issued: May 6, 2026

Hard Hat Services
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245 Kenilworth Ave
Glen Ellyn, IL 60137

Executive Summary

This Inflow Flood Control Plan (Report) for the former Sixth Street Generating Station (SSS) has been prepared in accordance with the requirements of the United States Environmental Protection Agency rules for Hazardous and Solid Waste Management System – Disposal of CCR from Electric Utilities (40 CFR Parts 257 and 261, also known as CCR Rule).

On May 8, 2024, the EPA issued the Final Legacy Coal Combustion Residual (CCR) Surface Impoundment Rule ("Legacy Surface Impoundment Rule") that established regulations for CCR surface impoundments at inactive facilities (40 C.F.R. § 257.100). The Legacy Surface Impoundment Rule requires that legacy surface impoundments that no longer receive CCR but contain both CCR and liquid on or after October 19, 2015 and that are located at an inactive electric utility, generally comply with the EPA requirements for inactive CCR surface impoundments in accordance with Title 40 of the Code of Federal Regulations, Part 257 Subpart D Hazardous and Solid Waste Management System; Disposal of CCR from Electric Utilities.

This Report assesses the hydrologic and hydraulic capacity requirements for the SSS Closed Ash Pond in Cedar Rapids, Iowa in accordance with §257.82 of the CCR Rule. Primarily, the Report documents how the inflow design flood control system has been designed and constructed to meet the CCR Rule section §257.82.

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1. INTRODUCTION

The owner or operator of the Coal Combustion Residual (CCR) unit must conduct an initial and periodic inflow design flood control system plan to determine if each CCR unit adequately manages flow into and from each CCR unit during and following the peak discharge of the inflow design flood. The inflow design flood is selected based on the hazard potential classification (§257.73(a)(2)) for each CCR unit.

1.1 CCR Rule Requirements

The CCR Rule requires an initial and periodic inflow design flood control system plan certified by a qualified professional engineer (PE) for all legacy CCR surface impoundments (§257.82(c)(5)).

1.2 Hydrologic and Hydraulic Capacity Applicability

The Interstate Power and Light Company (IPL), Sixth Street Generating Station (SSS) in Cedar Rapids, Iowa (Figure 1) has one legacy CCR surface impoundment, identified as the SSS Closed Ash Pond. The Closed Ash Pond was historically referred to as Ash Pond 1, Ash Pond 2, Ash Pond 3, and Ash Pond 4. These ash ponds were operated collectively, contiguous to one another, and were closed in place under one continuous cover system. Because of this, the ash ponds are being considered a single legacy surface impoundment. The SSS Closed Ash Pond meets the requirements of §257.82 and is subject to the periodic structural stability assessment requirements of the CCR Rule.

2. FACILITY DESCRIPTION

SSS was located near the center of Cedar Rapids on the eastern shore of the Cedar River in Linn County at 509 6th St NE, Cedar Rapids, IA 52401 (Figure 1). Cedar Lake is located to the north of the facility while the commercial and industrial areas of Cedar Rapids border the east and south.

SSS originated as a town lighting plant in 1888, in a 70-foot by 70-foot building. In 1891, a 40-foot building extension was constructed with a 153-foot stack. SSS became a fossil-fueled electric generating station that initiated operations in 1921. Over the years, the facility consisted of five dual-compartment boiler steam electric generating units detailed below. SSS did not operate after June of 2008 due to a catastrophic flood, was retired at that time, and then demolished in 2015.

General Facility Information:

Date of Initial Facility Operations:	1888
Historical NPDES Permit Number:	IA-5715109
Latitude / Longitude:	41° 59’ 5.31” N 91° 40’ 6.70” W
Unit Nameplate Ratings:	Unit 1 & 2 (1921) 10.0 MW - Coal
	Unit 3 & 4 (1925) 10.0 MW - Coal
	Unit 5 & 6 (1925) 10.0 MW - Coal
	Unit 7 & 8 (1945) 15.0 MW – Coal
	Unit 9 & 10 (1950) 28.7 MW – Coal or Natural Gas
Impoundment IDNR State ID	57-SDP-34-04C

2.1 SSS Closed Ash Pond Location

The SSS Closed Ash Pond is located northeast of the former SSS facility and is situated underneath Interstate 380, which includes several highway foundations and supports throughout the closed impoundment. The Closed Ash Pond was historically referred to as Ash Pond 1, Ash Pond 2, Ash Pond 3, and Ash Pond 4. These ash ponds were operated collectively, contiguous to one another, and were closed in place under one continuous cover system. Because of this, the ash ponds are being considered a single legacy surface impoundment.

An engineered cap was constructed atop of the SSS Closed Ash Pond in 2017 and 2018. The engineered cap drainage area is approximately 10.3 acres. The embankments are approximately 12 feet high relative to the grades outside the Closed Ash Pond. The current configuration includes a storm water retention pond on top of the cap, which handles storm water runoff from Interstate 380. This storm water pond largely evaporates, although in case of a significant storm event, a drainage ditch carries water to the south where an outlet structure can discharge water from a corrugated metal pipe to the south, outside the boundary of the SSS Closed Ash Pond.

The overflow outfall structure is a 12-inch diameter pipe with a concrete standpipe containing orifices and an emergency spillway at elevation 729.5. Part of the western portion of the engineered cap drains through a swale that discharges through a rock chute to the south, outside the boundary of the SSS Closed Ash Pond. The perimeter area around the Closed Ash Pond functions as a vegetated drainage ditch that drains to a 30-inch diameter culvert that discharges below the railroad tracks and into Cedar Lake.

3. HYDROLOGIC AND HYDRAULIC CAPACITY- §257.82(a)

This Report provides hydrologic and hydraulic capacity information for the inflow design flood control systems which is to:

1. Adequately manage flow into each CCR unit during and following the peak discharge inflow of the specified design flood,
2. Adequately manage flow from each CCR unit to collect and control the peak discharge resulting from the inflow design flood; and,
3. Handle discharge from the CCR unit in accordance with NPDES regulations 40 CFR §257.3-3.

3.1 Hazard Classification and Design Storm

The SSS Closed Ash Pond has been assigned a Significant Hazard Potential classification as losses may not principally be limited to the owner's property. Mis-operation or failure will likely not result in loss of life as there are no occupied buildings or residences located in the immediate vicinity of the CCR surface impoundment, and the adjacent spaces are not generally occupied. Failure would be unlikely to affect Interstate 380 or reach a navigable water body. A release to the northwest would likely impact the railroad switch yard. A release to the northeast would likely impact the parking lot and any parked vehicles. A release to the east and southeast would likely impact the lowland area and possibly the parking garage. A release to the southwest would likely be limited to IPL's property.

The design flood (or storm) for the SSS Closed Ash Pond is the 1,000-year return event Soil Conversation Service (SCS) Type Midwest and Southeast United States (MSE) 4, 24-hour storm as defined in 40 CFR 257.82 (3) (ii). The total rainfall for the event selected from the National

Oceanographic and Atmospheric Administration's probabilistic map for the SSS site coordinates is 11.1 inches for the 1,000-year event, Appendix A.

3.2 Hydrologic and Hydraulic Capacity Methods

The 1,000-year SCS Type MSE 4 storm was routed across the Closed Ash Pond engineered cap and through the storm water pond outfall structure or rock chute. These storm water discharges along with storm water from adjacent uncontrolled areas around the Close Ash Pond were routed to the 30-inch culvert that accepts discharges from the site, see Attachment C. The routing was completed using the program HydroCAD up to the downstream 30-inch culvert. This program uses the unit hydrograph method to generate a Type MSE 4 distribution rainfall for the drainage area to the SSS Closed Ash Pond. HydroCAD routes the rainfall hydrograph through the outlet structure storing water within the impoundment in accordance with the reservoir capacity of the impoundment. The proportion of runoff to rainfall for the drainage watershed is input based on characteristics of the watershed area. The drainage areas of the watershed include 3.5 acres of cover area to pond, 4.8 acres of area to interior swale, 1.0 acres of pond area, 0.9 acres of area to western swale/rock chute, and 1.9 acres of uncontrolled exterior drainage area, shown in Appendix C.

3.3 Hydrologic and Hydraulic Capacity Input and Assumptions

This section identifies the input and assumptions for the hydrologic and hydraulic capacity calculations. The input for each sub-drainage area of the SSS Closed Ash Pond are:

Sub-Area	Acreage	Weighted Average Curve Number (CN)	Average Slope (%)	Hydraulic Length (ft)
Cover Area to Pond	3.5	80	3.3	211
Area to Interior Swale	4.8	80	3.2	405
Pond Area	1.0	98	0	0
Area to Western Swale	0.9	74	1.9	425
Uncontrolled Exterior Drainage Area	1.9	78	0.53	1,222

Based on the inputs and assumptions entered into HydroCAD, storm water routing model results demonstrate that the Closed Ash Pond is capable of effectively managing runoff from a 1000-year storm event. The storm water routing model results generated HydroCAD using these inputs and assumptions are provided in Appendix C.

4. Inflow Design Flood Control System Plan

The 12.1 acres of storm water flow from the SSS Closed Ash Pond and surrounding area will discharge to the 30-inch culvert at a flow of 21.8 cubic feet per second during peak storm flow. The storm water pond and interior swale on the engineered cap of the SSS Closed Ash Pond will store 5.7 acre-feet of water during the event and the maximum water elevation will reach 728 feet. The minimum crest elevation of the on the south embankment near the outlet structure is elevation 729.5 feet with a resultant freeboard of 1.5 feet at the peak of the storm flow through the engineered cap outlet structure.

The results of the storm routing through the SSS Closed Ash Pond using HydroCAD are presented in Appendix C.

5. QUALIFIED PROFESSIONAL ENGINEER CERTIFICATION

To meet the requirements of 40 CFR 257.82(c)(5), I Mark W. Loerop hereby certify that I am a licensed professional engineer in the State of Iowa; and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in 40 CFR 257.82.

By: _____

Name: MARK LOEROP

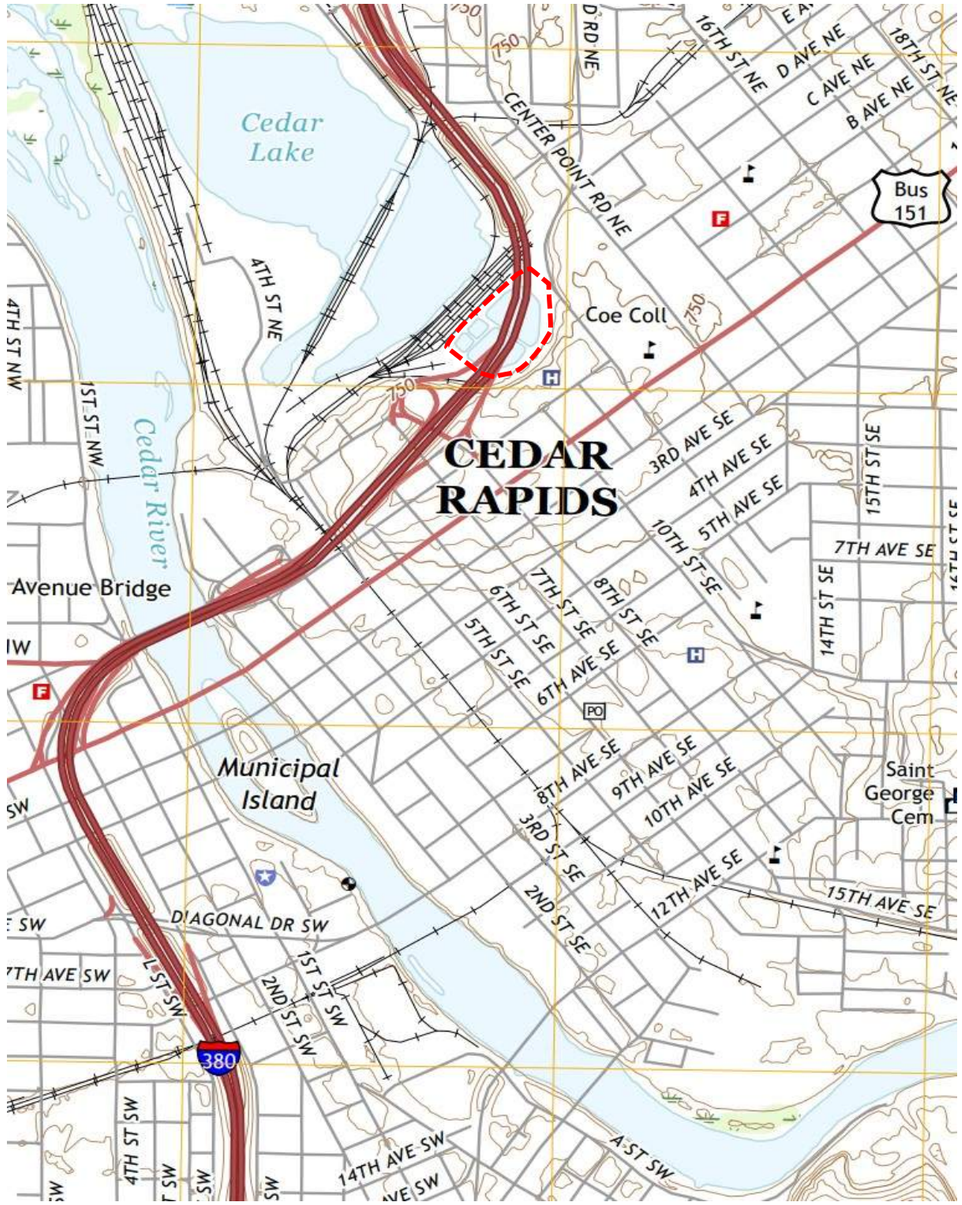
Date: MAY 6, 2026

FIGURES

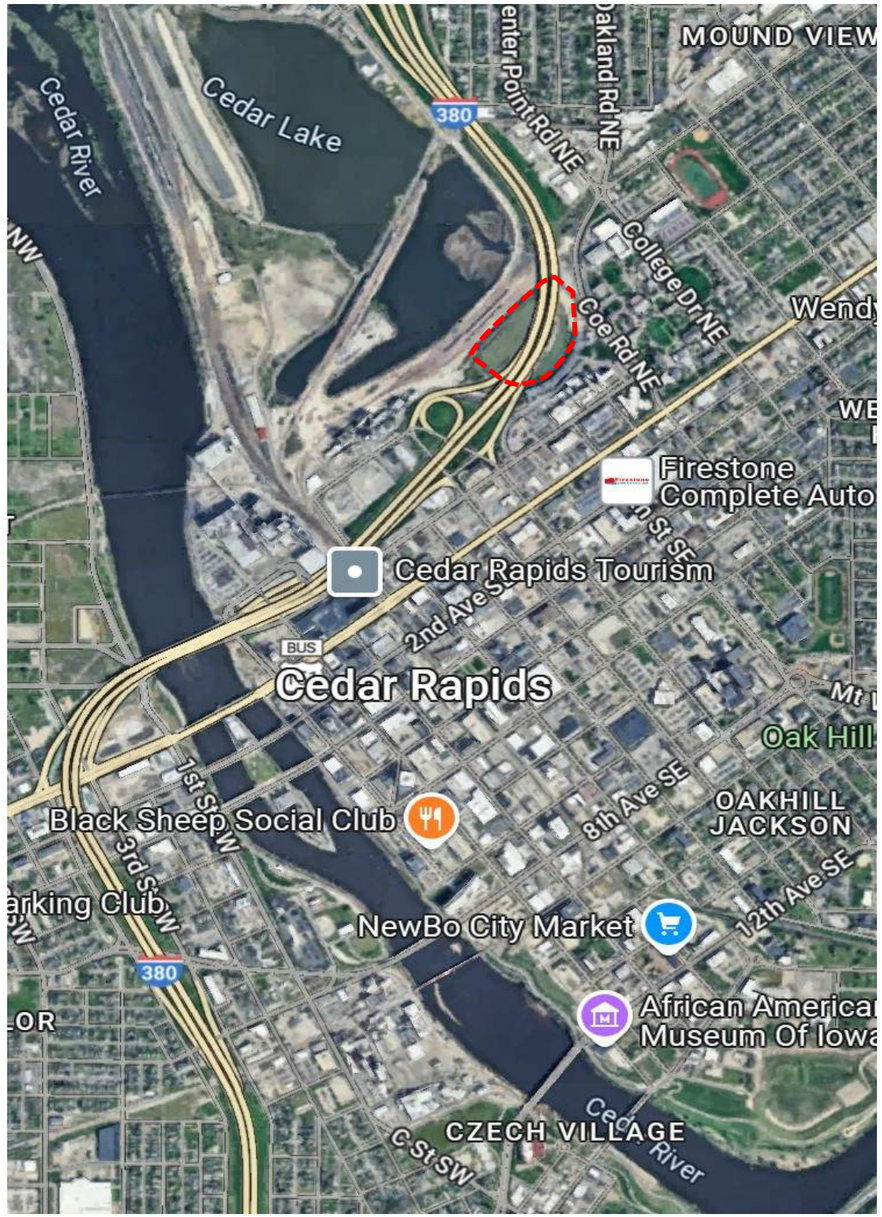
Alliant Energy
Interstate Power and Light Company
Sixth Street Generating Station
Cedar Rapids, Iowa

Inflow Design Flood Control System Plan

Topography Map



Aerial Photo



Approximate Property Boundary

hard hat SERVICES	Site Location Sixth Street Generating Station Interstate Power and Light Company	Drawing Figure 1 Date 2/3/2026

APPENDIX A – NOAA Storm Frequency

Alliant Energy
Interstate Power and Light Company
Sixth Street Generating Station
Cedar Rapids, Iowa

Inflow Design Flood Control System Plan

NOAA Atlas 14, Volume 8, Version 2
Location name: Cedar Rapids, Iowa, USA*
Latitude: 41.9868°, Longitude: -91.6617°
Elevation: 724 ft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Deborah Martin, Sandra Pavlovic, Ishani Roy, Michael St. Laurent, Carl Trypaluk, Dale Unruh, Michael Yekta, Geoffery Bonnin

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	**0.380** (0.295-0.491)	**0.442** (0.342-0.571)	**0.547** (0.422-0.707)	**0.636** (0.488-0.825)	**0.762** (0.567-1.01)	**0.862** (0.627-1.16)	**0.965** (0.679-1.32)	**1.07** (0.725-1.49)	**1.22** (0.793-1.72)	**1.33** (0.845-1.90)
10-min	**0.557** (0.431-0.719)	**0.648** (0.501-0.837)	**0.800** (0.617-1.04)	**0.931** (0.714-1.21)	**1.12** (0.830-1.48)	**1.26** (0.918-1.69)	**1.41** (0.995-1.93)	**1.57** (1.06-2.18)	**1.78** (1.16-2.52)	**1.95** (1.24-2.78)
15-min	**0.679** (0.526-0.877)	**0.790** (0.611-1.02)	**0.976** (0.753-1.26)	**1.14** (0.871-1.47)	**1.36** (1.01-1.81)	**1.54** (1.12-2.07)	**1.72** (1.21-2.35)	**1.91** (1.29-2.66)	**2.17** (1.42-3.08)	**2.38** (1.51-3.40)
30-min	**0.954** (0.739-1.23)	**1.11** (0.862-1.44)	**1.38** (1.07-1.79)	**1.61** (1.24-2.09)	**1.93** (1.44-2.57)	**2.19** (1.59-2.94)	**2.45** (1.73-3.35)	**2.73** (1.84-3.79)	**3.10** (2.02-4.39)	**3.39** (2.15-4.84)
60-min	**1.24** (0.959-1.60)	**1.44** (1.12-1.87)	**1.80** (1.39-2.33)	**2.11** (1.62-2.74)	**2.56** (1.91-3.41)	**2.92** (2.12-3.92)	**3.29** (2.32-4.51)	**3.69** (2.50-5.14)	**4.24** (2.76-6.02)	**4.67** (2.97-6.68)
2-hr	**1.52** (1.19-1.94)	**1.78** (1.39-2.27)	**2.22** (1.73-2.84)	**2.61** (2.02-3.34)	**3.18** (2.40-4.21)	**3.64** (2.69-4.86)	**4.13** (2.95-5.61)	**4.66** (3.19-6.44)	**5.38** (3.55-7.59)	**5.96** (3.82-8.46)
3-hr	**1.70** (1.34-2.15)	**1.98** (1.56-2.51)	**2.48** (1.94-3.14)	**2.92** (2.28-3.72)	**3.58** (2.73-4.73)	**4.13** (3.07-5.50)	**4.72** (3.39-6.38)	**5.34** (3.69-7.37)	**6.22** (4.13-8.76)	**6.93** (4.47-9.80)
6-hr	**1.99** (1.59-2.49)	**2.32** (1.85-2.91)	**2.92** (2.32-3.66)	**3.46** (2.74-4.36)	**4.28** (3.31-5.61)	**4.97** (3.74-6.56)	**5.71** (4.15-7.67)	**6.50** (4.54-8.91)	**7.63** (5.13-10.7)	**8.55** (5.57-12.0)
12-hr	**2.28** (1.84-2.82)	**2.67** (2.16-3.31)	**3.37** (2.71-4.18)	**4.00** (3.20-4.98)	**4.96** (3.87-6.43)	**5.76** (4.38-7.53)	**6.62** (4.87-8.82)	**7.56** (5.34-10.3)	**8.89** (6.03-12.3)	**9.96** (6.56-13.9)
24-hr	**2.61** (2.13-3.19)	**3.04** (2.48-3.71)	**3.81** (3.10-4.67)	**4.51** (3.65-5.54)	**5.57** (4.40-7.14)	**6.46** (4.97-8.35)	**7.41** (5.51-9.77)	**8.44** (6.02-11.4)	**9.90** (6.80-13.7)	**11.1** (7.38-15.4)
2-day	**3.02** (2.50-3.64)	**3.46** (2.86-4.18)	**4.25** (3.50-5.15)	**4.98** (4.08-6.05)	**6.08** (4.87-7.71)	**7.01** (5.46-8.97)	**8.01** (6.03-10.5)	**9.10** (6.57-12.2)	**10.6** (7.38-14.6)	**11.9** (8.00-16.4)
3-day	**3.33** (2.78-3.99)	**3.76** (3.13-4.51)	**4.55** (3.78-5.47)	**5.27** (4.35-6.36)	**6.38** (5.14-8.03)	**7.31** (5.74-9.30)	**8.32** (6.30-10.8)	**9.42** (6.84-12.5)	**11.0** (7.67-15.0)	**12.3** (8.30-16.8)
4-day	**3.59** (3.01-4.28)	**4.03** (3.37-4.81)	**4.82** (4.02-5.76)	**5.55** (4.60-6.66)	**6.65** (5.38-8.32)	**7.58** (5.97-9.58)	**8.58** (6.53-11.1)	**9.66** (7.05-12.8)	**11.2** (7.86-15.2)	**12.5** (8.48-17.1)
7-day	**4.22** (3.57-4.98)	**4.73** (4.00-5.58)	**5.60** (4.72-6.63)	**6.37** (5.34-7.57)	**7.49** (6.10-9.23)	**8.41** (6.67-10.5)	**9.36** (7.18-12.0)	**10.4** (7.63-13.6)	**11.8** (8.33-15.9)	**12.9** (8.86-17.6)
10-day	**4.78** (4.07-5.61)	**5.36** (4.56-6.28)	**6.32** (5.36-7.43)	**7.14** (6.02-8.43)	**8.31** (6.79-10.1)	**9.24** (7.37-11.4)	**10.2** (7.85-12.9)	**11.2** (8.26-14.6)	**12.5** (8.90-16.8)	**13.6** (9.39-18.4)
20-day	**6.50** (5.60-7.51)	**7.23** (6.22-8.36)	**8.43** (7.23-9.78)	**9.43** (8.05-11.0)	**10.8** (8.93-13.0)	**11.9** (9.60-14.5)	**13.0** (10.1-16.2)	**14.1** (10.5-18.1)	**15.6** (11.2-20.6)	**16.7** (11.7-22.5)
30-day	**8.01** (6.96-9.19)	**8.91** (7.73-10.2)	**10.4** (8.96-11.9)	**11.6** (9.94-13.4)	**13.2** (10.9-15.7)	**14.4** (11.7-17.5)	**15.7** (12.3-19.4)	**16.9** (12.7-21.6)	**18.5** (13.4-24.4)	**19.7** (13.9-26.5)
45-day	**10.0** (8.76-11.4)	**11.2** (9.77-12.7)	**13.0** (11.3-14.9)	**14.5** (12.6-16.7)	**16.5** (13.7-19.4)	**18.0** (14.6-21.5)	**19.4** (15.2-23.8)	**20.7** (15.6-26.3)	**22.5** (16.3-29.4)	**23.7** (16.8-31.7)
60-day	**11.8** (10.3-13.3)	**13.2** (11.6-15.0)	**15.5** (13.5-17.6)	**17.2** (15.0-19.7)	**19.5** (16.3-22.8)	**21.2** (17.3-25.2)	**22.7** (17.9-27.7)	**24.2** (18.3-30.4)	**25.9** (18.9-33.7)	**27.2** (19.3-36.2)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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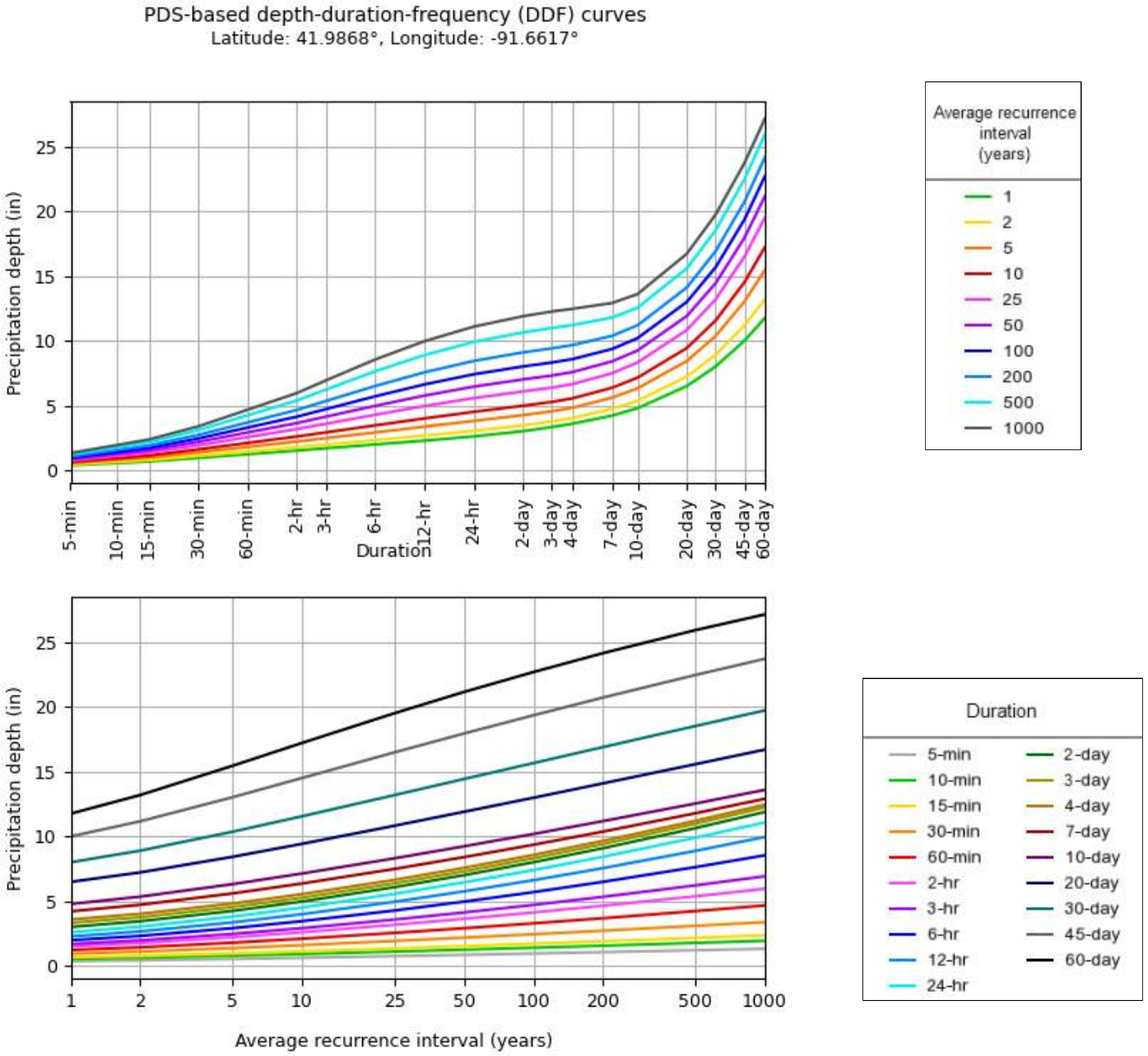
PF graphical



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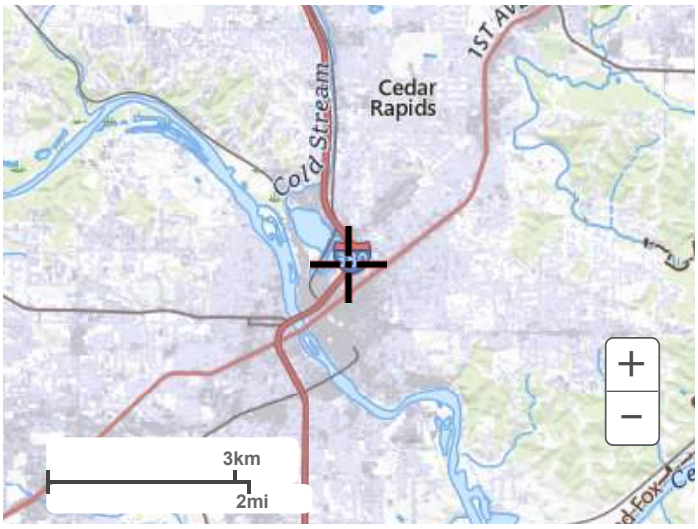
Maps & aerials

Small scale terrain



Large scale terrain

Large scale map

Large scale aerial

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US Department of Commerce
National Oceanic and Atmospheric Administration
National Weather Service
National Water Center
1325 East West Highway
Silver Spring, MD 20910
Questions?: HDSC.Questions@noaa.gov

APPENDIX B – Outfall Drawings

Alliant Energy
Interstate Power and Light Company
Sixth Street Generating Station
Cedar Rapids, Iowa

Inflow Design Flood Control System Plan

ROCK CHUTE
SEE DETAIL 4/11

SWALE FINAL COVER
SEE DETAIL 3/9

SOIL FINAL COVER
SEE DETAIL 1/9

OUTLET STRUCTURE AND
EMERGENCY SPILLWAY
SEE DETAILS 1/11 2/11

A

A'

B

B'

SEE SHEET 8

SEE SHEET 8

FENCE INSTALLED TO CONCRETE
BRIDGE STRUCTURE PROVIDING
FULL SITE PERIMETER CONTROL

GATE

GATE

POND FINAL COVER
SEE DETAIL 2/9

E 5,420,500
E 5,420,600
E 5,420,700
E 5,420,800
E 5,420,900
E 5,421,000
E 5,421,100
E 5,421,200

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N 3,464,300

LEGEND

- EXISTING GRADE (1' CONTOUR)
- EXISTING GRADE (5' CONTOUR)
- EXISTING GRADE (2' CONTOUR)
- EXISTING GRADE (10' CONTOUR)
- EXISTING WATER EDGE
- EXISTING WETLAND
- AS-BUILT GRADE (1' CONTOUR)
- AS-BUILT GRADE (5' CONTOUR)
- CHAIN LINK FENCE
- AS-BUILT DIVERSION BERM
- AS-BUILT DECK DRAIN SWALE
- LIMITS OF LAMINATED GEOSYNTHETIC CLAY LINER (GCL)
- SOIL FINAL COVER AREA
- POND FINAL COVER AREA
- SWALE FINAL COVER AREA
- WETLAND SEEDING AREA
- AS-BUILT FINAL COVER EROSION PROTECTION
- POND STONE
- EROSION STONE
- 3" MACADAM STONE IN LIEU OF TOPSOIL
- AS-BUILT STABILIZED CONSTRUCTION ENTRANCE
- SEDIMENT LOG

NOTES:

1. AS-BUILT GRADES REPRESENT TOP OF TOPSOIL/FINAL COVER.
2. EROSION MAT WAS PLACED OVER SWALE FINAL COVER AREAS AND ALL 4:1 AND STEEPER SLOPES.
3. ALL SOIL FINAL COVER AREAS RECEIVED PERMANENT RURAL AREA SEED MIX.
4. ALL SWALE FINAL COVER AREAS RECEIVED NATIVE GRASS SEED MIX UNLESS OTHERWISE NOTED AS WETLAND SEEDING AREAS.
5. WETLAND SEEDING AREAS RECEIVED WETLAND SEED MIX.

N

40 0 40

SCALE: 1" = 40'

DRAWN BY: KP
CHECKED BY: PEG
APPROVED BY: EJN 10/26/18

PROJECT NO. 25212261.04
DRAWN: 01/16/17
REVISED: 10/26/18

CLIENT
INTERSTATE POWER AND LIGHT CO.
200 1ST STREET S.E.
CEDAR RAPIDS, IA 52402

ENGINEER
SCS ENGINEERS
2830 DAIRY DRIVE MADISON, WI 53718-6751
PHONE: (608) 224-2830

SITE
CONSTRUCTION DOCUMENTATION
SETTLING POND CLOSURE
FORMER 6TH STREET GENERATING STATION
CEDAR RAPIDS, IOWA

AS-BUILT RESTORATION PLAN

SHEET
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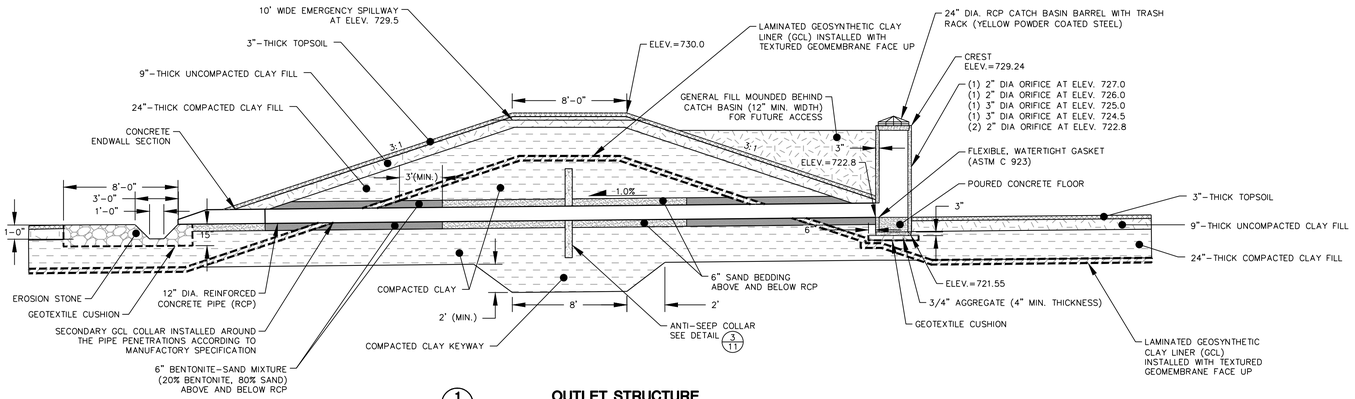
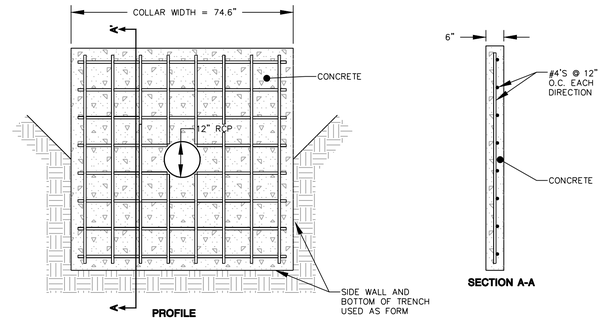
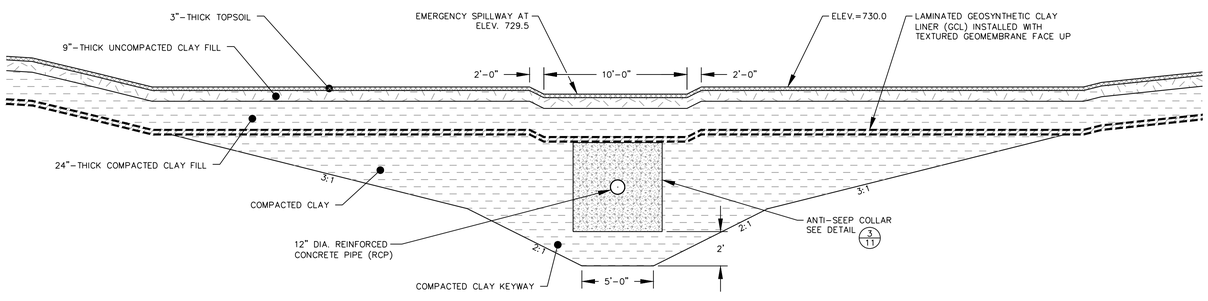


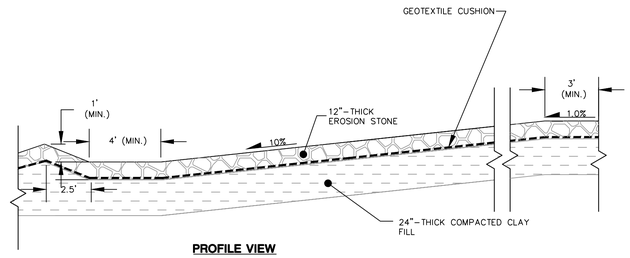
1/11 **OUTLET STRUCTURE**
SCALE: 1" = 5'



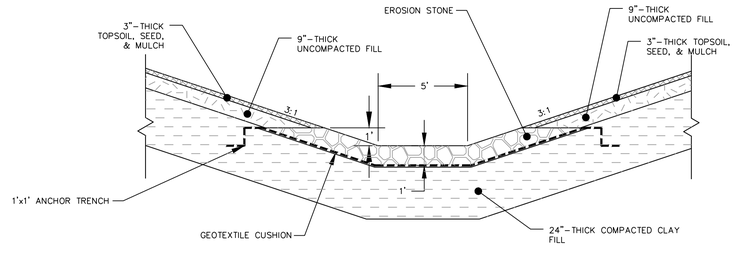
3/11 **ANTI-SEEP COLLAR**
SCALE: 1" = 5'



2/11 **EMERGENCY SPILLWAY**
SCALE: 1" = 5'



PROFILE VIEW



SECTION VIEW

4/11 **ROCK CHUTE**
SCALE: 1" = 4'

SCS ENGINEERS
2830 DAIRY DRIVE MADISON, WI 53718-6751
PHONE: (608) 224-2830

PROJECT NO.	25212261.04	
DRAWN:	01/16/17	DRAWN BY: KP
REVISED:	10/03/18	CHECKED BY: PEG
		APPROVED BY: EJN 10/26/18

CLIENT
INTERSTATE POWER AND LIGHT CO.
200 1ST STREET S.E.
CEDAR RAPIDS, IA 52402

ENGINEER

SITE
CONSTRUCTION DOCUMENTATION
CCR SURFACE IMPOUNDMENT
FORMER 5TH STREET GENERATING STATION
CEDAR RAPIDS, IOWA

DETAILS

SHEET
11 of 11

APPENDIX C – Hydraulic Analysis

Alliant Energy
Interstate Power and Light Company
Sixth Street Generating Station
Cedar Rapids, Iowa

Inflow Design Flood Control System Plan

Storm Water Management Calculations

Purpose:
The purpose of the storm water runoff calculations is to demonstrate that the existing storm water management features at the 6th Street Closed Ash Pond can accommodate and safely convey the runoff from a 1000-year, 24-hour storm event.

The current storm water management conditions are shown in **Figure C1.**

Approach:
Hydrograph Generation
HydroCAD was used to model the storm water management systems and develop the hydrographs using TR-20 methodologies. The model is designed to simulate the surface runoff response of a watershed to a precipitation event. Input parameters for the model include precipitation depth for the design storm event from NOAA ATLAS 14, storm type MSE 4, contributing drainage areas, runoff curve numbers, and time of concentration.

Pond & Swale Evaluation
The Pond and Swale were evaluated for the capacity to safely convey the 1000-year, 24-hour storm event without overtopping. HydroCAD was utilized to determine storage available based on the Pond geometry, depth of flow and velocity in the Swale based on the Swale geometry, and peak flow into the Pond and Swale. Note that the Pond and Swale were modeled as one node, because the Pond and Swale will act as a single storage unit when flows are high.

Key Assumptions:
- Drainage areas and time of concentration flow paths are as shown in **Figure C1**.
- A MSE 4 rainfall distribution was used based on the National Engineering Handbook Part 650. The precipitation depth for the 1000-year, 24-hour storm was assumed to be 11.10 inches, based on NOAA ATLAS 14 Point Precipitation Frequency Estimates (NOAA's National Weather Service Hydrometeorological Design Studies Center Precipitation Frequency Data Server).
- Runoff curve numbers were based on tables presented in Urban Hydrology for Small Watersheds and were assumed as follows and as listed in the modeling.

Cover Type	CN
Grass Area	74 – >75% Grass cover, Good, HSG C
Brush Area	77 – Brush, Poor, HSG C
Road	98 – Interstate Area Above Site

- The Pond has water in it under normal conditions. Conservatively assumed water level in Pond was at the elevation to discharge to Interior Swale. The Interior Swaler is dry during normal conditions.
- The precipitation landing on the bridge over-pass above the site is directed through downspouts onto the engineered cap. The flow into downspouts into the cap area is not part of the model.
- Modeled the engineered cap area as grass cover and ignores riprap/stone cover.
- Hydraulic evaluation of inflow and discharge from the Closed Ash Pond was performed through the impoundment outlet structure and up to the up to the 30-inch culvert inlet that discharges under the railroad tracks. Evaluation of flow through the 30-inch downstream structure was not performed.

- Other assumptions are included with the calculations attached.

Results:

Hydrograph Generation

The hydrograph modeling results for the 1000-year, 24-hour storm event are included in the Hydrograph Generation section below.

Pond Evaluation

The Pond and Swale have the capacity to safely convey the 1000-year, 24-hour storm event. The runoff from the 1000-year, 24-hour storm event will remain within the limits of the closure and discharge is controlled through the outlet structure in the Interior Swale. Peak water elevation reaches 728 ft with a berm elevation of ~729.5 ft leaving approximately 1.5 feet of freeboard under the elevated storm event conditions. Refer to the Hydrograph Generation section below.

NOTES:

1. EXISTING GRADE OUTSIDE OF FINAL COVER LIMITS FROM SCS ENGINEERS GROUND SURVEYS PERFORMED ON OCTOBER 10, 2012 AND APRIL 22, 2014, AND SUPPLEMENTED WITH SEPTEMBER 1, 2011 SCHNOOR BONIFAZI ENGINEERING & SURVEY GROUND SURVEY. HIGHWAY BRIDGE FEATURES BASED ON AS-BUILT DRAWINGS FOR THE CEDAR VALLEY FREEWAY OVER CM ST. P & P RR AND ASH PIT WASTE AREA, PROJECT NO. IG-380-6(56) 264-02-57, PROVIDED BY IOWA DEPARTMENT OF TRANSPORTATION (IDOT).
2. EXISTING GROUND CONTOURS (DASHED 2' AND 10') OUTSIDE OF FINAL COVER LIMITS BASED ON GENERALIZED 2 FOOT CONTOURS OF LINN COUNTY IOWA DERIVED FROM LIDAR DATA DOWNLOADED FROM THE IOWA NATURAL RESOURCES GEOGRAPHIC INFORMATION SYSTEMS LIBRARY.
3. EXISTING GRADES WITHIN THE FINAL COVER LIMITS BASED ON THE CONSTRUCTION DOCUMENTATION DRAWINGS FOR THE SETTLING POND CLOSURE AT THE FORMER 6TH STREET GENERATING STATION PREPARED BY SCS ENGINEERS DATED OCTOBER 26, 2018.
4. HORIZONTAL SITE DATUM BASED ON IOWA STATE PLANE COORDINATE SYSTEM NAD 83 (2011). VERTICAL SITE DATUM REFERENCED TO NAVD 88.
5. EXISTING WETLAND LIMITS PROVIDED BY STANTEC CONSULTING SERVICES, INC. WETLAND LIMITS ARE BASED ON STANTEC'S OCTOBER 19, 2012 ON-SITE WETLAND DETERMINATION.
6. AERIAL IMAGERY FROM AUTODESK BING MAPS OBTAINED JANUARY 12, 2026.

LEGEND

- EXISTING GROUND (1' CONTOUR)
- 725 EXISTING GROUND (5' CONTOUR)
- EXISTING GROUND (2' CONTOUR)
- 740 EXISTING GROUND (10' CONTOUR)
- EXISTING WETLAND
- EXISTING CHAIN FENCE LINE
- EXISTING OUTLET STRUCTURE
- SA EXISTING SANITARY SEWER
- DRAINAGE AREA BOUNDARY
- TIME OF CONCENTRATION FLOWPATH
- LIMITS OF FINAL COVER
- AS-BUILT FINAL COVER EROSION PROTECTION
- POND STONE
- EROSION STONE
- 3" MACADAM STONE IN LIEU OF TOPSOIL

N

50 0 50

SCALE: 1" = 50'

RAILROAD CULVERT

28R ROCK CHUTE

DRAINAGE AREA 19S
WESTERN SWALE TO ROCK CHUTE
0.905 ACRES

WESTERN SWALE

OUTLET STRUCTURE

INTERIOR SWALE

CANADIAN NATIONAL RAILWAY

WET DETENTION POND

DRAINAGE AREA 14S
AREA TO INTERIOR SWALE
(NOT VIA POND)
4.844 ACRES

DRAINAGE AREA 15S
POND AREA
1.018 ACRES

DRAINAGE AREA 13S
COVER AREA TO POND
3.519 ACRES

DRAINAGE AREA 16S
UNCONTROLLED EXTERIOR DRAINAGE AREA

DRAINAGE AREA 16S
UNCONTROLLED EXTERIOR DRAINAGE AREA
1.939 ACRES

ST. LUKES HOSPITAL
SURFACE PARKING

ST. LUKES HOSPITAL
PARKING RAMP

ST. LUKES HOSPITAL
SURFACE PARKING

COE ROAD NE

ONE WAY

E 5,420,400
E 5,420,500
E 5,420,600
E 5,420,700
E 5,420,800
E 5,420,900
E 5,421,000
E 5,421,100
E 5,421,200
E 5,421,300
E 5,421,400

N 3,463,200 N 3,463,300 N 3,463,400 N 3,463,500 N 3,463,600 N 3,463,700 N 3,463,800 N 3,463,900 N 3,464,000 N 3,464,100 N 3,464,200 N 3,464,300 N 3,464,400 N 3,464,500 N 3,464,600

U:\2025\25170\Drawings\Drawings\250113 Figure 1 Drainage Areas.dwg, 1/16/2026 3:40:43 PM

FIGURE C1

EXISTING DRAINAGE AREAS

6TH STREET GENERATING STATION
CEDAR RAPIDS, IOWA

SITE

CLIENT
INTERSTATE POWER AND LIGHT CO.
309 6TH STREET N.E.
CEDAR RAPIDS, IA 52402

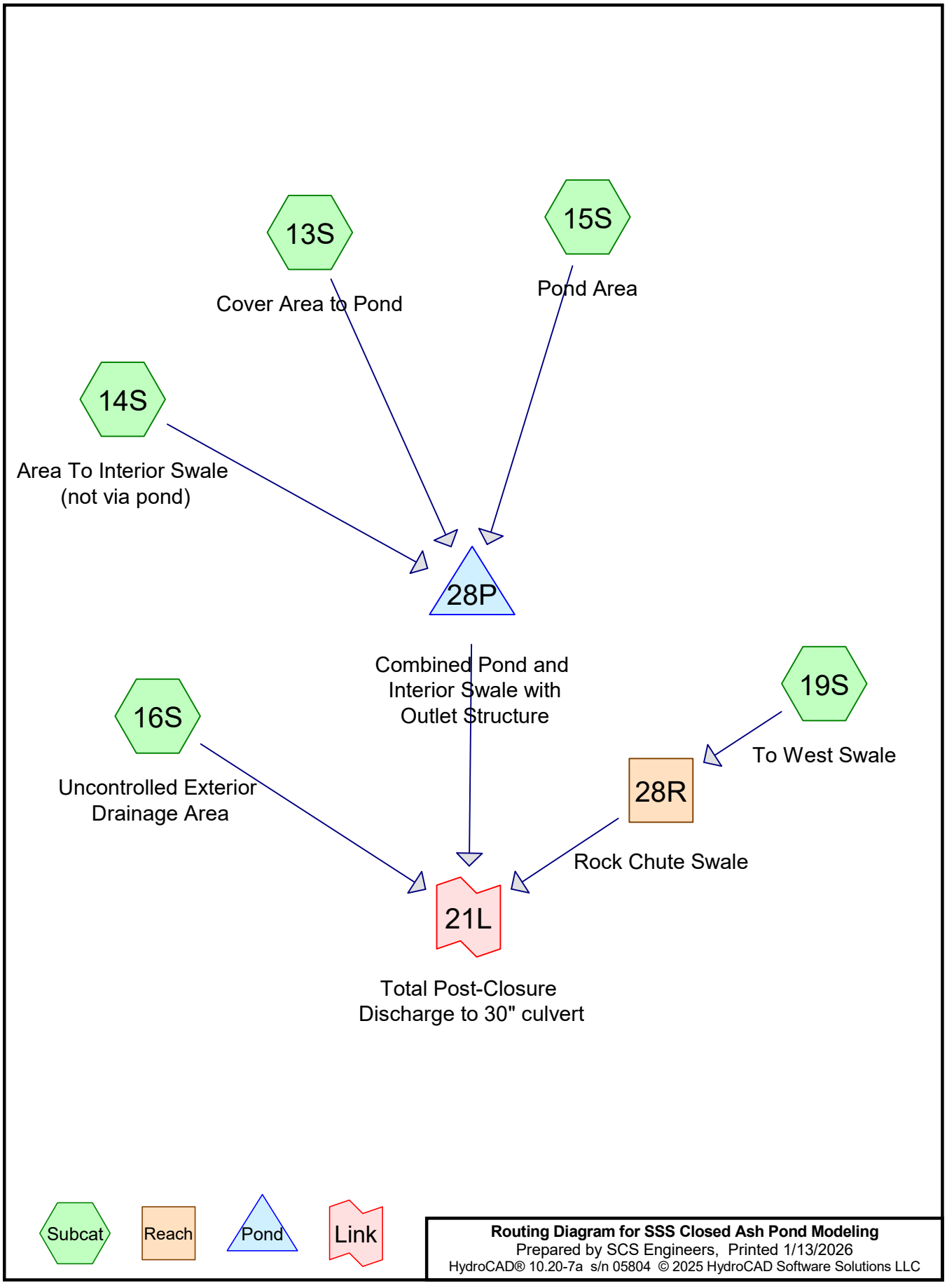
ENGINEER
SCS ENGINEERS
2830 DAIRY DRIVE MADISON, WI 53718-6751
PHONE: (608) 224-2830

DRAWN BY:	RAR	
CHECKED BY:	RJG	
APPROVED BY:	BSS	01/16/2026

PROJECT NO.	25251701.01
DRAWN:	09/12/2025
REVISED:	01/16/2026

Hydrograph Generation

- 1000-year, 24-hour Storm Event


13S
Cover Area to Pond
15S
Pond Area
14S
Area To Interior Swale
(not via pond)
28P
Combined Pond and
Interior Swale with
Outlet Structure
16S
Uncontrolled Exterior
Drainage Area
19S
To West Swale
28R
Rock Chute Swale
21L
Total Post-Closure
Discharge to 30" culvert
Subcat
Reach
Pond
Link
Routing Diagram for SSS Closed Ash Pond Modeling
Prepared by SCS Engineers, Printed 1/13/2026
HydroCAD® 10.20-7a s/n 05804 © 2025 HydroCAD Software Solutions LLC

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	1000-yr, 24hr	MSE 24-hr	4	Default	24.00	1	11.10	2

Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
4.629	74	(14S, 19S)
3.588	74	>75% Grass cover, Good, HSG C (13S, 16S)
0.770	77	Brush, Poor, HSG C (16S)
0.840	98	Interstate area above contributing to pond (13S)
1.120	98	Interstate area above contributing to swale (14S)
0.260	98	interstate above to inlet (16S)
1.018	98	to pond elevation 728.25 (15S)
12.225	**81**	**TOTAL AREA**

Soil Listing (selected nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
4.358	HSG C	13S, 16S
0.000	HSG D	
7.867	Other	13S, 14S, 15S, 16S, 19S
12.225		**TOTAL AREA**

Ground Covers (selected nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subc Num
0.000	0.000	0.000	0.000	4.629	4.629		
0.000	0.000	3.588	0.000	0.000	3.588	>75% Grass cover, Good	
0.000	0.000	0.770	0.000	0.000	0.770	Brush, Poor	
0.000	0.000	0.000	0.000	0.840	0.840	Interstate area above contributing to pond	
0.000	0.000	0.000	0.000	1.120	1.120	Interstate area above contributing to swale	
0.000	0.000	0.000	0.000	0.260	0.260	interstate above to inlet	
0.000	0.000	0.000	0.000	1.018	1.018	to pond elevation 728.25	
0.000	**0.000**	**4.358**	**0.000**	**7.867**	**12.225**	**TOTAL AREA**	

Pipe Listing (selected nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Width (inches)	Diam/Height (inches)	Inside-Fill (inches)	Node Name
1	28P	722.80	722.23	57.0	0.0100	0.011	0.0	12.0	0.0	

Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 13S: Cover Area to Pond Runoff Area=153,270 sf 23.87% Impervious Runoff Depth=8.58"
Flow Length=211' Tc=13.9 min CN=80 Runoff=34.12 cfs 2.515 af

Subcatchment 14S: Area To Interior Runoff Area=210,999 sf 23.12% Impervious Runoff Depth=8.58"
Flow Length=405' Tc=14.6 min CN=80 Runoff=46.17 cfs 3.462 af

Subcatchment 15S: Pond Area Runoff Area=1.018 ac 100.00% Impervious Runoff Depth=10.86"
Tc=0.0 min CN=98 Runoff=16.43 cfs 0.921 af

Subcatchment 16S: Uncontrolled Exterior Runoff Area=84,481 sf 13.41% Impervious Runoff Depth=8.31"
Flow Length=1,222' Tc=22.8 min CN=78 Runoff=14.65 cfs 1.343 af

Subcatchment 19S: To West Swale Runoff Area=39,443 sf 0.00% Impervious Runoff Depth=7.77"
Flow Length=65' Tc=8.2 min CN=74 Runoff=9.93 cfs 0.586 af

Reach 28R: Rock Chute Swale Avg. Flow Depth=0.76' Max Vel=1.59 fps Inflow=9.93 cfs 0.586 af
n=0.045 L=340.0' S=0.0050 '/' Capacity=15.22 cfs Outflow=8.98 cfs 0.586 af

Pond 28P: Combined Pond and Interior Peak Elev=727.99' Storage=246,424 cf Inflow=84.30 cfs 6.898 af
Outflow=1.55 cfs 4.561 af

Link 21L: Total Post-Closure Discharge to 30" culvert Inflow=21.75 cfs 6.491 af
Primary=21.75 cfs 6.491 af

Total Runoff Area = 12.225 ac Runoff Volume = 8.828 af Average Runoff Depth = 8.67"
73.51% Pervious = 8.987 ac 26.49% Impervious = 3.238 ac

Summary for Subcatchment 13S: Cover Area to Pond

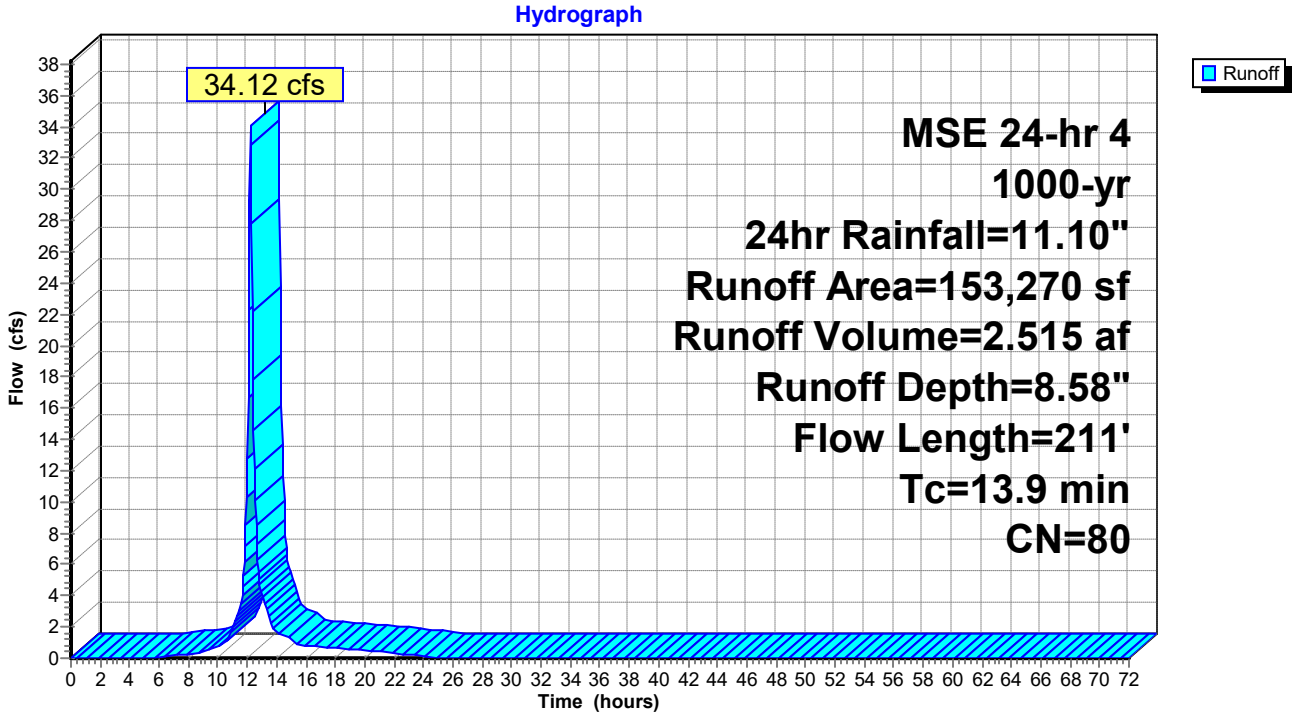
Runoff = 34.12 cfs @ 12.22 hrs, Volume= 2.515 af, Depth= 8.58"
Routed to Pond 28P : Combined Pond and Interior Swale with Outlet Structure

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 1000-yr, 24hr Rainfall=11.10"

	Area (sf)	CN	Description
	116,680	74	>75% Grass cover, Good, HSG C
*	36,590	98	Interstate area above contributing to pond
	153,270	80	Weighted Average
	116,680		76.13% Pervious Area
	36,590		23.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.4	100	0.0300	0.13		**Sheet Flow,** Grass: Dense n= 0.240 P2= 3.04"
1.4	99	0.0300	1.21		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.1	12	0.1460	2.67		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
13.9	211	Total			

Subcatchment 13S: Cover Area to Pond



Summary for Subcatchment 14S: Area To Interior Swale (not via pond)

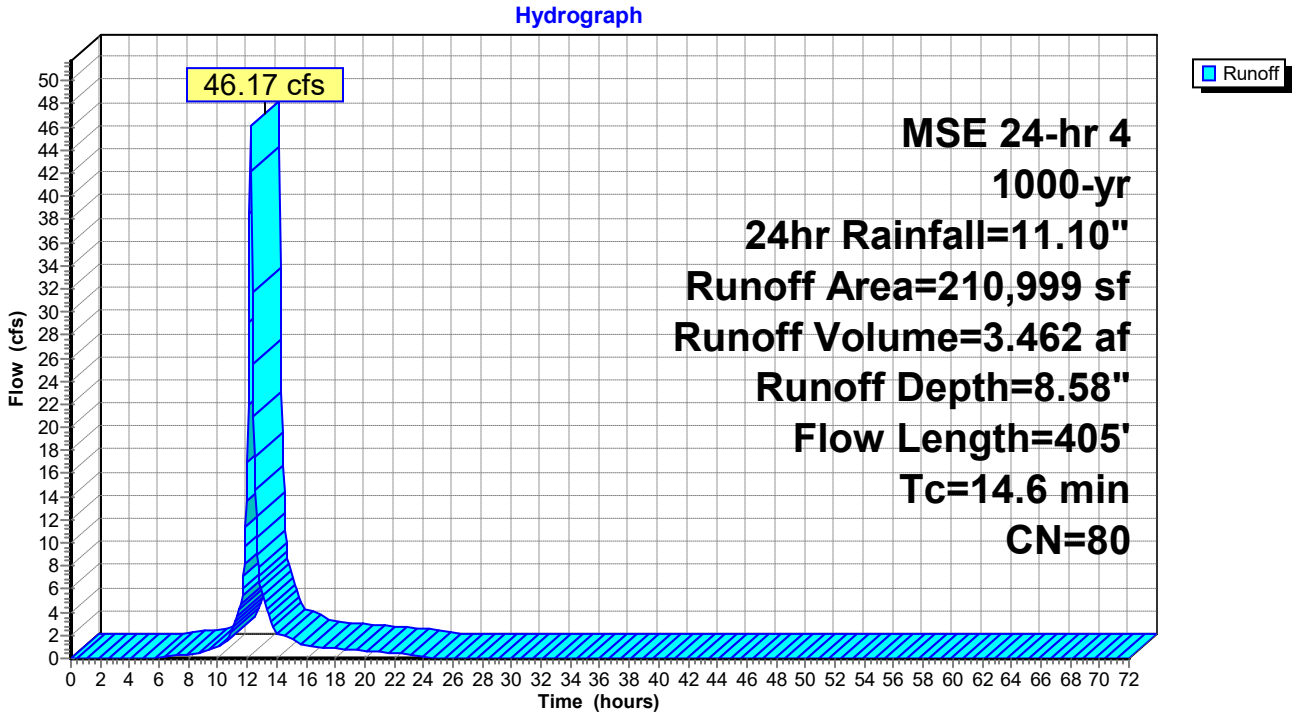
Runoff = 46.17 cfs @ 12.22 hrs, Volume= 3.462 af, Depth= 8.58"
Routed to Pond 28P : Combined Pond and Interior Swale with Outlet Structure

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 1000-yr, 24hr Rainfall=11.10"

	Area (sf)	CN	Description
*	162,212	74	
*	48,787	98	Interstate area above contributing to swale
	210,999	80	Weighted Average
	162,212		76.88% Pervious Area
	48,787		23.12% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.4	100	0.0300	0.13		**Sheet Flow,** Grass: Dense n= 0.240 P2= 3.04"
1.4	100	0.0300	1.21		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.2	25	0.1000	2.21		**Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps
0.6	180	0.0100	4.82	125.30	**Channel Flow, Swale (XS and WP assume 2' water)** Area= 26.0 sf Perim= 21.5' r= 1.21' n= 0.035 Earth, dense weeds
14.6	405	Total			

Subcatchment 14S: Area To Interior Swale (not via pond)



Summary for Subcatchment 15S: Pond Area

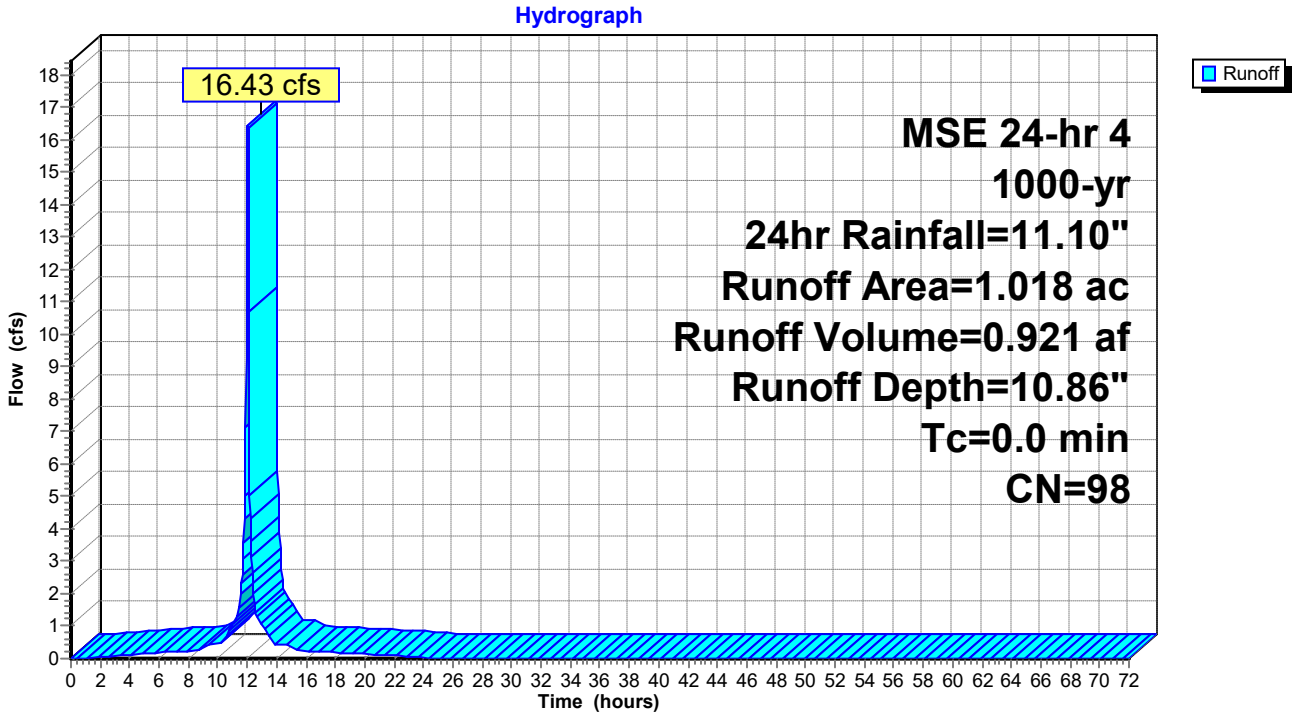
[46] Hint: Tc=0 (Instant runoff peak depends on dt)

Runoff = 16.43 cfs @ 12.04 hrs, Volume= 0.921 af, Depth=10.86"
Routed to Pond 28P : Combined Pond and Interior Swale with Outlet Structure

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 1000-yr, 24hr Rainfall=11.10"

	Area (ac)	CN	Description
*	1.018	98	to pond elevation 728.25
	1.018		100.00% Impervious Area

Subcatchment 15S: Pond Area



Summary for Subcatchment 16S: Uncontrolled Exterior Drainage Area

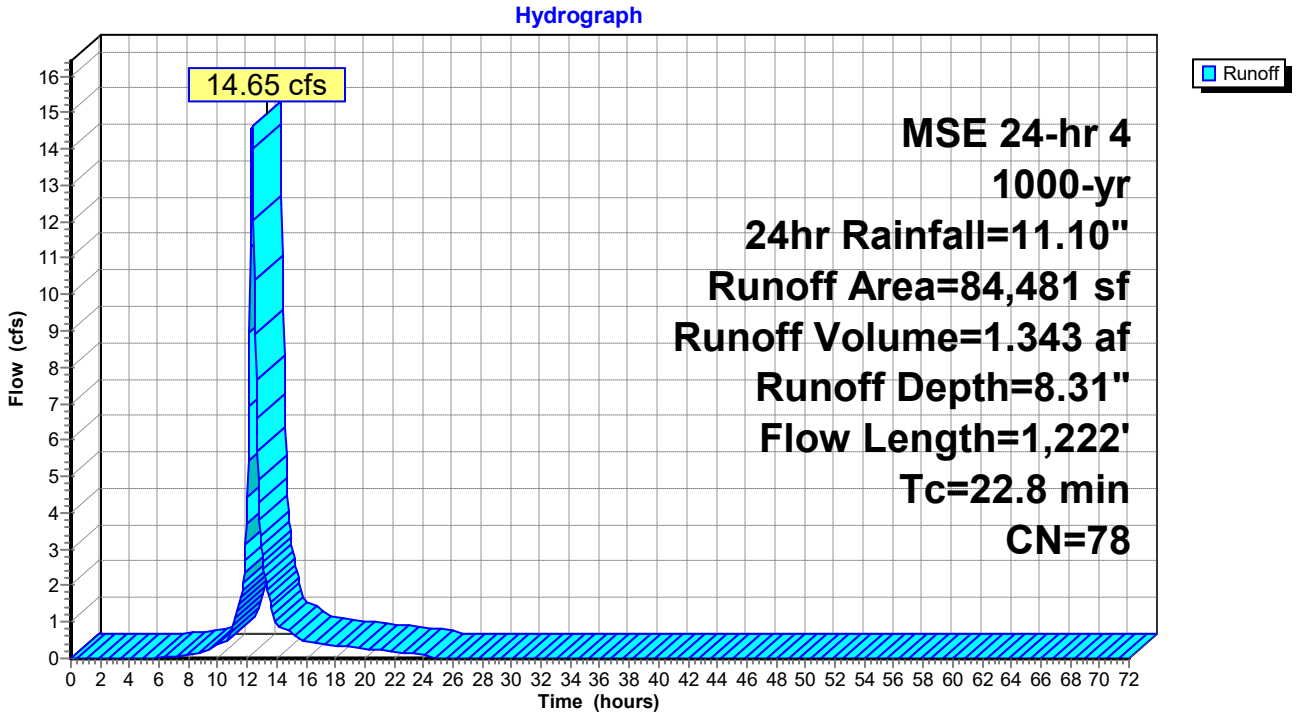
Runoff = 14.65 cfs @ 12.32 hrs, Volume= 1.343 af, Depth= 8.31"
Routed to Link 21L : Total Post-Closure Discharge to 30" culvert

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 1000-yr, 24hr Rainfall=11.10"

	Area (sf)	CN	Description
*	33,541	77	Brush, Poor, HSG C
	39,614	74	>75% Grass cover, Good, HSG C
*	11,326	98	interstate above to inlet
	84,481	78	Weighted Average
	73,155		86.59% Pervious Area
	11,326		13.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.4	15	0.1730	0.18		**Sheet Flow,** Grass: Dense n= 0.240 P2= 3.04"
0.4	6	0.5000	0.24		**Sheet Flow,** Grass: Dense n= 0.240 P2= 3.04"
4.3	36	0.0560	0.14		**Sheet Flow,** Grass: Dense n= 0.240 P2= 3.04"
16.7	1,165	0.0060	1.16		**Shallow Concentrated Flow,** Grassed Waterway Kv= 15.0 fps
22.8	1,222	Total			

Subcatchment 16S: Uncontrolled Exterior Drainage Area



Summary for Subcatchment 19S: To West Swale

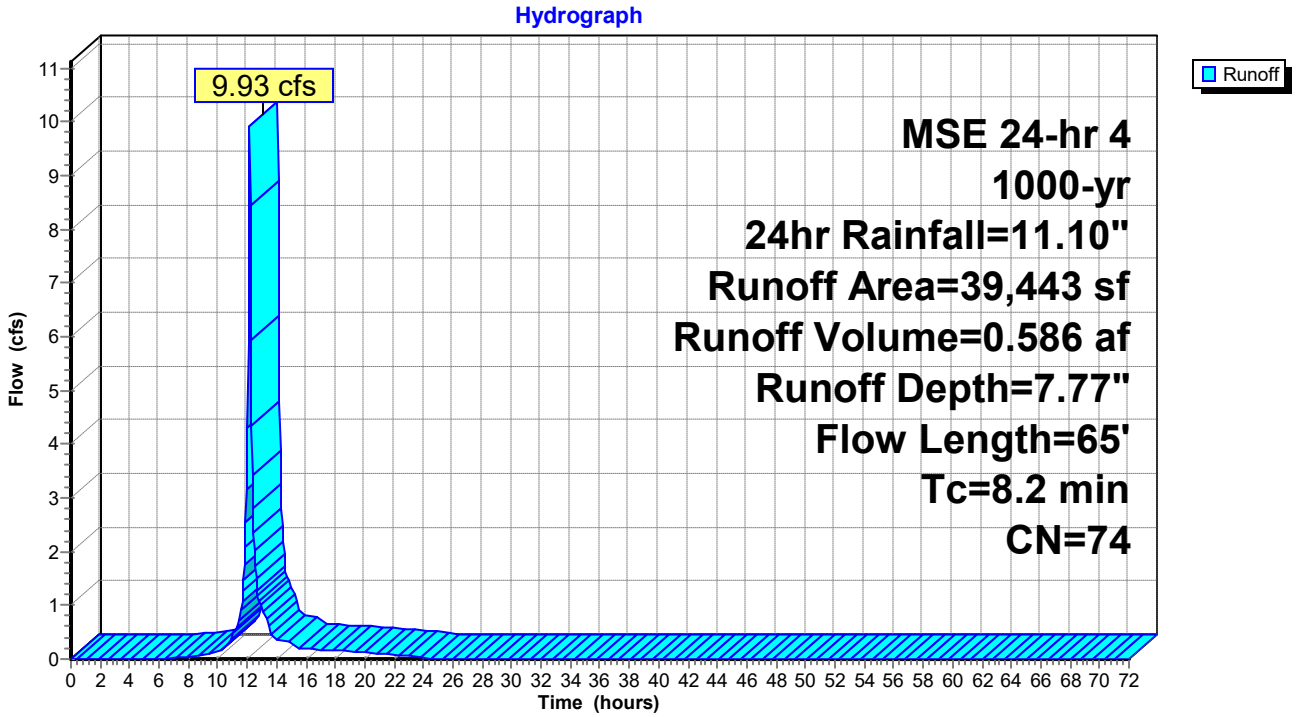
Runoff = 9.93 cfs @ 12.15 hrs, Volume= 0.586 af, Depth= 7.77"
Routed to Reach 28R : Rock Chute Swale

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
MSE 24-hr 4 1000-yr, 24hr Rainfall=11.10"

	Area (sf)	CN	Description
*	39,443	74	
	39,443		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.2	50	0.0300	0.12		**Sheet Flow,** Grass: Dense n= 0.240 P2= 3.04"
1.0	15	0.3300	0.24		**Sheet Flow,** Grass: Dense n= 0.240 P2= 3.04"
8.2	65	Total			

Subcatchment 19S: To West Swale



Summary for Reach 28R: Rock Chute Swale

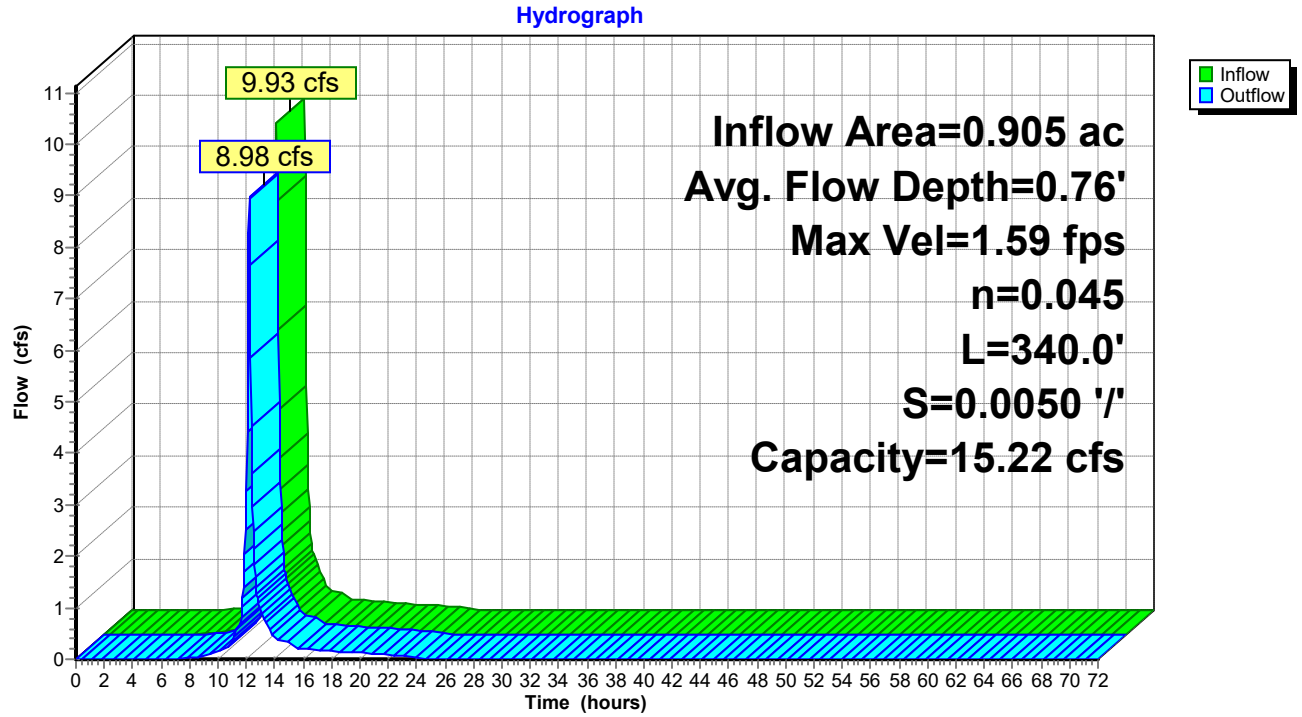
Inflow Area = 0.905 ac, 0.00% Impervious, Inflow Depth = 7.77" for 1000-yr, 24hr event
Inflow = 9.93 cfs @ 12.15 hrs, Volume= 0.586 af
Outflow = 8.98 cfs @ 12.19 hrs, Volume= 0.586 af, Atten= 10%, Lag= 2.4 min
Routed to Link 21L : Total Post-Closure Discharge to 30" culvert

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Max. Velocity= 1.59 fps, Min. Travel Time= 3.6 min
Avg. Velocity = 0.35 fps, Avg. Travel Time= 16.3 min

Peak Storage= 1,913 cf @ 12.19 hrs
Average Depth at Peak Storage= 0.76' , Surface Width= 9.71'
Bank-Full Depth= 1.00' Flow Area= 8.2 sf, Capacity= 15.22 cfs

5.18' x 1.00' deep channel, n= 0.045
Side Slope Z-value= 3.0 '/' Top Width= 11.18'
Length= 340.0' Slope= 0.0050 '/'
Inlet Invert= 729.47', Outlet Invert= 727.77'

‡



Summary for Pond 28P: Combined Pond and Interior Swale with Outlet Structure

Inflow Area = 9.380 ac, 31.75% Impervious, Inflow Depth = 8.82" for 1000-yr, 24hr event
Inflow = 84.30 cfs @ 12.22 hrs, Volume= 6.898 af
Outflow = 1.55 cfs @ 18.80 hrs, Volume= 4.561 af, Atten= 98%, Lag= 395.1 min
Primary = 1.55 cfs @ 18.80 hrs, Volume= 4.561 af
Routed to Link 21L : Total Post-Closure Discharge to 30" culvert

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
Peak Elev= 727.99' @ 18.80 hrs Surf.Area= 55,334 sf Storage= 246,424 cf

Plug-Flow detention time= 1,331.6 min calculated for 4.561 af (66% of inflow)
Center-of-Mass det. time= 1,248.5 min (2,032.1 - 783.6)

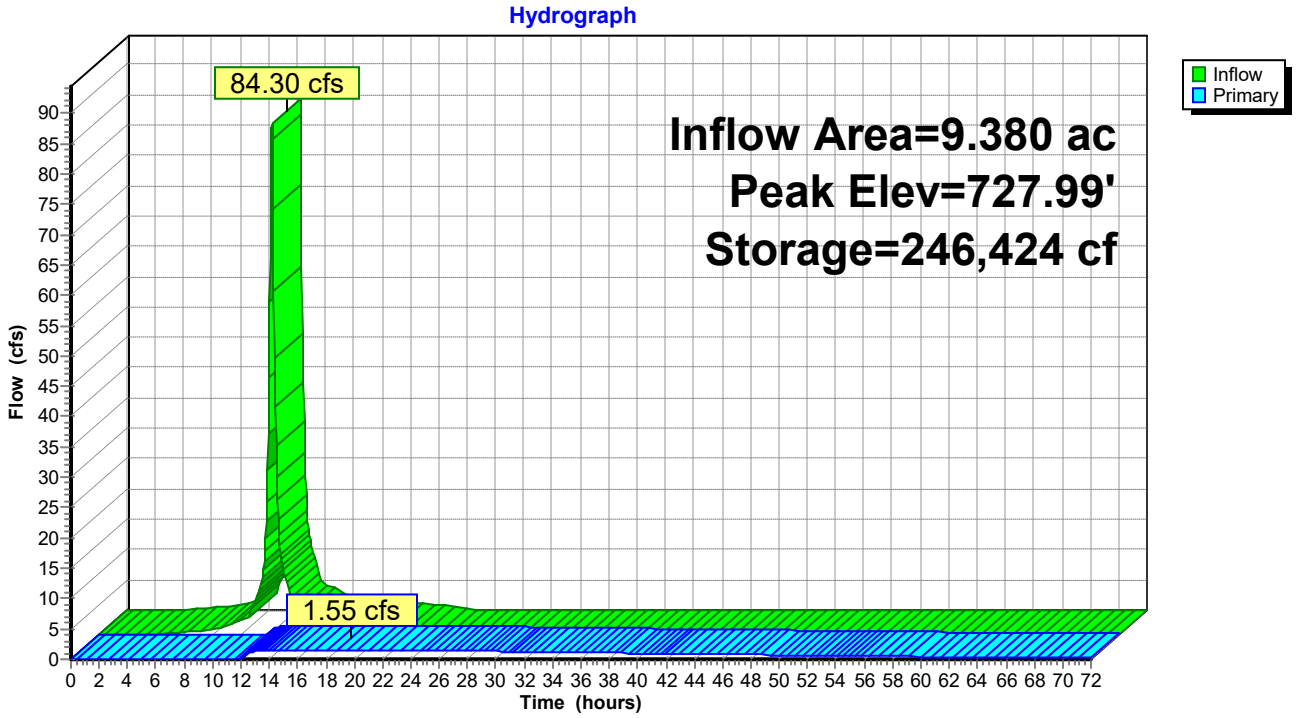
Volume	Invert	Avail.Storage	Storage Description
#1	720.00'	345,145 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
720.00	13,092	0	0
721.00	19,350	16,221	16,221
722.00	22,594	20,972	37,193
723.00	25,449	24,022	61,215
724.00	28,775	27,112	88,327
725.00	33,171	30,973	119,300
726.00	38,437	35,804	155,104
727.00	44,860	41,649	196,752
728.00	55,424	50,142	246,894
729.00	66,722	61,073	307,967
730.00	7,633	37,178	345,145

Device	Routing	Invert	Outlet Devices
#1	Primary	722.80'	**12.0" Round Culvert** L= 57.0' RCP, groove end projecting, Ke= 0.200 Inlet / Outlet Invert= 722.80' / 722.23' S= 0.0100 '/' Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	729.20'	**24.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	722.80'	**2.0" Vert. Orifice/Grate X 2.00** C= 0.600 Limited to weir flow at low heads
#4	Device 1	724.50'	**3.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#5	Device 1	725.00'	**3.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#6	Device 1	726.00'	**2.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#7	Device 1	727.00'	**2.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#8	Primary	729.50'	**10.0' long x 8.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.43 2.54 2.70 2.69 2.68 2.68 2.66 2.64 2.64 2.64 2.65 2.65 2.66 2.66 2.68 2.70 2.74

Primary OutFlow Max=1.55 cfs @ 18.80 hrs HW=727.99' TW=0.00' (Dynamic Tailwater)
- **1=Culvert** (Passes 1.55 cfs of 8.73 cfs potential flow)
  - **2=Orifice/Grate** (Controls 0.00 cfs)
  - **3=Orifice/Grate** (Orifice Controls 0.47 cfs @ 10.88 fps)
  - **4=Orifice/Grate** (Orifice Controls 0.43 cfs @ 8.83 fps)
  - **5=Orifice/Grate** (Orifice Controls 0.40 cfs @ 8.15 fps)
  - **6=Orifice/Grate** (Orifice Controls 0.15 cfs @ 6.65 fps)
  - **7=Orifice/Grate** (Orifice Controls 0.10 cfs @ 4.59 fps)
- **8=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 28P: Combined Pond and Interior Swale with Outlet Structure



Summary for Link 21L: Total Post-Closure Discharge to 30" culvert

Inflow Area = 12.225 ac, 26.49% Impervious, Inflow Depth > 6.37" for 1000-yr, 24hr event
Inflow = 21.75 cfs @ 12.26 hrs, Volume= 6.491 af
Primary = 21.75 cfs @ 12.26 hrs, Volume= 6.491 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Link 21L: Total Post-Closure Discharge to 30" culvert