solutions and action

Interstate Power and Light Company
Sixth Street Generation Station
CCR Surface Impoundment Structural Stability Assessment
154.018.028.007.001
Report issued: May 6, 2026

Hard Hat Services
ph: 630-688-1314
hardhatinc.com
245 Kenilworth Ave
Glen Ellyn, IL 60137

Executive Summary

This Structural Stability Assessment (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 serves as the initial structural stability assessment of the SSS Closed Ash Pond in Cedar Rapids, Iowa in accordance with §257.73(b) and §257.73(d) of the CCR Rule and is focused on documenting whether the design, construction, operation, and maintenance of the CCR unit is consistent with recognized and generally accepted good engineering practices for the maximum volume of CCR and CCR wastewater which can be impounded within each CCR unit.

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1. INTRODUCTION

The owner or operator of Coal Combustion Residual (CCR) units must conduct an initial and periodic structural stability assessment and document whether the design, construction, operation, and maintenance of the CCR unit is consistent with recognized and generally accepted good engineering practices for the maximum volume of CCR and CCR wastewater which can be impounded therein. This Report serves as the initial review and has been prepared in accordance with the requirements of §257.73(b) and §257.73(d) of the CCR Rule.

1.1 CCR Rule Requirements

The CCR Rule requires an initial and periodic structural stability assessment by a qualified professional engineer (PE) for existing and legacy CCR surface impoundments with a height of 5 feet or more and a storage volume of 20 acre-feet or more; or the existing CCR surface impoundment has a height of 20 feet or more (40 CFR §§ 257.73(b), 257.73(d) and 257.83(b)).

1.2 Structural Stability Assessment Applicability

The Interstate Power and Light Company (IPL), Sixth Street Generating Station (SSS) in Cedar Rapids, Iowa has one legacy CCR surface impoundment, identified as the SSS Closed Ash Pond (Figure 1). 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 §257.73(b)(1) and §257.73(b)(2) 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, Iowa 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

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 (Figure 1). 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 (Appendix A).

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 stormwater retention pond on top of the cap, which handles stormwater runoff from Interstate 380. This stormwater 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. A Federal Emergency Management Agency (FEMA) Flood Zone Map for Cedar Lake, IA has been included in Appendix B.

3. STRUCTURAL STABILITY ASSESSMENT- §257.73(d)

This Report documents whether the design, construction, operation, and maintenance of the SSS Closed Ash Pond CCR unit is consistent with recognized and generally accepted good engineering practices for maximum volume of CCR and CCR wastewater which can be impounded.

3.1 SSS Closed Ash Pond Information

The southwest embankment of the SSS Closed Ash Pond consists of approximately 5 horizontal to 1.0 vertical (5H:1V) at the top of the slope and 1.5H:1V at the toe of the slope on the exterior side. Exterior slopes of the northwest embankment consist of approximately 3H:1V at the top of the slope and 2H:1V at the toe of the slope. With the engineering cap construction, there are no interior embankment slopes. The cap area and embankment slopes are vegetated and mowed to control the growth of woody vegetation.

In 2025, subsurface soil investigations were undertaken to collect soil samples and determine the in-situ density of the embankments and install monitoring wells. The soil borings were advanced using hollow stem augers and sampling was completed with a standard split spoon (ASTM D1556). The density information, Appendix C, indicates the conditions of the embankments.

Based on the annual inspections conducted by Hard Hat Services, there have been no significant changes regarding settlement, instability, or reconfiguration of the SSS Closed Ash Pond.

3.1.1 CCR Unit Foundation and Abutments - §257.73(d)(1)(i)

As identified within a 2002 Subsurface Exploration for the Pulverizer Additions,[1] surficial deposits at the site include recent alluvium associated with the nearby Cedar River. These deposits include sand and clay which were deposited by flowing water of the Cedar River. The nature of the deposit depends more on the velocity of the water flow at the time of deposition than any other single factor, with sand and gravel associated with the faster moving water, and silt and clay associated with slower moving or stagnant water.

The bedrock at SSS is derived from the Wapsipinicon Formation of the Middle Devonian Series, Devonian Period, Paleozoic Era (some 385 million years ago). The Wapsipinicon formation includes, in order of decreasing prevalence, limestone, dolomite, and shale.

From the Subsurface Exploration for the Pulverizer Additions, the fill below the SSS basement floor varied in depth from about 1.2 feet to 10.5 feet and was fractured weathered to highly weathered, very poor to fair crystalline dolomite was encountered. The dolomite bedrock was encountered to the maximum depth explored which was 22.5 feet. Rock quality was typically very poor as numerous relative fresh fractures were visible in the core samples recovered. It is possible that the near surface bedrock at SSS may have been disturbed in the initial construction, perhaps by blasting.

An Ash Pond Slope Stability and Hydraulic Analysis[2] in 2011, which was prior to the closure construction activities, included five borings and three cone penetrometer tests (CPT) atop the

[1] Subsurface Exploration, Proposed Pulverizer Additions, 6th Street Power Plant, 2002, Team Services (Soil, Environmental and Material Consultants)
[2] Ash Pond Slope Stability and Hydraulic Analysis, 6th Street Generating Station, 2011, Aether DBS

surrounding legacy CCR impoundment. The fill in all five borings was identified as ash/slag from 17 to 24 feet in depth except for three borings which contained surficial clay, which was observed from 4.5 to 7 feet thick. The locations of clay likely indicates that clay was placed on the eastern and southern embankments to construct the modern 1980s configuration of the legacy CCR impoundment. Native soil under the fill was identified as sand with a thin clay or peat layer present in some of the borings at the native soil interface. The CPT results indicated that the alluvial sands found under the fill was dense and have no inherent instability.

3.1.2 Slope Protection - §257.73(d)(1)(ii)

The northwest and southwest embankment tops are generally at the same elevation as the engineered cap. The southwest embankment of the SSS Closed Ash Pond consists of approximately 5H:1V at the top of the slope and 1.5H:1V at the toe of the slope on the exterior side. Exterior slopes of the northwest embankment consist of approximately 3H:1V at the top of the slope and 2H:1V at the toe of the slope. With the engineered cap construction there are no interior embankment slopes. The cap area and embankment slopes are vegetated and mowed to control the growth of woody vegetation.

Sudden drawdown is addressed in Section 3.2.7.

3.1.3 CCR Embankment Density- §257.73(d)(1)(iii)

The embankments consist of stiff to hard clay and silt fill overlying CCR fill that varies from medium dense to very loose. The results of soil borings taken in 2025 show that the upper clay and silt fill is well compacted to a density and strength that is comparable to the native sands below the embankment. The lower CCR fill is not as well compacted as the clay and silt fill

(Appendix C). The SSS Safety Factor Report identifies stability results under various loading conditions.

3.1.4 Vegetation Management - §257.73(d)(1)(iv)

Historically, vegetation management has been conducted on a periodic basis. Annual inspections and 7-day inspections have been conducted according to the CCR Rule. Based on those inspections, the facility has continued to routinely manage vegetation, minimizing animal activity and deep rooting vegetation. The vegetation management has been maintained with recognized and generally accepted good engineering practices.

3.1.5 Spillway Management - §257.73(d)(1)(v)

The SSS Closed Ash Pond includes a pond atop of the engineered cap. The pond area has an overflow pipe which only discharges water when the water elevation reaches the corresponding outflow level. The pond is largely an evaporation pond which only overflows from significant storm events. As identified in the SSS Inflow Design Flood Control Plan, the SSS Closed Ash Pond will store the 1000-year storm event without overtopping. The pond is also equipped with an emergency overflow over cut down from the maximum berm elevation which would discharge at same location as the discharge pipe. The emergency overflow is a grass slope which is capable of preventing erosion.

3.1.6 Hydraulic Structures - §257.73(d)(1)(vi)

The SSS Closed Ash Pond area has a 12-inch concrete discharge pipe which only discharges water when the water elevation reaches the corresponding outflow elevation. On October 29, 2025, the concrete discharge was inspected by Ground Penetrating Radar Systems using a remote-controlled camera. No signification issues or repairs were identified during the inspection. The

pond largely operates as an evaporation pond which only overflows from significant storm events. The SSS Closed Ash Pond has been designed to maintain structural integrity and is free of significant deterioration, deformation, distortion, bedding deficiencies, sedimentation, and debris which may negatively affect the operation of the hydraulic structure.

3.1.7 Sudden Drawdown - §257.73(d)(1)(vii)

The embankments of the SSS Closed Ash Pond can be subject to the rise and fall of flood water from the Cedar River. The historic typical stage of the Cedar River is approximately 705-710 feet elevation range (US Army Corps of Engineers Cedar River at Cedar Rapids, IA River Gage Historic Data) (Appendix D). The Cedar River 100-year flood condition will rise to approximately 726.5 feet elevation with the record high of approximately 731 feet elevation that occurred during the June 2008 flood event (US Army Corps of Engineers Cedar River at Cedar Rapids, IA River Gage Historic Data). The embankments are constructed of clay, silt, and CCR that have the potential to saturate and lose strength during a sudden drawdown event. IPL identified that there were no reported negative impacts to the downstream slope of the embankments following the historic June 2008 flood event or since the engineered cap construction. Additionally, the rise of the flooding is often rapid, but drawdown is generally slower that will reduce the potential for sudden drawdown slope instability.

4. QUALIFIED PROFESSIONAL ENGINEER CERTIFICATION

To meet the requirements of 40 CFR 257.73(d)(3), 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 257.73(b) and 40 CFR 257.73(d).

By: _____

Name: Mark Loerop

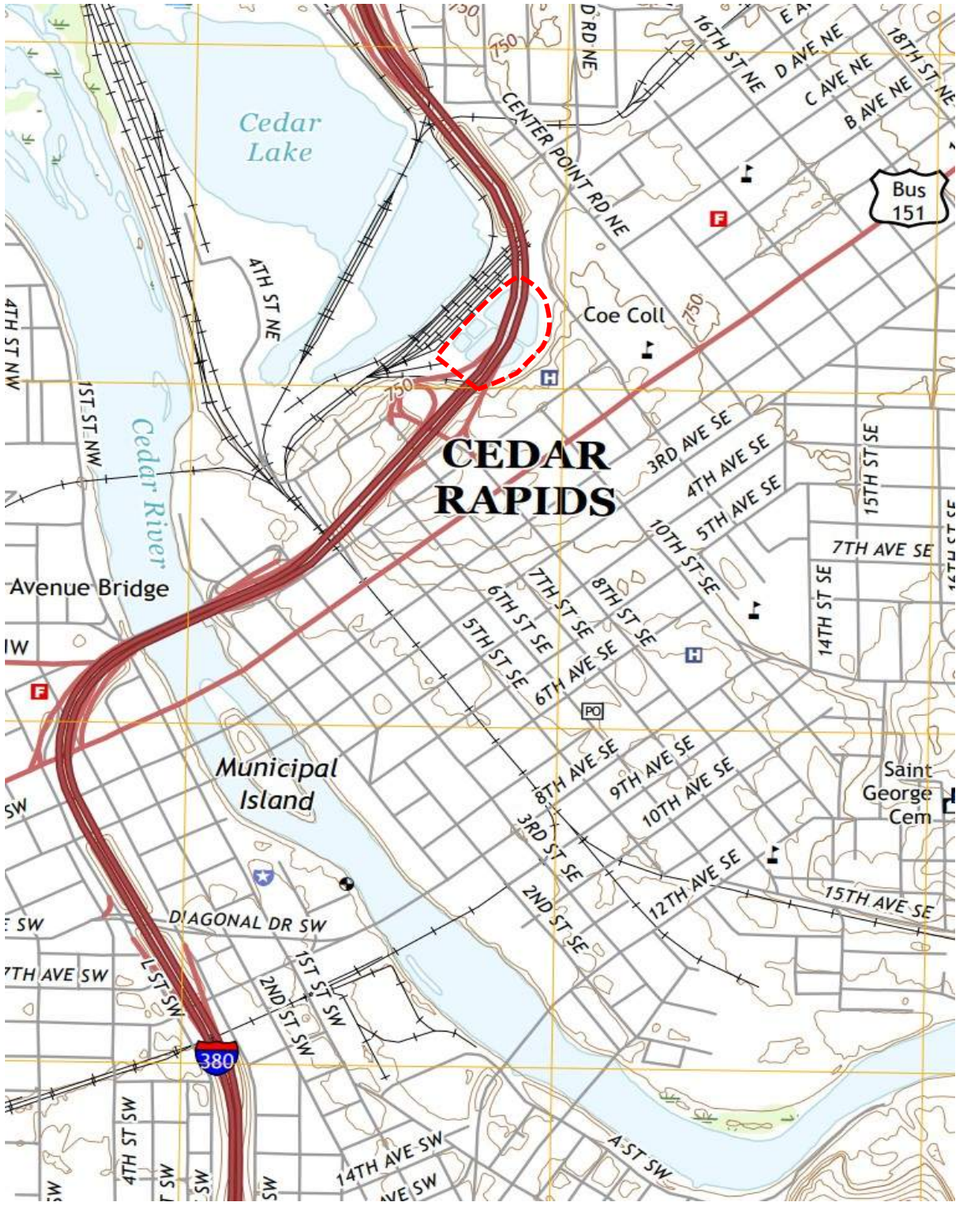
Date: May 6, 2026

FIGURES

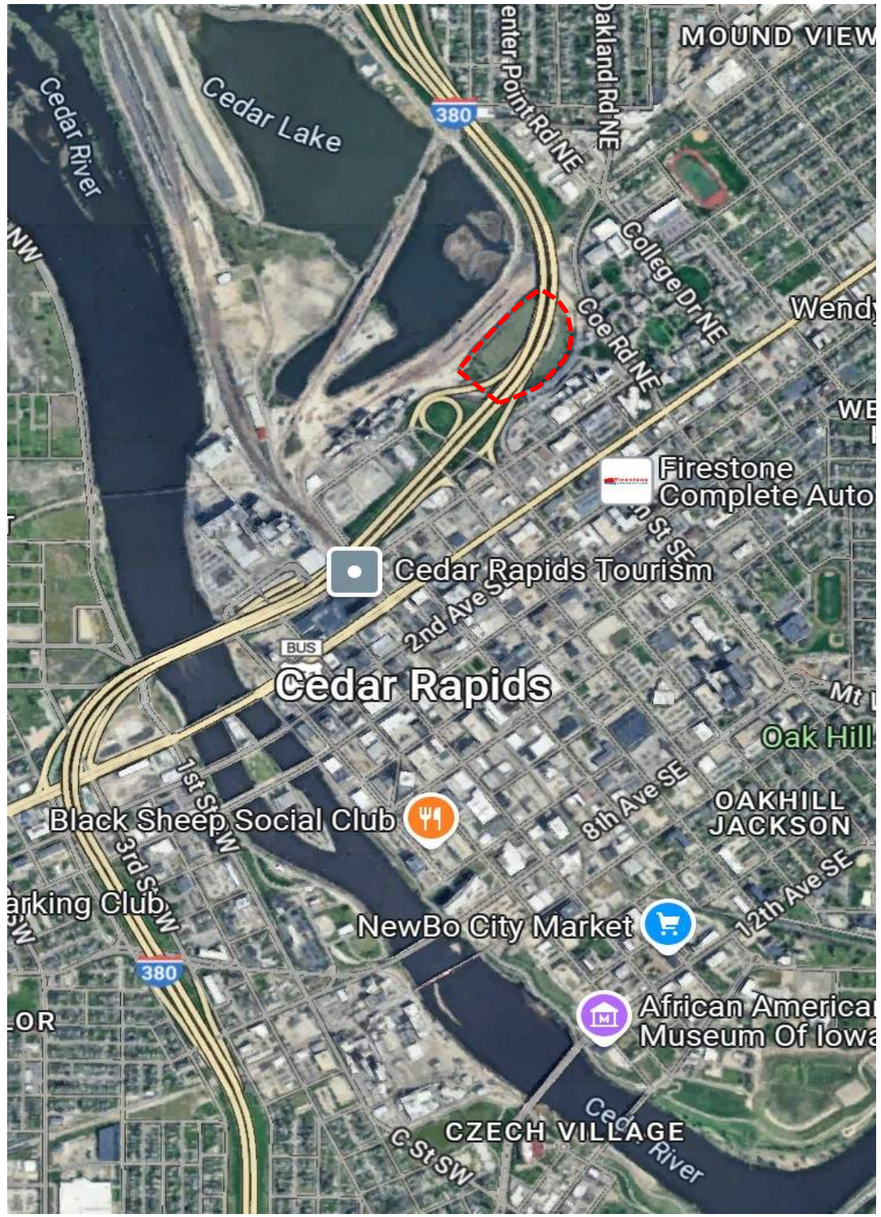
Alliant Energy
Interstate Power and Light Company
Sixth Street Generating Station
Cedar Rapids, Iowa

Structural Stability Assessment

Topography Map



Aerial Photo



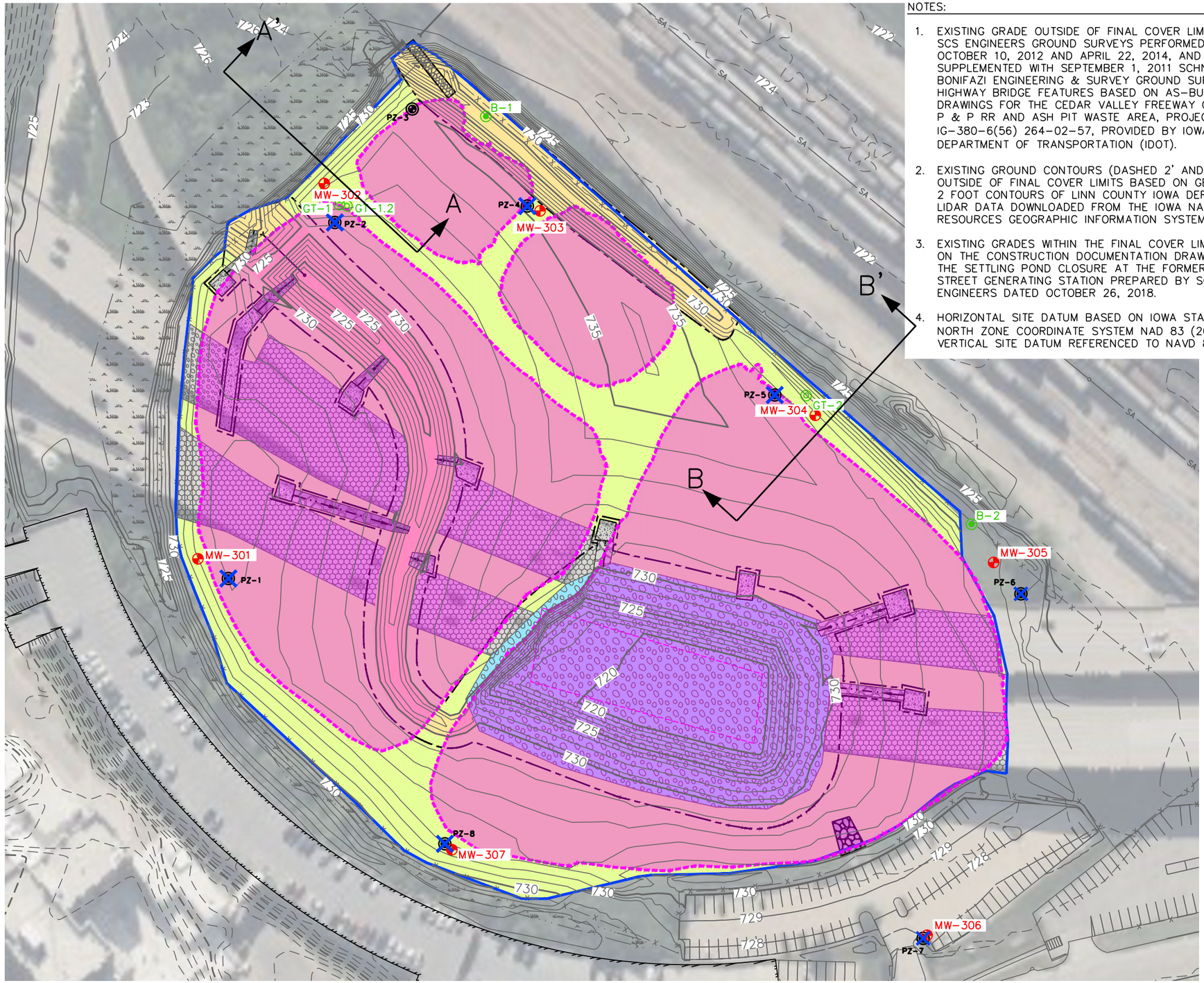
Approximate Property Boundary

hard hat SERVICES	Site Location Sixth Street Generating Station Interstate Power and Light Company	Drawing Figure 1 Date 7/8/2025

APPENDIX A – Closed Ash Pond Cross Section Location

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

Structural Stability Assessment



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, NORTH ZONE 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 IMAGE FROM BING MAPS USING CIVIL 3D.
7. GEOPROBE/1"DIAMETER TEMPORARY MONITORING WELLS (PIEZOMETERS) GP-1/PZ-1 THRU GP-8/PZ-8 DRILLED/INSTALLED BY TERRACON ON AUG. 4-5, 2025.
8. PZ-1 THRU PZ-8 SURVEYED BY MOHN SURVEYING ON AUG. 27, 2025.
9. EXISTING PZ-3 TO REMAIN AS WATER LEVEL ONLY WELLS FOR INDEFINITE PERIOD OF TIME.
10. GEOTECHNICAL SOIL BORINGS AND 2" DIAMETER MONITORING WELLS MW-301 THRU MW-307 DRILLED/INSTALLED BY TERRACON ON NOVEMBER 10-13, 2025.
11. SOIL BORINGS B-1 AND B-2 WERE DRILLED ON APRIL 23-24, 2014.

LEGEND

- EXISTING GRADE (1' CONTOUR)
- 725 EXISTING GRADE (5' CONTOUR)
- EXISTING GRADE (2' CONTOUR)
- 740 EXISTING GRADE (10' CONTOUR)
- EXISTING WETLAND
- x x EXISTING CHAIN LINK FENCE
- PZ-5 EXISTING GEOPROBE SOIL BORING/1" DIAMETER MONITORING WELL (PIEZOMETER) WATER LEVEL ONLY
- LIMITS OF LAMINATED GEOSYNTHETIC CLAY LINER (GCL)
- SOIL FINAL COVER AREA
- POND FINAL COVER AREA
- SWALE FINAL COVER AREA
- LIMITS OF FINAL COVER
- APPROXIMATE LIMIT OF SETTLING PONDS PRIOR TO FINAL COVER CONSTRUCTION
- PZ-5 ABANDONED 1" DIAMETER MONITORING WELL (PIEZOMETER)
- MW-305 EXISTING 2" DIAMETER MONITORING WELL
- GT-2 GEOTECHNICAL SOIL BORING (2025)
- B-2 SOIL BORING (2014)

N

100 0 100

SCALE: 1" = 100'

PROJECT NO.	25225170.01	DRAWN BY:	AR
DRAWN:	12/08/2025	CHECKED BY:	BSS
REVISED:	03/10/2026	APPROVED BY:	BSS 05/06/2026

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

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

SITE: FORMER 6TH STREET GENERATING STATION
CEDAR RAPIDS, IOWA

CROSS SECTION LOCATION MAP

FIGURE 1

I:\25225170.01\Drawings\Slope Stability\1_Section A-A' and B-B' Location Map.dwg, 3/10/2026 4:40:35 PM

APPENDIX B – FEMA Flood Zone Profiles for Cedar Lake

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

Structural Stability Assessment

National Flood Hazard Layer FIRMette

FEMA

91°40'10"W 41°59'31"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

91°39'33"W 41°59'4"N

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 1/7/2026 at 4:57 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

APPENDIX C – Boring Logs and Lab Data

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

Structural Stability Assessment

SCS ENGINEERS
Environmental Consultants and Contractors

SOIL BORING LOG INFORMATION

Revised 5/6/2026

Route To: Watershed/Wastewater ☐ Waste Management ☒
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
IPL 6th Street Legacy CCR Site SCS#: 25225170.00	PWTS#224069-01	GT-1

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Scott Zeien Terracon	11/12/2025	11/12/2025	SPT auger

Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			13.0 Feet	733.0 Feet MSL	4.3 in

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 3,463,429 N, 5,420,597 E S / C / N
SW 1/4 of NE 1/4 of Section 21, T 83 N, R 7 W
Lat 41° 59' 10.2" Long 91° 39' 47.6"
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	Civil Town/City/ or Village
	Linn	Cedar Rapids, Iowa

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Pocket Penetrometer Reading (tsf)	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			0	TOPSOIL, very dark grayish brown (10YR 3/2), organics (root/grass), silt, sand, very brittle. (FILL)	TOPSOIL									
S1	21	22	1.5	LEAN CLAY (CL), dark brown, some silt, fine to coarse sand, trace fine gravel, subrounded and subangular sand, subrounded gravel, root hairs, very hard, brownish orange mottling. (FILL)	CL				4.5+	M				
S2	15	23	4.5	SILT with SAND (ML), yellowish orange, very fine to fine sand, subrounded sand, light gray mottling, black mottling at base of interval. (FILL)	ML				4.5+	M				
S3			6.0	SILT with SAND (ML) and cement, black. (FILL)	ML									
S4	16.5	13	7.5	SILT with SAND (ML), yellowish orange, very fine to fine sand, subrounded sand, gray mottling, some clay, clay content increases with depth of silt interval. (FILL)	ML				3.0	M				
S5	15	6	9.0	LEAN CLAY (CL), greenish gray, some silt, very plastic, olive gray mottling, trace root hairs. (FILL)	CL				1.5	M+				
S6	10	2	10.5						0.25					
S7			12.0	ASH, black, bottom ash and fly ash, grain sizes variable, very loose to loose. (FILL)					--	W				Started drilling with water at 13'
S8	24	1	13.5						--	W				
S9	18	5	15.0		FILL				--	W				
			16.5											
			18.0	pocket of poorly grained sand										
			19.5	some coal/cinders/organics from 19-20'										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm	Tel:
Bri Salome	SCS 2830 Dairy Drive, Madison, WI 53718	Fax:

Boring Number GT-1 Page 2 of 3

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Pocket Penetrometer Reading (tsf)	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
S10	13.5	50 FOR 5"	21.0	WOOD	WOOD				!	W				
S11			22.5	LEAN CLAY, black, very soft.	CL									
S12	16	4	24.0	SILT (ML), very dark brown, trace clay, medium stiff, brittle, root hairs, peaty.	ML				0.25	M				
S13									0.75					
S14	19	3	25.5	LEAN CLAY (CL), black, trace silt, medium stiff, very plastic, layer of organics overlay.	CL				0.75	W				
S15	13	14	27.0	POORLY GRADED SAND (SP), gray, fine to coarse sand, loose to medium dense, subrounded sand.	SP				--	W				
S16	11	15	28.5						--	W				
S17	10	6	30.0	some fine to coarse subrounded gravel 29-34'					--	W				
S18	12	34	31.5						--	W				
S19	14	50 FOR 5"	33.0						--	M+				
S20	17	24	34.5	POORLY GRADED SAND (SP), olive gray, fine to coarse sand, fine to coarse gravel, dense, subrounded sand, subrounded and subangular gravel, pockets of fine sand, pocket of just gravel, lots of variety in grain size, not uniform, very light brown at bottom.	SP				--	W				
S21	18	57	36.0	POORLY GRADED SAND (SP), light gray, very fine to medium sand, very trace fine gravel, very dense, subrounded sand and gravel.	SP				--	W				
S22	10	39	37.5						--	M+				
S23	13	34	39.0	POORLY GRADED SAND (SP), olive gray, fine to coarse sand, fine to coarse gravel, medium to very dense, subrounded sand, subrounded and subangular gravel, pockets of fine sand, pocket of just gravel, lots of variety in grain size, not uniform, very light brown at bottom.	SP				--	W				
S24	13	23	40.5						--	W				
			42.0											
			43.5											
			45.0	POORLY GRADED SAND (SP), light brownish gray, very fine to medium sand, trace coarse sand, trace fine gravel, medium dense to dense, subrounded sand and gravel.	SP				--	W				
			46.5											
			48.0											
			49.5											
			51.0											
			52.5											

Boring Number GT-1 Page 3 of 3

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Pocket Penetrometer Reading (tsf)	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
			54.0	POORLY GRADED SAND (SP), light brownish gray, very fine to medium sand, trace coarse sand, trace fine gravel, medium dense to dense, subrounded sand and gravel. *(continued)*										
S25	11	30	55.5	some fine to coarse gravel					--	W				
			57.0											
			58.5											
S26	12	25	60.0						--	W				
			61.5		SP									
			63.0											
			64.5											
S27	11	20	66.0	color change - light orangish brown, some silt					--	W				
			67.5											
			69.0	color change - light gray, fine to coarse subrounded sand										
S28	19	33	70.5	pocket of subrounded gravel					--	W				
				color change - light brown, fine to medium sand, trace coarse, subrounded.										
				End of boring at 71'.										

SCS ENGINEERS
Environmental Consultants and Contractors

SOIL BORING LOG INFORMATION

Revised 5/6/2026

Route To: Watershed/Wastewater ☐ Waste Management ☒
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
IPL 6th Street Legacy CCR Site SCS#: 25225170.00	PWTS#224069-01	GT-1.2

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Scott Zeien Terracon	11/13/2025	11/13/2025	SPT auger

Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			13.0 Feet	733.0 Feet MSL	4.3 in

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 3,463,436 N, 5,420,598 E S / C / N
SW 1/4 of NE 1/4 of Section 21, T 83 N, R 7 W
Lat 41 ° 59 ' 10.3 "
Long 91 ° 39 ' 47.6 "
Local Grid Location ☐ N Feet ☐ S ☐ E Feet ☐ W

Facility ID	County	Civil Town/City/ or Village
	Linn	Cedar Rapids, Iowa

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Pocket Penetrometer Reading (tsf)	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			0	Blind drilled to 24'. Reference GT-1 for lithology.										
			1.5											
			3.0											
			4.5											
			6.0											
			7.5											
			9.0											
			10.5											
			12.0											
			13.5											
			15.0											
			16.5											
			18.0											
			19.5											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature		Firm	Tel:
	Bri Salome	SCS 2830 Dairy Drive, Madison, WI 53718	Fax:

Boring Number GT-1.2 Page 2 of 2

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Pocket Penetrometer Reading (tsf)	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
			21.0	Blind drilled to 24'. Reference GT-1 for lithology. *(continued)*										
			22.5											
	NA		24.0	SHELBY TUBE 24-26'. ORGANIC CLAY (OH), black, with sand, medium stiff.	OH				0.5		60	36	82.3	Water Content = 39.1%
			25.5	End of boring at 26'. Collected one shelby tube.										

SCS ENGINEERS
Environmental Consultants and Contractors

SOIL BORING LOG INFORMATION

Revised 5/6/2026

Route To: Watershed/Wastewater ☐ Waste Management ☒
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
IPL 6th Street Legacy CCR Site SCS#: 25225170.00	PWTS#224069-01	GT-2

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Scott Zeien Terracon	11/12/2025	11/12/2025	SPT auger

Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			16.0 Feet	733.0 Feet MSL	4.3 in

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 3,463,873 N, 5,420,778 E S / C / (N)
SW 1/4 of NE 1/4 of Section 21, T 83 N, R 7 W

Lat 41 ° 59 ' 14.5 "
Long 91 ° 39 ' 45.1 "

Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	Civil Town/City/ or Village
	Linn	Cedar Rapids, Iowa

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties: Pocket Penetrometer Reading (tsf)	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			0	Blind drilled 0-24'. Reference SP-304 for lithology.										
			1.5											
			3.0											
			4.5											
			6.0											
			7.5											
			9.0											
			10.5											
			12.0											
			13.5											
—			15.0											Drilling with mud started at 15'
			16.5											
			18.0											
			19.5											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm	Tel:
Bri Salome	SCS 2830 Dairy Drive, Madison, WI 53718	Fax:

Boring Number GT-2

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Pocket Penetrometer Reading (tsf)	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
			21.0	Blind drilled 0-24'. Reference SP-304 for lithology. *(continued)*										
			22.5											
			24.0	SHELBY TUBE 24-26'. SANDY ORGANIC SILT (OH), black, medium stiff.	OH				1.0		72	28	51.4	Water Content = 59.2%
	NA		25.5											
S1	13	13	27.0	POORLY GRADED SAND (SP), olive gray, fine to coarse sand, trace fine gravel, loose to medium dense, subrounded sand, subrounded and subangular gravel.	SP				--	W				
			28.5											
S2	12	10	30.0						--	W				
			31.5											
S3	11	8	33.0						--	W				
			34.5											
S4	12	15	36.0						--	W				
S5	16	25	37.5	POORLY GRADED SAND (SP), light gray, very fine to fine sand, trace medium sand, medium dense, subrounded very fine to fine, subangular medium.	SP				--	W				
			39.0	trace subrounded coarse sand, some subangular medium sand										
S6	13	16	40.5						--	W				
S7	12	15	42.0	POORLY GRADED SAND (SP), light gray, very fine to medium sand, trace coarse sand, trace fine to coarse gravel, medium dense, subrounded sand and gravel.	SP				--	W				
			43.5											
S8	17	4	45.0	SILT (ML), greenish gray, very soft.	ML				--	W				
			46.5											
S9	10	0	48.0	POORLY GRADED SAND (SP), light gray, very fine to fine sand, trace medium sand, very loose, subrounded very fine to fine, subangular medium.	SP				--	W				
S10	11	7	49.5	POORLY GRADED SAND (SP), light gray, very fine to medium sand, loose to medium dense, subrounded sand.	SP				--	W				
			51.0											
			52.5											

Boring Number GT-2 Page 3 of 3

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Pocket Penetrometer Reading (tsf)	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
			54.0	POORLY GRADED SAND (SP), light gray, very fine to medium sand, loose to medium dense, subrounded sand. *(continued)*										
S11	13	8	55.5						--	W				
			57.0											
			58.5	color change - light olive gray										
S12	11	10	60.0						--	W				
			61.5		SP									
			63.0											
			64.5	no recovery 64-66'										
S13	0	13	66.0						--	--				
			67.5											
			69.0	pocket of fine to coarse subrounded gravel										
S14	5	9	70.5						--	W				
				End of boring at 71'.										

SCS ENGINEERS
Environmental Consultants and Contractors

SOIL BORING LOG INFORMATION

Revised 5/6/2026

Route To: Watershed/Wastewater ☐ Waste Management ☒
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
IPL 6th Street Legacy CCR Site SCS#: 25225170.00	PWTS#224069-01	SB-304/MW-304

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Scott Zeien Terracon	11/11/2025	11/11/2025	SPT auger

Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
		MW-304	16.0 Feet	733.1 Feet MSL	4.3 in

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒
State Plane 3,463,866 N, 5,420,774 E S / C /(N)
SW 1/4 of NE 1/4 of Section 21, T 83 N, R 7 W
Lat 41° 59' 14.5"
Long 91° 39' 45.2"
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	Civil Town/City/ or Village
	Linn	Cedar Rapids, Iowa

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Pocket Penetrometer Reading (tsf)	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			0	TOPSOIL, very dark grayish brown (10YR 3/2), silt, sand, organics (roots/grass). (FILL)	TOPSOIL									
S1	20	9	1.5	SILT with SAND (ML), light olive brown (2.5Y 5/4), very fine to fine sand, trace medium sand, subrounded very fine to fine, subangular medium. (FILL)	ML				3.5	M				
S2	21	6	3.0	Pocket of pale brown cemented material.					--	M				
				LEAN CLAY (CL), dark olive brown (2.5Y 3/3), some silt, trace fine to medium sand, trace fine to coarse gravel, subrounded sand, angular gravel, coals, cinders, black mottling. (FILL)	CL									
S3	24	41	4.5		FILL				4.5	M				
			6.0	ASH, bottom ash, multicolored (5Y 5/4, 10YR 2/2, 10YR 5/5), fine to medium grains, dense, subangular gains, coal, cinders. (FILL)										
S4	24	14	7.5	ASH, bottom ash mixed with fly ash, black (10YR 2/1), fine to medium grains, loose to very loose, subrounded and subangular grains, coal, cinders, cemented fly ash. (FILL) fine to medium subangular pieces of red brick at 7'					--	M				
	20	7	9.0						--	M				
			10.5											
S5	14	3		greenish gray mottle					--	M+				
			12.0	fine to medium subangular pieces of red brick										
	20	7	13.5	trace green gray	FILL				--	M+				
S6	21	10	15.0						--	M+				
			16.5											
	16	4	18.0						--	W				SATURATED AT 16'
	23	2	19.5	slight iridescent sheen - no odors or obvious contamination					--	W				

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm	Tel:
Bri Salome	SCS 2830 Dairy Drive, Madison, WI 53718	Fax:

Boring Number SB-304/MW-304 Page 2 of 2

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	U S C S	Graphic Log	Well Diagram	PID/FID	Soil Properties: Pocket Penetrometer Reading (tsf)	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
S7	24	2	21.0	ASH, bottom ash mixed with fly ash, black (10YR 2/1), fine to medium grains, loose to very loose, subrounded and subangular grains, coal, cinders, cemented fly ash. (FILL) *(continued)*	FILL				--	W				
S8	6	3	22.5						0.5	M+				
			24.0	LEAN CLAY (CL), very dark brown (10YR 2/2), some silt, some medium sand, medium stiff, rounded sand.	CL									
				End of boring at 24'. Set well MW-304 with a 10' screen at 23'.										

GESTRA

191 W. Edgerton Ave
Milwaukee, WI 53207
(414)933-7444

Report On: Test Report Attachment

Lab No: 25-06465
Report No: 25-06465

Project No: 25351-40 **Cust No:** 0410

Client: SCS Engineers
Debra Nelson
SCS Engineers
2830 Dairy Drive
Madison, WI 53718

Project: Former IPL 6th St. Generating Station

Report Date: 12/19/2025

Location:

Sample Date: 12/18/2025
Sampled By: Client

Remarks: See attatched for Former 6th Street Results

Orig: SCS Engineers Attn: Debra Nelson
(1-ec copy)
1-cc Laboratory

Respectfully Submitted,

Nicole Merkes,

GESTRA Engineering, Inc
191 W. Edgerton Ave
Milwaukee, WI 53207
Phone: (414) 933-7444; Fax: (414) 933-7844

Laboratory Test Results of Atterberg Limits of Soil

Project Name:	Former 6th St. Generating Station	Date:	December 17, 2025
Project Number:	25368-40	Client:	SCS
Project Location:	Cedar Rapids	SCS #:	25225170.01
ASTM Designation:	**D4318 (Method A)**		

Sample Information

Type of Sample	Shelby Tube
Boring Number	GT-1
Sample Number	--
Depth of Sample	24' -26'

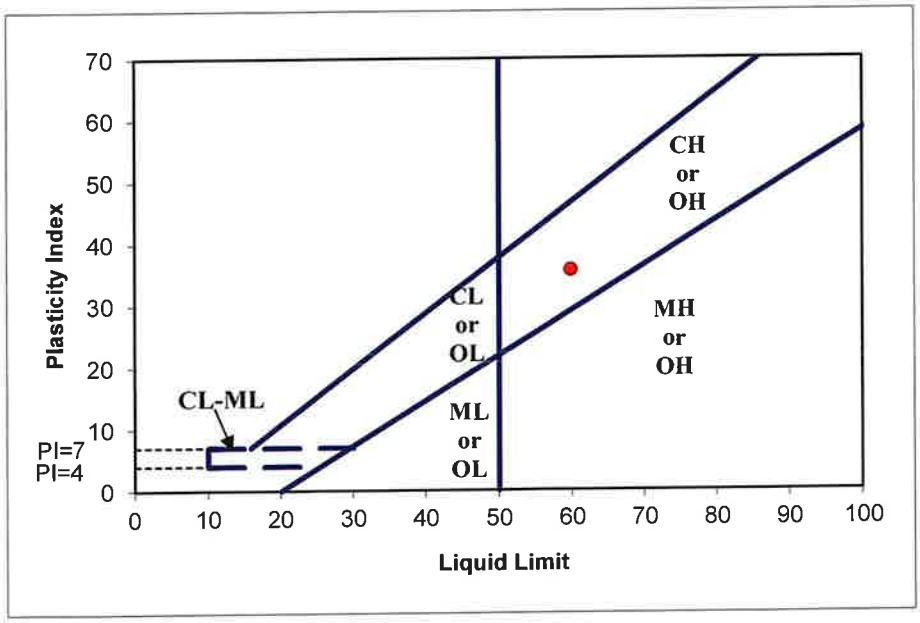
Determination of Liquid Limit

Cup Number			
Weight of Cup (g)	18.71	18.72	18.88
Weight of Wet Soil and Cup (g)	42.26	40.58	40.91
Weight of Dry Soil and Cup (g)	33.63	32.44	32.44
Moisture Content (%)	57.8	59.3	62.5
Blow Counts	31	26	17

Determination of Plastic Limit

Cup Number		
Weight of Cup (g)	6.92	7.22
Weight of Wet Soil and Cup (g)	14.17	14.33
Weight of Dry Soil and Cup (g)	12.78	12.98
Moisture Content (%)	23.7	23.4

Compilation of Test Results



Liquid Limit	60
Plastic Limit	24
Plasticity Index	36
USCS Symbol	**CH**

Performed by: M. Biddick

Reviewed By: Nicole Merkes
GESTRA Engineering, Inc.

Geotechnical-Structural-Pavement-Construction Material

GESTRA Engineering, Inc
191 W. Edgerton Ave
Milwaukee, WI 53207
Phone: (414) 933-7444; Fax: (414) 933-7844

Laboratory Test Results of Mechanical Analysis of Soil or Aggregate

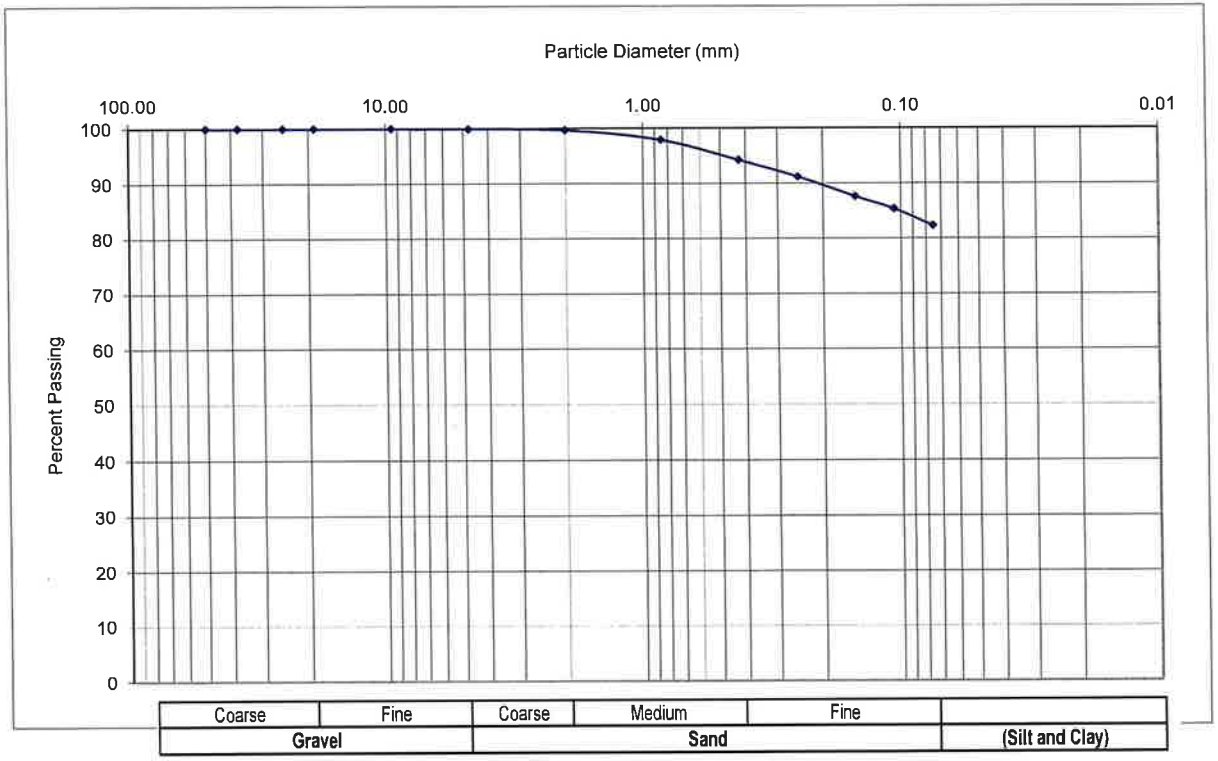
Project Name:	Former 6th St. Generating Station	Date:	December 8, 2025
Project Number:	25368-40	Reported To:	SCS
Project Location:	Cedar Rapids	SCS #:	25225170.01
ASTM Designation:	**D6913** **Method B**		

Sample Information

Type of Sample:	Shelby Tube	Sample Number:	-
Boring Number:	GT-1	Depth of Sample:	24'-26'

Mechanical Analysis Data

Sieve	Sieve Opening (mm)	Percent Passing (%)
2	50	100.0
1 1/2	37.5	100.0
1	25.0	100.0
3/4	19.0	100.0
3/8	9.5	100.0
#4	4.75	99.9
#10	2.000	99.7
#20	0.850	97.9
#40	0.425	94.3
#60	0.250	91.2
#100	0.150	87.7
#140	0.106	85.4
#200	0.075	82.3
Pan		81.7



Moisture Content 39.1 %

Remarks: Gravel 0.1 % Sand 17.6 %
Passing #200 Sieve (Silt & Clay) 82.3 %

Performed by: C. Schneider

Reviewed by: Nicole Merkes
GESTRA Engineering, Inc.

GESTRA Engineering, Inc
191 W. Edgerton Ave
Milwaukee, WI 53207
Phone: (414) 933-7444; Fax: (414) 933-7844

Shelby Tube Extraction Form

Project Name:	Former 6th St. Generating Station	Date:	December 4, 2025
Project Number:	25368-40	Client:	SCS
Projection Location:	Cedar Rapids	SCS #:	25225170.01
ASTM Designation:	D2488		

Sample Information

Boring Number	GT-1
Sample Number	--
Depth of Sample	24' - 26'

qp: 0.50 - 0.75

Recovery:	18"
Soil Description:	Organic fat clay, black, moist, medium stiff, with sand and trace wood fibers.
	Top 4": Dark brown peat, moist.

Performed By: S. McLafferty

Reviewed By: Nicole Merkes

GESTRA Engineering, Inc
191 W. Edgerton Ave
Milwaukee, WI 53207
Phone: (414) 933-7444; Fax: (414) 933-7844

Laboratory Test Results of Atterberg Limits of Soil

Project Name:	Former 6th St. Generating Station	Date:	December 17, 2025
Project Number:	25368-40	Client:	SCS
Project Location:	Cedar Rapids	SCS #:	25225170.01
ASTM Designation:	**D4318 (Method A)**		

Sample Information

Type of Sample	Shelby Tube
Boring Number	GT-2
Sample Number	--
Depth of Sample	24' -26'

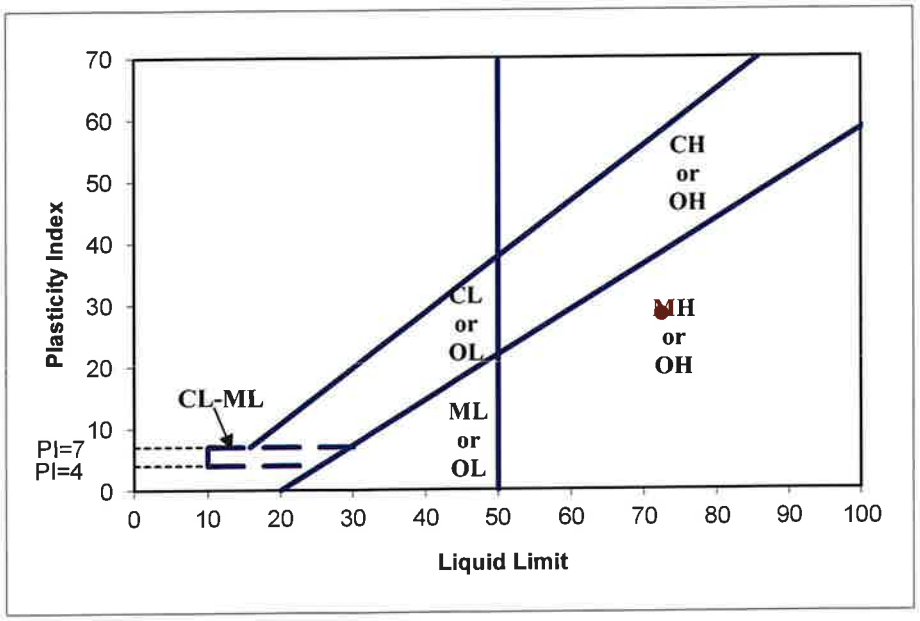
Determination of Liquid Limit

Cup Number			
Weight of Cup (g)	10.79	11.10	11.02
Weight of Wet Soil and Cup (g)	31.69	34.83	39.58
Weight of Dry Soil and Cup (g)	23.09	24.81	27.32
Moisture Content (%)	69.9	73.1	75.2
Blow Counts	33	21	18

Determination of Plastic Limit

Cup Number		
Weight of Cup (g)	7.30	7.16
Weight of Wet Soil and Cup (g)	16.76	16.35
Weight of Dry Soil and Cup (g)	13.86	13.54
Moisture Content (%)	44.2	44.0

Compilation of Test Results



Liquid Limit	72
Plastic Limit	44
Plasticity Index	28
USCS Symbol	**MH/OH**

Performed by: M. Biddick

Reviewed By: Nicole Merkes
GESTRA Engineering, Inc.

Geotechnical-Structural-Pavement-Construction Material

GESTRA Engineering, Inc
191 W. Edgerton Ave
Milwaukee, WI 53207
Phone: (414) 933-7444; Fax: (414) 933-7844

Laboratory Test Results of Mechanical Analysis of Soil or Aggregate

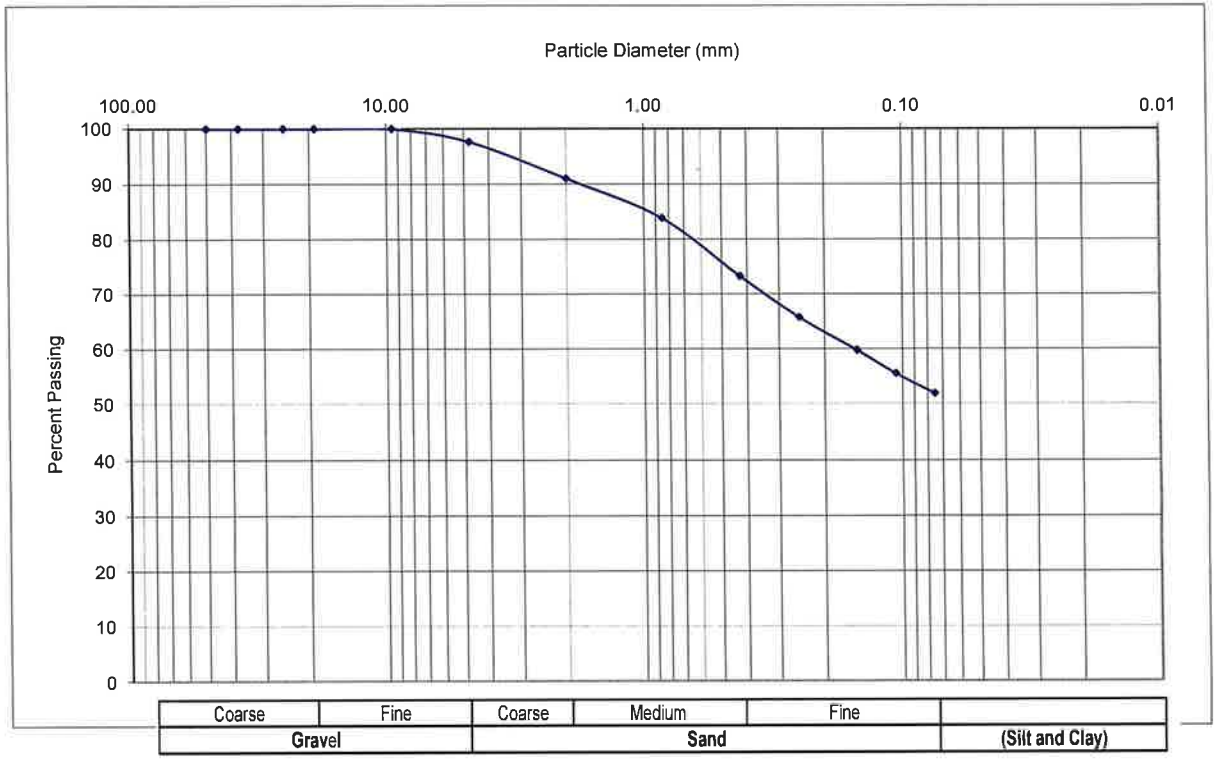
Project Name:	Former 6th St. Generating Station	Date:	December 9, 2025
Project Number:	25368-40	Reported To:	SCS
Project Location:	Cedar Rapids	SCS #:	25225170.01
ASTM Designation:	**D6913** **Method** **B**		

Sample Information

Type of Sample:	Shelby Tube	Sample Number:	-
Boring Number:	GT-2	Depth of Sample:	24'-26'

Mechanical Analysis Data

Sieve	Sieve Opening (mm)	Percent Passing (%)
2	50	100.0
1 1/2	37.5	100.0
1	25.0	100.0
3/4	19.0	100.0
3/8	9.5	100.0
#4	4.75	97.7
#10	2.000	91.1
#20	0.850	83.9
#40	0.425	73.3
#60	0.250	65.8
#100	0.150	59.8
#140	0.106	55.5
#200	0.075	51.9
Pan		50.6



Moisture Content 59.2 %

Remarks: Gravel 2.3 % Sand 45.8 %
Passing #200 Sieve (Silt & Clay) 51.9 %

Performed by: C. Schneider

Reviewed by: Nicole Merkes
GESTRA Engineering, Inc.

Geotechnical-Structural-Pavement-Construction Material

GESTRA Engineering, Inc
191 W. Edgerton Ave
Milwaukee, WI 53207
Phone: (414) 933-7444; Fax: (414) 933-7844

Shelby Tube Extraction Form

Project Name:	Former 6th St. Generating Station	Date:	December 4, 2025
Project Number:	25368-40	Client:	SCS
Projection Location:	Cedar Rapids	SCS #:	25225170.01
ASTM Designation:	**D2488**		

Sample Information

Boring Number	GT-2
Sample Number	
Depth of Sample	24' - 26'

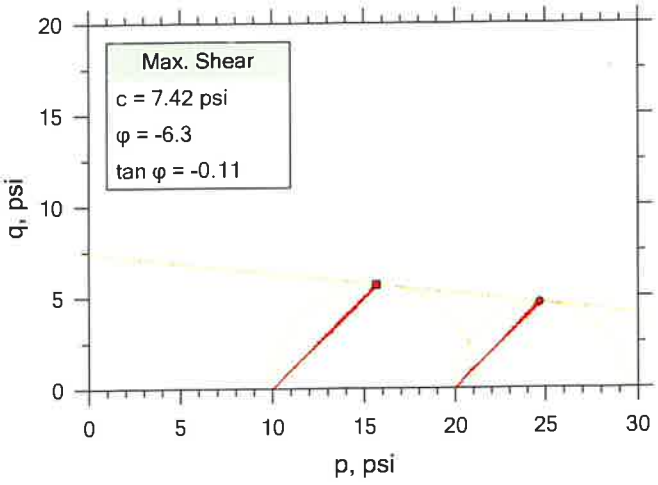
qp: 1.00

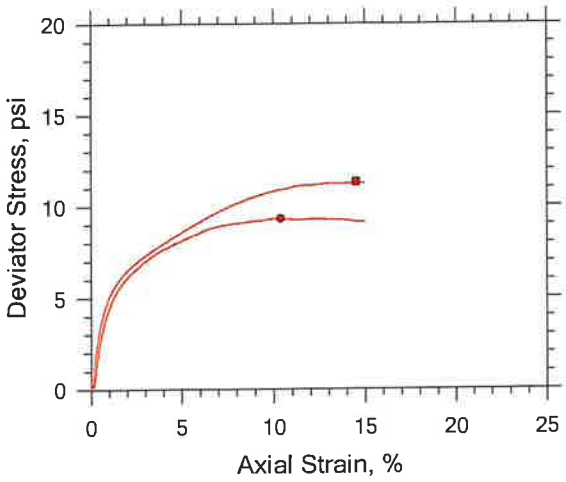
Recovery:	19"
Soil Description:	Sandy elastic silt, black, moist, medium stiff to stiff, plant fibers present.
	Bottom 8": gray sand, wet.

Performed By: S. McLafferty

Reviewed By: Nicole Merkes

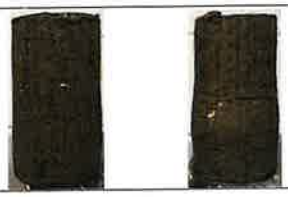
Unconsolidated Undrained by ASTM D2850





		■	●
Symbol		N/A	N/A
Sample ID		24'-26'	24'-26'
Depth		1	2
Test Number		5.700	5.695
Initial	Height, in	2.691	2.685
	Diameter, in	48.5	48.5
	Moisture Content (from Cuttings), %	76.2	70.9
	Dry Density, pcf	108.6	95.6
	Saturation (Wet Method), %	1.20	1.36
	Void Ratio	44.6	50.8
Final	Moisture Content, %	76.2	70.9
	Dry Density, pcf	5.685	5.661
	Cross-Sectional Area (Method A), in²	100.0	100.0
	Saturation, %	1.19	1.36
	Void Ratio	0.000	0.000
	Back Pressure, psi	9.986	19.98
Vertical Effective Consolidation Stress, psi		9.992	19.99
Horizontal Effective Consolidation Stress, psi		0.000	0.000
Vertical Strain after Consolidation, %		0.000	0.000
Volumetric Strain after Consolidation, %		0.000	0.000
Time to 50% Consolidation, min		5.659	4.669
Shear Strength, psi		14.5	10.4
Strain at Failure, %		1.000	1.000
Strain Rate, %/min		11.32	9.338
Deviator Stress at Failure, psi		10.10	20.07
Effective Minor Principal Stress at Failure, psi		21.41	29.41
Effective Major Principal Stress at Failure, psi		---	---
B-Value			

Notes:
- Before Shear Saturation set to 100% for phase calculation.
- Moisture Content determined by ASTM D2216.
- Deviator Stress includes membrane correction.
- Values for c and φ determined from best-fit straight line for the specific test conditions. Actual strength parameters may vary and should be determined by an engineer for site conditions.



GESTRA

Project Name: Former 6th St. Gen. Facility | Location: Cedar Rapids | Project Number: 25368-40

Boring Number: GT-1 | Tester: S. McLafferty | Checker: N. Merkes

Sample Number: N/A | Test Date: 12/08/2025 | Depth: 24'-26'

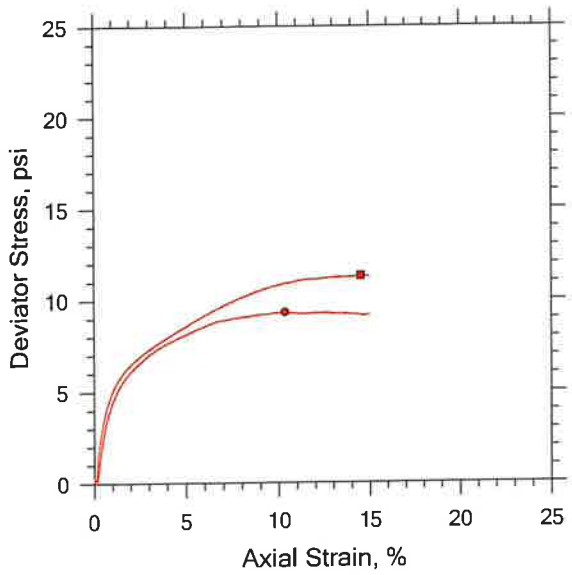
Test Number: 1 | Preparation: Shelby Tube | Elevation:

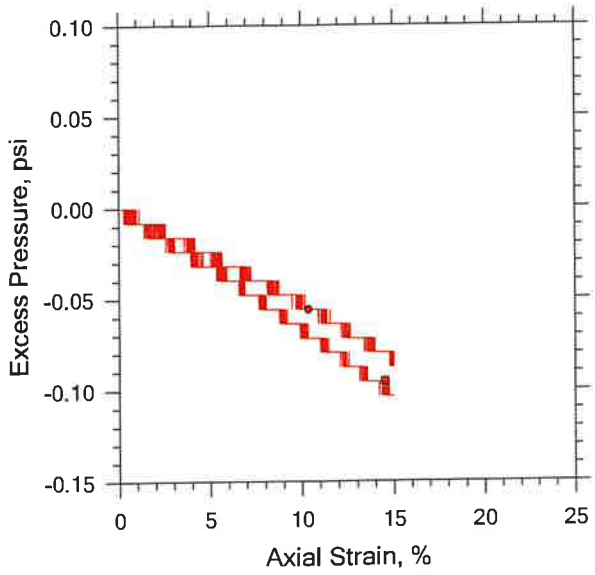
Client: SCS | Classification: | Group Symbol:

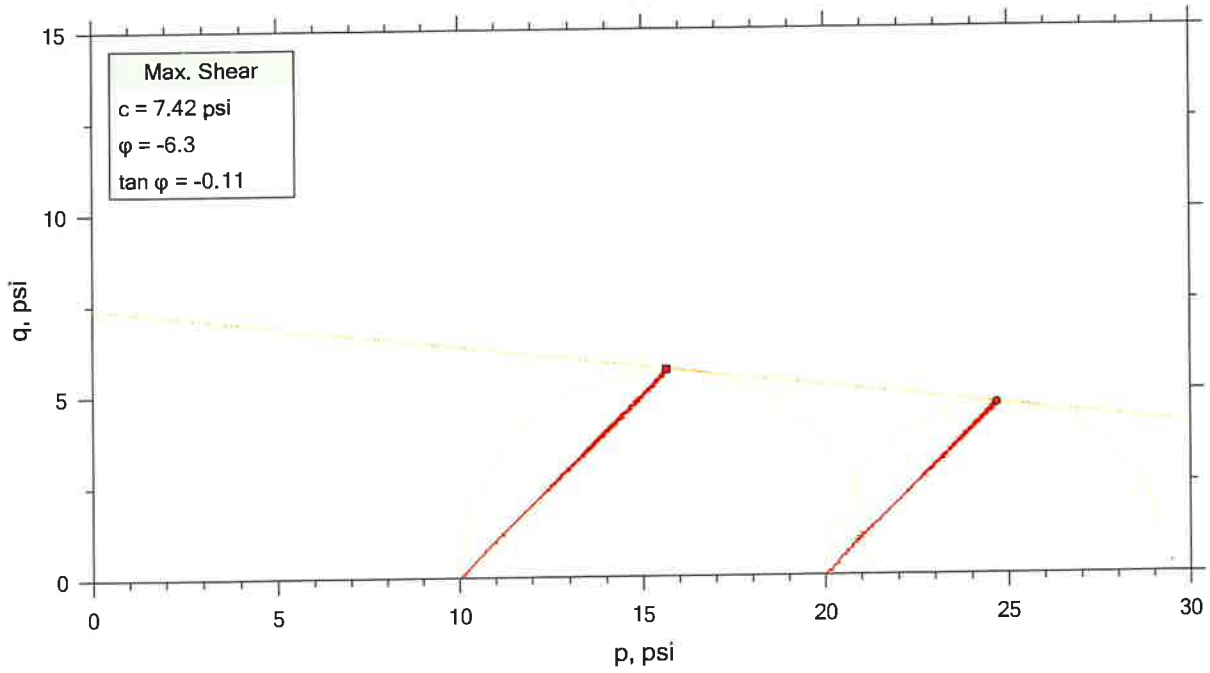
Description: Organic fat clay, black, moist, medium stiff, with sand and trace wood fibers.

Remarks:

Unconsolidated Undrained by ASTM D2850







	Sample No.	Test No.	Depth	Tested By	Test Date	Checked By	Check Date	Test File
■	N/A	1	24'-26'	S. McLafferty	12/08/2025	N. Merkes	12/09/2025	GT-1, UU 10psi.dat
●	N/A	2	24'-26'	S. McLafferty	12-08-2025	N. Merkes	12/09/2025	GT-1, UU 20psi.dat

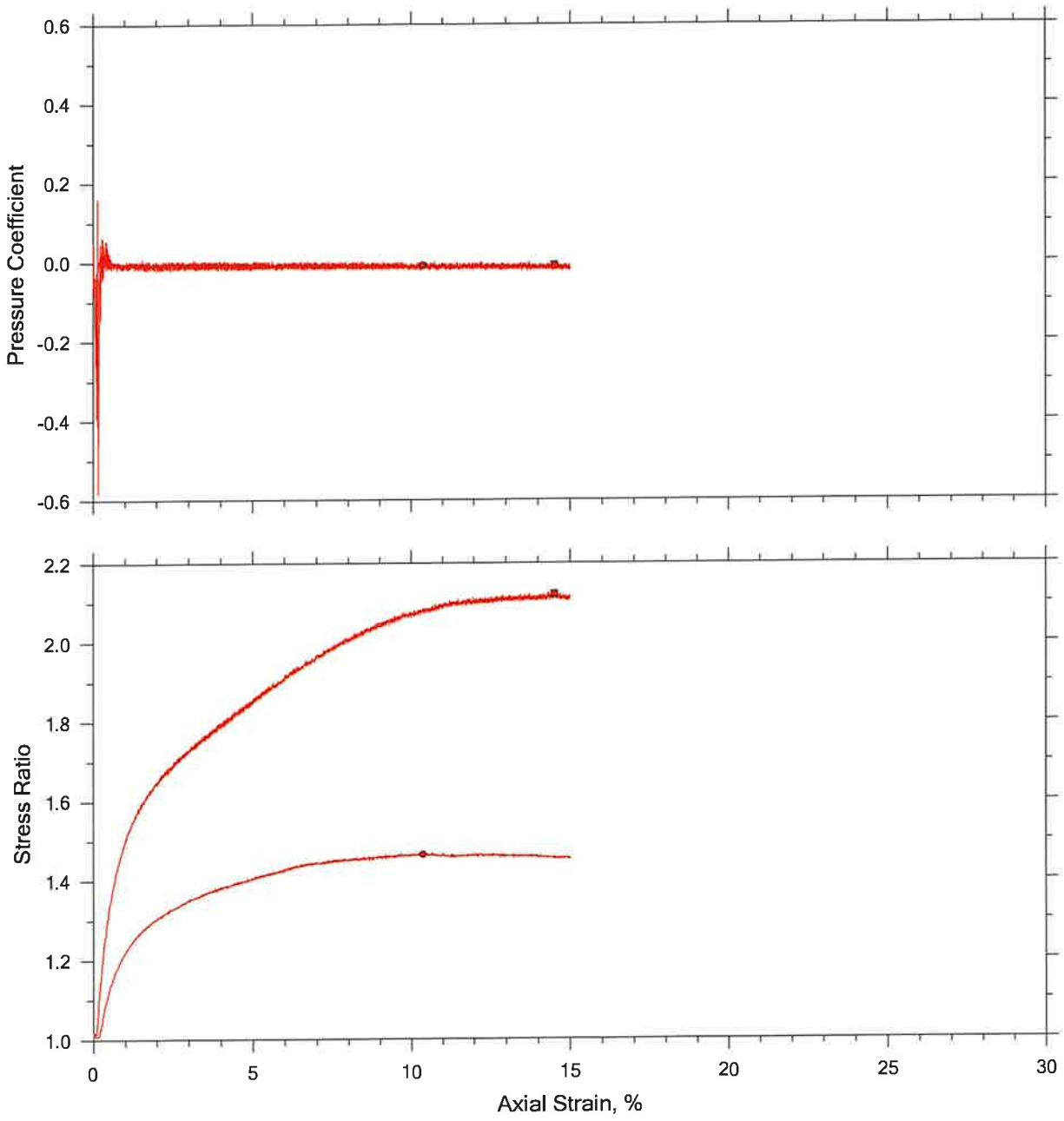
GESTRA

Project Name: Former 6th St. Gen. Facility	Location: Cedar Rapids	Project Number: 25368-40
Boring Number: GT-1	Tester: S. McLafferty	Checker: N. Merkes
Sample Number: N/A	Test Date: 12/08/2025	Depth: 24'-26'
Test Number: 1	Preparation: Shelby Tube	Elevation:
Client: SCS	Classification:	Group Symbol:

Description: Organic fat clay, black, moist, medium stiff, with sand and trace wood fibers.

Remarks:

Unconsolidated Undrained by ASTM D2850



	Sample No.	Test No.	Depth	Tested By	Test Date	Checked By	Check Date	Test File
■	N/A	1	24'-26'	S. McLafferty	12/08/2025	N. Merkes	12/09/2025	GT-1, UU 10psi.dat
●	N/A	2	24'-26'	S. McLafferty	12-08-2025	N. Merkes	12/09/2025	GT-1, UU 20psi.dat

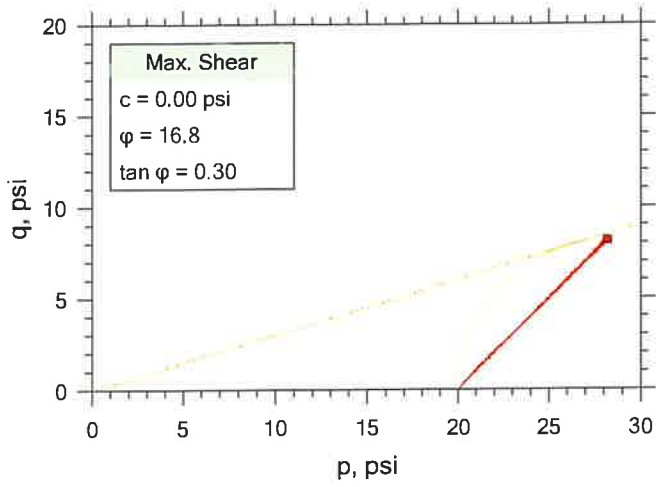
GESTRA

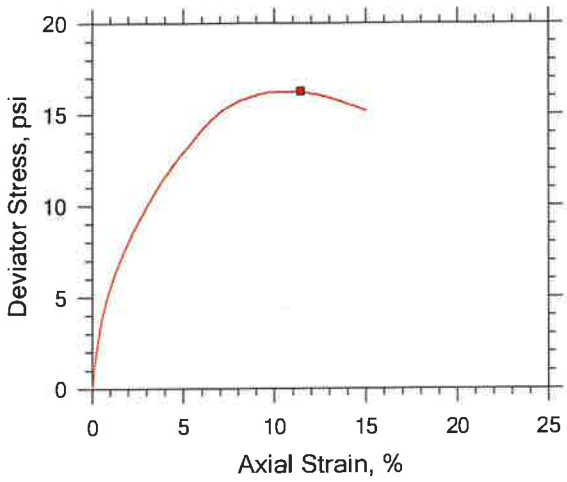
Project Name: Former 6th St. Gen. Facility	Location: Cedar Rapids	Project Number: 25368-40
Boring Number: GT-1	Tester: S. McLafferty	Checker: N. Merkes
Sample Number: N/A	Test Date: 12/08/2025	Depth: 24'-26'
Test Number: 1	Preparation: Shelby Tube	Elevation:
Client: SCS	Classification:	Group Symbol:

Description: Organic fat clay, black, moist, medium stiff, with sand and trace wood fibers.

Remarks:

Unconsolidated Undrained by ASTM D2850





Symbol		■
Sample ID		N/A
Depth		24'-26'
Test Number		1
Initial	Height, in	5.743
	Diameter, in	2.792
	Moisture Content (from Cuttings), %	86.8
	Dry Density, pcf	54.2
	Saturation (Wet Method), %	111.3
	Void Ratio	2.09
Final	Moisture Content, %	77.1
	Dry Density, pcf	54.6
	Cross-Sectional Area (Method A), in²	6.091
	Saturation, %	100.0
	Void Ratio	2.07
	Back Pressure, psi	0.000
Vertical Effective Consolidation Stress, psi		19.97
Horizontal Effective Consolidation Stress, psi		19.98
Vertical Strain after Consolidation, %		0.000
Volumetric Strain after Consolidation, %		0.000
Time to 50% Consolidation, min		0.000
Shear Strength, psi		8.139
Strain at Failure, %		11.4
Strain Rate, %/min		1.000
Deviator Stress at Failure, psi		16.28
Effective Minor Principal Stress at Failure, psi		20.63
Effective Major Principal Stress at Failure, psi		36.91
B-Value		---

Notes:
- Before Shear Saturation set to 100% for phase calculation.
- Moisture Content determined by ASTM D2216.
- Atterberg Limits determined by ASTM D4318.
- Deviator Stress includes membrane correction.
- Values for c and φ determined from best-fit straight line for the specific test conditions. Actual strength parameters may vary and should be determined by an engineer for site conditions.

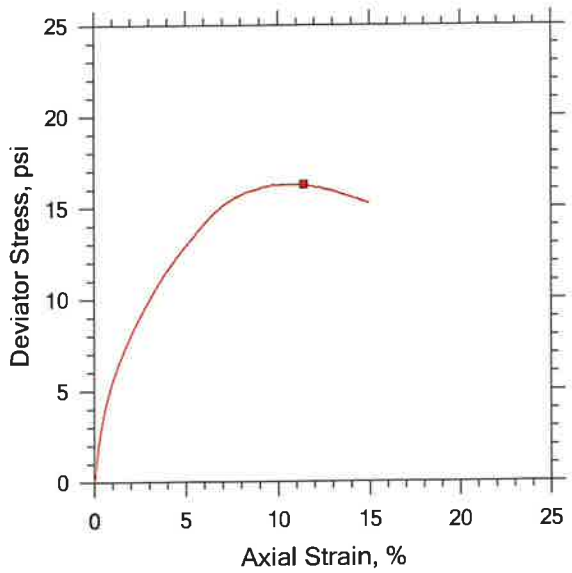
GESTRA

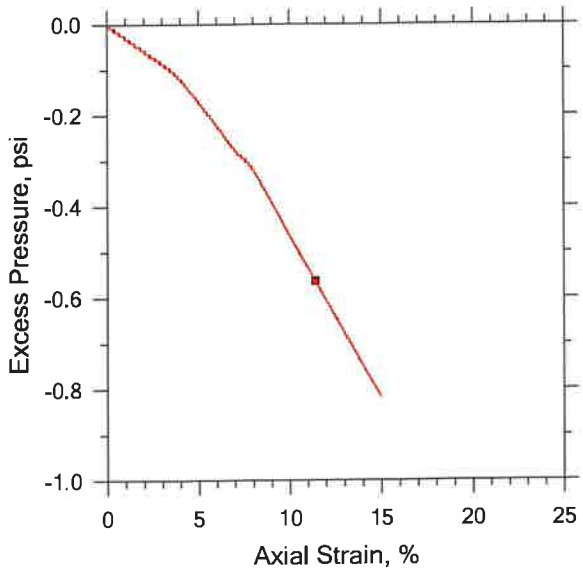
Project Name: Former 6th St. Gen. Station	Location: Cedar Rapids	Project Number: 25368-40
Boring Number: GT-2	Tester: N. Merkes	Checker: N. Merkes
Sample Number: N/A	Test Date: 12/09/2025	Depth: 24'-26'
Test Number: 1	Preparation: Shelby Tube	Elevation:
Client: SCS	Classification:	Group Symbol:

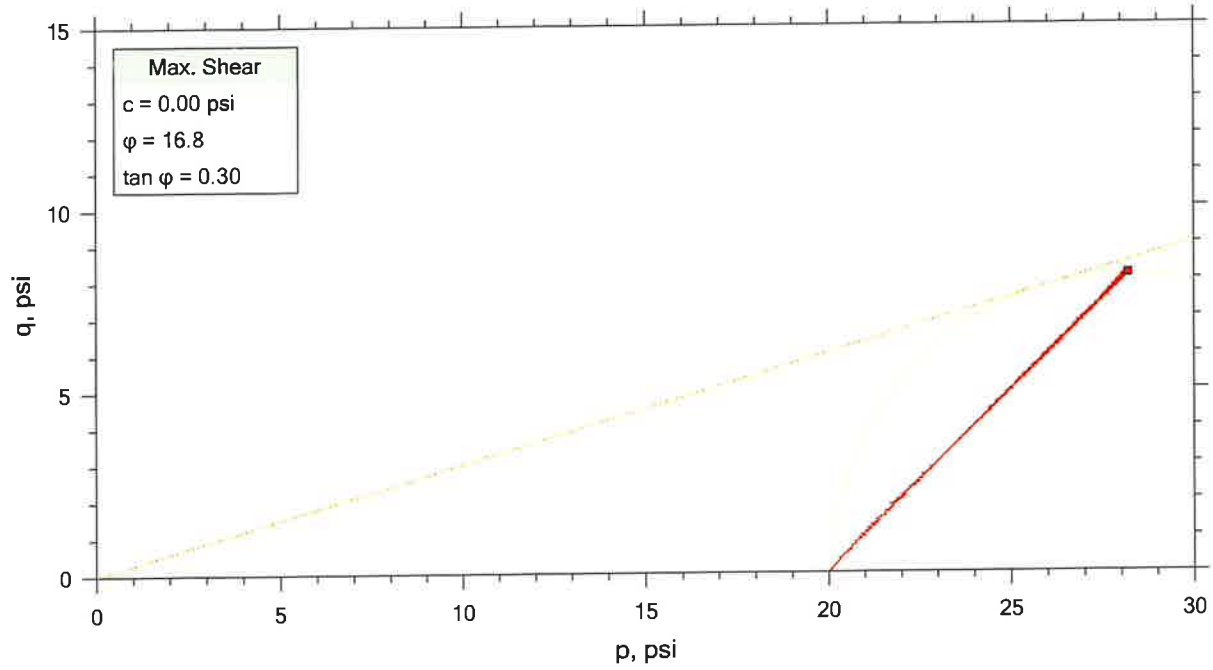
Description: Sandy elastic silt, black, moist, medium stiff to stiff, plant fibers present.

Remarks:

Unconsolidated Undrained by ASTM D2850







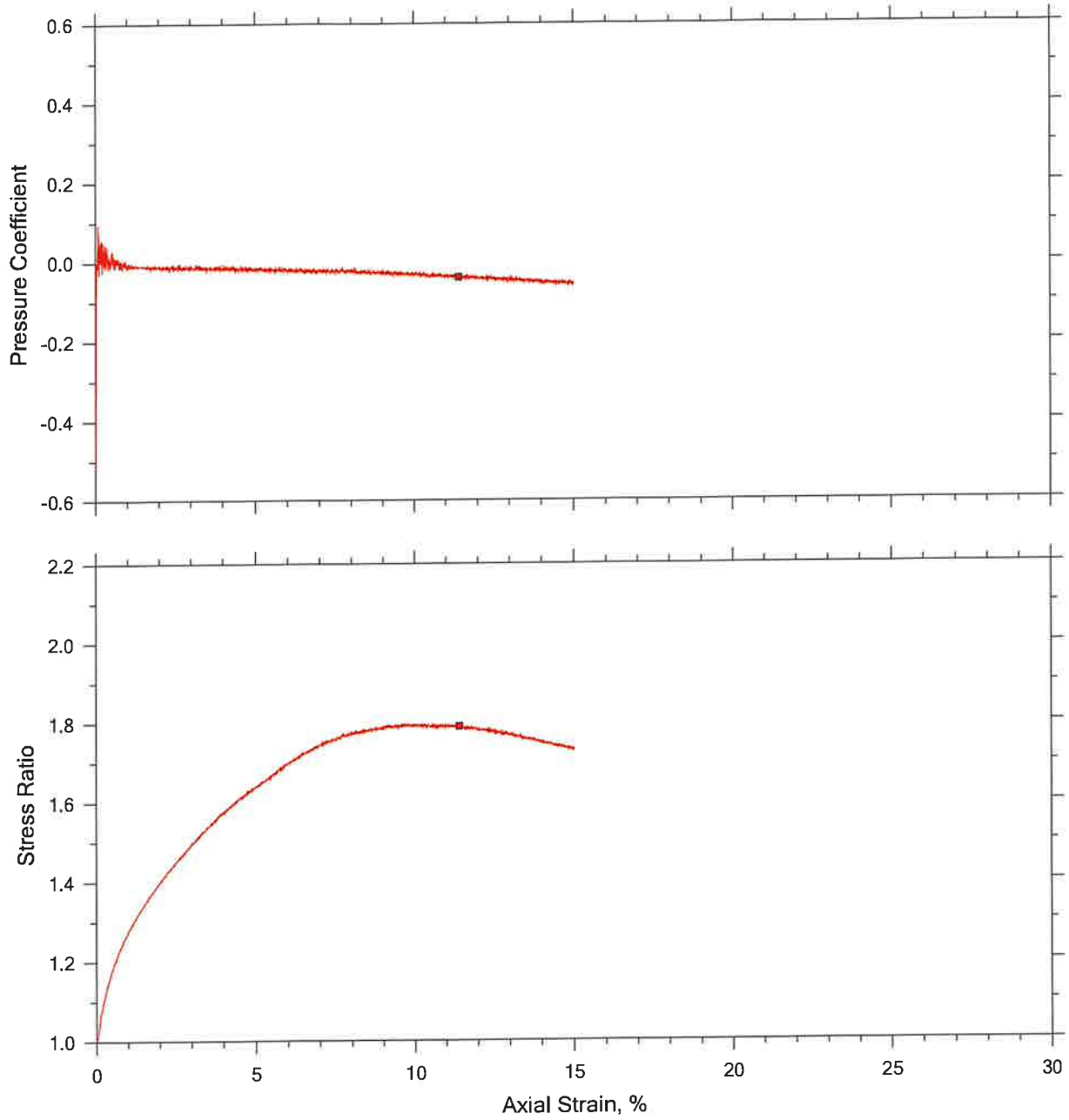
	Sample No.	Test No.	Depth	Tested By	Test Date	Checked By	Check Date	Test File
■	N/A	1	24'-26'	N. Merkes	12/09/2025	N. Merkes	12/18/2025	GT-2, UU 20psi.dat

Project Name: Former 6th St. Gen. Station	Location: Cedar Rapids	Project Number: 25368-40
Boring Number: GT-2	Tester: N. Merkes	Checker: N. Merkes
Sample Number: N/A	Test Date: 12/09/2025	Depth: 24'-26'
Test Number: 1	Preparation: Shelby Tube	Elevation:
Client: SCS	Classification:	Group Symbol:

Description: Sandy elastic silt, black, moist, medium stiff to stiff, plant fibers present.

Remarks:

Unconsolidated Undrained by ASTM D2850



	Sample No.	Test No.	Depth	Tested By	Test Date	Checked By	Check Date	Test File
■	N/A	1	24'-26'	N. Merkes	12/09/2025	N. Merkes	12/18/2025	GT-2, UU 20psi.dat

Project Name: Former 6th St. Gen. Station	Location: Cedar Rapids	Project Number: 25368-40
Boring Number: GT-2	Tester: N. Merkes	Checker: N. Merkes
Sample Number: N/A	Test Date: 12/09/2025	Depth: 24'-26'
Test Number: 1	Preparation: Shelby Tube	Elevation:
Client: SCS	Classification:	Group Symbol:

Description: Sandy elastic silt, black, moist, medium stiff to stiff, plant fibers present.

Remarks:

GESTRA

GESTRA Engineering, Inc
191 W. Edgerton Ave
Milwaukee, WI 53207
Phone (414) 933-7444, Fax (414) 933-7844

Laboratory Test Results of Moisture Content, Organic Content, and Density of Soil

Project Name: Former 6th St. Generating Station
Project Number: 25368-40
Project Location: Cedar Rapids
ASTM Designation: **D2216, D2974 (Method A), D7263**

Date: December 8, 2025
Report To: SCS
SCS #: 25225170.01

Boring Number	GT-1									
Sample Number	24'-26'									
Cup Number										
Weight of Cup (g)	64.25									
Weight of Wet Soil and Cup (g)	122.61									
Weight of Dry Soil and Cup (g)	98.32									
Weight of Soil and Cup After Burn (g)	93.91									
Weight of Sample for Density (lbs)										
Diameter (in)										
Length(in)										
Moisture Content (%)	71.3									
Organic Content (%)	12.9									
Wet Density (pcf)										
Dry Density (pcf)										

Boring Number	GT-2									
Sample Number	24' - 26'									
Cup Number										
Weight of Cup (g)	63.51									
Weight of Wet Soil and Cup (g)	119.73									
Weight of Dry Soil and Cup (g)	93.61									
Weight of Soil and Cup After Burn (g)	88.16									
Weight of Sample for Density (lbs)										
Diameter (in)										
Length(in)										
Moisture Content (%)	86.8									
Organic Content (%)	18.1									
Wet Density (pcf)										
Dry Density (pcf)										

Performed by S. McLafferty/C. Schneider

Reviewed by Nicole Merkes

SCS ENGINEERS
Environmental Consultants and Contractors

SOIL BORING LOG INFORMATION

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
IPL-CCR Settling Ponds SCS#: 25212261.02		B-1

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Mike Mueller Cascade Drilling	4/23/2014	4/23/2014	4-1/4" HSA

Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			20.0 Feet	730.6 Feet	8.0 in

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane N, E S/C/N
SW 1/4 of NE 1/4 of Section 21, T 83 N, R 7 W
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N Feet ☐ S ☐ E Feet ☐ W

Facility ID	County	Civil Town/City/ or Village
	Linn	Cedar Rapids

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	Moisture Content (%)	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			0	WELL GRADED GRAVEL with SAND (fill)	FILL									
S1	12	5, 10, 12	1–2	SANDY LEAN CLAY, dark yellowish brown (10YR 4/6), mottled with very dark grayish brown (10YR 3/2), few gravel (fill)	FILL					M				140lb Hammer
S2	10	12, 9, 10	3–5	WELL GRADED SAND, dark brown (7.5YR 3/2), few brick rubble (fill)	FILL					M				
S3	1	8, 7, 8	6–7							M				
			8	Same as above, with trace clay 6'-7'										
S4	12	2, 2, 5	9–10	WELL GRADED SAND with SILT, black (10YR 2/1) (ash)	FILL			51.6		M			21.5	
S5	18	1, 1,	11–12	SILT, black (10YR 2/1) (ash), trace fine to coarse sand (ash)	FILL			124.2		W			64	

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature

Firm SCS Engineers
2830 Dairy Drive Madison, WI 53718
Tel: (608)224-2830
Fax:

SCS ENGINEERS
Environmental Consultants and Contractors

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number B-1

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	Moisture Content (%)	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
		1		SILT, black (10YR 2/1) (ash), trace fine to coarse sand (ash) *(continued)*										
			13											
S6	18	6, 5, 7	14	Sheen on sample 14'-15', no odor, orange brick rubble	FILL			54.3		W				
			15											
			16	POORLY GRADED GRAVEL, very pale brown (10YR 7/4), coarse, few wood chips, with black silt (fill)										
S7	2	39, 11, 7	17							W				
			18											
			19		FILL									
S8	8	9, 5, 6	20							W				
			21											
S9a	14	1, 1, 4	22	ORGANIC SILT, black (10YR 2/1), few silt (OC=13.9%)	OH			77.2	0.25	W	63	20		
S9b				PEAT, black (10YR 2/1) (OC=27.05)	PT			109.5						
			23											
S10	12	7, 7, 17	24	SANDY ORGANIC SILT, dark brown (7.5YR 3/2), scattered roots (OC=8.9%)	OL			51.4		W				
			25											
			26	ORGANIC SILT, dark brown (7.5YR 3/2), few organics (roots, etc.), with sand (OC=13.9%)										
S11	16	9, 10, 14	27					67.1	0.5	W	55	5		
			28											
S12	18	2, 5, 8	29		OH			73.4	1.0	W	59	8		
			30											
			31											
S13	18	1, 1,	32					55.8	0.25	W	63	3		

SCS ENGINEERS
Environmental Consultants and Contractors

SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number B-1 Page 3 of 3

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	Moisture Content (%)	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
		6		ORGANIC SILT, dark brown (7.5YR 3/2), with sand, driller reports feeling gravel 31'-34'	OH									
			33											
S14a	10	2, 9, 26	34					56.1		W				
S14b				SAND, dark grayish brown (10YR 4/2), fine to coarse, with gravel				11.5					4.2	
			35											
			36		SP									
S15	16	11, 23, 19	37							W				
				Abandoned with bentonite										
				OC=Organic Content by Loss on Ignition (%) End of boring @ 37.5										

SCS ENGINEERS
Environmental Consultants and Contractors

SOIL BORING LOG INFORMATION

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
IPL-CCR Settling Ponds SCS#: 25212261.02		B-2

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Mike Mueller Cascade Drilling	4/24/2014	4/24/2014	4-1/4" HSA

Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet	728.3 Feet	8.0 in

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane N, E S/C/N
SE 1/4 of NE 1/4 of Section 21, T 83 N, R 7 W

Lat ° ' "
Long ° ' "

Local Grid Location ☐ N Feet ☐ S ☐ E Feet ☐ W

Facility ID	County	Civil Town/City/ or Village
	Linn	Cedar Rapids

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	Moisture Content (%)	Soil Properties: Standard Penetration	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			1	WELL GRADED GRAVEL with SAND (fill)	FILL									
S1a				SILT, black (10YR 2/1) (fill)	FILL									140 lb Hammer
S1b	13	2, 25, 10	2	WELL GRADED SAND, dark yellowish brown (10YR 4/3) (fill)	FILL					M				
			3											
S2	18	3, 2, 4	4	SANDY SILT, very dusky red (7.5R 2.5/3) and black (10YR 2/1), sand is fine grained, trace organics (ash)				125.4		M			54.4	
			5											
			6		FILL									
S3	18	4, 10, 25	7					63.3		M				
			8											
			9	SILT, black (10YR 2/1), trace fine sand (ash)										
S4	18	6, 2, 1		wet @ 9.5'				142.9		W			69.4	
			10		FILL									
			11											
S5	18	1/12, 1	12					188.7		W				

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature

Firm SCS Engineers
2830 Dairy Drive Madison, WI 53718

Tel: (608)224-2830
Fax:

SCS ENGINEERS
Environmental Consultants and Contractors

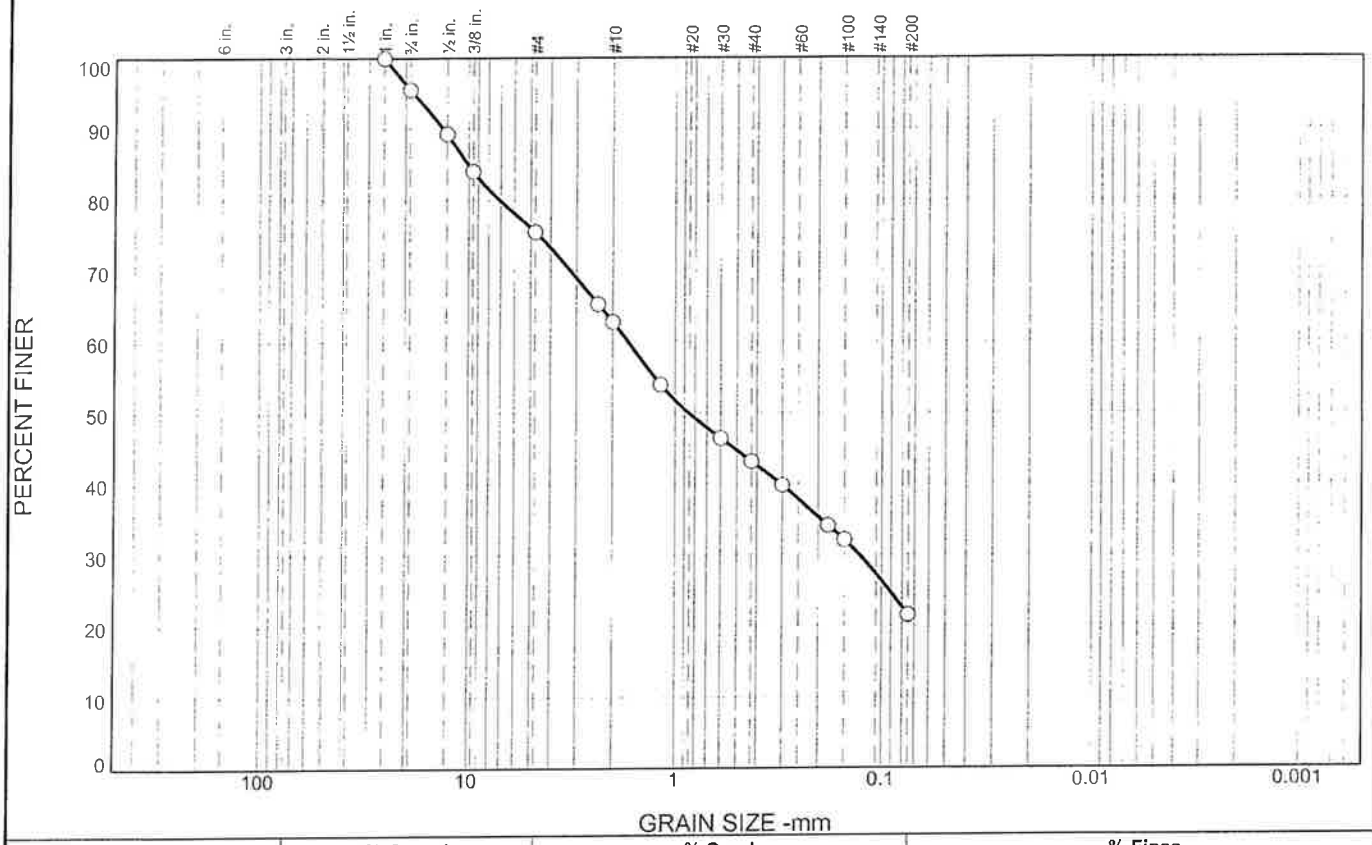
SOIL BORING LOG INFORMATION SUPPLEMENT
Form 4400-122A

Boring Number B-2

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	Moisture Content (%)	Soil Properties: Standard Penetration	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
			13	SILT, black (10YR 2/1), trace fine sand (ash) *(continued)*										
S6	18	1, 1/12	14		FILL			208.2		W			61.5	
			15											
			16											
S7a	18	2, 5, 7	17					171.1		W				
S7b				SANDY ORGANIC SILT, black (10YR 2/1) and dark yellowish brown (10YR 4/6) (OC=18.2%)	OH			86.4			62	5		
			18											
			19	SAND, dark grayish brown (10YR 4/2), fine to medium, with gravel										
S8	8	2, 7, 17	20							W				
			21											
S9	0	1, 4, 4	22							W				
			23											
S10	12	1, 1, 4	24	with SILT (SP-SM) near 24'	SP			21.3		W			5.8	
			25											
			26											
S11	18	2, 8, 15	27							W				
			28											
			29											
S12	12	8, 27, 29	30							W				
				Abandoned with bentonite										

OC=Organic Content by Loss on Ignition (%)
End of boring @ 30

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	4.4	20.1	12.7	19.6	21.7	21.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1	100.0		
3/4	95.6		
1/2	89.3		
3/8	84.0		
#4	75.5		
#8	65.3		
#10	62.8		
#16	54.0		
#30	46.5		
#40	43.2		
#50	39.8		
#80	34.1		
#100	32.1		
#200	21.5		

* (no specification provided)

Material Description

Black Fine to Coarse Sand, Some Gravel and Silt (Ash)

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 13.2318 D_{85}= 10.0709 D_{60}= 1.6919
D_{50}= 0.8595 D_{30}= 0.1278 D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= SM AASHTO=

Remarks

Natural Moisture = 51.6%
Note: Description refers to particle sizes only. No Atterberg Limits or organic content were determined.

Sample Number: B1, S4 **Depth:** 8.5-10'

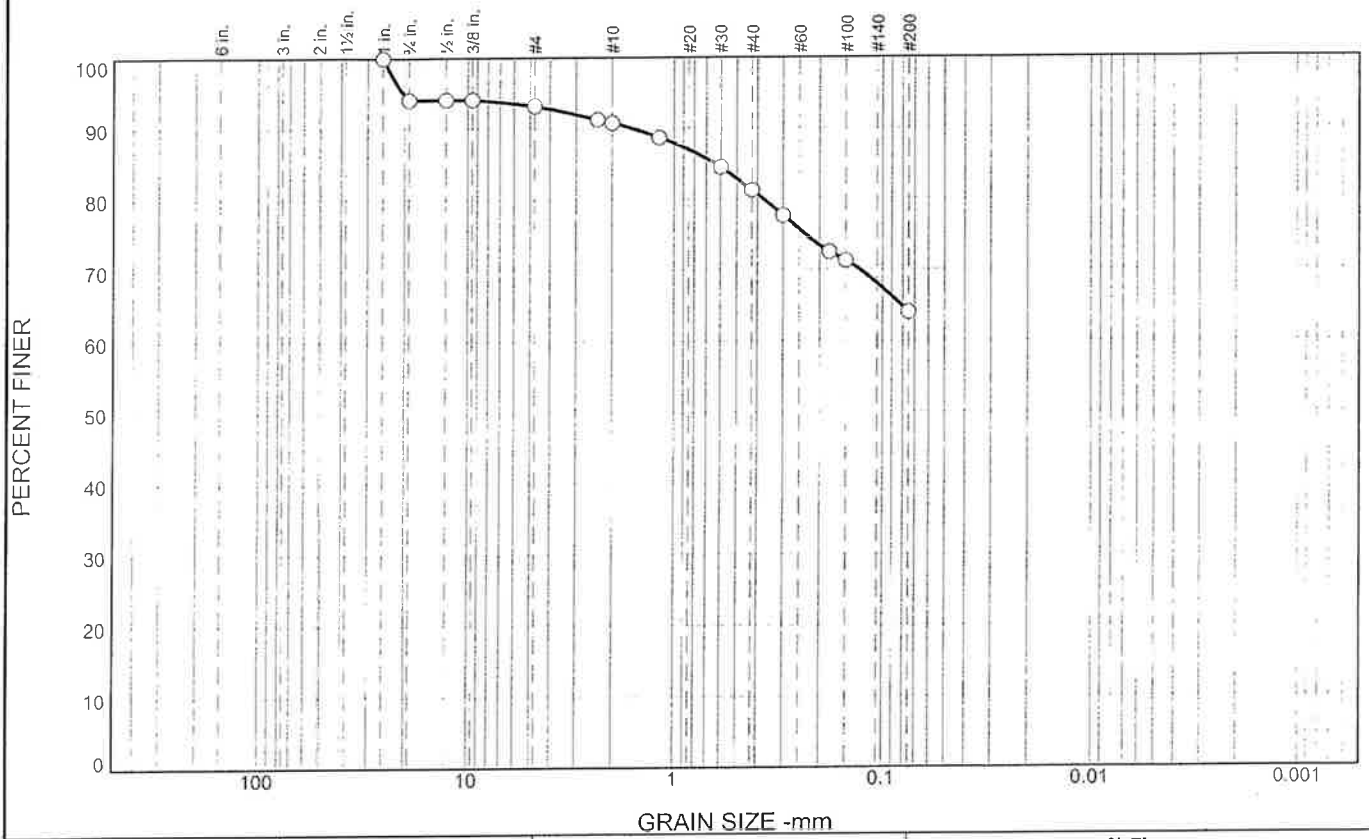
Date: 5/21/14

CGC, Inc.

Client: SCS Engineers
Project: 6th Street Generating Station (#25212261.02)
Project No: C13016-26 **Figure**

Tested By: DRW **Checked By:** DAS

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	5.9	1.0	2.3	9.6	17.2	64.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1	100.0		
3/4	94.1		
1/2	94.1		
3/8	94.1		
#4	93.1		
#8	91.2		
#10	90.8		
#16	88.7		
#30	84.5		
#40	81.2		
#50	77.6		
#80	72.5		
#100	71.2		
#200	64.0		

* (no specification provided)

Material Description

Black Silt, Some Sand, Little Gravel (Ash)

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 1.6064 D_{85}= 0.6402 D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= ML AASHTO=

Remarks

Natural Moisture = 124.2%
Note: Description refers to particle sizes only. No Atterberg Limits or organic content were determined.

Sample Number: B1, S5 **Depth:** 11-12.5'

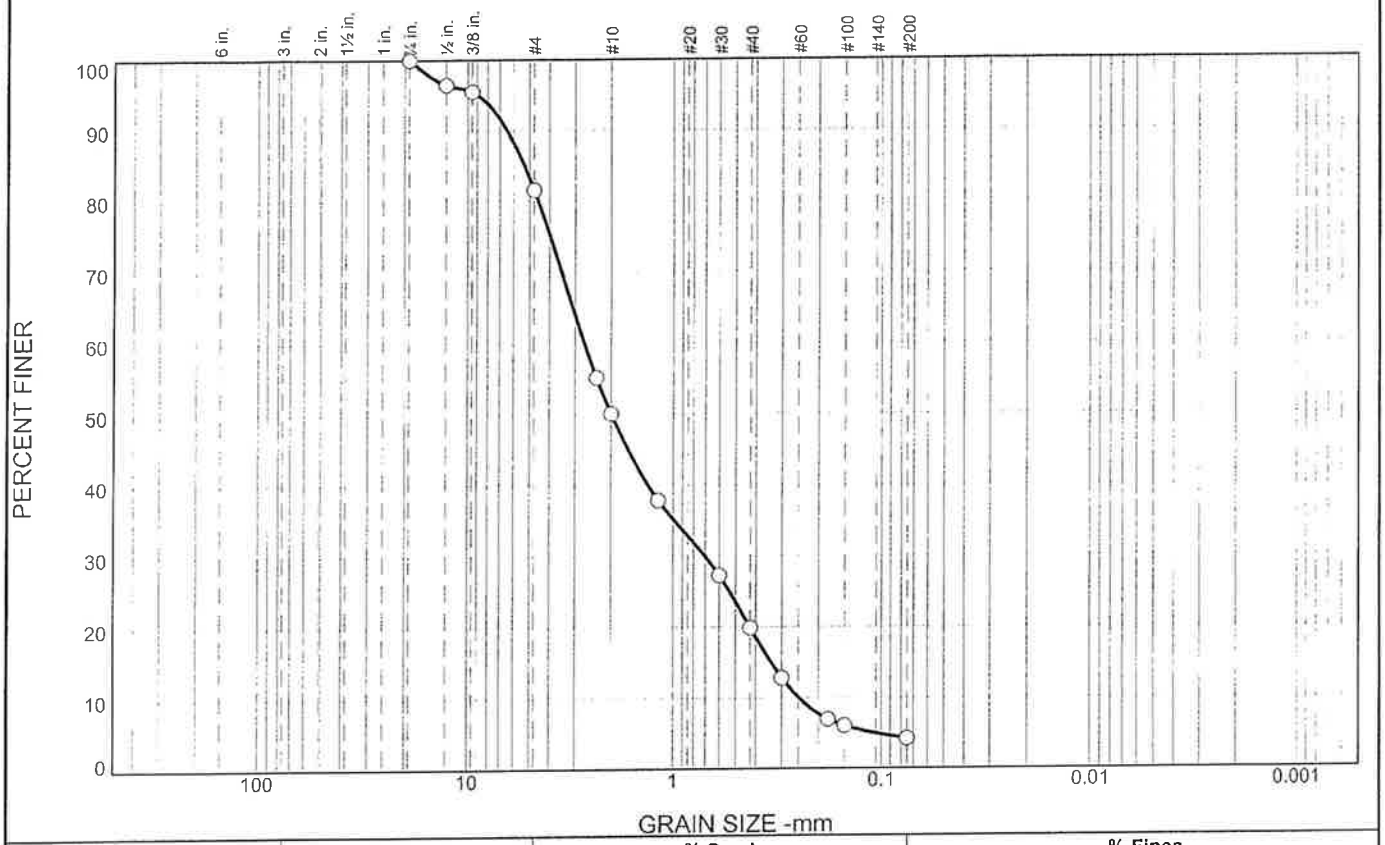
Date: 5/21/14

CGC, Inc.

Client: SCS Engineers
Project: 6th Street Generating Station (#25212261.02)
Project No: C13016-26 **Figure**

Tested By: DRW **Checked By:** DAS

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	18.4	31.5	30.2	15.7	4.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/4	100.0		
1/2	96.5		
3/8	95.5		
#4	81.6		
#8	55.2		
#10	50.1		
#16	37.8		
#30	27.3		
#40	19.9		
#50	12.8		
#80	6.9		
#100	6.0		
#200	4.2		

* (no specification provided)

Material Description

Brown Fine to Coarse Sand, Some Gravel, Traee Silt

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 6.4387 D_{85}= 5.2987 D_{60}= 2.7031
D_{50}= 1.9941 D_{30}= 0.7042 D_{15}= 0.3375
D_{10}= 0.2489 C_u= 10.86 C_c= 0.74

Classification

USCS= SP AASHTO=

Remarks

Natural Moisture = 11.5%

Sample Number: B1, S15 **Depth:** 36-37.5'

Date: 5/21/14

CGC, Inc.

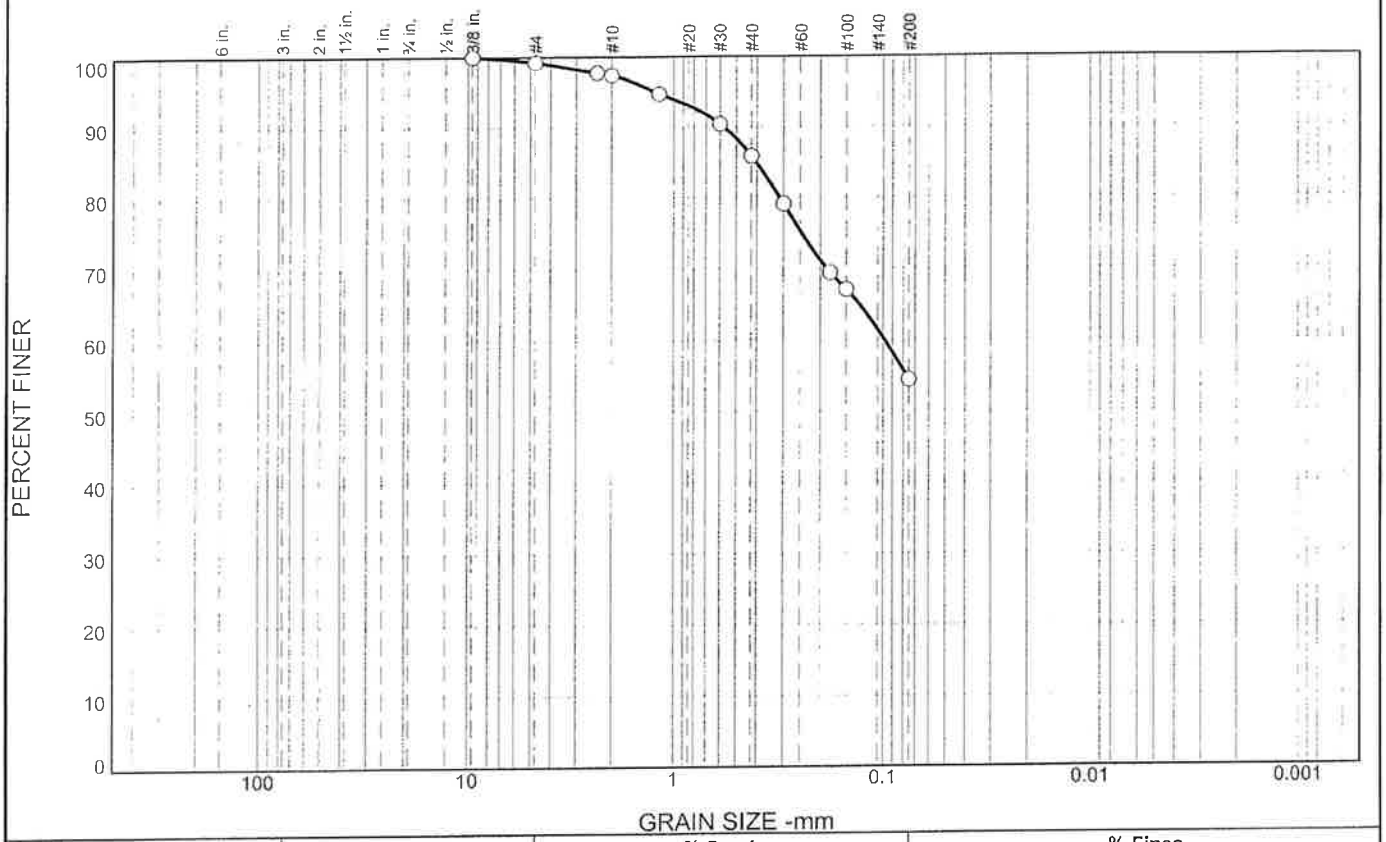
Client: SCS Engineers

Project: 6th Street Generating Station (#25212261.02)

Project No: C13016-26 **Figure**

Tested By: DRW **Checked By:** DAS

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.8	1.8	11.5	31.5	54.4	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/8	100.0		
#4	99.2		
#8	97.8		
#10	97.4		
#16	94.8		
#30	90.4		
#40	85.9		
#50	79.1		
#80	69.4		
#100	67.1		
#200	54.4		

* (no specification provided)

Material Description

Brown-Black Sandy Silt, Trace Gravel (Ash)

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 0.5752 D_{85}= 0.4041 D_{60}= 0.0987
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= ML AASHTO=

Remarks

Natural Moisture = 125.4%
Note: Description refers to particle sizes only. No Atterberg Limits or organic content were determined.

Sample Number: B2, S2 **Depth:** 3.5-5'

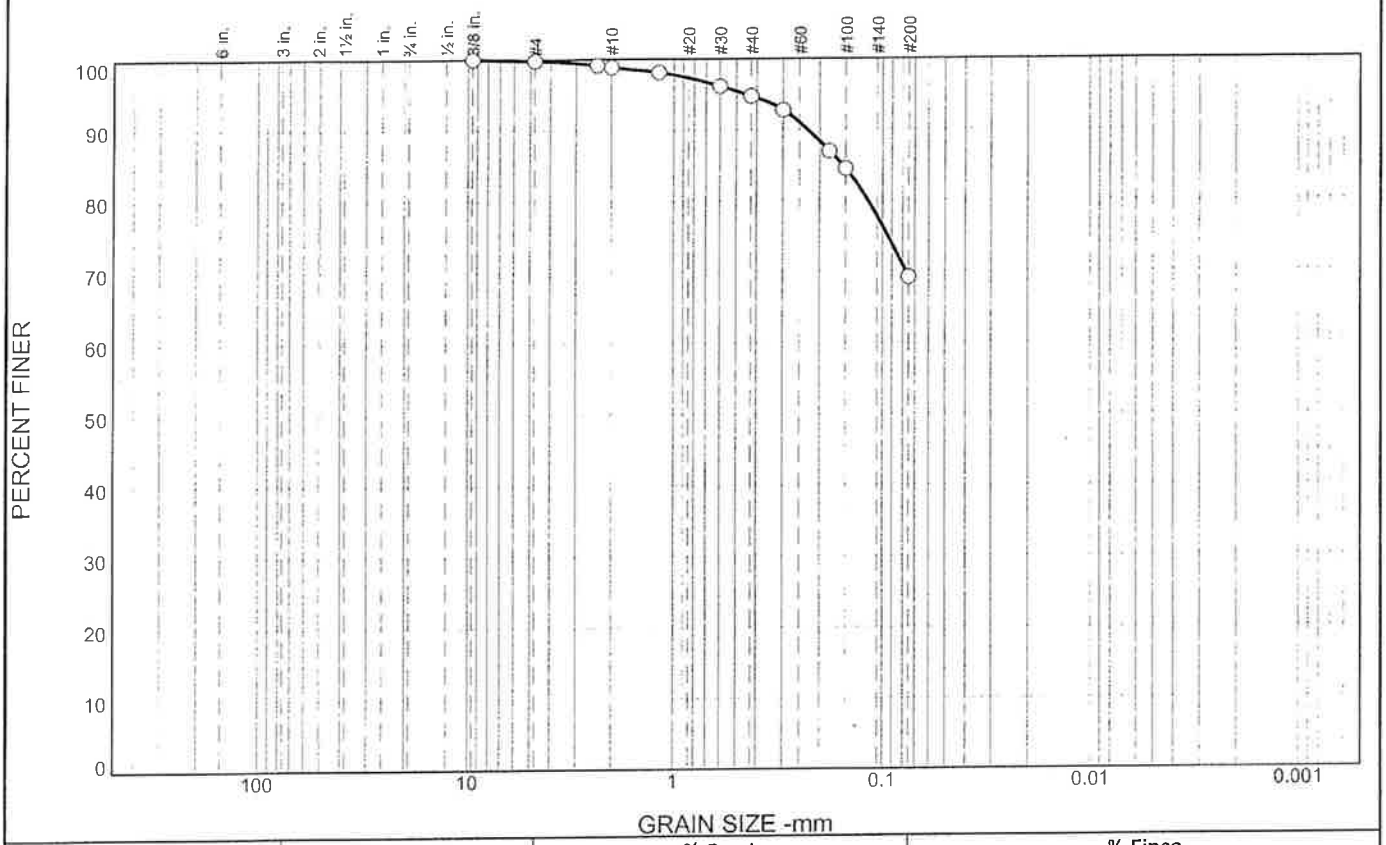
Date: 5/21/14

CGC, Inc.

Client: SCS Engineers
Project: 6th Street Generating Station (#25212261.02)
Project No: C13016-26 **Figure**

Tested By: DRW **Checked By:** DAS

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.2	0.9	4.2	25.5	69.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/8	100.0		
#4	99.8		
#8	99.2		
#10	98.9		
#16	98.1		
#30	96.1		
#40	94.7		
#50	92.7		
#80	86.9		
#100	84.4		
#200	69.2		

* (no specification provided)

Material Description

Black Silt, Some Sand, Trace Gravel (Ash)

Atterberg Limits

PL= NP LL= NV PI= NP

Coefficients

D_{90}= 0.2302 D_{85}= 0.1558 D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= ML AASHTO= A-4(0)

Remarks

Natural Moisture = 142.9%
Note: Description refers to particle sizes only. No Atterberg Limits or organic content were determined.

Sample Number: B2, S4 **Depth:** 8.5-10'

Date: 5/21/14

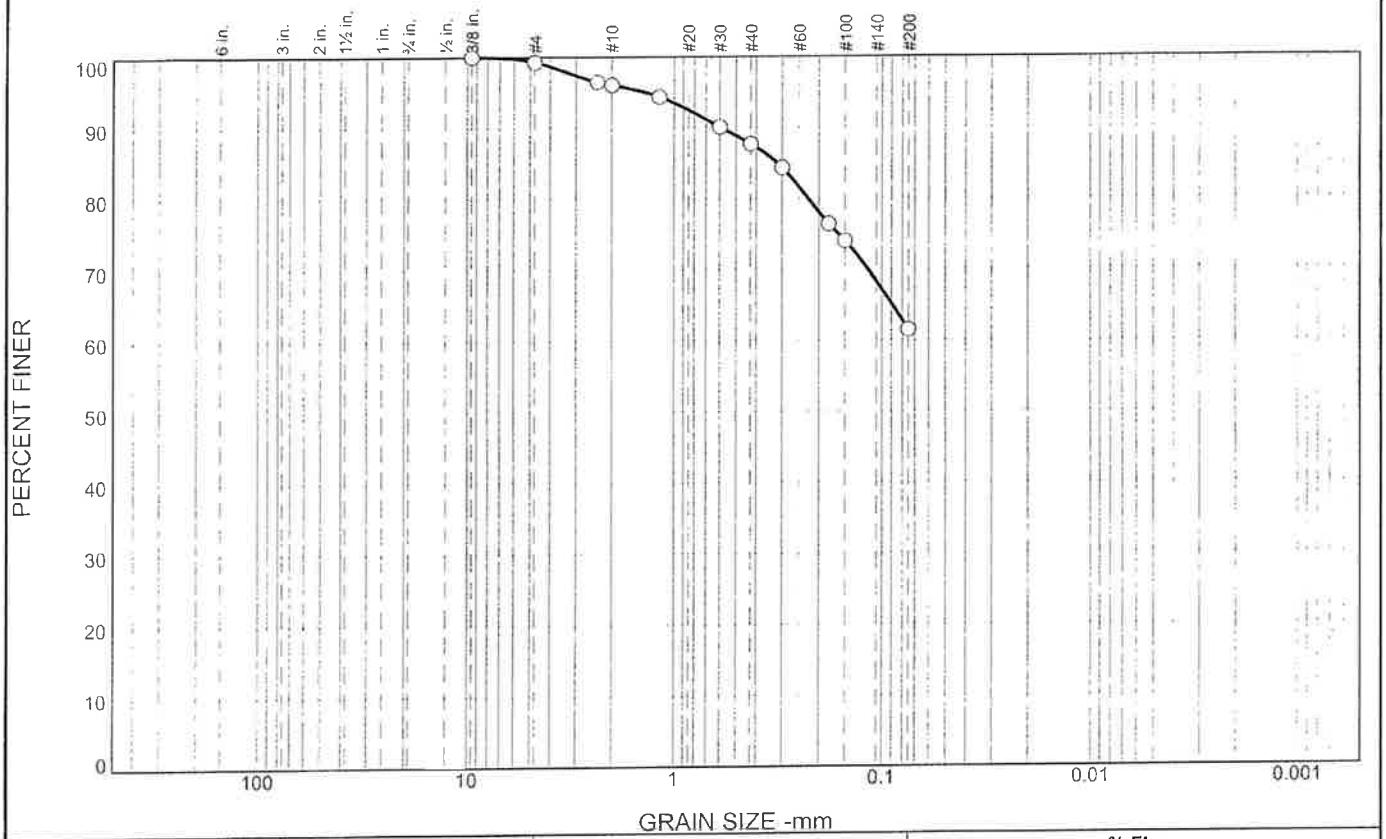
CGC, Inc.

Client: SCS Engineers
Project: 6th Street Generating Station (#25212261.02)

Project No: C13016-26 **Figure**

Tested By: DRW **Checked By:** DAS

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.7	3.3	8.3	26.2	61.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/8	100.0		
#4	99.3		
#8	96.5		
#10	96.0		
#16	94.3		
#30	90.1		
#40	87.7		
#50	84.3		
#80	76.3		
#100	73.9		
#200	61.5		

* (no specification provided)

Material Description

Black Sandy Silt, Trace Gravel (Ash)

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 0.5926 D_{85}= 0.3181 D_{60}=
D_{50}= D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= ML AASHTO=

Remarks

Natural Moisture = 208.2%
Note: Description refers to particle sizes only. No Atterberg Limits or organic content were determined.

Sample Number: B2, S6 **Depth:** 13.5-15'

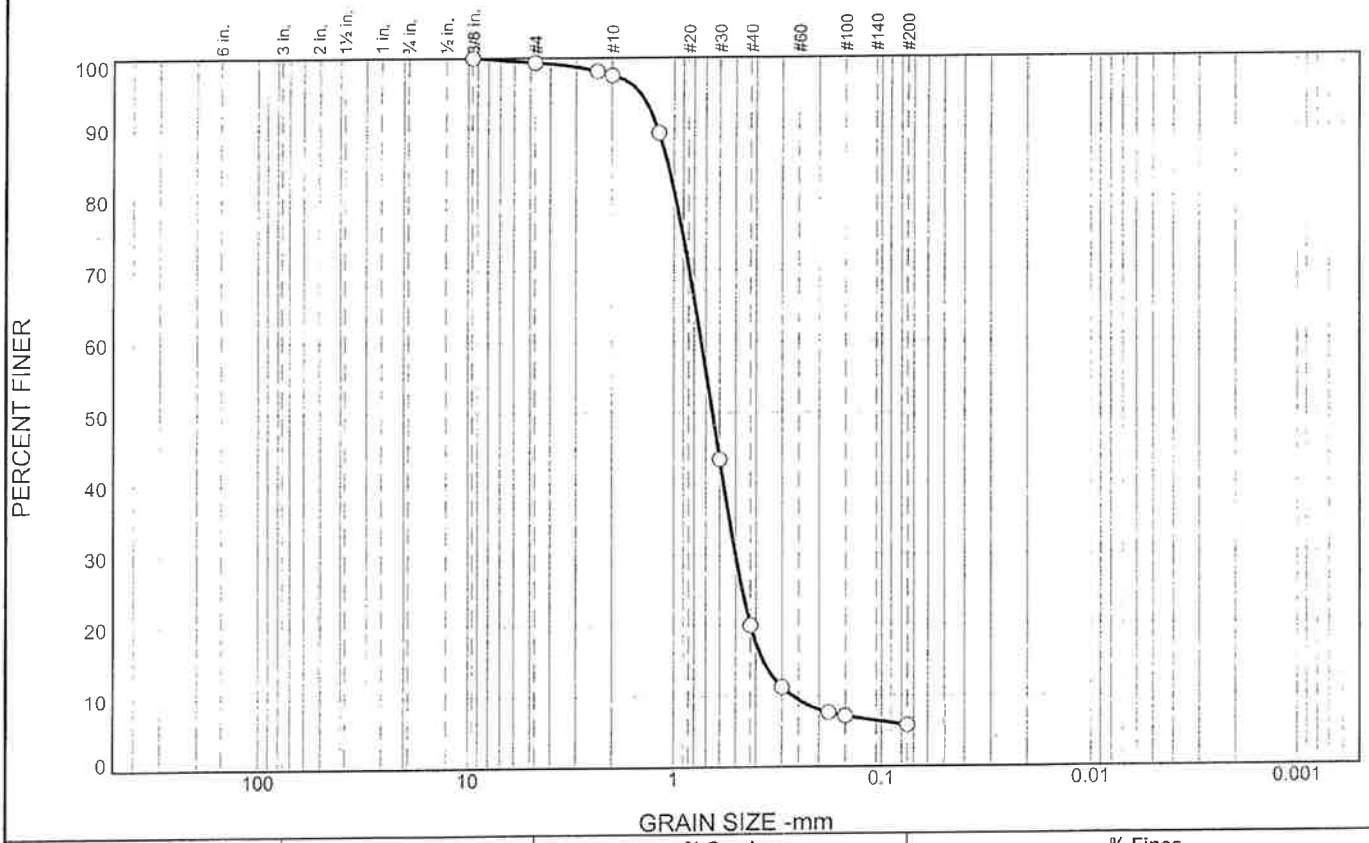
Date: 5/21/14

CGC, Inc.

Client: SCS Engineers
Project: 6th Street Generating Station (#25212261.02)
Project No: C13016-26 **Figure**

Tested By: DRW **Checked By:** DAS

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.7	1.8	77.6	14.1	5.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/8	100.0		
#4	99.3		
#8	98.1		
#10	97.5		
#16	89.4		
#30	43.4		
#40	19.9		
#50	11.3		
#80	7.6		
#100	7.2		
#200	5.8		

* (no specification provided)

Material Description

Brown Fine to Medium Sand, Little Silt, Trace Gravel

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 1.1995 D_{85}= 1.0713 D_{60}= 0.7387
D_{50}= 0.6515 D_{30}= 0.5032 D_{15}= 0.3705
D_{10}= 0.2662 C_u= 2.77 C_c= 1.29

Classification

USCS= SP-SM AASHTO=

Remarks

Natural Moisture = 21.3%

Sample Number: B2, S10 **Depth:** 23.5-25' **Date:** 5/21/14

CGC, Inc.

Client: SCS Engineers
Project: 6th Street Generating Station (#25212261.02)
Project No: C13016-26 **Figure**

Tested By: DRW **Checked By:** DAS

APPENDIX D – Hydrograph Data

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

Structural Stability Assessment

RIVERGAGES.COM
Water Levels of Rivers and Lakes

US Army Corps of Engineers

If you're having problem

Water Levels By:
Choose An Option

National Weather Service Products

Bookmark

Google Earth | What's This? | Google Map

Upstream

Cedar River at Cedar Rapids, IA

Downstream

Stream Name: Cedar River
Gage Zero: 700.47 Ft. NGVD29
Flood :12 Ft.
Record High :31.12 Ft.

Longitude: -91.66694444
Latitude: 41.97194444
River Mile: 85.4 miles upstream of mouth of Cedar R.
Record High Date: 06/13/2008

Drainage Area : 6510.00 Mi^2

Location of Gage :

Located in Linn County, Cedar Rapids, IA. on the right bank 400 ft upstream from the 8th Ave bridge and 2.7 miles upstream from Prairie Creek, 85.4 miles upstream of the Cedar River mouth.

For official flow data, please visit the USGS website listed in the Additional Links for this station. The National Weather Service information is also linked in the Additional Links for this station.

This gage is cooperatively operated by the US Geological Survey - Iowa Water Science Center and the Cedar Rapids Water Department.

Latest Data
03/12/2026 11:00 Central

Latest	7.66 Ft.
24 Hr. Change	-0.32 Ft.
Tomorrow's Forecast	N/A Plot Forecast
Last Year's	4.27 Ft.
Latest Flow	14,375 CFS

7 Days | Stage

Plot | Tabulate

Daily Historic Data
(06:00 Central Reading)

HG - Stage (Ft)

From JAN 1 1973
To FEB 28 2026

Elevation

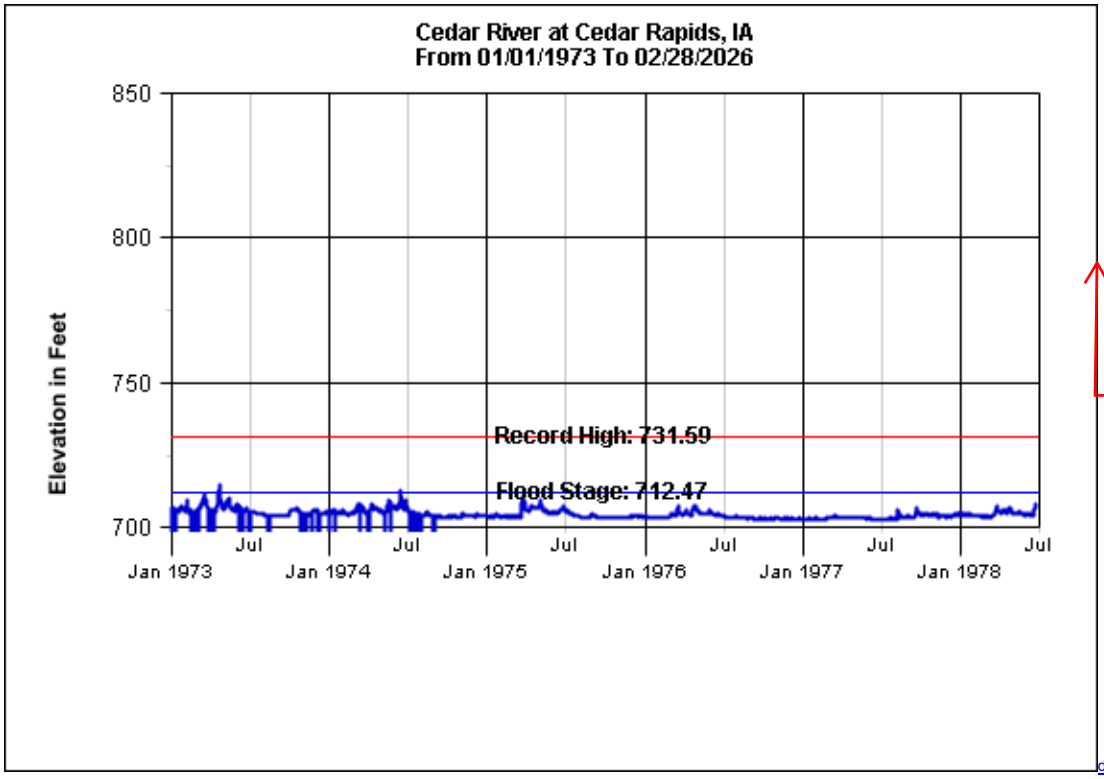
Plot | Tabulate | Tabulate (Yearly Formatted)

View All Images

Additional Links:
View Record Stage High / Lows
DECODES XML
Historic Flood Profiles (Palo to Cedar Rapids RM 128.8 to 109.2)
Rating Table
Bench Marks and Reference Points
Official National Weather Service information for this station
Official USGS data for this station

US Army Corps of Engineers - Rock Island District - Water Control Center - Contact Us

Cedar River at Cedar Rapids, IA
(06:00 Central)

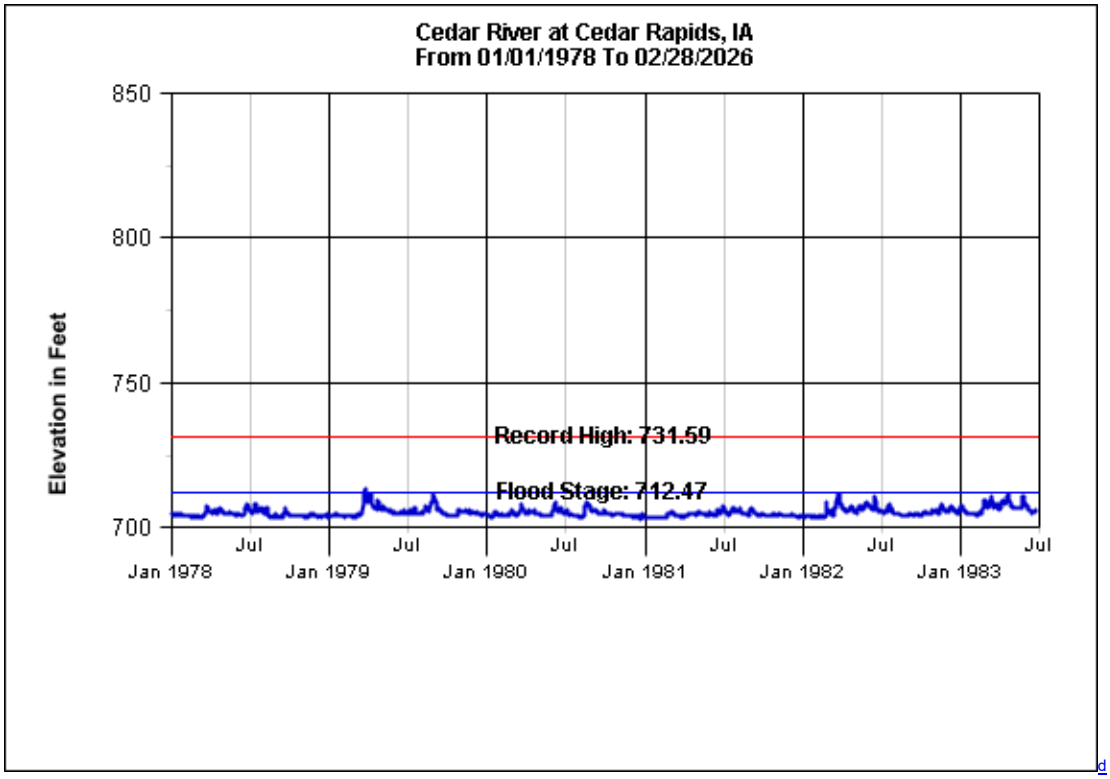


Flood Elevation
On Off
Record High Elevation
On Off
View Graph

100-year flood stage downstream at 6th Street Closed Ash Pond from FEMA is at elevation ~7 River Final WPDES Settling Pond from FEMA is at elevation ~726.5 feet

US Army Corps of Engineers - Rock Island District - Water Control Center - Contact Us

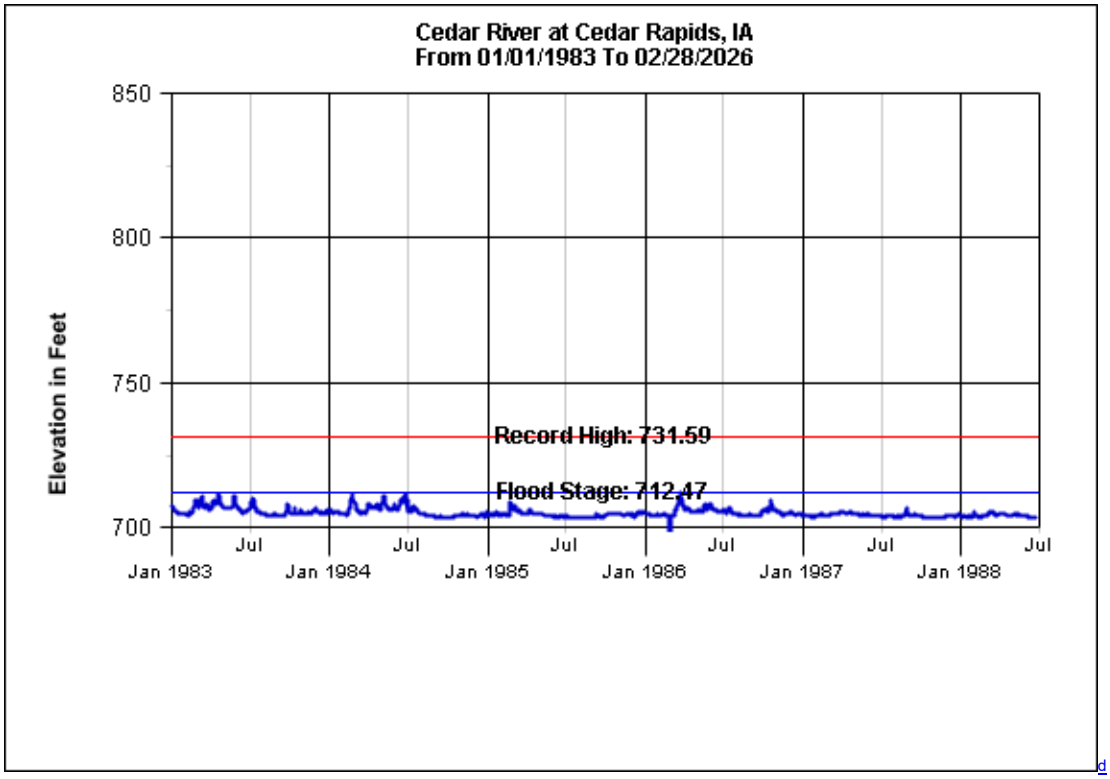
Cedar River at Cedar Rapids, IA
(06:00 Central)



Flood Elevation
On Off
Record High Elevation
On Off
View Graph

US Army Corps of Engineers - Rock Island District - Water Control Center - Contact Us

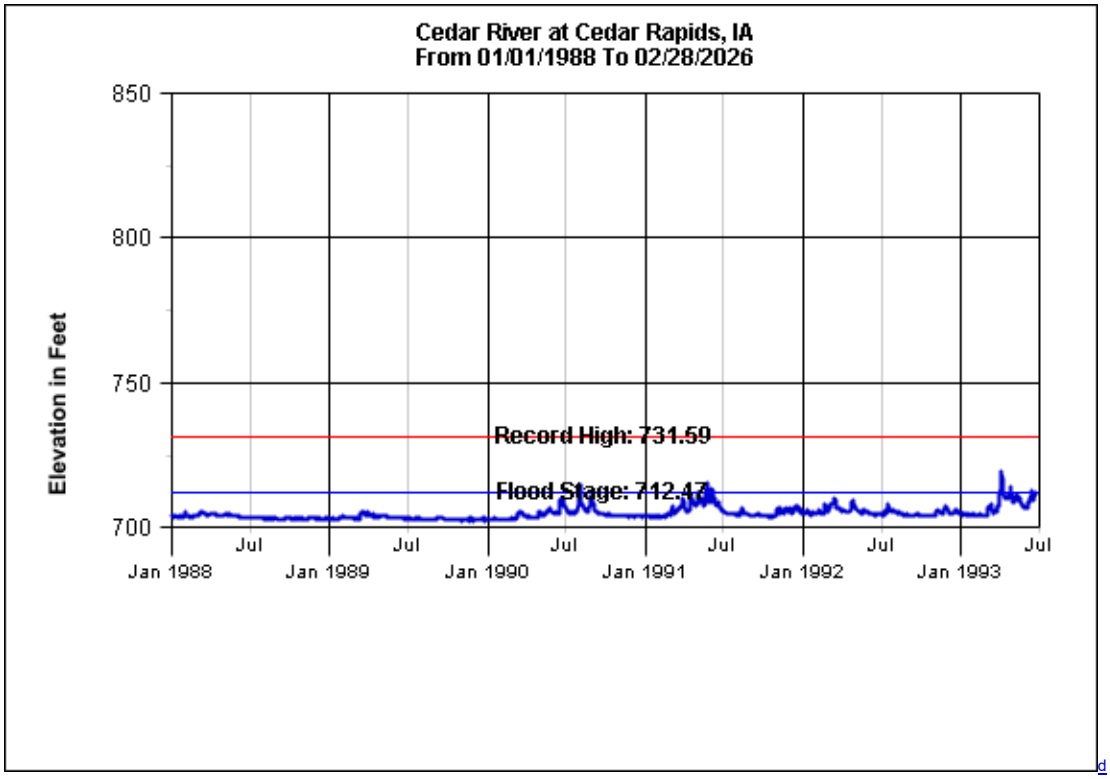
Cedar River at Cedar Rapids, IA
(06:00 Central)



Flood Elevation
On Off
Record High Elevation
On Off
View Graph

US Army Corps of Engineers - Rock Island District - Water Control Center - Contact Us

Cedar River at Cedar Rapids, IA
(06:00 Central)



Flood Elevation
On Off
Record High Elevation
On Off
View Graph

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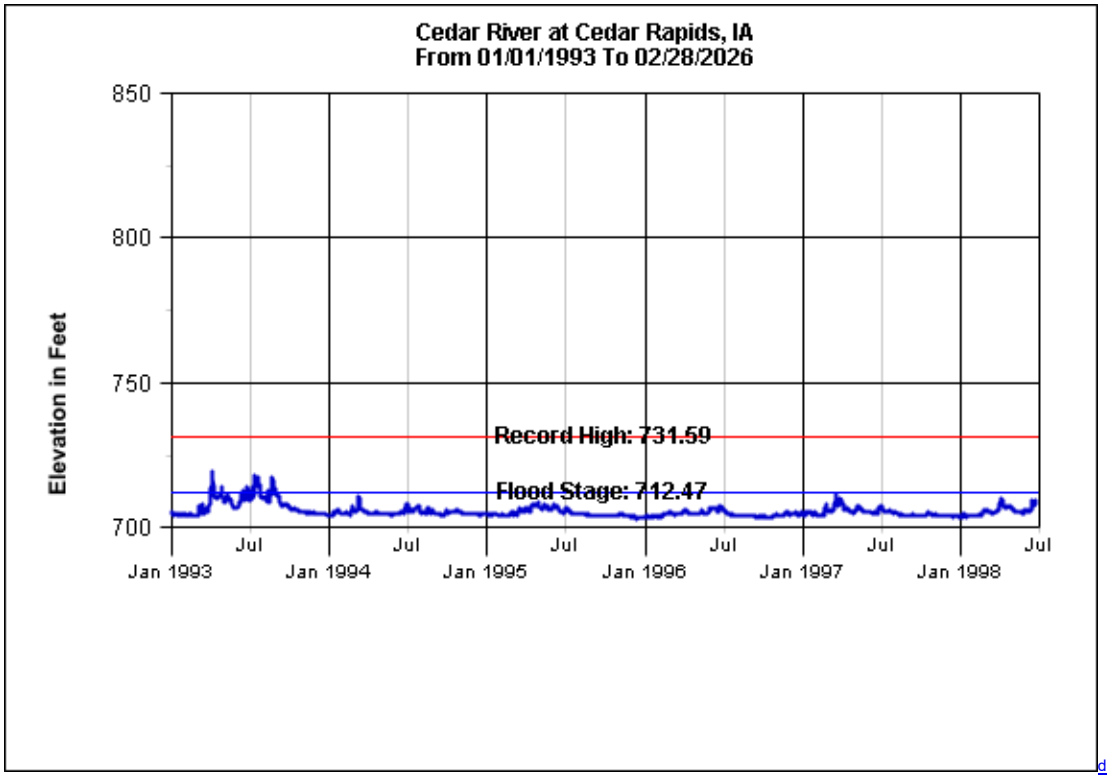
Cedar River at Cedar Rapids, IA
(06:00 Central)



Flood Elevation
On Off
Record High Elevation
On Off
View Graph

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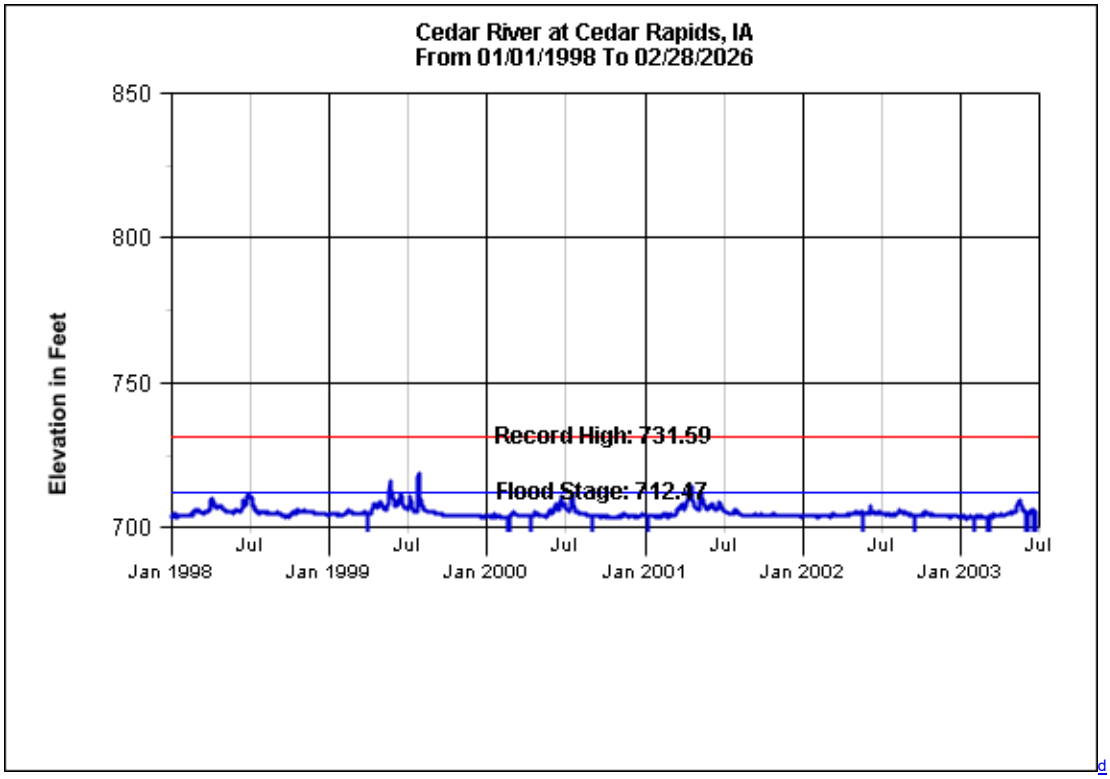
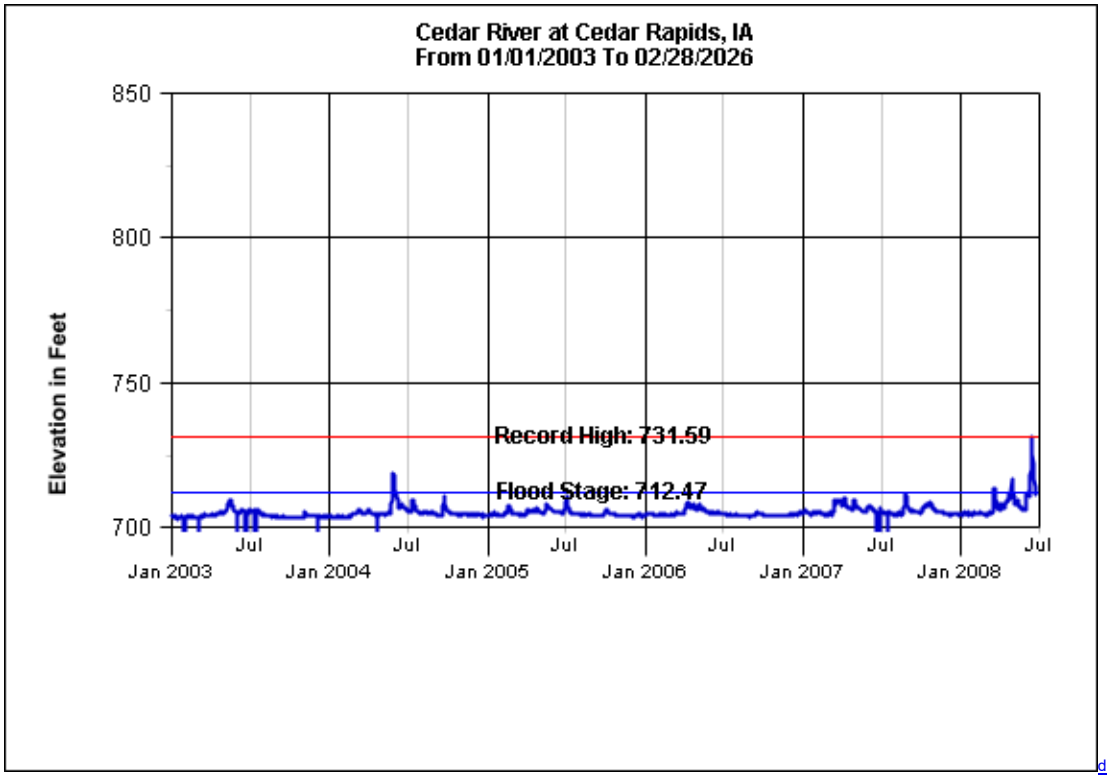
Cedar River at Cedar Rapids, IA
(06:00 Central)



Flood Elevation
On Off
Record High Elevation
On Off
View Graph

US Army Corps of Engineers - Rock Island District - Water Control Center - Contact Us

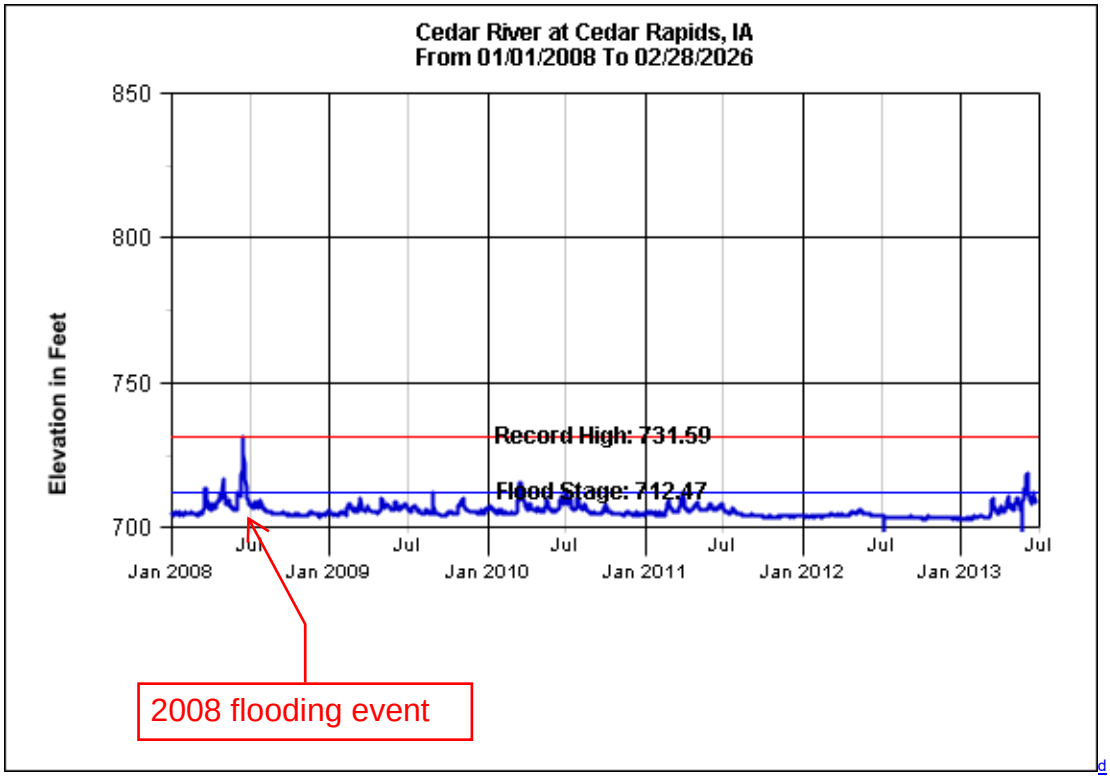
Cedar River at Cedar Rapids, IA
(06:00 Central)



Flood Elevation
On Off
Record High Elevation
On Off
View Graph

US Army Corps of Engineers - Rock Island District - Water Control Center - Contact Us

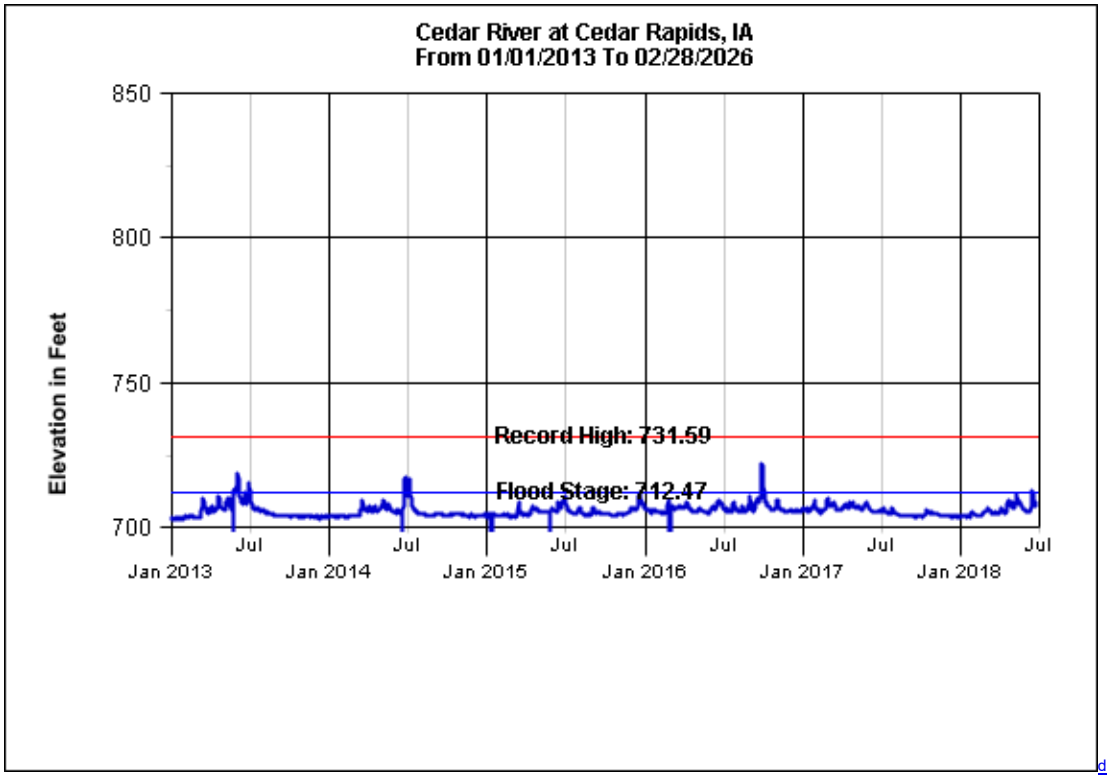
Cedar River at Cedar Rapids, IA
(06:00 Central)



Flood Elevation
On Off
Record High Elevation
On Off
View Graph

US Army Corps of Engineers - Rock Island District - Water Control Center - Contact Us

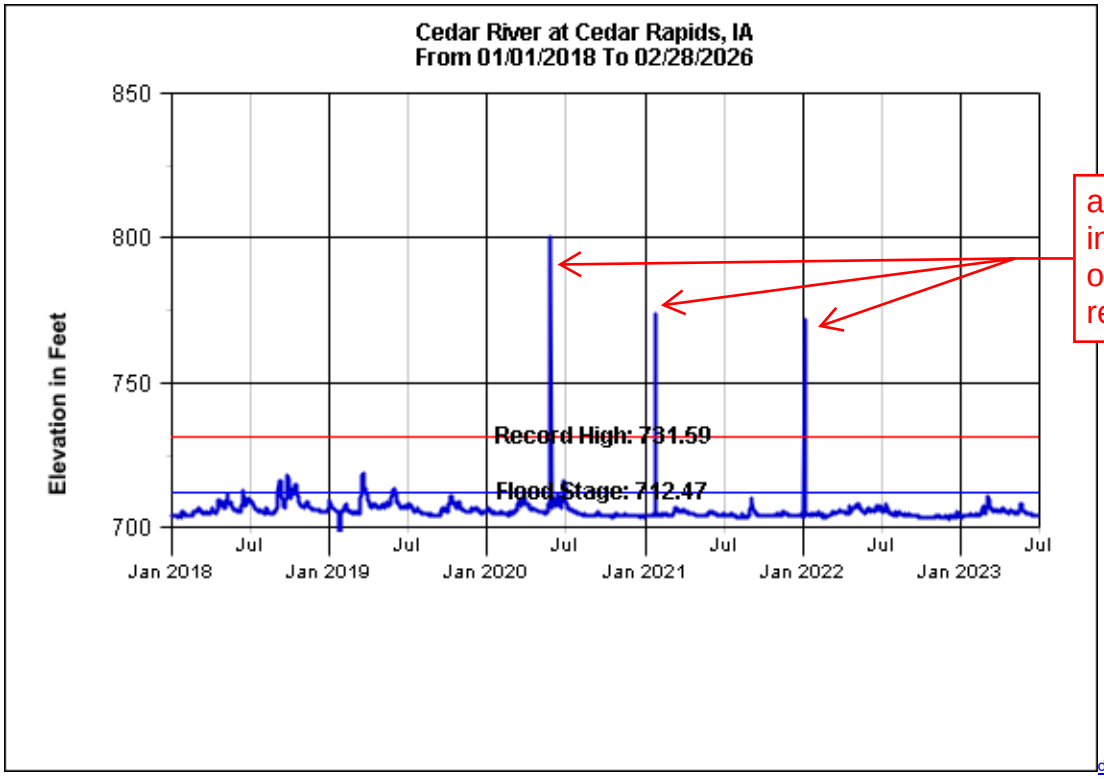
Cedar River at Cedar Rapids, IA
(06:00 Central)



Flood Elevation
On Off
Record High Elevation
On Off
View Graph

US Army Corps of Engineers - Rock Island District - Water Control Center - Contact Us

Cedar River at Cedar Rapids, IA
(06:00 Central)

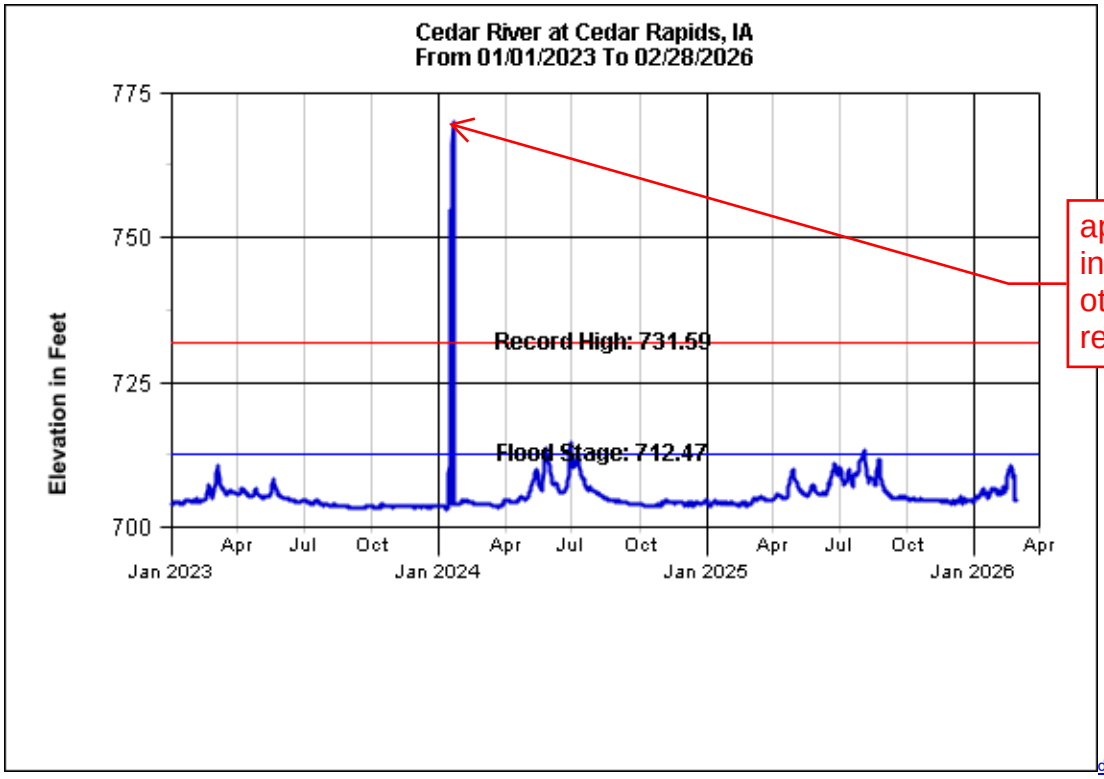


Flood Elevation
On Off
Record High Elevation
On Off
View Graph

appears to be instrument error or other erroneous readings

US Army Corps of Engineers - Rock Island District - Water Control Center - Contact Us

Cedar River at Cedar Rapids, IA
(06:00 Central)



Flood Elevation
On Off
Record High Elevation
On Off
View Graph

appears to be instrument error or other erroneous readings

US Army Corps of Engineers - Rock Island District - Water Control Center - Contact Us