

INITIAL HISTORY OF CONSTRUCTION
40 C.F.R. § 257.100(f)(2)(ii) and 40 C.F.R. § 257.73(c)(1)(i)-(xii)
PLANT KRAFT ASH POND 1 (AP-1)
GEORGIA POWER COMPANY

A rule amendment to the Federal Coal Combustion Residuals (CCR) Rule (40 C.F.R. Part 257) became effective on November 8, 2024. See Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals from Electric Utilities; Legacy CCR Surface Impoundments, 89 Fed. Reg. 38950 (“Legacy Rule”). The Legacy Rule defines the term “legacy CCR surface impoundment” and establishes regulatory requirements for CCR Units that meet the definition of a legacy CCR surface impoundment. The Legacy Rule requires the owner or operator of a legacy CCR surface impoundment to compile a history of construction. [See 40 C.F.R. § 257.100\(f\)\(2\)\(ii\); 40 C.F.R. § 257.73\(c\)\(1\)\(i\)-\(xii\).](#) To the extent feasible, the following information is provided:

(i) Site Name and Ownership Information:

Site Name: Plant Kraft AP-1

Site Location: 32.148056 N
81.150556 W
See Location Map in the Appendix.

Site Address: 155 Crossgate Rd
Port Wentworth, GA 31407

Owner: Georgia Ports Authority
Owner Address: PO Box 2406, Savannah, GA 31402

Operator: Georgia Power Company
Operator Address: 241 Ralph McGill Blvd
Atlanta, Georgia 30308

Point of Contact: Manager
Environmental Affairs
Georgia Power Company
BIN 10221
241 Ralph McGill Blvd.
Atlanta, Georgia 30308
(404)506-6505

CCR Impoundment Name: Plant Kraft Ash Pond (AP-1)

Identification Number: HSI Site No. 10415 (October 26, 2021)

(ii) CCR Unit Location Map:

Plant Kraft was located at 155 Crossgate Road in Port Wentworth, Chatham County, Georgia, approximately four (4) miles east of Interstate 95. See the Location Map in the Appendix.

(iii) Purpose of CCR Unit:

Plant Kraft began commercial operation in 1958 under the ownership of Savannah Electric Power Company until Georgia Power acquired Savannah Electric Power Company in 2006. Plant Kraft was comprised of four operating units: three coal-fired and one natural gas-fired. AP-1, which was also commissioned in 1958, was designed and constructed to receive and store coal combustion residuals produced during the coal-fired electric generating process at Plant Kraft. AP-1 functioned as a CCR dewatering pond with CCR sluiced to the impoundment, given time to precipitate out of the slurry, and then excavated for transport to an off-site, permitted solid waste disposal facility.

Plant Kraft retired October 13, 2015, ceasing generation prior to October 19, 2015, the effective date of the federal CCR Rule CFR 257.50(e). In 2015, Georgia Power began decommissioning Plant Kraft. As part of decommissioning activities at Plant Kraft, CCR in AP-1 was removed through excavation between June 5, 2015, and August 22, 2016, and disposed of off-site in a permitted solid waste disposal facility. AP-1 was closed under the regulatory oversight of Georgia EPD in 2021. Georgia Power donated a portion of the former plant, including the area encompassing former AP-1, to the Georgia Port Authority in 2021. Currently, the area of AP-1 is the location of critical infrastructure related to Georgia Port's Authority's ongoing operations.

On November 8, 2024, Georgia Power and Georgia Port Authority prepared an Applicability Report, as required by the Legacy Rule 40 CFR 257.100(f)(1). In the Applicability Report, Georgia Power and Georgia Port Authority included a demonstration for deferral pending future permitting action pursuant to 40 CFR 257.101(g). Under this section, the owner or operator of a legacy CCR surface impoundment need not demonstrate compliance with the performance standards in 40 CFR 257.102(c) or (d), provided that the owner demonstrates that the closure of the CCR unit met the standards specified in 40 CFR 257.101(g)(1) through (g)(6).

(iv) Watershed Description:

Plant Kraft AP-1 is located in the Lower Savannah Watershed, which is a significant portion of the approximately 9,850 square mile Savannah Watershed. AP-1 was approximately 7 acres in size and collected stormwater run-off from a small surrounding drainage area. The drainage area was approximately 1.29 acres and consisted of the surrounding dike crests and interior slopes.

(v) Description of physical and engineering properties of CCR impoundment foundation/abutments:

AP-1 was originally constructed as a partially incised CCR impoundment comprised of two partial interior dikes forming a serpentine drainage path through three rectangular interior cells. The interior dikes did not extend the full length on the west end allowing an open flow channel connecting the three cells. The top width of the cells varied from 122.5 feet to 129 feet. The overall length of the cells was approximately 787 feet. The partial interior dikes had a crest width of 20 feet and 24 feet with side slopes of 1.5H:1V. The design crest width was 25 feet on the north side of the impoundment and

approximately 20 ft. on the other sides. The area of the three cells is approximately seven (7) acres. Reference drawing 9477-FY-3A.

Based on drilling at the plant site, two main geologic units are present: a surficial sand unit and a regional silty confining layer. Underlying a thin layer of topsoil and/or fill material, the soils consist of approximately 12 to 28 feet of medium- to coarse-grained, loose, wet sand and silty sand with numerous, discontinuous layers and lenses of silty sand, sandy silt, and silty clay. The silt/clay layers range from 1 to 2 inches to several feet in thickness. Underlying the sand is an olive-green, dense, friable, micaceous, clayey to sandy silt interspersed with thin sandy layers, peat, and shell fragments. This geologic unit is also continuous throughout the entire site.

Information regarding the original dike fill and foundation engineering parameters was not available. However, a field and laboratory investigation was performed in 2010 to determine the engineering properties of the dike fill and foundation materials. The dike fill materials consisted of sand and sandy silt with an effective cohesion of 0 psf and effective internal friction angle of 35°. The foundation materials consisted of silty sands, sands, and clay. The clayey materials had an effective cohesion of 200 psf and internal friction angle of 20°. The foundation sands and silty sands had an effective cohesion of 100 psf with an effective internal friction angle of 33°.

(vi) Summary of Site Preparation and Construction Activities:

AP-1 was formed by an earth fill embankment constructed of sand and sandy silt excavated from the pond area. As part of the site preparation activities for AP-1's construction, a waste treatment pond was constructed adjacent to the south side of AP-1. This pond was later filled and the area reclaimed. The original depth of each cell was approximately eleven (11) feet. The maximum height of the embankment was about 6 feet on the east side. The outer embankment slopes on the east side were approximately 2.5H to 1.0V.

According to reference drawing 19338-C-100, dated 1977, the cells were modified to provide an opening on the east end of the southern interior cell while closing the opening on the west end to allow a longer, serpentine flow path through the three rectangular cells. The length of the southern cell had also been reduced as indicated by 1985 aerial imagery. The two northern cells were again modified in 2001 to allow for an apparent expansion of the substation. This modification reduced the length on the western end of both cells by backfilling about 40 feet. The eastern portion of the northern cell was also extended by excavation by approximately 80 feet.

(vii) Engineering Diagrams:

The following documents, including relevant information on the dimensional drawings of AP-1, can be found in the Appendix:

- 94477-FY-3A Lot Plan, Stone & Webster Engineering Corporation, Rev. 12 (Rev. 11 dated 8/7/1968).
- 19338-C-100 Plot Plan, Bernard Johnson Incorporated, 9/21/77.
- 62601-2 Plant Kraft Modified Ash Pond, 8/6/2001.

(viii) Description of Instrumentation:

There is no historical or current instrumentation for AP-1.

(ix) Area-Capacity Curves:

AP-1 is closed and currently not capable of storing water. All surface run-off from the area of AP-1 is routed off-site.

(x) Spillway/Diversion Design Features and Capacity Calculations:

AP-1 was constructed with a 5'-3" x 4'-6" concrete weir box outlet structure with a grated top. The outlet structure was constructed with a 24" wide rectangular weir at the top of the concrete box. A 42" diameter concrete discharge pipe conveyed the discharge to a drainage ditch located south of the cells which discharges through a NPDES permitted outfall into the Savannah River located along the east side of Plant Kraft. The outlet structure was located in the southwest corner of the impoundment to maintain the pond water level. Water level was maintained by positioning stop logs in the spillway structure.

(xi) Construction Specifications and Provisions for Surveillance, Maintenance, and Repair:

Prior to closure, inspection of the dikes of AP-1 were conducted on a regular basis – at least annually by professional dam safety engineers and at least weekly by trained plant personnel. The inspections provided assurance that structures were sound and that action was taken, as needed, based on the findings. During annual inspections, dam safety engineers inspected any maintenance or remediation activities performed since the previous inspection, checked the status of work recommended in prior inspections, ensured that the posting of emergency notification information is up to date and evaluated any items noted during plant personnel inspections.

Design drawings showing the original plans for construction of AP-1 are located in the Appendix. There were no construction specifications available.

(xii) Known Record of Structural Instability:

There is no known record of structural instability at AP-1.

APPENDIX

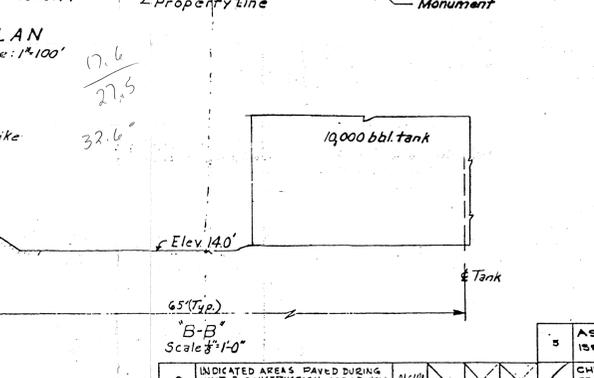
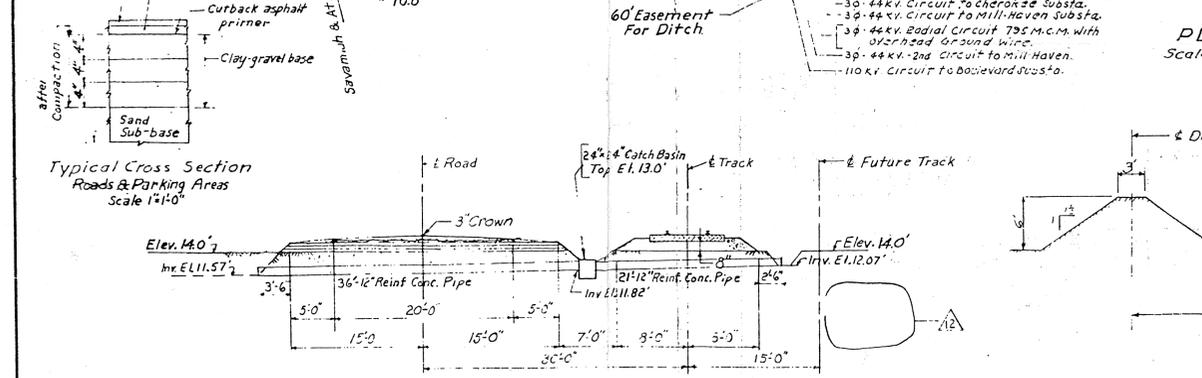
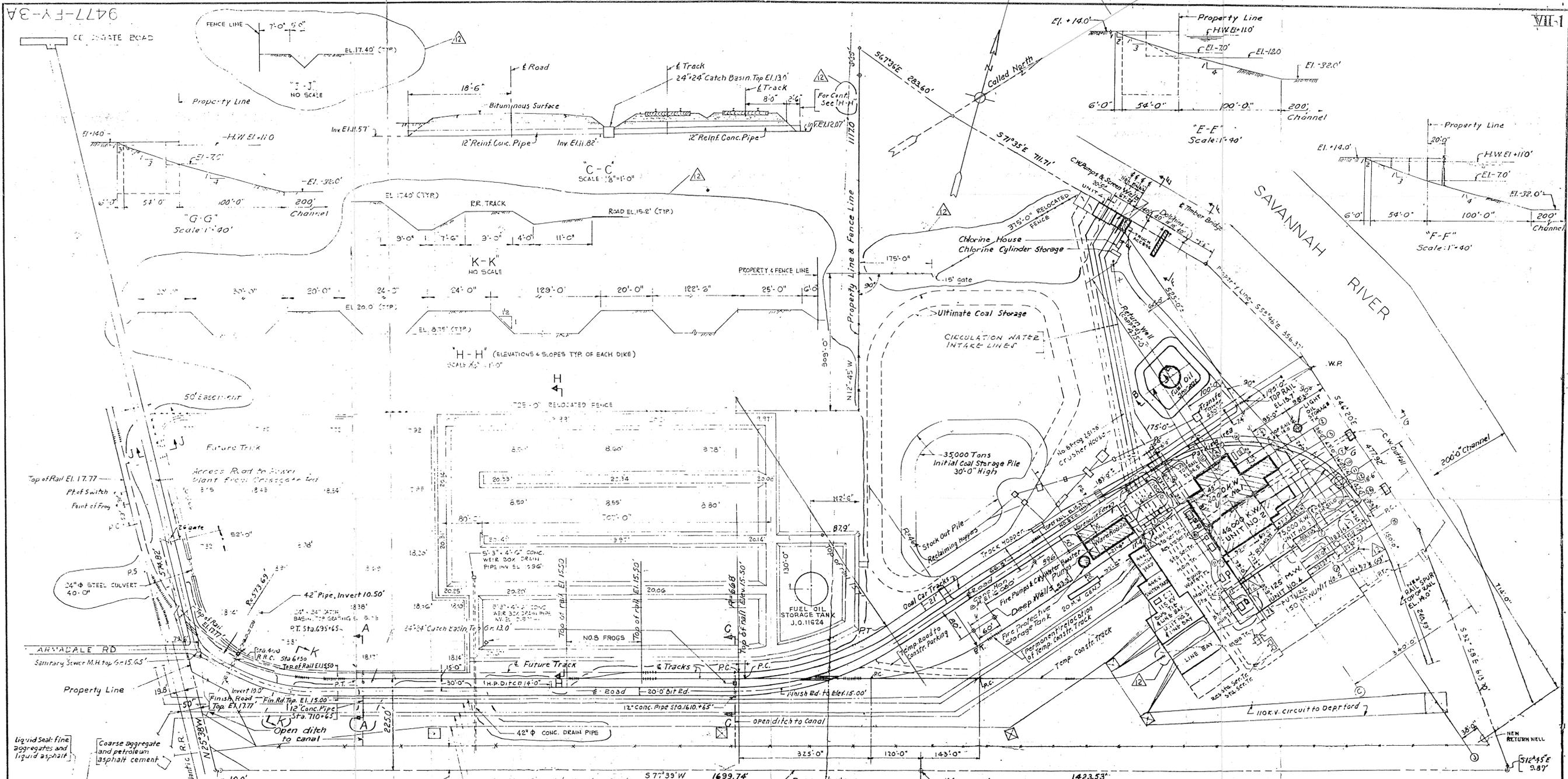


**PLANT KRAFT AP-1
2014**

LOCATION MAP (2014)



LOCATION MAP (2022)



Notes:
 Scale: As noted
 For coal conveying arrangement see dwgs. 9477-FM-15A, FM-15B, FM-15C & FM-15D.
 For circulating water lines see dwg. 9477-FP-1A & FP-1B.
 For switchyard see dwg. 9477-FE-21A.
 For arrangement Screen Well & Pump House see dwg. 9477-FM-16A.
 For Screen Well concrete outline Sh. I. see dwg. 9477-FG-3B.
 For outfall structure see dwg. 9477-FV-4A.
 For all large pipe see dwg. 9477-FY-3A.
 For Duct Lines & Manholes see Schematic Duct Line Plan Dwg. 9477-FE-24B.
 For Circ. Water Line Arrgt Present & Future 10858-SP-1C
 Datum Reference for Power Station Elevations is District Corps of U.S. Engrs.
 Datum Reference for Transmission Tower and Circuit Elevations is U.S. C.Y.G.S.

Note:
 [Symbol] INDICATE AREAS PAVED DURING UNIT 3 CONSTRUCTION
 For details of areas paved during Unit 3 construction refer to mfr print file No. 10858-14.3-14A
 [Symbol] INDICATE AREAS PAVED DURING UNIT 4 CONSTRUCTION
 [Symbol] INDICATE AREAS REPAIRED DURING UNIT 4 CONSTRUCTION

APPROVED: *W. A. Kelley*
 REGISTERED PROFESSIONAL ENGINEER NO. 3414
 STATE OF GEORGIA

LOT PLAN

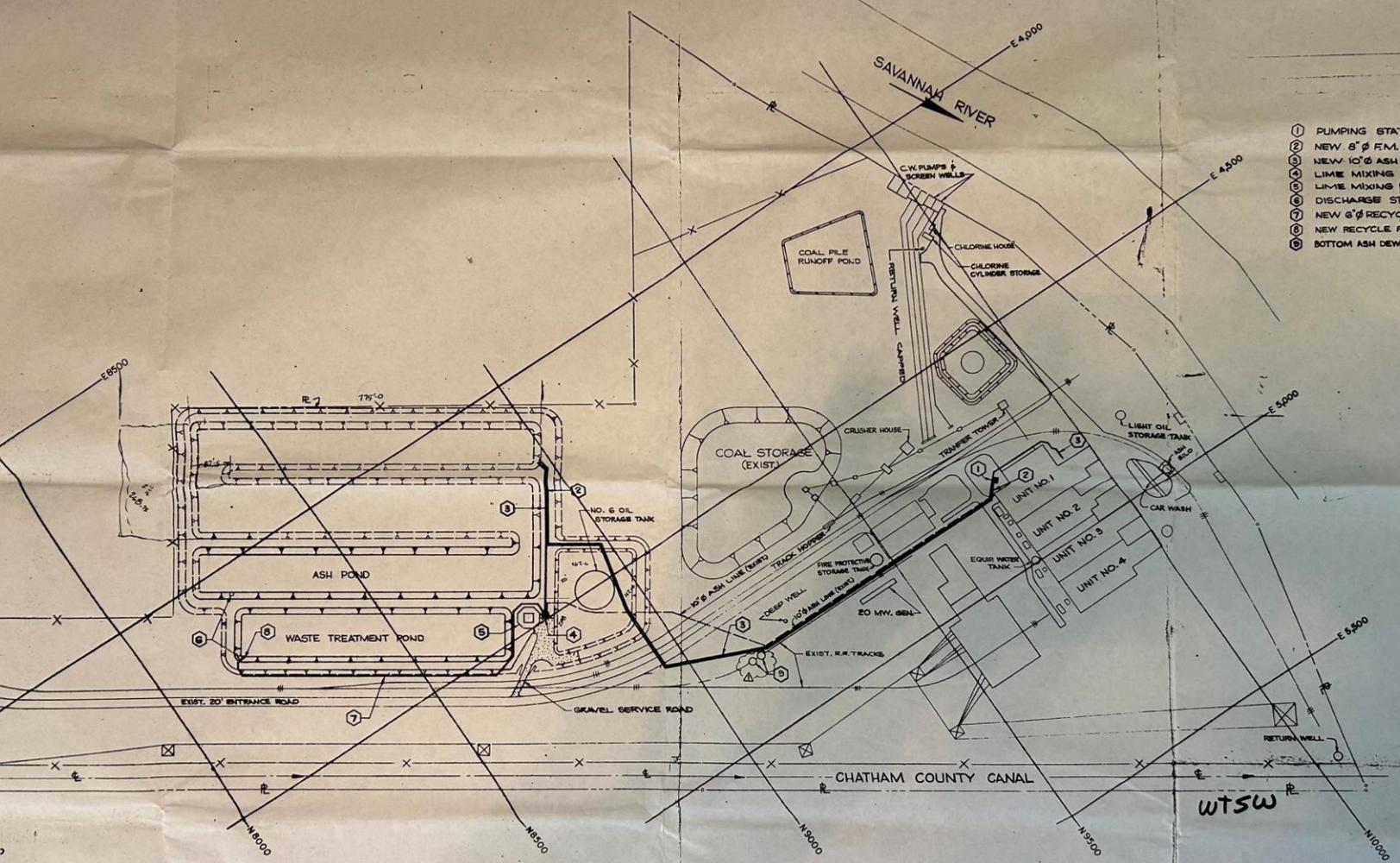
**UNIT 1 - PORT WENTWORTH STATION
 SAVANNAH ELECTRIC AND POWER CO
 SAVANNAH, GEORGIA**

STONE & WEBSTER ENGINEERING CORPORATION
 DRAWING NUMBER **9477-FY-3A**

ISSUE	DESCRIPTION	CHECKED	DATE	ISSUE	DESCRIPTION	CHECKED	DATE	ISSUE	DESCRIPTION	CHECKED	DATE
12	AS BUILT FOR J.O. 9477 ISSUED FOR J.O. 10014			1	ORIGINAL ISSUE						
11	ADD GAS TUBING, EXTENDED WAREHOUSE, RELOCATED RAILROAD TRACK	JRP	8/16	2	HOLD REMOVED - DIRE. NOTES SECTIONS "E-E", "F-F" & "G-G" CHANGED						
10	ISSUED FOR J.O. 11574			3	INDICATED AREAS PAVED DURING UNIT 3 CONSTRUCTION, ADDED NEW RAIL SPUR, FIELD CHANGES						
				4	CHLORINE HOUSE & CHLORINE STORAGE SHED RELOCATED, MINOR CHANGES						
				5	DIMENSIONS TO FUEL OIL STORAGE TANK, WAREHOUSE, DEEP WELLS, ETC. CHANGED						
				6	AS BUILT FOR J.O. 10014 ISSUED FOR J.O. 10058						
				7	ADDED RAIL SPUR ON 340'-0" R., NEW ASH SILO, NEW RETURN WELL						
				8	INDICATED AREAS PAVED DURING UNIT 3 CONSTRUCTION, ADDED NEW RAIL SPUR, FIELD CHANGES & RADIUS 340.37' WAS 340'-0"						
				9	INDICATED AREAS PAVED DURING UNIT 3 CONSTRUCTION, ADDED NEW RAIL SPUR, FIELD CHANGES						



- ① PUMPING STATION
- ② NEW 8" Ø F.M.
- ③ NEW 10" Ø ASH LINE
- ④ LIME MIXING TANK
- ⑤ LIME MIXING BASIN
- ⑥ DISCHARGE STRUCTURES
- ⑦ NEW 8" Ø RECYCLE LINE
- ⑧ NEW RECYCLE PUMP
- ⑨ BOTTOM ASH DEWATERING EQUIPMENT



RELEASED FOR CONSTRUCTION
 BY *J.H. Carter* DATE 7-21-77

JOHNSON
 ENGINEERS - ARCHITECTS - PLANNERS
 340 INTERSTATE NORTH
 ATLANTA, GEORGIA 30308
 PHONE NO. 7505-01

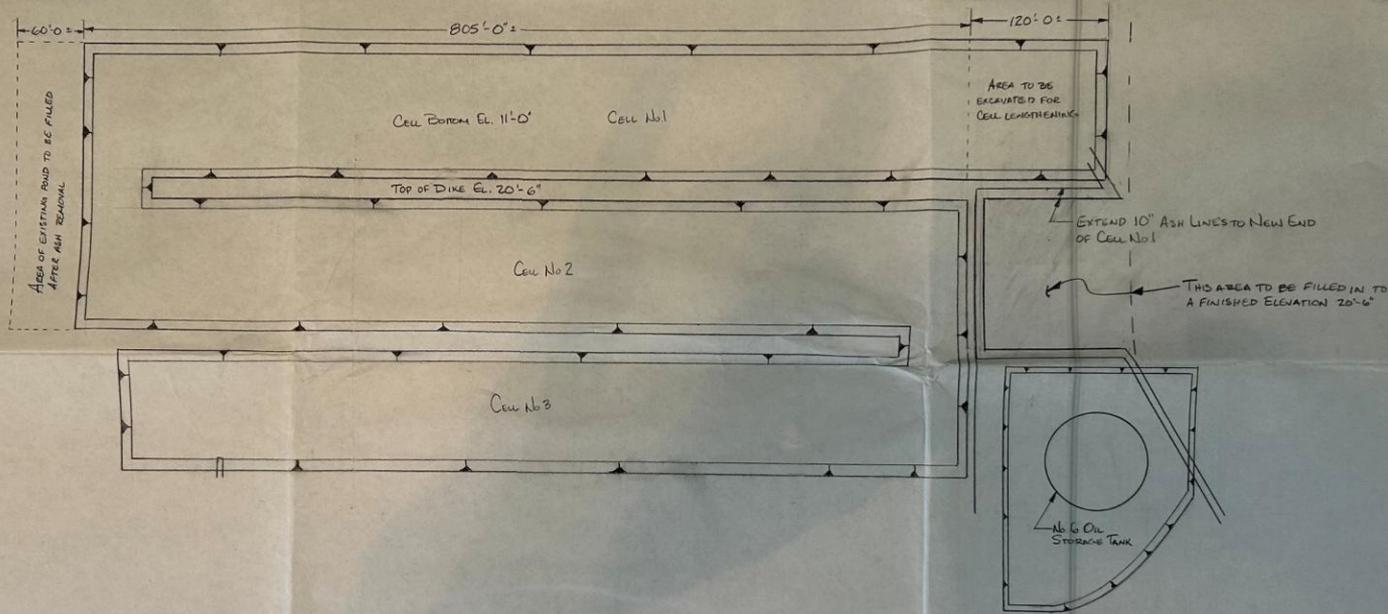
PLOT PLAN
 SAVANNAH ELECTRIC AND POWER CO.,
 SAVANNAH, GEORGIA

DRAWING NUMBER 19338-C-100



SCALE	DATE
1"=100'	7-27-77
	7-27-77
	7-27-77
	7-28-77
	7-28-77
	7-28-77

NO.	DATE	BY	REVISION
1			ADDED BOTTOM ASH DEWATERING EQUIP



BID FILE

SCALE: 1" = 50' 0"	APPROVED BY:	DRAWN BY: OSN
DATE: 8-6-01	REVIEWED:	
PLANT KRAFT Modified Ash Ponds		DRAWING NUMBER: C-2604-2