HISTORY OF CONSTRUCTION
40 C.F.R. § 257.100(f)(2)(ii) and 40 C.F.R. § 257.73(c)(1)(i)-(xii)
PLANT BRANCH ASH POND C (AP-C)
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 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 Branch
Site Location:	Putnam County
Site Address:	1100 Milledgeville Rd Milledgeville, GA 31061
Owner:	Georgia Power Company
Owner Address:	241 Ralph McGill Blvd Atlanta, GA 30308
Point of Contact:	Manager Environmental Affairs Georgia Power Company BIN 10221 Atlanta, Georgia 30308 (404) 506-6505
CCR Impoundment Name:	Plant Branch Ash Pond C (AP-C)
Identification Number:	NPDES Permit No. GA0026051

(ii) CCR Unit Location Map:

33.190303 N, 83.305425 W

The location of AP-C is shown on the United States Geological Survey (USGS) 7½-minute topographic quadrangle map presented in the Appendix.

(iii) Purpose of CCR Unit:

Plant Branch formerly operated as a four unit, coal-fired power plant that commenced power generation in 1965, ceased generating electricity prior to April 2015, and was decommissioned in 2019. AP-C is one of the five ash ponds (A, B, C, D, and E) that were constructed to receive and store coal combustion residuals (CCR) during the power generating process at Plant Branch. AP-C is currently inactive and will be closed by removal.

(iv) Watershed Description:

AP-C is located within the Beaverdam Creek – Lake Sinclair Subwatershed (HUC-12), which encompasses 13,618 acres. This subwatershed is part of the Big Cedar Creek Watershed (HUC-10), which encompasses 139,574 acres. Plant Branch is located entirely within the Big Cedar Creek Watershed. The drainage area associated with AP-C is approximately 74 acres, which includes direct rainfall and runoff from adjacent areas.

(v) Description of Physical and Engineering Properties of CCR Unit Foundation/Abutments:

Plant Branch is located within the Piedmont physiographic province, which lies between the Blue Ridge Mountains to the northwest and the Upper Coastal Plain to the south. This province is underlain by regionally metamorphosed rocks including granitic gneisses, amphibolites, and mica schists. Physical and chemical weathering of metamorphic and igneous rocks in the humid climate of the southern Piedmont results in a variably thick blanket of residual soils and saprolite above the bedrock. The degree of weathering decreases gradually with depth, with no clear boundary typically present between the weathered zones. Because of such variations in rock types and structure, the depth of weathering can vary significantly over short horizontal distances. The thickness of the residual soil encountered in borings is variable, ranging from approximately 10 feet (ft) to as much as 75 ft. The observed saprolite thickness is consistent with other Piedmont areas in the southeastern United States. The saprolite is thicker in upland areas, and generally thinner in lowland areas. Between the residual soil/saprolite zone and the underlying bedrock, there is a zone of partially weathered rock (PWR), as defined by standard penetration test data, where available. The PWR at the site was encountered at depths between 2 and 60 ft below ground surface (ft bgs) and accounts for a majority of the "transition zone" that lies between the saprolite and underlying competent bedrock. The transition zone, consisting of PWR and the upper fractured bedrock, is relatively thin with thicknesses generally being less than 10 feet. The top of rock surface generally follows topography which has been largely uniformly weathered. The top of rock surface across the site ranged from within a few feet of ground surface to approximately 90 ft bgs.

AP-C is impounded by dams on the west, south, and east sides and by natural ground on the north side. AP-C South Dam was constructed partially across a cove. Granular materials (mostly rocks) from construction of Plant Branch were placed across Cove "C" to Elevation (El.) 340 ft to form a rock base. Prior to the construction of the rest of the AP-C South Dam, there was "existing fill" adjacent to Lake Sinclair, and the downstream side of the AP-C South Dam was constructed on top of this "existing fill". The existing fill was reported to be similar as the fill materials used for Ash Pond B Dam construction and consists of boulders, gravel, and soil overburden spoil from construction of Plant Branch, which were confirmed by the historical borings. Along the AP-C West and East Dams, the foundation materials, as shown in the historical borings, generally are medium stiff to stiff materials consisting of clay, clayey silt, and sandy silt. The only noted exception was near the southeast corner of the East Dam (Boring B-12), where approximately 4-ft thick loose layer (sandy silt).

AP-C Dam is regulated as a Category II Dam under the Georgia Safe Dams Program.

(vi) Summary of Site Preparation and Construction Activities:

Prior to the construction of the AP-C Dams, exploration activities for the dam foundation and borrow areas, including drilling and lab testing, were completed in September 1969. Boring locations are presented in the Appendix, and findings from the dam foundation exploration are summarized in the previous section. Borrow areas are presented in the Appendix. A minimum of 12 inches of all unsuitable foundation material was stripped or removed prior to the fill placement of the AP-C Dams.

Original construction of AP-C consists of two major phases. During the first phase, AP-C Dams were raised to El. 380 ft with 2 Horizontal to 1 Vertical (2H to 1V) slopes on both the downstream and upstream sides by placing fill materials. If the existing ground elevation was at or above El. 380 ft, the first construction phase did not include any construction for those portions of the dams. In the second phase, the dams were raised to approximate El. 400 ft. The design drawings show 2H:1V slopes on both downstream and upstream sides, and a crest width of 15 ft. As noted in the design drawings, the upstream slope may be changed to 1.75H:1V at the discretion of the engineer if suitable foundation conditions are encountered. It was noted that the constructed slopes on the downstream side ranged from 1.6H:1V to 2.0H:1V, which is confirmed by the site's topographic maps. Engineering design parameters were obtained from soil samples collected and tested during pre-construction geotechnical investigation, pre-construction borrow studies, and subsequent explorations, and were presented in the original design stability analysis.

Since July 1971, several repairs were made on both downstream and upstream slopes of AP-C dams. In 1977, there was increased seepage noted after the pond water level was raised, resulting in a crushed stone filter being constructed over the seepage areas to mitigate potential soil particle migration. In 2009, the downstream face of the south dam and the south portion of the downstream face of east dam were "re-faced" with riprap.

(vii) Engineering Diagrams:

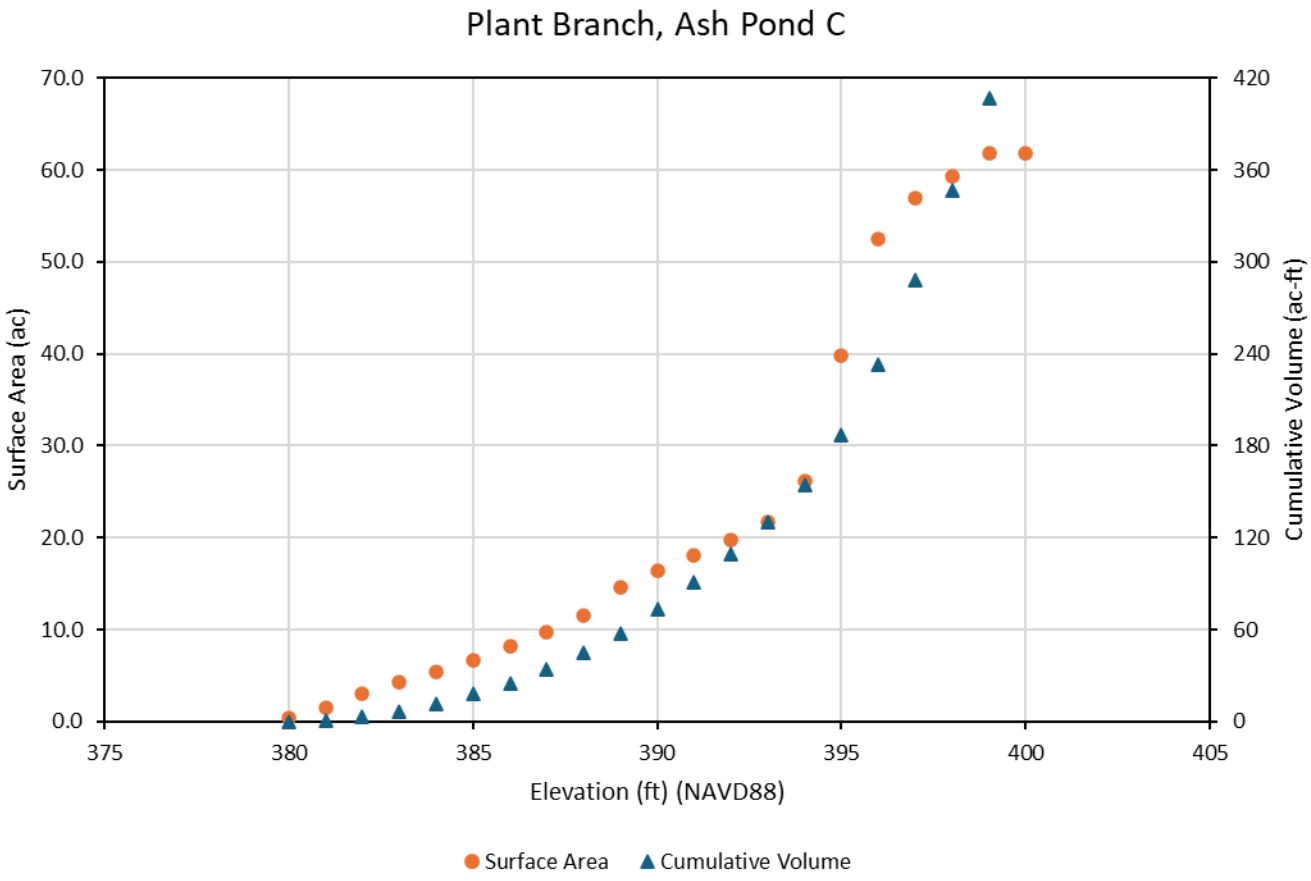
The following drawings including relevant information on the construction of AP-C can be found in the Appendix:

- Site Location Map
- Plant Harllee Branch General Arrangement Showing Ash Ponds "B" and "C" (Sheet H-160 dated June 1966)
- Plant Harllee Branch Future Ash Pond and Dyke (Sheet D-32 dated 11/5/1968)
- Plant Harllee Branch New Ash Pond Dike "C" Plan and Sections (Sheet H-89A dated 3/16/1970)
- Plant Harllee Branch New Ash Pond Dike Foundation and Embankment Exploration Study Map (Sheet H-85 dated 9/10/1969)
- Plant Harllee Branch New Ash Pond Dike Foundation and Embankment Exploration Study Map (Sheet H-85A, date not legible)
- Plant Harllee Branch General Location Map (Sheet H-91 dated 3/30/1970)
- Plant Harllee Branch New Ash Pond Dike Downstream Drain Details (Sheet C-46 dated 3/24/1970)
- Plant Harllee Branch Ash Pond C Dike Slope Stability Analysis (Sheet E-104, undated)
- Plant Harllee Branch Sketch of Dewatering Plan for New Ash Pond Dike (Sheet C-47 dated 4/8/1970)
- Plant Harllee Branch Ash Pond Dike Placement of Rock Near the Toe (Sheet C-15 dated 7/29/1977)
- Locations of Instrumentations at or near Ash Ponds B, C, and D Dikes (Geosyntec, 2025)
- Plant Branch Ash Pond "C" Water Collection Project Sump Location Plan and Details (E23347 dated 1/09/2012)
- Plant Harllee Branch Discharge Structure Details (Sheet H-82 dated 3/30/1970)
- Plant Harllee Branch Ash Pond Discharge/Recycle Structure Dike Modification (Sheet D-83 dated 9/30/1976)
- Pond B and C Outfall Surveys (Jordan Engineering, 2017)
- Plant Branch, Field Notes from 12 February 2020 (Georgia Power Company, 2020)

(viii) Description of Instrumentation:

Six piezometers, PZ-1 through PZ-6, were installed along AP-C Dams to monitor the phreatic surface. Locations of PZ-1 through PZ-6 are provided by Georgia Power Company and are presented in the Appendix. Piezometers PZ-1 through PZ-3 were installed near the center of the AP-C South Dam, while piezometers PZ-4 through PZ-6 were installed near the center of AP-C West Dam. Readings from these six piezometers are collected at least every 30 days by qualified personnel. There are also three seepage drains and five sumps installed to manage and monitor the groundwater elevations at the South dam.

(ix) Area-Capacity Curves:



Note: The surface area of the highest closed contour available from the LiDAR was used as the surface area for elevations above the highest closed contour.

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

AP-C was built with an overflow structure which consisted of a 42-inch (in.) diameter corrugated metal pipe (CMP) with a 48-in CMP riser. The pipe was decommissioned by grouting and abandoned in place. Additionally, AP-C was built with a recycle structure which consisted of steel sheet piles to El. 400.0 ft. The recycle structure was abandoned in place. Presently, AP-C has an auxiliary spillway on the southwestern dam near the southwest corner of the pond. The auxiliary spillway, permitted under National Pollutant Discharge Elimination System (NPDES) Permit Number GA0026051, includes two 24-inch (in.) diameter high-density polyethylene (HDPE)

siphon pipes. The northern pipe is approximately 250-ft long with an upgradient invert elevation of El. 395.70 ft and a downgradient invert elevation of El. 378.54 ft. The southern pipe is approximately 250-ft long with an upgradient invert elevation of El. 395.91 ft and a downgradient invert elevation of El. 378.33 ft.

With a maximum allowable starting water surface elevation of El. 391.90 ft, the auxiliary spillway at AP-C can adequately manage the 1,000-year, 24-hour storm event without overtopping the dam (i.e., El. 400 ft).

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

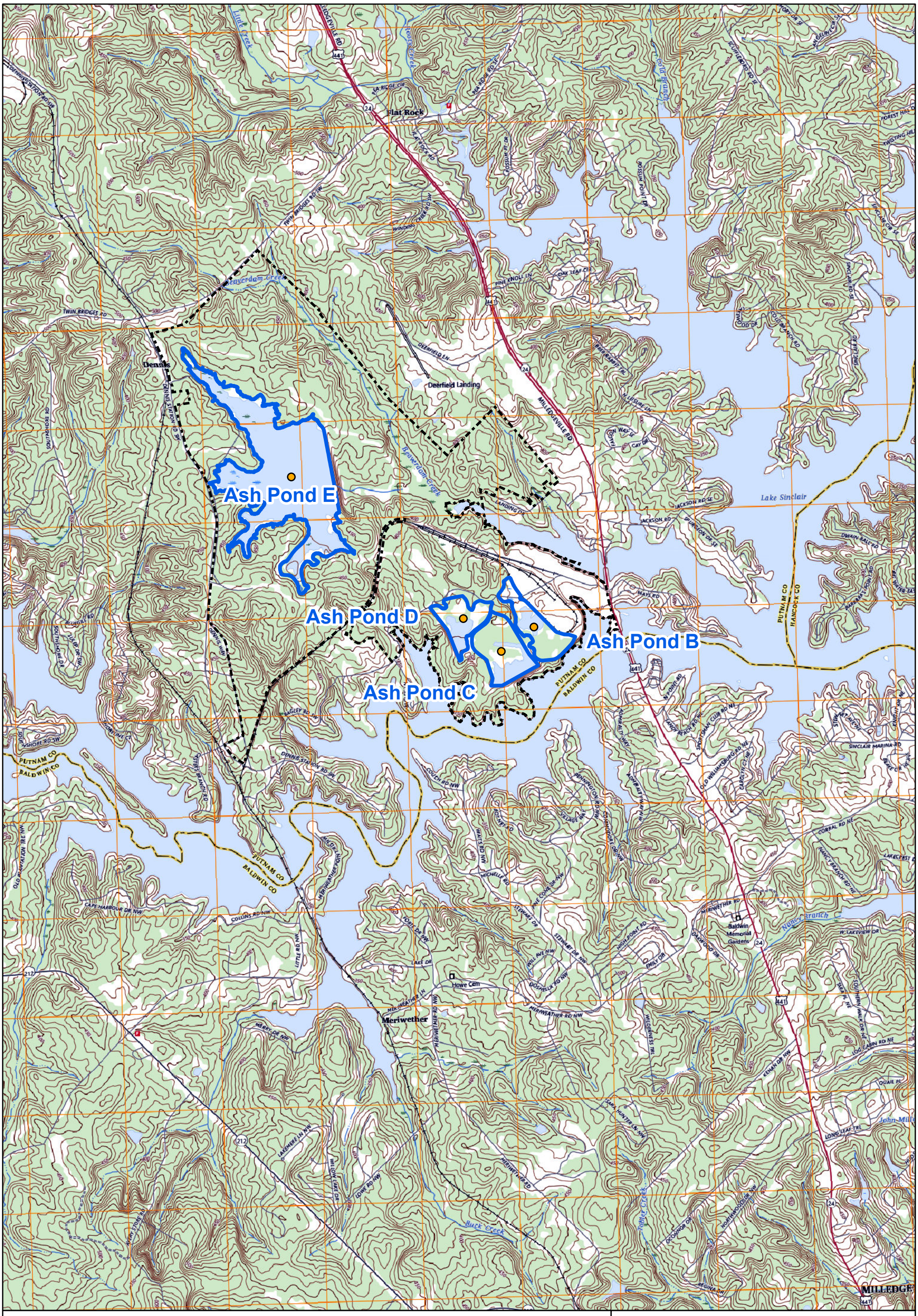
There are no Construction Specifications or provisions related to surveillance, maintenance, and repair of AP-B dam.

Inspections of dams are conducted on a regular basis; semi-annually by professional dam safety engineers and at 7-day intervals by qualified personnel. In addition, inspections are performed after any unusual circumstance, which is procedurally defined as an elevated rain event, post storm (hurricane, flood, etc.), post flood event (if adjacent to a river or stream), high tide (if applicable), earthquake, or blasting or demolition activities with vibrational impacts (stack drops, etc.). The inspections provide a visual assessment that structures are sound and that action is taken, as needed, based on the findings. Safety inspections include numerous checklist items. Specific items vary from site to site but generally include observations for pond levels, weather conditions, rainfall since the prior inspection, instrument readings, condition of retaining structures, slopes, drains and discharge structures, and surface anomalies such as erosion, settlement, animal burrows, or ant hills. Dam safety engineers assess instrument readings, inspect any maintenance or remediation performed since the previous inspection, check the status of work recommended at prior inspections, ensure that emergency notification information is current, and evaluate any items noted during the 7-day interval inspections.

(xii) Known Record of Structural Instability:

There is no known record of structural instability for AP-C. As noted in previous sections, areas of minor sloughing at AP-C Dams were addressed by placing new fill materials forming a flatter slope. Areas of seepage were addressed by placing crushed stone on the downstream side of AP-C South Dam and select areas of the East Dam. Subsequent analyses confirmed the dams' structural stability.

APPENDIX



Legend

- Property Boundary
- Pond Boundary
- Topographic Contour (10-ft intervals)

Notes:
1. Topography data obtained from USGS 7.5-Minute Series, 2023.

N

0 5,000 Feet

USGS Topographic Map
Lake Sinclair West Quadrangle

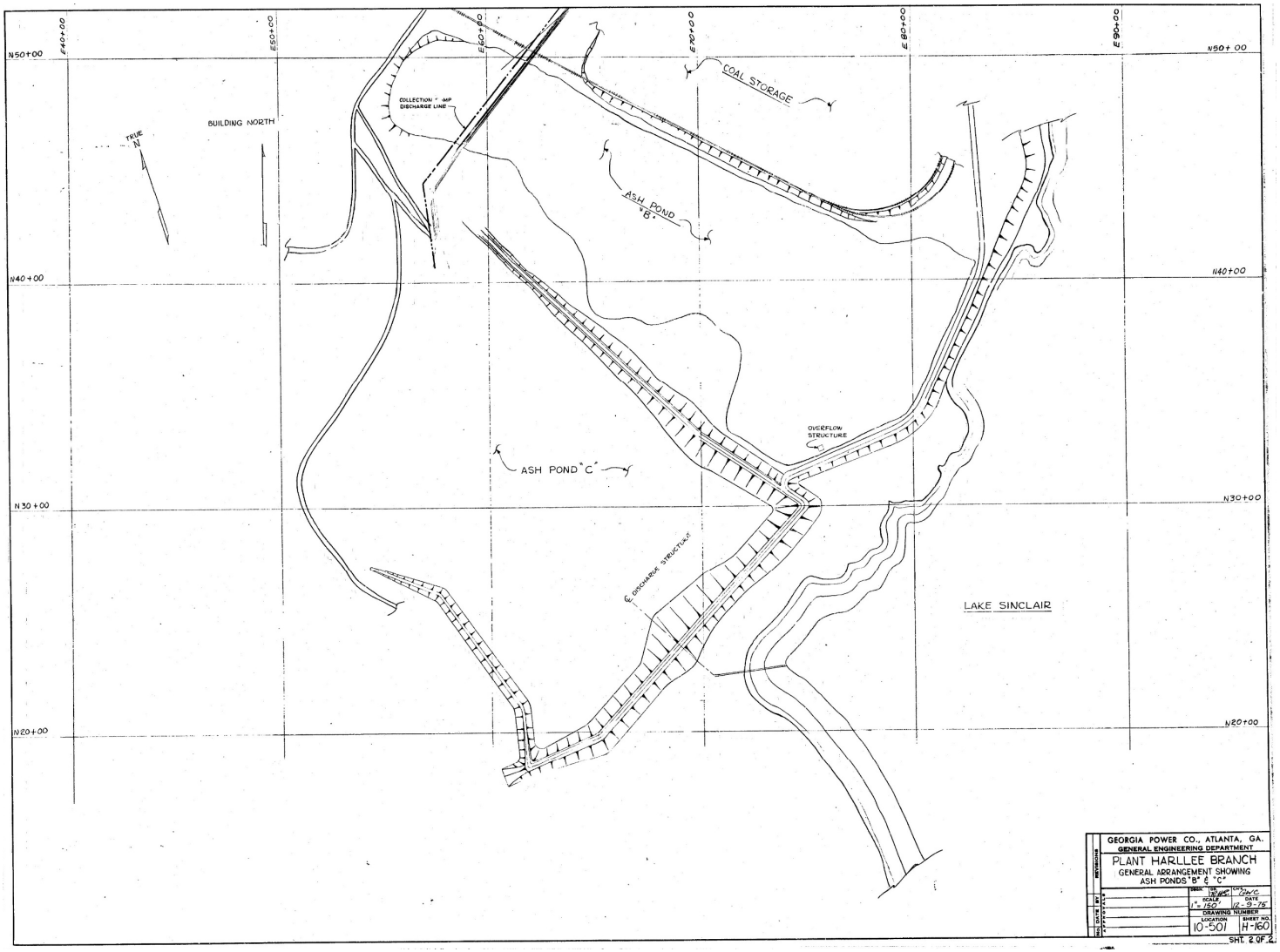
Georgia Power Company
1100 Milledgeville Road
Putnam County, GA 31061

Geosyntec consultants

Kennesaw, GA | February 2026

Appendix

(ARO) N:\GA Power\Plant Branch\GIS\APRX\Site_Layout_BCD\Site_Layout_BCD.aprx\USGS Topographic Map - Lake Sinclair West Quadrangle 9/15/2025



Plant Harllee Branch General Arrangement Showing Ash Ponds "B" and "C" (Sheet H-160 dated June 1966)
Georgia Power Company

Geosyntec consultants

Georgia Power

Project No. GW11718

February 2026

Appendix

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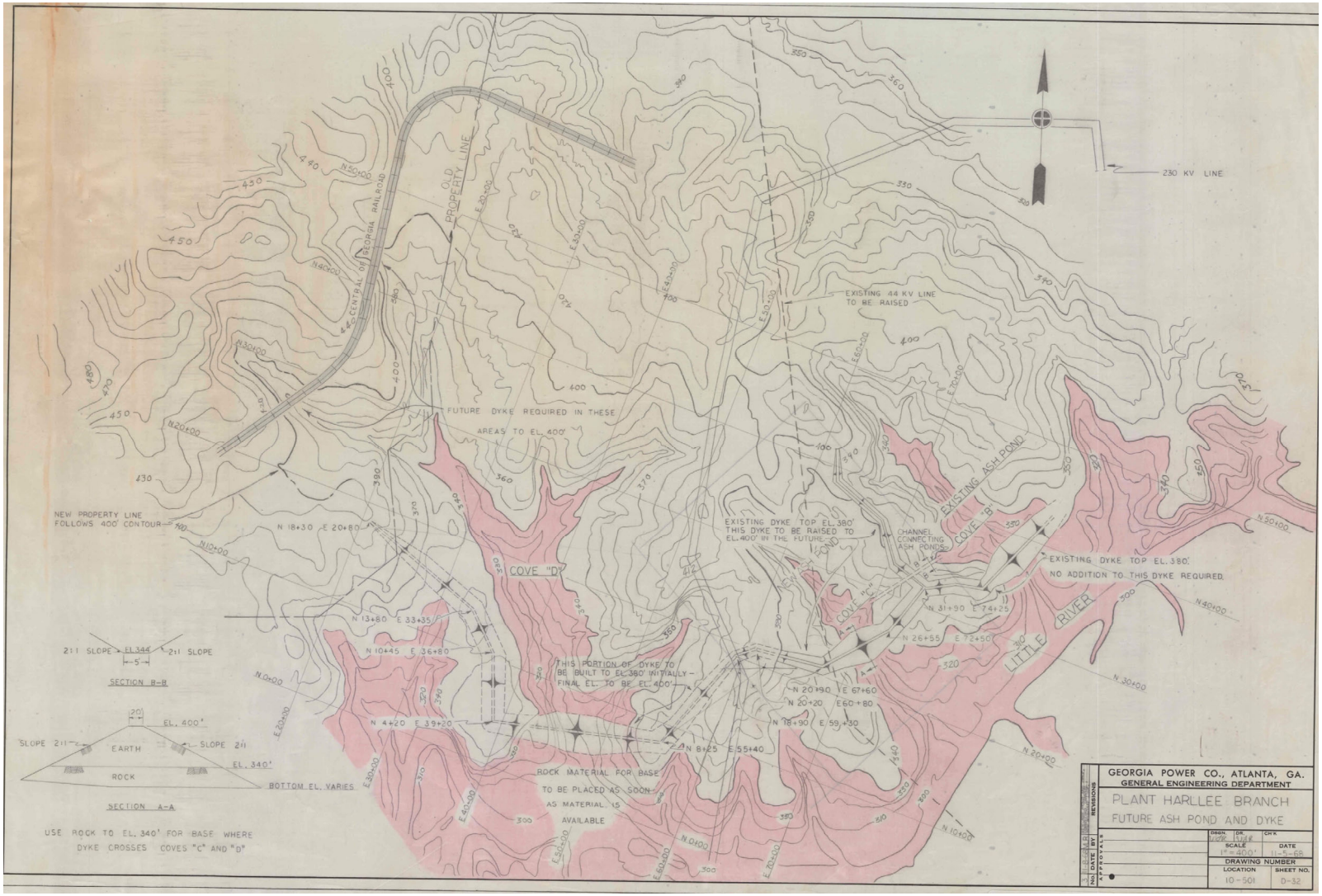

Plant Harllee Branch Future Ash Pond and Dyke
(Sheet D-32 dated 11/5/1968)
Georgia Power Company

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Project No. GW11718

February 2026

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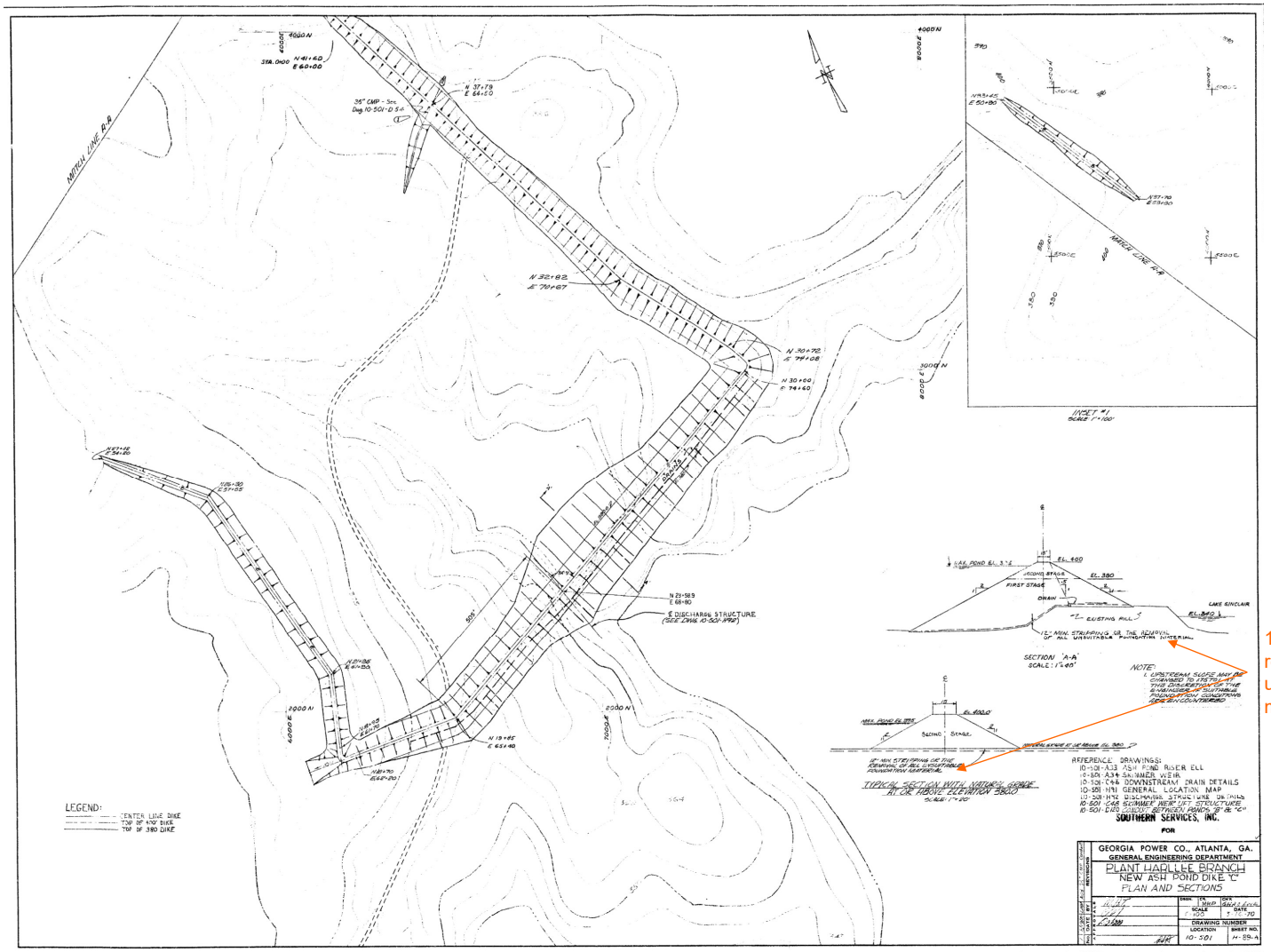

12" min stripping or the removal of all unsuitable foundation material.

Plant Harllee Branch New Ash Pond Dike "C" Plan and Sections (Sheet H-89A dated 3/16/1970) Georgia Power Company

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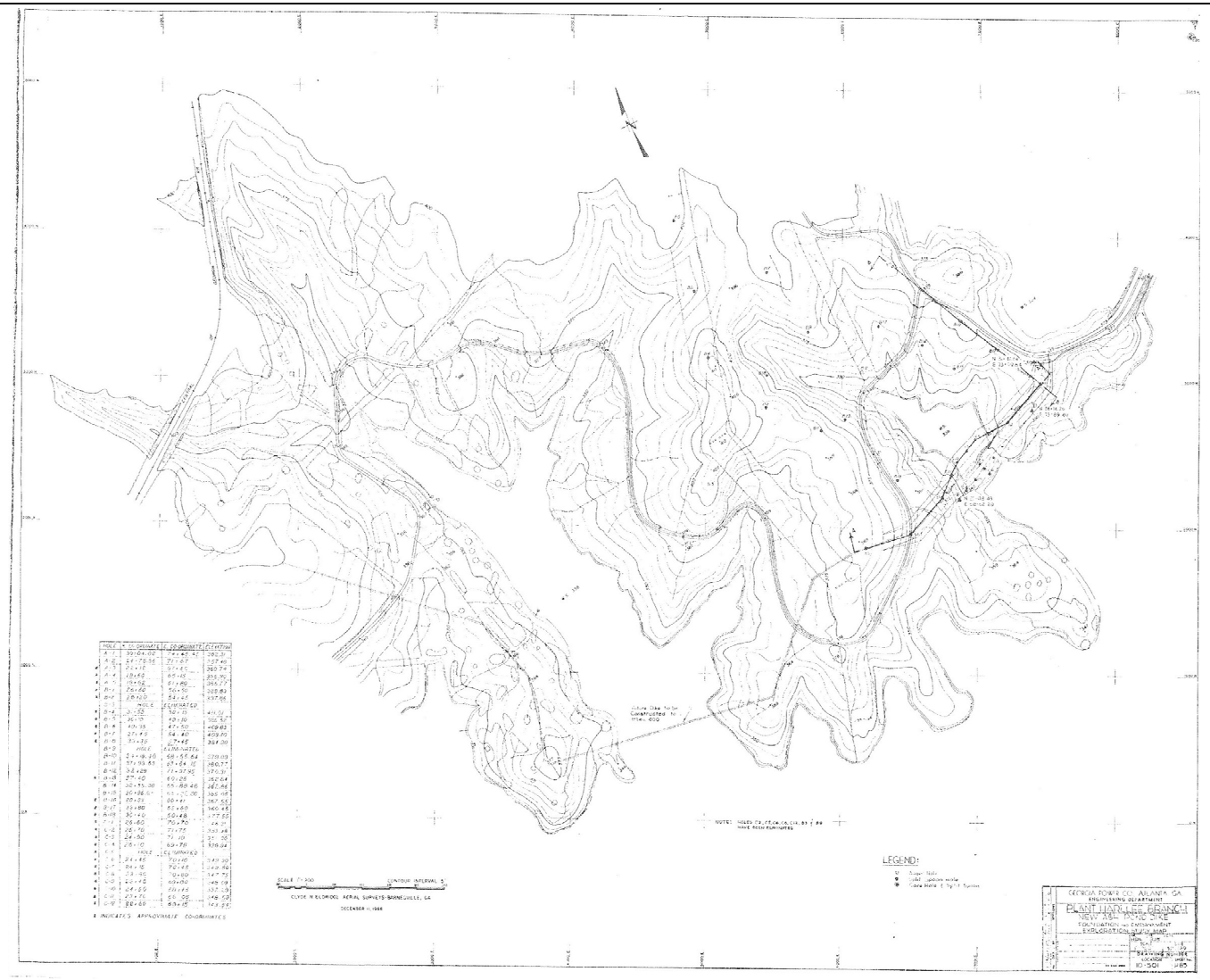

Plant Harllee Branch New Ash Pond Dike Foundation and Embankment Exploration Study Map (Sheet H-85 dated 9/10/1969) Georgia Power Company

Geosyntec consultants

Georgia Power

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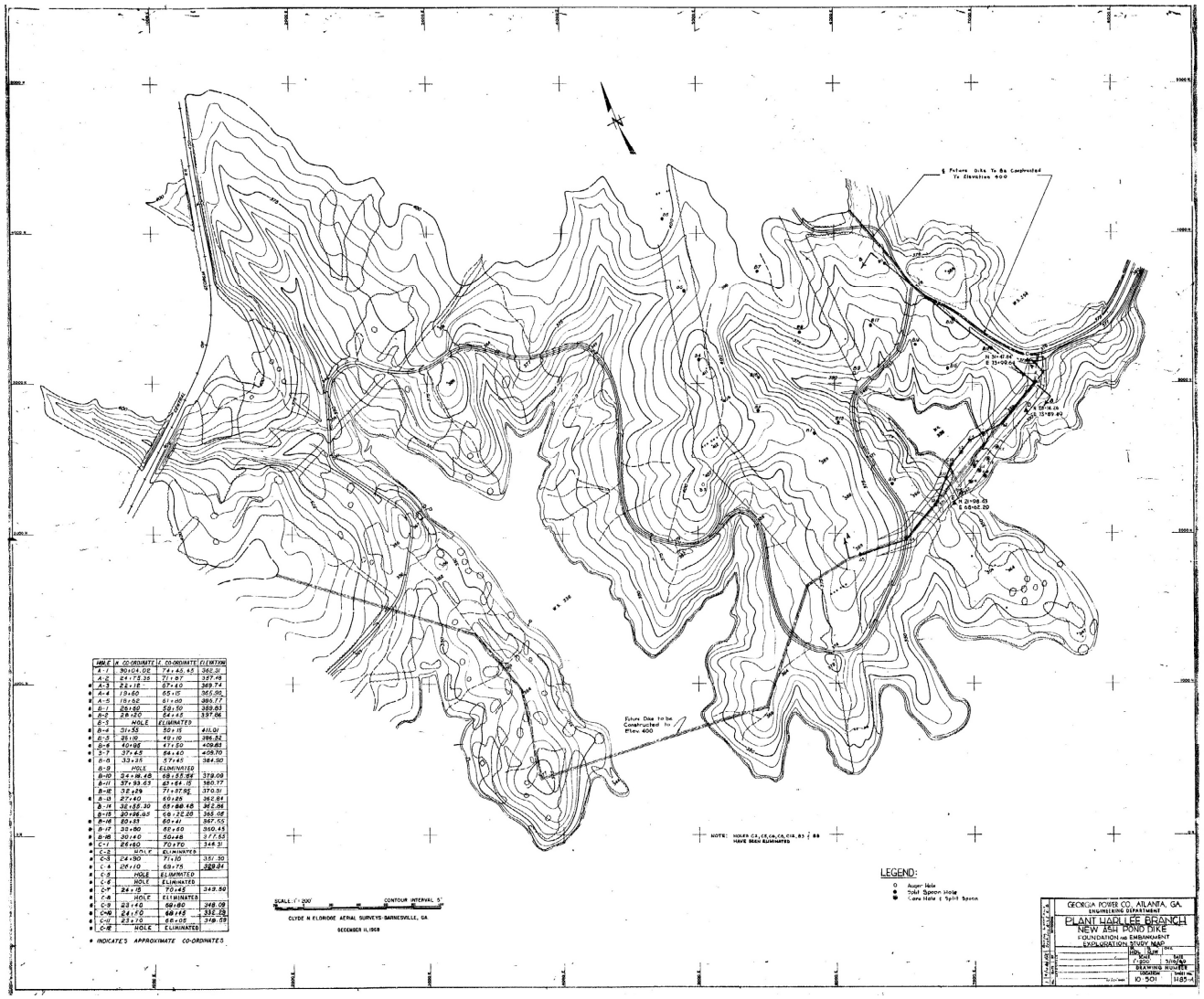

Plant Harllee Branch New Ash Pond Dike Foundation and Embankment Exploration Study Map (Sheet H-85A, date not legible)
Georgia Power Company

Geosyntec consultants

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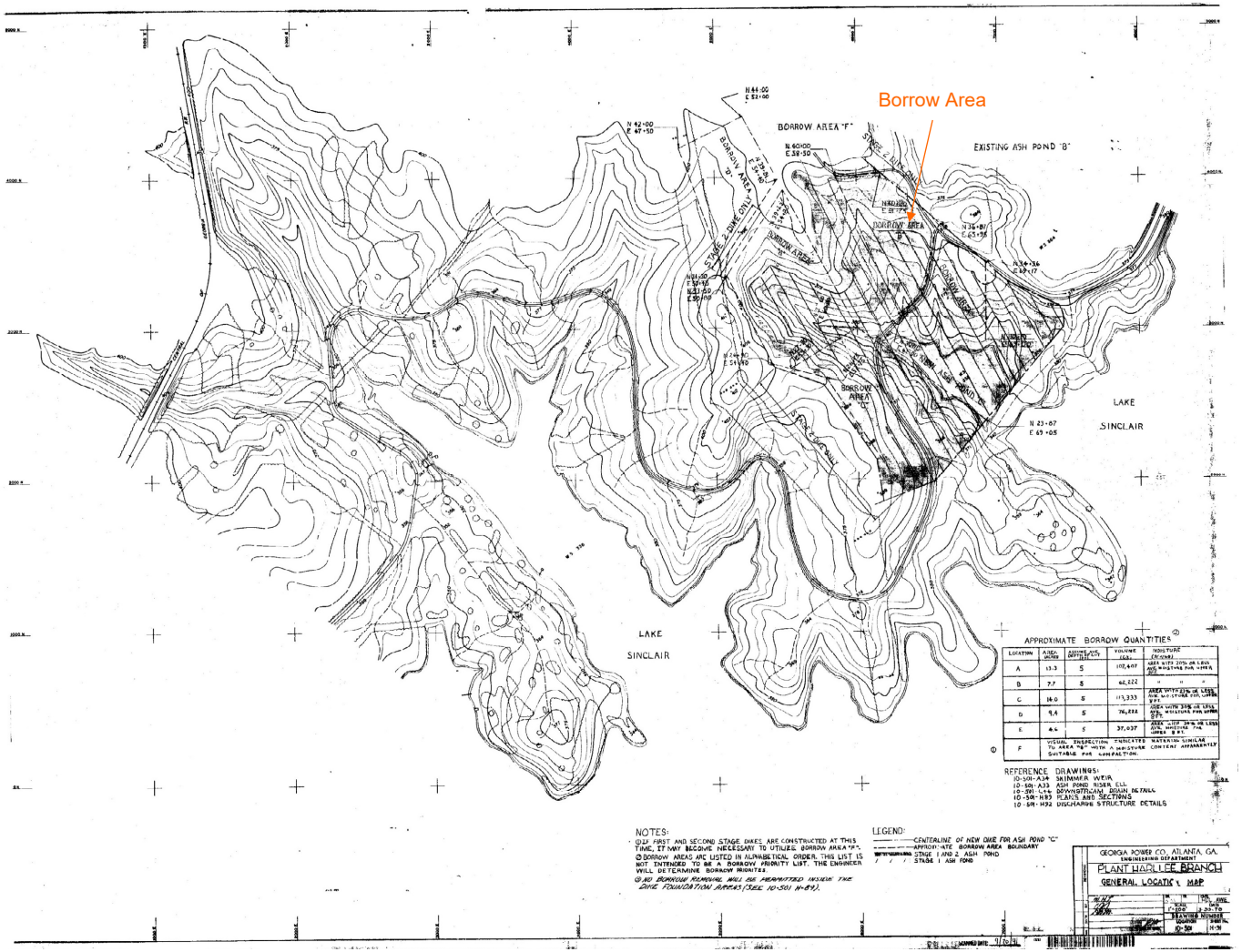

Plant Harllee Branch General Location Map
(Sheet H-91 dated 3/30/1970)
Georgia Power Company

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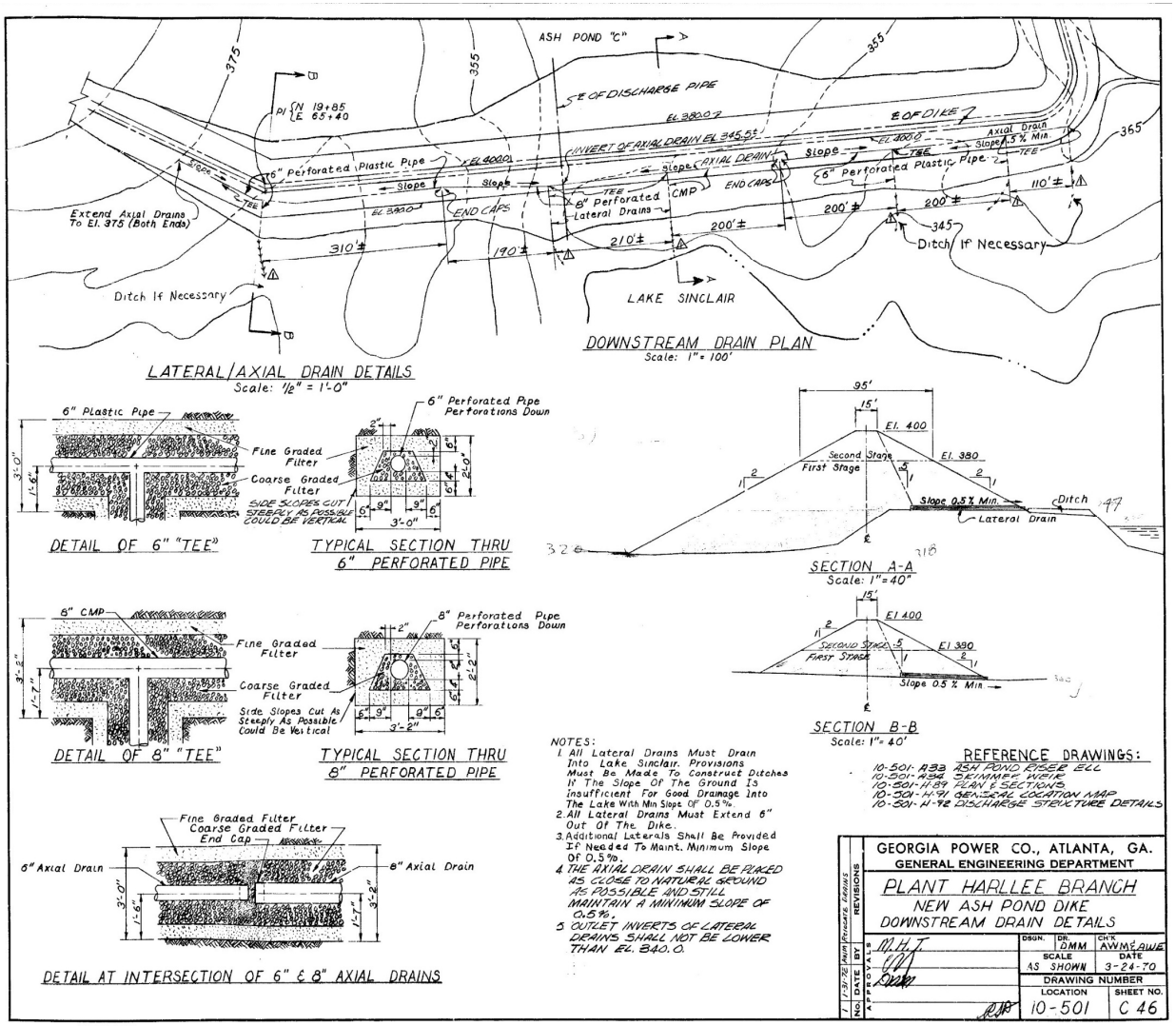

Note: The pipe was decommissioned by grouting.

Plant Harllee Branch New Ash Pond Dike Downstream Drain Details
(Sheet C-46 dated 3/24/1970)
Georgia Power Company

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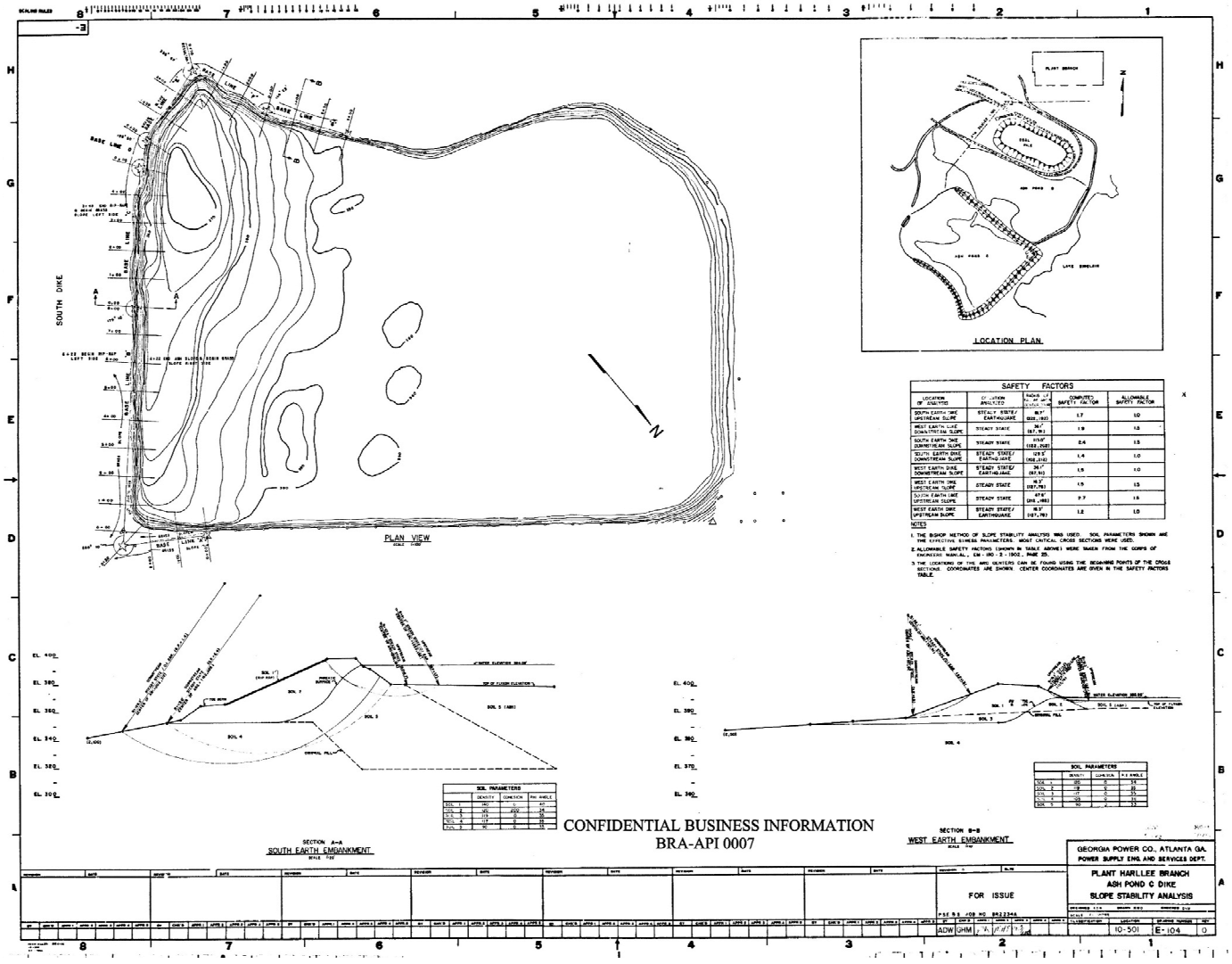

Plant Harllee Branch Ash Pond C Dike Slope Stability Analysis
(Sheet E-104, undated)
Georgia Power Company

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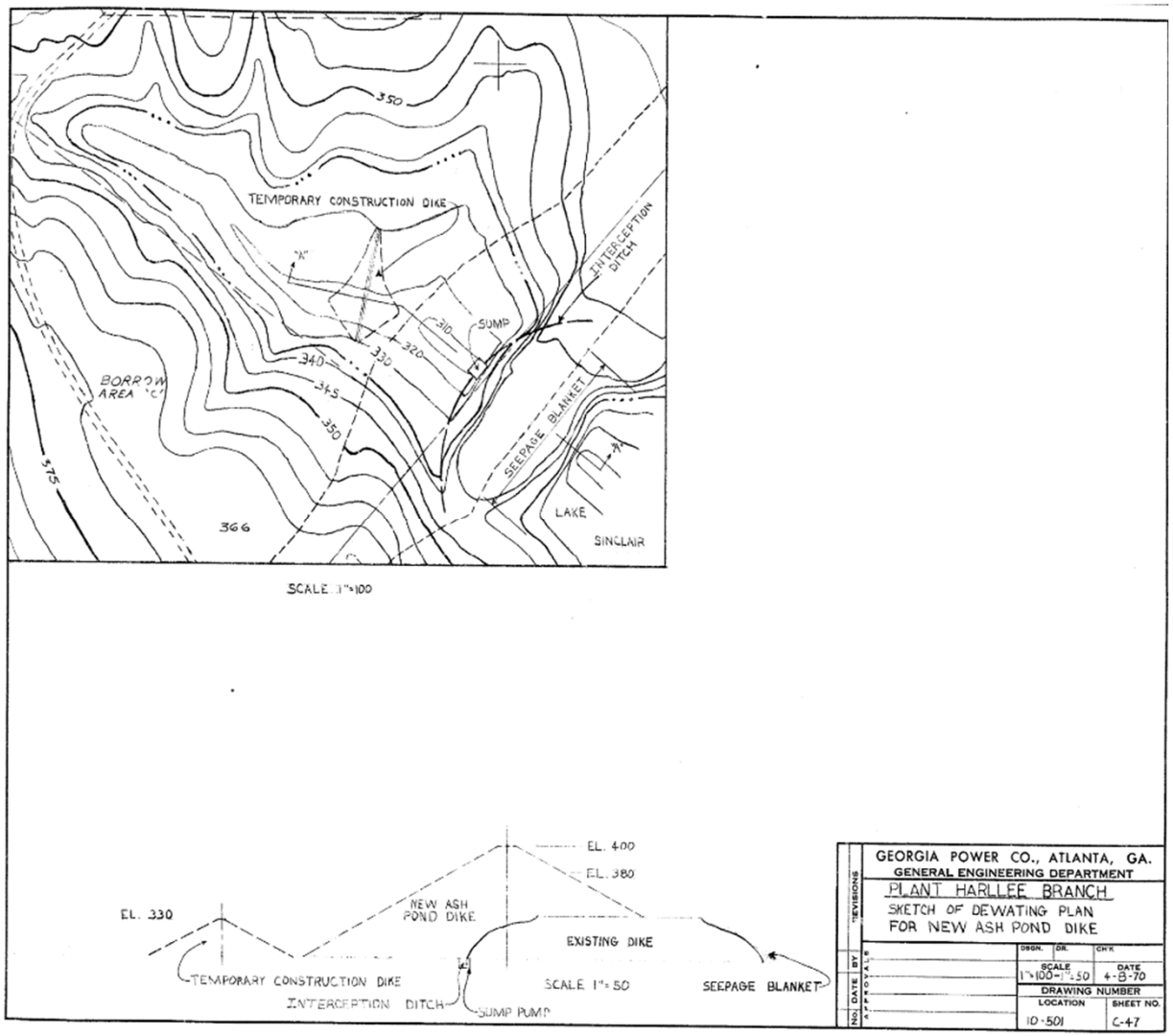

Plant Harllee Branch Sketch of Dewatering Plan for New Ash Pond Dike
(Sheet C-47 dated 4/8/1970)
Georgia Power Company

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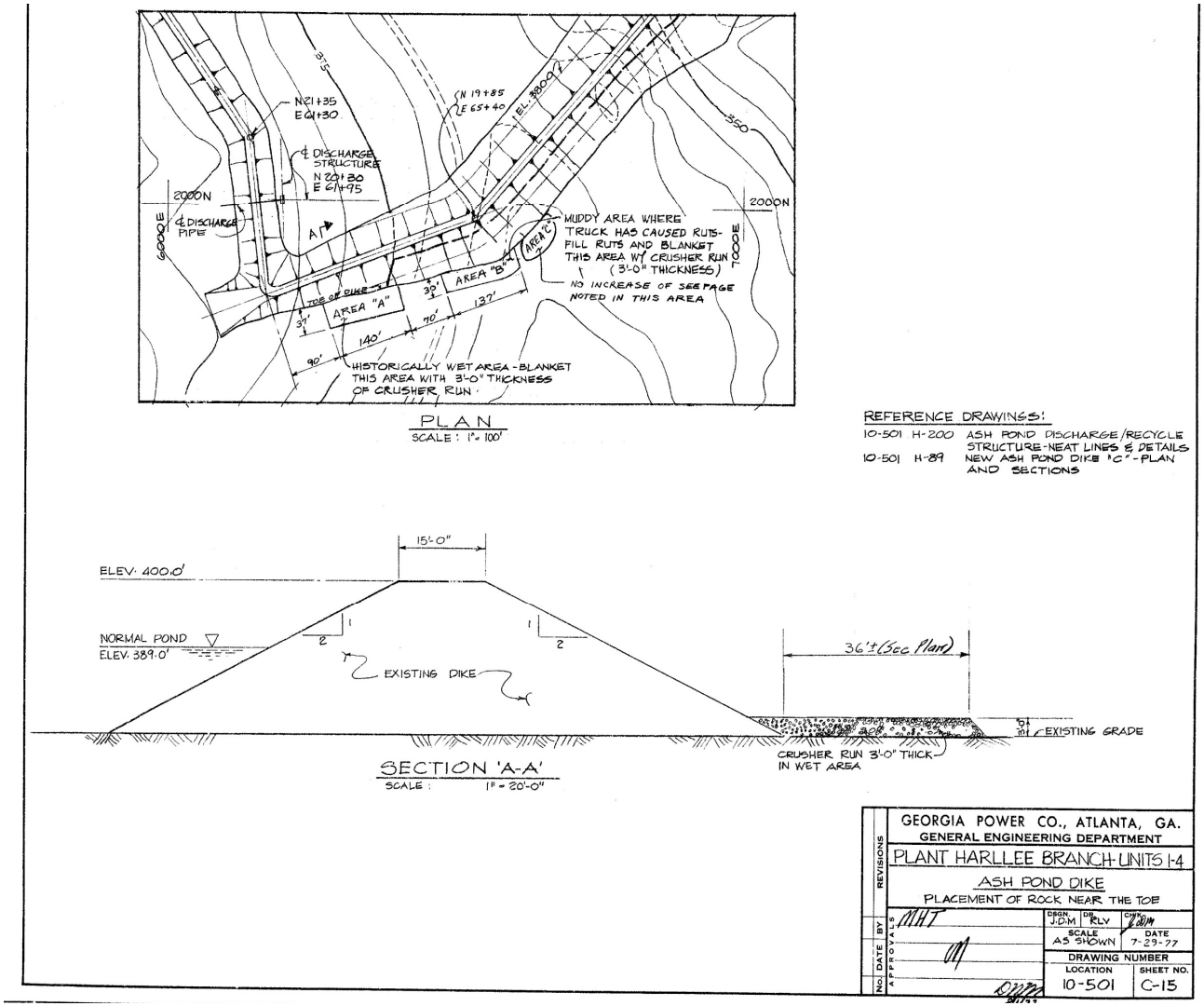

Plant Harllee Branch Ash Pond Dike Placement of Rock near the Toe (Sheet C-15 dated 7/29/1977) Georgia Power Company

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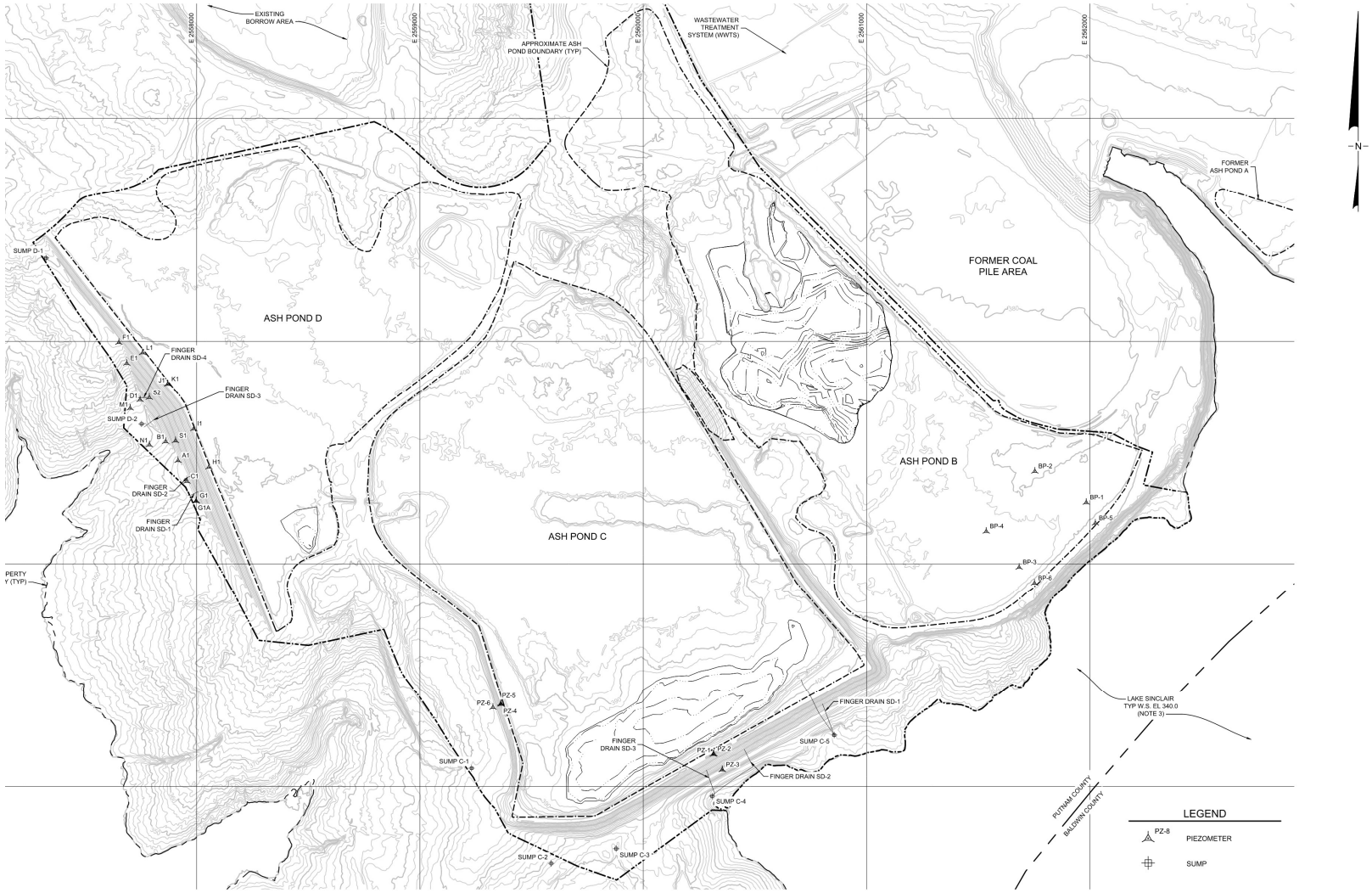

Locations of Instrumentations at or near Ash Ponds B, C, and D Dikes (Geosyntec, 2025)
Georgia Power Company

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Georgia Power

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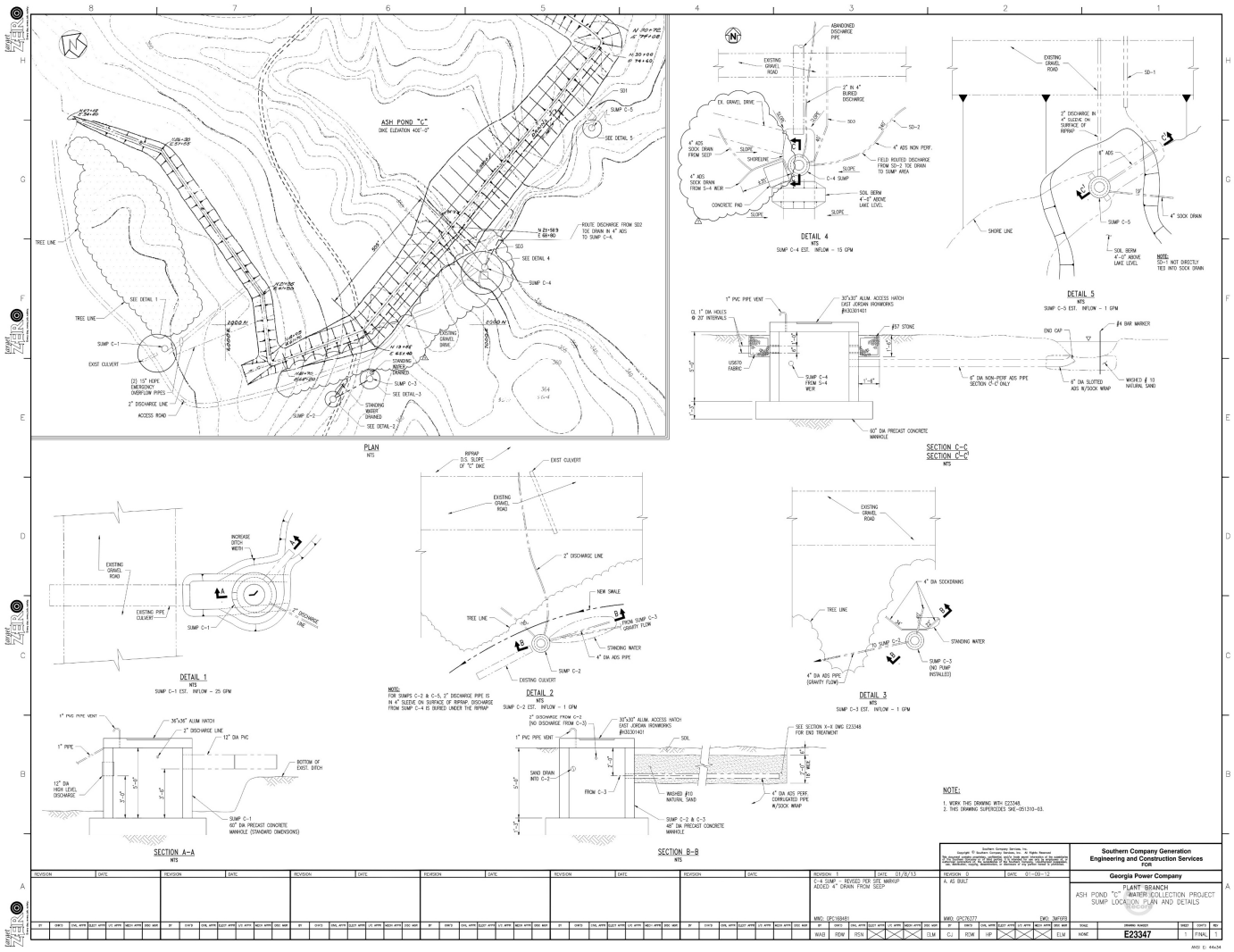

Plant Branch Ash Pond "C" Water Collection Project Sump Location Plan and Details (E23347 dated 1/09/2012) Georgia Power Company

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Georgia Power

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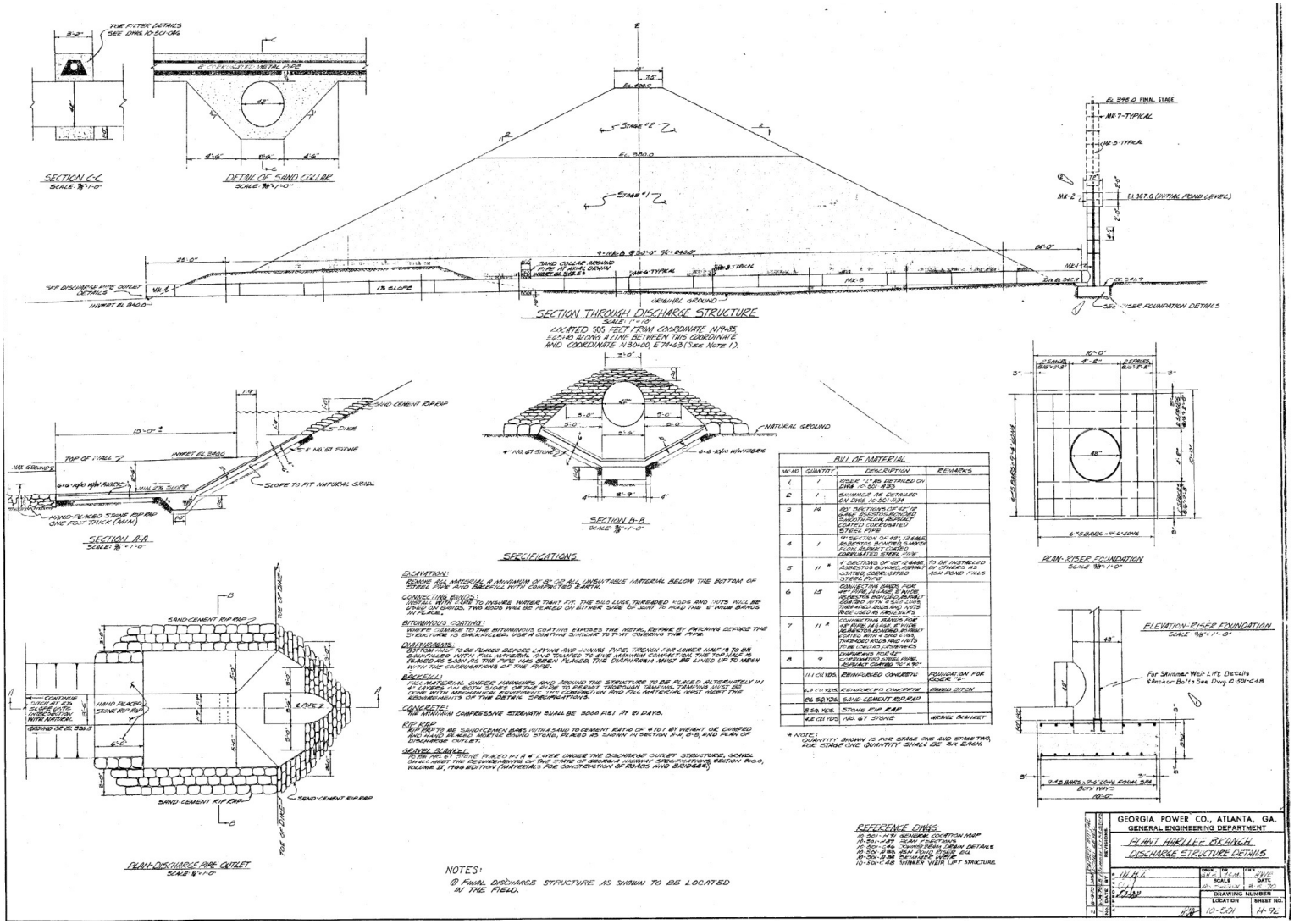

Plant Harllee Branch Discharge Structure Details
(Sheet H-92 dated 3/30/1970)
Georgia Power Company

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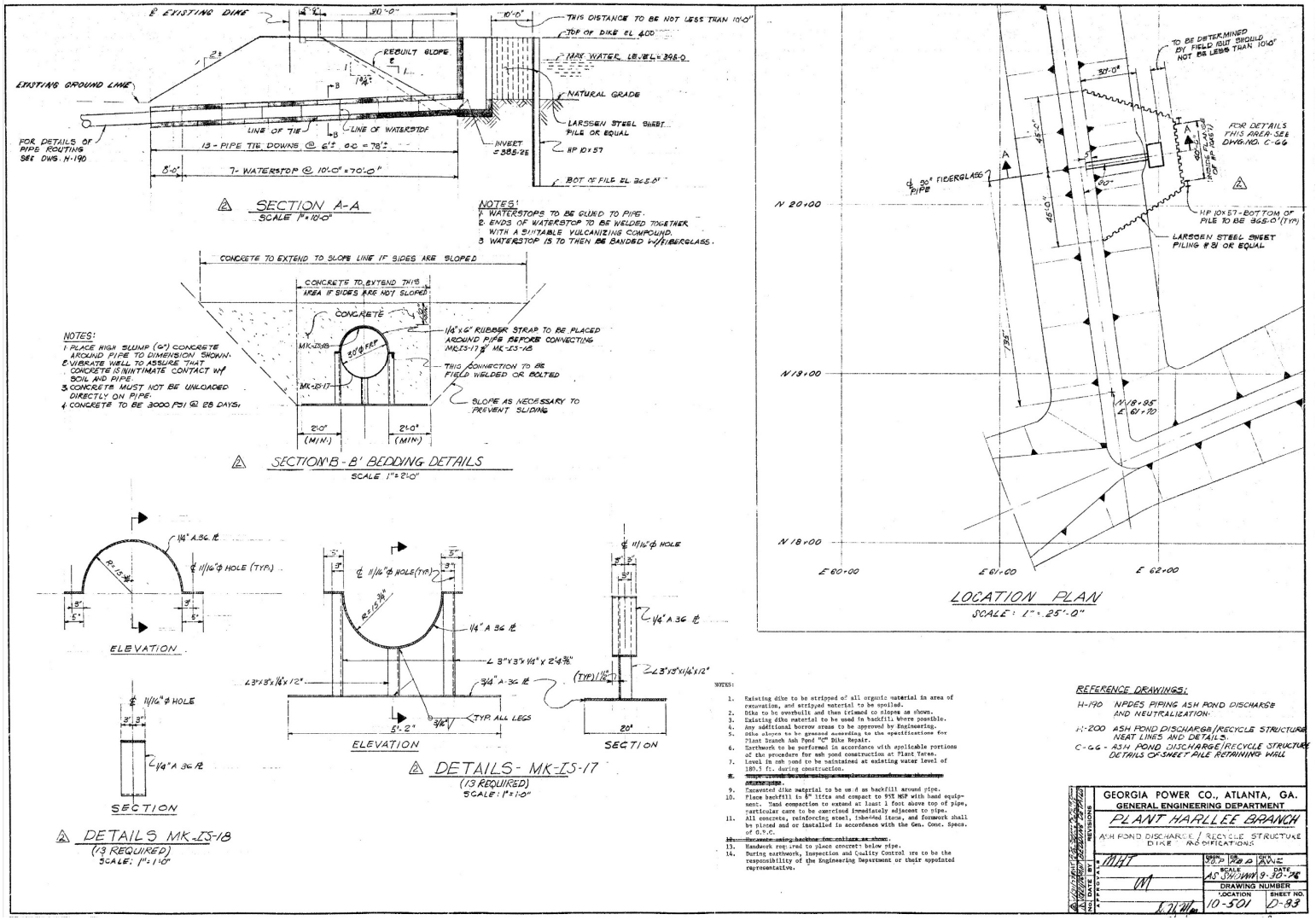

Plant Harllee Branch Ash Pond Discharge/Recycle Structure Dike Modification
(Sheet D-83 dated 9/30/1976)
Georgia Power Company

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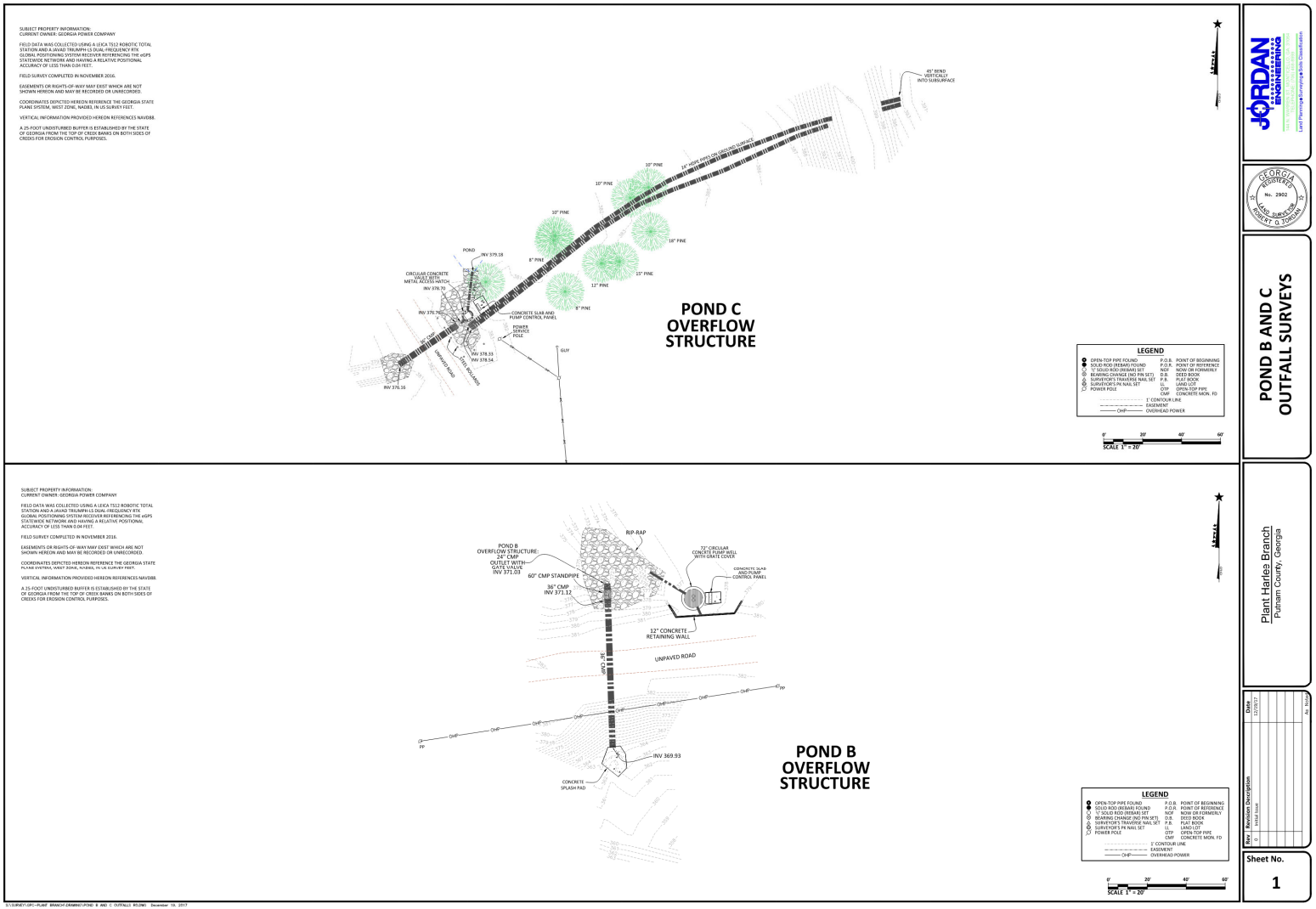

Pond B and C Outfall Surveys
(Jordan Engineering, 2017)
Georgia Power Company

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PLANT BRANCH 02-12-2020 GPC 1117958

STAF GAUGE IN POND "C" TOP DAM 399.86
STAF GAUGE CHECKED ✓

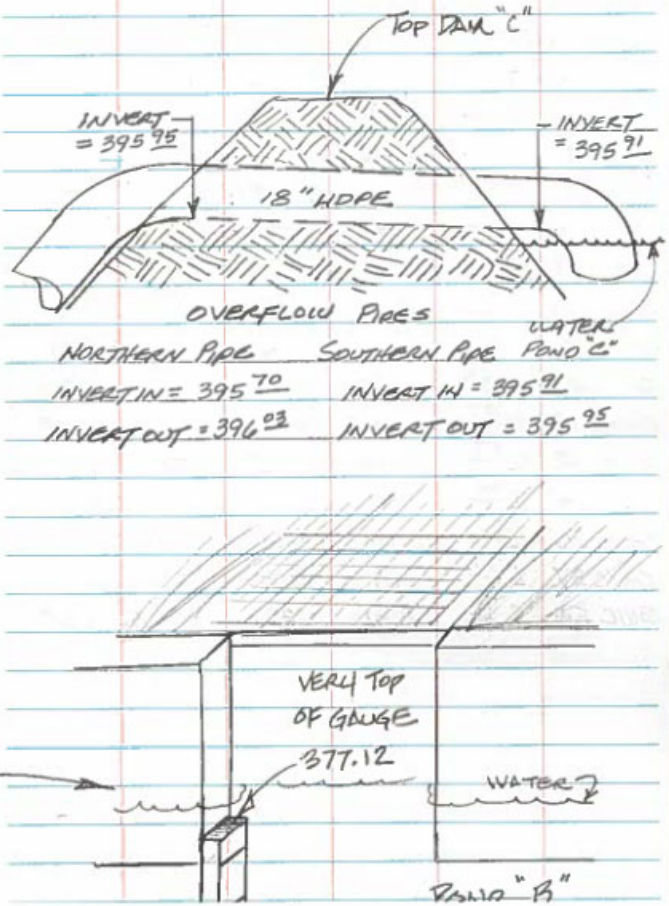
INVERT ELEVATIONS FOR EMERGENCY
OVERFLOW PIPES POND "C" (1.85 TOP ROCK TO INVERT)
SOUTH PIPE INVERT = 395.91
NORTH PIPE INVERT = 395.70

POND "B" TOP RIP RAP AT RING BERM = 379 42
TOP DIRT AT RING BERM (KNOTCH) = 378 92

POND "B" WATER TREATMENT PLANT
PROPOSED BERM LOCATION
5019 N 1162857.69 5020 N 1162822.74
E 2560453.11 E 2560484.72

POND "E" ASH PIPE 1.7' DIAMETER (END PIPE)
N 1167001.803
E 2551441.069
TOP PIPE = 429.93
INVERT = 428.23

TOP STAFF GAUGE POND "B" = 377.12



Plant Branch, Field Notes from 12 February 2020
(Georgia Power Company, 2020)
Georgia Power Company

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Georgia Power

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