

**HISTORY OF CONSTRUCTION**  
**40 CFR 257.73(c)(1)(i)-(xii)**  
**PLANT HAMMOND ASH POND (AP-2)**  
**GEEORGIA POWER COMPANY**

***(i) Site Name and Ownership Information:***

Site Name: Plant Hammond

Site Location: Rome, Georgia  
Site Address: 5963 Alabama Highway SW  
Rome, GA 30165

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

CCR Impoundment Name: Plant Hammond AP-2

NID Identification Number: GA05204

EPA's "Disposal of Coal Combustion Residuals from Electric Utilities" Final Rule (40 C.F.R. Part 257 and Part 261), §257.73(c)(1), requires the owner or operator of an existing CCR surface impoundment to compile a history of construction. To the extent feasible, the following information is provided:

***(ii) Location:***

34°15'04"N, 85°21'10"W  
See Location Map in the Appendix

***(iii) Purpose of CCR Unit:***

Plant Hammond is a four (4) coal fire unit electric generating facility. Plant Hammond has historically utilized four (4) ponds in the management of coal combustion residuals. AP-2 was designed to receive and store coal combustion residuals produced during the electric generating process at Plant Hammond.

***(iv) Watershed Description:***

Plant Hammond AP-2 is located within the Cabin Creek HUC-12 watershed which has a total area of 10,472 acres and the Morton Bend HUC-12 watershed which has a total area of 21,984 acres. AP-2 is located entirely within the Morton Bend watershed. The entire Plant Hammond property is located within the Upper Coosa HUC-8 watershed which has a drainage area of 1,025,639 acres. AP-2 does not receive stormwater run-off from adjacent areas.

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

AP-2 is a diked structure with a 24 ft. high perimeter embankment. Borings drilled at AP-2 indicate clayey sand embankments and sandy clay foundation material. Borings drilled at other locations at the Plant Hammond site indicate that the clayey alluvium extends down to approximate elevation 565 ft to 570 ft, and is underlain by a 5-ft to 10-ft thick deposit of coarse sand and gravel above rock.

***(vi) Summary of Site Preparation and Construction Activities:***

AP-2 was commissioned in 1969 with a total storage capacity of 821,000 CY, a corresponding surface area of 21.2 acres, and a maximum embankment height of 24 feet. The embankment was constructed with borrow soils from within AP-2 and the excavation of the Unit #4 precipitator substructure area. The embankment was constructed with upstream and downstream slopes of 2H:1V. A diagonal separator dike was added to AP-2 in 1998, effectively dividing AP-2 in half. AP-2 is currently used as a dewatering facility for fly ash and bottom ash, with dewatering operations alternating between halves. The halves are hydraulically connected via 24-in corrugated metal pipes. Dewatered ash is excavated and transported to the nearby Huffaker Road facility, a permitted solid waste disposal location owned and operated by Georgia Power Company.

***(vii) Engineering Diagrams:***

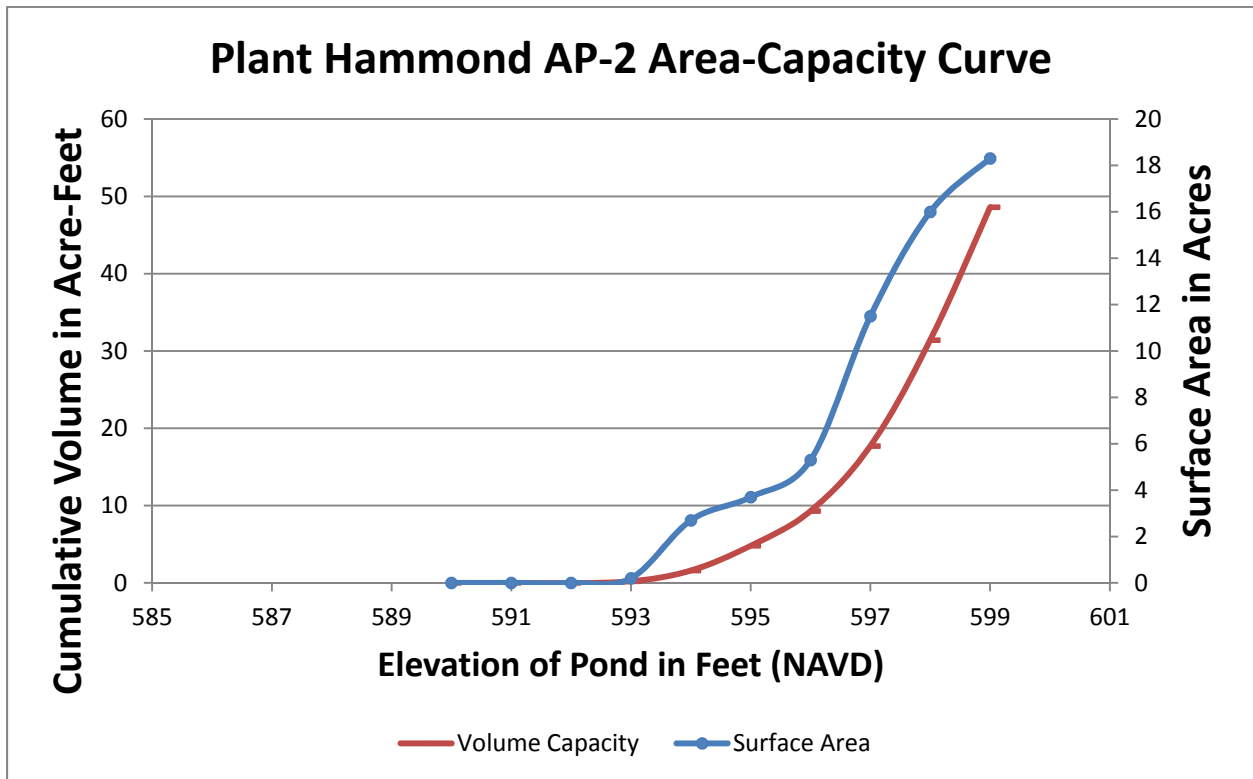
The following drawings reflecting the construction of AP-2 can be found in the Appendix:

- Site Location Map
- Georgia Power Company Drawing H-400 – General Layout of Plant Area and New Ash Pond West of Powerhouse
- Georgia Power Company Drawing H-401 – Cross Sections and Volume Calculations for New Ash Pond West of Powerhouse
- Georgia Power Company Drawing C-406 – Ash Pond Overflow Structure
- Georgia Power Company Drawing H-254 – Ash Sluice Pipe Trench Modifications Neatlines & Reinforcing
- Georgia Power Company Drawing E8543 – Ash Pond #2 Separator Dike Location and Details
- Georgia Power Company Drawing E8544 – Ash Pond #2 Excavation Plan for Northern Cell
- Georgia Power Company Drawing ES1844S1 – Boring Locations and Cross Sections

***(viii) Description of Instrumentation:***

There are 2 piezometers installed along the crest of the southern embankment of AP-2 used to monitor water levels in the embankment.

**(ix) Area-capacity curves:**



**(x) Spillway/Diversion design features and capacity calculations:**

AP-2 does not have an open channel spillway. AP-2 was divided into a northern and a southern cell in 1998, each having an independent 24 – in diameter CMP principal spillway which flows into a discharge basin in the northeast corner of the pond. The discharge from this basin is the 30-inch FRP recycle line to AP-1. The northern and southern cells also discharge via a 24–inch CMP into a smaller collection basin in the southwestern portion of AP-2. This basin serves as the emergency discharge for the northern and southern cells. The emergency flows are currently discharged to an unnamed creek to the Coosa River via a 24-in diameter high-density polyethylene (HDPE) pipe. The upstream invert of this pipe is 594.1 ft with a downstream invert of 565.0 ft. The original auxiliary discharge structure has not been located and is assumed to be abandoned during the installation of the 24-inch HDPE pipe. The 24-inch HDPE outlet and inlet are visually inspected semi-annually.

As a significant hazard structure, AP-2 must be capable of safely storing and/or passing runoff resulting from the 24-hour, 1000-year storm event. The normal water surface elevation in AP-2 is 593.1 feet. The top of dike elevation is 598.7 feet. During the design storm, the peak water surface elevation is 598.4 (leaving a freeboard of 0.3 feet below the top of dike).

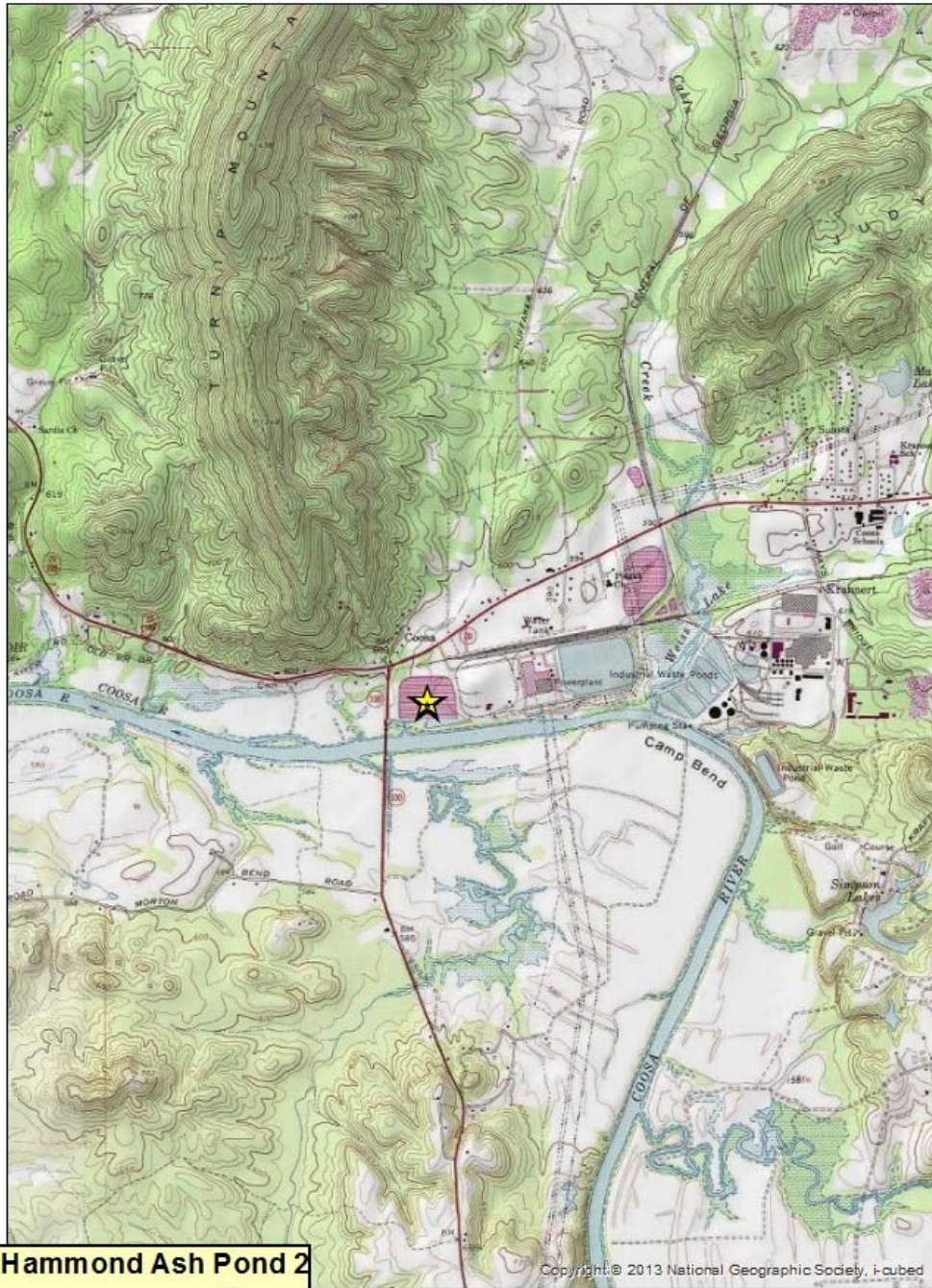
***(xi) Provisions for surveillance, maintenance and repair:***

Inspections of dikes are critical components and are conducted on a regular basis—at least annually by professional dam safety engineers and at least weekly by trained plant personnel. In addition, inspections are performed after significant events such as storms. The inspections provide assurance 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 may include observations of such things as pond levels, weather conditions, rainfall since the prior inspection, instrument readings, conditions of slopes and drains, erosion, animal damage, ant hills, alignment of retaining structures and more. 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 plant personnel inspections.

***(xii) Known record of structural instability:***

There is no known record of structural instability for AP-2, and there are no major issues or repairs to Plant Hammond AP-2. Over the course of operation of AP-2, repairs of minor surface sloughs (vener sloughs) on the downstream slope have been performed.

## Appendix

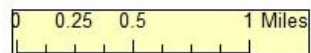


**Plant Hammond Ash Pond 2**

☆ Ash Pond Location

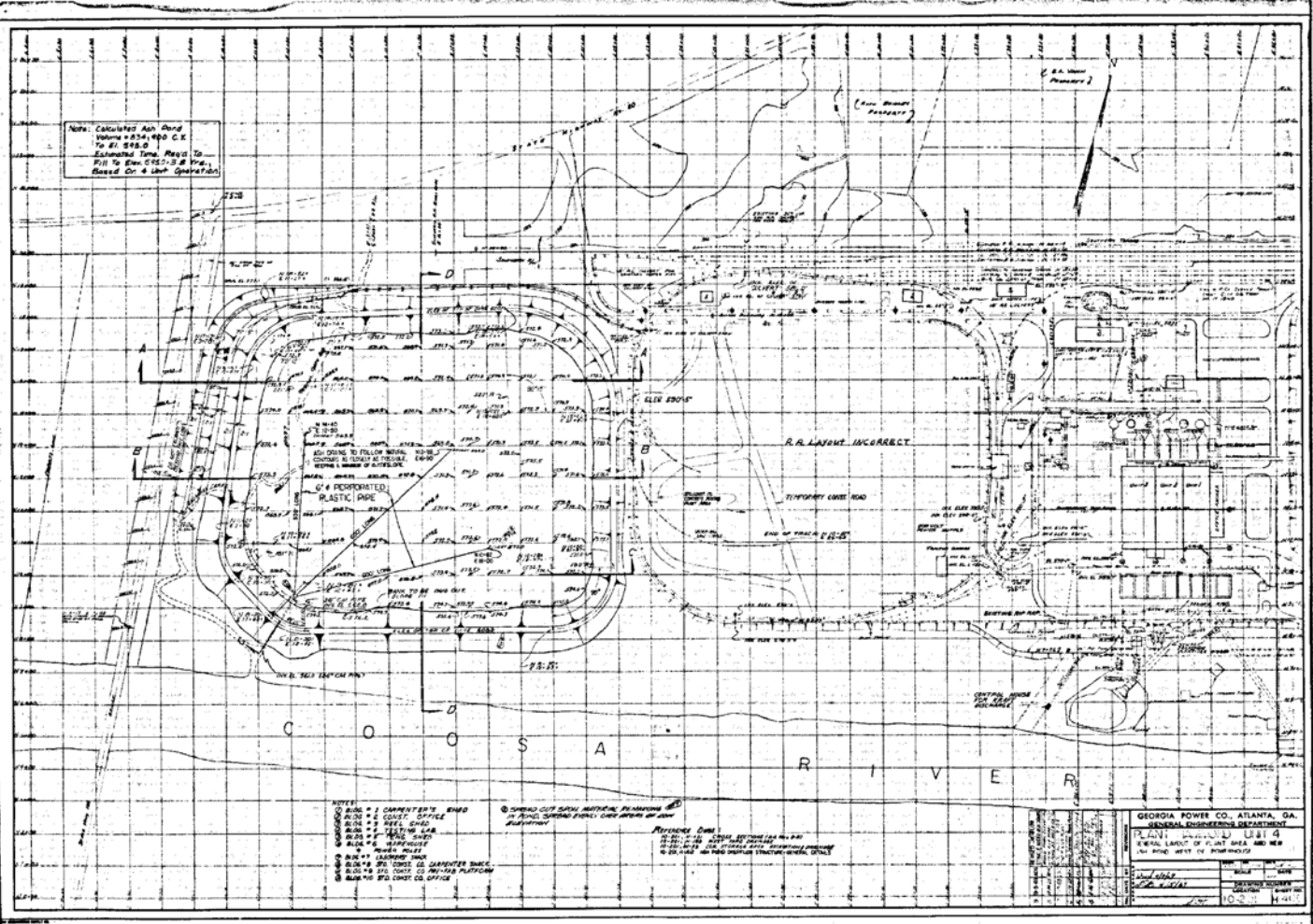
USA Topo Maps

N



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Note: Calculated Ash Pond Volume = 134,400 C.Y. To #1 578.0 Estimated Time, Road to #11 to Elev. 555'-3.8" (V.L.) Based On 4 Unit Operation



- NOTES
- 1. #1 COMMENTARY SHEET
  - 2. #2 CONST. OFFICE
  - 3. #3 CONST. OFFICE
  - 4. #4 CONST. OFFICE
  - 5. #5 CONST. OFFICE
  - 6. #6 CONST. OFFICE
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  - 45. #45 CONST. OFFICE
  - 46. #46 CONST. OFFICE
  - 47. #47 CONST. OFFICE
  - 48. #48 CONST. OFFICE
  - 49. #49 CONST. OFFICE
  - 50. #50 CONST. OFFICE

© CHECK FOR ANY MATERIAL PLACEMENT IN THIS SHEET FOR ONE YEAR OF USE

REVISIONS

1. BY: [ ] DATE: [ ]

2. BY: [ ] DATE: [ ]

3. BY: [ ] DATE: [ ]

4. BY: [ ] DATE: [ ]

5. BY: [ ] DATE: [ ]

GEORGIA POWER CO., ATLANTA, GA.  
GENERAL ENGINEERING DEPARTMENT

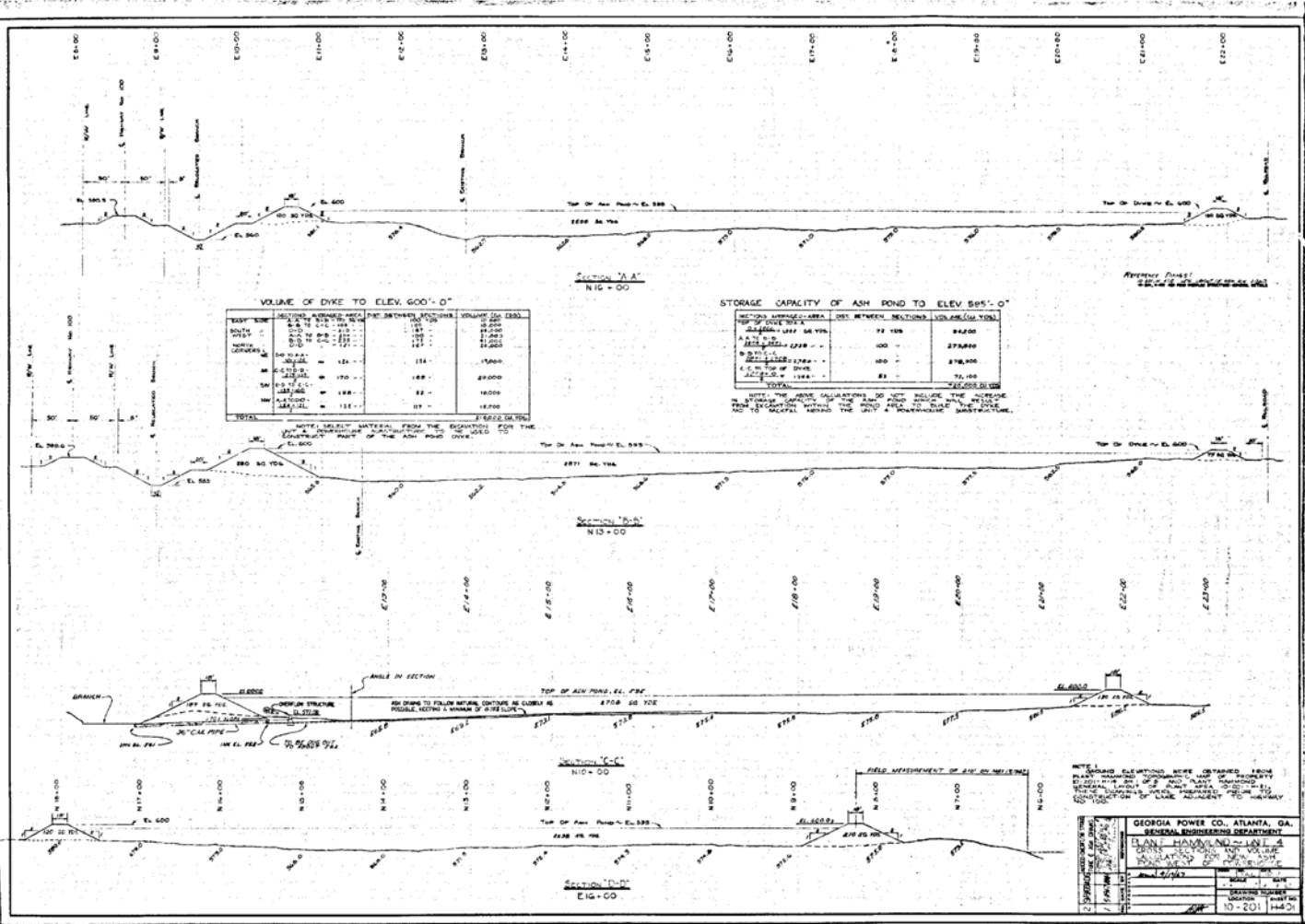
PLANT DESIGN UNIT 4  
GENERAL LAYOUT OF PLANT AREA AND NEAR BY BRIDGE WEST OF BOWENVILLE

DATE: [ ]

BY: [ ]

SCALE: [ ]

10-2-54



VOLUME OF DIKE TO ELEV. 600'-0"

SECTION	AREA	WIDTH	DEPTH	VOLUME
A-A	124	114	15000	185000
B-B	170	148	23000	391000
C-C	128	122	12000	153600
D-D	122	117	12000	146400
TOTAL				875000

STORAGE CAPACITY OF ASH POND TO ELEV. 595'-0"

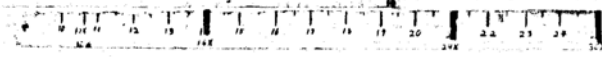
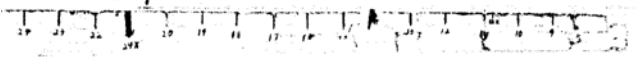
SECTION	AREA	WIDTH	DEPTH	VOLUME
A-A	74	108	84000	621600
B-B	100	148	270000	270000
C-C	100	122	120000	120000
D-D	81	117	120000	97200
TOTAL				1088800

NOTE: ELEVATIONS WERE OBTAINED FROM FIELD MEASUREMENTS AND OF NEARLY ALL POINTS. THE VOLUME OF STORAGE CAPACITY OF THE DAM AND THE DIKE TO BE CONSIDERED AS ONE STRUCTURE.

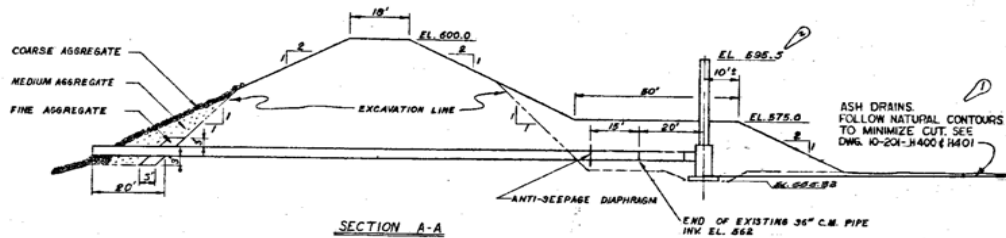
GEORGIA POWER CO., ATLANTA, GA.  
GENERAL ENGINEERING DEPARTMENT

BY: DAN HAVENLOCK  
CHECKED: [Signature]  
DATE: 10/2/52

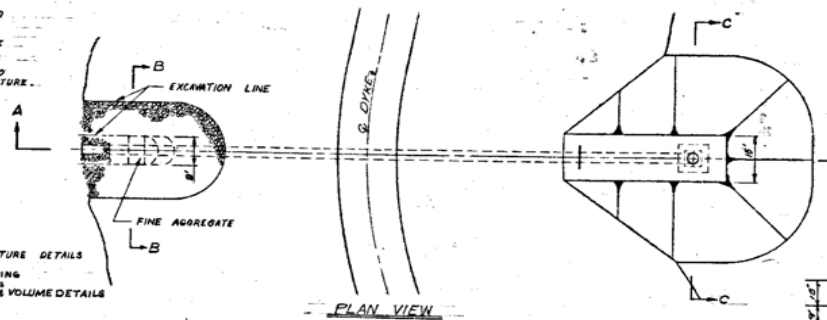
SCALE: 1" = 100'  
DRAWING NUMBER: 10-201  
REVISED: [Signature]



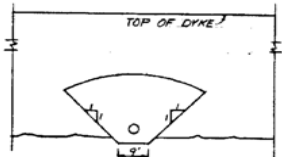




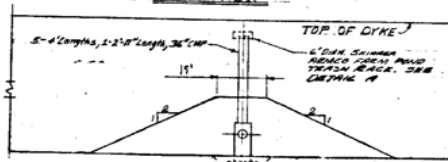
- NOTES:
1. COARSE AGGREGATE TO MEET GA STATE HWY. STD. SPEC. SIZE # 4 STONE.
  2. MEDIUM AGGREGATE TO BE GA STATE HWY. STD. SPEC. SIZE # 7 1/2 AGGREGATE OR APPROVED SUBSTITUTE.
  3. FINE AGGREGATE TO BE GA STATE HWY. STD. SPEC. SECTION 806 FINE GRADED AGGREGATE.
  4. AGGREGATE TO BE THOROUGHLY COMPACTED WITH VIBRATORY COMPACTOR SO AS TO ELIMINATE LARGE VOIDS.
  5. SOIL TO BE COMPACTED TO 100% RELATIVE DRY DENSITY AS DETERMINED BY THE STANDARD PROCTOR METHOD. SOME HAND COMPACTION WILL BE REQUIRED. FILL TO BE SELECTED SOIL OF AN INFERIOUS NATURE.
  6. POND TO BE RAISED IN 4' STAGES.



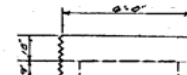
- REF. DWGS.
- 10-201 M-412 OVERFLOW STRUCTURE DETAILS
  - 10-201 M-600 GENERAL LAYOUT
  - 10-201 BA-400 BILL OF MATERIALS
  - 10-201 BM-404 BILL OF MATERIALS
  - 10-201 N-401 CROSS SECTIONS & VOLUME DETAILS



SECTION B-B

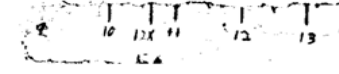
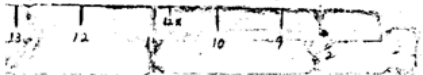


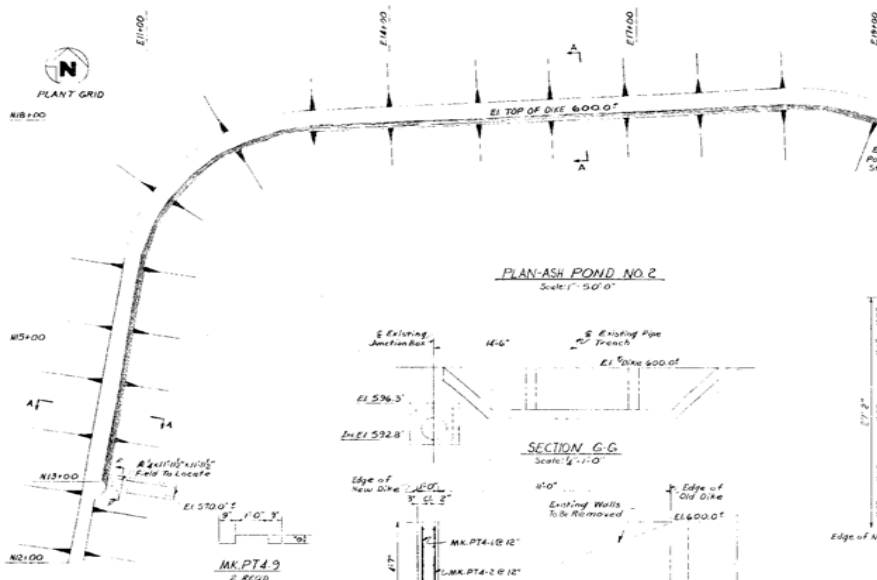
SECTION C-C



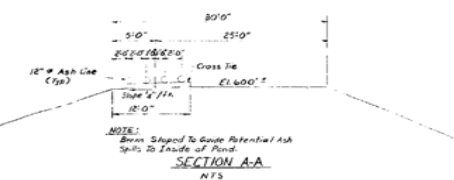
DETAIL A

GEORGIA POWER CO., ATLANTA, GA. GENERAL ENGINEERING DEPARTMENT			
PLANT HAMMOND UNIT # 4 ASH POND OVERFLOW STRUCTURE			
DESIGNED CHECKED APPROVED	DATE 7-7-59	SCALE 1" = 20'	SHEET NO. C-406
DRAWING NUMBER 10-201	LOCATION 10-201	SHEET NO. C-406	DATE 7-7-59

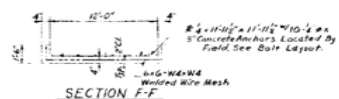




PLAN-ASH POND NO. 2  
Scale: 1"=50' 0"



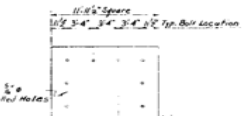
SECTION AA  
NTS



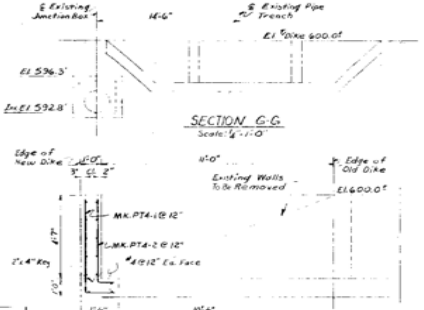
SECTION F-F  
NTS

**BILL OF MATERIAL**

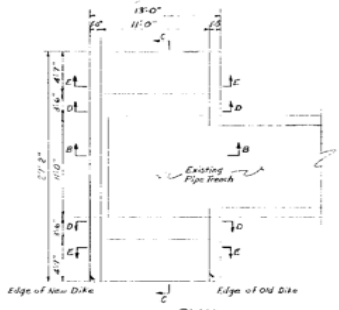
QUANTITY	DESCRIPTION
370 Sq Ft	6x6x1/4 Welded Wire Mesh
1	# 4 x 12' 1/2" Bars
10	1" x 4' x 8' Concrete Expansion Anchors



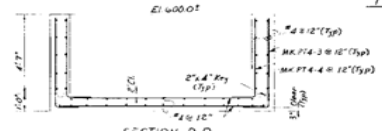
TYP BOLT LAYOUT  
NTS



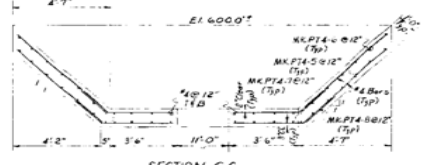
SECTION G-G  
Scale: 1"=10'



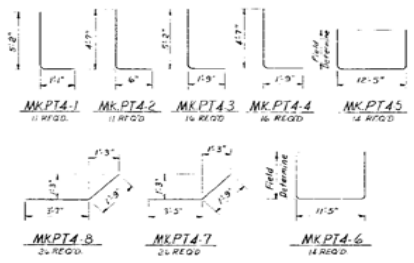
PLAN NEW PIPE TRENCH  
NTS



SECTION D-D  
NTS



SECTION C-C  
NTS



- NOTES:**
- Reinforcing to be done in accordance with ACI 308-7R.
  - Concrete to be placed in 24 hours after formwork is removed and 7 days after rebar is set.
  - Reinforcing steel to be placed in the center of the concrete.
  - Bar ends on the existing pipe trench on the outside of the ash pond to be removed prior to the placement of concrete.
  - Reinforcing steel to be placed in the center of the concrete.
  - Reinforcing steel to be placed in the center of the concrete.
  - All vertical steel to be placed in the center of the concrete.
  - The concrete shall be placed in the center of the concrete.

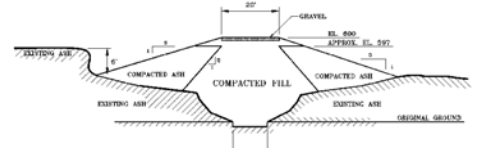
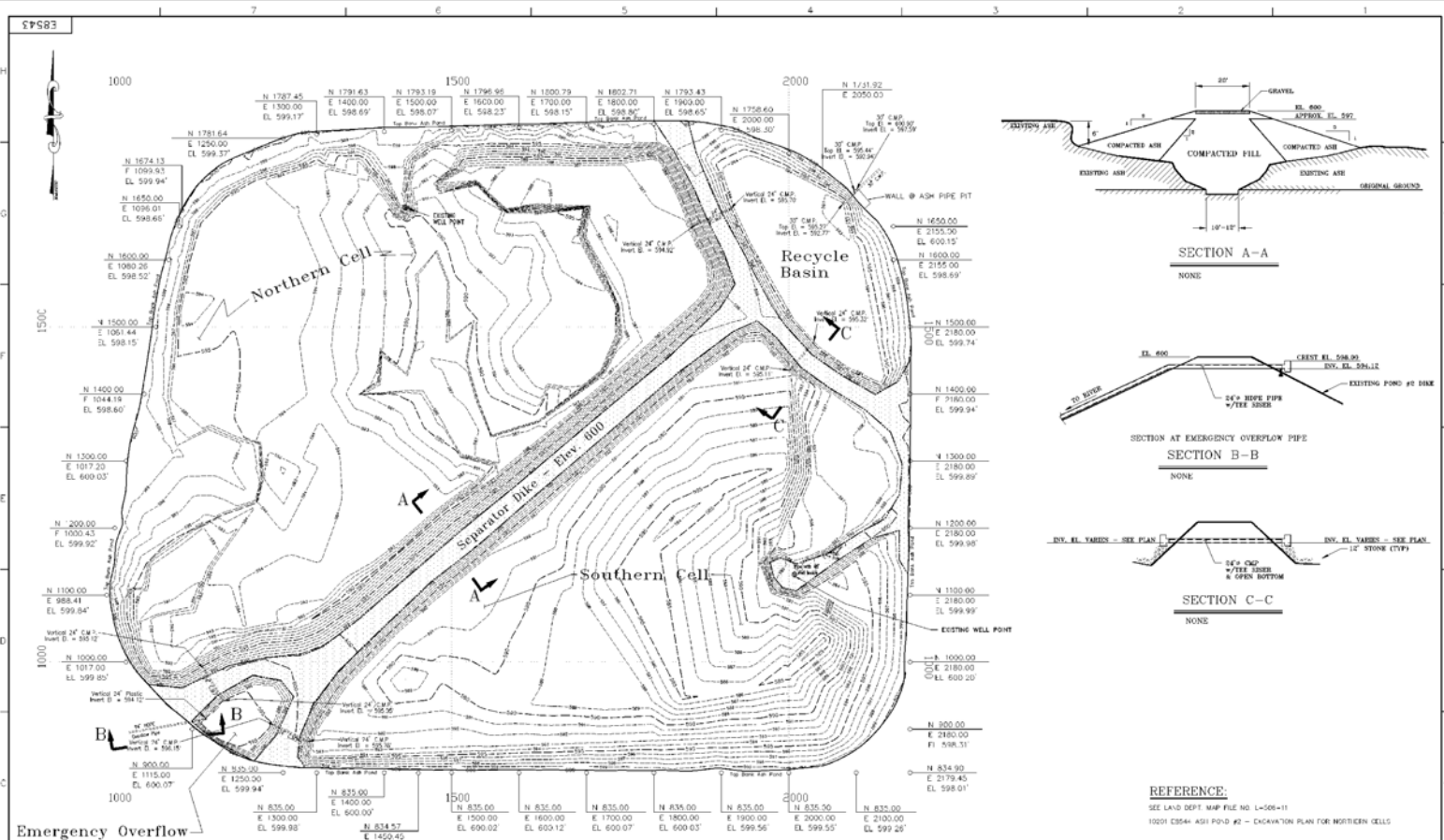
**REFERENCE:**

101-101	101-102	101-103	101-104
101-105	101-106	101-107	101-108

**GEORGIA POWER CO., ATLANTA, GA.**  
GENERAL ENGINEERING DEPARTMENT  
**PLANT HAMMOND UNITS 1-4**  
ASH SLUCE PIPE (RENCH) REINFORCING  
HEATLINES & REINFORCING

DATE	BY	CHKD	APP'D
10-20-01	11-20-01	11-20-01	11-20-01

2010 L.F. Straight #4 Bars Field To Cut As Required



SECTION A-A



SECTION AT EMERGENCY OVERFLOW PIPE  
SECTION B-B

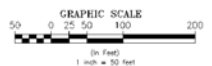


SECTION C-C

**REFERENCE:**  
SEE LAND DEPT. MAP FILE NO. L-568-11  
10201 E8541 ASH POND #2 - EXCAVATION PLAN FOR NORTHERN CELLS

**PLANT HAMMOND - ASH POND #2**

**LAYOUT OF SEPARATOR DIKE**



Southern Company Services Inc. GEORGIA POWER COMPANY											
PLANT HAMMOND ASH POND #2 SEPARATOR DIKE LOCATION and DETAILS											
DATE	BY	CHECKED	APPROVED	DATE	BY	CHECKED	APPROVED	DATE	BY	CHECKED	APPROVED

10201 E8541  
10201 E8543

