

HISTORY OF CONSTRUCTION
40 CFR §257.100(f)(2)(ii) and 40 CFR 257.73(c)(1)(i)-(xii)
PLANT ARKWRIGHT ASH POND (AP-3)
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 Arkwright
Location:	Macon, Georgia
Site Address:	5241 Arkwright Road Macon, GA 31210
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 Arkwright Ash Pond 3 (AP-3)
Identification Number:	GA Solid Waste Permit No. 011-025D(LI)

(ii) CCR Unit Location Map:

32.9277 N, 83.7069 W
See Location Map in the Appendix

(iii) Purpose of CCR Unit:

Plant Arkwright was a four (4) coal fire unit electric generating facility that began operation in 1941 and was retired in 2002. Demolition of the plant was completed in 2003. Plant Arkwright has historically utilized three (3) ponds in the management of coal combustion residuals (CCR). AP-3 was constructed as a surface impoundment in the late 1970’s and began to receive and store CCR produced during the

electric generating process at Plant Arkwright from construction completion until 2002.

AP-3 has been capped and no longer impounds water or receives waste. Closure construction activities completed on AP-3 have rendered the former surface impoundment incapable of receiving, discharging or impounding water, so AP-3 cannot function as a surface impoundment.

(iv) Watershed Description:

Plant Arkwright is located within the Beaverdam Creek-Ocmulgee River (030701031601) HUC-12 watershed, which has a total area of 28,931 acres. AP-3 is located entirely within the Beaverdam Creek-Ocmulgee River watershed. Drainage from the watershed, including approximately 30 acres of mixed commercial/industrial, residential and wooded area along the western perimeter of AP-3, flows to the existing ditches along the perimeter of the closed pond and not onto the top deck of AP-3.

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

AP-3 lies within the Piedmont physiographic province of north-central Georgia. The Piedmont Physiographic Province is characterized by Mesoproterozoic to Paleozoic metamorphic and igneous rocks that have been folded and faulted through multiple orogenies. The residual soils underlying AP-3 are the result of weathering of the underlying bedrock. AP-3 is founded on biotite gneiss, and the nearest fault is the Goat Rock Fault, which lies approximately five (5) miles north of the site.

In general, the foundation abutment soils consist of undisturbed residual soils varying from a firm to stiff silty clay, loose to medium dense silty sand, and medium dense to dense sand and gravel overlying weathered bedrock and/or bedrock. The residual soils range in thickness from 10 feet to 62 feet.

The dam at AP-3 was constructed of compacted clayey and sandy fill, obtained from borrow materials in the interior of the unit along the eastern edge. Engineering design parameters were obtained from samples collected and tested during modern geotechnical investigations.

(vi) Summary of Site Preparation and Construction Activities:

The main dam was originally constructed in the late 1970's and creates the AP-3 unit covering approximately 31.5 acres. AP-3 was created by construction of the main dam across the existing valley. CCR was sluiced behind the dam via a sluice line that crossed both the Norfolk Southern Railroad and Arkwright Road.

AP-3's impounding dam is a homogenous structure comprised of compacted residual soils supported above the residuum foundation soils, with a height ranging from integration with existing ground surface to 30 feet. The dam was single staged construction to elevation 350 ft. The fill for dam construction was placed in lifts and rolled. The upstream and downstream slopes are graded at 2H:1V. In 1977, modifications were made to the dam, including the addition of an emergency discharge structure and emergency spillway. In 1985, the dam was raised to elevation 352 ft. The fill for this dam modification, obtained from on-site borrow sources, was placed in controlled engineered lifts.

AP-3, as originally constructed, received stormwater run-on from two intermittent streams from the north and west. In 2005, the configuration of AP-3 was adjusted, and a pond was established at the North end to divert the offsite stormwater drainage into a diversion channel constructed on the east side of AP-3. This man-made surface channel discharges surface water through a weir structure located at the southeastern corner of the site and into the wetlands area located further south near Beaver Dam Creek.

In 2009, AP-3 was closed by constructing a geosynthetic clay liner overlain by a geocomposite drainage medium and eighteen (18) inches of soil cover and vegetation in accordance with Georgia Solid Waste Rules 391.3-4. A Closure Certificate under the Permit Tracking Number 011-025D(LI) was issued by GA EPD for AP-3 on August 19, 2010.

(vii) Engineering Diagram:

The following drawings reflecting the design of the Plant Arkwright AP-3 unit can be found in the Appendix:

- Site Location Map
- Aerial View
- Georgia Power Company Drawing HPS-2218 – 1976 Future Ash Pond Study
- Georgia Power Company Drawing H-2236 – 1977 Ash Sluice Recycle & Neutralization, Ash Pond Intake Structure – Outdoor, Concrete - Plan - Sections - Details - N.L. & Reinf.
- Georgia Power Company Drawing H-2237 – 1977 Ash Pond No 3 & Recycle System General Arrangement Sheet 1
- Georgia Power Company Drawing H-2238 – 1977 Ash Pond No 3 & Recycle System General Arrangement Sheet 2
- Georgia Power Company Drawing H-2242 – 1977 Ash Pond No 3 Dam and Spillway
- Georgia Power Company Drawing H-2250 – 1977 Ash Pond No 3 Emergency Discharge Structure
- Georgia Power Company Drawing – 1978 Company Inspection
- Georgia Power Company Drawing E-2228 – 1984 Ash Pond #3 Cross-Sections Near Right Abutment
- Georgia Power Company Drawing E-2229 – 1984 Ash Pond #3 Location of Cross-Sections at Right Abutment
- Georgia Power Company Drawing H-2300 – 1985 Ash Pond No 3 Dam Modification to EL 352.0
- Georgia Power Company Drawing H-8106 – 2004 Ash Pond #3 Diversion Ditch Plan and Section
- Georgia Power Company Drawing H-8107 – 2004 Ash Pond #3 Diversion Ditch Traverse Sections
- Georgia Power Company Drawing H-8108 – 2004 Ash Pond #3 Diversion Ditch Sections and Details Sheet 1
- Georgia Power Company Drawing H-8109 – 2004 Ash Pond #3 Diversion Ditch Sections and Details Sheet 2
- Georgia Power Company Drawing H-8159 – 2008 Ash Pond 2, Ash Pond 3 & Ash Monofil Site Topographic Map
- Georgia Power Company Drawing H-8160 – 2008 Ash Pond 3 and Ash Monofill Final Grading Plan
- Georgia Power Company Drawing H-8162 – 2008 Ash Pond 3 and Ash Monofill Sections
- Georgia Power Company Drawing H-8163 – 2008 Ash Pond 3 and Ash Monofill Misc Sections and Details

(viii) Description of Instrumentation:

There is no instrumentation installed for stability monitoring of dams at Plant Arkwright AP-3.

(ix) Area-Capacity Curves:

AP-3 can no longer impound free water, and an area-capacity curve is not applicable. All surface run-off from AP-3 is routed off-site.

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

AP-3 was originally designed with a primary discharge through a 24-inch corrugated metal pipe recycle line back to AP-2 where water would be pumped back to the plant or discharged through the AP-2 primary spillway to Beaverdam Creek. AP-3 was also constructed with an emergency spillway channel and emergency discharge structure along the southern limit of the ash pond, at the approximate midpoint of the dam. In 1985, the original emergency discharge structure was abandoned as part of a dam modification project. At that time, the original 24-inch recycle line was extended into the pond and the emergency spillway was modified with the addition of a labyrinth weir structure. Additionally, the dam was raised two feet. As part of the closure construction of AP-3 in 2008, these structures were abandoned in place or removed. The 24-inch BCCMP emergency discharge structure outlet pipe was abandoned in 2020 by grouting.

Currently, AP-3 does not have spillways and does not impound water. Stormwater is collected in drainage ditches along the perimeter of the closed ash pond. Additionally, the top deck of the closed pond drains to a low point at the southeast limit of AP-3 and through two 36-inch pipes. The two pipes drain to a riprap lined discharge channel, which outfalls to a riprap drainage feature. The current drainage configuration was designed for a 25-year, 24-hour storm event.

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

Due to the age of the facility, construction specifications were not available. Inspections of the dam for AP-3 are conducted on a regular basis—currently semi-annually by professional dam safety engineers and on a 7-day interval by qualified 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 weather conditions, rainfall since the prior inspection, conditions of slopes and drains, erosion, animal damage, ant hills, alignment of retaining structures and more. Dam safety engineers 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-3.

Appendix



Figure No.

1

Title

Ash Pond 3 Location

Client/Project
**Georgia Power
 Plant Arkwright Legacy Rule**

175578882

Project Location
 City of Macon
 Bibb County, Georgia

Prepared by WSW on 2025-09-25
 TR by AT on 2025-09-25



0 2,000
 Feet
 (At original document size of 11x17)
 1:24,000

Legend



Ash Pond Location

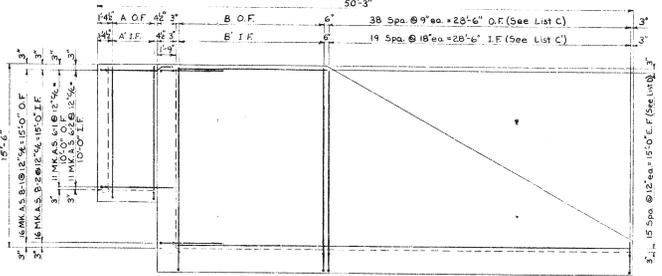
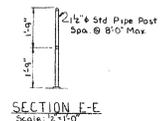
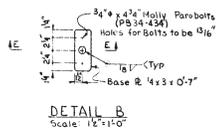
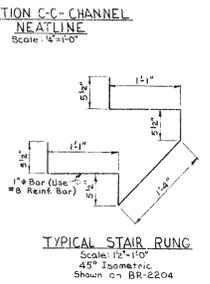
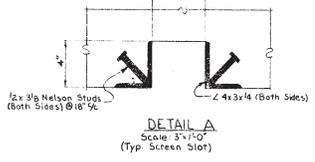
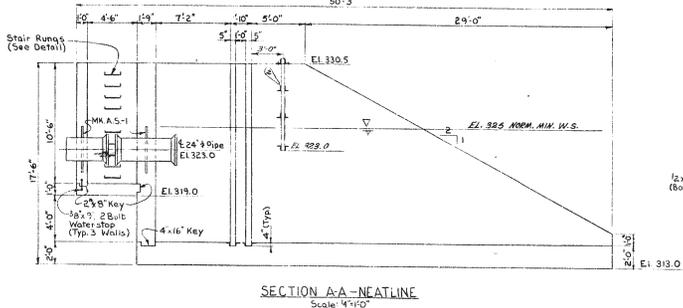
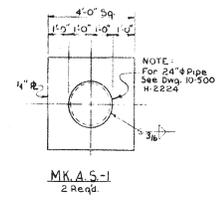
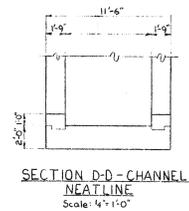
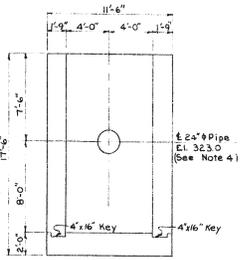
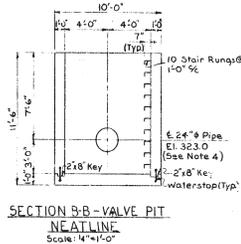
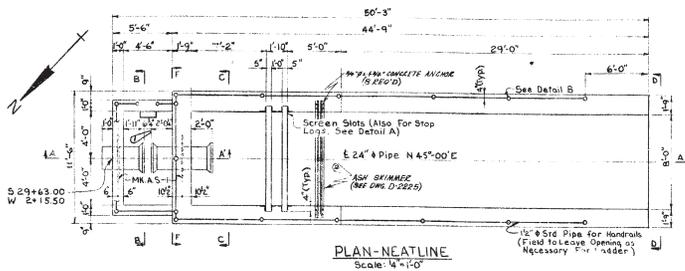


Notes
 1. Coordinate System: NAD 1983 StatePlane Georgia West FIPS 1002 Feet
 2. Unit locations courtesy of Georgia Power
 3. Background: Main Map basemap courtesy of ESRI USA Topo Maps and Key Map basemap courtesy of ESRI World Street Map.



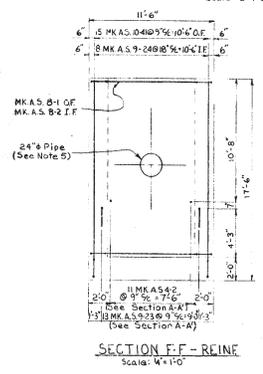


Plant Arkwright Aerial View



LIST OF REINFORCING
FOR PLACING ONLY-FABRICATE FROM BR-2204

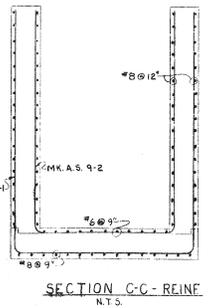
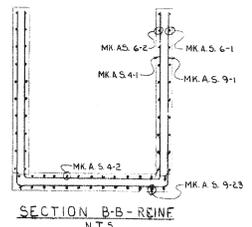
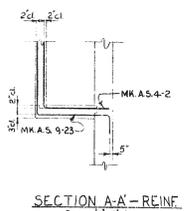
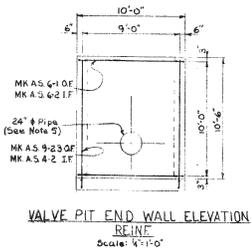
A	B	C	D
6 MK.A.S. 9-1 @ 9" x 3'-9"	6 MK.A.S. 4-1 @ 9" x 3'-9"	6 MK.A.S. 9-2 @ 9" x 13'-6"	6 MK.A.S. 9-2 @ 9" x 13'-6"
19 MK.A.S. 10-1 @ 9" x 13'-6"	10 MK.A.S. 9-2 @ 18" x 13'-6"	1 ea. MK.A.S. 10-2 Thru MK.A.S. 10-40	1 ea. MK.A.S. 9-3 Thru MK.A.S. 9-22



REFERENCE DRAWINGS

10-500	BR-2204	Bill of Rein
D-2225	Plan of Man-Point	
H-2224	Piping at Ash Pond No.2	
H-2237	General Arrangement	

- NOTES:**
- All Concrete to be 4000 psi @ 28 days.
 - All Reinforcing to be Grade 60, ASTM A-615.
 - Reinforcing to Have 2" Min. Cover of Concrete Where Poured against Form and 3" Min. Cover Where Poured against Earth.
 - Pipe to be Placed Before Concrete is Poured.
 - Field to Cut Reinforcing as Req'd Around Pipe.
 - All Structural Steel to be ASTM A-36.
 - All Welded Connections to be Made Using E-70XX Electrodes.
 - Field Shall Provide Primer and Paint Necessary to Cover Any Exposed Metal Surface.
 - All Exposed Concrete Edges to be Chamfered 1/4".
 - All Concrete Surfaces to be Exposed to Ash Pond Water to be Treated with Three (3) Applications of Solignum Linseed Oil. First Application to be Diluted with Turpentine (Part Oil to 4 Parts Turpentine).

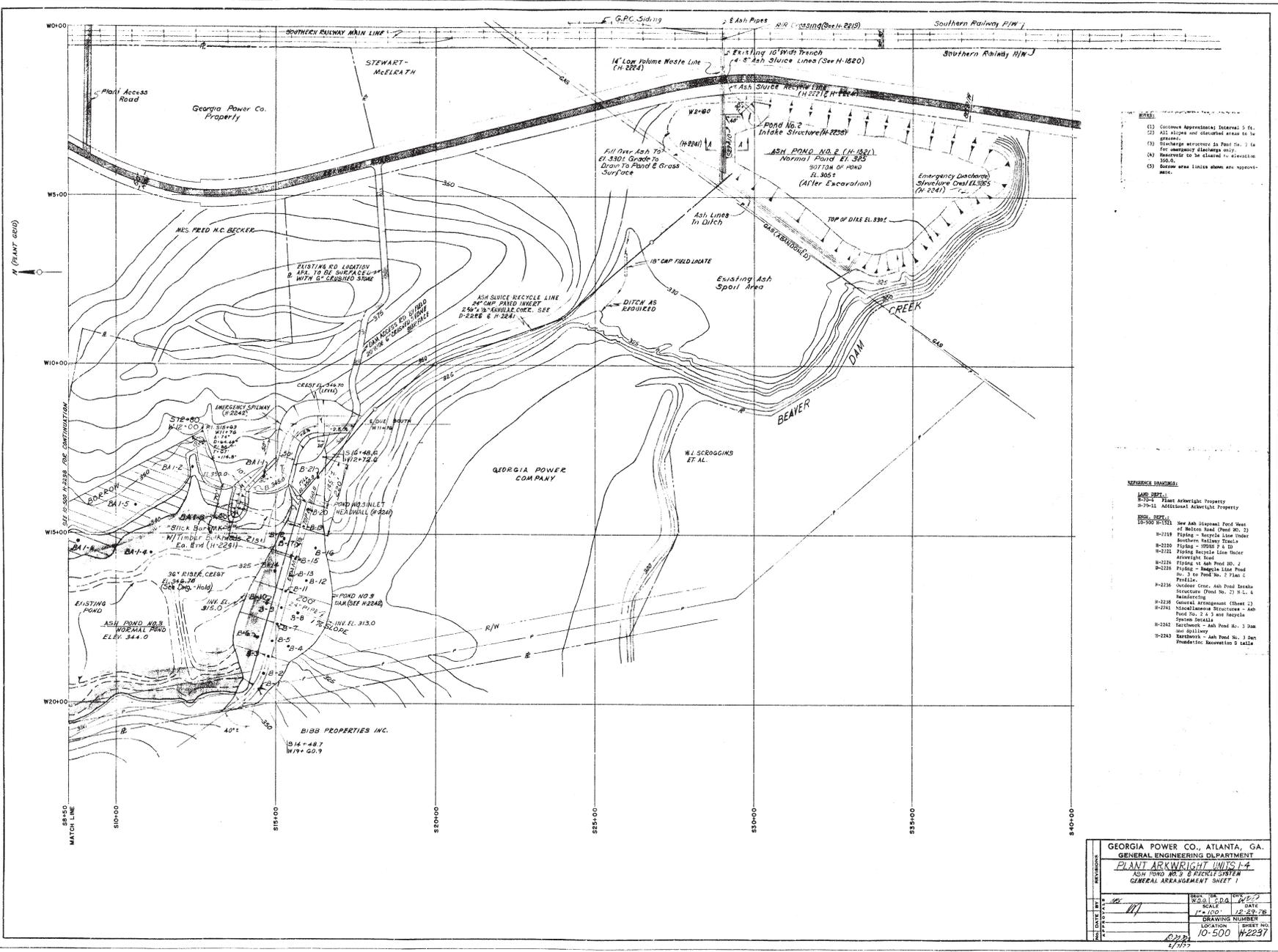


GEORGIA POWER CO., ATLANTA, GA.
GENERAL ENGINEERING DEPARTMENT

PLANT ARKWRIGHT

ASH SLUDGE RECYCLE & NEUTRALIZATION
ASH POND INTAKE STRUCTURE - OUTDOOR
CONCRETE-PLAN SECTIONS-DRAWINGS & REINFORCEMENT

DATE	SCALE	SHEET NO.
12-1-76	AS SHOWN	18-1-76
DRAWING NUMBER	LOCATION	SHEET NO.
		10-500 H-2236



- (1) Contour Approximate Interval 5 Ft.
- (2) All slopes and calculated areas to be graded.
- (3) Structure elevations in Pond No. 2 are for emergency discharge only.
- (4) Reservoir to be closed to circulation 350.0.
- (5) Shore area limits shown are approximate.

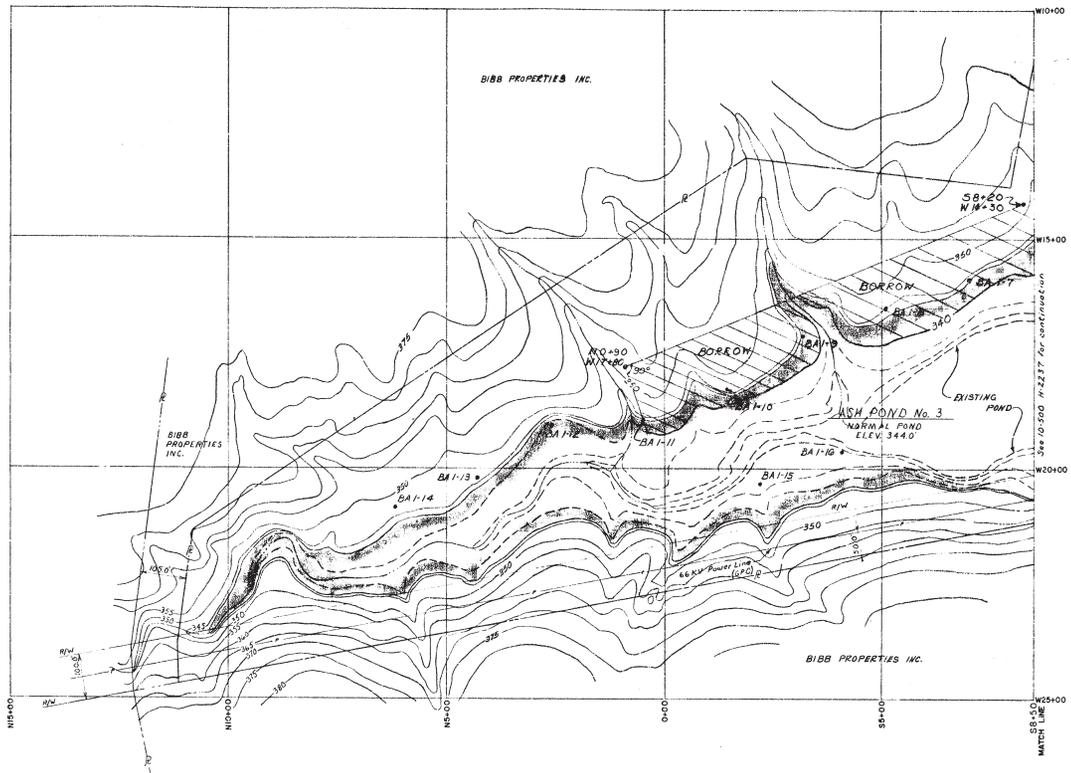
REFERENCE DRAWINGS:

- ASD 100-1 Plant Allowright Property
- 10-20-1 Additional Allowright Property
- 10-500 10-1501 New Ash Disposal Pond West of Millon Road (Pond No. 2)
- 10-2119 Filing - Weapola Lake Under Southern Railway Tracks
- 10-2120 Filing - WEAPOLA P & ID
- 10-2121 Filing - Weapola Lake Near Allowright Road
- 10-2122 Filing - Ash Pond No. 2
- 10-2123 Filing - Weapola Lake Pond No. 2 to Pond No. 2 Dam
- 10-2124 Pond No. 2 Dam
- 10-2125 Pond No. 2 Dam
- 10-2126 Pond No. 2 Dam
- 10-2127 Pond No. 2 Dam
- 10-2128 Pond No. 2 Dam
- 10-2129 Pond No. 2 Dam
- 10-2130 Pond No. 2 Dam
- 10-2131 Pond No. 2 Dam
- 10-2132 Pond No. 2 Dam
- 10-2133 Pond No. 2 Dam
- 10-2134 Pond No. 2 Dam
- 10-2135 Pond No. 2 Dam
- 10-2136 Pond No. 2 Dam
- 10-2137 Pond No. 2 Dam
- 10-2138 Pond No. 2 Dam
- 10-2139 Pond No. 2 Dam
- 10-2140 Pond No. 2 Dam
- 10-2141 Pond No. 2 Dam
- 10-2142 Pond No. 2 Dam
- 10-2143 Pond No. 2 Dam
- 10-2144 Pond No. 2 Dam
- 10-2145 Pond No. 2 Dam
- 10-2146 Pond No. 2 Dam
- 10-2147 Pond No. 2 Dam
- 10-2148 Pond No. 2 Dam
- 10-2149 Pond No. 2 Dam
- 10-2150 Pond No. 2 Dam

GEORGIA POWER CO., ATLANTA, GA.
GENERAL ENGINEERING DEPARTMENT
PLANT ARKRIGHT UNITS 1-4
ASH POND NO. 2 & RICKLYS SYSTEM
GENERAL ARRANGEMENT SHEET 1

DATE	BY	SCALE	DATE
10/22/57	WJ	1" = 100'	10/22/57
PROJECT NO.	DRAWING NUMBER	LOCATION	SHEET NO.
10-500	10-2237	10-500	10-2237

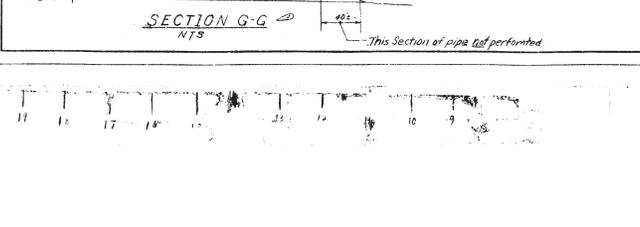
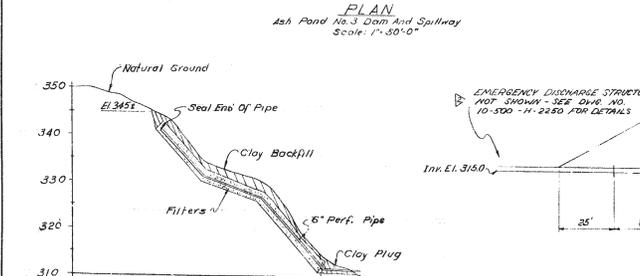
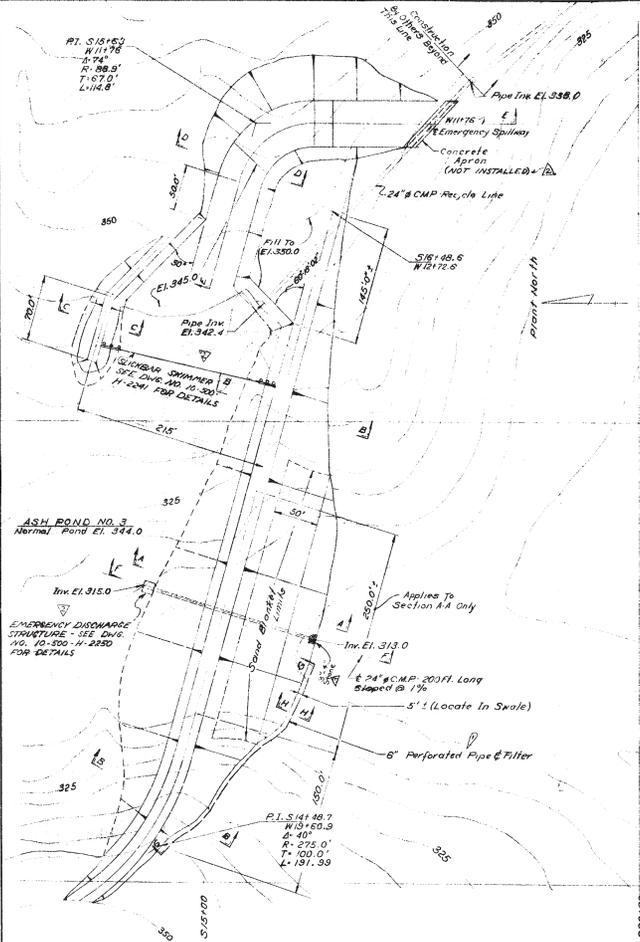
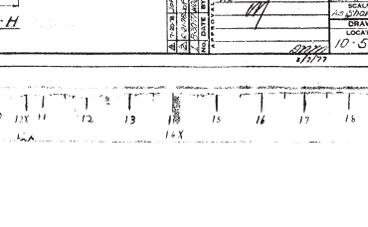
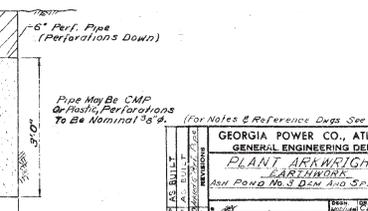
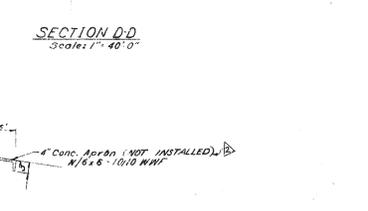
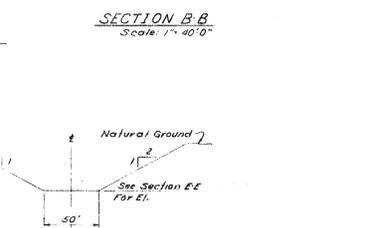
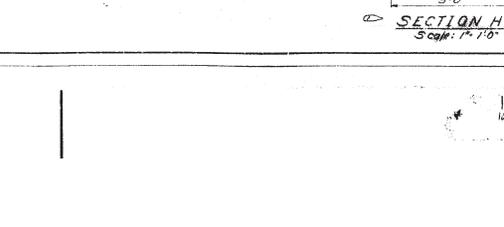
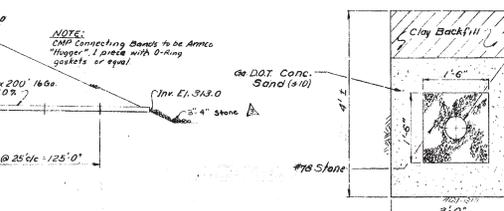
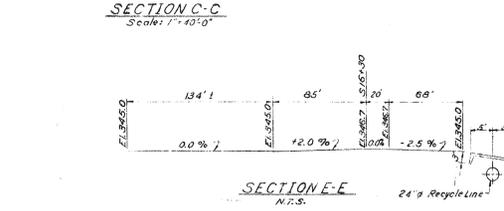
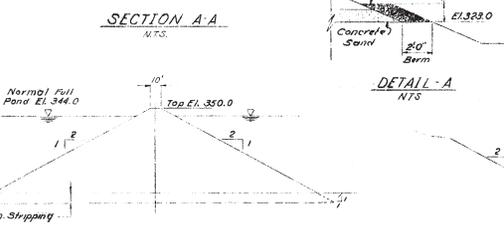
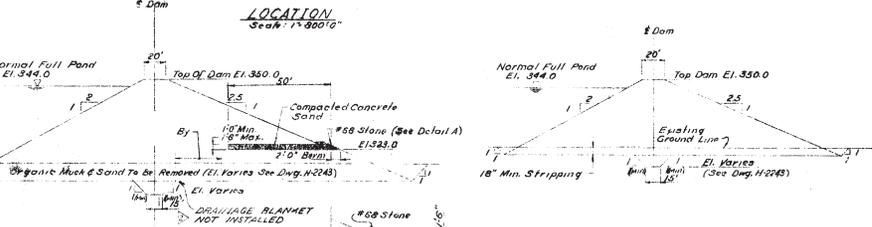
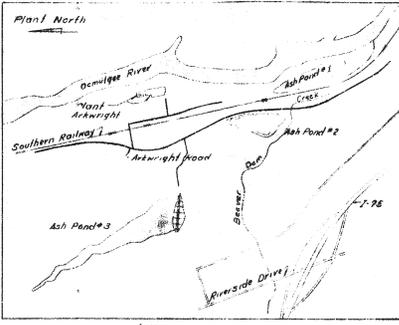




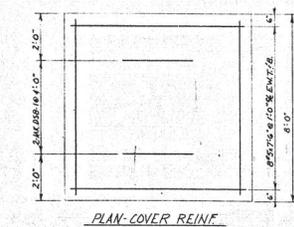
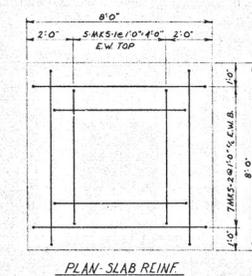
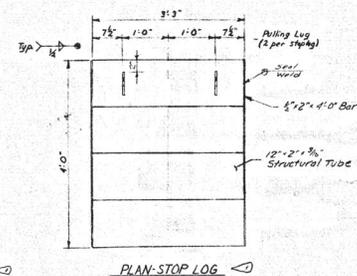
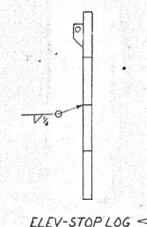
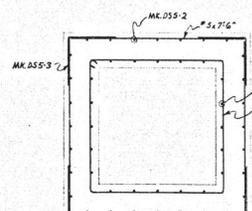
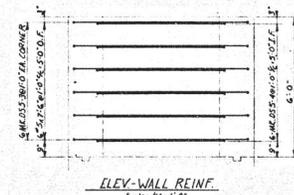
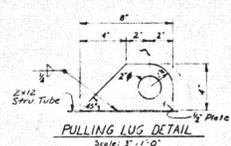
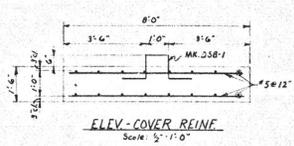
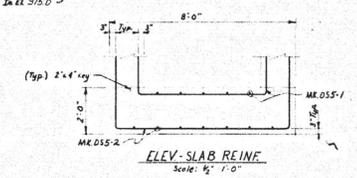
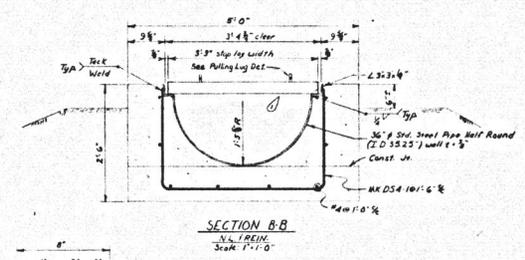
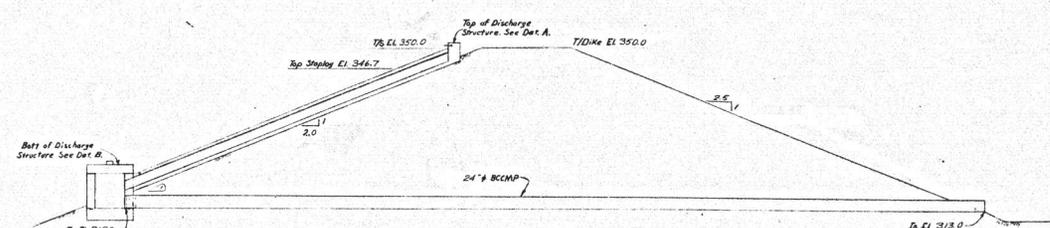
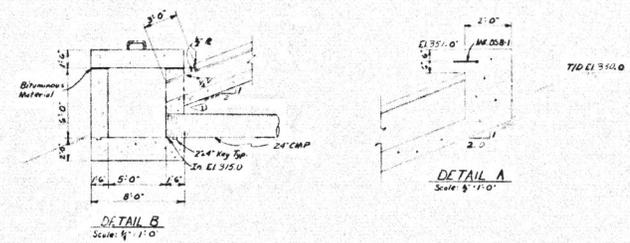
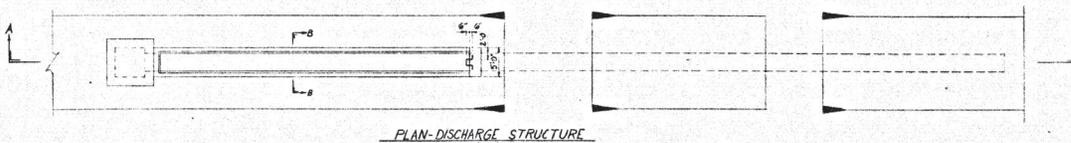
FOR NOTES & REFERENCES
SEE 10-500 H-2237

GEORGIA POWER CO., ATLANTA, GA.			
GENERAL ENGINEERING DEPARTMENT			
Plant Arkwright Units 1-4			
Ash Pond No. 3 Recycle System			
General Arrangement Sheet 2			
DATE	SCALE	DATE	
1/1	1"=100'	JAN 31 1977	
DRAWING NUMBER	LOCATION	SHEET NO.	
10-500	H-2238		





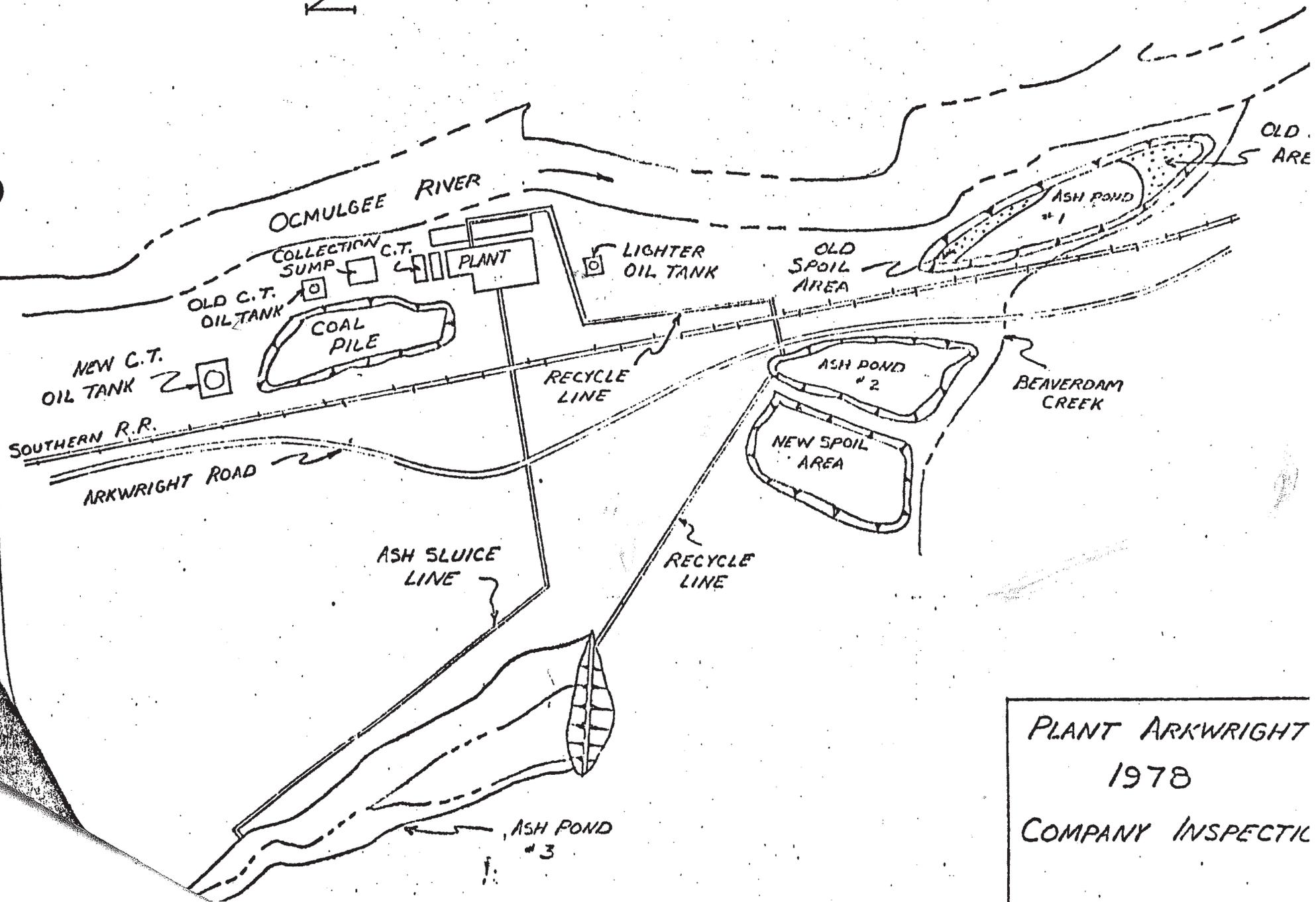
GEORGIA POWER CO., ATLANTA, GA. GENERAL ENGINEERING DEPARTMENT			
PLANT ARKWRIGHT UNIT 3 LABORATORY			
DAM POND NO. 3 DAM AND SPILLWAY			
DATE	SCALE	DATE	SCALE
10/27/77	1" = 30'-0"	10/27/77	1" = 30'-0"
DRAWING NUMBER	10-500	SHEET NO.	162342
LOCATION			



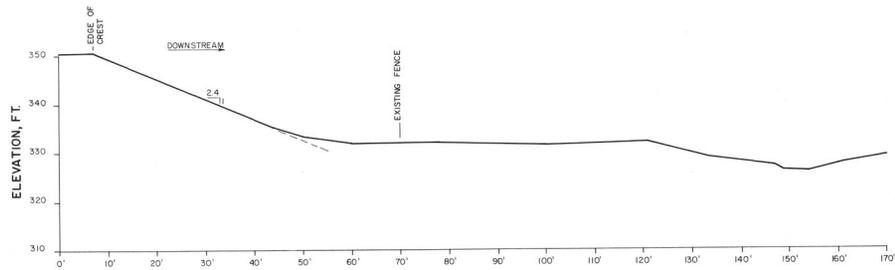
REFERENCE DRAWINGS:
10-500-502-25175 Ash Pond's Emergency Disch. Struct
10-500-71-2242 Ash Pond's Drain Spillway

NOTES:
1. Material To Be Field Supplied.
2. Concrete: 4000 psi, @ 28 Days.
3. Reinforcing ASPM # 6 @ 18" Grade w.o.
4. Top Slap To Be Constructed To Make Crest Elevation 314.70'.
5. Exposed Steel To Be Painted With Coal-Tar Epoxy.
6. Slapings to be bituminous coated.

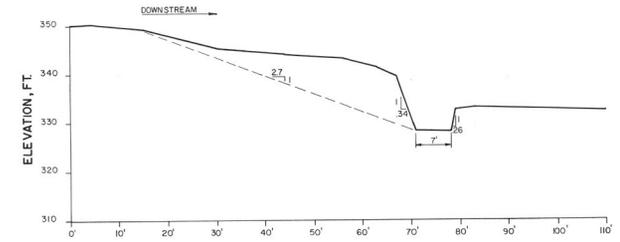
GEORGIA POWER CO., ATLANTA, GA.			
GENERAL ENGINEERING DEPARTMENT			
PLANT ARRAUGHT UNITS 1-4			
ASH POND No. 3-EMERGENCY DISCHARGE STRUCTURE			
DATE	SCALE	BY	CHKD
AS	NOTES	10-1-77	
DRAWING NUMBER		SHEET NO.	
10-500		H2250	



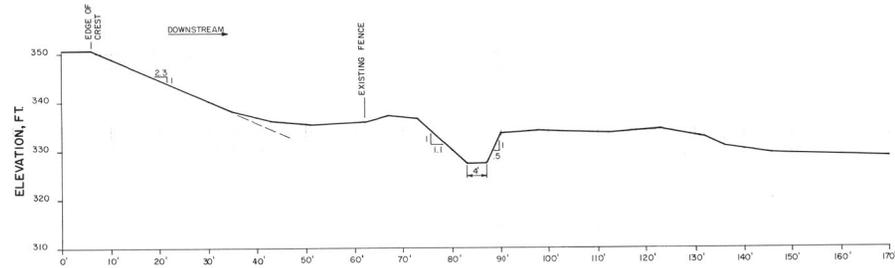
PLANT ARKWRIGHT
1978
COMPANY INSPECTIC



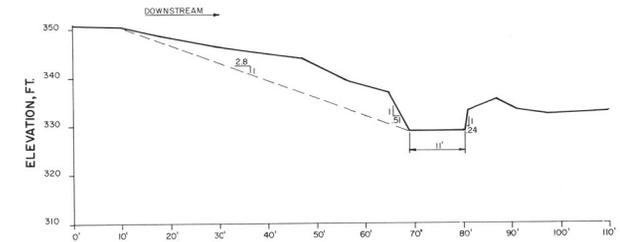
6+75



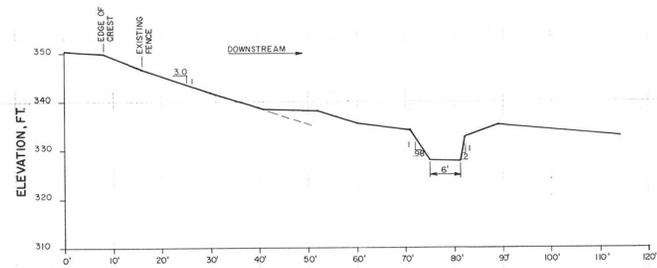
7+75



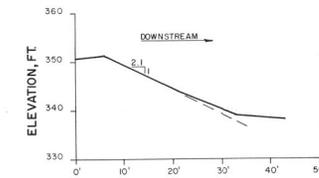
7+00



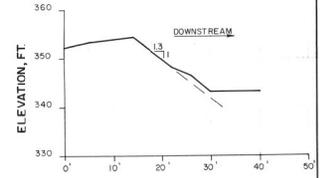
8+00



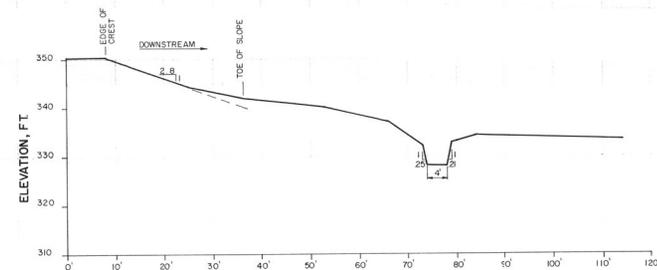
7+25



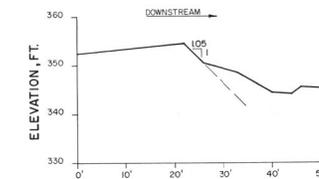
8+03.78



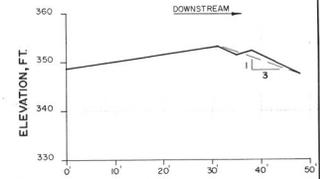
8+75



7+50



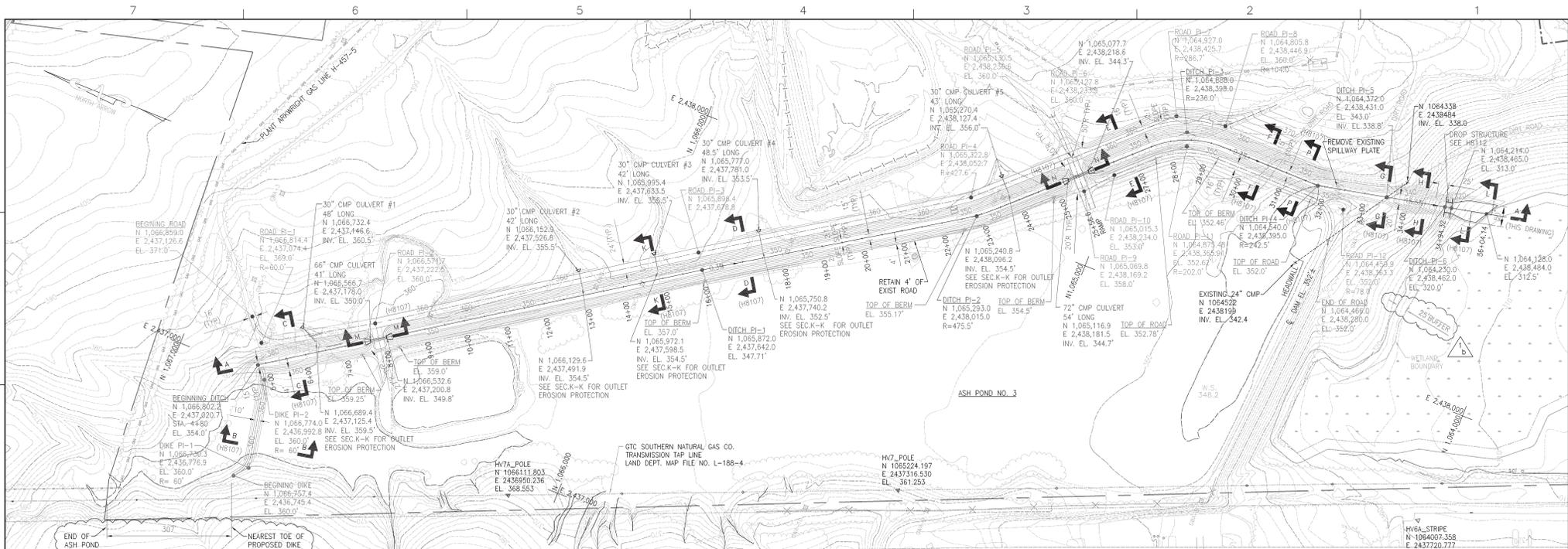
9+25



9+75

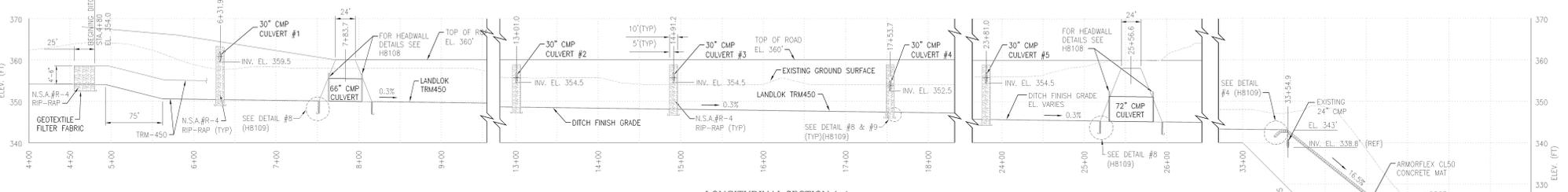
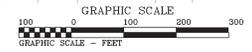
NOTE:
CROSS SECTIONS FROM SURVEY DATED
AUGUST 30, 1984. SEE DRWG. NO. 10-500 E-2229
FOR LOCATION OF SECTIONS.

GEORGIA POWER CO., ATLANTA, GA.			
PLANT ARKWRIGHT			
ASH POND #3			
CROSS SECTIONS NEAR RIGHT ABUTMENT			
DESIGNED BY	SCALE	DR. LAST	CHK
		DATE	DATE
APPROVED BY	DRAWING NUMBER	10-500 E-2228	



ASH POND NO. 3 DIVERSION DITCH PLAN VIEW

SCALE: 1" = 100'



LONGITUDINAL SECTION A-A

SCALE: H: 1" = 50' V: 1" = 10'

LEGEND:

- EXISTING MONITORING WELL (SEE NOTE 15, H8108)
- G.P.S. SURVEY MONUMENT
- SITE BOUNDARY
- 25' WETLAND BUFFER
- EXIST GROUND CONTOURS
- WETLANDS

NOTES:

1. FOR GENERAL NOTES SEE H8108.

REFERENCES:

- H8107 ASH POND #3 DIVERSION DITCH TRAVERSE SECTIONS
- H8108 ASH POND #3 DIVERSION DITCH SECTIONS & DETAILS SH.1
- H8109 ASH POND #3 DIVERSION DITCH SECTIONS & DETAILS SH.2
- H8110 ASH POND #3 DIVERSION DITCH EROSION & SEDIMENT CONTROL PLAN
- H8111 ASH POND #3 DIVERSION DITCH EROSION & SEDIMENT CONTROL TYPICAL DETAILS
- H8112 ASH POND #3 DIVERSION DITCH DROP STRUCTURE
- H-451-9 PLANT ARKWRIGHT GAS LINE
- J-48-11 PLANT ARKWRIGHT ASH POND NO.3
- L-188-4 CTC SOUTHERN NATURAL GAS CO. TRANSMISSION TAP LINE

This document contains proprietary, confidential, and/or trade secret information of the subsidiaries of the Southern Company or of third parties. It is intended for use only by employees of, or authorized contractors of, the subsidiaries of the Southern Company. Unauthorized possession, use, distribution, copying, dissemination, or disclosure of any portion hereof is prohibited.

Southern Company Services, Inc.
FOR

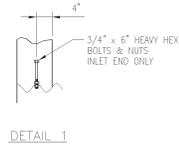
GEORGIA POWER COMPANY
PLANT ARKWRIGHT
ASH POND #3
DIVERSION DITCH
PLAN AND SECTION

REVISION	DATE	DESCRIPTION	REVISION	DATE	DESCRIPTION
1	03/02/2005		0	12/29/04	ISSUED FOR CONSTRUCTION
a. (08) ADDED DIMENSION AND TEXTS.					
b. (E1) CHANGED WETLAND BUFFER TO 25 FEET.					

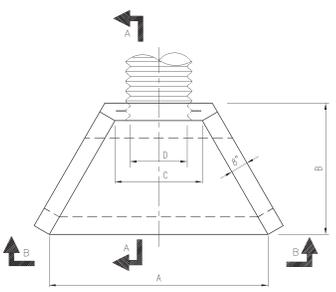
BY	CHK'D	DATE	APP'D	DATE	APP'D	BY	CHK'D	DATE	APP'D	DATE	APP'D
KKF	JDM	JLR				KKF	JDM	JLR			

SCALE	PROJ. NO.	DRAWING NUMBER	SH.	CON'T.	REV.
AS SHOWN	10550	H8106	1	FINAL	1

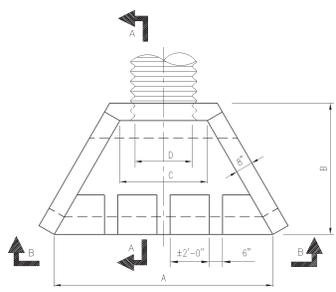
HEADWALL TABLE				
D	H	C	A	B
24"	3'-3"	2'-7"	8'-4"	5'-0"
30"	3'-9"	3'-3"	10'-2"	6'-0"
36"	4'-3"	3'-3"	12'-0"	7'-0"
42"	4'-9"	4'-7"	13'-10"	8'-0"
66"	6'-9"	6'-6"	15'-0"	14'-6"
72"	7'-3"	7'-0"	15'-0"	15'-9"



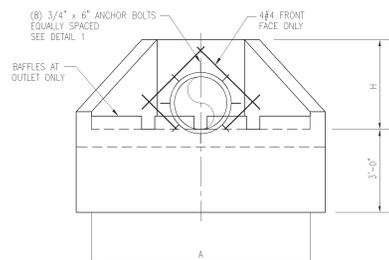
DETAIL 1



INLET PLAN

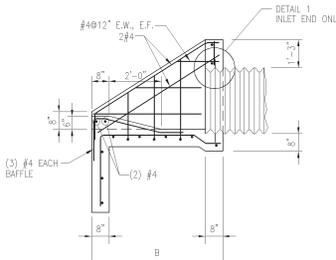


OUTLET PLAN



SECTION B-B

WINGED HEADWALL DETAIL
NOT TO SCALE



SECTION A-A



TYPICAL ACCESS ROAD SECTION
NOT TO SCALE

GENERAL NOTES:

- TOPOGRAPHY AND LAYOUT FOR THE ASH POND AREA IS BASED ON SURVEY DONE BY "METRO ENGINEERING AND SURVEYING CO." DATED JANUARY 26, 2001 AND THE WET LAND TOPOGRAPHY IS BASED ON INFORMATION PROVIDED BY ACER ENVIRONMENTAL, INC. JULY 21 2004.
- BEFORE STARTING ANY CONSTRUCTION WORK CONTRACTOR SHALL VERIFY THAT THE DIMENSIONS IN THE FIELD ARE IN AGREEMENT WITH THE DATA SHOWN ON DESIGN DRAWINGS. ANY VARIATION SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER FOR RESOLUTION BEFORE PROCEEDING WITH CONSTRUCTION.
- FOR SOIL BORING DATA SEE REPORT OF "SUBSURFACE AND SUBSURFACE INVESTIGATION", SECTION 2.0 OF "PLANT ARKRIGHT ASH POND # 3 SITE ACCEPTABILITY REPORT" DATED APRIL 2004.
- EXISTING SITE HORIZONTAL AND VERTICAL SURVEY CONTROL MONUMENT IS INDICATED ON DRAWING H8106.
- ALL BACKFILL SHALL BE IN ACCORDANCE WITH PROJECT SPECIFICATION No. 02223, "EARTHWORK - BACKFILLING"
- ALL SITE DEVELOPMENT MATERIAL SHALL BE IN ACCORDANCE WITH PROJECT SPECIFICATION No. 02205, "EARTHWORK - SITE DEVELOPMENT MATERIALS"
- ALL EROSION AND SEDIMENT CONTROL SHALL BE IN ACCORDANCE WITH PROJECT SPECIFICATION No. 01560, "EARTHWORK - TEMPORARY CONTROLS".
- ALL CONCRETE WORK SHALL CONFORM TO AMERICAN CONCRETE INSTITUTE STANDARD 318-02 AND SHALL BE IN ACCORDANCE WITH PROJECT SPECIFICATION No. 03300, "CAST IN PLACE CONCRETE"
- ALL CONCRETE SHALL HAVE A 28-DAY COMPRESSIVE STRENGTH OF 4,000 PSI. ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60.
- ALL REINFORCING STEEL SHALL HAVE A MINIMUM 2" COVER, EXCEPT FOR CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH SHALL HAVE 3" COVER.
- ALL REINFORCING SPLICES SHALL BE CLASS "B" UNLESS NOTED OTHERWISE ON DRAWING
- PRIOR TO PLACING CONCRETE ALL REINFORCING SHALL BE FREE OF LOOSE RUST AND SCALE OR ANY FOREIGN MATERIAL.
- ALL EXPOSED CONCRETE SHALL HAVE 45 DEGREE, 3/4" CHAMFER, EXCEPT AS NOTED.
- THE EXISTING TWENTY FOUR (24) INCH CMP "ASH SLUDGE RECYCLE PIPE" SHALL REMAIN IN OPERATION AT ALL TIMES DURING CONSTRUCTION.
- MONITORING WELLS GWC-1, GWC-2, GWC-3, GWC-4 AND GWC-6 WILL BE RELOCATED BY THE OWNER PRIOR TO START OF CONSTRUCTION OF THE DIVERSION DITCH.
- CONTRACTOR SHALL EXERCISE CARE NOT TO DAMAGE EXISTING 24 INCH DIAMETER REDIRCULATING WATER LINE DURING CONSTRUCTION. ANY DAMAGE SHALL BE REPAIRED TO THE OWNER'S SATISFACTION BEFORE CONTINUING WITH THE CONSTRUCTION WORK.
- AREAS DESIGNATED FOR EXCAVATION, EARTH FILL, DITCHES AND DIVERSION SHALL BE CLEARED GRUBBED AND STRIPPED OF ANY TREES, BRUSH, AND VEGETATION PRIOR TO EXCAVATION. CLEARING LIMITS SHALL BE HELD AT A MINIMUM. NO CLEARINGS SHALL BE PERFORMED IN THE BUFFER.
- IMMEDIATELY AFTER GRUBBING, TOPSOIL SHALL BE COMPLETELY STRIPPED WITHIN THE LIMITS OF CONSTRUCTION. TOPSOIL SHALL BE STOCKPILED AT LOCATIONS AS DIRECTED BY THE OWNER.
- THERE ARE ASH DEPOSITS WITHIN THE PROPOSED ROUTE OF THE DIVERSION DITCH BETWEEN APPROXIMATELY STATION 31+00 TO STATION 32+50. CONTRACTOR SHALL REMOVE ALL ASH DEPOSITS FROM THIS AND ANY OTHER SEDIMENT OF THE DITCH WORK PRIOR TO EXCAVATING AND BACKFILLING, AS SHOWN ON THE DRAWINGS.
- CONSTRUCTION OF THE DIVERSION DITCH SHALL START FROM STATION 36+0+4.4 AND PROGRESSIVELY MOVE TO STATION 4+80. THE LAST PORTION OF THE DITCH BETWEEN STATIONS 5+80 TO STATION 4+80 SHALL BE COMPLETED ONLY AFTER DOWNGRADE OPERATION OF ASH POND #3 IS COMPLETE, AND SHALL BEGINS AS DIRECTED BY THE OWNER. DOWNGRADE OF ASH POND #3 IS NOT INCLUDED WITHIN THE SCOPE OF THE DIVERSION DITCH WORK.
- CONTRACTOR SHALL ENSURE THAT THERE IS NO OVER FLOW OF ASH WATER FROM ASH POND #3 INTO THE DIVERSION DITCH DURING CONSTRUCTION.
- FILL MATERIAL SHALL BE FREE OF EXCESSIVE ORGANIC MATTER, RUBBISH, DEBRIS OR OTHER UNSUITABLE MATERIALS. EXCAVATED MATERIAL NOT SUITABLE FOR FILL SHALL BE STORED AND/OR DISPOSED WITHIN THE DESIGNATED SPOIL AREA SPECIFIED BY THE OWNER.
- WHEN THE WEATHER IS SUCH AS TO ENDANGER THE QUALITY OF THE FILL MATERIAL BEING PLACED, DUE TO RAIN OR ANY OTHER WEATHER ELEMENT, THE PLACEMENT OF MATERIAL SHALL BE STOPPED UNTIL WEATHER CONDITIONS ARE SATISFACTORY. UNDER NO CONDITIONS SHALL FILL BE PLACED DURING HEAVY RAINS. ANY PREVIOUSLY COMPACTED MATERIAL, WHICH HAS BECOME UNSUITABLE, SHALL BE REMOVED AND RECOMPACTED.
- PRIOR TO START OF ANY CONSTRUCTION WORK, EROSION AND SEDIMENT CONTROL SHALL BE PROVIDED FOR THE NEW DIVERSION DITCH CONSTRUCTION AS PER DRAWINGS H8110 AND H8111.

EROSION CONTROL MATS

- CONTRACTOR SHALL INSTALL CONCRETE EROSION CONTROL MATS AS SHOWN ON DRAWING. THE CONCRETE MAT SHALL BE "ARMORFLEX" OPEN CELL, CLASS-50", AS MANUFACTURED BY ARMORREC, 4301 INDUSTRIAL DRIVE BOWLING GREEN, KY OR APPROVED ALTERNATE, AND SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S WRITTEN RECOMMENDATIONS.
- ALL CELLULAR CONCRETE MATS MAY BE PRE-MANUFACTURED AS AN ASSEMBLY OF CONCRETE BLOCKS, OR ASSEMBLED ON-SITE BY HAND-PLACING INDIVIDUAL BLOCKS AS PER WRITTEN INSTALLATION PROCEDURE RECOMMENDED BY THE MANUFACTURER.
- THE CELLULAR CONCRETE MATS SHALL BE PLACED ON A GEOTEXTILE FIBER; THE GEOTEXTILE FIBER SHALL BE INDEPENDENT OF THE BLOCK SYSTEM.
- THE GEOTEXTILE FIBER SHALL BE MIRAFI 1100 N OR APPROVED ALTERNATE. THE EDGES OF THE GEOTEXTILES SHALL BE FINISHED TO PREVENT THE OUTER FIBER FROM PULLING AWAY FROM THE GEOTEXTILES.
- CONTRACTOR SHALL INSTALL TURF REINFORCEMENT MAT (TRM) AS SHOWN ON DRAWING, THE TRM SHALL BE UV-STABILIZED, NON-DEGRADABLE, SYNTHETIC FIBERSAND SHALL BE "TR-450" AS MANUFACTURED BY "S GEOSOLUTIONS", CHATTANOOGA, TENNESSEE, OR APPROVED ALTERNATE.
- THE TURF REINFORCEMENT MAT (TRM), TR-450 SHALL BE INSTALLED IN ACCORDANCE WITH THE WRITTEN RECOMMENDATIONS BY THE MANUFACTURER.

CORRUGATED STEEL PIPE (CMP) CULVERTS

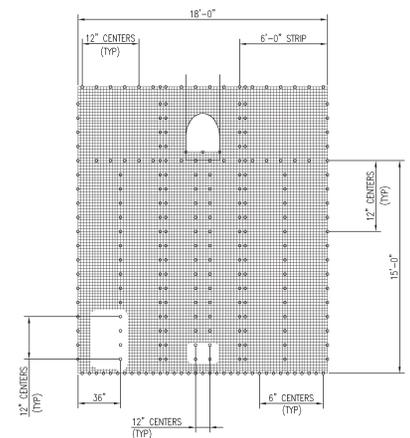
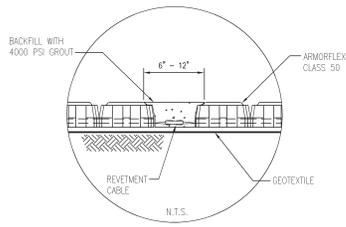
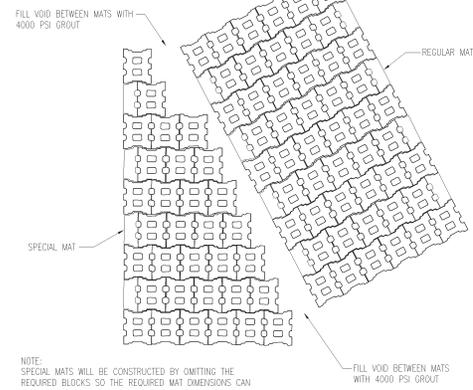
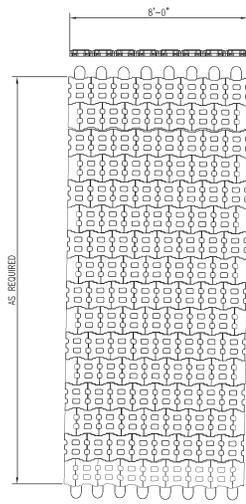
- CORRUGATED STEEL PIPE SIZE SHALL BE AS INDICATED ON DESIGN DRAWINGS, AND SHALL BE FORMED FROM GALVANIZED STEEL SHEET CONFORMING TO ASTM A929 AND MANUFACTURED TO THE REQUIREMENTS OF ASTM A760. CMP CULVERT WALL THICKNESS GAUGES SHALL BE AS FOLLOWS:
24" AND SMALLER 11GA
30" TO 54" (INCL.) 12GA
60" AND LARGER 10GA
- FIELD JOINTS SHALL BE MADE UP WITH COUPLING BANDS CONFORMING TO ASTM A760, IF REQUIRED, AND SHALL BE EQUIPPED WITH GASKETS TO LIMIT INFILTRATION.
- A DOUBLE HOT-DIP COATING OF BITUMINOUS MATERIAL SHALL BE APPLIED OVER THE BASIC GALVANIZING TO AN APPROXIMATE THICKNESS OF .05 IN. MEASURED ON THE CREST OF BOTH INSIDE AND OUTSIDE CORRUGATIONS
- PIPE BEDDING SHALL BE ON A FIRM FOUNDATION THROUGHOUT THE ENTIRE LENGTH OF THE PIPE. BEDDING MATERIAL SHALL BE TAMPED WHERE NECESSARY TO PROVIDE FIRM AND UNIFORM SUPPORT FOR THE PIPE, AND THE FOUNDATION SHALL BE SHAPED TO CONFORM TO THE BOTTOM ONE-FOURTH OF THE PIPE CIRCUMFERENCE OVER ITS ENTIRE LENGTH. COMPACTION OF BEDDING MATERIAL SHALL BE ACCOMPLISHED WITH A MECHANICAL TAMPER, SMALL VIBRATORY PLATE, OR OTHER MEANS TO ATTAIN REQUIRED COMPACTION.
- PIPE SHALL BE LAID TRUE (+ 1/8 INCH) TO THE ESTABLISHED LINE AND GRADE. SEPARATE SECTIONS OF PIPE SHALL BE JOINED FIRMLY TOGETHER WITH THE STEEL COUPLING BANDS DRAWN TIGHT TO ENSURE TIGHT JOINTS. CORRUGATIONS IN COUPLING BANDS SHALL MATCH THE CORRUGATIONS IN THE PIPES. LONGITUDINAL JOINTS, IF ANY, SHALL BE AT THE SIDE OF THE PIPE.
- CARE SHALL BE EXERCISED IN HAULING AND HANDLING PIPE TO AVOID DAMAGE TO THE PROTECTIVE COATING. ANY DAMAGE TO THE PROTECTIVE COATING SHALL BE REPAIRED BY CONTRACTOR USING AN ACCEPTABLE TOUCH-UP COATING MATERIAL.
- BACKFILL SHALL BE PLACED AND BROUGHT UP EVENLY ON BOTH SIDES OF THE PIPE FOR ITS FULL LENGTH. BACKFILL SHALL BE SELECT FILL MATERIAL. IT SHALL BE PLACED AND COMPACTED IN 9 INCH UNCOMPACTED LAYERS AND THEN COMPACTED TO A MINIMUM OF 95 PERCENT OF THE MAXIMUM DRY DENSITY
- NO CONSTRUCTION VEHICLES SHALL BE PERMITTED ON THE PIPE UNTIL 4 FEET OF BACKFILL COVER IS IN PLACE.

REFERENCES

H8106 ASH POND #3 DIVERSION DITCH PLAN & SECTION

REVISION	DATE										

This document contains proprietary, confidential, and/or trade secret information of the subsidiaries of The Southern Company or of third parties. It is intended for use only by employees of, or authorized contractors of, the subsidiary of The Southern Company. Unauthorized possession, use, distribution, copying, dissemination, or disclosure of any portion hereof is prohibited.		Southern Company Services, Inc. FOR GEORGIA POWER COMPANY	
REVISION 0 ISSUED FOR CONSTRUCTION	DATE 12/29/04	PLANT ARKRIGHT ASH POND #3 DIVERSION DITCH SECTIONS & DETAILS SHEET 1	
REA: AR-02203G KKF	EWO: 3553EW JDM	SCALE AS NOTED	PROJ. NO. 10500 H8108 SHEET 1 FINAL

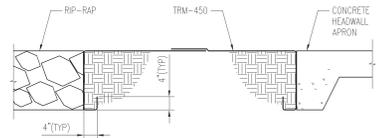
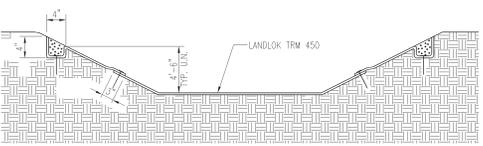
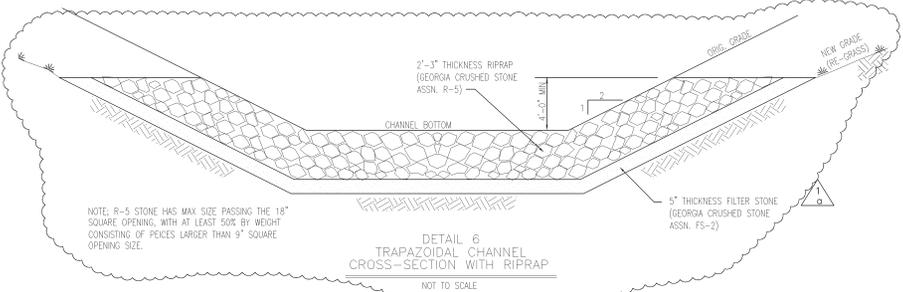


PLAN
DETAIL 1
TYPICAL ARMORFLEX CL 50 MAT
NOT TO SCALE

DETAIL 2
TYPICAL ARMORFLEX DETAIL CL 50 @ DITCH WIDTH
TRANSITION
NOT TO SCALE

DETAIL 3
GROUT SEAM
ARMORFLEX-MAT TO MAT CONNECTION
NOT TO SCALE

DETAIL 5
PLAN VIEW-TRM 450 STAPLING DIAGRAM
NOT TO SCALE



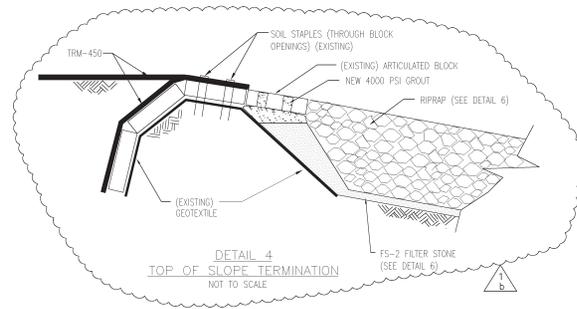
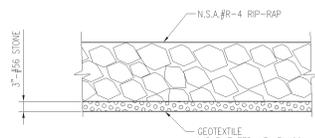
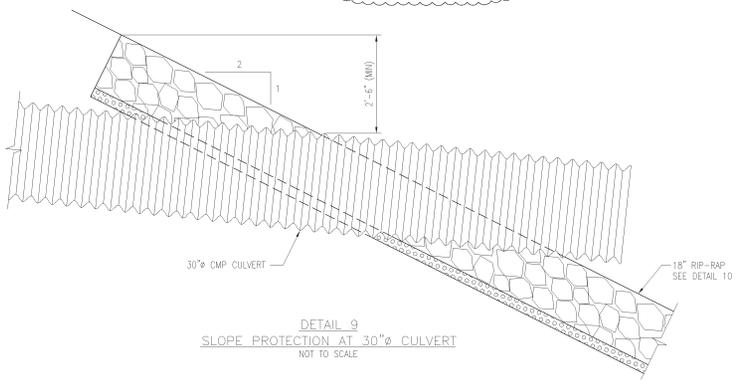
NOTE: R-5 STONE HAS MAX SIZE PASSING THE 18" SQUARE OPENING, WITH AT LEAST 50% BY WEIGHT CONSISTING OF PIECES LARGER THAN 9" SQUARE OPENING SIZE.

DETAIL 6
TRAPAZOIDAL CHANNEL
CROSS-SECTION WITH RIPRAP
NOT TO SCALE

NOTES:
1. PLACE 25 ANCHORS PER 10 SQ. YARDS OF CHANNEL SURFACE

DETAIL 7
TYPICAL CHANNEL CROSS SECTION
NOT TO SCALE

DETAIL 8
TRM-450 TRANSITION-CONCRETE TO RIP-RAP
NOT TO SCALE



DETAIL 9
SLOPE PROTECTION AT 30° CULVERT
NOT TO SCALE

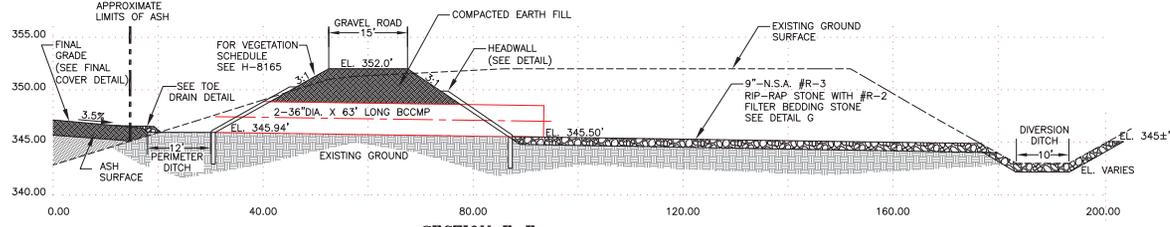
DETAIL 10
TYPICAL RIP-RAP DETAIL
NOT TO SCALE

DETAIL 4
TOP OF SLOPE TERMINATION
NOT TO SCALE

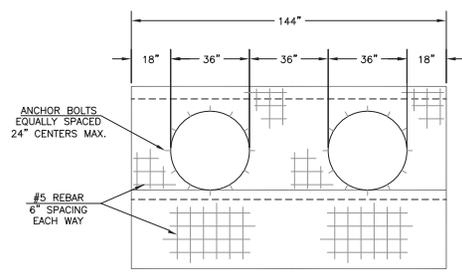
REVISION	DATE	REVISION	DATE	REVISION	DATE	REVISION	DATE	REVISION	DATE	REVISION	DATE	REVISION	DATE	REVISION	DATE	REVISION	DATE	REVISION	DATE							
										1	3-21-06	0	12/29/04	<p>ISSUED FOR CONSTRUCTION</p> <p>a. (C5) MODIFIED DETAIL 6-CHANGE ARMOR BLOCK TO RIPRAP</p> <p>b. (B1) MODIFIED DETAIL 4- ADDED RIPRAP</p> <p>AS-BUILT BASED ON REDLINE DRAWING RECEIVED FROM CONSTRUCTION SERVICES</p> <p>REA: AR-02203G EWO: 3553EW</p>												
BY	CHK'D	DATE	BY	CHK'D	DATE	BY	CHK'D	DATE	BY	CHK'D	DATE	BY	CHK'D	DATE	BY	CHK'D	DATE	BY	CHK'D	DATE	SCALE	PROJ. NO.	DRAWING NUMBER	SHEET NO.	TOTAL SHEETS	
JMR	JDM	ELM										KKF	JDM	JLL							AS NOTED	10500	H8109	1	FINAL	1

This document contains proprietary, confidential, and/or trade secret information of the subsidiaries of the Southern Company or of third parties. It is intended for use only by employees of, or authorized contractors of, the subsidiary of the Southern Company. Unauthorized possession, use, distribution, copying, dissemination, or disclosure of any portion hereof is prohibited.

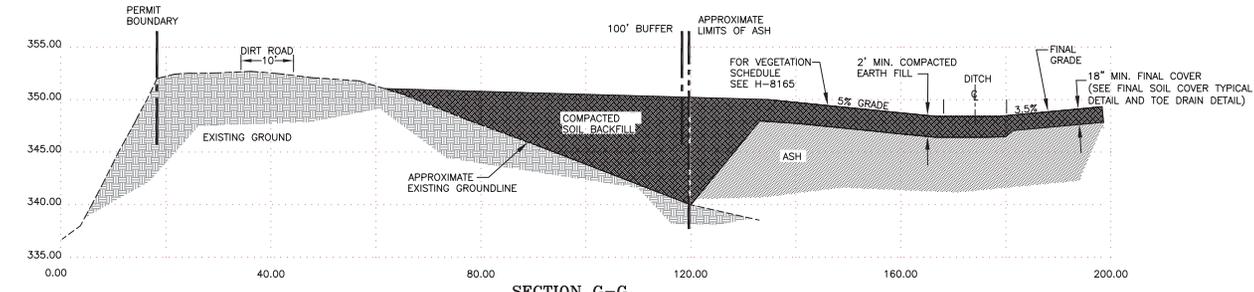
Southern Company Services, Inc.
FOR
GEORGIA POWER COMPANY
PLANT ARKWRIGHT
ASH POND #3
DIVERSION DITCH
SECTIONS & DETAILS SHEET 2



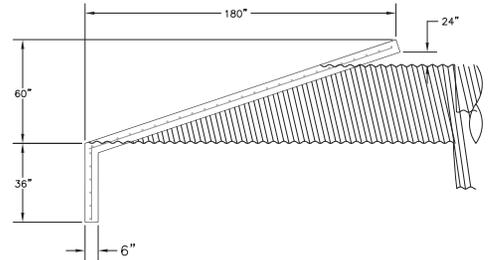
SECTION E-E
SCALE: H: 1"=10', V: 1"=5'



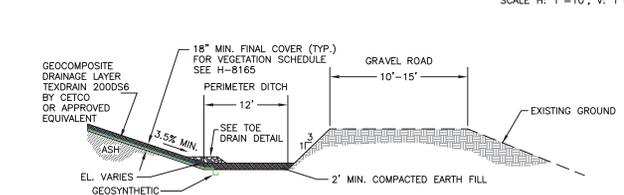
HEADWALL FRONT VIEW
NOT TO SCALE



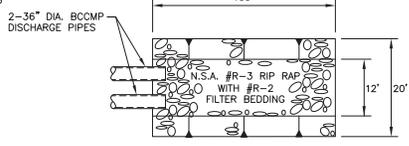
SECTION G-G
SCALE: H: 1"=10', V: 1"=5'



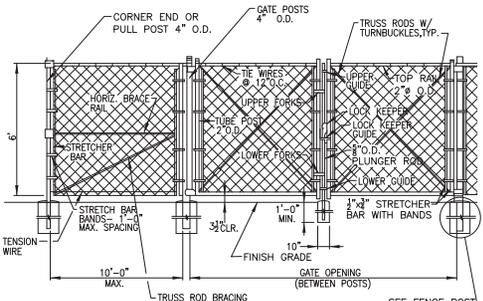
HEADWALL SIDE VIEW
NOT TO SCALE



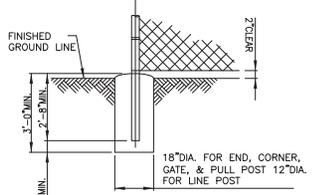
SECTION F-F
PERIMETER DITCH ALONG GRAVEL ROAD
NOT TO SCALE
(H-8160)



DETAIL G
NOT TO SCALE

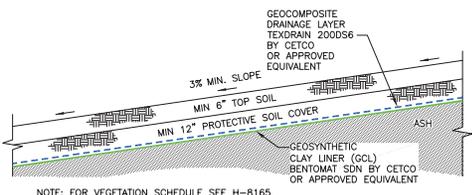


NOTE:
HORIZ. BRACE RAILS AND TRUSS ROD BRACING SHALL BE INSTALLED AT ALL CORNER, END, AND PULL POSTS. MESH 1 1/4"-2" AND 6-11 WIRE GAUGE, MIN 6' HEIGHT.

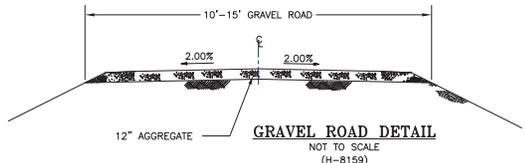


NOTE:
CONCRETE FOOTINGS WILL BE REQUIRED FOR ALL LINE, CORNER, GATE, END AND PULL POSTS.

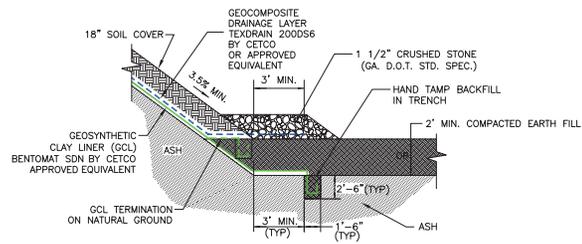
FENCE POST FOOTING
NOT TO SCALE



GCL FINAL SOIL COVER TYPICAL SECTION
NOT TO SCALE
(H-8161)



GRAVEL ROAD DETAIL
NOT TO SCALE
(H-8159)



TOE DRAIN DETAIL FOR
GEOCOMPOSITE DRAINAGE LAYER
NOT TO SCALE

NOTES:
1. FOR GENERAL NOTES AND REFERENCES SEE H-8159

REFERENCES:
1. FOR A COMPLETE DRAWING LIST SEE H-8138 AND H-8159.

REVISION	DATE																			

Southern Company Services, Inc.
Copyright © Southern Company Services, Inc. All Rights Reserved.
This document contains proprietary information. It is the property of Southern Company Services, Inc. and its subsidiaries. It is not to be distributed, copied, or otherwise used without the express written permission of Southern Company Services, Inc.

Southern Company Generation
Engineering and Construction Services
FOR

Georgia Power Company
PLANT ARKWRIGHT
ASH POND 3 AND ASH MONOFILL
MISC. SECTIONS AND DETAILS

REVISION 0 DATE 10/10/2008
ISSUED FOR CONSTRUCTION

REA: AR-02203G EWO: 3553EW

SCALE: AS SHOWN DRAWING NUMBER: **H-8163** SHEET: 1 OF 1