HISTORY OF CONSTRUCTION
40 C.F.R. 257.100(e)(3)(iv)
PLANT HAMMOND ASH POND 3 (AP-3)
GEORGIA POWER COMPANY

The Environmental Protection Agency's "Disposal of Coal Combustion Residuals from Electric Utilities" Final Rule (40 C.F.R. Part 257 & Part 261) was published in the Federal Register on April 17, 2015. A direct final rule revision in response to a partial vacatur of the Final Rule became effective on October 4, 2016. This revision eliminated the exemption for inactive coal combustion residual (CCR) surface impoundments and required such units to meet the same requirements as existing CCR surface impoundments. An extended timeline was given to inactive CCR surface impoundments that had prepared Notification of Intent to Initiate Closure compliant with 40 C.F.R. §257.105(i)(1), 40 C.F.R. §257.106(i)(1) and 40 C.F.R. §257.107(i)(1). 40 C.F.R. §257.100(e)(3)(iv) for inactive CCR surface impoundments requires a history of construction to be completed as set forth by 40 C.F.R. §257.73(b) and (c). The following information is provided on the history of construction:

(i) Site Name and Ownership Information:

Site Name:	Plant Hammond
Site Location:	Rome, Georgia
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-3
NID Identification Number:	None

(ii) Location:

34.2576° N, 85.3386° 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 CCRs. AP-3 was constructed to receive and store CCRs placed during the electric generating process at Plant Hammond. In the early 1980's, AP-3 was converted into a dry ash disposal area and in the early 1990's the pond stopped receiving CCR materials.

AP-3 has been capped in accordance with 40 C.F.R. §257.102(d)and no longer impounds water and no longer 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. Therefore, Rule 40 C.F.R. §257.73(b) and (c) are not applicable to the CCR unit's current condition. Further, Georgia Power Company is in the process of obtaining a solid waste permit for AP-3 under the Georgia Rules for Solid Waste Management, 391-3-4-.10. This closure method has eliminated the future impoundment of water, sediment, or slurry.

(iv) Watershed Description:

A portion of Plant Hammond is located within the Cabin Creek HUC-12 watershed which has a total area of 10,472 acres, and the remainder within Morton Bend HUC-12 watershed which has a total area of 21,984 acres. AP-3 is located entirely within the Cabin Creek 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-3 does not receive stormwater run-off from adjacent areas.

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

AP-3 was originally constructed in 1973 and 1974 as a diked structure with a 28 foot tall perimeter embankment with 2.5:1 side slopes. Borings drilled at AP-3 identified five soil categories: fill, terrace alluvium, residuum, highly weathered/fractured argillaceous limestone bedrock, and unweathered argillaceous limestone bedrock.

AP-3 dike material generally consists of clay fill with varying amounts of sand and gravel. The dike crest is approximately Elevation 608 feet and extends to approximate Elevation 580 feet at the dike toe. Available construction documentation includes reports of field density testing performed on the AP-3 dikes. The dike materials were compacted to 100% of the standard proctor density. Additionally, Standard Penetration Test results from historical boring logs indicate the dikes generally have a stiff to very stiff strength consistency. This strength consistency indicates the dikes were constructed using mechanical compaction methods.

The terrace alluvium is comprised of sediments deposited from the Coosa River and Cabin Creek. These soils were present under the majority of the dike fill. These soils are typically clayey sands to sandy clays and range in thickness from about 4 feet to 21 feet.

The residuum soil material was encountered beneath the dike material or terrace alluvium materials and extended to the weather/fractured argillaceous limestone bedrock. Thicknesses of this material ranged from 9 to 27 feet and generally described as clays with trace amounts of sand.

The highly weathered/fractured argillaceous limestone bedrock was observed below the residuum clay layer. This stratum consisted of varying proportions of clay and partially weathered

argillaceous limestone grading into a zone of fractured argillaceous limestone. This zone of material ranged in thickness from 6 feet to 17 feet before encountering unweathered argillaceous limestone bedrock.

The unweathered argillaceous limestone bedrock contained interbeds of calcareous shale. The bedrock is generally described as solid with numerous bedding plane fractures or partings. Solution features on the order of a few inches up to almost one foot have been documented in some boreholes. A comparison of solution features between borings does not indicate laterally continuous karst features within the bedrock.

(vi) Summary of Site Preparation and Construction Activities:

AP-3 was constructed in 1973 and 1974 with a total storage capacity of 1,108,000 CY, a corresponding surface area of 25 acres, and maximum embankment height of 28 ft. The embankment was constructed with compacted borrow soils from within AP-3 and an offsite borrow source north of the site. The unit was placed into operation in June 1977. AP-3 has been capped and no longer impounds water and no longer receives waste. Closure construction activities completed on AP-3 have rendered the former surface impoundment incapable of receiving, discharging or impounding water so Rule 40 C.F.R. §257.73(b) and (c) are not applicable to the CCR unit's current condition.

(vii) Engineering Diagrams:

The following drawings reflecting the construction of AP-3 can be found in the Appendix:

- Site Location Map
- Georgia Power Company Drawing H435-Stage 1 Construction
- Georgia Power Company Drawing H436-Plan and Sections
- Georgia Power Company Drawing D-50-Boring Plan
- Georgia Power Company Drawing D-449-Topographic Map of Plant Hammond 1973 Ash Pond As-Built
- Georgia Power Company Drawing A-408-Emergency Discharge*
- Georgia Power Company Drawing H497-Emergency Discharge Structure*
- Georgia Power Company Drawing D-51-Generalized Soil Profile
- Georgia Power Company Drawing H-506-Pisgah Church Yard Drainage Layout
- Georgia Power Company Drawing J-51-6- Topographic Map of Plant Hammond Ash Pond No. 3
- Georgia Power Company Drawing E-6-Discharge Structure B Miscellaneous Details*
- Georgia Power Company Drawing E-7-Discharge Structure B Structural Details*
- Georgia Power Company Drawing C102 Notes and reference Drawings

* Structures removed as part of the closure process for AP-3.

(viii) Description of Instrumentation:

There are two piezometers located near the AP-3 dike toe.

(ix) Area-capacity curves:

AP-3 can no longer impound free water and an area-capacity curve is not applicable.

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

During operation, a 36-inch steel pipe, 60-inch riser structure, and 36-inch corrugated metal pipe functioned as the spillway system. These features were removed as part of the closure construction of AP-3.

After closure, AP-3 does not have any spillways. The current configuration does not impound water. Stormwater from the cap is collected in riprap-lined perimeter ditches and directed towards multiple stormwater outfalls around the unit. The closed drainage configuration was designed for a 25-year, 24-hour storm event.

(xi) Provisions for surveillance, maintenance and repair:

Inspections of dikes 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 include observations of weather conditions, rainfall prior to the inspection, instrument readings, conditions of slopes and drains, erosion, animal damage, and 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 plant personnel inspections.

(xii) Known record of structural instability:

AP-3 was placed into operation in June 1977. In July 1977, seepage was identified in the concrete drainage ditch along the toe of the west downstream slope. AP-3 was taken out of service and an investigation was initiated in August 1977 to determine the cause of the seepage.

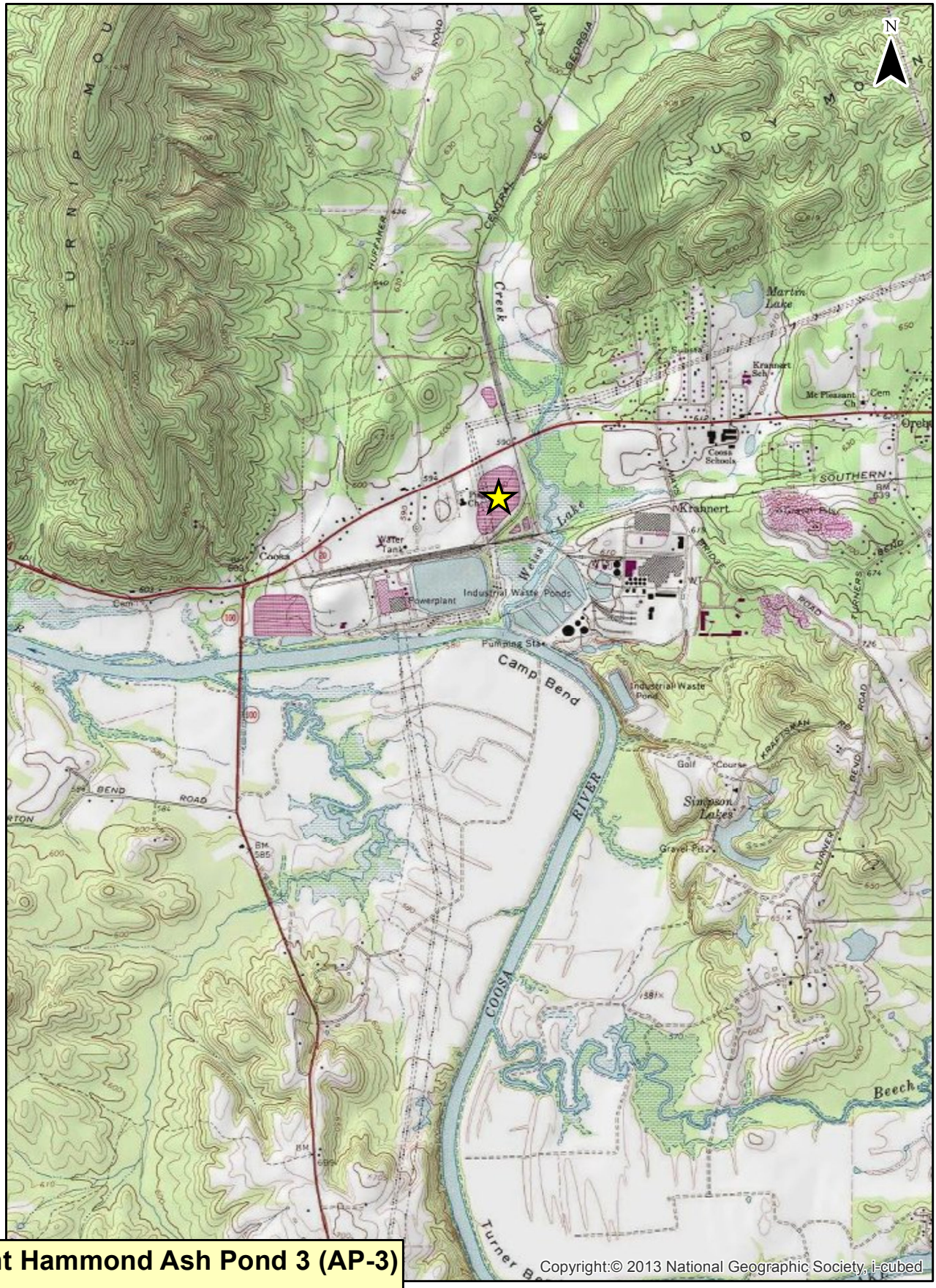
The seepage was likely due to wet-sluicing and the presence of a solution feature. Mitigation activities that centered on the drawdown of the pond's water level were completed in the area and the impoundment was converted to dry handling operations in 1982. Dike slope stability issues were not observed during the observed seepage event or subsequent mitigation efforts based on reviewed historical documentation.

Since the implementation of mitigation efforts, structural instability issues have not been observed for AP-3 based on reviewed historical documentation. In addition, slope stability analyses completed in 2018 (Stantec) indicated that the existing AP-3 configuration is stable under long term, pseudostatic, and post-earthquake conditions.

Reference

Stantec (2018). Slope Stability and Settlement Assessment, AP-3 Plant Hammond. Prepared for Georgia Power Company. October 30.

Appendix

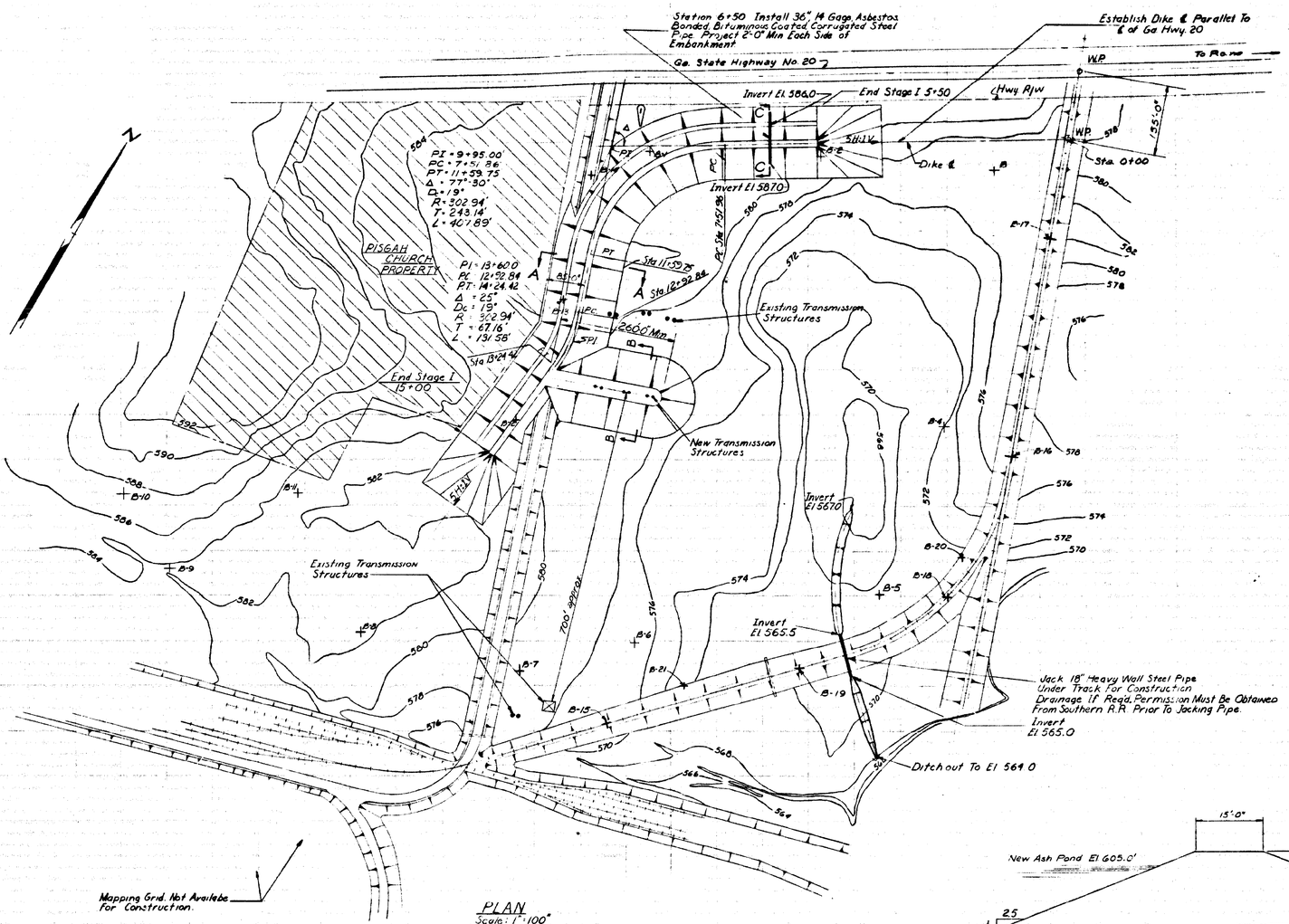


Plant Hammond Ash Pond 3 (AP-3)

★ Ash Pond Location

USA Topo Maps

0 0.25 0.5 1 Miles

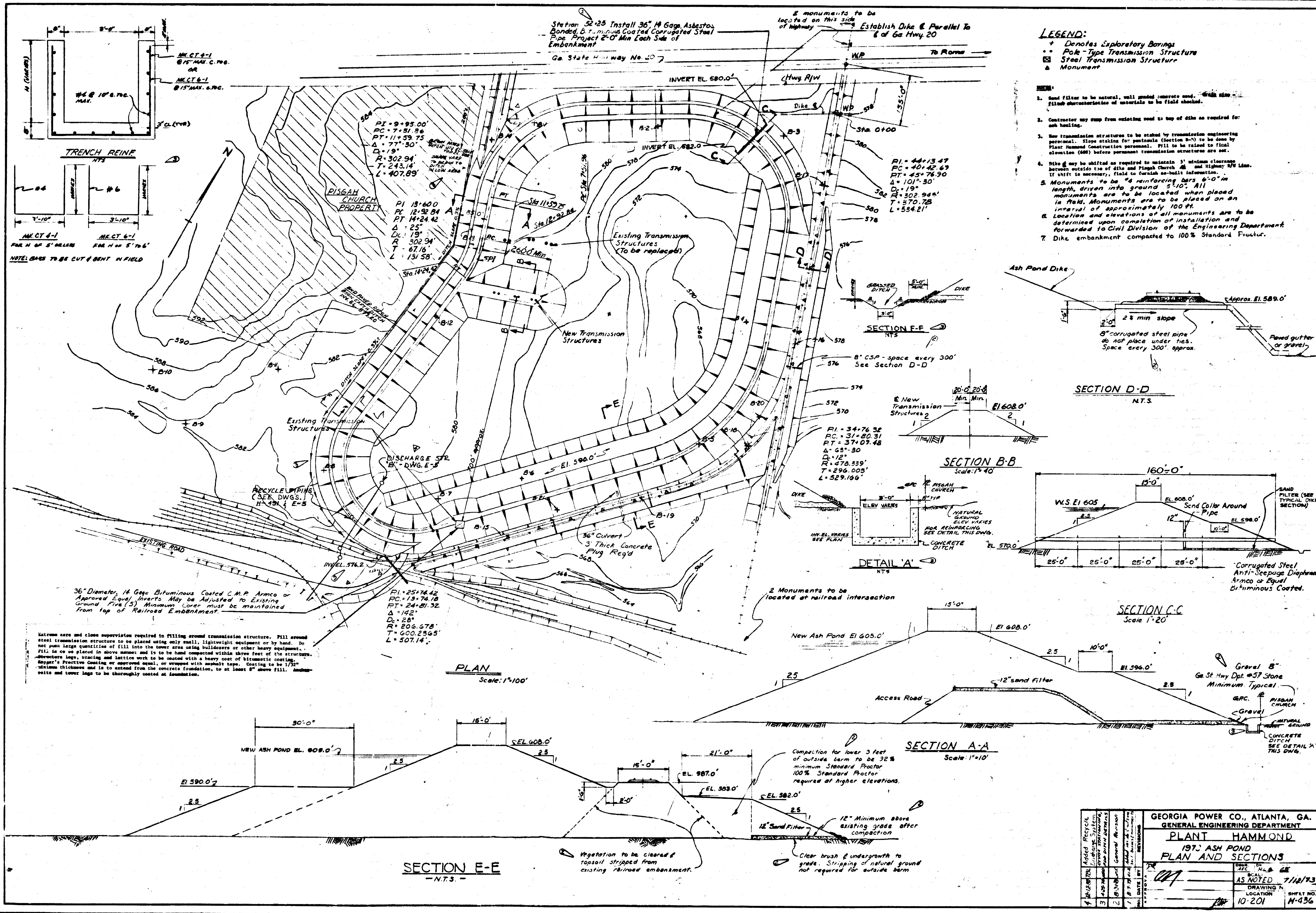


GEORGIA POWER CO., ATLANTA, GA.
GENERAL ENGINEERING DEPARTMENT

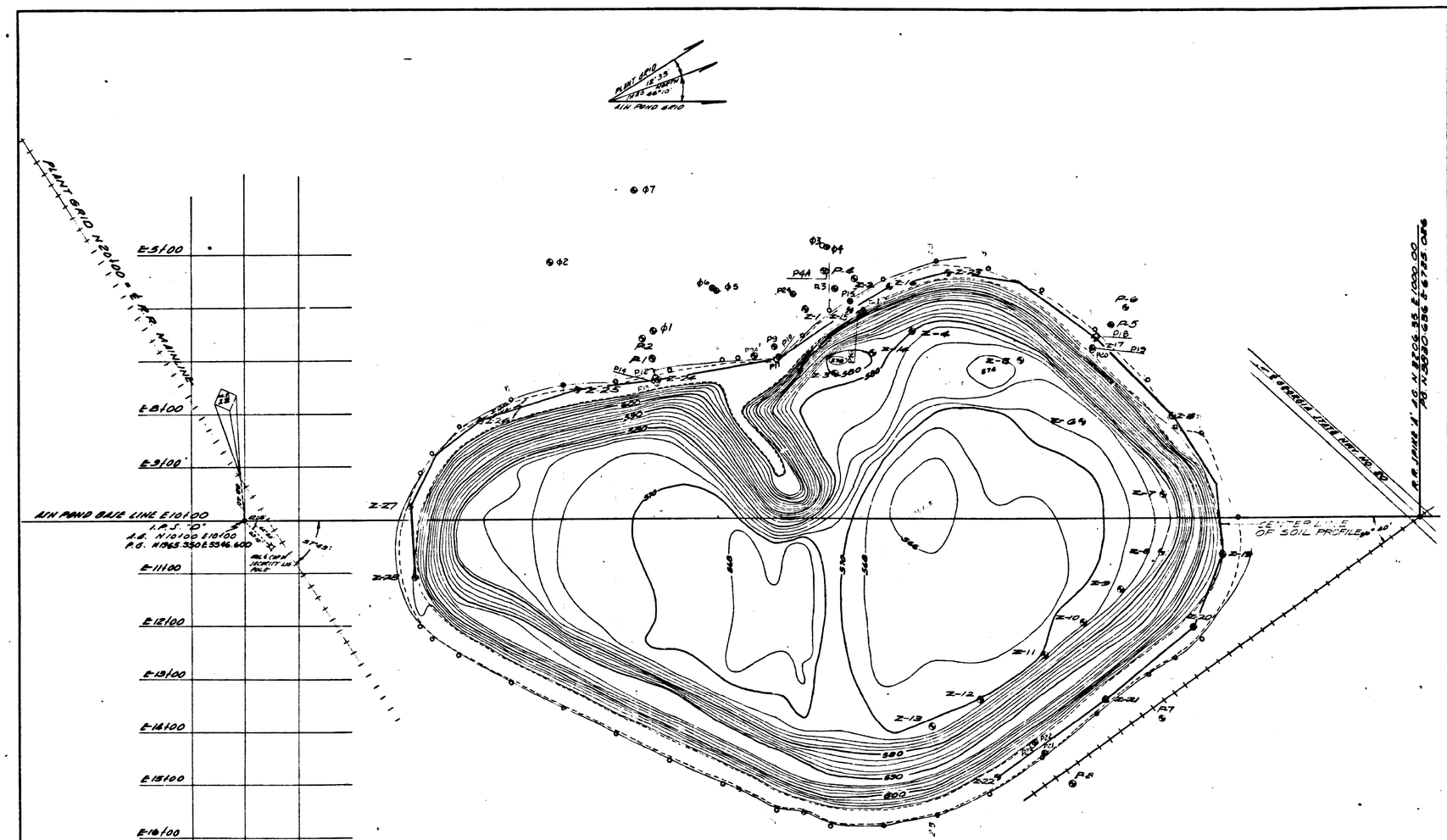
PLANT HAMMOND
1973 ASH POND
STAGE I CONSTRUCTION

DSGN	DR	CK	DATE
SCALE			DATE
As Noted			
DRAWING NUMBER			
LOCATION			SHEET NO.
10-201			H-35

REVISIONS
NO. DATE BY
APPROVALS



TRENCH REINF
NTS
MK. CT 4-1 @15" MAX. C. TO C. OR
MK. CT 6-1 @15" MAX. C. TO C.
#4 @ 10" C. TO C. MAX.
3" CL. (TYP)
H (VARIES)
MK. CT 4-1 FOR H OF 5' OR LESS
MK. CT 6-1 FOR H OF 5' TO 6'
NOTE: BARS TO BE CUT & BENT IN FIELD
Station 52+25 Install 36" 14 Gage, Asbestos Bonded, Bituminous Coated Corrugated Steel Pipe. Project 2'-0" Min Each Side of Embankment
Ga. State Highway No. 20
℄ monuments to be located on this side of highway
Establish Dike ℄ Parallel To ℄ of Ga. Hwy. 20
To Rome
W.P.
INVERT EL. 580.0'
Hwy. R/W
Dike ℄
Sta. 0+00
INVERT EL. 582.0
PISGAH CHURCH PROPERTY
PI = 9+95.00'
PC = 7+51.86
PT = 11+59.75
Δ = 77°-30'
Dc = 19°
R = 302.94'
T = 243.14'
L = 407.89'
PI 13+60.0
PC 12+92.84
PT 14+24.42
Δ = 25°
Dc = 19°
R = 302.94'
T = 67.16'
L = 131.58'
Sta. 14+24.42
Sta 11+59.75
Sta 12+92.84
2600' Min.
Existing Transmission Structures (To be replaced)
New Transmission Structures
P.I. = 44+13.47
P.C. = 40+42.69
P.T. = 45+76.90
Δ = 101°-30'
Dc = 19°
R = 302.94'
T = 370.78
L = 534.21'
8" CSP - space every 300' See Section D-D
Existing Transmission Structures
DISCHARGE STR. "B" - DWG. E-5
RECYCLE PIPING (SEE DWGS. H-451 & E-5)
EXISTING ROAD
INV. EL. 576.2
El. 590.0'
36" Culvert 3' Thick Concrete Plug Req'd
P.I. = 34+76.32
P.C. = 31+80.31
P.T. = 37+09.48
Δ = 63°-30
Dc = 12°
R = 478.339'
T = 296.005'
L = 529.166'
P.I. = 25+74.42
P.C. = 19+74.18
P.T. = 24+81.32
Δ = 142°
Dc = 28°
R = 206.678'
T = 600.2365'
L = 507.14'
36" Diameter, 14 Gage Bituminous Coated C.M.P. Armco or Approved Equal. Inverts May be Adjusted to Existing Ground. Five (5) Minimum Cover must be maintained from top of Railroad Embankment.
2 Monuments to be located at railroad intersection
Extreme care and close supervision required in filling around transmission structure. Fill around steel transmission structure to be placed using only small, lightweight equipment or by hand. Do not push large quantities of fill into the tower area using bulldozers or other heavy equipment. Fill is to be placed in above manner and is to be hand compacted within three feet of the structure. Structure legs, bracing and lattice work to be coated with a heavy coat of bitumastic coating. Kopper's Protective Coating or approved equal, or wrapped with asphalt tape. Coating to be 1/32" minimum thickness and is to extend from the concrete foundation, to at least 8" above fill. Anchor bolts and tower legs to be thoroughly coated at foundation.
PLAN
Scale: 1" = 100'
LEGEND:
+ Denotes Exploratory Borings
• • Pole-Type Transmission Structure
⊠ Steel Transmission Structure
▲ Monument
NOTES:
1. Sand filter to be natural, well graded concrete sand. Grain size - filter characteristics of materials to be field checked.
2. Contractor may ramp from existing road to top of dike as required for ash hauling.
3. New transmission structures to be staked by transmission engineering personnel. Slope staking for peninsula (Section B-B) to be done by Plant Hammond Construction personnel. Fill to be raised to final elevation (608) before permanent transmission structures are set.
4. Dike ℄ may be shifted as required to maintain 5' minimum clearance between outside toe of dike and Pisgah Church and Highway R/W Line. If shift is necessary, field to furnish as-built information.
5. Monuments to be #4 reinforcing bars 6'-0" in length, driven into ground 5'-10". All monuments are to be located when placed in field. Monuments are to be placed on an interval of approximately 100 ft.
6. Location and elevations of all monuments are to be determined upon completion of installation and forwarded to Civil Division of the Engineering Department.
7. Dike embankment compacted to 100% Standard Proctor.
GRASSED DITCH
DIKE
SECTION F-F
NTS
Ash Pond Dike
Approx. El. 589.0'
2% min slope
8" corrugated steel pipe do not place under ties. Space every 300' approx.
Paved gutter or gravel
SECTION D-D
N.T.S.
℄ New Transmission Structures
20'-0" 20'-0" Min. Min.
El 608.0'
SECTION B-B
Scale: 1" = 40'
℄ PISGAH CHURCH
ELEV VARIES
NATURAL GROUND ELEV. VARIES
FOR REINFORCING SEE DETAIL THIS DWG.
INV. EL. VARIES SEE PLAN
CONCRETE DITCH
DETAIL 'A'
NTS
160'-0"
15'-0"
W.S. El 605
EL. 608.0'
Sand Collar Around Pipe
EL. 598.0'
SAND FILTER (SEE TYPICAL DIKE SECTION)
EL. 570.0'
25'-0" 25'-0" 25'-0" 25'-0"
Corrugated Steel Anti-Seepage Diaphram Armco or Equal Bituminous Coated.
SECTION C-C
Scale 1" = 20'
New Ash Pond El 605.0'
El 608.0'
10'-0"
El. 596.0'
12" sand filter
Access Road
Gravel 8" Ga. St. Hwy Dpt. #57 Stone Minimum Typical.
Gravel
NATURAL GROUND
CONCRETE DITCH SEE DETAIL 'A' THIS DWG.
SECTION A-A
Scale: 1" = 10'
30'-0"
NEW ASH POND EL. 609.0'
El 590.0'
EL. 608.0'
21'-0"
EL. 587.0'
EL. 583.0'
EL. 582.0'
12" Sand Filter
Compaction for lower 3 feet of outside berm to be 92% minimum Standard Proctor. 100% Standard Proctor required at higher elevations.
12" Minimum above existing grade after compaction
Vegetation to be cleared & topsoil stripped from existing railroad embankment.
Clear brush & undergrowth to grade. Stripping of natural ground not required for outside berm
SECTION E-E
-N.T.S.-
GEORGIA POWER CO., ATLANTA, GA.
GENERAL ENGINEERING DEPARTMENT
PLANT HAMMOND
1973 ASH POND
PLAN AND SECTIONS
REVISIONS
4 Added Recycle Discharge System
3 Revise Stationing, Add Ditch Details
2 General Revision
1 Added Note & Monuments
SCALE: AS NOTED 7/12/73
LOCATION 10-201
SHEET NO. H-436



NO.	NORTH	EAST	ELEV.
P-1	1758.115	698.555	598.4
P-2	1750.476	659.872	595.6
P-3	2111.867	565.302	597.8
P-4	2089.852	532.730	582.5
P-5	2629.074	652.621	599.1
P-6	2658.363	601.739	584.4
P-7	2724.894	1377.173	592.7
P-8	2554.232	1500.828	582.9
N-1	2055.942	606.039	539.2
N-2	2146.763	545.480	598.53
N-3	2111.125	726.703	580.42
N-4	2253.971	645.296	581.25
N-5	2460.899	700.247	574.26
N-6	2573.193	808.550	572.44
N-7	2727.293	953.160	574.93
N-8	2722.490	1060.926	574.61
N-9	2546.455	1131.630	572.42
N-10	2576.345	1193.240	570.50
N-11	2503.627	1256.001	570.33
N-12	2383.261	1340.616	570.26
N-13	2289.815	1391.351	570.65
N-14	2181.425	684.425	582.50
N-15	2138.187	604.911	609.69
N-16	2211.328	561.323	609.74
N-17	2508.[illegible]	688.560	609.74
N-18	2745.302	803.578	609.26
N-19	2837.319	1066.442	609.20
N-20	2781.399	1203.961	609.26
N-21	2616.622	1341.747	609.89
N-22	2414.826	1487.714	609.31
N-23	2221.361	536.623	609.47
N-24	1766.046	738.612	608.9
N-25	1627.577	758.939	609.4
N-26	1440.269	813.308	609.2
N-27	1307.154	974.470	608.7
N-28	1314.938	1109.019	608.9
Ø-1	1666.181	694.816	585.5
Ø-2	1574.007	513.032	585.6
Ø-3	2092.335	429.704	582.4
Ø-4	2096.790	486.491	582.4
Ø-5	1891.467	569.654	585.7
Ø-6	1893.374	565.868	585.7
Ø-7	1732.249	375.303	587.67
P-4A	2093.512	531.066	582.6
P-9	1956.786	677.260	609.3
P-9A*	1960.574	691.558	609.1
P-10	2009.632	696.828	609.1
P-11	2005.779	699.530	609.1
P-12	1773.383	738.594	608.8
P-13	1776.114	745.122	609.1
P-14	1772.714	745.335	609.0
P-15	2139.472	538.059	609.1
P-16	2158.059	611.631	609.1
P-17	2157.125	608.356	609.00
P-18	2466.459	659.526	609.30
P-19	2534.042	678.206	609.32
P-20	2538.177	681.266	609.34
P-21	2300.260	1442.077	608.9
P-22	2486.110	1426.567	609.2
P-23	2490.311	1422.477	609.3
P-24	2035.539	573.455	583.80

* ANGLE CORING - NO CASING

NOTE: ALL BORING LOCATIONS ARE GIVEN IN ASH POND GRID COORDINATES

NOTE: THIS DWG MADE FROM 10-201-D460

A G - ASH POND GRID
P G. - PLANT GRID
o - IPS WITH APPROPRIATE NUMBER STAMPED ON TOP. ELEVATIONS SHOWN ARE TOP OF IPS.

SEE DWG. N-34-31 FOR END AREAS

GEORGIA POWER CO., ATLANTA, GA.
LAND DEPARTMENT

HAMMOND PLANT - ASH POND NO. 3
BORING PLAN

FLOYD COUNTY, GEORGIA

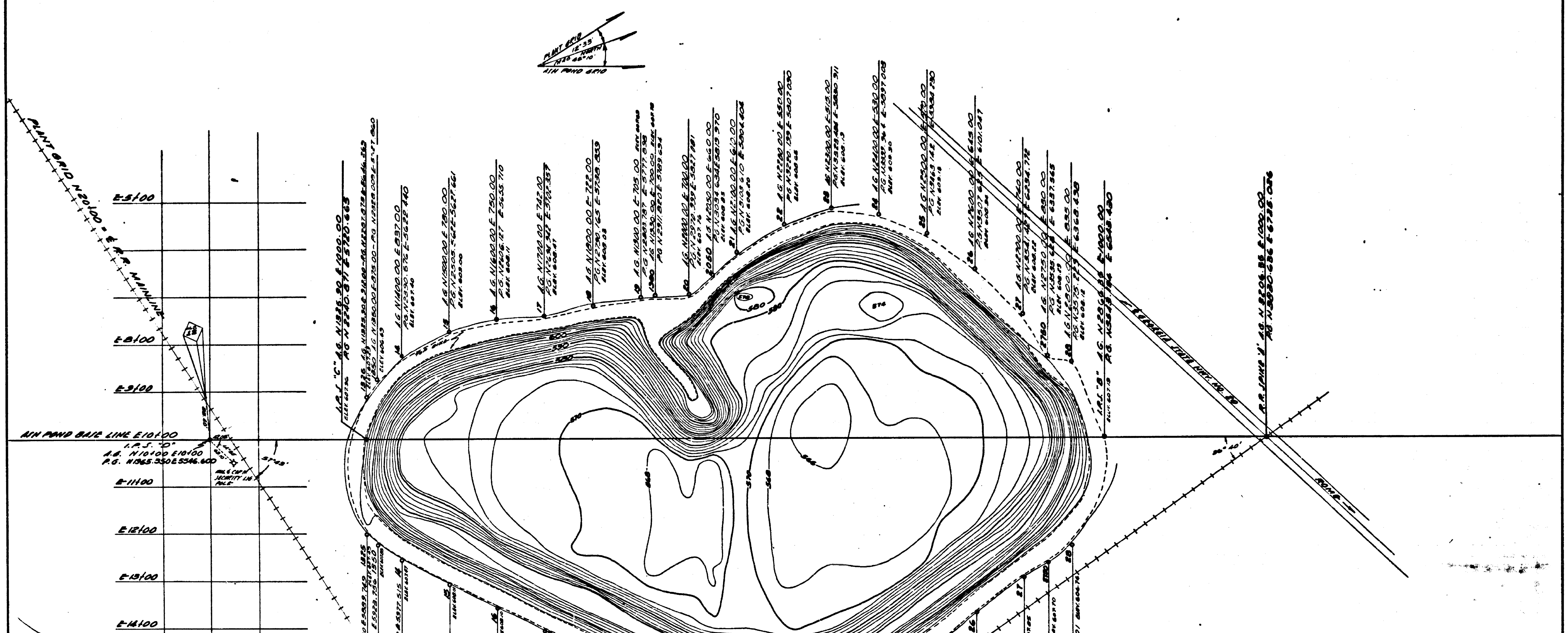
NO.	DATE	BY	REVISIONS

APPROVALS

DR. | TR. | CHK.

SCALE 1" = 100' | DATE AUG 26, 1971

DRAWING NUMBER
10-201 D-50



LEVEL	CAPACITY PER LEVEL CU. YDS.	ACCUMULATIVE CU. YDS.	REMAINDER CU. YDS.
1. BOT. TO 582.0	270,196	—	837,979
2. 582 TO 586	103,957	374,153	734,022
3. 586 TO 590	109,191	483,344	624,831
4. 590 TO 594	121,267	604,611	503,564
5. 594 TO 598	126,353	730,964	377,211
6. 598 TO 602	133,958	864,922	243,253
7. 602 TO 606	139,190	1,004,112	104,063
8. 606 TO TOP	104,063	1,108,175	0

A. G. - ASH POND GRID
P. G. - PLANT GRID
● - IPS WITH APPROPRIATE NUMBER STAMPED ON TOP. ELEVATIONS SHOWN ARE TOP OF IPS.

SEE DWG. N-34-31 FOR END AREAS.

GEORGIA POWER CO., ATLANTA, GA.
LAND DEPARTMENT

TOPOGRAPHIC MAP OF PLANT HAMMOND 1973 ASH POND AS BUILT

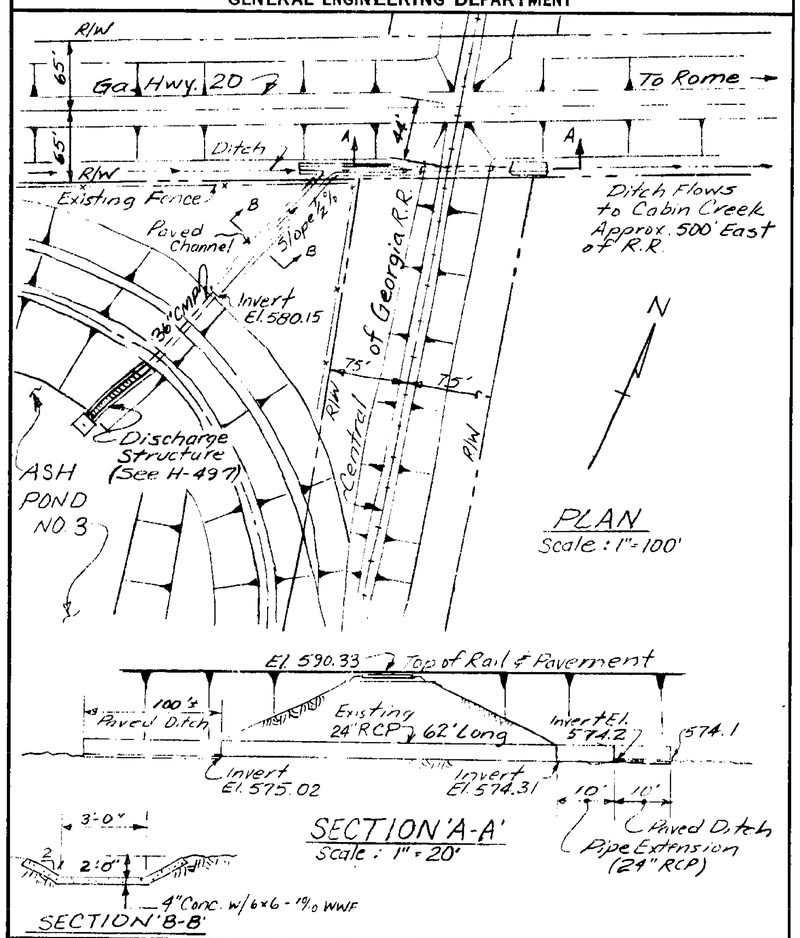
FLOYD COUNTY, GEORGIA

No.	DATE	BY	REVISIONS
1	9-14-76	GEG	REVISED CHART.

APPROVALS

DR. WAJ | TR. | CH'K
SCALE 1" = 100' | DATE AUG. 26, 1976
DRAWING NUMBER 10-201 D-449

GEORGIA POWER COMPANY---ATLANTA, GEORGIA
GENERAL ENGINEERING DEPARTMENT



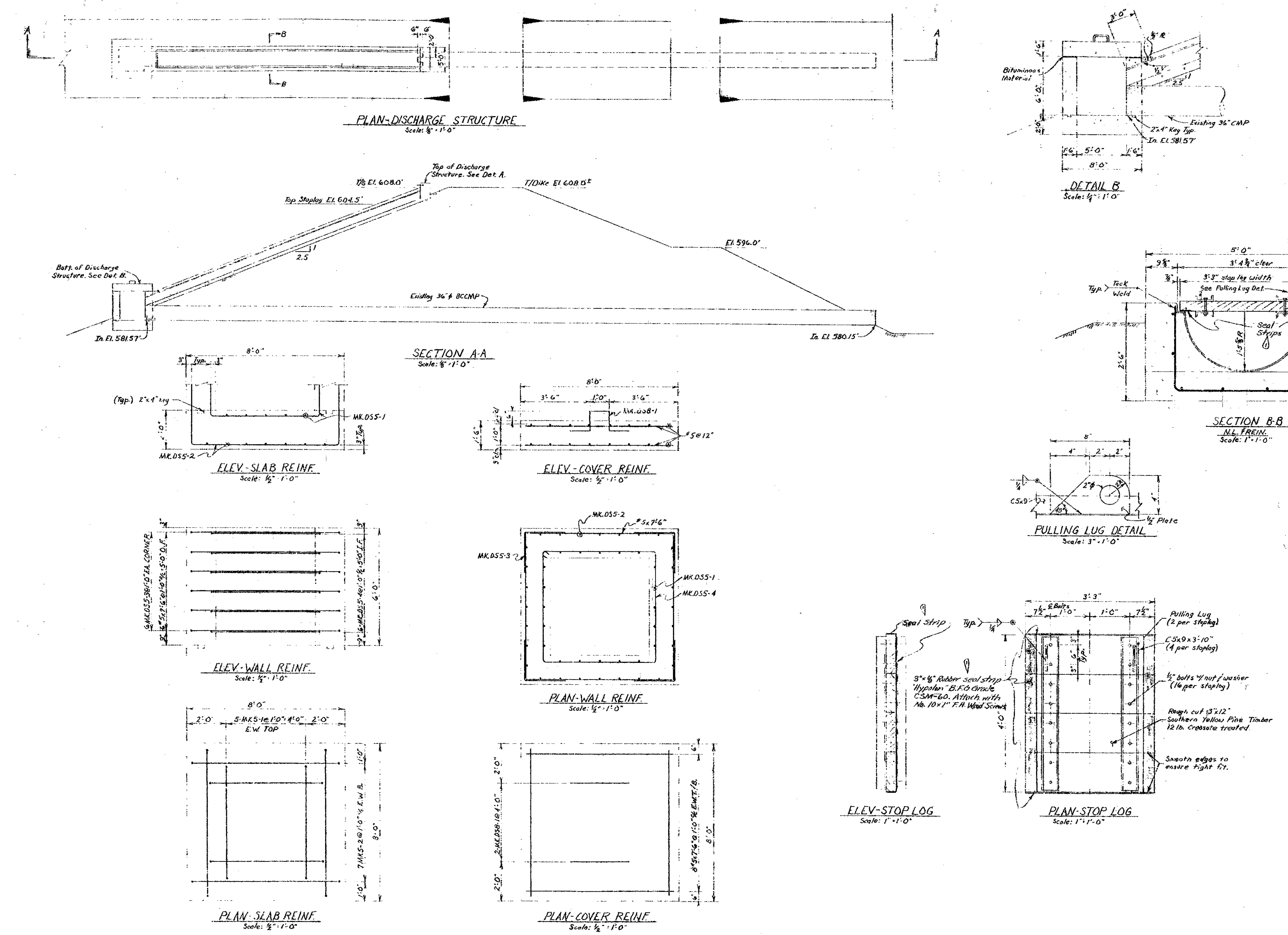
PLANT HAMMOND UNITS 1-4, COOSA, FLOYD CO., GEORGIA
ASH POND NO. 3 - EMERGENCY DISCHARGE

DESIGN WHD DR WHD DATE 1-7-77	REVISIONS	NUMBER	
CHECKED WOD SCALE Shown		10-201-A-408	
APPROVED [illegible]			

TRIM PRINTS ON THIS LINE

KOKE 17 6000 9-72 2463A+

TRIM PRINTS ON THIS LINE



REFERENCE DRAWINGS:
10-201 H-436 1973 Ash Pond, Plan & Sections
H-465 Ash Pipe Trench Between Ash Pond No. 1 & No. 3
BR-411 Emergency Discharge Structure

NOTES:
1. Material To Be Field Supplied.
2. Concrete: 4000 psi @ 28 days.
3. Reinforcing: ASTM A 615 Grade 60.
4. Top Stoplog To Be Constructed To Make Crest Elevation 604.50 Ft.
5. Exposed Steel To Be Painted With Coal-Tar Epoxy.

NO.	DATE	BY	REVISIONS
1	5-23-77	WDD	Add Seal Strips

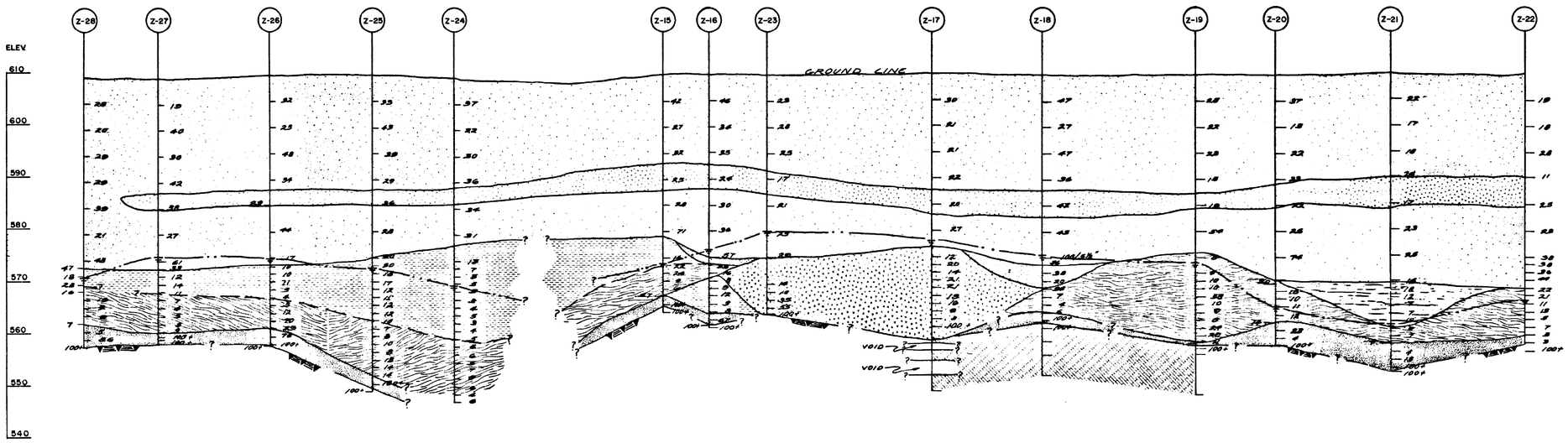
GEORGIA POWER CO., ATLANTA, GA.
GENERAL ENGINEERING DEPARTMENT
PLANT HAMMOND
ASH POND No. 3 - EMERGENCY DISCHARGE STRUCTURE

DSGN.	DR.	CH'K
WDD	H.P., Jr.	WDD

SCALE	DATE
AS NOTED	2-4-77

DRAWING NUMBER

LOCATION	SHEET NO.
10-201	H-497



LEGEND

- Fill-red, brown, gravelly, sandy clay
- Dark gray, fine sandy silt (weathered shale)
- Brown & tan, clayey, silt
- Brown, laminated, clayey, silt
- Tan, slightly clayey, fine to medium sand
- Brown, tan, gravelly, silty clay
- Soft to moderately hard calcareous shale, bedding planes dipping 40°
- Black, fractured, weathered shale
- Orange, brown, silty clay
- Z-00 Boring number
- Water level

NOTES:

1. Numbers alongside borings are the Standard Penetration Resistance values.

SCALE
VERTICAL 1" = 10'
HORIZONTAL 1" = 100'

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

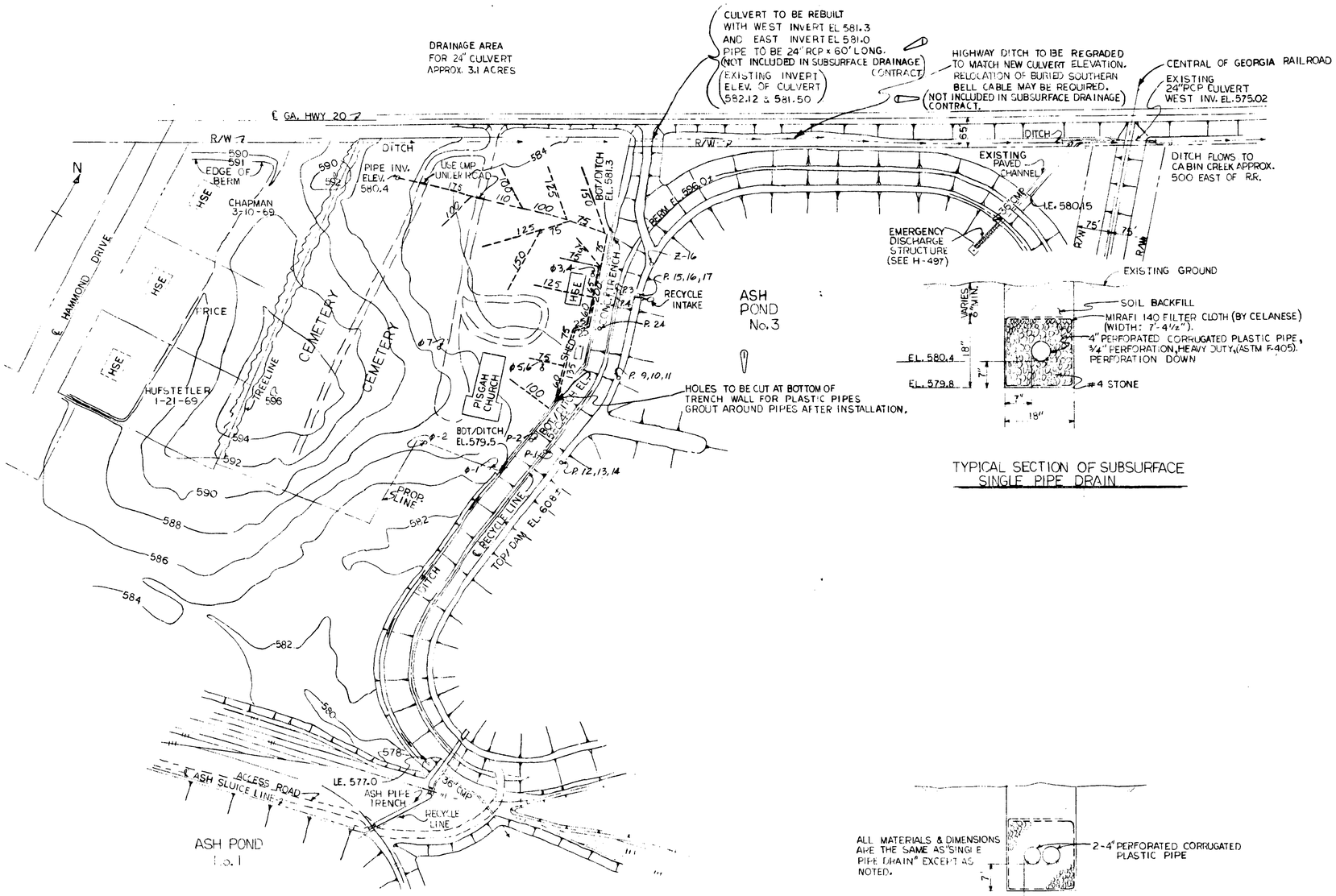
HAMMOND PLANT – ASH POND NUMBER 3
GENERALIZED SOIL PROFILE
FLOYD COUNTY, GEORGIA

DSGN.	DR.	CH'K.
TWM	TRW	MCM
SCALE 1"=10'		DATE 6/21/77
DRAWING NUMBER		
LOCATION 10-201		SHEET NO. D-51

REVISIONS

NO.	DATE	BY	APPROVALS

TELEDYNE POST 130 WHITEX SMOOTH



TYPICAL SECTION OF SUBSURFACE
SINGLE PIPE DRAIN

BILL OF MATERIAL

Item	Approximate Req'd Quantity
1. Filter cloth, Celanese Mirafi 140 328' x 14'-9" roll	4 Each
2. Pipe, perforated corrugated plastic, heavy duty, 4" diameter, 3/4" perforations, 250 ft. roll, ASTM F-405	10 Each
3. Fittings for above pipe	
45° WYE	7 Each
90° TEE	3 Each
45° Elbow	6 Each
90° Elbow	2 Each
Couplings	10 Each
End Cap	14 Each
A. Stone, crushed meeting Ga. D.O.T. Gradation for #4 coarse aggregate.	275 Tons
5. Excavation	550 Cu.yds.
6. Backfill	400 cu.yds.
7. Pipe, perforated corrugated steel, 16 gage, galvanized, 6" diameter 20 ft. lengths.	2 Each
8. Grassing	2 Acres

TYPICAL SECTION OF SUBSURFACE
DOUBLE PIPE DRAIN

NOTES:

1. Subdrain to be routed to miss trees and other permanent structures. (Locations shown are approximate)
2. O indicates piezometers.
3. Contours from orig. site map (10-201 H-147 dtd. 4/14/52).
4. All locations approximate.
5. ——— indicates single pipe drain.
6. ═══ indicates double pipe drain.
7. After subdrains are installed, church yard shall be fine graded to a smooth surface, sloping to drain to the concrete ditch or highway culvert as appropriate. Excess soil from trench excavation shall be spread evenly over the low areas of the yard.
8. All disturbed areas shall be re-grassed following grading operations.
   - A. Highway R/W & GPC property: According to Ga. D.O.T. Specifications for Roads & Bridges, Section 700.
   - B. Pisgah Church Property: Same as (A) or as required by property owners.
9. Proposed subdrain system to be installed so as to avoid interfering with house removal.
10. Highway culvert reconstruction is complete. Some general grading near the inlet may be required.
11. Ground water control in trenches during drain installation shall be the responsibility of the subsurface drainage contractor.

NO.	DATE	BY	REVISIONS
1	12-5-78	MWT	GENERAL

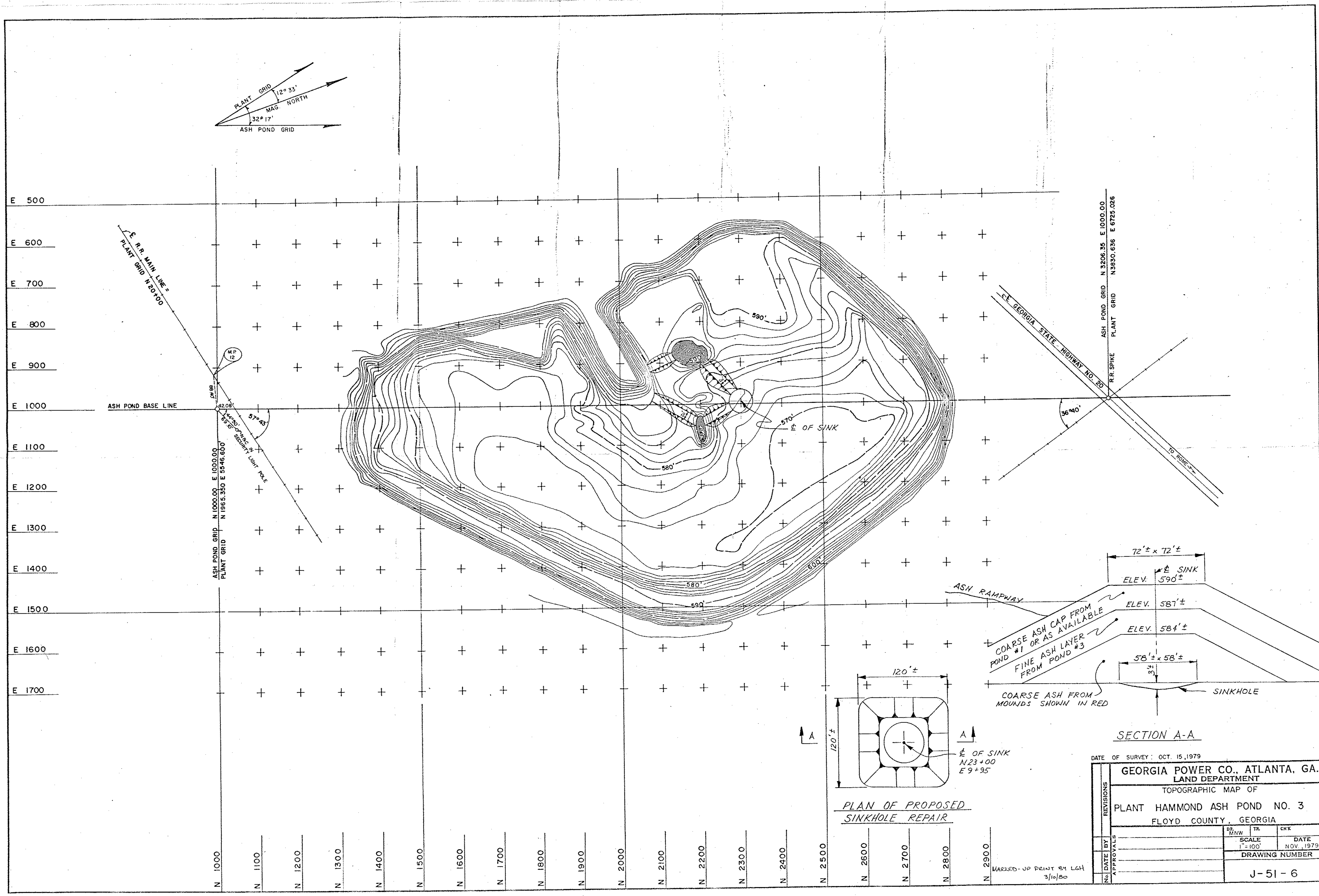
APPROVED: MHT

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

PLANT HAMMOND
ASH POND No. 3
PISGAH CHURCH YARD
DRAINAGE LAYOUT

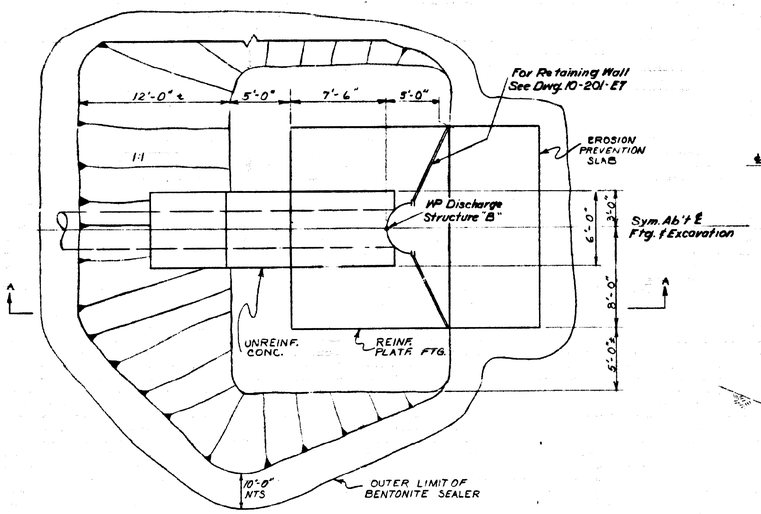
DRAWN	DR. MKH	CHK'D	DATE 1-23-78
SCALE	1" = 100'	DRAWING NUMBER	
LOCATION	10-201	SHEET NO.	H-506

1/30/79

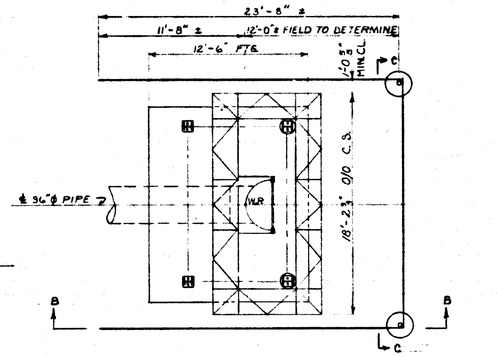


PLANT GRID
12° 33'
MAG. NORTH
32° 17'
ASH POND GRID
E 500
E 600
E 700
E 800
E 900
E 1000
E 1100
E 1200
E 1300
E 1400
E 1500
E 1600
E 1700
ASH POND BASE LINE
℄ R.R. MAIN LINE = PLANT GRID N 20+00
57° 43'
ASH POND GRID N 1000.00 E 1000.00
PLANT GRID N 1965.350 E 5546.600
590'
580'
570'
600'
℄ OF SINK
℄ GEORGIA STATE HIGHWAY NO. 20
TO ROME
36° 40'
R.R. SPIKE
ASH POND GRID N 3206.35 E 1000.00
PLANT GRID N3830.636 E 6725.026
ASH RAMPWAY
72'± x 72'±
℄ SINK
ELEV. 590'±
ELEV. 587'±
ELEV. 584'±
COARSE ASH CAP FROM POND #1 OR AS AVAILABLE
FINE ASH LAYER FROM POND #3
58'± x 58'±
COARSE ASH FROM MOUNDS SHOWN IN RED
SINKHOLE
SECTION A-A
120'±
A
A
℄ OF SINK N23+00 E9+95
PLAN OF PROPOSED SINKHOLE REPAIR
N 1000
N 1100
N 1200
N 1300
N 1400
N 1500
N 1600
N 1700
N 1800
N 1900
N 2000
N 2100
N 2200
N 2300
N 2400
N 2500
N 2600
N 2700
N 2800
N 2900
MARKED-UP PRINT BY LGH 3/10/80
DATE OF SURVEY: OCT. 15, 1979
GEORGIA POWER CO., ATLANTA, GA.
LAND DEPARTMENT
TOPOGRAPHIC MAP OF
PLANT HAMMOND ASH POND NO. 3
FLOYD COUNTY, GEORGIA
REVISIONS
No. DATE BY APPROVALS
DR. MNW
TR.
CH'K
SCALE 1" = 100'
DATE NOV. 1979
DRAWING NUMBER
J-51-6

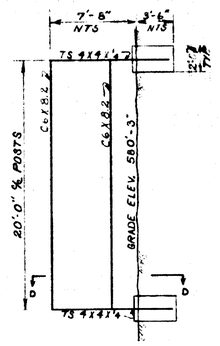
FILE #9203C



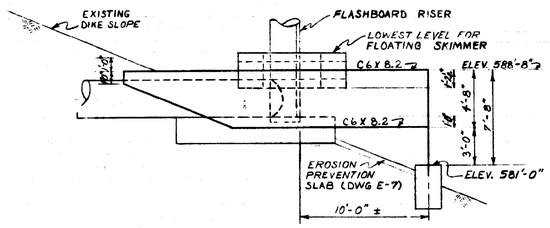
PLAN - APPROX. EXCAVATION
SCALE: 1/4" = 1'-0"



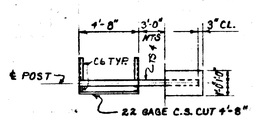
PLAN- LOW LEVEL STATIONARY SKIMMER
SCALE: 1/4" = 1'-0"



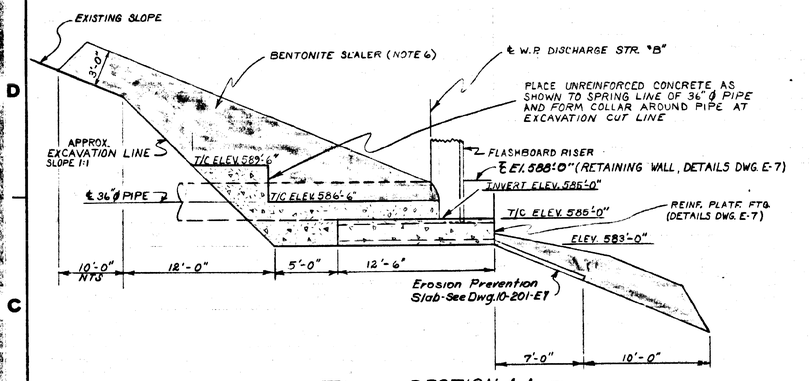
SECTION C-C



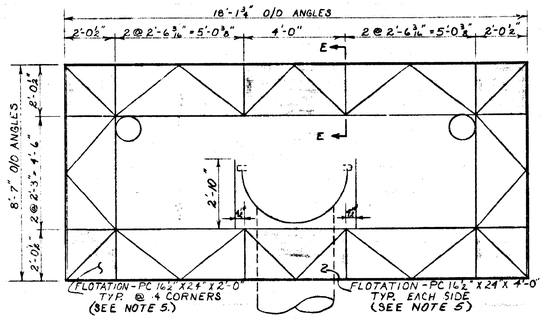
SECTION B-B
SCALE: 1/4" = 1'-0"



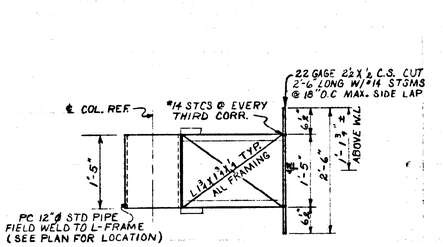
SECTION D-D
SCALE: 1/4" = 1'-0"



SECTION A-A
Scale: 1/4" = 1'-0"



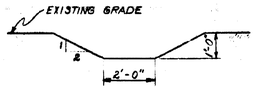
PLAN - FLOATING SKIMMER
SCALE: 1/2" = 1'-0"



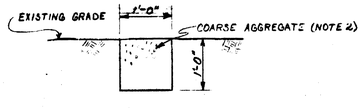
SECTION E-E
SCALE: 1" = 1'-0"

NOTES

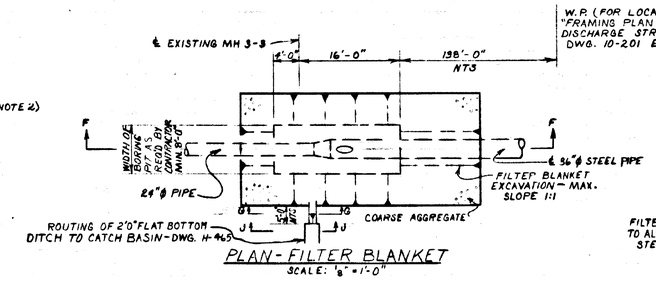
1. All notes on dwg. C102 also apply to this dwg.
2. Coarse aggregate shall meet Georgia DOT Standard Specification for Construction of Roads and Bridges (1977), Section 800, size number 57.
3. Fine aggregate shall meet Georgia DOT Specification (7/1/80 Edition) Section 881.02, size number 20.
4. Aggregate shall be spread in courses not exceeding six inches thick and compacted to 95% modified proctor in accordance with ASTM D 698-78.
5. Flotation cut from 1 1/2" x 24" x 8'-0" Styrofoam blocks as supplied by AAA Plastics or equal. Two 8'-0" blocks required.
6. Backfill of excavation at discharge structure and Bentonite Seal shall consist of a uniform mixture of 4% bentonite and select backfill. Mixture shall be compacted in 6" layers to 100% standard proctor in accordance with ASTM D 698-78.



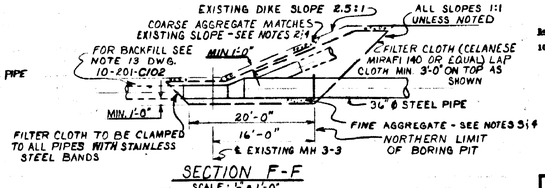
SECTION J-J
SCALE 1/2" = 1'-0"



SECTION G-G
FILTER BLANKET DRAIN
SCALE 1" = 1'-0"



PLAN - FILTER BLANKET
SCALE: 1/8" = 1'-0"



SECTION F-F
SCALE: 1/8" = 1'-0"

References Previous

10-201 B-5 Ash Pond #3 Discharge Structure B- Sections and Details.
C102 Gen. Notes Discharge Struct. B"

REVISION	DATE	BY	CHK'D	APPR. 1	APPR. 2	APPR. 3	APPR. 4	APPR. 5
0	1/9/81	RJW	TBL/WTC	WKN	[illegible]	[illegible]	[illegible]	
A	12/10/80	PAL	TBL/WTC					

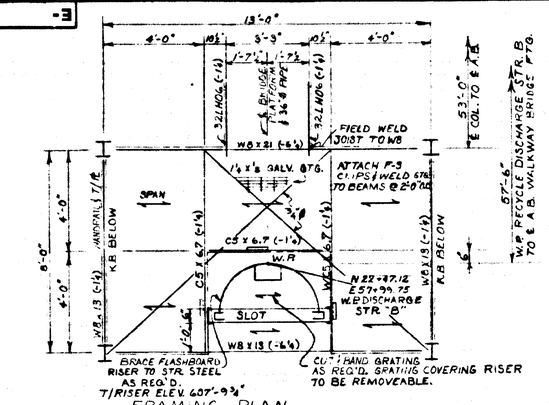
RELEASED FOR CONSTRUCTION

RELEASED FOR COMMENTS

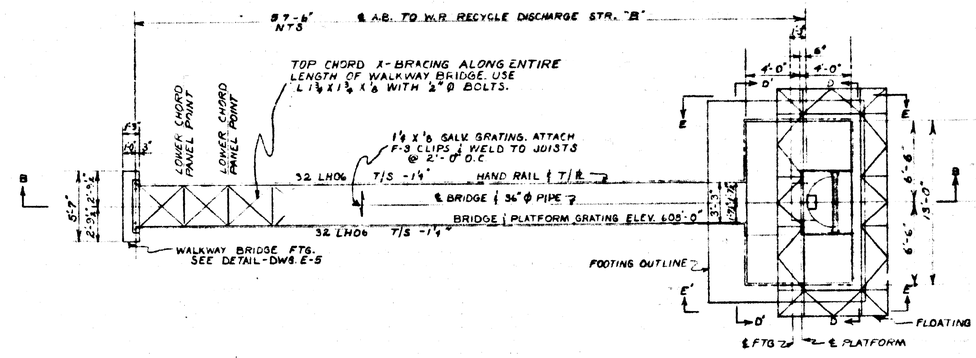
GEORGIA POWER CO., ATLANTA GA.
GENERAL ENGINEERING DEPARTMENT

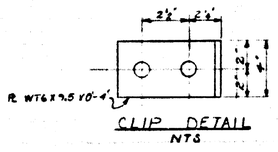
PLANT HAMMOND UNITS 1-4
ASH POND #3
DISCHARGE STRUCTURE B
MISCELLANEOUS DETAILS

DESIGNED T.B.L./W.T.C. DRAWN P.A.L. CHECKED W.T.C.
SCALE AS SHOWN
CLASSIFICATION | LOCATION 10-201 | DRAWING NUMBER E-6 | REV 0



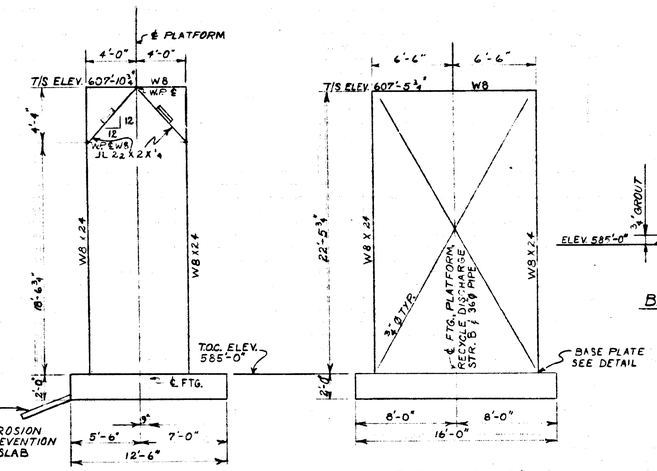
FRAMING PLAN
RECYCLE DISCHARGE STR. "B" PLATFORM
TOP OF GRATING ELEV. 608'-0"
SCALE: 1/4"-1'-0"





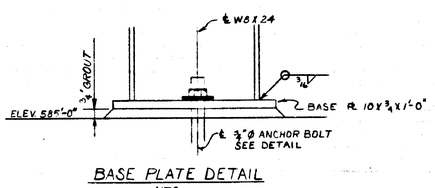
CLIP DETAIL
NTS

PLAN - WALKWAY BRIDGE AND RECYCLE DISCHARGE STR. "B" PLATFORM
TOP OF GRATING ELEV. 608'-0"
SCALE: 1/4"=1'-0"

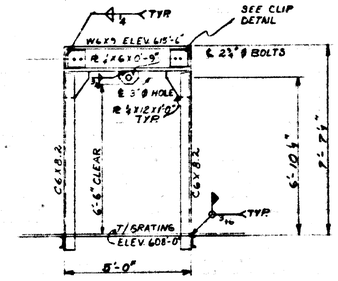


ELEV. F-F AS SHOWN
ELEV. F'-F' OPP. HAND
SCALE: 1/4" = 1'-0"

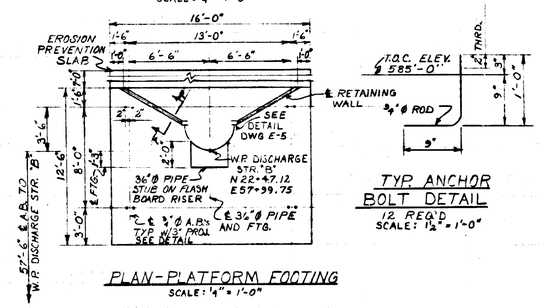
ELEV. D-D, D'-D'
SCALE: 1/4" = 1'-0"



BASE PLATE DETAIL
NTS

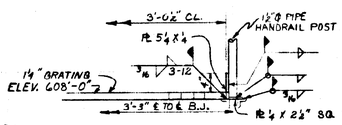


LIFTING FRAME DETAIL
NTS

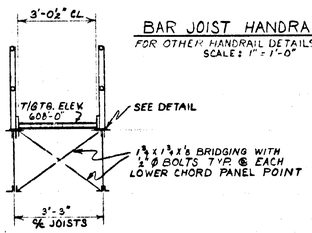


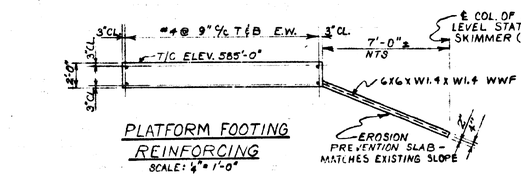
PLAN - PLATFORM FOOTING
SCALE: 1/4" = 1'-0"

TYP. ANCHOR BOLT DETAIL
12 REQ'D
SCALE: 1 1/2" = 1'-0"



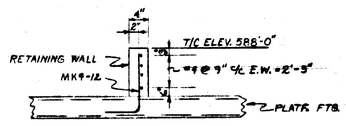
BAR JOIST HANDRAIL DETAIL
FOR OTHER HANDRAIL DETAILS SEE DWG. D-454
SCALE: 1" = 1'-0"





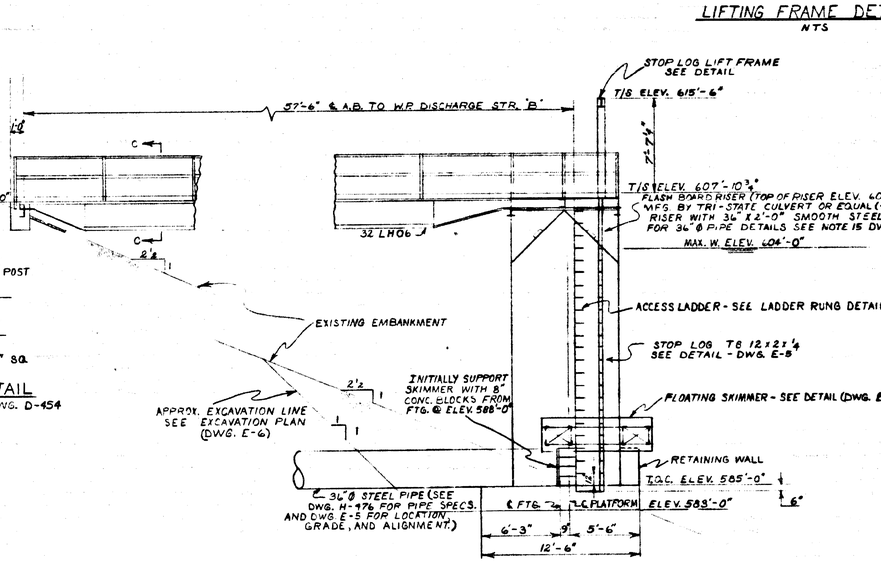
PLATFORM FOOTING REINFORCING
SCALE: 1/4" = 1'-0"

SECTION C-C
SCALE: 1/2" = 1'-0"

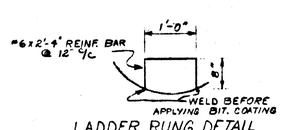


SECTION F-F
NTS

SECTION B-B
SCALE: 1/4" = 1'-0"



NOTES
1. FOR NOTES SEE DWG. C-102.



LADDER RUNG DETAIL
SCALE: 1" = 1'-0"

REFERENCE DRAWING

10-201	E-5	ASH POND #3 DISCHARGE STRUCTURE B - SECTIONS AND DETAILS
BR-407		BILL OF REINFORCING
C-102		GENERAL NOTES - DISCHARGE STR. "B"

DDR 1/13/81

REVISION	DATE	BY	CHK'D	APPR. 1	APPR. 2	APPR. 3	APPR. 4	APPR. 5
RELEASED FOR CONSTRUCTION	1/5/81	PJW	TBL	WTC				
RELEASED FOR COMMENTS	12/10/80	TBL	WTC					

GEORGIA POWER CO., ATLANTA GA.
GENERAL ENGINEERING DEPARTMENT

PLANT HAMMOND - UNITS 1-4
ASH POND #3
DISCHARGE STRUCTURE B
STRUCTURAL DETAILS

DESIGNED TBL WTC DRAWN PAL CHECKED WTC
SCALE AS SHOWN
CLASSIFICATION 10-201 LOCATION E-7 DRAWING NUMBER REV. 0

NOTES:

GENERAL:

1. All workmanship and material not noted shall conform to the latest A.C.I., A.S.T.M., A.W.S., or A.I.S.C. specifications.

2. Grating shall be galvanized Borden Metal Products Co. floor grating type W/B, size 5, bearing bars 1 1/4" x 1/8" at 1 3/16" c/c, type F-3 fasteners, or equal.

3. Grating shall be fabricated and banded with 1 1/4" x 1/8" bars prior to hot dip galvanizing.

4. Any galvanized area damaged during shipping or construction shall be cleaned to SSPC-SP-3-76 and coated with two coats of galvanize paint.

5. During construction the maximum water surface elevation of ash pond number 3 will be maintained at 580.0 by Georgia Power.

6. After construction of discharge structure B, the water surface shall vary between 595.0 and 604.0.

7. Survey control will be furnished by Georgia Power, as detailed in the specifications.

8. Any ash pipe trench damaged during construction shall be replaced in accordance with drawing H-466. Any Boiler Chemical Cleaning piping damaged by construction shall be replaced in accordance with Drawing H-465.

9. All buried steel piping to be bituminous coated, inside and outside, and paper wrapped on outside. Pipe shall conform to API 5L Grade B.

10. Piping notes 8 thru 15 on drawing H-476 shall also apply to this work.

11. All disturbed areas shall be regrassed with tall fescue seed according to Ga. DOT Spec. 700.

Pipe Boring:

12. The installation shall conform to Section 615 of the Ga. DOT Standard Specifications-Construction of Roads and Bridges-1977 and the July 1, 1980 Supplemental Specifications except as modified by the Georgia Power Specifications.

Earthwork:

13. Using the same soil removed during construction of the structure, the backfill shall be replaced and compacted in 6" layers to 100% Standard Proctor in accordance with ASTM D698-78, except backfill around discharge platform. For backfill at discharge platform see Excavation Plan on drawing E-6.

14. The soil under foundations shall be compacted to 100% Standard Proctor prior to placing of the concrete forms or reinforcing.

15. The contractor may use available pond ash to construct an equipment access road from the top of the dike to discharge structure B. This road must be removed and the dike returned to its original condition after the discharge is complete.

Concrete, Reinforcing and Anchor Bolts:

16. All concrete shall have a minimum compressive strength of 3000 psi at 28 days using type I cement, ASTM C150.

17. All reinforcing bars shall be deformed bars of intermediate grade billet steel having a minimum yield point of 60 ksi, ASTM A615-79.

18. Minimum cover for reinforcing steel shall be 2" where forms are used and 3" where concrete is placed against earth.

19. Top of concrete to be troweled, smooth, and level.

20. Cast in place anchor bolts shall be fabricated from 3/4" diameter rod conforming to ASTM A36-77. Rods shall be threaded in accordance with ASTM A307-78.

21. 3/4" of 4000 psi non-shrink, non-metallic grout shall be used under each platform column. This is not the same grout discussed in notes 22-25.

Grout (for use in pipe boring only):

22. After the pipe's line and grade have been accepted by Georgia Power, voids around the pipe shall be filled by pressure grouting. Grouting shall conform to Georgia Power Specifications for Inquiry No. GA-5784, Sections 2.04 and 2.05.

23. The grout shall be installed in such a manner that the accepted pipe line and grade shall not be altered by grouting.

24. The grout, when injected, should be free of lumps or coarse materials.

25. Grouting pressure, as measured at the point where the grout fitting contacts the 36" diameter pipe wall, shall not exceed 5 psi.

Steel:

26. All miscellaneous structural steel shall conform to ASTM A36-77.

27. All welds are to be made using E60xx electrodes. All surfaces to be welded shall be free of loose scale, slag, rust, grease, and any other foreign material.

28. All connections shall be bolted, unless noted, using bearing type with 3/4" diameter high strength bolts conforming to ASTM A325-79.

29. All structural steel tubing shall conform to ASTM A501-76.

30. All joist shall conform to the "Standard Specifications for Open Web Steel Joist, J and H Series" as adopted by the Steel Joist Institute.

Coatings:

Steel (except columns, column bracing, grating, pipes, flashboard riser, corrugated sheets and skimmer)

31. Prior to application of prime coat the steel shall be cleaned in accordance with Steel Structures Painting Council "Surface Preparation No. 6-76 Commercial Blast Cleaning."

32. Steel shall be primed with one shop coat of a white inorganic zinc primer to a minimum dry film thickness of 3 mils with one of the following inorganic zinc primers.

Ameron - Brea, California - Dimecote 6
Carboline Co. - St. Louis, Missouri - Carbo Zinc 11
Mobil Chemical Co. - Edison, New Jersey - Mobilizinc 7(11-F-12)
Tremec Company, Inc. - North Kansas City, Missouri - Tremec Zinc 92
Wisconsin Protective Coating Corp. - Green Bay, Wisconsin Plastic-Zinc 1000.

33. The primer shall be applied in strict accordance with the Manufacturer's instructions. Paint shall be applied within eight hours of start of cleaning and before rust "blooms" appear. All paint shall be thoroughly dry before the steel is loaded for shipment.

34. Field bolts, field welds and serious abrasions to the shop coat shall be spot cleaned in accordance with SSPC "Surface Preparation No. 3-76 Power Tool Cleaning" and spot painted with the same brand and number shop paint.

35. All primed structural steel shall be finish painted with one coat, 2.0 mil min. dry film thickness, of a paint compatible with the selected primer. Finish paint color for structural members shall be medium dark green and for handrails shall be safety yellow. The exact shade shall be approved by the plant manager prior to application.

Columns, column bracing, corrugated sheets, flashboard riser and skimmer steel:

36. Prior to application of coating, all surfaces shall be cleaned to SSPC "Surface Preparation No. 10-76 Near-white blast cleaning."

37. Coating on all surfaces shall be Black Coal Tar Epoxy, Koppers Bitumastic No. 300-M or equal.

38. Within six hours after blast cleaning, the surfaces shall be coated with a first coat of coal tar epoxy to a thickness of 8 to 10 mils. After the first coat has cured sufficiently, but within 24 hours, a second coat of coal tar epoxy shall be applied to a thickness of 8 to 10 mils. No coating shall be applied within 3" of field welded joints.

39. No cleaning or coating shall be done when the relative humidity in the vicinity of the application area is over 90 percent.

Steel Pipes:

40. Prior to application of coating, all surfaces shall be cleaned to SSPC "Surface Preparation No. 10-76 Near-white blast cleaning."

41. Within six hours after blast cleaning, the pipe surfaces shall be coated with one coat of a coal tar primer and 3/32" thick hot coat tar enamel, and the exterior surface wrapped with 80 pound Kraft paper. Coating shall not be applied within 3" of pipe ends.

42. All steel pipe welds shall be spot cleaned in accordance with SSPC SP No. 3-76 and spot coated with bituminous coating compatible to the pipe's original coating.

43. Cleaning and coating procedures and processes shall be in strict accordance with the coating Manufacturer's instructions.

Concrete Coating:

44. All concrete located at the riser shall be spray coated, after curing but prior to backfilling, with one coat of Trumbull 5X or Koppers Bitumastic No. 50 or equal.

Grating:

45. Hot dipped galvanized after fabrication.

Railroad Right-Of-Way:

46. Construction activity shall not take place on the railroad right-of-way, as shown on drawing H-465, except occasional equipment crossing at the existing road crossings.

Fiberglass Pipe:

47. All fiberglass pipe and fittings shall be furnished by the Purchaser, as detailed in Section 2.03 of the Georgia Power Specifications.

48. The Contractor shall install the pipe, as shown on drawing H-476, using the materials supplied by the pipe manufacturer and in strict accordance with the manufacturer's recommendations.

Cut and Cover Pipe Installation:

49. Pipe shall be installed using a Class "C" bedding, unless otherwise noted.

Class C bedding may be achieved by either of two construction methods.

Shaped Bottom.
The pipe shall be bedded with ordinary care in a soil foundation shaped to fit the lower part of the pipe exterior with reasonable closeness for at least 10 percent of its overall height.

Compacted Granular Bedding
The pipe shall be bedded in compacted granular material, meeting the requirements of ASTM Specification Designation C33-67, gradation 67 for coarse aggregates (3/4" to No. 4), placed on a flat trench bottom. The granular bedding shall have a minimum thickness of 4 inches under the barrel and shall extend one-tenth to one-sixth of the outside diameter up the pipe barrel at the sides.

50. The pipe shall be backfilled with material free of stones larger than 2" in diameter, organic material, frozen lumps or chunks of highly plastic clay. The backfill shall be placed simultaneously to the same elevation on each side of the pipe.

Reference Drawings:

10-201	BR-407	Bill of Reinforcing - Recycle Intake Structure
	BR-409	Bill of Reinforcing - NPDES Retrofits
	D-445	Recycle Line - Ash Pond #3 to #1 - Plan and Profile - sheet 1 of 2
	D-449	Topographic Map of Plant Hammond 1973 Ash Pond - as built.
	D-451	Recycle Line - Ash Pond #3 to #1 - Plan and Profile - Sheet 2 of 2
	D-454	Handrail Details
	E-6	Ash Pond #3 - Discharge Structure B - Misc. Details
	E-7	Ash Pond #3 Discharge Structure & Structural Details
	H-436	1973 Ash Pond - Plan & Sections
	H-465	Ash Pipe Trench Between Ash Pond #1 & #3 - Gen. Arrangement
	H-466	Ash Pipe Trench - N.L. & Reinf. - Sections & Details
	H-476	NPDES - Fiberglass Manhole Details
	J-51-6	Topographic Map of Plant Hammond Ash Pond No. 3 - 1979

No.	DATE	BY	REVISIONS
0	1-9-81	TBL	Released for Construction
A	12-19-80	WDM	Released for Comments

APPROVALS
WDA 1/12/81
MH Thompson 1/13/81

GEORGIA POWER CO., ATLANTA, GA.
POWER SUPPLY ENG. AND SERVICES DEPT.

PLANT HAMMOND
ASH POND NO.3 DISCHARGE STRUCTURE "B"
NOTES & REFERENCE DRAWINGS

DESIGN	DR.	CH'K
TBL	McNaull	TBL
SCALE: NO	DATE: 12-19-80	
DRAWING NUMBER		
LOCATION: 10-201	SHEET NO.: C102	