PLANT BRANCH CCR SURFACE IMPOUNDMENT CLOSURES
ASH POND E CLOSURE-BY-REMOVAL
PUTNAM COUNTY, GEORGIA
PERMIT DRAWINGS
NOVEMBER 2018

SOURCE: U.S. BUREAU OF THE CENSUS
GEORGIA STATE MAP
SCALE: NTS

LIST OF DRAWINGS	
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4	PROPERTY BOUNDARY SURVEY - SOUTH
5	EXISTING SITE CONDITIONS
6	CCR REMOVAL PLAN
7	RESTORATION GRADING PLAN
8	SITE CROSS SECTIONS I
9	SITE CROSS SECTIONS II
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12	PHASING PLANS III
13	STORMWATER MANAGEMENT SYSTEM PLAN
14	STORMWATER MANAGEMENT SYSTEM DETAILS
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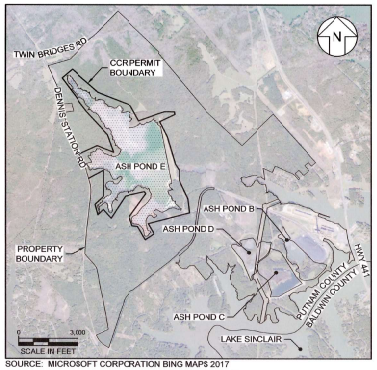

SOURCE: MICROSOFT CORPORATION BING MAPS 2017
VICINITY MAP
SCALE: 1" = 3,000'

PREPARED FOR:

Georgia Power

GENERAL MANAGER
GEORGIA POWER ENVIRONMENTAL AFFAIRS
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GEORGIA REGISTERED PROFESSIONAL ENGINEER MEHMET ISCIMEN
11/13/2018

Georgia Power

PERMIT DRAWINGS
NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION	DRN	APP
0	11.09.18	PERMIT DRAWINGS FOR GA EPD SUBMITTAL	JJA/SRR	MI

COVER SHEET

PLANT BRANCH CCR SURFACE IMPOUNDMENT CLOSURES
ASH POND E CLOSURE-BY-REMOVAL
PUTNAM COUNTY, GEORGIA

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PRCJ. NO.	GW6364	DWG. 6364-001	EDIT 11.09.18
SCALE	AS SHOWN	DRAWING 1 OF 15	
DATE	NOVEMBER 2018		

L:\CADD\GEORGIA POWER\PLANT BRANCH CSI\6364-01\DRAWINGS\6364-001

LINETYPE LEGEND

- APPROXIMATE ASH POND BOUNDARY (NOTE 13)
- BATHYMETRIC SURFACE
- CCR PERMIT BOUNDARY
- DAM SURFACE (ESTIMATED)
- EDGE OF ROAD / EXISTING BUILDINGS
- EXCAVATION SURFACE (NOTE 1)
- EXISTING GROUND (NOTE 1)
- FREE WATER SURFACE
- INTERIM DIKE SURFACE
- NON-WOVEN GEOTEXTILE SEPARATOR
- PRE-CCR PLACEMENT SURFACE (NOTE 1)
- PROPERTY BOUNDARY (NOTE 2)
- PROPOSED WATER MANAGEMENT LINE AND FLOW DIRECTION
- RESTORATION SURFACE
- STORMWATER DIVERSION / CHANNEL
- STORMWATER PIPE AND FLOW DIRECTION
- TREELINE

SYMBOL LEGEND

- CONTROL MARKER (NOTE 2)
- GROUNDWATER PIEZOMETER
- GUY WIRE
- HEADWALL
- HISTORICAL WELL / PIEZOMETER
- MONITORING NETWORK WELL
- POWER POLE
- PRINCIPAL SPILLWAY RISER
- RELIEF WELL
- 4% — SLOPE GRADE
- CREST / TOE — SLOPE INDICATOR
- 3 / 1 — SLOPE LABEL
- TRAILER OR BUILDING
- VEGETATION
- WATER SURFACE

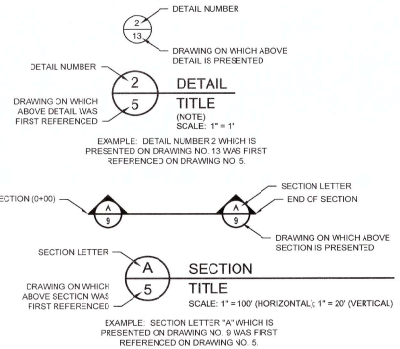
HATCH PATTERN LEGEND

- ACCESS ROAD (EXISTING AND PROPOSED)
- CONCRETE
- EXISTING CCR
- PIPE EMBEDMENT FILL
- RIPRAP
- STREAM (NOTE 1)
- SUBGRADE
- TRENCH BACKFILL / EARTHEN FILL
- WETLANDS (NOTE 1)

CONTOUR LEGEND

- 410 — BATHYMETRIC SURFACE ELEVATION (FEET) (NOTE 1)
- 410 — EXCAVATION SURFACE ELEVATION (FEET) (NOTE 1)
- 410 — EXISTING GROUND ELEVATION (FEET) (NOTE 1)
- 410 — FINISHED GRADE SURFACE ELEVATION (FEET)
- 410 — INTERIM DIKE SURFACE ELEVATION (FEET)
- 410 — RESTORATION SURFACE ELEVATION (FEET)

DETAIL AND SECTION IDENTIFICATION LEGEND



ABBREVIATIONS

AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS
APP	APPROVED BY
℄	CENTER LINE
CCR	COAL COMBUSTION RESIDUALS
DRN	DRAWN BY
DWG	DRAWING
E	EAST OR EASTING
EL	ELEVATION
FD	FINGER DRAIN
FT	FEET
GA EPD	GEORGIA ENVIRONMENTAL PROTECTION DIVISION
GDOT	GEORGIA DEPARTMENT OF TRANSPORTATION
GPC	GEORGIA POWER COMPANY
GSWCC	GEORGIA SOIL AND WATER CONSERVATION COMMISSION
HDPE	HIGH DENSITY POLYETHYLENE
H:V	HORIZONTAL TO VERTICAL, LENGTH RATIO FOR A SLOPE
HWY	HIGHWAY
IN	INCH
INV	INVERT
MAX	MAXIMUM
MIN	MINIMUM
MSL	MEAN SEA LEVEL
N	NORTH OR NORTHING
NAD	NORTH AMERICAN DATUM
NAVD88	NORTH AMERICAN VERTICAL DATUM OF 1988
NO.	NUMBER
NPDES	NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
N.S.A.	NATIONAL STONE ASSOCIATION
NTS	NOT TO SCALE
OC	ON CENTER
OZ	OUNCE
PROJ	PROJECT
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
REV	REVISION
S	SOUTH
SCS	SOUTHERN COMPANY SERVICES
SWP	STORMWATER PIPE
TYP	TYPICAL
U.S.	UNITED STATES
USEPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
W	WEST
W.S.	WATER SURFACE
WWTS	WASTEWATER TREATMENT SYSTEM
%	PERCENT OF PERCENTILE

REFERENCE NOTES

NOTES:

1. TOPOGRAPHY (I.E., EXISTING GROUND CONTOURS AND BATHYMETRY, UTILITIES, EXISTING ROADS, AND TREELINES SHOWN ON THIS DRAWING SET WERE OBTAINED FROM ELECTRONIC FILES PROVIDED BY GEORGIA POWER COMPANY DATED 4 JUNE 2017. STREAMS AND WETLANDS WERE OBTAINED FROM THE "PLANT BRANCH ASH POND E CLOSURE ENVIRONMENTAL SURVEY" AND THE "PLANT BRANCH SITE ENVIRONMENTAL SURVEY" BY ECOLOGICAL SOLUTIONS INC. DATED SEPTEMBER 2016 AND SEPTEMBER 2018, RESPECTIVELY. STREAM AND WETLAND SURVEY WAS CONDUCTED FOR AREAS WITHIN THE CCR PERMIT BOUNDARY AND ITS IMMEDIATE VICINITY. EXISTING GROUND CONTOURS WERE AUGMENTED WITH UPDATED TOPOGRAPHY PROVIDED BY GEORGIA POWER COMPANY TITLED "COMPOSITE SURFACE - BRANCH 2014 LIDAR WITH 2017 UAS AND FIELD-RUN TOPO UPDATES R0.DWG" AND DATED 15 DECEMBER 2017. THE PRE-CCR PLACEMENT SURFACE FOR ASH POND E WAS OBTAINED FROM ELECTRONIC FILES PROVIDED BY SOUTHERN COMPANY SERVICES AND DATED JUNE 2018. THE EXCAVATION SURFACE WAS DEVELOPED BY LOWERING THE PRE-CCR PLACEMENT SURFACE BY 6 INCHES.
2. PROPERTY BOUNDARY AND CONTROL MARKERS WERE OBTAINED FROM THE "PROPERTY BOUNDARY SURVEY, PLANT HARLLEE BRANCH" PREPARED BY JORDAN ENGINEERING AND DATED 10 SEPTEMBER 2018, SHOWN HEREIN ON DRAWINGS 3 AND 4.
3. WATER MANAGEMENT INFRASTRUCTURE LOCATIONS SHOWN WITHIN THE WATER MANAGEMENT INFRASTRUCTURE KEY MAP PRESENTED ON DRAWING 5 WERE OBTAINED FROM ELECTRONIC FILES PROVIDED BY SOUTHERN COMPANY SERVICES TITLED "BRANCH ASH POND CLOSURE SURVEY" ON 25 AUGUST 2017 AND "PLANT BRANCH - UNITS 1-4 WATER TREATMENT SYSTEM PIPING PLAN, ASH POND E DEWATERING" DATED 8 MARCH 2017. LOCATIONS ARE APPROXIMATE AND WILL BE FIELD VERIFIED AT THE TIME OF CONSTRUCTION.
4. GRID COORDINATE SYSTEM CORRESPONDS TO NORTH AMERICAN DATUM (NAD) 1983, GEORGIA WEST ZONE.
5. ELEVATIONS ARE IN FEET ABOVE MEAN SEA LEVEL, NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
6. VERTICAL AND HORIZONTAL EXTENTS OF EXISTING CCR PRESENTED IN THIS DRAWING SET ARE APPROXIMATE. BOTH HORIZONTAL AND VERTICAL LIMITS OF CCR WILL BE FIELD VERIFIED.
7. TOP OF EXISTING CCR WAS TAKEN AS THE BATHYMETRIC SURFACE IN AREAS OF WATER COVERAGE AND AS EXISTING GROUND IN DRY AREAS OF THE ASH POND.
8. ACCESS ROADS, ACCESS RAMPS, AND ASSOCIATED STORMWATER FEATURES WILL BE EVALUATED AS PART OF THE CONSTRUCTION DRAWINGS.
9. FUGITIVE DUST WILL BE MITIGATED AS SPECIFIED IN THE CLOSURE PLAN DATED NOVEMBER 2018.
10. DEWATERING WILL BE PERFORMED AS NEEDED AND AS SPECIFIED IN THE CLOSURE PLAN DATED NOVEMBER 2018.
11. CONTACT WATER FROM ASH POND E WILL EITHER BE DIVERTED TO WITHIN THE LIMIT OF ASH POND B AND THEN CONVEYED TO AN ON-SITE WASTEWATER TREATMENT SYSTEM (WWTS) OR DIRECTLY CONVEYED TO THE WWTS. A LINED ECONOTANK OR SIMILAR LINED TEMPORARY LIQUID STORAGE UNIT, CONNECTED BETWEEN ASH POND B AND THE WWTS, MAY BE UTILIZED TO PROVIDE ADDITIONAL STORAGE CAPACITY TO ASH POND B BEFORE CONVEYING THE CONTACT WATER TO THE WWTS. TREATED WATER WILL BE DISCHARGED TO LAKE SINCLAIR VIA NPDES OUTFALL NUMBER 03. DIVERTED NON-CONTACT STORMWATER WILL BE DISCHARGED TO RECEIVING WATER BODIES WITHOUT TREATMENT.
12. ADDITIONAL STORMWATER FEATURES (E.G., BERMS, CHANNELS, BENCHES, AND DOWNCHUTES) AND EROSION AND SEDIMENT CONTROLS MAY BE IMPLEMENTED FOR THE CONSTRUCTION AND POST-CONSTRUCTION SITE CONDITIONS.
13. ASH POND BOUNDARY FOR ASH POND E WAS DEVELOPED BASED ON FIELD INVESTIGATIONS, HISTORICAL DRAWINGS, AND AERIAL PHOTOS, AND IS APPROXIMATE. THE ASH POND BOUNDARY LINE REPRESENTS THE ESTIMATED LIMIT OF IMPOUNDED CCR.

GENERAL EROSION AND SEDIMENT CONTROL (E&SC) NOTES

NOTES:

1. ALL EROSION CONTROL MEASURES SHALL BE IN CONFORMANCE WITH THE CURRENT EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA." STORMWATER CONTROLS AND BEST MANAGEMENT PRACTICES SHALL BE DESIGNED, INSTALLED, AND MAINTAINED IN ACCORDANCE WITH THE APPLICABLE NPDES CONSTRUCTION STORMWATER DISCHARGE GENERAL PERMIT, NPDES INDUSTRIAL STORMWATER DISCHARGE GENERAL PERMIT, AND/OR THE FACILITY'S NPDES INDUSTRIAL WASTEWATER DISCHARGE INDIVIDUAL PERMIT.
2. STORM WATER DISCHARGES ASSOCIATED WITH ASH POND CLOSURE ACTIVITIES WILL BE COVERED UNDER THE APPLICABLE NPDES CONSTRUCTION STORMWATER DISCHARGE GENERAL PERMIT, NPDES INDUSTRIAL STORMWATER DISCHARGE GENERAL PERMIT, AND/OR THE FACILITY'S NPDES INDUSTRIAL WASTEWATER DISCHARGE INDIVIDUAL PERMIT.
3. STATE WATERS BUFFERS SHALL REMAIN UNDISTURBED, EXCEPT WHERE ENCROACHMENT IS REQUIRED TO FACILITATE ASH POND CLOSURE ACTIVITIES. UNLESS OTHERWISE EXEMPTED BY THE APPROPRIATE NPDES CONSTRUCTION STORMWATER DISCHARGE GENERAL PERMIT, A STATE WATERS BUFFER VARIANCE SHALL BE OBTAINED FROM GEORGIA EPD'S WATERSHED PROTECTION BRANCH PRIOR TO BUFFER ENCROACHMENT. GEORGIA EPD'S SOLID WASTE MANAGEMENT BRANCH SHALL BE NOTIFIED WHEN GPC ENVIRONMENTAL AFFAIRS APPLIES FOR A STATE WATERS BUFFER VARIANCE. CONTACT GPC ENVIRONMENTAL AFFAIRS FOR ASSISTANCE.
4. PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES FOR THIS PROJECT, THE PERMITTED BOUNDARY, THE LIMITS OF DISTURBANCE AND ALL WETLANDS AND STATE WATERS BUFFERS WITHIN 200 FEET OF THE LIMITS OF DISTURBANCE OR WITHIN THE PROPERTY BOUNDARY (WHICHEVER IS CLOSER) SHALL BE CLEARLY FLAGGED AND STAKED. THESE MARKINGS SHALL BE MAINTAINED UNTIL COMPLETION OF CONSTRUCTION / CLOSURE ACTIVITIES. SHOULD ANY OF THE MARKINGS BE DISTURBED, THE CONTRACTOR SHALL NOTIFY GEORGIA POWER COMPANY IMMEDIATELY. ALL CONSTRUCTION PERSONNEL SHALL BE SHOWN THE LOCATION OF THE LIMITS OF DISTURBANCE, STATE WATER BUFFERS, STATE WATERS AND WETLANDS OUTSIDE THE LIMITS OF DISTURBANCE TO PREVENT HEAVY EQUIPMENT ENCROACHMENT INTO THESE AREAS.

GEORGIA REGISTERED PROFESSIONAL ENGINEER MEMBER ISCMEM
11/3/2018

Georgia Power

PERMIT DRAWINGS
NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION	DRN	APP
1	11.09.18	PERMIT DRAWINGS FOR GA EPD SUBMITTAL	JJA/BRJ	MI

LEGENDS, ABBREVIATIONS, AND REFERENCE NOTES

PLANT BRANCH CCR SURFACE IMPOUNDMENT CLOSURES
ASH POND E CLOSURE-BY-REMOVAL
PUTNAM COUNTY, GEORGIA

Geosyntec consultants
1255 ROBERTS BOULEVARD NW, SUITE 200
KENNESAW, GEORGIA 30144-3694
PHONE: 678.202.9500
WWW.GEOSYNTEC.COM

PROJ. NO.	GW6364	DWG. 6364-002	EDIT 11.09.18
SCALE	AS SHOWN	DRAWING 2 OF 15	
DATE	NOVEMBER 2018		

L:\CAD\GA\GEORGIA POWER\PLANT BRANCH\BRANCH\BRANCH.DWG

SURVEYOR'S CERTIFICATION
This plat is a retracement of an existing parcel or parcels of land and does not subdivide or create a new parcel or make any changes to any real property boundaries. The recording information of the documents, maps, plats, or other instruments which created the parcel or parcels are stated hereon. THE RECORDATION OF THIS PLAT DOES NOT IMPLY APPROVAL OF THE LOCAL GOVERNING BODY OF ANY PERMITS, COMPLIANCE WITH LOCAL REGULATIONS OR REQUIREMENTS, OR SUITABILITY FOR ANY USE OR PURPOSE OF THE LAND. Furthermore, the undersigned land surveyor certifies that this plat complies with the minimum technical standards for property surveys in Georgia as set forth in the rules and regulations of the Georgia Board of Registration for Professional Engineers and Land Surveyors and as set forth in O.C.G.A. Section 43-15-37 (f).

Hollie S. Hall, GA RLS 3368

FOR CLERK'S OFFICE USE

CONTROL	STATE PLANE
CP 1 EL.: 436.38	N 1169521.62 E 2553558.67
CP 2 EL.: 453.95	N 1169747.21 E 2548645.78

COORDINATE SYSTEM INFORMATION TABLE

COORDINATE SYSTEM BASED ON STATE PLANE WEST

AVERAGE ELEVATION: 445.16'
STATE PLANE AVE. SCALE FACTOR: 1.00594949
COMPUTED ELEVATION FACTOR: 0.99997871
CONVERGENCE 03°36'30"
GA WEST NAD83(2011) ZONE, NAVD (88)
CONTROL INFORMATION ESTABLISHED WITH JAVAD TRIUMPH-LS DUAL-FREQUENCY GPS RECEIVER REFERENCING eGPS VIRTUAL BASE STATION DATA.

DENOTES PAINTED TREES OR FENCE NEAR PROPERTY LINE. LETTER IS CODE BELOW, B NUMBER IS FEET FROM LINE, AND ARROW IS DIRECTION FROM LINE THAT EVIDENCE WAS FOUND.

TP: STEEL TEE POST
B: BLUE PAINT
Y: YELLOW PAINT
R: RED PAINT
W: WHIT'E PAINT
CL: CHAIN LINK
BW: BARBED WIRE
HW: HOG WIRE

LINE LEGEND
- PROPOSED CCR PERMIT BOUNDARY
- EXTER OR GEORGIA POWER PROPERTY
- OVERHEAD POWER
- EASEMENT
- ADJOINING PROPERTY LINE
- ASPHALT PAVEMENT
- EDGE OF DIRT/GRAVEL
- STRUCTURE (AERIAL LOC)
- WIRE FENCE
- CHAIN LINK FENCE
- DRAINAGE PIPE
- 340' CONTOUR-FULL POOL ELEVATION
- WATER

PLAT ABBREVIATIONS

IPF	Iron Pin Found
IPS	Iron Pin Set w/plastic cap stamped "Jordan Engineering Land Surveying RLS 2902"
CTP	Crimp-Top Pipe
OTP	Open Top Pipe
CM	Concrete Monument
AI	Angle Iron
LL	Land Lot
D.B.	Deed Book
P.B.	Plat Book
P.C.	Plat Cabinet
SL	Slide
P.O.B.	Point of Beginning
P.O.C.	Point of Commencement
FEMA	Federal Emergency Management Agency
OHP	Overhead Power
N.T.R.	Not to Scale
GPC	Georgia Power Company
NOF	Now or Formerly

MONUMENTATION LEGEND
- Iron Pin Set w/plastic cap stamped "Jordan Engineering RLS 2902"
- Iron Pin Found
- Monument Set
- Monument Found
- Computed Point
- CP1 Control or Traverse Point
- GB1 Geodetic Control Point
- Benchmark or Temporary Benchmark (TBM)

UTILITY LEGEND
- Well
- Power Pole
- Transmission Tower
- Guy Wire

SURVEY CLOSURE STATEMENT

FIELD DATA WAS COLLECTED USING A LEICA TS12 ROBOTIC TOTAL STATION AND A JAVAD TRIUMPH-LS DUAL FREQUENCY GPS RECEIVER REFERENCING THE eGPS STATEWIDE NETWORK AND HAVING A RELATIVE POSITIONAL ACCURACY OF 0.04 FEET.

THIS PLAT HAS BEEN CALCULATED FOR CLOSURE AND IS FOUND TO BE ACCURATE WITHIN 1 FOOT IN 5,754,262 FEET.

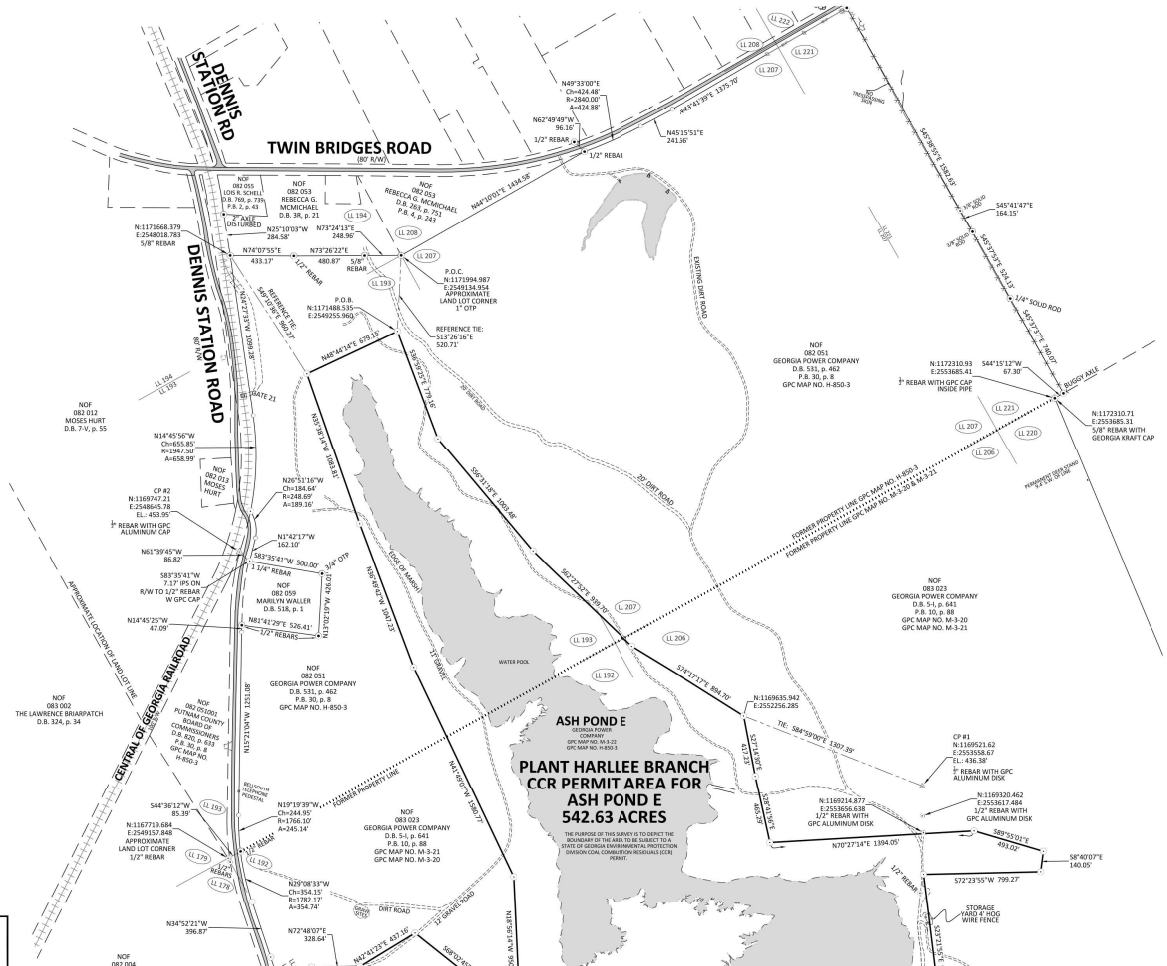
PARENT PARCEL FIELD WORK WAS COMPLETED IN JANUARY, 2018. NEW ASH POND E PARCEL TO BE SET FALL OF 2018.

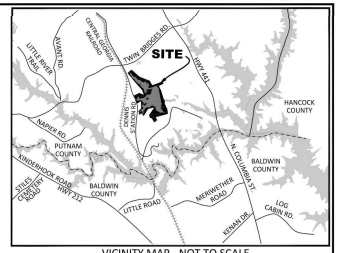
LEGAL DESCRIPTION – PROPOSED CCR PERMIT BOUNDARY FOR ASH POND E

All that parcel lying and being in Land Lots 177, 178, 191-193 and 205-207, District 2, Georgia Militia District 312, Putnam County, Georgia, containing 542.63 acres, as shown on a plat prepared by Hollie S. Hall, Georgia RLS 3368, on August 30, 2018, and being more particularly described as follows:

From the POINT OF COMMENCEMENT, which is a 1" open top pipe at the land lot corner common to land lots 193, 194, 207, and 208, having Georgia State Plane, West Zone, NAD83(2011) coordinates in US survey feet of north 1171994.987 and east 2549134.954, travel S13°26'16"E a distance of 520.71 feet to a ½" rebar set, having Georgia State Plane, West Zone, NAD83(2011) coordinates in US survey feet of north 1171488.535 and east 2549255.960, which is the POINT OF BEGINNING.

From the POINT OF BEGINNING, travel S36°59'25"E a distance of 779.16 feet to a ½" rebar set; thence S56°31'18"E a distance of 1003.48 feet to a ½" rebar set; thence S62°27'52"E a distance of 939.70 feet to a ½" rebar set; thence S74°17'17"E a distance of 894.70 feet to a ½" rebar set, said point having Georgia State Plane, West Zone, NAD83(2011) coordinates in US survey feet of north 1169635.942 and east 2552256.285; thence S37°14'30"E a distance of 417.23 feet to a ½" rebar set; thence S28°41'56"E a distance of 663.29 feet to a ½" rebar set; thence S28°41'56"E a distance of 1394.05 feet to a ½" rebar set; thence S89°55'01"E a distance of 493.02 feet to a ½" rebar set; thence S8°40'07"E a distance of 140.05 feet to a ½" rebar set; thence S72°23'55"W a distance of 799.27 feet to a ½" rebar set on the easterly edge of an existing gravel access road; thence S23°21'55"E a distance of 967.63 feet to a ½" rebar set; thence S16°44'35"E a distance of 1466.21 feet to a ½" rebar set; thence S32°56'05"E a distance of 390.14 feet to a ½" rebar set; thence S20°45'36"W a distance of 512.57 feet to a ½" rebar set; thence S20°45'18"E a distance of 767.95 feet to a ½" rebar set; thence S20°15'11"E a distance of 273.80 feet to a ½" rebar set; thence S6°30'05"E a distance of 707.77 feet to a ½" rebar set; thence S72°05'32"W a distance of 486.99 feet to a ½" rebar set; thence S74°31'23"W a distance of 436.34 feet to a ½" rebar set; thence S76°36'31"W a distance of 1239.85 feet to a ½" rebar set; thence S29°42'51"E a distance of 598.22 feet to a ½" rebar set; thence S55°14'53"W a distance of 543.38 feet to a ½" rebar set, having Georgia State Plane, West Zone, NAD83(2011) coordinates in US survey feet of North: 1162774.018 and east 2553006.716; thence N29°18'03"W a distance of 782.92 feet to a ½" rebar set; thence N83°39'44"W a distance of 271.53 feet to a ½" rebar set; thence N19°13'22"W a distance of 475.61 feet to a ½" rebar set; thence N34°52'19"E a distance of 1462.77 feet to a ½" rebar set; thence N35°00'44"W a distance of 126.24 feet to a ½" rebar set; thence S76°57'21"W a distance of 1027.57 feet to a ½" rebar set; thence S32°05'01"W a distance of 1338.43 feet to a ½" rebar set; thence N41°21'53"W a distance of 608.62 feet to a ½" rebar set; thence S44°40'57"W a distance of 400.87 feet to a ½" rebar set; thence N14°32'42"W a distance of 561.21 feet to a point; thence N46°35'39"E a distance of 605.10 feet to ½" rebar set; thence N0°09'23"W a distance of 1260.17 feet to ½" rebar set, having Georgia State Plane, West Zone, NAD83(2011) coordinates in US survey feet of North 1166264.985 and east 2550860.168; thence S85°18'24"W a distance of 742.69 feet to a ½" rebar set in the corner of an existing gravel access road; thence following said gravel access road the following courses: N22°28'20"W a distance of 133.25 feet to a point; thence N21°27'30"W a distance of 174.68 feet to a point; thence N21°17'19"W a distance of 117.27 feet to a point; thence N17°09'09"W a distance of 94.81 feet to a point; thence N13°29'21"W a distance of 81.27 feet to a point near the west edge of said existing gravel access road; thence N0°38'26"W a distance of 398.52 feet to a ½" rebar set; thence N72°48'07"E a distance of 328.64 feet to ½" rebar set on the north side of an existing 12' gravel access road; thence N42°41'23"E a distance of 437.16 feet to ½" rebar set; thence S68°02'45"E a distance of 911.73 feet to a ½" rebar set, having Georgia State Plane, West Zone, NAD83(2011) coordinates in US survey feet of north 1167244.083 and east 2551367.209; thence N18°56'14"W a distance of 950.82 feet to a ½" rebar set; thence N41°49'01"W a distance of 1580.77 feet to a ½" rebar set; thence N36°49'42"W a distance of 1047.23 feet to a ½" rebar set; thence N35°38'14"W a distance of 1083.81 feet to a ½" rebar set; thence N48°44'14"E a distance of 679.15 feet to the POINT OF BEGINNING.





VICINITY MAP - NOT TO SCALE

SUBJECT PROPERTY INFORMATION

TAX PARCEL:	082 051
CURRENT OWNER:	GEORGIA POWER COMPANY
DEED REFERENCE:	D.B. 531, p. 462
PLAT REFERENCE:	P.B. 30, p. 8, GPC MAP NO. H-850-3
TAX PARCEL:	083 023
CURRENT OWNER:	GEORGIA POWER COMPANY
DEED REFERENCE:	D.B. 5-I, p. 641
PLAT REFERENCE:	P.B. 10, p. 88, GPC MAP NO.M-3-20, GPC MAP NO. M-3-21
TAX PARCEL:	083 021
CURRENT OWNER:	GEORGIA POWER COMPANY
DEED REFERENCE:	D.B. 5M, p. 733
PLAT REFERENCE:	P.B. 26, p. 7, GPC MAP NO. M-3-20, GPC MAP NO. M-3-21
TAX PARCEL:	086 002
CURRENT OWNER:	GEORGIA POWER COMPANY
DEED REFERENCE:	D.B. 3K, p. 510; D.B. 3B, p. 597, D.B. 3E, p. 75, 83, 96
PLAT REFERENCE:	GPC MAP NO. M-3-8, GPC MAP NO M-153, P.B. 2, p. 123
TAX PARCEL:	086 001
CURRENT OWNER:	GEORGIA POWER COMPANY
DEED REFERENCE:	D.B. 554, p. 553, D.B. 623, p. 747
PLAT REFERENCE:	P.B. 26, p. 143, P.B. 28, p. 69-70, P.B. 30, p. 111, P.B. 31, p. 278
TAX PARCEL:	083 020001
CURRENT OWNER:	GEORGIA POWER COMPANY
DEED REFERENCE:	D.B. 26, p. 559; D.B. 414, p. 722
PLAT REFERENCE:	P.B. 29, p. 109, GPC MAP NO. H-921-2

SCALE: 1" = 400'

T:\Working2\Plants\Branch\\20180700047 Plant Branch-Ash Pond E - CCR Permit Boundary Survey.dwg

Georgia Power Company

PROPERTY BOUNDARY SURVEY
PLANT HARLLEE BRANCH
ASH POND E – PROPOSED CCR PERMIT BOUNDARY
LAND LOTS 177,178, 191-193 & 205-207
2nd DISTRICT, 312 G.M.D.
PUTNAM COUNTY, GEORGIA

DR.	TR.	Checked
HSH		ROJ/HSH
SCALE 1" = 400'		DATE 09.10.2018
DRAWING NUMBER P466-8		SHEET NUMBER SHEET 1 OF 2

REVISION BLOCK
APPROVALS

GEORGIA REGISTERED PROFESSIONAL LAND SURVEYOR HOLLIE S. HALL

Corporate License No. LSF 000768

JORDAN ENGINEERING
144 N. WARREN ST. MONTICELLO, GA 31064
(706) 468-8999 www.jordan-eng.com
Engineering Surveying Soils Classification

SURVEYOR'S CERTIFICATION

This plat is a retracement of an existing parcel or parcels of land and does not subdivide or create a new parcel or make any changes to any real property boundaries. The recording information of the documents, maps, plats, or other instruments which created the parcel or parcels are stated hereon or shown in the records of Putnam County. APPROVAL OF ANY LOCAL JURISDICTION, AVAILABILITY OF PERMITS, COMPLIANCE WITH LOCAL REGULATIONS OR REQUIREMENTS, OR SUITABILITY FOR ANY USE OR PURPOSE OF THE LAND. Furthermore, the undersigned land surveyor certifies that this plat complies with the minimum technical standards for property surveys in Georgia as set forth in the rules and regulations of the Georgia Board of Registration for Professional Engineers and Land Surveyors and as set forth in O.C.G.A. Section 15-6-67.

Hollie S. Hall, GA RLS 3368

FOR CLERK'S OFFICE USE

CONTROL	STATE PLANE
CP 1 EL.: 436.38	N 1169521.62 E 2553558.67
CP 2 EL.: 453.95	N 1169747.21 E 2548645.78

COORDINATE SYSTEM INFORMATION TABLE

COORDINATE SYSTEM BASED ON STATE PLANE WEST

AVERAGE ELEVATION: 445.16'
STATE PLANE AVE. SCALE FACTOR: 1.00594949
COMPUTED FACTOR: 0.99997871
CONVERGENCE 03°36'30"
GA WEST NAD83(2011) ZONE, NAVD (88)
CONTROL INFORMATION ESTABLISHED WITH JAVAD TRIUMPH-1S DUAL-FREQUENCY GPS RECEIVER REFERENCING eGPS VIRTUAL BASE STATION DATA.

DENOTES PAINTED TREES OR FENCE NEAR PROPERTY LINE. LETTER IS CODE BELOW. NUMBER IS FEET FROM LINE, AND ARROW IS DIRECTION FROM LINE THAT EVIDENCE WAS FOUND.
B 3

TP: STEEL TEE POST
B: BLUE PAINT
Y: YELLOW PAINT
R: RED PAINT
W: WHITE PAINT
CL: CHAIN LINK
BW: BARBED WIRE
HW: HOG WIRE

LINE LEGEND

- PROPOSED CCR PERMIT BOUNDARY
- EXTERIOR GEORGIA POWER PROPERTY
- OVERHEAD POWER
- EASEMENT
- ADJOINING PROPERTY LINE
- ASPHALT PAVEMENT
- EDGE OF DIRT/GRAVEL
- STRUCTURE (AERIAL LOC)
- WIRE FENCE
- CHAIN LINK FENCE
- DRAINAGE PIPE
- 340' CONTOUR-FULL POOL ELEVATION
- WATER

PLAT ABBREVIATIONS

IPF	Iron Pin Found
IPS	Iron Pin Set w/plastic cap stamped "Jordan Engineering RLS 2902"
CTP	Crimp-Top Pipe
OTP	Open Top Pipe
CM	Concrete Monument
AI	Angle Iron
LL	Land Lot
D.B.	Deed Book
P.B.	Plat Book
P.C.	Plat Cabinet
SL	Slide
P.O.B.	Point of Beginning
P.O.R.	Point of Reference
FEMA	Federal Emergency Management Agency
OHP	Overhead Power
N.T.S.	Not to Scale
GPC	Georgia Power Company
NOF	Now or Formerly

MONUMENTATION LEGEND

- Iron Pin Set w/plastic cap stamped "Jordan Engineering RLS 2902"
- Iron Pin Found
- Monument Set
- Monument Found
- Computed Point
- CP1 Control or Traverse Point
- TR1 Geodetic Control Point
- Benchmark or Temporary Benchmark (TBM)

UTILITY LEGEND

- Well
- Power Pole
- Transmission Tower
- Guy Wire

SURVEY CLOSURE STATEMENT

FIELD DATA WAS COLLECTED USING A LEICA TS12 ROBOTIC TOTAL STATION AND A JAVAD TRIUMPH-1S DUAL FREQUENCY GPS RECEIVER REFERENCING THE eGPS STATEWIDE NETWORK AND HAVING A RELATIVE POSITIONAL ACCURACY OF 0.04 FEET.

THIS PLAT HAS BEEN CALCULATED FOR CLOSURE AND IS FOUND TO BE ACCURATE WITHIN 1 FOOT IN 5,764,262 FEET.

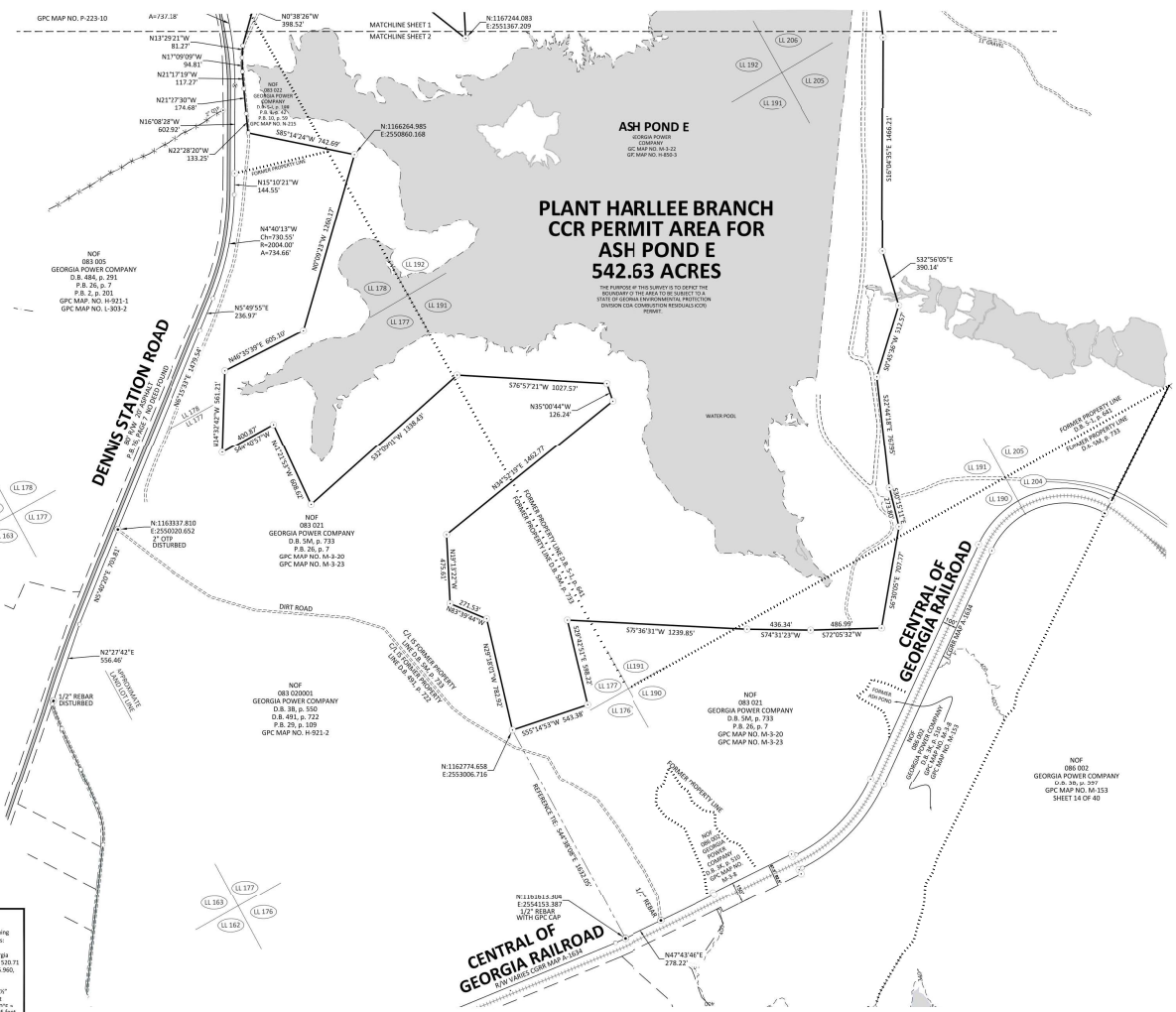
PARENT PARCEL FIELD WORK WAS COMPLETED IN JANUARY, 2018. NEW ASH POND E PARCEL TO BE SET FALL OF 2018.

LEGAL DESCRIPTION – PROPOSED CCR PERMIT BOUNDARY FOR ASH POND E

All that parcel lying and being in Land Lots 177, 178, 191-193 and 205-207, District 2, Georgia Militia District 312, Putnam County, Georgia, containing 542.63 acres, as shown on a plat prepared by Hollie S. Hall, Georgia RLS 3368, on August 30, 2018, and being more particularly described as follows:

From the POINT OF COMMENCEMENT, which is a 1" open top pipe at the land lot corner common to land lots 193, 194, 207, and 208, having Georgia State Plane, West Zone, NAD83(2011) coordinates in US survey feet of north 1171994.987 and east 2549134.954, travel S13°26'16"E a distance of 520.71 feet to a ½" rebar set, having Georgia State Plane, West Zone, NAD83(2011) coordinates in US survey feet of north 1171488.535 and east 2549255.960, which is the POINT OF BEGINNING.

From the POINT OF BEGINNING, travel S36°59'25"E a distance of 779.16 feet to a ½" rebar set; thence S56°31'18"E a distance of 1003.48 feet to a ½" rebar set; thence S62°27'52"E a distance of 939.70 feet to a ½" rebar set; thence S74°17'7"E a distance of 894.70 feet to a ½" rebar set, said point having Georgia State Plane, West Zone, NAD83(2011) coordinates in US survey feet of north 1169835.043 and east 2553256.985; thence S37°14'05"E a distance of 417.25 feet to a ½" rebar set; thence S28°41'58"E a distance of 465.29 feet to a ½" rebar set; thence S28°41'58"E a distance of 1394.05 feet to a ½" rebar set; thence S89°55'01"E a distance of 493.02 feet to a ½" rebar set; thence S8°40'07"E a distance of 140.05 feet to a ½" rebar set; thence S72°23'52"W a distance of 799.27 feet to a ½" rebar set on the easterly edge of an existing gravel access road; thence S23°21'55"E a distance of 967.63 feet to a ½" rebar set; thence S16°34'35"E a distance of 1466.21 feet to a ½" rebar set; thence S32°56'05"E a distance of 390.14 feet to a ½" rebar set; thence S0°45'36"W a distance of 512.57 feet to a ½" rebar set; thence S0°45'36"W a distance of 767.55 feet to a ½" rebar set; thence S30°15'11"E a distance of 273.80 feet to a ½" rebar set; thence S6°30'05"E a distance of 707.77 feet to a ½" rebar set; thence S72°05'32"W a distance of 486.99 feet to a ½" rebar set; thence S74°31'23"W a distance of 436.34 feet to a ½" rebar set; thence S76°36'31"W a distance of 1239.85 feet to a ½" rebar set; thence S29°42'51"E a distance of 598.22 feet to a ½" rebar set; thence S55°14'53"W a distance of 543.38 feet to a ½" rebar set, having Georgia State Plane, West Zone, NAD83(2011) coordinates in US survey feet of North: 1162774.658 and east 2553006.716; thence N29°18'01"W a distance of 782.92 feet to a ½" rebar set; thence N83°39'44"W a distance of 271.53 feet to a ½" rebar set; thence N19°13'22"W a distance of 475.61 feet to a ½" rebar set; thence N34°52'19"E a distance of 1462.77 feet to a ½" rebar set; thence N35°00'44"W a distance of 126.24 feet to a ½" rebar set; thence S76°57'21"W a distance of 1027.57 feet to a ½" rebar set; thence S32°05'03"W a distance of 1338.43 feet to a ½" rebar set; thence N41°21'53"W a distance of 608.62 feet to a ½" rebar set; thence S44°45'57"W a distance of 400.87 feet to a ½" rebar set; thence N14°32'42"W a distance of 561.21 feet to a point; thence N46°35'39"E a distance of 605.10 feet to ½" rebar set; thence N0°09'23"W a distance of 1260.17 feet to ½" rebar set, having Georgia State Plane, West Zone, NAD83(2011) coordinates in US survey feet of North: 1166264.985 and east 2550860.168; thence S85°14'24"W a distance of 742.69 feet to a ½" rebar set; thence N15°10'21"W a distance of 144.55 feet to a ½" rebar set; thence N22°28'20"W a distance of 133.25 feet to a point; thence N13°29'21"W a distance of 81.27 feet to a point; thence N17°09'09"W a distance of 94.81 feet to a point; thence N13°29'21"W a distance of 81.27 feet to a point near the west edge of said existing gravel access road; thence N0°38'26"W a distance of 398.52 feet to a ½" rebar set; thence N72°48'07"E a distance of 328.84 feet to ½" rebar set on the north side of an existing 12' gravel access road; thence N42°41'23"E a distance of 437.16 feet to ½" rebar set; thence S68°02'45"E a distance of 911.73 feet to a ½" rebar set, having Georgia State Plane, West Zone, NAD83(2011) coordinates in US survey feet of north 1167244.083 and east 2551367.209; thence N18°56'14"W a distance of 950.82 feet to a ½" rebar set; thence N41°40'01"W a distance of 1580.77 feet to a ½" rebar set; thence N35°49'42"W a distance of 1047.23 feet to a ½" rebar set; thence N35°38'14"W a distance of 1083.81 feet to a ½" rebar set; thence N48°44'14"E a distance of 679.15 feet to the POINT OF BEGINNING.


GPC MAP NO. P-223-10
MATCHLINE SHEET 1
MATCHLINE SHEET 2
N:1167244.083
E:2551367.209
N:1166264.985
E:2550860.168
ASH POND E
GEORGIA POWER COMPANY
GPC MAP NO. M-3-22
GPC MAP NO. H-850-3
PLANT HARLLEE BRANCH
CCR PERMIT AREA FOR
ASH POND E
542.63 ACRES
THE PURPOSE IF THIS SURVEY IS TO DEPICT THE BOUNDARY OF THE AREA TO BE SUBJECT TO A STATE OF GEORGIA ENVIRONMENTAL PROTECTION DIVISION COA COMBUSTION RESIDUALS (CCR) PERMIT.
DENNIS STATION ROAD
NOF
083 005
GEORGIA POWER COMPANY
D.B. 484, p. 291
P.B. 26, p. 7
P.B. 2, p. 201
GPC MAP. NO. H-921-1
GPC MAP NO. L-303-2
NOF
083 021
GEORGIA POWER COMPANY
D.B. 5M, p. 733
P.B. 26, p. 7
GPC MAP NO. M-3-20
GPC MAP NO. M-3-23
NOF
083 020001
GEORGIA POWER COMPANY
D.B. 38, p. 550
D.B. 491, p. 722
P.B. 29, p. 109
GPC MAP NO. H-921-2
NOF
086 002
GEORGIA POWER COMPANY
D.B. 36, p. 597
GPC MAP NO. M-3-153
SHEET 14 OF 40
CENTRAL OF GEORGIA RAILROAD
DIRT ROAD
WATER POOL
N:1163337.810
E:2550320.652
2" OTP
DISTURBED
N:1162774.658
E:2553006.716
N:1169515.508
E:2554153.387
1/2" REBAR
WITH GPC CAP
N47°43'46"E
278.22'
REFERENCE TIE - SAP-BEFORE 1432.05'
1/2" REBAR DISTURBED
N2°27'42"E
556.46'
APPROXIMATE LAND LOT LINE
N0°40'01" 703.81'
N0°09'23"W 1260.17'
N46°35'39"E 605.10'
N14°32'42"W 561.21'
N44°40'13"W
Ch=730.55'
R=2004.00'
A=734.66'
N15°10'21"W
144.55'
N22°28'20"W
133.25'
N16°08'28"W
602.92'
N13°29'21"W
81.27'
N17°09'09"W
94.81'
N21°17'19"W
117.27'
N21°27'30"W
174.68'
N0°38'26"W
398.52'
S85°14'24"W 742.69'
S68°02'45"E 911.73'
S32°56'05"E
390.14'
S16°34'35"E 1466.21'
S23°21'55"E 967.63'
S72°23'52"W 799.27'
S8°40'07"E 140.05'
S89°55'01"E 493.02'
S28°41'58"E 1394.05'
S28°41'58"E 465.29'
S37°14'05"E 417.25'
S62°27'52"E 939.70'
S74°17'7"E 894.70'
S56°31'18"E 1003.48'
S36°59'25"E 779.16'
S13°26'16"E 520.71'
N41°40'01"W 1580.77'
N35°49'42"W 1047.23'
N35°38'14"W 1083.81'
N48°44'14"E 679.15'
N18°56'14"W 950.82'
N72°48'07"E 328.84'
N42°41'23"E 437.16'
S44°45'57"W 400.87'
N76°57'21"W 1027.57'
N35°00'44"W
126.24'
N34°52'19"E 1462.77'
N32°05'03"W 1338.43'
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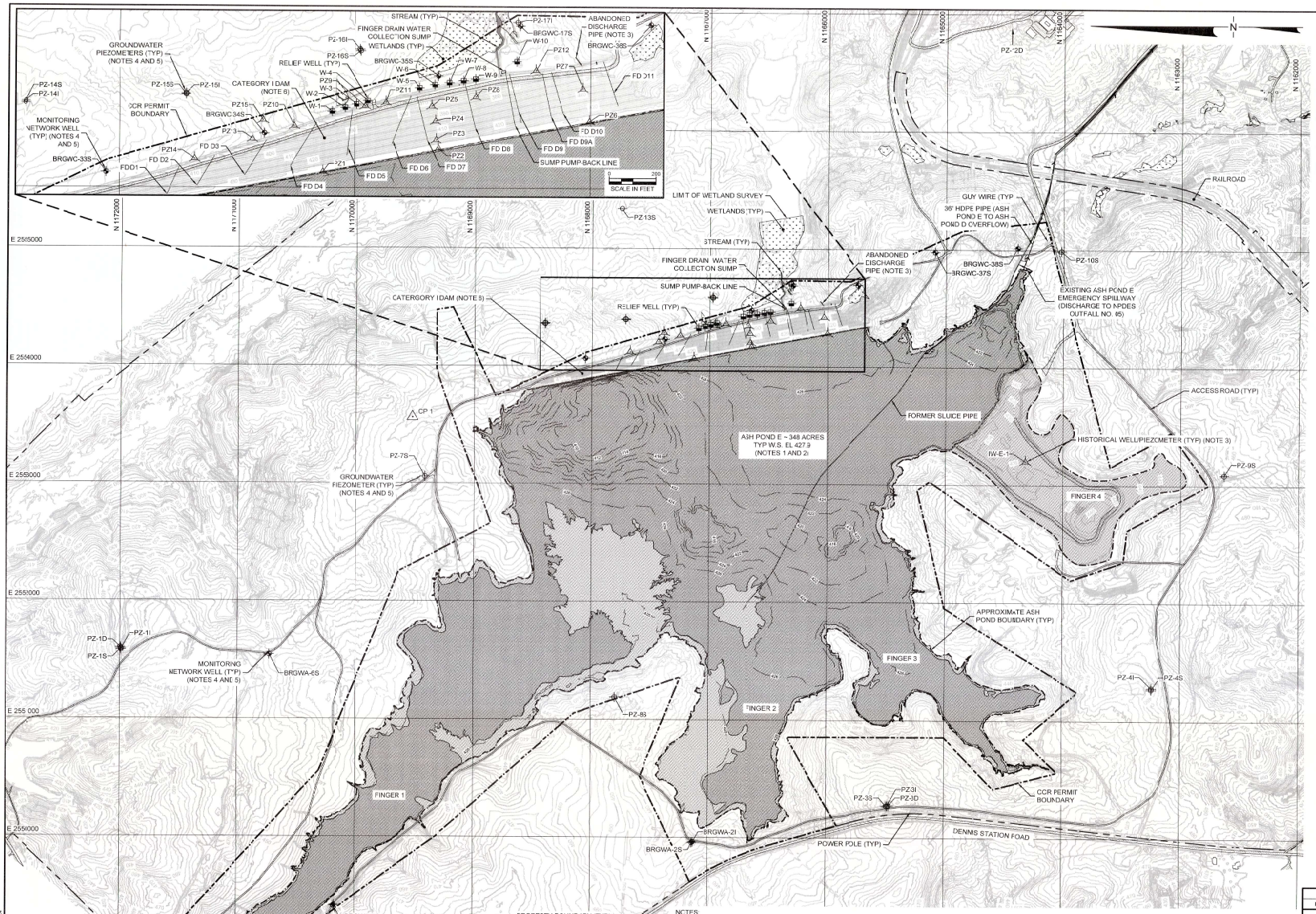
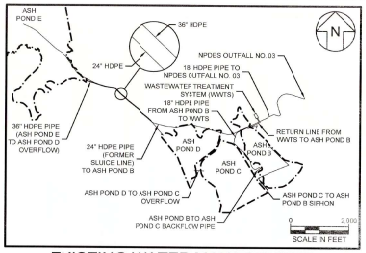
S74°31'23"W 436.34'
S72°05'32"W 486.99'
S6°30'05"E 707.77'
S30°15'11"E 273.80'
S0°45'36"W 767.55'
S0°45'36"W 512.57'
N19°13'22"W 475.61'
N83°39'44"W 271.53'
N29°18'01"W 782.92'
S50°14'53"W 543.38





EXISTING WATER MANAGEMENT INFRASTRUCTURE KEY MAP

SCALE: 1" = 2,000'

LEGEND

- EXISTING CCR AREA
- FREE WATER SURFACE WITHIN LIMITS OF ASH POND

MONITORING NETWORK WELLS AND GROUNDWATER PIEZOMETERS (NOTES 4 AND 5)		
MONITORING NETWORK WELL ID	**NORTHING**	**EASTING**
BRGWA-2I	1167190.82	2549962.18
BRGWA-2S	1167189.15	2549956.71
BRGWA-5I	1170192.46	2549410.36
BRGWA-5S	1170194.84	2549416.21
BRGWA-6S	1170791.13	2551543.35
BRGWC-17S	1166228.59	2554688.17
BRGWC-33S	1168036.81	2554063.16
BRGWC-34S	1167313.97	2554230.13
BRGWC-35S	1166615.80	2554475.19
BRGWC-36S	1165713.30	2554694.19
BRGWC-37S	1165092.09	2554978.10
BRGWC-38S	1164391.62	2555015.42
GROUNDWATER PIEZOMETER D	**NORTHING**	**EASTING**
PZ-1S	1171991.84	2551588.97
PZ-1I	1171991.05	2551581.03
PZ-1D	1171995.93	2551599.03
PZ-3S	1165492.06	2550273.07
PZ-3I	1165491.88	2550274.07
PZ-3D	1165492.07	2550275.07
PZ-4S	1163296.89	2551271.07
PZ-4I	1163295.89	2551283.91
PZ-7S	1169496.06	2553055.57
PZ-8S	1167797.92	2551188.17
PZ-9S	1162691.91	2553089.65
PZ-10S	1164000.10	2554991.05
PZ-12D	1164390.03	2557135.57
PZ-13S	1168090.11	2555277.57
PZ-14S	1168398.95	2554358.00
PZ-14I	1168396.82	2554365.05
PZ-15S	1167795.89	2554395.01
PZ-15I	1167795.92	2554398.59
PZ-16S	1166995.08	2554580.85
PZ-16I	1166998.05	2554587.86
PZ-17I	1166390.91	2554703.08

0 400 800
SCALE IN FEET

NOTES:

1. WATER SURFACE ELEVATION AND BATHYMETRIC CONTOURS WITHIN THE ASH POND WERE OBTAINED FROM ELECTRONIC FILES PROVIDED BY GEORGIA POWER COMPANY DATED 4 JUNE 2017. WATER SURFACE ELEVATION MAY FLUCTUATE WITH SEASONAL VARIATIONS.
2. ACREAGE PRESENTED WITHIN THE ASH POND REPRESENTS THE AREA WITHIN THE APPROXIMATE ASH POND BOUNDARY.
3. LOCATIONS OF THE SUMP, ABANDONED DISCHARGE PIPE, HISTORICAL WELLS AND PIEZOMETERS, AND FINGER DRAINS WERE APPROXIMATED FROM THE "PLANT BRANCH CCR SURFACE IMPOUNDMENT PIPE AND PENETRATION REPORT" PREPARED BY SOUTHERN COMPANY SERVICES AND DATED 23 JANUARY 2018.
4. MONITORING NETWORK WELL AND GROUNDWATER PIEZOMETER COORDINATES WERE OBTAINED FROM A REPORT BY GOLDER ASSOCIATES TITLED "GROUNDWATER MONITORING PLAN PLANT BRANCH ASH POND E" DATED NOVEMBER 2018.
5. MONITORING NETWORK WELLS ARE USED TO COLLECT ANALYTICAL SAMPLES AND MEASURE GROUNDWATER LEVELS WHEREAS GROUNDWATER PIEZOMETERS ARE ONLY USED TO MEASURE GROUNDWATER LEVELS.
6. THE DIKE OF ASH POND E IS A CATEGORY I DAM REGULATED BY GAEPD SAFE DAMS PROGRAM (SDP); STATE IDENTIFICATION NUMBER 117-322-02355.

GEORGIA REGISTERED PROFESSIONAL ENGINEER
11/13/2018

Georgia Power

PERMIT DRAWINGS
NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION	DRN	APP
0	11.09.18	PERMIT DRAWINGS FOR GAEPD SUBMITTAL	JJA/SRN	M

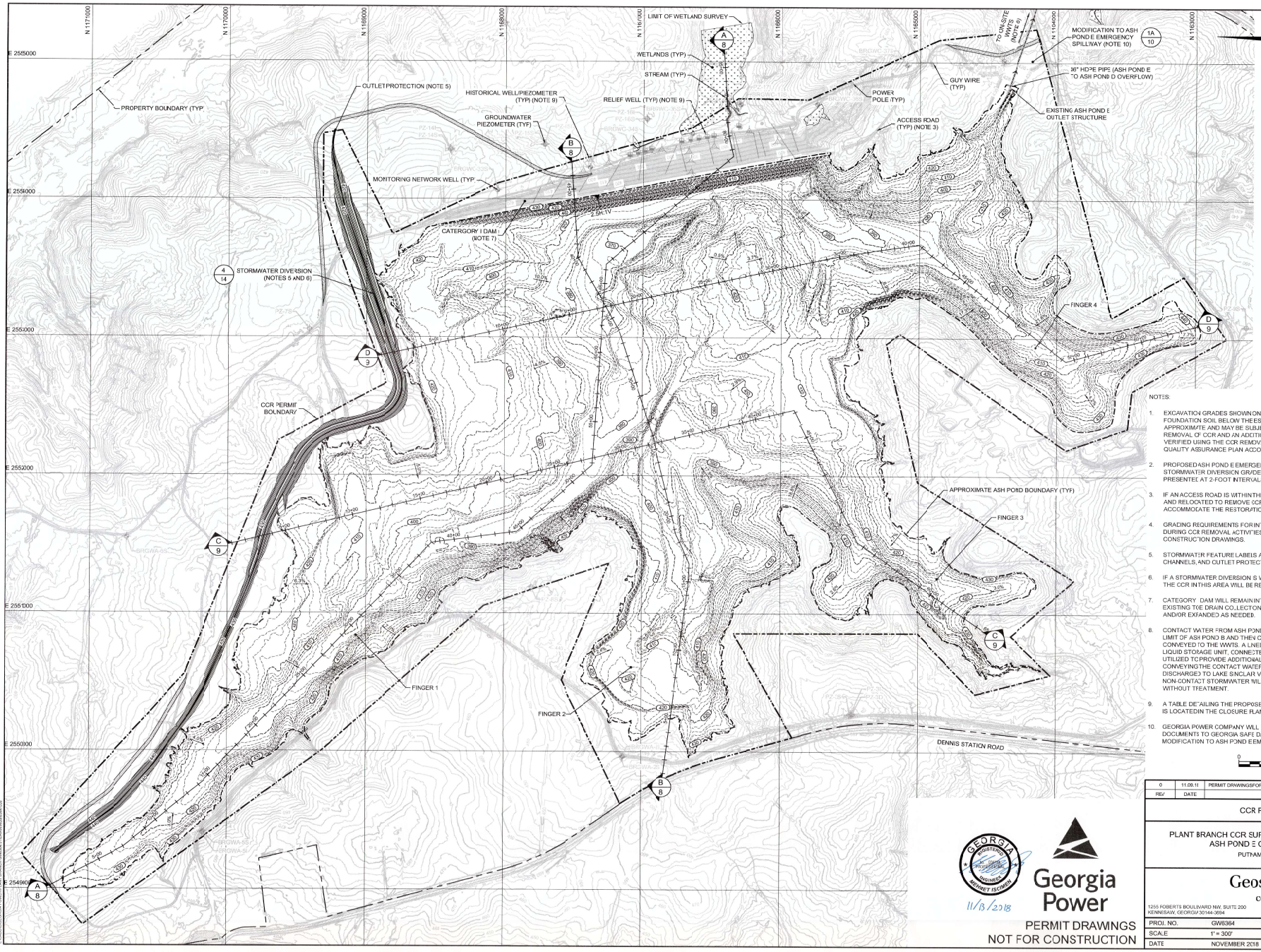
EXISTING SITE CONDITIONS

PLANT BRANCH CCR SURFACE IMPOUNDMENT CLOSURES
ASH POND E CLOSURE-BY-REMOVAL
PUTNAM COUNTY, GEORGIA

Geosyntec consultants
1255 ROBERTS BOULEVARD NW, SUITE 200
KENNESAW, GEORGIA 30144-3694
PHONE: 678.202.1500
WWW.GEOSYNTEC.COM

PROJ. NO.	GW6364	DWG. 6364-004	EDIT 1.09.18
SCALE	AS SHOWN	DRAWING 5 OF 15	
DATE	NOVEMBER 2018		

C:\CADD\GEORGIA POWER\PLANT BRANCH\PLANT BRANCH ASH POND E\PLANT BRANCH ASH POND E.DWG



NOTES:

1. EXCAVATION GRADES SHOWN ON THIS DRAWING DEPICT REMOVAL OF 6 INCHES OF FOUNDATION SOIL BELOW THE ESTIMATED BOTTOM OF CCR. GRADES SHOWN ARE APPROXIMATE AND MAY BE SUBJECT TO CHANGE BASED ON FIELD CONDITIONS. REMOVAL OF CCR AND AN ADDITIONAL 6 INCHES OF THE FOUNDATION SOIL WILL BE VERIFIED USING THE CCR REMOVAL CRITERIA DESCRIBED IN THE CONSTRUCTION QUALITY ASSURANCE PLAN ACCOMPANYING THIS PERMIT APPLICATION.
2. PROPOSED ASH POND E EMERGENCY SPILLWAY GRADES, EXCAVATION GRADES STORMWATER DIVERSION GRADES, AND EXISTING GROUND GRADES ARE PRESENTED AT 2-FOOT INTERVALS FOR CLARITY.
3. IF AN ACCESS ROAD IS WITHIN THE ASH POND BOUNDARY, IT WILL BE REMOVED AND RELOCATED TO REMOVE CCR PRESENT BENEATH IT AND/OR TO ACCOMMODATE THE RESTORATION GRADES.
4. GRADING REQUIREMENTS FOR INTERIM CUT SLOPES TO MAINTAIN STABILITY DURING CCR REMOVAL ACTIVITIES WILL BE ESTABLISHED AS PART OF THE CONSTRUCTION DRAWINGS.
5. STORMWATER FEATURE LABELS ASSOCIATED WITH STORMWATER DIVERSIONS, CHANNELS, AND OUTLET PROTECTION ARE SHOWN ON DRAWING 13.
6. IF A STORMWATER DIVERSION IS WITHIN THE APPROXIMATE ASH POND BOUNDARY, THE CCR IN THIS AREA WILL BE REMOVED TO ACCOMMODATE THE FINAL GRADES.
7. CATEGORY I DAM WILL REMAIN INTACT (UNDISTURBED) DURING CCR REMOVAL. EXISTING TOE DRAIN COLLECTION SYSTEM FOR ASH POND E DIKE MAY BE MODIFIED AND/OR EXPANDED AS NEEDED.
8. CONTACT WATER FROM ASH POND E WILL EITHER BE DIVERTED TO WITHIN THE LIMIT OF ASH POND B AND THEN CONVEYED TO AN ON-SITE WWTS OR DIRECTLY CONVEYED TO THE WWTS. A LINED ECONO-TANK OR SIMILAR LINED TEMPORARY LIQUID STORAGE UNIT, CONNECTED BETWEEN ASH POND B AND THE WWTS, MAY BE UTILIZED TO PROVIDE ADDITIONAL STORAGE CAPACITY TO ASH POND B BEFORE CONVEYING THE CONTACT WATER TO THE WWTS. TREATED WATER WILL BE DISCHARGED TO LAKE SINCLAIR VIA NPDES OUTFALL NUMBER 03. DIVERTED NON-CONTACT STORMWATER WILL BE DISCHARGED TO RECEIVING WATER BODIES WITHOUT TREATMENT.
9. A TABLE DETAILING THE PROPOSED DISPOSITION OF ASH POND INFRASTRUCTURE IS LOCATED IN THE CLOSURE PLAN ACCOMPANYING THIS PERMIT APPLICATION.
10. GEORGIA POWER COMPANY WILL PROVIDE NOTIFICATION AND NECESSARY DESIGN DOCUMENTS TO GEORGIA SAFE DAMS PROGRAM AT LEAST ONE YEAR PRIOR TO MODIFICATION TO ASH POND E EMERGENCY SPILLWAY.

0 300 600
SCALE IN FEET

REV	DATE	DESCRIPTION	DRN	A/P
0	11.09.18	PERMIT DRAWINGS FOR GA EPD SUBMITTAL	JJA/SRN	MI

CCR REMOVAL PLAN

PLANT BRANCH CCR SURFACE IMPOUNDMENT CLOSURES
ASH POND E CLOSURE-BY-REMOVAL
PUTNAM COUNTY GEORGIA

GEORGIA REGISTERED PROFESSIONAL ENGINEER MERRET ISCOMBE
11/13/2018

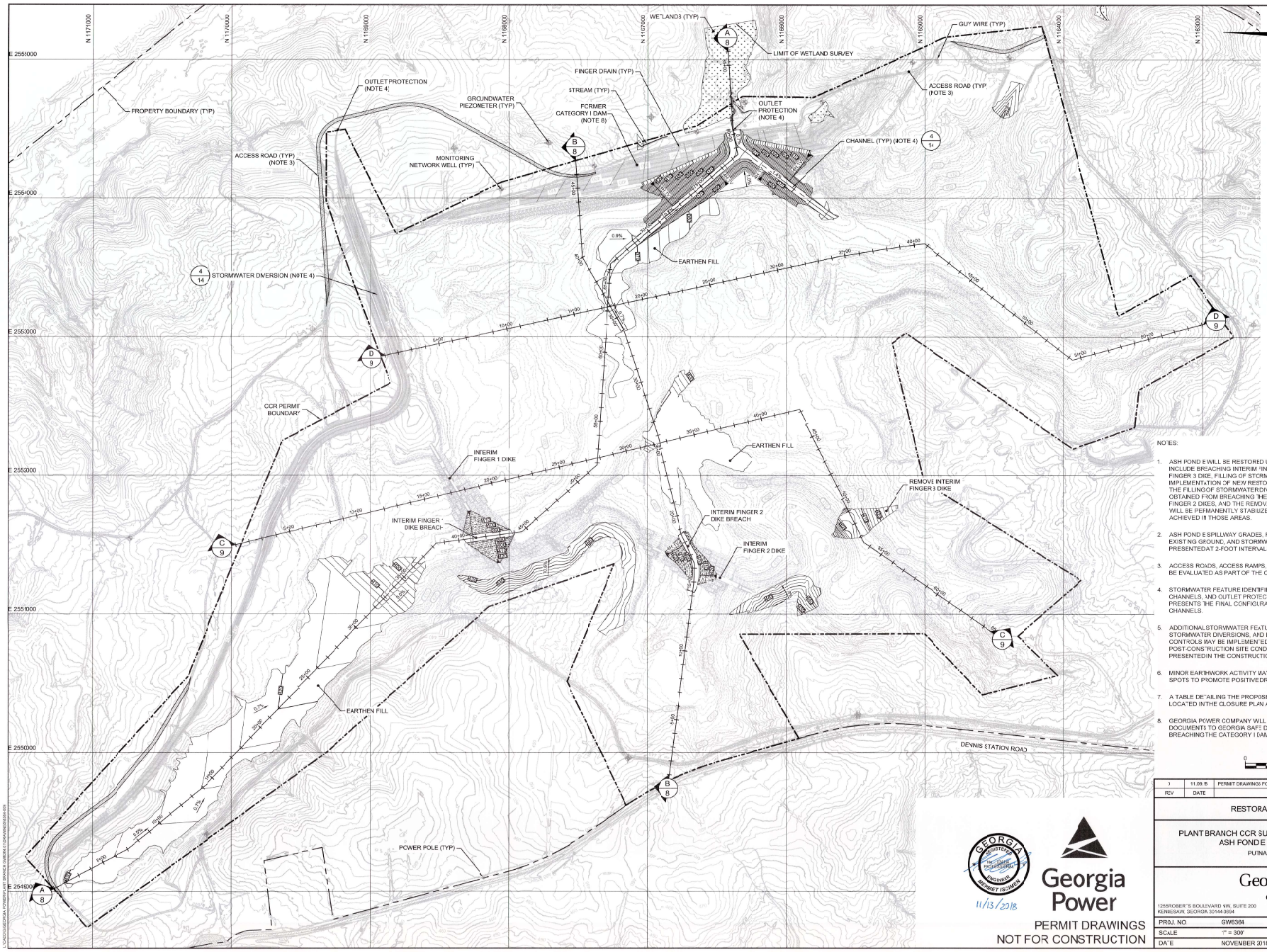
Georgia Power

PERMIT DRAWINGS
NOT FOR CONSTRUCTION

Geosyntec consultants
1255 ROBERTS BOULEVARD NW, SUITE 200
KENNESAW, GEORGIA 30144-3694
PHONE: 678.202.3500
WWW.GEOSYNTEC.COM

PROJ. NO.	GW6364	DWG. 6364-005	EDIT 11.09.18
SCALE	1" = 300'	DRAWING 6 OF 15	
DATE	NOVEMBER 2018		

I:\GA\DWG\GEORGIA POWER\PLANT BRANCH\DRAWING 11\DRAWINGS\6364-005



NOTES:

1. ASH POND E WILL BE RESTORED UPON COMPLETION OF CCR EXCAVATION TO INCLUDE BREACHING INTERIM FINGER 1 AND FINGER 2 DIKES, REMOVAL OF INTERIM FINGER 3 DIKE, FILLING OF STORMWATER DIVERSIONS (2A, 2B, AND 3A), AND IMPLEMENTATION OF NEW RESTORATION GRADES. NEW RESTORATION GRADES AND THE FILLING OF STORMWATER DIVERSIONS WILL BE ACHIEVED USING EARTHEN FILL OBTAINED FROM BREACHING THE CATEGORY I DAM AND INTERIM FINGER 1 AND FINGER 2 DIKES, AND THE REMOVAL OF INTERIM FINGER 3 DIKE. RESTORED AREAS WILL BE PERMANENTLY STABILIZED IN STAGES ONCE FINAL GRADES HAVE BEEN ACHIEVED IN THOSE AREAS.
2. ASH POND E SPILLWAY GRADES, RESTORATION GRADES, EXCAVATION GRADES, EXISTING GROUND, AND STORMWATER DIVERSION SURFACE GRADES ARE PRESENTED AT 2-FOOT INTERVALS FOR CLARITY.
3. ACCESS ROADS, ACCESS RAMPS, AND ASSOCIATED STORMWATER FEATURES WILL BE EVALUATED AS PART OF THE CONSTRUCTION DRAWINGS.
4. STORMWATER FEATURE IDENTIFIERS ASSOCIATED WITH STORMWATER DIVERSIONS, CHANNELS, AND OUTLET PROTECTION ARE SHOWN ON DRAWING 13. THIS DRAWING PRESENTS THE FINAL CONFIGURATION OF STORMWATER DIVERSIONS AND CHANNELS.
5. ADDITIONAL STORMWATER FEATURES (E.G. BERMS, CHANNELS, BENCHES STORMWATER DIVERSIONS, AND DOWNCHUTES) AND EROSION AND SEDIMENT CONTROLS MAY BE IMPLEMENTED FOR THE CONSTRUCTION AND POST-CONSTRUCTION SITE CONDITIONS. THE FEATURES AND CONTROLS WILL BE PRESENTED IN THE CONSTRUCTION DRAWINGS.
6. MINOR EARTHWORK ACTIVITY MAY BE PERFORMED IN LOCALIZED LOW OR STEEP SPOTS TO PROMOTE POSITIVE DRAINAGE AND MINIMIZE EROSION.
7. A TABLE DETAILING THE PROPOSED DISPOSITION OF ASH POND INFRASTRUCTURE IS LOCATED IN THE CLOSURE PLAN ACCOMPANYING THIS PERMIT APPLICATION.
8. GEORGIA POWER COMPANY WILL PROVIDE NOTIFICATION AND NECESSARY DESIGN DOCUMENTS TO GEORGIA SAFE DAMS PROGRAM AT LEAST ONE YEAR PRIOR TO BREACHING THE CATEGORY I DAM.

0 300 600
SCALE IN FEET

REV	DATE	DESCRIPTION	DRN	APP
0	11.09.18	PERMIT DRAWINGS FOR GA EPD SUBMITTAL	JJA/SRB	ME

GEORGIA REGISTERED PROFESSIONAL ENGINEER No. 33316 MEHMET ISDINER
11/13/2018

Georgia Power

PERMIT DRAWINGS
NOT FOR CONSTRUCTION

RESTORATION GRADING PLAN

PLANT BRANCH CCR SURFACE IMPOUNDMENT CLOSURES
ASH POND E CLOSURE-BY-REMOVAL
PUTNAM COUNTY, GEORGIA

Geosyntec consultants
1255 ROBERTS BOULEVARD NW, SUITE 200
KENNESAW, GEORGIA 30144-3594
PHONE: 678.202.9500
WWW.GEOSYNTEC.COM

PROJ. NO	GW6364	DWG. 6364-006	EDIT 11.09.18
SCALE	1" = 300'	DRAWING 7 OF 15	
DATE	NOVEMBER 2018		

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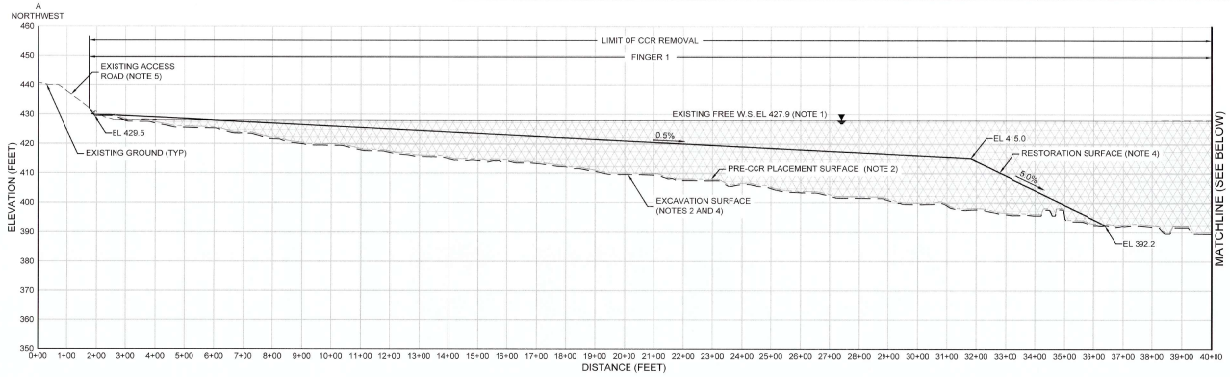
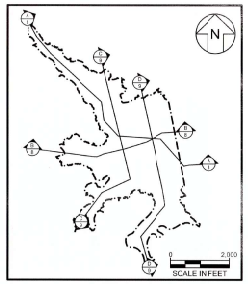
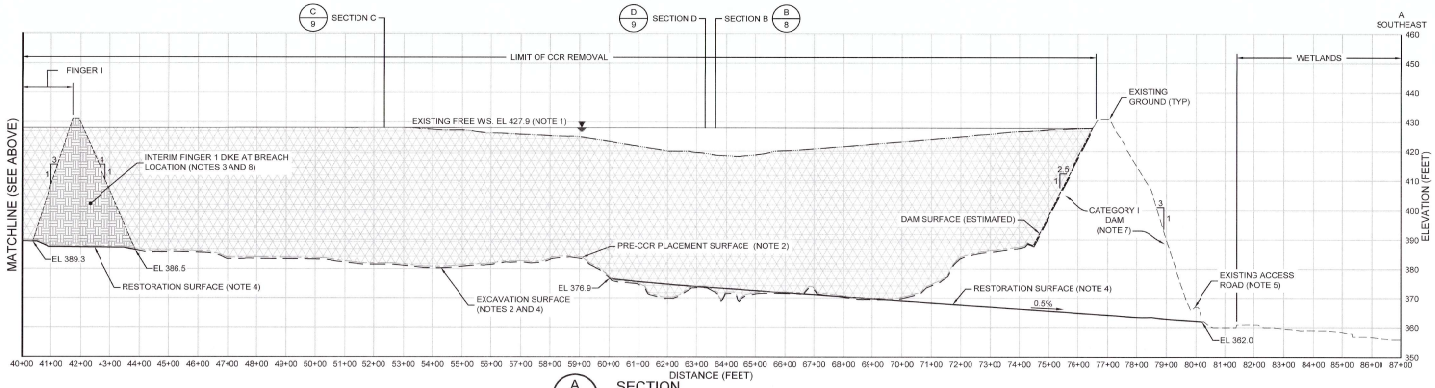




KEY MAP

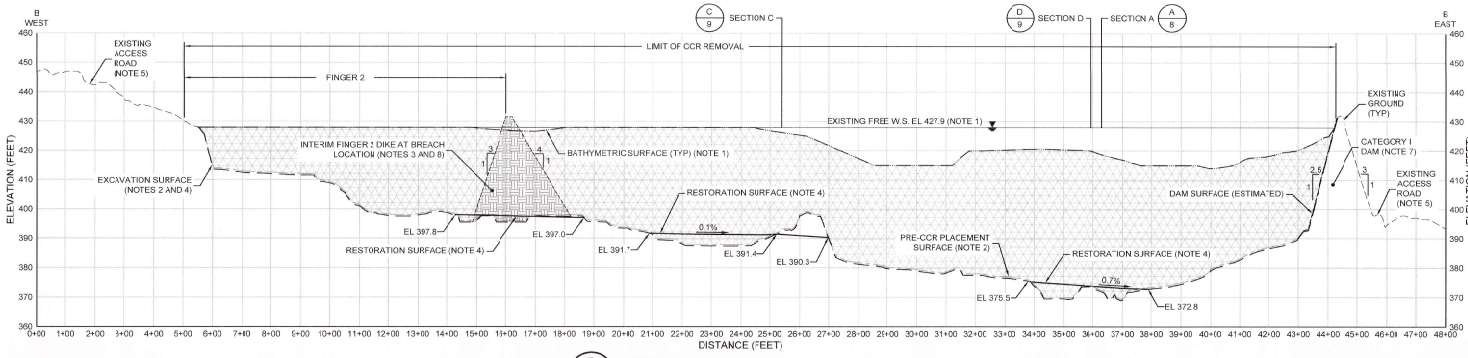
SCALE: 1" = 2,000'



A 6 SECTION

NORTHWEST - SOUTHEAST

SCALE: 1" = 200' (HORIZONTAL); 1" = 20' (VERTICAL)



B 6 SECTION

WEST - EAST

SCALE: 1" = 200' (HORIZONTAL); 1" = 20' (VERTICAL)

NOTES:

1. EXISTING FREE WATER SURFACE AND BATHYMETRIC SURFACE ELEVATIONS PERTAIN TO EXISTING SITE CONDITIONS AS SHOWN ON DRAWING 5. THIS INFORMATION WAS OBTAINED FROM ELECTRONIC FILES PROVIDED BY GEORGIA POWER COMPANY DATED JUNE 2017.

2. EXCAVATION GRADES SHOWN ON THIS DRAWING DEPICT REMOVAL OF 6 INCHES OF FOUNDATION SOIL BELOW THE ESTIMATED BOTTOM OF CCR. GRADES SHOWN ARE APPROXIMATE AND MAY BE SUBJECT TO CHANGE BASED ON FIELD CONDITIONS. REMOVAL OF CCR AND AN ADDITIONAL 6 INCHES OF THE FOUNDATION SOIL WILL BE VERIFIED USING THE CCR REMOVAL CRITERIA DESCRIBED IN THE CONSTRUCTION QUALITY ASSURANCE PLAN ACCOMPANYING THIS PERMIT APPLICATION.

3. INTERIM DIKES IN FINGERS 1, 2, AND 3 WILL BE CONSTRUCTED USING EARTHEN FILL OBTAINED FROM EXCAVATION OF STORMWATER DIVERSIONS AND BORROW AREAS. INTERIM DIKES AND STORMWATER DIVERSIONS ARE SHOWN ON DRAWINGS 10 AND 11. INTERIM FINGER DIKES 1, 2, AND 3 WILL BE CLASSIFIED AS CATEGORY II DAMS AND A COMPLETED DAM INVENTORY AND CLASSIFICATION FORM WILL BE SUBMITTED TO GEORGIA SAFE DAMS PROGRAM PRIOR TO CONSTRUCTION OF DIKES.

4. RESTORATION SURFACE WILL BE CONSTRUCTED USING EARTHEN FILL OBTAINED FROM BREACHING INTERIM FINGER 1 AND FINGER 2 DIKES AND THE CATEGORY I DAM, AND REMOVAL OF INTERIM FINGER 3 DIKE. ADDITIONALLY, AREAS OF THE EXCAVATION SURFACE THAT DO NOT REQUIRE EARTHWORK ACTIVITIES WILL REMAIN UNCHANGED AS PART OF THE RESTORATION GRADING.

5. EXISTING ACCESS ROAD LABELS REPRESENT THE CENTERLINE OF THE ROADS OBTAINED FROM ELECTRONIC FILES PROVIDED BY GEORGIA POWER COMPANY DATED JUNE 2017. IF AN ACCESS ROAD IS LOCATED WITHIN THE APPROXIMATE ASH POND BOUNDARY, IT WILL BE REMOVED AND RELOCATED TO REMOVE CCR PRESENT BENEATH IT AND/OR TO ACCOMMODATE THE RESTORATION GRADES. ACCESS ROADS WILL BE EVALUATED AS PART OF THE CONSTRUCTION DRAWINGS.

6. GRADING REQUIREMENTS FOR INTERIM CUT SLOPES TO MAINTAIN STABILITY DURING CCR REMOVAL ACTIVITIES WILL BE ESTABLISHED AS PART OF THE CONSTRUCTION DRAWINGS.

7. CATEGORY I DAM WILL REMAIN INTACT (UNDISTURBED) DURING CCR REMOVAL. EXISTING FINGER DRAIN AND SUMP SYSTEMS FOR ASH POND EDIKE MAY BE MODIFIED AND/OR EXPANDED AS NEEDED.

8. AN ADEQUATE SEPARATION (E.G., 100 FEET) FROM THE TOE OF THE INTERIM FINGER DIKES TO CCR WILL BE ESTABLISHED FOR CONSTRUCTION OF THE FINGER DIKES. METHODS TO SEPARATE CCR FROM THE INTERIM FINGER DIKE CONSTRUCTION AREAS WILL BE EVALUATED AS PART OF THE CONSTRUCTION DRAWINGS AND MAY INCLUDE ENGINEERING MEASURES SUCH AS LAYBACK SLOPES, SHEET PILES, GEOMEMBRANE LINERS, AND DEWATERING WELLS/TRENCHES.

0 200 400

SCALE IN FEET (HORIZONTAL)

0 20 40

SCALE IN FEET (VERTICAL)

GEORGIA REGISTERED PROFESSIONAL ENGINEER No. 24802 MEHMET ISCIMEN

11/13/2018

Georgia Power

PERMIT DRAWINGS
NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION	DRN	APP
1	11.09.18	PERMIT DRAWINGS FOR GA EPD SUBMITTAL	JJA/SRB	MI

SITE CROSS SECTIONS

PLANT BRANCH CCR SURFACE IMPOUNDMENT CLOSURES
ASH POND E CLOSURE-BY-REMOVAL
PUTNAM COUNTY, GEORGIA

Geosyntec consultants

1255 ROBERTS BOULEVARD NW, SUITE 200
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PHONE: 678.200.9500
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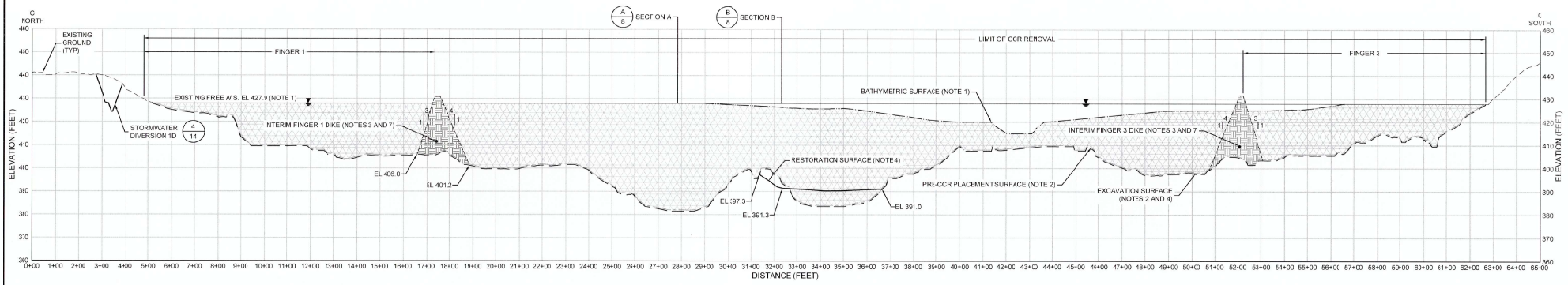
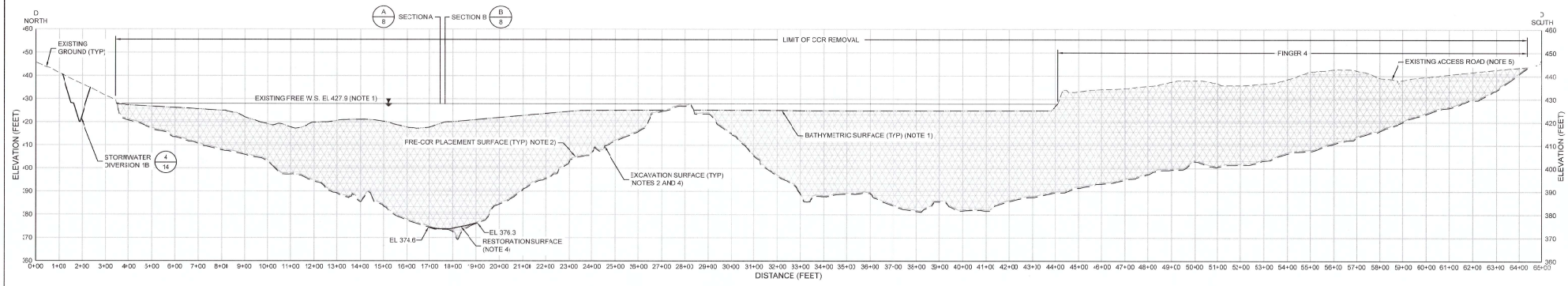
PROJ. NO.	GW6364	DWG. 6364-015	EDIT 11.09.18
SCALE	AS SHOWN	DRAWING 8 OF 15	
DATE	NOVEMBER 2018		

I:\GA\GW\GW6364 PLANT BRANCH CWS\GW6364 CWS\DRAWINGS\6364-015



C 6 SECTION
NORTH - SOUTH
SCALE: 1" = 200' (HORIZONTAL); 1" = 20' (VERTICAL)



D 6 SECTION
NORTH - SOUTH
SCALE: 1" = 200' (HORIZONTAL); 1" = 20' (VERTICAL)

NOTES:

1. EXISTING FREE WATER SURFACE AND BATHYMETRIC SURFACE ELEVATIONS PERTAIN TO EXISTING SITE CONDITIONS AS SHOWN ON DRAWING 5. THIS INFORMATION WAS OBTAINED FROM ELECTRONIC FILES PROVIDED BY GEORGIA POWER COMPANY DATED 4 JUNE 2017.

2. EXCAVATION GRADES SHOWN ON THIS DRAWING DEPICT REMOVAL OF 6 INCHES OF FOUNDATION SOIL BELOW THE ESTIMATED BOTTOM OF CCR. GRADES SHOWN ARE APPROXIMATE AND MAY BE SUBJECT TO CHANGE BASED ON FIELD CONDITIONS. REMOVAL OF CCR AND AN ADDITIONAL 6 INCHES OF THE FOUNDATION SOIL WILL BE VERIFIED USING THE CCR REMOVAL CRITERIA DESCRIBED IN THE CONSTRUCTION QUALITY ASSURANCE PLAN ACCOMPANYING THIS PERMIT APPLICATION.

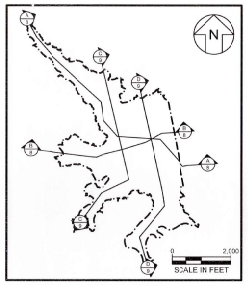
3. INTERIM DIKES IN FINGERS 1, 2, AND 3 WILL BE CONSTRUCTED USING EARTHEN FILL OBTAINED FROM EXCAVATION OF STORMWATER DIVERSIONS AND BORROW AREAS. INTERIM DIKES AND STORMWATER DIVERSIONS ARE SHOWN ON DRAWINGS 10 AND 11. INTERIM FINGER DIKES 1, 2, AND 3 WILL BE CLASSIFIED AS CATEGORY II DAMS AND A COMPLETED DAM INVENTORY AND CLASSIFICATION FORM WILL BE SUBMITTED TO GEORGIA SAFE DAMS PROGRAM PRIOR TO CONSTRUCTION OF DIKES.

4. RESTORATION SURFACE WILL BE CONSTRUCTED USING EARTHEN FILL OBTAINED FROM BREACHING INTERIM FINGER 1 AND FINGER 2 DIKES AND THE CATEGORY I DAM, AND REMOVAL OF INTERIM FINGER 3 DIKE. ADDITIONALLY, AREAS OF THE EXCAVATION SURFACE THAT DO NOT REQUIRE EARTHWORK ACTIVITIES WILL REMAIN UNCHANGED AS PART OF THE RESTORATION GRADING.

5. EXISTING ACCESS ROAD LABELS REPRESENT THE CENTERLINE OF THE ROADS APPROXIMATED FROM AERIAL IMAGERY. IF AN ACCESS ROAD IS LOCATED WITHIN THE APPROXIMATE ASH POND BOUNDARY, IT WILL BE REMOVED AND RELOCATED TO REMOVE CCR PRESENT BENEATH IT AND/OR TO ACCOMMODATE THE RESTORATION GRADES. ACCESS ROADS WILL BE EVALUATED AS PART OF THE CONSTRUCTION DRAWINGS.

6. GRADING REQUIREMENTS FOR INTERIM CUT SLOPES TO MAINTAIN STABILITY DURING CCR REMOVAL ACTIVITIES WILL BE ESTABLISHED AS PART OF THE CONSTRUCTION DRAWINGS.

7. AN ADEQUATE SEPARATION (E.G., 100 FEET) FROM THE TOE OF THE INTERIM FINGER DIKES TO CCR WILL BE ESTABLISHED FOR CONSTRUCTION OF THE FINGER DIKES. METHODS TO SEPARATE CCR FROM THE INTERIM FINGER DIKE CONSTRUCTION AREAS WILL BE EVALUATED AS PART OF THE CONSTRUCTION DRAWINGS AND MAY INCLUDE ENGINEERING MEASURES SUCH AS LAYBACK SLOPES, SHEET PILES, GEOMEMBRANE LINERS, AND DEWATERING WELLS/TRENCHES).



KEY MAP
SCALE: 1" = 2,000'

0 200 400
SCALE IN FEET (HORIZONTAL)

0 20 40
SCALE IN FEET VERTICAL)

GEORGIA REGISTERED PROFESSIONAL ENGINEER BERNET ISCIMEN
11/13/2018

Georgia Power

PERMIT DRAWINGS
NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION	DRN	APP
1	11.09.18	PERMIT DRAWINGS FOR GA EPD SUBMITTAL	JJA/SRB	MI

SITE CROSS SECTIONS II

PLANT BRANCH CCR SURFACE IMPOUNDMENT CLOSURES
ASH POND E CLOSURE-BY-REMOVAL
PUTNAM COUNTY, GEORGIA

Geosyntec consultants

1255 ROBERTS BOULEVARD NW, SUITE 200
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WWW.GEOSYNTEC.COM

PROJ. NO.	GW6364	DWG. 6364-01E	EDIT 11.09.18
SCALE	AS SHOWN	DRAWING 9 OF 15	
DATE	NOVEMBER 2018		

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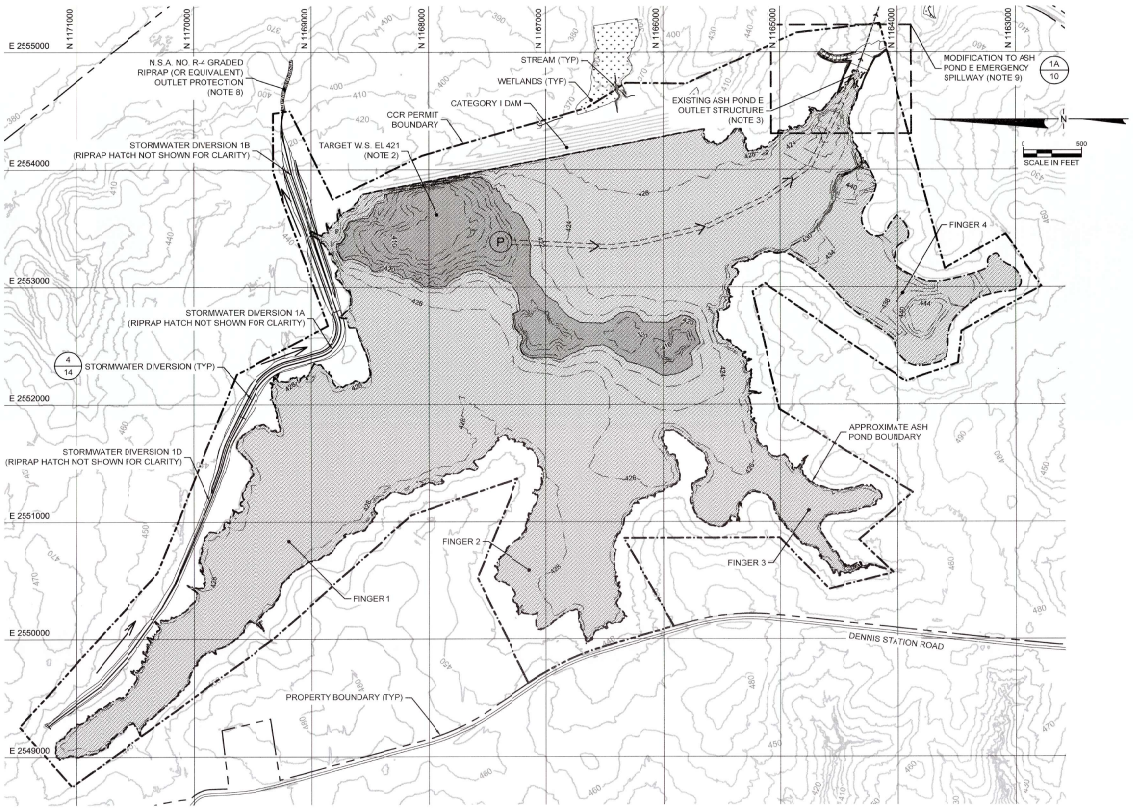
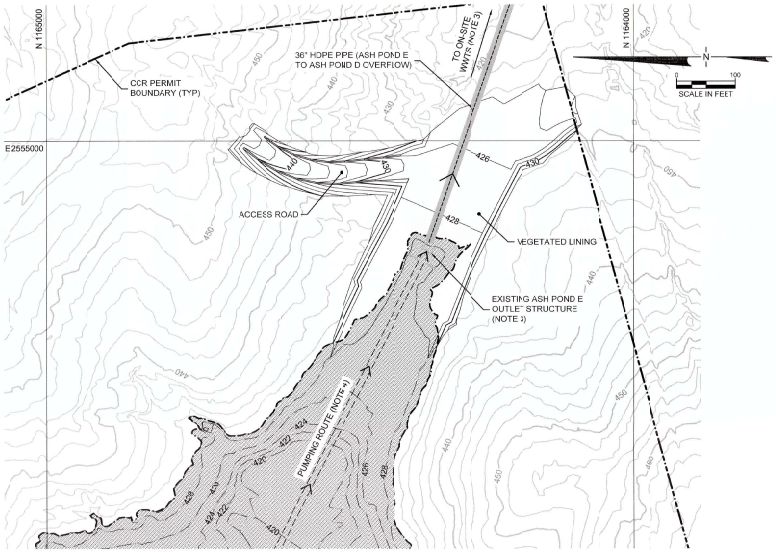


1 / - PLAN
PHASE I
(NOTES 2 AND 6)
SCALE: 1" = 500'



1A / 10 PLAN
MODIFICATION TO ASH POND E EMERGENCY SPILLWAY
(NOTES 7 AND 9)
SCALE: 1" = 100'

NOTES:

1. PHASES PRESENTED IN THIS DRAWING SET WERE DEVELOPED TO ADDRESS REMOVAL OF CCR FROM THE FINGERS AND MAIN BODY OF ASH POND E, WHILE ACHEVING COMPLIANCE WITH DESIGN CRITERIA RELATED TO STORMWATER AND CONTACT WATER MANAGEMENT. THE PHASING APPROACH IS CONCEPTUAL. PHASES MAY BE ADJUSTED AS NECESSARY, BASED ON APPROVAL FROM THE ENGINEER WITH THE REQUIREMENT THAT STORMWATER AND CONTACT WATER MANAGEMENT MEET THE DESIGN CRITERIA CONTAINED IN THE GEORGIA RULES FOR DAM SAFETY AND GA EPD STATE CCR RULE.
2. PLAN 1 PRESENTS A SNAPSHOT OF THE SITE CONDITION UPON COMPLETION OF PHASE I. IN THIS PHASE (I) A STORMWATER DIVERSION TO THE NORTH OF ASH POND E AND EAST OF FINGER 1 WILL BE CONSTRUCTED TO REDUCE RUN-ON INTO ASH POND E, (II) THE ASH POND E SPILLWAY GRADING WILL BE MODIFIED, AND (III) CONTACT WATER WILL BE GRAVITY DRAINED OR PUMPED TO GENERALLY MAINTAIN AN ELEVATION OF 421 FEET MSL OR BELOW USING THE OUTLET STRUCTURE TO MEET STORMWATER AND CONTACT WATER MANAGEMENT DESIGN CRITERIA CONTAINED IN THE GEORGIA RULES FOR DAM SAFETY AND GA EPD STATE CCR RULE.
3. CONTACT WATER FROM ASH POND E WILL EITHER BE DIVERTED TO WITHIN THE LIMIT OF ASH POND B AND THEN CONVEYED TO AN ON-SITE WWTS OR DIRECTLY CONVEYED TO THE WWTS. A LINED ECONOTANK OR SIMILAR LINED TEMPORARY LIQUID STORAGE UNIT, CONNECTED BETWEEN ASH POND B AND THE WWTS, MAY BE UTILIZED TO PROVIDE ADDITIONAL STORAGE CAPACITY TO ASH POND B BEFORE CONVEYING THE CONTACT WATER TO THE WWTS. TREATED WATER WILL BE DISCHARGED TO LAKE SINCLAIR VIA NPDES OUTFALL NUMBER 03. DIVERTED NONCONTACT STORMWATER WILL BE DISCHARGED TO RECEIVING WATER BODIES WITHOUT TREATMENT.
4. PUMPING ROUTES SHOWN ON THIS DRAWING ARE ILLUSTRATIVE AND NOT REPRESENTATIVE OF ACTUAL PUMP LOCATIONS AND ASSOCIATED PIPING ROUTES.
5. FLOW DIRECTION ARROWS ON STORMWATER DIVERSIONS HAVE BEEN OFFSET FROM THE STORMWATER DIVERSION GRADING FOR CLARITY.
6. ON PLAN 1, SPILLWAY GRADING AND BATHYMETRIC GRADES ARE PRESENTED AT 2-FOOT INTERVALS, AND EXISTING GROUND AND FINISHED GRADES ARE PRESENTED AT 10-FOOT INTERVALS FOR CLARITY.
7. ON PLAN 1A, SPILLWAY GRADING, EXISTING GROUND, AND BATHYMETRIC SURFACE GRADES ARE PRESENTED AT 2-FOOT INTERVALS FOR CLARITY.
8. N.S.A. NO. R-4 GRADED RIPRAP (OR EQUIVALENT) OUTLET PROTECTION WILL BE INSTALLED TO EXTEND FROM THE END OF STORMWATER DIVERSION 1B TO THE EAST TO EXISTING STREAM AT A WIDTH OF 25 FT, TO PROVIDE PROTECTION AGAINST EROSION AND SCOUR ON SLOPED SURFACES AS FLOW DISCHARGES TOWARDS LAKE SINCLAIR.
9. GEORGIA POWER COMPANY WILL PROVIDE NOTIFICATION AND NECESSARY DESIGN DOCUMENTS TO GEORGIA SAFE DAMS PROGRAM AT LEAST ONE YEAR PRIOR TO MODIFICATION TO ASH POND E EMERGENCY SPILLWAY.

LEGEND

- EXPOSED CCR AREA
- FREE WATER SURFACE (NOTE 2)
- PUMPING ROUTES (NOTES 3 AND 4)
- STORMWATER FLOW DIRECTION (NOTE 5)

GEORGIA REGISTERED PROFESSIONAL ENGINEER MEHMET ISCIMEN
11/13/2018

Georgia Power

PERMIT DRAWINGS
NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION	DRN	APP
1	11.09.18	PERMIT DRAWINGS FOR GA EPD SUBMITTAL	JJA/SRN	MI

PHASING PLANS I

PLANT BRANCH CCR SURFACE IMPOUNDMENT CLOSURES
ASH POND E CLOSURE-BY-REMOVAL
PUTNAM COUNTY, GEORGIA

Geosyntec consultants
1255 ROBERTS BOULEVARD NW, SUITE 200
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PROJ. NO.	GW6364	DWG. 6364-017	EDIT 11.09.18
SCALE	AS SHOWN	DRAWING 10 OF 15	
DATE	NOVEMBER 2018		

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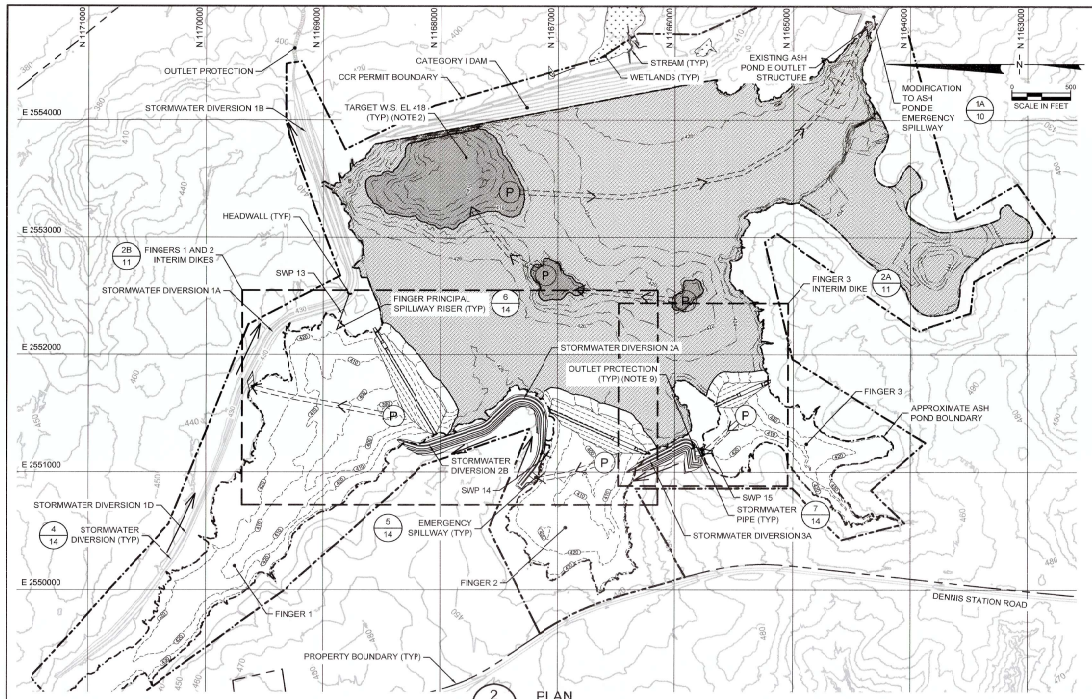
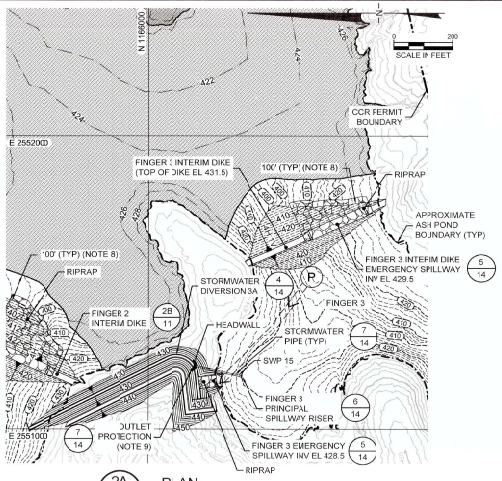
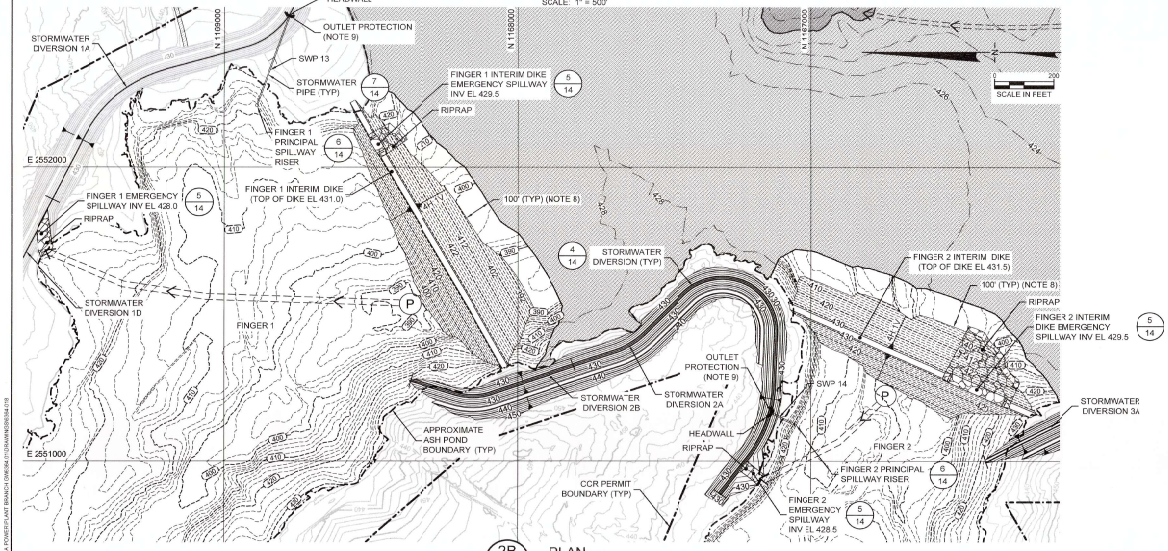


2 - PLAN
PHASE II
(NOTES 2 AND 6)
SCALE: 1" = 500'



2A 11 PLAN
FINGER 3 INTERIM DIKE
(NOTE 7)
SCALE: 1" = 200'



2B 11 PLAN
FINGERS 1 AND 2 INTERIM DIKES
(NOTE 7)
SCALE: 1" = 200'

NOTES:

1. PHASES PRESENTED IN THIS DRAWING SET WERE DEVELOPED TO ADDRESS REMOVAL OF CCR FROM THE FINGERS AND MAIN BODY OF ASH POND E, WHILE ACHIEVING COMPLIANCE WITH DESIGN CRITERIA RELATED TO STORMWATER AND CONTACT WATER MANAGEMENT. THE PHASING APPROACH IS CONCEPTUAL; PHASES MAY BE ADJUSTED AS NECESSARY BASED ON APPROVAL FROM THE ENGINEER, WITH THE REQUIREMENT THAT STORMWATER AND CONTACT WATER MANAGEMENT MEET THE DESIGN CRITERIA CONTAINED IN THE GEORGIA RULES FOR DAM SAFETY AND GA EPD STATE CCR RULE.
2. PLAN 2 PRESENTS A SNAPSHOT OF THE SITE CONDITION UPON COMPLETION OF PHASE I. IN THIS PHASE: (I) CCR FROM FINGERS 1, 2, AND 3 WILL BE REMOVED, (II) INTERIM FINGER DIKES WILL BE CONSTRUCTED TO SEPARATE STORMWATER (I.E., NON-CONTACT WATER) IN THE FINGERS FROM CONTACT WATER WITHIN ASH POND E, (III) TEMPORARY STORMWATER DIVERSIONS WILL BE CONSTRUCTED BETWEEN FINGERS 1, 2, AND 3 TO CONVEY STORMWATER, (IV) STORMWATER PUMPING SYSTEM, PRINCIPAL SPILLWAY RISERS, AND OUTLET PIPES WILL INSTALLED WITHIN FINGERS 1, 2, AND 3 UPON COMPLETION OF CCR REMOVAL TO DISCHARGE STORMWATER, AND (V) THE FREE WATER SURFACE ELEVATION (CONTACT WATER) WITHIN ASH POND E WILL BE GRAVITY DRAINED OR PUMPED TO GENERALLY MAINTAIN AN ELEVATION OF 418 FEET MSL OR BELOW. THESE ACTIVITIES ARE REQUIRED TO MEET STORMWATER AND CONTACT WATER MANAGEMENT DESIGN CRITERIA CONTAINED IN THE GEORGIA RULES FOR DAM SAFETY AND GA EPD STATE CCR RULE. THIS PHASE WILL BE EXECUTED IN STAGES AND REASONABLE MEASURES WILL BE TAKEN TO MINIMIZE STORMWATER RUN-ON INTO THE FINGERS DURING CCR REMOVAL IN THESE AREAS. MINIMIZATION TECHNIQUES MAY INCLUDE INSTALLING TEMPORARY BERMS OR CHANNELS AROUND THE FINGERS TO DIVERT RUNON AROUND THE WORKING AREAS TO EITHER DOWNSTREAM OF THE WORKING AREAS WITHIN THE FINGERS OR DIRECTLY INTO ASH POND E, AND AS NEEDED WITHIN THE WORKING AREAS OF THE FINGER TO ISOLATE CCR DEWATERING AND REMOVAL OPERATIONS. SHEET PILES, OTHER HYDRAULIC BARRIERS, OR HYDRAULIC CONTROL SYSTEMS MAY BE USED IN CONJUNCTION WITH THE FINGER DIKES TO ENHANCE THE STABILITY OF THE DIKES AND MINIMIZE RUNON FROM THE FINGERS TO THE MAIN BODY OF ASH POND E.
3. CONTACT WATER FROM ASH POND E WILL EITHER BE DIVERTED TO WITHIN THE LIMIT OF ASH POND B AND THEN CONVEYED TO AN ON-SITE WWTS OR DIRECTLY CONVEYED TO THE WWTS. A LINED ECONOTANK OR SIMILAR LINED TEMPORARY LIQUID STORAGE UNIT, CONNECTED BETWEEN ASH POND B AND THE WWTS, MAY BE UTILIZED TO PROVIDE ADDITIONAL STORAGE CAPACITY TO ASH POND B BEFORE CONVEYING THE CONTACT WATER TO THE WWTS. TREATED WATER WILL BE DISCHARGED TO LAKE SINCLAIR VIA NPDES OUTFALL NUMBER 003. DIVERTED NON-CONTACT STORMWATER AND STORMWATER COLLECTED IN FINGERS 1, 2, AND 3 WILL BE DISCHARGED TO RECEIVING WATER BODIES WITHOUT TREATMENT.
4. PUMPING ROUTES SHOWN ON THIS DRAWING ARE ILLUSTRATIVE AND NOT REPRESENTATIVE OF ACTUAL PUMP LOCATIONS AND ASSOCIATED PIPING ROUTES.
5. FLOW DIRECTION ARROWS ON STORMWATER DIVERSIONS HAVE BEEN OFFSET FROM THE STORMWATER DIVERSION GRADING FOR CLARITY.
6. ON PLAN 2, SPILLWAY AND BATHYMETRIC GRADES ARE PRESENTED AT 2-FOOT INTERVALS, AND INTERIM DIKE, EXISTING GROUND, STORMWATER DIVERSION, AND EXCAVATION GRADES ARE PRESENTED AT 10-FOOT INTERVALS FOR CLARITY.
7. ON PLANS 2A AND 2B, INTERIM DIKE, BATHYMETRIC, STORMWATER DIVERSION, EXCAVATION, AND EXISTING GROUND GRADES ARE PRESENTED AT 2-FOOT INTERVALS FOR CLARITY.
8. AN ADEQUATE SEPARATION (E.G., 100 FEET) FROM THE TOE OF THE INTERIM FINGER DIKES TO CCR WILL BE ESTABLISHED FOR CONSTRUCTION OF THE FINGER DIKES. METHODS TO SEPARATE CCR FROM THE INTERIM FINGER DIKE CONSTRUCTION AREAS WILL BE EVALUATED AS PART OF THE CONSTRUCTION DRAWINGS AND MAY INCLUDE ENGINEERING MEASURES SUCH AS LAYBACK SLOPES, SHEET PILES, GEOMEMBRANE LINERS, AND DEWATERING WELLS/TRENCHES.
9. OUTLET PROTECTION NOT SHOWN FOR CLARITY.
10. SLOPE INDICATORS REPRESENT 3H:1V SIDESLOPES UNLESS OTHERWISE NOTED.
11. STABILITY REQUIREMENTS FOR INTERIM FINGER DIKES WILL BE ESTABLISHED AS PART OF THE CONSTRUCTION DRAWINGS.

LEGEND

- COMPLETED CCR REMOVAL AREA
- EXPOSED CCR AREA
- FREE WATER SURFACE (NOTE 2)
- PUMPING ROUTES (NOTES 3 AND 4)
- STORMWATER FLOW DIRECTION (NOTE 5)

GEORGIA REGISTERED PROFESSIONAL ENGINEER MEHMET ISCIMEN
11/13/2018

Georgia Power

PERMIT DRAWINGS
NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION	DRN	APP
1	11.09.18	PERMIT DRAWINGS FOR GA EPD SUBMITTAL	JJA/SRP	MI

PHASING PLANS II

PLANT BRANCH CCR SURFACE IMPOUNDMENT CLOSURES
ASH POND E CLOSURE-BY-REMOVAL
PUTNAM COUNTY, GEORGIA

Geosyntec consultants
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WWW.GEOSYNTEC.COM

PROJ. NO.	GW6364	DWG. 6354-018	EDIT 11.09.18
SCALE	AS SHOWN	DRAWING 11 OF 15	
DATE	NOVEMBER 2018		

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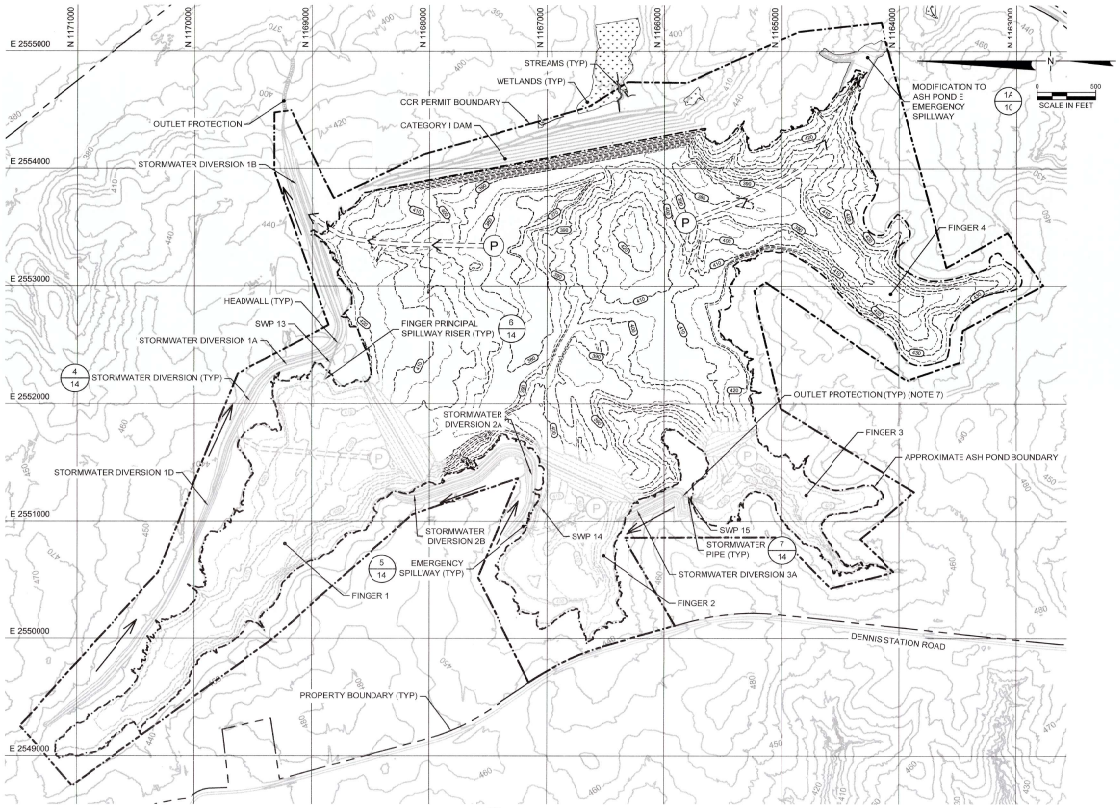

3 / - PLAN
PHASE III
(NOTES 2 AND 6)
SCALE: 1" = 500'

LEGEND

- COMPLETED CCR REMOVAL AREA
- (P) PUMPING ROUTES (NOTES 3, 4, AND 8)
- STORMWATER FLOW DIRECTION (NOTE 5)

NOTES:

1. PHASES PRESENTED IN THIS DRAWING SET WERE DEVELOPED TO ADDRESS REMOVAL OF CCR FROM THE FINGERS AND MAIN BODY OF ASH POND E, WHILE ACHIEVING COMPLIANCE WITH DESIGN CRITERIA RELATED TO STORMWATER AND CONTACT WATER MANAGEMENT. THE PHASING APPROACH IS CONCEPTUAL. PHASES MAY BE ADJUSTED AS NECESSARY, BASED ON APPROVAL FROM THE ENGINEER, WITH THE REQUIREMENT THAT STORMWATER AND CONTACT WATER MANAGEMENT MEET THE DESIGN CRITERIA CONTAINED IN THE GEORGIA RULES FOR DAM SAFETY AND GA EPD STATE CCR RULE.
2. PLAN 3 PRESENTS A SNAPSHOT OF THE SITE CONDITION UPON COMPLETION OF PHASE III. IN THIS PHASE: (I) DEWATERING AND REMOVAL OF CCR WILL BE CONDUCTED FOR THE REMAINDER OF ASH POND E, AND (II) THE FREE WATER SURFACE ELEVATION (CONTACT WATER) WITHIN ASH POND E WILL BE GRAVITY DRAINED OR PUMPED TO BE GENERALLY MAINTAINED AS LOW AS PRACTICAL TO FACILITATE CCR REMOVAL. THIS PHASE WILL BE EXECUTED IN STAGES AND REASONABLE MEASURES SUCH AS TEMPORARY BERMS, CHANNELS, AND SEDIMENT/STORMWATER BASINS WILL BE INSTALLED AS NEEDED WITHIN ASH POND E, TO ISOLATE CCR DEWATERING AND REMOVAL AREAS, TO DIVERT CONTACT WATER RUNOFF TO DOWNGRADIENT LOCATIONS WITHIN ASH POND E, AND TO MANAGE RUNOFF IN AREAS WHERE CCR REMOVAL IS COMPLETED AS STORMWATER. CCR REMOVAL WILL GENERALLY MOVE IN A DOWNGRADIENT DIRECTION, STARTING AT THE EDGE AND MOVING TOWARD THE LOW SPOTS OF THE ASH POND, TO LIMIT THE VOLUME OF WATER TO BE MANAGED DURING REMOVAL ACTIVITIES. PHASE III WILL BE FINISHED UPON COMPLETE REMOVAL OF CCR MATERIAL AND SIX INCHES OF UNDERLYING FOUNDATION SOIL FROM ASH POND E. AFTER COMPLETION OF PHASE III, PRIOR TO THE IMPLEMENTATION OF RESTORATION/GRADING, RUNOFF GENERATED AND COLLECTED WITHIN ASH POND E WILL BE MANAGED AS STORMWATER.
3. CONTACT WATER FROM ASH POND E WILL EITHER BE DIVERTED TO WITHIN THE LIMIT OF ASH POND 3 AND THEN CONVEYED TO AN ON-SITE WWTS OR DIRECTLY CONVEYED TO THE WWTS. A LINED ECONOTANK OR SIMILAR LINED TEMPORARY LIQUID STORAGE UNIT, CONNECTED BETWEEN ASH POND B AND THE WWTS, MAY BE UTILIZED TO PROVIDE ADDITIONAL STORAGE CAPACITY TO ASH POND B BEFORE CONVEYING THE CONTACT WATER TO THE WWTS. TREATED WATER WILL BE DISCHARGED TO LAKE SINCLAIR VIA NPDES OUTFALL NUMBER 03. DIVERTED NON-CONTACT STORMWATER AND STORMWATER COLLECTED IN FINGERS 1, 2, AND 3 WILL BE DISCHARGED TO RECEIVING WATER BODIES WITHOUT TREATMENT.
4. PUMPING ROUTES SHOWN ON THIS DRAWING ARE ILLUSTRATIVE AND NOT REPRESENTATIVE OF ACTUAL PUMP LOCATIONS AND ASSOCIATED PIPING ROUTES.
5. FLOW ARROWS HAVE BEEN OFFSET FROM APPLICABLE STORMWATER DIVERSIONS FOR CLARITY OF FLOW DIRECTION.
6. ON PLAN 3, SPILLWAY GRADING IS PRESENTED AT 2-FOOT INTERVALS; EXCAVATION GRADES ARE PRESENTED AT 5-FOOT INTERVALS; AND INTERIM DIKE, STORMWATER DIVERSION, AND EXISTING GROUND GRADES ARE PRESENTED 10-FOOT INTERVALS FOR CLARITY.
7. OUTLET PROTECTION NOT SHOWN FOR CLARITY.
8. NON-CONTACT STORMWATER COLLECTED WITHIN ASH POND E AFTER THE COMPLETION OF PHASE III WILL BE PUMPED TO THE STORMWATER DIVERSIONS OR DOWNGRADIENT DRAINAGE PATHWAYS FOR DISCHARGE TO RECEIVING WATER BODIES WITHOUT TREATMENT.

REV	DATE	DESCRIPTION	DRN	APP
1	11.09.18	PERMIT DRAWINGS FOR GA EPD SUBMITTAL	JJA/SRB	MI

PHASING PLANS III

PLANT BRANCH CCR SURFACE IMPOUNDMENT CLOSURES
ASH POND E CLOSURE-BY-REMOVAL
PUTNAM COUNTY, GEORGIA

GEORGIA REGISTERED PROFESSIONAL ENGINEER MEHMET ISCIMEN
11/13/2018

Georgia Power

PERMIT DRAWINGS
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PROJ. NO.	GW6364	DWG. 6364-032	EDIT 11.09.18
SCALE	1" = 500'	DRAWING 12 OF 15	
DATE	NOVEMBER 2018		

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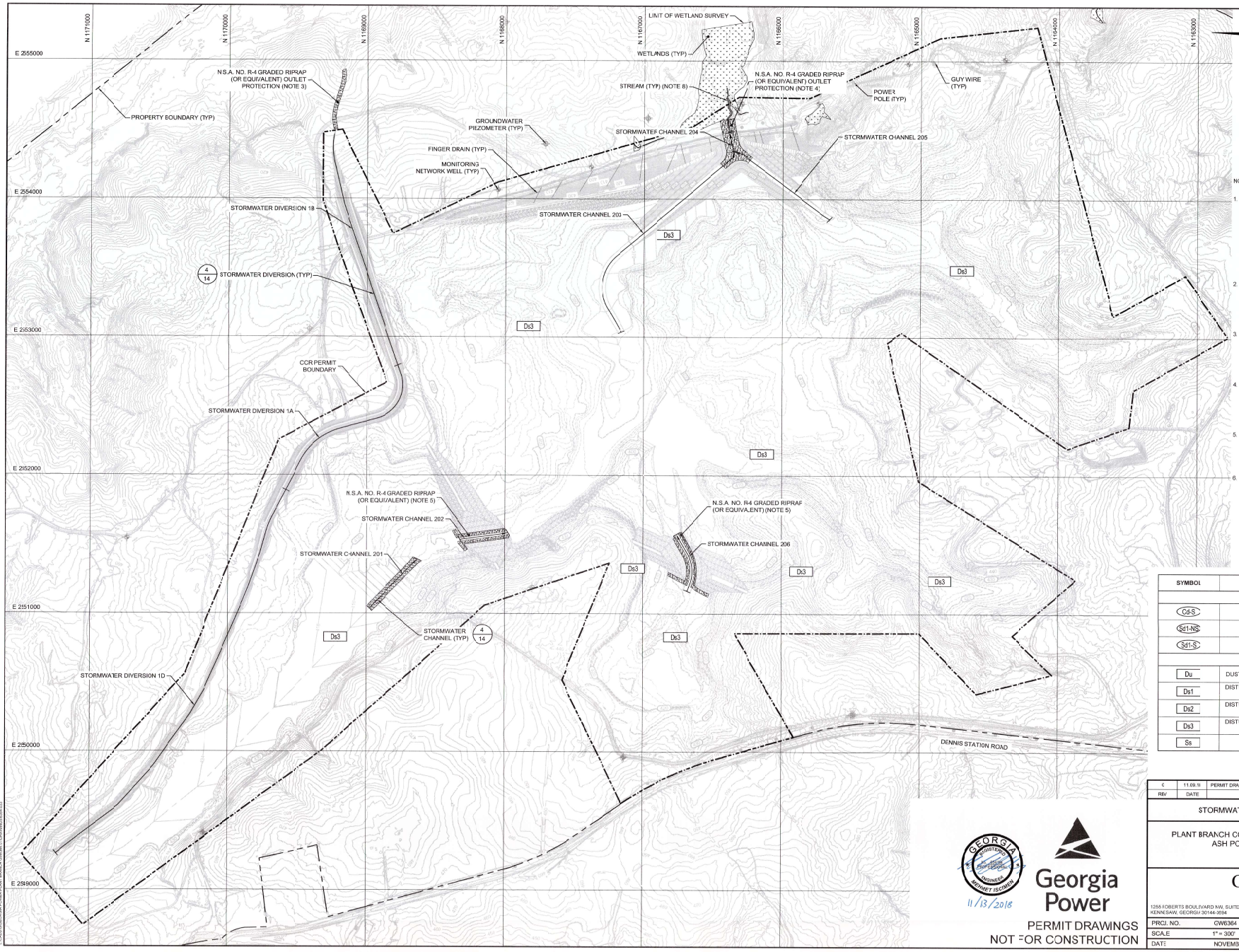

NOTES

1. GRADING SHOWN IS A COMBINATION OF (I) TOP OF FINISHED SURFACE FOR FINISHED GRADES AND RESTORATION SURFACE (I.E., TOP OF LINING FOR STORMWATER DIVERSIONS AND CHANNELS); (II) EXCAVATION SURFACE (I.E., PRE-CCR PLACEMENT GRADES WITH AN ADDITIONAL 6 INCHES OF FOUNDATION SOIL REMOVED WITHIN THE APPROXIMATE ASH POND BOUNDARY THAT REMAIN UNCHANGED AS PART OF THE RESTORATION GRADING; AND (III) EXISTING GROUND. GRADING IS SHOWN AS SCREENED TO HIGHLIGHT THE STORMWATER MANAGEMENT SYSTEM.
2. ADDITIONAL STORMWATER FEATURES (E.G., BERMS, CHANNELS, BENCHES, STORMWATER DIVERSIONS, AND DOWNCHUTES) MAY BE ADDED FOR CONSTRUCTION AND POST-CONSTRUCTION SITE CONDITIONS. THESE FEATURES WILL BE PRESENTED IN THE CONSTRUCTION DRAWINGS.
3. N.S.A. NO. R-4 GRADED RIPRAP (OR EQUIVALENT) OUTLET PROTECTION WILL BE INSTALLED TO EXTEND FROM THE END OF STORMWATER DIVERSION 1B TO THE EAST TO EXISTING STREAM, TO PROVIDE PROTECTION AGAINST EROSION AND SCOUR ON SLOPED SURFACES AS FLOW DISCHARGES TOWARDS LAKE SINCLAIR.
4. N.S.A. NO. R-4 GRADED RIPRAP (OR EQUIVALENT) OUTLET PROTECTION WILL BE INSTALLED TO EXTEND FROM THE END OF STORMWATER CHANNEL 204 TO THE EAST TO EXISTING WETLANDS TO PROVIDE PROTECTION AGAINST EROSION AND SCOUR IMMEDIATELY UPGRADIENT OF THE WETLANDS.
5. N.S.A. NO. R-4 GRADED RIPRAP (OR EQUIVALENT) WILL BE INSTALLED ALONG THE FACE AND AT THE TOP OF THE INTERIM FINGER DIKE BREACH TO PROVIDE PROTECTION AGAINST EROSION AND SCOUR OF THE PERMANENT PORTIONS OF THE DIKE.
6. A PHASED EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN (ESPCP), PREPARED IN ACCORDANCE WITH THE GEORGIA CONSTRUCTION GENERAL PERMIT (I.E. AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY) AND THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA, WILL BE DEVELOPED AS PART OF THE CONSTRUCTION DRAWINGS. BEST MANAGEMENT PRACTICES TO BE IMPLEMENTED AS PART OF THE ESPCP MAY INCLUDE BUT NOT BE LIMITED TO, THE FOLLOWING MEASURES:

SYMBOL	DESCRIPTION	DETAIL NO.
	STRUCTURAL MEASURES	
Cd-S	STONE CHECK DAM	9
Sd1-NS	FILTER SOCK	10
Sd1-S	SILT FENCE - TYPE SENSITIVE	8
	NONSTRUCTURAL MEASURES	
Du	DUST CONTROL ON DISTURBED AREAS	DETAILS FOR NON-STRUCTURAL MEASURES RELATED TO DISTURBED AREA STABILIZATION AND VEGETATION ARE PROVIDED IN THE CLOSURE PLAN.
Ds1	DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)	
Ds2	DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)	
Ds3	DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION)	
Ss	SLOPE STABILIZATION	

0 300 600
SCALE IN FEET

REV	DATE	DESCRIPTION	DRN	APP
C	11.09.18	PERMIT DRAWINGS FOR GA EPD SUBMITTAL	JJA/SRN	NI

GEORGIA REGISTERED PROFESSIONAL ENGINEER MEHMET I. SCHMEH
11/13/2018

Georgia Power

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STORMWATER MANAGEMENT SYSTEM PLAN

PLANT BRANCH CCR SURFACE IMPOUNDMENT CLOSURES
ASH POND E CLOSURE-BY-REMOVAL
PUTNAM COUNTY GEORGIA

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PROJ. NO.	GW6364	DWG. 6364-033	EDIT 11.09.18
SCALE	1" = 300'	DRAWING 13 OF 15	
DATE	NOVEMBER 2018		

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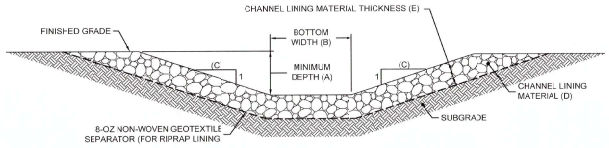
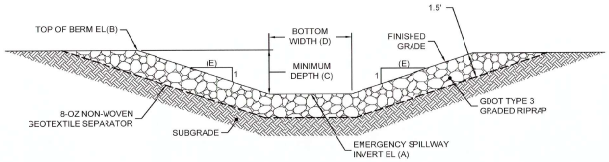


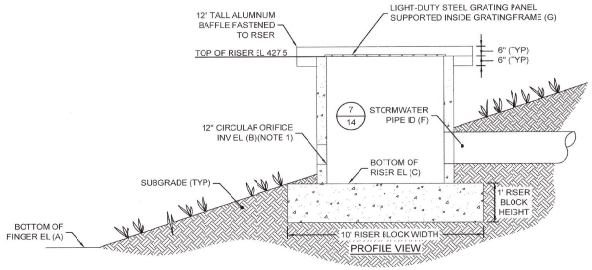


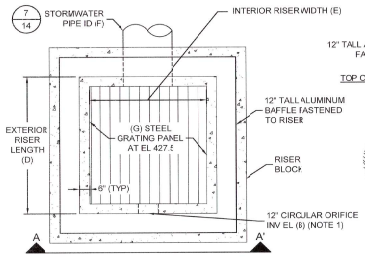
DESIGNATION					(A)	(B)	(C)	(D)	(E)
DIVERSION/CHANNEL ID	UPSTREAM INVERT EL (FT)	DOWNSTREAM INVERT EL (FT)	LENGTH (FT)	SLOPE (FT/FT)	MIN DEPTH (FT)	BOTTOM WIDTH (FT)	SIDE SLOPE	CHANNEL LINING	CHANNEL LINING THICKNESS
DIVERSION 1A	422.0	420.7	1,395	0.001	8.4	4.0	3.0	N.S.A. NO. R-3	9 INCHES
DIVERSION 1B	420.7	405.0	1,711	0.009	12.1	4.0	3.0	N.S.A. NO. R-4	18 INCHES
DIVERSION 1D	434.8	422.0	3,117	0.004	4.3	4.0	3.0	N.S.A. NO. R-3	9 INCHES
DIVERSION 2A	423.2	423.2	1,417	0.000	6.4	8.0	3.0	GRASS-LINED	N/A
DIVERSION 2B	423.2	423.2	582	0.000	6.8	8.0	3.0	GRASS-LINED	N/A
DIVERSION 3A	423.2	423.2	751	0.000	9.4	8.0	3.0	GRASS-LINED	N/A
CHANNEL 201	414.0	392.3	431	0.050	2.0	50.0	3.0	N.S.A. NO. R-4	18 INCHES
CHANNEL 202	386.3	386.4	351	0.008	10.0	50.0	4.0	GRASS-LINED	N/A
CHANNEL 203	375.6	363.4	1,717	0.007	10.0	50.0	4.0	GRASS-LINED (NOTE 5)	N/A
CHANNEL 204	363.4	362.0	168	0.008	10.0	100.0	4.0	N.S.A. NO. R-4	18 INCHES
CHANNEL 205	371.8	363.4	627	0.013	10.0	50.0	4.0	GRASS-LINED (NOTE 5)	N/A
CHANNEL 206	398.0	396.4	437	0.004	4.7	50.0	4.0	GRASS-LINED	N/A

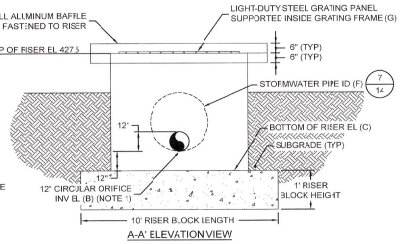
4/6 DETAIL
STORMWATER DIVERSION AND CHANNEL
SCALE: NTS

DESIGNATION	(A)	(B)	(C)	(D)	(E)
FINGER ID	EMERGENCY SPILLWAY INV EL (FT)	TOP OF BERM EL (FT)	MINIMUM DEPTH (FT)	BOTTOM WIDTH (FT)	SIDE SLOPE
FINGER 1	428.0	430.0	1.5	40.0	3.0
FINGER 2	428.5	430.5	2.0	40.0	3.0
FINGER 3	428.5	430.5	2.0	40.0	3.0
INTERIM FINGER 1 DIKE	429.5	431.0	1.5	50.0	12.0
INTERIM FINGER 2 DIKE	429.5	431.5	2.0	200.0	12.0
INTERIM FINGER 3 DIKE	429.5	431.5	2.0	200.0	12.0

5/11 DETAIL
EMERGENCY SPILLWAY
SCALE: NTS

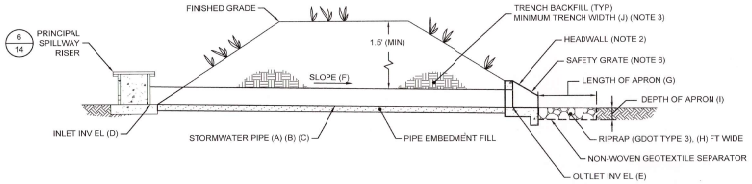






DESIGNATION	(A)	(B)	(C)	(D)	(E)	(F)	(G)
FINGER ID	BOTTOM OF FINGER EL (FT)	ORIFICE INV EL (FT)	BOTTOM OF RISER EL (FT)	EXTERIOR RISER LENGTH (FT)	INTERIOR RISER WIDTH (FT)	STORMWATER PIPE ID	PANEL LENGTH (IN) X WIDTH (IN)
FINGER 1	389.5	422.0	421.0	8	7	SWP 13	86 x 86
FINGER 2	393.5	423.2	422.2	7	6	SWP 14	74 x 74
FINGER 3	403.5	423.2	422.2	7	6	SWP 15	74 x 74

6/11 DETAIL
PRINCIPAL SPILLWAY RISER
SCALE: NTS



DESIGNATION	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
PIPE ID	MATERIAL TYPE (NOTE 4)	(NUMBER OF SURFACE WATER PIPE) - DIAMETER	LENGTH (FT)	INLET INV EL (FT)	OUTLET INV EL (FT)	SLOPE (FT/FT)	LENGTH OF RIPRAP APRON (FT)	WIDTH OF RIPRAP APRON (FT)	DEPTH OF RIPRAP APRON (FT)	MIN TRENCH WIDTH (FT)
SWP 13	RCP	(1) - 36 INCH	323	422.0	421.0	0.007	18	12	9	6.8
SWP 14	RCP	(1) - 36 INCH	86	423.2	423.2	0.000	18	12	9	6.8
SWP 15	RCP	(1) - 36 INCH	158	423.2	423.2	0.000	18	12	9	6.8

7/11 DETAIL
STORMWATER PIPE
SCALE: NTS

NOTES:

1. TRASH RACK WILL BE INSTALLED OVER DRAWDOWN ORIFICES TO PREVENT CLOGGING.
2. HEADWALLS WILL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH GDOT STANDARD DETAIL NUMBER 1001-3 OR APPROVED EQUIVALENT.
3. PIPE EMBEDMENT WILL BE CONSTRUCTED IN ACCORDANCE WITH GDOT STANDARD DETAIL NUMBER 1030D AND MINIMUM TRENCH WIDTHS IDENTIFIED IN STORMWATER PIPE DETAIL TABLE.
4. RCP OR APPROVED EQUIVALENT PIPE MATERIAL MAY BE UTILIZED. PIPE MATERIAL WILL BE EVALUATED IN THE CONSTRUCTION DRAWINGS.
5. DOWNGRADIENT PORTIONS OF STORMWATER CHANNELS 203 AND 205 WILL BE LINED WITH N.S.A NO. R-4 GRADED RIPRAP TO PROTECT AGAINST EROSION AND SCOUR NEAR THE CATEGORY I DAM BREACH.
6. SAFETY GRATES WILL BE FURNISHED AND INSTALLED AT OUTLET HEADWALLS IN ACCORDANCE WITH GDOT STANDARD DETAIL NUMBER D-5 OR APPROVED EQUIVALENT.

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REV	DATE	DESCRIPTION	DRN	APP
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STORMWATER MANAGEMENT SYSTEM DETAILS

PLANT BRANCH CCR SURFACE IMPOUNDMENT CLOSURES
ASH POND E CLOSURE-BY-REMOVAL
PUTNAM COUNTY, GEORGIA

Geosyntec consultants
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PROJ. NO.	GW6364	DWG. 6364-02	EDIT 11.09.18
SCALE	AS SHOWN	DRAWING 14 CF 15	
DATE	NOVEMBER 2018		

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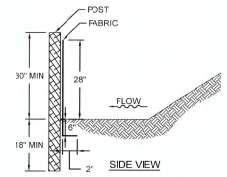
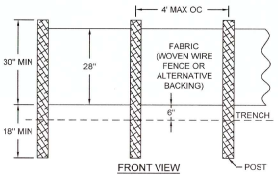
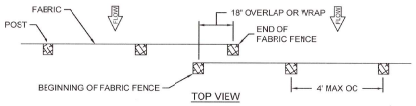


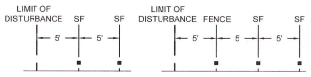
SIDE VIEW



FRONT VIEW



TOP VIEW



SILT FENCE SPACING

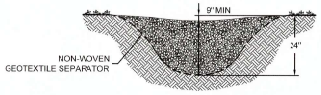
CRITERIA FOR SILT FENCE PLACEMENT	
LAND SLOPE (PERCENT)	MAXIMUM LENGTH OF SLOPE ABOVE FENCE (FEET)
<2	100
2 TO 5	75
5 TO 10	50
10 TO 20	25
>20	15

SILT FENCE NOTES:
1. FENCE WILL BE MAINTAINED DURING CONSTRUCTION UNTIL FINAL SURFACE TREATMENTS HAVE BEEN APPLIED AND A SUFFICIENT STAND OF GRASS HAS BEEN ESTABLISHED.
2. ADDITIONAL SILT FENCE WILL BE REQUIRED IN AREAS WHICH ARE CLEARED OR GRADED AND DO NOT HAVE STORMWATER RUNOFF DIVERTED TO SEDIMENT BASINS.

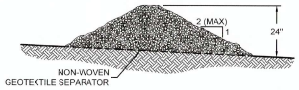
INSTALLATION:
1. WHERE NO SEDIMENT TRAP/STORMWATER DISPOSAL SYSTEM IS PRESENT, MAXIMUM SLOPE LENGTH WILL NOT EXCEED THAT IN THE TABLE. THE DRAINAGE AREA WILL NOT EXCEED 1/4 ACRE PER 100 FEET OF SILT FENCE.
2. INSTALL ALONG CONTOURS WITH ENDS POINTING UPHILL.
3. DO NOT PLACE IN WATERWAYS OR AREAS OF CONCENTRATED FLOW.
4. PROVIDE A RIPRAP SPLASH PAD OR OTHER OUTLET PROTECTION DEVICE FOR ANY POINT WHERE FLOW MAY TOP THE SEDIMENT FENCE. ENSURE THAT THE MAXIMUM HEIGHT OF THE FENCE AT A PROTECTED, REINFORCED OUTLET DOES NOT EXCEED 1 FT AND THAT SUPPORT POST SPACING DOES NOT EXCEED 4 FT FOR TYPE C.
5. POSTS WILL BE STEEL AND HAVE A MINIMUM LENGTH OF 4 FEET. POSTS WILL BE "U", "T", OR "C" SHAPED AND HAVE A MINIMUM WEIGHT OF 1.3 POUNDS PER FOOT. THE POSTS WILL HAVE PROJECTIONS FOR FASTENING THE WOVEN WIRE AND FILTER FABRIC. MAXIMUM POSTS SPACING WILL BE 4 FEET FOR TYPE C.
5. SAFETY CAPS ARE REQUIRED FOR ALL STEEL POSTS.
6. A WOVEN WIRE SUPPORT FENCE WILL BE USED WITH TYPE "C" FENCE. THE WIRE FENCE FABRIC WILL BE AT LEAST 36 INCHES HIGH AND WILL HAVE AT LEAST 6 HORIZONTAL WIRES. VERTICAL WIRES WILL HAVE A MAXIMUM SPACING OF 12 INCHES. THE TOP AND BOTTOM WIRES WILL BE AT LEAST 10 GAUGE AND ALL OTHER WIRES WILL BE AT LEAST 12 1/2 GAUGE.
7. APPROVED SILT FENCE FABRICS ARE LISTED IN THE GEORGIA DEPARTMENT OF TRANSPORTATION QUALIFIED PRODUCTS LIST #36 (QPL-36).

Sd1-S 8/13 DETAIL
SILT FENCE - TYPE SENSITIVE
SCALE: NTS
SOURCE: GSWCC

CROSS SECTION



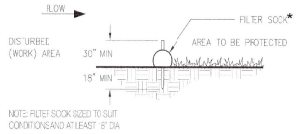
PROFILE VIEW



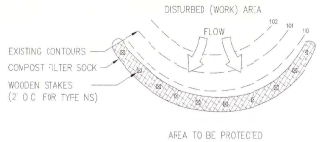
NOTES:
1. CHECK DAMS ARE TO BE USED ONLY IN SMALL OPEN CHANNELS (THEY ARE NOT TO BE USED IN LIVE STREAMS).
2. THE DRAINAGE AREA FOR STONE CHECK DAMS WILL NOT EXCEED TWO ACRES.
3. THE CENTER OF THE CHECK DAM MUST BE AT LEAST 9 INCHES LOWER THAN THE OUTER EDGES.
4. THE DAM HEIGHT SHOULD BE A MAXIMUM OF 2 FEET FROM CENTER TO RIM EDGE.
5. THE SIDE SLOPES OF THE CHECK DAM WILL NOT EXCEED A 2:1 SLOPE.
6. GEOTEXTILE WILL BE USED TO PREVENT THE MIGRATION OF SUBGRADE SOIL PARTICLES INTO THE STONES (REFER TO AASHTO M288-96, SECTION 7.3, TABLE 3).

Cd-S 9/13 DETAIL
STONE CHECK DAM
SCALE: NTS
SOURCE: GSWCC

CROSS SECTION



PLAN VIEW



* FILTER SOCK HEIGHT WILL BE EVALUATED TO MEET DESIGN CRITERIA IDENTIFIED WITHIN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA (3SWCC) AND PROVIDED WITHIN THE CONSTRUCTION DRAWINGS.

Sd1-NS 10/13 DETAIL
FILTER SOCK
SCALE: NTS
SOURCE: GSWCC

GEORGIA REGISTERED PROFESSIONAL ENGINEER SEDIMENT ISOTIMEN
11/3/2018

Georgia Power

PERMIT DRAWINGS
NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION	DRN	APP
1	11.09.18	PERMIT DRAWINGS FOR GA EPD SUBMITTAL	JJA/SRM	VR

EROSION AND SEDIMENT CONTROL DETAILS

PLANT BRANCH CCR SURFACE IMPOUNDMENT CLOSURES
ASH POND 1 CLOSURE-BY-REMOVAL
PUTNAM COUNTY, GEORGIA

Geosyntec consultants
1255 ROBERTS BOULEVARD NW, SUITE 200
KENNESAW, GEORGIA 30144-3694
PHONE: 678.202.8500
WWW.GEOSYNTEC.COM

PROJ. NO.	GW6364	DWG. 6384-034	EDIT 11.09.18
SCALE	AS SHOWN	DRAWING 15 OF 15	
DATE	NOVEMBER 2018		

I:\CADD\GEORGIA POWER\PLANT BRANCH\PLANT BRANCH CWR\BASE\GW6364-034