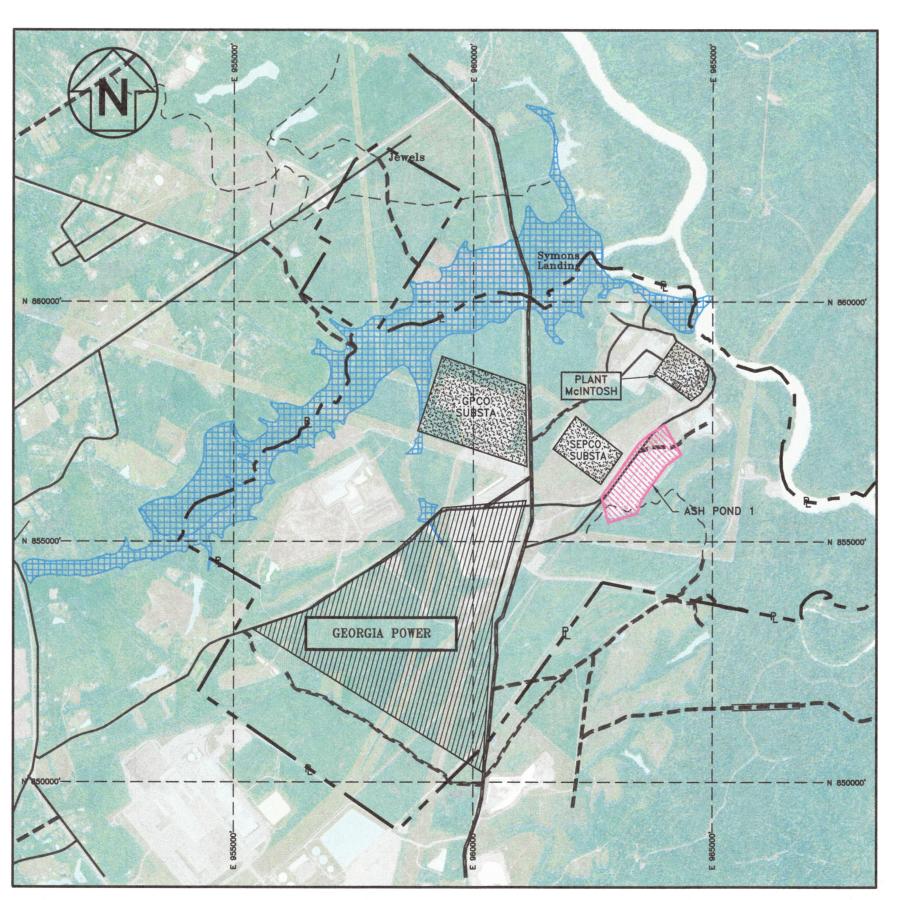
CLOSURE DRAWINGS GEORGIA POWER COMPANY PLANT MCINTOSH ASH POND 1 (AP-1) EXISTING COAL COMBUSTION RESIDUALS (CCR) SURFACE IMPOUNDMENT EFFINGHAM, GEORGIA NOVEMBER 2018

OWNER/OPERATOR

GEORGIA POWER COMPANY 241 RALPH MCGILL BLVD. ATLANTA, GEORGIA 30308

RESPONSIBLE OFFICIAL

GENERAL MANAGER-ENVIRONMENTAL AFFAIRS GEORGIA POWER COMPANY 241 RALPH MCGILL BLVD. ATLANTA, GEORGIA 30308 (404) 506-6505 gpcenv@southernco.com



PROJECT SITE LOCATION

NOT TO SCALE





REVISION HISTORY

DATE	SHEETS	REQUESTED BY		





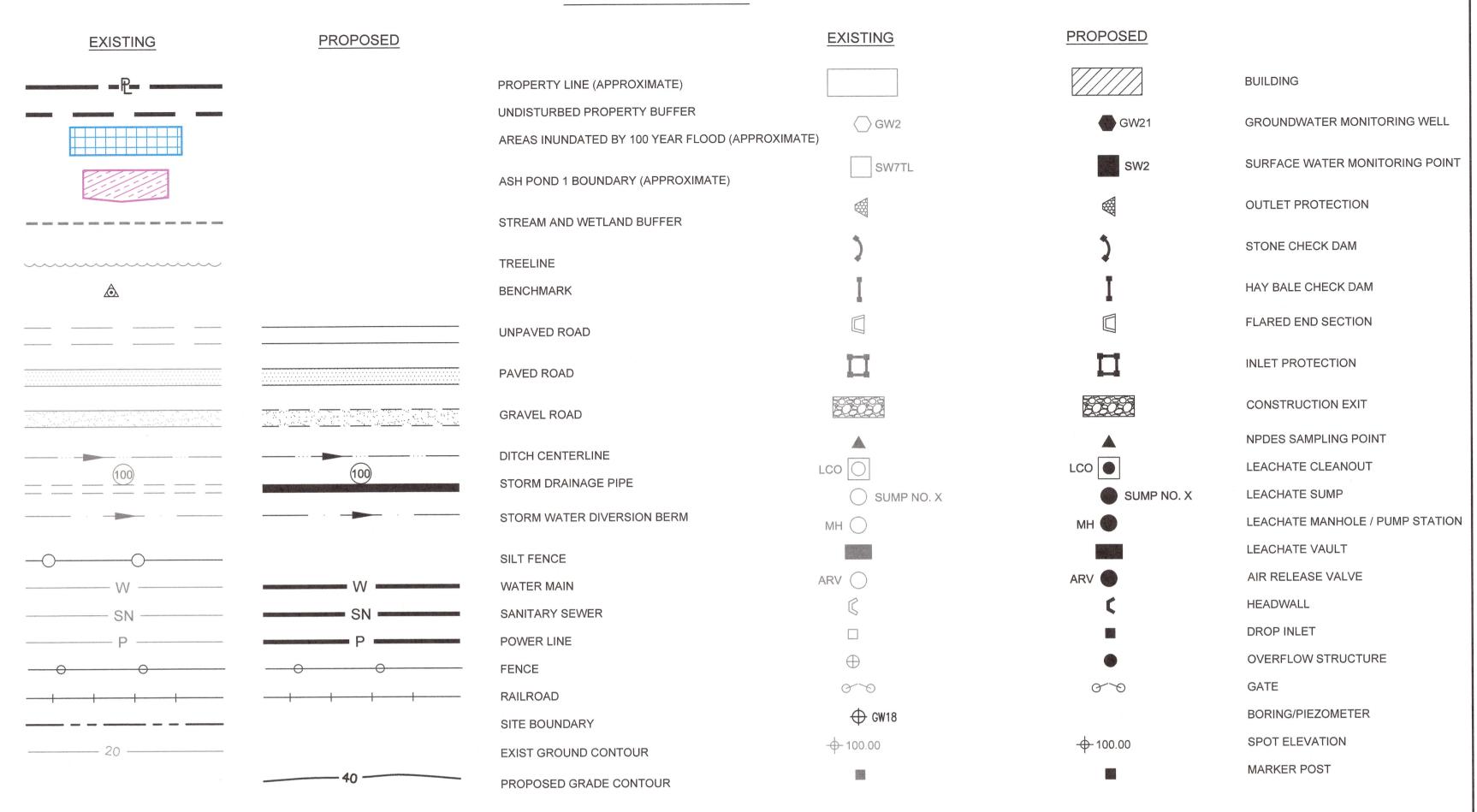
INDEX TO DRAWINGS

SHEET NO.	DESCRIPTION
-	COVER
1	INDEX AND LEGEND
2	EXISTING SITE CONDITIONS
3	ORIGINAL BASE GRADES
4	APPROXIMATE BOTTOM OF EXCAVATION GRADES
5	PROPOSED RESTORATION GRADES
6	CROSS-SECTIONS A-A', B-B' & C-C'
7	CROSS-SECTION D-D
8	PLAT & LEGAL DESCRIPTION
9	COMPLIANCE MONITORING NETWORK
10	DETAILS
11	DETAILS

GENERAL NOTES:

- PROPERTY LINE IS APPROXIMATE.
- 2. GRID IS STATE PLANE GRID, NAD83, EAST ZONE. (APPROXIMATE).
- 3. AERIAL WAS DEVELOPED FROM 2017 NAIP USDA-FSA-APFO AERIAL PHOTOGRAPHY.
- 4. GEORGIA POWER COMPANY PROPERTY LINE DATA OBTAINED FROM ESRI, DIGITALGLOBE, GEOEYE, EARTHSTAR GRAPHICS, CNES/AIRBUS DS, USDA, USGS, AEROGRID, IGN, AND THE GIS USER
- 5. SOUTHERN COMPANY SERVICES, EPS-7017-4 SITE SA-1, LAYOUT.
- 6. SAVANNAH ELECTRIC, P121 MCINTOSH PLANT SITE.
- 7. FLOOD INSURANCE RATE MAP, EFFINGHAM COUNTY, GEORGIA, PANEL 100 OF 175, MARCH, 1987.
- 8. SEE SHEET 2 FOR GENERAL NOTES AND REFERENCES.

LEGEND







INDEX AND LEGEND

CLOSURE DRAWINGS GEORGIA POWER COMPANY PLANT MCINTOSH ASH POND 1 (AP-1) EXISTING COAL COMBUSTION RESIDUALS (CCR) SURFACE IMPOUNDMENT EFFINGHAM, GEORGIA

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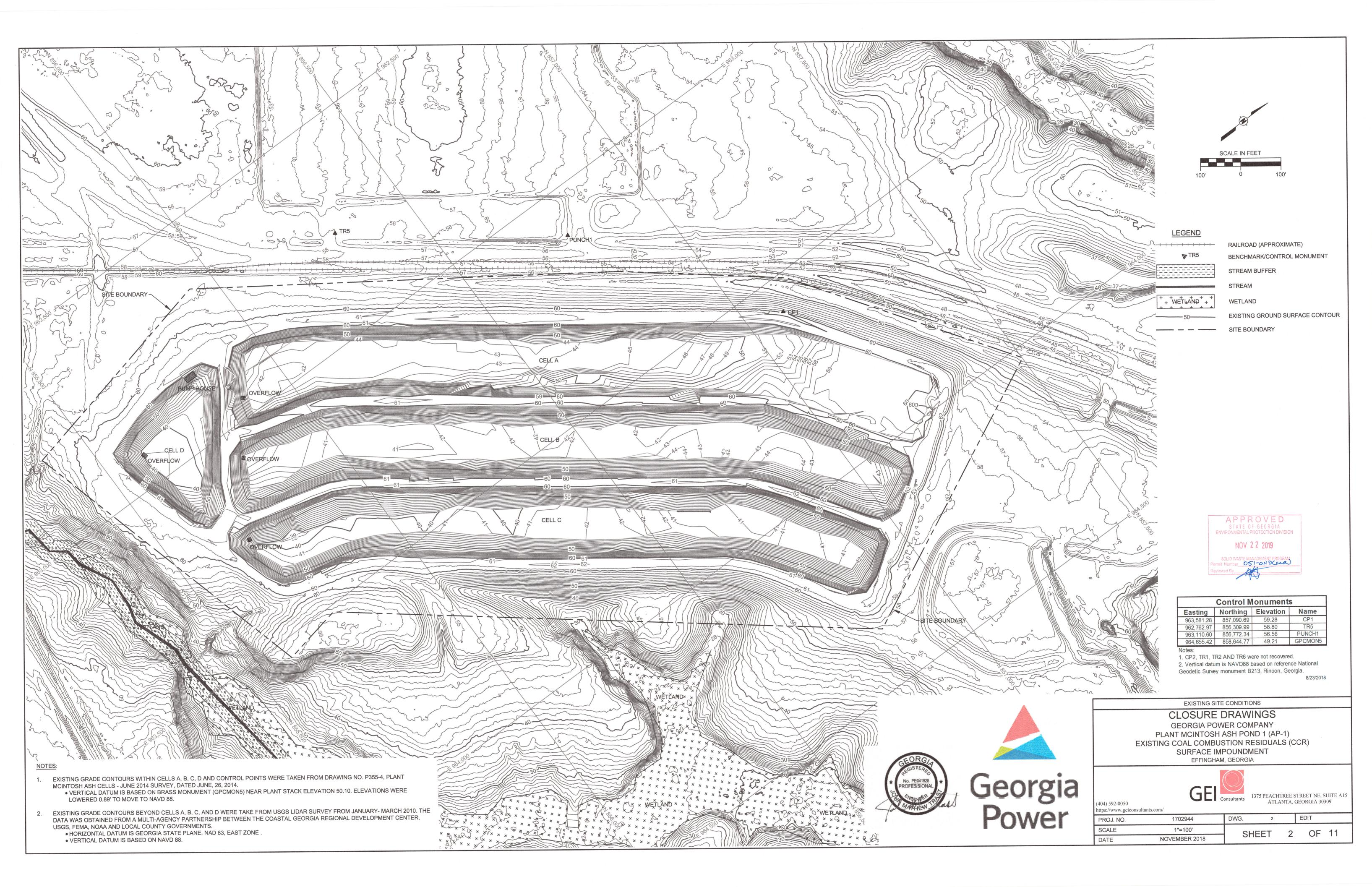


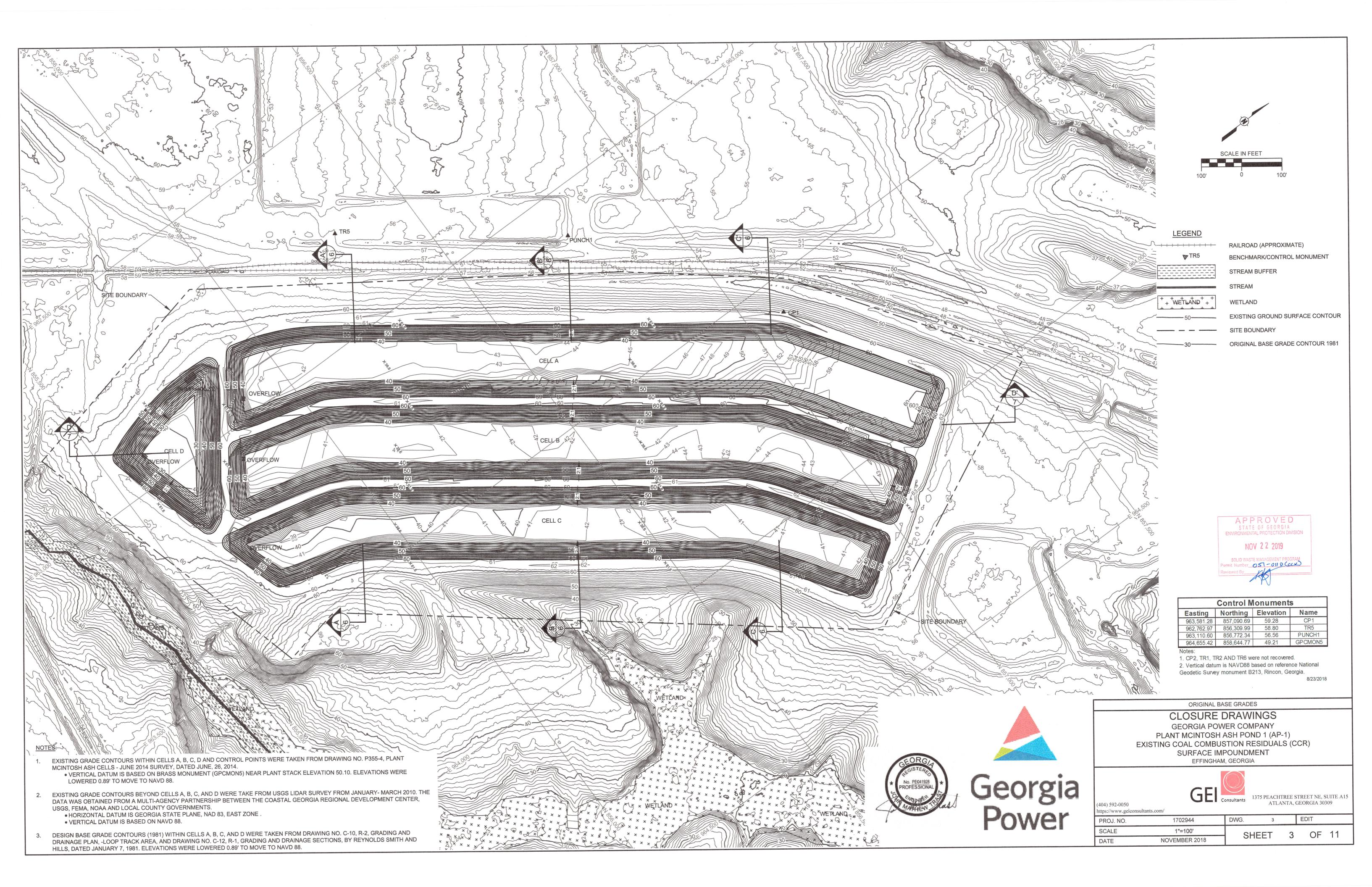
1375 PEACHTREE STREET NE, SUITE A15 ATLANTA, GEORGIA 30309

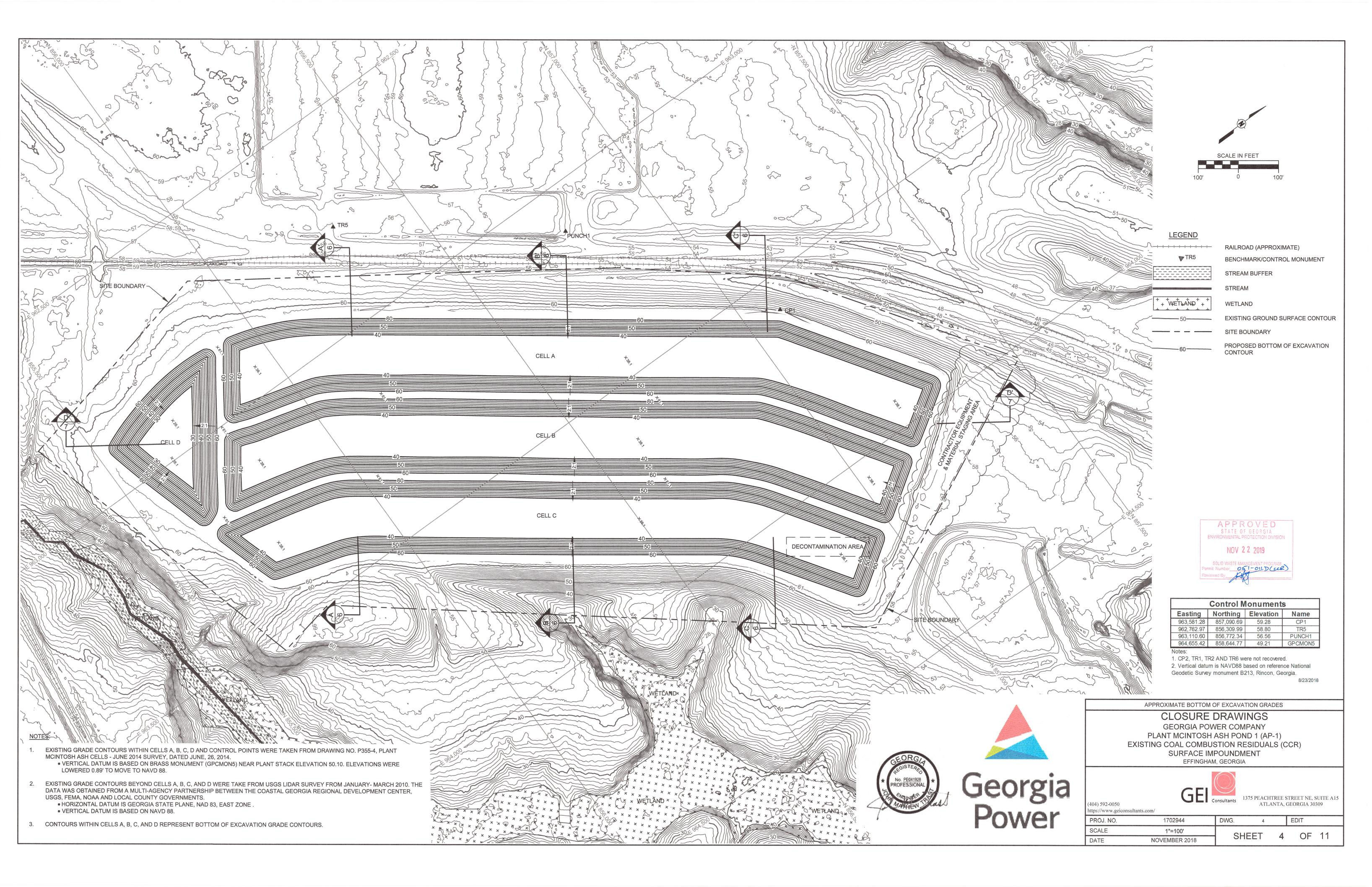
PROJ. NO. DWG. 1702944 SCALE NONE NOVEMBER 2018

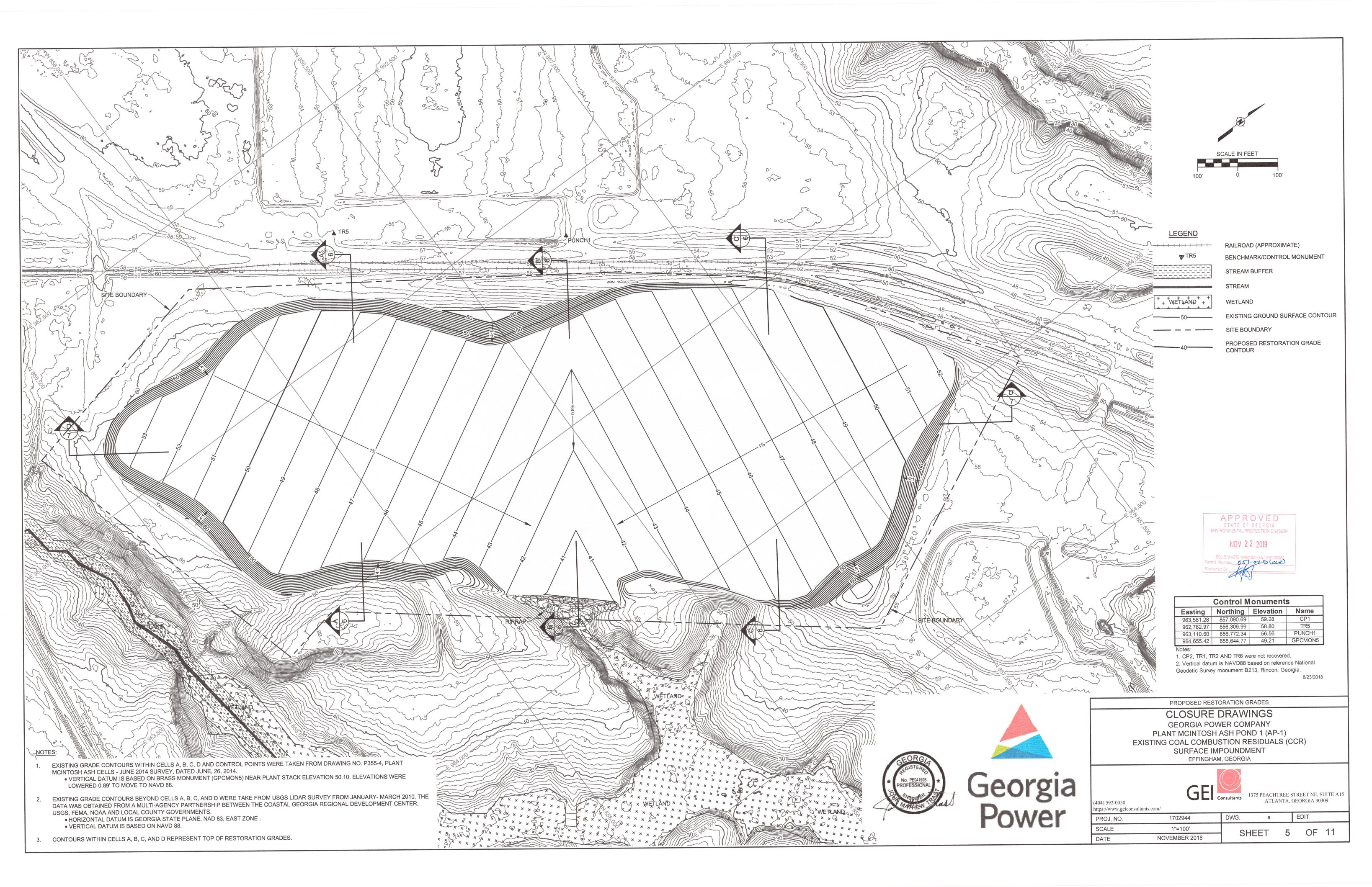
SHEET

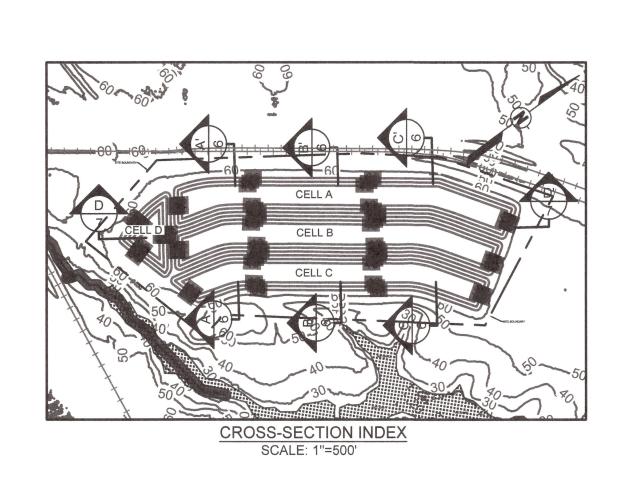
EDIT 1 OF 11

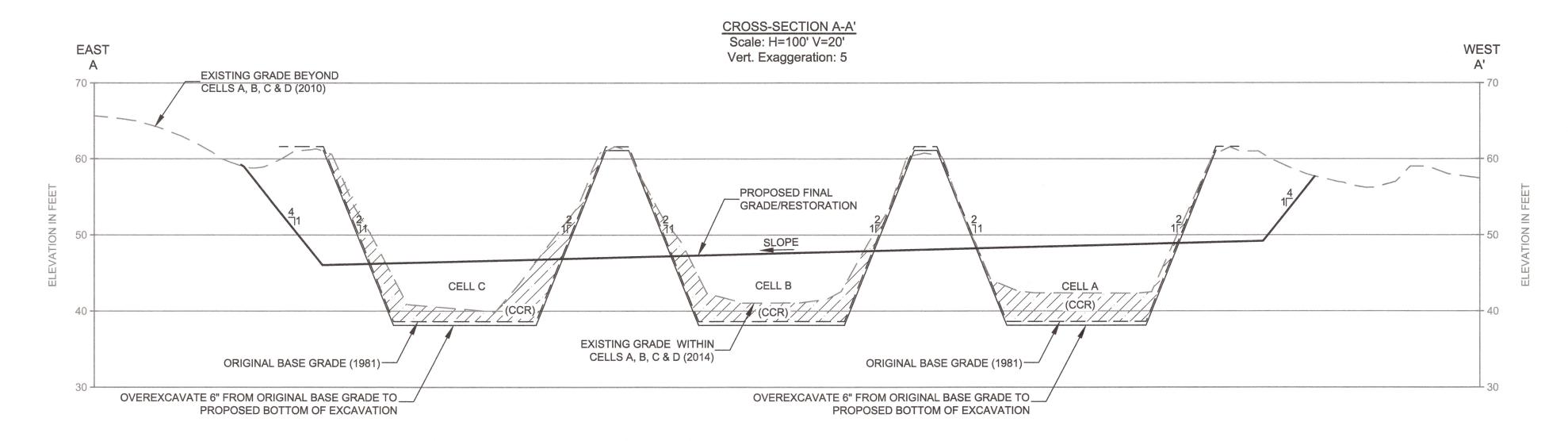


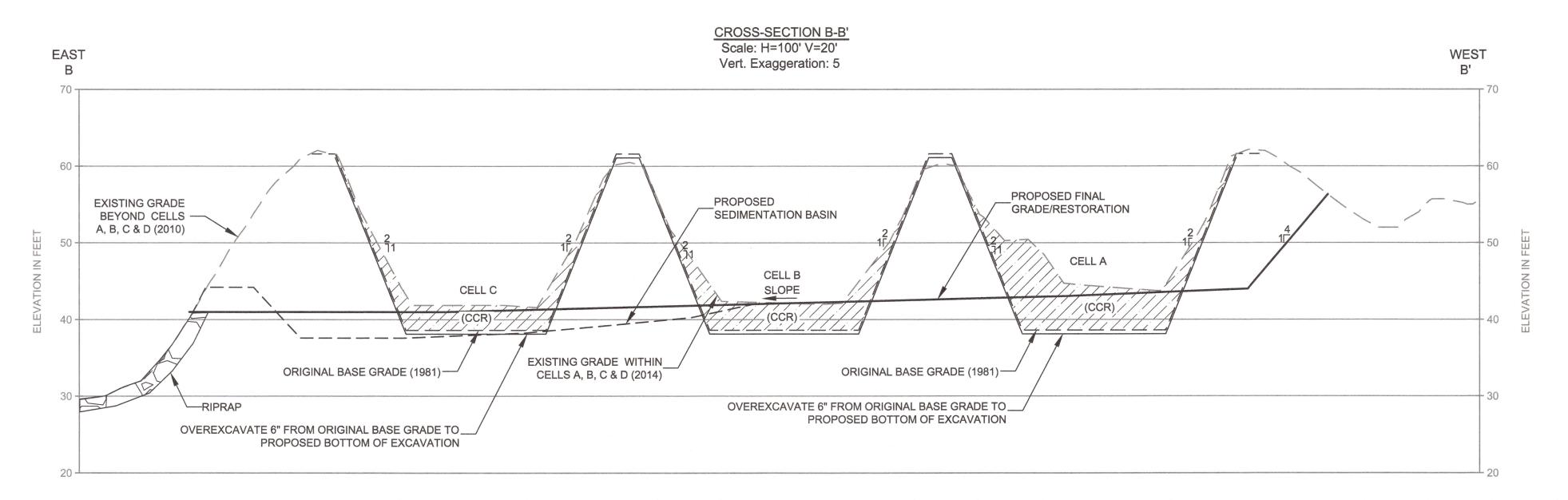


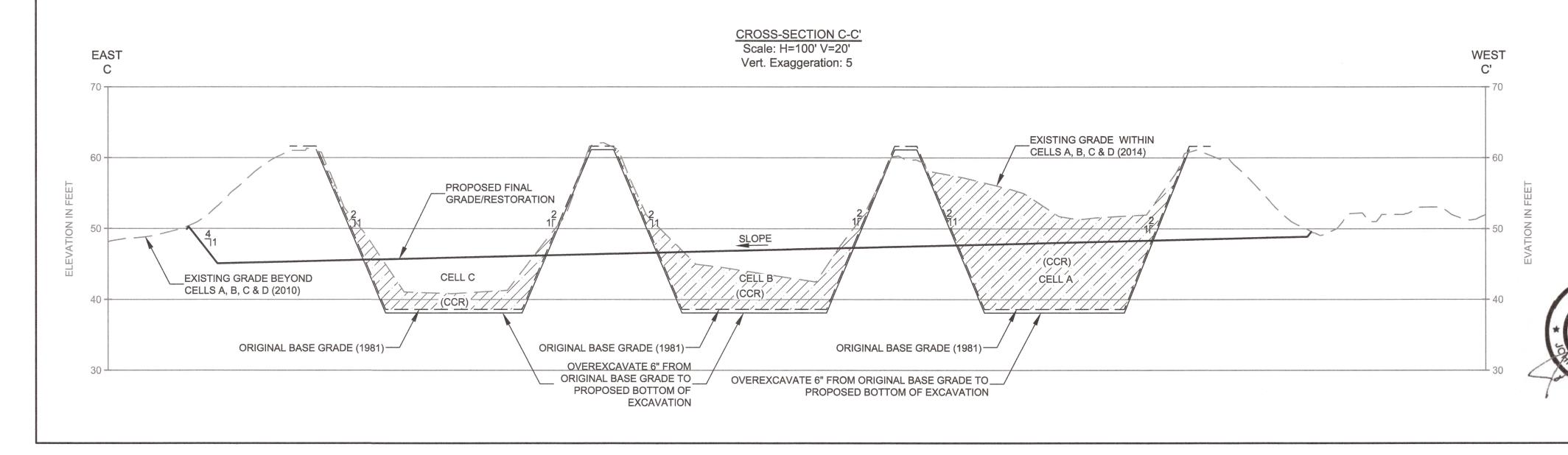
















CROSS-SECTIONS A-A', B-B' & C-C'

CLOSURE DRAWINGS

GEORGIA POWER COMPANY
PLANT MCINTOSH ASH POND 1 (AP-1)
EXISTING COAL COMBUSTION RESIDUALS (CCR)
SURFACE IMPOUNDMENT
EFFINGHAM, GEORGIA

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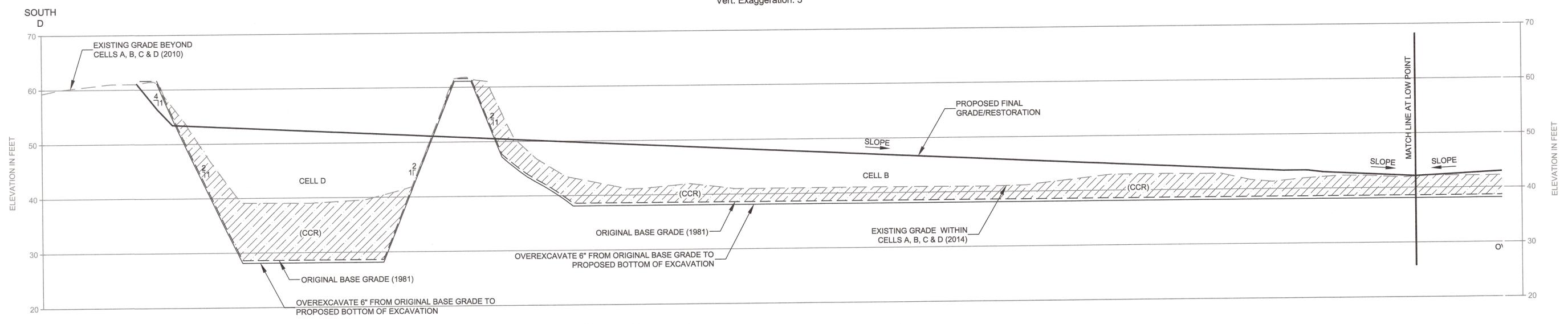


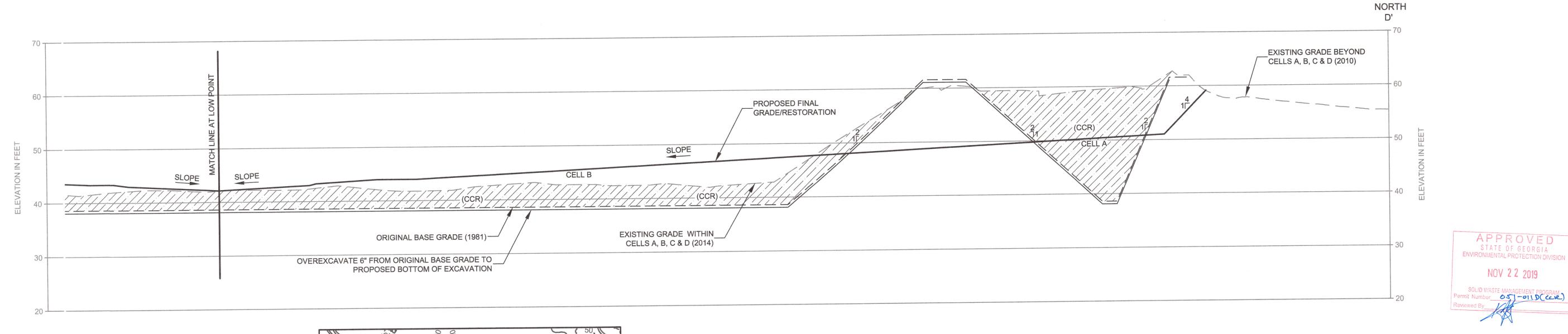
1375 PEACHTREE STREET NE, SUITE A15 ATLANTA, GEORGIA 30309

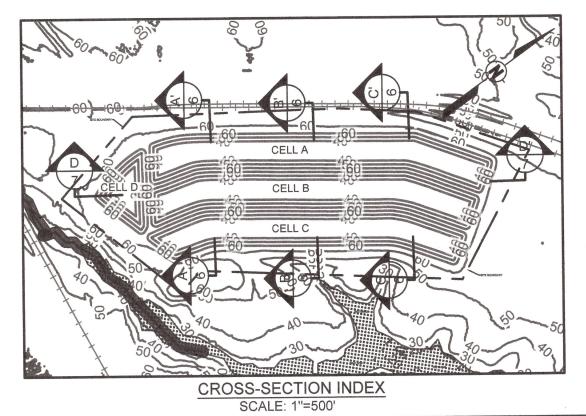
https://www.geiconsultants.com/

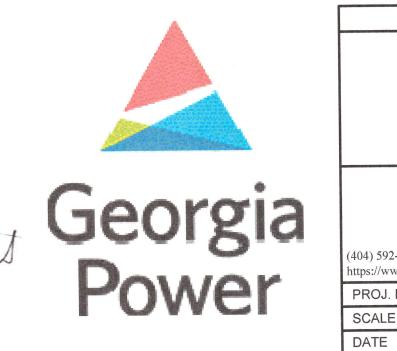
ROJ. NO.	1702944	DWG.	6		EDIT		
CALE	HORIZ. 1"=100', VERT. 1"=20'	SHEET 6		6	OF	11	
ATE	NOVEMBER 2018	SHEET 0		<u> </u>	- 1 1 -	Materials	

CROSS-SECTION D-D' Scale: H=100' V=20' Vert. Exaggeration: 5









CROSS-SECTION D-D' **CLOSURE DRAWINGS**

GEORGIA POWER COMPANY PLANT MCINTOSH ASH POND 1 (AP-1) EXISTING COAL COMBUSTION RESIDUALS (CCR) SURFACE IMPOUNDMENT EFFINGHAM, GEORGIA

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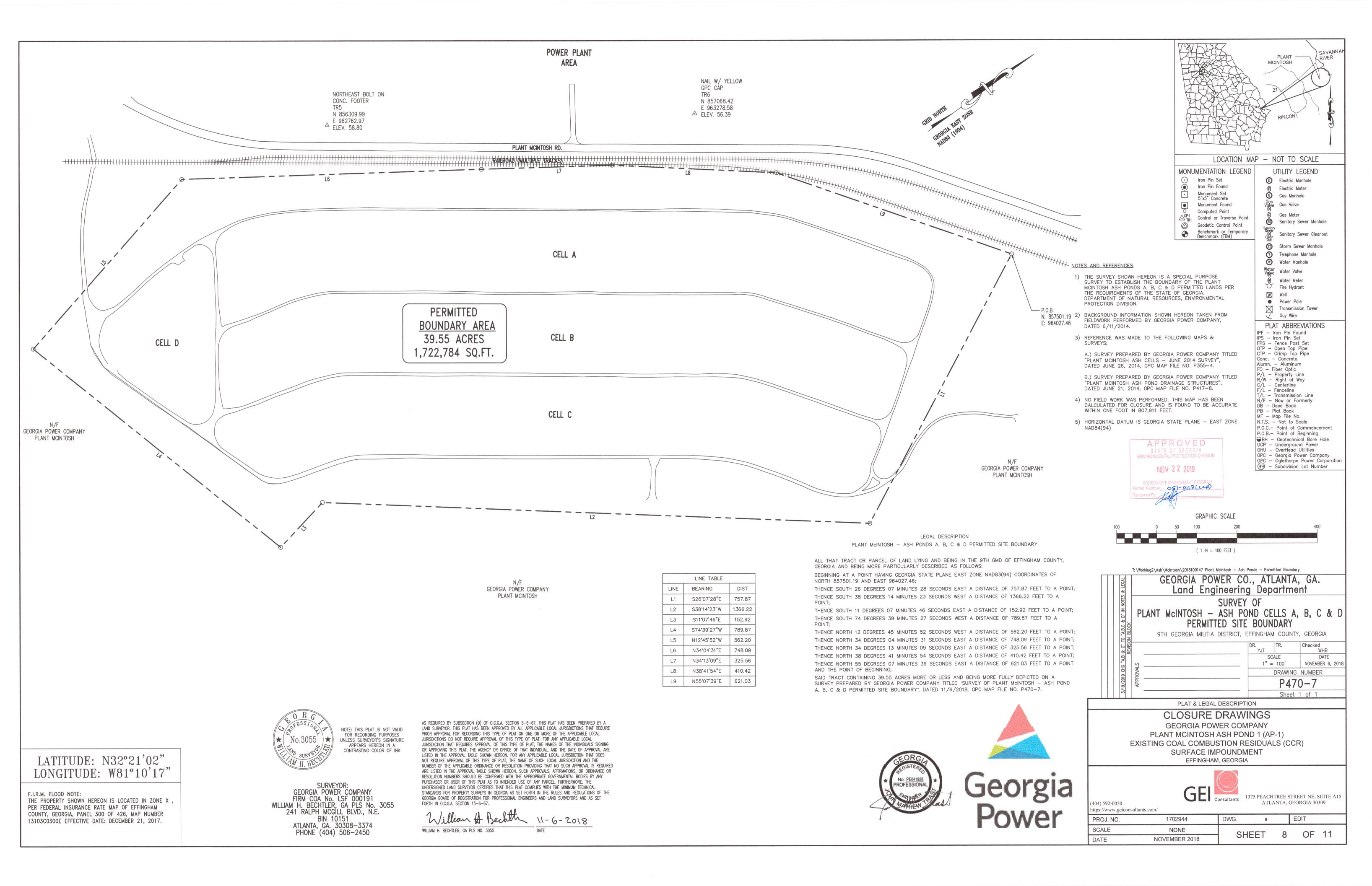
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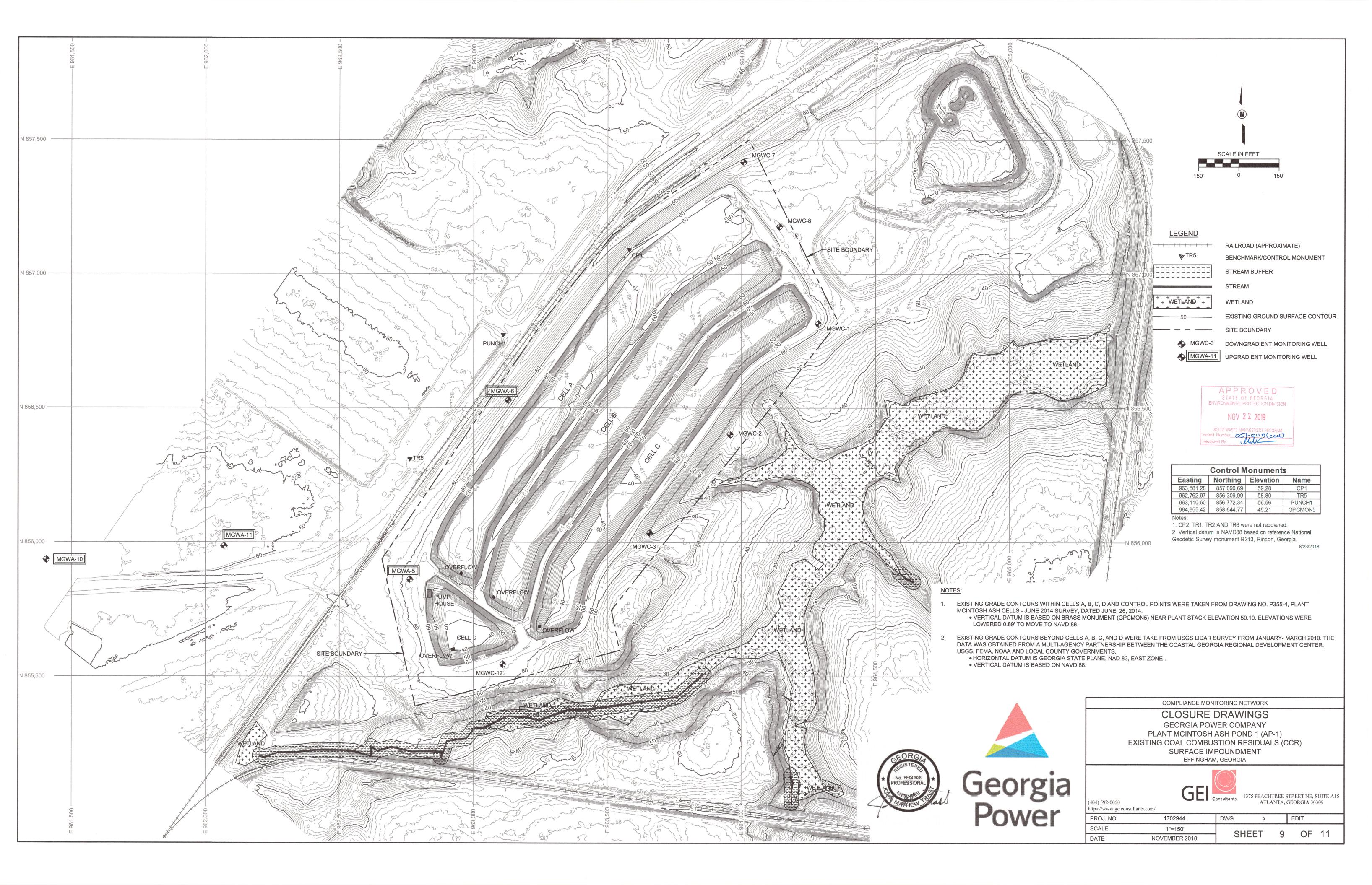
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https://www.geiconsultants.com/ 1702944 PROJ. NO. SCALE HORIZ. 1"=100', VERT. 1"=20'

NOVEMBER 2018

EDIT DWG. SHEET 7 OF 11





GEORGIA UNIFORM CODING SYSTEM

FOR SOIL EROSION AND SEDIMENT CONTROL PRACTICES

GEORGIA SOIL AND WATER CONSERVATION COMMISSION

CODE	PRACTICE	DETAIL	MAP	DESCRIPTION
			SYMBOL	
Cd	CHECKDAM		\$	A small temporary barrier or dam constructed across a swale, drainage ditch or area of concentrated flow.
Ch	CHANNEL STABILIZATION	9 0	74	Improving, constructing or stabilizing an open channe existing stream, or ditch.
Co	CONSTRUCTION EXIT		(LABEL)	A crushed stone pad located at the construction site exit to provide a place for removing mud from tires thereby protecting public streets.
Cr	CONSTRUCTION ROAD STABILIZATION		Cr),	A travelway constructed as part of a construction plar including access roads, subdivision roads, parking areas and other on-site vehicle transportation routes.
Dc	STREAM DIVERSION CHANNEL		*	A temporary channel constructed to convey flow around a construction site while a permanent structure is being constructed.
Di	DIVERSION			An earth channel or dike located above, below, or across a slope to divert runoff. This may be a temporary or permanent structure.
Dn1)	TEMPORARY DOWNDRAIN STRUCTURE		(LABEL)	A flexible conduit of heavy-duty fabric or other material designed to safely conduct surface runoff down a slope. This is temporary and inexpensive.
Dn2	PERMANENT DOWNDRAIN STRUCTURE		Dn2	A paved chute, pipe, sectional conduit or similar material designed to safely conduct surface runoff down a slope.
Fr	FILTER RING	0		A temporary stone barrier constructed at storm drain inlets and pond outlets.
Ga	GABION		A ST	Rock filter baskets which are hand-placed into position forming soil stabilizing structures.
Gr	GRADE STABILIZATION STRUCTURE		Gr (AREL)	Permanent structures installed to protect channels or waterways where otherwise the slope would be sufficient for the running water to form gullies.
Lv	LEVEL SPREADER			A structure to convert concentrated flow of water into less erosive sheet flow. This should be constructed only on undisturbed soils.
Rd	ROCK FILTER DAM		5	A permanent or temporary stone filter dam installed across small streams or drainageways.
Re	RETAINING WALL	· in	Re	A wall installed to stabilize cut and fill slopes where maximum permissible slopes are not obtainable. Each situation will require special design.
Rt	RETRO FITTING		Rt	A device or structure placed in front of a permanent stormwater detention pond outlet structure to serve as a temporary sediment filter.
Sd1)	SEDIMENT BARRIER	1	(INDICATE TYPE	A barrier to prevent sediment from leaving the construction site. It may be sandbags, bales of straw or hay, brush, logs and poles, gravel, or a silt fence.
Sd2	INLET SEDIMENT TRAP	V	INSURANCE I FPE	An impounding area created by excavating around a storm drain drop inlet. The excavated area will be filled and stabilized on completion of construction activities.
Sd3	TEMPORARY SEDIMENT BASIN		(Sd3)	A basin created by excavation or a dam across a waterway. The surface water runoff is temporarily stored allowing the bulk of the sediment to drop out.

FLOATING SURFACE SKIMMER

l(Sk)

A small temporary pond that drains a disturbed area

so that sediment can settle out. The principle feature distinguishing a temporary sediment trap from a

temporary sediment basin is the lack of a pipe or

A buoyant device that releases/drains water from the

surface of sediment ponds, traps, or basins at a

Linear control device constructed as a diversion perpendicular to the direction of runoff to enhance

dissipation and infiltration, while creating multiple

sedimentation chambers with the employment of

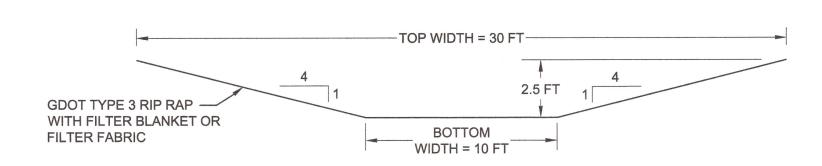
controlled rate of flow.

STRUCTURAL PRACTICES

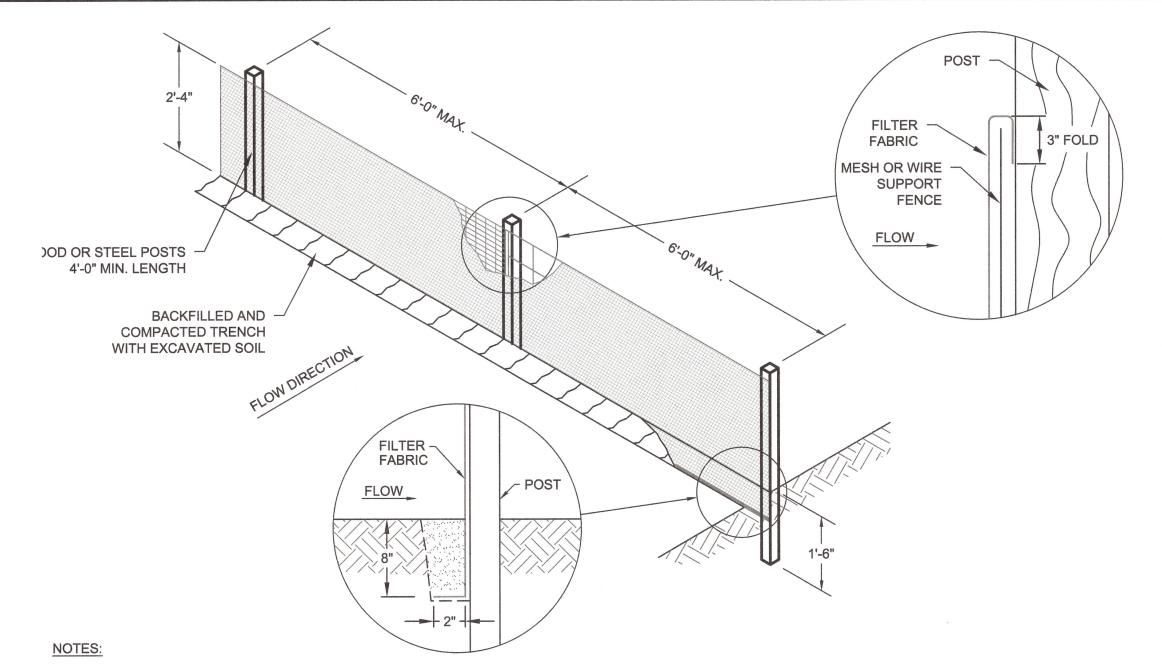
CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION			
Sr	TEMPORARY STREAM CROSSING		Sr (LABEL)	A temporary bridge or culvert-type structure protecting a stream or watercourse from damage by crossing construction equipment.			
St	STORMDRAIN OUTLET PROTECTION		St S	A paved or short section of riprap channel at the outlet of a storm drain system preventing erosion from the concentrated runoff.			
Su	SURFACE ROUGHENING		⊢Su)−l	A rough soil surface with horizontal depressions on a contour or slopes left in a roughened condition after grading.			
Tc	TURBIDITY CURTAIN	M	To	A floating or staked barrier installed within the water (it may also be referred to as a floating boom, silt barrier, or silt curtain).			
Тр	TOPSOILING		(SHOW STRIPING AND STORAGE AREAS)	The practice of stripping off the more fertile soil, storing it, then spreading it over the disturbed area after completion of construction activities.			
Tr	TREE PROTECTION	0	DENOTE TREE CENTERS)	To protect desirable trees from injury during construction activity.			
Wt	VEGETATED WATERWAY OR STORMWATER CONVEYANCE			Paved or vegetative water outlets for diversions, terraces, berms, dikes or similar structures.			

VEGETATIVE PRACTICES

CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Bf	BUFFER ZONE		Bf (ABEL)	Strip of undisturbed original vegetation, enhanced or restored existing vegetation or the reestablishment of vegetation surrounding an area of disturbance or bordering streams.
Cs	COASTAL DUNE STABILIZATION (WITH VEGETATION)	JEFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF	Cs	Planting vegetation on dunes that are denuded, artificially constructed, or re-nourished.
Ds1	DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)		Ds1	Establishing temporary protection for disturbed area where seedlings may not have a suitable growing season to produce an erosion retarding cover.
Ds2	DISTURBED AREA STABILIZATION (WITH TEMP SEEDING)		Ds2	Establishing a temporary vegetative cover with fast growing seedings on disturbed areas.
Ds3	DISTURBED AREA STABILIZATION (WITH PERM SEEDING)	11/1/10 mg	Ds3	Establishing a permanent vegetative cover such as trees, shrubs, vines, grasses, or legumes on disturbed areas.
Ds4	DISTURBED AREA STABILIZATION (SODDING)		Ds4	A permanent vegetative cover using sods on highly erodable or critically eroded lands.
Du	DUST CONTROL ON DISTURBED AREAS		Du	Controlling surface and air movement of dust on construction site, roadways and similar sites.
FI-Co	FLOCCULANTS AND COAGULANTS		FI-Co	Substance formulated to assist in the solids/liquid separation of suspended particles in solution.
Sb	STREAMBANK STABILIZATION (USING PERM VEGETATION)		Sb	The use of readily available native plant materials t maintain and enhance streambanks, or to prevent, restore and repair small streambank erosion proble
Ss	SLOPE STABILIZATION		Ss	A protective covering used to prevent erosion and establish temporary or permanent vegetation on steep slopes, shore lines, or channels.
Tac	TACKIFIERS AND BINDERS		Tac	Substance used to anchor straw or hay mulch by causing the organic material to bind together.



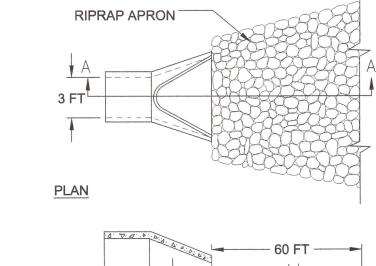
ARMORED STORMWATER CONVEYANCE CHANNEL SCALE: NTS



- 1. SILT FENCE TO BE INSTALLED PRIOR TO LAND DISTURBANCE AND MAINTAINED THROUGHOUT CONSTRUCTION.
- 2. FILTER FABRIC SHALL BE SECURELY ATTACHED TO POSTS WITH STAPLES, WIRES OR NAILS.
- MINIMUM SPLICE OVERLAP SHALL BE 2'-0" WITH A POST AT EACH END.
- USE OF MESH OR WIRE SUPPORT FENCE TO BE DETERMINED BY CONTRACTOR. 5. SILT FENCE INSTALLATION SHALL COMPLY WITH STANDARD GDOT DETAILS ON SHEET NOS. D-24A TO D.



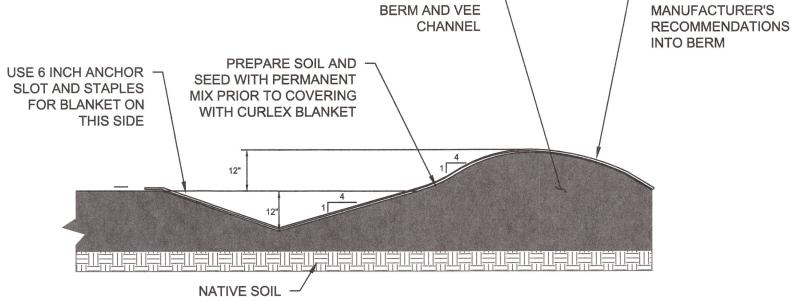
PIPE OUTLET TO FLAT AREA -- NO WELL DEFINED CHANNEL



PIPE OUTLET TO WELL DEFINED CHANNEL

1. La IS THE LENGTH OF THE RIPRAP

- 2. D = 1.5 TIMES THE MAXIMUM STONE DIAMETERBUT NOT LESS THAN 6".
- 3. IN A WELL-DEFINED CHANNEL, EXTEND THE APRON UP THE CHANNEL BANKS TO AN ELEVATION OF 6" ABOVE THE MAXIMUM TAILWATER DEPTH OR TO THE TOP OF THE BANK (WHICHEVER IS LESS).
- 4. A FILTER BLANKET OR FILTER FABRIC SHOULD BE INSTALLED BETWEEN THE RIPRAP AND THE SOIL FOUNDATION.



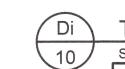
- 1. ALL TREES, STUMPS, BRUSH, ROOTS, WEEDS, AND OTHER OBJECTIONABLE MATERIALS SHOULD BE REMOVED FROM THE WORK
- 2. FOR NON-BACKFILL AREAS, THE DIVERSION SHOULD BE EXCAVATED AND SHAPED TO LINE GRADE, AND CROSS SECTION AS DESIGNED TO MEET THE CRITERIA SPECIFIED HEREIN. DIVERSIONS SHOULD BE EVENLY GRADED AND BE FREE OF IRREGULARITIES SUCH AS RISES OR DIPS THAT WOULD CAUSE NORMAL FLOW TO BE IMPEDED.
- 3. BERMS SHOULD BE MACHINE COMPACTED TO PREVENT UNEQUAL SETTLEMENT THAT WOULD CAUSE DAMAGE IN THE COMPLETED DIVERSION.
- 4. CHANNELS AND BERMS WITHIN DIVERSION SHALL BE COVERED WITH APPROVED EROSION CONTROL MATTING AS SHOWN AND SPECIFIED. STATE OF GEORGIA

GRADE CLEAN -

BACKFILL TO FORM

NOV 2 2 2019 Permit Number 05, T-011 D(ccr)

- SOIL STAPLES OR STAKES PLACED PER



Georgia Power

TYPICAL DIVERSION BERM SCALE: NTS

DETAILS

CLOSURE DRAWINGS GEORGIA POWER COMPANY PLANT MCINTOSH ASH POND 1 (AP-1) EXISTING COAL COMBUSTION RESIDUALS (CCR) SURFACE IMPOUNDMENT

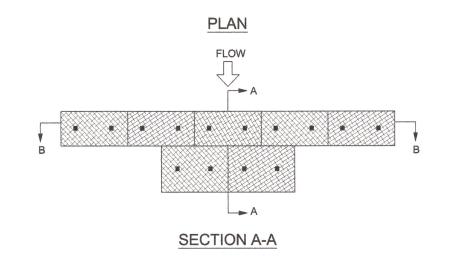
EFFINGHAM, GEORGIA

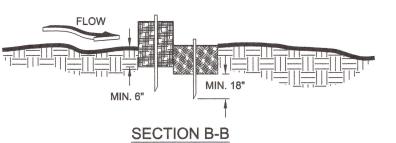
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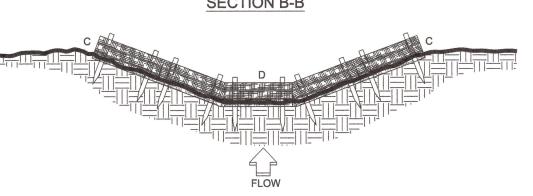
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DWG. EDIT PROJ. NO. SCALE NONE SHEET 10 OF 11 DATE NOVEMBER 2018





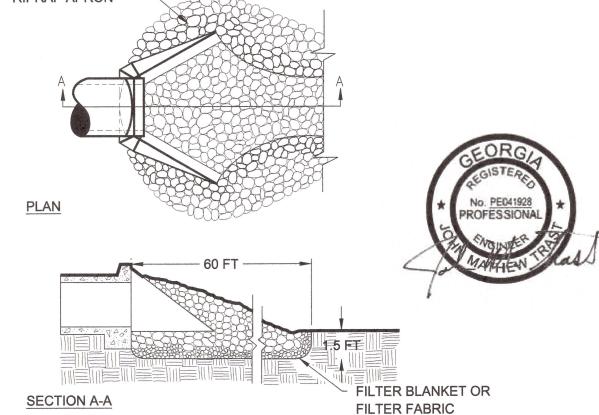


1. BALES SHOULD BE BOUND WITH WIRE OR NYLON STRING AND SHOULD BE PLACED IN ROWS WITH BALE ENDS TIGHTLY ABUTTING THE ADJACENT BALES.

2. REMOVE #4 REBAR AFTER STRAW BALES ARE NO LONGER IN PLACE.

TYPICAL STRAW BALE CHECK DAM

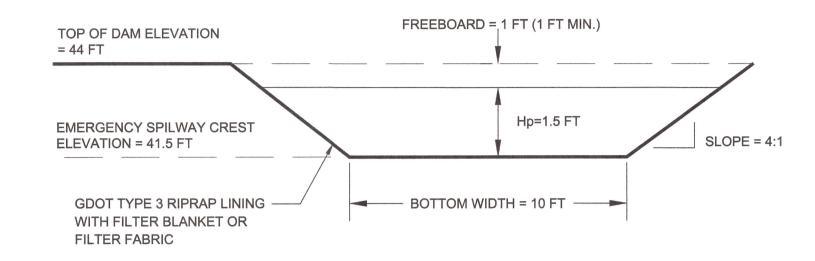
POINT C OF SECTION B-B SHOULD ALWAYS BE HIGHER THAN POINT D.



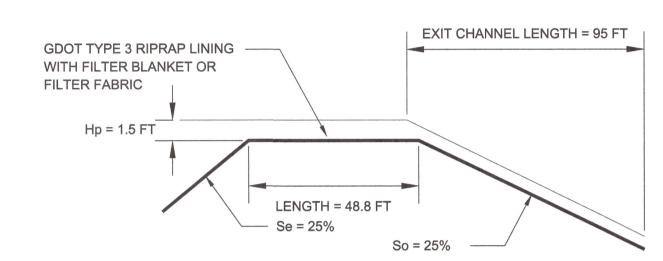
FILTER BLANKET OR FILTER FABRIC

RIPRAP OUTLET PROTECTION SCALE: NTS

PROFILE ALONG CENTERLINE

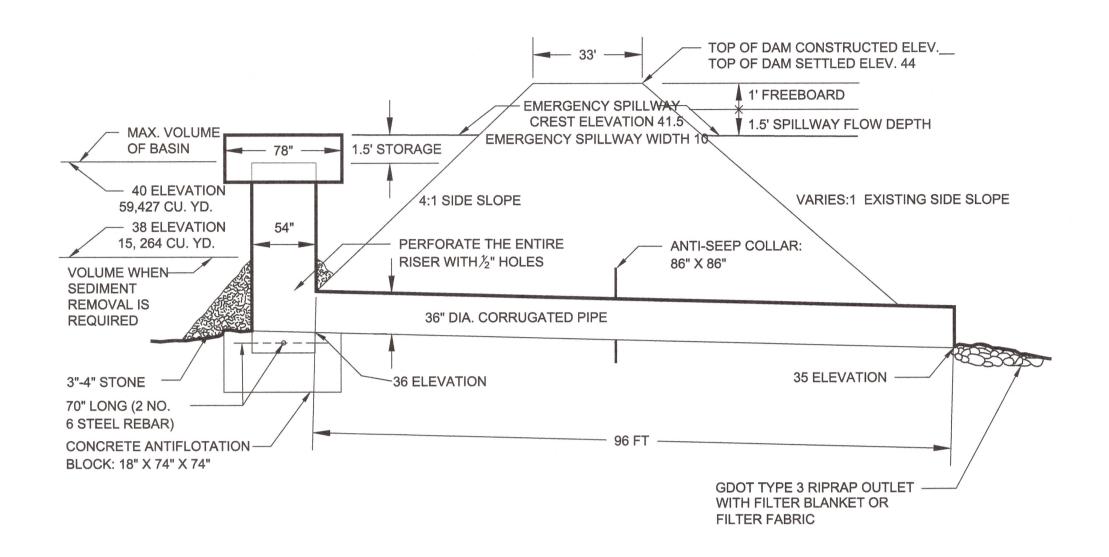


EMERGENCY SPILLWAY



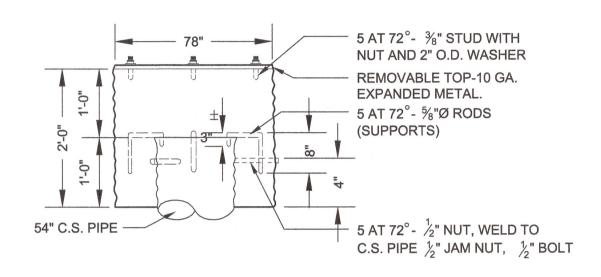
CROSS SECTIONAL DETAIL OF EMERGENCY SPILLWAY SCALE: NTS

CROSS-SECTIONAL DETAIL

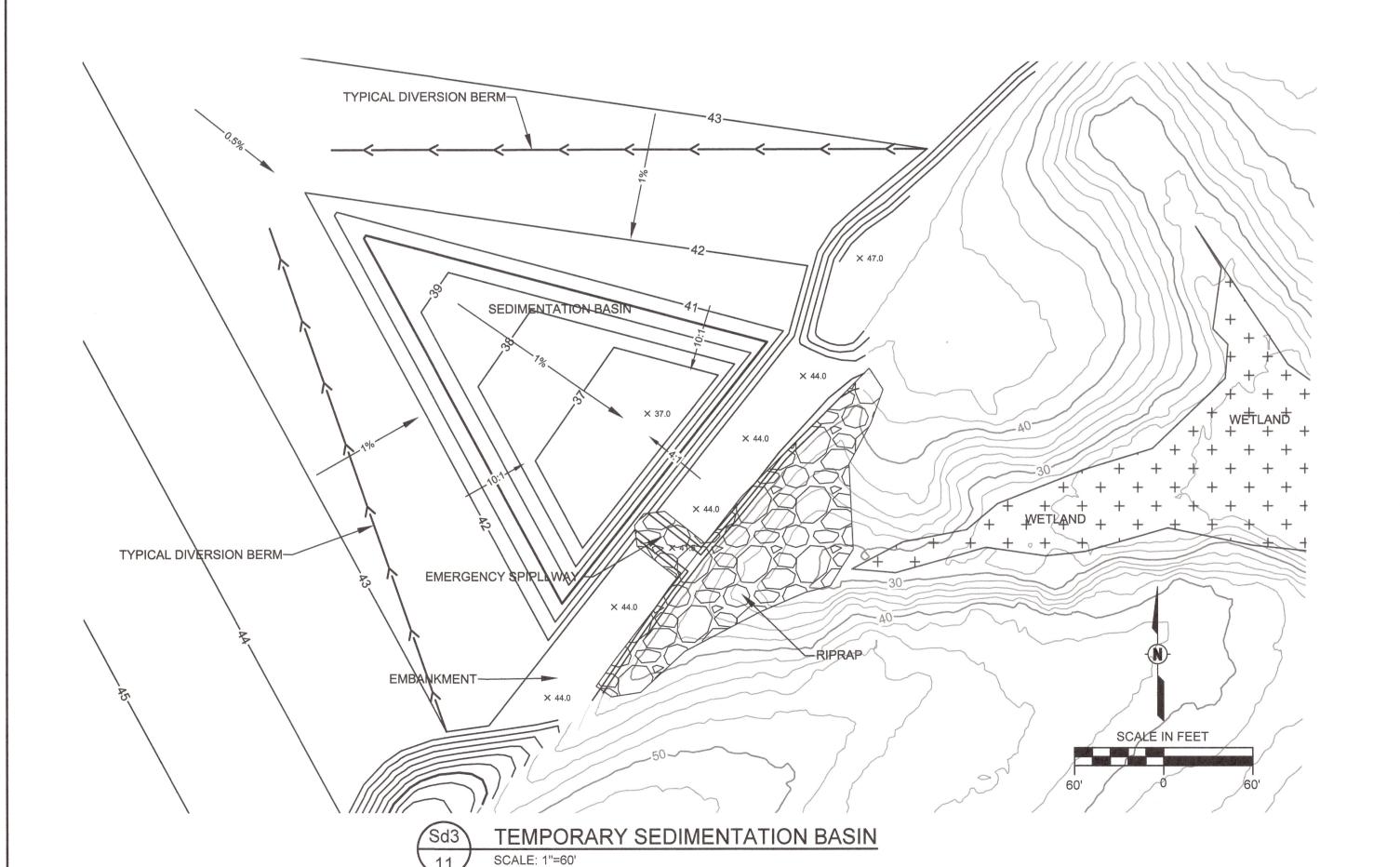


TEMPORARY SEDIMENTATION BASIN EMBANKMENT

SCALE: NTS



Sd3 TYPICAL TRASHRACK
11 SCALE: NTS







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