

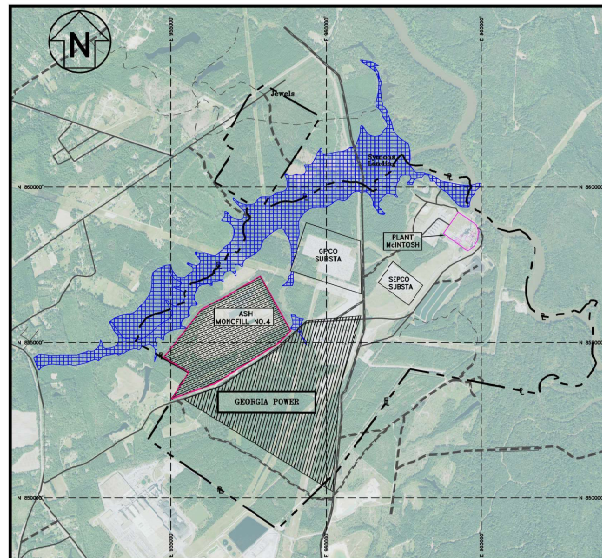
PERMIT DRAWINGS
GEORGIA POWER COMPANY
PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR)
EXISTING LANDFILL NO. 4
EFFINGHAM, GEORGIA
SEPTEMBER 30, 2022

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



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 TOPOGRAPHIC MAP
3	GENERAL SITE DEVELOPMENT ASH CELL LAYOUT
4	CELL 2A SITE DEVELOPMENT PLAN
5	CELL 2B SITE DEVELOPMENT PLAN
6	CELL 3 SITE DEVELOPMENT PLAN
7	CELL 4 SITE DEVELOPMENT PLAN
8	FINAL GRADING PLAN (SHEET 1 OF 2)
9	FINAL GRADING PLAN (SHEET 2 OF 2)
10	LONGITUDINAL & TRAVERSE SECTIONS (SHEET 1 OF 9)
11	LONGITUDINAL & TRAVERSE SECTIONS (SHEET 2 OF 9)
12	LONGITUDINAL & TRAVERSE SECTIONS (SHEET 3 OF 9)
13	LONGITUDINAL & TRAVERSE SECTIONS (SHEET 4 OF 9)
14	LONGITUDINAL & TRAVERSE SECTIONS (SHEET 5 OF 9)
15	LONGITUDINAL & TRAVERSE SECTIONS (SHEET 6 OF 9)
16	LONGITUDINAL & TRAVERSE SECTIONS (SHEET 7 OF 9)
17	LONGITUDINAL & TRAVERSE SECTIONS (SHEET 8 OF 9)
18	LONGITUDINAL & TRAVERSE SECTIONS (SHEET 9 OF 9)
19	VISC. SECTIONS & DETAILS (SHEET 1 OF 8)
20	VISC. SECTIONS & DETAILS (SHEET 2 OF 8)
21	VISC. SECTIONS & DETAILS (SHEET 3 OF 8)
22	VISC. SECTIONS & DETAILS (SHEET 4 OF 8)
23	VISC. SECTIONS & DETAILS (SHEET 5 OF 8)
24	VISC. SECTIONS & DETAILS (SHEET 6 OF 8)
25	VISC. SECTIONS & DETAILS (SHEET 7 OF 8)
26	VISC. SECTIONS & DETAILS (SHEET 8 OF 8)
27	EROSION CONTROL SECTIONS & DETAILS (SHEET 1 OF 8)
28	EROSION CONTROL SECTIONS & DETAILS (SHEET 2 OF 8)
29	EROSION CONTROL SECTIONS & DETAILS (SHEET 3 OF 8)
30	EROSION CONTROL SECTIONS & DETAILS (SHEET 4 OF 8)
31	EROSION CONTROL SECTIONS & DETAILS (SHEET 5 OF 8)
32	EROSION CONTROL SECTIONS & DETAILS (SHEET 6 OF 8)
33	EROSION CONTROL SECTIONS & DETAILS (SHEET 7 OF 8)
34	EROSION CONTROL SECTIONS & DETAILS (SHEET 8 OF 8)
35	GEOLOGICAL CROSS-SECTIONS (SHEET 1 OF 2)
36	GEOLOGICAL CROSS-SECTIONS (SHEET 2 OF 2)
37	LANDFILL NO. 4 COMPLIANCE MONITORING NETWORK
38	PLAT BOUNDARY & LEGAL DESCRIPTION

LEGEND

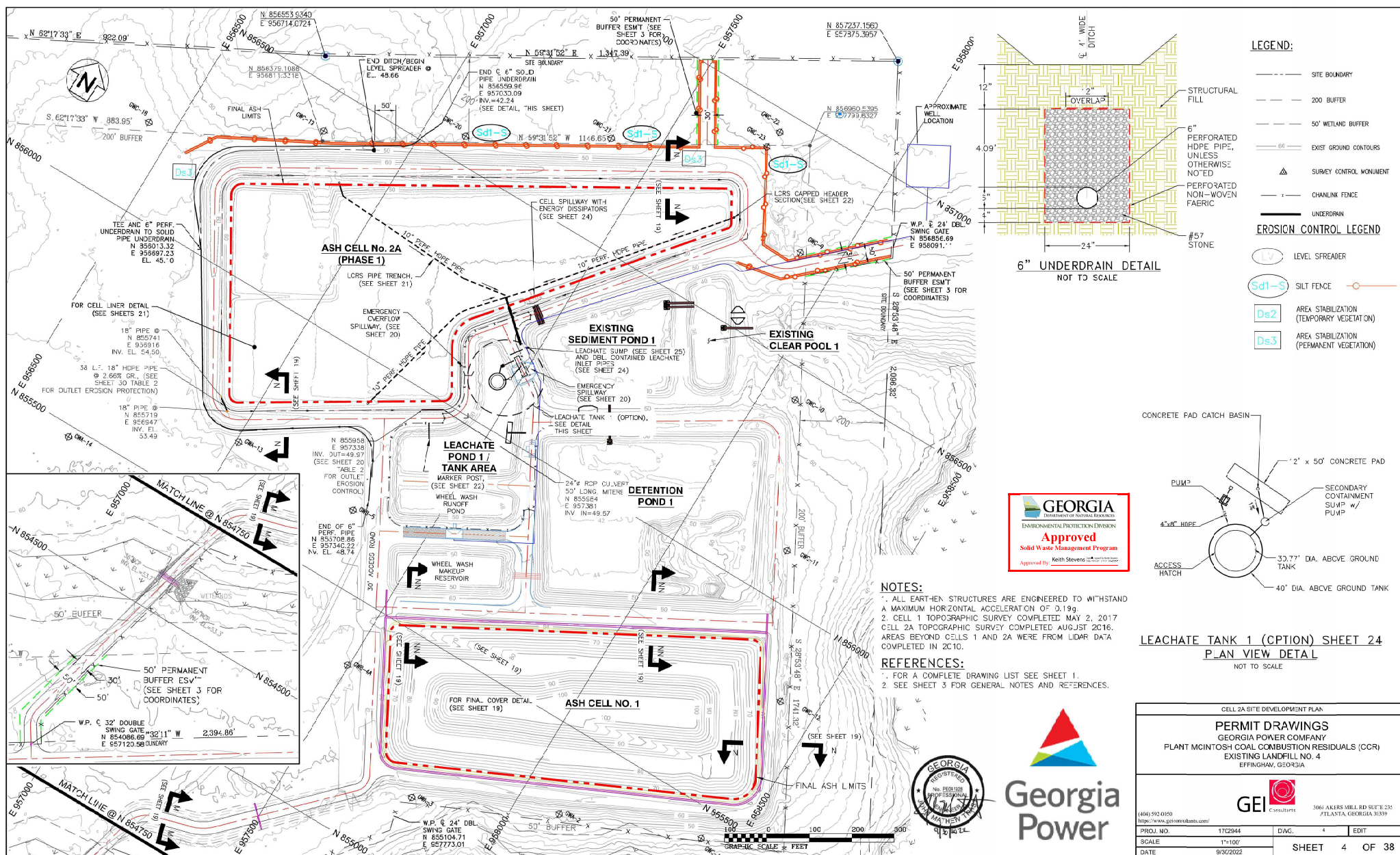
EXISTING	PROPOSED	EXISTING	PROPOSED	
				PROPERTY LINE (APPROXIMATE)
				UNDISTURBED PROPERTY BUFFER
				AREAS INUNDA TED BY 100 YEAR FLOOD (APPROXIMATE)
				ASH DISPOSAL SITE NO. 4 BOUNDARY (APPROXIMATE)
				STREAM AND WETLAND BUFFER
				TREELINE
				BENCHMARK
				UNPAVED ROAD
				PAVED ROAD
				GRAVEL ROAD
				DITCH CENTERLINE
				STORM DRAINAGE PIPE
				STORM WATER DIVERSION BERM
				SILT FENCE
				WATER MAIN
				SANITARY SEWER
				POWER LINE
				FENCE
				SITE BOUNDARY
				200 BUFFER
				50' WETLAND BUFFER
				EXIST GROUND CONTOURS
				FINAL GRADE CONTOURS
				UNDERDRAIN
				DOWNDRAIN
				SURFACE RUNOFF DIRECTION
				LIMITS OF WASTE
				BUILDING
				GROUNDWATER MONITORING WELL
				SURFACE WATER MONITORING POINT
				CUTLET PROTECTION
				STONE CHECK DAM
				HAY BALE CHECK DAM
				FLARED END SECTION
				INLET PROTECTION
				CONSTRUCTION EXIT
				NPDES SAMPLING POINT
				LEACHATE CLEANOUT
				LEACHATE SUMP
				LEACHATE MANHOLE / PUMP STATION
				LEACHATE VAULT
				AIR RELEASE VALVE
				HEADWALL
				DROP INLET
				OVERFLOW STRUCTURE
				GATE
				BORING/PIEZOMETER
				SPOT ELEVATION
				MARKER POST
				DOWNDRAIN PIPE AND SLOPED PAVED HEADWALL
				SEDIMENT TRAP
				EXCELSIOR SLOPE MATTING

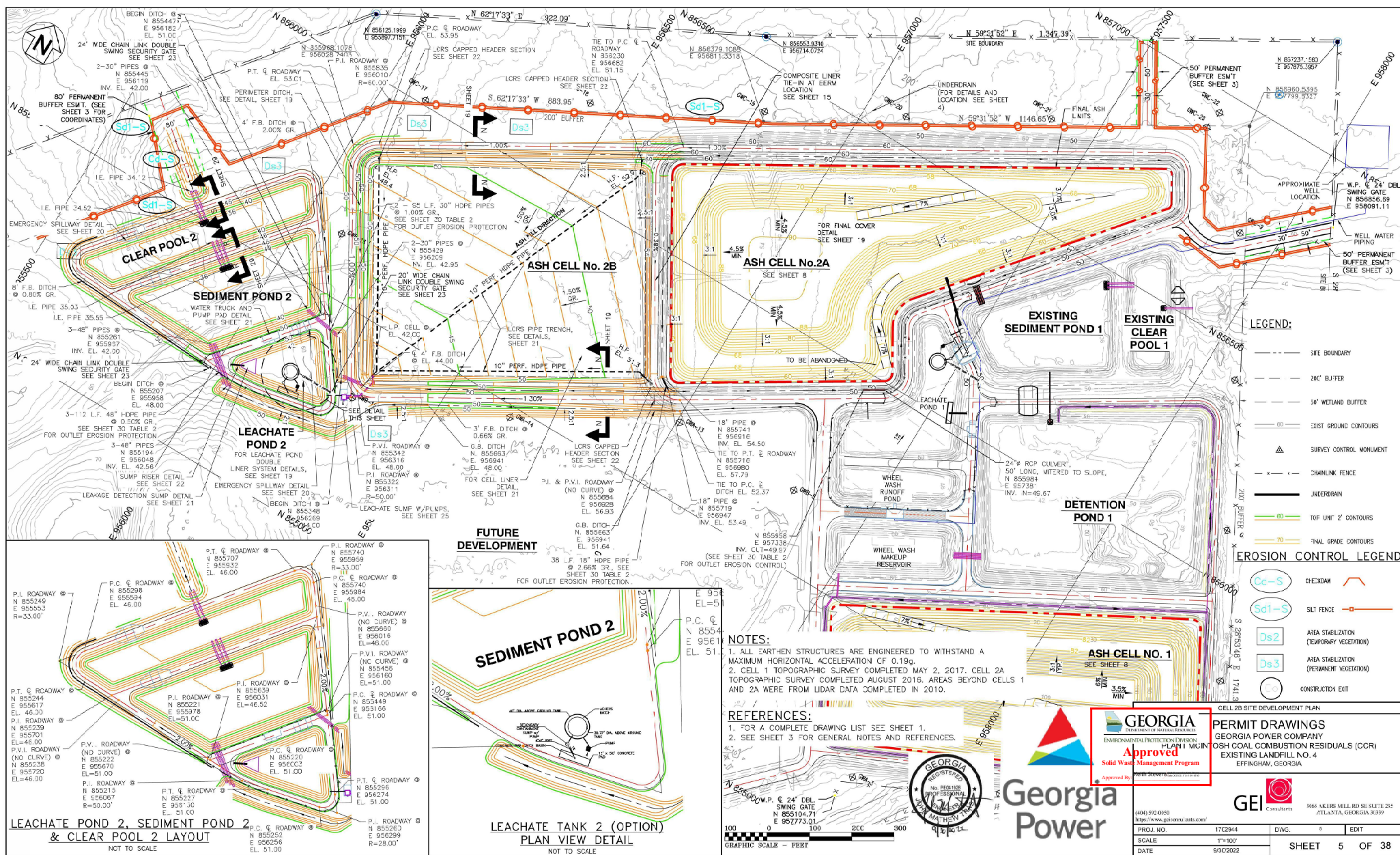
GENERAL NOTES:

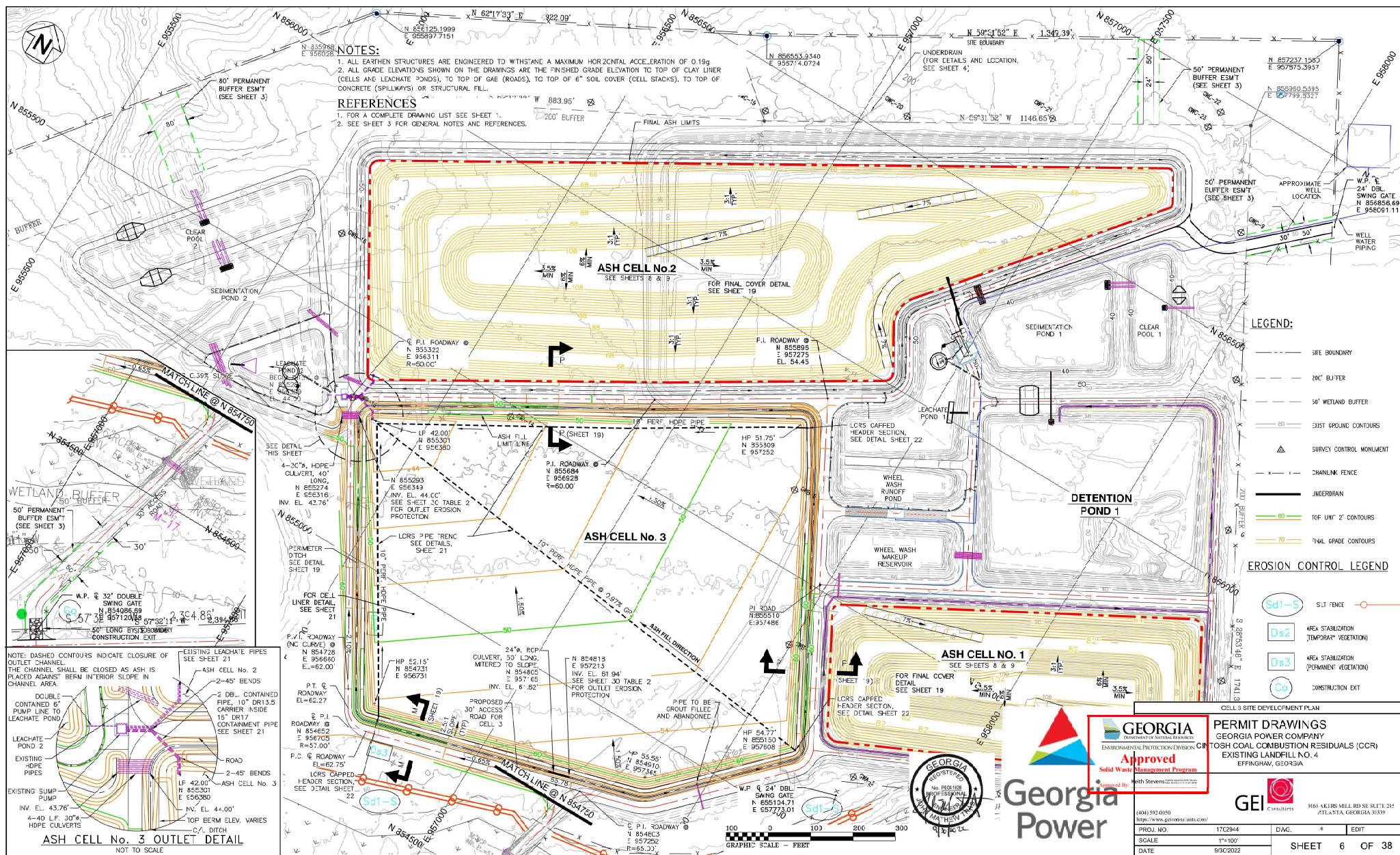
- PROPERTY LINE IS APPROXIMATE.
- GRID IS STATE PLANE GRID, NAD83, EAST ZONE. (APPROXIMATE)
- AERIAL WAS DEVELOPED FROM 2017 NAIP. USDA FSA AFFO AERIAL PHOTOGRAPHY.
- GEORGIA POWER COMPANY PROPERTY LINE DATA OBTAINED FROM ESRI, DIGITAL GLOBE, GEOEYE, EARTHSTAR, GRAPHICS, CHESAIREUS DS, USDA, USGS, AEROGRIID, IGN AND THE GIS USER COMMUNITY.
- SOUTHERN COMPANY SERVICES, EPS-2017-4 SITE SA-1, LAYOUT.
- SAVANNAH ELECTRIC, P121 MCINTOSH PLANT SITE.
- FLOOD INSURANCE RATE MAP, EFFINGHAM COUNTY, GEORGIA, PANEL "00 OF 173, MARCH, 1987.
- SEE SHEET 3 FOR GENERAL NOTES AND REFERENCES.



INDEX AND LEGEND			
PERMIT DRAWINGS GEORGIA POWER COMPANY PLANT MCINTOSH-1 COAL COMBUSTION RESIDUALS (CCR) EXISTING LANDFILL NO. 4 EFFINGHAM, GEORGIA			
1065 AKERS MILL RD. SUITE 215 ATLANTA, GEORGIA 30339			
(404) 592-9850 http://www.gecorp.com/plants/cm/	PROJ. NO. 1702944	DWG. 1	EDIT
SCALE NONE	SHEET 1 OF 38		
DATE 9/30/2022			







NOTES:
1. ALL EARTHEN STRUCTURES ARE ENGINEERED TO WITHSTAND A MAXIMUM HORIZONTAL ACCELERATION OF 0.19g.
2. ALL GRADE ELEVATIONS SHOWN ON THE DRAWINGS ARE THE FINISHED GRADE ELEVATION TO TOP OF CLAY LINER (CELLS AND LEACHATE POND), TO TOP OF GAE (ROADS), TO TOP OF 6" SOIL COVER (CELL STACKS), TO TOP OF CONCRETE (SPILLWAYS) OR STRUCTURAL FILL.

REFERENCES:
1. FOR A COMPLETE DRAWING LIST SEE SHEET 1.
2. SEE SHEET 3 FOR GENERAL NOTES AND REFERENCES.

- LEGEND:**
- SITE BOUNDARY
 - 200' BUFFER
 - 50' WETLAND BUFFER
 - EXIST GROUND CONTOURS
 - SURVEY CONTROL MONUMENT
 - CHAINLINK FENCE
 - UNDERDRAIN
 - TOP 10' 2" CONTOURS
 - FINAL GRADE CONTOURS
- EROSION CONTROL LEGEND**
- Sd1-S SLOTTED FENCE
 - Ds2 AREA STABILIZATION (TEMPORARY VEGETATION)
 - Ds3 AREA STABILIZATION (PERMANENT VEGETATION)
 - Co CONSTRUCTION EXIT

CELL 3 SITE DEVELOPMENT PLAN

PERMIT DRAWINGS
GEORGIA POWER COMPANY
TOSH COAL COMBUSTION RESIDUALS (CCR)
EXISTING LANDFILL NO. 4
EFFINGHAM, GEORGIA

Georgia Power

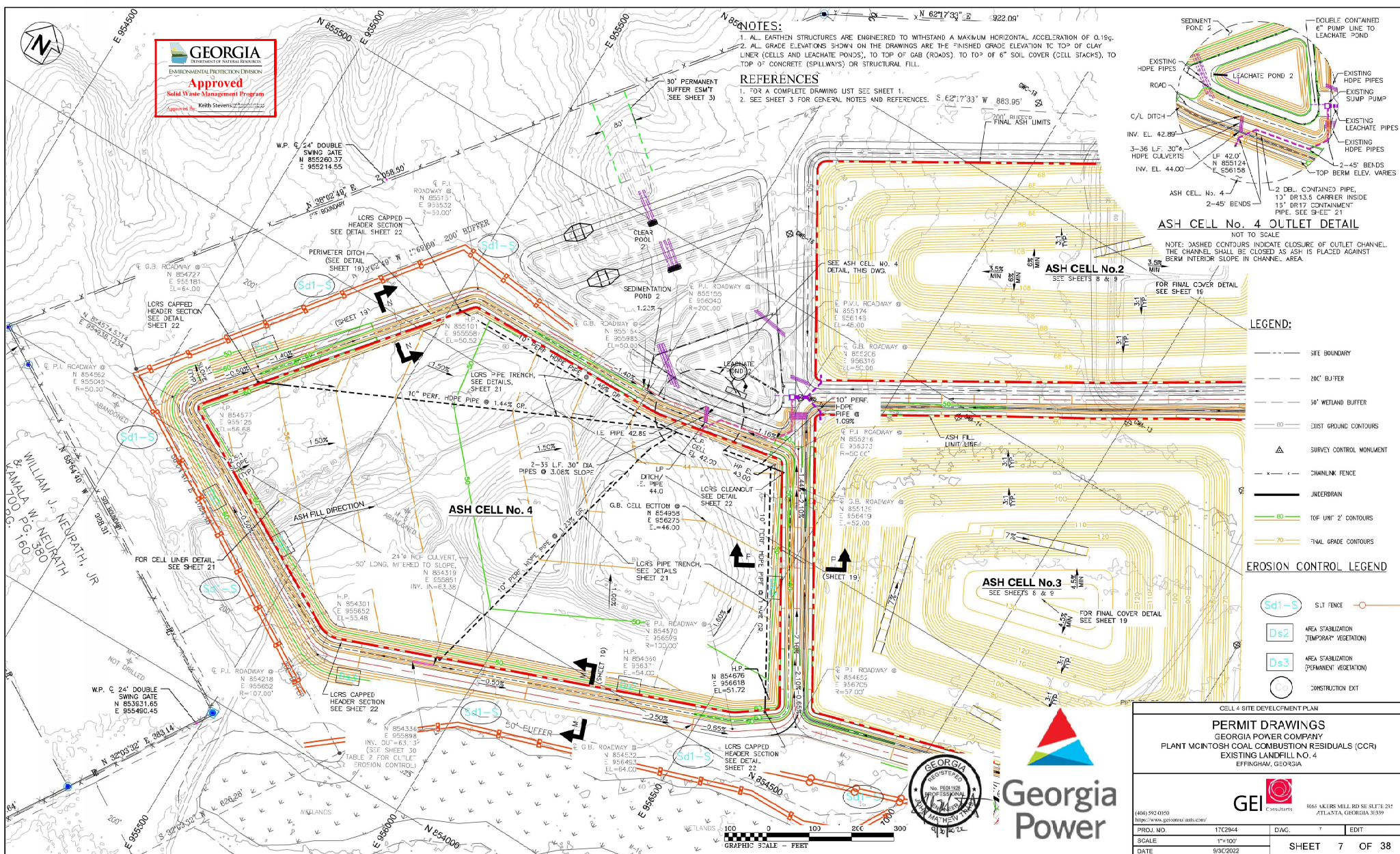
GEI Consultants

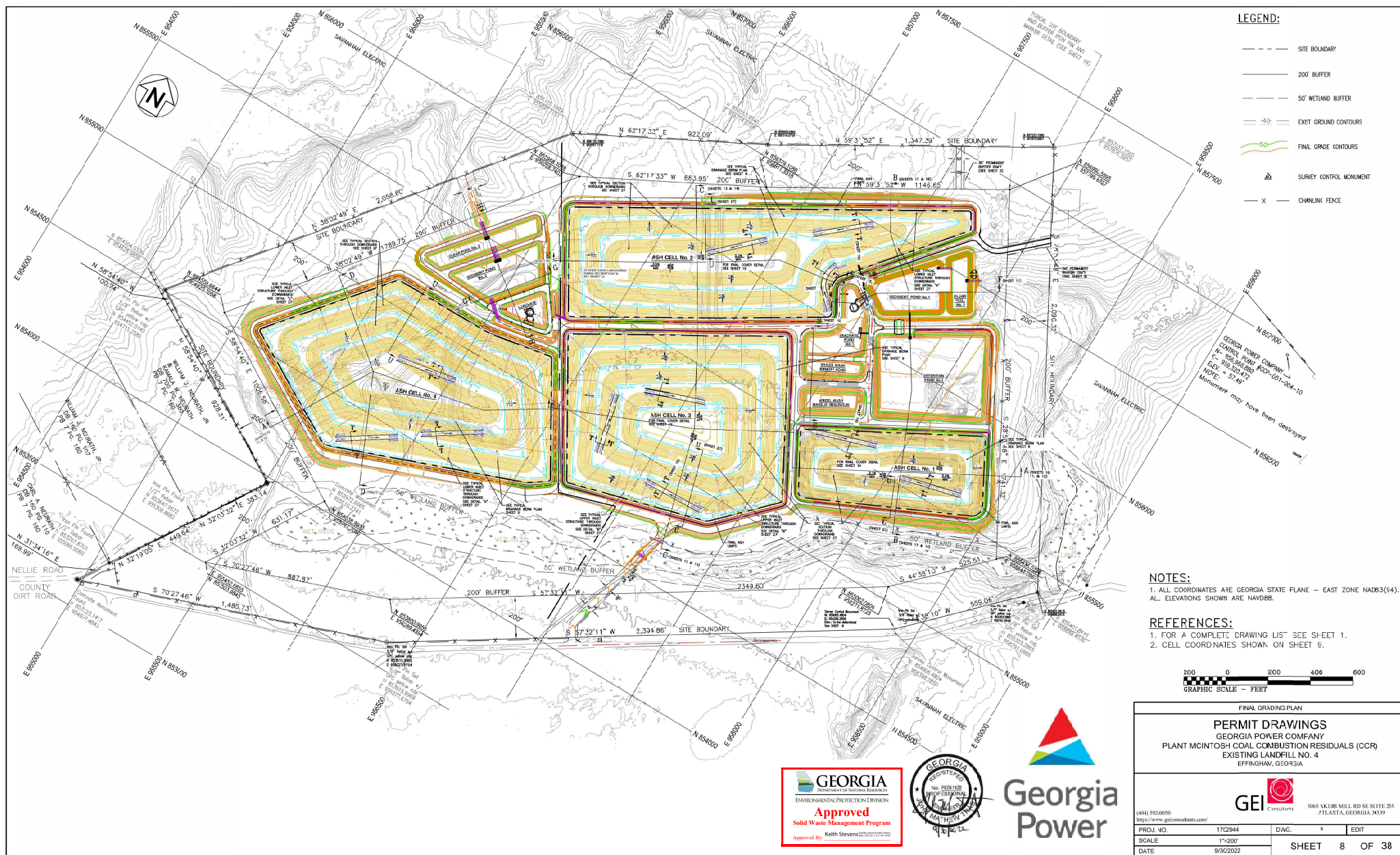
1065 AKERS MILL RD SE SUITE 215
ATLANTA, GEORGIA 30339

(800) 592-0350
http://www.gecorp.com/atlanta/

PROJ. NO.	17C2944	DWG.	6	EDIT
SCALE	1"=100'			
DATE	9/30/2002			

SHEET 6 OF 38





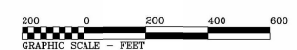
- LEGEND:**
- SITE BOUNDARY
 - 200' BUFFER
 - 50' WETLAND BUFFER
 - EXIST GROUND CONTOURS
 - FINAL GRADE CONTOURS
 - SURVEY CONTROL MONUMENT
 - CHAINLINK FENCE

NOTES:

1. ALL COORDINATES ARE GEORGIA STATE PLANE - EAST ZONE NAD83(54).
ALL ELEVATIONS SHOWN ARE NAVD83.

REFERENCES:

1. FOR A COMPLETE DRAWING LIST SEE SHEET 1.
2. CELL COORDINATES SHOWN ON SHEET 9.



FINAL GRADING PLAN			
PERMIT DRAWINGS			
GEORGIA POWER COMPANY			
PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR)			
EXISTING LANDFILL NO. 4			
EFFINGHAM, GEORGIA			
 1065 AKERS MILL RD SE SUITE 205 ATLANTA, GEORGIA 30339			
(800) 592-0850 http://www.geiconsultants.com/	PROJ. NO. 17C2944	DWG. B	EDIT
SCALE 1"=200'	SHEET 8 OF 38		
DATE 9/30/2022			

CELL 1 - HIGH POINTS & LOW POINTS

High Point	Northing	Easting	Elev.	Low Point	Northing	Easting	Elev.
HP101	855806.85	958271.32	81.5	LP101	855677.92	958345.55	79.5
HP102	855572.18	958252.55	81.5	LP102	855455.93	958099.94	79.5
HP103	855336.91	957714.07	81.5	LP103	855423.91	957449.74	79.5
HP104	855588.20	957890.49	81.5	LP104	855707.24	958082.48	79.5

DB100	855617.84	957803.03	81.5
-------	-----------	-----------	------

CELL 2 - HIGH POINTS

High Point	Northing	Easting	Elev.	Low Point	Northing	Easting	Elev.
HP201	856378.40	957283.00	87.5	LP201	855293.98	957185.10	85.5
HP202	856043.82	957174.07	87.5	LP202	855988.47	957092.31	85.5
HP203	855875.13	956517.22	87.5	LP203	85581.19	956799.89	85.5
HP204	855742.57	956684.59	87.5	LP204	855667.45	956531.78	85.5
HP205	855584.87	956739.17	87.5	LP205	855368.08	956319.79	85.5
HP206	855777.15	956559.07	87.5	LP206	855876.52	956468.17	85.5
HP207	855970.04	956555.22	87.5	LP207	855078.34	956738.78	85.5
HP208	856197.14	956616.52	87.5	LP208	855260.13	957042.23	85.5
HP209	856287.44	957119.29	87.5	LP209	855463.63	957471.39	85.5
HP210	856705.99	957669.66	87.5	LP210	855995.69	957263.90	85.5
HP211	856240.11	957264.57	87.5	LP211	855816.50	956982.23	85.5
HP212	856589.47	957123.54	87.5	LP212	856688.00	957083.35	85.5
HP213	855726.58	956845.25	87.5	LP213	855521.01	956460.32	85.5
HP214	855582.84	956877.14	87.5	LP214	855549.16	956296.41	85.5
HP215	855465.87	956347.88	87.5	LP215	855720.04	956189.01	85.5
HP216	855630.00	956358.52	87.5	LP216	855875.55	956247.03	85.5
HP217	855805.45	956134.58	87.5	LP217	855056.48	956525.34	85.5
HP218	855951.00	956257.08	87.5	LP218	855258.07	956842.87	85.5
HP219	856159.62	956687.69	87.5	LP219	855426.58	957155.85	85.5
HP220	856344.05	956955.60	87.5	LP220	855613.28	957492.50	85.5
HP221	856519.00	957210.47	87.5				

DB200	856254.58	957299.61	87.25
-------	-----------	-----------	-------

CELL 3 - HIGH POINTS

High Point	Northing	Easting	Elev.	Low Point	Northing	Easting	Elev.
HP301	855315.18	957104.00	127.5	LP301	855386.27	957165.05	125.5
HP302	855115.33	957087.00	127.5	LP302	855163.05	957256.11	125.5
HP303	855111.00	956857.41	127.5	LP303	855075.01	956904.62	125.5
HP304	855345.96	957088.65	127.5	LP304	855174.76	956833.90	125.5
HP305	855429.02	957247.76	127.5	LP305	855248.05	957346.27	125.5
HP306	855079.15	957086.17	107.5	LP306	855009.40	957012.31	125.5
HP307	854981.80	956528.41	107.5	LP307	854967.32	956841.42	125.5
HP308	855180.71	956721.11	107.5	LP308	855240.86	956733.59	125.5
HP309	855204.02	956795.39	107.5	LP309	855438.35	957041.33	125.5
HP310	855588.83	957258.03	87.5	LP310	855439.40	957339.15	85.5
HP311	855295.34	957429.77	87.5	LP311	855186.31	957484.75	85.5
HP312	855067.62	957420.63	87.5	LP312	855003.97	957354.31	85.5
HP313	854916.38	957336.05	87.5	LP313	854876.76	956912.17	85.5
HP314	854839.86	956615.36	87.5	LP314	854968.18	956722.33	85.5
HP315	855135.02	956621.45	87.5	LP315	855248.34	956574.97	85.5
HP316	855321.67	956671.77	87.5	LP316	855418.09	956833.52	85.5
HP317	855520.55	956691.76	87.5	LP317	85560.84	957138.10	85.5
HP318	855488.15	957421.65	87.5	LP318	855708.18	957284.59	85.5
HP319	855233.60	957068.19	87.5	LP319	855338.30	957490.59	85.5
HP320	855006.25	957486.38	87.5	LP320	855116.17	957581.55	85.5
HP321	854878.24	957229.13	87.5	LP321	854935.82	957410.95	85.5
HP322	854777.74	956635.61	87.5	LP322	854853.81	957131.34	85.5
HP323	854925.86	956626.55	87.5	LP323	854744.42	956726.54	85.5
HP324	855282.51	956452.59	87.5	LP324	855009.12	956546.69	85.5
HP325	855020.29	956783.16	87.5	LP325	855389.22	956611.50	85.5
HP326	855684.04	957088.11	87.5	LP326	855587.03	956939.34	85.5

DB300	855380.17	957111.09	126.74
DB301	855207.52	956690.61	108.6
DB302	854889.78	957004.16	86.9

CELL 1 - STACK ACCESS RAMPS

Ramp Corner	Northing	Easting	Elev.
RC101	855504.16	957611.50	82.0
RC102	855523.22	957601.44	82.0
RC103	855609.82	957877.71	82.0
RC104	855590.76	957881.78	82.0
RC105	855613.60	958331.14	82.0
RC106	855594.19	958341.98	82.0
RC107	855525.44	958064.84	122.0
RC108	855544.81	958056.85	122.0

CELL 3 - STACK ACCESS RAMPS

Ramp Corner	Northing	Easting	Elev.
RC301	854921.67	957322.91	88.0
RC302	854901.98	957322.67	88.0
RC303	854891.08	957038.17	88.0
RC304	854911.07	957037.41	88.0
RC305	854901.86	956788.90	88.0
RC306	854896.79	956769.56	88.0
RC307	855173.15	956697.06	08.0
RC308	855178.22	956716.40	08.0
RC309	855244.64	956815.54	08.0
RC310	855273.40	956808.61	08.0
RC311	855368.74	957077.93	28.0
RC312	855349.67	957084.42	28.0

CELL 2 - STACK ACCESS RAMPS

Ramp Corner	Northing	Easting	Elev.
RC201	856039.98	957367.73	54.0
RC202	856026.06	957353.38	54.0
RC203	856236.94	957269.13	68.0
RC204	856227.21	957286.60	68.0
RC205	856497.88	957322.37	68.0
RC206	856482.54	957335.54	68.0
RC207	856294.41	957120.50	88.0
RC208	856339.46	957107.33	88.0
RC209	856176.05	956928.99	88.0
RC210	856161.73	956942.96	88.0
RC211	855962.27	956738.39	138.0
RC212	855976.59	956724.42	138.0

NOTES:

- ALL EARTHEN STRUCTURES ARE ENGINEERED TO WITHSTAND A MAXIMUM HORIZONTAL ACCELERATION OF 0.19g.
- ALL GRADE ELEVATIONS SHOWN ON THIS DRAWING ARE THE FINISHED GRADE ELEVATIONS TO TOP OF CLAY LINER (CELLS AND LEACHATE POUNDS), TO TOP OF GAB (ROADS), TO TOP OF 6" SOIL COVER (CELL STACKS), TO TOP OF CONCRETE (SPILLWAYS) OR STRUCTURAL FILL.

CELL 4 - HIGH POINTS, LOW POINTS & GRADE BREAKS

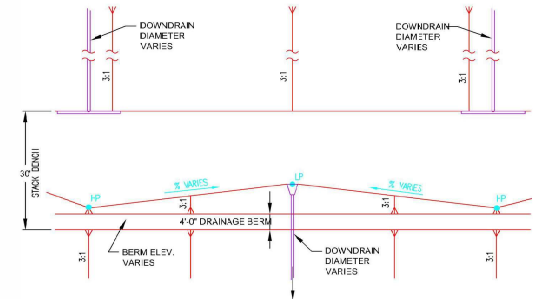
High Point	Northing	Easting	Elev.	Low Point	Northing	Easting	Elev.
HP401	854683.32	956167.19	107.5	LP401	854764.05	956339.46	105.5
HP402	854582.64	955908.61	107.5	LP402	854608.70	956958.88	105.5
HP403	854481.20	955942.74	107.5	LP403	854519.02	956728.66	105.5
HP404	854719.36	955488.63	107.5	LP404	854801.19	956473.10	105.5
HP405	854888.53	955643.19	107.5	LP405	854878.06	955570.24	105.5
HP406	854977.76	956016.67	107.5	LP406	854872.41	956029.53	105.5
HP407	854884.86	956114.55	107.5	LP407	854950.57	956065.99	105.5
HP408	854817.80	956419.61	87.5	LP408	854701.80	956484.08	85.5
HP409	854616.79	956292.19	87.5	LP409	854569.80	956166.61	85.5
HP410	854900.09	955913.47	87.5	LP410	854399.43	956612.24	85.5
HP411	854441.53	955325.65	87.5	LP411	854521.68	956404.16	85.5
HP412	854601.14	955273.41	87.5	LP412	854711.53	956384.51	85.5
HP413	854864.06	955500.36	87.5	LP413	854974.47	956641.23	85.5
HP414	854972.01	955832.50	87.5	LP414	854964.18	956945.70	85.5
HP415	854968.66	956259.02	87.5	LP415	854983.84	956201.29	85.5
HP416	854675.61	956617.21	67.5	LP416	854817.13	956526.83	65.5
HP417	854410.95	956017.39	67.5	LP417	854595.48	956474.35	65.5
HP418	854286.14	955897.15	67.5	LP418	854335.13	956855.09	65.5
HP419	854438.87	955355.53	67.5	LP419	854365.65	956492.05	65.5
HP420	854795.73	955315.14	67.5	LP420	854593.77	956145.59	65.5
HP421	855070.41	955844.47	67.5	LP421	854959.40	956476.44	65.5
HP422	855060.13	955948.94	67.5	LP422	855059.27	956795.50	65.5
HP423	855077.58	956180.47	67.5	LP423	855053.71	956066.16	65.5
HP424	854942.98	956293.38	107.5	LP424	854899.04	956245.44	105.5
HP425	855005.72	956287.88	87.5	LP425	854909.60	956349.74	85.5
HP426	854513.49	956032.66	87.5	LP426	854447.71	956983.57	86.45
HP427	854316.65	955963.02	67.5	LP427	854234.35	956604.55	67.0
HP428	854531.07	956325.60	67.5	LP428	854476.60	956169.31	65.5
HP429	854963.35	956429.28	67.5	LP429	855100.77	956313.28	65.5

GB424	854714.18	956292.55	106.64
GB425	854485.95	955953.28	87.1
GB426	854716.58	956247.82	106.93

CELL 4 - STACK ACCESS RAMPS

Ramp Corner	Northing	Easting	Elev.
RC401	854309.13	955688.66	88.0
RC402	854328.83	955677.66	88.0
RC403	854483.10	955916.19	88.0
RC404	854466.40	955927.20	88.0
RC405	854536.11	955923.74	88.0
RC406	854553.01	955912.73	88.0
RC407	854710.35	955251.22	08.0
RC408	854693.06	955262.23	08.0
RC409	854853.77	955015.32	08.0
RC410	854833.59	955018.87	08.0
RC411	854782.94	955737.68	28.0
RC412	854802.63	955734.13	28.0

NOTE: LOW POINT (LP) ELEVATIONS = 4" DOWNDRAIN END SECTION AND 1/4"VERT N.E. ELEVATION



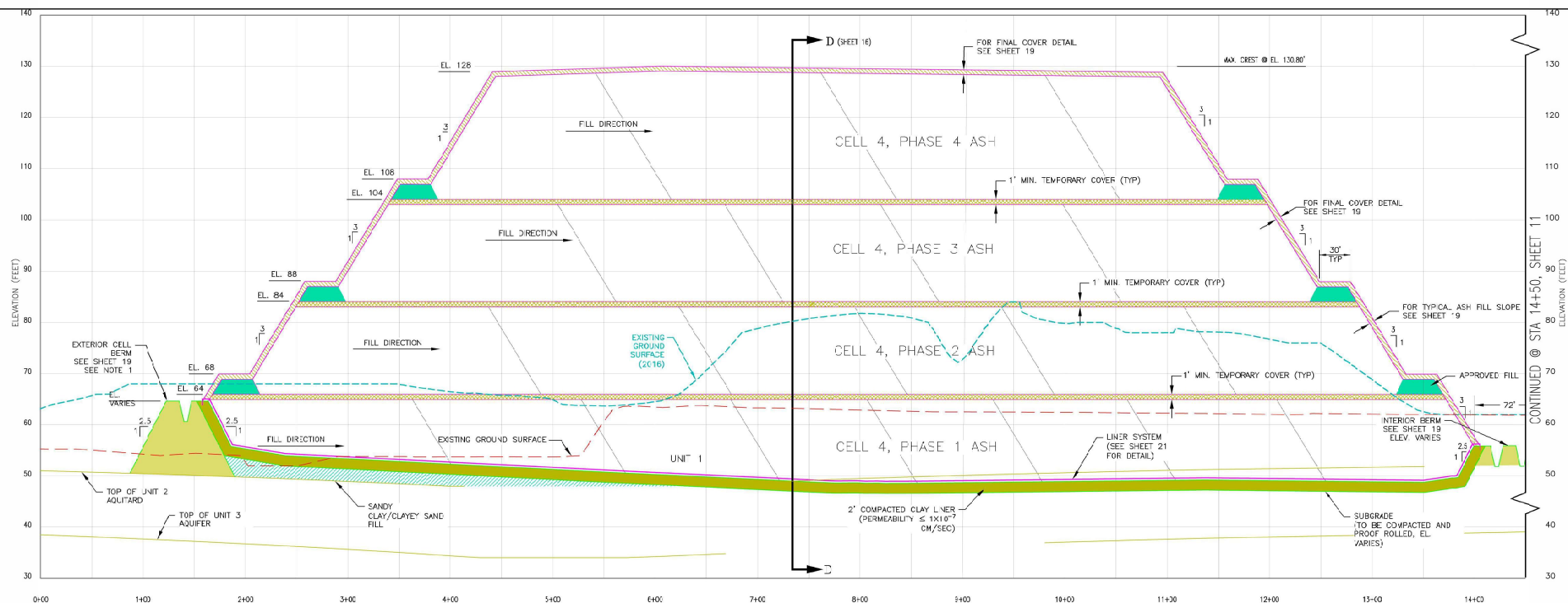
TYPICAL DRAINAGE BERM PLAN ON 30' STACK BENCH

N.T.S.

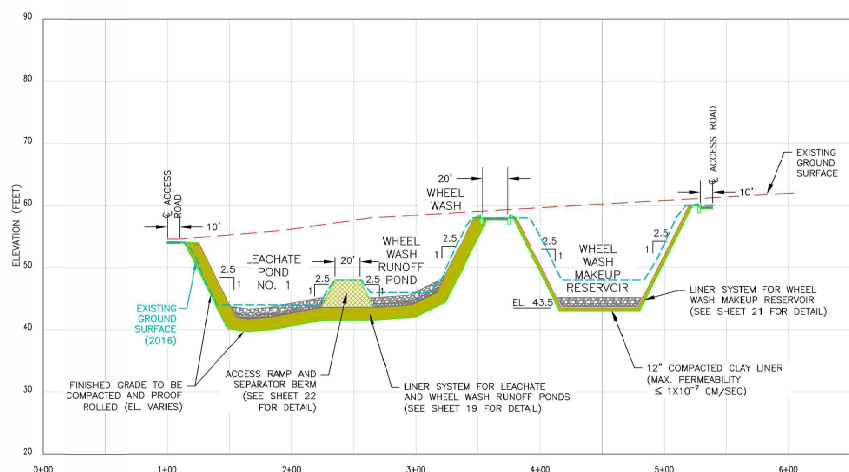
LEGEND:

- DOWNDRAIN (FOR DIAMETER SEE TABLE 3, H1C2768)
- SURFACE RUNOFF DIRECTION

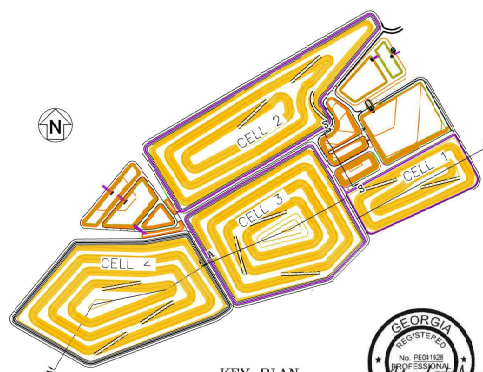
- HP423 HIGH POINT
- LP423 LOW POINT
- GB424 GRADE BREAK
- RC211 ACCESS RAMP



LONGITUDINAL SECTION A-A
SCALE H: 1"=50' V: 1"=10'



LONGITUDINAL SECTION S-S
SCALE H: 1"=50' V: 1"=10'



KEY PLAN
NOT TO SCALE

NOTES:

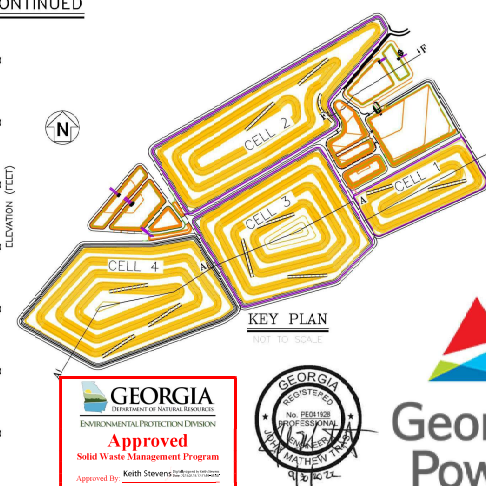
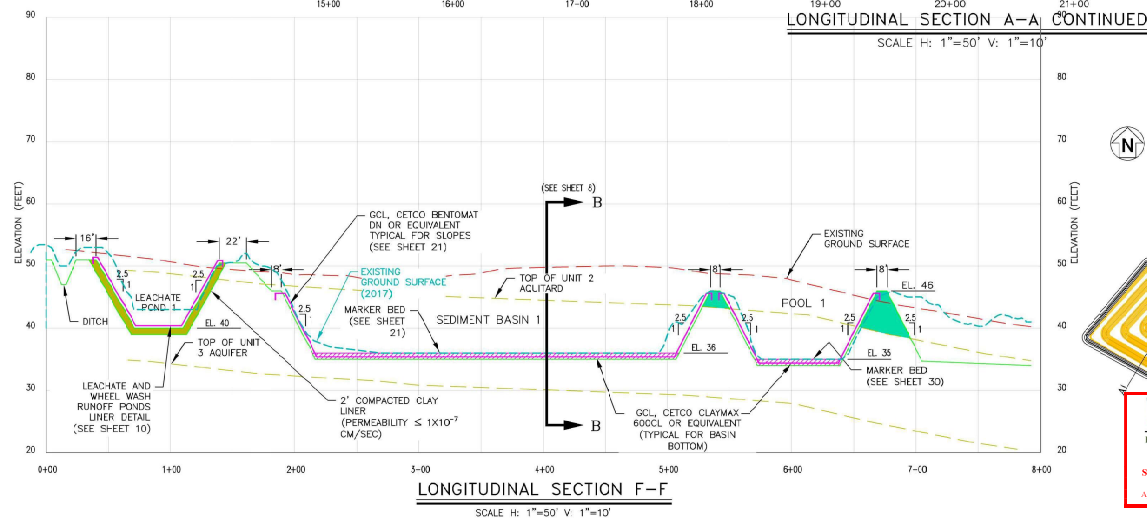
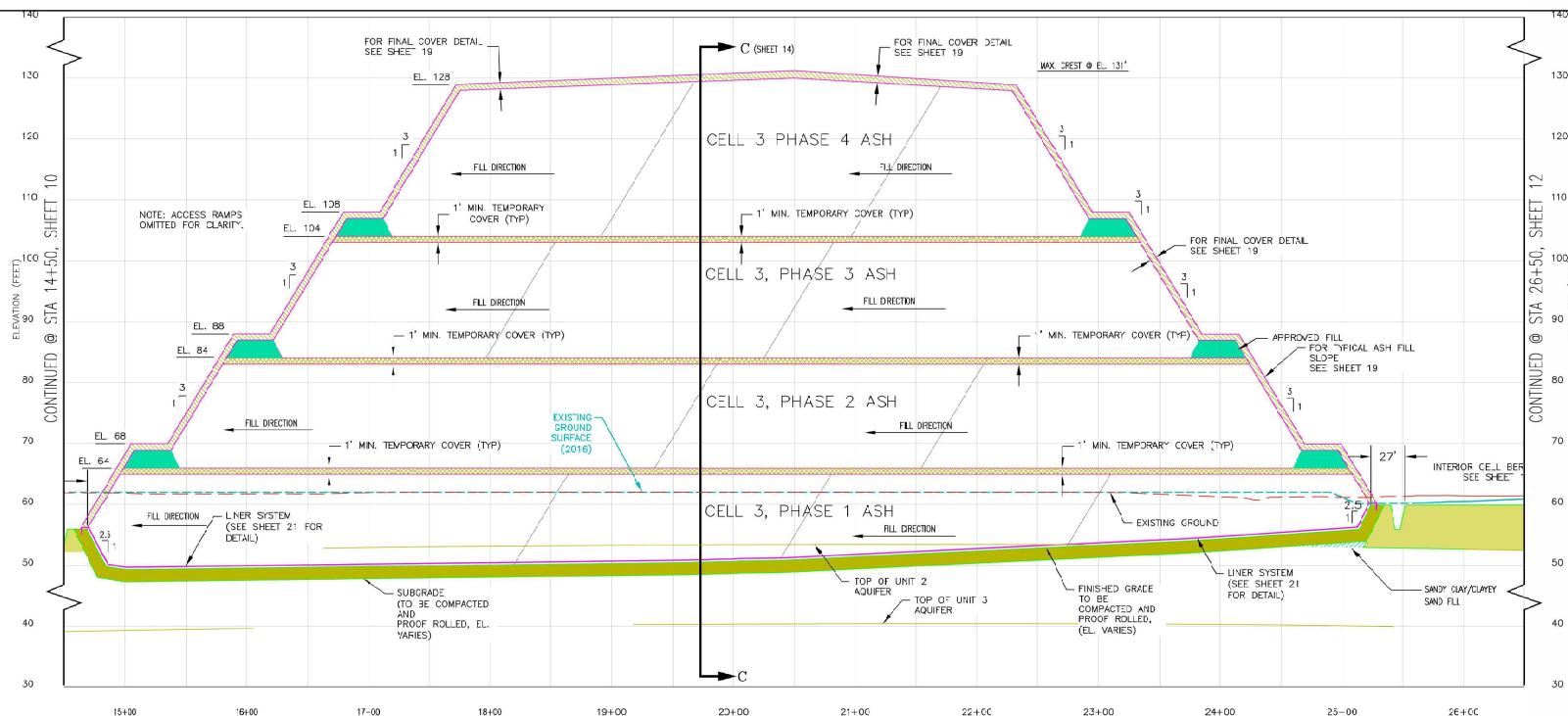
1. ALL PERIMETER DITCHES AND BERMS SHALL BE CONSTRUCTED OF APPROVED SANDY CLAY/CLAYEY SAND FILL OR NATURAL, IN-PLACE SOILS.
2. ALL EARTHEN STRUCTURES ARE ENGINEERED TO WITHSTAND A MAXIMUM HORIZONTAL ACCELERATION OF 0.19g.
3. CELL 1 TOPOGRAPHIC SURVEY COMPLETED MAY 2, 2017. CELL 2A TOPOGRAPHIC SURVEY COMPLETED AUGUST 2016. AREAS BEYOND CELLS 1 AND 2A WERE NOT SURVEYED IN 2010.

REFERENCES:

1. FOR A COMPLETE DRAWING LIST SEE SHEET 1.
2. SEE SHEET 3 FOR GENERAL NOTES AND REFERENCES.



LONGITUDINAL & TRAVERSE SECTIONS			
PERMIT DRAWINGS GEORGIA POWER COMPANY PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR) EXISTING LANDFILL NO. 4 EFFINGHAM, GEORGIA			
(804) 592-0350 http://www.georgiapower.com/		1661 AKERS MILL RD. SUITE 215 ATLANTA, GEORGIA 30339	
PROJ. NO.	17C2844	DWG.	10
SCALE	SEE ABOVE		
DATE	9/30/2022	SHEET	10 OF 38



NOTES:

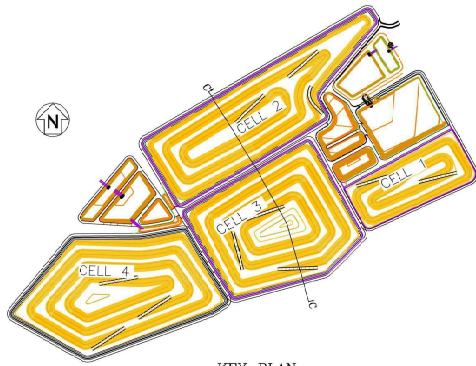
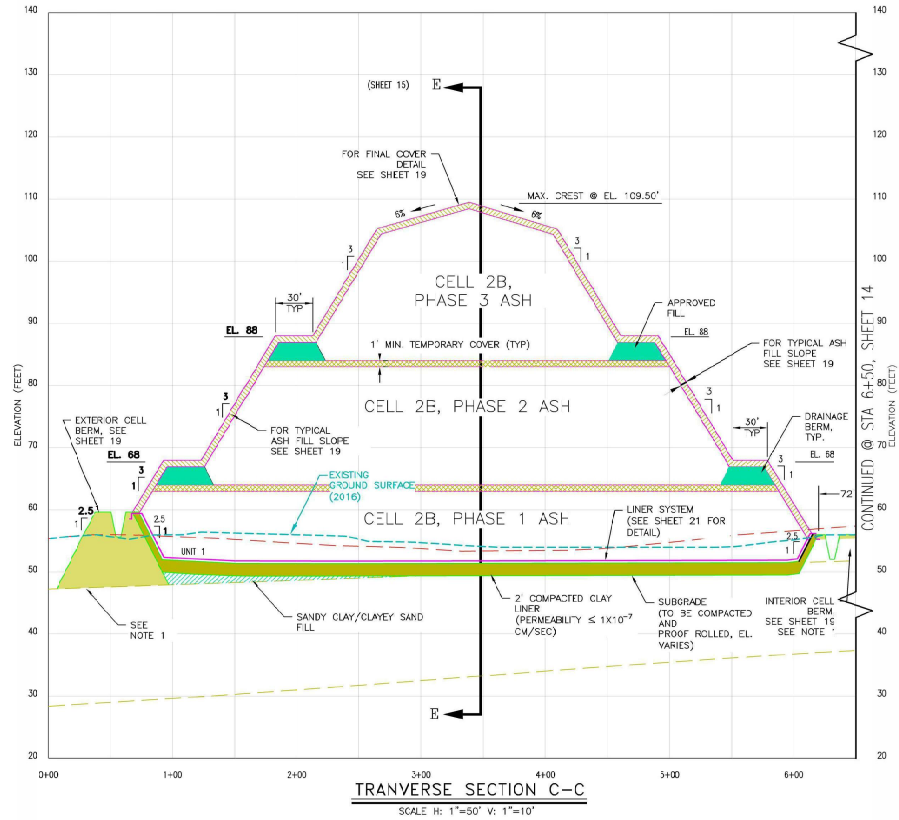
1. ALL PERIMETER DITCHES AND BERMS SHALL BE CONSTRUCTED OF APPROVED SANDY CLAY/CLAYEY SAND FILL OR NATURAL, IN-PLACE SOILS.
2. ALL EARTHEN STRUCTURES ARE ENGINEERED TO WITHSTAND A MAXIMUM HORIZONTAL ACCELERATION OF 0.19g.
3. CELL 1 TOPOGRAPHIC SURVEY COMPLETED MAY 2, 2017. CELL 2A TOPOGRAPHIC SURVEY COMPLETED AUGUST 2016. AREAS BEYOND CELLS 1 AND 2A WERE FROM LIDAR DATA COMPLETED IN 2010.

REFERENCES:

1. FOR A COMPLETE DRAWING LIST SEE SHEET 1.
2. SEE SHEET 3 FOR GENERAL NOTES AND REFERENCES.



LONGITUDINAL & TRAVERSE SECTIONS				
PERMIT DRAWINGS GEORGIA POWER COMPANY PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR) EXISTING LANDFILL NO. 4 EFFINGHAM, GEORGIA				
 1065 AKERS MILL RD SE SUITE 205 ATLANTA, GEORGIA 30339				
PROJ. NO.	17C2944	DWG.	1	EDIT
SCALE	SEE ABOVE	SHEET 11 OF 38		
DATE	9/30/2022			



NOTES:

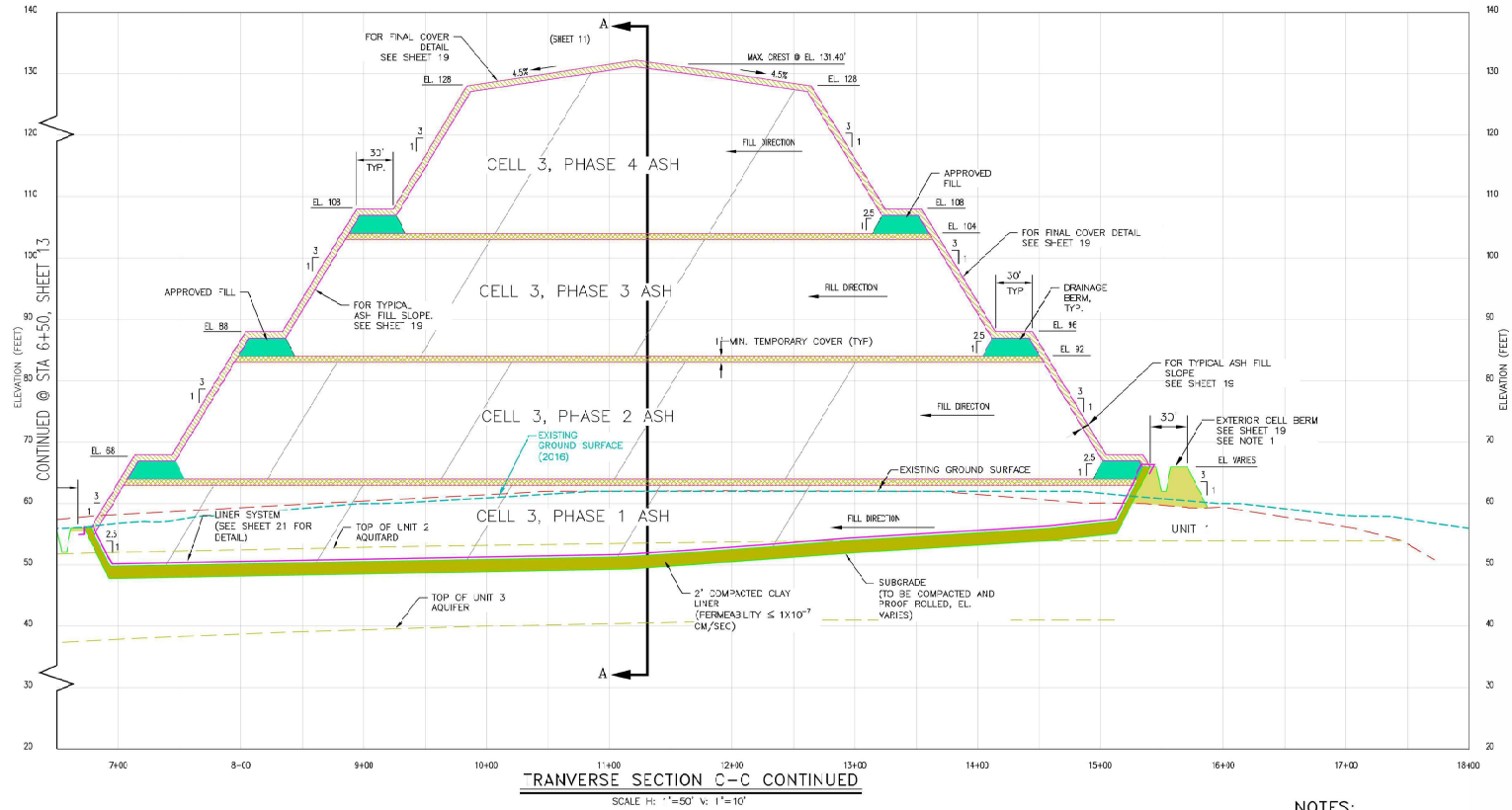
1. ALL PERIMETER DITCHES AND BERMS SHALL BE CONSTRUCTED OF APPROVED SANDY CLAY/CLAYEY SAND FILL OR NATURAL, IN-PLACE SOILS.
2. ALL EARTHEN STRUCTURES ARE ENGINEERED TO WITHSTAND A MAXIMUM HORIZONTAL ACCELERATION OF 0.19g.
3. CELL 1 TOPOGRAPHIC SURVEY COMPLETED MAY 2, 2017. CELL 2A TOPOGRAPHIC SURVEY COMPLETED AUGUST 2016. AREAS BEYOND CELLS 1 AND 2A WERE FROM JDAF DATA COMPLETED IN 2010.

REFERENCES:

1. FOR A COMPLETE DRAWING LIST SEE SHEET 1.
2. SEE SHEET 3 FOR GENERAL NOTES AND REFERENCES.



LONGITUDINAL & TRANSVERSE SECTIONS			
PERMIT DRAWINGS GEORGIA POWER COMPANY PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR) EXISTING LANDFILL NO. 4 EFFINGHAM, GEORGIA			
GEI Consultants (804) 592-0850 http://www.geiconsultants.com/ 1065 AKERS MILL RD SE SUITE 215 ATLANTA, GEORGIA 30339			
PROJ. NO.	17C2944	DWG.	3
SCALE	SEE ABOVE		
DATE	9/30/2022		
		SHEET	13 OF 38

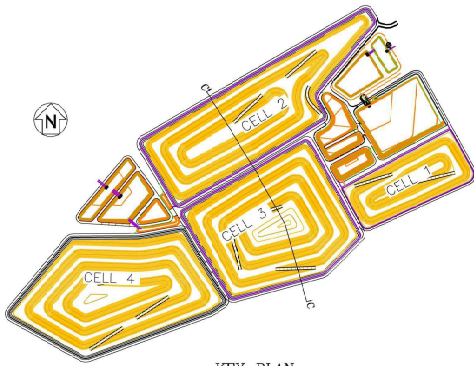


NOTES:

1. ALL PERIMETER DITCHES AND BERMS SHALL BE CONSTRUCTED OF APPROVED SANDY CLAY/CLAYEY SAND FILL OR NATURAL, IN-PLACE SOILS.
2. ALL EARTHEN STRUCTURES ARE ENGINEERED TO WITHSTAND A MAXIMUM HORIZONTAL ACCELERATION OF 0.19g.
3. CELL 1 TOPOGRAPHIC SURVEY COMPLETED MAY 2, 2017. CELL 2A TOPOGRAPHIC SURVEY COMPLETED AUGUST 2016. AREAS BEYOND CELLS 1 AND 2A WERE FROM JDAF DATA COMPLETED IN 2010.

REFERENCES:

1. FOR A COMPLETE DRAWING LIST SEE SHEET 1.
2. SEE SHEET 3 FOR GENERAL NOTES AND REFERENCES.

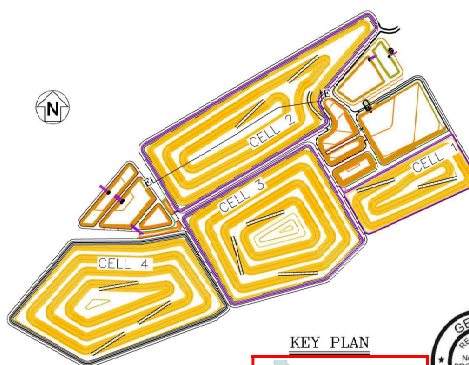
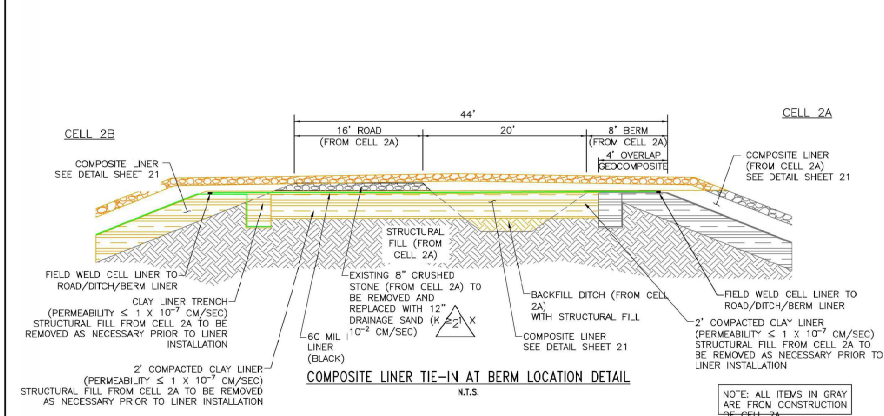
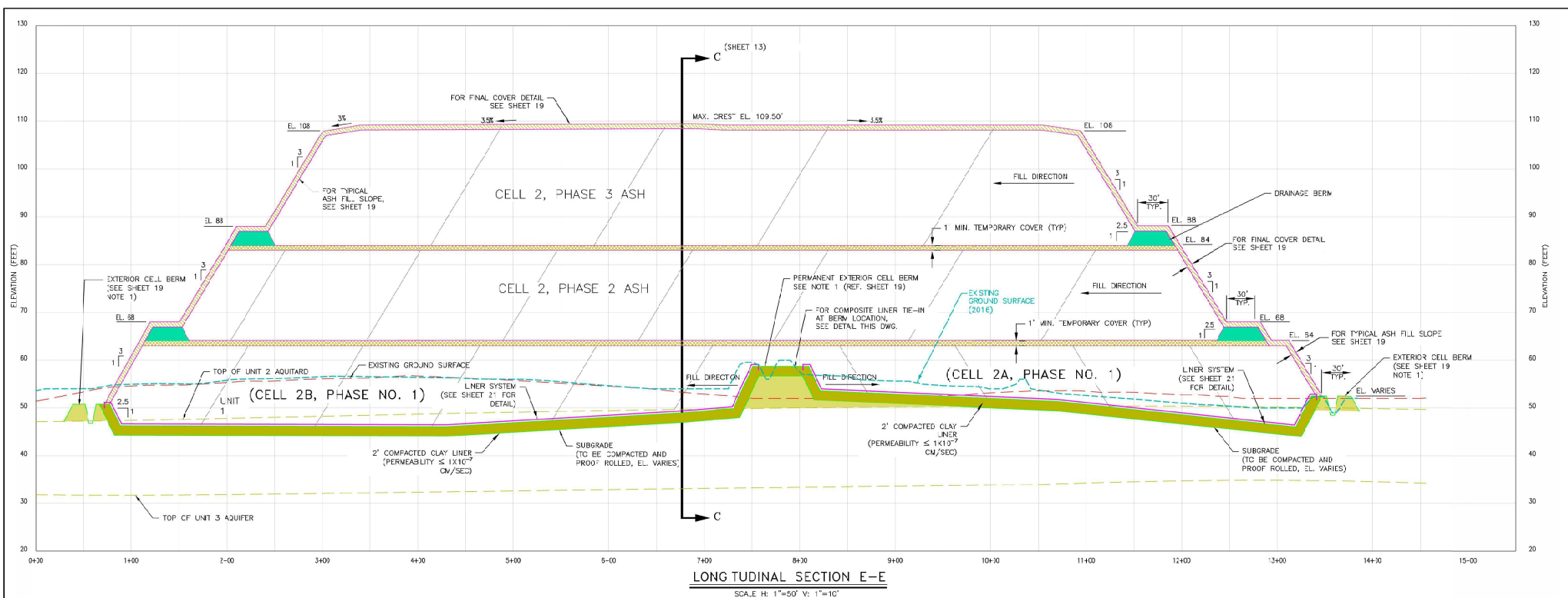


KEY PLAN

NOT TO
SCALE



LONGITUDINAL & TRANSVERSE SECTIONS				
PERMIT DRAWINGS				
GEORGIA POWER COMPANY				
PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR)				
EXISTING LANDFILL NO. 4				
EFFINGHAM, GEORGIA				
(844) 592-0850 https://www.geconsultants.com/		 GEI Consultants 1065 AKERS MILL RD SE SUITE 215 ATLANTA, GEORGIA 30339		
PROJ. NO.	17C2944	DWG.	4	EDIT
SCALE	SEE ABOVE	SHEET 14 OF 38		
DATE	9/30/2022			



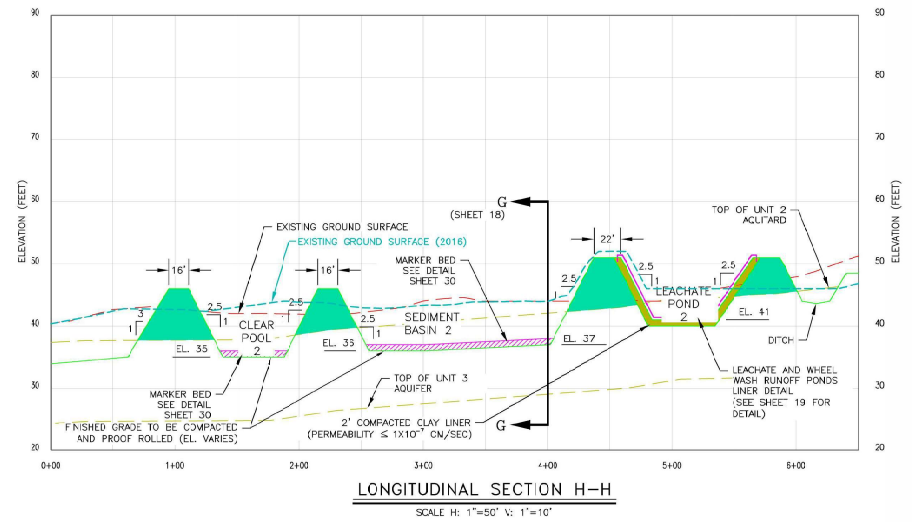
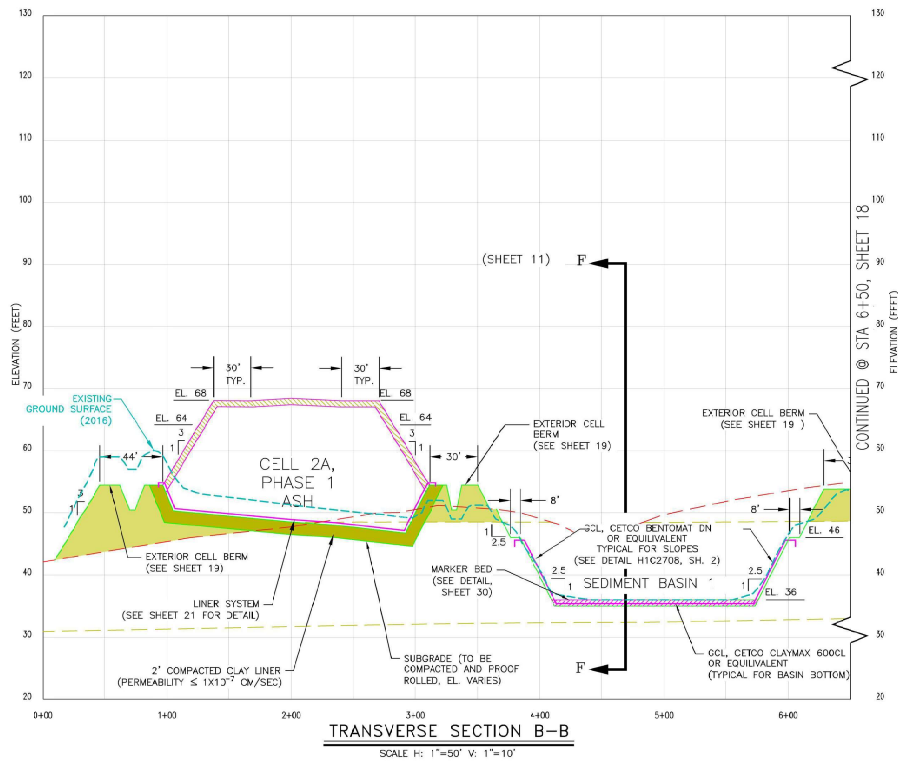
NOTES:

1. ALL PERIMETER DITCHES AND BERMS SHALL BE CONSTRUCTED OF APPROVED SANDY CLAY/CLAYEY SAND FILL OR NATURAL IN-PLACE SOILS.
2. ALL EARTHEN STRUCTURES ARE ENGINEERED TO WITH-STAND A MAXIMUM HORIZONTAL ACCELERATION OF 0.19g.
3. CELL 1 TOPOGRAPHIC SURVEY COMPLETED MAY 2, 2017. CELL 2A TOPOGRAPHIC SURVEY COMPLETED AUGUST 2016. AREAS BEYOND CELLS 1 AND 2A WERE FROM JDAF DATA COMPLETED IN 2010.

REFERENCES:

1. FOR A COMPLETE DRAWING LIST SEE SHEET 1.
2. SEE SHEET 3 FOR GENERAL NOTES AND REFERENCES.

LONGITUDINAL & TRAVERSE SECTIONS				
PERMIT DRAWINGS				
GEORGIA POWER COMPANY				
PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR)				
EXISTING LANDFILL NO. 4				
EFFINGHAM, GEORGIA				
(844) 592-0350 http://www.georgiapower.com/		1065 AKERS MILL RD. SUITE 215 ATLANTA, GEORGIA 30339		
PROJ. NO.	17C2944	DWG.	5	EDIT
SCALE	SEE ABOVE	SHEET 15 OF 38		
DATE	9/30/2022			

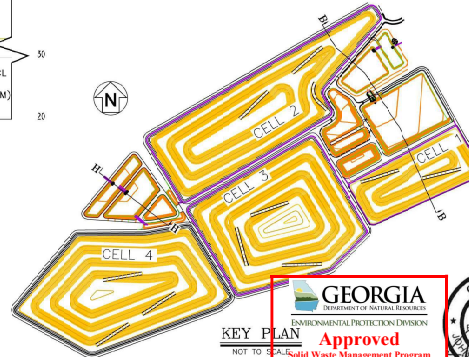


NOTES:

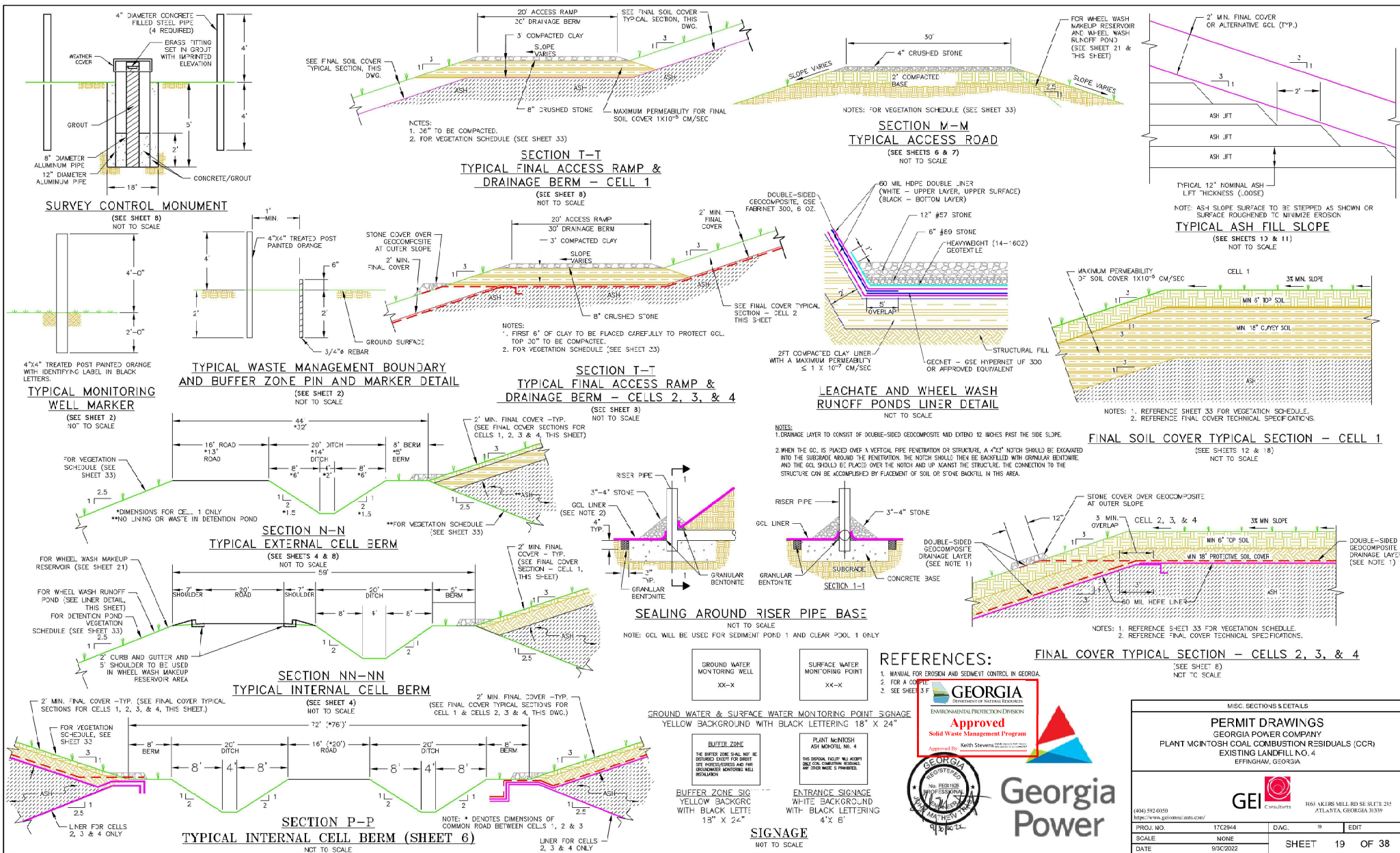
1. ALL PERIMETER DITCHES AND BERMS SHALL BE CONSTRUCTED OF APPROVED SANDY CLAY/CLAYEY SAND FILL OR NATURAL IN-PLACE SOILS.
2. ALL EARTHEN STRUCTURES ARE ENGINEERED TO WITHSTAND A MAXIMUM HORIZONTAL ACCELERATION OF 0.19g.
3. CELL 1 TOPOGRAPHIC SURVEY COMPLETED MAY 2, 2017. CELL 2A TOPOGRAPHIC SURVEY COMPLETED AUGUST 2016. AREAS BEYOND CELLS 1 AND 2A WERE FROM JDAF DATA COMPLETED IN 2010.

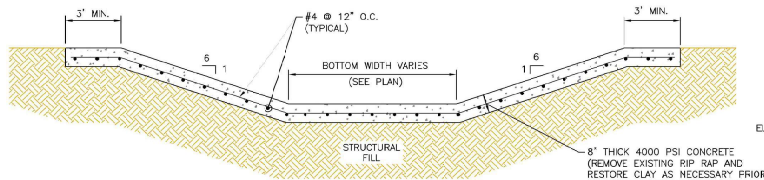
REFERENCES:

1. FOR A COMPLETE DRAWING LIST SEE SHEET 1.
2. SEE SHEET 3 FOR GENERAL NOTES AND REFERENCES.

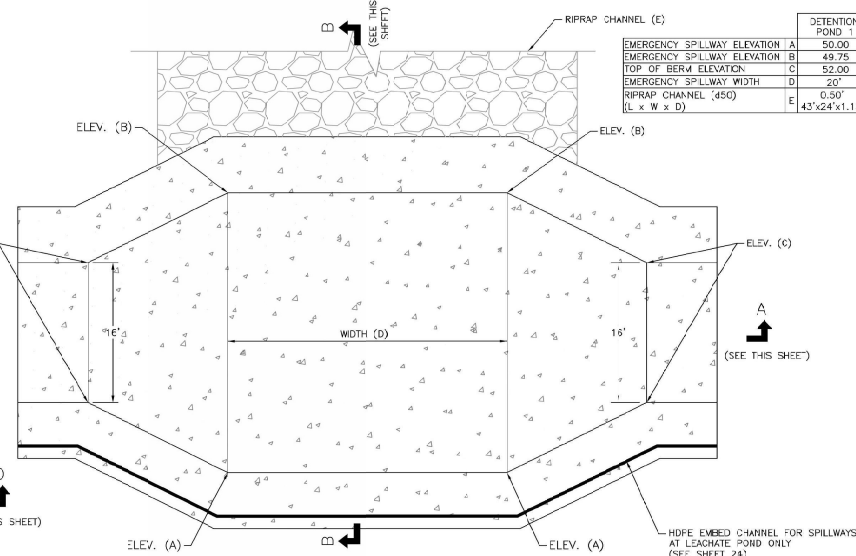


LONGITUDINAL & TRANSVERSE SECTIONS			
PERMIT DRAWINGS GEORGIA POWER COMPANY PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR) EXISTING LANDFILL NO. 4 EFFINGHAM, GEORGIA			
 1065 AKERS MILL RD SE SUITE 215 ATLANTA, GEORGIA 30339			
PROJ. NO.	17C2944	DWG.	7
SCALE	SEE ABOVE	DATE	9/30/2022
SHEET		17 OF 38	

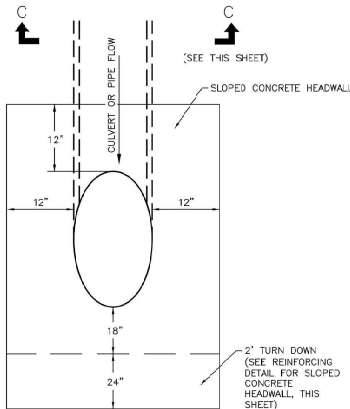




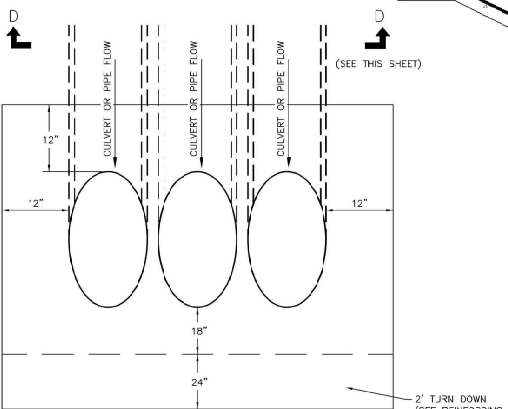
SECTION A-A
N.T.S.



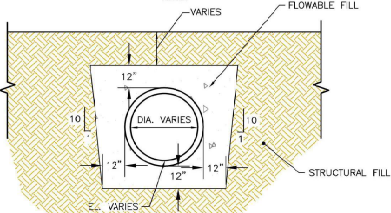
SPILLWAY DETAIL PLAN
N.T.S.



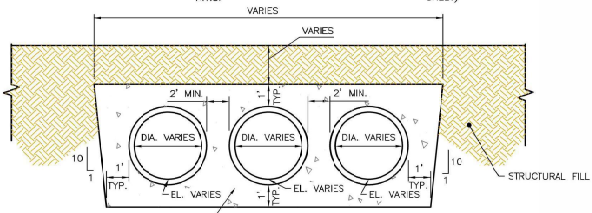
SINGLE PIPE CONCRETE HEADWALL PLAN
N.T.S.



MULTIPLE PIPE CONCRETE HEADWALL PLAN
N.T.S.



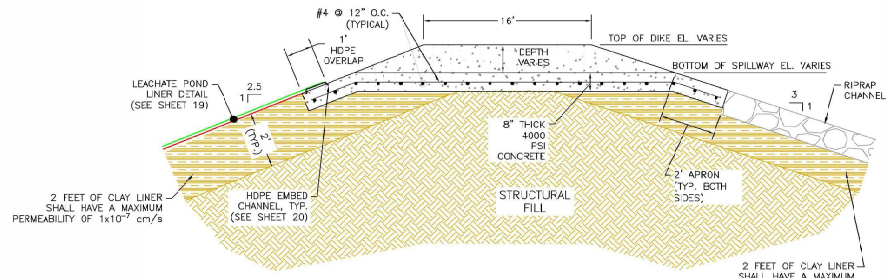
TYPICAL SINGLE PIPE SECTION C-C
N.T.S.



TYPICAL MULTIPLE PIPE SECTION D-D
N.T.S.

PIPE SECTIONS INSTALLED IN UNLINED PONDS
N.T.S.

	DETENTION POND 1	CL. EAR POOL 1	LEACHATE POND 1	SEDIMENT BASIN 2	CL. EAR POOL 2	LEACHATE POND 2
EMERGENCY SPILLWAY ELEVATION A	50.00	41.00	49.00	41.50	42.00	49.00
EMERGENCY SPILLWAY ELEVATION B	49.75	40.75	48.75	41.25	41.75	48.75
TOP OF BERM ELEVATION C	52.00	46.00	50.00	46.00	46.00	51.00
EMERGENCY SPILLWAY WIDTH D	20'	20'	20'	20'	20'	16'
RIPRAP CHANNEL (450) (L x W x D)	0.50'	0.25'	0.25'	1.0'	1.0'	0.25'
	43'x24'x1.13'	11'x24'x0.56'	4'x22'x0.56'	11'x24'x2.25'	13'x24'x2.25'	4'x22'x0.56'



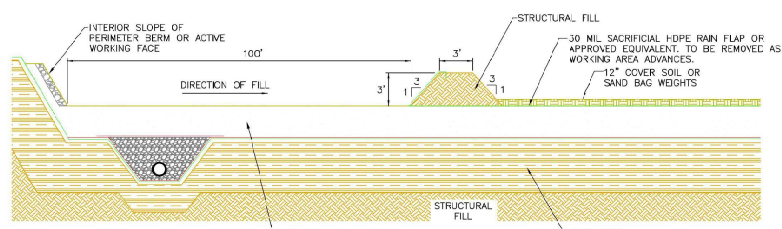
SECTION B-B
N.T.S.



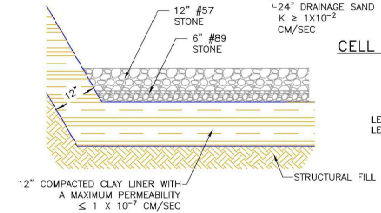
- REFERENCES:
1. MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA.
 2. FOR A COMPLETE DRAWING LIST SEE SHEET 1.
 3. SEE SHEET 3 FOR GENERAL NOTES AND REFERENCES.



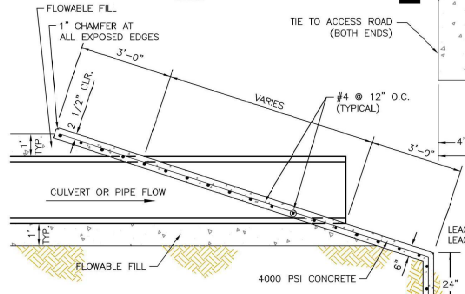
MISC. SECTIONS & DETAILS			
PERMIT DRAWINGS GEORGIA POWER COMPANY PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR) EXISTING LANDFILL NO. 4 EFFINGHAM, GEORGIA			
 1665 AKERS MILL RD SE SUITE 215 ATLANTA, GEORGIA 30339			
PROJ. NO.	17C2944	DWG.	20
SCALE	NONE	DATE	9/30/2022
SHEET		20 OF 38	



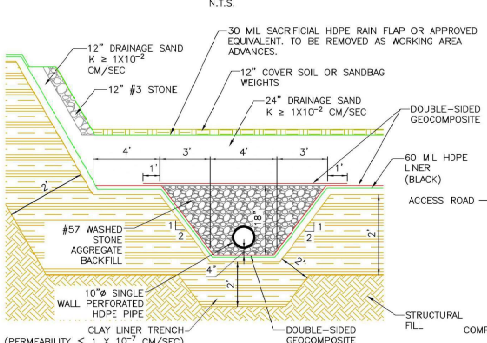
CELL FILL DETAIL
N.T.S.



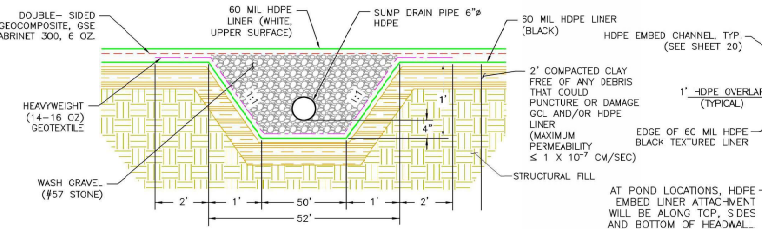
WHEEL WASH MAKEUP RESERVOIR LINER SYSTEM
N.T.S.



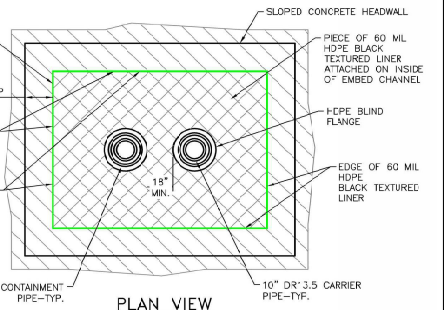
REINFORCING DETAIL FOR SLOPED CONCRETE HEADWALL IN UNLINED AREAS
N.T.S.



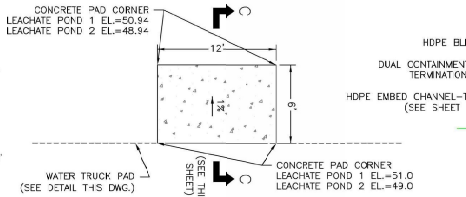
CELLS 2, 3, AND 4 COMPOSITE LINER & LCRS TRENCH DETAIL
N.T.S.



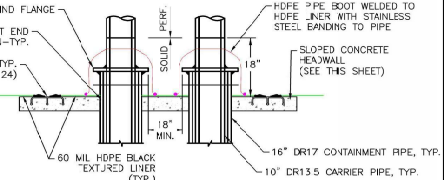
LEAK DETECTION SUMP DETAIL
NOT TO SCALE



PLAN VIEW



CONCRETE WATER PUMP PAD DETAIL PLAN
NOT TO SCALE

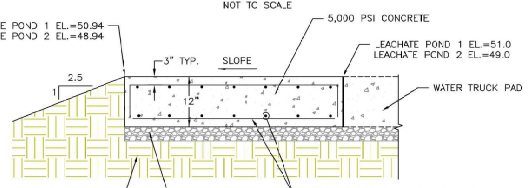


**SECTION VIEW
LEACHATE COLLECTION PIPE HEADWALL DETAIL**
N.T.S.

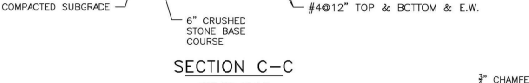
REFERENCES:

1. MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA.
2. FOR A COMPLETE DRAWING LIST SEE SHEET 2.
3. SEE SHEET 2 FOR GENERAL NOTES AND REFERENCES.

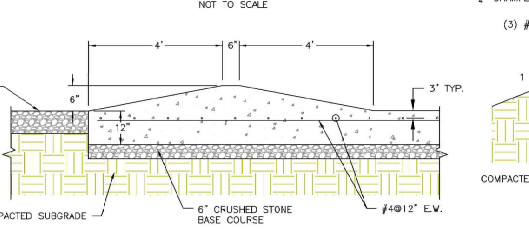
WATER TRUCK PAD DETAIL PLAN
NOT TO SCALE



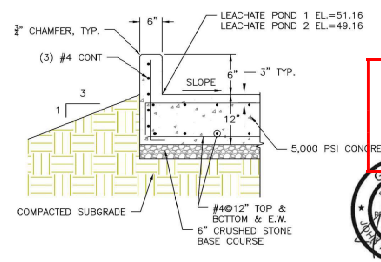
SECTION C-C
NOT TO SCALE



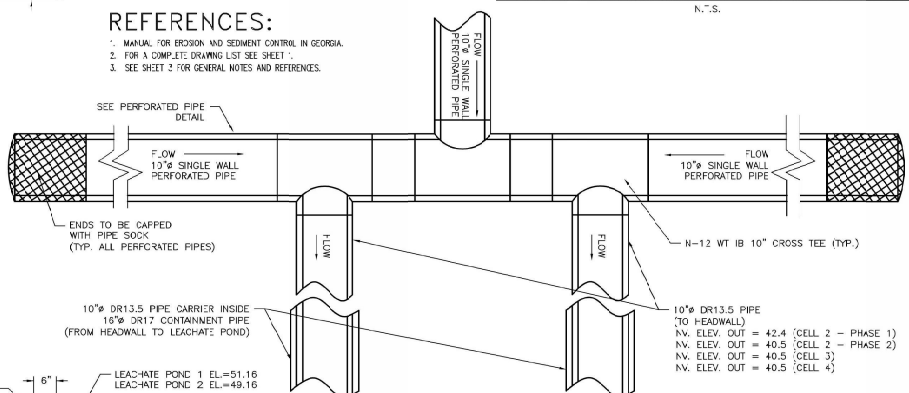
SECTION A-A
NOT TO SCALE



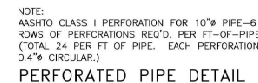
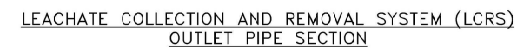
SECTION B-B
NOT TO SCALE



COLLECTOR PIPE JUNCTION DETAIL
NOT TO SCALE



MISC. SECTIONS & DETAILS			
PERMIT DRAWINGS GEORGIA POWER COMPANY PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR) EXISTING LANDFILL NO. 4 EFFINGHAM, GEORGIA			
 1665 AKERS MILL RD. SUITE 205 ATLANTA, GEORGIA 30339			
PROJ. NO.	17C2944	DWG.	21
SCALE	NONE		
DATE	9/30/2022	SHEET	21 OF 38



REFERENCES:

1. MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA.
2. FOR A COMPLETE DRAWING LIST SEE SHEET 1.
3. SEE SHEET 3 FOR GENERAL NOTES AND REFERENCES.

MISC. SECTIONS & DETAILS

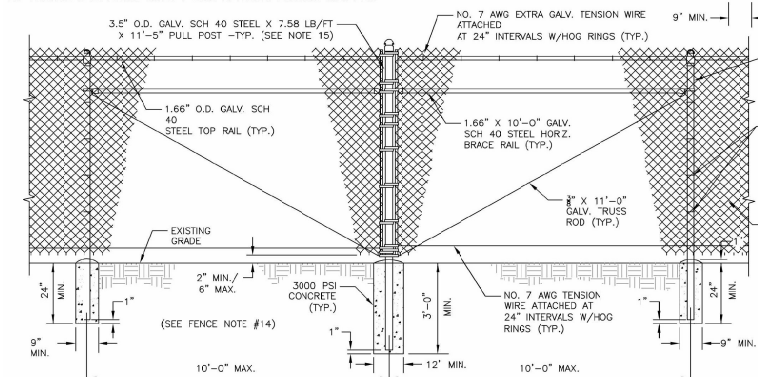
PERMIT DRAWINGS
GEORGIA POWER COMPANY
PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR)
EXISTING LANDFILL NO. 4
EFFINGHAM, GEORGIA

3065 AKERS MILL RD SE SUITE 235
ATL - NEA, GEORGIA 30339

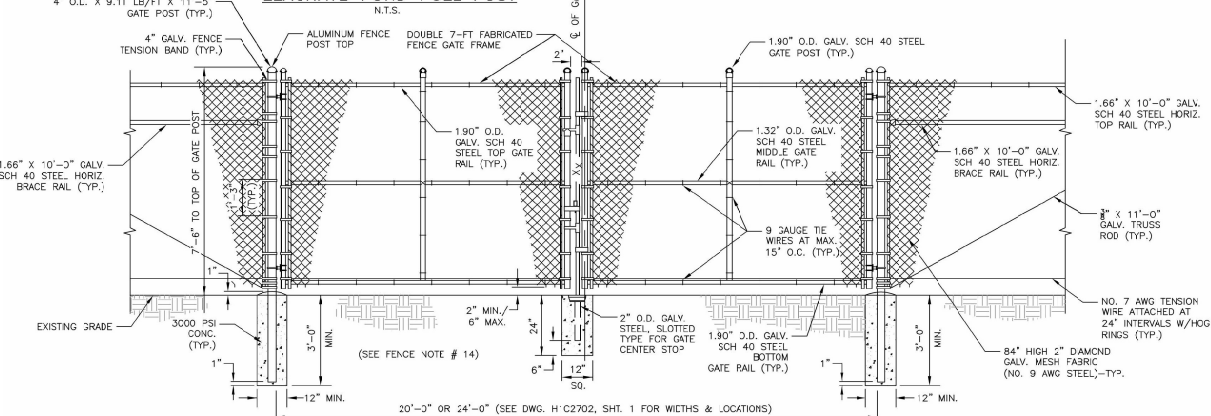
(404) 592-0350 https://www.geiconcoursants.com/		3665 AKERS MILL RD SE SUITE 215 ATLANTA, GEORGIA 30339	
PROJ. NO.	17C2944	DWG.	22
SCALE	NONE	SHEET 22 OF 38	
DATE	9/30/2022		

FENCE

- FENCE MATERIALS AND ERECTION SHALL BE IN ACCORDANCE WITH THE SOUTHERN COMPANY GENERAL PROVISIONS FOR CHAIN LINK FENCE SPECIFICATIONS 32.31.13.
- THE FENCE FABRIC TO SPIRALED TENSION WIRE BETWEEN POSTS WITH GALVANIZED STEEL HOG RINGS TOP AND BOTTOM AT INTERVALS OF TWO FEET.
- LIMIT TENSION IN FABRIC AND WIRE TO PREVENT BENDING OF GATE POSTS AND CORNER POSTS.
- WHEN GATE PANEL IS INSTALLED ON A CORNER POST, THE LATCH SHOULD BE INSTALLED ON THE OPPOSITE PANEL.
- PULL POSTS WILL BE INSTALLED AT APPROXIMATELY 10'-SPAN WHERE SPACING BETWEEN CORNER POSTS OR TERMINAL POSTS EXCEEDS 100 FEET TO PROVIDE FENCE GROUNDING POINT PER NEC, OR WHERE IT IS NECESSARY TO TERMINATE THE FENCE DUE TO A CHANGE IN GRADE. MATERIAL FOR PULL POSTS TO BE SAME AS CORNER POSTS.
- HINGE TO BE INSTALLED WITH GALVANIZED STEEL BOLT WITH TWO NUTS OR PREFERRED SELF-LOCKING TYPE NUT TO LOCK BOLT IN PLACE.
- CHAIN FOR GATE TO BE ONE PIECE 1" GALVANIZED STEEL WELDED SIZE 5/8, INSERTED BETWEEN GATE FRAME AND TENSION BAR, SUCH THAT A TIGHT FIT IS OBTAINED WITH LOCK INSTALLED FROM OUTSIDE GATE. EXCESS LINKS SHOULD BE REMOVED.
- FENCE FABRIC TO BE INSTALLED WITH TWIST SELVAGES AT BOTTOM.
- GATE HINGE TO BE INSTALLED FOR 1" OR LESS GAP BETWEEN GATE POST AND FRAME TO PREVENT ACCESS WHEN CLOSED AND TO ALLOW APPROX. 180-DEGREE INWARD OPENING.
- GATE KEEPER TO BE INSTALLED FOR EACH PANEL OF DOUBLE GATES AT MAXIMUM OPEN POSITION.
- TRUSS RODS ARE NOT REQUIRED WHEN ONLY ONE LINE POST IS IN A CONTINUOUS SPAN OF FABRIC.
- BOTTOM OF CHAIN LINK FABRIC TO BE INSTALLED A MINIMUM OF 2" TO A MAXIMUM OF 6" ABOVE FINISHED GRADE.
- USE 3/8" O.D. X 11'-5" POST FOR CORNER AND PULL POSTS REQUIRING BARBED WIRE TO BE HELD BY 45-DEGREE ARMS, CUT 12" OFF POST FOR A HEIGHT OF 10'-5".
- DOUBLE DRIVE GATES TO BE INSTALLED TO MINIMIZE OPENING TO 2" MAXIMUM. (CHAIN SHOULD NOT BE SLACK).
- CONCRETE TO BE POURED WITH A 1" DOME TO PREVENT FLOODING NEAR POST.

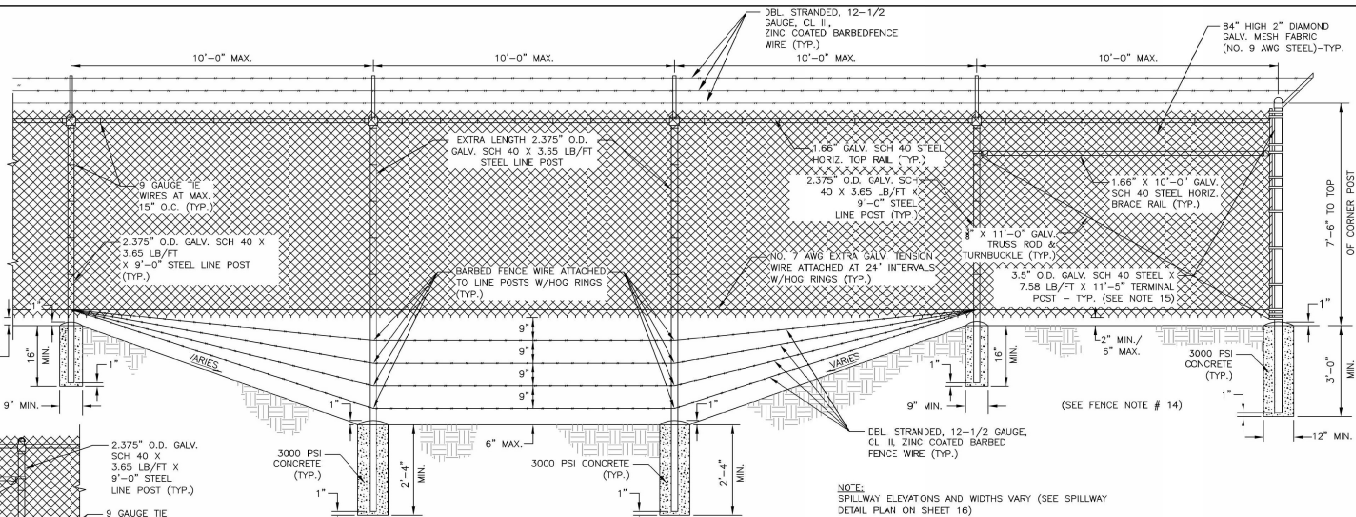


LEACHATE POND PULL POST



LEACHATE POND 20' OR 24' WIDE CHAIN LINK DOUBLE SWING SECURITY GATE

N.T.S.

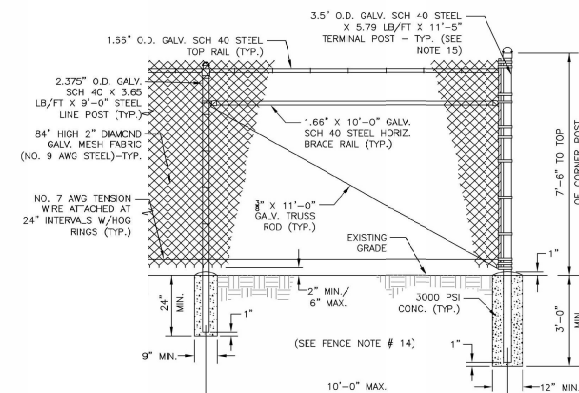


PERIMETER SECURITY FENCE DITCH CROSSING

N.T.S.

REFERENCES:

- MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA.
- FOR A COMPLETE DRAWING LIST SEE SHEET.
- SEE SHEET 1 FOR GENERAL NOTES AND REFERENCES.



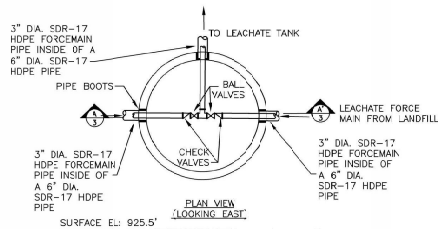
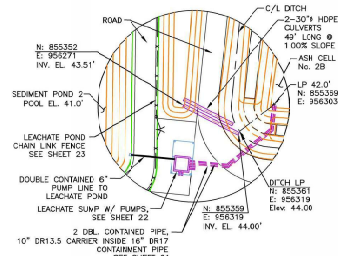
LEACHATE POND TYPICAL CORNER

N.T.S.



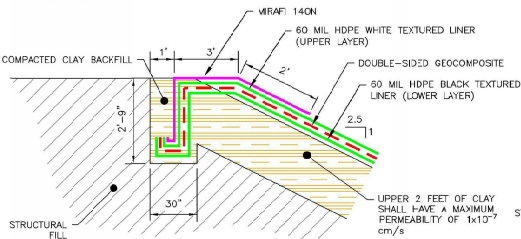
Georgia Power

MISC. SECTIONS & DETAILS			
PERMIT DRAWINGS			
GEORGIA POWER COMPANY			
PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR)			
EXISTING LANDFILL NO. 4			
EFFINGHAM, GEORGIA			
			
1065 AKERS MILL RD. SUITE 205 ATLANTA, GEORGIA 30339			
(800) 592-0850	https://www.geiconsultants.com/		
PROJ. NO.	17C2944	DWG.	23
SCALE	NONE	SHEET 23 OF 38	
DATE	9/30/2022		

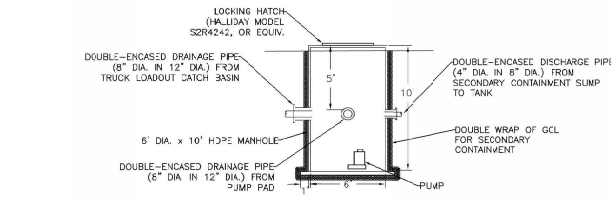


LEACHATE TANK FORCE MAIN JUNCTION MANHOLE DETAIL
N.T.S.

NOTE: UPSTREAM END OF SECONDARY CONTAINMENT PIPE SEALED AT MANHOLE. DOWNSTREAM END OF SECONDARY CONTAINMENT PIPES OPEN TO ALLOW DRAINAGE TO MANHOLE.

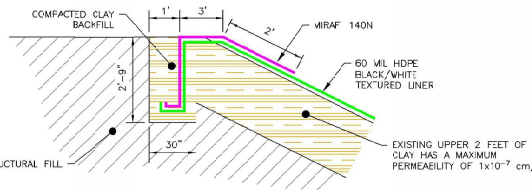


DOUBLE LINER ANCHOR TRENCH DETAIL
N.T.S.

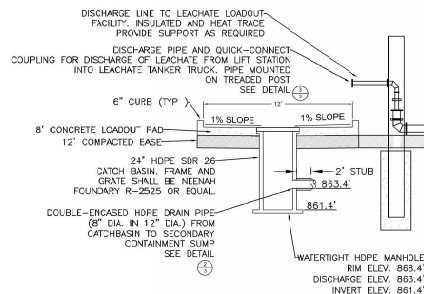


TRUCK LOADING SECONDARY CONTAINMENT SUMP DETAIL
N.T.S.

NOTE: DOWNSTREAM END OF SECONDARY CONTAINMENT PIPES OPEN TO ALLOW DRAINAGE TO MANHOLE.

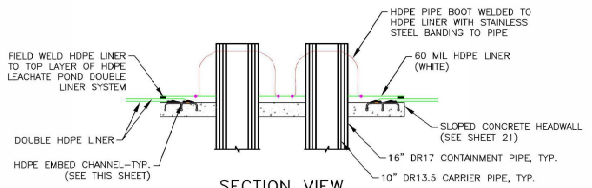


SINGLE LINER ANCHOR TRENCH DETAIL
N.T.S.



TRUCK LOADING PAD AND LEACHATE TANK DETAIL
N.T.S.

NOTE: ALTERNATIVE TO SECONDARY DRAIN PIPE W/ VALVE MAY INCLUDE SUMP PUMP WITH DISCHARGE PIPED OVER SECONDARY TANK WALL. STORMWATER WILL BE INSPECTED FOR CONTAMINATION PRIOR TO DISCHARGE.



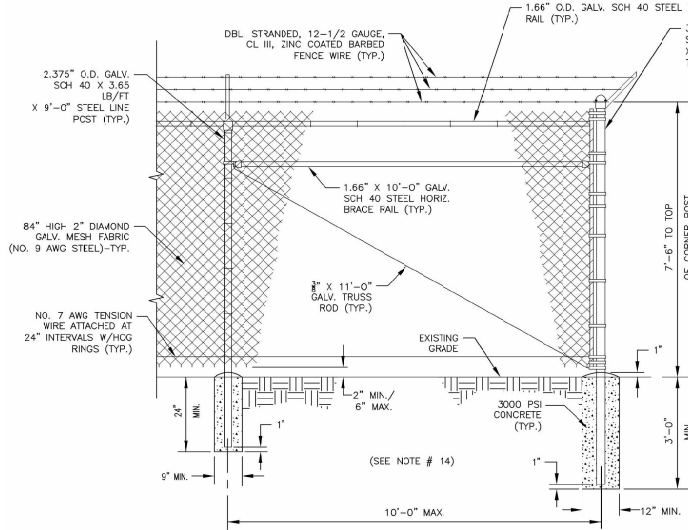
LEACHATE PIPE HEADWALL AT LEACHATE POND DETAIL
N.T.S.

REFERENCES:

1. MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA.
2. FOR A COMPLETE DRAWING LIST SEE SHEET 1.
3. SEE SHEET 2 FOR GENERAL NOTES AND REFERENCES.

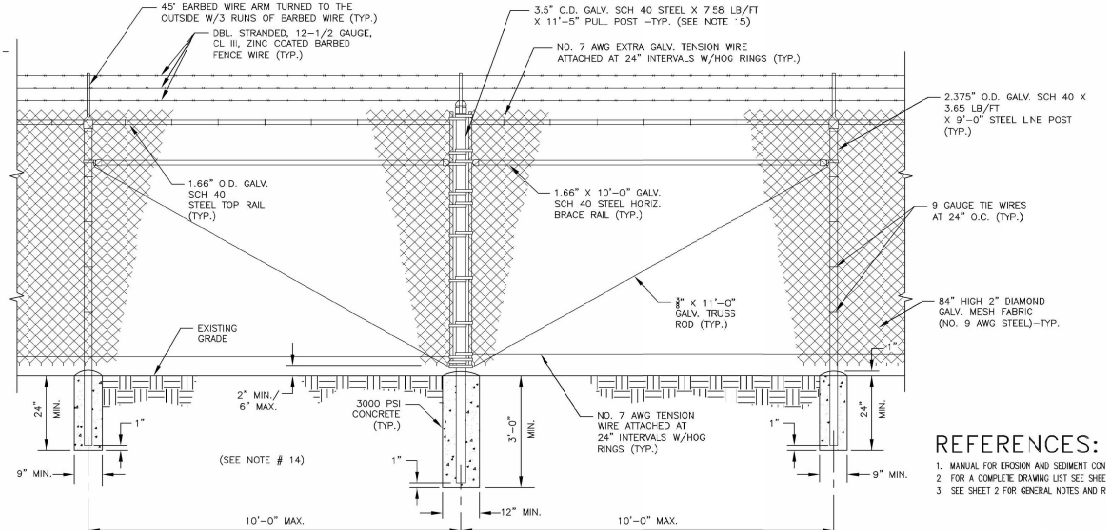


MISC. SECTIONS & DETAILS			
PERMIT DRAWINGS GEORGIA POWER COMPANY PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR) EXISTING LANDFILL NO. 4 EFFINGHAM, GEORGIA			
(800) 592-0350 http://www.geipower.com/			
PROJ. NO.	17C2944	DWG.	24
SCALE	NONE		
DATE	9/30/2022	SHEET	24 OF 38



PERIMETER SECURITY FENCE TYPICAL CORNER

N.T.S.

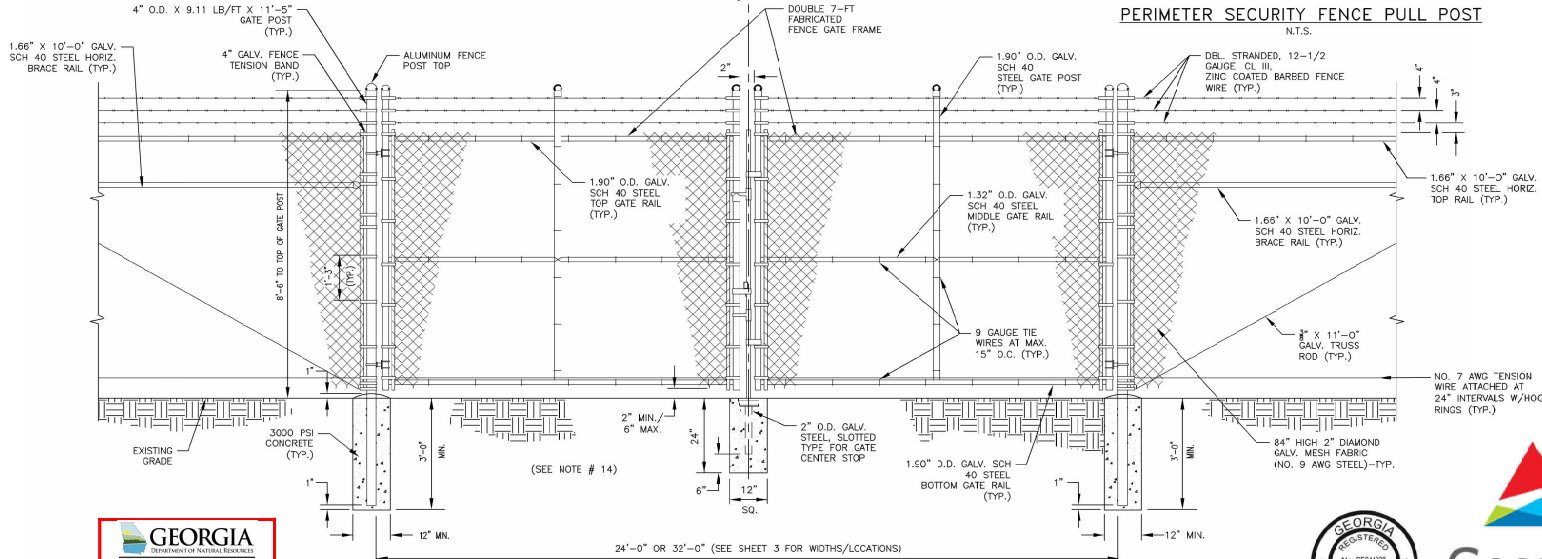


PERIMETER SECURITY FENCE PULL POST

N.T.S.

FENCE

1. FENCE MATERIALS AND ERECTION SHALL BE IN ACCORDANCE WITH THE SOUTHERN COMPANY GENERAL PROVISIONS FOR CHAIN LINK FENCE SPECIFICATIONS 22.31.13.
2. THE FENCE FABRIC TO SPIRAL TENSION WIRE BETWEEN POSTS WITH GALVANIZED STEEL HOG RINGS TOP AND BOTTOM AT INTERVALS OF TWO FEET.
3. LIMIT TENSION IN FABRIC AND WIRE TO PREVENT BENDING OF GATE POSTS AND CORNER POSTS.
4. WHEN GATE PANEL IS INSTALLED ON A CORNER POST, THE LATCH SHOULD BE INSTALLED ON THE OPPOSITE PANEL.
5. PULL POSTS WILL BE INSTALLED AT APPROXIMATELY MID-SPAN WHERE SPACING BETWEEN CORNER POSTS OR TERMINAL POSTS EXCEEDS 100 FEET TO PROVIDE FENCE GROUNDING POINT PER NEC, OR WHERE IT IS NECESSARY TO TERMINATE THE FENCE DUE TO A CHANGE IN GRADE. MATERIAL FOR PULL POSTS TO BE SAME AS CORNER POSTS.
6. HINGE TO BE INSTALLED WITH GALVANIZED STEEL BOLT WITH TWO NUTS OR PREFERRED SELF-LOCKING TYPE NUT TO LOCK BOLT IN PLACE.
7. CHAIN FOR GATE TO BE ONE PIECE: 1/2\"/>
8. FENCE FABRIC TO BE INSTALLED WITH TWIST SELVAGES AT BOTTOM.
9. GATE HINGE TO BE INSTALLED FOR 1/2\"/>
10. GATE KEEPER TO BE INSTALLED FOR EACH PANEL OF DOUBLE GATES AT MAXIMUM OPEN POSITION.
11. TRUSS RODS ARE NOT REQUIRED WHEN ONLY ONE LINE POST IS IN A CONTINUOUS SPAN OF FABRIC.
12. BOTTOM OF CHAIN LINK FABRIC TO BE INSTALLED A MINIMUM OF 2\"/>
13. USE 3/8\"/>
14. DOUBLE DRIVE GATES TO BE INSTALLED TO MINIMIZE OPENING TO 2\"/>
15. CONCRETE TO BE POURED WITH A 1\"/>



PERIMETER SECURITY FENCE 24' & 32' WIDE CHAINLINK DOUBLE SWING SECURITY GATE

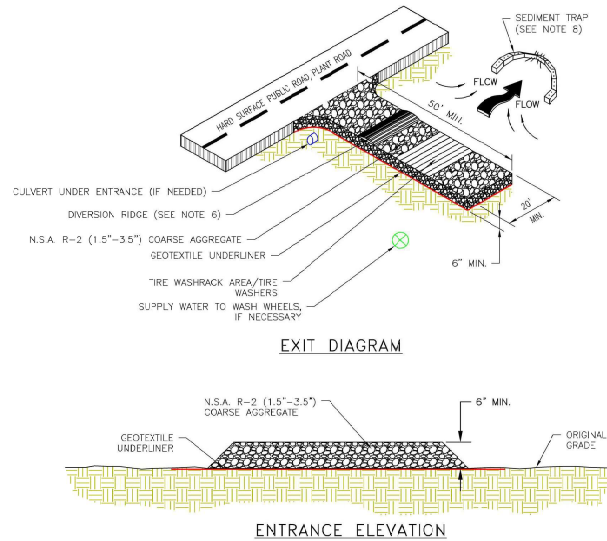
N.T.S.



MISC. SECTIONS & DETAILS			
PERMIT DRAWINGS GEORGIA POWER COMPANY PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR) EXISTING LANDFILL NO. 4 EFFINGHAM, GEORGIA			
(800) 592-0850 http://www.geiconsultants.com/			
PROJ. NO.	17C2944	DWG.	26
SCALE	NONE	SHEET	26 OF 38
DATE	9/30/2022		

NOTES:

1. AVOID LOCATING ON STEEP SLOPES OR AT CURVES ON PUBLIC ROADS.
2. REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE, AND CROWN FOR POSITIVE DRAINAGE.
3. AGGREGATE SIZE SHALL BE IN ACCORDANCE WITH NATIONAL STONE ASSOCIATION R-2 (1.5"-3.5" STONES).
4. GRAVEL PAD SHALL HAVE A MINIMUM THICKNESS OF 5".
5. PAD WIDTH SHALL BE EQUAL FULL WIDTH AT ALL POINTS OF VEHICULAR EGRESS, BUT NO LESS THAN 20'.
6. A DIVERSION RIDGE SHOULD BE CONSTRUCTED WHEN GRADE TOWARD PAVED AREA IS GREATER THAN 2%.
7. INSTALL PIPE UNDER THE ENTRANCE IF NEEDED TO MAINTAIN DRAINAGE DITCHES.
8. WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN (DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE ENTRANCE TO A SEDIMENT CONTROL DEVICE).
9. WASHRACKS AND/OR TIRE WASHERS MAY BE REQUIRED DEPENDING ON SCALE AND CIRCUMSTANCE. IF NECESSARY, WASHRACK DESIGN MAY CONSIST OF ANY MATERIAL SUITABLE FOR TRUCK TRAFFIC THAT REMOVES MUD AND DIRT.
10. MAINTAIN AREA IN A WAY THAT PREVENTS TRACKING AND/OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.



CRUSHED STONE CONSTRUCTION EXIT (Cg)
N.T.S.

DEFINITION

A TEMPORARY GRADE CONTROL STRUCTURE, OR DAM, CONSTRUCTED ACROSS A SWALE, DRAINAGE DITCH, OR AREA OF CONCENTRATED FLOW.

CONDITIONS

THIS PRACTICE IS APPLICABLE FOR USE IN SMALL OPEN CHANNELS AND IS NOT TO BE USED IN A LIVE STREAM. SPECIFIC APPLICATIONS INCLUDE:

1. TEMPORARY OR PERMANENT SWALES OR DITCHES IN NEED OF PROTECTION DURING ESTABLISHMENT OF GRASS LININGS.
2. TEMPORARY OR PERMANENT SWALES OR DITCHES WHICH, DUE TO THEIR SHORT LENGTH OF SERVICE OR OTHER REASONS, CANNOT RECEIVE A PERMANENT NON-ERODIBLE LINING, FOR AN EXTENDED PERIOD OF TIME.
3. OTHER LOCATIONS WHERE SMALL LOCALIZED EROSION AND RESULTING SEDIMENTATION PROBLEMS EXIST.

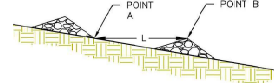
SPECIFICATIONS

THE FOLLOWING TYPES OF CHECK DAMS ARE USED FOR THIS STANDARD:

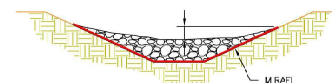
STONE CHECK DAM

STONE CHECK DAMS SHOULD BE CONSTRUCTED OF GRADED SIZE 2-10 INCH STONE. MECHANICAL OR HAND PLACEMENT SHALL BE REQUIRED TO ENSURE COMPLETE COVERAGE OF THE ENTIRE WIDTH OF DITCH OR SWALE AND THAT CENTER OF THE DAM IS LOWER THAN THE EDGES. THE CENTER OF THE CHECK DAM MUST BE AT LEAST 9 INCHES LOWER THAN THE OUTER EDGES.

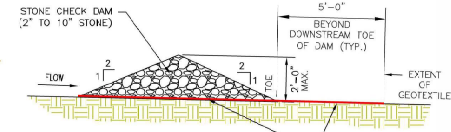
A = THE TOE OF THE UPSTREAM CHECK DAM.
B = TOE OF THE DOWNSTREAM CHECK DAM.
L = THE DISTANCE SUCH THAT POINTS A AND B ARE OF EQUAL ELEVATION.



SPACING BETWEEN CHECK DAMS
N.T.S.



CROSS SECTION
N.T.S.



PROFILE VIEW
N.T.S.

CHECK DAM - STONE CHECK DAM (Cd-S)
N.T.S.

NOTES:

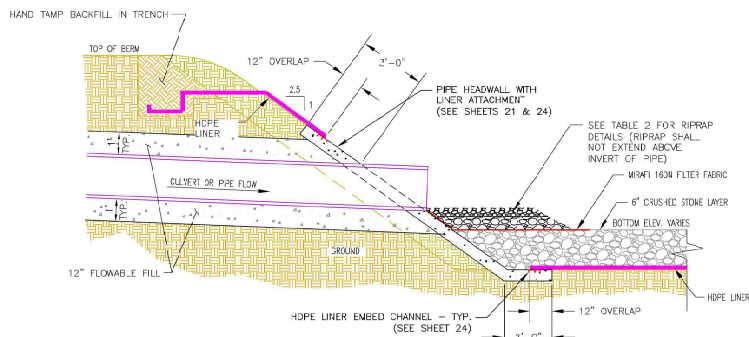
1. CHECK DAMS ARE TO BE USED ONLY IN SMALL OPEN CHANNELS (THEY ARE NOT TO BE USED IN LIVE STREAMS).
2. THE DRAINAGE AREA FOR STONE CHECK DAMS SHALL NOT EXCEED TWO ACRES.
3. THE CENTER OF THE CHECK DAM MUST BE AT LEAST 9 INCHES LOWER THAN THE OUTER EDGES.
4. THE DAM HEIGHT SHOULD BE A MAXIMUM OF 2 FEET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

REFERENCES:

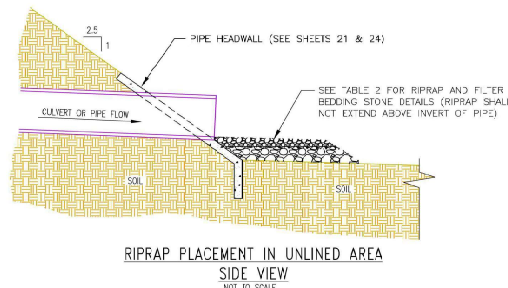
1. MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA.
2. FOR A COMPLETE DRAWING LIST SEE SHEET 1.
3. SEE SHEET 3 FOR GENERAL NOTES AND REFERENCES.



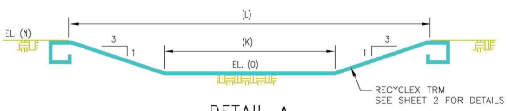
EROSION CONTROL SECTIONS & DETAILS			
PERMIT DRAWINGS			
GEORGIA POWER COMPANY			
PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR)			
EXISTING LANDFILL NO. 4			
EFFINGHAM, GEORGIA			
(844) 592-0350 https://www.gecorp.com/atlanta/			
PROJ. NO.	17C2944	DWG.	28
SCALE	NONE	EDIT	
DATE	9/30/2022	SHEET	28 OF 38



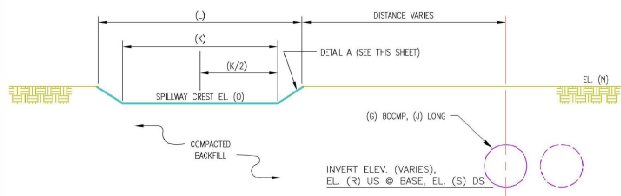
**RIPRAP PLACEMENT
PIPE HEADWALL WITH LINER ATTACHMENT
SIDE VIEW
NOT TO SCALE**



**RIPRAP PLACEMENT IN UNLINED AREA
SIDE VIEW
NOT TO SCALE**



**DETAIL A
FOR EROSION PROTECTION SEE SHEET 32**

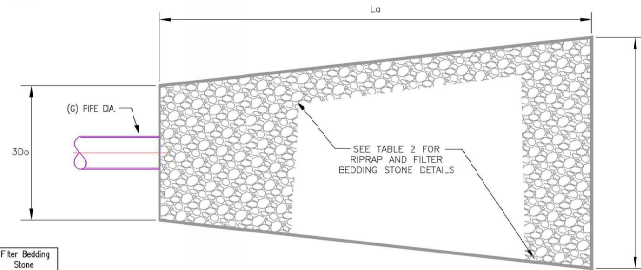


**SECTION 1-1
(SEE SHEET 29)
NOT TO SCALE**

TABLE 2 - DETENTION POND, SEDIMENTATION POND AND CLEAR POOL RIPRAP DETAILS

Location	Pipe Dia.	L ₁	L ₂	W	Thickness	Riprap	Filter Bedding Stone
Detention Pond 1	30"	16'	7.5'	18.5'	13.8'	N.S.A. #R-4	N.S.A. #FS-2
Sediment Pond 1	2-42"	30'	10.5'	35.5'	45'	N.S.A. #R-7	N.S.A. #FS-3
Sediment Pond 2	3-42"	25'	25.5'	35.5'	45'	N.S.A. #R-7	N.S.A. #FS-3
Clear Pool 1	42"	23'	15.5'	26.5'	27'	N.S.A. #R-3	N.S.A. #FS-2
Clear Pool 2	2-42"	23'	15.5'	30'	27'	N.S.A. #R-3	N.S.A. #FS-2
Wheel Wash Makeup Reservoir	4-24"	25'	16'	24'	27'	N.S.A. #R-3	N.S.A. #FS-2

CULVERT OUTLET RIPRAP DETAILS																																	
Location		Pipe Dia.	Pipe Type	Inlet Invert El.	Outlet Invert El.	Pipe Length	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z	
Access Rd Culv.		24"	ADS N-12	61.00'	60.35'	54'	13'	8'	15'	N.S.A. #R-4	13.8'	N.S.A. #FS-2																					
Cell 1 Berm West Culv.		24"	RF	56.35'	55.61'	54'	13'	8'	15'	N.S.A. #R-4	13.8'	N.S.A. #FS-2																					
Cell 1 Berm East Culv.		30"	RF	55.33'	55.09'	145'	14'	2'	4'	N.S.A. #R-4	13.8'	N.S.A. #FS-2																					
Cell 2 (Phase 1) Perimeter Ditch to Sed. Pond		3-30"	ADS N-12	45.85'	45.63'	44'	16'	22.5'	26.7'	N.S.A. #R-3	15.5'	N.S.A. #FS-2																					
Cell 2 (Phase 2) Perimeter Ditch to Exterior Ditch		2-30"	ADS N-12	44.00'	43.51'	49'	16'	8'	8'	N.S.A. #R-3	15.5'	N.S.A. #FS-2																					
Cell 2 (Phase 2) Exterior Ditch to Sed. Pond		2-30"	ADS N-12	42.95'	42.00'	35'	16'	15'	17.8'	N.S.A. #R-4	13.8'	N.S.A. #FS-2																					
Cell 3 Perimeter Ditch to Exterior Ditch		4-30"	ADS N-12	43.30'	43.76'	40'	16'	8'	8'	N.S.A. #R-4	13.8'	N.S.A. #FS-2																					
Cell 4 Perimeter Ditch to Exterior Ditch		2-30"	MIS N-12	44.30'	42.89'	36'	50'	8'	8'	N.S.A. #R-7	17.7'	N.S.A. #FS-3																					
Cell 3 & 4 Exterior Ditch to Sed. Pond		3-48"	MIS N-12	42.35'	42.01'	112'	33'	35'	17.8'	N.S.A. #R-4	13.8'	N.S.A. #FS-2																					
Cell 1 Stack Access Culvert		24"	RF	59.71'	56.84'	235'	13'	2'	4'	N.S.A. #R-4	13.8'	N.S.A. #FS-2																					
Cell 2 Stack Access Culvert		24"	RF	49.97'	49.67'	50'	13'	2'	4'	N.S.A. #R-4	13.8'	N.S.A. #FS-2																					
Cell 3 Stack Access Culvert		24"	RF	61.94'	61.62'	50'	13'	2'	4'	N.S.A. #R-4	13.8'	N.S.A. #FS-2																					
Cell 4 Stack Access Culvert		24"	RF	63.38'	63.13'	50'	13'	2'	4'	N.S.A. #R-4	13.8'	N.S.A. #FS-2																					



**DETAIL B, SECTION R-R, S-S
NOT TO SCALE**

GENERAL NOTES:

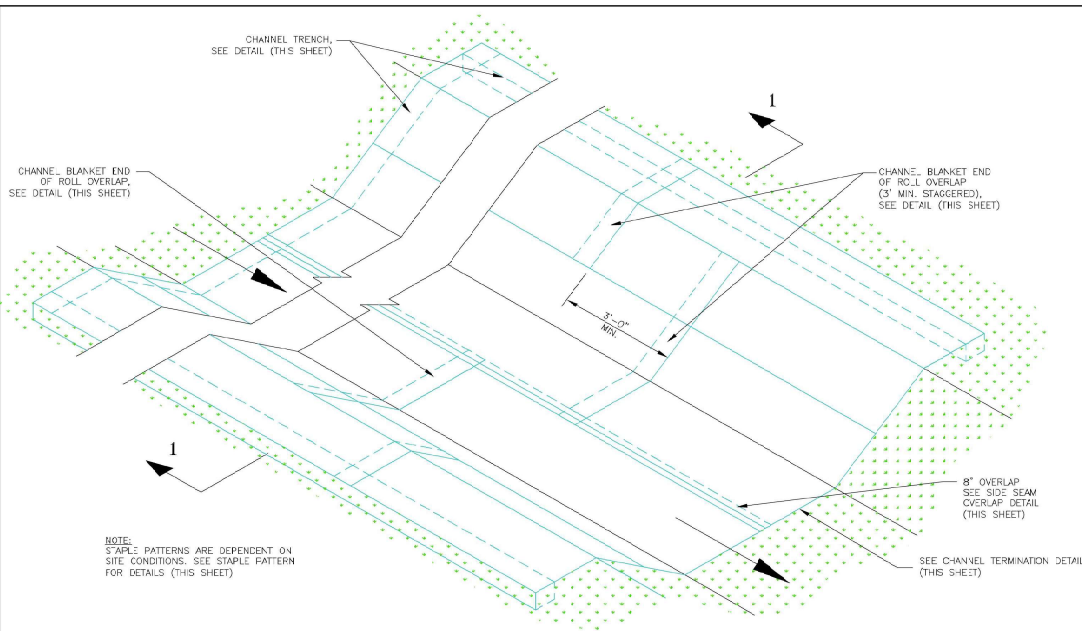
1. THE AREA TO RECEIVE THE PIPE SHALL BE HAND COMPACTED AND ANY SOFT OR UNSUITABLE MATERIAL REMOVED, THE AREA BACKFILLED, AND COMPACTED.
2. THE PIPE AND RISER SHALL BE PLACED ON FIRM, SMOOTH FOUNDATION.
3. THE BACKFILL MATERIAL SHALL BE CLEAN SOIL, FREE OF ROOTS, VEGETATION, OVERSIZED ROCKS, STONES OR OTHER OBJECTIONABLE MATERIAL.
4. AREAS ON WHICH FILL IS TO BE PLACED SHALL BE SCARIFIED PRIOR TO FILL PLACEMENT.
5. FILL MATERIAL SHALL BE COMPACTED, PLACED AND COMPACTED IN ACCORDANCE WITH THE CONSTRUCTION QUALITY CONTROL/QUALITY ASSURANCE PLAN AND THE SPECIFICATIONS FOR EARTH FILL ON DRAWING H122700.
6. THE RISER SHALL BE SECURELY ATTACHED TO THE PIPE OR SUB BY WELDING THE FULL CIRCUMFERENCE MAKING A WATERTIGHT STRUCTURAL CONNECTION.
7. ALL CONNECTIONS BETWEEN PIPE SECTIONS SHALL BE WATERTIGHT, ACHIEVED BY APPROVED WATERTIGHT BAND ASSEMBLIES.
8. THE FILL MATERIAL, AROUND THE PIPE SHALL BE PLACED IN 4 INCH LAYERS AND HAND COMPACTED UNDER AND AROUND THE PIPE TO AT LEAST THE SAME DENSITY AS THE ADJACENT FILL MATERIAL.
9. CARE MUST BE TAKEN TO NOT RAISE THE PIPE FROM FIRM CONTACT WITH ITS FOUNDATION. WHEN COMPACTING UNDER THE PIPE RAUNCHES.
10. A MINIMUM DEPTH OF 2 FT. OF HAND COMPACTED FILL SHALL BE PLACED OVER THE PIPE BEFORE PLACING AND COMPACTING FILL WITH CONSTRUCTION EQUIPMENT.
11. TRASH: NUTS, BOLTS, THREADS AND RODS SHALL BE BITUMINOUS COATED AFTER INSTALLATION.
12. ALL DISTURBED SOIL AREAS SHALL BE GRESSED UPON REACHING FINAL GRADE IN ACCORDANCE WITH THE VEGETATION SCHEDULE, DRAWING H122700.

REFERENCES:

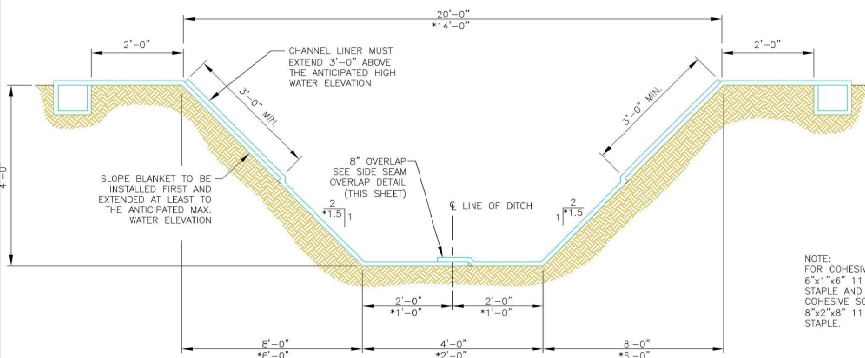
1. MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA.
2. FOR A COMPLETE DRAWING LIST SEE SHEET 1.
3. SEE SHEET 3 FOR GENERAL NOTES AND REFERENCES.



EROSION CONTROL SECTIONS & DETAILS			
PERMIT DRAWINGS GEORGIA POWER COMPANY PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR) EXISTING LANDFILL NO. 4 EFFINGHAM, GEORGIA			
(844) 592-0350 http://www.georgiapower.com/		1665 AKERS MILL RD SE SUITE 205 ATLANTA, GEORGIA 30339	
PROJ. NO.	17C2944	DWG.	30
SCALE	NONE	SHEET	30 OF 38
DATE	9/30/2022		



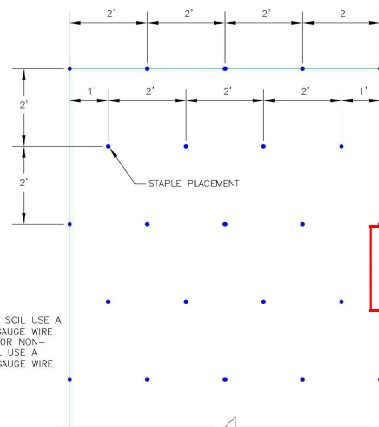
PERIMETER DITCH LINER DETAIL
NOT TO SCALE



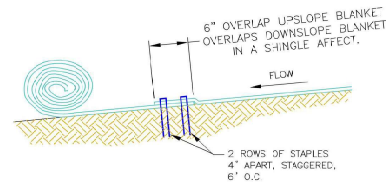
SECTION 1-1
NOT TO SCALE

*DIMENSIONS FOR CELL 1 PERIMETER DITCH

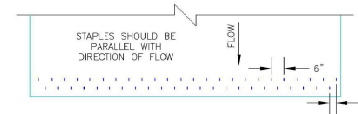
NOTE:
FOR COHESIVE SOIL USE A
6"x16" 11 GAUGE WIRE
STAPLE AND FOR NON-
COHESIVE SOIL USE A
8"x24" 11 GAUGE WIRE
STAPLE.



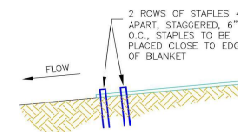
BLANKET STAPLE PATTERN
NOT TO SCALE



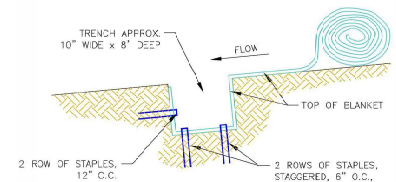
CHANNEL BLANKET END OF ROLL OVERLAP
NOT TO SCALE



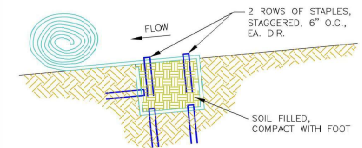
CHANNEL TERMINATION PLAN
NOT TO SCALE



CHANNEL TERMINATION
NOT TO SCALE



STEP 1

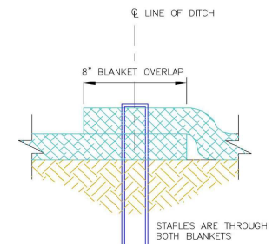


STEP 2

CHANNEL TRENCH
NOT TO SCALE

REFERENCES:

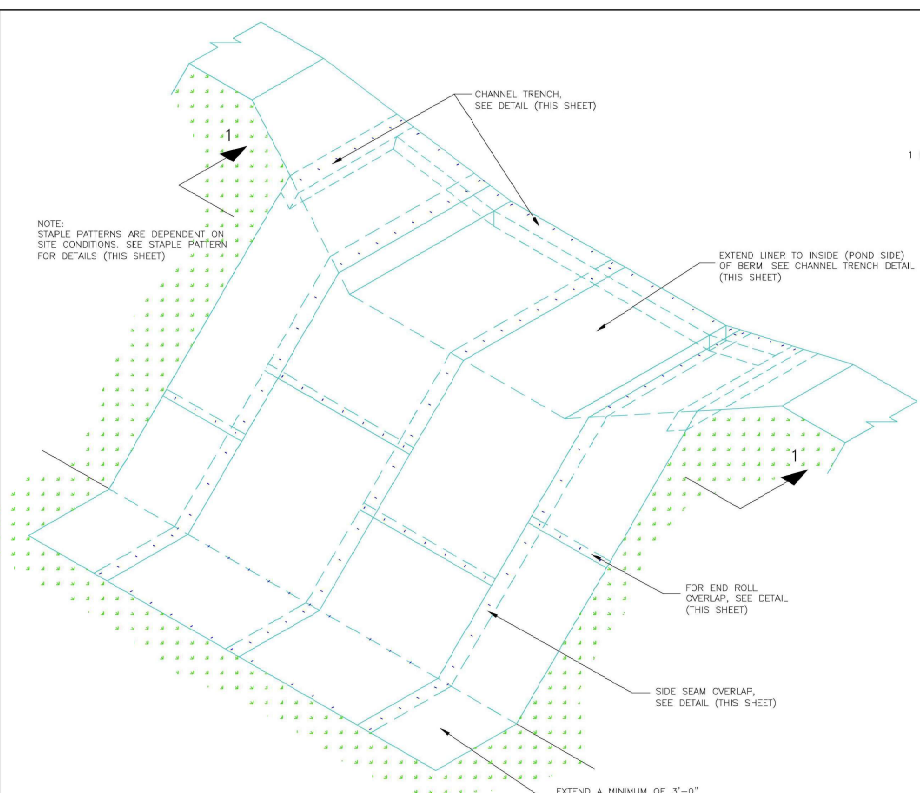
1. MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA.
2. FOR A COMPLETE DRAWING LIST SEE SHEET 1.
3. SEE SHEET 3 FOR GENERAL NOTES AND REFERENCES.



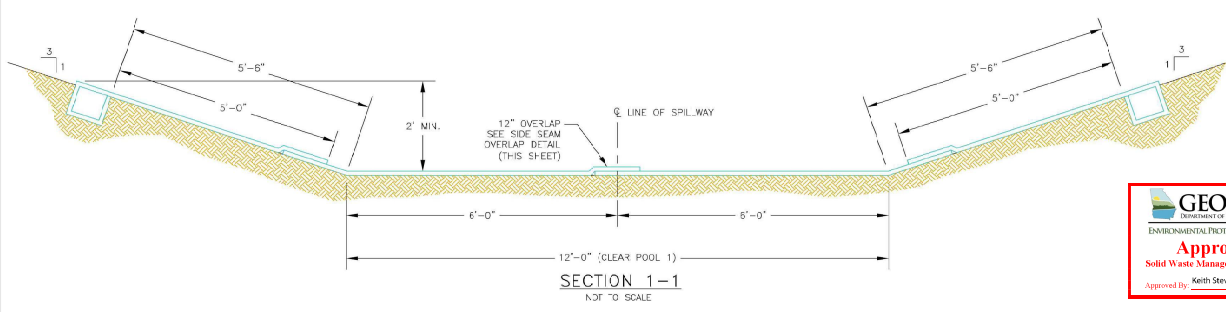
**SIDE SEAM OVERLAP
STAPLE DETAIL**
NOT TO SCALE



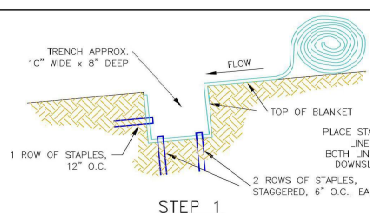
EROSION CONTROL SECTIONS & DETAILS			
PERMIT DRAWINGS GEORGIA POWER COMPANY PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR) EXISTING LANDFILL NO. 4 EFFINGHAM, GEORGIA			
1665 AKERS MILL RD SE SUITE 215 ATLANTA, GEORGIA 30339			
PROJ. NO.	17C2944	DWG.	31
SCALE	NONE		
DATE	9/30/2022	SHEET	31 OF 38



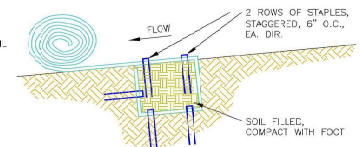
EMERGENCY SPILLWAY LINER DETAIL
NOT TO SCALE



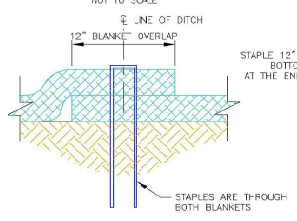
SECTION 1-1
NOT TO SCALE



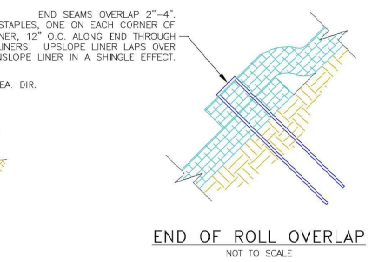
STEP 1



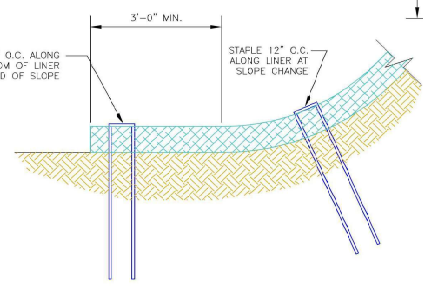
**STEP 2
SLOPE TRENCH**
NOT TO SCALE



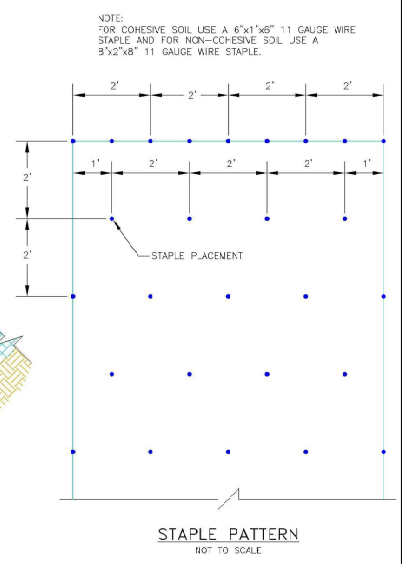
**SIDE SEAM OVERLAP
STAPLE DETAIL**
NOT TO SCALE



END OF ROLL OVERLAP
NOT TO SCALE

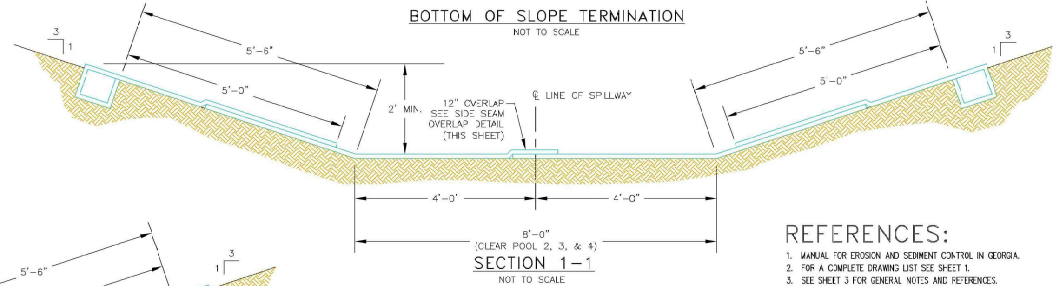


BOTTOM OF SLOPE TERMINATION
NOT TO SCALE



STAPLE PATTERN
NOT TO SCALE

NOTE:
FOR COHESIVE SOIL USE A 6"x1"x6" 11 GAUGE WIRE STAPLE AND FOR NON-COHESIVE SOIL USE A 3/2"x8" 11 GAUGE WIRE STAPLE.



SECTION 1-1
NOT TO SCALE

- REFERENCES:**
1. MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA.
 2. FOR A COMPLETE DRAWING LIST SEE SHEET 1.
 3. SEE SHEET 3 FOR GENERAL NOTES AND REFERENCES.



EROSION CONTROL SECTIONS & DETAILS			
PERMIT DRAWINGS GEORGIA POWER COMPANY PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR) EXISTING LANDFILL NO. 4 EFFINGHAM, GEORGIA			
(844) 592-0350 http://www.gecorpna.com/		GEI Consultants 1001 AKERS HILL RD SUITE 235 ATLANTA, GEORGIA 30339	
PROJ. NO.	17C2944	DWG.	32
SCALE	NONE	SHEET	32 OF 38
DATE	9/30/2022	EDIT	

PLANT, PLANTING RATE & PLANTING DATE FOR PERMANENT COVER

SPECIES	BROADCAST RATES	PLANTING DATES												REMARKS
		J	F	A	M	J	J	A	S	O	N	D		
Persecoia Bahi alone or with temporary cover	60 lbs./ac												Low growing. Sod forming. Slow to establish. Plant with companion crop. Will spread into bermuda pastures and lawns. Mix with Sericea Lespedeza.	
Winnington Bahi with other perennials	30 lbs./ac												Use alone only or better sites. Mix with perennial lespedeza or Crownvetch. Apply top dressing in spring following fall plantings. Nur for heavy use areas or athletic fields.	
Tall Fescue alone	50 lbs./ac													
Tall Fescue with other perennials	30 lbs./ac													
Reed Canary Grass alone	50 lbs./ac												Grows similar to Tall Fescue.	
Reed Canary Grass with other perennials	30 lbs./ac												Plant with winter annuals	
Common Bermuda uninfested seed with temporary cover	10 lbs./ac												Plant with Tall Fescue.	
Common Bermuda uninfested seed w/other perennials	6 lbs./ac													

Solid lines indicate optimum dates, dotted lines indicate permissible but marginal dates.

FERTILIZER REQUIREMENTS

WARM SEASON GRASSES

YEAR	EQUIVALENT N-P-K	ANALYSIS OR RATE		N TOP DRESSING RATE
First	5-12-12	1500 lbs./ac.	50-100 lbs./ac. 2/5/	
Second	6-12-12	800 lbs./ac.	30-140 lbs./ac. 2/	
Maintenance	10-10-10	400 lbs./ac.	20 lbs./ac.	

COD. SEASON GRASSES

YEAR	EQUIVALENT N-P-K	ANALYSIS OR RATE		N TOP DRESSING RATE
First	8-12-12	1500 lbs./ac.	50 lbs./ac./t/	
Second	3-10-10	1000 lbs./ac.		
Maintenance	3-10-10	400 lbs./ac.	-----	

DEFINITION

THE ESTABLISHMENT OF TEMPORARY VEGETATION COVER WITH FAST GROWING SPECIES FOR SEASONAL PROTECTION ON DISTURBED OR DENUDATED AREAS.

CONDITIONS

TEMPORARY VEGETATIVE MEASURES SHOULD BE COORDINATED WITH PERMANENT MEASURES TO ASSURE ECONOMIC AND EFFECTIVE STABILIZATION. MOST TYPES OF TEMPORARY VEGETATION ARE IDEAL TO USE AS COMPANION CROPS UNTIL THE PERMANENT VEGETATION IS ESTABLISHED. NOTE: SOME SPECIES OF TEMPORARY VEGETATION ARE NOT APPROPRIATE FOR COMPANION CROP PLANTINGS BECAUSE OF THEIR POTENTIAL TO OUT-COMPETE THE DESIRED SPECIES. (E.G. ANNUAL RYEGRASS). CONTACT NRCS OR THE LOCAL SWCD FOR MORE INFORMATION.

SPECIFICATIONS

GRADES AND SHAPING EXCESSIVE WATER RUN-OFF SHALL BE REDUCED BY PROPERLY DESIGNED AND INSTALLED EROSION CONTROL PRACTICES SUCH AS CLOSED DRAINS, DITCHES, DIKES, DIVERSIONS, SEDIMENT BARRIERS AND OTHERS. NO SHAPING OR GRADING IS REQUIRED IF SLOPES CAN BE STABILIZED BY HAND-SEEDS VEGETATION OR IF HYDRAULIC SEEDING EQUIPMENT IS TO BE USED.

SEEDBED PREPARATION

WHEN A HYDRAULIC SEEDER IS USED, SEEDBED PREPARATION IS NOT REQUIRED. WHEN USING CONVENTIONAL OR HAND-SEEDING, SEEDBED PREPARATION IS NOT REQUIRED IF THE SOIL MATERIAL IS LOOSE AND NOT SEALED BY RAINFALL. WHEN SOIL HAS BEEN SEALED BY RAINFALL OR CONSISTS OF SMOOTH CUT SLOPES, THE SOIL SHALL BE PITTED, TRENCHED OR OTHERWISE STARTED TO PROVIDE A PLACE FOR SEED TO LEDGE AND GERMINATE.

LIME AND FERTILIZER

AGRICULTURAL LIME IS REQUIRED UNLESS SOIL TESTS INDICATE OTHERWISE. APPLY AGRICULTURAL LIME AT A RATE DETERMINED BY SOIL TEST FOR pH. QUICK ACTING LIME SHOULD BE INCORPORATED TO MODIFY pH DURING THE GERMINATION PERIOD AND STIMULANTS SHOULD ALSO BE CONSIDERED WHEN THERE IS LESS THAN 3% ORGANIC MATTER IN THE SOIL. GRADED AREAS REQUIRE LIME APPLICATION. SOILS MUST BE TESTED TO DETERMINE REQUIRED AMOUNTS OF FERTILIZER AND AMENDMENTS. FERTILIZER SHOULD BE APPLIED BEFORE LAND PREPARATION AND INCORPORATED WITH A DISK, RIPPER, OR CHisel. ON SLOPES TOO STEEP FOR OR INACCESSIBLE TO EQUIPMENT, FERTILIZER SHALL BE HYDRAULICALLY APPLIED, PREFERABLY IN THE FIRST PASS WITH SEED AND SOME HYDRAULIC MULCH, THEN TOPPED WITH THE REMAINING REQUIRED APPLICATION RATE.

SEEDING SELECT A GRASS OR GRASS-LEGUME MIXTURE SUITABLE TO THE AREA AND SEASON OF THE YEAR. SEED SHALL BE APPLIED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, SPLIT-PACKER-SEEDER, OR HYDRAULIC SEEDER (SLURRY INCLUDING SEED AND FERTILIZER). DRILL OR SPLITPACKER SEEDERS SHOULD NORMALLY PLACE SEED ONE-QUARTER TO ONE-HALF INCH DEEP. APPROPRIATE DEPTH OF PLANTING IS TEN TIMES THE SEED DIAMETER. SOIL SHOULD BE "RAKED" LIGHTLY TO COVER SEED WITH SOIL IF SEEDING BY HAND. SEE TABLE 6-4-1 IN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA, SIXTH EDITION, 2014.

MULCHING

TEMPORARY VEGETATION CAN, IN MOST CASES, BE ESTABLISHED WITHOUT THE USE OF MULCH, PROVIDED THERE IS LITTLE TO NO EROSION POTENTIAL. HOWEVER, THE USE OF MULCH CAN OFTEN ACCELERATE AND ENHANCE GERMINATION AND VEGETATION ESTABLISHMENT. MULCH WITHOUT SEEDING SHOULD BE CONSIDERED FOR SHORT TERM PROTECTION. REFER TO DISTURBED AREA STABILIZATION (WITH MULCHING ONLY) IN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA, SIXTH EDITION, 2014.

IRRIGATION

DURING TIMES OF DROUGHT WATER SHALL BE APPLIED AT A RATE NOT CAUSING RUNOFF AND EROSION. THE SOIL SHALL BE THOROUGHLY WETTED TO A DEPTH THAT WILL INSURE GERMINATION OF THE SEED. SUBSEQUENT APPLICATIONS SHOULD BE MADE WHEN NEEDED.

PLANTING

HYDRAULIC SEEDING MIX THE SEED (UNCOATED IF NEEDED), FERTILIZER, AND WOOD CELLULOSE OR WOOD PULP FIBER MULCH WITH WATER AND APPLY IN A SLURRY UNIFORMLY OVER THE AREA TO BE TREATED. APPLY WITHIN ONE HOUR AFTER THE MIXTURE IS MADE.

CONVENTIONAL SEEDING

SEEDING WILL BE DONE ON A FRESHLY PREPARED AND FIRMED SEEDBED. FOR BROADCAST PLANTING, USE A CULTI-PACKER-SEEDER, DRILL, ROTARY SEEDER, OTHER MECHANICAL SEEDER, OR HAND SEEDING TO DISTRIBUTE THE SEED UNIFORMLY OVER THE AREA TO BE TREATED. COVER THE SEED LIGHTLY WITH 1/8 TO 1/4 INCH OF SOIL FOR SMALL SEED AND 1/2 TO 1 INCH FOR LARGE SEED WHEN USING A CULTI-PACKER OR OTHER SUITABLE EQUIPMENT.

NO-TILL SEEDING

NO-TILL SEEDING IS PERMISSIBLE INTO ANNUAL COVER CROPS WHEN PLANTING IS DONE FOLLOWING MATURITY OF THE COVER CROP OR IF THE TEMPORARY COVER STAND IS SPARSE ENOUGH TO ALLOW ADEQUATE GROWTH OF THE PERMANENT (PERENNIAL) SPECIES. NO-TILL SEEDING SHALL BE DONE WITH APPROPRIATE NO-TILL SEEDING EQUIPMENT. THE SEED MUST BE UNIFORMLY DISTRIBUTED AND PLANTED AT THE PROPER DEPTH.

INDIVIDUAL PLANTS

SHRUBS, VINES AND SPROGS MAY BE PLANTED WITH APPROPRIATE PLANTERS OR HAND TOOLS. PINE TREES SHALL BE PLANTED MANUALLY IN THE SUBSOIL FURROW. EACH PLANT SHALL BE SET IN A MANNER THAT WILL AVOID CROWDING THE ROOTS.

NURSERY STOCK PLANTS SHALL BE PLANTED AT THE SAME DEPTH OR SLIGHTLY DEEPER THAN THEY GREW AT THE NURSERY. THE TIPS OF VINES AND SPROGS MUST BE AT OR SLIGHTLY ABOVE THE GROUND SURFACE.

WHERE INDIVIDUAL HOLES ARE CUG, FERTILIZER SHALL BE PLACED IN THE BOTTOM OF THE HOLE, TWO INCHES OF SOIL SHALL BE ADDED AND THE PLANT SHALL BE SET IN THE HOLE.

MULCHING

MULCH IS REQUIRED FOR ALL PERMANENT VEGETATION APPLICATIONS. MULCH APPLIED TO SEEDING AREAS SHALL RECEIVE 75% TO 100% SOIL COVER. WHEN SELECTING A MULCH, DESIGN PROFESSIONALS SHOULD CONSIDER THE MULCH'S FUNCTIONAL LONGEVITY, VEGETATION ESTABLISHMENT ENHANCEMENT, AND EROSION CONTROL EFFECTIVENESS. SELECT THE MULCHING MATERIAL FROM THE FOLLOWING AND APPLY AS INDICATED:

- DRY STRAW OR DRY HAY OF GOOD QUALITY AND FREE OF NEED SEEDS CAN BE USED. DRY STRAW SHALL BE APPLIED AT THE RATE OF 2 TONS PER ACRE. DRY HAY SHALL BE APPLIED AT A RATE OF 2 1/2 TONS PER ACRE.
- WOOD CELLULOSE MULCH OR WOOD PULP FIBER SHALL BE USED WITH HYDRAULIC SEEDING. IT SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE. DRY STRAW OR DRY HAY SHALL BE APPLIED (AT THE RATE INDICATED ABOVE) AFTER HYDRAULIC SEEDING.
- ONE THOUSAND POUNDS OF WOOD CELLULOSE OR WOOD PULP FIBER, WHICH INCLUDES A TACKIFIER, SHALL BE USED WITH HYDRAULIC SEEDING ON SLOPES 1/4:1 OR STEEPER.
- SERICEA LESPEDEZA HAY CONTAINING MATURE SEED SHALL BE APPLIED AT A RATE OF THREE TONS PER ACRE.
- PINE STRAW OR PINE BARK SHALL BE APPLIED AT A THICKNESS OF 3 INCHES FOR BEDDING PURPOSES. OTHER SUITABLE MATERIALS IN SUFFICIENT QUANTITY MAY BE USED WHERE CRUMINALS OR OTHER GROUND COVERS ARE PLANTED. THIS IS NOT APPROPRIATE FOR SEEDING AREAS.
- WHEN USING TEMPORARY EROSION CONTROL BLANKETS OR BLOCK SOD, MULCH IS NOT REQUIRED.
- BITUMINOUS TREATED HAYING MAY BE APPLIED ON PLANTED AREAS, SLOPES, IN DITCHES OR DRY WATERWAYS TO PREVENT EROSION. BITUMINOUS TREATED HAYING SHALL BE APPLIED WITHIN 24 HOURS AFTER AN AREA HAS BEEN PLANTED. APPLICATION RATES AND MATERIALS MUST MEET GEORGIA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.

WOOD CELLULOSE AND WOOD PULP FIBERS SHALL NOT CONTAIN GERMINATION OR GROWTH INHIBITING FACTORS. THEY SHALL BE EVENLY DISPERSED WHEN AGITATED IN WATER. THE FIBERS SHALL CONTAIN A DYE TO ALLOW VISUAL METERING AND ARE IN UNIFORM APPLICATION DURING SEEDING.

APPLYING MULCH

STRAW OR HAY MULCH WILL BE SPREAD UNIFORMLY WITHIN 24 HOURS AFTER SEEDING AND/OR PLANTING. THE MULCH MAY BE SPREAD BY BLOWER-TYPE SPREADING EQUIPMENT, OTHER SPREADING EQUIPMENT OR BY HAND. MULCH SHALL BE APPLIED TO COVER 75% OF THE SOIL SURFACE. WOOD CELLULOSE OR WOOD FIBER MULCH SHALL BE APPLIED UNIFORMLY WITH HYDRAULIC SEEDING EQUIPMENT.

ANCHORING MULCH

ANCHOR STRAW OR HAY MULCH IMMEDIATELY AFTER APPLICATION BY ONE OF THE FOLLOWING METHODS:

- HAY AND STRAW MULCH SHALL BE PRESSED INTO THE SOIL IMMEDIATELY AFTER THE MULCH IS SPREAD. A SPECIAL "PACKER DISK" OR DISK HARROW WITH THE DISKS SET STRAIGHT MAY BE USED. THE DISKS MAY BE SMOOTH OR SERRATED AND SHOULD BE 20 INCHES OR MORE IN DIAMETER AND 8 TO 12 INCHES APART. THE EDGES OF THE DISKS SHALL BE DULL ENOUGH TO PRESS THE MULCH INTO THE GROUND WITHOUT CUTTING IT, LEAVING MUCH OF IT IN AN UPRIGHT POSITION. MULCH SHALL NOT BE PLOWED INTO THE SOIL.
- SYNTHETIC TACKIFIERS, FINDERS OR HYDRAULIC MULCH SPECIFICALLY DESIGNED TO TACK STRAW, SHALL BE APPLIED IN CONJUNCTION WITH OR IMMEDIATELY AFTER THE MULCH IS SPREAD. SYNTHETIC TACKIFIERS SHALL BE MIXED AND APPLIED ACCORDING TO MANUFACTURER'S SPECIFICATIONS. ALL TACKIFIERS, FINDERS OR HYDRAULIC MULCH SPECIFICALLY DESIGNED TO TACK STRAW SHOULD BE VERIFIED THROUGH THE EROSION AND SEDIMENT CONTROL IN GEORGIA, SIXTH EDITION.
- RYE OR WHEAT CAN BE INCLUDED WITH FALL AND WINTER PLANTINGS TO STABILIZE THE MULCH. THEY SHALL BE APPLIED AT A RATE OF ONE-QUARTER TO ONE-HALF BUSHED PER ACRE.
- PLASTIC MESH OR NETTING WITH MESH NO LARGER THAN ONE INCH BY ONE INCH MAY BE NEEDED TO ANCHOR STRAW OR HAY MULCH ON UNSTABLE SOILS AND CONCENTRATED FLOW AREAS. THESE MATERIALS SHALL BE INSTALLED AND ANCHORED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.

IRRIGATION

IRRIGATION WILL BE APPLIED AT A RATE THAT WILL NOT CAUSE RUNOFF.

SEEDING RATES FOR TEMPORARY SEEDING

SPECIES	RATES	PLANTING DATES												COMMENTS
		J	F	A	M	J	J	A	S	O	N	D		
Borley alone	144 lbs./ac													
Borley in mixture	24 lbs./ac												Winter hardy, use on productive soils	
Lespedeza, Annual alone	40 lbs./ac												May volunteer for several years. Use resistant EL.	
Lespedeza, Annual in mixture	10 lbs./ac													
Lovegrass, Weeping alone	4 lbs./ac												Not used for several years. Mix with Sericea Lespedeza.	
Lovegrass, Weeping in mixture	2 lbs./ac													
Miller, Browntop alone	40 lbs./ac												Quick dense cover. Will provide too much competition in mixtures if seeded at high rates.	
Miller, Browntop in mixture	10 lbs./ac													
Millet, Pearl alone	50 lbs./ac												Quick dense cover. May reach 5 feet in height. NOT recommended for mixtures.	
Oats alone	128 lbs./ac												Use on productive soils, not as winter hardy as rye or barley.	
Oats in mixture	32 lbs./ac													
Rye alone	158 lbs./ac												Quick cover. Drought tolerant and winter hardy.	
Rye in mixture	28 lbs./ac													
Ryegrass, Annual alone	40 lbs./ac												Dense cover. Very competitive and NOT to be used in mixtures.	
Sudangrass alone	60 lbs./ac												Good on droughty sites. NOT recommended for mixtures.	
Triticale alone	144 lbs./ac												Use on lower part of Southern Coastal Plain and in Atlantic Coastal Footwads only.	
Triticale in mixture	24 lbs./ac													
Wheat alone	180 lbs./ac												Winter hardy.	
Wheat w/other perennials	30 lbs./ac													

Solid lines indicate optimum dates, dotted lines indicate permissible but marginal dates.

REFERENCES:

1. MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA.

2. FOR A COMPLETE DRAWING LIST SEE SHEET 1.

3. SEE SHEET 3 FOR GENERAL NOTES AND REFERENCES.

GEORGIA

Department of Natural Resources

Environmental Protection Division

Approved

Solid Waste Management Program

Approved by Keith Stevens

GEORGIA

SEEDS TESTED

PROFESSIONAL

LABORATORY

9/25/2022

9/25/2022

Georgia Power

EROSION CONTROL SECTIONS & DETAILS

PERMIT DRAWINGS

GEORGIA POWER COMPANY

PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR)

EXISTING LANDFILL NO. 4

EFFINGHAM, GEORGIA

(804) 592-0850

https://www.gcp.com/consultants/

PROJ. NO. 17C2944

SCALE NONE

DATE 9/30/2022

DWG. 33

EDIT

SHEET 33 OF 38

PURPOSE:
TO MINIMIZE AND PREVENT SEDIMENT CARRIED BY SHEET FLOW FROM LEAVING THE SITE AND ENTERING NATURAL DRAINAGE WAYS OR STORM DRAINAGE SYSTEMS BY SLOWING STORM WATER RUNOFF AND CAUSING THE DEPOSITION AND/OR FILTRATION OF SEDIMENT AT THE STRUCTURE. THE BARRIERS RETAIN THE SOIL ON THE DISTURBED LAND UNTIL THE ACTIVITIES DISTURBING THE LAND ARE COMPLETED AND VEGETATION IS ESTABLISHED.

PERFORMANCE EVALUATION:
FOR A PRODUCT OR PRACTICE TO BE APPROVED AS A SEDIMENT BARRIER, THAT PRODUCT OR PRACTICE MUST HAVE A DOCUMENTED P-FACTOR NO GREATER THAN 0.045 FOR NON-SENSITIVE AREAS OR A P-FACTOR NO GREATER THAN 0.030 FOR SENSITIVE AREAS, AS SPECIFIED BY GSWCC. FOR COMPLETE TEST PROCEDURES AND APPROVED PRODUCTS LIST PLEASE VISIT WWW.GASWCC.GEORGIA.GOV.

DESIGN CRITERIA:
SEDIMENT BARRIERS ARE DESIGNED TO RETAIN SEDIMENT TRANSPORTED BY SHEET FLOW FROM DISTURBED AREAS. IT IS IMPORTANT FOR THE DESIGN PROFESSIONAL TO TAKE INTO ACCOUNT THE PROFILE OF THE PRODUCT FOR USE ON THE SITE. ALL SEDIMENT BARRIERS SHALL MEET THE REQUIRED P-FACTOR PERFORMANCE LEVEL. SUPPORTING INFORMATION OR TESTING CAN BE FOUND AT WWW.GASWCC.GEORGIA.GOV. UNDER DOCUMENTS.
SEDIMENT BARRIERS SHOULD ALSO PROVIDE A RIPRAP SPLASH PAD OR OTHER OUTLET PROTECTION DEVICE FOR ANY POINT WHERE FLOW MAY OVERTOP THE SEDIMENT BARRIER. ENSURE THAT THE MAXIMUM HEIGHT OF THE BARRIERS AT A PROTECTED, REINFORCED OUTLET DOES NOT EXCEED 1 FOOT AND THAT THE SUPPORT SPACING DOES NOT EXCEED 4 FEET.
WHERE ALL RUNOFF IS TO BE STORED BEHIND THE SEDIMENT BARRIER (WHERE NO STORM WATER DISPOSAL SYSTEM IS PRESENT), MAXIMUM CONTINUOUS SLOPE LENGTH BEHIND A SEDIMENT BARRIER SHALL NOT EXCEED THOSE SHOWN IN CRITERIA FOR SEDIMENT BARRIER TABLE. FOR LONGER SLOPE LENGTHS, SLOPE INTERRUPTERS MUST BE USED. THE DRAINAGE AREA SHALL NOT EXCEED 1/4 ACRE FOR EVERY 100 FEET OF SEDIMENT BARRIER.

PLACEMENT:
WHEN USING A SEDIMENT BARRIER THE DESIGN PROFESSIONAL MUST DETERMINE TYPE NS OR TYPE S. SENSITIVE AREAS CAN BE DEFINED AS ANY AREA THAT NEEDS ADDITIONAL PROTECTION. THESE AREAS INCLUDE BUT ARE NOT LIMITED TO: STATE WATERS, WETLANDS, OR ANY AREA THE DESIGN PROFESSIONAL DESIGNATES AS SENSITIVE.
WHEN USING MULTIPLE TYPES OF SEDIMENT BARRIERS ON A SITE IN A SINGLE RUN THE BARRIERS MUST BE OVERLAPPED 18 INCHES OR AS SPECIFIED BY DESIGN PROFESSIONAL. SEE OVERLAP AT FABRIC ENDS DETAIL.

CONSTRUCTION SPECIFICATIONS

TYPE S SEDIMENT BARRIER

SEDIMENT BARRIERS BEING USED AS TYPE S SHALL HAVE A SUPPORT SPACING OF NO GREATER THAN 4 FEET ON CENTER, WITH EACH DRIVEN INTO THE GROUND 18 INCHES. TYPE S SEDIMENT BARRIERS SHALL HAVE A P-FACTOR NO GREATER THAN 0.030.

INSTALLATION:
SEDIMENT BARRIERS SHOULD BE INSTALLED ALONG THE CONTOUR. TEMPORARY SEDIMENT BARRIERS SHALL BE INSTALLED ACCORDING TO THE FOLLOWING SPECIFICATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE DESIGN PROFESSIONAL.
FOR INSTALLATION OF THE BARRIERS, SEE DETAILS. IT IS IMPORTANT TO REMEMBER THAT NOT ALL SEDIMENT BARRIERS NEED TO BE TRENCHED INTO THE GROUND BUT MOST TALLER SEDIMENT BARRIERS DO.

POST INSTALLATION SHALL START AT THE CENTER OF A LOW POINT (IF APPLICABLE) WITH THE REMAINING POSTS SPACED NO GREATER THAN 5 FEET APART FOR TYPE NS SEDIMENT BARRIERS AND NO GREATER THAN 4 FEET APART FOR TYPE S SEDIMENT BARRIERS. FOR POST SIZE REQUIREMENT, SEE POST SIZE TABLE. FASTENERS FOR WOOD POSTS ARE LISTED IN FASTENERS FOR WOOD POSTS TABLE.

TRENCHING METHOD:
TRENCHING MACHINES HAVE BEEN USED FOR OVER TWENTY-FIVE YEARS TO DIG A TRENCH FOR BURYING PART OF THE FILTER FABRIC UNDERGROUND. USUALLY THE TRENCH IS ABOUT 2'-6" WIDE WITH A 6" EXCAVATION. POST SETTING AND FABRIC INSTALLATION OFTEN PRECEDE COMPACTION, WHICH MAKE EFFECTIVE COMPACTION MORE DIFFICULT TO ACHIEVE. EPA SUPPORTED AN INDEPENDENT TECHNOLOGY EVALUATION (ASCE 2001), WHICH COMPARED THREE PROGRESSIVELY BETTER VARIATIONS OF THE TRENCHING METHOD WITH STATIC SLICING METHOD. THE STATIC SLICING METHOD PERFORMED BETTER THAN TWO LOWER PERFORMANCE LEVELS OF THE TRENCHING METHOD, AND WAS AS GOOD AS OR BETTER THAN THE TRENCHING METHOD'S HIGHEST PERFORMANCE LEVEL. THE BEST TRENCHING METHOD TYPICALLY REQUIRED NEARLY TRIPLE THE TIME AND EFFORT TO ACHIEVE RESULTS COMPARABLE TO THE STATIC SLICING METHOD.

ALONG ALL STATE WATERS AND OTHER SENSITIVE AREAS, TWO ROWS OF TYPE S SEDIMENT BARRIERS SHALL BE USED. THE TWO ROWS TYPE S SHOULD BE PLACED A MINIMUM OF 36 INCHES APART.

MAINTENANCE:
SEDIMENT SHALL BE REMOVED ONCE IT HAS ACCUMULATED TO ONE-HALF THE ORIGINAL HEIGHT OF THE BARRIER. THIS IS EXTREMELY IMPORTANT WHEN SELECTING BMPs WITH A LOWER PROFILE.
SEDIMENT BARRIERS SHALL BE REPLACED WHENEVER THEY HAVE DEGRADED TO SUCH AN EXTENT THAT THE EFFECTIVENESS OF THE PRODUCT IS REDUCED (APPROXIMATELY SIX MONTHS) OR THE HEIGHT OF THE PRODUCT IS NOT MAINTAINING BOX OF ITS PROPERLY INSTALLED HEIGHT.
TEMPORARY SEDIMENT BARRIERS SHALL REMAIN IN PLACE UNTIL DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED. ALL SEDIMENT ACCUMULATED AT THE BARRIER SHALL BE REMOVED AND PROPERLY DISPOSED OF BEFORE THE BARRIER IS REMOVED.

FASTENERS FOR WOOD POSTS TABLE					
	GAUGE	CROWN	LEGS	STAPLES/POST	
WIRE STAPLES	17 MIN.	3/4"	1/2"	5 MIN.	
		WIDE	LONG		
NAILS	14 MIN.	1"	3/4"	4 MIN.	
			HEADS	NAIL/POST	

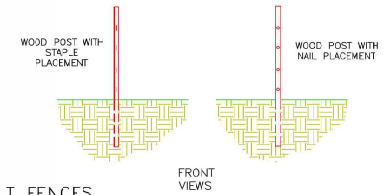
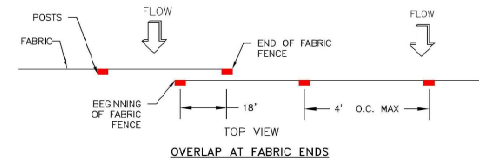
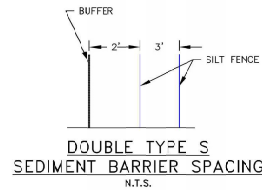
POST SIZE TABLE			
TYPE	MIN. LENGTH	TYPE OF POST	SIZE OF POST
NS	4'	SOFT WOOD	3" DIA. OR 2X4 OAK STEEL, 1.3 LB./FT. MIN.
S	4'	STEEL	1.3 LB./FT. MIN. OAK, 2" X 2"

NOTE:
THE FABRIC AND WIRE SHOULD BE SECURELY FASTENED TO POSTS, AND FABRIC ENDS MUST BE OVERLAPPED A MINIMUM OF 18" OR WRAPPED TOGETHER AROUND A POST TO PROVIDE A CONTINUOUS FABRIC BARRIER AROUND THE INLET.

CRITERIA FOR SEDIMENT BARRIER

LAND SLOPE	MAXIMUM SLOPE LENGTH ABOVE FENCE
PERCENT	FEET
<2	100
2 TO 5	75
5 TO 10	50
10 TO 20	25
>20*	15

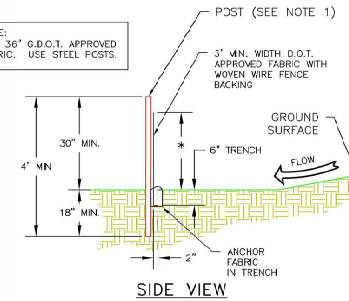
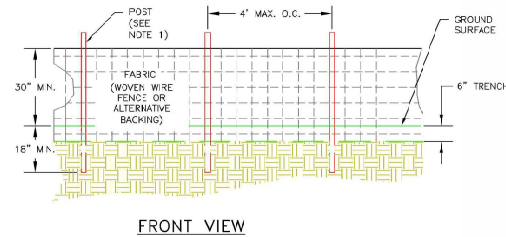
*IN AREAS WHERE THE SLOPE IS GREATER THAN 20%, A FLAT AREA LENGTH OF 10 FEET BETWEEN THE TOE OF SLOPE TO THE BARRIER SHOULD BE PROVIDED.



FASTENERS FOR SILT FENCES

N.T.S.

- NOTES:**
1. USE STEEL OR WOOD POSTS OR AS SPECIFIED BY THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
 2. HEIGHT (*) IS TO BE SHOWN ON THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.



TYPE S SEDIMENT BARRIER

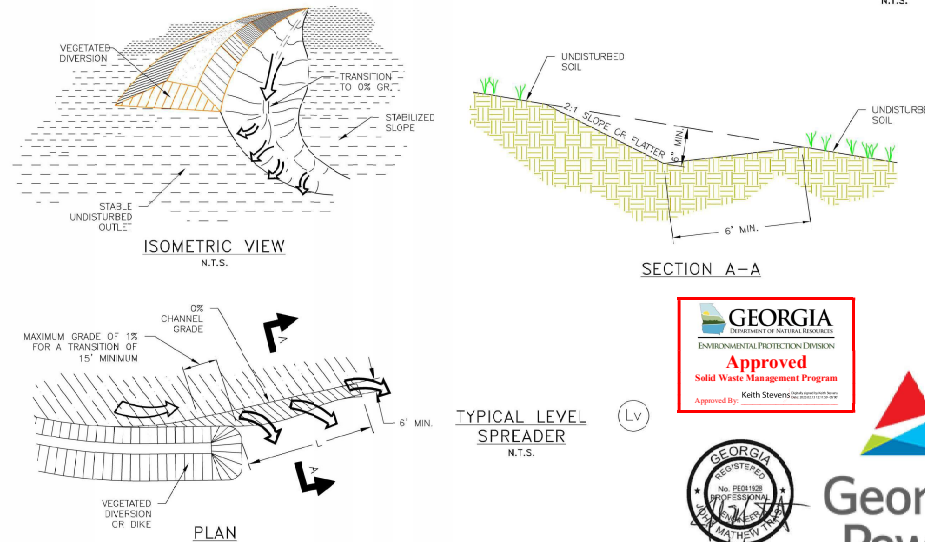
N.T.S.

- NOTES:**
1. FINAL DISCHARGE WILL BE OVER THE LEVEL LIP ONTO AN UNDISTURBED, STABILIZED AREA. THE OUTLET SHALL BE GENERALLY SMOOTH TO CREATE UNIFORM SHEET FLOW.
 2. GRADE OF CHANNEL, FOR LAST 15 FEET OF THE DIKE OR DIVERSION ENTERING THE LEVEL SPREADER SHALL BE LESS THAN OR EQUAL TO 1%.
 3. LEVEL SPREADERS MUST BE CONSTRUCTED ON UNDISTURBED SOIL (NOT ON FILL).
 4. STORM RUNOFF CONVERTED TO SHEET FLOW MUST DISCHARGE ONTO UNDISTURBED STABILIZED AREAS.

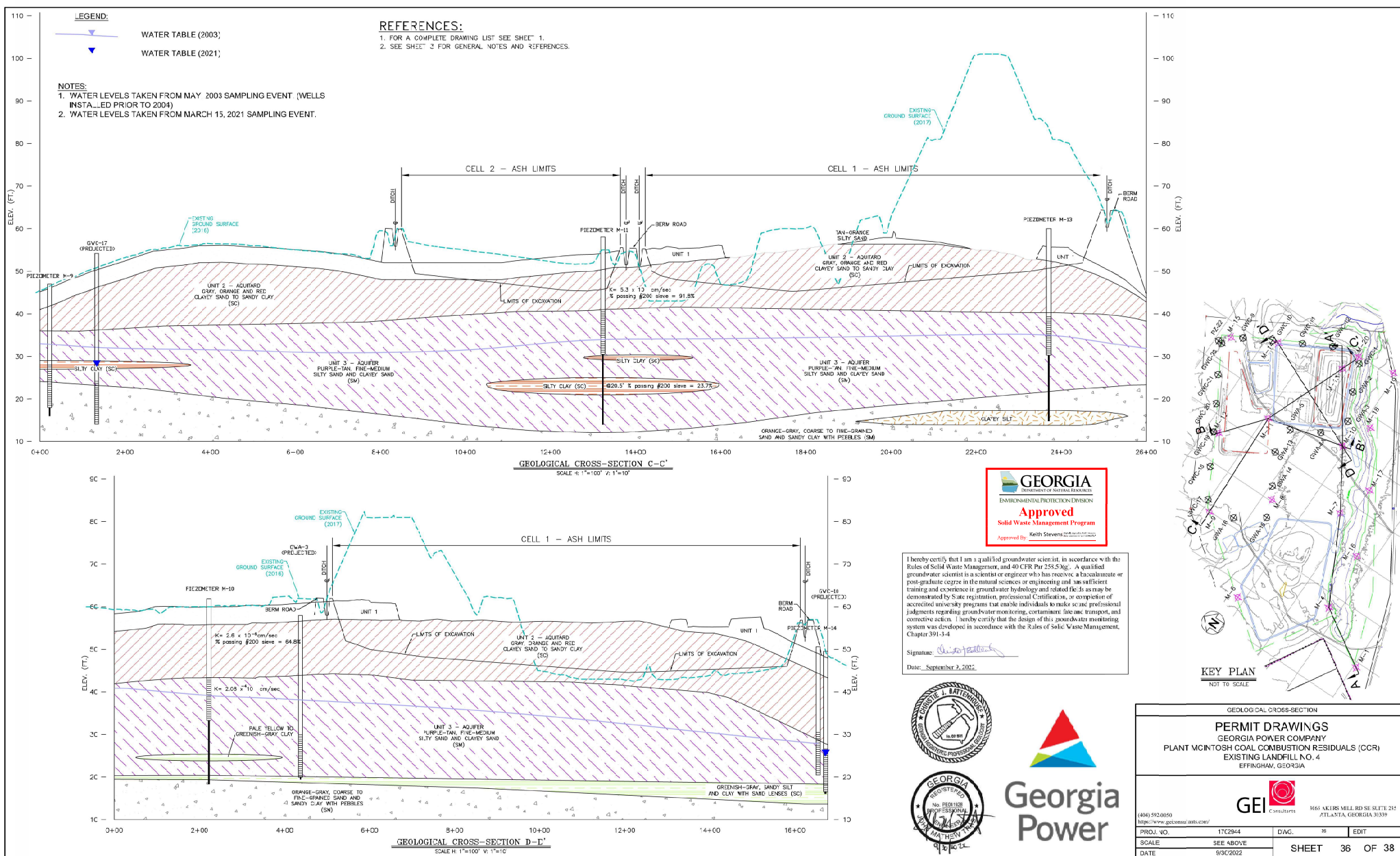
DESIGNER: 0' C/24' (40')	MINIMUM LENGTH: 12' (40')
UP TO 10	10
11 TO 20	20
21 TO 30	30
31 TO 40	40
41 TO 50	50

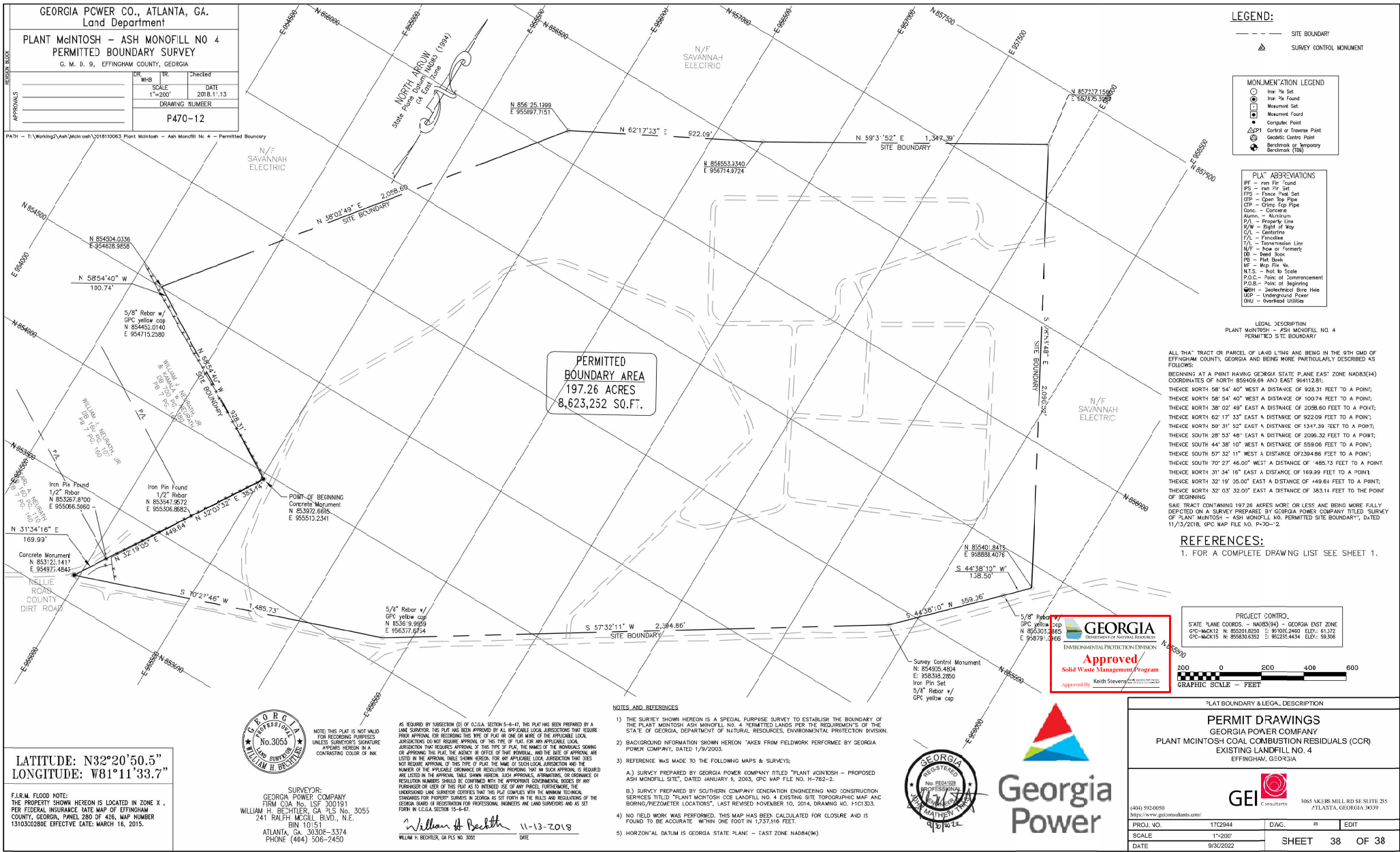
REFERENCES:

1. MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA.
2. FOR A COMPLETE DRAWING LIST SEE SHEET 1.
3. SEE SHEET 3 FOR GENERAL NOTES AND REFERENCES.



EROSION CONTROL SECTIONS & DETAILS			
PERMIT DRAWINGS			
GEORGIA POWER COMPANY			
PLANT MCINTOSH COAL COMBUSTION RESIDUALS (CCR)			
EXISTING LANDFILL NO. 4			
EFFINGHAM, GEORGIA			
(800) 592-0850 http://www.georgiapower.com/		GEI Consultants 166 AKERS MILL RD SE SUITE 215 ATLANTA, GEORGIA 30339	
PROJ. NO.	17C2944	DWG.	34
SCALE	NONE	EDIT	
DATE	9/30/2002	SHEET	34 OF 38







Jeffrey W. Cown, Director

Land Protection Branch
4244 International Parkway
Suite 104
Atlanta, Georgia 30354
404-362-2537

August 6, 2026

Jennifer McNelly
Vice President - Environmental Affairs
Georgia Power
241 Ralph McGill Boulevard
Atlanta, Georgia 30308

SUBJECT: Effingham County – GA Power Plant McIntosh Ash Monofill #4
Permit Number: 051-010D(CCR)
Minor Modification Approved
Submittal ID: 1012914

Dear Ms. McNelly:

The Georgia Environmental Protection Division (EPD) received your Request for Minor Modification to the Solid Waste Handling Permit (Minor Modification) on July 15, 2026. The Minor Modification seeks to install several borings to conduct a geotechnical investigation. EPD issued a Comment Letter on July 29, 2026, requesting that additional information be added to the submitted Site Plan. On August 5, 2026, EPD received a response to the comments along with a revised Site Plan. Based on its review of the information provided, EPD hereby approves the Minor Modification.

If you should have any questions, please do not hesitate to contact the undersigned.

Sincerely,

Kaveh
Torabzadeh

Digitally signed by Kaveh Torabzadeh
Date: 2026.08.06 09:08:22 -04'00'

Kaveh Torabzadeh
Environmental Engineer
Solid Waste Permitting Unit
Solid Waste Management Program

Nabil
Murshed

Digitally signed by Nabil Murshed
Date: 2026.08.06 09:47:56 -04'00'

Nabil Murshed
Geologist
Environmental Monitoring Unit
Solid Waste Management Program

cc: Tyler Boyles, Tim Earl, David Gibbons, Mike Smiley, Lauren Petty, Ben Hodges; GA Power (via email)
William Cook, Beverly Tipton, Keith Stevens; GA EPD (via email)

File: GEOS Submittal ID: 1012914

