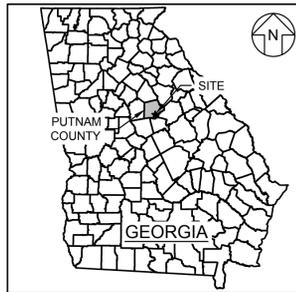
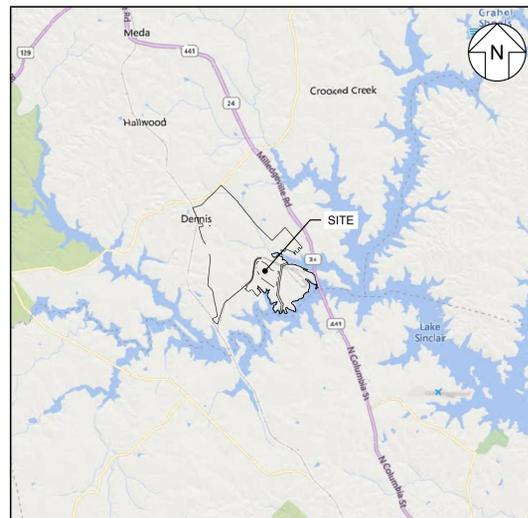


# PLANT BRANCH CCR LANDFILL PUTNAM COUNTY, GEORGIA

PERMIT DRAWINGS  
OCTOBER 2022  
REVISION 0

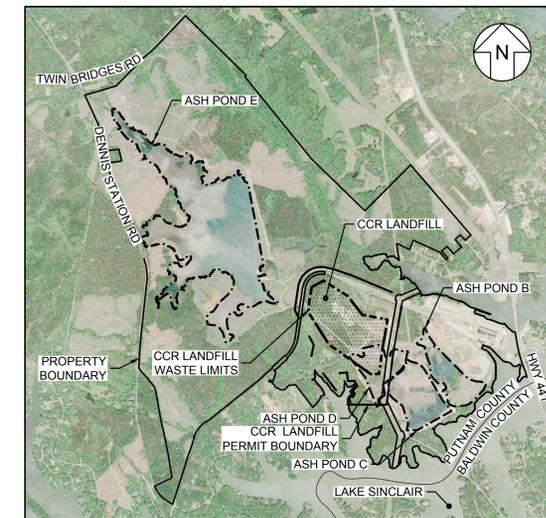


SOURCE: U.S. BUREAU OF THE CENSUS  
GEORGIA STATE MAP  
SCALE: NTS



SOURCE: MICROSOFT CORPORATION BING MAPS 2017  
LOCATION MAP  
SCALE: 1" = 2 MILES

LIST OF DRAWINGS	
DRAWING NO.	DRAWING TITLE
1	COVER SHEET
2	LEGENDS, ABBREVIATIONS, AND REFERENCE NOTES
3	PROPERTY BOUNDARY SURVEY
4	EXISTING SITE CONDITIONS
5	LINER (TOP OF GEOMEMBRANE) GRADING PLAN
6	FINAL COVER GRADING PLAN
7	SITE CROSS SECTIONS I
8	SITE CROSS SECTIONS II
9	LINER SYSTEM DETAILS I
10	LINER SYSTEM DETAILS II
11	LEACHATE MANAGEMENT SYSTEM PLAN
12	LEACHATE MANAGEMENT SYSTEM DETAILS I
13	LEACHATE MANAGEMENT SYSTEM DETAILS II
14	LEACHATE MANAGEMENT SYSTEM DETAILS III
15	LEACHATE MANAGEMENT SYSTEM DETAILS IV
16	LEACHATE MANAGEMENT SYSTEM DETAILS V
17	FINAL COVER SYSTEM DETAILS I
18	FINAL COVER SYSTEM DETAILS II
19	PHASING PLAN
20	STORMWATER MANAGEMENT SYSTEM PLAN
21	STORMWATER MANAGEMENT SYSTEM DETAILS I
22	STORMWATER MANAGEMENT SYSTEM DETAILS II
23	STORMWATER MANAGEMENT SYSTEM DETAILS III
24	EROSION AND SEDIMENT CONTROL AND MISCELLANEOUS DETAILS
25	SITE GROUNDWATER MONITORING PLAN



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

PREPARED FOR:



MANAGER  
GEORGIA POWER ENVIRONMENTAL AFFAIRS  
241 RALPH MCGILL BOULEVARD NE  
ATLANTA, GEORGIA 30308  
404.506.6505

PREPARED BY:



1255 ROBERTS BOULEVARD NW, SUITE 200  
KENNESAW, GEORGIA 30144  
678.202.9500



PERMIT DRAWINGS  
NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION	SRN	MI
0	10.14.22	GA EPD SUBMITTAL		

COVER SHEET				
PLANT BRANCH CCR LANDFILL PUTNAM COUNTY, GEORGIA				
<b>Geosyntec</b> consultants			<small>GEORGIA CERTIFICATE OF AUTHORIZATION (COA) NO. PEF000260, EXP. 06/30/2024</small> <small>PHONE: 678.202.9500</small> <small>WWW.GEOSYNTEC.COM</small>	
PROJ. NO.	GW6364	DWG.	6364-101	EDIT 10.14.22
SCALE	AS SHOWN	DRAWING 1 OF 25		
DATE	OCTOBER 2022			

**LINETYPE LEGEND**

	APPROXIMATE ASH POND BOUNDARY
	CCR LANDFILL PERMIT BOUNDARY (NOTE 3)
	CCR LANDFILL WASTE LIMIT
	CCR PERMIT BOUNDARY FOR ASH PONDS B, C, D, AND E (NOTE 4)
	CLOSURETURF® SYSTEM
	CWFM-1 CONTACT WATER FORCEMAIN
	UNDERDRAIN PIPE AT ASH POND D
	DOUBLE-SIDED GEOCOMPOSITE DRAINAGE LAYER
	DOWNCHUTE
	EDGE OF ROAD / EXISTING BUILDINGS
	EXISTING GROUND
	EXISTING WATER MANAGEMENT INFRASTRUCTURE
	FINGER DRAIN AND EXISTING CMP
	FINISHED GRADE / TOP OF LINER
	JANUARY 31, 2019 GROUNDWATER SURFACE
	LFM-1 LEACHATE FORCEMAIN 1
	LFM-2 LEACHATE FORCEMAIN 2
	LFM-3 LEACHATE FORCEMAIN 3
	LFM-4 LEACHATE FORCEMAIN 4
	LTS-1 LEACHATE TRANSMISSION LINE 1
	LTS-2 LEACHATE TRANSMISSION LINE 2
	NON-WOVEN GEOTEXTILE SEPARATOR OR CUSHION LAYER
	OVERHEAD POWER TRANSMISSION LINE / POWER DISTRIBUTION LINE
	POWER TRANSMISSION LINE EASEMENT
	PROPERTY BOUNDARY (NOTE 2)
	RAILROAD
	REINFORCED GEOSYNTHETIC CLAY LINER
	RESTORATION SURFACE AFTER REMOVAL OF CCR
	STORMWATER CHANNEL
	STORMWATER PIPE
	STREAM (NOTE 1)
	TB TOP DECK DIVERSION BERM
	TOP OF BEDROCK
	TOP OF PARTIALLY WEATHERED ROCK
	TREELINE
	TEXTURED HDPE OR LLDPE GEOMEMBRANE / PROTECTIVE HDPE SHEET
	WETLAND SURVEY LIMITS (NOTE 1)

**SYMBOL LEGEND**

	AIR RELEASE VALVE MANHOLE
	CLEANOUT MANHOLE
	CONCRETE RISER STRUCTURE
	EXTRUSION WELD
	FLOW DIRECTION
	GROUNDWATER PIEZOMETER
	GUY WIRE
	HEADWALL
	HISTORICAL WELL / PIEZOMETER
	JUNCTION MANHOLE
	LEACHATE COLLECTION SUMP / RISER PIPE / RISER PAD
	MONITORING NETWORK WELL
	OUTLET PROTECTION
	PIPE
	POWER POLE

**SYMBOL LEGEND (CONTINUED)**

	PROPOSED MONITORING WELL
	SLOPE GRADE
	SLOPE INDICATOR
	SLOPE LABEL
	STORMWATER MANHOLE / LEACHATE FORCEMAIN MANHOLE
	SUMP
	TEMPORARY PIEZOMETER
	TRAILER OR BUILDING
	UNDERDRAIN SUMP
	VEGETATION
	WATER SUPPLY WELL

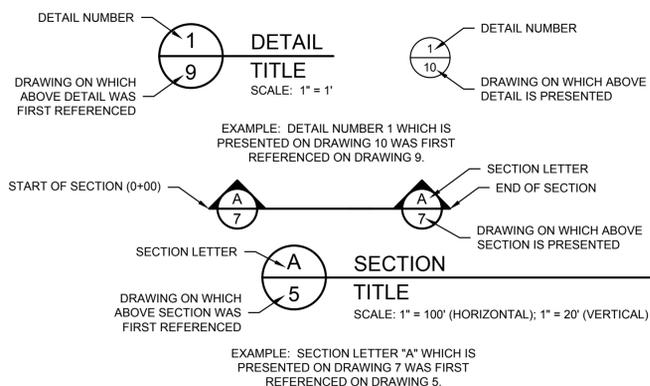
**HATCH PATTERN LEGEND**

	ACCESS ROAD (EXISTING AND PROPOSED) (NOTE 1)
	AGGREGATE BASE LAYER / AGGREGATE AT GEOCOMPOSITE EXIT AREA
	COARSE GRAVEL DRAINAGE LAYER
	COMPACTED CLAY LINER / COMPACTED SOIL LAYER
	CONCRETE
	EXISTING CCR AREA
	FREE WATER SURFACE
	FINE GRAVEL DRAINAGE LAYER
	FINE SAND FILTER LAYER
	LINED LEACHATE POND
	LOW PERMEABILITY ANCHOR TRENCH BACKFILL
	MEDIUM GRAVEL DRAINAGE LAYER
	PIPE BEDDING / PIPE EMBEDMENT FILL / MANHOLE EMBEDMENT FILL / COMPACTED GRANULAR SUBBASE
	PROTECTIVE SOIL LAYER / COMPACTED SOIL FILL
	RIPRAP / PROTECTIVE GRAVEL LAYER
	SUBGRADE
	TRENCH BACKFILL
	VEGETATIVE SOIL LAYER
	WETLANDS (NOTE 1)

**CONTOUR LEGEND**

	400 BATHYMETRIC SURFACE ELEVATION (FEET) (NOTE 1)
	410 RESTORATION SURFACE ELEVATION (FEET) (NOTE 1)
	380 EXISTING GROUND ELEVATION (FEET) (NOTE 1)
	530 FINAL SURFACE ELEVATION (FEET)
	410 LINER (TOP OF GEOMEMBRANE) ELEVATION (FEET)

**DETAIL AND SECTION IDENTIFICATION LEGEND**



**ABBREVIATIONS**

2-D	TWO-DIMENSIONAL
APP	APPROVED BY
APPROX.	APPROXIMATE
CCR	COAL COMBUSTION RESIDUALS
CM/SEC	CENTIMETERS PER SECOND
CMP	CORRUGATED METAL PIPE
CL	CENTERLINE
CY	CUBIC YARD
DIA	DIAMETER
DRN	DRAWN BY
DWG	DRAWING
E	EAST OR EASTING
EL	ELEVATION
EPD	ENVIRONMENTAL PROTECTION DIVISION
ESPCP	EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN
FT	FEET
G	GRAVITATIONAL ACCELERATION
GA	GEORGIA
GCL	GEOSYNTHETIC CLAY LINER
GDOT	GEORGIA DEPARTMENT OF TRANSPORTATION
GPC	GEORGIA POWER COMPANY
GSWCC	GEORGIA SOIL AND WATER CONSERVATION COMMISSION
H:V	HORIZONTAL TO VERTICAL LENGTH RATIO FOR A SLOPE
HDPE	HIGH DENSITY POLYETHYLENE
HWY	HIGHWAY
ID	IDENTIFIER / INTERIOR DIAMETER
IN	INCH
INV	INVERT
K	HYDRAULIC CONDUCTIVITY
KV	KILOVOLT
LB	POUND
LLDPE	LINEAR LOW-DENSITY POLYETHYLENE
MAX	MAXIMUM
MIN	MINIMUM
MPT	MALE PIPE THREAD
MSL	MEAN SEA LEVEL
N	NORTH OR NORTHING
NAD	NORTH AMERICAN DATUM
NAVD88	NORTH AMERICAN VERTICAL DATUM OF 1988
NE	NORTHEAST
NO.	NUMBER
NPDES	NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
N.S.A.	NATIONAL STONE ASSOCIATION
NTS	NOT TO SCALE
NW	NORTHWEST
OC	ON CENTER
PROJ	PROJECT
PVC	POLYVINYL CHLORIDE
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
REV	REVISION
S	SOUTH
SCH	SCHEDULE
SCS	SOUTHERN COMPANY SERVICES
SDR	STANDARD DIMENSION RATIO
SS	STAINLESS STEEL
SWC	STORMWATER CHANNEL
SWP	STORMWATER PIPE
TYP	TYPICAL
U.S.	UNITED STATES
W.S.	WATER SURFACE
WWTS	WASTE WATER TREATMENT SYSTEM
%	PERCENT OR PERCENTILE



**REFERENCE NOTES**

- NOTES:
- EXISTING GROUND CONTOURS SHOWN ON THIS DRAWING SET WERE OBTAINED FROM THE LIDAR SURVEY PERFORMED BY GEORGIA POWER COMPANY ON 1 AUGUST 2020 AND PROVIDED WITH THE ELECTRONIC FILE TITLED "BRANCH\_1FTCONTOURS". BATHYMETRY, UTILITIES, EXISTING ROADS, AND TREE LINES SHOWN ON THIS DRAWING SET WERE OBTAINED FROM ELECTRONIC FILES PROVIDED BY GEORGIA POWER COMPANY TITLED "BULK PROPERTY", DATED 16 JANUARY 2014, AND AS PART OF THE "PLANT BRANCH ASH POND B, C, & D REMEDIATION PLAN AND ASH POND E CLOSURE PLAN" DATED 4 JUNE 2017. CONTOURS WITHIN THE BEAVER POND WERE OBTAINED FROM A BATHYMETRIC MAP PREPARED BY SOUTHERN COMPANY CONSTRUCTION FIELD SERVICES AND DATED JUNE 2019. CONTOURS WITHIN THE EXISTING BORROW AREA WERE OBTAINED FROM A TOPO SURVEY PERFORMED BY JORDAN ENGINEERING, DATED OCTOBER 2019. RESTORATION GRADES SHOWN IN THE FOOTPRINTS OF ASH PONDS B, C, AND D ON THIS DRAWING SET WERE OBTAINED FROM PERMIT DRAWINGS TITLED "PLANT BRANCH CCR SURFACE IMPOUNDMENT CLOSURES ASH PONDS B, C, AND D CLOSURE-BY-REMOVAL PUTNAM COUNTY, GEORGIA" PREPARED BY GEOSYNTEC CONSULTANTS, DATED APRIL 2020. STREAMS AND WETLANDS WERE OBTAINED FROM THE "PLANT BRANCH SITE ENVIRONMENTAL SURVEY", "PLANT BRANCH SITE ENVIRONMENTAL SURVEY PART TWO", "ECOLOGICAL SURVEY REPORT GEORGIA POWER COMPANY PLANT BRANCH - CENTRAL AREA PUTNAM COUNTY, GEORGIA", AND "JURISDICTIONAL DETERMINATION REQUEST, PLANT BRANCH" BY ECOLOGICAL SOLUTIONS INC., DATED SEPTEMBER 2018, NOVEMBER 2018, MAY 2019, AND JULY 2020 RESPECTIVELY. THE SURVEY WAS LIMITED TO THE PROJECT AREA AND ITS IMMEDIATE VICINITY AND THIS DRAWING SET PRESENTS WETLANDS AND STREAMS LOCATED WITHIN THE SURVEY LIMITS ONLY. LETTERS FROM THE U.S. ARMY CORPS OF ENGINEERS, DATED 30 MAY 2019 AND 6 OCTOBER 2020, INDICATED THAT THE FIELD DELINEATION, PERFORMED ON 6 SEPTEMBER 2018 AND PRESENTED IN THE ECOLOGY SURVEY REPORT DATED MAY 2019, AND FIELD DELINEATION, PERFORMED ON MAY 2020 AND PRESENTED IN THE JURISDICTIONAL DETERMINATION REQUEST REPORT DATED JULY 2020 ARE VALID FOR A PERIOD OF FIVE YEARS, UNLESS NEW INFORMATION WARRANTS REVISION PRIOR TO THAT DATE.
  - PROPERTY BOUNDARY WAS OBTAINED FROM THE "PROPERTY BOUNDARY SURVEY, PLANT HARLEE BRANCH", PREPARED BY JORDAN ENGINEERING, DATED 10 SEPTEMBER 2018, AND PROVIDED BY GEORGIA POWER COMPANY.
  - CCR LANDFILL PERMIT BOUNDARY WAS OBTAINED FROM "SITE ACCEPTABILITY REPORT FOR PROPOSED CCR LANDFILL" PREPARED BY GEOSYNTEC CONSULTANTS, ORIGINALLY DATED JULY 2019 AND REVISED IN AUGUST 2020.
  - CCR PERMIT BOUNDARY FOR ASH PONDS B, C, D, AND E SHOWN ON DRAWING 4 WAS OBTAINED FROM THE "PROPERTY BOUNDARY SURVEY, PLANT HARLEE BRANCH ASH PONDS B, C & D - PROPOSED CCR PERMIT BOUNDARY" AND "PROPERTY BOUNDARY SURVEY, PLANT HARLEE BRANCH ASH POND E - PROPOSED CCR PERMIT BOUNDARY" PREPARED BY JORDAN ENGINEERING, DATED APRIL 9, 2020 AND JULY 3, 2020, RESPECTIVELY AND PROVIDED BY GEORGIA POWER COMPANY.
  - GRID COORDINATE SYSTEM CORRESPONDS TO NORTH AMERICAN DATUM (NAD) 1983, GEORGIA WEST ZONE.
  - ELEVATIONS ARE IN FEET ABOVE MEAN SEA LEVEL (MSL), NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
  - CONSTRUCTION ACCESS ROADS, ACCESS RAMPS, AND ASSOCIATED STORMWATER FEATURES WILL BE INCLUDED IN THE DETAILED DESIGN DRAWINGS.
  - ADDITIONAL STORMWATER FEATURES (E.G., BERMS, CHANNELS, BENCHES, AND DOWNCHUTES) AND EROSION AND SEDIMENT CONTROLS MAY BE IMPLEMENTED AS NEEDED FOR THE CONSTRUCTION AND POST-CONSTRUCTION SITE CONDITIONS.
  - MATERIAL PROPERTY REQUIREMENTS FOR FILL SOIL LAYERS, LINER SYSTEMS, FINAL COVER SYSTEMS, AND STORMWATER MANAGEMENT SYSTEMS ARE PROVIDED IN THE "CONSTRUCTION QUALITY ASSURANCE PLAN, PLANT BRANCH CCR LANDFILL PUTNAM COUNTY, GEORGIA" PREPARED BY GEOSYNTEC CONSULTANTS, DATED OCTOBER 2022.

**GENERAL EROSION AND SEDIMENT CONTROL (E&SC) NOTES**

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

**CERTIFICATION STATEMENTS**

- I CERTIFY THAT WETLANDS LOCATED WITHIN THE CCR PERMIT BOUNDARY WILL NOT BE IMPACTED AS A RESULT OF CONSTRUCTION ACTIVITIES AT THE SITE.
- I HAVE REVIEWED THE INFORMATION PRESENTED IN THIS DRAWING SET, AND IN MY PROFESSIONAL OPINION, ALL CONTAINMENT STRUCTURES ARE DESIGNED TO RESIST A MAXIMUM HORIZONTAL GROUND ACCELERATION OF 0.1235G.

SIGNATURE:

MEHMET ISCIMEN, P.E. NO.034164

REV	DATE	DESCRIPTION	SRN	MI
0	10.14.22	GA EPD SUBMITTAL		

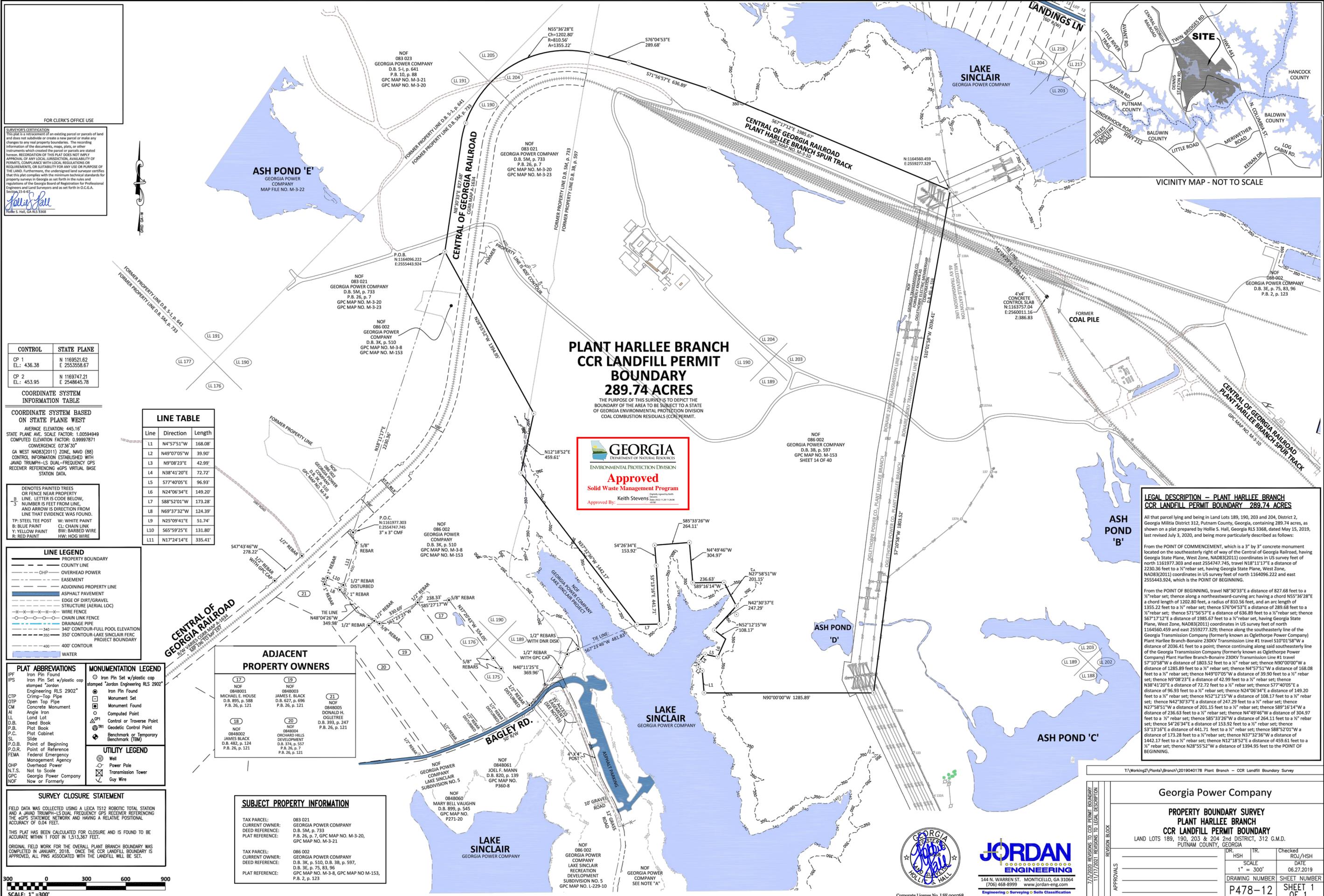
**LEGENDS, ABBREVIATIONS, AND REFERENCE NOTES**

**PLANT BRANCH CCR LANDFILL**  
PUTNAM COUNTY, GEORGIA

**Geosyntec consultants**  
GEORGIA CERTIFICATE OF AUTHORIZATION (COA) NO. PEF0002260, EXP. 06/30/2024  
1255 ROBERTS BOULEVARD NW, SUITE 200, KENNESAW, GEORGIA 30144-3694  
PHONE: 678.202.9500  
WWW.GEOSYNTEC.COM

PROJ. NO.	GW6364	DWG.	6364-102	EDIT	10.14.22
SCALE	AS SHOWN				
DATE	OCTOBER 2022	<b>DRAWING 2 OF 25</b>			





**PLANT HARLEE BRANCH  
CCR LANDFILL PERMIT  
BOUNDARY  
289.74 ACRES**

THE PURPOSE OF THIS SURVEY IS TO DEPICT THE BOUNDARY OF THE AREA TO BE SUBJECT TO A STATE OF GEORGIA ENVIRONMENTAL PROTECTION DIVISION COAL COMBUSTION RESIDUALS (CCR) PERMIT.



**LEGAL DESCRIPTION - PLANT HARLEE BRANCH  
CCR LANDFILL PERMIT BOUNDARY 289.74 ACRES**

All that parcel lying and being in Land Lots 189, 190, 203 and 204, District 2, Georgia Militia District 312, Putnam County, Georgia, containing 289.74 acres, as shown on a plat prepared by Hollie S. Hall, Georgia RLS 3368, dated May 15, 2019, last revised July 3, 2020, and being more particularly described as follows:

From the POINT OF COMMENCEMENT, which is a 3" by 3" concrete monument located on the southeasterly right of way of the Central of Georgia Railroad, having Georgia State Plane, West Zone, NAD83(2011) coordinates in US survey feet of north 1161977.303 and east 2554747.745; travel N11°17'17"E a distance of 2230.36 feet to a 1/2" rebar set, having Georgia State Plane, West Zone, NAD83(2011) coordinates in US survey feet of north 1164096.222 and east 2555443.924, which is the POINT OF BEGINNING.

From the POINT OF BEGINNING, travel N8°30'33"E a distance of 827.68 feet to a 1/2" rebar set; thence along a northeastward-curving arc having a chord length of 1202.80 feet, a radius of 810.56 feet, and an arc length of 1355.22 feet to a 1/2" rebar set; thence S76°04'53"E a distance of 289.68 feet to a 1/2" rebar set; thence S71°56'57"E a distance of 636.89 feet to a 1/2" rebar set; thence S67°17'12"E a distance of 1985.67 feet to a 1/2" rebar set, having Georgia State Plane, West Zone, NAD83(2011) coordinates in US survey feet of north 1164560.459 and east 2559277.329; thence along the southeasterly line of the Georgia Transmission Company (formerly known as Oglethorpe Power Company) Plant Harlee Branch-Bonaire 230KV Transmission Line #1 travel S10°01'58"W a distance of 1803.52 feet to a 1/2" rebar set; thence N90°00'00"W a distance of 1285.89 feet to a 1/2" rebar set; thence continuing along said southeasterly line of the Georgia Transmission Company (formerly known as Oglethorpe Power Company) Plant Harlee Branch-Bonaire 230KV Transmission Line #1 travel S71°10'58"W a distance of 1803.52 feet to a 1/2" rebar set; thence N90°00'00"W a distance of 1285.89 feet to a 1/2" rebar set; thence N21°05'34"E a distance of 149.20 feet to a 1/2" rebar set; thence S71°56'57"E a distance of 42.99 feet to a 1/2" rebar set; thence N38°41'20"E a distance of 72.72 feet to a 1/2" rebar set; thence S77°40'05"E a distance of 96.93 feet to a 1/2" rebar set; thence N21°05'34"E a distance of 149.20 feet to a 1/2" rebar set; thence N42°30'37"E a distance of 247.29 feet to a 1/2" rebar set; thence N27°58'51"W a distance of 201.15 feet to a 1/2" rebar set; thence S89°16'14"W a distance of 304.97 feet to a 1/2" rebar set; thence N49°07'05"W a distance of 39.90 feet to a 1/2" rebar set; thence S4°26'34"E a distance of 153.92 feet to a 1/2" rebar set; thence S3°13'16"E a distance of 441.71 feet to a 1/2" rebar set; thence S88°52'01"W a distance of 173.28 feet to a 1/2" rebar set; thence N17°32'36"W a distance of 1442.17 feet to a 1/2" rebar set; thence N12°18'52"E a distance of 459.61 feet to a 1/2" rebar set; thence N28°55'52"W a distance of 1394.95 feet to the POINT OF BEGINNING.

FOR CLERK'S OFFICE USE

**SURVEYOR'S CERTIFICATION**  
This plat is a retracement of an existing parcel or parcels of land and does not subdivide or create a new parcel or make any changes to any real property boundaries. The recording information of the documents, maps, plats, or other instruments which created the parcel or parcels are stated herein. RECORDATION OF THIS PLAT DOES NOT IMPLY APPROVAL OF ANY LOCAL JURISDICTION, AVAILABILITY OF PERMITS, COMPLIANCE WITH LOCAL REGULATIONS OR REQUIREMENTS, OR SUITABILITY FOR ANY USE OR PURPOSE OF THE LAND. Furthermore, the undersigned land surveyor certifies that this plat complies with the minimum technical standards for property surveys in Georgia as set forth in the rules and regulations of the Georgia Board of Registration for Professional Engineers and Land Surveyors and as set forth in O.C.G.A. Section 43-46-7.

*Hollie S. Hall*  
Hollie S. Hall, GA RLS 3368

CONTROL	STATE PLANE
CP 1	N 1169521.62 E 2553558.67
CP 2	N 1169747.21 E 2548645.78

**COORDINATE SYSTEM INFORMATION TABLE**

**COORDINATE SYSTEM BASED ON STATE PLANE WEST**  
AVERAGE ELEVATION: 445.16'  
STATE PLANE AVE. SCALE FACTOR: 1.00594949  
COMPUTED ELEVATION FACTOR: 0.99997871  
CONVERGENCE: 03'36"30"  
GA WEST NAD83(2011) ZONE, NAVD (86) CONTROL INFORMATION ESTABLISHED WITH JAVAD TRIUMPH-L5 DUAL-FREQUENCY GPS RECEIVER REFERENCING sGPS VIRTUAL BASE STATION DATA.

DENOTES PAINTED TREES OR FENCE NEAR PROPERTY LINE. LETTER IS CODE BELOW, NUMBER IS FEET FROM LINE, AND ARROW IS DIRECTION FROM LINE THAT EVIDENCE WAS FOUND.  
TP: STEEL TEE POST W: WHITE PAINT  
B: BLUE PAINT CL: CHAIN LINK  
Y: YELLOW PAINT BW: BARBED WIRE  
RW: RED PAINT

**LINE LEGEND**

- PROPERTY BOUNDARY
- COUNTY LINE
- OVERHEAD POWER
- EASEMENT
- ADJOINING PROPERTY LINE
- ASPHALT PAVEMENT
- EDGE OF DIRT/GRAVEL STRUCTURE (AERIAL LOC)
- WIRE FENCE
- CHAIN LINK FENCE
- 340' CONTOUR-FULL POOL ELEVATION PROJECT BOUNDARY
- 350' CONTOUR-LAKE SINCLAIR PROJECT BOUNDARY
- 400' CONTOUR
- WATER

**PLAT ABBREVIATIONS**

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

**MONUMENTATION LEGEND**

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

**UTILITY LEGEND**

- Well
- Power Pole
- Transmission Tower
- Guy Wire

**SURVEY CLOSURE STATEMENT**  
FIELD DATA WAS COLLECTED USING A LEICA TS12 ROBOTIC TOTAL STATION AND A JAVAD TRIUMPH-L5 DUAL-FREQUENCY GPS RECEIVER REFERENCING THE sGPS STATEWIDE NETWORK AND HAVING A RELATIVE POSITIONAL ACCURACY OF 0.04 FEET.  
THIS PLAT HAS BEEN CALCULATED FOR CLOSURE AND IS FOUND TO BE ACCURATE WITHIN 1 FOOT IN 1,513,367 FEET.  
ORIGINAL FIELD WORK FOR THE OVERALL PLANT BRANCH BOUNDARY WAS COMPLETED IN JANUARY, 2018. ONCE THE CCR LANDFILL BOUNDARY IS APPROVED, ALL PINS ASSOCIATED WITH THE LANDFILL WILL BE SET.

**LINE TABLE**

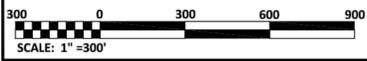
Line	Direction	Length
L1	N4°57'51"W	168.08'
L2	N49°07'05"W	39.90'
L3	N9°08'23"E	42.99'
L4	N38°41'20"E	72.72'
L5	S77°40'05"E	96.93'
L6	N24°06'34"E	149.20'
L7	S88°52'01"W	173.28'
L8	N69°37'32"W	124.39'
L9	N25°09'41"E	51.74'
L10	S65°59'25"E	131.80'
L11	N17°24'14"E	335.41'

**ADJACENT PROPERTY OWNERS**

17 NOF 0848001 MICHAEL E. HOUSE D.B. 895, p. 588 P.B. 26, p. 121	19 NOF 0848003 JAMES E. BLACK D.B. 627, p. 696 P.B. 26, p. 121	21 NOF 0848005 DONALD H. OGLETREE D.B. 393, p. 247 P.B. 26, p. 121
18 NOF 0848002 JAMES BLACK D.B. 482, p. 124 P.B. 26, p. 121	20 NOF 0848004 ORCHARD HILLS DEVELOPMENT D.B. 374, p. 557 P.B. 26, p. 7	

**SUBJECT PROPERTY INFORMATION**

TAX PARCEL: 083 021	CURRENT OWNER: GEORGIA POWER COMPANY
DEED REFERENCE: D.B. 5-M, p. 733	DEED REFERENCE: P.B. 26, p. 7, GPC MAP NO. M-3-20, GPC MAP NO. M-3-21
TAX PARCEL: 086 002	CURRENT OWNER: GEORGIA POWER COMPANY
DEED REFERENCE: D.B. 3K, p. 510, D.B. 3B, p. 597, D.B. 3E, p. 75, 83, 96	DEED REFERENCE: GPC MAP NO. M-3-8, GPC MAP NO. M-153, P.B. 2, p. 123



Georgia Power Company

**PROPERTY BOUNDARY SURVEY  
PLANT HARLEE BRANCH  
CCR LANDFILL PERMIT BOUNDARY**

LAND LOTS 189, 190, 203 & 204 2nd DISTRICT, 312 G.M.D. PUTNAM COUNTY, GEORGIA

DR.	TR.	Checked
HSJ	ROJ/HSJ	DATE
1	1	06.27.2019
DRAWING NUMBER	SHEET NUMBER	
P478-12	SHEET 1	OF 1

APPROVALS

11/17/2021 REVISIONS TO CCR PERMIT BOUNDARY

11/17/2021 REVISIONS TO LEGAL DESCRIPTION

REVISION BLOCK



**LEGEND**

	EXISTING CCR AREA
	FREE WATER SURFACE (NOTE 1)

MONITORING NETWORK WELLS, GROUNDWATER PIEZOMETERS, TEMPORARY PIEZOMETERS, AND WATER SUPPLY WELL (NOTES 5, 6, 7, 8, AND 9)		
MONITORING NETWORK WELL ID	NORTHING	EASTING
BRGWA-12I	1164301.20	2557138.90
BRGWA-12S	1164286.60	2557142.90
BRGWA-23S	1162971.70	2557868.10
BRGWC-30I	1161607.60	2557691.80
BRGWC-37S	1165093.00	2554979.50
BRGWC-38S	1164391.90	2555016.50
BRGWC-47	1162700.70	2559456.70
GROUNDWATER PIEZOMETER ID	NORTHING	EASTING
PZ-10S	1164021.50	2554990.50
PZ-11S	1162467.30	2557002.50
PZ-12D	1164311.90	2557136.40
PZ-22S/PZ-39	1163675.40	2557460.50
PZ-23I	1162975.40	2557877.70
PZ-48	1163046.70	2558444.60
PZ-54	1164828.70	2555458.30
PZ-55	1163208.00	2554783.60
TEMPORARY PIEZOMETER ID	NORTHING	EASTING
PB-1S	1164910.50	2556355.90
PB-2D	1164853.60	2556914.20
PB-4S	1164335.10	2556069.20
PB-4D	1164339.60	2556060.70
PB-7S	1163831.30	2556186.20
PB-8S	1163018.20	2556792.30
PB-8D	1163024.40	2556786.70
PB-10S	1163588.90	2558551.20
PB-10D	1163593.40	2558546.70
PB-13S	1162084.40	2556626.10
PB-13D	1162084.50	2556638.80

- NOTES:**
- EXISTING GROUND CONTOURS SHOWN ON THIS DRAWING SET WERE OBTAINED FROM THE LIDAR SURVEY PERFORMED BY GEORGIA POWER COMPANY ON 1 AUGUST 2020 AND PROVIDED WITH THE ELECTRONIC FILE TITLED "BRANCH 1FTCONTOURS". BATHYMETRY, UTILITIES, EXISTING ROADS, AND TREE LINES SHOWN ON THIS DRAWING SET WERE OBTAINED FROM ELECTRONIC FILES PROVIDED BY GEORGIA POWER COMPANY TITLED "BULK PROPERTY", DATED 16 JANUARY 2014, AND AS PART OF THE "PLANT BRANCH ASH POND B, C, & D REMEDIATION PLAN AND ASH POND E CLOSURE PLAN" DATED 4 JUNE 2017. CONTOURS WITHIN THE BEAVER POND WERE OBTAINED FROM A BATHYMETRIC MAP PREPARED BY SOUTHERN COMPANY CONSTRUCTION FIELD SERVICES AND DATED JUNE 2019. CONTOURS WITHIN THE EXISTING BORROW AREA WERE OBTAINED FROM A TOPO SURVEY PERFORMED BY JORDAN ENGINEERING, DATED OCTOBER 2019. ASH POND WATER SURFACE ELEVATIONS MAY VARY WITH SEASONAL FLUCTUATIONS.
  - WATER SURFACE ELEVATION OF LAKE SINCLAIR IS CONTROLLED BY SINCLAIR DAM AND WALLACE DAM AND IS GENERALLY MAINTAINED AT 340 FEET MSL.
  - LOCATIONS AND ELEVATIONS OF HISTORICAL WELLS AND PIEZOMETERS, FINGER DRAINS AND OTHER EXISTING FEATURES (E.G., SUMP PUMP-BACK LINES, ABANDONED DISCHARGE LINES, ELECTRICAL CONDUIT, COMMUNICATION LINE, ETC.) WERE APPROXIMATED FROM THE "PLANT BRANCH CCR SURFACE IMPOUNDMENT PIPE AND PENETRATION REPORT" PREPARED BY SOUTHERN COMPANY SERVICES, DATED 23 JANUARY 2019, GEOPHYSICAL EXPLORATION PERFORMED BY SOUTHERN COMPANY SERVICES DATED JUNE 2019, AND GEOSYNTEC'S SITE WALK NOTES ON 22 NOVEMBER 2019.
  - LOCATIONS AND CHARACTERISTICS (E.G., SIZE, MATERIAL TYPE, ETC.) OF BEAVER POND DISCHARGE PIPES WERE OBTAINED FROM ELECTRONIC FILES PROVIDED BY SOUTHERN COMPANY SERVICES ON 15 MARCH 2019, 8 APRIL 2019, AND 29 MAY 2019.
  - COORDINATES OF MONITORING NETWORK WELLS AND GROUNDWATER PIEZOMETERS WERE OBTAINED FROM A SURVEY CONDUCTED BY METRO ENGINEERING AND SURVEY CO. AND DATED 23 JULY 2020.
  - MONITORING NETWORK WELLS ARE USED TO COLLECT ANALYTICAL SAMPLES AND MEASURE GROUNDWATER LEVELS WHEREAS GROUNDWATER PIEZOMETERS ARE ONLY USED TO MEASURE GROUNDWATER LEVELS.
  - SUPPLEMENTARY TEMPORARY PIEZOMETERS WERE INSTALLED BY GEOSYNTEC CONSULTANTS AT SEVEN LOCATIONS TO MONITOR GROUNDWATER LEVELS AND MEASURE HORIZONTAL HYDRAULIC CONDUCTIVITY OF THE SUBSURFACE GEOLOGIC UNITS AS PART OF THE SITE INVESTIGATION FOR THE CCR LANDFILL IN 2018/2019. SURVEY OF THE TEMPORARY PIEZOMETERS COORDINATES WERE OBTAINED FROM A SURVEY CONDUCTED BY METRO ENGINEERING AND SURVEY AND DATED 23 JULY 2020.
  - GROUNDWATER PIEZOMETERS (PZ-11S, PZ-12D, PZ-22S/PZ-39, PZ-23I, PZ-48) AND TEMPORARY PIEZOMETERS (PB-1S, PB-2D, PB-4S, PB-4D, PB-7S, PB-8S, PB-8D, PB-10S, AND PB-10D) WILL BE ABANDONED PRIOR TO LANDFILL CONSTRUCTION. MONITORING NETWORK WELLS (BRGWA-12I, BRGWA-12S, BRGWA-23S) WILL BE ABANDONED AND REPLACED WITH NEW WELLS INSTALLED AT LOCATIONS OUTSIDE THE LANDFILL FOOTPRINT. PRIOR TO LANDFILL CONSTRUCTION, GROUNDWATER PIEZOMETERS, TEMPORARY PIEZOMETERS, AND MONITORING NETWORK WELLS LOCATED WITHIN THE PROPOSED WASTE FOOTPRINT WILL BE ABANDONED IN ACCORDANCE WITH THE "GROUNDWATER MONITORING PLAN, PLANT BRANCH CCR LANDFILL PUTNAM COUNTY, GEORGIA" PREPARED BY GEOSYNTEC CONSULTANTS, DATED OCTOBER 2022.
  - ONE WATER SUPPLY WELL (WSID GA2370066, WELL #1) IS LOCATED NEAR THE SKILLS CENTER BUILDINGS ACCORDING TO U.S. ENVIRONMENTAL PROTECTION AGENCY SAFE DRINKING WATER INFORMATION SYSTEM RECORDS. WATER SUPPLY WELL LOCATED WITHIN THE PROPOSED WASTE FOOTPRINT WILL BE ABANDONED PRIOR TO LANDFILL CONSTRUCTION IN ACCORDANCE WITH THE "GROUNDWATER MONITORING PLAN, PLANT BRANCH CCR LANDFILL PUTNAM COUNTY, GEORGIA" PREPARED BY GEOSYNTEC CONSULTANTS, DATED OCTOBER 2022.
  - PERMIT APPLICATION PACKAGES FOR CLOSURE-BY-REMOVAL OF PLANT BRANCH ASH PONDS B, C, D, AND E ARE PROVIDED UNDER SEPARATE COVER.
  - EASEMENT SHOWN FOR THE OVERHEAD POWER TRANSMISSION LINE (46KV) IS APPROXIMATE.
  - EXISTING STRUCTURES AND UTILITIES AROUND THE SKILLS CENTER BUILDINGS WILL BE ABANDONED AND DEMOLISHED PRIOR TO THE START OF LANDFILL CONSTRUCTION.
  - STREAMS AND WETLANDS WERE OBTAINED FROM THE "PLANT BRANCH SITE ENVIRONMENTAL SURVEY", "PLANT BRANCH SITE ENVIRONMENTAL SURVEY PART TWO", "ECOLOGY SURVEY REPORT GEORGIA POWER COMPANY PLANT BRANCH - CENTRAL AREA PUTNAM COUNTY, GEORGIA", AND "AND - JURISDICTIONAL DETERMINATION REQUEST, PLANT BRANCH" BY ECOLOGICAL SOLUTIONS INC., DATED SEPTEMBER 2018, NOVEMBER 2018, MAY 2019, AND JULY 2020 RESPECTIVELY. THE SURVEY WAS LIMITED TO THE PROJECT AREA AND ITS IMMEDIATE VICINITY AND THIS DRAWING SET PRESENTS WETLANDS AND STREAMS LOCATED WITHIN THE SURVEY LIMITS ONLY. LETTERS FROM THE U.S. ARMY CORPS OF ENGINEERS, DATED 30 MAY 2019 AND 5 OCTOBER 2020, INDICATED THAT THE FIELD DELINEATION, PERFORMED ON 6 SEPTEMBER 2018 AND PRESENTED IN THE ECOLOGY SURVEY REPORT DATED MAY 2019, AND FIELD DELINEATION, PERFORMED ON MAY 2020 AND PRESENTED IN THE JURISDICTIONAL DETERMINATION REQUEST REPORT DATED JULY 2020 ARE VALID FOR A PERIOD OF FIVE YEARS, UNLESS NEW INFORMATION WARRANTS REVISION PRIOR TO THAT DATE.
  - CEMETERY LOCATION WAS OBTAINED FROM ELECTRONIC FILES PROVIDED BY SOUTHERN COMPANY SERVICES ON 29 APRIL 2019.
  - THE SHOOTING RANGE CONSISTS PRIMARILY OF MAINTAINED LAWN AND ASSOCIATED BUILDINGS AND IS CURRENTLY INACTIVE.



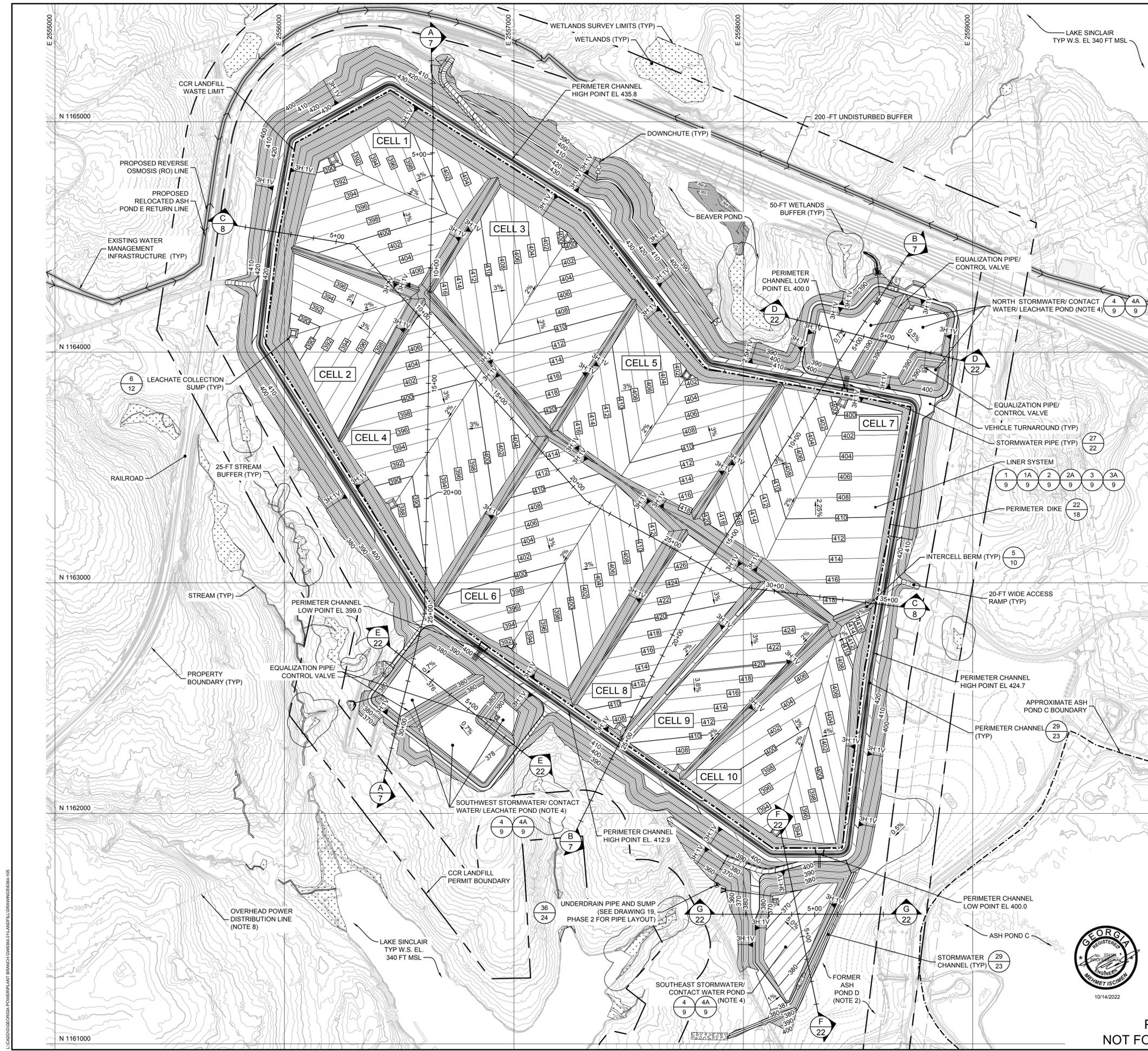
**PERMIT DRAWINGS  
NOT FOR CONSTRUCTION**

REV	DATE	DESCRIPTION	SRN	MI
0	10.14.22	GA EPD SUBMITTAL		

EXISTING SITE CONDITIONS	
PLANT BRANCH CCR LANDFILL PUTNAM COUNTY, GEORGIA	
<b>Geosyntec</b> consultants 1255 ROBERTS BOULEVARD NW, SUITE 200 KENNESAW, GEORGIA 30144-3694 PHONE: 678.202.9500 WWW.GEOSYNTEC.COM	
PROJ. NO.	GW6364
SCALE	AS SHOWN
DATE	OCTOBER 2022
DWG.	6364-104
EDIT	10.14.22
DRAWING 4 OF 25	

L:\CAD\GEORGIA POWER\PLANT BRANCH DWSM\STLANDFILL\DRAWINGS\DWG-104

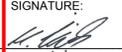


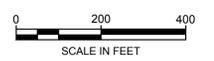
2-D AREAS OF LANDFILL SITE FEATURES	
AREA LABEL	2-D AREA (ACRES)
CCR LANDFILL PERMIT BOUNDARY	289.7
CCR LANDFILL (NOTE 7)	173.0
CCR LANDFILL WASTE LIMIT	115.2
NORTH STORMWATER/CONTACT WATER/LEACHATE POND (NOTE 7)	6.9
SOUTHWEST STORMWATER/CONTACT WATER/LEACHATE POND (NOTE 7)	8.2
SOUTHEAST STORMWATER/CONTACT WATER POND (NOTE 7)	5.5
CELL 1	12.6
CELL 2	7.9
CELL 3	13.2
CELL 4	14.9
CELL 5	11.4
CELL 6	15.6
CELL 7	14.6
CELL 8	7.4
CELL 9	6.6
CELL 10	11.1

- NOTES:
- EXISTING GROUND CONTOURS SHOWN ON THIS DRAWING PERTAIN TO EXISTING SITE CONDITIONS SHOWN ON DRAWING 4.
  - CONTOURS SHOWN IN THE FORMER ASH POND D AREA OUTSIDE THE LANDFILL AND SOUTHEAST STORMWATER/CONTACT WATER POND ARE BASED ON RESTORATION GRADES OBTAINED FROM PERMIT DRAWINGS TITLED "PLANT BRANCH CCR SURFACE IMPOUNDMENT CLOSURES ASH PONDS B, C, D, AND E. PORTIONS OF THE NORTH AND SOUTHWEST PONDS WILL BE SEPARATED BY DIVIDER DIKES AND WILL BE LINED TO CONTAIN CONTACT WATER/LEACHATE. THE SOUTHEAST STORMWATER POND WILL BE LINED TO CONTAIN CONTACT WATER DURING PLACEMENT OF CCR IN CELLS 7, 8, 9, AND 10. REFER TO DRAWING 19 FOR PHASING PLANS.
  - TOP OF LINER GRADES SHOWN ON THIS DRAWING REPRESENT THE TOP OF THE GEOMEMBRANE COMPONENT OF THE LINER SYSTEM.
  - CCR LANDFILL CELLS WILL BE CONSTRUCTED, OPERATED, AND CLOSED IN PHASES. CONSTRUCTION, FILLING, AND CLOSURE SCHEDULE WILL BE COORDINATED WITH CCR REMOVAL SCHEDULES FOR ASH PONDS B, C, D, AND E. PORTIONS OF THE NORTH AND SOUTHWEST PONDS WILL BE SEPARATED BY DIVIDER DIKES AND WILL BE LINED TO CONTAIN CONTACT WATER/LEACHATE. THE SOUTHEAST STORMWATER POND WILL BE LINED TO CONTAIN CONTACT WATER DURING PLACEMENT OF CCR IN CELLS 7, 8, 9, AND 10. REFER TO DRAWING 19 FOR PHASING PLANS.
  - REFER TO DRAWINGS 11 THROUGH 16 FOR THE LEACHATE MANAGEMENT SYSTEM PLAN AND DETAILS. LEACHATE MANAGEMENT FEATURES ARE NOT PRESENTED ON THIS DRAWING FOR CLARITY.
  - STORMWATER FEATURE LABELS ASSOCIATED WITH CHANNELS, PIPES (WITH OUTLET PROTECTION), HEADWALLS, PONDS, AND CONCRETE RISERS ARE SHOWN ON DRAWING 20.
  - CCR LANDFILL AREA INCLUDES ENTIRE FOOTPRINT OF THE LANDFILL TO THE TOE OF THE PERIMETER DIKES AND TOE OF THE NORTH, SOUTHWEST, AND SOUTHEAST STORMWATER/CONTACT WATER/LEACHATE POND DIKES. STORMWATER/CONTACT WATER/LEACHATE POND AREAS INCLUDE ENTIRE FOOTPRINT OF THE PONDS TO THE TOE OF THE POND DIKES AND CENTER OF THE PERIMETER ROAD.
  - DECOMMISSIONING AND REMOVAL OF THE OVERHEAD DISTRIBUTION LINE AND POLES WITHIN THE FOOTPRINT OF THE CCR LANDFILL WILL BE DESIGNED UNDER A SEPARATE SCOPE.

CERTIFICATION STATEMENT

I HAVE REVIEWED THE INFORMATION PRESENTED IN THIS DRAWING, AND IN MY PROFESSIONAL OPINION, ALL CONTAINMENT STRUCTURES ARE DESIGNED TO RESIST A MAXIMUM HORIZONTAL GROUND ACCELERATION OF 0.1235g.

SIGNATURE:  MEHMET ISCIMEN, P.E. NO.034164



PERMIT DRAWINGS  
NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION	SRN	MI
0	10.14.22	GA EPD SUBMITTAL		

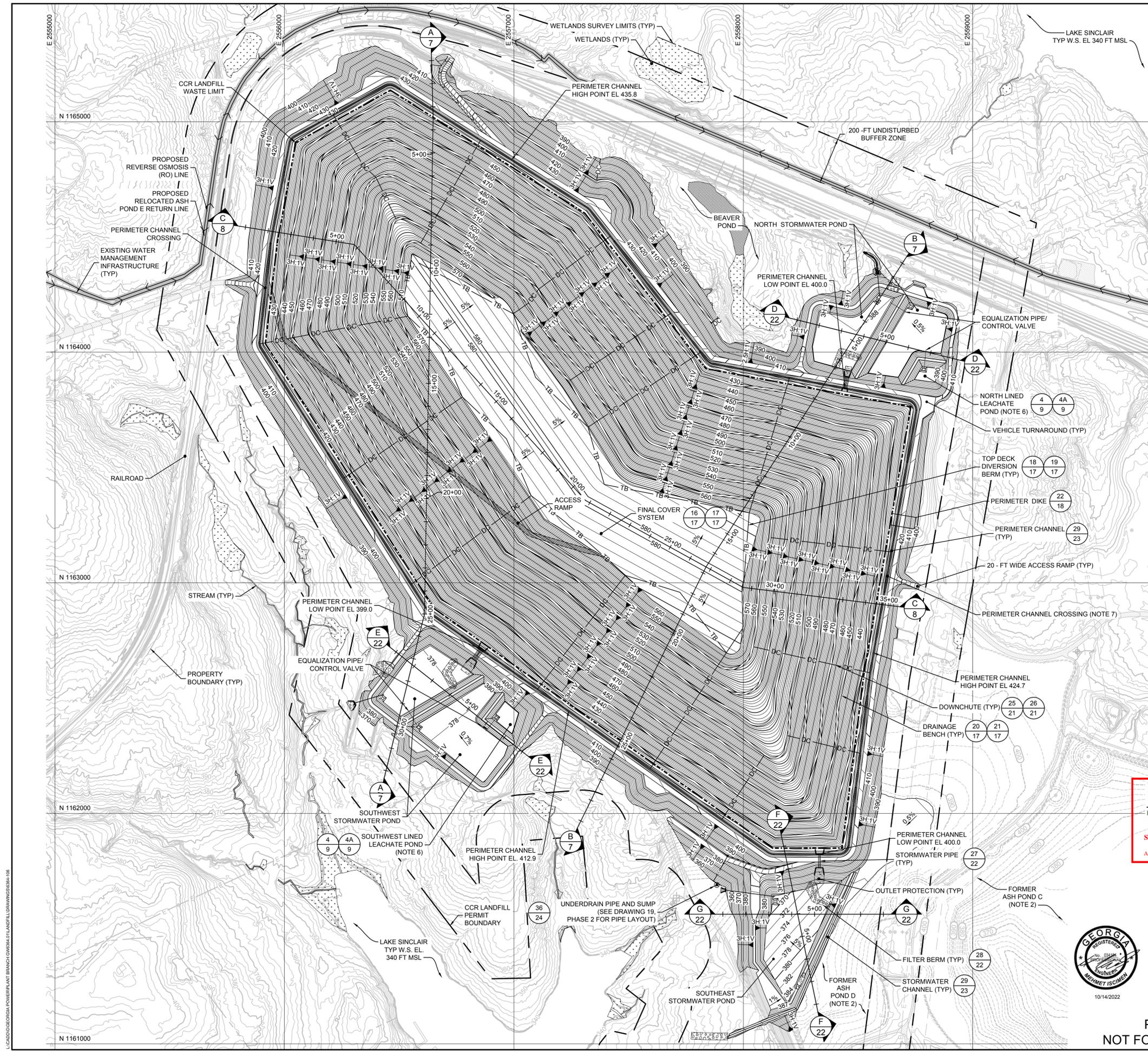
LINER (TOP OF GEOMEMBRANE) GRADING PLAN

PLANT BRANCH CCR LANDFILL  
PUTNAM COUNTY, GEORGIA

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

PROJ. NO.	GW6364	DWG.	6364-105	EDIT	10.14.22
SCALE	1" = 200'				
DATE	OCTOBER 2022	DRAWING 5 OF 25			

L:\CAD\GEORGIA POWER\PLANT BRANCH GW6364\LANDFILL\DRAWINGS\DWG-105



**NOTES:**

- EXISTING GROUND CONTOURS SHOWN ON THIS DRAWING PERTAIN TO EXISTING SITE CONDITIONS SHOWN ON DRAWING 4.
- CONTOURS SHOWN IN THE FORMER ASH PONDS C AND D OUTSIDE THE LANDFILL AND SOUTHEAST STORMWATER POND ARE BASED ON RESTORATION GRADES OBTAINED FROM PERMIT DRAWINGS TITLED "PLANT BRANCH CCR SURFACE IMPOUNDMENT CLOSURES ASH PONDS B, C, AND D CLOSURE-BY-REMOVAL PUTNAM COUNTY, GEORGIA" PREPARED BY GEOSYNTEC CONSULTANTS, DATED NOVEMBER 2018.
- TOP OF FINAL COVER GRADES SHOWN ON THIS DRAWING REPRESENT THE TOP OF THE VEGETATIVE SOIL LAYER FOR THE SOIL-GEOSYNTHETIC COMPOSITE FINAL COVER SYSTEM AND TOP OF THE CLOSURETURF® FOR THE ALTERNATIVE COVER SYSTEM.
- MAXIMUM LANDFILL WASTE STORAGE CAPACITY IS APPROXIMATELY 16,900,000 CY FOR THE SOIL-GEOSYNTHETIC COMPOSITE FINAL COVER SYSTEM AND 17,300,000 CY FOR ALTERNATIVE COVER SYSTEM (I.E., CLOSURETURF® COVER).
- STORMWATER FEATURE LABELS ASSOCIATED WITH CHANNELS, PIPES (WITH OUTLET PROTECTION), HEADWALLS, PONDS, AND CONCRETE RISERS ARE SHOWN ON DRAWING 20.
- PERIMETER CHANNELS, INTERIM CHANNELS, STORMWATER PIPES, PONDS, AND INTERIM LINERS WILL BE USED FOR BOTH CONTACT WATER AND STORMWATER MANAGEMENT DURING CCR LANDFILL CONSTRUCTION, OPERATION, AND CLOSURE. THE TRANSITION FROM CONTACT WATER TO STORMWATER MANAGEMENT WILL CONSIST OF REMOVING THE LINER AND/OR WASHING THE LINER AND PIPES. AT LOCATIONS WHERE SEPARATE PORTIONS OF THE PERIMETER CHANNELS ARE USED FOR STORMWATER AND CONTACT WATER MANAGEMENT, THE CHANNEL PORTIONS WILL BE SEPARATED BY INTERIM BERMS CONSTRUCTED ACROSS THE CHANNEL TO SEGREGATE THE TYPES OF FLOW.
- REFER TO DRAWING 19 FOR PHASING PLANS AND DRAWINGS 11 THROUGH 16 FOR THE LEACHATE MANAGEMENT SYSTEM PLAN AND DETAILS. LEACHATE MANAGEMENT FEATURES ARE NOT PRESENTED ON THIS DRAWING FOR CLARITY.

**CERTIFICATION STATEMENT**

I HAVE REVIEWED THE INFORMATION PRESENTED IN THIS DRAWING, AND IN MY PROFESSIONAL OPINION, ALL CONTAINMENT STRUCTURES ARE DESIGNED TO RESIST A MAXIMUM HORIZONTAL GROUND ACCELERATION OF 0.1235g.

SIGNATURE:  MEHMET ISCIMEN, P.E. NO.034164



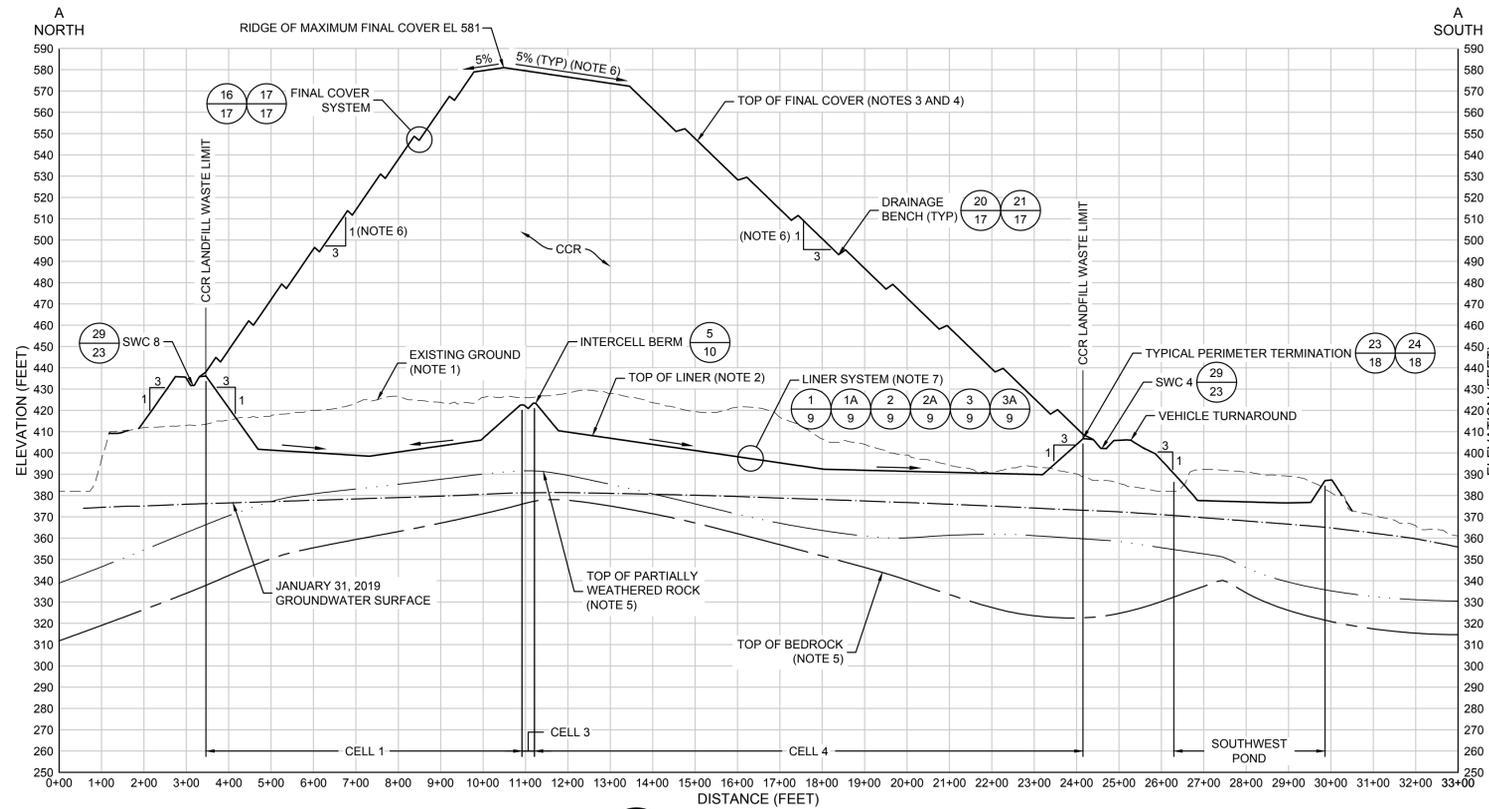
**PERMIT DRAWINGS  
NOT FOR CONSTRUCTION**

REV	DATE	DESCRIPTION	SRN	MI
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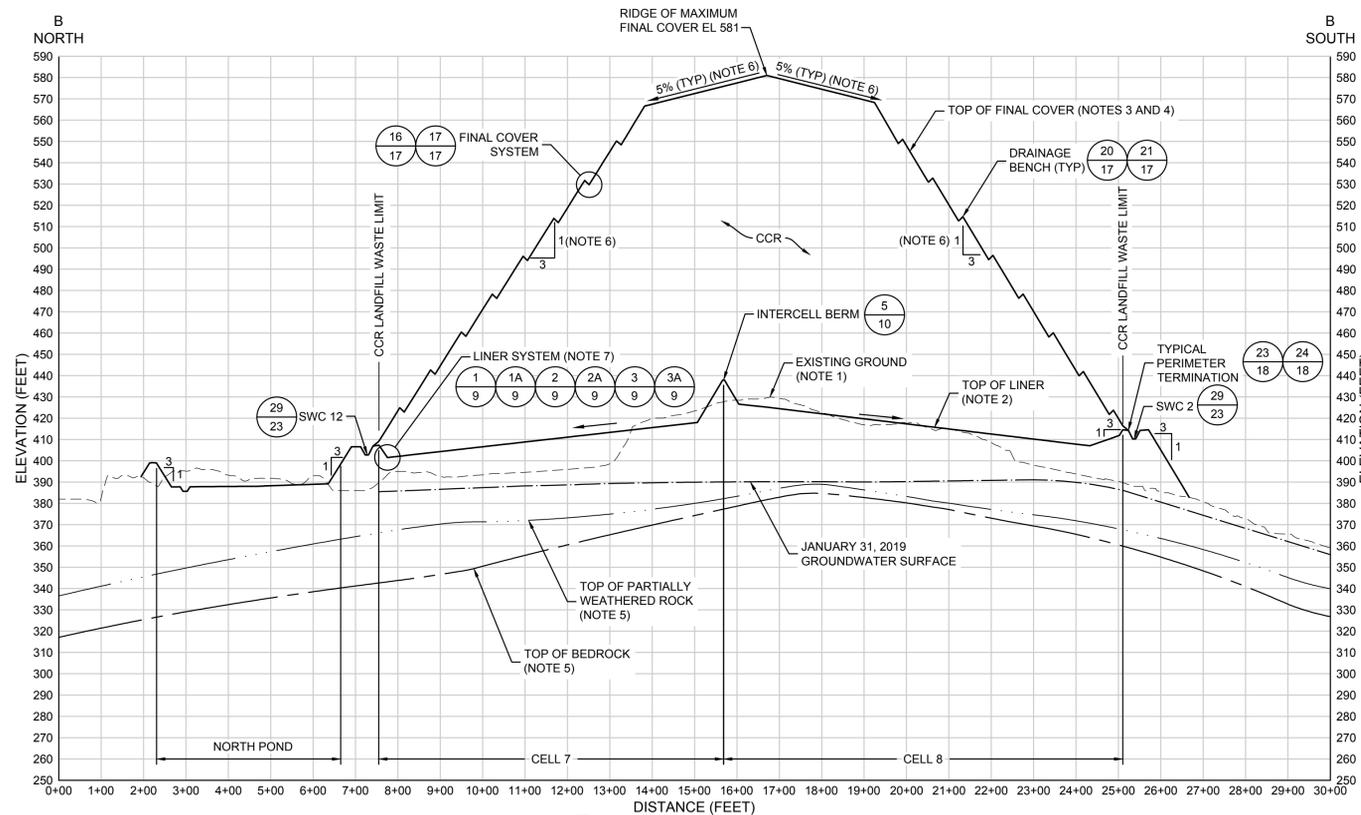
  

<b>FINAL COVER GRADING PLAN</b>					
PLANT BRANCH CCR LANDFILL PUTNAM COUNTY, GEORGIA					
<b>Geosyntec</b> consultants					
1255 ROBERTS BOULEVARD NW, SUITE 200 KENNESAW, GEORGIA 30144-3694					
GEORGIA CERTIFICATE OF AUTHORIZATION (COA) NO. PEF000260, EXP. 06/30/2024 PHONE: 678.202.9500 WWW.GEOSYNTEC.COM					
PROJ. NO.	GW6364	DWG.	6364-106	EDIT	10.14.22
SCALE	1" = 200'				
DATE	OCTOBER 2022	<b>DRAWING 6 OF 25</b>			

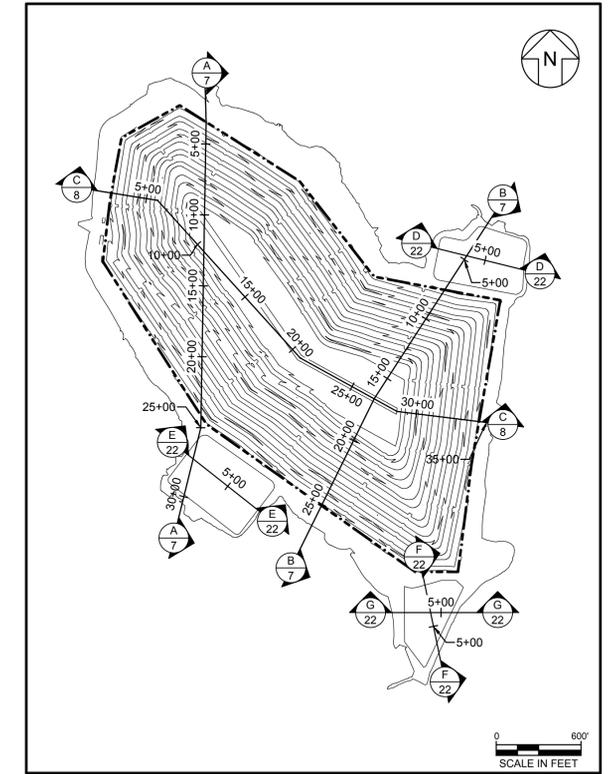
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**A**  
SECTION  
5 SECTION A (NORTH - SOUTH)  
SCALE: 1" = 200' (HORIZONTAL); 1" = 40' (VERTICAL)



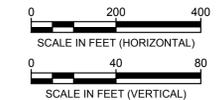
**B**  
SECTION  
5 SECTION B (NORTH - SOUTH)  
SCALE: 1" = 200' (HORIZONTAL); 1" = 40' (VERTICAL)



KEY MAP  
SCALE 1" = 600'

NOTES:

- EXISTING GROUND SURFACE SHOWN ON THIS DRAWING PERTAINS TO EXISTING SITE CONDITIONS SHOWN ON DRAWING 4 AND BASE GRADES FOLLOWING REMOVAL OF ASH POND D DIKE.
- TOP OF LINER (TOP OF GEOMEMBRANE COMPONENT OF THE LINER SYSTEM) SHOWN ON THIS DRAWING PERTAINS TO TOP OF LINER GRADES SHOWN ON DRAWING 5.
- TOP OF FINAL COVER SHOWN ON THIS DRAWING PERTAINS TO TOP OF FINAL COVER GRADES SHOWN ON DRAWING 6.
- TOP OF FINAL COVER GRADES (AND MAXIMUM ELEVATION) SHOWN ARE FOR BOTH SOIL-GEOSYNTHETIC COMPOSITE FINAL COVER SYSTEM AND CLOSURETURF® ALTERNATIVE COVER SYSTEM.
- TOP OF PARTIALLY WEATHERED ROCK AND TOP OF BEDROCK SURFACES WERE DEVELOPED BY GEOSYNTEC CONSULTANTS USING AVAILABLE SUBSURFACE INFORMATION FROM 2018/2019 SITE INVESTIGATION AND HISTORICAL BORING LOGS.
- TOP OF FINAL COVER DESIGN GRADES ARE SLOPED NO STEEPER THAN 3H:1V ON LANDFILL SIDE SLOPES BETWEEN DRAINAGE BENCHES, AND AT A MINIMUM FIVE (5) PERCENT ON THE LANDFILL TOP DECK. SLOPES AND FINAL COVER SYSTEM LAYER THICKNESSES MAY APPEAR DISTORTED ON THE CROSS SECTIONS DUE TO THE EXAGGERATED VERTICAL SCALE AND SKEWED ANGLE AT WHICH THESE SECTIONS WERE CUT COMPARED TO THE THREE-DIMENSIONAL TRUE SLOPE DIRECTIONS.
- LINER SYSTEM DESIGN GRADES ARE SLOPED NO STEEPER THAN 3H:1V ON DIKE AND INTERCELL BERM SIDE SLOPES, AND AT A MINIMUM OF 2.25 PERCENT TOWARDS THE LEACHATE COLLECTION CORRIDORS ON THE CELL FLOOR AREAS. LEACHATE COLLECTION CORRIDORS ARE SLOPED AT A MINIMUM OF TWO (2) PERCENT TOWARDS THE SUMPS.

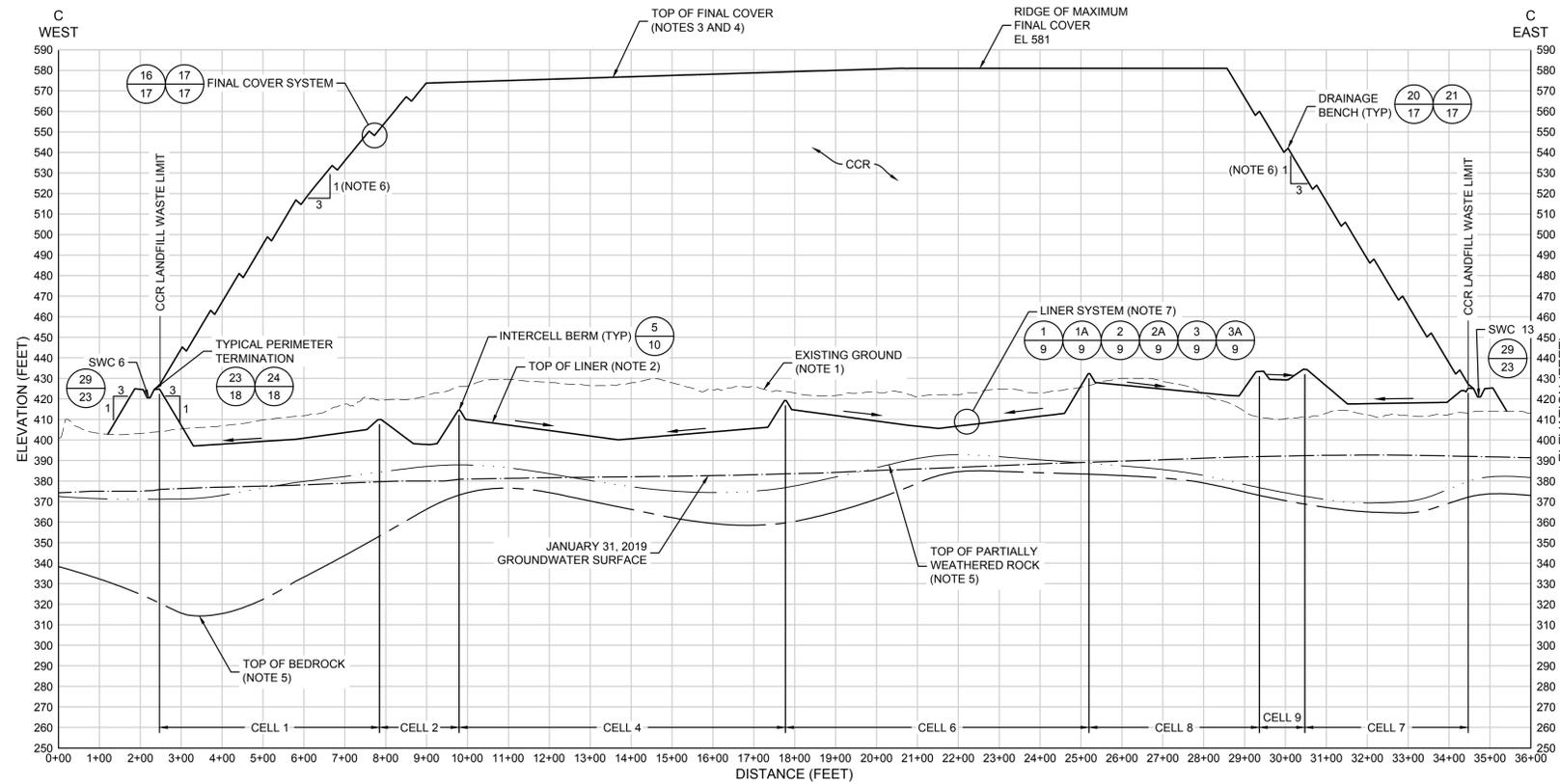


PERMIT DRAWINGS  
NOT FOR CONSTRUCTION

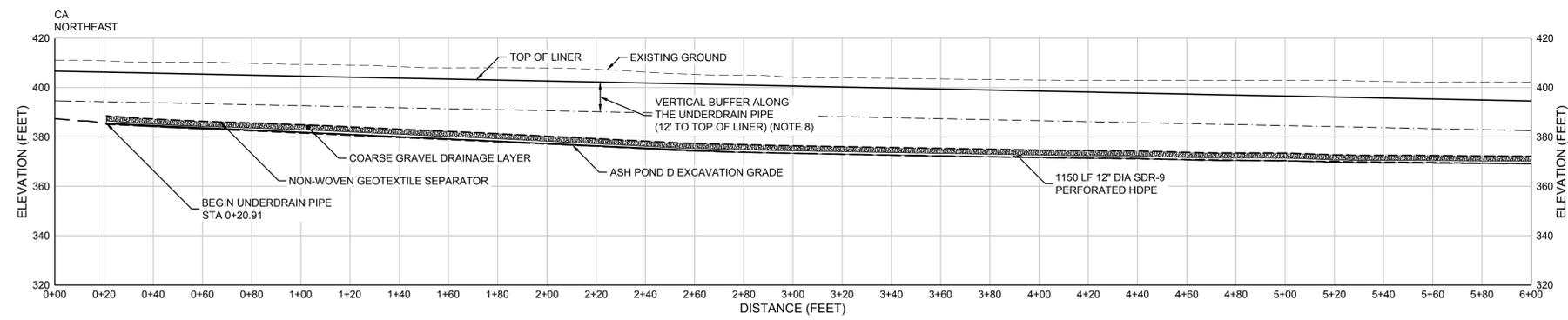
REV	DATE	DESCRIPTION	SRN	MI
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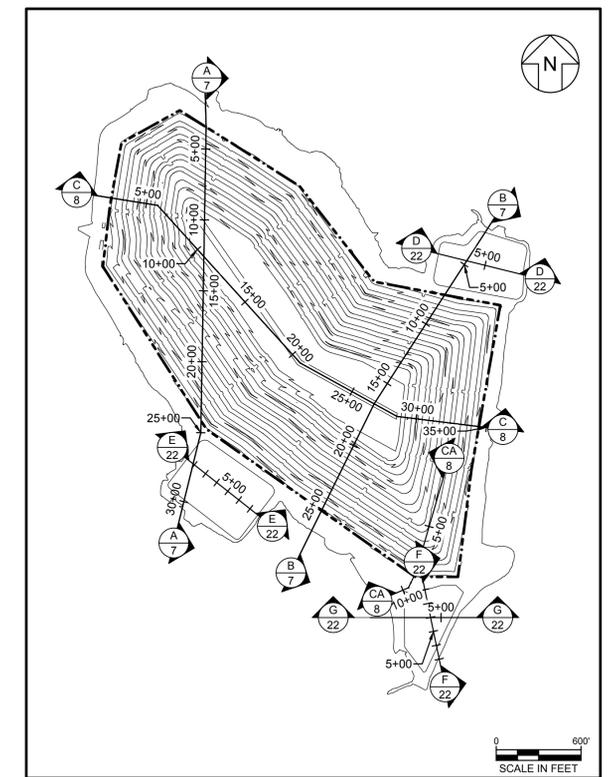
SITE CROSS SECTIONS I					
PLANT BRANCH CCR LANDFILL PUTNAM COUNTY, GEORGIA					
<b>Geosyntec</b> consultants <small>1255 ROBERTS BOULEVARD NW, SUITE 200 KENNESAW, GEORGIA 30144-3694</small>					
PROJ. NO.	GW6364	DWG.	6364-107	EDIT	10.14.22
SCALE	AS SHOWN	DRAWING 7 OF 25			
DATE	OCTOBER 2022				



**C**  
**5**  
SECTION C (WEST - EAST)  
SCALE: 1" = 200' (HORIZONTAL); 1" = 40' (VERTICAL)

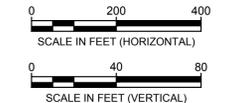


**CA**  
**8**  
DETAIL UNDERDRAIN PIPE  
SCALE: 1" = 30' (HORIZONTAL); 1" = 30' (VERTICAL)



**KEY MAP**  
SCALE 1" = 600'

- NOTES:
- EXISTING GROUND SURFACE SHOWN ON THIS DRAWING PERTAINS TO EXISTING SITE CONDITIONS SHOWN ON DRAWING 4.
  - TOP OF LINER (TOP OF GEOMEMBRANE COMPONENT OF THE LINER SYSTEM) SHOWN ON THIS DRAWING PERTAINS TO TOP OF LINER GRADES SHOWN ON DRAWING 5.
  - TOP OF FINAL COVER SHOWN ON THIS DRAWING PERTAINS TO TOP OF FINAL COVER GRADES SHOWN ON DRAWING 6.
  - TOP OF FINAL COVER GRADES (AND MAXIMUM ELEVATION) SHOWN ARE FOR BOTH SOIL-GEOSYNTHETIC COMPOSITE FINAL COVER SYSTEM AND CLOSURETURF® ALTERNATIVE COVER SYSTEM.
  - TOP OF PARTIALLY WEATHERED ROCK AND TOP OF BEDROCK SURFACES WERE DEVELOPED BY GEOSYNTEC CONSULTANTS USING AVAILABLE SUBSURFACE INFORMATION FROM 2018/2019 SITE INVESTIGATION AND HISTORICAL BORING LOGS.
  - TOP OF FINAL COVER DESIGN GRADES ARE SLOPED NO STEEPER THAN 3H:1V ON LANDFILL SIDE SLOPES BETWEEN DRAINAGE BENCHES, AND AT A MINIMUM FIVE (5) PERCENT ON THE LANDFILL TOP DECK. SLOPES AND FINAL COVER SYSTEM LAYER THICKNESSES MAY APPEAR DISTORTED ON THE CROSS SECTIONS DUE TO THE EXAGGERATED VERTICAL SCALE AND SKEWERED ANGLE AT WHICH THESE SECTIONS WERE CUT COMPARED TO THE THREE-DIMENSIONAL TRUE SLOPE DIRECTIONS.
  - LINER SYSTEM DESIGN GRADES ARE SLOPED NO STEEPER THAN 3H:1V ON DIKE AND INTERCELL BERM SIDE SLOPES, AND AT A MINIMUM OF 2.25 PERCENT TOWARDS THE LEACHATE COLLECTION CORRIDORS ON THE CELL FLOOR AREAS. LEACHATE COLLECTION CORRIDORS ARE SLOPED AT A MINIMUM OF TWO (2) PERCENT TOWARDS THE SUMPS.
  - IN ACCORDANCE WITH THE SITE LIMITATIONS ISSUED BY THE GA EPD ON 19 JUNE 2020, BOTTOM OF LINER GRADES ARE DESIGNED TO MAINTAIN A MINIMUM OF TEN FEET ABOVE THE ORIGINAL GROUND SURFACE (I.E., PRE-DEVELOPMENT SURFACE OR 6 INCHES ABOVE THE EXCAVATION GRADES) SHOWN ON THIS PROFILE ALONG A MINIMUM OF 100 FT ZONE ON EACH SIDE OF THE NORTHEAST-SOUTHWEST ORIENTED TOPOGRAPHIC DEPRESSION. THE DEPTH OF THE UNDERDRAIN PIPE MAY BE VARIED TO SUIT FIELD CONDITIONS, BUT A MINIMUM 5-FT SEPARATION BETWEEN THE EQUILIBRATED POTENTIOMETRIC SURFACE AND BOTTOM OF THE LINER SYSTEM WILL BE MAINTAINED.



PERMIT DRAWINGS  
NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION	SRN	MI
0	10.14.22	GA EPD SUBMITTAL		

**SITE CROSS SECTIONS II**

PLANT BRANCH CCR LANDFILL  
PUTNAM COUNTY, GEORGIA

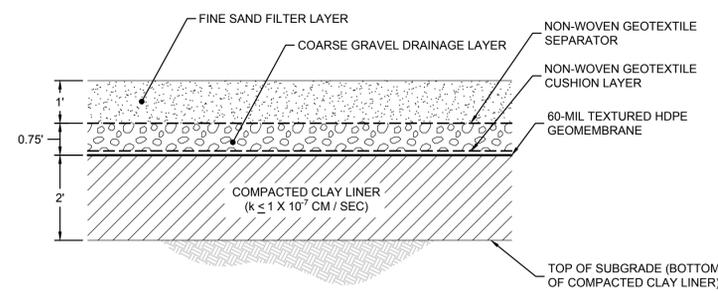
**Geosyntec**  
consultants

1255 ROBERTS BOULEVARD NW, SUITE 200  
KENNESAW, GEORGIA 30144-3694

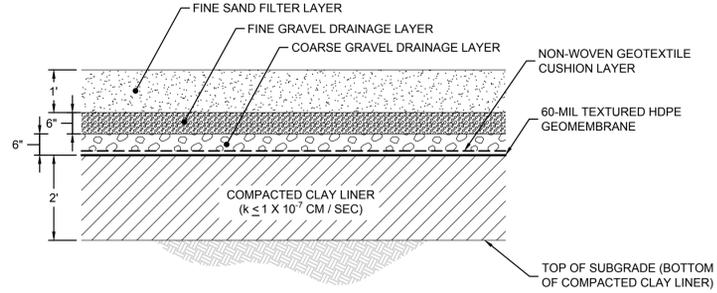
GEORGIA CERTIFICATE OF AUTHORIZATION (COA) NO. PEF000260, EXP. 06/30/2024  
PHONE: 678.202.9500  
WWW.GEOSYNTEC.COM

PROJ. NO.	GW6364	DWG.	6364-108	EDIT	10.14.22
SCALE	AS SHOWN				
DATE	OCTOBER 2022	<b>DRAWING 8 OF 25</b>			

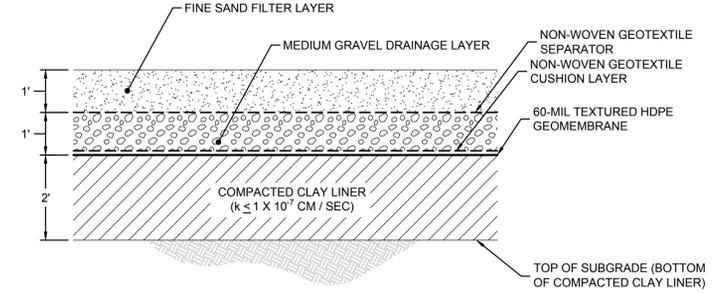
L:\CAD\GEORGIA POWER\PLANT BRANCH GW6364\LANDFILL\DRAWINGS\048-108



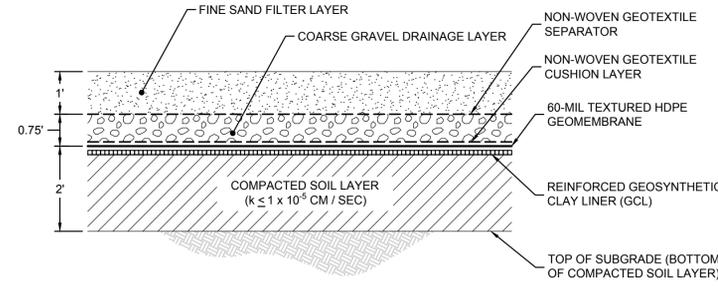
**1**  
**5** **DETAIL**  
**LINER SYSTEM - ALTERNATE NO. 1**  
(NOTES 2 AND 3)  
SCALE: 1" = 2'



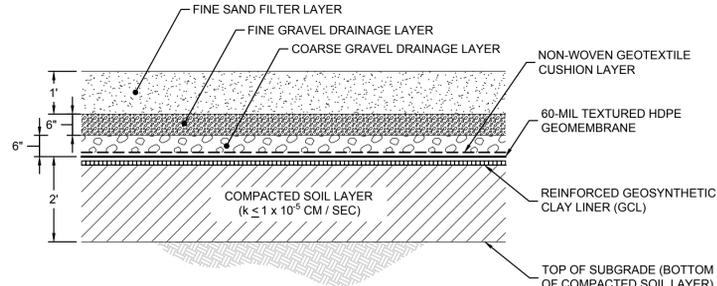
**2**  
**5** **DETAIL**  
**LINER SYSTEM - ALTERNATE NO. 2**  
(NOTES 2 AND 3)  
SCALE: 1" = 2'



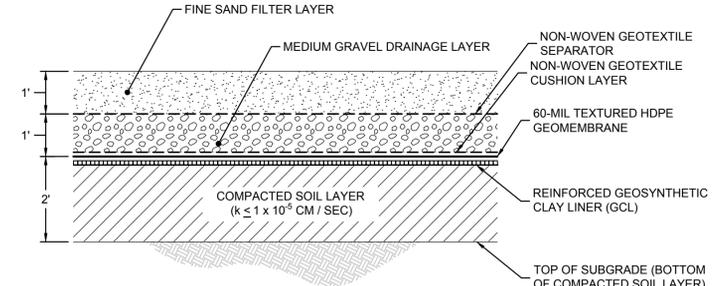
**3**  
**5** **DETAIL**  
**LINER SYSTEM - ALTERNATE NO. 3**  
(NOTES 2 AND 3)  
SCALE: 1" = 2'



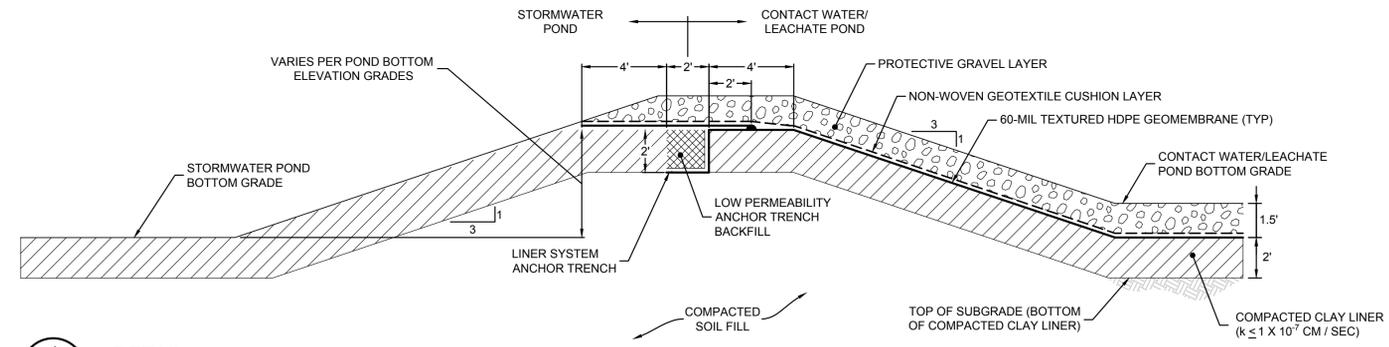
**1A**  
**5** **DETAIL**  
**LINER SYSTEM - ALTERNATE NO. 1A (WITH GCL)**  
(NOTES 2 AND 3)  
SCALE: 1" = 2'



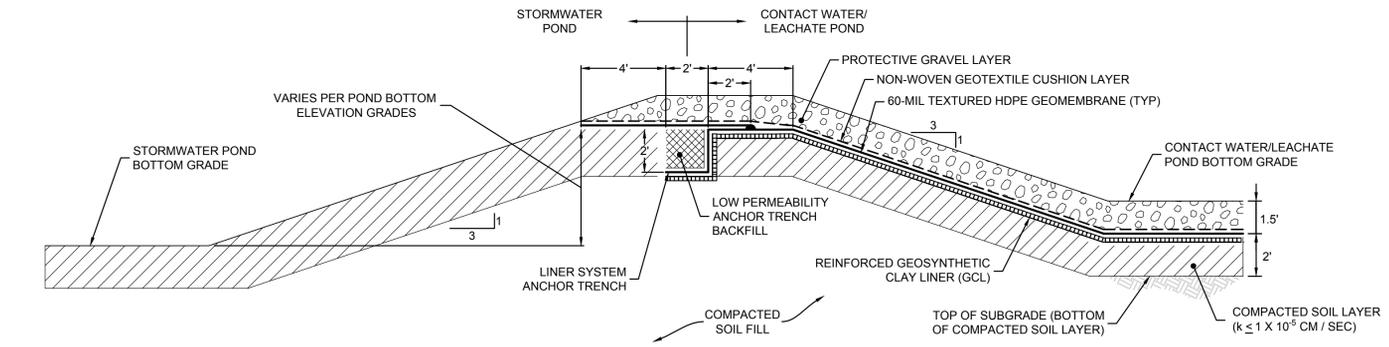
**2A**  
**5** **DETAIL**  
**LINER SYSTEM - ALTERNATE NO. 2A (WITH GCL)**  
(NOTES 2 AND 3)  
SCALE: 1" = 2'



**3A**  
**5** **DETAIL**  
**LINER SYSTEM - ALTERNATE NO. 3A (WITH GCL)**  
(NOTES 2 AND 3)  
SCALE: 1" = 2'



**4**  
**5** **DETAIL**  
**STORMWATER - CONTACT WATER - LEACHATE POND LINER SYSTEM AND DIVIDER DIKE - ALTERNATE NO. 1**  
(NOTES 2 AND 5)  
SCALE: 1" = 4'



**4A**  
**5** **DETAIL**  
**STORMWATER - CONTACT WATER - LEACHATE POND LINER SYSTEM AND DIVIDER DIKE - ALTERNATE NO. 1A (WITH GCL)**  
(NOTES 2 AND 5)  
SCALE: 1" = 4'

- NOTES:
1. GEOSYNTHETIC MATERIALS SHOWN (I.E., GEOMEMBRANE, GEOTEXTILE, AND REINFORCED GEOSYNTHETIC CLAY LINER (GCL)) HAVE NEGLIGIBLE THICKNESSES AND WERE EXAGGERATED FOR CLARITY.
  2. TOP OF LINER GRADES SHOWN ON DRAWING 5 REPRESENT THE TOP OF THE GEOMEMBRANE COMPONENT OF THE LINER SYSTEM AS SHOWN ON THIS DRAWING.
  3. AN ENGINEERED LAYER WILL BE PLACED AND COMPACTED BETWEEN THE BEDROCK AND THE LINER SYSTEM IF BEDROCK IS ENCOUNTERED AT AN ELEVATION ABOVE THE BASE OF LINER SYSTEM OR BEDROCK IS REMOVED DURING CONSTRUCTION ACTIVITIES. THE ENGINEERED LAYER WILL BE COMPRISED OF ONE FOOT OF SOIL WITH A HYDRAULIC CONDUCTIVITY EQUAL OR LESS THAN 1 X 10-5 CM/SEC CONSTRUCTED OVER ONE FOOT OF STRUCTURAL FILL, OR A GEOSYNTHETIC LAYER WITH A HYDRAULIC CONDUCTIVITY EQUIVALENT TO OR LESS THAN ONE FOOT OF SOIL OF 1 X 10-5 CM/SEC CONSTRUCTED OVER A MINIMUM OF TWO FEET OF STRUCTURAL FILL.
  4. DETAILS 1 THROUGH 3A REPRESENT LINER SYSTEMS FOR LANDFILL CELL BOTTOMS. REFER TO DETAILS 23 AND 24 ON DRAWING 18 FOR CELL SIDESLOPE LINER SYSTEM DETAILS.
  5. REFER TO DRAWING 19, PHASING PLAN, FOR WATER MANAGEMENT, AND SPECIFICALLY, HOW STORMWATER, CONTACT WATER, AND LEACHATE WILL BE MANAGED IN DIFFERENT CHAMBERS OF THE POND THROUGH DIFFERENT PHASES.



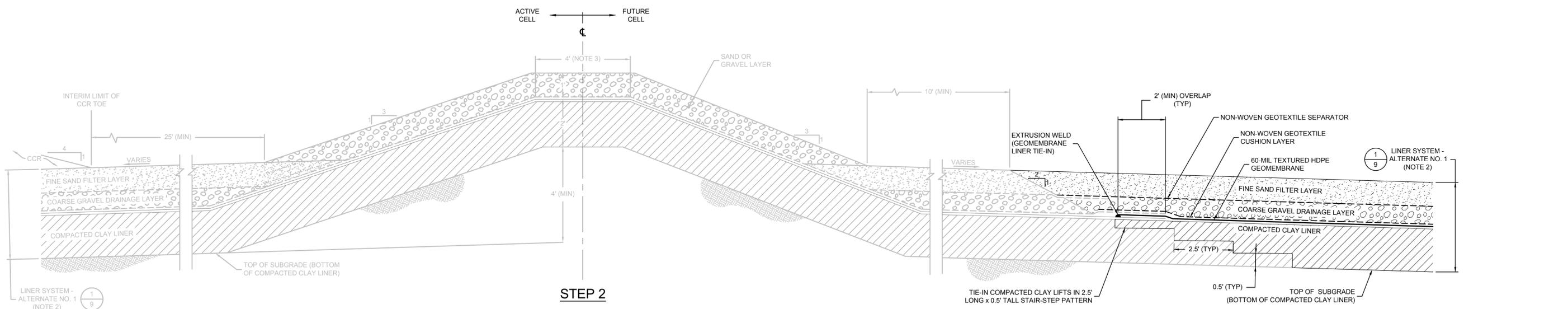
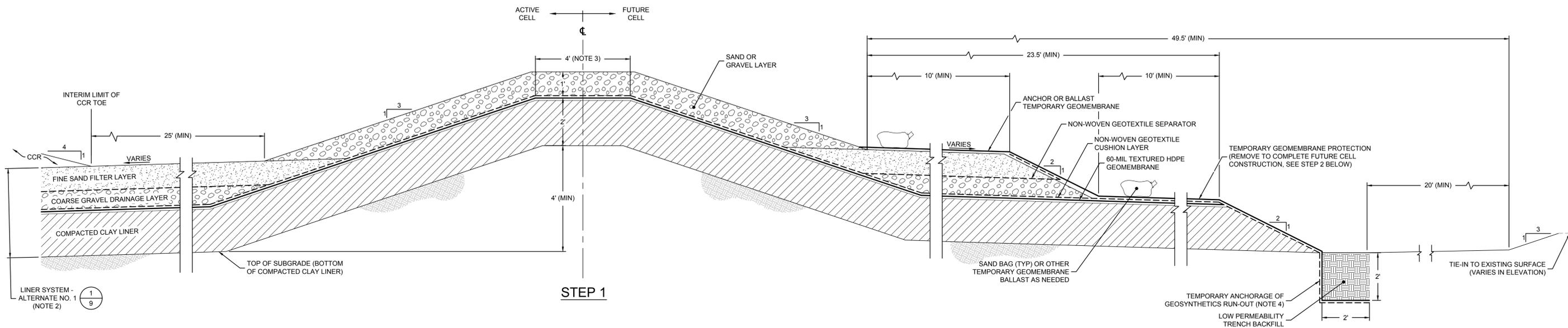
PERMIT DRAWINGS  
NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION	SRN	MI
0	10.14.22	GA EPD SUBMITTAL		

LINER SYSTEM DETAILS I				
PLANT BRANCH CCR LANDFILL PUTNAM COUNTY, GEORGIA				
<b>Geosyntec</b> consultants			GEORGIA CERTIFICATE OF AUTHORIZATION (COA) NO. PEF000260, EXP. 06/30/2024	
1255 ROBERTS BOULEVARD NW, SUITE 200 KENNESAW, GEORGIA 30144-3694			PHONE: 678.202.9500 WWW.GEOSYNTEC.COM	
PROJ. NO.	GW6364	DWG.	6364-109	EDIT 10.14.22
SCALE	AS SHOWN	DRAWING 9 OF 25		
DATE	OCTOBER 2022			

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**5** **DETAIL**  
**5** **INTERCELL BERM**  
 (NOTES 2 AND 4)  
 SCALE: 1" = 2'

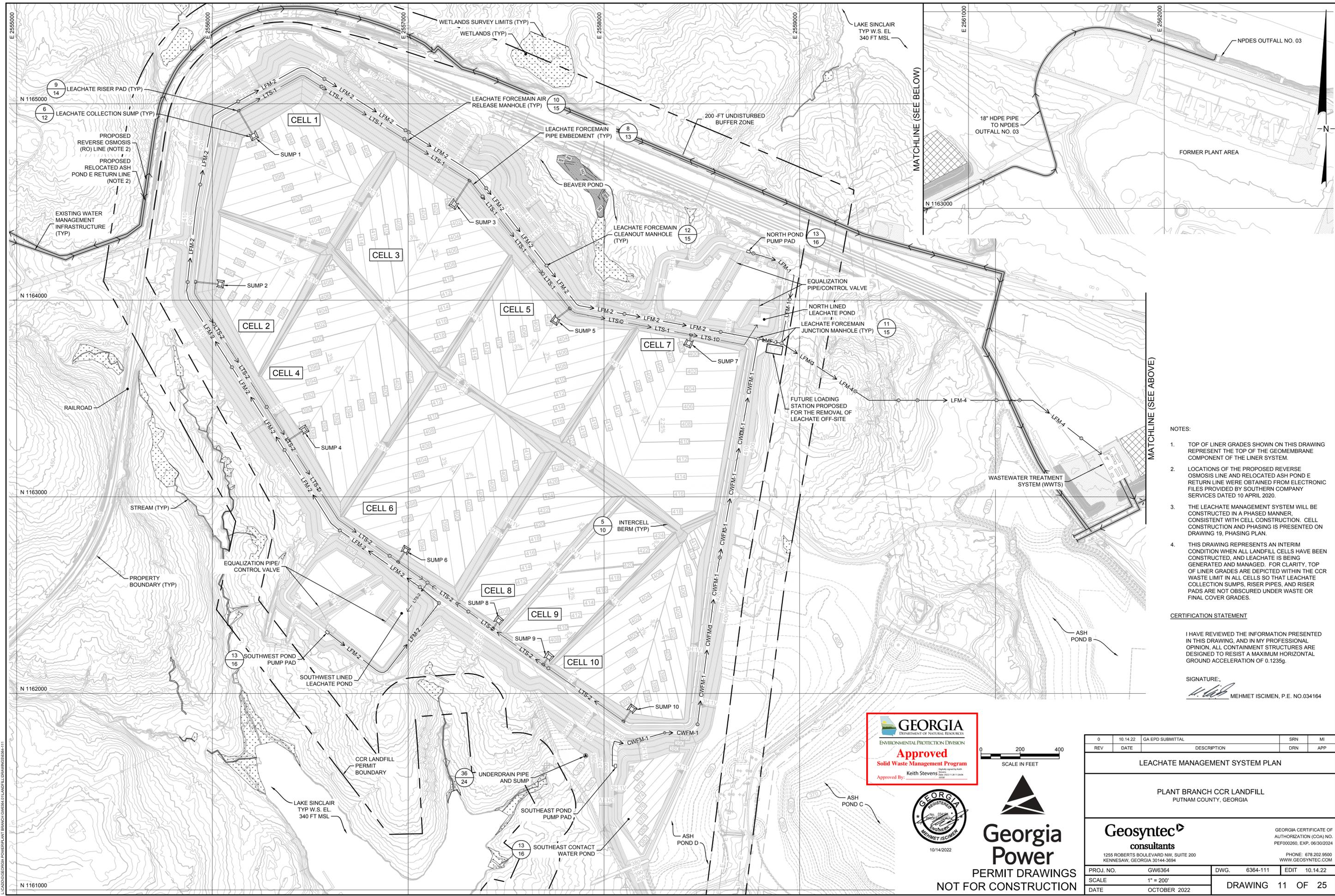
- NOTES:
1. GEOSYNTHETIC MATERIALS SHOWN (I.E., GEOMEMBRANE AND GEOTEXTILE) HAVE NEGLIGIBLE THICKNESSES AND WERE EXAGGERATED FOR CLARITY.
  2. DETAILS ON THIS DRAWING ARE BASED ON LINER SYSTEM ALTERNATE NO. 1. IF A DIFFERENT LINER SYSTEM ALTERNATE IS USED, DESIGN DETAILS WILL REMAIN CONSISTENT WITH THE INFORMATION PRESENTED ON THIS DRAWING.
  3. INTERCELL BERM TOP WIDTH IS 4- FEET AT ALL LOCATIONS EXCEPT FOR THE INTERCELL BERM SEPARATING CELL 8 AND CELL 9, WHERE THE TOP WIDTH IS 15 FEET. REFER TO DRAWING 05 FOR THE PLAN VIEW OF THE BERM'S GRADING.
  4. STEP 1 PRESENTS THE INTERCELL BERM AND THE LINER SYSTEM DETAIL FOR THE ACTIVE CELL AND THE TEMPORARY GEOMEMBRANE PROTECTION LAYER, TEMPORARY BALLAST (I.E., SAND BAGS), AND TEMPORARY ANCHORAGE OF GEOSYNTHETICS WHILE WAITING CONSTRUCTION OF THE FUTURE CELL. STEP 2 PRESENTS THE CONSTRUCTION OF FUTURE CELL AND TIE-INS, OVERLAPS, AND WELDS FOR THE PERMANENT LINER SYSTEM DETAIL.



**Georgia Power**  
 PERMIT DRAWINGS  
 NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION	SRN	MI
0	10.14.22	GA EPD SUBMITTAL		
<b>LINER SYSTEM DETAILS II</b>				
<b>PLANT BRANCH CCR LANDFILL</b> PUTNAM COUNTY, GEORGIA				
<b>Geosyntec</b> consultants 1255 ROBERTS BOULEVARD NW, SUITE 200 KENNESAW, GEORGIA 30144-3694			GEORGIA CERTIFICATE OF AUTHORIZATION (COA) NO. PEF000260, EXP. 06/30/2024 PHONE: 678.202.9500 WWW.GEOSYNTEC.COM	
PROJ. NO.	GW6364		DWG.	6364-110
SCALE	AS SHOWN		EDIT	10.14.22
DATE	OCTOBER 2022		<b>DRAWING 10 OF 25</b>	

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- NOTES:
1. TOP OF LINER GRADES SHOWN ON THIS DRAWING REPRESENT THE TOP OF THE GEOMEMBRANE COMPONENT OF THE LINER SYSTEM.
  2. LOCATIONS OF THE PROPOSED REVERSE OSMOSIS LINE AND RELOCATED ASH POND E RETURN LINE WERE OBTAINED FROM ELECTRONIC FILES PROVIDED BY SOUTHERN COMPANY SERVICES DATED 10 APRIL 2020.
  3. THE LEACHATE MANAGEMENT SYSTEM WILL BE CONSTRUCTED IN A PHASED MANNER, CONSISTENT WITH CELL CONSTRUCTION. CELL CONSTRUCTION AND PHASING IS PRESENTED ON DRAWING 19, PHASING PLAN.
  4. THIS DRAWING REPRESENTS AN INTERIM CONDITION WHEN ALL LANDFILL CELLS HAVE BEEN CONSTRUCTED, AND LEACHATE IS BEING GENERATED AND MANAGED. FOR CLARITY, TOP OF LINER GRADES ARE DEPICTED WITHIN THE CCR WASTE LIMIT IN ALL CELLS SO THAT LEACHATE COLLECTION SUMPS, RISER PIPES, AND RISER PADS ARE NOT OBSCURED UNDER WASTE OR FINAL COVER GRADES.

CERTIFICATION STATEMENT

I HAVE REVIEWED THE INFORMATION PRESENTED IN THIS DRAWING, AND IN MY PROFESSIONAL OPINION, ALL CONTAINMENT STRUCTURES ARE DESIGNED TO RESIST A MAXIMUM HORIZONTAL GROUND ACCELERATION OF 0.1235g.

SIGNATURE:  
 MEHMET ISCIMEN, P.E. NO.034164



PERMIT DRAWINGS  
 NOT FOR CONSTRUCTION

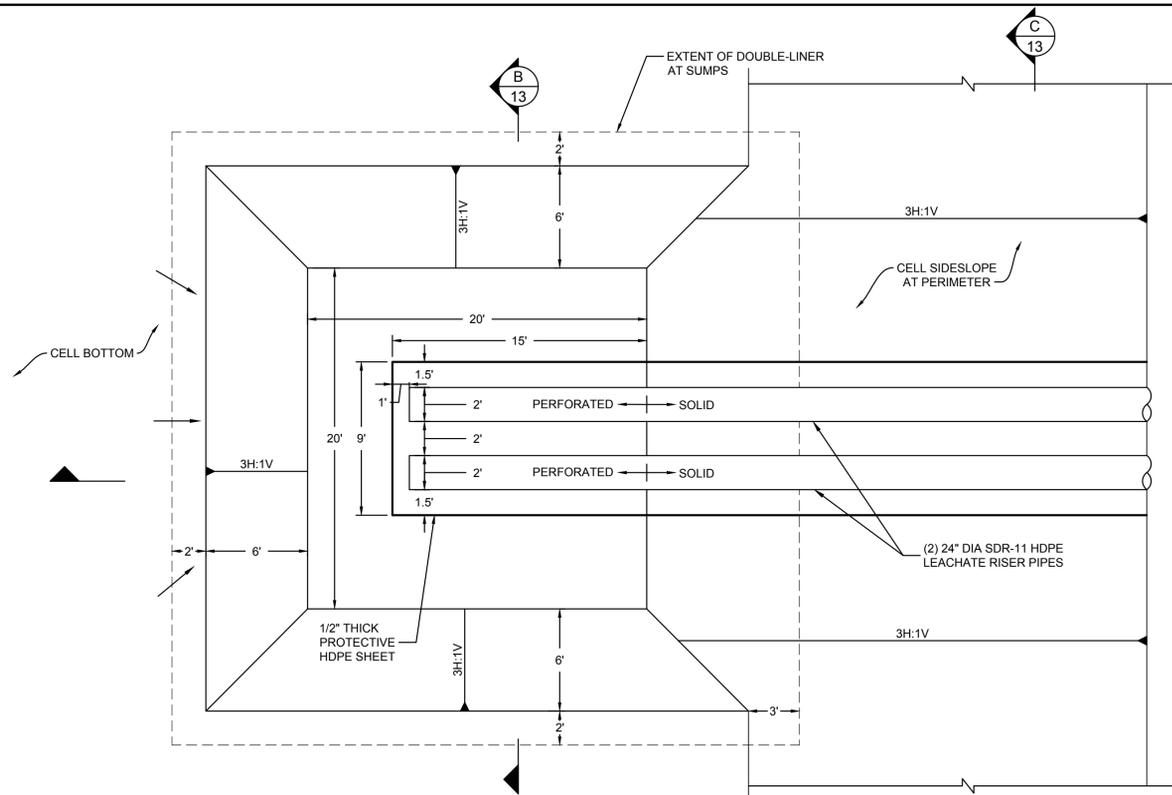


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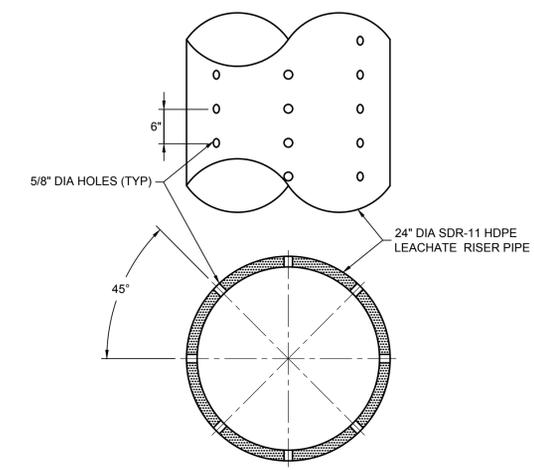
  

<b>LEACHATE MANAGEMENT SYSTEM PLAN</b>					
PLANT BRANCH CCR LANDFILL PUTNAM COUNTY, GEORGIA					
<b>Geosyntec</b> consultants					
<small>1255 ROBERTS BOULEVARD NW, SUITE 200 KENNESAW, GEORGIA 30144-3694</small>					
<small>GEORGIA CERTIFICATE OF AUTHORIZATION (COA) NO. PEF000260, EXP. 06/30/2024 PHONE: 678.202.9500 WWW.GEOSYNTEC.COM</small>					
PROJ. NO.	GW6364	DWG.	6364-111	EDIT	10.14.22
SCALE	1" = 200'				
DATE	OCTOBER 2022	DRAWING		11 OF 25	

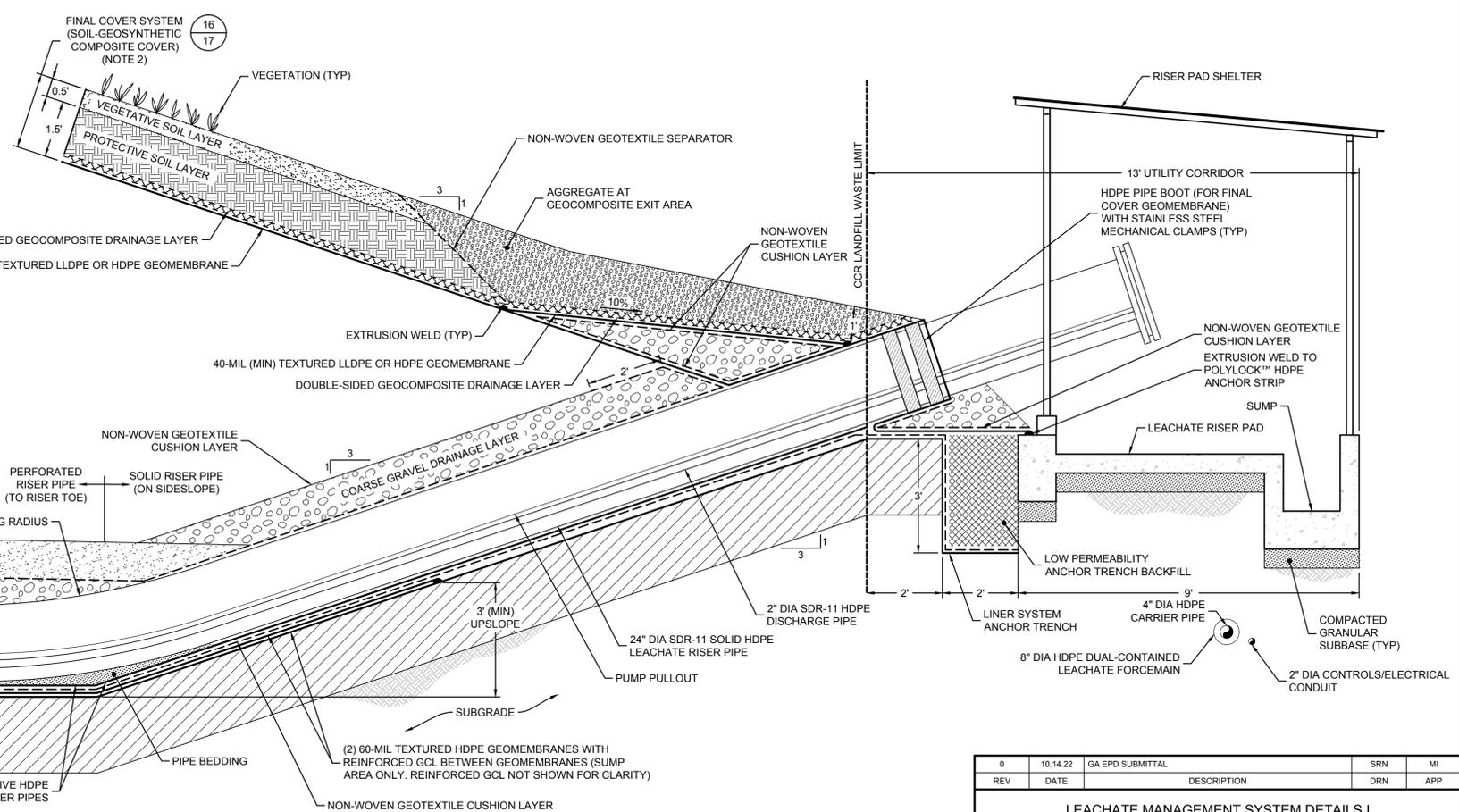
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**6**  
**5** **DETAIL**  
**LEACHATE COLLECTION SUMP PLAN VIEW**  
(NOTES 3 AND 4)  
SCALE: 1" = 5'



**7**  
**12** **DETAIL**  
**PERFORATED LEACHATE RISER PIPE**  
SCALE: NTS



**A**  
**12** **SECTION**  
**LEACHATE COLLECTION RISER TOE**  
(NOTES 2 AND 3)  
SCALE: 1" = 2'

- NOTES:
- GEOSYNTHETIC LAYER THICKNESSES EXAGGERATED FOR CLARITY.
  - DETAILS ON THIS DRAWING ARE BASED ON LINER SYSTEM ALTERNATE NO.1 AND SOIL-GEOSYNTHETIC COMPOSITE FINAL COVER SYSTEM. IF A DIFFERENT LINER AND FINAL COVER SYSTEM ALTERNATE IS USED, DESIGN DETAILS WILL REMAIN CONSISTENT WITH THE INFORMATION PRESENTED ON THIS DRAWING.
  - TWO RISER PIPES ARE PROVIDED FOR DESIGN REDUNDANCY AND ADDITIONAL EXTRACTION CAPACITY DURING AND AFTER STORM EVENTS: A PRIMARY RISER AND A SECONDARY RISER, EACH FURNISHED WITH A SUBMERSIBLE PUMP.
  - LEACHATE COLLECTION SUMP DETAIL PRESENTS THE PLAN VIEW OF THE LINER (TOP OF THE GEOMEMBRANE) GRADES AND LEACHATE COLLECTION PIPES.



PERMIT DRAWINGS  
NOT FOR CONSTRUCTION

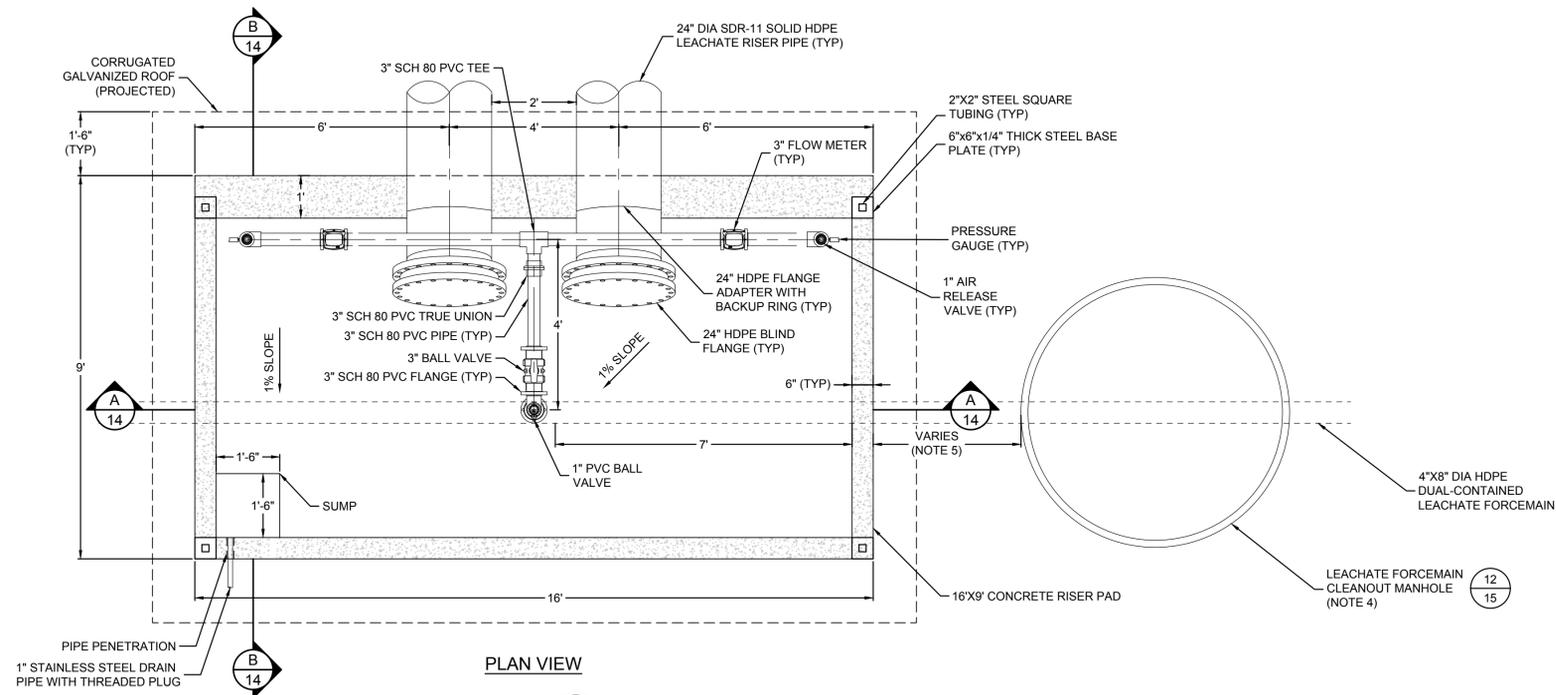
REV	DATE	DESCRIPTION	SRN	MI
0	10.14.22	GA EPD SUBMITTAL		

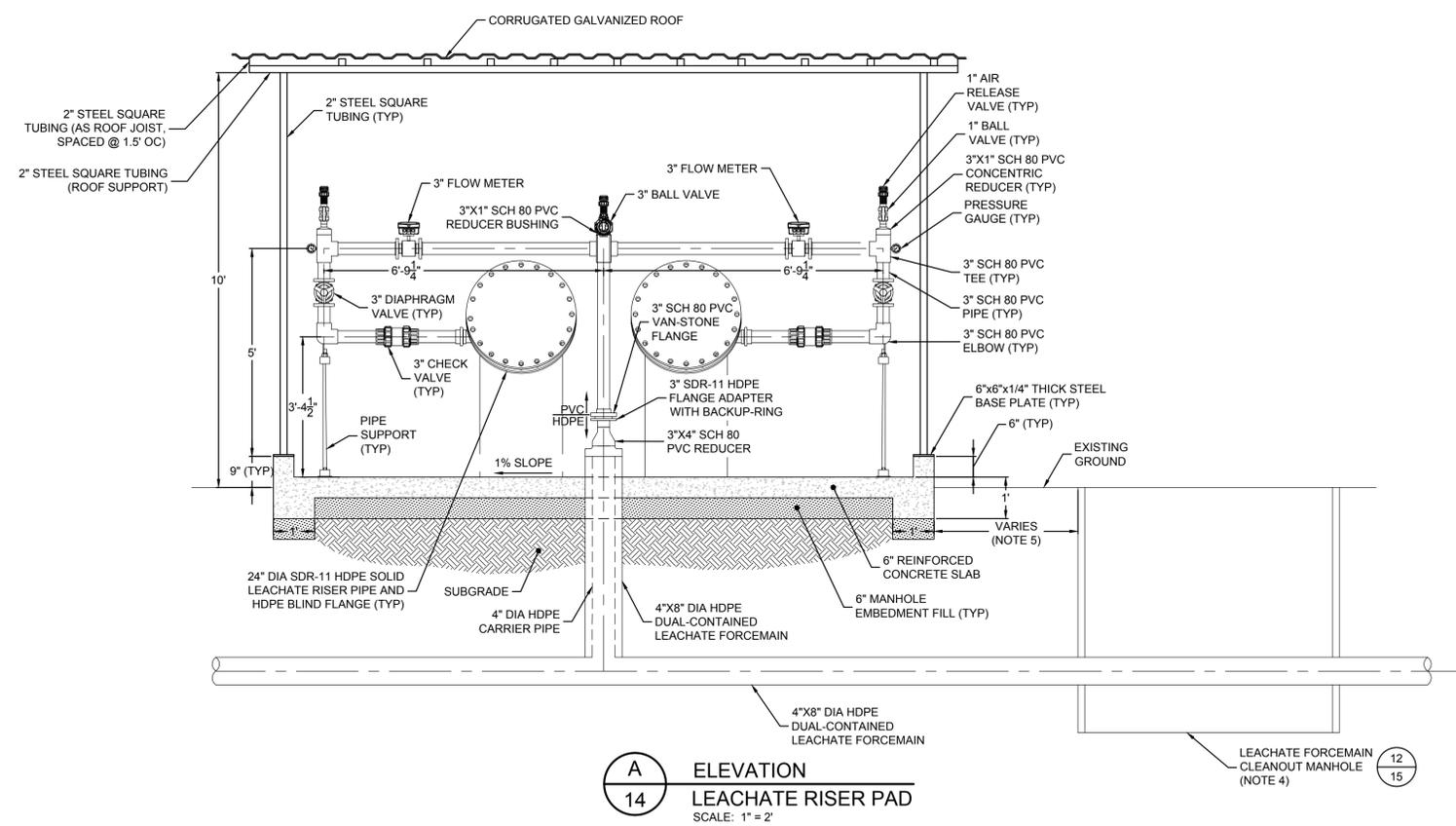
<b>LEACHATE MANAGEMENT SYSTEM DETAILS I</b>				
PLANT BRANCH CCR LANDFILL PUTNAM COUNTY, GEORGIA				
<b>Geosyntec</b> consultants			<small>GEORGIA CERTIFICATE OF AUTHORIZATION (COA) NO. PEF000260, EXP. 06/30/2024</small> <small>PHONE: 678.202.9500</small> <small>WWW.GEOSYNTEC.COM</small>	
PROJ. NO.	GW6364	DWG.	6364-112	EDIT 10.14.22
SCALE	AS SHOWN	<b>DRAWING 12 OF 25</b>		
DATE	OCTOBER 2022			

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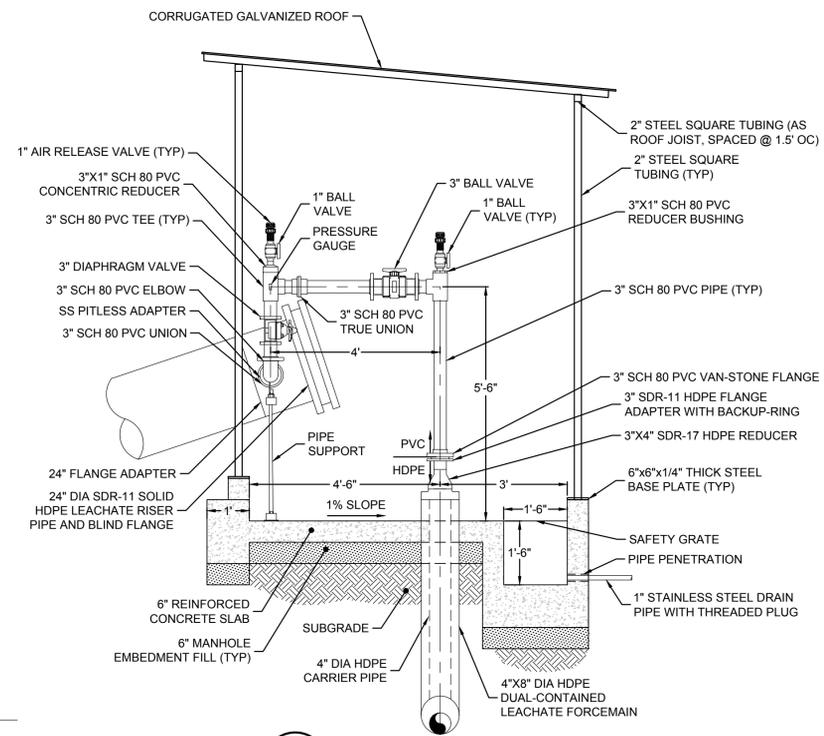




**9** **DETAIL**  
**11** **LEACHATE RISER PAD**  
SCALE: 1" = 2'



**A** **ELEVATION**  
**14** **LEACHATE RISER PAD**  
SCALE: 1" = 2'



**B** **ELEVATION**  
**14** **LEACHATE RISER PAD**  
SCALE: 1" = 2'

- NOTES:
1. PIPING, PIPING MATERIALS, AND VALVES ARE CONCEPTUAL TO ILLUSTRATE INTENDED FUNCTIONALITY AND MAY BE REVISED DURING DETAILED DESIGN. CHANGES DURING CONSTRUCTION WILL BE REFLECTED IN THE CONSTRUCTION CERTIFICATION REPORT OR A MINOR MODIFICATION TO THE D&O PLAN, IF NEEDED.
  2. ROOF AND SUPPORT STRUCTURES ARE SHOWN FOR ILLUSTRATION PURPOSES ONLY. CHANGES DURING CONSTRUCTION WILL BE REFLECTED IN THE CONSTRUCTION CERTIFICATION REPORT OR A MINOR MODIFICATION TO THE D&O PLAN, IF NEEDED.
  3. ELECTRICAL JUNCTION BOXES AND CONTROL PANELS WILL BE INCLUDED IN THE CONSTRUCTION CERTIFICATION REPORT.
  4. CLEANOUT MANHOLES WILL BE USED AT RISER PAD AREA OF EACH CELL. CLEANOUT MANHOLES MAY BE INSTALLED WITHIN RISER PADS, OR NEXT TO RISER PADS AS SHOWN ON THIS DRAWING. ADDITIONAL CLEANOUTS MAY BE ADDED AS NEEDED. CHANGES DURING CONSTRUCTION WILL BE REFLECTED IN THE CONSTRUCTION CERTIFICATION REPORT OR A MINOR MODIFICATION TO THE D&O PLAN, IF NEEDED.
  5. DISTANCES BETWEEN MANHOLES AND RISER PADS CAN BE MEASURED FROM THE LEACHATE MANAGEMENT PLAN DRAWING. CLEANOUT MANHOLE IS SHOWN ON THIS FOR REFERENCE ONLY.

REV	DATE	DESCRIPTION	SRN	MI
0	10.14.22	GA EPD SUBMITTAL		

**LEACHATE MANAGEMENT SYSTEM DETAILS III**

PLANT BRANCH CCR LANDFILL  
PUTNAM COUNTY, GEORGIA

**Geosyntec**  
consultants

1255 ROBERTS BOULEVARD NW, SUITE 200  
KENNESAW, GEORGIA 30144-3694

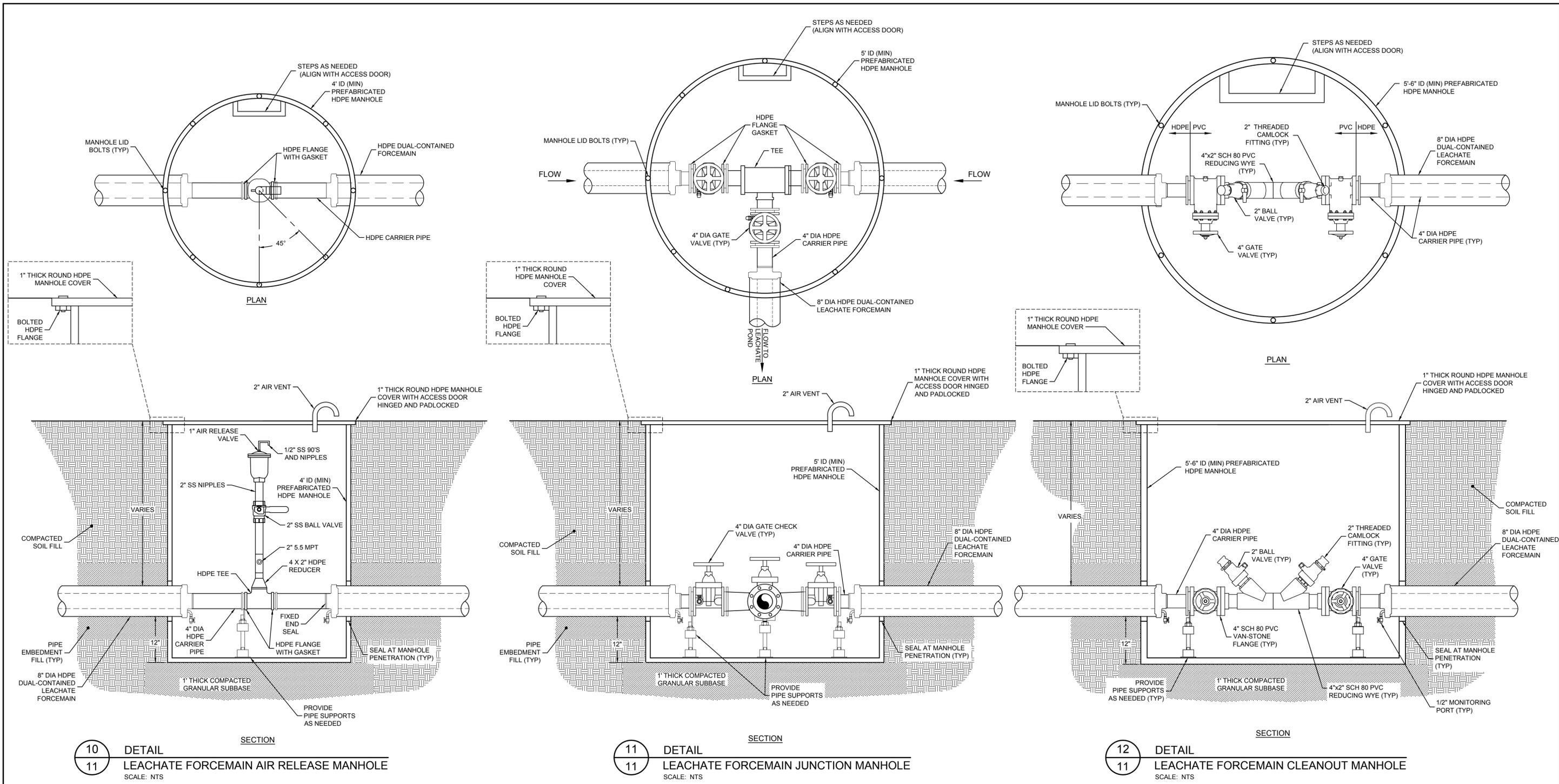
GEORGIA CERTIFICATE OF AUTHORIZATION (COA) NO. PEF000260, EXP. 06/30/2024  
PHONE: 678.202.9500  
WWW.GEOSYNTEC.COM

PROJ. NO.	GW6364	DWG.	6364-114	EDIT	10.14.22
SCALE	AS SHOWN				
DATE	OCTOBER 2022	DRAWING 14 OF 25			



**PERMIT DRAWINGS**  
**NOT FOR CONSTRUCTION**

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NOTE:  
 1. PIPING, PIPING MATERIALS, AND VALVES ARE CONCEPTUAL TO ILLUSTRATE INTENDED FUNCTIONALITY AND MAY BE REVISED DURING DETAILED DESIGN. CHANGES DURING CONSTRUCTION WILL BE REFLECTED IN THE CONSTRUCTION CERTIFICATION REPORT OR A MINOR MODIFICATION TO THE D&O PLAN, IF NEEDED.



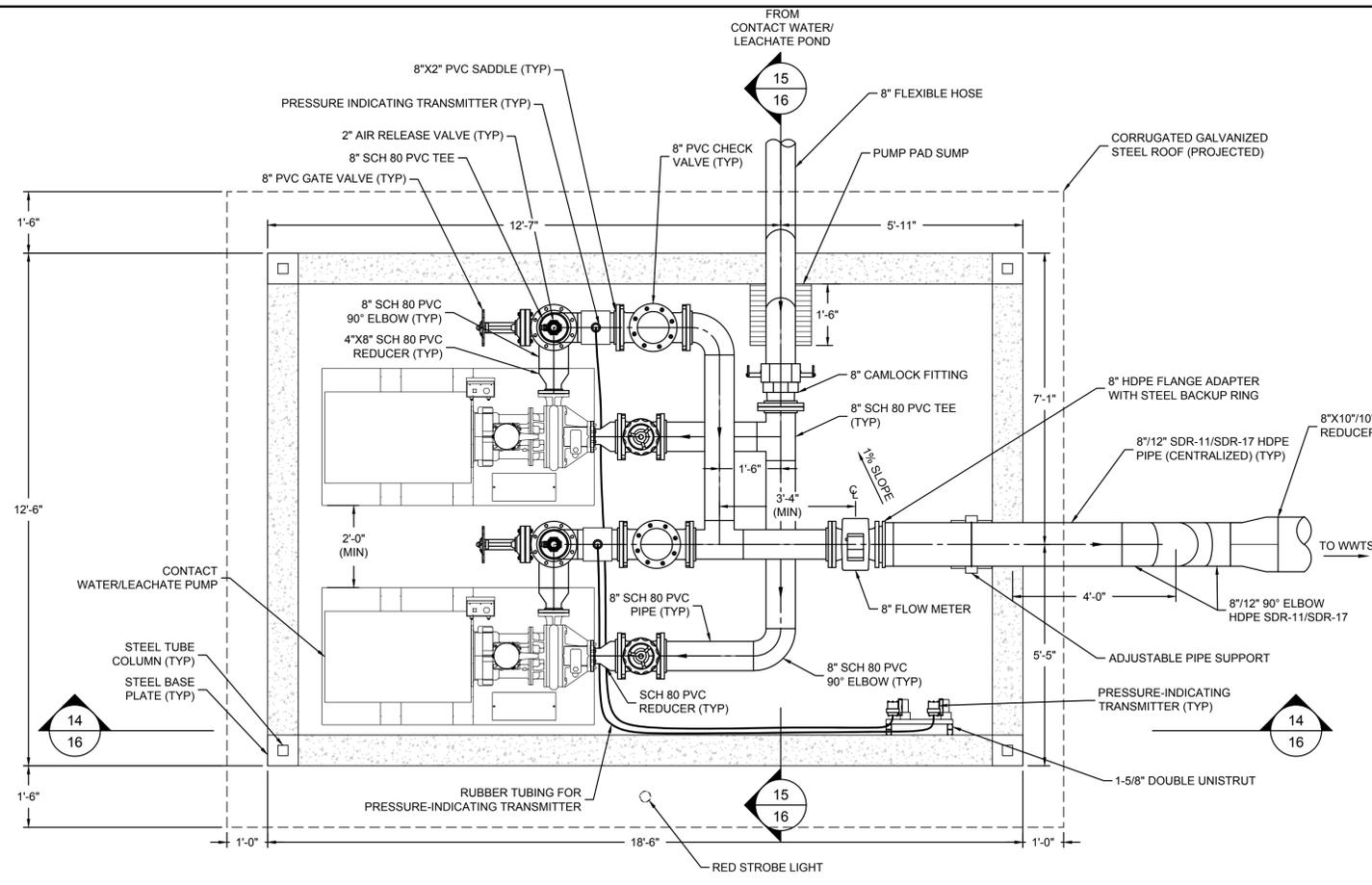
PERMIT DRAWINGS  
 NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION	SRN	MI
0	10.14.22	GA EPD SUBMITTAL		

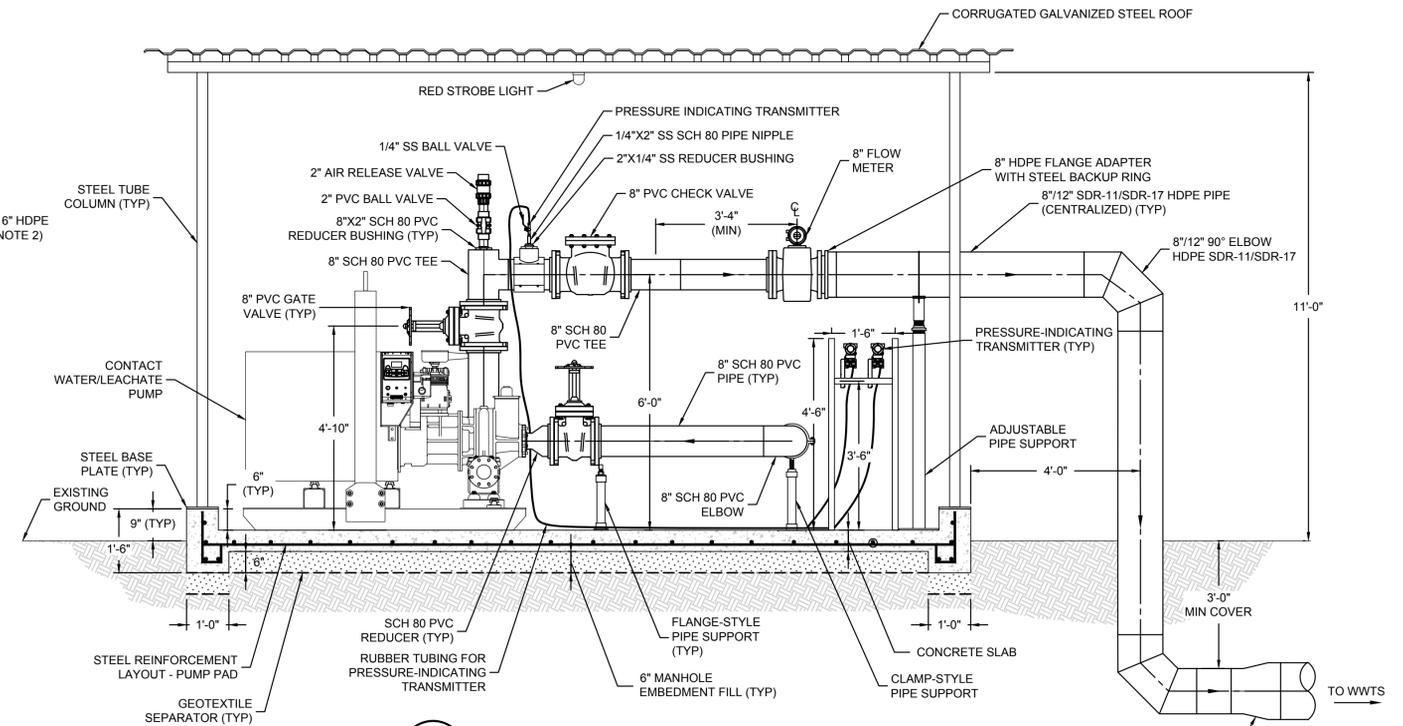
  

LEACHATE MANAGEMENT SYSTEM DETAILS IV				
PLANT BRANCH CCR LANDFILL PUTNAM COUNTY, GEORGIA				
<b>Geosyntec</b> consultants			GEORGIA CERTIFICATE OF AUTHORIZATION (COA) NO. PEF000260, EXP. 06/30/2024 1255 ROBERTS BOULEVARD NW, SUITE 200 KENNESAW, GEORGIA 30144-3694 PHONE: 678.202.9500 WWW.GEOSYNTEC.COM	
PROJ. NO.	GW6364	DWG.	6364-115	EDIT 10.14.22
SCALE	AS SHOWN	DRAWING 15 OF 25		
DATE	OCTOBER 2022			

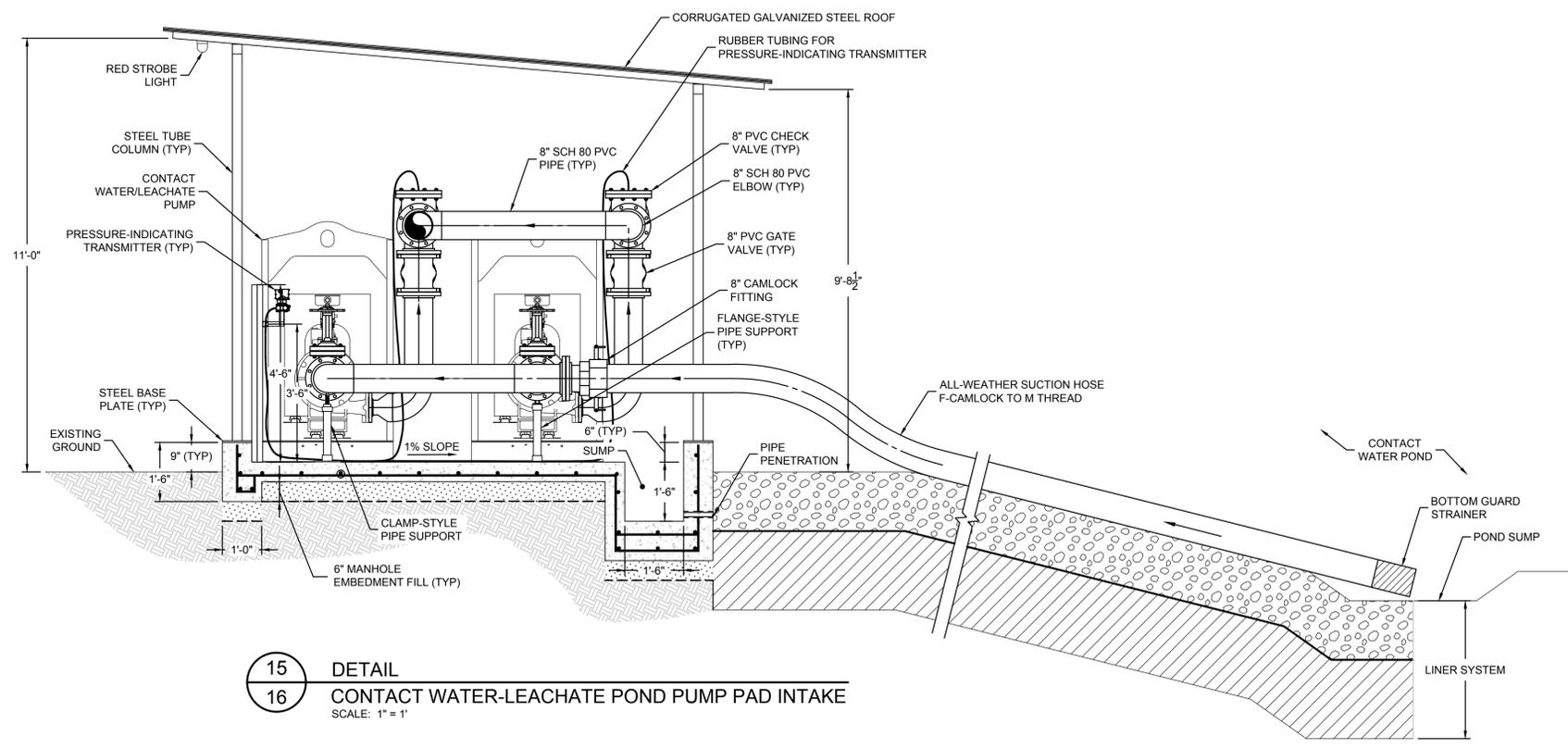
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**13 PLAN**  
**11 CONTACT WATER-LEACHATE POND PUMP PAD - PLAN**  
 SCALE: 1" = 1'



**14 DETAIL**  
**16 CONTACT WATER-LEACHATE POND PUMP PAD - SECTION**  
 SCALE: 1" = 2'



**15 DETAIL**  
**16 CONTACT WATER-LEACHATE POND PUMP PAD INTAKE**  
 SCALE: 1" = 1'

- NOTES:
1. PIPING, PIPING MATERIALS, VALVES, ROOF, AND SUPPORT STRUCTURES ARE CONCEPTUAL TO ILLUSTRATE INTENDED FUNCTIONALITY AND MAY BE REVISED DURING DETAILED DESIGN. CHANGES DURING CONSTRUCTION WILL BE REFLECTED IN THE CONSTRUCTION CERTIFICATION REPORT OR A MINOR MODIFICATION TO THE D&O PLAN, IF NEEDED.
  2. EXPANSION TO 10\"/>



PERMIT DRAWINGS  
 NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION	SRN	MI
0	10.14.22	GA EPD SUBMITTAL		

**LEACHATE MANAGEMENT SYSTEM DETAILS V**

**PLANT BRANCH CCR LANDFILL**  
 PUTNAM COUNTY, GEORGIA

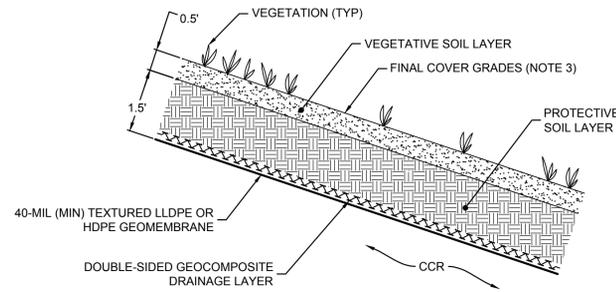
**Geosyntec**  
 consultants

1255 ROBERTS BOULEVARD NW, SUITE 200  
 KENNESAW, GEORGIA 30144-3694

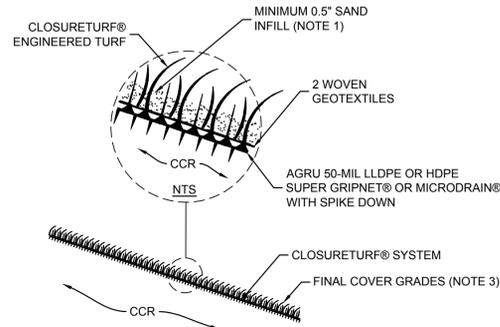
GEORGIA CERTIFICATE OF AUTHORIZATION (COA) NO. PEF000260, EXP. 06/30/2024  
 PHONE: 678.202.9500  
 WWW.GEOSYNTEC.COM

PROJ. NO.	GW6364	DWG.	6364-127	EDIT	10.14.22
SCALE	AS SHOWN				
DATE	OCTOBER 2022	DRAWING 16 OF 25			

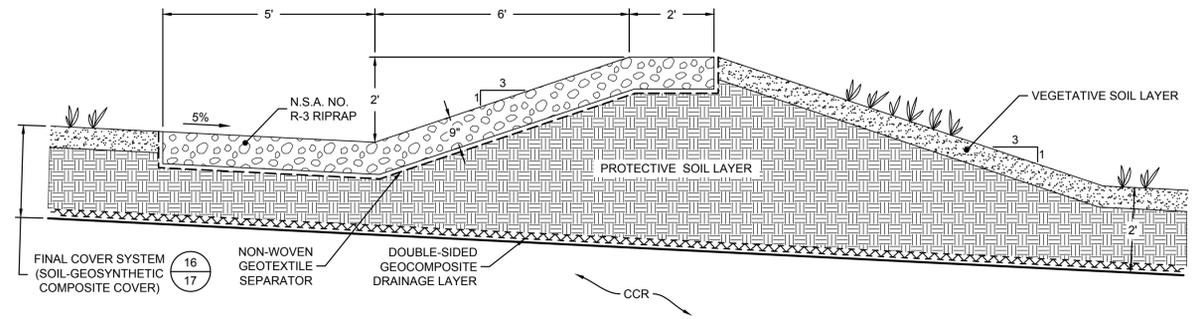
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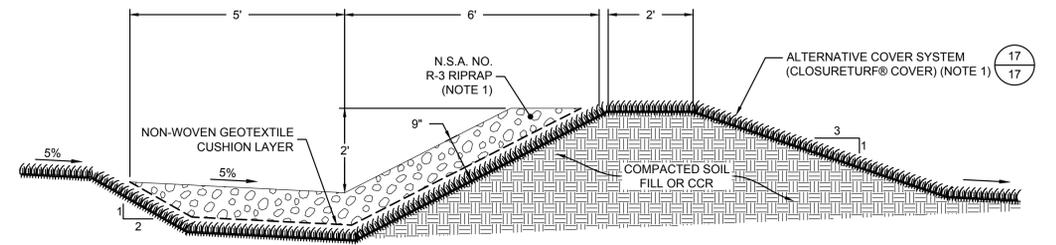
**16** DETAIL  
**6** FINAL COVER SYSTEM (SOIL-GEOSYNTHETIC COMPOSITE COVER)  
SCALE: 1" = 2'



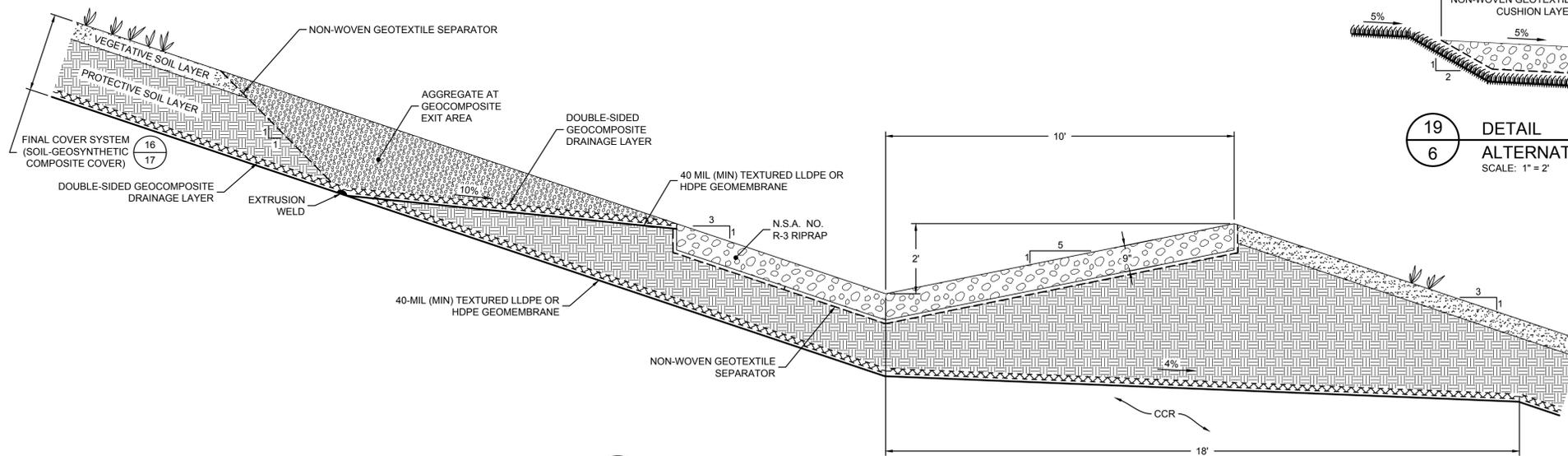
**17** DETAIL  
**6** ALTERNATIVE COVER SYSTEM (CLOSURETURF® COVER)  
SCALE: NTS



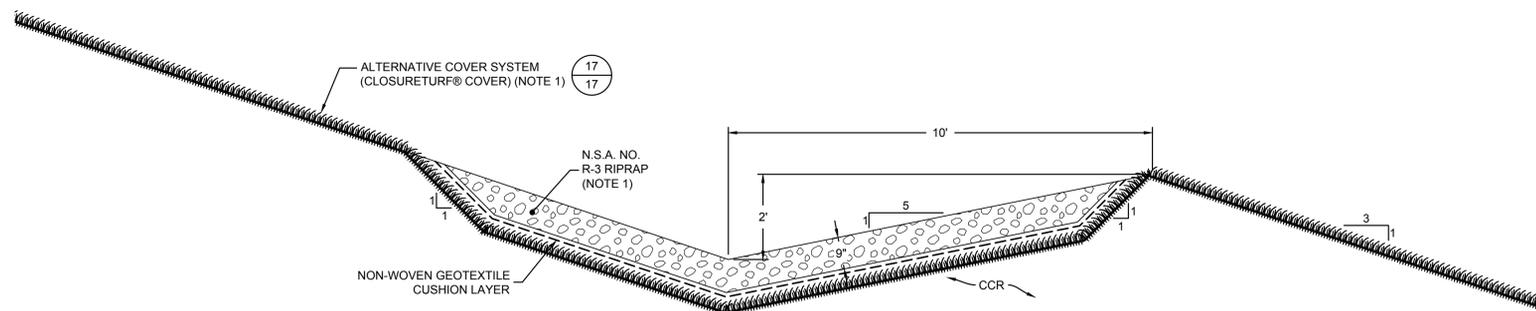
**18** DETAIL  
**6** FINAL COVER TOP DECK DIVERSION BERM  
SCALE: 1" = 2'



**19** DETAIL  
**6** ALTERNATIVE COVER TOP DECK DIVERSION BERM (CLOSURETURF® COVER)  
SCALE: 1" = 2'



**20** DETAIL  
**6** FINAL COVER DRAINAGE BENCH  
SCALE: 1" = 2'



**21** DETAIL  
**6** ALTERNATIVE COVER DRAINAGE BENCH (CLOSURETURF® COVER)  
SCALE: 1" = 2'

- NOTES:
- SAND INFILL WILL BE REPLACED WITH RIPRAP OR HYDROBINDER® AT AREAS OF CONCENTRATED FLOW (I.E., BENCHES, DOWNCHUTES, PERIMETER CHANNELS, TOP DECK DIVERSION BERMS).
  - GEOSYNTHETIC LAYER THICKNESSES EXAGGERATED FOR CLARITY.
  - TOP OF FINAL COVER GRADES SHOWN ON DRAWING 6 REPRESENT THE TOP OF THE VEGETATIVE SOIL LAYER FOR THE SOIL-GEOSYNTHETIC COMPOSITE FINAL COVER SYSTEM AND TOP OF THE CLOSURETURF® FOR THE ALTERNATIVE COVER SYSTEM.

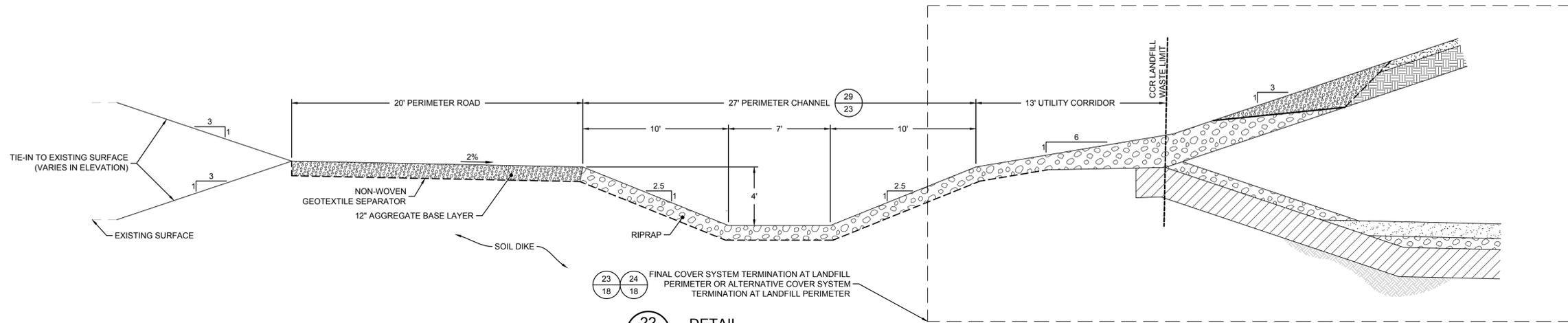


PERMIT DRAWINGS  
NOT FOR CONSTRUCTION

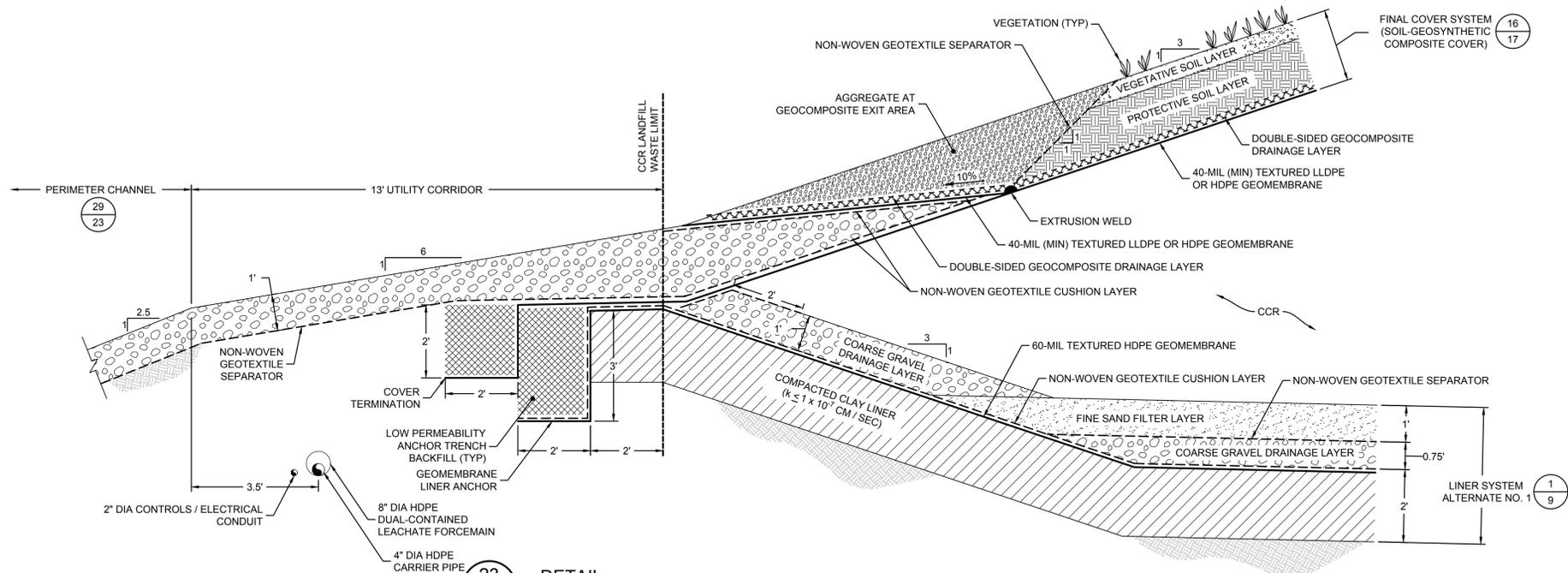
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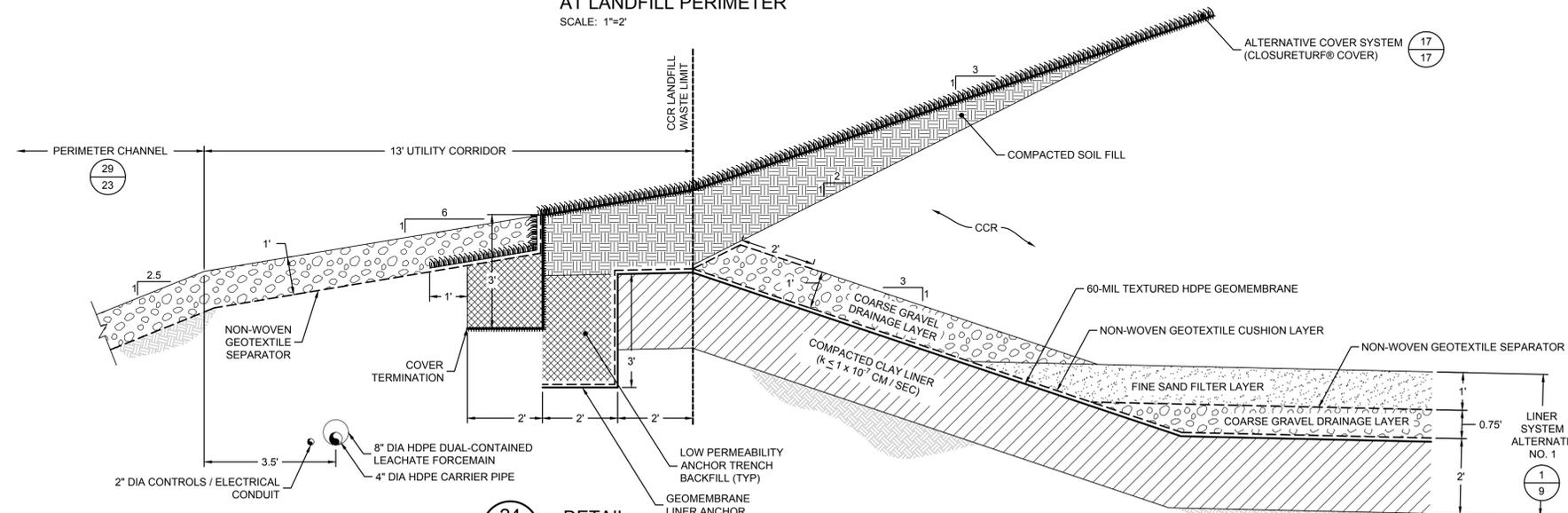
FINAL COVER SYSTEM DETAILS I				
PLANT BRANCH CCR LANDFILL PUTNAM COUNTY, GEORGIA				
<b>Geosyntec</b> consultants 1255 ROBERTS BOULEVARD NW, SUITE 200 KENNESAW, GEORGIA 30144-3634			GEORGIA CERTIFICATE OF AUTHORIZATION (COA) NO. PEF000260, EXP. 06/30/2024 PHONE: 678.202.9500 WWW.GEOSYNTEC.COM	
PROJ. NO.	GW6364	DWG.	6364-116	EDIT 10.14.22
SCALE	AS SHOWN	DRAWING 17 OF 25		
DATE	OCTOBER 2022			



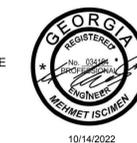
**22**  
**5** DETAIL  
**PERIMETER DIKE**  
SCALE: 1"=4'



**23**  
**7** DETAIL  
**FINAL COVER SYSTEM TERMINATION AT LANDFILL PERIMETER**  
SCALE: 1"=2'



**24**  
**7** DETAIL  
**ALTERNATIVE COVER SYSTEM TERMINATION AT LANDFILL PERIMETER**  
SCALE: 1"=2'



PERMIT DRAWINGS  
NOT FOR CONSTRUCTION

- NOTES:
1. GEOSYNTHETIC LAYER THICKNESSES EXAGGERATED FOR CLARITY.
  2. DETAILS ON THIS DRAWING ARE BASED ON LINER SYSTEM ALTERNATE NO. 1. IF A DIFFERENT LINER SYSTEM ALTERNATE IS USED, DESIGN DETAILS WILL REMAIN CONSISTENT WITH THE INFORMATION PRESENTED ON THIS DRAWING.

REV	DATE	DESCRIPTION	SRN	MI
0	10.14.22	GA EPD SUBMITTAL		

**FINAL COVER SYSTEM DETAILS II**

**PLANT BRANCH CCR LANDFILL**  
PUTNAM COUNTY, GEORGIA

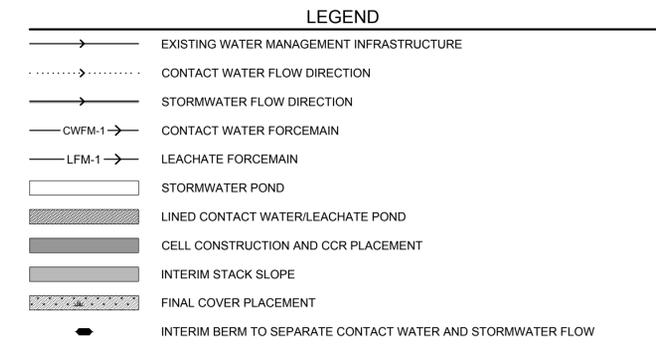
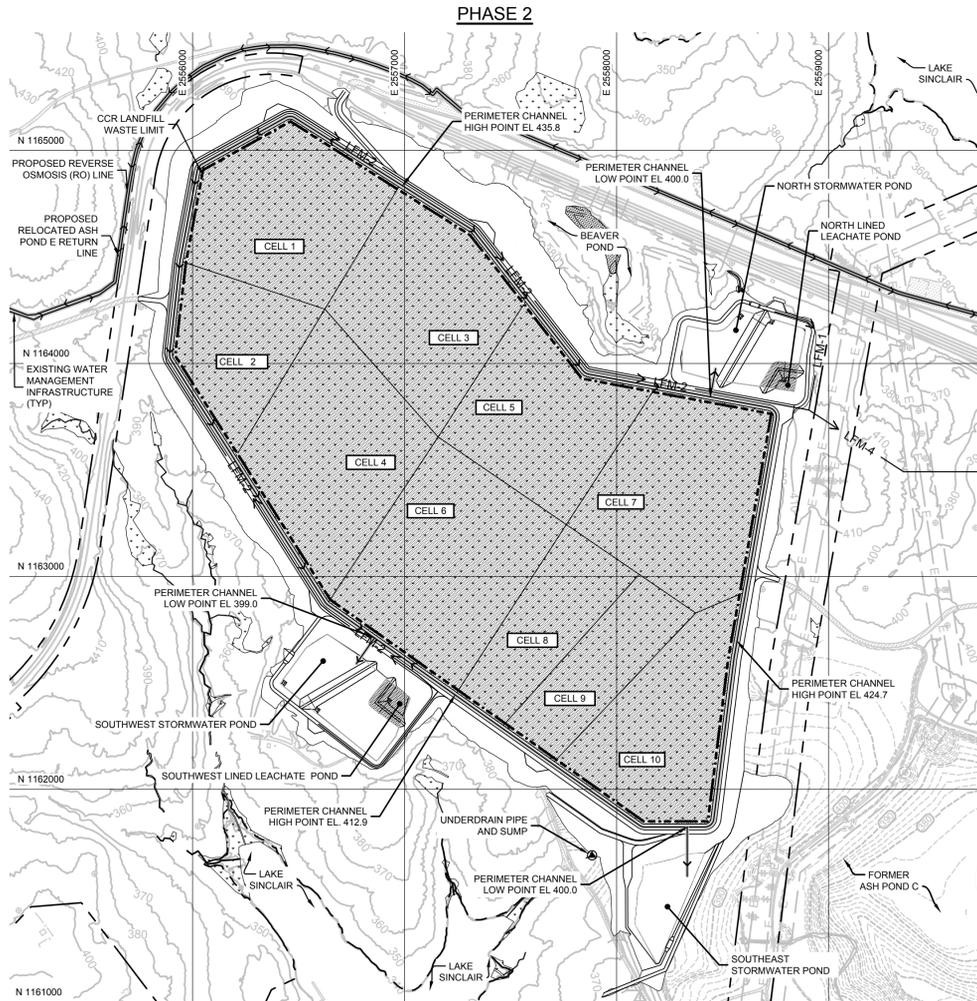
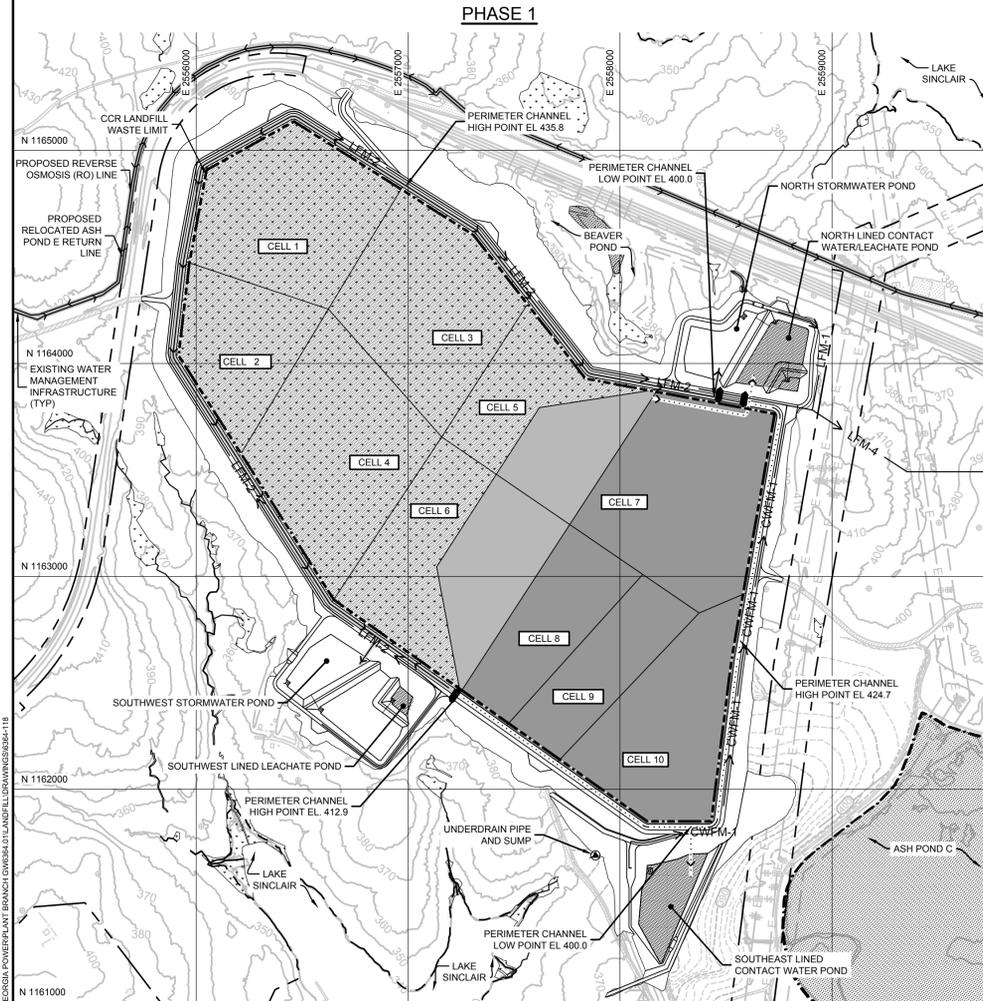
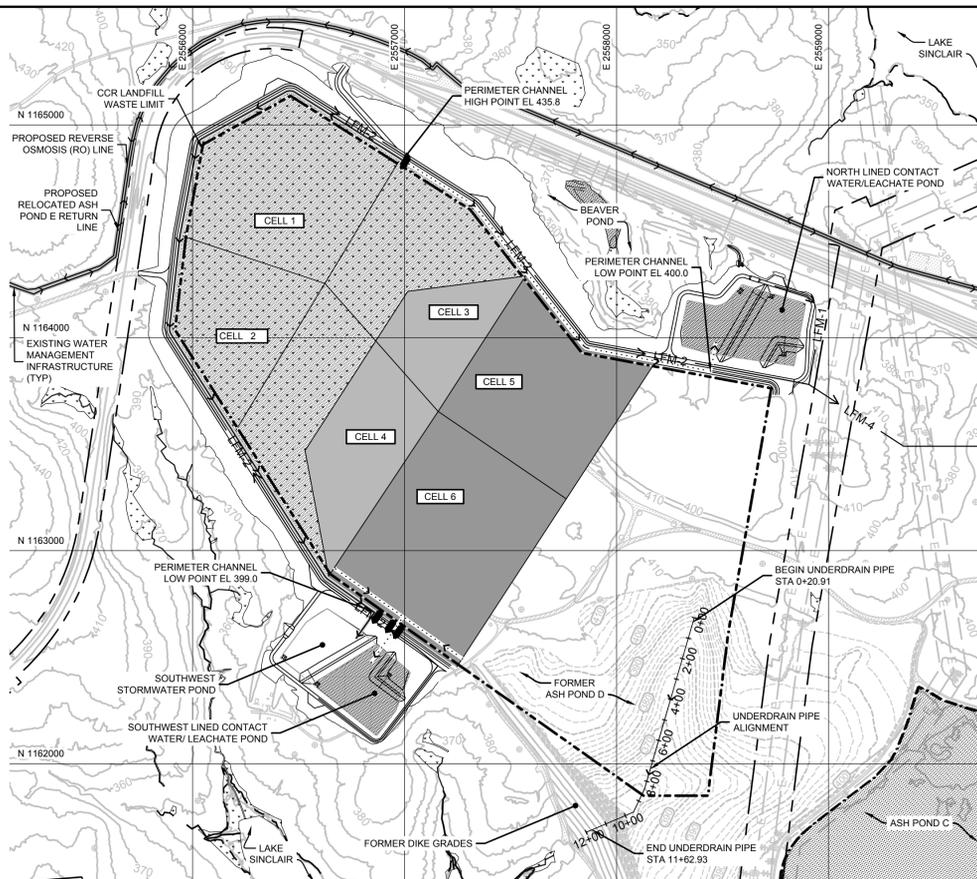
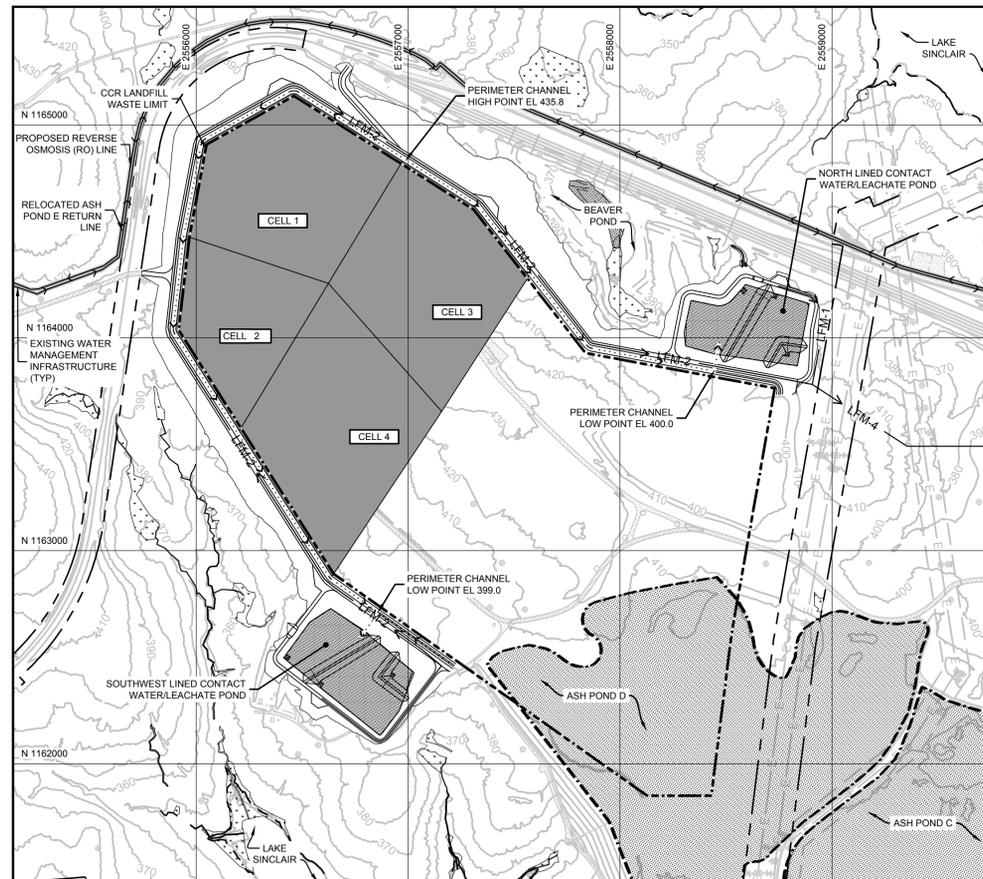
**Geosyntec consultants**

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KENNESAW, GEORGIA 30144-3694

GEORGIA CERTIFICATE OF AUTHORIZATION (COA) NO. PEF000260, EXP. 06/30/2024  
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PROJ. NO.	GW6364	DWG.	6364-117	EDIT	10.14.22
SCALE	AS SHOWN	<b>DRAWING 18 OF 25</b>			
DATE	OCTOBER 2022				

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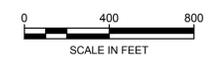


- NOTES:**
- PHASES PRESENTED HEREIN ARE SNAPSHOTS IN TIME DEVELOPED TO CONCEPTUALIZE THE SEQUENCE OF CCR LANDFILL CELL CONSTRUCTION (I.E. LINER PLACEMENT), PLACEMENT OF CCR REMOVED FROM ASH PONDS B, C, D, AND E, AND FINAL COVER PLACEMENT WITH CONSIDERATION FOR STORMWATER AND CONTACT WATER MANAGEMENT. THE PHASING APPROACH, AND STORMWATER AND CONTACT WATER MANAGEMENT TECHNIQUES, MAY BE ADJUSTED DURING THE DETAILED DESIGN AND/OR BASED ON FIELD CONDITIONS UPON APPROVAL BY THE DESIGNER OF RECORD. WITH THE REQUIREMENT THAT DESIGN CRITERIA RELATED TO STORMWATER AND CONTACT WATER MANAGEMENT ARE MET. EPD APPROVAL IS REQUIRED PRIOR TO ANY SIGNIFICANT MODIFICATIONS TO THE PHASING APPROACH AND ASSOCIATED STORMWATER AND CONTACT WATER MANAGEMENT.
  - PHASES ARE DEPICTED SCHEMATICALLY. GRADING ASSOCIATED WITH CCR LANDFILL CONSTRUCTION IS NOT SHOWN FOR CLARITY AND IS PRESENTED ON THE PLAN SHEETS WITHIN THIS DRAWING SET. SIMILARLY, THE INTERFACE BETWEEN CCR PLACEMENT AND FINAL COVER PLACEMENT IN PHASES 2 AND 3 IS DEPICTED IN A CONCEPTUAL MANNER. THE CONSTRUCTED INTERFACE WILL CONSIDER FINAL COVER STORMWATER MANAGEMENT FEATURES SUCH AS TOP DECK DIVERSION BERMS, DRAINAGE BENCHES, AND DOWNCHUTES.
  - PERIMETER CHANNELS, INTERIM CHANNELS, STORMWATER PIPES, PONDS, AND INTERIM LINES WILL BE USED FOR BOTH CONTACT WATER AND STORMWATER MANAGEMENT DURING CCR LANDFILL CONSTRUCTION, OPERATION, AND CLOSURE. THE TRANSITION FROM CONTACT WATER TO STORMWATER MANAGEMENT WILL CONSIST OF REMOVING THE LINER AND/OR WASHING THE LINER AND PIPES. AT LOCATIONS WHERE SEPARATE PORTIONS OF THE PERIMETER CHANNELS ARE USED FOR STORMWATER AND CONTACT WATER MANAGEMENT, THE CHANNEL PORTIONS WILL BE SEPARATED BY INTERIM BERMS CONSTRUCTED ACROSS THE CHANNEL TO SEGREGATE THE TYPES OF FLOW. THE INTERIM BERM LOCATIONS SHOWN ARE CONCEPTUAL AND MAY BE ADJUSTED.
  - EACH PHASE REPRESENTS A SNAPSHOT OF THE SITE AT THE CONCLUSION OF EACH PHASE. THE PHASE ACTIVITIES AND ASSOCIATED STORMWATER AND CONTACT WATER MANAGEMENT ACTIVITIES ARE DESCRIBED BELOW. NOTE THAT ACTIVITIES IN ANY PHASE MAY BE IMPLEMENTED IN SEVERAL SUB-PHASES AND NOT ALL AT ONCE.
    - PHASE 1 ACTIVITIES CONSIST OF THE CONSTRUCTION OF CELLS 1, 2, 3, AND 4 AND CCR PLACEMENT IN CELLS 1, 2, 3, AND 4.
      - IN THIS PHASE, THE NORTH AND SOUTHWEST STORMWATER/CONTACT WATER/LEACHATE PONDS AND THE PORTIONS OF PERIMETER DIKE, PERIMETER CHANNELS, AND ASSOCIATED UTILITY CORRIDORS THAT ARE REQUIRED FOR OPERATION OF CELLS 1 THROUGH 4 WILL BE CONSTRUCTED. THE PERIMETER CHANNELS AND NORTH AND SOUTHWEST PONDS WILL BE LINED IN THIS PHASE TO CONVEY AND RETAIN, RESPECTIVELY, STORMWATER AND CONTACT WATER GENERATED DURING CCR PLACEMENT.
      - CCR PLACED DURING PHASE 1 WILL INCLUDE THE CCR STORED WITHIN ASH POND D, TO FACILITATE THE FUTURE CONSTRUCTION OF CELLS 7, 8, 9, AND 10. PLACED CCR WILL ALSO INCLUDE PORTIONS OF THE CCR STORED WITHIN ASH PONDS B, C, AND/OR E BASED ON THE CCR REMOVAL SCHEDULES FOR THE ASH PONDS. DURING CCR PLACEMENT, CONTACT WATER GENERATED FROM THE WORKING CCR FACES WILL BE MANAGED AND CONVEYED THROUGH THE LINED PERIMETER CHANNELS AND DISCHARGED TO THE LINED NORTH AND SOUTHWEST PONDS.
    - PHASE 2 ACTIVITIES CONSIST OF CONSTRUCTION OF CELLS 5 AND 6, PLACEMENT OF CCR IN CELLS 3, 4, 5 AND 6, AND PLACEMENT OF FINAL COVER ON CELLS 1 AND 2, AND PORTIONS OF CELLS 3 AND 4.
      - CCR PLACED DURING PHASE 2 WILL INCLUDE PORTIONS OF THE CCR STORED WITHIN ASH PONDS B, C, AND/OR E BASED ON THE CCR REMOVAL SCHEDULES FOR THE ASH PONDS.
      - UPON PLACEMENT OF FINAL COVER ON CELLS 1 AND 2, AND PORTIONS OF CELLS 3 AND 4, THE PERIMETER CHANNEL FROM THE HIGH POINT AT CELL 1 TO THE SOUTHWEST POND, AND THE STORMWATER PIPES DISCHARGING TO THE SOUTHWEST POND, WILL BE TRANSITIONED FROM CONTACT WATER TO STORMWATER MANAGEMENT. ADDITIONALLY, THE SOUTHWEST POND WILL BE SEPARATED VIA A LINED DIVIDER DIKE SUCH THAT A PORTION OF THE POND WILL MANAGE STORMWATER (WITH LINER REMOVED) WHILE THE REMAINING PORTION WILL MANAGE CONTACT WATER AND LEACHATE (WITH LINER IN PLACE).
      - DURING CCR PLACEMENT ACTIVITIES IN PHASE 2, CONTACT WATER FROM THE WORKING CCR FACES WILL BE MANAGED BY INTERIM CONTACT WATER CHANNELS CONSTRUCTED WITHIN THE CCR LANDFILL WASTE LIMIT. CONTACT WATER WILL BE CONVEYED, VIA PUMPING OR GRAVITY, TO THE LINED CONTACT WATER/LEACHATE STORAGE PORTION OF THE NORTH AND SOUTHWEST PONDS.
    - PHASE 3 ACTIVITIES CONSIST OF CONSTRUCTION OF CELLS 7, 8, 9, AND 10 AND PLACEMENT OF CCR IN CELLS 5, 6, 7, 8, 9, AND 10 AND PLACEMENT OF FINAL COVER ON THE REMAINDER OF CELLS 3 AND 4, AND PORTIONS OF CELLS 5 AND 6.
      - DURING CONSTRUCTION OF CELLS 7, 8, 9, AND 10 THE SOUTHEAST STORMWATER/CONTACT WATER POND AND THE REMAINDER OF THE PERIMETER DIKE, PERIMETER CHANNELS, AND ASSOCIATED UTILITY CORRIDORS WILL BE CONSTRUCTED. THE PERIMETER CHANNELS AND SOUTHEAST POND WILL BE LINED IN THIS PHASE TO CONVEY AND RETAIN, RESPECTIVELY, STORMWATER AND CONTACT WATER GENERATED DURING CCR PLACEMENT.
      - UPON PLACEMENT OF FINAL COVER ON THE REMAINDER OF CELLS 3 AND 4, AND PORTIONS OF CELLS 5 AND 6, THE PERIMETER CHANNEL FROM THE HIGH POINT AT CELL 1 TO THE NORTH POND, AND THE STORMWATER PIPES DISCHARGING TO THE NORTH POND, WILL BE TRANSITIONED FROM CONTACT WATER TO STORMWATER MANAGEMENT. ADDITIONALLY, THE NORTH POND WILL BE SEPARATED VIA A LINED DIVIDER DIKE SUCH THAT A PORTION OF THE POND WILL MANAGE STORMWATER (WITH LINER REMOVED) WHILE THE REMAINING PORTION WILL MANAGE CONTACT WATER AND LEACHATE (WITH LINER IN PLACE).
      - DURING CCR PLACEMENT ACTIVITIES IN PHASE 3, CONTACT WATER FROM THE WORKING CCR FACES WILL BE MANAGED BY EITHER (i) INTERIM CONTACT WATER CHANNELS CONSTRUCTED WITHIN THE CCR LANDFILL WASTE LIMIT, WHICH WILL CONVEY CONTACT WATER VIA PUMPING OR GRAVITY, OR (ii) THE LINED PERIMETER CHANNELS TO THE STORMWATER PIPES, WHICH WILL DISCHARGE TO THE LINED CONTACT WATER/LEACHATE STORAGE PORTION OF THE NORTH AND SOUTHWEST PONDS, OR THE LINED SOUTHEAST POND.
    - PHASE 4 ACTIVITIES CONSIST OF PLACEMENT OF FINAL COVER ON THE REMAINDER OF CELLS 5 AND 6, AND CELLS 7, 8, 9, AND 10.
      - UPON PLACEMENT OF FINAL COVER ON THE UNCOVERED AREAS OF THE LANDFILL, THE PERIMETER CHANNELS ALONG THE EASTERN HALF OF THE LANDFILL (BETWEEN THE STORMWATER PIPES DISCHARGING TO THE NORTH AND SOUTHWEST PONDS), THE STORMWATER PIPES DISCHARGING TO THE SOUTHEAST POND, AND THE SOUTHEAST POND, WILL BE TRANSITIONED FROM CONTACT WATER TO STORMWATER MANAGEMENT. ADDITIONALLY, THE PORTION OF THE NORTH AND SOUTHWEST PONDS DEDICATED TO CONTACT WATER AND LEACHATE MANAGEMENT MAY BE REDUCED IN SIZE.
  - EXISTING WATER MANAGEMENT INFRASTRUCTURE, CONVEYING CONTACT WATER FROM ASH POND E, WILL BE RELOCATED TO THE NORTH AND OUTSIDE THE CCR LANDFILL FOOTPRINT PRIOR TO THE CCR LANDFILL CONSTRUCTION AND OPERATION.
  - A PERFORATED CONVEYANCE PIPE AND GRAVEL DRAINAGE LAYER WILL BE PLACED IN THE TOPOGRAPHIC DEPRESSION AND POTENTIAL GROUNDWATER DISCHARGE FEATURE IN THE FORMER ASH POND D AREA FOLLOWING THE CCR REMOVAL ACTIVITIES. REFER TO DRAWING 24 FOR CONVEYANCE SYSTEM DETAILS.
  - ADDITIONAL STORMWATER FEATURES (E.G., BERMS, CHANNELS, BENCHES, AND DOWNCHUTES) AND EROSION AND SEDIMENT CONTROLS WILL BE IMPLEMENTED AS NEEDED FOR THE CONSTRUCTION AND POST-CONSTRUCTION SITE CONDITIONS.
  - LEACHATE FORCEMAIN PIPING IS SHOWN FOR TRANSMISSION OF CONTACT WATER AND LEACHATE FROM THE LANDFILL PONDS TO THE WWTs AREA. LEACHATE PIPING FROM THE LANDFILL CELLS TO THE LANDFILL PONDS IS NOT SHOWN FOR CLARITY. REFER TO DRAWING 11 FOR ADDITIONAL DETAILS.

**CERTIFICATION STATEMENT**

I HAVE REVIEWED THE INFORMATION PRESENTED IN THIS DRAWING, AND IN MY PROFESSIONAL OPINION, ALL CONTAINMENT STRUCTURES ARE DESIGNED TO RESIST A MAXIMUM HORIZONTAL GROUND ACCELERATION OF 0.1239G.

SIGNATURE: *[Signature]*  
 MEHMET ISCIEM, P.E. NO.034164



PERMIT DRAWINGS  
NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION	SRN	MI
0	10.14.22	ISSUED FOR SUBMITTAL		

**PHASING PLAN**

**PLANT BRANCH CCR LANDFILL**  
PUTNAM COUNTY, GEORGIA

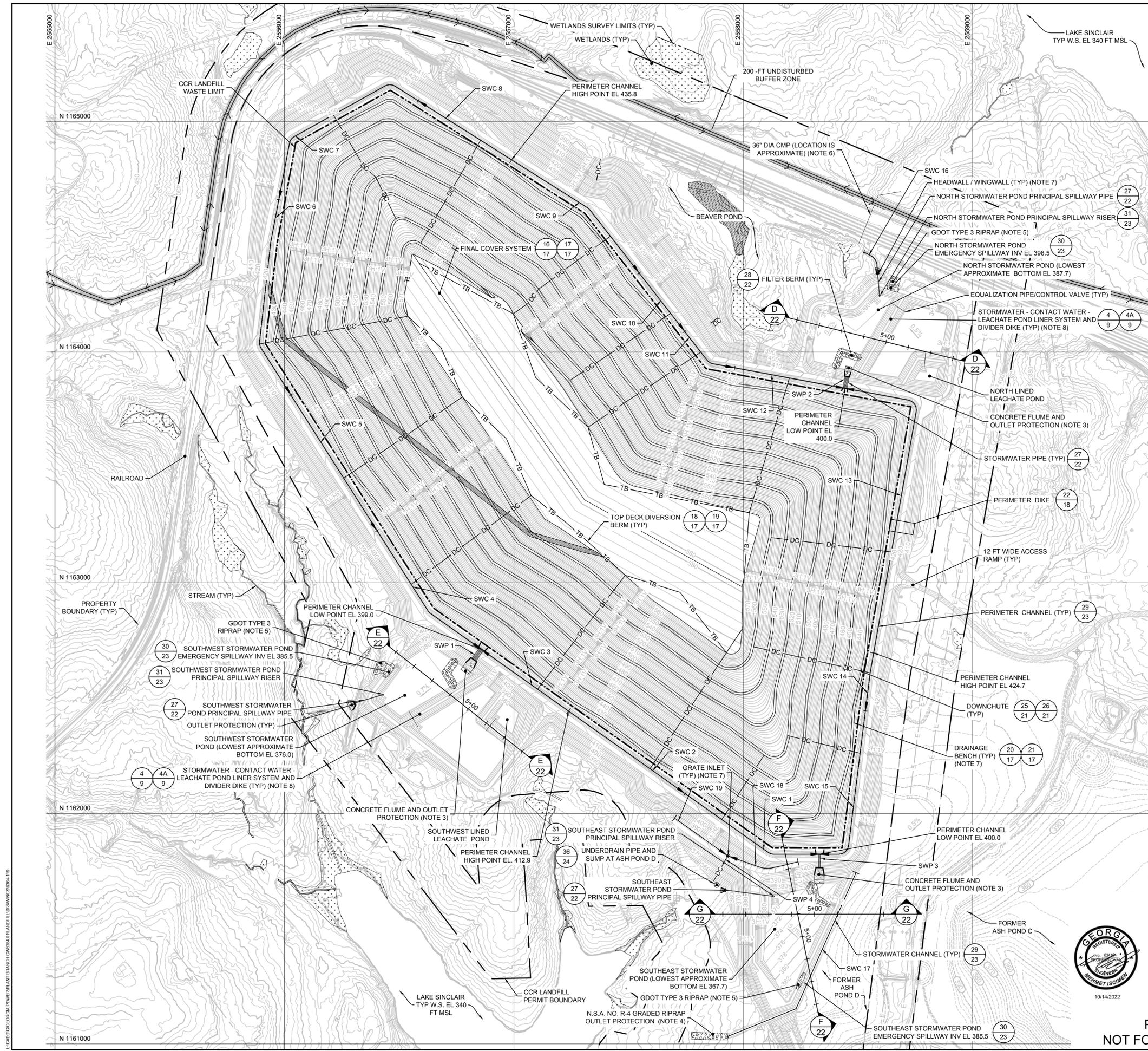
**Geosyntec consultants**

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GEORGIA CERTIFICATE OF AUTHORIZATION (COA) NO. PEF000260, EXP. 06/30/2024  
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PROJ. NO.	GW6364	DWG.	6364-118	EDIT	10.14.22
SCALE	1" = 400'				
DATE	OCTOBER 2022		DRAWING 19 OF 25		

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- NOTES:
- TOP OF FINAL COVER GRADES SHOWN ON THIS DRAWING REPRESENT THE TOP OF THE VEGETATIVE SOIL LAYER FOR THE SOIL-GEOSYNTHETIC COMPOSITE FINAL COVER SYSTEM AND TOP OF THE CLOSUREURF® FOR THE ALTERNATIVE COVER SYSTEM (I.E., TOP OF LINING FOR PERIMETER CHANNELS AND BENCHES. TOP OF FINAL COVER SYSTEM GRADES SHOWN DO NOT INCLUDE GRADING OF THE DOWNCHUTES AND TOP DECK DIVERSION BERMS FOR THE FINAL COVER.
  - ADDITIONAL STORMWATER FEATURES (E.G., BERMS, CHANNELS, BENCHES, DIVERSIONS, AND DOWNCHUTES) MAY BE ADDED FOR CONSTRUCTION AND POST-CONSTRUCTION CONDITIONS.
  - OUTLET PROTECTION AT STORMWATER PIPES (SWP) 1, 2, AND 3 WILL BE CONCRETE FLUMES EXTENDING DOWN THE POND INTERIOR SIDESLOPES AND APRON ALONG THE POND BOTTOM.
  - N.S.A. NO. R-4 GRADED RIPRAP (OR EQUIVALENT) OUTLET PROTECTION WILL BE INSTALLED TO EXTEND FROM THE END OF SWC 17 TO ELEVATION 360 TO PROVIDE PROTECTION AGAINST EROSION AND SCOUR IMMEDIATELY UPGRADIENT OF LAKE.
  - GDOT TYPE 3 GRADED RIPRAP (OR EQUIVALENT) WILL EXTEND FROM THE NORTH, SOUTHWEST, AND SOUTHEAST POND EMERGENCY SPILLWAYS, DOWN THE POND EXTERIOR SIDESLOPES AND ALONG EXISTING GRADE TO PROVIDE PROTECTION AGAINST EROSION AND SCOUR.
  - EXISTING 36-INCH DIAMETER CMP WILL CONVEY DISCHARGE FROM THE NORTH STORMWATER POND AND ADJACENT DRAINAGE AREAS UNDER THE RAILROAD TRACKS AND ULTIMATELY TO A TRIBUTARY OF LAKE SINCLAIR. THE CONDITION OF THE 36-INCH DIAMETER CMP IS UNDER EVALUATION FOR THE DETAILED DESIGN; IF PIPE REHABILITATION OR REPLACEMENT IS REQUIRED, CALCULATIONS WILL BE CONDUCTED TO EVALUATE THE PROPOSED REMEDY SUCH THAT AN EQUIVALENT (OR GREATER) FLOW CAPACITY IS PROVIDED.
  - HEADWALLS WILL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH GDOT STANDARD DETAIL NUMBER 1001-B FOR CIRCULAR CULVERTS AND WINGWALLS WILL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH GDOT STANDARD DETAIL NUMBER 2404 FOR BOX CULVERTS, OR APPROVED EQUIVALENTS. GRATE INLETS, INCLUDING GRATE AND STRUCTURE, WILL BE SELECTED AS STANDARD CATCH BASINS WITH CAST IRON GRATE INLETS IN ACCORDANCE WITH GDOT STANDARD DETAIL NUMBER 1010.
  - STORMWATER - CONTACT WATER - LEACHATE POND LINER SYSTEM AND DIVIDER DIKE BETWEEN THE STORMWATER AND FORMER CONTACT WATER STORAGE AREAS MAY BE REMOVED UPON CONVERSION OF THE POND TO STORE STORMWATER AND LEACHATE ONLY. THE DIKE AROUND THE LINED LEACHATE POND WILL REMAIN IN PLACE PERMANENTLY.
  - A PHASED EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN (ESPCP), PREPARED IN ACCORDANCE WITH THE GEORGIA CONSTRUCTION GENERAL PERMIT (I.E., AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY) AND THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA (GSWCC), WILL BE DEVELOPED AS PART OF THE DETAILED DESIGN. BEST MANAGEMENT PRACTICES TO BE IMPLEMENTED AS PART OF THE ESPCP MAY INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING MEASURES:

SYMBOL	DESCRIPTION	DETAIL NO. (DRAWING 24)
<b>STRUCTURAL MEASURES</b>		
	STONE CHECK DAM	33
	FILTER RING	32
	FILTER SOCK	34
	SLOPE STABILIZATION	35
<b>NON-STRUCTURAL MEASURES</b>		
	DUST CONTROL ON DISTURBED AREAS	DETAILS FOR NON-STRUCTURAL MEASURES RELATED TO DISTURBED AREA STABILIZATION AND VEGETATION ARE PROVIDED IN THE CLOSURE PLAN.
	DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)	
	DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)	
	DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION)	
	SLOPE STABILIZATION	

CERTIFICATION STATEMENT

I HAVE REVIEWED THE INFORMATION PRESENTED IN THIS DRAWING, AND IN MY PROFESSIONAL OPINION, ALL CONTAINMENT STRUCTURES ARE DESIGNED TO RESIST A MAXIMUM HORIZONTAL GROUND ACCELERATION OF 0.1235G.

SIGNATURE: MEHMET ISCIMEN, P.E. NO. 034164



PERMIT DRAWINGS  
NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION	SRN	MI
0	10.14.22	GA EPD SUBMITTAL		

**STORMWATER MANAGEMENT SYSTEM PLAN**

PLANT BRANCH CCR LANDFILL  
PUTNAM COUNTY, GEORGIA

**Geosyntec consultants**

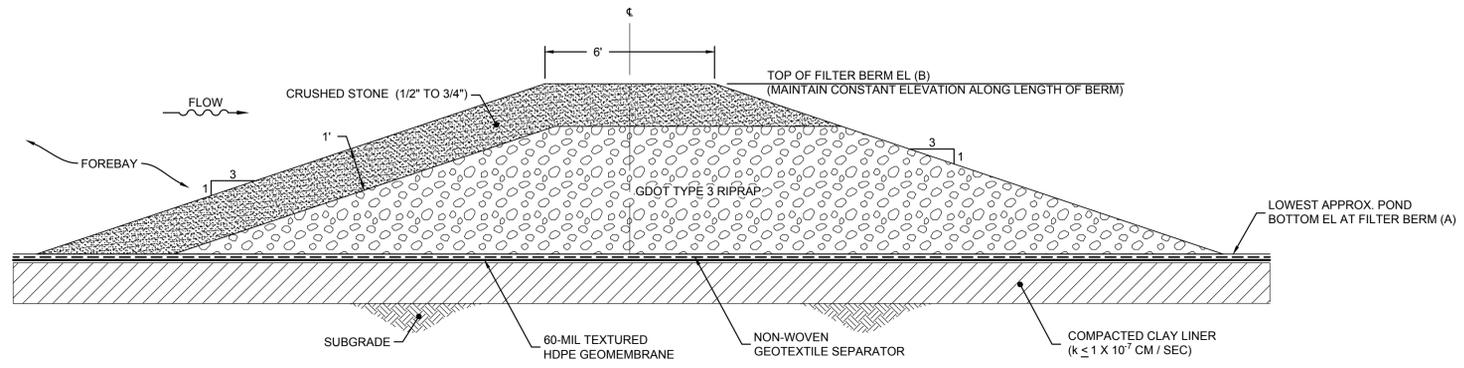
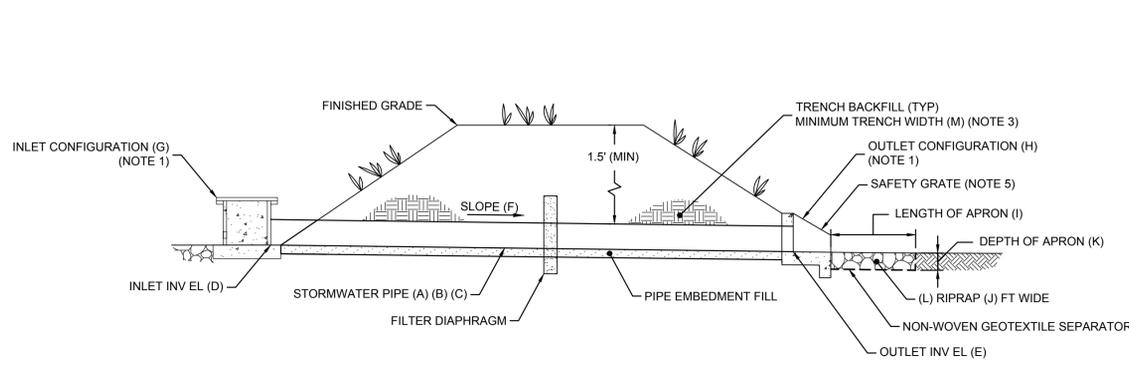
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PROJ. NO.	GW6364	DWG.	6364-119	EDIT	10.14.22
SCALE	1" = 200'				
DATE	OCTOBER 2022		DRAWING 20 OF 25		

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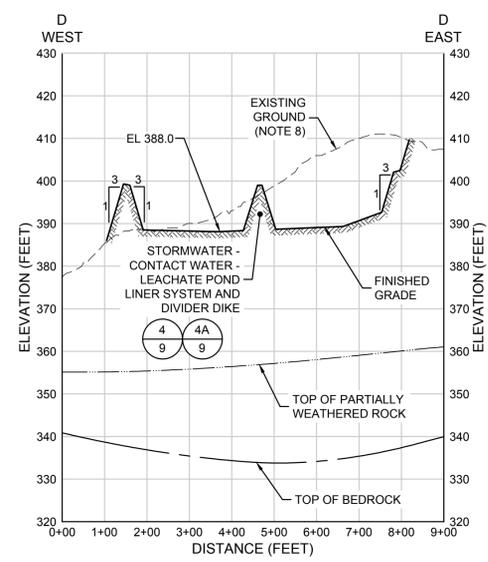
DESIGNATION	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)
PIPE ID	MATERIAL TYPE (NOTE 4)	(NUMBER OF STORMWATER PIPE/BOX CULVERT) - SPAN X HEIGHT OR DIAMETER (NOTE 2)	LENGTH (FT)	INLET INV EL (FT)	OUTLET INV EL (FT)	SLOPE (FT/FT)	INLET CONFIGURATION (NOTE 1)	OUTLET CONFIGURATION (NOTE 1)	LENGTH OF RIPRAP APRON (FT)	WIDTH OF RIPRAP APRON (FT)	DEPTH OF RIPRAP APRON (FT)	OUTLET PROTECTION GRADED RIPRAP	MIN TRENCH WIDTH (FT) (NOTE 3)
SWP 1	RCP	(4) - 6 FT X 3 FT	56	399.0	396.0	0.054	WINGWALL	WINGWALL	SEE NOTE 6				32.7
SWP 2	RCP	(4) - 5 FT X 3 FT	53	400.0	398.0	0.038	WINGWALL	WINGWALL					28.0
SWP 3	RCP	(2) - 6 FT X 3 FT	59	400.0	396.0	0.068	WINGWALL	WINGWALL					17.7
SWP 4	RCP	(1) - 18 INCH	36	379.4	379.0	0.011	GRATE INLET (NOTES 1 AND 12)	HEADWALL	SEE NOTE 13				4.1
NORTH POND PRINCIPAL SPILLWAY PIPE	RCP	(1) - 24 INCH	93	387.7	385.4	0.025	CONCRETE RISER	HEADWALL	20.0	6.0	3.00	N.S.A. NO. R-6	4.7
SOUTHWEST POND PRINCIPAL SPILLWAY PIPE	RCP	(1) - 24 INCH	125	375.5	370.4	0.041	CONCRETE RISER	HEADWALL	18.0	6.0	3.75	N.S.A. NO. R-7	4.7
SOUTHEAST POND PRINCIPAL SPILLWAY PIPE	RCP	(1) - 18 INCH	208	367.7	351.0	0.080	CONCRETE RISER	HEADWALL	20.0	4.5	3.75	N.S.A. NO. R-7	4.1

DESIGNATION	(A)	(B)
POND	LOWEST APPROX. POND BOTTOM EL AT FILTER BERM (FT)	TOP OF FILTER BERM EL (FT)
NORTH STORMWATER POND	388.7	392.7
SOUTHWEST STORMWATER POND	378.2	383.2
SOUTHEAST STORMWATER POND	373.0	380.0

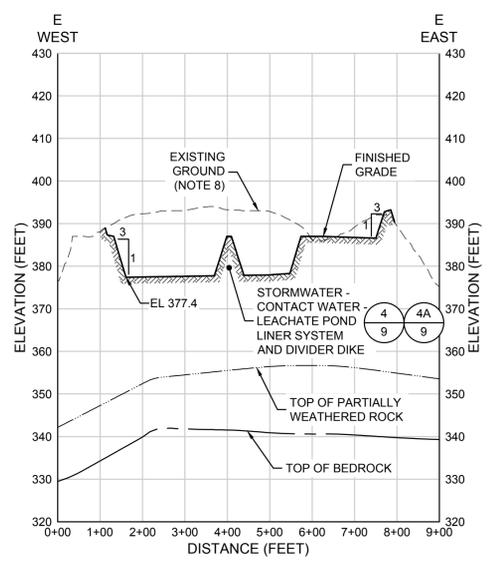
**28**  
**6** DETAIL  
**6** FILTER BERM  
SCALE: NTS

- NOTES:
- HEADWALLS WILL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH STANDARD DETAIL NUMBER 1001-B FOR CIRCULAR CULVERTS AND WINGWALLS WILL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH GDOT STANDARD DETAIL NUMBER 2404 FOR BOX CULVERTS, OR APPROVED EQUIVALENTS. GRATE INLETS, INCLUDING GRATE AND STRUCTURE, WILL BE SELECTED AS STANDARD CATCH BASINS WITH CAST IRON GRATE INLETS IN ACCORDANCE WITH GDOT STANDARD DETAIL NUMBER 1010.
  - BOX CULVERTS WILL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH GDOT STANDARD DETAIL NUMBER 2403.
  - PIPE EMBEDMENT WILL BE CONSTRUCTED IN ACCORDANCE WITH GDOT STANDARD DETAIL NUMBER 1030D FOR CIRCULAR CULVERTS AND GDOT STANDARD DETAIL NUMBER 2530P FOR BOX CULVERTS. MINIMUM TRENCH WIDTHS ARE IDENTIFIED IN COLUMN M OF THE STORMWATER PIPE DETAIL TABLE IN DETAIL 27.
  - RCP OR APPROVED EQUIVALENT PIPE MATERIAL WILL BE UTILIZED FOR STORMWATER PIPES AND BOX CULVERTS.
  - SAFETY GRATES WILL BE FURNISHED AND INSTALLED AT OUTLET HEADWALLS FOR CIRCULAR CULVERTS IN ACCORDANCE WITH GDOT STANDARD DETAIL NUMBER D-5 OR APPROVED EQUIVALENT.
  - OUTLET PROTECTION AT STORMWATER PIPES (SWP) 1, 2, AND 3 WILL BE CONCRETE FLUMES EXTENDING DOWN THE POND INTERIOR SIDESLOPES AND APRON ALONG THE POND BOTTOM.
  - THE STORMWATER PONDS WILL BE MAINTAINED TO REMOVE ACCUMULATED SEDIMENT (I) IN THE FOREBAYS (UPGRADIENT OF THE FILTER BERMS) WHEN THE SEDIMENT DEPTH REACHES HALF THE HEIGHT OF THE FILTER BERMS AND (II) IN THE MAIN POND STORAGE AREA WHEN THE SEDIMENT DEPTH REACHES 6 INCHES.
  - EXISTING GROUND SURFACE SHOWN ON THIS DRAWING PERTAINS TO EXISTING SITE CONDITIONS SHOWN ON DRAWING 4 EXCEPT IN THE FORMER ASH POND D AREA. RESTORATION SURFACE SHOWN IN THE FORMER ASH POND D AREA WAS OBTAINED FROM PERMIT DRAWINGS TITLED "PLANT BRANCH CCR SURFACE IMPOUNDMENT CLOSURES ASH PONDS B, C, AND D CLOSURE-BY-REMOVAL PUTNAM COUNTY, GEORGIA" PREPARED BY GEOSYNTEC CONSULTANTS, DATED NOVEMBER 2018.
  - TOP OF FINAL COVER SHOWN ON THIS DRAWING PERTAINS TO TOP OF FINAL COVER GRADES SHOWN ON DRAWING 6.
  - TOP OF FINAL COVER GRADES SHOWN ARE FOR BOTH SOIL-GEOSYNTHETIC COMPOSITE FINAL COVER SYSTEM AND CLOSURETURF® ALTERNATIVE COVER SYSTEM.
  - TOP OF LINER (TOP OF GEOMEMBRANE COMPONENT OF THE LINER SYSTEM) SHOWN ON THIS DRAWING PERTAINS TO TOP OF LINER GRADES SHOWN ON DRAWING 5.
  - GRATE INLET INVERT ELEVATION IS 381.4 FT.
  - SWP 4 DISCHARGES DIRECTLY INTO A DOWNCHUTE.

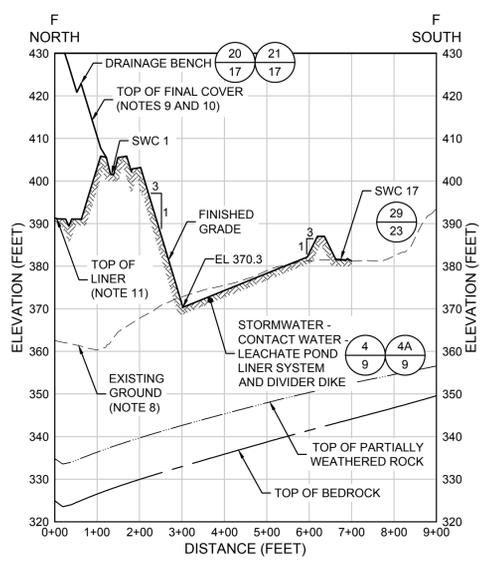
**27**  
**5** DETAIL  
**5** STORMWATER PIPE  
SCALE: NTS



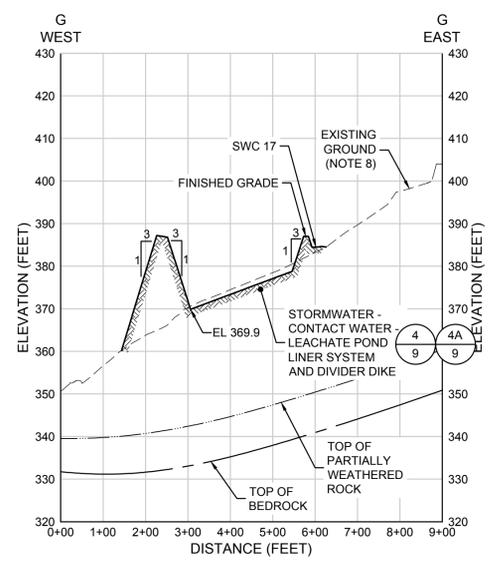
**D**  
**5** SECTION  
NORTH POND  
(NOTE 7)  
SCALE: 1" = 200' (HORIZONTAL); 1" = 20' (VERTICAL)



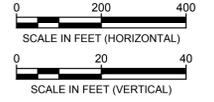
**E**  
**5** SECTION  
SOUTHWEST POND  
(NOTE 7)  
SCALE: 1" = 200' (HORIZONTAL); 1" = 20' (VERTICAL)



**F**  
**5** SECTION  
SOUTHEAST POND  
(NOTE 7)  
SCALE: 1" = 200' (HORIZONTAL); 1" = 20' (VERTICAL)



**G**  
**5** SECTION  
SOUTHEAST POND  
(NOTE 7)  
SCALE: 1" = 200' (HORIZONTAL); 1" = 20' (VERTICAL)



REV	DATE	DESCRIPTION	SRN	MI
0	10.14.22	GA EPD SUBMITTAL		

STORMWATER MANAGEMENT SYSTEM DETAILS II

PLANT BRANCH CCR LANDFILL  
PUTNAM COUNTY, GEORGIA

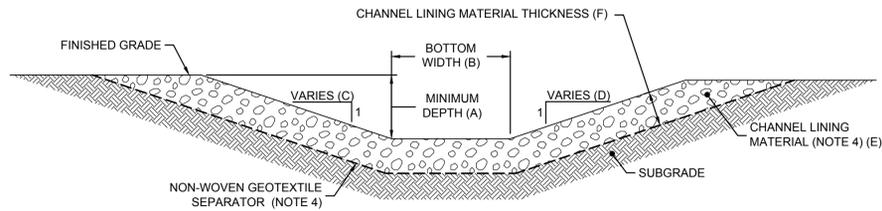
**Geosyntec consultants**  
1255 ROBERTS BOULEVARD NW, SUITE 200  
KENNESAW, GEORGIA 30144-3694

GEORGIA CERTIFICATE OF AUTHORIZATION (COA) NO. PEF000260, EXP. 06/30/2024  
PHONE: 678.202.9500  
WWW.GEOSYNTEC.COM

PROJ. NO.	GW6364	DWG.	6364-121	EDIT	10.14.22
SCALE	AS SHOWN	DRAWING 22 OF 25			
DATE	OCTOBER 2022				

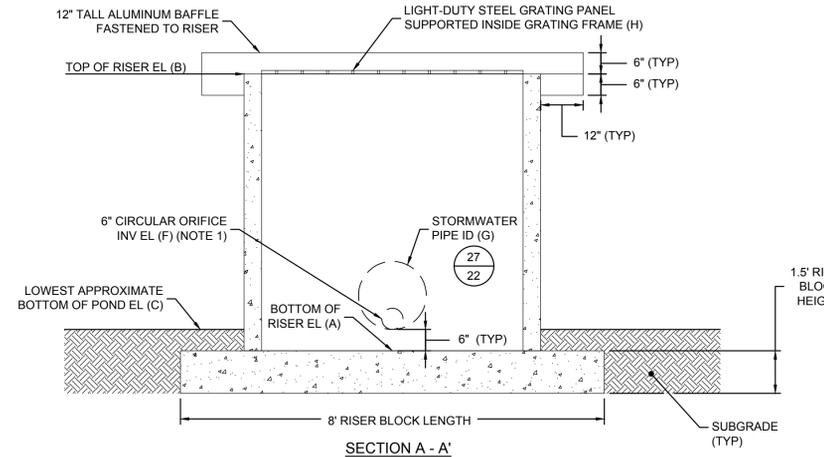
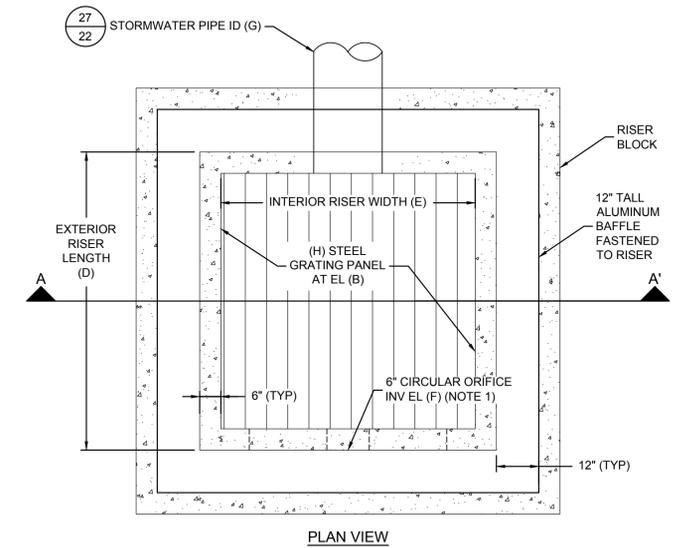
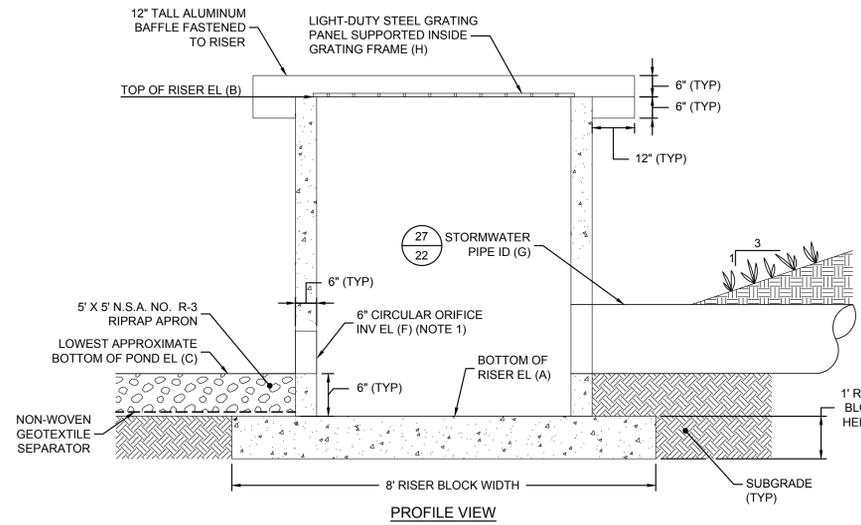
PERMIT DRAWINGS  
NOT FOR CONSTRUCTION

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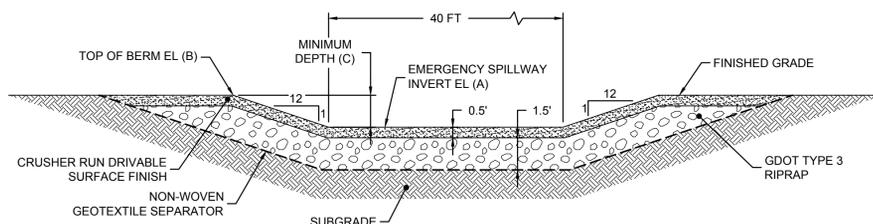
CHANNEL ID	UPSTREAM INVERT EL (FT)	DOWNSTREAM INVERT EL (FT)	LENGTH (FT)	SLOPE (FT/FT)	(A) MIN DEPTH (FT)	(B) BOTTOM WIDTH (FT)	(C) LEFT SIDE SLOPE (NOTE 2)	(D) RIGHT SIDE SLOPE (NOTE 2)	(E) CHANNEL LINING MATERIAL	(F) CHANNEL LINING THICKNESS (FT)
SWC 1	406.7	400.0	669	0.010	4.0	7.0	2.5	2.5	N.S.A. No. R-4	1.50
SWC 2	412.9	406.7	621	0.010	4.0	7.0	2.5	2.5	N.S.A. No. R-4	1.50
SWC 3	412.9	399.0	465	0.030	4.0	7.0	2.5	2.5	N.S.A. No. R-4	1.50
SWC 4	406.0	399.0	699	0.010	4.0	7.0	2.5	2.5	N.S.A. No. R-4	1.50
SWC 5	413.0	406.0	698	0.010	4.0	7.0	2.5	2.5	N.S.A. No. R-4	1.50
SWC 6	421.9	413.0	892	0.010	4.0	7.0	2.5	2.5	N.S.A. No. R-4	1.50
SWC 7	431.0	421.9	904	0.010	4.0	7.0	2.5	2.5	N.S.A. No. R-4	1.50
SWC 8	435.8	431.0	480	0.010	4.0	7.0	2.5	2.5	N.S.A. No. R-4	1.50
SWC 9	435.8	428.2	753	0.010	4.0	7.0	2.5	2.5	N.S.A. No. R-4	1.50
SWC 10	428.2	423.2	322	0.016	4.0	7.0	2.5	2.5	N.S.A. No. R-4	1.50
SWC 11	423.2	414.7	285	0.030	4.0	7.0	2.5	2.5	N.S.A. No. R-5	2.25
SWC 12	414.7	400.0	488	0.030	4.0	7.0	2.5	2.5	N.S.A. No. R-5	2.25
SWC 13	424.7	400.0	1,411	0.018	4.0	7.0	2.5	2.5	N.S.A. No. R-4	1.50
SWC 14	424.7	418.3	254	0.025	4.0	7.0	2.5	2.5	N.S.A. No. R-4	1.50
SWC 15	418.3	400.0	733	0.025	4.0	7.0	2.5	2.5	N.S.A. No. R-4	1.50
SWC 16	385.4	379.2	123	0.050	1.5	5.0	3.0	3.0	N.S.A. No. R-4	1.50
SWC 17	386.5	372.0	967	0.015	4.0	15.0	VARIES (NOTE 3)	3.0	N.S.A. No. R-4	1.50
SWC 18	405.0	381.4	313	0.075	1.5	0.0	3.0	3.0	N.S.A. No. R-4	1.50
SWC 19	384.2	381.4	284	0.010	1.5	0.0	3.0	3.0	N.S.A. No. R-4	1.50

**29**  
**5** **DETAIL**  
**PERIMETER AND STORMWATER CHANNELS**  
SCALE: NTS



DESIGNATION	(A) BOTTOM OF RISER EL (FT)	(B) TOP OF RISER EL (FT)	(C) LOWEST APPROX. BOTTOM OF POND EL (FT)	(D) EXTERIOR RISER LENGTH (FT)	(E) INTERIOR RISER WIDTH (FT)	(F) ORIFICE INV EL (FT)	(G) STORMWATER PIPE ID	(H) PANEL LENGTH (IN) X WIDTH (IN)
NORTH STORMWATER POND	387.2	393.2	387.7	6	5	387.7	NORTH POND PRINCIPAL SPILLWAY	62 x 62
SOUTHWEST STORMWATER POND	375.5	383.5	376.0	6	5	376.0	SOUTHWEST POND PRINCIPAL SPILLWAY	62 x 62
SOUTHEAST STORMWATER POND	367.2	372.2	367.7	6	5	367.7	SOUTHEAST POND PRINCIPAL SPILLWAY	62 x 62

**31**  
**20** **DETAIL**  
**CONCRETE RISER**  
SCALE: NTS



DESIGNATION	(A) SPILLWAY INV EL (FT)	(B) TOP OF BERM EL (FT)	(C) MINIMUM DEPTH (FT)
NORTH STORMWATER POND	398.5	399.0	0.5
SOUTHWEST STORMWATER POND	385.5	387.0	1.5
SOUTHEAST STORMWATER POND	385.5	387.0	1.5

**30**  
**20** **DETAIL**  
**EMERGENCY SPILLWAY**  
SCALE: NTS

- NOTES:
- TRASH RACK WILL BE INSTALLED OVER DRAWDOWN ORIFICES TO PREVENT CLOGGING.
  - SIDE SLOPE DIMENSIONS ARE PRESENTED SUCH THAT THE PERIMETER AND STORMWATER CHANNEL CROSS SECTIONS ARE CUT LOOKING DOWNSTREAM WITH RESPECT TO THE DIRECTION OF FLOW.
  - THE LEFT SIDE SLOPE OF STORMWATER CHANNEL 17 (SWC 17) VARIES WITH EXISTING GROUND.
  - FOR PERIMETER CHANNELS (SWC 1 THROUGH 15), NON-WOVEN GEOTEXTILE SEPARATOR AND CHANNEL LINING MATERIAL WILL NOT TERMINATE AT THE CREST OF THE CHANNEL SLOPE. SEE DETAIL 22 ON SHEET 18 FOR TERMINATION OF THESE COMPONENTS ON THE PERIMETER DIKE.



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STORMWATER MANAGEMENT SYSTEM DETAILS III

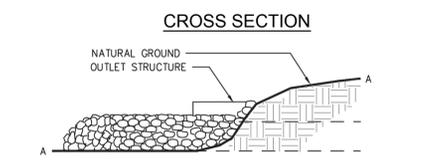
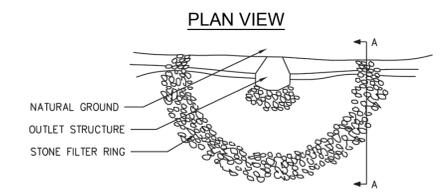
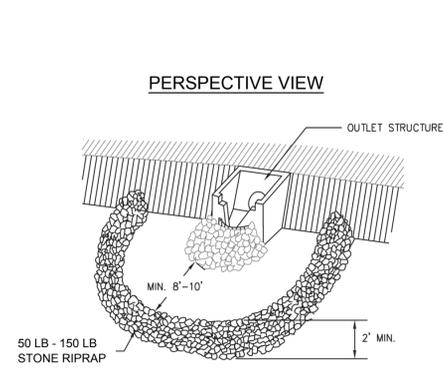
PLANT BRANCH CCR LANDFILL  
PUTNAM COUNTY, GEORGIA

**Geosyntec**  
consultants

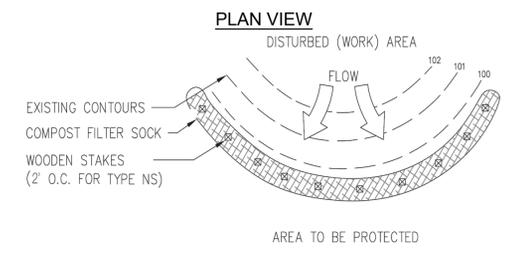
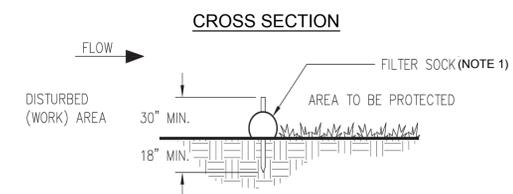
1255 ROBERTS BOULEVARD NW, SUITE 200  
KENNESAW, GEORGIA 30144-3694

GEORGIA CERTIFICATE OF AUTHORIZATION (COA) NO. PEF000260, EXP. 06/30/2024  
PHONE: 678.202.9500  
WWW.GEOSYNTEC.COM

PROJ. NO.	GW6364	DWG.	6364-122	EDIT	10.14.22
SCALE	AS SHOWN				
DATE	OCTOBER 2022	DRAWING 23 OF 25			

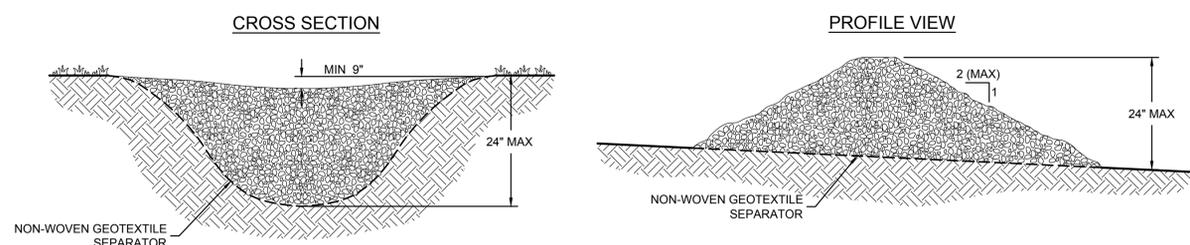


**32**  
**20** DETAIL  
**Fr** FILTER RING  
SCALE: NTS  
SOURCE: GSWCC



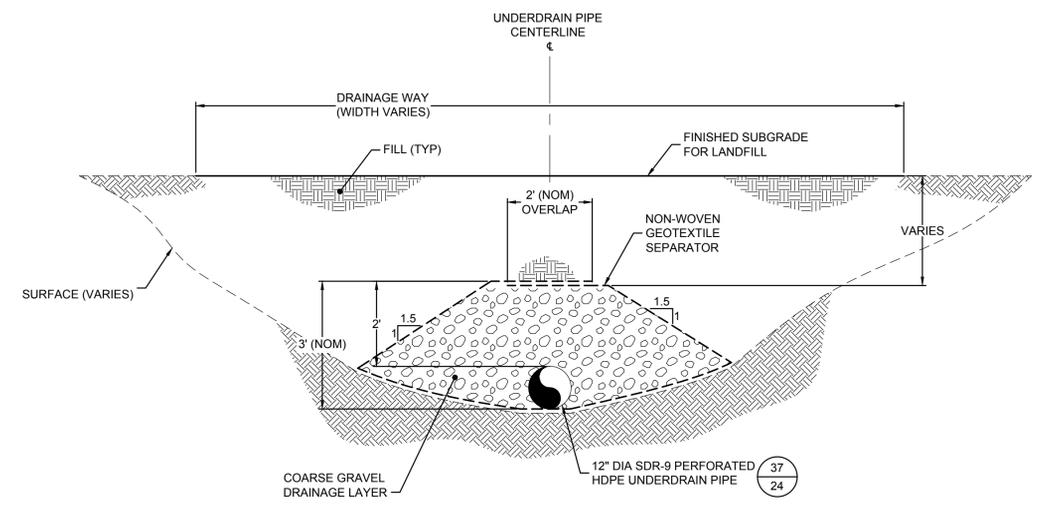
NOTE:  
1. FILTER SOCK HEIGHT WILL BE EVALUATED TO MEET DESIGN CRITERIA IDENTIFIED WITHIN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA (GSWCC) AND PROVIDED WITHIN THE DETAILED DESIGN. THE MINIMUM DIAMETER WILL BE 18".

**Sd1-NS** **34**  
**20** DETAIL  
FILTER SOCK  
SCALE: NTS  
SOURCE: GSWCC

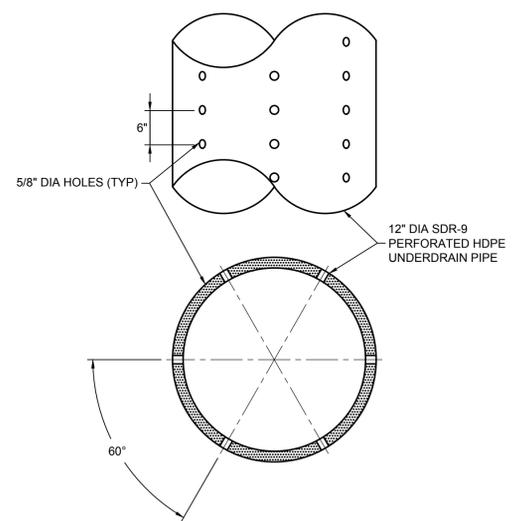


NOTES:  
1. CHECK DAMS ARE TO BE USED ONLY IN SMALL OPEN CHANNELS (THEY ARE NOT TO BE USED IN LIVE STREAMS).  
2. THE DRAINAGE AREA FOR STONE CHECK DAMS SHALL NOT EXCEED TWO ACRES.  
3. STONE CHECK DAM HEIGHT AND SPACING WILL BE EVALUATED TO MEET DESIGN CRITERIA IDENTIFIED WITHIN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA (GSWCC) AND PROVIDED WITHIN THE DETAILED DESIGN (SPACED SUCH THAT THE TOE OF THE UPSTREAM DAM IS AT THE SAME ELEVATION AS THE TOP OF THE DOWNSTREAM DAM).

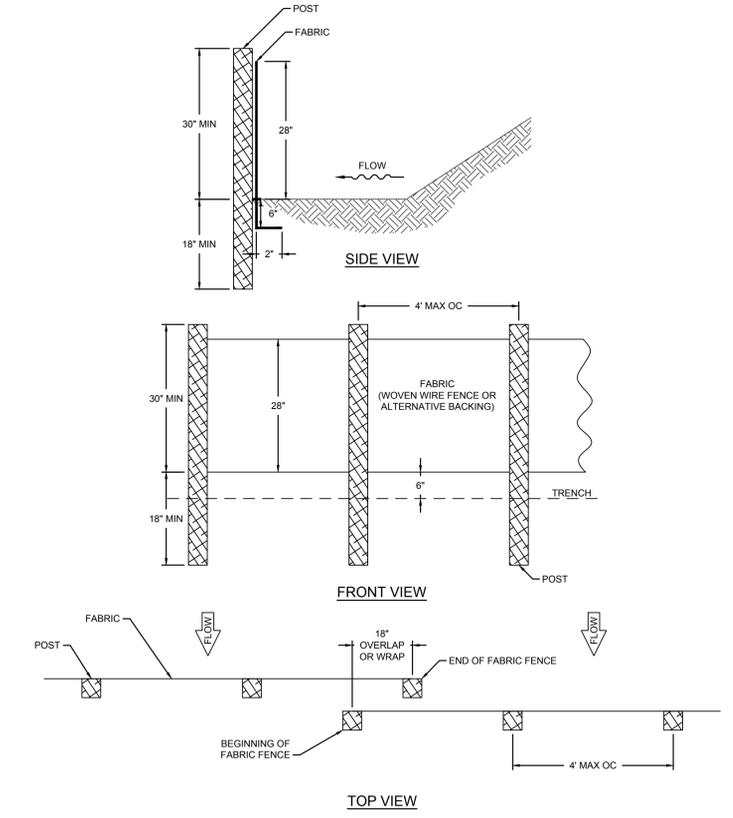
**Cd-S** **33**  
**20** DETAIL  
STONE CHECK DAM  
SCALE: NTS  
SOURCE: GSWCC



**36**  
**5** DETAIL  
UNDERDRAIN PIPE  
SCALE: NTS



**37**  
**24** DETAIL  
PERFORATIONS OF UNDERDRAIN PIPE  
SCALE: NTS



**SILT FENCE SPACING**

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

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

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

**Sd1-S** **35**  
**20** DETAIL  
SILT FENCE - TYPE SENSITIVE  
SCALE: NTS  
SOURCE: GSWCC



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REV	DATE	DESCRIPTION	SRN	MI
0	10.14.22	GA EPD SUBMITTAL		

EROSION AND SEDIMENT CONTROL AND MISCELLANEOUS DETAILS

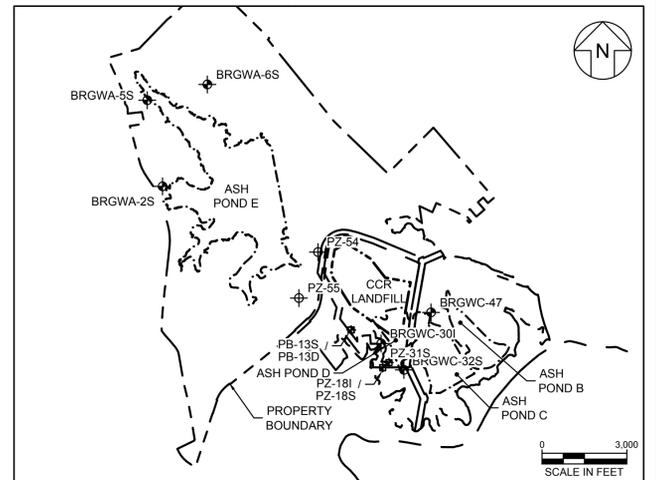
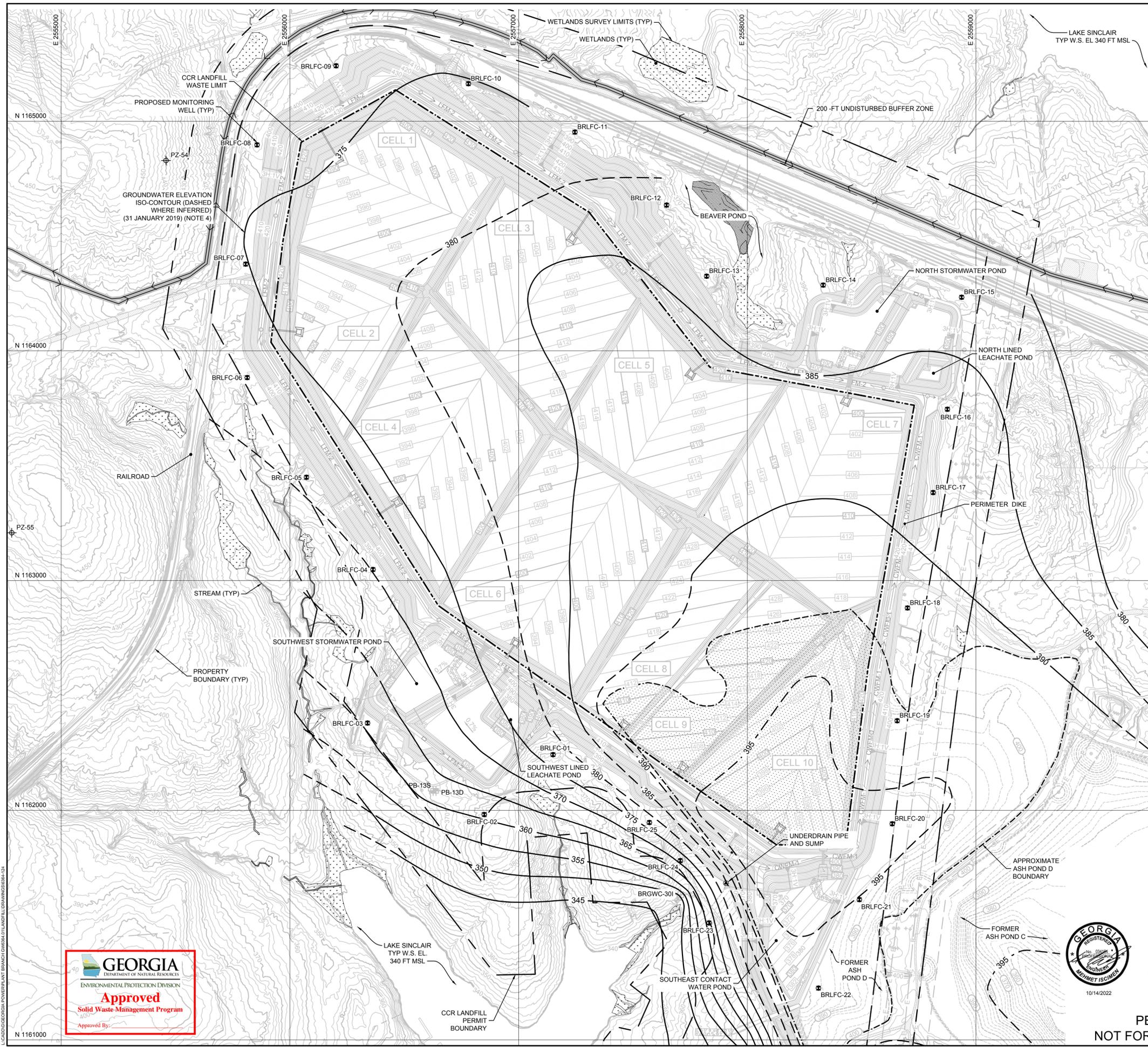
PLANT BRANCH CCR LANDFILL  
PUTNAM COUNTY, GEORGIA

**Geosyntec consultants**  
1255 ROBERTS BOULEVARD NW, SUITE 200  
KENNESAW, GEORGIA 30144-3694  
PHONE: 678.202.9500  
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GEORGIA CERTIFICATE OF AUTHORIZATION (COA) NO. PEF000260, EXP. 06/30/2024

PROJ. NO.	GW6364	DWG.	6364-123	EDIT	10.14.22
SCALE	AS SHOWN	DRAWING 24 OF 25			
DATE	OCTOBER 2022				

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**EXISTING MONITORING NETWORK WELL AND GROUNDWATER PIEZOMETER MAP (NOTES 2 AND 3)**

**EXISTING MONITORING NETWORK WELL/GROUNDWATER PIEZOMETER TABLE (NOTES 2 AND 3)**

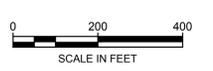
ID	NORTHING	EASTING	ID	NORTHING	EASTING
BRGWA-2S	1167139.70	2549952.60	PZ-18S	1160757.30	2557747.40
BRGWA-5S	1170177.50	2549415.50	PZ-18I	1160766.20	2557745.50
BRGWA-6S	1170732.90	2551540.80	PZ-31S	1160936.90	2557971.80
BRGWC-30I	1161607.60	2557691.80	PZ-54	1164828.70	2555458.30
BRGWC-32S	1160677.70	2558497.90	PZ-55	1163208.00	2554783.60
BRGWC-47	1162700.70	2559456.70	PB-13S	1162084.40	2556262.10
			PB-13D	1162084.50	255638.80

**PROPOSED MONITORING WELL TABLE**

ID	NORTHING	EASTING	ID	NORTHING	EASTING
BRLFC-01	1162242.02	2557150.34	BRLFC-13	1164325.04	2557822.04
BRLFC-02	1161981.31	2556849.81	BRLFC-14	1164286.26	2558331.65
BRLFC-03	1162379.44	2556339.26	BRLFC-15	1164233.41	2558936.98
BRLFC-04	1163048.02	2556362.99	BRLFC-16	1163745.64	2558874.65
BRLFC-05	1163449.76	2556072.26	BRLFC-17	1163383.08	2558812.41
BRLFC-06	1163883.55	2555813.17	BRLFC-18	1162880.75	2558700.30
BRLFC-07	1164377.60	2555806.51	BRLFC-19	1162389.46	2558655.17
BRLFC-08	1164896.46	2555856.03	BRLFC-20	1161941.00	2558633.71
BRLFC-09	1165240.88	2556201.74	BRLFC-21	1161610.91	2558489.93
BRLFC-10	1165162.99	2556780.26	BRLFC-22	1161225.48	2558311.09
BRLFC-11	1164952.28	2557246.08	BRLFC-23	1161509.38	2557832.88
BRLFC-12	1164634.47	2557647.01	BRLFC-24	1161780.67	2557706.62
			BRLFC-25	1161946.68	2557571.66

- NOTES:**
- MONITORING WELLS WILL BE SCREENED IN THE SAPROLITE AND PARTIALLY WEATHERED ROCK UNITS (IF PRESENT) TO TARGET THE PRIMARY ZONE OF GROUNDWATER FLOW IN THE UPPERMOST AQUIFER.
  - EXISTING WELL LOCATIONS BRGWA-2S, BRGWA-5S, AND BRGWA-6S LOCATED UPGRADIENT OF ASH POND E WERE SELECTED AS BACKGROUND LOCATIONS. EXISTING PIEZOMETERS PZ-54 AND PZ-55, LOCATED SIDE-GRADIENT OF ASH POND E ARE POTENTIAL BACKGROUND LOCATIONS. THESE WELLS ARE ALL SCREENED AT THE APPROPRIATE DEPTHS WITHIN THE SAME GEOLOGIC FORMATION AS THE PROPOSED GROUNDWATER MONITORING NETWORK.
  - EXISTING WELLS AND PIEZOMETERS SHOWN ON THE EXISTING MONITORING NETWORK WELL AND GROUNDWATER PIEZOMETER MAP AND TABLE ON THIS DRAWING (BRGWC-30I, BRGWC-32S, PB-13S, PB-13D, PZ-18S, PZ-18I, PZ-31S, AND BRGWC-47) WILL BE USED FOR DEPTH TO WATER MEASUREMENTS AND POTENTIOMETRIC SURFACE EVALUATION. THESE LOCATIONS ARE NOT PART OF THE COMPLIANCE MONITORING WELL NETWORK FOR THE CCR LANDFILL.
  - POTENTIOMETRIC SURFACE CONTOURS SHOWN ON THIS DRAWING WERE PREPARED BASED ON WATER LEVEL MEASUREMENTS RECORDED ON 31 JANUARY 2019 AND OBTAINED FROM "SITE ACCEPTABILITY REPORT FOR PROPOSED CCR LANDFILL" PREPARED BY GEOSYNTEC CONSULTANTS AND DATED JULY 2019.
  - IN ACCORDANCE WITH THE SITE LIMITATIONS ISSUED BY THE GA EPD ON 19 JUNE 2020, LINER GRADES WITHIN THE HATCHED AREA (I.E. WITHIN ASH POND D LIMITS) ARE DESIGNED TO MAINTAIN: (I) A MINIMUM OF TEN FEET ABOVE THE ORIGINAL GROUND SURFACE (I.E. PRE-DEVELOPMENT SURFACE) ALONG A MINIMUM OF 100 FEET ZONE ON EACH SIDE OF THE AXIS OF THE NORTH-EAST-SOUTH WEST ORIENTED TOPOGRAPHIC DEPRESSION; AND (II) A MINIMUM OF FIVE FEET ABOVE THE ORIGINAL GROUND SURFACE IN ALL OTHER AREAS. FOR THE REST OF THE CCR LANDFILL, LINER GRADES ARE DESIGNED TO MAINTAIN A MINIMUM OF TEN FEET ABOVE THE POTENTIOMETRIC SURFACE SHOWN ON THIS DRAWING.

**CERTIFICATION STATEMENT**  
 I HAVE REVIEWED THE INFORMATION PRESENTED IN THIS DRAWING, AND IN MY PROFESSIONAL OPINION, ALL CONTAINMENT STRUCTURES ARE DESIGNED TO RESIST A MAXIMUM HORIZONTAL GROUND ACCELERATION OF 0.1239G.  
 SIGNATURE: MEHMET ISCIMEN, P.E. NO.034164



**Georgia Power**  
 PERMIT DRAWINGS  
 NOT FOR CONSTRUCTION



REV	DATE	DESCRIPTION	SRN	MI
0	10.14.22	GA EPD SUBMITTAL		

**SITE GROUNDWATER MONITORING PLAN**

**PLANT BRANCH CCR LANDFILL**  
 PUTNAM COUNTY, GEORGIA

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

GEORGIA CERTIFICATE OF AUTHORIZATION (COA) NO. PEF000260, EXP. 06/30/2024

PROJ. NO.	GW6364	DWG.	6364-124	EDIT	10.14.22
SCALE	1" = 200'				
DATE	OCTOBER 2022				

**DRAWING 25 OF 25**

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