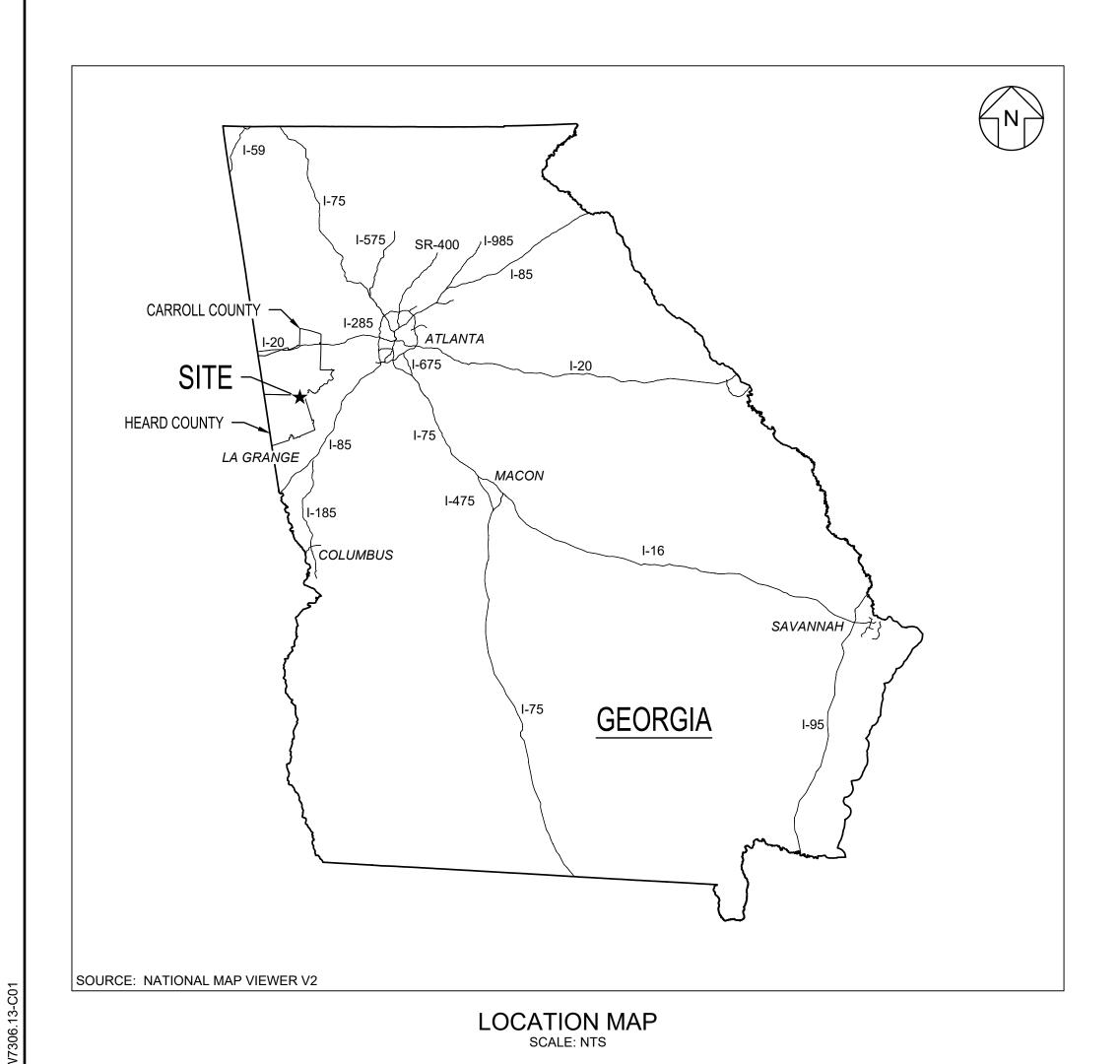
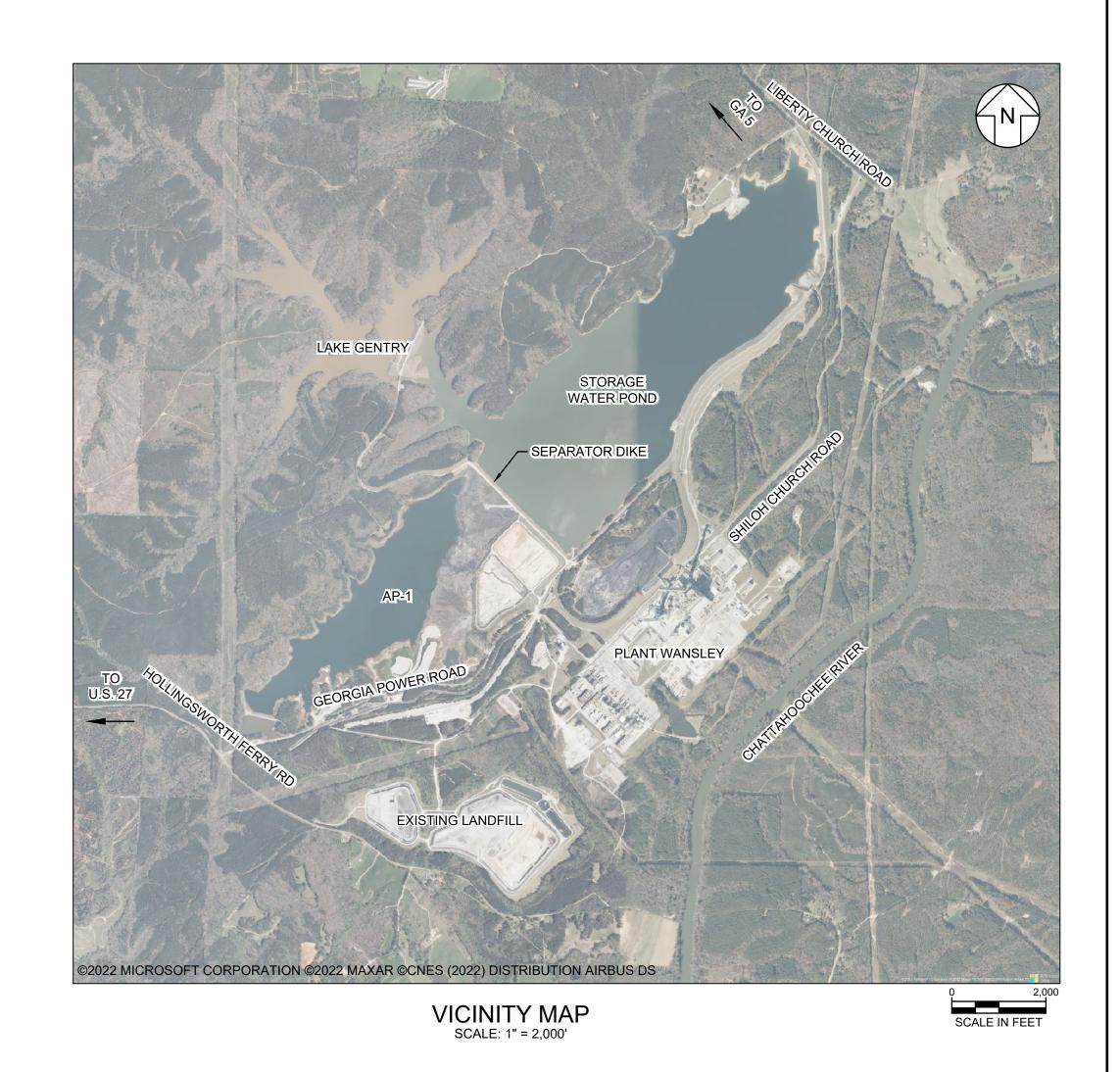
PLANT WANSLEY ASH POND 1 CLOSURE BY REMOVAL HEARD AND CARROLL COUNTIES, GEORGIA CCR PERMIT DRAWINGS

CCR PERMIT DRAWINGS FEBRUARY 2025



	LIST OF SHEETS
DRAWING NO	DRAWING TITLE
01	COVER SHEET
02	LEGENDS, SYMBOLS, AND ABBREVIATIONS
03	PROPERTY BOUNDARY SURVEY AND LEGAL DESCRIPTION
04	SITE GROUNDWATER MONITORING PLAN
05	EXISTING SITE CONDITIONS - TOPOGRAPHY AND AP-1 BATHYMETRY
06	CCR REMOVAL PLAN - OVERVIEW
07	CCR REMOVAL PLAN - I
08	CCR REMOVAL PLAN - II
09	CCR REMOVAL PLAN - III
10	CCR REMOVAL PLAN - IV
11	CCR REMOVAL PLAN - V
12	SITE RESTORATION GRADING PLAN
13	SEPARATOR DIKE PLAN
14	SITE SECTIONS - I
15	SITE SECTIONS - II
16	SEPARATOR DIKE SECTIONS
17	CONSTRUCTION SEQUENCING PLAN - I
18	CONSTRUCTION SEQUENCING PLAN - II
19	FINAL STORMWATER AND ESC PLAN
20	STORMWATER AND ESC DETAILS - I
21	STORMWATER AND ESC DETAILS - II
22	STORMWATER AND ESC DETAILS - III



PREPARED FOR:



GEORGIA POWER ENVIRONMENTAL AFFAIRS 241 RALPH MCGILL BOULEVARD NE ATLANTA, GEORGIA 30308-3374 TELEPHONE: 404.506.6505 EMAIL: GPCENV@SOUTHERNCO.COM

PHYSICAL SITE ADDRESS:
PLANT WANSLEY
1371 LIBERTY CHURCH ROAD
CARROLLTON, GA 30116

PREPARED BY:



1255 ROBERTS BOULEVARD NW, SUITE 200 KENNESAW, GEORGIA 30144-3694 TELEPHONE: 678.202.9500





	G	eosyntec consultants	G	eorg	ia
	PLANT	WANSLEY ASH POND CLOSURE HEARD AND CARROLL COUNTIES, GE		MOVAL	
		COVER SHEET			
REV	DATE	DESCRIPTION		DRN	APP
0	02.06.25	GA EPD CCR PERMIT DRAWINGS		DLJ	JMG

PROJ. NO. GW9155

SCALE

AS SHOWN

DATE

PHONE: 678.202.9500 WWW.GEOSYNTEC.COM

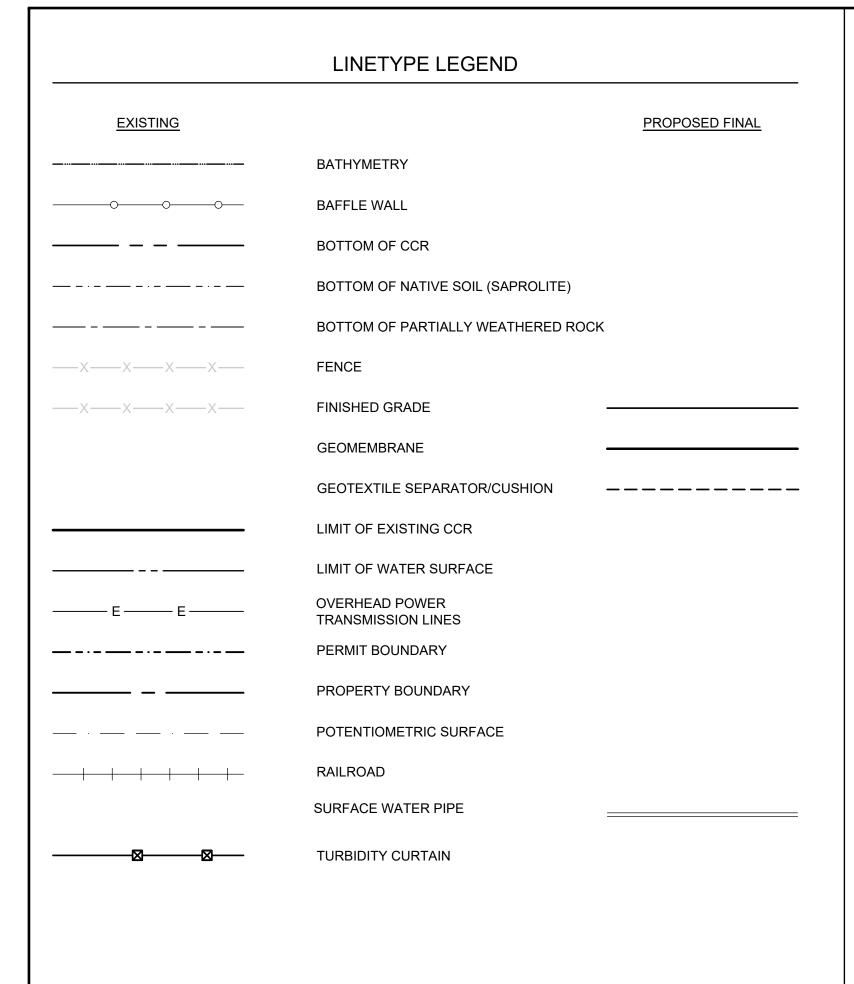
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DWG. GW7306.13-C01 EDIT 2/6/25

DRAWING 01 OF 22



SYMBOL LEGEND

MONITORING WELL - ASSESSMENT

MONITORING WELL - UPGRADIENT

MONITORING WELL - DOWNGRADIENT

FREE WATER SURFACE

PIEZOMETER

SLOPE GRADE

SLOPE LABEL

VEGETATION

SLOPE INDICATOR

TRAILER OR BUILDING

WATER FLOW DIRECTION

EXISTING

♣ WGWC-11

▲ WGWC-11

WGWA-7

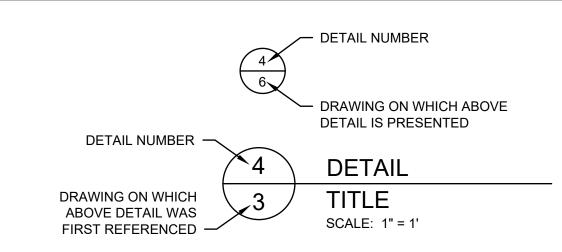
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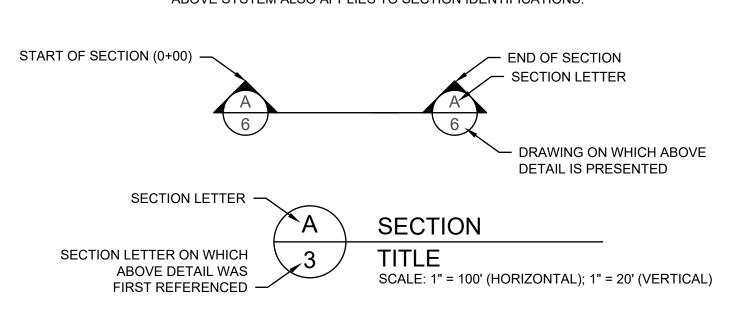
CREST

DETAIL AND SECTION IDENTIFICATION LEGEND



EXAMPLE: DETAIL NUMBER 4 WHICH IS PRESENTED ON DRAWING NO. 6 WAS FIRST REFERENCED ON DRAWING NO. 3.

ABOVE SYSTEM ALSO APPLIES TO SECTION IDENTIFICATIONS.



EXAMPLE: SECTION LETTER "A" WHICH IS PRESENTED ON DRAWING NO. 6 WAS FIRST REFERENCED ON DRAWING NO. 3.

NOTE: CONVENTION PROVIDED ABOVE IS APPLICABLE

HATCH PATTERN LEGEND

<u>SYMBOL</u> COMPONENT

CONCRETE

CCR

CONTRACTOR LAY DOWN AREA DEEP SOIL MIX ZONE

RIPRAP - SEEPAGE BERM

PROTECTIVE SOIL LAYER

SAND

HYDROSEED

RIPRAP

WATER SURFACE

ABBREVIATIONS

PERCENT OR PERCENTILE

AASHTO AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS

ACRES ASH POND 1 AP-1

APPROVED BY APPROX APPROXIMATE

AMERICAN SOCIETY FOR TESTING AND MATERIALS

BEST MANAGEMENT PRACTICE

COAL COMBUSTION RESIDUALS CONSTRUCTION QUALITY ASSURANCE

CENTERLINE DIAMETER

> DRAWN BY DWG DRAWING

EASTING E.G. FOR EXAMPLE

EL **ELEVATION** FT FEET

GA EPD GEORGIA ENVIRONMENTAL PROTECTION DIVISION

GDOT GEORGIA DEPARTMENT OF TRANSPORTATION GEORGIA POWER COMPANY

GSWCC GEORGIA SOIL AND WATER CONSERVATION COMMISSION

HORIZONTAL TO VERTICAL LENGTH RATIO FOR A SLOPE

HIGH DENSITY POLYETHYLENE

HECP HYDRAULIC EROSION CONTROL PRODUCTS

THAT IS **IDENTIFIER** INCH

INV INVERT LBS POUNDS

LINEAR LOW DENSITY POLYETHYLENE

LOD LIMITS OF DISTURBANCE

MAX MAXIMUM

ONE-THOUSANDTH OF AN INCH

MIN MINIMUM

NITROGEN / NORTH / NORTHING

NAD83 NORTH AMERICAN DATUM OF 1983 NAVD88 NORTH AMERICAN VERTICAL DATUM OF 1988

NO. NUMBER

NPDES NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

NITROGEN-PHOSPHORUS-POTASSIUM

NATIONAL STONE ASSOCIATION

NORTHWEST ON CENTER

PERIMETER CHANNEL

PARTS PER MILLION

PARTIALLY WEATHERED ROCK

PIEZOMETER

ROLLED EROSION CONTROL PRODUCTS

SOUTHERN COMPANY SERVICES SILT FENCE

SQUARE FEET

STATION

TYP **TYPICAL**

WATER SURFACE W.S.

REFERENCE NOTES

GENERAL NOTES:

1. GRID COORDINATE SYSTEM CORRESPONDS TO NAD83, GEORGIA WEST ZONE.

2. ELEVATIONS PRESENTED ARE IN FEET, NAVD88.

3. TOPOGRAPHY (I.E., EXISTING GROUND CONTOURS) WAS OBTAINED BY LIDAR SURVEY. BATHYMETRY (I.E., BOTTOM OF POND CONTOURS) WAS OBTAINED BY MULTIBEAM HYDROGRAPHIC SURVEY COMPLETED IN AUGUST 2019. BOTH SURVEYS WERE COMPLETED AND PROVIDED BY ARC SURVEYING AND MAPPING IN NOVEMBER 2019.

4. BATHYMETRY REFLECTS THE CONDITIONS AT THE TIME OF THE SURVEY AND MAY NOT REFLECT CURRENT CONDITIONS.

5. PLANIMETRIC FEATURES AND PROPERTY BOUNDARY ARE APPROXIMATE AND WERE OBTAINED FROM ELECTRONIC FILES PROVIDED BY SCS IN NOVEMBER 2016.

6. THE LATERAL LIMIT OF CCR IS APPROXIMATE BASED ON DRAWINGS PROVIDED BY SCS AND FIELD DISCUSSIONS WITH PLANT WANSLEY STAFF. FIELD VERIFICATION OF THE ACTUAL LIMIT OF CCR DURING CONSTRUCTION WILL

7. THE LATERAL LIMIT OF WATER SURFACE WITHIN AP-1 IS BASED ON A POOL ELEVATION OF 781.5 FT, WHICH MAY FLUCTUATE WITH SEASONAL VARIATIONS.

8. THE BOTTOM OF CCR SURFACE WAS APPROXIMATED BASED ON A TOPOGRAPHIC SURVEY, PERFORMED FOLLOWING THE CONSTRUCTION OF THE SEPARATOR DIKE AND PRIOR TO RECEIPT OF CCR IN THE SURFACE IMPOUNDMENT (SHEET G-10023, DATED 01 MARCH 1976, PROVIDED BY SCS). IN AREAS WHERE THE POST-CONSTRUCTION TOPOGRAPHIC SURFACE IS ABOVE THE 2019 BATHYMETRIC SURFACE, THE BOTTOM OF CCR SURFACE WAS ASSUMED TO BE THE ELEVATION OF THE BATHYMETRIC SURFACE. GEOTECHNICAL DATA FROM 24 BORINGS COLLECTED BY GEOSYNTEC IN SPRING 2017 AND 30 CPTS COLLECTED BY GEOSYNTEC IN SPRING 2019 ALONG THE PROPOSED CONTAINMENT STRUCTURE ALIGNMENT WERE INTEGRATED INTO THE BOTTOM OF CCR SURFACE. BOTTOM OF CCR IS TO BE FIELD VERIFIED WITHIN THE CLOSURE BY REMOVAL

9. TOP OF EXISTING CCR WAS ASSUMED AS THE BATHYMETRIC SURFACE IN AREAS COVERED BY WATER AND AS EXISTING GROUND IN DRY AREAS.

10. SUBGRADE SURFACES (NATIVE SOIL, PWR, AND ROCK) WERE DEVELOPED FROM HISTORICAL BORINGS AND SITE DATA: (I) COLLECTED BY GEOSYNTEC CONSULTANTS IN 2016, 2017, AND 2019; AND (II) PROVIDED BY SCS IN

11. NO WORK SHALL SIGNIFICANTLY IMPACT THE EXISTING SEPARATOR DIKE BETWEEN AP-1 AND THE STORAGE WATER POND.

12. DEWATERING OF CCR DURING CLOSURE CONSTRUCTION WILL BE PERFORMED IN ACCORDANCE WITH THE ASH POND WATER MANAGEMENT PLAN (SECTION 3 OF PART B WITHIN THIS PERMIT APPLICATION).

13. CONTACT WATER FROM AP-1 DURING CLOSURE CONSTRUCTION WILL BE TREATED PRIOR TO DISCHARGE THROUGH THE NPDES OUTFALL TO MEET SPECIFICATIONS PROVIDED IN THE ASH POND DEWATERING PLAN, NPDES PERMIT NO. GA0026778, WHICH WAS APPROVED BY GA EPD ON NOVEMBER 29, 2021.

14. DUST CONTROL WILL BE MANAGED AS SPECIFIED IN THE FUGITIVE DUST CONTROL PLAN SECTION OF THE CLOSURE PLAN (SECTION 7 OF PART A WITHIN THIS PERMIT APPLICATION).

15. PERMIT BOUNDARY WAS DEVELOPED BY ESTABLISHING A MINIMUM 200-FT OFFSET UPGRADIENT OF AP-1, WHICH INCORPORATES ALL DOWNGRADIENT MONITORING WELLS, AND GENERALLY FOLLOWS THE PLANT ROAD ALONG THE SOUTH SIDE OF AP-1.

16. MONITORING WELL AND PIEZOMETER COORDINATES WERE OBTAINED FROM THE GROUNDWATER MONITORING PLAN (SECTION 6 OF PART A WITHIN THIS PERMIT APPLICATION).

17. ACCESS ROADS, ACCESS RAMPS, AND ASSOCIATED STORMWATER FEATURES WILL BE EVALUATED AS PART OF THE DETAILED DESIGN.

CONTOUR LEGEND

EXISTING PROPOSED BATHYMETRIC ELEVATION (FEET) —···— 400 —···— **EXISTING GROUND ELEVATION (FEET)**

FINISHED GRADE ELEVATION (FEET)

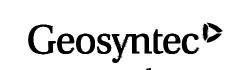
02.06.25 GA EPD CCR PERMIT DRAWINGS REV DATE DRN APP DESCRIPTION

430 —

Georgia

LEGENDS, SYMBOLS, AND ABBREVIATIONS

PLANT WANSLEY ASH POND CLOSURE BY REMOVAL HEARD AND CARROLL COUNTIES, GEORGIA



consultants

PROJ. NO.

SCALE

255 ROBERTS BOULEVARD, NW, SUITE 200 PHONE: 678.202.950 KENNESAW, GEORGIA 30144 USA

Power WWW.GEOSYNTEC.COM DWG. GW7306.13-C02 EDIT GW9155 AS SHOWN DRAWING 02 OF 22 FEBRUARY 2025

GEORGIA ENVIRONMENTAL PROTECTION DIVISION Approved **Solid Waste Management Program** Approved By: Keith Stevens Digitally signed by Keith Steven Date: 2025.02.27 10:47:49 -05'00

PROFESSIONA

MONUMENTATION LEGEND

UTILITY LEGEND

LEGAL DESCRIPTION

PLANT WANSLEY - CCR PERMITTED LANDS - MAINTENANCE AREA

ALL THAT PARCEL OR TRACT OF LAND LYING AND BEING IN LAND LOTS 172, 173, 178, AND 179 OF THE 4TH/ DISTRICT, HEARD COUNTY, GEORGIA AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

TO FIND THE POINT OF BEGINNING, COMMENCE AT A POINT, HAVING GEORGIA STATE PLANE, WEST ZONE, NAD83 COORDINATES OF: N 1245632.61 AND E 2027504.96; THENCE RUNNING SOUTH 45 DEGREES 16 MINUTES 06 SECONDS EAST A DISTANCE OF 1672.69; THENCE SOUTH 44 DEGREES 38 MINUTES 02 SECONDS A DISTANCE OF 1864.39 FEET TO A POINT AND THE POINT OF BEGINNING;

THENCE SOUTH 31 DEGREES 32 MINUTES 22 SECONDS WEST A DISTANCE OF 1773.10 FEET TO A POINT;

THENCE SOUTH 61 DEGREES 51 MINUTES 36 SECONDS WEST A DISTANCE OF 1767.17 FEET TO A POINT; THENCE NORTH 73 DEGREES 08 MINUTES 24 SECONDS WEST A DISTANCE OF 114.06 FEET TO A POINT;

THENCE NORTH 35 DEGREES 45 MINUTES 58 SECONDS EAST A DISTANCE OF 743.44 FEET TO A POINT; THENCE RUNNING ALONG A CURVE TO THE RIGHT AN ARC DISTANCE OF 6.62 FEET (SAID ARC HAVING A RADIUS OF 50.00 FEET AND BEING SUBTENDED BY A CHORD 6.61 FEET IN LENGTH WITH A BEARING OF

NORTH 39 DEGREES 33 MINUTES 31 SECONDS EAST TO A POINT; THENCE NORTH 43 DEGREES 21 MINUTES 04 SECONDS EAST A DISTANCE OF 308.09 FEET TO A POINT;

THENCE NORTH 06 DEGREES 32 MINUTES 55 SECONDS WEST A DISTANCE OF 197.31 FEET TO A POINT THENCE NORTH 39 DEGREES 06 MINUTES 30 SECONDS EAST A DISTANCE OF 509.33 FEET TO A POINT;

THENCE NORTH 69 DEGREES 09 MINUTES 15 SECONDS EAST A DISTANCE OF 444.48 FEET TO A POINT; THENCE NORTH 44 DEGREES 03 MINUTES 50 SECONDS EAST A DISTANCE OF 1377.22 FEET TO A POINT;

THENCE SOUTH 44 DEGREES 38 MINUTES 02 SECONDS EAST A DISTANCE OF 405.33 FEET TO A POINT AND THE POINT OF BEGINNING; SAID TRACT CONTAINS 44.70 ACRES (1,947,155 SQUARE FEET).

LEGAL DESCRIPTION

PLANT WANSLEY - CCR PERMITTED LANDS - ASH POND 1

ALL THAT PARCEL OR TRACT OF LAND LYING AND BEING IN LAND LOTS 166, 167, 168, 171, 172, 173, 178, 179 AND 180 OF THE 4th DISTRICT, HEARD COUNTY, GEORGIA AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

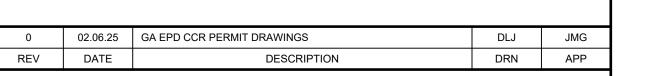
TO FIND THE POINT OF BEGINNING, COMMENCE AT THE CORNER COMMON TO LAND LOTS 158, 159, 168 AND 169, HAVING GEORGIA STATE PLANE, WEST ZONE, NAD83 COORDINATES OF: N 1247433.50 AND E 2022235.07; THENCE RUNNING SOUTH 71 DEGREES 07 MINUTES 59 SECONDS EAST A DISTANCE OF 5569.11 FEET TO A POINT AND THE POINT OF BEGINNING;

THENCE RUNNING SOUTH 45 DEGREES 16 MINUTES 06 SECONDS EAST A DISTANCE OF 1672.69 FEET TO A POINT; THENCE RUNNING SOUTH 44 DEGREES 38 MINUTES 02 SECONDS EAST A DISTANCE OF 1864.39 FEET TO A POINT; THENCE RUNNING SOUTH 31 DEGREES 32 MINUTES 22 SECONDS WEST A DISTANCE OF 1773.10 FEET TO A POINT; THENCE RUNNING SOUTH 61 DEGREES 51 MINUTES 36 SECONDS WEST A DISTANCE OF 1767.17 FEET TO A POINT; THENCE RUNNING NORTH 73 DEGREES 08 MINUTES 24 SECONDS WEST A DISTANCE OF 169.47 FEET TO A POINT; THENCE RUNNING SOUTH 82 DEGREES 10 MINUTES 14 SECONDS WEST A DISTANCE OF 70.19 FEET TO A POINT; THENCE RUNNING ALONG A CURVE TO THE RIGHT AN ARC DISTANCE OF 480.70 FEET (SAID ARC HAVING A RADIUS OF 1511.09 FEET AND BEING SUBTENDED BY A CHORD 478.68 FEET IN LENGTH LYING TO THE NORTH OF SAID ARC AND BEARING NORTH 84 DEGREES 54 MINUTES 34 SECONDS WEST) TO A POINT; THENCE RUNNING ALONG A CURVE TO THE LEFT AN ARC DISTANCE OF 602.47 FEET (SAID ARC HAVING A RADIUS OF 947.69 FEET AND BEING SUBTENDED BY A CHORD 592.38 FEET IN LENGTH LYING TO THE SOUTH OF SAID ARC AND BEARING SOUTH 85 DEGREES 59 MINUTES 30 SECONDS WEST) TO A POINT; THENCE RUNNING SOUTH 67 DEGREES 34 MINUTES 27 SECONDS WEST A DISTANCE OF 1519.55 FEET TO A POINT; THENCE RUNNING ALONG A CURVE TO THE LEFT AN ARC DISTANCE OF 310.83 FEET (SAID ARC HAVING A RADIUS OF 4332.68 FEET AND BEING SUBTENDED BY A CHORD 310.76 FEET IN LENGTH LYING TO THE SOUTHEAST OF SAID ARC AND BEARING SOUTH 65 DEGREES 01 MINUTES 46 SECONDS WEST) TO A POINT; THENCE RUNNING SOUTH 59 DEGREES 04 MINUTES 48 SECONDS WEST A DISTANCE OF 668.39 FEET TO A POINT; THENCE RUNNING ALONG A CURVE TO THE RIGHT AN ARC DISTANCE OF 387.93 FEET (SAID ARC HAVING A RADIUS OF 1320.98 FEET AND BEING SUBTENDED BY A CHORD 386.54 FEET IN LENGTH LYING TO THE NORTHWEST OF SAID ARC AND BEARING SOUTH 64 DEGREES 01 MINUTES 22 SECONDS WEST) TO A POINT; THENCE RUNNING SOUTH 76 DEGREES 34 MINUTES 49 SECONDS WEST A DISTANCE OF 114.84 FEET TO A POINT; THENCE RUNNING NORTH 40 DEGREES 04 MINUTES 42 SECONDS WEST A DISTANCE OF 446.67 FEET TO A POINT; THENCE RUNNING NORTH 77 DEGREES 50 MINUTES 46 SECONDS WEST A DISTANCE OF 681.68 FEET TO A POINT; THENCE RUNNING SOUTH 45 DEGREES 00 MINUTES 00 SECONDS WEST A DISTANCE OF 116.35 FEET TO A POINT; THENCE RUNNING SOUTH 12 DEGREES 09 MINUTES 14 SECONDS WEST A DISTANCE OF 225.07 FEET TO A POINT; THENCE RUNNING SOUTH 45 DEGREES 00 MINUTES 00 SECONDS WEST A DISTANCE OF 188.93 FEET TO A POINT; THENCE RUNNING NORTH 02 DEGREES 16 MINUTES 55 SECONDS EAST A DISTANCE OF 1045.84 FEET TO A POINT; THENCE RUNNING NORTH 45 DEGREES 04 MINUTES 24 SECONDS EAST A DISTANCE OF 243.29 FEET TO A POINT; THENCE RUNNING NORTH 62 DEGREES 11 MINUTES 18 SECONDS EAST A DISTANCE OF 498.70 FEET TO A POINT; THENCE RUNNING NORTH 21 DEGREES 37 MINUTES 19 SECONDS EAST A DISTANCE OF 754.92 FEET TO A POINT; THENCE RUNNING NORTH 55 DEGREES 23 MINUTES 23 SECONDS EAST A DISTANCE OF 786.67 FEET TO A POINT; THENCE RUNNING NORTH 33 DEGREES 17 MINUTES 46 SECONDS EAST A DISTANCE OF 1096.72 FEET TO A POINT; THENCE RUNNING NORTH 31 DEGREES 26 MINUTES 36 SECONDS EAST A DISTANCE OF 722.89 FEET TO A POINT; THENCE RUNNING NORTH 45 DEGREES 01 MINUTES 42 SECONDS EAST A DISTANCE OF 1401.06 FEET TO A POINT; THENCE RUNNING NORTH 62 DEGREES 41 MINUTES 02 SECONDS EAST A DISTANCE OF 1563.49 FEET TO A POINT AND THE POINT OF BEGINNING;

SAID TRACT CONTAINS 511.48 ACRES (22,279,888 SQUARE FEET).







PROPERTY BOUNDARY SURVEY AND LEGAL DESCRIPTION

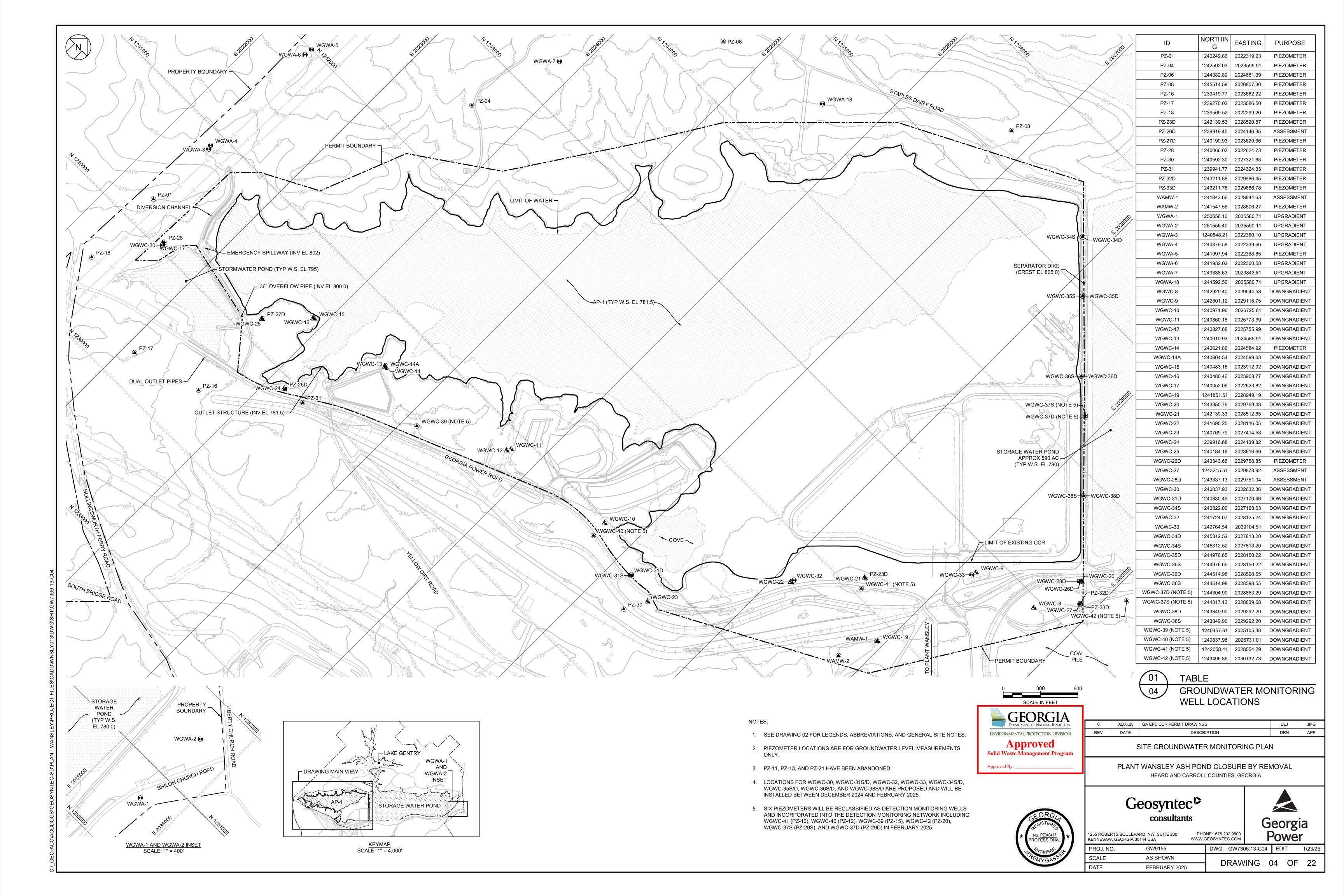
PLANT WANSLEY ASH POND CLOSURE BY REMOVAL HEARD AND CARROLL COUNTIES, GEORGIA

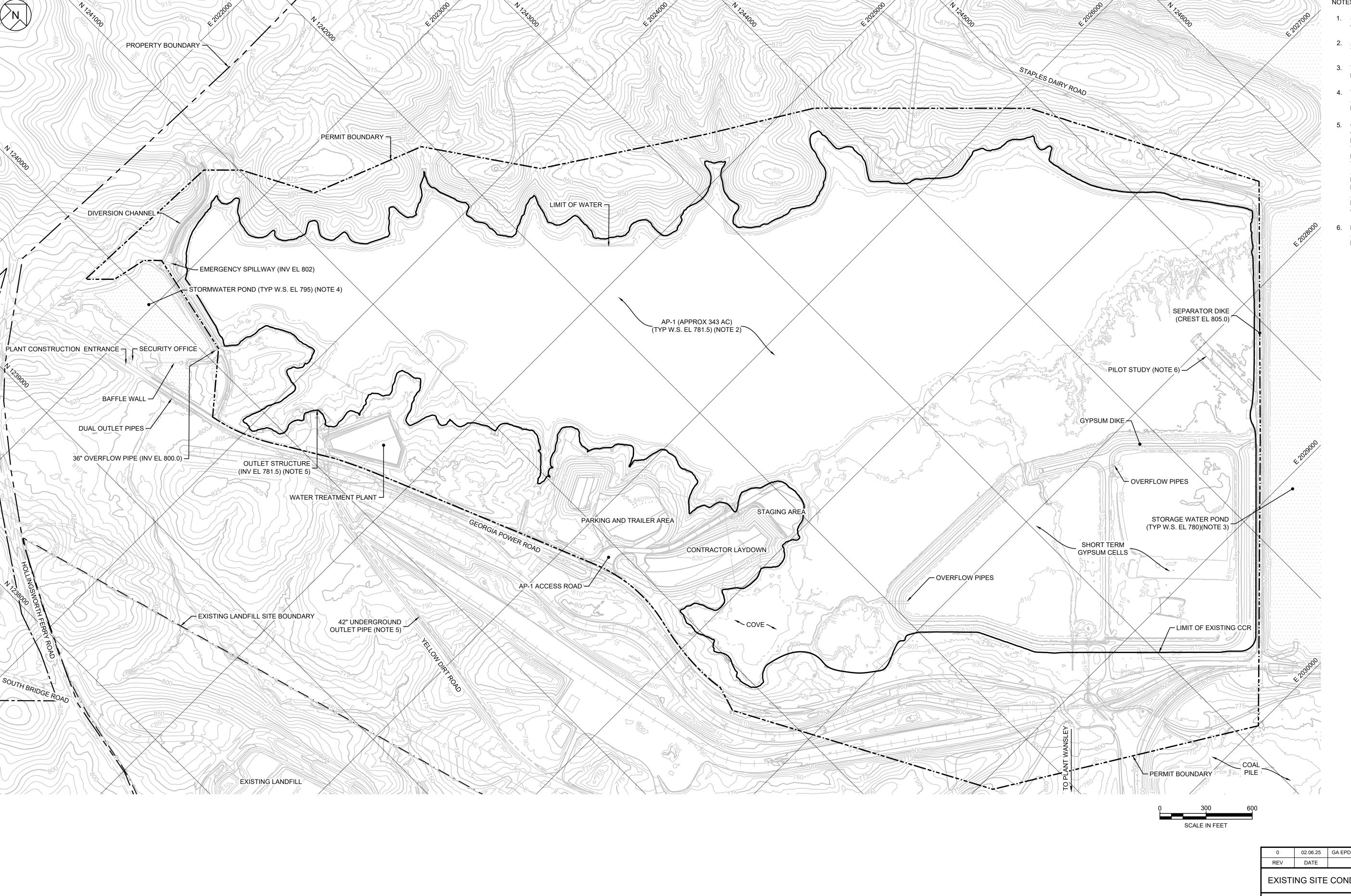


255 ROBERTS BOULEVARD, NW, SUITE 200 PHONE: 678.202.950 WWW.GEOSYNTEC.COM KENNESAW. GEORGIA 30144 USA

Georgia Power

PROJ. NO. GW9155 DWG. GW7306.13-C03 | EDIT SCALE AS SHOWN DRAWING 03 OF 22 FEBRUARY 2025





- SEE DRAWING 02 FOR LEGENDS, ABBREVIATIONS, AND GENERAL SITE NOTES.
- 2. ACREAGE PRESENTED WITHIN AP-1 REPRESENTS THE AREA WITHIN THE LIMIT OF EXISTING CCR.
- 3. WATER WITHIN THE STORAGE WATER POND IS NON-CONTACT WATER.
- 4. WATER WITHIN THE STORMWATER POND TO THE WEST OF AP-1 IS NON-CONTACT WATER. THIS POND IS FED AND DISCHARGES SURFACE WATER FROM OFFSITE.
- 5. CONCRETE OUTLET STRUCTURE CONTAINS ORIFICES CONTROLLED BY SLUICE GATES, WHICH WILL BE CLOSED DURING AP-1 CLOSURE CONSTRUCTION. IN ACCORDANCE WITH THE GA EPD APPROVED ASH POND DEWATERING PERMIT, DISCHARGES FROM AP-1 DURING CONSTRUCTION WILL BE ROUTED THROUGH THE WATER TREATMENT PLANT AND THEN CONVEYED BY THE 42-INCH PIPE TO THE PLANT PRIOR TO DISCHARGE INTO THE STORMWATER RETENTION POND. THE STORMWATER RETENTION POND IS SAMPLED IN ACCORDANCE WITH THE NPDES PERMIT (GA0026778) AND DISCHARGED THROUGH PERMITTED OUTFALL 01 TO THE CHATTAHOOCHEE RIVER.
- PILOT STUDY AREA INCLUDES CCR THAT WAS PREVIOUSLY STABILIZED WITH PORTLAND CEMENT AS WELL AS GAB. BOTH WILL BE REMOVED DURING CONSTRUCTION.

02.06.25 GA EPD CCR PERMIT DRAWINGS DRN APP DESCRIPTION EXISTING SITE CONDITIONS - TOPOGRAPHY AND AP-1 BATHYMETRY

> PLANT WANSLEY ASH POND CLOSURE BY REMOVAL HEARD AND CARROLL COUNTIES, GEORGIA



DATE

GEORGIA

DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

Approved

consultants

FEBRUARY 2025

1255 ROBERTS BOULEY KENNESAW, GEORGIA	, ,		GEOSYNTEC.COM		Po	wer	,	
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DWG 11

KEYMAP

GEORGIA

DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

Approved

Solid Waste Management Program

Approved By: Keith Stevens Digitally signed by Keith Stevens Date: 2025.02.27 10:47:49-05'00'

DRN APP

Georgia

Power

DWG. GW7306.13-C06 | EDIT 5/7/24

DRAWING 06 OF 22

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GW9155

AS SHOWN

FEBRUARY 2025

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

PROJ. NO.

SCALE

DATE

consultants

PHONE: 678.202.9500 WWW.GEOSYNTEC.COM



DESIGN AND CONTRACTOR WORK PLANS.

SEE DRAWINGS 07 THROUGH 11.

CCR REMOVAL.

5. CCR VERIFICATION OF REMOVAL WILL BE COMPLETED BY THE CQA CONSULTANT ON A 100-FT BY 100-FT GRID SYSTEM. FOLLOWING VERIFICATION OF CCR

6. 100-FT BY 100-FT GRID SYSTEM IS NOT SHOWN ON THIS DRAWING FOR CLARITY.

REMOVAL, THE CONTRACTOR WILL REMOVE 6-INCHES OF NATIVE SOIL AND CQA

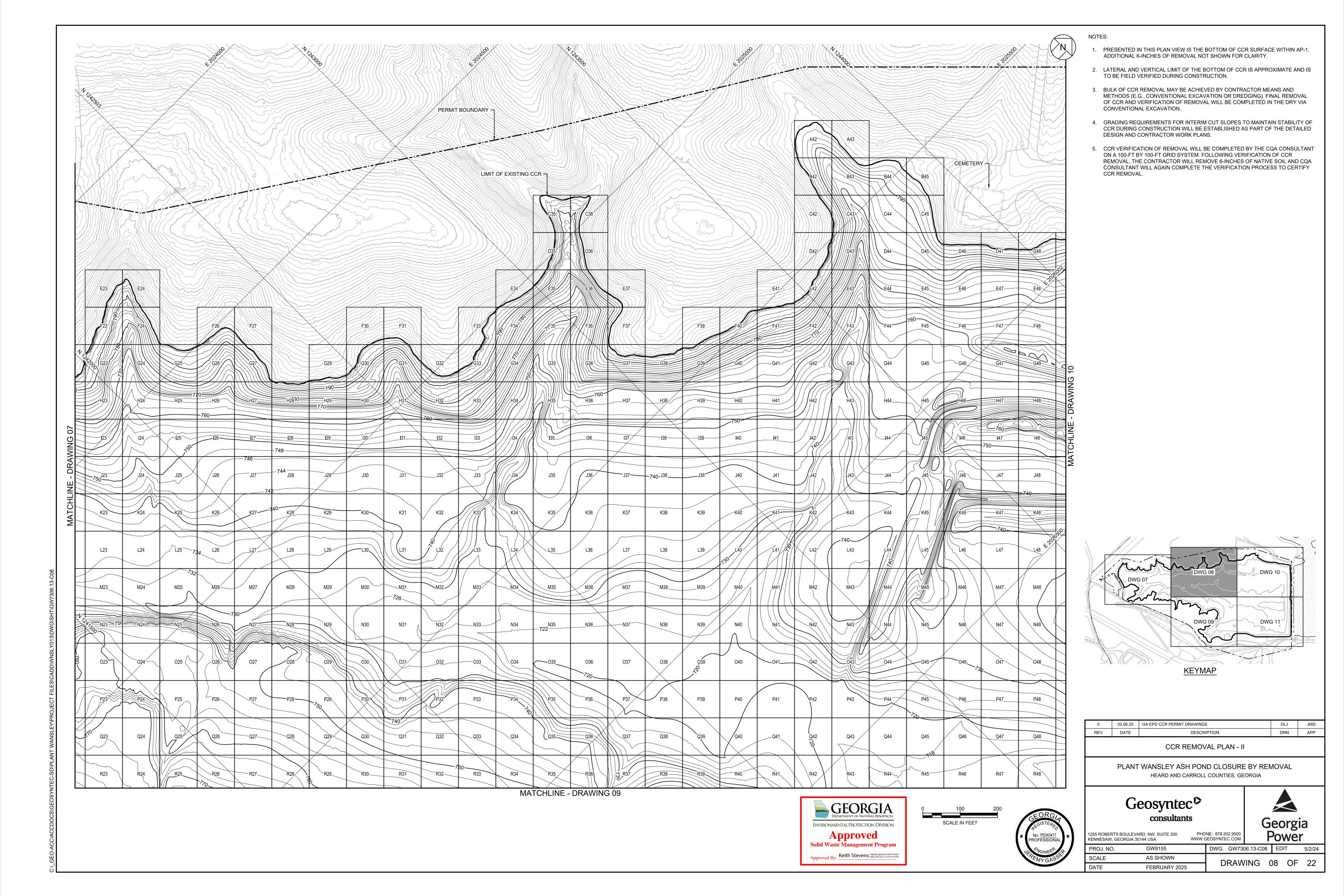
CONSULTANT WILL AGAIN COMPLETE THE VERIFICATION PROCESS TO CERTIFY

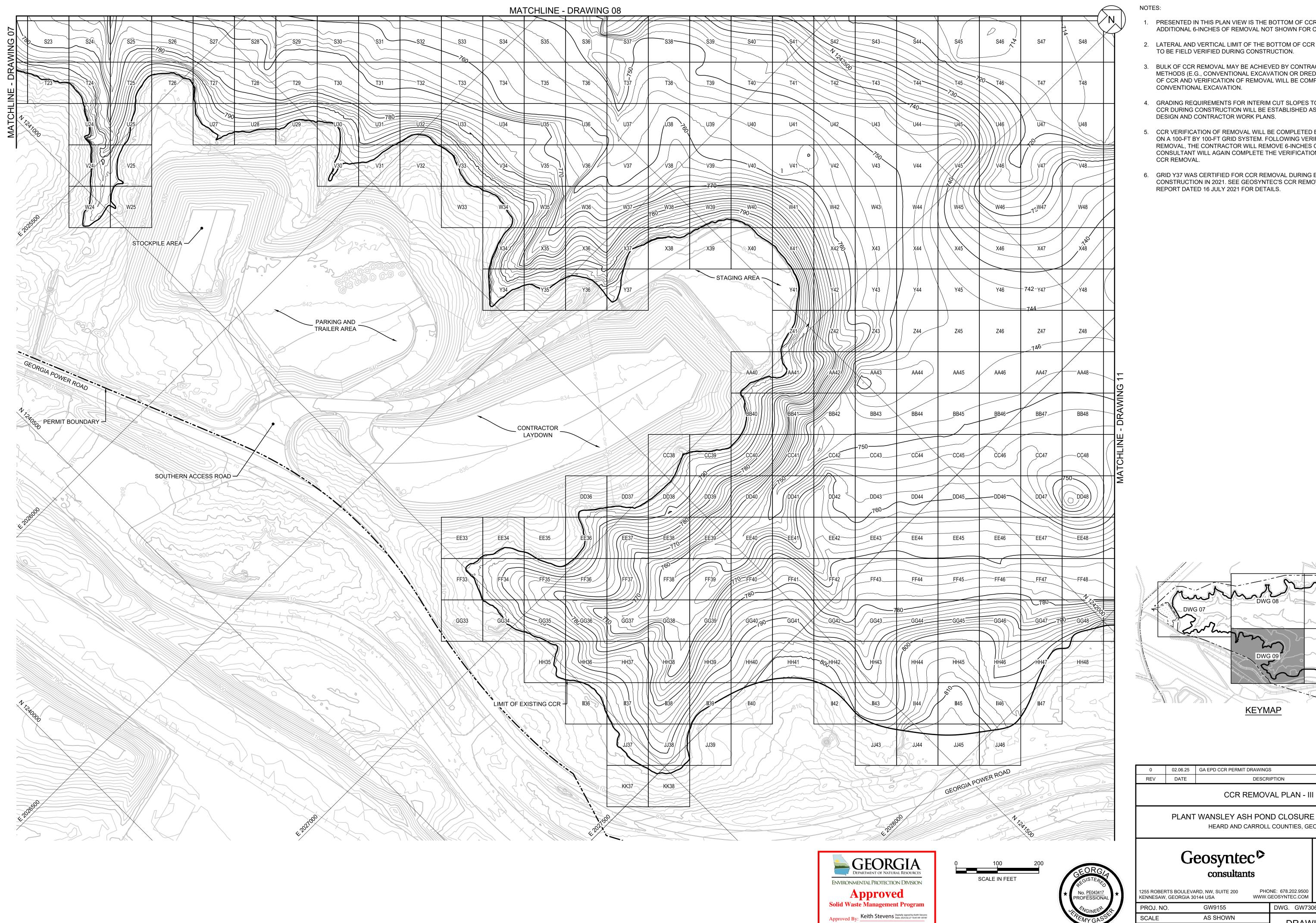


- METHODS (E.G., CONVENTIONAL EXCAVATION OR DREDGING). FINAL REMOVAL OF CCR AND VERIFICATION OF REMOVAL WILL BE COMPLETED IN THE DRY VIA
- CCR DURING CONSTRUCTION WILL BE ESTABLISHED AS PART OF THE DETAILED
- REMOVAL, THE CONTRACTOR WILL REMOVE 6-INCHES OF NATIVE SOIL AND CQA CONSULTANT WILL AGAIN COMPLETE THE VERIFICATION PROCESS TO CERTIFY

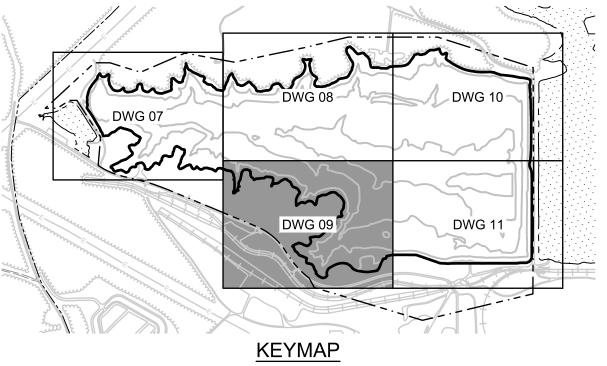
DRN APP

Georgia Power





- PRESENTED IN THIS PLAN VIEW IS THE BOTTOM OF CCR SURFACE WITHIN AP-1. ADDITIONAL 6-INCHES OF REMOVAL NOT SHOWN FOR CLARITY.
- 2. LATERAL AND VERTICAL LIMIT OF THE BOTTOM OF CCR IS APPROXIMATE AND IS
- 3. BULK OF CCR REMOVAL MAY BE ACHIEVED BY CONTRACTOR MEANS AND METHODS (E.G., CONVENTIONAL EXCAVATION OR DREDGING). FINAL REMOVAL OF CCR AND VERIFICATION OF REMOVAL WILL BE COMPLETED IN THE DRY VIA
- 4. GRADING REQUIREMENTS FOR INTERIM CUT SLOPES TO MAINTAIN STABILITY OF CCR DURING CONSTRUCTION WILL BE ESTABLISHED AS PART OF THE DETAILED
- 5. CCR VERIFICATION OF REMOVAL WILL BE COMPLETED BY THE CQA CONSULTANT ON A 100-FT BY 100-FT GRID SYSTEM. FOLLOWING VERIFICATION OF CCR REMOVAL, THE CONTRACTOR WILL REMOVE 6-INCHES OF NATIVE SOIL AND CQA CONSULTANT WILL AGAIN COMPLETE THE VERIFICATION PROCESS TO CERTIFY
- 6. GRID Y37 WAS CERTIFIED FOR CCR REMOVAL DURING EARLY SITE WORK CONSTRUCTION IN 2021. SEE GEOSYNTEC'S CCR REMOVAL CERTIFICATION



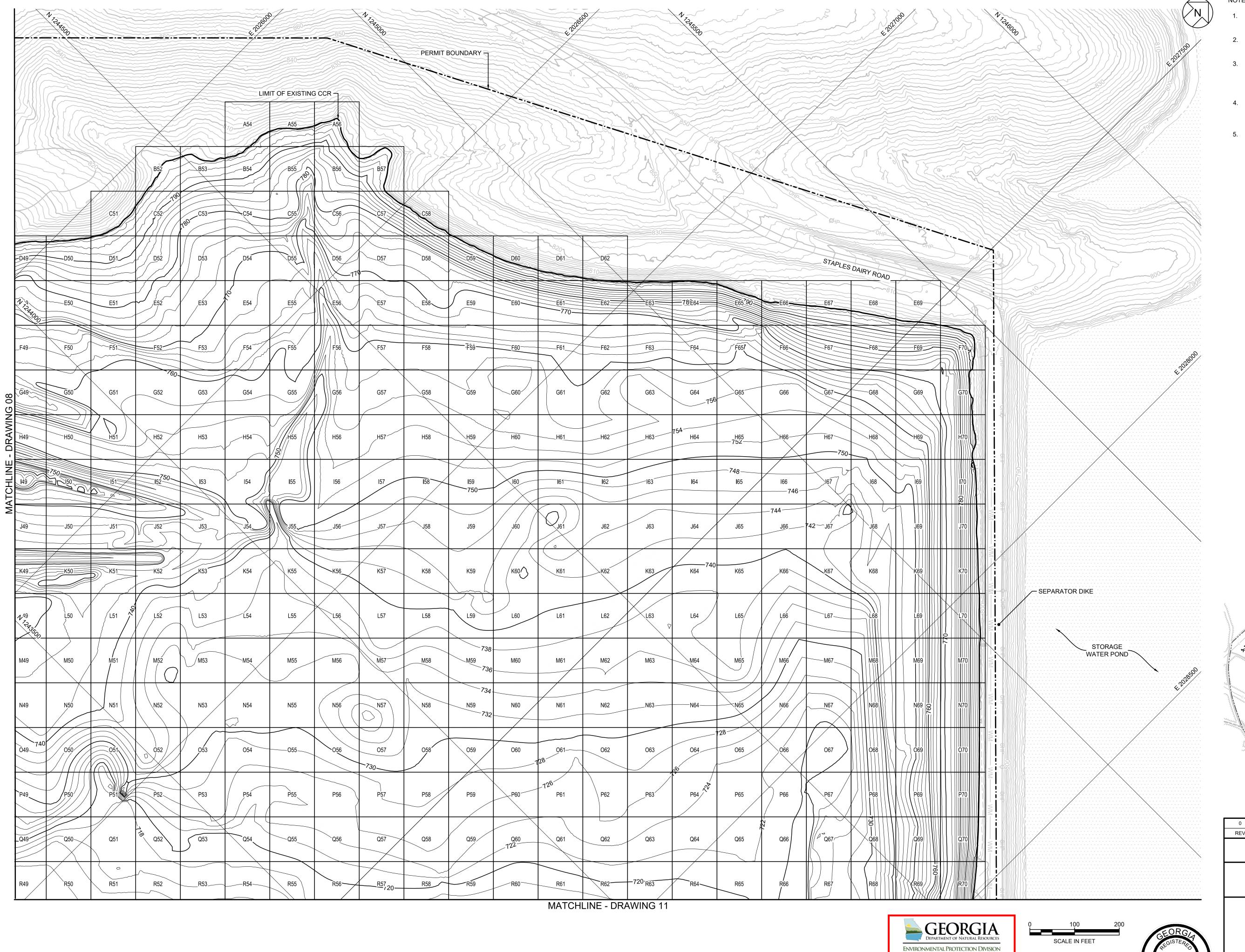
0 02.06.25 GA EPD CCR PERMIT DRAWINGS DLJ JMG REV DATE DESCRIPTION DRN APP					
REV DATE DESCRIPTION DRN APP	0	02.06.25	GA EPD CCR PERMIT DRAWINGS	DLJ	JMG
	REV	DATE	DESCRIPTION	DRN	APP

PLANT WANSLEY ASH POND CLOSURE BY REMOVAL HEARD AND CARROLL COUNTIES, GEORGIA

Georgia Power

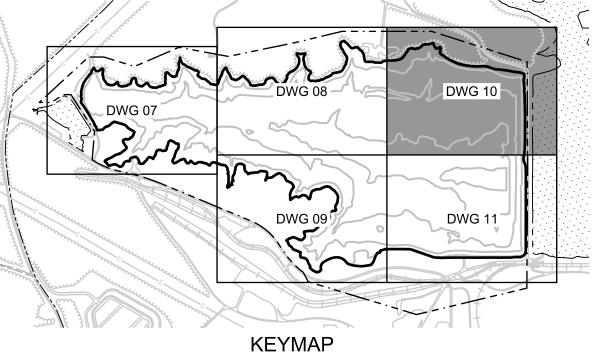
DWG. GW7306.13-C09 EDIT SCALE DATE AS SHOWN DRAWING 09 OF 22

FEBRUARY 2025



NOT

- PRESENTED IN THIS PLAN VIEW IS THE BOTTOM OF CCR SURFACE WITHIN AP-1.
 ADDITIONAL 6-INCHES OF REMOVAL NOT SHOWN FOR CLARITY.
- LATERAL AND VERTICAL LIMIT OF THE BOTTOM OF CCR IS APPROXIMATE AND IS TO BE FIELD VERIFIED DURING CONSTRUCTION.
- 3. BULK OF CCR REMOVAL MAY BE ACHIEVED BY CONTRACTOR MEANS AND METHODS (E.G., CONVENTIONAL EXCAVATION OR DREDGING). FINAL REMOVAL OF CCR AND VERIFICATION OF REMOVAL WILL BE COMPLETED IN THE DRY VIA CONVENTIONAL EXCAVATION.
- 4. GRADING REQUIREMENTS FOR INTERIM CUT SLOPES TO MAINTAIN STABILITY OF CCR DURING CONSTRUCTION WILL BE ESTABLISHED AS PART OF THE DETAILED DESIGN AND CONTRACTOR WORK PLANS.
- 5. CCR VERIFICATION OF REMOVAL WILL BE COMPLETED BY THE CQA CONSULTANT ON A 100-FT BY 100-FT GRID SYSTEM. FOLLOWING VERIFICATION OF CCR REMOVAL, THE CONTRACTOR WILL REMOVE 6-INCHES OF NATIVE SOIL AND CQA CONSULTANT WILL AGAIN COMPLETE THE VERIFICATION PROCESS TO CERTIFY CCR REMOVAL.



0	02.06.25	GA EPD CCR PERMIT DRAWINGS	DLJ	JMG
REV	DATE	DESCRIPTION	DRN	APP

CCR REMOVAL PLAN - IV

PLANT WANSLEY ASH POND CLOSURE BY REMOVAL HEARD AND CARROLL COUNTIES, GEORGIA

Geosyntec consultants

EVARD NIM SHITE 200 PHONE: 67

Georgia Power

1255 ROBERTS BOI	JLEVARD, NW, SUITE 200	 NE: 678.202.9500
KENNESAW, GEOR	GIA 30144 USA	GEOSYNTEC.COM
PROJ. NO.	GW9155	DWG. GW730

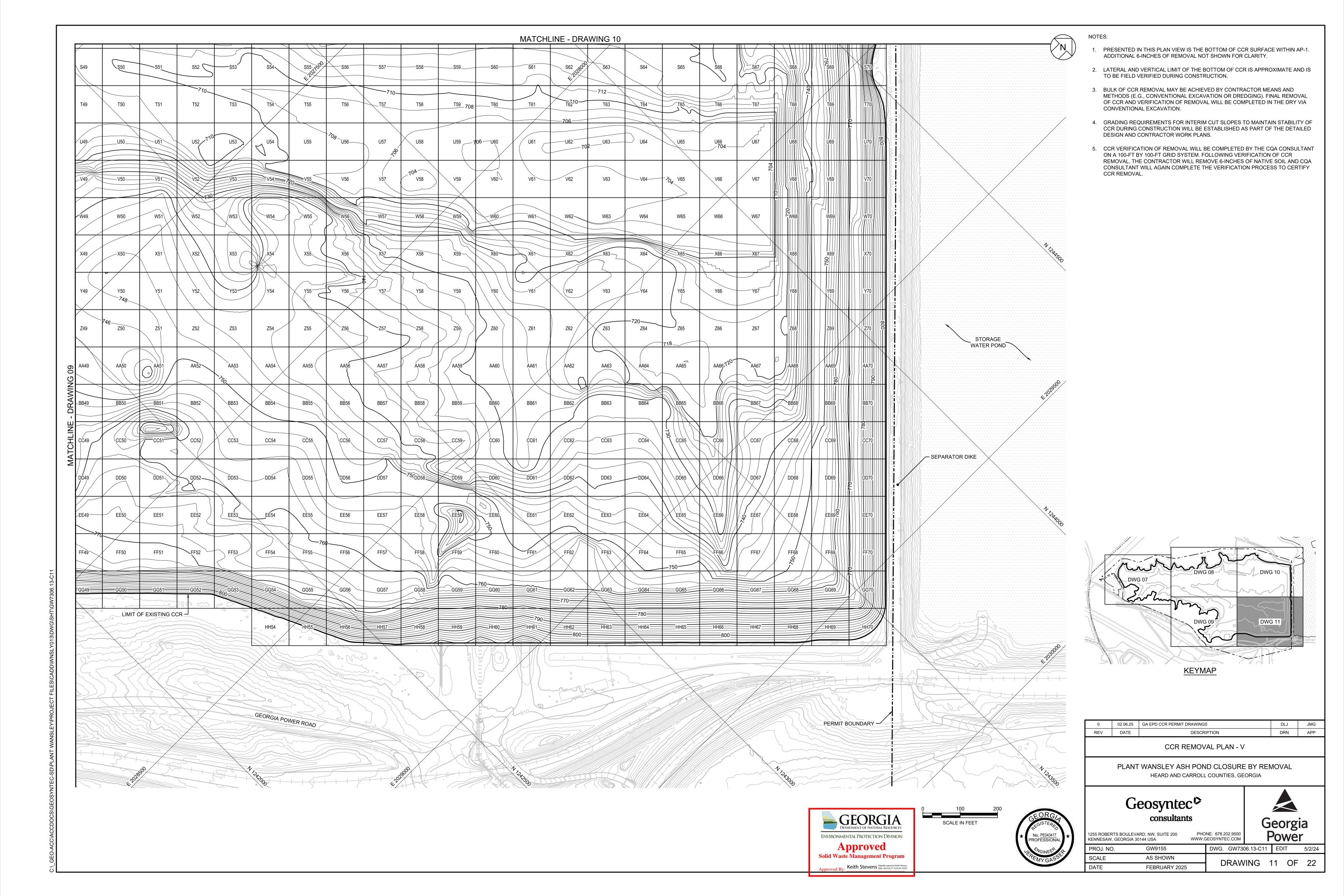
Approved

Solid Waste Management Program

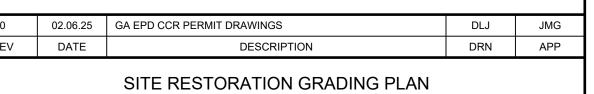
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 PROJ. NO.
 GW9155
 DWG.
 GW7306.13-C10
 EDIT
 5/2/24

 SCALE
 AS SHOWN
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 22



- 2. MINOR EARTHWORK ACTIVITIES MAY BE PERFORMED IN LOCALIZED LOW OR STEEP SPOTS TO PROMOTE POSITIVE DRAINAGE AND MINIMIZE
- 3. UPON VERIFICATION OF CCR REMOVAL AND ADDITIONAL 6 INCHES OF SOIL REMOVAL, CONTRACTOR SHALL HYDROSEED THE ENTIRE POND BOTTOM AND SLOPE TO FACILITATE VEGETATIVE GROWTH TO PREVENT EROSION. THIS PROCESS CAN BE COMPLETED IN PHASES AS THE VERIFICATION PROCESS IS COMPLETED.
- 4. UPON VERIFICATION OF CCR REMOVAL AND ADDITIONAL 6 INCHES OF SOIL REMOVAL FROM AP-1, CONTRACTOR SHALL PLACE RIPRAP DETAILED ALONG THE ENTIRETY OF THE UPSTREAM (AP-1) SIDE OF THE SEPARATOR DIKE.
- 5. SEE DRAWING 13 FOR DETAILS ON THE SEPARATOR DIKE RIPRAP.



PLANT WANSLEY ASH POND CLOSURE BY REMOVAL HEARD AND CARROLL COUNTIES, GEORGIA

Geosyntec consultants

: 678.202.9500

Georgia Power DWG. GW7306.13-C12 EDIT 5/2/24

DRAWING 12 OF 22

417 ONAL ★	1255 ROBERTS BOU KENNESAW, GEORG	JLEVARD, NW, SUITE 200 GIA 30144 USA		NE: 678.2 GEOSYNTE	
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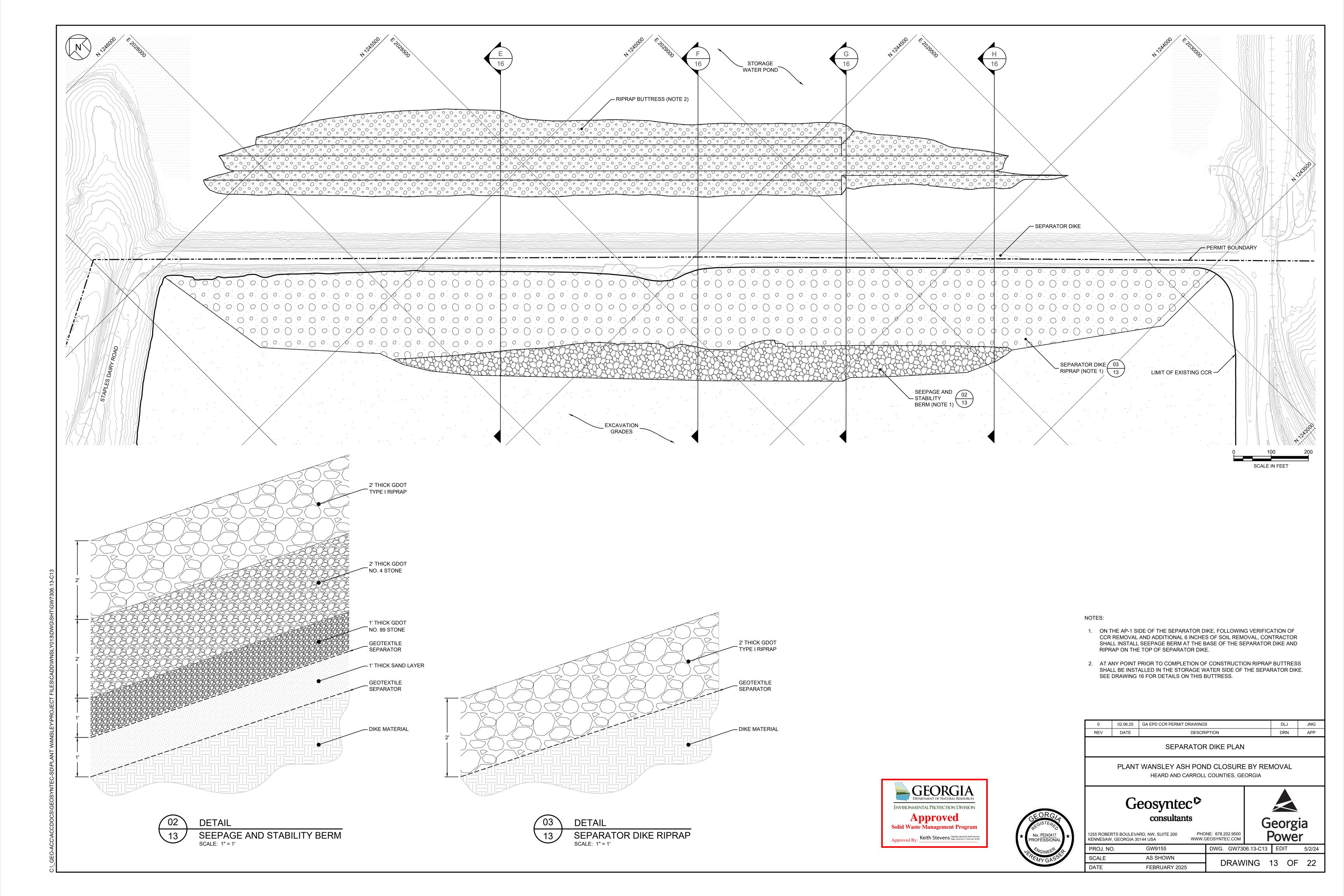
GEORGIA

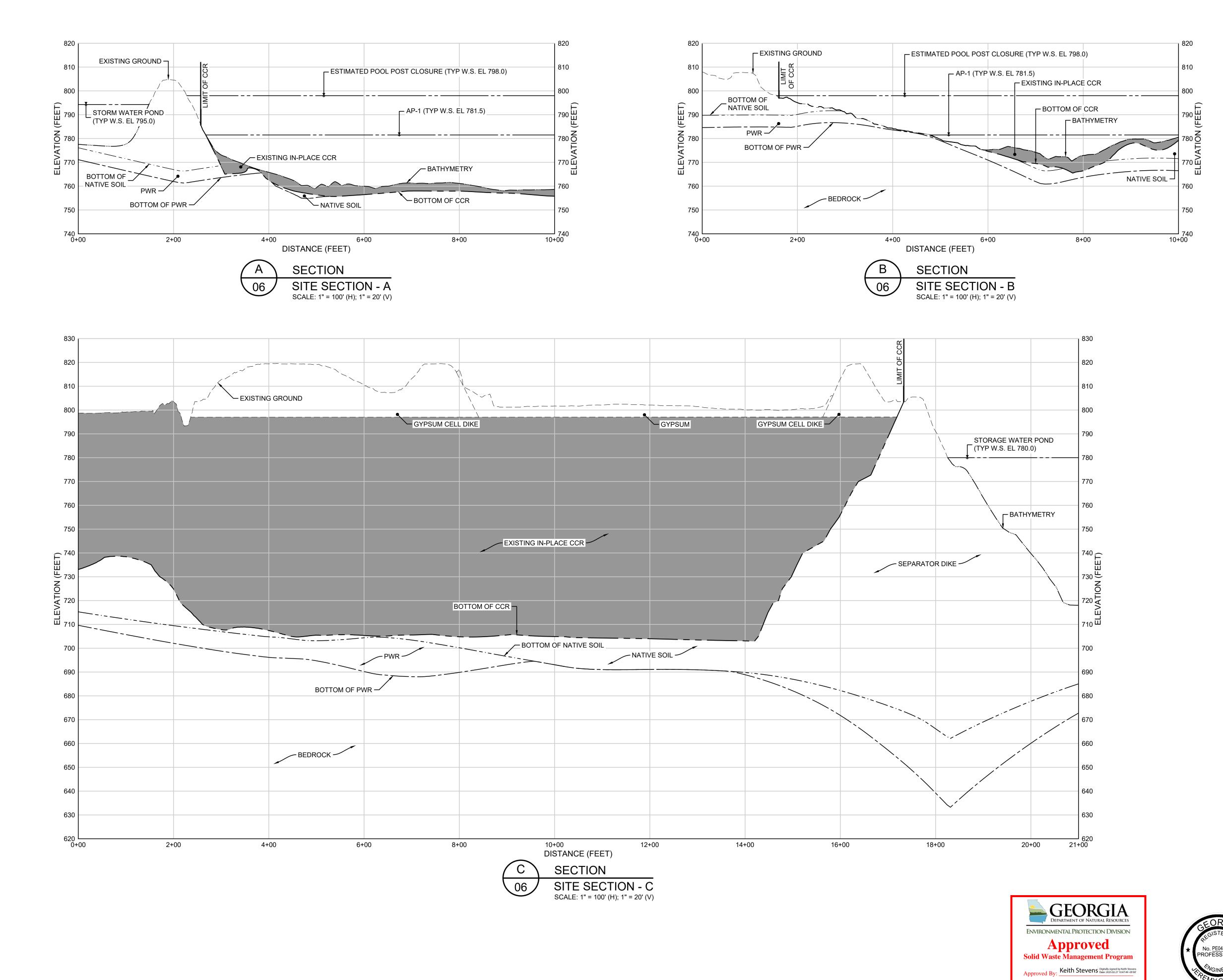
DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

Approved

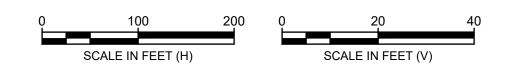
Approved By: Keith Stevens Digitally signed by Keith Stevens Date: 2025.02.27 10:47:49-0500'





NOTES:

- 1. BOTTOM OF CCR SURFACE IS SHOWN IN THESE SECTIONS. EXCAVATION SURFACE IS NOT SHOWN FOR CLARITY AND WILL BE 6 INCHES BELOW THE BOTTOM OF CCR SURFACE.
- 2. BATHYMETRY WITHIN THE STORMWATER POND IS ESTIMATED AND NOT SURVEYED.



0	02.06.25	GA EPD CCR PERMIT DRAWINGS	DLJ	JMG
REV	DATE	DESCRIPTION	DRN	APP

SITE SECTIONS - I

PLANT WANSLEY ASH POND CLOSURE BY REMOVAL HEARD AND CARROLL COUNTIES, GEORGIA

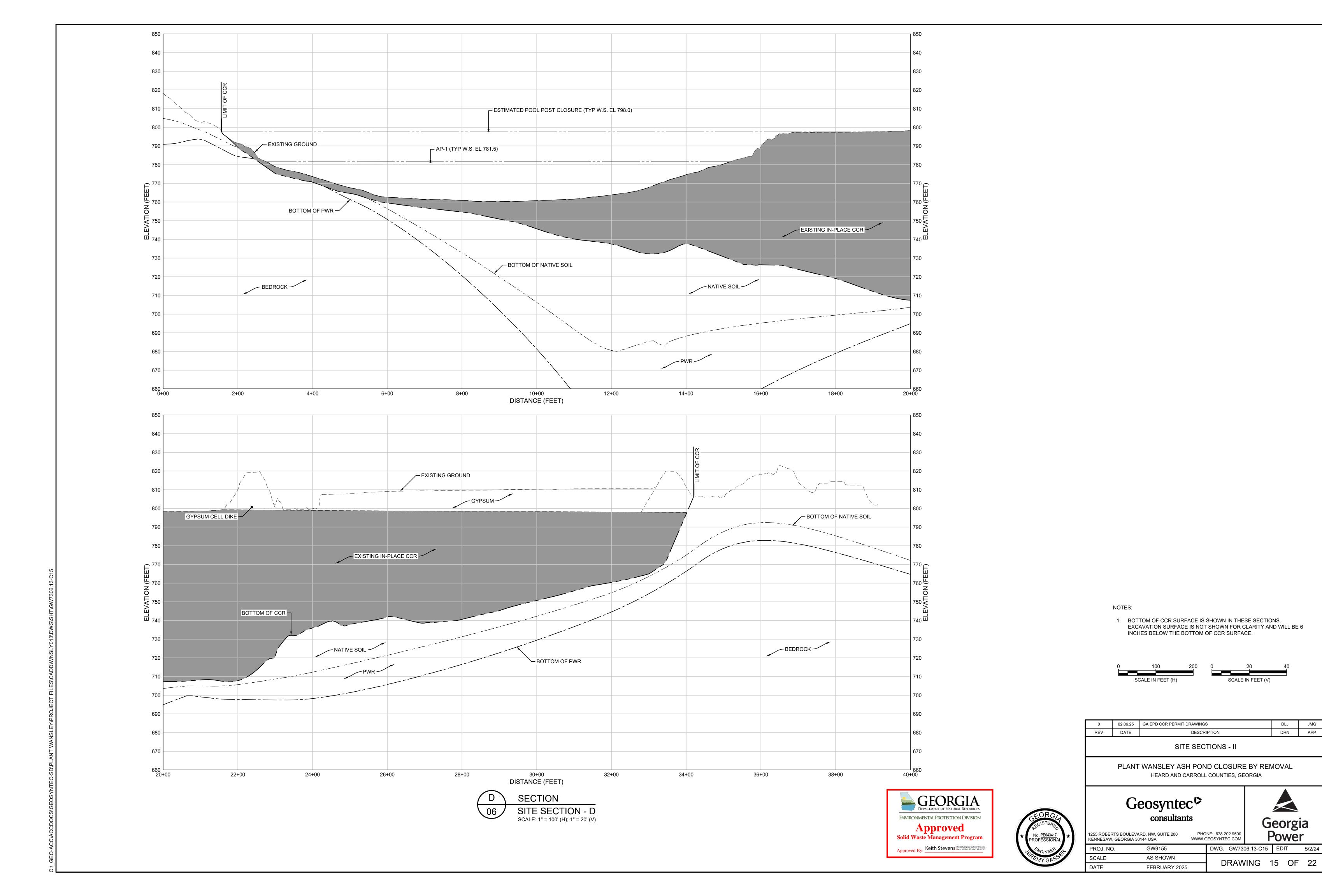
Geosyntec[©]

consultants

FEBRUARY 2025

Georgia Power

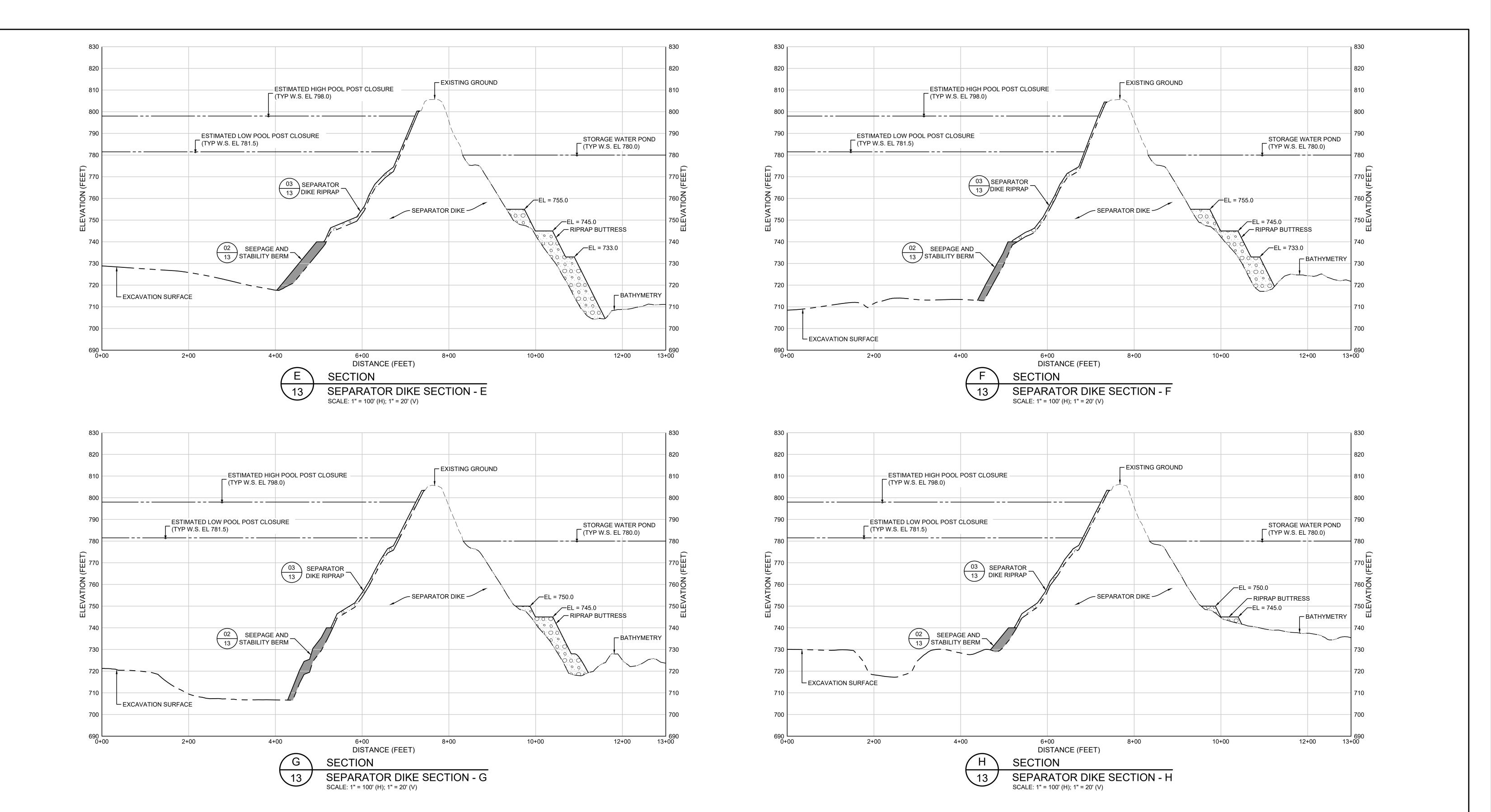
PHONE: 678.202.9500 WWW.GEOSYNTEC.COM 1255 ROBERTS BOULEVARD, NW, SUITE 200 KENNESAW, GEORGIA 30144 USA PROJ. NO. GW9155 DWG. GW7306.13-C14 EDIT 5/2/24 SCALE DATE AS SHOWN DRAWING 14 OF 22



DRN APP

Georgia Power

DRAWING 15 OF 22



NOTES:

 SEE DETAILS ON DRAWING 13 FOR PLACEMENT OF MATERIALS ON THE AP-1 SIDE OF THE SEPARATOR DIKE.

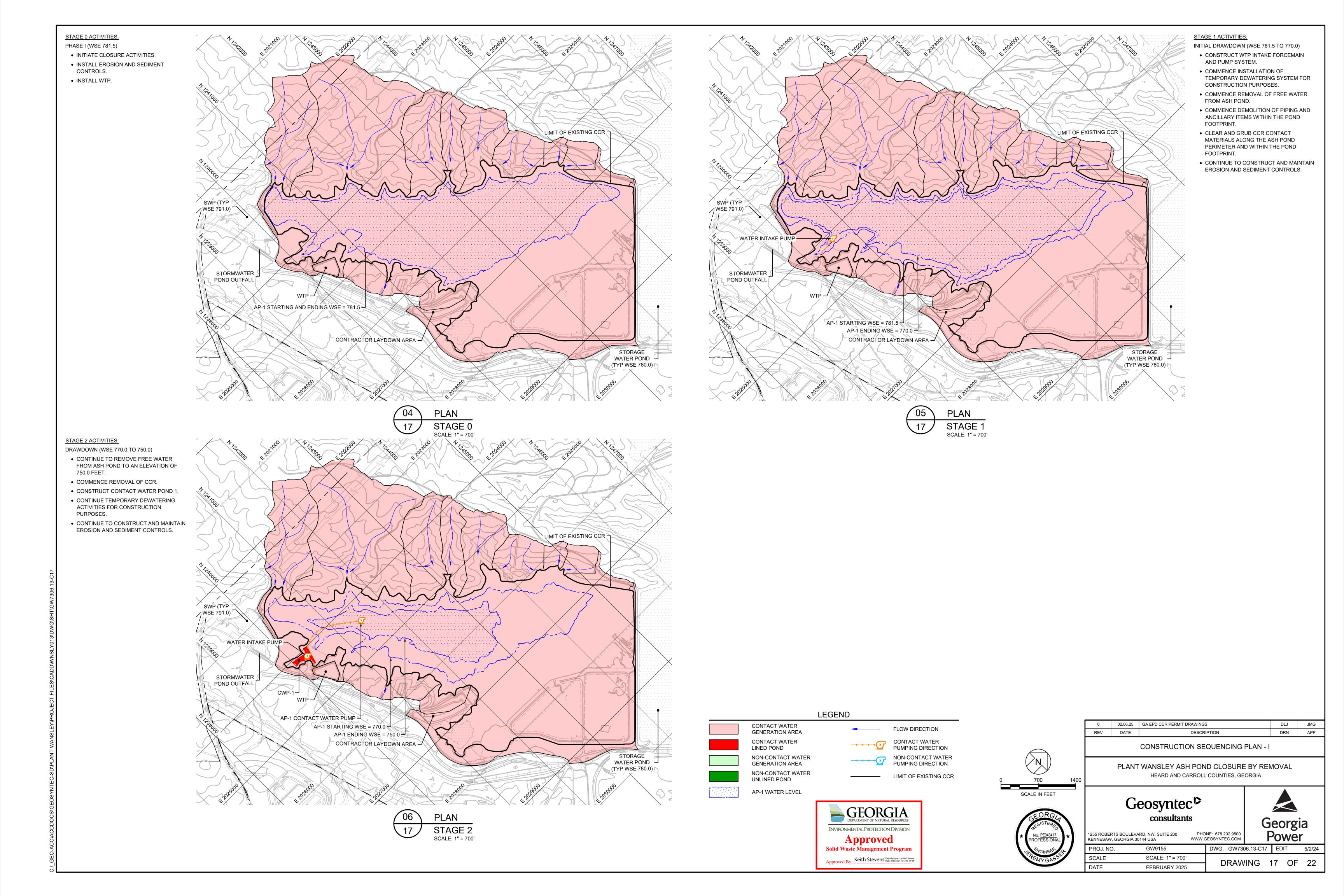
2. RIPRAP BUTTRESS SHALL CONSIST OF GDOT TYPE 1 RIPRAP.

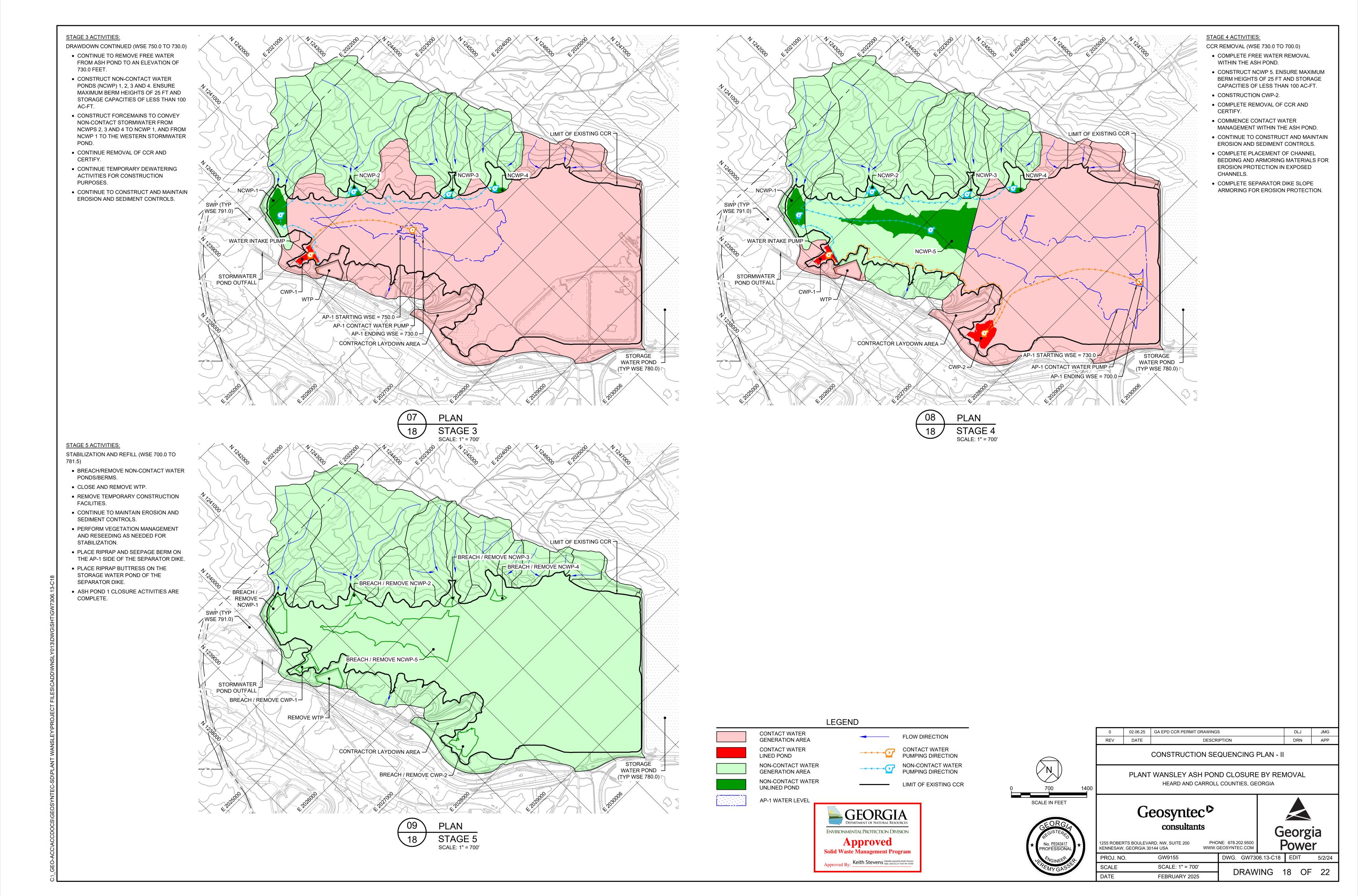


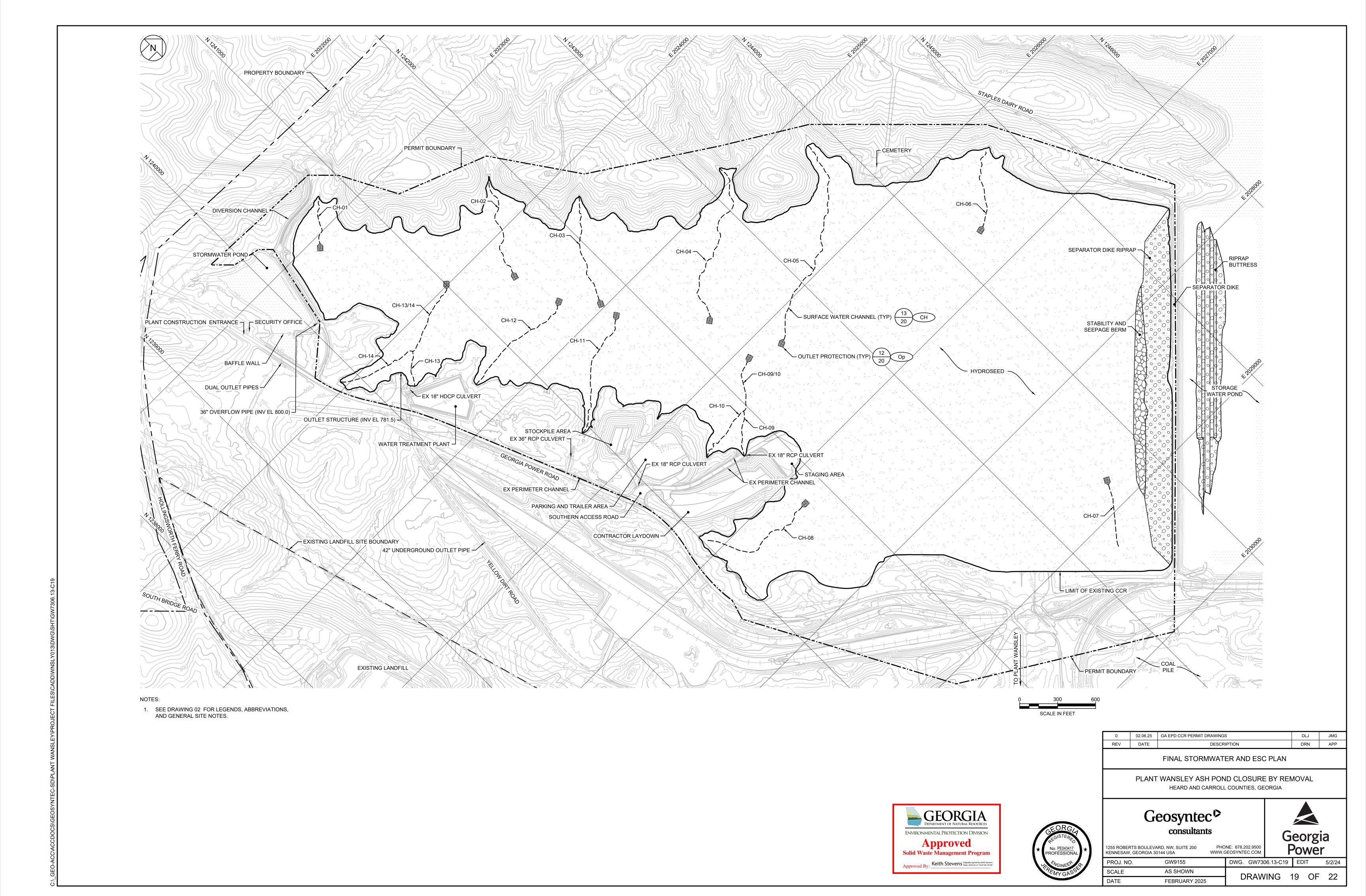
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	PLANT		SH POND CLOSURE CARROLL COUNTIES, GE		MOVAL	
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1255 ROBER	RTS BOULEVA	ARD, NW, SUITE 200	PHONE: 678.202.9500	Ī		r

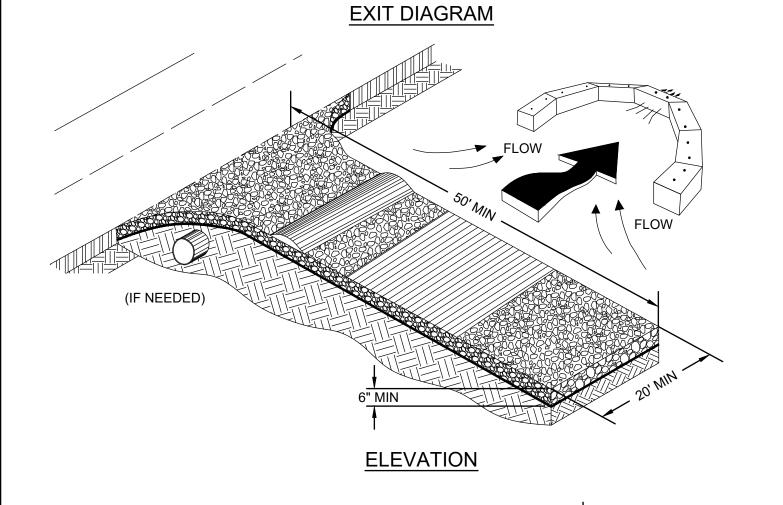
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02.06.25 GA EPD CCR PERMIT DRAWINGS



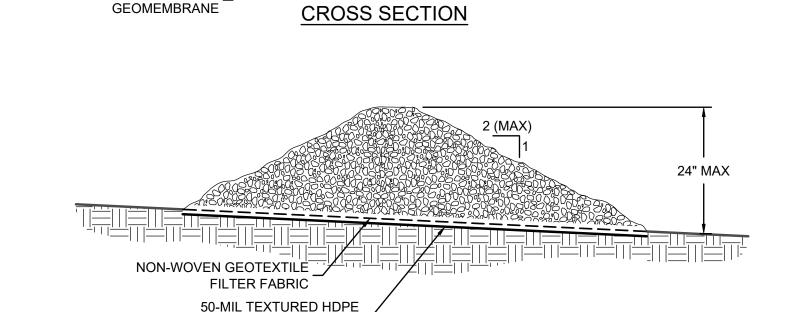






- 1. AVOID LOCATING ON STEEP SLOPES OR AT CURVES ON PUBLIC ROADS.
- 2. REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE, AND CROWN FOR POSITIVE DRAINAGE.
- 3. AGGREGATE SIZE SHALL BE IN ACCORDANCE WITH NATIONAL STONE ASSOCIATION (NSA) R-2 (1.5"-3.5" STONE).
- 4. GRAVEL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





MIN 9"

NON-WOVEN GEOTEXTILE

FILTER FABRIC

50-MIL TEXTURED HDPE

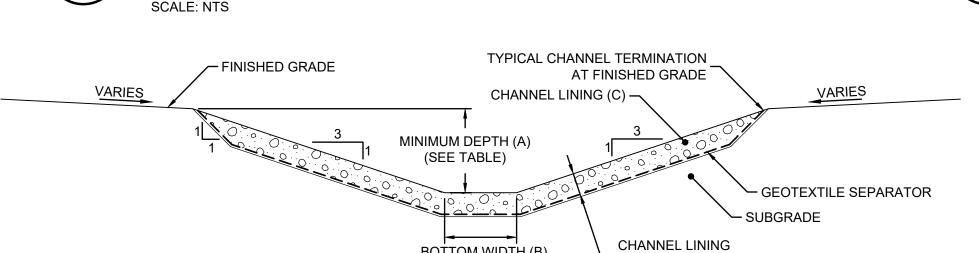
1. CHECK DAMS ARE TO BE USED ONLY IN SMALL OPEN CHANNELS (THEY ARE NOT TO BE USED IN LIVE STREAMS).

PROFILE VIEW

2. THE DRAINAGE AREA FOR STONE CHECK DAMS SHALL NOT EXCEED TWO ACRES.

GEOMEMBRANE

- 3. THE CENTER OF THE CHECK DAM MUST BE AT LEAST 9 INCHES LOWER THAN THE OUTER EDGES.
- 4. THE DAM HEIGHT SHOULD BE A MAXIMUM OF 2 FEET FROM CENTER TO RIM EDGE.
- 5. THE SIDE SLOPES OF THE CHECK DAM SHALL NOT EXCEED A 2:1 SLOPE.
- 6. GEOTEXTILE SHALL BE USED TO PREVENT THE MITIGATION OF SUBGRADE SOIL PARTICLES INTO THE STONES (REFER TO AASHTO M288-96, SECTION 7.3, TABLE 3).
- 7. CHECK DAMS SHALL BE SPACED 200 FT APART IN ALL PERIMETER CHANNELS.
- 8. CHECK DAMS SHALL BE PLACED ON BOTH SIDES OF THE OUTFLOW WEIRS AND SPACED 3 FEET FROM THE EDGES OF THE WEIR.



BOTTOM WIDTH (B)

(SEE TABLE)

THICKNESS (D)

NOTES:

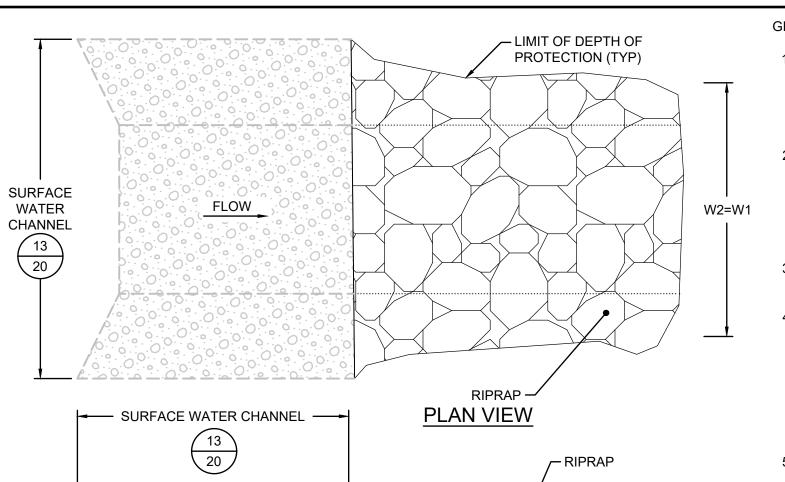
- 1. CHANNEL STABILIZATION (CH-1) 1.1. VEGETATED LINING: VELOCITIES OF LESS THAN 5FT/SEC.
- 1.2. EROSION CONTROL BLANKETS/SOD REQUIRED TO ESTABLISH VEGETATION.

2. CHANNEL STABILIZATION (CH-2): 2.1. RIP RAP: VELOCITIES BETWEEN 5-10 FT/SEC.

2.2. FILTER BLANKET LAYER REQUIRED - SAND/GRAVEL OR GEOTEXTILE. SELECTED GEOTEXTILE SHOULD MEET AASH-TO M2288-96 SECTION 7.5.

									CHANNEL		
ID	UPSTREAM ELEV (FT)	DOWNSTREAM ELEV (FT)	LENGTH (FT)	SLOPE	MIN DEPTH (FT)	BOTTOM WIDTH (FT)	CHANNEL LINING	RIPRAP TYPE (D50)	LINING THICKNESS (FT)	Q (CFS)	V (FPS)
CH-01	800.0	755.0	455.0	0.099	2.50	3.00	CH-2	GDOT TYPE 1 RIP RAP	3	103	9.1
CH-02	800.0	734.0	923.0	0.072	3.00	4.00	CH-2	GDOT TYPE 1 RIP RAP	3	111	7.5
CH-03	800.0	729.0	941.0	0.075	2.50	3.00	CH-2	GDOT TYPE 3 RIP RAP	1.5	43	6.3
CH-04	800.0	720.0	1425.0	0.056	3.00	4.00	CH-2	GDOT TYPE 3 RIP RAP	1.5	89	6.5
CH-05	800.0	718.0	1795.0	0.046	3.00	4.00	CH-2	GDOT TYPE 1 RIP RAP	3	123	5.0
CH-06	798.0	746.0	718.2	0.072	2.50	3.00	CH-2	GDOT TYPE 3 RIP RAP	1.5	41	5.6
CH-07	810.0	728.0	552.6	0.148	3.00	3.00	CH-2	GDOT TYPE 3 RIP RAP	1.5	61	9.0
CH-08	780.0	744.0	891.2	0.040	3.00	3.00	CH-2	GDOT TYPE 3 RIP RAP	1.5	97	4.4
CH-09	800.0	760.0	525.0	0.076	3.00	3.00	CH-2	GDOT TYPE 3 RIP RAP	1.5	33	5.3
CH-10	800.0	760.0	667.0	0.060	2.00	3.00	CH-2	GDOT TYPE 3 RIP RAP	1.5	13	3.7
CH-09/10	760.0	724.0	435.2	0.083	2.50	3.00	CH-2	GDOT TYPE 1 RIP RAP	3	58	6.7
CH-11	800.0	727.0	1050.0	0.070	2.50	3.00	CH-2	GDOT TYPE 3 RIP RAP	1.5	53	6.0
CH-12	800.0	731.0	995.0	0.069	2.50	3.00	CH-2	GDOT TYPE 3 RIP RAP	1.5	49	5.8
CH-13	800.0	766.0	285.0	0.119	2.50	3.00	CH-2	GDOT TYPE 3 RIP RAP	1.5	21	5.5
CH-14	780.0	766.0	657.6	0.021	2.00	3.00	CH-2	GDOT TYPE 3 RIP RAP	1.5	19	2.4
CH-13/14	766.0	741.0	568.2	0.044	2.50	3.00	CH-2	GDOT TYPE 3 RIP RAP	1.5	52	4.9





FLOW DESIGN STORM NORMAL DEPTH -DITCH BOTTOM -GEOTEXTILE -SEPARATOR PROFILE VIEW

GENERAL NOTES:

- 1. RIPRAP OUTLET PROTECTION SHOULD BE USED TO REDUCE A DRAINAGE STRUCTURE'S DISCHARGE VELOCITY. RIPRAP OUTLET PROTECTION IS SHOWN FOR GEORGIA STANDARD 1120, BUT IS INSTALLED SIMILARY FOR OTHER DRAINAGE OUTLET STRUCTURES. RIPRAP OUTLET PROTECTION IS SHOWN FOR A CONCRETE DITCH, BUT IS INSTALLED SIMILARLY TO TRANSITION FROM OTHER CHANNEL LININGS.
- 2. RIPRAP OUTLET PROTECTION SHALL BE DESIGNED IN ACCORDANCE WITH THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA". THE DESIGNER SHALL PROVIDE THE FOLLOWING IN THE PLANS: CHANNEL DEPTH, FLOW RATE OF DESIGN STORM (Q), VELOCITY (V), TAILWATER CONDITION (Tw), APRON LENGTH (La), APRON WIDTH AT DRAINAGE STRUCTURE (WI), APRON WIDTH DOWNSTREAM (W2), AVERAGE STONE
- 3. THE MINIMUM DESIGN FOR RIPRAP OUTLET PROTECTION SHALL BE THE 25 YEAR STORM EVENT.

DIAMETER (d50), INSTALLATION DEPTH (D), AND TYPE OF RIPRAP WITH QUANTITY.

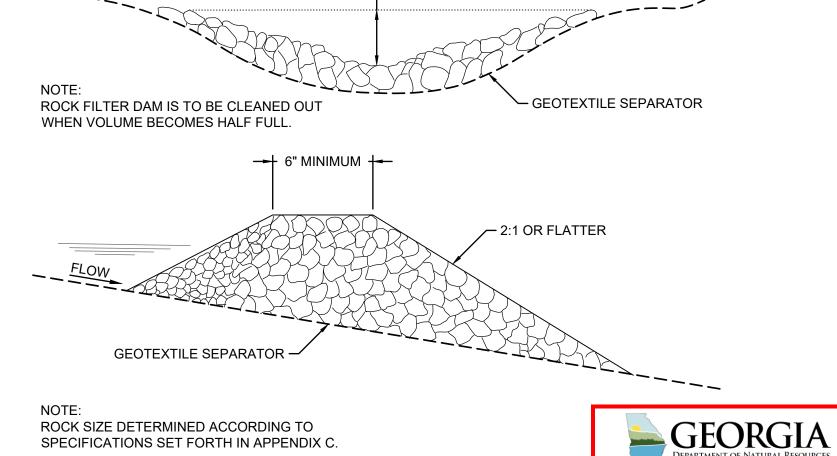
- 4. THE APRON WIDTHS SHALL BE THE SAME WHEN THE DRAINAGE STRUCTURE DISCHARGES PARALLEL INTO A WELL-DEFINED CHANNEL, THE APRON WIDTHS IN THIS CASE SHALL REPRESENT THE WIDTH AT THE DEPTH OF PROTECTION, THE RIPRAP SHALL BE INSTALLED TO THE TOP OF THE CHANNEL OR 1-FOOT ABOVE THE NORMAL DEPTH OF THE CHANNEL'S DESIGN STORM (WHICHEVER IS LESS). THE DESIGNER SHALL PROVIDE THE DEPTH OF PROTECTION (Dp) IF THE RIPRAP SHOULD NOT BE INSTALLED TO THE TOP OF THE CHANNEL. RIPRAP SHOULD ALSO BE INSTALLED TO ARMOR CHANNEL CORNER AT THE OUTLET STRUCTURE.
- 5. STONE SIZE SHALL BE AS SPECIFIED IN THE TABLE.
- 6. PLASTIC FILTER FABRIC IS REQUIRED UNDERNEATH RIPRAP APRON.

DIMENSIONS

- DESIGN STORM FLOW RATE
- DESIGN STORM VELOCITY TAILWATER CONDITION/DESIGN STORM NORMAL
- APRON LENGTH
- APRON WIDTH UPSTREAM AT DEPTH OF
- **PROTECTION**
- APRON WIDTH DOWNSTREAM AT DEPTH OF
- PROTECTION
- d50 AVERAGE STONE DIAMETER
- INSTALLATION DEPTH
- DEPTH OF PROTECTION

ID	Q (CFS)	V (FPS)	W1 (FT)	W2 (FT)	APRON LENGTH (FT)	RIPRAP TYPE (D50)	APRON THICKNESS (IN)
CH-01	103	9.1	13	13	30	GDOT TYPE 1 RIP RAP	36
CH-02	111	7.5	14	14	30	GDOT TYPE 1 RIP RAP	36
CH-03	43	6.3	10	10	30	GDOT TYPE 3 RIP RAP	36
CH-04	89	6.5	14	14	30	GDOT TYPE 3 RIP RAP	36
CH-05	123	5.0	18	18	30	GDOT TYPE 1 RIP RAP	36
CH-06	41	5.6	10	10	30	GDOT TYPE 3 RIP RAP	36
CH-07	61	9.0	10	10	30	GDOT TYPE 3 RIP RAP	36
CH-08	97	4.4	17	17	30	GDOT TYPE 3 RIP RAP	36
CH-09	33	5.3	N/A	N/A	N/A	N/A	N/A
CH-10	13	3.7	N/A	N/A	N/A	N/A	N/A
CH-09/10	58	6.7	11	11	30	GDOT TYPE 1 RIP RAP	36
CH-11	53	6.0	11	11	30	GDOT TYPE 3 RIP RAP	36
CH-12	49	5.8	11	11	30	GDOT TYPE 3 RIP RAP	36
CH-13	21	5.5	N/A	N/A	N/A	N/A	N/A
CH-14	19	2.4	N/A	N/A	N/A	N/A	N/A
CH-13/14	52	4.9	12	12	30	GDOT TYPE 3 RIP RAP	36





- 9" MINIMUM

ENVIRONMENTAL PROTECTION DIVISION



Solid Waste Management Program

Keith Stevens Date: 2025.02.27 10:47:49 -05'0

0	02.06.25	GA EPD CCR PERMIT DRAWINGS	DLJ	JMG
REV	DATE	DESCRIPTION	DRN	APP

STORMWATER AND ESC DETAILS - I

PLANT WANSLEY ASH POND CLOSURE BY REMOVAL HEARD AND CARROLL COUNTIES, GEORGIA

consultants

Power

1255 ROBERTS BOULEVARD, NW, SUITE 200 PHONE: 678.202.950 WWW.GEOSYNTEC.COM KENNESAW, GEORGIA 30144 USA PROJ. NO. GW9155 DWG. GW7306.13-C20 | EDIT 5/2/24 SCALE AS SHOWN DRAWING 20 OF 22 FEBRUARY 2025

<u>PL</u>	ANT, PLANTING	RAT	E & I	PLAN	NTIN	G D	4TE	FOR	TEN	ИРО	RAR	Y SE	EED	<u>ING</u>	
BROADCAST															
SPECIES	PLANTING DATES														
		J	F	М	Α	М	J	J	Α	S	0	N	D		
BARLEY ALONE	144 LBS/AC								••••	··· -		• • • • •	•••	WINTER HARDY, USE ON	
BARLEY IN MIXTURE	24 LBS/AC								••••	··-		• • • • •	•••	PRODUCTIVE SOILS	
LESPEDEZA, ANNUAL ALONE	40 LBS/AC		•••		• • • • •									MAY VOLUNTEER FOR SEVERAL	
LESPEDEZA, ANNUAL IN MIXTURE	10 LBS/AC		••••											YEARS. USE INOCULANT TYPE EL.	
LOVEGRASS, WEEPING	4 LBS/AC			••••										MAY LAST FOR SEVERAL	
ALONE LOVEGRASS, WEEPING IN MIXTURE	2 LBS/AC			••••										YEARS. MIX WITH SERICEA LESPEDEZA.	
MILLET, BROWNTOP ALONE	40 LBS/AC													QUICK DENSE COVER. WILL PROVIDE TOO MUCH COMPETITION	
MILLET, BROWNTOP IN MIXTURE	10 LBS/AC							••••						IN MIXTURES IF SEEDED AT HIGH RATES.	
MILLET, PEARL ALONE	50 LBS/AC				•••				• • • • •	•				QUICK DENSE COVER. MAY REACH 5 FEET IN HEIGHT. NOT RECOMMENDED FOR MIXTURES.	
OATS ALONE	128 LBS/AC													USE ON PRODUCTIVE SOILS. NOT AS	
OATS IN MIXTURE	32 LBS/AC													WINTER HARDY AS RYE OR BARLEY.	
RYE ALONE	168 LBS/AC								•••				• • • • •	QUICK COVER. DROUGHT	
RYE IN MIXTURE	28 LBS/AC								•••				• • • • •	TOLERANT AND WINTER HARDY.	
RYEGRASS, ANNUAL ALONE	40 LBS/AC		• • • • • •		•••				• • • • •					DENSE COVER. VERY COMPETITIVE AND NOT TO BE USED IN MIXTURES.	
SUDANGRASS ALONE	60 LBS/AC				••••				• • • • •					GOOD ON DROUGHTY SITES. NOT RECOMMENDED FOR MIXTURES.	
TRITICALE ALONE	144 LBS/AC									•••	•••		•••	USE ON LOWER PART OF SOUTHERN	
TRITICALE IN MIXTURE	24 LBS/AC									•••	• • •		•••	COASTAL PLAIN AND IN ATLANTIC COASTAL FLATWOODS ONLY.	
WHEAT ALONE	180 LBS/AC									• • • • •	-			WINTER HARDY.	
WHEAT WITH OTHER PERENNIALS	30 LBS/AC									• • • • •			<u> </u>		

SOLID LINES INDICATE OPTIMUM DATES, DOTTED LINES INDICATE PERMISSIBLE BUT MARGINAL DATES.

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

TEMPORARY VEGETATIVE MEASURES SHOULD BE COORDINATED WITH PERMANENT MEASURES TO ASSURE ECONOMICAL AND EFFECTIVE STABILIZATION. MOST TYPES OF TEMPORARY VEGETATION ARE IDEAL TO USE THE FIRST PASS WITH SEED AND SOME HYDRAULIC MULCH, THEN TOPPED AS COMPANION CROPS UNTIL THE PERMANENT VEGETATION IS ESTABLISHED. WITH THE REMAINING REQUIRED APPLICATION RATE. NOTE: SOME SPECIES OF TEMPORARY VEGETATION ARE NOT APPROPRIATE FOR COMPANION CROP PLANTINGS BECAUSE OF THEIR POTENTIAL TO OUT-COMPETE THE DESIRED SPECIES (E.G. ANNUAL RYEGRASS). CONTACT NATURAL RESOURCE CONSERVATION SERVICE OR THE LOCAL SOIL WATER CONSERVATION DISTRICT FOR MORE INFORMATION.

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

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

LIME AND FERTILIZER

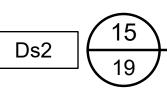
APPLY AGRICULTURAL LIME AT A RATE DETERMINED BY SOIL TEST FOR pH.

QUICK ACTING LIME SHOULD BE INCORPORATED TO MODIFY pH DURING THE GERMINATION PERIOD. BIO STIMULANTS SHOULD ALSO BE CONSIDERED WHEN THERE IS LESS THAN 3% ORGANIC MATTER IN THE SOIL. GRADED AREAS REQUIRE LIME APPLICATION. SOILS MUST BE TESTED TO DETERMINE REQUIRED AMOUNTS OF FERTILIZER AND AMENDMENTS. FERTILIZER SHOULD BE APPLIED BEFORE LAND PREPARATION AND INCORPORATED WITH A DISK, RIPPER, OR CHISEL. ON SLOPES TOO STEEP FOR OR INACCESSIBLE TO EQUIPMENT, FERTILIZER SHALL BE HYDRAULICALLY APPLIED, PREFERABLY IN

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

TEMPORARY VEGETATION CAN, IN MOST CASES, BE ESTABLISHED WITHOUT THE USE OF MULCH, PROVIDED THERE IS LITTLE TO NO EROSION POTENTIAL. HOWEVER, THE USE OF MULCH CAN OFTEN ACCELERATE AND ENHANCE GERMINATION AND VEGETATION ESTABLISHMENT. MULCH WITHOUT SEEDING SHOULD BE CONSIDERED FOR SHORT TERM PROTECTION. REFER TO Ds1-DISTURBED AREA STABILIZATION (WITH MULCHING ONLY) IN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA, LATEST EDITION, FOR MORE INFORMATION.

DURING TIMES OF DROUGHT, WATER SHALL BE APPLIED AT A RATE NOT CAUSING RUNOFF AND EROSION. THE SOIL SHALL BE THOROUGHLY WETTED AGRICULTURAL LIME IS REQUIRED UNLESS SOIL TESTS INDICATE OTHERWISE. TO A DEPTH THAT WILL ENSURE GERMINATION OF THE SEED. SUBSEQUENT APPLICATIONS SHOULD BE MADE WHEN NEEDED.

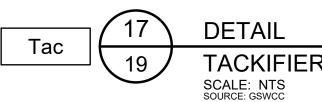


DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)

TACKIFIERS ARE USED AS A TIE-DOWN FOR SOIL, COMPOST, SEED, STRAW, HAY OR MULCH. TACKIFIERS HYDRATE IN WATER AND READILY BLEND WITH OTHER SLURRY MATERIALS TO FORM A HOMOGENOUS SLURRY.

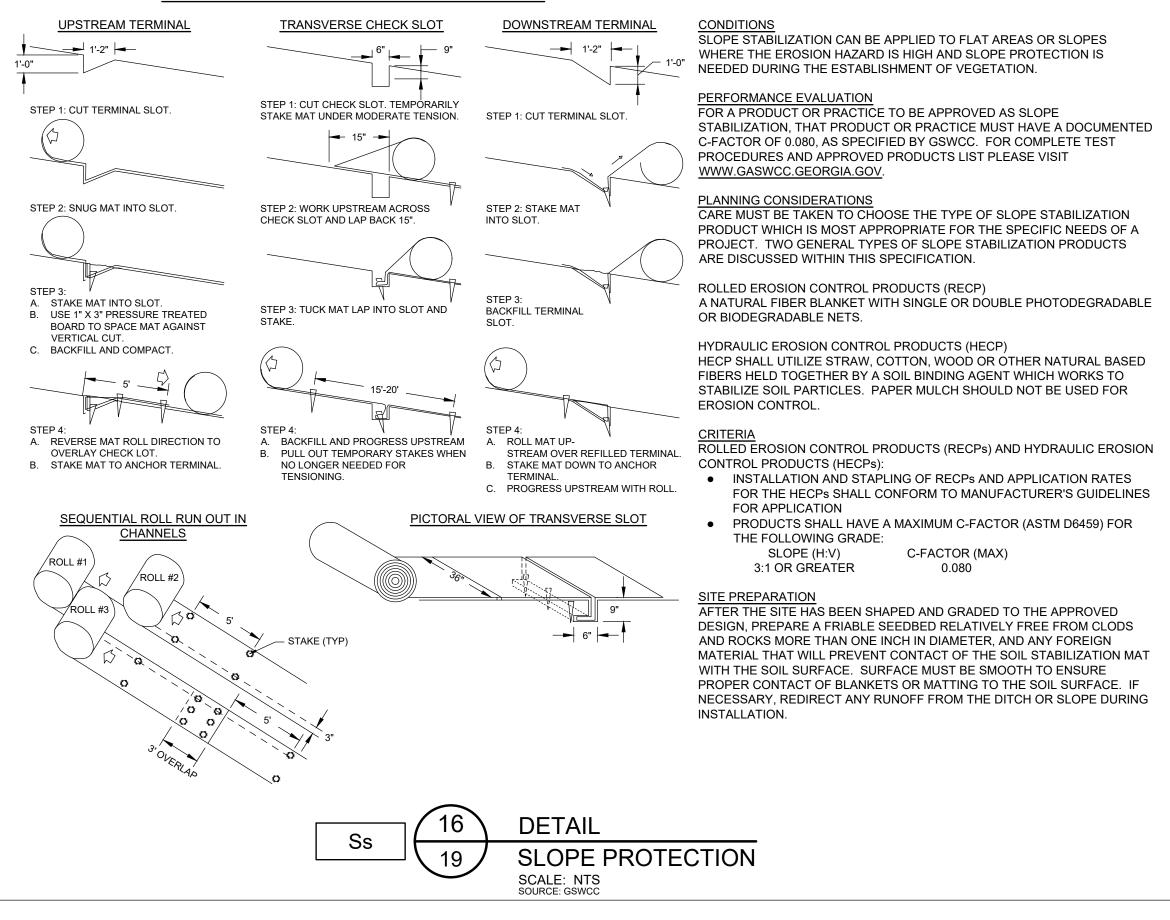
TO REDUCE SOIL EROSION FROM WIND AND WATER ON CONSTRUCTION SITES. OTHER BENEFITS INCLUDE SOIL INFILTRATION, SOIL FERTILITY, ENHANCED SEED GERMINATION, INCREASED SOIL COHESION, ENHANCED SOIL STABILIZATION, REDUCED STORMWATER RUNOFF TURBIDITY, AND REDUCTION IN LOSS OF TOPSOIL.

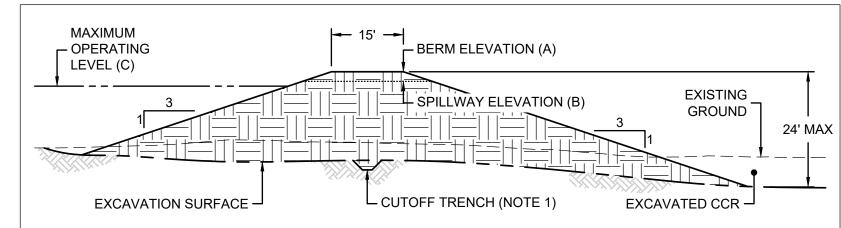
THIS PRACTICE IS INTENDED FOR DIRECT SOIL SURFACE APPLICATION TO SITES WHERE THE TIMELY ESTABLISHMENT OF VEGETATION MAY NOT BE FEASIBLE OR WHERE VEGETATION COVER IS ABSENT OR INADEQUATE. SUCH AREAS INCLUDE CONSTRUCTION AREAS, WHERE PLANT RESIDUES ARE INADEQUATE TO PROTECT THE SOIL SURFACE, AND WHERE LAND DISTURBING ACTIVITIES PREVENT THE ESTABLISHMENT OR MAINTENANCE OF A VEGETATIVE COVER.



TYPICAL INSTALLATION GUIDELINES FOR ROLLED EROSION CONTROL PRODUCTS (RECP)

BLANKET AND MATTING CROSS-SECTIONS





1. CUTOFF TRENCH SHALL HAVE A MINIMUM DEPTH OF 2 FT, HORIZONTAL TO VERTICAL SLOPES OF 1:1, A MINIMUM BOTTOM WIDTH OF 2 FT, AND BE CONSTRUCTED OF RELATIVELY IMPERVIOUS MATERIAL, I.E. COMPACTED EARTH, SOIL-BENTONITE MIX, OR SLURRY.

ID	BERM ELEV (A)	SPILLWAY ELEV (B)	MAX OPERATING LEVEL (C)	VOLUME (AC-FT)
CWP-1	791.0	789.0	788.0	87.0
NCWP-1	777.0	775.0	774.0	239.4
NCWP-2	782.0	770.0	769.0	2.8
NCWP-3	763.0	761.0	760.0	10.2
NCWP-4	766.0	764.0	763.0	22.9
NCWP-5	745.0	743.0	742.0	141.2



METHODS AND MATERIALS

A. TEMPORARY METHODS

MULCHES. SEE STANDARD Ds1 - DISTURBED AREA STABILIZATION (WITH MULCHING ONLY). SYNTHETIC RESINS MAY BE USED INSTEAD OF ASPHALT TO BIND MULCH MATERIAL. REFER TO SPECIFICATION TAC-TACKIFIERS IN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA, LATEST EDITION. RESINS SUCH AS CURASOL OR TERRATACK SHOULD BE USED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

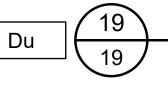
VEGETATIVE COVER. REFER TO Ds2 - DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING).

B. PERMANENT METHODS

PERMANENT VEGETATION. SEE SPECIFICATION Ds3 - DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION) IN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA, LATEST EDITION. EXISTING TREES AND LARGE SHRUBS MAY AFFORD VALUABLE PROTECTION IF LEFT IN PLACE.

TOPSOILING. THIS ENTAILS COVERING THE SURFACE WITH LESS EROSIVE SOIL MATERIAL. SEE SPECIFICATION TP - TOPSOILING IN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA. LATEST EDITION.

THIS PRACTICE IS APPLICABLE TO AREAS SUBJECT TO SURFACE AND AIR MOVEMENT OF DUST WHERE ON AND OFF-SITE DAMAGE MAY OCCUR WITHOUT TREATMENT



DUST CONTROL ON DISTURBED AREAS

THE FOLLOWING MEASURES SHALL BE IMPLEMENTED TO MINIMIZE CCR FROM BECOMING AIRBORNE AT THE FACILITY, INCLUDING CCR FUGITIVE DUST ORIGINATING FROM CCR UNITS, ROADS, AND OTHER CCR MANAGEMENT AND MATERIAL HANDLING ACTIVITIES:

- FUGITIVE DUST ORIGINATING FROM THE CLOSURE OF AP-1 WILL BE CONTROLLED USING WATER SUPPRESSION, COMPACTION, SYNT HETI SUPPRESSION ACENTS OR VEGETATIVE COVERS, OR DUST SUPPRESSION AGENTS.
- CCR THAT IS TRANSPORTED VIA TRUCK TO THE EXISTING ONSITE LANDFILL WILL BE CONDITIONED TO APPROPRIATE MOISTURE CONTENT TO REDUCE THE POTENTIAL FOR FUGITIVE DUST.
- WATER SUPPRESSION WILL BE USED, AS NEEDED, TO CONTROL FUGITIVE DUST ON FACILITY ROADS USED TO TRANSPORT CCR AND OTHER CCR MANAGEMENT AREAS.
- SPEED LIMITS WILL BE USED TO REDUCE THE POTENTIAL FOR FUGITIVE DUST
- TRUCKS USED TO TRANSPORT CCR WILL BE FILLED TO OR UNDER CAPACITY TO REDUCE THE POTENTIAL FOR MATERIAL SPILLAGE.

GPC PERSONNEL AND/OR THEIR CONTRACTORS SHALL PERFORM VISUAL OBSERVATIONS OF AP-1 AND SURROUNDING AREAS. APPROPRIATE CORRECTIVE ACTIONS FOR FUGITIVE DUST WILL BE IMPLEMENTED AS NECESSARY. LOGS WILL BE USED TO RECORD THE USE OF WATER-SPRAY EQUIPMENT. AMENDMENTS TO THE FUGITIVE DUST CONTROL PLAN MAY BE MADE AT ANY TIME AS REQUIRED DUE A CHANGE IN CONDITIONS THAT WOULD AFFECT THE IN-PLACE PLAN. ALL REVISIONS TO THE FUGITIVE DUST CONTROL PLAN WILL BE DOCUMENTED AND PLACED IN THE OPERATING RECORD. REFER TO THE CLOSURE PLAN SECTION 6.3.6.

CCR FUGITIVE DUST CONTROL



Keith Stevens Digitally signed by Ke

02.06.25 GA EPD CCR PERMIT DRAWINGS REV DATE DESCRIPTION DRN APP STORMWATER AND ESC DETAILS - II

PLANT WANSLEY ASH POND CLOSURE BY REMOVAL HEARD AND CARROLL COUNTIES, GEORGIA

FEBRUARY 2025



255 ROBERTS BOULEVARD, NW, SUITE 200 PHONE: 678.202.950 WWW.GEOSYNTEC.COM KENNESAW, GEORGIA 30144 USA DWG. GW7306.13-C21 EDIT PROJ. NO. GW9155 SCALE AS SHOWN DRAWING 21 OF 22

Environmental Protection Division

CUBIC YARDS OF TOPSOIL REQUIRED FOR APPLICATION TO VARIOUS DEPTHS

	PER 1,000 SQUARE FEET	PER ACRE
1	3.1	134
2	6.2	268
3	9.3	403
4	12.4	537
5	15.5	672
6	18.6	806

THIS PRACTICE IS RECOMMENDED FOR SITES OF 2:1 OR FLATTER SLOPES WHERE

- THE TEXTURE OF THE EXPOSED SUBSOIL OR PARENT MATERIAL IS NOT SUITABLE TO PRODUCE ADEQUATE VEGETATIVE GROWTH.
- 2. THE SOIL MATERIAL IS SO SHALLOW THAT THE ROOTING ZONE IS NOT DEEP ENOUGH TO SUPPORT PLANTS WITH CONTINUING SUPPLIES OF MOISTURE AND FOOD.

3. THE SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH.

TOPSOIL SHOULD BE FRIABLE AND LOAMY, FREE OF DEBRIS, OBJECTIONABLE WEEDS AND STONES, AND CONTAIN NO TOXIC SUBSTANCE THAT MAY BE HARMFUL TO PLANT GROWTH. A pH RANGE OF 5.0-7.5

FIELD EXPLORATION SHOULD BE MADE TO DETERMINE WHETHER THE QUANTITY AND QUALITY OF SURFACE SOIL JUSTIFIES STRIPPING.

STRIPPING SHOULD BE CONFINED TO THE IMMEDIATE CONSTRUCTION AREA. A 4 TO 6 INCH STRIPPING DEPTH IS COMMON, BUT MAY VARY DEPENDING ON THE PARTICULAR SOIL

IF pH VALUE IS LESS THAN 6.0, LIME SHALL BE APPLIED AND INCORPORATED WITH THE TOPSOIL TO ADJUST THE pH TO 6.5 OR HIGHER. TOPSOILS CONTAINING SOLUBLE SALTS GREATER THAN 500 PARTS PER MILLION SHALL NOT BE USED.

SITE PREPARATION (WHERE TOPSOIL IS TO BE ADDED)

IS ACCEPTABLE. SOLUBLE SALTS SHOULD NOT EXCEED 500 PPM.

TOPSOILING - WHEN TOPSOILING, MAINTAIN NEEDED EROSION CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, BERMS, DIKES, LEVEL SPREADERS, WATERWAYS, SEDIMENT BASINS, ETC.

GRADING - GRADES ON THE AREAS TO BE TOPSOILED WHICH HAVE BEEN PREVIOUSLY ESTABLISHED SHALL BE MAINTAINED.

LIMING - SOIL TESTS SHOULD BE USED TO DETERMINE THE pH OF THE SOIL. WHERE THE pH OF THE SUBSOIL IS 5.0 OR LESS OR COMPOSED OF HEAVY CLAYS, AGRICULTURAL LIMESTONE SHALL BE SPREAD AT THE RATE OF 100 POUNDS PER 1,000 SQUARE FEET. LIME SHALL BE DISTRIBUTED UNIFORMLY OVER DESIGNATED AREAS AND WORKED INTO THE SOIL IN CONJUNCTION WITH TILLAGE OPERATIONS AS DESCRIBED IN THE FOLLOWING PROCEDURE.

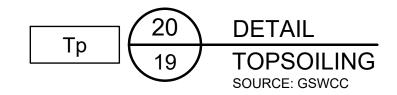
BONDING - USE ONE OF THE FOLLOWING METHODS TO INSURE BONDING OF TOPSOIL AND SUBSOIL

1. TILLING. AFTER THE AREAS TO BE TOPSOILED HAVE BEEN BROUGHT TO GRADE, AND IMMEDIATELY PRIOR TO DUMPING AND SPREADING THE TOPSOIL, THE SUBGRADE SHALL BE LOOSENED BY DISCING

OR SCARIFYING TO A DEPTH OF AT LEAST 3 INCHES TO PERMIT BONDING OF THE TOPSOIL TO THE SUBSOIL. 2. TRACKING. PASSING A BULLDOZER OVER THE ENTIRE SURFACE AREA OF THE SLOPE TO LEAVE HORIZONTAL DEPRESSIONS.

. $\,$ TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING THE SOIL STRUCTURE.

2. A UNIFORM APPLICATION OF 6 INCHES (UNSETTLED) IS RECOMMENDED, BUT MAY BE ADJUSTED AT THE DISCRETION OF THE ENGINEER OR LANDSCAPE ARCHITECT



APPLYING PLANT RESIDUES OR OTHER SUITABLE MATERIALS, PRODUCED ON THE SITE IF POSSIBLE, TO THE SOIL SURFACE.

MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 14 DAYS OF DISTURBANCE. MULCH CAN BE USED AS A SINGULAR EROSION CONTROL DEVICE FOR UP TO SIX MONTHS, BUT IT SHALL BE APPLIED AT THE APPROPRIATE DEPTH (DEPENDING ON THE MATERIAL USED), ANCHORED, AND HAVE A CONTINUOUS 90% COVER OR GREATER OF THE SOIL SURFACE.

MAINTENANCE SHALL BE REQUIRED TO MAINTAIN APPROPRIATE DEPTH AND 90% COVER. TEMPORARY VEGETATION MAY BE EMPLOYED INSTEAD OF MULCH IF THE AREA WILL REMAIN UNDISTURBED FOR LESS THAN SIX MONTHS.

IF ANY AREA WILL REMAIN UNDISTURBED FOR GREATER THAN SIX MONTHS, PERMANENT VEGETATIVE TECHNIQUES SHALL BE EMPLOYED. REFER TO Ds2-DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING), AND Ds3 - DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION).

MULCHING WITHOUT SEEDING THIS STANDARD APPLIES TO GRADED OR CLEARED AREAS WHERE SEEDINGS MAY NOT HAVE A SUITABLE GROWING SEASON TO PRODUCE AN EROSION RETARDANT COVER, BUT CAN BE STABILIZED WITH

A MULCH COVER. SITE PREPARATION

- GRADE TO PERMIT THE USE OF EQUIPMENT FOR APPLYING AND ANCHORING MULCH.
- 2. INSTALL NEEDED EROSION CONTROL MEASURES AS REQUIRED SUCH AS DIKES, DIVERSIONS, BERMS, TERRACES, AND SEDIMENT BARRIERS.

- 3. LOOSEN COMPACT SOIL TO A MINIMUM DEPTH OF 3 INCHES.

MULCHING MATERIALS

SELECT ONE OF THE FOLLOWING MATERIALS AND APPLY AT THE DEPTH INDICATED:

1. DRY STRAW OR HAY SHALL BE APPLIED AT A DEPTH OF 2 TO 4 INCHES PROVIDING COMPLETE SOIL COVERAGE. ONE ADVANTAGE OF THIS MATERIAL IS EASY APPLICATION.

2. WOOD WASTE (CHIPS, SAWDUST OR BARK) SHALL BE APPLIED AT A DEPTH OF 2 TO 3 INCHES. ORGANIC MATERIAL FROM THE CLEARING STAGE OF DEVELOPMENT REMAINING ON SITE CAN BE CHIPPED AND APPLIED AS MULCH. THIS METHOD OF MULCHING CAN GREATLY REDUCE EROSION CONTROL COSTS.

3. POLYETHYLENE FILM SHALL BE SECURED OVER BANKS OR STOCKPILED SOIL MATERIAL FOR TEMPORARY PROTECTION. THIS MATERIAL CAN BE SALVAGED AND RE-USED.

APPLYING MULCH WHEN MULCH IS USED WITHOUT SEEDING, MULCH SHALL BE APPLIED TO PROVIDE FULL COVERAGE OF THE EXPOSED AREA.

. DRY STRAW OR HAY MULCH AND WOOD CHIPS SHALL BE APPLIED UNIFORMLY BY HAND OR BY MECHANICAL EQUIPMENT 2. IF THE AREA WILL EVENTUALLY BE COVERED WITH PERENNIAL VEGETATION, 20-30 POUNDS OF NITROGEN PER ACRE, IN ADDITION TO THE NORMAL AMOUNT, SHALL BE APPLIED TO OFFSET THE UPTAKE OF NITROGEN CAUSED BY THE DECOMPOSITION OF THE ORGANIC MULCHES.

ANCHORING MULCH

. STRAW OR HAY MULCH CAN BE PRESSED INTO THE SOIL WITH A DISK HARROW WITH THE DISK SET STRAIGHT OR WITH A SPECIAL "PACKER DISK." DISKS MAY BE SMOOTH OR SERRATED AND SHOULD BE 20 INCHES OR MORE IN DIAMETER AND 8 TO 12 INCHES APART. THE EDGES OF THE DISK SHOULD BE DULL ENOUGH NOT TO CUT THE MULCH BUT TO PRESS IT INTO THE SOIL LEAVING MUCH OF IT IN AN ERECT POSITION. STRAW OR HAY MULCH SHALL BE ANCHORED IMMEDIATELY AFTER APPLICATION. STRAW OR HAY MULCH SPREAD WITH SPECIAL BLOWER-TYPE EQUIPMENT MAY BE ANCHORED. TACKIFIERS, BINDERS, AND HYDRAULIC MULCH WITH TACKIFIER SPECIFICALLY DESIGNED FOR TACKING STRAW CAN BE SUBSTITUTED FOR EMULSIFIED ASPHALT. REFER TO MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA, LATEST EDITION, SPECIFICATION TAC-TACKIFIERS. PLASTIC MESH OF NETTING WITH MESH NO LARGER THAN ONE INCH BY ONE INCH SHALL BE INSTALLED

ACCORDING TO MANUFACTURER'S SPECIFICATIONS. . NETTING OF THE APPROPRIATE SIZE SHALL BE USED TO ANCHOR WOOD WASTE. OPENINGS OF THE NETTING SHALL NOT BE LARGER THAN THE AVERAGE SIZE OF THE WOOD WASTE CHIPS.



			IIN
YEAR	EQUIVALENT N-P-K	ANALYSIS OR RATE	TOP DRESSING
FIRST	6-12-12	1500 LBS/AC	50-100 LBS/AC 2/6/
SECOND	6-12-12	800 LBS/AC	50-100 LBS/AC 2/
MAINTENANCE	10-10-10	400 LBS/AC	30 LBS/AC
	COO	OL SEASON GRASSES	
			N
YEAR	EQUIVALENT N-P-K	ANALYSIS OR RATE	TOP DRESSING
FIRST	6-12-12	1500 LBS/AC	50 LBS/AC/6/
SECOND	0-10-10	1000 LBS/AC	
MAINTENANCE	0-10-10	400 LBS/AC	

FERTILIZER REQUIREMENTS

PLANT, PLANTING RATE & PLANTING DATE FOR PERMANENT COVER

	I LAI	NI,IL	./\!\!!!	1010	$\frac{VL\;Q}{Q}$. I L/	11 N I II N	0 0/	<u> </u>	<u>OIX I</u>			1 1 1	COVER	5. PINE STRAW OR PINE BARK SHALL BE APPLIED AT A THICKNESS OF 3 INCHES FOR BEDDING			
SPECIES	SPECIES BROADCAST RATES J F M A		PLANTING DATES M A M J J A S O N D						3	0 1	N D		PLANTING DATE REMARKS	PURPOSES. OTHER SUITABLE MATERIALS IN SUFFICIENT QUANTITY MAY BE USED WHERE ORNAMENTALS OR OTHER GROUND COVERS ARE PLANTED. THIS IS NOT APPROPRIATE FOR				
															SEEDED AREAS.			
LESPEDEZA SERICEA SCARIFIED	60 LBS/AC						••							WIDELY ADAPTED. LOW MAINTENENCE. MIX WITH COMMON BERMUDA OR TALL FESCUE. INOCULATE SEED WITH EL INOCULANT.	 WHEN USING TEMPORARY EROSION CONTROL BLANKETS OR BLOCK SOD, MULCH IS NOT REQUIRED. BITUMINOUS TREATED ROVING MAY BE APPLIED ON PLANTED AREAS, SLOPES, IN DITCHES, OR DRY WATERWAYS TO PREVENT EROSION. BITUMINOUS TREATED ROVING SHALL BE APPLIED WITHIN 24 HOURS AFTER AN AREA HAS BEEN PLANTED. APPLICATION RATES AND MATERIALS MUST MEET 			
LESPEDEZA SERICEA UNSCARIFIED	75 LBS/AC			,	• • • • •	••••	• • • • • • •	••••						MIX WITH TALL FESCUE.	GEORGIA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS. WOOD CELLULOSE AND WOOD PULF FIBERS SHALL NOT CONTAIN GERMINATION OR GROWTH INHIBITING FACTORS. THEY SHALL BE			
PENSACOLA BAHIA ALONE OR WITH TEMPORARY COVER	60 LBS/AC	• • • • •	• • • • • •			-	• • • • •	• • • • •	• • • • • •			• • • • • •	••	LOW GROWING. SOD FORMING. SLOW TO ESTABLISH. PLANT WITH A COMPANION CROP. WILL SPREAD INTO BERMUDA	EVENLY DISPERSED WHEN AGITATED IN WATER. THE FIBERS SHALL CONTAIN A DYE TO ALLOW VISUAL METERING AND AID IN UNIFORM APPLICATION DURING SEEDING.			
WILMINGTON BAHIA WITH OTHER PERENNIALS	30 LBS/AC	• • • • •	• • • • • •			-	• • • • •	• • • • •	• • • •			• • • • • •		PASTURES AND LAWNS. MIX WITH SERICEA LESPEDEZA.	APPLYING MULCH STRAW OR HAY MULCH WILL BE SPREAD UNIFORMLY WITHIN 24 HOURS AFTER SEEDING AND/OR PLANTING. THE MULCH MAY BE SPREAD BY BLOWER-TYPE SPREADING EQUIPMENT, OTHER SPREADING			
TALL FESCUE ALONE	50 LBS/AC								• • •		 · · ·			USE ALONE ONLY ON BETTER SITES. MIX WITH PERENNIAL LESPEDEZA OR CROWNVETCH. APPLY TOP DRESSING IN	EQUIPMENT, OR BY HAND. MULCH SHALL BE APPLIED TO COVER 75% OF THE SOIL SURFACE. WOOD CELLULOSE OR WOOD FIBER MULCH SHALL BE APPLIED UNIFORMLY WITH HYDRAULIC SEEDING EQUIPMENT.			
TALL FESCUE WITH OTHER PERENNIALS	30 LBS/AC													SPRING FOLLOWING FALL PLANTINGS. NOT FOR HEAVY USE AREAS OR ATHLETIC FIELDS.	ANCHORING MULCH			
REED CANARY GRASS ALONE	50 LBS/AC														ANCHOR STRAW OR HAY MULCH IMMEDIATELY AFTER APPLICATION BY ONE OF THE FOLLOWING METHODS:			
REED CANARY GRASS WITH OTHER PERENNIALS	30 LBS/AC								• • •					GROWS SIMILAR TO TALL FESCUE.	 HAY AND STRAW MULCH SHALL BE PRESSED INTO THE SOIL IMMEDIATELY AFTER THE MULCH IS SPREAD. A SPECIAL "PACKER DISK" OR DISK HARROW WITH THE DISKS SET STRAIGHT MAY BE USED THE DISKS MAY BE SMOOTH OR SERRATED AND SHOULD BE 2 INCHES OR MORE IN DIAMETER AND 8 			
COMMON BERMUDA UNHULLED SEED WITH TEMPORARY COVER	10 LBS/AC												PLANT WITH WINTER ANNUALS.	TO 12 INCHES APART. THE EDGES OF THE DISKS SHALL BE DULL ENOUGH TO PRESS THE MULCH INTO THE GROUND WITHOUT CUTTING IT, LEAVING MUCH OF IT IN AN ERECT POSITION. MULCH SHALL NOT BE PLOWED INTO THE SOIL.				
COMMON BERMUDA UNHULLED SEED WITH OTHER PERENNIALS	6 LBS/AC													PLANT WITH TALL FESCUE.	2. SYNTHETIC TACKIFIERS, FINDERS, OR HYDRAULIC MULCH SPECIFICALLY DESIGNED TO TACK STRAW SHALL BE APPLIED IN CONJUNCTION WITH OR IMMEDIATELY AFTER THE MULCH IS SPREAD. SYNTHETIC TACKIFIERS SHALL BE MIXED AND APPLIED ACCORDING TO MANUFACTURER'S			

SOLID LINES INDICATE OPTIMUM DATES, DOTTED LINES INDICATE PERMISSIBLE BUT MARGINAL DATES.

THE PLANTING OF PERENNIAL VEGETATION SUCH AS TREES, SHRUBS, VINES, GRASSES, OR LEGUMES ON EXPOSED AREAS FOR FINAL PERMANENT STABILIZATION. PERMANENT PERENNIAL VEGETATION SHALL BE USED TO ACHIEVE FINAL STABILIZATION.

PERMANENT PERENNIAL VEGETATION IS USED TO PROVIDE A PROTECTIVE COVER FOR EXPOSED AREAS INCLUDING CUTS, FILLS, DAMS, AND OTHER DENUDED AREAS.

GRADING AND SHAPING GRADING AND SHAPING MAY NOT BE REQUIRED WHERE HYDRAULIC SEEDING MIX THE SEED (INOCULATED IF NEEDED), FERTILIZER, AND WOOD CELLULOSE AND FERTILIZING EQUIPMENT IS TO BE USED. VERTICAL BANKS SHALL BE SLOPED TO ENABLE PLANT ESTABLISHMENT. WHEN CONVENTIONAL SEEDING UNIFORMLY OVER THE AREA TO BE TREATED. APPLY WITHIN ONE HOUR AND FERTILIZING ARE TO BE DONE, GRADE AND SHAPE WHERE FEASIBLE AND AFTER THE MIXTURE IS MADE. PRACTICAL, SO THAT EQUIPMENT CAN BE USED SAFELY AND EFFICIENTLY DURING SEEDBED PREPARATION, SEEDING, MULCHING AND MAINTENANCE OF SEEDING WILL BE DONE ON A FRESHLY PREPARED AND FIRMED SEEDBED. THE VEGETATION. CONCENTRATIONS OF WATER THAT WILL CAUSE EXCESSIVE SOIL EROSION SHALL BE DIVERTED TO A SAFE OUTLET. DIVERSIONS AND OTHER TREATMENT PRACTICES SHALL CONFORM WITH THE

SEEDBED PREPARATION

DONE AS FOLLOWS:

SEEDBED PREPARATION MAY NOT BE REQUIRED WHERE HYDRAULIC SEEDING NO-TILLING SEEDING AND FERTILIZING EQUIPMENT IS TO BE USED (BUT IS STRONGLY RECOMMENDED FOR ANY SEEDING PROCESS, WHEN POSSIBLE). WHEN CONVENTIONAL SEEDING IS TO BE USED, SEEDBED PREPARATION WILL BE

BROADCAST PLANTINGS

APPROPRIATE STANDARDS AND SPECIFICATIONS.

TILLAGE, AT A MINIMUM, SHALL ADEQUATELY LOOSEN THE SOIL TO A DEPTH OF 4 TO 6 INCHES; ALLEVIATE COMPACTION; INCORPORATE LIME AND FERTILIZER; SMOOTH AND FIRM THE SOIL; ALLOW FOR THE PROPER PLACEMENT OF SEED, SPRIGS, OR PLANTS; AND ALLOW FOR THE ANCHORING OF STRAW OR HAY MULCH IF A DISK IS TO BE USED.

- 2. TILLAGE MAY BE DONE WITH ANY SUITABLE EQUIPMENT. TILLAGE SHOULD BE DONE ON THE CONTOUR WHERE FEASIBLE.
- ON SLOPES TOO STEEP FOR THE SAFE OPERATION OF TILLAGE EQUIPMENT, THE SOIL SURFACE SHALL BE PITTED OR TRENCHED ACROSS AND SPRIGS MUST BE AT OR SLIGHTLY ABOVE THE GROUND SURFACE. THE SLOPE WITH APPROPRIATE HAND TOOLS TO PROVIDE TWO PLACES 6 TO 8 INCHES APART IN WHICH SEED MAY LODGE AND GERMINATE. HYDRAULIC SEEDING MAY ALSO BE USED.

INDIVIDUAL PLANTS

- 1. WHERE INDIVIDUAL PLANTS ARE TO BE SET, THE SOIL SHALL BE PREPARED BY EXCAVATING HOLES, OPENING FURROWS, OR DIBBLE PLANTING.
- 2. FOR NURSERY STOCK PLANTS, HOLES SHALL BE LARGE ENOUGH TO
- ACCOMMODATE ROOTS WITHOUT CROWDING. 3. WHERE PINE SEEDLINGS ARE TO BE PLANTED, SUBSOIL UNDER THE ROW 36 INCHES DEEP ON THE CONTOUR FOUR TO SIX MONTHS PRIOR TO PLANTING. SUBSOILING SHOULD BE DONE WHEN THE SOIL IS DRY, PREFERABLY IN AUGUST OR SEPTEMBER.

HYDRAULIC SEEDING

OR WOOD PULP FIBER MULCH WITH WATER AND APPLY IN A SLURRY

CONVENTIONAL SEEDING FOR BROADCAST PLANTING, USE A CULTIPACKER-SEEDER, DRILL ROTARY SEEDER, OTHER MECHANICAL SEEDER, OR HAND SEEDING TO DISTRIBUTE THE SEED UNIFORMLY OVER THE AREA TO BE TREATED. COVER THE SEED LIGHTLY WITH 1/8 TO 1/4 INCH OF SOIL FOR SMALL SEED AND 1/2 TO 1 INCH FOR LARGE SEED WHEN USING A CULTIPACKER OR OTHER SUITABLE EQUIPMENT.

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

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

NURSERY STOCK PLANTS SHALL BE PLANTED AT THE SAME DEPTH OR SLIGHTLY DEEPER THAN THEY GREW AT THE NURSERY. THE TIPS OF VINES

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



DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION) SOURCE: GSWCC

GEORGIA **ENVIRONMENTAL PROTECTION DIVISION Approved Solid Waste Management Program** Approved By: Keith Stevens Digitally signed by Keith Steven Date: 2025.02.27 10:47:49-05'00



02.06.25 GA EPD CCR PERMIT DRAWINGS DRN APP REV DATE DESCRIPTION

PLANT WANSLEY ASH POND CLOSURE BY REMOVAL HEARD AND CARROLL COUNTIES, GEORGIA

STORMWATER AND ESC DETAILS - III

255 ROBERTS BOULEVARD, NW. SUITE 200

MULCH IS REQUIRED FOR ALL PERMANENT VEGETATION APPLICATIONS. MULCH APPLIED TO SEEDED AREAS SHALL RECEIVE 75% TO 100% SOIL COVER. WHEN SELECTING A MULCAPONTESSIONALS

ENHANCEMENT, AND EROSION CONTROL EFFECTIVENESS. SELECT THE MULCHING MATERIAL FROM THE

1. DRY STRAW OR DRY HAY OF GOOD QUALITY AND FREE OF WEED SEEDS CAN BE USED. DRY STRAW SHALL BE APPLIED AT THE RATE OF 2 TONS PER ACRE. DRY HAY SHALL BE APPLIED AT A RATE OF 2

2. WOOD CELLULOSE MULCH OR WOOD PULP FIBER SHALL BE USED WITH HYDRAULIC SEEDING. IT

3. ONE THOUSAND POUNDS OF WOOD CELLULOSE OR WOOD PULP FIBER, WHICH INCLUDES A TACKIFIER. SHALL BE USED WITH HYDRAULIC SEEDING ON SLOPES 1/4:1 OR STEEPER.

SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE. DRY STRAW OR DRY HAY SHALL BE

4. SERICEA LESPEDEZA HAY CONTAINING MATURE SEED SHALL BE APPLIED AT A RATE OF THREE TONS

SPECIFICATIONS. ALL TACKIFIERS, FINDERS, OR HYDRAULIC MULCH SPECIFICALLY DESIGNED TO

TACK STRAW SHOULD BE VERIFIED NONTOXIC THROUGH EPA 2021.0 TESTING. REFER TO TACKIFIERS-TAC IN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA, LATEST

3. RYE OR WHEAT CAN BE INCLUDED WITH FALL AND WINTER PLANTINGS TO STABILIZE THE MULCH.

4. PLASTIC MESH OR NETTING WITH MESH NO LARGER THAN ONE INCH BY ONE INCH MAY BE NEEDED

WHEN HYDRAULIC SEEDING EQUIPMENT IS USED, THE INITIAL FERTILIZER SHALL BE MIXED WITH SEED,

SLURRY. THE INNOCULANT, IF NEEDED, SHALL BE MIXED WITH THE SEED PRIOR TO BEING PLACED INTO

THE HYDRAULIC SEEDER. THE SLURRY MIXTURE WILL BE AGITATED DURING APPLICATION TO KEEP THE INGREDIENTS THOROUGHLY MIXED. THE MIXTURE WILL BE SPREAD UNIFORMLY OVER THE AREA WITHIN

ONE HOUR AFTER BEING PLACED IN THE HYDROSEEDER. FINELY GROUND LIMESTONE CAN BE APPLIED

IN THE MULCH SLURRY OR IN COMBINATION WITH THE TOP DRESSING. WHEN CONVENTIONAL PLANTING

IS TO BE DONE, LIME AND FERTILIZER SHALL BE APPLIED UNIFORMLY IN ONE OF THE FOLLOWING WAYS:

4. A FERTILIZER PELLET SHALL BE PLACED AT ROOT DEPTH IN THE CLOSING HOLE BESIDE EACH PINE

REFER TO THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA, LATEST EDITION, FOR

CONSERVATIONIST OF THE NATURAL RESOURCES CONSERVATION SERVICE BEFORE THEY ARE USED.

PLANNED USE AND MAINTENANCE OF THE AREA; TIME OF YEAR OF PLANTING; METHOD OF PLANTING;

ESTABLISHED AND CAN BE PLANTED ALONE. EXAMPLES OF THESE ARE COMMON BERMUDA, TALL

FESCUE, AND WEEPING LOVEGRASS. OTHER PERENNIALS, SUCH AS BAHIA GRASS AND SERICEA

THE TARGET PERENNIAL SPECIES BECOME ESTABLISHED. FOR EXAMPLE, COMMON SEEDING

COMBINATIONS ARE 1) WEEPING LOVEGRASS WITH SERICEA LESPEDEZA (SCARIFIED) AND 2) TALL

COMPANION CROPS. ANNUAL COMPANION CROPS SHOULD BE USED ONLY WHEN THE PERENNIAL

TOP MILLET WITH COMMON BERMUDA IN MID SUMMER. CARE SHOULD BE TAKEN IN SELECTING

BE USED IN ANY SEEDING MIXTURES CONTAINING PERENNIAL SPECIES DUE TO ITS ABILITY TO

OUT-COMPETE DESIRED SPECIES CHOSEN FOR PERMANENT PERENNIAL COVER.

COMPANION CROP SPECIES AND SEEDING RATES BECAUSE ANNUAL CROPS WILL COMPETE WITH

PERENNIAL SPECIES FOR WATER, NUTRIENTS, AND GROWING SPACE. A HIGH SEEDING RATE OF THE

FESCUE WITH SERICEA LESPEDEZA (UNSPECIFIED). PLANT SELECTION MAY ALSO INCLUDE ANNUAL

PLANTS SHALL BE SELECTED ON THE BASIS OF SPECIES CHARACTERISTICS; SITE AND SOIL CONDITIONS;

LESPEDEZA, ARE SLOW TO BECOME ESTABLISHED AND SHOULD BE PLANTED WITH ANOTHER PERENNIAL

SPECIES ARE NOT PLANTED DURING THEIR OPTIMUM PLANTING PERIOD. A COMMON MIXTURE IS BROWN

COMPANION CROP MAY PREVENT THE ESTABLISHMENT OF PERENNIAL SPECIES. RYEGRASS SHALL NOT

SPECIES. THE ADDITIONAL SPECIES WILL PROVIDE QUICK COVER AND AMPLE SOIL PROTECTION UNTIL

APPROVED SPECIES. SPECIES NOT LISTED SHALL BE APPROVED BY THE STATE RESOURCE

AND THE NEEDS AND DESIRES OF THE LAND USER. SOME PERENNIAL SPECIES ARE EASILY

1. APPLY BEFORE LAND PREPARATION SO THAT IT WILL BE MIXED WITH THE SOIL DURING SEEDBED

MIX WITH THE SOIL USED TO FILL THE HOLES, DISTRIBUTE IN FURROWS.

BROADCAST AFTER STEEP SURFACES ARE SCARIFIED, PITTED, OR TRENCHED.

INNOCULANT (IF NEEDED), AND WOOD CELLULOSE OR WOOD PULP FIBER MULCH AND APPLIED IN A

TO ANCHOR STRAW OR HAY MULCH ON UNSTABLE SOILS AND CONCENTRATED FLOW AREAS. THESE

THEY SHALL BE APPLIED AT A RATE OF ONE-QUARTER TO ONE-HALF BUSHELS PER ACRE.

MATERIALS SHALL BE INSTALLED AND ANCHORED ACCORDING TO MANUFACTURER'S

SHOULD CONSIDER THE MULCH'S FUNCTIONAL LONGEVITY, VEGETATION ESTABLISHMENT

APPLIED (AT THE RATE INDICATED ABOVE) AFTER HYDRAULIC SEEDING.

FOLLOWING AND APPLY AS INDICATED:

SPECIFICATIONS.

REPARATION.

TREE SEEDLING.

PLANT SELECTION

LIME AND FERTILIZER APPLICATION

5/2/24

WWW.GEOSYNTEC.COM KENNESAW GEORGIA 30144 USA DWG. GW7306.13-C22 EDIT PROJ. NO. GW9155 SCALE AS SHOWN DRAWING 22 OF 22 FEBRUARY 2025

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