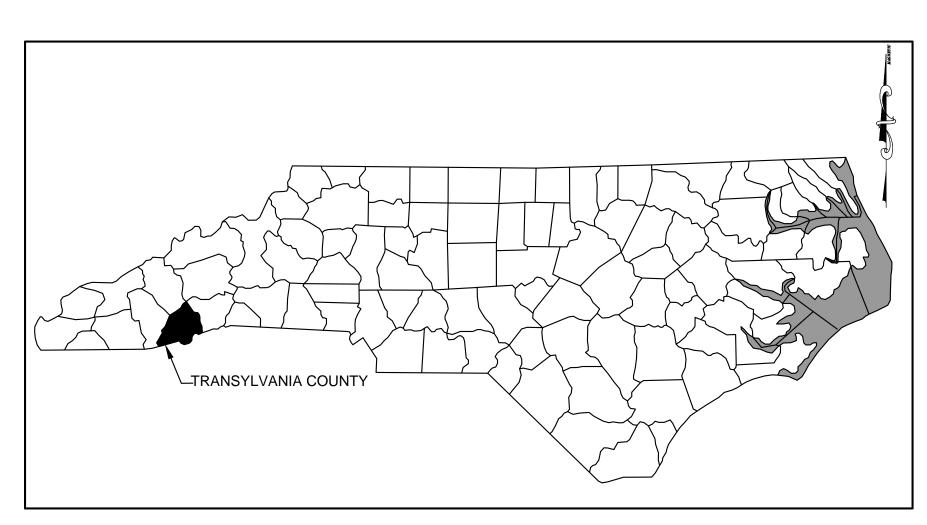
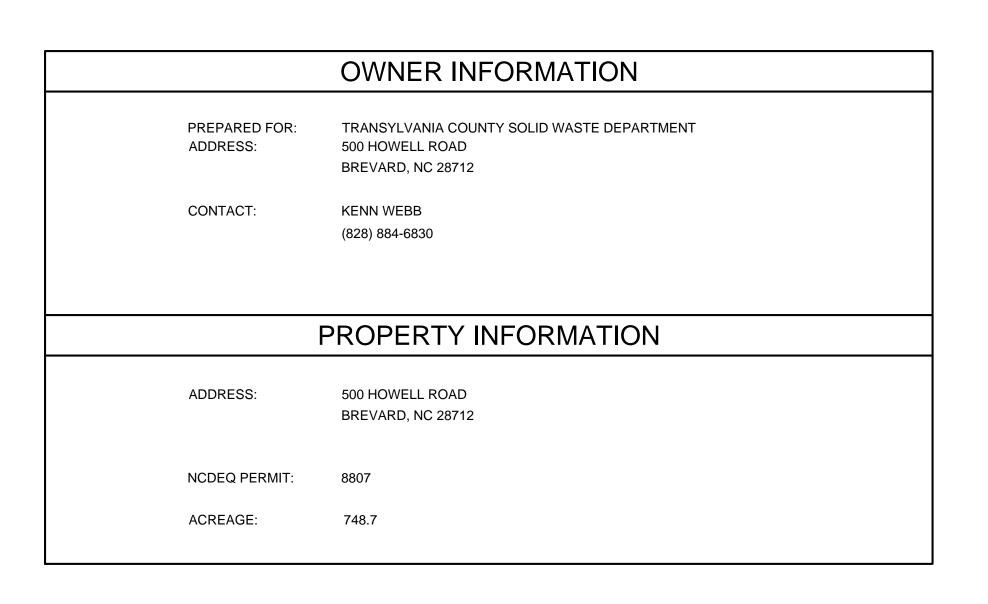
# WOODRUFF LANDFILL PHASE 7 EXPANSION CONSTRUCTION

TRANSYLVANIA COUNTY, NORTH CAROLINA



NORTH CAROLINA





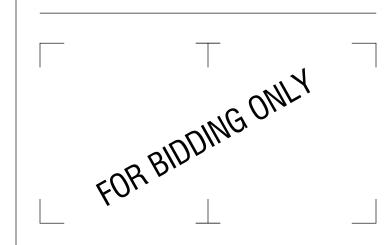
2000 PICKENS TO STATE OF THE PROPERTY OF THE P
Fiench-BroadsRiver
22000
Rosman Tr
Quebec Mountain
2600
Whetstone Gap
Whetstone 2400
A DDROVINA A TELLOCATION Whitmire
APPROXIMATE LOCATION  OF PROPERTY LINE  2600  26
PROPOSED BORROW AREA 1
PROPOSED BORROW Mountain TOWER ACCESS ROAD
AREA 2 PERMITTED PHASE 7
EXPANSION Middle
Fork
Maple Gap  NANTAHALA NATIONAL FOREST  NANTAHALA NATIONAL FOREST
ADDROVIMATE LOCATION
OF PHASES 1-6
Blue Ridge
GRAPHIC SCALE
Claypole 0 1600 2006 4000
Ridge Mountain Claypois
Haven (FEET)

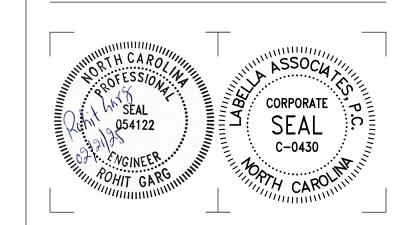
VICINITY MAP
AS NOTED

CONSTRUCTION PLAN FEBRUARY 2025

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**DESCRIPTION** 

TITLE SHEET

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# TRANSYLVANIA COUNTY 500 HOWELL ROAD, BREVARD, NORTH CAROLINA 28712



# WOODRUFF LANDFILL PHASE 7 EXPANSION CONSTRUCTION

500 HOWELL ROAD, BREVARD, NORTH CAROLINA 28712

NO:	DATE:	DESCRIPTION:
Revisions		

PROJECT NUMBER:	2250798	
DRAWN BY:		
DEVIEWED DV	RH	
REVIEWED BY:	KN/RG	
ISSUED FOR:	REBID	
DATE:	02/21/25	

TITLE SHEET

DRAWING NUMBER:

DRAWING NAME:

CP-T

#### LEGEND AND GENERAL NOTES

#### ENVIRONMENTAL MONITORING FEATURES LANDFILL AND ROAD FEATURES **EXISTING GROUNDWATER MONITORING WELL** MW-X PAVED ROAD MW-# PROPOSED GROUNDWATER MONITORING WELL **EXISTING OBSERVATION WELL** MW-OW-# \_\_\_\_\_\_ GRAVEL/DIRT ROAD → MW-OW-X PROPOSED OBSERVATION WELL NES-OW-X **EXISTING NES WELL EDGE OF PAVEMENT** NES-OW-# LIMIT OF WASTE/EDGE OF LINER PROPOSED NES WELL MW-PW-X FACILITY BOUNDARY/CELL LIMITS/PHASE LIMITS EXISTING PERFORMANCE WELL MW-PW-# PROPOSED PERFORMANCE WELL MW-X EXISTING SENTINEL WELL **BUILDINGS AND STRUCTURES** MW-# PROPOSED SENTINEL WELL EW-X **EXISTING EXTRACTION WELL** BUILDING ■ EW-# PROPOSED EXTRACTION WELL WETLANDS PIEZOMETER **FOUNDATION** PIEZOMETER **O** GP-X **GAS PROBE EXISTING GAS VENT HYDROLOGY ∆**GV-# PROPOSED GAS VENT APPROXIMATE 100 YEAR FLOOD PLAIN **▲**GW-X EXISTING GAS WELL **▲**GW-# PROPOSED GAS WELL STREAM OR RIVER **SMP-X** SURFACE WATER MONITORING POINT WETLAND ■LMP-1 LEACHATE MONITORING POINT B-X BORE HOLE LOCATION **VEGETATION** ⊗ C-X CORING LOCATION SINGLE TREE SS-X SOIL SAMPLING LOCATION ⊕TP-X TEST PIT LOCATION TREE LINE WELL LOCATION SPRINGHEAD LOCATION SHRUB SURVEY FEATURES **EROSION AND SEDIMENT CONTROL FEATURES** BENCHMARK SEDIMENT FENCE **CONTROL POINT INLET PROTECTION** PROPERTY LINE EASEMENT \_\_\_\_\_ **OUTLET PROTECTION (SIZE VARIES)** RIGHT OF WAY FENCE LINE \_\_\_\_\_x \_\_\_\_x \_\_\_\_x \_\_\_\_ DIVERSION BERM LIMITS OF DISTURBANCE GUARDRAIL 0 0 0 0 0 0 0 0 RESOURCE PROTECTION AREA TOPOGRAPHICAL FEATURES EXISTING 10' CONTOUR \_\_\_\_100 \_\_\_\_ UTILITIES EXISTING 2' CONTOUR UTILITY POLE PROPOSED 10' CONTOUR HYDRANT PROPOSED 2' CONTOUR $\bigcirc\Box$ LIGHT POLE GROUNDWATER SURFACE CONTOUR TANK (SIZE VARIES) (FT ABOVE MEAN SEA LEVEL) TRANSFORMER BEDROCK SURFACE CONTOUR (FT ABOVE MEAN SEA LEVEL) MANHOLE CLEANOUT SPOT ELEVATION **100.00** VALVE AIR RELEASE VALVE (ARV) OHE ---OVERHEAD ELECTRIC PLAN-VIEW HATCHING — — — UGE — — — — UGE — — · UNDERGROUND ELECTRIC OVERHEAD TELEPHONE **EXISTING** PROPOSED ---UGT----UNDERGROUND TELEPHONE LEACHATE FORCE MAIN **DEMOLITION** DUAL CONTAINMENT LEACHATE FORCE MAIN ——DCFM——DCFM—— PROPOSED SANITARY SEWER (GRAVITY LINE) ASPHALT **PAVEMENT** PROCESS SEWER LANDFILL GAS LINE \_\_\_\_ G\_\_\_\_ . **. . . . . . . . . . . . . . . .** . GRAVEL . . . . . . . . . . . . . . . . . NATURAL GAS LINE . . . . . . . . . . . . . . . . . POTABLE WATER CONCRETE SOLID PIPE (TYPE NOTED) PERFORATED PIPE (TYPE NOTED) \_\_\_\_\_ WETLANDS $\vee$ $\vee$ $\vee$ $\vee$ $\vee$ \_\_\_\_\_ CULVERT (SIZE NOTED) \_\_\_\_\_\_ STABILIZATION **EROSION CONTROL**

BLANKET (ECB) AND STABILIZATION

GEOGRID AND STABILIZATION

#### **SURVEY NOTES:**

- 1. TOPOGRAPHIC CONTOUR INTERVAL = 2 FEET, UNLESS INDICATED OTHERWISE.
- 2. TOPOGRAPHY CONSISTS OF AERIAL SURVEY, DATED JANUARY 17, 2025 COMPLETED BY SPATIAL DATA CONSULTANTS, HIGH POINT, NC. COORDINATE SYSTEM FOR ALL DIGITAL
- 3. THIS MAP WAS PREPARED BY DATA COMPILED FROM RECORDED SUBDIVISION PLATS, PARCEL PLATS, DEEDED DESCRIPTION DATA, AND OTHER PUBLIC RECORDS OWNED BY TRANSYLVANIA COUNTY. LABELLA AND TRANSYLVANIA COUNTY ASSUME NO LEGAL RESPONSIBILITY OR LIABILITY FOR ANY OF THE INFORMATION CONTAINED ON THIS MAP

#### **GENERAL NOTES:**

- 1. LANDSCAPING IS NOT PROPOSED FOR THIS PROJECT. HOWEVER THE BUFFER AREA SHOWN ON DRAWINGS WILL REMAIN UNDISTURBED EXCEPT FOR THE INSTALLATION OF UTILITIES, STORMWATER DRAINAGE FEATURES AND ACCESS TO THE SITE. WHEN POSSIBLE CLEARING WITHIN THE BUFFER WILL BE ALIGNED TO MINIMIZE VISUAL IMPACTS.
- 2. SOIL STOCKPILE AREAS WILL BE ESTABLISHED TO FACILITATE PHASED CONSTRUCTION. STOCKPILE LOCATIONS AND SIZE MAY VARY AND MAY NOT BE LIMITED TO THE AREAS SHOWN. SEDIMENT FENCE WILL BE INSTALLED AROUND THE BASE OF THE STOCKPILE
- 3. BASED ON THE NC SURFACE WATER CLASSIFICATIONS WEBSITE, THE NEAREST WATERBODIES TO THE PROJECT ARE WOODRUFF BRANCH AND BROWNS MILL CREEK (CLASSIFICATION C; TR) AND THE PROJECT IS LOCATED IN THE FRENCH BROAD RIVER

#### CONSTRUCTION SEQUENCE

- 1. OBTAIN PLAN APPROVAL AND OTHER APPLICABLE PERMITS.
- 2. DELINEATE AND FLAG THE LIMITS OF CONSTRUCTION.
- 3. HOLD PRECONSTRUCTION MEETING AT LEAST ONE (1) WEEK PRIOR TO START OF CONSTRUCTION.
- 4. NOTIFY NCDEQ'S LAND QUALITY SECTION AT LEAST 48 HOURS BEFORE COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
- 5. IDENTIFY CONSTRUCTION ACCESS FOR CONSTRUCTION ENTRANCE, CONSTRUCTION ROUTES AND EQUIPMENT PARKING AREAS. INSTALL STABILIZED CONSTRUCTION ENTRANCE(S).

GENERAL EROSION AND SEDIMENT CONTROL NOTES:

ALL TIMES.

SOIL STABILIZATION

1. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLANS SHALL BE MAINTAINED ON THE SITE AT

2. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES

3. ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING

LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED.

5. PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN DAYS

STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR.

THROUGHOUT CONSTRUCTION ACTIVITIES, TEMPORARY OR PERMANENT STABILIZATION WILL BE INITIATED

WITHIN 7-14 DAYS AFTER THE CESSATION OF ANY CLEARING, GRADING, EXCAVATING, OR OTHER

PERMANENT SEEDING SCHEDULES AND BEST MANAGEMENT PRACTICES.

LAND-DISTURBING ACTIVITIES ON ANY PORTION OF THE CONSTRUCTION SITE. A SOIL REINFORCEMENT

MAT WILL BE PLACED OVER DISTURBED AREAS WHEN UNFAVORABLE WEATHER CONDITIONS PREVENT ESTABLISHMENT OF GROUND COVER. DRAWING NO. CP-16 INCLUDES THE MINIMUM TEMPORARY AND

AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE

APPLIED WITHIN SEVEN DAYS OR FOURTEEN DAYS (DEPENDING ON SITE AREA) TO DENUDED AREAS THAT MAY

NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT (UNDISTURBED) FOR LONGER THAN 30 DAYS. PERMANENT

4. THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EACH

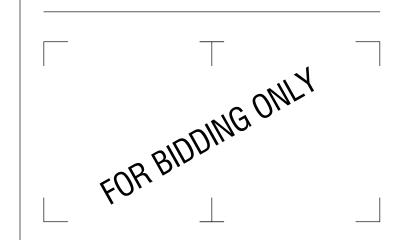
RUNOFF-PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE

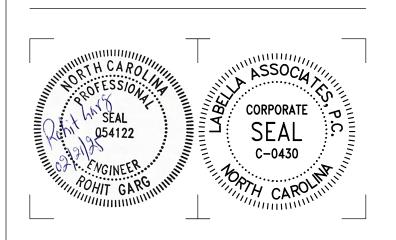
EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.

NECESSARY AS DETERMINED BY THE NCDEQ DIVISION OF LAND QUALITY AND THE PROJECT ENGINEER.

- 6. INSTALL TEMPORARY DIVERSIONS AND SEDIMENT FENCING.
- 7. CONSTRUCT THE PROPOSED SEDIMENT BASIN AND MODIFY THE EXISTING SEDIMENT BASIN. BASIN EMBANKMENTS AND BASIN BOTTOMS SHOULD BE PROVIDED WITH ADEQUATE GROUND COVER IMMEDIATELY UPON CONSTRUCTION.
- 8. CLEAR THE SITE OF ANY VEGETATION AND DEBRIS.
- CONTRACTOR SHALL COORDINATE THE RELOCATION OF THE CELL TOWER POWER LINES AND THE FIBER OPTIC CABLES WITH THE APPROPRIATE LOCAL
- 10. RELOCATE EXISTING MANHOLE AND FORCEMAIN TO THE PROPOSED TEMPORARY LOCATIONS.
- 11. CONSTRUCT THE PERIMETER CONTAINMENT BERM AND CONSTRUCT AND STABILIZE ALL PERIMETER STORMWATER CONVEYANCE FEATURES.
- 12. SEED AND STABILIZE ALL DISTURBED AREAS OUTSIDE OF THE LANDFILL EXPANSION AREA IMMEDIATELY AFTER GRADING IS COMPLETED. TEMPORARY OR PERMANENT STABILIZATION SHOULD BE APPLIED AS SOON AS PRACTICABLE, BUT IN ANY EVENT WITHIN 7 OR 14 CALENDAR DAYS (DEPENDING ON SITE AREA) FROM THE LAST LAND-DISTURBING ACTIVITY.
- 13. REVIEW THE EROSION AND SEDIMENT CONTROL (E&SC) PLAN AND CONFIRM THAT THE INSTALLED E&SC FEATURES ARE APPROPRIATE FOR THE CONSTRUCTION PHASE OF THE LANDFILL.
- 14. EXCAVATE THE DELINEATED LANDFILL EXPANSION AREA TO THE REQUIRED DEPTH AND GRADE THE AREA IN ACCORDANCE WITH THE PROJECT PLANS AND
- 15. INSPECT ALL E&S FEATURES WEEKLY AND FOLLOWING EACH RAINFALL EVENT OF 1.0 INCH OR GREATER, MAKE REPAIRS IMMEDIATELY.
- 16. INSTALL THE BOTTOM LINER SYSTEM WITHIN THE LANDFILL EXPANSION AND IN ACCORDANCE WITH THE PROJECT PLANS AND SPECIFICATIONS.
- 17. INSTALL THE LEACHATE COLLECTION SYSTEM WITHIN THE LANDFILL EXPANSION AND IN ACCORDANCE WITH THE PROJECT PLANS AND SPECIFICATIONS.
- 18. REMOVE THE TEMPORARY MANHOLE AND FORCEMAIN.
- 19. INSTALL PROTECTIVE COVER LAYER OVER THE LEACHATE COLLECTION SYSTEM.
- 20. INSTALL A RAIN COVER OR RAIN FLAP TO DEMARCATE THE ACTIVE WASTE AREA FROM THE INACTIVE WASTE AREA. THE INSTALLED RAIN COVER OR FLAP FACILITATES SEGREGATION OF STORMWATER GENERATED OVER THE INACTIVE WASTE AREA FROM THE LEACHATE GENERATED IN THE ACTIVE WASTE AREA. THE LEACHATE GENERATED IN THE ACTIVE WASTE AREA WILL BE COLLECTED BY THE LEACHATE COLLECTION SYSTEM WHILE THE UNCONTAMINATED COLLECTED OVER THE RAIN COVER OR FLAP WILL BE PUMPED INTO THE PERIMETER STORMWATER CONVEYANCE FEATURES.
- 21. INSTALL THE REQUIRED PERMANENT E&SC AND STORMWATER MANAGEMENT FEATURES E.G., DIVERSION BERMS, SLOPE DRAINS, INLET PROTECTIONS, OUTLET PROTECTIONS, WATER BARS, ETC.
- 22. APPLY TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER ON ALL DISTURBED AREAS AS SOON AS PRACTICABLE, BUT IN ANY EVENT WITHIN 7 OR 14 CALENDAR DAYS (DEPENDING ON SITE AREA) FROM THE LAST LAND-DISTURBING ACTIVITY.
- 23. AFTER THE SITE IS STABILIZED, REMOVE ALL TEMPORARY MEASURES AND ESTABLISH PERMANENT VEGETATION ON THE DISTURBED AREAS.

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#### TRANSYLVANIA COUNTY 500 HOWELL ROAD, BREVARD NORTH CAROLINA 28712

Land of Waterfalk



#### **WOODRUFF LANDFILL** PHASE 7 EXPANSION CONSTRUCTION

500 HOWELL ROAD, BREVARD, NORTH CAROLINA 28712

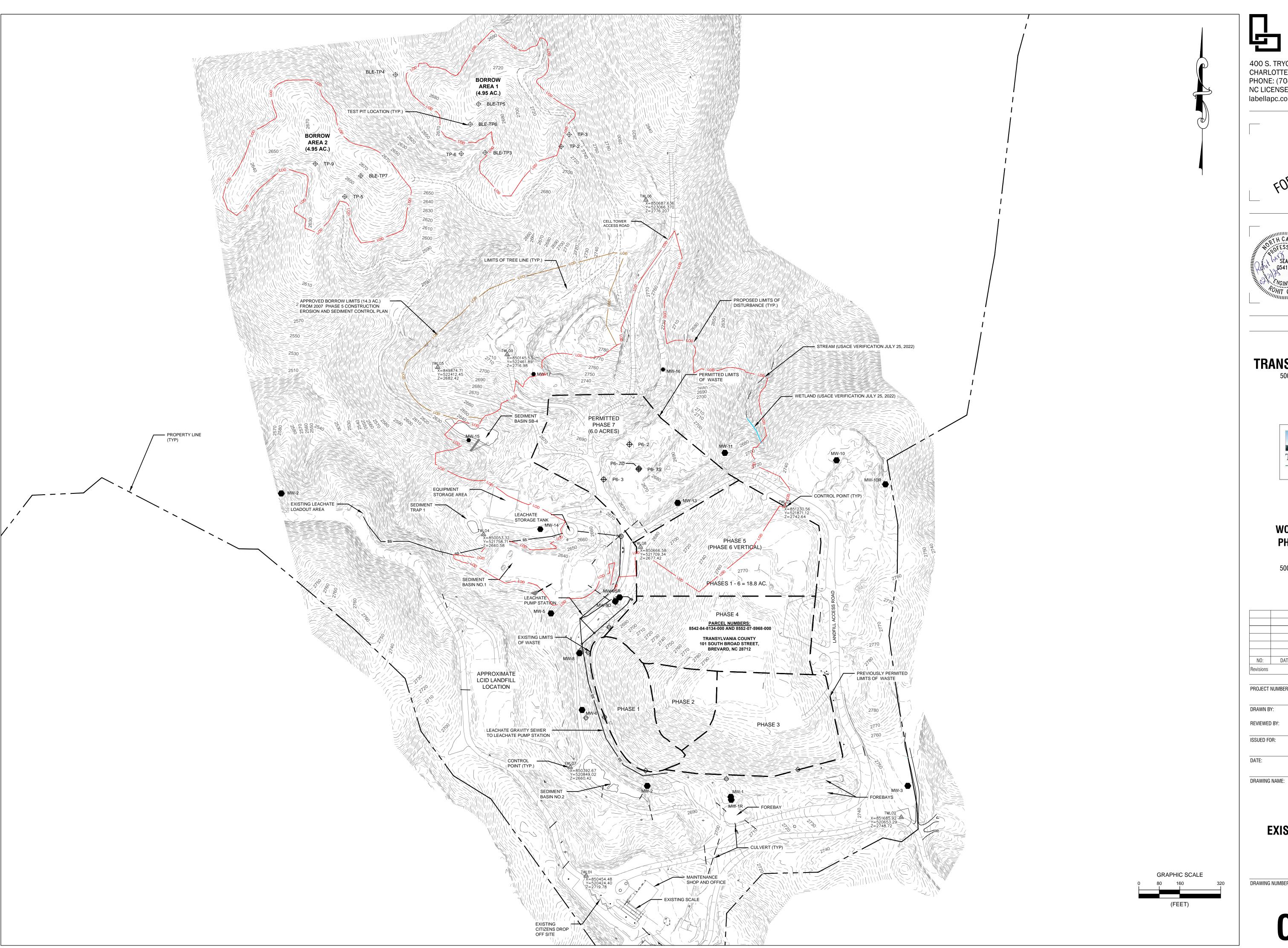
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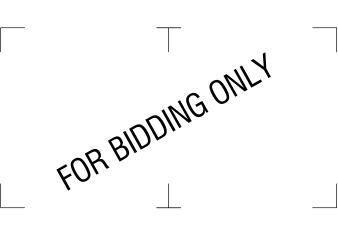
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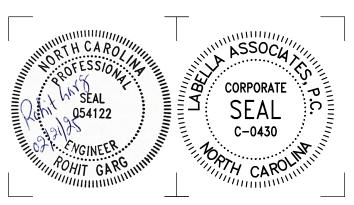
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DRAWING NAME:









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#### TRANSYLVANIA COUNTY 500 HOWELL ROAD, BREVARD,

NORTH CAROLINA 28712



#### **WOODRUFF LANDFILL PHASE 7 EXPANSION** CONSTRUCTION

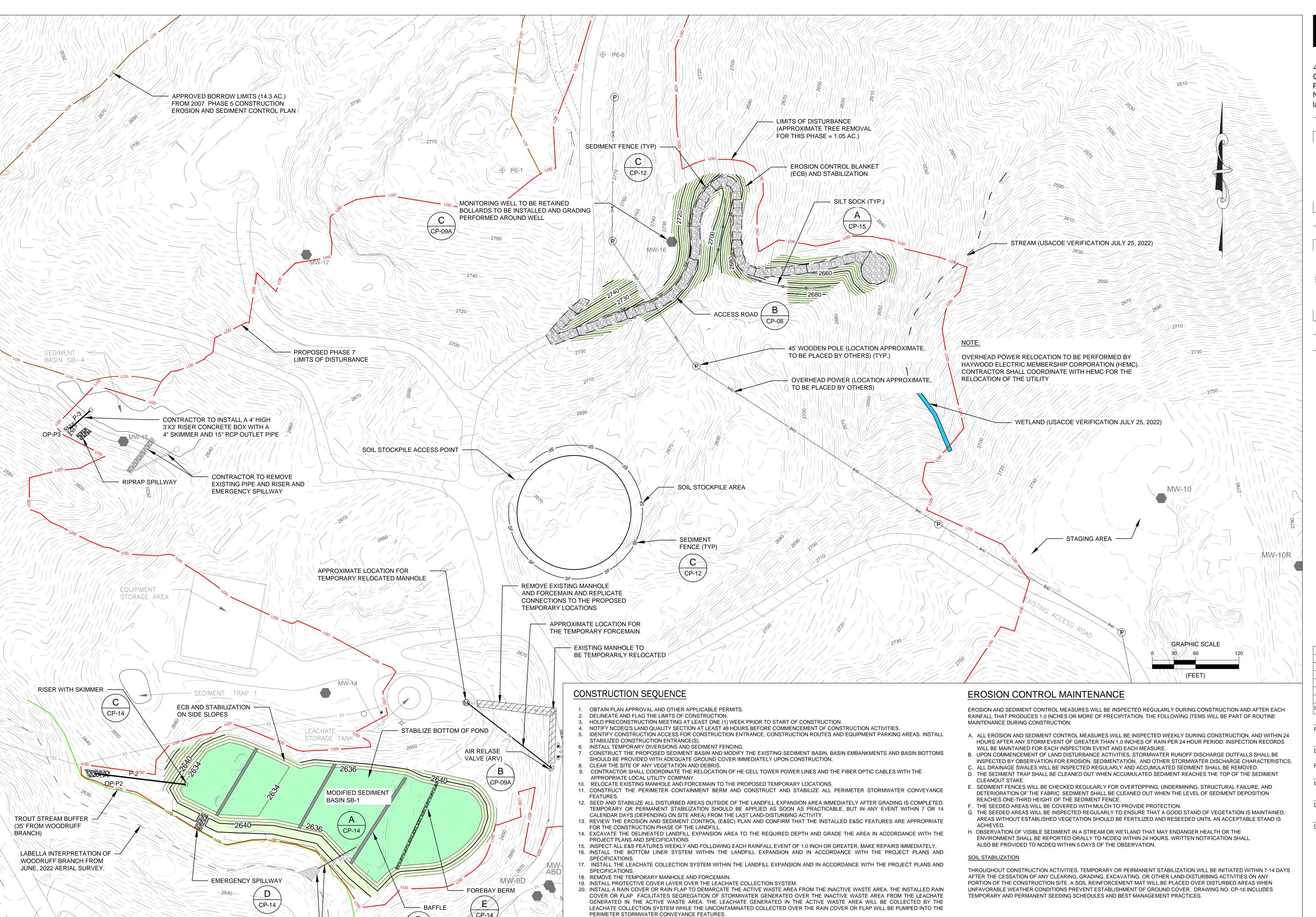
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NO:	DATE:	DESCRIPTION:

2250798	
RH	
KN/RG	
REBID	
02/21/25	
	RH KN / RG REBID

#### **EXISTING CONDITIONS**

DRAWING NUMBER:



PROTECTIONS, OUTLET PROTECTIONS, WATER BARS, ETC.

CONTRACTOR TO REMOVE

EXISTING PIPE AND RISER AND OUTLET PROTECTION

. INSTALL THE REQUIRED PERMANENT E&SC AND STORMWATER MANAGEMENT FEATURES E.G., DIVERSION BERMS, SLOPE DRAINS, INLET

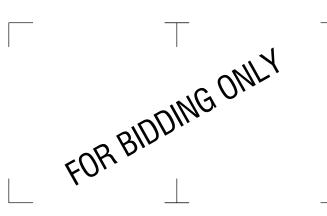
22. APPLY TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER ON ALL DISTURBED AREAS AS SOON AS PRACTICABLE, BUT IN

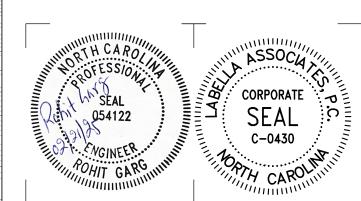
23. AFTER THE SITE IS STABILIZED, REMOVE ALL TEMPORARY MEASURES AND ESTABLISH PERMANENT VEGETATION ON THE DISTURBED

ANY EVENT WITHIN 7 OR 14 CALENDAR DAYS (DEPENDING ON SITE AREA) FROM THE LAST LAND-DISTURBING ACTIVITY.

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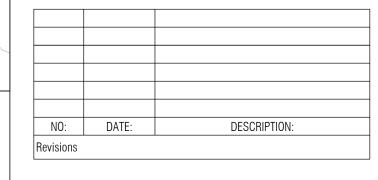
# TRANSYLVANIA COUNTY 500 HOWELL ROAD, BREVARD, NORTH CAROLINA 28712



NORTH CAROLINA

# WOODRUFF LANDFILL PHASE 7 EXPANSION CONSTRUCTION

500 HOWELL ROAD, BREVARD, NORTH CAROLINA 28712



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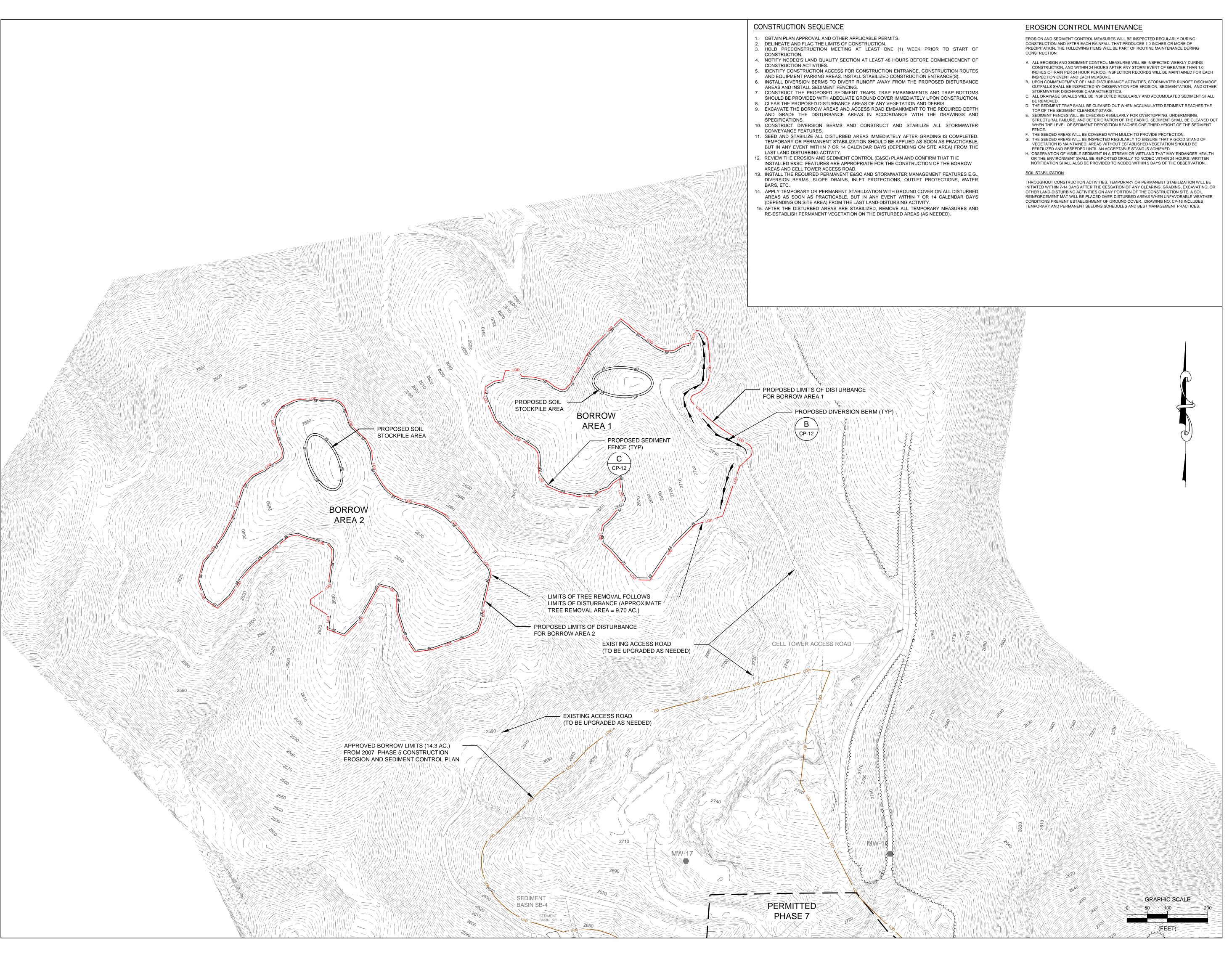
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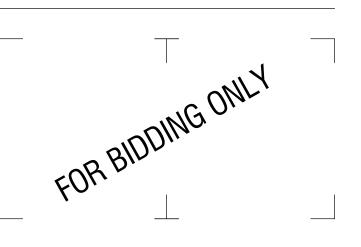
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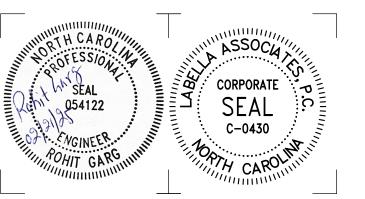
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## TRANSYLVANIA COUNTY 500 HOWELL ROAD, BREVARD,

NORTH CAROLINA 28712



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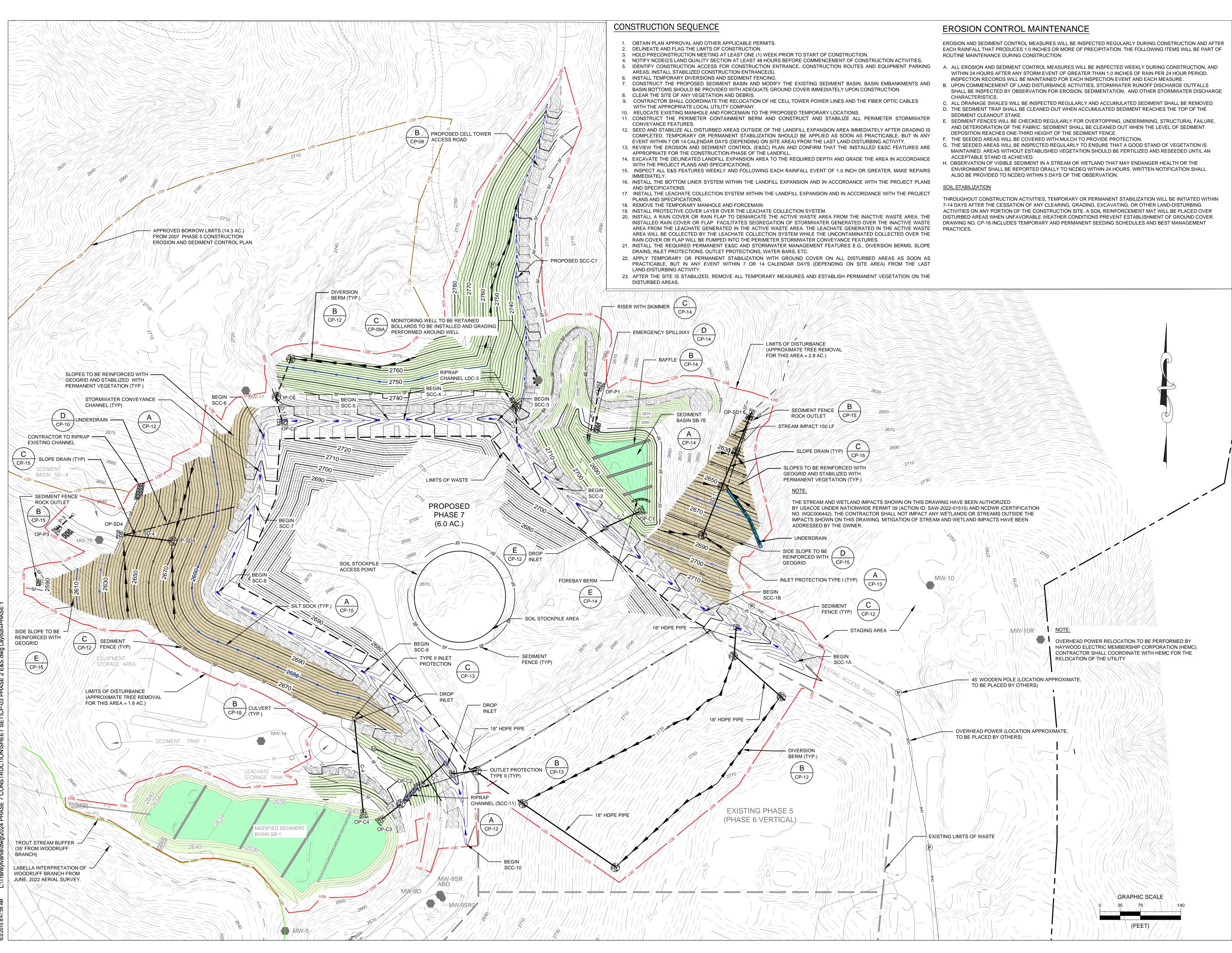
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DRAWING NAME:

BORROW AREAS
EROSION AND SEDIMENT
CONTROL PLAN
PHASE 1

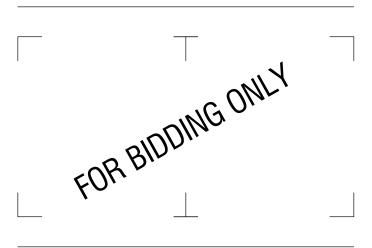
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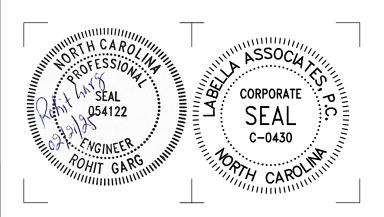
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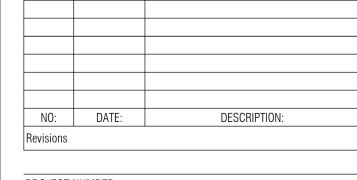
NORTH CAROLINA 28712



NORTH CAROLINA

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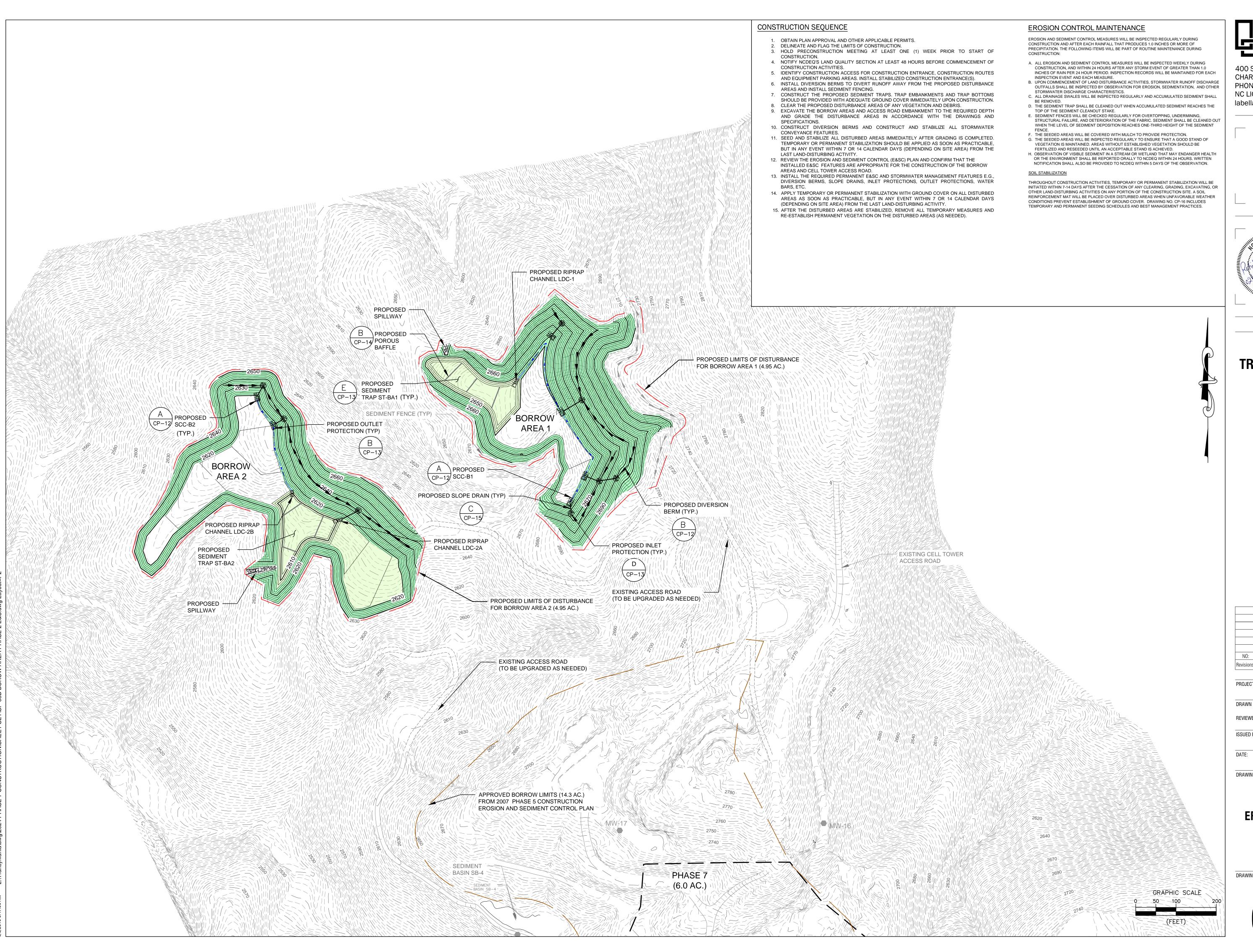
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PHASE 7
EROSION AND SEDIMENT
CONTROL PLAN
PHASE 2

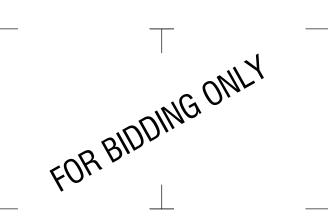
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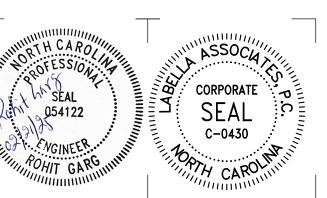
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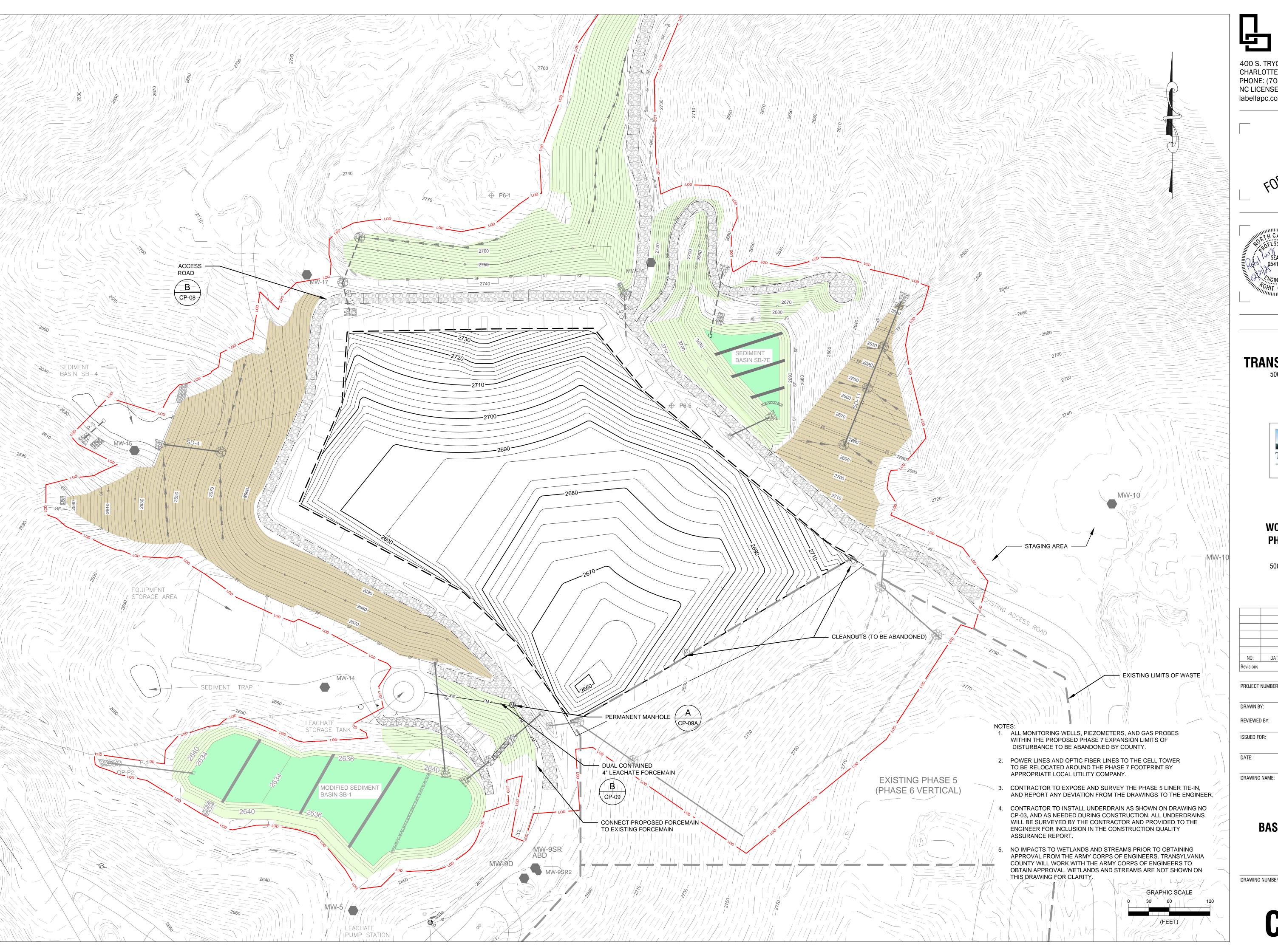
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BORROW AREAS
EROSION AND SEDIMENT
CONTROL PLAN
PHASE 2

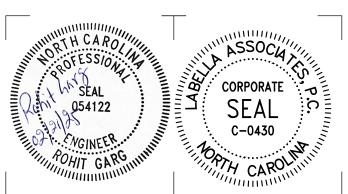
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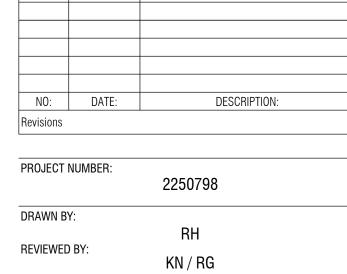
### TRANSYLVANIA COUNTY

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#### **WOODRUFF LANDFILL PHASE 7 EXPANSION** CONSTRUCTION

500 HOWELL ROAD, BREVARD, NORTH CAROLINA 28712

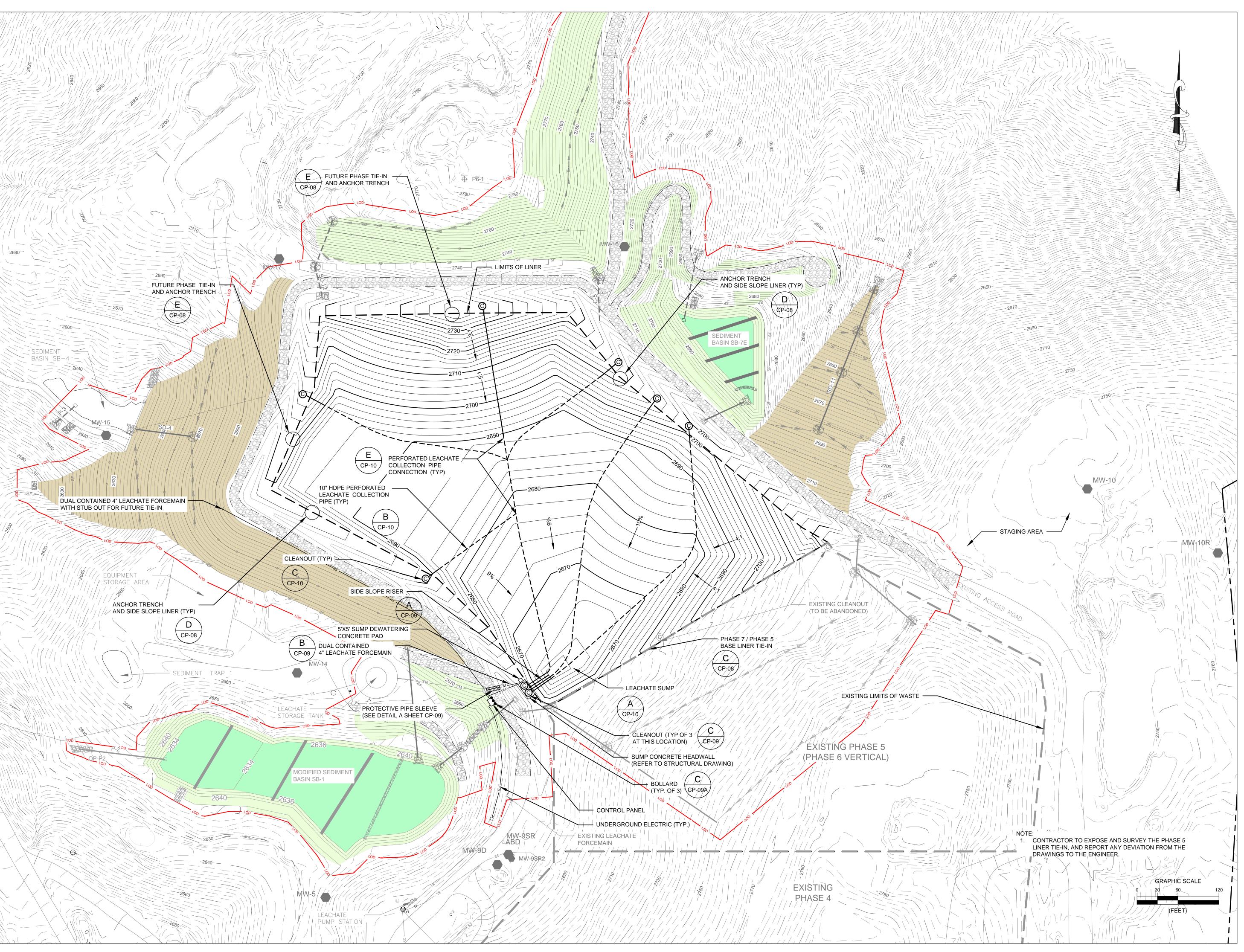


#### PHASE 7 **BASE GRADING PLAN**

REBID

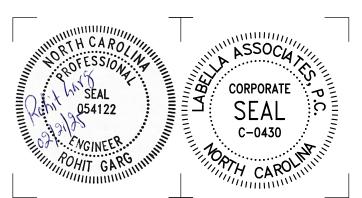
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## TRANSYLVANIA COUNTY 500 HOWELL ROAD, BREVARD.

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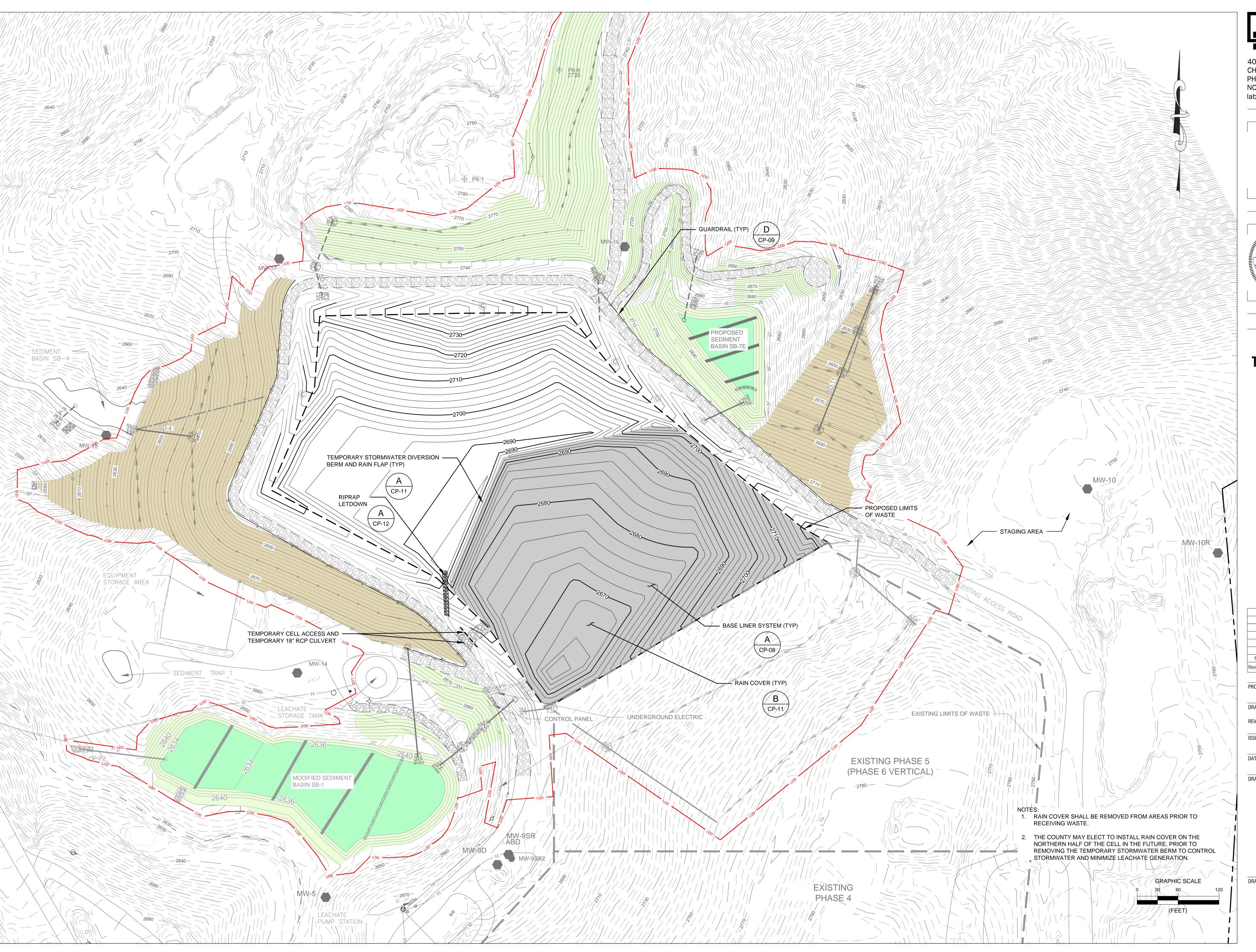
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02/21/25

DRAWING NAME:

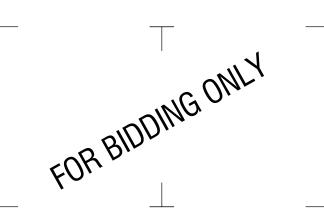
PHASE 7 TOP OF LINER GRADING PLAN

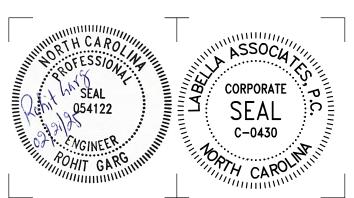
DRAWING NUMBER:



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## TRANSYLVANIA COUNTY

500 HOWELL ROAD, BREVARD, NORTH CAROLINA 28712



# WOODRUFF LANDFILL PHASE 7 EXPANSION CONSTRUCTION

500 HOWELL ROAD, BREVARD, NORTH CAROLINA 28712

NO:	DATE:	DESCRIPTION:
Revisions		
Revisions		
PROJECT N	NUMBER:	

PROJECT NUMBER:

2250798

DRAWN BY:

RH

REVIEWED BY:

KN / RG

ISSUED FOR:

REBID

DATE:

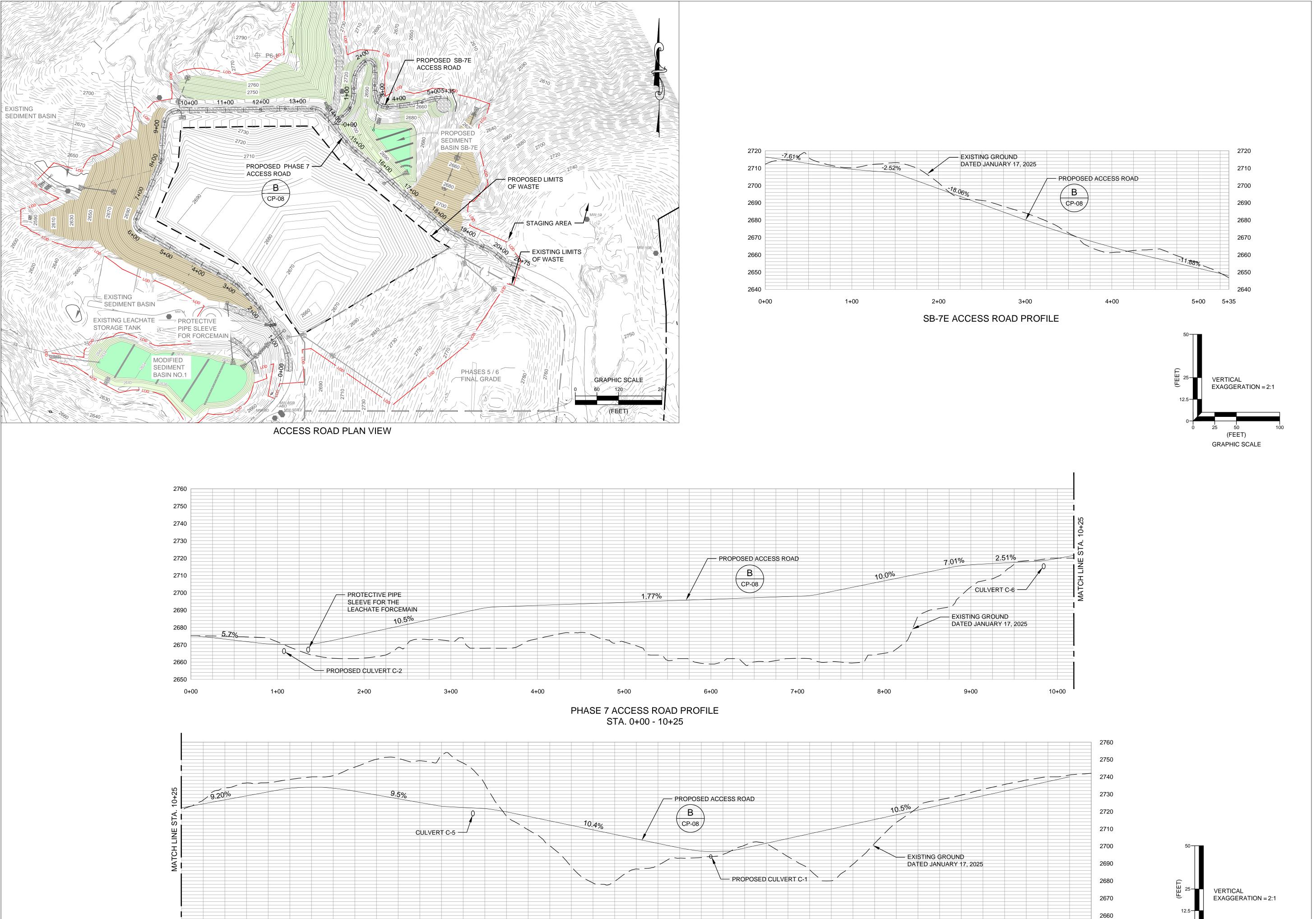
02/21/25

DRAWING NAME:

PHASE 7

TOP OF DRAINAGE LAYER GRADING PLAN

DRAWING NUMBER:



16+00

PHASE 7 ACCESS ROAD PROFILE STA. 10+25 - 20+75 17+00

13+00

12+00

11+00

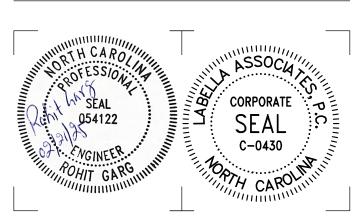
14+00

15+00

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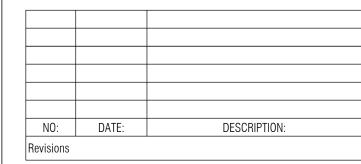
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# TRANSYLVANIA COUNTY 500 HOWELL ROAD, BREVARD, NORTH CAROLINA 28712



# WOODRUFF LANDFILL PHASE 7 EXPANSION CONSTRUCTION

500 HOWELL ROAD, BREVARD, NORTH CAROLINA 28712



PROJECT NUMBER:

2250798

DRAWN BY:

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KN / RG

ISSUED FOR:

REBID

DATE:

02/21/25

DRAWING NAME:

PHASE 7 AND SB-7E ACCESS ROADS PLAN VIEW AND PROFILE

DRAWING NUMBER:

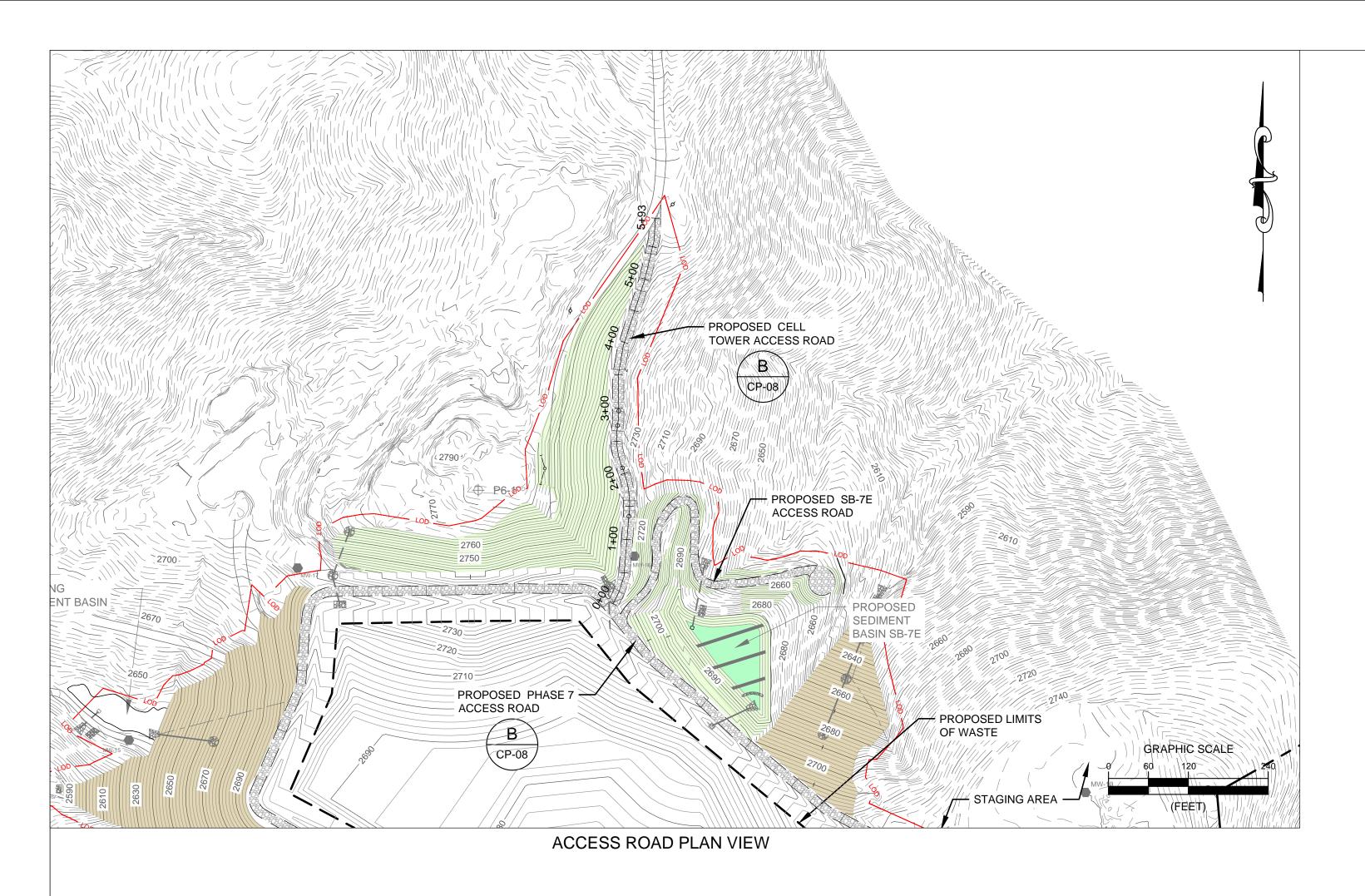
GRAPHIC SCALE

2650

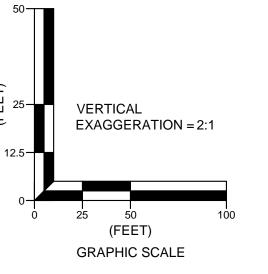
20+75

20+00

19+00

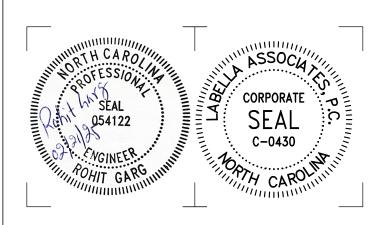












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## TRANSYLVANIA COUNTY

500 HOWELL ROAD, BREVARD, NORTH CAROLINA 28712



#### **WOODRUFF LANDFILL PHASE 7 EXPANSION** CONSTRUCTION

500 HOWELL ROAD, BREVARD, NORTH CAROLINA 28712

NO:	DATE:	DESCRIPTION:
Revisions		

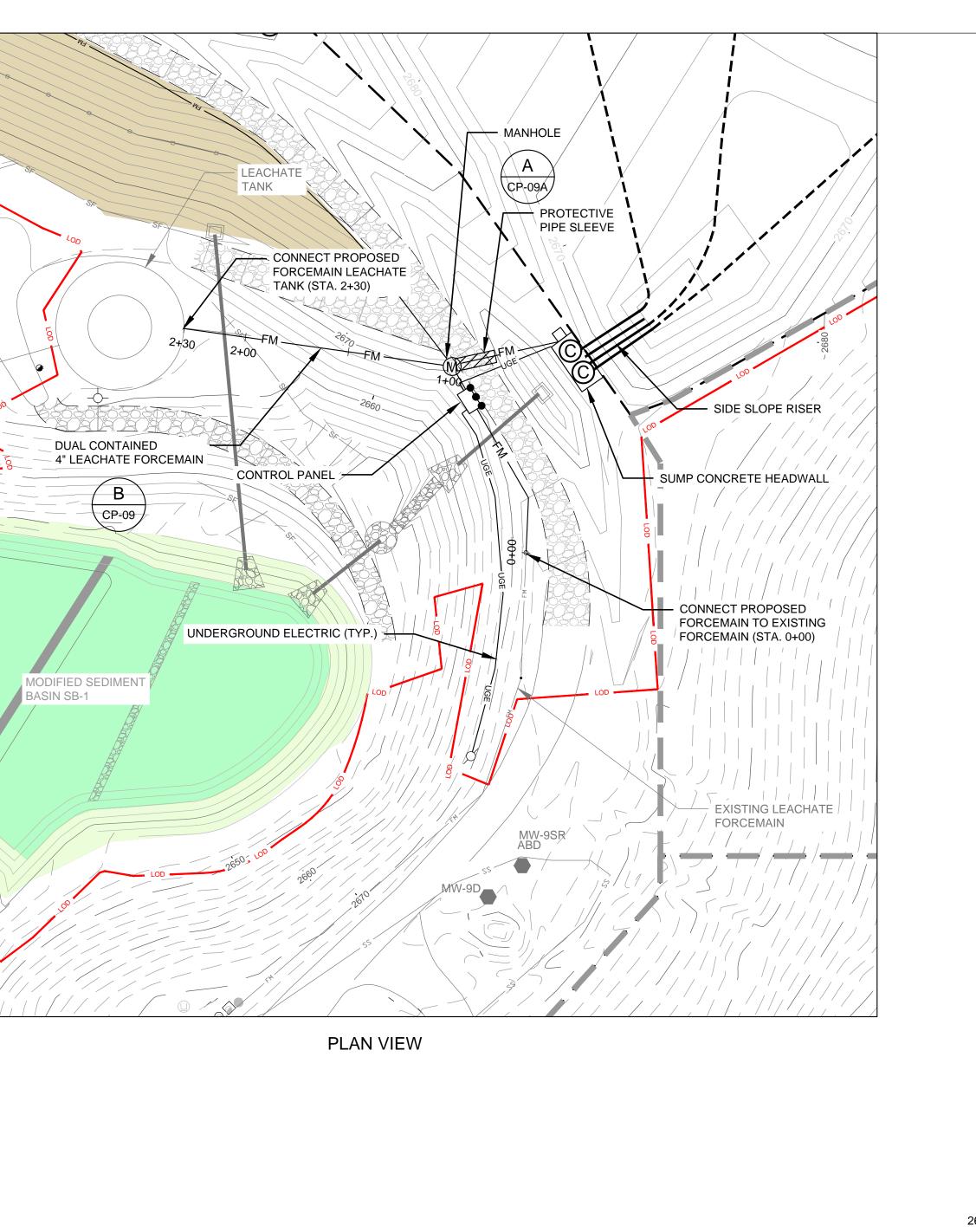
PROJECT NUMBER:	2250798	
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REVIEWED BY:	KN / RG	
ISSUED FOR:	REBID	
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DRAWING NAME:

**CELL TOWER ACCESS ROAD PLAN VIEW AND PROFILE** 

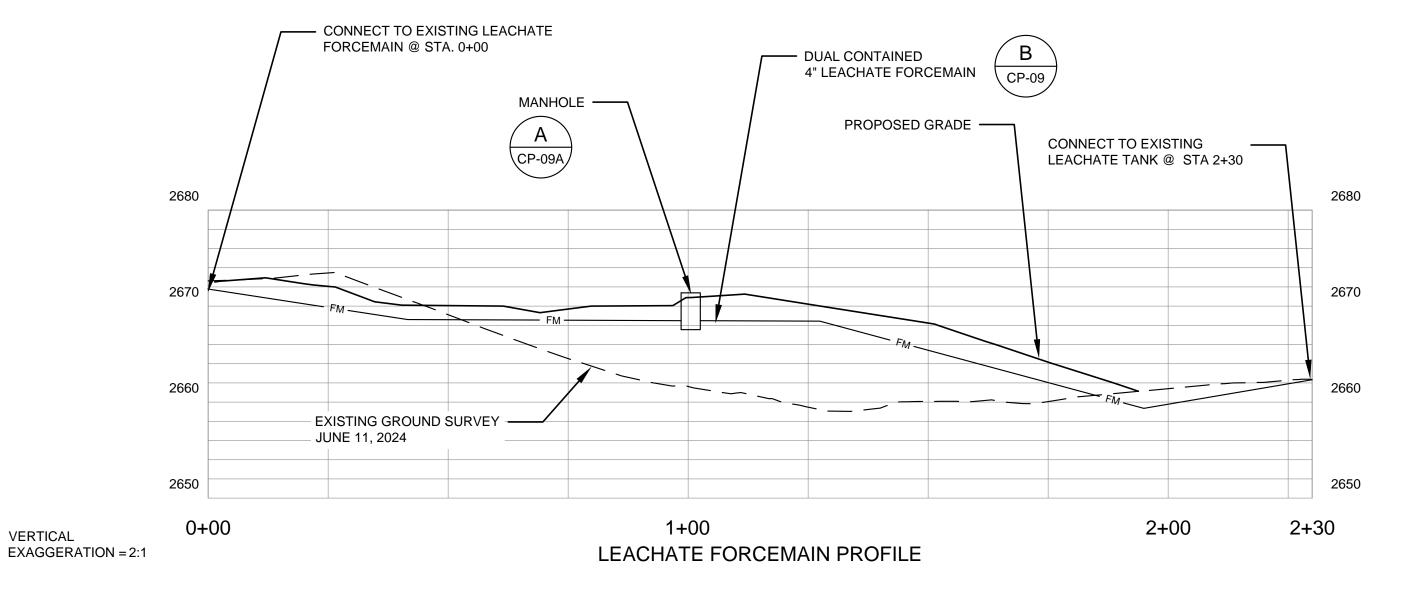
DRAWING NUMBER:

CP-07A



VERTICAL

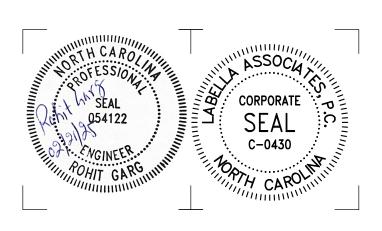
**GRAPHIC SCALE** 





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## TRANSYLVANIA COUNTY

500 HOWELL ROAD, BREVARD, NORTH CAROLINA 28712



#### **WOODRUFF LANDFILL PHASE 7 EXPANSION** CONSTRUCTION

500 HOWELL ROAD, BREVARD, NORTH CAROLINA 28712

NO:	DATE:	DESCRIPTION:

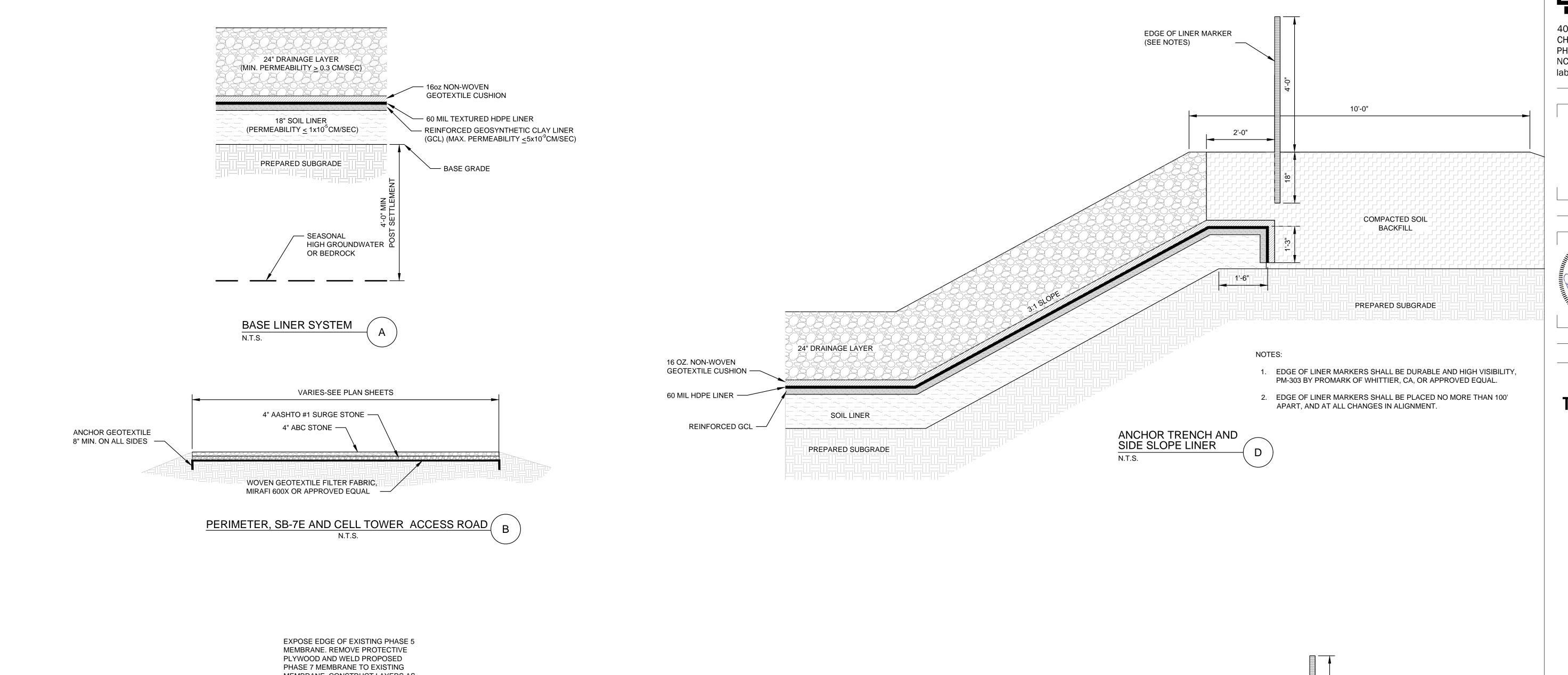
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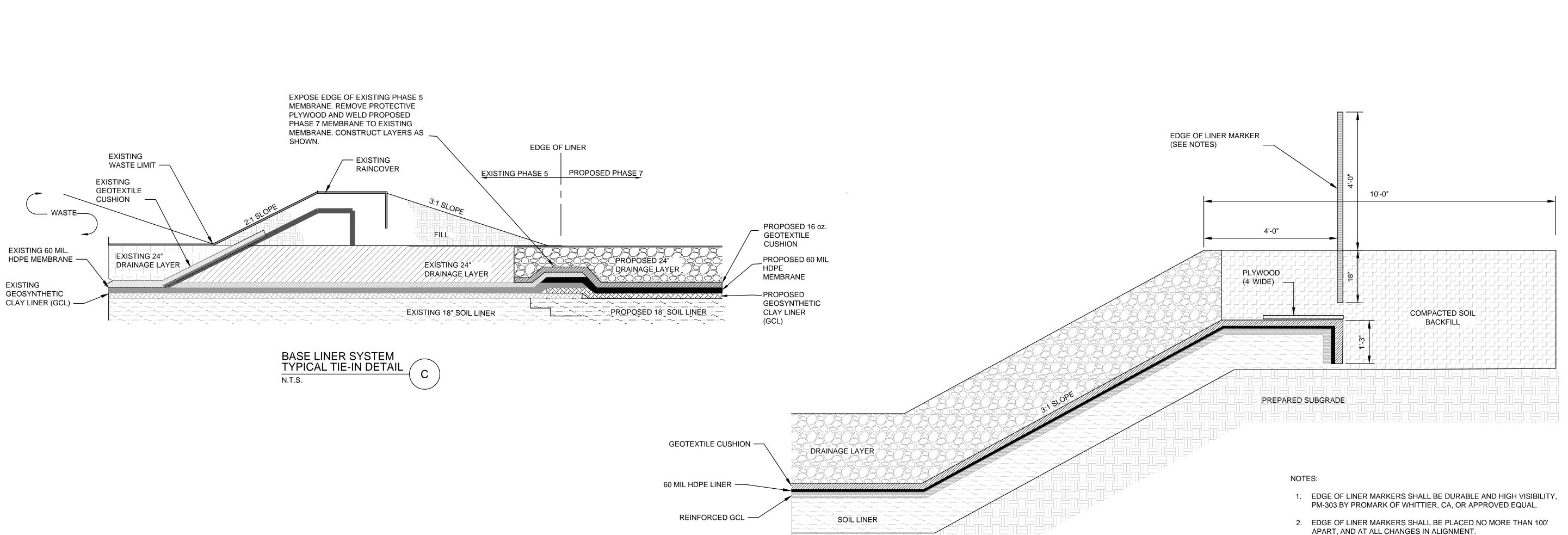
#### **LEACHATE FORCEMAIN PLAN AND PROFILE**

DRAWING NUMBER:

DRAWING NAME:

CP-07B

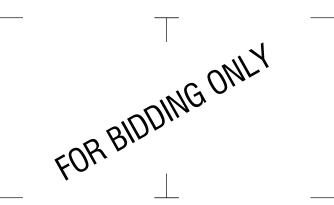


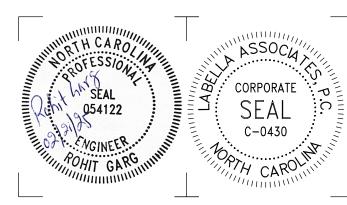


PREPARED SUBGRADE

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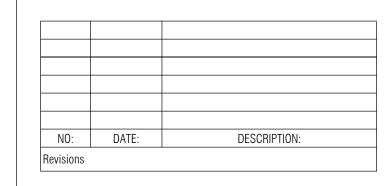
## TRANSYLVANIA COUNTY 500 HOWELL ROAD, BREVARD.

500 HOWELL ROAD, BREVARD, NORTH CAROLINA 28712



# WOODRUFF LANDFILL PHASE 7 EXPANSION CONSTRUCTION

500 HOWELL ROAD, BREVARD, NORTH CAROLINA 28712



PROJECT NUMBER:	2250798	
DRAWN BY:		
REVIEWED BY:	RH	
NEVIEWED DT.	KN / RG	
ISSUED FOR:	REBID	
DATE:	02/21/25	

#### **GENERAL DETAILS**

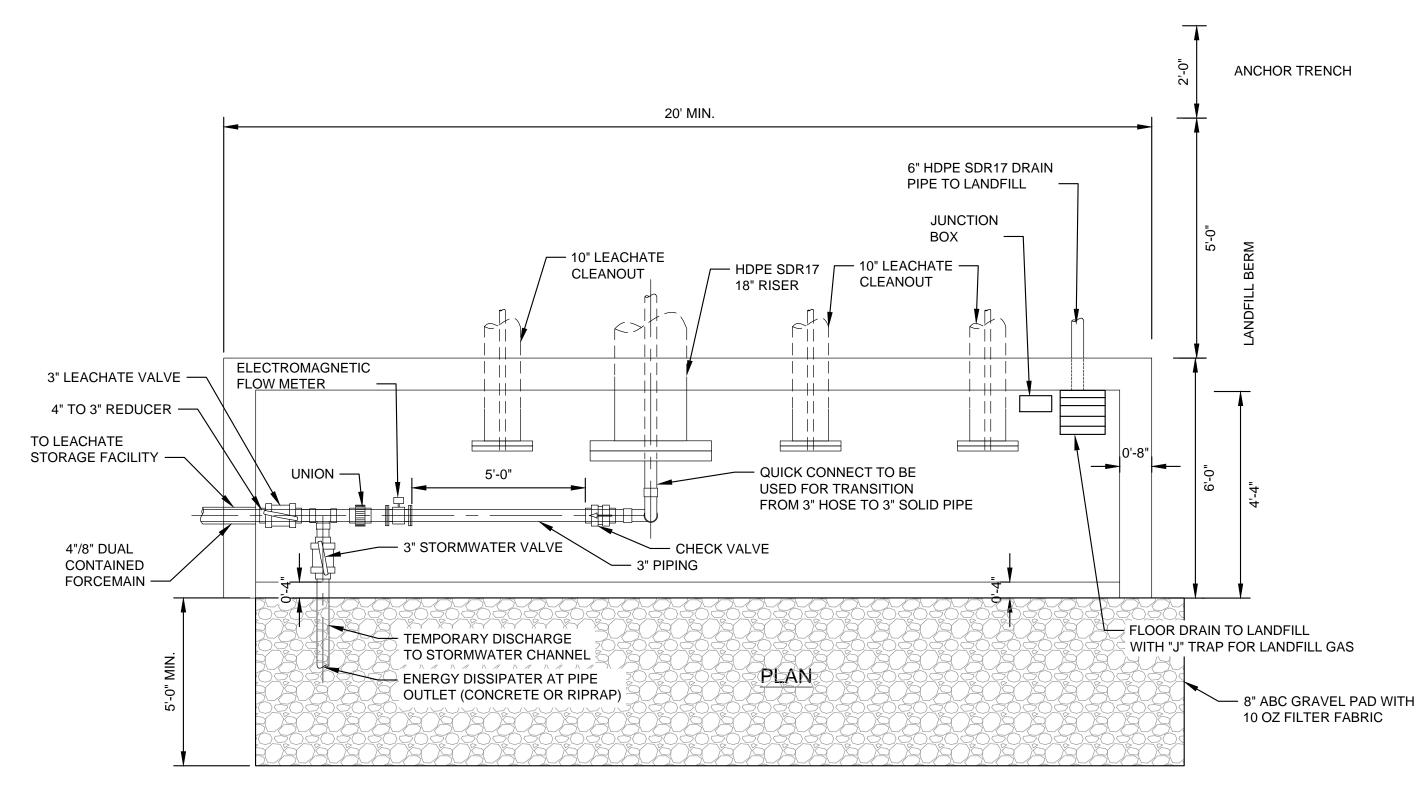
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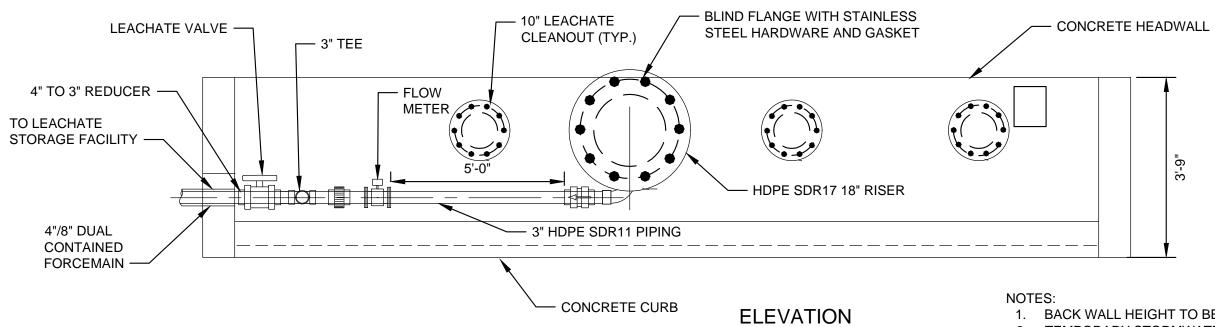
PHASE 7 AND FUTURE PHASE ANCHOR TRENCH AND

SIDE SLOPE LINER

N.T.S.

DRAWING NAME:





SUMP CONCRETE HEADWALL DETAIL N.T.S. NOTES:
1. BACK WALL HEIGHT TO BE 1'-0" ABOVE FINAL CLOSURE GRADES

TEMPORARY STORMWATER VALVE SHOULD BE FLG \* FLG 3" DIAMETER. VALVE TO BE USED TO DISCHARGE STORMWATER PRIOR TO INITIAL WASTE PLACEMENT. AFTER WASTE PLACEMENT

TO DISCHARGE STORMWATER PRIOR TO INITIAL WASTE PLACEMENT. AFTER WASTE PLACEMENT BEGINS, VALVE SHOULD BE REMOVED AND THE THE PIPE CAPPED.

3. FLOOR DRAIN TO LANDFILL OR CONNECTED TO LEACHATE PIPE, GIVEN A J-PIPE IS INSTALLED.

TRAP DEPTH TO BE ADJUSTED FOR LANDFILL GAS COLLECTION VACUUM SET POINTS. MIN 4" DRAIN PIPE TO BE USED.

PIPE SUPPORTS TO BE INSTALLED IN ACCORDANCE WITH ANSI/MSS SP-58-2018, AT MINIMUM. PIPE SUPPORTS TO BE STAINLESS STEEL OR CONCRETE,

WITH LINED SADDLES TO PREVENT ABRASION OF PIPE AND APPURTENANCES.

PIPE INSULATION, CLADDING AND HEAT TRACING TO BE PROVIDED TO PROTECT FROM FREEZING AND WEATHER ELEMENTS.(SEE PROJECT SPECIFICATIONS)

PROVIDE FREEZE PROTECTION FOR FLOW METER.
ALL ELECTRICAL CONDUIT SHALL BE SEALED TO PREVENT LANDFILL GAS MIGRATION.

ALL PIPING AND MATERIAL USED SHALL BE SCH 80 PVC OR APPROVED EQUIVALENT.

9. PROVIDE A MINIMUM 5' GRAVEL PAD IN FRONT OF RISER AREA.

10. ALL PIPE CONNECTIONS TO BE FLANGED WITH GASKETS AND STAINLESS STEEL HARDWARE.11. ALL PIPING SHALL BE SCH 80 PVC, UNLESS OTHERWISE NOTED.

 FLOW METER READER AND RECORDER SHALL BE INSTALLED IN THE PUMP ELECTRICAL PANEL.
 PIPE INSULATION SHALL BE CONSTRUCTED IN ACCORDANCE WITH ASTM C585 AND PROVIDE INSULATION FOR OUTDOOR APPLICATION IN TRANSYLVANIA COUNTY, NC.

14. PIPE CLADDING SHALL BE CONSTRUCTED IN ACCORDANCE WITH ASTM C1879 AND PROVIDE DURABLE NON-CORROSIVE INSULATION FOR OUTDOOR APPLICATION IN TRANSYLVANIA COUNTY, NC.

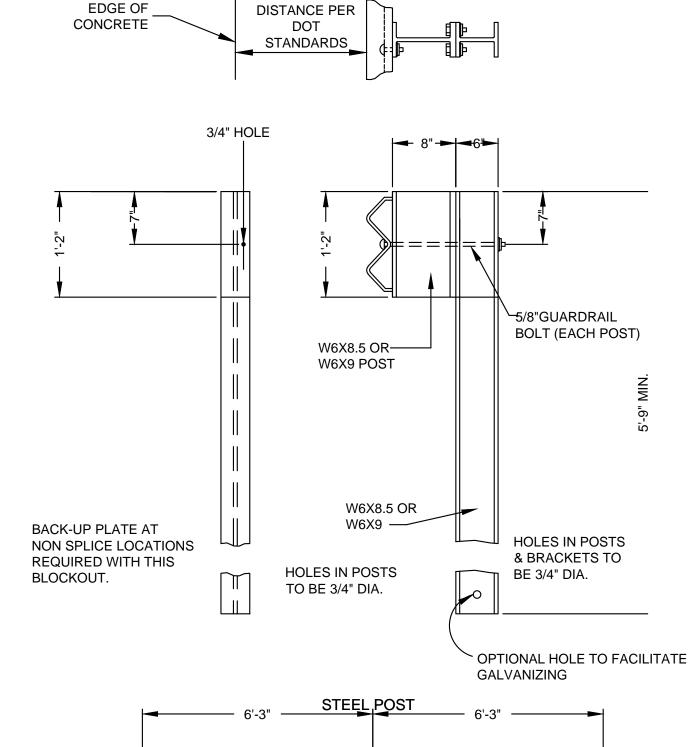
- LOCAL BACKFILL MATERIAL - 4" / 8" Ø DUAL CONTAINED **FORCEMAIN** #57 STONE BEDDING MATERIAL (6" MIN.) 2'-9" (MAX) 1. SELECT FILL WILL BE PLACED IN LIFTS NOT EXCEEDING 8" AND COMPACTED TO 95% MAX DRY DENSITY (STANDARD PROCTOR) TO 12" ABOVE THE CROWN OF THE PIPE, MIN. LEACHATE FORCEMAIN PIPE TRENCH DETAIL 2. PLACE CONT. #10 THIN STRANDED COPPER, INSULATED TRACER N.T.S. WIRE, SUITABLE FOR DIRECT BURY, IN THE TRENCH NEXT TO ALL PIPING. BRING ENDS TO A TEST STATION, AND TEST CONTINUITY

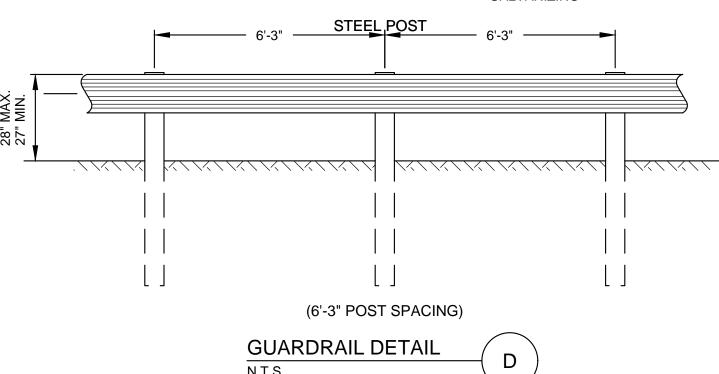
IN THE PRESENCE OF THE ENGINEER OR REPRESENTATIVE.

NOTES: ALL BOLTS, NUTS, WASHERS, AND STEEL BLOCKOUTS ARE TO BE GALVANIZED.

POST AND BLOCKOUT MAY BE HOT ROLLED OR WELDED.

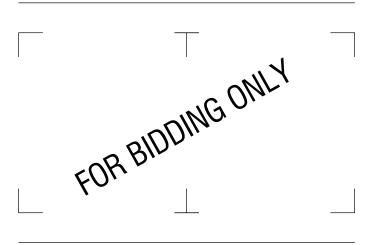
\*STANDARD WASHER TO BE USED ON LAST 50' OF RUN OFF END.

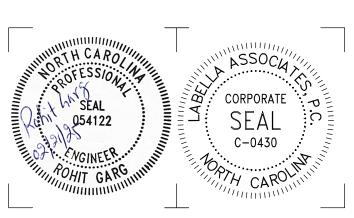






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## TRANSYLVANIA COUNTY 500 HOWELL ROAD, BREVARD,

NORTH CAROLINA 28712

Land of Waterfalls



# WOODRUFF LANDFILL PHASE 7 EXPANSION CONSTRUCTION

500 HOWELL ROAD, BREVARD, NORTH CAROLINA 28712

NO:	DATE:	DESCRIPTION:

PROJECT NUMBER:

2250798

DRAWN BY:

RH

REVIEWED BY:

KN / RG

ISSUED FOR:

REBID

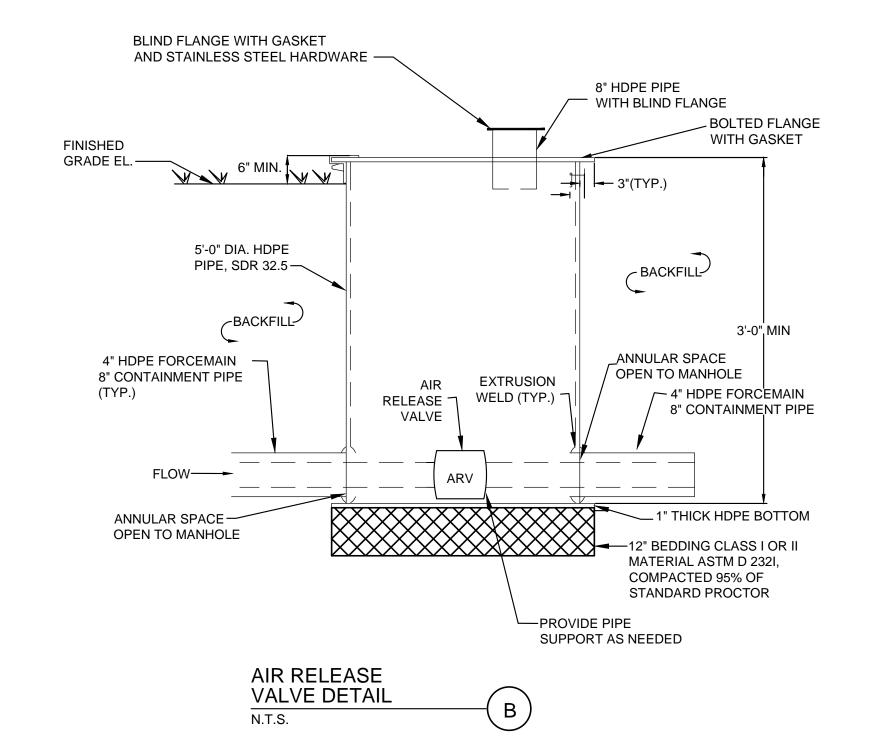
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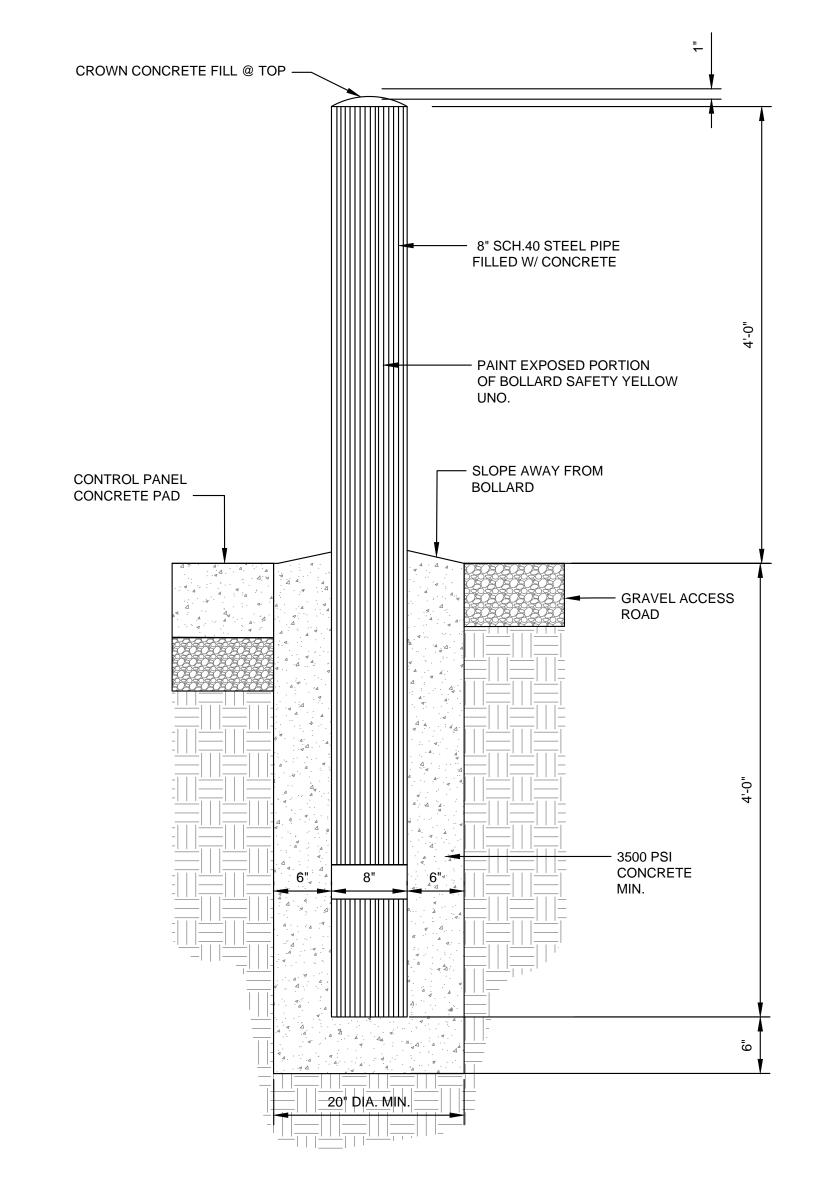
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**GENERAL DETAILS** 

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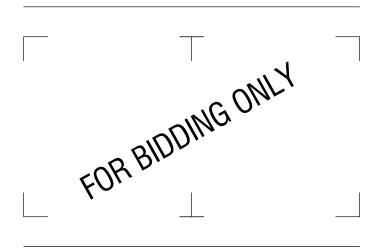
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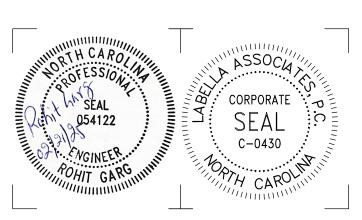












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## TRANSYLVANIA COUNTY 500 HOWELL ROAD, BREVARD,

NORTH CAROLINA 28712



# WOODRUFF LANDFILL PHASE 7 EXPANSION CONSTRUCTION

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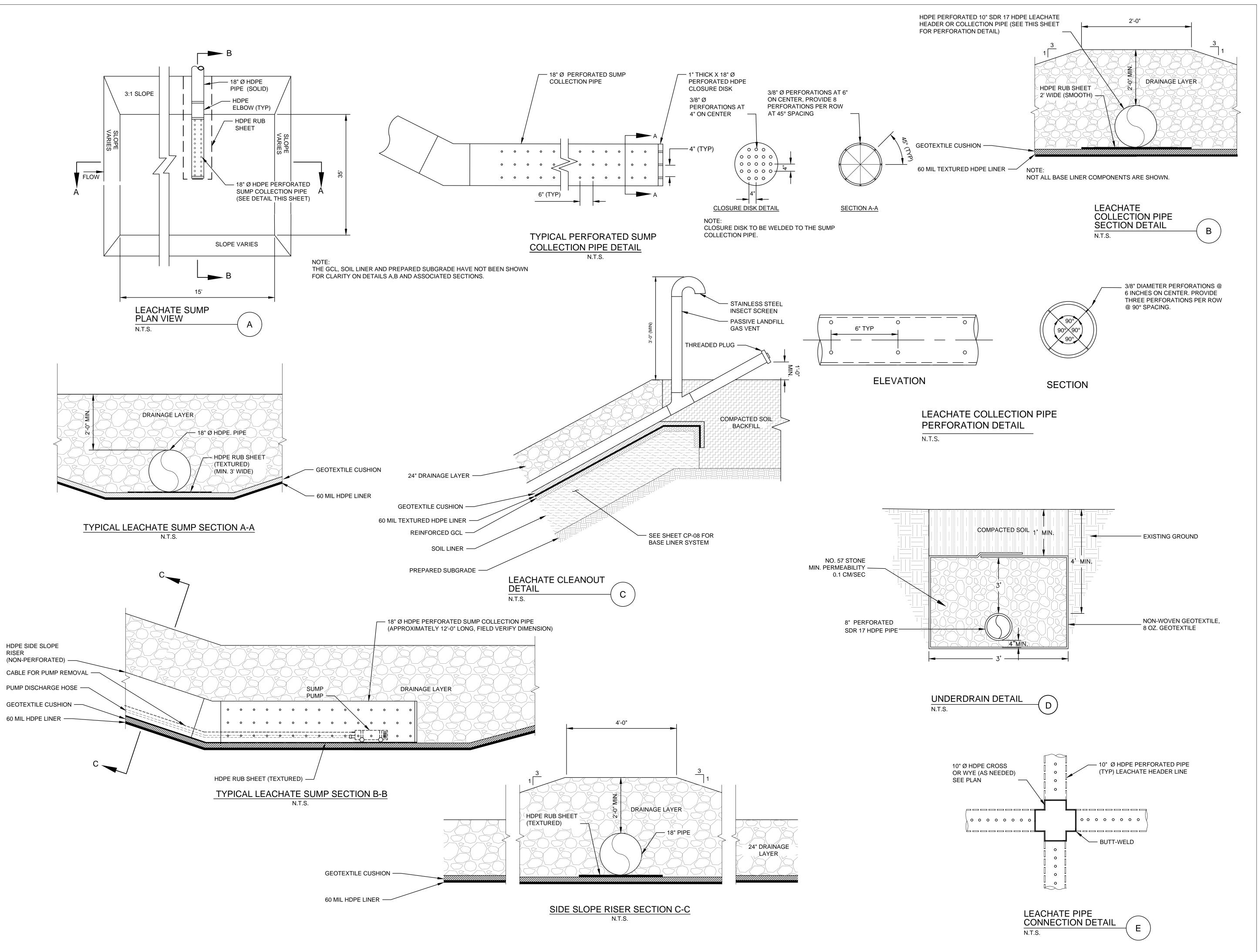
02/21/25

**GENERAL DETAILS** 

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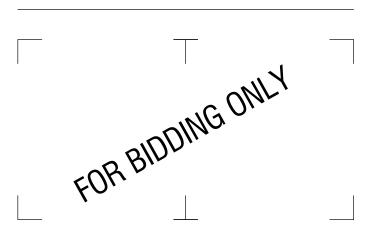
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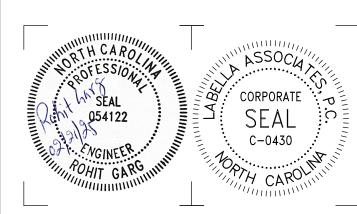
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# TRANSYLVANIA COUNTY 500 HOWELL ROAD, BREVARD, NORTH CAROLINA 28712





# WOODRUFF LANDFILL PHASE 7 EXPANSION CONSTRUCTION

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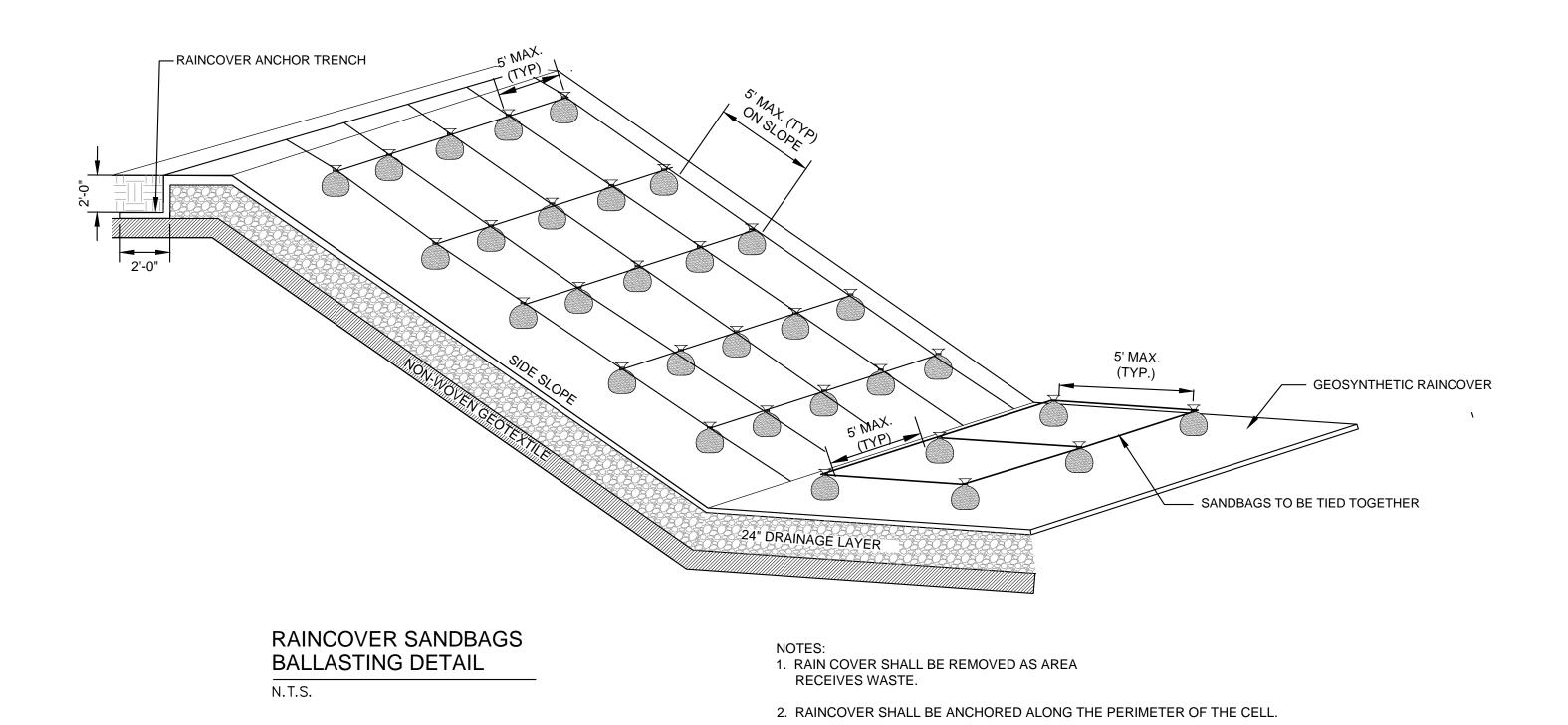
DATE:

02/21/25

**GENERAL DETAILS** 

DRAWING NUMBER:

DRAWING NAME:



RAINCOVER DETAIL

N.T.S.

B

3. ULTRAVIOLET RESISTANT MATERIAL (SANDBAGS AND ROPE) SHALL BE USED.

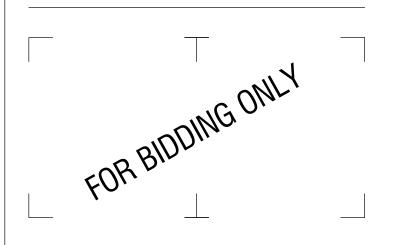
5. SAND USED TO FILL SANDBAGS SHALL BE FREE OF ORGANIC MATTER.

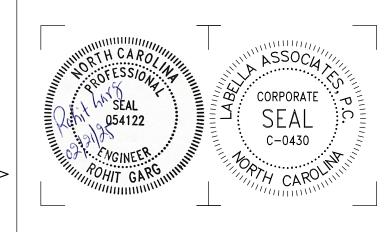
4. A SANDBAG SHALL BE BURIED IN THE RAINCOVER

ANCHOR TRENCH EVERY 5 FT.



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## TRANSYLVANIA COUNTY 500 HOWELL ROAD, BREVARD,

500 HOWELL ROAD, BREVARD, NORTH CAROLINA 28712



# WOODRUFF LANDFILL PHASE 7 EXPANSION CONSTRUCTION

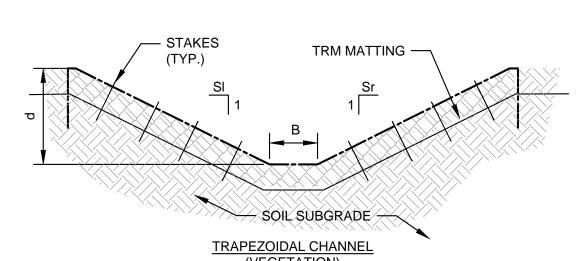
500 HOWELL ROAD, BREVARD, NORTH CAROLINA 28712

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DEMENTED DV	RH	
REVIEWED BY:	KN / RG	
ISSUED FOR:	REBID	
DATE:	02/21/25	
DRAWING NAME:		

**GENERAL DETAILS** 

DRAWING NUMBER:



1								
		STORMW	ATER CC	NVEYAN	CE CHAN	INEL (SCC	C) SCHEDULE	
	CHANNEL SECTION NO.	CHANNEL TYPE	BOTTOM WIDTH (B) (FT)	TOTAL DEPTH (d) (FT)	LANDFILL SIDE SLOPE (SI)	OTHER SIDE SLOPE (Sr)	CHANNEL LINING	MIN. LINING THICKNESS (T)
	SCC - 1A	TRAPEZOIDAL	3'-0"	2'-0"	3	3	LINED / RIPRAP d <sub>50</sub> = 9"	20"
	SCC - 1B	TRAPEZOIDAL	3'-0"	2'-0"	3	3	LINED / RIPRAP d 50= 12"	27"
	SCC - 2	TRAPEZOIDAL	3'-0"	2'-0"	3	3	LINED / RIPRAP d <sub>50</sub> = 9"	20"
	SCC - 3	TRAPEZOIDAL	3'-0"	2'-0"	3	3	LINED / RIPRAP d <sub>50</sub> = 9"	20"
	SCC - 4	TRAPEZOIDAL	3'-0"	2'-0"	3	3	LINED / RIPRAP d <sub>50</sub> = 6"	20"
	SCC - 5	TRAPEZOIDAL	3'-0"	2'-0"	3	3	LINED / RIPRAP d <sub>50</sub> = 6"	14"
	SCC - 6	TRAPEZOIDAL	3'-0"	2'-0"	3	3	LINED / RIPRAP d <sub>50</sub> = 9"	20"
	SCC - 7	TRAPEZOIDAL	3'-0"	2'-0"	3	3	LINED / RIPRAP d <sub>50</sub> = 6"	14"
	SCC - 8	TRAPEZOIDAL	3'-0"	2'-0"	3	3	LINED / RIPRAP d <sub>50</sub> = 6"	14"
	SCC - 9	TRAPEZOIDAL	3'-0"	2'-0"	3	3	LINED / RIPRAP d <sub>50</sub> = 15"	34"
	SCC - 10	TRAPEZOIDAL	3'-0"	2'-0"	3	3	LINED / RIPRAP d <sub>50</sub> = 6"	14"
	SCC - 11	TRAPEZOIDAL	6'-0"	1'-0"	3	3	LINED / RIPRAP d 50= 18"	40.5"
	SCC - B1	TRAPEZOIDAL	3'-0"	2'-0"	3	3	TRM / VEGETATION	-
	SCC - B2	TRAPEZOIDAL	3'-0"	2'-0"	3	3	TRM / VEGETATION	-
	LDC-1	TRAPEZOIDAL	6'-0"	1'-0"	3	3	LINED / RIPRAP d50 = 6"	14"
	LDC-2A	TRAPEZOIDAL	6'-0"	1'-0"	3	3	LINED / RIPRAP d50 = 9"	21"
	LDC-2B	TRAPEZOIDAL	6'-0"	1'-0"	3	3	LINED / RIPRAP d50 = 6"	14"
	LDC-3	TRAPEZOIDAL	6'-0"	1'-0"	3	3	LINED / RIPRAP d50 = 6"	14"
•	SCC - C1	TRIANGULAR	N/A	2'-0"	2	2	LINED / RIPRAP d50 = 12"	27"

**STORMWATER** 

TYPICAL DETAIL

**CONVEYANCE CHANNEL** 

6'-0" MAX ON OPEN RUNS

4'-0" MAX ON POOLING AREAS

**ELEVATION** 

SEDIMENT

FENCE DETAIL

#### **CONVEYANCE CHANNEL GENERAL NOTES:**

- CLEAR THE FOUNDATION AREA OF TREES, STUMPS, ROOTS, LOOSE ROCK, AND OTHER OBJECTIONABLE MATERIAL.
- EXCAVATE THE CROSS SECTION TO THE LINES AND GRADES OF THE FOUNDATION OF THE LINER AS SHOWN ON THE PLANS. BRING OVER-EXCAVATED AREAS TO GRADE BY INCREASING THE THICKNESS OF THE LINER OR BY BACKFILLING WITH MOIST SOIL COMPACTED TO THE DENSITY OF THE SURROUNDING MATERIAL
- 3. PLACE FILTERS, BEDDING'S, AND FOUNDATION DRAINS TO LINE AND GRADE IN THE MANNER SPECIFIED. PLACE FILTER AND BEDDING MATERIALS IMMEDIATELY AFTER SLOPE PREPARATION.
- 4. FOR SYNTHETIC FILTER FABRICS, OVERLAP THE DOWNSTREAM EDGE BY AT LEAST 12 INCHES WITH THE UPSTREAM EDGE WHICH IS BURIED A MINIMUM 12 INCHES IN A TRENCH. SPACE ANCHOR PINS EVERY 3 FEET ALONG THE OVERLAP.
- 5. SPREAD GRANULAR MATERIALS IN A UNIFORM LAYER. WHEN MORE THAN ONE GRADATION IS REQUIRED, SPREAD THE LAYERS SO THERE IS MINIMAL MIXING.
- 6. FILTER MATERIAL SHOULD CONSIST OF A LEAST 3 INCHES OF MATERIAL ON ALL SIDES OF THE DRAIN PIPE. THE DRAIN PIPE CONDUIT SHOULD BE A MINIMUM OF 4 INCHES IN DIAMETER.
- PERFORM ALL CHANNEL CONSTRUCTION IN A MANNER THAT MINIMIZES THE MOBILIZATION OF SOIL. IMMEDIATELY VEGETATE ALL DISTURBED AREAS OR OTHERWISE PROTECT THEM AGAINST SOIL EROSION.

#### CONVEYANCE CHANNEL MAINTENANCE NOTES:

— PLASTIC OR

WIRE TIES

- EXISTING

**GROUND** 

SLOPE LENGTH (FT) MAX. AREA (FT<sup>2</sup>)

10,000

7,500

5,000

2,500

1,500

- INSPECT CHANNELS AT LEAST WEEKLY AND AFTER EACH RAINFALL OF 1.0 INCH OR GREATER AND MAKE REPAIRS PROMPTLY. GIVE SPECIAL ATTENTION TO THE OUTLET AND INLET SECTIONS AND OTHER POINTS WHERE CONCENTRATED FLOW ENTERS.
- 2. CAREFULLY CHECK STABILITY AT ROAD CROSSINGS, LOOKING FOR INDICATION OF PIPING, SCOUR HOLES, OR BANK FAILURES. MAKE ANY REPAIRS IMMEDIATELY.
- 3. MAINTAIN ALL VEGETATION ADJACENT TO THE CHANNEL IN A HEALTHY, VIGOROUS CONDITION.

POSTS SHALL BE 1.33 LB/L.F. STEEL WITH MIN

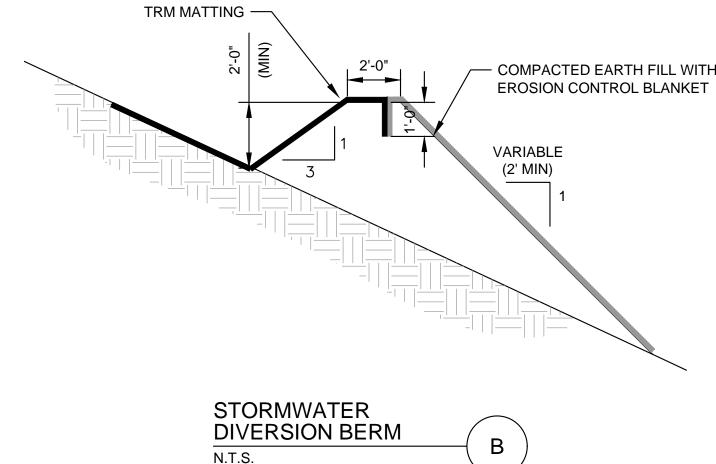
2. LOCATE SEDIMENT FENCE AS NEEDED AT

WORK ACTIVITIES SO THAT IT WILL NOT

INTERFERE WITH THE WORK.

A SUFFICIENT DISTANCE FROM PROPOSED

LENGTH OF 5 FT.



# EROSION CONTROL BLANKET

1. REMOVE AND PROPERLY DISPOSE OF ALL TREE, BRUSH, STUMPS, AND OTHER OBJECTIONABLE MATERIAL.

STORMWATER DIVERSION BERM GENERAL NOTES:

- COMPACTED EARTH FILL WITH 2. TEMPORARY DIVERSIONS ARE TO ONLY BE USED FOR DRAINAGE AREAS OF 5 ACRES

3. RIDGES WILL HAVE A 2 FEET MINIMUM TOP WIDTH, 2:1 OR FLATTER SIDE SLOPES

AND A MINIMUM OF 0.3 FEET FREEBOARD.

4. CHANNELS WILL HAVE A PARABOLIC, TRAPEZOIDAL, OR V SHAPE WITH SIDE SLOPES OF 2:1 OR FLATTER.

5. ANY POINT WHERE VEHICLES WILL BE CROSSING SHOULD HAVE 3:1 OR FLATTER

6. ENSURE THE TOP OF THE DIKE IS NOT LOWER AT ANY POINT THAN THE DESIGN ELEVATION PLUS THE SPECIFIED SETTLEMENT.

7. PROVIDE SUFFICIENT ROOM AROUND DIVERSIONS TO PERMIT MACHINE RE-GRADING AND CLEANOUT.

8. VEGETATE THE RIDGE IMMEDIATELY AFTER CONSTRUCTION UNLESS IT WILL REMAIN IN PLACE LESS THAN 30 WORKING DAYS

GEOCOMPOSITE SHALL BE DAYLIGHTED TO THE BENCH OR DIVERSION BERM EVERY 350'...

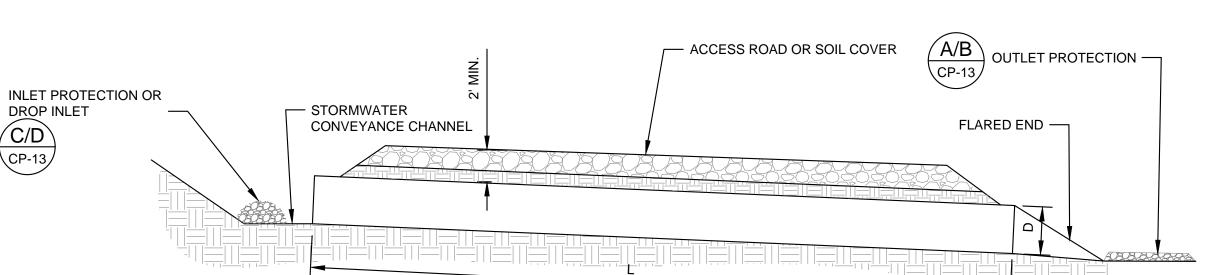
#### STORMWATER DIVERSION BERM MAINTENANCE NOTES:

INSPECT ALL MEASURES AT LEAST WEEKLY AND AFTER EVERY RAINFALL OF 1.0 INCH OR

MAKE ALL REPAIRS IMMEDIATELY.

IMMEDIATELY REMOVE ANY SEDIMENT FROM THE FLOW AREA AND REPAIR THE DIVERSION

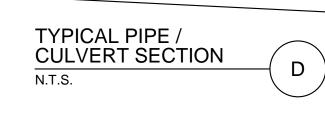
4. CHECK OUTLETS AND MAKE TIMELY REPAIRS AS NEEDED.



PIF	PIPE / CULVERT SCHEDULE						
PIPE NO.	DIAMETER / TYPE (D)	LENGTH (L)	INV. IN	INV. OUT			
C-1	24" RCP	62'	2692	2688			
C-2	(2) 24" RCP	52'	2662	2658			
C-3	(2) 24" RCP	42'	2646	2640			
C-4	24" RCP	170'	2660	2640			
C-5	18" HDPE	60'	2718	2714			
P-1	18" RCP	95'	2682	2675			
P-2	18" RCP	128'	2634	2632			
P-3	15" RCP	37'	2628	2626			

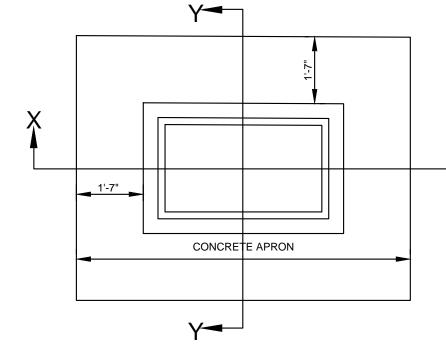
DROP INLET

\CP-13 /



#### PIPE/CULVERT MAINTENANCE NOTES:

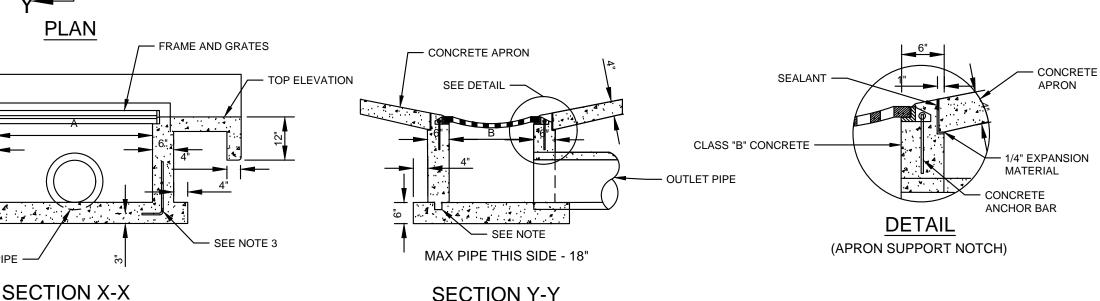
- 1. INSPECT ALL MEASURES AT LEAST WEEKLY AND AFTER EACH RAINFALL OF 1.0 INCH OR GREATER.
- 2. PIPES SHOULD BE CHECKED FOR LOOSE PIPE JOINTS, CRUSHED PIPE, DIFFERENTIAL SETTLEMENT. POOR COMPACTION OR EXCESSIVE SETTLEMENT. ANY PIPE ISSUES SHOULD BE REPAIRED OR RECONSTRUCTED PROMPTLY, IF NECESSARY, UNDER THE SUPERVISION OF A LICENSED GEOTECHNICAL ENGINEER.
- 3. PIPE COVER AND EMBANKMENTS SHOULD BE CHECKED FOR SAGGING, CRACKS, SLUMPING, DEPRESSIONS, BULGES, AND ANY SIGNS OF INTERNAL EROSION AND LOSS OF COVER MATERIAL. ANY DEFECTS TO THE PIPE COVER SHOULD BE REPAIRED UNDER THE SUPERVISION OF A LICENSED GEOTECHNICAL ENGINEER OR RECONSTRUCTED, IF NECESSARY.
- 4. MAKE SURE ALL PIPES DRAIN PROPERLY AND PIPES ARE CLEARED OF ANY DEBRIS.
- 5. CHECK STORMWATER CHANNELS, AND INLET AND OUTLET PROTECTION FOR SIGNS OF EROSION AND STABILIZE IMMEDIATELY OR REFRESH RIPRAP.



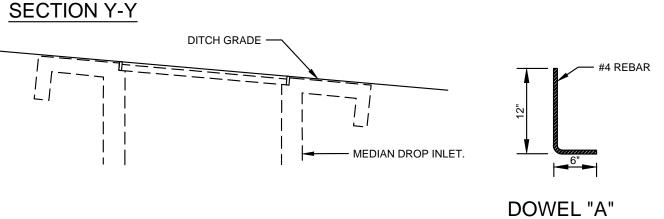
#### **GENERAL NOTES:**

DROP INLET

- USE CLASS "B" CONCRETE THOUGHOUT.
- 2. PROVIDE ALL GRATED DROP INLETS OVER 3'-6' IN DEPTH WITH STEPS 12"
- 3. OPTIONAL CONSTRUCTION MONOLITHIC POUR, 2" KEYWAY, OR 4" KEYWAY, OR #4 BAR DOWELS AT 12" CENTERS AS DIRECTED BY THE ENGINEER.
- 4. USE FORMS FOR THE CONSTUCTION OF THE BOTTOM SLAB.
- 5. IF REINFORCED CONCRETE PIPE IS SET IN THE BOTTOM SLAB OF BOX, ADD TO SLAB AS SHOWN ON
- 6. CONSTRUCT JUNCTION INLETS WITH PIPE CROWNS MATCHING.
- 7. MAX DEPTH OF THIS STRUCTURE FROM TOP OF BOTTOM SLAB TO TOP ELEVATION IS 12 FEET.
- 8. CHAMFER ALL EXPOSED CORNERS 1".



MIN	NIMUM DIN	MENSIONS	AND QUA	NTITIES F	OR CONC	RETE GR	ATED DRO	P INLET	
PIPE	SPAN	WIDTH	HEIGHT		CUBIC YA				CTIONS NE PIPE
D	А	В	Н	BOTTOM SLAB	H PER FT. HT.	H MIN. TOTAL	TOTAL	C.S.	R.C.
12"	3'-8"	2'-0"	2'-6"	0.362	0.247	0.597	0.958	0.020	0.032
15"	3'-8"	2'-0"	2'-9"	0.362	0.247	0.659	0.021	0.023	0.036
18"	3'-8"	2'-0"	3'-0"	0.362	0.247	0.720	0.082	0.033	0.049
24"	3'-8"	2'-0"	3'-6"	0.362	0.247	0.865	0.227	0.059	0.085
30"	3'-8"	2'-0"	4'-0"	0.362	0.247	0.988	0.350	0.092	0.127
36"	3'-8"	2'-0"	4-6"	0.362	0.247	0.112	0.474	0.132	0.178



### DROP INLET MAINTENANCE NOTES:

1. INSPECT ALL MEASURES AT LEAST WEEKLY AND AFTER EACH RAINFALL OF 1.0 INCH OR GREATER. 2. REMOVE SEDIMENT AND DEBRIS THAT COULD IMPEDE FLOW. 3. INSPECT FOR CRACKS, DIFFERENTIAL SETTLEMENT, LEAKS, AND OTHER SIGNS OF DAMAGE OR INSTABILITY.

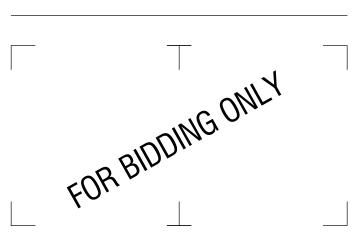
400 S. TRYON STREET

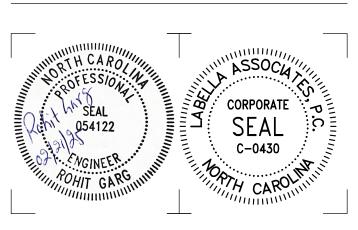
CHARLOTTE, NC 28285

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#### TRANSYLVANIA COUNTY 500 HOWELL ROAD, BREVAR NORTH CAROLINA 28712



#### **WOODRUFF LANDFILL** PHASE 7 EXPANSION CONSTRUCTION

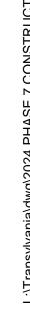
500 HOWELL ROAD, BREVARD NORTH CAROLINA 28712

NO:	DATE:	DESCRIPTION:
Revisions	D/ (IL.	BEOOTHI HOW.

PROJECT NUMBER:		
	2250798	
DRAWN BY:		
	RH	
REVIEWED BY:	I/N / DC	
	KN / RG	
ISSUED FOR:	DEDID	
	REBID	
DATE:		
	02/21/25	
DRAWING NAME:		
DITATING NAME.		

#### **EROSION AND SEDIMENT CONTROL DETAILS**

DRAWING NUMBER:



SEE NOTE 1 -

FILTER FABRIC -

EXISTING GROUND -

**ANCHOR FABRIC** INTO GROUND

4" FORWARD ALONG TRENCH -

VOLUMES OF WATER SUFFICIENT TO CAUSE FAILURE OF THE STRUCTURE)

WIRE OR PLASTIC ZIP TIES SHOULD HAVE A MINIMUM 50 POUND TENSILE STRENGTH.

8" DOWN AND

SEDIMENT FENCE GENERAL NOTES:

SEDIMENT FENCE PERFORMANCE.

PLACE 12 INCHES OF FABRIC ALONG THE BOTTOM AND SIDE OF THE TRENCH.

CONSTRUCT THE SEDIMENT BARRIER OF STANDARD STRENGTH OR EXTRA STRENGTH SYNTHETIC FILTER FABRICS.

GROUND A MINIMUM OF 24 INCHES. WIRE MESH SHOULD BE A MINIMUM 14-GAUGE WITH 6 INCH MESH SPACING.

FABRIC DIRECTLY TO POSTS. WIRE OR PLASTIC ZIP TIES SHOULD HAVE A MINIMUM OF 50 POUND TENSILE STRENGTH.

ENSURE THAT THE HEIGHT OF THE SEDIMENT FENCE DOES NOT EXCEED 24 INCHES ABOVE THE GROUND. (HIGHER FENCES MAY IMPOUND

SUPPORT STANDARD STRENGTH FILTER FABRIC BY WIRE MESH FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS. EXTEND THE WIRE

6. EXTRA STRENGTH FILTER FABRIC WITH 6 FOOT POST SPACING DOES NOT REQUIRE A WIRE MESH SUPPORT FENCE. SECURELY FASTEN THE FILTER

9. BACKFILL THE TRENCH WITH SOIL PLACED OVER THE FILTER FABRIC AND COMPACT. THOROUGH COMPACTION OF THE BACKFILL IS CRITICAL TO

EXCAVATE THE TRENCH APPROXIMATELY 4 INCHES WIDE AND 8 INCHES DEEP ALONG THE PROPOSED LINE OF THE POSTS AND UPSLOPE FROM THE

MESH SUPPORT TO THE BOTTOM OF THE TRENCH. FASTEN THE WIRE REINFORCEMENT, THEN FABRIC ON THE UPSLOPE SIDE OF THE FENCE POST.

CONSTRUCT THE FILTER FABRIC FROM A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID JOINTS. WHEN JOINTS ARE NECESSARY, SECURELY FASTEN THE FILTER CLOTH ONLY AT A SUPPORT POST WITH 4 FEET MINIMUM OVERLAP TO THE NEXT POST.

#### INSPECT ALL MEASURES AT LEAST WEEKLY AND AFTER EACH RAINFALL OF 1.0 INCH OR WHEN A WIRE MESH SUPPORT FENCE IS USED, SPACE POSTS A MAXIMUM OF 8 FEET APART. SUPPORTS SHOULD BE DRIVEN SECURELY INTO THE GREATER. MAKE ANY REQUIRED REPAIRS IMMEDIATELY.

AVOID UNDERMINING THE FENCE DURING CLEANOUTS.

SEDIMENT FENCE MAINTENANCE NOTES:

**SECTION** 

MAX. SLOPE LENGTH AND SLOPE FOR WHICH

SEDIMENT FENCE IS APPLICABLE

25

FILTER FABRIC

DIRECTION -

SLOPE

<2%

2 to 5%

5 to 10%

10 to 20%

BACKFILL TRENCH AND

COMPACT THOROUGHLY

4" MIN

- SHOULD THE FABRIC OF A SEDIMENT FENCE COLLAPSE, TEAR, DECOMPOSE, OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY.
- 3. REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND REDUCE PRESSURE ON THE FENCE. TAKE CARE TO
- 4. REMOVE ALL FENCING MATERIALS AND UNSTABLE SEDIMENT DEPOSITS AND BRING THE AREA TO GRADE AND STABILIZE IT AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

#### OUTLET PROTECTION DETAIL - TYPE I N.T.S.

#### OUTLET PROTECTION TYPE I AND II MAINTENANCE NOTES:

CLASS B

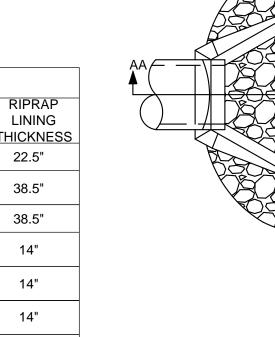
FILTER BERM

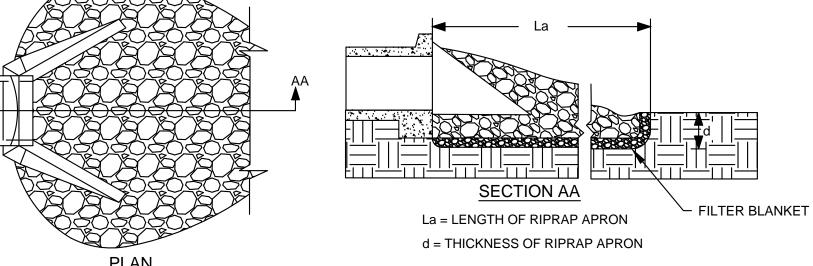
NC DOT #5 OR # 57 WASHED STONE

RIPRAP HEADWALL -

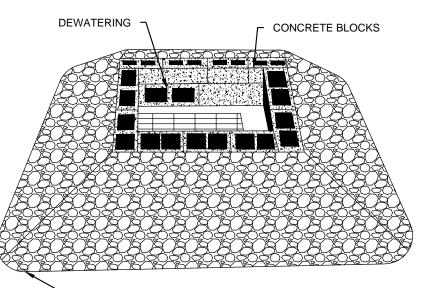
**FLOW** 

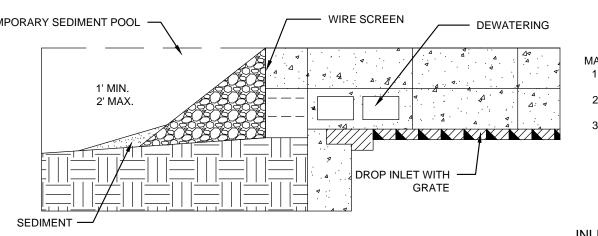
- 1. INSPECT OUTLET STRUCTURES AT LEAST WEEKLY AND AFTER EACH RAINFALL OF 1.0 INCH OR GREATER AND MAKE NECESSARY REPAIRS AS SOON AS PRACTICAL.
- 2. CHECK OUTLETS FOR EROSION AROUND OR BELOW RIPRAP AND FOR IF STONES HAVE BEEN DISLODGED. MAKE REPAIRS IMMEDIATELY TO PREVENT FURTHER DAMAGE.
- 3. INSPECT OUTLET PROTECTION AND RECEIVING CHANNELS FOR SEDIMENT DEPOSITION AND CLEAN AS NECESSARY.













- 1. LAY ONE BLOCK, ON EACH SIDE OF THE STRUCTURE, ON ITS SIDE IN THE BOTTOM ROW TO ALLOW POOL DRAINAGE. THE FOUNDATION SHOULD BE EXCAVATED AT LEAST 2 INCHES BELOW THE CREST OF THE STORM DRAIN. PLACE THE BOTTOM ROW OF BLOCKS AGAINST THE EDGE OF THE STORM DRAIN FOR LATERAL SUPPORT AND TO AVOID WASHOUTS WHEN OVERFLOW OCCURS. IF NEEDED, GIVE LATERAL SUPPORT TO SUBSEQUENT ROWS BY PLACING 2 INCH X 4 INCH WOOD STUDS THROUGH BLOCK OPENINGS.
- 2. CAREFULLY FIT HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2-INCH OPENINGS OVER ALL BLOCK OPENINGS TO HOLD GRAVEL IN
- 3. USE CLEAN GRAVEL 1/2 TO 3/4 INCH IN DIAMETER, PLACED 2 INCHES BELOW THE TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER AND SMOOTH IT TO AN EVEN GRADE. NCDOT #57 WASHED STONE IS RECOMMENDED.

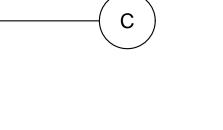
#### MAINTENANCE:

BEFORE STABILIZING.

- INSPECT ALL MEASURES AT LEAST WEEKLY AND AFTER EVERY RAINFALL OF 1.0 INCH OR GREATER; REPAIR IMMEDIATELY. REMOVE SEDIMENT AS NECESSARY TO PROVIDE ADEQUATE STORAGE
- VOLUME FOR SUBSEQUENT RAINS. WHEN THE CONTRIBUTING DRAINAGE AREA HAS BEEN ADEQUATELY STABILIZED, REMOVE ALL MATERIALS AND ANY UNSTABLE SOIL, AND EITHER SALVAGE OR DISPOSE OF IT PROPERLY. BRING THE DISTURBED AREA TO PROPER GRADE, THEN SMOOTH AND COMPACT

## INLET PROTECTION TYPE II MAINTENANCE NOTES:

- 1. INSPECT ALL MEASURES AT LEAST WEEKLY AND AFTER EVERY RAINFALL OF 1.0 INCH OR GREATER AND MAKE NECESSARY REPAIRS AS SOON AS PRACTICAL.
- 2. REMOVE SEDIMENT AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR SUBSEQUENT RAINS. 3. WHEN THE CONTRIBUTING DRAINAGE AREA HAS BEEN ADEQUATELY STABILIZED, REMOVE ALL MATERIALS AND PROPER GRADE, THEN SMOOTH AND COMPACT BEFORE STABILIZING.



#### OVERFILL 6" FOR SETTLEMENT **EMERGENCY BY-PASS** 6" BELOW SETTLED TOP OF DAM **NATURAL** 2' TO 3.5' GROUND **FILTER FABRIC PLAN VIEW** 12" MIN. OF NCDOT #5 OR #57 WASHED 1.5' MIN. STONE 3600 CU FT/ ACRE

Spillway Design		
Drainage Area (acres)	Weir Length (ft)*	
1	4	
2	6	
3	8	
4	10	
5	12	
*Dimensions shown are minimums.		

## **TEMPORARY** SEDIMENT TRAP

-FABRIC -

**CROSS-SECTION** 

#### **OUTLET PROTECTION TYPE II GENERAL NOTES:**

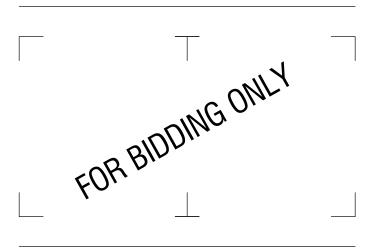
- 1. COMPACT ANY FILL REQUIRED IN THE SUBGRADE TO THE DENSITY OF THE SURROUNDING UNDISTURBED MATERIAL. LOW AREAS IN THE SUBGRADE ON UNDISTURBED SOIL MAY ALSO BE FILLED BY INCREASING THE RIPRAP THICKNESS.
- 2. THE RIPRAP AND GRAVEL FILTER MUST CONFORM TO THE SPECIFIED GRADING LIMITS
- 3. FILTER CLOTH, WHEN USED, MUST MEET DESIGN REQUIREMENTS, AND BE PROPERLY PROTECTED FROM PUNCHING OR TEARING DURING INSTALLATION. REPAIR ANY DAMAGE BY REMOVING THE RIPRAP AND PLACING ANOTHER PIECE OVER THE DAMAGED AREA. IF THE DAMAGE IS EXTENSIVE, REPLACE THE ENTIRE FILTER CLOTH.
- 4. ALL CONNECTING JOINTS SHOULD OVERLAP SO THE TOP LAYER IS ABOVE THE DOWNSTREAM LAYER A MINIMUM OF 1 FOOT.
- 5. THE MINIMUM THICKNESS OF THE RIPRAP SHOULD BE 1.5 TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESS THAN 6".
- 6. RIPRAP MAY BE FIELD STONE OR ROUGH QUARRY STONE. IT SHOULD BE HARD, ANGULAR HIGHLY WEATHER-RESISTANT AND POORLY GRADED.
- 7. CONSTRUCT THE APRON ON ZERO GRADE WITH NO OVERFILL AT THE END. MAKE THE TOP OF THE RIPRAP AT THE DOWNSTREAM END LEVEL WITH THE RECEIVING AREA OR SLIGHTLY
- 8. ENSURE THAT THE APRON IS PROPERLY ALIGNED WITH THE RECEIVING STREAM AND PREFERABLY STRAIGHT THROUGHOUT ITS LENGTH. IF A CURVE IS NEEDED, PLACE IN THE UPPER SECTION OF THE APRON.

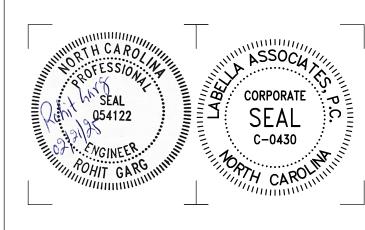
#### **OUTLET PROTECTION TYPE II MAINTENANCE NOTES:**

- 1. INSPECT OUTLET STRUCTURES AT LEAST WEEKLY AND AFTER EACH RAINFALL OF 1.0 INCH OR GREATER.
- 2. CHECK OUTLETS FOR EROSION AROUND OR BELOW RIPRAP AND FOR IF STONES HAVE BEEN DISLODGED. MAKE REPAIRS IMMEDIATELY TO PREVENT FURTHER DAMAGE.

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#### TRANSYLVANIA COUNTY 500 HOWELL ROAD, BREVARI NORTH CAROLINA 28712



#### **WOODRUFF LANDFILL PHASE 7 EXPANSION CONSTRUCTION**

500 HOWELL ROAD, BREVARD, NORTH CAROLINA 28712

NO:	DATE:	DESCRIPTION:		
Revisions				
PROJECT	PROJECT NUMBER:			
		2250798		
DRAWN B	Y:			
RH				
REVIEWED BY:				
		KN / RG		
ISSUED FO	OR:			
		REBID		

**EROSION AND SEDIMENT CONTROL DETAILS** 

02/21/25

DRAWING NUMBER:

DATE:

DRAWING NAME:

**CP-13** 



RIPRAP HEADWALL 1' MIN. HEIGHT 3'-0" CULVERT (36" MAX.) -SEDIMENT STORAGE ZONE - CLASS B RIPRAP FILTER BERM NC DOT #5 OR # 57 WASHED STONE

**PROFILE** 

CULVERT

(36" MAX) -

INLET PROTECTION DETAIL - TYPE I N.T.S.

#### OP-P3 10.5' 4.5' OP-P2 4.5' 10.5' OP-SD4 4.5' 10.5' OP-SD11 4.5' 10.5' OP-SD12 10.5' 4.5' NOTES: 1. INSTALL 10oz NON-WOVEN GEOTEXTILE BETWEEN RIPRAP AND SOIL FOUNDATION.

OUTLET PROTECTION SCHEDULE

4.5'

4.5'

26'

35'

35'

10.5'

10.5'

**RIPRAP** 

10"

17"

17"

14"

14"

14"

14"

OUTLET NO

OP-C1

OP-C2

OP-C3

OP-C4

OP-P1

24'

30'

30'

# — 2:1 SLOPE GRAVEL FILTER

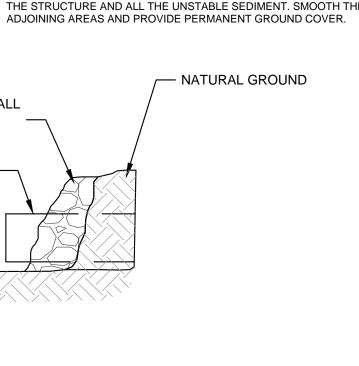
TEMPORARY SEDIMENT POOL —

#### **INLET PROTECTION GENERAL NOTES:**

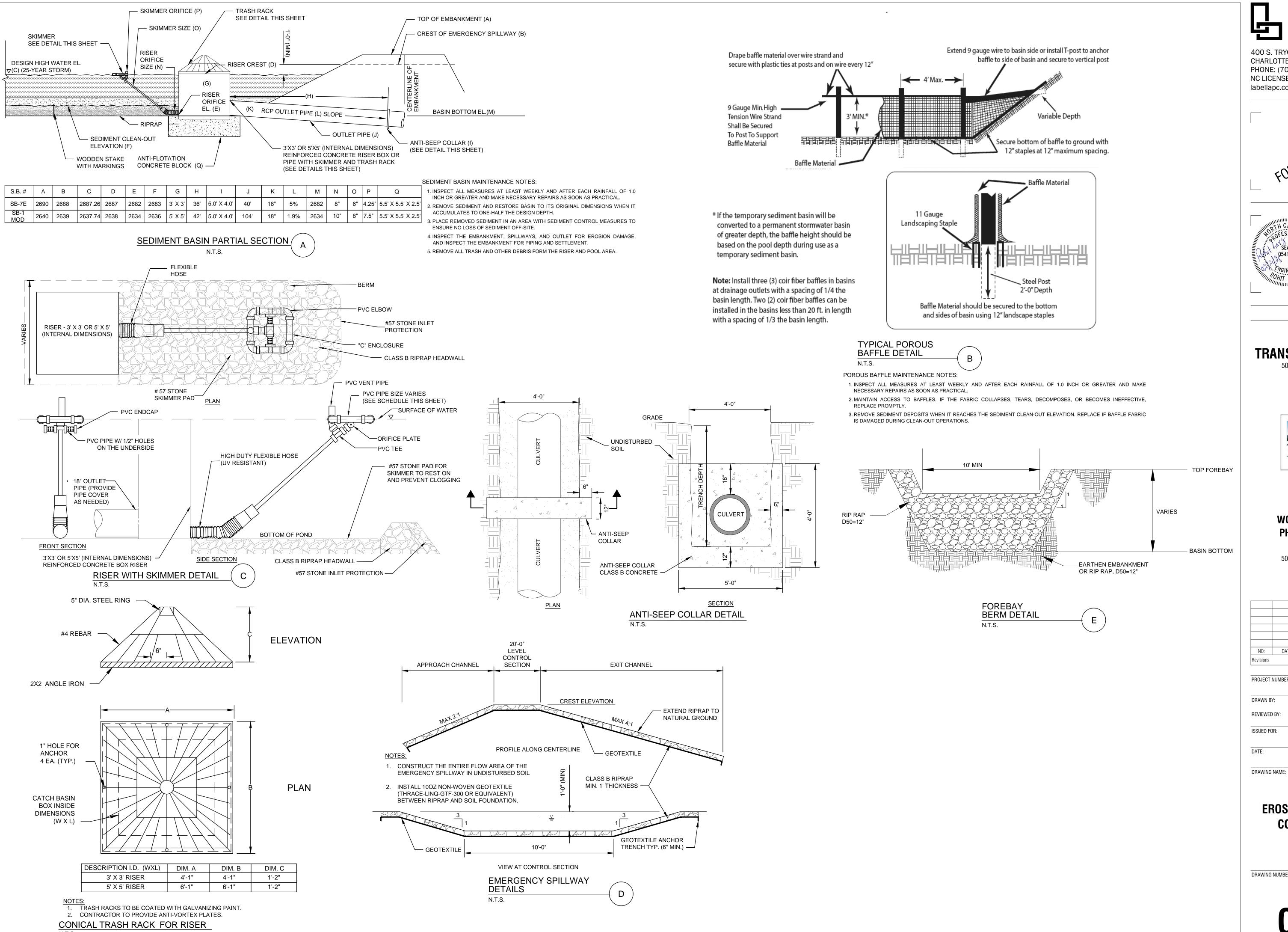
- 1. CLEAR THE AREA OF ALL DEBRIS THAT MIGHT HINDER EXCAVATION AND DISPOSAL OF SPOIL.
- 2. INSTALL THE CLASS B OR CLASS 1 RIPRAP IN A SEMI-CIRCLE AROUND THE PIPE INLET. THE STONE SHOULD BE BUILT UP HIGHER ON EACH END WHERE IT TIES INTO THE EMBANKMENT. THE MINIMUM CREST WIDTH OF THE RIPRAP SHOULD BE 3 FEET, WITH A MINIMUM BOTTOM WIDTH OF 11 FEET. THE MINIMUM HEIGHT SHOULD BE 2 FEET, BUT ALSO 1 FOOT LOWER THAN THE EMBANKMENT OF DIVERSIONS.
- 3. A 1 FOOT THICK LAYER OF NC DOT #5 OR #57 STONE SHOULD BE PLACED ON THE OUTSIDE SLOPE OF THE RIPRAP.
- 4. THE SEDIMENT STORAGE AREA SHOULD BE EXCAVATED AROUND THE OUTSIDE OF THE STONE HORSESHOE 18 INCHES BELOW NATURAL GRADE.
- 5. WHEN CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED, REMOVE THE PIPE AND ROCK, FILL DEPRESSION, ESTABLISH FINAL GRADING ELEVATIONS, COMPACT THE AREA PROPERLY, AND STABILIZE WITH GROUND COVER.

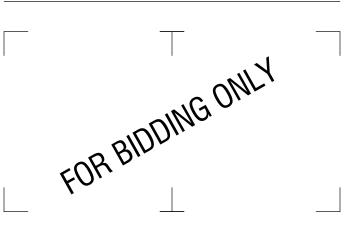
#### **INLET PROTECTION MAINTENANCE NOTES:**

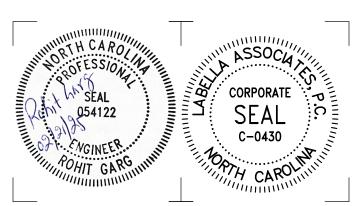
- 1. INSPECT ALL MEASURES AT LEAST WEEKLY AND AFTER EACH RAINFALL OF 1.0 INCH OR GREATER
- 2. REMOVE SEDIMENT AND RESTORE THE SEDIMENT STORAGE AREA TO ITS ORIGINAL DIMENSIONS
- WHEN THE SEDIMENT HAS ACCUMULATED TO ONE-HALF THE DESIGN DEPTH OF THE TRAP.
- 3. PLACE THE SEDIMENT THAT IS REMOVED IN THE DESIGNATED DISPOSAL AREA AND REPLACE THE CONTAMINATED PART OF THE GRAVEL FACING.
- 4. CHECK THE STRUCTURE FOR DAMAGE. ANY RIPRAP DISPLACED FROM THE STONE HORSESHOE
- MUST BE REPLACED IMMEDIATELY.
- 5. AFTER ALL THE SEDIMENT-PRODUCING AREAS HAVE BEEN PERMANENTLY STABILIZED, REMOVE THE STRUCTURE AND ALL THE UNSTABLE SEDIMENT. SMOOTH THE AREA TO BLEND WITH THE



TO BE INSTALLED ON ALL SLOPE DRAIN INLETS.







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#### TRANSYLVANIA COUNTY 500 HOWELL ROAD, BREVARD

NORTH CAROLINA 28712



#### **WOODRUFF LANDFILL PHASE 7 EXPANSION CONSTRUCTION**

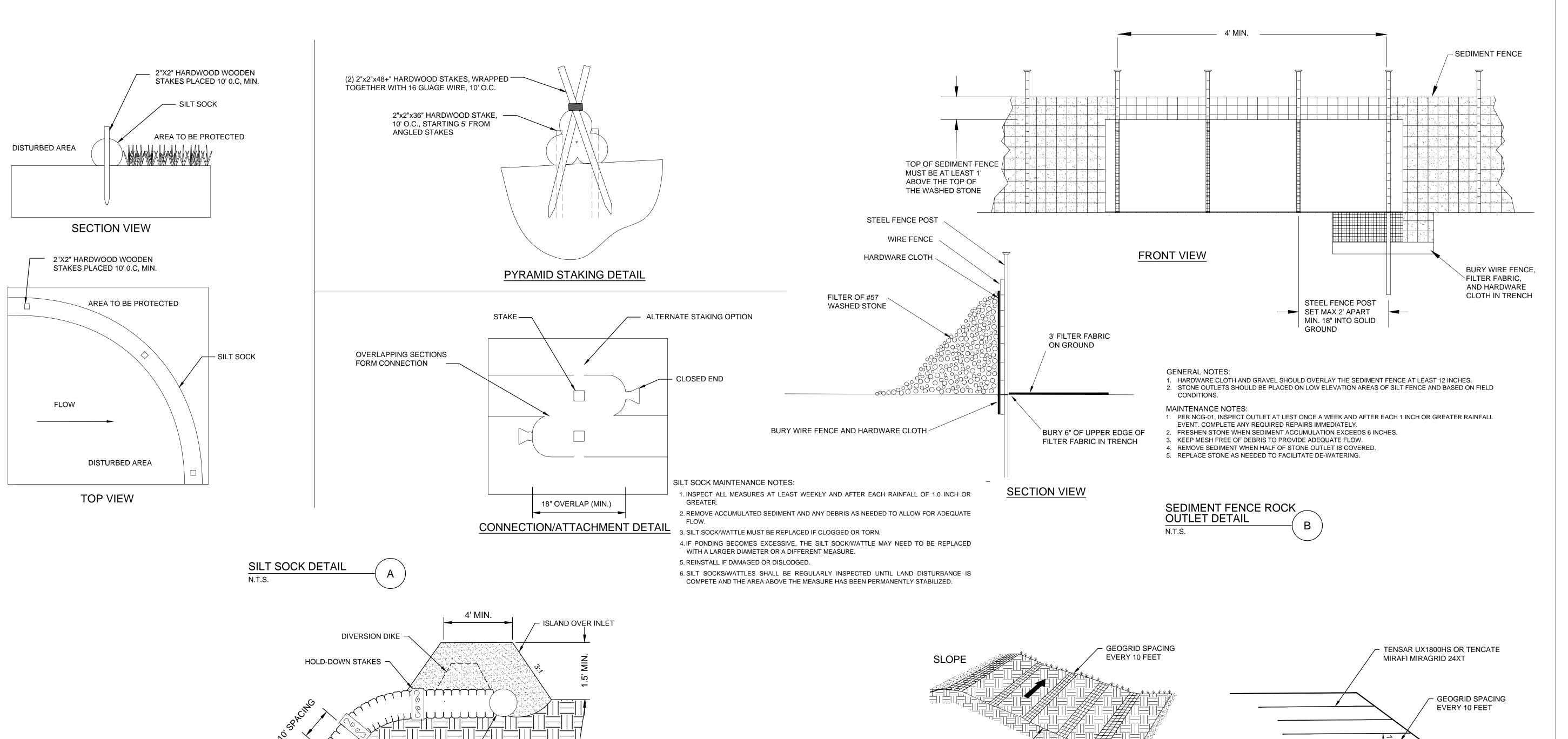
500 HOWELL ROAD, BREVARD, NORTH CAROLINA 28712

NO:	DATE:	DESCRIPTION:
Revisions		

PROJECT NUMBER: 2250798 DRAWN BY: RH REVIEWED BY KN/RG ISSUED FOR: REBID 02/21/25

#### **EROSION AND SEDIMENT CONTROL DETAILS**

DRAWING NUMBER:

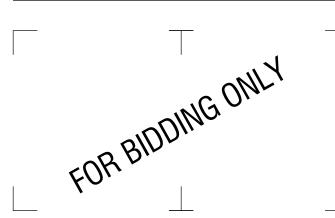


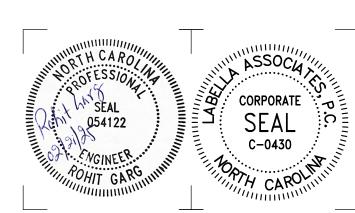
GEOGRID TO BE EXTENDED A MAXIMUM OF 75 FEET INTO NEW FILL SLOPES

(SEE NOTE 1)



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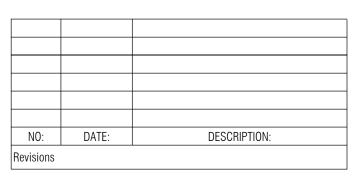
## TRANSYLVANIA COUNTY

500 HOWELL ROAD, BREVARD NORTH CAROLINA 28712



#### **WOODRUFF LANDFILL PHASE 7 EXPANSION CONSTRUCTION**

500 HOWELL ROAD, BREVARD, NORTH CAROLINA 28712



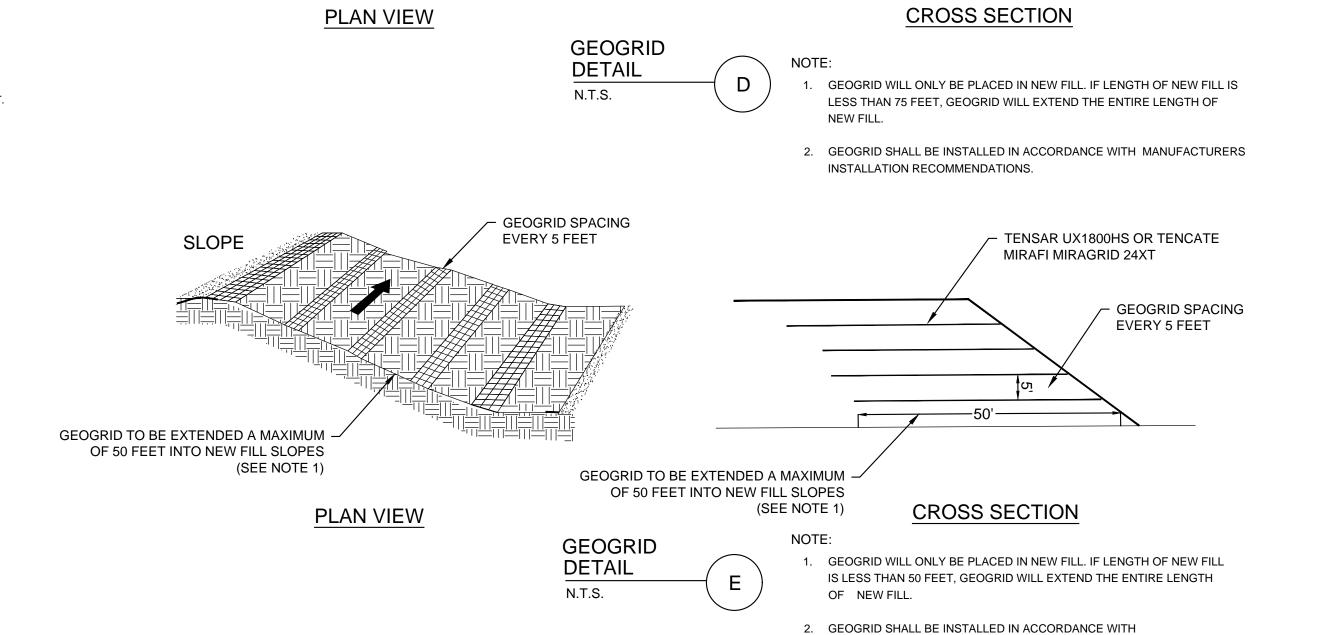
PROJECT NUMBER: 2250798 DRAWN BY: RH REVIEWED BY: KN/RG ISSUED FOR: REBID DATE: 02/21/25

#### **EROSION AND SEDIMENT CONTROL DETAILS**

DRAWING NUMBER:

DRAWING NAME:

**CP-15** 



GEOGRID TO BE EXTENDED A MAXIMUM OF 75 FEET INTO NEW FILL SLOPES

(SEE NOTE 1)

MANUFACTURER INSTALLATION RECOMMENDATIONS.

SLOPE DRAIN **DETAIL** 

PLAN VIEW

STANDARD T-SECTION

TOP OF HAND-COMPACTED

FILL (ISLAND)

PLASTIC CORRUGATED -

LEVEL SECTION

**CROSS-SECTION VIEW** 

STABILIZE OUTLET

TOP OF

DIVERSION

NATURAL

GROUND

DIVERSION

CHANNEL

1. ALL SLOPE DRAINS SHALL BE A MINIMUM OF 18"...

SLOPE DRAIN GENERAL NOTES:

2. PLACE SLOPE DRAINS ON UNDISTURBED SOIL OR WELL COMPACTED FILL AT

LOCATIONS AND ELEVATIONS SHOWN ON THE PLAN. 3. SLIGHTLY SLOPE THE SECTION OF PIPE UNDER THE DIKE TOWARD ITS OUTLET.

4. HAND TAMP THE SOIL UNDER AND AROUND THE ENTRANCE SECTION IN LIFTS

FILL OVER THE DRAIN AT THE TOP OF THE SLOPE TO A MINIMUM OF 1.5 FEET DEPTH, 4 FEET TOP WIDTH AND 3:1 SIDE SLOPES.

6. ENSURE ALL SLOPE DRAIN CONNECTIONS ARE WATERTIGHT.

7. COMPACT FILL MATERIAL AND SECURELY FASTEN THE EXPOSED SECTION OF THE DRAIN WITH GROMMETS OR STAKES SPACED NO MORE THAN 10 FEET

8. EXTEND THE DRAIN BEYOND THE TOE OF THE SLOPE, AND ADEQUATELY PROTECT THE OUTLET FROM EROSION.

9. MAKE THE COMPACTED, SETTLED DIKE RIDGE NO LESS THAN 1 FOOT ABOVE THE TOP OF THE PIPE AT EVERY POINT.

10. IMMEDIATELY STABILIZE ALL DISTURBED AREAS FOLLOWING CONSTRUCTION. SLOPE DRAIN MAINTENANCE NOTES:

1. INSPECT ALL MEASURES AT LEAST WEEKLY AND AFTER

EACH RAINFALL OF 1.0 INCH OR GREATER; REPAIR

#### **GENERAL NOTES**

- 1. SEEDING PRODUCTS SHOULD BE TRANSPORTED AND HANDLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- 2. GRASS SEED MIXTURE SHOULD BE DELIVERED IN SEALED CONTAINERS; DAMAGED PACKAGES WILL NOT BE ACCEPTED.
- 3. FERTILIZER SHOULD BE DELIVERED IN WATERPROOF BAGS SHOWING WEIGHT, CHEMICAL ANALYSIS, AND NAME OF MANUFACTURER.
- 4. PROMPTLY INSPECT SHIPMENTS TO ASSURE THAT PRODUCTS COMPLY WITH REQUIREMENTS, QUANTITIES ARE CORRECT, AND PRODUCTS ARE UNDAMAGED.
- 5. STORE AND PROTECT PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS, WITH SEALS AND LABELS INTACT AND LEGIBLE.
- 6. SITE REVIEW MEETINGS WILL BE HELD MONTHLY. THE MEETINGS WILL BE ATTENDED BY THE CONTRACTOR, SITE FOREMAN, AND OWNER OR OWNER'S REPRESENTATIVE. RESULT OF SITE REVIEWS WILL BE DOCUMENTED AND CIRCULATED TO THE MEETING ATTENDEES BY THE CONTRACTOR.
- 7. DURING CONSTRUCTION, THE RECORDING OF SEEDING MAINTENANCE DATA IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. AT THE END OF WORK, CONTRACTOR SHALL SUBMIT MAINTENANCE DATA TO OWNER TO ENABLE CONTINUING MAINTENANCE. MAINTENANCE DATA SHOULD INCLUDE MAINTENANCE INSTRUCTIONS, CUTTING METHOD, MAXIMUM GRASS HEIGHTS, TYPES, APPLICATION FREQUENCY, AND RECOMMENDED COVERAGE OF FERTILIZER.
- 8. THE CONTRACTOR WILL COMMUNICATE WITH THE OWNER OR HIS REPRESENTATIVE ON A MONTHLY BASIS TO SUMMARIZE WORK PERFORMED AND IMMEDIATELY NOTIFY THE OWNER OF ANY FAILURE OF THE SITE TO REMAIN STABILIZED.

#### STABILIZATION TIMEFRAME

- A. SOIL STABILIZATION SHALL BE ACHIEVED ON ANY AREA OF THE SITE WHERE LAND-DISTURBING ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED ACCORDING TO THE FOLLOWING SCHEDULE:
- 1. ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN 7 CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACTIVITY.
- 2. ALL OTHER DISTURBED AREAS SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN 14 CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACTIVITY.
- B. CONDITIONS IN MEETING THE STABILIZATION REQUIREMENTS ABOVE, THE FOLLOWING CONDITIONS OR EXEMPTIONS SHALL APPLY:
- 1. EXTENSIONS OF TIME MAY BE APPROVED BY THE PERMITTING AUTHORITY BASED ON WEATHER OR OTHER SITE-SPECIFIC CONDITIONS THAT MAKE COMPLIANCE IMPRACTICABLE.
- 2. ALL SLOPES 50' IN LENGTH OR GREATER SHALL APPLY THE GROUND COVER WITHIN 7 DAYS EXCEPT WHEN THE SLOPE IS FLATTER THAN 4:1. SLOPES LESS THAN 50' SHALL APPLY GROUND COVER WITHIN 14 DAYS EXCEPT WHEN SLOPES ARE STEEPER THAN 3:1, THE 7 DAY-REQUIREMENT APPLIES.
- 3. ANY SLOPED AREA FLATTER THAN 4:1 SHALL BE EXEMPT FROM THE 7-DAY GROUND COVER REQUIREMENT.
- 4. SLOPES 10' OR LESS IN LENGTH SHALL BE EXEMPT FROM THE 7-DAY GROUND COVER REQUIREMENT EXCEPT WHEN THE SLOPE IS STEEPER THAN 2:1.

#### **SEEDING MATERIALS**

- 1. TOPSOIL MATERIAL SHALL BE EXCAVATED FROM SITE AND FREE OF WEEDS.
- 2. SEED MIXTURE: SEED MIXTURES SHOULD BE PROVIDED IN CONTAINERS SHOWING PERCENTAGE OF SEED MIX, YEAR OF PRODUCTION, NET WEIGHT, DATE OF PACKAGING. AND LOCATION OF PACKAGING.
- 3. MULCHING MATERIAL: MULCH SHOULD CONSIST OF OAT OR WHEAT STRAW, DRY, FREE FROM WEEDS AND OTHER FOREIGN MATTER DETRIMENTAL TO PLANT LIFE.
- 4. LIME: LIME SHALL COMPLY WITH APPLICABLE NORTH CAROLINA STATE LAWS AND SHALL BE DELIVERED IN UNOPENED BAGS OR OTHER CONVENIENT STANDARD CONTAINERS, EACH FULLY LABELED WITH THE MANUFACTURER'S GUARANTEED ANALYSIS. LIME SHALL BE GROUND LIMESTONE CONTAINING NOT LESS THAN 85 PERCENT TOTAL CARBONATES, AND SHALL BE GROUND TO SUCH FINENESS THAT 90 PERCENT BY WEIGHT WILL PASS THROUGH A NO. 20 MESH SIEVE AND 50 PERCENT BY WEIGHT WILL PASS THROUGH A NO. 100 MESH SIEVE.
- 5. FERTILIZER: FERTILIZER SHALL COMPLY WITH APPLICABLE NORTH CAROLINA STATE LAWS AND SHALL BE DELIVERED IN UNOPENED BAGS OR OTHER CONVENIENT STANDARD CONTAINER, EACH FULLY LABELED WITH THE MANUFACTURER'S GUARANTEED ANALYSIS. FERTILIZER SHALL CONTAIN NOT LESS THAN 10 PERCENT NITROGEN, 10 PERCENT AVAILABLE PHOSPHORIC ACID AND 10 PERCENT WATER SOLUBLE POTASH (N-P-K, 10-10-10). ANY FERTILIZER WHICH BECOMES CAKED OR OTHERWISE DAMAGED, MAKING IT UNSUITABLE FOR USE, WILL NOT BE ACCEPTABLE AND SHALL BE IMMEDIATELY REMOVED FROM THE JOB SITE.

#### **SEEDING SCHEDULE AND RATES**

TEMPORARY SEEDING:

PROVIDE TEMPORARY STABILIZATION IN ACCORDANCE WITH THE FOLLOWING SEEDING SCHEDULE AND APPLICATION RATES:

SEASON SEEDING DATES		SEEDING MIXTURE	RATE (lbs./acre)
LATE WINTED AND EARLY CRRING	FEBRUARY 1 - MAY 1	RYE (GRAIN)	120
LATE WINTER AND EARLY SPRING	FEBRUARY 1 - MAY 1	SUDANGRASS	50
SUMMER	MAY 15 - AUGUST 15	GERMAN MILLET	40
FALL	AUGUST 15 - DECEMBER 15	RYE (GRAIN)	120

#### PERMANENT SEEDING:

PERMANENT STABILIZATION SHOULD BE PROVIDED IN ACCORDANCE WITH THE FOLLOWING SEEDING SCHEDULE AND APPLICATION RATES:

SPECIES	SEEDING DATES	SEEDING MIXTURE	RATE (lbs./acre)
	NOVEMBER 1 - APRIL 30	RYE GRAIN WHEAT	40 30
NURSE CROP (USE FOR IMMEDIATE STABILIZATION)	MAY 11 - SEPTEMBER 30	GERMAN MILLET	10
OTABILIZATION)	MAY 1 - SEPTEMBER 1	KOBE LESPEDEZA KOREAN LESPEDEZA	10 10
PRIMARY CROP: NON-NATIVE	MARCH 15 - APRIL 30	CROWN VETCH	15
SPECIES		KY 31 TALL FESCUE	100
(ONLY USE FOR LONG-TERM	AUGUST 15 - MAY 1	KY BLUE GRASS	15
STABILIZATION IF NATIVE SPECIES ARE UNAVAILABLE)	AUGUST 1 - JUNE 1	HARD FESCUE	15
	DECEMBER 1 - APRIL 5	SWITCHGRASS	2.5 - 3.5
	MAY 1 - APRIL 15	DEERTONGUE	4.0 - 6.0
	DECEMBER 4 ARRIVAT	BIG BLUESTEM	5.0 - 7.0
PRIMARY CROP: NATIVE SPECIES	DECEMBER 1 - APRIL 15	SWEET WOODREED	1.5 - 2.5
	MARCH 1 - MAY 15 JULY 15 - AUGUST 15	INDIAN WOODOATS	1.5 - 2.5
	DECEMBER 1 - MAY 15 AUGUST 15 - OCTOBER 15	SOFT RUSH	1.5 - 2.5

\*PERMANENT STABILIZATION USING NATIVE CROPS SHOULD BE BASED ON A SEEDING MIXTURE USING BETWEEN 4 - 6 NATIVE SEED SPECIES THAT HAVE SIMILAR SOIL DRAINAGE ADAPTATIONS (E.G. A MIXTURE OF SWITCHGRASS, BIG BLUESTEM, SWEET WOODREED AND INDIAN WOODOATS SEEDS CAN BE APPLIED AT RATES SPECIFIED IN THE TABLE ABOVE). TYPICAL NATIVE SEED MIXTURE SHOULD BE APPLIED AT A RATE IN THE RANGE OF 15 LBS./ACRE.

#### **SEEDING PROCEDURES**

- AREAS WHERE TOPSOIL MATERIAL IS TO BE PLACED AND AREAS TO BE SEEDED INCLUDE ALL AREAS DISTURBED DURING CONSTRUCTION BEYOND THE LIMITS OF THE PROPOSED EXPANSION WHICH ARE NOT TO BE PAVED.
- 2. VERIFY THAT PREPARED SOIL BASE IS READY TO RECEIVE WORK AND SEED ALL AREAS DISTURBED AS A RESULT OF CONSTRUCTION ACTIVITIES.
- 3. PREPARE SUBSOIL TO ELIMINATE UNEVEN AREAS AND LOW SPOTS. MAINTAIN LINES, LEVELS, PROFILES AND CONTOURS. MAKE CHANGES IN GRADE GRADUAL. BLEND SLOPES INTO LEVEL AREAS.
- 4. REMOVE DELETERIOUS MATERIALS, SUCH AS WEEDS, UNDESIRABLE PLANTS, AND THEIR ROOTS. REMOVE CONTAMINATED SUBSOIL.
- 5. SCARIFY SUBSOIL TO A DEPTH OF 3 INCHES WHERE TOPSOIL MATERIAL IS TO BE PLACED. REPEAT CULTIVATION IN AREAS WHERE EQUIPMENT USED FOR HAULING AND SPREADING TOPSOIL HAS COMPACTED SUBSOIL.
- 6. PLACE TOPSOIL MATERIAL DURING DRY WEATHER AND ON DRY UNFROZEN SUBGRADE 2 TO 3 WEEKS PRIOR TO SOWING SEED.
- 7. SPREAD TOPSOIL MATERIAL OVER AREA TO BE SEEDED. FINISHED THICKNESS OF TOPSOIL MATERIAL SHALL BE 3 INCHES MINIMUM AFTER SETTLING AND NOMINAL COMPACTION CAUSED BY SPREADING EQUIPMENT.
- 8. GRADE TO ELIMINATE ROUGH, LOW, OR SOFT AREAS, AND TO ENSURE POSITIVE DRAINAGE.
- 9. RAKE TOPSOIL MATERIAL AND REMOVE ROOTS, VEGETABLE MATTER, ROCKS, CLODS, AND OTHER NON-ORGANIC MATERIAL.
- 10. APPLY LIME AND FERTILIZER ACCORDING TO SOIL TESTS, OR APPLY LIME AT THE RATE OF 2,000 LBS. /ACRE AND 10-10-10 GRADE FERTILIZER AT THE RATE OF 750 LBS./ACRE. MIX THOROUGHLY INTO UPPER 4 6 INCHES OF TOPSOIL. LIGHTLY WATER TO AID THE DISSIPATION OF FERTILIZER AND LIME.
- 11. PREPARE SEEDBED TO A DEPTH OF 4 TO 6 INCHES. REMOVE LOOSE ROCKS, ROOTS AND OTHER OBSTRUCTIONS SO THAT THEY WILL NOT INTERFERE WITH THE ESTABLISHMENT AND MAINTENANCE OF VEGETATION.
- 12. TO AMEND SOIL, FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2000 LBS./ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LBS./ACRE 10-10-10 FERTILIZER.
- 13. APPLY MULCH AT A RATE OF 4,000 LBS./ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. RE-FERTILIZE IF GROWTH IS NOT FULLY ADEQUATE.
- 14. RESEED, RE-FERTILIZE, AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.
- 15. LIGHTLY COMPACT SEEDED AREAS BY MEANS OF A ROLLER OR OTHER APPROVED EQUIPMENT IMMEDIATELY AFTER SOWING.
- 16. DURING PERMANENT STABILIZATION, MULCH MUST COVER 80 % OF THE SOIL SURFACE AT A MINIMUM AND MUST BE ANCHORED BY TACKING WITH ASPHALT, NETTING. OR A MULCH ANCHORING TOOL.
- 17. REFERTILIZE IN THE SECOND YEAR UNLESS GROWTH IS FULLY ADEQUATE. RESEED, REFERTILIZE, AND MULCH DAMAGED AREAS IMMEDIATELY.

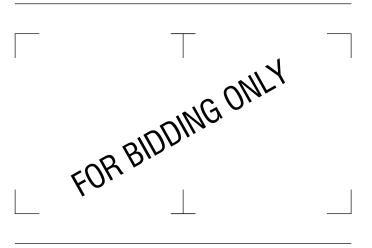
#### **MAINTENANCE**

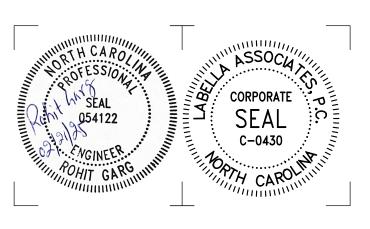
THE FOLLOWING ITEMS, AT A MINIMUM,
SHALL BE PART OF ROUTINE MAINTENANCE
DURING CONSTRUCTION:

- . SEEDED AREAS SHALL BE INSPECTED REGULARLY TO ENSURE THAT A GOOD STAND OF VEGETATION IS MAINTAINED. AREAS WITHOUT ESTABLISHED VEGETATION SHALL BE FERTILIZED AND RESEEDED.
- 2. SEEDED AREAS WILL BE INSPECTED WITHIN 24 HOURS AFTER ANY STORM EVENT OF GREATER THAN 0.5 INCHES OF RAIN PER 24 HOUR PERIOD.
- 3. GRASS SHALL BE MOWED ON A REGULAR BASIS. TYPICAL MINIMUM MOWING HEIGHT SHALL BE 4 INCHES FOR WARM-SEASON TURF SPECIES AND 6 INCHES FOR COOL-SEASON SPECIES.
- 4. SITE OBSERVATIONS SHOULD BE PERFORMED MONTHLY TO CHECK FOR THE PRESENCE OF INVASIVE SPECIES. IF FOUND, INVASIVES SHOULD BE TREATED IMMEDIATELY WITH APPROPRIATE CULTURAL PRACTICES AND/OR BY THE USE OF SEASONALLY APPROPRIATE AND SITE-APPROPRIATE HERBICIDES.



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## TRANSYLVANIA COUNTY 500 HOWELL ROAD, BREVARD,

NORTH CAROLINA 28712



# WOODRUFF LANDFILL PHASE 7 EXPANSION CONSTRUCTION

500 HOWELL ROAD, BREVARD, NORTH CAROLINA 28712

NO:	DATE:	DESCRIPTION:
Revisions		·

PROJECT NUMBER:

2250798

DRAWN BY:

RH

REVIEWED BY:

KN / RG

ISSUED FOR:

REBID

DATE:

02/21/25

#### **SEEDING SPECIFICATIONS**

DRAWING NUMBER:

## GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT

IMPLEMENTING THE DETAILS AND SPECIFICATIONS ON THIS PLAN SHEET WILL RESULT IN THE CONSTRUCTION ACTIVITY BEING CONSIDERED COMPLIANT WITH THE GROUND STABILIZATION AND MATERIALS HANDLING SECTIONS OF THE NCG01 CONSTRUCTION GENERAL PERMIT (SECTIONS E AND F, RESPECTIVELY). THE PERMITTEE SHALL COMPLY WITH THE EROSION AND SEDIMENT CONTROL PLAN APPROVED BY THE DELEGATED AUTHORITY HAVING JURISDICTION. ALL DETAILS AND SPECIFICATIONS SHOWN ON THIS SHEET MAY NOT APPLY DEPENDING ON SITE CONDITIONS AND THE DELEGATED AUTHORITY HAVING JURISDICTION.

## REQUIRED GROUND STABILIZATION TIMEFRAMES

Site Area Description	Stabilize within this many calendar days after ceasing land disturbance	Timeframe Variations	
(a) Perimeter dikes, swales, ditches, and perimeter slopes	7	None	
(b) High Quality Water (HQW) Zones	7	None	
(c) Slopes steeper than 3:1	7	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed	
(d) Slopes 3:1 to 4:1	14	<ul> <li>7 days for slopes greater than 50' in length and with slopes steeper than 4:1</li> <li>7 days for perimeter dikes, swales, ditches, perimeter slopes, and HQW Zones</li> <li>10 days for the Falls Lake Watershed</li> </ul>	
(e) Areas with slopes flatter than 4:1	14	<ul> <li>7 days for perimeter dikes, swales, ditches, perimeter slopes, and HQW Zones</li> <li>10 days for the Falls Lake Watershed unless there is zero slope.</li> </ul>	

NOTE: AFTER THE PERMANENT CESSATION OF CONSTRUCTION ACTIVITIES, ANY AREAS WITH TEMPORARY GROUND STABILIZATION SHALL BE CONVERTED TO PERMANENT GROUND STABILIZATION AS SOON AS PRACTICABLE BUT IN NO CASE LONGER THAN 90 CALENDAR DAYS AFTER THE LAST LAND DISTURBING ACTIVITY. TEMPORARY GROUND STABILIZATION SHALL BE MAINTAINED IN A MANNER TO RENDER THE SURFACE STABLE AGAINST ACCELERATED EROSION UNTIL PERMANENT GROUND STABILIZATION IS ACHIEVED.

#### **GROUND STABILIZATION SPECIFICATION**

STABILIZE THE GROUND SUFFICIENTLY SO THAT RAIN WILL NOT DISLODGE THE SOIL. USE ONE OF THE TECHNIQUES IN THE TABLE BELOW:

Temporary Stabilization	Permanent Stabilization
<ul> <li>Temporary grass seed covered with straw or</li> </ul>	Permanent grass seed covered with straw or
other mulches and tackifiers	other mulches and tackifiers
Hydroseeding	Geotextile fabrics such as permanent soil
Rolled erosion control products with or	reinforcement matting
without temporary grass seed	Hydroseeding
Appropriately applied straw or other mulch	Shrubs or other permanent plantings covered
Plastic sheeting	with mulch
	Uniform and evenly distributed ground cover
	sufficient to restrain erosion
	Structural methods such as concrete, asphalt or
	retaining walls
	Rolled erosion control products with grass seed

#### POLYACRYLAMIDES (PAMS) AND FLOCCULANTS

- 1. SELECT FLOCCULANTS THAT ARE APPROPRIATE FOR THE SOILS BEING EXPOSED DURING CONSTRUCTION, SELECTING FROM THE NC DWR LIST OF APPROVED PAMS/FLOCCULANTS.
- 2. APPLY FLOCCULANTS AT OR BEFORE THE INLETS TO EROSION AND SEDIMENT CONTROL MEASURES.
- 3. APPLY FLOCCULANTS AT THE CONCENTRATIONS SPECIFIED IN THE NC DWR LIST OF APPROVED PAMS/FLOCCULANTS AND IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
- 4. PROVIDE PONDING AREA FOR CONTAINMENT OF TREATED STORMWATER BEFORE DISCHARGING OFFSITE.
- 5. STORE FLOCCULANTS IN LEAK-PROOF CONTAINERS THAT ARE KEPT UNDER STORM-RESISTANT COVER OR SURROUNDED BY SECONDARY CONTAINMENT STRUCTURES.

#### **EQUIPMENT AND VEHICLE MAINTENANCE**

- 1. MAINTAIN VEHICLES AND EQUIPMENT TO PREVENT DISCHARGE OF FLUIDS.
- 2. PROVIDE DRIP PANS UNDER ANY STORED EQUIPMENT.
- 3. IDENTIFY LEAKS AND REPAIR AS SOON AS FEASIBLE, OR REMOVE
- LEAKING EQUIPMENT FROM THE PROJECT.

  4. COLLECT ALL SPENT FLUIDS, STORE IN SEPARATE CONTAINERS AND PROPERLY DISPOSE AS HAZARDOUS WASTE (RECYCLE WHEN POSSIBLE).
- 5. REMOVE LEAKING VEHICLES AND CONSTRUCTION EQUIPMENT FROM SERVICE UNTIL THE PROBLEM HAS BEEN CORRECTED.
- BRING USED FUELS, LUBRICANTS, COOLANTS, HYDRAULIC FLUIDS AND OTHER PETROLEUM PRODUCTS TO A RECYCLING OR DISPOSAL CENTER THAT HANDLES THESE MATERIALS.

#### LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE

- 1. NEVER BURY OR BURN WASTE. PLACE LITTER AND DEBRIS IN APPROVED WASTE CONTAINERS.
- 2. PROVIDE A SUFFICIENT NUMBER AND SIZE OF WASTE CONTAINERS (E.G DUMPSTER, TRASH RECEPTACLE) ON SITE TO CONTAIN CONSTRUCTION AND DOMESTIC WASTES.
- 3. LOCATE WASTE CONTAINERS AT LEAST 50 FEET AWAY FROM STORM DRAIN INLETS AND SURFACE WATERS UNLESS NO OTHER ALTERNATIVES ARE REASONABLY AVAILABLE.
- 4. LOCATE WASTE CONTAINERS ON AREAS THAT DO NOT RECEIVE SUBSTANTIAL AMOUNTS OF RUNOFF FROM UPLAND AREAS AND DOES NOT DRAIN DIRECTLY TO A STORM DRAIN, STREAM OR WETLAND.
- COVER WASTE CONTAINERS AT THE END OF EACH WORKDAY AND BEFORE STORM EVENTS OR PROVIDE SECONDARY CONTAINMENT. REPAIR OR REPLACE DAMAGED WASTE CONTAINERS.
- 6. ANCHOR ALL LIGHTWEIGHT ITEMS IN WASTE CONTAINERS DURING TIMES OF HIGH WINDS.
- 7. EMPTY WASTE CONTAINERS AS NEEDED TO PREVENT OVERFLOW. CLEAN UP IMMEDIATELY IF CONTAINERS OVERFLOW.
- 8. DISPOSE WASTE OFF-SITE AT AN APPROVED DISPOSAL FACILITY.
- 9. ON BUSINESS DAYS, CLEAN UP AND DISPOSE OF WASTE IN DESIGNATED WASTE CONTAINERS.

#### PAINT AND OTHER LIQUID WASTE

- 1. DO NOT DUMP PAINT AND OTHER LIQUID WASTE INTO STORM DRAINS. STREAMS OR WETLANDS.
- 2. LOCATE PAINT WASHOUTS AT LEAST 50 FEET AWAY FROM STORM DRAIN INLETS AND SURFACE WATERS UNLESS NO OTHER ALTERNATIVES ARE REASONABLY AVAILABLE.
- 3. CONTAIN LIQUID WASTES IN A CONTROLLED AREA.
- 4. CONTAINMENT MUST BE LABELED, SIZED AND PLACED APPROPRIATELY FOR THE NEEDS OF SITE.
- 5. PREVENT THE DISCHARGE OF SOAPS, SOLVENTS, DETERGENTS AND OTHER LIQUID WASTES FROM CONSTRUCTION SITES.

#### PORTABLE TOILETS

- 1. INSTALL PORTABLE TOILETS ON LEVEL GROUND, AT LEAST 50 FEET AWAY FROM STORM DRAINS, STREAMS OR WETLANDS UNLESS THERE IS NO ALTERNATIVE REASONABLY AVAILABLE. IF 50 FOOT OFFSET IS NOT ATTAINABLE, PROVIDE RELOCATION OF PORTABLE TOILET BEHIND SEDIMENT FENCE OR PLACE ON A GRAVEL PAD AND SURROUND WITH SAND BAGS.
- 2. PROVIDE STAKING OR ANCHORING OF PORTABLE TOILETS DURING PERIODS OF HIGH WINDS OR IN HIGH FOOT TRAFFIC AREAS
- 3. MONITOR PORTABLE TOILETS FOR LEAKING AND PROPERLY DISPOSE OF ANY LEAKED MATERIAL. UTILIZE A LICENSED SANITARY WASTE HAULER TO REMOVE LEAKING PORTABLE TOILETS AND REPLACE WITH PROPERLY OPERATING UNIT.

#### EARTHEN STOCKPILE MANAGEMENT

- 1. SHOW STOCKPILE LOCATIONS ON PLANS. LOCATE EARTHEN-MATERIAL STOCKPILE AREAS AT LEAST 50 FEET AWAY FROM STORM DRAIN INLETS, SEDIMENT BASINS, PERIMETER SEDIMENT CONTROLS AND SURFACE WATERS UNLESS IT CAN BE SHOWN NO OTHER ALTERNATIVES ARE REASONABLY AVAILABLE.
- 2. PROTECT STOCKPILE WITH SEDIMENT FENCE INSTALLED ALONG TOE OF SLOPE WITH A MINIMUM OFFSET OF FIVE FEET FROM THE TOE OF STOCKPILE.
- 3. PROVIDE STABLE STONE ACCESS POINT WHEN FEASIBLE.
- 4. STABILIZE STOCKPILE WITHIN THE TIMEFRAMES PROVIDED ON THIS SHEET AND IN ACCORDANCE WITH THE APPROVED PLAN AND ANY ADDITIONAL REQUIREMENTS. SOIL STABILIZATION IS DEFINED AS VEGETATIVE, PHYSICAL OR CHEMICAL COVERAGE TECHNIQUES THAT WILL RESTRAIN ACCELERATED EROSION ON DISTURBED SOILS FOR TEMPORARY OR PERMANENT CONTROL NEEDS.

# ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER SANDBAGS (TYP.) OR STAPLES OR STAPLES OR STAPLES SOURCETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LOUID ANDORS SOLID REACHES 75% OF THE STRUCTURES SCAPACITY. WITH A MINIMANDE WHEN THE LOUID ANDORS SOLID REACHES 75% OF THE STRUCTURES SCAPACITY. WITH A MINIMANDE WHEN THE LOUID ANDORS SOLID REACHES 75% OF THE STRUCTURES SCAPACITY. WITH A MINIMANDE WHEN THE LOUID ANDORS SOLID REACHES 75% OF THE STRUCTURES SCAPACITY WITH A MINIMANDE WHEN THE LOUID ANDORS SOLID REACHES 75% OF THE STRUCTURES SCAPACITY WITH A MINIMANDE WHEN THE LOUID ANDORS SOLID REACHES 75% OF THE STRUCTURES SCAPACITY WITH A MINIMANDE WHEN THE LOUID ANDORS SOLID REACHES 75% OF THE STRUCTURES SCAPACITY WITH A MINIMANDE WHEN THE LOUID ANDORS SOLID REACHES 75% OF THE STRUCTURES SCAPACITY WITH A MINIMANDE WHEN THE LOUID ANDORS SOLID REACHES 75% OF THE STRUCTURES SCAPACITY WITH A MINIMANDE WHEN THE LOUID ANDORS SOLID REACHES 75% OF THE STRUCTURES SCAPACITY WITH A MINIMANDE WHEN THE LOUID ANDORS SOLID REACHES 75% OF THE STRUCTURE SCAPACITY WITH A MINIMANDE WHEN THE LOUID ANDORS SOLID REACHES 75% OF THE STRUCTURE SCAPACITY WITH A MINIMANDE WHEN THE LOUID ANDORS SOLID REACHES 75% OF THE STRUCTURE SCAPACITY WITH A MINIMANDE WHEN THE LOUID ANDORS SOLID REACHES 75% OF THE STRUCTURE SCAPACITY WITH A MINIMANDE WHEN THE LOUID ANDORS SOLID REACHES 75% OF THE STRUCTURE SCAPACITY WITH A MINIMANDE WHEN THE LOUID ANDORS SOLID REACHES 75% OF THE STRUCTURE SCAPACITY WITH A MINIMANDE WHEN THE LOUID ANDORS SOLID REACHES 75% OF THE STRUCTURE SCAPACITY WITH A MINIMANDE WHEN THE LOUID ANDORS SOLID REACHES 75% OF THE STRUCTURE SCAPACITY WITH A MINIMANDE WHEN THE LOUID ANDORS SOLID REACHES 75% OF THE STRUCTURE SCAPACITY WITH A MINIMANDE WHEN THE LOUID ANDORS SOLID REACHES 75% OF THE STRUCTURE SCAPACITY WITH A MINIMANDE WHEN THE LOUID ANDORS SOLID REACHES 75% OF THE STRUCTURE SCAPACITY WITH A MINIMANDE WHEN THE LOUID ANDORS SOLID REACHES 75% OF THE STRUCTURE SCAPACITY WITH A MINIMANDE WHEN THE LOUID ANDORS SOLID REACHES 75% O

BELOW GRADE WASHOUT STRUCTURE

ABOVE GRADE WASHOUT STRUCTURE NOT TO SCALE

#### **CONCRETE WASHOUTS**

SEDIMENT FENCE.

DO NOT DISCHARGE CONCRETE OR CEMENT SLURRY FROM THE SITE.
 DISPOSE OF, OR RECYCLE SETTLED, HARDENED CONCRETE RESIDUE IN

ACCORDANCE WITH LOCAL AND STATE SOLID WASTE REGULATIONS AND

- AT AN APPROVED FACILITY.

  3. MANAGE WASHOUT FROM MORTAR MIXERS IN ACCORDANCE WITH THE ABOVE ITEM AND IN ADDITION PLACE THE MIXER AND ASSOCIATED MATERIALS ON IMPERVIOUS BARRIER AND WITHIN LOT PERIMETER
- 4. INSTALL TEMPORARY CONCRETE WASHOUTS PER LOCAL REQUIREMENTS, WHERE APPLICABLE. IF AN ALTERNATE METHOD OR PRODUCT IS TO BE USED, CONTACT YOUR APPROVAL AUTHORITY FOR REVIEW AND APPROVAL. IF LOCAL STANDARD DETAILS ARE NOT AVAILABLE, USE ONE OF THE TWO TYPES OF TEMPORARY CONCRETE WASHOUTS PROVIDED ON THIS DETAIL.
- 5. DO NOT USE CONCRETE WASHOUTS FOR DEWATERING OR STORING DEFECTIVE CURB OR SIDEWALK SECTIONS. STORMWATER ACCUMULATED WITHIN THE WASHOUT MAY NOT BE PUMPED INTO OR DISCHARGED TO THE STORM DRAIN SYSTEM OR RECEIVING SURFACE WATERS. LIQUID WASTE MUST BE PUMPED OUT AND REMOVED FROM PROJECT.
- 6. LOCATE WASHOUTS AT LEAST 50 FEET FROM STORM DRAIN INLETS AND SURFACE WATERS UNLESS IT CAN BE SHOWN THAT NO OTHER ALTERNATIVES ARE REASONABLY AVAILABLE. AT A MINIMUM, INSTALL PROTECTION OF STORM DRAIN INLET(S) CLOSEST TO THE WASHOUT WHICH COULD RECEIVE SPILLS OR OVERFLOW.
- 7. LOCATE WASHOUTS IN AN EASILY ACCESSIBLE AREA, ON LEVEL GROUND AND INSTALL A STONE ENTRANCE PAD IN FRONT OF THE WASHOUT.
  ADDITIONAL CONTROLS MAY BE REQUIRED BY THE APPROVING AUTHORITY.
- 8. INSTALL AT LEAST ONE SIGN DIRECTING CONCRETE TRUCKS TO THE WASHOUT WITHIN THE PROJECT LIMITS. POST SIGNAGE ON THE WASHOUT ITSELF TO IDENTIFY THIS LOCATION.
- 9. REMOVE LEAVINGS FROM THE WASHOUT WHEN AT APPROXIMATELY 75% CAPACITY TO LIMIT OVERFLOW EVENTS. REPLACE THE TARP, SAND BAGS OR OTHER TEMPORARY STRUCTURAL COMPONENTS WHEN NO LONGER FUNCTIONAL. WHEN UTILIZING ALTERNATIVE OR PROPRIETARY PRODUCTS, FOLLOW MANUFACTURER'S INSTRUCTIONS.
- 10. AT THE COMPLETION OF THE CONCRETE WORK, REMOVE REMAINING LEAVINGS AND DISPOSE OF IN AN APPROVED DISPOSAL FACILITY. FILL PIT, IF APPLICABLE, AND STABILIZE ANY DISTURBANCE CAUSED BY REMOVAL OF WASHOUT.

#### HERBICIDES, PESTICIDES AND RODENTICIDES

- 1. STORE AND APPLY HERBICIDES, PESTICIDES AND RODENTICIDES IN ACCORDANCE WITH LABEL RESTRICTIONS.
- 2. STORE HERBICIDES, PESTICIDES AND RODENTICIDES IN THEIR ORIGINAL CONTAINERS WITH THE LABEL, WHICH LISTS DIRECTIONS FOR USE, INGREDIENTS AND FIRST AID STEPS IN CASE OF ACCIDENTAL POISONING.
- 3. DO NOT STORE HERBICIDES, PESTICIDES AND RODENTICIDES IN AREAS WHERE FLOODING IS POSSIBLE OR WHERE THEY MAY SPILL OR LEAK INTO WELLS, STORMWATER DRAINS, GROUND WATER OR SURFACE WATER. IF A SPILL OCCURS, CLEAN AREA IMMEDIATELY.
- 4. DO NOT STOCKPILE THESE MATERIALS ONSITE.

#### **HAZARDOUS AND TOXIC WASTE**

- 1. CREATE DESIGNATED HAZARDOUS WASTE COLLECTION AREAS ON-SITE.
- 2. PLACE HAZARDOUS WASTE CONTAINERS UNDER COVER OR IN SECONDARY CONTAINMENT.
- 3. DO NOT STORE HAZARDOUS CHEMICALS, DRUMS OR BAGGED MATERIALS DIRECTLY ON THE GROUND.

#### **SEDIMENT FENCE MAINTENANCE**

- INSPECT SEDIMENT FENCES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY.
- 2. SHOULD THE FABRIC OF A SEDIMENT FENCE COLLAPSE, TEAR, DECOMPOSE, OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY.
- 3. REMOVE SEDIMENT DEPOSITS WHEN THE HEIGHT OF THE SEDIMENT HAS REACHED HALF THE HEIGHT OF THE FABRIC ABOVE GROUND AFTER INSTALLATION.

#### SKIMMER BASINS MAINTENANCE

- 1. INSPECT SKIMMER SEDIMENT BASIN AT LEAST WEEKLY AND AFTER EACH RAIN EVENT (1/2 INCH OR GREATER) AND REPAIR IMMEDIATELY. REMOVE SEDIMENT AND RESTORE THE BASIN TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT ACCUMULATES TO ONE HALF THE HEIGHT OF THE FIRST BAFFLE. EXCAVATE THE SEDIMENT FROM THE ENTIRE BASIN, INCLUDING AREA UNDERNEATH THE SKIMMER. VEGETATION IN BASIN SHOULD NOT INTERFERE WITH SKIMMER FUNCTION.
- 2. REPAIR OR REPLACE DAMAGED BAFFLES AND ANCHOR, IF NECESSARY. CLEAN ANY DEBRIS FROM SKIMMER **STONE**INLET AND OUTLET PROTECTION MAINTENANCE INSPECT STONE/RIPRAP STRUCTURES WEEKLY AND AFTER EACH RAIN EVENT (1/2 INCH OR GREATER) TO EVALUATE IF EROSION AROUND OR UNDER STONE/RIPRAP HAS TAKEN PLACE OR IF STONES HAVE BEEN DISLODGED. MAKE ALL NECESSARY REPAIRS PROMPTLY.

#### STORMWATER CHANNELS MAINTENANCE

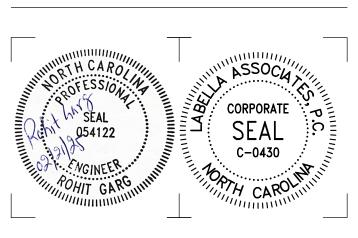
DURING THE ESTABLISHMENT PERIOD, CHECK GRASS-LINED CHANNELS AFTER EVERY RAINFALL. AFTER GRASS IS ESTABLISHED, PERIODICALLY CHECK THE CHANNEL; CHECK IT AFTER EVERY HEAVY RAINFALL EVENT (1/2 INCH OR GREATER). IMMEDIATELY MAKE REPAIRS. CHECK THE CHANNEL OUTLET AND ALL ROAD CROSSINGS FOR BANK STABILITY AND EVIDENCE OF PIPING OR SCOUR HOLES. REMOVE ALL SIGNIFICANT SEDIMENT ACCUMULATIONS TO MAINTAIN THE DESIGNED CARRYING CAPACITY. KEEP THE GRASS IN A HEALTHY, VIGOROUS CONDITION AT ALL TIMES.

#### **SLOPE DRAINS MAINTENANCE**

INSPECT SLOPE DRAINS AND SUPPORTING DIVERSIONS AFTER EVERY RAINFALL (1/2 INCH OR GREATER), AND PROMPTLY MAKE NECESSARY REPAIRS.

#### 400 S. TRYON STREET CHARLOTTE, NC 28285 PHONE: (704) 376-6423 NC LICENSE # C-0430 labellapc.com





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# TRANSYLVANIA COUNTY 500 HOWELL ROAD, BREVARD, NORTH CAROLINA 28712



# WOODRUFF LANDFILL PHASE 7 EXPANSION CONSTRUCTION

500 HOWELL ROAD, BREVARD, NORTH CAROLINA 28712

NO:	DATE:	DESCRIPTION:
Revisions	·	

PROJECT NUMBER:

2250798

DRAWN BY:

RH

REVIEWED BY:

KN / RG

ISSUED FOR:

REBID

DATE:

02/21/25

DRAWING NAME:

GROUND STABILIZATION
AND MATERIAL HANDLING

DRAWING NUMBER:

#### SECTION A: SELF-INSPECTION

SELF-INSPECTIONS ARE REQUIRED DURING NORMAL BUSINESS HOURS IN ACCORDANCE WITH THE TABLE BELOW. WHEN ADVERSE WEATHER OR SITE CONDITIONS WOULD CAUSE THE SAFETY OF THE INSPECTION PERSONNEL TO BE IN JEOPARDY, THE INSPECTION MAY BE DELAYED UNTIL THE NEXT BUSINESS DAY ON WHICH IT IS SAFE TO PERFORM THE INSPECTION. IN ADDITION, WHEN A STORM EVENT OF GREATER THAN 0.5 INCHES OCCURS OUTSIDE OF NORMAL BUSINESS HOURS, THE SELF-INSPECTION SHALL BE PERFORMED UPON THE COMMENCEMENT OF THE NEXT BUSINESS DAY. ANY TIME WHEN INSPECTIONS WERE DELAYED SHALL BE NOTED IN THE INSPECTION RECORD.

Inspect	Frequency (during normal business hours)	Inspection records must include:
(1) Rain gauge maintained in good working order	Daily	Daily rainfall amounts.  If no daily rain gauge observations are made during weekend holiday periods, and no individual-day rainfall information available, record the cumulative rain measurement for those u attended days (and this will determine if a site inspection needed). Days on which no rainfall occurred shall be recorded "zero." The permittee may use another rain-monitoring device approved by the Division.
(2) E&SC Measures	At least once per 7 calendar days and within 24 hours of a rain event $\geq 0.5$ inches in 24 hours	<ol> <li>Identification of the measures inspected,</li> <li>Date and time of the inspection,</li> <li>Name of the person performing the inspection,</li> <li>Indication of whether the measures were operating properly,</li> <li>Description of maintenance needs for the measure,</li> <li>Description, evidence, and date of corrective actions taken.</li> </ol>
(3) Stormwater discharge outfalls (SDOs)	At least once per 7 calendar days and within 24 hours of a rain event > 0.5 inches in 24 hours	<ol> <li>Identification of the discharge outfalls inspected,</li> <li>Date and time of the inspection,</li> <li>Name of the person performing the inspection,</li> <li>Evidence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration,</li> <li>Indication of visible sediment leaving the site,</li> <li>Description, evidence, and date of corrective actions taken.</li> </ol>
(4) Perimeter of site	At least once per 7 calendar days and within 24 hours of a rain event $\geq 0.5$ inches in 24 hours	<ol> <li>If visible sedimentation is found outside site limits, then a record of the following shall be made:</li> <li>Actions taken to clean up or stabilize the sediment that has lef the site limits,</li> <li>Description, evidence, and date of corrective actions taken, and</li> <li>An explanation as to the actions taken to control future releases.</li> </ol>
(5) Streams or wetlands onsite or offsite (where accessible)	At least once per 7 calendar days and within 24 hours of a rain event > 0.5 inches in 24 hours	If the stream or wetland has increased visible sedimentation or a stream has visible increased turbidity from the construction activity, then a record of the following shall be made:  1. Description, evidence and date of corrective actions taken, and 2. Records of the required reports to the appropriate Division Regional Office per Part III, Section C, Item (2)(a) of this permit
(6) Ground stabilization measures	After each phase of grading	<ol> <li>The phase of grading (installation of perimeter E&amp;SC measures, clearing and grubbing, installation of storm drainage facilities, completion of all land-disturbing activity, construction or redevelopment, permanent ground cover).</li> <li>Documentation that the required ground stabilization measures have been provided within the required timeframe or an assurance that they will be provided as soon as possible.</li> </ol>

NOTE: THE RAIN INSPECTION RESETS THE REQUIRED 7 CALENDAR DAY INSPECTION REQUIREMENT.

NON-SURFACE WITHDRAWAL SHALL NOT COMMENCE UNTIL THE E&SC PLAN AUTHORITY HAS APPROVED THESE ITEMS,

#### PART III SELF-INSPECTION. RECORDKEEPING AND REPORTING

#### **SECTION B: RECORDKEEPING**

E&SC PLAN DOCUMENTATION THE APPROVED E&SC PLAN AS WELL AS ANY APPROVED DEVIATION SHALL BE KEPT ON THE SITE. THE APPROVED E&SC PLAN MUST BE KEPT UP-TO-DATE THROUGHOUT THE COVERAGE UNDER THIS PERMIT. THE FOLLOWING ITEMS PERTAINING TO THE E&SC PLAN SHALL BE KEPT ON SITE AND AVAILABLE FOR INSPECTION AT ALL TIMES DURING NORMAL BUSINESS HOURS.

Item to Document	Documentation Requirements
(a) Each E&SC measure has been installed and does not significantly deviate from the locations, dimensions and relative elevations shown on the approved E&SC plan.	Initial and date each E&SC measure on a copy of the approved E&SC plan or complete, date and sign an inspection report that lists each E&SC measure shown on the approved E&SC plan. This documentation is required upon the initial installation of the E&SC measures or if the E&SC measures are modified after initial installation.
(b) A phase of grading has been completed.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate completion of the construction phase.
(c) Ground cover is located and installed in accordance with the approved E&SC plan.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate compliance with approved ground cover specifications.
(d) The maintenance and repair requirements for all E&SC measures have been performed.	Complete, date and sign an inspection report.
(e) Corrective actions have been taken to E&SC measures.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate the completion of the corrective action.

- ADDITIONAL DOCUMENTATION TO BE KEPT ON SITE IN ADDITION TO THE E&SC PLAN DOCUMENTS ABOVE, THE FOLLOWING ITEMS SHALL BE KEPT ON THE SITE AND AVAILABLE FOR INSPECTORS AT ALL TIMES DURING NORMAL BUSINESS HOURS, UNLESS THE DIVISION PROVIDES A SITE-SPECIFIC EXEMPTION BASED ON UNIQUE SITE CONDITIONS THAT MAKE THIS REQUIREMENT NOT PRACTICAL:
- (a) THIS GENERAL PERMIT AS WELL AS THE CERTIFICATE OF COVERAGE. AFTER IT IS
- (b) RECORDS OF INSPECTIONS MADE DURING THE PREVIOUS TWELVE MONTHS. THE PERMITTEE SHALL RECORD THE REQUIRED OBSERVATIONS ON THE INSPECTION RECORD FORM PROVIDED BY THE DIVISION OR A SIMILAR INSPECTION FORM THAT INCLUDES ALL THE REQUIRED ELEMENTS. USE OF ELECTRONICALLY-AVAILABLE RECORDS IN LIEU OF THE REQUIRED PAPER COPIES WILL BE ALLOWED IF SHOWN TO PROVIDE EQUAL ACCESS AND UTILITY AS THE HARD-COPY RECORDS.
- DOCUMENTATION TO BE RETAINED FOR THREE YEARS. ALL DATA USED TO COMPLETE THE E-NOI AND ALL INSPECTION RECORDS SHALL BE MAINTAINED FOR A PERIOD OF THREE YEARS AFTER PROJECT COMPLETION AND MADE AVAILABLE UPON REQUEST . [40 CFR 122.41]

PART II, SECTION G, ITEM (4)

DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT

SEDIMENT BASINS AND TRAPS THAT RECEIVE RUNOFF FROM DRAINAGE AREAS OF ONE ACRE OR MORE SHALL USE OUTLET STRUCTURES THAT WITHDRAW WATER FROM THE SURFACE WHEN THESE DEVICES NEED TO BE DRAWN DOWN FOR MAINTENANCE OR CLOSE OUT UNLESS THIS IS INFEASIBLE. THE CIRCUMSTANCES IN WHICH IT IS NOT FEASIBLE TO WITHDRAW WATER FROM THE SURFACE

SHALL BE RARE (FOR EXAMPLE, TIMES WITH EXTENDED COLD WEATHER). NON-SURFACE WITHDRAWALS FROM SEDIMENT BASINS SHALL BE ALLOWED ONLY WHEN ALL OF THE FOLLOWING CRITERIA

(a) THE E&SC PLAN AUTHORITY HAS BEEN PROVIDED WITH DOCUMENTATION OF THE NON-SURFACE WITHDRAWAL AND THE SPECIFIC TIME PERIODS OR CONDITIONS IN WHICH IT WILL OCCUR. THE

(d) VEGETATED, UPLAND AREAS OF THE SITES OR A PROPERLY DESIGNED STONE PAD IS USED TO THE EXTENT FEASIBLE AT THE OUTLET OF THE DEWATERING TREATMENT DEVICES DESCRIBED IN

(c) DEWATERING DISCHARGES ARE TREATED WITH CONTROLS TO MINIMIZE DISCHARGES OF POLLUTANTS FROM STORMWATER THAT IS REMOVED FROM THE SEDIMENT BASIN. EXAMPLES OF

(f) SEDIMENT REMOVED FROM THE DEWATERING TREATMENT DEVICES DESCRIBED IN ITEM (C) ABOVE IS DISPOSED OF IN A MANNER THAT DOES NOT CAUSE DEPOSITION OF SEDIMENT INTO

(b) THE NON-SURFACE WITHDRAWAL HAS BEEN REPORTED AS AN ANTICIPATED BYPASS IN ACCORDANCE WITH PART III, SECTION C, ITEM (2)(C) AND (D) OF THIS PERMIT,

(e) VELOCITY DISSIPATION DEVICES SUCH AS CHECK DAMS, SEDIMENT TRAPS, AND RIPRAP ARE PROVIDED AT THE DISCHARGE POINTS OF ALL DEWATERING DEVICES, AND

APPROPRIATE CONTROLS INCLUDE PROPERLY SITED, DESIGNED AND MAINTAINED DEWATERING TANKS, WEIR TANKS, AND FILTRATION SYSTEMS.

#### PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING

#### **SECTION C: REPORTING**

- I. OCCURRENCES THAT MUST BE REPORTED PERMITTEES SHALL REPORT THE FOLLOWING OCCURRENCES:
- (a) VISIBLE SEDIMENT DEPOSITION IN A STREAM OR WETLAND.

#### (b) OIL SPILLS IF:

- THEY ARE 25 GALLONS OR MORE.
- THEY ARE LESS THAN 25 GALLONS BUT CANNOT BE CLEANED UP WITHIN 24 HOURS,
- THEY CAUSE SHEEN ON SURFACE WATERS (REGARDLESS OF VOLUME), OR
- THEY ARE WITHIN 100 FEET OF SURFACE WATERS (REGARDLESS OF VOLUME).

(C) RELEASES OF HAZARDOUS SUBSTANCES IN EXCESS OF REPORTABLE QUANTITIES UNDER SECTION 311 OF THE CLEAN WATER ACT (REF: 40 CFR 110.3 AND 40 CFR 117.3) OR SECTION 102 OF CERCLA (REF: 40 CFR 302.4) OR G.S. 143-215.85.

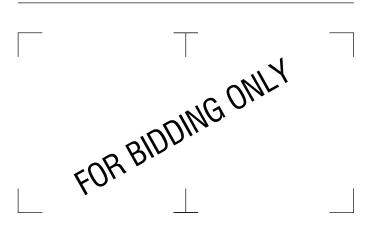
- (d) ANTICIPATED BYPASSES AND UNANTICIPATED BYPASSES.
- (e) NONCOMPLIANCE WITH THE CONDITIONS OF THIS PERMIT THAT MAY ENDANGER HEALTH OR THE ENVIRONMENT.

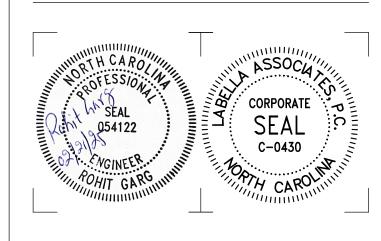
#### 2. REPORTING TIMEFRAMES AND OTHER REQUIREMENTS

AFTER A PERMITTEE BECOMES AWARE OF AN OCCURRENCE THAT MUST BE REPORTED, HE SHALL CONTACT THE APPROPRIATE DIVISION REGIONAL OFFICE WITHIN THE TIMEFRAMES AND IN ACCORDANCE WITH THE OTHER REQUIREMENTS LISTED BELOW. OCCURRENCES OUTSIDE NORMAL BUSINESS HOURS MAY ALSO BE REPORTED TO THE DEPARTMENT'S ENVIRONMENTAL EMERGENCY CENTER PERSONNEL AT (800) 858-0368.

Occurrence	Reporting Timeframes (After Discovery) and Other Requirements
(a) Visible sediment	Within 24 hours, an oral or electronic notification.
deposition in a	Within 7 calendar days, a report that contains a description of the
stream or wetland	sediment and actions taken to address the cause of the deposition.
	Division staff may waive the requirement for a written report on a case-by-case basis.
	• If the stream is named on the NC 303(d) list as impaired for sediment-
	related causes, the permittee may be required to perform additional
	monitoring, inspections or apply more stringent practices if staff
	determine that additional requirements are needed to assure compliance
	with the federal or state impaired-waters conditions.
(b) Oil spills and	Within 24 hours, an oral or electronic notification. The notification
release of	shall include information about the date, time, nature, volume and
hazardous	location of the spill or release.
substances per Item	
1(b)-(c) above	
(c) Anticipated	A report at least ten days before the date of the bypass, if possible.
bypasses [40 CFR	The report shall include an evaluation of the anticipated quality and
122.41(m)(3)]	effect of the bypass.
(d) Unanticipated	Within 24 hours, an oral or electronic notification.
bypasses [40 CFR	Within 7 calendar days, a report that includes an evaluation of the
122.41(m)(3)]	quality and effect of the bypass.
(e) Noncompliance	Within 24 hours, an oral or electronic notification.
with the conditions	Within 7 calendar days, a report that contains a description of the
of this permit that	noncompliance, and its causes; the period of noncompliance,
may endanger	including exact dates and times, and if the noncompliance has not
health or the	been corrected, the anticipated time noncompliance is expected to
environment[40	continue; and steps taken or planned to reduce, eliminate, and
CFR 122.41(l)(7)]	prevent reoccurrence of the noncompliance. [40 CFR 122.41(I)(6).
	Division staff may waive the requirement for a written report on a
	case-by-case basis.

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#### TRANSYLVANIA COUNTY

500 HOWELL ROAD, BREVARD, **NORTH CAROLINA 28712** 



#### **WOODRUFF LANDFILL** PHASE 7 EXPANSION CONSTRUCTION

500 HOWELL ROAD, BREVARD NORTH CAROLINA 28712

NO:	DATE:	DESCRIPTION:
Revisions		

PROJECT NUMBER: 2250798 DRAWN BY: REVIEWED BY: KN / RG ISSUED FOR: REBID DATE: 02/21/25 DRAWING NAME:

> INSPECTION, RECORDKEEPING, AND REPORTING

DRAWING NUMBER:

HAVE BEEN MET:

ITEM (C) ABOVE,

WATERS OF THE UNITED STATES.

#### STRUCTURAL NOTES

#### **GENERAL NOTES:**

SPECIFICATIONS.

- 1) ALL STRUCTURAL WORK, INCLUDING MATERIAL STRESSES AND METHODS OF CONSTRUCTION SHALL CONFORM TO THE NORTH CAROLINA BUILDING CODE, 2018 EDITION AND ALL OTHER APPLICABLE LOCAL CODES.
- 2) THE CONTRACTOR SHALL COORDINATE ALL STRUCTURAL WORK WITH THE CIVIL, PLUMBING AND ELECTRICAL DRAWINGS AND
- 3) THE WORD "EQUAL" WHERE USED IN THESE DRAWINGS OR CONTRACT DOCUMENTS SHALL BE DEFINED AS "EQUIVALENT" FOR THE PURPOSES OF SUBSTITUTION OF PROPRIETARY PRODUCTS, SHOP FABRICATED ITEMS, OR OTHERWISE. THE ABBREVIATION "A.E."
- REFERS TO "APPROVED EQUIVALENT".

THE CONTRACTOR IS RESPONSIBLE FOR THE STRUCTURAL STABILITY OF THE STRUCTURE, WALLS, FOUNDATIONS, ETC., DURING

- 5) DO NOT SCALE DRAWINGS. COORDINATE ALL CONCRETE SLAB LOCATIONS WITH CIVIL DRAWINGS.
- 6) SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AFTER BEING REVIEWED BY THE CONTRACTOR.APPLICABLE SHOP DRAWINGS ARE AS FOLLOWS:
- 1. REINFORCING STEEL
  2. CONCRETE MIX DESIGNS

#### **EARTHWORK AND FOUNDATION NOTES:**

- 1) THERE HAS BEEN NO GEOTECHNICAL EVALUATION PERFORMED. THE ASSUMED ALLOWABLE SOIL BEARING PRESSURE = 2000 PSF. FOUNDATIONS SHALL BEAR ON SOUND, NATIVE SOIL OR SELECT IMPORTED STRUCTURAL FILL.
- AFTER THE TOPSOIL, ROOTMAT, TRASH, DEBRIS, ORGANIC MATERIALS AND ANY OTHER DELETERIOUS MATERIAL IS STRIPPED, ALL AREAS WITHIN ANY BUILDING FOOTPRINT AND PAVEMENT ARE TO BE PROOF ROLLED WITH A LOADED DUMP TRUCK OR SIMILAR PNEUMATIC TIRED VEHICLE WITH A STATIC WEIGHT BETWEEN TEN AND TWENTY TONS. PROOF ROLLING WILL BE PERFORMED BY COMPLETING A MINIMUM OF FOUR PASSES WITH THE VEHICLE TWO PASSES OF WHICH SHOULD BE PERPENDICULAR TO THE PRECEDING ONES. SOFT OR LOOSE SOILS IDENTIFIED DURING THIS ROLLING SHOULD BE EXCAVATED AND REPLACED WITH STRUCTURAL FILL AS DIRECTED BY THE OWNER'S GEOTECHNICAL ENGINEER. PROOF ROLLING OPERATIONS ARE TO BE PERFORMED UNDER THE SUPERVISION OF THE OWNER'S GEOTECHNICAL ENGINEER.
- 3) CONTROL GROUNDWATER AT ALL EXCAVATIONS TO ALLOW THE PROPER INSTALLATION OF FOUNDATIONS. CONTRACTOR IS RESPONSIBLE TO DIRECT WATER AWAY FROM EXCAVATIONS AND SUMP WITH PUMPS AS REQUIRED.
- ) ALL FOOTINGS, SLABS AND PAVEMENT ARE TO BE PLACED ON CLEAN, DRY, LEVEL, UNDISTURBED NATIVE SOIL, ON IMPORTED, SELECT STRUCTURAL FILL, OR LEAN CONCRETE THAT HAS BEEN INSPECTED AND APPROVED BY THE OWNER'S GEOTECHNICAL ENGINEER.
- THE SUITABILITY AND STABILITY OF EXISTING SOILS, THE DEPTHS AND LATERAL LIMITS OF UNSUITABLE MATERIAL TO BE REMOVED, AND ADEQUACY OF FOUNDATION BEARING GRADES SHALL BE DETERMINED BY THE OWNER'S GEOTECHNICAL ENGINEER, SHOULD UNSUITABLE MATERIAL BE ENCOUNTERED.
- 6) IMPORTED SELECT STRUCTURAL FILL PLACED BENEATH PROPOSED FOUNDATIONS AND AS BACKFILL AGAINST PROPOSED FOUNDATIONS SHALL BE A MATERIAL CONSISTING OF PREDOMINATELY GRANULAR SOILS, FREE FROM ORGANIC MATTER, CLAY, ICE, DEBRIS, OR OTHER DELETERIOUS MATERIAL. STRUCTURAL FILL SHALL CONSIST OF A WELL-GRADED MATERIAL HAVING A MAXIMUM PARTICLE SIZE OF 3" AND LESS THAN 12% BY WEIGHT PASSING THE NO. 200 SIEVE. THE PROPOSED MATERIAL FOR SELECT STRUCTURAL FILL SHALL BE APPROVED BY THE OWNER'S GEOTECHNICAL ENGINEER. A GRADATION ANALYSIS OF ON-SITE SOILS SHOULD BE SUBMITTED FOR APPROVAL PRIOR TO USE.
- 7) REUSE OF THE ON-SITE SOILS AS STRUCTURAL FILL BELOW THE PROPOSED SLAB BASE COURSE MATERIAL TO ATTAIN THE PROPOSED FINISHED SUBGRADE IS CONTINGENT UPON PROPER SITE PREPARATION, PROPER COMPACTION, AND CONTROL OF MOISTURE. A MAXIMUM PARTIAL SIZE OF 2" SHALL BE USED FOR THE ON-SITE SOILS WHEN REUSED AS STRUCTURAL FILL BELOW SLAB BASE COURSE MATERIAL. IT SHOULD BE ANTICIPATED THAT PROPER COMPACTION OF THE ON-SITE MATERIALS WILL BE DIFFICULT IF EARTHWORK IS PERFORMED DURING WET SEASONS, OR IF THE MATERIAL IS ABOVE OPTIMUM MOISTURE CONTENT. IMPORTED SELECT STRUCTURAL FILL MAY THEN BE REQUIRED.
- 8) AGGREGATE BASE COURSE MATERIAL PLACED BENEATH SLABS SHALL BEAR UPON 6" OF FREE-DRAINING GRANULAR MATERIAL AND MEET THE REQUIREMENTS OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION (NCDOT) "STANDARD SPECIFICATION FOR HIGHWAY CONSTRUCTION"
- 9) PRIOR TO PLACING THE BASE COURSE MATERIAL, SUBGRADE SHALL BE THOROUGHLY PROOFROLLED WITH A LARGE VIBRATORY ROLLER UNDER THE OBSERVATION OF THE OWNER'S GEOTECHNICAL ENGINEER. IF PLASTIC/ELASTIC SOILS ARE EXPOSED AT THE FOUNDATION BEARING ELEVATION OR FLOOR SLAB ELEVATION, UNDERCUT AT LEAST 24 OR 18 INCHES, RESPECTIVELY, OF THE UNSUITABLE MATERIAL AND REPLACE WITH APPROVED COMPACTED STRUCTURAL FILL.
- 10) IF EXISTING FILLS ARE ENCOUNTERED AT SUBGRADE ELEVATIONS, UNDERCUT AND REPLACE THE EXISTING SOILS WITH AN APPROVED BACKFILL TO A DEPTH OF 4.0 FEET BELOW FINISHED GRADE.
- 11) STRUCTURAL FILL SOILS THAT ARE PLACED TO REACH FINAL GRADES REQUIRE A 24" BUFFER OF APPROVED STRUCTURAL FILL BETWEEN THE BOTTOM OF THE FOUNDATIONS AND THE ELASTIC/PLASTIC SOIL, FOR SLABS, AN 18" BUFFER IS REQUIRED.
- 12) ALL BACKFILL OPERATIONS SHALL BE CONDUCTED IN DRY AREAS ONLY.
- 13) IF WET CONDITIONS ARE ANTICIPATED, OR IF GROUNDWATER IS ENCOUNTERED DURING EARTHWORK, FOUNDATION BEARING GRADES SHALL BE UNDERCUT APPROXIMATELY 6 INCHES, AND REPLACED WITH SELECT IMPORTED STRUCTURAL FILL. PRIOR TO PLACING THE FILL, A WOVEN GEOTEXTILE FABRIC (MIRAFI 500X OR APPROVED EQUAL) SHALL BE PLACED UPON THE APPROVED BEARING GRADE. THE GEOTEXTILE SHALL BE WRAPPED OVER THE TOP OF THE STRUCTURAL FILL. THE SELECT IMPORTED STRUCTURAL FILL SHALL EXTEND A MINIMUM LATERAL DISTANCE FROM THE EDGE OF THE FOUNDATION OF 6 INCHES. OWNER'S GEOTECHNICAL ENGINEER OR TESTING AGENCY SHALL EVALUATE FOUNDATION BEARING GRADES.
- 14) ALL EXCAVATIONS SHALL FULLY CONFORM TO ALL LOCAL, STATE, AND FEDERAL SAFETY AND ENVIRONMENTAL REGULATIONS.
- 5) ALL FILL MATERIAL PLACED BENEATH FLOOR SLABS AND FOUNDATIONS, AND AGAINST FOUNDATIONS SHALL BE SPREAD IN MAXIMUM 8" THICK LAYERS AND UNIFORMLY COMPACTED TO AT LEAST 95% OF ITS MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR TEST (ASTM D1557) WITH A  $\pm$ -3% OF THE OPTIMUM MOISTURE CONTENT AND 100% WITHIN THE TOP TWO FEET OF FINISHED GRADE. IN CONFINED OR OVER EXCAVATED AREAS WHERE EITHER A SMALL SELF-PROPELLED COMPACTOR OR A MANUALLY OPERATED COMPACTOR IS USED, THE FILL SHALL BE PLACED IN MAXIMUM 6" AND 4" THICK LIFTS RESPECTIVELY.
- 16) BACKFILL MATERIALS REQUIRED AS A RESULT OF OVER-EXCAVATION BY THE CONTRACTOR WITHOUT PRIOR APPROVAL SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

#### CONCRETE MATERIAL REQUIREMENTS:

- 1) CONCRETE PROPERTIE
  - a. MINIMUM COMPRESSIVE STRENGTH: 4500 PSI AT 28-DAYS; MAXIMUM WATER/CEMENT RATIO: 0.45.
    b. Slump Limit: 4 inches, plus or minus 1 inch. If admixtures are used to improve workability, the maximum slump
  - LIMITS MAY BE RELAXED WITH ENGINEER'S APPROVAL; AIR CONTENT: 6% +/- 1%.

    C. COURSE AGGREGATE: 1 INCH NOMINAL MAXIMUM AGGREGATE SIZE.
- 2) ALL REINFORCING BARS SHALL CONFORM TO ASTM A615 GRADE 60.
- 3) SYNTHETIC MACRO-FIBER: POLYOLEFIN MACRO-FIBERS ENGINEERED AND DESIGNED FOR USE IN CONCRETE, COMPLYING WITH ASTM C1116/C 1116M, TYPE III.

STRUCTURAL LOADS 2018 NORTH CAROLINA BUILDING CODE 1607 A. <u>LIVE LOADS</u> CONCENTRATED OCCUPANCY OR USE <u>UNIFORM</u> CONCRETE SLABS 125 PSF REDUCTION IN LIVE LOADS AS PERMITTED PER NC BUILDING CODE 1607.10 B. ROOF LOADS NORTH CAROLINA BUILDING CODE 1607.12 MINIMUM ROOF LIVE LOAD RAIN SURCHARGE LOAD HAS BEEN APPLIED TO AREAS WHERE PONDING OCCURS IN ACCORDANCE WITH SECTION 1611. NORTH CAROLINA BULDIING CODE 1608 GROUND SNOW LOAD, Pg (FIGURE 1608.2) 20 PSF SNOW EXPOSURE FACTOR, Ce 1.0 THERMAL FACTOR, Ct 1.0 SNOW LOAD IMPORTANCE FACTOR, Is 1.0 D. WIND LOAD DESIGN CRITERIA NORTH CAROLINA BUILDING CODE 1609 ANALYSIS PROCEDURE ASCE 7-10 DIRECTIONAL PROCEDURE ULTIMATE DESIGN WIND SPEED (3 SECOND GUST), Vult 115 MPH NOMINAL DESIGN WIND SPEED (3 SECOND GUST), Vasd 89 MPH OCCUPANCY CATEGORY (TABLE 1604.5) WIND LOAD IMPORTANCE FACTOR, IW 1.00 EXPOSURE CATEGORY WIND DIRECTIONALITY FACTOR, Kd 0.85 TOPOGRAPHIC FACTOR, Kzt 1.00 GUST-EFFECT FACTOR, G 0.85 INTERNAL PRESSURE COEFFICIENT, GCpi  $\pm 0.18$ VELOCITY PRESSURE, q 13.7 PSF . WIND LOAD (COMPONENTS & CLADDING) NORTH CAROLINA BUILDING CODE 1609 ASCE 7-10 METHOD 1 ANALYSIS PROCEDURE BASIC WIND SPEED 115 MPH INTERNAL PRESSURE COEFFICIENT, GCpi  $\pm 0.18$ MINIMUM DESIGN WIND PRESSURE 16.0 PSF SEISMIC DESIGN CRITERIA NORTH CAROLINA BUILDING CODE 1613 OCCUPANCY CATEGORY SEISMIC IMPORTANCE FACTOR Ie 1.00 MAPPED SPECTRAL RESPONSE ACCELERATION 0.303g AT SHORT PERIODS, Ss AT 1 SECOND PERIOD, S1 0.109g SITE CLASS DESIGN SPECTRAL RESPONSE ACCELERATION AT SHORT PERIODS, SDS 0.315g AT 1 SECOND PERIOD, SD1 0.172g

EQUIVALENT LATERAL-FORCE

SEISMIC DESIGN CATEGORY

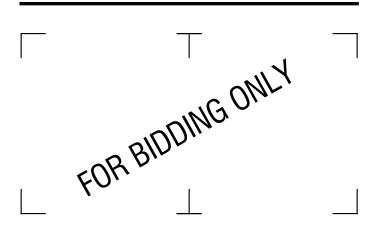
ANALYSIS PROCEDURE:

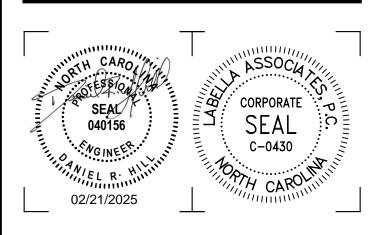
DESIGN BASE SHEAR, V

BASIC SEISMIC-FORCE-RESISTING SYSTEM:

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## TRANSYLVANIA COUNTY 500 HOWELL ROAD, BREVARD,

NORTH CAROLINA 28712



## WOODRUFF LANDFILL PHASE 7 CONSTRUCTION

500 HOWELL ROAD, BREVARD, NORTH CAROLINA 28712

NO:	DATE:	DESCRIPTION:

PROJECT NUMBER:

2250798

DRAWN BY:

JW

REVIEWED BY:

DRH

ISSUED FOR:

REBID

DATE:

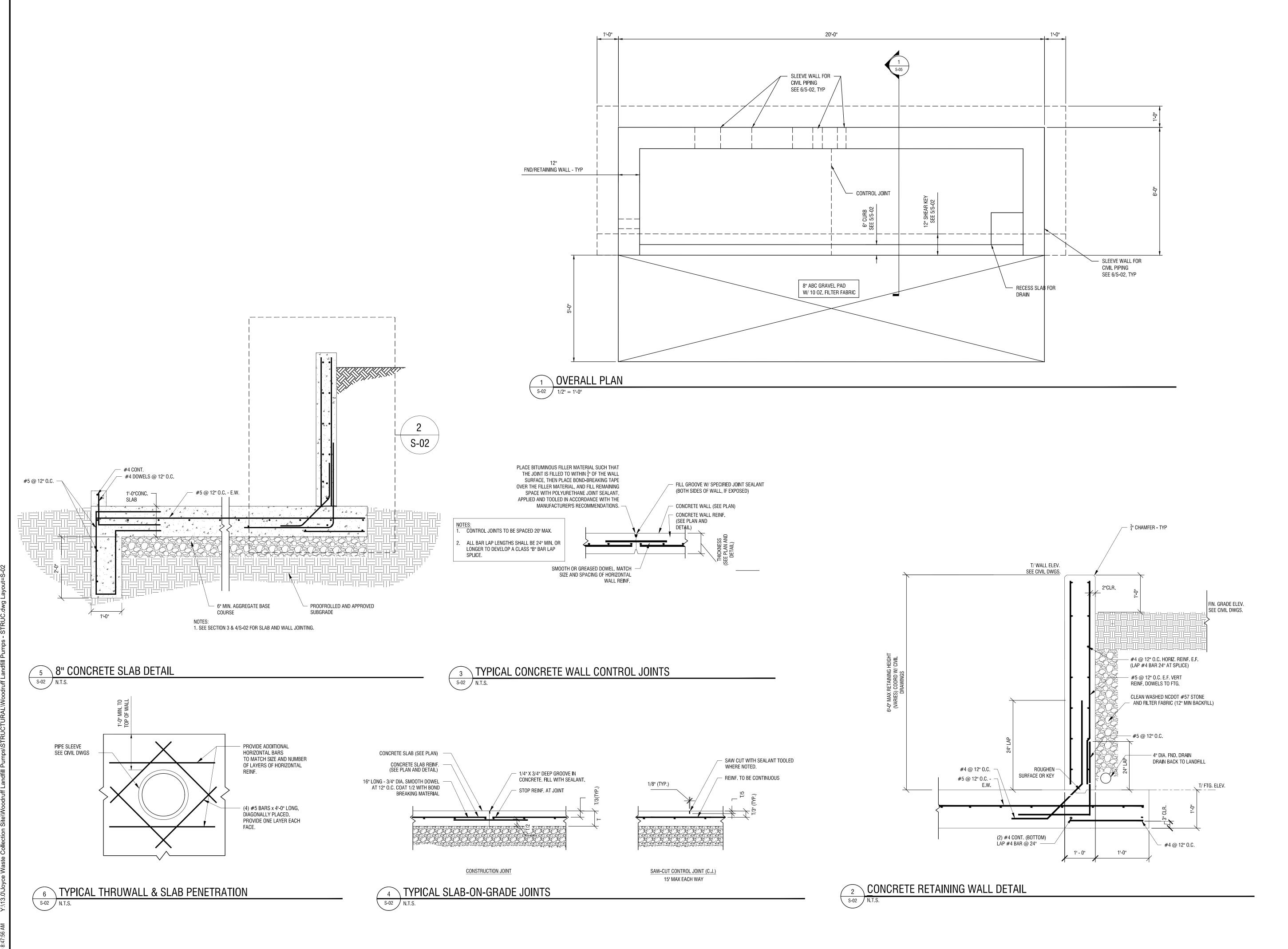
02/21/2025

**GENERAL NOTES** 

DRAWING NUMBER:

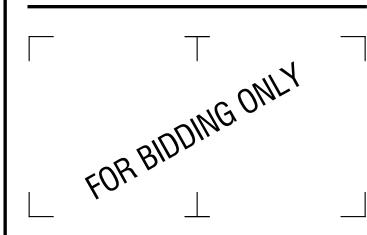
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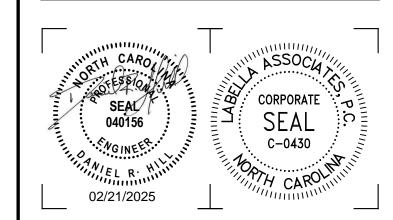
**S-01** 



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# TRANSYLVANIA COUNTY 500 HOWELL ROAD, BREVARD, NORTH CAROLINA 28712



## WOODRUFF LANDFILL PHASE 7 CONSTRUCTION

500 HOWELL ROAD, BREVARD, NORTH CAROLINA 28712

NO:	DATE:	DESCRIPTION:

PROJECT NUMBER:	2250798	
DRAWN BY:	JW	
REVIEWED BY:	DRH	
ISSUED FOR:	REBID	
DATE:	02/21/2025	

DRAWING NAME:

#### **FOUNDATION PLAN & DETAILS**

DRAWING NUMBER:

**S-02** 

**GENERAL ELECTRICAL NOTES** 

- 1. THE WORK COVERED BY THIS CONTRACT CONSISTS OF FURNISHING ALL LABOR, EQUIPMENT, SUPPLIES, AND MATERIALS AND PERFORMING ALL OPERATIONS, INCLUDING TRENCHING, BACKFILLING, CUTTING, CHANNELING, CHASING AND PATCHING NECESSARY FOR THE INSTALLATION OF THE COMPLETE ELECTRICAL SYSTEM IN STRICT ACCORDANCE WITH THE PLANS, NOTES AND REFERENCED SPECIFICATIONS.
- 2. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST/ADOPTED ISSUE OF THE <u>NATIONAL ELECTRIC CODE</u> (NEC), APPLICABLE LOCAL AND STATE CODES. SERVICE CONNECTIONS AND METERING SHALL BE IN ACCORDANCE WITH THE UTILITY COMPANY'S STANDARDS.
- 3. ALL ABOVE GRADE WIRING SHALL BE RUN IN RIGID STEEL OR IMC CONDUIT RACEWAYS. ALL JOINTS SHALL BE THREADED AND SEALED TO DISCOURAGE ENTRANCE OF WATER AND GASES. WHERE INDICATED, PROVIDE SEAL FITTINGS RATED FOR 40% FILL, OR INCREASE CONDUIT/SEAL SIZE SO FILL DOES NOT EXCEED 25%.
- 4. THE CONDUIT AND THE NEUTRAL CONDUCTOR FOR THE WIRING SYSTEMS, AND ALL ELECTRICAL EQUIPMENT SHALL BE GROUNDED. ALL FEEDER AND BRANCH CIRCUIT CONDUITS SHALL CONTAIN A GREEN GROUNDING CONDUCTOR IN ADDITION TO THE CIRCUIT CONDUCTORS. THE GROUNDING SLOT IN ALL RECEPTACLES AND MOTOR FRAMES SHALL BE GROUNDED BY CONNECTION THROUGH A BONDED JUMPER TO THE OUTLET BOX OR CONDUIT AND GROUNDING CONDUCTOR.
- 5. ALL CONDUCTORS, UNLESS OTHERWISE NOTED, SHALL BE TYPE THWN OR THHN STRANDED COPPER RUN IN CONDUIT. MINIMUM BRANCH CIRCUIT WIRING SHALL BE #12 AWG. CONDUIT SHALL BE SIZED PER NEC HOWEVER, MINIMUM SIZE SHALL BE 3/4". ALL POWER AND CONTROL CONDUCTORS SHALL BE RATED FOR 600
- 6. ALL EQUIPMENT, EXCEPT WHERE SPECIFICALLY NOTED OTHERWISE, SHALL BE FURNISHED WITH FACTORY APPLIED FINISHED COAT. ALL PRIME COATED EQUIPMENT SHALL BE TOUCHED UP WHERE SCRATCHED, CLEANED, AND LEFT READY FOR PAINTING TO BE DONE BY CONTRACTOR.
- 7. THE SPECIFICATIONS DETAILING STUDY PROCEDURES, GOALS AND LABELING REQUIREMENTS HAVE BEEN PROVIDED BY LEAD PROFESSIONAL AS PART OF THIS CONSTRUCTION DOCUMENT PACKAGE.
- 8. THE ELECTRICAL CONTRACTOR SHALL CONNECT ALL EQUIPMENT REQUIRING ELECTRICAL CONNECTION EXCEPT AS OTHERWISE SPECIFICALLY NOTED. LOW VOLTAGE CONTROL WIRING FOR MECHANICAL EQUIPMENT IS INCLUDED IN THE MECHANICAL WORK. THE EXACT LOCATION OF STUB-UPS AND POINTS OF CONNECTION TO EQUIPMENT FURNISHED BY OTHER TRADES SHALL BE COORDINATED WITH THE TRADE FURNISHING THE EQUIPMENT BEFORE THE CONDUIT IS INSTALLED.

SERVICE CALCULATIONS @ 120/240V, 10, 3W

3HP, 230V, 10 SUBMERSIBLE PUMP 17.0

120-VOLT CONTROL & RECEPTACLES 6.4

 120-VOLT CONTROL & RECEPTACLES
 6.4
 FLA

 TOTAL LOAD
 23.4
 AMPS

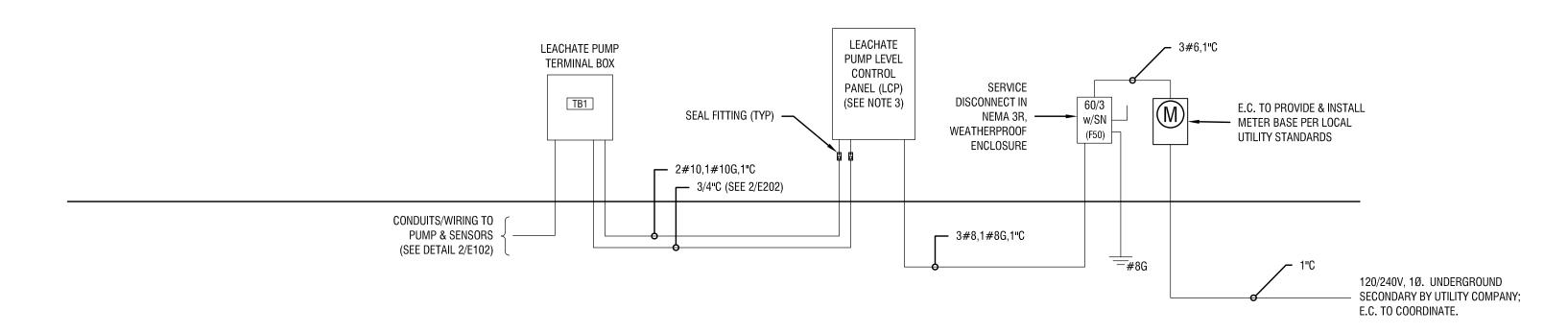
 MOTOR FLA X .25 =
 4.3
 AMPS

 MIN WIRE SIZE AMPS
 27.7
 AMPS

 MOTOR FLA X 1.25 =
 21.3
 AMPS

 OVERCURRENT PROTECTION
 48.0
 AMPS

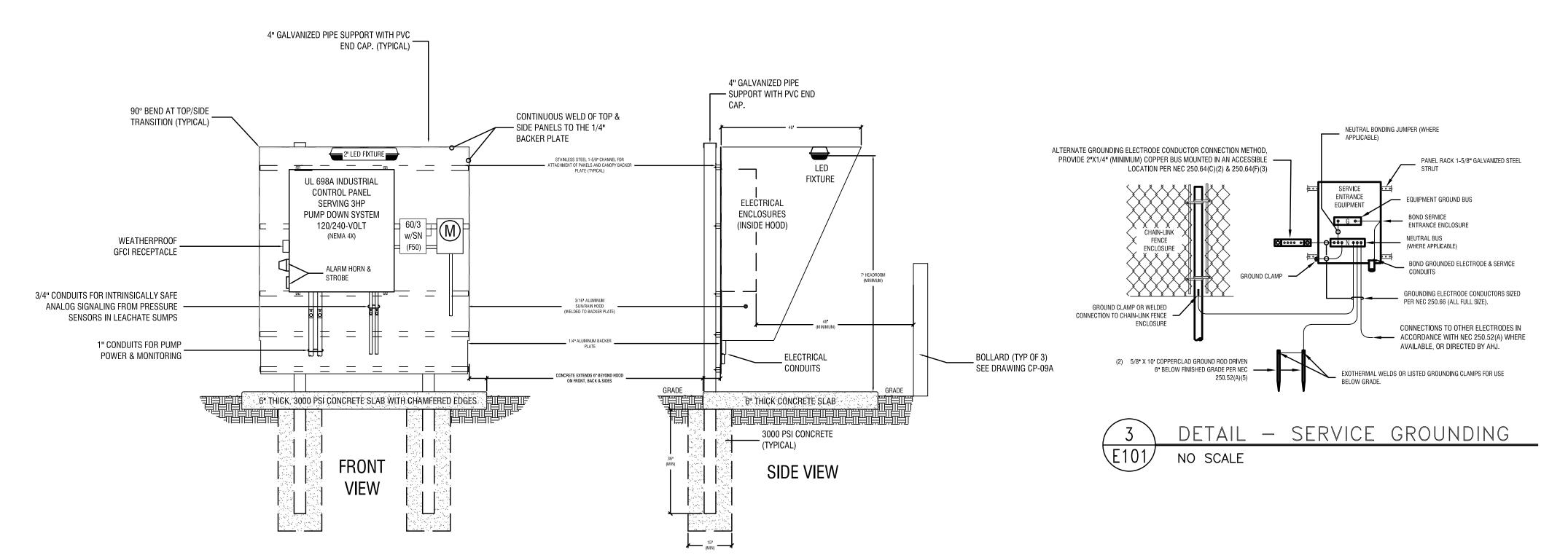
SERVICE & OVERCURRENT PROTECTION SIZED AT 50 AMP





#### **ELECTRICAL NOTES:**

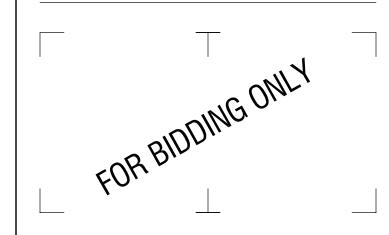
- 1. 3-1/2", SCH. 80 PVC CONDUITS SHALL BE INSTALLED TO SERVE THE 3 HP PUMP. CONDUITS SHALL CONNECT BETWEEN THE LEVEL CONTROL PANEL (LCP) VIA AN INTERMEDIATE TERMINAL BOX ADJACENT TO THE SUMP HEADWALL, STUB INTO SIDE OF WET WELL. 3-1/2" CONDUIT IS SIZED TO CONVEY THE MANUFACTURER FURNISHED SUBMERSIBLE PUMP CABLES BETWEEN THE SUBMERSIBLE PUMP TO THE TERMINAL BOX. CONDUITS ARE OF AMPLE SIZE TO ACCOMMODATE THE 1.8" POWER & 0.51" MONITORING CABLE THAT FEEDS EACH PUMP (~1.25 in²)., WITH MOTORS IN PLACE, SUBMERSIBLE CABLES SHALL BE PULLED INTO TERMINAL CABINET AND TERMINATED. IF ATTACHED CABLES ARE EXCESSIVE, THE EXCESS LENGTON PLANS) SHALL BE CUT AWAY PRIOR TO MAKING TERMINATION IN THE INTERMEDIATE TERMINAL ENCLOSURE. THWN WIRE SIZES AND QUANTITIES (INDICATED ON PLANS) SHALL BE USED TO CONNECT BETWEEN THE OUTDOOR TERMINAL CABINET
- 2. A MINIMUM WORKING CLEARANCE OF 3'-6" FROM EQUIPMENT FACES SHALL BE MAINTAINED PER NEC 110.26. ELECTRICAL AND CONTROL CABINETS SHALL BE MOUNTED SUCH THAT NO OPERABLE HANDLE EXCEEDS 6'-6" ABOVE FINISHED FLOOR (AFF) WHEN IN THEIR HIGHEST POSITION.
- 3. THE LEVEL CONTROL PANEL (LCP) SHALL COMMAND PUMP TO START/STOP BASED ON SUMP LIQUID LEVELS. POWER INPUT SHALL BE 240-VOLT, 1-PHASE. FROM THIS POWER INPUT, POWER QUALITY (OVER/UNDER VOLTAGE, PHASE LOSS/REVERSAL) IS MONITORED AND 120V CONTROL POWER IS USED TO POWER THE LEVEL SENSING CONTROLS. CONTROL PANEL SHALL CONTAIN OVER TEMPERATURE AND SEAL FAILURE MONITORING FOR THE PUMP. E.C. SHALL PROVIDE ALL INTERCONNECT WIRING BETWEEN "LCP" AND TERMINAL CABINETS AS INDICATED. SEE SHEET E103 FOR ANTICIPATED "FIELD WIRING" CONNECTIONS.
- 4. PROVIDE NEMA 4X, STAINLESS STEEL J-BOX WITH TERMINAL STRIPS AND WIRE MANAGEMENT SUPPORTS FOR POWER/CONTROL CONNECTIONS FOR SUMP PUMP. BOX SHALL BE CONSTRUCTED OF EITHER STAINLESS STEEL OR FIBERGLASS-REINFORCED POLYESTER (FRP). BOX SHALL BE SIZED IN ACCORDANCE WITH NEC; COORDINATE EXACT LOCATION WITH TRANSYLVANIA COUNTY & MOUNT BOX ONTO 4X4 TREATED WOOD POSTS ADJACENT TO SUMP HEADWALL. COORDINATE EXACT LOCATION WITH INSTALLED HATCH AND VENT OPENING LOCATIONS. ALTERNATE LOCATIONS, IF USED, SHOULD BE >3' (HORIZONTAL DISTANCE) FROM NEAREST EDGE OF SUMP SIDE SLOPE RISER HATCH AND > 5' FROM SUMP SIDE SLOPE RISER OPENINGS.

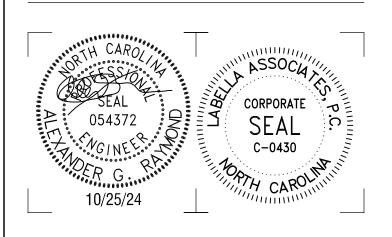


2 DETAIL — EQUIPMENT RACK, SUN/WEATHER HOOD & PAD E101 NO SCALE

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## TRANSYLVANIA COUNTY 500 HOWELL ROAD, BREVARD,

500 HOWELL ROAD, BREVARD, NORTH CAROLINA 28712



## WOODRUFF LANDFILL PHASE 7 CONSTRUCTION

500 HOWELL ROAD, BREVARD, NORTH CAROLINA 28712

NO:	DATE:	DESCRIPTION:

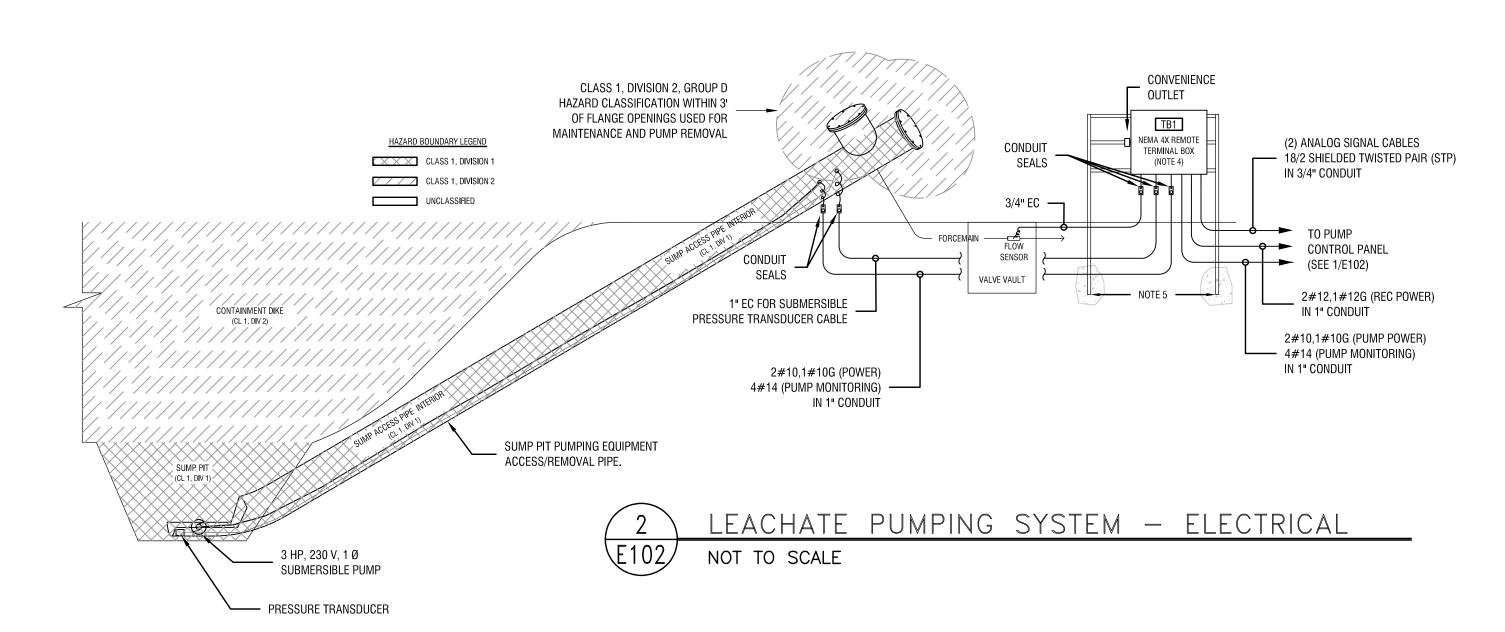
PROJECT NUMBER:	2250798	
DRAWN BY:		
DEMENSED DV	AR	
REVIEWED BY:	AR	
ISSUED FOR:	REBID	
DATE:	02/21/2025	

#### **ELECTRICAL DETAILS**

DRAWING NUMBER:

DRAWING NAME:

E101

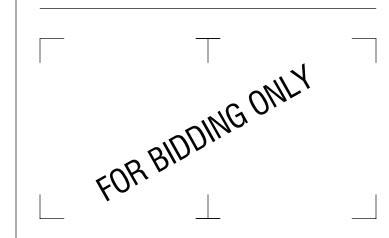


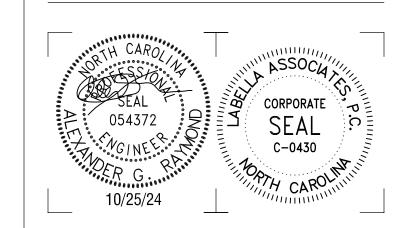
#### NOTES:

- 1. FIELD WIRING DETAIL SHOWS THE ANTICIPATED EXTERNAL "FIELD WIRED" CONNECTIONS TO AND BETWEEN THE LEVEL CONTROL PANEL, THE REMOTE TERMINAL BOX AND CONNECTIONS TO PUMPING AND LEVEL SENSING EQUIPMENT AT PUMP SITE. E.C. SHALL VERIFY WIRING REQUIREMENTS WITH FINAL, APPROVED SHOP DRAWING/SCHEMATICS AND WIRE COMPLETE. ALL WIRING NECESSARY TO ACHIEVE AUTOMATIC, PUMP DOWN OPERATION AT PUMP SITE. CONTROL PANEL SHALL BE UL 698A LISTED AND SHALL BE APPROVED BY TRANSYLVANIA COUNTY OFFICIALS (OR ASSIGNED OTHERS) PRIOR TO FABRICATION.
- 2. UNLESS OTHERWISE DIRECTED, CONTROL WIRING FOR EQUIPMENT INDICATED SHALL BE #14 THWN COPPER CONDUCTORS RUN IN A PROPERLY SIZED (PER NEC) ELECTRICAL CONDUIT. COORDINATE EXACT REQUIREMENTS AND WIRE COMPLETE. MINIMUM CONDUIT SIZE SHALL BE 3/4".
- 3. ANALOG, RF SIGNAL OR OTHER "SHIELDED" TYPE CABLES SHALL BE SELECTED TO MEET SYSTEM & COMPONENT REQUIREMENTS. E.C. TO COORDINATE REQUIREMENTS, INSTALL CABLES, CONDUIT SLEEVES (WHERE APPLICABLE) AND MAKE FINAL CONNECTIONS.
- 4. ALL WIRING BETWEEN THE LEVEL CONTROL PANEL AND THE REMOTE TERMINAL BOX SHALL BE ROUTED TO AVOID TRAVELING THROUGH OR BENEATH AREAS THAT ARE CLASSIFIED AS HAVING POTENTIAL FOR HAZARDOUS GASES OR VAPORS. INSTALL REMOTE TERMINAL BOX NEAR TOP OF SUMP SIDE SLOPE RISER BUT OUTSIDE HAZARD ZONES INDICATED ON DETAIL 2/E102 (OR THOSE DIRECTED BY LOCAL AHJ, IF MORE SEVERE). TERMINAL BOX SHALL BE NEMA 4X, STAINLESS STEEL, SIZED PER NEC. E.C. SHALL VERIFY EQUIPMENT CABLE/CONDUCTOR SIZES, AMPERE RATINGS, CABLE TYPES, ETC. AND PROVIDE WIRE TERMINALS AND POWER LUGS TO ACCOMMODATE POWER, DIGITAL AND ANALOG SIGNAL CONNECTIONS REQUIRED. CABLES SHALL BE LISTED, LABELED (FOR THEIR INTENDED APPLICATION) AND CORRECTLY SIZED (PER NEC) TO SUPPLY THE CONNECTED LOADS/EQUIPMENT THEY SERVE.
- 5. PROVIDE STAINLESS STEEL ELECTRICAL EQUIPMENT RACK. COORDINATE EXACT LOCATION SO THAT ELECTRICAL ENCLOSURES ARE NOT WITHIN OR ABOVE ANY HAZARDOUS AREA SEE DETAIL 2/E102 CLASSIFIED AREAS FOR THIS INSTALLATION. TERMINAL BOX SHALL BE AFFIXED TO RACK SUPPORTS USING ONLY THE FACTORY DRILLED HOLES. EACH VERTICAL SUPPORT SHALL BE EMBEDDED 36" (MIN) BELOW GRADE WITH BASE SET IN (MIN) 60 LBS OF CONCRETE.



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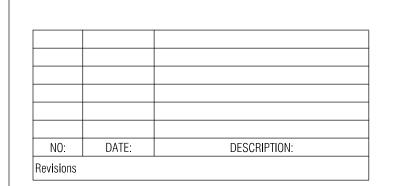
### TRANSYLVANIA COUNTY

500 HOWELL ROAD, BREVARD, NORTH CAROLINA 28712



## WOODRUFF LANDFILL PHASE 7 CONSTRUCTION

500 HOWELL ROAD, BREVARD, NORTH CAROLINA 28712



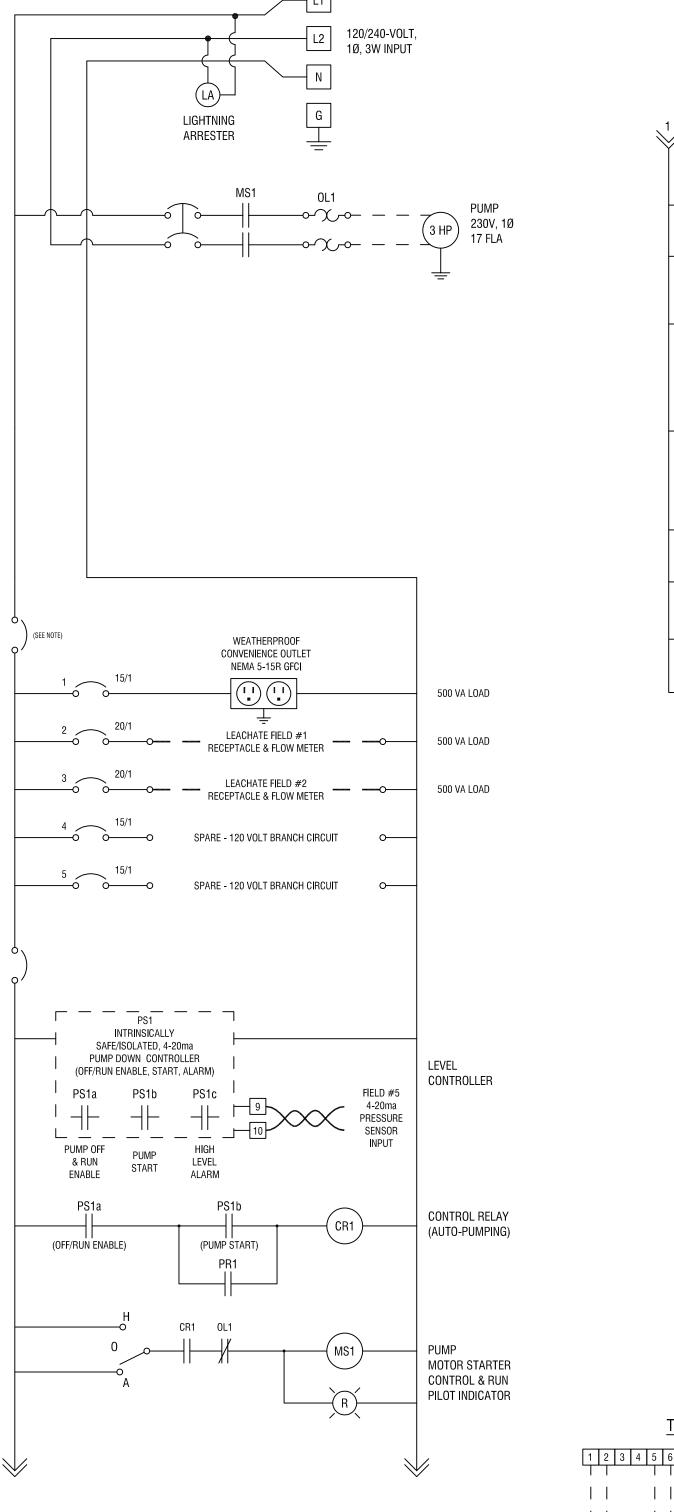
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PROJECT NUMBER:	2250798	
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	02/21/2025	
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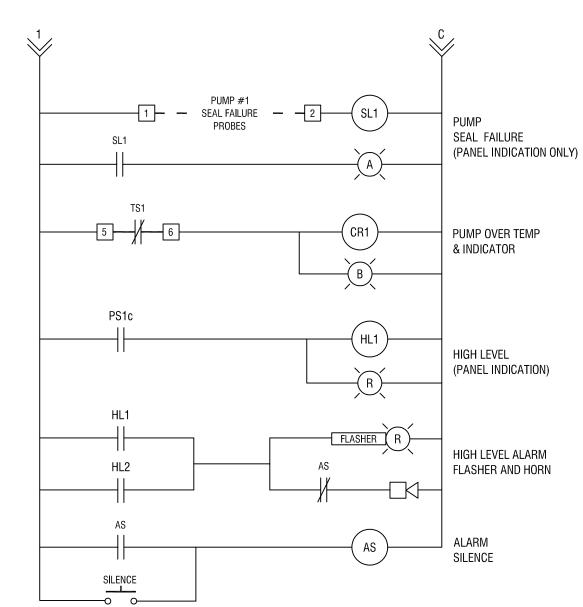
**ELECTRICAL DETAILS** 

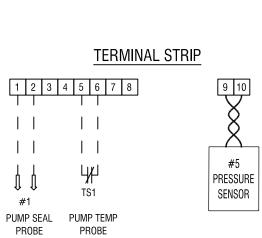
DRAWING NUMBER:

E102

THE BELOW SCHEMATIC IS PROVIDED AS A GUIDE AND SHOWS BASIC ELEMENTS THAT MUST BE PROVIDED (AT A MINIMUM). PANEL SHALL BE U.L. APPROVED AS A COMPLETE ASSEMBLY AND LISTED AS SUCH. COMPONENT SELECTION, i.e., BREAKER SIZES, FUSE SIZES, INTERCONNECT WIRING, OVERLOAD HEATERS, ETC., SHALL BE IN ACCORDANCE WITH NEC; AND, ALONG WITH ACTUAL PANEL DESIGN, SHALL BE THE RESPONSIBILITY OF THE MANUFACTURER. ALL ELEMENTS NECESSARY, BUT NOT SHOWN, TO ACHIEVE SATISFACTORY OPERATION OF PUMPING SYSTEM, AND TELEMETRY SHALL BE INCLUDED. CONTROL PANEL SUBMITTALS SHALL BE APPROVED BY TRANSYLVANIA COUNTY PRIOR TO FABRICATION.

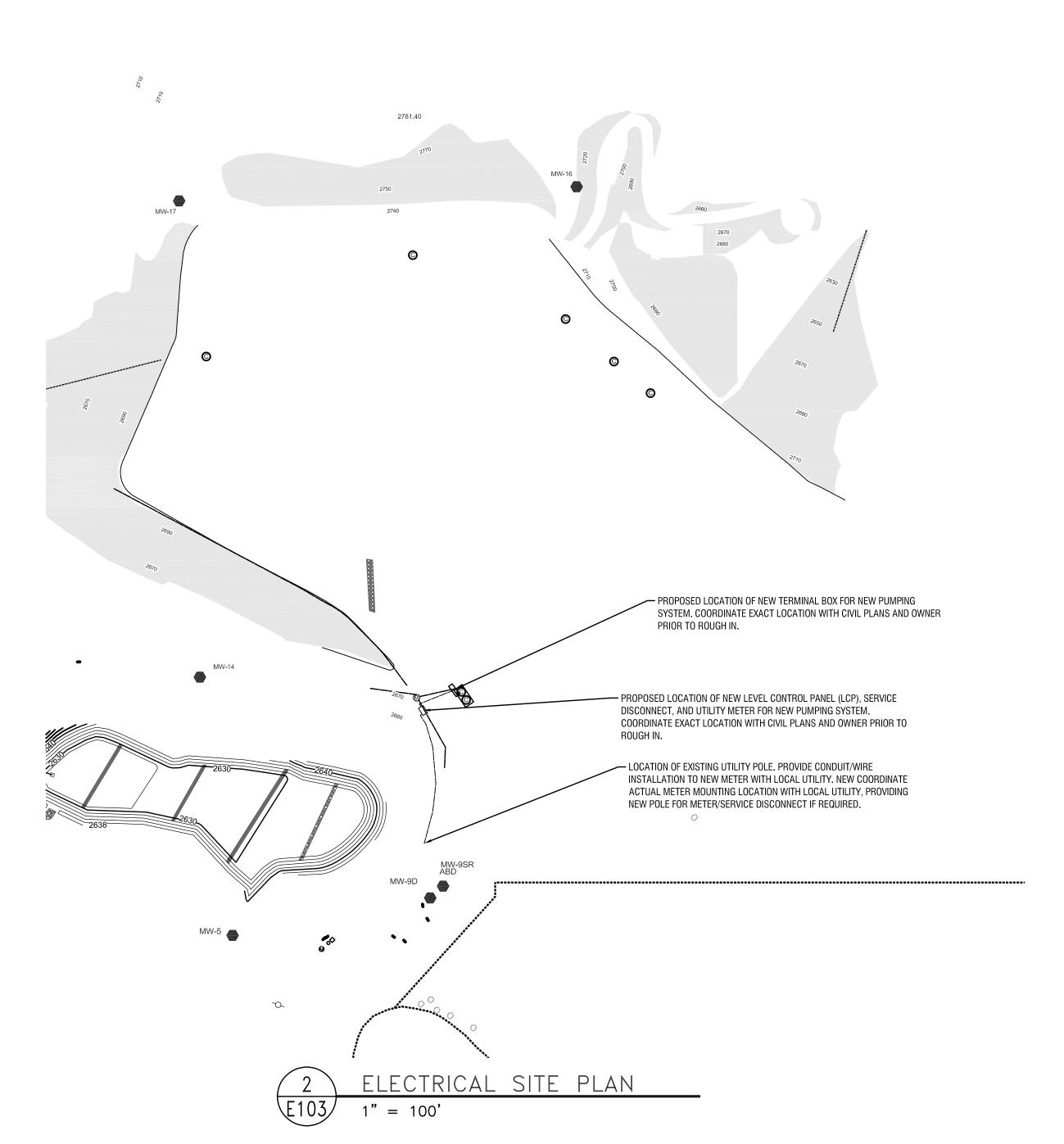






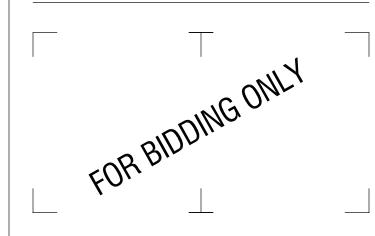
ALL EQUIPMENT & WIRING INSTALLED IN SUMP PIT SHALL BE RATED SUITABLE FOR CL. 1, DIV. 1, GRP. D HAZARDOUS ENVIRONMENTS. NG SHALL BE MAINTAINED PER NEC 504.

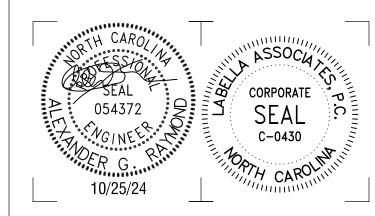




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## WOODRUFF LANDFILL PHASE 7 CONSTRUCTION

500 HOWELL ROAD, BREVARD, NORTH CAROLINA 28712

NO:	DATE:	DESCRIPTION:

PROJECT NUMBER:	2250798	
DRAWN BY:	4.0	
REVIEWED BY:	AR	
NEVIEWED DT.	AR AR	
ISSUED FOR:	DEDID	
	REBID	
DATE:	02/21/2025	
	02/21/2023	

DRAWING NAME:

#### **ELECTRICAL DETAILS**

DRAWING NUMBER:

E103