

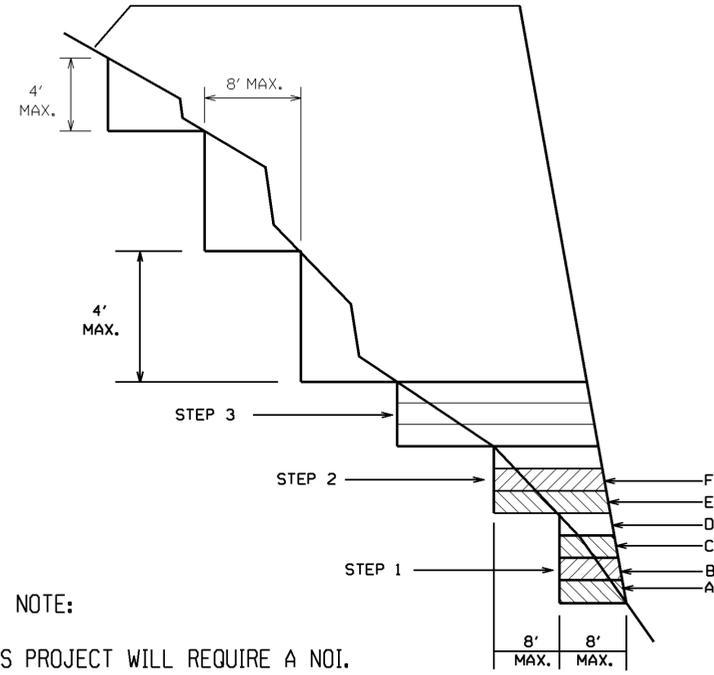
PIPE CULVERT MATERIAL ALTERNATES FOR PIEDMONT/BLUE RIDGE REGION

TYPE OF PIPE INSTALLATION	CONCRETE	CORRUGATED STEEL AASHTO M-36		CORRUGATED ALUMINUM AASHTO M-196	PLASTIC			
		ALUMINUM COATED (TYPE 2) CORR. STEEL	PLAIN ZINC COATED	PLAIN UNCOATED ALUMINUM	CORR. POLY-ETHYLENE AASHTO M-252	CORR. POLY-ETHYLENE SMOOTH LINED AASHTO M-294 TYPE "S"	POLY VINYL CHLORIDE (PVC) PROFILE WALL AASHTO M-304	POLY VINYL CHLORIDE (PVC) CORRUGATED SMOOTH INTERIOR ASTM F-949
LONGITUDINAL INTERSTATE AND TRAVEL BEARING	X							
LONGITUDINAL NON-INTERSTATE AND NON-TRAVEL BEARING	X	X		X	X	X	X	X
STORM DRAIN	GRADE ≤ 10%	ADT < 250	X	X	X	X	X	X
		250 < ADT < 1500	X	X*	X	X	X	X
		1500 < ADT < 15,000	X			X	X	X
		ADT > 1500	X					
GRADE > 10%	ADT < 250		X	X	X	X	X	
	ADT > 250			X	X	X	X	
SIDE DRAIN	X	X	X	X	X	X	X	
PERMANENT SLOPE DRAIN		X	X	X	X	X	X	
PERFORATED UNDERDRAIN		X	X	X	X	X	X	

* THIS TYPE PIPE CAN BE USED IF THE ADDITION OF TYPE "B" COATING (AASHTO M-190, HALF BITUMINOUS COATED WITH PAVED INVERT) IS UTILIZED.

NOTE:

- ALLOWABLE MATERIALS ARE INDICATED BY AN "X".
- STRUCTURAL REQUIREMENTS OF STORM DRAIN PIPE WILL BE IN ACCORDANCE WITH GEORGIA STANDARD 1030-D OR 1030-P, WHICHEVER IS APPLICABLE, AND THE STANDARD SPECIFICATIONS.
- GRADED AGGREGATE BACKFILL SHALL BE USED IN CROSS DRAIN APPLICATION FOR ALL PLASTIC PIPES (AASHTO M-294, HDPE PIPE; AASHTO M-304, PVC PIPE; ASTM F-949, PVC PIPE).
- THE CONTRACTOR SHALL PROVIDE ADDITIONAL STORM SEWER CAPACITY CALCULATIONS IF A PIPE MATERIAL OTHER THAN CONCRETE IS SELECTED.
- PIPE USED UNDER MECHANICALLY STABILIZED EARTH (MSE) WALLS, WITHIN MSE WALL BACKFILL, OR WITHIN FIVE FEET OF AN MSE WALL FACE SHALL BE CLASS V CONCRETE PIPE.
- PROJECT SPECIFIC pH AND RESISTIVITY VALUES ARE ENTERED INTO THE RESPECTIVE BOXES ABOVE TO DETERMINE ALLOWABLE PIPE MATERIALS.



- NOTE:
- THIS PROJECT WILL REQUIRE A NOI.
 - A WAITING PERIOD IS REQUIRED FOR THE FINAL STRIPING ON THIS PROJECT. A 30 CALENDAR DAY WAITING PERIOD SHALL BE REQUIRED AFTER THE FINAL SURFACE COURSE IS CONSTRUCTED BEFORE THE FINAL STRIPING IS PLACED. THIS IS BEING DONE IN ORDER TO PROVIDE A CURING TIME FOR THE ASPHALT. DURING THIS TIME FRAME, TEMPORARY STRIPING SHALL BE REQUIRED IN ACCORDANCE WITH SECTION 150.04 OF THE FINAL SURFACE COURSE.
 - THE ENTIRE RIGHT OF WAY WITHIN THE PROJECT LIMITS SHALL BE CLEARED FOR THE INSTALLATION OF UTILITIES.
 - GRUBBING ACTIVITIES WITHIN WETLAND AREAS SHALL BE LIMITED TO WITHIN THE CONSTRUCTION LIMITS.
THE CONTRACTOR NEEDS TO NOTIFY THE DISTRICT TRAFFIC SAFETY ENGINEER IN DISTRICT 2 AT (478) 552-4619 AT LEAST TWO WEEKS BEFORE FINAL STRIPING OPERATIONS
 - CONTRACT TIME SHALL NOT END UNTIL PERMANENT STRIPING HAS BEEN ACCEPTED.

- WHERE THE EMBANKMENT IS TO BE PLACED ON A HILLSIDE OR ANOTHER EXISTING EMBANKMENT HAVING A SLOPE OF 3 TO 1 OR STEEPER, THE FOUNDATION MUST BE BENCHING WHILE THE EMBANKMENT IS BEING MADE. (SEE DIAGRAM AT LEFT.)
- THE DIAGRAM SHOWS THAT BEFORE LAYER "A" IS PLACED THE FIRST STEP (1) IS CUT INTO THE SLOPE A MAXIMUM DISTANCE OF ABOUT 8 FEET (ABOUT 3/4 THE WIDTH OF THE TYPICAL D-8 BULLDOZER BLADE.) SUCCESSIVE LAYERS B, C, AND D ARE THEN PLACED BEFORE LAYER "E" IS PLACED. IF IT IS ANTICIPATED THAT THE VERTICAL PART OF THE STEP WILL EXCEED 4' IF A 8' HORIZONTAL CUT IS MADE, THEN THE ACTUAL CUT STOPS WHEN THE VERTICAL PART REACHES A MAXIMUM OF A 4' ALLOWING THE HORIZONTAL DISTANCE VARY.
- THE PROCESS OF BENCHING IS CONSIDERED INCIDENTAL TO THE ITEM OF CLASSIFIED EXCAVATION AND BORROW IN CONSTRUCTION OF THE EMBANKMENT AND NO ADDITIONAL MEASUREMENT OF QUANTITY OR PAYMENT WILL BE MADE FOR BENCHING.

BENCHING DETAIL
NO SCALE



Know what's below.
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UTILITY OWNER	SERVICE
GEORGIA POWER CO.	Power
LINCOLN COUNTY	Water
RAYLE EMC	Power
WILKES TELEPHONE CO.	Telephone

STP00-0076-01(029) LINCOLN CO.

ENVIRONMENTAL RESOURCES TABLE								
RESOURCE NAME/TYPE	LOCATION		SIDE	CONSTRUCTION ACTIVITY	PERMITTED ACTIVITY	CONTROLLING CRITERIA	SPECIAL PROVISION?	COMMENTS INCLUDING ANY PERMIT EXPIRATION DATES
	BEGINNING STA	ENDING STA						
JOHNSON PROPERTY	STA 104+81	STA 112+06.30	RT	NO ACTIVITY WITHIN BOUNDARY	N/A	N/A	NONE	N/A
OPEN WATER (POND 1)	STA 43+57.48	STA 41+00	RT	NO ACTIVITY WITHIN BOUNDARY	N/A	N/A	NONE	N/A
EPHEMERAL (STREAM 2)	STA 58+00	STA 62+00	LT	EXTENSION OF DRAINAGE STRUCTURE	0.001 ACRES IMPACT	N/A	NONE	N/A
EPHEMERAL (STREAM 3)	STA 79+00	STA 80+00	RT	EXTENSION OF DRAINAGE STRUCTURE	0.001 ACRES IMPACT	N/A	NONE	N/A
INTERMITTENT STREAM 4	STA 79+50	STA 80+50	RT	NO ACTIVITY WITHIN BOUNDARY	N/A	N/A	NONE	N/A
EPHEMERAL (STREAM 5)	STA 135+00	STA 137+00	LT	EXTENSION OF DRAINAGE STRUCTURE	0.002 ACRES IMPACT	N/A	NONE	N/A
INTERMITTENT STREAM 6	STA 136+50	STA 140+00	RT	NO ACTIVITY WITHIN BOUNDARY	N/A	N/A	NONE	N/A
WETLAND 7	STA 136+50	STA 140+00			0.032 ACRES IMPACT	N/A	NONE	WETLAND TO BE PROTECTED BY THE INSTALLATION OF ORANGE BARRIER FENCE

GEORGIA
DEPARTMENT
OF
TRANSPORTATION

REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES
LINCOLN COUNTY
PI#231360

DRAWING No.
4-001