

LOCATION SKETCH

DESIGN DATA:
TRAFFIC A.D.T.: 5,600 (2016)
TRAFFIC A.D.T.: 9,500 (2036)
TRAFFIC D.H.V.:
DIRECTIONAL DIST: 60%
% TRUCKS: 7%
SPEED DESIGN: 35 MPH (ANVIL BLOCK RD.)
35 MPH (RATEREE DR.)

LOCATION & DESIGN
APPROVAL DATE:

FUNCTIONAL CLASS: COLLECTOR

THIS PROJECT IS 100% IN CLAYTON
COUNTY, 98% IN THE CITY OF LAKE
CITY, 2% IN THE CITY OF FOREST
PARK AND IS 100% IN CONG.DIST.NO.5.

PROJECT DESIGNATION:

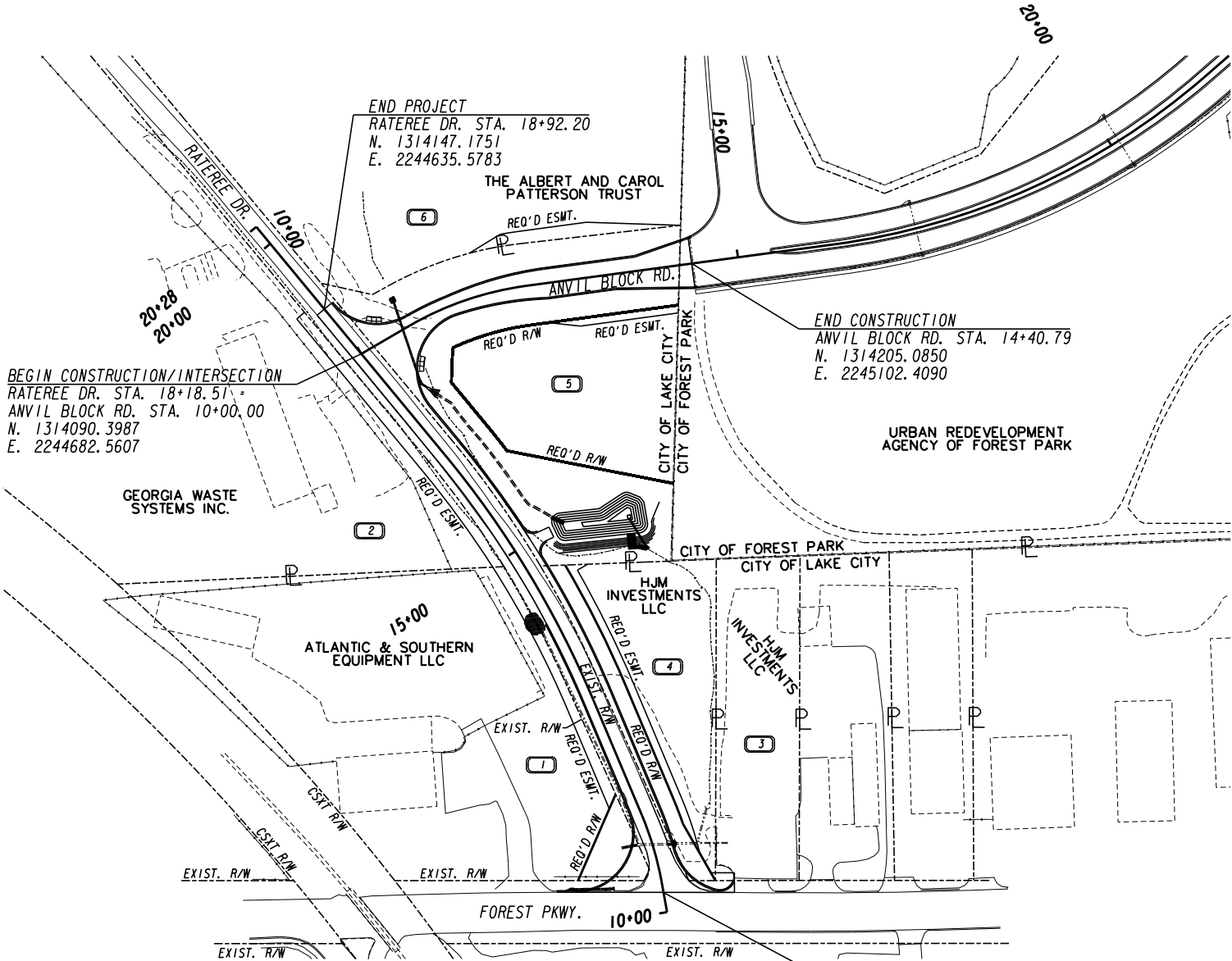
THIS PROJECT HAS BEEN PREPARED
USING THE HORIZONTAL GEORGIA
COORDINATE SYSTEM OF 1984 (NAD
1983/94 WEST ZONE, AND THE NORTH
AMERICAN VERTICAL DATUM (NAVD)
OF 1988.

THE DATA, TOGETHER WITH ALL OTHER INFORMATION SHOWN ON THESE PLANS OR IN ANYWAY
INDICATED THEREBY, WHETHER BY DRAWINGS OR NOTES, OR IN ANY OTHER MANNER, ARE BASED UPON
FIELD INVESTIGATIONS AND ARE BELIEVED TO BE INDICATIVE OF ACTUAL CONDITIONS. HOWEVER, THE
SAME ARE SHOWN AS INFORMATION ONLY, ARE NOT GUARANTEED, AND DO NOT BIND THE DEPARTMENT
OF TRANSPORTATION IN ANY WAY. THE ATTENTION OF BIDDER IS SPECIFICALLY DIRECTED TO
SUBSECTIONS 102.04, 102.05, AND 104.03 OF THE SPECIFICATIONS.

URBAN REDEVELOPMENT AGENCY

CITY OF FOREST PARK

PLAN AND PROFILE OF PROPOSED ANVIL BLOCK ROAD, PHASE III



LENGTH OF PROJECT	COUNTY No.
	Project No.
	MILES
NET LENGTH OF ROADWAY	0J64I
NET LENGTH OF BRIDGES	0.0000
NET LENGTH OF PROJECT	0J64I
NET LENGTH OF EXCEPTIONS	0.0000
GROSS LENGTH OF PROJECT	0J64I



NOTE :
ALL REFERENCES IN THIS DOCUMENT, WHICH INCLUDES ALL PAPERS, WRITINGS,
DOCUMENTS, DRAWINGS, OR PHOTOGRAPHS USED, OR TO BE USED IN CONNECTION
WITH THIS DOCUMENT, TO "STATE HIGHWAY DEPARTMENT OF GEORGIA," "STATE
HIGHWAY DEPARTMENT," "GEORGIA STATE HIGHWAY DEPARTMENT," "HIGHWAY
DEPARTMENT," OR "DEPARTMENT" WHEN THE CONTEXT THEREOF MEANS THE
STATE HIGHWAY DEPARTMENT OF GEORGIA, AND SHALL BE DEEMED TO MEAN
THE DEPARTMENT OF TRANSPORTATION.

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P: 678.795.3600 www.NV5.com
GA License # PEF003715, LSF000935
Formerly CALYX Engineers & Consultants



PREPARED BY: 4/1/2020

PLANS COMPLETED	DESIGN
REVISIONS	

[illegible]

[illegible]

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GENERAL NOTES



2. AN N.O. I. (15/15 NOT) REQUIRED FOR THIS PROJECT.
3. INGRESS AND EGRESS SHALL BE MAINTAINED AT ALL TIMES TO ADJACENT PROPERTIES. REFER TO SUB-SECTION 107.07 OF THE GEORGIA STANDARD SPECIFICATIONS.
4. ALL DRIVEWAYS THAT ARE TO BE RECONSTRUCTED WILL BE PAVED BACK TO THE TIE IN POINT OR REQUIRED RIGHT OF WAY, WHICHEVER IS GREATER. ALL DRIVEWAYS OVER 11% IN GRADE SHALL BE PAVED WITH CONCRETE UNLESS OTHERWISE NOTED IN THE PLANS. ALL OTHER DRIVEWAYS SHALL BE REPLACED AS FOLLOWS: ASPHALT FOR ASPHALT, CONCRETE FOR CONCRETE AND ASPHALT FOR EARTH / GRAVEL DRIVES. RESIDENTIAL DRIVES SHALL BE 14 FEET WIDE AT THE THROAT UNLESS NOTED OTHERWISE IN THE PLANS. COMMERCIAL DRIVES SHALL BE 24 FEET WIDE UNLESS NOTED OTHERWISE IN THE PLANS. EXISTING DRIVEWAY LOCATIONS ARE SHOWN FROM THE BEST AVAILABLE DATA; THE CONTRACTOR SHALL CONSTRUCT DRIVEWAYS TO MATCH THE LOCATION OF EXISTING DRIVEWAYS AT THE TIE IN POINT, IF APPLICABLE. THE CONTRACTOR SHALL OBTAIN THE APPROVAL FROM THE ENGINEER PRIOR TO MAKING ANY REVISIONS TO LOCATION, WIDTH, AND/OR NUMBER OF DRIVES TO BE CONSTRUCTED. DRIVES SHALL BE CONSTRUCTED USING:

RESIDENTIAL:
ASPHALT - (SURFACE COURSE FROM THE MAINLINE),
GRADED AGGREGATE BASE, 6".
CONCRETE - DRIVEWAY CONCRETE, 6 IN THICK,
(URBAN SHOULDER) CONC VALLEY GUTTER, 6 IN.

COMMERCIAL:
ASPHALT - (SURFACE COURSE FROM THE MAINLINE),
220 LB/SY RECYCLED ASPHALT CONC, 19 MM SUPERPAVE,
6P 1 OR 2, INCL BITUM MATL & H LIME
GRADED AGGREGATE BASE, 6".
CONCRETE - DRIVEWAY CONCRETE, 8 IN THICK
(URBAN SHOULDER) CONC VALLEY GUTTER, 8 IN.
5. ALL BORROW AND WASTE SITES FOR THIS PROJECT SHALL BE ENVIRONMENTALLY APPROVED PRIOR TO CONSTRUCTION ACTIVITIES OCCURRING IN THEM. ALL COMMON FILL OR EXCESS MATERIAL DISPOSED OUTSIDE THE PROJECT RIGHT OF WAY SHALL BE PLACED IN EITHER A PERMITTED SOLID WASTE FACILITY, A PERMITTED INERT WASTE LANDFILL, OR IN AN ENGINEERED FILL. SEE SECTION 201 OF THE STANDARD SPECIFICATION AND SUPPLEMENTS THERETO FOR ADDITIONAL INFORMATION.
6. THERE IS NO KNOWN SUITABLE PLACE TO BURY EXISTING BRIDGE/CONSTRUCTION DEBRIS WITHIN THE PROJECT'S LIMITS. THE CONTRACTOR SHALL PROVIDE AN ENVIRONMENTALLY APPROVED SITE AS SHOWN IN GA. SPECIFICATION 201 TO DISPOSE OF EXISTING BRIDGE/CONSTRUCTION DEBRIS AT NO ADDITIONAL COST TO THE DEPARTMENT.
7. NO SEPARATE PAYMENT WILL BE MADE FOR TEMPORARY DRAINAGE ITEMS. COST WILL BE INCLUDED IN OVERALL BID SUBMITTED.
8. CLEAR FROM R/W TO R/W AND EASEMENTS UNLESS OTHERWISE NOTED.

GENERAL NOTES - STANDARD SIGNS

1. ALL STANDARD HIGHWAY SIGNS SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE DETAILS SHOWN IN THE PLANS, THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION, AND THE GEORGIA SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS, AND/OR SPECIAL PROVISIONS.
2. SIGN ERECTION STATIONS ARE APPROXIMATE AND MAY BE ADJUSTED TO MEET FIELD CONDITIONS WHERE NECESSARY, BUT SHALL BE WITHIN THE LIMITATIONS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION. NO SIGN LOCATION SHALL BE CHANGED BY THE CONTRACTOR OR BY THE PROJECT ENGINEER WITHOUT PRIOR APPROVAL FROM THE OFFICE OF TRAFFIC OPERATIONS.
3. ALL STANDARD HIGHWAY SIGNS SHALL BE ERECTED AT A HEIGHT OF 7 FEET ABOVE THE NORMAL EDGE OF PAVEMENT TO THE BOTTOM OF THE SIGN OR ASSEMBLY.
- 4a. HORIZONTAL CLEARANCE FOR STANDARD HIGHWAY SIGNS ON INTERSTATE HIGHWAYS SHALL BE 32 FEET FROM THE NORMAL EDGE OF PAVEMENT TO THE NEARER EDGE OF THE SIGN(S), UNLESS SPECIFIED OTHERWISE IN THE PLANS. HORIZONTAL CLEARANCE FOR STANDARD HIGHWAY SIGNS ON RAMPS SHALL BE 2 FEET FROM THE NORMAL EDGE OF PAVED SHOULDER, OR EDGE OF GRADED SHOULDER WHEN PRESENT.
- 4b. HORIZONTAL CLEARANCE FOR STANDARD HIGHWAY SIGNS ON ALL OTHER ROADWAYS SHALL BE 6 FEET FROM THE EDGE OF THE PAVED SHOULDER OR 12 FEET FROM THE NORMAL EDGE OF PAVEMENT TO THE NEARER EDGE OF THE SIGN(S), WHICHEVER IS GREATER. THE HORIZONTAL CLEARANCE IN NON-MOUNTABLE CURB SECTIONS SHALL BE AT LEAST 2 FEET FROM THE CURB FACE TO THE NEARER EDGE OF THE SIGN(S).
- 4c. HORIZONTAL CLEARANCE FOR STANDARD HIGHWAY SIGNS MOUNTED BEHIND GUARD RAIL SHALL BE 6 FEET FROM THE FACE OF THE GUARD RAIL TO THE NEARER EDGE OF THE SIGN(S).
5. SINGLE PLATE, HORIZONTAL RECTANGULAR SIGNS OVER 48 INCHES IN WIDTH SHALL BE MOUNTED ON TWO POSTS WITH 2 EACH 2 INCH x 1/2 INCH x (WIDTH OF SIGN) ALUMINUM OR GALVANIZED STEEL STRAPS. THE STRAPS SHALL BE FLUSH WITH THE BACK OF THE SIGN WITH ONE EACH ACROSS THE TOP AND BOTTOM OF THE SIGN. THE CENTERLINE OF EACH POST SHALL BE INSET 1/6TH OF THE SIGN WIDTH FROM THE EDGE OF THE SIGN. SIGN PLATE BOLT HOLES SHALL BE 3/8 INCH DIAMETER, DRILLED OR PUNCHED, AS SHOWN ON THE SIGN PLATE DETAILS.
6. EACH 42 OR 48 INCH WIDE x 18 OR 24 INCH HIGH SIGN REQUIRES ONE 2 INCH x 1/2 INCH x (WIDTH OF SIGN) ALUMINUM OR GALVANIZED STEEL STRAP LOCATED IN THE CENTER OF THE SIGN AND FLUSH WITH THE BACK OF THE SIGN.
7. SIGN ASSEMBLIES SHALL BE MOUNTED ON ALUMINUM OR GALVANIZED STEEL STRAP FRAMES. FOR DETAILS AND STRAP SPECIFICATIONS REFER TO SIGN ASSEMBLY-TYPICAL FRAMING DETAILS.
8. TYPE 9 (VERY HIGH INTENSITY) REFLECTIVE SHEETING SHALL BE USED FOR ALL STANDARD HIGHWAY SIGNS REQUIRING REFLECTORIZED BACKGROUNDS EXCEPT AS SPECIFIED BELOW OR SPECIFIED OTHERWISE IN THE PLANS. EITHER CLASS 1 OR CLASS 2 ADHESIVE BACKING IS PERMISSIBLE.
9. TYPE 11 (VERY HIGH INTENSITY) REFLECTIVE SHEETING SHALL BE USED FOR ALL RED SERIES SIGNS (R1-1, R1-2, R1-3P, R5-1, R5-1A, R5-1B).
10. TYPE 11 (VERY HIGH INTENSITY) FLUORESCENT YELLOW REFLECTIVE SHEETING SHALL BE USED FOR ALL WARNING SIGNS.
11. TYPE 11 (VERY HIGH INTENSITY) FLUORESCENT YELLOW GREEN REFLECTIVE SHEETING SHALL BE USED FOR SCHOOL ZONE (S1-1, S2-1, S3-1, S4-3, AND THE TOP PORTION OF THE S5-1) SIGNS. ALL REGULATORY SIGNS WITHIN THE SCHOOL ZONE SIGNING SHALL HAVE TYPE 9 (VERY HIGH INTENSITY) REFLECTIVE SHEETING.
12. A 1/2 INCH MINIMUM AIR SPACE SHALL BE REQUIRED BETWEEN ALL SIGN PLATES WITHIN AN ASSEMBLY.
13. WHERE SIGNS WITHIN AN ASSEMBLY EXTEND BELOW THE STANDARD MOUNTING HOLES ON THE POST(S), ADDITIONAL 3/8 INCH DIAMETER HOLE(S), DRILLED OR PUNCHED, SHALL BE REQUIRED TO PROPERLY MOUNT THE ASSEMBLY.
14. INTERSTATE SHIELDS SHALL CONTAIN THE WORD GEORGIA. ALL INTERSTATE, U.S., AND GEORGIA SHIELDS REQUIRING ALT, BUS, CONN, LOOP, OR SPUR SHALL USE 4 INCH SERIES "D" LETTERS. REFER TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION, FOR DETAILS.
15. FOR DETAILS OF SPECIAL DESIGN HIGHWAY SIGNS, SEE DETAILS OF MISCELLANEOUS SIGNS.
16. REFER TO PLAN SHEETS FOR LOCATION OF THE DISTRICT ENGINEERS OFFICE TO BE SHOWN ON ALL R552-1 (LIMITED ACCESS) SIGNS IN THIS PROJECT, IF ANY.
17. THE CONTRACTOR WILL, AS REQUESTED BY THE DISTRICT TRAFFIC OPERATIONS ENGINEER, BE REQUIRED TO REMOVE ANY EXISTING SIGNS THAT ARE DUPLICATED OR ARE CONTRARY TO THESE SIGN PLANS.

pH

Resistivity

Project Number: ANVIL BLOCK ROAD, PHASE III

County: CLAYTON

P. I. Number:

Pipe Culvert Material Alternates

TYPE OF INSTALLATION			PIPE TYPE									
			CONCRETE	STEEL			ALUMINUM	THERMOPLASTIC				
			REINFORCED CONCRETE AASHTO M-170	CORRUGATED STEEL ALUMINUM COATED (TYPE 2) AASHTO M-36	CORRUGATED STEEL PLAIN ZINC COATED AASHTO M-36	POLYMER COATED STEEL AASHTO M-245	CORRUGATED ALUMINUM AASHTO M-196	CORRUGATED HDPE AASHTO M-252	CORRUGATED SMOOTH LINED HDPE TYPE "S" AASHTO M-294	CORRUGATED SMOOTH LINED POLYPROPYLENE AASHTO M-330	PVC CORRUGATED SMOOTH INTERIOR AASHTO F-949	PVC Profile Wall Drain Pipe AASHTO M-304
S T O R M D R A I N	NON-TRAVEL BEARING (OUTSIDE ROADBED)	INTERSTATE	X									
		NON INTERSTATE	X						X	X	X	X
	TRAVEL BEARING (INSIDE ROADBED)	GRADE 10% ADT < 1,500	X						X	X	X	X
		1,500 < ADT < 5,000	X						X	X	X	X
		5,000 < ADT < 15,000	X						X	X	X	X
		ADT > 15,000 & INTERSTATES	X									
		GRADE > 10%							X	X	X	X
	SIDE DRAIN		X						X	X	X	X
	PERMANENT SLOPE DRAIN			X	X	X	X		X	X	X	X
	PERFORATED UNDERDRAIN			X	X		X	X	X	X	X	X

- NOTE:
- Allowable materials are indicated by an "X".
 - Structural, installation, fill height and backfill requirements of storm drain pipe will be in accordance with Georgia Standard 1030-D or 1030-P and the Standard Specifications.
 - 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.
- Rev. 1-12-16

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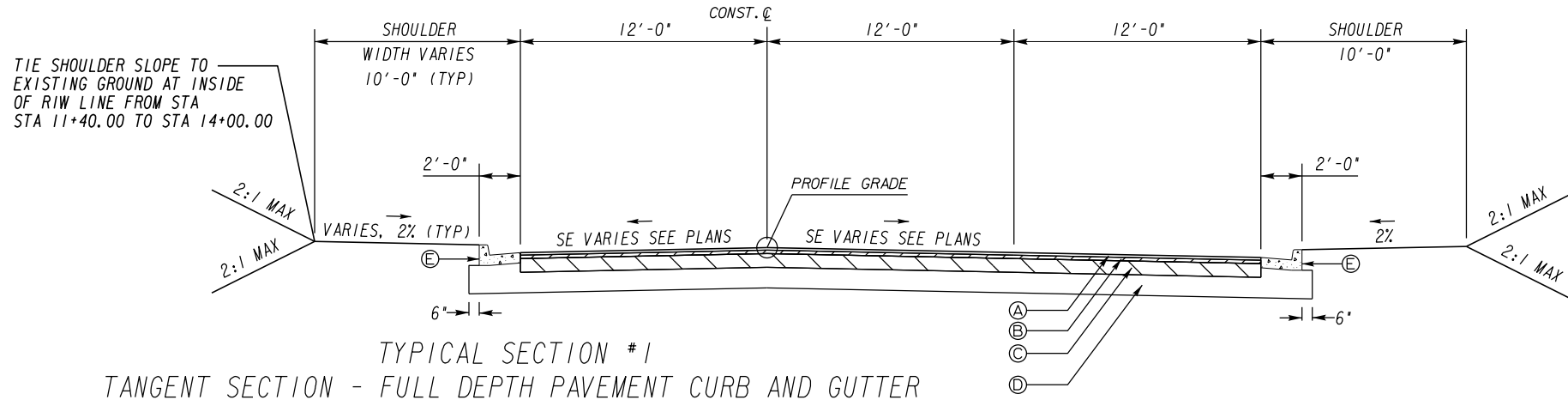
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REVISION DATES

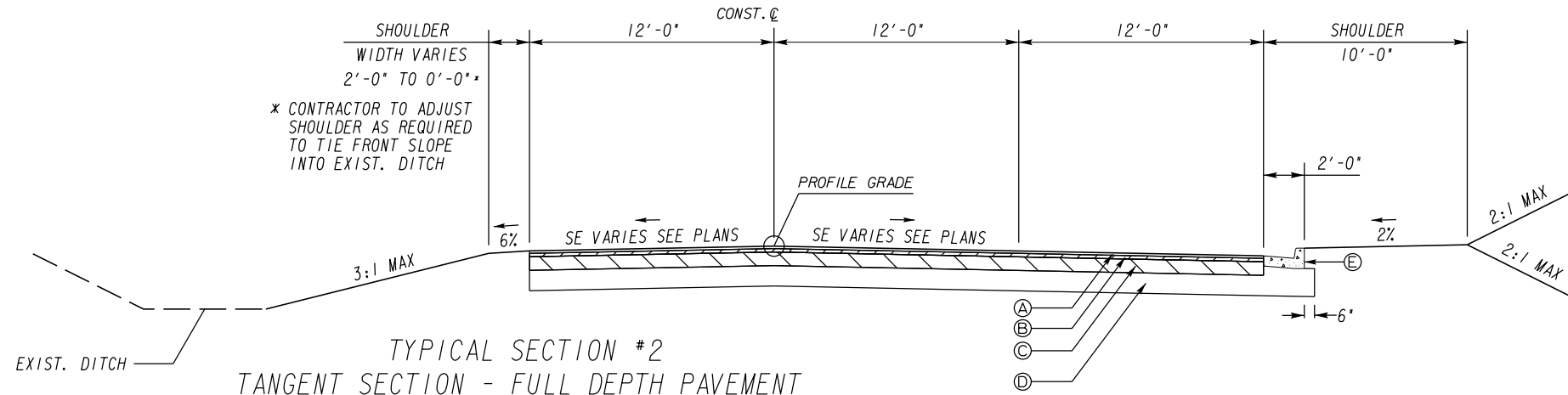
GENERAL NOTES

ANVIL BLOCK ROAD, PHASE III

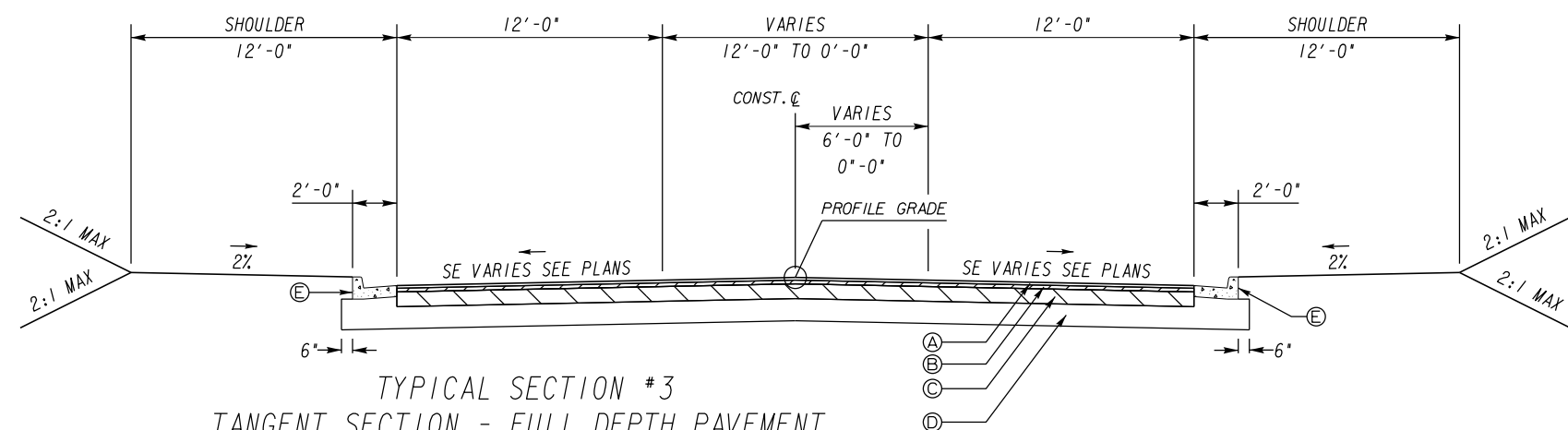
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TYPICAL SECTION #1
TANGENT SECTION - FULL DEPTH PAVEMENT CURB AND GUTTER
RATEEE DRIVE
STA. 10+25.50 TO STA. 14+00.00



TYPICAL SECTION #2
TANGENT SECTION - FULL DEPTH PAVEMENT
RATEEE DRIVE
STA. 14+00.00 TO STA. 18+92.20



TYPICAL SECTION #3
TANGENT SECTION - FULL DEPTH PAVEMENT
ANVIL BLOCK ROAD
STA. 10+12.17 TO STA. 14+40.79

- (A) RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GROUP 2 ONLY, INCL BITUM MATL & H LIME (165 LB/SY)
- (B) RECYCLED ASPH CONC 19 MM SUPERPAVE, GROUP 1 OR 2, INCL BITUM MATL & H LIME (220 LB/SY)
- (C) RECYCLED ASPH CONC 25 MM SUPERPAVE, GROUP 1 OR 2, INCL BITUM MATL & H LIME (330 LB/SY)
- (D) 12" GRADED AGGREGATE BASE CRS, INCL MATL
- (E) GA STD 9032B 8" X 24" CURB AND GUTTER TYPE 2. SEE 13 SERIES FOR LOCATIONS OF 8"X30" CURB AND GUTTER

SUMMARY OF QUANTITIES

ROADWAY								
	GR AGGR BASE COURSE	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL POLY-MOD BIT MATL & H LIME	TACK COAT	DRIVEWAY CONCRETE, 8 IN TK	CONC CURB & GUTTER, 8 IN X 24 IN, TP 2	RIGHT OF WAY MARKERS
DRAWING NO.	TON	TON	TON	TON	GAL	SY	LF	EA
	310-1101	402-3121	402-3190	402-4510	413-0750	441-0018	441-6216	634-1200
13-001	4131	931	621	466	395	56	2102	12
TOTAL:	4131	931	621	466	395	56	2102	12

DRAINAGE											
STRUCTURE	LOCATION	STORM DRAIN PIPE, 18 IN, H 1-10	STORM DRAIN PIPE, 24 IN, H 1-10	FLARED END SECTION 18 IN, STORMDRAIN	STN DUMPED RIP RAP, TP 3, 12 IN	PLASTIC FILTER FABRIC	ADJUST CATCH BASIN TO GRADE	CATCH BASIN, GP 1	DROP INLET, GP 1	STORMSEWER MANHOLE, TP 1	TURF REINFORCING MATTING, TP 1
		LF	LF	EA	SY	SY	EA	EA	EA	EA	SY
		550-1180	550-1240	550-4218	603-2180	603-7000	611-8000	668-1100	668-2100	668-4300	711-0100
A-1	ANVIL BLOCK, 17+26.00	10		1	8	8					
A-2	ANVIL BLOCK, 17+41.00	110						1			
A-3	ANVIL BLOCK, 10+68.77								1		
B-1	RATEREE, 10+42.11	52						1			
B-2	RATEREE, 10+53.83									1	
C-3	RATEREE, 10+81.25		6					1			
C-4	RATEREE, 10+93.00		22								
C-4.1	RATEREE, 10+96.96										
C-5	RATEREE, 11+56.43						1				
POND		40			32	34		1			73
TOTAL:		212	28	1	40	42	1	4	1	1	73

SUMMARY OF QUANTITIES

SIGNING											
STATION	LT/RT	INSTL. NO.	HIGHWAY SIGNS						SQUARE TUBE POST		
			SIGN CODE	636-1036					636-2070		
				HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 11					GALV STEEL POSTS, TP 7		
				SIZE	WIDTH	HEIGHT	QUANTITY	SQ FT	LENGTH (FEET)	QUANTITY	TOTAL LENGTH
RATEREE, 10+60	LT	1	R1-1	36" OCT	OCT	36	1	7.46	13.00	1	13.00
RATEREE, 10+47	RT	2	R1-1	36" OCT	OCT	36	1	7.46	13.00	1	13.00
RATEREE, 10+47	RT	3	R-SERIES	24" x 30"	24	30	1	5.00			
RATEREE, 13+00	LT	4	R3-8C	36" x 30"	36	30	1	7.50	13.00	1	13.00
RATEREE, 13+00	LT	5	R-SERIES	24" x 30"	24	30	1	5.00			
RATEREE, 17+54	RT	6	R1-2	36" x 36"	36	36	1	4.50	13.00	1	13.00
ANVIL BLOCK, 10+38	LT	7	R1-1	36" OCT	OCT	36	1	7.46	13.00	1	13.00
ANVIL BLOCK, 14+57	LT	8	R1-1	36" OCT	OCT	36	1	7.46	13.00	1	13.00
ANVIL BLOCK, 14+79	LT	9	M4-4	24" x 12"	24	12	1	2.00	13.00	1	13.00
ANVIL BLOCK, 14+79	LT	10	M1-5	24" x 24"	24	24	1	4.00			
ANVIL BLOCK, 14+79	LT	11	M6-1L	24" x 12"	24	12	1	2.00			
ANVIL BLOCK, 17+54	LT	12	R1-2	36" x 36"	36	36	1	4.50	13.00	1	13.00
TOTAL:								65.00			104.00

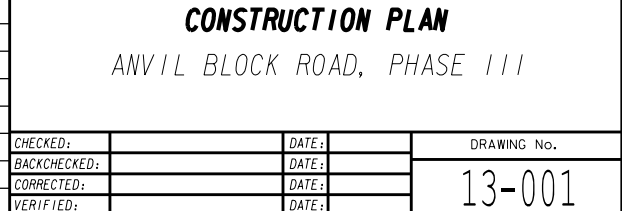
MARKING									
	THERMOPLASTIC PVMT MARKING, ARROW, TP 2	THERMOPLASTIC PVMT MARKING, ARROW, TP 5	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW	THERMOPLASTIC SOLID TRAF STRIPE, 24 IN, WHITE	THERMOPLASTIC SOLID TRAF STRIPE, 8 IN, WHITE	THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, WHITE	THERMOPLASTIC TRAF STRIPING, WHITE	THERMOPLASTIC TRAF STRIPING, YELLOW
DRAWING NO.	EA	EA	LF	LF	LF	LF	GLF	SY	SY
	653-0120	653-0150	653-1501	653-1502	653-1704	653-1804	653-3501	653-6004	653-6006
26-001	13	2	5236	3418	71	182	147	979	155
TOTAL:	13	2	5236	3418	71	182	147	979	155

SUMMARY OF QUANTITIES

EROSION CONTROL												
	CONSTRUCTION EXIT	CONSTRUCT AND REMOVE RIP RAP CHECK DAMS, STONE PLAIN RIP RAP/SAND BAGS	CONSTRUCT AND REMOVE STONE FILTER RING	CONSTRUCT AND REMOVE INLET SEDIMENT TRAP	MAINTENANCE OF TEMPORARY SILT FENCE, TP A	MAINTENANCE OF CHECK DAMS - ALL TYPES	MAINTENANCE OF CONSTRUCTION EXIT	MAINTENANCE OF INLET SEDIMENT TRAP	MAINTENANCE OF STONE FILTER RING	TEMPORARY SILT FENCE, TYPE A	EROSION CONTROL MATS, SLOPES	TURF REINFORCING MATTING, TP 1
STAGE	EA	EA	EA	EA	LF	LF	EA	EA	EA	LF	SY	SY
	163-0300	163-0527	163-0542	163-0550	165-0010	165-0041	165-0101	165-0105	165-0111	171-0010	716-2000	711-0100
INITIAL	2	5	2		1365	110	2		2	2730		
INTERMEDIATE	2	5	2	6	1344	110	2	6	2	2688		
FINAL											605	390
TOTAL:	4	10	4	6	2709	220	4	6	4	5418	605	390

GRASSING			
DESCRIPTION	ITEM	UNIT	QUANTITY
TEMPORARY GRASSING	163-0232	AC	0.75
MULCH	163-0240	TN	6.00
PERMANENT GRASSING	700-6910	AC	1.50
AGRICULTURAL LIME	700-7000	TN	4.00
FERTILIZER MIXED GRADE	700-8000	TN	2.00
FERTILIZER NITROGEN CONTENT	700-8100	LB	60.00

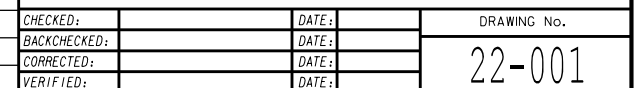
WATER QUALITY INSPECTIONS (167-1500)	
Total	6 MO
WATER QUALITY MONITORING AND SAMPLING (167-1000)	
Total	1 EA

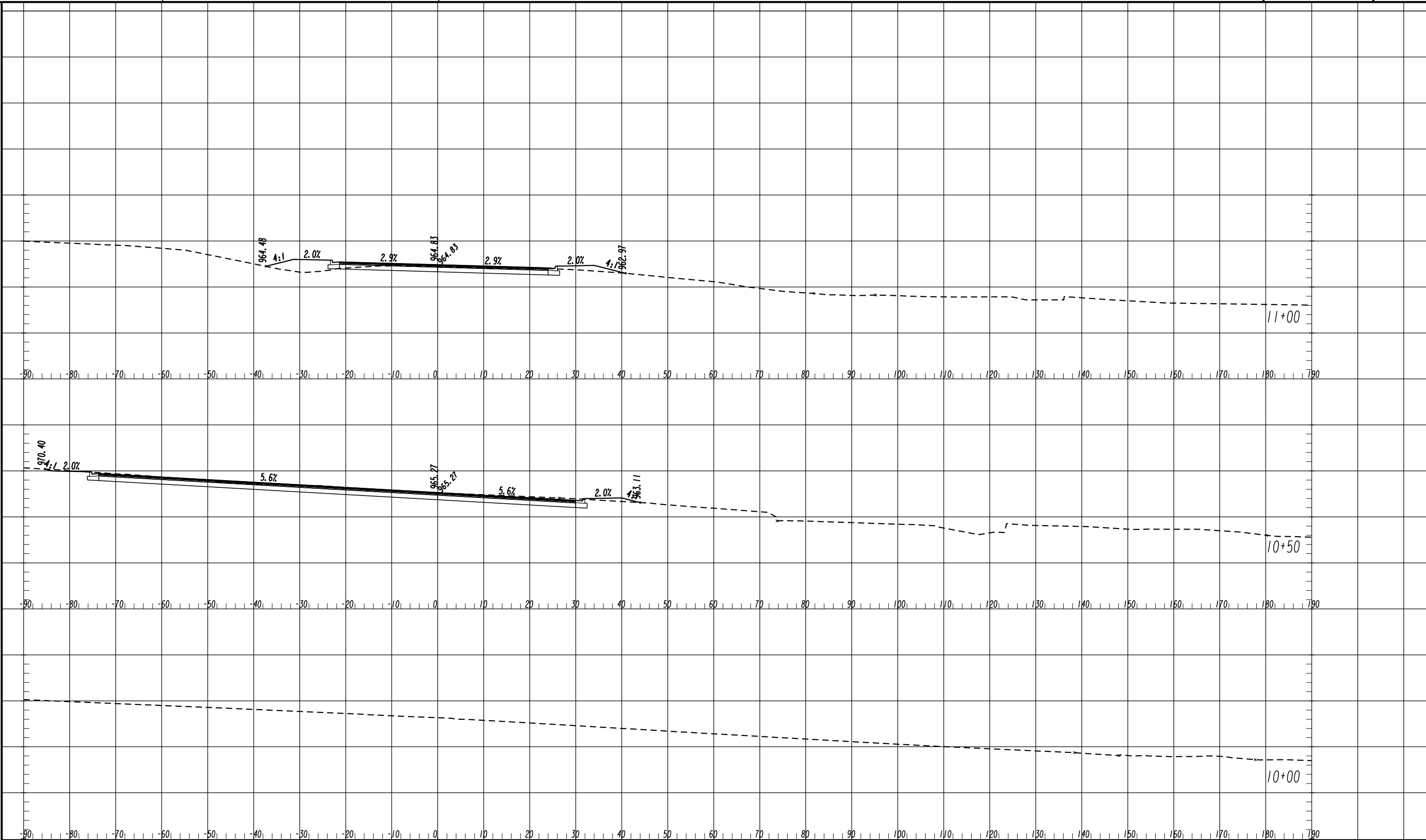


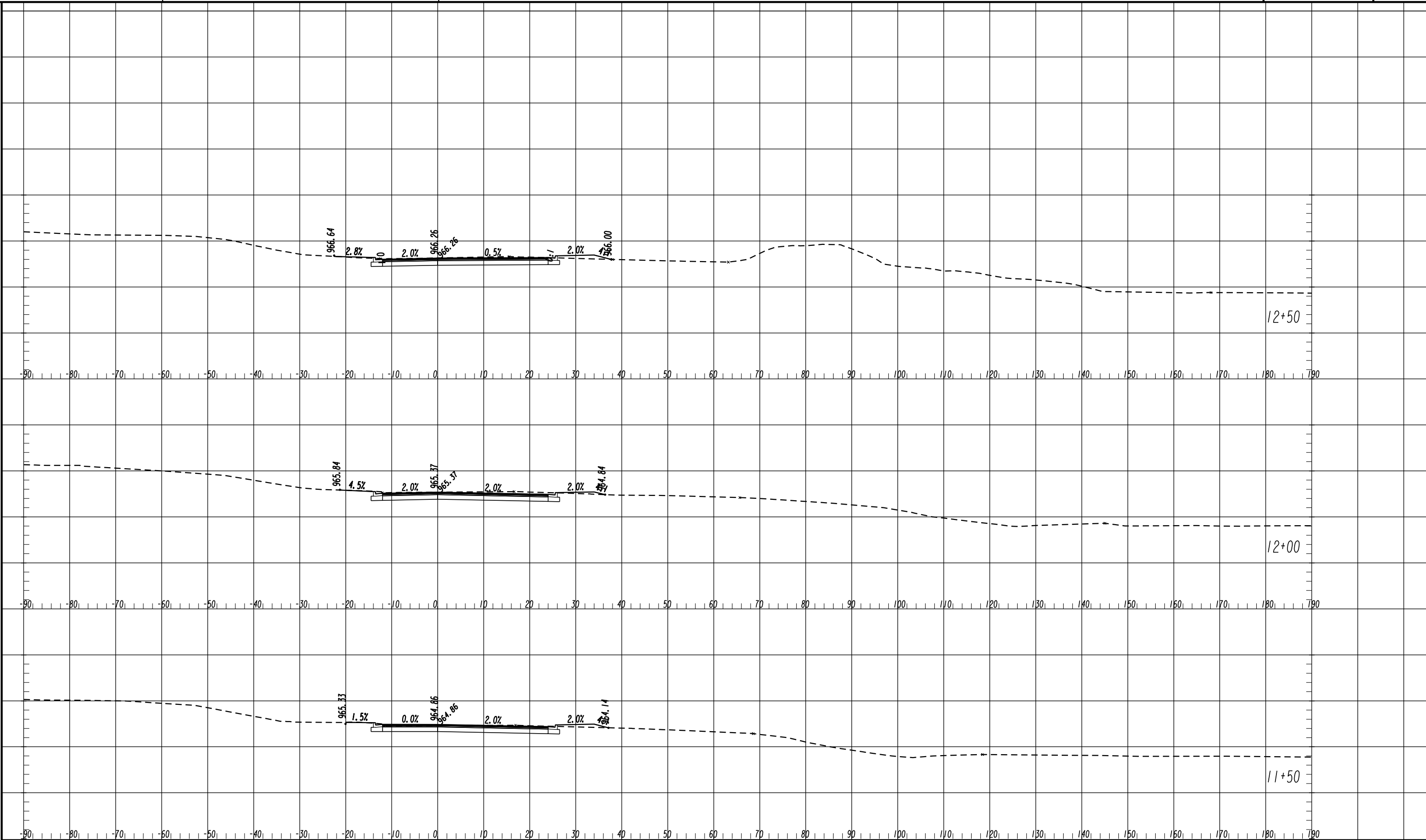
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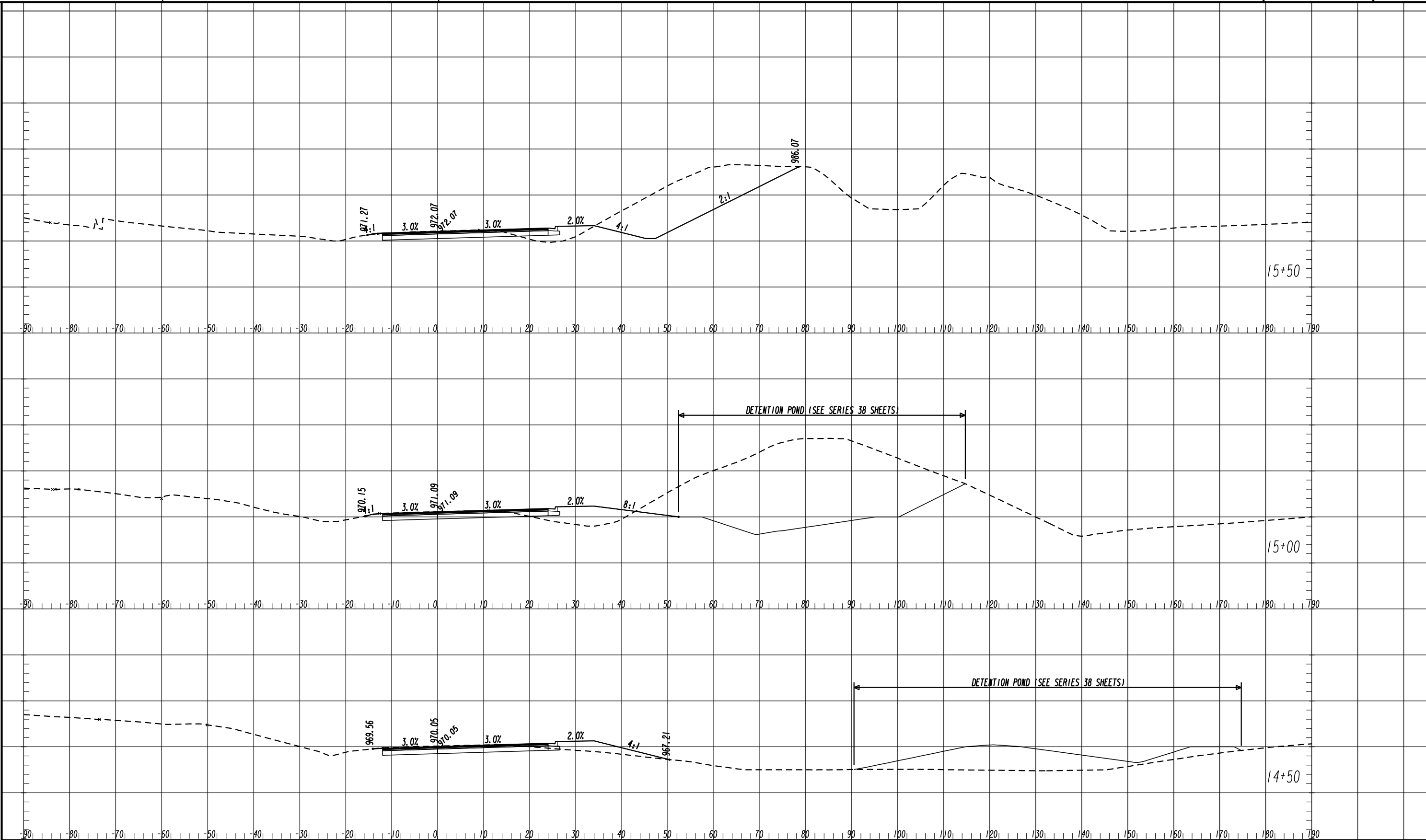








REVISION DATES			CROSS SECTIONS ANVIL BLOCK ROAD, PHASE III RATEREE DRIVE		
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11/8/2018

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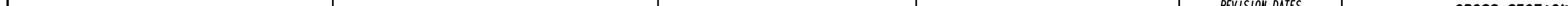
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23-004	

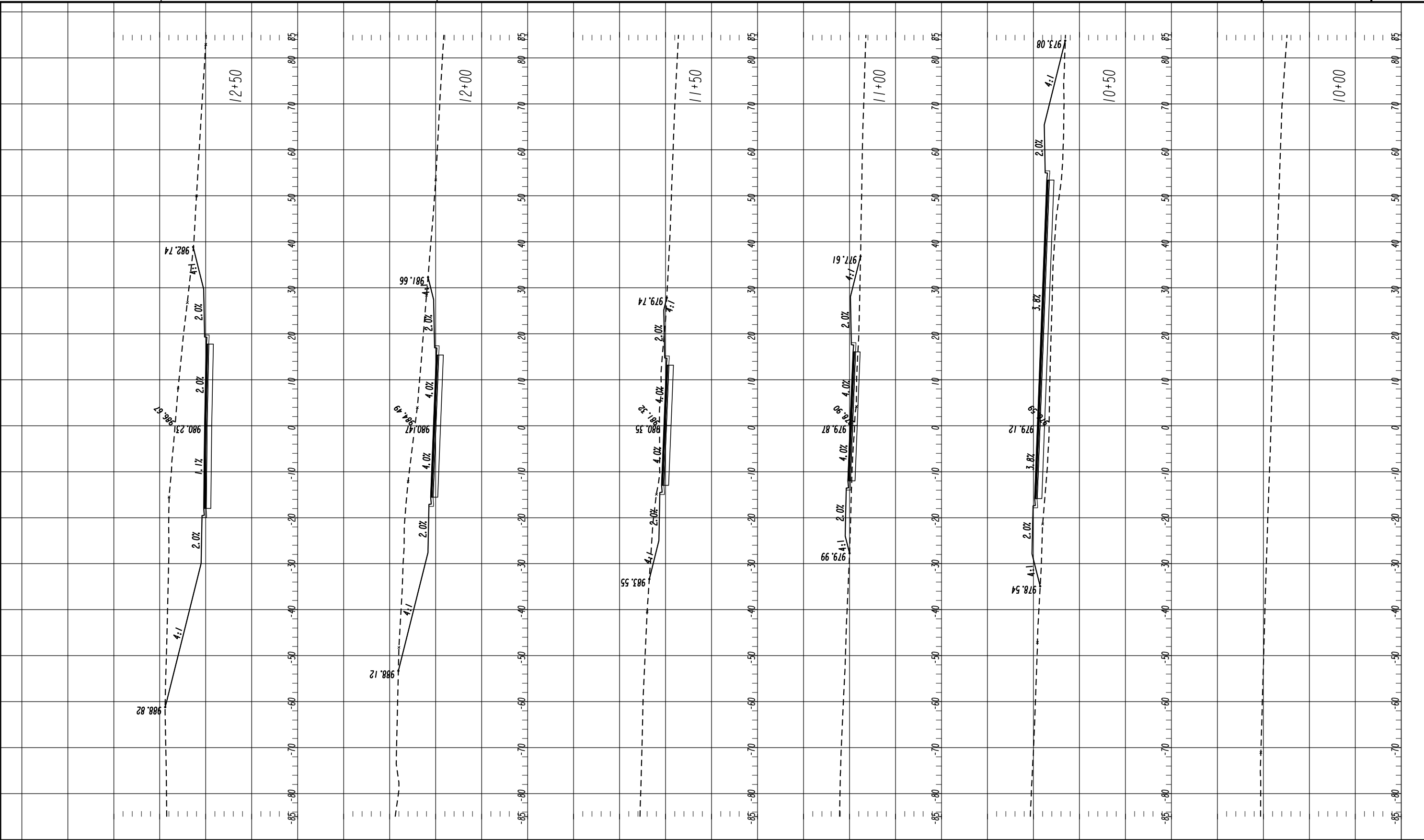


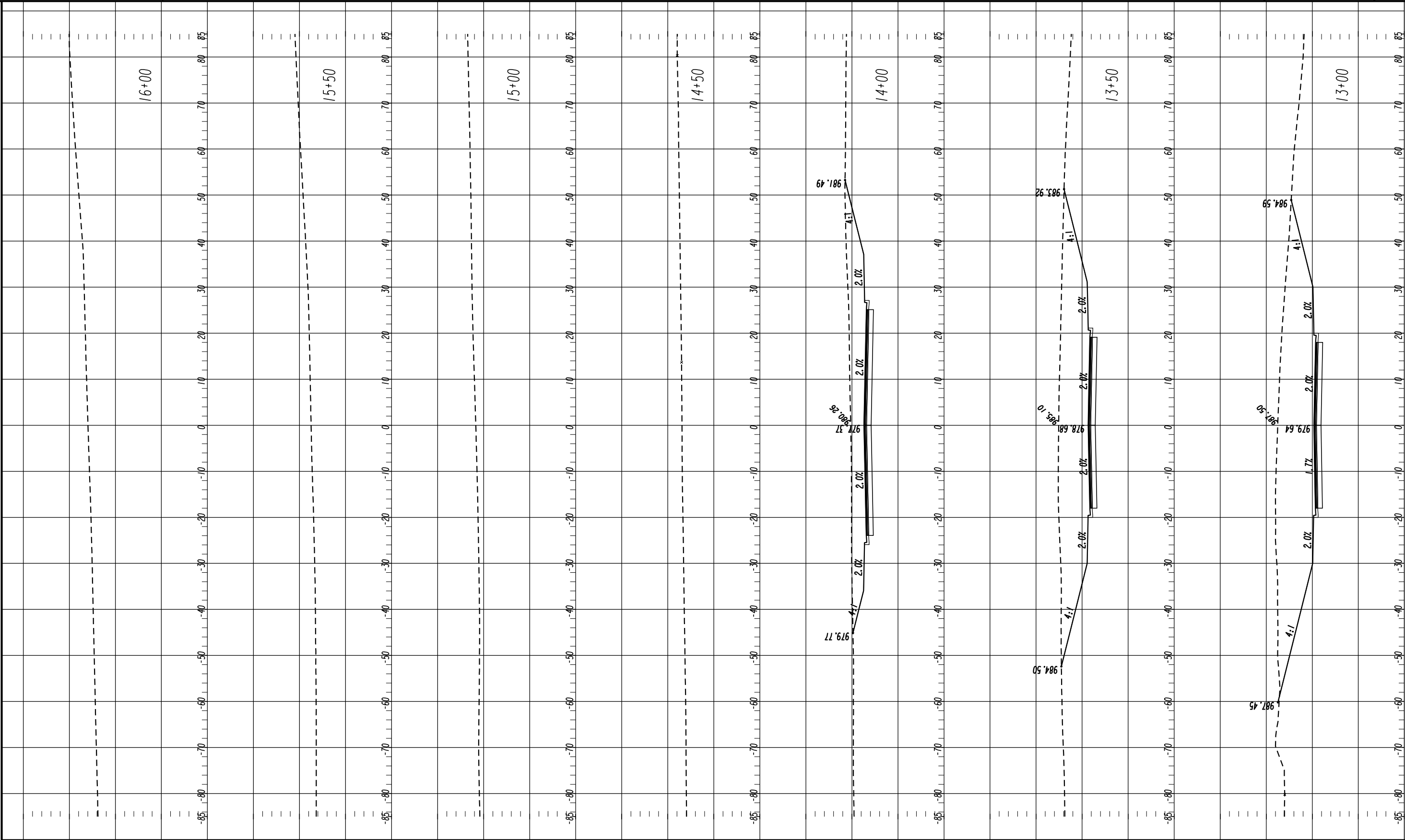
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REVISION DATES				CROSS SECTIONS			
				ANVIL BLOCK ROAD, PHASE III			
				RATEREE DRIVE			
				CHECKED:		DATE:	
				BACKCHECKED:		DATE:	
				CORRECTED:		DATE:	
				VERIFIED:		DATE:	
				DRAWING No.			
				23-005			



REVISION DATES			<div>CROSS SECTIONS</div> <div>ANVIL BLOCK ROAD, PHASE III</div> <div>RATEREE DRIVE</div>				
			CHECKED:		DATE:		DRAWING No. 23-006
			BACKCHECKED:		DATE:		
			CORRECTED:		DATE:		
			VERIFIED:		DATE:		





09/17/2015

SUXEN

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REVISION DATES

CROSS SECTIONS

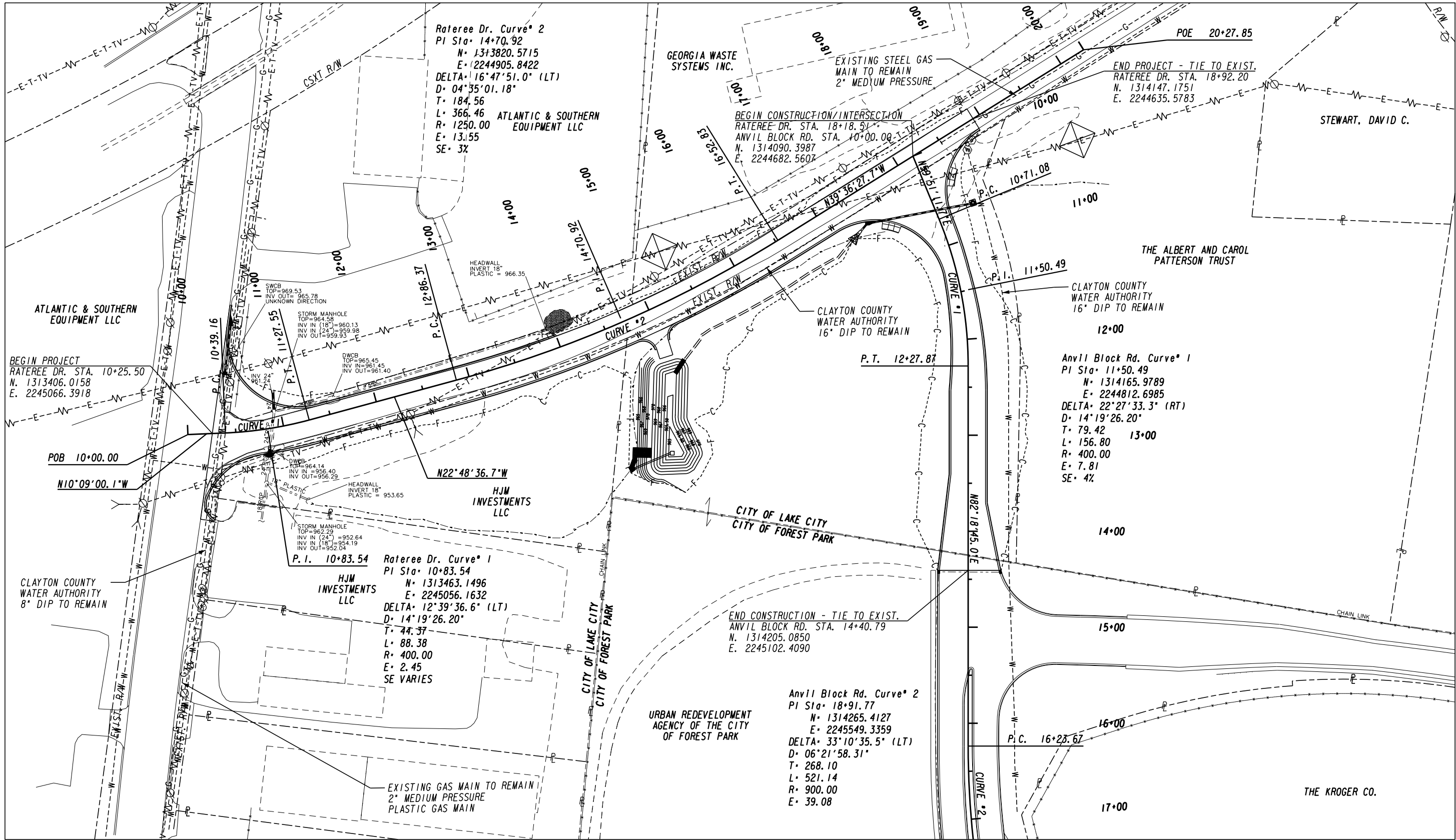
ANVIL BLOCK ROAD, PHASE III

ANVIL BLOCK ROAD

CHECKED:		DATE:	
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	

DRAWING No.

23-008



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

N|V|5

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SCALE IN FEET

0

50

100

200

REVISION DATES

UTILITY PLANS

ANVIL BLOCK ROAD, PHASE III

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

24-001

10/23/2015

GPLN



26-001

DRY DETENTION DETAIL

DRY DETENTION BASIN NOTES

SEQUENCE OF CONSTRUCTION FOR DRY DETENTION BASIN

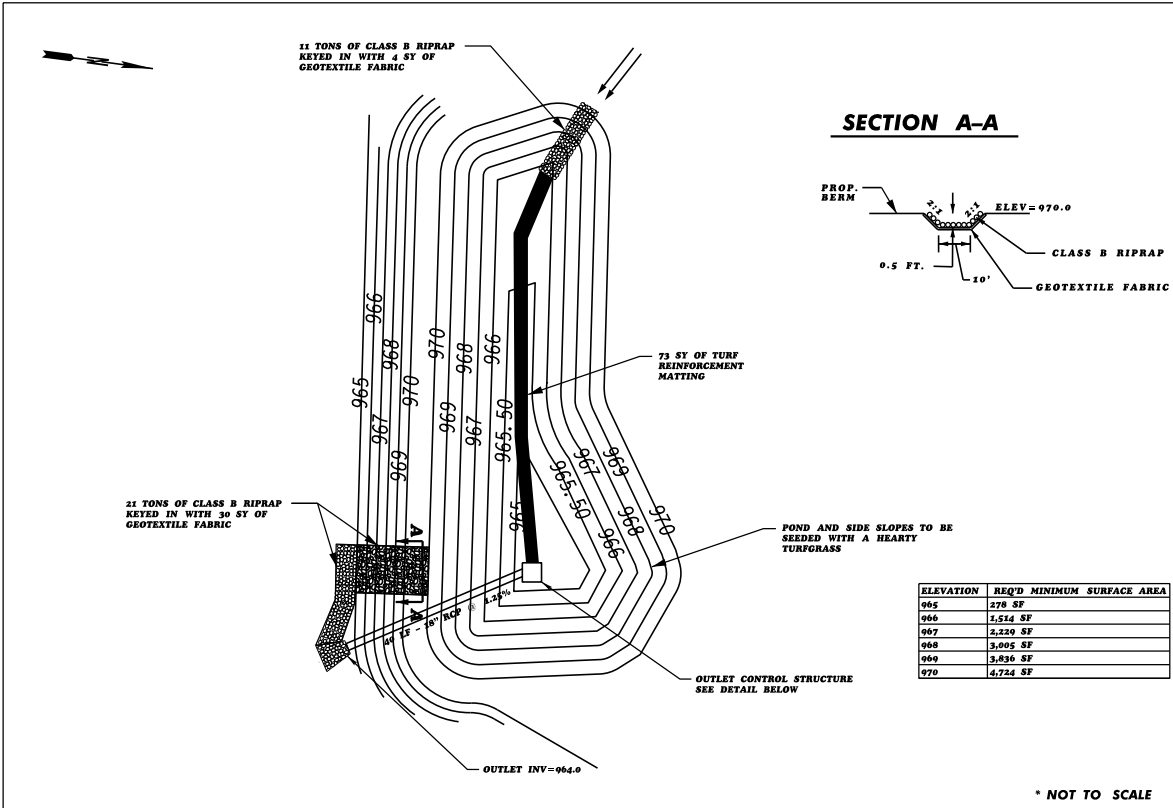
1. INSTALL ALL EROSION CONTROL MEASURES (AS NEEDED THROUGH CONSTRUCTION STAGES).
2. EXCAVATE FOR THE BASIN. PREPARE THE BASIN FLOOR AT THE GIVEN GRADE.
3. CONSTRUCT MAIN POND.
4. LAY TURF REINFORCEMENT MAT.
5. CONSTRUCT AND INSTALL OUTLET CONTROL STRUCTURE AND 18" RCP.
6. ADD GRATES/TRASH RACK ON BOX.

GENERAL NOTES FOR DRY DETENTION BASIN

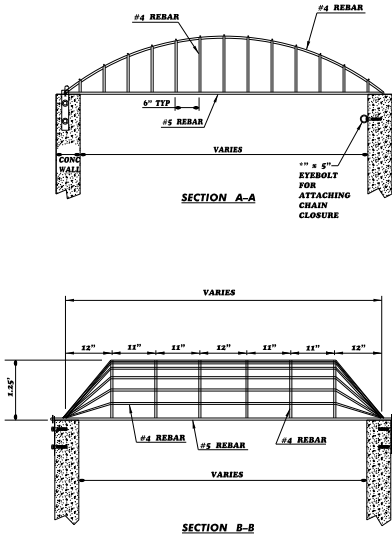
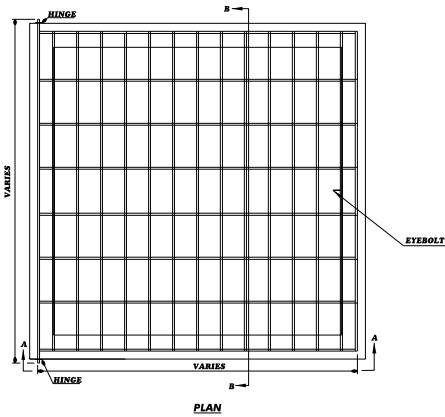
1. APPLY SEEDING OVER THE SIDE SLOPES AND ANY EXPOSED SURFACE THAT NEEDS TO BE PROTECTED AGAINST IMMEDIATE POTENTIAL STORM EVENT.
2. THE SURVEYOR SHALL VERIFY THE INVERTS AND ELEVATIONS AT THE FOLLOWING POINTS AT THE END OF EACH PHASE OF CONSTRUCTION:
- INVERTS IN THE PIPE AND THE BOXES.
3. THE BERM SHALL BE CONSTRUCTED WITH SUITABLE FILL MATERIAL PER THE ENGINEER.
4. ANY FILL MATERIAL SHALL BE COMPACTED.

MAINTENANCE RECOMMENDATIONS

1. REMOVE DEBRIS, TRASH AND SEDIMENT BUILDUP FROM THE BASIN AS NECESSARY TO MINIMIZE OUTLET CLOGGING AND IMPROVE AESTHETICS.
2. REPAIR AND REVEGETATE ERODED AREAS AS NEEDED.
3. CHECK INLETS AND OUTLETS FOR STRUCTURAL REPAIR TO CONFIRM THAT THEY ARE OPERATIONAL.
4. MOW AS NECESSARY TO LIMIT UNWANTED VEGETATION AND REMOVE CLIPPINGS AS PRACTICAL.
5. NO PORTION OF THE DRY DETENTION POND SHOULD BE FERTILIZED AFTER THE FIRST INITIAL FERTILIZATION THAT IS REQUIRED TO ESTABLISH VEGETATION.
6. STABLE GROUND COVER SHOULD BE MAINTAINED IN THE DRAINAGE AREA TO REDUCE THE SEDIMENT LOAD TO THE DRY DETENTION POND.
7. ONCE A YEAR, A DAM SAFETY EXPERT SHOULD INSPECT THE EMBANKMENT (IF APPLICABLE).
8. RECORDS OF OPERATION AND MAINTENANCE SHOULD BE KEPT IN A KNOWN SET LOCATION AND MUST BE AVAILABLE UPON REQUEST.



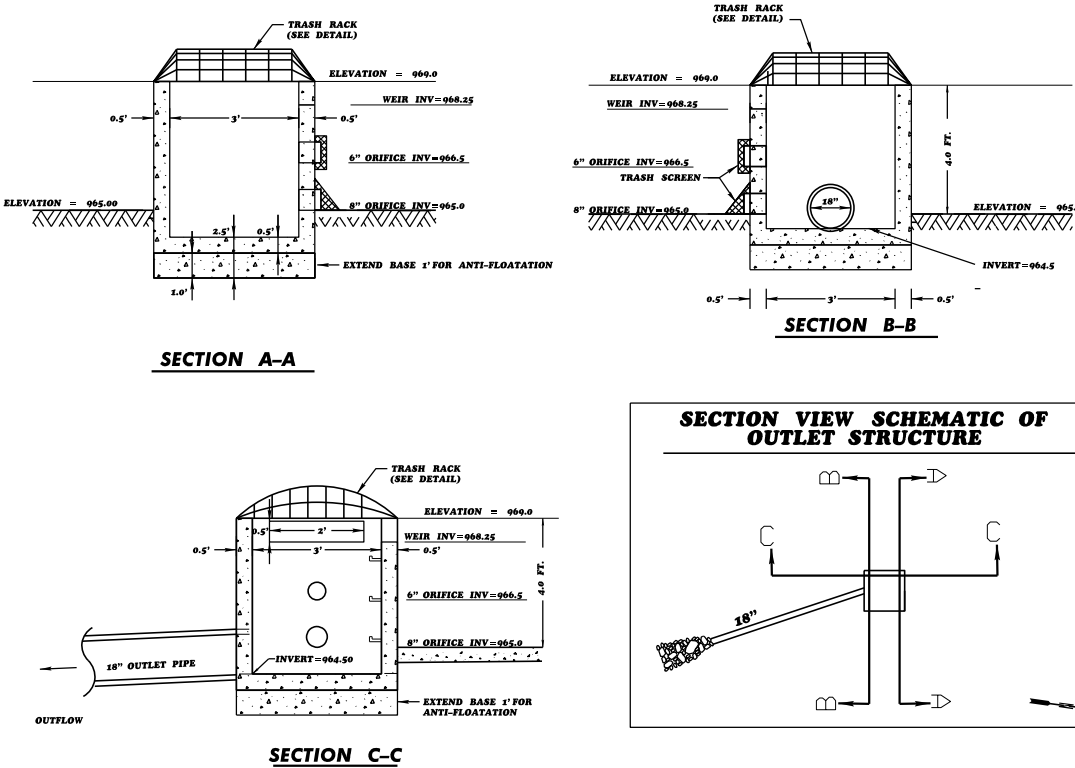
TRASH RACKS FOR OUTLET STRUCTURES



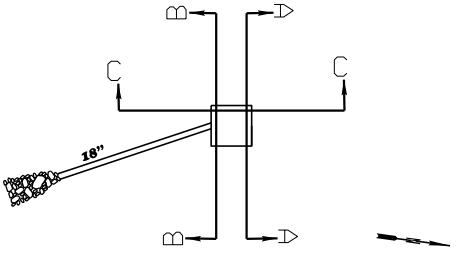
- RISER TRASH RACK NOTES:**
1. ALL JOINTS SHALL BE FULLY WELDED AROUND JOINT WITH A MINIMUM OF A 1" BEAD.
 2. 1/2" BOLTS ARE ANCHORED IN CONCRETE FOLLOW STD. DWG. 862.03 AND 862.04 FOR ANCHORING PROCEDURE.
 3. EYEBOLT FOR CHAIN CLOSURE SHALL BE INSTALLED BY THE SAME METHOD AS THE HINGE PLATE BOLTS.
 4. RACK AND HARDWARE SHALL BE REBAR AND GALVANIZED IN ACCORDANCE WITH ASTM A-553.

* NOT TO SCALE

DRY DETENTION BASIN OUTLET CONTROL STRUCTURE



SECTION VIEW SCHEMATIC OF OUTLET STRUCTURE



* NOT TO SCALE

DRY DETENTION BASIN OUTLET CONTROL STRUCTURE

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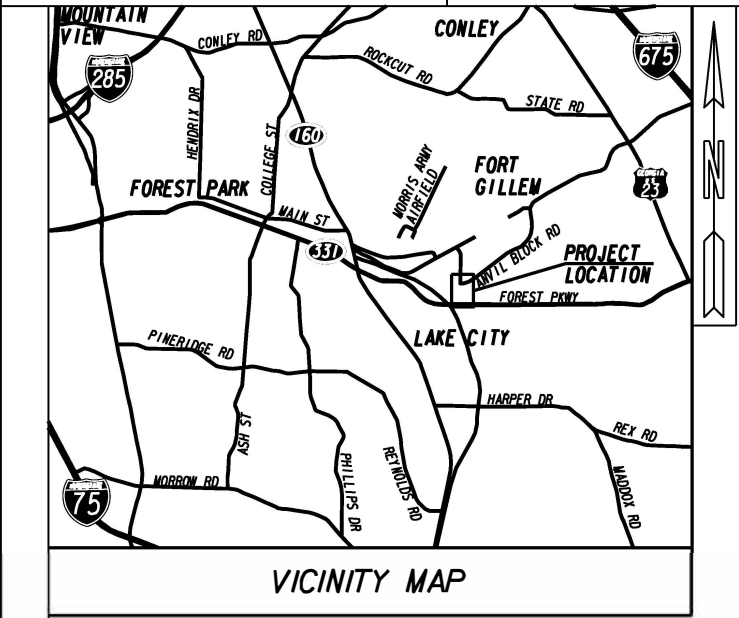
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REVISION DATES

SPECIAL CONSTRUCTION DETAIL
ANVIL BLOCK ROAD, PHASE III

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		

38-001



This project has been prepared using the Horizontal Georgia Coordinate System of 1984(NAD1983)/94 WEST Zone, and the North American Vertical Datum (NAVD) of 1988.



PRIMARY PERMITTEE

OWNER / TITLE: TIM STAUB, VP PROJECT MANAGEMENT
C/O URBAN REDEVELOPMENT AGENCY OF FOREST PARK
ADDRESS: 3350 RIVERWOOD PARKWAY
SUITE 700 ATLANTA GA 30339
PHONE: 678-435-5233

24 HOUR CONTACT:

Name _____

Street Address _____

City, State Zip _____

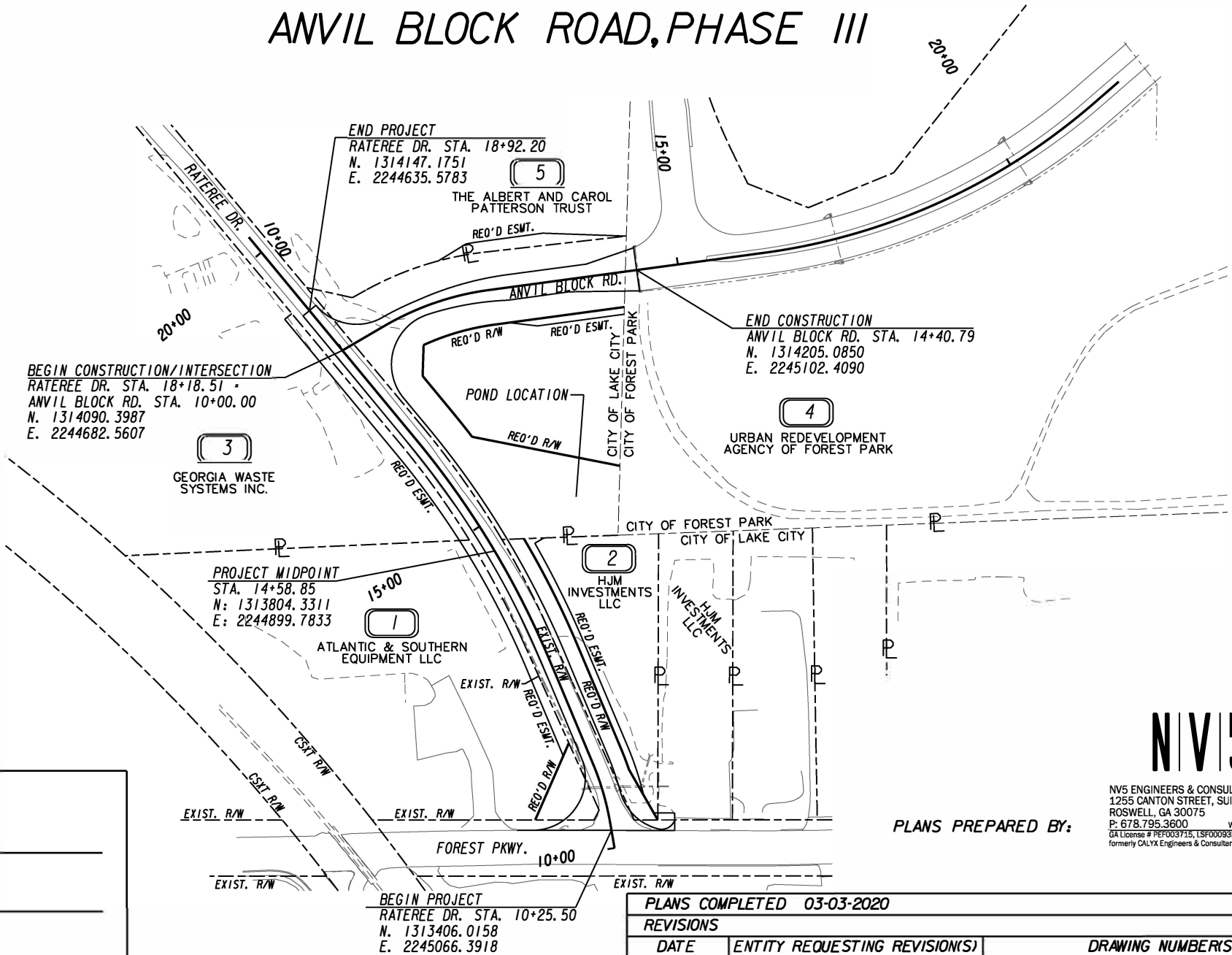
Phone Number _____

Email Address _____

Contractor shall complete the information in this box.

URBAN REDEVELOPMENT AGENCY
CITY OF FOREST PARK

EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN
ANVIL BLOCK ROAD, PHASE III



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PLANS PREPARED BY:

PLANS COMPLETED 03-03-2020

REVISIONS				
DATE	ENTITY REQUESTING REVISION(S)	DRAWING NUMBER(S)	SIGNATURE	GSWCC LEVEL II CERT. #
- -				
- -				
- -				
- -				
- -				
- -				

LENGTH OF PROJECT	
	MILES
NET LENGTH OF ROADWAY	0.1641
NET LENGTH OF BRIDGES	0.0000
NET LENGTH OF PROJECT	0.1641
NET LENGTH OF EXCEPTIONS	0.0000
GROSS LENGTH OF PROJECT	0.1641

"I certify that this Erosion, Sedimentation and Pollution Control Plan has been prepared in accordance with Part IV, of the General NPDES Permit No. GA100002."

"I certify that the permittee's Erosion, Sedimentation and Pollution Control Plan provides for an appropriate and comprehensive system of best management practices required by the Georgia Water Quality Control Act and the document 'Manual for Erosion and Sediment Control in Georgia' (Manual) published by the State Soil and Water Conservation Commission as of January 1 of the year in which the land disturbing activity was permitted, provides for sampling of the receiving water(s) or the sampling of the storm water outfalls and that the designed system of best management practices and sampling methods is expected to meet the requirements contained in the General NPDES Permit No. GA100002."

"I certify that the permittee's Erosion, Sedimentation and Pollution Control Plan provides for the monitoring of: (a) all perennial and intermittent streams and other water bodies shown on the USGS topographic map and all other field verified perennial and intermittent streams and other water bodies, or (b) where any such specific identified perennial or intermittent stream and other water body is not proposed to be sampled, I have determined in my professional judgment, utilizing the factors required in the General NPDES Permit No. GA100002, that the increase in the turbidity of each specific identified sampled receiving water will be representative of the increase in the turbidity of a specific identified un-sampled receiving water."

"I certify under penalty of law that this plan was prepared after a site visit to the location described herein by myself or my authorized agent, under my direct supervision."

"The design professional who prepared the ES&PC Plan is to inspect the installation of the initial sediment storage requirements, perimeter control BMPs, and sediment basins within 7 days after installation in accordance with Part IV.A.5 page 26 of the permit."

BEGIN-POINT COORDINATES

Longitude: -84.3359°

Latitude: 33.6106°

MID-POINT COORDINATES

Longitude: -84.3364°

Latitude: 33.6117°

END-POINT COORDINATES

Longitude: -84.3373°

Latitude: 33.6126°



4/11/2020

GSWCC GEORGIA SOIL AND WATER CONSERVATION COMMISSION

Kenneth R. McDuff
Level II Certified Design Professional

CERTIFICATION NUMBER 000000133
ISSUED 06/04/2017 EXPIRES 06/04/2020

ESPCP GENERAL NOTES

The escape of sediment from the project site shall be prevented by the installation of erosion and sediment control measures and practices prior to land-disturbing activities.

Erosion and sedimentation control measures will be maintained at all times. If full implementation of the approved plan does not provide for effective control, additional erosion and sedimentation control measures shall be implemented to control or treat the sediment source.

ESPCP ALTERATIONS

This Erosion, Sedimentation, and Pollution Control Plan (ESPCP) is provided by the Department. It addresses the staged construction of the project on the basis of common construction methods and techniques. If the Contractor elects to alter the staged construction from that shown in the plans or utilize construction techniques that render this plan ineffective, the Contractor shall revise the plans in accordance to Special Provision 161-Control of Soil Erosion and Sedimentation of the contract.

The Contractor, the Certified Design Professional, and the WECS shall carefully evaluate this plan prior to commencing land-disturbing activities. Admendments/revisions to the ESPCP which have a significant effect on BMPs with a hydraulic component requir es a formal revision of the ESPCP and the signature of a GSWCC Level-II Certified Design Professional. Additional BMPs may be added per Special Provision 161-Control of Soil Erosion and Sedimentation.

CONSTRUCTION SCHEDULE AND SEQUENCE OF MAJOR ACTIVITIES

The Contractor is responsible for developing the construction schedule for the project. The construction schedule for this project shall be submitted after the project is awarded along with the NOI. A copy of the construction schedule shall be maintained at the project site.

The project budget includes sufficient funds for the payment of construction exlts. The Contractor is responsible for establishing at least one (1) construction exit per the specifications of the construction exit detail included in this ESPCP to minimize or eliminate the vehicle tracking of dirt, soils, and sediments off site. To facilitate project logistics, the Contractor is also responsible for selecting the location(s) of the construction exit(s).

The scope of the project is to build the remaining full depth portion of Anvil Block Road to Rateree Drive. The project will also widen the existing Rateree Drive, from its intersection with the Anvil Block Road extension to its intersection with Forest Parkway. The construction activities include placement of full depth pavement, widening of existing pavement, installation of curb and gutter, and the addition of 4 new drainage struictures.

INITIAL PHASE

Install perimeter fencing around the project limits where existing drainage patterns will allow on-site water to leave site using a single layer of SDI-NS. The silt should be removed when the accumulation reaches half the height of the fence. Install a sediment basin, filter rings, check dams in existing ditches, and mulch at the locations shown in the BMP location details. If unforeseen conditions exist in the field that warrant additional erosion control measures, the contractor must construct additional erosion control devices deemed necessary by the site inspector.

INTERMEDIATE PHASE

Install the following according to the bmp location details: SDI-NS at the toe of all fill slopes and temporary grassing. Silt should be removed when the accumulation reaches half the height of the fence. Inlet sediment traps will be utilized on all storm structures as they are constructed. Filter rings and check dams will be used as shown in the BMP location details. Mulch will be utilized in accordance with sections 163, 700, or 711. Stage I - the temporary sedimet basin is to remain in place and functional throught the intermediate phase.

FINAL PHASE

Install permanent erosion control measures, including permanent grassing, slope stabilization, rip rap, and turf reinforcement in ditches. Once final grading has ocured and the site is stabilized, remove the sediment from the basin and grade the detention pond to final grades. See grading plan, Drawing No. 38-0001. Some final phase measures may be installed during intermediate phase if final grade has been obtained. See landscaping plans or erosion control plans for details.

SITE STABLIZATION AND VEGETATION PLANTING SCHEDULE

The EPD General NPDES GARIO0002 permit states that any disturbed area where construction activities have temporarily or permanently ceased shall be stabilized within 14 days of such cessation or as soon as practicable if precluded by adverse weather conditions. However in special cases, the Project Engineer may require the contractor to perform stabilization more often than 14 days.

Disturbed areas shall be stabilized with suitable material listed in the current edition of the Department's Standard Specifications (or Special Provisions) Sections 161, 163, 700, or 711 on the basis of when construction activities are expected to resume.

All temporary and permanent vegetative practices including plant species, planting dates, seeding, fertilizing, liming, and mulching rates for this project can be found in Section 700 of the current edition of the Department's Standard Specifications (or Special Provisions) and other applicable contract documents or landscaping plans.

BMP INSTALLATION AND MAINTENANCE MEASURES

See the Department's Standard Specifications (or Special Provisions) 161, 163, 165, 700, 711, and other contract documents for installation and maintenance measures.

PETROLEUM STORAGE, SPILLS AND LEAKS

These plans expressly delegate the responsibility of proper on-site hazardous material management to the Contractor. The Contractor shall at a minimum provide an action plan and keep the necessary materials on site for the capture, clean up, and disposal of any petroleum product, or other hazardous material, leaks or spills associated with the servicing, refueling or operation of any equipment utilized at the site. A copy of the action plan shall be submitted to the Project Engineer and maintained on the project site. All personnel operating or servicing equipment shall be familiar with the action plan. The Contractor shall not park, refuel, or maintain equipment within stream buffers.

If the Contractor elects to store petroleum products on site, the Contractor shall prepare an ESPCP addendum that addresses the additional BMPs needed for onsite storage and spill prevention for petroleum products. This plan shall be prepared by a Certified Design Professional as required by GARIO0002 for inclusion with these plans. The Contractor's attention is specifically directed to Standard Specification 107-Legal Regulations and Responsibility to the public for additional requirements.

WASTE DISPOSAL

Where attainable, locate waste collection areas, dumpsters, trash cans and portable toilets at least 50 feet away from streets, gutters, watercourses and storm drains. Secondary containment shall be provided around liquid waste collection areas to minimize the likelihood of contaminated discharges. The Contractor shall comply with applicable state and local waste storage and disposal regulations and obtain all necessary permits. Solid materials, including building materials, shall not be discharged to Waters of the State, unless authorized by a Section 404 Permit.

DEWATERING AND PUMPING ACTIVITIES

Any pumped discharge from an excavation or disturbed area shall be routed through an appropriately sized sediment basin, silt filter bag, or shall be treated equivalently with suitable BMP's. The contractor shall ensure the post BMP treated discharge is sheet flowing. Failure to create sheet flow will obligate the contractor to perform water quality sampling of pumped discharges. The contractor shall prepare sampling plans in accordance with the current GARIO0002 NPDES permit by utilizing a Certified Design Professional. No separate payment will be made for water quality sampling of pump discharges.

NONSTORMWATER DISCHARGES

Nonstormwater discharges defined in Part III.A.2 of the NPDES Permit will be identified after construction has commenced. These discharges shall be subject to the same requirements as storm water discharges required by the Georgia Erosion and Sedimentation Control Act, the NPDES Permit, the Clean Water Act, the Manual for Erosion and Sediment Control in Georgia, Department Standards, and other contract documents. The NPDES does not authorize the discharge of soaps or solvents used in vehicle and equipment washing or the discharge of wastewater containing stucco, paint,oils, curing compounds, and other construction materials.

READY MIX CHUTE WASH DOWN

The washing of ready-mix concrete drums and dump truck bodies used in the delivery of Portland cement concrete is prohibited on this site.

In accordance with Standard Specification 107: Legal Regulations and Responsibility to the Public, only the discharge chute utilized in the delivery of Portland cement concrete may be rinsed free of fresh concrete remains. The Contractor shall excavate a pit outside of State water buffers, at least 25 feet from any storm drain and outside of the travelled way, including shoulders, for a wash-down pit. The pit shall be large enough to store all wash-down water without overlapping. Immediately after the wash-down operations are completed and after the wash-down water has soaked into the ground, the pit shall be filled in, and the ground above it shall be graded to match the elevation of the surrounding areas. Alternate wash-down plans must be approved by the Project Engineer.

Wash-down plans describe procedures that prevent wash-down water from entering streams and rivers. Never dispose of wash-down water down a storm drain. Establish a wash-down pit that includes the following: (1) a location away from any storm drain, stream, or river, (2) access to the vehicle being used for wash down, (3) sufficient volume for wash-down water, and (4) permission to use the area for wash down.

On sites where permission or access to excavate a wash-down pit is unavailable, the Contractor may have to wash-down into a sealable 55-gallon drum or other suitable container and then transport the container to a proper disposal site. For additional information, refer to the Georgia Small Business Environmental Assistance Program's "A Guide for Ready Mix Chute/Hopper Wash-down".

OTHER CONTROLS

If the Contractor elects to store building material, building products, construction waste, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, and other materials on the site, the Contractor shall provide an appropriate covering to minimize the exposure of those materials or products to precipitation and stormwater to minimize the discharge of pollutants. Minimization of exposure is not required in cases where exposure to precipitation and to stormwater will not result in a discharge of pollutants, or where exposure of the specific material or product poses little risk to stormwater contamination or is intended for outdoor use.

The Contractor shall follow this ESPCP and ensure and demonstrate compliance with all applicable State and/or local regulations for waste disposal, sanitary sewer and septic systems, and petroleum storage.

The Contractor shall control dust from the site in accordance with Section 161 of the current edition of the Department's Standard Specifications.

POSTCONSTRUCTION BMPs FOR STORMWATER MANAGEMENT

All permanent postconstruction BMPs are shown in the construction plans and in the ESPCP plan. The postconstruction BMPs for this project consist of detention ponds, rriprop at pipe outlets for velocity dissipation and outlet stabilization, channel/ditch stabilization with turf reinforcing mats, and slope stabilization matting. The postconstruction BMPs will provide permanent stabilization of the site and prevent abnormal transportation of sediment and pollutants into receiving waters.

SOIL SERIES INFORMATION

The following is a summary of the soils that are expected to be found on the project site:

Erosion Hazard (Off-Road, Off-Trail)

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
CeB	Cecil sandy loam, 2 to 6 percent slopes	Moderate	Cecil (100%)	Surface kw times slope times R index (0.28)	2.8	76.6%
PaC	Pacolet sandy loam, 6 to 10 percent slopes	Moderate	Pacolet (100%)	Surface kw times slope times R index (0.72)	0.0	0.6%
UD	Urban land	Not rated	Urban land (100%)		0.8	22.8%
Totals for Area of Interest					3.7	100.0%

SILT FENCE INSTALLATION WITH J HOOKS AND SPURS

Silt fence should never be run continuously. The silt fence should turn back into the fill or slope to create small pockets that trap silt and force stormwater to flow through the silt fence. This technique is called using J hooks (or spurs). The J hooks shall be utilized on all silt fences that are located around the perimeter of the project and along the toe of embankments or slopes. The J hooks shall be spaced in accordance with GDOT Construction Detail D-24C. The maximum J-hook spacing is reached when the top of the J hook is at the same elevation as the bottom of the immediately upgradient J hook. J Hooks shall be paid for as silt fence items per linear foot. All costs and other incidental items are included in cost of installing and maintaining the silt fence.



4/11/2020

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Formerly CARLYX Engineers & Consultants

NTS

REVISION DATES

ESPCP GENERAL NOTES

ANVIL BLOCK ROAD, PHASE III

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		51-001

SEDIMENT STORAGE

The site has a total disturbed area of 2.43 acres. The following table summarizes the required and available sediment storage for every outfall on this project. The Contractor shall provide and maintain the storage volumes for the BMP's specified in this table.

Location	Total Drainage Area (acres)	Disturbed Area (acres)	Required Sediment Storage Volume (yd³)	Total Storage Volume Provided (yd³)	Temporary Sediment Basins		Check Dams (2.5 yd³/each)		Inlet Sediment Traps (1.5 yd³/each)		Silt Fence (0.3 yd³/ft)		Filter Rings (3 yd³/each)	
					Basin #	Total Volume (yd³)	# of Devices	Total Volume (yd³)	# of Devices	Total Volume (yd³)	Length (ft)	Total Volume (yd³)	# of Devices	Total Volume (yd³)
Pond Outfall														
Initial	2.61	0.67	175	722	1	323	-	-	-	-	1330	399	-	-
Intermediate				727	1	323	-	-	1	1.5	1330	399	1	3
C-2														
Initial	11.68	1.77	783	1161	1	323	5	12.5	-	-	2730	819	2	6
Intermediate				1157	1	323	5	12.5	6	9	2688	806	2	6

To prevent runoff from bypassing inlet sediment traps, a temporary sump shall be installed around all inlet sediment traps that are not located in a low point or an excavated sump. Construct temporary sumps in accordance with Construction Detail D-24C. Temporary sumps shall be installed in a manner that ensures stormwater does not bypass the inlet. The Contractor may submit alternate temporary containment berm designs to the Project Engineer for approval.

USE OF ALTERNATIVE AND/OR ADDITIONAL BMPS:

No alternative or additional BMPS will be used on this project.

RIPRAP OUTLET PROTECTION

Structure #, Outfall ID#, or Station and Offset	Pipe Diameter	Q ₂₅	V ₂₅	Tailwater Condition	Width at Drainage Structure	Apron Length	Downstrea m Width	Average Stone Diameter	Apron Thickness	Riprap Type	Quantity
	Do (ft)	(ft ³ /s)	(ft/s)	(TW<0.5 Do TW>0.5 Do)	W1=3Do (ft)	La (ft)	W2=Do+La (ft)	d ₅₀ (ft)	D (ft)	(Type 3 or Type 1)	
A-1	1.5	5.5	7.14	TW<0.5 Do	5.10	9	10.50	0.40	1.50	Type 3	8

TEMPORARY SEDIMENT BASIN DETAILS:

The table below is provided to show the overall dimensions and significant elevations of each sediment basin. Drainage areas, required sediment storage volumes, and actual sediment basin volumes as measured at the riser crest elevations are shown in the sediment storage section. See Construction Detail D-22 and Section 54 of the ESPCP plan sheets for further details.

Temporary Sediment Basin ID	Inlet Location (Station & Offset)	Drainage Area	Q _c	Q ₂₅	Bottom Elevation MSL	Bottom Width	Bottom Length	Principal Spillway Riser Crest Elevation MSL	Width at Riser Crest	Length at Riser Crest	Effective Length at Riser Crest	Principal Spillway Riser Pipe Nominal Diameter, D _r	Antifloation Block Dimensions	Principal Spillway Outlet Pipe Nominal Diameter, D _{ps}	Outlet Pipe @ Discharge Point Elevation MSL	Top of Dam Elevation MSL	Inside Width at Top of Dam	Inside Length at Top of Dam	Overall Outside Footprint Width	Overall Outside Footprint Length	Emergency Spillway Crest Elevation MSL	Emergency Spillway Bottom Width	Floating Suface Skimmer Orifice Diameter	Basin Dewatering Time	Cleanout Volume, V _c	Cleanout Elevation MSL
#		(ac)	(cfs)	(cfs)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(in)	(in) x (in)	(in)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(in)	(hr)	(cy)	(ft)
1	15+00, 70' RT	3.40	5.03	14.78	965.00	See Grading Plan - Drawing No. 38-0001	See Grading Plan - Drawing No. 38-0001	969.00	See Grading Plan - Drawing No. 38-0001	See Grading Plan - Drawing No. 38-0001	See Grading Plan - Drawing No. 38-0001	30	46 x 46	18	964.00	970.00	See Grading Plan - Drawing No. 38-0001	See Grading Plan - Drawing No. 38-0001	See Grading Plan - Drawing No. 38-0001	See Grading Plan - Drawing No. 38-0001	969.50	See Grading Plan - Drawing No. 38-0001	2.00	30	107.77	967.08

CHANNEL PROTECTION

All channels may be stabilized exclusively with permanent grassing except as noted otherwise in the table below.

Begin Station and Offset	End Station and Offset	Q ₂₅ (ft ³ /s)	V ₂₅ (ft/s)	Type of Channel Lining	Channel Bottom Width (ft)	Depth of Protection Dp (ft)	Quantity (yd ²)
15+00 LT	18+50 LT	14.15	2.52	TRM-1	0.0	0.50	390
15+50 RT	17+25 RT	5.53	1.56	GRASS	2.0	0.50	140

DISCHARGES INTO OR WITHIN ONE LINEAR MILE UPSTREAM OF AND WITHIN THE SAME WATERSHED AS ANY PORTION OF A BIOTA IMPAIRED STREAM SEGMENT

All outfalls are either located further than 1 linear mile upstream or outside of the watershed of an impaired stream segment that has been listed for criteria violated, "Bio F" (impaired fish community) and/or "Bio M" (impaired macro invertebrate community), within Category 4a, 4b or 5, and the potential cause is either "NP" (nonpoint source) or "UR" (urban runoff).

STATE-WATER BUFFER IMPACTS

State-water buffers, as defined by O.C.G.A. 12-7-1, are not impacted by this project.

Non-exempt activities shall not be conducted within the 25- or 50-foot undisturbed stream buffers as measured from the point wrested vegetation or within 25-feet of the coastal marshland buffer as measured from the Jurisdictional Determination Line without first acquiring the necessary variances and permits.



INSPECTIONS AND REPORTING

As the primary permittee, the Department must retain the design professional who prepared the ESPCP, or an alternative design professional approved by EPD in writing, to inspect the installation of the initial sediment storage requirements and perimeter control BMPs within 7 days of installation over the entire Infrastructure project. Alternatively, for linear Infrastructure projects, the permittee must retain either of these personnel to inspect the initial sediment storage requirements and perimeter control BMPs for the initial segment, as defined by Part IV.A.5. of the current GARI00002 Permit, within 7 days of installation and all sediment basins within the entire linear Infrastructure project within 7 days of installation. The inspecting design professional shall report the results to the primary permittee within 7 days, and the permittee must correct all deficiencies within 2 business days of receipt of the inspection report, unless on-site weather conditions are such that more time is required. Additionally, the Department's Construction Project Engineer will be responsible for all subsequent 7 day inspections for all new BMP installations.

All other inspections shall be documented on the appropriate Department inspection forms. See Standard Specification (or Special Provision) 167 and other contract documents for inspection and reporting requirements. These inspections shall continue until the Notice of Termination (NOT) is submitted.

Whenever the Department finds that a BMP has failed or is deficient beyond routine maintenance and has resulted in sediment deposition into waters of the State, the Contractor shall take reasonable steps to address the condition, including cleaning up any contaminated surfaces so the material will not discharge in subsequent storm events. When the repair does not require a new or replacement BMP or significant repair, the BMP failure or deficiency must be corrected by the close of the next business day from the time of discovery. A repair requiring a new or replacement BMP or significant repair must be operational by no later than 7 days from the time of discovery. If the repair time within 7 days is infeasible, the Contractor and the Department shall schedule the BMP repair to be operational as soon as practical after the 7 day time frame.

Failure to perform inspections as required by the contract documents and the NPDES permit shall result in the cessation of all construction activities with the exception of Traffic Control and Erosion Control. Continued failure to perform inspections shall result in non-refundable deductions as specified in the contract documents.

WATER QUALITY INSPECTING AND SAMPLING PROCEDURES

See Special Provision 167 and other contract documents for the inspecting and sampling procedures. Sampling locations are provided in the Sampling Location table herein.

RETENTION OF RECORDS

The Department will retain all records related to the implementation of this ESPCP in accordance with Part IV.F of the General Permit GARI00002.

SAMPLING LOCATIONS AND GENERAL NOTES

Representative sampling may be utilized on this project as explained here. The individual outfall drainage basins along the project corridor have been carefully evaluated and compared on the basis of four characteristics: the type of construction activity, the disturbed acreage, the average slope about the outfall, and the soil erosion index 0-10, 10 being the most erodible soil. The construction activity types are new road on fill, new road in cut, road widening, and maintenance/safety. The disturbed area classes are less than or equal to 1 acre, greater than 1 acre to less than 2 acres, and equal to or greater than 2 acres. The average outfall slope is mild if it is equal to or less than 0.03, and steep if it is greater than 0.03. The soil erosion index is low if it is less than or equal to 5 and high if it is greater than 5. After evaluation of these characteristics as presented in the project's drainage area map, hydrology and hydraulic studies, construction plans, geotechnical soil survey, and erosion sedimentation and pollution control plans, the Department has determined that the representative sampling scheme shown below is valid for the duration of the project. The table shows the groups of similar outfall drainage basins.

The increase in turbidity at the specified locations in the table below will be representative of the alternate outfall drainage basins when similar outfall drainage basins exist. Approved primary and alternate representative sampled features are identified in the table below.

Note: The Total Site Area is 3.51 acres.										
SAMPLING INFORMATION										
Primary Sampled Feature	Location (Station and Offset)	Name of Receiving Water	Applicable Construction Stage for Sampling	Sampling Type (Outfall or Receiving water)	Drainage Area for Receiving Water (mi²)	Upstream Disturbed Area (acres)	Warm or Cold Water Stream	Appendix B NTU Value (Outfall Sampling only)	Allowable NTU Increase (Receiving water sampling only)	Location Description
1 UP	10+75, 56' RT Rateree Drive	Upton Creek	All	Manhole	3.5	2.43	Warm	75	N/A	Upstream

The primary sampled features specified should be used as the initial sampling locations. An alternate sampled feature may be used if additional sampling is required or to replace a primary sampled feature that is no longer located within the active phase of construction.



4/11/2020

N|V|5

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Formerly CALYX Engineers & Consultants

NTS

REVISION DATES

ESPCP GENERAL NOTES

ANVIL BLOCK ROAD, PHASE III

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		51-003
CORRECTED:		DATE:		
VERIFIED:		DATE:		



Georgia Soil and Water Conservation Commission
EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN CHECKLIST
INFRASTRUCTURE CONSTRUCTION PROJECTS

SWCD: ☒ #N/A

Project Name: ANVIL BLOCKROAD, PHASE III Address:

City/County: CITY OF FOREST PARK, CLAYTON COUNTY Date on Plans: 3/3/2020

Name & Email of Person Filling Out Checklist: KEN MCDUFF, Ken.McDuff@nv5.com

Plan Page #	Included Y/N
51-004	Y

50-001	Y
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50-001	Y
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50-001	Y
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53-001	Y
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50-001	Y
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50-001	Y
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51-001	Y
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50-001	Y
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55-001	Y
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50-001	Y
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50-001	Y
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50-001	Y
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50-001	Y
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51-002	Y
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51-002	N/A
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51-001	Y
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51-001	Y
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51-001	Y
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51-001	Y
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51-001	Y
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51-002	N/A
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N/A	N/A
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51-001	Y
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51-001	Y
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51-001	Y
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51-001	Y
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51-001	Y
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51-001	Y
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TO BE SHOWN ON ES&PC PLAN

- 1 The applicable Erosion, Sedimentation and Pollution Control Plan Checklist established by the Commission as of January 1 of the year in which the land-disturbing activity was permitted.
(The completed Checklist must be submitted with the ES&PC Plan or the Plan will not be reviewed)
- 2 Level II certification number issued by the Commission, signature and seal of the certified design professional.
(Signature, seal and Level II number must be on each sheet pertaining to ES&PC Plan or the Plan will not be reviewed)
- 3 The name and phone number of the 24-hour local contact responsible for erosion, sedimentation and pollution controls.
- 4 Provide the name, address, email address, and phone number of primary permittee.
- 5 Note total and disturbed acreage of the project or phase under construction.
- 6 Provide the GPS locations of the beginning and end of the Infrastructure project. Give the Latitude and Longitude in decimal degrees.
- 7 Initial date of the Plan and the dates of any revisions made to the Plan including the entity who requested the revisions.
- 8 Description of the nature of construction activity.
- 9 Provide vicinity map showing site's relation to surrounding areas. Include designation of specific phase, if necessary.
- 10 Identify the project receiving waters and describe all sensitive adjacent areas including streams, lakes, residential areas, wetlands, marshlands, etc. which may be affected.
- 11 Design professional's certification statement and signature that the site was visited prior to development of the ES&PC Plan as stated on Part IV page 21 of the permit.
- 12 Design professional's certification statement and signature that the permittee's ES&PC Plan provides for an appropriate and comprehensive system of BMPs and sampling to meet permit requirements as stated on Part IV page 20 of the permit.*
- 13 Design professional certification statement and signature that the permittee's ES&PC Plan provides for representative sampling as stated on Part IV.D.6.c.(3) page 37 of permit as applicable.*
- 14 Clearly note the statement that "The design professional who prepared the ES&PC Plan is to inspect the installation of the initial sediment storage requirements, perimeter control BMPs, and sediment basins within 7 days after installation," in accordance with Part IV.A.5, page 26 of the permit.*
- 15 Clearly note the statement that "Non-exempt activities shall not be conducted within the 25 or 50-foot undisturbed stream buffers as measured from the point of wooded vegetation or within 25-feet of the coastal marshland buffer as measured from the Jurisdictional Determination Line without first acquiring the necessary variances and permits."
- 16 Provide a description of any buffer encroachments and indicate whether a buffer variance is required.
- 17 Clearly note the statement that "Amendments/revisions to the ES&PC Plan which have a significant effect on BMPs with a hydraulic component must be certified by the design professional."
- 18 Clearly note the statement that "Waste materials shall not be discharged to waters of the State, except as authorized by a section 404 permit."
- 19 Clearly note statement that "The escape of sediment from the site shall be prevented by the installation of erosion and sediment control measures and practices prior to land disturbing activities."
- 20 Clearly note statement that "Erosion control measures will be maintained at all times. If full implementation of the approved Plan does not provide for effective erosion control, additional erosion and sediment control measures shall be implemented to control or treat the sediment source."
- 21 Clearly note the statement "Any disturbed area left exposed for a period greater than 14 days shall be stabilized with mulch or temporary seeding."
- 22 Any construction activity which discharges storm water into an Impaired Stream Segment, or within 1 linear mile upstream of and within the same watershed as, any portion of an Impaired Stream Segment must comply with Part III. C. of the Permit. Include the completed Appendix 1 listing all the BMPs that will be used for those areas of the site which discharge to the Impaired Stream Segment.*
- 23 If a TMDL Implementation Plan for sediment has been finalized for the Impaired Stream Segment (identified in item 22 above) at least six months prior to submittal of NOI, the ES&PC Plan must address any site-specific conditions or requirements included in the TMDL Implementation Plan.*
- 24 BMPs for concrete washdown of bolls, concrete mixer chutes, hoppers and the rear of the vehicles. Washout of the drum at the construction site is prohibited.*
- 25 Provide BMPs for the remediation of all petroleum spills and leaks.
- 26 Description of the measures that will be installed during the construction process to control pollutants in storm water that will occur after construction operations have been completed.*
- 27 Description of practices to provide cover for building materials and building products on site.*
- 28 Description of the practices that will be used to reduce the pollutants in storm water discharges.*
- 29 Description and chart or timeline of the intended sequence of major activities which disturb soils for the major portions of the site (i.e., initial perimeter and sediment storage BMPs, clearing and grubbing activities, excavation activities, utility activities, temporary and final stabilization).

Plan Page #	Included Y/N
51-003	Y

51-003	Y
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51-003	Y
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51-003	Y
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51-003	Y
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51-003 and 55-001	Y
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51-001	Y
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ALL PLANS	Y
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55-001	Y
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51-002	N/A
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51-002	N/A
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51-002	N/A
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N/A	N/A
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53-001	Y
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55-001	Y
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53-001	Y
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53-001	Y
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51-001	Y
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54-001 to 54-003	Y
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51-002	Y
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52-0001 to 52-0007	Y
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56 SERIES	Y
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51-001	Y
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TO BE SHOWN ON ES&PC PLAN

30 Provide complete requirements of inspections and record keeping by the primary permittee.*

31 Provide complete requirements of sampling frequency and reporting of sampling results.*

32 Provide complete details for retention of records as per Part IV.F. of the permit.*

33 Description of analytical methods to be used to collect and analyze the samples from each location.*

34 Appendix B rationale for NTU values at all outfall sampling points where applicable.*

35 Delineate all sampling locations, perennial and intermittent streams and other water bodies into which storm water is discharged also provide a summary chart of the justification and analysis for the representative sampling as applicable.*

36 A description of appropriate controls and measures that will be implemented at the construction site including: (1) initial sediment storage requirements and perimeter control BMPs, (2) intermediate grading and drainage BMPs, and (3) final BMPs. For construction sites where there will be no mass grading and the initial perimeter control BMPs, intermediate grading and drainage BMPs, and final BMPs are the same, the plan may combine all of the BMPs into a single phase.*

37 Graphic scale and North arrow.

38 Existing and proposed contour lines with contour lines drawn at an interval in accordance with the following:

Existing Contours	USGS 1": 2000' Topographical Sheets
Proposed Contours	1" : 400' Centerline Profile

39 Use of alternative BMPs whose performance has been documented to be equivalent to or superior to conventional BMPs as certified by a Design Professional (unless disapproved by EPD or the Georgia Soil and Water Conservation Commission). Please refer to the Alternative BMP Guidance Document found at www.gaswcc.org.

40 Use of alternative BMP for application to the Equivalent BMP List. Please refer to Appendix A-2 of the Manual for Erosion & Sediment Control in Georgia 2016 Edition.*

41 Delineation of the applicable 25-foot or 50-foot undisturbed buffers adjacent to State waters and any additional buffers required by the Local Issuing Authority. Clearly note and delineate all areas of impact.

42 Delineation of on-site wetlands and all State waters located on and within 200 feet of the project site.

43 Delineation and acreage of contributing drainage basins on the project site.

44 Delineate on-site drainage and off-site watersheds using USGS 1" : 2000' topographical sheets.

45 An estimate of the runoff coefficient or peak discharge flow of the site prior to and after construction activities are completed.

46 Storm-drain pipe and weir velocities with appropriate outlet protection to accommodate discharges without erosion. Identify/Delineate all storm water discharge points.

47 Soil series for the project site and their delineation.

48 The limits of disturbance for each phase of construction.

49 Provide a minimum of 67 cubic yards of sediment storage per acre drained using a temporary sediment basin, retrofitted detention pond, and/or excavated inlet sediment traps for each common drainage location. Sediment storage volume must be in place prior to and during all land disturbance activities until final stabilization of the site has been achieved. A written justification explaining the decision to use equivalent controls when a sediment basin is not attainable must be included in the plan for each common drainage location in which a sediment basin is not provided. A written justification as to why 67 cubic yards of storage is not attainable must also be given. Worksheets from the Manual must be included for structural BMPs and all calculations used by the design professional to obtain the required sediment storage when using equivalent controls. When discharging from sediment basins and impoundments, permittees are required to utilize outlet structures that withdraw water from the surface, unless infeasible. If outlet structures that withdraw water from the surface are not feasible, a written justification explaining this decision must be included in the plan.

50 Location of Best Management Practices that are consistent with and no less stringent than the Manual for Erosion and Sediment Control in Georgia. Use uniform coding symbols from the Manual, Chapter 6, with legend.

51 Provide detailed drawings for all structural practices. Specifications must, at a minimum, meet the guidelines set forth in the Manual for Erosion and Sediment Control in Georgia.

52 Provide vegetative plan, noting all temporary and permanent vegetative practices. Include species, planting dates and seeding, fertilizer, lime and mulching rates. Vegetative plan shall be site specific for appropriate time of year that seeding will take place and for the appropriate geographic region of Georgia.

*If using this checklist for a project that is less than 1 acre and not part of a common development but within 200 ft of a perennial stream the " checklist items would be N/A.

EFFECTIVE JANUARY 1, 2020



4/11/2020

NV5

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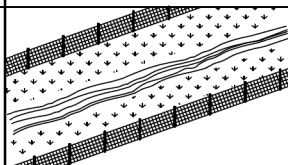

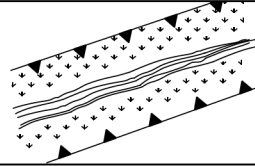

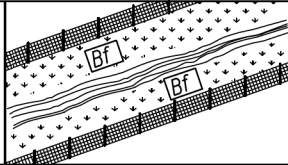
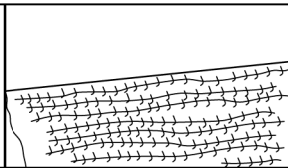
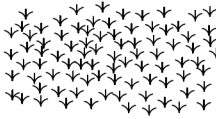
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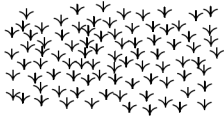


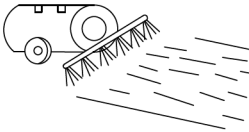
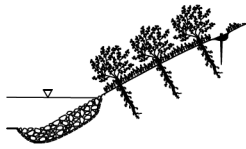

REVISION DATES

ESPCP GENERAL NOTES

ANVIL BLOCK ROAD, PHASE III

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		
VERIFIED:		DATE:		51-004



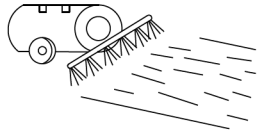

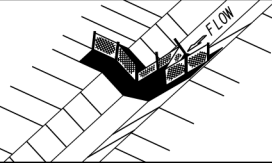

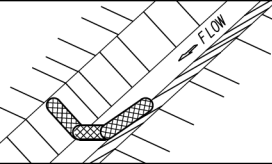

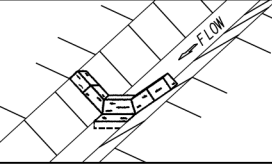

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
	ORANGE BARRIER FENCE		ORANGE BARRIER FENCE DELINEATES ENVIRONMENTALLY SENSITIVE AREAS WHERE THE CONTRACTOR SHALL NOT CLEAR, GRUB, OR PLACE CONSTRUCTION MATERIALS OR EQUIPMENT WITHIN THIS AREA.
	LINE CODE  ORANGE BARRIER FENCE		
ESA	ENVIRONMENTALLY SENSITIVE AREA		AN ENVIRONMENTALLY SENSITIVE AREA (ESA) CONTAINS RESOURCES THAT ARE ENVIRONMENTALLY, CULTURALLY, OR HISTORICALLY SENSITIVE. ESAs INCLUDE, BUT ARE NOT LIMITED TO: STATE WATER BUFFERS, HISTORIC SITES, ARCHAEOLOGICAL SITES, AND PROTECTED ANIMAL AND PLANT SPECIES HABITATS. IF WORK IS AUTHORIZED IN THIS AREA, THE WORK MUST BE PERFORMED IN ACCORDANCE WITH SECTION 107 AND ANY OTHER APPLICABLE SPECIAL PROVISIONS AND APPLICABLE PLAN NOTES.
	LINE CODE  ESA-25' (OR 50')STREAM BUFFER, ETC.		
<div>Bf</div>	BUFFER ZONE		A STRIP OF UNDISTURBED ORIGINAL VEGETATION, ENHANCED OR RESTORED EXISTING VEGETATION, OR THE RE-ESTABLISHMENT OF VEGETATION SURROUNDING AN AREA OF DISTURBANCE OR BORDERING STREAMS, PONDS, WETLANDS, LAKES, AND COASTAL WATERS. WHEN NECESSARY, BUFFER ZONES ARE TO BE PROTECTED BY ORANGE BARRIER FENCE.
	SYMBOL <div>Bf</div>		
<div>Ds1</div>	MULCH SECTION 163		THIS IS AN APPLICATION OF STRAW MULCH USED TO REDUCE SOIL EROSION AND STABILIZE THE SOIL. IT IS USED TO CONTROL EROSION IN AREAS WHERE PERMANENT VEGETATION IS OUT OF SEASON OR TO TEMPORARILY STABILIZE AREAS PRIOR TO FINAL GRADING. MULCHING REQUIREMENTS ARE ADDRESSED BY STANDARD SPECIFICATIONS AND/OR THE PROJECT ENGINEER. THE BMP SYMBOL FOR APPLICABLE AREAS AND/OR A NOTE SHALL BE INCLUDED ON APPLICABLE SHEETS IN SECTION 54.
	SYMBOL <div>Ds1</div>		
<div>Ds2</div>	TEMPORARY GRASSING SECTION 163,700		THE SOWING OF A QUICK GROWING SPECIES OF GRASS SUITABLE TO THE AREA AND SEASON. IT IS TYPICALLY USED TO CONTROL EROSION IN AREAS LONGER THAN MULCHING IS EXPECTED TO LAST. TEMPORARY GRASSING SHOULD BE USED ON ALL PROJECTS ACCORDING TO THE STANDARD SPECIFICATIONS. THE BMP SYMBOL FOR APPLICABLE AREAS AND/OR A NOTE SHALL BE INCLUDED ON APPLICABLE SHEETS IN SECTION 54.
	SYMBOL <div>Ds2</div>		

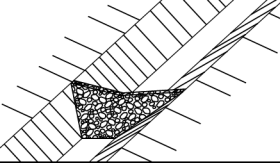

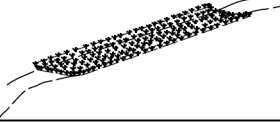
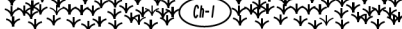
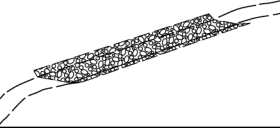
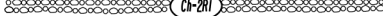
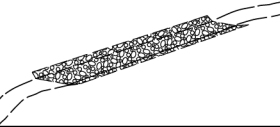
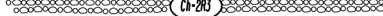
CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Ds3	PERMANENT GRASSING SECTION 700		THE SOWING OF PERMANENT VEGETATION, SUCH AS GRASS, SUITABLE TO THE AREA AND SEASON. PERMANENT VEGETATION SHALL BE USED ON ALL PROJECTS ACCORDING TO THE STANDARD SPECIFICATION. THE BMP SYMBOL FOR APPLICABLE AREAS AND/OR A NOTE SHALL BE INCLUDED ON APPLICABLE SHEETS IN SECTION 54.
	SYMBOL <div>Ds3</div>		
Ds4	SODDING CONSTRUCTION DETAIL D-54 SECTION 700, 890		THE INSTALLATION OF A SPECIES OF GRASS SODDING SUITABLE TO THE AREA AND SEASON TO PROVIDE IMMEDIATE PERMANENT VEGETATION. SODDING MAY BE SHOWN FOR HIGHLY SENSITIVE AREAS, TO IMPROVE AESTHETICS, OR FOR SPECIAL PLANTING REQUIREMENTS ON THE BASIS OF ENVIRONMENTAL COMMITMENTS OR LANDSCAPING REQUIREMENTS. THE BMP PATTERN FOR APPLICABLE AREAS AND/OR A NOTE SHALL BE INCLUDED ON APPLICABLE SHEETS IN SECTION 54.
	PATTERN 		
F1-Co	FLOCCULANTS COAGULANTS SECTION 163,700, 895		FLOCCULANTS AND COAGULANTS ARE USED TO SETTLE SUSPENDED SEDIMENT, HEAVY METALS, AND HYDROCARBONS (TSS) IN SLOW MOVING RUNOFF FROM CONSTRUCTION SITES FOR WATER CLARIFICATION. ANIONIC POLYACRYLAMIDES (PAM) MAY BE USED IN CONJUNCTION WITH BMPs WITHIN CHANNELS UPSTREAM OF A POST-CONSTRUCTION POND, TEMPORARY SEDIMENT BASIN, OR TEMPORARY SEDIMENT TRAP. FLOCCULANTS SHALL NOT BE USED DOWNSTREAM OF AFOREMENTIONED BMPs! FLOCCULANTS/COAGULANTS ARE TO BE SHOWN ON PLANS WITH APPLICABLE BMP IF NEEDED. PAYMENT FOR PAM AS A FLOCCULANT WILL BE INCLUDED IN THE PRICE FOR THE INSTALLATION AND/OR MAINTENANCE OF THE BMP IT IS USED IN CONJUNCTION WITH. NO SEPARATE PAYMENT WILL BE MADE.
	SYMBOL <div>F1-Co</div> POLYACRYLAMIDE		
Sb	STREAMBANK STABILIZATION SECTION 702		STREAMBANK STABILIZATION IS THE USE OF READILY AVAILABLE NATIVE PLANT MATERIALS TO MAINTAIN AND ENHANCE STREAMBANKS, OR TO PREVENT, OR RESTORE AND REPAIR SMALL STREAMBANK EROSION PROBLEMS. STREAMBANK STABILIZATION AREAS SHOULD BE SHOWN ON THE PLANS WHEN APPLICABLE TO THE PROJECT. REFER TO THE PROJECT'S STREAM AND STREAM BUFFER MITIGATION PLANS FOR PLANT SPECIES, LOCATIONS, AND OTHER PLANTING DETAILS.
	PATTERN 		

NOTE:

- DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
- FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".

REVISION DATES			EROSION CONTROL LEGEND			
			UNIFORM CODE SHEET			
			ANVIL BLOCK ROAD, PHASE III			
			CHECKED:	DATE:	DRAWING No.	
			BACKCHECKED:	DATE:		
			CORRECTED:	DATE:		
			VERIFIED:	DATE:	52-0001	

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Ss	SLOPE STABILIZATION CONSTRUCTION DETAIL D-35 SECTION 716		SLOPE STABILIZATION (EROSION CONTROL MATTING) IS A PROTECTIVE COVERING USED TO PREVENT EROSION AND ESTABLISH TEMPORARY OR PERMANENT VEGETATION ON STEEP SLOPES, SHORE LINES, OR CHANNELS. SLOPE STABILIZATION MAY BE A ROLLED EROSION CONTROL PRODUCT (RECP) OR A HYDRAULIC EROSION CONTROL PRODUCT (HECP). SLOPE STABILIZATION SHALL BE USED ON ALL CUT OR FILL SLOPES OF 2.5:1 OR STEEPER AND WITHIN 50 FEET OF ALL CROSS DRAINS AND CULVERTS. NOTE: ONLY COCONUT FIBER BLANKET OR WOOD FIBER BLANKET SHALL BE USED AS SLOPE STABILIZATION WITHIN BUFFERED AREAS.
		PATTERN 	
Tac	TACKIFIERS SECTION 163, 700, 895		TACKIFIERS HYDRATE IN WATER AND READILY BLEND WITH OTHER SLURRY MATERIALS AND ARE USED TO TIE-DOWN FOR SOIL, COMPOST, SEED, STRAW, HAY OR MULCH. TACKIFIERS REQUIREMENTS, SUCH AS ANIONIC POLYACRYLAMIDES (PAM) ARE ADDRESSED BY STANDARD SPECIFICATIONS AND ARE NOT TYPICALLY SHOWN ON THE PLANS. PAM IS TYPICALLY USED BY THE CONTRACTOR FOR TEMPORARY OR PERMANENT GRASSING. REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR CRITERIA.
		SYMBOL  POLYACRYLAMIDE	
Cd-F	FABRIC CHECK DAM CONSTRUCTION DETAIL D-24D SECTION 171		A CHECK DAM COMPOSED OF SYNTHETIC FIBER FABRIC, WIRE REINFORCED, POST, OVERFLOW WEIR, AND TURF REINFORCEMENT MATTING (TRM) SPLASHPAD PLACED IN DITCHES IN A SPECIAL CONFIGURATION WHICH CONTROLS ENERGY DISSIPATION AND FILTRATION OF STORM WATER. SEE CONSTRUCTION DETAIL D-24D FOR ADDITIONAL INFORMATION AND SPACING REQUIREMENTS. THIS ITEM IS SUITABLE FOR USE IN ROADSIDE DITCHES THAT ARE PART OF INFRASTRUCTURE CONSTRUCTION PROJECTS AND WITHIN THE CLEAR ZONE. IF THIS ITEM IS USED IN AN AREA WITH FLOWS GREATER THAN 2.0-CFS OR WITHOUT A SEDIMENT BASIN, A MINIMUM OF ONE ROCK FILTER DAM SHALL BE USED AT THE DOWNSTREAM DISCHARGE POINT.
		SYMBOL 	
Cd-Fs	COMPOST FILTER SOCK CHECK DAM CONSTRUCTION DETAIL D-52 SECTION 163		A COMPOST FILTER SOCK CHECK DAM IS COMPOSED OF A PHOTODEGRADABLE OR BIODEGRADABLE KNITTED MESH MATERIAL CONTAINING A WEED FREE FILLER MATERIAL DERIVED FROM A WELL-DECOMPOSED SOURCE OF ORGANIC MATTER. THEY SHALL BE PROPERLY STAKED FOR DITCH APPLICATIONS. REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR MATERIAL SPECIFICATIONS. IF THIS ITEM IS USED IN AN AREA WITH FLOWS GREATER THAN 2.0-CFS OR WITHOUT A SEDIMENT BASIN, A MINIMUM OF ONE ROCK FILTER DAM SHALL BE USED AT THE DOWNSTREAM DISCHARGE POINT.
		SYMBOL 	
Cd-Hb	BALED STRAW CHECK DAM CONSTRUCTION DETAIL D-52 SECTION 163		A BALE STRAW CHECK DAM IS COMPOSED OF BALES PREFERABLY BOUND WITH WIRE OR NYLON INSTEAD OF TWINE. BALES SHOULD BE PLACED IN ROWS WITH BALE ENDS TIGHTLY ABUTTING ADJACENT BALES. THE DOWNSTREAM ROW OF BALES SHALL BE PLACED IN A TRENCH TO ALLOW THE TOP OF THE BALE'S LONG, WIDE SIDE TO BE LEVEL WITH THE GROUND AS A NON-ERODIBLE SPLASH PAD. PROPER STAKING IS ALSO REQUIRED FOR DITCH APPLICATIONS. IF THIS ITEM IS USED IN AN AREA WITH FLOWS GREATER THAN 2.0-CFS OR WITHOUT A SEDIMENT BASIN, A MINIMUM OF ONE ROCK FILTER DAM SHALL BE USED AT THE DOWNSTREAM DISCHARGE POINT.
		SYMBOL 	

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Cd-S	STONE CHECK DAM OR SANDBAG CHECK DAM CONSTRUCTION DETAIL D-56 SECTION 163, 603		STONE CHECK DAMS ARE CONSTRUCTED OF TYPE-3 RIP-RAP WITH GEOTEXTILE UNDERLINER. STONE CHECK DAMS ARE PREFERRED IN ROADWAY DITCHES OUTSIDE THE CLEAR ZONE. CONSIDERATION SHOULD BE GIVEN TO USING OTHER APPROPRIATE CHECK DAMS AND/OR BMPs WITHIN THE CLEAR ZONE. SANDBAG CHECK DAMS ARE RECOMMENDED IN CONCRETE LINED CHANNELS FOR TEMPORARY VELOCITY CONTROL ONLY. ENSURE DISCHARGE POINT IS PROPERLY STABILIZED AND INCLUDE APPROPRIATE BMPs FOR SEDIMENT STORAGE UPSTREAM AND/OR DOWNSTREAM OF CONCRETE LINED CHANNELS. IF THIS ITEM IS USED IN AN AREA WITH FLOWS GREATER THAN 2.0-CFS OR WITHOUT A SEDIMENT BASIN, A MINIMUM OF ONE ROCK FILTER DAM SHALL BE USED AT THE DOWNSTREAM DISCHARGE POINT.
		SYMBOL 	
Ch-I	VEGETATED CHANNEL STABILIZATION SECTION 700		A NEW OR EXISTING CHANNEL MAY BE LINED WITH PERMANENT VEGETATION ONLY FOR VELOCITIES UP TO 5.0 fps. THIS MEASURE SHALL BE DESIGNED IN ACCORDANCE WITH THE GDOT CHANNEL LINING DESIGN PROGRAM. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED. TYPICALLY NOT SHOWN IN PLANS.
		LINE CODE 	
Ch-2R1	CHANNEL STABILIZATION RIP-RAP, TYPE 1 CONSTRUCTION DETAIL D-49 SECTION 603		THIS ITEM CONSISTS OF LINING A CHANNEL WITH TYPE 1 RIP-RAP 24" THICK (UNLESS SPECIFIED OTHERWISE) PLACED ON TOP OF A GEOTEXTILE UNDERLINER. THE RIP-RAP SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH "Dp" RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED. "Dp" SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
		LINE CODE 	
Ch-2R3	CHANNEL STABILIZATION RIP-RAP, TYPE 3 CONSTRUCTION DETAIL D-49 SECTION 603		THIS ITEM CONSISTS OF LINING A CHANNEL WITH TYPE 3 RIP-RAP 24" THICK (UNLESS SPECIFIED OTHERWISE) PLACED ON TOP OF A GEOTEXTILE UNDERLINER. THE RIP-RAP SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH "Dp" RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED. "Dp" SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
		LINE CODE 	

NOTE:

- DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
- FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".

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REVISION DATES

EROSION CONTROL LEGEND

UNIFORM CODE SHEET
ANVIL BLOCK ROAD, PHASE III

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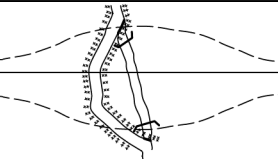
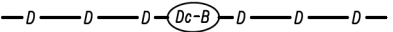
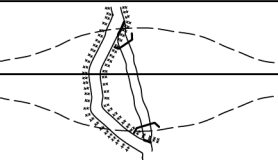

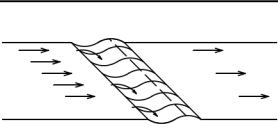
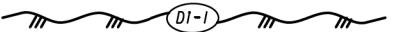
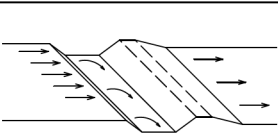
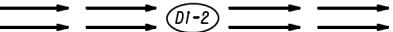
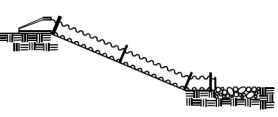

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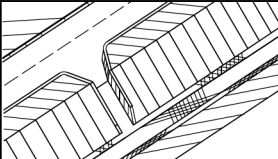
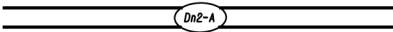
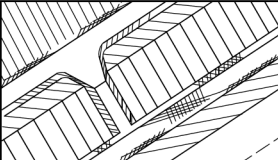

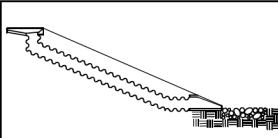

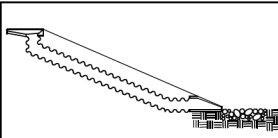

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Ch-2T1	TURF REINFORCEMENT MAT (TRM) CONSTRUCTION DETAIL D-35 SECTION 711		THIS THREE DIMENSIONAL EROSION CONTROL MAT IS USED IN CONJUNCTION WITH PERMANENT VEGETATION IN CHANNELS TO STABILIZE THE SOIL BY REINFORCING THE GRASS ROOTS TO PROVIDE LONG-TERM PROTECTION FOR SHEAR STRESSES 0-2 psf. THE TRM SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH "Dp" RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM.
	LINE CODE		"Dp" SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
Ch-2T2	TURF REINFORCEMENT MAT (TRM) CONSTRUCTION DETAIL D-35 SECTION 711		THIS THREE DIMENSIONAL EROSION CONTROL MAT IS USED IN CONJUNCTION WITH PERMANENT VEGETATION IN CHANNELS TO STABILIZE THE SOIL BY REINFORCING THE GRASS ROOTS TO PROVIDE LONG-TERM PROTECTION FOR SHEAR STRESSES 0-4 psf. THE TRM SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH "Dp" RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM.
	LINE CODE		"Dp" SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
Ch-2T3	TURF REINFORCEMENT MAT (TRM) CONSTRUCTION DETAIL D-35 SECTION 711		THIS THREE DIMENSIONAL EROSION CONTROL MAT IS USED IN CONJUNCTION WITH PERMANENT VEGETATION IN CHANNELS TO STABILIZE THE SOIL BY REINFORCING THE GRASS ROOTS TO PROVIDE LONG-TERM PROTECTION FOR SHEAR STRESSES 0-6 psf. THE TRM SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH "Dp" RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM.
	LINE CODE		"Dp" SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
Ch-2T4	TURF REINFORCEMENT MAT (TRM) CONSTRUCTION DETAIL D-35 SECTION 711		THIS THREE DIMENSIONAL EROSION CONTROL MAT IS USED IN CONJUNCTION WITH PERMANENT VEGETATION IN CHANNELS TO STABILIZE THE SOIL BY REINFORCING THE GRASS ROOTS TO PROVIDE LONG-TERM PROTECTION FOR SHEAR STRESSES 0-8 psf. THE TRM SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH "Dp" RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM.
	LINE CODE		"Dp" SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
Ch-2T5	TURF REINFORCEMENT MAT (TRM) CONSTRUCTION DETAIL D-35 SECTION 711		THIS THREE DIMENSIONAL EROSION CONTROL MAT IS USED IN CONJUNCTION WITH PERMANENT VEGETATION IN CHANNELS TO STABILIZE THE SOIL BY REINFORCING THE GRASS ROOTS TO PROVIDE LONG-TERM PROTECTION FOR SHEAR STRESSES 0-10 psf. THE TRM SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH "Dp" RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM.
	LINE CODE		"Dp" SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Ch-2T6	TURF REINFORCEMENT MAT (TRM) CONSTRUCTION DETAIL D-35 SECTION 711		THIS THREE DIMENSIONAL EROSION CONTROL MAT IS USED IN CONJUNCTION WITH PERMANENT VEGETATION IN CHANNELS TO STABILIZE THE SOIL BY REINFORCING THE GRASS ROOTS TO PROVIDE LONG-TERM PROTECTION FOR SHEAR STRESSES 0-12 psf. THE TRM SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH "Dp" RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM.
	LINE CODE		"Dp" SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
Ch-3	CONCRETE CHANNEL STABILIZATION CONSTRUCTION DETAIL D-10, D-49 SECTION 441		CHANNELS ARE LINED WITH CONCRETE FOR VELOCITIES >10 fps. THIS ITEM CONSISTS OF CONSTRUCTING A 4" THICK CONCRETE CHANNEL. THE CONCRETE SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH "Dp" RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM.
	LINE CODE		"Dp" SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN. RIP-RAP SHOULD BE USED TO DISSIPATE ENERGY DOWNSTREAM OF CONCRETE LINED CHANNELS.
Co	CONSTRUCTION EXIT CONSTRUCTION DETAIL D-41 SECTION 163,800		A CONSTRUCTION EXIT IS A STONE STABILIZED PAD THAT REDUCES OR ELIMINATES THE TRANSPORT OF MUD FROM CONSTRUCTION AREAS ONTO PUBLIC ROADS BY EQUIPMENT OR RUNOFF. BEST USED AT ACCESS POINTS, I.E. NEW LOCATION PROJECTS, BORROW PITS, WASTE PITS, ACCESS ROADS, ETC. SHOULD BE MINIMUM 20' WIDE, 50' LONG, 6" THICK, AND REQUIRES A GEOTEXTILE UNDERLINER. ON SITES WHERE THE GRADE TOWARD A PAVED AREA IS GREATER THAN 2%, A FULL WIDTH DIVERSION RIDGE 6" TO 8" HIGH WITH 3:1 SLOPES SHALL BE CONSTRUCTED APPROXIMATELY 15' UPSTREAM OF PAVED AREA. A TIRE WASHING AREA TO REMOVE MUD MAY ALSO BE REQUIRED PRIOR TO ENTRANCE ONTO PUBLIC ROADWAYS.
	SYMBOL		ALL CONSTRUCTION EXIT REQUIREMENTS ARE INCLUDED IN THE PRICE OF THE CONSTRUCTION EXIT.
Dc-A	STREAM DIVERSION CHANNEL GEOTEXTILE, POLYETHYLENE FILM SECTION 163		A TEMPORARY CHANNEL CONSTRUCTED TO CONVEY FLOW AROUND A CONSTRUCTION SITE WHILE A PERMANENT DRAINAGE STRUCTURE IS BEING CONSTRUCTED IN A NATURAL STREAM. THIS IS A MEASURE USED TO PROTECT STREAM BEDS FROM EROSION. LINE THE CHANNEL WITH GEOTEXTILE OR POLYETHYLENE FILM. INSTALL TWO ROWS OF Sd1-S PARALLEL TO THE CHANNEL TO PREVENT SEDIMENT LADEN RUNOFF FROM ENTERING THE STREAM. THE SIZE OF THE CHANNEL WILL DEPEND ON THE DISCHARGE, CHANNEL GEOMETRY, CHANNEL SLOPE AND ROUGHNESS. IT IS ACCEPTABLE FOR VELOCITIES BETWEEN 0 - 2.5 fps.
	LINE CODE		THE DRAINAGE AREA SHALL BE NOT GREATER THAN 1 SQUARE MILE. CONSTRUCTION OF THE DIVERSION CHANNEL IS INCLUDED IN THE COST OF THE STRUCTURE.

NOTE:

- DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
- FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Dc-B	STREAM DIVERSION CHANNEL GEOTEXTILE ONLY SECTION 163		A TEMPORARY CHANNEL CONSTRUCTED TO CONVEY FLOW AROUND A CONSTRUCTION SITE WHILE A PERMANENT DRAINAGE STRUCTURE IS BEING CONSTRUCTED IN A NATURAL STREAM. THIS IS A MEASURE USED TO PROTECT STREAM BEDS FROM EROSION. LINE THE CHANNEL WITH GEOTEXTILE ONLY. INSTALL TWO ROWS OF Sd1-S PARALLEL TO THE CHANNEL TO PREVENT SEDIMENT LADEN RUNOFF FROM ENTERING THE STREAM. THE SIZE OF THE CHANNEL WILL DEPEND ON THE DISCHARGE, CHANNEL GEOMETRY, CHANNEL SLOPE AND ROUGHNESS. IT IS ACCEPTABLE FOR VELOCITIES BETWEEN 2.5 - 9.0 fps.
	LINE CODE 		THE DRAINAGE AREA SHALL BE NOT GREATER THAN 1 SQUARE MILE. CONSTRUCTION OF THE DIVERSION CHANNEL IS INCLUDED IN THE COST OF THE STRUCTURE.
Dc-C	STREAM DIVERSION CHANNEL RIP-RAP & GEOTEXTILE SECTION 163		A TEMPORARY CHANNEL CONSTRUCTED TO CONVEY FLOW AROUND A CONSTRUCTION SITE WHILE A PERMANENT DRAINAGE STRUCTURE IS BEING CONSTRUCTED IN A NATURAL STREAM. THIS IS A MEASURE USED TO PROTECT STREAM BEDS FROM EROSION. LINE THE CHANNEL WITH RIP-RAP AND GEOTEXTILE. INSTALL TWO ROWS OF Sd1-S PARALLEL TO THE CHANNEL TO PREVENT SEDIMENT LADEN RUNOFF FROM ENTERING THE STREAM. THE SIZE OF THE CHANNEL WILL DEPEND ON THE DISCHARGE, CHANNEL GEOMETRY, CHANNEL SLOPE AND ROUGHNESS. IT IS ACCEPTABLE FOR VELOCITIES BETWEEN 9.0 - 13.0 fps.
	LINE CODE 		THE DRAINAGE AREA SHALL BE NOT GREATER THAN 1 SQUARE MILE. CONSTRUCTION OF THE DIVERSION CHANNEL IS INCLUDED IN THE COST OF THE STRUCTURE.
D1-1	DIVERSION BERM CONSTRUCTION DETAIL D-47 SECTION 205		A NON-DESIGNED TEMPORARY EARTHEN BERM WITH A COMPACTED SUPPORTING RIDGE ON THE LOWER SIDE TO BE USED AT THE EDGE OF EMBANKMENT DURING THE GRADING OPERATION. THE BERMS ARE ALSO CONSTRUCTED ABOVE, ACROSS OR BELOW A SLOPE TO REDUCE THE LENGTH OF A SLOPE. THEY ARE USED TO INTERCEPT RUNOFF, PREVENTING SLOPE EROSION AND TO DIRECT THE RUNOFF TO A STABLE OUTLET, DOWN DRAINS 'Dn1' OR CATCHMENT AREAS AND ON ALL GRADING PROJECTS.
	LINE CODE 		
D1-2	DIVERSION CHANNEL SECTION 205		A DESIGNED TEMPORARY OR PERMANENT CHANNEL WITH A COMPACTED SUPPORTING RIDGE ON THE LOWER SIDE TO DIVERT OFFSITE RUNOFF AWAY FROM DISTURBED AREAS WITHIN THE PROJECT AREA. CHANNEL FOR OFFSITE RUNOFF SHALL BE STABILIZED WITH APPROPRIATE CHANNEL STABILIZATION.
	LINE CODE 		REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR DESIGN CRITERIA. A DIVERSION CHANNEL DETAIL MUST ALSO BE PROVIDED IN THE ESPCP. RUNOFF FROM DISTURBED AREAS WITHIN THE PROJECT AREA SHALL NOT BE ALLOWED TO CONVERGE WITH OFFSITE RUNOFF WITHIN THIS DIVERSION.
Dn1	TEMPORARY DOWNDRAIN STRUCTURE FLEXIBLE CONSTRUCTION DETAIL D-19 SECTION 163		A TEMPORARY PIPE SLOPE DRAIN IS A PLASTIC FLEXIBLE PIPE TO CARRY WATER FROM THE WORK AREA TO A LOWER ELEVATION. TEMPORARY SLOPE DRAINS SHOULD BE PLACED AT INTERVALS OF 350 FEET ON 0% - 2% GRADES, 200 FEET ON STEEPER GRADES AND MORE FREQUENTLY AS DICTATED BY FIELD CONDITIONS. THE TYPICAL PIPE SIZE IS A CORRUGATED 10". THE PIPE WILL BE ANCHORED WITH STAKES AT INTERVALS NOT TO EXCEED 10'.
	LINE CODE 		THE OUTLET AREA SHALL BE STABILIZED FOR VELOCITY DISSIPATION AND EROSION CONTROL.

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Dn2-A	PERMANENT DOWNDRAIN STRUCTURE CONCRETE CONSTRUCTION DETAIL D-9 SECTION 441		A CONCRETE FLUME TYPE 'A' IS USED TO DIRECT SURFACE RUNOFF DOWN A ROADWAY SLOPE INTO ANOTHER FORM OF CONTROL. IT IS USED IN ALL DEPRESSED AREAS WHERE WATER WILL FLOW DOWN THE SLOPE. IT IS DESIGNED FOR A 25-YEAR STORM AND MUST HAVE SOME FORM OF OUTLET PROTECTION. ADDITIONAL LABELING IS NOT REQUIRED IF SHOWN AS A PERMANENT DRAINAGE STRUCTURE ON THE CONSTRUCTION PLANS. INLETS SHALL BE SPACED ACCORDING TO GDOT GUIDELINES (REGARDING GUTTER SPREAD AND OTHER CRITERIA).
	LINE CODE 		
Dn2-B	PERMANENT DOWNDRAIN STRUCTURE CONCRETE CONSTRUCTION DETAIL D-9 SECTION 441		A CONCRETE FLUME TYPE 'B' IS USED TO DIRECT SURFACE DITCH RUNOFF DOWN A BACK SLOPE INTO ANOTHER FORM OF CONTROL. IT IS USED IN DEPRESSED AREAS WHERE CONCENTRATED OFFSITE WATER REACHES THE CUT SLOPE. IT IS DESIGNED TO SAFELY CONVEY WATER DOWN THE CUT SLOPE. IT IS DESIGNED FOR A 25-YEAR STORM AND MUST HAVE SOME FORM OF OUTLET PROTECTION. ADDITIONAL LABELING IS NOT REQUIRED IF SHOWN AS A PERMANENT DRAINAGE STRUCTURE ON THE CONSTRUCTION PLANS. INLETS SHALL BE SPACED ACCORDING TO GDOT GUIDELINES (REGARDING GUTTER SPREAD AND OR OTHER CRITERIA).
	LINE CODE 		
Dn2-1	PERMANENT DOWNDRAIN STRUCTURE GA. STD 9013 TP1, 9017J TP1, DETAIL D-26 TP1 SECTION 576, 577		CONCRETE DRAIN INLET WITH METAL PIPE IS USED TO DRAIN CURBS, ON A GRADE, DOWN TO A LOWER ELEVATION. THIS IS A PERMANENT STRUCTURE, REQUIRING OUTLET PROTECTION, TEMPORARY AND PERMANENT. INLETS SHALL BE SPACED ACCORDING TO GDOT GUIDELINES (REGARDING GUTTER SPREAD AND OR OTHER CRITERIA).
	LINE CODE 		
Dn2-2	PERMANENT DOWNDRAIN STRUCTURE GA. STD 9013 TP2, 9017J TP2, DETAIL D-26 TP2 SECTION 576, 577		CONCRETE DRAIN INLET AND METAL PIPE IS USED TO DRAIN CURB, IN A SAG, DOWN TO A LOWER ELEVATION. THIS IS A PERMANENT STRUCTURE, REQUIRING OUTLET PROTECTION, TEMPORARY AND PERMANENT. INLETS SHALL BE SPACED ACCORDING TO GDOT GUIDELINES (REGARDING GUTTER SPREAD AND OR OTHER CRITERIA).
	LINE CODE 		

NOTE:

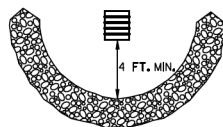

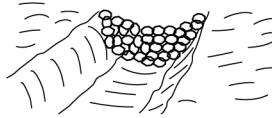





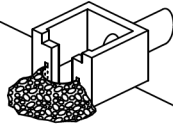

- DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
- FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".

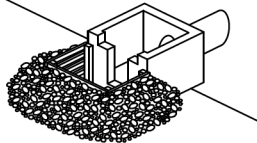
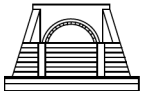


REVISION DATES

EROSION CONTROL LEGEND

UNIFORM CODE SHEET
ANVIL BLOCK ROAD, PHASE III

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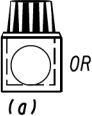



CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Fr	FILTER RING CONSTRUCTION DETAIL D-46 SECTION 163		A TEMPORARY STONE BARRIER CONSTRUCTED AT DRAINAGE STRUCTURE INLETS AND POST-CONSTRUCTION POND OUTLETS. IT REDUCES RUNOFF VELOCITY AND HELPS PREVENT SEDIMENT FROM LEAVING SITE PRIOR TO PERMANENT STABILIZATION OF THE DISTURBED AREA. REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR ADDITIONAL INFORMATION ON USAGE.
	SYMBOL 		
Rd	ROCK FILTER DAM CONSTRUCTION DETAIL D-43 SECTION 163, 603		ROCK FILTER DAMS ARE CONSTRUCTED OF TYPE 3 STONE RIP-RAP FACED WITH *57 STONE ON THE UPSTREAM SIDE. THEY ARE PLACED ACROSS DRAINAGEWAYS WHICH DRAIN 50 ACRES OR LESS. GEOTEXTILE UNDERLINER SHALL BE USED WHEN PLACING ROCK FILTER DAMS. THE DAM SHOULD NOT BE HIGHER THAN THE CHANNEL BANKS. ROCK FILTER DAMS SHOULD BE USED IN DITCHES PRIOR TO DISCHARGING INTO STREAMS, WETLANDS, OPEN-WATERS, OR OTHER ESAs.
	SYMBOL 		
Rd-B	STONE FILTER BERM CONSTRUCTION DETAIL D-50 SECTION 163, 603		STONE FILTER BERMS ARE CONSTRUCTED SIMILAR TO ROCK FILTER DAMS FOR A LINEAR APPLICATION. THEY ARE CONSTRUCTED OF TYPE-3 STONE RIP-RAP FACED WITH *57 STONE ON THE UPSTREAM SIDE. GEOTEXTILE UNDERLINER SHALL BE USED WHEN PLACING STONE FILTER BERMS. STONE FILTER BERMS ARE IDEAL ALONG THE PERIMETER FOR SHEET FLOW AND/OR SHALLOW CONCENTRATED FLOW TO A COMMON LOW AREA WHERE PERIMETER SILT FENCE ALONE MAY BE INSUFFICIENT. THERE IS NO WELL-DEFINED CHANNEL FOR A STANDARD ROCK FILTER DAM, AND/OR CONSTRUCTING A ROCK OUTLET TEMPORARY SEDIMENT TRAP IS NOT APPLICABLE.
	LINE CODE 		
Rp	RIP-RAP SECTION 603		RIP-RAP IS A FLEXIBLE PERMANENT BLANKET FOR PROTECTION OF FILL SLOPES AND BRIDGE END ROLLS. RIP-RAP TYPE-1 SHOULD BE PLACED ON TOP OF A GEOTEXTILE UNDERLINER AT A MINIMUM 24" THICKNESS OR AS INDICATED ON THE PLANS. RIP-RAP MAY ALSO BE USED AT DRAINAGE STRUCTURE OUTLETS WITHIN THE RIGHT-OF-WAY. HOWEVER, APPROPRIATE OUTLET PROTECTION SHOULD BE PROVIDED AT OUTFALLS. REFER TO STORM DRAIN OUTLET PROTECTION FOR ADDITIONAL INFORMATION ON USING RIP-RAP AT OUTFALLS.
	PATTERN 		
Rt-P	RETROFITTING PERFORATED HALF-ROUND PIPE CONSTRUCTION DETAIL D-44 SECTION 163		A PERFORATED HALF-ROUND PIPE WITH STONE FILTER PLACED IN FRONT OF A PERMANENT STORMWATER DETENTION POND OUTLET STRUCTURE TO SERVE AS A TEMPORARY SEDIMENT FILTER. SHOULD BE USED ONLY IN DETENTION PONDS WITH LESS THAN 30 ACRES TOTAL DRAINAGE AREA. SHALL ONLY BE USED IN DETENTION BASINS LARGE ENOUGH TO STORE 67 CUBIC YARDS OF SEDIMENT PER ACRE OF DISTURBED AREA. REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR DESIGN CRITERIA.
	SYMBOL 		

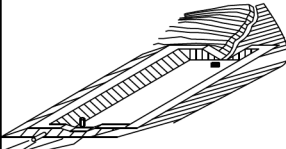
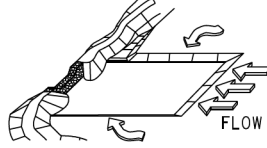
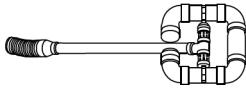
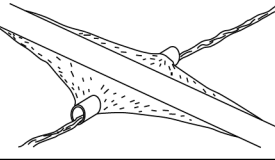
CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Rt-B	RETROFITTING SLOTTED BOARD DAM CONSTRUCTION DETAIL D-45 SECTION 163		A SLOTTED BOARD DAM CONSISTS OF STONE AND/OR FILTER FABRIC AND BOARDS WITH 0.5' - 1.0' SPACING TO SERVE AS A TEMPORARY SEDIMENT FILTER. PERMANENT STORMWATER DETENTION POND OUTLET: -DRAINAGE AREA UP TO 100 ACRES -DETENTION BASINS LARGE ENOUGH TO STORE 67 CUBIC YARDS OF SEDIMENT PER ACRE OF DISTURBED AREA ROADWAY DRAINAGE STRUCTURE: -OPEN END PIPES, WINGED HEADWALLS, OR CONCRETE WEIR OUTLETS WITH DRAINAGE AREA LESS THAN 30 ACRES REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR DESIGN CRITERIA.
	SYMBOL <div>Rt-B</div>		
Rt-Sg1 Rt-Sg2 Rt-Sg3	RETROFITTING SILT CONTROL GATES CONSTRUCTION DETAIL D-20 SECTION 163	 FRONT VIEW	A SILT CONTROL GATE CONSISTS OF BOARDS WITHOUT SPACING AND FILTER FABRIC TO BE USED FOR TEMPORARY SEDIMENT STORAGE ON ROADWAY PROJECTS AT THE INLET OF STRUCTURES WITH A DRAINAGE AREA UP TO 50 ACRES. THE DISTURBED AREA WITHIN THE DRAINAGE AREA SHALL NOT EXCEED 5 ACRES. SILT CONTROL GATES SHOULD NOT BE USED ALONE, BUT WITH ANOTHER BMP DOWNSTREAM PRIOR TO DISCHARGE LEAVING PROJECT AREA. DO NOT USE SILT GATES IN STATE WATERS. Rt-Sg1=TYPE 1: USED ON BOX CULVERTS Rt-Sg2=TYPE 2: USED ON STRAIGHT HEADWALLS Rt-Sg3=TYPE 3: USED ON FLARED END SECTIONS AND TAPERED HEADWALLS
	SYMBOL <div>Rt-Sg1</div> <div>Rt-Sg2</div> <div>Rt-Sg3</div>		
SdI-NS	SEDIMENT BARRIER (NON-SENSITIVE) SILT FENCE TYPE A CONSTRUCTION DETAIL D-24 SECTION 171		SEDIMENT BARRIERS MINIMIZE AND PREVENT SEDIMENT CARRIED BY SHEET FLOW FROM LEAVING THE PROJECT AREA BY CAUSING DEPOSITION AND/OR FILTRATION OF SEDIMENT. SILT FENCE USED AS PERIMETER CONTROL SHALL NOT BE INSTALLED ACROSS CONCENTRATED FLOW. TYPE-A SILT FENCE IS TYPICALLY USED IN NON-ENVIRONMENTALLY SENSITIVE AREAS (ESAs) OR IN AREAS WITH FILLS LESS THAN 10'. IT SHOULD BE PLACED A MINIMUM OF 10' FROM CONSTRUCTION LIMITS OR ALONG THE RIGHT-OF-WAY LINE.
	LINE CODE <div>A — A — A — SdI-NS — A — A — A —</div>		
SdI-S	SEDIMENT BARRIER (SENSITIVE) SILT FENCE TYPE C CONSTRUCTION DETAIL D-24 SECTION 171		SEDIMENT BARRIERS MINIMIZE AND PREVENT SEDIMENT CARRIED BY SHEET FLOW FROM LEAVING THE PROJECT AREA BY CAUSING DEPOSITION AND/OR FILTRATION OF SEDIMENT. SILT FENCE USED AS PERIMETER CONTROL SHALL NOT BE INSTALLED ACROSS CONCENTRATED FLOW. TYPE-C SILT FENCE IS TYPICALLY USED IN ENVIRONMENTALLY SENSITIVE AREAS (ESAs) OR IN AREAS WITH FILLS 10' AND GREATER. ALL ENVIRONMENTALLY SENSITIVE AREAS (ESAs) SHALL BE PROTECTED WITH A DOUBLE-ROW OF TYPE-C SILT FENCE REGARDLESS OF FILL HEIGHT. A SINGLE-ROW MAY BE USED FOR OTHER APPLICATIONS. IT SHOULD BE PLACED A MINIMUM OF 10' FROM CONSTRUCTION LIMITS OR ALONG THE RIGHT-OF-WAY LINE.
	LINE CODE <div>C — C — C — SdI-S — C — C — C —</div>		

NOTE:

- DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
- FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".

REVISION DATES			EROSION CONTROL LEGEND			
			UNIFORM CODE SHEET			
			ANVIL BLOCK ROAD, PHASE III			
CHECKED:		DATE:		DRAWING No.		
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CORRECTED:		DATE:				
VERIFIED:		DATE:				

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Sd1-BB	SEDIMENT BARRIER BRUSH BARRIER CONSTRUCTION DETAIL D-24B SECTION 201		THIS ITEM CONSISTS OF INTERMINGLED BRUSH, LOGS, ETC. SO AS NOT TO FORM A SOLID DAM. CONSTRUCTED AT THE TOE OF FILL SLOPES ONLY DURING THE CLEARING AND GRUBBING OPERATION. THE BARRIER SHOULD BE USED AT THE TOE OF FILL SLOPES ON GRADING PROJECTS IN RURAL AREAS WHERE SUFFICIENT RIGHT OF WAY OR EASEMENT IS AVAILABLE (10 FEET OR MORE). THE BARRIER SHOULD RUN ROUGHLY PERPENDICULAR TO THE FLOW OF WATER WHERE THIS DOES NOT CONFLICT WITH RIGHT-OF-WAY OR EASEMENT LIMITS. THEY WILL NOT BE PLACED IN WETLANDS.
	LINE CODE * * * Sd1-BB * * *		TYPICALLY NOT SHOWN ON PLANS. PAYMENT FOR THIS ITEM IS INCLUDED IN THE CLEARING AND GRUBBING COST. NO SEPARATE PAYMENT SHALL BE MADE.
Sd2-B	INLET SEDIMENT TRAP (BAFFLE BOX) CONSTRUCTION DETAIL D-42 SECTION 163		BAFFLE BOX INLET SEDIMENT TRAP USED FOR INLETS RECEIVING HIGH FLOW RATE AND/OR VELOCITY. A GUIDE FOR USE WILL BE FOR AN INLET RECEIVING FLOW RATES 7 cfs AND GREATER.
	SYMBOL Sd2-B		
Sd2-Bg	INLET SEDIMENT TRAP (BLOCK & GRAVEL) CONSTRUCTION DETAIL D-42 SECTION 163		BLOCK AND GRAVEL DROP INLET PROTECTION USED FOR WHERE HEAVY FLOWS ARE EXPECTED AND WHERE OVERFLOW CAPACITY IS NECESSARY TO PREVENT EXCESSIVE PONDING AROUND THE STRUCTURE. CAN BE USED AT CULVERT INLETS. A GUIDE FOR USE WILL BE FOR AN INLET RECEIVING FLOW RATES THAT RANGE FROM 5 - 7 cfs.
	SYMBOL Sd2-Bg		
Sd2-F	INLET SEDIMENT TRAP (FILTER FABRIC) CONSTRUCTION DETAIL D-24C SECTION 163	 OR  OR  (a) (b) (c)	(a) A SEDIMENT BARRIER CONSISTING OF A PREFABRICATED FRAME WITH FILTER FABRIC USED AROUND A DROP INLET OR CATCH BASIN. (b) A SEDIMENT BARRIER CONSISTING OF A PERFORATED METAL STAND PIPE WITH FILTER FABRIC USED AROUND A DROP INLET OR CATCH BASIN. (c) TYPE C SILT FENCE WITH SUPPORTING FRAME CAN BE USED AS AN ALTERNATE TO INLET SEDIMENT TRAP FOR AREAS WITH SLOPES < 5%.
	SYMBOL Sd2-F		THIS ITEM IS USED TO PREVENT SILT FROM ENTERING THE PIPE SYSTEM. SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS. RECOMMENDED FOR INLET RECEIVING FLOW RATES THAT RANGE FROM 0 - 4 cfs.
Sd2-G	INLET SEDIMENT TRAP (GRAVEL) CONSTRUCTION DETAIL D42 SECTION 163		GRAVEL DROP INLET PROTECTION USED WHERE HEAVY CONCENTRATED FLOWS ARE EXPECTED. STONE AND GRAVEL ARE USED TO TRAP SEDIMENT. THE SLOPE TOWARD THE INLET SHALL BE NO MORE THAN 3:1. A GUIDE FOR USE WILL BE FOR AN INLET RECEIVING FLOW RATES THAT RANGE FROM 3 - 5 cfs.
	SYMBOL Sd2-G		

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Sd3	TEMPORARY SEDIMENT BASIN CONSTRUCTION DETAIL D-22A, D-22B SECTION 163		A BASIN CREATED BY EXCAVATING AN AREA, DAMMING CONCENTRATED FLOW, OR A COMBINATION OF BOTH. THE BASIN IS DESIGNED TO STORE 67 CUBIC YARDS OF SEDIMENT PER ACRE OF DRAINAGE AREA. THE DRAINAGE AREA SHOULD NOT EXCEED 150 ACRES. BASINS TYPICALLY CONSISTS OF A DAM, PRINCIPAL SPILLWAY, AND AN EMERGENCY SPILLWAY. A FLOATING SURFACE SKIMMER SHALL BE REQUIRED AS PART OF THE PRINCIPAL SPILLWAY UNLESS INFEASIBLE. SUFFICIENT RIGHT-OF-WAY OR EASEMENT IS NEEDED FOR BASIN CONSTRUCTION AND MAINTENANCE ACCESS.
	SYMBOL Sd3		SEDIMENT BASINS SHALL BE CONSIDERED ON ALL PROJECTS, BUT MAY NOT BE PRACTICAL. BASINS SHOULD BE LOCATED TO MINIMIZE INTERFERENCE WITH CONSTRUCTION ACTIVITIES AND UTILITIES. REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR DESIGN CRITERIA.
Sd4-C	ROCK OUTLET TEMPORARY SEDIMENT TRAP CONSTRUCTION DETAIL D-53 SECTION 163	 FLOW	TEMPORARY POND WITH ROCK OUTLET DESIGNED TO STORE 67 CUBIC YARDS OF SEDIMENT PER DRAINAGE AREA. DRAINAGE AREA SHALL NOT EXCEED 5 ACRES. DISTINGUISHED FROM TEMPORARY SEDIMENT BASIN BY LACK OF PRINCIPAL SPILLWAY. MAXIMUM POND DEPTH FROM BOTTOM OF POND TO EMERGENCY SPILLWAY IS 4 FEET.
	SYMBOL Sd4-C		A TEMPORARY SEDIMENT BASIN SHALL BE EVALUATED PRIOR TO CONSIDERING A TEMPORARY SEDIMENT TRAP. A TEMPORARY SEDIMENT TRAP IS IDEAL FOR SMALL AREAS WITH NO UNUSUAL DRAINAGE FEATURES AND EFFECTIVE AGAINST COARSE SEDIMENT, BUT NOT AGAINST SILT OR CLAY PARTICLES THAT REMAIN SUSPENDED. REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR DESIGN CRITERIA.
Sk	FLOATING SURFACE SKIMMER CONSTRUCTION DETAIL D-22A, D-22B SECTION 163		A BUOYANT DEVICE THAT DRAINS WATER FROM THE SURFACE OF A TEMPORARY SEDIMENT BASIN AT A CONTROLLED FLOW RATE. THE INLET/ORIFICE SIZE IS DESIGNED TO DRAIN THE BASIN WITHIN 24 - 48 HOURS. THE SKIMMER INFORMATION SHALL BE PROVIDED IN CONJUNCTION WITH THE SEDIMENT BASIN INFORMATION IN PLANS. IF A SKIMMER IS INFEASIBLE, THE DESIGNER SHALL PROVIDE A WRITTEN JUSTIFICATION IN THE PLANS.
	SYMBOL Sk		SKIMMERS ARE ATTACHED TO A RISER WITHOUT PERFORATIONS AND ACTS AS THE PRIMARY SPILLWAY. THE SKIMMER BMP SYMBOL SHALL BE SHOWN IN CONJUNCTION WITH THE TEMPORARY SEDIMENT BASIN BMP SYMBOL WHEN APPLICABLE. REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR ADDITIONAL INFORMATION.
Sr	TEMPORARY STREAM CROSSING SECTION 107		A TEMPORARY STRUCTURE INSTALLED ACROSS A FLOWING STREAM OR WATERCOURSE FOR USE BY CONSTRUCTION EQUIPMENT. THIS BMP PROVIDES A MEANS TO CROSS STREAMS OR WATERCOURSES WITHOUT MOVING SEDIMENT INTO STREAMS, DAMAGING THE STREAM BED OR CHANNEL, OR CAUSING FLOODING. THIS BMP SHOULD NOT BE USED ON STREAMS WITH DRAINAGE AREAS GREATER THAN ONE SQUARE MILE, UNLESS SPECIFICALLY DESIGNED TO ACCOMMODATE THE ADDITIONAL DRAINAGE AREA BY THE DESIGN PROFESSIONAL. A CERTIFICATION STATEMENT AND SIGNATURE SHALL ACCOMPANY THE DESIGN.
	SYMBOL Sr		THIS BMP SHALL BE DESIGNED ACCORDING TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA". FOR CONTRACTOR'S USE ONLY!

NOTE:

1. DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
2. FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".

<i>CODE</i>	<i>PRACTICE STD OR DETAIL SPEC. SECT.</i>	<i>DETAIL</i>	<i>DESCRIPTION</i>

1. DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
2. FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".

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GA License # PEF003715, LSF000935
formerly CALYX Engineers & Consultants



BEGIN PROJECT
RATEREE DR.
STA. 10+25.50

FOREST PWY.

OUTFALL
C-2

OUTFALL
POND

INTERSECTION
RATEREE DR. STA. 18+18.51
ANVIL BLOCK RD. STA. 10+00.00

END PROJECT
RATEREE DR.
STA. 18+92.20

ANVIL BLOCK RD.

LIMIT OF CONSTRUCTION
ANVIL BLOCK RD.
STA. 14+40.79

DRAINAGE CALCULATIONS																
OUTFALL ID	OUTFALL TYPE	LOCATION		TOTAL DRAINAGE AREA (AC)	DISTURBED AREA (AC)	Q(50)		Q(100)		V(50)		V(100)		CN PRE	CN POST	AVERAGE OUTFALL CHANNEL SLOPE (%)
		RATEREE DRIVE				CFS		CFS		F/S		F/S				
		STATION	OFFSET/SIDE			PRE	POST	PRE	POST	PRE	POST	PRE	POST			
POND	DETENTION POND	14+26.25	145.75' RT	2.61	0.67	18.07	10.67	19.19	13.10	4.08	3.45	4.15	3.61	80	72	6.70
C-2	MANHOLE	10+74.80	55.91' RT	11.68	1.77	84.56	80.88	88.46	85.75	47.85	45.51	50.06	48.82	85	77	1.78

DISTURBED AREA: 2.43 AC

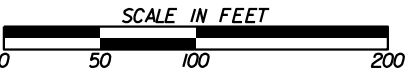
PROJECT TOTAL AREA: 3.51 AC



4/11/2020

N|V|5

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REVISION DATES

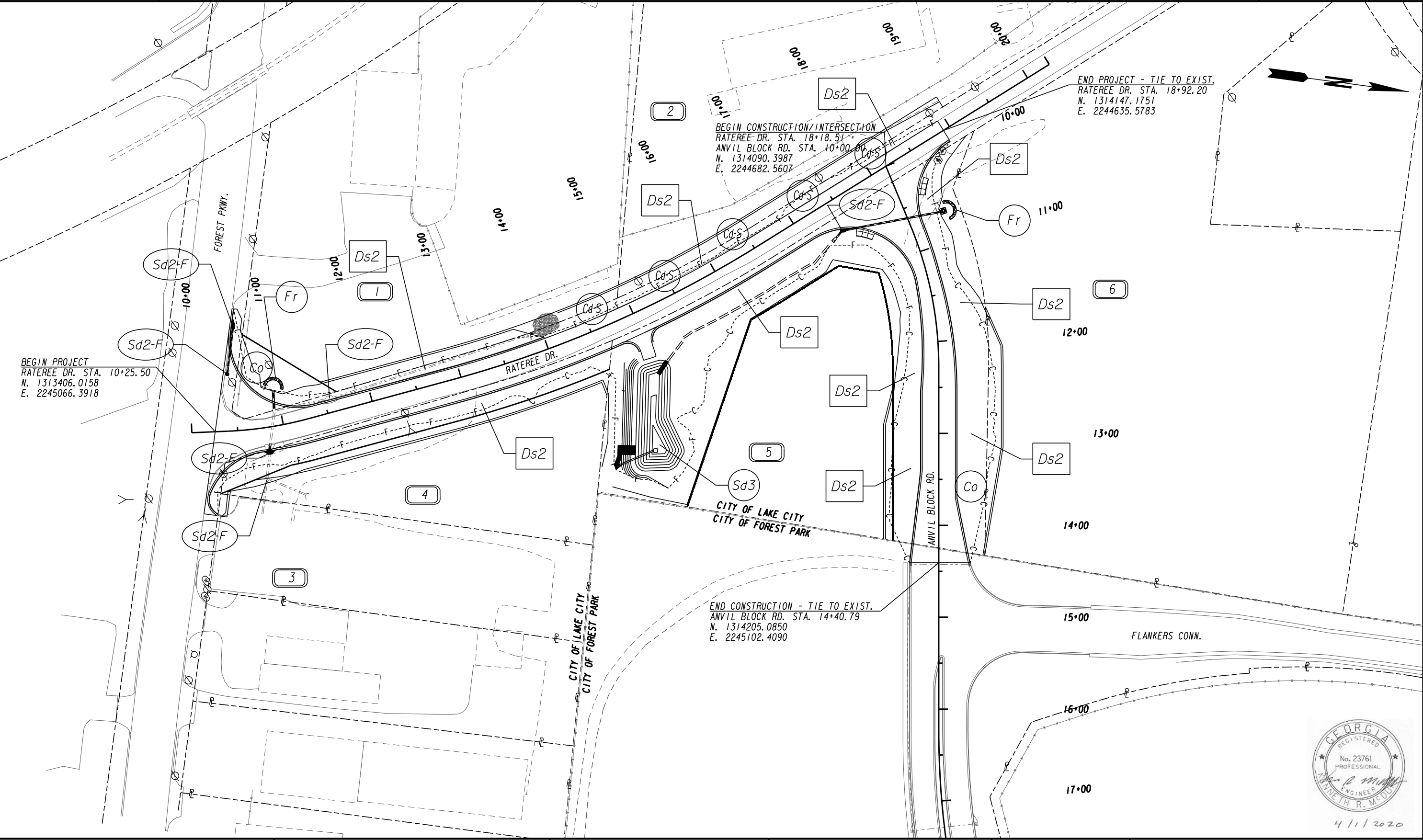
EROSION CONTROL DRAINAGE AREA MAP
ANVIL BLOCK ROAD, PHASE III

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SCALE IN FEET

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BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

NV5

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SCALE IN FEET

0

50

100

200

REVISION DATES

BMP LOCATION DETAILS

ANVIL BLOCK ROAD, PHASE III
INTERMEDIATE PHASE EROSION CONTROL

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54-002

10/23/2015

GPLN



Diagram illustrating a three-layered system with a dashed line labeled P above and solid lines labeled C and F below. The layers are filled with diagonal lines, cross-hatching, and cross-hatching.

SCALE IN FEET

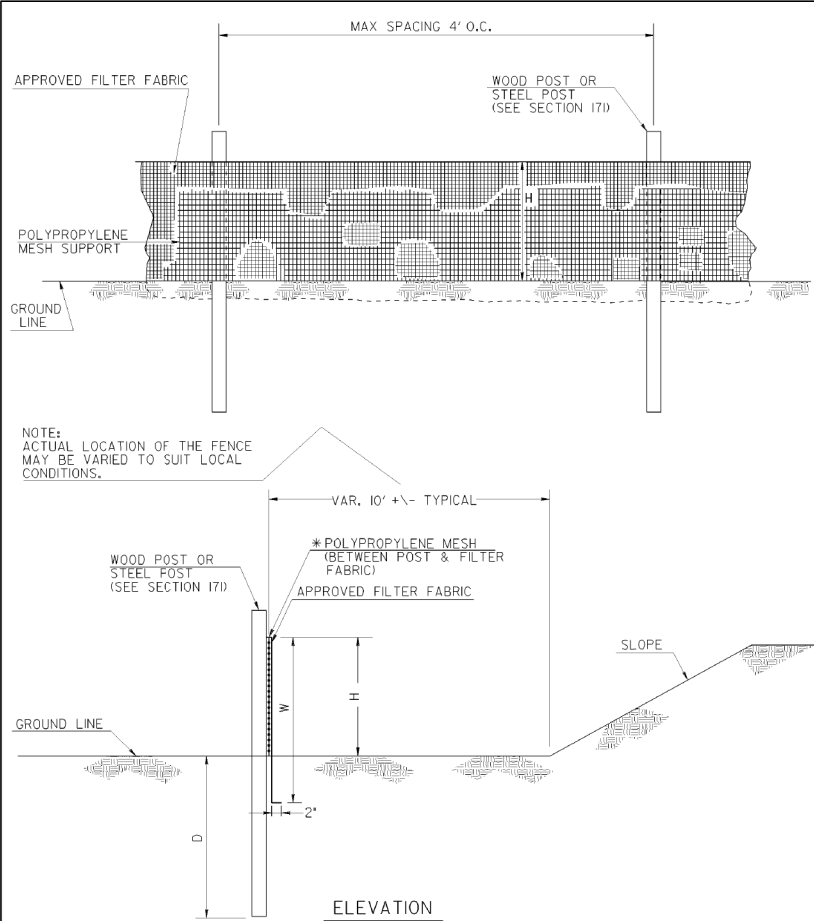
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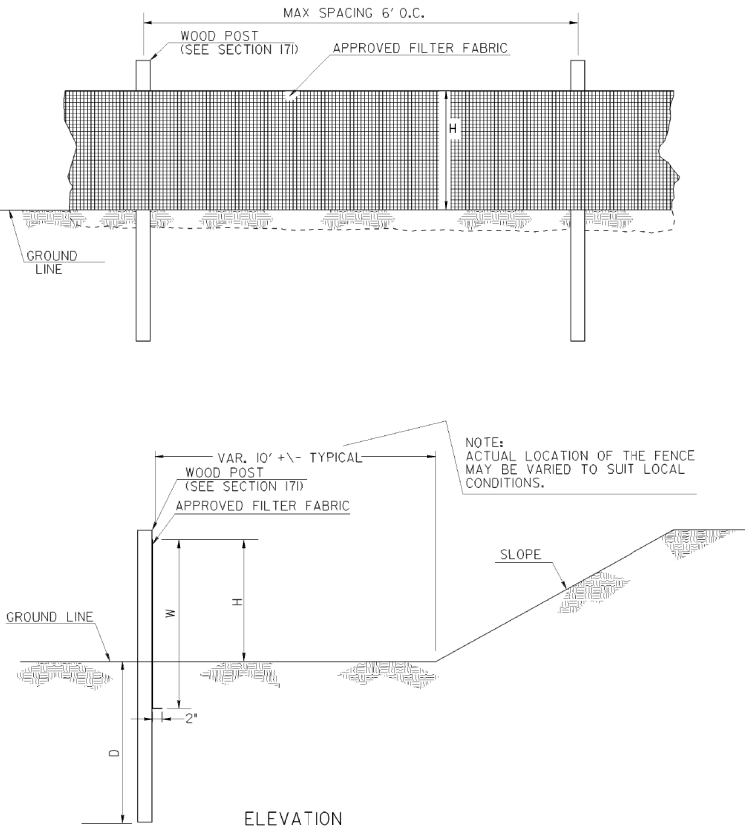


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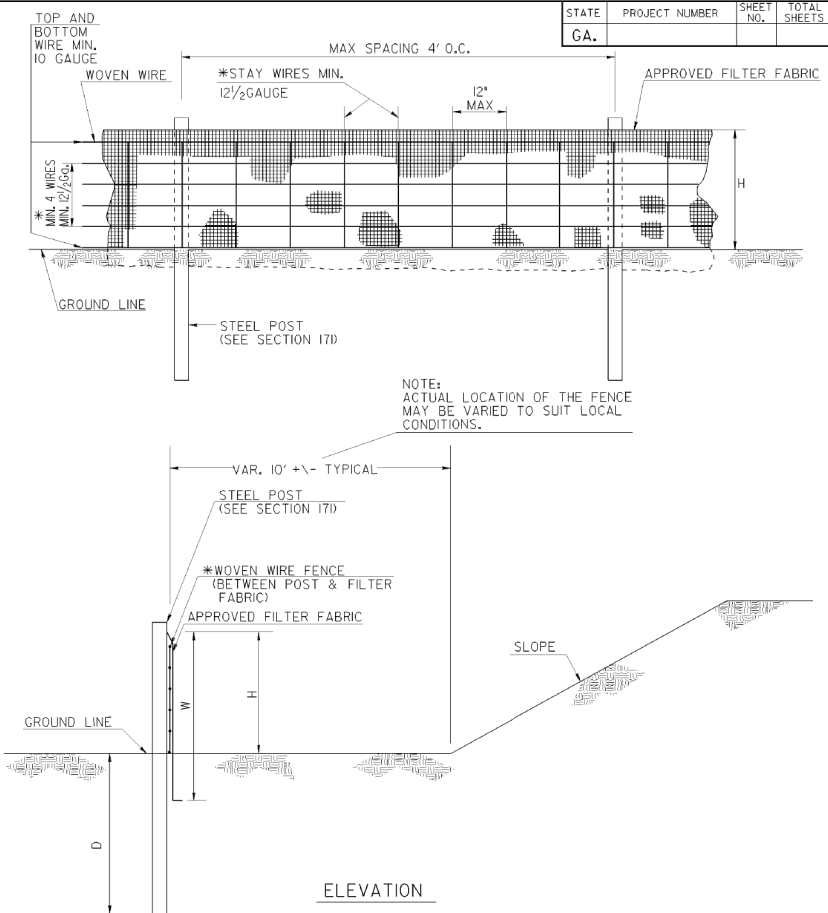
1/18/2011 1:25:13 PM \\G007-D5H1\G0PLOT\OCF\G0_K1p8000.qcf gowens V:\GARY\Rev. Construction Details\D-24A\D-24A.plt 60-R06



SINGLE ROW TYPE C SILT FENCE WITH POLYPROPYLENE MESH SUPPORT



SINGLE ROW TYPE A SILT FENCE



SINGLE ROW TYPE C SILT FENCE WITH WOVEN WIRE SUPPORT

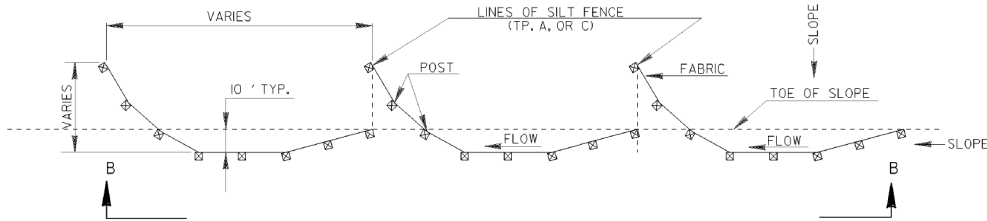
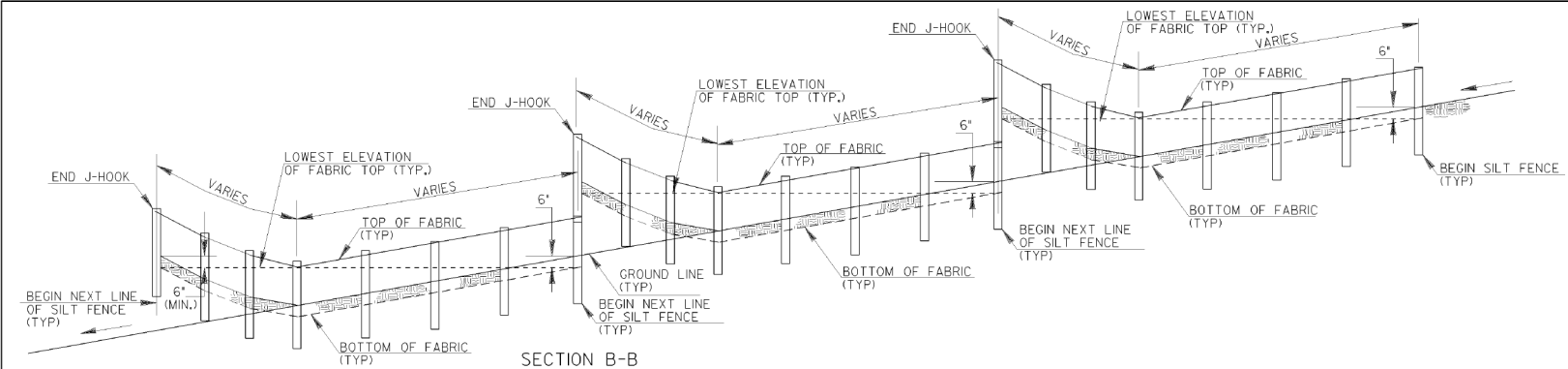
FENCE TYPE	POST LENGTH	H	D	W	TYPICAL USES
TYPE "A"	4 FT.	2'-4"	1'-6"	3'-0"	
TYPE "C"	4 FT.	2'-4"	1'-6"	3'-0"	AT BRIDGE END ROLLS, DOUBLE ROW ALONG STREAMS, WETLANDS AND ENVIRONMENTALLY SENSITIVE AREAS FOR USE OF THIS MATERIAL IN FABRIC CHECKDAMS SEE D-24D.

- NOTES:
- WIRE STAPLES SHALL BE AT LEAST 17 GAUGE, WITH LEGS AT LEAST 1/2 INCHES LONG AND A CROWN AT LEAST 3/4 INCHES WIDE. NAILS SHALL BE AT LEAST 14 GAUGE, 1 INCH LONG, WITH BUTTON HEADS AT LEAST 3/4 INCHES WIDE.
 - NAILS OR STAPLES SHALL BE EVENLY PLACED WITH AT LEAST 5 PER POST FOR TYPE A FENCE AND 4 PER POST FOR TYPE C FENCE.
 - THE VERTICAL WIRES FOR THE WOVEN WIRE SUPPORT FENCE SHALL HAVE A MAXIMUM SPACING OF 12 INCHES. THE TOP AND BOTTOM WIRES SHALL BE AT LEAST 10 GAUGE AND ALL OTHER WIRES SHALL BE AT LEAST 12 1/2 GAUGE.
 - TEMPORARY SILT FENCE INSTALLATION IS DIFFERENT THAN THE SILT RETENTION BARRIER INSTALLATION.
 - SEE SECTION 171 FOR SILT FENCE SPECIFICATIONS.
 - SEE SECTION 894 FOR FENCING SPECIFICATIONS.
 - SEE OPL-36 FOR A LIST APPROVED SILT FENCE FABRIC.
 - TEMPORARY SILT FENCE SHALL NOT BE PLACED WITHIN STATE WATERS UNLESS PERMITTED.

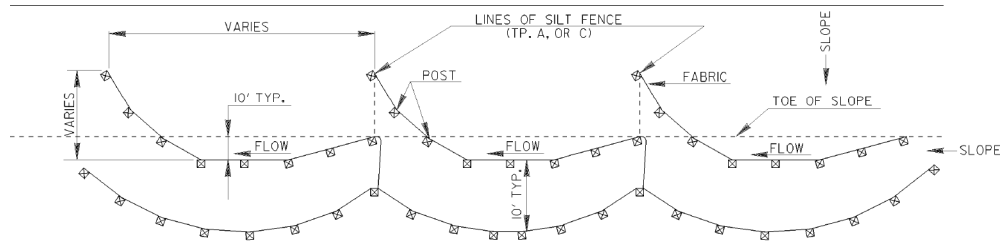
	DATE	DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA
	REVISION	CONSTRUCTION DETAILS TEMPORARY SILT FENCE
	BY	NO SCALE REV. AND REDRAWN JAN. 2011 NUMBER D-24A (SHEET 1 OF 4)

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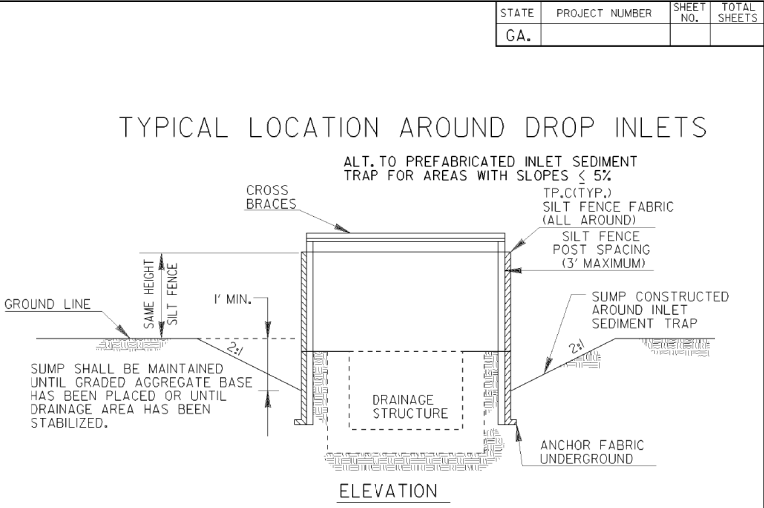
PLAN
SINGLE ROW SILT FENCE



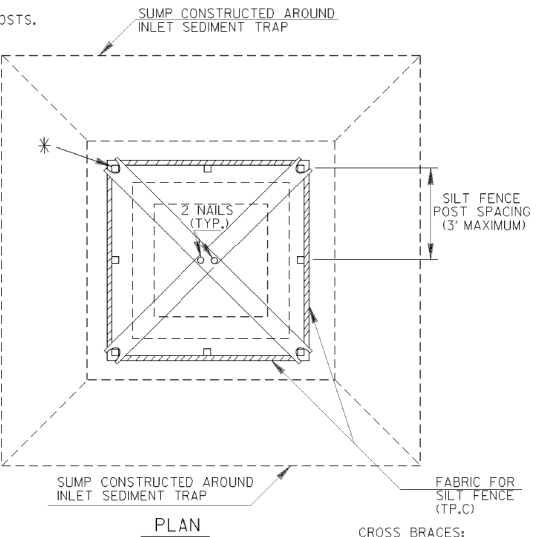
PLAN
DOUBLE ROW SILT FENCE

TYPICAL J HOOK SPACING		
SLOPE PERCENT	TYPE OF SILT FENCE	MINIMUM SPACING (FEET)
1% TO 2%	TYPE A	100' ±
2% TO 3%	TYPE A	50' ±
3% TO 4%	TYPE C	50' ±
4% TO 5%	TYPE C	25' ±

NOTE:
1. IF THE GRADE IS BETWEEN 0 TO 1 PERCENT, THE SILT FENCE SHALL BE PLACED ACROSS THE DITCH.
2. TEMPORARY SILT FENCE SHALL NOT BE PLACED WITHIN STATE WATERS.



* CROSS BRACING REQUIRED WHEN USING 'ALTERNATE' TYPE C PRODUCTS WHICH USE WOOD POSTS.



NOTE:
THE DRAINAGE AREA ENTERING THE INLET SEDIMENT TRAP SHALL BE NO GREATER THAN ONE ACRE.

TYPICAL CONSTRUCTION SEQUENCE FOR INLET SEDIMENT TRAP ALTERNATE

1. EXCAVATE APPROXIMATELY 4" TO 6" BELOW THE TOP OF THE INLET STRUCTURE.
2. PLACE THE FRAME ONTO THE INLET STRUCTURE, ENSURING PROPER SEATING OF FRAME TO STRUCTURE.
3. SLIDE THE FILTER OVER THE FRAME.
4. FILL THE FILTER POCKETS WITH SOIL, #57 GRAVEL OR EQUIVALENT. THE FILTER POCKETS SHOULD BE COMPLETELY FILLED TO ENSURE A GOOD SEAL BETWEEN THE GROUND AND INLET STRUCTURE.
5. BACK FILL AROUND THE FRAME AND FILTER ASSEMBLY IS NOT REQUIRED TO COMPLETE INSTALLATION; HOWEVER, BACK FILLING MAY BE NECESSARY TO COMPLETE EXCAVATION REQUIREMENTS FOR THE SITE.

NOTE:
INLET SEDIMENT TRAP ALTERNATE SHALL BE AS APPROVED BY THE GA, D.O.T, OFFICE OF MATERIALS & RESEARCH. DETAILS & SPECIFICATIONS NOT SHOWN ARE PER THE MANUFACTURER'S REQUIREMENTS.

(PLASTIC ALTERNATE)

NON-WOVEN FILTER COVER (SEC. 881.2.05)

1/4" MIN. THICK HIGH DENSITY POLYETHYLENE FRAME (OR APPROVED ALTERNATE)

BASE OF FRAME SHAPED & SIZED TO FIT INLET TOP

SIDE VIEW

(METAL ALTERNATE)

2"-0" OF 24" CMP OR SMOOTH STEEL WITH 2" MIN. DIA. HOLES AT RANDOM PATTERN AT 6" MAX. SPACING (HOLES MAY BE TORCHED)

1/4" THICK METAL PLATE TO FIT DIA.

FLOW

SIDE VIEW

TOP VIEW

NOTE: WHERE INLET SEDIMENT TRAPS ARE SPECIFIED, EITHER THE PLASTIC ALTERNATE (LEFT) OR THE METAL ALTERNATE (RIGHT) MAY BE USED AS APPROVED BY THE ENGINEER.

NOTE: INLET SEDIMENT TRAP AND INLET TO BE BUILT CONTINUOUS WITH PIPE

NOTE: PAYMENT AS INLET SEDIMENT TRAP PER EACH

NOTE: SEE SEPARATE DETAILS FOR SILT FENCE AROUND DROP INLETS.

INLET SEDIMENT TRAP - FOR DROP INLETS

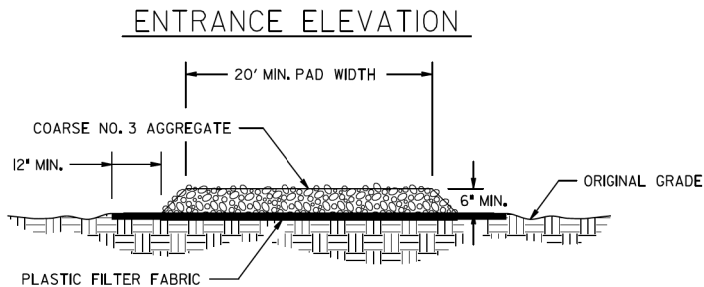
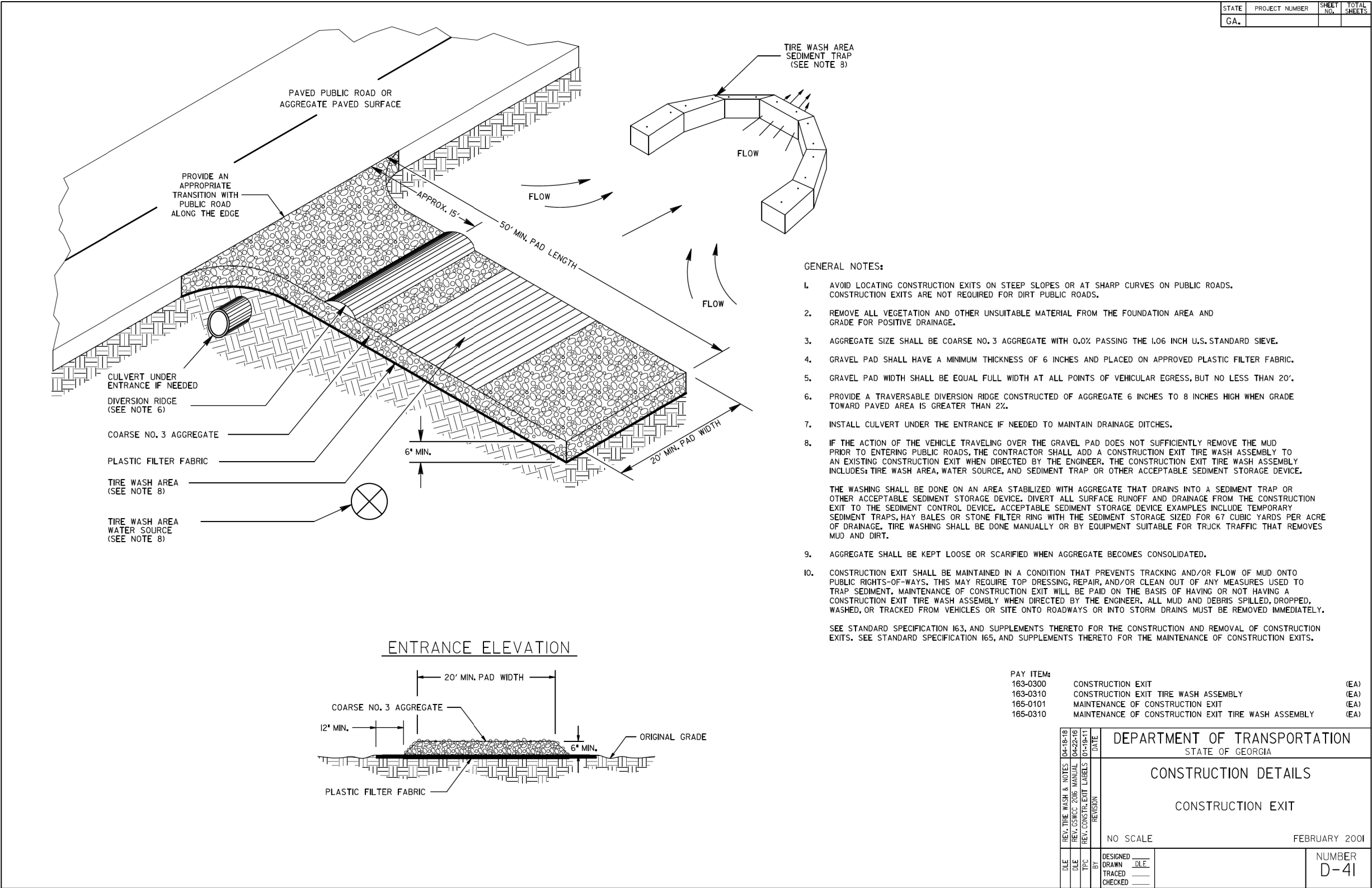
NOTE:
PAYMENT AS INLET SEDIMENT TRAP PER EACH.

NOTE:
SEE SEPARATE SHEET ENTITLED 'TEMPORARY SILT FENCE DETAILS' FOR SILT FENCE ERECTION DETAILS.

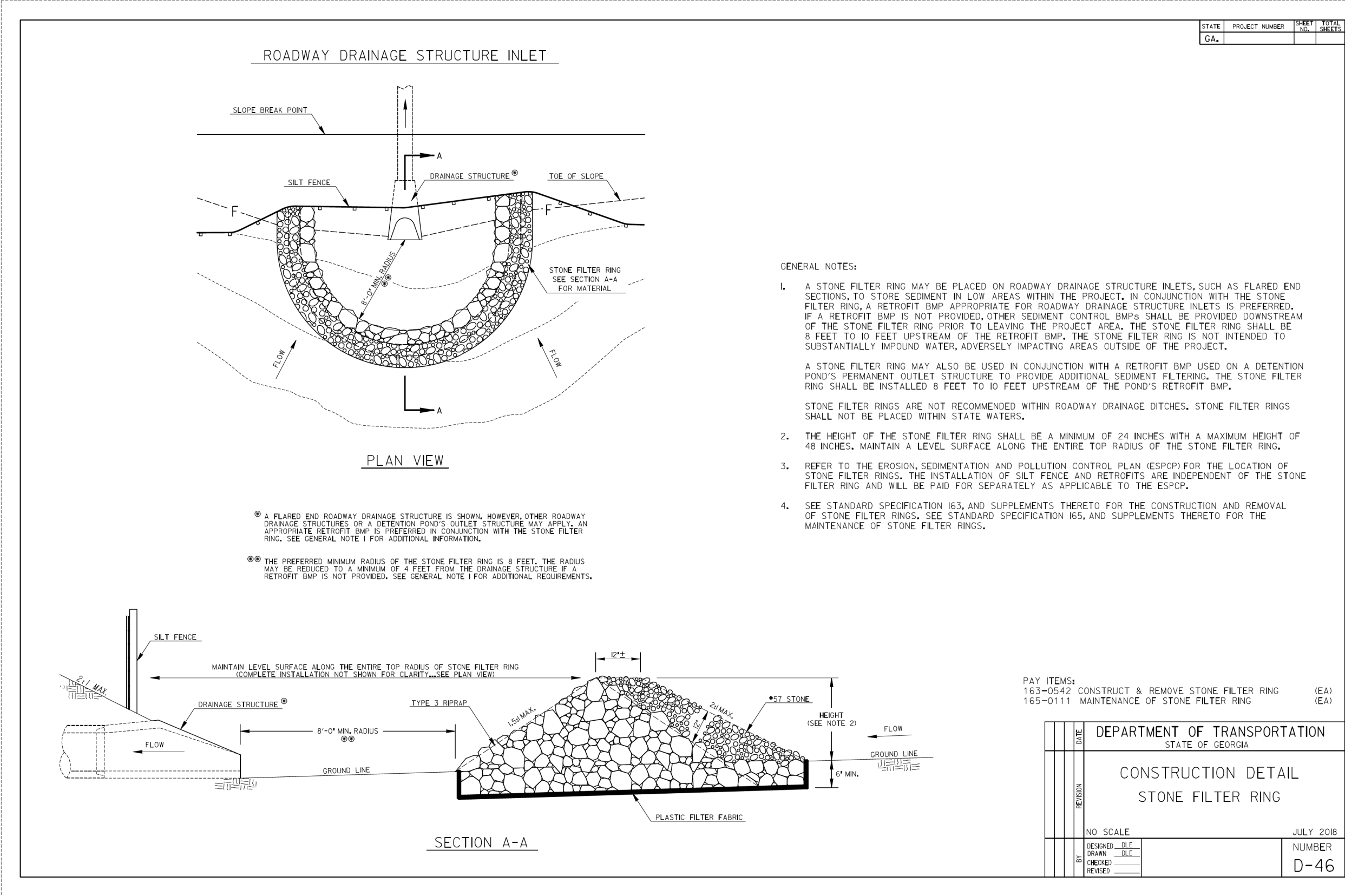
DATE	DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA
REVISION	CONSTRUCTION DETAILS TEMPORARY SILT FENCE J-HOOK, INLET SEDIMENT TRAPS
BY	NO SCALE JANUARY 2011
	NUMBER D-24C (SHEET 3 OF 4)

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REVISION DATES			<div>EROSION CONTROL CONSTRUCTION DETAILS</div> <div>ANVIL BLOCK ROAD, PHASE III</div>				
			CHECKED:		DATE:		DRAWING No. 56-005
			BACKCHECKED:		DATE:		
			CORRECTED:		DATE:		
			VERIFIED:		DATE:		



REVISION DATES			EROSION CONTROL CONSTRUCTION DETAILS ANVIL BLOCK ROAD, PHASE III				
			CHECKED:		DATE:		DRAWING No. 56-007
			BACKCHECKED:		DATE:		
			CORRECTED:		DATE:		
			VERIFIED:		DATE:		



STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.			

SOD LAYOUT

NOTE: SOD MAY BE EITHER 12" WIDE BY 22" LONG BLOCKS OR 21" WIDE BY 52" LONG ROLLS.

ABUTTING SOD

INCORRECT BUTTING

CORRECT BUTTING

SOD APPEARANCE

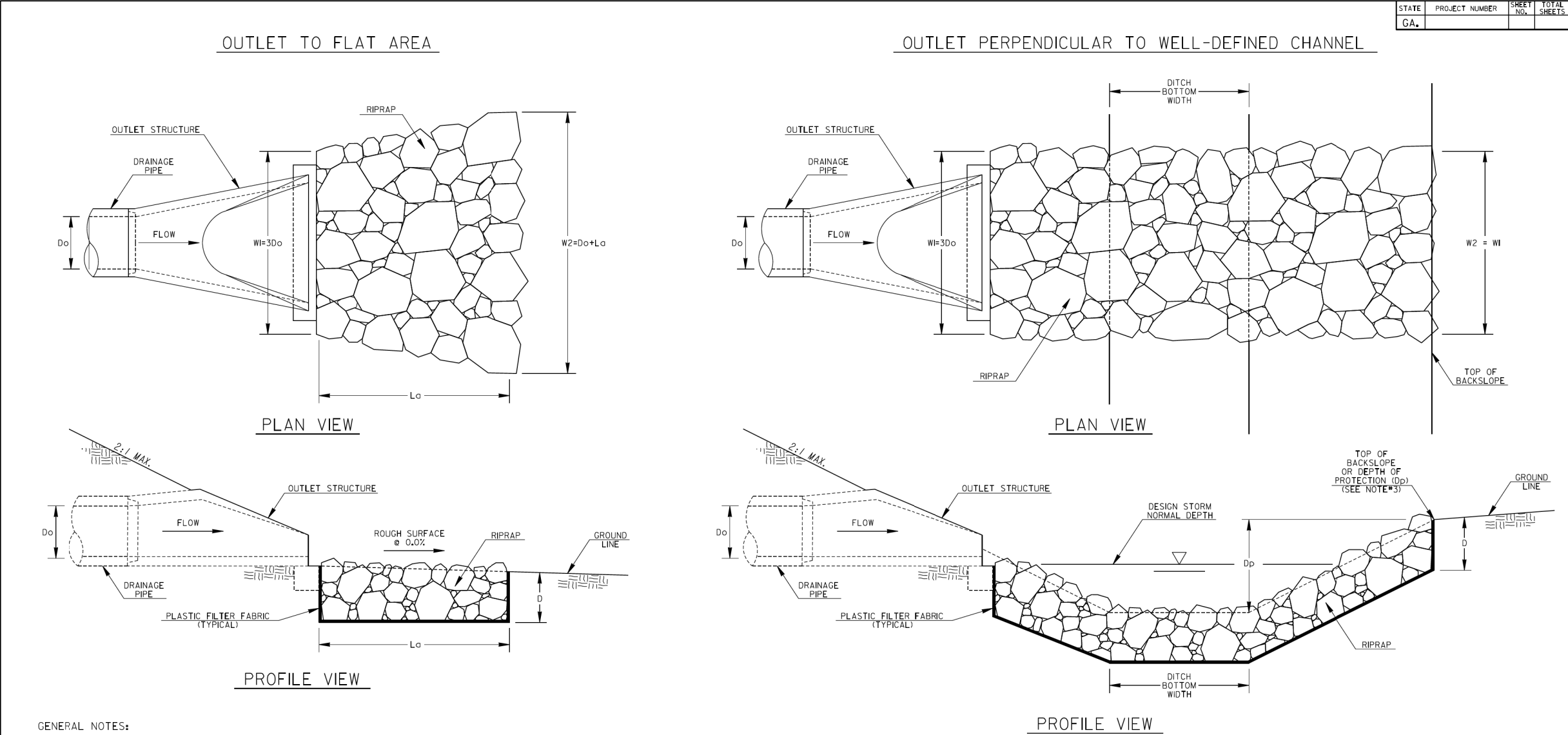
GRASS SHOULD BE GREEN, HEALTHY, AND MOWED AT A 2'-3" CUTTING HEIGHT

1/2" MAX. THATCH THICKNESS

1/2"-3/4" THICK SOIL AND DENSE ROOT MAT

PAY ITEM: 700-9300 SOD (SY)

DATE	DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA
REVISION	CONSTRUCTION DETAILS SOD INSTALLATION
BY	DESIGNED: DLE DRAWN: DLE TRACED: CHECKED: NO SCALE 4-22-2016 NUMBER D-54



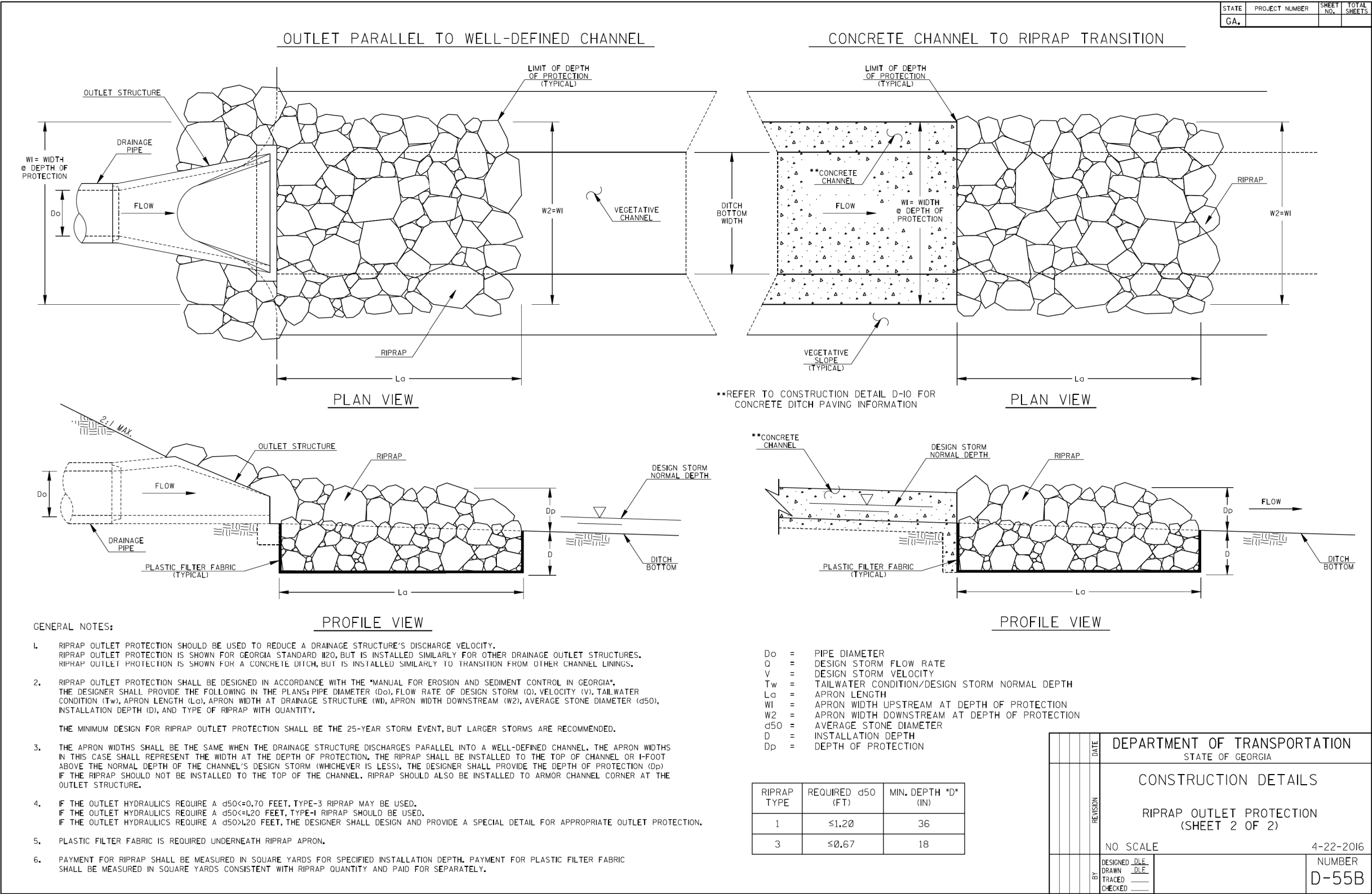
- GENERAL NOTES:
- RIPRAP OUTLET PROTECTION SHOULD BE USED TO REDUCE A DRAINAGE STRUCTURE'S DISCHARGE VELOCITY. RIPRAP OUTLET PROTECTION IS SHOWN FOR GEORGIA STANDARD #20, BUT IS INSTALLED SIMILARLY FOR OTHER DRAINAGE OUTLET STRUCTURES.
 - RIPRAP OUTLET PROTECTION SHALL BE DESIGNED IN ACCORDANCE WITH THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA". THE DESIGNER SHALL PROVIDE THE FOLLOWING IN THE PLANS: PIPE DIAMETER (Do), FLOW RATE OF DESIGN STORM (Q), VELOCITY (V), TAILWATER CONDITION (Tw), APRON LENGTH (Lo), APRON WIDTH AT DRAINAGE STRUCTURE (W1), APRON WIDTH DOWNSTREAM (W2), AVERAGE STONE DIAMETER (d50), INSTALLATION DEPTH (D), AND TYPE OF RIPRAP WITH QUANTITY.

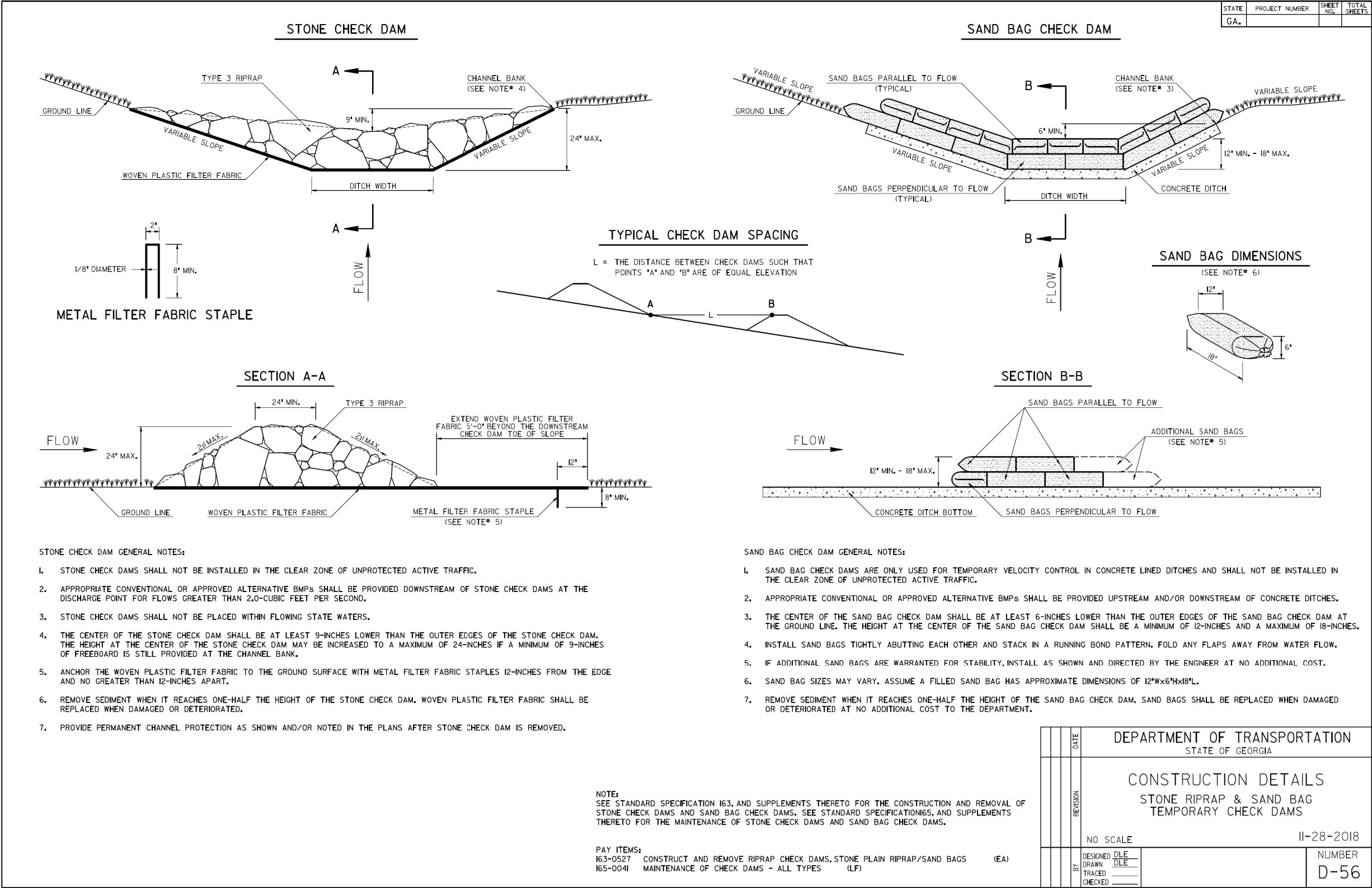
THE MINIMUM DESIGN FOR RIPRAP OUTLET PROTECTION SHALL BE THE 25-YEAR STORM EVENT, BUT LARGER STORMS ARE RECOMMENDED.
 - THE APRON WIDTHS SHALL BE THE SAME WHEN THE DRAINAGE STRUCTURE DISCHARGES PERPENDICULAR INTO A WELL-DEFINED CHANNEL. THE LENGTH SHALL EXTEND ACROSS THE CHANNEL AND UP TO THE TOP OF THE CHANNEL BACKSLOPE OR 1-FOOT ABOVE THE NORMAL DEPTH OF THE CHANNEL'S DESIGN STORM (WHICHEVER IS LESS). THE DESIGNER SHALL PROVIDE THE DEPTH OF PROTECTION (Dp) IF THE APRON DOES NOT EXTEND TO THE TOP OF THE BACKSLOPE.
 - IF THE OUTLET HYDRAULICS REQUIRE A d50<0.70 FEET, TYPE-3 RIPRAP MAY BE USED.
IF THE OUTLET HYDRAULICS REQUIRE A d50<1.20 FEET, TYPE-1 RIPRAP SHOULD BE USED.
IF THE OUTLET HYDRAULICS REQUIRE A d50>1.20 FEET, THE DESIGNER SHALL DESIGN AND PROVIDE A SPECIAL DETAIL FOR APPROPRIATE OUTLET PROTECTION.
 - PLASTIC FILTER FABRIC IS REQUIRED UNDERNEATH RIPRAP APRON.
 - PAYMENT FOR RIPRAP SHALL BE MEASURED IN SQUARE YARDS FOR SPECIFIED INSTALLATION DEPTH. PAYMENT FOR PLASTIC FILTER FABRIC SHALL BE MEASURED IN SQUARE YARDS CONSISTENT WITH RIPRAP QUANTITY AND PAID FOR SEPARATELY.

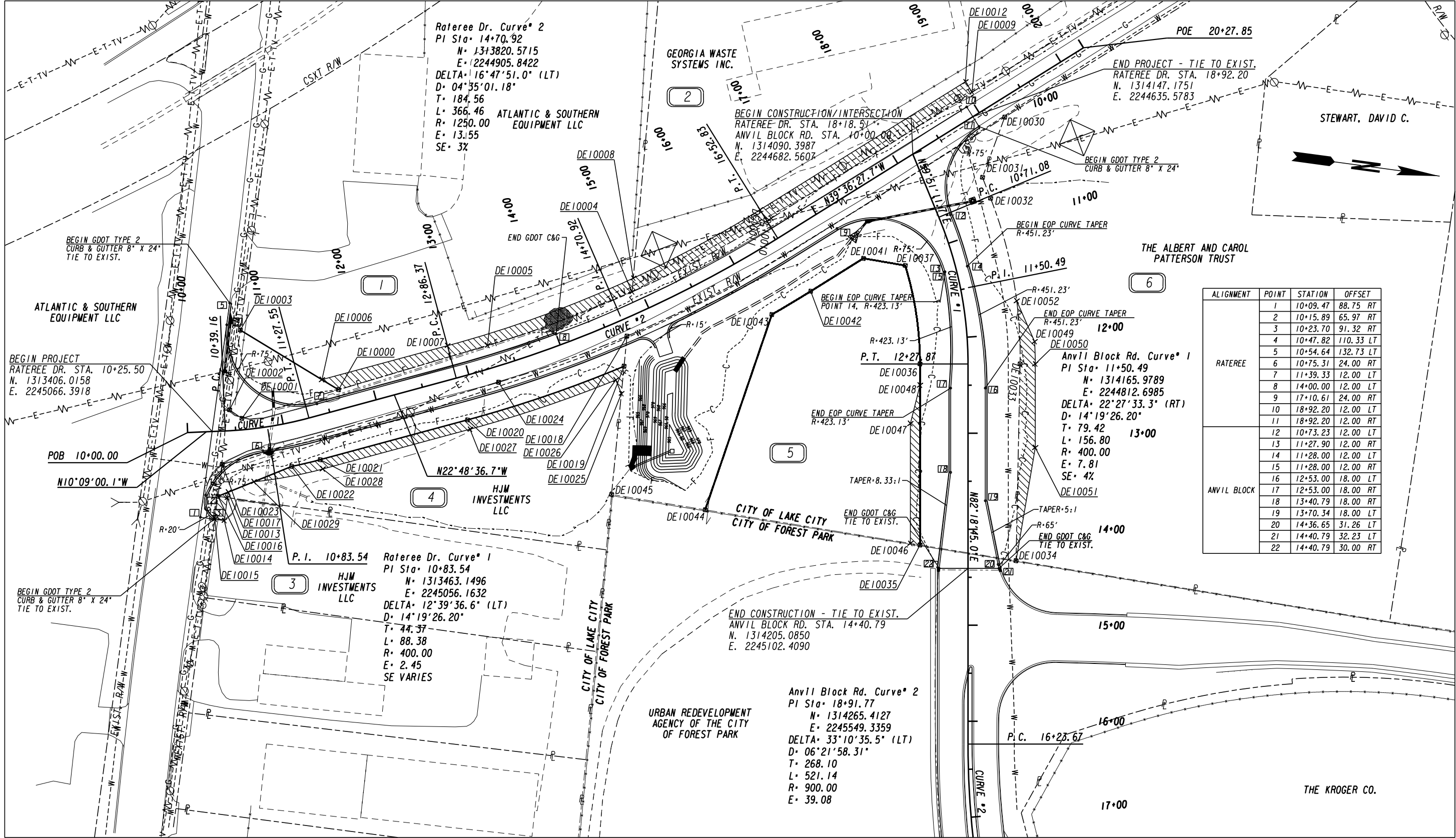
Do = PIPE DIAMETER
Q = DESIGN STORM FLOW RATE
V = DESIGN STORM VELOCITY
Tw = TAILWATER CONDITION/DESIGN STORM NORMAL DEPTH
Lo = APRON LENGTH
W1 = APRON WIDTH UPSTREAM
W2 = APRON WIDTH DOWNSTREAM
d50 = AVERAGE STONE DIAMETER
D = INSTALLATION DEPTH
Dp = DEPTH OF PROTECTION

RIPRAP TYPE	REQUIRED d50 (FT)	MIN. DEPTH "D" (IN)
1	≤1.20	36
3	≤0.67	18

		DATE	DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
		REVISION	CONSTRUCTION DETAILS RIPRAP OUTLET PROTECTION (SHEET 1 OF 2)	
		BY	DESIGNED <u>DLE</u> DRAWN <u>DLE</u> TRACED <u> </u> CHECKED <u> </u>	NO SCALE 4-22-2016 NUMBER D-55A







PARCEL 4 - HJM INVESTMENTS LLC
SEE SHEET 1
TOTAL REQ'D R/W = 11964.21 SF (0.275 ACRES)
TOTAL TEMP. EASW'T. = 28.82 SF + 3885.68 SF = 3914.50 SF (0.090 ACRES)
REMAINDER = +/- 0.805 ACRES


STATE OF GEORGIA DEPARTMENT OF TRANSPORTATION			
RIGHT OF WAY MAP			
PROJECT NO.: ANVIL BLOCK ROAD, PHASE III			
COUNTY: CLAYTON COUNTY			
LAND LOT NO: N/A			
LAND DISTRICT: N/A			
GMD DATE	<table style="width: 100%; border-collapse: collapse;"><tr><td style="text-align: center; padding: 5px;">DRAWING No.</td></tr><tr><td style="text-align: center; padding: 20px; font-size: 2em;">60-002</td></tr></table>	DRAWING No.	60-002
DRAWING No.			
60-002			

 PARCEL 6 TESMT - THE ALBERT AND CAROL PATTERSON TRUST
 REQ'D TEMP. EASM'T. DE15

PNT	OFFSET/	STATION/	ALIGNMENT
DE10052	55.49 L	11+70.00	Anvil Block
DE10049	70.00 L	12+08.00	Anvil Block
ARC LENGTH = 23.35			
CHORD BEAR = N 80°53'21.5" E			
LNTH CHORD = 23.35			
RADIUS = 470.00			
DEGREE = 12°11'26.1"			
DE10050	70.00 L	12+27.87	Anvil Block
DE10051	70.00 L	13+15.00	Anvil Block
DE10034	50.00 L	14+32.75	Anvil Block
DE10033	54.20 L	12+27.91	Anvil Block
ARC LENGTH = 65.86			
CHORD BEAR = S 79°17'34.7" W			
LNTH CHORD = 65.80			
RADIUS = 457.38			
DEGREE = 12°31'36.9"			
DE10052	55.49 L	11+70.00	Anvil Block
REQD EASMT AREA = 3165.29 SF			
REQD EASMT AREA = 0.073 ACRES			

PNT	OFFSET/	STATION/	ALIGNMENT
DE10048	50.00 R	12+50.00	Anvil Block
DE10035	50.00 R	14+16.38	Anvil Block
DE10046	60.00 R	14+14.74	Anvil Block
DE10047	60.00 R	12+90.00	Anvil Block
DE10048	50.00 R	12+50.00	Anvil Block
REQD EASMT AREA	= 1455.56 SF		
ACRES EASMT AREA	= 0.033 ACRES		

PARCEL 6 - THE ALBERT AND CAROL PATTERSON TRUST
SEE SHEET 1
TOTAL TEMP. EASM'T. = 3165.29 SF (0.073 ACRES)
REMAINDER = +/- 5.230 ACRES

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— C — F —


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ROSWELL, GA 30075
P: 678.795.3600 www.NV5.com
GA License # PEF003715, LSF000935
formerly CALYX Engineers & Consultants

DATE	REVISIONS

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
RIGHT OF WAY MAP
PROJECT NO: ANVIL BLOCK ROAD, PHASE III
COUNTY: CLAYTON COUNTY
LAND LOT NO: N/A
LAND DISTRICT: N/A
GMD
DATE SH 3 OF 3