

CONTRACTOR SHALL LOCATE ALL UTILITIES PRIOR TO BEGINNING WORK (CALL BEFORE YOU DIG: (DIAL 811). CONTRACTOR IS RESPONSIBLE FOR ALL LOCATION.

UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY. OTHER UTILITIES MAY EXIST WHICH ARE NOT SHOWN ON THESE PLANS.

ALL WORK SHALL BE DONE IN ACCORDANCE WITH GDOT STANDARDS.

CONTRACTOR SHALL ADHERE TO ALL EROSION CONTROL REGULATIONS, AND INSTALL ALL NECESSARY EROSION AND SEDIMENT CONTROL MEASURES, WHETHER OR NOT THE PLANS SHOW THE REQUIRED MEASURES.

24-HOUR EMERGENCY CONTACT SCOTT PUCKETT 770-531-6800

LOCAL MUNICIPALITY HALL COUNTY PUBLIC WORKS & UTILITIES 2875 BROWN BRIDGE RD GAINESVILLE, GA 30504 770-531-3973

DEPT. OF TRANSPORTATION KELVIN MULLINS 1475 JESSE JEWELL PARKWAY SUITE 100 GAINESVILLE, GA 30501 (770) 532-5500

OWNER/DEVELOPER HALL COUNTY PUBLIC WORKS & UTILITIES 2875 BROWN BRIDGE RD, GAINESVILLE, GEORGIA 30504 770-2531-3973

ot Date: 4/21/2023 2:56 Pile; Location: I:\FOR\data\transportation\HALL\0064-9033 Jim Hood & Rilla Road at Hall County\04 Drawings\41 Civil Drawings\Rilla Road\0064-9033\_CN.dv

UTILITIES

# ROADWAY CONSTRUCTION PLANS FOR RILLA ROAD IMPROVEMENT



PROJECT SCOPE 1" - 30" STREET ADDRESS: RILLA RD AT MT VERNON ROAD, HALL COUNTY, GEORGIA 34.423116, -83.847203

# CIVIL ENGINEER ACT CLASS Maple Street Suite 107 Cumming , GA 30040 Tel.: (770) 781–5507 oneatlas.com COA–LSF #1323, PEF #7665



PROJECT NO. 0064-9033

# ISSUE DATE: 04/21/2023 LAST REVISED: 04/21/2023

DROL #0064-9033 CONSTRUCTION DLANS		DATE
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PROPERTY AREA: 0.55 LIMITS OF DISTURBANCE: 0.55 ZONING: N/A - COUNTY ROW PROJECT DESCRIPTION: ROADWAY IMPROVEMENT SPEED LIMIT POSTED: 25 MPH

THIS PROJECT IS 100% IN HALL COUNTY

ALL WORK TO BE DONE IN ACCORDANCE WITH HALL COUNTY ENG. AND GEORGIA DOT STANDARDS AND SPECIFICATIONS, LATEST EDITIONS.

COLORIZED PLANS DISCLAIMER: THIS SET OF PLANS HAS BEEN FORMATTED TO BE PRINTED IN FULL COLOR. GRAY-SCALE PHOTO COPIES MAY NOT APPEAR AS INTENDED. CONTACT LONG ENGINEERING FOR ACCESS TO AN OFFICIAL GRAY-SCALE VERSION OF THE PLANS.

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CS502	DETAILS-SITE
CS503	DETAILS-SITE
CE501	DETAILS-ES&PC
CE502	DETAILS-ES&PC

UED FOR CONSTRUCTION

### CONSTRUCTION NOTES

- 1. DIRT FOR FILL SHALL BE CLEAN, COHESIVE CLAY OR SANDY CLAY FREE OF DEBRIS, ORGANICS, DELETERIOUS MATERIAL AND ROCKS GREATER THAN 3" DIA.
- 2. MAX CUT OR FILL SLOPES SHALL BE AS SHOWN ON THE PLANS BUT IN NO CASE SHALL EXCEED 2:1 (H:V) UNLESS APPROVED BY THE
- PROJECT GEOTECHNICAL ENGINEER FOR TEMPORARY SLOPES.
  3. EQUIPMENT AND MATERIALS SHALL BE STORED IN AREAS DESIGNATED BY THE OWNER. CONSTRUCTION AND STORAGE AREAS SHALL BE KEPT NEAT AND CLEAN. TREE SAVE AREAS SHALL NOT BE USED FOR STORAGE OR PARKING.
- ALL REINFORCED CONCRETE PIPE (RCP) SHALL BE CLASS III UNLESS OTHERWISE NOTED. CORRUGATED METAL PIPE SHALL BE 16 GA. MIN. AND ASPHALT OR ALUMINUM COATED.
- 5. ALL CATCH BASINS SHALL BE FLUSH WITH THE NEW CURB.
- 6. ALL MANHOLE TOPS SHALL BE SET FLUSH WITH FINISHED GRADE IN LANDSCAPED AND PAVED AREAS.
- CONTRACTOR TO VERIFY THE ELEVATIONS OF ALL TIE-IN POINTS FOR INSTALLATION OF UTILITIES, CURB & GUTTER, SIDEWALK AND PAVING.
   ALL BACKFILL MATERIAL SHALL BE COMPACTED TO NOT LESS THAN 95% OF THE OPTIMUM COMPACTION OR AS REQUIRED IN EARTHWORK SPECIFICATION FOR ANY SOIL CLASSIFICATION AS DETERMINED BY THE STANDARD PROCTOR TEST AASHTO T-180 METHOD "A". BACKFILL
- MATERIAL SHALL BE CLEAN AND FREE OF ROOTS, ROCK OR DELETERIOUS MATTER. CONTRACTOR SHALL CORRECT ANY DAMAGE TO CURBING OR PAVING CAUSED BY TRENCH SETTLEMENT WHICH OCCURS WITHIN 12 MONTHS OF PROJECT ACCEPTANCE. REFER TO GEOTECHNICAL REPORT.
- 9. MANHOLES & DROP INLETS ARE DIMENSIONED TO THE CENTER OF THE RISER. CATCH BASINS ARE DIMENSIONED TO THE CENTER OF THE CATCH BASIN AT THE FACE OF CURB. LAYOUT DIMENSIONS ARE TO FACE OF CURB. FACE OF WALL, CENTERLINE OF PIPE, UNLESS OTHERWISE NOTED.
- 10. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN PLAN AND FIELD CONDITIONS PROMPTLY UPON DISCOVERY. ANY CONFLICT OR DISCREPANCIES DISCOVERED WITHIN THE CONSTRUCTION PLANS SHALL BE REPORTED IMMEDIATELY TO THE OWNER'S REP AND ENGINEER OF RECORD FOR CLARIFICATION. FAILURE TO DO SO SHALL RESULT IN CONTRACTOR'S LIABILITY FOR ISSUES ARISING FROM SUCH CONFLICTS OR DISCREPANCIES.
- ALL EXISTING ELECTRICAL BOXES, WATER METER BOXES, AND VALVE BOXES, WHICH ARE TO REMAIN SHALL BE SET FLUSH WITH THE TOP OF THE PROPOSED GRADE.
   AREAS INTENDED TO SUPPORT PAVEMENT OR NEW FILL SHALL BE PROOFROLLED WITH A 20 TO 30 TON LOADED TRUCK OR OTHER
- PNEUMATIC-TIRED VEHICLE OF SIMILAR SIZE AND WEIGHT IN THE PRESENCE OF THE GEOTECHNICAL ENGINEER TO LOCATE WEAK, SOFT OR EXCESSIVELY WET MATERIALS. AREAS WHICH PUMP WHILE PROOFROLLED SHALL BE UNDERCUT AND BACK-FILLED IN ACCORDANCE WITH THE PROJECT EARTHWORK SPECIFICATIONS.
- 13. CRUSHED STONE AGGREGATE IN ROADWAY/PARKING AREA PAVEMENT BASE SHALL CONFORM WITH CURRENT STATE OF GEORGIA, DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. ALL ASPHALT MATERIAL AND PAVING OPERATIONS SHALL MEET APPLICABLE SPECIFICATIONS OF THE ASPHALT INSTITUTE AND GEORGIA DEPARTMENT OF TRANSPORTATION.
- 14. UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL REMOVE ALL SEDIMENT FROM THE DETENTION PONDS AND RESTORE THE PONDS TO THEIR PROPOSED FINISHED GRADE. ALL STORM DRAIN PIPES ARE ALSO TO BE COMPLETELY CLEANED OF ALL SILT AND DEBRIS AT THE COMPLETION OF CONSTRUCTION.
- 15. SIGNING AND STRIPING TO BE PROVIDED BY THE CONTRACTOR ACCORDING TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION WITH ALL REVISIONS INCLUDED.

# **DEMOLITION NOTES**

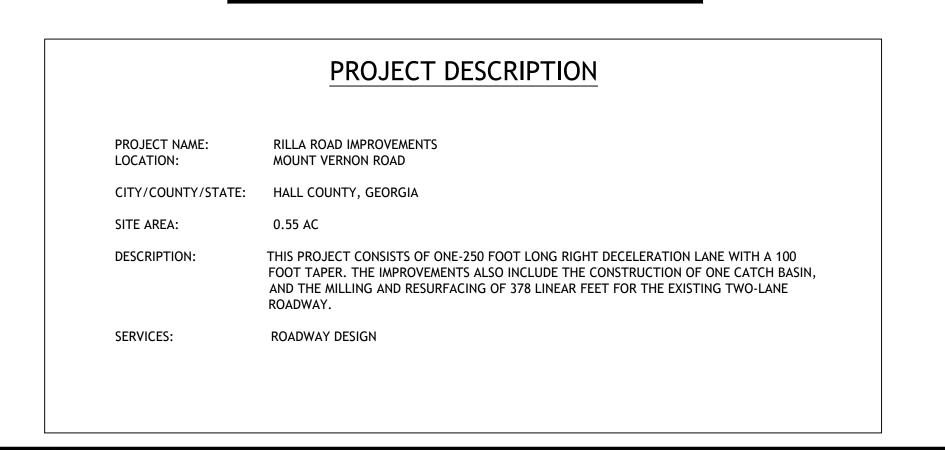
- 1. PRIOR TO CLEARING, THE CONTRACTOR SHALL OBTAIN WRITTEN VERIFICATION FROM ALL UTILITY COMPANIES THAT ALL UTILITIES HAVE BEEN REMOVED. IF UTILITIES HAVE NOT BEEN REMOVED BUT HAVE BEEN ABANDONED, THE VERIFICATION LETTER SHALL STATE THAT THEIR FACILITIES LEFT ON-SITE HAVE BEEN ISOLATED FROM THEIR SOURCE AND MAY BE REMOVED BY THE CONTRACTOR. IF UTILITIES ARE TO REMAIN AND HAVE BEEN LEFT ACTIVE, THE CONTRACTOR SHALL CAREFULLY PROTECT THEM AND IS RESPONSIBLE FOR RESTORING THEM TO THEIR PREVIOUS CONDITION OR BETTER IF DAMAGED.
- 2. DISCONNECT AND SEAL OFF ABANDONED UTILITIES AND UTILITIES TO BE REMOVED PRIOR TO START OF DEMOLITION. UTILITIES SHALL BE DISCONNECTED BELOW EXISTING GRADE OR OUTSIDE OF CONTRACT LIMITS BY THE APPLICABLE PUBLIC UTILITY. ALL COSTS FOR THIS WORK SHALL BE BORNE BY THE CONTRACTOR.
- 3. ALL MATERIALS GENERATED BY DEMOLITION, INCLUDING BUT NOT LIMITED TO: VEGETATION, PAVEMENTS, SLABS, RETAINING WALLS, FENCES, ORGANICS AND UNSUITABLE BEARING SOILS SHALL BE STRIPPED FROM THE SURFACE WITHIN THE CONSTRUCTION LIMITS AND DISPOSED OF LEGALLY OFFSITE. ALL WASTE FROM DEMOLITION OPERATIONS SHALL BE HAULED OFFSITE TO DISPOSAL AREA APPROVED BY THE STATE OF GEORGIA FOR THE HANDLING OF DEMOLITION MATERIAL AND DEBRIS.
- 4. CONTRACTOR SHALL HAVE THE LIMITS OF CLEARING AND ALL BUFFERS STAKED WITH FLAGGING STRUNG AT CLEARING LIMITS TO ENSURE THE PROPER LOCATION OF TREE SAVE FENCE AND PROPOSED IMPROVEMENTS.
- 5. ALL VEGETATION, ROOT SYSTEMS, TOPSOIL, REFUSE AND OTHER DELETERIOUS, NON-SOIL MATERIAL SHALL BE STRIPPED FROM THE PROPOSED CONSTRUCTION AREAS, REMOVED AND DISPOSED OF ACCORDING TO THE PROJECT SPECIFICATIONS. CLEAN TOPSOIL MAY BE STOCKPILED AND REUSED LATER IN LANDSCAPED AREAS.
- 6. ALL STRUCTURES TO BE DEMOLISHED SHALL BE COMPLETELY REMOVED ABOVE AND BELOW GRADE. ABANDONED SERVICE LINES TO THE STRUCTURES SHALL ALSO BE REMOVED.
- ALL NECESSARY PERMITS AND INSPECTIONS FOR DEMOLITION SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO BEGINNING WORK.
   CONTRACTOR SHALL PROTECT ALL ADJACENT LANDS FROM DAMAGE DURING DEMOLITION WORK. ANY OFF-SITE AREAS DISTURBED
- SHALL BE RETURNED TO A CONDITION EQUAL TO OR BETTER THAN THE EXISTING CONDITION.
  9. THE CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION SCHEDULES AND ACTIVITIES WITH THE APPROPRIATE UTILITY COMPANY AND THE OWNER/PROPERTY MANAGER OF ALL OPERATIONAL BUILDINGS ONSITE TO MINIMIZE DISRUPTIONS TO OVERALL PROPERTY
- FUNCTIONS. 10. THE CONTRACTOR SHALL MAINTAIN EXISTING UTILITY SERVICE TO ALL IMPACTED PROPERTIES/BUILDINGS UNTIL THE RELOCATED UTILITIES ARE INSPECTED AND APPROVED.
- ALL STRUCTURES NOT LABELED FOR DEMOLITION SHALL BE PROTECTED FROM DAMAGE DURING ALL PHASES OF CONSTRUCTION. ANY STRUCTURES THAT ARE TO REMAIN THAT ARE DAMAGED SHALL BE REPAIRED BY THE CONTRACTOR TO A CONDITION EQUAL TO OR
- BETTER THAN THE EXISTING CONDITION AT NO ADDITIONAL COST. 12. AT A MINIMUM, INITIAL EROSION & SEDIMENT CONTROL BMP'S SHALL BE INSTALLED AND DRAINAGE INLET PROTECTION SHALL BE IN PLACE PRIOR TO DEMOLITION OPERATIONS.
- 13. CONTRACTOR SHALL INSTALL NECESSARY BARRICADES, SUFFICIENT LIGHTS, SIGNS AND OTHER TRAFFIC CONTROL METHODS AS MAY BE NECESSARY FOR THE PROTECTION AND SAFETY OF THE PUBLIC. TRAFFIC CONTROL DEVICES AND MEASURES SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION DURATION AND CONFORM TO LOCAL AND STATE DEPARTMENT OF TRANSPORTATION STANDARDS & SPECIFICATIONS. INTERRUPTION TO TRAFFIC FLOW IS TO BE MINIMIZED DURING PEAK TRAFFIC HOURS.
- ALL STRUCTURES TO BE DEMOLISHED SHALL BE COMPLETELY REMOVED ABOVE AND BELOW GRADE. ABANDONED SERVICE LINES TO THE STRUCTURES SHALL ALSO BE REMOVED.
   CONTRACTOR IS DESCRIPTION OF CONSTRUCT THE IMPROVEMENTS CONTEMPLATED IN THE
- 15. CONTRACTOR IS RESPONSIBLE FOR ALL DEMOLITION NECESSARY TO CONSTRUCT THE IMPROVEMENTS CONTEMPLATED IN THE CONTRACT DOCUMENTS WHETHER OR NOT SHOWN ON THIS PLAN.
- CONTRACTOR IS TO PROVIDE TEMPORARY SHORING, BRACING, AND/OR SUPPORT SYSTEMS AS REQUIRED TO PROVIDE STABILITY AND PREVENT COLLAPSE OR FAILURE OF EXISTING IMPROVEMENTS TO REMAIN.
   CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING ALL EXISTING UTILITIES ON SITE, DETERMINING THEIR LOCATION AND ELEVATION AND
- PROTECTING THOSE TO REMAIN. 18. CONTRACTOR TO PROVIDE SUFFICIENT TEMPORARY FENCING TO PREVENT THE PUBLIC FROM ENTERING THE AREA IN WHICH
- DEMOLITION IS PLANNED OR IN PROGRESS. ALL GATES SHALL BE SECURED AND LOCKED DURING NON-WAKING HOURS.
- 19. STORM AND/OR SANITARY SEWER PIPES TO BE ABANDONED ARE TO BE REMOVED, GROUT FILLED OR CRUSHED IN PLACE. GROUT FILLING IS ONLY ALLOWED WHEN SPECIFICALLY INDICATED ON THE DEMOLITION PLAN.
- 20. REMOVAL OF UTILITIES WITHIN THE PUBLIC RIGHT OF WAY OR THAT MAY IMPACT ADJACENT PROPERTIES ARE TO BE COORDINATED WITH THE APPLICABLE UTILITY COMPANY.



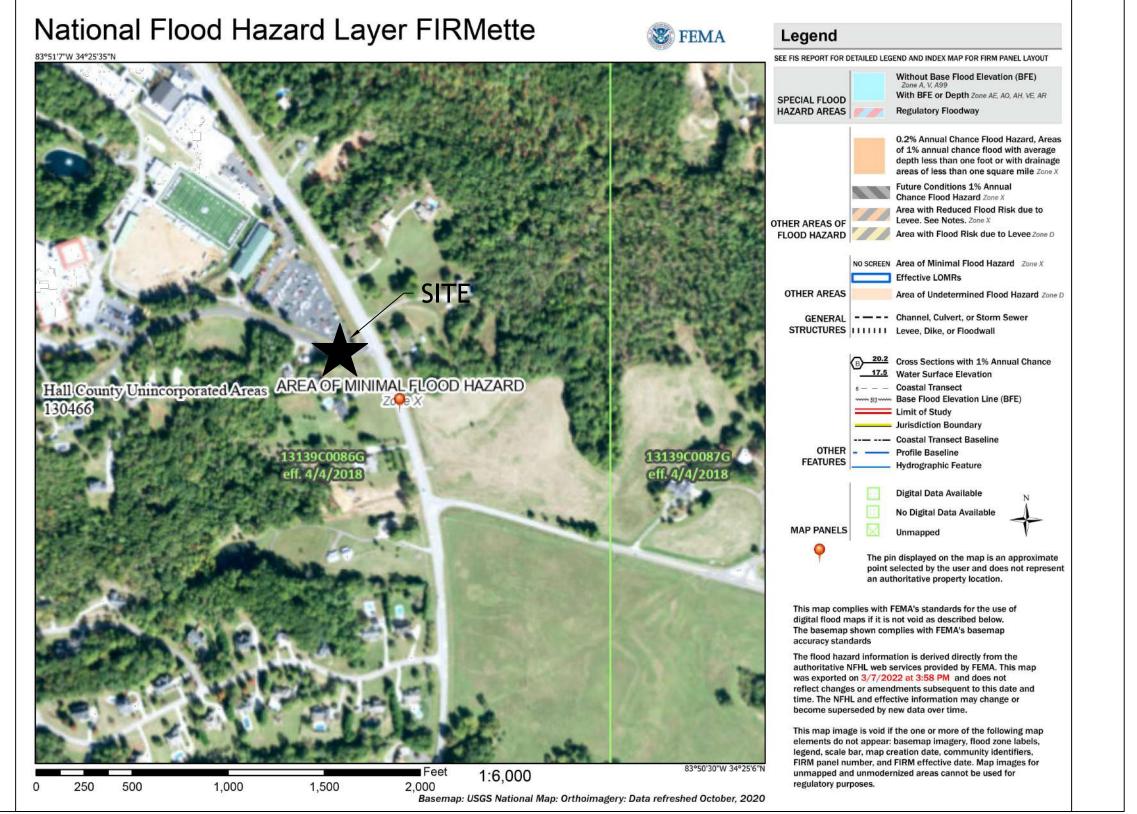
### Call before you dig

			REVIS	SIONS				
$\triangle$	DATE	BY	DESCRIPTION	$\square$	DATE	BY	DESCRIPTION	
								407 East Maple Stre
								407 East Maple Stre Cumming , GA Tel.: (770) 78 oneatlas.c
								oneatlas.co
								COA-LSF #1323, 1

APPROXIMATE EARTHWORK QUANTITIES CUT: 113.74 CY FILL: 36.35 CY NOTE: THESE QUANTITIES ARE APPROXIMATE AND SHOWN FOR PERMIT PURPOSES ONLY AND SHOULD NOT BE USED FOR BIDDING PURPOSES.



# FEMA FLOOD INSURANCE RATE MAP



PORTIONS OF THIS PROPERTY <u>ARE NOT</u> WITHIN THE 100-YEAR FLOOD PLAIN ACCORDING TO F.E.M.A F.I.R.M. PANELS 13139C0086G, DATED 04/04/2018.

		NAME	DATE		NAME	DATE
	DESIGNED BY	WS	04/21/2023	DRAWN BY	WS	04/21/2023
lite 107 40 07	CHECKED BY	BS	04/21/2023	CHECKED BY	BS	04/21/2023
7665	SUPERVISE	DBY				

### GENERAL NOTES

1.	PROJECT	RILLA ROAD IMPROVEMENT
	ADDRESS:	RILLA RD AT MT VERNON RO

RILLA RD AT MT VERNON ROAD, GAINESVILLE, HALL COUNTY, GEORGIA

OWNER:

HALL COUNTY PUBLIC WORKS & UTILITIES 2875 BROWNS BRIDGE ROAD GAINESVILLE, GEORGIA 30503 PHONE: 770-531-6800

ENGINEER: ATLAS TECHNICAL CONSULTANTS 407 EAST MAPLE STREET, SUITE 107 CUMMING, GA 30040

- 2. THE PROPERTY IS LOCATED IN HALL COUNTY.
- 3. THE PROPOSED PROJECT TOTAL DISTURBED AREA IS 0.55 ACRES.
- 4. PROPOSED ELEVATIONS ALONG CURB LINES ARE TO THE BOTTOM OF CURB UNLESS OTHERWISE NOTED BY A TC (TOP OF CURB).
- ALL CONSTRUCTION MUST CONFORM TO THE LOCAL JURISDICTIONAL STANDARDS, SPECIFICATIONS AND DETAILS. THE CONTRACTOR SHALL OBTAIN THESE DOCUMENTS, BECOME FAMILIAR WITH THEM AND HAVE THEM ON THE JOB SITE AT ALL TIMES.
- CONTRACTOR'S VEHICLES SHALL ONLY USE THE LOCAL ROADWAYS IN ACCORDANCE WITH JURISDICTIONAL REQUIREMENTS.
   NOTIFY LOCAL JURISDICTIONAL INSPECTOR 24 HOURS PRIOR TO BEGINNING OF
- NOTIFY LOCAL JURISDICTIONAL INSPECTOR 24 HOURS PRIOR TO BEGINNING OF CONSTRUCTION.
- 8. ALL CONSTRUCTION VEHICLES SHALL PARK IN AREAS DESIGNATED BY THE OWNER.
- OFF-STREET PARKING SHALL BE PROVIDED AND MAINTAINED THROUGHOUT CONSTRUCTION IF NEEDED.
   NECESSARY BARRICADES, SUFFICIENT LIGHTS, SIGNS AND OTHER TRAFFIC CONTROL DEVICES
- AS MAY BE NECESSARY FOR THE PROTECTION AND SAFETY OF THE PUBLIC SHALL BE PROVIDED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION AND MAINTAINED WHEN WORKING IN CLOSE PROXIMITY TO PUBLIC ROADS. INTERRUPTION TO TRAFFIC FLOW IS TO BE MINIMIZED DURING PEAK TRAFFIC HOURS.
- 11. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN ENTERING MANHOLES, PIPES OR OTHER STRUCTURES SHOWN ON THE PLANS. AT A MINIMUM, THESE PIPES AND STRUCTURES SHALL BE PROPERLY VENTILATED AND ENTRY SHALL CONFORM TO OSHA REQUIREMENTS.
- 12. CONTRACTOR SHALL CLEARLY MARK AND MAINTAIN PROPERTY CORNER MONUMENTATION AND BENCHMARKS WHENEVER POSSIBLE AND WILL BE RESPONSIBLE FOR THE COST OF REPLACING THEM IF DISTURBED OR DESTROYED.
- 13. THE CONTRACTOR SHALL LEAVE THE SITE IN A CLEAN AND NEAT CONDITION. ALL DEBRIS, VEGETATION WHICH HAS BEEN REMOVED, LUMBER, CONCRETE, ETC., SHALL BE REMOVED FROM THE SITE AND PROPERLY DISPOSED OF.
- 14. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION, ELEVATION AND PRESENCE OF UTILITIES SHOWN ON THE PLANS IS NOT TO BE RELIED ON TO BE ACCURATE, OR COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES HAVING UTILITIES WITHIN OR ADJACENT TO THE WORK AREA. THE CONTRACTOR SHALL HAVE THE UTILITIES FIELD LOCATED AND COORDINATED WITH UTILITY COMPANIES 72 HOURS PRIOR TO CONSTRUCTION TO HAVE THEM RELOCATED AND/OR ADAPTED FOR THE TIE-INS. IN ADDITION, CONTRACTOR IS REQUIRED TO CONTACT THE UTILITIES PROTECTION CENTER OF GEORGIA AT 1-800-282-7411 PRIOR TO ANY EXCAVATION.

### BENCHMARK

DESCRIPTION:

DELTA 10 N=1609135.66 E=2391838.90 EL=1352.81

TEMPORARY BENCHMARK

### REFERENCES

### SURVEY:

TOPOGRAPHIC SURVEY HALL COUNTY PUBLIC WORKS DEPARTMENT PREPARED BY ATLAS TECHNICAL CONSULTANTS DATED 12/29/2021.

## **GDOT GENERAL NOTES**

- 1. CONTRACTOR SHALL LOCATE ALL UTILITIES PRIOR TO BEGINNING WORK (CALL BEFORE YOU DIG: (DIAL
- 811). CONTRACTOR IS RESPONSIBLE FOR ALL LOCATION.
- PROJECT DOES NOT REQUIRE A NOTICE OF INTENT.
   PIPE CULVERT MATERIALS ALTERNATE CHART NOT APPLICABLE TO PROJECT SCOPE.
- PROJECT OWNER/DEVELOPER IS HALL COUNTY PUBLIC WORKS & UTILITIES.
- 5. UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY. OTHER UTILITIES MAY EXIST WHICH ARE NOT SHOWN ON THESE PLANS.
- 6. ALL WORK SHALL BE DONE IN ACCORDANCE WITH GDOT STANDARDS.
- 7. CONTRACTORS SHALL ADHERE TO ALL EROSION CONTROL REGULATIONS, AND INSTALL ALL NECESSARY EROSION AND SEDIMENT CONTROL MEASURES, WHETHER OR NOT THE PLANS SHOW THE REQUIRED MEASURES.

RILLA ROAD IMPROVEMENT
GENERAL NOTES

						ROADW	AY ITEMS							
ITEM #	150-1000	210-0100	310-1101	402-1812	402-3113	402-3190	413-1000	432-5010	441-0748	441-6012	441-6022	441-6718	444-1000	643-2153
LOCATION	TRAFFIC CONTROL	GRADING COMPLETE	GR AGGR BASE CRS, INCL MATL	RECYCLED ASPH CONC LEVELING, INCL BM&HL	RECYCLED ASPH CONC 12.5MM 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	BITUM TACK COAT	MILL ASPH CONC PVMT, VARIABLE DEPTH	CONCRETE MEDIAN, 6 IN	CONCRETE CURB & GUTTER, 6 IN X 24 IN, TP 2	CONCRETE CURB & GUTTER, 6 IN X 30 IN, TP 2	CONCRETE CURB & GUTTER, 6 IN X 24 IN, TP 7	SAWED JTS IN EXIST PAVEMENTS - PCC	CH LK FENCE W/EXT ARMS & BARB WIRE, 6 FT, 11 GA
	LS	LS	TN	TN	TN	TN	GL	SY	SY	LF	LF	LF	LF	LF
BEGIN TO END PROJ	1	1	255	19	54	108	119	1040	14	200	80	60	200	65
GRAVEL DRIVEWAY			42											
TOTAL	1	1	297	19	54	108	119	1040	14	200	80	60	200	65

		TEM	PORARY ER		ITROL					PERM			TROL		467 4000	467 4500
ITEM #	163-0240	163-0232	163-0300	163-0550	165-0010	165-0101	165-0105	171-0010	603-2186	603-7000	700-6910	700-7000	700-8000	700-8100	167-1000	167-1500
LOCATION	MULCH	TEMPORARY GRASSING	CONSTRUCTION EXIT	CONSTRUCT AND REMOVE INLET SEDIMENT TRAP	MAINT OF TEMPORARY SILT FENCE, TP A	MAINT OF CONSTRUCTION EXIST	MAINT OF INLET SEDIMENT TRAP	TEMPORARY SILT FENCE, TP A	STN DUMPED RIP RAP, TP 3, 36 IN	PLASTIC FILTER FABRIC	PERMANENT GRASSING	AGRICULTURAL LIME	FERTILIZER MIXED GRADE	FERTILIZER NITROGEN CONTENT	WATER QUALITY MONITORING & SAMPLING	WATER QUALITY INSPECTIONS
	TN	AC	EA	EA	LF	EA	EA	LF	SY	SY	AC	TN	TN	LB	EA	MO
BEGIN TO END PROJ	2	0.6	1	3	560	1	3	560	18	18	0.3	2.0	2.0	25	1	6
TOTAL	2	0.6	1	3	560	1	3	560	18	18	0.3	2.0	2.0	25	1	6

NOTES:

THE DISTURBED ARE SHOWN IN THE PLANS IS FOR CLEARING AND GRUBBING ESTIMATING PURPOSES ONLY. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE TOTAL ACREAGE SHOWN IN CASE HE ELECTS TO USE THE PLAN QUANTITY IN ESTIMATING HIS BID PRICE. NO CLAIMS WILL BE CONSIDERED FOR EXTRA COMPENSATION IN CASE THE ACREAGE SHOWN IS LESS THAN ACTUAL ACREAGE.

THE TEMPORARY EROSION CONTROL QUANTITIES ARE FOR ESTIMATING PURPOSES ONLY AND TO AID THE CONTRACTOR IN PREPARING HIS/HER EROSION CONTROL PLAN.

GRADING COMPLETE SHALL INCLUDE THE REMOVAL OF ANY INCIDENTAL STRUCTURES ENCOUNTERED DURING CONSTRUCTION WHICH ARE NOT SHOWN ON THE PLANS AS A SEPARATE PAY ITEM. HOWEVER, THIS ITEM AND QUANTITY ARE SHOWN FOR INFORMATION ONLY, NO SEPARATE PAYMENT MADE FOR CLEARING AND GRUBBING. COST TO BE INCLUDED IN THE BID FOR "GRADING COMPLETE".

ALL TEMPORARY SHORING AND TEMPORARY BARRIER NECESSARY FOR STAGE CONSTRUCTION SHALL BE INCLUDED IN BID PRICE FOR TRAFFIC CONTROL.



Know what's **below. Call** before you dig. FOR USE IN INCLEMENT WEATHER TO FACILITATE THE MOVEMENT OF LOCAL TRAFFIC ALONG ROADWAY CONSTRUCTION AND TO PERMIT INGRESS AND EGRESS AT DRIVES WHEN USED FOR THIS PURPOSE, SECTION 318 GA. STD.SP IS MODIFIED TO PERMIT TRUCK DUMPING ON UNPREPARED AND MUDDY SUBGRADE.

THE CONTRACTOR WILL HAVE THE CHOICE OF THE FOLLOWING MATERIALS: 1. GRADED AGGREGATE, ARTICLE 815.01

- 2. COURSE AGGREGATE SIZE 467, ARTICLE 800.01
- 3. STABILIZED AGGREGATE TYPE 1 OR 2, SECTION 803
- 4. CRUSHED STONE, ARTICLE 806.2

ALL MATERIALS ARE TO BE USED AS DIRECTED BY THE ENGINEER.

SAW CUTTING ASPHALT PAVEMENT WILL NOT BE PAID SEPARATELY. INCLUDE THE COST OF ASPHALT SAW CUTTING IN THE PRICE BID FOR OTHER ITEMS.



			STANDARD S	IGNS				
ITEM #	610-9001			636-1033			636-2080	
	REMOVE		TYPE	9 REFLECTIVI	ΤY	POS	TS (LINEAR F	EET)
LOCATION		CODE	Υ	YPE 1 (0.08)			TYPE 8	
	EACH		SIZE	QUANTITY	SQUARE FEET	LENGTH	QUANTITY	LINEAR FEET
3+50 LT	1	R1-2	36"X36"X36"	1	4.5	13	1	13
3+65 RT	1	R1-1	36"X36"	1	9	13	1	13
3+70 RT		R1-2	36"X36"X36"	1	4.5	13	1	13
TOTAL	2			3	18		3	39

	TI	EHRMOPLA	STIC STRIPI	NG		
ITEM #	653-1501	653-1502	653-1704	653-3501	653-0120	653-6004
LOCATION	THERMOPASTIC SOILD TRAFFIC STRIPE, 5" WHITE	THERMOPASTIC SOILD TRAFFIC STRIPE, 5" YELLOW	THERMOPASTIC SOLID TRAFFIC STRIPE, 24" WHITE	THERMOPLASTIC SKIP TRAF STRIPE, 5" WHITE	THERMOPASTIC PVMT MARKING, ARROW, TP2	THERMOPLASTIC TRAFFIC STRIPING, WHITE - DETAIL B
	LF	LF	LF	GLF	EA	SY
<b>RILLA ROAD</b>	945	760	11	100	3	32
TOTAL	945	760	11	100	3	32

		DR	RAINAGE IT	EMS			
ITEM #	550-1180	550-1300	550-1360	550-3330	550-4236	611-8000	668-2100
LOCATION	STORM DRAIN PIPE, 18", H 1-10	STORM DRAIN PIPE, 30", H 1-10	STORM DRAIN PIPE, 36", H 1-10	SAFETY END SECTION 30 IN, STORM DRAIN, 4:1 SLOPE	FLARED END SECTION 36 IN, STORM DRAIN	ADJUST CATCH BASIN TO GRADE	DROP INLET, GP 1
	LF	LF	LF	EA	EA	EA	EA
EX1		98		1			
A1			159				1
EX2			67			1	
EX3					1		
A2	10						1
TOTAL	10	98	226	1	1	1	2

					-	
5		NAME	DATE		NAME	DATE
	DESIGNED BY	WS	04/21/2023	DRAWN BY	WS	04/21/2023
te 107 D 7	CHECKED BY	BS	04/21/2023	CHECKED BY	BS	04/21/2023
7665	SUPERVISE	D BY				

# HALL COUNTY, GEORGIA

# RILLA ROAD IMPROVEMENT SUMMARY OF QUANTITIES

DRAWING NUMBER

CN002

### CLEARING PHASE NOTES

- 1. PRIOR TO LAND DISTURBING ACTIVITY, THE CONTRACTOR SHALL SCHEDULE A PRECONSTRUCTION MEETING WITH THE AREA SITE DEVELOPMENT INSPECTOR.
- 2. THE CONTRACTOR SHALL OBSERVE THE PROJECT SEQUENCE SHOWN ON THE PLANS. THE CONTRACTOR SHALL MAINTAIN CAREFUL SCHEDULING AND PERFORMANCE TO ENSURE THAT LAND STRIPPED OF IT'S NATURAL COVER IS EXPOSED ONLY IN
- SMALL QUANTITIES. 3. A COPY OF THE APPROVED LAND DISTURBANCE PLAN AND PERMIT SHALL BE PRESENT ON THE SITE AT ALL TIMES. 4. PRIOR TO COMMENCING LAND DISTURBANCE ACTIVITY, LIMITS OF LAND DISTURBANCE SHALL BE CLEARLY AND ACCURATELY DEMARCATED WITH STAKES, RIBBONS OR OTHER APPROPRIATE MEANS, AND SHALL BE DEMARCATED FOR THE DURATION OF THE CONSTRUCTION ACTIVITY. NO LAND DISTURBANCE SHALL OCCUR OUTSIDE THE LIMITS INDICATED ON THE APPROVED PLANS.
- 5. PRIOR TO ANY OTHER CONSTRUCTION, A STABILIZED CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED AT EACH POINT OF ENTRY TO OR EXIT FROM THE SITE OR ONTO ANY PUBLIC ROADWAY.
- 6. THE FOLLOWING INITIAL EROSION CONTROL MEASURES SHALL BE IMPLEMENTED PRIOR TO ANY OTHER CONSTRUCTION ACTIVITY: a. THE CONSTRUCTION EXIT SHALL BE PLACED AS SHOWN ON THE PLANS.
  - b. IMMEDIATELY AFTER THE ESTABLISHMENT OF THE CONSTRUCTION EXIT, ALL PERIMETER EROSION CONTROL AND STORMWATER MANAGEMENT DEVICES SHALL BE INSTALLED AS SHOWN ON THE EROSION CONTROL PLAN.
  - c. TREE PROTECTION FENCING SHALL BE INSTALLED PRIOR TO THE START OF ANY LAND DISTURBING ACTIVITY.
- 7. THE CONTRACTOR CAN PROCEED WITH CLEARING AND GRUBBING ACTIVITIES. AS CLEARING PERMITS, THE CONTRACTOR SHALL CONSTRUCT SEDIMENT STORAGE BMP'S AS SHOWN ON PLANS.
- 8. THE CONTRACTOR CAN UTILIZE CLEARED TREES AS BARRIER BRUSH SEDIMENT CONTROL WHERE INITIAL GRADING ACTIVITIES WILL NOT OCCUR.
- 9. NO BURN OR BURY PITS SHALL BE PERMITTED ON THE CONSTRUCTION SITE WITHOUT WRITTEN PERMISSION BY THE OWNER.
- 10. ALL SILT FENCES MUST MEET THE REQUIREMENTS OF SECTION 171-TEMPORARY SILT FENCE FOR THE DEPARTMENT OF
- TRANSPORTATION, STATE OF GEORGIA, STANDARD SPECIFICATIONS, LATEST EDITION. 11. SEDIMENT AND EROSION CONTROL MEASURES MUST BE CHECKED AFTER EACH RAIN EVENT. EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE THIRD THE CAPACITY OF THE DEVICE.
- ADDITIONAL DEVICES MUST BE INSTALLED IF NEW CHANNELS HAVE DEVELOPED. 12. THE CONSTRUCTION EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO THE PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 1"- 3" OF STONE, AS CONDITIONS DEMAND. ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED FROM A VEHICLE ONTO PUBLIC ROADWAY OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
- 13. CONTRACTOR SHALL INSPECT EROSION CONTROL MEASURES AT THE END OF EACH WORKING DAY TO ENSURE PROPER FUNCTIONING.
- 14. FAILURE TO INSTALL, OPERATE OR MAINTAIN ALL EROSION CONTROL MEASURES MAY RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE SITE UNTIL SUCH MEASURES ARE CORRECTED BACK TO THE APPROVED PLANS.

### **GRADING PHASE NOTES**

- 1. DURING CONSTRUCTION, THE CONTRACTOR SHALL MAINTAIN CAREFUL SCHEDULING AND PERFORMANCE TO ENSURE THAT LAND STRIPPED OF ITS NATURAL GROUND COVER IS EXPOSED ONLY IN SMALL QUANTITIES, AND THEREFORE LIMITED DURATIONS, BEFORE PERMANENT EROSION PROTECTION IS ESTABLISHED.
- EROSION CONTROL DEVICES SHALL BE INSTALLED IMMEDIATELY AFTER GROUND DISTURBANCE OCCURS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH EROSION CONTROL FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES DURING CONSTRUCTION AND TO ALTER THE LOCATION OF EROSION CONTROL DEVICES ACCORDINGLY. ANY DIFFICULTY IN CONTROLLING EROSION DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE DESIGN PROFESSIONAL IMMEDIATELY.
- 3. ALL GRADED AREAS SHALL BE APPLIED WITH VEGETATIVE COVER AS SOON AS FINAL GRADE IS ACHIEVED. MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 7 DAYS OF LAND DISTURBANCE. ALL DISTURBED AREAS LEFT MULCHED FOR MORE THAN 30 DAY SHALL BE STABILIZED WITH TEMPORARY GRASSING.
- 4. SEDIMENT AND EROSION CONTROL MEASURES MUST BE CHECKED AFTER EACH RAIN EVENT. EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE THIRD THE CAPACITY OF THE DEVICE. ADDITIONAL DEVICES MUST BE INSTALLED IF NEW CHANNELS HAVE DEVELOPED. CONTRACTOR SHALL INSPECT EROSION CONTROL MEASURES AT THE END OF EACH WORKING DAY TO ENSURE MEASURES
- ARE FUNCTIONING PROPERLY. 6. THE CONSTRUCTION EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACK OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 1" - 3" OF STONE, AS CONDITIONS DEMAND. ALL MATERIALS SPILLED, DROPPED, WASHED OR TRACKED FROM A VEHICLE ONTO PUBLIC ROADWAY OR INTO STORM
- DRAIN MUST BE REMOVED IMMEDIATELY. 7. FAILURE TO INSTALL, OPERATE OR MAINTAIN ALL EROSION CONTROL MEASURES, MAY RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE JOB UNTIL SUCH MEASURE ARE CORRECTED BACK TO THE APPROVED EROSION CONTROL PLANS.

### FINAL PHASE NOTES

- 1. ALL ROADWAY SHOULD BE GRASSED AS SOON AS FINAL GRADE IS ACHIEVED.
- 2. ALL DISTURBED AREAS ARE TO RECEIVE FINAL STABILIZATION WITH 100% OF THE SOIL SURFACE NOT COVERED WITH STRUCTURES OR PAVEMENTS UNIFORMLY COVERED IN PERMANENT VEGETATION WITH A DENSITY OF 70% OR GREATER OR LANDSCAPED IN ACCORDANCE WITH THE APPROVED LANDSCAPE PLAN.
- 3. UPON COMPLETION OF THE PROJECT AND RECEIPT OF THE CERTIFICATE OF COMPLETION, THE CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AND DISPOSE OF THEM UNLESS NOTED OTHERWISE ON PLANS.
- 4. ALL SEDIMENT IN STORM PIPES, PONDS, VAULTS, DRAINAGE STRUCTURES, ETC. IS TO BE COMPLETELY REMOVED AND DISPOSED OF PROPERLY.



# Know what's **below. Call** before you dig.

::									
5 12				REVIS	SIONS				
72	$\triangle$	DATE	BY	DESCRIPTION	$\square$	DATE	BY	DESCRIPTION	
2									407 East Maple Street Suite 10
21									407 East Maple Street Suite 10 Cumming , GA 30040
									Tel.: (770) 781–5507 oneatlas.com
7									COA-LSF #1323, PEF #7665



# EROSION CONTROL NOTES (LAND DISTURBANCE <1.0 ACRES)

- AND PERMITS.

# **VEGETATIVE PRA**

Bf	BUFFER ZONE		Bf	An undisturbed natural "green belt" separating the land-disturbing site from surrounding property and bordering streams. It serves to reduce water velocity and remove some sediment. It is also at times a noise or 'vision pollution' barrier.	CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION
Cs	COASTAL DUNE STABILIZATION	<u></u>	Cs	Planting vegetation on dunes that are denuded, artificially constructed, or re-nourished. retarding cover.	Cd	CHECKDAM	NAME AND ADDRESS	J	A small temporary barrier or dam constructed across a swale, drainage ditch or area of concentrated flow.
Ds1	DISTURBED AREA STABILIZATION (W/MULCHING ONLY)		Ds1	Establishing temporary protection for disturbed areas where seedings may not have a suitable growing season to produce an erosion	Ch	CHANNEL STABILIZATION			Improving, constructing or stabilizing an open channel, existing stream, or ditch.
Ds2	DISTURBED AREA STABILIZATION (w/TEMPORARY SEEDING)		Ds2	Establishing a temporary vegetative cover with fast growing seedings on disturbed areas.	Со	CONSTRUCTION EXIT		(label)	A crushed stone pad located at the construction exit to provide a place for removing mud from tires thereby protecting public streets.
Ds3	DISTURBED AREA STABILIZATION (w/PERMANENT SEEDING)	3	Ds3	Establishing permanent vegetative cover such as trees, shrubs, vines, sod, grasses or legumes on disturbed areas.	Cr	CONSTRUCTION ROAD STABILIZATION		C)	A travelway constructed as part of a construction plan including access roads, sub- division roads, parking areas and other on-site vehicle transportation routes.
Ds4	DISTURBED AREA STABILIZATION (WITH SODDING)		Ds4	A permanent vegetative cover using sods on highly erodible or critically eroded lands.	Dc	STREAM DIVERSION CHANNEL			A temporary channel con- structed to convey flow around a construction site while a permanent stucture is being constructed.
Du	DUST CONTROL ON DISTURBED AREAS		Du	Controlling surface and air movement of dust on construction site, roadways and similar sites.	Di	DIVERSION		HIN	An earth channel or dike located above, below or across a slope to divert runoff. This may be a temporary or permanent structure.
-I-Co	FLOCCULANTS AND COAGULANTS		Fl-Co	Substance formulated to assist in the solids/liquid separation of suspended particles in solution.	Dn1	TEMPORARY DOWNDRAIN STRUCTURE	T.	(label)	A flexible conduit of heavy- duty fabric or other ma- terial designed to safely conduct surface runoff down a slope. Temporary. and inexpensive.
Sb	STREAMBANK STABILIZATION (WITH PERMANENT VEGETATION)		Sb	The use of readily available native plant materials to maintain and enhance streambanks, or to prevent, or restore and repair small streambank erosion problems.	Dn2	PERMANENT DOWNDRAIN STRUCTURE		(label)	A paved chute, sectional conduit, pipe or similar material designed to designed to safely conduct surface runoff down a slope.
Ss	SLOPE STABILIZATION		Ss	A protective covering used to prevent erosion and establish temporary or permanent vegetation on steep slopes, shore lines, or channels.	Fr	FILTER RING	C		A temporary stone barrier constructed at storm drain inlets and pond outlets.
Гас	TACKIFIERS AND BINDERS		Tac	Substance used to anchor straw or hay mulch by causing the organic material to bind together.	Ga	GABION		ALL	Rock filter baskets which are hand-placed into position forming soil stabilizing structures.
	стрі	JCTURAI			Gr	GRADE STABILIZATION STRUCTURE		(label)	Permanent structures installed to protect natural or artificial channels or waterways where otherwise the slope would be sufficient for the running water to form gullies.
ODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION		LEVEL SPREADER			A structure to convert con- centrated flow of waters into less erosive sheet flow. This should be constructed only on undisturbed soils.
Spb	STEP		(app)	A linear control device constructed as a diversion perpendicular to the direction of the runoff to enhance dissipation and infiltration of run-	Rd	ROCK FILTER DAM	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		A permanent or temporary stone filter dam installed across small streams or drainageways.
	BERM	<u>Î</u>	(label)	off, while creating multiple sedi- mentation chambers with the em- ployment of intremediate dikes. A temporary bridge or	Re	RETAINING WALL		(label)	A wall installed to stabilize cut and fill slopes where maximum permissible slopes are not obtainable. Each situation will require special design.
Sr	TEMPORARY STREAM CROSSING		(label)	culvert-type structure protecting a stream or watercourse from damage by crossing construction equipment. A paved or short section of	Rt	RETROFITTING		R	A device or structure placed in front of a permanent stormwater detention pond outlet structure to serve as a temporary sediment
St	STORMDRAIN INLET/OUTLET PROTECTION		St	riprap channel at the outlet of a storm drain system preventing erosion from the concentrated runoff. A rough soil surface with	Sd1	SEDIMENT BARRIER		(label)	filter. A barrier to prevent sediment from leaving the construction site. It may be sandbags, bales of straw or hay, gravel or a sediment fence.
Su	SURFACE ROUGHING		H	horizontal depressions on a contour or slopes left in a roughened condition after grading. A floating or staked barrier in-	Sd2	SEDIMENT TRAP,		(indicate type)	An impounding area created by excavating around a storm drain inlet. The excavated area will be
Tc	TURBIDITY CURTAIN		₩ <sup>TC</sup>	stalled within the water (it may also be referred to as a floating boom, silt barrier, or silt curtain). The practice of stripping off the		TEMPORARY SEDIMENT	······································		filled and stabilized on completion of construction activities. A basin created by excavation or a dam across a waterway.
	TOPSOILING		show stripping & storag areas)	more fertile soil, storing it, then spreading it over the disturbed area after completion of construction activities.	Sd3	BASIN, TEMPORARY			The surface water runoff is temp- orarly stored allowing the bulk of the sediment to drop out. A small temporary pond that drains a disturbed area so that
Tp			/		Sd4	SEDIMENT TRAP,	E		sediment can settle out. The principle feature distinguishing a
	TREE PROTECTION		lenote tree centers)	To protect desirable trees from injury during construction activity.		TEMPORARY	and the second s		temporary sediment trap from a temporary sediment basin is the lack of a pipe or riser.

	SEEDING)			legumes on disturbed areas.					transportation routes.
Ds4	DISTURBED AREA STABILIZATION (WITH SODDING)		Ds4	A permanent vegetative cover using sods on highly erodible or critically eroded lands.	Dc	STREAM DIVERSION CHANNEL			A temporary channel con- structed to convey flow around a construction site while a permanent stucture is being constructed.
Du	DUST CONTROL ON DISTURBED AREAS		Du	Controlling surface and air movement of dust on construction site, roadways and similar sites.	Di	DIVERSION		HIN	An earth channel or dike located above, below or across a slope to divert runoff. This may be a temporary or permanent structure.
Fl-Co	FLOCCULANTS AND COAGULANTS		Fl-Co	Substance formulated to assist in the solids/liquid separation of suspended particles in solution.	Dn1	TEMPORARY DOWNDRAIN STRUCTURE		(label)	A flexible conduit of heavy- duty fabric or other ma- terial designed to safely conduct surface runoff down a slope. Temporary. and inexpensive.
Sb	STREAMBANK STABILIZATION (WITH PERMANENT VEGETATION)		Sb	The use of readily available native plant materials to maintain and enhance streambanks, or to prevent, or restore and repair small streambank erosion problems.	Dn2	PERMANENT DOWNDRAIN STRUCTURE		(label)	A paved chute, sectional conduit, pipe or similar material designed to designed to safely conduct surface runoff down a slope.
Ss	SLOPE STABILIZATION		Ss	A protective covering used to prevent erosion and establish temporary or permanent vegetation on steep slopes, shore lines, or channels.	Fr	FILTER RING	U		A temporary stone barrier constructed at storm drain inlets and pond outlets.
Тас	TACKIFIERS AND BINDERS		Tac	Substance used to anchor straw or hay mulch by causing the organic material to bind together.	Ga	GABION		STATISTICS OF STATISTICS	Rock filter baskets which are hand-placed into position forming soil stabilizing structures.
	STRI				Gr	GRADE STABILIZATION STRUCTURE		(label)	Permanent structures installed to protect natural or artificial channels or waterways where otherwise the slope would be sufficient for the running water to form gullies.
CODE	PRACTICE	DETAIL	MAP SYMBOL	DESCRIPTION	Lv	LEVEL SPREADER			A structure to convert con- centrated flow of waters into less erosive sheet flow. This should be constructed only on undisturbed soils.
				A linear control device constructed as a diversion perpendicular to the	Rd	ROCK FILTER			A permanent or temporary stone filter dam installed across small streams or
Snh	STEP		Spb	direction of the runoff to enhance		DAM			drainageways.
Spb	BERM		(label)		Re	DAM RETAINING WALL		A Re	drainageways. A wall installed to stabilize cut and fill slopes where maximum permissible slopes are not obtainable. Each situation
Spb Sr	N			direction of the runoff to enhance dissipation and infiltration of run- off, while creating multiple sedi- mentation chambers with the em- ployment of intremediate dikes. A temporary bridge or culvert-type structure protecting a stream or watercourse from damage by crossing construction equipment.	Re	RETAINING		J.L.	drainageways. A wall installed to stabilize cut and fill slopes where maximum permissible slopes are not obtainable. Each situation will require special design. A device or structure placed in front of a permanent stormwater detention pond outlet structure to serve
	BERM TEMPORARY STREAM	THINK YOUR	(label)	direction of the runoff to enhance dissipation and infiltration of run- off, while creating multiple sedi- mentation chambers with the em- ployment of intremediate dikes. A temporary bridge or culvert-type structure protecting a stream or watercourse from damage by crossing construction equipment. A paved or short section of riprap channel at the outlet of a storm drain system preventing erosion from the concentrated runoff.	Rt	RETAINING WALL RETROFITTING SEDIMENT		(label)	drainageways. A wall installed to stabilize cut and fill slopes where maximum permissible slopes are not obtainable. Each situation will require special design. A device or structure placed in front of a permanent stormwater detention pond outlet structure to serve as a temporary sediment filter. A barrier to prevent sediment from leaving the construction site. It may be sandbags, bales of straw or hay, gravel or a
Sr	BERM TEMPORARY STREAM CROSSING STORMDRAIN INLET/OUTLET		(label)	direction of the runoff to enhance dissipation and infiltration of run- off, while creating multiple sedi- mentation chambers with the em- ployment of intremediate dikes. A temporary bridge or culvert-type structure protecting a stream or watercourse from damage by crossing construction equipment. A paved or short section of riprap channel at the outlet of a storm drain system preventing erosion from the concentrated runoff. A rough soil surface with horizontal depressions on a contour or slopes left in a roughened condition after grading.	Rt Sd1	RETAINING WALL RETROFITTING SEDIMENT BARRIER		(label)	drainageways. A wall installed to stabilize cut and fill slopes where maximum permissible slopes are not obtainable. Each situation will require special design. A device or structure placed in front of a permanent stormwater detention pond outlet structure to serve as a temporary sediment filter. A barrier to prevent sediment from leaving the construction site. It may be sandbags, bales of straw or hay, gravel or a sediment fence. An impounding area created by excavating around a storm drain
Sr St	BERM TEMPORARY STREAM CROSSING STORMDRAIN INLET/OUTLET PROTECTION SURFACE		(label)	direction of the runoff to enhance dissipation and infiltration of run- off, while creating multiple sedi- mentation chambers with the em- ployment of intremediate dikes. A temporary bridge or culvert-type structure protecting a stream or watercourse from damage by crossing construction equipment. A paved or short section of riprap channel at the outlet of a storm drain system preventing erosion from the concentrated runoff. A rough soil surface with horizontal depressions on a contour or slopes left in a	Rt Sd1	RETAINING WALL RETROFITTING SEDIMENT BARRIER SEDIMENT TRAP, TEMPORARY		(label) (label) (label) (indicate type)	drainageways. A wall installed to stabilize cut and fill slopes where maximum permissible slopes are not obtainable. Each situation will require special design. A device or structure placed in front of a permanent stormwater detention pond outlet structure to serve as a temporary sediment filter. A barrier to prevent sediment from leaving the construction site. It may be sandbags, bales of straw or hay, gravel or a sediment fence. An impounding area created by excavating around a storm drain inlet. The excavated area will be filled and stabilized on completion of construction activities. A basin created by excavation
Sr St Su	BERM       TEMPORARY STREAM CROSSING       STORMDRAIN INLET/OUTLET PROTECTION       SURFACE ROUGHING       TURBIDITY		(label) (label) (label)	direction of the runoff to enhance dissipation and infiltration of run- off, while creating multiple sedi- mentation chambers with the em- ployment of intremediate dikes. A temporary bridge or culvert-type structure protecting a stream or watercourse from damage by crossing construction equipment. A paved or short section of riprap channel at the outlet of a storm drain system preventing erosion from the concentrated runoff. A rough soil surface with horizontal depressions on a contour or slopes left in a roughened condition after grading. A floating or staked barrier in- stalled within the water (it may also be referred to as a floating boom, silt barrier, or silt curtain). The practice of stripping off the more fertile soil, storing it, then spreading it over the disturbed area after completion of	Rt Sd1	RETAINING WALL RETROFITTING SEDIMENT BARRIER SEDIMENT TRAP,		(label) (label) (label)	drainageways. A wall installed to stabilize cut and fill slopes where maximum permissible slopes are not obtainable. Each situation will require special design. A device or structure placed in front of a permanent stormwater detention pond outlet structure to serve as a temporary sediment filter. A barrier to prevent sediment from leaving the construction site. It may be sandbags, bales of straw or hay, gravel or a sediment fence. An impounding area created by excavating around a storm drain inlet. The excavated area will be filled and stabilized on completion of construction activities. A basin created by excavation or a dam across a waterway. The surface water runoff is temp- orarly stored allowing the bulk of the sediment to drop out.
Sr St Su Tc	BERM       TEMPORARY STREAM CROSSING       STORMDRAIN INLET/OUTLET PROTECTION       SURFACE ROUGHING       TURBIDITY CURTAIN		(label)	direction of the runoff to enhance dissipation and infiltration of run- off, while creating multiple sedi- mentation chambers with the em- ployment of intremediate dikes. A temporary bridge or culvert-type structure protecting a stream or watercourse from damage by crossing construction equipment. A paved or short section of riprap channel at the outlet of a storm drain system preventing erosion from the concentrated runoff. A rough soil surface with horizontal depressions on a contour or slopes left in a roughened condition after grading. A floating or staked barrier in- stalled within the water (it may also be referred to as a floating boom, silt barrier, or silt curtain). The practice of stripping off the more fertile soil, storing it, then spreading it over the disturbed area after completion of	Rt Sd1 Sd2	RETAINING WALL RETROFITTING SEDIMENT BARRIER SEDIMENT TRAP, TEMPORARY SEDIMENT BASIN,		(label) (label) (label) (indicate type)	drainageways. A wall installed to stabilize cut and fill slopes where maximum permissible slopes are not obtainable. Each situation will require special design. A device or structure placed in front of a permanent stormwater detention pond outlet structure to serve as a temporary sediment filter. A barrier to prevent sediment from leaving the construction site. It may be sandbags, bales of straw or hay, gravel or a sediment fence. An impounding area created by excavating around a storm drain inlet. The excavated area will be filled and stabilized on completion of construction activities. A basin created by excavation or a dam across a waterway. The surface water runoff is temp- orarly stored allowing the bulk

# GEORGIA UNIFORM CODING SYSTEM FOR SOIL EROSION AND SEDIMENT CONTROL PRACTICES

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- SEE SHEETS CE501 THRU CE503 FOR EROSION CONTROL DETAILS. 1. THERE ARE NO WATERS OF THE STATE ON OR WITHIN 200 FEET OF PROJECT AREA.
- SOIL SERIES FOR ENTIRE DISTURBED AREA = CfC2 4.

NAME:

FIRM:

PHONE:

- DISTURBED AREA = 0.55 AC OWNER/DEVELOPER: HALL COUNTY PUBLIC WORKS & UTILITIES
- CONTRACTOR: TBD 6.

# 24 HOUR CONTACT

SCOTT PUCKETT HALL COUNTY PUBLIC WORKS & UTILITIES 770-531-6800

# APPROXIMATE ACTIVITY SCHEDULE

ANTICIPATED START DATE: TBD																	A		CIPA	TEI	D C	OWF	PLE	ETION DATE: TBD						
															MC	DN	ГН													
DESCRIPTION	1			2		3	}		4		5		6	6		7		8		9		1	0		11		12	2	1	3
INITIAL PHASE E&SC INSTALLATION			$\square$					$\square$											$\square$					H		$\square$				$\square$
7-DAY VISIT CERTIFICATION																+						-								H
SEDIMENT CONTROL-TREE PROTECTION																									+				+	
CLEARING & GRUBBING																														
NITIAL PHASE E&SC INSTALLATION																														
7-DAY VISIT CERTIFICATION																														
SEDIMENT CONTROL-TREE PROTECTION																														
CLEARING & GRUBBING																														
GRADING																														
MULCHING - TEMPORARY GRASSING				+												+						+							+	
MAINT. OF EROSION CONTROL DEVICES																														
FINAL LANDSCAPING, CLEANING OF STORM DRAINS				+												+						+			+				+	
DISPOSITION OF SEDIMENT DEVICES			+	+	$\left  \right $					+	$\vdash$	+			+	+			++	+	+	+	$\left  \right $	+	+	$\left  \right $	+		+	╞┼

		NAME	DATE		NAME	DATE
	DESIGNED BY	WS	04/21/2023	DRAWN BY	WS	04/21/2023
107	CHECKED BY	BS	04/21/2023	CHECKED BY	BS	04/21/2023
5	SUPERVISE	DBY				

1. NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE EPD 25' UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE POINT OF WRESTED VEGETATION WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES

2. ALONG ALL STATE WATERS AND OTHER SENSITIVE AREAS, TWO ROWS OF TYPE S SEDIMENT BARRIER SHALL BE USED OUTSIDE OF THE STATE WATERS UNDISTURBED BUFFER AND BE PLACED A MINIMUM OF 36 INCHES APART. 3. AMENDMENTS/REVISIONS TO THE ES&PC PLAN WHICH HAVE A SIGNIFICANT EFFECT ON BMP'S WITH A HYDRAULIC COMPONENT MUST BE PROVIDED BY THE DESIGN PROFESSIONAL PRIOR TO THEIR CONSTRUCTION. 4. CONTRACTOR TO MAINTAIN CONSTRUCTION EXITS TO PREVENT TRACKING OF MUD INTO THE PUBLIC RIGHT OF WAY. ANY TRACKED MUD IS TO BE REMOVED FROM THE ROAD WAY IMMEDIATELY. 5. ALL GRADED SLOPES 3:1 OR GREATER MUST BE HYDROSEEDED AND COVERED WITH GDOT APPROVED WHEAT OR WOOD FIBER MATTING. IF NOT HYDROSEEDED, GDOT APPROVED MATTING THAT HAS BEEN IMPREGNATED WITH SEED AND FERTILIZER MUST BE USED. ALL SLOPES MUST BE PROPERLY PROTECTED UNTIL A PERMANENT VEGETATIVE STAND IS ESTABLISHED.

6. ALL BMP'S TO REMAIN IN PLACE UNTIL PERMANENT VEGETATION IS WELL ESTABLISHED.

CTICES	
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STRUCTURAL PRACTICE
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CE001

## RILLA ROAD IMPROVEMENT **EROSION CONTROL NOTES**

2	CERTIFIED DESIGN PROFESSIONAL: NAME: BABAK SHAYAN LEVEL II CERTIFICATION NUMBER: 19368 (SEE TITLEBLOCK FOR SIGNATURE AND SEAL)	14 THE D SEDIM
3	DISTURBED AREA: 0.55 IF GREATER THAN 50 ACRES (AT ANY ONE TIME), LIST 4 BMP'S TO BE IMPLEMENTED PER APPENDIX 1 1. 2.	15 NON-E MEASU AS ME VARIA
	3. 4. 24-HOUR LOCAL EMERGENCY CONTACT	16 BUFFE DESCR
4	NAME: SCOTT PUCKETT PHONE NUMBER: 770-531-6800	
(5)	PRIMARY PERMITTEE NAME: HALL COUNTY PUBLIC WORKS & UTILITIES ADDRESS: 2875 BROWNS BRIDGE ROAD, GAINESVILLE, GEORGIA 30503 EMAIL ADDRESS: SPUCKETT@HALLCOUNTY.ORG PHONE NUMBER: 770-531-6800	(17) COMP (18) WAST 404 P
6	SITE INFORMATION (ACREAGE) DISTURBED AREA: 0.55 ACRES	19 THE E CONT
7	<u>GPS LOCATION OF CONSTRUCTION EXIT (IN DECIMAL DEGREES)</u> : LATITUDE: 34.42165 LONGITUDE: -83.84636	20 EROSI PLAN MEASU
(8)	INITIAL DATE OF THE PLANS: SEE COVER SHEET AND/OR TITLE BLOCK FOR INFORMATION DESCRIPTION OF THE NATURE OF CONSTRUCTION ACTIVITY:	(21) ANY D TEMPO
9	EXISTING: EXISTING SITE IS RILLA ROAD RIGHT-OF-WAY.	
	PROPOSED: A 100' TAPER AND 250' STORAGE LANE WITH CURB AND GUTTER AND STORMWATER IMPROVEMENTS WILL BE ADDED TO RILLA ROAD.	OF IM IF
10	VICINITY MAP:	US 1. 2. 3.
(11)	<image/> <section-header><section-header><text></text></section-header></section-header>	Projec City/C Name Plan Page # CE010 CE010 CE010 CE010 CE010 CE010 CE010 CE010 CE010
(12)	SITE VISIT CERTIFICATION	CE010
	A SITE VISIT TO THE LOCATIONS DESCRIBED HEREIN BY MYSELF OR MY AUTHORIZED AGENT, UNDER MY DIRECT SUPERVISION."	CE010
	PROFESSIONAL, PE (CERT.# NUMBER) DATE	CE010
$\frown$		CE010
(13)	"I CERTIFY THAT THE PERMITTEE'S EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN	CE010
	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	CE010
	GEORGIA SOIL AND WATER CONSERVATION COMMISSION AS OF JANUARY 1 OF THE YEAR IN WHICH THE LAND-DISTURBING ACTIVITY WAS PERMITTED, PROVIDES FOR THE SAMPLING OF THE RECEIVING WATER(S) OR THE SAMPLING OF THE STORM WATER OUTFALLS AND THAT THE	CE010
	DESIGNED SYSTEM OF BEST MANAGEMENT PRACTICES AND SAMPLING METHODS IS EXPECTED TO MEET THE REQUIREMENTS CONTAINED IN THE GENERAL NPDES PERMIT NO. GAR 100001."	CE010
	PROFESSIONAL, PE (CERT.# NUMBER) DATE	CE010
		N/A
AB	DRAMA	
	eorgia811.com	CE010
	Know what's <b>below.</b> Call before you dig.	

REVISIONS

△ DATE

BY DESCRIPTION

)	-		IONAL WHO PREPARED THE ES&PC PLAN IS TO INSPECT THE INSTALL REQUIREMENTS AND PERIMETER CONTROL BMP'S WITHIN 7 DAYS AFTI	
)	MEASUR AS MEAS	ED FROM T	TES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50-FOOT UNDISTING POINT OF WRESTED VEGETATION OR WITHIN 25-FEET OF THE COAS THE JURISDICTIONAL DETERMINATION LINE WITHOUT FIRST ACQUIRING MITS.	TAL MARSHLA
)	BUFFER DESCRIP	ENCROACH/ TION:	<u>NTS</u>	
	BUFFER	VARIANCE F	QUIRED?YES,XNO	
)			ONS TO THE ES&PC PLAN WHICH HAVE A SIGNIFICANT EFFECT ON BM E CERTIFIED BY THE DESIGN PROFESSIONAL.	P'S WITH A H'
)	WASTE <i>I</i> 404 PER		HALL NOT BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AU	THORIZED BY
)			MENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION O AND PRACTICES PRIOR TO LAND DISTURBING ACTIVITIES.	F EROSION AN
	PLAN DC	DES NOT PR	EASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTAT VIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND S IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.	
)		TURBED AF ARY SEEDI	A LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE ST	ABILIZED WIT
	DOES OR V	VITHIN 1 LII	<u>CHARGE:</u> RUCTION ACTIVITY WHICH DISCHARGES STORMWATER INTO AN <i>IMPAIREI</i> AR MILE UPSTREAM OF AND WITHIN THE SAME WATERSHED AS ANY POR M SEGMENT, COMPLY WITH PART III. C. OF THE PERMIT? YES, _	TION OF AN <b>BI</b>
	USED 1. 2. 3.		, PROVIDE ( <i>LIST BELOW</i> ) THE COMPLETED APPENDIX 1 LISTING ALL THE AREAS OF THE SITE WHICH DISCHARGE TO THE IMPAIRED STREAM SEGME	
	4.			
		·		
			EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN INFRASTRUCTURE CONSTRUCTION PROJECTS	I CHECKLIST
	Project I	Name:	SWCD:	T VERNON RD
	City/Cou	inty:	AINSVILLE/ HALL COUNTY Date on Plans: rson filling out checklist: DEREK UDEMBA DUDEMBA@LONGENG.C	4/21/2 OM
	Plan Page #	Included Y/N	TO BE SHOWN ON ES&PC PLAN	
	CE010	Y	<ol> <li>The applicable Erosion, Sedimentation and Pollution Control Plan Checklistest of the year in which the land-disturbing activity was permitted.</li> </ol>	ablished by the
	CE010	Γγ	<ul> <li>(The completed Checklist must be submitted with the ES&amp;PC Plan or the Plan v</li> <li>2 Level II certification number issued by the Commission, signature and seal of the</li> </ul>	
			(Signature, seal and level II number must be on each sheet pertaining to ES&F	PC Plan or the P
	CE001 C000	Y Y	<ul><li>3 The name and phone number of the 24-hour contact responsible for erosion, s</li><li>4 Provide the name, address, email address, and phone number of primary per</li></ul>	
	CE010	Y	5 Note total and disturbed acreages of the project or phase under construction.	
	CE010	Y	6 Provide the GPS locations of the beginning and end of the Infrastructure project decimal degrees.	t Give the Latitu
	CE010 CE010	Y Y	<ul><li>7 Initial date of the Plan and the dates of any revisions made to the Plan including</li><li>8 Descriptions of the nature of construction activity and existing site conditions.</li></ul>	the entity who r
	CE010	Y	<ul> <li>9 Provide vicinity map showing site's relation to surrounding areas. Include desi</li> </ul>	gnation of specif
	N/A	Ν	10 Identify the project receiving waters and describe all sensitive adjacent areas in wetlands, marshlands, etc. which may be affected.	ncluding streams
	CE010	Υ	<ol> <li>Design professional's certification statement and signature that the site was visite Plan as stated on <b>Part IV page 21</b> of the permit</li> </ol>	ed prior to devel
	CE010	Υ	12 Design professional's certification statement and signature that the permittee's E and comprehensive system of BMPs and sampling to meet permit requirements	-
	CE010	Y	13 Design professional certification statement and signature that the permittee's ES	&PC Plan provi
	CE010	Y	<ul> <li>sampling as stated on Part IV.D.6.c.(3) page 37 of the permit as applicable.</li> <li>14 Clearly note the statement that "The design professional who prepared the ESi</li> </ul>	
			initial sediment storage requirements, perimeter control BMPs, and sediment ba in accordance with <b>Part IV.A.5 page 26</b> of the permit. *	asins within 7 day
	CE010	Y	15 Clearly note the statement that "Non-exempt activities shall not be conducted w buffers as measured from the point of wrested vegetation or within 25-feet of the	
	CE010	Γ Υ ]	from the Jurisdictional Determination Line without first acquiring the necessary v 16 Provide a description of any buffer encroachments and indicate whether a buffer	•
	CE010	Y	17 Clearly note the statement that "Amendments/revisions to the ES&PC Plan whit	
	CE010	Γ Υ ]	hydraulic component must be certified by the design professional." * 18 Clearly note the statement that "Waste materials shall not be discharged to wate	rs of the State, e
	CE010		Section 404 permit." * 19 Clearly note statement that "The escape of sediment from the site shall be preve	
			sediment control measures and practices prior to land disturbing activities."	
	CE010	Ŷ	20 Clearly note statement that "Erosion control measures will be maintained at all ti Plan does not provide for effective erosion control, additional erosion and sedir	•
	CE010	Γγ	to control or treat the sediment source." 21 Clearly note the statement "Any disturbed area left exposed for a period greate	er than 14 days :
			or temporary seeding."	
	CE010	Y	22 Any construction activity which discharges storm water into an Impaired Stream of and within the same watershed as, any portion of a Biota Impaired Stream S permit. Include the completed Appendix 1 listing all the BMPs that will be used to the Impaired Stream Segment. *	egment must cor
	N/A	N	23 If a TMDL Implementation Plan for sediment has been finalized for the Impaired above) at least six months prior to submittal of NOI, the ES&PC Plan must addr requirements included in the TMDL Implementation Plan. *	-
	CE010	Y	24 BMPs for concrete washdown of tools, concrete mixer chutes, hoppers and the at the construction site is prohibited. *	e rear of the veh
	CE010	Y	25 Provide BMPs for the remediation of all petroleum spills and leaks.	

DATE

BY DESCRIPTION

### AN IS TO INSPECT THE INSTALLATION OF THE INITIAL ROL BMP'S WITHIN 7 DAYS AFTER INSTALLATION.

THE 25 OR 50-FOOT UNDISTURBED STREAM BUFFERS AS WITHIN 25-FEET OF THE COASTAL MARSHLAND BUFFER LINE WITHOUT FIRST ACQUIRING THE NECESSARY

A SIGNIFICANT EFFECT ON BMP'S WITH A HYDRAULIC

OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION

NTED BY THE INSTALLATION OF EROSION AND SEDIMENT RBING ACTIVITIES.

TIMES. IF FULL IMPLEMENTATION OF THE APPROVED L, ADDITIONAL EROSION AND SEDIMENT CONTROL THE SEDIMENT SOURCE.

ER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR

FORMWATER INTO AN IMPAIRED STREAM SEGMENT, SAME WATERSHED AS ANY PORTION OF AN **BIOTA** . OF THE *PERMIT*? \_\_\_\_\_ YES, \_\_\_\_ NO

TED APPENDIX 1 LISTING ALL THE BMP'S THAT WILL BE TO THE IMPAIRED STREAM SEGMENT:

### PRODUCT SPECIFIC PRACTICES

(24) <u>CONCRETE TRUCKS</u>: CONCRETE TRUCKS WILL NOT BE ALLOWED TO WASHOUT OR DISCHARGE SURPLUS CONCRETE DRUM WASH ON SITE. WASH AREAS, IF CONSTRUCTED, WILL CONSIST OF AN ENCLOSED WASTE COLLECTION AREA THAT WILL CONTAIN THE CONCRETE WASH UNTIL IT HARDENS. SEE ES&PC PLANS FOR LOCATION AND ES&PC DETAILS.

PAINTS: ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM OR SURFACE WATERS BUT WILL BE PROPERLY DISPOSED OF ACCORDING TO MANUFACTURE'S INSTRUCTIONS AND FEDERAL, STATE AND LOCAL REGULATIONS.

### BMPs FOR THE REMEDIATION OF ALL PETROLEUM SPILLS AND LEAKS

PETROLEUM PRODUCTS: ALL ON SITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY PETROLEUM TO BE STORED IN TANKS WILL BE SURROUNDED BY AN EARTHEN BERM AS A SECONDARY PROTECTIVE MEASURE ALL CONTAINERS/TANKS WILL BE REGULARLY INSPECTED FOR CRACKS OR LEAKAGE. IF POSSIBLE, PETROLEUM PRODUCTS WILL BE STORED IN A COVERED AREA. ANY ASPHALT SUBSTANCES USED ON SITE WILL BE APPLIED ACCORDING TO THE MANUFACTURE'S RECOMMENDATIONS.

	CE010 Y	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.*
	CE010 Y	27 Description of practices to provide cover for building materials and building products on site.*
	CE010 Y	28 Description of the practices that will be used to reduce the pollutants in storm water discharges.*
	CE020 Y	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).
	CE020 Y	30 Provide complete requirements of inspections and record keeping by the primary permittee.*
	CE020 Y	31 Provide complete requirements of sampling frequency and reporting of sampling results.*
ary 1	CE020 Y	32 Provide complete details for retention of records as per Part IV.F. of the permit.*
	CE020 Y	33 Description of analytical methods to be used to collect and analyze the samples from each location.*
	CE020 Y	34 Appendix B rationale for NTU values at all outfall sampling points where applicable.*
d)	CE020 Y	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.*
	CE020 Y	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.*
۰.	CE020 Y	37 Graphic scale and North arrow.
	CE020 Y	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
AS,		Proposed Contours 1" : 400' Centerline Profile
.u.,	CE020 Y	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.
	CE020 Y	40 Use of alternative BMP for application to the Equivalent BMP List. Please refer to Appendix A-2 of the Manual for
; ermit. *		Erosion & Sediment Control in Georgia 2016 Edition.*
	N/A N	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
the	CE020 Y	42 Delineation of on-site wetlands and all State waters located on and within 200 feet of the project site.
	CE020 Y	43 Delineation and acreage of contributing drainage basins on the project site.
	CE102 Y	44 Delineate on-site drainage and off-site watersheds using USGS 1" :2000' topographical sheets.
m J	N/A N	45 An estimate of the runoff coefficient or peak discharge flow of the site prior to and after construction activities are completed.
	N/A N	46 Storm-drain pipe and weir velocities with appropriate outlet protection to accommodate discharges without erosion.
		Identify/Delineate all storm water discharge points.
าล	CE020 Y	47 Soil series for the project site and their delineation.
	CG101 Y	48 The limits of disturbance for each phase of construction.
'a	N/A N	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
/ed		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
inted		included for structural BMPs and all calculations used by the design professional to obtain the required sediment storage
nulch		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 infeasible are not feasible, a written justification explaining this decision must be included in the Plan.
am the	CE020 Y	50 Location of Best Management Practices that are consistent with and no less stringent than the Manual for Erosion and
rge		Sediment Control in Georgia. Use uniform coding symbols from the Manual, Chapter 6, with legend.
	CE020 Y	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.
	CE001 Y	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.
rum		*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, 2023

### NSTRUCTION PROJECTS Address: MOUNT VERNON RD 4/21/2023 Date on Plans: DEMBA DUDEMBA@LONGENG.COM

d Pollution Control Plan Checklist established by the Commission as of Janua tivity was permitted.

d with the ES&PC Plan or the Plan will not be reviewed)

Commission, signature and seal of the certified design professional. be on each sheet pertaining to ES&PC Plan or the Plan will not be reviewed

our contact responsible for erosion, sedimentation and pollution controls

and end of the Infrastructure project. Give the Latitude and Longitude in

revisions made to the Plan including the entity who requested the revisions. activity and existing site conditions.

n to surrounding areas. Include designation of specific phase, if necessary. escribe all sensitive adjacent areas including streams, lakes, residential areas affected.

t and signature that the site was visited prior to development of the ES&PC permit

t and signature that the permittee's ES&PC Plan provides for an appropriate sampling to meet permit requirements as stated on Part IV page 20 of the pe and signature that the permittee's ES&PC Plan provides for representative age 37 of the permit as applicable. \*

professional who prepared the ES&PC Plan is to inspect the installation of meter control BMPs, and sediment basins within 7 days after installation." f the permit 📩

pt activities shall not be conducted within the 25 or 50-foot undisturbed stream ted vegetation or within 25-feet of the coastal marshland buffer as measured. vithout first acquiring the necessary variances and permits."

chments and indicate whether a buffer variance is required.

ts/revisions to the ES&PC Plan which have a significant effection BMPs with i the design professional." 🎽

erials shall not be discharged to waters of the State, except as authorized by

sediment from the site shall be prevented by the installation of erosion and rior to land disturbing activities."

I measures will be maintained at all times. If full implementation of the approve control, additional erosion and sediment control measures shall be impleme

area left exposed for a period greater than 14 days shall be stabilized with m

storm water into an Impaired Stream Segment, or within 1 linear mile upstrea portion of a Biota Impaired Stream Segment must comply with Part III. C. of th listing all the BMPs that will be used for those areas of the site which discharg

t has been finalized for the Impaired Stream Segment (identified in item 22 I of NOI, the ES&PC Plan must address any site-specific conditions or nentation Plan. \*

crete mixer chutes, hoppers and the rear of the vehicles. Washout of the dr

COA-LSF #1323

HALL COUNTY, GEORGIA

		NAME	DATE		NAME	DATE
773	DESIGNED BY	WS	04/21/2023	DRAWN BY	WS	04/21/2023
eet Suite 107 30040 1-5507	CHECKED BY	BS	04/21/2023	CHECKED BY	BS	04/21/2023
om PEF #7665	SUPERVISE	D BY				

POLLUTION AND SPILL PREVENTION MEASURES

1. <u>GOOD HOUSEKEEPING PRACTICES</u>: AN EFFORT WILL BE MADE TO STORE ONLY ENOUGH PRODUCT TO DO THE JOB. ALL MATERIALS ONSITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER ONE ROOF OR ENCLOSURE. PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINER WITH ORIGINAL MANUFACTURE'S LABEL. SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURE. WHENEVER POSSIBLE, ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER.

2. HAZARDOUS PRODUCTS

- THESE PRACTICES ARE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS.
- A. PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE. B. ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED; THEY CONTAIN IMPORTANT INFORMATION.
- C. IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURERS' OR LOCAL AND STATE RECOMMENDED METHODS FOR PROPER DISPOSAL WILL BE FOLLOWED.
- 3. LOCAL, STATE AND MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND PROCEDURES WILL BE MADE AVAILABLE TO SITE PERSONNEL.
- 4. MATERIAL AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREAS. TYPICAL MATERIALS AND EQUIPMENT INCLUDES, BUT IS NOT LIMITED TO, BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, CAT LITTER, SAND, SAWDUST AND PROPERLY LABELED PLASTIC AND METAL WASTE CONTAINERS.
- 5. SPILL PREVENTION PRACTICES AND PROCEDURES WILL BE REVIEWED AFTER A SPILL AND ADJUSTED AS NECESSARY TO PREVENT FUTURE SPILLS.
- 6. ALL SPILLS WILL BE CLEANED UP IMMEDIATELY UPON DISCOVERY. ALL SPILLS WILL BE REPORTED AS REQUIRED BY LOCAL, STATE, AND FEDERAL REGULATIONS.
- 7. FOR SPILLS THAT IMPACT SURFACE WATER (LEAVE A SHEEN ON SURFACE WATER) THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1-800-426-2675.
- 8. FOR SPILLS OF UNKNOWN AMOUNT, THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1-800-426-2675.
- 9. FOR SPILLS GREATER THAN 25 GALLONS AND NO SURFACE WATER IMPACTS OCCUR, THE GEORGIA E.P.D. WILL BE CONTACTED WITHIN 24 HOURS.
- 10. FOR SPILLS LESS THAN 25 GALLONS AND NO SURFACE WATER IMPACTS OCCUR, THE SPILL WILL BE CLEANED UP AND LOCAL AGENCIES WILL BE CONTACTED AS REQUIRED.

THE CONTRACTOR SHALL NOTIFY THE LICENSED PROFESSIONAL WHO PREPARED THE THIS PLAN IF MORE THAN 1320 GALLONS OF PETROLEUM IS STORED ONSITE (THIS INCLUDES CAPACITIES OF EQUIPMENT) OR IF ANY ONE PIECE OF EQUIPMENT HAS A CAPACITY GREATER THAN 660 GALLONS. THE CONTRACTOR WILL NEED A SPILL PREVENTION CONTAINMENT AND COUNTERMEASURERS PLAN PREPARED BY THAT LICENSED PROFESSIONAL.

DESCRIPTION OF THE MEASURES THAT WILL BE INSTALLED DURING THE CONSTRUCTION PROCESS TO CONTROL 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 SEE SHEET XXX FOR DETAILS

27 <u>DESCRIPTION OF PRACTICES TO PROVIDE COVER FOR BUILDING MATERIALS AND BUILDING PRODUCTS ON SITE</u>: SEE SHEET XXX FOR DETAILS

FERTILIZERS: FERTILIZER USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORM WATER. STORAGE WILL BE IN A COVERED SHED (WHENEVER POSSIBLE). THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER WILL BE TRANSFERRED TO SEALABLE PLASTIC BINS TO AVOID SPILLS (WHENEVER POSSIBLE).

SANITARY/SEPTIC WASTES: ALL SANITARY WASTE FACILITIES WILL BE SERVICED BY A QUALIFIED DOMESTIC WASTE HAULER. FACILITIES WILL BE PLACED OUT OF HIGH FLOW AREAS, AND WILL BE KEPT AWAY FROM, AND NOT RINSED INTO, STORM DRAIN INLETS AND RECEIVING BODIES OF WATER.

SANDBLASTING GRITS: NO SANDBLASTING GRIT WILL BE DISPOSED OF ON SITE. ITS DISPOSAL WILL BE COORDINATED WITH A LICENSED WASTE MANAGEMENT OR TRANSPORT AND DISPOSAL FIRM.

CONSTRUCTION WASTES: ALL CONSTRUCTION WASTE, FOR EXAMPLE: RUBBLE, PACKAGING MATERIALS, SCRAP BUILDING SUPPLIES, AND TREES AND SHRUBS REMOVED DURING GRUBBING, WILL BE COLLECTED AT A DESIGNATED ON-SITE LOCATION. IF POSSIBLE THE WASTE ACCUMULATION AREA WILL BE LOCATED IN A COVERED AREA. ALL CONSTRUCTION WASTES WILL BE REMOVED REGULARLY ON A CONSISTENT SCHEDULE AND DISPOSED OF AT AUTHORIZED DISPOSAL SITES.

DETERGENTS: THE USE OF DETERGENTS WILL BE LIMITED ON SITE, AND NO WASH WATER CONTAINING DETERGENTS WILL BE DISCHARGED TO STORM DRAIN INLETS OR RECEIVING BODIES OF WATER.

(28) DESCRIPTION OF THE PRACTICES THAT WILL BE USED TO REDUCE THE POLLUTANTS IN STORMWATER DISCHARGES: SEDIMENT FROM DISTURBED AREAS - PROVIDE PERIMETER SEDIMENT BARRIERS AND STABILIZE DISTURBED AREAS AS SOON AS POSSIBLE. PHASE CONSTRUCTION TO MINIMIZE THE DURATION DISTURBED SOILS ARE EXPOSED. IMPLEMENT THE ES&PC PLAN, PROVIDE INSPECTIONS AND MODIFY THE PLAN AS REQUIRED TO KEEP IT EFFECTIVE

- AT REDUCING EROSION AND CONTAINING SEDIMENT. EROSION OF SLOPES AND CHANNELS - UTILIZE SLOPE DRAINS, MATTING BLANKETS AND DIVERT STORMWATER AWAY FROM STEEP SLOPES. AVOID DISTURBING NATURAL CHANNELS AND MAINTAIN A VEGETATIVE BUFFER BETWEEN THE CHANNEL AND THE DISTURBED AREA. USE A DOUBLE ROW OF SILT FENCE AND, IF NECESSARY, UTILIZE MULCH OR HAY BALES BETWEEN THE TWO ROWS.
- EXCESSIVE RUNOFF REDUCE IMPERVIOUS SURFACES AND DIVERT STORMWATER FROM THEM TO VEGETATED AREAS, INFILTRATION TRENCHES, BIORETENTION AREAS AND RAIN GARDENS TO PROMOTE INFILTRATION. CONSTRUCTION POLLUTANTS - PROVIDE PROPER CONTAINERS FOR FERTILIZERS, CHEMICALS, PETROLEUM
- PRODUCTS, PAINT AND OTHER POTENTIAL POLLUTANTS AND DO NOT EXPOSE THEM TO RAINFALL OR STORMWATER. 5. TRASH AND DEBRIS - PROVIDE DUMPSTERS AND GARBAGE RECEPTACLES ON SITE, REMOVE ALL GARBAGE FROM
- SITE PERIODICALLY AND DISPOSE OF LEGALLY. 6. POLLUTANTS/SEDIMENT IN STORM DRAINS - PROVIDE INLET PROTECTION AT ALL POINTS WHERE
- POLLUTANTS/SEDIMENT CAN ENTER THE STORM DRAIN SYSTEM AND IMMEDIATELY CLEAN OUT ANY POLLUTANTS/SEDIMENT THAT ENTERS THE SYSTEM.

2)	GSWCC GEORGIA SOIL AND WATER CONSERVATION COMMISSIO
	Babak Shayan
	Level II Certified Plan Reviewer
	CERTIFICATION NUMBER0000019368
	ISSUED: 01/06/2022 Expires: 01/06/2025

(4)

24-HOUR EMERGENCY CONTACT: SCOTT PUCKETT 770-531-6800

> RILLA ROAD IMPROVEMENT E&SC NOTES

DRAWING NUMBER

CE010

# APPROXIMATE ACTIVITY SCHEDULE

ANTICIPATED START DATE: TBD																				A٢	ITI	CI	PA	TEC	) C	0	۸PL	ET.	101	۱D.	AT	E: '	TBI	)		_
	MONTH																																			
DESCRIPTION	1			2			3			4		5	5		e	6		7	,		8			9			10		1	1		1	2		13	3
NITIAL PHASE E&SC INSTALLATION	-																+											H		$\square$	+			H	-	
-DAY VISIT CERTIFICATION																														$\square$				H		
EDIMENT CONTROL-TREE PROTECTION																									+						+					_
CLEARING & GRUBBING																	+													╞						_
NITIAL PHASE E&SC INSTALLATION																	╈		+												+					
7-DAY VISIT CERTIFICATION																	╞		+								+			╞	+					
SEDIMENT CONTROL-TREE PROTECTION														_			+		+																	_
CLEARING & GRUBBING																																				
GRADING																														╞						
ULCHING - TEMPORARY GRASSING																	+		+								+			╞	+					_
AINT. OF EROSION CONTROL DEVICES																	+																			_
NAL LANDSCAPING, CLEANING OF STORM DRAINS																	╞													╞	+					
			+	+	$\square$						+						+	$\left  \right $	_					$\square$	+	$\parallel$	_	$\left  \right $		$\parallel$	+	H	_	H	+	_

### (30) INSPECTIONS (PERMITTEE REQUIREMENTS)

EACH DAY WHEN ANY TYPE OF CONSTRUCTION ACTIVITY HAS TAKEN PLACE AT A PRIMARY PERMITTEE'S SITE, CERTIFIED PERSONNEL PROVIDED BY THE PRIMARY PERMITTEE SHALL INSPECT: (A) ALL AREAS AT THE PRIMARY PERMITTEE'S SITE WHERE PETROLEUM PRODUCTS ARE STORED, USED, OR HANDLED FOR SPILLS AND LEAKS FROM VEHICLES AND EQUIPMENT AND (B) ALL LOCATIONS AT THE PRIMARY PERMITTEE'S SITE WHERE VEHICLES ENTER OR EXIT THE SITE FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING. THESE INSPECTIONS MUST BE CONDUCTED UNTIL A NOTICE OF TERMINATION IS SUBMITTED.

- . MEASURE RAINFALL ONCE EVERY 24 HOURS EXCEPT ANY NON-WORKING SATURDAY, NON-WORKING SUNDAY AND NON-WORKING FEDERAL HOLIDAY UNTIL A NOTICE OF TERMINATION IS SUBMITTED. MEASUREMENT OF RAINFALL MAY BE SUSPENDED IF ALL AREAS OF THE SITE HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION.
- . CERTIFIED PERSONNEL (PROVIDED BY THE PRIMARY PERMITTEE) SHALL INSPECT THE FOLLOWING AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.5 INCHES RAINFALL OR GREATER (UNLESS SUCH STORM ENDS AFTER 5:00PM ON ANY FRIDAY OR ON ANY NON-WORKING SATURDAY, NON-WORKING SUNDAY OR ANY NON-WORKING FEDERAL HOLIDAY IN WHICH CASSE THE INSPECTION SHALL BE COMPLETED BY THE END OF THE NEXT BUSINESS DAY AND/OR WORKING DAY, WHICHEVER OCCURS FIRST): (A) DISTURBED AREAS OF THE PRIMARY PERMITTEE'S CONSTRUCTION SITE; (B) AREAS USED BY THE PRIMARY PERMITTEE FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION; AND (C) STRUCTURAL CONTROL MEASURES. EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN APPLICABLE TO THE PRIMARY PERMITTEE'S SITE SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATER(S). FOR AREAS OF A SITE THAT HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION, THE PERMITTEE MUST COMPLY WITH PART IV.D.4.A.(4). THESE INSPECTIONS MUST BE CONDUCTED UNTIL A NOTICE OF TERMINATION IS SUBMITTED.
- 4. CERTIFIED PERSONNEL (PROVIDED BY THE PRIMARY PERMITTEE) SHALL INSPECT AT LEAST ONCE PER MONTH DURING THE TERM OF THIS PERMIT (I.E., UNTIL A NOTICE OF TERMINATION IS RECEIVED BY EPD) THE AREAS OF THE SITE THAT HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION. THESE AREAS SHALL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM AND THE RECEIVING WATER(S). EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE. THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATER(S).
- 5. BASED ON THE RESULTS OF EACH INSPECTION, THE SITE DESCRIPTION AND THE POLLUTION PREVENTION AND CONTROL MEASURES IDENTIFIED IN THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN, THE PLAN SHALL BE REVISED AS APPROPRIATE NOT LATER THAN SEVEN (7) CALENDAR DAYS FOLLOWING EACH INSPECTION. IMPLEMENTATION OF SUCH CHANGES SHALL BE MADE AS SOON AS PRACTICAL BUT IN NO CASE LATER THAN SEVEN (7) CALENDAR DAYS FOLLOWING EACH INSPECTION.
- 6. A REPORT OF EACH INSPECTION AND THE NAME(S) OF CERTIFIED PERSONNEL MAKING EACH INSPECTION, THE DATE(S) OF EACH INSPECTION, CONSTRUCTION PHASE (I.E., INITIAL, INTERMEDIATE OR FINAL), MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN, AND ACTIONS TAKEN IN ACCORDANCE WITH PART IV.D.4.A.(5) OF THE PERMIT SHALL BE MADE AND RETAINED AT THE SITE OR BE READILY AVAILABLE AT A DESIGNATED ALTERNATE LOCATION UNTIL THE ENTIRE SITE OR THAT PORTION OF A CONSTRUCTION PROJECT THAT HAS BEEN PHASED HAS UNDERGONE FINAL STABILIZATION AND A NOTICE OF TERMINATION IS SUBMITTED TO EPD. SUCH REPORTS SHALL BE READILY AVAILABLE BY THE END OF THE SECOND BUSINESS DAY AND/OR WORKING DAY AND SHALL IDENTIFY ALL INCIDENTS OF BEST MANAGEMENT PRACTICES THAT HAVE NOT BEEN PROPERLY INSTALLED AND/OR MAINTAINED AS DESCRIBED IN THE PLAN. WHERE THE REPORT DOES NOT IDENTIFY ANY INCIDENTS, THE INSPECTION REPORT SHALL CONTAIN A CERTIFICATION THAT THE BEST MANAGEMENT PRACTICES ARE IN COMPLIANCE WITH THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN. THE REPORT SHALL BE SIGNED IN ACCORDANCE WITH PART V.G.2. OF THIS PERMIT.

### (31) <u>SAMPLING FREQUENCY</u> (GAR 100001 IV.D.6.d)

- . THE PRIMARY PERMITTEE MUST SAMPLE IN ACCORDANCE WITH THE PLAN AT LEAST ONCE FOR EACH RAINFALL EVENT DESCRIBED BELOW. FOR A QUALIFYING EVENT, THE PERMITTEE SHALL SAMPLE AT THE BEGINNING OF ANY STORM WATER DISCHARGE TO A MONITORED RECEIVING WATER AND/OR FROM A MONITORED OUTFALL LOCATION WITHIN IN FORTY-FIVE (45) MINUTES OR AS SOON AS POSSIBLE.
- 2. HOWEVER, WHERE MANUAL AND AUTOMATIC SAMPLING ARE IMPOSSIBLE (AS DEFINED IN THIS PERMIT), OR ARE BEYOND THE PERMITTEE'S CONTROL, THE PERMITTEE SHALL TAKE SAMPLES AS SOON AS POSSIBLE, BUT IN NO CASE MORE THAN TWELVE (12) HOURS AFTER THE BEGINNING OF THE STORM WATER DISCHARGE.
- 3. SAMPLING BY THE PERMITTEE SHALL OCCUR FOR THE FOLLOWING QUALIFYING EVENTS:

REVISIONS

△ DATE

- A. FOR EACH AREA OF THE SITE THAT DISCHARGES TO A RECEIVING WATER OR FROM AN OUTFALL, THE FIRST RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH WITH A STORM WATER DISCHARGE THAT OCCURS DURING NORMAL BUSINESS HOURS AS DEFINED IN THIS PERMIT AFTER ALL CLEARING AND GRUBBING OPERATIONS HAVE BEEN COMPLETED, BUT PRIOR TO COMPLETION OF MASS GRADING OPERATIONS, IN THE DRAINAGE AREA OF THE LOCATION SELECTED AS THE SAMPLING LOCATION;
- B. IN ADDITION TO (A) ABOVE, FOR EACH AREA OF THE SITE THAT DISCHARGES TO A RECEIVING WATER OR FROM AN OUTFALL, THE FIRST RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH WITH A STORM WATER DISCHARGE THAT OCCURS DURING NORMAL BUSINESS HOURS AS DEFINED IN THIS PERMIT EITHER 90 DAYS AFTER THE FIRST SAMPLING EVENT OR AFTER ALL MASS GRADING OPERATIONS HAVE BEEN COMPLETED, BUT PRIOR TO SUBMITTAL OF A NOT, IN THE DRAINAGE AREA OF THE LOCATION SELECTED AS THE SAMPLING LOCATION, WHICHEVER COMES FIRST;
- C. AT THE TIME OF SAMPLING PERFORMED PURSUANT TO (A) AND (B) ABOVE, IF BMP'S IN ANY AREA OF THE SITE THAT DISCHARGES TO A RECEIVING WATER OR FROM AN OUTFALL ARE NOT PROPERLY DESIGNED, INSTALLED AND MAINTAINED, CORRECTIVE ACTION SHALL BE DEFINED AND IMPLEMENTED WITHIN TWO (2) BUSINESS DAYS, AND TURBIDITY SAMPLES SHALL BE TAKEN FROM DISCHARGES FROM THAT AREA OF THE SITE FOR EACH SUBSEQUENT RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH DURING NORMAL BUSINESS HOURS\* UNTIL THE SELECTED TURBIDITY STANDARD IS ATTAINED, OR UNTIL POST-STORM EVENT INSPECTIONS DETERMINE THAT BMP'S ARE PROPERLY DESIGNED, INSTALLED AND MAINTAINED:
- D. WHERE SAMPLING PURSUANT TO (A), (B) OR (C) ABOVE IS REQUIRED BUT NOT POSSIBLE (OR NOT REQUIRED BECAUSE THERE WAS NO DISCHARGE), THE PERMITTEE, IN ACCORDANCE WITH PART IV.D.4.A.(6), MUST INCLUDE A WRITTEN JUSTIFICATION IN THE INSPECTION REPORT OF WHY SAMPLING WAS NOT PERFORMED. PROVIDING THIS JUSTIFICATION DOES NOT RELIEVE THE PERMITTEE OF ANY SUBSEQUENT SAMPLING OBLIGATIONS UNDER (A), (B) OR (C) ABOVE; AND
- E. EXISTING CONSTRUCTION ACTIVITIES, I.E., THOSE THAT ARE OCCURRING ON OR BEFORE THE EFFECTIVE DATE OF THIS PERMIT, THAT HAVE MET 4) ABOVE SHALL SAMPLE IN ACCORDANCE WITH (B). THOSE EXISTING CONSTRUCTION ACTIVITIES THAT HAVE MET 3) ABOVE SHALL NOT BE REQUIRED TO CONDUCT ADDITIONAL SAMPLING OTHER THAN AS REQUIRED BY (C) ABOVE.



DATE BY DESCRIPTION

CHOOSE TO MEET THE REQUIREMENTS OF (A) AND (B) ABOVE BY COLLECTING TURBIDITY SAMPLES FROM ANY RAIN S 0.5 INCH AND ALLOWS FOR SAMPLING AT ANY TIME OF THE DAY OR WEEK

EXCEPT FOR FLOWS FROM FIRE FIGHTING ACTIVITIES, SOURCES OF NON-STORM WATER LISTED IN PART 111.A.2. NED WITH STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY MUST BE IDENTIFIED IN THE AND ENSURE THE IMPLEMENTATION OF APPROPRIATE POLLUTION PREVENTION MEASURES FOR THE NON-STORM SCHARGE.

BY DESCRIPTION

	IN PART II.C. BY THE FIFTEE MONTHS DURING WHICH SA CLEARLY LEGIBLE FORMAT. THE SAMPLING RESULTS ON OR THE RECEIVING WATER( SIMILAR MANNER TO THE EF REPORTS MUST BE SUBMITT
2.	<ul> <li>ALL SAMPLING REPORTS SH.</li> <li>A. THE RAINFALL AMOUNT,</li> <li>B. THE NAME(S) OF THE CE</li> <li>C. THE DATE(S) ANALYSES V</li> <li>D. THE TIME(S) ANALYSES V</li> <li>E. THE NAME(S) OF THE CE</li> <li>F. REFERENCES AND WRITT</li> <li>G. THE RESULTS OF SUCH A TAPES, ETC., USED TO D</li> <li>H. RESULTS WHICH EXCEED</li> <li>I. CERTIFICATION STATEME</li> </ul>
3.	ALL WRITTEN CORRESPOND (OR SIMILAR SERVICE) TO TH A OF THIS PERMIT. THE PER OR THE PROOF OF SUBMITT CONSTRUCTION UNTIL SUCH SUBMITTAL IS PROVIDED BY REQUIRED, A PAPER COPY M
	ORDING AND RECORDS
	THE PRIMARY PERMITTEE SH

(31) <u>REPORTING (GAR 100001 IV.E.)</u>

TEE SHALL RETAIN THE FOLLOWING RECORDS AT THE CONSTRUCTION SITE OR THE RECORDS SHALL BE READILY AVAILABLE AT A DESIGNATED ALTERNATE LOCATION FROM COMMENCEMENT OF CONSTRUCTION UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART VI:

- B. A COPY OF THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN REQUIRED BY THIS PERMIT; C. THE DESIGN PROFESSIONAL'S REPORT OF THE RESULTS OF THE INSPECTION CONDUCTED IN ACCORDANCE WITH PART IV.A.5. OF THIS PERMIT:
- D. A COPY OF ALL SAMPLING INFORMATION, RESULTS, AND REPORTS REQUIRED BY THIS PERMIT; E. A COPY OF ALL INSPECTION REPORTS GENERATED IN ACCORDANCE WITH PART IV.D.4.A. OF THIS PERMIT; F. A COPY OF ALL VIOLATION SUMMARIES AND VIOLATION SUMMARY REPORTS GENERATED IN ACCORDANCE WITH PART
- III.D.2. OF THIS PERMIT: AND G. DAILY RAINFALL INFORMATION COLLECTED IN ACCORDANCE WITH PART IV.D.4.A.(2). OF THIS PERMIT.
- TO THE PERMITTEE.
- ACTIVITIES.
- 4. NOI'S ARE TO BE SUBMITTED BY RETURN RECEIPT CERTIFIED MAIL (OR SIMILAR SERVICE) TO BOTH THE DISTRICT OFFICE OF THE EPD AND TO THE LOCAL ISSUING AUTHORITY.
- FACILITY/SITE.

# (33) SAMPLING REQUIREMENTS

# PERMIT MUST BE REPORTED TO EPD.

### SAMPLING POINT

- (42) DELINEATION OF ONSITE WETLANDS AND ALL STATE WATERS LOCATED ON OR WITHIN 200 FEET OF THE PROJECT SITE: 8. FOR CONSTRUCTION ACTIVITIES THE PRIMARY PERMITTEE MUST SAMPLE ALL RECEIVING WATER(S), OR ALL OUTFALL(S), OR A WETLANDS (ARE NOT) PRESENT WITHIN THE SITE. COMBINATION OF RECEIVING WATER(S) AND OUTFALL(S). SAMPLES TAKEN FOR THE PURPOSE OF COMPLIANCE WITH THIS STATE WATERS (ARE NOT) PRESENT WITHIN THE SITE. PERMIT SHALL BE REPRESENTATIVE OF THE MONITORED ACTIVITY AND REPRESENTATIVE OF THE WATER QUALITY OF THE STATE WATERS (DO NOT) EXIST WITHIN 200 FEET OF THE SITE AS DEPICTED ON THE PLAN SHEET(S). RECEIVING WATER(S) AND/OR THE STORM WATER OUTFALLS USING THE FOLLOWING MINIMUM GUIDELINES:
- A. THE UPSTREAM SAMPLE FOR EACH RECEIVING WATER(S) MUST BE TAKEN IMMEDIATELY UPSTREAM OF THE CONFLUENCE OF THE FIRST STORM WATER DISCHARGE FROM THE PERMITTED ACTIVITY (I.E., THE DISCHARGE FARTHEST UPSTREAM AT THE SITE) BUT DOWNSTREAM OF ANY OTHER STORM WATER DISCHARGES NOT ASSOCIATED WITH THE PERMITTED ACTIVITY. WHERE APPROPRIATE, SEVERAL UPSTREAM SAMPLES FROM ACROSS THE RECEIVINGWATER(S) MAY NEED TO BE TAKEN AND THE ARITHMETIC AVERAGE OF THE TURBIDITY OF THESE SAMPLES USED FOR THE UPSTREAM TURBIDITY VALUE.

- C. IDEALLY THE SAMPLES SHOULD BE TAKEN FROM THE HORIZONTAL AND VERTICAL CENTER OF THE RECEIVING WATER(S) OR THE STORM WATER OUTFALL CHANNEL(S). D. CARE SHOULD BE TAKEN TO AVOID STIRRING THE BOTTOM SEDIMENTS IN THE RECEIVING WATER(S) OR IN THE OUTFALL STORM WATER CHANNEL.
- F. THE SAMPLES SHOULD BE KEPT FREE FROM FLOATING DEBRIS.
- PERENNIALS APPROPRIATE FOR THE REGION). APPLICABLE.

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1. THE APPLICABLE PERMITTEES ARE REQUIRED TO SUBMIT THE SAMPLING RESULTS TO THE EPD AT THE ADDRESS SHOWN ENTH DAY OF THE MONTH FOLLOWING THE REPORTING PERIOD. REPORTING PERIODS ARE MPLES ARE TAKEN IN ACCORDANCE WITH THIS PERMIT. SAMPLING RESULTS SHALL BE IN A . UPON WRITTEN NOTIFICATION, EPD MAY REQUIRE THE APPLICABLE PERMITTEE TO SUBMIT N A MORE FREQUENT BASIS. SAMPLING AND ANALYSIS OF ANY STORM WATER DISCHARGE(S) (S) BEYOND THE MINIMUM FREQUENCY STATED IN THIS PERMIT MUST BE REPORTED IN A PD. THE SAMPLING REPORTS MUST BE SIGNED IN ACCORDANCE WITH PART V.G.2. SAMPLING TED TO EPD UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART VI.

HALL INCLUDE THE FOLLOWING INFORMATION:

- , DATE, EXACT PLACE AND TIME OF SAMPLING OR MEASUREMENTS; ERTIFIED PERSONNEL WHO PERFORMED THE SAMPLING AND MEASUREMENTS; WERE PERFORMED;
- WERE INITIATED;
- ERTIFIED PERSONNEL WHO PERFORMED THE ANALYSES;
- TEN PROCEDURES, WHEN AVAILABLE, FOR THE ANALYTICAL TECHNIQUES OR METHODS USED; ANALYSES, INCLUDING THE BENCH SHEETS, INSTRUMENT READOUTS, COMPUTER DISKS OR DETERMINE THESE RESULTS;
- 1000 NTU SHALL BE REPORTED AS "EXCEEDS 1000 NTU;" AND NENT THAT SAMPLING WAS CONDUCTED AS PER THE PLAN.

DENCE REQUIRED BY THIS PERMIT SHALL BE SUBMITTED BY RETURN RECEIPT CERTIFIED MAIL THE APPROPRIATE DISTRICT OFFICE OF THE EPD ACCORDING TO THE SCHEDULE IN APPENDIX RMITTEE SHALL RETAIN A COPY OF THE PROOF OF SUBMITTAL AT THE CONSTRUCTION SITE TAL SHALL BE READILY AVAILABLE AT A DESIGNATED LOCATION FROM COMMENCEMENT OF TH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART VI. IF AN ELECTRONIC Y EPD THEN THE WRITTEN CORRESPONDENCE MAY BE SUBMITTED ELECTRONICALLY; IF MUST ALSO BE SUBMITTED BY RETURN RECEIPT CERTIFIED MAIL OR SIMILAR SERVICE.

A. A COPY OF ALL NOTICES OF INTENT SUBMITTED TO EPD;

2. COPIES OF ALL NOTICES OF INTENT, NOTICES OF TERMINATION, INSPECTION REPORTS, SAMPLING REPORTS (INCLUDING ALL CALIBRATION AND MAINTENANCE RECORDS AND ALL ORIGINAL STRIP CHART RECORDINGS FOR CONTINUOUS MONITORING INSTRUMENTATION), OR OTHER REPORTS REQUESTED BY THE EPD, EROSION, SEDIMENTATION AND POLLUTION CONTROL PLANS, RECORDS OF ALL DATA USED TO COMPLETE THE NOTICE OF INTENT TO BE COVERED BY THIS PERMIT AND ALL OTHER RECORDS REQUIRED BY THIS PERMIT SHALL BE RETAINED BY THE PERMITTEE WHO EITHER PRODUCED OR USED IT FOR A PERIOD OF AT LEAST THREE YEARS FROM THE DATE THAT THE THE NOT IS SUBMITTED IN ACCORDANCE WITH PART VI OF THIS PERMIT. THESE RECORDS MUST BE MAINTAINED AT THE PERMITTEE'S PRIMARY PLACE OF BUSINESS OR AT A DESIGNATED ALTERNATIVE LOCATION ONCE THE CONSTRUCTION ACTIVITY HAS CEASED AT THE PERMITTED SITE. THIS PERIOD MAY BE EXTENDED BY REQUEST OF THE EPD AT ANY TIME UPON WRITTEN NOTIFICATION

3. OWNERS OR OPERATORS OR BOTH WHO INTEND TO OBTAIN COVERAGE UNDER THIS GENERAL PERMIT FOR STORM WATER DISCHARGES FROM A CONSTRUCTION SITE, SHALL SUBMIT A NOTICE OF INTENT (NOI) IN ACCORDANCE WITH THE REQUIREMENTS OF THIS PART AT LEAST FOURTEEN (14) DAYS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION

5. WHERE AN OWNER OR AN OPERATOR OR BOTH CHANGES AFTER AN NOI HAS BEEN FILED, THE SUBSEQUENT OWNER OR OPERATOR OR BOTH MUST FILE A NEW NOI AT LEAST SEVEN (7) DAYS BEFORE BEGINNING OF WORK AT THE

GENERAL NPDES PERMIT #GAR 100001 REQUIRES THE SAMPLING OF STORMWATER RUNOFF AND MONITORING OF NEPHELOMETRIC TURBIDITY IN RECEIVING WATER(S) OR OUTFALLS.

ALL SAMPLING SHALL BE COLLECTED BY "GRAB SAMPLES" AND THE ANALYSIS OF THESE SAMPLES MUST BE CONDUCTED IN ACCORDANCE WITH METHODOLOGY AND TEST PROCEDURES ESTABLISHED BY 40 CFR PART 136 (UNLESS OTHER TEST PROCEDURES HAVE BEEN APPROVED); THE GUIDANCE DOCUMENT TITLED "NPDES STORM WATER SAMPLING GUIDANCE DOCUMENT, EPA 833-B-92-001" AND GUIDANCE DOCUMENTS THAT MAY BE PREPARED BY THE EPD.

3. SAMPLE CONTAINERS SHOULD BE LABELED PRIOR TO COLLECTING THE SAMPLES. LABELING SHOULD INCLUDE: PROJECT NAME, SAMPLE LOCATION. SAMPLE NO., DATE COLLECTED, TIME COLLECTED

4. SAMPLES SHOULD BE WELL MIXED BEFORE TRANSFERRING TO A SECONDARY CONTAINER.

5. LARGE MOUTH, WELL CLEANED AND REUSED GLASS OR PLASTIC JARS SHOULD BE USED FOR COLLECTING SAMPLES. THE JARS SHOULD BE CLEANED THOROUGHLY TO AVOID CONTAMINATION.

6. MANUAL, AUTOMATIC OR RISING STAGE SAMPLING MAY BE UTILIZED. SAMPLES REQUIRED BY THIS PERMIT SHOULD BE ANALYZED IMMEDIATELY, BUT IN NO CASE LATER THAN 48 HOURS AFTER COLLECTION. HOWEVER, SAMPLES FROM AUTOMATIC SAMPLERS MUST BE COLLECTED NO LATER THAN THE NEXT BUSINESS DAY AFTER THEIR ACCUMULATION, UNLESS FLOW THROUGH AUTOMATED ANALYSIS IS UTILIZED. IF AUTOMATIC SAMPLING IS UTILIZED AND THE AUTOMATIC SAMPLER IS NOT ACTIVATED DURING THE QUALIFYING EVENT, THE PERMITTEE MUST UTILIZE MANUAL SAMPLING OR RISING STAGE SAMPLING DURING THE NEXT QUALIFYING EVENT. DILUTION OF SAMPLES IS NOT REQUIRED. SAMPLES MAY BE ANALYZED DIRECTLY WITH A PROPERLY CALIBRATED TURBIDIMETER. SAMPLES ARE NOT REQUIRED TO BE COOLED.

7. SAMPLING AND ANALYSIS OF THE RECEIVING WATER(S) OR OUTFALLS BEYOND THE MINIMUM FREQUENCY STATED IN THIS

- B. THE DOWNSTREAM SAMPLE FOR EACH RECEIVING WATER(S) MUST BE TAKEN DOWNSTREAM OF THE CONFLUENCE OF THE LAST STORM WATER DISCHARGE FROM THE PERMITTED ACTIVITY (I.E., THE DISCHARGE FARTHEST DOWNSTREAM AT THE SITE) BUT UPSTREAM OF ANY OTHER STORM WATER DISCHARGE NOT ASSOCIATED WITH THE PERMITTED ACTIVITY. WHERE APPROPRIATE, SEVERAL DOWNSTREAM SAMPLES FROM ACROSS THE RECEIVING WATER(S) MAY NEED TO BE TAKEN AND THE ARITHMETIC AVERAGE OF THE TURBIDITY OF THESE SAMPLES USED FOR THE DOWNSTREAM TURBIDITY VALUE.
- E. THE SAMPLING CONTAINER SHOULD BE HELD SO THAT THE OPENING FACES UPSTREAM.
- G. PERMITTEES DO NOT HAVE TO SAMPLE SHEETFLOW THAT FLOWS ONTO UNDISTURBED NATURAL AREAS OR AREAS STABILIZED BY THE PROJECT. FOR PURPOSES OF THIS SECTION, STABILIZED SHALL MEAN, FOR UNPAVED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURES AND AREAS LOCATED OUTSIDE THE WASTE DISPOSAL LIMITS OF A LANDFILL CELL THAT HAS BEEN CERTIFIED BY EPD FOR WASTE DISPOSAL, 100% OF THE SOIL SURFACE IS UNIFORMLY COVERED IN PERMANENT VEGETATION WITH A DENSITY OF 70% OR GREATER, OR LANDSCAPED ACCORDING TO THE PLAN (UNIFORMLY COVERED WITH LANDSCAPING MATERIALS IN PLANNED LANDSCAPE AREAS), OR EQUIVALENT PERMANENT STABILIZATION MEASURES AS DEFINED IN THE MANUAL (EXCLUDING A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET CROP
- H. ALL SAMPLING PURSUANT TO THIS PERMIT MUST BE DONE IN SUCH A WAY (INCLUDING GENERALLY ACCEPTED SAMPLING METHODS, LOCATIONS, TIMING, AND FREQUENCY) AS TO ACCURATELY REFLECT WHETHER STORM WATER RUNOFF FROM THE CONSTRUCTION SITE IS IN COMPLIANCE WITH THE STANDARD SET FORTH IN PARTS III.D.3. OR III.D.4., WHICHEVER IS

(34) STORMWATER MONITORING RATIONALE

HE FOLLOWING FACTORS WERE CONSIDERED WHEN DETERMINING THE STORMWATER MONITORING POINT LOCA MONITORING POINTS CHOSEN WHERE MAJORITY OF SITE RUNOFF ENTERS CONVEYANCE LEAVING SITE AND A LOCATION WITHIN RECEIVING CONVEYANCE JUST UPSTREAM OF WHERE THE MAJORITY OF SITE RUNOFF ENTERS THE CONVEYANCE. MONITORING POINT LOCATION ADJUSTED AS SHOWN ON PLAN AS CHANGES ARE MADE TO WHERE SITE RUNOFF ENTERS RECEIVING CONVEYANCE.

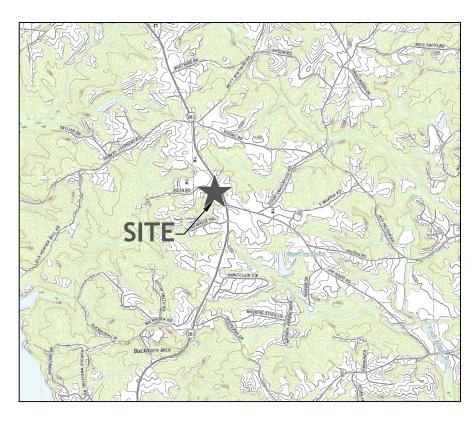
### SAMPLING OF (OUTFALL/RECEIVING WATER) NUMBER OF OUTFALLS: 1

APPENDIX B NTU VALUE: 75 SURFACE WATER DRAINAGE AREA (SQ MILES): 0.13

### WATERS SUPPORTING WARM WATER FISHERIES

				SURFAC	E WATER DR	AINAGE ARE	A, (SQ. MILES	)	
		0-4.99	5-9.99	10-24.99	25-49.99	50-99.99	100-249.99	250-499.99	500+
_	1.00-10	(75)	150	200	400	750	750	750	750
(Ac)	10.01-25	50	100	100	200	300	500	750	750
E SIZE	25.01-50	50	50	100	100	200	300	750	750
SITE	50.01-100	50	50	50	100	100	150	300	600
	100.01+	50	50	50	50	50	100	200	100

(35) DELINEATION OF ALL SAMPLING LOCATIONS, PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES INTO WHICH STORMWATER IS DISCHARGED



(36) DESCRIPTION OF EROSION CONTROL BMP'S BY PHASE:

INITIAL PHASE - INSTALL PERIMETER SILT FENCE, TREE SAVE FENCE IF APPLICABLE, AND ANY OTHER BMP'S NECESSARY TO PREVENT SEDIMENT FROM LEAVING THE SITE PRIOR TO REMOVING EXISTING PAVEMENT THROUGHOUT SITE AND PRIOR TO STRIPPING TOPSOIL. UPON REMOVAL OF PAVEMENT, ESTABLISH DIVERSIONS TO TEMPORARY SEDIMENT BASIN, LIMITS OF DISTURBANCE ARE TO ONLY BE THE AREAS NEEDED TO INSTALL THE INITIAL BMP'S.

INTERMEDIATE PHASE - ROUGH GRADING, INSTALLATION OF MAIN STORM SEWER LINE AND INSTALLATION OF INLET SEDIMENT TRAPS, MATTING WITH TEMPORARY OR PERMANENT VEGETATION. MONITOR PREVIOUSLY INSTALLED PERIMETER SILT FENCE.

FINAL PHASE - PAVING THE ROADWAY AND FINAL GRADING AND VEGETATION STABILIZATION, FINAL DISPOSITION OF ALL TEMPORARY SEDIMENT BMP'S.

- $(\mathbf{38})$  existing and proposed contour lines
- (**39**) <u>ALTERNATE BMP'S</u>

SEE PLAN SHEET(S)

USE OF ALTERNATIVE BMP'S WHOSE PERFORMANCE HAS BEEN DOCUMENTED TO BE EQUIVALENT TO OR SUPERIOR TO CONVENTIONAL BMP'S 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. NO ALTERNATE BMP'S HAVE BEEN UTILIZED UNLESS NOTED BELOW

- (40) USE OF ALTERNATIVE BMP'S FOR APPLICATION TO THE EQUIVALENT BMP LIST: NO ALTERNATE BMP'S HAVE BEEN UTILIZED UNLESS NOTED ABOVE
- (43) DELINEATION AND ACREAGE OF CONTRIBUTING DRAINAGE BASINS ON THE PROJECT SITE:
- (44) HYDROLOGY STUDY AND MAPS OF DRAINAGE BASINS FOR BOTH PRE- AND POST- DEVELOPED CONDITIONS:
- (45) <u>CURVE NUMBERS</u> EXISTING CONDITIONS CN = N/A PROPOSED CONDITIONS CN = N/A
- (47) SOIL SERIES FOR PROJECT SITE
- SEE SHEET CE101 FOR DELINEATIONS.
- (48) LIMITS OF DISTURBANCE FOR EACH PHASE OF CONSTRUCTION: SEE PLAN SHEET(S) FOR DELINEATION(S).

5		NAME	DATE		NAME	DATE
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EST MANAGEMENT PRACTICES

SEE ES&PC PLAN SHEET(S) AND ES&PC SHEET CE001 FOR UNIFORM CODING SYMBOLS.

(51) DETAILED DRAWINGS FOR ALL STRUCTURAL PRACTICES SEE ES&PC PLAN SHEET(S) AND ES&PC DETAIL SHEET(S) FOR DETAILS.

(52) EGETATIVE PLAN FOR ALL STRUCTURAL PRACTICES (TEMPORARY AND PERMANENT): EE ES&PC PLAN SHEET(S) AND ES&PC DETAIL SHEET(S) FOR DETAILS.

# **GENERAL NOTES**

- 1. THE EROSION SEDIMENTATION AND POLLUTION CONTROL PLAN SHALL BE SIGNED IN ACCORDANCE WITH PART IV., AND BE RETAINED ON THE SITE (OR, IF NOT POSSIBLE, AT A READILY ACCESSIBLE LOCATION) WHICH GENERATES THE STORM WATER DISCHARGE IN ACCORDANCE WITH PART IV.F. OF THIS PERMIT.
- 2. THE PRIMARY PERMITTEE SHALL MAKE PLANS AVAILABLE UPON REQUEST TO THE EPD; TO DESIGNATED OFFICIALS OF THE LOCAL GOVERNMENT REVIEWING SOIL EROSION AND SEDIMENT CONTROL PLANS, GRADING PLANS, OR STORM WATER MANAGEMENT PLANS; OR IN THE CASE OF A STORM WATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITY WHICH DISCHARGES THROUGH A MUNICIPAL SEPARATE STORM SEWER SYSTEM WITH AN NPDES PERMIT, TO THE LOCAL GOVERNMENT OPERATING THE MUNICIPAL SEPARATE STORM SEWER SYSTEM.
- 3. EPD MAY NOTIFY THE PRIMARY PERMITTEE AT ANY TIME THAT THE PLAN DOES NOT MEET ONE OR MORE OF THE MINIMUM REQUIREMENTS OF THIS PART. WITHIN SEVEN (7) DAYS OF SUCH NOTIFICATION (OR AS OTHERWISE PROVIDED BY EPD), THE PRIMARY PERMITTEE SHALL MAKE THE REQUIRED CHANGES TO THE PLAN AND SHALL SUBMIT TO EPD EITHER THE AMENDED PLAN OR A WRITTEN CERTIFICATION THAT THE REQUESTED CHANGES HAVE BEEN MADE.
- 4. THE PRIMARY PERMITTEE(S), AS APPLICABLE, SHALL AMEND THEIR PLAN WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE, WHICH HAS A SIGNIFICANT EFFECT ON BMP'S WITH A HYDRAULIC COMPONENT, I.E., THOSE BMP'S WHERE THE DESIGN IS BASED UPON RAINFALL INTENSITY, DURATION AND RETURN FREQUENCY OF STORMS OR IF THE PLAN PROVES TO BE INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANTS FROM SOURCES IDENTIFIED UNDER PART IV.D.3. AMENDMENTS TO THE PLAN MUST BE CERTIFIED BY A DESIGN PROFESSIONAL AS PROVIDED IN THIS PERMIT.
- 5. THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN SHALL INCLUDE, AS A MINIMUM, BEST MANAGEMENT PRACTICES, INCLUDING SOUND CONSERVATION AND ENGINEERING PRACTICES TO PREVENT AND MINIMIZE EROSION AND RESULTANT SEDIMENTATION, WHICH ARE CONSISTENT WITH, AND NO LESS STRINGENT THAN, THOSE PRACTICES CONTAINED IN THE "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.
- 6. ALL WRITTEN CORRESPONDENCE REQUIRED BY THIS PERMIT SHALL BE SUBMITTED BY RETURN RECEIPT CERTIFIED MAIL (OR SIMILAR SERVICE) TO THE APPROPRIATE DISTRICT OFFICE OF THE EPD. THE PERMITEE SHALL RETAIN A COPY OF THE PROOF OF SUBMITTAL AT THE CONSTRUCTION SITE OR THE PROOF OF SUBMITTAL SHALL BE READILY AVAILABLE AT A DESIGNATED LOCATION FROM COMMENCEMENT OF CONSTRUCTION UNTIL SUCH TIME AS A N.O.T. IS SUBMITTED IN ACCORDANCE WITH PART IV. IF AN ELECTRONIC SUBMITTAL IS PROVIDED BY EPD, THEN THE WRITTEN CORRESPONDENCE MAY BE SUBMITTED ELECTRONICALLY; IF REQUIRED, A PAPER COPY MUST ALSO BE SUBMITTED BY RETURN RECEIPT CERTIFIED MAIL OR SIMILAR SERVICE.
- 7. EACH PERMITTEE MUST COMPLY WITH ALL APPLICABLE CONDITIONS OF THIS PERMIT. ANY PERMIT NONCOMPLIANCE CONSTITUTES A VIOLATION OF THE GEORGIA WATER QUALITY CONTROL ACT AND IS GROUNDS FOR ENFORCEMENT ACTION; FOR PERMIT TERMINATION; OR FOR DENIAL OF A PERMIT RENEWAL APPLICATION. FAILURE OF A PRIMARY PERMITTEE TO COMPLY WITH ANY APPLICABLE TERM OR CONDITION OF THIS PERMIT SHALL NOT RELIEVE ANY OTHER PRIMARY PERMITTEE FROM COMPLIANCE WITH THEIR APPLICABLE TERMS AND CONDITIONS OF THIS PERMIT.
- 8. EACH PERMITTEE MUST DOCUMENT IN THEIR RECORDS ANY AND ALL KNOWN VIOLATIONS OF THIS PERMIT AT HIS/HER SITE WITHIN SEVEN (7) DAYS OF HIS/HER KNOWLEDGE OF THE VIOLATION. A SUMMARY OF THESE VIOLATIONS MUST BE SUBMITTED TO EPD BY THE PERMITTEE WITHIN FOURTEEN (14) DAYS OF HIS/HER DISCOVERY OF THE VIOLATION.
- 9. PENALTIES FOR VIOLATIONS OF PERMIT CONDITIONS. THE FEDERAL CLEAN WATER ACT AND THE GEORGIA WATER QUALITY CONTROL ACT (O.C.G.A. 12-5-20, ET SEQ.) PROVIDE THAT ANY PERSON WHO FALSIFIES, TAMPERS WITH, OR KNOWINGLY RENDERS INACCURATE ANY MONITORING DEVICE OR METHOD REQUIRED TO BE MAINTAINED UNDER THIS PERMIT, MAKES ANY FALSE STATEMENT, REPRESENTATION, OR CERTIFICATION IN ANY RECORD OR OTHER DOCUMENT SUBMITTED OR REQUIRED TO BE MAINTAINED UNDER THIS PERMIT, INCLUDING MONITORING REPORTS OR REPORTS OF COMPLIANCE OR NONCOMPLIANCE SHALL, UPON CONVICTION BE PUNISHED BY A FINE OR BY IMPRISONMENT, OR BY BOTH. THE FEDERAL CLEAN WATER ACT AND THE GEORGIA WATER QUALITY CONTROL ACT ALSO PROVIDE PROCEDURES FOR IMPOSING CIVIL PENALTIES WHICH MAY BE LEVIED FOR VIOLATIONS OF THE ACTS, ANY PERMIT CONDITION OR LIMITATION ESTABLISHED PURSUANT TO THE ACTS, OR NEGLIGENTLY OR INTENTIONALLY FAILING OR REFUSING TO COMPLY WITH ANY FINAL OR EMERGENCY ORDER OF THE DIRECTOR.
- 10. THE NOTES PRESENTED HEREIN SUMMARIZE THE PERTINENT POINTS IN GENERAL PERMIT #GAR 100001. THE PRIMARY PERMITTEE IS RESPONSIBLE FOR COMPLYING WITH ALL PROVISIONS OF THE PERMIT.

### BEST MANAGEMENT PRACTICES

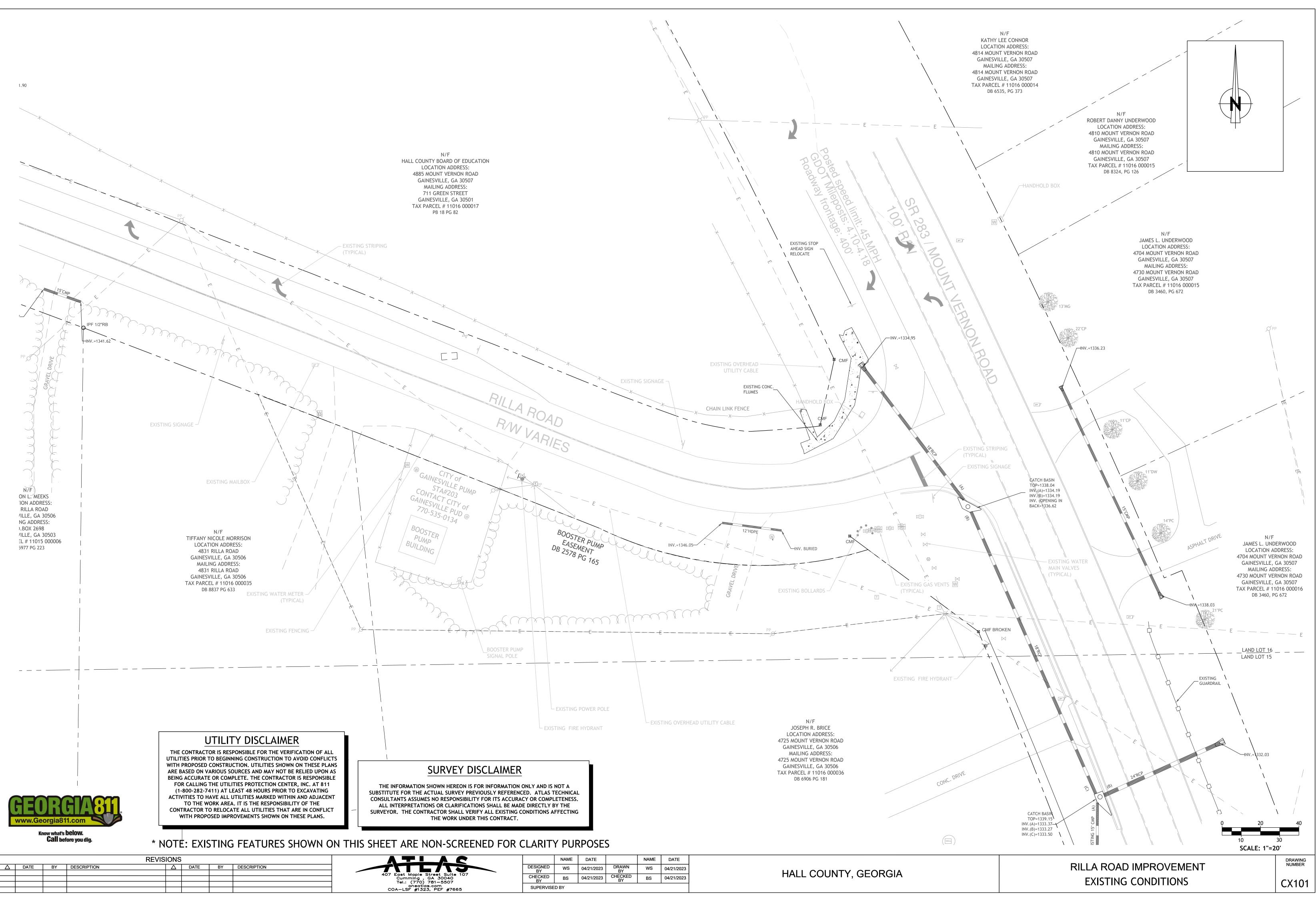
- 1. BEST MANAGEMENT PRACTICES, AS SET FORTH IN THIS PERMIT, ARE REQUIRED FOR ALL CONSTRUCTION ACTIVITIES, AND MUST BE IMPLEMENTED IN ACCORDANCE WITH THE DESIGN SPECIFICATIONS CONTAINED IN THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" (MANUAL) PUBLISHED BY THE STATE SOIL AND WATER CONSERVATION COMMISSION AS OF JANUARY 1 OF THE YEAR IN WHICH THE LAND-DISTURBING ACTIVITY WAS PERMITTED TO PREVENT OR REDUCE THE POLLUTION OF WATERS OF GEORGIA. PROPER DESIGN, INSTALLATION, AND MAINTENANCE OF BEST MANAGEMENT PRACTICES SHALL CONSTITUTE A COMPLETE DEFENSE TO ANY ACTION BY THE DIRECTOR OR TO ANY OTHER ALLEGATION OF
- NONCOMPLIANCE WITH PART 111.D.3 AND PART 111.D.4 OF PERMIT #GAR 100001. . EXCEPT AS REQUIRED TO INSTALL THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMP'S AS DESCRIBED IN PART IV.D.3., THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMP'S MUST BE INSTALLED AND IMPLEMENTED PRIOR TO CONDUCTING ANY OTHER CONSTRUCTION ACTIVITIES (E.G., CLEARING, GRUBBING AND GRADING) WITHIN THE CONSTRUCTION SITE OR WHEN APPLICABLE, WITHIN PHASED SUB-PARTS OR SEGMENTS OF THE CONSTRUCTION SITE. FAILURE TO COMPLY SHALL CONSTITUTE A VIOLATION OF THIS PERMIT FOR EACH DAY ON WHICH CONSTRUCTION ACTIVITIES OCCUR. THE DESIGN PROFESSIONAL WHO PREPARED THE PLAN MUST INSPECT THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMP'S IN ACCORDANCE WITH PART IV.A.5. WITHIN SEVEN (7) DAYS AFTER INSTALLATION.
- FAILURE TO PROPERLY DESIGN, INSTALL, OR MAINTAIN BEST MANAGEMENT PRACTICES SHALL CONSTITUTE A VIOLATION OF THIS PERMIT FOR EACH DAY ON WHICH SUCH FAILURE OCCURS. BMP MAINTENANCE AS A RESULT OF THE PERMITTEE'S ROUTINE INSPECTIONS SHALL NOT BE CONSIDERED A VIOLATION FOR THE PURPOSES OF THIS PARAGRAPH. IF DURING THE COURSE OF THE PERMITTEES ROUTINE INSPECTION BMP FAILURES ARE OBSERVED WHICH HAVE RESULTED IN SEDIMENT DEPOSITION INTO WATERS OF THE STATE, THE PERMITTEE SHALL CORRECT THE BMP FAILURES AND SHALL SUBMIT A SUMMARY OF THE VIOLATIONS TO EPD, IN ACCORDANCE WITH PART V.A.2 OF PERMIT #GAR100001
- 4. A DISCHARGE OF STORM WATER RUNOFF FROM DISTURBED AREAS WHERE BEST MANAGEMENT PRACTICES HAVE NOT BEEN PROPERLY DESIGNED, INSTALLED, AND MAINTAINED SHALL CONSTITUTE A SEPARATE VIOLATION FOR EACH DAY ON WHICH SUCH DISCHARGE RESULTS IN THE TURBIDITY OF RECEIVING WATER(S) BEING INCREASED BY MORE THAN TEN (10) NEPHELOMETRIC TURBIDITY UNITS FOR WATERS CLASSIFIED AS TROUT STREAMS OR MORE THAN TWENTY-FIVE (25) NEPHELOMETRIC TURBIDITY UNITS FOR WATERS SUPPORTING WARM WATER FISHERIES, REGARDLESS OF A PERMITTEE'S CERTIFICATION, UNDER PART II.B.1.i OF PERMIT #GAR10001,
- 5. WHEN THE PERMITTEE HAS ELECTED TO MONITOR OUTFALL(S), THE DISCHARGE OF STORM WATER RUNOFF FROM DISTURBED AREAS WHERE BEST MANAGEMENT PRACTICES HAVE NOT BEEN PROPERLY DESIGNED, INSTALLED, AND MAINTAINED SHALL CONSTITUTE A SEPARATE VIOLATION FOR EACH DAY ON WHICH SUCH CONDITION RESULTS IN THE TURBIDITY OF THE DISCHARGE EXCEEDING THE VALUE SELECTED FROM APPENDIX B APPLICABLE TO THE CONSTRUCTION SITE. AS SET FORTH THEREIN, THE NEPHELOMETRIC TURBIDITY UNIT (NTU) VALUE SHALL BE SELECTED FROM APPENDIX B BASED UPON THE SIZE OF THE CONSTRUCTION SITE, THE SURFACE WATER DRAINAGE AREA AND WHETHER THE RECEIVING WATER(S) SUPPORTS WARM WATER FISHERIES OR IS A TROUT STREAM AS INDICATED IN THE RULES AND REGULATIONS FOR WATER QUALITY CONTROL, CHAPTER 391-3-6 AT WWW.GAEPD.ORG

# 24-HOUR EMERGENCY CONTACT: SCOTT PUCKETT 770-531-6800

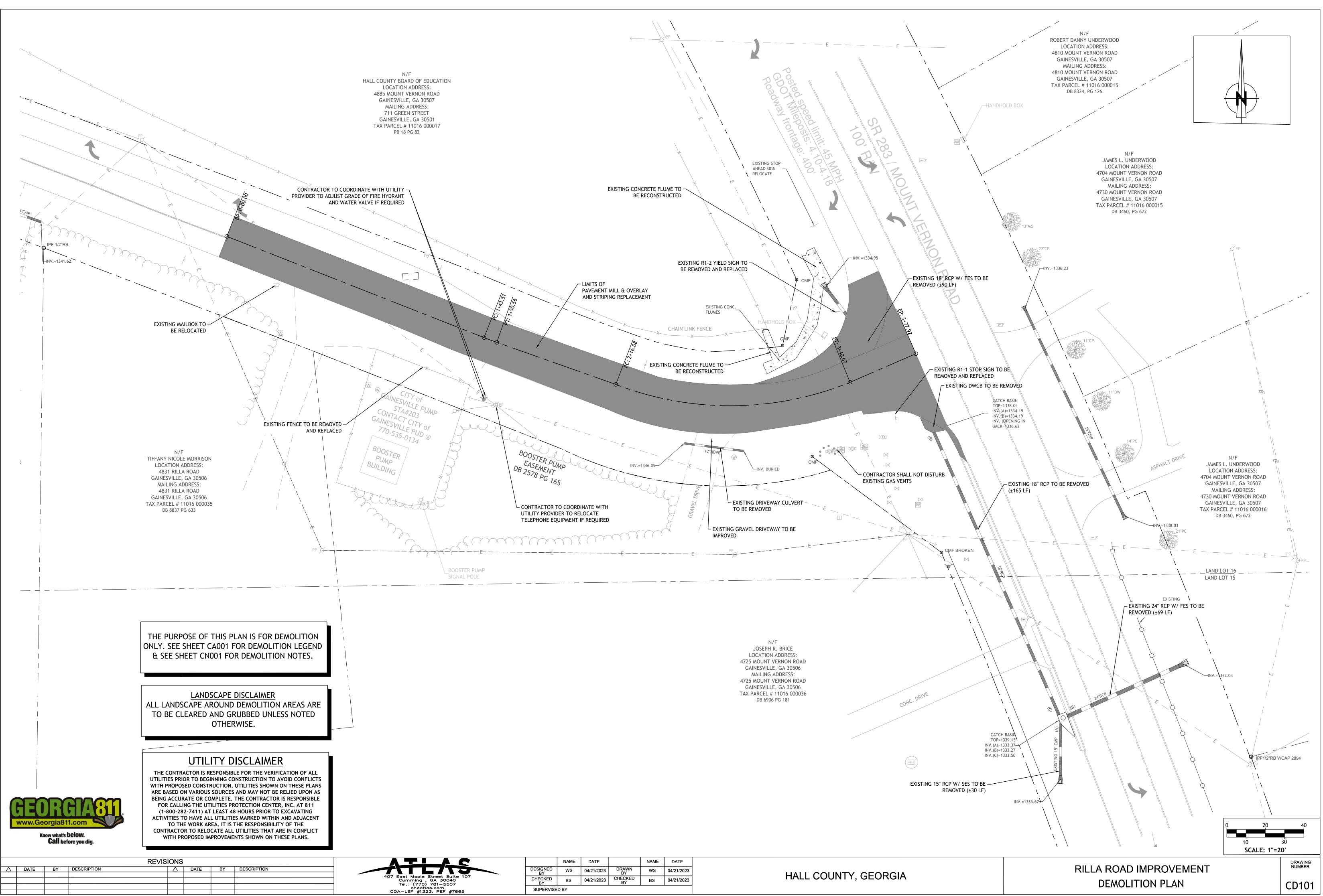
# **RILLA ROAD IMPROVEMENT** E&SC NOTES

DRAWING NUMBER

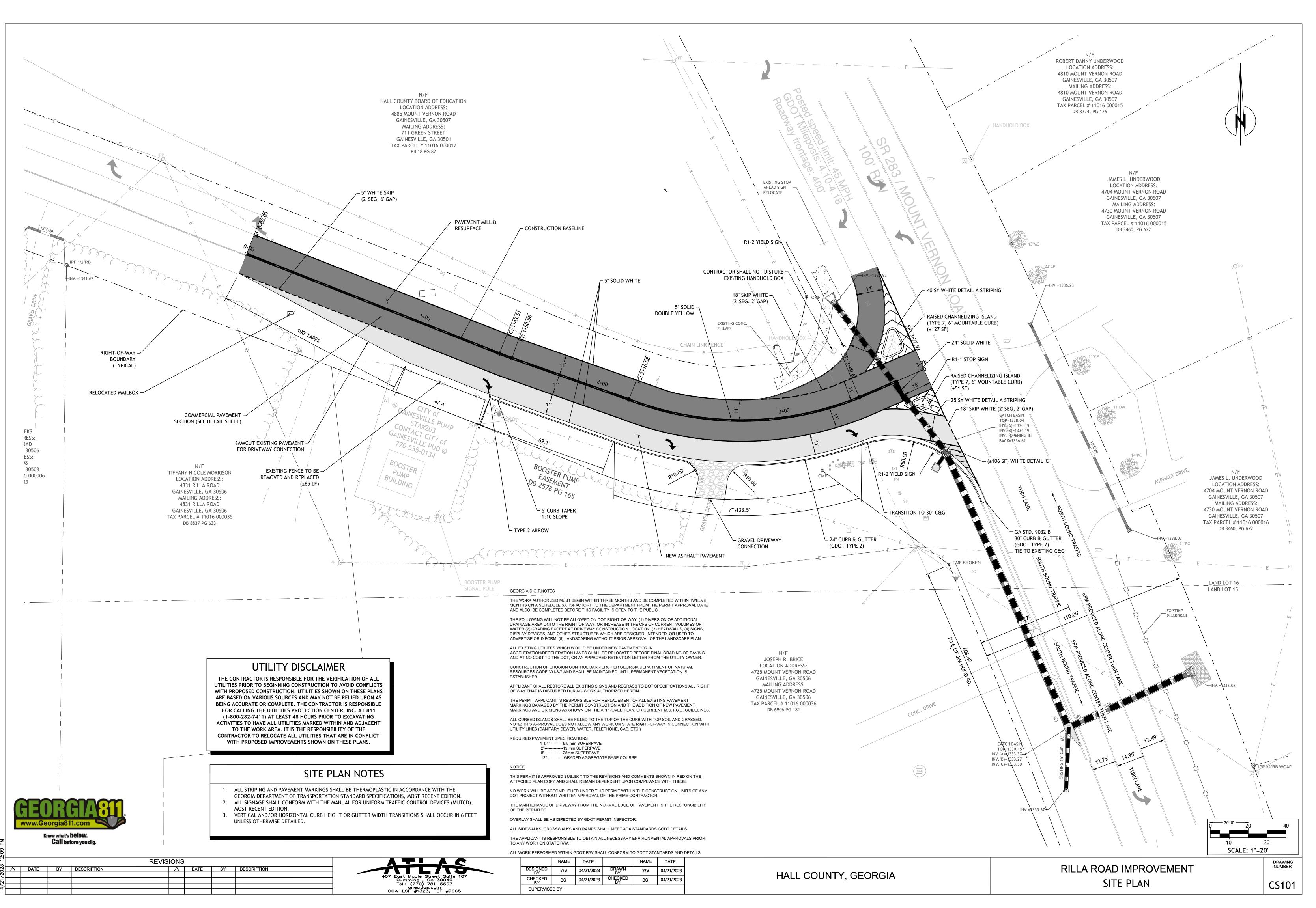
**CE020** 

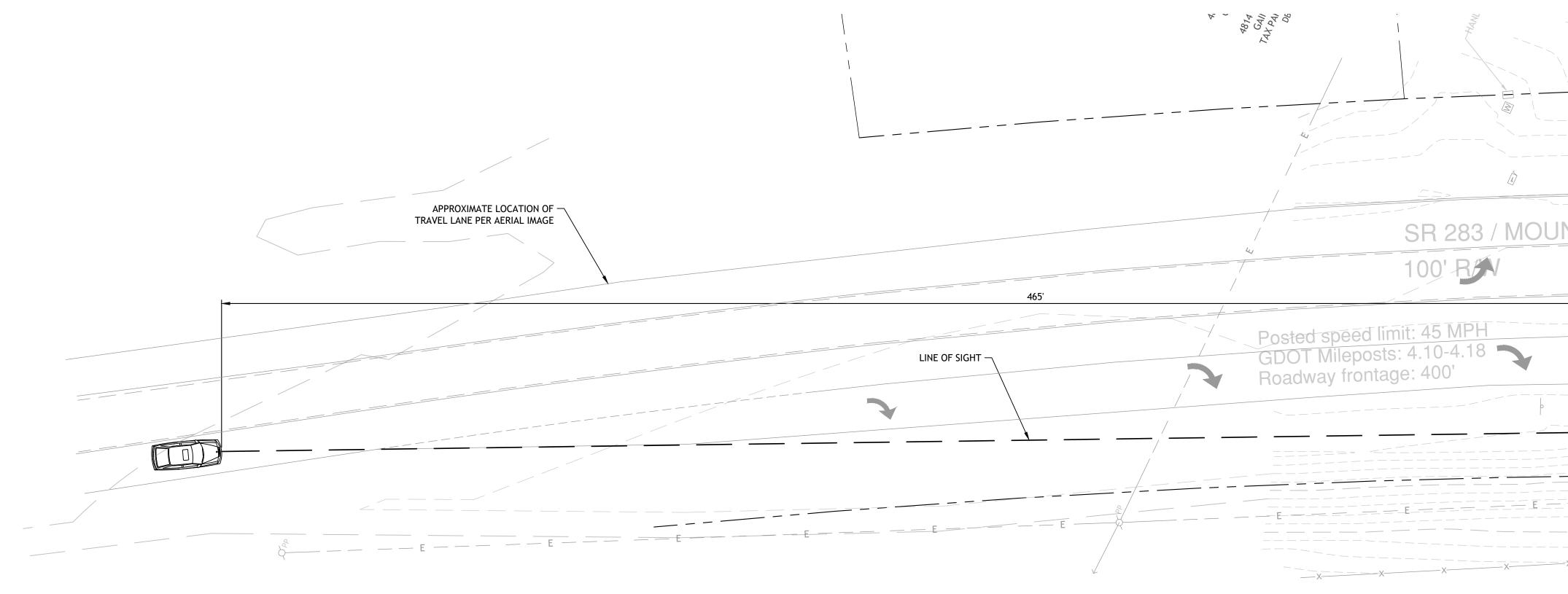


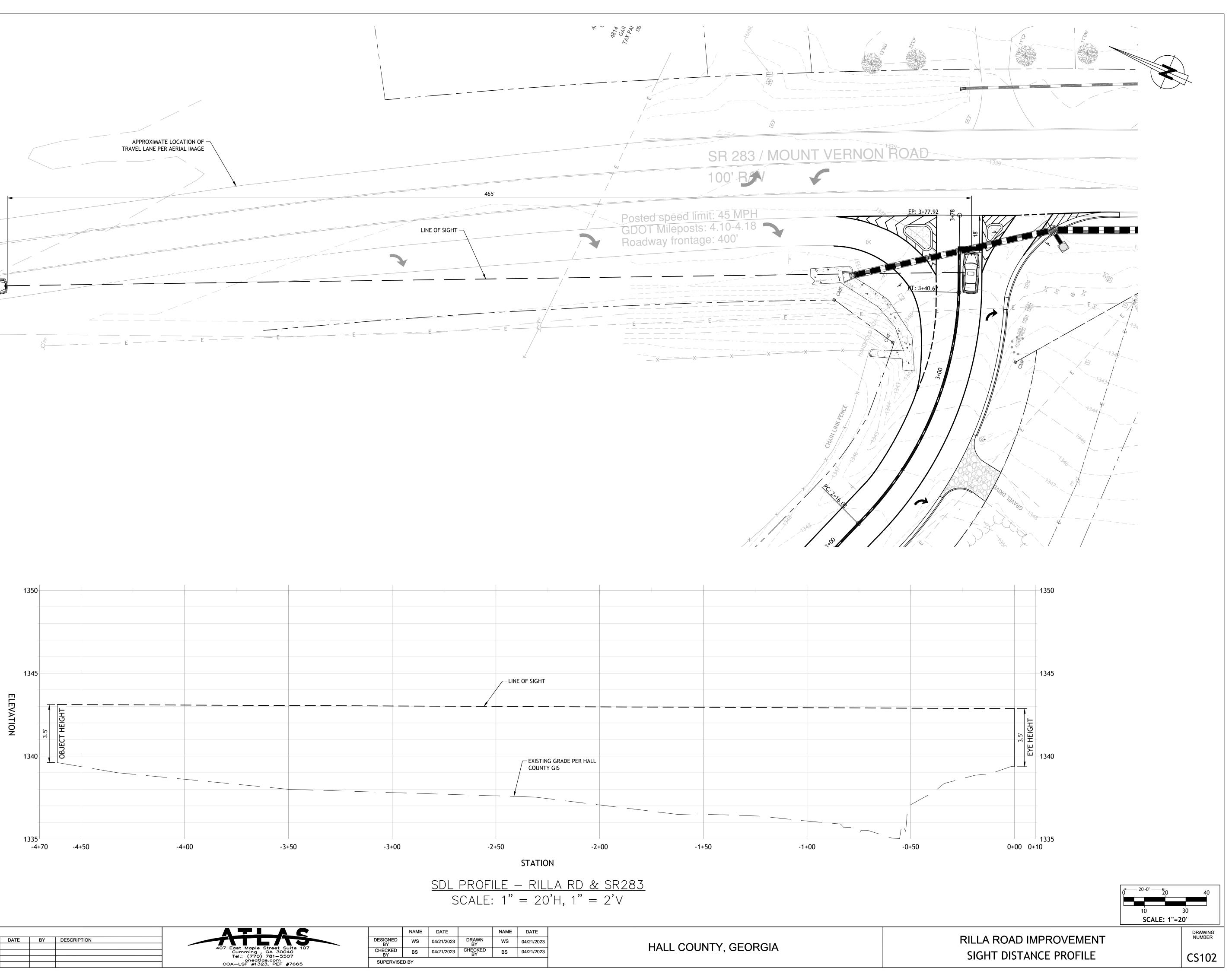
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665	SUPERVISE	DBY				



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	DESIGNED BY	ws	04/21/2023	DRAWN BY	WS	04/21/2023
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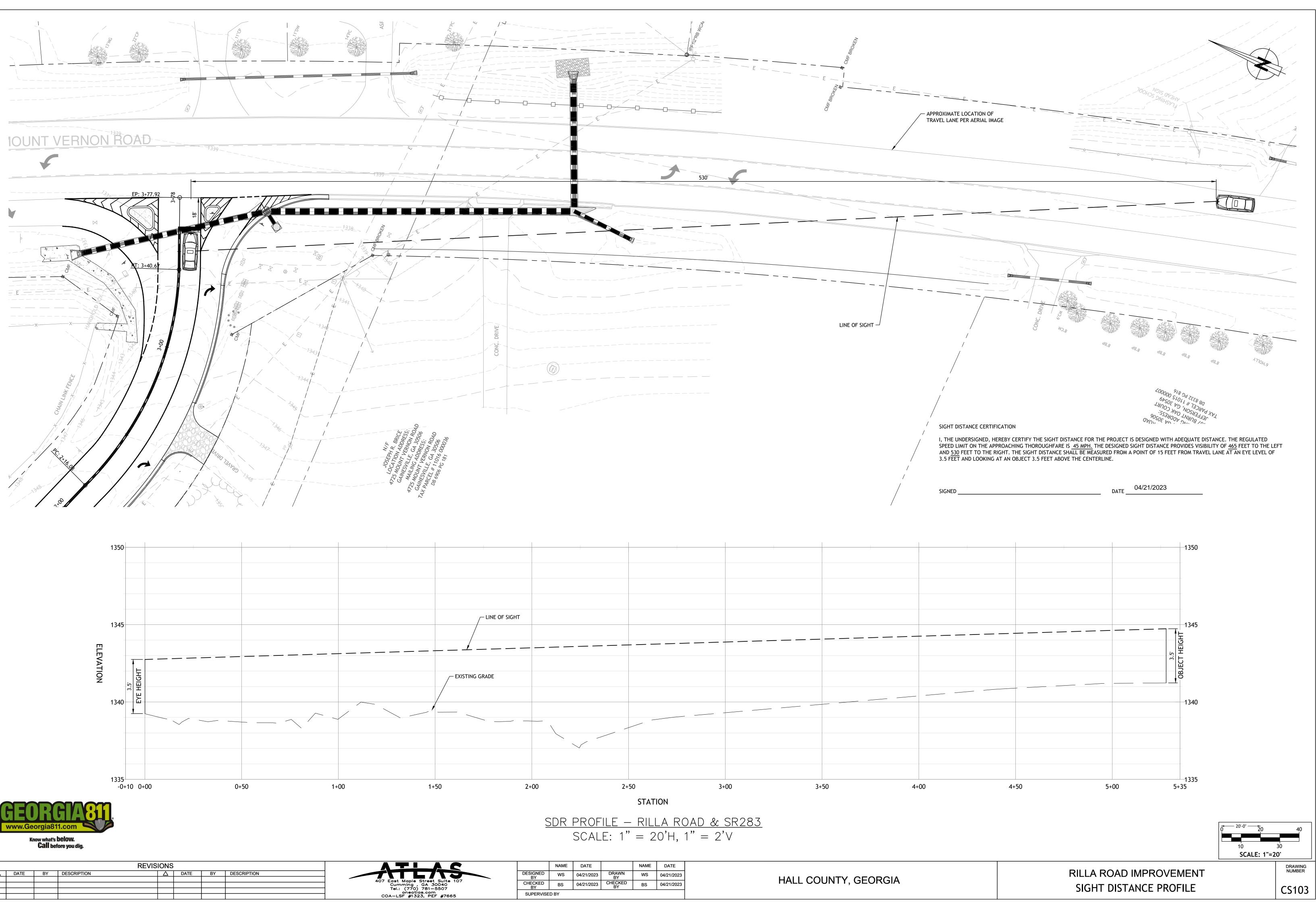


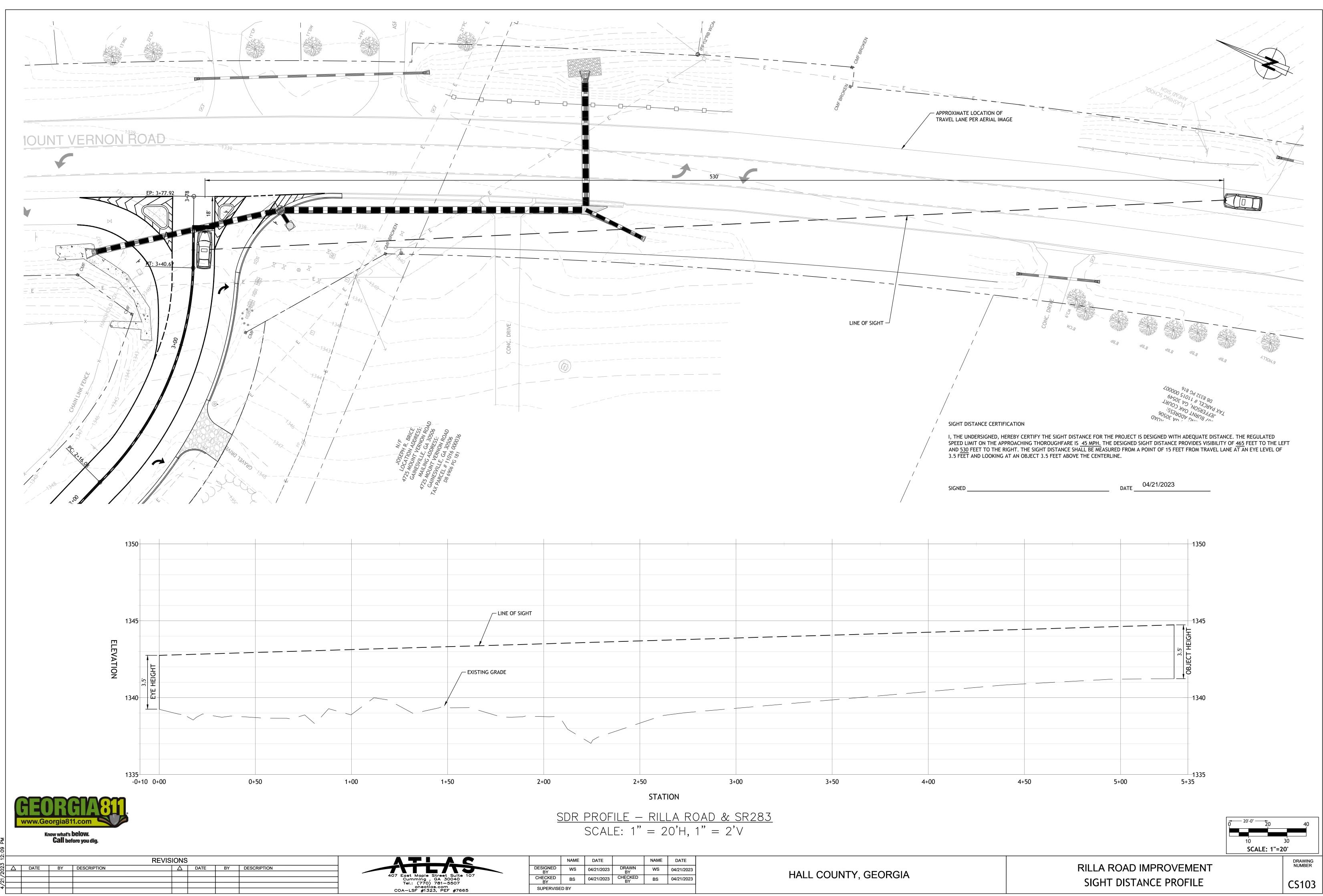


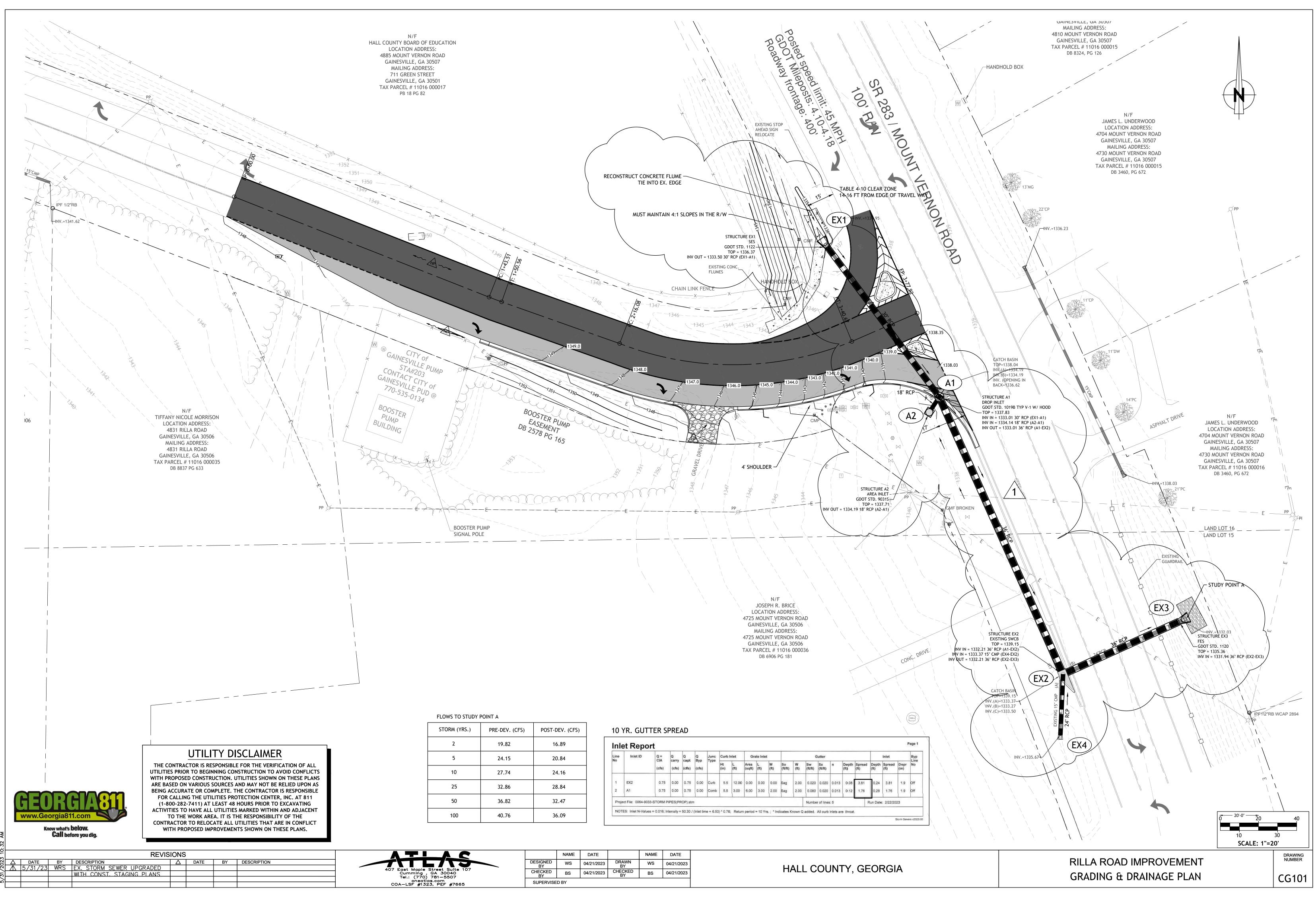
REVISIONS			NAME	DATE		NAME	DATE
△ DATE BY DESCRIPTION		DESIGNED BY	WS	04/21/2023	DRAWN BY	ws	04/21/2023
	407 East Maple Street Suite 107 Cumming , GA 30040 Tel.: (770) 781-5507	CHECKED BY	BS	04/21/2023	CHECKED BY	BS	04/21/2023
	oneatlas.com COA–LSF #1323, PEF #7665	SUPERVISE	D BY				

HALL	COUNTY,	GEORGIA

SDL PROFILE - RILLA RD & SR283
SCALE: 1" = 20'H, 1" = 2'∨







5	24.15	20.84
10	27.74	24.16
25	32.86	28.84
50	36.82	32.47
100	40.76	36.09
	5	

Line No	Inlet ID	Q = CIA	Q	Q capt	Q Byp	Junc Type	Curb I	nlet	Gra	ate inlet				G	lutter					Inlet		Byp
		(cfs)	(cfs)	(cfs)	(cfs)	Type	Ht (in)	L (ft)	Area (sqft)	L (ft)	W (ft)	So (ft/ft)	W (ft)	Sw (ft/ft)	Sx (ft/ft)	n	Depth (ft)	Spread (ft)	Depth (ft)	Spread (ft)	Depr (in)	No
1	EX2	0.75	0.00	0.75	0.00	Curb	5.5	12.00	0.00	0.00	0.00	Sag	2.00	0.020	0.020	0.013	0.08	3.81	0.24	3.81	1.9	Off
2	A1	0.75	0.00	0.75	0.00	Comb	5.5	3.00	6.00	3.00	2.00	Sag	2.00	0.080	0.020	0.013	0.12	1,76	0.28	1.76	1.9	Off
Proje	ct File: 0064-903	3-STORM P	IPES(PF	ROP).stn	n							-		Numbe	r of lines	: 5			Run Date	: 2/22/20	23	

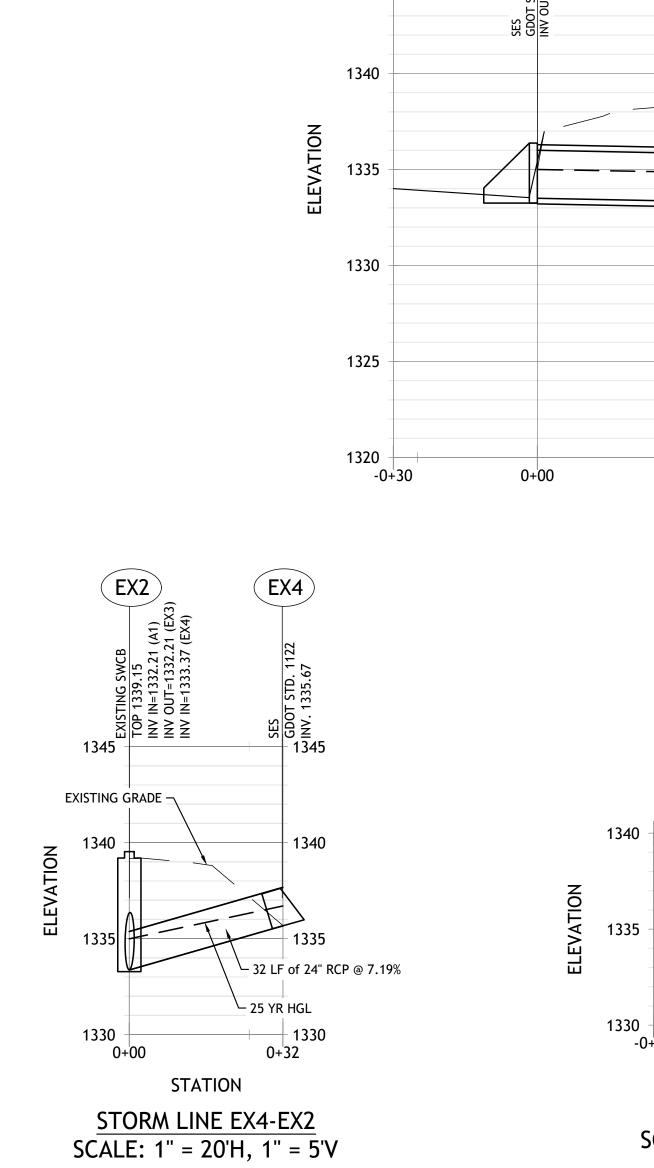
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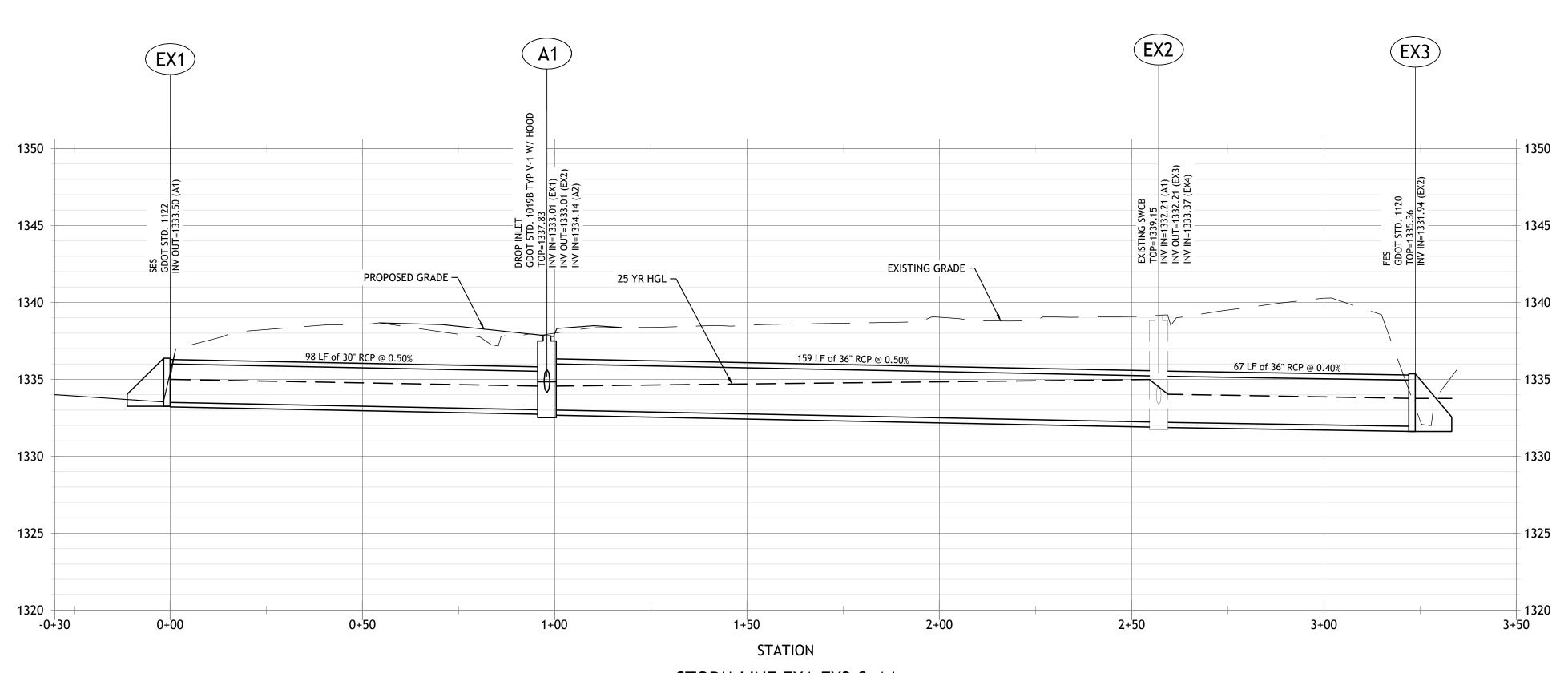




Know what	at's <b>below</b> .	
Call	before you dig.	

	REVIS	IONS						NAME	DATE		NAME	DATE	
BY	DESCRIPTION	Δ	DATE	BY	DESCRIPTION		DESIGNED BY	WS	04/21/2023	DRAWN BY	WS	04/21/2023	
						407 East Maple Street Suite 107 Cumming , GA 30040 Tel.: (770) 781-5507	CHECKED BY	BS	04/21/2023	CHECKED BY	BS	04/21/2023	
						oneatlas.com COA-LSF #1323, PEF #7665	SUPERVISE	D BY					
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25 YR HGL 1330 <del>|</del> -0+20 0+00 STATION <u>STORM LINE A1-A2</u> SCALE: 1" = 20'H, 1" = 5'V

(A1)

, ТҮР 01 (ЕХ1) 14 (А2) 31<sup>г</sup>

DROP INLE GDOT STD GDOT STD INV IN=1337 INV IN=1337 INV IN=1337 INV IN=1337.1 INV=1334.1

(A2)

15

STORM LINE EX1-EX3 & A1 SCALE: 1" = 20'H, 1" = 5'V

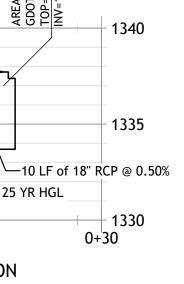
# **Storm Sewer Tabulation**

Statio	n	Len	Drng /	Area	Rnoff	Area	хC	Tc		Rain	Total	Cap	Vel	Pipe	ř.	Invert El	ev	HGL Ele	v	Grnd / Ri	m Elev	Line ID
.ine	To Line	(ft)	Incr (ac)	Total (ac)	coeff (C)	Incr	Total	Inlet (min)	Syst (min)	-(I) (in/hr)	flow (cfs)	full (cfs)	(ft/s)	Size (in)	Slope (%)	Dn (ft)	0.50	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	
1	End	67.000	0.10	5.23	0.95	0.10	3.33	5.0	6.2	8.7	28.84	42.34	6.44	36	0.40	1331.94	1332.21	1333.76	1334.03	1338.36	1339,15	EX2-EX3
2	1	159.000	0.10	3.50	0.95	0.10	2.53	5.0	5.4	9.1	23.09	47.31	4.83	36	0.50	1332.21	1333.01	1334.99	1334.56	1339.15	1337.83	A1-EX2
3	2	98.000	2.50	2.50	0.83	2.08	2.08	5.0	5.0	9.4	19.45	29.00	6.21	30	0.50	1333.01	1333.50	1334.56	1335.00	1337.83	1336.00	EX1-A1
4	2	9.590	0.90	0.90	0.40	0.36	0.36	5.0	5.0	9.4	3.38	7.58	4.15	18	0.52	1334.14	1334.19	1334.84	1334.89	1337.83	1337.71	A2-A1
5	1	32.000	1.63	1.63	0.43	0.70	0.70	5.0	5.0	9.4	6.57	60.64	3.57	24	7.19	1333.37	1335.67	1334.99	1336.58	1339.15	1336.92	EX4-EX2
Proje	ct File	: 0064-9	033-51	ORM PI	PES(PP	ROP) str	n		1					1		Numbe	r of lines: {			Run Da	te: 3/27/2	123

-54.057 (the time + 5.00) -0.74, Return period = Hs. 25; c = cir = e = e = b = b = b = b = c

# 25-YEAR STORM SEWER ANALYSIS RESULTS

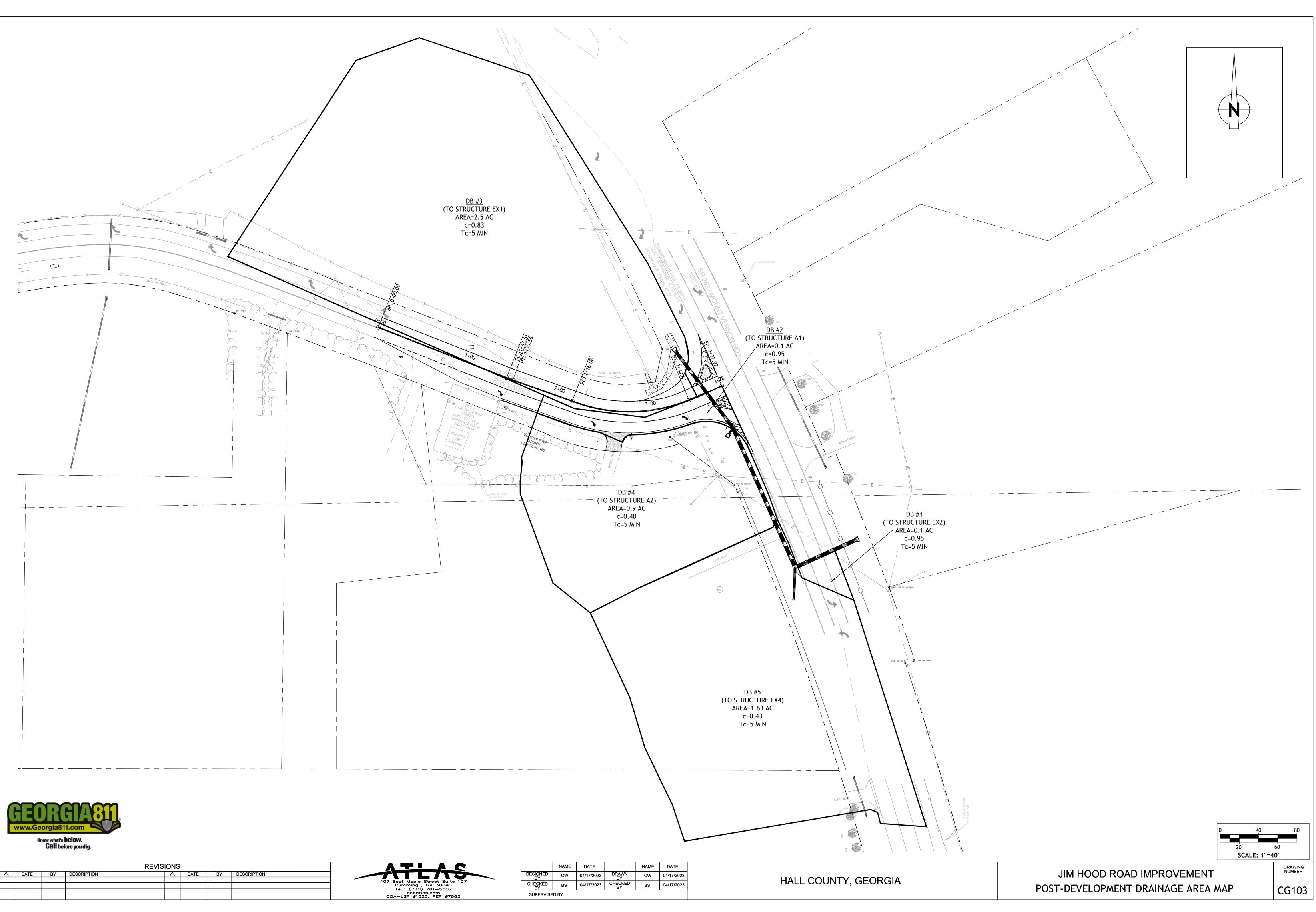
HALL COUNTY, GEORGIA



### Page 1

Storm Sewers v2023.00

RILLA ROAD IMPROVEMENT
DRAINAGE PROFILES





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02	$\Delta$	DATE	BY	DESCRIPTION		DATE	BY	DESCRIPTION	
5									407 East Maple Street Suite
้ผ่									407 East Maple Street Suite Cumming , GA 30040
4									Tel.: (770) 781–5507 oneatigs.com
									COA-LSF #1323, PEF #766

# CONSTRUCTION PHASE I SOUTH BOUND LANE CLOSURE

AHEAD SIGN -

N/F JOSEPH R. BRICE

LOCATION ADDRESS:

4725 MOUNT VERNON ROAD

GAINESVILLE, GA 30506 MAILING ADDRESS:

4725 MOUNT VERNON ROAD

GAINESVILLE, GA 30506 TAX PARCEL # 11016 000036

DB 6906 PG 181

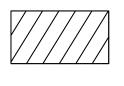
EXISTING C FLUMES

HAIN LINK FENCE

5

# NOTE:

SEE TRAFFIC CONTROL DETAILS SHT. CD 102 GDOT STD. 9102 AND GDOT STD. 9100 FOR LANE CLOSURE ON TWO-LANE HIGHWAY. ALTERNATING LANES CONTROLLED BY FLAGGER. ACCESS SHALL BE PROVIDED TO ALL PRIVATE DRIVES DURING CONSTRUCTION.



WORK AREA



CATCH BASIN TOP=1339.15 INV.(A)=1333.37-INV.(B)=1333.27 INV.(C)=1333.50

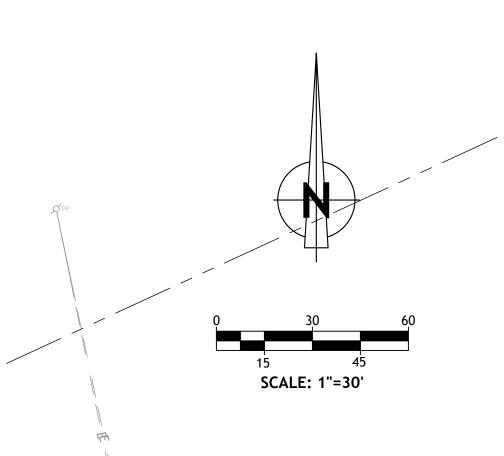


N/F 30BBY LEE WILEY, JR. LOCATION ADDRESS: 55 MOUNT VERNON ROAD MAILING ADDRESS: 667 BURNT OAK COURT JEFFERSON, GA 30549 C PARCEL # 11015 000007 DB 8332 PG 816
306 M MIN 367 167 100 100 100 100 100 100 100 100 100 10

ATLAS

Cumming , GA 30040 Tel.: (770) 781–5507 oneatias.com COA–LSF #1323, PEF #7665

	REV	ISIONS	5		
BY	DESCRIPTION		DATE	BY	DESCRIPTION



N/F

JAMES L. UNDERWOOD LOCATION ADDRESS:

4704 MOUNT VERNON ROAD

GAINESVILLE, GA 30507 MAILING ADDRESS:

4730 MOUNT VERNON ROAD

GAINESVILLE, GA 30507 TAX PARCEL # 11016 000015

DB 3460, PG 672

N/F

JAMES L. UNDERWOOD

LOCATION ADDRESS: 4704 MOUNT VERNON ROAD

MAILING ADDRESS: 4730 MOUNT VERNON ROAD

GAINESVILLE, GA 30507

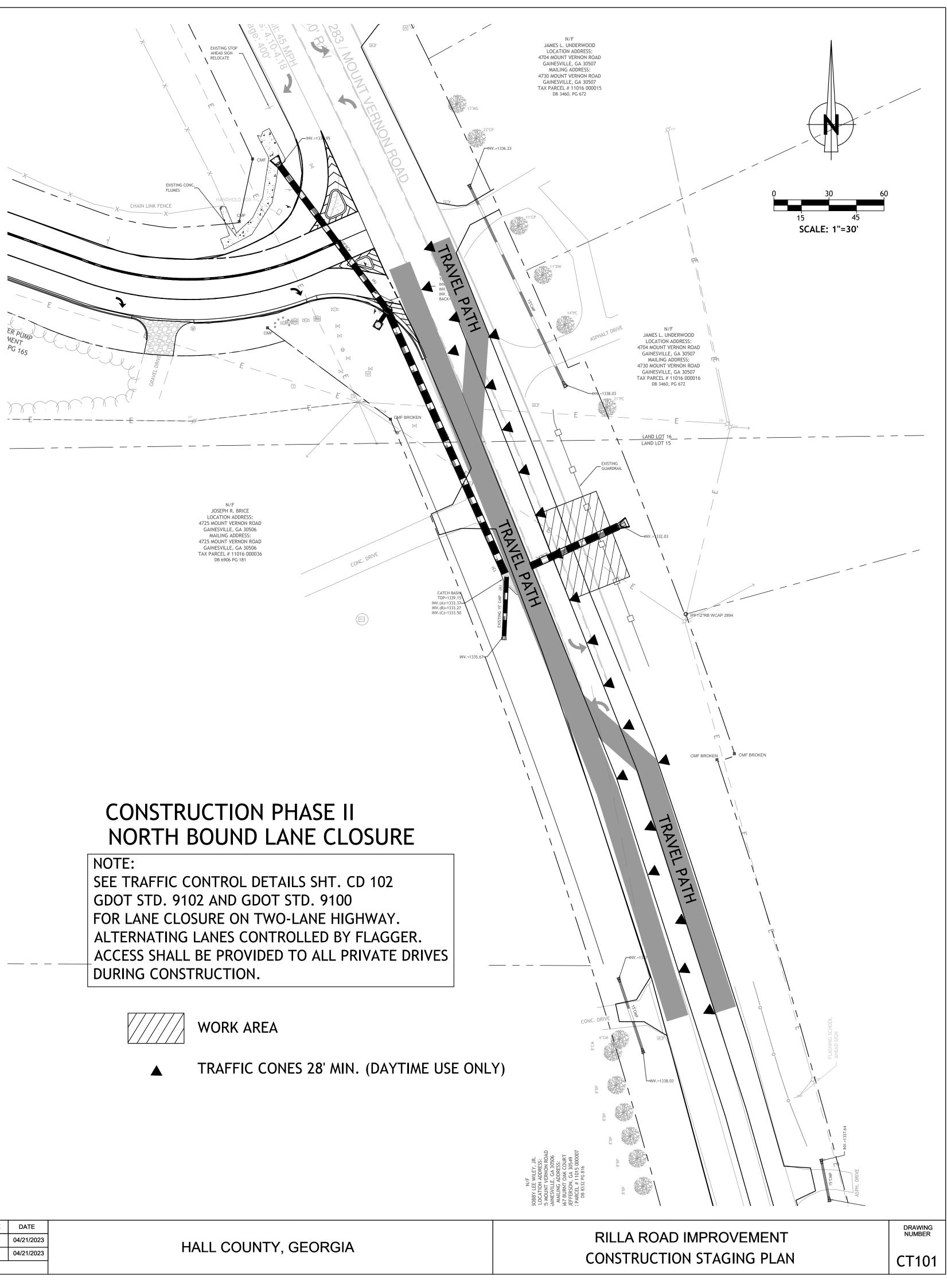
TAX PARCEL # 11016 000016 DB 3460, PG 672

LAND LOT 16 LAND LOT 15

TRAVEL PATH

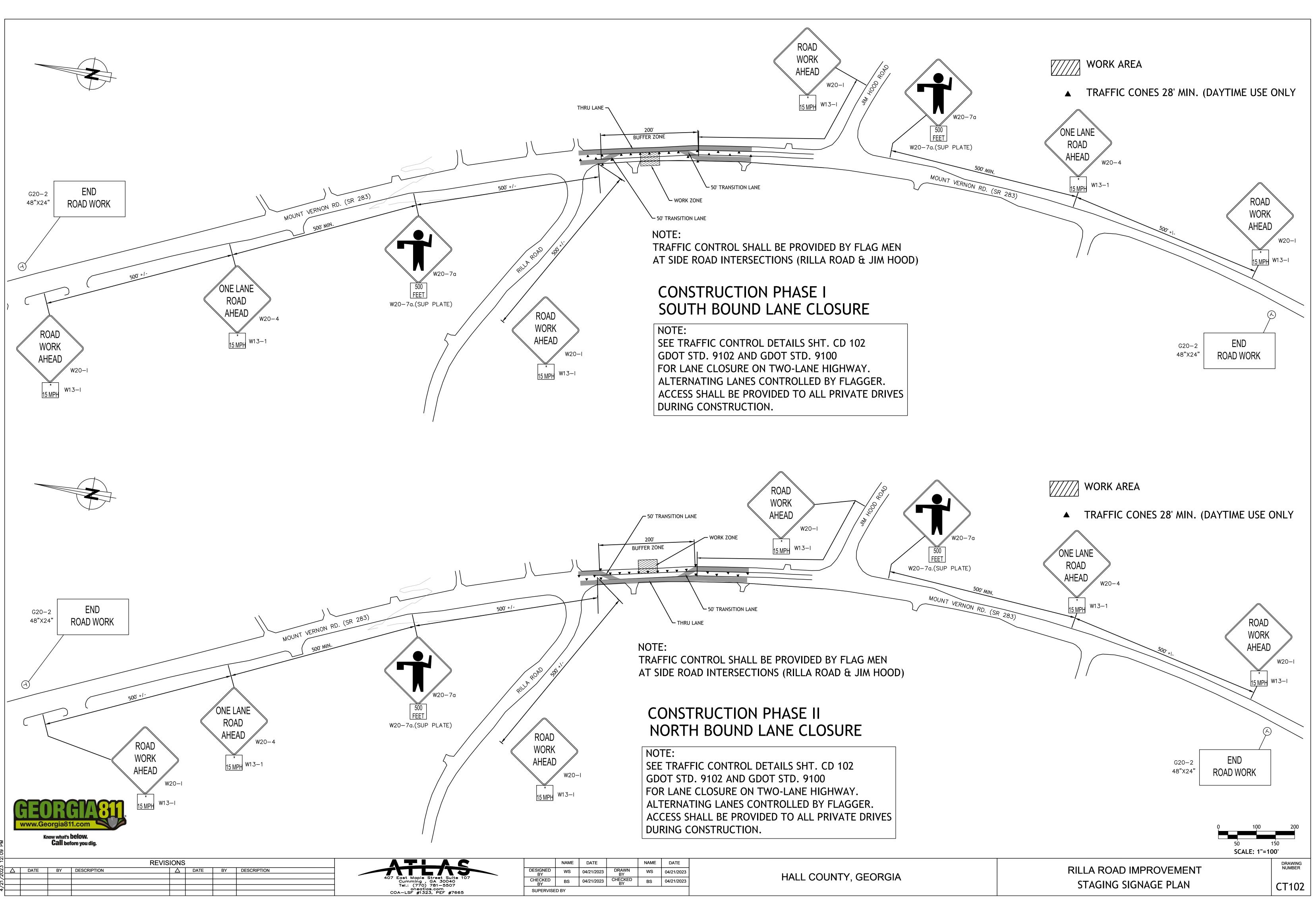
"RB WCAP 289

GAINESVILLE, GA 30507





	NAME	DATE		NAME	DATE
DESIGNED BY	WS	04/21/2023	DRAWN BY	WS	04/21/2023
CHECKED BY	BS	04/21/2023	CHECKED BY	BS	04/21/2023
SUPERVISE	D BY				



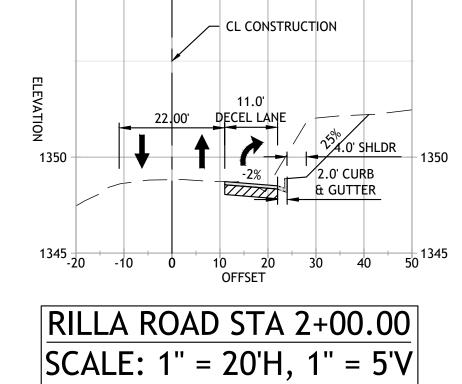
I: /FOR/DATA/TRANSPORTATION/HALL/0064-9033 JIM HOOD & RILLA ROAD AT HALL COUNTY/04 DRAWINGS/41 CIVIL DRAWINGS/RILLA ROAD/0064-90.



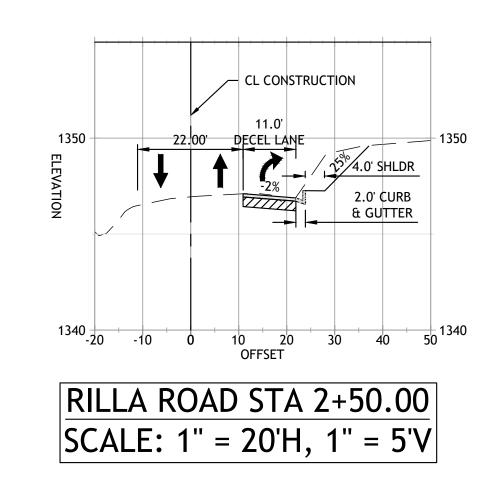
now what	t's <b>be</b>	IOW.
Call	before	you dig.

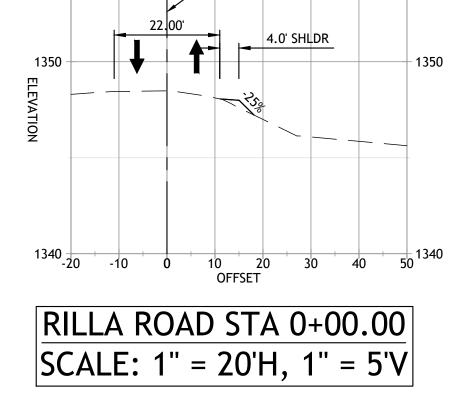
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TE	BY	DESCRIPTION	$\Delta$	DATE	BY	DESCRIPTION		DESIGNED BY	WS	04/21/2023	DRAWN BY	WS	04/21/2023
							407 East Maple Street Suite 107 Cumming , GA 30040 Tel.: (770) 781–5507	CHECKED BY	BS	04/21/2023	CHECKED BY	BS	04/21/2023
			_				oneatlas.com COA-LSF #1323, PEF #7665	SUPERVISE	) BY				



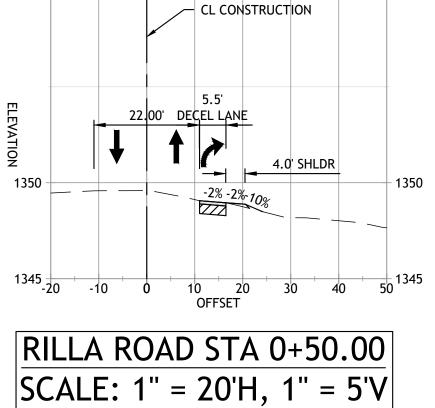


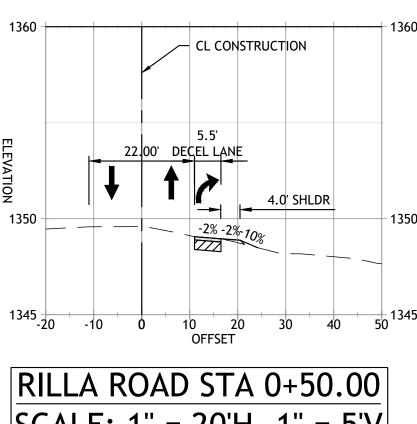
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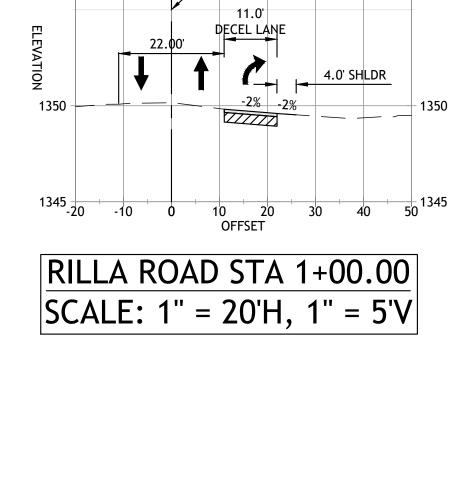




- CL CONSTRUCTION

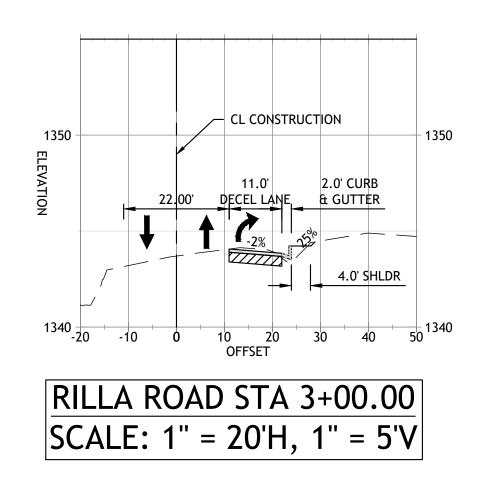






— CL CONSTRUCTION

1360



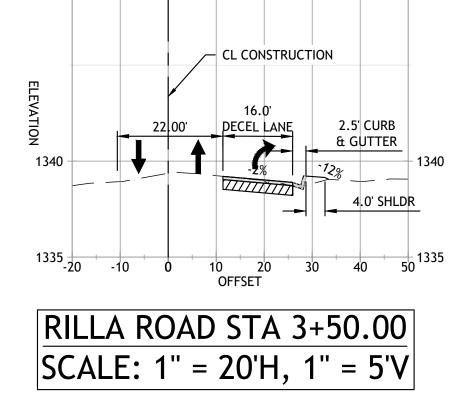
UTILITY DISCLAIMER THE CONTRACTOR IS RESPONSIBLE FOR THE VERIFICATION OF ALL UTILITIES PRIOR TO BEGINNING CONSTRUCTION TO AVOID CONFLICTS WITH PROPOSED CONSTRUCTION. UTILITIES SHOWN ON THESE PLANS ARE BASED ON VARIOUS SOURCES AND MAY NOT BE RELIED UPON AS BEING ACCURATE OR COMPLETE. THE CONTRACTOR IS RESPONSIBLE FOR CALLING THE UTILITIES PROTECTION CENTER, INC. AT 811 (1-800-282-7411) AT LEAST 48 HOURS PRIOR TO EXCAVATING ACTIVITIES TO HAVE ALL UTILITIES MARKED WITHIN AND ADJACENT TO THE WORK AREA. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL UTILITIES THAT ARE IN CONFLICT WITH PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS.

## HALL COUNTY, GEORGIA

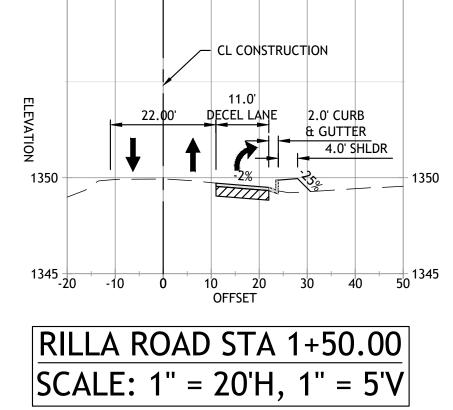
RILLA ROAD IMPROVEMENT
ROAD SECTIONS

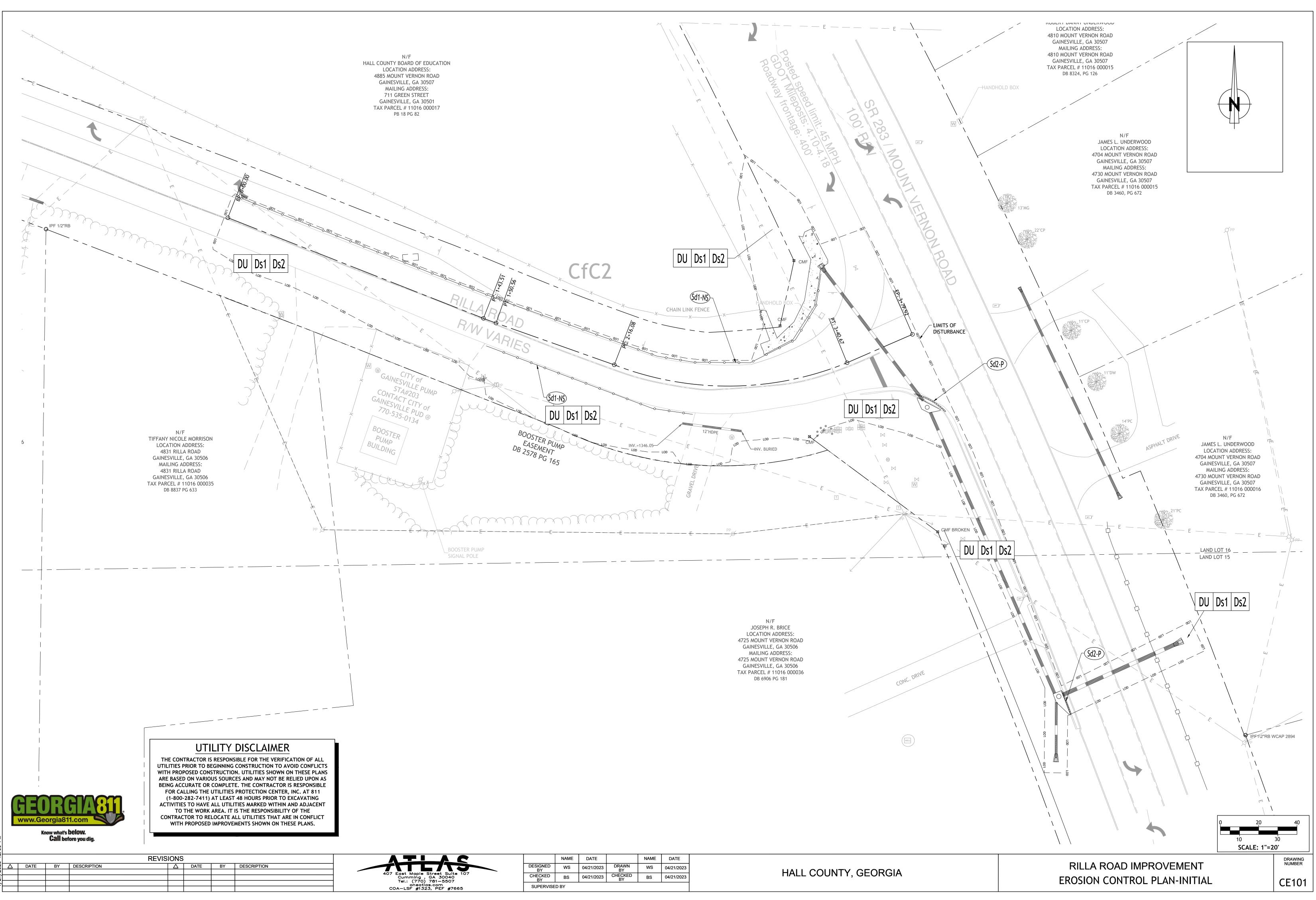
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CP101

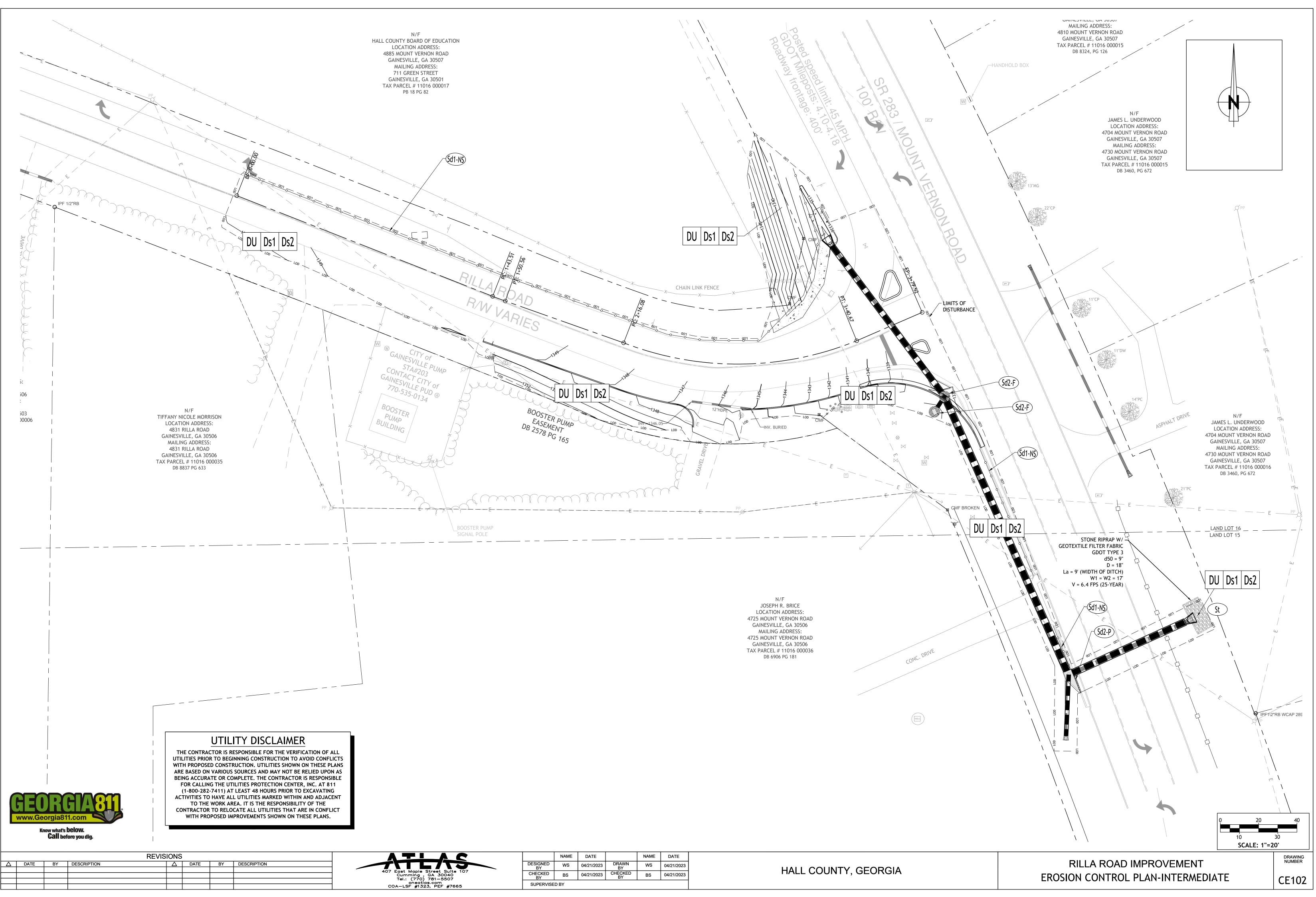


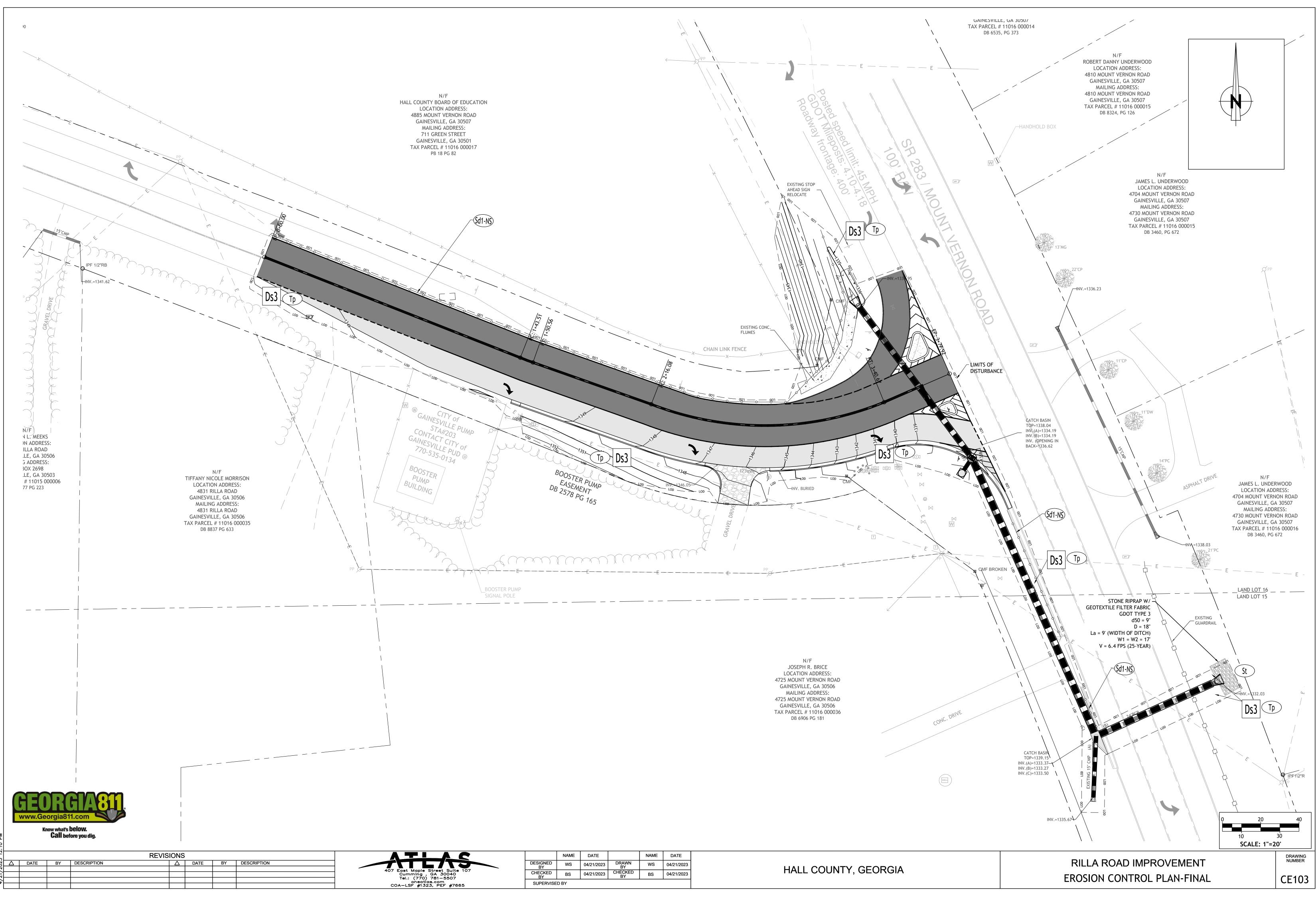
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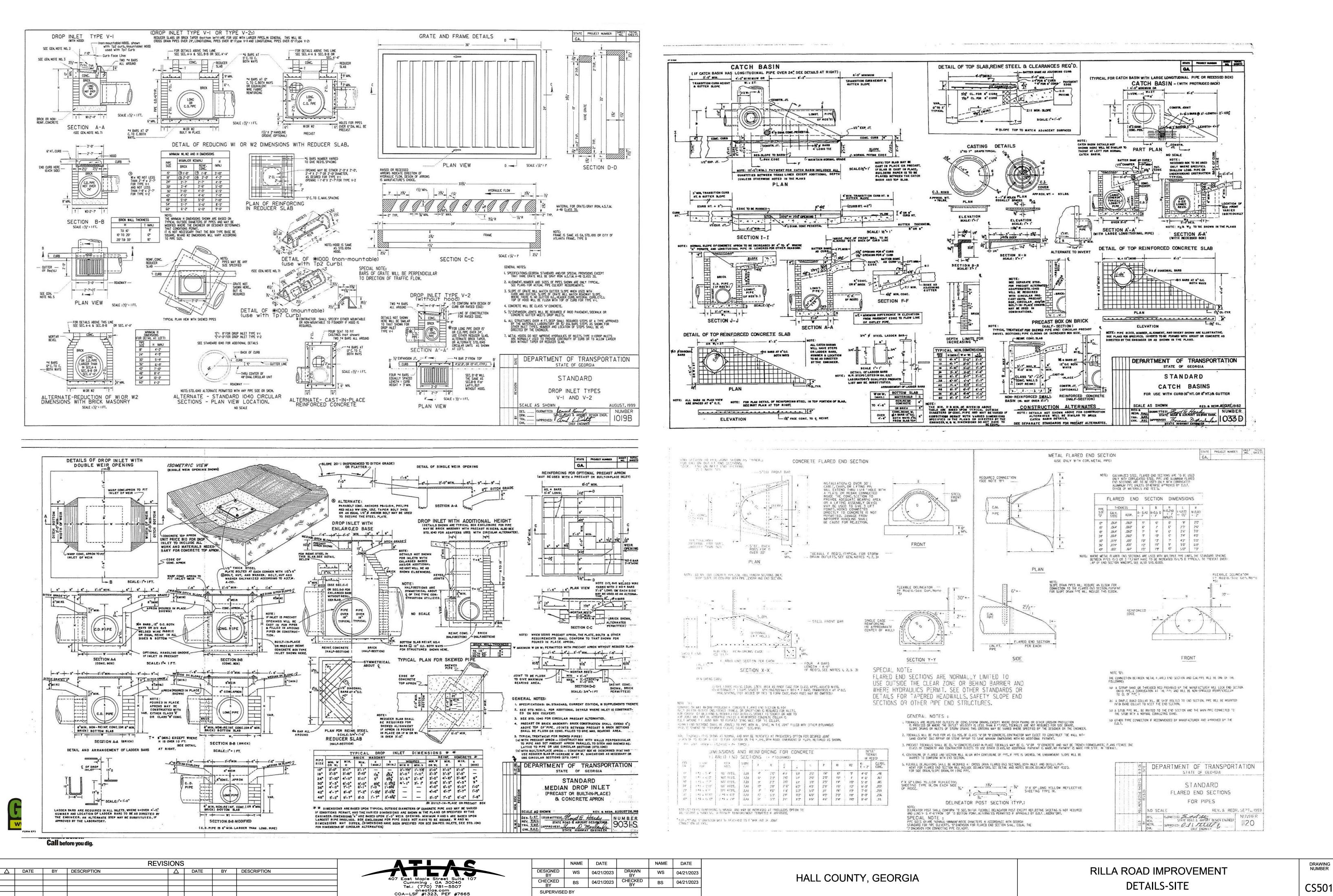


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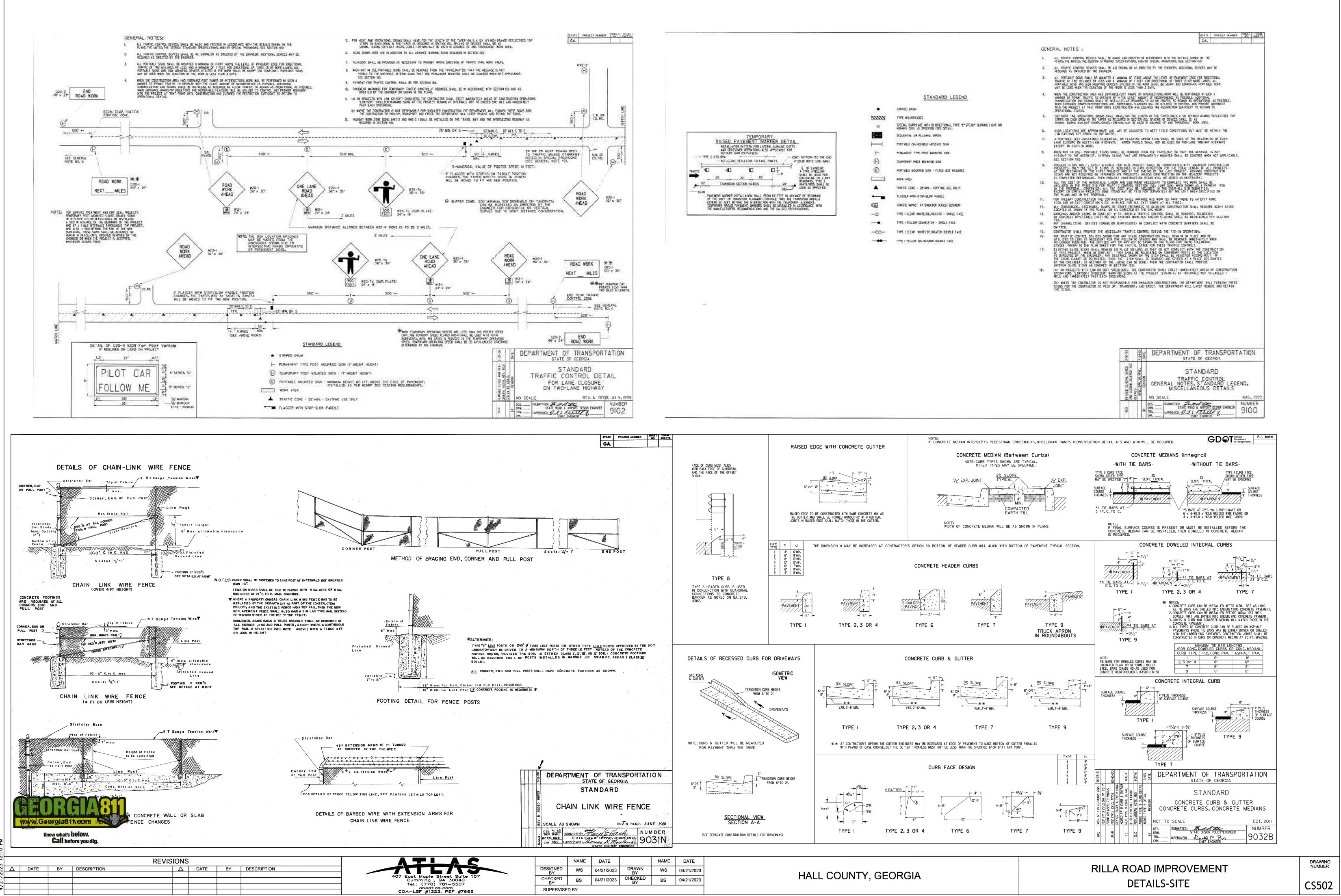


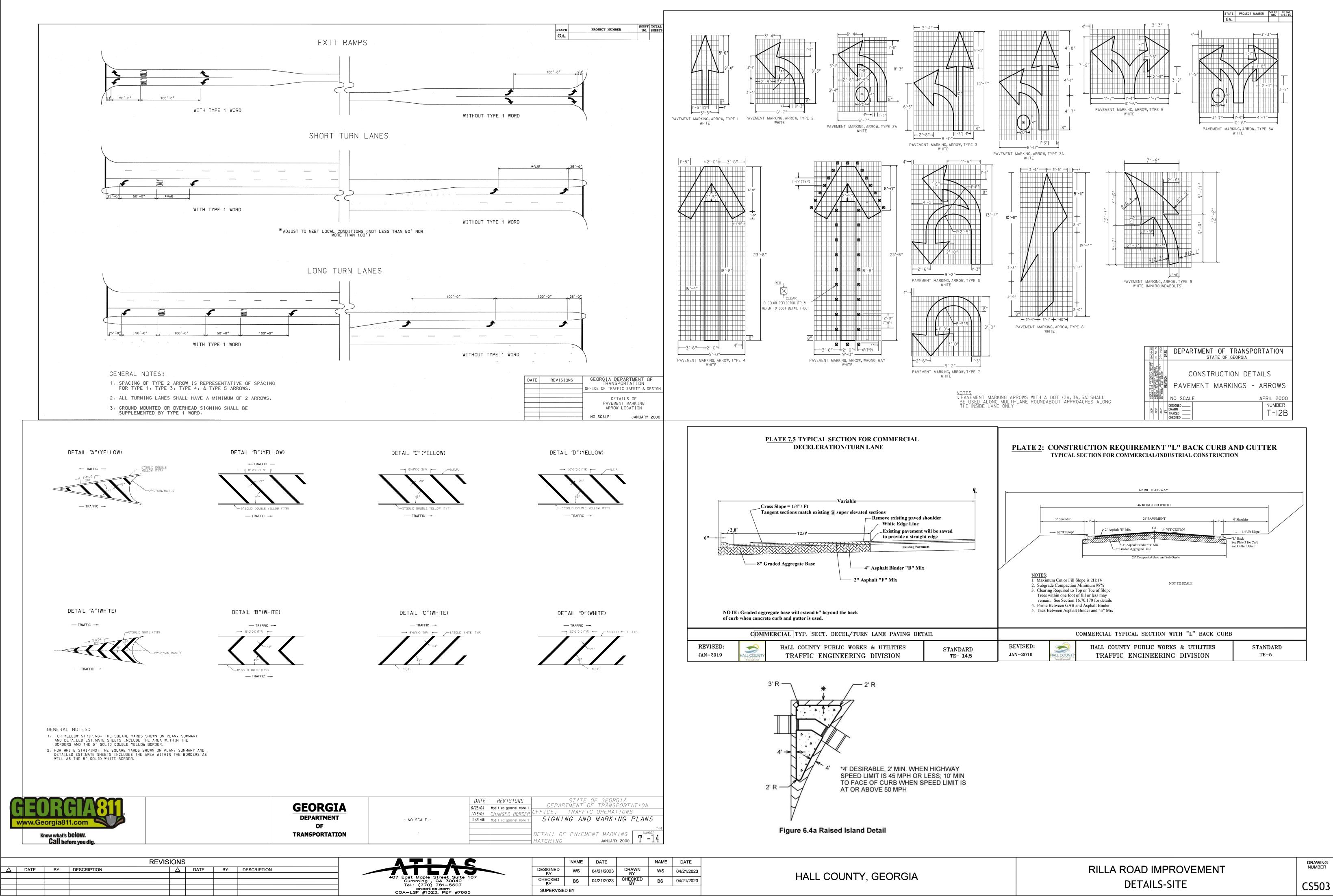


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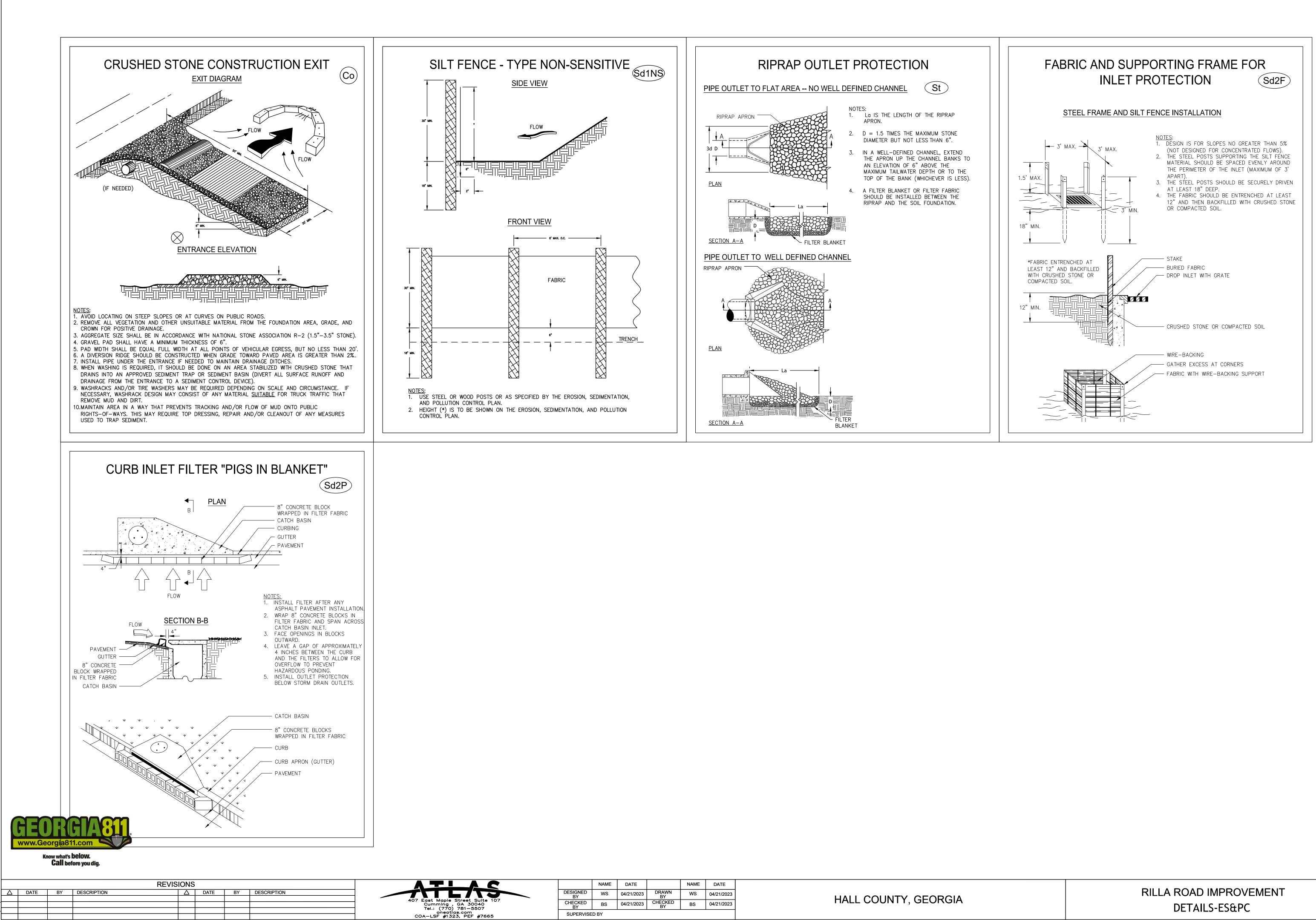


DETAILS-	SITE





RILLA ROAD IMPROVEMENT
DETAILS-SITE



5		NAME	DATE		NAME	DATE
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DEFINITION

CONDITIONS

Applying plant residues or other suitable materials,

Mulch or temporary grassing shall be applied to all

used as a singular erosion control device for up to six

nonths, but it shall be applied at the appropriate depth,

lepending on the material used, anchored, and have a

ontinuous 90% cover or greater of the soil surface.

depth and 90% cover. Temporary vegetation may be

employed instead of mulch if the area will remain

vegetative techniques shall be employed.

MULCHING WITHOUT SEEDING

SPECIFICATIONS

with a mulch cover.

Site Preparation

anchoring mulch.

Mulching Materials

this material is easy application.

JSʻ

arriers.

ndicated:

Maintenance shall be required to maintain appropriate

undisturbed for greater than six months, permanent

This standard applies to grades or cleared areas where

produce an erosion retardant cover, but can be stabilized

. Grade to permit the use of equipment for applying and

. Install needed erosion control measures as required

3. Loosen compact soil to a minimum depth of 3 inches.

Select one of the following materials and apply at the depth

nches providing complete soil coverage. One advantage of

STURBED AREA

MULCHING ONLY)

Dry straw or hay shall be applied at a depth of 2 to 4

such as dikes, diversions, berms, terraces and sediment

seedings may not have a suitable growing season to

undisturbed for less than six months. If an area will remain

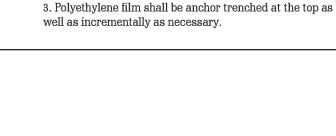
exposed areas within 14 days of disturbance. Mulch can be

produced on the site if possible, to the soil surface.



w what's	below.	
<b>Call</b> be	fore you dig.	

	REVISIONS									
Δ	DATE	BY	DESCRIPTION	Δ	DATE	BY	DESCRIPTION			



no larger than one inch by one inch shall be installed according to manufacturer's specifications. 2. Netting of the appropriate size shall be used to anchor STABILIZATION (WITH wood waste. Openings of the netting shall not be larger han the average size of the wood waste chips.

100 gallons of emulsified asphalt and 100 gallons of water per ton of mulch. Tackifers and binders can be substituted for emulsified asphalt. Please refer to specification Tb -Tackifers and Binders. Plastic mesh or netting with mesh

asphalt (Grade AE-5 or SS-1). The asphalt emulsion shall be sprayed onto the mulch as it is ejected from the machine. Use

immediatelv after application. Straw or hay mulch spread with special blower-type equipment may be anchored with emulsified

1. Straw or hay mulch can be pressed into the soil with a disk harrow with the disk set straight or with a special "packer disk." Disks may be smooth or serrated and should be 20 inches or more in diameter and 8 to 12 inches apart. The edges of the disk should be dull enough not to cut the mulch but to press it into the soil leaving much of it in an erect position. Straw or hay mulch shall be anchored

4. Apply polyethylene film on exposed areas. Anchoring Mulch

mulches. 3. Cutback asphalt shall be applied uniformly. Care should be taken in areas of pedestrian traffic due to problems of 'tracking in" or damage to shoes, clothing, etc.

uniformly by hand or by mechanicalequipment. 2. If the area will eventually be covered with perennial vegetation, 20-30 pounds of nitrogen per acre in addition to the normal amount shall be applied to offset the uptake of nitrogen caused by the decomposition of the organic

Applying Mulch When mulch is used without seeding, mulch shall be applied to provide full coverage of the exposed area. 1. Dry straw or hay mulch and wood chips shall be applied

4. Polyethylene film shall be secured over banks or stockpiled soil material for temporary protection. This material can be salvaged and reused.

reduce erosion control costs. 3. Cutback asphalt (slow curing) shall be applied at 1200 gallons per acre (or 1/4 gallon per sq.yd.).

2. Wood waste (chips, sawdust or bark) shall be applied at a depth of 2 to 3 inches. Organic material from the clearing stage of development should remain on site, be chipped, and applied as mulch. This method of mulching can greatly

seasonal protection on disturbed or denuded areas.

DEFINITION

Temporary grassing, instead of mulch, can be applied to rough graded areas that will be exposed for less than six months. Temporary vegetative measures should be coordinated with permanent measures to assure economical and effective stabilization. Most types of temporary vegetation are ideal to use as companion crops until the permanent vegetation is established.

CONDITIONS

SEEDING RATES FOR

**TEMPORARY SEEDING** 

RATE Per

1,000 sq.ft.

3.9 pounds

0.9 pound

0.9 pound

0.1 pound

1.4 pounds

0.9 pound

4.1 pounds

variations and conditions.

\* Unusual site conditions may require heavier seeding rates

\*\* Seeding dates may need to be altered to fit temperture

SPECIES

Ryegrass

Annual

Lespedeza

Weeping

Lovegrass

Browntop

Millet

Wheat

Ds2

Sudangrass

The establishment of temporary vegetative cover with fast growing seedings for Grading and Shaping

RATE Per | PLANTING

Acre \*

3 bu.

40 lbs.

40 lbs.

4 lbs.

60 lbs.

40 lbs.

3 bu.

ISTURBED AREA STABILIZATION

(WITH TEMPORARY SEEDING)

DATES \*\*

9/1-3/1

8/15-4/1

1/15-3/15

2/15-6/15

3/1-8/1

4/1-7/15

9/15-2/1

year. Seed shall be applied uniformly by hand, cyclone seeder, drill, cultipacker seeder, or hydraulic seeder (slurry including seed and fertilizer). Drill or cultipacker seeders should normally place seed one-quarter to one-half inch deep. Appropriate depth of planting is ten times the seed diameter. Soil should be "raked" lightly to cover seed with soil if seeded by hand.

Temporary vegetation can, in most cases, be established without the use of mulch. Mulch without seeding should be considered for short term protection.

soil material is loose and not sealed by rainfall. When soil has been sealed by rainfall or consists of smooth cut slopes, the soil shall be pitted, trenched or otherwise scarified to provide a place for seed to lodge and germinate. Lime and Fertilizer Agricultural lime is required unless soil tests indicate otherwise. Apply agricultural lime at a rate of one ton per acre. Graded areas require lime

efficiently during seedbed preparation, seeding, mulching and maintenance of the vegetation. ncentrations of water that will cause excessive soil erosion shall be diverted to application. Soils can be tested to determine if fertilizer is needed. On a safe outlet. Diversions and other treatment practices shall conform with the reasonably fertile soils or soil material, fertilizer is not required. For soils with appropriate standards and specifications. very low fertility, 500 to 700 pounds of 10-10-10 fertilizer or the equivalent per acre (12-16 lbs./1,000 sq. ft.) shall be applied. Fertilizer should be applied before Seedbed Preparation land preparation and incorporated with a disk, ripper or chisel.

Seedbed preparation may not be required where hydraulic seeding and Seeding fertilizing equipment is to be used. When conventional seeding is to be used, seedbed preparation will be done as follows: Select a grass or grass-legume mixture suitable to the area and season of the Broadcast plantings Tillage at a minimum, shall adequately loosen the soil to a depth of 4 to 6 inches; alleviate compaction; incorporate lime and fertilizer; smooth and firm the soil; allow for the proper placement of seed, sprigs, or plants; and allow for the anchoring of straw or hay mulch if a disk is to be used. Mulching 2. Tillage may be done with any suitable equipment.

Refer to Ds1 - Disturbed Area Stabilization (With Mulching Only).

Irrigation During times of drought, water shall be applied at a rate not causing runoff and erosion. The soil shall be thoroughly wetted to a depth that will insure germination of the seed. Subsequent applications should be made when needed

DEFINITION
Controlling surface and air movement of dust on construction sites, roads, and demolition sites.
CONDITIONS
This practice is applicable to areas subject to surface and air movement of dust where on and off-site damage may occur without treatment.
METHOD AND MATERIALS
A. TEMPORARY METHODS
Mulches. See standard Ds1 - Disturbed Area Stabilization (With Mulching Only). Synthetic resins may be used instead of asphalt to bind mulch material. Refer to standard Tb-Tackifiers and Binders. Resins such as Curasol or Terratack should be used according to manufacturer's recommendations.
Vegetative Cover. See standard Ds2 - Disturbed Area Stabilization (With Temporary Seeding).
Spray-on Adhesives. These are used on mineral soils (not effective on muck soils). Keep traffic off these areas. Refer to standard Tb-Tackifiers and Binders.
Tillage. This practice is designed to roughen and bring clods to the surface. It is an emergency measure which should be used before wind erosion starts. Begin plowing on windward side of site. Chisel-type plows spaced about 12 inches apart, spring-toothed harrows, and similar plows are examples of equipment which may produce the desired effect.
Irrigation. This is generally done as an emergency treatment. Site is sprinkled with water until the surface is wet. Repeat as needed.
Barriers. Solid board fences, snow fences, burlap fences, crate walls, bales of hay and similar material can be used to control air currents and soil blowing. Barriers placed at right angles to prevailing currents at intervals of about 15 times their height are effective in controlling wind erosion.
Calcium Chloride. Apply at rate that will keep surface moist. May need retreatment.
B. PERMANENT METHODS
Permanent Vegetation. See standard Ds3 -Disturbed Area Stabilization (With Permanent Vegetation). Existing trees and large shrubs may afford valuable protection if left in place.
Topsoiling. This entails covering the surface with less erosive soil material. See standard Tp - Topsoiling.
Stone. Cover surface with crushed stone or coarse gravel. See standard Cr-Construction Road Stabilization.
DUST CONTROL ON

### SPECIFICATIONS

Excessive water run-off shall be reduced by properly designed and installed erosion control practices such as closed drains, ditches, dikes, diversions, sediment barriers and others.

No shaping or grading is required if slopes can be stabilized by hand-seeded vegetation or if hydraulic seeding equipment is to be used.

### Seedbed Preparation

When a hydraulic seeder is used, seedbed preparation is not required. When using conventional or handseeding, seedbed preparation is not required if the

### The planting of perennial vegetation such as trees, shrubs, vines, grasses, or legumes on exposed areas for final permanent stabilization. Permanent perennial vegetation shall be used to achieve final stabilization..

### CONDITIONS

DEFINITION

DISTURBED AREAS

Permanent perennial vegetation is used to provide a protective cover for exposed areas including cuts, fills, dams, and other denuded areas.

### SPECIFICATIONS

### Grading and Shaping

Grading and shaping may not be required where hydraulic seeding and fertilizing equipment is to be used. Vertical banks shall be sloped to enable plant establishment.

When conventional seeding and fertilizing are to be done, grade and shape where feasible and practical, so that equipment can be used safely and

Tillage should be done on the contour where feasible.

STURBED AREA STABILIZATION

(WITH PERMANENT VEGETATION)

# IDs3

surface shall be pitted or trenched across the slope with appropriate hand tools to provide two places 6 to 8 inches apart in which seed may lodge and germinate. Hydraulic seeding may also be used.

4. On slopes too steep for the safe operation of tillage equipment, the soil

### Individual Plants

1. Where individual plants are to be set, the soil shall be prepared by excavating holes, opening furrows, or dibble planting. 2. For nursery stock plants, holes shall be large enough to accommodate roots

without crowding. 3. Where pine seedlings are to be planted, subsoil under the row 36 inches deep on the contour four to six months prior to planting. Subsoiling should be done when the soil is dry, preferably in August or September.

### Planting

### Hydraulic Seeding

Mix the seed (innoculated if needed), fertilizer, and wood cellulose or wood pulp fiber mulch with water and apply in a slurry uniformly over the area to be treated. Apply within one hour after the mixture is made.

### Conventional Seeding

Seeding will be done on a freshly prepared and firmed seedbed. For broadcast planting, use a cultipacker seeder, drill, rotary seeder, other mechanical seeder, or hand seeding to distribute the seed uniformly over the area to be treated. Cover the seed lightly with 1/8 to 1/4 inch of soil for small seed and 1/2 to 1 inch for large seed when using a cultipacker or other suitable equipment.

### No-Till Seeding

No-till seeding is permissible into annual cover crops when planting is done following maturity of the cover crop or if the temporary cover stand is sparse enough to allow adequate growth of the permanent (perennial) species. No-till seeding shall be done with appropriate no-till seeding equipment. The seed must be uniformly distributed and planted at the proper depth.

### Individual Plants

Shrubs, vines and sprigs may be planted with appropriate planters or hand tools. Pine trees shall be planted manually in the subsoil furrow. Each plant shall be set in a manner that will avoid crowding the roots. Nursery stock plants shall be planted at the same depth or slightly deeper than they grew at the nursery. The tips of vines and sprigs must be at or slightly above the ground surface. Where individual holes are dug, fertilizer shall be placed in the bottom of the hole, two inches of soil shall be added and the plant shall be set in the



el.: (770) 781-550

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### HALL COUNTY, GEORGIA

### **RILLA ROAD IMPROVEMENT** DETAILS-ES&PC

DRAWING NUMBER

**CE502** 

\* Unusual site conditions may require heavier seeding rates \*\* Seeding dates may need to be altered to fit temperature variations and conditions.

### PLANTING RATE Per RATE Per SPECIES 1,000 sq.ft. DATES \*\* Acre \* BAHIA 1.4 POUNDS 60 LBS. 1/1-12/31 BERMUDA 0.2 POUND 10 LBS. 2/15-7/1 BLOCK SOD BLOCK SOD 4/1-7/1 CENTIPEDE ONLY ONLY 75 LBS. 1/1-12/31 LESPEDEZA 1.7 POUNDS VEEPING 0.1 POUND 4 LBS. 2/1-6/15 LOVE GRASS 0.9 POUND 40 LBS. 3/15-6/1

areas. These materials shall be installed and anchored according to manufacturer's specifications.

conjunction with or immediately after the mulch is spread. Synthetic tackifiers shall be mixed and applied according to manufacturer's specifications. Refer to

2. Hay and straw mulch shall be pressed into the soil immediately after the mulch is spread. A special "packer disk" or disk harrow with the disks set straight may be used. The disks may be smooth or serrated and should be 20 inches or more in diameter and 8 to 12 inches apart. The edges of the disks shall be dull enough to press the mulch into the ground without cutting it,

The combination of asphalt emulsion and water shall consist of a homogeneous mixture satisfactory for spraying. The mixture shall consist of 400 gallons of grade SS-1h or CSS-1h emulsified asphalt and 100 gallons of water per ton of

Mulching

three tons per acre.

for seeded areas.

required.

Applying Mulch

Straw or hay mulch will be spread uniformly within 24 hours after seeding and/or planting. The mulch may be spread by blower-type spreading equipment, other spreading equipment or by hand. Mulch shall be applied to cover 75% of

the soil surface. Wood cellulose or wood fiber mulch shall be applied uniformly with hydraulic

Mulch is required for all permanent vegetation applications. Mulch applied to

seeded areas shall achieve 75% soil cover. Select the mulching material from

3. One thousand pounds of wood cellulose or wood pulp fiber, which includes a

4. Sericea lespedeza hay containing mature seed shall be applied at a rate of

purposes. Other suitable materials in sufficient quantity may be used where

6. When using temporary erosion control blankets or block sod, mulch is not

7. Bituminous treated roving may be applied on planted areas on slopes, in

materials must meet Georgia Department of Transportation specifications.

Wood cellulose and wood pulp fibers shall not contain germination or growth

inhibiting factors. They shall be evenly dispersed when agitated in water. The

fibers shall contain a dye to allow visual metering and aid in uniform application

ditches or dry waterways to prevent erosion. Bituminous treated roving shall be

applied within 24 hours after an area has been planted. Application rates and

ornamentals or other ground covers are planted. This is not appropriate

5. Pine straw or pine bark shall be applied at a thickness of 3 inches for bedding

tackifier, shall be used with hydraulic seeding on slopes 3/4:4 or steeper.

seeding equipment.

special blower equipment.

during seeding.

Anchoring Mulch

Anchor straw or hay mulch immediately after application by one of the following methods:

1. Emulsified asphalt can be (a) sprayed uniformly onto the mulch as it is

ejected from the blower machine or (b) sprayed on the mulch immediately following mulch application when straw or hay is spread by methods other than SWITCH GRASS

Irrigation Irrigation shall be applied at a rate that will not cause runoff.

SEEDING RATES FOR

PERMANENT SEEDING

needed to anchor straw or hay mulch on unstable soils and concentrated flow

# Tb - Tackifiers and Binders. mulch. They shall be applied at a rate of one-quarter to one half bushel per acre. 5. Plastic mesh or netting with mesh no larger than one inch by one inch may be

leaving much of it in an erect position. Mulch shall not be plowed into the soil. 3. Synthetic tackifiers or binders approved by GDOT shall be applied in 4. Rye or wheat can be included with Fall and Winter plantings to stabilize the

Care shall be taken at all times to protect state waters, the public, adjacent property, pavements, curbs, sidewalks, and all other structures from asphalt discoloration.