

# 2024 LMIG ROAD IMPROVEMENTS

FOR

# GARDEN CITY, GEORGIA

JANUARY 17, 2025



7513 MASON FALLS DR., WINSTON, GEORGIA 30187  
( P ) 770-688-5148 / ( F ) 770-577-0300



1/17/25

Rev.	Description	Date	Appr.

DRAWING NO.  
G-001

SHEET NO.  
1 OF 13







- NOTES:

- NOTES:**
1. SHADED AREAS INDICATE PAVEMENT LIMITS.
  2. ALL SPEED BUMPS WITHIN THE LIMITS OF THIS PROJECT SHALL BE REMOVED PRIOR TO MILLING AND WILL NOT BE REPLACED.
  3. DELIVER ASPHALT MILLINGS TO GARDEN CITY PUBLIC WORKS DEPARTMENT AT #1 BUD BROWN DRIVE, GARDEN CITY, GA. COORDINATE DELIVERY LOCATION WITH VIRGIL MOORE, PUBLIC WORKS SUPERVISOR / PHONE: 912-483-2447.
  4. MAINTAIN/RESTORE EXISTING DRAINAGE PATTERNS.
  5. FOR CONCRETE AND ASPHALT DRIVEWAYS AND INTERSECTIONS, TRANSITION PAVEMENT SURFACE TO MATCH EX. PAVEMENT ELEVATION AT EDGE OF PAVEMENT. FOR GRAVEL AND DIRT DRIVEWAYS, TRANSITION PAVEMENT SURFACE TO MATCH EX. DRIVEWAY ELEVATION AT 3 FEET OUTSIDE EOP TO PROVIDE SMOOTH FULL DEPTH TRANSITION.
  6. TAPER PAVEMENT EDGES WITHIN 18" OF EXISTING CURB LINES TO ENSURE POSITIVE DRAINAGE.
  7. ADJUST ALL MANHOLE COVERS AND VALVE BOXES TO FINISHED GRADE.
  8. ROAD STRIPING TO BE COMPLETED AS INDICATED ON BID FORM AND AS SHOWN ON DRAWING, OR AS OTHERWISE DIRECTED BY OWNER.

OLMSTEAD PL.  
CLIP PAVEMENT EDGES, MILL 1.5" EXIST. PAVEMENT  
1.5" 9.5mm SUPERPAVE

CHATHAM VILLA DR.

A map showing the location of the project on Augusta Rd. / Hwy 21. The map includes a street grid and a highlighted section of the road.

- BEGIN PROJECT AT GDOT ROW

— END PROJECT AT EXIST.  
CONCRETE SECTION

- REMOVE SPEED BUMP

— BYCK AVE.  
(CONCRETE SECTION  
TO REMAIN AS IS)

JASPER DR.  
CLIP PAVEMENT EDGES, MILL 1.5" EXIST. PAVEMENT  
1.5" 9.5mm SUPERPAVE

BYCK AVE. (END AT CONC. SECTION)  
CLIP PAVEMENT EDGES, MILL 1.5" EXIST. PAVEMENT  
1.5" 9.5mm SUPERPAVE

- REMOVE SPEED BUMP

## REMOVE SPEED BUMP

ADJUST M.H.  
FRAME & COVER  
TO FINISHED  
GRADE

EXISTING RAILROAD

— BYCK AVE. (SOUTHEAST OF  
CHATHAM VILLA DR.)

CLIP PAVEMENT EDGES, MILL 1.5" EXIST. PAVEMENT  
1.5" 9.5mm SUPERPAVE  
±50 LF 5" DOUBLE YELLOW CENTERLINE STRIPING

- REMOVE SPEED BUMP

CHATHAM VILLA DR.

- EXISTING ISLAND IN ROAD



1/17/25

**Engineering Associates**  
7513 MASON FALLS DR., WINSTON, GEORGIA 30181  
( P ) 770-688-5148 / ( F ) 770-577-0300

SCALE: AS SHOWN				Rev.	Description	Date	Appr.
Date:	11/17/25	Drawn by:	HHH				
Project #:	10061131	Design by:	BDJ				
		Review by:					
		Check by:					
		BDJ					

2024 LMIG ROAD IMPROVEMENTS  
GARDEN CITY, GEORGIA

GARDEN CITY, CHATHAM COUNTY, GEORGIA

RESURFACING PLAN

DRAWING NO.  
C-101  
SHEET NO.  
3 OF 13





1  
C-102

3  
C-102

- 2  
C-102

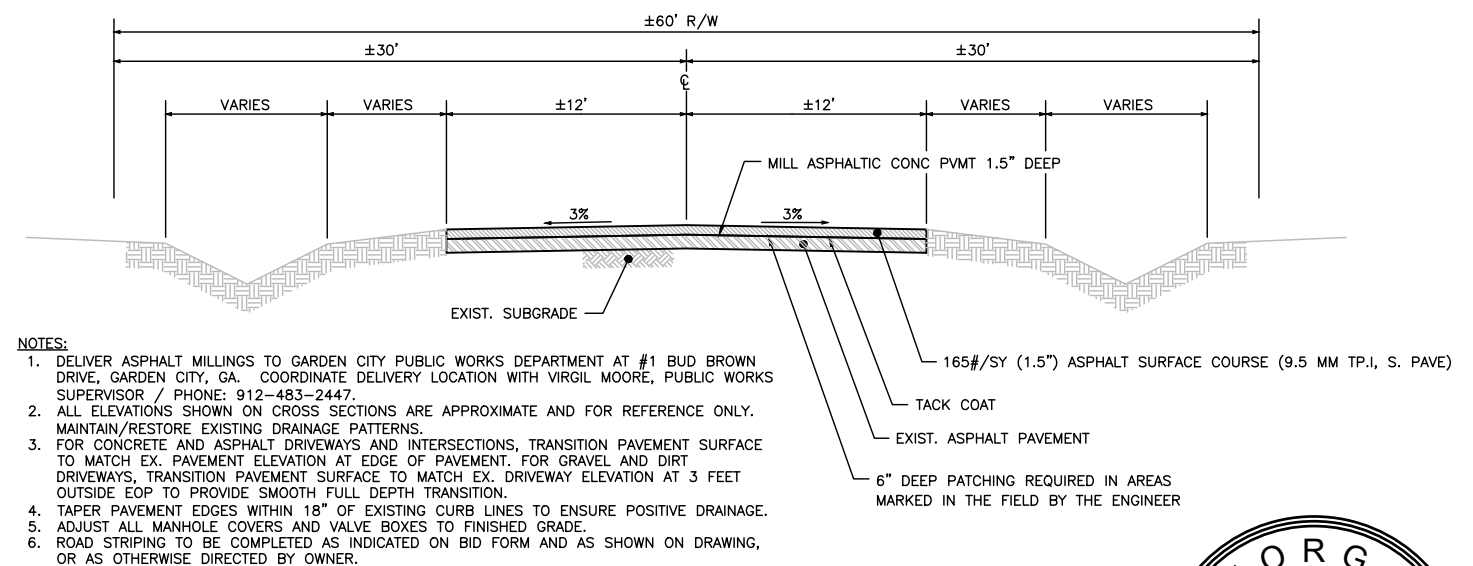
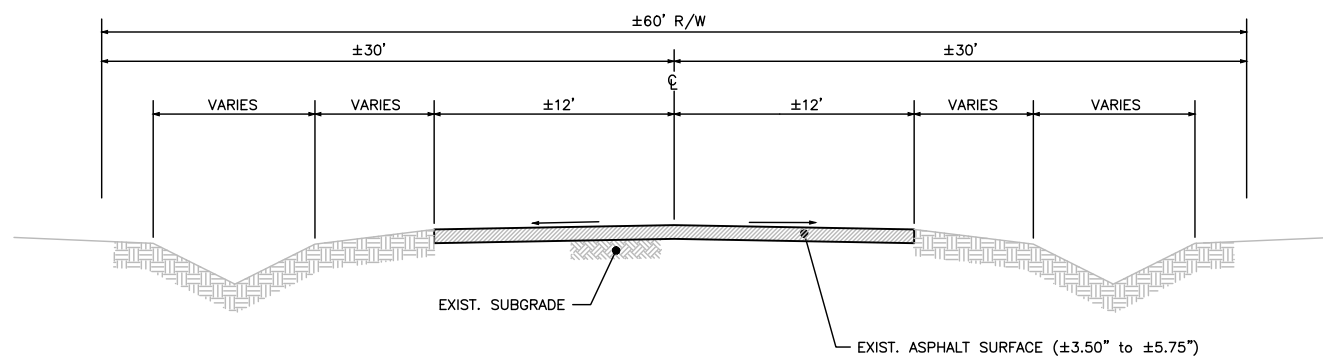
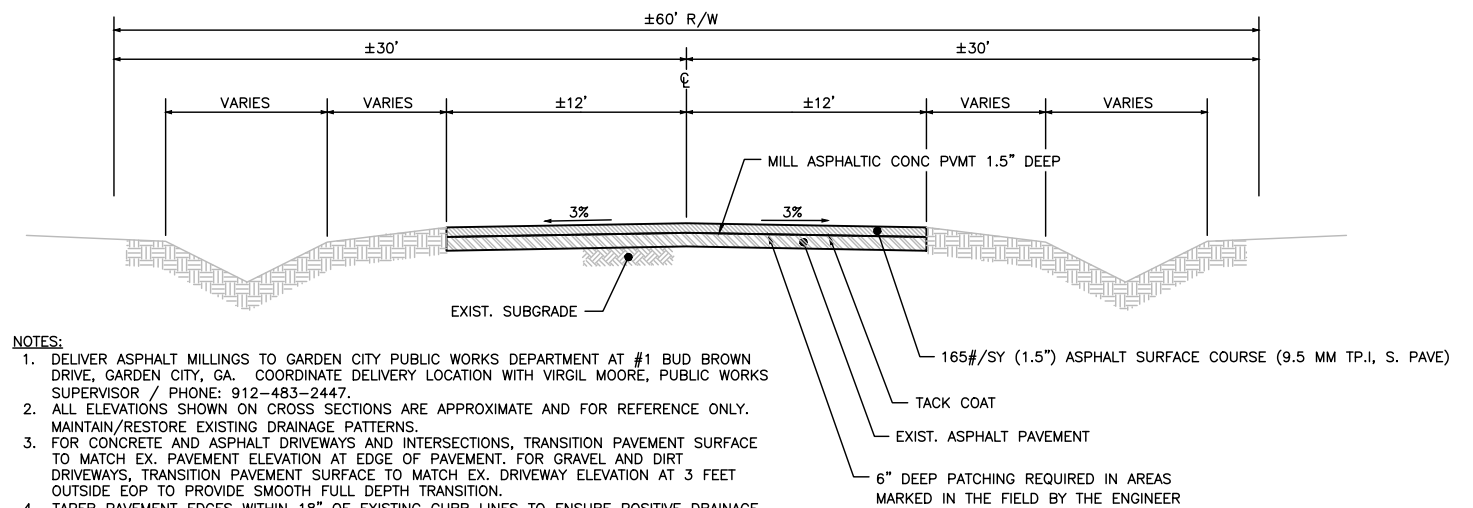
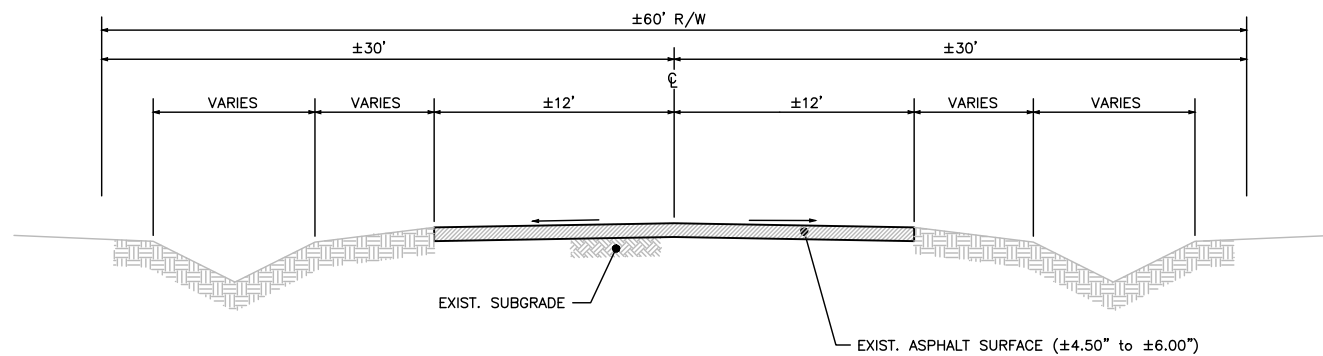
4  
C-102

NOT TO SCALE

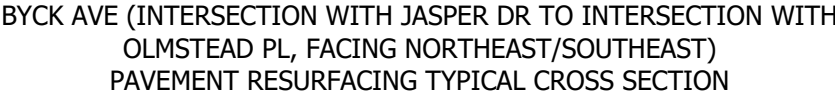
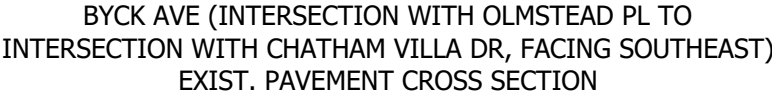
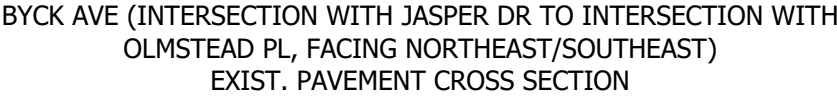
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- A circular professional engineer seal for the State of Georgia. The outer ring contains the text "GEORGIA" at the top and "ENGINEER" at the bottom, separated by two stars. Inside this ring, the word "REGISTERED" is written in an arc. In the center of the seal, the text "No. 23334" is positioned above the word "PROFESSIONAL". A large, stylized signature, "Brennan D. Jones", is written across the center of the seal, overlapping the "PROFESSIONAL" text and the "ENGINEER" arc.

DRAWING NO.  
C-102  
SHEET NO.  
4 OF 13









- NOTES:**
1. DELIVER ASPHALT MILLINGS TO GARDEN CITY PUBLIC WORKS DEPARTMENT AT #1 BUD BROWN DRIVE, GARDEN CITY, GA. COORDINATE DELIVERY LOCATION WITH VIRGIL MOORE, PUBLIC WORKS SUPERVISOR / PHONE: 912-483-2447.
  2. ALL ELEVATIONS SHOWN ON CROSS SECTIONS ARE APPROXIMATE AND FOR REFERENCE ONLY. MAINTAIN/RESTORE EXISTING DRAINAGE PATTERNS.
  3. FOR CONCRETE AND ASPHALT DRIVEWAYS AND INTERSECTIONS, TRANSITION PAVEMENT SURFACE TO MATCH EX. PAVEMENT ELEVATION AT EDGE OF PAVEMENT. FOR GRAVEL AND DIRT DRIVEWAYS, TRANSITION PAVEMENT SURFACE TO MATCH EX. DRIVEWAY ELEVATION AT 3 FEET OUTSIDE EOP TO PROVIDE SMOOTH FULL DEPTH TRANSITION.
  4. TAPER PAVEMENT EDGES WITHIN 18" OF EXISTING CURB LINES TO ENSURE POSITIVE DRAINAGE.
  5. ADJUST ALL MANHOLE COVERS AND VALVE BOXES TO FINISHED GRADE.
  6. ROAD STRIPING TO BE COMPLETED AS INDICATED ON BID FORM AND AS SHOWN ON DRAWING, OR AS OTHERWISE DIRECTED BY OWNER.

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2024 LMIG ROAD IMPROVEMENTS  
GARDEN CITY, GEORGIA

GARDEN CITY, CHATHAM COUNTY, GEORGIA

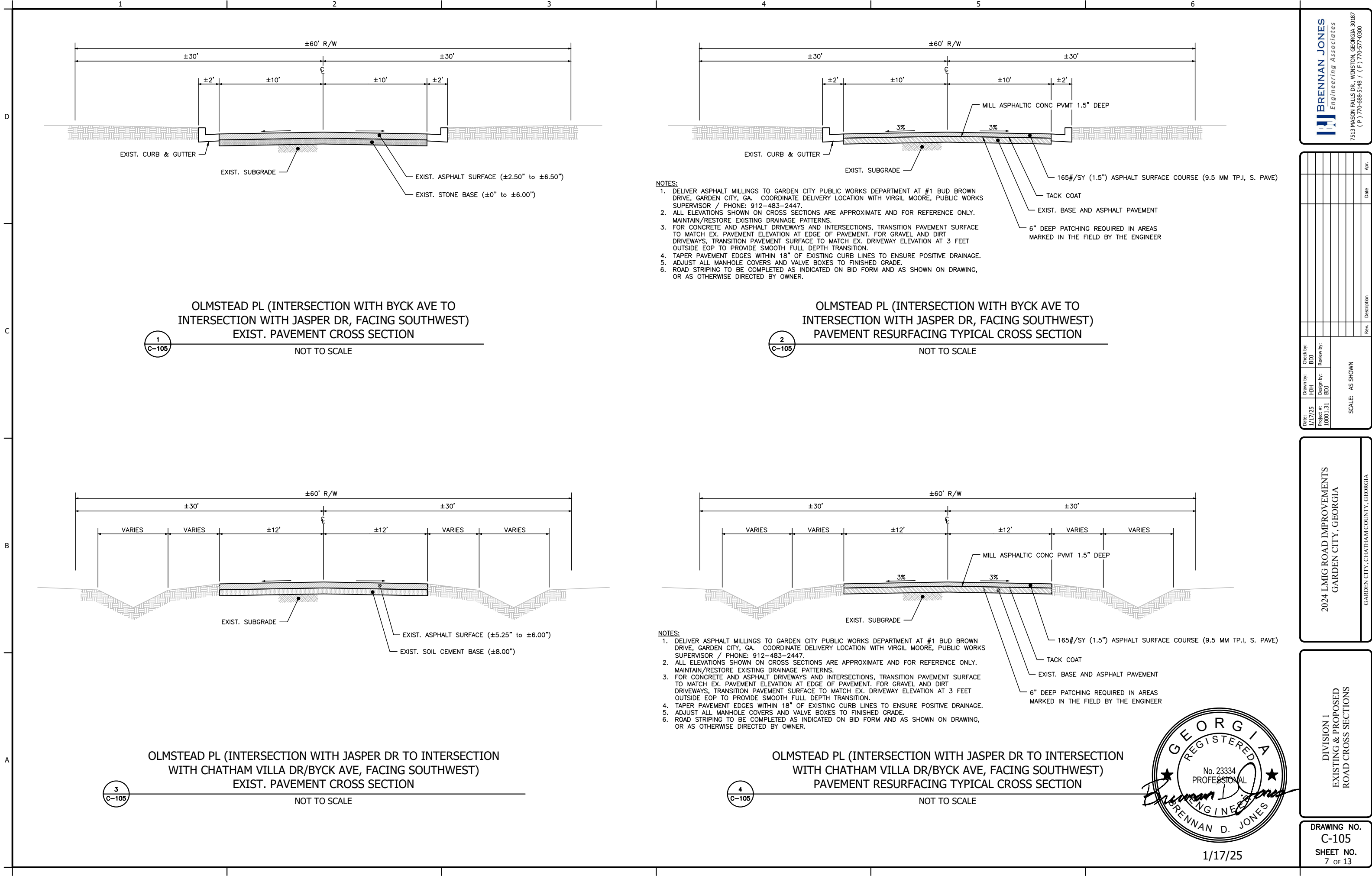
# DIVISION 1 EXISTING & PROPOSED ROAD CROSS SECTIONS

DRAWING NO.  
C-104  
SHEET NO.  
6 OF 13



1/17/25





7513 MASON FALLS DR., WINSTON, GEORGIA 30087

(P) 770-688-5148 / (F) 770-577-4300

BRENNAN JONES

Engineering Associates

2024 LMIG ROAD IMPROVEMENTS

GARDEN CITY, GEORGIA

DIVISION 1

EXISTING & PROPOSED

ROAD CROSS SECTIONS

DRAWING NO.

C-105

SHEET NO.

7 OF 13

DATE: 1/17/25

PROJECT #: 10001.31

DESIGN BY: BDI

CHECK BY: BDI

REVIEW BY: BDI

SCALE: AS SHOWN

APR.

DATE

DESCRIPTION

REV.

GEORGIA

REGISTERED

No. 23334

PROFESSIONAL

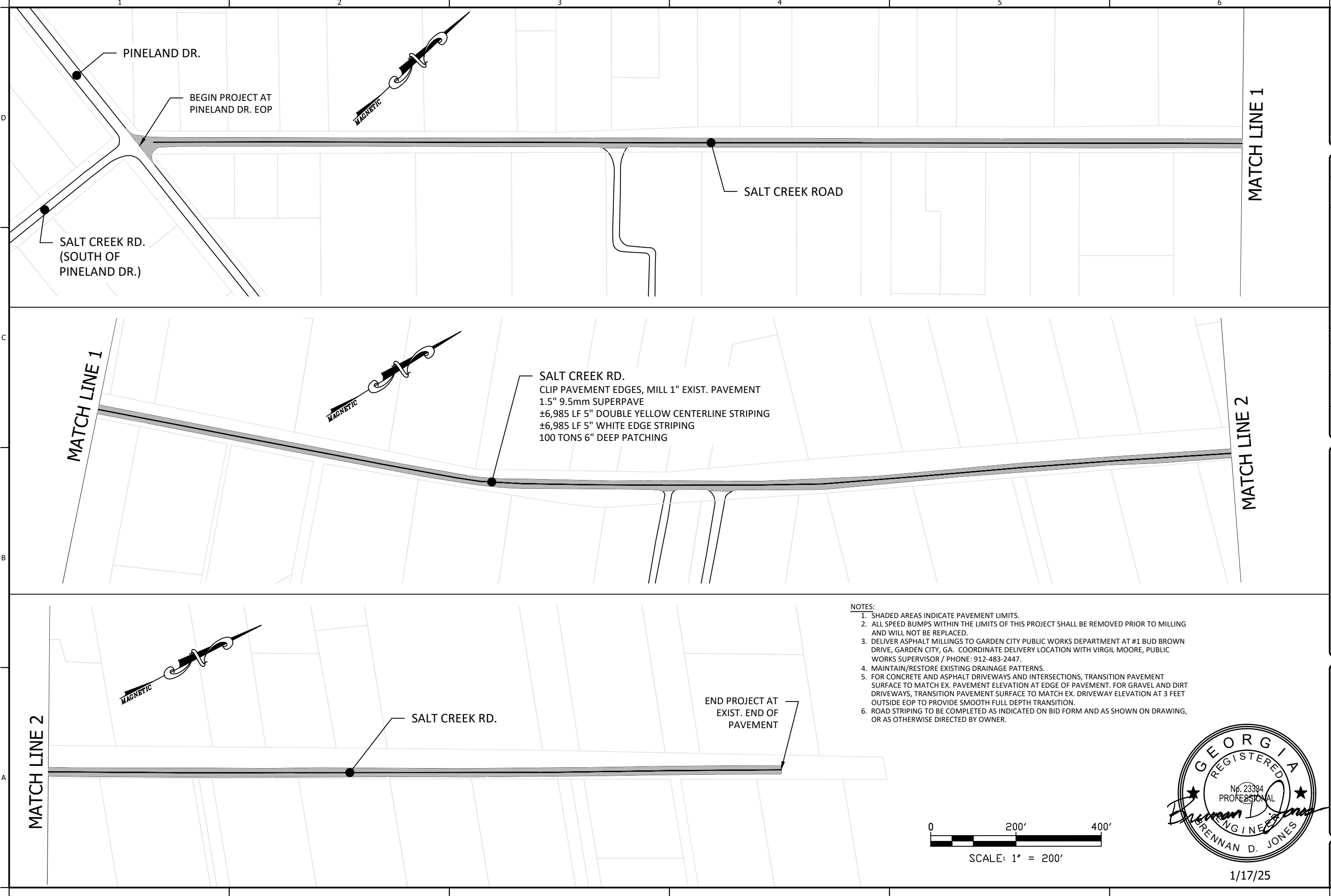
BRENNAN D. JONES

1/17/25









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  2. ALL SPEED BUMPS WITHIN THE LIMITS OF THIS PROJECT SHALL BE REMOVED PRIOR TO MILLING AND WILL NOT BE REPLACED.
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1/17/25

BRENNAN JONES

Engineering Associates

7513 MASON FALLS DR., WINSTON, GEORGIA 30187  
(P) 770-688-5148 / (F) 770-577-0300

Date:	Drawn by:	Check by:	Project #:	Design by:	Review by:	Rev.	Description	Apr.
1/17/25	HJH	BDJ	10001.31	BDJ				
SCALE: AS SHOWN								

2024 LMIG ROAD IMPROVEMENTS  
GARDEN CITY, GEORGIA

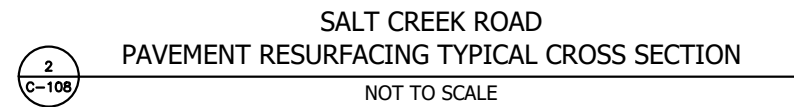
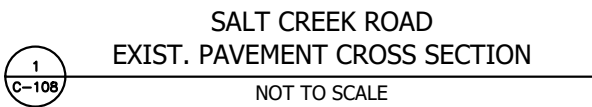
GARDEN CITY, CHATHAM COUNTY, GEORGIA

DIVISION 2  
RESURFACING PLAN

DRAWING NO.  
C-107

SHEET NO.  
9 OF 13





A circular professional engineer seal for the State of Georgia. The outer ring contains the text "GEORGIA" at the top and "ENGINEER" at the bottom, separated by two stars. Inside this ring, the word "REGISTERED" is written in an arc. In the center, the text "No. 23334" and "PROFESSIONAL" are displayed. A signature, "Brennan D. Jones", is written across the seal in a cursive script.

DRAWING NO.  
C-108  
SHEET NO.  
10 OF 13

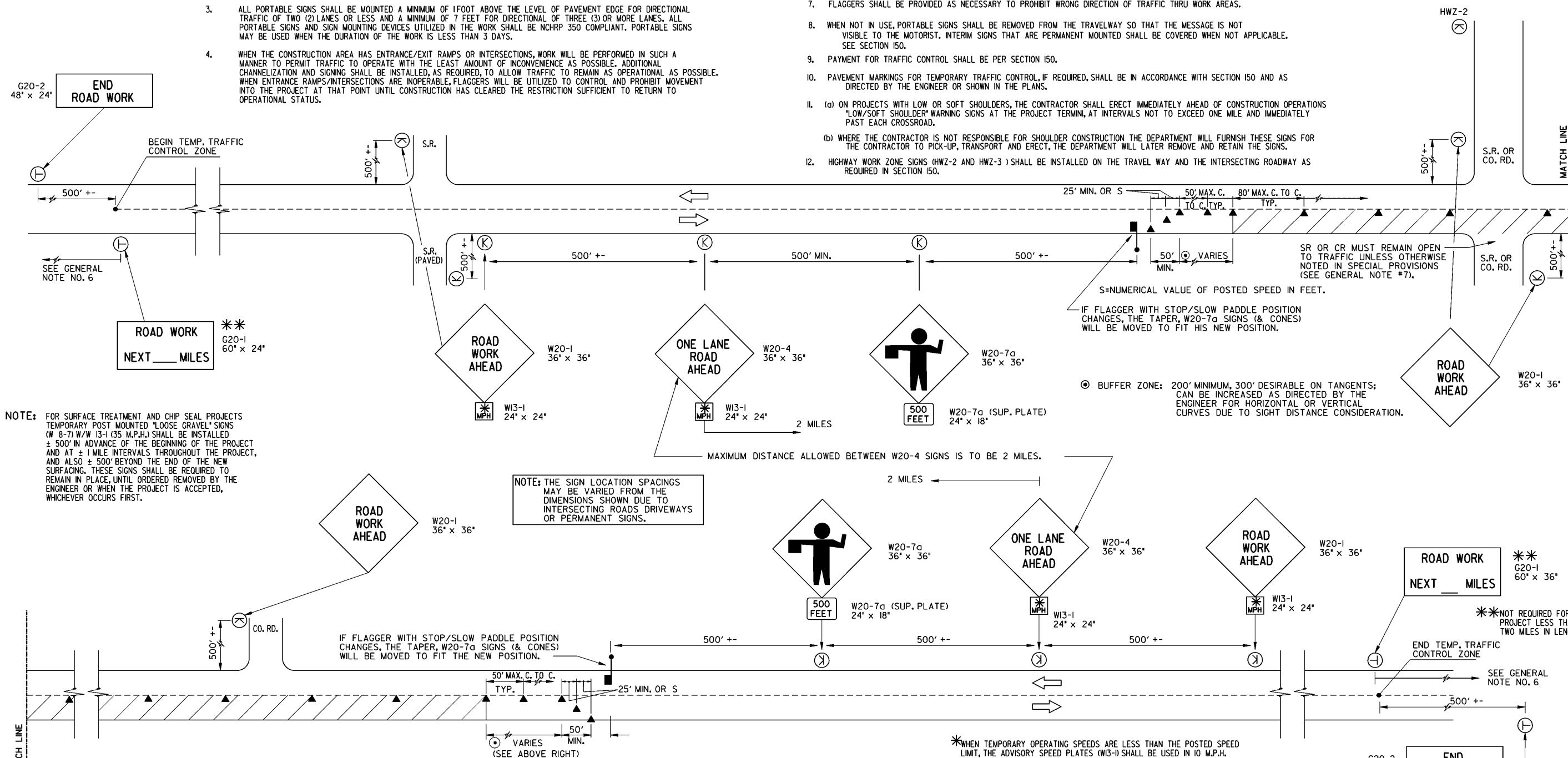


STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.			

GENERAL NOTES:

1. ALL TRAFFIC CONTROL DEVICES SHALL BE MADE AND ERECTED IN ACCORDANCE WITH THE DETAILS SHOWN ON THE PLANS; THE MUTCD; THE GEORGIA STANDARD SPECIFICATIONS, AND/OR SPECIAL PROVISIONS. (SEE SECTION 150)
2. ALL TRAFFIC CONTROL DEVICES SHALL BE AS SHOWN, OR AS DIRECTED BY THE ENGINEER. ADDITIONAL DEVICES MAY BE REQUIRED AS CONTROLLED BY THE ENGINEER.
3. ALL PORTABLE SIGNS SHALL BE MOUNTED A MINIMUM OF 10 FEET ABOVE THE LEVEL OF PAVEMENT EDGE FOR DIRECTIONAL TRAFFIC OF TWO (2) LANES OR LESS AND A MINIMUM OF 7 FEET FOR DIRECTIONAL OF THREE (3) OR MORE LANES. ALL PORTABLE SIGNS AND SIGN MOUNTING DEVICES UTILIZED IN THE WORK SHALL BE NCHRP 350 COMPLIANT. PORTABLE SIGNS MAY BE USED WHEN THE DURATION OF THE WORK IS LESS THAN 3 DAYS.
4. WHEN THE CONSTRUCTION AREA HAS ENTRANCE/EXIT RAMPS OR INTERSECTIONS, WORK WILL BE PERFORMED IN SUCH A MANNER TO PERMIT TRAFFIC TO OPERATE WITH THE LEAST AMOUNT OF INCONVENIENCE AS POSSIBLE. ADDITIONAL CHANNELIZATION AND SIGNING SHALL BE INSTALLED, AS REQUIRED, TO ALLOW TRAFFIC TO REMAIN AS OPERATIONAL AS POSSIBLE. WHEN ENTRANCE RAMPS/INTERSECTIONS ARE INOPERABLE, FLAGGERS WILL BE UTILIZED TO CONTROL AND PROHIBIT MOVEMENT INTO THE PROJECT AT THAT POINT UNTIL CONSTRUCTION HAS CLEARED THE RESTRICTION SUFFICIENT TO RETURN TO OPERATIONAL STATUS.

5. FOR NIGHT TIME OPERATIONS, DRUMS SHALL HAVE, FOR THE LENGTH OF THE TAPER ONLY, A SIX (6') INCH ORANGE REFLECTIZED TOP STRIPE ON EACH DRUM IN THE TAPER AS REQUIRED IN SECTION 150. SPACING OF DEVICES SHALL BE AS SHOWN. DURING DAYLIGHT HOURS, CONES (28" MIN.) MAY BE USED IN ADVANCE OF AND THROUGHOUT WORK AREA.
6. SIGNS SHOWN HERE ARE IN ADDITION TO ALL ADVANCE WARNING SIGNS REQUIRED IN SECTION 150.
7. FLAGGERS SHALL BE PROVIDED AS NECESSARY TO PROHIBIT WRONG DIRECTION OF TRAFFIC THRU WORK AREAS.
8. WHEN NOT IN USE, PORTABLE SIGNS SHALL BE REMOVED FROM THE TRAVELWAY SO THAT THE MESSAGE IS NOT VISIBLE TO THE MOTORIST. INTERIM SIGNS THAT ARE PERMANENT MOUNTED SHALL BE COVERED WHEN NOT APPLICABLE. SEE SECTION 150.
9. PAYMENT FOR TRAFFIC CONTROL SHALL BE PER SECTION 150.
10. PAVEMENT MARKINGS FOR TEMPORARY TRAFFIC CONTROL, IF REQUIRED, SHALL BE IN ACCORDANCE WITH SECTION 150 AND AS DIRECTED BY THE ENGINEER OR SHOWN IN THE PLANS.
11.
  - (a) ON PROJECTS WITH LOW OR SOFT SHOULDERS, THE CONTRACTOR SHALL ERECT IMMEDIATELY AHEAD OF CONSTRUCTION OPERATIONS "LOW/SOFT SHOULDER" WARNING SIGNS AT THE PROJECT TERMINI, AT INTERVALS NOT TO EXCEED ONE MILE AND IMMEDIATELY PAST EACH CROSSROAD.
  - (b) WHERE THE CONTRACTOR IS NOT RESPONSIBLE FOR SHOULDER CONSTRUCTION THE DEPARTMENT WILL FURNISH THESE SIGNS FOR THE CONTRACTOR TO PICK-UP, TRANSPORT AND ERECT, THE DEPARTMENT WILL LATER REMOVE AND RETAIN THE SIGNS.
12. HIGHWAY WORK ZONE SIGNS (HWZ-2 AND HWZ-3 ) SHALL BE INSTALLED ON THE TRAVEL WAY AND THE INTERSECTING ROADWAY AS REQUIRED IN SECTION 150.

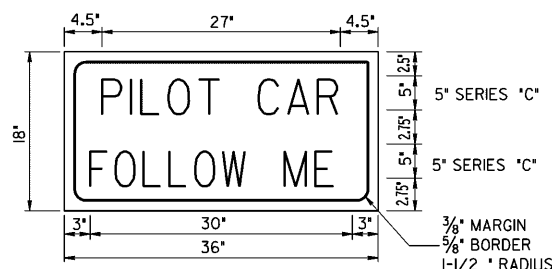


**NOTE:** FOR SURFACE TREATMENT AND CHIP SEAL PROJECTS TEMPORARY EROSION CONTROLLED "LOSING" GRAVEL SIGNS (W 8-74 W/19) (3-74 W/19) SHALL BE INSTALLED ± 500' IN ADVANCE OF THE BEGINNING OF THE PROJECT AND AT ± 1 MILE INTERVALS THROUGHOUT THE PROJECT, AND ALSO ± 500' BEYOND THE END OF THE NEW SURFACING. THESE SIGNS SHALL BE REQUIRED TO REMAIN IN PLACE, UNTIL ORDERED REMOVED BY THE ENGINEER OR WHEN THE PROJECT IS ACCEPTED, WHICHEVER OCCURS FIRST.



**NOTE:** THE SIGN LOCATION SPACINGS MAY BE VARIED FROM THE DIMENSIONS SHOWN DUE TO INTERSECTING ROADS DRIVEWAYS OR PERMANENT SIGNS.

\* WHEN TEMPORARY OPERATING SPEEDS ARE LESS THAN THE POSTED SPEED LIMIT, THE ADVISORY SPEED PLATES (W3-I) SHALL BE USED IN 10 M.P.H. INCREMENTS, UNTIL THE SPEED IS REDUCED TO THE TEMPORARY OPERATING SPEED. TEMPORARY OPERATING SPEED SHALL BE 35 M.P.H. UNLESS OTHERWISE DETERMINED BY THE ENGINEER.

DETAIL OF G20-4 SIGN For Pilot Vehicle  
IF REQUIRED OR USED ON PROJECT



### STANDARD LEGEND

- STRIPED DRUM
- └ PERMANENT TYPE POST MOUNTED SIGN (7' MOUNT HEIGHT)
- ⊕ TEMPORARY POST MOUNTED SIGN - (7' MOUNT HEIGHT)
- Ⓚ PORTABLE MOUNTED SIGN - MINIMUM HEIGHT OF 1 FT. ABOVE THE EDGE OF PAVEMENT,  
INSTALLED AS PER NCHRP 350 TESTING REQUIREMENTS.
-  WORK AREA
- ▲ TRAFFIC CONE - 28" MIN. - DAYTIME USE ONLY
-  FLAGGER WITH STOP-SLOW PADDLE

3-30-06		DATE		DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA			
REMOVED FLAGS AND REV.		GENERAL NOTES, REV. SIGN		G20-2A TO G20-2.		REVISION	
STANDARD TRAFFIC CONTROL DETAIL FOR LANE CLOSURE ON TWO-LANE HIGHWAY				NO SCALE			
				REV. & REDR. JULY, 1995			
GLO	BY	DES. _____ DRW. _____ TRA. _____ CHK. _____		(SUBMITTED) <i>B. A. H.</i> STATE ROAD & AIRPORT DESIGN ENGINEER (APPROVED) <i>D. S. H.</i> CHIEF ENGINEER		NUMBER 9102	



## SITE INFORMATION

1. OWNER AND PRIMARY PERMITEE: GARDEN CITY / ADDRESS: 100 CENTRAL AVENUE, GARDEN CITY, GA 31405 / CONTACT: RHONDA FERRELL-BOWLES, CITY MANAGER / PHONE: 912-963-2753
2. 24-HOUR CONTACT FOR EROSION, SEDIMENTATION AND POLLUTION CONTROL: VIRGIL MOORE, PUBLIC WORKS SUPERVISOR / PHONE: 912-483-2447
3. EXISTING SITE CONDITIONS: THE PROJECT IS LOCATED ON DEVELOPED LAND IN GARDEN CITY, CHATHAM COUNTY, GEORGIA. DEVELOPED LAND CONSISTS OF RESIDENTIAL AREA ROADS.
4. THE TOTAL AREA OF THE PROJECT SITE IS APPROX. 3.50 ACRES, WITH LESS THAN 1 ACRE OF THE SITE THAT WILL BE DISTURBED BY CONSTRUCTION ACTIVITIES.
5. PROJECT DESCRIPTION: RESURFACING OF EXISTING PUBLIC ROADS.
6. THIS PROJECT IS NOT WITHIN 200' OF STATE WATERS. NO IMPAIRED STREAMS WILL BE AFFECTED BY THIS PROJECT.

## CONSTRUCTION ACTIVITY NOTES

1. PRIOR TO ANY ACTIVITY, SET-UP A PRE-CONSTRUCTION MEETING WITH THE OWNER'S REPRESENTATIVE, CONTRACTOR, DESIGN ENGINEER, AND COUNTY/CITY INSPECTOR TO REVIEW THE ESPC PLAN.
2. THE INSTALLATION OF EROSION CONTROL MEASURES SHALL TAKE PLACE PRIOR TO OR CONCURRENT WITH LAND DISTURBING ACTIVITIES. PROVISIONS TO PREVENT EROSION OF THE SOIL OF THE SITE SHALL CONFORM TO THE REQUIREMENTS OF THE "EROSION AND SEDIMENTATION ACT OF 1975" AS SHOWN HEREON AND STIPULATED IN THE "MANUAL FOR EROSION CONTROL AND SEDIMENT CONTROL IN GEORGIA" BY STATE SOIL AND WATER CONSERVATION COMMITTEE. THE PROVISIONS IN THE MANUAL SHALL BE FOLLOWED AND INSTALLED IN A MANNER SO AS TO MINIMIZE EROSION OF THE DISTURBED AREAS AND PREVENT SEDIMENT FROM LEAVING THE SITE.
3. ANY ADDITIONAL SILT FENCE, RIP-RAP, MULCHING, CHECK DAMS, OR PERMANENT GRASSING REQUIRED BY THE CONTRACT DOCUMENTS SHALL BE INSTALLED IMMEDIATELY AFTER CONSTRUCTION HAS PROCEEDED TO THE POINT THAT THESE MEASURES CAN BE EFFECTIVELY IMPLEMENTED AND SHALL BE MAINTAINED IN PROPER WORKING ORDER UNTIL ALL DISTURBED AREAS ARE STABILIZED AND PERMANENT VEGETATION HAS BEEN ESTABLISHED. THE LOCATION OF SOME OF THE EROSION CONTROL DEVICES MAY HAVE TO BE ALTERED FROM THAT SHOWN ON THE PLANS IF DRAINAGE PATTERNS DURING CONSTRUCTION ARE DIFFERENT FROM THE FINAL PROPOSED DRAINAGE PATTERNS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ESTABLISH EROSION CONTROL FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES DURING ANY PHASE OF CONSTRUCTION. ANY DIFFICULTY IN CONTROLLING EROSION DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.
4. THE EROSION CONTROL MEASURES DETAILED HEREON SHALL BE CONTINUED UNTIL THE PERMANENT VEGETATION ON PLANTED SHOULDERS AND SLOPES IS SUFFICIENTLY ESTABLISHED TO BE AN EFFECTIVE EROSION DETERRENT. THE SEDIMENT REMOVED FROM THE CONTROL STRUCTURES SHALL BE EVENLY DISTRIBUTED UPSTREAM OF EROSION CONTROL MEASURES. DISPOSED SEDIMENT SHALL BE PERMANENTLY GRASSED.
5. SILT FENCE SHALL BE PLACED DOWN GRADIENT OF ALL STOCKPILED SOIL OR BORROW AREAS.
6. WORK WILL BE COMPLETED IN SECTIONS TO MINIMIZE EXPOSED AREAS. GRASSING WILL BE SOWN ON DISTURBED SECTIONS BEFORE BEGINNING WORK ON THE NEXT SECTION.
7. PRIOR TO ANY CONSTRUCTION, A STABILIZED CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED AT THE EXIT FROM WORK AREAS LOCATED ADJACENT TO PUBLIC RIGHTS-OF-WAY. THE CONSTRUCTION EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD INTO PUBLIC RIGHTS-OF-WAY.
8. IMMEDIATELY AFTER THE ESTABLISHMENT OF CONSTRUCTION EXITS, ALL PERIMETER EROSION CONTROL DEVICES SHALL BE INSTALLED. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH, LAND-DISTURBING ACTIVITIES.
9. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. PLACE SILT BARRIERS AS SHOWN AND/OR DIRECTED BY THE PROJECT ENGINEER OR OWNER. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.
10. IF REQUIRED, A COPY OF THE APPROVED LAND DISTURBANCE PLAN SHALL BE PRESENT ON THE SITE WHENEVER LAND DISTURBING ACTIVITY IS IN PROGRESS.
11. ALL VEGETATIVE STABILIZATION SHALL BE ACCOMPLISHED AS SOON AS CONSTRUCTION PERMITS.

## AUTHORIZED NON-STORMWATER DISCHARGES

1. THE FOLLOWING NON-STORMWATER DISCHARGES MAY BE AUTHORIZED BY THIS PERMIT PROVIDED THE NON- STORMWATER COMPONENT OF THE DISCHARGE IS EXPLICITLY LISTED IN THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN AND IS IN COMPLIANCE WITH PART IV.D.7.;
  - 1.1. DISCHARGES FROM FIRE FIGHTING ACTIVITIES;
  - 1.2. FIRE HYDRANT FLUSHING;
  - 1.3. POTABLE WATER SOURCES INCLUDING WATER LINE FLUSHING;
  - 1.4. IRRIGATION DRAINAGE;
  - 1.5. AIR CONDITIONING CONDENSATE;
  - 1.6. SPRINGS;
  - 1.7. UNCONTAMINATED GROUND WATER; AND
  - 1.8. FOUNDATION OR FOOTING DRAINS WHERE FLOWS ARE NOT CONTAMINATED WITH PROCESS MATERIALS OR POLLUTANTS.
2. MIXED STORMWATER DISCHARGES

## BMPs FOR CONSTRUCTION MATERIAL STORAGE

1. FOR BUILDING MATERIALS, BUILDING PRODUCTS, CONSTRUCTION WASTES, TRASH, LANDSCAPE MATERIALS, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE AND OTHER MATERIALS PRESENT ON THE SITE, PROVIDE COVER (E.G. PLASTIC SHEETING, TEMPORARY ROOFS) TO MINIMIZE THE EXPOSURE OF THESE PRODUCTS TO PRECIPITATION AND TO STORMWATER, OR A SIMILARLY EFFECTIVE MEANS DESIGNED TO MINIMIZE THE DISCHARGE OF POLLUTANTS FROM THESE AREAS.
2. MINIMIZATION OF EXPOSURE IS NOT REQUIRED IN CASES WHERE EXPOSURE TO PRECIPITATION AND TO STORMWATER WILL NOT RESULT IN A DISCHARGE OF POLLUTANTS, OR WHERE EXPOSURE OF A SPECIFIC MATERIAL OR PRODUCT POSES LITTLE RISK TO STORMWATER CONTAMINATION (SUCH AS FINAL PRODUCTS AND MATERIALS INTENDED FOR OUTDOOR USE).
3. ANY FERTILIZERS THAT ARE TO BE STORED ON-SITE, SHALL BE STORED IN A PROTECTED SECURABLE ENCLOSURE. THE CONTENTS OF ANY PARTIALLY USED BAGS AT FERTILIZERS SHALL BE TRANSFERRED TO A CLEARLY TO A CLEARLY LABELED, SEAL ABLE PLASTIC CONTAINER TO AVOID SPILLS.

## BMPs FOR CONSTRUCTION MATERIAL HANDLING

1. CONCRETE
  - 1.1. CONCRETE WASHOUT OF THE CONCRETE TRUCK DRUM IS PROHIBITED AT THIS PROJECT SITE.
2. FERTILIZERS AND HERBICIDES
  - 2.1. FERTILIZERS AND HERBICIDES USED SHALL BE APPLIED IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER, AS LONG AS THIS AMOUNT DOES NOT EXCEED THE GUIDELINES SET FORTH IN THE CROP ESTABLISHMENT OR IN THE GSWCC MANUAL FOR EROSION AND SEDIMENT CONTROL IF GEORGIA.
  - 2.2. ONCE APPLIED, FERTILIZER SHALL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORM WATER.

3. PETROLEUM PRODUCTS
  - 3.1. ALL ONSITE VEHICLES SHALL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE.
  - 3.2. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS THAT ARE CLEARLY LABELED.
  - 3.3. ANY PETROLEUM TO BE STORED IN TANKS SHALL BE SURROUNDED BY AN EARTHEN BERM AS A SECONDARY PROTECTIVE MEASURE.
  - 3.4. ANY ASPHALT SUBSTANCES USED ON SITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER RECOMMENDATIONS.
  - 3.5. ALL FUELING AND EQUIPMENT STORAGE SHALL BE PERFORMED AT THE DESIGNATED LOCATION. A COVERED 55 GALLON DRUM AND A SHOVEL SHALL BE PLACED AT THIS LOCATION.
  - 3.6. CONTAINERS FOR PRODUCTS SUCH AS FUELS, LUBRICANTS AND TARS WILL BE INSPECTED DAILY FOR LEAKS AND SPILLS. THIS INCLUDES ON-SITE VEHICLE AND MACHINERY DAILY INSPECTIONS AND REGULAR PREVENTATIVE MAINTENANCE OF SUCH EQUIPMENT.
  - 3.7. EQUIPMENT MAINTENANCE AREAS WILL BE LOCATED AWAY FROM STATE WATER, NATURAL DRAINS AND STORM WATER DRAINAGE INLETS.
4. PAINTS, FINISHES AND SOLVENTS
  - 4.1. ALL PRODUCTS WILL BE STORED IN TIGHTLY SEALED ORIGINAL CONTAINERS WHEN NOT IN USE.
  - 4.2. EXCESS PRODUCT SHALL NOT BE DISCHARGED TO THE STORM WATER COLLECTION SYSTEM.

## BMPs FOR WASTE DISPOSAL

1. LOCATE WASTE COLLECTION AREAS AWAY FROM STREETS, GUTTERS, WATERCOURSES AND STORM DRAINS. WASTE COLLECTION AREAS, SUCH AS DUMPSTERS, ARE OFTEN BEST LOCATED NEAR CONSTRUCTION SITE ENTRANCES TO MINIMIZE TRAFFIC ON DISTURBED SOILS.
2. SECONDARY CONTAINMENT SHOULD BE USED AROUND LIQUID WASTE COLLECTION AREAS TO FURTHER MINIMIZE THE LIKELIHOOD OF CONTAMINATED DISCHARGES.
3. SOLID MATERIALS, INCLUDING BUILDING MATERIALS, SHALL NOT BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.
4. ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL, STATE, AND/OR FEDERAL REGULATIONS AND BY THE MANUFACTURER OF SUCH PRODUCTS.
5. MATERIAL SAFETY DATA SHEETS (MSDS) FOR EACH SUBSTANCE WITH HAZARDOUS PROPERTIES THAT IS USED ON THE JOB SITE WILL BE OBTAINED AND USED FOR THE PROPER MANAGEMENT OF POTENTIAL WASTES THAT MAY RESULT FROM THESE PRODUCTS. AN MSDS WILL BE MAINTAINED IN THE ESPCP FILE AT THE JOB SITE CONSTRUCTION TRAILER OFFICE.
6. EACH EMPLOYEE WHO MUST HANDLE A SUBSTANCE WITH HAZARDOUS PROPERTIES WILL BE INSTRUCTED ON THE USE OF MSDS SHEETS AND THE SPECIFIC INFORMATION IN THE APPLICABLE MSDS FOR THE PRODUCT HE/SHE IS USING, PARTICULARLY REGARDING SPILL CONTROL TECHNIQUES.
7. THE CONTRACTOR SHALL TRAIN ALL PERSONNEL IN THE PROPER CLEANUP AND HANDLING OF SPILLED MATERIALS.
8. NO SPILLED HAZARDOUS MATERIALS OR HAZARDOUS WASTES SHALL BE ALLOWED TO COME IN CONTACT WITH STORMWATER DISCHARGES. IF SUCH CONTACT OCCURS, THE STORMWATER DISCHARGE WILL BE CONTAINED ON SITE UNTIL APPROPRIATE MEASURES IN COMPLIANCE WITH STATE AND FEDERAL REGULATIONS ARE TAKEN TO DISPOSE OF SUCH CONTAMINATED STORMWATER.
9. NO TYPE OF CONSTRUCTION WASTE SHALL BE BURIED ON SITE.
10. THE CONTRACTOR SHALL TRAIN ALL PERSONNEL ON PROPER WASTE DISPOSAL PROCEDURES.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SEEING THAT PROPER WASTE DISPOSAL AND SPILL PROCEDURES ARE FOLLOWED.
12. WASTE MATERIALS SHALL NOT BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.

## ADDITIONAL ESPC PLAN PROCEDURES

1. EROSION CONTROL MEASURES SHALL BE AS A MINIMUM IN CONFORMANCE WITH "THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" BY THE GA. SOIL & WATER CONSERVATION COMMISSION.
2. ALL EROSION CONTROL MEASURES SHALL BE INSPECTED DAILY AND AFTER EACH HEAVY-RUNOFF PRODUCING RAINFALL.
3. ALL NECESSARY REPAIRS SHALL BE MADE IMMEDIATELY TO MAINTAIN A FUNCTIONING EROSION CONTROL SYSTEM.
4. THE FAILURE OF ANY EROSION CONTROL DEVICE TO FUNCTION AS INTENDED, FOR ANY REASON, SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.
5. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED IF DEEMED NECESSARY BY ON-SITE INSPECTION BY THE OWNER, ENGINEER OR CITY INSPECTOR.
6. CUT AND FILL SLOPES SHALL NOT EXCEED 2H:1V.
7. ALL STUMPS, LIMBS, AND TREE TOPS ARE TO BE DISPOSED OF OFF-SITE AND THE SOIL IS TO BE CLEANED BY USE OF A ROOT RAKE OR SIMILAR IMPLEMENT.
8. MINIMIZING WIND EROSION AND CONTROLLING DUST WILL BE ACCOMPLISHED BY ONE OR MORE OF THE FOLLOWING METHODS:
  - 8.1. COVERING 30% OR MORE OF THE SOIL SURFACE WITH NON-ERODIBLE MATERIAL.
  - 8.2. ROUGHENING THE SOIL TO PRODUCE RIDGES PERPENDICULAR TO THE PREVAILING WIND.
  - 8.3. FREQUENT WATERING OF EXCAVATION AND FILL AREAS.
  - 8.4. PROVIDING GRAVEL OR PAVING AT ENTRANCE/EXIT DRIVES.
9. STAGING AREAS, MATERIAL STORAGE, CONCRETE WASHOUT AREAS, OR DEBRIS BURN AND BURIAL HOLES SHALL NOT BE LOCATED WITHIN 500 FEET OF DESIGNATED TREE PROTECTION AREAS.
10. NO BURN AND BURY PITS SHALL BE PERMITTED ON THE CONSTRUCTION SITE WITHOUT PERMISSION BY THE OWNER AND/OR THE ENGINEER OF RECORD.
11. SEEDING AND FERTILIZING
  - 11.1. SEED AREA SHALL BE INSPECTED FOR FAILURE AND NECESSARY REPAIRS SHALL BE MADE WITHIN THE SAME SEASON, IF POSSIBLE.
  - 11.2. WHEN HAND PLANTING, MULCH (HAY OR STRAW) SHALL BE UNIFORMLY SPREAD OVER SEED AREA WITHIN 24 HOURS OF SEEDING.
  - 11.3. DURING UNSUITABLE GROWING SEASONS, MULCH SHALL BE USED AS A TEMPORARY COVER (D<sub>51</sub>). ON SLOPES THAT ARE 4:1 OR STEEPER, MULCH SHALL BE ANCHORED.
12. SILT FENCE
  - 12.1. ANY FABRIC WHICH COLLAPSES, TEARS, DECOMPOSES, OR BECOMES INEFFECTIVE WILL BE REPLACED IMMEDIATELY.
  - 12.2. REMOVE SEDIMENT DEPOSITS BEHIND FENCE WHEN SEDIMENT ACCUMULATES TO 6 INCHES.
13. CONSTRUCTION
  - 13.1. MAINTAIN IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 1.5-3.5 STONE, AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEANOUT OF ANY STRUCTURES USED TO TRAP SEDIMENT.
  - 13.2. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES OR SITE ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
14. EROSION CONTROL MATTING AND BASKETS
  - 14.1. FURNISH AND INSTALL MESH MATTING OVER PREVIOUSLY PREPARED AND SEEDED AREAS WITH SLOPES STEEPER THAN 2.5:1 AND A HEIGHT 10 FEET OR GREATER.
  - 14.2. INSPECT MATTING PERIODICALLY AFTER INSTALLATION. REPAIR ANY DISLOCATION OR FAILURE IMMEDIATELY.
  - 14.3. REINSTALL MATTING IF WASHOUT OR BREAKAGE OCCURS.

## SPILL PROCEDURES

1. MANUFACTURER RECOMMENDED METHODS FOR SPILL CLEANUP SHALL BE CLEARLY POSTED AND SITE PERSONNEL SHALL BE MADE AWARE OF THE LOCATION OF THIS INFORMATION.
- 2.1 ALL FUEL SPILLS SHALL BE REMOVED TO FULL DEPTH OF SOIL CONTAMINATION AND THE SOIL SHALL BE PLACED IN A DRUM.
- 2.2 WHEN THE DRUM IS FULL, DISPOSE OF DRUM PROPERLY IN AN APPROVED ENVIRONMENTAL PROTECTION AGENCY (EPA) HAZARDOUS LAND FILL.
- 2.2.2 FOR SPILLS 25 GALLONS AND GREATER MUST BE REPORTED TO THE EPA.
- 2.3 THESE PLANS DO NOT AUTHORIZE THE DISCHARGE OF HAZARDOUS MATERIALS OR OILS RESULTING FROM AN ONSITE SPILL.
3. MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP SHALL BE READILY AVAILABLE.
- 3.6 EQUIPMENT AND MATERIALS WILL INCLUDE, BUT NOT BE LIMITED TO, BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, OIL ABSORBANT, SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.
- 3.7.1 SITE PERSONNEL SHALL BE MADE AWARE OF CLEANUP MATERIAL AND EQUIPMENT LOCATIONS.
4. ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.
5. THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.
6. SPILLS OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY.
7. SPILL REMEDIATION TEAM
- 7.1 THE PERMITTEE WILL DESIGNATE A SPILL PREVENTION AND CLEANUP COORDINATOR.
- 7.2.1 AT LEAST THREE OTHER SITE PERSONNEL SHALL RECEIVE SPILL PREVENTION AND CLEANUP TRAINING.

# GEORGIA UNIFORM CODING SYSTEM

## FOR SOIL EROSION AND SEDIMENT CONTROL PRACTICES

## STRUCTURAL PRACTICES

CODE	PRACTICE	DESCRIPTION
(Cd)	CHECKDAM	A SMALL TEMPORARY BARRIER OR DAM CONSTRUCTED ACROSS A SWALE, DRAINAGE DITCH OR AREA OF CONCENTRATED FLOW.
(Ch)	CHANNEL STABILIZATION	IMPROVING, CONSTRUCTING OR STABILIZING AN OPEN CHANNEL, EXISTING STREAM, OR DITCH.
(Co)	CONSTRUCTION EXIT	A CRUSHED STONE PAD LOCATED AT THE CONSTRUCTION SITE EXIT TO PROVIDE A PLACE FOR REMOVING MUD FROM TIRES THEREBY PROTECTING PUBLIC STREETS.
(Cr)	CONSTRUCTION ROAD STABILIZATION	A TRAVELWAY CONSTRUCTED AS PART OF A CONSTRUCTION PLAN INCLUDING ACCESS ROADS, SUBDIVISION ROADS, PARKING AREAS AND OTHER ON-SITE VEHICLE TRANSPORTATION ROUTES.
(Dc)	STREAM DIVERSION CHANNEL	A TEMPORARY CHANNEL CONSTRUCTED TO CONVEY FLOW AROUND A CONSTRUCTION SITE WHILE A PERMANENT STRUCTURE IS BEING CONSTRUCTED.
(Di)	DIVERSION	AN EARTH CHANNEL OR DIKE LOCATED ABOVE, BELOW, OR ACROSS A SLOPE TO DIVERT RUNOFF. THIS MAY BE A TEMPORARY OR PERMANENT STRUCTURE.
(Dn1)	TEMPORARY DOWNDRAIN STRUCTURE	A FLEXIBLE CONDUIT OF HEAVY-DUTY FABRIC OR OTHER MATERIAL DESIGNED TO SAFELY CONDUCT SURFACE RUNOFF DOWN A SLOPE. THIS IS TEMPORARY AND INEXPENSIVE.
(Dn2)	PERMANENT DOWNDRAIN STRUCTURE	A PAVED CHUTE, PIPE, SECTIONAL CONDUIT OR SIMILAR MATERIAL DESIGNED TO SAFELY CONDUCT SURFACE RUNOFF DOWN A SLOPE.
(Fr)	FILTER RING	A TEMPORARY STONE BARRIER CONSTRUCTED AT STORM DRAIN INLETS AND POND OUTLETS.
(Ga)	GABION	ROCK FILTER BASKETS WHICH ARE HAND-PLACED INTO POSITION FORMING SOIL STABILIZING STRUCTURES.
(Gr)	GRADE STABILIZATION STRUCTURE	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.
(Lv)	LEVEL SPREADER	A STRUCTURE TO CONVERT CONCENTRATED FLOW OF WATER INTO LESS EROSIIVE SHEET FLOW. THIS SHOULD BE CONSTRUCTED ONLY ON UNDISTURBED SOILS.
(Rd)	ROCK FILTER DAM	A PERMANENT OR TEMPORARY STONE FILTER DAM INSTALLED ACROSS SMALL STREAMS OR DRAINAGEWAYS.
(Re)	RETAINING WALL	A WALL INSTALLED TO STABILIZE OUT AND FILL SLOPES WHERE MAXIMUM PERMISSIBLE SLOPES ARE NOT OBTAINABLE. EACH SITUATION WILL REQUIRE SPECIAL DESIGN.
(Rt)	RETROFITTING	A DEVICE OR STRUCTURE PLACED IN FRONT OF A PERMANENT STORMWATER DETENTION POND OUTLET STRUCTURE TO SERVE AS A TEMPORARY SEDIMENT FILTER.
(Sd1)	SEDIMENT BARRIER SENSITIVE	A BARRIER TO PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. IT MAY BE SANDBAGS, BALES OF STRAW OR HAY, BRUSH, LOGS AND POLES, GRAVEL, OR A SILT FENCE.
(Sd2)	INLET SEDIMENT TRAP	AN IMPOUNDING AREA CREATED BY EXCAVATING AROUND A STORM DRAIN DROP INLET. THE EXCAVATED AREA WILL BE FILLED AND STABILIZED ON COMPLETION OF CONSTRUCTION ACTIVITIES.
(Sd3)	TEMPORARY SEDIMENT BASIN	A BASIN CREATED BY EXCAVATION OR A DAM ACROSS A WATERWAY. THE SURFACE WATER RUNOFF IS TEMPORARILY STORED ALLOWING THE BULK OF THE SEDIMENT TO DROP OUT.
(Sr)	TEMPORARY STREAM CROSSING	A TEMPORARY BRIDGE OR CULVERT-TYPE STRUCTURE PROTECTING A STREAM OR WATERCOURSE FROM DAMAGE BY CROSSING CONSTRUCTION EQUIPMENT.
(St)	STORMDRAIN OUTLET PROTECTION	A PAVED OR SHORT SECTION OF RIPRAP CHANNEL AT THE OUTLET OF A STORM DRAIN SYSTEM PREVENTING EROSION FROM THE CONCENTRATED RUNOFF.
(Su)	SURFACE ROUGHENING	A ROUGH SOIL SURFACE WITH HORIZONTAL DEPRESSIONS ON A CONTOUR OR SLOPES LEFT IN A ROUGHENED CONDITION AFTER GRADING.
(Tp)	TOPSOILING	THE PRACTICE OF STRIPPING OFF THE MORE FERTILE SOIL, STORING IT, THEN SPREADING IT OVER THE DISTURBED AREA AFTER COMPLETION OF CONSTRUCTION ACTIVITIES.
(Wt)	VEGETATED WATERWAY OR STORMWATER CONVEYANCE CHANNEL	PAVED OR VEGETATIVE WATER OUTLETS FOR DIVERSIONS, TERRACES, BERMS, DIKES OR SIMILAR STRUCTURES.

## DESIGN PROFESSIONAL'S ESPC PLAN CERTIFICATION

I CERTIFY THAT THE PERMITTEE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN PROVIDES FOR AN APPROPRIATE AND COMPREHENSIVE SYSTEM OF BEST MANAGEMENT PRACTICES REQUIRED BY THE GEORGIA WATER QUALITY CONTROL ACT AND THE DOCUMENT "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" (MANUAL) PUBLISHED BY THE STATE SOIL AND WATER CONSERVATION COMMISSION AS OF JANUARY 1 OF THE YEAR IN WHICH THE LAND-DISTURBING ACTIVITY WAS PERMITTED, PROVIDES FOR THE SAMPLING OF THE RECEIVING WATER(S) OR THE SAMPLING OR THE STORM WATER OUTFALLS AND THAT THE DESIGNED SYSTEM OF BEST MANAGEMENT PRACTICES AND SAMPLING METHODS IS EXPECTED TO MEET THE REQUIREMENTS CONTAINED IN THE GENERAL NPDES PERMIT NO. GAR 100002.

BRENNAN D. JONES, P.E.

1/17/2025

DATE \_\_\_\_\_

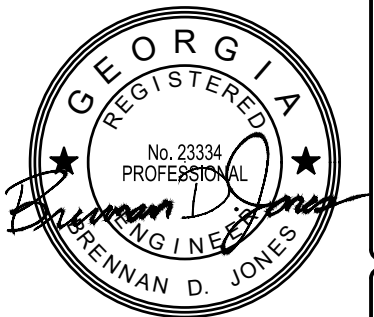
# GEORGIA UNIFORM CODING SYSTEM

## FOR SOIL EROSION AND SEDIMENT CONTROL PRACTICES

## VEGETATIVE PRACTICES

CODE	PRACTICE	DESCRIPTION
Bf	BUFFER ZONE	A STRIP OF NATURAL UNDISTURBED VEGETATION, ENHANCED OR RESTORED EXISTING VEGETATION OR RE-ESTABLISHMENT OF VEGETATION SURROUNDING AN AREA OF DISTURBANCE OR STREAM BORDER.
Cs	COASTAL DUNE STABILIZATION (WITH VEGETATION)	PLANTING VEGETATION ON DUNES THAT ARE DENUDED, ARTIFICIALLY CONSTRUCTED, OR RE-NOURISHED.
Ds1	DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)	ESTABLISHING TEMPORARY PROTECTION FOR DISTURBED AREAS WHERE SEEDLINGS MAY NOT HAVE A SUITABLE GROWING SEASON TO PRODUCE AN EROSION RETARDING COVER.
Ds2	DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)	ESTABLISHING A TEMPORARY VEGETATIVE COVER WITH FAST GROWING SEEDINGS ON DISTURBED AREAS.
Ds3	DISTURBED AREA STABILIZATION (WITH PERMANENT SEEDING)	ESTABLISHING A PERMANENT VEGETATIVE COVER SUCH AS TREES, SHRUBS, VINES, GRASSES, SOD OR LEGUMES ON DISTURBED AREAS.
Ds4	DISTURBED AREA STABILIZATION (WITH SODDING)	A PERMANENT VEGETATIVE COVER USING SODS ON HIGHLY ERODABLE OR CRITICALLY ERODED LANDS.
Du	DUST CONTROL ON DISTURBED AREAS	CONTROLLING SURFACE AND AIR MOVEMENT OF DUST ON CONSTRUCTION SITE, ROADWAYS AND SIMILAR SITES.
Mb	EROSION CONTROL MATTING AND BLANKETS	THE INSTALLATION OF A PROTECTIVE COVERING (BLANKET) OR SOIL STABILIZATION MAT ON A PREPARED PLANTING AREA OF A STEEP SLOPE, CHANNEL, OR SHORELINE.
Pm	POLYCRYLAMIDE (PAM)	THE LAND APPLICATION OF PRODUCT CONTAINING ANIONIC POLYACRYLAMIDE (PAM) AS TEMPORARY SOIL BINDING AGENTS TO REDUCE SOIL EROSION.
Sb	STREAMBANK STABILIZATION (USING PERMANENT VEGETATION)	THE USE OF READILY AVAILABLE NATIVE PLANT MATERIALS TO MAINTAIN AND ENHANCE STREAMBANKS, TO PREVENT, OR RESTORE AND REPAIR SMALL STREAMBANK EROSION PROBLEMS.
Tb	TACKIFIERS AND BINDERS	SUBSTANCE USED TO ANCHOR STRAW OR HAY MULCH BY CAUSING THE ORGANIC MATERIAL TO BIND TOGETHER.

BRENNAN D. JONES, PE  
GSWCC LEVEL II DESIGN  
CERTIFICATION No. 117



1/17/25

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LMIG ROAD IMPROVEMENTS  
GARDEN CITY, GEORGIA

GARDEN CITY CHATHAM COUNTY GEORGIA

EROSION, SEDIMENTATION  
AND POLLUTION CONTROL  
NOTES & DETAILS - 1 OF 2

DRAWING NO.  
C-301  
SHEET NO.  
12 OF 13



Ds2 TEMPORARY SEEDING CHART																	
SPECIES	BROADCAST RATES 2/ - PLS 3/		RESOURCE AREA	PLANTING RATES BY RESOURCE AREA PLANTING DATES												REMARKS	
	PER ACRE	PER 1000 SQ. FT.		OPTIMUM													
				PERMISSIBLE BUT MARGINAL													
				J	F	M	A	M	J	J	A	S	O	N	D		
OATS			M-L P C														QUICK DENSE COVER.
ALONE	40 LBS	2.93 LB	C	■													
RYEGRESS, ANNUAL (LOLIUM TEMULENTUM)			M-L P C														227,000 SEED PER POUND. DENSE COVER. VERY COMPETITIVE VERY COMPETITIVE AND IS NOT TO BE USED IN MIXTURES
ALONE	40 LBS	0.9 LB	C														
SUDANGRASS (SORGHUM SUDANESE)			M-L P C														55,000 SEED PER POUND. GOOD ON DROUGHTY SITES. NOT RECOMMENDED FOR MIXTURES.
ALONE	60 LBS	1.4 LB	C														
MILLET, BROWNTOP (PANICUM FASCICULATUM) ALONE IN MIXTURES	60 LBS 10 LBS	1.35 LB 0.2 LB	M-L P C														137,000 SEED PER POUND. QUICK DENSE COVER. WILL PROVIDE TOO MUCH COMPETITION IN MIXTURES IF SEEDED AT HIGH RATES.

Ds3 PERMANENT SEEDING CHART																
SPECIES	BROADCAST RATES 2/ - PLS 3/		RESOURCE AREA	PLANTING RATES BY RESOURCE AREA PLANTING DATES												REMARKS
	PER ACRE	PER 1000 SQ. FT.		OPTIMUM PERMISSIBLE BUT MARGINAL												
				J	F	M	A	M	J	J	A	S	O	N	D	
BERMUDA, COMMON (CYNODON DACTYLON) HULLED SEED ALONE WITH OTHER PERENNIALS	10 LBS 6 LBS	0.2 LB 0.1 LB	P C													1,787,000 SEED PER POUND. QUICK COVER. LOW GROWING AND SOD FORMING. FULL SUN. GOOD FOR ATHLETIC FIELDS.
BERMUDA, COMMON (CYNODON DACTYLON) UNHULLED SEED WITH TEMPORARY COVER WITH OTHER PERENNIALS	10 LBS 6 LBS	0.2 LB 0.1 LB	P C													PLANT WITH WINTER ANNUALS. PLANT WITH TALL FESCUE.
CENTIPEDE (EREMOCHLOA OPHIUROIDES)	BLOCK SOD ONLY		P C													DROUGHT TOLERANT. FULL SUN OR PARTIAL SHADE. EFFECTIVE ADJACENT TO CONCRETE AND IN CONCENTRATED FLOW AREAS. IRRIGATION AS NEEDED UNTIL FULLY ESTABLISHED. DO NOT PLANT NEAR PASTURES. WINTERHARDY AS FAR NORTH AS ATHENS AND ATLANTA.
BAHIA (PASPALUM NOTATUM) ALONE OR W/ TEMP. COVER WITH OTHER PERENNIALS	60 LBS 30 LBS	1.4 LB 0.7 LB	P C													166,000 SEED PER POUND. SLOW TO ESTABLISH. LOW GROWING AND SOD FORMING.
LESPEDeza, SERICEA (LESPEDeza CUNEATA) SCARIFIED UNSCARIFIED SEED-BEARING HAY	60 LBS 75 LBS 3 TONS	1.4 LB 1.7 LB 138 LB	M-L P C M-L P C M-L P C													350,000 SEED PER POUND. WIDELY ADAPTED. LOW MAINTENANCE. MIX WITH WEEPING LOVEGRASS, COMMON BERMUDA, BAHIA, OR TALL FESCUE. TAKES 2 TO 3 YEARS TO BECOME FULLY ESTABLISHED. EXCELLENT ON ROAD BANKS. INOCULATE SEED WITH EL INOCULANT.  MIX WITH TALL FESCUE OR WINTER ANNUALS.  CUT WHEN SEED IS MATURE. BUT BEFORE IT SHATTERS. TALL FESCUE OR WINTER ANNUALS.
LOVEGRASS, WEEPING (ERAGROSTIS CURVULA) ALONE WITH OTHER PERENNIALS	4 LBS 2 LBS	0.1 LB 0.05 LB	M-L P C													1,500,000 SEED PER POUND. QUICK COVER. DROUGHT TOLERANT. GROWS WELL WITH SERICEA LESPEDeza ON ROADBANKS.

Ds1	<u>MULCHING SPECIFICATIONS:</u>
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MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 14 DAYS OF DISTURBANCE. MULCH CAN BE USED AS A SINGULAR EROSION CONTROL DEVICE FOR UP TO SIX MONTHS, BUT IT SHALL BE APPLIED AT THE APPROPRIATE DEPTH, DEPENDING ON THE MATERIAL USED, ANCHORED, AND HAVE CONTINUOUS 90% COVER OR GREATER OF THE SOIL SURFACE. MAINTENANCE SHALL BE REQUIRED TO MAINTAIN APPROPRIATE DEPTH AND 90% COVER. TEMPORARY VEGETATION MAY BE EMPLOYED INSTEAD OF MULCH IF THE AREA WILL REMAIN UNDISTURBED FOR LESS THAN SIX MONTHS. IF AN AREA WILL REMAIN UNDISTURBED FOR GREATER THAN SIX MONTHS, PERMANENT VEGETATION TECHNIQUES SHALL BE EMPLOYED.

## SITE PREPARATION

1. GRADE TO PERMIT THE USE OF EQUIPMENT FOR APPLYING AND ANCHORING MULCH.
2. INSTALL NEEDED EROSION CONTROL MEASURES AS REQUIRED SUCH AS DIKES, DIVERSIONS, BERMS, TERRACES, AND SEDIMENT BARRIERS.
3. LOOSEN COMPACT SOIL TO A MINIMUM DEPTH OF 3 INCHES.

## 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 UNIFORMLY BY HAND OR BY MECHANICAL EQUIPMENT.
2. IF THE AREA WILL EVENTUALLY BE COVERED WITH PERENNIAL VEGETATION, 20-30 POUNDS OF NITROGEN PER ACRE IN ADDITION TO THE NORMAL AMOUNT SHALL BE APPLIED TO OFFSET THE UPTAKE OF NITROGEN CAUSED BY THE DECOMPOSITION OF THE ORGANIC MULCHES.
3. CUTBACK ASPHALT SHALL BE APPLIED UNIFORMLY. CARE SHOULD BE TAKEN IN AREAS OF PEDESTRIAN TRAFFIC DUE TO PROBLEMS OF "TRACKING IN" OF DAMAGE TO SHOES, CLOTHING, ETC.
4. APPLY POLYETHYLENE FILM ON EXPOSED AREAS.

### ANCHORING MULCH

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. THE DISKS SHOULD BE IN AN ERRECT POSITION. STRAW OR HAY MULCH SHALL BE ANCHORED IMMEDIATELY AFTER APPLICATION. STRAW OR HAY MULCH SPREAD WITH SPECIAL BLOWER-TYPE EQUIPMENT MAY BE ANCHORED WITH EMULSIFIED ASPHALT (GRADE A-E 5 OR SS-1). THE ASPHALT EMULSION SHALL BE SPRAYED ONTO THE MULCH AS IT IS EJECTED FROM THE MACHINE. USE 100 GALLONS OF EMULSIFIED ASPHALT AND 100 GALLONS OR WATER PER TON OF MULCH. TACKIFIERS AND BINDERS CAN BE SUBSTITUTED FOR EMULSIFIED ASPHALT. PLEASE REFER TO SPECIFICATION T6-TACKIFIERS AND BINDERS. PLASTIC MESH OR NETTING WITH MESH NO LARGER THAN ONE INCH BY ONE INCH SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATION.
2. NETTING OF THE APPROPRIATE SIZE SHALL BE USED TO ANCHOR WOOD WASTE. OPENINGS OF THE NETTING SHALL NOT BE LARGER THAN THE AVERAGE SIZE OF THE WOOD WASTE CHIPS.
3. POLYETHYLENE FILM SHALL BE ANCHOR TRENCHED AT THE TOP AS WELL AS INCREMENTALLY AS NECESSARY.

Ds2	<u>TEMPORARY SEEDING SPECIFICATIONS:</u>
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## GRADING AND SHAPING

1. EXCESSIVE WATER RUNOFF MUST BE CONTROLLED BY PLANNED AND INSTALLED EROSION CONTROL PRACTICES SUCH AS CLOSED DRAINS, DITCHES, DIKES, DIVERSIONS, SEDIMENT BASINS, AND OTHERS.

### SEEDBED PREPARATION

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

### LIME AND FERTILIZER

1. AGRICULTURAL LIME IS NOT REQUIRED.
2. ON REASONABLY FERTILE SOILS OR SOIL MATERIAL, FERTILIZER IS NOT REQUIRED.
3. ON SOILS OF VERY LOW FERTILITY, USE 500 TO 700 POUNDS 10-10-10 FERTILIZER OR THE EQUIVALENT PER ACRE (12-16 lbs./1000 sq. ft.). IF THE SITE WILL PERMIT, APPLY BEFORE LAND PREPARATION AND DISK, RIP, OR CHISEL TO INCORPORATE.

## SEEDING

1. SELECT A GRASS OR GRASS-LEGUME MIXTURE SUITABLE TO THE AREA AND SEASON OF THE YEAR.
2. APPLY SEED 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-HALF TO ONE INCH DEEP.

## MULCHING

TEMPORARY VEGETATION CAN, IN MOST CASES, BE ESTABLISHED WITHOUT THE USE OF MULCH. MULCH WITHOUT SEEDING SHOULD BE CONSIDERED FOR SHORT TERM PROTECTION. SEE Ds1 - DISTURBED AREA STABILIZATION (WITH MULCHING ONLY).

### IRRIGATION

IF WATER IS APPLIED, IT MUST BE AT A RATE NOT CAUSING RUNOFF AND EROSION. THOROUGHLY WET THE SOIL TO A DEPTH THAT WILL INSURE GERMINATION OF THE SEED. SUBSEQUENT APPLICATIONS SHOULD BE MADE WHEN NEEDED.

Ds3	<u>PERMANENT SEEDING SPECIFICATIONS:</u>
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### A. GRADING AND SHAPING

1. GRADING AND SHAPING IS NOT NORMALLY REQUIRED WHERE HYDRAULIC SEEDING AND FERTILIZING EQUIPMENT IS TO BE USED. VERTICAL BANKS SHALL BE SLOPED TO ENABLE PLANT ESTABLISHMENTS.

## B. SEEDBED PREPARATION

1. SEEDED PREPARATION MAY NOT BE REQUIRED WHERE HYDRAULIC SEEDING AND FERTILIZING EQUIPMENT IS TO BE USED.
2. WHEN CONVENTIONAL SEEDING IS TO BE USED, SEEDED PREPARATION WILL BE DONE AS FOLLOWS:
  - A. BROADCAST PLANTING
    - 1. 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
    - 2. 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.

### C. LIME AND FERTILIZER - RATES AND ANALYSIS

1. WHERE PERMANENT VEGETATION IS TO BE ESTABLISHED, AGRICULTURAL LIME SHALL BE APPLIED AS INDICATED BY SOIL TEST OR AT THE RATE OF 1 TO 2 TONS PER ACRE. AGRICULTURAL LIME SHALL BE WITHIN THE SPECIFICATIONS OF THE GEORGIA DEPARTMENT OF AGRICULTURE.
2. LIME SPREAD BY CONVENTIONAL EQUIPMENT WILL BE "GROUND LIMESTONE". GROUND LIMESTONE IS CALCITIC OR DOLOMITIC LIMESTONE GROUND SO THAT 90 PERCENT OF THE MATERIAL WILL PASS THROUGH A 10-MESH SIEVE AND NOT LESS THAN 25 PERCENT WILL PASS THROUGH A 100-MESH SIEVE.
3. AGRICULTURAL LIME SPREAD BY HYDRAULIC SEEDING EQUIPMENT WILL BE "FINELY GROUND LIMESTONE." FINELY GROUND LIMESTONE IS CALCITIC OR DOLOMITIC LIMESTONE GROUND SO THAT 98 PERCENT OF THE MATERIAL WILL PASS THROUGH A 20-MESH SIEVE AND NOT LESS THAN 70 PERCENT WILL PASS THROUGH A 100-MESH SIEVE.

#### D. LIME AND FERTILIZER - APPLICATION

1. WHEN HYDRAULIC SEEDING EQUIPMENT IS USED:
  - A. THE INITIAL FERTILIZER WILL BE MIXED WITH SEED, INOCULATE (IF NEEDED) AND WOOD CELLULOSE OR WOOD PULP FIBER MULCH AND APPLIED IN A SLURRY. THE SLURRY WILL BE AGITATED DURING APPLICATION TO KEEP THE INGREDIENTS THOROUGHLY MIXED. THE MIXTURE WILL BE SPREAD UNIFORMLY OVER THE AREA WITHIN ONE HOUR
  - B. AFTER BEING PLACED IN THE HYDROSEEDER.
  - C. FINELY GROUND LIMESTONE WILL BE MIXED WITH WATER AND APPLIED IMMEDIATELY AFTER MULCHING IS COMPLETED OR IN COMBINATION WITH THE TOP DRESSING.
2. WHEN CONVENTIONAL PLANTING IS TO BE DONE, LIME AND FERTILIZER WILL BE APPLIED UNIFORMLY IN ONE OF THE FOLLOWING WAYS:
  - A. APPLY BEFORE LAND PREPARATION SO THAT IT WILL BE MIXED WITH THE SOIL DURING SEEDBED PREPARATION; OR,
  - B. MIX WITH THE SOIL USED TO FILL THE HOLES, DISTRIBUTE IN FURROWS; OR,
  - C. BROADCAST AFTER STEEP SURFACES AND SCARIFIED, PITTED OR TRENCHED.
  - D. A FERTILIZER PELLET WILL BE PLACED AT ROOT DEPTH.

CONSTRUCTION SCHEDULE							
ACTIVITY	ANTICIPATED START DATE: 2/15/25			ANTICIPATED END DATE: 4/30/25			
	MONTH						
	JAN	FEB	MAR	APR	MAY	JUN	
LOCATE EXISTING UTILITIES							
INSTALL EROSION CTRL. MEASURES							
EARTHWORK/CLEARING							
INSTALLATION/SITE IMPROVEMENTS							
MAINTAIN EROSION CTRL. MEASURES							
TEMPORARY GRASS & MULCHING							
INSTALL PERMANENT GRASSING							
REMOVE EROSION CTRL. MEASURES							

**NOTE:**  
THE SCHEDULE INDICATES THE ESTIMATED SEQUENCE AND DURATION OF CONSTRUCTION ACTIVITY EVENTS. IT HAS BEEN PREPARED WITHOUT THE ASSISTANCE OF THE CONTRACTOR. AFTER CONTRACTOR SELECTION BY THE OWNER, THE CONTRACTOR MAY PROPOSE ADJUSTMENT TO THE SCHEDULE AS DEEMED NECESSARY. HOWEVER, SUCH ADJUSTMENT MUST BE APPROVED THROUGH THE LAND DISTURBANCE PERMIT ISSUING AGENCY.

[illegible]

BRENNAN D. JONES, PE  
GSWCC LEVEL II DESIGN  
CERTIFICATION No. 117



1/17/25

**BRENNAN JONES**  
*Engineering Associates*

[illegible]

2024 LMIG ROAD IMPROVEMENTS  
GARDEN CITY, GEORGIA

GARDEN CITY, CHATHAM COUNTY, GEORGIA

EROSION, SEDIMENTATION  
AND POLLUTION CONTROL  
NOTES & DETAILS - 2 OF 2

DRAWING NO.  
C-302  
SHEET NO.  
13 OF 13