PROJECT SPECIFIC NOTES

1. PRIOR TO CLEARING AND CONSTRUCTION ACTIVITIES COMMENCING, THE CONTRACTOR SHALL PLACE THE ORANGE CONSTRUCTION/SAFETY BARRIER FENCE IN AREAS NOTED IN THE PLANS AS ENVIRONMENTALLY SENSITIVE AREAS (ESA) TO ENSURE THAT THE ESA IS NOT ADVERSELY IMPACTED DURING PROJECT CONSTRUCTION.

2. THIS PROJECT REQUIRES A NOTICE OF INTENT (NOI).

3. BEFORE DEMOLITION OF THE EXISTING BRIDGE, THE CONTRACTOR SHALL REMOVE THE BRASS NAMEPLATE (ROEBLING BRIDGE) FROM THE EXISTING BRIDGE AND DELIVER TO THE DISTRICT MAINTENANCE ENGINEER, LOCATED AT 204 NORTH HIGHWAY 301, JESUP, GEORGIA 31546.

4. THE EXISTING SIGN AT APPROX. STA. 297+80, 107' RT. ON TIMBER POST SHALL BE DELIVERED TO THE DISTRICT MAINTENANCE ENGINEER, LOCATED AT 204 NORTH HIGHWAY 301, JESUP, GEORGIA 31546.

5. ALL DRIVEWAYS THAT ARE TO BE RECONSTRUCTED SHALL BE PAVED BACK TO THE R/W, BEYOND THE R/W, ALL RECONSTRUCTED DRIVES SHALL BE REPLACED IN KIND, I.E. ASPHALT FOR ASPHALT, CONCRETE FOR CONCRETE, AND G.A.B. FOR GRAVEL OR EARTH, EXCEPT AS NOTED ON THE PLANS. THE DEPTH OF MATERIALS SHALL BE AS FOLLOWS:

ASPHALT DRIVEWAYS:	RESIDENTIAL:	12.5 MM SUPERPAVE, 165 LBS/SY 19MM SUPERPAVE, 220LBS/SY G.A.B., 6 IN. DEPTH
	COMMERCIAL:	12.5 MM SUPERPAVE, 165 LBS/SY 19 MM SUPERPAVE, 220 LBS/SY G.A.B., 8 IN. DEPTH
CONCRETE DRIVEWAYS:	RESIDENTIAL: COMMERCIAL:	6' CONCRETE VALLEY GUTTER 8" CONCRETE VALLEY GUTTER
GRAVEL OR EARTH DRIVEWAYS:	ALL TYPES:	12.5 MM SUPERPAVE, 165 LBS/SY G.A.B., 6 IN. DEPTH

6. ALL EXISTING PIPES WITHIN PROJECT LIMITS TO BE REMOVED UNLESS OTHERWISE NOTED.

7. REMOVAL
A. SOILS WITH HIGH IN-PLACE MOISTURE CONTENT:
IN SOME PARTS OF THE PROJECT ALIGNMENT, THE SOILS AT/NEAR THE PROPOSED GRADE WERE FOUND TO HAVE IN-PLACE MOISTURE CONTENTS FAR ABOVE THE CORRESPONDING OPTIMUM MOISTURE CONTENTS. THIS CONDITION HAS THE POTENTIAL TO CAUSE PUMPING PROBLEMS DURING SUBGRADE AND BASE CONSTRUCTION. IT IS RECOMMENDED THAT UPON COMPLETION OF ANY NECESSARY EXCAVATION IN THESE AREAS, 24-INCHES OF SUBGRADE SOILS FROM BENEATH THE PROPOSED PAVEMENT AND SHOULDERS BE REMOVED AND EITHER DRIED OUT AND REPLACED, OR REPLACED WITH DRIER SOILS. THE LOCATIONS WHERE HIGH IN-PLACE MOISTURE CONTENTS WILL LIKELY BE ENCOUNTERED ARE:

STATION TO STATION	LOCATION
323+50± TO 324+50±	RIGHT
324+50± TO 329+28±	LEFT & RIGHT
13+50± TO 16+15± (BOAT RAMP DRIVEWAY)	LEFT & RIGHT

THIS WORK SHOULD BE DONE UNDER THE DIRECTION OF THE DESIGN BUILD TEAM ENGINEER, AND MAY BE ELIMINATED IF THE SUBGRADE SOILS ARE DRY AND STABLE AT THE TIME OF CONSTRUCTION.

B. CLASS IV-SOILS-MUCK WITH ORGANICS:
MATERIALS UNSUITABLE FOR EMBANKMENT CONSTRUCTION (CLASS IV SOILS - MUCK WITH ORGANICS) WHICH REQUIRES REMOVAL WERE ENCOUNTERED AT THE LOCATIONS AND ESTIMATED MAXIMUM DEPTHS INDICATED BELOW:

STATION TO STATION	LOCATION	ESTIMATED MAX DEPTH
323+50 TO 324+50±	LEFT	48"
10+60 TO 13+50± (BOAT RAMP DRIVEWAY)	LEFT & RIGHT	36"

THE ABOVE RECOMMENDATIONS FOR REMOVAL ARE BASED ON PROBING OF THE SURFICIAL MATERIALS WITH A PROBE ROD AND VISUAL EXAMINATION OF MUCK SAMPLES OBTAINED FROM THESE LOCATIONS. THE MUCK SAMPLES OBTAINED FROM THE ABOVE LOCATIONS WERE SIMILAR, AND ONE SAMPLE WAS TESTED FOR ORGANIC CONTENT. RESULTS OF THE ORGANIC CONTENT TEST ARE PRESENTED IN TABLE TO THE RIGHT.

THE REMOVED MATERIALS MAY BE USED IN THIN LAYERS TO FLATTEN SIDE SLOPES OR MAY BE WASTED OUTSIDE THE CONSTRUCTION LIMITS OF THE PROJECT. REPLACEMENT MATERIALS SHOULD BE GRANULAR EMBANKMENT PLACED TO A HEIGHT OF 18 INCHES ABOVE THE WATER ELEVATION AT THE TIME OF CONSTRUCTION, IN ACCORDANCE WITH SPECIAL PROVISION 208. A LAYER OF GEOGRID (SPECIAL PROVISION 809) SHOULD BE PLACED ON THE EXCAVATED SURFACE PRIOR TO PLACEMENT OF THE GRANULAR EMBANKMENT. REMOVAL AND REPLACEMENT SHOULD BE IN ACCORDANCE WITH THE "REMOVAL DETAIL" PRESENTED ON DRAWING NO. 4-03.

8. NONE OF THE MATERIALS FOUND ON THIS PROJECT WILL REQUIRE WASTING.

9. THE TOP 12 INCHES OF SUBGRADE ON THIS PROJECT, INCLUDING RAMPS AND CROSSROADS, SHALL BE CONSTRUCTED WITH CLASS II B2 OR BETTER MATERIAL. THIS WORK SHALL BE DONE IN ACCORDANCE WITH SPECIAL PROVISION SECTION 209.

10.
A. THE PROJECT ALIGNMENT CROSSES A NUMBER OF LOW WET AREAS, WHICH MAY REMAIN INUNDATED AT THE TIME OF CONSTRUCTION. DITCHING WILL LIKELY BE REQUIRED TO DRAIN ANY STANDING WATER PRIOR TO EMBANKMENT CONSTRUCTION. THE LOW WET AREAS WERE AT THE FOLLOWING STATIONS:

STATION TO STATION	LOCATION
278+50± TO 284+50±	LEFT
322+00± TO 323+50±	LEFT
324+50± TO 328+00±	LEFT

B. IF THERE IS STANDING WATER AND IT IS NOT FEASIBLE TO DRAIN THESE AREAS DURING CONSTRUCTION, A MAT OF GRANULAR EMBANKMENT SHOULD BE PLACED TO A HEIGHT OF 18 INCHES ABOVE THE WATER LEVEL PRIOR TO PLACING NORMAL FILLS. THIS WORK SHALL BE DONE IN ACCORDANCE WITH SPECIAL PROVISION SECTION 208

C. IF THE GROUND SURFACE IS WET AND UNSTABLE DUE TO HIGH GROUNDWATER, IT IS RECOMMENDED THAT A LAYER OF FILTER FABRIC BE PLACED ON TOP OF THE EXISTING GROUND SURFACE PRIOR TO PLACING THE FILLS, AS SHOWN ON THE 'FILTER FABRIC DETAIL' ON DRAWING NO. 4-03. PLACEMENT OF THE FABRIC SHOULD BE IN ACCORDANCE WITH SPECIAL PROVISION SECTION 881.

D. THE REQUIREMENT OF ANY OF THESE MEASURES MAY BE ELIMINATED AT THE DIRECTION OF THE DESIGN BUILD TEAM ENGINEER IF THE SUBGRADE SOILS ARE DRY AND STABLE AT THE TIME OF CONSTRUCTION.

11. A 12-INCH BLANKET OF TYPE II FOUNDATION BACKFILL MATERIAL SHALL BE PLACED UNDER THE BARREL OF ALL CULVERTS, AND 48-INCH DIAMETER AND LARGER CROSS-DRAINS ON THIS PROJECT.

12. WHERE NEW FILLS ARE TO BE PLACED ON EXISTING SLOPES STEEPER THAN 3:1, THE EXISTING SLOPE SHOULD BE BENCHED IN ACCORDANCE WITH THE "BENCHING DETAIL" PRESENTED ON DRAWING NO. 4-03

13. A LAYER OF FAT CLAY UNDERLAIN BY A LAYER OF LEAN CLAY/CLAYEY SAND WAS ENCOUNTERED AT BOTH SOUTH AND NORTH BRIDGE ABUTMENT LOCATIONS. THE TOTAL THICKNESS OF THE CLAY LAYERS IS ABOUT TEN FEET AS DEPICTED IN THE BORING LOGS INCLUDED IN APPENDIX II OF SOIL SURVEY REPORT. RESULTS OF CONSOLIDATION TESTS ON SAMPLES OF BOTH TYPES OF CLAY OBTAINED FROM THESE BORINGS ARE PRESENTED IN APPENDIX III OF SOIL SURVEY REPORT. BASED ON THE ANALYSES OF THESE RESULTS, IT IS RECOMMENDED THAT A WAITING PERIOD OF 12 MONTHS BE ALLOWED IN THE CONSTRUCTION SCHEDULE BETWEEN FILL PLACEMENT AND PAVEMENT CONSTRUCTION AT BOTH BRIDGE ABUTMENTS. SETTLEMENT PLATES SHOULD BE INSTALLED TO MONITOR THE PROGRESS OF SETTLEMENT WITH TIME, AND THE LENGTH OF THE WAITING PERIOD MAY BE INCREASED OR DECREASED BASED ON THE SETTLEMENT MONITORING DATA, AT THE DISCRETION OF THE DESIGN BUILD TEAM GEOTECHNICAL ENGINEER. THE 12- MONTH WAITING PERIOD IS FOR SIGNIFICANT COMPLETION OF THE PRIMARY CONSOLIDATION SETTLEMENT. THE TOTAL PRIMARY CONSOLIDATION SETTLEMENT NEAR THE ABUTMENTS IS ESTIMATED TO BE 18 TO 24 INCHES. AFTER THE WAITING PERIOD, SETTLEMENT WILL CONTINUE TO OCCUR AT A DECREASING RATE DUE TO SECONDARY COMPRESSION. THE TOTAL SETTLEMENT AFTER THE WAITING PERIOD IS ESTIMATED TO BE ABOUT 2 INCHES IN A 20-YEAR DESIGN PERIOD.

14. THE PONDS/LAKES AT THE FOLLOWING LOCATIONS WILL LIKELY REQUIRE SILTATION CONTROL DURING CONSTRUCTION:

STATION TO STATION	LOCATION
275+70± TO 277+00±	LEFT
323+00± TO 326+10±	RIGHT

RESULTS OF ORGANIC CONTENT TEST ON A MUCK SAMPLE

STATION TO STATION	SAMPLE NO.	SAMPLE DEPTH (FEET)	NATURAL MOISTURE CONTENT (%)	ORGANIC CONTENT (%)
10+60±13+50± (BOAT RAMP DRIVEWAY)	M-1	2	48.2	20.1

Fn: 5.9 Resistance: 9900 — COUNTY: CHATHAM — P.I. NO.: 0008651

PROJECT NO.: CSSTP-0008-00(651) **Pipe Culvert Material Alternates**
For Coastal Plain Region

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

NOTES:

1. Allowable materials are indicated by an "X".

2. Structural requirements of storm drain pipe will be in accordance with Georgia Standard 1030-D or 1030-P, whichever is applicable, and the standard specifications.

3. Graded aggregate backfill shall be used in cross drain applications for all plastic pipes (AASHTO M-294, HDPE pipe, AASHTO M-304, ASTM F-949, PVC pipe).
See attached approved pipe chart.

4. Pipe used under mechanically stabilized earth (MSE) walls, within MSE wall backfill, or within five feet of an MSE wall face shall be Class V Concrete Pipe.

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3595 ENGINEERING DRIVE
NORCROSS, GEORGIA 30092
(770) 263-9118

REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: INNOVATIVE PROGRAM DELIVERY

GENERAL NOTES

DRAWING No. 4-01

3/1/2007 GPLN