

FULTON COUNTY



**PURCHASING DEPARTMENT
REQUEST FOR PROPOSAL NO. #14RFP95820K-JD**

**DESIGN/BUILD SERVICES FOR FAIRBURN ROAD FROM VILLAGE
DRIVE TO NORTH UTOY CREEK ROAD, BRIDGE, AND SIDEWALK
IMPROVEMENTS PROJECT**

VOLUME II

For

PUBLIC WORKS/GENERAL SERVICES

RFP DUE DATE AND TIME: Monday, January 26, 2015 11:00 A.M.

RFP ISSUANCE DATE: December 19, 2014

PURCHASING CONTACT: Joyce Daniel, Assistant Purchasing Agent

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**LOCATION: FULTON COUNTY PURCHASING DEPARTMENT
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ATLANTA, GA 30303**

#14RFP95820K-JD
Design/Build Services for Fairburn Road from Village Drive to North Utoy
Creek Road, Bridge, and Sidewalk Improvements Project

REQUEST FOR PROPOSALS
TABLE OF CONTENTS

Section/Page

VOLUME I

SECTIONS 1-11

1.0	INTRODUCTION	1-1
1.1	Project Description	1-1
1.2	Background	1-1
1.3	Procurement Process	1-1
1.4	Selection Process	1-1
1.5	Obtaining the RFP	1-2
1.6	Pre-Proposal Conference	1-2
1.7	Proposal Due Date	1-6
1.8	Delivery Requirements	1-6
1.9	Contact Person and Inquiries	1-6
2.0	INSTRUCTIONS TO PROPOSERS	2-1
2.2	Contract/Definitions	2-1
2.3	No Contact During Procurement Process	2-5
2.4	Clarification & Addenda	2-6
2.5	Term of Contract	2-7
2.6	RFP Submittals	2-7
2.7	Proposal Evaluation	2-7
2.8	Disqualification of Proposers	2-7
2.9	Reserved Rights	2-8
2.10	Applicable Laws	2-8
2.11	Georgia Utility Contractor's License	2-8
2.12	General Contractor's License	2-8
2.13	Professional Licenses	2-9
2.14	Insurance and Risk Management Provisions	2-9
2.15	Liquidated Damages	2-9
2.16	Accuracy of RFP and Related Documents	2-9
2.17	Responsibility of Proposer	2-10
2.18	Confidential Information	2-10
2.19	County Rights and Options	2-10
2.20	Cost of Proposal Preparation and Selection Process	2-12
2.21	Termination of Negotiation	2-12
2.22	Wage Clause	2-12
2.23	Additional or Supplemental Information	2-12
2.24	Reporting Responsibilities	2-13
2.25	Georgia Security and Immigration Compliance Act	2-13
2.26	Authorization to Transact Business	2-13

#14RFP95820K-JD
Design/Build Services for Fairburn Road from Village Drive to North Utoy
Creek Road, Bridge, and Sidewalk Improvements Project

REQUEST FOR PROPOSALS
TABLE OF CONTENTS

		Section/Page
	2.27	Right to Protest 2-14
	2.28	First Source Jobs Policy 2-14
	2.29	Non-Collusion 2-14
	2.30	Exceptions to County's Contract..... 2-14
	2.31	General Requirements..... 2-15
3.0	PROPOSAL REQUIREMENTS	3-1
	3.1	Submission Requirements..... 3-1
	3.1.1	Proposal Submission Date and Submittal Format..... 3-1
	3.1.2	Number of Copies..... 3-2
	3.2	Overview of Proposal Requirements 3-2
	3.3	General Description 3-2
	3.3.1	Project Location 3-2
	3.3.2	Design/Build Concept 3-3
	3.4	Scope of Work..... 3-5
	3.5	Project Deliverables..... 3-81
	3.6	Project Schedule..... 3-81
	3.7	Technical Proposal Format and Content..... 3-81
	3.8	Cost Proposal Format and Content 3-88
4.0	EVALUATION CRITERIA	4-1
	4.1	Proposal Evaluation Criteria 4-1
5.0	PROPOSAL FORMS	5-1
	5.1	Introduction
	5.2	Proposal Forms
		Form A: Certification Regarding Debarment
		Form B: Non-Collusion Affidavit of Proposer
		Form C: Certificate of Acceptance of Request for Proposal Requirements
		Form D: Disclosure Form and Questionnaire
		Form E: Georgia Security and Immigration Contractor Affidavit/Agreement
		Form F: Georgia Security and Immigration Subcontractor Affidavit
		Form G: Professional License
		Form H: Local Preference Affidavit of Proposer
		Form I: Service Disabled Veteran Preference Affidavit of Proposer

#14RFP95820K-JD
Design/Build Services for Fairburn Road from Village Drive to North Utoy
Creek Road, Bridge, and Sidewalk Improvements Project

REQUEST FOR PROPOSALS
TABLE OF CONTENTS

		<u>Section/Page</u>
6.0	CONTRACT COMPLIANCE REQUIREMENTS	6-1
6.1	Non-Discrimination in Contracting and Procurement	
6.2	Equal Business Opportunity Plan (EBO Plan). This document is not a form rather a statement created by the proposer on its company letterhead addressing the EBO Plan requirements.	
6.3	Determination of Good Faith Efforts	
6.4	Required Forms and EBO Plan	
	Exhibit A: Promise of Non-Discrimination	
	Exhibit B: Employment Report	
	Exhibit C: Schedule of Intended Subcontractors	
	Exhibit D: Letter of Intent to Perform as a Subcontractor or Provide Materials or Service	
	Exhibit E: Declaration Regarding Subcontracting Practices	
	Exhibit F: Joint Venture Affidavit	
	Exhibit G: Prime Contractor/Subcontractor Utilization Report	
	Exhibit H: First Source Jobs Program Agreement, Form 3	
7.0	INSURANCE AND RISK MANAGEMENT PROVISIONS.....	7-1
8.0	BID BOND/BID FORM	8-1
9.0	PAYMENT AND PERFORMANCE BOND	9-1
10.0	EXHIBITS	10-1
	Exhibit 1 – Required Submittal Checklist	
11.0	APPENDICES	11-1

VOLUME II

General Conditions
Special Conditions
Design-Build Contract Special Conditions
Division Work Requirements
Cost Proposal Forms
Safety Plan
Contract Drawings

VOLUME III

Owner-Contractor Agreement (Sample Contract)

GENERAL CONDITIONS

00700-1 FAMILIARITY WITH SITE

Execution of this agreement by the Contractor is a representation that the Contractor has visited the site, has become familiar with the local conditions under which the work is to be performed, and has correlated personal observations with the requirements of this agreement.

00700-2 CONTRACT DOCUMENTS

This agreement consists of Owner's invitation for bid, instructions to bidders, bid form, performance bond, payment bond, acknowledgments, the contract, general conditions, special conditions, specifications, plans, drawings, exhibits, addenda, and written change orders.

- A. Notice of Award of Contract; and
- B. Execution of Contract Documents

Upon notification of Award of Contract, the Owner shall furnish the Contractor the conformed copies of Contract Documents for execution by the Contractor and the Contractor's surety.

Within ten (10) days after receipt the Contractor shall return all the documents properly executed by the Contractor and the Contractor's surety. Attached to each document shall be an original power-of-attorney for the person executing the bonds for the surety and certificates of insurance for the required insurance coverage.

After receipt of the documents executed by the Contractor and his surety with the power-of-attorney and certificates of insurance, the Owner shall complete the execution of the documents. Distribution of the completed documents will be made upon completion.

Should the Contractor and/or Surety fail to execute the documents within the time specified; the Owner shall have the right to proceed on the Bid Bond accompanying the bid.

If the Owner fails to execute the documents within the time limit specified, the Contractor shall have the right to withdraw the Contractor's bid without penalty.

Drawings and Specifications:

The Drawings, Specifications, Contract Documents, and all supplemental documents, are considered essential parts of the Contract, and requirements occurring in one are as binding as though occurring in all. They are intended to define, describe and provide for all Work necessary to complete the Project in an acceptable manner, ready for use, occupancy, or operation by the Owner.

In case of conflict between the Drawings and Specifications, the Specifications shall govern. Figure dimensions on Drawings shall govern over scale dimensions, and detailed Drawings shall govern over general Drawings.

In cases where products or quantities are omitted from the Specifications, the description and quantities shown on the Drawings shall govern.

Any ambiguities or need for clarification of the Drawings or Specifications shall be immediately reported to the Construction Manager in writing. Any such ambiguity or need for clarification shall be handled by the Construction Manager in writing. No clarification of the Drawings and Specifications hereunder by the Construction Manager shall entitle the Contractor to any

additional monies unless a Change Order has been processed as provided by "Changes in the Contract" hereof.

Any work done by the Contractor following a discovery of such differing site condition or ambiguity or need for clarification in the Contract Drawings and Specifications prior to a written report to the Construction Manager shall not entitle the Contractor to additional monies and shall be done at the Contractor's risk.

The Construction Manager will furnish the Contractor five (5) copies of the Contract Drawings and the Specifications, one copy of which the Contractor shall have available at all times on the Project site.

00700-3 DEFINITIONS

The following terms as used in this agreement are defined as follows to the extent the definitions herein differ or conflict with those in the Instructions for Bidders, Section 00100, the definitions herein shall control.

Alternate Bids – the amount stated in the bid or proposal to be added to or deducted from the amount of the base bid or base proposal if the corresponding change in project scope or alternate materials or methods of construction is accepted.

Base Bid – the amount of money stated in the bid or proposal as the sum for which the bidder or proposer offers to perform the work.

Change Order - an alteration, addition, or deduction from the original scope of work as defined by the contract documents to address changes or unforeseen conditions necessary for project completion. A written order to the Contractor issued by the County pursuant to Fulton County Policy and Procedures 800-6 for changes in the work within the general scope of the contract documents, adjustment of the contract price, extension of the contract time, or reservation of determination of a time extension.

Construction Manager shall mean the individual designated in writing, by the Director of the Facilities and Transportation Services Department as the Construction Manager.

Contractor shall mean the party of the second part to the Contract Agreement or the authorized and legal representative of such party.

Contract Documents include the Contract Agreement, Contractor's Bid (including all documentation accompanying the Bid and any post-Bid documentation required by the County prior to the Notice of Award), Bonds, all Special Conditions, General Conditions, Supplementary Conditions, Specifications, Drawings and addenda, together with written amendments, change orders, field orders and the Construction Manager's written interpretations and clarifications issued in accordance with the General Conditions on or after the date of the Contract Agreement.

Shop drawing submittals reviewed in accordance with the General Conditions, geotechnical investigations and soils report and drawings of physical conditions in or relating to existing surface structures at or contiguous to the site are not Contract Documents.

Contract Price - The sum specified in the Agreement to be paid to the Contractor in consideration of the Work.

Contract Time shall mean the number of consecutive calendar days as provided in the Contract Agreement for completion of the Work, to be computed from the date of Notice to Proceed.

Owner or County shall mean Fulton County Government, party of the first part to the Contract Agreement, or its authorized and legal representatives.

Day - A calendar day of twenty-four hours lasting from midnight of one day to midnight the next day.

Detention Equipment Contractor ("DEC") – Any legally chartered business entity whose primary activity is the supply and/or installation of detention hardware equipment and related systems.

Director - Director of the Facilities and Transportation Services Department of Fulton County, Georgia or the designee thereof.

Engineer of Record – QK4 developed the specifications and drawings referred to herein.

Final Completion shall mean the completion of all work as required in accordance with the terms and conditions of the contract documents.

Liquidated Damages shall mean the amount, stated in the Contract Agreement, which the Contractor agrees to pay to the Owner for each consecutive calendar day beyond the Contract time required to complete the Project or for failing to comply with associated milestones. Liquidated Damages will end upon written notification from the Owner of Final Acceptance of the Project or upon written notification of from the Owner of completion of the milestone.

Notice to Proceed - A written communication issued by the County to the Contractor authorizing it to proceed with the work, establishing the date of commencement and completion of the work, and providing other direction to the Contractor.

Products shall mean materials or equipment permanently incorporated into the work.

Program Manager - Not used in this contract. Delete all references.

Project Manual - The Contract Documents

Provide - shall mean to furnish and install.

Substantial Completion - The date certified by the Construction Manager when all or a part of the work, as established pursuant to General Condition 0700-81, is sufficiently completed in accordance with the requirements of the contract documents so that the identified portion of the work can be utilized for the purposes for which it is intended.

Work or Project - All of the services specified, indicated, shown or contemplated by the contract documents, and furnishing by the Contractor of all materials, equipment, labor, methods, processes, construction and manufacturing materials and equipment, tools, plans, supplies, power, water, transportation and other things necessary to complete such services in accordance with the contract documents to insure a functional and complete facility.

00700-4 CODES

All codes, specifications, and standards referenced in the contract documents shall be the latest editions, amendments and revisions of such referenced standards in effect as of the date of the request for proposals for this contract.

00700-5 REVIEW OF CONTRACT DOCUMENTS

Before making its proposal to the County, and continuously after the execution of the agreement, the Contractor shall carefully study and compare the contract documents and shall at once report to the Construction Manager any error, ambiguity, inconsistency or omission that

may be discovered, including any requirement which may be contrary to any law, ordinance, rule, or regulation of any public authority bearing on the performance of the work. By submitting its proposal, the Contractor agrees that the contract documents, along with any supplementary written instructions issued by or through the Construction Manager that have become a part of the contract documents, appear accurate, consistent and complete insofar as can be reasonably determined. If the Contractor has timely reported in writing any error, inconsistency, or omission to the Construction Manager, has properly stopped the affected work until instructed to proceed, and has otherwise followed the instructions of the Construction Manager, the Contractor shall not be liable to the County for any damage resulting from any such error, inconsistency, or omission in the contract documents. The Contractor shall not perform any portion of the work without the contract documents, approved plans, specifications, products and data, or samples for such portion of the work. For purposes of this section "timely" is defined as the time period in which the contractor discovers, or should have discovered, the error, inconsistency, or omission, with the exercise of reasonable diligence.

00700-6 STRICT COMPLIANCE

No observation, inspection, test or approval of the County or Construction Manager shall relieve the Contractor from its obligation to perform the work in strict conformity with the contract documents except as provided in General Condition 00700-48.

00700-7 APPLICABLE LAW

All applicable State laws, County ordinances, codes, and rules and regulations of all authorities having jurisdiction over the construction of the project shall apply to this agreement. The Contractor shall comply with the requirements of any Fulton County program concerning non-discrimination in contracting. All work performed within the right of way of the Georgia Department of Transportation and any railroad crossing shall be in accordance with Georgia Department of Transportation regulations, policies and procedures and, where applicable, those of any affected railroad. The Contractor shall comply with all laws, ordinances, codes, rules and regulations bearing on the conduct of the work as specified and the Contractor agrees to indemnify and hold harmless the County, its officers, agents and employees, as well as the Construction Manager and the Program Manager against any claim or liability arising from or based on the violation of any law, ordinance, regulation, order or decree affecting the conduct of the work, whether occasioned by the Contractor, his agents or employees.

00700-8 PERMITS, LICENSES AND BONDS

All permits and licenses necessary for the work shall be secured and paid for by the Contractor. If any permit, license or certificate expires or is revoked, terminated, or suspended as a result of any action on the part of the Contractor, the Contractor shall not be entitled to additional compensation or time. The Contractor shall obtain and keep in force at all times performance and payment bonds payable to Fulton County in penal amounts equal to 100% of the Contract price.

00700-9 TAXES

- A. The Contractor shall pay all sales, retail, occupational, service, excise, old age benefit and unemployment compensation taxes, consumer, use and other similar taxes, as well as any other taxes or duties on the materials, equipment, and labor for the work provided by the Contractor which are legally enacted by any municipal, county, state or federal authority, department or agency at the time bids are received, whether or not yet

effective. The Contractor shall maintain records pertaining to such taxes and levies as well as payment thereof and shall make the same available to the County at all reasonable times for inspection and copying. The Contractor shall apply for any and all tax exemptions which may be applicable and shall timely request from the County such documents and information as may be necessary to obtain such tax exemptions. The County shall have no liability to the Contractor for payment of any tax from which it is exempt.

- B. The Contractor is obligated to comply with all local and State Sales and Use Tax laws. The Contractor shall provide the Owner with documentation to assist the Owner in obtaining sales and/or use tax refunds for eligible machinery and equipment used for the primary purpose of reducing or eliminating air or water pollution as provided for in Chapter 48-8-3 (36) and (37) of the Official Code of Georgia. All taxes shall be paid by the Contractor. All refunds will accrue to the Owner.

Acceptance of the project as complete and final payment will not be made by the Owner until the Contractor has fully complied with this requirement.

00700-10 DELINQUENT CONTRACTORS

The County shall not pay any claim, debt, demand or account whatsoever to any person firm or corporation who is in arrears to the County for taxes. The County shall be entitled to a counterclaim, back charge, and offset for any such debt in the amount of taxes in arrears, and no assignment or transfer of such debt after the taxes become due shall affect the right of the County to offset any taxes owed against said debt.

00700-11 LIEN WAIVERS

The Contractor shall furnish the County with evidence that all persons who have performed work or furnished materials pursuant to this agreement have been paid in full prior to submitting its demand for final payment pursuant to this agreement. A final affidavit, Exhibit A, must be completed, and submitted to comply with requirements of 00700-11. In the event that such evidence is not furnished, the County may retain sufficient sums necessary to meet all lawful claims of such laborers and materialmen. The County assumes no obligation nor in any way undertakes to pay such lawful claims from any funds due or that may become due to the Contractor.

00700-12 MEASUREMENT

All items of work to be paid for per unit of measurement shall be subject to inspection, measurement, and confirmation by the Construction Manager.

00700-13 ASSIGNMENT

The Contractor shall not assign any portion of this agreement or moneys due there from (include factoring of receivables) without the prior written consent of the County. The Contractor shall retain personal control and shall provide personal attention to the fulfillment of its obligations pursuant to this agreement. Any assignment without the express written consent of the County shall render this contract voidable at the sole option of the County.

00700-14 FOREIGN CONTRACTORS

In the event that the Contractor is a foreign corporation, partnership, or sole proprietorship, the Contractor hereby irrevocably appoints the Secretary of State of Georgia as its agent for service

of all legal process for the purpose of this contract only.

00700-15 INDEMNIFICATION

The Contractor hereby assumes the entire responsibility and liability for any and all injury to or death of any and all persons, including the Contractor's agents, servants, and employees, and in addition thereto, for any and all damages to property caused by or resulting from or arising out of any act or omission in connection with this contract or the prosecution of work hereunder, whether caused by the Contractor or the Contractor's agents, Servants, or employees, or by any of the Contractor's subcontractors or suppliers, and the Contractor shall indemnify and hold harmless the County, the Construction Manager, County's Commissioners, officers, employees, successors, assigns and agents, or any of their subcontractors from and against any and all loss and/or expense which they or any of them may suffer or pay as a result of claims or suits due to, because of, or arising out of any and all such injuries, deaths and/or damage, irrespective of County or Construction Manager negligence (except that no party shall be indemnified for their own sole negligence). The Contractor, if requested, shall assume and defend at the Contractor's own expense, any suit, action or other legal proceedings arising there from, and the Contractor hereby agrees to satisfy, pay, and cause to be discharged of record any judgment which may be rendered against the County and the Construction Manager arising there from.

In the event of any such loss, expense, damage, or injury, or if any claim or demand for damages as heretofore set forth is made against the County or the Construction Manager, the County may withhold from any payment due or thereafter to become due to the Contractor under the terms of this Contract, an amount sufficient in its judgment to protect and indemnify it and the Construction Manager, County's Commissioners, officers, employees, successors, assigns and agents from any and all claims, expense, loss, damages, or injury; and the County, in its discretion, may require the Contractor to furnish a surety bond satisfactory to the County, providing for such protection and indemnity, which bond shall be furnished by the Contractor within five (5) days after written demand has been made therefore. The expense of said Bond shall be borne by the Contractor.

00700-16 SUPERVISION OF WORK AND COORDINATION WITH OTHERS

The Contractor shall supervise and direct the work using the Contractor's best skill and attention. The Contractor shall be solely responsible for all construction methods and procedures and shall coordinate all portions of the work pursuant to the contract subject to the overall coordination of the Construction Manager. All work pursuant to this agreement shall be performed in a skillful and workmanlike manner.

The County reserves the right to perform work related to the Project with the County's own forces and to award separate contracts in connection with other portions of the project, other work on the site under these or similar conditions of the contract, or work which has been extracted from the Contractor's work by the County.

When separate contracts are awarded for different portions of the project or other work on the site, the term "separate contractor" in the Contract Documents in each case shall mean the contractor who executes each separate County Agreement.

The Contractor shall cooperate with the County and separate contractors in arranging the introduction and storage of materials and equipment and execution of their work, and shall cooperate in coordinating connection of its work with theirs as required by the Contract

Documents.

If any part of the Contractor's Work depends for proper execution or results upon the work of the County or any separate contractor, the Contractor shall, prior to proceeding with that portion of the Work, promptly report to the Construction Manager any apparent discrepancies or defects in such other work that render it unsuitable for such proper execution and results **within fourteen (14) days** of discovery of such discrepancy or defect. Failure of the Contractor to so report in writing shall constitute an acceptance of the County's or separate contractor's work as fit and proper to receive the Work, except as to any defects which may subsequently become apparent in such work by others.

Any costs caused by defective or untimely work shall be borne by the party responsible therefore.

Should the Contractor wrongfully cause damage to the work or property of the County or to other work or property on the site, including the work of separate contractors, the Contractor shall promptly remedy such damage at the Contractor's expense.

Should the Contractor be caused damage by any other contractor on the Project, by reason of such other contractor's failure to perform properly his contract with the County, no action shall lie against the County or the Construction Manager inasmuch as the parties to this agreement are the only beneficiaries hereof and there are no third party beneficiaries and neither the County nor the Construction Manager shall have liabilities therefore, but the Contractor may assert his claim for damages solely against such other contractor. The Contractor shall not be excused from performance of the contract by reason of any dispute as to damages with any other contractor or third party.

Where the Work of this Contract shall be performed concurrently in the same areas as other construction work, the Contractor shall coordinate with the Construction Manager and the separate contractors in establishing mutually acceptable schedules and procedures that shall permit all jobs to proceed with minimum interference.

If a dispute arises between the Contractor and separate contractors as to their responsibility for cleaning up, the County may clean up and charge the cost thereof to the Contractor or contractors responsible therefore as the County shall determine to be just.

00700-17 ADMINISTRATION OF CONTRACT

The Program Manager and the Construction Manager shall provide administration services as hereinafter described.

For the administration of this Contract, the Construction Manager shall serve as the County's primary representative during design and construction and until final payment to the Contractor is due. The Construction Manager shall advise and consult with the County and the Program Manager. The primary point of contact for the Contractor shall be the Construction Manager. All correspondence from the Contractor to the County shall be forwarded through the Construction Manager. Likewise, all correspondence and instructions to the Contractor shall be forwarded through the Construction Manager.

The Construction Manager will determine in general that the construction is being performed in accordance with design and engineering requirements, and will endeavor to guard the County against defects and deficiencies in the Work.

The Construction Manager will not be responsible for or have control or charge of construction

means, methods, techniques, sequences, or procedures, or for safety precautions and programs in connection with the Work, nor will it be responsible for the Contractor's failure to carry out the Work in accordance with the Contract Documents. The Construction Manager will not be responsible for or have control or charge over the acts or omissions of the Contractor, its engineers, consultants, subcontractors, or any of their agents or employees, or any other persons performing the Work.

Based on the Construction Manager's observations regarding the Contractor's Applications for Payment, the Construction Manager shall determine the amounts owing to the Contractor, in accordance with the payment terms of the Contract, and shall issue Certificates for Payment in such amount to the County.

The Construction Manager shall render interpretations necessary for the proper execution or progress of the Work. Either party to the Contract may make written requests to the Construction Manager for such interpretations.

Claims, disputes and other matters in question between the Contractor and the County relating to the progress of the Work or the interpretation of the Contract Documents shall be referred to the Construction Manager for interpretation.

All interpretations of the Construction Manager shall be consistent with the intent of and reasonably inferable from the Contract Documents and shall be in writing or in graphic form.

Except, as otherwise provided in this Contract, the Construction Manager shall issue a decision on any disagreement concerning a question of fact arising under this Contract. The Construction Manager shall reduce the decision to writing and mail or otherwise furnish a copy thereof to the Contractor. The decision of the Construction Manager shall be final and conclusive unless, within thirty (30) days from the date of receipt of such copy, the Contractor files a written appeal with the Director of Public Works and mails or otherwise furnishes the Construction Manager a copy of such appeal. The decision of the Director of Public Works or the Director's duly authorized representative for the determination of such appeals shall be final and conclusive. Such final decision shall not be pleaded in any suit involving a question of fact arising under this Contract, provided such is not fraudulent, capricious, arbitrary, so grossly erroneous as necessarily implying bad faith, or is not supported by substantial evidence. In connection with any appeal proceeding under this Article, the Contractor shall be afforded an opportunity to be heard and to offer evidence in support of Contractor's appeal. Pending any final decision of a dispute hereunder, the Contractor shall proceed diligently with the performance of the Contract as directed by the Construction Manager.

The Construction Manager shall have authority to reject Work which does not conform to the Contract Documents. Whenever, in the Construction Manager's opinion, it is considered necessary or advisable for the implementation of the intent of the Contract Documents, the County shall have authority to require special inspection or testing of the Work whether or not such Work be then fabricated, installed or completed. The Contractor shall pay for such special inspection or testing if the Work so inspected or tested is found not to comply with the requirements of the contract; the County shall pay for special inspection and testing if the Work is found to comply with the contract. Neither the Construction Manager's authority to act under this Subparagraph, nor any decision made by the Construction Manager in good faith either to exercise or not to exercise such authority, shall give rise to any duty or responsibility of the Construction Manager to the Contractor, any subcontractor, any of their agents or employees, or any other person performing any of the Work.

The Contractor shall provide such shop drawings, product data, and samples as may be

required by the Construction Manager and/or as required by these Contract Documents.

The Construction Manager shall conduct inspections to determine Substantial Completion and Final Completion, and shall receive and forward to the County for review written warranties and related documents required by the Contract Documents and assembled by the Contractor. The Construction Manager shall approve and issue Certificates for Payment upon compliance with Substantial and Final Completion requirements indicated in General Conditions 00700-81, 00700-82, 00700-84 and 00700-85 of this Agreement.

Except as provided in General Condition 00700-48, the Contractor shall not be relieved from the Contractor's obligations to perform the work in accordance with the contract documents by the activities or duties of the County or any of its officers, employees, or agents, including inspections, tests or approvals, required or performed pursuant to this agreement.

00700-18 RESPONSIBILITY FOR ACTS OF EMPLOYEES

The Contractor shall employ only competent and skilled personnel. The Contractor shall, upon demand from the Construction Manager, immediately remove any superintendent, foreman or workman whom the Construction Manager may consider incompetent or undesirable.

The Contractor shall be responsible to the County for the acts and omissions of the Contractor's employees, subcontractors, and agents as well as any other persons performing work pursuant to this agreement for the Contractor.

00700-19 LABOR, MATERIALS, SUPPLIES, AND EQUIPMENT

Unless otherwise provided in this agreement, the Contractor shall make all arrangements with necessary support agencies and utility companies provide and pay for all labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for the execution and completion of the work.

00700-20 DISCIPLINE ON WORK SITE

The Contractor shall enforce strict discipline and good order among its employees and subcontractors at all times during the performance of the work, to include compliance with the Fulton County Drug Free Work Place Policy. The Contractor shall not employ any subcontractor who is not skilled in the task assigned to it. The Construction Manager may, by written notice, require the Contractor to remove from the work any subcontractor or employee deemed by the Construction Manager to be incompetent.

00700-21 HOURS OF OPERATION

All work at the construction site shall be performed during regular business hours of the Fulton County government, except upon the Construction Manager's prior written consent to other work hours. It is further understood that the Contractor's construction schedule is based on a normal 40 hours, five day work week, less Fulton County-recognized holidays. Contractors work schedule shall not violate Fulton County Noise Ordinance by working hours inconsistent with the Fulton County Noise Ordinance. The County's current noise ordinance or other applicable ordinance shall govern. If the Contractor desires to work in excess of this limit, the Contractor shall submit a written request to the Construction Manager, a minimum of five days prior to the desired work date. The Contractor shall be responsible for any additional expenses incurred by the Owner as a result of the extended work hours, including resident inspection overtime. The cost associated with resident inspector overtime shall be deducted from the Contractor monthly payment request.

00700-22 FAMILIARITY WITH WORK CONDITIONS

The Contractor shall take all steps necessary to ascertain the nature and location of the work and the general and local conditions which may affect the work or the cost thereof. The Contractor's failure to fully acquaint itself with the conditions which may affect the work, including, but not limited to conditions relating to transportation, handling, storage of materials, availability of utilities, labor, water, roads, weather, topographic and subsurface conditions, other separate contracts to be entered into by the County relating to the project which may affect the work of the Contractor, applicable provisions of law, and the character and availability of equipment and facilities necessary prior to and during the performance of the work shall not relieve the Contractor of its responsibilities pursuant to this agreement and shall not constitute a basis for an equitable adjustment of the contract terms. The County reserves the right to perform with its own forces or to contract with other entities for other portions of the project work, in which case the Contractor's responsibility to assure its familiarity with work conditions hereunder shall include all coordination with such other contractors and the County necessary to insure that there is no interference between contractors as will delay or hinder any contractor in its prosecution of work on the project. The County assumes no responsibility for any understandings or representations concerning conditions of the work made by any of its officers, agents, or employees prior to the execution of this agreement.

00700-23 RIGHT OF ENTRY

The County reserves the right to enter the site of the work by such agent, including the Construction Manager, as it may elect for the purpose of inspecting the work or installing such collateral work as the County may desire. The Contractor shall provide safe facilities for such access so that the County and its agents may perform their functions.

00700-24 NOTICES

Any notice, order, instruction, claim or other written communication required pursuant to this agreement shall be deemed to have been delivered or received as follows:

- Upon personal delivery to the Contractor, its authorized representative, or the Construction Manager, on behalf of the County.
- Personal delivery may be accomplished by in-person hand delivery or bona fide overnight express service.

Three (3) days after depositing in the United States mail a certified letter addressed to the Contractor or the Construction Manager for the County. For purposes of mailed notices, the County's mailing address shall be 141 Pryor Street, 6th Floor, Atlanta, Georgia 30303, or as the County shall have otherwise notified the Contractor. The Contractor's mailing address shall be the address stated in its proposal or as it shall have most recently notified the Construction Manager in writing.

00700-25 SAFETY**A. SAFETY, HEALTH AND LOSS PREVENTION**

The Contractor shall be responsible for implementing a comprehensive project-specific safety, health and loss prevention program and employee substance abuse program for this project. All Sub-Contractors must either implement their own program or follow the Contractor's safety, health and loss prevention program and employee substance abuse program.

The Contractor's safety, health and loss prevention program and employee substance abuse program must meet or exceed all governmental regulations (OSHA, EPA, DOT, State, local), and any other specific Fulton County requirements

B. COUNTY'S SAFETY, HEALTH, AND LOSS PREVENTION PROCESS GUIDELINES AND REQUIREMENTS

The County and its agents reserve the right, but assume no duty, to establish and enforce safety, health, and loss prevention guidelines and to make the appropriate changes in the guidelines, for the protection of persons and property and to review the efficiency of all protective measures taken by the Contractor. The Contractor shall comply with all safety, health, and loss prevention process guidelines and requirements and changes made by the County or its agent(s). The issuance of any such guidelines or changes by the County or its agent(s) shall not relieve the Contractor of its duties and responsibilities under this Agreement, and the County or its agent(s) shall not thereby assume, nor be deemed to have assumed, any such duties or responsibilities of the Contractor.

C. COMPLIANCE OF WORK, EQUIPMENT, AND PROCEDURES WITH ALL APPLICABLE LAWS and REGULATIONS

All Work, whether performed by the Contractor or its Sub-Contractors of any tier, or anyone directly or indirectly employed by any of them, and all equipment, appliances, machinery, materials, tools and like items incorporated or used in the Work, shall be in compliance with and conform to:

1. All applicable laws, ordinances, rules, regulations and orders of any public, quasi-public or other governmental authority relating to the safety of persons and their protection against injury, specifically including, but in no event limited to, the Federal Occupational Safety and Health Act of 1970, as amended, and all rules and regulations now or hereafter in effect pursuant to said Act.
2. All rules, regulations, and requirements of the County or its agent(s) and its insurance carriers relating there to. In the event of a conflict or differing requirements the more stringent shall govern.

D. PROTECTION OF THE WORK

1. The Contractor shall, throughout the performance of the Work, maintain adequate and continuous protection of all Work and temporary facilities against loss or damage from whatever cause, shall protect the property of the County and third parties from loss or damage from whatever cause arising out of the performance of the Work, and shall comply with the requirements of the County or its agent(s) and its insurance carriers, and with all applicable laws, codes, rules and regulations, (as same may be amended) with respect to the prevention of loss or damage to property as a result of fire or other hazards.
2. The County or its agent(s) may, but shall not be required to, make periodic inspections of the Project work area. In such event, however, the Contractor shall not be relieved of its aforesaid responsibilities and the County or its agent(s) shall not assume, nor shall it be deemed to have assumed, any responsibility otherwise imposed upon the assurance of Contractor by this Agreement.

E. SAFETY EQUIPMENT

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1. The Contractor shall provide to each worker on the Project work area the proper safety equipment for the duties being performed by that worker and will not permit any worker on the Project work area who fails or refuses to use the same. The County or its agent shall have the right, but not the obligation, to order the removal of a worker from the Project work site for his/her failure to comply with safe practices or substance abuse policies.

F. EMERGENCIES

1. In any emergency affecting the safety of persons or property, or in the event of a claimed violation of any federal or state safety or health law or regulation, arising out of or in any way connected with the Work or its performance, the Contractor shall act immediately to prevent threatened damage, injury or loss and to remedy said violation. Failing such action the County or its agent(s) may immediately take whatever steps it deems necessary including, but not limited to, suspending the Work as provided in this Agreement.
2. The County or its agent(s) may offset any and all costs or expenses of whatever nature, including attorneys' fees, paid or incurred by the County or its agent(s) (whether such fees are for in-house counsel or counsel retained by the County or its agent), in taking the steps authorized by Section 00700-25(G) (1) above against any sums then or thereafter due to the Contractor. The Contractor shall defend, indemnify and hold the County, its officers, agents, and employees harmless against any and all costs or expenses caused by or arising from the exercise by the County of its authority to act in an emergency as set out herein. If the Contractor shall be entitled to any additional compensation or extension of time change order on account of emergency work not due to the fault or neglect of the Contractor or its Sub-Contractors, such additional compensation or extension of time shall be determined in accordance with General Condition 00700-52 and General Condition 00700-87 of this Agreement.

G. SUSPENSION OF THE WORK

1. Should, in the judgment of the County or its agent(s), the Contractor or any Sub-Contractor fail to provide a safe and healthy work place, the County or its agent shall have the right, but not the obligation, to suspend work in the unsafe areas until deficiencies are corrected. All costs of any nature (including, without limitation, overtime pay, liquidated damages or other costs arising out of delays) resulting from the suspension, by whomsoever incurred, shall be borne by the Contractor.
2. Should the Contractor or any Sub-Contractor fail to provide a safe and healthy work place after being formally notified in writing by the County or its agents of such non-compliance, the contract may be terminated following the termination provision of the contract.

H. CONTRACTOR'S INDEMNITY OF THE COUNTY FOR CONTRACTOR'S NON-COMPLIANCE WITH SAFETY PROGRAM

1. The Contractor recognizes that it has sole responsibility to assure its Safety Program is implemented and to assure its construction services are safely provided. The Contractor shall indemnify, defend and hold the County and its agents harmless, from and against any and all liability (whether public or private),

penalties (contractual or otherwise), losses, damages, costs, attorneys' fees, expenses, causes of action, claims or judgments resulting, either in whole or in part, from any failure of the Contractor, its Sub-Contractors of any tier or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, to comply with the safety requirements of the contract. The Contractor shall not be relieved of its responsibilities under the safety requirements of the Contract should the County or its agent(s) act or fail to act pursuant to its rights hereunder.

2. The Contractor shall not raise as a defense to its obligation to indemnify under this Subparagraph I any failure of those indemnified hereunder to assure Contractor operates safely, it being understood and agreed that no such failure shall relieve the Contractor from its obligation to assure safe operations or from its obligation to so indemnify. The Contractor also hereby waives any rights it may have to seek contribution, either directly or indirectly, from those indemnified hereunder.
3. In any and all claims against those indemnified hereunder by any employee of the Contractor, any Sub-Contractor of any tier or anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation under this Subparagraph I shall not be limited in any way as to the amount or type of damages, compensation or benefits payable by or for the Contractor or any Sub-Contractor of any tier under any workers' compensation act, disability benefit or other employee benefit acts.

00700-26 BLASTING AND EXCAVATION

The Contractor acknowledges that it is fully aware of the contents and requirements of O.C.G.A. § 25-9-1 through 25-9-12 concerning blasting and excavation near underground gas pipes and facilities and shall fully comply therewith.

00700-27 HIGH VOLTAGE LINES

The Contractor acknowledges that it is fully aware of the contents and requirements O.C.G.A. § 46-3-30 through 46-3-39 concerning safeguards against contact with high voltage lines, and the Contractor shall fully comply with said provisions.

00700-28 SCAFFOLDING AND STAGING

The Contractor acknowledges that it is the person responsible for employing and directing others to perform labor within the meaning of O.C.G.A. § 34-1-1 and agrees to comply with said provisions.

00700-29 CLEAN-UP

The Contractor shall clean up all refuse, rubbish, scrap materials, and debris caused by its operations to the end that the site of the work shall present a neat, orderly and workmanlike appearance at all times.

00700-30 PROTECTION OF WORK

The Contractor shall be responsible for maintenance and protection of the work, which shall include any County-furnished supplies, material, equipment, until final completion of this agreement and acceptance of the work as defined herein. Any portion of the work suffering injury, damage or loss shall be considered defective and shall be corrected or replaced by the

Contractor without additional cost to the County.

00700-31 REJECTED WORK

The Contractor shall promptly remove from the project all work rejected by the Construction Manager for failure to comply with the contract documents and the Contractor shall promptly replace and re-execute the work in accordance with the contract documents and without expense to the County. The Contractor shall also bear the expense of making good all work of other Contractors destroyed or damaged by such removal or replacement.

00700-32 DEFECTIVE WORK

If the Contractor defaults or neglects to carry out any portion of the work in accordance with the contract documents, and fails within three days after receipt of written notice from the Construction Manager to commence and continue correction of such default or neglect with diligence and promptness, the County may, after three days following receipt by the Contractor of an additional written notice and without prejudice to any other remedy the County may have, make good such deficiencies and complete all or any portion of any work through such means as the County may select, including the use of a separate Contractor. In such case, an appropriate change order shall be issued deducting from the payments then or thereafter due the Contractor the cost of correcting such deficiencies. In the event the payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the County on demand.

The County may, at its option, accept defective or nonconforming work instead of requiring its removal or correction. In such case, a change order shall be issued reducing the price due the contractor to the extent appropriate and equitable. Such contract price adjustment shall be effected whether or not final payment has been made.

00700-33 WARRANTY OF NEW MATERIALS

The Contractor warrants to the County that all materials and equipment furnished under this contract will be new unless otherwise specified, and the Contractor further warrants that all work will be of good quality, free from faults and defects, and in conformance with the contract documents. The warranty set forth in this paragraph shall survive final acceptance of the work.

00700-34 CONTRACTOR'S WARRANTY OF THE WORK

If within one year after the date of issuance of the certificate of final payment pursuant to General Condition 84, or within such longer period of time as may be prescribed by law or by the term of any applicable special warranty required by the contract documents, any of the work is found to be defective or not in accordance with the contract documents, the Contractor shall correct such work promptly after receipt of written notice from the Construction Manager to do so. This obligation shall survive both final payment for the work and termination of the contract.

00700-35 ASSIGNMENT OF MANUFACTURERS' WARRANTIES

Without limiting the responsibility or liability of the Contractor pursuant to this agreement, all warranties given by manufacturers on materials or equipment incorporated in the work are hereby assigned by the Contractor to the County. If requested, the Contractor shall execute formal assignments of said manufacturer's warranties to the County. All such warranties shall be directly enforceable by the County.

00700-36 WARRANTIES IMPLIED BY LAW

The warranties contained in this agreement, as well as those warranties implied by law, shall be deemed cumulative and shall not be deemed alternative or exclusive. No one or more of the warranties contained herein shall be deemed to alter or limit any other.

00700-37 STOP WORK ORDERS

In the event that the Contractor fails to correct defective work as required by the contract documents or fails to carry out the work in accordance with contract documents, the Construction Manager, in writing, may order the Contractor to stop work until the cause for such order has been eliminated. This right of the County to stop work shall not give rise to any duty on the part of the County or the Construction Manager to execute this right for the benefit of the Contractor or for any other person or entity.

00700-38 TERMINATION FOR CAUSE

If the Contractor is adjudged bankrupt, makes a general assignment for the benefit of creditors, suffers the appointment of a receiver on account of its insolvency, fails to supply sufficient properly skilled workers or materials, fails to make prompt payment to subcontractors or materialmen, disregards laws, ordinances, rules, regulations, or orders of any public authority having jurisdiction, fails to diligently prosecute the work, or is otherwise guilty of a material violation of this agreement and fails within seven days after receipt of written notice to commence and continue correction of such default, neglect, or violation with diligence and promptness, the County may, after seven days following receipt by the Contractor of an additional written notice and without prejudice to any other remedy the County may have, terminate the employment of the Contractor and take possession of the site as well as all materials, equipment, tools, construction equipment and machinery thereon. The County may finish the work by whatever methods the County deems expedient. In such case, the Contractor shall not be entitled to receive any further payment until the work is completed. If the unpaid balance of the contract price exceeds the cost of completing the work, such excess shall be paid to the Contractor. If such costs exceed the unpaid balance, the Contractor shall pay the difference to the County on demand. This obligation for payment shall survive the termination of the contract. Termination of this agreement pursuant to this paragraph may result in disqualification of the Contractor from bidding on future County contracts.

00700-39 TERMINATION FOR CONVENIENCE

The County may, at any time upon written notice to the Contractor, terminate the whole or any portion of the work for the convenience of the County. The effective date of the terminations shall be provided in the written notice. Said termination shall be without prejudice to any right or remedy of the County provided herein. In addition, in the event this agreement has been terminated due to the default of the Contractor, and if it is later determined that the Contractor was not in default pursuant to the provisions of this agreement at the time of termination, then such termination shall be considered a termination for convenience pursuant to this paragraph.

00700-40 TERMINATION FOR CONVENIENCE - PAYMENT

If the Contract is terminated for convenience by the Owner as provided in this article, Contractor will be paid compensation for those services actually performed as approved by the Owner or his representative. Partially completed tasks will be compensated for based on a signed statement of completion prepared by the Project Manager and submitted to the Contractor which shall itemize each task element and briefly state what work has been completed and what

work remains to be done. Contractor shall also be paid for reasonable costs for the orderly filing and closing of the project.

00700-41 TERMINATION FOR CONVENIENCE - PAYMENT LIMITATIONS

Except for normal spoilage, and except to the extent that the County shall have otherwise expressly assumed the risk of loss, there shall be excluded from the amounts payable to the Contractor the fair value, as determined by the Construction Manager, of property which is destroyed, lost, stolen or damaged so as to become undeliverable to the County or to another buyer.

00700-42 COST TO CURE

If the County terminates for cause the whole or any part of the work pursuant to this agreement, then the County may procure upon such terms and in such manner as the Construction Manager may deem appropriate, supplies or services similar to those so terminated, and the Contractor shall be liable to the County for any excess costs for such similar supplies or services. The Contractor shall continue the performance of this agreement to the extent not terminated hereunder.

00700-43 ATTORNEY'S FEES

Should the Contractor default pursuant to any of the provisions of this agreement, the Contractor and its surety shall pay to the County such reasonable attorney's fees as the County may expend as a result thereof and all costs, expenses, and filing fees incidental thereto.

00700-44 CONTRACTOR'S RESPONSIBILITIES UPON TERMINATION

After receipt of a notice of termination from the County, and except as otherwise directed by the Construction Manager, the Contractor shall:

1. Stop work under the contract on the date and to the extent specified in the notice of termination;
2. Place no further orders or subcontracts for materials, services or facilities, except as may be necessary for completion of such portion of the work under the agreement as is not terminated;
3. Terminate all orders and subcontracts to the extent that they relate to the performance of work terminated by the notice of termination;
4. Assign to the County in the manner, at the times, and to the extent directed by the Construction Manager, all of the rights, title and interest of the Contractor under the orders and subcontracts so terminated, in which case the County shall have the right, at its discretion, to settle or pay any and all claims arising out of the termination of such orders or subcontracts;
5. Settle all outstanding liabilities and all claims arising out of such termination of orders and subcontracts with the approval or ratification of the Construction Manager, to the extent the Construction Manager may require, which approval or ratification shall be final for all purposes;
6. Transfer title and deliver to the entity or entities designated by the Construction Manager, in the manner, at the times, and to the extent, if any, directed by the

Construction Manager, and to the extent specifically produced or specifically acquired by the Contractor for the performance of such portion of the work as has been terminated:

- a. The fabricated or un-fabricated parts, work, and progress, partially completed supplies, and equipment, materials, parts, tools, dyes, jigs, and other fixtures, completed work, supplies, and other material produced as a part of or acquired in connection with the performance of the work terminated by the notice of termination; and
 - b. The completed or partially completed plans, drawings, information, and other property to the work.
7. Use its best efforts to sell in the manner, at the times, to the extent, and at the prices directed or authorized by the Construction Manager, any property described in Section 6 of this paragraph, provided, however, that the Contractor shall not be required to extend credit to any buyer and further provided that the proceeds of any such transfer or disposition shall be applied in reduction of any payments to be made by the County to the Contractor pursuant to this agreement.
 8. Complete performance of such part of the work as shall not have been terminated by the notice of termination; and
 9. Take such action as may be necessary, or as the Construction Manager may direct, for the protection and preservation of the property related to the agreement which is in the possession of the Contractor and in which the County has or may acquire an interest.

00700-45 RECORDS

The Contractor shall preserve and make available to the County all of its records, books, documents and other evidence bearing on the costs and expenses of the Contractor and any subcontractor pursuant to this agreement upon three days advance notice to the Contractor.

00700-46 DEDUCTIONS

In arriving at any amount due the Contractor pursuant to the terms of this agreement, there shall be deducted all liquidated damages, advance payments made to the Contractor applicable to the termination portion of the contract, the amount of any claim which the County may have against the Contractor, the amount determined

By the Construction Manager to be necessary to protect the County against loss due to outstanding potential liens or claims, and the agreed price of any materials acquired or sold by the Contractor and not otherwise recovered by or credited to the County.

00700-47 REIMBURSEMENT OF THE COUNTY

In the event of termination, the Contractor shall refund to the County any amount paid by the County to the Contractor in excess of the costs properly reimbursable to the Contractor.

00700-48 SUSPENSION, INTERRUPTION, DELAY, DAMAGES

The Contractor shall be entitled to only those damages and that relief from termination by the County as specifically set forth in this agreement. The Construction Manager may issue a

written order requiring the Contractor to suspend, delay or interrupt all or any part of the work for such period of time as the County may determine to be appropriate for the convenience of the County. If the performance of the work is interrupted for an unreasonable period of time by an act of the County or any of its officers, agents, employees, contractors, or consultants in the administration of this agreement, an equitable adjustment shall be made for any increase in the Contractor's costs of performance and any increase in the time required for performance of the work necessarily caused by the unreasonable suspension, delay, or interruption. Any equitable adjustment shall be reduced to writing and shall constitute a modification to this agreement. In no event, however, shall an equitable adjustment be made to the extent that performance of this agreement would have been suspended, delayed or interrupted by any other cause, including the fault or negligence of the Contractor. No claim for an equitable adjustment pursuant to this paragraph shall be permitted before the Contractor shall have notified the Construction Manager in writing of the act or failure to act involved, and no claim shall be allowed unless asserted in writing to the Construction Manager within ten days after the termination of such suspension, delay or interruption.

00700-49 COMMENCEMENT AND DURATION OF WORK

The County may issue a Notice to Proceed at any time within 120 days following execution of the contract by the County. The Contractor shall commence work pursuant to this agreement within ten days of mailing or delivery of written notice to proceed. The Contractor shall diligently prosecute the work to completion within the time specified therefore in the Agreement. The capacity of the Contractor's construction and manufacturing equipment and plan, sequence and method of operation and forces employed, including management and supervisory personnel, shall be such as to insure completion of the work within the time specified in the Agreement.

The Contractor and County hereby agree that the contract time for completion of the work is reasonable taking into consideration the average climatic conditions prevailing in the locality of the work and anticipated work schedules of other contractors whose activities are in conjunction with or may affect the work under this contract.

00700-50 TIME OF THE ESSENCE

All time limits stated in this agreement are of the essence of this contract.

00700-51 IMPACT DAMAGES

Except as specifically provided pursuant to a stop work order or change order, the Contractor shall not be entitled to payment or compensation of any kind from the County for direct or indirect or impact damages including, but not limited to, costs of acceleration arising because of delay, disruption, interference or hindrance from any cause whatsoever whether such delay, disruption, interference or hindrance is reasonable or unreasonable, foreseeable or unforeseeable, or avoidable, provided, however, that this provision shall not preclude the recovery of damages by the Contractor for hindrances or delays due solely to fraud or bad faith on the part of the County, its agents, or employees. The Contractor shall be entitled only to extensions in the time required for performance of the work as specifically provided in the contract.

00700-52 DELAY

The Contractor may be entitled to an extension of the contract time, but not an increase in the contract price or damages, for delays arising from unforeseeable causes beyond the control and

without the fault or negligence of the Contractor or its subcontractors for labor strikes, acts of God, acts of the public enemy, acts of the state, federal or local government in its sovereign capacity, by acts of another separate contractor, or by an act or neglect of the County.

00700-53 INCLEMENT WEATHER

The Contractor shall not be entitled to an extension of the contract time due to normal inclement weather. Unless the Contractor can substantiate to the satisfaction of the Construction Manager that there was greater than normal inclement weather and that such greater than normal inclement weather actually delayed the work, the Contractor shall not be entitled to an extension of time therefore. The following shall be considered the normal inclement weather days for each month listed, and extensions of time shall be granted in increments of not less than one half day only for inclement weather in excess of the days set out.

January	10 days
February	10 days
March	7 days
April	6 days
May	4 days
June	3 days
July	4 days
August	2 days
September	2 days
October	3 days
November	6 days
December	9 days

00700-54 DELAY - NOTICE AND CLAIM

The Contractor shall not receive an extension of time unless a Notice of Delay is filed with the Construction Manager within ten days of the first instance of such delay, disruption, interference or hindrance and a written Statement of the Claim is filed with the Construction Manager within 20 days of the first such instance. In the event that the Contractor fails to comply with this provision, it waives any claim which it may have for an extension of time pursuant to this agreement.

00700-55 STATEMENT OF CLAIM - CONTENTS

The Statement of Claim referenced in Article 00700-54 shall include specific information concerning the nature of the delay, the date of commencement of the delay, the construction activities affected by the delay, the person or organization responsible for the delay, the anticipated extent of the delay, and any recommended action to avoid or minimize the delay.

00700-56 WORK BEHIND SCHEDULE, REMEDY BY CONTRACTOR

If the work actually in place falls behind the currently updated and approved schedule, and it becomes apparent from the current schedule that work will not be completed within the contract time, the Contractor agrees that it will, as necessary, or as directed by the Construction Manager, take action at no additional cost to the County to improve the progress of the work,

including increasing manpower, increasing the number of working hours per shift or shifts per working day, increasing the amount of equipment at the site, and any other measure reasonably required to complete the work in a timely fashion.

00700-57 DILIGENCE

The Contractor's failure to substantially comply with the requirements of the preceding paragraph may be grounds for determination by the County that the Contractor is failing to prosecute the work with such diligence as will insure its completion within the time specified. In such event, the County shall have the right to furnish, from its own forces or by contract, such additional labor and materials as may be required to comply with the schedule after 48 hours written notice to the Contractor, and the Contractor shall be liable for such costs incurred by the County.

00700-58 SET-OFFS

Any monies due to the Contractor pursuant to the preceding paragraph of this agreement may be deducted by the County against monies due from the County to the Contractor.

00700-59 REMEDIES CUMULATIVE

The remedies of the County under Articles 00700-56, 00700-57, and 00700-58 are in addition to and without prejudice to all of the rights and remedies of the County at law, in equity, or contained in this agreement.

00700-60 TITLE TO MATERIALS

No materials or supplies shall be purchased by the Contractor or by any Subcontractor subject to any chattel mortgage or under a conditional sales contract or other agreement by which any interest is retained by the seller. The Contractor hereby warrants that it has good and marketable title to all materials and supplies used by it in the work, and the Contractor further warrants that all materials and supplies shall be free from all liens, claims, or encumbrances at the time of incorporation in the work.

00700-61 INSPECTION OF MATERIALS

All materials and equipment used in the construction of the project shall be subject to adequate inspection and testing in accordance with accepted standards and in accordance with the requirements of the contract documents. Additional tests performed after the rejection of materials or equipment shall be at the Contractor's expense.

00700-62 CONSTRUCTION MANAGER'S PRESENCE DURING TESTING

All tests performed by the Contractor shall be witnessed by the Construction Manager unless the requirement therefore is waived in writing. The Construction Manager may perform additional tests on materials previously tested by the Contractor, and the Contractor shall furnish samples for this purpose as requested.

00700-63 MATERIALS INCORPORATED IN WORK

The Contractor shall furnish all materials and equipment to be incorporated in the work. All such materials or equipment shall be new and of the highest quality available. Manufactured materials and equipment shall be obtained from sources which are currently manufacturing such materials, except as otherwise specifically approved by the Construction Manager.

00700-64 STORAGE OF MATERIALS

Materials and equipment to be incorporated in the work shall be stored in such a manner as to preserve their quality and fitness for the work and to facilitate inspection.

00700-65 PAYROLL REPORTS

The Contractor may be required to furnish payroll reports to the Construction Manager as required by the Owner Controlled Insurance Program.

00700-66 CONTRACTORS' REPRESENTATIVE

Before beginning work, the Contractor shall notify the Construction Manager in writing of one person within its organization who shall have complete authority to supervise the work, receive orders from the Construction Manager, and represent the Contractor in all matters arising pursuant to this agreement. The Contractor shall not remove its representative without first designating in writing a new representative. The Contractor's representative shall normally be present at or about the site of work while the work is in progress. When neither the Contractor nor its representative is present at the work site, the superintendent, foreman, or other of the Contractor' employee in charge of the work shall be an authorized representative of the Contractor.

00700-67 SPECIALTY SUB-CONTRACTORS

The Contractor may utilize the services of specialty subcontractors on those parts of the project which, under normal contracting practices, are performed by specialty subcontractors. The Contractor shall not award more than seventy-five percent of the work to subcontractors.

00700-68 INSPECTION BY THE CONSTRUCTION MANAGER

All work pursuant to this agreement shall be subject to inspection by the Construction Manager for conformity with contract drawings and specifications. The Contractor shall give the Construction Manager reasonable advance notice of operations requiring special inspection of a portion of the work.

00700-69 WORK COVERED PRIOR TO CONSTRUCTION MANAGER'S INSPECTION

In the event that work is covered or completed without the approval of the Construction Manager, and such approval is required by the specifications or required in advance by the Construction Manager, the Contractor shall bear all costs involved in inspection notwithstanding conformance of such portion of the work to the contract drawings and specifications.

00700-70 SCHEDULING OF THE WORK

The work of this contract shall be planned, scheduled, executed, and reported as required by the Contract Documents.

00700-71 PROGRESS ESTIMATES

The Contractor shall prepare a written report for the Construction Manager's approval, on County forms, of the total value of work performed and materials and equipment obtained to the date of submission. Such a report must accompany each request for a progress payment and is subject to review and approval by the Construction Manager. Approval of a progress estimate or tendering of a progress payment shall not be considered an approval or acceptance of any work performed, and all estimates and payments shall be subject to correction in subsequent estimates. Progress payments shall be made for all completed activities and for materials suitably stored on-site.

00700-72 PROGRESS PAYMENTS

Upon approval of each monthly estimate of work performed and materials furnished, the Construction Manager shall approve payment to the Contractor for the estimated value of such work, materials, and equipment, less the amount of all prior payments and any liquidated damages. The Contractor will be paid 100 percent, less retainage, of the cost of materials received and properly stored on-site but not incorporated into the work. Payments for materials or equipment stored on the site shall be conditioned upon submission by the Contractor of bills of sale to establish the County's title to such materials or equipment. The Contractor's request for payment shall provide sufficient detail as to the work completed or materials purchased for which payment is requested to permit meaningful review by the Construction Manager.

00700-73 TIME OF PAYMENT

The Contractor will be paid within 45 days following receipt of an approved Progress Estimate. The Contractor expressly agrees that the payment provisions within this Contract shall supersede the rates of interest, payment periods, and contract and subcontract terms provided for under the Georgia Prompt Pay Act, O.C.G.A. §13-11-1 et seq., and that the rates of interest, payment periods, and contract and subcontract terms provided for under the Prompt Pay Act shall have no application to this Contract. The County shall not be liable for any late payment interest or penalty.

00700-74 RETAINAGE

The County shall retain from each progress payment ten percent of the estimated value of the work performed until the progress payments, including retainage, total 50 percent of the contract price. If a contract includes two or more projects or assignments that have been separately priced and have separate budgets, and the performances of such projects or assignments are not related to or dependent upon the performance of any other, the 50 per cent limit shall be based upon the price for each individual project or assignment. Thereafter, no further retainage shall be withheld so long as the Contractor is making satisfactory progress to insure completion of the work within the time specified therefore. The County may reinstate the ten percent retainage in the event the Construction Manager determines that the Contractor is not making satisfactory progress to complete the work within the time specified in this agreement or in the event that the Construction Manager provides a specific cause for such withholding. The County may also withhold retainage upon substantial completion of the work as provided in O.C.G.A. §13-10-81(c). Interest may be paid upon the retainage in accordance with Georgia law.

00700-75 PAYMENT OF SUBCONTRACTORS

The Contractor shall promptly pay each subcontractor upon the receipt of payment from the County. Such payment shall be made from the amount paid to the Contractor pursuant to the subcontractor's work. The Contractor shall also maintain the records of the percentage retained from payments to the Contractor pursuant to such subcontractor's work. The Contractor shall procure agreements from each subcontractor requiring each subcontractor to pay their subcontractors, agents and employees in a similar manner. The County reserves the right to inquire of any subcontractor, supplier, materialmen, or sub-consultant, the status of any indebtedness of the Contractor. The County further reserves the right to require the Contractor to designate on each instrument of payment exceeding \$400.00 to subcontractors, suppliers, materialmen, and sub-consultants that such payment is on account of the work under this Contract.

00700-76 COUNTY'S RESPONSIBILITIES TO SUBCONTRACTORS

Neither the County nor the Construction Manager shall have any obligation to pay any subcontractor except as otherwise required by law.

00700-77 PROGRESS PAYMENTS - ACCEPTANCE OF WORK

Certification of progress payments, as well as the actual payment thereof, shall not constitute the County's acceptance of work performed pursuant to this agreement.

00700-78 PAYMENTS IN TRUST

All sums paid to the Contractor pursuant to this agreement are hereby declared to constitute trust funds in the hands of the contractor to be applied first to the payment of claims of subcontractors, laborers, and suppliers arising out of the work, to claims for utilities furnished and taxes imposed, and to the payment of premiums on surety and other bonds and on insurance for any other application.

00700-79 JOINT PAYMENTS

The County reserves the right to issue any progress payment or final payment by check jointly to the Contractor and any subcontractor or supplier.

00700-80 RIGHT TO WITHHOLD PAYMENT

The Construction Manager may decline to approve payment and may withhold payment in whole or in part to the extent reasonable and necessary to protect the County against loss due to defective work, probable or actual third party claims, the Contractor's failure to pay subcontractors or materialmen, reasonable evidence that the work will not be completed within the contract time or contract price or damage to the County or any other contractor on the project.

00700-81 CERTIFICATE OF SUBSTANTIAL COMPLETION

Upon the Contractor's submission of a request for a certificate of Substantial Completion, the Construction Manager shall inspect the work and determine whether the work is Substantially Complete. If the work is Substantially Complete, the Construction Manager shall issue a certificate of Substantial Completion of the work which shall establish the date of Substantial Completion, shall state the responsibilities of the County and the Contractor for security, maintenance, heat, utilities, damage to the work and insurance, and shall fix the time within which the Contractor shall complete the items submitted by the Contractor as requiring correction or further work. The certificate of substantial completion of the work shall be submitted to the County and the Contractor for their written acceptance of the responsibilities assigned to them pursuant to such certificate.

If in the sole opinion of the Construction Manager, the work is not substantially complete, the Construction Manager shall notify the Contractor of such, in writing, and outline requirements to be met to achieve Substantial Completion.

00700-82 PAYMENT UPON SUBSTANTIAL COMPLETION

Upon Substantial Completion of the work and upon application by the Contractor and approval by the Construction Manager, the County shall make payment reflecting 100% work completed, less value of work remaining as determined by Construction Manager and any authorized retainage.

00700-83 COMMENCEMENT OF WARRANTIES

Warranties required by this agreement shall commence on the date of final completion of the project as determined under Article 00700-84 unless otherwise provided in the certificate of Substantial Completion.

00700-84 FINAL PAYMENT - WAIVER OF CLAIMS, DISPUTE OF FINAL PAYMENT

The acceptance of the Substantial Completion payment shall constitute a waiver of all claims by the Contractor except those previously made in writing and identified by the Contractor as unsettled at the time of application for payment at Substantial Completion and except for the retainage sums due at final acceptance. Following the Construction Manager's issuance of the certificate of Substantial Completion and the Contractor's completion of the work pursuant to this agreement, the Contractor shall forward to the Construction Manager a written notice that the work is ready for final inspection and acceptance. If after inspection the Construction Manager certifies that the work is complete and issues written notification of such to the Contractor, the Contractor shall forward to the Construction Manager a final application for payment. The Construction Manager shall issue a certificate for payment, which shall approve final payment to the Contractor and shall establish the date of final completion.

In the event the Contractor timely disputes the amount of the final payment, the amount due the Contractor shall be deemed by the Contractor and the County to be an unliquidated sum and no interest shall accrue or be payable on the sum finally determined to be due to the Contractor for any period prior to final determination of such sum, whether such determination be by agreement of the Contractor and the County or by final judgment of the proper court in the event of litigation between the County and the Contractor. The Contractor specifically waives and renounces any and all rights it may have under O.C.G.A. §13-6-13 and agrees that in the event suit is brought by the Contractor against the County for any sum claimed by the Contractor under the Contract or for any extra or additional work, no interest shall be awarded on any sum found to be due from the County to the Contractor in the final judgment entered in such suit. All final judgments shall draw interest at the legal rate, as specified by law.

00700-85 DOCUMENTATION OF COMPLETION OF WORK

Neither the final payment nor the remaining retainage shall become due until the Contractor submits the following documents to the Construction Manager:

- a. An affidavit that all payrolls, bills for materials and equipment, and other indebtedness connected with the work have been paid or otherwise satisfied;
- b. The surety's consent to final payment; and
- c. Any other data reasonably required by the County or Construction Manager establishing payment or satisfaction of all such obligations, including releases, waivers of liens, and documents of satisfaction of debts.

In the event that a subcontractor refuses to furnish a release or waiver as required by the County or Construction Manager, the Contractor may furnish a bond satisfactory to the County to indemnify the County against such loss. In the event that any lien or indebtedness remains unsatisfied after all payments are made, the contractor shall refund to the County all moneys that the County may become compelled to pay in discharging such lien or other indebtedness, including all costs and reasonable attorney's fees.

00700-86 GOVERNING LAW

Each and every provision of this agreement shall be construed in accordance with and governed by Georgia law. The parties acknowledge that this contract is executed in Fulton County, Georgia and that the contract is to be performed in Fulton County, Georgia. Each party hereby consents to the Fulton Superior Court's sole jurisdiction over any dispute which arises as a result of the execution or performance of this agreement, and each party hereby waives any and all objections to venue in the Fulton Superior Court.

00700-87 CHANGES IN THE WORK**A. CHANGE ORDERS**

1. A Change Order is a written order to the Contractor signed to show the approval and the authorization of the County, issued after execution of the Contract, authorizing a change in the Work and/or an adjustment in the Contract Sum or the Contract Time. Change Orders shall be written using forms designated by the County with Contractor providing supporting documentation as required by the Construction Manager. The Contract Sum and the Contract Time may be changed only by approved Change Order pursuant to Fulton County Procedure 800-6. The amount payable by the Change Order is payment in full for all direct and indirect costs incurred and related to the work under said Change Order, including but not limited to delays, imports, acceleration, disruption and extended overhead. A Change Order signed by the Contractor indicates the Contractor's agreement therewith, including the adjustment in either or both of the Contract Sum or the Contract Time.
2. The County, without invalidating the Contract, may order changes in the Work within the general scope of the Contract as defined herein. The time allowed for performance of the work and the contract price to be paid to the Contractor may be adjusted accordingly.
3. The cost or credit to the County resulting from a change in the Work shall be determined in one or more of the following ways:
 - a. By mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation;
 - b. By unit prices stated in the Contract Documents or subsequently agreed upon;
 - c. By cost to be determined in a manner agreed upon by the parties and a mutually acceptable fixed or percentage fee; or
 - d. By the method provided in Subparagraph A4 below.
4. If none of the methods set forth in Subparagraphs 3a, 3b, or 3c above is agreed upon, the Contractor, provided a written order signed by the Construction Manager is received, shall promptly proceed with the Work involved. The cost of such Work shall then be determined by the Construction Manager on basis of the reasonable expenditures and savings of those performing the Work attributable to the change. The cost of the change shall include only the items listed in Subparagraph 5a below, and in the case of either a decrease or an increase in the Contract Sum, an allowance for overhead and profit in accordance with the

schedules set forth in Subparagraphs 5b and 6 below shall be applied to the cost or credit.

- a. In such case, and also under Subparagraph 3a above, the Contractor shall keep and present, in such form as the Construction Manager may prescribe, an itemized accounting of all actual costs expended, together with appropriate supporting data for inclusion in a Change Order.
 - b. All hourly rate charges shall be submitted to the Construction Manager for prior review and approval. All hourly rate charges shall be properly supported as required by the Construction Manager with certified payrolls, or their acceptable equivalent. When authorized to proceed for a given change and actual expenditures have been made prior to execution of a Change Order for the entire change, such actual expenditures may be summarized monthly, and if approved, incorporated into a Change Order. When both additions and credits covering related Work or substitutions are involved in any one change, the allowance for overhead and profit shall be figured on the basis of the net increase or decrease, if any, with respect to that change.
5. In Subparagraphs 3 and 4 above, the items included in "Cost" and "Overhead" shall be based on the following schedule:
- a. Unless otherwise provided in the Contract Documents, "Cost" shall be limited to the following: cost of materials incorporated into the Work, including sales tax and cost of delivery; cost of direct labor (labor cost may include a pro rata share of foreman's account of the change) including social security, old age and unemployment insurance, and fringe benefits required by agreement or custom; workers' or workmen's compensation insurance; rental value of equipment and machinery; costs for preparing Shop Drawings.
 - b. Unless otherwise provided in the Contract Documents, "Overhead" shall include the following: bond and insurance premiums including increase and decreases from change in the Work, supervision, superintendence, construction parking, wages of timekeepers, watchmen and clerks, small tools, consumable supplies, expendables, incidentals, general office expense, the cost of additional reproduction for the Contractor's subcontractors beyond that agreed upon in the Contract Documents, construction parking, any additional costs of craft supervision by the Contractor's or subcontractors' superintendents, and overhead charges which would be customary and expended regardless of the change in the Work due to other overlapping activities which are included as part of the original Contract, and all other expenses not included in "Cost" above.
 - c. In the event that a change is issued by the County which would require the expenditure of substantial amounts of special supervision (beyond the foreman level) by the Contractor, the Contractor may, at the sole direction of the Construction Manager, be allowed to incorporate these charges into the agreement cost for the change.

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6. In Subparagraphs 3 and 4 above, the allowance for overhead and profit combined, included in the total cost or credit to the County, shall be based on the following schedule:
 - a. For the Contractor, for any work performed by the Contractor's own forces, ten (10) percent of the cost.
 - b. For the Contractor, for any work performed by a Contractor's subcontractor, five (5) percent of the amount due the subcontractor.
 - c. For each subcontractor or sub-subcontractor involved, for any work performed by that subcontractor's or sub-subcontractor's own forces, ten (10) percent of the cost.
 - d. For each subcontractor, for work performed by a sub-subcontractor, five (5) percent of the amount due to the sub-subcontractor.
 - e. Cost to which overhead and profit is to be applied shall be determined in accordance with Subparagraph 5 above unless modified otherwise.
 7. In order to facilitate checking of quotations for extras or credits, all proposals or bids, except those so minor that their propriety can be seen by inspection, shall be accompanied by a complete itemization of costs, including labor cost, materials and subcontracts. Labor and materials shall be itemized in the manner defined in Subparagraph 4 above. Where major cost items are subcontracts, they shall be itemized also. In no case shall a change be approved without such itemization.
 8. No payment shall be made for any changes to the contract that is not included in a fully executed Change Order.

B. CONCEALED, UNKNOWN AND DIFFERING CONDITIONS

1. Should concealed conditions be encountered in the performance of the Work below the surface of the ground, or should concealed or unknown conditions in an existing structure be at variance with the conditions indicated by the Contract Documents, or should unknown physical conditions below the surface of the ground or concealed or unknown conditions in an existing structure of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this Contract, be encountered, the Contract Sum and Contract Time shall be equitably adjusted by Change Order upon request by either party made **within twenty (20) days after the first observance** of the conditions. No such request for equitable adjustment shall be valid unless the Contractor complies with this (20) days' notice and Subparagraph C.1. below.
2. The Contractor shall promptly, and before such conditions are disturbed, notify the Construction Manager in writing of any claim of concealed, unknown or differing conditions pursuant to this paragraph. The Construction Manager shall authorize the Engineer to investigate the conditions, and if it is found that such conditions do materially so differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performance of any part of the Work under this Contract, whether or not changed as a result of such conditions, an equitable adjustment shall be recommended to the Construction Manager.

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3. No claim of the Contractor under this clause shall be allowed unless the Contractor has given the notice required in (a) above, prior to disturbing the condition.
 4. No claim by the Contractor for an equitable adjustment shall be allowed if asserted after final payment under this Contract.
 5. Any materially differing site condition as between what is shown on the Drawings and Specifications and actually found on site shall be immediately reported to the Construction Manager in writing prior to the commencement of Work at the site. Failure of the Contractor to notify the Construction Manager in writing of the differing site condition prior to performance of Work at the site shall constitute a waiver of any claim for additional monies. Any Change Order necessitated by the differing site condition shall be processed as provided under "Changes in the Contract".

C. REQUESTS FOR ADDITIONAL COST

1. If the Contractor wishes to request an increase in the Contract Sum, the Contractor shall give the Construction Manager written notice thereof within twenty (20) days after the occurrence of the event, or identification of the conditions, giving rise to such request. This notice shall be given by the Contractor before proceeding to execute the Work, except in an emergency endangering life or property in which case the Contractor shall proceed in accordance with Article 00700-25 and Subparagraph A.4 above. No such request shall be valid unless so made within the twenty (20) days specified above. If the County and the Contractor cannot agree on the amount of the adjustment in the Contract Sum, it shall be determined by the Construction Manager. Any change in the Contract Sum resulting from such claim shall be documented by Change Order.
2. If the Contractor claims that addition cost is involved because of, but not limited to (1) any written interpretation pursuant to General Condition 00700-17 of this Agreement, (2) any order by the County to stop the Work pursuant to Articles 00700-25 and 00700-37 of this Agreement where the Contractor was not at fault, or any such order by the Construction Manager as the County's agent, or (3) any written order for a minor change in the Work issued pursuant to Paragraph D below, the Contractor shall submit a request for an increase in the Contract Sum as provided in Subparagraph C.1 above. No such claim shall be valid unless the Contractor complies with Subparagraph C.1 above and approved by the County pursuant to Change Order Policy 800-6.

D. MINOR CHANGES IN THE WORK

The Construction Manager may order minor changes in the Work not involving an adjustment in the Contract Price, extension of the time allowed for performance of the work and not inconsistent with the intent of the Contract Documents. Such changes shall be effected by a written Change Directive issued by the Construction Manager, and shall be binding on the County and the Contractor. The Contractor shall carry out such written orders promptly.

E. BONDS

If any change order results in an increase in the contract price, the contractor shall increase the penal sum of the performance and payment bonds to equal the increased price.

00700-88 DISAGREEMENT WITH ORDERS FOR CHANGE

Contractor's written acceptance of a Change Order or other order for changes shall constitute his final and binding agreement to the provisions thereof and a waiver of all claims in connection therewith, whether direct or consequential in nature. Should Contractor disagree with any order for changes, he may submit a notice of potential claim to the Construction Manager, at such time as the order is set forth in the form of a Change Order. Disagreement with the provisions of an order for changes shall not relieve Contractor of his obligation under Article 00700-87 of this Agreement.

00700-89 NO WAIVER OF REMEDIES

Exercise by the County of any remedy is not exclusive of any other remedy available to County and shall not constitute a waiver of any such other remedies. Failure of the County to exercise any remedy, including breach of contract remedies, shall not preclude the County from exercising such remedies in similar circumstances in the future.

00700-90 LAND AND RIGHTS-OF-WAY

The owner will provide, as indicated in the Contract Documents and prior to Notice to Proceed, the lands upon which the work is to be done, right-of-way for access thereto, and such other lands which are designated for the use of the Contractor. The Contractor shall confine the Contractor's work and all associated activities to the easements and other areas designated for the Contractor's use. The Contractor shall comply with any limits on construction methods and practices which may be required by easement agreements. If, due to some unforeseen reason, the necessary easements are not obtained, the Contractor shall receive an equitable extension of contract time dependent upon the effect on the critical path of the project schedule or the County may terminate the Contract for its convenience.

00700-91 COORDINATION WITH STATE DEPARTMENT OF TRANSPORTATION

No clearing or grading shall be completed by Contractor within the State Department of Transportation (DOT) area under construction. The Contractor must coordinate his construction scheduling with DOT.

If the Contractor begins work before DOT's completion date, he must obtain the approval of DOT before starting work in the area. The state DOT has the right to stop the Contractor's work the DOT area.

The Contractor shall receive no additional compensation or damages resulting from delay or work stoppage from DOT actions or scheduling.

Contractor shall obtain DOT drawings of the DOT, project area for verification of road geometry, storm drains, etc. from Georgia Department of Transportation or Fulton County. The Contractor is responsible for obtaining any pertinent DOT revisions.

1.1

INDEX

SUBJECT	GENERAL CONDITION ARTICLE #
Administration of Contract	17
Applicable Law	7
Assignment	13
Blasting and Excavation	26
Changes	87, 88
Clean Site	29
Codes	4
Commencement of Work	49
Contract Documents	2
Contractor's Representative	66
Defective Work	31, 32
Definitions	3
Delay	51, 52, 54, 55
Extension of Time	52, 53, 54
Familiarity of Time	1, 22
Final Payment	84
Governing Law	86
High Voltage Lines	27
Inclement Weather	53
Indemnification	15
Inspections	23, 61, 62, 68, 69
Interruption	48
Licenses	8
Liquidated Damages	46, 48
New Materials	33, 63
Notices	24
Payment	72, 73, 75
Payment of Subcontractors	75, 76
Payment Upon Substantial Completion	82, 84

<i>SUBJECT</i>	<i>GENERAL CONDITION ARTICLE #</i>
Payroll Reports	65
Permits	8
Progress Payments	72, 73, 77, 78, 79, 80
Protection of Work	30, 64
Records Inspection	45
Retainage	11, 74
Safety	25
Scaffolding and Staging	28
Scheduling	70
Service of Process	14
Stop Work Order	37
Subcontractors	67, 76
Substantial Completion	81
Suspension	48
Supervision of Work	16, 66
Surety's Responsibility	17
Taxes	9, 10
Termination for Cause	38, 44, 47
Termination for Convenience	39, 40, 41
Time of the Essence	50
Warranties	33, 34, 35, 36
Work Behind Schedule	56

EXHIBIT A
FINAL AFFIDAVIT

TO FULTON COUNTY, GEORGIA

I, _____, hereby certify that all suppliers of materials, equipment and service, subcontractors, mechanic, and laborers employed by _____ or any of his subcontractors in connection with the design and/or construction of _____ at Fulton County have been paid and satisfied in full as of _____, 200____, and that there are no outstanding obligations or claims of any kind for the payment of which Fulton County on the above-named project might be liable, or subject to, in any lawful proceeding at law or in equity.

Signature

Title

Personally appeared before me this _____ day of _____, 20____.
_____, who under Oath deposes and says that he is _____ of the firm of _____, that he has read the above statement and that to the best of his knowledge and belief same is an exact true statement.

Notary Public

My Commission expires

SPECIAL CONDITIONS

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS (EXECUTIVE ORDER 11246) (43 FR 14895)

1. As used in these specifications:
 - a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
 - b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;
 - c. "Employer Identification Number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U. S. Treasury Department Form 941.
 - d. "Minority" includes:
 - i. Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
 - ii. Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
 - iii. Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
 - iv. American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
2. Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U. S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the

EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.

4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7a through p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. The Contractor is expected to make substantially uniform progress toward its goals in each craft during the period specified.
5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.
6. In order for the non-working training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U. S. Department of Labor.
7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:
 - a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
 - b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organization's responses.

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- c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefore, along with whatever additional actions the Contractor may have taken.
 - d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
 - e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minority and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.
 - f. Disseminate the Contractor's EEO policy by providing the notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year, and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
 - g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with onsite supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
 - h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.

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- i. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and test to be used in the selection process.
 - j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's workforce.
 - k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
 - l. Conduct, at least annually, an inventory and evaluation of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
 - m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
 - n. Ensure that all facilities and company activities are non-segregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
 - o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
 - p. Conduct a review, at least annually of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these Specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the

effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.

9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).
10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.
11. The Contractor shall not enter into any subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.
14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

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15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

November 15, 2011

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

SPECIAL PROVISION
Project No. STP-0006-00(275) Fulton County
P.I. No. 0006275

Section 108 – Prosecution and Progress

Retain Section 108.08 as written and add the following:

C. Intermediate Contract Time

1. Special Conditions - Roadway

Failure to reopen the lanes as specified in Special Provision 150.11.A will result in the assessment of Liquidated Damages at the rate of \$1000 per hour or portion of an hour thereof.

Failure to adhere to not working on holidays and the Georgia Tax Free Weekend as specified in Special Provision 150.11.C will result in the assessment of Liquidated Damages at the rate of \$5,000 per calendar day.

All Liquidated Damages specified above are cumulative and are in addition to those which may be assessed in accordance with Sub-section 108.08 for failure to complete the overall Project.

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

**SPECIAL PROVISION
Project No. STP-0006-00(275) Fulton County
P.I. No. 0006275**

Section 150 – Traffic Control

Retain Section 150 as written and add the following:

150.11 SPECIAL CONDITIONS:

A. WORK HOURS:

This project requires the following restricted work hours:
Lane closures will not be permitted during weekdays (Monday through Friday) between the hours of 6:00 a.m. to 9:00 am; and 3:30 to 6:30 pm. Monday through Friday.

Failure by the contractor to reopen the lane by the times specified will result in damages assessed in accordance with Section 108.08 of this contract.

B. TRAFFIC CONTROL PLAN:

A TRAFFIC CONTROL PLAN SHALL BE SUBMITTED TWO (2) WEEKS PRIOR TO ANY WORK FOR REVIEW AND APPROVAL BY THE ENGINEER.

C. HOLIDAY WORK:

No work shall be allowed during the following dates due to holidays:

May 24, 2014 – May 27, 2014 – Memorial Day

July 4, 2014 – 4th of July

August 30, 2014 – September 2, 2014 – Labor Day

November 26, 2014 – November 30, 2014 – Thanksgiving

December 24, 2014 – January 1, 2015 – Christmas and New Years

Lane closures shall not be allowed during the weekends of the Georgia Tax Free Weekends.

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

**SPECIAL PROVISION
Project No. STP-0006-00(275) Fulton County
P.I. No. 0006275**

Section 615 – Jacking or Boring Pipe

Delete Section 615 as written and substitute the following:

Section 615 – Directional Boring

615.1 GENERAL DESCRIPTION

This work shall consist of installing various sizes of conduits by directional boring through whatever materials may be encountered.

615.2 MATERIALS

Use conduit types and sizes that conform to the plans and the following:

MATERIALS	SECTION
Smooth-Wall Coilable Electrical Polyethylene Conduit	923 (SPECIAL PROVISION)

615.3 CONSTRUCTION REQUIREMENTS

When required, suitable pits or trenches shall be excavated for the boring operation and for placing the end joints or termination connectors of conduit. Where necessary, they shall be securely sheeted and braced to prevent caving.

Where directional boring is required under railroads, highways, streets or other facilities, construction shall be done in the manner that will not interfere with the operation of the facility, and shall not weaken the roadbed or structure. No roadway pavement, subgrade, roadbed, paved shoulder, or unpaved median shall be disturbed or excavated as part of the boring or pipe placing operation for any reason without written authorization by the Engineer. In the above areas, any broken or damaged boring rod/stem, boring head (including transmitter/transponder locating heads and cutter heads), couplings (including backreaming, swivel or connector couplings), or any other material that cannot be retrieved as part of the pullback operation shall become the property of the Department and shall be abandoned in place unless otherwise authorized in writing by the Engineer. There shall be no additional payment for abandoned material.

Furnish, for the Engineer's approval, a plan showing the proposed methods for the installation of the horizontal directional bore. The Engineer will review the proposed installation plan within 10 working days of receipt by the Department. No directional boring work will be allowed until the Contractor's submitted plan is approved by the Engineer. This plan shall include the following detail as a minimum:

- List of projects completed by the company performing the boring operation, environment of installation (urban work, river crossing, freeway), diameter of product installation and length of bores. This list of projects must include the name, address and phone number of an owner's representative with knowledge of the performance of the work. Provide at least five previously completed projects of similar scope to the boring work included in this contract.
- List of Contractor's key personnel with a resume of boring experience. The Department will be the sole judge of the qualifications of the foreman and the drill operators.
- Location of all proposed boring entry and exit pits.
- Proposed alignment of bore both horizontal and vertical. The proposed alignment shall maintain a minimum clearance of 18 inches (450 mm) or 2 times the diameter of the final product installation, whichever is greater, at any obstruction. Boring will not be allowed in select backfill areas such as at mechanically stabilized wall locations.
- Proposed diameter of bore. This diameter is the diameter of the final product installation.
- Proposed diameter of pilot borehole.
- Proposed diameter of back reamer. In no case shall the diameter of the back reamer exceed 1.5 times the diameter of the final product installation.
- Proposed depth of cover. The depth of cover shall be equal to or greater than 10 times the diameter of the final product installation. Additionally, the minimum depth of cover allowed in paved shoulders shall be 4 feet (1.22 meters). The minimum depth of cover under travel lanes or otherwise outside of the paved shoulder shall be 8 feet (2.44 meters).
- Evaluation of soil conditions to be encountered. Full soil survey not required. As a minimum, excavate the entrance and exit pits for the proposed bore and determine the nature of the material likely to be encountered. The drilling fluid composition should be based on the evaluation of the materials encountered in the bore pit excavation.
- Proposed composition of drilling fluid.
- Proposed drilling fluid pressure and flow rates.
- Proposed drilling fluid management plan.
- Proposed pull back rate.
- Type of tracking system

Continuously monitor the location and alignment of the pilot drill process to insure compliance with the proposed installation alignment and to verify depth of the bore. Monitoring shall be accomplished by manual plotting based on location and depth readings provided by the locating/tracking system or by computer generated bore logs which map the bore path based on information provided by the locating/tracking system. Readings or plots shall be obtained on every drill rod and provided to the Engineer on a daily basis for as-builts.

Monitoring of the drilling fluids such as the pumping rate, pressures, viscosity and density during the pilot bore, back reaming, and/or pipe installation stages shall be undertaken to ensure adequate removal of soil cuttings and to ensure that the stability of the borehole is maintained. Drilling fluid pressures should not exceed that which can be supported by the overburden (soil) pressure to prevent heaving or a hydraulic fracture of the soils. Excess drilling fluids shall be contained at the entry and exit points until recycled or removed from the site. Ensure that all drilling fluids are disposed of in a manner acceptable to the appropriate local, state and federal regulations. The Contractor's work will be immediately suspended whenever drilling fluids seep to the surface other than in the boring entrance or exit pit. The Contractor must propose a method to prevent further seepage and must remove and dispose of any drilling fluid on the surface prior to resuming the boring operation.

To minimize heaving during pullback, the pullback rate should be determined to maximize the removal of soil cuttings and minimize compaction of the ground surrounding the borehole. The pullback rate shall also minimize over cutting of the borehole during the back reaming operation to ensure that excessive voids are not created resulting in post installation settlement. Any surfaces damaged by the work shall be restored to their preconstruction conditions. All costs associated with the restoration are to be borne by the Contractor.

The distance that the excavation extends beyond the end of the bore will depend upon the character of the excavated material, but shall not exceed 2 feet (0.61 meters) in any case. This distance shall be decreased on instructions from the Engineer if the character of the material being excavated makes it desirable.

Once the directional boring is begun, the operation shall be carried on without interruption, insofar as practical.

The pits or trenches excavated to facilitate boring operations shall be backfilled immediately after the boring has been completed.

The boring shall proceed from a surface staging area provided for the boring equipment and workers. The location of the staging area shall be approved by the Engineer. The holes shall be bored mechanically. Excavated material will be placed near the top of the working pit and disposed of as required. The use of water or other fluids in connection with the boring operation will be permitted only to the extent necessary to lubricate cutting. Jetting will not be permitted.

Excavation will not be paid for separately, but all of the provisions of Section 205 and 208 shall govern.

In unconsolidated soil formations a gel-forming colloidal drilling fluid consisting of at least 10% high grade carefully processed bentonite may be used to consolidate excavated material, seal the walls of the hole, and furnish lubrication for subsequent removal of material and immediate back reaming/installation of conduit. Flow pressure on the drilling fluid shall be continuously monitored and maintained at the minimal pressure required to place the fluid. At no time shall the flow pressure exceed 500 psi (3448 k Pa) and should normally not exceed 200 psi (1379 k Pa). All drilling fluid shall be completely removed from both ends of the bore and properly disposed of at a location provided by the Contractor.

Allowable variation from line and grade established by the Engineer shall be a maximum of 2 percent. Any voids which develop during the installation operation and are determined by the Engineer to be detrimental to the Work, shall be pressure grouted with an approved mix.

Directional boring operations inherently include the risk of encountering under grade obstructions that begin to alter the bore direction. Should an obstruction be encountered, the Engineer shall be immediately notified. Attempts at corrective measures to restore the proper bore alignment should include but are not limited to boring deeper or shallower (if minimum pipe depth can be maintained), moving the boring head to the right or left of the obstruction, to attempt to bore through the obstruction (if other than solid rock). To restore the bore alignment, a minimum of three attempts to the Engineer's satisfaction shall be made at each encountered obstruction with different corrective measures. If a suitable bore alignment cannot be restored, the Engineer may authorize a relocation of the bore. Unsuccessful boring attempts shall be paid in accordance with Sections 615.4 and 615.5 below, using the obstruction location as one end of the measured length of directional boring.

615.4 MEASUREMENT

Directional bores will be measured by the horizontal linear foot (meter) of bore complete in place. The measurement for payment shall be determined by obtaining measurements from the points at which the bore arrives at the required minimum acceptable depth, at the entrance and exit of the boring operation, following the central axis of the bore. Directional boring above the minimum acceptable depth shall not be measured for payment.

615.5 PAYMENT

This work performed and materials furnished as prescribed by this Item, measured as provided under Measurement shall be full compensation for furnishing the bore, conduits and all incidentals necessary to complete the Item. All excavated material resulting from the directional boring operations shall be disposed of or used as directed by the Engineer at no additional cost to the Department.

Payment will be made under:

Item No. 615-1200	Directional Bore (Size)	per Linear Foot (meter)
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**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

**SPECIAL PROVISION
Project No. STP-0006-00(275) Fulton County
P.I. No. 0006275**

Section 923 – Electrical Conduit

Delete Section 923 as written and substitute the following:

Section 923 – Electrical Conduit

923.1 GENERAL DESCRIPTION

This section includes the requirements for metallic, nonmetallic, and flexible electrical conduit.

923.1.01 Related References

A. Standard Specifications

General Provisions 101 through 150.

B. Referenced Documents

National Electrical Code

ANSI C-80.1

ASTM A 90

ASTM F 2160

Federal Specification WW-C-540a

Federal Specification W-C-1094

American National Standards Institute (ANSI) Specification TC 14, Type HW

Underwriters Laboratories (UL) 651

National Electrical Manufacturers Association (NEMA) Standard TC 7,

Type EPEC-B- HDPE

923.2 Materials

923.2.01 Metallic Conduit

A. Requirements

1. Use metallic conduit that meets the requirements of and is used according to the latest edition of the National Electrical Code.
 - a. Check the Plans or Project Proposal for the type of conduit allowed.
 - b. Ensure each section of conduit shows approval by the Underwriter's Laboratories, Inc. (UL).

-
2. Rigid Steel Conduit
Ensure that rigid steel conduit, elbows, and couplings meet ANSI C-80-1.
Use conduit protected by a uniform metallic zinc coating on both the exterior and interior surfaces.
 - a. Coat the conduit and coupling with a minimum coating of 1.24 oz./ft. (378g/m), total of both surfaces.
 - b. Determine the weight of the zinc coating using either ASTM A 90, or, if the Engineer elects, a magnetic or electromagnetic thickness gage to measure the coating thickness.
 3. Rigid Aluminum Conduit
Ensure that rigid aluminum conduit, elbows, and couplings meet Federal Specifications WW-C-540a.

B. Fabrication

General Provisions 101 through 150

C. Acceptance

General Provisions 101 through 150

D. Materials Warranty

General Provisions 101 through 150

923.2.02 Nonmetallic Conduit

A. Requirements

1. Polyvinyl Chloride (PVC) Conduit
Use unplasticized PVC conduit that meets the requirements of UL 651.
 - a. Use Type 1 conduit only when encased in concrete. UL 651 refers to Type 1 as Type EB.
 - b. Use Type II conduit for direct burial. Use Schedule 40 (heavy wall), unplasticized PVC conduit that meets the requirements of Federal Specification W-C-1094, unless otherwise specified.
2. Fiberglass Reinforced Epoxy (FRE) Conduit.
Use FRE conduit and fittings that meet the requirements of NEMA Standard TC 14, Type HW.
3. Smooth-Wall Coilable Electrical Polyethylene Conduit (HDPE).
Use HDPE conduit and fittings that meet the requirements of NEMA Standard TC 7, Type EPEC – B – HDPE (HDPE SDR 13.5).

B. Fabrication

General Provisions 101 through 150

C. Acceptance

General Provisions 101 through 150

D. Materials Warranty

General Provisions 101 through 150

923.2.03 Flexible Conduit

A. Requirements

1. Use flexible conduit with a galvanized steel core and a UV- resistant PVC cover.
2. Use liquid-tight conduit with a continuous copper ground.
3. Use conduit that meets the requirements of Article 351 of the National Electrical Code.

B. Fabrication

General Provisions 101 through 150

C. Acceptance

General Provisions 101 through 150

D. Materials Warranty

General Provisions 101 through 150

SECTION XI: SPECIAL CONDITIONS

SECTION 101 - DEFINITION AND TERMS

Section 101.04 AVAILABLE DAY

Delete the phrase: " at least five hours of"

Section 101.14 COMMISSIONER

Delete as written and substitute the following: the Fulton County Board of Commissioners

Section 101.22 DEPARTMENT

Delete as written and substitute the following: Fulton County Board of Commissioners

Section 101.24 ENGINEER

Delete as written and substitute the following: The Fulton County Director of Public Works, Acting directly or through his duly authorized representative or, as revealed by the context in which used, the entity responsible for the design, engineering and specifications to the plans.

Section 101.31 HOLIDAYS

Substitute: Fulton County for State of Georgia

Delete the following: January 19, Lee's Birthday; 3rd Monday in February, Washington's Birthday; April 26, Confederate Memorial Day; 2nd Monday in October, Columbus Day.

Add the following: Friday following Thanksgiving; Christmas Eve.

Section 101.48 PROPOSAL

The term proposal shall be considered to be synonymous with bid.

Add the following definitions:

Section 101.84 COUNTY

Fulton County Board of Commissioners

Section 101.85 OWNER

Fulton County Board of Commissioners

Section 101.86 CONSTRUCTION MANAGER

The owner's authorized representative, who shall manage the contract on behalf of owner.

SECTION 102 - BIDDING REQUIREMENTS AND CONDITIONS

Section 102.01 PREQUALIFICATION OF BIDDERS

Add the following: This section also applies to Fulton County vendors.

Section 102.03 CONTENTS OF PROPOSAL FORMS

Delete in its entirety and substitute the following:

Bid Submittal

Bids shall clearly indicate the Legal Name, Address, and Telephone Number of the Bidder (Company, Firm, Partnership, and Individual). Bids shall be signed above the Typed or Printed Name and Title of the Signer. The Signer Shall Have the Authority to Bind the Bidder to the Submitted Bid.

One (1) Original Bid Package and Three (3) Copies of the Bid Shall Be Submitted in One Sealed Package, Clearly Marked on the Outside Sealed Bid for "**Design/Build for Fairburn Road from Village Drive to North Utoy Creek Road, Bridge, and Sidewalk Improvements Project**" and addressed to:

Fulton County Department of Purchasing and Contract Compliance
Attn.: Joyce Daniel, Assistant Purchasing Agent
130 Peachtree Street, S.E., Suite 1168
Atlanta, Georgia 30303

If utility work subject to the requirements of O.C.G.A. Section 43-14-8.2 is required for the project, the outside of the Bid shall also be marked, Contractor's Georgia Utility License Number _____.

Information to be Submitted

Failure to submit any required data item may be cause for rejection. Bidders may submit such other data as they deem appropriate. However, voluminous or overly elaborate Bids are discouraged.

Bid Information Shall Include:

Bid Form - Provide a Bid Form for each individual project for which a bid is submitted on the forms provided in the Bid Documents.

Bid Bond - As required by Section 102.08.

Insurance - Refer to Added Section 102.15.

Compliance with Equal Opportunity Requirements - Refer to Section 102.07G and Added Section 107.26.

Project Schedule - Provide a Project Schedule in Accordance with Section 108.03.

Affidavits - Signed, Certified Copies of the Non-Conflict of Interest Certification; Non-Collusion Affidavit of Bidder; and Special Assurances for Utility Contract Work within Public Right-of-Way.

Organization Description - Provide a Short Resume of the Organization. Include Types of Similar Services/products Performed/provided by the Firm.

Project History - Provide a description of experience the firm has had with projects similar to the one described herein. Include contact person, name of project and telephone number, other than members of your firm that can be contacted regarding this project.

Current Workload - Provide the existing workload of personnel to be assigned, showing ability to meet project needs.

Organization - Provide a personnel summary of those individuals anticipated to be assigned to the project and the percentage of project for which each will be responsible.

Financial Capability - Provide certified copies of financial statements for the previous three (3) years. Note: Privately held companies should submit such financial statements

as will allow adequate comparison with the financial data of publicly held companies.

References - Provide a list of references, contacts and telephone numbers that may be contacted regarding firm performance on the form provided.

Section 102.05 EXAMINATION OF PLANS, SPECIFICATIONS, SPECIAL PROVISIONS, AND SITE OF THE WORK

Add the following Paragraphs:

The drawings, specifications, contract documents, and all supplemental documents are considered essential parts of the Contract, and requirements occurring in one are as binding as though occurring in all. They are intended to define, describe, and provide for all work necessary to complete the project in an acceptable manner, ready for use, occupancy, or operation by the Owner in case of conflict between the drawings and specifications, the specifications will govern. Figure dimensions on drawings shall govern over scale dimensions, and detailed drawings shall govern over general drawings.

In cases where products or quantities are omitted from the specifications, the description and quantities shown on the drawings shall govern.

The County will not be responsible for Bidders errors or misjudgment, nor for any information on local conditions or general laws and regulations.

The Bidder shall notify the Owner of the date and time he/she proposes to examine the work site(s). The Bidder shall confine the examination to the specific areas designated for the proposed construction, including easements and public rights-of-way. If, due to some unforeseen reason, the Owner's proceedings for obtaining the proposed construction site have not been completed, the bidder may enter the site only with the express consent of the property owner. The Bidder is solely responsible for any and all damages caused and/or resulting from the site examination.

Section 102.06 PREPARATION OF PROPOSAL

Delete the fourth and fifth paragraph, beginning at the Certificate of Current Capacity.

Add the following:

The Bidder shall comply with the relevant requirements of all Federal State, County or local laws. The Bidder warrants that it has not employed or retained any company or person, other than a bona-fide employee working solely for the Bidder, to solicit or secure this Agreement, and that it has not paid or agreed to pay any company or person, other than a bona-fide employee working solely for the Bidder, any fee, commission, percentage, brokerage fee, gifts, or any consideration, contingent upon or resulting from the award or making of this Agreement. For breach or violation of this warranty, the Owner shall have the right to annul this Agreement without liability, or, at its discretion, to deduct from the Agreement price or consideration, or otherwise recover, the full amount of such fee, commission, percentage, brokerage fee, gift or contingent fee.

Delete the paragraph beginning "All bids in excess of \$500,000" and subsequent paragraphs.

Section 102.07 REJECTION OF PROPOSALS

In the first sentence of introductory paragraph, delete the phrase: If the Certificate of Current Capacity is not executed under Oath and Substantiated,
Add the following paragraphs to 102.07.H:

EQUAL OPPORTUNITY:

Except as otherwise provided, during the performance of this Contract the Contractor agrees as follows:

The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed and treated during employment without regard to race, color, religion, sex, or national origin. Such action shall include, but not be limited to, the following:

Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.

The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this Equal Opportunity Clause. The Contractor will in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

The Contractor will send to each labor union or representative of workers with which Contractor has collective bargaining agreement or other contract or understanding, a notice advising the labor union or worker's representative of the Contractor's commitments under this Equal Opportunity Clause, and shall post copies of the notice in conspicuous places available to employees and applicants for employment. Contractor agrees to comply with all Lawful agreements, if any, which the contractor had made with any association, union, or other entity, with respect to wages, salaries and working conditions, so as not to cause inconvenience, picketing, or work stoppage.

C) The Contractor shall include the provisions of this Equal Opportunity Article in every subcontract or purchase order so that such provisions will be binding upon each subcontractor or vendor. Failure of a successful bidder or contractor to fully disclose all the contractors or subcontractors to be engaged in a given public contract award may result in cancellation of the contract and imposition of a sanction on such violating bidder or contractor for the period of one (1) year.

Section 102.08 PROPOSAL GUARANTY

Delete in its entirety and substitute:

Each bidder must submit with the bid a separate bid bond for each project, each in an amount not less than five (5) percent of the dollar amount bid. Bonds must be written by a licensed Georgia agent in a company licensed to write surety bonds in the State of Georgia, and acceptable to Fulton County. Bonds are to be made out to Fulton County, Georgia.

Attorneys-in-fact who sign bids and/or contract bonds must file a certified and effectively dated copy of their power-of-attorney with each bond.

Bonds shall be written by a surety listed in the Department of the Treasury circular 570; authorized to do business in the State of Georgia; and shall have an underwriting limitation in excess of 100% of the bid amount. The bonds and surety shall be subject to approval by the Attorney for the County.

Each bidder must submit with the bid proof of ability to provide a separate Performance and a Payment **Bond for each project. The Performance bond shall be in an amount equal to One Hundred Percent (100%) of the contract amount and the Payment Bond shall be in an amount equal to One Hundred Ten Percent (110%) of the contract amount.** If awarded the Contract, the successful Contractor will be required to provide a separate Performance and Payment Bonds for each project within seven days after Notice of Award and prior to the start of any work.

Section 102.09 DELIVERY OF PROPOSALS

Delete in its entirety and substitute the following:

Any bids received after the stated time and date (included in this contract) will not be considered. It shall be the sole responsibility of the bidder to have his/her bid delivered to the Fulton County Department of Purchasing and Contract Compliance for receipt on or before the above stated time and date. If a bid is sent by U.S. Mail, the bidder shall be responsible for its timely delivery to the Purchasing and Contract Compliance Department. Bids delayed by mail will not be considered, shall not be opened, and arrangements shall be made for their return at the bidders request and expense.

Any bids may be withdrawn up until the date and time set above for receipt of the bids. Any bid not so withdrawn shall, upon opening, constitute an irrevocable offer for a period of sixty (60) days to furnish Fulton County with the services set forth in the attached Scopes of Work until a bid has been duly submitted and accepted by the Fulton County Board of Commissioners. No guarantee or representation is made herein as to the time between receipt of bid and subsequent Board action. All expenses for making bids to the County are to be borne by the bidder.

Add the following sections:

Section 102.15 INSURANCE REQUIREMENTS

The insurance requirements for this contract are described in this contract document, and the contractor shall comply with, the Owner Controlled Insurance Program, attached to and made a part of this contract.

Any insurance provided by the Contractor pursuant to this bid must be obtained from a company licensed to do business by the Georgia Department of Insurance.

Section 102.16 ADDENDA AND INTERPRETATION

No interpretation of the meaning of the Bid Documents will be made orally to any Bidder. Any request for such interpretation shall be in writing addressed to Fulton County Purchasing Department, Attn: Darlene Banks, Assistant Purchasing Agent, 130 Peachtree Street, S.W., Suite 1168, Atlanta, GA, 30303. Each such interpretation shall be given in writing, separately numbered and dated, and furnished to each interested Bidder. Any request not received in time to accomplish such interpretation and distribution will not be accepted.

Only communications from firms which are in writing and signed will be recognized by the County. The County shall not be responsible for oral interpretations given by any County Employee, representative or others. The issuance of an addendum is the only official method whereby interpretation, clarification, or additional information can be given and upon which the bidder may rely.

If any addenda are issue to this Invitation to Bid, the County will attempt to notify all prospective bidders who have secured same. However, it shall be the responsibility of each bidder, prior to submitting the bid, to contact the Fulton County Department of Purchasing and Contract Compliance at (404) 730-4200 to determine if addenda were issued and to make such addenda a part of the bid.

SECTION 103 - AWARD OF CONTRACT AND EXECUTION OF CONTRACT

Add the following:

Any agreement or contract resulting from the acceptance of a bid shall be on a County approved document form. The county reserves the right to reject any agreement that does not conform to the ITB and any County requirement for agreement and contract. The County reserves the right to modify the agreement resulting from this bid upon the recommendation of the County Attorney.

Section 103.01 CONSIDERATION OF PROPOSALS

Delete in its entirety and substitute the following:

The County reserves the right to accept or reject any and/or all bids, to waive irregularities and technicalities, and to request resubmission. Any sole response that is received on the submission date may or may not be rejected by the County depending

on available competition and timely needs of the County. There is no obligation on the part of the County to award the contract to the lowest bidder and the County reserves the right to award the contract to the lowest responsible bidder submitting a responsive bid with a resulting agreement which is most advantageous and in the best interest of the County. The County shall be the sole judge of the bid and the resulting agreement that is in its best interest and its decision shall be final. The County also reserves the right to make such investigation as it deems necessary to determine the ability of any bidder to perform the work or service requested. Information the County deems necessary to make this determination shall be provided by the bidder. Such information may include, but shall not be limited to, current financial statements by an independent CPA; verification of availability of personnel; and past performance records.

Section 103.02 AWARD OF CONTRACT

Delete in its entirety and substitute the following:

Subject to Section 103.01, the award(s) shall be made by the Board of Commissioners of Fulton County to the lowest reliable bidder(s) as soon as possible after receipt of bids, taking into consideration price and the responsiveness to the requirements set forth in the Request for Bid. Should the Owner require additional time to award a contract, the time may be extended by mutual agreement between the Owner and the successful Contractor. If an Award of Contract has not been made within sixty (60) days from the bid opening date, or within the extension mutually agreed upon, the Bidder may withdraw the bid without further liability on the part of either party.

Section 103.06 EXECUTION AND APPROVAL OF CONTRACT

Delete in its entirety and substitute the following:

The Owner shall furnish the Contractor(s) the conformed copies of Contract Documents within fifteen (15) days of Notice of Award of Contract, for execution by the Contractor(s) and the Contractor's surety.

Within ten (10) days after receipt, the Contractor shall return all documents properly executed by the Contractor and the Contractor's surety.

Attached to each document shall be the power-of-attorney for the person executing the bonds for the surety and certificates of insurance for the required insurance coverage.

Within thirty (30) days after receipt of the documents executed by the Contractor and his surety with the power-of-attorney and certificates of insurance, the Owner shall complete the execution of the documents. Distribution of the completed documents will be made upon completion.

Should the Contractor and/or surety fail to execute the documents within time specified, the Owner shall have the right to proceed on the Bid Bond accompanying the bid. If the Owner fails to execute the documents within the time limit specified, the Contractor shall have the right to withdraw the Contractor's bid without penalty.

Section 103.07 FAILURE TO EXECUTE CONTRACT

Delete in its entirety and substitute the following:

Subject to O.C.G.A. Section 13-10-1 et. seq. (as amended) and O.C.G.A. 36-91-1 et. seq., failure to execute the Contract, Contract Performance and Payment Bonds, or furnish satisfactory proof of carriage of the insurance required within ten (10) days after receipt of copies of the Contract may be just cause for annulment of the award and for the forfeiture of the proposal guaranty or bid bond to Fulton County, not as a penalty, but as liquidation of damages sustained. At the decision of the County, the award may then be made to the next lowest responsible Bidder, or the work may be re-advertised or constructed by County forces. The Contract and Contract bonds shall be executed in quadruplicate.

SECTION 104 - SCOPE OF WORK

Section 104.03 ALTERATIONS OF PLANS OR CHARACTER OF WORK

Retain 104.03.B, 104.03.C, and 104.03.D and delete remainder in its entirety and substitute the following:

CHANGES IN THE WORK:

The Construction Manager as the Owner's Agent may, pursuant to Fulton County Change Order Procedures (800-6), at any time, without notice to the sureties, by written order designated or indicated to be a change order, make any change in the Work within the general scope of the Contract, including but not limited to changes in the following:

In the specifications (including drawings and designs);
In the method or manner of performance of the work;
In the Owner-furnished facilities, equipment, materials, services, or site; or
Directing acceleration in the performance of the work.

Any other written order or oral order (which terms as used in this paragraph (b) shall include direction, instruction, interpretation or determination) from the Construction Manager which causes any such change, shall be treated as a change order under this clause, provided that the Contractor gives the Construction Manager written notice stating the date, circumstances, and source of the order and that the Contractor regards the order as a change order.

Except as herein provided, no other, statement, or conduct of the Construction Manager shall be treated as a change under this clause or entitle the Contractor to an equitable adjustment hereunder. All change orders shall be issued pursuant to the Owner's change order policies and procedures.

If any change under this clause causes an increase in the Contractor's cost of, or the time required for, the performance of any part of the Work under this Contract, whether or not changed by any order, an adjustment may be made and the Contract modified in

writing accordingly; provided, however, that except for claims based on defective plans or specifications, no claim for any change under (b) above shall be allowed for any costs incurred more than five (5) days before the Contractor gives written notice as therein required; and provided further, that in the case of defective plans or specifications for which the Owner is responsible, the adjustment shall include any increased cost reasonably incurred by the Contractor in attempting to comply with such defective plans or specifications. The responsibility of the owner for defective plans or specifications under this Section shall be determined on the same standard of liability as applies to claims for delay under Section 105.13B.

If the Contractor intends to assert a claim for an equitable adjustment under this clause, he must, within thirty (30) days after receipt of a written change order under (a) above or the furnishing of a written notice under (b) above, submit to the Construction Manager a written statement setting forth the general nature and monetary extent of such claim, unless this period is extended by the Construction Manager. The statement of claim hereunder may be included in the notice under (b) above.

The Owner may, when changes are minor or when changes would result in relatively small changes in the Contract Price or Contract Time, elect to postpone the issuance of a Change Order until such time that a single change order of substantial importance can be issued incorporating several changes. In such cases, the Owner shall indicate this intent in a written response to the Contractor's request for a change.

No claim by the Contractor for an adjustment hereunder shall be allowed if asserted after final payment under this Contract.

E. CHANGES IN CONTRACT PRICE:

The Contract Price constitutes the total compensation (subject to authorized adjustment) payable to Contractor for performing the work. All duties, responsibilities, and obligations assigned to or undertaken by the Contractor shall be at Contractor's expense without changes in the Contract Price.

The Contract Price may only be changed by a Change Order (800-6). Any claim for an increase in the Contract Price shall be based on written notice delivered to the Construction Manager within fifteen (15) days of the occurrence of the event giving rise to the claim. Notice of the amount of the claim with supporting data shall be delivered within thirty (30) days of such occurrence unless the Construction Manager allows an additional period of time to ascertain accurate cost data. Any change in the Contract Price resulting from any such claim shall be incorporated in a Change Order.

The value of any work by a Change Order of any claim for an increase or decrease in the Contract Price shall be determined in one of the following methods in the order of precedence listed below:

By estimating the number of unit quantities of each part of the work which is changed (either increased or decreased) and then multiplying the estimated number of such unit quantities by the price Bid (which price shall include the Contractor's overhead and

profit) for a unit quantity thereof.

The Owner shall fix the total lump sum value of the change in the work of the Contractor following submittal within a reasonable time from the Contractor of an estimate of the direct cost of the work, which shall be added to or deducted from the Contract Price (which estimate shall include the Contractor's overhead and profits. If the Contractor does not submit an estimate of cost of the work in a reasonable time or if the Owner and Contractor do not reach agreement on the cost, the Owner may fix the total lump sum value at some reasonable amount. On any lump sum change which involves a net credit to the Owner, no allowance for overhead and profit shall be included.

F. CHANGES IN CONTRACT TIME:

The Contract Time may be changed only by a Change Order (800-6). Changes in the Work described in the subsection above entitled Changes in the Work and any other claim made by the Contractor for a change in the Contract Time shall be evaluated by the Owner with the assistance and input of the Construction Manager and if the conditions warrant, an appropriate adjustment of the Contract Time will be made.

The Owner, when making these evaluations shall take into consideration the amount and scope of Work which has been changed and shall evaluate if the change in Work has affected the critical path activities as currently approved on the Schedule of Record such that it would delay the completion of the Project. If after these evaluations have been made and in the opinion of the Owner, the Contractor is due an extension of time, then it shall be granted by a Change Order and the Owner shall pay the associated cost due the Contractor for direct field costs attributable to such extension.

Section 104.05 MAINTENANCE DURING CONSTRUCTION

Add the following as Section 104.05.H:

H. For this contract, all flaggers must have received training and a certificate upon completion of the training program. All costs for providing certified flaggers will be borne by the Contractor and payment to the Contractor will be included in the overall price bid for the project or in the item for Traffic Control when Traffic Control is included in the Contract as a pay item.

Failure to provide certified flaggers as required above shall be reason for the Construction Manager suspending work involving the flagger(s) and withholding all payments due until the Contractor provides the certified flaggers.

Add the following as Section 104.05.I:

I. The Contractor shall not perform work, move equipment or materials on the traveled way that slows traffic flow between the hours of 7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m. Equipment or materials moved on or across the traveled way at other times shall be done in such a manner as not to unduly interfere with traffic.

In the event that compliance with the objectives stated above is not achieved, the Construction Manager shall close down all operations being performed. The Construction Manager shall also withhold any payments due, when necessary, until the above requirements have been met.

There will be no separate measurement of payment for the work described herein, and all cost, direct or indirect, for complying with this requirement shall be included in the price bid for TRAFFIC CONTROL.

SECTION 105 - CONTROL OF WORK

Section 105.02 PLANS AND WORKING DRAWINGS

Add the following:

SHOP DRAWINGS:

The term "shop drawings" includes as-built drawings, diagrams, layouts, prints, descriptive literature, test reports, samples, calculations, schedules, schematics, material lists and information and items of similar meaning furnished by the Contractor to explain in detail specific portions of the Work required by the Contract.

A. SUBMITTAL REQUIRED:

The Contractor shall furnish to the Construction Manager for review in accordance with the procedure outlined below, as-built drawings and descriptive literature for all manufactured or fabricated products. Performance curves and detailed information on non-manufactured products shall be provided when requested by the Construction Manager. Additional information such as special drawings, schedules, calculations and curves, shall be provided as specifically required in the Contract Documents. All submittals shall become the property of the OWNER with unrestricted rights of publication, disclosure, and use without attribution. Submittals shall include, but are not limited to, the following:

1. Labeling: Labeling equipment shall include:

- a. Job name and job location.
Specification reference section and numbers.
Contract Drawing reference section and numbers.

2. Orderliness of Submittal: Shop drawings shall include in either a typed form or by reference numbers indicated on the submittal all items referenced in the Specification. This list shall follow the sequence of the Specifications.

3. Drawings (as-built): Drawings of equipment and materials shall be job specific and become the OWNER's property. Catalog drawings are not acceptable unless they have been clearly modified for the Project.

B. CONTRACTOR'S REVIEW:

The Contractor shall review and check Drawings and submittals. The Contractor shall indicate Contractor's approval by initials and date, and shall also reference each submittal to the paragraph of the Specifications or the Drawing number where the item appears. If the Drawings or submittal deviate from the Contract Documents, the Contractor shall advise the Construction Manager, in writing, of the deviation and the reasons therefore. The Contractor shall submit a minimum of six (6) copies of all shop drawings to the Construction Manager. All submittal Drawings shall be certified by a Professional Engineer Registered in the State of Georgia. A transmittal form shall accompany each submittal or group of submittal. A separate transmittal sheet shall be used for reference to each numbered paragraph of the Specifications.

ENGINEER'S REVIEW:

All submittals will be reviewed within a reasonable time after receipt, stamped, dated and initialed by the Engineer before they are returned to the Contractor.

1. Acceptable submittals will be marked No Exceptions Taken. A minimum of three (3) copies will be retained by the Engineer for the Engineer's and the Owner's use and the remaining copies will be returned to the Contractor.
2. Submittal requiring minor corrections before the product is acceptable will be marked "Make Corrections Noted". The Contractor may not order, fabricate or ship the items included in the submittal until the indicated corrections are made. Drawings must be resubmitted for review prior to installation or use of products.
3. Submittals marked "Amend and Resubmit" must be revised to reflect required changes and the initial review procedure repeated. The "Rejected - See Remarks" notation is used to indicate products which are not acceptable. Upon return of a submittal so marked, the Contractor shall repeat the initial review procedure utilizing acceptable products.

DRAWINGS FOR CONSTRUCTION:

Drawings or other submittal not bearing the Engineer's No Exceptions Taken notation shall not be issued to subcontractor or utilized for construction purposes. No work shall be done or products installed without a drawing or submittal bearing the No Exceptions Taken notation. The Contractor shall maintain at the job site a complete set of shop drawings bearing the Engineer's stamp.

E. SUBSTITUTIONS:

In the event the Contractor obtains the Engineer's approval for the use of products other than that which is called for in the Contract Documents, the Contractor shall, at Contractor's expense and using methods approved by the Engineer, make any changes to structures, piping and electrical work that may be necessary to accommodations these products.

CONTRACTOR'S RESPONSIBILITY

Use of the "No Exceptions Taken" notation on shop drawings or other submittal is general and shall not relieve the Contractor of the responsibility of furnishing products of the proper dimension, size, quality, quantity, materials and all performance characteristics, to efficiently perform the requirements and intent of the Contract Documents. The Engineer's review shall not relieve the Contractor of responsibility for errors of any kind on the shop drawings. Review is intended only to assure conformance with the design concept of the Project and compliance with the information given in the Contract Documents. The Contractor is responsible for dimensions to be confirmed and correlated at the job site.

The Contractor is also responsible for information that pertains solely to the fabrication processes or to the technique of construction and for the coordination of the work of all trades. Any materially differing site condition as between what is shown on the Drawings and Specifications and actually found on site shall be immediately reported to the Construction Manager in writing prior to the commencement of Work at the site. Failure of the Contractor to notify the Construction Manager in writing of the differing site condition prior to performance of Work at the site shall constitute a waiver of any claim for additional monies. Any Change Order necessitated by the differing site condition shall be processed as provided under "Changes in the Contract."

Any ambiguities or need for clarification of the Drawings or Specifications shall be immediately reported to the Construction Manager in writing. Any such ambiguity or need for clarification shall be handled by the Construction Manager in writing. No clarification of the Drawings and Specifications hereunder by the Construction Manager shall entitle the Contractor to any additional monies unless a Change Order has been processed as provided by Section 104.03 hereof.

Any work done by the Contractor following a discovery of such differing site condition or ambiguity or need for clarification in the Contract Drawings and Specifications prior to a written report to the Construction Manager shall not entitle the Contractor to additional monies and shall be done at the Contractor's risk.

The Construction Manager will furnish the Contractor five (5) copies of the Contract Drawings and the Specifications, which shall remain the OWNER'S property, one copy of which the Contractor shall have available at all times on the Project site.

Section 105.03 CONFORMITY WITH PLANS AND SPECIFICATIONS

Add the following:

Whenever the Engineer's design is based on a specific product of a particular manufacturer, that manufacturer will be shown on the Drawings and/or listed first in the list of approved manufacturers in the Specifications. Substitutions will be considered if the term "Equal To" precedes the names of approved manufacturers in the Specifications.

The Contractor may, after receiving the Notice to Proceed, submit shop drawings on the substitute product for consideration.

Any Bidder intending to furnish substitute products is cautioned to verify that the item being furnished will perform the same functions and have the same capabilities as the item specified. The Bidder should include in the Bid the cost of accessory items which may be required by the substitute product, even though named, and the cost of any architectural, structural, mechanical, piping, electrical or other modifications required to accommodate the substitution.

Approval of the Engineer is dependent on the Engineer's determination that the product offered is essentially equal in function, performance, quality of manufacture, ease of maintenance, reliability, service life and other criteria to that on which the design is based, and will require no major modifications to structures, electrical systems, control systems, or piping systems.

Section 105.11 INSPECTION OF WORK

Add the following:

Unless otherwise provided in this Contract, acceptance by the Owner shall be made as promptly as practicable after completion and inspection of all work required by this Contract, or that portion of the Work that the Construction Manager determines can be accepted separately. Prior to any such inspection, contractor shall provide Record Drawings, certified by a Professional Engineer, registered in the State of Georgia, for that portion of the Work to be inspected. Acceptance shall be final and conclusive except as regards latent defects, fraud, or such gross mistakes as may amount to fraud, or as regards the Owner's rights under any warranty or guarantee.

Section 105.13 CLAIMS FOR ADJUSTMENT AND DISPUTES

Delete 105.13 (A) (3)

SECTION 106 - CONTROL OF MATERIALS

Section 106.01 SOURCE OF SUPPLY AND QUANTITY OF MATERIALS

Add the following:

Unless otherwise specifically provided in this contract, all equipment, material, and articles incorporated in the work covered by this contract are to be new and of the most suitable grade for the purpose intended. Unless otherwise specifically provided in this contract, reference to any equipment, material or article, or patented process by trade name, make, or catalog number, shall be regarded as establishing a standard of quality and shall not be construed as limiting competition. The Contractor may, at his option, use any equipment, material, article, or process, which in the judgment of the Construction Manager, is equal to that named. The Contractor shall furnish to the Construction Manager for his approval the name of the manufacturer, the model number, and other identifying data and information respecting the performance, capacity, nature, and rating of the machinery and other equipment which the Contractor contemplates

incorporating in the work. When required by this contract, or when called for by the Construction Manager, the Contractor shall furnish the Construction Manager for approval full information concerning the material or articles which he contemplates incorporating in the work. When so directed, samples shall be submitted for approval at the Contractor's expense, with all shipping charges prepaid.

Machinery, equipment, material, and articles installed or used without required approval shall be at the risk of subsequent rejection. All work under this contract shall be performed in a skillful and workmanlike manner.

SECTION 107 - LEGAL REGULATIONS AND RESPONSIBILITY TO THE PUBLIC

Section 107.01 LAWS TO BE OBSERVED

Delete in its entirety and substitute the following:

The Contractor's attention is directed to the fact that all applicable Federal, State and County laws, municipal ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the Projects shall apply to the Contract throughout, and they will be deemed to be included in the Contract as though written out in full herein. The Contractor shall keep fully informed of all laws, ordinances and regulations of the Federal, State, County, and municipal governments or authorities in any manner affecting those engaged or employed in the Work or the materials used in the Work or in any way affecting the conduct of the Work and of all orders and decrees of bodies or tribunals having any jurisdiction or authority over same. If any discrepancy or inconsistency should be discovered in these Contract Documents or in the Drawings or Specifications herein referred to, in relation to any such law, ordinance, regulation, order or decree, the Contractor shall herewith report the same in writing to the Owner. The Contractor shall at all times observe and comply with all such existing and future laws, ordinances and regulations, and shall protect and indemnify the Owner and the Owner's agents against the violation of any such law, ordinance, regulation, order or decree, whether by the Contractor or by the Contractor's employees.

Section 107.02 PERMITS AND LICENSES

Add the following:

Permits and licenses of a temporary nature, including building permits, necessary for the prosecution of the Work shall be secured and paid for by the Contractor. Permits, licenses and easements for permanent structures or permanent changes in existing facilities shall be secured and paid for by the Owner, unless otherwise specified. The Contractor will pay all sales, consumer, use and other similar taxes required by the law of the place where the Work is performed. The Contractor is obligated to comply with all local and state sales and use tax laws. The Contractor shall provide the Owner with documentation to assist the Owner in obtaining sales and/or use tax refunds for eligible machinery and equipment used for the primary purpose of reducing or eliminating air or water pollution as provided for in Chapter 48-8-3(36) and (37) of the Official Code of Georgia Annotated. Acceptance of the project as completed will not be made by the Owner until the Contractor has fully complied with this requirement.

Section 107.07 PUBLIC CONVENIENCE AND SAFETY

Add the following:

The Contractor shall install all necessary appurtenances along highways, streets, and roadways in accordance with MUTCD and Fulton County regulations, with reference to construction operations, safety, traffic control, road maintenance, and repair.

PROTECTION OF TRAFFIC:

The contractor shall provide suitable signs, barricades, and lights for protection of traffic in locations where traffic may be endangered by Roadway improvements. They shall be removed as soon as conditions which necessitated their placement has been cleared. No highway, street, or roadway shall be closed without first obtaining permission from the proper authority.

1. The contractor shall provide, erect and maintain all necessary barricades suitable and sufficient lights and other traffic control devices; shall provide qualified flaggers where necessary to direct traffic; shall take all necessary precautions for the protection of the work and the safety of the public. Flaggers shall be certified by attending a Georgia DOT approved flagged training program.
2. Roadway construction traffic devices and their installation shall be in accordance with the current Manual on Uniform Traffic Control Devices for Streets and Highways.
3. Placement and removal of construction traffic control devices shall be coordinated with the DOT and Fulton County a minimum of 48 hours in advance.
4. Installation of construction traffic control devices shall be performed prior to commencement of channel improvement activities. Construction traffic control devices shall be removed immediately following their useful purpose.
5. Traffic control devices used intermittently, such as Flagmen Ahead signs, shall be removed and replaced when needed.
6. Channelization devices shall be positioned preceding an obstruction at a taper length as required by current Manual on Uniform Traffic Control Devices for streets and Highways, appropriate for the speed limit at location. Channel devices shall be patrolled to ensure that they are maintained in the proper position throughout their period of use.

Section 107.13 PROTECTION AND RESTORATION OF PROPERTY AND LANDSCAPE

B. Erosion and Siltation Control

Add the following:

All measures for the control of erosion and siltation must follow the guidelines as specified in the Georgia Erosion and Sedimentation Act of 1975 (as amended).

C: Pollution Add the following:

All measures required to minimize water pollution to affected waters shall be undertaken in the proposed Work. To achieve this end, regard shall be given to the protection of the watershed natural cover, measures instituted to assure minimal siltation and bank erosion from the construction, and other measures taken to reduce water pollution to a minimum. The Contractor must adhere to the Soil Erosion and Sedimentation Act of 1975 (as amended) and the Erosion and Sedimentation Control Ordinance of Fulton County in effect at the time of the issuance of this agreement.

Any area used or involved in the Project disturbed by the Contractor, shall be restored to present or better condition even though such area is outside the limits of that specified for grading, grassing or landscaping.

All chemicals used during Project construction or furnished for Project operation, whether herbicide, pesticide, disinfectant, polymer, reactant or of other classification, must show approval of either EPA or USDA. Use of all such chemicals and disposal of residues shall be in strict conformance with instructions.

Necessary sanitary conveniences for the use of the labor on the Work shall be erected and maintained by the Contractor to comply with all applicable laws and regulations and in accordance with all Safety requirements. Their use shall be strictly enforced.

Should the Contractor so desire, he may build shanties or other structures for housing tools, machinery, and supplies, but they will be permitted only in locations approved by the Construction Manager, and their surroundings shall be maintained at all times in a sanitary and satisfactory manner. On or before the completion of the Work, all such structures shall be removed, together with all rubbish and trash, at the expense of the Contractor.

The Contractor shall restore all easement areas upon completion of the Work and before leaving the Project Work Area. The Owner reserves the right to withhold funds for unsatisfactory clean-up and easement restoration.

F. MAILBOXES

Delete subsection F and substitute the following:

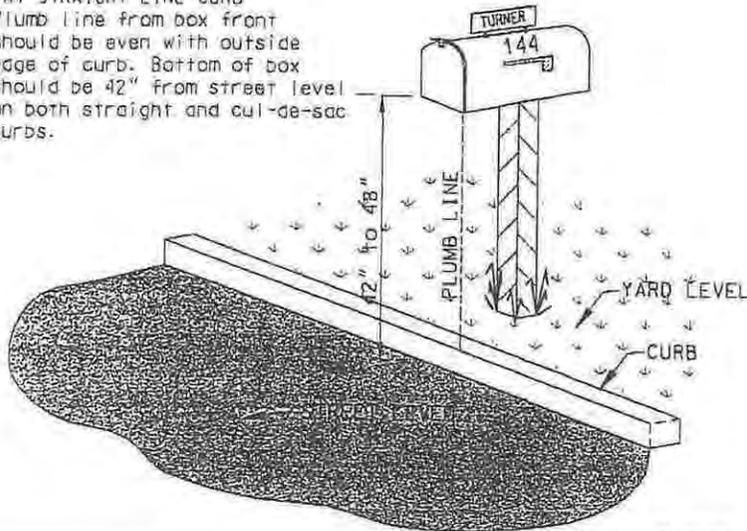
The Contractor shall have responsibility for removing and relocating all mailboxes to an area outside of the construction limits but still accessible for mail deliveries and convenient to the mail carrier and the patron during the entire time of construction. It may be necessary for the Contractor to confer with the Post Office serving the area. The U.S. Postal Service has provided guidelines for the final placement of mailboxes as shown in the following figures.

As soon as construction has progressed to the stage that the mailbox may be erected in its permanent position, the Contractor shall coordinate the erection with the patron and the Post Office serving the area. Any damages to the posts or mailboxes due to the removal and/or relocations by the Contractor will remain the responsibility of the Contractor, all damages posts and/or mailboxes shall be replaced and installed by the Contractor at his expense, excluding mailbox enclosures of masonry construction.

Any cost or costs to the Contractor for removing, relocating or installations of mailboxes as stated above, shall be included in the overall bid price.

(A) STRAIGHT LINE CURB

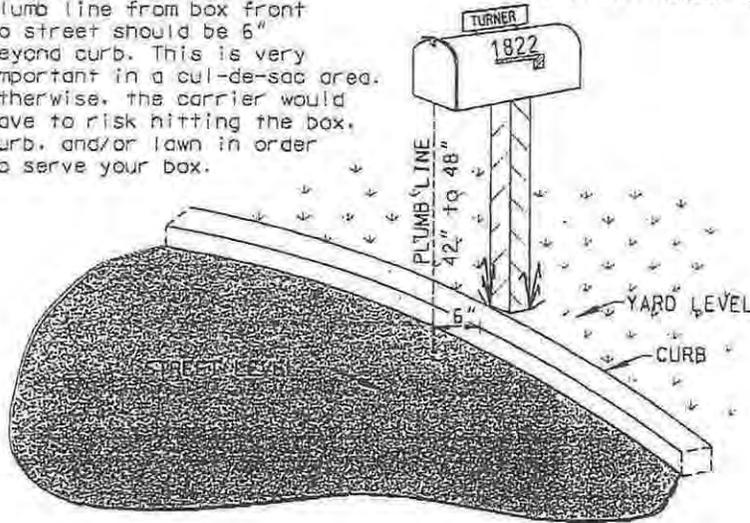
Plumb line from box front should be even with outside edge of curb. Bottom of box should be 42" from street level on both straight and cul-de-sac curbs.



* Street number on all boxes

(B) CUL-DE-SAC CURB

Plumb line from box front to street should be 6" beyond curb. This is very important in a cul-de-sac area. Otherwise, the carrier would have to risk hitting the box, curb, and/or lawn in order to serve your box.



* Street number on all boxes

U.S. POSTAL SERVICE MAILBOX GUIDELINES

The carrier can best serve/approach your box when it is positioned to the right of your driveway (when facing house), unless there is a cement drain on that side or, of course, if you live on a corner and your box and driveway are not on the same street. CAUTION: Be careful not to dig into telephone or power lines when erecting mail box.

Section 107.16 OPENING SECTIONS OF PROJECT TO TRAFFIC

Add the following:

The Owner shall have the right to take possession of or use any completed or partially completed part of the Work. Prior to such possession or use, the Construction Manager shall furnish the Contractor an itemized list of work remaining to be performed or corrected on such portions of the Project as are to be possessed or used by the Owner, provided that failure to list any item of Work shall not relieve the Contractor of the responsibility for compliance with the terms of the Contract. Such possession or use shall not be deemed an acceptance of any Work under the Contract. While the Owner has such possession or use, the Contractor, notwithstanding the provisions of the article of this Contract, entitled, Permits and Responsibilities, shall be relieved of the responsibility for the loss or damage to the Work resulting from the Owner's possession or use. If such prior possession or use by the Owner delays the progress of the Work or causes additional expense to the Contractor, such shall be transmitted to the owner in writing and an equitable adjustment in the Contract Price or the time of completion may be made, and the Contract may be modified in writing accordingly.

Section 107.18 ACQUISITION OF RIGHT OF WAY

Add the following paragraphs:

The Owner will provide, as indicated in the Contract Documents, the lands upon which the Work is to be done, rights-of-way for access thereto, and such other lands which are designated for the use of the Contractor. The Contractor shall confine the Contractor's Work and all associated activities to the easements and other areas designated for the Contractor's use. The Contractor shall comply with any limits on construction methods and practices which may be required by easement agreements. If, due to some unforeseen reason, the necessary easements are not obtained as scheduled, the Contractor may receive an extension of Contract Time, dependent upon the effect on the critical path activities of the project schedule.

Notwithstanding any provision to the contrary herein, should the owner fail to obtain the necessary rights-of-way contemplated in the scope of work, and should the work to be performed be stopped, delayed and/or enjoined by a court-of-law or otherwise, either party may terminate this agreement pursuant to the Termination for Convenience Clause and such clause shall govern in all respects any termination stemming from the Owners failure to obtain the necessary rights-of-way contemplated in the scope of work.

The Contractor shall inspect all easements and rights-of-way to insure that the County has obtained all land and rights-of-way as shown in the plans necessary for completion of the Work to be performed pursuant to the Contract Documents. The Contractor shall comply with all stipulations contained in easements acquired by the Department.

SECTION 107.20 NO WAIVER OF LEGAL RIGHTS

Add the words AND WARRANTY to the title of this section.

Add the following:

WARRANTY:

The Contractor shall warrant for a period of one year from the date of the final acceptance that the completed project is free from all defects due to faulty products or workmanship and the Contractor shall promptly make such corrections as may be necessary by reason of such defects. The Owner will give notice of observed defects with reasonable promptness. In the event that the Contractor should fail to make such repairs, adjustments, or other work that may be made necessary by such defects, the Owner may do so and charge the Contractor the cost thereby incurred. The Performance Bond shall remain in full force and effect through the warranty period.

Section 107.21 CONTRACTOR'S RESPONSIBILITY FOR UTILITY PROPERTY AND SERVICES

A. Overhead or Underground Utility Facilities

Add the following:

The Contractor is responsible for the location of above and below ground utilities and structures which may be affected by the Work.

B. Utility Facility Owners Add the following:

The contractor, as required by Georgia Law (Code Section 25-9-1 through 25-9-13), shall call the Utilities Protection Center (UPC) at 325-5000 or 1-800-282-7411, and all utilities, agencies or departments that own/or operate utilities in the vicinity of the construction work site to verify the location of existing utilities.

The following steps shall be exercised to avoid interruption of existing utility service:

Provide the required notice to the utility owners and allow them to locate their facilities according to the Georgia Law.

Expose the facility to verify its true location and grade in advance of roadway improvement. Repair or have repaired, any damage to utilities resulting from locating or exposing their true location.

Avoid utility damage and interruption by protecting it with means or methods recommended by the utility owner.

C. Cooperation With Facility Owners Add the following:

The Contractor shall so schedule the Work that the operation of any existing facility, including water mains and sewers, will not be interrupted. In the event certain tie-ins or other operations make it absolutely necessary to interrupt the operation of existing facilities, the Owner will be notified and such work will be done at a time and in a manner acceptable to the Construction Manager. Bypasses of untreated or partially treated wastes which are absolutely necessary to complete the Work shall be shown on the Construction Progress Schedule. The Construction Manager shall be notified in writing

of the date and time, and duration of such bypasses at least ten (10) days in advance.

The Contractor shall protect from damage all existing improvements or utilities at or in proximity to the site of the Work, and shall repair or restore any damage to such facilities resulting from failure to exercise reasonable care, in the performance of work. If the Contractor fails or refuses to repair any such damage promptly, the Owner may have the Work performed and charges the cost thereof to the Contractor.

Prior to implementing Roadway Improvements, the Contractor shall verify all existing utilities true vertical and horizontal location within the vicinity. In order to avoid conflicts between existing and proposed facilities or utilities, the Contractor shall take whatever means may be necessary to protect existing facilities or utilities during performance of Roadway Improvements, as approved by the Engineer/Construction Manager. No payment will be made for the relocation of existing utilities or for any work associated with the protection of existing facilities or utilities unless contract pay items are included. The owner and/or operators of private or public utilities shall have access to such utilities at all times for the installation, maintenance, adjustment, repair and operation of said utilities. No extra compensation will be allowed because of the delay or interference caused by such work.

The plans show the approximate location of certain underground utilities, gas mains, water lines, drains, telephone cables, and structures according to information presented and available in the records. The determination of the exact location and other data on all existing facilities, their proper protection, maintenance and support during the prosecution of the work, is the express responsibility of the Contractor. Wherever existing utilities are encountered which conflict in actual position and location with the proposed work, the Contractor shall promptly notify the utility owner and Construction Manager.

Temporary support, beams or bridging for utilities shall be left in place during backfill operations unless otherwise directed by the Construction Manager.

All costs in connection with supporting, protecting, relocating, removal repair of damage, restoration of other ground structures, whether or not they are shown on the plans, not borne by the owner or owners of the utilities shall be borne by the Contractor.

No separate payment will be made for any work performed as herein above specified unless otherwise stated in the bid as a separate payment item. All costs in connection therewith shall be included in the contract price for the item to which the work pertains.

The Contractor shall be solely and directly responsible to the owner and/or other operator of such utility properties for any damage, injury, expense, loss, inconvenience or delay, or for any suits, actions, claims or any character brought on account of any damages which may result from the carrying out of the work.

The utilities shown on the plans are for the Contractor's benefit and are to be considered as approximate in location and are not all inclusive or exact. It is the Contractor's responsibility to contact all utilities and have them locate their lines in the field. Utilities shall be contacted a minimum of two (2) working days prior to commencing of

construction.

It will be the Contractor's responsibility to conform to all the requirements of the specifications as they relate to cooperation with utility owners and the protection of utility installations that exist on the Project.

The Contractor will not be paid for any delays or extra expense caused by utility facilities, obstructions, or any other items not being removed or relocated to clear construction in advance of his work. It shall be the responsibility of the Contractor to coordinate his work with any work to be performed by others in any right-of-way clearance and arrange a schedule of operations that will allow for completion of the Project without undue delay.

Information concerning utility facilities known to exist within the Project limits is shown on the contract drawings.

Add the following SECTION 107.26 EQUAL OPPORTUNITY

Except as otherwise provided, during the performance of this Contract the Contractor agrees as follows:

The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin.

The Contractor will take affirmative action to ensure that applications are employed and treated during employment without regard to race, color, religion, sex, or national origin. Such action shall include but not be limited to, the following.

Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.

The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this Equal Opportunity Clause.

The Contractor will in all solicitations or advertisement for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

The Contractor will send to each labor union or representative of workers with which Contractor has collective bargaining agreements or other contracts or understanding, a notice advising the labor union or worker's representative of the Contractor's commitments under this Equal Opportunity Clause, and shall post copies of the notice in conspicuous places available to employees and applicants for employment. Contractor agrees to comply with all Lawful agreements, if any, which the contractor had made with any association, union, or other entity, with respect to wages, salaries, and working conditions so as not to cause inconvenience, picketing, or work stoppage.

The Contractor shall include the provisions of this Equal Opportunity article in every subcontract or purchase order so that such provisions will be binding upon each

subcontractor or vendor.

Failure of a successful bidder or contractor to fully disclose all the contractors or subcontractors to be engaged in a given public contract award may result in cancellation of the contract and imposition of a sanction on such violating bidder or contractor for the period of one (1) year.

SECTION 108 - PROSECUTION AND PROGRESS

Section 108.01 SUBLETTING OF CONTRACT

Delete the following:

All that remaining portion of the fifth paragraph starting with the sentence beginning: Except for certain items exempted.

Add the following:

In accordance with the provisions stated above, the following items are designated Specialty Items whenever they appear in the Contract:

- All Grassing Items
- All Fencing Items
- All Highway Lighting Items
- All Highway Sign Items
- All Guardrail Items (Except Bridge Handrail)
- All Utility Items
- All Landscaping Items
- All Pressure Grouting, Slab Removal and Replacement
- All Permanent Traffic Markings
- All Signal Systems
- Construction Layout

If the Contractor elects to sublet a Specialty Item, no work on any such Specialty Items shall be begun without prior approval of the necessary subcontract.

The Contractor's cost for Construction Layout shall be fully documented prior to deduction from the original Contract Amount.

Section 108.02 NOTICE TO PROCEED:

Retain as written except as follows:

Delete the second paragraph which begins "Within 10 calendar days..." and substitute the following:

Within 10 available days after the Notice to Proceed has been issued, the Contractor shall begin the work. Contract Time charges for available day projects will begin on the date the Contractor starts to work, or 10 days after the Notice to Proceed, whichever comes first. For Completion Date Projects Contracts Time charges shall begin on the day after the Notice to Proceed.

proposed dates of commencement and completion of each of the various subdivisions of work required under the Contract Documents and the anticipated amount of each monthly payment that will become due to the Contractor in accordance with the Project Schedule. This Schedule shall be in a bar chart or critical path method format and in sufficient detail to assure adequate planning and execution of the work and to assist the Engineer in appraising the reasonableness of the proposed Schedule and evaluating progress of the work.

The Progress Schedule must be activity oriented and not event oriented, except for determination of milestones. The Schedule shall be prepared under the supervision of the Contractors' regular management personnel to show the order and interdependence of activities and the sequence in which the work is to be accomplished as planned by the Contractor. The selection and number of activities shall be subject to the Engineer's approval.

Contractor shall submit at monthly intervals an updated Progress Schedule showing the status of completed and remaining work. The monthly update shall indicate the date upon which activities were started and completed. The time estimated to complete partially completed activities shall be indicated. Changes in contract work shall be incorporated into the Progress Schedule no later than the first monthly update following the date that a written directive is issued.

In addition to the updated Schedule, the monthly update shall include a narrative report which shall include a description of current and anticipated problem areas, delaying factors and their impact, and an explanation of corrective actions taken or proposed.

The complete Progress Schedule, including a schedule of anticipated earnings, shall be submitted within thirty (30) calendar days after receipt of Notice to Proceed. The approved Progress Schedule shall then be the Schedule to be used by the Contractor for planning, organizing, and directing the work, and for reporting progress. If the Contractor thereafter desires to make changes in the Schedule, he shall notify the Engineer in writing stating the reasons for the change. If the Engineer considers these changes to be of a major nature, he may require the Contractor to revise and submit for approval, without additional cost to the County, all of the affected portions of the Progress Schedule to show the effect of the entire project.

Failure to submit an updated schedule with the monthly payment request will be cause for rejection of the payment request. If, in the opinion of the Engineer, the Contractor falls behind in his schedule or will not be able to complete the project within the time limits, he may require the Contractor to revise his schedule and put additional equipment and/or manpower on the job as so ordered at no additional cost to the County.

Section 108.06 TEMPORARY SUSPENSION OF WORK

Add the following paragraphs:

"In the event of temporary suspension of work, or during inclement weather, or whenever the Engineer shall direct, the Contractor will, and will cause his subcontractors to protect carefully his and their work and materials against damage or injury from the weather. If, in the opinion of the Engineer, any work or materials shall have been damaged or injured

by reason of failure on the part of the Contractor or any of his subcontractors to protect his work, such materials shall be removed and replaced at the expense of the Contractor.

Should the County be prevented or enjoined from proceeding with work either before or after the start of construction by reason of any litigation or by any reason beyond the control of the County, the Contractor shall not be entitled to make or assert claim for damage by reason of said delay; but time for completion of the work will be extended to such reasonable time as the County may determine will compensate for time lost by such delay with such determination to be set forth in writing."

SECTION 108.07 DETERMINATION OF CONTRACT TIME

Add the following:

It is the intent of this Special Provision to require the Contractor to have the road open to two-way traffic as soon as possible. The date of beginning and times for the completion of the work are therefore essential conditions of the Contract Documents.

SECTION 108.08 LIQUIDATED DAMAGES

Add the following:

At the County's convenience and not to it prejudice the County may provide written notice of the commencement of the assessment of liquidated damages.

SECTION 109 - MEASUREMENT AND PAYMENT

Section 109.07 PARTIAL PAYMENTS

Delete section 109.07.A and Substitute the following

As long as the gross value of completed work is less than 50% of the total Contract amount, or if the Contractor is not maintaining his construction schedule to the satisfaction of the Engineer, the County shall retain 10% of the gross value of the completed work as indicated by the current estimate certified by the Engineer for payment.

After the gross value of completed work becomes equal to or exceeds 50% of the total Contract amount within a time period satisfactory to the County, then the total amount to be retained shall be 5% of the gross value of the completed work as indicated by current estimates, until all pay items are substantially completed. When time charges have ceased as defined in 108.07G and pending final acceptance and final payment, the amount retained may be further reduced at the discretion of the Engineer, subject to agreement by the Contractor and his Surety.

Section 109.07.G: Delete as written and substitute the following:

Interest will be paid upon funds retained pursuant to Section 109.07.A. in accordance with Georgia Law.

Delete Paragraph 109.07.H and Substitute the Following:

The Contractor shall promptly pay each subcontractor upon the receipt of payment from the County. Such payment shall be made from the amount paid to the Contractor pursuant to the subcontractor's work. The Contractor shall also maintain the records of the percentage retained from payments to the Contractor pursuant to such subcontractor's work. The Contractor shall procure agreements from each subcontractor requiring each subcontractor to pay their subcontractors, agents and employees in a similar manner. The County reserves the right to inquire of any subcontractor, supplier, materialman, or subcontractor, the status of any indebtedness of the Contractor. The County further reserves the right to require the contractor to designate on each instrument of payment exceeding \$400.00 to subcontractors, suppliers, materialmen, and subcontractors that such payment is on account of the work under this Contract. Neither the County nor the Contract or Program Managers shall have any obligation to pay any subcontractor except as otherwise required by law.

Add as Section 109.07.I

I. INVOICES AND REQUESTS FOR PAYMENT: Invoices and requests for payment shall describe in sufficient detail to permit meaningful review by the Contract Manager the work completed for which the invoice or request is being submitted and shall not contain any provision adding to or altering the terms of the contract with regard to timeliness of payment or any other term of the contract. Any invoice containing any such provision shall be denied and is of no force or effect whether or not executed, accepted, or paid by the County. The Contractor shall re-submit the invoice or request for payment in a form consistent with the terms of the contract.

Section 109.08 FINAL PAYMENT

Delete in its entirety: Replace with the following:

Final Payment: Upon completion by the Contractor of the Work, including the receipt of any final written submissions of the Contractor, including drawings, and documentation of completion of punch list items, and the approval thereof by the COUNTY, the COUNTY will pay the Contractor a sum equal to 100 percent (100%) of the compensation set forth herein, less any assessed liquidated damages and the total of all previous partial payments, paid or in the process of payment.

Invoices and requests for payment shall not contain any provision adding to or altering the terms of the contract with regard to timeliness of payment or any other term of the contract. Any invoice containing any such provision shall be denied and is of no force or effect whether or not executed, accepted, or paid by the County. The Contractor shall re-submit the invoice or request for payment in a form consistent with the terms of the contract.

Final payment will be acknowledged by the Contractor on a form provided by the County, which form the Contractor will execute and return to the County. The County shall send such form to the Contractor by certified mail, return receipt requested. The return receipt card shall be conclusive evidence of tender by the County of the final payment. The Contractor agrees that acceptance of this final payment shall be in full

and final settlement of all claims arising against the County or the Contract Manager for work done, materials furnished, costs incurred, or otherwise arising out of this Agreement and shall release the County from any and all further claims of whatever nature, whether known or unknown for and on account of said Agreement, and for any and all work done, and labor and materials furnished, in connection with same. The failure of the Contractor within 120 days of tender of the final payment to execute and return the release form or to notify the County of any dispute of the final payment shall operate as an acceptance of the County's tender as correct and shall operate as and be a release to the County and its Construction Manager from all claims of liability under this contract and for any act or neglect of the County or the Construction Manager.

In the event the Contractor timely disputes the amount of the final payment as stated therein, the amount due the Contractor shall be deemed by the Contractor and the County to be an unliquidated sum and no interest shall accrue or be payable on the sum finally determined to be due to the Contractor for any period prior to final determination of such sum, whether such determination be by agreement of the Contractor and the County or by final judgment of the proper court in the event of litigation between the County and the Contractor. The Contractor specifically waives and renounces any and all rights it may have under Section 13-6-13 of the Official Code of Georgia and agrees that in the event suit is brought by the Contractor against the County for any sum claimed by the Contractor under the Contract or for any extra or additional work, no interest shall be awarded on any sum found to be due from the County to the Contractor in the final judgment entered in such suit. All final judgments shall draw interest at the legal rate, as specified by law. Also, the Contractor agrees that notwithstanding any provision or provisions of Chapter 11 of Title 13 of the Official Code of Georgia that the provisions of this contract control as to when and how the Contractor shall be paid for the Work. Further, the Contractor waive and renounces any and all rights it may have under Chapter 11 of Title 13 of the Official Code of Georgia.

The Contractor expressly agrees that the payment provisions within this Contract shall supersede the rates of interest, payment periods, and contract and subcontract terms provided for under the Georgia Prompt Pay Act, O.C.G.A. Section 13-11-1 et seq., and that the rates of interest, payment periods, and contract and subcontract terms provided for under the Prompt Pay Act shall have no application to this Contract and are hereby waived. The County shall not be liable for any late payment interest or penalty.

SECTION 150 TRAFFIC CONTROL

Add the following:

150.01 DESCRIPTION: This section as supplemented by the Plans, Specifications, and Manual on Uniform Traffic Control Devices (MUTCD) shall be considered the Traffic Control Plan. Activities shall consist of furnishing, installing, maintaining, and removing necessary traffic signs, barricades, lights, signals, cones, pavement markings, and other traffic control devices and shall include flagging and other means for guidance and protection of vehicular and pedestrian traffic through the Work Zone. This Work shall include both maintaining existing devices (excluding Traffic Signals) and installing additional devices as necessary in construction work zones.

For this project, all references in the Standard Construction Details listed below to Type I

Barricades, Type II Barricades, Types "A" flashing-lights and Type "C" steady burn lights are deleted, except that Type "C" lights will be required for tapers in nighttime lane closures.

For this project, all references to flags on construction warning signs in the Standard Construction Details listed below are deleted except for signs which are mounted at less than seven feet (7') in height (portable signs).

Standard Construction Details

Lane Closure on Two Lane Highway

Lane Closure on Multi-Lane Undivided Highway

Traffic Control General Notes, Standard Legend, Miscellaneous Details

In addition, G20-1, G20-2A, and W20-1 signs shown on Georgia Standards 9102, 9106, 9107, and applicable Standard Construction Details shall conform to Part VI of the MUTCD, 2003 Edition.

When any provisions of this Specification or the Plans do not meet the minimum requirements of the MUTCD, the MUTCD shall govern. The 2003 Edition of the MUTCD shall be in effect for the duration of the project.

The Contractor shall designate, prior to beginning any work, a Work Site Traffic Supervisor who shall be responsible for initiating, installing and maintaining all traffic control devices as described in Sub-Section 150.01. The Work Site Traffic Supervisor shall have to least one year experience directly related to work site traffic control in a supervisory or responsible capacity and shall have been certified by the American Traffic Services Association Work Site Traffic Supervisor Certification Program or an equal approved by Georgia Department of Transportation.

The Work Site Traffic Supervisor shall have a copy of the MUTCD on the job site. Copies of the current MUTCD may be obtained from:

U.S. Government Printing Office
Superintendent of Documents
Mail Stop: SSOP
Washington, D.C. 20402-9328

The Work Site Traffic Supervisor or his approved responsible representative shall be available on a twenty-four hour basis with access to all equipment and materials needed to maintain traffic control and handle traffic related situations. The Work Site Traffic Supervisor shall ensure that routine deficiencies are corrected within a twenty-four hour period.

The Work Site Traffic Supervisor shall be available on the site within forty-five (45) minutes after notification of an emergency situation, prepared to positively respond to repair the roadway or to provide alternate traffic arrangements. Failure to actively pursue corrective measures as directed will result in a payment deduction in accordance with Sub-Section 150.08 from monies due or to become due the contractor. In addition, in emergency situations, Standard Specification Sub-Section 105.15 is amended to delete the requirement of forty-eight hours prior to the Engineer proceeding to maintain the Work operations.

The Work Site Traffic Supervisor shall verify daily that the Portable Variable Message Signs are in good operating condition and are displaying the appropriate messages.

To ensure that the provisions of this Sub-Section are adequately adhered to, the Work Site Traffic Supervisor shall submit on a weekly basis a completed Traffic Control Report Form for the Project Engineer's review and comment.

Failure to comply with the provisions of this modification of Section 150 shall be grounds for decertification and/or removal of the Work Site Traffic Supervisor from the project.

Failure to maintain a designated Work Site Traffic Supervisor or failure to comply with the provisions of this Document will result in cessation of all activities except traffic and erosion control and such other activities deemed to be necessary for Project maintenance and safety.

All traffic control devices used during the construction of a project shall meet the Standards utilized in the MUTCD, and shall comply with the requirements of these Specifications, Project Plans, and Special Provisions. Reference is made to Subsections 104.05, 107.07, and 107.09.

All reflectorization for construction (black on orange) signs, object markers, and channelization devices shall meet the requirements of Section 913, Type II or III unless otherwise specified. All other signs shall meet the requirements of Type I unless otherwise specified.

No work shall be started on any project until the appropriate traffic control devices have been placed in accordance with Project requirements. Changes to traffic flow shall not commence unless all labor, materials, and equipment necessary to make the changes are available on the Project.

The Contractor shall secure the Engineer's approval of the Contractor's proposed plan of operation, sequence of work and methods of providing for the safe passage of vehicular and pedestrian traffic before it is placed in operation. The proposed plan of operation shall supplement the approved traffic control plan, proposed by the Contractor, and shall be submitted to Fulton County for approval in accordance with Subsection 104.03 of the Standard Specifications.

Some additional traffic control details will be required prior to any major shifts of traffic. The traffic control details shall include, but not be limited to, the following:

1. A detailed drawing showing traffic location and lineage for each step of the change.
2. The location, size, and message of all signs required by the MUTCD, Plans, Special Provisions, and other signs as required to fit conditions.
3. The method to be used in, and the limits of, the obliteration of conflicting lines and markings.

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4. Type, location, and extent of new lines and markings.
 5. Horizontal and vertical alignment and super elevation rates for detours, including cross section and profile grades along each edge of exist of existing pavement.

Drainage details for temporary and permanent alignments.

7. Location, length, and/or spacing of channelization and protective devices (temporary barrier, guardrail, barricades, etc.)

8. Starting time, duration and date of planned change.

9. For each traffic shift, a paving plan, erection plan, or work site plan, as appropriate, detailing workforce, materials, and equipment necessary to accomplish the proposed work. This will be the minimum resource allocation required in order to start the work.

E. The above details shall be submitted to the Engineer for approval at least 14 days prior to the anticipated traffic shift. The Contractor shall have traffic control details for a traffic shift which has been approved by the Engineer prior to commencement of the physical shift. All preparatory work relative to the traffic shift which does not interfere with traffic shall be accomplished prior to the designated starting time. The Engineer and the Contractor's representative will verify that all conditions have been met prior to the Contractor obtaining materials for the actual traffic shift.

F. Traffic control devices shall be in acceptable condition when first erected on the project and shall be maintained in accordance with Subsection 104.05 throughout the construction period. All unacceptable traffic control devices shall be replaced within 24 hours. When not in use, all traffic control devices shall be removed, placed or covered so as not to be visible to traffic. If traffic control devices are left in place for more than ten days after completion of the Work, the County shall have the right to remove such devices, claim possession thereof, and deduct the cost of such removal from any monies due, or which may become due, the Contractor.

G. The Department reserves the right to restrict construction operations when, in the opinion of the Engineer, the continuance of the Work would seriously hinder traffic flow on days immediately before, on, or after holidays or other days in which unusual traffic conditions exist, including threatening or inclement weather.

150.02 TEMPORARY TRAFFIC CONTROL ZONES:

In addition to the other provisions contained herein, work zone traffic control shall be accomplished using the following means and materials:

Portable advance warning signs as required by the contract or meeting the requirements of the MUTCD and Sub-Section 150.03.

Portable sequential or flashing arrow panels as shown in the Plans or Specifications for

use on Interstate or multi-lane highway lane closure only, shall be a minimum size of 48" high by 96" wide with not less than 15 lamps used for the arrow. The arrow shall occupy virtually the entire size of the arrow panel and shall have a minimum legibility distance of one mile. The minimum legibility distance is that distance at which the arrow panel can be comprehended by an observer on a sunny day, or clear night. Arrow panels shall be equipped with automatic dimming features for use during hours of darkness. The arrow panels shall also meet the requirements as shown in the MUTCD. The sequential or flashing arrow panels shall not be used for lane closures on two-lane, two-way highways when traffic is restricted to one-lane operations in which case, appropriate signing, flaggers and when required, pilot vehicles will be deemed sufficient.

Portable changeable message signs meeting the requirements of Section 632 and the MUTCD.

Channelization devices meeting the standards of the MUTCD and Subsection 150.05.

Precast concrete barrier meeting the requirements of Section 622.

Temporary traffic signals meeting the requirements of Section 647.

Pavement marking materials complying with Subsection 150.04.A.

B. LANE CLOSURES:

1. All lanes closures shall have prior approval of the Engineer. Lane closures that require same direction traffic to be split around the Work Area will not be approved for roadways with posted speeds of 35 mph or greater, excluding turn lanes.

2. On multilane highways where traffic has been shifted to the inside lanes for overnight use, the entrance and exit ramps shall have channelization devices placed on both sides of the ramp. The temporary ramp taper length shall be greater than, or equal to, the existing taper length. Interim EXIT gore signs shall be placed at the ramp divergence. Channelization device spacing shall be 10 feet for 200 feet in advance of the temporary gore, and 10 feet for the first 100 feet of the temporary gore.

3. Termination Area: The transition to normal or full width highway at the end of a lane closure shall be a maximum of 150 feet.

4. To provide the greatest possible convenience to the public in accordance with Subsection 107.07, the Contractor shall remove all signs, lane closure markings, and devices immediately when lane closure work is completed or temporarily suspended for any length of time or as directed by the Engineer.

C. TRAFFIC PACING METHOD:

PACING OF TRAFFIC: With prior approval from the Engineer, traffic may be paced allowing the Contractor up ten (10) minutes maximum to work in or above all lanes of traffic for the following purposes:

a. Placing bridge members or other bridge work.

Placing overhead sign structures.

Other work items requiring interruption of traffic.

The Contractor shall provide a uniformed police officer with patrol vehicle and blue flashing light for each direction of pacing. The police officer, Engineer, and flaggers at ramps shall be provided with a radio which will provide continuous contact with the Contractor.

When ready to start the work activity, the police vehicle will put into the travel lanes and act as a pilot vehicle slowing the traffic thereby providing a gap in traffic allowing the Contractor to perform the Work. Any on-ramps between the pace and the work area shall be blocked during pacing of traffic, with a flagger properly dressed and equipped with a Stop/Slow paddle. Each ramp should be opened after the police vehicle has passed.

Pilot vehicles shall travel at a safe pace speed, desirably not less than 20 mph interstate and 10 mph non-interstate. The Contractor shall provide a vehicle to proceed in front of the police vehicle and behind the other to inform the Contractor's work force when all vehicles have cleared the area.

Traffic will not be permitted to stop during pacing except in extreme cases as approved by the Engineer.

METHODS OF SIGNING FOR TRAFFIC PACING: At a point not less than 1,000 feet in advance of the beginning point of the pace, the Contractor shall erect and cover a W-special sign (72 inch x 72 inch) with a Type "B" flashing light, with the legend " TRAFFIC SLOWED AHEAD SHORT DELAY" (See Detail 150-A). A portable changeable message sign may be used in lieu of the W-special sign. On divided highways this sign shall be double indicated. A worker with a two-way radio shall be posted at the sign, and upon notice that the traffic is to be paced shall turn on the flashing light and reveal the sign. When traffic is not being paced, the flashing light shall be turned off and the sign covered or removed. W-special signs are reflectorized black on orange, Series "C" letters and borders of the size specified.

The Contractor's truck and other vehicles shall travel in the direction of normal roadway traffic unless separated by positive barrier, or when construction activity necessitates otherwise, and shall not reverse direction except at intersection, interchanges, or approved temporary crossings.

E. The Contractor shall ensure that dust, mud, and other debris from construction activities do not interfere with normal traffic operations or adjacent properties.

F. Existing street lighting shall remain lighted as long as practical and until removal is approved by the Engineer.

Adequate temporary lighting shall be provided at all nighttime work sites where workers will be immediately adjacent to traffic.

For their own protection, workers in or adjacent to traffic during nighttime operation shall wear reflectorized vests.

The parking of Contractor's and/or workers personal vehicles within the work area or adjacent to traffic is prohibited.

The Work Site Traffic Supervisor shall monitor the work to ensure that all the rocks, boulders, construction debris, stockpiled materials, equipment, tools and other potential hazards are kept clear of the travelway. These items shall be stored in a location, in so far as practical, where they will not be subject to a vehicle running off the road and striking them.

K All existing pedestrian walkways shall be maintained. Whenever changes to the worksite necessitate changes to existing walkways, temporary walkways shall be provided and maintained, with appropriate signs as necessary, to allow safe passage of pedestrian traffic.

150.03 SIGNS:

When required for proper traffic control during construction of the project, all existing guide, warning, and regulatory signs shall be maintained by the Contractor in accordance with these Specifications. Existing street name signs shall be maintained at street intersections. All existing illuminated signs shall remain lighted and be maintained by the Contractor.

When not in use, all inappropriate traffic signs or portions thereof shall be removed, placed or covered so as not to be visible to traffic. All construction warning signs shall be removed within seven (7) calendar days after time charges are stopped or pay items are complete. Subsequent punch list or other work to be performed shall be accomplished utilizing temporary construction warning signs that shall be removed daily.

The Contractor shall not remove any existing signs and supports without prior approval from the Engineer. All existing signs and supports which are to be removed shall be stored and protected as directed by the Engineer, and become the property of the Department unless otherwise specified in the contract documents.

Interim guide, warning, or regulatory signs required to direct traffic shall be furnished, installed, reused and maintained by the Contractor in accordance with the MUTCD, the Plans, Special Provisions, or as directed by the Engineer. These signs shall remain the property of the Contractor. The bottom of all interim signs shall be at least seven feet above the level of pavement edge.

Existing special guide signs on the Project shall be maintained until conditions require a change in location or legend content. When change is required, existing signs shall be modified and continued in use if the required modification can be made within existing sign borders using design requirements (legend, letter size, spacing, border, etc.) equal to that of the existing signs, or of Subsection 150.03.E.5. Differing legend designs shall not be mixed in the same sign.

MATERIALS – INTERIM SIGNS:

POSTS – Posts for all interim signs shall meet the requirements of Section 911 except that green or silver paint may be used in lieu of galvanization for steel posts or structural shape posts. Wood posts are not required to be pressure treated.

Post for all interim signs shall be constructed to yield upon impact unless the posts are protected by guardrail, portable barrier, impact attenuator or other type of positive barrier protection. Unprotected posts shall meet the breakaway requirements of the "1985 AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaries and Traffic Signals". Unprotected post splices will not be permitted any higher than four inches above the ground line to lessen the possibility of affecting the undercarriage of a vehicle.

SIGN BLANKS AND PANELS – All sign blanks and panels shall conform to Section 912 of the Specifications except that blanks and panels may be ferrous based or other metal alloys. Type 1 and Type 2 sign blanks shall have a minimum thickness of 0.08 inches regardless of the sign type used. Alternative sign blank materials (composites, poly carbonates, fiberglass reinforced plastics, recycled plastics, etc.) shall have a letter of approval from the Office of Materials and Research for use as interim construction signs before these materials are allowed to be incorporated into the work. Signs shall be painted to prevent rust if other metals are used in lieu of aluminum. Plywood blanks or panels will not be permitted

G. All existing, interim and new permanent signs shall be installed so as to be completely visible for an advance distance in compliance with the MUTCD. Limbs, brush, construction equipment and materials shall be kept clear of the driver's line of sight to the signs.

Portable advance warning signs shall be placed ahead of construction in accordance with Part VI of the MUTCD and shall include a series of at least three advance road construction (W20-1) signs placed at the termini of the project. The series shall have the legend ROAD WORK (1500 FEET, 1000 FEET, AND 500 FEET). In addition to the above, multi-lane divided highways shall also have the legend ROAD WORK (2 MILES, 1 MILE, AND ½ MILE.) On-ramps and at grade intersecting roadways shall be signed with a minimum of one portable ROAD WORK AHEAD sign. Portable advance warning signs shall be in place only during times that construction is in progress or as directed by the Engineer. Signs shall be removed or covered at all other times.

Construction warning signs which are mounted at less than seven feet in height (portable signs) shall have two 18 inch x 18 inch fluorescent red-orange or orange-red warning flags mounted on each sign. Project mileage indicated on the G20-1 sign shall be the actual project mileage rounded up to the nearest whole mile. All construction warning signs on divided highways shall be double indicated (i.e., on the left and right sides of the roadway.)

The sequential or flashing arrow panels shall be placed on the shoulder at or near the point where the lane closing transition begins. The panels shall be mounted on a vehicle,

trailer, or other suitable support. Vehicle mounted panels shall be provided with remote controls. Minimum mounting height shall be seven feet above the roadway to the bottom of the panel, except on vehicle mounted panels which should be as high as practical.

The portable changeable message sign, when specified, shall be placed ahead of construction activities and shall meet the requirements of Section 632 and the MUTCD.

The flashing beacon assembly, when specified, shall be used in conjunction with construction warning signs, regulatory, or guide signs to inform traffic of special road conditions which require additional driver attention. The flashing beacon assembly shall be installed in accordance with the requirements of Section 647.

150.04 PAVEMENT MARKINGS

Generally, full pattern pavement markings in accordance with Section 652 and in conformance with Section 3A and 3B, except 3B-3 and 3B-5, of the MUTCD are required on all courses before the roadway is opened to traffic. No passing zones shall be marked to conform to Section 150.04 E. During construction and maintenance activities on all highways open to traffic, both existing markings and markings applied under this Section shall be fully maintained until Final Acceptance. If the pavement markings are, or become, unsatisfactory in the judgment of the Engineer due to wear, weathering, or construction activities, they shall be restored immediately. On resurfacing projects pavement markings shall be provided on all surfaces that are placed over existing markings. On widening and reconstruction projects (where the lane configuration is altered from the pre-construction layout) pavement markings will be as required by the Plans or the Engineer. On new construction projects pavement marking plans will be provided.

MATERIALS: All traffic striping applied under this Section shall be a minimum four inches in width and shall conform to the requirements of Section 652, except as modified herein. Raised pavement markers (RPMs) shall meet the requirements of Section 654. Markings on the final surface course which must be removed shall be a removable type. The Contractor will be permitted to use paint, thermoplastic, or tape on pavement which is to be overlaid as part of the project, unless otherwise directed by the Engineer. Partial (skip) reflectorization (i.e. reflectorizing only a portion of a stripe) will not be allowed.

USAGE: The Contractor shall sequence the work in such a manner as to allow the installation of markings in the final lane configuration at the earliest possible stage.

Inappropriate or conflicting existing pavement markings shall be removed.

When shifting of traffic necessitated removal of centerline, lane lines, or edge lines, all such lines shall be removed prior to, during, or immediately after any change so as to present the least interference with traffic.

Before any change in traffic lane(s) alignment, marking removal equipment shall be present on the project for immediate use. If marking removal equipment failures occur, the equipment shall be repaired or replaced (including leasing equipment if necessary), so that the removal can be accomplished without delay.

Except for the final surface, marking on asphaltic concrete may be obliterated by an overlay course, when approved by the Engineer. When an asphaltic concrete overlay is placed for the sole purpose of eliminating conflicting markings and the in place asphaltic concrete section will allow, said overlay will be eligible for payment only if designated in the Plans. Overlays to obliterate lines will be paid for only once and further traffic shifts in the same area shall be accomplished with removable markings. Only the minimum asphaltic concrete thickness required to cover lines (generally 60 lb./sq. yd. Of Asphaltic Concrete "H") will be allowed. Excessive build-up will not be permitted. When an overlay for the sole purpose of eliminating conflicting markings is not allowed, the markings no longer applicable shall be removed in accordance with Subsection 656.02. The elimination of conflicting pavement markings by over painting with paint or liquid asphalt is not acceptable.

Raised pavement markers (RPMs) are required as listed below for all asphaltic concrete pavements before the roadway is open to traffic. When Portland Cement Concrete is an intermediate or final surface and is open to traffic, one available day is allowed for cleaning and drying before the installation of RPMs is required.

EXCEPTIONS FOR INTERIM MARKINGS: Some exceptions to the time of placement and pattern of markings are permitted as noted below; however, full pattern pavement markings are required for the completed project.

TWO-LANE, TWO-WAY ROADWAYS

a. **SKIP LINES:** All interim skip (broken) stripe shall conform to Section 652 except that stripes shall be at least four feet long with a maximum gap of 36 feet. On curves greater than six degrees, a two-foot stripe with a maximum gap of 18 feet shall be used. In lane shift areas skip lines will not be allowed. Solid Lines will be required. Interim skip lines must be replaced with markings in full compliance with Section 652 prior to expiration of the 14 available day period.

Interim raised pavement markers may be substituted for the interim skip (broken) stripes. If raised pavement markers are substituted for the four foot interim skip stripe, four markers spaced at equal interim raised pavement markers are substituted for interim skip lines.

Interim raised pavement markers shall be retro-reflective, shall be the same color as the pavement markers for which they are substituted, and shall be visible during daytime.

The type of interim marker and method of attachment to the pavement shall be approved by the Office of Materials and Research but in no case will the markers be attached by the use of nails.

The interim raised pavement markers shall be maintained until the full pattern pavement markings are applied. At the time full pattern pavement markings are applied the interim raised markers shall be removed in a manner that will not interfere with application of the full pattern pavement markings.

b. **NO PASSING BARRIER:** On two-lane, two-way roadways for periods not to exceed three (3) calendar days where skip centerlines are in place, no-passing zones

shall be identified by using post or portable mounted DO NOT PASS regulatory signs (R4-1 24" x 30") shall be placed at the end of each no-passing zone. Post mounted signs shall be placed in accordance with the MUTCD. Portable signs shall have a minimum vertical height of three feet above the pavement surface to the bottom of the sign and be secured in such a manner as to not be easily blown over or misaligned.

c. **EDGELINES:**

(1) Bituminous Surface Treatment Paving: Edgelines will not be required on intermediate surfaces (including asphaltic concrete leveling for bituminous surface treatment paving) that are in use for a period of less than 60 calendar days except at bridge approaches, on lane transitions, lane shifts, and in such other areas as determined by the Engineer. On the final surface, edgelines shall be placed within 30 calendar days of the time that the final surface was placed.

(2) All Other Types of Pavement: Edgelines will not be required on intermediate surfaces that are in use for a period of less than 30 calendar days except at bridge approaches, on lane transitions, lane shifts, and in such other areas as determined by the Engineer. On the final surface, edgelines shall be placed within 14 calendar days of the time that the surface was placed.

d. **MISCELLANEOUS PAVEMENT MARKINGS:** School zones, railroads, stopbars, symbols, words and other similar markings shall be placed on final surfaces conforming to Section 652 within 14 calendar days of completion of the final surface. On intermediate surfaces these markings will generally not be required unless specified by the Engineer because of special conditions or when the intermediate surface will be in use for more than 45 calendar days.

MULTI-LANE HIGHWAYS – WITH NO PAVED SHOULDER(S) OR PAVED SHOULDER(S) FOUR FEET OR LESS

a. **UNDIVIDED HIGHWAYS (INCLUDES PAVE CENTER TURN LANE)**

(1) Centerlines and No-Passing Barrier – Full pattern centerlines and no-passing barriers shall be restored before nightfall.

(2) Lanelines – Interim skip (broken) stripe as described in Subsection 150.04. E.1.a. may be used for periods not to exceed three (3) calendar days. In lane shift areas skip lines are not allowed. Solid lines are required.

(3) Edgelines – Edgelines shall be placed on intermediate and final surfaces within three calendar days of obliteration.

F APPLICATION OF PAVEMENT MARKINGS: The Contractor shall furnish layout, clean as necessary, and pre-line the surface for the placement markings applied under this Section. All existing marking tape on final surfaces shall be removed prior to placement of final markings.

Pavement markings shall re-establish No-Passing Zones in the locations and configuration that existed prior to construction. Existing No-Passing Zones shall be clearly identified as to location prior to construction by staking or erection of DO NOT PASS and PASS WITH CARE signs. On new location projects and on projects where

either horizontal or vertical alignments have been modified, the location of No-Passing Zones will be identified by the Engineer.

G. **MOBILE OPERATIONS:** When pavement markings (centerlines, lane lines, and edge lines) are applied in a continuous operation by moving vehicles and equipment, the following minimum equipment and warning devices shall be required in addition to the requirements of the MUTCD:

1. A lead vehicle is required for two-way traffic conditions and shall have an approved sequential or flashing arrow panel mounted so as to be easily visible to oncoming traffic. A lead vehicle is not required for low volume off-system routes and one-way traffic applications.
2. The work vehicle applying markings shall have a sequential or flashing arrow panel mounted on the rear. If the work vehicle is also functioning as the lead vehicle then an approved arrow panel shall be mounted so as to be easily visible to oncoming traffic. The work vehicle shall follow directly behind the lead vehicle.
3. The work vehicle placing cones shall follow directly behind the work vehicle applying the markings. The cone work vehicle shall have a sequential or flashing arrow panel mounted on the rear.
4. For multi-lane roadways a protection vehicle shall follow the above vehicles and the protection vehicle shall also display a prominent sign with the legend PASS ON LEFT (RIGHT). On interstate and limited access roadways, the protection vehicle shall be equipped with a truck mounted attenuator (TMA) that is certified for impacts not less than 45 mph in accordance with NCHRP 230.
5. All vehicles shall be equipped with the official slow moving vehicle symbol sign and left and right-side rear mounted flashing yellow lights.

150.05 CHANNELIZATION

A. **GENERAL:** Channelization shall clearly delineate the travelway through the work zone and alert drivers and pedestrians to conditions created by work activities in or near the travelway. Channelization shall be done in accordance with the plans and specifications, the MUTCD, and the following requirements.

1. Types of Devices Permitted for Channelization in Construction Work Zones:

a. **DRUMS:**

(1) **DESIGN:** Drums shall meet the minimum requirement of the MUTCD and shall be reflectorized as required in Subsection 150.01.C.

(2) **APPLICATION:** Drums shall be used as the required channelizing device to delineate the full length of a lane closure, shift, or encroachment, except as modified by this Subsection.

TRANSITION TAPERS AND LANE CLOSURES: Drums shall be used on all transition tapers. The minimum length of the approach transition taper for a lane closure, shift, or

encroachment for highways with posted speed of 45 mph or greater shall be equal to the lane width of lateral shift (Ft.) x the posted speed limit (Mph), ($L = WS$), but not less than 150 feet. For multiple lane closures, only one lane shall be closed per taper with a minimum tangent length of $2L$ between tapers. The length of a closed lane, excluding the transition taper, will be limited to two miles, unless otherwise approved or directed by the Engineer. Drums shall be placed the full length of the taper spaced at maximum intervals in feet equal to the numerical speed limit (EXAMPLE: 55 MPH Speed Limit = 55 feet maximum spacing).

For taper lengths on urban, residential or other streets where the posted speed is 40 mph or less, the minimum length of the approach transition taper shall be computed using the formula $L + WS^2/60$. Greater taper length shall be used when required for individual situations.

Drums with steady burning lights, for the length of the taper only, are required if the condition exists into the night.

LONGITUDINAL CHANNELIZATION: Drums shall be spaced as listed below for various roadside work conditions except as modified by Subsection 150.06. Spacing shall be used for situations meeting any of the conditions listed as follows:

50 FOOT SPACING MAXIMUM:

For difference in elevation exceeding two inches.

For heeled sections no steeper than 4:1 as shown in Subsection 150.06, Detail 150-E.

100 FOOT SPACING MAXIMUM:

For difference in elevation of two inches or less

Flush areas where equipment or workers are within ten feet of the travel lane

200 FOOT SPACING MAXIMUM: Where equipment or workers are more than ten feet from travel lane. Lateral offset clearance to be four feet from the travel lane.

For paved areas eight feet or greater in width that are paved flush with a standard width travel lane.

For disturbed shoulder areas not completed to typical section that are flush to the travel lane and considered a usable shoulder.

When the appropriate signs are posted advising of conditions such as soft or low shoulder, drum may be removed after shoulders are completed to typical section and grassed and after guardrail or other safety devices have been installed.

VERTICAL PANELS:

DESIGN: All vertical panels shall have a minimum of 270 square inches of retro-reflective area facing the traffic and shall meet the requirements of the MUTCD.

APPLICATION: Lane encroachment by the drum on the travel way should permit a remaining lane width of ten feet. When encroachment reduces the travel way to less

than ten feet, vertical panels shall be used to restore the travel way to ten feet or greater. No other application of verbal panels will be permitted.

CONES:

DESIGN: All cones shall be a minimum of 28 inches in height regardless of application and shall meet the requirements of the MUTCD.

APPLICATION: For longitudinal channelizing only, cones will be permitted for daylight closures or minor shifts. (Drums are required for all tapers.) The use of cones for nighttime work will not be permitted.

BARRICADES:

DESIGN: The use of Type I and Type II barricades will not be permitted. Type III barricades shall meet the minimum requirements of the MUTCD and shall be reflectorized as required in Subsection 150.01.C.

APPLICATION: Type III barricades shall be placed as required by the plans, the Standards, and as directed by the Engineer.

WARNING LIGHTS:

DESIGN: All warning lights shall meet the requirements of the MUTCD.

APPLICATION:

Type A low intensity flashing lights shall be used as shown in the Plans, the Standards, and as directed by the Engineer. Flashing lights are not required for advance warning signs in Subsection 150.03.H.

Type C Steady Burn lights shall be used on all tapers when the condition exists into the night. Steady burn lights shall also be used as shown in the Plans, the Standards, and as directed by the Engineer.

PORTABLE BARRIERS:

DESIGN: Portable Barriers shall meet the requirements of Section 622 – PRECAST CONCRETE BARRIER.

APPLICATION: Portable Barrier shall be placed as required by the plans, standards, and as directed by the Engineer. When Portable Barrier is located 20 feet or less from a travel lane, yellow reflectors shall be fixed to the top of the barrier at intervals not greater than 50 feet and shall be mounted approximately two inches above the barrier. The reflectors shall be either 10"x10" square Type V (or equal) reflective sheeting mounted on flat-sheet panels, or 8" diameter center-mounted sealed prismatic reflex reflectors housed in an aluminum backing with a single grommeted hole.

Approach end of Portable Barrier shall be flared or protected by and impact attenuator (crash cushion) or other approved treatment in accordance with Georgia Standard 4960,

Construction Details and Standard Specifications.

On interstate or other controlled access highways where lane shift or crossovers cause opposing traffic to be separated by less than 40 ft., precast concrete barrier shall be used as a separator.

150.06 EXCAVATION ADJACENT TO A TRAVEL LANE:

Construction work involving trenching adjacent to a travel way shall not begin until the Contractor is able to continuously place the required typical section to within two inches of the existing pavement elevation, or heal the remaining difference in elevation to the traveled way as shown in Detail 150-E.

Channelization devices and placement during the construction period shall conform to the requirements of Subsection 150.05 and Details 150-B, 150-C, 150-D, and 150-E. In addition to the signs specified in Section 150 and the MUTCD, a W-20 sign with the legend "(LEFT) (RIGHT) LANE NARROWS" with two flags shall be kept just off the paving edge and 500 feet upstream of the point where channelization devices are erected on the paving edge.

STONE BASES, SOIL AGGREGATE BASES, AND SOIL BASES: Drop-offs in elevation of more than two inches between surfaces carrying, or adjacent to, traffic will not be allowed for more than 24 hours. However, where the Contractor has demonstrated the ability to continuously excavate and open as a startup area for periods not to exceed 48 hours.

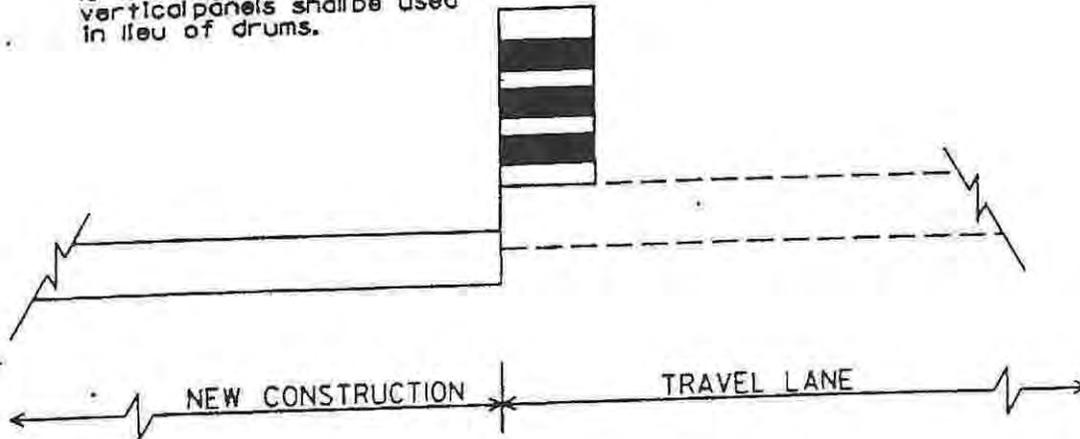
ASPHALT BASES/BINDERS: Drop-offs in elevation of more than two inches between surfaces carrying or adjacent to traffic will not be allowed for more than 48 hours.

PORTLAND CEMENT CONCRETE AND CEMENT STABILIZED BASES: Construction work adjacent to the traveled way which involves these types of bases shall be healed within 48 hours after the curing period is complete for each section placed. During the placement period, traffic control devices will be in accordance with Subsection 150.05 and Detail 150.B.

MISCELLANEOUS EXCAVATIONS OR DROP-OFFS ADJACENT TO TRAVELWAY: Work such as drainage structures, utility facilities, or any other work which results in a drop-off adjacent to the travel way shall be performed expeditiously so as to minimize the exposure to the hazard. As soon as practical, the excavation shall be backfilled to the minimum requirements of Detail 150-E. In no case will the drop-off be allowed to exist more than five (5) calendar days. This may require stage construction, such as plating and backfilling the incomplete work.

NOTE: Drums required for this location, spaced at 50 FT. intervals. If the traveled way width is reduced to less than 10 feet by the use of drums, vertical panels shall be used in lieu of drums.

Location of drums when drop-off exceeds 4 inches.

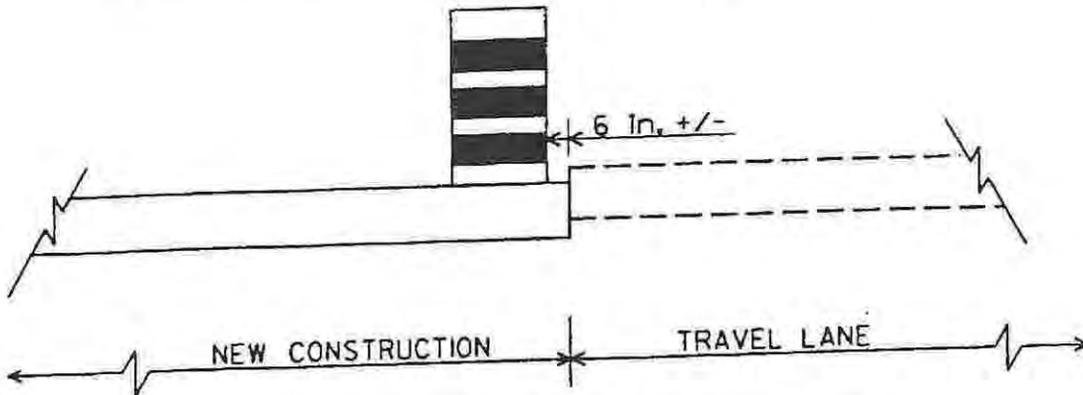


DROP-OFF GREATER THAN 4 INCHES

DETAIL 150-B

Drums spaced at 50 feet intervals.

Location of drums when drop-off is 2+ inches to 4 inches.

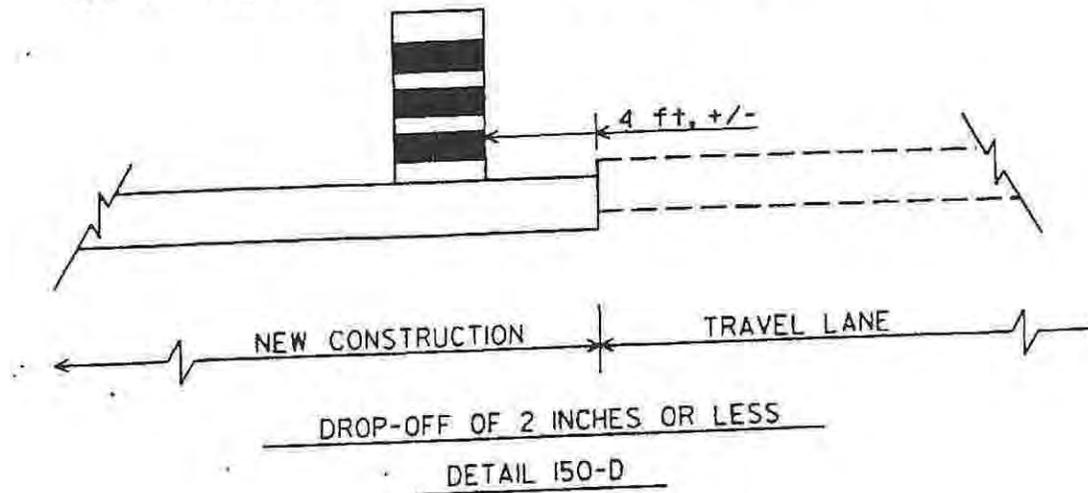


DROP-OFF OF 2+ INCHES TO 4 INCHES

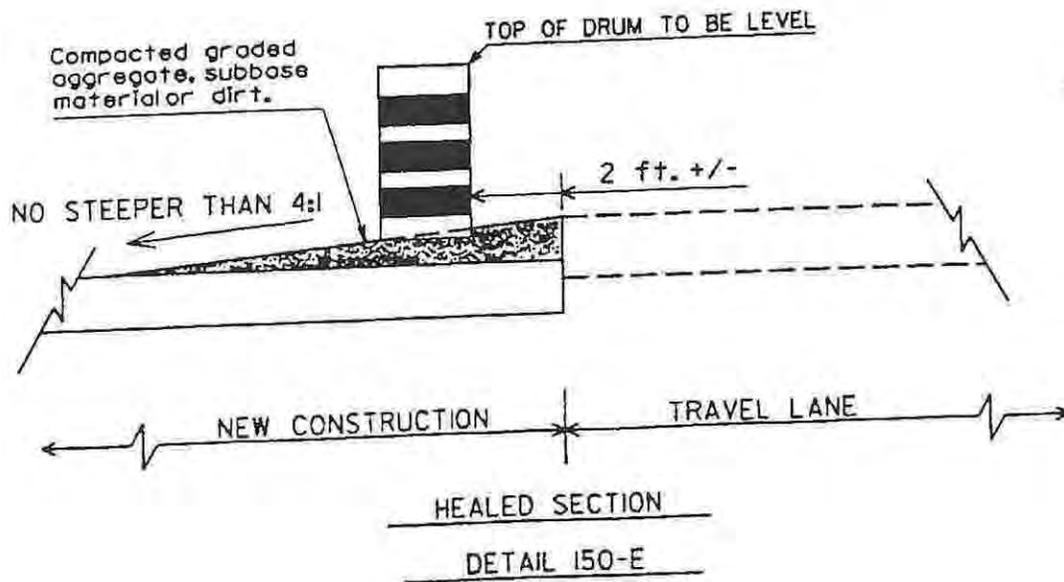
DETAIL 150-C

Drums spaced at 100 feet intervals.

Location of drums when drop-off is 2 inches or less.



Location of drums immediately after completion of healed section, spaced at 50 ft. intervals.



150.07 FLAGGING AND PILOT CARS:

Flaggers shall be provided as required to handle traffic, as specified in the Plans or Special Provisions, and as required by the Engineer.

All flaggers shall meet the requirements of the MUTCD and shall have received training and a certificate upon completion of the training from a Department approved training program. Failure to provide certified flaggers as required above shall be reason for the Engineer suspending work involving the flagger(s) until the Contractor provides the certified flagger(s).

Flaggers shall wear high-visibility clothing in compliance with the MUTCD and shall use a Stop/Slow paddle meeting the requirements of the MUTCD for controlling traffic. The Stop/Slow paddles shall have a shaft length of seven (7) feet minimum. In addition to the Stop/Slow paddle, a flagger may use a 24 inches square red/orange flag as an additional device to attract attention. For night work, the vest shall have reflectorized stripes on front and back.

Pilot vehicles shall be provided if specified in the Plans or Specifications and meet the requirements of the MUTCD.

Signs for flagger traffic control shall be placed in advance of the flagging operation in accordance with the MUTCD. In addition to the signs required by the MUTCD, signs at regular intervals, warning of the presence of the flagger shall be placed beyond the point where traffic can reasonably be expected to stop under the most severe conditions for that day's work.

ENFORCEMENT:

The safe passage of pedestrians and traffic through and around the temporary traffic control zone, while minimizing confusion and disruption to traffic flow, shall have priority over all other Contractor activities. Continued failure of the Contractor to comply with the requirements of Section 150 (TRAFFIC CONTROL) will result in non-refundable deductions of monies from the Contract as shown in this Subsection for non-performance of Work.

Failure of the Contractor to comply with this Specification shall be reason for the Engineer suspending all other work on the Project, except erosion control and traffic control, taking corrective action as specified in Subsection 105.15, and/or withholding payment of monies due the Contractor for any work on the Project until traffic control deficiencies are corrected. These other actions shall be in addition to the deductions for non-performance of traffic control.

SCHEDULE OF DEDUCTIONS FOR EACH CALENDAR DAY OF DEFICIENCIES OF TRAFFIC CONTROL INSTALLATION AND/OR MAINTENANCE		
ORIGINAL TOTAL CONTROL AMOUNT		
From More Than	To and Including	Daily Charge
\$0	\$100,000	\$100
\$100,000	\$1,000,000	\$250
\$1,000,000	\$5,000,000	\$500
\$5,000,000	\$20,000,000	\$750
\$20,000,000	\$40,000,000	\$1,000
\$40,000,000	-----	\$1,500

MEASUREMENT:

TRAFFIC CONTROL: When listed as a pay item in the Proposal, payment will be made at the Lump Sum price bid, which will include all traffic control not paid for separately, and will be paid as follows:

When the first Construction Report is submitted, the Traffic Control Plan and WTCS is approved; a payment of 25 (twenty-five) percent of the Lump Sum price will be made. For each progress payment thereafter, the total of the Project percent complete shown on the last pay statement plus 25 (twenty-five) percent will be paid (less previous payments), not to exceed one hundred (100) percent and subject to normal retainage.

When no payment item for Traffic Control – Lump Sum is shown in the Proposal, all of the requirements of Section 150 and the Traffic Control Plan shall be in full force and effect. The cost of complying with these requirements will not be paid for separately, but shall be included in the overall bid submittal.

SIGNS: When shown as a pay item in the contract, interim special guide signs will be paid for as listed below. All other regulatory, warning, and guide signs, as required by the Contract, will be paid for under Traffic Control Lump Sum or included in the overall bid submitted.

Interim ground mounted or interim overhead special guide signs will be measured for payment by the square foot. This payment shall be full compensation for furnishing the signs, including supports as required, erecting, illuminating overhead signs, maintaining, removing, re-erecting, and final removal from the Project. Payment will be made only one time regardless of the number of moves required.

Remove and rest existing special guide signs, ground mount or overhead, complete, in place, will be measured for payment per each. Payment will be made only one time regardless of the number of moves required.

Modify special guide signs, ground mount or overhead, will be measured for payment by the square foot. The area measured shall include only that portion of the sign modified. Payment shall include materials, removal from posts or supports when necessary, and remounting as required.

CHANGEABLE MESSAGE SIGN, PORTABLE: Changeable Message Sign, Portable will be measured as specified in Section 632.

TRAFFIC SIGNAL INSTALLATION – TEMPORARY: Traffic Signal Installation – Temporary will be measured as specified in Section 647.

FLASHING BEACON ASSEMBLY: Flashing Beacon Assemblies will be measured as specified in Section 647.

TEMPORARY, SAND LOADED ATTENUATOR MODULES: Each Sand Loaded Attenuator Module of the type specified includes all material components, hardware, incidentals, labor site preparation and maintenance. Each module will be measured for payment by the drum only once regardless of the number of locations installed. Modules to replace those damaged or destroyed by traffic impact will also be measured by the unit for payment. Upon completion of the project, the modules shall be removed and retained by the Contractor.

PORTABLE IMPACT ATTENUATORS: Each Portable Impact Attenuator will be measured by the unit which shall include all material components, hardware, incidentals, labor, site preparation, and maintenance, including spare parts recommended by the manufacturer for repairing minor accident damage. Each unit will be measured only once regardless of the number of locations installed, moves required, or number of repairs necessary because of traffic damage. Upon completion of the project, the units shall be removed and retained by the Contractor.

PAVEMENT MARKINGS: Pavement markings will be measured as specified in Section 150.

PAYMENT:

When shown in the Schedule of Items in the Proposal, the following items will be paid for separately:

Item No. 150. Traffic Control.....Lump Sum

Item No. 150. Traffic Control, Solid Traffic Stripe ____ Inch, (Color).....per Linear Foot

Item No. 150. Traffic Control, Skip Traffic Stripe ____ Inch, (Color).....per Linear Foot

Item No. 150. Traffic Control, Solid Traffic Stripe, Thermoplastic ____ Inch, (Color).....per Linear Foot

Item No. 150. Traffic Control, Skip Traffic Stripe, Thermoplastic ___ Inch, (Color).....per
Linear Foot

Item No. 150. Traffic Control, Pavement Arrow with Raised Reflectors.....per Each

Item No. 150. Traffic Control, Raised Pavement Markers – All Types.....per Each

Item No. 150. Interim Ground Mounted Special Guide Signs.....per Square Foot

Item No. 150. Interim Overhead Special Guide Signs.....per Square Foot

Item No. 150. Remove & Reset Existing Special Guide Signs, Ground Mount, Complete
in Placeper Each

Item No. 150. Remove & Reset Existing Special Guide Signs, Overhead, Complete in
Place.....per Each

Item No. 150. Traffic Control, Temporary Sand Loaded Attenuator
Modules.....per Each

Item No. 150. Traffic Control, Portable Impact Attenuator.....per Each

Item No. 150. Traffic Control, Pavement Markers, Words and Symbols.....per Square
Foot

Item No. 150. Traffic Control, Pavement Arrow (Painted) With Raised Reflectors.....per
Each

Item No. 150. Modify Special Guide Sign, Ground Mount.....per Square Foot

Item No. 150. Modify Special Guide Sign, Overhead.....per Linear Foot

Item No. 632. Changeable Message Sign, Portable.....per Each

Item No. 647. Traffic Signal Installation, Temp.....Lump Sum

Item No. 647. Flashing Beacon Assembly, Structure Mounted.....per Each

Item No. 647. Flashing Beacon Assembly, Cable Supported.....per Each

SECTION 702 – VINE, SHRUB AND TREE PLANTING

Section 702.1 GENERAL DESCRIPTION:

Retain as written and add the following:

“Pay Item No. 702-0001 if included in the contract is intended for use as miscellaneous landscaping which may or may not be required on the project as directed/requested by the Engineer. Use of this item will be only as specifically authorized by the Fulton County Public Works Department.

Every effort will be made to negotiate an acceptable price with the Contractor for installation of landscaping required. If Fulton County is unable to negotiate an agreeable price with the Contractor, Fulton County reserves the right to negotiate both price and warranties with specialty contractors for this purpose. The Contractor will then be required to include the work authorized, utilizing the authorized specialty subcontractor. A maximum allowance of 5% may be included for overhead purposes of the prime contractor above the negotiated specialty contractor agreement.”

Section 702.5 PAYMENTS:

Retain as written and add the following:

“For payment purposes, negotiated prices will be converted to a percentage of Item No. 702-0001. Payment for this item will be only for amounts authorized by the Engineer. Final Payment may or may not equal 100% of the Lump Sum Price included in the Contract.

Payment will be made under:

Item No. 702-0001.

Miscellaneous Landscaping.....Allowance

SPECIAL CONDITIONS

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA SPECIAL PROVISION

Section 534—Pedestrian Overpass Bridge

534.1 General Description

This Specification covers the design, materials, fabrication, transportation, erection, measurement, and payment for 4 (four) Pedestrian Overpass Bridges complete in place, over North Utoy Creek and South Utoy Creek.

534.1.01 Definitions

The Pedestrian Overpass Bridge is that portion of the bridge above the top of the cap, excluding cheek walls, and consists of a simply supported, steel, truss span that is compatible with the bridge substructure. The Pedestrian Overpass Bridge includes, but is not limited to, anchor bolts, bearing assemblies, concrete walkways, and pedestrian handrails.

Engineer- Where referenced in these plans or documents the Engineer or Project Engineer shall be the Fulton County Engineer or their designated representative.

534.1.02 Related References

A. Standard Specifications

- Section 105—Control of Work
- Section 106—Control of Materials
- Section 500—Concrete Structures
- Section 501—Steel Structures
- Section 511—Reinforcement Steel

B. Referenced Documents

- AASHTO Standard Specifications for Highway Bridges, 17th Edition, with interims as indicated on the Plans
- AASHTO Guide Specifications for Pedestrian Bridges, 1997 Edition
- American Institute of Steel Construction (AISC), Manual of Steel Construction, 9th Edition.

534.1.03 Submittals

A. Plans

Submit plans, calculations, and specifications to the Engineer for approval prior to beginning fabrication and construction. Sign and seal plans, calculations, and specifications by a registered professional engineer currently licensed to practice in the State of Georgia.

B. Contractor and Fabricator Qualifications

At least 30 (thirty) days prior to beginning fabrication, submit to the Engineer for review and approval, evidence of at least three (3) projects similar in concept and scope of fabrication. Include names, addresses, and telephone numbers, of the owner's representatives.

534.2 Design Criteria

A. Geometry

Provide the following:

1. Inside clear width between handrails of 10'- 0", as shown on the Plans.
2. The length as shown on the Plans.

B. Loading

Include the following loads in the design:

1. Self- weight
2. Uniformly distributed load of 85 pounds per square foot.
3. A moving concentrated load equal to 10,000 lb. axle loading, without impact.

534.3 Materials

A. Structural Steel

The bridge shall be fabricated from unpainted structural steel in accordance with ASTM A709 Grade 50W (A709M Grade 345) for plates and structural shapes, and ASTM A606 (A606M) or ASTM A847 (A847M) for tubular sections.

Minimum yield strength is equal to or greater than 50,000 psi

Minimum material thickness for all members is 3/16 inch

B. Concrete

Use Class A concrete placed in accordance with the Plans.

C. Composite Steel Floor Deck

Use a galvanized steel floor deck with a minimum thickness of .0336 inch (22 gage). Manufacture the floor deck by a member of the Steel Deck Institute.

D. Bolts

Bolt field splices with type 3 High Strength ASTM A 325 or ASTM A 490 bolts.

E. Accessories**1. Railing**

Use railings with a smooth outside surface without protrusions and depressions. Attach railing thirty six (36) inches above the floor deck in accordance with the AASHTO Specifications. Grind-smooth the ends of all angles that are provided as part of the railing assembly. Use only tubes with closed ends.

2. Toe Plate

Attach a five (5) inch (125 mm) steel channel two (2) inches above the floor deck.

534.4 Construction Requirements**534.4.01 Personnel**

General Provisions 101 through 150

534.4.02 Equipment

General Provisions 101 through 150

534.4.03 Preparation

General Provisions 101 through 150

534.4.04 Fabrication**A. Fabrication****1. Workmanship**

Perform the fabrication, shop connections, and workmanship in accordance with Section 501 of the Georgia Specifications

2. Welding

Perform all welding by certified welders that have in their possession a current welding certification card issued by the Georgia D.O.T. Office of Materials and Research. Utilize E70 or E80 series electrodes. Use only E70XX (excluding E7014 and E7024) low hydrogen electrodes for manual shielded arc welding.

3. Camber

Fabricate each truss to produce a 1.0% positive camber after all dead loads have been applied.

4. Finish

Sand blast all prominently exposed surfaces of weathering steel in accordance with the Steel Structures Painting Council (SSPC) Surface Preparation Specification No. 6 "Commercial Blast Cleaning".

B. Delivery and Erection

1. Notify the Project Engineer two weeks in advance of delivery of the bridge superstructure unit.
2. Install anchor bolts in accordance with the manufacturer's recommendations.

534.4.05 Quality Assurance

Furnish a warranty against defects in material and workmanship for a period of ten (10) years from the manufacturer.

534.4.06 Contractor Warranty and Maintenance

General Provisions 101 through 150

534.5 Measurement

This work will be measured for payment on a Lump Sum basis, complete and accepted in place.

534.5.01 Limits

General Provisions 101 through 150

534.6 Payment

This work will be paid for at the Contract Price per pedestrian overpass bridge complete in place. Payment includes all material (structural steel, high strength bolts, composite steel deck forms, concrete, bearing assemblies, elastomeric pads, and anchor bolts), labor, and equipment necessary to complete the work.

Payment will be made under:

Item No. 534	Pedestrian Overpass Bridge #1	Lump Sum
	Pedestrian Overpass Bridge #2	Lump Sum
	Pedestrian Overpass Bridge #3	Lump Sum
	Pedestrian Overpass Bridge #4	Lump Sum

534.6.01 Adjustments

General Provisions 101 through 150

DIVISION OF WORK REQUIREMENTS

**FAIRBURN ROAD BRIDGES HYDRAULIC PRELIMINARY STUDY
(See PDF File)**

BRIDGE FOUNDATION EXPLORATION REPORT

**Appendix A
Appendix B
(See PDF File)**

CR 1349 (Fairburn Road) over North Utoy and South Utoy

Preliminary Hydraulic Study

Project Number T-259 Fulton County

FEMA and Community Coordination Required
Unincorporated Fulton County, Georgia
Community No: 135160

March 2014

Submitted for Review by:
Qk4
3169 Holcomb Bridge Road. Suite 455
Norcross, GA 30071

Table of Contents

Hydraulic Summary Report 3

Predicted Scour Report 5

Appendix A: Calculations

- Hydraulic Table, incl. Clearance Calculations

- Riprap Calculations

Appendix B: Risk Assessment Sheet

Appendix C: Preliminary Roadway Plans and Typical Section Sheets

Appendix D: Preliminary Bottomless Culvert Layout

**Appendix E: HEC-RAS Output – Natural/ Unrestricted Conditions, Existing Conditions,
Proposed Conditions South Utoy Creek**

**Appendix F: HEC-RAS Output – Natural/ Unrestricted Conditions, Existing Conditions,
Proposed Conditions n North Utoy Creek**

HYDRAULIC SUMMARY REPORT

Project Location and Description

The crossings of Fairburn Road (CR 1349) over South Utoy Creek and North Utoy Creek are located in Fulton County, approximately 7 miles west of the City of Atlanta, Georgia. The existing 40 ft long by 28.8 ft wide (out-to-out) single span bridge is proposed to be replaced. This site is located in an urban section of Fulton County.

South Utoy Creek

The new structure at South Utoy Creek is a 61 ft long (back of headwall to back of headwall) 65 ft wide by bottomless culvert spans the channel and will be constructed on the existing roadway centerline. The foundations of the bottomless culvert are to be built at 75 degrees to the roadway centerline. The abutments of the existing bridge are at 86 degrees to the roadway centerline. The angle difference is contributed to the proposed structures to a closer match the channel direction. The structure has also been shifted 4 ft north of the centerline of the creek to avoid a sanitary sewer trunk. The skew and shift results in a longer bottomless culvert.

North Utoy Creek

The new structure at North Utoy Creek is a 50 ft long (back of headwall to back of headwall) by 65 ft wide by bottomless culvert that will be constructed on the existing roadway centerline. The foundations of the bottomless culvert are to be built at 84 degrees to the roadway centerline. The abutments of the existing bridge are at 89 degrees to the roadway centerline. The angle difference is contributed to the proposed structures to a closer match the channel direction. The skew and shift results in a longer bottomless culvert.

Existing Condition

The existing single span bridge consists of concrete vertical abutment walls on footings and steel beams with concrete decking overlaid with asphalt. The sufficiency rating of the South Utoy Creek and North Utoy Creek are 80.17 and 79.95 respectively. The existing low point elevation

of Fairburn Road embankment in the flood plain is 801.20 measured at the high side of the downstream shoulder of the low point on Fairburn Road.

Proposed Condition

The proposed replacement structures are bottomless culverts. The existing approaches will not be raised; however, sidewalk will be added resulting in increased width of the embankment. The wider structure the bottomless culvert provides and the improved angle will be positioned to better accommodate the upstream angle of attack at the eastern embankment. Fairburn Road will be closed for construction of the replacement bridge over Pea Creek; therefore, no detour bridge is required at this site.

The proposed bottomless culvert is designed to provide acceptable channel velocities; limit theoretical scour depths, limit back water to no rise for the 100-year storm frequency, and provide no flooding for the design year and 10-year storms. This study analyzed the 10-year (design storm) and 100-year storm events. Also 500-year flood stage elevations were calculated.

Method of Analysis

The peak discharge used was from the flood study FEMA provided. This flood study was used to calculate the latest calculated from the latest National Flood Insurance Map revised September 18, 2013. According to the Flood insurance Study also revises September 18, 2013 the regional regression equations were developed from a 1974 USGS and adapted to the Atlanta Metro Area in 1975. This information can be found in "Flood Insurance Study: Fulton County, Georgia and Incorporated Areas: Volume 1 of 5: Revised September 18, 2013: Federal Emergency Management Agency: Flood Insurance Study Number 1321CV001B".

The area of opening, velocities, and floodstage elevations for the natural, existing and proposed conditions were calculated using the HEC-RAS modeling. Reaches downstream were interpolated to provide more information about the downstream conditions. The existing and proposed conditions were adapted to match the existing approaches and the proposed structures. This hydraulic data is detailed in Appendix A. Table 3 details a comparison of data for storage impacts at the reach section upstream of the bridge crossing and reach section at location of

structure. Table 3 compares existing to proposed conditions based on peak discharge data, velocities and water surface elevations.

A risk assessment was performed and no risk was found due to the lack of development in the immediate upstream and downstream flood plains, along with significant reduction in the storm velocities and backwater values from the existing conditions. Cochran Mill Road will be closed during the construction of the new structure.

It is important to note the analysis of was based on a 10 year storm event and not a 100 year storm event because the 100- years storm event floods the existing structure by over 4 feet. Raising the existing approaches could cause up stream flooding. To provide structure that will provide over 1 foot of free board and span the entire 100-year flood plain a single structure spanning both creeks with a total length of over 500 feet would need be to provided for the flood plain that currently is over 1100 feet.

Summary & Conclusion

The proposed 65 foot bottomless culvert design for a 10-year storm will not flood Fairburn Road compared to the existing structure at a 10-year storm. The proposed structure will also provide no rise in the 100- year storm upstream. The downstream will also show no rise at the convergence with Utoy Creek for each design storm.

PREDICTED SCOUR REPORT

Overview

Theoretical scour depths for the proposed bottomless culvert at this site were calculated by using the methods shown in the FHWA publication, HEC-18, "Evaluating Scour at Bridges" and the HEC-RAS computer program. While geotechnical soil borings were not conducted for this site, an assessment of the soil type was made in the field during the site inspection. The soil type at this site was judged to be medium sand. Therefore, the D₅₀ soil particle sizes are estimated to be 0.00123 feet (0.38 mm). Tables and calculations showing predicted scour depths are included in the following pages.

Summary & Conclusion

Foundations for the proposed abutments should exceed the scour depths noted. The exception will be if rock is encountered before such depths. Plots of the total scour for the proposed bridge under both storm events are included in the following pages. The following calculation sheets include theoretical scour depths at the abutments; however, rip rap placed at the abutments protects against scouring. See rip rap calculation in the following pages.

South Utoy 100 yr Scour Analysis

Hydraulic Design Data

Contraction Scour

	Left	Channel	Right
Input Data			
Average Depth (ft):	8.53	11.45	6.71
Approach Velocity (ft/s):	1.17	2.04	0.95
Br Average Depth (ft):	2.39	11.99	2.39
BR Opening Flow (cfs):	1785.75	3100.10	2298.35
BR Top WD (ft):	180.58	57.56	234.24
Grain Size D50 (mm):	0.38	0.38	0.38
Approach Flow (cfs):	2866.23	2961.04	1328.74
Approach Top WD (ft):	287.46	126.62	208.79
K1 Coefficient:	0.640	0.640	0.640
Results			
Scour Depth Ys (ft):	3.24	7.73	3.20
Critical Velocity (ft/s):	1.72	1.81	1.66
Equation:	Clear	Live	Clear

Abutment Scour

	Left	Right
Input Data		
Station at Toe (ft):	9960.24	10024.26
Toe Sta at appr (ft):	9943.02	10076.10
Abutment Length (ft):	287.46	208.79
Depth at Toe (ft):	15.25	14.98
K1 Shape Coef:	0.82 - Vert. with wing walls	
Degree of Skew (degrees):	90.00	90.00
K2 Skew Coef:	1.00	1.00
Projected Length L' (ft):	287.46	208.79
Avg Depth Obstructed Ya (ft):	8.53	6.71
Flow Obstructed Qe (cfs):	2866.23	1328.74
Area Obstructed Ae (sq ft):	2451.01	1401.50
Results		
Scour Depth Ys (ft):	22.83	17.00
Qe/Ae = Ve:	1.17	0.95
Froude #:	0.07	0.06
Equation:	Froehlich	Froehlich

Combined Scour Depths

Left abutment scour + contraction scour (ft):	26.07
Right abutment scour + contraction scour (ft):	20.20

South Utoy 500 yr Scour Analysis

Hydraulic Design Data

Contraction Scour

	Left	Channel	Right
Input Data			
Average Depth (ft):	8.72	13.42	7.89
Approach Velocity (ft/s):	0.86	1.64	0.76
Br Average Depth (ft):	4.89	14.10	2.73
BR Opening Flow (cfs):	6489.61	1947.82	1249.57
BR Top WD (ft):	820.55	57.56	421.85
Grain Size D50 (mm):	0.38	0.38	0.38
Approach Flow (cfs):	4715.63	2792.21	2179.16
Approach Top WD (ft):	629.79	126.62	361.71
K1 Coefficient:	0.640	0.640	0.640
Results			
Scour Depth Ys (ft):	0.00	2.07	0.00
Critical Velocity (ft/s):	1.73	1.86	1.70
Equation:	Clear	Clear	Clear

Abutment Scour

	Left	Right
Input Data		
Station at Toe (ft):	9960.24	10024.26
Toe Sta at appr (ft):	9943.02	10076.10
Abutment Length (ft):	629.79	361.71
Depth at Toe (ft):	17.72	17.45
K1 Shape Coef:	0.82 - Vert. with wing walls	
Degree of Skew (degrees):	90.00	90.00
K2 Skew Coef:	1.00	1.00
Projected Length L' (ft):	629.79	361.71
Avg Depth Obstructed Ya (ft):	8.72	7.89
Flow Obstructed Qe (cfs):	4715.63	2179.16
Area Obstructed Ae (sq ft):	5492.07	2 855.47
Results		
Scour Depth Ys (ft):	25.41	19.81
Qe/Ae = Ve:	0.86	0.76
Froude #:	0.05	0.05
Equation:	Froehlich	Froehlich

Combined Scour Depths

Left abutment scour + contraction scour (ft):	25.41
Right abutment scour + contraction scour (ft):	19.81

North Utoy 100 yr Scour Analysis

Hydraulic Design Data

Contraction Scour

	Left	Channel	Right
Input Data			
Average Depth (ft):	6.79	11.44	5.48
Approach Velocity (ft/s):	0.56	1.56	0.49
Br Average Depth (ft):	2.69	10.60	0.78
BR Opening Flow (cfs):	2146.88	2177.26	76.51
BR Top WD (ft):	228.51	66.39	43.69
Grain Size D50 (mm):	0.38	0.38	0.38
Approach Flow (cfs):	1279.84	2230.19	906.96
Approach Top WD (ft):	335.33	124.63	340.31
K1 Coefficient:	0.640	0.640	0.640
Results			
Scour Depth Ys (ft):	2.70	5.14	0.49
Critical Velocity (ft/s):	1.66	1.81	1.60
Equation:	Clear	Clear	Clear

Abutment Scour

	Left	Right
Input Data		
Station at Toe (ft):	9967.50	10031.79
Toe Sta at appr (ft):	9921.43	10043.96
Abutment Length (ft):	336.43	341.31
Depth at Toe (ft):	16.97 1	6.97
K1 Shape Coef:	0.82 - Vert. with wing walls	
Degree of Skew (degrees):	90.00	90.00
K2 Skew Coef:	1.00	1.00
Projected Length L' (ft):	336.43	341.31
Avg Depth Obstructed Ya (ft):	6.81	5.50
Flow Obstructed Qe (cfs):	1299.52	924.88
Area Obstructed Ae (sq ft):	2291.15	1876.41
Results		
Scour Depth Ys (ft):	16.08	13.59
Qe/Ae = Ve:	0.57	0.49
Froude #:	0.04	0.04
Equation:	Froehlich	Froehlich

Combined Scour Depths

Left abutment scour + contraction scour (ft):	21.22
Right abutment scour + contraction scour (ft):	18.73

North Utoy 500 yr Scour Analysis

Hydraulic Design Data

Contraction Scour

	Left	Channel	Right
Input Data			
Average Depth (ft):	9.46	14.10	7.86
Approach Velocity (ft/s):	0.58	1.50	0.52
Br Average Depth (ft):	5.23	13.14	2.21
BR Opening Flow (cfs):	2444.36	3190.70	298.94
BR Top WD (ft):	228.51	66.39	115.77
Grain Size D50 (mm):	0.38	0.38	0.38
Approach Flow (cfs):	1854.33	2639.22	1440.46
Approach Top WD (ft):	335.33 1	24.63	354.91
K1 Coefficient:	0.640	0.640	0.640
Results			
Scour Depth Ys (ft):	0.79	8.71	0.00
Critical Velocity (ft/s):	1.75	1.87	1.70
Equation:	Clear	Clear	Clear

Abutment Scour

	Left	Right
Input Data		
Station at Toe (ft):	9967.50	10031.79
Toe Sta at appr (ft):	9921.43	10043.96
Abutment Length (ft):	336.43	355.91
Depth at Toe (ft):	19.68	19.68
K1 Shape Coef:	0.82 - Vert. with wing walls	
Degree of Skew (degrees):	90.00	90.00
K2 Skew Coef:	1.00	1.00
Projected Length L' (ft):	336.43	355.91
Avg Depth Obstructed Ya (ft):	9.47	7.88
Flow Obstructed Qe (cfs):	1877.61	1461.65
Area Obstructed Ae (sq ft):	3187.09	2804.22
Results		
Scour Depth Ys (ft):	19.82	17.26
Qe/Ae = Ve:	0.59	0.52
Froude #:	0.03	0.03
Equation:	Froehlich	Froehlich

Combined Scour Depths

Left abutment scour + contraction scour (ft):	28.53
Right abutment scour + contraction scour (ft):	25.96

Appendix A: Calculations

BRIDGE HYDRAULIC DESIGN CRITERIA

FAIRBURN ROAD OVER SOUTH UTOY CREEK

Project name file name V:\14603 Fairburn Road\Hydraulic Study\FEMA\Proposed Model Flood Study Data\Proposed Analysis Caldwell Branch, Utoy, N, Utoy, S. Utoy Creeks\South Utoy Creek\A-J\Simulations\SouthUtoyCreek.prj
 Proposed Plan Conspan O1165
 Existing Plan Existing Bridge
 Natural Conditions Plan Natural Conditions

10 YEAR STORM (Minimum Design Storm)

CREEK FLOODS	NATURAL CONDITIONS	EXISTING BRIDGE Span = 38.84'	Proposed Bottomless Culvert Span = 65'
FLOOD STAGE AT FULL VALLEY	800.70	800.70	800.70
TOTAL DISCHARGE (CFS)	3761	3761	3761
DISCHARGE THRU BRIDGE (CFS)		3510.98	3509.76
BRIDGE OPEN AREA (FT ²)		581.6	677.09
VELOCITY THRU BRIDGE (FPS)		6.47	5.55
CHANNEL VELOCITY (FPS)	3.76	6.54	5.72
MAXIMUM BACKWATER (FT)		1.06	0.27
RISE (FT)			-0.79
WS ELEV APPROACH SECTION (Reach 1283.438)	801.89	802.95	802.16

100 YEAR STORM

CREEK FLOODS	NATURAL CONDITIONS	EXISTING BRIDGE W = 29'	Proposed Bottomless Culvert Span = 65'
FLOOD STAGE AT FULL VALLEY	804.49	804.49	804.49
TOTAL DISCHARGE (CFS)	7156	7156	7156
DISCHARGE THRU BRIDGE (CFS)		2416.01	3061.04
BRIDGE OPEN AREA (FT ²)		386.53	536.98
VELOCITY THRU BRIDGE (FPS)		6.20	5.72
CHANNEL VELOCITY (FPS)	2.25	4.43	4.51
MAXIMUM BACKWATER (FT)		0.68	0.39
RISE (FT)			-0.29
WS ELEV APPROACH SECTION (Reach 1283.438)	805.07	805.75	805.46

500 YEAR STORM

CREEK FLOODS	NATURAL CONDITIONS	EXISTING BRIDGE W = 29'	Proposed Bottomless Culvert Span = 65'
FLOOD STAGE AT FULL VALLEY	806.9	806.9	806.9
TOTAL DISCHARGE (CFS)	9687	9687	9687
DISCHARGE THRU BRIDGE (CFS)		2600.79	3645.74
BRIDGE OPEN AREA (FT ²)		1480.01	1797.66
VELOCITY THRU BRIDGE (FPS)		1.79	1.67
CHANNEL VELOCITY (FPS)	1.82	2.79	2.45
MAXIMUM BACKWATER (FT)		0.04	0.05
WS ELEV APPROACH SECTION (Reach 1283.438)	807.35	807.39	807.40

BRIDGE HYDRAULIC DESIGN CRITERIA

FAIRBURN ROAD OVER NORTH UTOY CREEK

Project name file name V:\14603 Fairburn Road\Hydraulic Study\FEMA\Proposed Model Flood Study Data\Proposed Analysis Caldwell Branch, Utoy, N. Utoy, S. Utoy Creeks\North Utoy Creek\HYDRAULIC\CS\Simulations
 Proposed Plan Conspan O1165
 Existing Plan Existing Bridge
 Natural Conditions Plan Natural

10 YEAR STORM (Minimum Design Storm)

	NATURAL CONDITIONS	EXISTING BRIDGE Span = 38.84'	Proposed Bottomless Culvert Span = 65'
CREEK FLOODS			
FLOOD STAGE AT FULL VALLEY	800.70	800.70	800.70
TOTAL DISCHARGE (CFS)	2316	2316	2316
DISCHARGE THRU BRIDGE (CFS)		2316	2316
BRIDGE OPEN AREA (FT ²)		418.75	620.19
VELOCITY THRU BRIDGE (FPS)		5.53	3.73
CHANNEL VELOCITY (FPS)	3.76	5.53	3.73
MAXIMUM BACKWATER (FT)		0.46	0.06
RISE (FT)			-0.40
WS ELEV APPROACH SECTION (Reach 1037.962)	801.39	801.85	801.45

100 YEAR STORM

	NATURAL CONDITIONS	EXISTING BRIDGE W = 29'	Proposed Bottomless Culvert Span = 65'
CREEK FLOODS			
FLOOD STAGE AT FULL VALLEY	804.49	804.49	804.49
TOTAL DISCHARGE (CFS)	4417	4417	4417
DISCHARGE THRU BRIDGE (CFS)		1688.72	1857.34
BRIDGE OPEN AREA (FT ²)		886.85	1167.88
VELOCITY THRU BRIDGE (FPS)		4.98	3.78
CHANNEL VELOCITY (FPS)	2.25	4.15	3.00
MAXIMUM BACKWATER (FT)		0.11	-0.02
RISE (FT)			-0.13
WS ELEV APPROACH SECTION (Reach 1037.962)	805.28	805.39	805.26

500 YEAR STORM

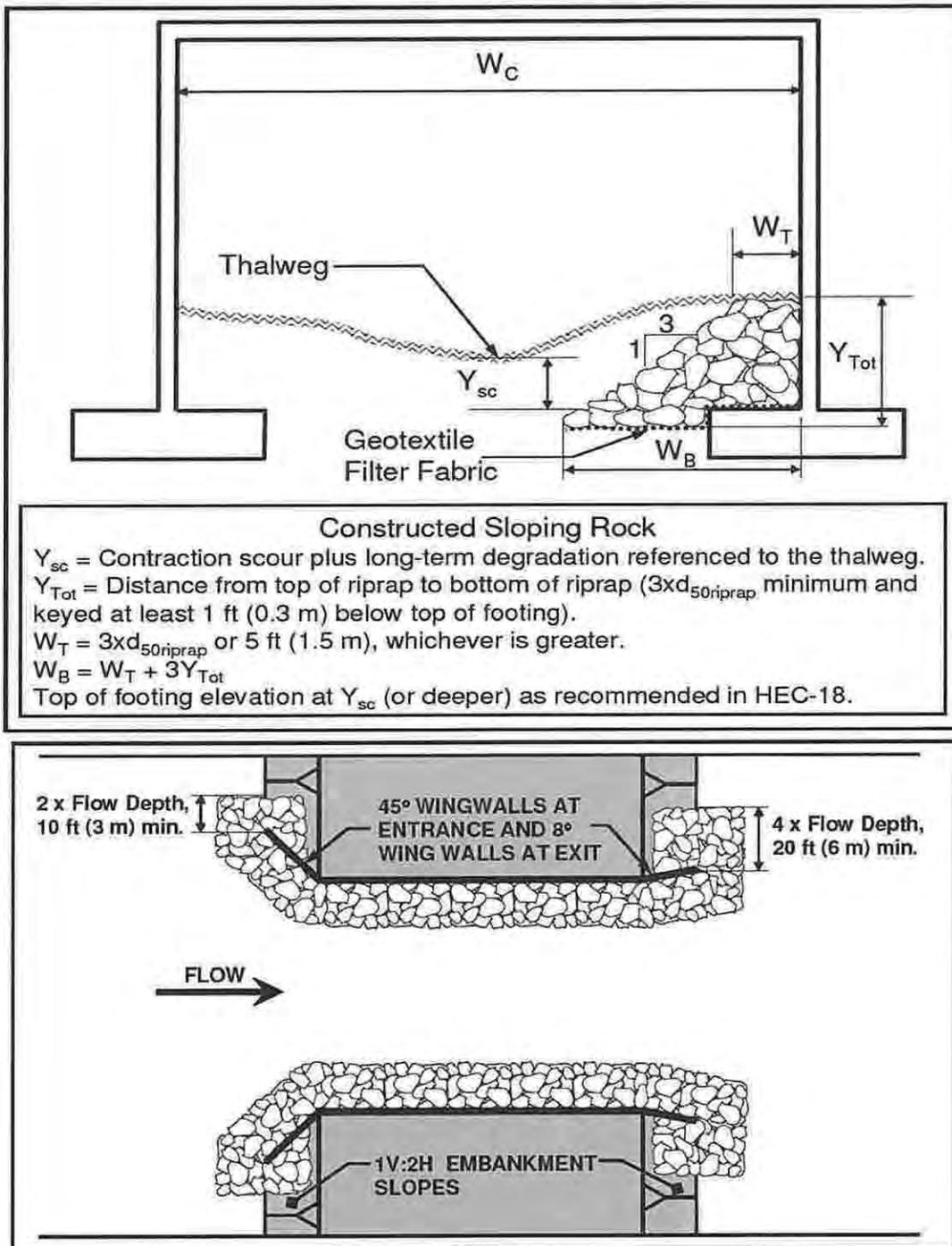
	NATURAL CONDITIONS	EXISTING BRIDGE W = 29'	Proposed Bottomless Culvert Span = 65'
CREEK FLOODS			
FLOOD STAGE AT FULL VALLEY	806.9	806.9	806.9
TOTAL DISCHARGE (CFS)	5934	5934	5934
DISCHARGE THRU BRIDGE (CFS)		2165.24	2244.48
BRIDGE OPEN AREA (FT ²)		1352.25	1773.73
VELOCITY THRU BRIDGE (FPS)		4.39	3.35
CHANNEL VELOCITY (FPS)	1.92	6.04	4.45
MAXIMUM BACKWATER (FT)		0.4	0.15
WS ELEV APPROACH SECTION (Reach 1037.962)	807.77	808.17	807.92

RIP RAP CALCULATIONS

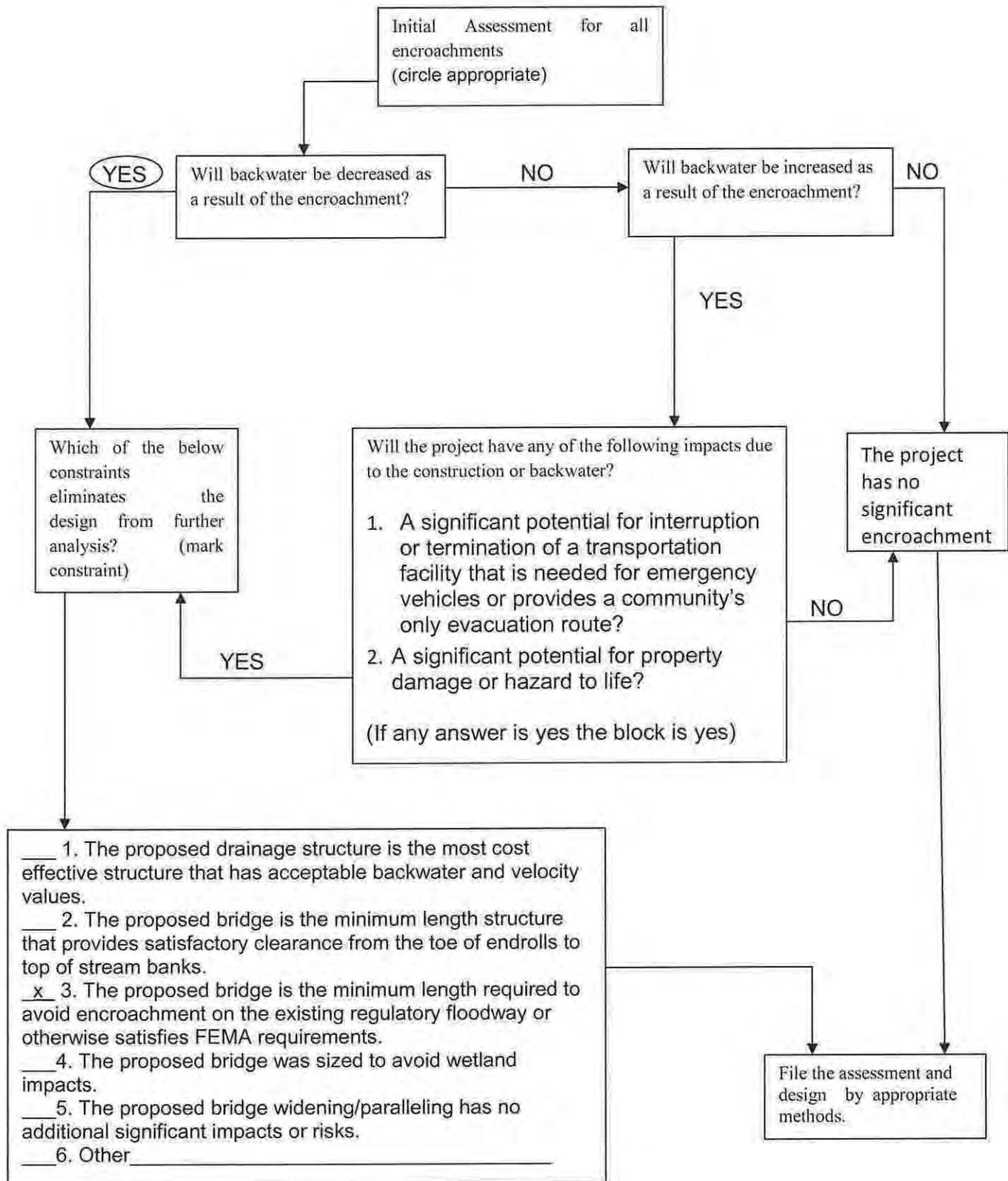
The FHWA publications, HEC No. 18, "Evaluating Scour at Bridges" and HEC No. 23, "Bridge Scour and Stream Instability Countermeasures Experience, Selection, and Design Guidance Second Edition," are recommended to be used to determine the riprap requirements for this project. Calculations should be based on the 100-year storm. Plastic filter fabric will be required under the rip rap as well. Since the 100-year storm elevation overtops the structure. The rip rap protection should extend up the shoulder break point.

RIP RAP Placement

The figures below show the recommended layout based in HEC-23 for a bottomless culvert:



Appendix B: Risk Assessment Sheet



Appendix C: Preliminary Roadway Plans and Typical Section Sheets

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	T-259	1	24

FULTON COUNTY FACILITIES AND TRANSPORTATION SERVICES AND DEPARTMENT

30% PLANS OF PROPOSED
SIDEWALK AND BRIDGE IMPROVEMENTS
FOR FAIRBURN ROAD FROM
CASCADE ROAD TO NORTH UTOY CREEK
FULTON COUNTY
T-259



LOCATION SKETCH

POINT	DESCRIPTION	NORTHING	EASTING	ELEVATION	STA & OFFSET
SVA1333	*DPW 91 ATLANTA*	1354784.82	2192062.39	826.39	147+36.61, 29.77
SVA2360	PK	1355522.20	2191881.74	804.27	155+06.25, 26.37
SVA15	1/2" REBAR	1356176.13	2192070.47	803.10	161+87.66, 13.71
SVA16	3/4" REBAR	1356650.12	2192084.11	804.27	166+57.92, 16.10

FEDERAL ROUTE N/A
STATE ROUTE N/A
COUNTY ROAD 1349

SURVEY AND COORDINATE DATA:
(HORIZONTAL DATUM - NAD 83/78 (HARN))
(VERTICAL DATUM - NAVD 1983)
COORDINATE ZONE - GEORGIA WEST.

DESIGN DATA:
TRAFFIC A.D.T. : 7900 (2002)
TRAFFIC A.D.T. : 11,740 (2022)
DESIGN SPEED : 35 MPH
FUNCTIONAL CLASSIFICATION : URBAN MINOR ARTERIAL

THIS PROJECT HAS BEEN DESIGNED TO COMPLY WITH THE TITLE 2 PROVISIONS OF THE AMERICANS WITH DISABILITY ACT (ADA).

All work is to be done in accordance with the Georgia Department of Transportation Standard Specifications for the Construction of Roads and Bridges, 2001 Edition and supplements thereto, as approved by the Federal Highway Administration.

3189 Noland Bridge Road,
Suite 455
Norcross, Georgia 30071
(404) 293-5800



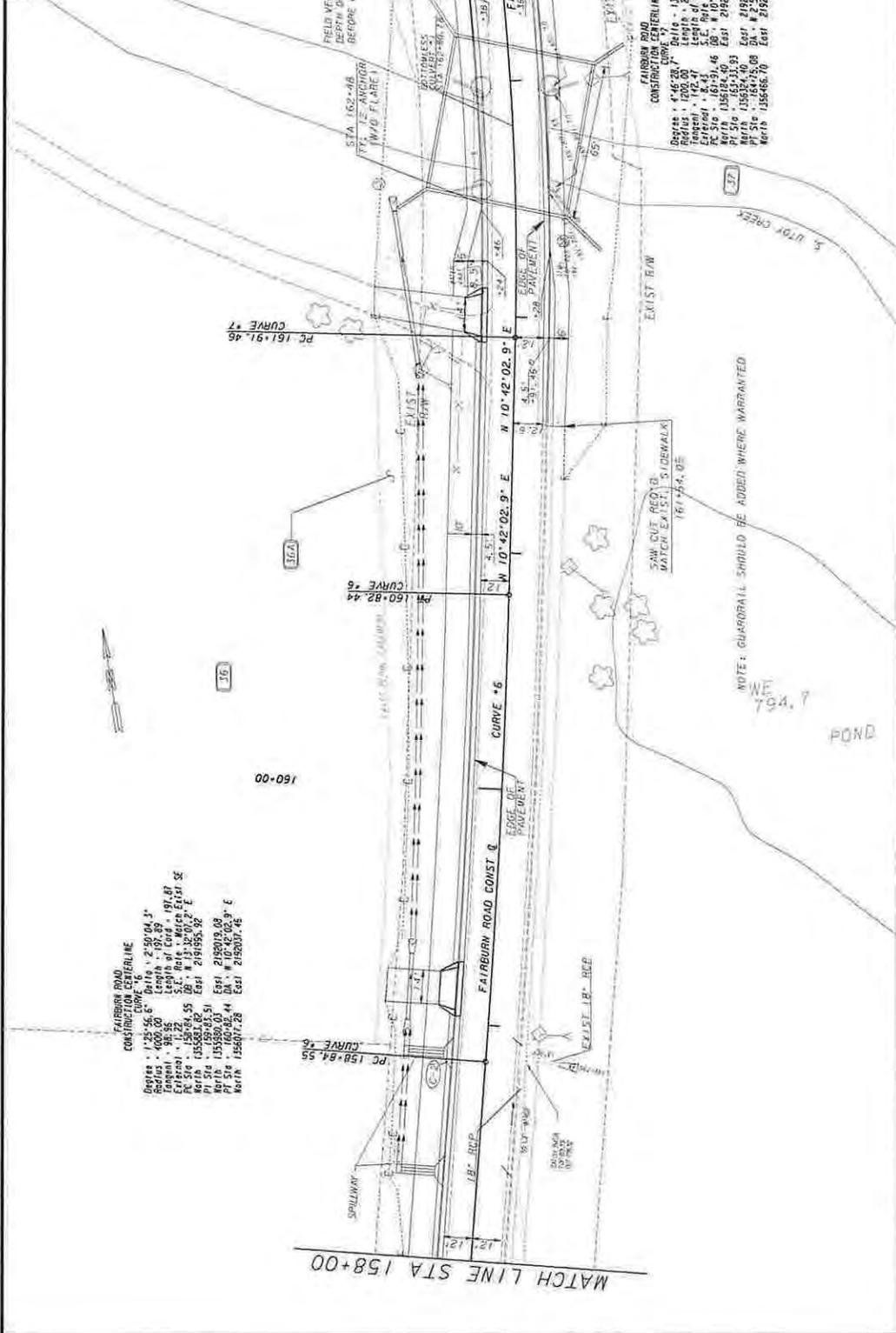
LENGTH OF PROJECT	MILES	FEET
NET LENGTH OF ROADWAY	0.50	2665.23
NET LENGTH OF BRIDGES	0.00	0.00
NET LENGTH OF PROJECT	0.50	2665.23
NET LENGTH OF EXCEPTORS	0.00	0.00
GROSS LENGTH OF PROJECT	0.50	2665.23

PLANS COMPLETED:
REV IS IONS:

NOTE: REFERENCES IN THIS DRAWING TO THE GEORGIA STATE HIGHWAY DEPARTMENT, THE GEORGIA DEPARTMENT OF TRANSPORTATION, THE GEORGIA DEPARTMENT OF REVENUE, THE GEORGIA DEPARTMENT OF CORRECTIONS, THE GEORGIA DEPARTMENT OF COMMUNITY DEVELOPMENT, THE GEORGIA DEPARTMENT OF EDUCATION, THE GEORGIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, THE GEORGIA DEPARTMENT OF HEALTH SERVICES, THE GEORGIA DEPARTMENT OF LABOR INDUSTRY AND CONSUMER AFFAIRS, THE GEORGIA DEPARTMENT OF NATURAL RESOURCES, THE GEORGIA DEPARTMENT OF OCCUPATIONAL AND PROFESSIONAL TRAINING, THE GEORGIA DEPARTMENT OF REVENUE, THE GEORGIA DEPARTMENT OF TRANSPORTATION, THE GEORGIA DEPARTMENT OF WORKFORCE DEVELOPMENT, THE GEORGIA DEPARTMENT OF COMMUNITY DEVELOPMENT, THE GEORGIA DEPARTMENT OF EDUCATION, THE GEORGIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, THE GEORGIA DEPARTMENT OF HEALTH SERVICES, THE GEORGIA DEPARTMENT OF LABOR INDUSTRY AND CONSUMER AFFAIRS, THE GEORGIA DEPARTMENT OF NATURAL RESOURCES, THE GEORGIA DEPARTMENT OF OCCUPATIONAL AND PROFESSIONAL TRAINING, THE GEORGIA DEPARTMENT OF REVENUE, THE GEORGIA DEPARTMENT OF TRANSPORTATION, THE GEORGIA DEPARTMENT OF WORKFORCE DEVELOPMENT.

100% OF THIS PROJECT IS LOCATED IN FULTON COUNTY.

DATE PLOTTED: 11/11/2024 10:00 AM



PROPERTY AND EXISTING R/W LINE

CONSTRUCTION LIMITS

EASEMENT FOR CONSTRUCTION

EASEMENT FOR CONSTRUCTION OF TEMPORARY TRAFFIC DETOUR

SCALE IN FEET

REVISION DATES

FAIRBURN ROAD IMPROVEMENTS

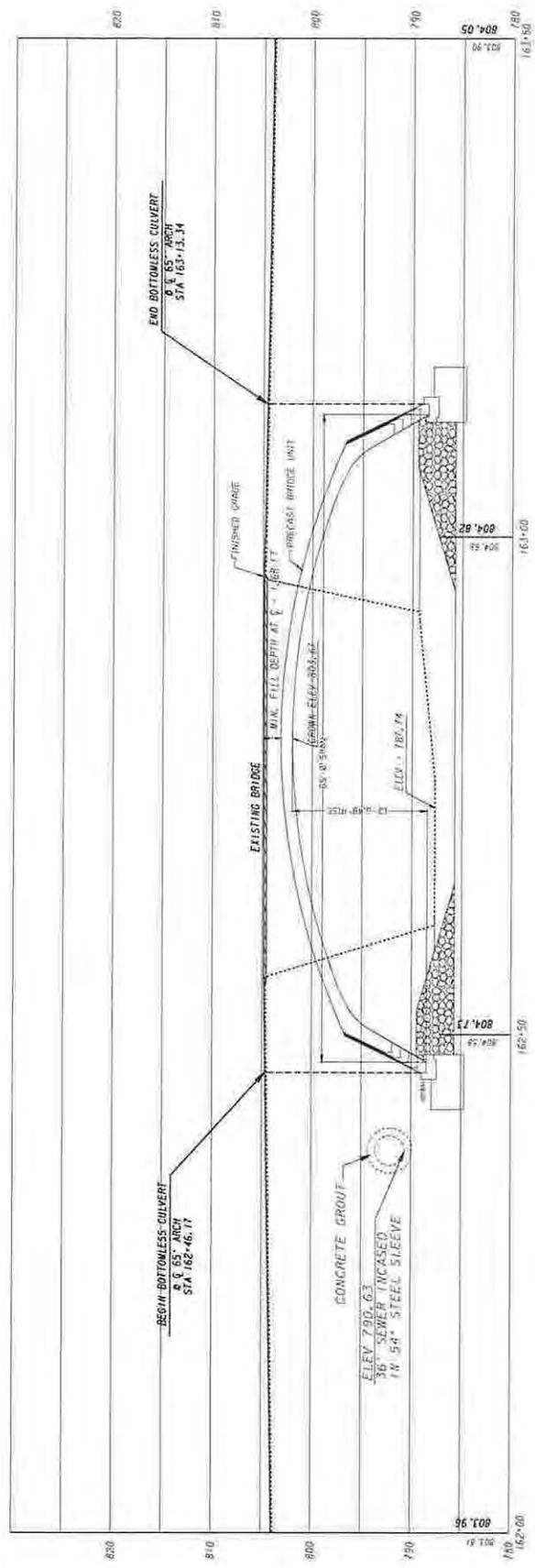
MAINLINE PLAN

STA. 158+00 TO STA. 164+00

13-04

Appendix D: Preliminary Roadway Profile at Bottomless Culvert

CONTRACT NUMBER	1229
SHEET NO.	21
TOTAL SHEETS	24



REVISION DATES	DESCRIPTION

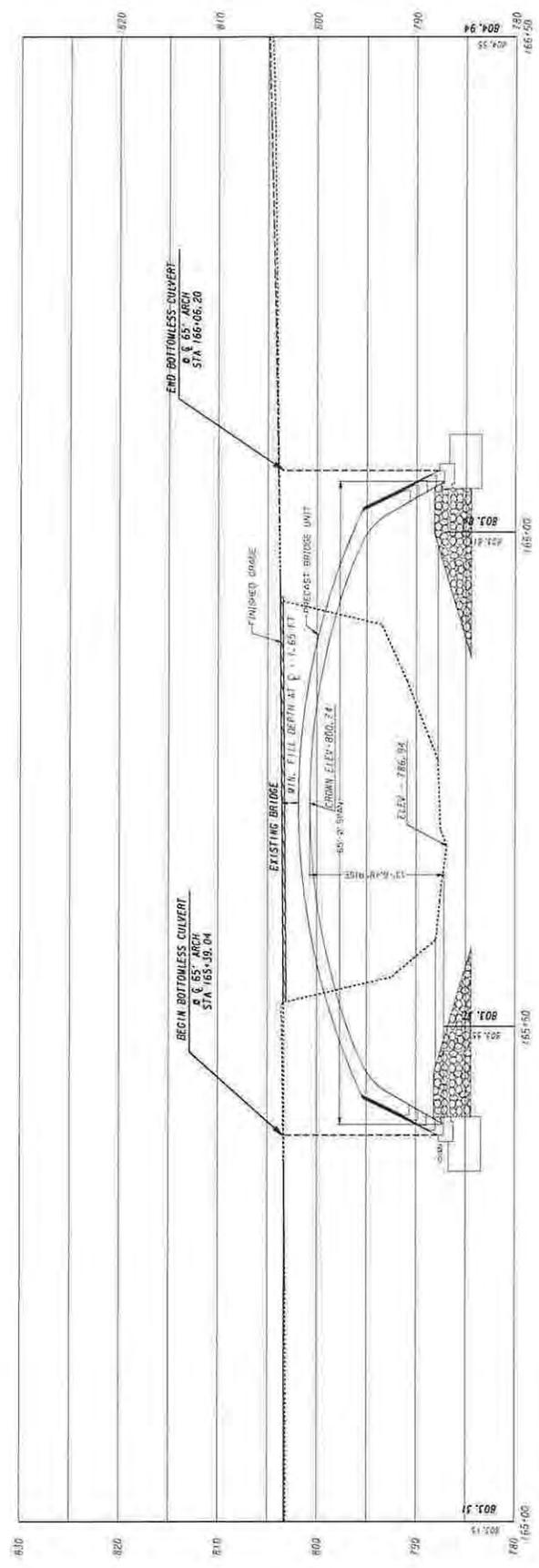
FAIRBURN COUNTY ELECTRIC UTILITIES AND TRANSPORTATION DEPARTMENT
CULVERT PLANS
 FAIRBURN RD IMPROVEMENTS
 SOUTH UTOY CREEK
 CROSS SECTION VIEW



HORIZONTAL SCALE IN FEET	0 5 10 20
VERTICAL SCALE IN FEET	0 5 10 20

162-50
162-60
163-00
163-100
163-200
163-300
163-400
163-500
163-600
163-700
163-800
163-900
164-000

CONTRACT	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
13104	1229	14	14



HORIZONTAL SCALE IN FEET 0 5 10 20		VERTICAL SCALE IN FEET 0 5 10 20	
		FAIRBURN COUNTY FACILITIES AND TRANSPORTATION SERVICES DEPARTMENT CULVERT PLANS FAIRBURN RD IMPROVEMENTS NORTH UTOPY CREEK CROSS SECTION VIEW	
REVISION DATES		DRAWING NUMBER 36-02	

DATE PLOTTED: 04/20/2011 10:44:48 AM