

BIDDING AND CONTRACT DOCUMENTS, GENERAL CONDITIONS, SUPPLEMENTARY GENERAL CONDITIONS, AND TECHNICAL SPECIFICATIONS

FOR

HOTEL SITE DEVELOPMENT STEPHEN S. GREEN DRIVE

CITY OF SAVANNAH EVENT NO. 5954

MAY, 2018

HOTEL SITE DEVELOPMENT - STEPHEN GREEN DRIVE

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NOTICE TO BIDDERS

Sealed proposals, in duplicate, will be received by the Mayor and Aldermen of the City of Savannah and the Savannah Airport Commission in the office of the City Purchasing Agent, 1375 Chatham Parkway, Second Floor, Savannah, Georgia 31405 until **May 15, 2018**, 1:30 p.m. local time, at which time and place all proposals received will be publicly opened and read aloud.

Bidders are invited to submit proposals for:

HOTEL SITE DEVELOPMENT - STEPHEN GREEN DRIVE CITY OF SAVANNAH EVENT NO. 5954

This project includes, but is not limited to, clearing and grubbing, site grading, 12" water main extension, 8" gravity sewer line, 4" force main, and installation of a sanitary sewer pump station.

Bidders are invited to submit proposals for this work on the proposal forms provided. Other proposal forms will not be accepted.

The complete examination and understanding of the construction plans, specifications, contract documents, and site of the proposed work is necessary to properly submit a proposal. Construction plans, specifications, and contract documents are available for examination and may be obtained from the offices of the Savannah Airport Commission, 400 Airways Avenue, Savannah/Hilton Head International Airport, Savannah, Georgia 31408, Phone (912) 964-0514, for a cost of \$50.00 per set. This cost is non-refundable. Please make checks payable to Savannah Airport Commission.

A pre-bid conference for bidders will be conducted in the Savannah Airport Commission Conference Room, third floor, Savannah/Hilton Head International Airport, Savannah, Georgia, on May 1, 2018, at 11:00 A.M.

A Bid Bond in the form as bound in the contract documents or certified check in the amount of not less than five percent (5%) of the total amount bid must accompany each bid.

Successful bidder will be required to execute and to provide a Payment Bond and Performance Bond each in an amount of one hundred percent (100%) of the total value of the contract awarded to him with a satisfactory surety or sureties for the full and faithful performance of the work. If the total value of the contract is less than \$100,000.00, a Payment Bond or Performance Bond may not be required.

The Savannah Airport Commission, in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 U.S.C. 2000d to 2000d-4 and Title 49, Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally assisted programs of the Department of Transportation

GDOT Revised 07/20/09 issued pursuant to such Act, hereby notifies all bidders that, in any contract entered into pursuant to this advertisement, Disadvantaged Business Enterprises will be afforded equal opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

The Contractor agrees to ensure that Disadvantaged Business Enterprises that are presumed to be socially and economically disadvantaged as defined in 49 CFR Part 26.5 have an equal opportunity to participate in the performance of this contract. In this regard all Contractors shall take all necessary and reasonable steps to ensure that Disadvantaged Business Enterprises have an equal opportunity to compete for and perform contracts. Contractors shall not discriminate on the basis of race, color, or national origin or sex in the award or performance of this contract.

The Contractor, or any subcontractor, submitting a bid for utility contracting, as defined in O.C.G.A. Section 43-14-2 to a utility system as defined in said section, shall conform to O.C.G.A. Section 43-14-8.2 et seq. with reference to Utility Contractor's Licenses. Utility contracting means a proposal to perform utility work to a utility system as defined in O.C.G.A. Section 43-14-2(17).

No bid may be withdrawn after closing time for the receipt of proposals for a period of ninety (90) days.

This is a bid for construction and therefore the City's local vendor preference ordinance will not apply.

The Mayor and Aldermen of the City of Savannah and the Savannah Airport Commission reserve the right to waive any informalities, irregularities, and/or technicalities in or reject any and all bids and/or to award or refrain from awarding the Contract for the Work.

Mayor and Aldermen of the

	City of Savannah and the Savannah Airport Commission
Dated:	
1	By: Purchasing Director

INSTRUCTIONS TO BIDDERS

GENERAL

- A. <u>Licenses</u>. The successful Bidder must be a licensed contractor as required by the Georgia State Licensing Board and will be required to obtain any necessary licenses or permits to conduct the work as may be prescribed by the State of Georgia and by the City of Savannah.
- B. Examination of Conditions Affecting Work. Prior to submitting a Proposal, each Bidder shall examine and thoroughly familiarize himself with all existing conditions including all applicable laws, codes, ordinances, rules and regulations that will affect his work. Bidders shall visit the site, examine the grounds and all existing buildings, utilities, and roads, and shall ascertain by any reasonable means all conditions that will in any manner affect the work. The drawings have been prepared on the basis of surveys and inspections of the site, and represent the best factual information available without being considered as a representation of the Owner. This, however, shall not relieve the Bidder of the necessity for fully informing himself as to existing physical conditions.

C. <u>Nondiscrimination and Segregated Facilities</u>

- Bidders must comply with the President's Executive Order No. 11246 which prohibits discrimination in employment regarding race, creed, color, sex or national origin.
- Each Bidder shall complete, sign and include in his bid proposal the Equal Opportunity Report Statement. When a determination has been made to award a contract to a specific Contractor, such Contractor shall, prior to award, after award or both, furnish such other pertinent information regarding his own employment policies and practices as well as those of his proposed subcontractors as the Savannah Airport Commission, City of Savannah, or the Secretary of Labor may require. All such information required of a subcontractor shall be furnished by the Contractor.
- 3. The Equal Opportunity Report Statement, Equal Opportunity Clause (41 CFR 60-741.5), and all other EEO requirements shall be included in all nonexempt subcontracts entered into by the Contractor. Subcontracts entered into by the Contractor shall also include all other applicable labor provisions. No subcontract shall be awarded to a noncomplying subcontractor.
- 4. In addition, the Contractor will also insert in each of his subcontracts a clause requiring the subcontractor to include these provisions in

any lower tier subcontracts that may in turn be made.

E. Compliance with Law

site.

- Bidders must comply with Title IV of the Civil Rights Act of 1964, the Davis-Bacon Act, the Anti-Kickback Act and the Contract Work Hours Standard Act.
- Bidders must comply with all state laws, local ordinances, except that any preferential consideration of local in-state Bidders is not allowed.
- 3. **Employment Eligibility Verification** Pursuant to the "Georgia Security and Immigration Compliance Act of 2006," O.C.G.A. Section 13-10-91, public employers and their contractors and subcontractors are required to verify the work eligibility of all newly hired employees through an electronic federal work authorization program. The Georgia Department of Labor has added a new Chapter 300-10-1, entitled "Public Employers, Their Contractors and Subcontractors Required to Verify New Employee Work Eligibility Through a Federal Work Authorization Program." to the Rules and Regulations of the State of Georgia. (See website: http://www.dol.state.ga.us/pdf/rules/300 10 1.pdf.) The new rules designate the "Employment Eligibility Verification (EEV) Basic Pilot Program" operated by the U. S. Citizenship and Immigration Services Bureau of the U.S. Department of Homeland Security as the electronic federal work authorization program to be utilized for these purposes. The EEV/Basic Pilot Program can be accessed at: https://www.vis-dhs.com/EmployerRegistration. Bidders shall comply with this new rule, and submit with their bid the form titled "Contractor Affidavit and Agreement", page I-2(a). After the contract has been awarded, the Contractor shall secure from all subcontractors the form titled "Subcontractor Affidavit and Agreement", page I-2(b), which must be submitted to the Savannah Airport Commission prior to the subcontractor beginning work at the

CONTRACTOR AFFIDAVIT AND AGREEMENT

By executing this affidavit, the undersigned contractor verifies its compliance with O.C.G.A. 13-10-91, stating affirmatively that the individual, firm, or corporation which is contracting with the Savannah Airport Commission has registered with and is participating in a federal work authorization program* [any of the electronic verification of work authorization programs operated by the United States Department of Homeland Security or any equivalent federal work authorization program operated by the United States Department of Homeland Security to verify information of newly hired employees, pursuant to the Immigration Reform and Control Act of 1986 (IRCA), P.L. 99-603], in accordance with the applicability provisions and deadlines established in O.C.G.A. 13-10-91.

The undersigned further agrees that, should it employ or contract with any subcontractor(s) in connection with the physical performance of services pursuant to this contract with the Savannah Airport Commission, contractor will secure from such subcontractor(s) similar verification of compliance with O.C.G.A. 13-10-91 on the Subcontractor Affidavit provided in Rule 300-10-01-.08 or a substantially similar form. Contractor further agrees to maintain records of such compliance and provide a copy of each such verification to the Savannah Airport Commission the time the subcontractor(s) is retained to perform such service.

EEV/Basic Pilot Program* User Identification Number		
Company Name		
BY: Authorized Officer or Agent (Contractor Name)	Date	
Title of Authorized Officer or Agent of Contractor		
Printed Name of Authorized Officer or Agent		
SUBSCRIBED AND SWORN BEFORE ME ON THIS THE DAY OF		
Notary Public My Commission Expires:		

ARCH Revised 70/20/09

^{*} As of the effective date of O.C.G.A. 13-10-91, the applicable federal work authorization program is the "EEV/Basic Pilot Program" operated by the U. S. Citizenship and Immigration Services Bureau of the U. S. Department of Homeland Security, in conjunction with the Social Security Administration (SSA).

SUBCONTRACTOR AFFIDAVIT

By executing this affidavit, the undersigned subcontractor stating affirmatively that the individual, firm or corporation services under a contract with	which is engaged in the physical performance of on tered with and is participating in a federal work of work authorization programs operated by the requivalent federal work authorization program and Security to verify information of newly hired Control Act of 1986 (IRCA), P.L. 99-603], in
EEV/Basic Pilot Program* User Identification Number	
Company Name	
BY: Authorized Officer or Agent (Contractor Name)	Date
Title of Authorized Officer	
Printed Name of Authorized Officer or Agent	
SUBSCRIBED AND SWORN BEFORE ME ON THIS THE DAY OF	
Notary Public My Commission Expires:	

GDOT Revised 07/20/09

^{*} As of the effective date of O.C.G.A. 13-10-91, the applicable federal work authorization program is the "EEV/Basic Pilot Program" operated by the U. S. Citizenship and Immigration Services Bureau of the U. S. Department of Homeland Security, in conjunction with the Social Security Administration (SSA).

F. Insurance Requirements

1. Insurance requirements shall be as specified in Paragraph 7, Supplementary General Conditions.

G. General Bond Requirements

- 1. The Bid Bond shall be five percent (5%) of the total amount bid. Only the Bid Bond as bound within these documents or a Certified Check is acceptable. **No other form will be accepted**.
- 2. Payment Bond and Performance Bond shall be each in the amount of one hundred percent (100%) of the total value of the contract. Only the Payment and Performance Bond as bound within and made a part of the specifications and these documents is acceptable. No other form will be accepted. If the amount bid is less than \$100,000.00, a Payment Bond or Performance Bond may not be required.
- The Bid Bond, Payment Bond, and Performance Bond shall be countersigned by a Georgia Resident Agent. The Resident Agent shall also provide their Georgia License Number in the space provided.

II. PREPARATION AND SUBMISSION OF PROPOSALS

- A. Sealed proposals for the construction of the project will be received until 1:30 P.M. local time on **May 15, 2018**.
- B. The proposal shall be on the "Proposal Form" provided; no other forms are acceptable.
- C. Each Bidder shall present his proposal in a sealed opaque envelope and marked at the lower <u>left hand corner</u> "Proposal for Airport Improvements, Savannah/Hilton Head International Airport, HOTEL SITE DEVELOPMENT -STEPHEN GREEN DRIVE, City of Savannah Event No. 5954" with the name of the Bidder.

Proposals in duplicate shall be delivered to the office of the Director of Purchasing, City of Savannah, 1375 Chatham Parkway, Second Floor, Savannah, GA 31405.

D. The Bidder's envelope shall contain two (2) complete copies of the following documents, both with original signatures and corporate seals:

Proposal Form
Disadvantaged Business Enterprise Requirements
Disadvantaged Business Enterprise Assurance Form
Equal Employment Opportunity Statement

Bidder Qualification Questionnaire Bid Bond or Certified Check Bid Schedule

- E. Proposals shall be submitted as indicated by the "Proposal Form" and shall be signed in ink by an official of the firm submitting the proposal.
- F. Erasures or other changes in a proposal shall be explained or noted over the signature of the Bidder.
- G. Proposals containing reservations, conditions, omissions, unexplained erasures or alterations, items not required in the bid, or irregularities of any kind, may be rejected by the Owner as being incomplete and not qualified for consideration.
- H. Each proposal shall indicate the full business name, phone number, and address of the Bidder and shall be signed by him with the usual signature.
- I. A proposal submitted by a partnership shall list the names of all partners and shall be signed in the partnership name by one of the members of the partnership.
- J. A proposal submitted by a corporation shall be signed by the legal name of the corporation, followed by the state of incorporation and the title designation of the corporation in legal matters. The name of each person signing the proposal shall be typed or printed below the signature.
- K. A Power of Attorney or other satisfactory evidence of the authority of the officer signing on behalf of the corporation shall be furnished for the Owner's records.
- L. The proposal must be accompanied by a Bid Bond executed on the form provided or a Certified Check payable to the Savannah Airport Commission in an amount equal to not less than five percent (5%) of the bid. If a Bidder is awarded the contract, but fails, refuses, or neglects to execute the contract or to furnish the required Payment and Performance Bonds within ten (10) days after receipt of written notice of award, then the amount of this Bond or Check shall be paid to, or retained by, the Owner as liquidated damages, although not as a penalty. Bid Bond, Payment Bond, and Performance Bond shall be on the forms provided herein. No other forms will be accepted.
- M. Acknowledgment of receipt of all addenda shall be made by each Bidder in the space provided in the Proposal Form.
- N. The Bidder is required to fill in all the blank spaces on the proposal and all of the unit prices on the proposal.

III. INTERPRETATIONS

- A. Each Bidder shall carefully examine the Plans and the Contract Documents and all addenda or other revisions and thoroughly familiarize themselves with the detailed requirements prior to submitting a proposal. Should a Bidder find discrepancies or ambiguities in, or omission from Bidding Documents, or should he be in doubt as to their meaning, he shall at once and, in any event not later than ten (10) days prior to bid date, notify the Owner who will send written addenda to all Bidders. The Savannah Airport Commission will not be responsible for any oral instructions. All addenda sent to Bidders will become a part of Contract Documents. All inquiries shall be directed to the Executive Director, Savannah Airport Commission, Savannah/Hilton Head International Airport, 400 Airways Avenue, Savannah, Georgia 31408, Telephone Number (912) 964-0514, FAX (912) 964-0877. No allowance will be made after bids are received for oversight by Bidder.
- B. Where a discrepancy occurs between the prices quoted in words and/or in numbers, the unit price written in words shall govern the final costs or award of contract.

IV. MODIFICATIONS AND/OR WITHDRAWALS OF PROPOSALS

- A. A bid may not be modified, withdrawn, or canceled by the Bidder during a ninety (90) calendar day period following the time and date designated for the receipt of bids, and each Bidder so agrees in submitting his bid.
- B. Negligence on the part of the Bidder in the preparation of his proposal shall not be grounds for the modification or withdrawal of a proposal after the time set for bid opening.

V. ACCEPTANCE/REJECTION OF BIDS

- A. This is a bid for construction and therefore the City's local vendor preference ordinance will not apply.
- B. The Contractor, or any subcontractor, submitting a bid for utility contracting, as defined in O.C.G.A. Section 43-14-2 to a utility system as defined in said section, shall conform to O.C.G.A. Section 43-14-8.2 et seq. with reference to Utility Contractor's Licenses. Utility contracting means a proposal to perform utility work to a utility system as defined in O.C.G.A. Section 43-14-2(17).
- C. The Savannah Airport Commission proposes to award the contract to the lowest qualified Bidder (See Page I-3, Section II – Preparation and Submission of Bid Proposals) submitting a reasonable bid as determined at the sole discretion of the Commission.
- D. The Mayor and Aldermen of the City of Savannah and the Savannah Airport

Commission reserve the right to waive any informalities, irregularities, and/or technicalities in or reject any and all bids and/or to award or refrain from awarding the Contract for the Work.

BIDDER'S CHECKLIST

THIS CHECKLIST MUST BE ATTACHED AS THE COVER SHEET TO YOUR BID PRIOR TO SEALING YOUR BID AND SUBMITTING IT TO THE OFFICE OF THE PURCHASING DIRECTOR. IF THIS CHECKLIST IS NOT ATTACHED, YOUR BID WILL BE DISQUALIFIED. IF THIS CHECKLIST IS INCOMPLETE OR IF ANY ITEM CANNOT BE VERIFIED AS BEING INCLUDED WITH YOUR BID, YOUR BID WILL BE DISQUALIFIED.

NAME AND ADDRESS:
CITY OF SAVANNAH EVENT NUMBER: 5954
PROJECT NAME: HOTEL SITE DEVELOPMENT – STEPHEN GREEN DRIVE
INSTRUCTIONS TO BIDDERS
The contents of your bid package must be clearly marked and submitted <u>IN THE FOLLOWING ORDER</u> : 1) acknowledgement of addendum, 2) bid bond, and 3) the bid proposal page. Please place a check mark in the appropriate space and indicate the number of addendums received:
1) Addendum received?No
Indicate number of addendums received:
2) Bid Bond enclosed?YesNo
Form of bid bond:Surety BondCashier's CheckCertified Check
3) Are all signature pages of the bid proposal signed?YesNo
4) Total Amount of Bid: \$
FOR CITY USE ONLY
Verification of Bid Package Content:
1) Addendum Acknowledged?YesNo
Number of Addendums Issued:
2) Bid Bond Enclosed:YesNo
Form of bid bond:Surety BondCashier's CheckCertified Check
3) Bid Proposal Pages Signed:YesNo
I certify that the above items were/were not included with the attached bid at the time and place of the bid opening.
Title
Signature
Date

REV. 03/03/04 P-O

PROPOSAL FORM

то:	Mayor and Aldermen of the City of Savannah and the Savannah Airport Commission	
FROM:		 -
	Bidder's Name	
	Address	1.
	City, State and Zip Code	
	Date	Phone Number

The undersigned, as Bidder, does hereby declare that he has familiarized himself with the local conditions affecting the cost of the work, Contract Documents including the "Notice to Bidders," "Instructions to Bidders," "Proposal," "Bid Schedule," "General Conditions," "Supplementary General Conditions," and the Specifications and Drawings and other related Construction Documents, together with any addenda to such Construction Documents as listed herein (paragraph 12) and hereby proposes to furnish all material and perform all work required in strict accordance with the provisions of documents noted above for the consideration of prices quoted in the "Bid Schedule" (see Page P-21 thru P-23) and attached hereto and incorporated by reference.

The undersigned understands that the quantities shown in the "Bid Schedule" are approximate only, are intended principally to serve as a guide in evaluating proposals and are subject to either increase or decrease.

- 2. The undersigned affirms that in making such bid, neither he nor any company that he may represent, nor anyone on behalf of him or his company, directly or indirectly, has entered into any combination, collusion, undertaking or agreement with any other Bidder or Bidders to maintain the prices of said work, or any compact to prevent any other Bidder or Bidders from bidding on said contract or work and further affirms that such bid is made without regard or reference to any other Bidder or proposal and without any agreement or understanding or combination either directly or indirectly with any other person or persons with reference to such bidding in any way or manner whatsoever.
- 3. The undersigned, when notified of the acceptance of this proposal, does hereby

agree to enter into a construction contract with the Owner, within ten (10) days from the date on the Notice of Acceptance, for the execution of the work described in the period of time, and he shall give 100% Performance Bond and Payment Bond with good and sufficient surety to assure satisfactory completion thereof.

4. The undersigned further agrees that if awarded the contract he will commence the work within ten (10) calendar days after the date of the Notice to Proceed and that he will complete the work in accordance with the schedules and time frame set forth in the Contract or such amended time as may be granted. If the undersigned fails to complete any phase of the work within the given time frame and if he fails to complete all of the work on or before the expiration of the allowed calendar days, then and in that event, he further expressly agrees that, for each day that any phase of the work under this Contract remains uncompleted thereafter, the Owner may deduct from the Contract price herein specified the stipulated sum of liquidated damages as scheduled in the Contract and retain for failure of the undersigned to complete this Contract on or before the expiration of the scheduled critical time frames.

The undersigned agrees that the Owner's damages caused by delay are capable of being established but would be difficult to measure accurately and that the sums herein specified as liquidated damages listed in the Contract are not a penalty, but represent that parties' estimate of the actual damages which the Owner would suffer per day if the work is not completed as scheduled.

- 5. In submitting this bid, it is understood that the right is reserved by the Owner to waive irregularities and informalities and to reject all bids and to negotiate with the apparent qualified low bidders if necessary. It is agreed that this bid may not be withdrawn for a period of ninety (90) days after the opening thereof.
- 6. The undersigned has attached hereto a Cashiers Check, or Bid Bond in the sum of
- 7. The undersigned affirms that he has completed, signed and included in his Bid Proposal the following:
 - a. Disadvantaged Business Enterprise Requirements
 - b. Disadvantaged Business Enterprise Assurance Form
 - c. Equal Opportunity Report Statement
 - d. Bidder Qualifications Questionnaire
 - e. Bid Schedule

A bid shall be considered unqualified and shall be rejected if it fails to include these fully executed statements or if the Bidder fails to furnish required data. When a determination has been made to award a contract to a specific contractor, such contractor shall, prior to award, furnish such other pertinent information regarding his own employment policies and practices as well as those of his proposed subcontractors as the City of Savannah, the Savannah Airport Commission or the Secretary of Labor may require.

The Bidder shall furnish similar statements executed by each of his first tier and second tier subcontractors whose contracts equal \$10,000 or more and shall obtain similar compliance by such subcontractors before awarding such subcontracts. No subcontract shall be awarded to any non-complying subcontractor.

- 8. It is understood and agreed that all workmanship and materials under all items of work are guaranteed for one year from the date of final acceptance, unless otherwise specified.
- 9. The undersigned affirms that he has completed all of the blank spaces in the applicable Bid Schedule with an amount in words and numbers and agrees that where a discrepancy occurs between the prices quoted in words and/or in numbers the unit price written in words, unless obviously incorrect, shall govern the final costs or award of Contract. In the case of a tie bid price, the Owner may negotiate a price with each low tie Bidder.
- 10. The undersigned agrees that the Contract lump sum shall be decreased or increased where planned quantities shown on the drawings are decreased or increased, and that such increase or decrease shall be determined by use of the appropriate unit price if shown on the applicable Bid Schedule.
- 11. The undersigned affirms that wages not less than the minimum rates or wages, as predetermined for this project by the U. S. Secretary of Labor and City of Savannah, were used in the preparation of this proposal.
- 12. The undersigned acknowledges receipt of the following addenda:

Addendum No.	Date	
	-	
	-	

The Bidder shall fill out the appropriate form (a, b, or c) and strike out the other two. A corporation duly organized and doing business under the laws of the State a. for whom bearing official title of , whose signature is affixed to this bid, is duly authorized to execute contracts. If Foreign Corporation or non State of Georgia Corporation: date of qualification in _____ (State).

Name and address of process agent: (Out of state Contractor shall also provide name and address of process agent in the State of Georgia.) b. A partnership, all of the members of which, with addresses are: (Designate general partners as such).

13. The legal status of the undersigned is:

If all partners are nonresidents of Georgia: Designate name and address of agent for service of process located in Georgia.

 An individual, whose signature is affixed to this bid. (If nonresidents of Georgia, resident agent for the service of process must be designated.)

Dated and signed	l at	3	
12	, this	day of	_, 2018.
	NAME OF DIDDED		
	NAME OF BIDDER	***************************************	
	BY		
	TITLE:		
	BUSINESS ADDRES	SS	
	PHONE NO		
	CEODOIA TAX DEC	ISTRATION NO	
	GEORGIA TAX REG	ISTRATION NO	
WITNESS:			

DISADVANTAGED BUSINESS ENTERPRISE REQUIREMENTS

THE FOLLOWING BID CONDITIONS APPLY TO THIS CONTRACT. SUBMISSION OF A PROPOSAL BY A PROSPECTIVE CONTRACTOR SHALL CONSTITUTE FULL ACCEPTANCE OF THESE BID CONDITIONS.

A. DEFINITION (49 CFR Part 26.5)

Disadvantaged Business Enterprise (DBE) as used in this Contract shall have the same meaning as those firms that are presumed to be socially and economically disadvantaged as defined in Paragraph 26.5, 49 CFR Part 26. (Definition: Socially and economically disadvantaged individual).

B. POLICY

It is the policy of the Savannah Airport Commission that Disadvantaged Business Enterprises shall have an equal opportunity to participate in the performance of all contracts and subcontracts.

C. DBE OBLIGATION

All Bidders, Prospective Contractors, and Contractors shall take all necessary and reasonable steps to ensure that Disadvantaged Business Enterprises have an equal opportunity to compete for and perform contracts. Bidders, Prospective Contractors, and Contractors shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of Contracts.

D. COMPLIANCE

All Bidders, Prospective Contractors, and Contractors for this Contract are hereby notified that failure to carry out the Policy and DBE Obligation, as set forth above, may be considered by the Savannah Airport Commission as a breach of Contract which may result in termination of the Contract or other such action as deemed appropriate by the Savannah Airport Commission.

E. SUBCONTRACT CLAUSES

All Bidders, Prospective Contractors, and Contractors hereby assure that they will include the above clauses in all subcontracts, which offer further subcontracting opportunities.

F. CONTRACT AWARD ELIGIBILITY

 Bidders, Prospective Contractors, and Contractors shall meet the DBE goal or provide the Commission with documentation of its good-faith effort(s) to meet the DBE goal to the satisfaction of, and as requested by the Savannah Airport Commission. The Savannah Airport Commission has the right, at its sole discretion, to accept or reject any and all bids submitted, accept or reject any DBE participation (and/or percentage of) being proposed, and accept or reject any good-faith efforts.

G. SUBCONTRACT GOAL

- The attainment of the goal established for this Contract is to be measured as a percentage of the total dollar value of the Contract.
 - The goal established for this Contract is as follows:

8.5% to be performed by DBEs.

H. AVAILABLE ELIGIBLE DBEs

- 1. For this Contract, the Savannah Airport Commission will accept, as an eligible DBE, firms that are currently certified by any Federal, State, or municipal government agency or other organizations approved by the Commission and/or firms registered as a DBE(includes MBE/WBE firms) with and accepted by the City of Savannah or other municipality, or organizations approved by the Commission provided they are owned by individuals presumed to be socially and economically disadvantaged in accordance with paragraph A, Definition, of these requirements. Proof of certification/registration shall be provided to the Savannah Airport Commission as requested.
- 2. Bidders, Prospective Contractors, and Contractors are encouraged to inspect the Georgia Department of Transportation, City of Savannah, and other DBE directories to assist in locating possible DBEs for the work to be performed. Credit towards meeting the DBE goal will not be counted until the DBE(s) to be used is/are either certified or registered as outlined in paragraph 1 above and such certification(s) and/or registration(s) are accepted by the Commission.

BIDDER'S REQUIRED SUBMISSION

- The following documents must be submitted with the Bid Proposal:
 - a. DBE SUBCONTRACTORS LIST Bidders must complete and properly execute the DBE Subcontractor list (Page P-9).
 - Bidders must complete and properly execute the "DBE ASSURANCE FORM" (Page P-15).
- The following document must be submitted to the Commission prior to award of the contract.

- Bidders must complete DBE NOTIFICATION OF INTENT TO SUBCONTRACT for each DBE subcontractor (Page P-10).
- b. Good-faith efforts documentation (if applicable).

DISADVANTAGED BUSINESS ENTERPRISE (DBE) SUBCONTRACTORS LIST (Reproduce if additional copies are needed)

Disadvantaged Business Enterprise Subcontractor (Company Name)	Description	on of Work/Materials	Dollar Value of Subcontract Work
74			
Total Dollar Value of Subcontract	ct Work	\$	
Total Dollar Value of Basic Bid		\$	
Percent of Total		7	%

DBE NOTIFICATION OF INTENT TO SUBCONTRACT

Project Name: HOTEL SITE DEVELOPMENT - STEPHEN GREEN DRIVE

	trianio. Hotelone province.				
Bid Da	te:				
Contra	actor:				
Hereby	y intends to subcontract or purchase mater	ials for the	following wor	k items to:	
DBE:	Name				
	Address				
	City/State/Zip	F	Phone		
Item No.	Description of Work/Materials	Unit	Quantity	Unit Cost	Amount
	1				
Total a	amount of subcontract		\$		
DBE S	Sub or Supplier Signature				
	Title				
	Date				
Prime	Contractor Signature				
	Title				
	Date				

This form must be signed by the Prime Contractor and the DBE Subcontractor. A separate form is required for each DBE Subcontractor. The form(s) shall be submitted whether or not DBE participation is being proposed. If DBE participation is not being proposed, Bidder, Prospective Contractor, or Contractor must indicate "NONE" beside DBE name and mark "O" in \$ value space. The proposed contract amounts specified on this form for a DBE firm must be the same (verify) as the amounts shown on the DBE Subcontractor's List for the same DBE firm unless the amounts are more favorable for the DBE or unless otherwise approved by the Commission. This form must be submitted with the Bid Proposal or within five (5) business days after bid opening.

J. GOOD-FAITH EFFORTS

Good-faith efforts are required by the Bidder, Prospective Contractor, and Contractor when the DBE goal established for a contract is not met, or any at anytime during the contract when achievement of the DBE goal is in jeopardy. It is the Bidder's, Prospective Contractor's, and Contractor's responsibility to provide documentation as required by the Commission to ascertain the efforts made. Goodfaith efforts include documented efforts made by Contractor to include personal contacts, follow-ups and earnest negotiations with DBEs. The Savannah Airport Commission reserves the right to accept or reject any and/or all effort(s) by Bidder, Prospective Contractor, and Contractor. The following are examples of effort(s) that are acceptable by the Savannah Airport Commission.

- a. Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBEs who have the capability to perform the work of the contract.
- b. Selecting portions of the work to be performed by DBEs in order to increase the likelihood that the DBE goals will be achieved.
- c. Providing interested DBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
- d. Negotiating in good faith with interested DBEs.
- e. Not rejecting DBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities.
- f. Making efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance as required by the recipient or contractor.
- g. Making efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.
- h. Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and Federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBEs.

K. CONTRACTOR ASSURANCES

Agreements between Bidder, Prospective Contractor, and Contractor and a DBE in which the DBE promises not to provide subcontracting quotations to other Bidders are prohibited. The Bidder, Prospective Contractor, and Contractor shall make a

good-faith effort to replace a DBE subcontractor, which is unable to perform successfully, with another DBE subcontractor. Substitutions must be coordinated with and approved by the Commission.

The Bidder, Prospective Contractor, and Contractor shall establish and maintain records and submit reports and cancelled checks, as required, which will identify and assess progress in achieving the DBE subcontract goal and other DBE affirmative action efforts.

In order to properly monitor payments to DBEs, the Savannah Airport Commission will require that the prime contractor send along with each payment to their DBE subcontractor or supplier a "Verification of Payments Received Letter", (Page P-13) which the DBE(s) must sign and return to the Commission's DBELO for monitoring and DBE Program record keeping purposes.

The Savannah Airport Commission will also require each prime contractor to submit to the Commission a monthly pay request that shall be accompanied by a "DBE Utilization Form" (Page P-14) which is a report of DBE expenditures. The report shall show all DBE subcontractors, and non-DBE subcontractors if and as required by the Commission, the amount of their subcontract, the amount earned to date, the amount earned for that respective pay request and the amount remaining to be earned. At the sole discretion of the Commission, the contractor's future pay requests will be withheld or disapproved until the DBE Utilization Form is submitted as required, and until DBEs are promptly and properly paid as verified by receipt of the Verification of Payments Received Letter (Page P-13).

Prior to the close out of the project, if and as required, the Prime Contractor shall furnish the Savannah Airport Commission copies of cancelled checks, invoices, and any other information from all DBE subcontractors utilized on the project.

Failure by the prime contractor to comply with these requirements may result in the prime contractor being placed in default of its contract. In addition, violation of this provision by the prime contractor entitles the Commission to exercise any other rights it has by law or under the Contract.

END OF DBE REQUIREMENTS

VERIFICATION OF PAYMENTS RECEIVED

	(Date)
Mr. Dawoud Stevenson Disadvantaged Business Enterprise Liaison Officer Savannah Airport Commission 400 Airways Avenue Savannah, GA 31408	
RE: Verification of Payments Received HOTEL SITE DEVELOPMENT – STEPHEN GREEN DRIVE	
Dear Sir:	
This letter is to certify that	(dollar amount) from (prime contractor). This
amount represents payment for work performed from (M/D/Y) which is% of the \$	
Sincerely,	
(Type or Print Title	name of person signing letter)
	ne to be an official of the firm of
he/she had read the above statement and that the same is true and cor	duly sworn stated his/her oath that rect.
This,,,,	_
Notary Public	
State of	
My Commission Expires	

(Non AIP Constr) Revised 07/21/09

DBE UTILIZATION FORM

Project Name: HOTEL SITE DEVELOPMENT - STEPHEN GREEN DRIVE

Contractor (Company):			ı			
Address:			Ĩ			
Pay Request #:	From	To:				
Subcontractor	DBE/Non- DBE	Work Item	Subcontract Amount	Amount Earned To Date	Amount This Pay Request	Amount Remaining
Signed:		Date:				
Type or Print Name:						
Title:						
Personally appeared before me, the Undersigned Authority, firm of true and correct.	Undersigned Authority,	who is known to me to be an official of the who after being duly sworn, stated of his oath that he had read the above statement and that the same is	of his oath that he	who is knov had read the above s	who is known to me to be an official of the the above statement and that the same is	ficial of the he same is
This day of		Notary Public:	Public:			
State of						

(Non AIP Constr) Revised 07/21/09

DISADVANTAGED BUSINESS ENTERPRISE ASSURANCE FORM

by checking	Prospective Contractor, or Contractor shall complete the following statement the appropriate box (check one only). Failure to complete this statement shall or rejection of Bid.
	The Bidder, Prospective Contractor, or Contractor is able to assure meeting the requirements of the DBE Provisions, included under the DISADVANTAGED BUSINESS ENTERPRISE REQUIREMENTS, and shall utilize not less than the prescribed Contract Goal of $\underline{8.5\%}$ (percent) DBE participation.
	The Bidder, Prospective Contractor, or Contractor is unable to assure DBE participation of <u>8.5%</u> (percent) in this Contract, but shall provide for a minimum of% (percent) DBE participation. (If this box is checked, Bidder shall fill-in the percentage.)
	(Company Name of Bidder/Prospective Contractor/Contractor) (Printed or Typed)
	IRS Number:
	(Printed Name of Person Signing)
	By:(Signature)*
	Title:
	Date:

* - Must be same signature of Bid Proposal.

END OF DBE ASSURANCE

EQUAL OPPORTUNITY REPORT STATEMENT as Required by 41 CFR 60-1.7(b)

The Bidder (Proposer) shall complete the following statement by checking the appropriate boxes. Failure to complete these blanks may be grounds for rejection of bid:

boxe	s. Failure to complete these blanks may be grounds for rejection of bid:
1.	The Bidder (Proposer) has has not developed and has on file at each establishment affirmative action programs pursuant to 41 CFR 60-1.40 and 41 CFR 60-2.
2.	The Bidder (Proposer) has has not participated in any previous contract or subcontract subject to the equal opportunity clause prescribed by Executive Order 11246, as amended.
3.	The Bidder (Proposer) has has not filed with the Joint Reporting Committee the annual compliance report on Standard Form 100 (EEO-1 Report).
4.	The Bidder (Proposer) does does not employ fifty (50) or more employees.
	NAME OF BIDDER:
	BY:
	TITLE:
	DATE:

BIDDER QUALIFICATION QUESTIONNAIRE

Subr	mitted by				
		Name of Bi	dder		
A. TVI				() An Individua () A Partnersh () A Corporation	
Princ	cipal Office	Address:			
		d guarantees the	truth and accurac	y of all statements	s and all answers to
1.	How many present na		organization been	n business as a c	ontractor under your
2.	How many general co		ce in construction	work has your or	ganization had as a
	As a subc	ontractor?			
3.			information conce b) years for the type		ur organization has n this project.
	Project Title	Contract Amount	Required Completion Date	Actual Completion Date	Name and Address of Owner
	Ş 				

Have you	ever failed to complete any work awarded to you? If so, where and v
some oth	officer or partner of your organization ever been an officer or part er organization that failed to complete a construction contract? If so ndividual, name of other organization, and the reason therefor.
contract	officer or partner of your organization ever failed to complete a constr handled in his own name? If so, state name of individual, name of on therefor.
contract	handled in his own name? If so, state name of individual, name of
contract and reas Give be organiza	handled in his own name? If so, state name of individual, name of

8.				e subcontractors you may expect to of the work each subcontractor will
	Name and Addre	(17th - 7th)		Description of Work
9.	List below the so	ources of supp	ply of the various	s materials you intend to incorporate in
	Source of Supply	/		Material
		-		
Witn	ess or Attest:	Ocorgia ra	ix registration rvo	
70-	(Corporate Seal)			
	orn to and subscribed b		. 2018.	
	commission expires:			
	Notary Public			

BID BOND

(NOT TO BE FILLED OUT IF A CERTIFIED CHECK IS SUBMITTED)

KN	OVV /	ALL	MEN			PRESENT						
and										a Co	as Fi rporate	Surety
authorize	d unde	r the	laws	of the	State of					u 00.	porato	to do
business	in the	State	of	DXX- 170 AUX		ldermen of				,	as sur	ety, are
held and	firmly b	oound	unto t	ne Ma	yor and A	Idermen of	the City	of Sav	/annah	n and	the Sa	vannah
Airport C	ommiss	ion in	the su	m of _								
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assigns.	iu seve	any	biria o	urseive	es and o	ui fielis, ex	eculors	s, aum	ilistiat	oi, si	1006220	JIS AIIU
				ove of	oligation is	s such that i	f the att	tached	propos	sal of	(insert	amount
bid)				for	the im	provement	of a	irport	faciliti	es l	HOTEL	SITE
DEVELO	PMEN	T - S	TEPHE	N GRE	EN DRIV	E, stipulated	d in said	d propo	sal in	accor	dance	with the
						is accepted						
named B	Bidder, a	and the	e said E	Bidder	shall withi	n ten (10) d	ays afte	r notice	of sa	id awa	ard ente	er into a
						Payment						
						Aldermen of						
						oid. Other Bond will be						
						Commission						
201 W 201 W									- 17		damag	C 3.
Signed to	his			day	y of				, 20	18.		
(Principa	ıl must i	ndicat	te whet	her coi	poration,	partnership,	compa	ny or in	dividu	al)		
This pers	son siar	nina sl	hall in h	nis								
handwrit							Princi	ipal				
name, hi								A 2004/000				
Where th		_	_	a			BY:_					
corporat				100								
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herein, s				;u			Title					
bind the												
(AFFIX S	SURET	Y'S C	ORPOF	RATES	SEAL)							
								Sure	ety			
							COU	NTERS	IGNE	D:		
							Geor	gia Res	ident /	Agent		
							Goor	gia Lice	nee N	umbo	ır	
							Geor	yla Lice	HIDC IV	unibe	1	

GDOT P-20

	Stephen S. Green Drive - Road BID ITEMS				
CLEARIN	IG, GRASSING, AND EROSION CONTROL FOR WATER AND	SEWER			
Item	Description	Quantity	Units	Unit Price	Total
1	Clearing	0.3	AC		
2	Grassing	0.3	AC		
3	Erosion, Sedimentation, and Pollution Control	0.3	AC		
	Sub-Total : CLEARING, GRASSING, AND EROSION CONTR	OL FOR WA	TER AND	SEWER	
EWER C	COLLECTION SYSTEM			***	
4	Pump Station Complete	Job	2	LUMP SUM	
5	4" PVC Force Main	837	LF		
6	8" Gravity Sewer (6-10 ft)	405	LF		
7	Standard Manhole	4	EA		
8	Connect 4" to Existing Sanitary Sewer Manhole including Coating of the Discharge Manhole and Two Downstream Manholes	1	EA		
9	Air/Vacuum Release Valves & Manholes	2	EA		
10	Fittings	550	LB		
11	Horizontal Directional Drill 4" FPVC Force Main	427	LF		
	Sub-Total : SEWER COLLECTION SY	STEM			
WATER	DISTRIBUTION SYSTEM				
12	12" PVC Water Main	438	EA		
13	Fire Hydrant Assembly	1	EA		
14	12" Gate Valve in Manhole	2	EA		
15	8" Gate Valve in Manhole	1	EA		
16	4" Gate valve in Manhole	1	EA		
17	1" PE SDR 9 Water Service Line	376	EA		
18	12"X2" Tapping Saddle, Corporation Stop and Ball Valve in Box	1	EA		
19	1"Tapping Saddle, Corporation Stop in Valve Box and Permanent Sampling Station	1	EA		
20	D.I. Fittings	1600	LB		
21	Remove Cap and Connect to Existing 12" Water Main	1	EA		
21	Sub-Total: WATER DISTRIBUTION S		L.		
CLEARI	ING, GRASSING, AND EROSION CONTROL FOR HOTEL SITES	25000	T		
22	Clearing & Grubbing - Hotel Sites	3.6	AC	-	
23	Clearing & Grubbing - Road	1.5	AC		
24	Grassing	5.1	AC		
25	Silf Fence Type NS	1632	LF		
26	Silt Fence Type S	745	LF		
27	Stone Check Dam	3	EA		
28	Construction Exit	1	EA		
29	Rip Rap	65	. SY		

	Strip Topsoil - Stockpile	2,900	CY	
7	Strip Topsoil - Respread	2,700	CY	
3	Strip Topsoil - Haul Off	200	CY	
9	Excavate Sediment Basin - Haul Off	700	CY	
30	Borrow for Road Sub-base (Road EL +/- 20)	2,300	CY	
31	Rough Grading for Hotel Sites (Smooth Out)	16,000	SY	
32	Grade Roadside Swales	900	LF	
33	Fine Grade Road and Shoulders	4,800	SY	
34	15" RCP	48	LF	
35	15" Flared End Section	2	EA	
36	18" RCP	103	LF	
37	18" Flared End Section	1	EA	
38	Junction Box	1	EA	
39	24" RCP	44	LF	
40	24" Flared End Section	1	EA	
41	Control Structure	1	EA	
	Sub-Total : GRADING AND DRAIN	NAGE		
AVING	G			
42	8" Graded Aggregate Base	2,890	SY	
43	2" 19 mm Superpave Binder Course	320	TONS	
44	1.5" 9.5 mm Superpave Surface Course	240	TONS	
45	Connect to Existing Roadway	1	LS	
46	Signage & Striping	1	LS	
	Sub-Total : PAVING			
ENER	:AL			
37.00.5	Mobilization	1	LS	
47	y	1	LS	
48	Construction Layout		1	
riio.	Traffic Control	1	LS	
48		1	LS LS	
48 49	Traffic Control			
48 49 50	Traffic Control Construction Testing Stone Bedding* Sand Backfill*	1	LS	
48 49 50 51	Traffic Control Construction Testing Stone Bedding*	1 100	LS CY	
48 49 50 51 52	Traffic Control Construction Testing Stone Bedding* Sand Backfill* Undercut and Backfill of Unsuitable Material under	1 100 100	LS CY CY	

These items are of an indeterminate quantity and are presented only to establish a unit price. These items may or may not be utilized in the construction of the project. No payment will be made for these items without written authorization from Owner or Engineer.

BID SCHEDULE

In accordance with all bid documents, addenda, plans, and specifications, the undersigned proposes to furnish all services, material, labor, tools, equipment, and other means of construction required for the HOTEL SITE DEVELOPMENT – STEPHEN GREEN DRIVE Savannah/Hilton Head International Airport.

TOTAL BID WRITTEN IN V	VORDS:	
	(Dollars) (\$) Lump Sum
NAME OF BIDDER:		
BY:		
TITLE:		
BUSINESS		
ADDRESS:		
WITNESS:		
WITNESS:		

SAVANNAH AIRPORT COMMISSION

CONTRACT

This AGREEMENT, made and entered into this day of,, by and between the Mayor and Aldermen of the City of Savannah and the Savannah Airport Commission, hereinafter designated the Owner, party of the first part, and of the City of, and State of, hereinafter designated the Contractor, party of the second part,		
designated the Contractor, party of the second part,		
WITNESSETH:		
THAT THE PARTIES to these presents, each in consideration of the undertakings, promises and agreements on the part of the other, herein contained, have undertaken, promised and agreed, and do hereby undertake, promise, and agree; the party(ies) of the first part for itself, its successors, and assigns, and the party(ies) of the second part for its, itself, and its, their heirs, executors, administrators, successors, and assigns; as follows:		
That the party(ies) of the second part in consideration of the sums of money herein specified to be paid by said party of the first part to said party(ies) of the second part, shall and will at its, their own cost and expense furnish all labor, materials, tools, and equipment to construct HOTEL SITE DEVELOPMENT – STEPHEN GREEN DRIVE at the Savannah/Hilton Head International Airport, in accordance with:		
- The Plans;		
 The Specifications, Bidding and Contract Requirements, General Conditions, and Supplementary General Conditions; 		
- All Addenda, issued prior to opening of Bids;		
all therein referred to as the Contract Documents, are hereby made a part of this Contract, all of said work to be fully completed to the acceptance of and by the Mayor and Aldermen of the City of Savannah, and the Savannah Airport Commission in the amount of Dollars/Cents		
(\$).		
If the Contractor fails to comply with any of the terms, conditions, provisions, or stipulations of this Contract, according to the true intent and meaning thereof, then the		

party of the first part may avail itself of any or all remedies provided in that behalf in the Contract and shall have the right and power to proceed in accordance with the provisions thereof.

That the Contractor shall commence the Work within ten (10) days of the date set

That the Contractor shall commence the Work within ten (10) days of the date set by the Owner in a written Notice-To-Proceed and shall substantially complete all work under this Contract within one hundred fifty (150) calendar days after the date shown in the Notice-To-Proceed.

The Owner hereby agrees to pay to the Contractor for the said work the price set forth in the BID SCHEDULE, at the times and manner set forth in the Contract Documents. Payments to the Contractor by the Owner shall be made upon presentation of the proper certificates to the Owner and upon terms set forth in the Contract Documents.

It is mutually agreed between the parties hereto that time is the essence of this Contract, and in the event the Construction is not substantially complete by the date specified below in COLUMN I of the CONSTRUCTION SCHEDULE, it is agreed that from any money due or to become due the Contractor or his Surety, the Owner may retain the dollar amount shown below in COLUMN II per day for each calendar day thereafter, Sundays and Holidays included, that the work remains incomplete, not as a penalty but as liquidation of a reasonable portion of damages that will be incurred by the Owner by failure of the Contractor to complete the work within the times stipulated:

CONSTRUCTION SCHEDULE

COLUMN I

COLUMN II

Completion Date After Notice-to-Proceed Liquidated Damages per Calendar Day if Not Completed by Calendar Days Shown in Column I

Entire Project

150

\$500.00

It is further mutually agreed between the parties hereto that if, at any time after the execution of the Agreement (including the various guarantee periods thereunder) and the Surety Bonds hereto attached, the Owner shall deem the surety or sureties upon such bond or bonds to be unsatisfactory, or if, for any reason, such bond or bonds cease to be adequate to cover the performance of the work or the prompt payment for said labor, materials, supplies and services, the Contractor shall, at his own expense within five (5) days from the date of written notice from the Owner to do so, furnish additional bond or bonds in such form and amount, and with such surety or sureties, as shall be satisfactory to the Owner. In such event, no further payment to the Contractor shall be deemed due under this Agreement until such new or additional bond or bonds are furnished in a manner and form satisfactory to the Owner.

IN WITNESS WHEREOF, the parties to the agreement have hereunto set their hands and seals and have executed this agreement the day and year first above written.

SAVANNAH AIRPORT COMMISSION		
OWNE (Party of the l		
BY:	Stephen S, Green, Chairman	
ATTEST:	Gregory B. Kelly, Secretary (Seal)	
CONTRA (Party of the Se		
	Company Name	
BY:	Name (Signature)	
TITLE:	Title	
	Name (Print/Type) (Seal)	
ATTEST:	Name (Signature)	
TITLE:	Title	
	Name (Print/Type) (Seal)	
	Out-of-state contractors must affix Georgia tax registration number.	
ration esident,		

name, his own name, and his title. Where the person signing for a corpor is other than the President or Vice President he must, by affidavit, as contained herein, show his authority to bind the corporation.

Corporate seal is required for all companies that are incorporated.

Contractor must indicate whether Corporation, Partnership, Company

The person signing shall in his own handwriting sign the principal's

GDOT Revised 04/24/13

or Individual

SAVANNAH AIRPORT COMMISSION

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS: that
as Principal, hereinafter called Contractor, and
as
Surety, hereinafter called Surety, are held and firmly bound unto the Mayor and Aldermen of the City of Savannah, Georgia and the Savannah Airport Commission as Obligee, hereinafter called Owner, in the amount of
dollars (\$
for the payment of which Contractor and Surety bind themselves, their heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.
WHEREAS, Contractor has by written agreement dated, entered into a Contract with Owner to construct HOTEL SITE DEVELOPMENT – STEPHEN GREEN DRIVE, Savannah/Hilton Head International Airport in accordance with all of the Contract Documents consisting of the Plans and Specifications, and all addenda or other revisions prepared by Michael Baker International, which Contract is be reference made a part hereof and is hereinafter referred to as the Contract.

NOW, THEREFORE, the conditions of the above obligation is such that if the said Contractor shall well and faithfully perform the things agreed by him to be done and performed according to the terms of said Contract, and shall promptly make payments to all persons supplying labor, material, and supplies used directly or indirectly by the said Contractor, or subcontractor(s), in the prosecution of the work provided for in said Contract, we agreeing and assenting that this undertaking shall be for the benefit of any subcontractor, material men, or laborer having a just claim, as well as for the Obligee herein, then this obligation shall be void, otherwise, the same shall remain in full force and effect, it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall in no event exceed the amount of this obligation as herein stated.

The said Surety hereby stipulates and agrees that no modifications, omissions, or additions, in or to the terms of said Contract or on or to the plans and specifications therefor shall in any way affect the obligation of said Surety or its Bond.

The said Surety shall inform the Owner thirty (30) days prior to expiration of this bond, by giving notice by registered mail.

Signed and sealed this	day of	
Principal must indicate whether corporation, partnership, company or individual.		Principal
The person signing shall, in his own handwriting, sign the principal's name, his own name and his title. Where a person signing for a corporation	BY:	Name (Signature)
is other than the President or Vice President, he must, by affidavit as contained herein, show his authority to bind the corporation.	TITLE:	Name (Print/Type)
corporation.	(Affix C	ontractor's Corporate Seal)
	ATTEST BY: _	Name (Signature)
	TITLE:	Name (Print/Type)
(Affix Surety's Corporate Seal)		
(Allix Surety's Corporate Seal)	BY:	Surety
	51.	Name (Signature)
		Name (Print/Type)
	COUN	TERSIGNED:
		Georgia Resident Agent
		Georgia Resident Agent (Print/Type)
		Georgia License Number

SAVANNAH AIRPORT COMMISSION

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS: that,
as Principal, hereinafter called Contractor, and
as
Surety, hereinafter called Surety, are held and firmly bound unto the Mayor and Aldermen
of the City of Savannah, Georgia, and the Savannah Airport Commission as Obligee,
hereinafter called Owner, in the amount of
dollars (\$)
for the payment of which Contractor and Surety bind themselves, their heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.
WHEREAS, Contractor has by written agreement dated, entered into a Contract with Owner to construct HOTEL SITE DEVELOPMENT –
STEPHEN GREEN DRIVE, at Savannah/Hilton Head International Airport in accordance
with all of the Contract Documents consisting of the Plans and Specifications, and all
addenda or other revisions prepared by Michael Baker International which Contract is by
reference made a part hereof and is hereinafter referred to as the Contract.

NOW, THEREFORE, the condition of the above obligation is such that if the said Contractor shall well and faithfully perform the things agreed by him to be done and performed according to the terms of said Contract, and shall promptly make payments to all persons supplying labor, material, and supplies used directly or indirectly by the said Contractor, or subcontractor(s), in the prosecution of the work provided for in said Contract, we agreeing and assenting that this undertaking shall be for the benefit of any subcontractor, material men, or laborer having a just claim, as well as for the Obligee herein, then this obligation shall be void, otherwise, the same shall remain in full force and effect, it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall in no event exceed the amount of this obligation as herein stated.

The said Surety hereby stipulates and agrees that no modifications, omissions, or additions, in or to the terms of said Contract or on or to the plans and specifications therefor shall in any way affect the obligation of said Surety or its Bond.

The said Surety further stipulates and agrees that in the event of a default or deficiency on the part of the Contractor amounting to a breach of the Contract, the Owner may, by giving notice by registered mail to Contractor and Surety, require that such default or deficiencies be remedied within ten (10) days from the date of such notice. Failure so to remedy or to take proper steps to remedy such defaults or deficiencies within said period shall be cause for the Owner to require that Surety take over and prosecute the work under the Contract and to take over all obligations pertaining thereto. In the event the work under the Contract is taken over by the Surety in a manner satisfactory to the Owner, the Owner will pay to the Surety henceforth all amounts due and to become due under the Contract, including amendments, less the balance of the Contract price previously paid to the Contractor and less liquidated damages, if assessed. The Owner GDOT

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shall not be liable for any monies not due on the Contract and shall not be made a party to any dispute between Contractor and Surety.

If the Surety does not take over the work in a satisfactory manner within ten (10) days after the notice of default or does not proceed with completing the work in accordance with the Contract, the Owner shall have full power and authority, without impairing the obligation of the Contract or the Contract Bond, to take over the completion of the work; to appropriate or use any or all material and equipment that may be suitable; to enter into agreements and provisions thereof; or to use such other methods as may be required for completion of the Contract. The Contractor and his Surety shall be liable for all costs incurred by the Owner in completing the work and for all liquidated damages in conformity with the terms of the Contract. If the sum of such liquidated damages and the expense so incurred by the Owner is less than the sum which would have been payable under this Contract if it had been completed by the Contractor or his Surety, the Contractor or his Surety shall be entitled to receive the difference; and if the sum of such expense and such liquidated damages exceeds the sum which would have been payable under the Contract, the Contractor and his Surety shall be liable and shall pay to the Owner the amount of such excess. Notice to the Contractor shall be deemed to have been served when delivered to the man in charge of any office used by the Contractor, his representative at or near the work, or by registered mail addressed to the Contractor at his last known place of business.

The said Surety further stipulates and agrees that this bond is also given and made as a guarantee insuring the Owner against loss resulting from costs of repairing, replacing, or reconstructing any portion of the work performed or equipment furnished under the Contract, because of failure to perform as specified or from being defective in any manner whatsoever. This bond shall remain in full force and effect for a period of one year after the date of written recommendation and of acceptance by the Owner.

The said Surety shall inform the Owner thirty (30) days prior to expiration of this bond, by giving notice by registered mail.

Signed and sealed this	day of	
Principal must indicate whether corporation, partnership, company or individual.		Principal
The person signing shall, in his own handwriting, sign the principal's name, his own name and his title. Where a person signing for a corporation is other than the President or Vice President, he must, by affidavit as contained herein, show his authority to bind the corporation.	BY:	Name (Signature)
	TITLE:	Name (Print/Type)
	(Affix C	ontractor's Corporate Seal)
	ATTEST BY: _	Name (Signature)
		Name (Print/Type)
	TITLE:	
(Affix Surety's Corporate Seal)		Surety
	BY:	Name (Signature)
		Name (Print/Type)
	COUN	TERSIGNED:
		Georgia Resident Agent
		Georgia Resident Agent (Print/Type)
		Georgia License Number

SAVANNAH AIRPORT COMMISSION

BOND AFFIDAVIT

State of	
County of	
authorized (resident) (nonresident) insurance age	authority, personally appeared no, being duly sworn, deposes and says that he is a duly ent, properly licensed under the laws of the State of Georgia, to represent of y name), a company authorized to make corporate surety
bonds under the laws of the State of Georgia.	y hame), a company dutionized to make corporate curery
Said he	further certifies that as Attorney-in-fact for the said has signed the attached bond in the sum of
(U. S. \$) on be covering Savannah/Hilton Head International Ai STEPHEN GREEN DRIVE, Savannah Airport Com	ehalf ofirport, to construct HOTEL SITE DEVELOPMENT – mission, Savannah, Georgia.
Said fur	ther certifies that the premium on the said bond is which will be paid in full direct
his commission will not be divided with a	led in his regular accounts to the said, and that he will receive s Attorney-in-fact for the execution of said Bond and that anyone except as follows: percent to ame), who is duly authorized resident insurance agent
$\overline{A_{G}}$	gent and Attorney-in-fact
С	OUNTERSIGNED:
G	eorgia Resident Agent
G	eorgia Resident Agent (Print/Type)
G	eorgia License Number
A	cknowledgement for Attorney-in-fact
s 	worn to and subscribed before me this day of , A. D. 20
N	lotary Public,
S	tate of
N	ly Commission expires

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GENERAL CONDITIONS

SECTION 10

DEFINITION OF TERMS

Whenever the following terms are used in these specifications, in the contract, in any documents or other instruments pertaining to construction where these specifications govern, the intent and meaning shall be interpreted as follows:

- <u>10-01 AASHTO</u>. The American Association of State Highway and Transportation Officials, the successor association to AASHO.
- <u>10-02 ACCESS ROAD</u>. The right-of-way, the roadway and all improvements constructed thereon connecting the airport to a public highway.
- <u>10-03 A. I. P.</u> The Airport Improvements Program, a grant-in-aid program administered by the Federal Aviation Administration.
- <u>10-04 ADVERTISEMENT (NOTICE TO BIDDERS)</u>. A public announcement, as required by local law, inviting bids for work to be performed and materials to be furnished.
- <u>10-05 ADVISORY CIRCULAR</u>. A document issued by the FAA containing informational material and guidance. When referred to in the plans and specifications, advisory circulars shall have the same force as supplemental specifications.
- 10-06 AIR OPERATIONS AREA. For the purpose of these specifications, the term air operations area shall mean any area of the airport used or intended to be used for the landing, takeoff, or surface maneuvering of aircraft. An air operations area shall include such paved or unpaved areas that are used or intended to be used for the unobstructed movement of aircraft in addition to its associated runway, taxiway, or apron.
- <u>10-07 AIRPORT</u>. Any area of land or water which is used or intended to be used for the landing and takeoff of aircraft, and includes its buildings, pavements, and other facilities located thereon and as they may from time to time be revised, extended, or defined.
- <u>10-08 ASTM</u>. The American Society for Testing and Materials.
- 10-09 AWARD. The acceptance, by the Owner, of the successful Bidder's proposal.
- <u>10-10 BIDDER</u>. Any individual, partnership, firm or corporation, acting directly or through a duly authorized representative, who submits a proposal for the work contemplated.
- <u>10-11 BUILDING AREA</u>. An area on the airport to be used, considered, or intended to be used for airport buildings or other airport facilities located thereon.

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- 10-12 CALENDAR DAY. Every day shown on the calendar.
- <u>10-13 CHANGE ORDER</u>. A written order to the Contractor covering changes in the plans, specifications, or proposal quantities and establishing the basis of payment and contract time adjustment, if any, for the work affected by such changes. The work covered by a change order shall be within the scope of the contract.
- 10-14 CONTRACT. The written agreement between the Owner and the Contractor covering the work to be performed. The awarded contract shall include, but is not limited to: The Advertisement; The Contract Form; The Proposal; The Performance Bond; The Payment Bond; any required insurance certificates; The General Conditions; The Supplementary General Conditions; The Specifications; The Plans; any addenda issued to Bidders; Change Orders and Agreements which are required to complete the construction of the work in an acceptable manner, including authorized extensions thereof, all of which constitute one instrument.
- 10-15 CONTRACT ITEM (PAY ITEM). A specific unit of work for which a price is provided in the contract.
- 10-16 CONTRACT TIME. The number of calendar days or working days, stated in the proposal, allowed for completion of the contract, including authorized time extensions. If a calendar date of completion is stated in the proposal, in lieu of a number of calendar or working days, the contract shall be completed by that date.
- <u>10-17 CONTRACTOR</u>. The individual, partnership, firm, or corporation primarily liable for the acceptable performance of the work contracted and for the payment of all legal debts pertaining to the work who acts directly or through lawful agents or employees to complete the contract work.
- <u>10-18 DRAINAGE SYSTEM</u>. The system of pipes, ditches, and structures by which surface or subsurface waters are collected and conducted from the airport area.
- <u>10-19 ENGINEER</u>. The individual, partnership, firm, or corporation duly authorized by the Owner to be responsible for the engineering supervision (and inspection if applicable) of the contract work and an authorized representative of the Owner or acting therethrough.
- <u>10-20 EQUIPMENT</u>. All machinery, together with the necessary supplies for upkeep and maintenance, and also all tools and apparatus necessary for the proper construction and acceptable completion of work.
- 10-21 EXTRA WORK. An item of work not provided for in the awarded contract as previously modified by change order or supplemental agreement, but which is found by the Engineer to be necessary to complete the work within the intended scope of the contract as previously modified.

- 10-22 FAA. The Federal Aviation Administration of the U. S. Department of Transportation.
- <u>10-23 FEDERAL SPECIFICATIONS</u> The Federal Specifications and Standards, and supplements, amendments, and indices thereto are prepared and issued by the General Services Administration of the Federal Government.
- 10-24 FIELD ORDER. A field order is a written agreement between the Owner and the Contractor, which is used to permit the Contractor to exceed the plan quantities on items bid by unit price. This field order does not exclude the use of a change order or alter the quantities by changing the requirements set out in subsection 40-02 of these specifications. It only allows the Contractor to continue work until such time as a formal change order is written.
- 10-25 INSPECTOR. An authorized representative of the Engineer and/or the Owner assigned to make all necessary inspections and/or tests of the work performed or being performed, or of the materials furnished or being furnished by the Contractor.
- 10-26 INTENTION OF TERMS. Whenever, in these specifications or on the plans, the words "directed," "required," "permitted," "ordered," "designated," "prescribed," or words of like import are used, it shall be understood that the direction, requirement, permission, order, designation, or prescription of the Engineer is intended; and similarly, the words "approved," "acceptable," "satisfactory," or words of like import, shall mean approved by, or acceptable to, or satisfactory to the Engineer, subject in each case to the final determination of the Owner.
- "Shall" refers to actions by either the Contractor or the Owner and means the Contractor or Owner has entered into a covenant with the other party to do or perform the action. "Will" refers to actions entered into by the Contractor or the Owner as a covenant to do or to perform the action. "May" refers to permissive actions.
- Any reference to a specific requirement of a numbered paragraph of the contract specifications or a cited standard shall be interpreted to include all general requirements of the entire section, specification item, or cited standard that may be pertinent to such specific reference.
- 10-27 LABORATORY. The official testing laboratories of the Owner or such other laboratories as may be designated by the Owner.
- <u>10-28 LIGHTING</u>. A system of fixtures providing or controlling the light sources used on or near the airport or within the airport buildings. The field lighting includes all luminous signals, markers, floodlights, and illuminating devices used on or near the airport or to aid in the operation of aircraft landing, taking off from, or taxiing on the airport surface.
- 10-29 MAJOR AND MINOR CONTRACT ITEMS. A major contract item shall be any item that is listed in the proposal, the total cost of which is equal to or greater than ten percent

- (10%) of the total amount of the awarded contract. All other items shall be considered minor contract items.
- <u>10-30 MATERIALS</u>. Any substance specified for use in the construction of the contract work.
- <u>10-31 MIL SPECIFICATIONS.</u> The Military Specifications and Standards, and indices thereto, are prepared and issued by the Department of Defense. They may be obtained from the Commanding Officer, Naval Supply Depot, 5801 Tabor Avenue, Philadelphia, Pennsylvania 19120, Attention: Code CDS.
- 10-32 NOTICE TO PROCEED. A written notice to the Contractor to begin the actual contract work on a previously agreed to date. If applicable, the Notice to Proceed shall state the date on which the contract time begins.
- 10-33 OWNER (SPONSOR). The term Owner shall mean the party of the first part or the contracting agency signatory to the contract. The term Sponsor shall have the same meaning as the term Owner. The Owner is the Savannah Airport Commission.
- <u>10-34 PAVEMENT</u>. The combined surface course, base course, and subbase course, if any, considered as a single unit.
- 10-35 PAYMENT BOND. The approved form of security furnished by the Contractor and his surety as a guarantee of good faith and ability on the part of the Contractor to execute the work in accordance with the terms of the Plans, Specifications, and Contract, and as a guarantee that the Contractor will pay, in full, all bills and account for material and labor used in the construction of the work, as provided by law.
- 10-36 PERFORMANCE BOND. The approved form of security furnished by the Contractor and his surety as a guaranty that the Contractor will complete the work in accordance with the terms of the Contract.
- <u>10-37 PLANS</u>. The official drawings or exact reproductions, approved by the Engineer, which show the location, character, dimensions, and details of the airport and the work to be done and which are to be considered as a part of the contract, supplementary to the specifications.
- <u>10-38 PROJECT</u>. The agreed scope of work for accomplishing specific airport development with respect to a particular airport.
- <u>10-39 PROPOSAL</u>. The written offer of the Bidder (when submitted on the approved proposal form) to perform the contemplated work and furnish the necessary materials in accordance with the provisions of the plans and specifications.
- <u>10-40 PROPOSAL GUARANTY</u>. The security furnished with a proposal to guarantee that the Bidder will enter into a contract if his proposal is accepted by the Owner.

- 10-41 RUNWAY. The area on the airport prepared for the landing and takeoff of aircraft.
- <u>10-42 SPECIAL PROVISIONS</u>. The specific clauses setting forth conditions or requirements peculiar to the project under consideration.
- <u>10-43 SPECIFICATIONS</u>. A part of the contract containing the written directions and requirements for completing the contract work. Standards for specifying materials or testing which are cited in the contract specifications by reference shall have the same force and effect as if included in the contract.
- 10-44 SPONSOR. A public agency or a political subdivision of a State in whom rests the title to the airport at which the construction under this contract is to be performed. Political subdivision refers to a County, City, Village, Township, or any combination or authority thereof as provided by law for the construction and operation of airports. The sponsor may also be referred to as the Owner in several parts of the contract.
- 10-45 STRUCTURES. Airport facilities such as bridges, culverts, catch basins, inlets, retaining walls, cribbing, storm and sanitary sewer lines, underdrains, electrical ducts, manholes, handholes, lighting fixtures and bases, transformers, flexible and rigid pavements, navigational aids, buildings, vaults, and other man-made features of the airport that may be encountered in the work and not otherwise classified herein.
- <u>10-46 SUBCONTRACTOR</u>. The prequalified (where required) individual, partnership or corporation, or a combination thereof, undertaking the execution of a part of the work under the terms of the contract, by virtue of an agreement with the Contractor approved by the Owner.
- 10-47 SUBGRADE. The soil which forms the pavement foundation.
- <u>10-48 SUPERINTENDENT</u>. The Contractor's executive representative who is present on the work during progress, authorized to receive and fulfill instructions from the Engineer, and who shall supervise and direct the construction.
- 10-49 SUPPLEMENTAL AGREEMENT. A written agreement between the Contractor and the Owner covering: (1) work that would increase or decrease the total amount of the awarded contract, or any major contract item, by more than twenty-five percent (25%), such increased or decreased work being within the scope of the originally awarded contract, or (2) work that is not within the scope of the originally awarded contract.
- 10-50 SURETY. The corporation, partnership, or individual, other than the Contractor, executing payment or performance bonds which are furnished to the Owner by the Contractor.
- 10-51 TAXIWAY. For the purpose of this document, the term taxiway means the portion of the air operations area of an airport that has been designated by competent airport

authority for movement of aircraft to and from the airport's runways or aircraft parking areas.

- <u>10-52 UNSUITABLE MATERIAL</u>. Material that contains organics, excessive fines, and/or exhibits movement during proofrolling is deemed unsuitable and shall be removed and replaced by the Contractor as directed by the Engineer.
- <u>10-53 WARRANTY AND GUARANTEE</u>. A guarantee from the Contractor to the Owner that his material furnished and work performed will meet the conditions stated in the Supplemental General Conditions of these specifications.
- <u>10-54 WORK</u>. The furnishing of all labor, materials, tools, equipment, and incidentals necessary or convenient to the Contractor's performance of all duties and obligations imposed by the contract, plans, and specifications.
- 10-55 WORKING DAY. A working day shall be any day other than a legal holiday, Saturday, or Sunday on which the normal working forces of the Contractor may proceed with regular work for at least six (6) hours toward completion of the contract. Unless work is suspended for causes beyond the Contractor's control, Saturdays, Sundays, and holidays on which the Contractor's forces engage in regular work, requiring the presence of an inspector, will be considered as working days.

SECTION 20

PROPOSAL REQUIREMENTS AND CONDITIONS

<u>20-01 ADVERTISEMENT (NOTICE TO BIDDERS)</u>. An official notice to contractors stating the time and place for the submission of sealed proposals on designated projects or proposed work. This notice shall contain a description of the proposed work, instructions to the bidders, regarding proposal forms, proposal guaranty, plans, specifications, and the reservation of the right of the Owner to reject all or any bids.

<u>20-02 COMPETENCY OF BIDDERS</u>. Each bidder must furnish, in the place provided in the Contract Documents, satisfactory evidence of his competency to perform the proposed work. Such evidence of competency shall consist of statements covering the bidder's past experience on similar work, a list of equipment that would be available for the work, and a list of all personnel that would be available. Such evidence of financial responsibility shall consist of a confidential statement or report of the bidder's financial resources and liabilities as of the last calendar year or the Contractor's last fiscal year. At the time of submitting such financial statements or reports, the bidder shall further certify whether his financial responsibility is approximately the same as stated.

A bidder may submit evidence that he is prequalified with the State Department of Transportation and is on the current "Bidder's List" of the state in which the proposed work is located. Such evidence of State Department of Transportation prequalification may be submitted as evidence of financial responsibility in lieu of the certified statements or reports hereinbefore specified.

<u>20-03 CONTENTS OF PROPOSAL FORMS</u>. The Owner shall furnish bidders with proposal forms. All papers bound with or attached to the proposal forms are necessary parts and must not be detached.

The plans, specifications, and other documents designated in the proposal form shall be considered a part of the proposal whether attached or not.

<u>20-04 ISSUANCE OF PROPOSAL FORMS</u>. The Owner reserves the right to refuse to issue a proposal form to a prospective bidder should such bidder be in default for any of the following reasons:

- a. Failure to comply with any prequalification regulations of the Owner, if such regulations are cited, or otherwise included, in the proposal as a requirement for bidding.
- b. Failure to pay, or satisfactorily settle, all bills due for labor and materials on former contracts in force (with the Owner) at the time the Owner issues the proposal to a prospective bidder.

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- c. Contractor default under previous contracts with the Owner.
- d. Unsatisfactory work on previous contracts with the Owner.
- e. Currently behind schedule on any current contract with the Owner.

20-05 INTERPRETATION OF ESTIMATED PROPOSAL QUANTITIES. An estimate of some or all of the quantities of the work to be done and/or the materials to be furnished under these specifications may be given in the proposal. It is the result of careful calculations and is believed to be correct. It is given only as a basis for comparison of proposals and the award of the contract. The Owner does not expressly or by implication agree that the actual quantities involved will correspond exactly therewith; nor shall the bidder plead misunderstanding or deception because of such estimates of quantities, or of the character, location, or other conditions pertaining to the work. Payment to the Contractor will be made only for the actual quantities of work performed and/or materials furnished in accordance with the relevant plans and specifications as verified by the Engineer. It is understood that the subject quantities may be increased or decreased as hereinafter provided in the subsection titled ALTERATION OF WORK AND QUANTITIES of Section 40 without in any way invalidating the unit bid prices.

<u>20-06 EXAMINATION OF PLANS, SPECIFICATIONS, AND SITE.</u> The bidder is expected to carefully examine the site of the proposed work, the proposal, plans, specifications, and contract forms. He shall satisfy himself as to the character, quality, and quantities of work to be performed, materials to be furnished, and as to the requirements of the proposed contract. The submission of a proposal shall be prima facie evidence that the bidder has made such examination and is satisfied as to the conditions to be encountered in performing the work and as to the requirements of the proposed contract, plans, and specifications.

Boring logs and other records of subsurface investigations and tests (if any) are available for inspection of bidders. It is understood and agreed that such subsurface information, whether included in the plans, specifications, or otherwise made available to the bidder, was obtained and is intended for the Owner's design and estimating purposes only. Such information has been made available for the convenience of all bidders. It is further understood and agreed that each bidder is solely responsible for all assumptions, deductions, or conclusions which he may make or obtain from his examination of the boring logs and other records of subsurface investigations and tests that are furnished by the Owner.

<u>20-07 PREPARATION OF PROPOSAL</u>. The bidder shall submit his proposal in duplicate on the forms furnished by the Owner. All blank spaces in the proposal forms must be correctly filled in where indicated for each and every time a quantity is given. The bidder shall state the price (written in ink or typed) both in words and numerals for each pay item furnished in the proposal. In case of conflict between words and numerals, the words, unless obviously incorrect, shall govern.

The bidder shall sign his proposal correctly in ink. If the proposal is made by an individual, his name and post office must be shown. If made by a partnership, the name and post office address of each member of the partnership must be shown. If made by a corporation, the person signing the proposal shall give the name of the state under the laws of which the corporation was chartered and the name, titles, and business addresses of the president, secretary, and the treasurer. Anyone signing a proposal as an agent shall file evidence of his authority to do so and that the signature is binding upon the firm or corporation.

<u>20-08 IRREGULAR PROPOSALS</u>. Proposals shall be considered irregular for the following reasons:

- a. If the proposal is on a form other than that furnished by the Owner, or if the Owner's form is altered, or if any part of the proposal form is detached.
- If there are unauthorized additions, conditional or alternate pay items, or irregularities of any kind which make the proposal incomplete, indefinite, or otherwise ambiguous.
- c. If the proposal does not contain a unit price for each pay item listed in the proposal, except in the case of authorized alternate pay items, for which the bidder is not required to furnish a unit price.
- d. If the proposal contains unit prices that are obviously unbalanced.
- e. If the proposal is not accompanied by the proposal guaranty specified by the Owner.

The Owner reserves the right to reject any irregular proposal and the right to waive technicalities if such waiver is in the best interest of the Owner and conforms to local laws and ordinances pertaining to the letting of construction contracts.

<u>20-09 PROPOSAL GUARANTY</u>. Each proposal must be accompanied by a Certified Check payable to the Owner, or a Proposal Bond, in the form provided herein, in favor of the Owner, in the amount of five percent (5%) of the total amount bid for the work. The amount of such Bond or Check of the Bidder whose proposal is accepted shall be forfeited and paid to the Owner as liquidated damages if said Bidder fails to enter into a Contract with the Owner and to furnish the required Contract Bond within ten (10) days after Notice of Acceptance of the proposal.

The surety on the Proposal Bond shall be a corporate Surety authorized under the laws of the state in which the project is located to do business in said state and authorized to write that type of bond through a resident agent of the corporations located in said state.

20-10 DELIVERY OF PROPOSAL. Each proposal submitted shall be placed in a sealed envelope plainly marked with the project numbers, name and business address of the

Bidder on the outside. When sent by mail, preferably registered, the sealed proposal, marked as indicated above, should be enclosed in an additional envelope. No proposal will be considered unless received at the place specified in the advertisement before the time specified for opening all bids. Proposals received after the bid opening time shall be returned to the Bidder unopened.

<u>20-11 WITHDRAWAL OR REVISION OF PROPOSALS</u>. A Bidder may withdraw or revise (by withdrawal of one proposal and submission of another) a proposal provided the Bidder's request for withdrawal is received by the Owner in writing or by telegram before the time specified for opening bids. Revised proposals must be received at the place specified in the advertisement before the time specified for opening all bids.

<u>20-12 PUBLIC OPENING OF PROPOSALS</u>. Proposals shall be opened and read publicly at the time and place specified in the advertisement. Bidders, their authorized agents, and other interested persons are invited to attend.

Proposals that have been withdrawn (by written or telegraphic request) or received after the time specified for opening bids shall be returned to the Bidder unopened.

<u>20-13 DISQUALIFICATION OF BIDDERS</u>. A Bidder may be considered disqualified for any of the following reasons:

- a. Submitting more than one proposal from the same partnership, firm, or corporation under the same or different name.
- b. Evidence of collusion among Bidders. Bidders participating in such collusion shall be disqualified as Bidders for any future work of the Owner until any such participating Bidder has been reinstated by the Owner as a qualified Bidder.
- c. If the Bidder is considered to be "in default" for any reason specified in the subsection titled ISSUANCE OF PROPOSAL FORMS of this section.
- d. Any firm or person debarred for violation of the Davis-Bacon Act is ineligible to be a prime contractor or subcontractor on any contract funded by the airport grant program.
- e. If the Contractor has performed unsatisfactory work on previous contracts with the Owner.
- f. If the Contractor is currently behind schedule on any current contract with the Owner.
- g. If the Contractor has been disqualified from bidding on or performing work at the Savannah/Hilton Head International Airport.

SECTION 30

AWARD AND EXECUTION OF CONTRACT

30-01 CONSIDERATION OF PROPOSALS. After the proposals are publicly opened and read, they will be compared on the basis of the lump sum bids (± alternates) or of the summation of the products obtained by multiplying the estimated quantities shown in the low proposal by the unit bid prices (± alternates). If a Bidder's proposal contains a discrepancy between bid prices written in words and bid prices written in numbers, the price written in words shall govern.

Until the award of a contract is made, the Owner reserves the right to reject a Bidder's proposal for any of the following reasons:

- a. If the proposal is irregular as specified in the subsection titled IRREGULAR PROPOSALS of Section 20.
- If the Bidder is disqualified for any of the reasons specified in the subsection titled DISQUALIFICATION OF BIDDERS of Section 20.

In addition, until the award of a contract is made, the Owner reserves the right to reject any or all proposals; waive technicalities, if such waiver is in the best interest of the Owner and is in conformance with applicable state and local laws or regulations pertaining to the letting of construction contracts; advertise for new proposals; or proceed with the work otherwise. All such actions shall promote the Owner's best interests.

<u>30-02 AWARD OF CONTRACT</u>. The award of a contract, if it is to be awarded, shall be made within ninety (90) calendar days of the date specified for publicly opening proposals, unless otherwise specified herein.

Award of the contract shall be made by the Owner to the lowest qualified Bidder whose proposal conforms to the cited requirements of the Owner.

30-03 CANCELLATION OF AWARD. The Owner reserves the right to cancel the award without liability to the Bidder, except return of proposal guaranty, at any time before a contract has been fully executed by all parties and is approved by the Owner in accordance with subsection titled APPROVAL OF CONTRACT of this Section.

30-04 RETURN OF PROPOSAL GUARANTY. All proposal guarantees, except those of the two lowest Bidders, will be returned immediately after the Owner has made a comparison of bids as hereinbefore specified in the subsection titled CONSIDERATION OF PROPOSALS of this Section. Proposal guaranties of the two lowest Bidders will be retained by the Owner until such time as an award is made, at which time the unsuccessful Bidder's proposal guaranty will be returned. The successful Bidder's proposal guaranty will be returned as soon as the Owner received the contract bonds as

GDOT Revised 02/01/01 specified in the subsection titled REQUIREMENTS OF CONTRACT BONDS of this Section.

30-05 REQUIREMENTS OF CONTRACT BONDS. At the time of the execution of the contract, the successful Bidder shall furnish the Owner Payment and Performance Bonds which have been fully executed by the Bidder and his Surety guaranteeing the performance of the work and the payment of all legal debts that may be incurred by reason of the Contractor's performance of the work. The Surety and the form of the Bond or Bonds shall be acceptable to the Owner. Unless otherwise specified in this subsection, the Surety Bond or Bonds shall be in a sum equal to the full amount of the contract.

<u>30-06</u> EXECUTION OF CONTRACT. The successful Bidder shall sign (execute) the necessary agreements for entering into the contract and return such signed contract to the Owner, along with the fully executed Payment and Performance Bonds specified in the subsection titled REQUIREMENTS OF CONTRACT BONDS of this Section, and along with required Insurance Certificates, if applicable, within ten (10) calendar days from the date in the Notice of Acceptance by the Owner. If the contract is mailed, special handling is recommended.

30-07 APPROVAL OF CONTRACT. Upon receipt of the contract and contract bond or bonds that have been executed by the successful Bidder, the Owner shall complete the execution of the contract in accordance with local laws or ordinances and return the fully executed contract to the Contractor. Delivery of the fully executed contract to the Contractor shall constitute the Owner's approval to be bound by the successful Bidder's proposal and the terms of the contract.

<u>30-08 FAILURE TO EXECUTE CONTRACT</u>. Failure of the successful Bidder to execute the contract and furnish an acceptable Surety Bond or Bonds within the ten (10) calendar day period specified in the subsection titled REQUIREMENTS OF CONTRACT BONDS of this section shall be just cause for cancellation of the award and forfeiture of the proposal guaranty, not as a penalty, but as liquidation of damages to the Owner.

SECTION 40

SCOPE OF WORK

<u>40-01 INTENT OF CONTRACT</u>. The intent of the contract is to provide for construction and completion in every detail of the work described. It is further intended that the Contractor shall furnish all labor, materials, equipment, tools, transportation, and supplies required to complete the work in accordance with the plans, specifications, and terms of the contract.

40-02 ALTERATION OF WORK AND QUANTITIES. The Owner reserves and shall have the right to make such alterations in the work as may be necessary or desirable to complete the work intended in an acceptable manner. Alterations which are for work within the general scope of the contract shall be covered by "Change Orders" or "Field Orders" issued by the Owner as recommended by the Engineer. Change orders or field orders for altered work may include extensions of contract time where, in the Owner's opinion as recommended by the Engineer, such extensions are commensurate with the amount and difficulty of added work.

<u>40-03 OMITTED ITEMS</u>. The Engineer, with the approval of the Owner, may, in the Owner's best interest, omit from the work any contract items except major contract items. Major contract items may be omitted by a supplemental agreement. Such omission of contract items shall not invalidate any other contract provision or requirement.

Should a contract item be omitted or otherwise ordered to be nonperformed, the Contractor shall be paid for all work performed toward completion of such item prior to the date of the order to omit such item. Payment for work performed shall be in accordance with the subsection titled PAYMENT FOR OMITTED ITEMS of Section 90.

40-04 EXTRA WORK. Should acceptable completion of the contract require the Contractor to perform an item of work for which no basis of payment has been provided in the original contract or previously issued change orders or supplemental agreements, the same shall be called Extra Work. Extra work that is within the general scope of the contract shall be covered by written change order. Change orders for such extra work shall contain agreed lump sum and/or unit prices for performing the change order work in accordance with the requirements specified in the order, and shall contain any adjustment to the contract time that, in the Engineer's opinion, is necessary for completion of such extra work.

When determined by the Engineer, with the approval of the Owner, to be in the Owner's best interest, he may order the Contractor to proceed with extra work by force account as provided in the subsection titled PAYMENT FOR EXTRA AND FORCE ACCOUNT WORK of Section 90.

Extra work that is necessary for acceptable completion of the project, but is not within the general scope of the work covered by the original contract shall be covered by a supplemental agreement as hereinbefore defined in the subsection titled SUPPLEMENTAL AGREEMENT of Section 10.

Any claim for payment of extra work that is not covered by written agreement (change order, field order, or supplemental agreement) shall be rejected by the Owner.

40-05 MAINTENANCE OF TRAFFIC. It is the explicit intention of the contract that the safety of aircraft, as well as the Contractor's equipment and personnel, is the most important consideration. It is understood and agreed that the Contractor shall provide for the free and unobstructed movement of aircraft in the Air Operations Area of the airport with respect to his own operations and the operations of all his subcontractors as specified in the subsection titled LIMITATION OF OPERATIONS of Section 80. It is further understood and agreed that the Contractor shall provide for the uninterrupted operation of visual and electronic signals (including power supplies thereto) used in the guidance of aircraft while operating to, from, and upon the airport as specified in the subsection titled CONTRACTOR'S RESPONSIBILITY FOR UTILITY SERVICE AND FACILITIES OF OTHERS in Section 70.

With respect to his own operations and the operations of all his subcontractors, the Contractor shall provide marking, lighting, and other acceptable means of identifying: personnel, equipment, vehicles, storage areas, and any work area or condition that may be hazardous to the operation of aircraft, fire-rescue equipment, or maintenance vehicles at the airport.

When the contract requires the maintenance of vehicular traffic on an existing road, street, or highway during the Contractor's performance of work that is otherwise provided for in the contract, plans and specifications, the Contractor shall keep such road, street, or highway open to all traffic and shall provide such maintenance as may be required to accommodate traffic. The Contractor shall furnish, erect, and maintain barricades, warning signs, flag persons, and other traffic control devices in reasonable conformity with the Manual of Uniform Traffic Control Devices for Streets and Highways (published by the United States Government Printing Office) unless otherwise specified herein. The Contractor shall also construct and maintain in a safe condition any temporary connections necessary for ingress to and egress from abutting property or intersecting roads, streets, or highways. Unless otherwise specified herein, the Contractor will not be required to furnish snow removal for such existing road, street, or highway.

The Contractor shall at all times conduct his work so as to create no hindrance, hazard, or obstacle to vehicular traffic using the airport and must, at all times, conduct the work in conformance with requirements of the Executive Director or his authorized representative.

All existing grassed areas beyond the limit of work damaged by the Contractor's operations shall be restored to their original condition by the Contractor.

If the Contractor is given approval to work at night, he shall provide lights at the work site and along the access route. Type, direction, number and location of lights shall be subject to the approval of the Executive Director.

All costs incurred in compliance with this subsection, including but not limited to: safeguarding personnel and equipment, maintaining air traffic, providing flag persons, temporary lighting, shall be considered incidental to the work under this contract and shall be included in respective contract lump sum and/or unit prices, and no additional payment therefore shall be made.

The Contractor shall indemnify and hold harmless the Owner, its agents, servants, employees, of an from any and all claims, demands, debts, liabilities, or causes of action, of every kind or nature whatsoever, whether in law or in equity, resulting from the acts or omissions of the Contractor, its agents, servants, employees and subcontractors with respect to the requirements of this subsection and in the performance of this contract.

40-06 REMOVAL OF EXISTING STRUCTURES. All existing structures encountered within the established lines, grades, or grading sections shall be removed by the Contractor, unless such existing structures are otherwise specified to be relocated, adjusted up or down, salvaged, abandoned in place, reused in the work or to remain in place. Should the Contractor encounter an existing structure (above or below ground) in the work for which the disposition is not indicated on the plans, the Engineer shall be notified prior to disturbing such structure. The disposition of existing structures so encountered will be immediately determined by the Engineer in accordance with the provisions of the contract.

Except as provided in the subsection titled RIGHTS IN AND USE OF MATERIALS FOUND IN THE WORK of this section, it is intended that all existing materials or structures that may be encountered (within the lines, grades, or grading sections established for completion of the work) shall be utilized in the work as otherwise provided for in the contract and shall remain the property of the Owner when so utilized in the work.

40-07 RIGHTS IN AND USE OF MATERIALS FOUND IN THE WORK. Should the Contractor encounter any material such as (but not restricted to) sand, stone, gravel, slag, or concrete slabs within the established lines, grades, or grading sections, the use of which is intended by the terms of the contract to be either embankment or waste, he may at his option either:

- a. Use such material in another contract item, providing such use is approved by the Engineer and is in conformance with the contract specifications applicable to such use: or,
- b. Remove such material from the site, upon written approval of the Owner; or,
- c. Use such material for his own temporary construction of the contract.

Under no circumstances will the material be removed from airport property without written approval from the Executive Director. Should the Contractor wish to exercise option a., b., or c., he shall request the Owner's approval in advance of such use.

Should the Owner approve the Contractor's request to exercise option a., b., or c., the Contractor shall be paid for the excavation or removal of such material at the applicable contract price. The Contractor shall replace, at his own expense, such removed or excavated material with an agreed equal volume of material that is acceptable for use in constructing embankment, backfills, or otherwise to the extent that such replacement material is needed to complete the contract work. The Contractor shall not be charged for his use of such material so used in the work or removed from the site.

It is understood and agreed that the Contractor shall make no claim for delays for reason of his exercise of option a., b., or c.

The Contractor shall not excavate, remove, or otherwise disturb any material, structure, or part of a structure which is located outside the lines, grades, or grading sections established for the work, except where such excavation or removal is provided for in the contract, plans or specifications.

<u>40-08 FINAL CLEANING UP.</u> Upon completion of the work and before acceptance and final payment will be made, the Contractor shall remove from the site all machinery, equipment, surplus and discarded materials, rubbish, temporary structures, and stumps or portions of trees. He shall cut all brush and woods within the limits indicated establish erosion-resistant ground covers as specified, and he shall leave the site in a neat and presentable condition. Material cleared from the site and deposited on adjacent property will not be considered as having been disposed of satisfactorily, unless the Contractor has obtained the written permission of such property Owner.

40-09 ACCESS TO THE WORK. Access to the work will be via the access routes shown on the plans or as directed by the Engineer. The Contractor shall identify access routes with suitable signs, barricades, and similar equipment.

The entire access route and construction site shall be kept free and clean of all debris at all times and maintained in good repair by the Contractor. All damage to the access route caused by the actions of the Contractor or his agents shall be immediately repaired to the satisfaction of the Owner.

No additional payment will be made to the Contractor for complying with the requirements of this subsection.

No other access to the work sites will be permitted without written approval of the Engineer. Contractor's vehicles and equipment, including vehicles and equipment of subcontractors and others coming under the Contractor's control, will not be permitted to traverse other airfield areas of pavement without written approval of the Engineer.

GDOT Revised 05/07/02 Contractor's vehicles, equipment, and materials may be stored in the area designated on the Plans. Upon completion of the work, the storage area shall be cleaned up and returned to its original condition to the satisfaction of the Engineer. No special payment will be made for clean up and restoration of the storage area.

Space will be allotted by the Engineer for the use of employees of the Contractor and his subcontractor(s) for the daily parking of their automobiles during the construction period. Personal vehicles of employees and vehicles operated by vendors of goods or services will not be permitted beyond the Contractor's parking area. Drivers of vehicles being operated beyond this area shall be subject to loss or permission to enter the construction site.

<u>40-10 CHANGE ORDERS</u>. Any change to the work that affects the price, schedule, or scope of the contract shall be submitted in writing and approved by the Executive Director or his representative. If the change is an emergency and critical to the project, a verbal approval by the Executive Director may be given provided an estimated cost of the change is given prior to approval.

Any changes affecting the cost of the project that have not been approved by the Executive Director or his representative will be subject to non-payment and cost may be borne by the Contractor.

40-11 REMOVAL OF MATERIAL FROM AIRPORT PROPERTY. Material including but not limited to sand, topsoil, stone, rock, concrete, asphalt, asphalt millings, sod, earth, and any other items on airport property shall not be removed from airport property without permission from the Executive Director or his representative.

SECTION 50

CONTROL OF WORK

50-01 AUTHORITY OF THE ENGINEER. The Engineer will decide any and all questions which may arise as to the quality and acceptability of materials furnished, work performed, and as to the manner of performance and rate of progress of the work. He will decide all questions which may arise as to the interpretation of the specifications or plans relating to the work, the fulfillment of the contract on the part of the Contractor, and the rights of different Contractors on the project. The Engineer will recommend to the Owner the amount and quality of the several kinds of work performed and materials furnished which are to be paid for under this contract.

<u>50-02 CONFORMITY WITH PLANS AND SPECIFICATIONS</u>. All work and all materials furnished shall be in conformity with the lines, grades, grading sections, cross sections, dimensions, material requirements and the contract, plans, or specifications.

If the Engineer finds the materials furnished, work performed, or the finished product are not in conformity with the plans and specifications and have resulted in an unacceptable finished product, the affected work or materials shall be removed and replaced or otherwise corrected by and at the expense of the Contractor in accordance with the Engineer's written orders as directed by the Owner.

50-03 COORDINATION OF CONTRACT, PLANS, AND SPECIFICATIONS. The contract, plans, specifications, and all referenced standards cited are essential parts of the contract requirements. A requirement occurring in one is as binding as though occurring in all. They are intended to be complementary and to describe and provide for a complete work. In resolving conflicts, discrepancies, or errors in the various contract documents, the documents shall be given the order of precedence, as follows: Contract, Change Order, Addenda, Plans, Specifications, General Conditions and Supplementary General Conditions. In case of discrepancy, figured dimensions, unless obviously incorrect, shall govern over scaled dimensions. Cited standards for materials or testing, and cited FAA Advisory Circulars and Georgia Department of Transportation specifications shall be considered as standard specifications.

Any table, gradation, size, dimension, rate, mix, method, nomenclature, pay item number, basis of payment or method of measurement shown on the plans, which is at variance with the standard specifications, shall be considered an amendment or supplement to the applicable specification.

The Contractor shall not take advantage of any apparent error or omission on the plans or specifications. In the event the Contractor discovers any apparent error or discrepancy, he shall immediately call upon the Engineer for his interpretation and decision, and such decision will be final. If there is a conflict between what is shown on the plans and that stated in the specifications, the more stringent of the two will take precedence.

GDOT Revised 02/01/01 <u>50-04 COOPERATION OF CONTRACTOR</u>. The Contractor will be supplied with two (2) copies each of the plans and specifications. He shall have available on the work site at all times one (1) copy each of the plans and specifications. Additional copies of plans and specifications may be obtained by the Contractor for the cost of reproduction.

The Contractor shall give constant attention to the work to facilitate the progress thereof, and he shall cooperate with the Engineer and his inspectors and with other Contractors in every way possible. The Engineer shall allocate the work and designate the sequence of construction in case of controversy between Contractors. The Contractor shall have a competent superintendent on the work site at all times who is fully authorized as his agent on the work. The superintendent shall be capable of reading and thoroughly understanding the plans and specifications and shall receive and fulfill instructions from the Engineer or his authorized representative.

50-05 COOPERATION BETWEEN CONTRACTORS. The Owner reserves the right to contract for and perform other or additional work on or near the work covered by this contract.

When separate contracts are let within the limits of any one project, each Contractor shall conduct his work so as not to interfere with or hinder the progress of completion of the work being performed by other Contractors. Contractors working on the same project shall cooperate with each other as directed.

Each Contractor shall arrange his work and shall place and dispose of the materials being used so as not to interfere with the operations of the other Contractors within the limits of the same project. He shall join his work with that of the others in an acceptable manner and shall perform it in proper sequence to that of the above.

50-06 CONSTRUCTION LAYOUT AND STAKES. Utilizing the data shown on the plans and/or furnished by the Engineer, the Contractor shall establish all horizontal and vertical controls necessary to construct the work in conformance with the plans and specifications. The work shall include performing all calculations required and setting all stakes needed, such as offset stakes, reference point stakes, slope stakes, and other reference marks or points necessary to provide lines and grades for construction.

The Contractor shall employ only competent personnel and utilize only suitable equipment in performing layout work.

He shall not engage the services of any person or persons in the employ of the Engineer for performance of layout work.

Adequate field notes and records shall be kept as layout work is accomplished. These field notes and records shall be available for review by the Engineer as the work progresses and copies shall be furnished to the Engineer at the time of completion of the project. Any inspection or checking of the Contractor's field notes or layout work by the

GDOT Revised 02/01/01 Engineer and the acceptance of all or any part thereof, shall not relieve the Contractor of his responsibility to achieve the lines, grades, and dimensions shown in the plans and specifications.

The cost of all stakes and the cost of performing layout work as described above shall be included in the contract lump sum and/or unit prices for the various items of work to which it is incidental.

50-07 AUTOMATICALLY CONTROLLED EQUIPMENT. Whenever batching or mixing plant equipment is required to be operated automatically under the contract and a breakdown or malfunction of the automatic controls occurs, the equipment may be operated manually or by other methods for a period of forty-eight (48) hours following the breakdown or malfunction, provided this method of operating will produce results which conform to all other requirements of the contract.

<u>50-08 AUTHORITY AND DUTIES OF INSPECTORS</u>. Inspectors employed by the Owner shall be authorized to inspect all work done and all materials furnished. Such inspection may extend to all or any part of the work and to the preparation, fabrication, or manufacture of the materials to be used. Inspectors are not authorized to revoke, alter, or waive any provision of the contract. Inspectors are not authorized to issue instructions contrary to the plans and specifications or to act as foreman for the Contractor.

<u>50-09 INSPECTION OF THE WORK</u>. All materials and each part or detail of the work shall be subject to inspection by the Engineer. The Engineer shall be allowed access to all parts of the work and shall be furnished with such information and assistance by the Contractor as is required to make a complete and detailed inspection.

If the Engineer requests it, the Contractor, at any time before acceptance of the work, shall remove or uncover such portions of the finished work as may be directed. After examination, the Contractor shall restore said portions of the work to the standard required by the specifications. Should the work thus exposed or examined prove acceptable, the uncovering, or removing, and the replacing of the covering or making good of the parts removed will be paid for as extra work; but should the work so exposed or examined prove unacceptable, the uncovering, or removing, and the replacing of the covering and making good of the parts removed will be at the Contractor's expense.

Any work done and materials used requiring inspection which is done without the required supervision or inspection by an authorized representative of the Owner may be ordered removed and replaced at the Contractor's expense.

Should the contract work include relocation, adjustment, or any other modification to existing facilities, not the property of the (contract) Owner, authorized representative of the Owners of such facilities shall have the right to inspect such work. Such inspection shall in no sense make any facility owner a party to the contract, and shall in no way interfere with the rights of the parties to this contract.

50-10 REMOVAL OF UNACCEPTABLE AND UNAUTHORIZED WORK. All work which does not conform to the requirements of the contract, plans and specifications will be considered unacceptable, unless otherwise determined accepted by the Engineer and Owner as provided in the subsection titled CONFORMITY WITH PLANS AND SPECIFICATIONS of this section.

Unacceptable work, whether the result of poor workmanship, use of defective materials, damage through carelessness, or any other cause found to exist prior to the final acceptance of the work, shall be removed immediately and replaced in an acceptable manner in accordance with the provisions of the subsection titled CONTRACTOR'S RESPONSIBILITY FOR WORK of Section 70.

Work done contrary to the instructions of the Engineer, work done beyond the lines shown on the plans or as given, except as herein specified, or any extra work done without authority, will be considered as unauthorized and will not be paid for under the provisions of the contract. Work so done may be ordered removed or replaced at the Contractor's expense.

Upon failure on the part of the Contractor to comply forthwith with any order of the Engineer made under the provisions of this subsection, the Engineer will have authority to cause unacceptable work to be remedied or removed and replaced and unauthorized work to be removed and to deduct the costs (incurred by the Owner) from any monies due or to become due the Contractor.

<u>50-11 LOAD RESTRICTIONS</u>. The Contractor shall comply with all legal load restrictions in the hauling of materials on public roads beyond the limits of the work. A special permit will not relieve the Contractor of liability for damage which may result from the moving of material or equipment.

The operation of equipment of such weight or so loaded as to cause damage to structures or to any other type of construction will not be permitted. Hauling of materials over the base course or surface course under construction shall be limited as directed. No loads will be permitted on a concrete pavement, base, or structure before the expiration of the curing period. The Contractor shall be responsible for all damage done by his hauling equipment and shall correct such damage at his own expense.

<u>50-12 MAINTENANCE DURING CONSTRUCTION</u>. The Contractor shall maintain the work during construction and until the work is accepted. This maintenance shall constitute continuous and effective work prosecuted day by day, with adequate equipment and forces so that the work is maintained in satisfactory condition at all times.

In the case of a contract for the placing of a course upon a course or subgrade previously constructed, the Contractor shall maintain the previous course or subgrade during all construction operations.

All costs of maintenance work during construction and before the project is accepted shall be included in the prices bid on the various contract items, and the Contractor will not be paid an additional amount for such work.

50-13 FAILURE TO MAINTAIN THE WORK. Should the Contractor at any time fail to maintain the work as provided in the subsection titled MAINTENANCE DURING CONSTRUCTION of this section, the Engineer will immediately notify the Contractor of such noncompliance. Such notification will specify a reasonable time within which the Contractor shall be required to remedy such unsatisfactory maintenance condition. The time specified will give due consideration to the exigency that exists.

Should the Contractor fail to respond to the Engineer's notification, the Engineer may suspend any work necessary for the Owner to correct such unsatisfactory maintenance condition, depending on the exigency that exists. Any maintenance cost incurred by the Owner, shall be deducted from monies due or to become due the Contractor.

50-14 PARTIAL ACCEPTANCE. If at any time during the prosecution of the project the Contractor substantially completes a usable unit or portion of the work, the occupancy of which will benefit the Owner, he may request the Engineer to make final inspection of that unit. If the Engineer finds upon inspection that the unit has been satisfactorily completed in compliance with the contract, he may accept it as being completed, and the Contractor may be relieved of further responsibility for that unit. Such partial acceptance and beneficial occupancy by the Owner shall not void or alter any provision of the contract.

<u>50-15 FINAL ACCEPTANCE</u>. Upon due notice from the Contractor of presumptive completion of the entire project, the Engineer and Owner will make an inspection. If all construction provided for and contemplated by the contract is found to be completed in accordance with the contract, plans, and specifications, such inspection shall constitute the final inspection. The Engineer will notify the Contractor in writing of final acceptance as of the date of the final inspection.

If, however, the inspection discloses any work, in whole or in part, as being unsatisfactory, the Engineer will give the Contractor the necessary instructions for correction of same, and the Contractor shall immediately comply with and execute such instructions. Upon correction of the work, another inspection will be made which shall constitute the final inspection, provided the work has been satisfactorily completed. In such event, the Engineer will make the final acceptance and notify the Contractor in writing of this acceptance as of the date of final inspection.

50-16 CLAIMS FOR ADJUSTMENT AND DISPUTES. If for any reason the Contractor deems that additional compensation is due him for work or materials not clearly provided for in the contract, plans or specifications, or previously authorized as extra work, he shall notify the Engineer in writing of his intention to claim such additional compensation before he begins the work on which he bases the claim. If such notification is not given or the Engineer is not afforded proper opportunity by the Contractor for keeping strict account of actual cost as required, then the Contractor hereby agrees to waive any claim for such

additional compensation. Such notice by the Contractor and the fact that the Engineer has kept account of the cost of the work shall not in any way be construed as proving or substantiating the validity of the claim. When the work on which the claim for additional compensation is based has been completed, the Contractor shall, within ten (10) calendar days, submit his written claim to the Engineer who will present it to the Owner for consideration in accordance with local laws or ordinances.

Nothing in this subsection shall be construed as a waiver of the Contractor's right to dispute final payment based on differences in measurements or computations.

<u>50-17 RETEST OF WORK</u>. When, as provided for in the contract documents, the Owner performs sampling and tests of the work and the tests show a failure to meet the requirements of the contract documents, the expense of the retesting, after reworking or substitution by the Contractor will be at the expense of the Contractor and such costs will be deducted from the payments otherwise due to the Contractor.

<u>50-18 CORRECTION OF WORK AFTER FINAL PAYMENT</u>. Neither the final certificate nor payment, nor any provision in the contract documents shall relieve the Contractor of responsibility for faulty materials or workmanship and, unless otherwise specified, he shall remedy any defect due thereto and pay for any damage to other work resulting therefrom, which shall appear within a period of one year from date of final acceptance.

The Owner shall give notice of observed defects with reasonable promptness. Wherever the work "acceptance" occurs, it shall be understood to mean final acceptance.

SECTION 60

CONTROL OF MATERIALS

60-01 SOURCE OF SUPPLY AND QUALITY REQUIREMENTS. The materials used on the work shall conform to the requirements of the contract, plans, and specifications. Unless otherwise specified, such materials that are manufactured or processed shall be new (as compared to used or reprocessed).

In order to expedite the inspection and testing of materials, the Contractor shall furnish complete statements to the Engineer as to the origin, composition, and manufacture of all materials to be used in the work. Such statements shall be furnished promptly after execution of the contract but, in all cases, prior to delivery of such materials.

At the Engineer's option, materials may be approved at the source of supply before delivery is started. If it is found after trial that sources of supply for previously approved materials do not produce specified products, the Contractor shall furnish materials from other sources.

60-02 SAMPLES, TESTS, AND CITED SPECIFICATIONS. All materials requiring testing which are used in the work shall be inspected, tested, and approved by the Engineer before incorporation in the work. Any work in which such materials are used untested without approval or written permission of the Engineer shall be performed at the Contractor's risk. Materials found to be unacceptable and unauthorized will not be paid for and, if directed by the Engineer, shall be removed at the Contractor's expense. Unless otherwise designated, tests in accordance with the cited standard methods of AASHTO of ASTM which are current on the date of advertisement for bids will be made by and at the expense of the Owner. All materials being used are subject to inspection, test, or rejection at any time prior to or during incorporation into the work. Copies of all required tests will be furnished to the Contractor's representative at his request. In the event that any tests show a failure to meet the requirements of the contract documents, the expense of retesting, after substitution or modification by the Contractor, will be at the expense of the Contractor and such costs will be deducted from the payments otherwise due to the Contractor. The Contractor shall furnish the required samples without charge. The Contractor shall give sufficient notification of the placing of orders for materials to permit testing.

<u>60-03 CERTIFICATION OF COMPLIANCE</u>. The Engineer may permit the use, prior to sampling and testing, of certain materials or assemblies when accompanied by manufacturer's certificates of compliance stating that such materials or assemblies fully comply with the requirements of the contract. The certificate shall be signed by the manufacturer. Each lot of such materials or assemblies delivered to the work must be accompanied by a certificate of compliance in which the lot is clearly identified.

Materials or assemblies used on the basis of certificates of compliance may be sampled

and tested at any time and if found not to be in conformity with contract requirements will be subject to rejection whether in place or not.

The form and distribution of certificates of compliance shall be as approved by the Engineer.

When a material or assembly is specified by "brand name or equal" and the Contractor elects to furnish the specified "brand name," the Contractor shall be required to furnish the manufacturer's certificate of compliance for each lot of such material or assembly delivered to the work. Such certificates of compliance shall clearly identify each lot delivered and shall certify as to:

- a. Conformance to the specified performance, testing, quality, or dimensional requirements; and,
- Suitability of the material or assembly for the use intended in the contract work.

Should the Contractor propose to furnish an "or equal" material or assembly, he shall furnish the manufacturer's certificates of compliance as hereinbefore described for the specified brand name material or assembly. However, the Engineer will recommend to the Owner as to whether the proposed "or equal" is suitable for use in the work.

The Engineer reserves the right to refuse permission for use of materials or assemblies on the basis of certificates of compliance.

<u>60-04 PLANT INSPECTION</u>. The Engineer or his authorized representative may inspect, at its source, any specified material or assembly to be used in the work. Manufacturing plants may be inspected from time to time for the purpose of determining compliance with specified manufacturing methods or materials to be used in the work and to obtain samples required for his acceptance of the material or assembly.

Should the Engineer conduct plant inspections, the following conditions shall exist:

- a. The Engineer shall have the cooperation and assistance of the Contractor and the producer with whom he has contracted for materials.
- b. The Engineer shall have full entry at all reasonable times to such parts of the plants that concern the manufacture or production of the materials being furnished.
- c. If required by the Engineer, the Contractor shall arrange for adequate office or working space that may be reasonably needed for conducting plant inspections. Office or working space should be conveniently located with respect to the plant.

GDOT Revised 02/01/01 It is understood and agreed that the Owner shall have the right to retest any material which has been tested and approved at the source of supply after it has been delivered to the site. The Engineer shall have the right to reject only material which, when retested, does not meet the requirements of the contract, plans, or specifications.

<u>60-05 ENGINEER'S FIELD OFFICE AND LABORATORY</u>. When specified and provided for, the Contractor shall furnish a building for the exclusive use of the Engineer as a field office and field testing laboratory. The building shall be furnished and maintained by the Contractor as specified and shall become the property of the Contractor when the contract work is completed.

60-06 STORAGE OF MATERIALS. Materials shall be so stored as to assure the preservation of their quality and fitness for the work. Stored materials, even though approved before storage, may again be inspected prior to their use in the work. Stored materials shall be located so as to facilitate their prompt inspection. The Contractor shall coordinate the storage of all materials with the Engineer. Materials to be stored on airport property shall not create an obstruction to air navigation nor shall they interfere with the free and unobstructed movement of aircraft. Unless otherwise shown on the plans, the storage of materials and the location of the Contractor's plant and parked equipment or vehicles shall be as directed by the Engineer.

Private property shall not be used for storage purposes without written permission of the Owner or lessee of such property. The Contractor shall make all arrangements and bear all expenses for the storage of materials on private property. Upon request, the Contractor shall furnish the Engineer a copy of the property owner's permission.

All storage sites on private or airport property shall be restored to their original condition by the Contractor at his entire expense, except as otherwise agreed to (in writing) by the owner or lessee of the property.

<u>60-07 UNACCEPTABLE MATERIALS</u>. Any material or assembly that does not conform to the requirements of the contract, plans, or specifications shall be considered unacceptable and shall be rejected. The Contractor shall remove any rejected material or assembly from the site of the work, unless otherwise instructed by the Engineer.

Rejected material or assembly, the defects of which have been corrected by the Contractor, shall not be returned to the site of the work until such time as the Engineer has approved its use in the work.

60-08 OWNER-FURNISHED MATERIALS. The Contractor shall furnish all materials required to complete the work, except those specified herein (if any) to be furnished by the Owner. Owner-furnished materials shall be made available to the Contractor at the location specified herein.

All costs of handling, transportation from the specified location to the site of work, storage, and installing Owner-furnished materials shall be included in the price bid for the contract

GDOT Revised 02/01/01 item in which such Owner-furnished material is used.

After any Owner-furnished material has been delivered to the location specified, the Contractor shall be responsible for any demurrage, damage, loss, or other deficiencies which may occur during the Contractor's handling, storage, or use of such Owner-furnished material. The Owner will deduct from any monies due or to become due the Contractor any cost incurred by the Owner in making good such loss due to the Contractor's handling, storage, or use of Owner-furnished materials.

SECTION 70

LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC

70-01 LAWS TO BE OBSERVED. The Contractor shall keep fully informed of all federal and state laws, all local laws, ordinances, and regulations and all orders and decrees of bodies or tribunals having any jurisdiction or authority, which in any manner affect those engaged or employed on the work, or which in any way affect the conduct of the work. He shall at all times observe and comply with all such laws, ordinances, regulations, orders and decrees; and shall protect and indemnify the Owner and all his officers, agents, or servants against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order or decree, whether by himself or his employees.

If the Contractor observes that the drawings and specifications are at variance with any laws, codes, ordinances, and regulations, he shall promptly notify the Engineer in writing, and any necessary changes shall be adjusted as provided in the contract for changes in the work. If the Contractor performs any work contrary to such laws, codes, ordinances, and regulations, and without such notice to the Engineer, he shall bear all costs arising therefrom.

<u>70-02 PERMITS, LICENSES, AND TAXES</u>. The Contractor shall procure all permits and licenses, pay all charges, fees, and taxes and give all notices necessary and incidental to the due and lawful prosecution of the work.

70-03 PATENTED DEVICES, MATERIALS, AND PROCESSES. If the Contractor is required or desires to use any design, device, material, or process covered by letters of patent or copyright, he shall provide for such use by suitable legal agreement with the patentee or Owner. The Contractor and the surety shall indemnify and save harmless the Owner, any third party, or political subdivision from any and all claims for infringement by reason of the use of any such patented design, device, material or process, or any trademark or copyright, and shall indemnify the Owner for any costs, expenses, and damages which it may be obliged to pay by reason of an infringement, at any time during the prosecution or after the completion of the work.

70-04 RESTORATION OF SURFACES DISTURBED BY OTHERS. The Owner reserves the right to authorize the construction, reconstruction, or maintenance of any public or private utility service, FAA, or National Oceanic and Atmospheric Administration (NOAA) facility, or a utility service of another government agency, at any time during the progress of the work.

Except as listed on the plans or contract documents, the Contractor shall not permit any individual, firm, or corporation to excavate or otherwise disturb such utility services or facilities located within the limits of the work without the written permission of the Engineer.

GDOT Revised 02/01/01 Should the Owner of public or private utility service, FAA, or NOAA facility, or a utility service of another government agency, be authorized to construct, reconstruct, or maintain such utility service of facility during the progress of the work, the Contractor shall cooperate with such Owners by arranging and performing the work in this contract so as to facilitate such construction, reconstruction, or maintenance by others. When ordered as extra work by the Engineer, the Contractor shall make all necessary repairs to the work which are due to such authorized work by others, unless otherwise provided for in the contract, plans, or specifications. It is understood and agreed that the Contractor shall not be entitled to make any claim for damages due to such authorized work by others or for any delay to the work resulting from such authorized work.

70-05 STATE AID PARTICIPATION. The attention of the Contractor is invited to the fact that the state in which this project is located may pay a portion of the cost of this improvement. In accordance with said state's rules and regulations, work will be subject to such inspections as the state, or its representative, may deem necessary to protect the interests of the people of the state. The Contractor shall furnish the inspecting party with every reasonable assistance to ascertain whether or not the requirements and intent of the contract are being met. Such inspections will in no way imply that the state is party to the contract, except for those contracts wherein the state is a signatory.

<u>70-06 SANITARY, HEALTH AND SAFETY PROVISIONS</u>. The Contractor shall provide and maintain in a safe, sanitary condition such accommodations for the use of his employees as may be necessary to comply with the requirements of the state and local boards of health, or of other bodies or tribunals having jurisdiction.

Attention is directed to federal, state and local laws, rules, and regulations concerning construction safety and health standards. The Contractor shall not require any worker to work in surroundings or under conditions which are unsanitary, hazardous, or dangerous to his health or safety.

<u>70-07 PUBLIC CONVENIENCE AND SAFETY</u>. The Contractor shall control his operations and those of his subcontractors and all suppliers to assure the least inconvenience to the traveling public. Under all circumstances, safety shall be the most important consideration.

The Contractor shall maintain the free and unobstructed movement of vehicular traffic with respect to his own operations and those of his subcontractors and all suppliers in accordance with the subsection titled MAINTENANCE OF TRAFFIC of Section 40 hereinbefore specified and shall limit such operations for the convenience and safety of the traveling public.

The Contractor shall provide initial and continuing instructions to all supervisors, employees, subcontractors, and suppliers to enable them to conduct their work in a manner that will provide the maximum safety with the least hindrance to air and ground traffic, the general public, airport employees, and to the workmen employed on the site.

All safety provisions specified by the plans and documents or received from the Engineer, and those required by laws, codes and ordinances, shall be thoroughly disseminated and rigidly enforced.

<u>70-08 BARRICADES</u>, WARNING SIGNS, AND HAZARD MARKINGS. The Contractor shall furnish, erect, and maintain all barricades, warning signs, and markings for hazards necessary to protect the public and the work. When used during periods of darkness, such barricades, warning signs and hazard markings shall be suitably illuminated.

For vehicular and pedestrian traffic, the Contractor shall furnish, erect, and maintain barricades, warning signs, lights and other traffic control devices in reasonable conformity with the Georgia Manual of Uniform Traffic Control Devices for Streets and Highways.

The Contractor shall furnish, erect, and maintain markings and associated lighting of open trenches, excavations, temporary stock piles, and his parked construction equipment that may be hazardous to the operation of emergency fire-rescue or maintenance vehicles on the airport in reasonable conformance to FAA Advisory Circular 150-5370-2F, "Safety on Airports During Construction Activity."

The Contractor shall furnish and erect all barricades, warning signs, and markings for hazards prior to commencing work which requires such erection and shall maintain the barricades, warning signs, and markings for hazards until their dismantling is directed by the Engineer.

70-09 USE OF EXPLOSIVES. When the use of explosives is necessary for the prosecution of the work, the Contractor shall exercise the utmost care not to endanger life or property, including new work. The Contractor shall be responsible for all damage resulting from the use of explosives.

All explosives shall be stored in a secure manner in compliance with all laws and ordinances, and all such storage places shall be clearly marked. Where no local laws or ordinances apply, storage shall be provided satisfactory to the Engineer and, in general, not closer than 1,000 feet from the work or from any building, road or other place of human occupancy.

The Contractor shall notify each property owner and public utility company having structures or facilities in proximity to the site of the work of his intention to use explosives. Such notice shall be given sufficiently in advance to enable them to take such steps as they may deem necessary to protect their property from injury.

The use of electric blasting caps is prohibited on airport property.

70-10 PROTECTION AND RESTORATION OF PROPERTY AND LANDSCAPE. The Contractor shall be responsible for the preservation of all public and private property, and shall protect carefully from disturbance or damage all land monuments and property marks until the Engineer has witnessed or otherwise referenced their location and shall

not move them until directed.

The Contractor shall be responsible for all damage or injury to property of any character, during the prosecution of the work, resulting from any act, omission, neglect, or misconduct in his manner or method of executing the work, or at any time due to defective work or materials, and said responsibility will not be released until the project shall have been completed and accepted.

When or where any direct or indirect damage or injury is done to public or private property by or on account of any act, omission, neglect, or misconduct in the execution of the work, or in consequence of the non-execution thereof by the Contractor, he shall restore at his own expense, such property to a condition similar or equal to that existing before such damage or injury was done, by repairing, rebuilding, or otherwise restoring as may be directed, or he shall make good such damage or injury in an acceptable manner.

Work that is to remain in place which is damaged or defaced by reasons of work performed under this contract, shall be restored at no additional cost to the Owner.

Items removed, indicated to be salvaged for Owner or reused in new work, which are damaged beyond repair, shall be replaced with equal new materials under this contract at no additional cost of the Owner.

Existing pavement or other existing work not specified for removal which is temporarily removed, damaged, exposed or in any way disturbed or altered by work under this contract shall be repaired, patched, or replaced to the complete satisfaction of the Engineer at no additional cost to the Owner.

Where it is necessary to cut, alter, remove, or temporarily remove and replace existing property or equipment, the cost shall be included in the contract price for the item creating such work.

It is recognized that the Owner will incur the costs for employees' salaries, engineering fees, and otherwise in connection with the damage and inspection and repair of any such damage, caused by the Contractor; consequently that the Owner may incur loss of income by reason of the diversion of aircraft traffic from the airport resulting from interruption of the use of airport facilities; and that such expenses and loss of income are not measurable now and may not be reasonably ascertainable at the time of any incident The Owner and the Contractor hereby agree to the caused by this Contractor. assessment of liquidated damages in lieu of such expenses of other damages incurred by the Owner. In addition to the obligation of this Contractor to immediately repair any cables or facilities damaged by the Contractor, as set forth above, the sum of not greater than \$1,000.00 per incident may be deducted from any money due the Contractor, or if no money is due the Contractor, the Owner shall have the right to recover said sum or sums from the Contractor, from the surety or from both. The amount of these deductions are to cover liquidated damages to the sponsor incurred by additional and other expenses and damages arising from the incident or incidents caused by the Contractor, and such deductions are not considered as penalties.

70-11 RESPONSIBILITY FOR DAMAGE CLAIMS. The Contractor shall indemnify and save harmless the Engineer and the Owner and their officers, and employees from all suits, actions, or claims of any character brought because of any injuries or damages received or sustained by any person, persons, or property on account of the operations of the Contractor; or on account of or in consequence of any neglect in safeguarding the work; or through use of unacceptable materials in constructing the work; or because of any act or omission, neglect, or misconduct of said Contractor; or because of any claims or amounts recovered from any infringement of patent, trademark, or copyright; or from any claims or amounts arising or recovered under the "Workmen's Compensation Act," or any other law, ordinance, order, or decree. Money due the Contractor under any by virtue of his contract as may be considered necessary by the Owner for such purpose may be retained for the use of the Owner or, in case no money is due, his surety may be held until such suit or suits, action or actions, claim or claims for injuries or damages as aforesaid shall have been settled and suitable evidence to that effect furnished to the Owner, except that money due the Contractor will not be withheld when the Contractor produces satisfactory evidence that he is adequately protected by public liability and property damage insurance.

70-12 THIRD PARTY BENEFICIARY CLAUSE. It is specifically agreed between the parties executing the contract that it is not intended by any of the provisions of any part of the contract to create the public or any member thereof a third party beneficiary or to authorize anyone not a party to the contract to maintain a suit for personal injuries or property damage pursuant to the terms or provisions of the contract.

70-13 OPENING OF SECTION OF AIRPORT TO TRAFFIC. Whenever in the opinion of the Engineer, any runway or any structure is in an acceptable condition, it may be opened to traffic upon the written order of the Engineer. The opening of any runway shall be held as an acceptance of said runway but shall not be considered as a waiver of any of the provisions of these specifications or contract. Pending final completion and acceptance of the work, all necessary repairs and renewals on any section of the runway, so opened, due to defective material or work, to natural causes other than ordinary wear and tear, or to the operations of the Contractor, shall be performed by and at the expense of the Contractor.

70-14 CONTRACTOR'S RESPONSIBILITY FOR WORK. Until the Engineer's final written acceptance of the entire completed work, excepting only those portions of the work accepted in accordance with the subsection titled PARTIAL ACCEPTANCE of Section 50, the Contractor shall have the charge and care thereof and shall take every precaution against injury or damage of any part due to the action of the elements or from any other cause, whether arising from the execution or from the non-execution of the work. The Contractor shall rebuild, repair, restore, and make good all injuries or damages to any portion of the work occasioned by any of the above causes before final acceptance and shall bear the expense thereof except damage to the work due to unforeseeable causes beyond the control of and without the fault or negligence of the Contractor, including but

not restricted to acts of God such as earthquake, tidal wave, tornado, hurricane or other cataclysmic phenomenon of nature, or acts of the public enemy or of governmental authorities.

If the work is suspended for any cause whatever, the Contractor shall be responsible for the work and shall take such precautions necessary to prevent damage to the work. The Contractor shall provide for normal drainage and shall erect necessary temporary structures, signs, or other facilities at his expense. During such period of suspension of work, the Contractor shall properly and continuously maintain in an acceptable growing condition all living material in newly established plantings, seedings, and soddings furnished under his contract, and shall take adequate precautions to protect new tree growth and other important vegetative growth against injury.

<u>70-15 CONTRACTOR'S RESPONSIBILITY FOR UTILITY SERVICE AND FACILITIES OF OTHERS</u>. As provided in the subsection titled RESTORATION OF SURFACES DISTURBED BY OTHERS of this section, the Contractor shall cooperate with the Owner of any public or private utility service, FAA, or National Oceanic and Atmospheric Administration (NOAA), or a utility service of another government agency, that may be authorized by the Owner to construct, reconstruct, or maintain such utility services or facilities during the progress of the work. In addition, the Contractor shall control his operations to prevent the unscheduled interruption of such utility services and facilities.

To the extent that such public or private utility services, FAA, or NOAA facilities, or utility services of another governmental agency are known to exist within the limits of the contract work, the approximate locations have been indicated on the plans.

It is understood and agreed that the Owner does not guarantee the accuracy or the completeness of the location information relating to existing utility services, facilities, or structures that may be shown on the plans or encountered in the work. Any inaccuracy or omission in such information shall not relieve the Contractor of his responsibility to protect such existing features from damage or unscheduled interruption of service.

Prior to commencing the work in the general vicinity of an existing utility service or facility, the Contractor shall again notify each such Owner of his plan of operation.

If, in the Contractor's opinion, the Owner's assistance is needed to locate the utility service or facility or the presence of a representative of the Owner is desirable to observe the work, such advice should be included in the notification. Such notification shall be given by the most expeditious means to reach the utility owner's PERSON TO CONTACT no later than two normal business days prior to the Contractor's commencement of operations in such general vicinity. The Contractor shall furnish a written summary of the notification to the Engineer.

The Contractor's failure to give the two days' written notice hereinabove provided shall be cause for the Engineer to suspend the Contractor's operations in the general vicinity of a utility service or facility.

GDOT Revised 02/01/01 Where the outside limits of an underground utility service have been located and staked on the ground, the Contractor shall be required to use excavation methods acceptable to the Engineer within three feet (3') of such outside limits at such points as may be required to insure protection from damage due to the Contractor's operations.

Should the Contractor damage or interrupt the operation of a utility service or facility by accident or otherwise, he shall immediately notify the proper authority and the Engineer and shall take all reasonable measures to prevent further damage or interruption of service. The Contractor, in such events, shall cooperate with the utility service or facility owner and the Engineer continuously until such damage has been repaired and service restored to the satisfaction of the utility or facility owner.

The Contractor shall bear all costs of damage and restoration of service to any utility service or facility due to his operations whether or not due to negligence or accident. The contract owner reserves the right to deduct such costs from any monies due or which may become due the Contractor, or his surety.

<u>70-16 FURNISHING RIGHTS-OF-WAY</u>. The Owner will be responsible for furnishing all rights-of-way upon which the work is to be constructed in advance of the Contractor's operations.

70-17 PERSONAL LIABILITY OF PUBLIC OFFICIALS. In carrying out any of the contract provisions or in exercising any power or authority granted to him by this contract, there shall be no liability upon the Engineer, his authorized representatives, or any official of the Owner either personally or as an official of the Owner. It is understood that in such matters they act solely as agents and representatives of the Owner.

70-18 NO WAIVER OF LEGAL RIGHTS. Upon completion of the work, the Owner will expeditiously make final inspection and notify the Contractor of final acceptance. Such final acceptance, however, shall not preclude or stop the Owner from correcting any measurement, estimate, or certificate made before or after completion of the work, nor shall the Owner be precluded or stopped from recovering from the Contractor or his surety, or both, such overpayment as may be sustained, or by failure on the part of the Contractor to fulfill his obligations under the contract. A waiver on the part of the Owner of any breach of any part of the contract shall not be held to be a waiver of any other or subsequent breach.

The Contractor, without prejudice to the terms of the contract, shall be liable to the Owner for latent defects, fraud, or such gross mistakes as may amount to fraud, or as regards the Owner's rights under any warranty or guaranty.

<u>70-19 ENVIRONMENTAL PROTECTION</u>. The Contractor shall comply with all federal, state, and local laws and regulations controlling pollution of the environment. He shall take necessary precautions to prevent pollution of streams, lakes, ponds, and reservoirs

with sediment, fuels, oils, bitumens, chemicals, or other harmful materials and to prevent pollution of the atmosphere from particulate and gaseous matter.

In the event of conflict between federal, state, or local laws, codes ordinances, rules and regulations concerning pollution control, the most restrictive applicable ones shall apply.

The Contractor shall pay special attention to the pollution control requirements of the several specifications. Work items which may cause excessive pollution and shall be closely controlled by the Contractor are:

- Clearing, grubbing, or other disposal.
- b. Stripping, excavation, and embankment.
- c. Drainage and ditching.
- d. Aggregate production, handling, and placing.
- e. Cement, lime, or other stabilization.
- Concrete and bituminous materials handling, production, and paving.
- g. Seeding, fertilizing, mulching, and use of herbicides or insecticides.
- Contractor's own housekeeping items, haul roads, sanitary facilities, water supply, equipment fueling, servicing and cleaning, job clean up, and disposal.

When the Contractor submits his tentative progress schedule in accordance with PROSECUTION AND PROGRESS, Section 80, he shall also submit for acceptance of the Engineer, his schedules for accomplishment of temporary and permanent erosion control work, as are applicable for clearing, grading, structures at watercourses, construction, and paving, and his proposed method of erosion control on haul roads and borrow pits and his plan for disposal of waste materials. No work shall be started until the erosion control schedules and methods of operations have been accepted by the Engineer.

All bituminous and portland cement concrete proportioning plants shall meet state requirements.

The following listed stipulations shall apply to this contract unless more restrictive ones are specified by the plans, special provisions, laws, codes, ordinances, etc. Cost of pollution control shall be incidental to the appropriate work items unless otherwise specified.

a. Control of Water Pollution and Siltation

- 1. All work of water pollution and siltation control is subject to inspection by the local and/or state governmental enforcing agent.
- All applicable regulations of fish and wildlife agencies and statutes relating to the prevention and abatement of pollution shall be complied with in the performance of the contract.
- 3. Construction operations shall be conducted in such manner as to reduce erosion to the practicable minimum and to prevent damaging siltation of watercourses, streams, lakes, or reservoirs. The surface area of erodible land, either on or off the airport site, exposed to the elements by clearing, grubbing, or grading operations, including gravel pits, waste or disposal areas, and haul roads, at any one time, for this contract, shall be subject to approval of the Engineer and the duration of such exposure prior to final trimming and finishing of the areas shall be held to the minimum practical. The Engineer shall have full authority to order the suspension of grading and other operations pending adequate and proper performance of trimming, finishing, and maintenance work or to restrict the area of erodible land exposed to the elements.
- 4. Materials used for permanent erosion control measures shall meet the requirements of the applicable specifications. Gravel or stone, consisting of durable particles of fines, shall be used for construction pads, haul roads, and temporary roads in or across streams.
- 5. Where called for on the plans, a silting basin and/or siltation fence shall be constructed to prevent siltation in streams from construction operations.
- The disturbance of lands and waters that are outside the limits of construction as staked is prohibited, except as found necessary and approved by the Engineer.
- 7. The Contractor shall conduct his work in such manner as to prevent the entry of fuels, oils, bituminous materials, chemicals, sewage or other harmful materials into streams, rivers, lakes, or reservoirs.
- 8. Water from aggregate washing or other operations containing sediment shall be treated by filtration, by use of a settling basin, or other means to reduce the sediment content to a level acceptable to the local and/or state governmental enforcing agent.

- 9. All waterways shall be cleared as soon as practicable of falsework, piling, debris, or other obstructions placed during construction operations and not a part of the finished work. Care shall be taken during construction and removal of such barriers to minimize the muddying of a stream.
- 10. The Contractor shall care for the temporary erosion and siltation control measures during the period that the temporary measures are required and for the permanent erosion control measure until the contract has been completed and accepted. Such care shall consist of the repair of areas damaged by erosion, wind, fire, or other causes.
- 11. Permanent and temporary erosion control work that is damaged due to the Contractor's operations or where the work required is attributed to the Contractor's negligence, carelessness, or failure to install permanent controls at the proper time, or due to any other cause, shall be repaired at the Contractor's expense.
- b. Open Burning of Combustible Wastes. Open burning will not be permitted. The Contractor shall remove all combustible waste materials from airport property and dispose of it in a waste area supplied by the Contractor off airport property.

c. Control of Other Air Pollutants

- Minimum possible areas of open grading, borrow, or aggregate excavation shall be exposed at one time, consistent with the progress of the work.
- Grading areas shall be kept at proper moisture conditions.
- 3. Sand or dust blows shall be temporarily mulched, with or without seeding, or otherwise controlled with stabilizing agents.
- 4. Cements, fertilizers, chemicals, volatiles, etc., shall be stored in proper containers or with proper coverings to prevent accidental discharge into the air.
- 5. Aggregate bins, cement bins, and dry material batch trucks shall be property covered to prevent loss of material to the air.
- 6. Drilling, grinding, and sand blasting apparatus shall be equipped with water, chemical, or vacuum dust controlling systems.
- 7. Applications of chemicals and bitumens shall be held to recommended rates.

- 8. Bituminous mixing plants shall be equipped with dust collectors as noted in the specifications.
- Quarrying, batching, and mixing operations and the transfer of materials between trucks, bins, or stockpiles shall be properly controlled to minimize dust diffusion.
- 10. When necessary, certain operations shall be delayed until proper wind or climatic conditions exist to dissipate or inhibit potential pollutants to the satisfaction of the Engineer.

70-20 ARCHAEOLOGICAL AND HISTORICAL FINDINGS. Unless otherwise specified in this subsection, the Contractor is advised that the site of the work is not within any property, district, or site, and does not contain any building, structure, or object listed in the current National Register of Historic Places published by the United States Department of Interior.

Should the Contractor encounter, during his operations, any building, part of a building, structure, or object which is incongruous with its surroundings, he shall immediately cease operations in that location and notify the Engineer. The Engineer will immediately investigate the Contractor's finding and will direct the Contractor to either resume his operations or to suspend operations as directed.

Should the Engineer order suspension of the Contractor's operations in order to protect an archaeological or historical finding, or order the Contractor to perform extra work, such shall be covered by an appropriate contract modification (change order or supplemental agreement) as provided in the subsection titled EXTRA WORK of Section 40 and the subsection titled PAYMENT FOR EXTRA WORK AND FORCE ACCOUNT WORK of Section 90. If appropriate, the contract modification shall include an extension of contract time in accordance with the subsection titled DETERMINATION AND EXTENSION OF CONTRACT TIME of Section 80.

SECTION 80

PROSECUTION AND PROGRESS

<u>80-01 SUBLETTING OF CONTRACT</u>. The Owner will not recognize any subcontractor on the work. The Contractor shall at all times when work is in progress be represented either in person, by a qualified superintendent, or by other designated, qualified representative who is duly authorized to receive and execute orders of the Engineer.

Should the Contractor elect to assign his contract, said assignment shall be concurred in by the surety, shall be presented for the consideration and approval of the Owner, and shall be consummated only on the written approval of the Owner. In case of approval, the Contractor shall file copies of all subcontracts with the Engineer.

80-02 NOTICE TO PROCEED. The Notice to Proceed shall state the date on which it is expected the Contractor will begin the construction and from which date contract time will be charged. The Contractor shall begin the work to be performed under the contract within ten (10) days of the date set by the Engineer in the written Notice to Proceed, but in any event, the Contractor shall notify the Engineer at least twenty-four (24) hours in advance of the time actual construction operations will begin.

80-03 PROSECUTION AND PROGRESS. Unless otherwise specified, the Contractor shall submit his CPM progress schedule for the Engineer's approval within ten (10) days after the effective date of the Notice to Proceed. The Contractor's CPM progress schedule, when approved by the Engineer, may be used to establish major construction operations and to check on the progress of the work. The Contractor shall provide sufficient materials, equipment, and labor to guarantee the completion of the project in accordance with the plans and specifications within the time set forth in the proposal.

If the Contractor falls significantly behind the submitted schedule, the Contractor shall, upon the Engineer's request, submit a revised CPM schedule for completion of the work within the contract time and modify his operations to provide at his own expense such additional materials, equipment, and labor necessary to meet the revised schedule. Should the prosecution of the work be discontinued for any reason, the Contractor shall notify the Engineer at least twenty-four (24) hours in advance of resuming operations.

The Contractor shall submit an updated schedule with each pay request and at least monthly.

<u>80-04 LIMITATION OF OPERATIONS</u>. The Contractor shall control his operations and the operations of his subcontractors and all suppliers so as to provide for the free and unobstructed movement of aircraft in the AIR OPERATIONS AREA of the airport.

When the work requires the Contractor to conduct his operations within an AIR OPERATIONS AREA of the airport, the work shall be coordinated with airport

GDOT Revised 05/07/02 management (through the Engineer) at least forty-eight (48) hours prior to commencement of such work. The Contractor shall not request closure of an AIR OPERATIONS AREA until so authorized by the Engineer and until the necessary temporary marking and associated lighting is in place as provided in the subsection titled BARRICADES, WARNING SIGNS, AND HAZARD MARKINGS of Section 70.

When the contract work requires the Contractor to work within an AIR OPERATIONS AREA of the airport, the Contractor shall maintain constant two-way radio communications with the FAA control tower. The Contractor will immediately obey all instructions to vacate the AIR OPERATIONS AREA. Failure to maintain constant radio communications with the control tower or to obey instructions shall be cause for suspension of the Contractor's operations in the AIR OPERATIONS AREA until the satisfactory conditions are provided.

80-05 CHARACTER OF WORKERS, METHODS AND EQUIPMENT. The Contractor shall, at all times, employ sufficient labor and equipment for prosecuting the work to full completion in the manner and time required by the contract, plans, specifications, and approved schedule.

All workers shall have sufficient skill and experience to perform properly the work assigned to them. Workers engaged in special work or skilled work shall have sufficient experience in such work and in the operation of the equipment required to perform the work satisfactorily.

Any person employed by the Contractor or by a subcontractor who, in the opinion of the Engineer, does not perform his work in a proper and skillful manner or is intemperate or disorderly shall, at the written request of the Engineer, be removed forthwith by the Contractor or subcontractor employing such person, and shall not be employed again in any portion of the work without the approval of the Engineer.

Should the Contractor fail to remove such person or persons or fail to furnish suitable and sufficient personnel for the proper prosecution of the work, the Engineer may suspend the work by written notice until compliance with such orders.

All equipment which is proposed to be used on the work shall be of sufficient size in such mechanical condition as to meet requirements of the work and to produce a satisfactory quality of work. Equipment used on any portion of the work shall be such that no injury to previously completed work, adjacent property, or existing airport facilities will result from its use.

When the methods and equipment to be used by the Contractor in accomplishing the work are not prescribed in the contract, the Contractor is free to use any methods or equipment that will accomplish the work in conformity with the requirements of the contract, plans, specifications, and approved schedule.

When the contract specifies the use of certain methods and equipment, such methods and equipment shall be used unless others are authorized by the Engineer. If the

GDOT Revised 05/07/02 Contractor desires to use a method or type of equipment other than specified in the contract, he may request authority from the Engineer to do so. The request shall be in writing and shall include a full description of the methods and equipment proposed and of the reasons for desiring to make the change. If approval is given, it will be without recourse or assumption of liability on the part of the Engineer or Owner and on the condition that the Contractor will be fully responsible for producing work in conformity with the contract requirements. If, after trial use of the substituted methods or equipment, the Engineer determines that the work produced does not meet contract requirements, the Contractor shall discontinue the use of the substitute method or equipment and shall complete the remaining work with the specified methods and equipment. The Contractor shall remove any deficient work and replace it with work of specified quality, or take such other corrective action as the Engineer may direct. No change will be made in basis of payment for the contract items involved nor in contract time as a result of authorizing a change in methods or equipment under this subsection.

The failure to provide adequate labor and equipment may be considered cause of terminating the contract.

<u>80-06 TEMPORARY SUSPENSION OF THE WORK</u>. The Engineer shall have the authority to suspend the work wholly, or in part, for such period or periods as he may deem necessary, due to unsuitable weather, or such other conditions as are considered unfavorable for the prosecution of the work, or for such time as is necessary due to the failure on the part of the Contractor to carry out orders given or perform any or all provisions of the contract.

In the event that the Contractor is ordered by the Engineer, in writing, to suspend work for some unforeseen cause not otherwise provided for in the contract and over which the Contractor has no control, the Contractor may be reimbursed for actual money expended on the work during the period of shutdown. This shall be computed from the effective date of the Engineer's order to suspend work to the effective date of the Engineer's order to resume the work. Claims for such compensation shall be filed with the Engineer within the time period stated in the Engineer's order to resume the work. The Contractor shall submit with his claim information substantiating the amount shown on the claim. The Engineer will forward the Contractor's claim to the Owner for consideration in accordance with local laws or ordinances. No provision of this article shall be construed as entitling the Contractor to compensation for delays due to inclement weather, for suspensions made at the request of the Contractor, or for any other delay provided for in the contract, plans, or specifications.

If it should become necessary to suspend work for an indefinite period, the Contractor shall store all materials in such manner that they will not become an obstruction nor become damaged in any way. He shall take every precaution to prevent damage or deterioration of the work performed and provide for normal drainage of the work. The Contractor shall erect temporary structures where necessary to provide for traffic on, to, or from the airport.

<u>80-07 DETERMINATION AND EXTENSION OF CONTRACT TIME</u>. The number of contract days allowed for completion of the work shall be stated in the Contract and shall be known as the CONTRACT TIME.

CONTRACT TIME based on CALENDAR DAYS shall consist of the number of calendar days stated in the contract counting from the effective date of the Notice to Proceed and including all Saturdays, Sundays, holidays, non-work days, and normal weather days. All calendar days elapsing between the effective dates of the Engineer's orders to suspend and resume all work due to causes not the fault of the Contractor, shall be excluded.

If the Contractor finds it impossible for reasons beyond his control to complete the work within the contract time as specified, or as extended in accordance with the provisions of this subsection, he may, at any time prior to the expiration of the contract time as extended, make a written request to the Owner for an extension of time setting forth the reasons which he believes will justify the granting of his request. The Contractor's plea that insufficient time was specified is not a valid reason for extension of time. If the Engineer finds that the work was delayed because of conditions beyond the control and without the fault of the Contractor, he may recommend to the Owner an extension of time for completion in such amount as the conditions justify. The extended time for completion shall then be in full force and effect, the same as though it were the original time for completion.

80-08 FAILURE TO COMPLETE ON TIME. For each calendar day as specified in the contract that any work remains uncompleted after the contract time (including all extensions and adjustments as provided in the subsection titled DETERMINATION AND EXTENSION OF CONTRACT TIME of this Section), liquidated damages shall be deducted from any money due or to become due the Contractor or his surety; in the amount specified in the Contract.

Such deducted sums shall not be deducted as a penalty but shall be considered as liquidation of a reasonable portion of damages that will be incurred by the Owner should the Contractor fail to complete the work in the time provided in his contract.

Permitting the Contractor to continue and finish the work or any part of it after the time fixed for its completion, or after the date to which the time for completion may have been extended, will in no way operate as a waiver on the part of the Owner of any of its rights under the contract.

<u>80-09 DEFAULT AND TERMINATION OF CONTRACT</u>. The Contractor shall be considered in default of his contract and such default will be considered as cause for the Owner to terminate the contract for any of the following reasons if the Contractor:

a. Fails to begin the work under the contract within the time specified in the "Notice to Proceed," or

- Fails to perform the work or fails to provide sufficient and adequate workers, equipment or materials to assure completion of work in accordance with the terms of the contract, or
- Performs the work unsuitably or neglects or refuses to remove materials or to perform anew such work as may be rejected as unacceptable and unsuitable, or
- d. Discontinues the prosecution of the work, or
- e. Fails to resume work which has been discontinued within a reasonable time after notice to do so, or
- f. Becomes insolvent or is declared bankrupt, or commits any act of bankruptcy or insolvency, or
- g. Allows any final judgment to stand against him unsatisfied for a period of ten (10) days, or
- h. Makes an assignment for the benefit of creditors, or
- i. For any other cause whatsoever, fails to carry on the work in an acceptable manner.

Should the Engineer consider the Contractor to be in default of the contract for any reason hereinbefore specified, he shall immediately give written notice to the Contractor and the Contractor's surety as to the reasons for considering the Contractor in default and the Owner's intentions to terminate the contract.

If the Contractor or surety, within a period of ten (10) days after such notice, does not proceed in accordance therewith, then the Owner will, upon written notification from the Engineer of the facts of such delay, neglect, or default and the Contractor's failure to comply with such notice, have full power and authority without violating the contract, to take the prosecution of the work out of the hands of the Contractor. The Owner may appropriate or use any or all materials and equipment that have been mobilized for use in the work and are acceptable and may enter into an agreement for the completion of said contract according to the terms and provisions thereof, or use such other methods as in the opinion of the Engineer will be required for the completion of said contract in an acceptable manner.

All costs and charges incurred by the Owner, together with the cost of completing the work under contract, will be deducted from any monies due or which may become due the Contractor. If such expense exceeds the sum which would have been payable under the contract, then the Contractor and the surety shall be liable and shall pay to the Owner the amount of such excess.

<u>80-10 TERMINATION FOR NATIONAL EMERGENCIES</u>. The Owner shall terminate the contract or portion thereof by written notice when the Contractor is prevented from proceeding with the construction as a direct result of an Executive Order of the President with respect to the prosecution of war or in the interest of national defense.

When the contract, or any portion thereof, is terminated before completion of all items of work in the contract, payment will be made for the actual number of units or items of work completed at the contract price or as mutually agreed for items of work partially completed or not started. No claims or loss of anticipated profits shall be considered.

Reimbursement for organization of the work, and other overhead expenses, (when not otherwise included in the contract) and moving equipment and materials to and from the job will be considered, the intent being that an equitable settlement will be made with the Contractor.

Acceptable materials, obtained or ordered by the Contractor for the work and that are not incorporated in the work shall, at the option of the Contractor, be purchased from the Contractor at actual cost as shown by receipted bills and actual cost records at such points of delivery as may be designated by the Engineer.

Termination of the contract or a portion thereof shall neither relieve the Contractor of his responsibilities for the completed work nor shall it relieve his surety of its obligation for and concerning any claim arising out of the work performed.

The Engineer and the Owner shall be given full access to all books, cost records, correspondence, and papers of the Contractor relating to the contract in order to determine amounts to be paid the Contractor due to any termination of the contract.

80-11 <u>TERMINATION FOR CONVENIENCE OF OWNER</u>. The Owner may, at any time upon ten days' written notice to the Contractor, terminate (without prejudice to any right or remedy of the Owner) the whole or any portion of the Work for the convenience of the Owner.

The Contractor in calculating his termination application for payment, shall develop his outstanding costs as defined herein, including those materials in transit and uncancelable with the appropriate percentage markups; subcontractors shall follow same procedures. All costs must be substantiated by adequate back-up documentation.

SECTION 90

MEASUREMENT AND PAYMENT

<u>90-01 MEASUREMENT OF QUANTITIES</u>. All work completed under the contract will be measured by the Engineer, or his authorized representatives, using United States Customary Units of Measurement or the International System of Units.

The method of measurement and computations to be used in determination of quantities of material furnished and of work performed under the contract will be those methods generally recognized as conforming to good engineering practice.

Unless otherwise specified, longitudinal measurements for area computations will be made horizontally, and no deductions will be made for individual fixtures (or leave-outs) having an area of nine (9) square feet (0.8 square meter) or less. Unless otherwise specified, transverse measurements for area computations will be the neat dimensions shown on the plans or ordered in writing by the Engineer.

Structures will be measured according to neat lines shown on the plans or as altered to fit field conditions.

Unless otherwise specified, all contract items which are measured by the linear foot such as electrical ducts, conduits, pipe culverts, underdrains, and similar items shall be measured parallel to the base or foundation upon which such items are placed.

In computing volumes of excavation, the average end area method or other acceptable methods will be used.

The thickness of plates and galvanized sheet used in the manufacture of corrugated metal pipe, metal plate pipe culverts and arches, and metal cribbing will be specified and measured in decimal fractions of inches.

The term "ton" will mean the short ton consisting of 2,000 pounds (907 kilograms) avoirdupois. All materials which are measured or proportioned by weights shall be weighed on accurate, approved scales by competent, qualified personnel at locations designated by the Engineer. If material is shipped by rail, the car weight may be accepted, provided that only the actual weight of material is paid for. However, car weights will not be acceptable for material to be passed through mixing plants. Trucks used to haul material being paid for by weight shall be weighed empty daily at such times as the Engineer directs, and each truck shall bear a plainly legible identification mark.

Materials to be measured by volume in the hauling vehicle shall be hauled in approved vehicles and measured therein at the point of delivery. Vehicles for this purpose may be of any size or type acceptable to the Engineer, provided that the body is of such shape that the actual contents may be readily and accurately determined. All vehicles shall be

loaded to at least their water level capacity and all loads shall be leveled when the vehicles arrive at the point of delivery.

When requested by the Contractor and approved by the Engineer in writing, material specified to be measured by the cubic yard (cubic meter) may be weighed and such weights will be converted to cubic yards (cubic meters) for payment purposes. Factors for conversion from weight measurement to volume measurement will be determined by the Engineer and shall be agreed to by the Contractor before such method of measurement of pay quantities is used.

Bituminous materials will be measured by the gallon (liter) or ton (kilogram). When measured by volume, such volumes will be measured at 60° F. (15°C.) using ASTM D1250 for asphalts or ASTM D633 for tars.

Net certified scale weights or weights based on certified volumes in the case of rail shipments will be used as a basis of measurement, subject to correction when bituminous material has been lost from the car or the distributor, wasted, or otherwise not incorporated in the work.

When bituminous materials are shipped by rail or truck transport, net certified weights by volume, subject to correction for loss or foaming may be used for computing quantities.

Cement will be measured by the ton (kilogram) or hundredweight.

Timber will be measured by the thousand feet board measure (M.F.B.M.) actually incorporated in the structure. Measurement will be based on nominal widths and thickness and the extreme length of each piece.

The term "lump sum" when used as an item of payment will mean complete payment for the work described in the contract.

When a complete structure or structural unit (in effect, "lump sum" work) is specified as the unit of measurement, the unit will be construed to include all necessary fittings and accessories.

Rental of equipment will be measured by time in hours of actual working time and necessary traveling time of the equipment within the limits of the work. Special equipment ordered by the Engineer in connection with force account work will be measured as agreed in the change order or supplemental agreement authorizing such force account work as provided in the subsection titled PAYMENT FOR EXTRA AND FORCE ACCOUNT WORK of this section.

When standard manufactured items are specified such as fence, wire, plates, rolled shapes, pipe conduit, etc. and these items are identified by gage, unit weight, section dimensions, etc., such identification will be considered to be nominal weights or dimensions. Unless more stringently controlled by tolerances in cited specifications,

GDOT Revised 05/07/02 manufacturing tolerances established by the industries involved will be accepted.

Scales for weighing materials which are required to be proportioned or measured and paid for by weight shall be furnished, erected, and maintained by the Contractor, or be certified permanently installed commercial scales.

Scales shall be accurate within one-half percent (.5%) of the correct weight throughout the range of use. The Contractor shall have the scales checked under the observation of the Engineer before beginning work and at such other times as requested. The intervals shall be uniform in spacing throughout the graduated or marked length of the beam or dial and shall not exceed one-tenth of one percent (.1%) of the nominal rated capacity of the scale, but not less than one pound (454 grams). The use of spring balances will not be permitted.

Beams, dials, platforms, and other scale equipment shall be so arranged that the operator and inspector can safely and conveniently view them.

Scale installations shall have available ten (10) standard fifty (50) pound (2.3 kilogram) weights for testing the weighing equipment or suitable weights and devices for other approved equipments.

Scales must be tested for accuracy and serviced before use at a new site. Platform scales shall be installed and maintained with the platform level and rigid bulkheads at each end.

Scales "overweighing" (indicating more than correct weight) will not be permitted to operate and all materials received subsequent to the last previous correct weighing-accuracy test will be reduced by the percentage of error in excess of one-half of one percent (.5%).

In the event inspection reveals the scales have been "underweighing" (indicating less than correct weight) they shall be adjusted and no additional payment to the Contractor will be allowed for materials previously weighed and recorded.

All costs in connection with furnishing, installing, certifying, testing and maintaining scales for furnishing check weights and scale house, and for all other items specified in this subsection, for the weighing of materials for proportioning or payment, shall be included in the unit contract prices for the various items of the project.

When the estimated quantities for a specific portion of the work are designated as the pay quantities in the contract, they shall be the final quantities for which payment for such specific portion of the work will be made, unless the dimensions of said portion of the work shown on the plans are revised by the Engineer. If revised dimensions result in an increase or decrease in the quantities of such work, the final quantities for payment will be revised in the amount represented by the authorized changes in the dimensions.

<u>90-02 SCOPE OF PAYMENT</u>. The Contractor shall receive and accept compensation provided for in the contract as full payment for furnishing all materials, for performing all work under the contract in a complete and acceptable manner, and for all risk, loss, damage, or expense of whatever character arising out of the nature of the work or the prosecution thereof, subject to the provisions of the subsection titled NO WAIVER OF LEGAL RIGHTS of Section 70.

When the "basis of payment" subsection of a technical specification requires that the contract price (price bid) include compensation for certain work or material essential to the item, this same work or material will not also be measured for payment under any other contract item which may appear elsewhere in the contract, plans, or specifications.

90-03 COMPENSATION FOR ALTERED QUANTITIES. When the accepted quantities of work vary from the quantities in the proposal, the Contractor shall accept as payment in full, so far as contract items are concerned, payment at the original contract price for the accepted quantities of work actually completed and accepted. No allowance, except as provided for in the subsection titled ALTERATION OF WORK AND QUANTITIES of Section 40 will be made for any increased expense, loss of expected reimbursement, or loss of anticipated profits suffered or claimed by the Contractor which results directly from such alterations or indirectly from his unbalanced allocation of overhead and profit among the contract items, or from any other cause.

<u>90-04 PAYMENT FOR OMITTED ITEMS</u>. As specified in the subsection titled OMITTED ITEMS of Section 40, the Engineer shall have the right to omit from the work (order nonperformance) any contract item, except major contract items, in the best interest of the Owner.

Should the Engineer omit or order nonperformance of a contract item or portion of such item from the work, the contractor shall accept payment in full at the contract prices for any work actually completed and acceptable prior to the Engineer's order to omit or nonperform such contract item.

Acceptable materials ordered by the Contractor or delivered on the work prior to the date of the Engineer's order will be paid for at the actual cost (not to exceed the contract item bid cost) of the Contractor and shall thereupon become the property of the Owner.

In addition to reimbursement hereinbefore provided, the Contractor shall be reimbursed for all actual costs (not to exceed the contract item bid cost) incurred for the purpose of performing the omitted contract item prior to the date of the Engineer's order. Such additional costs incurred by the Contractor must be directly related to the deleted contract item and shall be supported by certified statements by the Contractor as to the nature and amount of such costs.

90-05 PAYMENT FOR EXTRA AND FORCE ACCOUNT WORK. Extra work, performed in accordance with the subsection titled EXTRA WORK of Section 40, will be paid for at the contract prices or agreed prices specified in the change order or supplemental

agreement authorizing such extra work. When the change order or supplemental agreement authorizing the extra work requires that it be done by force account, such force account shall be measured and paid for based on expended labor, equipment, and materials plus fifteen percent (15%) for overhead and profit.

- a. <u>Miscellaneous</u>. No additional allowance will be made for general superintendence, the use of small tools, or other costs for which no specific allowance is herein provided.
- b. <u>Comparison of Records</u>. The Contractor and the Engineer shall compare records of the cost of force account work at the end of each day. Agreement shall be indicated by signature of the Contractor and Engineer or their duly authorized representatives.
- c. <u>Statements</u>. No payment will be made for work performed on a force account basis until the Contractor has furnished the Owner with duplicate itemized statements of the cost of such force account work detailed as follows:
 - 1. Name, classification, date, daily hours, total hours, rate, and extension for each laborer and foreman.
 - Designation, dates, daily hours, total hours, rental rate, and extension for each unit of machinery and equipment.
 - 3. Quantities of materials, prices, and extensions.
 - Transportation of materials.
 - Cost of property damage, liability and workmen's compensation insurance premiums, unemployment insurance contributions, and social security tax.

Statements shall be accompanied and supported by receipted invoice for all materials used and transportation charges. However, if materials used on the force account work are not specifically purchased for such work but are taken from the Contractor's stock, then in lieu of the invoices the Contractor shall furnish an affidavit certifying that such materials were taken from his stock, that the quantity claimed was actually used, and that the price and transportation claimed represent the actual cost to the Contractor.

The additional payment, based on the percentages specified above, shall constitute full compensation for all items of expense not specifically provided for the force account work. The total payment made as provided above shall constitute full compensation for such work.

<u>90-06 PARTIAL PAYMENTS</u>. Partial payments will be made at least once each month as the work progresses. Said payments will be based upon estimates approved by the Engineer of the value of the work performed and materials complete in place in accordance with the contract, plans, specifications, and approved schedule. Such partial payments may also include the delivered actual cost of those materials stockpiled and stored in accordance with the subsection titled PAYMENT FOR MATERIAL ON HAND of this section.

An updated schedule (progress report) shall be submitted with every partial/interim payment request and must be received before any payment will be released.

With each payment request, the Contractor shall submit to the Owner a waiver of lien properly executed by each major subcontractor who has performed work on or supplied materials to the work covered by the previous payment request, and an affidavit and lien waiver executed by the Contractor. (See page GC-90-8)

No partial payment will be made when the amount due the Contractor since the last estimate amounts to less than five hundred dollars (\$500).

From the total of the amount determined to be payable on a partial payment, a retainage of ten percent (10%) of each progress payment due will be withheld until fifty percent (50%) of the contract value including change orders and other additions to the contract value provided for by the contract documents is due, and as long as the manner of completion of the contract work and its progress are reasonably satisfactory to the Engineer, the Owner shall withhold no more retainage. At the discretion of the Owner and with the approval of the Contractor, the retainage of each subcontractor may be released separately as the subcontractor completes his work.

If, after discontinuing the retention, the Owner's authorized contract representative determines that the work is unsatisfactory or has fallen behind schedule, retention may be resumed at the previous level. If retention is resumed by the Owner, the Contractor and subcontractors shall be entitled to resume withholding retainage accordingly.

At substantial completion of the work or such other standard of completion as may be provided in the contract documents and as the Owner's authorized contract representative determines the work to be reasonably satisfactory, the Owner shall within thirty (30) days after invoice and other appropriate documentation as may be required by the contract documents are provided pay the retainage to the Contractor. If at that time there are any remaining incomplete minor items, an amount equal to two hundred percent (200%) of the value of each item as determined by the Owner's authorized contract representative shall be withheld until such item or items are completed. The reduced retainage shall be shared by the Contractor and subcontractors as their interests may appear.

The Contractor shall, within ten (10) days from the Contractor's receipt of retainage from the Owner, pass through payments to subcontractors and shall reduce each subcontractor's retainage in the same manner as the Contractor's retainage is reduced by the Owner, provided that the value of each subcontractor's work complete and in place equals fifty percent (50%) of his subcontract value, including approved change orders and other additions to the subcontract value and provided, further, that the work of the subcontractor is proceeding satisfactorily and the subcontractor has provided or provides

AFFIDAVIT

Contractor's Affidavit of Payment of Debts, Claims and Release of Liens.

Savannah Airport Commission and, between the
for construction of HOTEL SITE DEVELOPMENT -
STEPHEN GREEN DRIVE.
The undersigned hereby certifies that all work under the above contract has been performed in accordance with the terms thereof, that all materialmen, subcontractors, mechanics, and laborers have been paid and satisfied in full, and that there are no outstanding claims of any character including disputed claims or any claims to which the contractor/party has or will asset any defense arising out of the performance of the contract which have not been paid and satisfied in full.
The undersigned further certifies that to the best of his knowledge and belief there are no unsatisfied claims for damages resulting from injury or death to any employees, subcontractors, or the public at large arising out of the performance of the contract, or any suits or claims for any other damage of any kind, nature, or description which might constitute a lien upon the property of the Owner.
The undersigned makes this affidavit as provided by law for the purpose of receiving payment for work performed during this contract of all claims against the Owner arising under or by virtue of this contract. Acceptance of such payment is acknowledged as a release of the Owner form any and all claims arising under or by virtue of this contract.
This pay period from to
Signature
Title
Company
Personally appeared before me, the Undersigned Authority, who is known to me to be an official of the firm of who after being duly sworn, stated of his
oath that he had read the above statement and that the same is true and correct.
This,
Notary Public, State of
My Commission expires

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such satisfactory reasonable assurances of continued performance and financial responsibility to complete his work including any warranty work as the Contractor in his reasonable discretion may require, including, but not limited to, a payment and performance bond.

Before the final (and other partial) payments are made, the Contractor shall submit an affidavit that all subcontractors and material suppliers and vendors have been paid. (See Page GC-90-8)

It is understood and agreed that the Contractor shall not be entitled to demand or receive partial payment based on quantities of work in excess of those provided in the proposal or covered by approved change orders or supplemental agreements, except when such excess quantities have been determined by the Engineer to be a part of the final quantity for the item of work in question.

No partial payment shall bind the Owner to the acceptance of any materials or work in place as to quality or quantity. All partial payments are subject to correction at the time of final payment as provided in the subsection titled ACCEPTANCE AND FINAL PAYMENT of this section.

90-07 PAYMENT FOR MATERIALS ON HAND. Partial payments may be made to the extent of the delivered cost of nonperishable materials to be incorporated in the work, provided that such materials meet the requirements of the contract, plans, and specifications and are delivered to acceptable sites on the airport property or at other sites in the vicinity that are acceptable to the Owner. Such delivered costs of stored or stockpiled materials may be included in the next partial payment after the following conditions are met:

- a. The materials have been stored or stockpiled in a manner acceptable to the Engineer at or on an approved site.
- b. The Contractor has furnished the Engineer with acceptable evidence of the quantity and quality of such stored or stockpiled materials.
- c. The Contractor has furnished the Engineer with satisfactory evidence that the material and transportation costs have been paid.
- d. The Contractor has furnished the Owner legal title (free of liens or encumbrances of any kind) to the material so stored or stockpiled.
- e. The Contractor has furnished the Owner evidence that the material so stored or stockpiled is insured against loss by damage or to disappearance of such materials at any time prior to use in the work.

f. The value of the delivered material to be used in one item of work exceeds \$3,000 and is not scheduled to be incorporated into the work within sixty (60) days after delivery.

It is understood and agreed that the transfer of title and the Owner's payment for such stored or stockpiled materials shall in no way relieve the Contractor of his responsibility for furnishing and placing such materials in accordance with the requirements of the contracts, plans and specifications.

In no case will the amount of partial payments for materials on hand exceed the contract price for such materials or the contract price for the contract item in which the material is intended to be used.

No partial payment will be made for stored or stockpiled living or perishable plant materials.

The Contractor shall bear all costs associated with the partial payment of stored or stockpiled materials in accordance with the provisions of this subsection.

<u>90-08 ACCEPTANCE AND FINAL PAYMENT</u>. When the contract work has been accepted in accordance with the requirements of the subsection titled FINAL ACCEPTANCE of Section 50, the Contractor shall prepare a final estimate of the items of work actually performed. The Engineer will approve the Contractor's final estimate or advise the Owner of his objections to the final estimate which are based on disputes in measurements or computations of the final quantities to be paid under the contract as amended by change order or supplemental agreement.

The Contractor and Engineer shall resolve all disputes (if any) in the measurement and computation of final quantities to be paid within thirty (30) calendar days of the Engineer's receipt of the Contractor's final estimate. If after such thirty (30) day period a dispute still exists, the Engineer may recommend for approval the Contractor's estimate under protest of the quantities in dispute, and such disputed quantities shall be considered by the Owner as a claim in accordance with the subsection titled CLAIMS FOR ADJUSTMENT AND DISPUTES of Section 50.

After the Engineer has approved, or approved under protest, the Contractor's final estimate, final payment will be processed based on the entire sum, or the undisputed sum in case of approval under protest, determined to be due the Contractor less all previous payments and amounts to be deducted under the provisions of the contract. All prior partial estimates and payments shall be subject to correction in the final estimate and payment.

If the Contractor has filed a claim for additional compensation under the provisions of the subsection titled CLAIMS FOR ADJUSTMENTS AND DISPUTES of Section 50 or under the provisions of this subsection, such claims will be considered by the Owner in accordance with local laws or ordinances. Upon final adjudication of such claims, any

additional payment determined to be due the Contractor will be paid pursuant to a supplemental, final estimate.

Prior to final payment the Contractor shall submit to the Owner a sworn affidavit that all bills for labor, materials, equipment, service, subcontractors and incidentals have been paid in full and that there are no outstanding bills or suits pending in connection with the work done or labor and materials furnished under the contract. The affidavit form will be furnished by the Owner. (See page GC-90-12)

With each payment request, the Contractor shall submit to Owner (1) a summary of invoices of all subcontractors and material men who have performed work, or delivered materials to the work covered by the previous month's payment request, (2) a waiver of lien properly executed by each major subcontractor who has performed work on or supplied materials to the work covered by the previous payment request, and (3) an affidavit and lien waiver executed by the Contractor.

90-09 LIENS.

Contractor agrees to keep the work and the site(s) on which work is to be performed free and clear of all liens and claims of liens of or materials furnished pursuant to the Contract Documents. Pursuant to an following compliance with the requirements of Paragraph 9.6.7, Contractor hereby waives any right it may have in connection with the work to file any liens, mechanics or otherwise. Notwithstanding anything to the contrary contained in the Contract Documents, if any such lien is filed or contained in the Contract Documents, if any such lien is filed or there is any reason to believe that any lien may be filed at any time during the progress of the work or the duration of this Contract, the Owner may refuse to make any payment otherwise due the Contractor or withhold from any payment due to Contractor a sum sufficient in the opinion of the Owner to pay all obligations and expense necessary to satisfy such lien or claim and completely indemnify the Owner against any such lien or claim unless or until Contractor shall furnish satisfactory evidence, within ten calendar days after demand therefor by the Owner, that the indebtedness and the lien in respect thereof, if any, has been satisfied, discharged, and released of record, or that the Contractor has caused such lien to be released of record if and as provided by law, pending the resolution of any dispute between Contractor and the person filing such lien. If Contractor shall fail to furnish to Owner evidence requested from the Contractor within ten calendar days after demand from the Owner, the Owner, upon consent of the Contractor's surety, may discharge such indebtedness and deduct the amount required therefor, together with any and all losses, costs, damages and attorney's fees suffered or incurred by the Owner from any sum payable to Contractor under the Contract Documents.

Final payment to Contractor may be withheld until the work and the site(s) on which the work is to be performed are free and clear of any and all liens or rights thereto arising because of work performed or materials furnished under the Contract Documents.

AFFIDAVIT

Contractor's Affidavit of Payment of Debts, Claims and Release of Liens

Whereas a cor Airport Commission a		, between the Savannah for
construction of HOTE	L SITE DEVELOPMENT – STEPHEN	GREEN DRIVE.
n accordance with aborers have been peharacter including d	the terms thereof, that all materialr paid and satisfied in full, and that th isputed claims or any claims to which	the above contract has been performed men, subcontractors, mechanics, and here are no outstanding claims of any in the contractor/party has or will asset which have not been paid and satisfied
unsatisfied claims for the public at large ar	damages resulting from injury or deat rising out of the performance of the o	his knowledge and belief there are no the to any employees, subcontractors, or contract, or any suits or claims for any the constitute a lien upon the property of
payment in full settle arising under or by	ment for work performed during this of	y law for the purpose of receiving final contract of all claims against the owner such payment is acknowledged as a per by virtue of this contract.
This da	ay of	·
Signature		
Title		
Company		
Personally app	peared before me, the Undersigned A	to be an official of the firm of who after being duly sworn,
stated of his oath tha	t he had read the above statement and	
This	day of	
Notary Public, State	of	
My Commission expi	res FINAL PAY REQUES	ST.
	THALTATREQUE	● (1, 1)

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SAVANNAH AIRPORT COMMISSION

SUPPLEMENTARY GENERAL CONDITIONS

SUMMARY OF WORK

- a. This project includes, but is not limited to, clearing and grubbing, site grading, 12" water main extension, 8" gravity sewer line, 4" force main, and installation of a sanitary sewer pump station.
- b. The location of the project is Savannah/Hilton Head International Airport.
- c. The Owner for whom this work shall be executed is the Savannah Airport Commission, 400 Airways Avenue, Savannah, GA 31408.

SEQUENCE OF WORK

The Contractor shall follow the sequence of work as outlined. The Contractor shall submit for approval to the Savannah Airport Commission a sequence of construction prior to commencing work.

3. CONSTRUCTION SCHEDULE AND SCHEDULE UPDATES

The Contractor shall submit for approval to the Savannah Airport Commission a graphic CPM (bar chart) schedule showing dates of commencing and completing each activity as they will be performed, including sequence, duration of each activity, critical path, milestones, and completion date. This schedule shall be completed and delivered to the Owner for approval thereby prior to issuance of the Notice to Proceed.

An updated schedule (progress report) shall be submitted along with any partial/interim pay request.

Any proposed revisions to the approved schedule shall be submitted by the Contractor to the Owner for approval.

4. COORDINATION OF WORK BY CONTRACTOR

Contractor shall notify the Savannah Airport Commission's representative, the Engineer, the inspector, and the project manager 24 hours in advance of any material being placed or work being performed that requires testing. If such notification is not made, any material placed or work done will be the responsibility of the Contractor and shall not be accepted by the Owner, unless satisfactory proof

can be given to the Owner that such work met the required standard of testing for that item.

The Contractor shall notify the Owner's representative, the Engineer, the inspector, and the project manager at least 48 hours in advance to request any change to his approved work schedule. Any change that would affect scope, cost, or schedule of the project must be approved by the Owner; otherwise, the project may be stopped and any down time would be absorbed by the Contractor and, if applicable, could be charged as liquidated damages if the project exceeds the work days or calendar days stipulated in the contract.

5. WARRANTIES AND GUARANTEES

The Contractor shall furnish to the Owner written warranties on all equipment and material furnished on this contract. The Contractor shall guarantee to the Savannah Airport Commission that he will replace, repair, and make good any and all failures of his work, including all labor and material required to repair or replace all failed work for a period of 12 months beginning at the date of written acceptance of the project. If an item fails or has to be replaced within that 12-month period, he will, upon replacement or repair, guarantee that item for an amount of time that will equal 12 months from the date of repair or replacement.

AS BUILT PLANS

The Contractor shall note on a set of plans any and all changes made to the plans, to include dimensions and reference points of the changes made. Any authorized changes made to the plans will be noted on the plans. All uncharted utilities or structures encountered during construction will be noted and located on the plans. This set of marked up as built plans shall be submitted to the Owner before final payment will be made on the project.

INSURANCE REQUIREMENTS

The Contractor shall obtain and maintain with a company or companies authorized to do business in the State of Georgia, and approved by the Savannah Airport Commission, such insurance as will protect the Commission, and Contractor, from claims set forth below which may arise out of or result from Contractor's operations under the contract and for which the Contractor is legally liable, which includes operations by subcontractors, subcontractor's/subcontractors, or by any persons directly or indirectly employed by Contractor or Subcontractor.

a. Claims under workers' compensation, disability benefit, and other similar employee benefit acts. Further, Contractor shall relieve the Commission from any costs due to accidents or other liabilities mentioned in workers' compensation act. Contractor or subcontractors with either an insufficient number of employees or in certain excluded occupational classifications are required to maintain WORKERS' compensation coverage

on a voluntary basis regardless of the statutory regulations. If the Contractor is from a state other than Georgia, before work begins he shall take whatever measures are necessary to eliminate conflicts regarding which state is responsible for WORKERS' compensation claims.

- b. Claims for damages because of bodily injury, occupational sickness or disease, or death of his employees.
- c. Claims for damages because of bodily injury, sickness or disease, or death of any person other than his employees.
- d. Claims for damages insured by usual personal injury liability coverage which are sustained (1) by any person as a result of an offense directly or indirectly related to the employment of such person by the Contractor, or (2) by another person.
- e. Claims for damages, other than to the work itself, because of injury to or destruction of tangible property, including loss of use resulting therefrom.
- f. Claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance, or use of any motor vehicle.

The insurance required above, shall be written for not less than the following amounts, or greater if required by law:

a. Workers' Compensation:

Georgia Statutory

Employer's Liability, including all states

\$1,000,000 - each accident

\$1,000,000 - disease - policy limit

\$1,000,000 - disease - each employee

b. <u>Comprehensive General Liability:</u> shall include all major divisions of coverage and be on a comprehensive basis including, but not limited to:

Premises, operations, including explosion, collapse and underground; Independent Contractors' Protective; Products and Completed Operations; Broad Form Property Damage including completed operations; Contractual Liability; Personal Injury Liability with employment exclusion deleted. Must include projects at airports.

Bodily Injury and Property Damage Limits: \$1,000,000 combined single limit, each occurrence

<u>Products and Completed Operations:</u>
Insurance to be maintained for three (3) years after issuance of the final certificate for payment.

c. Mobile Equip/Comprehensive Vehicle Liability:

(Owned, non-owned, and hired.)

Bodily Injury/Property Damage Combined:

\$1,000,000 combined single limit, each occurrence

d. Umbrella/Excess Liability:

Umbrella/Excess Liability insurance covering all liability lines excess of the primary limits. The total limits of liability for each coverage including primary and umbrella coverages shall be no less than \$5,000,000 combined single limit – each occurrence.

e. <u>Builders Risk (Property Insurance):</u> (IF APPLICABLE TO THE TYPE OF CONSTRUCTION)

Shall be purchased and maintained by the Contractor covering the entire Work at the site to the full insurable value thereof, including stockpiled material at the construction site intended for incorporation into the project.

Also, such insurance shall be in a company or companies against which Commission has no reasonable objection, and shall include the interest of the Commission, the Contractor, and Subcontractors in the Work. Such insurance shall insure against the perils of Fire, Extended Coverage, Theft, Vandalism and Malicious Mischief, and all other risks. If the Commission is damaged by the failure of the Contractor to maintain such insurance and to so notify the Commission, then the Contractor shall bear all reasonable costs properly attributable thereto. If not covered under such insurance or otherwise provided in the contract documents applicable to constructions, the Contractor shall effect and maintain similar Property Insurance on the Work stored off the site or in transit when such portions of the work are to be included in an application for payment under the contract.

The insurance required above should include contractual liability insurance applicable to the Contractor's obligations.

Detailed Information Relating to Insurance:

a. The Savannah Airport Commission requires that ALL LIABILITY POLICIES must be ENDORSED to include the Mayor and Aldermen of the City of Savannah and the Savannah Airport Commission, its officers, directors, agents and employees as ADDITIONAL INSURED. This must be reflected on the Certificate of Insurance which shall

be furnished to the Commission. The Certificate of Insurance shall evidence proper limits of coverage as set forth herein and that the policy or policies will not be cancelled or modified without thirty (30) days prior written notice thereof is given to the Savannah Airport Commission. The Certificate shall also reflect that all policies have been endorsed to include waivers of any and all subrogation. The Contractor shall also require its subcontractors and subcontractors/subcontractors to endorse their policies to include the Mayor and Aldermen of the City of Savannah and the Savannah Airport Commission, its officers, directors, agents and employees as <u>ADDITIONAL INSURED</u>.

- b. The extent of coverage or limits of liability provided under the policies procured by the Contractor and/or Subcontractors shall not be construed to be a limitation on the nature or extent of the Contractor's obligations or to relieve the Contractor of any such obligations or representation by the Savannah Airport Commission as to the adequacy of the insurance to protect the Contractor against the obligations imposed on him by law or by this or any other contract. All policies shall be primary and non contributory.
- c. Immediate notification must be given to the Savannah Airport Commission and/or its agent upon receiving any knowledge or notification of claim or litigation on which the Savannah Airport Commission may be named.
- d. The Contractor shall indemnify, protect, defend, and hold completely harmless the Commission, and its officers, agents and employees from and against any and all liabilities, losses, suits, claims, judgments, fines, or demands arising by reason of injury or death of any person or damage to any property, including all reasonable costs for investigation and defense thereof (including but not limited to attorney fees, court costs, and expert fees), of any nature whatsoever arising out of or incident to this contract and/or the use of occupancy of the leased premises or the acts or omissions of Contractor's officers, agents, employees, contractors, subcontractors, licensees, or invitees, regardless of where the injury, death, or damage may occur, unless such injury, death or damage is caused by the sole negligence of the Commission. The Commission shall give to Contractor reasonable notice of any such claims or actions. The Contractor shall also use counsel reasonably acceptable to Commission in carrying out its obligations hereunder.

All policies shall be endorsed to include waivers of any and all subrogation.

PREVAILING WAGE RATES

The construction wage rates have been furnished and compiled by the City of Savannah and certified by the U. S. Department of Labor to be wages prevailing for construction of projects in the Chatham County area. In accordance with the terms of the Proposal, the Contractor agrees to pay to each employee of the corresponding craft at least the wage rate listed.

In addition to the basic hourly rates shown, certain crafts, trades or industries indicate health, welfare, pension, and other fringe benefits which are given employees pursuant to a bona fide Collective Bargaining Agreement for the

respective craft, trade, or industry. In the absence of any such Agreement, the basic hourly rates plus the monetary equivalent for the fringe benefit payments indicated, less any legal deductions, shall be paid directly to the employees.

If the wage rate determination of the U. S. Department of Labor incorporated in the following page does not include rates for requested classifications, the Bidder is responsible for ascertaining the rates payable for such classifications and whether area practice requires their use in accomplishing the work. No inference concerning area practice is to be drawn from this omission. Further, the omission will not, per se, establish any liability for increased labor cost resulting from the use of such classifications.

The Contractor and Subcontractors at any tier shall make and submit a copy of, to the Savannah Airport Commission, within seven (7) days, a record of all payments for labor with an affidavit that the weekly wages paid are not less than the applicable wage rates contained in the wage determination incorporated into the contract and that the classifications set forth therein for each laborer and mechanic conforms with the work he/she performed. Such records shall contain the name of the individual, his/her classification, the hourly rate, the number of and the total amount paid including any and all worked. deductions/withholdings for all individuals who provided and were paid via any means for labor on this project. Records shall be made, and copies provided to the Owner with each pay request, of all payments of any kind (including cash, check, voucher, or any other type of remuneration) to any individual (including employees, subcontractors, independent contractors, day laborers, or anybody else) who performed labor on this project for any kind of compensation whatsoever. Every pay request shall also include a copy of a record of Workers' compensation paid for any and all persons paid in any manner for labor of any type on this project.

The Contractor shall post and maintain a copy of the wage determination at the Contractor's field office or any other location as directed by the Savannah Airport Commission.

General Decision Number: GA180241 01/05/2018 GA241

Superseded General Decision Number: GA20170241

State: Georgia

Construction Type: Highway

County: Chatham County in Georgia.

HIGHWAY CONSTRUCTION PROJECTS

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.35 for calendar year 2018 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.35 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2018. The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number 0

Publication Date 01/05/2018

SUGA2014-063 10/03/2016

Distributor, Raker, Screed,

P	Rates	Fringes
CARPENTER, Includes Form Work\$	17.46	0.00
CEMENT MASON/CONCRETE FINISHER\$	17.62	0.00
HIGHWAY/PARKING LOT STRIPING: Operator (Striping Machine)\$	12.39	1.94
IRONWORKER, REINFORCING\$	15.46	0.00
IRONWORKER, STRUCTURAL\$	15.13	0.00
LABORER: Grade Checker\$	11.45	0.00
LABORER: Mason Tender - Cement/Concrete\$	11.44	0.00
LABORER: Pipelayer\$	11.09	0.00
LABORER: Asphalt (Includes		

Shoveler, a	and Spreader)\$ 11.95	0.00
	ommon or General, rosion Control\$ 10.97	0.00
OPERATOR: Backhoe/Exc	cavator/Trackhoe\$ 17.47	0.00
	Bobcat/Skid Loader\$ 12.22	0.00
OPERATOR:	Broom/Sweeper\$ 14.04	1.43
OPERATOR:	Bulldozer \$ 17.03	0.00
OPERATOR:	Compactor \$ 14.04	0.00
OPERATOR:	Concrete Saw\$ 18.47	0.00
OPERATOR:	Crane\$ 24.38	0.00
OPERATOR:	Grader/Blade\$ 18.18	0.00
OPERATOR:	Hydroseeder \$ 13.93	0.00
OPERATOR:	Loader\$ 15.16	0.00
OPERATOR:	Mechanic\$ 19.85	0.00
OPERATOR:	Milling Machine\$ 16.20	1.64
OPERATOR: Aggregate,	Paver (Asphalt, and Concrete)\$ 14.98	0.00
OPERATOR:	Piledriver \$ 16.70	0.00
OPERATOR:	Roller \$ 14.57	0.00
OPERATOR:	Scraper \$ 12.64	0.00
OPERATOR:	Screed\$ 17.53	0.00
PAINTER:	Spray\$ 23.30	0.00
TRAFFIC CO	NTROL: Flagger\$ 12.20	0.00
TRAFFIC CO Laborer-Co Barricades		
	ver/Sweeper\$ 12.55	0.00
	GNALIZATION:\$ 13.40	0.00
	GNALIZATION:	0.00
TRUCK DRIV	/ER: Dump Truck\$ 13.72	0.00
TRUCK DRIV	VER: Flatbed Truck\$ 14.96	1.19

TRUCK DRIVER:			
Truck	\$	14.92	0.00
TRUCK DRIVER:	Lowboy Truck\$	16.26	0.00
TRUCK DRIVER:	Off the Road		
Truck	\$	12.38	0.00
TRUCK DRIVER:	Water Truck\$	14.00	0.00
TRUCK DRIVER:	Semi/Trailer		
Truck	\$	16.13	0.00

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or

"UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can

be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations Wage and Hour Division U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION

9. CONTRACTOR'S AND SUBCONTRACTOR'S RECORDS

- a. The Contractor and all Subcontractors, at any tier, shall maintain for a period of not less than three (3) years from the date of final payment all books, records, documents, and papers pertaining to the contract.
- b. The Contractor and all Subcontractors, at any tier, shall provide to the City of Savannah, the Savannah Airport Commission, the FAA or any other Federal or State agency, the Comptroller General of the United States, or any of their duly authorized representatives access to all such books, documents, papers and records pertaining to the contract for the purposes of examining, auditing and copying them.

10. SAFETY

The contractor shall maintain a safe and secure work area during construction. All safety rules and regulations shall be adhered to per OSHA, GDOT, and City of Savannah. In addition, the contractor shall be responsible for safety and security of his worksite.

- a. Airport safety is an extremely important element of managing and operating today's airport. Specific rules, regulations, advisory circulars and guidelines are placed upon the airport owner/operator to improve safety on airports and to protect its users, tenants, and neighbors.
 - (1) Entry Into the Air Operations Area Entry shall be by gate(s) designated by the Executive Director or his representative. The Contractor shall be responsible for gate security. No personal vehicles owned by Contractor's employees or subcontractors shall be allowed on the airfield at any time. (Not applicable)
 - (2) <u>Communications</u> Radio contact with the control tower must be maintained by all Contractor vehicles on the airfield. Vehicles must contact the control tower upon entering active runway, taxiway, or apron area where aircraft are moving or are subject to move; and if working within five hundred (500) feet of the centerline of any active runway or two hundred (200) feet of the centerline of any (active) taxiway, the Contractor shall maintain radio contact with the control tower at all times. If the Contractor has vehicles with no radio, then such vehicles shall form a convoy and follow a vehicle having two way radio contact with the control tower. Contractors working in runway clear zones shall maintain constant radio contact with the control tower. The Contractor shall be responsible for supplying his own radios.

The Contractor shall reimburse the Airport Commission for the full amount of any fines placed on the Airport Commission due to an unauthorized crossing of an active runway or taxiway by the Contractor or any of his subcontractors. (Not applicable)

- (3) Flags All vehicles, upon entering the Air Operations Area shall display an orange and white-checkered flag, staff mounted, of not less than three (3) feet square displayed on the vehicle. Cranes, backhoes, and similar equipment working within five hundred (500) feet of the centerline or runways and two hundred (200) feet of taxiways and in clear zones, shall display the same size and type of flag specified for vehicles attached to the boom. Crane booms shall be lowered when not in use. (Not applicable)
- (4) <u>Airport Rules and Regulations</u> Contractor(s) shall be responsible for informing all employees concerning pertinent airport and Federal Aviation Administration rules and regulations. Contractor(s) shall conform with all rules and regulations and directives issued either orally or in writing by the Executive Director or his representative. All pertinent local, state and federal safety requirements shall be observed by the Contractor(s) and Contractor(s)' personnel.

11. STORAGE AREA

- (a) Material or personal vehicular storage area shall be assigned by the Executive Director or his representative.
- (b) Materials to be stored on airport property shall not create an obstruction to air navigation nor shall they interfere with the free unobstructed movement of aircraft.
- (c) Loose materials capable of causing damage to aircraft landing gears, propellers, or being ingested in jet engines, shall not be stored on or around active aircraft movement areas.
- (d) Stockpiled material will be constrained in a manner to prevent movement resulting from aircraft blast or wind conditions in excess of 10 knots. Stockpiled material shall be prominently marked with orange flags and lighted with flashing yellow lights during hours of restricted visibility.
- (e) The Contractor shall be responsible for the security of his material and equipment.

12. OPEN TRENCHES (Not applicable)

- (a) All open trenches, excavations within the Air Operations Area, shall be marked by lighted and flagged barricades. Barricades shall be alternate orange and white markings with flashing yellow lights and a maximum of 18 inches in height. Barricades adjacent to runways or taxiway pavement areas shall be required to be secured in such manner to prevent tipping over. Flags shall be orange and white, staff mounted, and not less than 20" x 20". All barricades shall be subject to approval by the Executive Director. The Contractor shall provide the name and phone number of two individuals to be on call 24 hours per day for emergency maintenance of barricade lighting.
- (b) All construction work closer than one hundred twenty-five (125) feet of the edge of a runway or eighty-five (85) feet from the edge of a taxiway will require temporary closing of the runway or taxiway. Temporarily closed taxiways shall be marked by lighted and weighted barricades as shown on the plans. Temporarily closed runways shall be marked with a cross placed on the runway numbers by the Savannah Airport Commission.
- (c) Prior to beginning any excavation within two hundred (200) feet of the centerline of any runway or taxiway, the Contractor shall notify the Executive Director or his representative. All trench excavation within the Air Operations Area shall be backfilled and compacted at the end of each work day.
- (d) Construction equipment or material shall not be stored within the Air Operations Area during hours of restricted visibility or darkness without the approval of the Executive Director or his representative.
 - (e) Open flame welding or torch cutting operations are prohibited unless fire and safety precautions are provided in accordance with NFPA codes and approved by the Owner. Open flame welding or torch cutting will be permitted on Airport property by obtaining a permit from the Airport Fire Department.

13. MOTORIZED VEHICLES (Not applicable)

- (a) Vehicular traffic crossing active aircraft movement areas (runways, taxiways or aircraft parking aprons) shall be controlled either by two-way radio contact with the control tower, by escort, flagman, signal lights, or other appropriate means as approved by the FAA Control Tower Chief. After receiving clearance from the Control Tower, the driver's personal observation that no aircraft is approaching his position will be made before he makes any crossing of active taxiway or runway. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING HIS OWN RADIOS.
- (b) Contractor(s) shall post two (2) crossing guards, one (1) on each side of all active aircraft movement areas (runways, taxiways and aircraft movement

areas (runways, taxiways and aircraft parking aprons). Each crossing guard shall be equipped with a portable two way radio (121.90 MHz) and maintain constant radio contact with the control tower. All vehicular traffic shall come to a complete stop at all active aircraft movement areas and shall not proceed into active aircraft movement areas without authorization from the control tower. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING HIS OWN RADIOS.

- (c) If it is desirable to clearly identify the vehicles for control purposes by either assigned initials or numbers, then the identifying symbol shall be of eight (8) inch minimum, block-style character of a color easily read. Symbols may be applied by use of tape or water soluble paint.
- (d) Motorized vehicles and equipment operating in the AOA shall not exceed fifteen (15) miles per hour.
- (e) Aircraft shall have priority over all motorized vehicles and equipment.
 - (f) All electrical and control cables shall be buried a minimum of thirty-six (36) inches below the surface of the ground.

14. DEBRIS

- (a) Waste and loose material capable of causing damage to aircraft shall not be placed on active aircraft movement areas. Material tracked on these areas shall be removed continuously during the work project. (A/C 150/5370-2C)
- (b) Debris shall be disposed of in the manner designated by the Executive Director or his representative.

15. <u>NOTAMS</u> (Not applicable)

Construction NOTAMS shall be issued by the Executive Director or his representative. Construction causing runway or taxiway closures shall be kept to a minimum and scheduled closures shall be discussed with the Executive Director or his representative as far in advance as possible, but not less than forty eight (48) hours in advance. Landing and taking off of scheduled airlines shall have priority.

16. BURNING

Burning is permitted on airport property by obtaining a permit from local governmental agencies and Airport Fire Department.

17. EROSION

Contractor(s) shall consider permanent means of control or prevention of soil erosion not only to preserve and protect the slopes, pavement and other facilities, but also to reduce potential sources of water pollution.

18. ACCIDENTS

All accidents causing personal injury or property damage shall be reported to the Executive Director or his representative immediately. The contractor(s) shall provide, at the site, such equipment and medical facilities as are necessary to supply first aid service to anyone who may be injured in connection with the performance of the work, whether on or adjacent to the site, which causes death, personal injury, or property damage, giving full details and statements of witnesses. In addition, if death or serious injuries or serious damages are caused, the accident shall be reported immediately by telephone to the Executive Director or his representative and the Project Engineer.

19. PROTECTION OF AIRPORT, CABLES, CONTROLS, NAVAIDS, AND WEATHER BUREAU FACILITIES (Not applicable)

a. The Contractor is hereby informed that there are installed on the airport FAA Navaids, including, without limitation, ASR, UHF and VHF receivers and transmitters; U. S. Weather Bureau facilities; airfield lighting systems; electric cables and controls relating to such Navaids and facilities. Such Navaids, Weather Bureau and other facilities, and electric cables must be fully protected during the entire construction time. Work under this contract can be accomplished in the vicinity of these facilities and cables only at approved periods of time.

Approval is subject to withdrawal at any time because of changes in the weather, emergency conditions on the existing airfield areas, anticipation of emergency conditions, and for any other reason determined by the Engineer acting under the orders and instructions of the airport management and the designated FAA representative. Any instructions to this Contractor to clear any given area, at any time, by the Engineer, the Airport Management, or the FAA Control Tower (by radio or other means) shall be immediately executed. Construction work will be commenced in the cleared areas only when additional instructions are issued by the Engineer.

b. Power and control cables leading to and from any FAA Navaids, Weather Bureau and other facilities, will be marked in the field by the local FAA System Support Center personnel or the Engineer for the information of the Contractor, before any work in their general vicinity is started. Thereafter, through the entire time of this construction, the Contractor shall not allow any construction equipment to cross these cables without first protecting the cable with steel boiler plate, or similar structural devices, on three feet either side of the marked cable route. All excavation within three feet of existing cables

shall be accomplished by hand digging only. The Contractor will be penalized an amount of \$1,000 per instance if during his work he cuts a marked cable.

c. The Contractor shall immediately repair, at this own expense with identical material by skilled workmen, any underground cables serving FAA Navaids, Weather Bureau and other airport facilities which are damaged by his workmen, equipment, or work. Prior approval of the Engineer must be obtained for the materials, temporary or permanent repairs the Contractor proposed to make to any other airport facilities and cables damaged by this Contractor. Should the repair require splicing, it shall be spliced at the discretion of the local FAA System Support Center Manager as to who shall perform the work. Where the FAA performs the work, it shall be at the Contractor's expense. No work shall be backfilled or covered prior to approval by the System Support Center Manager.

20. GOVERNING LAW

This Agreement shall be deemed to be made in and construed in accordance with the laws of the State of Georgia.

21. INDEMNIFICATION

Contractor shall protect, defend, and indemnify Commission and its officers, agents and employees from and against any and all liabilities, losses, suits, claims, judgments, fines or demands arising by reasons of injury or death of any person, or damage to any property, including all reasonable costs for investigation and defense thereof (including but not limited to attorney fees, court costs, and expert fees), of any nature whatsoever arising out of or incident to this Agreement and/or the use or occupancy of the Premises or the acts or omissions of contractor's officers, agents, employees, contractors, subcontractors, licensees, or invitees, regardless of where the injury, death or damage may occur, unless such injury, death, or damage is caused by the sole negligence of the Commission. The Commission shall give to contractor reasonable notice of any such claims or actions. The Contractor shall also use counsel reasonably acceptable to Commission in carrying out its obligations hereunder. The provisions of this section shall survive the expiration or early termination of this Agreement.

22. NONDISCRIMINATION

(As required by Title VI of the Civil Rights Act of 1964; Department of Transportation 49 CFR Part 21; and Section 520 of the Airport and Airway Improvement Act of 1982).

"The Contractor assures that it will comply with pertinent statutes, Executive Orders and such rules as are promulgated to assure that no person shall, on the grounds of race, creed, color, national origin, sex, age, or handicap be excluded from participating in any activity conducted with or benefiting from Federal assistance."

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SECTION 02110 - SITE CLEARING

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SECTION 02110

SITE CLEARING

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Removal of surface debris.
- B. Removal of paving, curbs, and other materials located along proposed water and sewer utility route.
- C. Removal of trees, shrubs, and other plant life.
- D. Topsoil excavation.

1.2 RELATED SECTIONS

A. Section 02204 - Earthwork.

1.3 OMITTED

1.4 REGULATORY REQUIREMENTS

- A. Conform to applicable City, County, and State codes for environmental requirements, and disposal of debris.
- B. Coordinate clearing Work with utility companies.

PART 2 - PRODUCTS

2.1 MATERIALS

Provide tree protection materials as detailed on the construction drawings.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Verify that existing plant life designated to remain is tagged or identified.
- B. Identify a salvage area for placing removed materials. All non-salvageable material shall be disposed of off-site by Contractor at his expense.

3.2 PROTECTION

A. All trees on site will be saved except those marked specifically by the Owner's representative for removal during construction. No trees, either those marked for removal on site or any other tree, may be removed prior to the preconstruction conference. All trees not to be removed will be protected from injury to their

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roots and to their top to a distance three feet (3') beyond the drip-line and no grading, trenching, pruning, or storage of materials may go in this area except as provided by an Owner's representative stakeout. Contractor will pay a penalty for any tree removed from the site which has not been marked specifically for removal. Contractor also will pay for any tree which dies due to damage during construction. This applies to all trees on site whether or not they are shown on the plans.

B. Contractor shall not be held accountable for damages to trees resulting from placement of fill or removal of soils where such action is required by the contract documents. Any tree, the trunk of which is within 10 feet of any footing or trench, shall be exempt from these penalties except that the Contractor shall exercise all reasonable precautions to preserve even these trees. Contractor agrees to pay fines as established below in the event he or any of his subcontractors causes loss or removal of trees designated to be saved under provisions of this contract.

The fines are as follows:

<u>Fine</u>
\$ 150.00
200.00
250.00
400.00
500.00
600.00
750.00
1,500.00
2,000.00
\$ 2,500.00
\$

- C. Trees shall be graded by Owner's representative as to variety, condition and site importance, with above figures acting as a maximum fine. Lowest assessment amount shall be no less than one-half of the above fine figures.
- D. Protect bench marks, survey control points, and existing structures from damage or displacement.
- E. Protect all remaining utilities.
- F. Clearing operations shall be conducted so as to prevent damage by falling trees to trees left standing, to existing structures and installations, and to those under construction, and to provide for the safety of employees and others.

3.3 CLEARING

A. Clear areas required for access to site and execution of work. Clearing shall consist of felling and cutting trees into sections, and satisfactory disposal of trees and other vegetation designated for removal, including downed timber, snags, brush, and rubbish occurring within area to be cleared. Trees, stumps, roots, brush, and other vegetation in areas to be cleared shall be removed completely from the site, except such trees and vegetation as may be indicated or directed

to be left standing. Trees designated to be left standing within cleared areas shall be trimmed of dead branches 1–1/2–inch or more in diameter. Limbs and branches to be trimmed shall be neatly cut close to the trunk of the tree or main branches. Cuts more than 1–1/2–inches in diameter shall be painted with an acceptable tree wound paint. Trees and vegetation to be left standing shall be protected from damage incident to clearing, grubbing, and construction operations, by the erection of timber barriers or by such other means as circumstances require. Such barriers must be placed and be approved by the OWNER before construction observations can proceed (See 3.2). Clearing shall also include removal and disposal of structures that obtrude, encroach upon, or otherwise obstruct the work.

3.4 REMOVAL

- A. Where indicated or directed, trees and stumps shall be removed from areas outside those areas designated for clearing and grubbing. Work shall include felling of such trees and removal of their stumps and roots. Trees shall be disposed of as hereinafter specified.
- B. Remove debris, rock, and other extracted plant life from site.
- C. Partially remove paving, curbs, and driveways as indicated. Neatly saw cut edges at right angle to surface.

3.5 DISPOSAL

A. Disposal of trees, branches, snags, brush, stumps, etc., resulting from clearing and grubbing shall be the Contractor's responsibility and shall be disposed of by removal from site. All costs in connection with disposing of materials will be at the Contractor's expense. Contractor shall be responsible for compliance with all local and State laws and regulations relative to the removal and disposal of material. All liability of any nature resulting from disposal of cleared and grubbed material shall become the Contractor's responsibility. Disposal of all materials cleared and grubbed will be in accordance with rules and regulations of the State of Georgia. No material will be burned unless directed to do so by the OWNER. Contractor shall obtain a permit to burn on site from local fire department, before beginning the work.

3.6 GRUBBING

A. Grubbing shall consist of removal and disposal of stumps, roots larger than one (1) inch in diameter, and matted roots from designated grubbing areas. This material, together with logs and other organic or metallic debris not suitable for building of pavement subgrade or building pads, shall be excavated and removed to a depth of not less than 18-inches below original surface level of the ground in embankment areas and not less than 2-feet below finished earth surface in excavated areas. Depressions made by grubbing shall be filled with suitable material and compacted to make the surface conform with original adjacent ground.

END OF SECTION

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SECTION 02200

EARTHWORK

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Grading
- B. Excavation
- C. Backfilling
- D. Compaction
- E. Remove and Replace Topsoil
- F. Dressing of Shoulders and Banks
- G. Stone Drainage Filter
- H. Water Control
- I. Testing

1.2 RELATED SECTIONS

- A. Section 01800 Testing Services
- B. Section 02110 Site Clearing
- C. Section 02550 Water Distribution System
- D. Section 02554 Wastewater Collection System

1.3 OMITTED

1.4 REFERENCES (LATEST REVISION)

- A. ASTM D 448 Sizes of Aggregate for Road and Bridge Construction.
- ASTM D 1557 Laboratory Compaction Characteristics of Soil Using Modified Effort.
- C. ASTM D 2487 Classification of Soils for Engineering Purposes (Unified Soil Classification System).
- D. ASTM D 6938 In–Place Density and Water Content of Soil and Soil–Aggregate by Nuclear Methods (Shallow Depth).

- E. ASTM D 3740 Minimum Requirements for Agencies Engaged in Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction.
- F. ASTM E 329 Agencies Engaged in Construction Inspection and/or Testing.

1.5 SUBMITTALS

- A. Section 01 33 00 Submittal Procedures: Procedures for submittals.
- B. Materials Source: Submit gradation analysis, proctor results, and soil classification for all borrow material.

1.6 QUALITY ASSURANCE

A. Perform all work in accordance with Federal standards, State of Georgia standards, and City of Savannah standards.

1.7 TESTING

- A. Laboratory tests for moisture density relationship for fill materials shall be in accordance with ASTM D 1557, (Modified Proctor).
- B. In place density tests in accordance with ASTM D 6938.
- C. Testing laboratory shall operate in accordance with ASTM D 3740 and E 329 and be acceptable to the Engineer.
- D. The testing laboratory and Project Engineer/Project Representative shall be given a minimum of 48 hours notice prior to taking any of the tests.
- E. Contractor will employ and pay for services of an independent testing agency or laboratory to perform specified earthwork unless otherwise specified.
- F. Test results shall be furnished to the Owner and Engineer prior to continuing with associated or subsequent work.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Borrow shall consist of sand or sand-clay soils capable of being readily shaped and compacted to the required densities, and shall be reasonably free of roots, trash, rock, material that could damage pipe, and other deleterious material.
- B. All soils used for structural fills, water and wastewater utilities backfill, and roadway embankment fills, including areas requiring over excavation and replacement with structural fill material, shall be non-plastic granular material containing less than 25 percent fines passing the No. 200 sieve.

- C. All structural fills and maintenance strip fills should be placed in 6" 8" loose lifts and compacted to a minimum of 95% of the soil's Modified Proctor maximum dry density (ASTM D–1557). Fill brought to the site should be within 3 percent (wet or dry) of the optimum moisture content.
- D. All drainage, water and wastewater utilities backfill should be placed in thin, (6 inches or less) loose lifts and compacted to a minimum of 95% of the soil's Modified Proctor maximum dry density (ASTM D-1557). Fill brought to the site should be within 3 percent (wet or dry) of the optimum moisture content.
- E. Some manipulation of the moisture content (such as wetting, drying) will be required during the filling operation to obtain the required degree of compaction. The manipulation of the moisture content is highly dependent on weather conditions and site drainage conditions. Therefore, the contractor should prepare both dry and wet fill materials to obtain the specified compaction during grading. A sufficient number of density tests should be performed to confirm the required compaction of the fill material.
- F. Contractor shall furnish all borrow material.
- G. Contractor shall be responsible for and bear all expenses in developing borrow sources including securing necessary permits, drying the material, haul roads, clearing, grubbing, excavating the pits, placing, compaction and restoration of pits and haul roads to a condition satisfactory to property owners and in compliance with applicable federal, state, and local laws and regulations.

2.2 SOURCE QUALITY CONTROL

- A. If tests indicate materials do not meet specified requirements, change material and retest.
- B. Provide materials of each type from same source throughout the Work.

PART 3 - EXECUTION

3.1 TOPSOIL

- A. Contractor shall strip topsoil and stockpile on site at a location determined by the Owner at the Contractor's expense.
- B. Topsoil shall be placed to a depth of 4 inches over all disturbed or proposed landscaped areas.
- C. Topsoil shall be provided at Contractor's expense if it is not available from site.
- D. Any remaining topsoil determined by the Owner or Engineer to be useful will be stored on site at a location determined by the Owner at the Contractor's expense.
- Do not excavate wet topsoil.

3.2 EXCAVATION

- Suitable excavation material shall be transported to and placed in fill areas within limits of the work.
- B. Unsuitable material encountered in areas to be paved and under building pads, shall be excavated 2 feet below final grade and replaced with suitable material from site or borrow excavations. Contractor shall notify Engineer if more than 2 feet of excavation is needed to replace unsuitable material.
- Unsuitable and surplus excavation material not required for fill shall be disposed of
 off site.
- D. Proper drainage, including sediment and erosion control, shall be maintained at all times. Methods shall be in accordance with the National Pollutant Discharge Elimination System standards and other local, state, and federal regulations.
- E. Unsuitable materials as stated herein are defined as highly plastic clay soils, of the CH and MH designation, border line soils of the SC–CH description, and organic soils of the OL and OH description based on the Unified Soils Classification System.

3.3 GROUND SURFACE PREPARATION FOR FILL

- A. All vegetation, roots, brush, heavy sods, heavy growth of grass, decayed vegetable matter, rubbish, and other unsuitable material within the areas to be filled shall be stripped and removed prior to beginning the fill operation.
- B. Sloped ground surfaces steeper than 1 vertical to 4 horizontal, on which fill is to be placed shall be plowed, stepped, or benched, or broken up as directed, in such a manner where fill material will bond with the existing surface.
- C. Surfaces on which fill is to be placed and compacted shall be wetted or dried as may be required to obtain the specified compaction.

3.4 FILL

A. Shall be placed in successive horizontal layers 8 inches to 12 inches in loose depth for the full width of the cross-section and compacted as required.

3.5 OMITTED

3.6 FINISHED GRADING

- A. All areas covered by the project including excavated and filled sections and adjacent transition areas shall be smooth graded and free from irregular surface changes.
- B. Degree of finish shall be that ordinarily obtainable from either blade-grader or scraper operations, supplemented with hand raking and finishing, except as otherwise specified.

- C. Unpaved areas to within 0.05 feet of elevations shown on the drawings provided such deviation does not create low spots that do not drain.
- D. Subgrade to within 0.05 feet of the drawing elevations less the thickness of the concrete slab or pavement section.
- E. Ditches and lagoon banks shall be finished graded, dressed, and seeded within 14 calendar days of work to reduce erosion and permit adequate drainage.

3.7 DISPOSAL OF WASTE MATERIAL

A. All vegetation, roots, brush, sod, broken pavements, curb and gutter, rubbish, and other unsuitable or surplus material stripped or removed from limits of construction shall be disposed of by the Contractor.

3.8 PROTECTION

- A. Graded areas shall be protected from traffic, erosion, settlement, or any washing away occurring from any cause prior to acceptance.
- B. Contractor shall be responsible for protection of below grade utilities shown on the drawings or indicated by the Owner at all times during earthwork operations.
- C. Repair or re–establishment of graded areas prior to final acceptance shall be at the Contractors expense.
- D. Site drainage shall be provided and maintained by Contractor during construction until final acceptance of the project. Drainage may be by supplemental ditching, or pumping if necessary, prior to completion of permanent site drainage.

3.9 DRAINAGE

A. Contractor shall be responsible for providing surface drainage away from all construction areas. This shall include maintenance of any existing ditches or those constructed in the immediate vicinity of the work. Contractor shall provide proper and effective measures to prevent siltation of wetlands, streams, and ditches on both the Owner's property, and those properties downstream.

3.10 FIELD QUALITY CONTROL

- A. Compaction testing shall be performed in accordance with ASTM D 6938. Where tests indicate the backfill does not meet specified requirements, the backfill shall be reworked or removed and replaced, and then retested at the Contractor's expense.
- B. Unpaved areas at least 95% of maximum laboratory density within 3% optimum moisture content unless otherwise accepted by the Engineer.
- C. Areas Around and Below Structures top 6 inch layer of subbase to at least 98% of maximum laboratory density within 2% optimum moisture content. Layers below

- top 6 inches shall be compacted to 95% of maximum laboratory density within 2% optimum moisture content.
- D. Subgrades Under Pavement Removed and Replaced for Utility Installations 100% Standard (ASTM D–698) as shown on details.
- E. Rolling and compaction equipment and methods shall be subject to acceptance by the Engineer. Acceptance in no way relieves Contractor of the responsibility to perform in correct and timely means.
- F. All roadway earthwork and preparation shall be completed in accordance with Sections 02231, 02512GA, and the Georgia Department of Transportation Standard Specifications for Construction of Transportation System, 2013 Ed.

3.11 PROOF ROLLING

A. Shall be required on the subbase of all curb and gutter and paved areas and on the base of all paved areas where designated by the Engineer. Proof rolling shall take place after all underground utilities are installed and backfilled. The operation shall consist of rolling the subbase or base with a fully loaded 10—wheeled dump truck. A full load shall consist of 10 to 12 cubic yards of soil or rock. The dump truck shall be capable of traveling at a speed of two to five miles per hour and be in sound mechanical shape with no exhaust leaks or smoking from burning oil. The Engineer shall determine number of passes and areas rolled.

END OF SECTION

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SECTION 02211 - EROSION, SEDIMENTATION, AND POLLUTION CONTROL (GA)

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Appendix "A" – Notice of Intent

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SECTION 02211

EROSION, SEDIMENTATION, AND POLLUTION CONTROL (GA)

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Soil erosion, sediment and pollution control measures shall include all temporary and permanent means of soil protection, trapping soils and containment of pollutants on the construction site during land disturbing activities. Activities covered in this section are regulated by the Manual for Erosion and Sediment Control in Georgia (latest revision) and Georgia's National Pollutant Discharge Elimination System Permit (NPDES), General Permit No. GAR100003.
- B. Reporting
- C. Sampling

1.2 RELATED SECTIONS

- A. Section 02110 Site Clearing
- B. Section 02200 Earthwork
- C. Section 02400 Storm Drainage
- D. Section 02485 Grassing
- E. Section 02550 City of Savannah's Water Distribution System
- F. Section 02554 Wastewater Collection System

1.3 PURPOSES

- A. The purpose of this section is to achieve the following goals:
 - Minimize soil exposure by proper timing of clearing grading and construction.
 - 2. Retain existing vegetation whenever feasible.
 - 3. Vegetate and mulch disturbed areas as soon as possible.
 - Divert runoff away from disturbed areas.
 - 5. Minimize length and steepness of slopes when it is practical.
 - 6. Reduce runoff velocities with check dams or surface roughing.
 - 7. Trap sediment on site.

- 8. Inspect and maintain erosion, sedimentation and pollution control measures.
- 9. Report on condition of Best Management Practices (BMPs).
- 10. Sample site run off per Georgia's NPDES Permit.

1.4 QUALITY ASSURANCE

A. Manufacturer's Qualifications: Firms regularly engaged in manufacture of soil erosion, sedimentation and pollution control systems products of types, materials, and sizes required, whose products have been in satisfactory use in similar service for not less than 5 years.

Codes and Standards: Comply with all applicable Local, State and Federal Standards pertaining to soil erosion, sedimentation and pollution control.

1.5 SUBMITTALS

A. Product Data: Submit manufacturer's technical product data and installation instruction for soil erosion, sedimentation and pollution control materials and products.

PART 2 - PRODUCTS

2.1 VEGETATIVE MATERIALS

- A. Mulch
 - 1. Dry straw or hay.
 - 2. Wood chips, sawdust or bark.
 - 3. Cutback asphalt.
- B. Temporary Seeding
 - 1. Annual Ryegrass
 - 2. Browntop Millet
- C. Permanent Seeding
 - 1. Common Bermuda
 - 2. Centipede
- D. Sod
 - 1. Common Bermuda

- 2. Centipede
- 3. St. Augustine
- E. Fertilizer
 - Commercial 6-12-12

2.2 STRUCTURAL MATERIALS

- A. Check Dam
 - 1. Stone (2" 10")
 - 2. Bales of densely baled hay or straw wrapped with synthetic or wire bands (two minimum per bale).
- B. Construction Exit
 - 1. Minimum 20' x 50' x 0.5' layer of 1.5" to 3.5" stone with a geotextile underliner.
- C. Filter Ring
 - 1. Minimum 2' high stone ring. Stone shall be no smaller than 3" to 5" when utilized at storm drain inlets and pond outlets with pipe diameters less than 12".
 - 2. Minimum 2' high stone ring. Stone shall be no smaller than 10" to 15" when utilized at storm drain inlets and pond outlets with pipe diameters greater than 12".

D. Sediment Barrier

- 1. Bales of densely baled hay or straw wrapped with synthetic or wire bands (two minimum per bale).
- Silt Fence Shall be a woven geotextile fabric sheet of plastic yarn composed of a long chain synthetic polymer with at least 85% by weight propylene, ethylene, amide, ester or vinylidene chloride, and shall contain stabilizers and/or inhibitors added to the base plastic to make the filaments resistant to deterioration due to ultra-violet and/or heat exposure. The fabric shall be finished so the filaments will retain their relative position with respect to each other. The fabric shall be free of defects, rips, holes or flaws. The manufacturer shall have either an approved color mark yarn in the fabric or label the fabricated silt fence with both the manufacturer and fabric name every 100'.

The fabric shall meet the following requirements:

Grab Strength

90 lbs.

Mullen Burst Strength 150 lbs. UV Resistance 80 %

E. Inlet Sediment Trap

- 1. Silt fence (Type C) supported by steel posts.
- 2. Baffle Box Constructed of 2" x 4" boards spaced a maximum of 1" apart or plywood with weep holes 2" in diameter (See detail).
- 3. Sod Inlet Protection Four 1 foot wide strips of sod on each side of the inlet (See detail).
- 4. Curb Inlet Protection Eight inch concrete blocks wrapped in filter fabric, placed in front of a curb inlet.
- F. Storm Drain Outlet Protection
 - Geotextile fabric equivalent to Mirafi FW700.
 - Rip-rap (See detail for size).

2.3 CHEMICAL MATERIALS

- Dust Control Calcium Chloride, Anionic Asphalt Emulsion, Latex Emulsion or Resin in–Water Emulsion.
- B. Anionic Polyacrylamide (PAM) Consult state and local laws concerning the regulations of this chemical.

PART 3 - EXECUTION

3.1 GENERAL

- All disturbed soil areas except those to support paving shall be graded and Α. protected from erosion with vegetative materials. Sedimentation discharge from the construction site into natural drainage ways and storm drainage systems shall be prevented by means of vegetative measures and temporary structural practices. These vegetative measures and structural practices are known as Best Rainfall, pollution control measures and Management Practices (BMPs). construction exit condition shall be monitored and reported on each day when construction activities take place. Erosion and sedimentation control measures shall be monitored and reported on every seven days and within 24 hours of a aualifying rainfall event of 0.5 inches or more. Sampling of construction site discharging water shall be sampled within 45 minutes of a qualifying rainfall event and analyzed immediately or no later than 48 hours after collection. The above reports shall be submitted to the Georgia EPD by the fifteenth day of the month following the reporting period.
- B. The Contractor (Operator) is considered a "Primary Permittee" and shall submit a Notice of Intent (NOI) in accordance with General Permit No. GAR100003 at least

14 days prior to the commencement of construction activities. Contractor shall retain a copy of the Erosion, Sedimentation, and Pollution Control Plan and Comprehensive Monitoring Program required by above permit at construction site or be readily available at a designated alternate location from date of project initiation to date of final stabilization. Copies of all Notice of Intent, Notice of Termination, plans, monitoring reports and all other records required by above permit shall be retained by Contractor for a period of at least three years from date the site is finally stabilized. Copies of Notice of Intent (NOI), Notice of Termination (NOT) and General Permit Number GAR100003 are found at the end of this section.

3.2 ON-SITE OBSERVATION

A. Engineer is required by General Permit No. GAR100003 to check the installation of Erosion, Sedimentation and Pollution Control measures within one week after initial construction activities commence. The Contractor shall notify Engineer within 24 hours of control measures installation for the above site visit. Engineer, within the above parameters, shall check subsequent installation of control measures.

3.3 VEGETATIVE PRACTICES

A. Mulch

- Dry straw or hay shall be applied at a depth of 2 to 4 inches by hand or mechanical equipment providing complete soil coverage. Straw or hay shall be anchored immediately after application. Straw or hay can be anchored with a disk harrow, packer disk or emulsified asphalt.
- Wood chips, sawdust or bark shall be applied at a depth of 2 to 3 inches by hand or mechanical equipment providing complete soil coverage. Netting of the appropriate size shall be used to anchor the above materials.
- 3. Cutback asphalt shall be applied at 1,200 gallons per acre or 1/4 gallon per square yard.

B. Seeding

- Seed shall be applied uniformly by hand, cyclone seeder, drill, cultipacker seeder or hydraulic seeder. Drill or cultipacker seeders shall place seed 1/4" to 1/2" deep. Soil shall be raked lightly to cover seed with soil if seeded by hand.
- During times of drought, water shall be applied at a rate not causing runoff and erosion. The soil shall be thoroughly wetted to depth insuring germination of the seed. Subsequent applications of water shall be made when needed.
- 3. Refer to Section 02485 Grassing for additional seeding requirements.

C. Sodding

 Bring soil surface to final grade. Clear surface of trash, woody debris stones and dirt clods larger than 1". Mix fertilizer into soil surface. Apply sod to soil when surface is not muddy or frozen. Lay sod with tight joints and in straight lines. Do not overlap joints. Stagger joints and do not stretch sod. On slopes steeper than 3:1, sod shall be anchored with pins or other approved methods. Installed sod shall be rolled or tamped to provide good contact between sod and soil. Irrigate sod and soil to a depth of 4" immediately after installation. Irrigation shall be used to supplement rainfall for a minimum of 2–3 weeks.

2. Refer to Section 02902 – Grassing for additional sodding requirements.

3.4 STRUCTURAL MEASURES

A. Check Dam

- Stone Shall be constructed of graded size 2–10 inch stone underlayed with a geotextile fabric. Mechanical or hand placement shall be required to insure complete coverage of entire width of ditch or swale and center of dam is lower than edges. Sediment shall be removed when it reaches a depth of one-half the original dam height or before.
- 2. Haybale Shall be staked and embedded a minimum of 4" and may be used as temporary check dams in concentrated flow areas while vegetation is becoming established. They should not be used where the drainage area exceeds one acre. Sediment shall be removed when it reaches a depth of one-half the original dam height or before.

B. Construction Exit

1. A stone stabilized pad shall be located at any point where traffic will be leaving the construction site to a public right-of-way, street, alley, sidewalk, parking area or any other area where there is a transition from bare soil to a paved area. The pad shall be constructed of 1.5" to 3.5" stone, having a minimum thickness of 6" and not less than 20' wide and 50' long. The pad shall be underlayed with a geotextile fabric. The pad shall be maintained in a condition, which will prevent tracking or flow of mud onto public rights-of-way. This may require periodic top dressing with 1.5" to 3.5" stone. All materials spilled, dropped, washed or tracked from vehicles or site onto roadways or into storm drains must be removed immediately.

C. Filter Ring

Shall surround all sides of the structure receiving runoff from disturbed areas. It shall be placed a minimum of 4' from the structure. It may also be used below storm drains discharging into detention ponds, creating a centralized area for sediment accumulation. When utilized below a storm drain outlet, it shall be placed such that it does not create a condition causing water to back-up into the storm drain and inhibit the function of the storm drain system. The larger stone can be faced with smaller filter stone on the upstream side for added sediment filtering capabilities. Mechanical or hand placement of stone shall be required to uniformly surround the structure.

 Filter ring must be kept clear of trash and debris. This requires continuous monitoring and maintenance, which includes sediment removal when one-half full. Filter rings are temporary and should be removed when the site has been stabilized.

D. Sediment Barrier

1. Hay or straw bales may be used in areas of low sheet flow rates. They shall not be use if the project duration is expected to exceed three months. Bales shall be placed in a single row, lengthwise, and embedded in the soil to a depth of 4". Bales must be securely anchored in place by stakes or bars driven through the bales or by other acceptable means to prevent displacement. Bales shall be placed so the binding wire or twine around the bale will not touch the soil. Sediment shall be removed once it has accumulated to one—half the original height of the barrier. Barriers shall remain in place until disturbed areas have been permanently stabilized. All sediment accumulated at the barrier shall be removed and properly disposed of before the barrier is removed. The slope lengths contributing runoff to a bale barrier cannot exceed those listed below.

	Maximum Slope Length
Land Slope	<u>Above Bale</u>
(Percent)	(Feet)
< 2	75
2 to 5	50
5 to 10	35
10 to 20	20
> 20	10

- 2. Silt fence may be used in areas of higher sheet flow rates. The drainage area shall not exceed ¼ acre for every 100' of silt fence. Silt fence shall not be installed across streams, ditches, waterways or other concentrated flow areas. Silt fence shall be installed according to this specification, as shown on the construction drawings or as directed by the Engineer. See details on the construction drawings for installation requirements.
 - a. Type A A 36" wide filter fabric silt fence shall be used on construction sites where the life of the project is greater than or equal to six months.
 - b. Type B A 22" wide filter fabric silt fence shall be limited to use on minor projects, such as residential home sites or small commercial developments where permanent stabilization will be achieved in less than six months.
 - c. Type C A 36" wide filter fabric silt fence with wire reinforcement shall be used where runoff flows or velocities are particularly high or where slopes exceed a vertical height of 10'. Along stream buffers and other sensitive areas, two rows of Type C silt fence or one row of Type C silt fence backed by hay bales shall be used.

 Where all runoff is to be stored behind the silt fence (where no stormwater disposal system is present), the slope lengths contributing runoff to a silt fence barrier cannot exceed those listed below.

	Maximum Slope Length
Land Slope	Above Fence
(Percent)	(Feet)
< 2	100
2 to 5	75
5 to 10	50
10 to 20	25
> 20*	15

- In areas where the slope is greater than 20%, a flat area length of 10' between the toe of the slope and the fence shall be provided.
- 4. Sediment shall be removed once it has accumulated to one-half the original height of the barrier. Filter fabric shall be replaced whenever it has deteriorated to such an extent that the effectiveness of the fabric is reduced (approximately six months). Barriers shall remain in place until disturbed areas have been permanently stabilized. All sediment accumulated at the barrier shall be removed and properly disposed of before the barrier is removed.

E. Inlet Sediment Trap

- Shall be installed at or around all storm drain inlets receiving runoff from disturbed areas. Sediment traps must be self draining unless they are otherwise protected in an approved manner that will not present a safety hazard. The drainage area entering the inlet sediment trap shall be no greater than one acre. Sediment traps may be constructed on natural ground surface, on an excavated surface or on machine compacted fill provided they have a non-erodible outlet.
- 2. Type C silt fence supported by steel posts may be used where the inlet drains a relatively flat area (slope no greater than 5%) and shall not apply to inlets receiving concentrated flows, such as in street or highway medians. The stakes shall be spaced evenly around the perimeter of the inlet a maximum of 3' apart and securely driven into the ground, approximately 18" deep. The fabric shall be entrenched 12" and backfilled with crushed stone or compacted soil. Fabric and wire shall be securely fastened to the posts and fabric ends must be overlapped a minimum of 18" or wrapped together around a post to provide a continuous fabric barrier around the inlet. The trap shall be inspected daily and after each rain. Repairs are to be made as needed. Sediment shall be removed once it has accumulated to one-half the height of the trap. Sediment shall not be washed into the inlet. It shall be removed from the sediment trap and disposed of and stabilized so it will not enter the inlet again. When the contributing drainage area has been permanently stabilized, all materials and any sediment shall be removed and either salvaged or disposed of properly. The disturbed

- area shall be brought to proper grade, smoothed and compacted. Appropriately stabilize all disturbed areas around the inlet.
- A baffle box shall be used for inlets receiving runoff with a higher volume or 3. velocity. The box shall be constructed of 2" x 4" boards spaced a maximum of 1" apart or of plywood with weep holes 2" in diameter. The weep holes shall be placed approximately 6" on center vertically and horizontally. The entire box shall be wrapped in Type C filter fabric that is entrenched 12" and backfilled. Gravel shall be placed around the box to a depth of 2" to 4". The trap shall be inspected daily and after each rain. Repairs are to be made as needed. Sediment shall be removed once it has accumulated to one-half the height of the trap. Sediment shall not be washed into the inlet. It shall be removed from the sediment trap and disposed of and stabilized so it will not enter the inlet again. When the contributing drainage area has been permanently stabilized, all materials and any sediment shall be removed and either salvaged or disposed of properly. The disturbed area shall be brought to proper grade, smoothed and compacted. Appropriately stabilize all disturbed areas around the inlet.
- 4. Sod Inlet Protection shall be used only at the time of permanent seeding, to protect the inlet from sediment and mulch material until permanent vegetation has become established. The sod shall be place to form a turf mat covering the soil for a distance of 4' from each side of the inlet structure. Sod strips shall be staggered so adjacent strip ends are not aligned. Re–sod areas where an adequate stand of sod is not obtained. New sod should be mowed sparingly. Grass height should not be less than 2" to 3".
- 5. Curb Inlet Protection shall be used on curb inlets receiving runoff from disturbed areas once pavement has been installed. Place 8" concrete blocks wrapped in filter fabric in front of the curb inlet opening. A gap of approximately 4" shall be left between the inlet filter and the inlet to allow for overflow and prevention of hazardous ponding in the roadway. This method of inlet protection shall be removed if a safety hazard is created. Sediment shall be removed from curb inlet protection immediately.

F. Storm Drain Outlet Protection

- Outlet protection aprons shall be constructed at all storm drain outlets, road culverts, paved channel outlets discharging into natural or constructed channels. Apron will extend from end of the conduit, channel or structure to the point of entry into an existing stream or publicly maintained drainage system. Apron length, width and stone size shall conform to details on the construction drawings. Apron shall be constructed with no slope along its length. Invert elevation of the downstream end of apron shall be equal to the elevation of the receiving channel invert. There shall be no overfall at the end of apron. Apron shall be located so there are no bends in the horizontal alignment.
- Subgrade for geotextile fabric and rip-rap shall follow required lines and grades shown on the construction drawings. Compact any subgrade fill required to the density of surrounding undisturbed material. Low areas in subgrade on undisturbed soil may also be filled by increasing rip-rap

thickness. Geotextile fabric shall be protected from punching or tearing during installation. Repair any damage by removing rip-rap and placing another piece of fabric over the damaged area. All connecting joints shall overlap a minimum of 1'. If damage is extensive, replace entire geotextile fabric. Rip-rap shall be placed by equipment or hand. Minimum thickness of rip-rap shall be 1.5 times the maximum stone diameter. Immediately after construction, stabilize all disturbed areas around apron with vegetation.

 Check outlet apron after heavy rains to see if any erosion around or below the rip-rap has taken or if stones have been dislodged. Immediately make all needed repairs to prevent further damage.

3.5 CHEMICAL MEASURES

A. Dust Control

 Dust raised from vehicular traffic shall be controlled by wetting down roads with water or by the use of chemicals. Chemicals shall be applied in accordance with the manufacturer's recommendations.

B. Soil Binding

- This temporary practice is intended for direct soil surface application to sites where the timely establishment of vegetation may not be feasible or where vegetative cover is absent or inadequate. This temporary practice is not intended for application to surface waters of the state. It is intended for application within construction storm water ditches and storm drains that feed into previously constructed sediment ponds or basins.
- 2. Anionic Polyacrylamide (PAM) is available in emulsions, powders, gel bars and logs. It is required that other Best Management Practices be used in combination with anionic PAM. The use of seed and mulch for additional erosion protection beyond the life of anionic PAM is recommended. Use 50' setbacks when applying anionic PAM near natural water bodies. Never add water to PAM, add PAM slowly to water. If water is added to PAM, globs can form which can clog dispensers. This signifies incomplete dissolving of PAM and therefore increases the risk of under application. Application rates shall conform to manufacturer's guidelines. maximum application rate of PAM, in pure form, shall not exceed 200pounds/acre/year. Contractors using anionic PAM shall obtain and follow all Material Safety Data Sheet requirements and manufacturer's recommendations. Gel bars and logs of anionic PAM mixtures may be used in ditch systems. This application shall meet the same testing requirements as anionic PAM emulsions and powders. Maintenance will consist of reapplying anionic PAM to disturbed areas, including high traffic areas, which interfere in the performance of this practice.

3.6 MONITORING AND REPORTING

A. Each day, when any type of construction activity takes place on the construction site, Contractor's qualified personnel shall monitor and record rainfall, inspect all

areas where petroleum products are stored, used or handled for spills and leaks from vehicles and equipment and check all locations where vehicles enter or exit the site for evidence of off site sediment tracking. These inspections shall be conducted until a Notice of Termination (NOT) is submitted. For linear construction where a phased activity is conducted, this paragraph applies to the active phase(s) of work.

- B. Once every seven calendar days and within 24 hours of the end of a storm 0.5 inches or greater, Contractor's qualified personnel shall inspect disturbed areas of the construction site that have not undergone final stabilization, areas used for storage of materials that are exposed to precipitation that have not undergone final stabilization and structural control measures (BMPs). Erosion and sediment control measures identified in the Erosion, Sedimentation and Pollution Control Plan shall be observed to ensure they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving water(s). These inspections must be conducted until a Notice of Termination is submitted. For linear construction where a phase activity is conducted, this paragraph applies to the active phase(s) of work.
- C. Contractor's qualified personnel shall inspect a least once per month during the term of the General Permit, areas of the construction site having undergone final stabilization. These areas hall be inspected for evidence of, or the potential for, pollutants entering the drainage system and receiving water(s). Erosion and sediment control measure shall be observed to ensure they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving water(s). For linear construction, monthly inspections in accordance with this paragraph shall be made for those phases on which final stabilization has been completed.
- D. Contractor shall prepare a report summarizing the scope of inspections, name(s) of qualified personnel making the inspections, date(s) of inspections, major observations relating to the implementation of the Erosion, Sedimentation and Pollution Control Plan and any actions taken. This report shall be retained on the construction site or be readily available at a designated alternate location until the entire site or portion of a construction project that was phased, has undergone final stabilization and a Notice of Termination (NOT) is submitted to EPD. Such reports shall identify any incidents of non–compliance. Where the report does not identify any incidents of non–compliance, the re report shall contain a certification that the facility is in compliance with the Erosion, Sedimentation and Pollution Control Plan and the General Permit. The report shall be signed in accordance with the General Permit.

3.7 SAMPLING AND ANALYSIS

A. Contractor must manually or automatically sample in accordance with the Comprehensive Monitoring Plan (CMP) at least once for each rainfall event described below. For a qualifying event, samples must be taken within forty-five (45) minutes of:

- The accumulation of the minimum amount of rainfall, if the storm water discharge to a monitored receiving water or from a monitored outfall has begun at or prior to the accumulation.
- The beginning of any storm water discharge to a monitored receiving water or from a monitored outfall, if the discharge begins after the accumulation of the minimum amount of rainfall.

However, where manual and automatic sampling are impossible (as defined in the permit), or are beyond the Contractor's control, the Contractor shall take samples as soon as possible, but in no case more than 12 hours after the beginning of the storm water discharge.

- B. Sampling shall occur for the following events:
 - 1. For each area of the site discharging to a receiving stream, the first rain event reaching or exceeding 0.5 inch and allows for monitoring during normal business hours* (Monday thru Friday, 8:00 a.m. to 5:00 p.m. and Saturday 8:00 a.m. to 5:00 p.m. when construction activity is being conducted by the Primary permittee) occurring after all clearing and grubbing operations are completed in the drainage area of the location selected as the sampling location;
 - 2. In addition to (1) above, for each area of the site discharging to a receiving stream, the first rain event reaching or exceeding 0.5 inch and allows for monitoring during normal business hours* occurring either 90 days after the first sampling event or after all mass grading operations are completed in the drainage area of the location selected as the sampling location, whichever comes first.
 - 3. At the time of the sampling performed pursuant to (1) and (2) above, if BMPs are found to be properly designed, installed, and maintained, no further action is required. If BMPs in any area of the site discharging to a receiving stream are not properly designed, installed, and maintained, corrective action shall be defined and implemented within two business days, and turbidity samples shall be taken from discharges of the same area for each subsequent rain event reaching or exceeding 0.5 inch during normal business hours* until the selected turbidity standard is attained, or until post–storm event inspections determine BMPs are properly designed, installed, and maintained;
 - 4. Existing construction activities, i.e., those occurring on or before the effective date of this permit, having met the sampling required by (1) above shall sample in accordance with (2). Those existing construction activities having met the sampling required by (2) above shall not be required to conduct additional sampling other than as required by (3) above.
 - * Note the Permittee may choose to meet the requirements of (1) and (2) above by collecting turbidity samples from any rain event

reaching or exceeding 0.5 inch and allows for monitoring at any time of the day or week.

- 5. For linear construction, if at any time during the life of the project, BMPs have not been properly designed, installed or maintained for the construction activities that discharge into a receiving water which is not being sampled, the Contractor shall sample that receiving water for the first rainfall event greater than or equal to 0.5 inches thereafter and for every rainfall event greater than or equal to 0.5 inches until BMPs are properly designed, installed and maintained.
- C. Sampling shall be collected by "grab samples" and the analysis of these samples must be conducted in accordance with methodology and test procedures established in the General Permit. Sample containers shall be labeled prior to collecting the samples. Samples shall be well mixed before transferring to a secondary container. Large mouth, well cleaned and rinsed glass or plastic jars shall be used for collecting samples. The jars shall be cleaned thoroughly to avoid contamination. Manual or automatic sampling shall be utilized. Samples required by the General Permit shall be analyzed immediately, but in no case later than 48 hours after collection. However, samples from automatic samplers must be collected no later than the next business day after their accumulation, unless flow through automated analysis is utilized. Samples are not required to be cooled. Samples taken for the purpose of compliance with the General Permit shall be representative of the monitored activity and representative of the water quality of the receiving water(s) and/or the storm water outfalls using the following minimum quidelines:
 - The upstream sample for each receiving water(s) must be taken immediately upstream of the confluence of the first storm water discharge from the permitted construction site but downstream of any other storm water discharges not associated with the site. Where appropriate, several upstream samples from across the receiving water(s) may need to be taken and the average turbidity of these samples used for an upstream turbidity value.
 - 2. The downstream sample for each receiving water(s) must be taken downstream of the confluence of the last storm water discharge from the construction site but upstream of any other storm water discharge not associated with the site. Where appropriate, several downstream samples from across the receiving water(s) may need to be taken and the average turbidity of these samples used for a downstream turbidity value.
 - 3. Samples shall be taken from the horizontal and vertical center of the receiving water(s) or the storm water outfall channel(s).
 - 4. Care shall be taken to avoid stirring the bottom sediments in the receiving water(s) or in the outfall storm water channel(s).
 - 5. Sampling container shall be held so the opening faces upstream.
 - Samples shall be kept from floating debris.

- D. For all construction sites and common developments other than linear construction projects, the Contractor shall sample all receiving water(s), or all outfall(s) or a combination of receiving water(s) and outfall(s). For linear construction projects, the Contractor must sample all perennial and intermittent streams and other water bodies shown on an USGS topographic map and all other field verified perennial and intermittent streams and other water bodies, or all outfalls into such streams and other water bodies, or a combination thereof.
- E. Contractor shall provide and implement all safety equipment and procedures necessary for sampling during hazardous weather conditions and in the event of biological, chemical or physical hazards
- F. Contractor shall submit a summary of the monitoring results to the EPD at the address shown in the General Permit by the fifteenth day of the month following the reporting period. For a monitoring period during which no qualifying rainfall events occur, a monitoring report must be submitted stating such. Monitoring periods are calendar months beginning with the first month after the effective date of the General Permit. Monitoring reports shall be signed in accordance with the General Permit and submitted to EPD until such time as a NOT is submitted.
- G. Contractor must retain copies of all monitoring results and monitoring information reported. In addition to other record keeping requirements, the monitoring information shall include:
 - Date, exact place and time of sampling or measurements.
 - Name(s) of the individual(s) who performed the sampling and measurements.
 - Date(s) analyses were performed.
 - Time(s) analyses were initiated.
 - 5. Name(s) of the individual(s) who performed the analyses.
 - 6. References and written procedures, when available, for the analytical techniques or methods used. A quality control/quality assurance program must be included in the written procedures.
 - 7. The results of such analyses, including the bench sheets, instrument readouts, computer disks or tapes, used to determine these results.
 - 8. Results exceeding 1,000 NTU shall be reported as "Exceeds 1,000 NTU."
- H. Suggested monitoring and report forms are found at the end of this section.

End of Section

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SECTION 02231

AGGREGATE BASE COURSE

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Aggregate base course.

1.2 RELATED SECTIONS

- A. Section 01700 Measurement and Payment: Requirements applicable to unit prices for the work of this section.
- B. Section 02200 Earthwork

1.3 OMITTED

1.4 REFERENCES (LATEST REVISION)

- A. ASTM C 131 Resistance to Degradation of Small–Size Course Aggregate by Abrasion and Impact in the Lost Angeles Machine.
- B. ASTM D 1557 Laboratory Compaction Characteristics of Soil Using Modified Effort.
- C. ASTM D 6938 In–Place Density and Water Content of Soil and Soil–Aggregate by Nuclear Methods (Shallow Depth).
- D. ASTM D 3740 Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock Used in Engineering Design and Construction.
- E. ASTM E 329 Agencies Engaged in Construction Inspection and/or Testing.

1.5 QUALITY ASSURANCE

A. Perform work in accordance with the <u>Georgia Department of Transportation Standard Specifications Construction of Transportation Systems</u>, 2013 Edition (Latest Revision).

1.6 TESTING

- A. Laboratory tests for moisture density relationship for fill materials shall be in accordance with ASTM D 1557, (Modified Proctor).
- B. In place density tests in accordance with ASTM D 6938.
- C. Testing laboratory shall operate in accordance with ASTM D 3740 and E 329 and be acceptable to the Engineer.

- D. Testing laboratory and Project Engineer/Project Representative shall be given a minimum of 48 hours notice prior to taking any tests.
- E. Testing shall be Contractor's responsibility and performed at Contractor's expense by a commercial testing laboratory operating in accordance with subparagraph C above.
- F. Test results shall be furnished to the Engineer prior to continuing with associated or subsequent work.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Aggregate shall consist of processed and blended crushed granite stone. Aggregates shall be free from lumps and balls of clay, organic matter, objectionable coatings, and other foreign material and shall be durable and sound. Coarse aggregate shall have a percentage of wear not to exceed 65% after 500 revolutions as determined by ASTM C 131. Coarse aggregate shall meet applicable requirements of Section 800, Coarse Aggregate of the Georgia Department of Transportation Standard Specifications Construction of Transportation Systems, 2013 Edition. Material shall meet the following gradation requirements of Section 815.

Sieve Size	Percent by Weight Passing
2"	100
1–1/2"	97 – 100
3/4"	60 - 90
#10	25 - 45
#60	5 - 30
#200	4 – 11

B. Prime Coat: Shall consist of low viscosity liquid asphalt such as MC-30, MC-70, MC-250, RC-30, RC-70, or RC-250, conforming to Section 412 of the <u>Georgia Department of Transportation Standard Specifications Construction of Transportation Systems</u>, 2013 Edition.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify subbase has been tested, is dry, and slopes and elevations are correct.
- B. ON SITE OBSERVATIONS OF WORK: The Owner's Representative or Engineer will have the right to require any portion of the work be completed in their presence and if the work is covered up after such instruction, it shall be exposed by the Contractor for observation at no additional cost to the Owner. However, if the Contractor notifies the Owner such work is scheduled, and the Owner fails to appear within 48 hours, the Contractor may proceed. All work completed and materials furnished shall be subject to review by the Owner, Engineer or Project

Representative. Improper work shall be reconstructed, and all materials, which do not conform to the requirements of the specifications, shall be removed from the work upon notice being received from the Engineer for the rejection of such materials. Engineer shall have the right to mark rejected materials to distinguish them as such.

Contractor shall give the Owner, Project Engineer or Project Representative a minimum of 48 hours notice for all required observations or tests.

3.2 PREPARATION

- A. Subbase shall be graded and shaped conforming to the lines, grades, and cross sections required and cleaned of all foreign substances prior to constructing base course. Do not place base on soft, muddy or frozen surfaces. Correct irregularities in subbase slope and elevation by scarifying, reshaping, and recompacting.
- B. At the time of base course construction, subbase shall contain no frozen material.
- C. Surface of subbase shall be checked by the Engineer or Project Representative for adequate compaction and surface tolerances. Ruts or soft yielding spots appearing in areas of subbase course having inadequate compaction, and areas not smooth or which vary in elevation more than 3/8 inch above or below required grade established on the plans, shall be corrected to the satisfaction of the Engineer or Project Representative. Base material shall not be placed until subbase has been properly prepared and test results have so indicated.

3.3 AGGREGATE PLACEMENT

- A. Aggregate shall be placed with an acceptable spreader in accordance with Georgia Department of Transportation Standard Specifications Construction of Transportation Systems, 2013 Edition Section 310 and in accordance with all terms included in these specifications. (Spreader shall contain a hopper, adjustable screed and designed so there will be a uniform, steady flow of material from the hopper. Spreader shall be capable of laying material without segregation across full width of the lane to a uniform thickness and to a uniform loose density.) Spreaders are not required on curb and gutter road sections.
- B. Level and contour surfaces to elevations and slopes indicated.
- C. Add small quantities of fine aggregate to coarse aggregate as appropriate to assist compaction.
- Add water to assist compaction. If excess water is apparent, remove aggregate and aerate to reduce moisture content.
- E. Use mechanical tamping equipment in areas inaccessible to compaction equipment.
- F. While at optimum moisture (\pm 1–1/2%), compact base course with rollers capable of obtaining required density. Vibratory, flatwheel, and other rollers accepted by the Engineer may be used to obtain required compaction. Rolling shall continue until base is compacted to 98% of the maximum laboratory dry density as

determined by ASTM D 1557. In-place density of the compacted base will be determined in accordance with ASTM D 6938.

3.4 PRIME COAT

- A. Bituminous material for the prime coat shall be applied uniformly and accurately in quantities of not less than 0.15 gallons per square yard nor more than 0.30 gallons per square yard of base course. All irregularities in the base course surface shall be corrected prior to application of prime coat. Clean the base course of all mud, dirt, dust, and caked and loose material
- B. Do not apply prime to a wet surface nor when temperature is below 40°F in the shade. Do not apply prime when rain threatens nor when weather conditions prevent proper construction and curing of prime coat.
- C. The primed base should be adequately cured before the binder or surface course is laid. In general, a minimum of 48 hours should be allowed for complete curing. Ordinarily, proper surface condition of the prime is indicated by a slight change in the shiny black appearance to a slightly brown color.

3.5 TOLERANCES

- A. Flatness: Maximum variation of 1/4 inch measured with an acceptable 10-foot straight edge.
- B. Scheduled Compacted Thickness: Within 3/8 inch.
- C. Variation from Design Elevation: Within 3/8 inch.
- D. Depth measurements for compacted thickness shall be made by test holes through the base course. Where base course is deficient, correct such areas by scarifying, adding base material and recompacting as directed by the Engineer.

3.6 FIELD QUALITY CONTROL

- A. Density and moisture testing will be performed in accordance with ASTM D 1557 and ASTM D 6938.
- B. If tests indicate Work does not meet specified requirements, remove Work, replace, and retest.
- C. Frequency of Tests:
 - 1. Base Density and Thickness One test per 5,000 square feet.

END OF SECTION