



Savannah Airport Commission

Bidding & Contract Documents,
General Conditions, & Technical
Specifications for

Special Inspections, Material Testing &
Quality Control for

Security Checkpoint Expansion

SAC JOB ID: 30566

September 2022



SAVANNAH AIRPORT COMMISSION

Special Inspections, Material Testing & Quality Control for SAC 30566 – Security Checkpoint Expansion

TABLE OF CONTENTS

TITLE

NOTICE TO BIDDERS	N-1
INSTRUCTIONS TO BIDDERS	I-1 TO I-6
BIDDER'S CHECKLIST	P-0.1 TO P-0.2
PROPOSAL FORM	P-1 TO P-3
BID SCHEDULE	P-4 TO P-7
EQUAL OPPORTUNITY REPORT STATEMENT	P-8
CERTIFICATE ON NON-SEGREGATED FACILITIES	P-9
DBE REQUIREMENTS	P-10 TO P-14
DBE ASSURANCE FORM	P-15
DBE NOTICE OF INTENT TO SUBCONTRACT	P-16
DBE SUBCONTRACTORS LIST	P-17
VERIFICATION OF PAYMENTS	P-18
DBE UTILIZATION FORM	P-19
SUBCONTRACTORS LIST	P-20
CONTRACT	C-1 TO C-2
GENERAL CONDITIONS OF THE CONTRACT	GC-1 TO GC-8
TESTING REQUIREMENTS	GC-8
TESTING LAB ACCREDITATION	GC-9 TO GC-10
 P-501 MATERIAL ACCEPTANCE	 P-501-1 TO P-501-9

SAVANNAH AIRPORT COMMISSION

NOTICE TO BIDDERS

Sealed proposals will be received by the Mayor and Aldermen of the City of Savannah and the Savannah Airport Commission in the office of the Savannah Airport Commission Engineering Department, 400 Airways Ave., Third Floor, Savannah, GA 31408 until **Tuesday, September 20th, 2022, 1:30 pm EST**, at which time and place all proposals received will be opened and read aloud.

Bidders are invited to submit proposals for:

Special Inspections, Material Testing & Quality Control for

Security Checkpoint Expansion

SAC JOB ID 30566

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, ext. 4478.

No Bid Bond will 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 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 as defined in 49 CFR Part 26 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.

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 or irregularities in or reject any or all bids and to award or refrain from awarding the Contract for the Work.

SAVANNAH AIRPORT COMMISSION

INSTRUCTIONS TO BIDDERS

I. GENERAL

- A. Licenses. The successful Bidder must be a licensed Contractor as required by the Georgia State Licensing Board and will be required to obtain any and all necessary licenses or permits to conduct the work as may be prescribed by the State of Georgia and by the City of Savannah.
- B. Testing Lab Accreditation. All federally funded construction projects costing \$250,000 and more require that the testing laboratory be accredited in accordance with AC 150/5370-10H, dated December 21st, 2018.
- C. 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 an essentially accurate indication of the physical conditions at the site. This, however, shall not relieve the Bidders of ascertaining for themselves the conditions or expected site conditions for construction of the project. The Owner will not be responsible for any unforeseen conditions of the site encountered during construction.
- D. Nondiscrimination and Segregated Facilities
 - 1. Bidders must comply with the President's Executive Order No. 11246, amended by 13672 on July 21, 2014, which prohibits discrimination in employment regarding race, creed, color, sex or national origin.
 - 2. 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 FAA, or the Secretary of Labor, the City of Savannah or the Savannah Airport Commission may require. All such information required of a subcontractor shall be furnished by the Contractor.
 - 3. The Equal Opportunity Report Statement, Certification of Non-segregated Facilities, Equal Opportunity Clause, and all other EEO requirements shall be included in all non-exempt 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 non-complying 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

1. 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.
2. Bidders shall comply with all state laws and 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-3. After the contract has been awarded, the Contractor shall secure from all subcontractors the form titled “Subcontractor Affidavit and Agreement”, page I-4, which must be submitted to the Savannah Airport Commission prior to the subcontractor beginning work at the site.

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.

Company Name

EEV/Basic Pilot Program* User Identification No.

Signature: Authorized Officer or Agent

Date

Printed Name of Authorized Officer or Agent

Title of Authorized Officer or Agent of Contractor

SUBSCRIBED AND SWORN BEFORE ME

ON THIS THE _____ DAY OF _____, _____.

Notary Public: _____

(Notary Seal)

My Commission Expires: _____

* 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 verifies its compliance with O.C.G.A. 13-10-91, stating affirmatively that the individual, firm or corporation which is engaged in the physical performance of services under a contract with _____ on behalf of 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.

Company Name

EEV/Basic Pilot Program* User Identification No.

Signature: Authorized Officer or Agent

Date

Printed Name of Authorized Officer or Agent

Title of Authorized Officer or Agent of Contractor

SUBSCRIBED AND SWORN BEFORE ME

ON THIS THE _____ DAY OF _____, _____.

Notary Public: _____

(Notary Seal)

My Commission Expires: _____

* 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. General Bond Requirements

1. No Bid Bonds required.

II. PREPARATION AND SUBMISSION OF PROPOSALS

- A. Sealed proposals for the special inspections, material testing, and quality control of the project will be received until **1:30 PM, local time, September 20th, 2022**. Proposals shall be delivered to the **Savannah Airport Commission, Engineering Department, 400 Airways Ave., Savannah, GA 31408**. Bids received after 1:30pm will be considered non-responsive.
- 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 left hand corner: **"SAC 30566 SPECIAL INSPECTIONS, MATERIAL TESTING & QUALITY CONTROL FOR SECURITY CHECKPOINT EXPANSION."**
- D. The Bidder's envelope shall contain the signed original and one complete copy of the following documents:
 1. Bidder's Checklist
 2. Proposal Form
 3. Bid Schedule
 4. Equal Employment Opportunity Report Statement
 5. Disadvantaged Business Enterprise Assurance
 6. Certificate of Non-Segregated Facilities
 7. Bidder Qualification Questionnaire
 8. E-Verify Form for Prime Contractor
- 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 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 Bidder is required to fill in all the blank spaces on the Proposal and Bid Schedule.

III. 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.

IV. 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 Owner proposes to award the Contract to the lowest qualified Bidder submitting a reasonable Bid.
- C. The Mayor and Aldermen of the City of Savannah and the Savannah Airport Commission reserve the right to waive any informalities, irregularities, or technicalities in or reject any and all bids and/or to award or refrain from awarding the Contract for the Work.

END OF INSTRUCTIONS TO BIDDERS

SAVANNAH AIRPORT COMMISSION

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 OF BIDDER:	
ADDRESS (STREET, UNIT):	
ADDRESS (CITY, STATE, ZIP):	
PHONE NUMBER:	
EMAIL ADDRESS:	

INSTRUCTIONS TO BIDDERS

The contents of your bid package must be clearly marked and submitted **IN THE FOLLOWING ORDER**: 1) acknowledgement of addendum, 2) bid bond, 3) the bid proposal page, 4) DBE goals, 5) DBE good faith efforts, and 6) Total amount of bid. Please place a check mark in the appropriate space and indicate the number of addendums received:

1) Addendum received? Yes ☐ No ☐

Indicate number of addendums received: _____

2) Are all signature pages of the bid proposal signed? Yes ☐ No ☐

3) Total Amount of Bid: \$ _____

IF THE FOLLOWING DOCUMENTS ARE NOT COMPLETED AND ENCLOSED WITH THE BID PACKAGE, THE BID MAY BE DISQUALIFIED. CHECK APPROPRIATE SPACE:

- | | | |
|---|------------------------------|-----------------------------|
| 1. Bidder's Checklist | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| 2. Proposal Form | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| 3. Bid Schedule | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| 4. Equal Employment Opportunity Statement | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| 5. Disadvantaged Business Enterprise Assurance Form | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| 6. Certificate of Non-Segregated Facilities | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| 7. Bidder Qualification Questionnaire | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| 8. E-Verify Form for Prime Contractor | Yes <input type="checkbox"/> | No <input type="checkbox"/> |

Certified By: _____
(Name) (Title)

Signature: _____

FOR COMMISSION USE ONLY

Verification of Bid Package Content:

1) Addendum Received: Yes ☐ No ☐

Indicate number of addendums received: _____

2) Bid Proposal Pages Signed: Yes ☐ No ☐

I certify that the above items were/were not included with the attached bid at the time and place of the bid opening.

(Signature)

(Date)

(Printed Name)

(Title)

SAVANNAH AIRPORT COMMISSION

PROPOSAL FORM

TO: Mayor and Aldermen of the
City of Savannah and the
Savannah Airport Commission

FROM: _____
Bidder's Name

Address

City, State and Zip Code

Phone Number

E-mail Address

- A. The undersigned, as Bidder, does hereby declare that he has familiarized himself with the local conditions affecting the cost of the work, the Contract Documents including the "Notice to Bidders", "Instructions to Bidders", "Proposal", "Bid Schedule", "General Conditions", and the specifications and drawings and other related construction documents, together with any addenda to such construction documents as listed herein 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."
- B. 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.
- C. 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.
- D. 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) calendar days from the date on the Notice of Acceptance, for the execution of the work described in the period of time.
- E. In submitting this Bid, it is understood that the right is reserved by the Owner to waive formalities, technicalities, and irregularities, and to reject all Bids and to negotiate with apparent qualified low Bidder if necessary. It is agreed that THIS BID MAY NOT BE WITHDRAWN FOR A PERIOD OF NINETY (90) DAYS AFTER the opening thereof.

F. The undersigned affirms that he has completed all the blank spaces in the Bid Schedules with an amount in words and/or 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 take precedence and 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.

G. The legal status of the undersigned is: (The Bidder shall complete appropriate portion of form (1., 2., or 3.) and strike out the other two.)

1. A corporation duly organized and doing business under the laws of the State of _____, for whom bearing official title of _____, whose signature is affixed to this Bid, is duly authorized to execute contracts.

If a Foreign Corporation or non-State of Georgia Corporation: date of qualification in _____ (State).

Name and address of Agent for Process: _____
(Process in the State of Georgia): _____

(Out of State Contractor shall also provide name and address of process agent in the State of Georgia.)

2. A partnership, all of the members of which, with addresses are: (Designate general partners as such.)

If all partners are non-residents of Georgia: Designate name and address of agent required for service of process located in the state Georgia.

3. An individual, whose signature is affixed to this bid. (If non-residents of Georgia. (Designate name and address of agent required for service of process located in the state of Georgia.)

Dated and signed this _____ day of _____, 2022.

NAME OF BIDDER: _____

BY: _____

TITLE: _____

BUSINESS ADDRESS: _____

PHONE NO. () _____

GEORGIA TAX
REGISTRATION NO. _____

WITNESS: _____

END OF PROPOSAL FORM

SECURITY CHECKPOINT EXPANSION - SAC JOB ID 30566				
QUALITY ASSURANCE TESTING				
BID SCHEDULE NO. 1				
Test Description	Quan.	Unit	Unit Rate	Total
SOIL TESTS:				
A. Compaction and Stabilization (D1557)	2	Each		
B. Nuclear Density Test (D6938)	10	Each		
C. Sand Cone Density Test (D1556)	2	Each		
D. Utility Installation Observation (on site)	10	Hour		
E. Natural Sample Moisture Content	2	Each		
F. Grain-Size Analysis - Full Gradation (C117)	2	Each		
G. *Stand-By	10	Hour		
CONCRETE MATERIALS:				
A. Concrete Flexural Strength Tests (Min Two (2) Beams Per Sub-lot	8	Each		
B. Slump Test	4	Each		
C. Air Content Test (C231)	4	Each		
D. *Stand-By	10	Hour		
E. **Concrete Compressive Test (2 cysl per sub lot) Slump, air	4	Each		
AGGREGATE TESTING:				
A. Sodium Soundness (C88) and LA Abrasion (C131)	1	Test		
B. Grain Size Determination				
1. Full Grain Size (8 Sieves)	1	Test		
2. Wash Through (#200)	1	Test		
C. Sieve Analysis - Coarse Aggregate	1	Test		
BID SCHEDULE NO. 1 - TOTAL:				
*Stand-By time will only be used if there is a delay caused by the contractor or other reason. This time is not to be used for a basis of time compilation for schedule trips to the site for testing. Technician time shall be included in the costs for each respective test.				
**If required.				
Each respective test shall also include all time for mileage, travel, administrative duties, reviews, material, labor, reports, and all other items associated with the testing.				
Each test shall also include all time for mileage, travel, administrative duties, reviews, material reports, and all other items associated with testing.				
Tests shall be taken as directed by SAC Engineering. This work is meant to provide Special Inspections & Quality Assurance Testing for the Security Checkpoint Expansion project. Testing frequency shall be based on SAC Engineering guidelines.				

SECURITY CHECKPOINT EXPANSION - SAC JOB ID 30566				
SPECIAL INSPECTIONS				
BID SCHEDULE NO. 2				
Material /Activity	Services	Hours	Unit Rate	Total
1704.2.6 Inspection of Fabricators				
Verify fabrication/quality control procedures	In-plant review (3)	2		
1705.2 Steel Construction				
1. Fabricator and erector documents (Verify reports and certificates as listed in AISC 360, chapter N, paragraph 3.2 for compliance with construction documents).	Submittal Review	2		
2. Material verification of structural steel.	Shop (3) and field inspection	16		
3. Embedments (Verify diameter, grade, type, length, embedment. See 1705.3 for anchors).	Field Inspection	40		
4. Verify member locations, braces, stiffeners, and application of joint details at each connection comply with construction documents.	Field Inspection	120		
5. Structural Steel Welding:				
a. Inspection tasks Prior to Welding (Observe, or perform for each welded joint or member, the QA tasks listed in AISC 360-16, Table C-N5.4-1).	Shop (3) and field inspection	80		
b. Inspection tasks During Welding (Observe, or perform for each welded joint or member, the QA tasks listed in AISC 360-16, Table C-N5.4-2).	Shop (3) and field inspection	100		
c. Inspection tasks After Welding (Observe, or perform for each welded joint or member, the QA tasks listed in AISC 360-16, Table C-N5.4-3).	Shop (3) and field inspection	100		
d. Non-destructive testing (NDT) of welded joints: See Commentary				
1) Complete penetration groove welds 5/16" or greater in risk category III or IV.	Shop (3) of field ultrasonic testing - 100%	16		
2) Thermally cut surfaces of access holes when material 1>2".	Shop (3) or field magnetic Particle or Penetrant testing	8		
3) Welded joints subject to fatigue when required by AISC 360, Appendix 3, Table A-3.1	Shop (3) or field radiographic or Ultrasonic testing	12		
4) Fabricator's NDT reports when fabricator performs NDT	Verify reports	8		
6. Structural Steel Bolting:				
a. Inspection tasks Prior to Bolting (Observe, or perform tasks for each bolted connection, in accordance with QA tasks listed in AISC 360-16, Table C-N5.6-1).	Observe or perform as noted (4)	60		
b. Inspection tasks During Bolting (Observe the QA tests listed in AISC 360-16, Table C-N5.6-2).	Observe (4)	60		
1) Pre-tensioned and slip-critical joints				
a) Turn-of-nut with matching markings				
b) Direct tension indicator				
c) Twist-off-type tension control bolt				
d) Turn-of-nut without matching markings				
e) Calibrated wrench				
2) Snug-tight joints				
c. Inspection tasks After Bolting (Perform tasks for each bolted connection in accordance with QA tasks listed in AISC 360, Table C-N5.6-3).	Perform (4)	40		
1705.2.2 Steel Construction Other Than Structural Steel				
1. Material verification of cold-formed steel deck:		40		
a. Identification markings	Field Inspection			
b. Manufacturer's certified test reports	Submittal Review			
2. Connection of cold-formed steel deck to supporting structure:	Shop (3) and field inspection	80		
a. Welding				
b. Other fasteners (in accordance with AISC 360, Section N6).				
1) Verify fasteners are in conformance with approved submittal.				
2) Verify fastener installation is in conformance with approved submittal and manufacturer's recommendations.				
3) Verify temporary restrictive/bracing are installed in accordance with the approved truss submittal package.				
1705.3 Concrete Construction				
1. Inspection of reinforcing steel installation (see 1705.2.2 for welding)	Shop (3) and field inspection	40		
2. Inspection of anchors cast in concrete where allowable loads have been increased per section 1908.5 or where strength design is used.	Shop (3) and field inspection	24		
3. Inspection of anchors and reinforcing steel post-installed in hardened concrete: Per research reports including verification of anchor type, anchor dimensions, hole dimensions, hole cleaning procedures, anchor spacing, edge distances, concrete minimum thickness, anchor embedment and tightening torque.	Field Inspection	24		
4. Verify use of approved design mix.	Shop (3) and field inspection	4		
5. Fresh concrete sampling, perform slump and air content tests and determine temperature of concrete.	Shop (3) and field inspection	16		
6. Inspection of concrete and shotcrete placement for proper application techniques.	Shop (3) and field inspection	10		
7. Inspection for maintenance of specified curing temperature and techniques.	Shop (3) and field inspection	10		
8. Inspection of formwork for shape, lines, location, and dimensions.	Field Inspection	16		
9. Concrete strength testing and verification of compliance with construction documents.	Field testing and review of laboratory reports	16		

1705.4 Masonry Construction (Verify the Following are in Compliance at START of Construction) (ACI 530-13 Table 3.1.2 & 3.1.3)				
(A) Level A, B and C Quality Assurance:				
1. Verify compliance with approved submittals	Field Inspection	40		
1705.4 Masonry Construction (Verify the Following are in Compliance PRIOR to Grouting) (ACI 530-13 Table 3.1.2 & 3.1.3)				
(B) Level B Quality Assurance:				
1. Verification of f_m and f_{acc} prior to construction	Testing by unit strength method or prism test method	16		
(C) Levels B and C Quality Assurance:				
1. Verification of Slump Flow and Visual Stability Index (VSI) of self-consolidating grout as delivered to the project.	Field testing and review of laboratory reports	8		
2. Verify compliance with approved submittals.	Field Inspection	8		
3. Verify proportions of site-mixed mortar, grout and prestressing grout for bonded tendons.	Field Inspection	8		
4. Verify grade, type, and size of reinforcement and anchor bolts, and prestressing tendons and anchorages.	Field Inspection	12		
5. Verify construction of mortar joints.	Field Inspection	8		
6. Verify placement of reinforcement, connectors, and prestressing tendons and anchorages.	Field Inspection	24		
7. Verify grout space prior to grouting.	Field Inspection	4		
8. Verify placement of grout and prestressing grout for bonded tendons.	Field Inspection	8		
1705.4 Masonry Construction (Verify the Following are in Compliance DURING Construction) (ACI 530-13 Table 3.1.2 & 3.1.3)				
(C) Levels B and C Quality Assurance:				
9. Verify size and location of structural masonry elements.	Field Inspection	8		
10. Verify types, size, and location of anchors, including details of anchorage of masonry to structural members, frames, or other construction.	Field Inspection	8		
11. Verify welding of reinforcement (see 1705.2.2).	Field Inspection	8		
12. Verify preparation, construction, and protection of masonry during cold weather (temperature below 40°F) or hot weather (temperature above 90°F).	Field Inspection	8		
13. Observe preparation of prisms.	Field Inspection	8		
1705.6 Soils				
1. Verify materials below foundations are adequate to achieve the design bearing capacity. Augur cast pile installation	Field Inspection	16		
2. Verify excavations are extended to proper depth and have reached proper material.	Field Inspection	16		
3. Perform classification and testing of controlled fill materials.	Field Inspection	16		
4. Verify use of proper materials, densities, and lift thicknesses during placement and compaction of controlled fill.	Field Inspection	16		
5. Prior to placement of controlled fill, observe subgrade and verify that site has been prepared properly.	Field Inspection	8		
*During fill placement, the Special Inspector shall verify that proper materials and procedures are used in accordance with the provisions of the approved geotechnical report				
1705.8 Cast-In-Place Deep Foundations				
1. Inspection drilling operations and maintain accurate records for each element.	Field Inspection	40		
2. Verify placement locations and plumbness, confirm element diameters, lengths, and accurate end-bearing strata capacity. Record concrete or grout volumes.	Field Inspection	40		
1705.10.3 Wind-resisting Components				
1. Roof cladding	Shop (3) and field inspection	60		
2. Wall cladding	Shop (3) and field inspection	60		
1705.11.5 Architectural Components Special Inspections for Seismic Resistance				
1. Inspection during the erection and fastening of exterior cladding and interior and exterior veneer.	Field Inspection	40		
2. Inspection during the erection and fastening of interior and exterior nonbearing walls.	Field Inspection	40		
1705.11.6 Mechanical and Electrical Components Special Inspections for Seismic Resistance				
1. Inspection during the anchorage of electrical equipment for emergency or standby power systems.	Field Inspection	40		
1705.16 Fire-Resistant Penetrations and Joints [1705.17]				
1. Inspections of penetration firestop systems conducted in accordance with ASTM E 2174.	Field Inspection	24		
2. Inspections of fire-resistant joint systems conducted in accordance with ASTM E 2393	Field Inspection	40		
BID SCHEDULE NO. 2 - TOTAL:				
BID SCHEDULE NO. 1 & NO. 2 - GRAND TOTAL:				

SAVANNAH AIRPORT COMMISSION

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 **SPECIAL INSPECTIONS, MATERIAL TESTING & QUALITY CONTROL FOR SECURITY CHECKPOINT EXPANSION.**

TOTAL AMOUNT BID: \$_____

TOTAL AMOUNT BID WRITTEN IN WORDS: _____

NAME OF BIDDER: _____

BY: _____

TITLE: _____

BUSINESS: _____

ADDRESS: _____

WITNESS: _____

WITNESS: _____

SAVANNAH AIRPORT COMMISSION
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:

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: _____
(SIGNATURE)*

TITLE: _____

DATE: _____

** Must be same signature on Bid Proposal*

END OF EQUAL OPPORTUNITY REPORT STATEMENT

SAVANNAH AIRPORT COMMISSION

CERTIFICATE OF NON-SEGREGATED FACILITIES

CERTIFICATION TO BE SUBMITTED BY CONSTRUCTION CONTRACTORS OF APPLICANTS AND THEIR SUBCONTRACTORS (APPLICABLE TO CONSTRUCTION CONTRACTS AND RELATED SUBCONTRACTS EXCEEDING TEN THOUSAND (\$10,000.00) DOLLARS (US) WHICH ARE NOT EXEMPT FROM THE EQUAL OPPORTUNITY CLAUSE.)

The federally assisted Construction Contractor certifies that he does not maintain or provide, for his employees, any segregated facilities at any of his establishments and that he does not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. The federally assisted Construction Contractor certifies that he will not maintain or provide, for his employees, segregated facilities at any of his establishments and that he will not permit his employees to perform their services at any location under his control, where segregated facilities are maintained. The federally assisted Construction Contractor agrees that a breach of this certification is a violation of the equal opportunity clause in this contract. As used in this certification, the term "segregated facilities" means any waiting room, work areas, restrooms and washrooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directives or are in fact segregated on the basis of race, color, religion, or national origin because of habit, local custom, or any other reason. The federally assisted Construction Contractor agrees that (except where he has obtained identical certifications from proposed subcontractors for specific time periods) he will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding ten thousand (\$10,000.00) dollars (US) which are not exempt from the provisions of the equal opportunity clause and that he will retain such certifications in his files.

Signature of Contractor

Title

Printed Name of Contractor

END OF CERTIFICATE OF NON-SEGREGATED FACILITIES

SAVANNAH AIRPORT COMMISSION

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)

1. 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.
2. To review 49 CFR Part 26 in its entirety, go to www.osdbu.dot.gov. Select DBE Program, click on 49 CFR 26, and review the Federal Regulation.

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, or 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, or Contractors shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of Contracts.

D. COMPLIANCE

All Contractors or subcontractors for U.S. DOT-assisted contracts are hereby notified that failure to carry out the U.S. DOT policy and the DBE obligation, as set forth herein for this project, shall constitute a breach of contract which may result in termination of the contract or such other remedy as deemed appropriate by the Savannah Airport Commission. The Savannah Airport Commission has the right to revise these program specifications at any time before or during the project by addendum or amendment in order to comply with FAA Regulations and/or directives.

1. The Savannah Airport Commission has the right, at its sole discretion, to accept or reject any DBE participation (and/or percentage of) and accept or reject any good-faith efforts.

E. CONTRACT ASSURANCE (49 CFR Part 26.13[b])

The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of U.S. DOT-assisted contracts. As outlined above, failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the Commission may deem appropriate.

F. SUBCONTRACT CLAUSES

These DBE Requirements shall be made a part of each agreement with all contractors and subcontractors on U.S. DOT-assisted contracts.

G. CONTRACT AWARD ELIGIBILITY

1. Bidders, Prospective Contractors, or Contractors are hereby advised that meeting DBE subcontract goal or making a documented good-faith effort to meet such goal to the satisfaction of the Savannah Airport Commission in their sole discretion is a condition of being awarded this DOT-assisted contract.
2. The Savannah Airport Commission proposes to award the contract to the lowest responsive Bidder, Prospective Contractor, or Contractor submitting a reasonable bid provided the Bidder, Prospective Contractor, or Contractor has met the goal for DBE participation or, if failing to meet the goal, the Bidder, Prospective Contractor, or Contractor has documented an acceptable good-faith effort to meet the established goal for DBE participation. The Bidder, Prospective Contractor, or Contractor is advised that the Savannah Airport Commission at its sole discretion will determine whether or not the Bidder, Prospective Contractor, or Contractor has made an acceptable good-faith effort towards meeting the DBE goal to qualify for contract award. The Savannah Airport Commission has the right to reject any and all bids submitted and accept or reject any good-faith efforts.

H. SUBCONTRACT GOAL

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

RACE-NEUTRAL – 0% TO BE PERFORMED BY DBEs

I. AVAILABLE CERTIFIED DBEs

1. This contract is subject to the certification procedures outlined in 49 CFR Part 26.81 – Unified Certification Program (UCP). The UCP is administered by the Georgia Department of Transportation (GDOT).
2. The Georgia Department of Transportation (GDOT) has developed a Disadvantaged Business Enterprise (DBE) Directory for the Unified Certification Program. The Directory is available by contacting the Georgia Department Transportation Civil Rights Office on line at www.dot.state.ga.us. The GDOT may be reached by telephone at (404) 631-1972.
3. According to 49 CFR Part 26.81, subparagraph (c) “all certifications by UCPs shall be pre-certifications; i.e., certifications that have been made final before the due date for bids or offers on a contract on which a firm seeks to participate as a DBE.”
4. For this contract, only those DBE firms that are certified under the UCP as administered by the GDOT shall be acceptable. Firms who desire certification, must complete the GDOT Uniform Certification Application in its entirety (as applicable), which can be obtained from the GDOT’s website: www.dot.state.ga.us. You may also contact the Georgia Department of Transportation Office at (404) 631-1972.

J. DBE PARTICIPATION COUNTED TOWARD GOAL (49 CFR Part 26.55)

Bidders, Prospective Contractors, or Contractors shall apply the standards outlined by 49 CFR Part 26.55 when determining how DBE participation is to be counted towards the goal on this contract. Please refer to www.osdbu.dot.gov. Select DBE Program, click on 49 CFR 26, and scroll to Part 26.55 – “How is DBE participation counted towards goal?”

K. BIDDER’S REQUIRED SUBMISSION

1. The following documents must include the information requested and be submitted with the Bid Proposal:
 - a. **DBE ASSURANCE FORM**
2. The following documents must include the information requested and be submitted with the Bid Proposal or within five (5) business days after bid opening.
 - a. **DBE SUBCONTRACTOR LIST**
 - b. **DBE NOTIFICATION OF INTENT TO SUBCONTRACT** for each DBE subcontractor.

L. GOOD-FAITH EFFORTS (49 CFR Part 26.53)

Good-faith efforts are required by the Bidder, Prospective Contractor, or Contractor when the DBE goal established for a contract is not met, or at any time during the contract when the achievement of the DBE goal is in jeopardy. The Bidder, Prospective Contractor, or Contractor is responsible for providing and/or indicating in writing to the satisfaction of the Commission all efforts that would demonstrate good faith in the solicitation of DBE participation for this contract. In the process of awarding the bid or at any time during the contract as outlined above, the Commission will evaluate the efforts of the Bidder, Prospective Contractor, or Contractor in accordance with 49 CFR Part 26, Appendix A and Part 26.53. The Commission’s evaluation will focus on those efforts made prior to bid opening.

The Commission reserves the right in its sole discretion to accept or reject any or all efforts by the Bidder, Prospective Contractor, or Contractor.

In order to review the efforts that will be considered acceptable by the Commission in accordance with Part 26, in its entirety, the Bidder, Prospective Contractor, or Contractor must refer to www.osdbu.dot.gov, 49 CFR Part 26, Section 26.109, “What are the rules governing information, confidentiality, cooperation, and intimidation or retaliation”, then scroll down to Appendix A to Part 26 – “Guidance Concerning Good-Faith Efforts”. Also, refer to Section 26.53 – “What are the good faith procedures recipients follow in situations where there are contract goals”.

Examples of acceptable good-faith efforts in accordance with Part 26, in part, are as follows:

- 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.

M. ADMINISTRATIVE RECONSIDERATION (49 CFR PART 26.53)

Within two business days if being informed by the Savannah Airport Commission that it is not responsive because it has not documented sufficient good-faith efforts, a bidder/contractor may request administrative reconsideration. Bidder/contractor should make this request in writing to the following reconsideration official: Executive Director, 400 Airways Avenue, Savannah, GA 31408, Facsimile, 912-964-0877. The reconsideration official will not have played any role in the original determination that the bidder/contractor did not document sufficient good-faith efforts.

As part of this reconsideration, the bidder/contractor will have the opportunity to provide written documentation or argument concerning the issue of whether it met the goal or made adequate good-faith efforts to do so. The bidder/contractor will have the opportunity to meet in person with the reconsideration official to discuss the issue of whether it met the goal or made adequate good-faith efforts to do so. The Commission will send the bidder/contractor a written decision on reconsideration, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good-faith efforts to do so. The result of the reconsideration process is not administratively appealable to the Department of Transportation.

N. PROMPT PAYMENT (49 CFR Part 26.29)

The prime contractor shall certify in writing that all subcontractors and suppliers have been paid for work and materials from previous progress payments received, less any retainage, by the prime contractor prior to receipt of any further progress payments (Periodic Pay Request Affidavit, and Final Pay Request Affidavit).

The prime contractor is required to pay each subcontractor/supplier for satisfactory performance of its contract no later than ten (10) days from the receipt of each payment the prime contractor receives from the Savannah Airport Commission.

The Commission will hold retainage from prime contractors and provide for prompt and regular incremental acceptances of portions of the prime contract and then pay retainage to prime contractors based on these acceptances. The prime contractor must pay all retainage owed to their subcontractors for satisfactory completion of the accepted work within thirty (30) days after the Commission's payment to the prime contractor.

A subcontractor's work is satisfactorily completed when all the tasks called for in the subcontract have been accomplished and documented as required by the Commission. When the Commission has made an incremental acceptance of a portion of a prime contract, the work of a subcontractor covered by that acceptance is deemed to be satisfactorily completed.

Any delay or postponement of payment from the above referenced timeframes may occur only for good cause following written approval of the Commission. The prime contractor will not be reimbursed for work performed by subcontractors unless and until the prime contractor ensures that the subcontractors are promptly paid for the work they have performed. The Savannah Airport Commission will require prime contractors to include a similar clause in their subcontracts requiring subcontractors to promptly pay their sub-subcontractors.

Unless delay or postponement of payment is approved in writing by the Commission, in accordance with this provision, failure by the prime contractor to comply with these prompt payment requirements may result in the prime contractor being placed in default of its contract. In addition, violation of this provision by prime contractor entitles the Commission to exercise any other rights it has by law or under the Contract. (See General Conditions, Section 80, paragraph 80-08).

In order to properly monitor payments to DBEs, and as required by the Commission the prime contractor will be required to send along with each payment to their DBE subcontractor or supplier a "Verification of Payments Received Letter", which the DBE(s) must sign and return to the Commission's DBELO for monitoring and DBE Program record keeping purposes.

The Commission will also require each prime contractor to submit to the Commission a monthly pay request which shall be accompanied by a "DBE Utilization Form" which is a report of DBE expenditures. The report will show 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.

Prior to close out of the project, the Commission may also require that the prime contractor furnish and/or require the prime contractor to have its subcontractor(s) furnish to the Commission with copies of canceled checks, invoices, and/or any other information from DBE subcontractors/sub-subcontractors utilized on the project.

To the extent that there is any inconsistency between the original and these amendments, the amendments shall take precedence.

END OF DBE REQUIREMENTS

SAVANNAH AIRPORT COMMISSION

DISADVANTAGED BUSINESS ENTERPRISE ASSURANCE FORM

The Bidder, Prospective Contractor, or Contractor shall complete the following statement by checking the appropriate box (check one only). Failure to complete this statement shall be grounds for 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 0% (percent) RACE-NEUTRAL DBE Participation.

Company Name, Printed or Typed

IRS Number

Printed Name of Person Signing

Title

BY: _____
Signature*
** Must be same signature as Bid Proposal*

Date

END OF DBE ASSURANCE FORM

SAVANNAH AIRPORT COMMISSION

DBE NOTIFICATION OF INTENT TO SUBCONTRACT

Project Name: SPECIAL INSPECTIONS, MATERIAL TESTING & QUALITY CONTROL FOR SECURITY CHECKPOINT EXPANSION

SAC JOB ID: 30566

Bid Date: _____

Contractor: _____

Hereby intends to subcontract or purchase materials for the following work items to:

DBE: Name _____

Address _____

City/State/Zip _____ Phone _____

Item No.	Description of Work/Materials	Unit	Quantity	Unit Cost	Amount

\$ Value = \$ _____

and/or if regular dealer X 60% (Refer to Paragraph "J") \$ _____

Total \$ Value \$ _____

DBE 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 "0" 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.

END OF DBE INTENT TO SUBCONTRACT

SAVANNAH AIRPORT COMMISSION

DISADVANTAGED BUSINESS ENTERPRISE (DBE) SUBCONTRACTORS LIST

(Reproduce if additional copies are needed)

Disadvantaged Business Enterprise Subcontractor (Company Name)	Description of Work/Materials	Dollar Value of Subcontract Work *

Total Dollar Value of Subcontract Work \$ _____

Total Dollar Value of Basic Bid \$ _____

Percent of Total (*See note below) _____ %

* NOTE: **IMPORTANT** – Not all DBE participation can be counted at 100%. For example, when using a regular dealer for supplies and materials, participation must be counted at 60% of the value. Also, all DBE firms must perform a commercially useful function. Before calculating the percentage, refer to Paragraph “J” - DBE PARTICIPATION COUNTED TOWARD GOAL for these and other requirements.

END OF DBE SUBCONTRACTORS LIST

SAVANNAH AIRPORT COMMISSION
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
SAC JOB ID: 30566
MATERIAL TESTING & QUALITY CONTROL FOR SECURITY CHECKPOINT
EXPANSION

Dear Sir:

This letter is to certify that _____ (name of DBE firm) has received \$_____ (dollar amount) from _____ (prime contractor). This amount represents payment for work performed from _____ (M/D/Y) to _____ (M/D/Y) which is _____% of the total contract amount of \$_____.

Sincerely,

(Type or Print name of person signing letter)

Title

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 his oath that he had read the above statement and that the same is true and correct.

This _____ day of _____, _____.

Notary Public: _____

State of: _____

My Commission Expires: _____

SAVANNAH AIRPORT COMMISSION

DBE UTILIZATION FORM

Project Name: Special Inspections, Material Testing & Quality Control for Security Checkpoint Expansion

Pay Request No. _____

Contractor (Company): _____

From: _____

Address: _____

To: _____

Subcontractor	Work Item (From Bid Schedule)	Item Detail (Qty, Type, Etc.)	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, _____ 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 _____ day of _____, _____.

Notary Public: _____

State of _____

My Commission Expires: _____

(Notary Seal)

SAVANNAH AIRPORT COMMISSION

SUBCONTRACTORS LIST

THIS SUBCONTRACTOR LIST IS NOT REQUIRED FOR SUBMISSION WITH PROPOSAL DOCUMENTS BUT SHALL BE SUBMITTED BY APPARENT LOW BIDDER WITHIN 48 HOURS AFTER OPENING OF PROPOSALS.

This list is attached to and is made an integral part of the Bid Proposal submitted by: (Bidder to insert full name and address)

For the construction of:

**SPECIAL INSPECTIONS, MATERIAL TESTING & QUALITY CONTROL FOR
SECURITY CHECKPOINT EXPANSION
SAC JOB ID: 30566**

The undersigned, hereinafter called "Bidder", lists below the names of the subcontractors who will perform the phases of the work indicated.

SUBCONTRACT
ITEM OF WORK

NAME AND ADDRESS
OF SUBCONTRACTOR

<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>

(Attach additional sheet(s) if necessary)

The Bidder declares that he has fully investigated each subcontractor listed and has received and has in his files evidence that each subcontractor maintains a fully equipped organization capable, technically and financially, of performing the pertinent work, and that he has performed similar installations in a satisfactory manner. The Bidder further declares that he shall not change any of these designated subcontractors for work on this Project without Owner's written permission.

In witness thereof, the Bidder has hereunto set his signature and affixed his seal this _____ day of _____, _____.

Firm Name: _____

By: _____

Title: _____

END OF SUBCONTRACTORS LIST

SAVANNAH AIRPORT COMMISSION

CONTRACT

This AGREEMENT, made and entered into this _____ day of _____, 2022, 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 Testing Laboratory, 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 for **SPECIAL INSPECTIONS, MATERIAL TESTING & QUALITY CONTROL for SECURITY CHECKPOINT EXPANSION, SAC 30566** at the Savannah / Hilton Head International Airport, in accordance with the Notice to Bidders, Instructions to Bidders, Proposal, Bid Schedule, and in accordance with the Plans, Specifications, General Conditions therein referred to in 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
(\$_____ USD).

If the Testing Laboratory 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.

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.

OWNER

(Party of the First Part)

SAVANNAH AIRPORT COMMISSION

BY:

Stephen S. Green, Chairman

(Seal)

ATTEST:

Gregory B. Kelly, Secretary

TESTING LABORATORY

(Party of the Second Part)

Company Name

BY:

Name (Signature)

TITLE:

Title

Name (Print/Type)

(Seal)

ATTEST:

Name (Signature)

TITLE:

Title

Name (Print/Type)

Testing Laboratory must indicate whether
Corporation, Partnership, Company
or Individual

Corporation: ☐ Partnership: ☐
Company: ☐ Individual: ☐

The person signing shall in his own
handwriting sign the principal's
name, his own name, and his title.

Where the 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.

Out-of-state contractors must affix Georgia
tax registration number.

Corporate seal is required for all
companies that are incorporated.

SAVANNAH AIRPORT COMMISSION

GENERAL CONDITIONS

1. SUMMARY OF WORK

- a. The work consists of furnishing all necessary labor, material, and testing equipment to perform testing and quality control as required in the scope of work for **SPECIAL INSPECTIONS, MATERIAL TESTING AND QUALITY CONTROL for SECURITY CHECKPOINT EXPANSION, SAC JOB ID 30566.**
- b. The location of the project is at the Savannah/Hilton Head International Airport, Savannah, Georgia.
- c. The Owner for whom this work shall be executed is the Savannah Airport Commission, 400 Airways Avenue, Savannah, Georgia 31408.

2. WORKING CONDITIONS

The Testing Laboratory will furnish on 12-hour notice person or persons to perform required testing. Testing will be performed throughout the time that Testing Laboratory is performing work that requires testing as shown on Bid Schedule.

The Testing Laboratory will not be expected to retain personnel on the work site after placement of material requiring testing has been completed during a workday.

3. TESTING PROCEDURES

If a test can be satisfactorily performed in the Testing Laboratory's home office, it will be permitted.

The results of all tests shall be furnished to the Savannah Airport Commission and the General Contractor on the same day that tests are made, with the exception of such tests on strength of concrete beams or cylinders.

Sand cone or comparable method shall be used to correlate the density and moisture with a nuclear device. When a satisfactory correlation has been established, a nuclear device may be used to test density and moisture.

Testing shall be performed in accordance with the project specifications and testing standards for each item tested.

The testing lab shall furnish technical advice and certified reports on the test results.

4. BILLING PROCEDURE FOR SERVICE PERFORMED UNDER BID SCHEDULE

Billing will be for the actual number of tests performed and at the unit price quoted in the bid proposal. Unit price per bid item will include all trips to project site to make tests, pick up of concrete beams, laboratory technician's time, administration, bookkeeping, record keeping, travel time, and report submittal. Hours of charges for engineering and technician time will not be paid unless contracted for under separate agreement.

Special Inspections hourly rates shall include not only the technicians hourly rate but also all testing, travel time, reports, equipment, and material to perform each inspection.

5. INSURANCE REQUIREMENTS

The Testing Laboratory shall maintain such insurance with insurance companies satisfactory to the Savannah Airport Commission as will protect the Savannah Airport Commission and the Mayor and Aldermen of the City of Savannah from claims under Workmen's Compensation acts and other employee benefit acts and from claims for damages because of bodily injury, including death, and from claims for property damage which may arise either out of or during operations whether such operations be by the bidder or by any subcontractor or by anyone directly or indirectly employed by any of them. Such insurance shall not be less than the following amounts and shall include the described coverages.

a. Workmen's Compensation

Applicable Federal and State	Statutory
Employer's Liability,	\$100,000.00

b. Contractor's Liability (Comprehensive General)

Including Explosion, Collapse, and Underground Coverages and Care, Custody, and Control.

1.	Bodily Injury-Each Occurrence	\$1,000,000.00
2.	Property Damage Including Completed Operations Broad Form-Each Occurrence	\$1,000,000.00
3.	Person Injury Including Hazards, A, B, and C, Not to Exclude Employees	\$Included
4.	Automobile Liability, Owned, Non-Owned and Hired	
	Bodily Injury-Each Occurrence	\$1,000,000.00
	Property Damage-Per Occurrence	\$1,000,000.00

c. These policies shall insure bidder and Savannah Airport Commission against all claims for injury or death to persons or damage to property and shall contain an appropriate cross liability clause insuring Savannah Airport Commission against any loss or damage to Savannah Airport Commission property resulting from any acts of bidder, its officers, employees, servants or subcontractors, and waiving any right of subrogation against the Savannah Airport Commission.

d. 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 Testing Laboratory 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 ADDITIONAL INSURED**.

6. AIRPORT RULES AND REGULATIONS

Testing Laboratory(s) shall be responsible for informing all employees concerning pertinent airport and Federal Aviation Administration rules and regulations. Testing Laboratory(s) shall conform with all rules and regulations and directives issued either orally or in writing by the Owner or his representative. All pertinent local, state and federal safety requirements shall be observed by the Testing Laboratory(s) and Testing Laboratory(s)' personnel. Testing Laboratory(s) shall execute a Hold Harmless Agreement with the Savannah Airport Commission, which form shall be furnished by the Airport Commission.

7. ACCIDENTS

All accidents causing personal injury or property damage shall be reported to the Executive Director or his representative immediately. The Testing Laboratory(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.

8. NOTICE TO PROCEED

The Notice to Proceed shall state the date on which it is expected the Testing Laboratory will begin the work and from which date the contract time will be charged. The Testing Laboratory shall begin the work to be performed under the contract within ten (10) calendar days of the date written by the Owner in the Notice to Proceed, but in any event, he shall notify the Owner at least 24-hours in advance of the time actual construction operations will begin.

9. SAFETY & SECURITY

The Testing Laboratory shall be responsible for the security of his equipment and materials. He shall be responsible for the security of all perimeter security gates, terminal doors and hatches leading to secure areas utilized by him. As directed by the Executive Director, locks shall be placed on each gate used by the Testing Laboratory. The locks must be marked in a manner showing company ownership and a key or combination provided to the Airport Police Department. The gates shall be locked at all times or guards posted at the gates to control access through them. Gate guards shall have a radio or cellular phone which will enable them to call the Police to report security problems or Testing Laboratory to verify identities, etc. For joint use gates, if a lock is found unsecured, the company owning the lock is in violation of Airport Rules and Regulations. In addition, unauthorized entry to the Air Operations Area through the gates may result in the responsible party being cited for violating Airport Regulations.

- a. The Federal Aviation Act of 1958, Section 901, 49 USC 1471, gives the Federal Aviation Administration authority to place a fine on any airport found to be in breach of a security requirement.
- b. The Testing Laboratory shall reimburse the Airport Commission for the full amount of any fines placed on the Airport Commission due to negligence on the part of the Testing Laboratory. Fines may be placed on the Airport Commission for such things as security gates being unlocked, terminal doors not secure, fences torn down, and Air Operations Area not being properly secured. These are only examples of items causing fines and not limitations. There could be other related items.
- c. It is the Testing Laboratory's responsibility to prevent any breach of security within his area of construction or any route of entry to area of construction.

- d. Security Clearances - All personnel having unescorted access to any security restricted area shall wear valid Savannah/Hilton Head International Airport identification badges so they are visible on their outer garments in such areas at all times to permit ready recognition by Airport Public Safety Officers. The Testing Laboratory's employees may be issued any one of the below listed Security Identification, etc. badges.
1. The Airport Identification Badges are issued to approved personnel in several colors:
 - a. BLUE – Issued to personnel requiring unlimited access inside the SIDA.
 1. Effective December 6, 2002, the TSA requires anyone requesting unescorted access to the SIDA shall be fingerprinted, a background check performed, and results returned prior to ID Badge being issued. **No exceptions.** This process takes 2 – 3 weeks. Anyone applying for badges shall submit application as soon as possible to ensure fingerprints / criminal history records are returned prior to start date of project.
 2. The cost for processing is \$30.00 per person. Everyone receiving a blue ID Badge must be fingerprinted.
 - b. YELLOW – Issued to contractors working in the vicinity of the aircraft movement area in order to perform their required duties. Persons with yellow badges may NOT enter the SIDA.
 - c. GREY – Issued to general aviation and tenants who require incidental access to the 1542.203 areas. Persons with Blue/Gray badges may NOT enter the SIDA.
 2. The color of the badge signifies the area on the airport where the badge holder may operate.
 - a. Identification badges must be controlled at all times. When personnel are terminated, upon completion of the construction project, and when badges expire, the Testing Laboratory is responsible for returning identification badges to the Credential Office. Before a new badge is issued to any person, their expired or invalid badge must be returned to the Credential Office.

Upon completion of a project, it will be the responsibility of the Testing Laboratory to collect all badges issued under his contract. Subcontractors are responsible for collecting their badges. Before final payment is made on the project, a written notification from the Credential Office will be given to the Director of Engineering. The written notice will state the number of badges issued and the number of badges returned.
 - b. A fee of \$20.00 (without reader), \$25.00 (with reader), payable in advance, is charged for each badge issued. The Testing Laboratory shall make a cash deposit of \$200 prior to receiving any badges. This deposit is refundable providing all badges have been returned. For each badge not returned by the Testing Laboratory, \$200.00 will be deducted from any monies due the Testing Laboratory or his surety. All costs, i.e., ID Badge, fingerprint requirements, and deposit(s) shall be paid in advance.

- c. The Testing Laboratory shall be required to comply with the Transportation Security Administration Amendment to Part 1542.209 prior to commencing work. All personnel hired after December 6, 2002, who have unescorted access to any area on the airport controlled for security reasons shall have background checks to the extent allowable by law, including at a minimum, references and prior employment histories to the extent necessary to verify representations made by the employee/applicant relative to employment in the preceding ten (10) years. The Testing Laboratory shall certify to the Commission by using SAC Form 513 that such checks were conducted and are on file in the Testing Laboratory's office for inspection by the Transportation Security Administration (TSA) or Savannah Airport Commission representatives.
- d. The Testing Laboratory shall provide the Savannah Airport Commission a list of all employees having access to the Air Operations Area on SAC Form 513.
- e. SAC Form 513 shall be used by the Testing Laboratory whenever applying for the identification badges. Only the Testing Laboratory or representative, who shall be designated in writing, shall sign SAC Form 513.
- f. All badge requests and background forms shall be turned in forty-eight (48) hours in advance. Once approved, all badge holders shall attend SIDA Contractor's badge and/or airfield drivers training classes.
- g. Any person found within any security restricted area without proper identification shall be in violation of Federal law and the Airport Rules and Regulations. All such persons shall be escorted off the Air Operations Area and may be cited by the Airport Public Safety Department. In addition, the person may have their identification badge revoked.
- h. Any delay in construction of project due to violations of Federal or Airport Regulations shall be absorbed by the Testing Laboratory and not the Airport Commission.
- i. Motorized Vehicles
No personal vehicles (POV's) are allowed in the AOA. Only company vehicles with the company name displayed will be permitted access to the AOA.

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 TESTING LABORATORY SHALL BE RESPONSIBLE FOR SUPPLYING THEIR OWN RADIOS.**

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.

Motorized vehicles and equipment operating in the AOA shall not exceed fifteen (15) miles per hour.

Aircraft shall have priority over all motorized vehicles and equipment.

10. INDEMNIFICATION

a. Governing Law

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

- b. The Testing Laboratory shall protect, defend, and indemnify Commission and its officers, agents and employees from an 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 Agreement and/or the use or occupancy of the Premises or the acts or omissions of Testing Laboratory'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 Testing Laboratory reasonable notice of any such claims or actions. The Testing Laboratory 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.

11. TERMINATION OF CONTRACT

The provisions of this contract may be terminated by either party without cause, in which event at least thirty (30) days prior written notice of such termination shall be given to the other. In the event the Savannah Airport Commission causes abandonment, termination, or suspension of this Contract, or parts thereof, the Testing Laboratory shall be compensated for services rendered up to the time of such abandonment, termination, or suspension. Compensation to the Testing Laboratory shall be for any reasonable costs incurred by the Testing Laboratory up to the time of abandonment, termination, or suspension. The Testing Laboratory shall submit full documentation of costs incurred.

12. 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 Testing Laboratory shall comply with and shall ensure that the following Non-Discrimination clause is inserted in all subcontracts, subleases, and other agreements at all tiers:

"The Testing Laboratory 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."

13. TECHNICAL REQUIREMENTS (If Required)

- a. Engineering Date shall include, but not be limited to, the following:
 1. Keeping records of test results with sample lot / location recorded.
 2. Sorting and compiling data to meet requirements set forth in computing the pay factor for concrete.
 3. Keeping account of lots and locations of lots to meet acceptance criteria for compressive strength, slump, and air content of concrete structures; GABC nuclear density testing and proctor(s) for GABC, and nuclear density testing and proctor(s) for compacted soils.
- b. Guideline set out in Section 110 Method of Estimating Percentage of Material within Specification Limits. (PWL).
- c. Reports shall be sealed by a Professional Engineer registered in Georgia. Test results shall be communicated to the Owner by the most expeditious means practicable as soon as same become available, with hard copy to follow as specified herein.

14. ENGINEERING SERVICES (If Required)

This item is to be utilized for professional service needs when material and/or job conditions warrant the use of such personnel in advising the Owner and Contractor as to cause and/or solution of geotechnical problem(s) on the project. This service must be requested by the Owner. This service does not include general advice or conversation pertaining to routine testing results, scheduling, or procedures related to testing as such services are covered by this Agreement and are not considered an extra charge thereunder.

15. SPECIAL INSPECTIONS

This item will be used solely on the Security Checkpoint Expansion utilizing guidelines set forth in the statement of special inspections as submitted. The hourly rate shall include the special inspectors time and all necessary tests for compliance with the Statement of Special Inspections and the testing may or may not include all line items shown in the Bid Schedule depending on construction methods.

16. TESTING LAB ACCREDITATION

- a. Mandatory standards contained in Federal Aviation Administration (FAA) Advisory Circular (AC) 150/5370-10A, Standards for Specifying Construction of Airports, paragraphs 401-3.5 and 401-5.1 for plant mix bituminous pavements and paragraphs 501-2.1, 501-3.4, and 501-5.1 for Portland cement concrete pavement, require that testing firms be accredited by national authorities as evidence of the firm's competence to perform certain tests.

The FAA Southern Region will require compliance with ASTM D 3666, Standard Specifications for Minimum Requirements for Agencies Testing and Inspecting Bituminous Paving Materials and ASTM C 1077, Standard Practice for Laboratories Testing Concrete Aggregates for Use in Construction and Criteria for Laboratory Evaluation, for all paving projects (includes subbase, base and surface courses, as appropriate) over \$250,000.

For asphalt projects in the state of Florida, the FAA has approved substitution of Florida Department of Transportation (FLDOT) accreditations for national accreditations. It is anticipated that FLDOT accreditations for Portland cement concrete will also be substituted for national accreditations in the near future.

However, only national accreditations will be acceptable on Airport Improvement Program (AIP) projects outside the state of Florida.

- b. FAA, Airports Division, Southern Region is issuing the following timetable for implementing lab accreditation requirements:

Effective January 1, 1996:

Any testing firm employed to develop mix formulas and/or to perform acceptance and sampling testing on airport paving projects exceeding \$250,000 within the FAA Southern Region must provide evidence that it has begun the accreditation process and has requested an inspection of its laboratory facilities by a "qualified national authority" such as the AASHTO Accreditation Program (AMRL), the American Association for Laboratory Accreditation (AALA), the National Voluntary Laboratory Accreditation Program (NVLAP), etc. Firms working in Florida must possess FLDOT accreditation on plant mix bituminous paving.

Effective January 1, 1997:

Any testing firm employed to develop mix formulas and/or to perform acceptance and sampling testing on airport paving projects exceeding \$250,000 within the Southern Region must fully comply with ASTM D 3666 and/or ASTM C 1077 requirements. Firms working in Florida must possess FLDOT accreditation on plant mix bituminous paving and Portland cement concrete paving.

- c. National Accreditation Authorities

Cement and Concrete Reference Laboratory (CCRL)
National Institute of Standards and Technology, Bldg. 226, Room A365
Gaithersburg, MD 20899
301/975-6704 Dave Savage

National Voluntary Laboratory Accreditation Program (NVLAP)
National Institute of Standards and Technology, Bldg. 411, Room A124
Gaithersburg, MD 20899
301/975-4016 Paul Martin

American Association for Laboratory Accreditation (AALA)
656 Quince Orchard Road, Suite 203
Gaithersburg, MD 20878-1409
301/670-1377

AASHTO Accreditation Program (AMRL)
444 N. Capitol St. NW, Suite 225
Washington, DC 20001
202/624-5800



U.S. Department
of Transportation
**Federal Aviation
Administration**

Memorandum

Subject: **ACTION:** Testing Laboratory Evaluation,
AC 150/5370-10A

Date: January 23, 2004

From: Manager, Airport Engineering Division, AAS-100

Reply to
Attn. of:

To: All Regions
ATTN: Manager, Airports Division

In certain specifications and program guidance, we require testing laboratories to meet standards published in the American Society for Testing and Materials (ASTM) C 1077 and ASTM D 3666. These standards set forth the criteria for evaluating the capability of a laboratory to perform designated tests on concrete and bituminous materials. Both standards require inspection and/or accreditation by a national authority. Effective with this memorandum, we recognize the U.S. Army Corps of Engineers, Engineer Research and Development Center, Materials Testing Center (MTC), Waterways Experiment Station, Vicksburg, MS as a national authority capable of determining that laboratories meet the requirements of ASTM C 1077 and ASTM D 3666. We recognize a current validation report from the MTC that includes these tests as evidence that a laboratory meets the requirements of these standards. Laboratories that have been validated under this program are listed on the MTC homepage at <http://www.wes.army.mil/SL/MTC/mtc.htm>.

Attached is an example of a validation report issued by the MTC (used by permission). If you have any questions, please contact Jeff Rapol on 202-267-7474.

ORIGINAL SIGNED BY

Rick Marinelli, P.E.

Attachment



DEPARTMENT OF THE ARMY
ENGINEER RESEARCH AND DEVELOPMENT CENTER, CORPS OF ENGINEERS,
WATERWAYS EXPERIMENT STATION, 3809 HALLS FERRY ROAD
VICKSBURG, MISSISSIPPI 39180-4116

COPY FOR YOUR
INFORMATION

REPLY TO
ATTENTION OF:

CEERD-GS-E (1110-1-8100c)

08 Oct 03

Memorandum For Commander, USAE District, Vicksburg, ATTN: CEMVK-CD-VR/Mr. Wilhelm Lutigsham,
Alexandria Project Office, P. O. Box 6561, Alexandria, LA 71305

SUBJECT: Validation of Geotechnical Testing Laboratory, Inc., Alexandria, LA

1. Reference Military Interdepartmental Purchase Request No. W6078PM23625608, dated 18 Dec 02, requesting the inspection of the materials testing laboratory of Geotechnical Testing Laboratory, Inc., Alexandria, LA. This laboratory was inspected on 16-17 Jan 03. The results of that inspection were reported to the Commander, USAE District, Vicksburg on 23 Jan 03 and the laboratory reported their deficiency corrections to the Materials Testing Center on 23 Sep 03.

2. The Quality System of the laboratory is satisfactory and we are granting a validation of the lab to perform material tests for the U.S. Army Corps of Engineers. The material test methods that the laboratory is validated to perform are:

- a. Aggregate Tests: ASTM C40, C117, C127, C128, C136, C29, C566, C702, and D75.
- b. Bituminous Tests: ASTM D2726 and D3658.
- c. Concrete Tests: ASTM C31, C39, C138, C143, C172, C173, C231, C1064, C42, C78, C174, C192, C470, C511, C817, and C1077.
- d. Soil Tests: ASTM D421, D422, D427, D698, D854, D1140, D1556, D1557, D2166, D2216, D2487, D2488, D2922, D3017, D3740, and D4318.

3. We will add Geotechnical Testing Laboratory, Inc., Alexandria, LA to the list of commercial laboratories qualified to conduct material tests for the U.S. Army Corps of Engineers, see the Materials Testing Center homepage at <http://www.wes.army.mil/SLM/CMTC/mtrc.htm>. All Corps offices will be notified of this decision and will have the opportunity to use their services. The laboratory will remain on our list of laboratories qualified to conduct material tests until 16 Jan 06, three (3) years from the date of the inspection.

DANIEL A. LEAVELL
Director, Materials Testing Center

CF:
Mr. Mark Wooley/Geotechnical Testing Laboratory, Inc., Alexandria, LA
Ms. Rae Anderson/CEMVN-CD-GS

EXAMPLE OF A VALIDATION REPORT ISSUED BY THE MTC (USED BY
PERMISSION)

SAVANNAH AIRPORT COMMISSION

P-501 MATERIAL ACCEPTANCE

- I. Acceptance Sampling and Testing.** All acceptance sampling and testing, with the exception of coring for thickness determination, necessary to determine conformance with the requirements specified in this section will be performed by the Engineer. Concrete shall be accepted for strength and thickness on a lot basis.

A lot shall consist of 4,800 square yards.

Testing organizations performing these tests shall meet the requirements of ASTM C 1077. The Contractor shall bear the cost of providing curing facilities for the strength specimens, per paragraph 501-5.1a(3), and coring and filling operations, per paragraph 501-5.1b(1).

1. Flexural Strength

- a. **Sampling.** Each lot shall be divided into four equal sublots. One (1) specimen shall be taken for each subplot from the plastic concrete delivered to the job site. Sampling locations shall be determined by the Engineer in accordance with random sampling procedures contained in ASTM D 3665. The concrete shall be sampled in accordance with ASTM C 172.
- b. **Testing.** Specimens shall be made in accordance with ASTM C 31 and the flexural strength of each specimen shall be determined in accordance with ASTM C 78.
- c. **Field Test Specimens.** Concrete samples shall be taken and furnished by the Contractor and tests shall be taken in the field to determine the consistency, air content, and strength of the concrete. Flexural test beams shall be made each day that the concrete is placed. Each group of test beams shall be molded from the same batch of concrete and shall consist of a sufficient number of specimens to provide two flexural strength tests at each test age. One group of specimens will be made during the first half of each shift, and the other during the last portion of the shift. The specimens shall be made in accordance with ASTM C 31. However, at the start of paving operations and when the aggregate source, aggregate characteristics, or mix design is changed, additional groups of test beams may be required until the Engineer is satisfied that the concrete mixture being used complies with the strength requirements of these specifications.

Test ages will be seven (7) and twenty-eight (28) days.

The flexural strength of the concrete shall meet the following requirements:

The average of any four (4) consecutive strength tests, tested at the end of twenty-eight (28) days, shall have an average flexural strength equal to or greater than the specified flexural strength.

Not more than twenty (20%) percent of the beams tested at the end of twenty-eight (28) days shall have a flexural strength less than the specified strength. Specimens which are obviously defective shall not be considered in the determination of the strength.

When it appears that the test specimens will fail to conform to the requirements for strength, the Engineer shall have the right to order changes in the concrete sufficient to increase the strength to meet these requirements. When a satisfactory relationship between seven (7) day and twenty-eight (28) day strengths has been established and approved, the seven (7) day test results may be used as an indication of the 28-day strengths. However, the seven (7) day test results will not replace the results of the twenty-eight (28) day tests if the twenty-eight (28) day results fall below the requirement.

- d. **Curing.** The Contractor shall provide adequate facilities for the curing of beams. During the 24 hours after molding, the temperature immediately adjacent to the specimens must be maintained in the range of 60 to 80°F, and loss of moisture from the specimens must be prevented. The specimens may be stored in tightly constructed wooden boxes, damp sand pits, temporary buildings at construction sites, under wet burlap in favorable weather or in heavyweight closed plastic bags, or use other suitable methods, provided the temperature and moisture loss requirements are met.

The Contractor shall also provide all materials necessary for the sampling, making, storing, and curing the beams in accordance with ASTM C 31, at facilities set up and furnished by the Contractor at the worksite. Steel beam molds shall be 6" x 6" with a length of 22 inches. Beam molds which are unacceptable to the Engineer shall be replaced by the Contractor at no cost to the Owner. Curing facilities shall include the furnishing and operating of satisfactory water tanks equipped with heating or cooling devices that will automatically maintain the temperature of the water at 73°F ± 5° for curing beams for strength tests.

- e. **Acceptance.** Acceptance of pavement for flexural strength will be determined by the Engineer in accordance with paragraph 501-5.2b. No additional cores or samples taken from the cured concrete will be considered for acceptance testing.

2. Pavement Thickness

- a. **Sampling.** Each lot shall be divided into four equal sublots and one core shall be taken by the Contractor for each subplot. Sampling locations shall be determined by the Engineer in accordance with random sampling procedures contained in ASTM D 3665.

Cores shall be neatly cut with a core drill. The Contractor shall furnish all tools, labor, and materials for cutting samples and filling the cored hole. Core holes shall be filled by the Contractor with a non-shrink grout approved by the Engineer within one day after sampling.

- b. **Testing.** The thickness of the cores shall be determined by the Engineer by the average caliper measurement in accordance with ASTM C 174.
- c. **Acceptance.** Acceptance of pavement for thickness shall be determined by the Engineer in accordance with paragraph 501-5.2c.
- d. **Partial Lots.** When operational conditions cause a lot to be terminated before the specified four tests have been made for the lot, the following procedure will be used to adjust the lot size and the number of tests for the lot.

Where three sublots have been produced, they shall constitute a lot. Where one or two sublots have been produced, they shall be incorporated into the next lot or the previous lot and the total number of sublots shall be used in the acceptance criteria calculation, i.e., **n=5 or n=6.**

II. Acceptance Criteria

1. General. Acceptance will be based on the following characteristics of the completed pavement:

- a. Flexural strength
- b. Thickness
- c. Smoothness
- d. Grade
- e. Edge slump
- f. Dowel bar alignment

Flexural strength will be evaluated for acceptance by the Engineer in accordance with paragraph 501-5.2b. Thickness will be evaluated for acceptance by the Engineer in accordance with paragraph 501-5.2c. Smoothness will be evaluated by the Engineer in accordance with paragraph 501-5.2e(3).

Acceptance for flexural strength and thickness will be based on the criteria contained in paragraph 501-5.2e(1). Acceptance for thickness will be based on the criteria contained in paragraph 501-5.2e(2). Acceptance for smoothness will be based on the criteria contained in paragraph 501-5.2e(3). Acceptance for grade will be based on the criteria contained in paragraph 501-5.2e(4).

The Engineer may at any time, notwithstanding previous plant acceptance, reject and require the Contractor to dispose of any batch of concrete mixture which is rendered unfit for use due to contamination segregation, or improper slump. Such rejection may be based on only visual inspection. In the event of such rejection, the Contractor may take a representative sample of the rejected material in the presence of the Engineer, and if he can demonstrate in the laboratory, in the presence of the Engineer, that such material was erroneously rejected, payment will be made for the material at the contract unit price.

2. Flexural Strength. Acceptance of each lot of in-place pavement for flexural strength shall be based on the percentage of material within specification limits (PWL). The PWL plan considers the variability (standard deviation) of the material and the testing procedures, as well as the average (mean) value of the test results. The standard deviation shall be determined from the Contractor's own data or from historic data. If a material with high variability is produced, then a higher average strength must be maintained in order to achieve a PWL of 80 percent or more.

3. Pavement Thickness. Acceptance of each lot of in-place pavement shall be based on the percentage of material within specification limits. The standard deviation shall be determined from the Contractor's own data or from historic data. If a pavement with a high thickness variability is placed, then a higher average thickness must be maintained in order to achieve a PWL of 90 percent or more.

Concrete will be accepted for thickness based on cross-section survey of subbase and surface course prepared by an independent licensed surveyor in the State of Georgia hired by the Contractor and approved by the Savannah Airport Commission. When the measurement indicates deficiency not more than 0.2 inch (5 mm) from the plan thickness, full payment will be made. When such measurement is deficient more than 0.2 inch (5 mm) and not more than 0.5 inch (25 mm) from the plan thickness, an adjusted unit price, as provided in paragraph 501.2.2 will be paid.

4. **Percentage of Material Within Specification Limits (PWL).** The percentage of material within specification limits shall be determined in accordance with procedures specified in Section 110 of the General Conditions.

The lower specification limit (L) for flexural strength and thickness shall be:

Lower Specification Limit (L)

Flexural Strength	Design strength given in paragraph 501-3.1.
Thickness	0.97 x Plan thickness for the lot

5. Acceptance Criteria

- a. **Flexural Strength.** If the PWL of the lot equals or exceeds 80 percent of the flexural strength the pay factor for the lot shall be 1.0, as determined in accordance with paragraph 501-8.1a. If the PWL is less than 80 percent the pay factor for the lot shall be less than 1.0, as determined in accordance with paragraph 501-8.1a.
- b. **Thickness.** If the PWL of the lot equals or exceeds 90 percent for thickness, the pay factor for the lot shall be 1.0, in accordance with paragraph 501-8.1b. If the PWL is less than 90 percent the factor for the lot shall be less than 1.0, as determined in accordance with paragraph 501-8.1b.
- c. **Smoothness.** As soon as the concrete has hardened sufficiently, the pavement surface shall be tested with a 16-foot straightedge or other specified device. Surface smoothness deviations shall not exceed 1/4 inch from a 16-foot straightedge placed in any direction, including placement along and spanning any pavement joint edge.

Areas in a slab showing high spots of more than 1/4 inch but not exceeding 1/2 inch in 16 feet shall be marked and immediately ground down with an approved grinding machine to an elevation that falls within the tolerance of 1/4 inch or less. Where the departure from correct cross section exceeds 1/2 inch, the pavement shall be removed and replaced at the expense of the Contractor when so directed by the Engineer.
- d. **Grade.** An evaluation of the surface grade shall be made by the Engineer for compliance to the tolerances contained below.
- e. **Lateral Deviation.** Lateral deviation from established alignment of the pavement edge shall not exceed plus or minus 0.10 foot in any lane.
- f. **Vertical Deviation.** Vertical deviation from established grade shall not exceed plus or minus 0.04 feet at any point.

g. **Edge Slump.** When slip-form paving is used, not more than 15 percent of the total free edge of each five hundred feet (500) of pavement, or fraction thereof, shall have an edge slump exceeding 1/4-inch, and none of the free edge of the pavement shall have an edge slump exceeding 3/8-inch. (The total free edge of 500 feet of pavement will be considered the cumulative total linear measurement of pavement edge originally constructed as nonadjacent to any existing pavement; i.e., 500 feet of paving lane originally constructed as a separate lane will have 1,000 feet of free edge, 500 feet of fill-in lane will have no free edge, etc.) The area affected by the downward movement of the concrete along the pavement edge shall be limited to not more than 18 inches from the edge. When excessive edge slump cannot be corrected before the concrete has hardened, the area with excessive edge slump shall be removed and replaced at the expense of the Contractor when so directed by the Engineer.

6. **Dowel Bar Alignment.** Dowel bars and assemblies shall be checked for position and alignment. The maximum permissible tolerance on dowel bar alignment in each plane, horizontal, and vertical shall not exceed 2 percent of 1/4 inch per foot of dowel bar.

a. **Removal and Replacement of Concrete.** Any area or section of concrete that is removed and replaced shall be removed and replaced back to planned joints to the greatest extent possible. The Contractor shall replace damaged dowels and the requirements for doweled longitudinal construction joints in paragraph 501-4.10 shall apply to all contraction joints exposed by concrete removal.

Any concrete that develops a crack prior to final acceptance shall be removed and replaced at no cost to the Owner. The minimum size of replacement area shall be 12'-6" x 25'.

III. CONTRACTOR QUALITY CONTROL

1. **Quality Control Program.** The Contractor shall develop a Quality Control Program in accordance with Section 100 of the General Conditions. The program shall address all elements which effect the quality of the pavement including but not limited to:

- a. Mix Design
- b. Aggregate Gradation
- c. Quality of Materials
- d. Stockpile Management
- e. Proportioning
- f. Mixing and Transportation
- g. Placing and Consolidation
- h. Joints
- i. Dowel Placement and Alignment
- j. Flexural or Compressive Strength
- k. Finishing and Curing
- l. Surface Smoothness

2. **Quality Control Testing.** The Contractor shall perform all quality control tests necessary to control the production and construction processes applicable to this specification and as set forth in the Quality Control Program. The testing program shall include, but not necessarily be limited to, tests for aggregate gradation, aggregate moisture content slump, and air content.

A Quality Control Testing Plan shall be developed as part of the Quality Control Program.

a. **Fine Aggregate**

- i. **Gradation.** A sieve analysis shall be made at least twice daily in accordance with ASTM C 136 from randomly sampled material taken from the discharge gate of storage bins or from the conveyor belt.
- ii. **Moisture Content.** If an electric moisture meter is used, at least two direct measurements of moisture content shall be made per week to check the calibration. If direct measurements are made in lieu of using an electric meter, two tests shall be made per day. Tests shall be made in accordance with ASTM C 70 or ASTM C 566.

b. **Coarse Aggregate**

Gradation. A sieve analysis shall be made at least twice daily for each size of aggregate. Tests shall be made in accordance with ASTM C 136 from randomly sampled material taken from the discharge gate of storage bins or from the conveyor belt.

- i. **Moisture Content.** If an electric moisture meter is used, at least two direct measurements of moisture content shall be made per week to check the calibration. If direct measurements are made in lieu of using an electric meter, two tests shall be made per day. Tests shall be made in accordance with ASTM C 566.
- ii. **Slump.** Four slump tests shall be performed for each lot of material produced in accordance with the lot size defined in Section 501-5.1. One test shall be made for each subplot. Slump tests shall be performed in accordance with ASTM C 143 from material randomly sampled from material discharged from trucks at the paving site. Material samples shall be taken in accordance with ASTM C 172.
- iii. **Air Content.** Four air content tests shall be performed for each lot of material produced in accordance with the lot size defined in Section 501-5.1. One test shall be made for each subplot. Air content shall be performed in accordance with ASTM C 231 for gravel and stone coarse aggregate and ASTM C 173 for slag or other porous coarse aggregate, from material randomly sampled from trucks at the plant site. Material samples shall be taken in accordance with ASTM C 172.

3. **Control Charts.** The Contractor shall maintain linear control charts for fine and coarse aggregate, gradation, slump, and air content.

Control charts shall be posted in a location satisfactory to the Engineer and shall be kept up to date at all times. As a minimum, the control charts shall identify the project number, the contract item number, the test number, each test parameter, the Action and Suspension Limits, or Specification limits, applicable to each test parameter, and the Contractor's test results.

The Contractor shall use the control charts as part of a process control system for identifying potential problems and assignable causes before they occur. If the Contractor's projected data during production indicates a potential problem and the Contractor is not taking satisfactory action, the Engineer may halt production or acceptance of the material.

- a. **Fine and Coarse Aggregate Gradation.** The Contractor shall record the mining average of the last five gradation tests for each control sieve on linear control charts. Specification limits contained in Tables 1 and 2 shall be superimposed on the Control Chart for job control.
- b. **Slump and Air Content.** The Contractor shall maintain linear control charts both for individual measurements and range (i.e., difference between lightest and lowest measurements) for slump and air content in accordance with the following Action and Suspension Limits.

CONTROL CHART LIMITS

Control Parameter	Individual Measurement Action Limit	Suspension Limit	Range Suspension Limit
Slump	± 1 inch (25 mm)	± 1.5 inches (38 mm)	± 2.4 inches (61 mm)
Air Content	$\pm 1.2\%$	$\pm 1.8\%$	$\pm 2.8\%$

The individual measurement control charts shall use the mix design target values as indicators of central tendency.

1. **Corrective Action.** The Quality Control Plan shall indicate that appropriate action shall be taken when a process is believed to be set out of control. The Plan shall detail what action will be taken to bring a process into control and shall contain sets of rules to gauge when a process is out of control. As a minimum, a process shall be deemed out of control and corrective action taken if any one of the following conditions exists.
 - a. **Fine and Coarse Aggregate Gradation.** When two consecutive averages of five tests are outside of the Tables 1 or 2 specification limits, immediate steps, including a halt to production, shall be taken to correct the gradation.
 - b. **Fine and Coarse Aggregate Moisture Content.** Whenever the moisture content of the fine or coarse aggregate changes by more than 0.5 percent, the scale settings for the aggregate batcher(s) and water batcher shall be adjusted.
 - c. **Slump.** The Contractor shall halt production and make appropriate adjustments whenever:
 - i. One point falls outside the Suspension Limit line for individual measurements or range; or
 - ii. Two points in a row fall outside the Action Limit line for individual measurements.

- d. **Air Content.** The Contractor shall halt production and adjust the amount of air-entraining admixture whenever:
- i. One point falls outside the Suspension Limit line for individual measurements or range; or
 - ii. Two points in a row fall outside the Action Limit line for individual measurements.
 - iii. Whenever a point falls outside the Action Limits line, the air-entraining admixture dispense shall be calibrated to ensure that it is opening correctly and with good reproducibility.

IV. METHOD OF MEASUREMENT

1. **Portland Cement Concrete Pavement.** Measurement shall be by the number of square yards adjusted in accordance with paragraphs 501-8.1a,b, and c. Payment shall be full compensation for all labor, materials, tools, equipment and incidentals including all joint sealing work required to complete the work as specified herein and on the drawings.

V. BASIS OF PAYMENT

1. **General.** Payment for an accepted lot of concrete pavement shall be made at the contract unit price per square yard in place adjusted in accordance with paragraphs 501-8.1a,b, and c. Payment shall be full compensation for labor, materials, tools, equipment, and incidentals including all joint sealing work required to complete the work as specified herein on the drawings. Payment for over strength concrete will not be made. Maximum payment for P-501 is 100 percent of the bid price per square yard.
- a. **Basis of Adjusted Payment for Flexural Strength (PFs).** Any pay factor for flexural strength shall be determined in accordance with the following schedule when the percent within specification limits (PWL) equals or exceeds 60 percent.

Percent within Limits (PWL)	Pay Factor for Flexural Strength (PFs)
80-100	1.0
60-79	$0.00017 \text{ PWL}^2 - 0.0105 \text{ PWL} + 0.75$

When the PWL is below 60 percent the lot shall be removed and replaced. However, the Engineer may decide to accept the deficient lot. In that case, if the Engineer and Contractor agree in writing that the lot shall not be removed, it will be paid for at 50 percent of the contract unit price.

- b. **Basis of Adjusted Payment for Thickness (PF_T).** A pay factor for thickness shall be determined in accordance with the following schedule when the percent within specification limits (PWL) equals or exceeds 25 percent.

Percent within Limits (PWL)	Pay Factor for Thickness (PF _T)
90-100	1.0
25-89	$0.000034 \text{ PWL}^2 - 0.00006 \text{ PWL} + 0.72$

When the PWL is below 25 percent the lot shall be removed and replaced. However, the Engineer may decide to accept the deficient lot. In that case, if the Engineer and contractor agree in writing that the lot shall not be removed, it will be paid for at 50 percent of the contract unit price.

- c. **Lot Pay Factor.** The percent payment for an accepted lot shall be arrived at by successively multiplying the contract unit price by both factors determined in paragraphs 501-1a and b.

$$\text{PF}_s \times \text{PF}_T \times \text{Contract unit price} = \text{Adjusted payment for lot}$$

2. Payment will be made under:

BASE BID

Items dependent on Bid Schedule.