



INVITATION TO BID #16ITB102592K-JD

**Crack Seal, Seal Coat, and Re-Marking for Fulton
County Airport-Brown Field**

For

**Department of Real Estate and Asset Management
Volume I**

BID ISSUANCE DATE: April 22, 2016

BID DUE DATE AND TIME: Monday, May 23, 2016, 11:00 A.M.

PRE-BID CONFERENCE DATE: May 12, 2016 10:00 A.M.

PURCHASING CONTACT: Joyce Daniel, Assistant Purchasing Agent

E-MAIL: joyce.daniel@fultoncountyga.gov

**LOCATION: FULTON COUNTY DEPARTMENT OF PURCHASING
130 PEACHTREE STREET, S.W., SUITE 1168
ATLANTA, GA 30303**

TABLE OF CONTENTS

Invitation to Bid

VOLUME I

Owner-Contractor Agreement – Sample Contract

Section 1 - Instructions to Bidders

1. Contract Documents
2. Bid Preparation
3. Receipt and Opening of Bids
4. Addenda and Interpretations
5. Site Examination
6. Bidder's Modification and Withdrawal of Bids
7. Bid and Contract Security
8. Surety Bonds
9. Insurance Requirements
10. Right to Reject Bids
11. Applicable Laws
12. Examination of Contract Documents
13. Bid Evaluation
14. Award Criteria
15. Disqualification of Bidders
16. Basis of Award
17. Professional Licenses
18. Wage Clause
19. Notice of Award of Contract
20. Execution of Contract Documents
21. Invoices and Payment Terms
22. Equal Employment Opportunity (EEO) in Purchasing and Contracting
23. Joint Venture
24. Contractors Compliance with Procurement
25. Georgia Security and Immigration Compliance Act
26. Subcontracting Opportunities
27. Term of Contract
28. No Contact Provision
29. Authorization to Transact Business
30. Pre-Construction Conference
31. Substitutions
32. Right to Protest
33. Bid General Conditions
34. Submittals

Section 2

Bid Form

Section 3

Bond Forms

Section 4

Scope of Work and Technical Specifications

Section 5

Insurance and Risk Management Provisions

TABLE OF CONTENTS

Section 6

Purchasing Forms

- Form A - Non-Collusion Affidavit of Prime Bidder
- Form B - Certificate of Acceptance of Request for Bid Requirements
- Form C - Georgia Professional License Certification (*not applicable*)
- Form D – Certification Regarding Debarment
- Form E – Disclosure Form and Questionnaire
- Form F – Georgia Security and Immigration Contractor Affidavit and Agreement
- Form G – Georgia Security and Immigration Subcontractor Affidavit

Section 7

Contract Compliance Requirements

Non-Discrimination in Contracting and Procurement

Required Forms and EBO Plan:

- Exhibit A – Promise of Non-Discrimination
- Exhibit B – Employment Report
- Exhibit C – Schedule of Intended Subcontractor Utilization
- Exhibit D – Letter of Intent to Perform As a Subcontractor or Provide Materials or Services
- Exhibit E – Declaration Regarding Subcontracting Practices
- Exhibit F – Joint Venture Disclosure Affidavit
- Exhibit G – Prime Contractor/Subcontractor Utilization Report
- Equal Business Opportunity Plan (EBO Plan)

VOLUMNE II

Section 8

General Conditions

Section 9

Special Conditions

Mandatory Federal Contract Provisions

Section 10

Exhibits

Exhibit 1- Davis Bacon Act Wages

Exhibit 2- Drawings List

Section 11

Appendices

Appendix A AC 150/5370-2F Operational safety on Airports During Construction

Appendix B AC 150/5210-5D Painting, marking, and Lighting of Vehicles Used on an Airport

INVITATION TO BID**#16ITB102592K-JD - CRACK SEAL, SEAL COAT, AND RE-MARKING FOR FULTON COUNTY AIRPORT-BROWN FIELD**

Sealed Bids for furnishing all materials, labor, tools, equipment and appurtenances necessary for Crack Seal, Seal Coat, and Re-Marking of Fulton County Airport-Brown Field will be received by the Fulton County Department of Purchasing and Contract Compliance at 130 Peachtree Street, S.W. Suite 1168 Atlanta, GA 30303, **no later than 11:00 a.m.**, local time, on **Monday, May 23, 2016**.

SCOPE OF WORK

This project consists of the placement of an asphalt pavement seal coat, sealing cracks in existing asphalt pavement, and re-marking of the entire aircraft movement area pavements. This movement area includes Runway 8/26, Runway 14/32 and all taxiways. The detailed scope of work and technical specifications are outlined in Scope of Work Section 4, and Technical Specifications of this bid document.

METHOD OF SOURCE SELECTION

This procurement is being conducted and the specific method of source selection in accordance with all applicable provisions of the Georgia Local Public Works Construction Law, O.C.G.A. §36-91-1 through 36-91-95 when a public works construction project cost exceeds \$100,000.

PERMITS

The selected Bidder will be required to obtain any permits needed to perform the work described in these contract documents.

BID DOCUMENTS

This document and supporting documents can be downloaded at the Fulton County Website, <http://www.fultoncountyga.gov> under "Bid Opportunities".

The Bid Documents and Drawings for this project may be examined and copies obtained at a cost of \$200.00 at the following location(s):

Michael Baker International, Inc.
420 Technology Parkway, Suite 150
Norcross, Georgia 30092
(770) 263-9118

A viewing copy **(FOR VIEWING PURPOSES ONLY)** of the **Drawings** will be available in the Department of Purchasing & Contract Compliance Plan Room located at 130 Peachtree Street, S.W. Suite 1168, Atlanta, Georgia 30303.

PURCHASING CONTACT

Information regarding the bid or bid requirements, either procedural or technical, may be obtained by submitting questions in writing to:

Fulton County Government
Department of Purchasing & Contract Compliance
Attn: Joyce Daniel
Fulton County Public Safety Building
130 Peachtree Street, S.W. Suite 1168
Atlanta, GA 30303
Email: joyce.daniel@fultoncountyga.gov
Fax: 404-355-5806
Reference Bid #16ITB102592K-JD

PRE-BID CONFERENCE

Date: Thursday, May 12, 2016
Time: 10:00 a.m. Mandatory Site Visit Immediately Following the Pre-Bid Conference
Location: Fulton County Airport-Brown Field
First Floor Conference Room
3977 Aviation Circle, NW
Atlanta, Georgia 30336

A Pre-Bid Conference will be held at the **Fulton County Airport-Brown Field**, located at **3977 Aviation Circle NW, First Floor Conference Room, Atlanta, Georgia 30336**. ***Mandatory Site Visit immediately following the Pre-Bid Conference. Inquiries regarding the solicitation either technical or otherwise may be submitted in writing prior to the pre-bid conference and will be addressed at the pre-bid conference.***

Any additional questions asked at the Pre-Bid Conference must be submitted in written form at the Pre-Bid conference and will be responded to in the form of an addendum with the County's official responses.

The Pre-Bid Conference will be conducted for the purpose of explaining the County's bid process, the specifications/technical documents, and to provide non-binding verbal responses to questions concerning these bid specifications and to discuss issues from the Bidders perspective. However, no verbal response provided at the Pre-Bid Conference binds the County. Only those responses to written questions that are responded to by the County in written communications will be official.

Fulton County does not discriminate on the basis of disability in the admission or access to its programs or activities. Any requests for reasonable accommodations required by individuals to fully participate in any open meeting, program or activity of Fulton County Government should be directed to Rholanda Stanberry, Contract Compliance Administrator at (404) 612-6304 or email: rholanda.stanberry@fultoncountyga.gov.

BONDING REQUIREMENTS

Each Bid must be accompanied by a Bid Bond, prepared on the Bid Bond provided in this Bid Document or a Surety Company's Standard Bid Bond, duly executed by the Bidder as principal and having as surety, a surety company licensed to do business in the State of Georgia by the Georgia Insurance Commissioner and listed in the latest issue of U.S. Treasury Circular 570, in the amount of five percent of the Bid.

The successful Bidder for this Contract will be required to furnish a satisfactory Performance and Payment Bond each in the amount of 100 percent of the Bid, and proof of insurance in accordance with the requirements set forth in Section 5 of this Bid Document.

END OF SECTION

OWNER - CONTRACTOR AGREEMENT

#16ITB102592K-JD - Crack Seal, Seal Coat, and Re-Marking for Fulton County Airport-Brown Field

Contractor: _____ Project No. _____

Address: _____ Telephone: _____

Contact: _____ Facsimile: _____

THIS AGREEMENT is effective as of the _____ day of _____, 20____, by and between Fulton County, a political subdivision of the State of Georgia (hereinafter called the "County"), and the above named CONTRACTOR in accordance with all provisions of this Construction Agreement ("Contract"), which consists of the following: Owner-Contractor Agreement, Owner's invitation for bid, instructions to bidders, bid form, performance bond, payment bond, acknowledgments, general conditions, special conditions, scope of work and specifications, plans, drawings, exhibits, addenda, Purchasing forms, Office of Contract Compliance Forms, Risk Management insurance provisions forms and written change orders.

The specific Exhibits of this Contract are as follows:

- Exhibit A: General Conditions
- Exhibit B: Special Conditions (if applicable)
- Exhibit C: Addenda
- Exhibit D: Bid Form
- Exhibit E: Bonds (Bid, Payment & Performance)
- Exhibit F: Scope of Work and Technical Specifications
- Exhibit G: Exhibits
- Exhibit H: Purchasing Forms
- Exhibit I: Office of Contract Compliance Forms
- Exhibit J: Risk Management Insurance Provisions Forms

WITNESSETH: That the said Contractor has agreed, and by these present does agree with the said County, for and in consideration of a Contract Price of **[INSERT CONTRACT AMOUNT IN WORDS]**, (**[\$[INSERT CONTRACT AMOUNT IN NUMBERS]**) and other good and valuable consideration, and under the penalty expressed on Bonds hereto attached, to furnish all equipment, tools, materials, skill, and labor of every description necessary to carry out and complete in good, firm, and workmanlike manner, the Work specified, in strict conformity with the Drawings and the Specifications hereinafter set forth, which Drawings and Specifications together with the bid submittals made by the Contractor, General Conditions, Special Provisions, Detailed Specifications, Exhibits, and this Construction Agreement, shall all form essential parts of this Contract. The Work covered by this Contract includes all Work indicated on Plans and Specifications and listed in the Bid entitled:

Project Number: **[INSERT PROJECT #]**

CRACK SEAL, SEAL COAT, and RE-MARKING FOR FULTON COUNTY AIRPORT-BROWN FIELD

The Contractor, providing services as an Independent Contractor, shall commence the Work with adequate force and equipment within 10 days from receipt of Notice to Proceed ("NTP") from the County, and shall complete the work within **[INSERT CONTRACT DURATION]** calendar days

from the Notice to Proceed or the date work begins, whichever comes first. The Contractor shall remain responsible for performing, in accordance with the terms of the Contract, all work assigned prior to the expiration of the said calendar days allowed for completion of the work even if the work is not completed until after the expiration of such days. The Contractor shall agree that in the performance of this Contract he will comply with all lawful agreements, if any, which the contractor has made with any association, union or other entity, with respect to wages, salaries and working conditions, so as to cause inconvenience, picketing or work stoppage.

[Insert if applicable For each calendar day that any work remains uncompleted after the time allowed for completion of the work, the Contractor shall pay the County the sum of \$ 500.00 not as a penalty but as liquidated damages, which liquidated damages the County may deduct from any money due the contractor. At the County's convenience and not to it prejudice the County may provide written notice of the commencement of the assessment of liquidated damages].

As full compensation for the faithful performance of this Contract, the County shall pay the Contractor in accordance with the General Conditions and the prices stipulated in the Bid, hereto attached.

It is further mutually agreed between the parties hereto that if, at any time after the execution of this Agreement and the Surety Bonds hereto attached for its faithful performance, the County shall deem the surety or sureties upon such bonds to be unsatisfactory, or, if, for any reason, such bonds cease to be adequate to cover the performance of the Work, the Contractor shall, at his expense, within five days after receipt of notice from the County so to do, furnish an additional bond or bonds in such form and amount, and with such surety or sureties as shall be satisfactory to the County. In such event no further payment to the Contractor shall be deemed to be due under this Agreement until such new or additional security for the faithful performance of the Work shall be furnished in manner and form satisfactory to the County.

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

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

This Contract constitutes the full agreement between the parties, and the Contractor shall not sublet, assign, transfer, pledge, convey, sell or otherwise dispose of the whole or any part of this Contract or his right, title, or interest therein to any person, firm or corporation without the previous consent of the County in writing. Subject to applicable provisions of law, this Contract shall be in full force and effect as a Contract, from the date on which a fully executed and approved counterpart hereof is delivered to the Contractor and shall remain and continue in full force and effect until after the expiration of any guarantee period and the Contractor and his sureties are finally released by the County.

This agreement was approved by the Fulton County Board of Commissioner on [Insert approval date and item number].

[SIGNATURES NEXT PAGE]

SAMPLE CONTRACT

IN WITNESS THEREOF, the Parties hereto have caused this Contract to be executed by their duly authorized representatives as attested and witnessed and their corporate seals to be hereunto affixed as of the day and year date first above written.

OWNER:

CONTRACTOR:

FULTON COUNTY, GEORGIA

[Insert Contractor COMPANY NAME]

John H. Eaves, Commission Chair
Board of Commissioners

[Insert Name & Title of person authorized to sign contract]

ATTEST:

ATTEST:

Mark Massey
Clerk to the Commission (Seal)

Secretary/
Assistant Secretary

(Affix Corporate Seal)

APPROVED AS TO FORM:

Office of the County Attorney

APPROVED AS TO CONTENT:

[Insert Department Head Name]
[Insert Department Head Title]

END OF SECTION

SAMPLE CONTRACT

INSTRUCTIONS TO BIDDERS

1. CONTRACT DOCUMENTS

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

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

The Contract Documents shall define and describe the complete work to which they relate.

2. BID PREPARATION

Bidders shall **SUBMIT ONE (1) ORIGINAL, SIGNED AND DATED, AND TWO (2) COPIES** on the forms provided in the Bid Document.

All bids must be made on the bid forms contained herein and shall be subject to all requirements of the Agreement Documents. All bids must be regular in every respect and no interlineations, excisions, or special conditions shall be made or included in the bid by the Bidder.

Lump sum, unit price and extensions of unit prices must be entered in the appropriate spaces provided on the Bid Schedule/Bid Form. Unit prices shall include an appropriate allocation of overhead and other indirect costs so that the summation of unit price extensions and lump sum items represents the total bid amount. All blank spaces must be typed or hand written in blue ink on the "Original". All dollar amounts must be BOTH in writing and figures and represent prices for the published scope of work without exceptions.

The County may, in its sole discretion, reject any bid determined as irregular, a conditional bid or any bid on which there is an alteration of, or departure from the Bid Schedule attached.

Erasures or other changes in the bids must be explained or noted over the signature of the Bidder. All corrections to any entry must be lined out and initialed by the Bidder. Please do not use correction tapes or fluid. Failure to do so shall render the Bidder as non-responsive and cause rejection of the bid.

Failure to execute the Bid Schedule/Bid Form documents may result in Bidder being deemed non-responsive and cause rejection of the bid.

3. RECEIPT AND OPENING OF BIDS

Sealed bids will be received by the Fulton County Department of Purchasing & Contract Compliance at Fulton County Public Safety Building, 130 Peachtree Street, S.W., Suite 1168 Atlanta, Georgia 30303. All submitted bids shall be time and date stamped according to the clock at the front desk of the Fulton County Department of Purchasing & Contract Compliance. The original signed Bid with three (3) copies shall be submitted in a sealed envelope, addressed to the Department of Purchasing and Contract Compliance and labeled **#16ITB102592K-JD-Crack Seal, Seal Coat, and Re-Marking for Fulton County Airport-Brown Field**.

REQUIRED SUBMITTALS: The bidder **must complete and execute** the following:

1. Bid Form
2. Acknowledgement of each Addendum
3. Bid Bond
4. Purchasing Forms (See Submittal Check List at end of this Section), fully executed
5. Contract Compliance Forms (See Submittal Check List at end of this Section), fully executed
6. Risk Management Insurance Provisions Form
7. References – Provide three (3) current references for projects completed over the past five (5) years showing work of a similar nature at an airport with an active air traffic control tower.
8. Provide copy of certification with the Georgia Department of Transportation's Equal Employment Opportunity (EEO) office.

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

Bid shall be publicly opened, with only the names and total bid price of the bidders disclosed at the opening.

4. ADDENDA AND INTERPRETATIONS

No interpretations of the meaning of the Drawings, Specifications or other pre-bid documents will be made to any Bidder orally.

Bidders requiring clarification or interpretation of the Contract Documents shall make a request in writing, either by mail, hand delivery, e-mail or fax, to the Purchasing Agent at the address below. To be given consideration, requests must

be received no later than **1:00 PM, Friday, May 13, 2016**. The County will not respond to any requests, oral or written, received after this date. Telephone inquiries will not be accepted.

Department of Purchasing and Contract Compliance
Attn: Joyce Daniel, Assistant Purchasing Agent
Fulton County Public Safety Building
130 Peachtree Street, S.W., 1168
Atlanta, GA 30303
Fax: (404) 335-5806
joyce.daniel@fultoncountyga.gov
Bid # 16ITB102592K-JD

Only communications from firms that are in writing and signed will be recognized by the County as duly authorized expressions on behalf of proposers/bidders. Any and all such interpretations and any supplemental instructions will be in the form of written Addenda to the Specifications which, if any addend are issued to this Invitation to Bid.

Failure of Bidders to receive or acknowledge any Addendum shall not relieve them of any obligation under the Bid. All Addenda shall become part of the Contract Documents.

5. SITE EXAMINATION

There will be a mandatory site visit for this project. It will be held on **Thursday, May 12, 2016 at 10:00 A.M.**, immediately following the Pre-Bid Conference. Bidders are required to attend.

Location: Fulton County Airport-Brown Field
First Floor Conference Room
3977 Aviation Circle, NW
Atlanta, Georgia 30336

6. BIDDER'S MODIFICATION AND WITHDRAWAL OF BIDS

A Bidder may modify or withdraw its bid by written request, provided that the request is received by the County prior to the bid due date and time at the address to which bids are to be submitted. Provided further, that in case of an electronic request (i.e. facsimile, e-mail, etc.) a written confirmation thereof over the authorized signature of the Bidder must be received by the County at the address to which original Bids are to be submitted within three (3) calendar days after issue of the electronic message. Following withdrawal of its bid, the Bidder may submit a new bid, providing delivery is affected prior to the established bid opening date and time. **No bid may be withdrawn after bid due date for sixty (60) calendar days.**

7. BID AND CONTRACT SECURITY

A Bid Bond for an amount equal to five percent (5%) of the bid amount must accompany each Proposal. The bid bond shall be submitted in a separate, sealed envelope marked "Bid Bond".

Bids must be accompanied by a bid bond or certified check in an amount of five percent (5%) of the TOTAL AMOUNT of the base bid. The bid bond or certified check shall apply ONLY TO THIS BID. The bid name and contract number must appear on the security instrument. The bond must remain in full force and effect until the Bidder executes the final Contract. Bids not satisfying the bonding requirements of this project will be declared non-responsive.

Any bid bond, performance bond, payment bond, or security deposit required for public works construction contract shall be approved and filed with purchasing agent. At the option of the County, if the surety named in the bond is other than a surety company authorized by law to do business in this state pursuant to a current certificate of authority to transact surety business by the Commissioner of Insurance, such bond shall not be approved and filed unless such surety is on the United States Department of Treasury's list of approved bond sureties.

A Purchasing Agent shall approve as to form and as to the solvency of the surety any bid bond, performance bond, or payment bond required by this. In the case of a bid bond, such approval shall be obtained prior to acceptance of the bid or proposal. In the case of payment bonds and performance bonds, such approval shall be obtained prior to the execution of the contract.

Whenever, in the judgment of the County:

- (1) Any surety on a bid, performance, or payment bond has become insolvent;
- (2) Any corporation surety is no longer certified or approved by the Commissioner of Insurance to do business in the state; or
- (3) For any cause there are no longer proper or sufficient sureties on any or all the bonds

The County may require the contractor to strengthen any or all of the bonds or to furnish a new or additional bond or bonds within ten days. Thereupon, if so ordered by the County, all work on the contract shall cease unless such new or additional bond or bonds are furnished. If such bond or bonds are not furnished within such time, the County may terminate the contract and complete the same as the agent of and at the expense of the contractor and his or her sureties.

As a condition of responsiveness the bidder must contain a Bid Bond for an amount equal to 5% of the bid amount. The Bid Bond shall be included in a separate envelope marked on the outside "Bid Bond". Checks or letters of credit of any type will not be accepted. A certified cashier's check will be acceptable. Provide a completed and fully executed Bid Bond. When the bidder's package is opened, a purchasing agent will verify the presence of the Bid Bond and remove it from the Proposal Package.

If the bidder withdraws its bid from the competition after the selection of its bid for a reason not authorized by Georgia law, the County will proceed on the Bid Bond, along with any other available remedies.

The Surety of the Bid Bond shall be from a surety company authorized to do business in the State of Georgia, shall be listed in the Department of Treasury Circular 570, and shall have an underwriting limitation in excess of 100% of the bid amount. The Bonds and Surety shall be subject to approval by the County Attorney.

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

8. **SURETY BONDS**

The submission of surety bonds subsequent to the Bid submission shall be:

- a. Any surety bond submitted in accordance with the Bid or Agreement requirements must be issued by a corporate surety company satisfactory to the Commission and authorized to act as such in the State of Georgia;
- b. Such bonds shall conform to the forms provided with the Bid Documents and be completed in accordance with the instructions thereon; and
- c. In accordance with Georgia law, and upon award of the Agreement, separate performance and payment bonds shall be required of the successful Bidder, each in an amount not less than the total amount payable under the Agreement. The performance bond shall remain in effect for one (1) year after final acceptance of the Work or the guaranty period under the Agreement, whichever is the larger.

The payment bond shall remain in effect for the period required under Georgia law for the payment bonds on public construction agreements. Reference is made to the bond forms and the Agreement Documents for additional particulars of the terms required in the bonds. In the case of any inconsistency between the Bond Forms and Georgia law, the law shall control. Alterations, extension of the time allowed for performance, extra and additional Work, and other changes authorized under the Agreement may be made without notice to or consent of the surety or sureties.

9. **INSURANCE REQUIREMENTS**

The Contractor shall procure and maintain during the life of this Agreement, Workmen's Compensation, Public Liability, Property Damage, Automobile Liability insurance and any other insurance necessary to satisfy the requirements of the Agreement Documents. At the time of award, a copy of the successful Bidder's Certificate of Insurance must be provided through the County's online insurance compliance system.

The County has implemented an online insurance compliance system designed to make the experience of submitting and retrieval of insurance information quick and easy. This system is designed to be used by insurance brokers and agents on behalf of their insurance clients for submittal of Certificates of Insurance ("COI") directly to the Fulton County Department of Purchasing. Instructions will be provided to the successful bidder.

10. RIGHT TO REJECT BIDS

The County reserves the right to reject any or all bids and to waive informalities. No bids will be received after the time set for opening bids. Any unauthorized conditions, limitations or provisions attached to the Bid, except as provided herein, will render it informal and may cause its rejection. Unbalanced bids will be subject to rejection. Any bidder may withdraw his/her bid, either personally or by telegraphic or written request, at any time prior to the scheduled closing time for receipt of bids. Telegraphic or written requests for withdrawal must be in the possession of the County prior to the closing time for receipt of bids.

11. APPLICABLE LAWS

All applicable laws and regulations of the State of Georgia and ordinances and regulations of Fulton County shall apply. Protestors shall seek resolution of their complaints in the manner provided in the Fulton County Purchasing Code §102-488 et. seq., which is incorporated by reference herein.

12. EXAMINATION OF CONTRACT DOCUMENTS

Prospective bidders shall examine the contract documents and before submitting a bid, shall make a written request to the County for an interpretation or correction of any ambiguity, in consistency or error therein which could be discovered by a bidder. At the bid opening each bidder shall be presumed to have read and be familiar with the contract documents.

13. BID EVALUATION

- a. Each Bid timely received and in the County's hands at the time set forth for the Bid opening shall constitute an offer to perform the Agreement on the terms and conditions thereof, in strict accordance with the Agreement documents, and all other requirements, all for the Bid total. For good cause and valuable consideration, the sufficiency of which is acknowledged by submittal of a Bid, each Bidder promises and agrees that its Bid shall be irrevocable for a period of **sixty calendar days** after the Bid opening and will not be withdrawn or modified during that time. The County may accept any Bid by giving the Bidder Written Notice of acceptance during that time. If necessary, the period of time specified may be extended by written agreement between the County and the Bidder or Bidders concerned.
- b. After the Bids have been opened and before any award is made, the County will evaluate the Bid process, the Bid total, the supplements to the Bid form, Bidder's experience, proposed Subcontractors and equipment

- manufacturers and other data relating to Bidders' responsibility and qualifications to perform the Agreement satisfactorily.
- c. All extension of the unit prices shown and the subsequent addition of extended amounts may be verified by the County. In the event of a discrepancy between the unit price bid and the extension, the unit price will be deemed intended by the Bidder and the extension shall be adjusted. In the event of a discrepancy between the sum of the extended amounts and the bid total, the sum of the extended amounts shall govern.
 - d. Bidder may be required to submit, in writing, the addresses of any proposed Subcontractors or Equipment manufacturers listed on the Bid, and to submit other material information relative to proposed Subcontractors or Equipment manufacturers. The County reserves the right to disapprove any proposed Subcontractor or Equipment manufacturers whose technical or financial ability or resources or whose experience are deemed inadequate.
 - e. The County reserves the right to reject any Bid the prices of which appear to be unbalanced, and to reject any or all Bids, or parts thereof, if it determines, in its sole discretion, that such rejection is in the best interest of the County. Where only a single responsible and responsive Bid is received, the County may in its sole discretion, elect to conduct a price or cost analysis of the Bid. Such Bidder shall cooperate with such analysis and provide such supplemental information as may be required. The determination whether to enter into an Agreement with such sole Bidder shall be solely within the County's discretion and not dependent upon performance of a price or cost analysis.
 - f. Bids will be evaluated on the basis of determining the lowest Bid total of a Bidder, not including alternates, whose Bid is responsive to the Invitation to Bid and who is determined to be technically, financially and otherwise responsible to perform the Agreement satisfactorily, and to meet all other requirements of the Bidding Documents relating thereto. Any Bid may be rejected if it is determined by the County to be non-responsive, provided, however, that the Commission reserves the right to waive any irregularities or technicalities which it determines, within its sole discretion, to be minor in nature and in the interest of the public. Furthermore, any Bid may be rejected if it is determined by the County, in its sole discretion, that the Bidder is not capable of performing the Agreement satisfactorily based upon review of its experience and technical and financial capabilities, or the failure of such bidder to provide information requested relating to such determination. Additionally, the County reserves the right to disqualify Bids, before and after the bid opening, upon evidence of collusion with intent to defraud or other illegal practices upon the part of any Bidder(s).
 - g. The County intends to award the Agreement at the earliest practicable date to the lowest responsive, responsible Bidder(s), provided that the Bid is within the funds available for the project. In addition, the County reserves the right to reject all Bids if it determines, in its sole discretion, that the public interest will be best served by doing so.

- h. A Pre-award Conference may be conducted with the apparent low Bidder(s) to review general requirements of the Bidding Documents.

14. AWARD CRITERIA

Award will be made after evaluating the prices, responsiveness and responsibility of each Bidder.

A. **Responsiveness:** The determination of responsiveness will be determined by the following:

- a. The completeness of all material, documents and/or information required by the County;
- b. Whether the bidder has submitted a complete Bid form without irregularities, excisions, special conditions, or alternative bids for any item unless specifically requested in the Bid form.

B. **Responsibility:** The determination of the bidder's responsibility will be determined by the following

- a. The ability, capacity and skill of the Bidder to perform and/or provide the Work required;
- b. The County reserves the right to reject any bid if the evidence submitted by, or investigation of, the bidder fails to satisfy the County that he/she is properly qualified to carry out the obligations of the Contract;
- c. The character, integrity, reputation, judgment, experience and efficiency of the Bidder;
- d. The quality of performance of work on previous contracts or work; Maintains a permanent place of business individually or in conjunction with the prime contractor.
- e. Has the appropriate and adequate technical experience necessary to perform the Work;
- f. Has adequate personnel and equipment to do the Work expeditiously;
- g. Has suitable financial means to meet obligations incidental to the work.

15. DISQUALIFICATION OF BIDDERS

Any of the following may be considered as sufficient for disqualification of a Bidder and the rejection of the Bid:

- a. Submission of more than one Bid for the same work by an individual, firm, partnership or Corporation under the same or different name(s);
- b. Evidence of collusion among Bidders;
- c. Previous participation in collusive bidding on Work for the County;
- d. Submission of an unbalanced Bid, in which the prices quoted for same items are out of proportion to the prices for other items;
- e. Lack of competency of Bidder. The Agreement will be awarded only to a Bidder(s) rated as capable of performing the Work.

16. BASIS OF AWARD

The Contract, if awarded, will be awarded to the lowest responsive and responsible bidder. No bid may be withdrawn for a period of sixty (60) days after the date of bid opening except as permitted by O.C.G.A., §36-91-41 et seq., as amended. Each Bid must be accompanied by a Bid Bond in accordance with the Bid Bond Requirements provided in the Contract Documents, on a Surety Company's Standard Bid Bond Form acceptable to the County in an amount no less than 5% of the amount bid. The successful bidder will be required to furnish a Performance Bond and Payment Bond, **on or before** the issuance of Notice to Proceed, each in the amount of 100% of the Contract Amount. All other required Contract Documents must be fully completed and executed by the Contractor and his/her Surety, and submitted to the Owner **on or before** the issuance of the Notice to Proceed.

17. PROFESSIONAL LICENSES - (NON-APPLICABLE)

The State of Georgia requires that the following professions are required by state law to be licensed:

1. Electricians
2. Plumbers
3. Conditioned Air Contractors
4. Low voltage Contractors

Bidders and any sub-contractors performing any of the above described work must provide a copy of their license for the work they will perform on this project. Bidders must complete Form C3: Georgia Professional License Certification in Section 6, Purchasing Forms Failure to provide the required license may deem your bid non-responsive.

18. WAGE CLAUSE

Pursuant to 102-413, Each Contractor shall agree that in the performance of the Contract he will comply with all lawful agreements, if any, which the Contractor had made with any association, union, or other entity, with respect to wages, salaries, and working conditions, so as not to cause inconvenience, picketing, or work stoppage.

19. NOTICE OF AWARD OF CONTRACT

As soon as possible, and within sixty (60) days after receipt of bids, the County shall notify the successful Bidder of the Award of Contract.

The award shall be made by the Board of Commissioners of Fulton County to the lowest responsive, responsible bidder(s) as soon as possible after receipt of bids, taking into consideration price and the responsiveness to the requirements set forth in the Invitation for Bid. In such case, no claim shall be made by the selected Contractor(s) for loss of profit if the contract is not awarded or awarded for less

work than is indicated and for less than the amount of his bid. The total of the awarded contract shall not exceed the available funds allocated for this project.

Should the County require additional time to award the contract, the time may be extended by mutual agreement between the County and the successful bidder. If an Award of Contract has not been made within sixty (60) days from the bid date or within the extension mutually agreed upon, the Bidder may withdraw the Bid without further liability on the part of either party.

Any award made by the Board of Commissioners as a result of this bid will begin from the date of the notice to proceed. The Bidder agrees hereby to commence work under this Contract, with adequate personnel and equipment, on a date to be specified in a written order from the user department. The contract shall become effective on the Contract Date and shall continue in effect until the end of the term of the contract or until the project has been closed-out unless earlier terminated pursuant to the termination provisions of the contract.

20. EXECUTION OF CONTRACT DOCUMENTS

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

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

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

Should the contractor and/or surety fail to execute the documents within the time specified, the County shall have the right to proceed on the Bid Bond accompanying the bid.

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

Should an extension of any of the time limits stated above be required, this shall be done only by mutual agreement between both parties.

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

21. INVOICES AND PAYMENT TERMS

Invoices are to be mailed to the County department specified on the resulting purchase order or master agreement. All invoices must include the purchase order number or master agreement number. Failure to comply may result in delayed payments. The County payment terms are Net 30 days unless a cash discount is allowed for payment within not less than twenty (20) days. The payment term shall begin on the date the merchandise is inspected, delivered and accepted by the County.

Submittal of Invoices: Invoices shall be submitted as follows:

Via Mail:

Fulton County Government
141 Pryor Street, SW
Suite 7001
Atlanta, Georgia 30303
Attn: Finance Department – Accounts Payable

OR

Via Email:

Email: Accounts.Payable@fultoncountyga.gov

At minimum, original invoices must reference all of the following information:

- 1) Vendor Information
 - a. Vendor Name
 - b. Vendor Address
 - c. Vendor Code
 - d. Vendor Contact Information
 - e. Remittance Address
- 2) Invoice Details
 - a. Invoice Date
 - b. Invoice Number (uniquely numbered, no duplicates)
 - c. Purchase Order Reference Number
 - d. Date(s) of Services Performed
 - e. Itemization of Services Provided/Commodity Units
- 3) Fulton County Department Information (needed for invoice approval)
 - a. Department Name
 - b. Department Representative Name

22. EQUAL EMPLOYMENT OPPORTUNITY (“EEO”) IN PURCHASING AND CONTRACTING

To be eligible for award of this Agreement, the Bidder must certify and fully comply with the requirements, terms, and conditions of the County’s Non Discrimination in Contracting and Procurement.

23. JOINT VENTURE

Any Bidder intending to respond to this solicitation as a joint venture must submit an executed joint venture agreement with its offer. The agreement must designate those persons or entities authorized to execute documents or otherwise bind the joint venture in all transactions with Fulton County, or be accompanied by a document, binding upon the joint venture and its constituent members, making such designation. Offers from joint ventures that do not include these documents will be rejected as being non-responsive.

24. CONTRACTORS COMPLIANCE WITH ALL ASSURANCES AND/OR PROMISES MADE IN RESPONSE TO PROCUREMENT

Should any Bidder submit a response to the County promising to provide a certain level of service for either the scope of work, MFBE participation, or any other matter, including where such promise or assurance is greater than what is required by the procurement documents, and should this response containing the promise or assurance be accepted by the County and made a part of the Contract Documents, then this degree or level of service promised by the bidder relating to the scope of work, MFBE participation, or other matter shall be considered to be a material part of the Agreement between the bidder and the County, such that the bidder's failure to provide the agreed upon degree or level of service or participation shall be a material breach of the Agreement giving the County just cause to terminate the Agreement for cause, pursuant to the General Conditions of the Agreement.

25. GEORGIA SECURITY AND IMMIGRATION COMPLIANCE ACT

This Invitation to Bid is subject to the Georgia Security & Immigration Compliance Act. Effective July 1, 2013, bidders and proposers are notified that all bids/proposals for services that are to be physically performed within the State of Georgia must be accompanied by proof of their registration with and continuing and future participation in the E-Verify program established by the United States Department of Homeland Security. Physical performance of services means any performance of labor or services for a public employer using a bidding process or by contract wherein the labor or services exceed \$2,499.99 99 (except for services performed by an individual who is licensed pursuant to Title 26, Title 43, or the State Bar of Georgia).

A completed affidavit must be submitted on the top of the bid/proposal at the time of submission, prior to the time for opening bids/proposals. Under state law, the County cannot consider any bid/proposal which does not include a completed affidavit. It is not the intent of this notice to provide detailed information or legal advice concerning the Georgia Security & Immigration Compliance Act. All bidders/proposers intending to do business with the County are responsible for independently apprising themselves and complying with the requirements of that law and its effect on County procurements and their participation in those procurements. For additional information on the E-Verify program or to enroll in the program, go to: <https://e-verify.uscis.gov/enroll>.

The Director of Purchasing & Contract Compliance is authorized to conduct random audits of a contractor's or subcontractors' compliance with the Illegal Immigration Reform and Enforcement Act and the rules and regulations of the Georgia Department of Labor.

See Section 00420, Purchasing Forms & Instructions for declarations and affidavits.

26. SUBCONTRACTING OPPORTUNITIES

Potential prime contractors submitting a bid on this project for Fulton County and are seeking subcontractors and/or suppliers can advertise those subcontracting opportunities on the County's website, <http://www.fultoncountyga.gov> under "Subcontracting Bid Opportunities".

27. TERM OF CONTRACT

The term of the Agreement shall be for a period of **sixty (60) available days**, or as may be amended under the Agreement to comprise the Agreement Time. Contractor shall commence the Work within ten calendar days after receipt of Notice to Proceed and shall substantially complete the Work within sixty (60) available days from issuance of the Notice to Proceed.

28. NO CONTACT PROVISION

It is the policy of Fulton County that the evaluation and award process for County contracts shall be free from both actual and perceived impropriety, and that contacts between potential vendors and County officials, elected officials and staff regarding pending awards of County contracts shall be prohibited.

- A. No person, firm, or business entity, however situated or composed, obtaining a copy of or responding to this solicitation, shall initiate or continue any verbal or written communication regarding this solicitation with any County officer, elected official, employee, or designated County representative, between the date of the issuance of this solicitation and the date of the County Manager's recommendation to the Board of Commissioners for award of the subject contract, except as may otherwise be specifically authorized and permitted by the terms and conditions of this solicitation.
- B. All verbal and written communications initiated by such person, firm, or entity regarding this solicitation, if same are authorized and permitted by the terms and conditions of this solicitation, shall be directed to the Purchasing Agent.
- C. Any violation of this prohibition of the initiation or continuation of verbal or written communications with County officers, elected officials, employees, or designated County representatives shall result in a written finding by the Purchasing Agent that the submitted Bid or proposal of the person, firm, or entity in violation is "non-responsive", and same shall not be considered for award.

29. AUTHORIZATION TO TRANSACT BUSINESS

If the Contractor is a corporation or corporations combined to form a joint venture, the corporation or members of the joint venture team, prior to Agreement execution, must submit documentary evidence from the Secretary of State that the corporation is in good standing and that the corporation is authorized to transact business in the State of Georgia.

30. PRE-CONSTRUCTION CONFERENCE

A pre-construction conference may be held with the successful Bidder and all known Subcontractors at a time and place set by the County.

31. SUBSTITUTIONS

See Special Conditions Article.

32. RIGHT TO PROTEST

Any actual bidder or offeror that has submitted a bid/proposal for a particular procurement and is aggrieved in connection with the solicitation or award of the contract shall protest in writing to the purchasing agent after the date that the specific bid or proposal is submitted. No protest will be accepted or considered prior to the date the specific bid or proposal is submitted; it will be considered untimely. All protests shall set forth in full detail the factual and legal bases for the protest and specific relief sought by the protestor. Protests arising from factual or legal bases that the protestor knew or should have known prior to the submission of the bid/proposal must be submitted within three business days of the submission of the bid/proposal. Protests arising from factual or legal bases that the protestor knew or should have known subsequent to the date the bid/proposal was submitted must be submitted within ten business days after the protestor knew or should have known of such bases, but in no event shall any protest be submitted more than ten business days after the award of the contract. Untimely protests will not be considered by the purchasing agent and will be simply denied as untimely. Decisions on timeliness by the purchasing agent are not appealable. An oral protest or a protest to an official, employee, User Department, or other person apart from the Director of Purchasing & Contract Compliance does not comply.

33. BID GENERAL CONDITIONS

1. A Bid may be withdrawn upon receipt of a written request prior to the stated due date and time. If a firm seeks to withdraw a bid after the due date and time, the firm must present a notarized statement indicating that an error was made, with an explanation of how it occurred. The withdrawal request must be accompanied by documentation supporting the claim. Prior to approving or disapproving the request, an opinion will be obtained from the County Attorney's Office indicating whether the firm is bound by its Bid.

Bids for projects that are solicited pursuant to the Georgia Local Government Public Works Construction Law (O.C.G.A. § 36-91-1 et seq.) may be withdrawn as follows:

The County must advise Offerors in the solicitation of the number of days that Offerors will be required to honor their Bid. If an Offeror is not selected within 60 days of opening the Bids, any Offeror that is determined by the governmental entity to be unlikely of being selected for contract award will be released from the Bid.

2. Fulton County shall be the sole judge of the quality and the applicability of all Bids. Design, features, overall quality, local facilities, terms and other pertinent considerations will be taken into account in determining acceptability.
3. The successful Offeror must assume full responsibility for delivery of all goods and services proposed.
4. The successful Offeror must assume full responsibility for replacement of all defective or damaged goods and/or performance of contracted services within thirty (30) days' notice by the County of such defect, damage or deficiency.
5. The successful Offeror must assume full responsibility for providing warranty service on all goods, materials, or equipment provided to the County with warranty coverage. Should a vendor be other than the manufacturer, the vendor and not the County is responsible for contacting the manufacturer. The Offeror is solely responsible for arranging for the service to be performed.
6. The successful Offeror shall be responsible for the proper training and certification of personnel used in the performance of the services proposed.
7. The successful Offeror shall not assign, transfer, convey, sublet, or otherwise dispose of any contract resulting from the Bid or of any of its rights, title or interest therein without prior written consent of the Fulton County Board of Commissioners.
8. In case of default by the successful Offeror, Fulton County may procure the articles or services from another source and hold the successful Vendor responsible for any resultant excess cost.
9. All proposals and Bids submitted to Fulton County are subject to the Georgia "Open Records Act", Official Code of Georgia, Annotated (O.C.G.A.) § 50-18-70 et seq.
10. All proposals and Bids submitted to Fulton County involving Utility Contracting are subject to the Georgia law governing licensing of Utility Contractors, O.C.G.A. §43-14-8.2(h).

34. SUBMITTALS

The following submittals must be completed and submitted with the Bid Submittal. This checklist is provided to ensure that the Bidder submits certain required information with its Bid.

	Bid Submittal Check Sheet	Check (√)
1.	Georgia Security and Immigration Contractor Affidavit(s) and Agreements	
2.	Georgia Security and Immigration Subcontractor Affidavit(s)	
3.	Bid Form	
4.	Acknowledgment of Addenda	
5.	Bid Bond	
6.	Non-Collusion Affidavit	
7.	Certificate of Acceptance of Request for Bid	
8.	Georgia Utility Contractor's License (Non Applicable)	
9.	Georgia General Contractors License (Applicable)	
10.	Georgia Professional License (Applicable)	
11.	Certificate Regarding Debarment	
12.	Disclosure Form and Questionnaire	
13.	Office of Contract Compliance Requirements (submitted in a separate envelope)	
14.	Proof of Insurance Coverage	
15.	References – Provide three (3) current references for projects completed over the past five (5) years showing work of a similar nature at an airport with an active air traffic control tower	
16.	Provide copy of certification with the Georgia Department of Transportation's Equal Employment Opportunity (EEO) office.	

END OF SECTION

BID FORM

Submitted To: Fulton County Government

Submitted By: _____

For: **#16ITB102592K-JD - Crack Seal, Seal Coat, and Re-Marking for Fulton County Airport-Brown Field**

Submitted on _____, 20__.

The undersigned, as Bidder, hereby declares that the only person or persons interested in the Bid as principal or principals is or are named herein and that no other person than herein mentioned has any interest in this Bid or in the Contract to be entered into; that this Bid is made without connection with any other person, company or parties making a Bid; and that it is in all respects fair and in good faith without collusion or fraud.

The Bidder further declares that he has examined the site of the work and informed himself fully in regard to all conditions pertaining to the place where the work is to be done; that he has examined the Drawings and Specifications for the work and contractual documents relative thereto, and has read all instructions to Bidders and General Conditions furnished prior to the openings of bids; that he has satisfied himself relative to the work to be performed.

The Bidder proposes and agrees, if this Bid is accepted, to contract with the Board of Commissioners of Fulton County, Atlanta, Georgia, in the form of contract specified, to furnish all necessary materials, equipment, machinery, tools, apparatus, means of transportation and labor necessary, and to complete the construction of the work in full and complete accordance with the shown, noted, and reasonably intended requirements of the Specifications and Contract Documents to the full and entire satisfaction of the Board of Commissioners of Fulton County, Atlanta, Georgia, with a definite understanding that no money will be allowed for extra work except as set forth in the attached General Conditions and Contract Documents for the following prices.

THE BASE BID IS THE AMOUNT UPON WHICH THE BIDDER WILL BE FORMALLY EVALUATED AND WHICH WILL BE USED TO DETERMINE THE LOWEST RESPONSIBLE BIDDER.

The base bid may not be withdrawn or modified for a period of sixty (60) days following the receipt of bids.

BASE BID AMOUNT

\$ _____
(Dollar Amount In Numbers)

(Dollar Amount in Words)

The Bidder agrees hereby to commence work under this Contract, with adequate personnel and equipment, on a date to be specified in a written "Notice to Proceed" from the County.

The Bidder declares that he understands that the quantities shown for the unit prices items are subject to either increase or decrease, and that should the quantities of any of the items of work be increased, the Bidder proposes to do the additional work at the unit prices stated herein; and should the quantities be decreased, the Bidder also understands that payment will be made on the basis of actual quantities at the unit price bid and will make no claim for anticipated profits for any decrease in quantities; and that actual quantities will be determined upon completion of work, at which time adjustments will be made to the contract amount by direct increase or decrease.

BASE BID AMOUNT

Runway 8-26

Item No.	Spec No.	Item Description	Unit	Est. Quantity	Amount
1	01000	Mobilization	L Sum	1	\$
2	S-160	Sterilization of Pavement Cracks All Sizes	L Sum	1	\$
3	S-190A	Pavement Marking Removal	Sq. Ft.	150,110.	\$
4	S-190B	Pavement Rubber Removal	Sq. Ft.	159,400	\$
5	P-608	Emulsified Asphalt Seal Coat	Sq. Yd.	84,275	\$
6	P-611A	Seal Small Crack in Bituminous Pavement	Lin. Ft.	62,882	
7	P-611B	Seal Medium Crack in Bituminous Pavement	Lin. Ft.	125,764	\$
8	P-611C	Seal Large Crack in Bituminous Pavement	Lin. Ft.	20,960	\$
9	P-620A	Pavement Marking, White Reflective, Final Application (Full Rate)	Sq. Ft.	80,025	\$
10	P-620B	Pavement Marking, White Non-Reflective, Initial Application (Half Rate)	Sq. Ft.	80,025	\$
11	P-620C	Pavement Marking, Yellow Reflective Final Application (Full Rate)	Sq. Ft.	5,600	\$
12	P-620D	Pavement Marking, Yellow Non-Reflective Initial Application (Half Rate)	Sq. Ft.	5,600	\$
13	P-620E	Preformed Thermoplastic Surface Painted Signs	Each	17	\$
	TOTAL BASE BID AMOUNT (lines 1-13)				\$

Alternate Bid No.1 Taxiway "I"

Item No.	Spec No.	Item Description	Unit	Est Quantity	Amount
1	01000	Mobilization	L Sum	1	\$
2	S-160	Sterilization of Pavement Cracks All Sizes	L Sum	1	\$
3	S-190A	Pavement Marking Removal	Sq. Ft.	7,150	\$
4	P-608	Emulsified Asphalt Seal Coat	Sq. Yd.	63,410	\$
5	P-611A	Seal Small Crack in Bituminous Pavement	Lin. Ft.	47,316	\$
6	611B	P- Seal Medium Crack in Bituminous Pavement	Lin. Ft.	96,632	\$
7	P-611C	Seal Large Crack in Bituminous Pavement	Lin. Ft.	15,722	\$
8	P-620C	Pavement Marking, Yellow Reflective, Final Application (Full Rate)	Sq. Ft.	7,510	\$
9	P-620D	Pavement Marking, Yellow Non-Reflective, Final Application (Half Rate)	Sq. Ft.	7,510	\$
	TOTAL ALTERNATE BID NO. 1 AMOUNT (lines 1-9)				\$

Alternate Bid No. 2 Runway 14-32

Item No.	Spec No.	Item Description	Unit	Est Quantity	Amount
1	01000	Mobilization	L. Sum	1	\$
2	S-160	Sterilization of Pavement Cracks All Sizes	L. Sum	1	\$
3	S-190A	Pavement Marking Removal	Sq. Ft.	34,725	\$
4	S-190B	Pavement Rubber Removal	Sq. Ft.	91,520	\$
5	P-608	Emulsified Asphalt Seal Coat	Sq. Yd.	53,700	\$
6	P-611A	Seal Small Cracks in Bituminous Pavement	Lin. Ft.	44,820	\$
7	P-611B	Seal Medium Cracks in Bituminous Pavement	Lin. Ft.	89,640	\$
8	P-611C	Seal Large Cracks in Bituminous Pavement	Lin. Ft.	14,940	\$
9	P-620A	Pavement Marking, White Reflective, Final Application (Full Rate)	Sq. Ft.	35,000	\$
10	P-620B	Pavement Marking, White Non-Reflective, Initial Application (Half Rate)	Sq. Ft.	35,000	\$
11	P-620C	Pavement Marking, Yellow Reflective, Final Application (Full Rate)	Sq. Ft.	5,374	\$
12	P-620D	Pavement Marking, Yellow Non-Reflective, Initial Application (Half Rate)	Sq. Ft.	5,374	\$
13	P-620E	Preformed Thermoplastic Surface Painted Signs	Each	28	\$
	TOTAL ALTERNATE BID NO. 2 AMOUNT (lines 1-13)				\$

Alternate Bid No.3- Taxiway 'A' & Taxiway 'B'

Item No.	Spec No.	Item Description	Unit	Est Quantity	Amount
1	01000	Mobilization	L Sum	1	\$
2	S-160	Sterilization of Pavement Cracks All Sizes	L Sum	1	\$
3	S-190A	Pavement Marking Removal	Sq. Ft.	9,700	\$
4	P-608	Emulsified Asphalt Seal Coat	Sq. Yd.	49,350	\$
5	P-611A	Seal Small Cracks in Bituminous Pavement	Lin. Ft.	41,169	\$
6	P-611B	Seal Medium Cracks in Bituminous Pavement	Lin. Ft.	82,339	\$
7	P-611C	Seal Large Cracks in Bituminous Pavement	Lin. Ft.	13,723	\$
8	P-620C	Pavement Marking, Yellow Reflective, Final Application (Full Rate)	Sq. Ft.	7,900	\$
9	P-620D	Pavement Marking, Yellow Non-Reflective, Initial Application (Half Rate)	Sq. Ft.	7,900	\$
	TOTAL ALTERNATE BID NO. 3 AMOUNT (lines 1-9)				\$

The Bidder furthermore agrees that, in the case of a failure on his part to execute the Contract Agreement and Bonds within ten days after receipt of conformed contract documents for execution, the Bid Bond accompanying his bid and the monies payable thereon shall be paid into the funds of the Owner as liquidated damages for such failure.

Enclosed is a Bid Bond in the approved form, in the sum of:

_____ Dollars

(\$ _____) according to the conditions of "Instructions to Bidders" and provisions thereof.

The undersigned acknowledges receipt of the following addenda (list by the number and date appearing on each addendum) and thereby affirms that its Bid considers and incorporates any modifications to the originally issued Bidding Documents included therein.

BID BOND

No bid for a contract in Fulton County for work to be done shall be valid for any purpose unless the Contractor shall give a Bid Bond with good and sufficient surety payable to, in favor of, and for the protection of Fulton County. The Bid Bond shall not be less than 5% of the total amount payable by the terms of the Contract. No bid shall be read aloud or considered if a proper bid bond has not been submitted.

Surety companies executing Bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State of Georgia.

Attestation for the corporation must be by the corporate officer; for a partnership by another partner; for an individual by a notary with the corporate seal.

BID BOND

#16ITB102592K-JD – Crack Seal, Seal Coat, Re-Marking for Fulton County Airport-Brown Field

FULTON COUNTY GOVERNMENT

KNOW ALL MEN BY THESE PRESENTS, THAT WE _____

_____ hereinafter called the PRINCIPAL, and _____

_____ hereinafter call the SURETY, a corporation chartered and existing under the laws of the State of _____

_____ and duly authorized to transact Surety business in the

State of Georgia, are held and firmly bound unto the Fulton County Government (COUNTY), in

the penal sum of _____

_____ Dollars and Cents (\$ _____) good and lawful money of the

United States of America, to be paid upon demand of the COUNTY, to which payment well and

truly to be made we bind ourselves, our heirs, executors, and administrators and assigns, jointly

and severally and firmly by these presents.

WHEREAS the PRINCIPAL has submitted to the COUNTY, for **#16ITB102592K-JD – Crack Seal, Seal Coat, Re-Marking for Fulton County Airport-Brown Field**, a Bid;

WHEREAS the PRINCIPAL desires to file this Bond in accordance with law:

NOW THEREFORE: The conditions of this obligation are such that if the Bid be accepted, the

PRINCIPAL shall within ten (10) calendar days after receipt of written notification from the

COUNTY of the award of the Contract execute the Contract in accordance with the Bid and upon

the terms, conditions and prices set forth therein, in the form and manner required by the

COUNTY, and execute sufficient and satisfactory Performance and Payments Bonds payable to

the COUNTY, each in the amount of one hundred percent (100%) of the total contract price, in

form and with security satisfactory to said COUNTY, then this obligation to be void; otherwise, to

be and remain in full force and virtue in law; and the SURETY shall upon failure of the

PRINCIPAL to comply with any or all of the foregoing requirements within the time specified

above immediately pay to the COUNTY, upon demand the amount hereof in good and lawful

money of the United States of America, not as a penalty, but as liquidated damages.

In the event suit is brought upon this Bond by the COUNTY and judgment is recovered, the SURETY shall pay all costs incurred by the COUNTY in such suit, including attorney's fees to be fixed by the Court.

Enclosed is a Bid Bond in the approved form, in the amount of _____
_____ Dollars
(\$ _____) being in the amount of five percent (5%) of the Contract Sum.
The money payable on this bond shall be paid to the COUNTY, for the failure of the Bidder to execute a Contract within ten (10) days after receipt of the Contract and at the same time furnish a Payment Bond and Performance Bond.

(SIGNATURES ON NEXT PAGE)

IN TESTIMONY THEREOF, the PRINCIPAL and SURETY have caused these presents to be duly signed and sealed this _____ day of _____, 20__

ATTEST:

PRINCIPAL

BY _____

(SEAL)

CERTIFICATE AS TO CORPORATE PRINCIPAL

I, _____, certify that I am the Secretary of the Corporation named as principal in the within bond; that _____, who signed the said bond of said corporation; that I know this signature, and his/her signature thereto is genuine; and that said bond was duly signed, sealed and attested for in behalf of said Corporation by authority of its governing body.

SECRETARY

(CORPORATE SEAL)

SURETY

BY _____

(SEAL)

END OF SECTION

PAYMENT BOND

No Contract with Fulton County for work to be done shall be valid for any purpose unless the Contractor provides a Payment Bond with good and sufficient surety payable to Fulton County for the use and protection of all sub-contractors and all persons supplying labor, materials, machinery, and equipment in the prosecution of the work provided for in the Contract. The Payment Bond shall be in the amount of 100% of the total contract amount, payable by the terms of the Contract, and shall be written on the following form.

Surety companies executing Bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State of Georgia.

Attestation for the corporation must be by the corporate officer; for a partnership by another partner; for an individual by a notary with the corporate seal.

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS that [insert name of contractor] (hereinafter called the "Principal") and [insert name of surety] (hereinafter called the "Surety"), are held and firmly bound unto **FULTON COUNTY**, a political subdivision of the State of Georgia (hereinafter called the "Owner"), its successors and assigns as obligee, in the penal sum of _____ **[100% of contract amount]**, lawful money of the United States of America, for the payment of which the Principal and the Surety bind themselves, their administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered, or is about to enter, into a certain written contract with the Owner, dated _____ **[insert date of contract]**, which is incorporated herein by reference in its entirety (hereinafter called the "Contract"), for construction-type services of a project known as **#16ITB102592K-JD – Crack Seal, Seal Coat and RE-Marking for Fulton County Airport-Brown Field**, as more particularly described in the Contract (hereinafter called the "Project");

NOW, THEREFORE, the condition of this obligation is such that if the Principal shall promptly make payment to all persons working on or supplying labor or materials under the Contract, and any amendments thereto, with regard to labor or materials furnished and used in the Project, and with regard to labor or materials furnished but not so used, then this obligation shall be void; but otherwise it shall remain in full force and effect.

1. A "Claimant" shall be defined herein as any subcontractor, person, party, partnership, corporation or the entity furnishing labor, services or materials used, or reasonably required for use, in the performance of the Contract, without regard to whether such labor, services or materials were sold, leased or rented, and without regard to whether such Claimant is or is not in privity of contract with the Principal or any subcontractor performing work on the Project, including, but not limited to, the following labor, services, or materials: water, gas, power, light, heat, oil, gasoline, telephone service or rental of equipment directly applicable to the Contract.

2. In the event a Claimant files a lien against the property of the Owner, and the Principal fails or refuses to satisfy or remove it promptly, the Surety shall satisfy or remove the lien promptly upon written notice from the Owner, either by bond or as otherwise provided in the Contract.

3. The Surety hereby waives notice of any and all modifications, omissions, additions, changes, alterations, extensions of time, changes in the payment terms, and any other amendments in or about the Contract and agrees that the obligations undertaken by this Bond shall not be impaired in any manner by reason of any such modifications, omissions, additions, changes, alterations, extensions of time, changes in payment terms, and amendments.

4. The Surety hereby agrees that this Bond shall be deemed amended automatically and immediately, without formal or separate amendments hereto, upon any amendment or modifications to the Contract, so as to bind the Principal and Surety, jointly and severally, to the full payment of any Claimant under the Contract, as amended or modified, provided only that the Surety shall not be liable for more than the penal sum of the Bond, as specified in the first paragraph hereof.

5. This Bond is made for the use and benefit of all persons, firms, and corporations who or which may furnish any materials or perform any labor for or on account of the construction-type services to be performed or supplied under the Contract, and any amendments thereto, and they and each of them may sue hereon.

6. No action may be maintained on this Bond after one (1) year from the date the last services, labor, or materials were provided under the Contract by the Claimant prosecuting said action.

7. This Bond is intended to comply with O.C.G.A. Section 13-10-1, and shall be interpreted so as to comply with the minimum requirements thereof. However, in the event the express language of this Bond extends protection to the Owner beyond that contemplated by O.C.G.A. Section 13-10-1, or any other statutory law applicable to this Project, then the additional protection shall be enforced in favor of the Owner, whether or not such protection is found in the applicable statutes. **IN WITNESS WHEREOF**, the Principal and Surety have hereunto affixed their corporate seals and caused this obligations to be signed by their duly authorized representatives this _____ of _____, _____.

_____(SEAL)
(Principal)

By: _____

Attest:

Secretary

_____(SEAL)
(Surety)

By: _____

Attest:

Secretary

(Address of Surety's Home Office)

(Resident Agent of Surety)

PERFORMANCE BOND

No contract with Fulton County for work to be done shall be valid for any purpose unless the Contractor provides a Performance Bond with good and sufficient surety payable to, in favor of, and for the protection of Fulton County. The Performance Bond shall be in the amount of 100% of the total contract amount, payable by the terms of the Contract, and shall be written on the following form.

Surety companies executing Bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business as a surety in Georgia.

Attestation for the corporation must be by the corporate officer; for a partnership by another partner; for an individual by a notary with the corporate seal.

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS that _____
(hereinafter called the "Principal") and _____
(hereinafter called the "Surety"), are held and firmly bound unto **FULTON COUNTY**, a political subdivision of the State of Georgia (hereinafter called the "Owner"), its successors and assigns, in the penal sum of _____ [100% of Contract amount], lawful money of the United States of America, for the payment of which the Principal and the Surety bind themselves, their administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered, or is about to enter, into a certain written contract with the Owner, dated _____, which is incorporated herein by reference in its entirety (hereinafter called the "Contract"), for construction-type services of a project known as **#16ITB102592K-JD – Crack Seal, Seal Coat and Re-Marking for Fulton County Airport-Brown Field**, more particularly described in the Contract (hereinafter called the "Project");

NOW, THEREFORE, the conditions of this obligation are as follows, that if the Principal shall fully and completely perform all the undertakings, covenants, terms, conditions, warranties, and guarantees contained in the Contract, including all modifications, amendments, changes, deletions, additions, and alterations thereto that may hereafter be made, then this obligation shall be void; otherwise it shall remain in full force and effect.

Whenever the Principal shall be, and declared by the Owner to be, in default under the Construction-Type Contract, the Surety shall promptly remedy the default as follows:

1. Complete the Contract in accordance with its terms and conditions; or, at the sole option of the Owner,
2. Obtain a bid or bids for completing the Contract in accordance with its terms and conditions, and upon determination by the Surety and the Owner of the lowest responsible bidder, arrange for a contract between such bidder and Owner and make available as the work progresses (even though there should be a default or succession of defaults under the Contract or contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the contract price; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the penal sum set forth in the first paragraph hereof, as may be adjusted, and the Surety shall make available and pay to the Owner the funds required by this Paragraph prior to the payment of the Owner of the balance of the contract price, or any portion thereof. The term "balance of the contract price," as used in this paragraph, shall mean the total amount payable by the Owner to the Contractor under the Contract, and any amendments thereto, less the amount paid by the Owner to the Contractor; or, at the sole option of the Owner,
3. Allow Owner to complete the work and reimburse the Owner for all reasonable costs incurred in completing the work.

In addition to performing as required in the above paragraphs, the Surety shall indemnify and hold harmless the Owner from any and all losses, liability and damages, claims, judgments, liens, costs and fees of every description, including reasonable attorney's fees, litigation costs and expert witness fees, which the Owner may incur, sustain or suffer by reason of the failure or default on the part of the Principal in the performance of any or all of the terms, provisions, and requirements of the Contract, including any and all amendments and modifications thereto, or

incurred by the Owner in making good any such failure of performance on the part of the Principal.

The Surety shall commence performance of its obligations and undertakings under this Bond promptly and without delay, after written notice from the Owner to the Surety.

The Surety hereby waives notice of any and all modifications, omissions, additions, changes, alterations, extensions of time, changes in payment terms, and any other amendments in or about the Contract, and agrees that the obligations undertaken by this Bond shall not be impaired in any manner by reason of any such modifications, omissions, additions, changes, alterations, extensions of time, change in payment terms, and amendments.

The Surety hereby agrees that this Bond shall be deemed amended automatically and immediately, without formal or separate amendments hereto, upon any amendment to the Contract, so as to bind the Principal and the Surety to the full and faithful performance of the Contract as so amended or modified, and so as to increase the penal sum to the adjusted Contract Price of the Contract.

No right of action shall accrue on this Bond to or for the use of any person, entity or corporation other than the Owner and any other obligee named herein, or their executors, administrators, successors or assigns.

This Bond is intended to comply with O.C.G.A. Section 36-91-1 et seq., and shall be interpreted so; as to comply with; the minimum requirements thereof. However, in the event the express language of this Bond extends protection to; the Owner beyond that contemplated by O.C.G.A. Section 36-91-1 et seq. and O.C.G.A. Section 13-10-1, as amended, or any other statutory law applicable to this Project, then the additional protection shall be enforced in favor of the Owner, whether or not such protection is found in the applicable statutes.

IN WITNESS WHEREOF the undersigned have caused this instrument to be executed and their respective corporate seals to be affixed and attested by their duly authorized representatives this _____ day of _____, _____.

_____(SEAL)
(Principal)

By _____

Attest:

Secretary

_____(SEAL)
(Surety)

By: _____

Attest:

Secretary

(Address of Surety's Home Office)

(Resident Agent of Surety)

END OF SECTION

SECTION 4**SCOPE OF WORK AND TECHNICAL SPECIFICATIONS****PART 1****SCOPE OF WORK**

This project consists of the placement of an asphalt pavement seal coat, sealing cracks in existing asphalt pavement, and re-marking of the entire aircraft movement area pavements. This movement area includes Runway 8/26, Runway 14/32 and all taxiways.

PERMITS:

The selected Bidder will be required to obtain any permits needed to perform the work described in these contract documents.

FEDERAL AVIATION ADMINISTRATION (FAA) REQUIREMENT

This project is partially funded by the State and/or local funds. Accordingly, the successful bidder will be required to comply with all applicable FAA, Federal and State rules and regulations, as well as those of Fulton County. The Airport and Airway Improvement Act of 1982 and Part 152 of the Federal Aviation Regulations (14 CFR Part 152) can be located at www.faa.gov/airports. Project must conform to all American with Disabilities Act (ADA) regulations.

A Disadvantage Business Enterprise (DBE) participation goal of 10.34% has been established for this project. Bidders shall comply with 49 C.F.R. Part 26 in their efforts to attain this goal. Bidders shall be required to document sufficient DBE participation to meet this goal, or alternatively document good faith efforts to do so. Davis-Bacon wage rates for Fulton County, GA will also apply.

DBE firms must be certified with the Georgia Department of Transportation's Equal Employment Opportunity (EEO) office. Certification document is to be submitted with the bid.

SECTION 01000

MOBILIZATION

PART 1 GENERAL

1.01 DESCRIPTION:

- A. The work covered by this section consists of preparatory work and operations, including but not limited to those necessary for the movement of personnel, equipment, supplies, and incidentals to the project site; for providing the items required by the General Provisions, Supplementary Conditions, Section 01510 Temporary Facilities and the General Requirements including but not limited to: the establishment of all temporary offices, buildings and other facilities necessary for work on the project, staging areas, haul routes, construction exits, and other facilities necessary for work on the project, surveying and construction staking, performance/payment bonds, labor, temporary gate, all barricades, closed runway markers, underground utility locators and materials bond, insurance, and for all other work and operations which must be performed or costs incurred prior to beginning work on the various items on the project site. This item also includes all work outside the limits of construction that is necessary to restore areas disturbed by the Contractor to their original condition including, but not limited to, pavement rehabilitation, grading, seeding, mulching, cleaning, and disposal.

PART 2 PRODUCTS

2.01 No products are associated with this project

PART 3 EXECUTION

3.01 PAYMENT:

- A. All work covered by this section will be paid for at the contract lump sum price for "Mobilization".
- B. Partial payments for the item of "Mobilization" will be made with the first and second partial pay estimates paid on the contract, and will be made at the rate of 25 percent of the lump sum price for "Mobilization" on each of these partial pay estimates.
- C. Partial Payments for the item of "Mobilization" after the second pay estimate will be made on a pro-rated basis with the monthly partial payment amount being related to the percent earned to date of the overall Contract, if the percent earned to date of the overall Contract exceeds 50% at the time of the estimate.
- D. The total sum of all payments shall not exceed the original contract amount bid for the item, regardless of the fact that the Contractor may have, for any reason, shut down his work on the project or moved equipment away from the project and then back again.
- E. All such payments will be made less the retainage provided for in the Contract.

Payment will be made under:

01000 Mobilization – per Lump Sum

END OF SECTION 01000

SECTION 01010

SUMMARY OF WORK

PART 1 GENERAL

1.01 RELATED DOCUMENTS:

- A. Drawings and general provisions of Contract, including General Provisions and Supplementary Conditions and other Division 1 Specification sections, apply to work of this section.

1.02 PROJECT IDENTIFICATION:

- A. The Project name is **#16ITB102592K-JD - Crack Seal, Seal Coat, and Re-Marking, Fulton County Airport - Brown Field, GDOT Project No. APXXX-XXXX-XX(121) Fulton**, as shown on Contract Documents prepared by: Michael Baker International, Inc. Drawings and Specifications are dated: **August , 2015**.

1.03 CONTRACT DOCUMENTS:

- A. Related requirements and conditions that are indicated on the Contract Documents include, but are not necessarily limited to the following:
 - 1. Existing site conditions and restrictions on use of the site.

1.04 SUMMARY BY REFERENCES:

- A. Work of the Contract can be summarized by references to the Contract, General Provisions, Supplementary Conditions, Specification Sections, Drawings, addenda and modifications to the contract documents issued subsequent to the initial printing of this project manual and including but not necessarily limited to printed material referenced by any of these. It is recognized that work of the Contract is also unavoidably affected or influenced by governing regulations, natural phenomenon including weather conditions and other forces outside the contract documents.
- B. Division 1 - General Requirements of the contract specifications is an integral part of the Contract Documents for each of the Contracts.

1.05 SEQUENCING OF WORK:

- A. The Contractor shall submit his proposed work schedule and sequencing/safety plan, ten (10) days prior to the preconstruction conference, for the Owner's and Engineer's approval. The sequencing/safety plan submitted by the Contractor shall conform, but is not limited to, the following requirements:
 - 1. No open trenches will be left overnight without adequate safety measures and traffic control devices approved by the Engineer.
 - 2. The Contractor shall maintain one lane of traffic open at all times during construction except for periods acceptable to the Owner and approved by Engineer in writing. The Contractor shall make his request in writing to close all lanes, on a case by case basis, at least seven (7) days in advance of the requested closure.

3. The sequencing/safety plan shall insure no interruption of normal airport operations in and around the work areas during construction.
4. The Contractor shall give the Engineer a two-day written notice of any changes in the work schedule in order to inform and coordinate work activities with the airport's tenants.
5. The Contractor's sequencing/safety plan shall include details regarding barricades and other traffic control devices and the proposed number of devices to be used to maintain a safe work area. The final decision regarding the amount of barricades and safety devices to be used shall be determined by the Owner. All costs associated with the barricades/safety devices will be paid for in the various items of associated work.

1.06**CONCURRENT WORK BY OWNER:**

- A. **Overlapping Work:** The work to be performed may overlap work by others to be performed concurrently. Each Contractor shall coordinate and schedule his work with the knowledge that each may be working the same area simultaneously. Each Contractor will be expected to cooperate with the Engineer, Owner, and other Contractors in the completion of the work.
- B. **Disputes:** The Engineer, whose decision will be final, will decide any disputes arising between the Contractors.
- C. **Coordination:** Contractors shall coordinate their schedules and work activities very, including holding weekly meetings in the presence of the Engineer's onsite representative. Contractors must cooperate with each other, including working around each other's work activities. Potential delays as a result of lack of coordination will not be considered grounds for claim for additional time extensions and/or additional compensations.

1.07**CONTRACTOR USE OF PREMISES:**

- A. **Use of the Site:** Confine operations at the site to the areas permitted under the Contract. Portions of the site beyond areas on which work is indicated are not to be disturbed. Conform to site rules and regulations affecting the work while engaged in project construction.
- B. Keep existing drives, entrances, and air operations areas designated to remain open, clear and available to the Owner, his employees and the public at all times. Do not use these areas for parking or storage of materials.
- C. Do not unreasonably encumber the site with materials or equipment. Confine stockpiling of materials and location of storage sheds to the areas indicated. If additional storage is necessary, obtain Engineer's approval.
- D. Lock automotive type vehicles, such as passenger cars and trucks, and other mechanized or motorized construction equipment, when parked and unattended, so as to prevent unauthorized use. Do not leave such vehicles or equipment unattended with the motor running or the ignition key in place. Contractor personnel shall not be allowed among the airfield employee's vehicles or equipment.

1.08**WORK RESTRICTION:**

- A. **NAVAID Areas:** During the time of construction, the Contractor may be restricted from working in or around certain essential electronic navigational aids necessary to the safe operation of the airport. The Contractor is hereby notified that the Engineer may restrict construction operations in those areas closest to the active runway and taxiways.
- B. **Radio Communication:** Contractor shall maintain two-way radio communication with the Airport air operations personnel, on their frequency, at all times during construction. Contractor shall have a working radio on site at all times during construction and shall assign responsible personnel, including flagmen, to continuously monitor the radio. All radios shall be as specified in Section 01510.
- C. **Notice to Airmen (NOTAMS):** The Contractor shall provide necessary information on construction conditions so that the Owner can advise the Flight Service Station to issue a NOTAM in accordance with established criteria. All requests for NOTAMS for taxiway closures shall be made at least 48 hours in advance (not including weekends) by the Contractor to the Engineer. All requests for closure of a runway or for moving into a phase that requires the closure of a Navaid shall be made at least 7 days in advance (not including weekends) by the Contractor to the Engineer.
- D. **Turf Restoration:** All non-paved areas that are disturbed by the Contractor's work, staging area, haul roads, etc. shall be reseeded and restored to original condition by the Contractor. Except where otherwise specified, there will be no separate pay item for this work; it will be considered incidental to and included in the price bid for Section 01000, Mobilization.
- E. **Security:** Contractor shall provide security within his construction area and shall keep all unauthorized personnel out.
- F. **Haul Route on Airfield Pavement:** Contractor will not be allowed to use any of the existing runways, taxiways, or aprons as part of the haul road unless authorized in writing by the Engineer.
- G. **Access Points:** All construction traffic shall enter and exit the project area only through the project access point(s) shown on the plans or approved by the Engineer. Contractor will be responsible for security of entrance gates under use by him/her.
- H. **Construction Stakeout:** The Contractor shall perform construction stakeout in accordance with Article 50-06 of the General Provisions.
- I. **Haul Route:** The Contractor shall be responsible for establishing haul routes suitable for supporting all necessary transportation and construction equipment for the duration of the project. Any existing roads or other areas that are used as part of the haul route shall be restored to their original condition after completion of the project. The Contractor will be responsible for all cleanup operations of debris that may be on the haul route and for watering and/or other dust preventive measures to preclude fugitive dust from affecting buildings, occupants, or airfield operations. No separate payment will be made for seeding or mulching, or pavement restoration; such costs will be incidental to and included in the price bid for Section 01000, Mobilization.

- J. Airfield Safety Devices: Contractor shall maintain all airfield safety devices such as staked limit lines for the duration of the project as required. Damaged stakes or flagging shall be replaced immediately.
- K. Vehicular Markings and Lighting: All vehicles and equipment used on the airfield shall meet airport requirements for marking and lighting.
- L. Contracts During Non-Working Hours: For the duration of the project, the Contractor shall designate a list of authorized individuals in a prioritized order, to be on 24 hour call, and these individuals shall be equipped with a beeper and cellular phone. These individuals shall be able to respond to any situation arising out of the performance of the work on this project, particularly during nighttime hours, and shall respond and be on the project site within one hour after the phone call or beep.
- M. Airfield Pavement Cleanup: The Contractor shall promptly clean any and all debris arising from the project work that is left on operational airfield pavement. The Owner may remove any debris attributable to the Contractor found to be a hazard to aircraft. A fee of \$250/hour will be assessed to the Contractor for all such cleaning and will be deducted on the next Contractor pay request.

1.09

EQUIPMENT:

- A. All areas that are disturbed by Contractor's work, staging area, haul roads, etc., shall be restored to original condition by the Contractor. There will be no separate pay item for this work. Contractor will provide security within his construction area and will keep all unauthorized personnel out.
- B. All construction traffic shall enter and exit the project area via the project access routes shown on the plan and approved by the Engineer only.

1.10

COORDINATION:

- A. General: The work of this Contract includes coordination of the entire work of the project, including preparation of general coordination drawings, diagrams and schedules, and control of site utilization, from beginning of construction activity through project close-out and warranty periods.

1.11

PARTIAL OWNER OCCUPANCY OR USE:

The Owner reserves the right to use completed and accepted work provided such use does not interfere with completion of other work. Such use will not affect warranty stipulations addressed elsewhere in the contract documents.

1.12

MEASUREMENT AND PAYMENT:

Except as otherwise specified, no separate measurement or payment will be made for work set forth in this section; such costs will be considered as incidental to and included in the price for Section 01000, Mobilization, or other items as appropriate.

END OF SECTION 01010

SECTION 01030

**AIRPORT PROJECT PROCEDURES
(Construction Safety Plan)**

PART 1: GENERAL

1.01 **INTRODUCTION.** This project will involve Contractor operations within active Air Operations Areas (AOA). The Airport will conduct normal aircraft operations during the course of this project, subject to certain restrictions called out in this section or elsewhere in the specifications. Therefore, to provide for the security and safety of Airport users and the Contractor's forces, as well as to minimize interruptions to aircraft operations, the Contractor shall limit his work within the areas designated and conduct his operations as specified.

1.02 **UNAUTHORIZED CROSSING OF ACTIVE AIRFIELD OPERATIONS AREAS (AOA).** Any fines or assessments levied against the Sponsor as a result of intrusions in the AOA or other violations by the Contractor's personnel or those of his subcontractors and material suppliers will be passed on to the Contractor. In addition, the Contractor will be subject to a fine of \$1,000.00 per incident, assessed by the Sponsor.

1.03 **AIR OPERATION AREA (AOA) SAFETY REQUIREMENTS.**

A. **Barricades:** Existing aprons, taxiways and runways outside the limits of construction shall be separated from construction areas with barricades as shown on the plans and described in Section 01530.

1.04 **CONSTRUCTION SAFETY REQUIREMENTS**

A. **General:**

1. **Safety Officer:** The Contractor is required to employ a Safety Officer who will be the liaison between the Contractor, the Engineer and the Owner in all safety related matters for the duration of the project. The Safety Officer shall be on call 24 hours per day for emergency maintenance of airport hazard lighting, barricades, and other safety features.
2. **Protection of Utilities:** The Contractor shall be responsible for field marking and protecting all utilities within the construction limits.
3. **Storage of Equipment, Vehicles, and Materials:** All equipment, vehicles, and materials must be stored in the designated storage or staging area or in areas acceptable to the Engineer.
4. **Vehicular Markings:** Contractor vehicles and equipment shall be marked with checkered flags and lighted with flashing beacons to comply with requirements of FAA AC 150/5210-5D.
5. **Construction Methods Limitation:**
 - a. No open flames or burning will be allowed on Airport property unless specifically authorized by Engineer.
 - b. Stockpiled material shall be constrained in a manner to prevent displacement by jet blast, prop blast, or wind and shall be kept to a height so as to not penetrate FAR Part 77 imaginary air space.

- 6. Safety and Accident Protection:
 - a. The Contractor shall comply with all applicable federal, state, and local laws, ordinances, and regulations governing safety, health, and sanitation; shall provide barricades; and shall take any other needed actions, on his own responsibility, that are reasonably necessary to protect the life and health of employees on the job, the safety of airport users, and the safety of moving and parked aircraft, and other property during the performance of the work.
 - b. The Safety Officer's duties shall include accident prevention.
 - 7. Navigational Aids: Airport navigational aid critical areas are shown on the drawings. The Contractor shall not enter these areas without the Engineer's approval.
 - 8. FAA Advisory Circular: Except as otherwise specified, FAA AC 150/5370-2F and all its references shall be used in maintaining airport operational safety during construction. **A copy of this circular is reproduced and attached herein as Appendix A.**
- B. Runway and Taxiway Safety Zones:
- 1. Limitations: When necessary to accomplish construction in areas adjacent to runways and taxiways, the construction equipment, vehicles, and men are authorized to operate without interruption within the project limits, except within the following areas and as specified otherwise:
 - Distance from Runway centerline or end
 - within 250 feet.
 - Distance from active Taxiway centerline
 - within 40 feet.
 - Runway End approach areas
 - within 20:1 slope
approach surface as shown on drawings,
unless noted otherwise.
 - 2. Request for Facility Closures: Construction activities on runways or taxiways or within the above restricted areas shall only be performed at times when the runway or taxiways are closed to aircraft. Closure of a runway or taxiway or any portion thereof must be requested in writing by the Contractor through the Engineer. This request must indicate the areas needed and a schedule of operations and time(s) required for operations within the area. The Owner reserves the right, however, to shift any approved closure periods to alleviate aircraft congestion or when inclement weather conditions dictate.
 - 3. Equipment Operation Restrictions: Contractor may be permitted to operate trenching machines and other equipment in the runway and taxiway safety zones provided all of the following conditions are satisfied:
 - a. The equipment operator and/or crew foreman monitors the ATC ground frequency continuously, using a two way radio transceiver.

- b. All equipment shall be cleared from the Runway or Taxiway Safety Zones during aircraft operations (landings, take-offs, and taxiing).
 - c. All equipment within the Runway and Taxiway Safety Zones is manned and being used. No unnecessary or parked equipment will be allowed within the Runway and Taxiway Safety Zones.
 - d. All excavated trenches and holes shall be backfilled, tamped and leveled to match existing grades before workmen leave the site at the end of each work day.
4. Stockpiles: Stockpiled materials shall not be permitted within the runway or taxiway safety zones.
5. Grading Requirements: All construction within a restricted area shall be performed in such a manner that, at the end of the closure period, it will leave the safety area with no abrupt grade changes or grades in excess of 5 percent and with no trenches with depth or width greater than 3 inches, unless in the case of taxiway safety areas, the safety area has been marked and barricaded in accordance with FAA A/C 150/5370-2F and as approved by the Engineer.
- C. Obstructions to Navigation:
- 1. Violation of Safety Zone Surfaces: Penetration of equipment, vehicles, materials, or men into the safety zones and approach surfaces requires the preparation and distribution of Notices of Airmen (NOTAM) in advance to the actual penetration.
 - 2. Scheduling: When part of the work in this project is in violation of FAR Part 77, the clearance distance requirements from runway and taxiway edges shall be incorporated into the construction sequence schedule. At no time shall the construction limits of the area under construction violate the safety zones without prior notification to and approval by the Engineer.
 - 3. Coordination and Communication: Work within and adjacent to active AOAs shall be coordinated with the Engineer prior to commencement of the activity. Work crews in these areas shall be accompanied by the construction superintendent and the resident inspector, both of which shall be in constant radio contact with ATC.
- D. **Additional safety requirements are set forth in FAA A/C 150/5370-2F, "Operational Safety on Airports During Construction," attached to the end of the project manual as Appendix "A."**

1.05 SAFETY PLANNING: The Contractor shall integrate and maintain requirements of airport operational safety into each of his planning and work schedules. The Contractor's Safety Officer shall continuously monitor all planning schedules and work underway for compliance to AC 150/5370-2F; he shall maintain vigilance to detect areas needing attention due to oversight or altered construction activities. Airport operational safety during construction will be on the agenda at the preconstruction conference and each coordination and progress meeting.

1.06 SECURITY REQUIREMENTS: The Contractor has the responsibility for maintaining control of the access gates or any other entrance to the AOA. The Contractor may utilize a gate

guard or install an automatic operated gate controller with limited access with numeric key-pad. The Contractor's method of maintaining security shall be set forth in his Security Plan.

1.07

BARRICADES: Contractor shall provide barricades along the active runway and taxiway pavement areas and elsewhere as shown on the plans or as directed by the Engineer while work is proceeding in the taxiway, apron and runway areas. Barricades shall be placed and relocated as necessary during the course of the work to clearly identify areas closed to aircraft operations.

1.08

CONTRACTOR USE OF PREMISES.

- A. Use of the Site: Confine operations at the site to the areas designated on the Drawings. Portions of the site beyond areas on which work is indicated are not to be disturbed. Conform to site rules and regulations affecting the work as stated on this Safety Plan while engaged in project construction.
- B. Keep existing drives, entrances and air operations areas designated to remain open, clear and available to the Owner, his employees and the public at all times. Do not use these areas for parking or storage of materials.
- C. Do not unreasonably encumber the site with materials or equipment. Confine stockpiling of materials and location of storage sheds to the areas indicated. If additional storage is necessary, obtain Engineer's approval.
- D. Lock automotive type vehicles, such as passenger cars and trucks, and other mechanized or motorized construction equipment, when parked and unattended, so as to prevent unauthorized use. Do not leave such vehicles or equipment unattended with the motor running or the ignition key in place.

PART 2:

PRODUCTS

2.01

BARRICADES: Barricades shall be of material and construction as specified in Section 01530.

PART 3:

EXECUTION

3.02

LIMITATION OF CLOSURES:

- A. Airfield pavement closures will be made only by the OWNER through the Engineer. The Contractor shall request the closure through the OWNER, to issue the order to close an active airfield pavement.

3.03

BARRICADE INSTALLATION:

- A. Install barricades at location shown on the drawings and where directed by Engineer. Maintain barricades and markings until removal is directed by Engineer.
- B. Barricade batteries shall be checked and maintained on a weekly basis to insure the adequate operation of the flashers during the night. Replace batteries as required. Upon removal of barricades, repair any damage to pavement or surrounding area caused by markers or barricades.

3.04

MEASUREMENT AND PAYMENT:

Except as otherwise specified in Item 01530, no measurement or payment shall be made for this item of work, and it will be considered as incidental cost to Mobilization, Section 01000.

END OF SECTION 01030

SECTION 01040

PROJECT COORDINATION

PART 1: GENERAL

1.01 RELATED DOCUMENTS. All contract documents and drawings apply to work of this section.

1.02 DESCRIPTION OF WORK: Administrative and supervisory requirements necessary for coordination of work on the project include but are not necessarily limited to the following:

- 1. Coordination and meetings.
- 2. Surveys and records or reports.
- 3. Limitations on use of site.
- 4. Special reports.
- 5. General installation provisions.
- 6. Cleaning and protection.
- 7. Conservation and salvage.

PART 2: PRODUCTS (Not applicable.)

PART 3: EXECUTION

3.01 COORDINATION AND MEETINGS.

- A. General: The Contractor shall prepare a written memorandum on required coordination activities and include such items as required notices, reports and attendance at meetings. Distribute this memorandum to each entity performing work at the Project site. Prepare similar memorandum for separate Contractors where interfacing of their work is required.
- B. Preconstruction Conference: A Preconstruction Conference will be scheduled after award of Contract and prior to issuance of a Notice to Proceed. Key Project personnel representing the Prime Contractor and all major Subcontractors will be required to attend this Conference. All other parties involved with this Project, such as the Owner, Engineer, and FAA, will also be represented. All affected parties at the Preconstruction Conference will review the entire Construction Schedule carefully. The Contractor shall prepare a detailed Construction Schedule for review prior to and at the Preconstruction Conference.
- C. Coordination Meetings: The Contractor shall hold General Project Coordination Meetings at regularly scheduled times convenient for all parties involved. These meetings may be as often as weekly if required. These meetings are in addition to specified meetings held for other purposes, such as regular Project meetings and special Pre-installation Meetings. Request representation at each meeting by every party currently involved in coordination or planning for the work of the entire Project. Conduct meetings in a manner, which will resolve coordination problems. Record results of the meeting and distribute copies to everyone in attendance and to others affected by decision or actions resulting from each meeting.

1. The Contractor shall also conduct daily coordination meetings with the Engineer's representative, and designated Owner's representative to coordinate construction and airport operations.
- D. Progress Meetings: Conduct progress meetings by teleconference weekly and at the project site monthly. Notify the Owner and Engineer of scheduled meeting dates. Coordinate dates of meetings with preparation of the payment request. Progress meeting can be held in conjunction with coordination meetings.
- E. Attendees: In addition to representatives of the Owner and Engineer, each subcontractor, supplier or other entity concerned with current progress or involved in planning, coordination or performance of future activities shall be represented at these meetings by persons familiar with the project and authorized to conclude matters relating to progress.
- F. Agenda: Review and correct or approve minutes of the previous coordination meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to the current status of the project, and to airport operational safety during construction.
1. Contractor's Construction Schedule: Review progress since the last meeting. Determine where each activity is in relation to the Contractor's Construction Schedule, whether on time or ahead or behind schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be expedited; secure commitments from parties involved doing so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
 2. Other: Review the present and future needs of each entity present, including such items as:
 - a. Interface requirements.
 - b. Time.
 - c. Sequences.
 - d. Deliveries.
 - e. Off-site fabrication problems.
 - f. Access.
 - g. Site utilization.
 - h. Temporary facilities and services.
 - i. Hours of work.
 - j. Hazards and risks.
 - k. Housekeeping.
 - l. Quality and work standards.
 - m. Change orders.
 - n. Documentation of information for payment requests.
- G. Reporting: No later than 3 days after each progress meeting date, Contractor shall distribute copies of minutes of the meeting to each party present and to other parties who should have been present. Include a brief summary, in narrative form, of progress since the previous meeting and report.
- H. Schedule Updating: Revise the construction schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue the revised schedule concurrently with the report of each meeting.

3.02**SURVEYS AND RECORDS/REPORTS.**

- A. Construction Staking: The Engineer has established survey base lines for the Contractor. The Contractor shall take all necessary precautions to prevent the loss or damage of primary control points. The Contractor will be responsible for staking required for construction. Working from lines and levels established by the design survey, establish and maintain benchmarks and other dependable markers required for construction. Establish bench marks and markers to set lines and levels for work at each stage of construction and elsewhere as needed to properly locate each element of the project. Calculate and measure required dimensions as shown within recognized tolerances. Drawings shall not be scaled to determine dimensions. Advise entities performing work of marked lines and levels provided for their use.
- B. Survey Procedures: Before proceeding with the layout of actual work, verify the layout information shown on the drawings, in relation to the property survey and existing benchmarks. As work proceeds, check every major element for line, level and plumb. Maintain a surveyor's log or record book of such checks; make this log or record book available for the Engineer's reference. Record deviations from required lines and levels, and advise the Engineer promptly upon detection of deviations that exceed indicated or recognized tolerances. Record deviations, which are accepted, and not corrected, on record drawings. Survey work shall be performed by and under supervision of a professional (registered) land surveyor in the State where the project is located.
- C. Quality of Work: The elevations of permanent and temporary benchmarks shall be determined and recorded to the nearest 0.01 foot. Differential leveling and transit traverses shall be of such precision that the error of vertical closure in feet shall not exceed plus or minus 0.1 foot in 5000 feet. The angular error of closure for transit traverses shall not exceed 1.0-minute times the square root of the number of angles turned.
1. Slope stakes shall be placed, as a minimum, at 100-foot stations, breaks in the original ground surface, and at any other Intermediate stations necessary to insure accurate location for construction layout and measurement. Slope stakes and cross sections shall be perpendicular to the centerline. Significant breaks in grade shall be determined for cross sections. Distances shall be measured horizontally and recorded to the nearest 0.1 foot. Side shots for interim construction stakes may be taken with a hand level.
- D. Records: All survey data shall be recorded in fully identified, standard hardbound engineering survey field notebooks with consecutively numbered pages. All field notes and printed data shall include the purpose or description of the work, the date the work was performed, weather data, sketches and the personnel who performed and checked the work. Electronically generated survey data and computations shall be bound, page numbered and cross-referenced in a bound field notebook containing the index for all survey data.
1. The construction survey records shall be available at all times during the progress of the work for examination and use by the Engineer and copies shall be made available to the Engineer upon request. The original field notebooks and other records shall be turned over to and become the property of the Owner prior to final acceptance of the work.
- E. Quality Assurance Survey Services: Contractor shall furnish surveying services required to establish horizontal and vertical location of soil

density tests by Owner's QA testing laboratory.

- F Engineer Services: Engineer will furnish available benchmark and coordinate information at no cost to Contractor.

3.03

LIMITATIONS ON USE OF THE SITE:

- A. General: Limitations on site usage as well as specific Requirements that impact site utilization are indicated on the drawings and by other contract documents Schedule deliveries so as to minimize space and time requirements for storage of materials and equipment on site.
- B. Waste Disposal: Waste materials shall be disposed of off airport property except as specified otherwise in Contract Documents.

3.04

MEASUREMENT AND PAYMENT: No measurement or payment will be made for work in this section; it will be considered as incidental cost to Mobilization and other items of work.

END OF SECTION 01040

SECTION 01060

CONTROL OF EROSION, SILTATION AND POLLUTION

PART 1 GENERAL

1.01 GENERAL REQUIREMENTS:

The Contractor shall take whatever measures are necessary to minimize soil erosion and siltation, water pollution and air pollution caused by his operations. The Contractor shall also comply with the applicable regulations of all legally constituted authorities relating to pollution prevention and control. The Contractor shall keep himself fully informed of all such regulations which in any way affect the conduct of the work, and shall at all times observe and comply with all such regulations. In the event of conflict between such regulations and the requirements of the specifications, the more restrictive requirements shall apply.

1.02 EROSION CONTROL SCHEDULE: (NOT REQUIRED)

At or prior to the preconstruction conference, the Contractor shall submit to the Engineer for his approval 3 copies of his erosion control schedule. This schedule shall show the time relationship between phases of the work which must be coordinated to reduce erosion, and shall describe construction practices and temporary erosion control measures which will be used to minimize erosion. The schedule shall also show the Contractor's proposed method of erosion control on haul roads and borrow and material pits, and his plan for disposal of waste materials. No work shall be started until the erosion control schedules and methods of operations have been approved by the Engineer.

PART 2 PRODUCTS (Not used)

PART 3 EXECUTION

3.01 EROSION AND SILTATION CONTROL: (NOT REQUIRED)

The Contractor shall exercise every reasonable precaution throughout the life of the project to prevent the eroding of soil and silting of rivers, streams, lakes, reservoirs, other impoundments, ground surfaces, or other property.

Prior to suspension of operations on the project or any portion thereof, the Contractor shall take all necessary measures to protect the construction area, including but not limited to borrow pits, soil type base courses, and waste areas, from erosion during the period of suspension.

3.02 COORDINATION OF EROSION CONTROL OPERATIONS: (NOT REQUIRED)

Temporary and permanent erosion control measures shall be provided as shown on the plans or as directed by the Engineer. All permanent erosion control work shall be incorporated into the project at the earliest practicable time. Temporary erosion control measures shall be coordinated with permanent erosion control measures and all other work on the project to assure economical, effective, and continuous erosion control throughout the construction and post construction period and to minimize siltation of rivers, streams, lakes, reservoirs, other water impoundments, ground surfaces, or other property. The contractor is responsible for monitoring downstream conditions and clearing any debris and sediment caused by construction until the project is completed.

Temporary erosion control measures shall include but not be limited to the use of temporary berms, dikes, dams, silt fences, drainage ditches, silt basins, diversion ditches, slope drains, structures, vegetation, mulches, mats, netting, gravel, rip rap, or any other methods or devices that are necessary. Temporary erosion control measures may include work outside the construction limits where such work is necessary as a result of construction such as borrow pit operations, haul roads, plant sites, equipment storage sites, and disposal of waste or debris. The Contractor shall be liable for all damages to public or private property caused by silting or slides originating in waste areas furnished by the Contractor.

Materials for temporary erosion control measures shall have been approved by the Engineer before being used or shall be as directed by the Engineer.

Erosion control measures installed by the Contractor shall be acceptably maintained by the Contractor.

3.03 **WATER AND AIR POLLUTION:**

The Contractor shall exercise every reasonable precaution throughout the life of the project to prevent pollution of rivers, streams, and water impoundments. Pollutants such as chemicals, fuels, lubricants, bitumens, raw sewage, and other harmful waste shall not be discharged into or within 200 ft. of rivers, streams, or impoundments, or into natural or manmade channels leading thereto.

The Contractor shall comply with all Federal, State or local air pollution regulations throughout the life of the project.

3.04 **OPEN BURNING OF COMBUSTIBLE WASTES:**

Where and if burning is permitted by the specifications, the following conditions shall apply:

No tires, oils, asphalt, paint, or coated metals are permitted in combustible waste piles.

Burning shall not be permitted unless the prevailing wind is away from a nearby town, built-up area, or aircraft operations area.

Burning shall not be permitted during a local air inversion or other climatic condition as would result in a pall of smoke over a nearby town, built-up area, or aircraft operations area.

Burning shall not be permitted when the danger of brush or forest fires is made known by State, local, or Federal officials.

The size and number of fires shall be restricted to avoid the danger of brush or forest fires. Burning shall be done under surveillance of a watchman, who shall have fire-fighting equipment and tools readily available.

3.05 **DUST CONTROL:**

The Contractor shall control dust throughout the life of the project within the project area and at all other areas affected by the construction of the project, including, but not specifically limited to unpaved roads, haul roads, access roads, disposal sites, borrow and material pits, and production sites. Dust control shall not be considered effective where the amount of dust creates a potential or actual unsafe condition, public nuisance, or condition endangering the value, utility, or appearance of any property. The Contractor shall supply the necessary number of water trucks and shall provide additional water trucks as directed by the Engineer at no additional cost to the Owner.

The Contractor will not be directly compensated for any dust control measures necessary, as this work will be considered incidental to the work covered by the various contract times.

3.06 APPLICATION OF SPECIFICATIONS:

The provisions of this section shall apply to all construction operations. Further references and detailed requirements concerning erosion, siltation, and pollution prevention and control, may be given in other sections of the specifications and on the drawings.

3.07 CONTRACTOR'S INSPECTION AND REPORT:

The Contractor shall make an inspection of the construction site on a daily basis and after each potentially damaging rainfall. All possible petroleum leaks and construction exits must be inspected daily. Note shall be taken of any damage to existing erosion control features and of siltation problems encountered during the inspection. In a report to the Engineer, the Contractor shall outline his corrective measures to be undertaken and the date of implementation.

3.08 TEMPORARY SUSPENSION OF WORK:

Failure of the Contractor to fulfill any of the requirements of this section may result in the Engineer ordering the stopping of construction operations in accordance with the following:

- A. The Engineer shall have the authority to suspend the work wholly or in part by written order, for such periods as he may deem necessary due to conditions considered unfavorable for the suitable prosecution of the work, or to failure on the part of the Contractor to correct conditions unsafe for workmen or the general public or to carry out orders given or to perform any provisions of the contract. Such suspension of operations will not justify an extension of contract time.
- B. Failure on the part of the Contractor to perform the necessary measures to control erosion, siltation, and pollution will result in the Engineer notifying the Contractor to take such measures. Any fine, penalty or other cost assessed by State, local or other governmental agencies for non-performance of erosion, siltation or pollution controls against the Owner shall become the responsibility of the Contractor; such assessments, if not paid by the Contractor, shall be deducted from monies due the Contractor at the completion of the job. In the event that the Contractor fails to perform such measures within 24 hours after receipt of such notice, the Engineer may suspend the work as provided above, or may proceed to have such measures performed by others. The cost of such work performed by others will be deducted from monies due the Contractor on his contract.

3.09 PAYMENT:

Except where specified otherwise elsewhere in the specifications, there will be no direct payment for any work in connection with the requirements of this section; the work shall be considered incidental to grading, excavation, embankment, or other operations.

END OF SECTION 01060

SECTION 01070

ABBREVIATIONS AND SYMBOLS

PART 1

GENERAL

1.01

DESCRIPTION:

- A. Abbreviations that may be used in the Contract Documents including the drawings are listed in this section and have the identifications and meanings shown herein except where otherwise indicated.
- B. Symbols are identified on the drawings.
- C. Related requirements in other parts of the Contract Documents.
 - 1. Drawing symbols: Contract drawings
 - 2. Drawing abbreviations: Contract drawings.

1.02

ABBREVIATIONS:

- A. Agencies, Codes, Standards, etc.:

AASHTO	American Association of State Highway and Transportation Officials
ACI	American Concrete Institute
AF	Air Force
AGC	Associated General Contractors of America
AI	Asphalt Institute
AIA	American Institute of Architects
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
ANG	Air National Guard
ANSI	American National Standard Institute
API	American Petroleum Institute
AREA	American Railway Engineering Association
ASTM	American Society for Testing and Materials
AWPA	American Wood Preservers Association
AWG	American Wire Gage
AWS	American Welding Society
AWWA	American Water Works Association
COE	Corps of Engineers
CRSI	Concrete Reinforcing Steel Institute
FAA	Federal Aviation Administration
FHWA	Federal Highway Administration
FS	Federal Specifications
GADOT	Georgia Department of Transportation
MUTCD	Manual on Uniform Traffic Control Devices for Streets and Highways
NEMA	National Electrical Manufacturers Association
NEC	National Electrical Code
NWS	National Weather Service
OSHA	Occupational Safety and Health Act
PCA	Portland Cement Association
UL	Underwriter's Laboratories, Inc.

B. Drawing Abbreviations:

1. The following list is not necessarily all inclusive; additional abbreviations may be used and defined on the drawings.
2. Some abbreviations used on the drawings may not have the same meaning as that identified in the following list; the non-conforming meanings are identified on the drawings when not self-evident.
3. Some variation in use of periods and capitalization may be found on the drawings.

ABBREVIATION	MEANING
A	
AB	Anchor Bolt
ABT	About
ABV	Above
AC	Advisory Circular (FAA)
AC	Alternating current
AC	Asphaltic concrete
ACFT	Aircraft
ADDN.	Addition
AF	Air Force
AGG.	Aggregate
AIP	Airport Improvement Program
ALIGN	Alignment
ALP	Airport layout plan
ALS	Approach lighting system
ALT	Alternate
ANT.	Antenna
AOA	Air operational area
AP	Airport
APPROX.	Approximate
ARCH.	Architecture
ARP	Airport reference point
ASPH	Asphalt
ATC	Air traffic control
ATCT	Air traffic control tower
AVE	Avenue
AVG	Average
AWG	American wire gage
AWOS	Automatic weather observing system
B	
B TO B	Back to back
BCN	Beacon
BDY	Boundary
BET.	Between
BF	Both faces
BIT. or BITUM	Bituminous
BLDG	Building
BL	Base line
BM	Bench mark
BOT	Bottom
BRL	Building restriction line
BRK	Brick
BS	Both sides
BTW	Between

BW	Both ways
C	
C	Centigrade
C TO C	Center to Center
CA	Cable
CB	Catch Basin
CBM	Construction bench mark
CD	Check dam
CEM	Cement
CFM	Cubic feet per minute
CFS	Cubic feet per second
CHAM	Chamfer
CHG	Change
CHK	Check
CI	Cast iron
CIP	Cast iron pipe
CJ	Construction joint
CL	Clear
C/L	Center line
CLR	Clearance
CMP	Corrugated metal pipe
CO	Cleanout
CONC	Concrete
CONST	Construction
CONT	Continue
CORR	Corrugate
CPP	Corrugated Polyethylene
CPS	Cycles per second
CTB	Cement Treated Base Course
CULV	Culvert
CY. or CU.YD.	Cubic yard
D	
D	Depth
DAT	Datum
DBL	Double
DBST	Double bituminous surface treatment
DC	Direct current
DEF. ANG.	Deflection angle
DEG	Degree
DEMO.	Demolish
DI	Drop inlet
DIA	Diameter
DIP	Ductile iron pipe
DIM.	Dimension
DIR	Direction
DIST	Distant
DIV	Division
DO.	Ditto
DSGN	Design
DTD	Dated
DWG	Drawing
E	
EA	Each
EF	Each face
EG	For example

EJ or EXP JT	Expansion joint
EL or ELEV	Elevation
ENGR	Engineer
EOP	Edge of pavement
EQ	Equal
EQUIP.	Equipment
EQUIV.	Equivalent
EST	Estimate
EW	Each way
EXC	Excavate
EXIST.	Existing
EXT	Exterior
F	
F	Fahrenheit
F TO F	Face to face
FAB	Fabricate
FAR	Federal Aviation Regulation
FBO	Fixed base operator
FDN	Foundation
FF	Finish floor
FG	Finish grade
FH	Fire hydrant
FIG.	Figure
FIN.	Finish
FLD	Field
FOD	Foreign object damage
FPM	Feet per minute
FPS	Feet per second
FS	Federal Specification
FT	Foot or feet
FTG	Footing
FW	Fresh water
FWD	Forward
G	
GA	Gage or Gauge
GAL	Gallon
GALV	Galvanize
GEN	General
GFE	Government-furnished equipment
GOVT	Government
GPM	Gallons per minute
GPS	Gallons per second
GRD	Ground or grade
GV	Gate valve
GVGI	Generic visual glideslope indicator
H	
HP	High point
HGR	Hangar
HGT	Height
HH	Handhole
HIRL	High intensity runway lights
HMAC	Hot mix asphaltic concrete
HOR or HORIZ	Horizontal
HWY	Highway
I	
ID	Inside diameter
IDENT	Identification

IFR	Instrument flight rule
ILS	Instrument landing system
IN.	Inch
INCL	Include
INT	Intersect
INV	Invert
IP	Inlet protection
IP	Iron pipe
J	
JB	Junction Box
JFR	Jet fuel resistant
JMF	Job mix formula
JT	Joint
K	
K	Kip (1,000 lb)
KWY	Keyway
L	
LAT	Latitude
LB	Pound
LC	Length of curve
LF	Linear feet
LG	Length or long
LIN	Linear
LIRL	Low intensity runway lights
LITL	Low intensity taxiway lights
LOA	Length over-all
LOC	Localizer
LONG.	Longitudinal
LP	Low point
LVC	Length of vertical curve
M	
MAINT	Maintenance
MALS	Medium intensity approach lighting system
MATL	Material
MAX	Maximum
MH	Manhole
MHW	Mean high water
MIN	Minimum
MIRL	Medium intensity runway lights
MITL	Medium intensity taxiway lights
MISC	Miscellaneous
MLS	Microwave landing system
MLW	Mean low water
MON	Monument
MSL	Mean sea level
MTL	Metal
N	
NATL	National
NAVAID	Navigational aid
NIC	Not in contract
NO.	Number
NOM	Nominal
NOTAM	Notice to airmen
NTS	Not to scale
O	
OA	Over-all
OC	On center

OD	Outside diameter
OFZ	Obstacle free zone
OPS	Operations
ORIG	Original
P	
PAPI	Precision approach path
PAR	Precision approach radar
PAV'T	Pavement
PC	Point of curve
PCC	Portland cement concrete
PFC	Porous friction course
PI	Point of intersection
PIV	Post indicator valve
PJF	Premolded joint filler
POL	Petroleum fuel, oil, and/or lubricants
PL	Plate
PREP	Prepare
PROJ	Project
PROP	Proposed
PSI	Pounds per square inch
PT	Point
PT	Point of tangency
PVC	Polyvinyl chloride
PVC	Point of vertical curve
PVI	Point of vertical intersection
PVT	Point of taxiway lights vertical tangency
PVMT	Pavement
Q	
QA	Quality assurance
QC	Quality control
R	
R	Right
R or RAD	Radius
RAIL	Runway alignment indicator lights
R/W or RW	Runway
RC	Reinforced concrete
RCP	Reinforced concrete pipe
RD	Road
REIL	Runway end identifier
REINF	Reinforce
RELOC	Relocated
REP	Repair
REQD	Required
RET	Return
REV	Revise
ROC	Run of crusher
ROW	Right of way
RPM	Revolutions per minute
RPZ	Runway protection zone
RR	Railroad
S	
S	Slope
SABC	Stabilized aggregate base course
SALV	Salvage
SAN	Sanitary
SB	Straw bale
SBST	Single bituminous surface treatment

SCHED	Schedule
SEC	Second slope indicator
SEC Cor	Section corner
SECT	Section
SEP	Separate
SF	Silt fence
SF or SQ. FT.	Square feet
SHT	Sheet
SHLD	Shoulder rules
SIM	Similar
SK	Sketch
SP	Space(s)
SPEC	Specification
SQ	Square
SS	Stainless steel
STA	Station
STD	Standard
STL	Steel
STR	Structural fabric
SUPP	Supplement
SWG	Swing
SYM	Symbol
SYM	Symmetrical
SY or SQ.YD.	Square yards between
SYS	System
T	
T	Thick
T	Ton
T&B	Top and bottom
TBM	Temporary bench mark
TECH	Technical
TEL	Telephone
TEMP	Temperature
THK	Thick
THRU	Through
T/L or TL	Taxilane
TOC	Top of curb
TOG	Top of grate
TOL	Tolerance
TOP	Top of pavement
TRANS	Transformer
TSD	Temporary slope drain
T/W or TW	Taxiway
TYP	Typical
U	
UD	Underdrain
UG	Underground
UGT	Underground telephone line
USGS	United States Geodetic Survey
V	
VASI	Visual approach
VB	Valve box
VC	Vertical curve
VCP	Vitrified clay
VERT	Vertical
VFR	Visual flight
VS	Versus

W	
W	Water
W/	With
WGT	Weight
W/O	Without
WL	Water line
WWF	Welded wire
WP	Working point
X	
X	By (used dimensions)
XSECT	Cross section
Y	
YD	Yard
Z	

1.03

SYMBOLS:

- A. As outlined on drawings.

PART 2

PRODUCTS (Not Applicable)

PART 3

EXECUTION (Not Applicable)

END OF SECTION 01070

SECTION 01090

REGULATIONS AND DEFINITIONS

PART 1 GENERAL

1.01 RELATED DOCUMENTS:

Drawings, General Provisions, Supplementary Conditions, Specifications, and other contract documents apply to work of this section. See Section 10 of General Provisions for additional definitions.

1.02 DESCRIPTION OF REQUIREMENTS:

A. General: This section specifies procedural and administrative requirements for compliance with governing regulations, codes and standards imposed upon the work. These requirements include obtaining permits, licenses, inspections, releases and similar documentation, as well as payments, statements and similar requirements associated with regulations, codes and standards.

The term "Regulations" is defined to include laws, statutes, ordinances and lawful orders issued by governing authorities, as well as those rules, conventions and agreements within the construction industry which effectively control the performance of the work regardless of whether they are lawfully imposed by governing authority or not.

B. Governing Regulations: Refer to General Provisions, Supplementary Conditions, and General Requirements for requirements related to compliance with governing regulations.

1.03 DEFINITIONS:

A. General Explanation: Certain terms used in contract documents are defined in this article. Definitions and explanations contained in this section are not necessarily complete, but are general for the work to the extent that they are not stated more explicitly in another element of the contract documents.

B. General Requirements: Provisions and requirements of Division 1 sections apply to the entire work of the contract and, where so indicated, to other elements which are included in the project.

C. Indicated: The term "indicated" is a cross-reference to graphic representations, notes or schedules on the drawings, to other paragraphs or schedules in the specifications, and to similar means of recording requirements in contract documents. Where terms such as "shown", "noted", "scheduled", and "specified" are in lieu of "indicated", it is for the purpose of helping the reader locate the cross-reference, and no limitation of locations is intended except as specifically noted.

D. Directed, Requested, etc.: Terms such as "directed", "requested", "authorized", "selected", "approved", "required", "accepted", and "permitted" mean "directed by the Engineer", "requested by the Engineer", and similar phrases. However, no such implied meaning will be interpreted to extend the Engineer's responsibility into the Contractor's area of construction supervision.

- E. Approved: Where used in conjunction with the Engineer's response to submittals, requests, applications, inquiries, reports and claims by the Contractor, the term "approved" will be held to limitations of the Engineer's responsibilities and duties as specified in General Provisions and Supplementary Conditions. In no case will the Engineer's approval be interpreted as a release of the Contractor from responsibilities to fulfill requirements of contract documents or acceptance of the work, unless otherwise provided by requirements of the contract documents.
- F. Project Site: The term "project site" means the space available to the Contractor for performance of the work, either exclusively or in conjunction with others performing other construction as part of the project. The extent of the project site is shown on the drawings.
- G. Furnish: The term "furnish" is used to mean "supply and deliver to the project site, ready for unloading, unpacking, assembly, installation, and similar operations."
- H. Install: The term "install" is used to describe operations at project site including the actual "unloading, unpacking, assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning and similar operations."
- I. Provide: The term "provide" means "to furnish and install, complete and ready for the intended use."
- J. Installer: The "installer" is the "the entity" (person or firm) engaged by the Contractor, its subcontractor or sub-subcontractor for performance of a particular element of construction at the project site, including installation, erection, application and similar required operations. It is a requirement that installers are experienced in the operations they are engaged to perform.

1.04

SUBMITTALS:

Permits, Licenses, and Certificates: For the Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, and similar documents, correspondence and records established in conjunction with compliance with standards and regulations bearing upon performance of the work.

PART 2

PRODUCTS (Not Applicable)

PART 3

EXECUTION (Not Applicable)

END OF SECTION 01090

MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.01 DESCRIPTION:

- A. Method of Measurement and Payment: This section supplements Section 90 of the General Provisions and establishes the method of measurement and payment for work performed under this contract.

- B. Unit Price: Except where lump sum is indicated, payment for work performed shall be made on a unit price basis in accordance with the accepted bid and the method of payment provided in the General Provisions.

- C. Related Requirements in Other Parts of the Specifications:
 - 1. Bid (Proposal).
 - 2. Agreement.
 - 3. Conditions of the Contract.

- D. Related Requirements Specified in Other Sections:
 - 1. Summary of Work - Section 01010.
 - 2. Submittals - Section 01300.
 - 3. Contract Closeout - Section 01700.

- E. Work With No Identified Payment Items: No additional payment will be made for items of work for which a separate payment item is not specified or contained in the Bid Schedule; such work shall be deemed incidental to the project and payment for said work shall be considered as included in the various unit bid prices.

1.02 APPLICATIONS FOR PAYMENT:

- A. Submittal Schedule: Submit Applications for Payment to the Engineer in accordance with the schedule established by Conditions of the Contract and Agreement between Owner and Contractor.

- B. Format and Data Required:
 - 1. Submit Applications for Partial Payment with itemized data typed on 8 1/2 x 11 inch white paper continuation sheets.

 - 2. Provide itemized data on continuation sheet: Format, schedules, line items and values: Those of the Schedule of Values accepted by the Engineer.

- C. Preparation of Application for Each Progress Payment:
 - 1. Application Form:
 - a. Fill in required information, including that for Change Orders executed prior to the date of submittal of application.

 - b. Fill in summary of dollar values to agree with the respective totals indicated on the continuation sheets.

- c. Execute certification with the signature of a responsible officer of the contract firm.
 2. Continuation Sheets:
 - a. Fill in total list of all scheduled component items of work, with item number and the scheduled dollar value for each item.
 - b. Fill in the dollar value in each column for each scheduled line item when work has been performed or products stored.
 3. List each Change Order executed prior to the date of submission, at the end of the continuation sheets.
 - a. List by Change Order and description, as for an original component item of work.
 4. Submit Applications for Payment to Owner at the times stipulated in the Agreement.
 - a. Number: Four copies of each Application.
- D. Substantiating Data:
 1. When the Owner or Engineer require substantiating data, Contractor shall submit suitable information with cover letter identifying:
 - a. Project.
 - b. Application number and date.
 - c. Detailed list of enclosures.
 - d. For stored products: Item number and identification as shown on application.
 - e. Description of specific material.
 2. Submit one copy of data and cover letter for each copy of application.
- E. Preparation of Application for Final Payment:
 1. Fill in application form as specified for progress payments.
 2. Use continuation sheet for presenting the final statement of accounting as specified in Section 01700 - Contract Closeout.

1.03**CHANGE ORDER PROCEDURES:**

- A. Format and Data Required:
 1. Change Orders shall be prepared and submitted and will be processed in accordance with requirements of General Provisions and Funding Agency Requirements.
 2. Engineer will transmit Certificate for Change to Owner and Agency for approval.

3. When Owner and Agency approval is received, Change Order will be included under next partial Application for Payment.

1.04

MEASURES AND WEIGHTS:

- A. Contractor Assistance: To aid the Owner in determining all quantities, the Contractor shall, whenever so requested, provide scales, equipment and assistance for weighing or for measuring any of the materials at no cost to the Owner.
- B. Weights and Measures: Quantities for payment will be the actual weight or actual measure, and no special or trade or so-termed customary allowances will be made, nor will any material which is lost or misplaced be included for payment.
- C. Use of Planimeter: For estimating quantities in which computation of areas by geometric methods would be comparatively laborious, it is agreed that the planimeter shall be considered an instrument of precision to the measurement of such areas.
- D. Precedence of Dimensions: Figured dimensions on drawings shall take precedence over measurement by scale, and detailed working drawings are to take precedence over general drawings and shall be considered as explanatory of them and not as indicating extra work.

PART 2

PRODUCTS (Not Applicable)

PART 3

EXECUTION (Not Applicable)

END OF SECTION 01150

SECTION 01300

SUBMITTALS

PART 1

GENERAL

1.01

SUBMITTALS BY CONTRACTOR:

- A. Construction Progress Schedule.
- B. Certifications as specified in the various sections.
- C. Shop Drawings and Project Data as specified in the various sections.
- D. Miscellaneous:
 - 1. Equipment Manuals.
 - 2. Weekly Payroll.
 - 3. EEO Reports.
 - 4. Safety Plan.
 - 5. Security Plan.
 - 6. Warranties and Bonds.
 - 7. QC Plan.
 - 8. Other(s) as required.

1.02

PROGRESS SCHEDULE:

- A. Bar-Chart Schedule: Submit a CPM or linear type bar-chart schedule 7 calendar days prior to the preconstruction conference date established for the work. On the schedule, indicate a time bar for each major category or unit of work to be performed at the site, properly sequenced and coordinated with other elements of work. Show completion of the work sufficiently in advance of the date established for substantial completion of work.
 - 1. Superimpose an S-curve on the schedule to show the "estimated" total dollar-volume of work performed at any date during the contract time, with a column of cost figures in the left hand margin ranging from zero to the contract sum.
 - 2. Submittal Tabulation: With the bar-chart submittal, submit tabulation, date, of the submittals, which are required during the first 30 days of construction time. At the Contractor's option, submittal dates may be shown on the bar-chart schedule, in lieu of being tabulated.
- B. Phasing: Arrange schedule with notations to show how sequence of work is affected by requirements for phased completion, limitations of continued utilization, non-interruptable services, use prior to substantial completion, site restrictions, apron and taxiway closures, provisions for future work, seasonal variations, environmental control, and similar provisions of total project. Phase I schedule is required at the preconstruction meeting. Each subsequent phasing schedule is required at least two weeks before the phase is to begin. Refer to other sections of Division 1 and other contract documents for requirements.

- C. Distribution: Following the initial submittal to and response by the Engineer, print and distribute progress schedules to the Engineer (3 copies), Owner, separate contractors, principal subcontractors and suppliers or fabricators, and others with a need-to-know schedule-compliance requirement. Post copies in the project meeting room and temporary field office. When revisions are made, distribute updated issues to the same entities and post updated issues in the same locations. Delete entities from distribution when they have completed their assigned work and are no longer involved in the performance of scheduled work.
- D. Update: Contractor shall update the schedule monthly for duration of construction.

1.03**SHOP DRAWINGS AND PRODUCT DATA:**

- A. Scope: Submit shop drawings, certifications, and product data for all products to be incorporated in the work.
- B. Shop Drawings Will:
1. Be original drawings, prepared by the Contractor, subcontractor, supplier, or distributor, which illustrate some portion of the work; showing fabrication, layout, setting, or erection details.
 2. Be prepared by a qualified detailer.
 3. Identify details by reference to sheet and detail numbers shown on Contract Drawings.
 4. Plan sheets shall be 22 in. x 34 in. or larger.
- C. Product Data Will:
1. Include manufacturer's standard schematic drawings. The Contractor will:
 - a. Modify drawings to delete information which is not applicable to project.
 - b. Supplement standard information to provide additional information applicable to project.
 2. Include manufacturer's catalog sheets, brochures, diagrams, schedules, performance charts, illustrations and other standard descriptive data. The Contractor will:
 - a. Clearly mark each copy to identify pertinent materials or products.
 - b. Show dimensions and clearances required.
 - c. Show performance characteristics and capacities.
- D. The Contractor Will:
1. Be responsible for all submittals.
 2. Review shop drawings and product data prior to submission.
 3. Verify:
 - a. Field measurements.

- b. Field construction criteria.
 - c. Catalog numbers and similar data.
- 4. Coordinate each submittal with the requirements of the work and of the Contract Documents.
 - 5. Notify the Engineer, in writing at time of submission, of deviations in submittals from requirements of the Contract Documents.
 - 6. Begin no work which requires submittals until the return of submittals with the Engineer's stamp and initials or signature indicating review.
 - 7. After the Engineer's review, distribute copies.
- E. Contractor's Responsibilities:
- 1. Contractor's responsibility for errors and omissions in submittals is not relieved by the Engineer's review of submittals.
 - 2. Contractor's responsibility for deviations in submittals from requirements of the Contract Documents is not relieved by the Engineer's review of submittal, unless the Engineer gives written acceptance of specific deviations.
- F. Submission Requirements Include:
- 1. The shop drawings shall be submitted in sufficient time to allow discussion and correction prior to beginning the work. Work shall not be performed nor materials ordered prior to the review of the drawings except at the Contractor's risk.
 - 2. Submit Six (6) copies of all shop drawings after which four (4) copies will be returned for correction or marked reviewed as noted. Any drawings returned for correction must be resubmitted with same number of copies as required above.
 - 3. In lieu of six (6) copies, Contractor may provide submittals via email. If submittals are sent via email, Engineer will provide PDF versions of reviewed copies unless Contractor specifically requests paper copies.
 - 4. All submittals must be accompanied by a transmittal letter, in duplicate, containing:
 - a. Date.
 - b. Project title and number.
 - c. Contractor's name and address.
 - d. The number of each shop drawing and product data submitted.
 - e. Notification of deviations from Contract Documents.
 - f. Other pertinent data.
 - 5. Submittals shall include the following, as applicable:
 - a. Date and revision dates.
 - b. Project title and number.
 - c. The names of:
 - (1) Engineer.

- (2) Contractor.
- (3) Subcontractor.
- (4) Supplier.
- (5) Manufacturer.
- (6) Separate detailer when pertinent.

- d. Identification of product or material.
- e. Relation to adjacent structure or materials.
- f. Field dimensions, clearly identified as such.
- g. Specification item or section number.
- h. Applicable standards, such as ASTM number or Federal Specification.
- i. A blank space, 5 in. x 5 in., for the Engineer's stamp.
- j. Identification of deviations from the Contract Documents.
- k. Contractor's stamp, initialed or signed, certifying Contractor's review of submittal, verification of field measurements, and compliance with Contract Documents.

G. Resubmission Requirements Include:

- 1. Revision of initial drawings as required and resubmittal as specified for initial submittal.
- 2. An indication on the drawings of any changes which have been made, other than those requested by the Engineer.
- 3. On product data resubmittals, include new data as required for initial submittal.

H. Distribution to Others:

After review and approval, the Contractor will distribute copies of shop drawings and product data which carry the Engineer's stamp to others as may be required.

I. Shop Drawings and Product Data:

- 1. Submit notarized certifications cosigned by manufacturer/supplier and Contractor for:
 - a. Storm drainage pipe, castings and structure materials.
 - b. Fencing components.
 - c. Pavement subbase, base, surfacing and related materials.
 - d. Grass seed.
 - e. Structural concrete materials.
 - f. Reinforcing steel.
 - g. Reinforcing steel.
 - h. Pavement marking paint.
 - i. Electrical wire and fixtures.
 - j. Lighting components.
 - k. Erosion control products
 - l. All other products as required by the drawings, specifications, and Engineer.
- 2. Submit shop drawings, product data and steel placement plans for:
 - a. All cast-in-place or precast structures.

- b. Catch basin and manhole grate, cover and frame castings.
- c. Airport lighting equipment and materials.
- d. Concrete and asphalt mix designs.
- e. All other products as required by the drawings, specifications, and Engineer.

1.04**MISCELLANEOUS:**

- A. Equipment Manual: Prepare an Installation, Operation, and Maintenance Manual for all airport lighting, gate controls, and other equipment installed as a part of this contract. This manual shall be a vinyl notebook with ring bound compilation of manufacturers' instructions and maintenance manuals. Prepare this manual, marking out sections which do not apply, and present four (4) copies to the Owner through the Engineer after the final inspection is complete. Final payment will not be processed until the Owner has received and accepted the Manual.
- B. Weekly Payrolls:
1. In accordance with Section 100 of the General Provisions, submit certified weekly payrolls for prime contractor and all subcontractors working at project site.
 2. Submit payrolls no later than 7 calendar days after pay period. Payrolls will be considered current if received within 10 calendar days after last work day of payroll work week. A work week is the seven day period between midnight Sunday and midnight the following Sunday.
 3. The Contractor is responsible for submission of payrolls by his subcontractors.
 4. Submit a typed summary sheet with each payroll submission listing by week when contractor and each subcontractor worked at site.
 5. A payroll submission is only required for weeks when Contractor or subcontractor is actually working at the site.
 6. Payrolls shall be submitted weekly. Pay applications will not be processed if pay rolls are not current for the period of the pay application.
- C. EEO Reports:
1. Contractor shall submit Monthly Employment Utilization Report and Annual EEO-1 Report to the appropriate Federal Labor Area Office in accordance with Section 100 of the General Provisions. Submit copy of submittal to Owner for his records.
 2. Prime Contractor shall insure that all his first tier subcontractors submit these reports and shall submit a sworn statement to Owner monthly certifying that all subcontractor reports have been submitted as required.
- D. DBE Expenditure Reports:
- With each application for payment, the Contractor shall submit his DBE expenditure report indicating the name, date and amount disbursed to his DBE subcontractors for the period as well as for the project to date expenditure. This form shall also include all information as required by GDOT and FAA.

E. Security Plan:

At preconstruction conference submit for approval, proposed security plan describing specifically how security will be maintained at each access point and work area by Contractor's forces.

F. Warranties and Bonds:

Submit as specified in Section 01740.

PART 2 **PRODUCTS** (Not Applicable)

PART 3 **EXECUTION** (Not Applicable)

END OF SECTION 01300

SECTION 01400

QUALITY CONTROL SERVICES

PART 1 **GENERAL**

1.01 **RELATED DOCUMENTS:** Drawings, General Provisions, Supplementary Conditions, Specifications, and other Contract Documents apply to work of this section.

1.02 **DESCRIPTION OF REQUIREMENTS:**

- A. **General:** Required inspection and testing services are intended to assist in the determination of probable compliance of the work with requirements specified or indicated. These required services do not relieve the Contractor of responsibility for compliance with these requirements or for compliance with requirements of the Contract Documents.
- B. **Specified Inspection and Tests:** Inspection, tests and related actions specified in this section and elsewhere in the Contract Documents are not intended to limit the Contractor's own quality control procedures which facilitate overall compliance with requirements of the Contract Documents.
- C. **Contractor Quality Control:** Requirements for the Contractor to provide quality control services as required by the Engineer, the Owner, governing authorities or other authorized entities are not limited by the provisions of this section.

1.03 **RESPONSIBILITIES:**

- A. **Contractor Responsibilities:** Contractor is responsible for his own quality control testing and inspection to insure the quality of his means and methods of construction will produce the specified quality of work, and for any tests and inspections required by regulatory agencies. Costs for these services shall be included in the contract sum. The Contractor may employ and pay an independent agency, testing laboratory or other qualified firm to perform quality control services specified, or these services may be performed by qualified contractor personnel.
 - 1. The Contractor shall submit for Engineer's approval a Quality Control (QC) Plan delineating his methods for each item requiring inspections, tests, and similar services.
- B. **Quality Assurance:** The Owner will engage and pay for the services of an independent agency to perform inspections and tests of materials for Quality Assurance.
- C. **Retest Responsibility:** Where results of required inspections, tests, or similar services prove unsatisfactory and do not indicate compliance with the requirements of the Contract Documents, then retests are the responsibility of the Contractor, [and shall be deducted from monies due the Contractor on his monthly pay request], regardless of whether the original test was the Contractor's responsibility. Retesting of work revised or replaced by the Contractor is the Contractor's responsibility, where required tests were performed on original work.
- D. **Responsibility for Associated Services:** The Contractor is required to cooperate with the independent agencies performing required inspections, tests, and similar services. Provide such auxiliary services as are reasonably requested. Notify the testing agency sufficiently in advance of operations to permit assignment of personnel. These auxiliary services include but are not necessarily limited to the following:
 - 1. Providing access to the work.
 - 2. Taking samples or providing assistance with taking samples.
 - 3. Delivery of samples to test laboratories.

- 4. Security and protection of samples and test equipment at the project site.
- 5. Surveying services required to establish horizontal and vertical location of tests by Engineer's quality assurance testing laboratory.

1.04 **SCHEDULE OF SERVICES:**

Schedule of Inspections and Tests: Each specification section identifies principal inspections, tests and similar services required by the Contractor Documents.

PART 2 **PRODUCTS** (Not Applicable)

PART 3 **EXECUTION**

3.01 **REPAIR AND PROTECTION:**

General: Upon completion of inspection, testing, sample-taking, and similar services performed on the work, repair damaged work and test sites to eliminate deficiencies. Protect work exposed by or for quality control service activities, and protect repaired work. Repair and protection is the Contractor's responsibility, regardless of the assignment of responsibility for inspection, testing or similar services.

3.02 **MEASUREMENT AND PAYMENT:**

No measurement or payment will be made for work in this section; it will be considered as incidental cost to Mobilization and other items of work.

END OF SECTION 01400

SECTION 01510

TEMPORARY FACILITIES

PART 1 **GENERAL**

1.01 **DESCRIPTION:**

- A. Contractor shall furnish, install and maintain temporary utilities required for construction and other temporary facilities as indicated; remove on completion of work.
- B. No construction shall be started until the Engineer's field office is furnished and in good working order, furnished as herein specified, and made available to the Engineer. The office shall be erected at a location designated by the Engineer and shall be separate from any building used by the Contractor.
- C. Related requirements are specified in other sections of the specifications.

1.02 **REQUIREMENTS OF REGULATORY AGENCIES:**

- A. Comply with National Electric Code.
- B. Comply with Federal, State, and Local codes and regulations and with utility company requirements.

PART 2 **PRODUCTS**

2.01 **MATERIALS GENERAL:**

Materials, furniture, and equipment may be new or used, but must be adequate in capacity for the required usage, must not create unsafe conditions, and must not violate requirements of applicable codes and standards. Acceptability of all items will be determined by the Engineer.

PART 3 **EXECUTION**

3.01 **TEMPORARY ELECTRICITY AND LIGHTING:**

Provide temporary electrical service required for power and lighting, and pay all costs for service and for power used.

3.02 **TEMPORARY WATER:**

- A. Provide water for construction purposes; pay all costs for installation, maintenance and removal, and service charges for water used.
- B. The site is served by a municipal water system. The Contractor shall make arrangements for securing and providing necessary water as required for the performance of the work.

3.03 **TEMPORARY SANITARY FACILITIES:**

- A. Provide sanitary facilities in compliance with laws and regulations.
- B. Service, clean and maintain facilities and enclosures.

3.04**TEMPORARY SUPPORT FACILITIES:**

- A. General: Provide reasonably neat and uniform in appearance temporary support facilities acceptable to the Engineer and the Owner.
- B. Siting: Locate field offices, storage and fabrication sheds and other support facilities for easy access to the work. Position office so that windows give the best possible view of construction activities.
- C. Maintenance: Maintain field offices, on-site plants, storage and fabrication sheds, temporary sanitary facilities, waste collection and disposal systems, and project identification and temporary signs until project completion.
- D. Airfield Communications:
1. Contractor shall furnish his construction personnel with sufficient truck and hand-held radios to allow all construction locations to be in radio contact with the Unicom Frequency. The Contractor shall furnish two (2) hand-held radios for use by the Engineer. All radios shall be capable of two-way communications and shall be iCOM IC-A6 VHF Air Band Transceivers or approved equal. When working within active runway or taxiway safety areas, project superintendents shall be in constant radio contact and shall be responsible for controlling the movement of project equipment, vehicles and personnel.
 2. Provide the following accessories: 114 VAC wall charger, plug-in earphone, car cigarette lighter DC charger, one spare battery, case with belt loop, antenna, and operating manual. Radio shall cover Aviation NAV band 108-118 mH, and COM band 118-136 mH.
 3. All radios will remain the property of the Owner.
 4. The Contractor will not be directly compensated for providing two-way radios as this work is considered incidental to the work covered by the various contract items.
- E. Staging Area: Contractor shall prepare his staging area and access road by grading, drainage, and placing a six (6) inch thick stone base of coarse aggregate (#57 stone), or 6" aggregate surface course, per GDOT Item 318, over the entire staging area and access road(s). The Contractor shall apply a periodic top dressing to the stone base in order to minimize any fugitive dust or mud during the construction period. Upon completion of the project, the stone base shall be completely removed, the site graded to drain, and then seeded and mulched in accordance with Item T-901.
- F. Access and Haul Roads:
1. Locations of access, temporary stabilized construction, and haul roads will be approved by the Engineer and are shown on the drawings. These roads will be located to minimize conflict with Airport operations and shall be maintained, well defined, and confined to the minimum area required. Damaged roads shall be promptly repaired by the Contractor to the satisfaction of the Engineer at no cost to the Owner.
 2. The Contractor shall construct the access and haul roads and shall maintain the roads as required to create no dust. All project traffic must be routed

through these areas. The Contractor shall provide all markings required to clearly define the access and haul roads.

- 2. The Contractor will be responsible for obtaining any necessary driveway permit(s) from local or state agencies for access and haul roads.
- 3. If access or haul roads cross a utility, the Contractor shall protect the utility as directed by the Owner of the utility.
- 4. Except as otherwise noted herein, there shall be no direct payment for the construction, maintenance, and removal of access and haul roads.

G. Facilities for Night Work:

- 1. To perform construction activities at night, Contractor shall furnish, install and maintain temporary construction lights to illuminate night work areas during hours of darkness. The equipment used for lighting shall provide a sufficient amount of light to illuminate the work areas satisfactorily for construction and inspection. The Contractor may be required to provide additional lighting units, as directed by the Engineer. Upon completion of each nighttime operation, the lighting equipment shall be removed from the construction area and stored in the Contractor's storage area.
- 2. The Contractor will be required to coordinate lighting positions with ATC prior to any night work. This coordination will be accomplished and requested through the Engineer.
- 3. No direct payment shall be made for this item.

3.05

REMOVAL:

- A. Completely remove temporary materials and their use is no required.
- B. Clean and repair damage caused by temporary installations or use of temporary facilities. Restore grassed and paved areas to their pre-construction condition.

3.06

MEASUREMENT AND PAYMENT:

- A. Payment for all items in this section shall be included in Section 01000, Mobilization

END OF SECTION 01510

SECTION 01600

MATERIAL AND EQUIPMENT

PART 1 **GENERAL**

1.01 **GENERAL:**

- A. Material and Equipment (Products) Incorporated Into the Work:
 - 1. Shall conform to applicable specifications and standards.
 - 2. Shall comply with size, make, type and quality specified, or as specifically approved in writing by the Engineer.
 - 3. Shall not be used for any purpose other than that for which it is designed or is specified.

- B. Manufactured and Fabricated Products:
 - 1. Design, fabricate and assemble in accord with the best engineering and shop practices.
 - 2. Manufacture like parts of duplicate units to standard sizes and gages, to be interchangeable.
 - 3. Products shall be suitable for service conditions.
 - 4. Equipment capacities, sizes and dimensions shown or specified shall be adhered to unless variations are specifically approved by Engineer in writing.

- C. Related Requirements in Other Parts of the Project Manual:
 - 1. Conditions of the Contract.

- D. Standardization:
 - 1. Unless otherwise approved by the Engineer, items and equipment of a similar type and function shall be furnished by one manufacturer to standardize on replacement parts, service calls, operation and maintenance matters, and to avoid a division of responsibility among several manufacturers.
 - 2. A single supplier shall be used on principal items of equipment and systems where one or more components are not manufactured by the principal supplier; this is required to place performance and service responsibilities for the entire unit or system with only one supplier or manufacturer.

1.02 **PRODUCTS SUBSTITUTIONS AND OPTIONS:**

- A. Products List:
 - 1. Contractor shall submit a complete list of products to be incorporated into the work (with the name of the installing contractor) at the Preconstruction Conference required by these specifications.

- B. Contractor's Options:

1. For products specified only by reference standard, select any product meeting that standard.
2. For products specified by naming several products or manufacturers, select any one of the products or manufacturers named, which complies with the specifications.
3. Airport lighting and materials covered by FAA specifications require prior approval of the FAA and shall be listed in the latest edition of Advisory Circular 150/5345-53. Select equipment from the Certified Airport Lighting Equipment list appended to the Advisory Circular. An updated list is published biannually.

C. Product Substitutions:

1. Contractor shall submit, at the Preconstruction Conference, all requests for product substitutions. No requests for substitutions will be accepted from manufacturers or suppliers.
2. Submit a separate written request for each product, supported with complete data, with drawings and samples as appropriate, including:
 - a. Comparison of the qualities of the proposed substitution with that specified.
 - b. Changes required in other elements of the work because of the substitution.
 - c. Effect on the construction schedule.
 - d. Cost data comparing the proposed substitution with the product specified.
 - e. Any required license fees or royalties.
 - f. Availability of maintenance service, and source of replacement materials.
3. Engineer shall be the judge of the equality and acceptability of the proposed substitution.
4. If Engineer determines the proposed substitute product is not "equal" to the specified product, the Contractor must provide the specified product, subject to Engineer's shop drawing review and approval.
5. No further requests for substitutions will be considered after Preconstruction Conference.

D. Contractor's Representation: A request for a substitution constitutes a representation that Contractor:

1. Has investigated the proposed product and determined that it is equal to or superior in all respects to that specified.
2. Will provide the same warranties or bonds for the substitution as for the product specified.

3. Will coordinate the installation of an accepted substitution into the work, and make such other changes as may be required to make the work complete in all respects.
 4. Waives all claims for additional costs, under his responsibility, which may subsequently become apparent.
- E. Engineer's Review: Engineer will review requests for substitutions with reasonable promptness and notify Contractor, in writing, of the decision to accept or reject the requested substitution.

1.03**MANUFACTURER'S INSTRUCTIONS:**

- A. Printed Instructions: When Contract Documents require that installation of work shall comply with manufacturer's printed instructions, Contractor shall obtain and distribute copies of such instructions to parties involved in the installation, including copies to Engineer.
1. Maintain one set of complete instructions at the job site during installation and until completion.
- B. Strict Compliance: Handle, install, connect, clean, condition, and adjust products in strict accord with such instructions and in conformity with specified requirements.
1. Should job conditions or specified requirements conflict with manufacturer's instruction, consult with Engineer for further instructions.
 2. Do not proceed with work without clear instructions.
- C. Complete Compliance: Perform work in accord with manufacturer's instructions. Do not omit any preparatory step or installation procedure unless specifically modified or exempted by Contract Documents.

1.04**TRANSPORTATION AND HANDLING:**

- A. Deliveries: Contractor shall arrange deliveries of products in accord with construction schedules; coordinate to avoid conflict with work and conditions at the site.
1. Deliver products in undamaged condition, in manufacturer's original containers or packaging, with identifying labels intact and legible.
 2. Immediately on delivery, inspect shipments to assure compliance with requirements of contract documents and approved submittals, and that products are properly protected and undamaged.
- B. Handling: Provide equipment and personnel to handle products by methods to prevent soiling or damage of products or packaging.

1.05**STORAGE AND PROTECTION:**

- A. Storage: Store products in accord with manufacturer's instructions, with seals and labels intact and legible.
 - 1. Store products subject to damage by the elements in weathertight enclosures.
 - 2. Maintain temperature and humidity within the ranges required by manufacturer's instructions.

- B. Exterior Storage:
 - 1. Store fabricated products above the ground, on blocking or skids; prevent soiling or staining. Cover products which are subject to deterioration with impervious sheet coverings; provide adequate ventilation to avoid condensation.
 - 2. Store loose granular materials in a well-drained area on solid surfaces to prevent mixing with foreign matter.

- C. Storage Inspection: Arrange storage in a manner to provide easy access for inspection. Make periodic inspections of stored products to assure that products are maintained under specified conditions, and free from damage or deterioration.

- D. Protection After Installations: Provide substantial coverings as necessary to protect installed products from damage from traffic and subsequent construction operations. Remove when no longer needed.

PART 2 **PRODUCTS** (Not Applicable)

PART 3 **EXECUTION** (Not Applicable)

END OF SECTION 01600

SECTION 01700

CONTRACT CLOSEOUT

PART 1 GENERAL

1.01 GENERAL:

- A. Comply with requirements stated in conditions of the contract and in specifications for administrative procedures in closing out the work.

- B. Related requirements in other parts of the Project Manual:
 - 1. Fiscal provisions, legal submittals and additional administrative requirements:

Conditions of the contract.

- C. Related requirements specified in other sections:
 - 1. Closeout submittals required of trades: The respective sections of specifications.
 - 2. Project Record Documents: Section 01720.
 - 3. Warranties and Bonds: Section 01740.

1.02 SUBSTANTIAL COMPLETION:

The conditions and procedures for inspection; and Contractor's, Engineer's and Owner's responsibilities pertaining to substantial completion are as specified in the General Provisions and in the Supplementary Conditions.

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION

3.01 FINAL INSPECTION:

- A. Shall be in accordance with conditions and procedures outlined in the Contract Documents.

- B. When Engineer finds that the work is acceptable under the Contract Documents, he will request required Contractor's Closeout Submittals.

3.02 REINSPECTION FEES:

- A. Should Engineer perform re-inspections due to failure of the work to comply with the claims of status of completion made by the Contractor:
 - 1. Owner will compensate Engineer for such additional services.
 - 2. Owner will deduct the amount of such compensation from the final payment due the Contractor.

3.03 CONTRACTOR'S CLOSEOUT SUBMITTALS TO ENGINEER:

- A. Evidence of compliance with requirements of governing authorities:
 - 1. Certificates of Inspection.
- B. Project Record Documents: Conform to requirements of Section 01720. To be submitted as a condition for release of final payment (including retainage).
- C. Warranties and Bonds: Conform to requirements of Section 01740.
- D. Evidence of payment and release of liens: To requirements of General Provisions and Supplementary Conditions.
- E. Certificates of Insurance for products and completed operations.
- F. Once the Engineer has determined the work is acceptable under the Contract Documents, he will furnish the Contractor appropriate number of copies of the following forms, copies of which are attached:
 - a) Contractor Warranty Form
 - b) Affidavit of Payment
 - c) Affidavit of Release of Liens
 - d) Final Waiver of Lien
 - e) Consent of Surety for Final Payment
 - f.) Final DBE participation Report

3.04

PAYMENT:

No separate payment will be made under this section for work described or specified herein.

END OF SECTION 01700

SECTION 01710

CLEANING AND DISPOSAL

PART 1 GENERAL

1.01 DESCRIPTION:

Contractor shall execute cleaning during progress of the work and at completion of the work, as required by the General Provisions and other specification documents.

1.02 DISPOSAL REQUIREMENTS:

- A. Conduct cleaning and disposal operations to comply with all local, state and federal codes, ordinances, regulations, and anti-pollution laws; and with airport and construction safety requirements.
- B. All disposal of waste materials shall be off airport property in accordance with all Local, State and Federal laws and regulations.
- C. Contractor shall be responsible for arranging for and obtaining off-site disposal areas, including payment for all costs associated with such disposal.

1.03 SUBMITTALS:

- A. Prior to beginning work, submit a Disposal Plan for the satisfactory disposal of all waste materials and debris.
- B. Submit two (2) copies of the disposal site owner's written permission for such disposal with Disposal Plan.

PART 2 PRODUCTS

2.01 MATERIALS:

- A. Use only those cleaning materials which will not create hazards to health or property and which will not damage surfaces.
- B. Use only those cleaning materials and methods recommended by manufacturer of the surface material to be cleaned.
- C. Use cleaning materials only on surfaces recommended by cleaning material manufacturer.

PART 3 EXECUTION

3.01 CLEANING:

- A. Execute periodic cleaning to keep the work, site and adjacent properties free from accumulations of waste materials, rubbish, windblown debris, and dust resulting from construction operations.
- B. Provide on-site containers for the collection of waste materials, debris and rubbish.
- C. Remove waste materials, debris and rubbish from the site periodically and dispose of at approved locations.

3.02 **BARRIERS AND PROTECTION:**

Protect existing structures and vegetation from cleaning and disposal operations as required.

3.03 **DUST CONTROL:**

A. Schedule cleaning and other operations so that dust and other contaminants resulting therefrom will not fall on wet or newly coated surfaces, will not damage or contaminate aircraft, and will not unduly affect the work of other airport tenants.

3.04 **DISPOSAL OF DEBRIS AND WASTE MATERIALS:**

A. If permitted by Owner and local, state and federal statutes, Contractor may dispose of combustible materials on-site by burning.

1. Unguarded fires will not be permitted.
2. Burning will be restricted as follows:
 - a. Burning of poison oak, poison ivy or other plants of similar nature will be prohibited.
 - b. Tires or other combustible waste material shall not be used to augment burning.
 - c. Burning operations that may in any way be hazardous to air operations will not be allowed.

B. Non-combustible and waste materials and ashes shall be removed from site and disposed of in accordance with the Disposal Plan.

3.05 **PAYMENT:**

No separate payment will be made under this section for work described or specified herein.

END OF SECTION 01710

SECTION 01720

PROJECT RECORD DOCUMENTS

PART 1 **GENERAL**

1.01 **GENERAL REQUIREMENTS:**

- A. Contractor shall maintain at the site as specified herein for the Owner one (1) record copy of:
 - 1. Drawings.
 - 2. Specifications.
 - 3. Addenda.
 - 4. Change orders and other modifications.
 - 5. Engineer field orders or written instructions.
 - 6. Approved shop drawings, product data and samples.
 - 7. Field test records.
 - 8. Laboratory test records.

- B. Related requirements in other parts of the Project Manual:
 - 1. Conditions of the Contract.

PART 2 **PRODUCTS** (Not Used.)

PART 3 **EXECUTION**

3.01 **MAINTENANCE OF DOCUMENTS AND SAMPLES:**

- B. Store record documents and samples in Contractor's field office apart from documents used for construction.

- C. File documents and samples in accordance with data filing format of the Construction Specifications Institute - MASTERFORMAT.

- D. Maintain documents in a clean, dry, legible condition and in good order. Do not use record documents for construction purposes.

- E. Make documents and samples available at all times for inspection by Engineer.

3.02 **RECORDING:**

- A. Stamp or label each document "PROJECT RECORDS" in 3/4 inch letters.

- B. During daily progress of the work, the job superintendent for the Contractor shall record information concurrently with construction progress.
 - 1. Do not conceal any work until required information is recorded.

- C. Drawings: Legibly mark to record actual construction in color codes designated by the Engineer.

- D. All field data for record information shall be obtained by a surveyor who is a Registered Land Surveyor (RLS) in the state of Georgia. All field notes to determine

the "as-built" conditions shall be sealed by the RLS who performed the survey and shall be submitted to the Engineer.

- F. Record Information includes but is not limited to the following:
1. Depths of various elements of foundation in relation to finish reference datum.
 2. Horizontal and vertical locations of pavements and underground utilities and appurtenances, referenced to permanent surface improvements or finish reference datum.
 3. Field changes of dimension and detail.
 4. Changes made by field order or by change order.
 5. Details not on original contract drawings.
 6. Extent and dimensions of pavement removal.
 7. Any other changes in the plans.
 8. Storm drainage system construction:
 - a) Exact distance between all catch basins, manholes, points of intersection, and line terminals or headwalls.
 - b) The invert elevation of the end of all pipes, stub outs, and headwalls.
 - c) The rim (top of frame) or top of grate and invert elevations of all manholes, catch basins, and other structures.
 9. Electrical construction identification:
 - a) Exact distance between all manholes and points of intersection.
 - b) Exact size and location of duct bank or cable run and what circuits it feeds.
 - c) Exact location of any lines abandoned in place.
 - d) Exact location, type, and size of runway and taxiway edge lights, centerline lights, and/or touchdown zone lights.
 - e) Rim and invert elevation of all manholes and duct banks.
 - f) Depth of cover on direct burial lines.
 - g) Locations of cable splices.
 - h) Location and description of signs.
- F. Specifications and addenda: Legibly mark each section to record:
1. Manufacturer, trade name, catalog number, and supplier of each product actually installed.

- 2. Changes made by field order or by change order.
- G. All horizontal control dimensions shall be to the nearest tenth of a foot. Elevations shall be to the nearest one-hundredth of a foot.

3.03

SUBMITTAL:

- A. At the close of the job and prior to receipt of final payment, the Contractor shall deliver to the Engineer for the Owner one (1) complete set of Record Documents.
- B. Accompany submittal with transmittal letter containing:
 - 1. Date.
 - 2. Project title and number.
 - 3. Contractor's name and address
 - 4. Title and number of each record document.
 - 5. Signature of Contractor or his authorized representative.

3.04

PAYMENT:

No separate payment will be made under this section for work described or specified herein. The cost of this work shall be considered incidental to and included in other items of work.

END OF SECTION 01720

SECTION 01740

WARRANTIES AND BONDS

PART 1 **GENERAL**

1.01 **GENERAL REQUIREMENTS:**

- A. Contractor shall:
 - 1. Compile specified warranties and bonds.
 - 2. Compile specified service and maintenance contracts.
 - 3. Co-execute submittals to verify compliance with Contract Documents.
 - 4. Review submittals to verify compliance with Contract Documents.
 - 5. Submit to Engineer for review and transmittal to Owner.

- B. Related requirements in other parts of the Project Manual:
 - 1. Bid Bonds: Instructions to bidders.
 - 2. Performance Bond and Payment Bond: Conditions of the contract.
 - 3. General warranty of construction: Conditions of the contract.

- C. Related requirements specified in other sections:
 - 1. Contract closeout: Section 01700
 - 2. Equipment Manuals: Section 01300
 - 3. Warranties and Bonds required for specific products: Each respective section of specifications.
 - 4. Provisions of Warranties and Bonds, duration: The respective section of specifications which specifies the product.

PART 2 **PRODUCTS** (Not Used)

PART 3 **EXECUTION**

3.01 **SUBMITTAL REQUIREMENTS:**

- A. Assemble warranties, bonds and service and maintenance contracts, executed by each of the respective manufacturers, suppliers, and subcontractors.

- B. Number of original signed copies required: Two (2) each.

- C. Table of Contents: Neatly typed, in orderly sequence. Provide complete information for each item.
 - 1. Product or work item.
 - 2. Firm, with name of principal, address, and telephone number.
 - 3. Scope.
 - 4. Date of beginning of warranty, bond or service and maintenance contract.
 - 5. Duration of warranty, bond or service, and maintenance contract.
 - 6. Provide information for Owner's personnel:
 - a. Proper procedure in case of failure.
 - b. Instances which might affect the validity of warranty or bond.
 - 7. Contractor, name of responsible principal, address and telephone number.

3.02 **FORM OF SUBMITTALS:**

- A. Prepare in duplicate packets.
- B. Format:
 - 1. Size 8 1/2 inches x 11 inches, punch sheets for 3-ring binder.
 - a. Fold larger sheets to fit into binders.
 - 2. Cover: Identify each packet with typed or printed title "WARRANTIES AND BONDS". List:
 - a. Project title and number
 - b. Owner's name.
 - c. Contractor's name and address.
- C. Binders: Commercial quality, 3-ring, with durable and cleanable plastic covers.

3.03

TIME OF SUBMITTALS:

- A. Submit within ten (10) days after date of substantial completion, and prior to final request for payment.
- B. For items of work where acceptance is delayed materially beyond the date of substantial completion, provide updated submittal within ten (10) days after acceptance, listing the date of acceptance as the start of the warranty period.

3.04

SUBMITTALS REQUIRED:

Submit warranties, bonds, service and maintenance contracts as specified in the respective sections of specifications.

3.05

PAYMENT:

No separate payment will be made under this section for work described or specified herein.

END OF SECTION 01740

PART 3

**TECHNICAL SPECIFICATIONS
PART 3**

ITEM S-160

STERILIZATION OF PAVEMENT CRACKS

DESCRIPTION

160-1.1 This item shall consist of furnishing and applying a soil sterilant to cracks and joints in pavement identified as harboring vegetation and as directed by the Engineer. Dense growths of grass and other vegetation shall be removed from areas to receive sterilant before application of sterilant. Areas to receive sterilant shall be treated by the Contractor as necessary and as approved by the Engineer.

160-1.2 **SUBMITTALS.** The Contractor shall submit the manufacturer's literature for sterilant chemicals proposed for use on the project. Copies of the manufacturer's recommendations for mixing and application shall be included. Submittals shall be submitted to the Engineer for approval at least 15 days prior to use.

160-1.3 **WARNINGS.** The Contractor shall strictly adhere to all warnings, cautions, and precautions outlined on product labels.

MATERIALS AND CONSTRUCTION

160-2.1 Soil sterilants shall be a mixture of the commercial brand of Roundup herbicide by Monsanto and Surflan A.S. herbicide by Dow AgroSciences. Other brands may be substituted by a like and equal product that will provide the quantity of like active chemicals as approved by the Engineer.

Application Rate -	Roundup	- 5 quarts per acre.
	Surflan A.S.	- 2-1/2 lbs. per acre.

The above materials shall be mixed together in accordance with label directions and applied in two applications. The first application shall be allowed to remain a minimum of seven (7) days to take effect. The second application shall remain open for two to three (2-3) days before subsequent work begins in the treated area.

The mixture may be applied with any sprayer that will apply the spray uniformly. Sprayer shall be checked before and during use to ensure proper application. The specified amounts shall be added to clean water in the sprayer tank during the filling operation. Material must be in suspension at all times by continuous agitation.

It is intended to treat only those cracks and areas supporting growths of vegetation; it is not intended as a general application of sterilants to pavement surfaces.

Care shall be taken to prevent spillage on slopes or grassed areas to remain. Damage to vegetated areas to remain and to crops, livestock, wildlife, and general environment resulting from careless handling or misuse of sterilants shall be replaced or repaired as directed by the Engineer at the Contractor's expense.

160-2.2 The treated areas shall be cleaned of soil, vegetation, and other debris prior to placement of any subsequent surface treatment, tack coat, or crack sealant.

MEASUREMENT AND PAYMENT

160-3.1 Payment will be made at the contract unit price per lump sum treated with soil sterilization. This price shall be full compensation for furnishing all materials and for all preparation, delivery, application, and cleanup, and for all labor, equipment, tools, and incidentals necessary to complete both applications as described. Bid price per lump sum shall be for two (2) applications of soil sterilant in all cracks and areas shown as necessary and approved by the Engineer.

Payment will be made under:

Item S-160 Sterilization of Pavement Cracks, all sizes -- per lump sum

END OF ITEM S-160

ITEM S-190

PAVEMENT MARKING AND RUBBER REMOVAL

DESCRIPTION

- 190-1.1** This item shall consist of removing existing and temporary pavement markings and rubber deposits from paved areas designated on the drawings or required by the Engineer. The Contractor shall schedule and coordinate the removal operations with the Engineer prior to the start of any work. The limits of pavement marking and rubber removal will be determined by the Engineer.

MATERIALS

- 190-2.1** **WATER.** Water to be used by high-pressure water equipment or for other purposes shall be obtained by the Contractor.
- 190-2.2** **CHEMICALS.** The use of chemicals for removing pavement markings or rubber deposits will not be permitted.

EQUIPMENT

- 190-3.1** **EQUIPMENT.** Equipment, tools, and machinery to be used in the work shall be in safe and satisfactory operational condition at all times.

CONSTRUCTION

- 190-4.1** **ENVIRONMENTAL CONDITIONS.** Except as approved by the Engineer, do not perform work when the atmospheric temperature is below 40 degrees F or when the pavement is covered with snow or ice.
- 190-4.2** **DEGREE OF REMOVAL.** Remove all loose, flaking paint from existing painted areas that are to be re-stripped with compatible materials, and from paved areas to be overlaid with new asphalt pavement; hard, firm paint that has the surface chalk removed may remain in such areas. Remove 100% of all existing and temporary markings that do not comply with the new striping layout. Remove 100% of all existing marking materials that are not compatible with new marking materials to be placed thereon; compatibility of the marking materials shall be certified in writing by the manufacturer of the new marking material. Remove not less than 90% of all visible rubber deposits.
- 190-4.3** **REMOVAL METHODS.** Pavement markings and rubber deposits shall be removed from indicated areas by methods acceptable to the Engineer that cause negligible damage to existing pavements, surface texture, joint sealants, or other airfield appurtenances as determined by the Engineer. The Contractor shall repair at his expense any damage to the pavement, surface texture, sealant, or appurtenances caused by the removal work by methods acceptable to the Engineer.

Obliterating pavement markings by masking with paint, bituminous material, surface treatments or other cover material will not be an acceptable removal method.

Any removal method that causes objectionable dust, contaminated water runoff, or other such hazard or nuisance shall be controlled by means approved by the Engineer that eliminate such causes of objection or its use will not be allowed.

190-4.4 **REMOVAL OF DEPOSITS.** Sand, water, residue, and other waste material that may be deposited on the pavement as a result of removal operations shall be removed as the work progresses. Obtain the approval of residue removal and disposal method from the Engineer prior to beginning work. Accumulations of residue or other waste materials, which might interfere with drainage or might constitute a hazard to aircraft or aircraft operations, will not be permitted.

190-4.5 **TEST SECTION.** Prior to the start of work, remove rubber deposits and pavement markings on designated test areas not less than 50 square yards in size. Use approved procedures and equipment needed to achieve the required degree of rubber and marking removal. The test section will be inspected and approved by the Engineer before any further removal work will be allowed.

190-4.6 **SAFETY.** Upon notification of emergency, all equipment and personnel must be capable of being removed from the runway by exiting at the nearest taxiway to a point beyond the hold short line, or to a minimum of 200 feet from the edge of the runway in three minutes or less, leaving the runway surface suitable for any function for which the structure was originally designed.

METHOD OF MEASUREMENT

190-5.1 The quantity of pavement marking and rubber removal to be paid for shall be the number of square feet of designated pavement markings and rubber deposits removed in accordance with the specifications, complete, and accepted by Engineer.

190-5.2 There shall be no separate measurement or payment for removing loose and flaking paint, and paint chalkings, from existing markings to be overlaid or restriped. All costs for this work shall be considered incidental and shall be included in contract unit prices for other payment items.

BASIS OF PAYMENT

190-6.1 For removal of existing non-conforming, non-compatible, or temporary pavement markings and rubber deposits, payment shall be made at the contract unit price per square foot. This contract price shall be full compensation for all disposal work and for furnishing all material, labor, equipment, tools, and incidentals necessary to complete the item.

Payment will be made under:

Item S-190A Pavement Marking Removal – per Square Foot

Item S-190B Pavement Rubber Removal – per Square Foot

END OF ITEM S-190

EMULSIFIED ASPHALT SEAL COAT

DESCRIPTION

608-1.1 This item shall consist of the application of a emulsified asphalt surface treatment composed of an emulsion of natural and refined asphalt materials, water and, if specified, a polymer additive, for taxiways and runways with the application of a suitable aggregate to maintain adequate surface friction; and airfield secondary and tertiary pavements including low-speed taxiways, shoulders, overruns, roads, parking areas, and other general applications with or without aggregate applied. Emulsified Asphalt Seal Coat products assist in pavement preservation through reducing the rate of pavement oxidation. The emulsified asphalt surface treatment shall be applied in accordance with these specifications, and as shown on the plans or as directed by the Engineer.

608-1.2 **Quantities of materials per square yard (square meter).** The approximate amounts of materials per square yard (square meter) for the asphalt surface treatment shall be as provided in the table for the treatment area(s) at the specified dilution rate(s) as noted on the plans. The actual application rates will vary within the range specified to suit field conditions and will be recommended by the manufacturer's representative and approved by the Engineer from the test area/sections evaluation.

Application Rate

Dilution Rate	Quantity of Emulsion gal/yd ² (l/m ²)	Quantity of Aggregate lb/yd ² (kg/m ²)
1:1	0.10-0.15 (0.45-0.68)	0.20-0.50 (0.11-0.27)
2:1	0.08-0.15 (0.36-0.54)	0.20-0.50 (0.11-0.27)

A Dilution Rate of 1:1 shall be applied to the Base Bid and Additive Bid 1 work.

A Dilution Rate of 2:1 shall be applied to Additive Bid 2 and Additive Bid 3 work.

MATERIALS

608-2.1 **Aggregate.** The aggregate material shall be a dry, clean, dust and dirt free, sound, durable, angular shaped manufactured specialty sand, such as that used as an abrasive, with a Mohs hardness of 6 to 8. The Contractor shall submit manufacturer's technical data and a manufacturer's certification indicating that the specialty sand meets the requirements of the specification to the Engineer prior to start of construction. The sand must be approved for use by the Engineer and shall meet the following gradation limits when tested in accordance with ASTM C136 and ASTM C117:

Aggregate Material Gradation Requirements

Sieve Designation (square openings)	Percentage by Weight Retained Sieves
No. 8 (2.38 mm)	0
No. 16 (1.19 mm)	0-8
No. 20 (0.84 mm)	0-28
No. 30 (0.60 mm)	20-50
No. 40 (0.42 mm)	10-55
No. 50 (0.30 mm)	0-30
No. 70 (0.21 mm)	0-5
No. 100 (0.15 mm)	0-2
No. 200 (0.07 mm)	0-2

The Contractor shall provide a certification showing particle size analysis and properties of the material delivered for use on the project. The Contractor's certification may be subject to verification by testing the material delivered for use on the project.

608-2.2 Asphalt material. The Contractor shall furnish the vendor's certified test reports for the emulsified asphalt, in its concentrated form, to the Engineer, showing that the material meets the following properties:

Concentrated Asphalt Material Properties

Properties	Specification	Limits
Saybolt Furol Viscosity at 77°F (25°C)	ASTM D244	20 – 100 seconds
Residue by Distillation or Evaporation	ASTM D244	57% minimum
Sieve Test	ASTM D244	0.1% maximum
24-hour Stability	ASTM D244	1% maximum
5-day Settlement Test	ASTM D244	5.0% maximum
Particle Charge ¹	ASTM D244	Positive 6.5 maximum pH

¹ pH may be used in lieu of the particle charge test which is sometimes inconclusive in slow setting, asphalt emulsions.

The asphalt material concentrate must be diluted with heated water prior to application. The asphalt material, when diluted in the volumetric proportion of one part concentrated asphalt material to one part hot water or two parts concentrated asphalt material to one part hot water shall have the following properties:

One-to-One Dilution Emulsion Properties

Properties	Specification	Limits
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In Ready-to-Apply Form, one part concentrate to one part water, by volume		
Saybolt Furol Viscosity at 77°F (25°C)	ASTM D244	10 – 50 seconds
Residue by Distillation or Evaporation	ASTM D244	28.5% minimum
Pumping Stability ¹		Pass

¹ Pumping stability is tested by pumping one pint (475 ml) of seal coat diluted one (1) part concentrate to one (1) part water, at 77°F (25°C), through a 1/4-inch (6 mm) gear pump operating 1750 rpm for 10 minutes with no significant separation or coagulation.

Two-to-One Dilution Emulsion Properties

Properties	Specification	Limits
In Ready-to-Apply Form, two parts concentrate to one part water, by volume		
Saybolt Furol Viscosity at 77°F (25°C)	ASTM D244	10 – 50 seconds
Residue by Distillation or Evaporation	ASTM D244	38% minimum
Pumping Stability ¹		Pass

¹ Pumping stability is tested by pumping one pint (475 ml) of seal coat diluted one (1) part concentrate to one (1) part water, at 77°F (25°C), through a 1/4-inch (6 mm) gear pump operating 1750 rpm for 10 minutes with no significant separation or coagulation.

The asphalt material base residue shall contain not less than 20% gilsonite, or uintaite and shall not contain any tall oil pitch or coal tar material. The material shall be compatible with asphaltic concrete, and have a 5-year minimum proven performance record at airports with similar climatic conditions. Curing time, under recommended application conditions, shall not exceed eight (8) hours.

Emulsion Residue by Distillation or Evaporation Tests

Properties	Specification	Limits
Viscosity at 275°F (135°C)	ASTM D4402	1750 cts maximum
Solubility in 1, 1, 1 trichloroethylene	ASTM D2042	97.5% minimum
Penetration	ASTM D5	50 dmm maximum
Asphaltenes	ASTM D2007	15% minimum
Saturates	ASTM D2007	15% maximum
Polar Compounds	ASTM D2007	25% minimum
Aromatics	ASTM D2007	15% minimum

The Contractor shall furnish

vendor's certified test reports showing that the material is the type, grade and quality specified for each load of asphalt material delivered to the project. The certification shall also show the shipment number, refinery, consignee, destination, contract number and date of shipment. The test reports and certification shall be delivered to the Engineer before permission is granted to use the material. The furnishing of the vendor's certified test report for the asphalt material shall not be interpreted as a basis for final acceptance. The manufacturer's material test report certification may be subject to verification by testing the material delivered for use on the project.

The asphalt material storage and handling temperature shall be between 50°F - 160°F (10°C - 70°C) and the material shall be protected from freezing, or whenever outside temperature drops below 40°F (4°C) for prolonged time periods.

608-2.3 Water. Water used in making the emulsion shall be potable, free from harmful soluble salts and chemicals, and at least 100°F (38°C).

608-2.4 Polymer. The polymer shall be a vinyl acrylic polymer approved for use by the asphalt material manufacturer. The Contractor shall submit manufacturer's technical data, the manufacturer's certification indicating that the polymer meets the requirements of the specification, and the asphalt material manufacturer's approval of its use to the Engineer. The polymer must be approved for use by the Engineer and shall meet the following properties:

Polymer Properties

Properties	Limits
Solids Content	54 to 57%, Percent by Weight
Weight	8.9 to 9.8 pounds/gallon (1.07 to 1.17 kg/L)
pH	4.0 to 6.0
Particle Charge	Nonionic/Anionic
Mechanical Stability	Excellent
Film Forming Temperature, °C	+5°C, minimum
Tg, °C	22°C, maximum

APPLICATION RATE

608-3.1 Material performance for runway and high-speed taxiway projects. The Contractor shall submit to the Engineer friction tests, from previous airport projects which used the seal coat materials in a similar environment, in accordance with AC 150/5320-12, at 40 or 60 mph (65 or 95 km/h) wet, showing, as a minimum; friction value of pavement surface prior to sealant application; two values, tested between 24 and 96 hours after application, with a minimum of 24 hours between tests; and one value tested at no less than 180 days or greater than 360 days after the application. The results of the two tests between 24 and 96 hours shall indicate friction is increasing at a rate to obtain similar friction value of the pavement surface prior to application, and the long term test shall indicate no apparent adverse effect with time relative to friction values and existing pavement surface. The Contractor shall submit to the Engineer a list of airports which meet the above requirements, as well as technical details on application rates, aggregate rates, and point of contact at these airports to confirm use and success of sealer with aggregate. Friction tests shall be submitted from no less than one of the airports on the list and each set of tests described above, must be from one project.

Seal coat material submittal without required friction performance will not be approved. Friction tests performed on this project cannot be used as a substitute of this requirement.

608-3.2 Test areas and test sections. A qualified manufacturer's representative shall be present in the field to assist the Contractor in applying test areas and/or test sections to determine the appropriate application rate of both emulsion and sand to be approved by the Engineer.

A test area and/or section shall be applied for each differing HMA pavement surface identified in the project. The test area(s) and/or test section(s) shall be used to determine the material application rate(s) of both emulsion and sand prior to full production. The same equipment and method of operation shall be utilized on the test area(s) and/or test section(s) as will be utilized on the remainder of the work.

- a. **For taxiway, taxilane and apron surfaces.** Prior to full application, the Contractor shall place test areas at varying application rates as advised by the manufacturer's representative and acceptable to the Engineer to determine appropriate application rate(s). The test areas will be located on representative section(s) of the pavement to receive the asphalt surface treatment designated by the Engineer.
- b. **For runway and high speed exit taxiway surfaces.** Prior to full application, the Contractor shall place a series of test sections a minimum of 300 feet (90 m) long by 12 feet (3.6 m) wide, or width of anticipated application, whichever is greater, at varying application rates as recommended by the manufacturer's representative and acceptable to the Engineer to determine appropriate application rate(s). The area to be tested will be located on a representative section of the pavement to receive the asphalt surface treatment designated by the Engineer. Before beginning the test section(s), the skid resistance of the existing pavement shall be determined for each test section with a continuous friction measuring equipment (CFME). The skid resistance test after application shall be at approximately the same location as the test done on the existing pavement. The Contractor may begin testing the skid resistance of runway and high speed exit taxiway test sections after application of the asphalt surface treatment has fully cured. Aircraft shall not be permitted on the runway or high speed exit taxiway test sections for a minimum of 24 hours and until such time as the Contractor validates that its surface friction meets AC 150/5320-12. The results of the friction evaluation meet or exceed the Maintenance Planning levels provided in Table 3-2, "Friction Level Classification for Runway Pavement Surfaces," in AC 150/5320-12, Measurement, Construction, and Maintenance of Skid-resistant Airport Pavement Surfaces, when tested at speeds of 40 and 60 mph (65 and 95 km/h) wet with approved CFME.

If the test section should prove to be unsatisfactory, necessary adjustments to the application rate, placement operations, and equipment shall be made. Additional test sections shall be placed and additional skid resistance tests performed and evaluated. Full production shall not begin without the Engineer's approval of an appropriate application rate(s). Acceptable test sections shall be paid for in accordance with paragraph 608-8.1.

CONSTRUCTION METHODS

608-4.1 Worker safety. The seal coat product shall be handled with caution. The Contractor shall obtain a Material Safety Data Sheet (MSDS) for both the asphalt emulsion product and sand and require workmen to follow the manufacturer's recommended safety precautions.

608-4.2 Weather limitations. The asphalt emulsion shall be applied only when the existing pavement surface is dry and when the weather is not foggy, rainy, or when the wind velocity will prevent the uniform application of the material. No material shall be applied when dust or sand is blowing or when rain is anticipated within eight (8) hours of application completion. The atmospheric temperature and the pavement surface temperature shall both be above 60°F (16°C) and rising. During application, account for wind drift. Cover existing buildings, structures, runway edge lights, taxiway edge lights, informational signs, retro-reflective marking and in-pavement duct markers as necessary to protect against overspray before applying the emulsion. Should emulsion get on any light or marker fixture, promptly clean the fixture. If cleaning is not satisfactory to the Engineer, the Contractor shall replace any light, sign or marker with equivalent equipment at no cost to the Owner.

608-4.3 Equipment and tools. The Contractor shall furnish all equipment, tools, and machinery necessary for the performance of the work.

- a. **Pressure distributor.** The emulsion shall be applied with a manufacturer-approved computer rate-controlled asphalt distributor. The equipment shall be in good working order and contain no contaminants or diluents in the tank. Spreader bar tips must be clean, free of burrs, and of a size to maintain an even distribution of the emulsion. Any type of tip or pressure source is suitable that will maintain predetermined flow rates and constant pressure during the application process with application speeds under eight (8) miles per hour (13 km per hour) or seven (700) feet per minute (213 m per minute). Test the equipment under pressure for leaks and to ensure it is in good working order before use.

The distributor truck shall be equipped with a 12-foot (3.7-m), minimum, spreader bar with individual nozzle control. The distributor truck shall be capable of specific application rates in the range of 0.05 to 0.25 gallons per square yard (0.15 to 0.80 liters per square meter). These rates shall be computer-controlled rather than mechanical. The distributor truck shall have an easily accessible thermometer that constantly monitors the temperature of the emulsion, and have an operable mechanical tank gauge that can be used to cross-check the computer accuracy.

A distributor truck shall be provided, if necessary, equipped to effectively heat and mix the material to the required temperature prior to application. Heating and mixing shall be done in accordance with the manufacturer's recommendations. Care shall be taken not to overheat or over mix the material.

The distributor shall be equipped to hand spray the emulsion in areas identified either on the plans or by the Engineer.

- b. **Aggregate spreader.** The asphalt distributor truck will be equipped with an aggregate spreader mounted to the distributor truck that can apply sand to the emulsion in a single pass operation without driving through wet emulsion. The aggregate spreader shall be equipped with a variable control system capable of uniformly distributing the sand at the specified rate at varying application widths and speeds. The sander shall have a minimum hopper capacity of at least 3,000 pounds (1361 kg) of sand. Push-type hand sanders will be allowed for use around lights, signs and other obstructions.
- c. **Power broom/blower.** A power broom and/or blower shall be provided for removing loose material from the surface to be treated.

d. **Equipment calibration.** The Contractor shall calibrate the equipment using either of the following procedures:

(1) **First procedure.** The Contractor shall furnish a State Calibration Certification for the emulsified asphalt distributor, from any state providing that service, or other acceptable agency certification approved by the Engineer, and the calibration date shall have been within six (6) months of the contract award, or up to 12 months if supporting documents substantiate continuous work using the same distributor.

(2) **Second procedure.** The Contractor shall furnish all equipment, materials and labor necessary to calibrate the emulsified asphalt distributor and the aggregate spreader. Perform all calibrations with the approved job materials and prior to applying the specified coatings to the prepared surface. Perform calibration of the emulsified asphalt distributor in accordance with ASTM D2995. Perform work to calibrate the tank and measuring devices of the distributor. Perform inspection and calibration at the beginning of the work and at least once a day during construction.

608-4.4 Preparation of asphalt pavement surfaces. Clean pavement surface immediately prior to placing the seal coat by sweeping, flushing well with water leaving no standing water, or a combination of both, so that it is free of dust, dirt, grease, vegetation, oil or any type of objectionable surface film. Remove oil or grease that has not penetrated the asphalt pavement by scraping or by scrubbing with a detergent, then wash thoroughly with clean water. After cleaning, treat these areas with the oil spot primer. Any additional surface preparation, such as crack repair, shall be in accordance with paragraph 101-3.6.

a. **New asphalt pavement surfaces.** Allow new asphalt pavement surfaces to cure so that there is no concentration of oils on the surface. A period of at least 30 days at 70°F (21°C) daytime temperatures shall elapse between the placement of a hot mixed asphalt concrete surface course and the application of the surface treatment.

Perform a water-break-free test to confirm that the surface oils have degraded and dissipated. (Cast approximately one gallon (4 liters) of clean water out over the surface. The water should sheet out and wet the surface uniformly without crawling or showing oil rings.) If signs of crawling or oil rings are apparent on the pavement surface, additional time must be allowed for additional curing and retesting of the pavement surface prior to treatment.

608-4.5 Emulsion mixing. The application emulsion shall be obtained by blending asphalt material concentrate, water and polymer, if specified. Always add heated water to the asphalt material concentrate, never add asphalt material concentrate to heated water. Mix one part heated water to one part or two parts asphalt material concentrate, by volume.

If polymer is required, add 1% polymer, by volume, to the emulsion mix. If the polymer is added to the emulsion mix at the plant, submit weigh scale tickets to the Engineer. As an option, the polymer may be added to the emulsion mix at the job site provided the polymer is added slowly while the circulating pump is running. The mix must be agitated for a minimum of 15 minutes or until the polymer is mixed to the satisfaction of the Engineer.

608-4.6 Application of asphalt emulsion. The asphalt emulsion shall be applied using a pressure distributor upon the properly prepared, clean and dry surface at the application rate recommended by the manufacturer's representative and approved by the Engineer from the test area/sections evaluation for each designated treatment area. The asphalt emulsion should be applied at a temperature between 130°F (54°C) and 160°F (70°C) or in accordance with the manufacturer's recommendation.

Pavement surfaces which have excessive runoff of seal coat due to excessive amount of material being applied or excessive surface grade shall be treated in two or more applications to the specified application rate at no additional cost to the Owner. Each additional application shall be performed after the prior application of material has penetrated into the pavement.

If low spots and depressions greater than 1/2 inch (12 mm) in depth in the pavement surface cause ponding or puddling of the applied materials, the pavement surface shall be broomed with a broom drag. Brooming shall continue until the pavement surface is free of any pools of excess material. Ponding and/or puddling shall not cause excessive pavement softening and/or additional distress. The Engineer shall inspect and approve areas after brooming.

During all applications, the surfaces of adjacent structures shall be protected to prevent their being spattered or marred. Asphalt materials shall not be discharged into borrow pits or gutters or on the airport area.

608-4.7 Application of aggregate material. Immediately following the application of the asphalt emulsion or as directed by the Engineer, sand at the rate recommended by the manufacturer's representative and approved by the Engineer from the test area/sections evaluation for each designated application area, shall be spread uniformly over the asphalt emulsion. The aggregate shall be spread to the same width of application as the asphalt material and shall not be applied in such thickness as to cause blanketing.

Sprinkling of additional aggregate material, and spraying additional asphalt material over areas that show up having insufficient cover or bitumen, shall be done by hand whenever necessary. In areas where hand work is necessitated, the sand shall be applied before the sealant begins to break.

Sanding shall be performed to prevent excessive amounts of sand from accumulating on the pavement prior to the emulsion being applied. The Contractor shall clean areas with excess or loose sand and dispose of off airport property.

QUALITY CONTROL

608-5.1 Manufacturer's representation. The manufacturer's representative shall have knowledge of the material, procedures, and equipment described in the specification and shall be responsible for determining the application rates and shall oversee the preparation and application of the seal coat product. Documentation of the manufacturer representative's experience and knowledge for applying the seal coat product shall be furnished to the Engineer a minimum of 10 work days prior to placement of the test sections. The cost of the manufacturer's representative shall be included in the bid price.

608-5.2 Contractor qualifications. The Contractor shall provide the Engineer Contractor qualifications for applicators, personnel and equipment. The Contractor shall also provide documentation that the Contractor is qualified to apply the seal coat and to have made at least three (3) applications similar to this project in the past two (2) years.

MATERIAL ACCEPTANCE

608-6.1 Friction tests. Friction tests in accordance with AC 150/5320-12, Measurement, Construction, and Maintenance of Skid-Resistant Airport Pavement Surfaces, shall be accomplished on all runway and high-speed taxiways that have received a seal coat. The Contractor shall coordinate testing with the Engineer. Each test includes performing friction tests at 40 mph and 60 mph (65 or 95 km/h) both wet, 15 feet (4.5 m) to each side of runway centerline. Friction test shall be run within 30 days prior to application of the seal coat to runway and/or high-speed taxiways and after application of the seal coat. The Engineer shall be present for testing. The Contractor shall provide a written report of friction test results.

METHOD OF MEASUREMENT

608-7.1 Asphalt surface treatment. The quantity of asphalt surface treatment shall be measured by the square yards of material applied in accordance with the plans and specifications and accepted by the Engineer.

The Contractor must furnish the Engineer with the certified weigh bills when materials are received for the asphalt material used under this contract. The Contractor must not remove material from the tank car or storage tank until initial amounts and temperature measurements have been verified.

BASIS OF PAYMENT

608-8.1 Payment shall be made at the contract unit price per square yard for the asphalt surface treatment applied and accepted by the Engineer. This price shall be full compensation for all surface preparation, furnishing all materials, delivery and application of these materials, for all labor, equipment, tools, and incidentals necessary to complete the item, including the friction testing and all work required to meet AC 150/5320-12, and any costs associated with furnishing a qualified manufacturer's representative to assist with test strips.

Payment will be made under:

Item P-608 Emulsified Asphalt Seal Coat – per square yard

MATERIAL REQUIREMENTS

ASTM C117	Standard Test Method for Materials Finer than 75-µm (No. 200) Sieve in Mineral Aggregates by Washing
ASTM C136	Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates
ASTM D5	Standard Test Method for Penetration of Bituminous Materials
ASTM D244	Standard Test Methods and Practices for Emulsified Asphalts
ASTM D2007	Standard Test Method for Characteristic Groups in Rubber Extender and Processing Oils and Other Petroleum-Derived Oils by the Clay-Gel Absorption Chromatographic Method
ASTM D2042	Standard Test Method for Solubility of Asphalt Materials in Trichloroethylene
ASTM D2995	Standard Practice for Estimating Application Rate of Bituminous Distributors
ASTM D4402	Standard Test Method for Viscosity Determination of Asphalt at Elevated Temperatures Using a Rotational Viscometer
ASTM D5340	Standard Test Method for Airport Pavement Condition Index Surveys
AC 150/5320-12	Measurement, Construction, and Maintenance of Skid-Resistant Airport Pavement Surfaces
AC 150/5320-17	Airfield Pavement Surface Evaluation and Rating (PASER) Manuals
AC 150/5380-6	Guidelines and Procedures for Maintenance of Airport Pavements

END OF ITEM P-608

ITEM P-611

SEALING CRACKS IN BITUMINOUS PAVEMENT

DESCRIPTION

- 611-1.1** This item shall consist of cleaning and repair of cracks including open lane joints in bituminous pavement. Small to medium width cracks, as indicated on the drawings and specified in paragraph 611-5.3, shall be sealed with a resilient and adhesive sealant. Large cracks shall be filled with hot applied mastic material. Existing sealed cracks in satisfactory condition as determined by the Engineer shall not be resealed. The work shall be located as shown on the drawings or as directed by the Engineer.

MATERIALS

- 611-2.1** **CRACK SEALANT.** Crack sealing material shall meet the requirements of ASTM D 6690, Type II or III.
- 611-2.2** **BACKER ROD.** Backer rod material shall meet the requirements of ASTM D 5249, Type 1, and shall be compressible, non-shrinkable, nonabsorbent, and compatible with the sealant. The rod shall not soften or melt at application temperature of sealant. Minimum rod diameter shall be at least 25% greater than the nominal width of crack or sealant reservoir in which rod is placed.
- 611-2.3** **HOT APPLIED MASTIC REPAIR MATERIAL.** The mastic repair material for asphalt pavements shall be manufactured by Deery American Corporation or an approved equal. The mastic shall be black in color.

EQUIPMENT

- 611-3.1** **GENERAL REQUIREMENTS.** Furnish all equipment, tools, and accessories necessary to prepare and clean cracks and install sealants and repair materials. Machines, rollers, tools, and equipment used in the work shall be approved by the Engineer before the work is started and shall be maintained in proper working condition at all times.
- 611-3.2** **CRACK ROUTING EQUIPMENT.** The routing equipment shall be a self-powered machine operating a power driven tool or bit specifically designed for routing cracks in bituminous pavement. The bit shall rotate about a vertical axis at sufficient speed to cut a smooth vertical-walled reservoir in the pavement surface and shall maintain accurate cutting without damaging the sides or top edges of the reservoir. The router shall be capable of following the trace of the crack without deviation. The use of rotary impact routing devices will not be permitted for cleaning cracks except when vertical-sided carbide tipped bits approved by the Engineer are used.
- 611-3.3** **CRACK PREPARATION.** Either a vertical spindle router or a concrete saw shall be used to clean cracks and form the minimum sealant reservoir required. When formation of a sealant reservoir is not required, a wire brush supplemented by sandblasting may be used for cleaning. If the equipment used or its operator cannot obtain proper crack preparation and without damage to asphalt pavement to remain, the work will not be allowed to continue until the cause of the unsatisfactory work is remedied.
- A. Vertical Spindle Router. Router bits of diameter indicated shall be on hand to work the existing variable width cracks. The router shall be able to follow the crack, remove any old sealant, and widen the crack as indicated without chipping or spalling the bituminous pavement around the crack.
- B. Concrete Saw. The saw shall be equipped with a 6-inch diameter or less diamond or abrasive blade capable of closely following cracks without damaging or overcutting adjacent pavement.

- C. Wire Brush. The cleaning equipment shall be a self-powered machine operating a power-driven wire brush suitable for cleaning cracks in bituminous pavement. The wire brush shall remove debris from the crack without unduly damaging the edges of sound pavement.

611-3.4 **SANDBLASTING EQUIPMENT.** Equipment shall include air compressor, hose, and nozzles of proper size, shape, and opening capable of removing foreign material from cracks. Attach an adjustable guide to the nozzle that will hold the nozzle aligned with the crack to effectively clean without damage to asphalt edges. Adjust the height, angle of inclination, and size of nozzle to sandblast and clean the crack.

611-3.5 **AIR COMPRESSOR.** Provide portable air compressor capable of operating the air blasting and sandblasting equipment and capable of blowing out sand, water, dust, and other objectionable materials from the cracks. The compressor shall furnish oil free air at a pressure not less than 100 psi and a minimum rate of 150 cfm at the nozzles. The compressor shall be equipped with traps that maintain the compressed air free of oil and water.

611-3.6 **HOT COMPRESSED-AIR (HCA) HEAT LANCE.** Provide a HCA heat lance to warm, dry, and clean the crack when the sealing operation must be conducted in less than desirable conditions and as directed by Engineer. Undesirable conditions occur following rain or when the pavement temperature is below 50 degrees F. The heat lance shall be capable of producing heated air at 2,500 degrees F and at a minimum velocity of 2,000 feet per second. Heating the cracks using direct flame methods shall not be permitted.

611-3.7 **VACUUM SWEEPER.** Provide self-propelled, vacuum pickup sweepers capable of completely removing all cuttings, loose sand, water, and debris from pavement surface and cracks.

611-3.8 **HOT-APPLIED SEALANT EQUIPMENT.** Install hot-applied sealant materials with unit applicators recommended and approved by the sealant manufacturer which will heat and extrude the sealant. Equip the mobile units with double-wall agitator type kettles with an oil medium in the outer space for heat transfer, a direct-connected pressure-type extruding device with nozzle or nozzles shaped for insertion in the cracks to be filled, and positive devices for controlling the temperature of oil and sealer. Design the applicator so that the sealant will circulate through the delivery hose and return to the kettle when not sealing. Insulate the applicator wand from the kettle to the nozzle. Select dimensions of the nozzles such that the tip of the nozzle will easily feed sealant into the void space of the crack. Equip the nozzle tip with a metal cross-bar to assure that the top of the sealant fed into the sealant reservoir is level and within the indicated tolerance below the pavement surface.

SUBMITTALS

611-4.1 **SUBMITTALS.** No installation of materials will be allowed until all submittals have been received and accepted.

- A. Manufacturer's Catalog Data and Instructions. Submit copies of manufacturer's catalog data and recommendations for sealant installation and equipment use.
- B. Equipment List and Statements. Submit a list and description of the sealant installation equipment, including model and serial number, to be used and a statement from the supplier of the sealant that the proposed equipment is acceptable for installing the specified sealant.
- C. Certified Test Reports. Submit certification that sealant to be used meets the specification.

CONSTRUCTION METHODS

611-5.1 **SEALANT DELIVERY AND STORAGE.** Each lot or batch of sealant compound shall be delivered to the job site in the manufacturer's original sealed container. Each container shall be marked with

the manufacturer's name, batch or lot number, shelf life, and the safe heating temperature and shall be accompanied by the manufacturer's certification stating that the compound meets the requirements of this specification. Materials delivered to the job site shall be inspected for defects, unloaded, and stored with a minimum of handling to avoid damage. Storage facilities shall be provided at the job site to protect materials from weather and to maintain them at temperatures as recommended by the manufacturer.

611-5.2 WEATHER LIMITATIONS. Do not proceed when weather conditions detrimentally affect the quality of cleaning or preparing cracks and applying sealants and repair materials. Apply sealants only if the pavement temperature is at least 50 degrees F and sealant reservoirs are dry unless an approved HCA heat lance is used. Materials shall be protected from free moisture.

611-5.3 CRACK PREPARATION. Final cleaning operations shall be accomplished immediately in advance of sealing operations. Clean the cracks by removing existing defective sealants, dirt, vegetation, and other foreign material with the equipment specified herein, but not limited thereto. Remove deteriorated and cracked bituminous pavement adjacent to the crack. Cleaning procedures which damage pavements by chipping or spalling will not be permitted. Preparation shall be as follows:

- A. Minor Cracks. Cracks less than 1/4 inch wide do not need to be sealed.
- B. Small Cracks. Cracks 1/4 to 1/2 inch wide, measured at the pavement surface, shall be routed to a width of not less than 1/2 inch and to a minimum depth of 3/4 inch. The routed crack shall be sandblasted and cleaned using compressed air.
- C. Medium Cracks. Cracks 1/2 to 1-1/2 inches wide at the pavement surface shall be wire brushed or sandblasted and cleaned using compressed air.
- D. Large Cracks. Cracks greater than 1-1/2 inches wide at the pavement surface shall be cleaned by wire brushing or sandblasting and air blasting. Contiguous bituminous pavement that is cracked and deteriorated shall be removed to sound pavement.

611-5.4 BACKUP MATERIAL. Backer rod material, at option of Contractor, may be inserted into the lower portion of cracks to be sealed as indicated on the drawings. Care shall be taken to ensure that the backup material is wedged in place at the specified minimum depth to avoid rod flotation.

611-5.5 PREPARATION OF SEALANT. Hot-applied sealants shall not be heated in excess of the safe heating temperature recommended by the manufacturer as shown on the sealant containers. Sealant that has been overheated or subjected to application temperatures for over 4 hours or that has remained in the applicator at the end of the day's operation shall be withdrawn and wasted.

611-5.6 INSTALLATION OF SEALANT.

- A. Time of Application. Cracks shall be sealed immediately following final cleaning of the crack walls and following the placement of the backup material when used. Cleaned cracks that cannot be sealed immediately or that have been exposed to rain prior to sealing, shall be recleaned and allowed to dry, or dried and blown out with a HCA heat lance, prior to installing the sealant.
- B. Sealing the Crack. Immediately proceeding, but not more than 50 feet ahead of the crack sealing operations, a final cleaning with compressed air or HCA heat lance shall be performed. The cracks shall be filled from the bottom up and the sealant recessed below the pavement surface as shown on the drawings. Overfilling the cracks shall not be permitted. Excess or spilled sealant shall be removed from the pavement by approved methods and

discarded. The sealant shall be installed in such a manner as to prevent the formation of voids and entrapped air. Several passes with the applicator wand may be necessary to obtain the specified sealant depth from the pavement surface. Sealant lost in unbacked or poorly backed cracks shall be replaced at no cost to the Owner. In no case shall gravity methods or pouring pots be used to install the sealant material. Traffic shall not be permitted over newly sealed pavement until sealant has properly cured to a state that pick-up or dislodgement by traffic will not occur. Cracks shall be checked frequently to ensure that the newly installed sealant is cured to a tack-free condition within 3 hours.

611-5.7 **CRACK SEALANT INSTALLATION TEST SECTION.** Prior to cleaning and sealing of cracks for the entire project, a test section at least 200 linear feet long shall be prepared using the specified materials and approved equipment, to demonstrate the proposed sealing of all cracks of the project. Following the completion of the test section and before any other crack is sealed, the test section shall be inspected by the Engineer to determine that the materials and installation meet the requirements specified. If materials or installation do not meet requirements, the materials shall be removed and the cracks recleaned and resealed at no cost to the Owner. When the test section meets the requirements, it may be incorporated into the permanent work and paid for at the contract unit price per linear foot for sealing items scheduled. All other cracks shall be sealed in the manner approved for sealing the test section.

611-5.8 **REPAIR OF LARGE CRACKS.** After preparation and cleaning of large cracks, inside crack surfaces shall be coated with a surface conditioner by a spray or a brush application as shown on the plans. The crack shall be filled with the mastic material to a finish elevation level with adjacent pavement surfaces. No separate payment will be made for surface conditioner used in the repair of cracks. This material is considered incidental to crack repair and the cost shall be included in the bid unit price for repair of large cracks.

611-5.9 **CLEANUP.** Upon completion of the project, all unused materials and debris shall be removed from the site and the pavement shall be left in a clean condition.

611-5.10 **ACCEPTANCE.** The crack sealant shall be inspected for proper cure and set rate, proper recess, adhesion to the bituminous pavement, cohesive unity within the sealant, foreign objects, entrapped air, voids, and other defects. Sealants exhibiting any deficiencies at any time prior to the final acceptance of the project shall be removed from the crack, wasted, and replaced as specified herein at no additional cost to the Owner.

METHOD OF MEASUREMENT

611-6.1 Sealing and repair of cracks in bituminous pavement shall be measured by the linear foot of sealed and repaired cracks, in place, complete, and accepted.

BASIS OF PAYMENT

611-7.1 Payment for crack sealing and repair shall be made at the contract unit price per linear foot. The price shall be full compensation for all routing, cleaning, removal of old sealant, preparation and disposal work, for furnishing all materials, for all preparation, delivering and placing of these materials, and for all labor, equipment, tools, and incidentals necessary to complete all work in this section.

Payment will be made under:

- Item P-611A Seal Small Crack in Bituminous Pavement - per Linear Foot
- Item P-611B Seal Medium Crack in Bituminous Pavement - per Linear Foot
- Item P-611C Seal Large Crack in Bituminous Pavement - per Linear Foot

MATERIAL REQUIREMENTS

ASTM D 5249 Backer Material for Use with Cold- and Hot-Applied Joint Sealants in Portland Cement Concrete and Asphalt Joints

ASTM D 6690 Joint and Crack Sealants, Hot-Applied, for Concrete and Asphalt Pavements

END OF ITEM P-611

ITEM P-620

RUNWAY AND TAXIWAY MARKING

DESCRIPTION

- 620-1.1** This item shall consist of the preparation and painting of numbers, markings, and stripes on the surface of runways, taxiways, and aprons, in accordance with these specifications and at the locations shown on the plans, or as directed by the Engineer. The terms "paint" and "marking material" as well as "painting" and "application of markings" are interchangeable throughout this specification.

MATERIALS

- 620-2.1** **Materials acceptance.** The Contractor shall furnish manufacturer's certified test reports for materials shipped to the project. The certified test reports shall include a statement that the materials meet the specification requirements. The reports can be used for material acceptance or the Engineer may perform verification testing. The reports shall not be interpreted as a basis for payment. The Contractor shall notify the Engineer upon arrival of a shipment of materials to the site. All material shall arrive in sealed containers 55 gallons or smaller for inspection by the Engineer. Material shall not be loaded into the equipment until inspected by the Engineer.

- 620-2.2** **Marking materials.** Paint shall be waterborne in accordance with the requirements of paragraph 620-2.2.a. Paint shall be furnished in White (37925), Yellow (33538 or 33655), and Black (37038) in accordance with Federal Standard No. 595.

- a. Waterborne.** Paint shall meet the requirements of Federal Specification TT-P-1952E, Type II. The non-volatile portion of the vehicle for all paint types shall be composed of a 100% acrylic polymer as determined by infrared spectral analysis.

- 620-2.3** **Reflective media.** Glass beads shall meet the requirements for Federal Specification TT-B-1325D, Type III. Glass beads shall be treated with all compatible coupling agents recommended by the manufacturers of the paint and reflective media to ensure adhesion and embedment.

CONSTRUCTION METHODS

- 620-3.1** **Weather limitations.** The painting shall be performed only when the surface is dry and when the surface temperature is at least 45°F (7°C) and rising and the pavement surface temperature is at least 5°F (2.7°C) above the dew point or meets the manufacturer's recommendations. Markings shall not be applied when the pavement temperature is greater than 120°F.] Markings shall not be applied when the wind speed exceeds 10 mph unless windscreens are used to shroud the material guns.

- 620-3.2** **Equipment.** Equipment shall include the apparatus necessary to properly clean the existing surface, a mechanical marking machine, a bead dispensing machine, and such auxiliary hand-painting equipment as may be necessary to satisfactorily complete the job.

The mechanical marker shall be an atomizing spray-type or airless-type marking machine suitable for application of traffic paint. It shall produce an even and uniform film thickness at the required coverage and shall apply markings of uniform cross-sections and clear-cut edges without running or spattering and without over spray.

- 620-3.3** **Preparation of surface.** Immediately before application of the paint, the surface shall be dry and free from dirt, grease, oil, laitance, or other foreign material that would reduce the bond between the paint and the pavement. The area to be painted shall be cleaned by sweeping, blowing, or water-blasting, or by other methods as required to remove all contaminants minimizing damage to the pavement surface. Use of any chemicals or impact abrasives during surface preparation shall be approved in advance by the Engineer. After the cleaning operations, sweeping, blowing, or rinsing

with pressurized water shall be performed to ensure the surface is clean and free of grit or other debris left from the cleaning process.

At least 24 hours prior to remarking existing markings, existing markings must be removed such that 75% of the existing markings are removed. After removal, the surface shall be cleaned of all residue or debris either with sweeping or blowing with compressed air or both.

Prior to the application of any markings, the Contractor shall certify in writing that the surface has been prepared in accordance with the paint manufacturer's requirements, that the application equipment is appropriate for the type of marking paint and that environmental conditions are appropriate for the material being applied. This certification along with a copy of the paint manufacturer's surface preparation and application requirements must be submitted and approved by the Engineer prior to the initial application of markings.

620-3.4 **Layout of markings.** The proposed markings shall be laid out in advance of the paint application. The locations of markings to receive glass beads shall be shown on the plans.

620-3.5 **Application.** Paint shall be applied at the locations and to the dimensions and spacing shown on the plans. Paint shall not be applied until the layout and condition of the surface has been approved by the Engineer. The edges of the markings shall not vary from a straight line more than 1/2 inch (12 mm) in 50 feet (15 m), and marking dimensions and spacings shall be within the following tolerances:

Dimension and Spacing	Tolerance
36 inch (910 mm) or less	±1/2 inch (12 mm)
greater than 36 inch to 6 feet (910 mm to 1.85 m)	±1 inch (25 mm)
greater than 6 feet to 60 feet (1.85 m to 18.3 m)	±2 inch (50 mm)
greater than 60 feet (18.3 m)	±3 inch (76 mm)

The paint shall be mixed in accordance with the manufacturer's instructions and applied to the pavement with a marking machine at the rate shown in Table 1. The addition of thinner will not be permitted. A period of [] shall elapse between placement of a bituminous surface course or seal coat and application of the paint.

Prior to the initial application of markings, the Contractor shall certify in writing that the surface has been prepared in accordance with the paint manufacturer's requirements, that the application equipment is appropriate for the marking paint and that environmental conditions are appropriate for the material being applied. This certification along with a copy of the paint manufactures application and surface preparation requirements must be submitted to the Engineer prior to the initial application of markings.

620-3.6 **Test strip.** Prior to the full application of airfield markings, the Contractor shall produce a test strip in the presence of the Engineer. The test strip shall include the application of a minimum of 5 gallons (4 liters) of paint and application of 35 lbs (15.9 kg) of Type I/50 lbs (22.7 kg) of Type III glass beads. The test strip shall be used to establish thickness/darkness standard for all markings. The test strip shall cover no more than the maximum area prescribed in Table 1 (e.g., for 5 gallons (19 liters) of waterborne paint shall cover no more than 575 square feet (53.4 m2).

**Table 1. Application Rates For Paint And Glass Beads
(See Note regarding Red and Pink Paint)**

Paint Type	Paint Square feet per gallon, ft ² /gal (Sq m per liter, m ² /l)	Glass Beads, Type I, Gradation A Pounds per gallon of paint-lb/gal (Km per liter of paint-kg/l)	Glass Beads, Type III Pounds per gallon of paint- lb/gal (Km per liter of paint-kg/l)	Glass Beads, Type IV Pounds per gallon of paint-lb/gal (Km per liter of paint-kg/l)
*	*	*	*	*
*	*	*	*	*
Waterborne Type I or II	115 ft ² /gal max (2.8 m ² /l)	7 lb/gal min (0.85 kg/l)	10 lb/gal min (1.2 kg/l)	--

Glass beads shall be distributed upon the marked areas at the locations shown on the plans to receive glass beads immediately after application of the paint. A dispenser shall be furnished that is properly designed for attachment to the marking machine and suitable for dispensing glass beads. Glass beads shall be applied at the rate shown in Table 1. Glass beads shall not be applied to black paint or green paint. Glass beads shall adhere to the cured paint or all marking operations shall cease until corrections are made. Different bead types shall not be mixed. Regular monitoring of glass bead embedment should be performed.

All emptied containers shall be returned to the paint storage area for checking by the Engineer. The containers shall not be removed from the airport or destroyed until authorized by the Engineer.

620-3.7 Application--preformed thermoplastic airport pavement markings.

- a. **Asphalt and Portland cement.** To ensure minimum single-pass application time and optimum bond in the marking/substrate interface, the materials must be applied using a variable speed self-propelled mobile heater with an effective heating width of no less than 16 feet (5 m) and a free span between supporting wheels of no less than 18 feet (5.5 m). The heater must emit thermal radiation to the marking material in such a manner that the difference in temperature of 2 inches (50 mm) wide linear segments in the direction of heater travel must be within 5% of the overall average temperature of the heated thermoplastic material as it exits the heater. The material must be able to be applied at ambient and pavement temperatures down to 35°F (2°C) without any preheating of the pavement to a specific temperature. The material must be able to be applied without the use of a thermometer. The pavement shall be clean, dry, and free of debris. A non-volatile organic content (non-VOC) sealer with a maximum applied viscosity of 250 centiPoise must be applied to the pavement shortly before the markings are applied. The supplier must enclose application instructions with each box/package.

620-3.8 Protection and cleanup. After application of the markings, all markings shall be protected from damage until dry. All surfaces shall be protected from excess moisture and/or rain and from disfiguration by spatter, splashes, spillage, or drippings. The Contractor shall remove from the work area all debris, waste, loose or unadhered reflective media, and by-products generated by the surface preparation and application operations to the satisfaction of the Engineer. The Contractor shall dispose of these wastes in strict compliance with all applicable state, local, and Federal environmental statutes and regulations.

METHOD OF MEASUREMENT

620-4.1 The quantity of runway and taxiway markings to be paid for shall be [the number of square feet (square meters) of painting and the number of pounds (kg) of reflective media] [the number of square feet (square meters) of preformed markings] [one complete item in place] performed in accordance with the specifications and accepted by the Engineer.

BASIS OF PAYMENT

620-5.1 Payment shall be made at the respective contract price per square foot. This price shall be full compensation for furnishing all materials and for all labor, equipment, tools, and incidentals necessary to complete the item.

Payment will be made under:

- Item P-620A Runway Marking, White Reflective, Final Application (Full Rate) – per Square Foot
- Item P-620B Runway Marking, White Non-Reflective, Initial Application (Half Rate)-per Square Foot
- Item P-620C Runway Marking, Yellow Reflective, Final Application (Full Rate) – per Square Foot
- Item P-620D Runway Marking, Yellow Non-Reflective, Initial Application (Half Rate)-per Square Foot

TESTING REQUIREMENTS

- ASTM C371 Standard Test Method for Wire-Cloth Sieve Analysis of Nonplastic Ceramic Powders
- ASTM D92 Standard Test Method for Flash and Fire Points by Cleveland Open Cup Tester
- ASTM D711 Standard Test Method for No-Pick-Up Time of Traffic Paint
- ASTM D968 Standard Test Methods for Abrasion Resistance of Organic Coatings by Falling Abrasive
- ASTM D1652 Standard Test Method for Epoxy Content of Epoxy Resins
- ASTM D2074 Standard Test Method for Total, Primary, Secondary, and Tertiary Amine Values of Fatty Amines by Alternative Indicator Method
- ASTM D2240 Standard Test Method for Rubber Property - Durometer Hardness
- ASTM D7585 Standard Practice for Evaluating Retroreflective Pavement Markings Using Portable Hand-Operated Instruments
- ASTM E1710 Standard Test Method for Measurement of Retroreflective Pavement Marking Materials with CEN-Prescribed Geometry Using a Portable Retroreflectometer
- ASTM E2302 Standard Test Method for Measurement of the Luminance Coefficient Under Diffuse Illumination of Pavement Marking Materials Using a Portable Reflectometer
- ASTM G154 Standard Practice for Operating Fluorescent Ultraviolet (UV) Lamp Apparatus for Exposure of Nonmetallic Materials

MATERIAL REQUIREMENTS

- ASTM D476 Standard Classification for Dry Pigmentary Titanium Dioxide Products

- 40 CFR Part 60, Appendix A-7, Method 24
 Determination of volatile matter content, water content, density, volume solids, and weight solids of surface coatings

- 29 CFR Part 1910.1200 Hazard Communication

- FED SPEC TT-B-1325D
 Beads (Glass Spheres) Retro-Reflective

- American Association of State Highway and Transportation Officials (AASHTO) M247
 Standard Specification for Glass Beads Used in Pavement Markings

- FED SPEC TT-P-1952E
 Paint, Traffic and Airfield Marking, Waterborne

- Commercial Item Description A-A-2886B
 Paint, Traffic, Solvent Based

- FED STD 595 Colors used in Government Procurement

- AC 150/5340-1 Standards for Airport Markings

END OF ITEM P-620

SECTION 5

INSURANCE AND RISK MANAGEMENT PROVISIONS

#16ITB102592K-JD – Crack Seal, Seal Coat, and Re-Marking for Fulton County Airport-Brown Field

The following is the minimum insurance and limits that the Contractor/Vendor must maintain. If the Contractor/Vendor maintains higher limits than the minimum shown below, Fulton County Government requires and shall be entitled to coverage for the higher limits maintained by the Contractor/Vendor.

It is Fulton County Government’s practice to obtain Certificates of Insurance from our Contractors and Vendors. Insurance must be written by a licensed agent in a company licensed to write insurance in the State of Georgia, with an A.M. Best rating of at least A-VI, subject to final approval by Fulton County. Respondents shall submit with the bid/proposal evidence of insurability satisfactory to Fulton County Government as to form and content. Either of the following forms of evidence is acceptable:

- A letter from an insurance carrier stating that upon your firm/company being the successful Bidder/Respondent that a Certificate of Insurance shall be issued in compliance with the Insurance and Risk Management Provisions outlined below.
- A Certificate of Insurance complying with the Insurance and Risk Management Provisions outlined below (Request for Bid/Proposal number and Project Name, Number and Description must appear on the Certificate of Insurance).
- A combination of a specific policy written with an umbrella policy covering liabilities in excess of the required limits is acceptable to achieve the applicable insurance coverage levels.

Proof of insurance must be provided to Fulton County Government prior to the start of any activities/construction as described in the bid document(s). Any and all Insurance Coverage(s) and Bonds required under the terms and conditions of the contract shall be maintained during the entire length of the contract, including any extensions or renewals thereto, and until all work has been completed to the satisfaction of Fulton County Government.

Accordingly the Respondent shall provide a certificate evidencing the following:

1. WORKERS COMPENSATION/EMPLOYER’S LIABILITY INSURANCE – STATUTORY (In compliance with the Georgia Workers Compensation Acts, including but not limited to U.S. Longshoremen and Harbor Workers Act and any other State or Federal Acts or Provisions in which jurisdiction may be granted)

Employer’s Liability Insurance	BY ACCIDENT	EACH ACCIDENT	\$1,000,000
Employer’s Liability Insurance	BY DISEASE	POLICY LIMIT	\$1,000,000
Employer’s Liability Insurance	BY DISEASE	EACH EMPLOYEE	\$1,000,000

2. COMMERCIAL GENERAL LIABILITY INSURANCE (Including contractual Liability Insurance)

Bodily Injury and Property Damage Liability (Other than Products/Completed Operations)	Each Occurrence General Aggregate	\$1,000,000 \$2,000,000
Products\Completed Operation Personal and Advertising Injury Damage to Rented Premises	Aggregate Limit Limits Limits	\$2,000,000 \$1,000,000 \$100,000

3. BUSINESS AUTOMOBILE LIABILITY INSURANCE

Bodily Injury & Property Damage (Including operation of non-owned, owned, and hired automobiles).	Each Occurrence	\$1,000,000
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4. UMBRELLA LIABILITY Per Occurrence/Aggregate \$1,000,000/\$1,000,000

5. CONTRACTOR POLLUTION Each Occurrence \$1,000,000

Certificates of Insurance

The aforementioned insurance policies shall contain or be endorsed to contain a Provision that coverage afforded under such policies shall not expire, be cancelled or altered without at least forty-five (45) prior written notice to Fulton County Government. Certificates of Insurance are to list Fulton County Government as an Additional Insured (except for Workers' Compensation), using ISO Additional Insured Endorsement form CG 20 10 (11/85) version, it's equivalent or on a blanket basis.

If Fulton County Government shall so request, the Respondent, Contractor or Vendor will furnish the County for its inspection and approval such policies of insurance with all endorsements, or confirmed specimens thereof certified by the insurance company to be true and correct copies.

The Contractor/Vendor insurance shall apply as Primary Insurance before any other insurance or self-insurance, including any deductible, non-contributory, and Waiver of Subrogation provided in favor of Fulton County Government. .

Additional Insured under the General Liability, Auto Liability, Umbrella Policies (with exception of Workers Compensation and Professional Liability), with no Cross Suits exclusion.

Important:

It is understood that neither failure to comply nor full compliance with the foregoing insurance requirements shall limit or relieve the Contractor/Vendor from any liability

incurred as a result of their activities/operations in conjunction with the Contract and/or Scope of Work.

USE OF PREMISES

Contractor/Vendor shall confine its apparatus, the storage of materials and the operations of its workers to limits/requirements indicated by law, ordinance, permits and any restrictions of Fulton County Government and shall not unreasonably encumber the premises with its materials (Where applicable).

PROTECTION OF PROPERTY

Contractor/Vendor will adequately protect its own work from damage, will protect Fulton County Government's property from damage or loss and will take all necessary precautions during the progress of the work to protect all persons and the property of others from damage or loss.

Contractor/Vendor shall take all necessary precautions for the safety of employees of the work and shall comply with all applicable provisions of the Federal, State and local safety laws and building codes to prevent accidents or injury to persons on, about, or adjacent to the premises where work is being performed.

Contractor/Vendor shall erect and properly maintain at all times as required by the conditions and progress of the work, all necessary safeguards for the protection of its employees, Fulton County Government employees and the public and shall post all applicable signage and other warning devices to protect against potential hazards for the work being performed (Where applicable).

CONTRACTOR/VENDOR ACKNOWLEDGES HAVING READ, UNDERSTANDING, AND AGREEING TO COMPLY WITH THE AFOREMENTIONED STATEMENTS, AND THE REPRESENTATIVE OF THE CONTRACTOR/VENDOR IDENTIFIED BELOW IS AUTHORIZED TO SIGN CONTRACTS ON BEHALF OF THE RESPONDING CONTRACTOR/VENDOR.

COMPANY: _____ SIGNATURE: _____

NAME: _____ TITLE: _____

DATE: _____

PURCHASING FORMS & INSTRUCTIONS

This section contains the procurement forms that are required to be executed and submitted with the bid package. This section does not contain all forms required to be included with the bid package submittal.

To be deemed responsive to this ITB, Bidders must provide the information requested and complete in detail all Purchasing Forms. The appropriate individual(s) authorized to commit the Bidder to the Project must sign the Purchasing Forms. Bidders should reproduce each Purchasing Form, as required, and complete the appropriate portions of the forms provided in this section.

- Form A: Non-Collusion Affidavit of Prime Bidder/Offeror
- Form B: Certificate of Acceptance of Request for Bid/Proposal Requirements
- Form C: Professional License Certifications (***not applicable***)
 - Form C1 – Georgia Utility License Contractor License (***not applicable***)
 - Form C2 – Georgia General Contractors License (***applicable***)
 - Form C3 – Georgia Professional License (***applicable***)
- Form D: Certification Regarding Debarment
- Form E: Disclosure Form and Questionnaire
- Form F: Georgia Security and Immigration Contractor Affidavit and Agreement
- Form G: Georgia Security and Immigration Subcontractor Affidavit

FORM A: NON-COLLUSION AFFIDAVIT OF BIDDER/OFFEROR

STATE OF GEORGIA

COUNTY OF FULTON

I, _____ certify that pursuant to Fulton County Code Section 102-397, this bid or proposal is made without prior understanding, agreement or connection with any corporation, firm or person submitting a bid for the same work, labor or service to be done or the supplies, materials or equipment to be furnished and is in all respects fair and without collusion or fraud. I understand collusive bidding is a violation of state and federal law and can result in fines, prison sentences and civil damages awards. I agree to abide by all conditions of this bid or proposal and certify that I am authorized to sign this bid or proposal for the bidder.

Affiant further states that pursuant to O.C.G.A. Section 36-91-21 (d) and (e), _____ has not, by itself or with others, directly or indirectly, prevented or attempted to prevent competition in such bidding or proposals by any means whatsoever. Affiant further states that (s)he has not prevented or endeavored to prevent anyone from making a bid or offer on the project by any means whatever, nor has Affiant caused or induced another to withdraw a bid or offer for the work.

Affiant further states that the said offer of _____ is bona fide, and that no one has gone to any supplier and attempted to get such person or company to furnish the materials to the bidder only, or if furnished to any other bidder, that the material shall be at a higher price.

(COMPANY NAME)

(PRESIDENT/VICE PRESIDENT)

Sworn to and subscribed before me this _____ day of _____, 20__.

(SECRETARY/ASSISTANT SECRETARY)

(Affix corporate seal here, if a corporation)

Notary Public: _____

County: _____

Commission Expires: _____

NOTE:

IF THE OFFEROR IS A PARTNERSHIP, ALL OF THE PARTNERS AND ANY OFFICER, AGENT, OR OTHER PERSON WHO MAY HAVE REPRESENTED OR ACTED FOR THEM IN BIDDING FOR OR PROCURING THE CONTRACT SHALL ALSO MAKE THIS OATH.

IF THE OFFEROR IS A CORPORATION, ALL OFFICERS, AGENTS, OR OTHER PERSONS WHO MAY HAVE ACTED FOR OR REPRESENTED THE CORPORATION IN BIDDING FOR OR PROCURING THE CONTRACT SHALL MAKE THE OATH.

FORM B: FULTON COUNTY CERTIFICATE OF ACCEPTANCE OF BID/PROPOSAL REQUIREMENTS

This is to certify that on this day, offeror acknowledges that he/she has read this solicitation document, pages # _____ to # _____ inclusive, including any addenda # _____ to # _____ exhibit(s) # _____ to # _____, attachment(s) # _____, and/or appendices # _____ to # _____ in its entirety, and agrees that no pages or parts of the document have been omitted, that he/she understands, accepts and agrees to fully comply with the requirements therein, and that the undersigned is authorized by the offeror to submit the proposal herein and to legally obligate the offeror thereto.

This is also to certify that the offeror has reviewed the form Fulton County contract included in the solicitation documents and agrees to be bound by its terms, or that the offeror certifies that it is submitting any proposed modification to the contract terms with its proposal. The offeror further certifies that the failure to submit proposed modifications with the proposal waives the offeror's right to submit proposed modifications later. The offeror also acknowledges that the indemnification and insurance provisions of Fulton County's contract included in the solicitation documents are non-negotiable and that proposed modifications to said terms may be reason to declare the offeror's proposal as non-responsive.

Company: _____

Signature: _____

Name: _____

Title: _____

Date: _____

(Corporate Seal)

FORM C1: CONTRACTOR'S GEORGIA UTILITY LICENSE CERTIFICATION

Contractor's Name: _____

Utility Contractor's Name: _____

Expiration Date of License: _____

I certify that the above information is true and correct and that the classification noted is applicable to the Bid for this Project.

Signed:

Date:

(ATTACH COPY OF LICENSE)

NOT APPLICABLE

**FORM C2: CONTRACTOR'S GEORGIA GENERAL CONTRACTOR'S LICENSE
CERTIFICATION**

Contractor's Name: _____

General Contractor's License Number: _____

Expiration Date of License: _____

I certify that the above information is true and correct and that the classification noted is applicable to the Bid for this Project.

Signed:

Date:

(ATTACH COPY OF LICENSE)

APPLICABLE

FORM C3: GEORGIA PROFESSIONAL LICENSE CERTIFICATION

NOTE: Please complete this form for the work your firm will perform on this project.

Contractor's Name: _____

Performing work as: Prime Contractor ____ Sub-Contractor ____

Professional License Type: _____

Professional License Number: _____

Expiration Date of License: _____

I certify that the above information is true and correct and that the classification noted is applicable to the Bid for this Project.

Signed: _____

Date: _____

(ATTACH COPY OF LICENSE)

APPLICABLE

FORM D: CERTIFICATION REGARDING DEBARMENT

- (1) The Offeror certifies that neither it or its subcontractors is presently debarred, suspended, proposed for debarment, declared ineligible, or otherwise excluded from doing business with any government agency. Any such exclusion may cause prohibition of your firm from participating in any procurement by the Fulton County Government.
- (2) If the Offeror is unable to certify to any of the statements in this certification, such Offeror or subcontractor shall attach an explanation to this bid or proposal.

INSTRUCTIONS FOR CERTIFICATION

By signing and submitting this certification, the Offeror is providing the certification set out below:

- (1) The certification in this clause is a material representation of fact upon which reliance will be placed. If it is later determined that the prospective vendor knowingly rendered a false certification, the Purchasing Agent may pursue all available remedies, including suspension and/or debarment, for withdrawal of award or termination of a contract.
- (2) The prospective Offeror shall provide immediate written notice to the Purchasing Agent if at anytime the Offeror learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- (3) Offeror shall be under a continuing duty to immediately inform the Purchasing Agent in writing of any changes, if as a result of such changes, the Offeror certification regarding debarment is affected.

DEBARMENT ORDINANCE

The following Section 102-449 of Fulton County Code of Laws establishes the procedure for the debarment of contractors.

(a) Authority to suspend.

After reasonable notice to the entity involved and reasonable opportunity for that entity to be heard, the Purchasing Agent, after consultation with user department, the County Manager and the County Attorney shall have the authority to suspend an entity for cause from consideration for award of county contracts. As used in this section, the term entity means any business entity, individual, firm, contractor, subcontractor or business corporation, partnership, limited liability corporation, firm, contractor, subcontractor or business structured; provided, further, that any such entity shall also be subject to suspension under this section if any of its constituents, members, subcontractors at any tier of such entity's and the entity, or any constituent or member, knew or should have known of the commission of the act. The suspension shall be for a period not to exceed three (3) years unless cause is based on a felony conviction for an offense related or associated with fraudulent contracting or misappropriation of funds wherein the suspension shall not exceed seven (7) years.

(b) Causes for Suspension. The causes for suspension include:

- (1) Conviction for commission of a criminal offense as an incident to obtain or attempting to obtain a public or private contract or subcontract, or in performance of such contract or subcontract;

- (2) Conviction of state or federal statutes of embezzlement, theft, forgery, bribery, falsification or destruction of records, receiving stolen property or other offense indicating a lack of business integrity or business honesty which currently, seriously and directly affects responsibility as a county contractor.
- (3) Conviction of state or federal anti-trust statutes arising out of the solicitation and submission of bids and proposals;
- (4) Violation of contract provisions, as set forth below, of a character which is regarded by the Purchasing Agent to be so serious as to justify suspension action:
 - a. Failure to perform in accordance with the specifications within a time limit provided in a county contract;
 - b. A recent record of failure to perform or unsatisfactory performance in accordance with the terms of one or more contracts; provided, that failure to perform or unsatisfactory performance caused by acts beyond the control of the contractor shall not be considered to be a basis for suspension;
 - c. Material representation of the composition of the ownership or workforce or business entity certified to the county as a minority business enterprise; or
 - d. Falsification of any documents.
- (5) For violation of the ethical standards set forth in Fulton County Code Chapter 9, Code of Ethics.
- (6) Knowing misrepresentation to the county, of the use which a majority owned contractor intends to make a minority business enterprise (a business entity at least 51 percent of which is owned and controlled by minority persons, as defined in Fulton County Code Section 102-431) as a subcontractor or a joint venture partner, in performing work under contract with the County.

Failure to fully and truthfully provide the information required, may result in the disqualification of your bid/proposal from consideration or termination of the Contract, once awarded. This document must be completed and included as a part of the bid/proposal package along with other required documents.

[SIGNATURES ON NEXT PAGE]

Under penalty of perjury, I declare that I have examined this certification and all attachments hereto, if applicable, to the best of my knowledge and belief, and all statements contained hereto are true, correct, and complete.

On this _____ day of _____, 20____

(Legal Name of Offeror) (Date)

(Signature of Authorized Representative) (Date)

(Title)

FORM E: DISCLOSURE FORM AND QUESTIONNAIRE

1. Please provide the names and business addresses of each of the Offeror's firm's officers and directors.

For the purposes of this form, the term "Offeror" means an entity that responds to a solicitation for a County contract by either submitting a proposal in response to a Request for Proposal or a Request for Qualification or a Bid in response to an Invitation to Bid. Describe accurately, fully and completely, their respective relationships with said Offeror, including their ownership interests and their anticipated role in the management and operations of said Offeror.

2. Please describe the general development of said Offeror's business during the past five (5) years, or such shorter period of time that said Offeror has been in business.

3. Please state whether any employee, agent or representative of said Offeror who is or will be directly involved in the subject project has or has ever: (i) directly or indirectly had a business relationship with Fulton County; (ii) directly or indirectly received revenues from Fulton County; or (iii) directly or indirectly receives revenues from the result of conducting business on Fulton County property or pursuant to any contract with Fulton County. Please describe in detail any such relationship.

LITIGATION DISCLOSURE:

Failure to fully and truthfully disclose the information required, may result in the disqualification of your bid or proposal from consideration or termination of the Contract, once awarded.

1. Please state whether any of the following events have occurred in the last five (5) years with respect to said Offeror. If any answer is yes, explain fully the following:

(a) whether a petition under the federal bankruptcy laws or state insolvency laws was filed by or against said Offeror, or a receiver fiscal agent or similar officer was appointed by a court for the business or property of said Offeror;

Circle One: YES NO

(b) whether Offeror was subject of any order, judgment, or decree not subsequently reversed, suspended or vacated by any court of competent jurisdiction, permanently enjoining said Offeror from engaging in any type of business practice, or otherwise eliminating any type of business practice; and

Circle One: YES NO

(c) whether said Offeror's business was the subject of any civil or criminal proceeding in which there was a final adjudication adverse to said Offeror, which directly arose from activities conducted by the business unit or corporate division of said Offeror which submitted a bid or proposal for the subject project. If so please explain.

Circle One: YES NO

2. Have you or any member of your firm or team to be assigned to this engagement ever been indicted or convicted of a criminal offense within the last five (5) years?

Circle One: YES NO

3. Have you or any member of your firm or team been terminated (for cause or otherwise) from any work being performed for Fulton County or any other Federal, State or Local Government?

Circle One: YES NO

4. Have you or any member of your firm or team been involved in any claim or litigation adverse to Fulton County or any other federal, state or local government, or private entity during the last three (3) years?

Circle One: YES NO

- 5. Has any offeror, member of offeror’s team, or officer of any of them (with respect to any matter involving the business practices or activities of his or her employer), been notified within the five (5) years preceding the date of this offer that any of them are the target of a criminal investigation, grand jury investigation, or civil enforcement proceeding?

Circle One: YES NO

If you have answered “YES” to any of the above questions, please indicate the name(s) of the person(s), the nature, and the status and/or outcome of the information, indictment, conviction, termination, claim or litigation, the name of the court and the file or reference number of the case, as applicable. Any such information should be provided on a separate page, attached to this form and submitted with your proposal.

NOTE: If any response to any question set forth in this questionnaire has been disclosed in any other document, a response may be made by attaching a copy of such disclosure. (For example, said Offeror's most recent filings with the Securities and Exchange Commission (“SEC”) may be provided if they are responsive to certain items within the questionnaire.) However, for purposes of clarity, Offeror should correlate its responses with the exhibits by identifying the exhibit and its relevant text.

Disclosures must specifically address, completely respond and comply with all information requested and fully answer all questions requested by Fulton County. Such disclosure must be submitted at the time of the bid or proposal submission and included as a part of the bid/proposal submitted for this project. Disclosure is required for Offerors, joint venture partners and first-tier subcontractors.

Failure to provide required disclosure, submit officially signed and notarized documents or respond to any and all information requested/required by Fulton County can result in the bid/proposal declared as non-responsive. This document must be completed and included as a part of the bid/proposal package along with other required documents.

[SIGNATURES ON NEXT PAGE]

Under penalty of perjury, I declare that I have examined this questionnaire and all attachments hereto, if applicable, to the best of my knowledge and belief, and all statements contained hereto are true, correct, and complete.

On this _____ day of _____, 20_____

(Legal Name of Proponent) (Date)

(Signature of Authorized Representative) (Date)

(Title)

Sworn to and subscribed before me,

This _____ day of _____, 20_____

(Notary Public) (Seal)

Commission Expires _____
(Date)

**FORM F: GEORGIA SECURITY AND IMMIGRATION CONTRACTOR AFFIDAVIT
AND AGREEMENT**

Instructions:

Contractors must attest to compliance with the requirements of O.C.G.A 13-10-91 and the Georgia Department of Labor Rule 300-10-01-.02 by executing the Contractor Affidavit provided.

STATE OF GEORGIA

COUNTY OF FULTON

FORM F: GEORGIA SECURITY AND IMMIGRATION 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 engaged in the physical performance of services¹ under a contract with [insert name of prime contractor] on behalf of Fulton County Government has registered with and is participating in a federal work authorization program*,² 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 to this contract with Fulton County Government, 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 Fulton County Government at the time the subcontractor(s) is retained to perform such service.

EEV/Basic Pilot Program* User Identification Number

BY: Authorized Officer of Agent (Insert Contractor Name)

Title of Authorized Officer or Agent of Contractor

Printed Name of Authorized Officer or Agent

Sworn to and subscribed before me this ___ day of ___, 20__.

Notary Public: _____

County: _____

Commission Expires: _____

¹O.C.G.A. § 13-10-90(4), as amended by Senate Bill 160, provides that "physical performance of services" means any performance of labor or services for a public employer (e.g., Fulton County) using a bidding process (e.g., ITB, RFQ, RFP, etc.) or contract wherein the labor or services exceed \$2,499.99, except for those individuals licensed pursuant to title 26 or Title 43 or by the State Bar of Georgia and is in good standing when such contract is for service to be rendered by such individual.

²*[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].

**FORM G: GEORGIA SECURITY AND IMMIGRATION SUBCONTRACTOR
AFFIDAVIT****Instructions:**

In the event that your company is awarded the contract for this project, and will be utilizing the services of any subcontractor(s) in connection with the physical performance of services pursuant to this contract, the following affidavit must be completed by such subcontractor(s). Your company must provide a copy of each such affidavit to Fulton County Government, Department of Purchasing & Contract Compliance with the proposal submittal.

All subcontractor affidavit(s) shall become a part of the contract and all subcontractor(s) affidavits shall be maintained by your company and available for inspection by Fulton County Government at any time during the term of the contract. All subcontractor(s) affidavit(s) shall become a part of any contractor/subcontractor agreement(s) entered into by your company.

STATE OF GEORGIA

COUNTY OF FULTON

FORM G: GEORGIA SECURITY AND IMMIGRATION 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 services³ under a contract with [insert name of prime contractor] _____ behalf of Fulton County Government has registered with and is participating in a federal work authorization program*,⁴ in accordance with the applicability provisions and deadlines established in O.C.G.A. 13-10-91.

EEV/Basic Pilot Program* User Identification Number

BY: Authorized Officer of Agent
(Insert Subcontractor Name)

Title of Authorized Officer or Agent of Subcontractor

Printed Name of Authorized Officer or Agent

Sworn to and subscribed before me this _____ day of _____, 20__.

Notary Public: _____

County: _____

Commission Expires: _____

³O.C.G.A. § 13-10-90(4), as amended by Senate Bill 160, provides that "physical performance of services" means any performance of labor or services for a public employer (e.g., Fulton County) using a bidding process (e.g., ITB, RFQ, RFP, etc.) or contract wherein the labor or services exceed \$2,499.99, except for those individuals licensed pursuant to title 26 or Title 43 or by the State Bar of Georgia and is in good standing when such contract is for service to be rendered by such individual.

⁴*[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].

SECTION 7

CONTRACT COMPLIANCE REQUIREMENTS

NON-DISCRIMINATION IN PURCHASING AND CONTRACTING

It is the policy of Fulton County Government that discrimination against businesses by reason of the race, color, gender or national origin of the ownership of any such business is prohibited. Furthermore, it is the policy of the Board of Commissioners ("Board") that Fulton County and all vendors and contractors doing business with Fulton County shall provide to all businesses the opportunity to participate in contracting and procurement paid, in whole or in part, with monetary appropriations of the Board without regard to the race, color, gender or national origin of the ownership of any such business. Similarly, it is the policy of the Board that the contracting and procurement practices of Fulton County should not implicate Fulton County as either an active or passive participant in the discriminatory practices engaged in by private contractors or vendors seeking to obtain contracts with Fulton County.

Implementation of Equal Employment Opportunity (EEO) Policy

The County effectuates Equal Employment Opportunity thru Policy #800-8, Non-Discrimination in Contracting and Procurement. This policy considers racial and gender workforce availability. The availability of each workgroup is derived from the work force demographics set forth in the 2000 Census EEO file prepared by the United States Department of Commerce for the applicable labor pool normally utilized for the contract.

Monitoring of EEO Policy

Upon award of a contract with Fulton County, the successful bidder/proposer must complete an Equal Employment Opportunity Report (EEOR), describing the racial and gender make-up of the firm's work force. If the EEOR indicates that the firm's demographic composition indicates underutilization of employee's of a particular ethnic group for each job category, the firm will be required to submit an aggressive action plan setting forth steps the firm will take to address the identified underutilization.

DETERMINATION OF GOOD FAITH EFFORTS

During the course of the project, the Prime Contractor shall demonstrate that they have made all efforts reasonably possible to ensure that Minority and Female Business Enterprises (MFBE) have had a full and fair opportunity to compete and win subcontracts on this project. The Prime Contractor is required to include all outreach attempts that would demonstrate a "Good Faith Effort" in the solicitation of sub-consultants/subcontractors.

Written documentation demonstrating the Prime Contractor's outreach efforts to identify, contact, contract with or utilize Minority or Female owned businesses shall include holding pre-bid conferences, publishing advertisements in general circulation media, trade association publications, minority-focused media, and the County's bid board, as well as other efforts.

Include a list of publications where the advertisement was placed as well as a copy of the advertisement. Advertisement shall include at a minimum, scope of work, project location, location(s) of where plans and specifications may be viewed or obtained and trade or scopes of

work for which subcontracts are being solicited.

EQUAL BUSINESS OPPORTUNITY PLAN (EBO PLAN)

In addition to the proposal submission requirements, each vendor **must** submit an Equal Business Opportunity Plan (EBO Plan) with their bid/proposal. The EBO Plan is designed to enhance the utilization of a particular racial, gender or ethnic group by a bidder/proposer, contractor, or vendor or by Fulton County. The respondent **must** outline a plan of action to encourage and achieve diversity and equality in the available procurement and contracting opportunities with *this solicitation*.

The EBO Plan **must** identify and include:

1. Potential opportunities within the scope of work of *this solicitation* that will allow for participation of racial, gender or ethnic groups.
2. Efforts that will be made by the bidder/proposer to encourage and solicit minority and female business utilization in *this solicitation*.

Fulton County encourages joint ventures, teaming, partnering and mentor-protégé relationships with minority and female businesses in an effort to achieve contracting and procurement diversity.

Prompt Payment: The prime contractor **must** certify in writing and **must** document all subcontractors, sub-consultants and suppliers have been promptly paid for work and materials, (less any retainage by the prime contractor prior to receipt of any further progress payments). In the event the prime contractor is unable to pay subcontractors, sub-consultants or suppliers until it has received a progress payment from Fulton County, the prime contractor shall pay all subcontractors, sub-consultants or suppliers funds due from said progress payment within forty-eight (48) hours of receipt of payment from Fulton County. In no event shall a subcontractor, sub-consultant or supplier be paid later than fifteen (15) days as provided for by state law.

REQUIRED FORMS AND EBO PLAN

In order to be compliant with the intent and provisions of the Fulton County Non-Discrimination in Purchasing and Contracting Ordinance (99-0960), bidders/proposers **must** submit the following completed documents. Failure to provide this information **shall** result in the proposal being deemed non-responsive.

- Exhibit A – Promise of Non-Discrimination
- Exhibit B – Employment Report
- Exhibit C – Schedule of Intended Subcontractor Utilization
- Exhibit D – Letter of Intent to Perform as a Subcontractor or Provide Materials or Services
- Exhibit E – Declaration Regarding Subcontractors Practices
- Exhibit F – Joint Venture Disclosure Affidavit
- Equal Business Opportunity Plan (EBO Plan). This document is not a form rather a statement created by the bidder/proposer on its company letter head addressing the EBO Plan requirements.

The following document must be completed as instructed if awarded the project:

- Exhibit G – Prime Contractor's Subcontractor Utilization Report

All Contract Compliance documents (Exhibits A – H and EBO Plan) are to be placed in a **separate sealed envelope** clearly marked "Contract Compliance". The EBO Plan must be submitted on company letterhead. These documents are considered part of and should be submitted with the Technical Proposal.

EXHIBIT A – PROMISE OF NON-DISCRIMINATION

“Know all persons by these presents, that I/We (_____),
Name

_____ Title Firm Name

Hereinafter “Company”, in consideration of the privilege to bid on or obtain contracts funded, in whole or in part, by Fulton County, hereby consent, covenant and agree as follows:

- 1) No person shall be excluded from participation in, denied the benefit of, or otherwise discriminated against on the basis of race, color, national origin or gender in connection with any bid submitted to Fulton County for the performance of any resulting there from,
- 2) That it is and shall be the policy of this Company to provide equal opportunity to all businesses seeking to contract or otherwise interested in contracting with this Company without regard to the race, color, gender or national origin of the ownership of this business,
- 3) That the promises of non-discrimination as made and set forth herein shall be continuing in nature and shall remain in full force and effect without interruption,
- 4) That the promise of non-discrimination as made and set forth herein shall be made a part of, and incorporated by reference into, any contract or portion thereof which this Company may hereafter obtain,
- 5) That the failure of this Company to satisfactorily discharge any of the promises of non-discrimination as made and set forth herein shall constitute a material breach of contract entitling the Board to declare the contract in default and to exercise any and all applicable rights and remedies, including but not limited to cancellation of the contract, termination of the contract, suspension and debarment from future contracting opportunities, and withholding and/or forfeiture of compensation due and owing on a contract; and
- 6) That the bidder shall provide such information as may be required by the Director of Purchasing & Contract Compliance pursuant to the Fulton County Non-Discrimination in Purchasing and Contracting Ordinance.

SIGNATURE: _____

ADDRESS: _____

TELEPHONE NUMBER: _____

EXHIBIT B – EMPLOYMENT REPORT

The demographic employment make-up for the bidder must be identified and submitted with this bid/proposal. In addition, if subcontractors will be utilized by the bidder/proposer to complete this project, then the demographic employment make-up of the subcontractor(s) must be identified and submitted with this bid.

JOB CATEGORIES	TOTAL EMPLOYED		TOTAL MINORITIES		WHITE (Not Hispanic Origin)		BLACK or AFRICAN AMERICAN (Not of Hispanic Origin)		HISPANIC or LATINO		AMERICA N INDIAN or ALASKAN NATIVE (AIAN)		ASIAN		NATIVE HAWAIIAN or OTHER PACIFIC ISLANDER (NHOP)		TWO or MORE RACES		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
EXECUTIVE/SENIOR LEVEL OFFICIALS and MANAGERS																			
FIRST/MID LEVEL OFFICIALS and MANAGERS																			
PROFESSIONALS																			
TECHNICIANS																			
SALES WORKERS																			
ADMINISTRATIVE SUPPORT WORKERS																			
CRAFT WORKERS																			
OPERATIVES																			
LABORERS & HELPERS																			
SERVICE WORKERS																			
TOTAL																			

FIRMS'S NAME
 ADDRESS
 TELEPHONE

This completed form is for (Check only one):

Submitted by: _____

Bidder/Proposer

Subcontractor

Date Completed: _____

EXHIBIT C - SCHEDULE OF INTENDED SUBCONTRACTOR UTILIZATION

If the bidder/proposer intends to subcontract any portion of this scope of work/service(s), this form **must be** completed and **submitted with the bid/proposal**. All prime bidders/proposers **must** include Letter(s) of Intent (Exhibit D) in the bid document for all subcontractors who will be utilized under the scope of work/services.

Prime Bidder/Proposer: _____

ITB/RFP Number: _____

Project Name or Description of Work/Service(s): _____

1. My firm, as Prime Bidder/Proposer on this scope of work/service(s) is _____ is not ___ a minority or female owned and controlled business enterprise. (Please indicate below the portion of work, including, percentage of bid/proposal amount that your firm will carry out directly):

2. If the Prime Bidder/Proposer is a Joint Venture, please complete Exhibit F: Joint Venture Disclosure Affidavit and attach a copy of the executed Joint Venture Agreement.

3. Sub-Contractors (including suppliers) to be utilized in the performance of this scope of work/service(s), if awarded, are:

SUBCONTRACTOR NAME: _____

ADDRESS: _____

PHONE: _____

CONTACT PERSON: _____

ETHNIC GROUP*: _____ COUNTY CERTIFIED** _____

WORK TO BE PERFORMED: _____

DOLLAR VALUE OF WORK: \$ _____ PERCENTAGE VALUE: _____ %

***Ethnic Groups: African American (AABE); Asian American (ABE); Hispanic American (HBE); Native American (NABE); White Female American (WFBE); **If yes, please attach copy of recent certification.**

SUBCONTRACTOR NAME: _____
ADDRESS: _____

PHONE: _____
CONTACT PERSON: _____
ETHNIC GROUP*: _____ COUNTY CERTIFIED** _____
WORK TO BE PERFORMED: _____

DOLLAR VALUE OF WORK: \$ _____ PERCENTAGE VALUE: _____ %

SUBCONTRACTOR NAME: _____
ADDRESS: _____

PHONE: _____
CONTACT PERSON: _____
ETHNIC GROUP*: _____ COUNTY CERTIFIED** _____
WORK TO BE PERFORMED: _____

DOLLAR VALUE OF WORK: \$ _____ PERCENTAGE VALUE: _____ %

SUBCONTRACTOR NAME: _____
ADDRESS: _____

PHONE: _____
CONTACT PERSON: _____
ETHNIC GROUP*: _____ COUNTY CERTIFIED** _____
WORK TO BE PERFORMED: _____

DOLLAR VALUE OF WORK: \$ _____ PERCENTAGE VALUE: _____ %

SUBCONTRACTOR NAME: _____
ADDRESS: _____

PHONE: _____
CONTACT PERSON: _____
ETHNIC GROUP*: _____ COUNTY CERTIFIED** _____
WORK TO BE PERFORMED: _____

DOLLAR VALUE OF WORK: \$ _____ PERCENTAGE VALUE: _____ %

***Ethnic Groups: African American (AABE); Asian American (ABE); Hispanic American (HBE); Native American (NABE); White Female American (WFBE); **If yes, please attach copy of recent certification.**

Total Dollar Value of Subcontractor Agreements: (\$)

Total Percentage Value: (%)

CERTIFICATION: The undersigned certifies that he/she has read, understands and agrees to be bound by the Bid/Proposer provisions, including the accompanying Exhibits and other terms and conditions regarding sub-contractor utilization. The undersigned further certifies that he/she is legally authorized by the Bidder/Proposer to make the statement and representation in this Exhibit and that said statements and representations are true and correct to the best of his/her knowledge and belief. The undersigned understands and agrees that if any of the statements and representations are made by the Bidder/Proposer knowing them to be false, or if there is a failure of the intentions, objectives and commitments set forth herein without prior approval of the County, then in any such event the Contractor's acts or failure to act, as the case may be, shall constitute a material breach of the contract, entitling the County to terminate the Contract for default. The right to so terminate shall be in addition to, and in lieu of, any other rights and remedies the County may have for other defaults under the contract.

Signature: _____ **Title:** _____

Firm or Corporate Name: _____

Address: _____

Telephone: () _____

Fax Number: () _____

Email Address: _____

EXHIBIT D

**LETTER OF INTENT TO PERFORM AS A SUBCONTRACTOR
OR
PROVIDE MATERIALS OR SERVICES**

This form **must** be completed by **ALL** known subcontractor and submitted with the bid/proposal. The Prime Contractor **must** submit Letters of Intent for **ALL** known subcontractors at time of bid submission.

To: _____
(Name of Prime Contractor Firm)

From: _____
(Name of Subcontractor Firm)

ITB/RFP Number: _____

Project Name: _____

The undersigned is prepared to perform the following described work or provide materials or services in connection with the above project (specify in detail particular work items, materials, or services to be performed or provided):

Description of Work	Project Commence Date	Project Completion Date	Estimated Dollar Amount

(Prime Bidder)

(Subcontractor)

Signature _____

Signature _____

Title _____

Title _____

Date _____

Date _____

EXHIBIT E - DECLARATION REGARDING SUBCONTRACTING PRACTICES

If the bidder/proposer **does not intend to subcontract** any portion of the scope of work services(s), this form **must be** completed and submitted with the bid/proposal.

_____ hereby declares that it is my/our intent to

(Bidder)

perform 100% of the work required for _____

(ITB/RFP Number)

(Description of Work)

In making this declaration, the bidder/proposer states the following:

1. That the bidder/proposer does not customarily subcontract elements of this type project, and normally performs and has the capability to perform and will perform **all elements** of the work on this project with his/her own current work forces;
2. If it should become necessary to subcontract some portion of the work at a later date, the bidder/proposer will comply with all requirements of the County's Non-Discrimination Ordinance in providing equal opportunities to all firms to subcontract the work. The determination to subcontract some portion of the work at a later date shall be made in good faith and the County reserves the right to require additional information to substantiate a decision made by the bidder/proposer to subcontract work following the award of the contract. Nothing contained in this provision shall be employed to circumvent the spirit and intent of the County's Non-Discrimination Ordinances;
3. The bidder will provide, upon request, information sufficient for the County to verify Item Number one.

AUTHORIZED COMPANY REPRESENTATIVE

Name: _____ **Title:** _____ **Date:** _____

Signature: _____

Firm: _____

Address: _____

Phone Number: _____

Fax Number: _____

Email Address: _____

EXHIBIT F - JOINT VENTURE DISCLOSURE AFFIDAVIT

ITB/RFP No. _____

Project Name _____

This form must be completed and submitted with the bid/proposal if a joint venture approach is to be undertaken.

In order to evaluate the extent of small, minority and female business involvement being proposed by a Bidder/Proposer, certain relevant information must be provided prior to contract award. The information requested below is to clearly identify and explain the extent of small business participation in the proposed joint venture. All items must be properly addressed before the business entity can be evaluated.

1. Firms:

- 1) **Name of Business:** _____
Street Address: _____
Telephone No.: _____
Nature of Business: _____

- 2) **Name of Business:** _____
Street Address: _____
Telephone No.: _____
Nature of Business: _____

- 3) **Name of Business:** _____
Street Address: _____
Telephone No.: _____
Nature of Business: _____

NAME OF JOINT VENTURE (If applicable): _____

ADDRESS: _____

PRINCIPAL OFFICE: _____

OFFICE PHONE: _____

Note: Attach additional sheets as required

1. Describe the capital contributions by each joint venturer and accounting thereof.
2. Describe the financial controls of the joint venture, e.g., will a separate cost center be established? Which venturer will be responsible for keeping the books? How will the expense therefore be reimbursed? What is the authority of each joint venture to commit or obligate the order?
3. Describe any ownership, options for ownership, or loans between the joint ventures. Identify terms thereof.
4. Describe the estimated contract cash flow for each joint venturer.
5. To what extent and by whom will the on-site work be supervised?
6. To what extent and by whom will the administrative office be supervised?
7. Which joint venturer will be responsible for material purchases including the estimated cost thereof? How will the purchase be financed?
8. Which joint venturer will provide equipment? What is the estimated cost thereof? How will the equipment be financed?
9. Describe the experience and business qualifications of each joint venturer.
10. Submit a copy of all joint venture agreements and evidence of authority to do business in the State of Georgia as well as locally, to include all necessary business licenses.
11. Percent of Minority/Female Business Enterprises ownership by each joint venture in terms of profit and loss sharing: _____

12. The authority of each joint venturer to commit or obligate the other: _____

13. Number of personnel to be involved in project, their crafts and positions and whether they are employees of the Minority/Female Business Enterprises enterprise, the majority firm or the joint venture: _____

14. Identification of control and participation in venture; list those individuals who are responsible for day-to-day management and policy decision-maker, including, but not limited to, those with prime responsibility for areas designated below; (use additional sheets if necessary)

<u>Name</u>	<u>Race</u>	<u>Sex</u>	<u>Financial Decisions</u>	<u>Supervision Field Operation</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

In connection with any work that these firms, as a joint venture, might be authorized to perform in connection with above captioned contract, we each do hereby authorize representatives of the Fulton County Department of Contract Compliance, Departments of Purchasing and Contract Compliance, and Finance, under the direction of the County Manger's Office, to examine, from time to time, the books, records and files to the extent that such relate to this County project.

WE DO SOLEMNLY DECLARE AND AFFIRM UNDER THE PENALTIES OF PERJURY THAT THE CONTENTS OF THE FOREGOING DOCUMENT ARE TRUE AND CORRECT, AND THAT WE ARE AUTHORIZED, ON BEHALF OF THE ABOVE FIRMS, TO MAKE THIS AFFIDAVIT AND GRANT THE ABOVE PRIVILEGE.

FOR _____
(Company)

Date: _____

(Signature of Affiant)

(Printed Name)

(Company)

Date: _____

(Signature of Affiant)

(Printed Name)

State of _____:

County of _____:

On this ____ day of _____, 20__, before me, appeared _____, the undersigned officer, personally appeared _____ known to me to be the person described in the foregoing Affidavit and acknowledges that he (she) executed the same in the capacity therein stated and for the purpose therein contained.

Should you have questions regarding any of the documents contained in Section 6, please feel free to contact the Office of Contract Compliance at (404) 612-6300, for further assistance.