FULTON COUNTY

INVITATION TO BID #13ITB90138K-JD

Obstruction Clearing for Fulton County Airport-Brown Field

For

Facilities & Transportation Services Department

BID DUE DATE AND TIME: Monday, November 18, 2013 at 11:00 A.M.
BID ISSUANCE DATE: October 10, 2013
PRE-BID CONFERENCE DATE: October 22, 2013 at 10:00 A.M.
PURCHASING CONTACT: Joyce Daniel, Assistant Purchasing Agent
E-MAIL: joyce.daniel@fultoncountyga.gov

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

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INVITATION TO BID
#13ITB90138K-JD-OBSTRUCTION CLEARING FOR FULTON COUNTY AIRPORT-BROWN FIELD

Sealed Bids for furnishing all materials, labor, tools, equipment and appurtenances necessary for Obstruction Clearing at 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, November 18, 2013**.

SCOPE OF WORK

The Project consists of the following major elements: construction of erosion and sedimentation control measures as needed for the project to protect adjacent sensitive areas, clearing and grubbing of trees within the clearing limits, clearing of trees outside of the specified wetland areas, the specified stream buffer, and the clearing of trees within the steep slope areas as shown on the project drawings.

The detailed scope of work and technical specifications are outlined in the Division of Work Section 3, Part 1, Scope of Work of this bid document.

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 **$150.00** at the following location:

The LPA Group Incorporated
A Unit of Michael Baker Corporation
3595 Engineering Drive
Norcross, GA 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 between the hours 8:30 a.m. to 5:00 p.m., Monday through Friday.

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) 335-5806
Reference Bid #13ITB90138K-JD

PRE-BID CONFERENCE

Date: Tuesday, October 22, 2013
Time: 10:00 A.M.
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**. ***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.

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 fiver 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.

OWNER - CONTRACTOR AGREEMENT

#13ITB90138K-JD-OBSTRUCTION CLEARING FOR FULTON COUNTY AIRPORT-BROWN FIELD

Contractor: _____ Project No. _____

Address: _____ Telephone: _____

Contact: _____ Facsimile: _____

THIS AGREEMENT is effective as of the _____ day of _____, 2013, 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: 13ITBXXXXXXX

OBSTRUCTION CLEARING 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 **Ninety (90) 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.

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 $ 1,000.00 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 _____ BOC Agenda Item #_____.

[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:

FULTON COUNTY, GEORGIA

John H. Eaves, Commission Chair
Board of Commissioners

ATTEST:

Mark Massey
Clerk to the Commission (Seal)

APPROVED AS TO FORM:

Office of the County Attorney

APPROVED AS TO CONTENT:

David L. Ricks, Director
Facilities and Transportation Services Department

CONTRACTOR:

[Insert Contractor COMPANY NAME]

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

ATTEST:

Secretary/
Assistant Secretary

(Affix Corporate Seal)

Sample Copy

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. RECIEPT 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. 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 **#13ITB90138K-JD–OBSTRUCTION CLEARING 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 – Five (5) from the last five (5) years where Bidder has performed work of a similar nature.
8. Copy of DBE Certification with the Georgia Department of Transportation's Equal Employment Opportunity (EEO) Office.
9. Copy of Georgia Department of Transportation Certification as a Contractor or Sub-contractor.

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 (see Section 00020). 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 **2:00 P.M. Thursday, November 7, 2013**. 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
Fulton County Public Safety Building
130 Peachtree Street, S.W., 1168
Atlanta, GA 30303
Fax: (404)335-5806
Joyce.Daniel@fultoncountyga.gov
Bid # 13ITB90138K-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 site visit for this project immediately following the Pre-Bid Conference. It will be held on **Tuesday, October 22, 2013, at Fulton County Airport-Brown Field, First Floor Conference Room, 3977 Aviation Circle, NW, Atlanta, GA 30336**. Bidders **are not** required to attend, but are encouraged to do so.

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.

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 Code of Laws §2-324, 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 Commission. 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 Commission 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 of 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 102-391, 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. 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.

22. 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.

23. 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.

24. GEORGIA SECURITY AND IMMIGRATION COMPLIANCE ACT

This Invitation to Bid is subject to the Georgia Security & Immigration Compliance Act. Pursuant to the Georgia Security & Immigration Compliance Act of 2006, as amended on May 11, 2009, 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. 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.

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

25. 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".

26. TERM OF CONTRACT

The term of the Agreement shall be for a period of **ninety (90) calendar 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 **ninety (90) calendar days** from issuance of the Notice to Proceed.

27. 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.

28. 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.

29. 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.

30. SUBSTITUTIONS

See Special Conditions Article.

31. 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.

32. BID GENERAL CONDITIONS

1. Proposals may be withdrawn upon receipt of a written request prior to the stated due date and time. If a firm seeks to withdraw a proposal 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 Fulton County's Legal Counsel indicating whether the firm is bound by its proposal.

Proposals 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 request for proposals of the number of days that Offerors will be required to honor their proposals. If an Offeror is not selected within 60 days of opening the proposals, any Offeror that is determined by the governmental entity to be unlikely of being selected for contract award will be released from the proposal.

2. Fulton County shall be the sole judge of the quality and the applicability of all proposals. 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 RFP 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).

33. 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 (Non-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.	Georgia Department of Transportation Certification as a Contractor/Sub-Contractor	
16.	References – Five (5) from the last five (5) years where Bidder has performed work of a similar nature	
17.	DBE Certification with the Georgia Department of Transportation's Equal Employment Opportunity (EEO) Office	

BID FORM

Submitted To: Fulton County Government

Submitted By: _____

For: **#13ITB90138K-JD-Obstruction Clearing for Fulton County Airport-Brown Field**

Submitted on _____, 2013

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 contact 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 (Do not include any Bid Alternates)

$_____
(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:

The following Cost Proposal Form shall be used for submitting Bid Prices

Item #	Spec. No.	Item Description	Est. Quantity	Item Unit	Total Cost
1	010000	Mobilization	1	Lump Sum	
2	P-151	Clearing and Grubbing	145	Acre	
3	D-753A	Erosion Control Check Dam	15	Each	
4	D-753B	Type III Rip Rap Filter Ring	6	Each	
5	E-891	Inlet Protection	10	Each	
6	E-893	Temporary Silt Fence	89,000	Linear Feet	
7	E-895	Temporary Erosion Control Matting	37,000	Sq. Yd.	
8	T-901	Seeding	145	Acre	
TOTAL COST (lines 1-8)					

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.

ADDENDUM # _____ DATED _____

ADDENDUM # _____ DATED _____

ADDENDUM # _____ DATED _____

ADDENDUM # _____ DATED _____

BIDDER: _____

Signed by: _____
[Type or Print Name]

Title: _____

Business Address: _____

_____

_____

Business Phone: _____

Note: If the Bidder is a corporation, the Bid shall be signed by an officer of the corporation; if a partnership, it shall be signed by a partner. If signed by others, authority for signature shall be attached.

The full name and addresses of persons or parties interested in the foregoing Bid, as principals, are as follows:

Name	**Address**

SECTION 3

SCOPE OF WORK AND TECHNICAL SPECIFICATIONS

ENGINEER OF RECORD

The LPA Group, Inc., a Unit of Michael Baker Corporation
3595 Engineering Drive
Norcross, GA 30092
770-263-9118

SEALS PAGE

SECTION 3

SCOPE OF WORK AND TECHNICAL SPECIFICATIONS

SCOPE OF WORK

The Project consists of the following major elements: construction of erosion and sedimentation control measures as needed for the project to protect adjacent sensitive areas, clearing and grubbing of trees within the clearing limits, clearing of trees outside of the specified wetland areas, the specified stream buffer, and the clearing of trees within the steep slope areas as sown on the project drawings.

PERMITS

It is anticipated that land disturbance permits are not required from Cobb and Fulton Counties. The selected bidder will be responsible for National Pollutant Discharge Elimination System (NPDES) Notice of Intent filing and compliance for the Infrastructure Construction Activity under General NPDES Permit No. GAR 100002 and pay all associated fees. The selected Bidder will be required to obtain any additional permits needed to perform the work described in these bid documents.

RIGHTS OF WAY/EASEMENTS

This clearing construction project includes work that may require working in, around or crossing of easements owned by Georgia Power, Colonial Pipeline, and the City of Atlanta. The selected Bidder will be required to obtain written permission from these utility owners prior to work being performed in, around and crossing these easements. The selected bidder will, also, be required to coordinate with these utilities for the work, restoration of the easement, protection of the utilities from construction activities and repair of any damage caused by the selected Bidder or his agents.

FEDERAL AVIATION ASSOCIATION (FAA) REQUIREMENTS

This project is partially funded by the Federal Aviation Association, 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 15.1% 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.

SECTION – 01000

GENERAL REQUIREMENTS – 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

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 **#13ITB90138K-JD-Obstruction Clearing for Fulton County Airport–Brown Field, FAA AIP Project No. X-XX-XXXX-XXX-XXXX, GDOT Project No. APXXX-XXXX-XX (121) Fulton**, as shown on Contract Documents prepared by: The LPA Group, Incorporated, a Unit of Michael Baker. Drawings and Specifications are dated: **July, 2013.**

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 Project Manager'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 Project Manager.

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 Project Manager 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 Project Manager 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 Project Manager, Owner, and other Contractors in the completion of the work.

B. Disputes: The Project Manager, 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 Project Manager'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 Project Manager'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 Project Manager 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 Project Manager. 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 Project Manager.

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 Project Manager.

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 Project Manager. 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 clean-up 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 Project Manager 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.

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 Project Manager 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 Project Manager.

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 Project Manager.

   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 Project Manager'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

Project Manager. 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 Project Manager.

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 Project Manager.

3. Coordination and Communication: Work within and adjacent to active AOAs shall be coordinated with the Project Manager 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 Project Manager 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 Project Manager'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 Project Manager. 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 Project Manager. Maintain barricades and markings until removal is directed by Project Manager.

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.

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. Pre-construction Conference: A Pre-construction 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, Project Manager, 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 Project Manager'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 Project Manager 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 Project Manager, 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 three (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 Project Manager 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 Project Manager's reference. Record deviations from required lines and levels, and advise the Project Manager 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 Project Managering 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 Project Manager and copies shall be made available to the Project Manager 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. Project Manager Services: Project Manager 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.

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.

The Project Manager will limit the area over which clearing and grubbing, excavation, borrow, and embankment operations are performed whenever the Contractor's operations do not make effective use of construction practices and temporary measures which will minimize erosion, or whenever effective erosion control features are not being completed as soon as permitted by construction operations.

1.02 EROSION CONTROL SCHEDULE:

At or prior to the preconstruction conference, the Contractor shall submit to the Project Manager 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 Project Manager.

PART 2 PRODUCTS (Not used)

PART 3 EXECUTION

3.01 EROSION AND SILTATION CONTROL:

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:

Temporary and permanent erosion control measures shall be provided as shown on the plans or as directed by the Project Manager. 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 Project Manager before being used or shall be as directed by the Project Manager.

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 Project Manager 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 Project Manager, 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 Project Manager ordering the stopping of construction operations in accordance with the following:

A. The Project Manager 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 Project Manager 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 Project Manager 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.

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 Project Managering 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 Project Managers
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	Project Manager
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

F (cont'd)

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

N (cont'd)

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	Pre-molded 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

R (cont'd)	
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)

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 Project Manager", "requested by the Project Manager", and similar phrases. However, no such implied meaning will be interpreted to extend the Project Manager's responsibility into the Contractor's area of construction supervision.

E. Approved: Where used in conjunction with the Project Manager's response to submittals, requests, applications, inquiries, reports and claims by the Contractor, the term "approved" will be held to limitations of the Project Manager's responsibilities and duties as specified in General Provisions and Supplementary Conditions. In no case will the Project Manager'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)

SECTION 01150

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 Project Manager 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 Project Manager.

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 Project Manager requires 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. Project Manager 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)

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-interruptible 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 Project Manager, print and distribute progress schedules to the Project Manager (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 Project Manager, 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 Project Manager's stamp and initials or signature indicating review.

7. After the Project Manager's review, distribute copies.

E. Contractor's Responsibilities:

1. Contractor's responsibility for errors and omissions in submittals is not relieved by the Project Manager's review of submittals.

2. Contractor's responsibility for deviations in submittals from requirements of the Contract Documents is not relieved by the Project Manager's review of submittal, unless the Project Manager 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, Project Manager 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) Project Manager.
      (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 Project Manager'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 Project Manager.
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 Project Manager'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 sub-base, 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 Project Manager.

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 Project Manager.

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 Project Manager 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)

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 Project Manager, 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 Project Manager'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 Project Manager'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.

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 Project Manager's field office is furnished and in good working order, furnished as herein specified, and made available to the Project Manager. The office shall be erected at a location designated by the Project Manager 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 Project Manager.

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 Project Manager 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 Project Manager. 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. Field Project Manager's Complex: The Owner has elected to provide the Project Manager with a vacant building to be used as

the Field Project Manager's Complex. The Contractor shall furnish an office for exclusive use by Project Manager's Resident Representative with the following requirements:

1. Minimum 12' x 56' Divided into two separate rooms with a common restroom (ADA compliant). Both rooms shall have exterior doors with locks and two sets of keys.

2. Utility services: Power, touchtone telephone, wireless Internet, fax, water, and sanitary.

3. Services: Water cooler, suitable indoor toilet facilities (ADA compliant), and HVAC.

4. Furnishings:

   a. 2 -office desks, with drawers, locks and two (2) sets of keys
   b. 2 -office swivel chairs
   c. 4 -office straight-back chairs
   d. 1-4-drawer legal size steel filing cabinet with lock and keys
   e. 1-steel wastebasket plus 1 larger trash can
   f. 1-30"x60" drafting table with stool
   g. 1-fully equipped first aid kit
   h. 1-bookcase with at least 9 linear feet of shelves
   i. 1-facsimile machine on its own separate line from the telephone
   j. 1-answering machine
   k. 1-plan stack file
   l. 1-adding machine, tape type, registering to at least ten (10) digits
   m. 1-OSHA-approved fire extinguisher
   n. 1-touchtone telephone with speaker on its own line, separate from the facsimile machine
   o. 1-wireless router and DSL or Broadband service. Contractor may share service with Project Manager as long as wireless router is provided and maintained for Project Manager. Internet shall be security enabled.
   p. 1- photocopy machine
   q. 1- document scanner capable of operating Windows XP software
   r. A combination copier/facsimile/scanner machine capable of operating Windows XP or equivalent software may be substituted for the individual facsimile, scanner and photocopy machines if approved by the Project Manager.

5. Site: Prepare the field office site consisting of two-way access to public roads, grading of the site for field office placement and vehicle parking, surface drainage,

stabilizing and maintaining the access road to the office site, and area lights. The vehicle parking areas shall be large enough to accommodate a minimum of 4 vehicles. The parking area and access road shall be adequately stabilized to provide an all-weather surface. The office area site preparation plans shall be reviewed and approved by the Project Manager prior to construction. Field Project Manager's Complex shall be inside airport security fencing. If not, Contractor shall provide security fencing at no additional cost. All costs associated with the site preparation shall be included in the cost of the Field Project Manager's Complex.

6. Maintenance: The Contractor shall be responsible for cleaning weekly the facility and furnishing toilet and washroom supplies.

7. All cost of utility usage, including local and long distance telephone calls, in the field office provided for the Project Manager during the course of this project will be borne by the Contractor.

8. Maintain Project Manager's field office up to sixty (60) days after until substantial completion of project. Remove when directed by the Project Manager; grade the site to drain, and seed and mulch in accordance with Item T-901.

F. 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.

G. Access and Haul Roads:

1. Locations of access, temporary stabilized construction, and haul roads will be approved by the Project Manager 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 Project Manager 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.

3. The Contractor will be responsible for obtaining any necessary driveway permit(s) from local or state agencies for access and haul roads.

4. If access or haul roads cross a utility, the Contractor shall protect the utility as directed by the Owner of the utility.

5. Except as otherwise noted herein, there shall be no direct payment for the construction, maintenance, and removal of access and haul roads.

H. 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 Project Manager. 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 Project Manager.

3. No direct payment shall be made for this item.

3.05 REMOVAL:

A. Completely remove temporary materials and equipment when their use is no longer 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

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 Project Manager.
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 Project Managering 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 Project Manager 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 Project Manager, 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. Project Manager shall be the judge of the equality and acceptability of the proposed substitution.

4. If Project Manager determines the proposed substitute product is not "equal" to the specified product, the Contractor must provide the specified product, subject to Project Manager'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. Project Manager's Review: Project Manager 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 Project Manager.

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 Project Manager for further instructions.

2. Do not proceed with work without clear instructions.

C. Complete Compliance: Perform work in accord with manufacturer's instructions. Do no 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 weather tight 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)

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, Project Manager'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 Project Manager finds that the work is acceptable under the Contract Documents, he will request required Contractor's Closeout Submittals.

3.02 REINSPECTION FEES:

A. Should Project Manager 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 Project Manager 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 PROJECT MANAGER:

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 Project Manager 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.

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 disposals 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.

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. Project Manager 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:

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

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

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

D. Make documents and samples available at all times for inspection by Project Manager.

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 Project Manager.

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 Project Manager.

E. 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 Project Manager 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.

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 Project Manager 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.

ITEM P-151 CLEARING AND GRUBBING

DESCRIPTION

151-1.1 This item shall consist of clearing or clearing and grubbing, including the disposal of materials, for all areas within the limits designated on the plans or as required by the Project Manager.

Clearing and grubbing shall consist of clearing the surface of the ground of the designated areas of all trees, stumps, down timber, logs, snags, brush, undergrowth, hedges, heavy growth of grass or weeds, fences, structures, debris, and rubbish of any nature, natural obstructions or such material which in the opinion of the Project Manager is unsuitable for the foundation of embankments,[i] strips, pavements, or other required structures, including the grubbing of stumps, roots, matted roots, foundations, and the disposal from the project of all spoil materials resulting from clearing and grubbing by ~~burning~~[9], mulching,[ii] or otherwise.

CONSTRUCTION METHODS

151-2.1 **GENERAL.** The areas denoted on the plans to be cleared or cleared and grubbed shall be staked on the ground by the Contractor and approved by the[iii] Project Manager. The clearing and grubbing shall be done at a satisfactory distance in advance of the grading operations.

All spoil materials removed by clearing or by clearing and grubbing shall be disposed of by burning, when permitted by local laws, or by removal to approved disposal areas off airport[iv]. When burning of material is permitted, it shall be burned under the constant care of competent watchmen so that the surrounding vegetation and other adjacent property will not be jeopardized. Burning shall be done in accordance with all applicable laws, ordinances, and regulations. Before starting any burning operations, the Contractor shall notify the agency having jurisdiction.

As far as practicable, waste concrete and masonry shall be placed on slopes of embankments or channels. When embankments are constructed of such material, this material shall be placed in accordance with requirements for formation of embankments. Any broken concrete or masonry that cannot be used in construction, and all other materials not considered suitable for use elsewhere, shall be disposed of by the Contractor. In no case shall any discarded materials be left in windrows or piles adjacent to or within the airport limits. The manner and location of disposal of materials shall be subject to the approval of the Project Manager and shall not create an unsightly or objectionable view. When the Contractor is required to locate a disposal area outside the airport property limits at his/her own expense, he shall obtain and file with the Project Manager, permission in writing from the property owner for the use of private property for this purpose.

If the plans or the specifications require the saving of merchantable timber, the Contractor shall trim the limbs and tops from designated trees, saw them into suitable lengths, and make the material available for removal by other agencies.

Any blasting necessary shall be done at the Contractor's responsibility, and the utmost care shall be taken not to endanger life or property.

The removal of existing structure and utilities required to permit orderly progress of work shall be accomplished by local agencies, unless otherwise shown on the plans. Whenever a telephone or electrical[v] pole, pipeline, conduit, sewer, roadway, or other utility is encountered and must be removed or relocated, the Contractor shall advise the Project Manager who will notify the proper local authority or owner and attempt to secure prompt action.

151-2.2 **CLEARING.** The Contractor shall clear the staked or indicated area of all objectionable materials. Trees unavoidably falling outside the specified limits must be cut up, removed, and disposed of in a satisfactory manner. In order to minimize damage to trees that are to be left standing, trees shall be felled toward the center of area being cleared. The Contractor shall preserve and protect from injury all trees not to be removed. The trees, stumps, and brush shall be cut to a height of not more than 12 inches (300 mm) above the ground. The grubbing of stumps and roots will not be required.

When isolated trees are designated for clearing, the trees shall be classed in accordance with the butt diameter size as measured at a point 18 inches (45 cm) above the ground level or at a designated height specified in the proposal.

Fences shall be removed and disposed of when directed by the Project Manager. Fence wire shall be neatly rolled and the wire and posts stored on the airport if they are to be used again, or stored at a designated location if the fence is to remain the property of a local owner or of a civic authority.

151-2.3 **CLEARING AND GRUBBING.** In areas designated to be cleared and grubbed, all stumps, roots, buried logs, brush, grass, and other unsatisfactory materials shall be removed, except where embankments exceeding 3-1/2 feet (105 cm) in depth are to be made outside of the limits of structural embankment for the[vi] paved areas. In cases where such depth of embankments is to be made, all unsatisfactory materials shall be removed, but sound trees, stumps, and brush can be cut off within 6 inches (150 mm) above the ground and allowed to remain. Tap roots and other projections over 1-1/2 inches (37 mm) in diameter shall be grubbed out to a depth of at least 18 inches (45 cm) below the finished subgrade or slope elevation.

Any buildings and miscellaneous structures that are shown on the plans to be removed shall be demolished or removed, and all materials there from shall be [vii]removed from the site. The remaining or existing foundations, wells, cesspools, and all like structures shall be destroyed by breaking out or breaking down the materials of which the foundations, wells, cesspools, etc., are built to a depth at least 2 feet (60 cm) below the existing surrounding ground. Any broken concrete, blocks, or other objectionable material that cannot be used in backfill shall be removed and disposed of. The holes or openings shall be backfilled with acceptable material and properly compacted.

All holes remaining after the grubbing operation in embankment areas shall have the sides broken down to flatten out the slopes, and shall be filled with acceptable material, moistened and properly compacted in layers to the density required in Item P-152. The same construction procedure shall be applied to all holes remaining after grubbing in excavation areas where the depth of holes exceeds the depth of the proposed excavation.

151-2.3 **DISPOSAL.** TREES, STUMPS, LIMBS, ROOTS, BURIED LOGS, AND OTHER SIMILAR WOOD PRODUCTS SHALL BE REMOVED FROM THE AIRPORT SITE BY THE CONTRACTOR. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMITTING AND COMPLYING WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS ASSOCIATED WITH THE DISPOSAL OF THESE MATERIALS.[viii]

METHOD OF MEASUREMENT

151-3.1 The quantities of clearing or clearing and grubbing as shown by the limits on the plans or as ordered by the Project Manager shall be the number of acres (square meters) or fractions thereof, of land specifically cleared or cleared and grubbed.

BASIS OF PAYMENT

151-4.1 Payment shall be made at the contract unit price per acre (square meter) for clearing and grubbing. 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-151 Clearing and grubbing—per acre

MODIFICATION OF STANDARDS - FAA ITEM P-151

1. Section 151-1.1 – Paragraph 4 – Insert "embankments" to allow removal of these areas in Runway Safety Areas and in other structural fill areas on the airport.

2. Section 151-1.1 – Paragraph 4 – Insert "mulching" because many counties do not allow burning and mulching can be used around the project for erosion control.

3. Section 151-2.1 – Paragraph 1 – Modified so that the Contractor is responsible for the staking rather than the Project Manager.

4. Section 151-2.1 – Paragraph 2 – Clarifies that disposal shall be off airport site.

5. Section 151-2.1 – Paragraph 6 – Revises "telegraph" to "electric" to allow for a more broad definition of the type of poles.

6. Section 151-2.3 – Paragraph 1 – Adds language to clarify that stumps and other items listed in this paragraph shall be removed not only directly under the pavement, but also in the limits of structural embankment (or influence) which is generally a 1:1 slope from the edge of pavement.

7. Section 151-2.3 – Paragraph 2 – Removes "burning" as many counties do not allow this and this also creates environmental concerns depending on what materials are in the existing buildings and structures.

8. Section151-2.3 - Paragraph added to address the Contractor's responsibility to not only clear and grub but to also dispose of all trees and other materials off-site.

9. Section 151-1.1 – Paragraph 4 – Strikethrough "burning" because burning is not allowed

ITEM D-753

RIP RAP

DESCRIPTION

753-1.1 This item shall consist of the construction of sub-base surge stone and other erosion control devices in accordance with these specifications, and conforming to the lines, grades, dimensions and locations shown on the drawings, or required by the Project Manager.

MATERIALS

753-2.1 **RIP RAP.** Stone for rip rap shall consist of field stone or rough unhewn quarry stone. The stone shall be sound, tough, dense, resistant to the action of air and water, and suitable in all other respects for the purpose intended. The stone shall be graded so that individual stones vary in weight from 20 to 300 pounds. At least 60 percent of the total weight of the rip rap shall be individual pieces weighing a minimum of 100 pounds each. Not more than 10 percent of the total weight of the rip rap may be individual pieces weighing less than 20 pounds each. Neither the breadth nor the thickness of any stone shall be less than 1/3 its length.

753-2.2 **FILTER FABRIC MATERIAL.** The filter fabric shall be composed of strong rot-proof synthetic fibers formed into a woven or non-woven fabric, free of any treatment or coating that might significantly alter its physical properties after installation. The fabric shall contain stabilizers and/or inhibitors to make the filaments resistant to deterioration resulting from sunlight or heat. The fabric shall be a pervious sheet of fibers oriented into a stable network so that the fibers retain their relative position with respect to each other. The edges of the fabric shall be finished to prevent the outer fiber from pulling away from the fabric. The fabric shall be free of defects or flaws that significantly affect its physical or filtering properties. Sheets of fabric may be sewn or bonded together. Except as otherwise specified, no deviation from any physical requirements will be permitted due to the presence of the seam.

During all periods of shipment and storage, the fabric shall be wrapped in a heavy-duty protective covering to protect the fabric from sunlight, mud, dust, dirt, and debris. The fabric shall not be exposed to temperatures greater than 140°F.

The fabric shall meet the physical requirements specified below. All strength requirements are minimum average roll values in the weakest principal direction.

753-2.3 **GDOT #57 STONE.** The stone shall meet the requirements of GDOT specifications. The Contractor shall provide certification that stone meets gradation requirements for the #57 size.

PHYSICAL REQUIREMENTS

Physical Property	Test Method	Requirements
Grab Strength	ASTM D 4632	200 lb. min.
Elongation	ASTM D 4632	15% min.
Seam Strength	ASTM D 4632	180 lb. min.
Puncture Strength	ASTM D 4833	80 lb. min.
Apparent Opening Size (U.S. Standard Sieve)	ASTM D 4751	No. 100 Sieve min. No. 50 Sieve max.
Ultraviolet Degradation	ASTM D 4355	70% Strength Retained at 150 hours
Trapezoid Tear	ASTM D 4533	50 lb. min.
Burst Strength	ASTM D 3786	320 psi min.

The Contractor shall furnish certified test reports with each shipment of material attesting that the fabric meets the requirements of this provision.

CONSTRUCTION METHODS

753-3.1 **PREPARING SUBGRADE.** Excavation shall be made to the required width and depth in accordance with the dimensions, lines, and grades as shown on the drawings or required by the Project Manager. Excavated material shall be disposed of as specified in Item P-152. When specified on the drawings or directed by the Project Manager, a layer of filter fabric shall be placed over the completed subgrade. The properly shaped, graded and compacted subgrade shall be checked and accepted by the Project Manager prior to placing any rip rap or fabric.

753-3.2 **PLACING FILTER FABRIC MATERIAL.** The surface to receive the filter fabric shall be free of obstructions, debris, and pockets of soft or low-density material.

At the time of installation, the fabric shall be rejected if it has defects, rips, holes, flaws, deterioration, or damage incurred during manufacture, transportation, or storage.

The filter fabric shall be laid smooth and free from tension, stress, folds, wrinkles, or creases. Horizontal overlaps shall be a minimum of 12 inches with the upper fabric overlapping the lower fabric. Vertical overlaps shall be a minimum of 18 inches with the upstream fabric overlapping the downstream fabric. In the event that the fabric is displaced or damaged during rip rap placement, the rip rap shall be removed and the fabric repositioned or

replaced prior to the replacement of the rip rap, all at no additional cost to the Owner.

The fabric shall be covered with rip rap within 2 days after placement of the fabric, or the fabric shall be replaced with new fabric. Filter fabric shall be protected from damage due to the placement of rip rap or other materials by limiting the height of drop of the material or by placing a cushioning layer of sand on top of the fabric before dumping the material.

753-3.3 **PLACING RIP RAP.** The Contractor shall place the stone by mechanical methods, augmented by hand placing, provided that when the rip rap is completed it forms a properly graded, dense, neat layer of stone without damage to any underlying fabric. The stone shall be graded so that the smaller stones are uniformly distributed throughout the mass. The surface of the completed rip rap shall be reasonably uniform and free from excessive humps and depressions.

The thickness of the completed rip rap shall be as shown on the drawings or as specified by the Project Manager.

METHOD OF MEASUREMENT

753-4.1 Rip-rap shall be measured by the unit, completed, and accepted. No measurement for payment shall be made for furnishing or installing filter fabric or washed stone as these items are considered incidental to the placement of rip rap.

BASIS OF PAYMENT

753-5.1 Payment for check dams and filter rings shall be made at the contract unit price per each completed and accepted, unless otherwise noted.

These prices for the above mentioned items shall be full compensation for furnishing all materials including filter fabric and for all preparation, hauling, and placing of these materials, and for all labor, equipment, tools, and incidentals necessary to complete this item.

Payment will be made under:

Item D-753A	Erosion Control Check Dams – per Each
Item D-753B	Type III Rip Rap Filter Ring – per Each

TESTING AND MATERIAL REQUIREMENTS

ASTM D 3786	Hydraulic Bursting Strength of Knitted Goods and Nonwoven Fabrics

ASTM D 4355	Deterioration of Geotextiles from Exposure to Ultraviolet Light and Water
ASTM D 4533	Trapezoid Tearing Strength of Geotextiles
ASTM D 4632	Breaking Load and Elongation of Geotextiles (Grab Method)
ASTM D 4751	Determining Apparent Opening Size of a Geotextile
ASTM D 4833	Index Puncture Resistance of Geotextiles, Geomembranes, and Related Products

ITEM E-891

INLET PROTECTION

DESCRIPTION

891-1.1 The work covered by this section consists of furnishing, placing and maintaining inlet protection at the locations and dimensions shown on the drawings or as directed by the Project Manager.

MATERIALS

891-2.1 **FILTER STONE:** Clean washed stone or gravel with 100 percent passing a 1 1/2-inch sieve and not more than 10 percent passing a 1/2-inch sieve.

891-2.2 **BLOCKS:** Nominal size 8 x 8 x 16 concrete block.

891-2.3 **WIRE SCREEN:** Hardware cloth or wire mesh with 1/2-inch openings.

CONSTRUCTION METHODS

891-3.1 **CONSTRUCTION:**

A. Lay one block on each side of the structure on its side in the bottom row to allow pool drainage. The foundation shall be excavated at least 2 inches below the crest of the inlet, or paved apron if present. Place the bottom row of blocks against the edge of the inlet or paved apron for lateral support and to avoid washouts when overflow occurs. If needed, give lateral support to subsequent rows by placing 2 x 4 wood studs through block openings.

B. Carefully fit hardware cloth or wire mesh over all block openings to hold filter stone in place.

C. Place filter stone 2 inches below the top of the block on a 2:1 slope or flatter and smooth it to an even grade.

891-3.2 **MAINTENANCE:** Inspect protection device after each rainfall. Repair or replace damaged areas as required. Replace sediment choked filter stone with clean filter stone. Remove sediment deposits when deposition accumulates to 1/2 of height of protection device.

METHOD OF MEASUREMENT

891-4.1 Inlet Protection shall be measured by each new protection device installed and accepted.

BASIS OF PAYMENT

891-5.1 The quantities of Inlet Protection will be paid for at the contract unit price per each, complete, in place and accepted. This price shall be full compensation for furnishing all materials and for all preparation, excavation, placing materials, and replacing materials as required to maintain protection; and for all labor equipment, tools, and incidentals necessary to complete the protection.

Payment will be made under:

Item E-891 Inlet Protection - per Each

ITEM E-893

TEMPORARY SILT FENCE

DESCRIPTION

893-1.1 This item shall consist of furnishing, installing, maintaining, and removing a geotextile barrier-fence designed to remove suspended particles from water passing through it.

893-1.2 The quantities of temporary silt fence shown on the drawings may be increased or decreased at the direction of the Project Manager based on weather, construction procedures, and actual site conditions that occur during construction. Such variations in quantity will not be considered as alterations in the details of construction or a change in the character of the work.

893-1.3 Except as otherwise directed by the Project Manager, installation of temporary silt fences shall be completed prior to any excavation, grading operations, or clearing and grubbing.

893-1.4 A self-supporting geotextile fence shall be used in this application. No wire supported geotextile fence shall be allowed.

MATERIALS

893-2.1 **GEOTEXTILE:** Fabric shall consist of rot-proof synthetic fibers formed into a woven or non-woven fabric meeting the requirements shown in Table 1. The geotextile shall be free of any treatment or coating which might adversely alter its physical properties after installation. Geotextile rolls shall be furnished with suitable wrapping for protection against moisture and extended ultraviolet exposure prior to placement. Each roll shall be labeled or tagged to provide product identification sufficient for inventory and quality control purposes. Rolls shall be stored in a manner which protects them from the elements.

TABLE 1 -PHYSICAL REQUIREMENTS FOR GEOTEXTILE

PROPERTY	TEST METHOD	REQUIREMENT
Tensile Strength	ASTM D 4632	90 lbs. minimum
Elongation	ASTM D 4632	50% maximum
Apparent Opening Size (U.S. Standard Sieve)	ASTM D 4751	No. 20 maximum No. 50 minimum
Ultraviolet Degradation at 500 Hours	ASTM D 4355	Minimum 70% Strength Retained

893-2.2 **POSTS:** Either wood or synthetic posts may be used. Posts shall have a minimum length of 36 inches plus burial depth and be of sufficient strength to resist damage during installation and to support applied loads after installation. Wood posts shall be at least 2 inch nominal square or 2 inch diameter. In soft ground, wet soils, swamps, and other similar conditions, provide a wider post or other means as needed to develop adequate resistance to applied loads.

893-2.3 **PRE-FABRICATED FENCE:** Pre-fabricated fence systems may be used provided they meet all of the above material requirements, perform satisfactorily in the field, and are approved by the Project Manager.

CONSTRUCTION METHODS

893-3.1 **FENCE INSTALLATION:** The Contractor shall install temporary silt fences as shown on the drawings and at other locations as directed by the Project Manager. Fence construction shall be adequate to handle the stress from sediment loading. Geotextile shall be adequately fastened to the support fence. Geotextile at the bottom of the fence shall be buried a minimum of 6 inches in a trench so that no flow can pass under the barrier. The trench shall be backfilled and the soil compacted over the geotextile. Fence height shall be not less than 32 inches or more than 36 inches above ground surface. The geotextile shall be spliced together only at a support post, with a minimum 6-inch overlay.

893-3.2 **POSTS:** Posts shall be spaced a maximum of 4 feet apart and where possible placed or driven a minimum of 24 inches into the ground. Where a 24 inch depth is impractical to achieve, the posts shall be adequately secured to prevent overturning of the fence due to sediment loading.

893.3.3 **SELF-SUPPORT:** When self-supported fence is used, the geotextile shall be securely fastened to fence posts.

893-3.4 **RESPONSIBILITY:** It is the Contractor's responsibility to maintain the integrity of silt fences as long as they are necessary to contain sediment runoff. The Contractor shall inspect all temporary silt fences immediately after each rainfall and at least daily during prolonged rainfall. Any deficiencies shall be immediately corrected by the Contractor. In addition, the Contractor shall make a daily review of the location of silt fences in areas where construction activities have changed the natural contour and drainage runoff to ensure that the silt fences are properly located for effectiveness. Where deficiencies exist, additional silt fences shall be installed as directed by the Project Manager. Should the silt fence become damaged, clogged, or otherwise ineffective while the barrier is still necessary, it shall be repaired or replaced promptly by the Contractor at his expense.

893-3.5 **SEDIMENT:** Sediment deposits shall be removed when the deposit reaches approximately one-half of the height of the silt fence.

893-3.6 **REMOVAL:** The silt fence shall remain in place until the Project Manager directs that it be removed. Upon removal, the Contractor shall remove and dispose of any excess sediment accumulations, dress the area to give a pleasing appearance, and vegetate all bare areas in accordance with the contract requirements. The fence materials will remain the property of the

Contractor and may be used at other locations provided the materials meet the requirements in Table 1.

METHOD OF MEASUREMENT

893-4.1 The quantity of temporary silt fence to be paid for shall be the actual number of linear feet of temporary silt fence, measured in place from end post to end post of each separate installation, which has been completed and accepted.

893-4.2 The quantity of temporary double silt fence to be paid for shall be the actual number of linear feet of temporary silt fence, measured in place from end post to end post of each separate installation, which has been completed and accepted. Chipping used between the temporary double silt fences shall be incidental to specification P-151, Clearing and Grubbing.

BASIS OF PAYMENT

893-5.1 No separate payment shall be made for removal and disposal of sediment accumulations. The cost of this work shall be considered incidental to the cost for temporary silt fence.

893-5.2 Payment for accepted temporary silt fence and temporary double silt fence shall be made at the contract unit price per linear foot.

The above price shall be full compensation for all work covered by this item, including but not limited to furnishing all fence posts, fence fabric, filter fabric, hardware, and other material; installing and maintaining the silt fence; removal and disposal of sediment accumulations from the silt fence; removal of the silt fence; and dressing the disturbed areas after the silt fence has been removed.

Payment will be made under:

Item E-893 Temporary Silt Fence -- per Linear Foot

TESTING AND MATERIAL REQUIREMENTS

ASTM D 4355	Deterioration of Geotextiles from Exposure to Ultraviolet Light and Water
ASTM D 4632	Breaking Load and Elongation of Geotextiles (Grab Method)
ASTM D 4751	Determining Apparent Opening Size of a Geotextile

ITEM E-895

EROSION CONTROL MATTING

DESCRIPTION

895-1.1 The work covered by this section consists of furnishing, placing, and securing temporary jute matting, excelsior matting, or paper matting, or permanent synthetic matting at locations shown on the plans or as directed by the Project Manager.

The quantity of matting to be placed will be affected by the actual conditions which occur during the construction of the project. The quantity of matting may be increased, decreased, or eliminated entirely at the direction of the Project Manager. Such variations in quantity will not be considered as alterations in the details of construction or a change in the character of the work.

MATERIALS

895-2.1 TEMPORARY MATTING MATERIAL:

A. General. Matting shall be jute matting, excelsior matting, or paper matting. Other acceptable material manufactured especially for erosion control may be used when approved by the Project Manager in writing before being used. Erosion control matting shall not be dyed, bleached, or otherwise treated in a manner that will result in toxicity to vegetation.

B. Jute Matting. Jute matting shall be of a uniform open plain weave of single jute yarn, 48 inches in width plus or minus 1 inch. The yarn shall be of a loosely twisted construction and shall not vary in thickness by more than one-half its normal diameter. There shall be 78 warp ends, plus or minus 2, per linear yard; and the weight shall average 1.122 pounds per linear yard of the matting with a tolerance of plus or minus 5 percent.

C. Excelsior Matting. Excelsior matting shall consist of a machine produced mat of curled wood excelsior at least 47 inches in width. The mat shall weigh 0.975 pounds per square yard with a tolerance of plus or minus 10 percent. At least 80 percent of the individual excelsior fibers shall be evenly distributed over the entire area of the blanket. One side of the excelsior matting shall be covered with a woven fabric of twisted paper cord or cotton cord, or with an extruded plastic mesh. The mesh size for either the fabric or plastic mesh shall be a minimum of 1 inch x 1 inch and a maximum of 1 1/2 inches x 3 inches.

D. Paper Matting. Paper matting shall consist of a knitted polypropylene yarn with uniform openings through which biodegradable paper strips have been continuously interwoven. The openings shall be no greater than 3/4 inch in their greatest dimension and 1/2 inch in their least dimension. The interwoven yarn and paper shall form a flexible mat

which will stretch in any direction so as to conform to the shape of an irregular surface when applied to such surface. Paper matting shall be 3.6 feet or more in width and weigh a minimum of 0.09 pound per square yard.

E. Wire Staples. Staples shall be machine made of No.11 gage steel wire formed into a "U" shape. The size when formed shall be not less than 6 inches in length with a throat of not less than 1 inch in width.

895-2.2 PERMANENT MATTING:

A. Material. The permanent matting shall consist of a web of mechanically or melt bonded polymer nettings, monofilaments or fibers which are entangled to form a strong and dimensionally stable matrix. Methods of bonding shall include polymer welding, thermal or polymer fusion, or the placement of fibers between two (2) high strength, bi-axially-oriented nets bound securely together by parallel lock stitching with polyolefin threads. The matting shall possess strength and elongation properties to limit stretching and shall maintain its shape before, during and after installation, under dry or water saturated conditions. All components of the matting shall be stabilized against ultraviolet degradation and shall be inert to chemicals normally encountered in a natural soil environment. The matting shall conform to the following physical properties:

PROPERTY	TEST METHOD	VALUE[1]
> Thickness	ASTM D-1777	0.5
> Resiliency (%)[2]	ASTM D-1777	80
> Weight (oz./sy)	ASTM D-3776	11
> Porosity (%)[3]	Calculated	90
> Ground Cover Factor (%)[4]	Light Projection Analysis	66
> Tensile Strength (lb./ft.)[5]	ASTM D-1682	130 x 120
> Tensile Elongation (%)[5]	ASTM D-1682 (max)	75 x 75
> Ultraviolet Stability (%)[6]	ASTM D-4355	80

NOTES:

1. All values are minimum average roll values unless otherwise indicated.
2. Resiliency defined as percent of original thickness retained after 3 cycles of a 100 psi load for 60 seconds followed by 60 seconds without load. Thickness measured 30 minutes after load removed by ASTM D-1777.
3. Porosity calculation based upon unit weight, thickness and specific gravity.
4. Ground Cover Factor represents "% shade" from Lumite Light Projection Test.
5. Values for both machine and cross machine directions under dry or saturated conditions.
6. Tensile strength retained after 1000 hours in an Xenon ARC Weatherometer.

B. Stakes or Staples. Wood stakes shall be sound 1 inch x 3 inch stock sawn in a triangular shape, and shall be from 12 inches to 18 inches long depending on the compaction of the soil. Metal staples shall be 11 gauge steel or greater, "U" shaped, with legs a minimum of 8" in length and with a 2" crown.

CONSTRUCTION METHODS

895-3.1 **MANUFACTURER'S INSTRUCTIONS:** Except as otherwise specified herein or approved by the Project Manager, each type of matting shall be installed in accordance with its manufacturer's printed instructions.

895-3.2 **TEMPORARY MATTING INSTALLATIONS:** Placing of matting shall be done immediately following seeding. The earth surface shall be smooth and free from stones, clods, or debris which will prevent the contact of the matting with the soil. Care shall be taken to preserve the required line, grade, and cross section of the area covered.

Matting shall be unrolled in the direction of the flow of water, and shall be applied without stretching so that it will lie smoothly but loosely on the soil surface. The up-channel or top of slope end of each piece of matting shall be buried in a narrow trench at least 5 inches deep. After the end of the matting is buried, the trench shall be closed and tamped firmly. Where one roll of matting ends and a second roll begins, the end of the upper roll shall be brought over the buried end of the second roll so that there will be a 6 inch overlap. Check slots shall be constructed at each 50 feet longitudinally in the matting or as directed by the Project Manager. These slots shall be narrow trenches at least 5 inches deep. The matting shall be folded over and buried to the full depth of the trench, after which the trench shall be closed and firmly tamped. Where 2 or more widths of matting are laid side by side, the overlap shall be at least 4 inches.

Staples shall be placed across matting at ends, junctions, and check slots and shall be spaced approximately 10 inches apart.

Staples shall be placed along the outer edges and down the center of each strip of matting and shall be spaced 3 feet apart. Staples shall also be placed along all lapped edges 2 to 3 feet apart.

When excelsior matting is used, the matting shall be installed with the fabric on the top side.

After matting has been placed and stapling completed, the matting shall be rolled with an approved roller to assure that it is in proper contact with the soil.

In the installation of matting on cut or fill slopes, the Project Manager may require adjustments in the trenching or stapling requirements to fit individual slope conditions.

895-3.3 PERMANENT MATTING INSTALLATION:

A. Site Preparation. All areas to be protected with the permanent matting shall be brought to final grade and seeded in accordance with Item T-901. The surface of the soil shall be smooth, firm, stable, and free of rock, clods, roots, or other obstructions which would prevent the matting from lying in direct contact with the soil surface. Do not use the matting in areas where rock outcroppings occur or large rocks are numerous.

B. Installation of Matting in Ditches. A transverse trench 6 inches wide by 9 inches deep shall be cut at the ends of the matting and at 25 foot intervals along the ditch. Longitudinal anchor slots may be specified by the Project Manager if large volumes of water are anticipated.

The center of matting shall be rolled out starting at the lower end of the ditch. Each adjacent strip of matting shall then be rolled out overlapping the preceding strip a minimum of 3 inches. The ends of each roll of matting shall be overlapped 3 feet with the upslope matting on top. The matting shall be stretched to the bottom of the slot, folded back and staked at one foot intervals in each anchor slot with one stake serving the overlapped edges of adjoining stripes. The slot is then backfilled and compacted. The matting shall then be staked snugly in the longitudinal slots and at maximum intervals of 6 feet along the ditch. The longitudinal anchor slots shall then be backfilled and dressed.

Runs of matting which begin at the outlet of a pipe shall be underlaid with filter fabric for a distance of 10 feet.

C. Installation of Matting on Slopes. Installation of matting on slopes shall be the same as for ditches except as follows: No longitudinal anchor slots are required. The entire slope shall be backfilled with loose soil to fill the voids in the mat.

D. Grassing. Designated areas to receive permanent matting shall be seeded prior to installation of matting as directed by the Project Manager.

E. Inspection. A representative of the matting manufacturer shall be present during installation to assure that the matting is installed per the manufacturer's printed instructions.

METHOD OF MEASUREMENT

895-4.1 The quantity of temporary erosion control matting to be paid for shall be the number of square yards, measured along the surface of the ground, over which temporary erosion control matting has been acceptably placed and maintained.

BASIS OF PAYMENT

895-5.1 The quantity of temporary erosion control matting, measured as provided above shall be paid for at the contract unit price per square yard.

The above price and payment shall be full compensation for all work covered by this section, including but not limited to furnishing all matting, staples, and other materials; and placing and securing the matting. Grassing shall be paid for under Item T-901.

Payment will be made under:

Item E-895 Temporary Erosion Control Matting -- per Square Yard.

TESTING AND MATERIAL REQUIREMENTS

ASTM D-1682	Tensile Strength and Elongation
ASTM D-1777	Material Thickness
ASTM D-3776	Weight of Materials
ASTM D-4355	Ultraviolet Stability

ITEM T-901 SEEDING

DESCRIPTION

901-1.1 This item shall consist of soil preparation, seeding, fertilizing and liming the areas shown on the plans or as directed by the Project Manager in accordance with these specifications. Work described in this section includes temporary grassing (Ds2) and permanent grassing (Ds3) over areas indicated. Mulching is required for both temporary and permanent grassing and shall be performed in accordance with Item T-908.

These specifications are to be used as a guide to enable the Contractor to develop a satisfactory stand of grass. The Contractor shall visit the site and acquaint himself as to the nature and condition of the soil and the extent of the work required prior to bidding. The Contractor shall have the soil tested to determine the actual rates and/or types of lime, fertilizer, seed and mulch required. Prior to construction, the contractor shall submit a seeding plan to the Project Manager for his review. In addition to the above, it shall also include his methods of maintenance, watering, reseeding, fertilizing, mowing and recommendations for future maintenance by the Owner. The Project Manager reserves the right to independently test the soil for grassing rates at no expense to the contractor. The Project Manager's decision for appropriate grassing rates shall be final. [1]

MATERIALS

901-2.1 **SEED.** The species and application rates application rates of grass, legume, and cover-crop seed furnished shall be those stipulated herein. Seed shall conform to the requirements of Fed. Spec. JJJ-S-181.

Seed shall be furnished separately or in mixtures in standard containers with the seed name, lot number, net weight, percentages of purity and of germination and hard seed, and percentage of maximum weed seed content clearly marked for each kind of seed. The Contractor shall furnish the Project Manager duplicate signed copies of a statement by the vendor certifying that each lot of seed has been tested by a recognized laboratory for seed testing within 6 months of date of delivery. This statement shall include: name and address of laboratory, date of test, lot number for each kind of seed, and the results of tests as to name, percentages of purity and of germination, and percentage of weed content for each kind of seed furnished, and, in case of a mixture, the proportions of each kind of seed. Submit certificates for all. Indicate grass species, weed content, and percent germination.[2]

Seeds shall be applied as follows:

Seed	Minimum Seed	Minimum Germination	Rate of Application
	Purity - 99%	90%	(per Project grassing schedule)

The grass seed to be furnished shall have a maximum of two and one-half percent (2-1/2%) of weed seed and a minimum eighty percent (80%) by weight pure live seed. The seed shall meet the Georgia Seed Laws and no "Below Standard" seed will be accepted.[3]

Seeding shall be performed during the period between February 15 and November 15, unless otherwise approved by the Project Manager. The detailed grassing schedule, including species and application rates shall be as shown on the grassing schedule included in the construction plans. [4]

Whenever possible, permanent grass shall be planted as soon as practical in the construction process. After initial soil disturbing activities have begun, grassing shall be instigated within and continued at regular intervals not to exceed 14 days. If permanent grassing is not practical within 14 days since the last application, then all erodible areas shall be temporarily mulched or temporarily grassed as directed by the Project Manager. **At no time shall erodible areas be left ungrassed or unmulched longer than fourteen (14) days.**[5]

901-2.2 **LIME.** Lime shall be ground limestone containing not less than 85% of total carbonates, and shall be ground to such fineness that 90% will pass through a No. 20 mesh sieve and 50% will pass through a No. 100 mesh sieve. Coarser material will be acceptable, providing the rates of application are increased to provide not less than the minimum quantities and depth specified in the special provisions on the basis of the two sieve requirements above. Dolomitic lime or a high magnesium lime shall contain at least 10% of magnesium oxide. Lime shall be applied at the rate of 3,000 pounds/acre. All liming materials shall conform to the requirements of ASTM C 602.

901-2.3 **FERTILIZER.** Fertilizer shall be standard commercial fertilizers supplied separately or in mixtures containing the percentages of total nitrogen, available phosphoric acid, and water-soluble potash. They shall be applied at the rate and to the depth specified herein, and shall meet the requirements of Fed. Spec. A-A-1909 and applicable state laws. They shall be furnished in standard containers with name, weight, and guaranteed analysis of contents clearly marked thereon. No cyanamide compounds or hydrated lime shall be permitted in mixed fertilizers.

The fertilizers may be supplied in one of the following forms:

a. A dry, free-flowing fertilizer suitable for application by a common fertilizer spreader;
b. A finely-ground fertilizer soluble in water, suitable for application by power sprayers; or
c. A granular or pellet form suitable for application by blower equipment.

Fertilizers shall be 10-10-10 commercial fertilizer and shall be spread at the rate of 1,000 pounds per acre.

901-2.4 **SOIL FOR REPAIRS.** The soil for fill and topsoiling of areas to be repaired shall be at least of equal quality to that which exists in areas adjacent to the area to be repaired. The soil shall be relatively free from large stones, roots, stumps, or other materials that will interfere with subsequent sowing of seed,

compacting, and establishing turf, and shall be approved by the Project Manager before being placed.

901–2.5 **TEMPORARY GRASSING.** Temporary grass shall be planted in lieu of permanent grass if it is not practical to permanent grass within 14 days of the last grassing application. Temporary grass shall conform to the requirements of sections 901-2.1 through sections 901-2.4 with the following exceptions:

A. SEED: Use Annual Rye Grass at the rate of 50 pounds per acre.

B. LIME: Lime may be omitted in temporary grassing operations.

C. HYDROMULCH: Hydromulch may be omitted in temporary grassing operations.

D. STAKING PEGS: Staking pegs may be omitted in temporary grassing, however asphalt binder or tackifier will be required.

All disturbed areas, except those which can be permanently grassed, shall be temporarily grassed. All temporary grass shall be plowed under prior to permanent grassing. The seed bed shall be prepared in accordance with the requirements of these specifications. At the Project Manager's option, the no-till method of overseeding may be used in lieu of plowing.[6]

CONSTRUCTION METHODS

901-3.1 **ADVANCE PREPARATION AND CLEANUP.** After grading of areas has been completed and before applying fertilizer and ground limestone, areas to be seeded shall be raked or otherwise cleared of stones larger than 2 inches (50 mm) in any diameter, sticks, stumps, and other debris that might interfere with sowing of seed, growth of grasses, or subsequent maintenance of grass-covered areas. If any damage by erosion or other causes has occurred after the completion of grading and before beginning the application of fertilizer and ground limestone, the Contractor shall repair such damage. This may include filling gullies, smoothing irregularities, and repairing other incidental damage.

An area to be seeded shall be considered a satisfactory seedbed without additional treatment if it has recently been thoroughly loosened and worked to a depth of not less than 5 inches (125 mm) as a result of grading operations and, if immediately prior to seeding, the top 3 inches (75 mm) of soil is loose, friable, reasonably free from large clods, rocks, large roots, or other undesirable matter, and if shaped to the required grade.

However, when the area to be seeded is sparsely sodded, weedy, barren and unworked, or packed and hard, any grass and weeds shall first be cut or otherwise satisfactorily disposed of, and the soil then scarified or otherwise loosened to a depth not less than 5 inches (125 mm). Clods shall be broken and the top 3 inches (75 mm) of soil shall be worked into a satisfactory seedbed by discing, or by use of cultipackers, rollers, drags, harrows, or other appropriate means.

Place topsoil to a depth of 3 to 6 inches as specified in Section T-905 on area to be grassed. Add lime as required to achieve a soil pH of at least 5.5 but at a minimum of 1.5 tons/acre. After preparation of soil, level areas to be seeded and bring to finish grade. Hand rake smooth, allowing for settlement.[7]

901-3.2 DRY APPLICATION METHOD.

a. **Liming.** Lime shall be applied separately and prior to the application of any fertilizer or seed and only on seedbeds that have previously been prepared as described above. The lime shall then be worked into the top 3 inches (75 mm) of soil after which the seedbed shall again be properly graded and dressed to a smooth finish.

b. **Fertilizing.** Following advance preparations and cleanup fertilizer shall be uniformly spread at the rate that will provide not less than the minimum quantity stated in paragraph 901-2.3.

c. **Seeding.** Grass seed shall be sown at the rate specified in paragraph 901-2.1 immediately after fertilizing, and the fertilizer and seed shall be raked within the depth range stated in the special provisions. Seeds of legumes, either alone or in mixtures, shall be inoculated before mixing or sowing, in accordance with the instructions of the manufacturer of the inoculant. When seeding is required at other than the seasons shown on the plans or in the special provisions, a cover crop shall be sown by the same methods required for grass and legume seeding.

d. **Rolling.** After the seed has been properly covered, the seedbed shall be immediately compacted by means of an approved lawn roller, weighing 40 to 65 pounds per foot (60 to 97 kg per meter) of width for clay soil (or any soil having a tendency to pack), and weighing 150 to 200 pounds per foot (223 to 298 kg per meter) of width for sandy or light soils.

e. **Mulching.** Mulch seeded areas having slopes of four to one or greater with dry mulch per Item T-908. [8]

901-3.3 WET APPLICATION METHOD.

a. **General.** The Contractor may elect to apply seed and fertilizer (and lime, if required) by spraying them on the previously prepared seedbed in the form of an aqueous mixture and by using the methods and equipment described herein. The rates of application shall be as specified in the special provisions.

b. **Spraying Equipment**. The spraying equipment shall have a container or water tank equipped with a liquid level gauge calibrated to read in increments not larger than 50 gallons (190 liters) over the entire range of the tank capacity, mounted so as to be visible to the nozzle operator. The container or tank shall also be equipped with a

mechanical power-driven agitator capable of keeping all the solids in the mixture in complete suspension at all times until used.

The unit shall also be equipped with a pressure pump capable of delivering 100 gallons (380 liters) per minute at a pressure of 100 pounds per square inch (690 kPa). The pump shall be mounted in a line that will recirculate the mixture through the tank whenever it is not being sprayed from the nozzle. All pump passages and pipe lines shall be capable of providing clearance for 5/8 inch (15 mm) solids. The power unit for the pump and agitator shall have controls mounted so as to be accessible to the nozzle operator. There shall be an indicating pressure gauge connected and mounted immediately at the back of the nozzle.

The nozzle pipe shall be mounted on an elevated supporting stand in such a manner that it can be rotated through 360 degrees horizontally and inclined vertically from at least 20 degrees below to at least 60 degrees above the horizontal. There shall be a quick-acting, three-way control valve connecting the recirculating line to the nozzle pipe and mounted so that the nozzle operator can control and regulate the amount of flow of mixture delivered to the nozzle. At least three different types of nozzles shall be supplied so that mixtures may be properly sprayed over distance varying from 20 to 100 feet (6 to 30 m). One shall be a close-range ribbon nozzle, one a medium-range ribbon nozzle, and one a long-range jet nozzle. For case of removal and cleaning, all nozzles shall be connected to the nozzle pipe by means of quick-release couplings.

In order to reach areas inaccessible to the regular equipment, an extension hose at least 50 feet (15 m) in length shall be provided to which the nozzles may be connected.

c. **Mixtures**. Lime, if required, shall be applied separately, in the quantity specified, prior to the fertilizing and seeding operations. Not more than 220 pounds (100 kg) of lime shall be added to and mixed with each 100 gallons (380 liters) of water. Seed and fertilizer shall be mixed together in the relative proportions specified, but not more than a total of 220 pounds (100 kg) of these combined solids shall be added to and mixed with each 100 gallons (380 liters) of water.

All water used shall be obtained from fresh water sources and shall be free from injurious chemicals and other toxic substances harmful to plant life. Brackish water shall not be used at any time. The Contractor shall identify to the Project Manager all sources of water at least 2 weeks prior to use. The Project Manager may take samples of the water at the source or from the tank at any time and have a laboratory test the samples for chemical and saline content. The Contractor shall not use any water from any source that is disapproved by the Project Manager following such tests.

All mixtures shall be constantly agitated from the time they are mixed until they are finally applied to the seedbed. All such mixtures shall be used within 2 hours from the time they were mixed or they shall be

wasted and disposed of at locations acceptable to the Project Manager.

d. **Spraying**. Lime, if required, shall be sprayed only upon previously prepared seedbeds. After the applied lime mixture has dried, the lime shall be worked into the top 3 inches (8 cm), after which the seedbed shall again be properly graded and dressed to a smooth finish.

Mixtures of seed and fertilizer shall only be sprayed upon previously prepared seedbeds on which the lime, if required, shall already have been worked in. The mixtures shall be applied by means of a high-pressure spray that shall always be directed upward into the air so that the mixtures will fall to the ground like rain in a uniform spray. Nozzles or sprays shall never be directed toward the ground in such a manner as might produce erosion or runoff.

Particular care shall be exercised to insure that the application is made uniformly and at the prescribed rate and to guard against misses and overlapped areas. Proper predetermined quantities of the mixture in accordance with specifications shall be used to cover specified sections of known area. Checks on the rate and uniformity of application may be made by observing the degree of wetting of the ground or by distributing test sheets of paper or pans over the area at intervals and observing the quantity of material deposited thereon.

On surfaces that are to be mulched as indicated by the plans or designated by the Project Manager, seed and fertilizer applied by the spray method need not be raked into the soil or rolled. However, on surfaces on which mulch is not to be used, the raking and rolling operations will be required after the soil has dried.

e. **Mulching**. Mulch seeded areas having slopes of four to one or greater with hydromulch per Item T-908. [9]

901-3.4 **MAINTENANCE OF SEEDED AREAS.** The Contractor shall protect seeded areas against traffic or other use by warning signs or barricades, as approved by the Project Manager. Surfaces gullied or otherwise damaged following seeding shall be repaired by regrading and reseeding as directed. The Contractor shall mow, water as directed, and otherwise maintain seeded areas in a satisfactory condition until final inspection and acceptance of the work. Contractor shall maintain grassing to a maximum height of 4-6" as directed by the Project Manager for the duration of the Project until substantial completion. Contractor shall repair damaged mulch and shall eradicate weeds that appear in grassed areas. At completion of grassing operation, remove excess soil and debris from project site.[10]

When either the dry or wet application method outlined above is used for work done out of season, it will be required that the Contractor shall establish a good stand of grass of uniform color and density to the satisfaction of the Project Manager. A grass stand shall be considered adequate when bare spots are one square foot or less, randomly dispersed, and do not exceed 3% of the area seeded. If at the time when the contract has been otherwise completed it is not possible to make an adequate

determination of the color, density, and uniformity of such stand of grass, payment for the unaccepted portions of the areas seeded out of season will be withheld until such time as these requirements have been met.

METHOD OF MEASUREMENT

901-4.1 The quantity of permanent grassing and mulching to be paid for shall be the number of acres, measured on the ground surface, completed and accepted.

901-4.2 The quantity of temporary grassing and mulching to be paid for shall be the number of acres, measured on the ground surface, completed and accepted.

BASIS OF PAYMENT

901-5.1 Payment shall be made at the contract unit price per acre or fraction thereof, for the pay item listed below, which price and payment shall be full compensation for furnishing and placing all material, fertilizer, lime, mulching, watering, mowing, and maintenance of seeded areas as directed by the Project Manager, and for all labor, equipment, tools, and incidentals necessary to complete the work prescribed in this item.

No separate payment will be made for multiple applications and/or repairs to Temporary and Permanent Grassing.

Usage of "Permanent Grassing" or "Temporary Grassing" will be determined at the Project Manager's discretion. The Owner reserves the right to modify or delete this quantity in part or in whole at its sole discretion. In this advent, no adjustment to the unit price will be permitted.

Payment will be made under:

Item T-901A Temporary Grassing and Mulching --per Acre

Item T-901B Permanent Grassing and Mulching -- per Acre

MATERIAL REQUIREMENTS

ASTM C 602	Agricultural Liming Materials
ASTM D 977	Emulsified Asphalt
FED SPEC A-A-1909	Fertilizer
FED SPEC JJJ-S-181	Seeds, Agriculture

MODIFICATION OF STANDARDS - FAA ITEM T-901

1. Section 901-1.1 – Language was added to clarify what items are included in the specification and expectations of the contractor to provide appropriate grassing for each project.

2. Section 901-2.1 – Paragraph 2 – Language was added to require the contractor to provide certificates for the grassing, which is an Erosion Control requirement.

3. Section 901-2.1 – Paragraph 3 – Paragraph added to clarify the requirement for pure seed and need for it to meet applicable State law.

4. Section 901-2.1 – Paragraph 4 – Language added to clarify that additional information is in the project grassing schedule, included as part of the construction plans for the project per Erosion Control requirements.

5. Section 901-2.1 – Paragraph 5 – Paragraph added to address the need for the contractor to grass within a certain period of time to meet Erosion Control requirements.

6. Section 901-2.5 – Section added to address the need and requirements for temporary grassing.

7. Section 901-3.1 – Paragraph 4 – Paragraph added to provide additional clarification for the need to topsoil, lime pH requirements, and additional surface preparation requirements.

8. Section 901-3.2e – Paragraph added to clarify that mulching is required in accordance with Item T-908.

9. Section 901-3.3e – Paragraph added to clarify that mulching is required in accordance with Item T-908.

10. Section 901-3.4 – Paragraph 1 – Language added to require that the contractor mow the grass during the project and that the contractor remove all weeks and excess soil prior to completion.

ITEM T-905 TOPSOILING

DESCRIPTION

905-1.1 This item shall consist of preparing the ground surface for topsoil application, removing topsoil from designated stockpiles or areas to be stripped on the site or from approved sources off the site, and placing and spreading the topsoil on prepared areas in accordance with this specification at the locations shown on the plans or as directed by the Project Manager.

MATERIALS

905-2.1 **TOPSOIL.** Topsoil shall be the surface layer of soil with no admixture of refuse or any material toxic to plant growth, and it shall be reasonably free from subsoil and stumps, roots, brush, stones (2 inches or more in diameter), and clay lumps or similar objects. There shall be no stones in the safety area and stones in these areas shall be removed as directed by the Project Manager. [i]Brush and other vegetation that will not be incorporated with the soil during handling operations shall be cut and removed. Ordinary sods and herbaceous growth such as grass and weeds are not to be removed but shall be thoroughly broken up and intermixed with the soil during handling operations. The topsoil or soil mixture, unless otherwise specified or approved, shall have a pH range of approximately 5.5 pH to 7.6 pH, when tested in accordance with the methods of testing of the association of official agricultural chemists in effect on the date of invitation of bids. The organic content shall be not less than 3% nor more than 20% as determined by the wet-combustion method (chromic acid reduction). There shall be not less than 20% nor more than 80% of the material passing the 200 mesh (0.075 mm) sieve as determined by the wash test in accordance with ASTM C 117.

Natural topsoil may be amended by the Contractor with approved materials and methods to meet the above specifications.

905-2.2 **INSPECTION AND TESTS.** Within 10 days following acceptance of the bid, the Project Manager shall be notified of the source of topsoil to be furnished by the Contractor. The topsoil shall be inspected by the Project Manager, Contractor, and grassing sub-consultant prior to stockpiling material[ii] to determine if the selected soil meets the requirements specified and to determine the depth to which stripping will be permitted. At this time, the Contractor may be required to take representative soil samples from several locations within the area under consideration and to the proposed stripping depths, for testing purposes as specified in 905-2.1.

CONSTRUCTION METHODS

905-3.1 **GENERAL.** Areas to be topsoiled shall be shown on the plans. If topsoil is available on the site, the location of the stockpiles or areas to be stripped of topsoil and the stripping depths shall be shown on the plans.

Suitable equipment necessary for proper preparation and treatment of the ground surface, stripping of topsoil, and for the handling and placing of all required materials shall be on hand, in good condition, and approved by the Project Manager before the various operations are started.

905-3.2 **PREPARING THE GROUND SURFACE.** Immediately prior to dumping and spreading the topsoil on any area, the surface shall be loosened by discs or spike-tooth harrows, or by other means approved by the Project Manager, to a minimum depth of 2 inches (50 mm) to facilitate bonding of the topsoil to the covered subgrade soil. The surface of the area to be topsoiled shall be cleared of all stones larger than 2 inches (50 mm) in any diameter and all litter or other material which may be detrimental to proper bonding, the rise of capillary moisture, or the proper growth of the desired planting. Limited areas as shown on the plans, which are too compact to respond to these operations, shall receive special scarification.

Grades on the area to be topsoiled, which have been established by others as shown on the plans, shall be maintained in a true and even condition. Where grades have not been established, the areas shall be smooth-graded and the surface left at the prescribed grades in an even and properly compacted condition to prevent, insofar as practical, the formation of low places or pockets where water will stand.

905-3.3 **OBTAINING TOPSOIL.** Prior to the stripping of topsoil from designated areas, any vegetation, briars, stumps and large roots, rubbish or stones found on such areas, which may interfere with subsequent operations, shall be removed using methods approved by the Project Manager. Heavy sod or other cover, which cannot be incorporated into the topsoil by discing or other means shall be removed at no additional cost to the Owner. [iii]

When suitable topsoil is available on the site, the Contractor shall remove this material from the designated areas and to the depth as directed by the Project Manager. The topsoil shall be spread on areas already tilled and smooth-graded, or stockpiled in areas approved by the Project Manager. Any topsoil stockpiled by the Contractor shall be re-handled and placed without additional compensation. Any topsoil that has been stockpiled on the site by others, and is required for topsoiling purposes, shall be removed and placed by the Contractor. The sites of all stockpiles and areas adjacent thereto which have been disturbed by the Contractor shall be graded if required and put into a condition acceptable for seeding at no additional cost to the Owner.[iv]

When suitable topsoil is secured off the airport site, the Contractor shall locate and obtain the supply, subject to the approval of the Project Manager. The Contractor shall notify the Project Manager sufficiently in advance of operations in order that necessary measurements and tests can be made. The Contractor shall remove the topsoil from approved areas and to the depth as directed. The topsoil shall be hauled to the site of the work and placed for spreading, or spread as required. Any topsoil hauled to the site of the work and stockpiled shall be re-handled and placed without additional compensation.

905-3.4 **PLACING TOPSOIL.** The topsoil shall be evenly spread on the prepared areas to a uniform depth of 2 inches (50 mm) after compaction, unless

otherwise shown on the plans or stated in the special provisions. Spreading shall not be done when the ground or topsoil is frozen, excessively wet, or otherwise in a condition detrimental to the work. Spreading shall be carried on so that turfing operations can proceed with a minimum of soil preparation or tilling.

After spreading, any large, stiff clods and hard lumps shall be broken with a pulverizer or by other effective means, and all stones or rocks (2 inches (50 mm) or more in diameter), roots, litter, or any foreign matter shall be raked up and disposed of by the Contractor. Stones less the 2 inches shall also be removed from safety areas as required by the Project Manager at no additional cost if the Project Manager is concerned that the stones may create a FOD issues.[v] After spreading is completed, the topsoil shall be satisfactorily compacted by rolling with a cultipacker or by other means approved by the Project Manager. The compacted topsoil surface shall conform to the required lines, grades, and cross sections. Any topsoil or other dirt falling upon pavements as a result of hauling or handling of topsoil shall be promptly removed.

METHOD OF MEASUREMENT

905-4.1 Topsoil obtained on the site shall be measured by the number of square yards of topsoil measured in its original position and stripped or excavated. Topsoil stockpiled by others and removed for topsoiling by the Contractor shall be measured by the number of square yards of topsoil measured in final place. Topsoil shall be measured by volume in square yards computed by survey or other approved methods.

BASIS OF PAYMENT

905-5.1 Payment will be made at the contract unit price per square yard for topsoiling (obtained on the site). This price shall be full compensation for the stripping, stockpiling, and furnishing all materials and for all preparation, placing, and spreading of the materials, and for all labor, equipment, tools, and incidentals necessary to complete the item.

Payment will be made under:

Item T-905 Topsoiling (Obtained on Site)—per Cubic Yard

TESTING MATERIALS

ASTM C 117 Materials Finer than 75-μm (No. 200) Sieve in Mineral Aggregates by Washing

MODIFICATION OF STANDARDS - FAA ITEM T-905

i. Section 905-2.1 – Paragraph 1 – Sentence was added to avoid stones in the safety areas, which could create FOD issues.

ii. Section 905-2.2 – Paragraph 1 – Language was added to clarify that the Project Manager, Contractor, and grassing subcontractor shall inspect and approve of the topsoil to be used. The intent is to minimize FOD issues and also provide a material that will be suitable for growing grass.

iii. Section 905-3.3 – Paragraph 1 – Language was added to clarify that removing stumps and other material stated in the paragraph shall be included in the unit price.

iv. Section 905-3.3 – Paragraph 2 – Language was added to clarify that the contractor shall grade and stabilize areas and this shall be included in the unit price.

v. Section 905-3.4 – Paragraph 2 – Sentence was added to avoid stones in the safety areas, which could create FOD issues

ITEM T-908 MULCHING

DESCRIPTION

908-1.1 This item shall consist of furnishing, hauling, placing, and securing mulch on surfaces indicated on the plans or designated by the Project Manager.

MATERIALS

908-2.1 **MULCH MATERIAL.** Acceptable mulch shall be the materials listed below or any approved locally available material that is similar to those specified. Low grade, musty, spoiled, partially rotted hay, straw, or other materials unfit for animal consumption will be acceptable. Mulch materials, which contain matured seed of species that would volunteer and be detrimental to the proposed overseeding, or to surrounding farm land, will not be acceptable. Straw or other mulch material which is fresh and/or excessively brittle, or which is in such an advanced stage of decomposition as to smother or retard the planted grass, will not be acceptable.

a. **Hay.** Hay shall be native hay, sudan grass hay, broomsedge hay, legume hay, or similar hay or grass clippings.

b. **Straw.** Straw shall be the threshed plant residue of oats, wheat, barley, rye, or rice from which grain has been removed.

c. **Hay Mulch Containing Seed.** Hay mulch shall be mature hay containing viable seed of native grasses or other desirable species stated in the special provisions or as approved by the Project Manager. The hay shall be cut and handled so as to preserve the maximum quantity of viable seed. Hay mulch that cannot be hauled and spread immediately after cutting shall be placed in weather-resistant stacks or baled and stored in a dry location until used.

d. **Manufactured Mulch.** Cellulose-fiber or wood-pulp mulch shall be products commercially available for use in spray applications. Mulch used for hydroseeding and hydromulching shall be wood cellulose fiber containing no germination inhibiting or growth inhibiting agents. Mulch shall contain 8-12% moisture, 99.2 to 99.6% organic matter, 0.4 to 0.8% ash, shall have a pH of 4.3 to 5.3%, and shall have a minimum water holding capacity of 1050 grams water/100 grams fiber.[i]

e. **Asphalt Binder.** Asphalt binder material shall conform to the requirements of ASTM D 977, Type SS-1 or RS-1.

908-2.2 **INSPECTION.** Within five (5) days after acceptance of the bid, the Project Manager shall be notified of sources and quantities of mulch materials available and the Contractor shall furnish him with representative samples of the materials to be used. These samples may be used as standards with the

approval of the Project Manager and any materials brought on the site that do not meet these standards shall be rejected.

CONSTRUCTION METHODS

908-3.1 **MULCHING.** Before spreading mulch, all large clods, stumps, stones, brush, roots, and other foreign material shall be removed from the area to be mulched. Mulch shall be applied immediately after seeding. The spreading of the mulch may be by hand methods, blower, or other mechanical methods, provided a uniform covering is obtained.

Mulch material shall be furnished, hauled, and evenly applied on the area shown on the plans or designated by the Project Manager. Straw or hay shall be spread over the surface to a uniform thickness at the rate of 2 to 3 tons per acre (1800-2700 kg per acre) to provide a loose depth of not less than 1-1/2 inches (37 cm) nor more than 3 inches (75 mm). Other organic material shall be spread at the rate directed by the Project Manager. Mulch may be blown on the slopes and the use of cutters in the equipment for this purpose will be permitted to the extent that at least 95% of the mulch in place on the slope shall be 6 inches (150 mm) or more in length. When mulches applied by the blowing method are cut, the loose depth in place shall be not less than 1 inch (25 mm) nor more than 2 inches (50 mm).

908-3.2 **SECURING MULCH.** The mulch shall be held in place by light discing, a very thin covering of topsoil, small brush, pins, stakes, wire mesh, asphalt binder, or other adhesive material approved by the Project Manager. Where mulches have been secured by either of the asphalt binder methods, it will not be permissible to walk on the slopes after the binder has been applied. The Contractor is warned that in the application of asphalt binder material he must take every precaution to guard against damaging or disfiguring structures or property on or adjacent to the areas worked and that he will be held responsible for any such damage resulting from his/her operations. Use a tackifier or binder listed on the Georgia Department of Transportation's Laboratory Qualified Products Manual at the rates specified by the manufacturer.[ii]

If the "peg and string" method is used, the mulch shall be secured by the use of stakes or wire pins driven into the ground on 5-foot (150 m) centers or less. Binder twine shall be strung between adjacent stakes in straight lines and crisscrossed diagonally over the mulch, after which the stakes shall be firmly driven nearly flush to the ground to draw the twine down tight onto the mulch.

908-3.3 **CARE AND REPAIR.**

a. The Contractor shall care for the mulched areas until final acceptance of the project. Such care shall consist of providing protection against traffic or other use by placing warning signs, as approved by the Project Manager, and erecting any barricades that may be shown on the plans before or immediately after mulching has been completed on the designated areas.

The Contractor shall be required to repair or replace any mulching that is defective or becomes damaged until the project is finally accepted. When, in the judgment of the Project Manager, such defects or damages are the result of poor workmanship or failure to meet the requirements of the specifications, the cost of the necessary repairs or replacement shall be borne by the Contractor. However, once the Contractor has completed the mulching of any area in accordance with the provisions of the specifications and to the satisfaction of the Project Manager, no additional work at his/her expense will be required, but subsequent repairs and replacements deemed necessary by the Project Manager shall be made by the Contractor and will be paid for as additional or extra work.

b. If the "asphalt spray" method is used, all mulched surfaces shall be sprayed with asphalt binder material so that the surface has a uniform appearance. The binder shall be uniformly applied to the mulch at the rate of approximately 8.0 gallons (32 liters) per 1,000 square feet (100 square meters), or as directed by the Project Manager, with a minimum of 6.0 gallons (24 liters) and a maximum of 10 gallons (40 liters) per 1,000 square feet (100 square meters) depending on the type of mulch and the effectiveness of the binder securing it. Bituminous binder material may be sprayed on the mulched slope areas from either the top or the bottom of the slope. An approved spray nozzle shall be used. The nozzle shall be operated at a distance of not less than 4 feet (120 cm) from the surface of the mulch and uniform distribution of the bituminous material shall be required. A pump or an air compressor of adequate capacity shall be used to insure uniform distribution of the bituminous material.

c. If the "asphalt mix" method is used, the mulch shall be applied by blowing, and the asphalt binder material shall be sprayed into the mulch as it leaves the blower. The binder shall be uniformly applied to the mulch at the rate of approximately 8.0 gallons (32 liters) per 1,000 square feet (100 square meters) or as directed by the Project Manager, with a minimum of 6.0 gallons (24 liters) and a maximum of 10 gallons (40 liters) per 1,000 square feet (100 square meters) depending on the type of mulch and the effectiveness of the binder securing it.

METHOD OF MEASUREMENT

908-4.1 Mulching shall not be measured for payment but will be incidental to T-901.

BASIS OF PAYMENT

908-5.1 Payment will be incidental to T-901 Grassing. The price shall be full compensation for furnishing all materials and for placing and anchoring the materials, and for all labor, equipment, tools, and incidentals necessary to complete the item.

MATERIAL REQUIREMENTS

ASTM D 977 Emulsified Asphalt

MODIFICATION OF STANDARDS - FAA ITEM T-908

i. Section 908-2.1d – Language added to clarify requirements of material used for hydromulching.

ii. Section 908-3.2 – Paragraph 1 – Language added to require that any tackifier or binder be a State approved product.

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

#13ITB90138K-JD-Obstruction Clearing 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 **#13ITB90138K-JD-Obstruction Clearing 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.

IN TESTIMONY THEREOF, the PRINCIPAL and SURETY have caused these presents to be duly signed and sealed this _____day of _____, 2013

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)

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 _____
(Insert name of Contractor)
(hereinafter called the "Principal") and _____(hereinafter called the
(Insert name of Surety)
"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 **#13ITB90138K-JD-Obstruction Clearing for Fulton County Airport-Brown Field**, as 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

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 _____(hereinafter called the
(Insert name of Surety)
"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 _____, which is incorporated herein by reference in its entirety (hereinafter called the "Contract"), for construction-type services of a project known as **#13ITB90138K-JD-Obstruction Clearing 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 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

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

#13ITB90138K-JD-Obstruction Clearing 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 **#13ITB90138K-JD-Obstruction Clearing 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.

IN TESTIMONY THEREOF, the PRINCIPAL and SURETY have caused these presents to be duly signed and sealed this _____day of _____, 2013

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)

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 _____
(Insert name of Contractor)
(hereinafter called the "Principal") and _____(hereinafter called the
(Insert name of Surety)
"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 **#13ITB90138K-JD-Obstruction Clearing for Fulton County Airport-Brown Field**, as 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

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 _____(hereinafter called the
(Insert name of Surety)
"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 _____, which is incorporated herein by reference in its entirety (hereinafter called the "Contract"), for construction-type services of a project known as **#13ITB90138K-JD-Obstruction Clearing 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 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 5

INSURANCE AND RISK MANAGEMENT PROVISIONS

INSURANCE AND RISK MANAGEMENT PROVISIONS

#13ITB90138K-JD-Obstruction Clearing for Fulton County Airport-Brown Field

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.

Upon award, the Contractor/Vendor must maintain at their expense, insurance with policy limits equal to or greater than the limits described below. 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	Aggregate Limit	$2,000,000
Personal and Advertising Injury	Limits	$1,000,000

Damage to Rented Premises	Limits	$100,000

3. **BUSINESS AUTOMOBILE LIABILITY INSURANCE**
   Combined Single Limits Each Occurrence $1,000,000
   (Including operation of non-owned, owned, and hired automobiles).

4. **UMBRELLA LIABILITY** Per Occurrence $1,000,000
   (In excess of above noted coverages)

Certificates of Insurance

Certificates shall state that the policy or policies shall not expire, be cancelled or altered without at least thirty (30) days prior written notice to Fulton County Government. Policies and Certificates of Insurance are to list Fulton County Government as an Additional Insured (except for Workers' Compensation) and shall conform to all terms and conditions (including coverage of the indemnification and hold harmless agreement) contained in the Insurance and Risk Management Provisions.

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 agrees to name the Owner and all other parties required of the Contractor/Vendor shall be included as additional insureds on the CGL, using ISO Additional Insured Endorsement forms CG 2010 11/85 or its equivalent coverage to the additional insureds. This insurance for the additional insureds shall be as broad as the coverage provided for the named Contractor. It 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.

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 **Insurance in no way Limits the Liability of the Contractor/Vendor.**

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.

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 t protect against potential hazards for the work being performed.

INDEMNIFICATION AND HOLD HARMLESS AGREEMENT

Contractor/Vendor hereby agrees to release, indemnify, defend and hold harmless Fulton County, its Commissioners, officers, employees, sub-consultants, successors, assigns and agents, from and against any and all losses (including death), claims, damages, liabilities, costs and expenses (including but not limited to all actions, proceedings, or investigations in respect thereof and any costs of judgments, settlements, court costs, attorney's fees or expenses, regardless of the outcome of any such action, proceeding, or investigation), caused by, relating to, based upon or arising out of any act or omission by Consultant, its directors, officers, employees, sub-consultants, successors, assigns or agents, or otherwise in connection (directly or indirectly) with its acceptance, or the performance, or nonperformance, of its obligations under these agreements. Such obligations shall not be construed to negate, abridge or otherwise reduce any other rights or obligations of indemnity which would otherwise exist as to any party or person as set forth in this paragraph.

Contractor/Vendor further agrees to protect, defend, indemnify and hold harmless Fulton County, its Commissioners, officers, employees, sub-consultants, successors, assigns and agents from and against any and all claims or liability for compensation under the Worker's Compensation Act, Disability Benefits Act, or any other employee benefits act arising out of injuries sustained by any employees of Consultant. These indemnities shall not be limited by reason of the listing of any insurance coverage.

CONTRACTOR/VENDOR ACKNOWLEDGES HAVING READ, UNDERSTANDING, AND AGREEING TO COMPLY WITH THIS INDEMNIFICATION AND HOLD HARMLESS AGREEMENT, 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 ***(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
- DBE Certification with Georgia Department of Transportation's Equal Employment Opportunity (EEO) Office
- Georgia Department of Transportation Certification as a Contractor/Sub-Contractor

FORM A: NON-COLLUSION AFFIDAVIT OF BIDDER/OFFEROR

STATE OF GEORGIA

COUNTY OF FULTON

I, _____ certify that pursuant to Fulton County Code Section 2-320 (11), 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) # to #_____, 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)

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)

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)

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 2-322 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 statues 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 Chapter 6, Article B, Minority Business Enterprise Affirmative Action Program and certified as such by the County) 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 or 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 or\f 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 services 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* [any of the electronic verification of work authorization programs operated by the United States Department of Homeland Security or any equivalent federal work authorization program operated by the United States Department of Homeland Security to verify information of newly hired employees, pursuant to the Immigration Reform and Control Act of 1986 (IRCA), P.L. 99-603], in accordance with the applicability provisions and deadlines established in O.C.G.A. 13-10-91.

The undersigned further agrees that, should it employ or contract with any subcontractor(s) in connection with the physical performance of services 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 Subcontract 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: _____

NOTE:

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

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 services 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* [any of the electronic verification of work authorization programs operated by the United States Department of Homeland Security or any equivalent federal work authorization program operated by the United States Department of Homeland Security to verify information of newly hired employees, pursuant to the Immigration Reform and Control Act of 1986 (IRCA), P.L. 99-603], in accordance with the applicability provisions and deadlines established in O.C.G.A. 13-10-91.

_____
EEV/Basic Pilot Program* User Identification Number

_____
BY: Authorized Officer of Agent
(Insert Subcontract 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: _____

NOTE:

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

INSTRUCTIONS

Due to the Federal funding associated with this project, the Office of Contract Compliance is requiring that you complete Section 7.

SECTION 7 - DISADVANTAGED BUSINESS ENTERPRISE REQUIREMENTS

Prospective Fulton County Bidders:

This project is Federally Funded in whole or in part and requires that information regarding Disadvantaged Business Enterprises (DBE) be included in this solicitation document. Please read all of the information carefully in particular the DBE goals that have been established for this project.

Although Fulton County maintains a directory of certified M/FBEs these vendors may or may not be certified Disadvantaged Business Enterprises (DBEs). If you are currently certified under Georgia Uniform Certification Program (UCP) Disadvantaged Business Enterprise Certification process you are eligible to participate in this solicitation as a DBE prime or subcontractor.

Should you have any questions about any of the information included in this section, please feel free to contact Joyce Daniel, Assistant Purchasing Agent at joyce.daniel@fultoncountyga.gov.

EQUAL OPPORTUNITY AND DISADVANTAGED BUSINESS ENTERPRISE UTILIZATION

The successful Bidder(s)/Offeror(s) will be required to comply with all applicable Equal Opportunity laws and regulations, including the Fulton County Nondiscrimination in Contracting and Procurement Ordinance approved by the Board of Commissioners on July 7, 1999, prohibiting discrimination in purchasing and contracting based on race, color, sex, religion or national origin. A minimum goal has been established for participation in this Contract by Disadvantaged Business Enterprises of **15.1%** of the total price of the Contract. Bidder(s)/Offeror(s) will be required to demonstrate maximum satisfactory efforts to achieve this goal.

PROPOSAL EVALUATION AND AWARD

The selection of a successful Bidder(s)/Offeror(s) will also be based on an evaluation of the information submitted under the Disadvantaged Business Enterprise Utilization Section.

LETTER OF INTENT

All Bidder(s)/Offeror(s) are required to provide, at the time of proposal submittal, a copy of Schedule of Intended Subcontractor Utilization Exhibit "C" and Attachment "A", as well as copies of Letters of Intent fully executed by sub-contractors Exhibit "D" and Attachment "B" that the prime plans to use on this contract. The Letter of Intent must specify a Description of Work the subcontractor will perform, dates of utilization as well as dollar value of the work. DBEs receiving Letters of Intent will have to be listed on the Schedule of DBE Participation form in the DBE Specification and they must have a current certification on file as a DBE with USDOT/FAA in accordance with the requirements in 49 CFR Parts 26.

FULTON COUNTY
DISADVANTAGED BUSINESS ENTERPRISE

POLICY STATEMENT

It is the policy of the County to ensure that DBEs, as defined in 49 CFR Part 26, have an equal opportunity to receive and participate in USDOT/FAA – assisted contracts. It is also our policy:

1. *To ensure nondiscrimination in the award and administration of USDOT/FAA assisted contracts;*
2. *To create a level playing field on which DBEs can compete fairly for USDOT/FAA assisted contracts;*
3. *To ensure that the DBE Program is narrowly tailored in accordance with applicable law;*
4. *To ensure that only firms that meet 49 CFR Part 26 eligibility standards are permitted to participate as DBEs;*
5. *To help remove barriers to the participation of DBEs in USDOT/FAA assisted contracts, and*
6. *To assist the development of firms that can compete successfully in the marketplace outside the DBE Program.*

IMPLEMENTATION OF DBE POLICY
CONTRACT GOALS

Fulton County complies with contract goals on those federally funded contracts that have subcontracting possibilities.

Each solicitation for which a contract goal has been established requires the bidders/offeror's to submit the following information as part of their bid/proposal on Exhibit "C" and "D" of the M/FBE documents and Attachment "A" and "B" of the DBE documents:

1. *The names, addresses and phone numbers of DBE firms that will participate in the contract;*
2. *A description of the work that each DBE will perform;*
3. *The dollar amount of the participation of each DBE firm participating;*
4. *Written and signed documentation of commitment to use DBE subcontractor(s) whose participation it submits to meet the contract goal;*
5. *Written and signed confirmation from the DBE that he/she is participating in the contract as provided in the prime contractor's commitment; and*
6. *If the contract goal is not met, documented evidence of good faith efforts made to meet the goal on this particular project.*

Fulton County has designated the Office of Contract Compliance as its DBE Liaison Office and Rholanda Stanberry, Contract Compliance Administrator or her designated representative as the DBE Liaison Officer (DBELO). The contact information is as follows:

130 Peachtree Street, SW
Suite 1167
Atlanta, Georgia 30303
404-612-5800

DEMONSTRATION OF "GOOD FAITH EFFORTS"

The obligation of the bidder/offeror is to make good faith efforts. The bidder/offeror can demonstrate that he has done so either by meeting the contract goal or documenting good faith efforts. The DBELO is responsible for determining whether a bidder/offeror who has not met the contract goal has documented sufficient good faith efforts to be regarded as responsive.

Fulton County will ensure that all information is complete and accurate and adequately documents the bidder/offeror's good faith efforts before the County commits to the performance of the contract by the bidder/offeror. Bidder's/offeror's that are informed by the Office of Contract Compliance that they have not met the "good faith efforts" requirements are entitled to administrative reconsideration of that determination, per 49 CFR 26.53(d).

MONITORING OF DBE POLICY

Fulton County will require prime contractors to maintain records and documents of payments of DBEs for three years following the performance of the contract. Those records must be made available for inspection upon request by any authorized representative of Fulton County or GDOT. This reporting requirement also extends to any certified DBE subcontractor.

Fulton County will keep a running tally of actual payments to DBE firms for work committed to DBE firms at the time of the contract award.

The Office of Contract Compliance Disadvantaged Business Enterprise Liaison Officer (OCC-DBELO) or the designated representative will perform interim audits of contract payments to DBEs. The audit will review payments to DBE subcontractors to ensure that the actual amount paid to DBE subcontractors equals or exceeds the dollar amounts stated in the schedule of DBE participation.

PROMPT PAYMENT

The prime contractor agrees to pay each subcontractor under this prime contract for satisfactory performance of its contract no later than 48 hours from receipt of each payment the prime contractor receives from Fulton County. The prime contractor agrees further to return retainage payments to each subcontractor within 48 hours after the satisfactorily completion of all work on project.

DISADVANTAGED BUSINESS ENTERPRISE CONTRACT GOALS PROJECT:

Part I. The Disadvantaged Business Enterprise (DBE) contract goal for services associated with this project is. DBE participation may be in the form of a prime contractor, a joint venture arrangement, subcontractors, suppliers and/or other arrangements that qualify under 49 CFR, Section 26.55.

DBE PROGRAM REMINDERS

1. **DBE PLAN.** All proposals must contain a DBE Participation plan in accordance with the goals set forth above. The DBE plan must identify each DBE's name address, and contact name, work description, and contract amount.

2. **Subcontractor and Supplier Participation**. Disadvantaged business enterprise participation may only be met through certified businesses that meet the standards of 49 CFR 26, Subparts D and E. Each prime contractor must meet the requirements of the DBE program.

3. **Failure to Meet DBE Goals**. Any bidder unable to meet the DBE goals must document the good faith efforts it made to meet the goals. Documentation must follow the requirements of the DBE plan pursuant to 49 CFR Part 26. If Fulton County determines that good faith efforts were not made, the bidder is entitled to administrative reconsideration under 49 CFR 26.53.

4. **DBE Certification.** DBE Certification will be handled in compliance with 49 CFR Part 26 and the Georgia UCP as set forth in this document.

5. **Reporting.** The successful bidder must submit monthly DBE participation reports as well as an Exhibit "G", to the Office of Contract Compliance Disadvantaged Business Enterprise Liaison Officer, in a form prescribed by the Office of Contract Compliance.

6. **DBE Program**. The DBE Program is governed by the provisions of 49 CFR Part 26.

7. **Contract Assurance.** The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, sex, religion, or sexual orientation in the award and performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as Fulton County deems appropriate.

CERTIFICATION

To be certified as a DBE, a firm must meet all certification eligibility standards of Subpart D and E of 49 CFR Part 26. Fulton County is currently a member of the Georgia Unified Certification Program and will accept the certification decisions made by the certifying members of the UCP. Currently the certifying members are GDOT and MARTA.

1. The GDOT DBE certification application forms and documentation can be acquired from GDOT. For information about the certification process or to apply for certification, firms should contact: Georgia Department of Transportation, Equal Opportunity Division, One Georgia Center, 600 West Peachtree Street, N.W., Atlanta, Georgia 30308, (404) 631-1990 or (http://www.dot.state.ga.us/dot/eeo-div).

2. Fulton County participates in the Unified Certification Program (UCP) developed by local municipalities and the Georgia Department of Transportation's Equal Opportunity Division and approved by USDOT.

3. Any firm or complainant may appeal GDOT's certification decision to USDOT/FAA. The County will promptly implement any USDOT/FAA certification appeal decisions affecting the eligibility of DBEs for our USDOT/FAA assisted contracting.

4. If a business is presumed to meet DBE standards at the time of bid/proposal opening and is later determined not eligible Fulton County will immediately notify the bidder/offeror. The bidder/offeror on this project will then be allowed and expected to substitute another DBE vendor certified under 49 CFR Part 26, to ensure that DBE participation requirements are met.

   During the life of this contract, the prime contractor must notify the Fulton County Disadvantaged Business Enterprise Liaison Officer (DBELO) immediately if any of its DBE participants are no longer available to do work under the contract, pursuant to 40 CFR Part 26.53(f). The prime contractor is then required to make

good faith efforts to identify a substitute DBE firm(s) and, once the County approves the substitution, the prime is then required to provide the new or amended subcontractors documentation to the Office of Contract Compliance.

ATTACHMENT "A"

DISADVANTAGED BUSINESS ENTERPRISE SUBCONTRACTOR UTILIZATION

List all Disadvantaged Business Enterprises *(DBE)* to be used as subcontractors on this project. All DBEs proposed for utilization on this project must be certified by GDOT or another certifying entity as described in 49 CFR Part 26 prior to utilization on this project.

Fulton County Certification Expiration Date	Subcontractor	Contactor(s) Address and Phone Number	Description of work to be subcontracted	Projected Subcontractor Dollar Amount	Percentage of Contract Value

Company Name _____ **Project Name** _____ **Project Number:** _____

ATTACHMENT "B"

SUBCONTRACTOR UTILIZATION

List all subcontractors, including lower tiers, to be used on this project. All DBEs proposed for utilization on this project must be certified by GDOT or another certifying entity as described in 49 CFR Part 26 prior to utilization on this project and specifically be identified on Form 1 or Form 2. (Please add additional Attachment "B's" as needed).

Fulton County Certification Expiration Date	Subcontractor	Contactor(s) Address and Phone Number	Description of work to be subcontracted	Projected Subcontractor Dollar Amount	Percentage of Contract Value

Company Name _____ **Project Name** _____ **Project Number:** _____

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**_____

GUIDANCE CONCERNING GOOD FAITH EFFORTS

I. When, as a recipient, you establish a contract goal on a DOT-assisted contract, a bidder must, in order to be responsible and/or responsive, make good faith efforts to meet the goal. The bidder can meet this requirement in either two ways. First, the bidder can meet the goal, documenting commitments for participation by DBE firms sufficient for this purpose. Second, even if it doesn't meet the goal, the bidder can document adequate good faith efforts. This means that the bidder must show that it took all necessary and reasonable steps to achieve a DBE goal or other requirement of this part which, by their scope, intensity, and appropriateness to the objective, could be expected to obtain sufficient DBE participation, even if they were not fully successful.

II. In any situation in which you have established a contract goal, part 26 requires you to use the good faith efforts mechanism of this part. As a recipient, it is up to you to make a fair and reasonable judgment whether a bidder that did not meet the foal made adequate good faith efforts. It is important for you to consider the quality, quantity, and intensity of the different kinds of efforts that the bidder has made. The efforts employed by the bidder should be those that one could reasonably expect a bidder to take if the bidder were actively and aggressively trying to obtain DBE participation sufficient to meet the DBE contract goal. Mere pro forma efforts are not good faith efforts to meet the DBE contract requirements. We emphasized, however, that your determination concerning the sufficiency of the firm's good faith efforts is a judgment call: meeting quantitative formulas is not required.

III. The Department also strongly cautions against requiring that a bidder meet a contract goal (i.e., obtain a specific amount of DBE participation) in order to be awarded a contract, even though the bidder makes adequate good faith efforts showing. This rule specifically prohibits you from ignoring bona fide good faith efforts.

IV. The following is a list of types of actions which you should consider as part of the bidder's good faith efforts to obtain DBE participation. It is not intended to be a mandatory checklist, not is it intended to be exclusive or exhaustive. Other factors or types of efforts may be relevant in appropriate cases.

A. Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBEs who have the capability to perform the work of the contract. The bidder must solicit this interest with in sufficient time to allow the DBEs to respond to the solicitation. The bidder must determine with certainty if the DBEs are interested by taking appropriate steps to follow up initial solicitations.

B. Selecting portions of the work to be performed by DBEs in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime contractor might be otherwise prefer to perform these work items with its own forces.

C. Providing interested DBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.

D. (1) Negotiating in good faith with interested DBEs. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or materials needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiations includes the names, addresses, and telephone numbers of DBEs that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could be reached for DBEs to perform the work.

(2) A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBEs is not in itself sufficient reason or a bidder's failure to meet the contract DBE goal, as long as such cost are reasonable. Also, the ability or desire of a prime contractor to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Prime contracts are not, however, required to accept higher quotes from DBEs if the price difference is excessive and unreasonable.

E. Not ejecting DBEs as being unqualified without sounds reasons based on a thorough investigation of their capabilities. The contractor's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are legitimate caused for the rejection of non-solicitation of bids in the contractor's effort to meet the project goal.

F. Making efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance as required by the recipient or contractor.

G. Making efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.

H. Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state and Federal minority/woman business assistance offices; and other organizations as allowed on a case–by-case basis to provide assistance in the recruitment and placement of DBEs.

V. In determining whether a bidder has made good faith efforts, you may take into account the performance of other bidders in meeting the contract. For example, when the apparent successful bidder fails to meet the contract goal, but others meet it, you may reasonably raise the question of whether, with additional reasonable efforts, the apparent successful bidder could have met the goal. If the apparent successful bidder fails to meet the goal, but meets or exceeds the DBE participation obtained by other bidders, you may view this, in conjunction with other factors, as evidence of the apparent successful bidder having made good faith efforts.

DOCUMENTATION OF GOOD FAITH EFFORTS

A bid may only be deemed DBE responsive if the entire goals has been met or if a sufficient showing of good faith efforts has been made in accordance with "49 CFR Part 26.53".

Company Name _____

Project Number _____

Project Name _____

Attach a thorough, detailed statement describing every step taken in an effort to meet DBE goal. Attach detailed documentary evidence supporting the efforts described in the statement. If the bidder is notified that it has failed to meet goal or document sufficient good faith efforts to meet the goal, the bidder is entitled to administrative reconsideration as described in 49 CFR 26.53(d).

FULTON COUNTY CERTIFICATE OF COMPLIANCE

The undersigned has prepared and submitted all the documents attached hereto. The documents have been prepared with a full understanding of the County's goals and objectives with respect to increased opportunity in the proposed work to be undertaken in the performance of this project. It is the company's intent to achieve the Disadvantaged Business Enterprise (DBE) goals as well as meet the requirements of the County's Non-Discrimination Ordinance in Purchasing and Contracting.

All information and representations contained herein and submitted with this bid or proposal are true and correct.

_____ _____

Witness

Signature
Company Authorized Representative

_____

Print Name
Company Authorized Representative

Date: _____

Company Name: _____

Project Number: _____

Project Name: _____

_____

Notary

_____

My Commission Expires

FULTON COUNTY FIRST SOURCE JOBS PROGRAM

STATEMENT OF POLICY:

It is the policy of Fulton County Government to provide employment opportunities to the citizens of Fulton County. This policy will apply to all contracts procured through the Department of Purchasing & Contract Compliance valued in excess of $200,000. The Prime Contractor is expected to utilize the First Source Jobs Program to fill 50% of the entry level jobs which arise as a result of any project funded in whole or in part with County funds with residents of Fulton County.

PURPOSE:

The purpose of this policy is to create a pool of employable persons who are residents of Fulton County to be called upon as a source to fill jobs created as a result of any eligible project funded in whole or in part with County funds in order to provide stable economic opportunities for families throughout the County. The First Source Jobs Program will be implemented by the Department of Purchasing & Contract Compliance and the Office of Workforce Development.

MONITORING POLICY:

Upon execution of a contract with Fulton County Government, the First Source Jobs Agreement (FSJ Form 2) will become a part of the contract between the bidder/proposer and Fulton County Government. The First Source Jobs Program will be monitored during routine site visits by the Office of Contract Compliance along with the Office of Workforce Development.

FULTON COUNTY

First Source Jobs Program Information

Company Name: _____

Project Number: _____

Project Name: _____

The following entry-level positions will become available as a result of the above referenced contract with Fulton County.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

Include a job description and all required qualifications for each position listed above.

Identify a company representative and contact phone number who will be responsible for coordinating with the First Source Jobs Program:

Company Representative: _____

Phone Number: _____

Email Address: _____

FORM 1

FULTON COUNTY
First Source Jobs Program Agreement

Awarded Contractor's Name: _____

Formal Contract Name: _____

RFP/ITB Number: _____

Contact Person: _____

Contact Phone: _____

The contractor listed above agrees to the following:

1. The contractor shall make a good faith effort to fill 50% of the entry level position(s) created by this project using the Fulton County First Source Jobs Program.

2. The contractor shall provide the applicable details of every entry level job in writing within the required form.

3. The contractor shall be expected to present documentation that confirms employment terms to both the employee and Fulton County.

The Office of Contract Compliance will assist with monitoring the participation of First Source Jobs Program employees during routine site visits and report findings to the Office of Workforce Development for confirmation and follow-up. The Office of Workforce Development shall notify the Director of Human Services and the Purchasing Agent of any determination of non-compliance with the requirements of this policy and recommend a resolution or action to be taken.

Upon a determination by the Purchasing Agent and the Director of Human Services that a contractor has failed to comply with any portion of this policy, the County may impose the following:

1. Ten percent (10%) of all future payments under the involved eligible project shall be entitled to be withheld from a contractor that has violated this policy until the contractor complies with the provisions of this policy.

The undersigned agrees to the terms and conditions set forth in this agreement.

Contractor's Official Title: _____ Date: _____

Contractor's Name: _____

Contractor's Signature: _____

FORM 2

SECTION 8

GENERAL CONDITIONS

GENERAL CONDITIONS

00700-1 FAMILIARITY WITH SITE

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

00700-2 CONTRACT DOCUMENTS

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

A. Notice of Award of Contract:

B. Execution of Contract Documents

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

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

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

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

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

Drawings and Specifications:

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

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

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

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

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

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

00700-3 DEFINITIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Engineer of Record – Hellmuth, Obata, Kassabaum, Inc., in conjunction with SafeTech Engineering developed the specifications and drawings referred to herein.

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

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

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

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

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

Project Manual - The Contract Documents.

Provide shall mean to furnish and install.

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

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

00700-4 CODES

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

00700-5 REVIEW OF CONTRACT DOCUMENTS

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

00700-6 STRICT COMPLIANCE

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

00700-7 APPLICABLE LAW

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

00700-8 PERMITS, LICENSES AND BONDS

All permits and licenses necessary for the work shall be secured and paid for by the Contractor. If any permit, license or certificate expires or is revoked, terminated, or

suspended as a result of any action on the part of the Contractor, the Contractor shall not be entitled to additional compensation or time. The Contractor shall obtain and keep in force at all times performance and payment bonds payable to Fulton County in penal amounts equal to 100% of the Contract price.

00700-9 TAXES

A. The Contractor shall pay all sales, retail, occupational, service, excise, old age benefit and unemployment compensation taxes, consumer, use and other similar taxes, as well as any other taxes or duties on the materials, equipment, and labor for the work provided by the Contractor which are legally enacted by any municipal, county, state or federal authority, department or agency at the time bids are received, whether or not yet effective. The Contractor shall maintain records pertaining to such taxes and levies as well as payment thereof and shall make the same available to the County at all reasonable times for inspection and copying. The Contractor shall apply for any and all tax exemptions which may be applicable and shall timely request from the County such documents and information as may be necessary to obtain such tax exemptions. The County shall have no liability to the Contractor for payment of any tax from which it is exempt.

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

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

00700-10 DELINQUENT CONTRACTORS

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

00700-11 LIEN WAIVERS

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

00700-12 MEASUREMENT

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

00700-13 ASSIGNMENT

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

00700-14 FOREIGN CONTRACTORS

In the event that the Contractor is a foreign corporation, partnership, or sole proprietorship, the Contractor hereby irrevocably appoints the Secretary of State of Georgia as its agent for service of all legal process for the purpose of this contract only.

00700-15 INDEMNIFICATION

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

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

00700-16 SUPERVISION OF WORK AND COORDINATION WITH OTHERS

The Contractor shall supervise and direct the work using the Contractor's best skill and attention. The Contractor shall be solely responsible for all construction methods and procedures and shall coordinate all portions of the work pursuant to the contract subject

to the overall coordination of the Construction Manager. All work pursuant to this agreement shall be performed in a skillful and workmanlike manner.

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

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

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

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

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

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

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

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

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

00700-17 ADMINISTRATION OF CONTRACT

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

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

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

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

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

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

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

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

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

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

The Contractor shall provide such shop drawings, product data, and samples as may be required by the Construction Manager and/or as required by these Contract Documents.

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

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

00700-18 RESPONSIBILITY FOR ACTS OF EMPLOYEES

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

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

00700-19 LABOR, MATERIALS, SUPPLIES, AND EQUIPMENT

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

00700-20 DISCIPLINE ON WORK SITE

The Contractor shall enforce strict discipline and good order among its employees and subcontractors at all times during the performance of the work, to include compliance

with the Fulton County Drug Free Work Place Policy. The Contractor shall not employ any subcontractor who is not skilled in the task assigned to it. The Construction Manager may, by written notice, require the Contractor to remove from the work any subcontractor or employee deemed by the Construction Manager to be incompetent.

00700-21 HOURS OF OPERATION

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

00700-22 FAMILIARITY WITH WORK CONDITIONS

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

00700-23 RIGHT OF ENTRY

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

00700-24 NOTICES

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

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

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

00700-25 SAFETY

A. SAFETY, HEALTH AND LOSS PREVENTION

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

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

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

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

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

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

1. All applicable laws, ordinances, rules, regulations and orders of any public, quasi-public or other governmental authority relating to the safety of persons and their protection against injury, specifically including, but in no event limited to, the Federal Occupational Safety and Health Act of 1970, as amended, and all rules and regulations now or hereafter in effect pursuant to said Act.

2. All rules, regulations, and requirements of the County or its agent(s) and its insurance carriers relating there to. In the event of a conflict or differing requirements the more stringent shall govern.

D. PROTECTION OF THE WORK

1. The Contractor shall, throughout the performance of the Work, maintain adequate and continuous protection of all Work and temporary facilities against loss or damage from whatever cause, shall protect the property of the County and third parties from loss or damage from whatever cause arising out of the performance of the Work, and shall comply with the requirements of the County or its agent(s) and its insurance carriers, and with all applicable laws, codes, rules and regulations, (as same may be amended) with respect to the prevention of loss or damage to property as a result of fire or other hazards.

2. The County or its agent(s) may, but shall not be required to, make periodic inspections of the Project work area. In such event, however, the Contractor shall not be relieved of its aforesaid responsibilities and the County or its agent(s) shall not assume, nor shall it be deemed to have assumed, any responsibility otherwise imposed upon the assurance of Contractor by this Agreement.

E. SAFETY EQUIPMENT

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

F. EMERGENCIES

1. In any emergency affecting the safety of persons or property, or in the event of a claimed violation of any federal or state safety or health law or regulation, arising out of or in any way connected with the Work or its performance, the Contractor shall act immediately to prevent threatened damage, injury or loss and to remedy said violation. Failing such action the County or its agent(s) may immediately take whatever steps it deems necessary including, but not limited to, suspending the Work as provided in this Agreement.

2. The County or its agent(s) may offset any and all costs or expenses of whatever nature, including attorneys' fees, paid or incurred by the County or its agent(s) (whether such fees are for in-house counsel or counsel retained by the County or its agent), in taking the steps authorized by Section 00700-25(G) (1) above against any sums then or thereafter due to the Contractor. The Contractor shall defend, indemnify and hold the County, its officers, agents, and employees harmless against any and all costs or expenses caused by or arising from the exercise by the County of its authority to act in an emergency as set out herein. If the Contractor shall be entitled to any additional compensation or extension of time change order on account of emergency work not due to the fault or

neglect of the Contractor or its Sub-Contractors, such additional compensation or extension of time shall be determined in accordance with General Condition 00700-52 and General Condition 00700-87 of this Agreement.

G. SUSPENSION OF THE WORK

1. Should, in the judgment of the County or its agent(s), the Contractor or any Sub-Contractor fail to provide a safe and healthy work place, the County or its agent shall have the right, but not the obligation, to suspend work in the unsafe areas until deficiencies are corrected. All costs of any nature (including, without limitation, overtime pay, liquidated damages or other costs arising out of delays) resulting from the suspension, by whomsoever incurred, shall be borne by the Contractor.

2. Should the Contractor or any Sub-Contractor fail to provide a safe and healthy work place after being formally notified in writing by the County or its agents of such non-compliance, the contract may be terminated following the termination provision of the contract.

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

1. The Contractor recognizes that it has sole responsibility to assure its Safety Program is implemented and to assure its construction services are safely provided. The Contractor shall indemnify, defend and hold the County and its agents harmless, from and against any and all liability (whether public or private), penalties (contractual or otherwise), losses, damages, costs, attorneys' fees, expenses, causes of action, claims or judgments resulting, either in whole or in part, from any failure of the Contractor, its Sub-Contractors of any tier or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, to comply with the safety requirements of the contract. The Contractor shall not be relieved of its responsibilities under the safety requirements of the Contract should the County or its agent(s) act or fail to act pursuant to its rights hereunder.

2. The Contractor shall not raise as a defense to its obligation to indemnify under this Subparagraph I any failure of those indemnified hereunder to assure Contractor operates safely, it being understood and agreed that no such failure shall relieve the Contractor from its obligation to assure safe operations or from its obligation to so indemnify. The Contractor also hereby waives any rights it may have to seek contribution, either directly or indirectly, from those indemnified hereunder.

3. In any and all claims against those indemnified hereunder by any employee of the Contractor, any Sub-Contractor of any tier or anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation under this Subparagraph I shall not be limited in any way as to the amount or type of damages, compensation or benefits payable by or for the Contractor or any Sub-Contractor of any tier under any workers' compensation act, disability benefit or other employee benefit acts.

00700-26 BLASTING AND EXCAVATION

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

00700-27 HIGH VOLTAGE LINES

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

00700-28 SCAFFOLDING AND STAGING

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

00700-29 CLEAN-UP

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

00700-30 PROTECTION OF WORK

The Contractor shall be responsible for maintenance and protection of the work, which shall include any County-furnished supplies, material, equipment, until final completion of this agreement and acceptance of the work as defined herein. Any portion of the work suffering injury, damage or loss shall be considered defective and shall be corrected or replaced by the Contractor without additional cost to the County.

00700-31 REJECTED WORK

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

00700-32 DEFECTIVE WORK

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

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

00700-33 WARRANTY OF NEW MATERIALS

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

00700-34 CONTRACTOR'S WARRANTY OF THE WORK

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

00700-35 ASSIGNMENT OF MANUFACTURERS' WARRANTIES

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

00700-36 WARRANTIES IMPLIED BY LAW

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

00700-37 STOP WORK ORDERS

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

00700-38 TERMINATION FOR CAUSE

If the Contractor is adjudged bankrupt, makes a general assignment for the benefit of creditors, suffers the appointment of a receiver on account of its insolvency, fails to supply sufficient properly skilled workers or materials, fails to make prompt payment to subcontractors or materialmen, disregards laws, ordinances, rules, regulations, or orders of any public authority having jurisdiction, fails to diligently prosecute the work, or is otherwise guilty of a material violation of this agreement and fails within seven days after receipt of written notice to commence and continue correction of such default, neglect, or

violation with diligence and promptness, the County may, after seven days following receipt by the Contractor of an additional written notice and without prejudice to any other remedy the County may have, terminate the employment of the Contractor and take possession of the site as well as all materials, equipment, tools, construction equipment and machinery thereon. The County may finish the work by whatever methods the County deems expedient. In such case, the Contractor shall not be entitled to receive any further payment until the work is completed. If the unpaid balance of the contract price exceeds the cost of completing the work, such excess shall be paid to the Contractor. If such costs exceed the unpaid balance, the Contractor shall pay the difference to the County on demand. This obligation for payment shall survive the termination of the contract. Termination of this agreement pursuant to this paragraph may result in disqualification of the Contractor from bidding on future County contracts.

00700-39 TERMINATION FOR CONVENIENCE

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

00700-40 TERMINATION FOR CONVENIENCE - PAYMENT

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

00700-41 TERMINATION FOR CONVENIENCE - PAYMENT LIMITATIONS

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

00700-42 COST TO CURE

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

00700-43 ATTORNEY'S FEES

Should the Contractor default pursuant to any of the provisions of this agreement, the Contractor and its surety shall pay to the County such reasonable attorney's fees as the

County may expend as a result thereof and all costs, expenses, and filing fees incidental thereto.

00700-44 CONTRACTOR'S RESPONSIBILITIES UPON TERMINATION

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

1. Stop work under the contract on the date and to the extent specified in the notice of termination;
2. Place no further orders or subcontracts for materials, services or facilities, except as may be necessary for completion of such portion of the work under the agreement as is not terminated;
3. Terminate all orders and subcontracts to the extent that they relate to the performance of work terminated by the notice of termination;
4. Assign to the County in the manner, at the times, and to the extent directed by the Construction Manager, all of the rights, title and interest of the Contractor under the orders and subcontracts so terminated, in which case the County shall have the right, at its discretion, to settle or pay any and all claims arising out of the termination of such orders or subcontracts;
5. Settle all outstanding liabilities and all claims arising out of such termination of orders and subcontracts with the approval or ratification of the Construction Manager, to the extent the Construction Manager may require, which approval or ratification shall be final for all purposes;
6. Transfer title and deliver to the entity or entities designated by the Construction Manager, in the manner, at the times, and to the extent, if any, directed by the Construction Manager, and to the extent specifically produced or specifically acquired by the Contractor for the performance of such portion of the work as has been terminated:
    a. The fabricated or un-fabricated parts, work, and progress, partially completed supplies, and equipment, materials, parts, tools, dyes, jigs, and other fixtures, completed work, supplies, and other material produced as a part of or acquired in connection with the performance of the work terminated by the notice of termination; and
    b. The completed or partially completed plans, drawings, information, and other property to the work.
7. Use its best efforts to sell in the manner, at the times, to the extent, and at the prices directed or authorized by the Construction Manager, any property described in Section 6 of this paragraph, provided, however, that the Contractor shall not be required to extend credit to any buyer and further provided that the proceeds of any such transfer or disposition shall be applied in reduction of any payments to be made by the County to the Contractor pursuant to this agreement.
8. Complete performance of such part of the work as shall not have been terminated by the notice of termination; and

9. Take such action as may be necessary, or as the Construction Manager may direct, for the protection and preservation of the property related to the agreement which is in the possession of the Contractor and in which the County has or may acquire an interest.

00700-45 RECORDS

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

00700-46 DEDUCTIONS

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

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

00700-47 REIMBURSEMENT OF THE COUNTY

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

00700-48 SUSPENSION, INTERRUPTION, DELAY, DAMAGES

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

00700-49 COMMENCEMENT AND DURATION OF WORK

The County may issue a Notice to Proceed at any time within 120 days following execution of the contract by the County. The Contractor shall commence work pursuant to this agreement within ten days of mailing or delivery of written notice to proceed. The

Contractor shall diligently prosecute the work to completion within the time specified therefore in the Agreement. The capacity of the Contractor's construction and manufacturing equipment and plan, sequence and method of operation and forces employed, including management and supervisory personnel, shall be such as to insure completion of the work within the time specified in the Agreement. The Contractor and County hereby agree that the contract time for completion of the work is reasonable taking into consideration the average climatic conditions prevailing in the locality of the work and anticipated work schedules of other contractors whose activities are in conjunction with or may affect the work under this contract.

00700-50 TIME OF THE ESSENCE

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

00700-51 IMPACT DAMAGES

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

00700-52 DELAY

The Contractor may be entitled to an extension of the contract time, but not an increase in the contract price or damages, for delays arising from unforeseeable causes beyond the control and without the fault or negligence of the Contractor or its subcontractors for labor strikes, acts of God, acts of the public enemy, acts of the state, federal or local government in its sovereign capacity, by acts of another separate contractor, or by an act or neglect of the County.

00700-53 INCLEMENT WEATHER

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

January	10 days
February	10 days
March	7 days
April	6 days
May	4 days
June	3 days
July	4 days

August	2 days
September	2 days
October	3 days
November	6 days
December	9 days

00700-54 DELAY - NOTICE AND CLAIM

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

00700-55 STATEMENT OF CLAIM - CONTENTS

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

00700-56 WORK BEHIND SCHEDULE, REMEDY BY CONTRACTOR

If the work actually in place falls behind the currently updated and approved schedule, and it becomes apparent from the current schedule that work will not be completed within the contract time, the Contractor agrees that it will, as necessary, or as directed by the Construction Manager, take action at no additional cost to the County to improve the progress of the work, including increasing manpower, increasing the number of working hours per shift or shifts per working day, increasing the amount of equipment at the site, and any other measure reasonably required to complete the work in a timely fashion.

00700-57 DILIGENCE

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

00700-58 SET-OFFS

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

00700-59 REMEDIES CUMULATIVE

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

00700-60 TITLE TO MATERIALS

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

00700-61 INSPECTION OF MATERIALS

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

00700-62 CONSTRUCTION MANAGER'S PRESENCE DURING TESTING

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

00700-63 MATERIALS INCORPORATED IN WORK

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

00700-64 STORAGE OF MATERIALS

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

00700-65 PAYROLL REPORTS

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

00700-66 CONTRACTORS' REPRESENTATIVE

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

00700-67 SPECIALTY SUB-CONTRACTORS

The Contractor may utilize the services of specialty subcontractors on those parts of the project which, under normal contracting practices, are performed by specialty

subcontractors. The Contractor shall not award more than seventy-five percent of the work to subcontractors.

00700-68 INSPECTION BY THE CONSTRUCTION MANAGER

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

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

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

00700-70 SCHEDULING OF THE WORK

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

00700-71 PROGRESS ESTIMATES

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

00700-72 PROGRESS PAYMENTS

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

00700-73 TIME OF PAYMENT

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

00700-74 RETAINAGE

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

00700-75 PAYMENT OF SUBCONTRACTORS

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

00700-76 COUNTY'S RESPONSIBILITIES TO SUBCONTRACTORS

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

00700-77 PROGRESS PAYMENTS - ACCEPTANCE OF WORK

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

00700-78 PAYMENTS IN TRUST

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

00700-79 JOINT PAYMENTS

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

00700-80 RIGHT TO WITHHOLD PAYMENT

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

00700-81 CERTIFICATE OF SUBSTANTIAL COMPLETION

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

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

00700-82 PAYMENT UPON SUBSTANTIAL COMPLETION

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

00700-83 COMMENCEMENT OF WARRANTIES

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

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

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

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

00700-85 DOCUMENTATION OF COMPLETION OF WORK

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

a. An affidavit that all payrolls, bills for materials and equipment, and other indebtedness connected with the work have been paid other otherwise satisfied;

b. The surety's consent to final payment; and

c. Any other data reasonably required by the County or Construction Manager establishing payment or satisfaction of all such obligations, including releases, waivers of liens, and documents of satisfaction of debts.

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

00700-86 GOVERNING LAW

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

00700-87 CHANGES IN THE WORK

A. CHANGE ORDERS

1. A Change Order is a written order to the Contractor signed to show the approval and the authorization of the County, issued after execution of the Contract, authorizing a change in the Work and/or an adjustment in the Contract Sum or the Contract Time. Change Orders shall be written

using forms designated by the County with Contractor providing supporting documentation as required by the Construction Manager. The Contract Sum and the Contract Time may be changed only by approved Change Order pursuant to Fulton County Procedure 800-6. The amount payable by the Change Order is payment in full for all direct and indirect costs incurred and related to the work under said Change Order, including but not limited to delays, imports, acceleration, disruption and extended overhead. A Change Order signed by the Contractor indicates the Contractor's agreement therewith, including the adjustment in either or both of the Contract Sum or the Contract Time.

2. The County, without invalidating the Contract, may order changes in the Work within the general scope of the Contract as defined herein. The time allowed for performance of the work and the contract price to be paid to the Contractor may be adjusted accordingly.

3. The cost or credit to the County resulting from a change in the Work shall be determined in one or more of the following ways:

   a. By mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation;

   b. By unit prices stated in the Contract Documents or subsequently agreed upon;

   c. By cost to be determined in a manner agreed upon by the parties and a mutually acceptable fixed or percentage fee; or

   d. By the method provided in Subparagraph A4 below.

4. If none of the methods set forth in Subparagraphs 3a, 3b, or 3c above is agreed upon, the Contractor, provided a written order signed by the Construction Manager is received, shall promptly proceed with the Work involved. The cost of such Work shall then be determined by the Construction Manager on basis of the reasonable expenditures and savings of those performing the Work attributable to the change. The cost of the change shall include only the items listed in Subparagraph 5a below, and in the case of either a decrease or an increase in the Contract Sum, an allowance for overhead and profit in accordance with the schedules set forth in Subparagraphs 5b and 6 below shall be applied to the cost or credit.

   a. In such case, and also under Subparagraph 3a above, the Contractor shall keep and present, in such form as the Construction Manager may prescribe, an itemized accounting of all actual costs expended, together with appropriate supporting data for inclusion in a Change Order.

   b. All hourly rate charges shall b submitted to the Construction Manager for prior review and approval. All hourly rate charges shall be properly supported as required by the Construction Manager with certified payrolls, or their acceptable equivalent. When authorized to proceed for a given change and actual expenditures have been made prior to execution of a Change Order for the entire change, such actual expenditures may be

summarized monthly, and if approved, incorporated into a Change Order. When both additions and credits covering related Work or substitutions are involved in any one change, the allowance for overhead and profit shall be figured on the basis of the net increase or decrease, if any, with respect to that change.

5. In Subparagraphs 3 and 4 above, the items included in "Cost and "Overhead" shall be based on the following schedule:

   a. Unless otherwise provided in the Contract Documents, "Cost" shall be limited to the following: cost of materials incorporated into the Work, including sales tax and cost of delivery; cost of direct labor (labor cost may include a pro rata share of foreman's account of the change) including social security, old age and unemployment insurance, and fringe benefits required by agreement or custom; workers' or workmen's compensation insurance; rental value of equipment and machinery; costs for preparing Shop Drawings.

   b. Unless otherwise provided in the Contract Documents, "Overhead" shall include the following: bond and insurance premiums including increase and decreases from change in the Work, supervision, superintendence, construction parking, wages of timekeepers, watchmen and clerks, small tools, consumable supplies, expendables, incidentals, general office expense, the cost of additional reproduction for the Contractor's subcontractors beyond that agreed upon in the Contract Documents, construction parking, any additional costs of craft supervision by the Contractor's or subcontractors' superintendents, and overhead charges which would be customary and expended regardless of the change in the Work due to other overlapping activities which are included as part of the original Contract, and all other expenses not included in "Cost" above.

   c. In the event that a change is issued by the County which would require the expenditure of substantial amounts of special supervision (beyond the foreman level) by the Contractor, the Contractor may, at the sole direction of the Construction Manager, be allowed to incorporate these charges into the agreement cost for the change.

6. In Subparagraphs 3 and 4 above, the allowance for overhead and profit combined, included in the total cost or credit to the County, shall be based on the following schedule:

   a. For the Contractor, for any work performed by the Contractor's own forces, ten (10) percent of the cost.

   b. For the Contractor, for any work performed by a Contractor's subcontractor, five (5) percent of the amount due the subcontractor.

   c. For each subcontractor or sub-subcontractor involved, for any work performed by that subcontractor's or sub-subcontractor's own forces, ten (10) percent of the cost.

d. For each subcontractor, for work performed by a sub-subcontractor, five (5) percent of the amount due to the sub-subcontractor.

e. Cost to which overhead and profit is to be applied shall be determined in accordance with Subparagraph 5 above unless modified otherwise.

7. In order to facilitate checking of quotations for extras or credits, all proposals or bids, except those so minor that their propriety can be seen by inspection, shall be accompanied by a complete itemization of costs, including labor cost, materials and subcontracts. Labor and materials shall be itemized in the manner defined in Subparagraph 4 above. Where major cost items are subcontracts, they shall be itemized also. In no case shall a change be approved without such itemization.

8. No payment shall be made for any changes to the contract that are not included in a fully executed Change Order.

B. CONCEALED, UNKNOWN AND DIFFERING CONDITIONS

1. Should concealed conditions be encountered in the performance of the Work below the surface of the ground, or should concealed or unknown conditions in an existing structure be at variance with the conditions indicated by the Contract Documents, or should unknown physical conditions below the surface of the ground or concealed or unknown conditions in an existing structure of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this Contract, be encountered, the Contract Sum and Contract Time shall be equitably adjusted by Change Order upon request by either party made **within twenty (20) days after the first observance** of the conditions. No such request for equitable adjustment shall be valid unless the Contractor complies with this (20) days notice and Subparagraph C.1. below.

2. The Contractor shall promptly, and before such conditions are disturbed, notify the Construction Manager in writing of any claim of concealed, unknown or differing conditions pursuant to this paragraph. The Construction Manager shall authorize the Project Manager to investigate the conditions, and if it is found that such conditions do materially so differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performance of any part of the Work under this Contract, whether or not changed as a result of such conditions, an equitable adjustment shall be recommended to the Construction Manager.

3. No claim of the Contractor under this clause shall be allowed unless the Contractor has given the notice required in (a) above, prior to disturbing the condition.

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

5. Any materially differing site condition as between what is shown on the Drawings and Specifications and actually found on site shall be immediately reported to the Construction Manager in writing prior to the

commencement of Work at the site. Failure of the Contractor to notify the Construction Manager in writing of the differing site condition prior to performance of Work at the site shall constitute a waiver of any claim for additional monies. Any Change Order necessitated by the differing site condition shall be processed as provided under "Changes in the Contract".

C. REQUESTS FOR ADDITIONAL COST

1. If the Contractor wishes to request an increase in the Contract Sum, the Contractor shall give the Construction Manager written notice thereof within twenty (20) days after the occurrence of the event, or identification of the conditions, giving rise to such request. This notice shall be give by the Contractor before proceeding to execute the Work, except in an emergency endangering life or property in which case the Contractor shall proceed in accordance with Article 00700-25 and Subparagraph A.4 above. No such request shall be valid unless so made within the twenty (20) days specified above. If the County and the Contractor cannot agree on the amount of the adjustment in the Contract Sum, it shall be determined by the Construction Manager. Any change in the Contract Sum resulting from such claim shall be documented by Change Order.

2. If the Contractor claims that addition cost is involved because of, but not limited to (1) any written interpretation pursuant to General Condition 00700-17 of this Agreement, (2) any order by the County to stop the Work pursuant to Articles 00700-25 and 00700-37 of this Agreement where the Contractor was not at fault, or any such order by the Construction Manager as the County's agent, or (3) any written order for a minor change in the Work issued pursuant to Paragraph D below, the Contractor shall submit a request for an increase in the Contract Sum as provided in Subparagraph C.1 above. No such claim shall be valid unless the Contractor complies with Subparagraph C.1 above and approved by the County pursuant to Change Order Policy 800-6.

D. MINOR CHANGES IN THE WORK

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

E. BONDS

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

00700-88 DISAGREEMENT WITH ORDERS FOR CHANGE

Contractor's written acceptance of a Change Order or other order for changes shall constitute his final and binding agreement to the provisions thereof and a waiver of all claims in connection therewith, whether direct or consequential in nature. Should Contractor disagree with any order for changes, he may submit a notice of potential

claim to the Construction Manager, at such time as the order is set forth in the form of a Change Order. Disagreement with the provisions of an order for changes shall not relieve Contractor of his obligation under Article 00700-87 of this Agreement.

00700-89 NO WAIVER OF REMEDIES

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

00700-90 LAND AND RIGHTS-OF-WAY

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

00700-91 COORDINATION WITH STATE DEPARTMENT OF TRANSPORTATION

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

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

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

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

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EXHIBIT A

FINAL AFFIDAVIT

TO FULTON COUNTY, GEORGIA

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

_____
Signature

_____
Title

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

_____
Notary Public

_____
My Commission expires

SECTION 8

PART 1 – GENERAL PROVISIONS

[1]SECTION 10

DEFINITION OF TERMS

Whenever the following terms are used in these specifications, in the contract, [2]in any documents or other instruments pertaining to construction where these specifications govern, the intent and meaning shall be interpreted as follows:

10-01 AASHTO - The American Association of State Highway and Transportation Officials, the successor association to AASHO.

10-02 ACCESS ROAD - The right-of-way, the roadway and all improvements constructed thereon connecting the airport to a public highway.

10-03 ADVERTISEMENT - A public announcement, as required by local law, inviting bids for work to be performed and materials to be furnished.

10-04 AIP - The Airport Improvement Program, a grant-in-aid program, administered by the Federal Aviation Administration.

10-05 AIR OPERATIONS AREA - For the purpose of these specifications, the term air operations area shall mean any area of the airport used or intended to be used for the landing, takeoff, or surface maneuvering of aircraft. An air operation area shall include such paved or unpaved areas that are used or intended to be used for the unobstructed movement of aircraft in addition to its associated runway, taxiway, or apron.

10-06 AIRPORT - Airport means an area of land or water that is used or intended to be used for the landing and takeoff of aircraft, and includes its buildings and facilities, if any.[3]

10-07 ASTM - The American Society for Testing and Materials.

10-08 AWARD - The acceptance, by the Owner, of the successful bid.[4]

10-09 BIDDER - Any individual, partnership, firm, or corporation, acting directly or through a duly authorized representative, who submits a bid for the work contemplated.[5]

10-10 BUILDING AREA - An area on the airport to be used, considered, or intended to be used for airport buildings or other buildings and facilities located thereon.[6]

10-11 CALENDAR DAY - Every day shown on the calendar.

10-12 CHANGE ORDER - A written order to the Contractor covering changes in the plans, specifications, or bid[7] quantities and establishing the basis of payment and contract time adjustment, if any, for the work affected by such changes. The work, covered by a change order, shall be within the scope of the contract.

10-13 CONTRACT - The written agreement covering the work to be performed. The awarded contract shall include, but is not limited to: The Advertisement; The Contract Form; The Bid[8]; The Performance Bond; The Payment Bond; any required insurance certificates; The Specifications; The Plans, and any addenda issued to bidders.

10-14 CONTRACT ITEM (PAY ITEM) - A specific unit of work for which a price is provided in the contract.

10-15 CONTRACT TIME - The number of calendar days or working days, stated in the bid[9], allowed for completion of the contract, including authorized time extensions. If a

calendar date of completion is stated in the bid,[10] in lieu of a number of calendar or working days, the contract shall be completed by that date.

10-16 CONTRACTOR - The individual, partnership, firm, or corporation primarily liable for the acceptable performance of the work contracted and for the payment of all legal debts pertaining to the work who acts directly or through lawful agents or employees to complete the contract work.

10-17 DRAINAGE SYSTEM - The system of pipes, ditches, and structures by which surface or subsurface waters are collected and conducted from the airport area.

10-18 ENGINEER (PROJECT MANAGER) - The individual, partnership, firm, or corporation duly authorized by the Owner (Sponsor) to be responsible for engineering supervision of the contract work and acting directly or through an authorized representative.[11]

10-19 EQUIPMENT - All machinery, together with the necessary supplies for upkeep and maintenance, and also all tools and apparatus necessary for the proper construction and acceptable completion of the work.

10-20 EXTRA WORK - An item of work not provided for in the awarded contract as previously modified by change order or supplemental agreement, but which is found by the Project Manager to be necessary to complete the work within the intended scope of the contract as previously modified.

10-21 FAA - The Federal Aviation Administration of the U.S. Department of Transportation. When used to designate a person, FAA shall mean the Administrator or his/her duly authorized representative.

10-22 FEDERAL SPECIFICATIONS - The Federal Specifications and Standards, and supplements, amendments, and indices thereto are prepared and issued by the General Services Administration of the Federal Government. [12]

10-23 INSPECTOR[13]- An authorized representative of the Project Manager assigned to make all necessary inspections and/or tests of the work performed or being performed, or of the materials furnished or being furnished by the Contractor.

10-24 INTENTION OF TERMS - Whenever, in these specifications or on the plans, the words "directed," "required," "permitted," "ordered," "designated," "prescribed," or words of the like import are used, it shall be understood that the direction, requirement, permission, order, designation, or prescription of the Project Manager is intended; and similarly, the words "approved," "acceptable," "satisfactory," or words of like import, shall mean approved by, or acceptable to, or satisfactory to the Project Manager, subject in each case to the final determination of the Owner.[14]

Any reference to a specific requirement of a numbered paragraph of the contract specifications or a cited standard shall be interpreted to include all general requirements of the entire section, specification item, or cited standard that may be pertinent to such specific reference.

10-25 LABORATORY - The official testing laboratories of the Owner or such other laboratories as may be designated by the Project Manager.[15]

10-26 LIGHTING - A system of fixtures providing or controlling the light sources used on or near the airport or within the airport buildings. The field lighting includes all luminous signals, markers, floodlights, and illuminating devices used on or near the airport or to aid in the operation of aircraft landing at, taking off from, or taxiing on the airport surface.[16]

10-27 MAJOR AND MINOR CONTRACT ITEMS - A major contract item shall be any item that is listed in the bid, the total cost of which is equal to or greater than 20 percent of the total amount of the award contract. All other items shall be considered minor contract items.[17]

10-28 MATERIALS - Any substance specified for use in the construction of the contract work.[18]

10-29 NOTICE TO PROCEED - A written notice to the Contractor to begin the actual contract work on a previously agreed to date. If applicable, the Notice to Proceed shall state the date on which the contract time begins.[19]

10-30 OWNER (SPONSOR) - The term Owner shall mean the party of the first part or the contracting agency signatory to the contract. For AIP contracts, the term sponsor shall have the same meaning as the term Owner.[20]

10-31 PAVEMENT - The combined surface course, base course, and subbase course, if any, considered as a single unit.[21]

10-32 PAYMENT BOND - The approved form of security furnished by the Contractor and his/her surety as a guaranty that he will pay in full all bills and accounts for materials and labor used in the construction of the work, as provided by law.[22]

10-33 PERFORMANCE BOND - The approved form of security furnished by the Contractor and his/her surety as a guaranty that the Contractor will complete the work in accordance with the terms of the contract.[23]

10-34 PLANS - The official drawings or exact reproductions which show the location, character, dimensions and details of the airport and the work to be done and which are to be considered as a part of the contract, supplementary to the specifications.[24]

10-35 PROJECT - The agreed scope of work for accomplishing specific airport development with respect to a particular airport.[25]

10-36 BID - The written offer of the bidder (when submitted on the approved bid form) to perform the contemplated work and furnish the necessary materials in accordance with the provisions of the plans and specifications.[26]

10-37 BID GUARANTY - The security furnished with a bid to guarantee that the bidder will enter into a contract if his/her bid is accepted by the Owner.[27]

10-38 RUNWAY - The area on the airport prepared for the landing and takeoff of aircraft.[28]

10-39 SPECIFICATIONS - A part of the contract containing the written directions and requirements for completing the contract work. Standards for specifying materials or testing which are cited in the contract specifications by reference shall have the same force and effect as if included in the contract physically.[29]

10-40 SPONSOR - See definition above of "OWNER."[30]

10-41 STRUCTURES - Airport facilities such as bridges; culverts; catch basins, inlets, retaining walls, cribbing; storm and sanitary sewer lines; water lines; underdrains; electrical ducts, manholes, handholes, lighting fixtures and bases; transformers; flexible and rigid pavements; navigational aids; buildings; vaults; and, other manmade features of the airport that may be encountered in the work and not otherwise classified herein.[31]

10-42 SUBGRADE - The soil that forms the pavement foundation.[32]

10-43 SUPERINTENDENT - The Contractor's executive representative who is present on the work site during construction, authorized to receive and fulfill instructions from the Project Manager, and who shall supervise and direct the construction.[33]

10-44 SUPPLEMENTAL AGREEMENT - A written agreement between the Contractor and the Owner covering: (1) work that would increase or decrease the total amount of the awarded contract, or any major contract item, by more than 25 percent, such increased or decreased work being within the scope of the originally awarded contract; or (2) work that is not within the scope of the originally awarded contract.[34]

10-45 SURETY - The corporation, partnership, or individual, other than the Contractor, executing payment or performance bonds which are furnished to the Owner by the Contractor.[35]

10-46 TAXIWAY - For the purpose of this document, the term taxiway means the portion of the air operations area of an airport that has been designated by competent airport authority for movement of aircraft to and from the airport's runways or aircraft parking areas.[36]

10-47 WORK - The furnishing of all labor, materials, tools, equipment, and incidentals necessary or convenient to the Contractor's performance of all duties and obligations imposed by the contract, plans, and specifications.[37]

10-48 WORKING DAY - A working day shall be any day other than a legal holiday, Saturday, or Sunday on which the normal working forces of the Contractor may proceed with regular work for at least six (6) hours toward completion of the contract. Unless work is suspended for causes beyond the Contractor's control, Saturdays, Sundays and holidays on which the Contractor's forces engage in regular work, requiring the presence of an inspector, will be considered as working days.[38]

MODIFICATION OF STANDARDS - FAA SECTION GP-10

[1] Deleted Heading
[2] Edited Text
[3] Edited definition for clarity purposes.
[4] Edited definition to indicate more commonly used term.
[5] Edited definition to indicate more commonly used term.
[6] Edited definition for clarity purposes.
[7] Edited definition to indicate more commonly used term.
[8] Edited definition to indicate more commonly used term.
[9] Edited definition to indicate more commonly used term.
[10] Edited definition to indicate more commonly used term.
[11] Edited definition for clarity purposes.
[12] Edited definition to remove address and non-applicable term.
[13] Deleted definition of Force Account, Re-Numbered definition.
[14] Edited definition for correct punctuation. and re-numbered.
[15] Re-Numbered definition.
[16] Re-Numbered definition.
[17] Re-Numbered definition, and edited to indicate more commonly used term.
[18] Re-Numbered definition.
[19] Re-Numbered definition.
[20] Edited definition for clarity purposes, and re-numbered.
[21] Re-Numbered definition.
[22] Edited definition for clarity purposes, and re-numbered.
[23] Re-Numbered definition.
[24] Re-Numbered definition.
[25] Re-Numbered definition.
[26] Edited definition to indicate more commonly used term, and re-numbered.
[27] Edited definition to indicate more commonly used term, and re-numbered.
[28] Re-Numbered definition.
[29] Re-Numbered definition.
[30] Re-Numbered definition.
[31] Re-Numbered definition.
[32] Re-Numbered definition.
[33] Edited definition for clarity purposes, and re-numbered.
[34] Edited definition for punctuation, and re-numbered.
[35] Edited definition for grammar, and re-numbered.
[36] Re-Numbered definition.
[37] Re-Numbered definition.
[38] Edited definition for clarity purposes, and re-numbered.

SECTION 20

BID REQUIREMENTS AND CONDITIONS[1]

20-01 ADVERTISEMENT (Notice to Bidders). A copy of the **advertisement** is included elsewhere in the bid package.[2]

20-02 PREQUALIFICATION OF BIDDERS. Each bidder shall furnish the Owner satisfactory evidence of his competency to perform the proposed work. Such evidence of competency, unless otherwise specified, shall consist of statements covering the bidder's past experience on similar work, a list of equipment that would be available for the work, and a list of key personnel that would be available. In addition, each bidder shall furnish the Owner satisfactory evidence of his/her financial responsibility. Such evidence of financial responsibility, unless otherwise specified, shall consist of a confidential statement or report of the bidder's financial resources and liabilities as of the last calendar year or the Contractor's last fiscal year. Such statements or reports shall be certified by a public accountant. At the time of submitting such financial statements or reports, the bidder shall further certify whether his/her financial responsibility is approximately the same as stated or reported by the public accountant. If the bidder's financial responsibility has changed, the bidder shall qualify the public accountant's statement or report to reflect his/her (bidder's) true financial condition at the time such qualified statement or report is submitted to the Owner.

Unless otherwise specified, a bidder may submit evidence that he is prequalified with the State Highway Division and is on the current "bidder's list" of the State in which the proposed work is located. Such evidence of State Highway Division prequalification may be submitted as evidence of financial responsibility in lieu of the certified statements or reports hereinbefore specified.

Each bidder shall submit "evidence of competency" and "evidence of financial responsibility" to the Owner no later than 10 days prior to the specified date for opening bids.[3]

20-03 CONTENTS OF BID FORMS. The Owner shall furnish bidders with bid forms. All papers bound with or attached to the bid forms are necessary parts and must not be detached.

The plans, specifications, and other documents designated in the bid form shall be considered a part of the bid whether attached or not.[4]

20-04 ISSUANCE OF BID FORMS. The Owner reserves the right to refuse to issue a bid form to a prospective bidder should such bidder be in default for any of the following reasons:[5]

a. Failure to comply with any prequalification regulations of the Owner, if such regulations are cited, or otherwise included in the bid as a requirement for bidding.[6]

b. Failure to pay, or satisfactorily settle, all bills due for labor and materials on former contracts in force (with the Owner) at the time the Owner issued the bid to a prospective bidder.[7]

c. Contractor default under previous contracts with the Owner.

d. Unsatisfactory work on previous contracts with the Owner.

20-05 INTERPRETATION OF ESTIMATED BID QUANTITIES. An estimate of quantities of work to be done and materials to be furnished under these specifications is given in the bid. It is the result of careful calculations and is believed to be correct. It is given only as a basis for comparison of bids and the award of the contract. The Owner does not expressly or by implication agree that the actual quantities involved will correspond exactly therewith; nor shall the bidder plead misunderstanding or deception because of such estimates of quantities, or of the character, location, or other conditions pertaining to the work.

Payment to the Contractor will be made only for the actual quantities of work performed or materials furnished in accordance with the plans and specifications. It is understood that the quantities may be increased or decreased as hereinafter provided in the subsection titled ALTERATION OF WORK AND QUANTITIES of Section 40 without in any way invalidating the unit bid prices.[8]

20-06 EXAMINATION OF PLANS, SPECIFICATIONS, AND SITE. The bidder is expected to carefully examine the site of the proposed work, the bid, plans, specifications, and contract forms. He shall satisfy himself as to the character, quality, and quantities of work to be performed, materials to be furnished, and as to the requirements of the proposed contract. The submission of a bid shall be prima facie evidence that the bidder has made such examination and is satisfied as to the conditions to be encountered in performing the work and as to the requirements of the proposed contract, plans, and specifications.[9]

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

20-07 PREPARATION OF BID. The bidder shall submit his/her bid on the forms furnished by the Owner. All blank spaces in the bid forms must be correctly filled in where indicated for each and every item for which a quantity is given. The bidder shall state the price (written in ink or typed) both in words and numerals for which he proposes to do each pay item furnished in the bid. In case of conflict between words and numerals, the words, unless obviously incorrect, shall govern.[10]

The bidder shall sign his/her bid correctly and in ink. If the bid is made by an individual, his/her name and post office address must be shown. If made by a partnership, the name and post office address of each member of the partnership must be shown. If made by a corporation, the person signing the bid shall give the name of the State under the laws of which the corporation was chartered and the names, titles, and business address of the president, secretary, and the treasurer. Anyone signing a bid as an agent shall file evidence of his/her authority to do so and that the signature is binding upon the firm or corporation.[11]

20-08 IRREGULAR BIDS. Bids shall be considered irregular for the following reasons:[12]

a. If the bid is on a form other than that furnished by the Owner, or if the Owner's form is altered, or if any part of the bid form is detached.[13]

b. If there are unauthorized additions, conditional or alternate pay items, or irregularities of any kind that make the bid incomplete, indefinite, or otherwise ambiguous.[14]

c. If the bid does not contain a unit price for each pay item listed in the bid, except in the case of authorized alternate pay items, for which the bidder is not required to furnish a unit price.[15]

d. If the bid contains unit prices that are obviously unbalanced.[16]

e. If the bid is not accompanied by the bid guaranty specified by the Owner.[17]

The Owner reserves the right to reject any irregular bid and the right to waive technicalities if such waiver is in the best interest of the Owner and conforms to local laws and ordinances pertaining to the letting of construction contracts.[18]

20-09 BID GUARANTEE. Each separate bid shall be accompanied by an original bid bond in the amount specified in the bid form. Such bond shall be made payable to the Owner.[19]

20-10 DELIVERY OF BID. Each bid submitted shall be placed in a sealed envelope plainly marked with the project number, title, and name and business address of the bidder on the outside. When sent by mail, the sealed bid should be enclosed in an additional envelope, with the outermost envelope containing bid information as indicated above. No bid will be considered unless received at the place specified in the advertisement before the time specified for opening all bids. Bids received after the bid opening time shall be returned to the bidder unopened, upon request and at bidder's expense.[20]

20-11 WITHDRAWAL OR REVISION OF BIDS. A bidder may withdraw or revise (by withdrawal of one bid and submission of another) a bid provided that the bidder's request for withdrawal is received by the Purchasing Administrator in writing before the time specified for opening bids. Revised bids must be received at the place specified in the advertisement before the time specified for opening all bids.[21]

20-12 PUBLIC OPENING OF BIDS. Bids shall be opened and read publicly at the time and place specified in the advertisement. Bidders, their authorized agents, and other interested persons are invited to attend. Bids that have been withdrawn (by written request) or received after the time specified for opening bids shall be returned to the bidder unopened[22]

20-13 REJECTION OF BIDDERS. A bid shall be considered rejected for any of the following reasons:[23]

a. Submitting more than one bid from the same partnership, firm, or corporation under the same or different name.[24]

b. Evidence of collusion among bidders. Bidders participating in such collusion shall be debarred as bidders for any future work of the Owner until such participating bidder has been reinstated by the Owner.[25]

c. If the bidder is considered to be in "default" for any reason specified in the subsection titled ISSUANCE OF BID FORMS of this section.[26]

MODIFICATION OF STANDARDS – FAA SECTION GP-20

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[1] Edited Heading
[2] Edited requirement to indicate where the Notice-to-Bidders is contained.
[3] Edited section for grammatical items and industry standards.
[4] Edited section to indicate more commonly used term.
[5] Edited section to indicate more commonly used term.
[6] Edited section to indicate more commonly used term.
[7] Edited section to indicate more commonly used term.
[8] Edited section to indicate more commonly used term.
[9] Edited section to indicate more commonly used term.
[10] Edited section for grammatical item and to indicate more commonly used term.
[11] Edited section to indicate more commonly used term.
[12] Edited section to indicate more commonly used term.
[13] Edited section to indicate more commonly used term.
[14] Edited section to indicate more commonly used term.
[15] Edited section to indicate more commonly used term.
[16] Edited section to indicate more commonly used term.
[18] Edited section to indicate more commonly used term.
[19] Edited section to indicate more commonly used term.
[20] Edited section to indicate local requirements and more commonly used term.
[21] Edited section to indicate local requirements and more commonly used term.
[22] Edited section to indicate local requirements and more commonly used term.
[23] Edited section to indicate local requirements and more commonly used term.
[24] Edited section to indicate local requirements and more commonly used term.
[25] Edited section to indicate more commonly used term.
[26] Edited section to indicate local requirements and more commonly used term.
[27] Edited section to indicate local requirements, more commonly used term, and correct punctuation.

SECTION 30

AWARD AND EXECUTION OF CONTRACT

See Instructions to Bidders for additional information on proposal requirements and conditions. In any case where the text is unclear or conflicts, the more stringent requirement shall apply.[1]

30-01 CONSIDERATION OF BIDS. After the bids are publicly opened and read, they will be compared on the basis of the summation of the products obtained by multiplying the estimated quantities shown in the bid by the unit bid prices. If a bid contains a discrepancy between unit bid prices written in words and unit bid prices written in numbers, the unit price written in words shall govern.[2]

Until the award of a contract is made, the Owner reserves the right to reject a bid for any of the following reasons:[3]

a. If the bid is irregular as specified in the subsection titled IRREGULAR BIDS of Section 20.[4]

b. If the bidder is rejected for any of the reasons specified in the subsection titled REJECTION OF BIDDERS of Section 20.[5]

In addition, until the award of a contract is made, the Owner reserves the right to reject any or all bids, waive technicalities, if such waiver is in the best interest of the Owner and is in conformance with applicable state and local laws or regulations pertaining to the letting of construction contracts; advertise for new bids; or proceed with the work otherwise. All such actions shall promote the Owner's best interests. [6]

30-02 AWARD OF CONTRACT. The award of a contract, if it is to be awarded, shall be made within 120 calendar days of the date specified for publicly opening bids, unless otherwise specified herein. [7]

Award of the contract shall be made by the Owner to the lowest, responsive, responsible bidder whose bid conforms to the cited requirements of the Owner. [8] For AIP contracts, unless otherwise specified in this subsection, no award shall be made until the FAA has concurred in the Owner's recommendation to make such award and has approved the Owner's proposed contract to the extent that such concurrence and approval are required by 49 CFR Part 18.

30-03 CANCELLATION OF AWARD. The Owner reserves the right to cancel the award of the contract without liability to the bidder, except return of bid guaranty, at any time before a contract has been fully executed by all parties and is approved by the Owner in accordance with the subsection titled APPROVAL OF CONTRACT of this section. [9]

30-04 RETURN OF BID GUARANTY. All bid guaranties, except those of the three lowest bidders, will be returned immediately after the Owner has made a comparison of bids as herein before specified in the subsection titled CONSIDERATION OF BIDS of this section. Bid guaranties of the three lowest bidders will be retained by the Owner until such time as an award is made, at which time, the unsuccessful bidder's bid guaranty will be returned. The Contractor's bid guaranty may be returned upon request

as soon as the Owner receives the contract bonds as specified in the subsection titled REQUIREMENTS OF CONTRACT BONDS of this section. [10]

30-05 REQUIREMENTS OF CONTRACT BONDS. At the time of the execution of the contract, the successful bidder shall furnish the Owner a surety bond or bonds that have been fully executed by the bidder and his surety guaranteeing the performance of the work and the payment of all legal debts that may be incurred by reason of the Contractor's performance of the work. The surety and the form of the bonds shall be acceptable to the Owner. Unless otherwise specified in this subsection, the surety bond or bonds shall be in a sum equal to the full amount of the contract. [11]

30-06 EXECUTION OF CONTRACT. The successful bidder shall sign (execute) the necessary agreements for entering into the contract and return such signed contract to the Owner, along with the fully executed surety bond or bonds specified in the subsection titled REQUIREMENTS OF CONTRACT BONDS of this section, within 15 calendar days from the date mailed or otherwise delivered to the successful bidder. If the contract is mailed, special handling is recommended. [12]

The contractor, sub-recipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of Department of Transportation (DOT) assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate.

30-07 APPROVAL OF CONTRACT. Upon receipt of the contract and contract bond or bonds that have been executed by the successful bidder, the Owner shall complete the execution of the contract in accordance with local laws or ordinances, and return the fully executed contract to the Contractor. Delivery of the fully executed contract to the Contractor shall constitute the Owner's approval and intent to be bound by the Contractor's bid and the terms of the contract. [13]

30-08 FAILURE TO EXECUTE CONTRACT. Failure of the successful bidder to execute the contract and furnish an acceptable surety bond or bonds within the 15 calendar day period specified in the subsection titled EXECUTION OF CONTRACT of this section shall be just cause for cancellation of the award and forfeiture of the bid guaranty, not as a penalty, but as liquidation of damages to the Owner. [14]

MODIFICATION OF STANDARDS - FAA SECTION GP-30

[1] Added Clarification..
[2] Edited section to indicate more commonly used term.
[3] Edited section to indicate more commonly used term.
[4] Edited section to indicate more commonly used term.
[5] Edited section to indicate more commonly used terms.
[6] Edited section to indicate more commonly used term and .
[7] Edited section to indicate time frame for award and more commonly used term.
[8] Edited section for more stringent award criteria, and indicate more commonly used term.
[9] Edited section for clarity purposes, and indicate more commonly used term.
[10] Edited section for local requirements, and indicate more commonly used terms.
[11] Edited section for grammar and clarity.
[12] Edited section for grammar.
[13] Edited section for clarity.
[14] Edited section to indicate more commonly used term.

SECTION 40
SCOPE OF WORK

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

40-02 ALTERATION OF WORK AND QUANTITIES. The Owner reserves and shall have the right to make such alterations in the work as may be necessary or desirable to complete the work originally intended in an acceptable manner. Unless otherwise specified herein, the Project Manager shall be and is hereby authorized to make such alterations in the work as may increase or decrease the originally awarded contract quantities, provided that the aggregate of such alterations does not change the total contract cost or the total cost of any major contract item by more than twenty-five percent (25%) (total cost being based on the unit prices and estimated quantities in the awarded contract). Alterations which do not exceed the twenty-five percent (25%) limitation shall not invalidate the contract nor release the surety, and the Contractor agrees to accept payment for such alterations as if the altered work had been a part of the original contract. These alterations which are for work within the general scope of the contract shall be covered by "Change Orders" issued by the Project Manager. Change orders for altered work shall include extensions of contract time where, in the Project Manager's opinion, such extensions are commensurate with the amount and difficulty of added work.[1]

Should the aggregate amount of altered work exceed the twenty-five percent (25%) limitation hereinbefore specified, such excess altered work shall be covered by supplemental agreement. If the Owner and the Contractor are unable to agree on a unit adjustment for any contract item that requires a supplemental agreement, the Owner reserves the right to terminate the contract with respect to the item and make other arrangements for its completion.[2]

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

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

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

time that, in the Project Manager's opinion, is necessary for completion of such extra work.

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

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

Any claim for payment of extra work that is not covered by written agreement (change order or supplemental agreement) shall be rejected by the Owner.[3]

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

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

When the contract requires the maintenance of vehicular traffic on an existing road, street, or highway during the Contractor's performance of work that is otherwise provided for in the contract, plans, and specifications, the Contractor shall keep such road, street, or highway open to all traffic and shall provide such maintenance as may be required to accommodate traffic. The Contractor shall furnish, erect, and maintain barricades, warning signs, flagmen, and other traffic control devices in reasonable conformity with the Manual of Uniform Traffic Control Devices for Streets and Highways (published by the United States Government Printing Office), unless otherwise specified herein. The Contractor shall also construct and maintain in a safe condition any temporary connections necessary for ingress to and egress from abutting property or intersecting roads, streets or highways. Unless otherwise specified herein, the Contractor will not be required to furnish snow removal for such existing road, street, or highway.[4]

The Contractor shall make his/her own estimate of all labor, materials, equipment, and incidentals necessary for providing the maintenance of aircraft and vehicular traffic as specified in this subsection.

The cost of maintaining the aircraft and vehicular traffic specified in this subsection shall not be measured or paid for directly, but shall be included in the various contract items.

40-06 REMOVAL OF EXISTING STRUCTURES. All existing structures encountered within the established lines, grades, or grading sections shall be removed by the Contractor, unless such existing structures are otherwise specified to be relocated, adjusted up or down, salvaged, abandoned in place, reused in the work or to remain in place. The cost of removing such existing structures shall not be measured or paid for directly, but shall be included in the various contract items.

Should the Contractor encounter an existing structure (above or below ground) in the work for which the disposition is not indicated on the plans, the Project Manager shall be notified prior to disturbing such structure. The disposition of existing structures so encountered shall be immediately determined by the Project Manager in accordance with the provisions of the contract.

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

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

a. Use such material in another contract item, providing such use is approved by the Project Manager and is in conformance with the contract specifications applicable to such use; or

b. Remove such material from the site, upon written approval of the Project Manager; or

c. Use such material for his/her own temporary construction on site; or

d. Use such material as intended by the terms of the contract.

Should the Contractor wish to exercise option a., b., or c., he shall request the Project Manager's approval in advance of such use.

Should the Project Manager approve the Contractor's request to exercise option a., b., or c., the Contractor shall be paid for the excavation or removal of such material at the applicable contract price. The Contractor shall replace, at his/her own expense, such removed or excavated material with an agreed equal volume of material that is acceptable for use in constructing embankment, backfills, or otherwise to the extent that such replacement material is needed to complete the contract work. The Contractor shall not be charged for his/her use of such material so used in the work or removed from the site. [5]

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

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

40-08 FINAL CLEANING UP. Upon completion of the work and before acceptance and final payment will be made, the Contractor shall remove from the site all machinery, equipment, surplus and discarded materials, rubbish, temporary structures, and stumps or portions of trees. He shall cut all brush and woods within the limits indicated and shall leave the site in a neat and presentable condition. Material cleared from the site and deposited on adjacent property will not be considered as having been disposed of satisfactorily, unless the Contractor has obtained the written permission of such property Owner.[6]

MODIFICATION OF STANDARDS - FAA SECTION GP-40

[1] Edited paragraph for grammar.
[2] Edited paragraph for grammar.
[3] Edited Section 40-04 for grammar.
[4] Edited paragraph to indicate more commonly used term and grammar,
[5] Removed paragraph to allow for more stringent requirement.
[6] Edited paragraph for grammar.

SECTION 50
CONTROL OF WORK

50-01 AUTHORITY OF THE PROJECT MANAGER. The Project Manager shall decide any and all questions which may arise as to the quality and acceptability of materials furnished, work performed, and as to the manner of performance and rate of progress of the work. The Project Manager shall decide all questions that may arise as to the interpretation of the specifications or plans relating to the work, the fulfillment of the contract on the part of the Contractor, and the rights of different Contractors on the project. The Project Manager shall determine the amount and quality of the several kinds of work performed and materials furnished which are to be paid for under the contract.[1]

[2]

50-02 CONFORMITY WITH PLANS AND SPECIFICATIONS. All work and all materials furnished shall be in reasonably close conformity with the lines, grades, grading sections, cross sections, dimensions, material requirements, and testing requirements that are specified (including specified tolerances) in the contract, plans or specifications.

If the Project Manager finds the materials furnished, work performed, or the finished product not within reasonably close conformity with the plans and specifications but that the portion of the work affected will, in his/her opinion, result in a finished product having a level of safety, economy, durability, and workmanship acceptable to the Owner, he will advise the Owner of his/her determination that the affected work be accepted and remain in place. In this event, the Project Manager will document his/her determination and recommend to the Owner a basis of acceptance that will provide for an adjustment in the contract price for the affected portion of the work. The Project Manager's determination and recommended contract price adjustments will be based on good engineering judgment and such tests or retests of the affected work as are, in his/her opinion, needed. Changes in the contract price shall be covered by contract modifications (change order or supplemental agreement) as applicable.

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

For the purpose of this subsection, the term "reasonably close conformity" shall not be construed as waiving the Contractor's responsibility to complete the work in accordance with the contract, plans, and specifications. The term shall not be construed as waiving the Project Manager's right to insist on strict compliance with the requirements of the contract, plans, and specifications during the Contractor's prosecution of the work, when, in the Project Manager's opinion, such compliance is essential to provide an acceptable finished portion of the work.[3]

For the purpose of this subsection, the term "reasonably close conformity" is also intended to provide the Project Manager with the authority to use good engineering judgment in his/her determinations as to acceptance of work that is not in strict conformity but will provide a finished product equal to or better than that intended by the requirements of the contract, plans and specifications.[4]

The Project Manager will not be responsible for the Contractor's means, methods, techniques, sequences, or procedures of construction or the safety precautions incident thereto.

50-03 COORDINATION OF CONTRACT, PLANS, AND SPECIFICATIONS. The contract, plans, specifications, and all referenced standards cited are essential parts of the contract requirements. A requirement occurring in one is as binding as though occurring in all. They are intended to be complementary and to describe and provide for a complete work. In case of discrepancy, calculated dimensions will govern over scaled dimensions; contract technical specifications shall govern over contract general provisions, plans, cited standards for materials or testing, and cited FAA advisory circulars; contract general provisions shall govern over plans, cited standards for materials or testing, and cited FAA advisory circulars; plans shall govern over cited standards for materials or testing and cited FAA advisory circulars. If any paragraphs contained in the Special Provisions conflict with General Provisions or Technical Specifications, the Special Provisions shall govern.

The Contractor shall not take advantage of any apparent error or omission on the plans or specifications. In the event the Contractor discovers any apparent error or discrepancy, he shall immediately call upon the Project Manager for his/her interpretation and decision, and such decision shall be final.

[5]**50-04 COOPERATION OF CONTRACTOR**. The Contractor will be supplied with two copies each of the plans and specifications. He shall have available on the work at all times one copy each of the plans and specifications. Additional copies of plans and specifications may be obtained by the Contractor for the cost of reproduction.[6]

The Contractor shall give constant attention to the work to facilitate the progress thereof, and he shall cooperate with the Project Manager and his/her inspectors and with other contractors in every way possible. The Project Manager shall allocate the work and designate the sequence of construction in case of controversy between contractors. The Contractor shall have a competent superintendent on the work at all times who is fully authorized as his/her agent on the work. The superintendent shall be capable of reading and thoroughly understanding the plans and specifications and shall receive and fulfill instructions from the Project Manager or his/her authorized representative.[7]

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

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

Each Contractor involved shall assume all liability, financial or otherwise, in connection with his/her contract and shall protect and save harmless the Owner from any and all damages or claims that may arise because of inconvenience, delays, or loss experienced by him because of the presence and operations of other Contractors working within the limits of the same project.

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

50-06 CONSTRUCTION LAYOUT AND STAKES. The Project Manager shall establish horizontal and vertical control only. The Contractor must establish all layout required for the construction of the work. Such stakes and markings as the Project Manager may set for either his/her own or the Contractor's guidance shall be preserved by the Contractor. In case of negligence on the part of the Contractor, or his/her employees, resulting in the destruction of such stakes or markings, an amount equal to the cost of replacing the same may be deducted from subsequent estimates due the Contractor at the discretion of the Project Manager.

The Contractor will be required to furnish all lines, grades and measurements from the control points necessary for the proper prosecution and control of the work contracted for under these specifications.

The Contractor must give weekly copies of the survey notes to the Project Manager so that the Project Manager may check them as to accuracy and method of staking. All areas that are staked by the Contractor must be checked by the Project Manager prior to beginning any work in the area. The Project Manager will make periodic checks of the grades and alignment set by the Contractor. In case of error on the part of the Contractor, or his/her employees, resulting in establishing grades and/or alignment that are not in accordance with the plans or established by the Project Manager, all construction not in accordance with the established grades and/or alignment shall be replaced without additional cost to the Owner.

No direct payment will be made, unless otherwise specified in contract documents, for this labor, materials, or other expenses therewith. The cost thereof shall be included in the price of the bid for the various items of the Contract.

Construction Staking and Layout includes but is not limited to:

Clearing and Grubbing perimeter staking.
Rough Grade slope stakes at 100-foot stations.
Drainage Swales slope stakes and flow line blue tops at 50-foot stations.
Subgrade blue tops at 25 foot stations and 25 foot offset distance (max.) for the following section locations:

a. Runway – minimum 5 per station
b. Taxiways – minimum 3 per station
c. Holding apron areas – minimum 3 per station
d. Roadways – minimum 3 per station

Base Course blue tops at 25 foot stations and 25 foot offset distance (max.) for the following section locations:

a. Runway – minimum 5 per station
b. Taxiways – minimum 3 per station
c. Holding apron areas – minimum 3 per station

Pavement areas:

a. Edge of Pavement hubs and tacks (for stringline by Contractor) at 100 foot stations
b. Between Lifts at 25 foot stations for the following section locations:
   (1). Runways – each paving lane width
   (2). Taxiways – each paving lane width
   (3). Holding areas – each paving lane width

c. After finish paving operations at 50 foot stations
   (1). All paved areas – Edge of each paving lane prior to next paving lot
d. Shoulder and safety area blue tops at 50 foot stations and at all break points with maximum of 50 foot offsets

Fence lines at 100 foot stations

Electrical and Communications System locations, lines and grades including but not limited to duct runs, connections, fixtures, signs, lights, VASI's, PAPI's, REIL's, Wind Cones, Distance Markers (signs), pull boxes and manholes.

Drain lines, cut stakes and alignment on 25-foot stations, inlet and manholes.

Painting and Striping layout (pinned with 1.5 inch PK nails) marked for paint Contractor. (All nails shall be removed after painting)

Laser, or other automatic control devices, shall be checked with temporary control point or grade hub at a minimum of once per 400 feet per pass (i.e. paving lane).

NOTE: Controls and stakes disturbed or suspect of having been disturbed shall be checked and/or reset as directed by the Project Manager without additional cost to the Owner.

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

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

Inspectors employed by the Owner are authorized to notify the Contractor or his/her representatives of any failure of the work or materials to conform to the requirements of the contract, plans, or specifications and to reject such nonconforming materials in question until such issues can be referred to the Project Manager for his/her decision.

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

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

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

expense unless the Owner's representative failed to inspect after having been given reasonable notice in writing that the work was to be performed.

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

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

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

Work done contrary to the instructions of the Project Manager, work done beyond the lines shown on the plans or as given, except as herein specified, or any extra work done without authority, will be considered as unauthorized and will not be paid for under the provisions of the contract. Work so done may be ordered removed or replaced at the Contractor's expense.[8]

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

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

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

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

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

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

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

Should the Contractor fail to respond to the Project Manager's notification, the Project Manager may suspend any work necessary for the Owner to correct such unsatisfactory maintenance condition, depending on the exigency that exists. Any maintenance cost incurred by the Owner, shall be deducted from monies due or to become due the Contractor.[9]

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

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

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

50-16 CLAIMS FOR ADJUSTMENT AND DISPUTES. If for any reason the Contractor deems that additional compensation is due him for work or materials not clearly provided for in the contract, plans, or specifications or previously authorized as extra work, he shall notify the Project Manager in writing of his/her intention to claim such additional compensation before he begins the work on which he bases the claim. If such notification is not given or the Project Manager is not afforded proper opportunity by the Contractor for keeping strict account of actual cost as required, then the Contractor hereby agrees to waive any claim for such additional compensation. Such notice by the Contractor and the fact that the Project Manager has kept account of the cost of the work shall not in any way be construed as proving or substantiating the validity of the claim. When the work on which the claim for additional compensation is based has been completed, the Contractor shall, within 10 calendar days, submit his/her written claim to the Project Manager who will present it to the Owner for consideration in accordance with local laws or ordinances.

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

50-17 COST REDUCTION INCENTIVE. The provisions of this subsection will apply only to contracts awarded to the lowest bidder pursuant to competitive bidding.

On projects with original contract amounts in excess of $100,000, the Contractor may submit to the Project Manager, in writing, proposals for modifying the plans, specifications or other requirements of the contract for the sole purpose of reducing the cost of construction. The cost reduction proposal shall not impair, in any manner, the essential functions or characteristics of the project, including but not limited to service life, economy of operation, ease of maintenance, desired appearance, design and safety standards. This provision shall not apply unless the proposal submitted is specifically identified by the Contractor as being presented for consideration as a value engineering proposal.

Not eligible for cost reduction proposals are changes in the basic design of a pavement type, runway and taxiway lighting, visual aids, hydraulic capacity of drainage facilities, or changes in grade or alignment that reduce the geometric standards of the project.

As a minimum, the following information shall be submitted by the Contractor with each proposal:

a. A description of both existing contract requirements for performing the work and the proposed changes, with a discussion of the comparative advantages and disadvantages of each;

b. An itemization of the contract requirements that must be changed if the proposal is adopted;

c. A detailed estimate of the cost of performing the work under the existing contract and under the proposed changes;

d. A statement of the time by which a change order adopting the proposal must be issued;

e. A statement of the effect adoption of the proposal will have on the time for completion of the contract; and

f. The contract items of work affected by the proposed changes, including any quantity variation attributable to them.

The Contractor may withdraw, in whole or in part, any cost reduction proposal not accepted by the Project Manager, within the period specified in the proposal. The provisions of this subsection shall not be construed to require the Project Manager to consider any cost reduction proposal that may be submitted.

The Contractor shall continue to perform the work in accordance with the requirements of the contract until a change order incorporating the cost reduction proposal has been issued. If a change order has not been issued by the date upon which the Contractor's cost reduction proposal specifies that a decision should be made, or such other date as the Contractor may subsequently have requested in writing, such cost reduction proposal shall be deemed rejected.

The Project Manager shall be the sole judge of the acceptability of a cost reduction proposal and of the estimated net savings from the adoption of all or any part of such proposal. In determining the estimated net savings, the Project Manager may disregard the contract bid prices if, in the Project Manager's judgment such prices do not represent a fair measure of the value of the work to be performed or deleted.

The Owner may require the Contractor to share in the Owner's costs of investigating a cost reduction proposal submitted by the Contractor as a condition of considering such proposal. Where such a condition is imposed, the Contractor shall acknowledge acceptance of it in writing. Such acceptance shall constitute full authority for the Owner to deduct the cost of investigating a cost reduction proposal from amounts payable to the Contractor under the contract.

If the Contractor's cost reduction proposal is accepted in whole or in part, such acceptance will be by a contract change order that shall specifically state that it is executed pursuant to this subsection. Such change order shall incorporate the changes in the plans and specifications which are necessary to permit the cost reduction proposal or such part of it as has been accepted and shall include any conditions upon which the Project Manager's approval is based.

The change order shall also set forth the estimated net savings attributable to the cost reduction proposal. The net savings shall be determined as the difference in costs between the original contract costs for the involved work items and the costs occurring as a result of the proposed change. The change order shall also establish the net savings agreed upon and shall provide for adjustment in the contract price that will divide the net savings equally between the Contractor and the Owner.

The Contractor's 50 percent share of the net savings shall constitute full compensation to the Contractor for the cost reduction proposal and the performance of the work.

Acceptance of the cost-reduction proposal and performance of the cost-reduction work shall not extend the time of completion of the contract unless specifically provided for in the contract change order.

MODIFICATION OF STANDARDS - FAA SECTION GP-50

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[1] Added additional requirement.
[2] Deleted sentence.
[3] Edited paragraph for grammar and more stringent requirements.
[4] Edited paragraph for grammar and more stringent requirements.
[5] Deleted heading.
[6] Edited the quantity of plans and specifications.
[7] Edited paragraph for clarity.
[8] Removed sentence to be more applicable to common practices.
[9] Edited paragraph to be consistent with common practices.

SECTION 60
CONTROL OF MATERIALS

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

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

At the Project Manager's option, materials may be approved at the source of supply before delivery is started. If it is found after trial that sources of supply for previously approved materials do not produce specified products, the Contractor shall furnish materials from other sources.[1]

The Contractor shall furnish airport lighting equipment that conforms to the requirements of cited materials specifications. In addition, where an FAA specification for airport lighting equipment is cited in the plans or specifications, the Contractor shall furnish such equipment that is:

a. Listed in FAA Advisory Circular (AC) 150/5345-53, Airport Lighting Equipment Certification Program, that is in effect on the date of advertisement; and,

b. Produced by the manufacturer qualified (by FAA) to produce such specified and listed equipment.

[2]**60-02 SAMPLES, TESTS, AND CITED SPECIFICATIONS.** Unless otherwise designated, all materials used in the work shall be inspected, tested, and approved by the Project Manager before incorporation in the work. Any work in which untested materials are used without approval or written permission of the Project Manager shall be performed at the Contractor's risk. Materials found to be unacceptable and unauthorized will not be paid for and, if directed by the Project Manager, shall be removed at the Contractor's expense. Unless otherwise designated, tests in accordance with the cited standard methods of ASTM, AASHTO, Federal Specifications, Commercial Item Descriptions, and all other cited methods, which are current on the date of advertisement for bids, will be made by and at the expense of the Project Manager. The testing organizations performing on site field tests shall have copies of all referenced standards on the construction site for use by all technicians and other personnel, including the Contractor's representative at his/her request. Unless otherwise designated, samples will be taken by a qualified representative of the Project Manager. All materials being used are subject to inspection, test, or rejection at any time prior to or during incorporation into the work. Copies of all tests will be furnished to the Contractor's representative at his/her request.

The Contractor shall employ a testing organization to perform all Contractor required tests. The Contractor shall submit to the Project Manager resumes on all testing organizations and individual persons who will be performing the tests. The Project Manager will determine if such persons are qualified. All the test data shall be reported to the Project Manager after the results are known. A legible, handwritten copy of all test

data shall be given to the Project Manager daily, along with printed reports, in an approved format, on a weekly basis. After completion of the project, and prior to final payment, the Contractor shall submit a final report to the Project Manager showing all test data reports, plus an analysis of all results showing ranges, averages, and corrective action taken on all failing tests.

60-03 CERTIFICATION OF COMPLIANCE. The Project Manager may permit the use, prior to sampling and testing, of certain materials or assemblies when accompanied by manufacturer's certificates of compliance stating that such materials or assemblies fully comply with the requirements of the contract.

The certificate shall be signed by the manufacturer. Each lot of such materials or assemblies delivered to the work must be accompanied by a certificate of compliance in which the lot is clearly identified.

Materials or assemblies used on the basis of certificates of compliance may be sampled and tested at any time and if found not to be in conformity with contract requirements will be subject to rejection whether in place or not.

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

When a material or assembly is specified by "brand name or equal" and the Contractor elects to furnish the specified "brand name", the Contractor shall be required to furnish the manufacturer's certificate of compliance for each lot of such material or assembly delivered to the work. Such certificate of compliance shall clearly identify each lot delivered and shall certify as to:[3]

a. Conformance to the specified performance, testing, quality or dimensional requirements; and,

b. Suitability of the material or assembly for the use intended in the contract work.

Should the Contractor propose to furnish an "or equal" material or assembly, he shall furnish the manufacturer's certificates of compliance as hereinbefore described for the specified brand name material or assembly. However, the Project Manager shall be the sole judge as to whether the proposed "or equal" is suitable for use in the work.[4]

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

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

Should the Project Manager conduct plant inspections, the following conditions shall exist:

a. The Project Manager shall have the cooperation and assistance of the Contractor and the producer with whom he has contracted for materials.

b. The Project Manager shall have full entry at all reasonable times to such parts of the plant that concern the manufacture or production of the materials being furnished.

c. If required by the Project Manager, the Contractor shall arrange for adequate office or working space that may be reasonably needed for conducting plant inspections. Office or working space should be conveniently located with respect to the plant.

It is understood and agreed that the Owner shall have the right to retest any material which has been tested and approved at the source of supply after it has been delivered to the site. The Project Manager shall have the right to reject only material which, when retested, does not meet the requirements of the contract, plans, or specifications.[5]

60-05 PROJECT MANAGER'S FIELD OFFICE. When specified and provided for as a contract item, the Contractor shall furnish a building for the exclusive use of the Project Manager as a field office and field testing laboratory. The building shall be furnished and maintained by the Contractor as specified herein and shall become property of the Contractor when the contract work is complete. [6]

60-06 STORAGE OF MATERIALS. Materials shall be so stored as to assure the preservation of their quality and fitness for the work. Stored materials, even though approved before storage, may again be inspected prior to their use in the work. Stored materials shall be located so as to facilitate their prompt inspection. The Contractor shall coordinate the storage of all materials with the Project Manager. Materials to be stored on airport property shall not create an obstruction to air navigation nor shall they interfere with the free and unobstructed movement of aircraft. Unless otherwise shown on the plans, the storage of materials and the location of the Contractor's plant and parked equipment or vehicles shall be as directed by the Project Manager. Private property shall not be used for storage purposes without written permission of the owner or lessee of such property. The Contractor shall make all arrangements and bear all expenses for the storage of materials on private property. Upon request, the Contractor shall furnish the Project Manager a copy of the property owner's permission.

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

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

Rejected material or assembly, the defects of which have been corrected by the Contractor, shall not be returned to the site of the work until such time as the Project Manager has approved its use in the work.[7]

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

All costs of handling, transportation from the specified location to the site of work, storage, and installing Owner-furnished materials shall be included in the unit price bid for the contract item in which such Owner-furnished material is used.

After any Owner-furnished material has been delivered to the location specified, the Contractor shall be responsible for any demurrage, damage, loss, or other deficiencies which may occur during the Contractor's handling, storage, or use of such

Owner-furnished material. The Owner will deduct from any monies due or to become due the Contractor any cost incurred by the Owner in making good such loss due to the Contractor's handling, storage, or use of Owner-furnished materials.[8]

MODIFICATION OF STANDARDS - FAA SECTION GP-60

[1] Edited paragraph for grammar.
[2] Deleted requirement to list equipment, as this information is shown on the plans and specifications.
[3] Edited paragraph for grammar.
[4] Edited paragraph for grammar.
[5] Edited paragraph for clarity.
[6] Revised paragraph as the Field Office is specified in Section 01510.
[7] Edited paragraph for grammar.
[8] Edited paragraph for grammar.

SECTION 70

LEGAL REGULATIONS AND RESPONSIBILITY TO PUBLIC

70-01 LAWS TO BE OBSERVED. The Contractor shall keep fully informed of all Federal and State laws, all local laws, ordinances, and regulations and all orders and decrees of bodies or tribunals having any jurisdiction or authority, which in any manner affect those engaged or employed on the work, or which in any way affect the conduct of the work. He shall at all times observe and comply with all such laws, ordinances, regulations, orders, and decrees; and shall protect and indemnify the Owner and all his/her officers, agents, or servants against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order, or decree, whether by himself or his/her employees.[1]

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

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

70-04 RESTORATION OF SURFACES DISTURBED BY OTHERS. The Owner reserves the right to authorize the construction, reconstruction, or maintenance of any public or private utility service, FAA or National Oceanic and Atmospheric Administration (NOAA) facility, or a utility service of another government agency at any time during the progress of the work. To the extent that such construction, reconstruction, or maintenance has been coordinated with the owner, such authorized work (by others) is indicated on the plans.

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

Should the owner of public or private utility service, FAA, or NOAA facility, or a utility service of another government agency be authorized to construct, reconstruct, or maintain such utility service or facility during the progress of the work, the Contractor shall cooperate with such owners by arranging and performing the work in this contract so as to facilitate such construction, reconstruction or maintenance by others whether or not such work by others is indicated on the drawings. When ordered as extra work by the Project Manager, the Contractor shall make all necessary repairs to the work which are due to such authorized work by others, unless otherwise provided for in the contract, plans, or specifications. It is understood and agreed that the Contractor shall not be

entitled to make any claim for damages due to such authorized work by others or for any delay to the work resulting from such authorized work.[2]

70-05 FEDERAL AID PARTICIPATION. For AIP contracts, the United States Government has agreed to reimburse the Owner for some portion of the contract costs. Such reimbursement is made from time to time upon the Owner's (sponsor's) request to the FAA. In consideration of the United States Government's (FAA's) agreement with the Owner, the Owner has included provisions in this contract pursuant to the requirements of the Airport Improvement Act of 1982, as amended by the Airport and Airway Safety and Capacity Expansion Act of 1987, and the Rules and Regulations of the FAA that pertain to the work.

As required by the Act, the contract work is subject to the inspection and approval of duly authorized representatives of the Administrator, FAA, and is further subject to those provisions of the rules and regulations that are cited in the contract, plans, or specifications.

No requirement of the Act, the rules and regulations implementing the Act, or this contract shall be construed as making the Federal Government a party to the contract nor will any such requirement interfere, in any way, with the rights of either party to the contract.[3]

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

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

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

The Contractor shall maintain the free and unobstructed movement of aircraft and vehicular traffic with respect to his/her own operations and those of his/her subcontractors and all suppliers in accordance with the subsection titled MAINTENANCE OF TRAFFIC of Section 40 hereinbefore specified and shall limit such operations for the convenience and safety of the traveling public as specified in the subsection titled LIMITATION OF OPERATIONS of Section 80 hereinafter.

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

For vehicular and pedestrian traffic, the Contractor shall furnish, erect, and maintain barricades, warning signs, lights and other traffic control devices in reasonable conformity with the Manual of Uniform Traffic Control Devices for Streets and Highways (published by the United States Government Printing Office).

When the work requires closing an air operations area of the airport or portion of such area, the Contractor shall furnish, erect, and maintain temporary markings and

associated lighting conforming to the requirements of AC 150/5340-1K, Standards for Airport Markings.

The Contractor shall furnish, erect, and maintain markings and associated lighting of open trenches, excavations, temporary stockpiles, and his/her parked construction equipment that may be hazardous to the operation of emergency fire-rescue or maintenance vehicles on the airport in reasonable conformance to AC 150/5370-2E, Operational Safety on Airports During Construction.

The Contractor shall identify each motorized vehicle or piece of construction equipment in reasonable conformance to AC 150/5370-2E.

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

Open-flame type lights shall not be permitted within the air operations areas of the airport.[4]

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

All explosives shall be stored in a secure manner in compliance with all laws and ordinances, and all such storage places shall be clearly marked. Where no local laws or ordinances apply, storage shall be provided satisfactory to the Project Manager and, in general, not closer than 1,000 feet from the work or from any building, road, or other place of human occupancy.[5]

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

The use of electrical blasting caps shall not be permitted on or within 1,000 feet of the airport property.[6]

70-10 PROTECTION AND RESTORATION OF PROPERTY AND LANDSCAPE. The Contractor shall be responsible for the preservation of all public and private property, and shall protect carefully from disturbance or damage all land monuments and property markers until the Project Manager has witnessed or otherwise referenced their location and shall not move them until directed.

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

When or where any direct or indirect damage or injury is done to public or private property by or on account of any act, omission, neglect, or misconduct in the execution of the work, or in consequence of the non-execution thereof by the Contractor, he shall restore, at his/her own expense, such property to a condition similar or equal to that

existing before such damage or injury was done, by repairing, or otherwise restoring as may be directed, or he shall make good such damage or injury in an acceptable manner.

70-11 RESPONSIBILITY FOR DAMAGE CLAIMS. The Contractor shall indemnify and save harmless the Project Manager and the Owner and their officers, and employees from all suits, actions, or claims of any character brought because of any injuries or damage received or sustained by any person, persons, or property on account of the operations of the Contractor; or on account of or in consequence of any neglect in safeguarding the work; or through use of unacceptable materials in constructing the work; or because of any act or omission, neglect, or misconduct of said Contractor; or because of any claims or amounts recovered from any infringements of patent, trademark, or copyright; or from any claims or amounts arising or recovered under the "Workmen's Compensation Act," or any other law, ordinance, order, or decree. Money due the Contractor under and by virtue of his/her contract as may be considered necessary by the Owner for such purpose may be retained for the use of the Owner or, in case no money is due, his/her surety may be held until such suit or suits, action or actions, claim or claims for injuries or damages as aforesaid shall have been settled and suitable evidence to that effect furnished to the Owner, except that money due the Contractor will not be withheld when the Contractor produces satisfactory evidence that he is adequately protected by public liability and property damage insurance.[7]

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

70-13 OPENING SECTIONS OF THE WORK TO TRAFFIC. Should it be necessary for the Contractor to complete portions of the contract work for the beneficial occupancy of the Owner prior to completion of the entire contract, such "phasing" of the work shall be specified or indicated on the plans. When so specified, the Contractor shall complete such portions of the work on or before the date specified or as otherwise specified. The Contractor shall make his/her own estimate of the difficulties involved in arranging his/her work to permit such beneficial occupancy by the Owner.

Upon completion of any portion of the work specified or indicated on the drawings, such portion shall be accepted by the Owner in accordance with the subsection titled PARTIAL ACCEPTANCE of Section 50.

No portion of the work may be opened by the Contractor for public use until ordered by the Project Manager in writing. Should it become necessary to open a portion of the work to public traffic on a temporary or intermittent basis, such openings shall be made when, in the opinion of the Project Manager, such portion of the work is in an acceptable condition to support the intended traffic. Temporary or intermittent openings are considered to be inherent in the work and shall not constitute either acceptance of the portion of the work so opened or a waiver of any provision of the contract. Any damage to the portion of the work so opened that is not attributable to traffic which is permitted by the Owner shall be repaired by the Contractor at his/her expense.

The Contractor shall make his/her own estimate of the inherent difficulties involved in completing the work under the conditions herein described and shall not claim any added compensation by reason of delay or increased cost due to opening a portion of the contract work.

Contractor shall be required to conform to safety standards contained AC 150/5370-2E, Operational Safety on Airports During Construction.

Contractor shall refer to the approved safety plan to identify barricade requirements and other safety requirements prior to opening up sections of work to traffic.[8]

70-14 CONTRACTOR'S RESPONSIBILITY FOR WORK. Until the Project Manager's final written acceptance of the entire completed work, excepting only those portions of the work accepted in accordance with the subsection titled PARTIAL ACCEPTANCE of Section 50, the Contractor shall have the charge and care thereof and shall take every precaution against injury or damage to any part due to the action of the elements or from any other cause, whether arising from the execution or from the non-execution of the work. The Contractor shall rebuild, repair, restore, and make good all injuries or damages to any portion of the work occasioned by any of the above causes before final acceptance and shall bear the expense thereof except damage to the work due to unforeseeable causes beyond the control of and without the fault or negligence of the Contractor, including but not restricted to acts of God such as earthquake, tidal wave, tornado, hurricane or other cataclysmic phenomenon of nature, or acts of the public enemy or of government authorities.[9]

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

70-15 CONTRACTOR'S RESPONSIBILITY FOR UTILITY SERVICE AND FACILITIES OF OTHERS. As provided in the subsection titled RESTORATION OF SURFACES DISTURBED BY OTHERS of this section, the Contractor shall cooperate with the owner of any public or private utility service, FAA or NOAA, or a utility service of another government agency that may be authorized by the Owner to construct, reconstruct or maintain such utility services or facilities during the progress of the work.

In addition, the Contractor shall control his/her operations to prevent the unscheduled interruption of such utility services and facilities.[10]

To the extent that such public or private utility services, FAA, or NOAA facilities, or utility services of another governmental agency are known to exist within the limits of the contract work, the approximate locations have been indicated, and owners identified, on the plans. [11]

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

It is further understood and agreed that the Contractor shall, upon execution of the contract, notify the owners of all utility services or other facilities of his/her plan of

operations. Such notification shall be in writing addressed to THE PERSON TO CONTACT as provided on the plans or designated by the Project Manager and the subsection titled RESTORATION OF SURFACES DISTURBED BY OTHERS of this section. A copy of each notification shall be given to the Project Manager. [12]

In addition to the general written notification hereinbefore provided, it shall be the responsibility of the Contractor to keep such individual owners advised of changes in his/her plan of operations that would affect such owners.

Prior to commencing the work in the general vicinity of an existing utility service or facility, the Contractor shall notify each owner of his/her plan of operation. If, in the Contractor's opinion, the owner's assistance is needed to locate the utility service or facility or the presence of a representative of the owner is desirable to observe the work, such advice should be included in the notification. Such notification shall be given by the most expeditious means to reach the utility owner's PERSON TO CONTACT no later than two normal business days prior to the Contractor's commencement of operations in such general vicinity. The Contractor shall furnish a written summary of the notification to the Project Manager. [13]

The Contractor's failure to give the two days' notice hereinabove provided shall be cause for the Project Manager to suspend the Contractor's operations in the general vicinity of a utility service or facility. [14]

Where the outside limits of an underground utility service have been located and staked on the ground, the Contractor shall be required to use excavation methods acceptable to the Project Manager within 3 feet of such outside limits at such points as may be required to ensure protection from damage due to the Contractor's operations. [15]

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

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

70-15.1 FAA FACILITIES AND CABLE RUNS. The Contractor is hereby advised that the construction limits of the project include existing facilities and buried cable runs that are owned, operated and maintained by the FAA. The Contractor, during the prosecution of the project work, shall comply with the following:

a. The Contractor shall permit FAA maintenance personnel the right of access to the project work site for purposes of inspecting and maintaining all existing FAA owned facilities.

b. The Contractor shall notify the above named FAA Airway Facilities Point-of-Contact seven (7) calendar days prior to commencement of construction activities in order to permit sufficient time to locate and mark existing buried cables and to schedule any required facility outages.

c. If prosecution of the project work requires a facility outage, the Contractor shall contact the above named FAA Point-of-Contact a minimum of 48 hours prior to the time of the required outage.

d. If prosecution of the project work results in damages to existing FAA equipment or cables, the Contractor shall repair the damaged item in conformance with FAA Airway Facilities' standards to the satisfaction of the above named FAA Point-of-Contact.

e. If the project work requires the cutting or splicing of FAA owned cables, the above named FAA Point-of-Contact shall be contacted a minimum of 48 hours prior to the time the cable work commences. The FAA reserves the right to have a FAA Airway Facilities representative on site to observe the splicing of the cables as a condition of acceptance. All cable splices are to be accomplished in accordance with FAA Airway Facilities' specifications and require approval by the above named FAA Point-of-Contact as a condition of acceptance by the Owner. The Contractor is hereby advised that FAA Airway Facilities restricts the location of where splices may be installed. If a cable splice is required in a location that is not permitted by FAA Airway Facilities, the Contractor shall furnish and install a sufficient length of new cable that eliminates the need for any splice.

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

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

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

The Contractor, without prejudice to the terms of the contract, shall be liable to the Owner for latent defects, fraud, or such gross mistakes as may amount to fraud, or as regards the Owner's rights under any warranty or guaranty. [16]

70-19 ENVIRONMENTAL PROTECTION. The Contractor shall comply with all Federal, state, and local laws and regulations controlling pollution of the environment. He shall take necessary precautions to prevent pollution of streams, lakes, ponds, and reservoirs with fuels, oils, bitumens, chemicals, or other harmful materials and to prevent pollution of the atmosphere from particulate and gaseous matter.

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

Should the Contractor encounter, during his/her operations, any building, part of a building, structure, or object that is incongruous with its surroundings, he shall immediately cease operations in that location and notify the Project Manager. The Project Manager will immediately investigate the Contractor's finding and will direct the Contractor to either resume his/her operations or to suspend operations as directed. [17]

Should the Project Manager order suspension of the Contractor's operations in order to protect an archaeological or historical finding, or order the Contractor to perform extra work, such shall be covered by an appropriate contract modification (change order or supplemental agreement) as provided in the subsection titled EXTRA WORK of Section 40 and the subsection titled PAYMENT FOR EXTRA WORK AND FORCE ACCOUNT WORK of Section 90. If appropriate, the contract modification shall include an extension of contract time in accordance with the subsection titled DETERMINATION AND EXTENSION OF CONTRACT TIME of Section 80. [18]

MODIFICATION OF STANDARDS - FAA SECTION GP-70

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[1] Edited paragraph for grammar.
[2] Edited section for grammar and clarity.
[3] Edited section to include applicable requirements.
[4] Edited section for clarity purposes and grammar.
[5] Removed metric reference.
[6] Removed metric reference.
[7] Edited section for clarity.
[8] Edited section for grammar and clarity.
[9] Edited section for grammar.
[10] Edited section for grammar.
[11] Edited to indicate utility services shown on the plans.
[12] Edited for clarity purposes.
[13] Edited for clarity purposes.
[14] Changed Owner to Project Manager.
[15] Removed metric reference.
[16] Edited section for grammar.
[17] Removed Owner requirement.
[18] Changed Owner to Project Manager.

SECTION 80

PROSECUTION AND PROGRESS

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

Should the Contractor elect to assign his/her contract, said assignment shall be concurred in by the surety, shall be presented for the consideration and approval of the Owner, and shall be consummated only on the written approval of the Owner. In case of approval, the Contractor shall file copies of all subcontracts with the Project Manager. [1]

80-02 NOTICE TO PROCEED. The Notice to Proceed shall state the date on which it is expected the Contractor will begin the construction and from which date contract time will be charged. The Contractor shall begin the work to be performed under the contract within 10 days of the date set by the Project Manager in the written Notice to Proceed, but in any event, the Contractor shall notify the Project Manager at least 24 hours in advance of the time actual construction operations will begin.[2]

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

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

For AIP contracts, the Contractor shall not commence any actual construction prior to the date on which the Notice to Proceed is issued by the Owner.[3]

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

When the work requires the Contractor to conduct his/her operations within an AIR OPERATIONS AREA of the airport, the work shall be coordinated with airport management (through the Project Manager) at least 48 hours prior to commencement of such work. The Contractor shall not close an AIR OPERATIONS AREA until so authorized by the Project Manager and until the necessary temporary marking and

associated lighting is in place as provided in the subsection titled BARRICADES, WARNING SIGNS, AND HAZARD MARKINGS of Section 70.[4]

When the contract work requires the Contractor to work within an AIR OPERATIONS AREA of the airport on an intermittent basis (intermittent opening and closing of the AIR OPERATIONS AREA), the Contractor shall maintain constant communications as hereinafter specified; immediately obey all instructions to vacate the AIR OPERATIONS AREA; immediately obey all instructions to resume work in such AIR OPERATIONS AREA. Failure to maintain the specified communications or to obey instructions shall be cause for suspension of the Contractor's operations in the AIR OPERATIONS AREA until the satisfactory conditions are provided. The AIR OPERATIONS AREAS (AOA) that cannot be closed to operating aircraft to permit the Contractor's operations on a continuous basis and will therefore be closed to aircraft operations intermittently are indicated on the drawings or will be designated by the Project Manager.[5]

Contractor shall be required to conform to safety standards contained in AC 150/5370-2, Operational Safety on Airports During Construction (See Special Provisions).

80-04.1 OPERATIONAL SAFETY ON AIRPORT DURING CONSTRUCTION. All Contractors' operations shall be conducted in accordance with the project safety plan and the provisions set forth within the current version of Advisory Circular 150/5370-2. The safety plan included within the contract documents conveys minimum requirements for operational safety on the airport during construction activities. The Contractor shall prepare and submit a plan that details how it proposes to comply with the requirements presented within the safety plan.

The Contractor shall implement all necessary safety plan measures prior to commencement of any work activity. The Contractor shall conduct routine checks of the safety plan measures to assure compliance with the safety plan measures.

The Contractor is responsible to the Owner for the conduct of all subcontractors it employs on the project. The Contractor shall assure that all subcontractors are made aware of the requirements of the safety plan and that they implement and maintain all necessary measures.

No deviation or modifications may be made to the approved safety plan unless approved in writing by the Owner or Project Manager.

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

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

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

Should the Contractor fail to remove such persons or person, or fail to furnish suitable

and sufficient personnel for the proper prosecution of the work, the Project Manager may suspend the work by written notice until compliance with such orders.

All equipment that is proposed to be used on the work shall be of sufficient size and in such mechanical condition as to meet requirements of the work and to produce a satisfactory quality of work. Equipment used on any portion of the work shall be such that no injury to previously completed work, adjacent property, or existing airport facilities will result from its use.[6]

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

When the contract specifies the use of certain methods and equipment, such methods and equipment shall be used unless others are authorized by the Project Manager. If the Contractor desires to use a method or type of equipment other than specified in the contract, he may request authority from the Project Manager to do so. The request shall be in writing and shall include a full description of the methods and equipment proposed and of the reasons for desiring to make the change. If approval is given, it will be on the condition that the Contractor will be fully responsible for producing work in conformity with contract requirements. If, after trial use of the substituted methods or equipment, the Project Manager determines that the work produced does not meet contract requirements, the Contractor shall discontinue the use of the substitute method or equipment and shall complete the remaining work with the specified methods and equipment. The Contractor shall remove any deficient work and replace it with work of specified quality, or take such other corrective action as the Project Manager may direct. No change will be made in basis of payment for the contract items involved nor in contract time as a result of authorizing a change in methods or equipment under this subsection.

80-06 TEMPORARY SUSPENSION OF THE WORK. The Project Manager shall have the authority to suspend the work wholly, or in part, for such period or periods as he may deem necessary, due to unsuitable weather, or such other conditions as are considered unfavorable for the prosecution of the work, or for such time as is necessary due to the failure on the part of the Contractor to carry out orders given or perform any or all provisions of the contract.[7]

In the event that the Contractor is ordered by the Project Manager, in writing, to suspend work for some unforeseen cause not otherwise provided for in the contract and over which the Contractor has no control, the Contractor may be reimbursed for actual money expended on the work during the period of shutdown. No allowance will be made for anticipated profits. The period of shutdown shall be computed from the effective date of the Project Manager's order to suspend work to the effective date of the Project Manager's order to resume the work. Claims for such compensation shall be filed with the Project Manager within the time period stated in the Project Manager's order to resume work. The Contractor shall submit with his/her claim information substantiating the amount shown on the claim. The Project Manager will forward the Contractor's claim to the Owner for consideration in accordance with local laws or ordinances. No provision of this article shall be construed as entitling the Contractor to compensation for delays due to inclement weather, for suspensions made at the request of the Contractor, or for any other delay provided for in the contract, plans, or specifications.[8]

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

80-07 DETERMINATION AND EXTENSION OF CONTRACT TIME.[9] The number of calendar days allowed for completion of the work shall be stated in the bid and contract and shall be known as the CONTRACT TIME.

Should the contract time require extension for reasons beyond the Contractor's control, it shall be adjusted as follows:

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

At the time of final payment, the contract time shall be increased in the same proportion as the cost of the actually completed quantities bears to the cost of the originally estimated quantities in the bid. Such increase in the contract time shall not consider either cost of work or the extension of contract time that has been covered by a Change Order or supplemental agreement. Charges against the contract time will cease as of the date of final acceptance.

If the Contractor finds it impossible for reasons beyond his/her control to complete the work within the contract time as specified, or as extended in accordance with the provisions of this subsection, he may, at any time prior to the expiration of the contract time as extended, make a written request to the Project Manager for an extension of time setting forth the reasons which he believes will justify the granting of his/her request. Requests for extension of time on calendar day projects, caused by inclement weather, shall be supported with National Weather Bureau data showing the actual amount of inclement weather exceeded which could normally be expected during the contract period The Contractor's plea that insufficient time was specified is not a valid reason for extension of time. If the Project Manager finds that the work was delayed because of conditions beyond the control and without the fault of the Contractor, he may extend the time for completion in such amount as the conditions justify. The extended time for completion shall then be in full force and effect, the same as though it were the original time for completion.

80-08 FAILURE TO COMPLETE ON TIME. For each calendar day that any work remains uncompleted after the contract time (including all extensions and adjustments as provided in the subsection titled DETERMINATION AND EXTENSION OF CONTRACT TIME of this Section), the sum specified in the contract and bid as liquidated damages will be deducted from any money due or to become due the Contractor or his/her surety. Such deducted sums shall not be deducted as a penalty but shall be considered as liquidation of a reasonable portion of damages that will be incurred by the owner should the Contractor fail to complete the work in the time provided in his/her contract.

Permitting the Contractor to continue and finish the work or any part of it after the time fixed for its completion, or after the date to which the time for completion may have been extended, will in no way operate as a waiver on the part of the Owner of any of its rights under the contract.[10]

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

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

b. Fails to perform the work or fails to provide sufficient workers, equipment or materials to assure completion of work in accordance with the terms of the contract, or

c. Performs the work unsuitably or neglects or refuses to remove materials or to perform anew such work as may be rejected as unacceptable and unsuitable, or

d. Discontinues the prosecution of the work, or

e. Fails to resume work which has been discontinued within a reasonable time after notice to do so, or

f. Becomes insolvent or is declared bankrupt, or commits any act of bankruptcy or insolvency, or

g. Allows any final judgment to stand against him unsatisfied for a period of 10 days, or

h. Makes an assignment for the benefit of creditors, or

i. For any other cause whatsoever, fails to carry on the work in an acceptable manner.

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

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

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

under the contract, then the Contractor and the surety shall be liable and shall pay to the Owner the amount of such excess.

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

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

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

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

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

80-11 WORK AREA, STORAGE AREA AND SEQUENCE OF OPERATIONS. The Contractor shall obtain approval from the Project Manager prior to beginning any work in all areas of the airport. No operating runway, taxiway, or Air Operations Area (AOA) shall be crossed, entered, or obstructed while it is operational. The Contractor shall plan and coordinate his/her work in such a manner as to insure safety and a minimum of hindrance to flight operations. All Contractor equipment and material stockpiles shall be stored in accordance with the approved safety plan and phasing plan. No equipment will be allowed to park within the approach area of an active runway at any time. No equipment shall be within the runway safety area at any time unless otherwise directed.
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MODIFICATION OF STANDARDS - FAA SECTION GP-80

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[1]Deleted work percentage as this is specified elsewhere.
[2] Edited section for grammar.
[3] Edited section for grammar and more commonly used terms.
[4] Changed operations to management.
[5] Edited paragraph for clarity purposes.
[6] Edited for grammar.
[7] Changed Owner to Project Manager.
[8] Changed Owner to Project Manager and Owner to Contractor.
[9] Section edited to reflect applicable requirements.
[10] Section edited for grammar.
[11] Edited for clarity.

SECTION 90

MEASUREMENT AND PAYMENT

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

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

Unless otherwise specified, longitudinal measurements for area computations will be made horizontally, and no deductions will be made for individual fixtures (or leave-outs) having an area of 9 square feet or less.[1] Unless otherwise specified, transverse measurements for area computations will be the neat dimensions shown on the plans or ordered in writing by the Project Manager.

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

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

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

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

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

Materials to be measured by volume in the hauling vehicle shall be hauled in approved vehicles and measured therein at the point of delivery. Vehicles for this purpose may be of any size or type acceptable to the Project Manager, provided that the body is of such shape that the actual contents may be readily and accurately determined. All vehicles shall be loaded to at least their water level capacity, and all loads shall be leveled when the vehicles arrive at the point of delivery.

When requested by the Contractor and approved by the Project Manager in writing, material specified to be measured by the cubic yard may be weighed, and such weights will be converted to cubic yards for payment purposes. Factors for conversion from weight measurement to volume measurement will be determined by the Project Manager

and shall be agreed to by the Contractor before such method of measurement of pay quantities is used.[3]

Bituminous materials will be measured by the gallon or ton. When measured by volume, such volumes will be measured at 60° F (15° C) or will be corrected to the volume at 60° F (15° C) using ASTM D 4311 for asphalts or ASTM D 633 for tars.[4]

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

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

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

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

The term "lump sum" when used as an item of payment will mean complete payment for the work described in the contract.[5]

When a complete structure or structural unit (in effect, "lump sum" work) is specified as the unit of measurement, the unit will be construed to include all necessary fittings and accessories.[6]

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

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

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

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

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

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

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

Scales "overweighing" (indicating more than correct weight) will not be permitted to operate, and all materials received subsequent to the last previous correct weighing-accuracy test will be reduced by the percentage of error in excess of one-half of 1 percent.[7]

In the event inspection reveals the scales have been "underweighing" (indicating less than correct weight), they shall be adjusted, and no additional payment to the Contractor will be allowed for materials previously weighed and recorded.[8]

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

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

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

When the "basis of payment" subsection of a technical specification requires that the contract price (price bid) include compensation for certain work or material essential to the item, this same work or material will not also be measured for payment under any other contract item which may appear elsewhere in the contract, plans, or specifications.[9]

90-03 COMPENSATION FOR ALTERED QUANTITIES. When the accepted quantities of work vary from the quantities in the bid, the Contractor shall accept as payment in full, so far as contract items are concerned, payment at the original contract price for the accepted quantities of work actually completed and accepted. No allowance, except as provided for in the subsection titled ALTERATION OF WORK AND QUANTITIES of Section 40 will be made for any increased expense, loss of expected reimbursement, or loss of anticipated profits suffered or claimed by the Contractor which results directly from such alterations or indirectly from his/her unbalanced allocation of overhead and profit among the contract items, or from any other cause.[10]

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

Should the Project Manager omit or order nonperformance of a contract item or portion of such item from the work, the Contractor shall accept payment in full at the contract prices for any work actually completed and acceptable prior to the Project Manager's order to omit or non-perform such contract item.

Acceptable materials ordered by the Contractor or delivered on the work prior to the date of the Project Manager's order will be paid for at the actual cost to the Contractor and shall thereupon become the property of the owner. [11]

In addition to the reimbursement hereinbefore provided, the Contractor shall be reimbursed for all actual costs incurred for the purpose of performing the omitted contract item prior to the date of the Project Manager's order. Such additional costs incurred by the Contractor must be directly related to the deleted contract item and shall be supported by certified statements by the Contractor as to the nature and the amount of such costs. [12]

90-05 PAYMENT FOR EXTRA AND FORCE ACCOUNT WORK. Extra work, performed in accordance with the subsection titled EXTRA WORK of Section 40, will be paid for at the contract prices or agreed prices specified in the change order or supplemental agreement authorizing the extra work. When the change order or supplemental agreement authorizing the extra work requires that it be done by force account, such force account shall be measured and paid for based on expended labor, equipment, and materials plus a negotiated and agreed upon allowance for overhead and profit.

a. Miscellaneous. No additional allowance will be made for general superintendence, the use of small tools, or other costs for which no specific allowance is herein provided.

b. Comparison of Record. The Contractor and the Project Manager shall compare records of the cost of extra work at the end of each day. Agreement shall be indicated by signature of the Contractor and the Project Manager or their duly authorized representatives.

c. Statement. No payment will be made for extra work performed until the Contractor has furnished the Project Manager with duplicate itemized statements of the cost of such extra work detailed as follows:

(1) Name, classification, date, daily hours, total hours, rate and extension for each laborer and foreman.

(2) Designation, dates, daily hours, total hours, rental rate, and extension for each unit of machinery and equipment.

(3) Quantities of materials, prices, and extensions.

(4) Transportation of materials.

(5) Cost of property damage, liability and workman's compensation insurance premiums, unemployment insurance contributions, and social security tax.

Statements shall be accompanied and supported by a receipted invoice for all materials used and transportation charges. However, if materials used on the force account work are not specifically purchased for such work but are taken from the Contractor's stock, then in lieu of the invoices the Contractor shall furnish an affidavit certifying that such materials were taken from his/her stock, that the quantity claimed was actually used, and that the price and transportation claimed represent the actual cost to the Contractor. [13]

90-06 PARTIAL PAYMENTS. Partial payments will be made to the Contractor at least once each month as the work progresses. Said payments will be based upon estimates, prepared by the Project Manager, of the value of the work performed and materials complete and in place in accordance with the contract, plans, and specifications. Such partial payments may also include the delivered actual cost of those materials stockpiled and stored in accordance with the subsection titled PAYMENT FOR MATERIALS ON HAND of this section. No partial payment will be made when the amount due to the Contractor since the last estimate amounts to less than five hundred dollars.

From the total of the amount determined to be payable on a partial payment, ten percent (10%) of such total amount will be deducted and retained by the Owner until the final payment is made, except as may be provided (at the Contractor's option) in the subsection titled PAYMENT OF WITHHELD FUNDS of this section. The balance ninety percent (90%) of the amount payable, less all previous payments, shall be certified for payment. Should the Contractor exercise his/her option, as provided in the subsection titled PAYMENT OF WITHHELD FUNDS of this section, no such 10 percent retainage shall be deducted.

When not less than ninety-five percent (95%) of the work has been completed the Project Manager may, at his/her discretion and with the consent of the surety, prepare an estimate from which will be retained an amount not less than twice the contract value or estimated cost, whichever is greater, of the work remaining to be done.

The remainder, less all previous payments and deductions, will then be certified for payment to the Contractor. [14]

It is understood and agreed that the Contractor shall not be entitled to demand or receive partial payment based on quantities of work in excess of those provided in the bid or covered by approved change orders or supplemental agreements, except when such excess quantities have been determined by the Project Manager to be a part of the final quantity for the item of work in question. [15]

No partial payment shall bind the owner to the acceptance of any materials or work in place as to quality or quantity. All partial payments are subject to correction at the time of final payment as provided in the subsection titled ACCEPTANCE AND FINAL PAYMENT of this section. [16]

[17-20]**90-07 PAYMENT FOR MATERIALS ON HAND. Deleted in its entirety.**

90-08 PAYMENT OF WITHHELD FUNDS. At the Contractor's option, if an Owner withholds retainage in accordance with the methods described in subsection 90-06 PARTIAL PAYMENTS, the Contractor may request that the Owner deposit the retainage into an escrow account. The Owner's deposit of retainage into an escrow account is subject to the following conditions:

a. The Contractor shall bear all expenses of establishing and maintaining an escrow account and escrow agreement acceptable to the Owner.

b. The Contractor shall deposit to and maintain in such escrow only those securities or bank certificates of deposit as are acceptable to the Owner and having a value not less than the retainage that would otherwise be withheld from partial payment.

c. The Contractor shall enter into an escrow agreement satisfactory to the Owner.

d. The Contractor shall obtain the written consent of the surety to such agreement.

90-09 ACCEPTANCE AND FINAL PAYMENT. When the contract work has been accepted in accordance with the requirements of the subsection titled FINAL ACCEPTANCE of Section 50, the Project Manager will prepare the final estimate of the items of work actually performed. The Contractor shall approve the Project Manager's final estimate or advise the Project Manager of his/her objections to the final estimate which are based on disputes in measurements or computations of the final quantities to be paid under the contract as amended by change order or supplemental agreement. The Contractor and the Project Manager shall resolve all disputes (if any) in the measurement and computation of final quantities to be paid within 30 calendar days of the Contractor's receipt of the Project Manager's final estimate. If, after such 30-day period, a dispute still exists, the Contractor may approve the Project Manager's estimate under protest of the quantities in dispute, and such disputed quantities shall be considered by the Owner as a claim in accordance with the subsection titled CLAIMS FOR ADJUSTMENT AND DISPUTES of Section 50.

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

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

MODIFICATION OF STANDARDS – FAA SECTION GP-90

[1] Removed metric reference.
[2] Edited paragraph for grammar.
[3] Removed metric references and edited for grammar.
[4] Removed metric reference, edited for grammar, and added correct ASTM reference.
[5] Edited paragraph for grammar.
[6] Edited paragraph for grammar.
[7] Edited for punctuation.
[8] Edited for punctuation.
[9] Edited for punctuation.
[10] Changed "Proposal" to "Bid".
[11] Edited paragraph for grammar.
[12] Edited paragraph for grammar.
[13] Edited section for Extra Work.
[14] Edited paragraph for grammar.
[15] Changed "Proposal" to "Bid".
[16] Edited paragraph for grammar.
[17] Deleted paragraph.
[18] Edited paragraph for grammar. (Deleted as part of #17)
[19] Edited paragraph for grammar. (Deleted as part of #17)
[20] Struck-through section as GDOT does not allow payment for stored materials. (Deleted as part of #17)

SECTION 100

CONTRACTOR QUALITY CONTROL PROGRAM

100-01 GENERAL. When the specification requires a Contractor Quality Control Program, the Contractor shall establish, provide, and maintain an effective Quality Control Program that details the methods and procedures that will be taken to assure that all materials and completed construction required by this contract conform to contract plans, technical specifications and other requirements, whether manufactured by the Contractor, or procured from subcontractors or vendors. Although guidelines are established and certain minimum requirements are specified herein and elsewhere in the contract technical specifications, the Contractor shall assume full responsibility for accomplishing the stated purpose.

The intent of this section is to enable the Contractor to establish a necessary level of control that will:

a. Adequately provide for the production of acceptable quality materials.

b. Provide sufficient information to assure both the Contractor and the Project Manager that the specification requirements can be met.

c. Allow the Contractor as much latitude as possible to develop his or her own standard of control.

The Contractor shall be prepared to discuss and present, at the preconstruction conference, his/her understanding of the quality control requirements. The Contractor shall not begin any construction or production of materials to be incorporated into the completed work until the Quality Control Program has been reviewed by the Project Manager. No partial payment will be made for materials subject to specific quality control requirements until the Quality Control Program has been reviewed.

The quality control requirements contained in this section and elsewhere in the contract technical specifications are in addition to and separate from the acceptance testing requirements. Acceptance testing requirements are the responsibility of the Project Manager.

100-02 DESCRIPTION OF PROGRAM.

a. General Description. The Contractor shall establish a Quality Control Program to perform inspection and testing of all items of work required by the technical specifications, including those performed by subcontractors. This Quality Control Program shall ensure conformance to applicable specifications and plans with respect to materials, workmanship, construction, finish, and functional performance. The Quality Control Program shall be effective for control of all construction work performed under this Contract and shall specifically include surveillance and tests required by the technical specifications, in addition to other requirements of this section and any other activities deemed necessary by the Contractor to establish an effective level of quality control.

b. Quality Control Program. The Contractor shall describe the Quality Control Program in a written document that shall be reviewed by the Project Manager prior to the start of any production, construction, or off-site fabrication. The written Quality Control

Program shall be submitted to the Project Manager for review at least seven (7) calendar days before the preconstruction conference.[1]

The Quality Control Program shall be organized to address, as a minimum, the following items:

a. Quality control organization;

b. Project progress schedule;

c. Submittals schedule;

d. Inspection requirements;

e. Quality control testing plan;

f. Documentation of quality control activities; and

g. Requirements for corrective action when quality control and/or acceptance criteria are not met.

The Contractor is encouraged to add any additional elements to the Quality Control Program that he/she deems necessary to adequately control all production and/or construction processes required by this contract.

100-03 QUALITY CONTROL ORGANIZATION. The Contractor Quality Control Program shall be implemented by the establishment of a separate quality control organization. An organizational chart shall be developed to show all quality control personnel and how these personnel integrate with other management/production and construction functions and personnel.

The organizational chart shall identify all quality control staff by name and function, and shall indicate the total staff required to implement all elements of the Quality Control Program including inspection and testing for each item of work. If necessary, different technicians can be utilized for specific inspection and testing functions for different items of work. If an outside organization or independent testing laboratory is used for implementation of all or part of the Quality Control Program, the personnel assigned shall be subject to the qualification requirements of paragraph 100-03a and 100-03b. The organizational chart shall indicate which personnel are Contractor employees and which are provided by an outside organization.

The quality control organization shall consist of the following minimum personnel:

a. Program Administrator. The Program Administrator shall be a full-time employee of the Contractor, or a consultant engaged by the Contractor. The Program Administrator shall have a minimum of five (5) years of experience in airport and/or highway construction and shall have had prior quality control experience on a project of comparable size and scope as the contract.

Additional qualifications for the Program Administrator shall include at least 1 of the following requirements:

(1) Professional engineer with one (1) year of airport paving experience acceptable to the Project Manager.

(2) Engineer-in-training with two (2) years of airport paving experience acceptable to the Project Manager.

(3) An individual with three (3) years of highway and/or airport paving experience acceptable to the Project Manager, with a Bachelor of Science Degree in Civil Engineering, Civil Engineering Technology or Construction.

(4) Construction materials technician certified at Level III by the National Institute for Certification in Engineering Technologies (NICET).

(5) Highway materials technician certified at Level III by NICET.

(6) Highway construction technician certified at Level III by NICET.

(7) A NICET certified engineering technician in Civil Engineering Technology with five (5) years of highway and/or airport paving experience acceptable to the Project Manager.

The Program Administrator shall have full authority to institute any and all actions necessary for the successful implementation of the Quality Control Program to ensure compliance with the contract plans and technical specifications. The Program Administrator shall report directly to a responsible officer of the construction firm. The Program Administrator may supervise the Quality Control Program on more than one project provided that person can be at the job site within one $(1)^2$ hours after being notified of a problem.

b. Quality Control Technicians. A sufficient number of quality control technicians necessary to adequately implement the Quality Control Program shall be provided. These personnel shall be either engineers, engineering technicians, or experienced craftsman with qualifications in the appropriate field equivalent to NICET Level II or higher construction materials technician or highway construction technician and shall have a minimum of two (2) years of experience in their area of expertise.

The quality control technicians shall report directly to the Program Administrator and shall perform the following functions:

(1) Inspection of all materials, construction, plant, and equipment for conformance to the technical specifications, and as required by Section 100-06.

(2) Performance of all quality control tests as required by the technical specifications and Section 100-07.

Certification at an equivalent level, by a state or nationally recognized organization will be acceptable in lieu of NICET certification.

c. Staffing Levels. The Contractor shall provide sufficient qualified quality control personnel to monitor each work activity at all times. Where material is being produced in a plant for incorporation into the work, separate plant and field technicians shall be provided at each plant and field placement location. The scheduling and coordinating of all inspection and testing must match the type and pace of work activity. The Quality Control Program shall state where different technicians will be required for different work elements.

100-04 PROJECT PROGRESS SCHEDULE. The Contractor shall submit a coordinated construction schedule for all work activities. The schedule shall be prepared as a network diagram in Critical Path Method (CPM), PERT, or other format, or as

otherwise specified in the contract. As a minimum, it shall provide information on the sequence of work activities, milestone dates, and activity duration.

The Contractor shall maintain the work schedule and provide an update and analysis of the progress schedule on a twice monthly basis, or as otherwise specified in the contract. Submission of the work schedule shall not relieve the Contractor of overall responsibility for scheduling, sequencing, and coordinating all work to comply with the requirements of the contract.

100-05 SUBMITTALS SCHEDULE. The Contractor shall submit a detailed listing of all submittals (e.g., mix designs, material certifications) and shop drawings required by the technical specifications. The listing can be developed in a spreadsheet format and shall include:

a. Specification item number;
b. Item description;
c. Description of submittal;
d. Specification paragraph requiring submittal; and
e. Scheduled date of submittal.

100-06 INSPECTION REQUIREMENTS. Quality control inspection functions shall be organized to provide inspections for all definable features of work, as detailed below. All inspections shall be documented by the Contractor as specified by Section 100-07.

Inspections shall be performed daily to ensure continuing compliance with contract requirements until completion of the particular feature of work. These shall include the following minimum requirements:

a. During plant operation for material production, quality control test results and periodic inspections shall be utilized to ensure the quality of aggregates and other mix components, and to adjust and control mix proportioning to meet the approved mix design and other requirements of the technical specifications. All equipment utilized in proportioning and mixing shall be inspected to ensure its proper operating condition. The Quality Control Program shall detail how these and other quality control functions will be accomplished and utilized.

b. During field operations, quality control test results and periodic inspections shall be utilized to ensure the quality of all materials and workmanship. All equipment utilized in placing, finishing, and compacting shall be inspected to ensure its proper operating condition and to ensure that all such operations are in conformance to the technical specifications and are within the plan dimensions, lines, grades, and tolerances specified. The Program shall document how these and other quality control functions will be accomplished and utilized.

100-07 QUALITY CONTROL TESTING PLAN. As a part of the overall Quality Control Program, the Contractor shall implement a quality control testing plan, as required by the technical specifications. The testing plan shall include the minimum tests and test frequencies required by each technical specification Item, as well as any additional quality control tests that the Contractor deems necessary to adequately control production and/or construction processes.

The testing plan can be developed in a spreadsheet fashion and shall, as a minimum, include the following:

a. Specification item number (e.g., P-401);
b. Item description (e.g., Plant Mix Bituminous Pavements);

c. Test type (e.g., gradation, grade, asphalt content);
d. Test standard (e.g., ASTM or AASHTO test number, as applicable);
e. Test frequency (e.g., as required by technical specifications or minimum frequency when requirements are not stated);
f. Responsibility (e.g., plant technician); and
g. Control requirements (e.g., target, permissible deviations).

The testing plan shall contain a statistically-based procedure of random sampling for acquiring test samples in accordance with ASTM D 3665. The Project Manager shall be provided the opportunity to witness quality control sampling and testing.

All quality control test results shall be documented by the Contractor as required by Section 100-08.

100-08 DOCUMENTATION. The Contractor shall maintain current quality control records of all inspections and tests performed. These records shall include factual evidence that the required inspections or tests have been performed, including type and number of inspections or tests involved; results of inspections or tests; nature of defects, deviations, causes for rejection, etc.; proposed remedial action; and corrective actions taken.

These records must cover both conforming and defective or deficient features, and must include a statement that all supplies and materials incorporated in the work are in full compliance with the terms of the contract. Legible copies of these records shall be furnished to the Project Manager daily. The records shall cover all work placed subsequent to the previously furnished records and shall be verified and signed by the Contractor's Program Administrator.

Specific Contractor quality control records required for the contract shall include, but are not necessarily limited to, the following records:

a. Daily Inspection Reports. Each Contractor quality control technician shall maintain a daily log of all inspections performed for both Contractor and subcontractor operations on a form acceptable to the Project Manager. These technician's daily reports shall provide factual evidence that continuous quality control inspections have been performed and shall, as a minimum, include the following:

(1) Technical specification item number and description;
(2) Compliance with approved submittals;
(3) Proper storage of materials and equipment;
(4) Proper operation of all equipment;
(5) Adherence to plans and technical specifications;
(6) Review of quality control tests; and
(7) Safety inspection.

The daily inspection reports shall identify inspections conducted, results of inspections, location and nature of defects found, causes for rejection, and remedial or corrective actions taken or proposed.

The daily inspection reports shall be signed by the responsible quality control technician and the Program Administrator. The Project Manager shall be provided at least one copy of each daily inspection report on the work day following the day of record.

b. Daily Test Reports. The Contractor shall be responsible for establishing a system that will record all quality control test results. Daily test reports shall document the following information:

(1) Technical specification item number and description;
(2) Test designation;
(3) Location;
(4) Date of test;
(5) Control requirements;
(6) Test results;
(7) Causes for rejection;
(8) Recommended remedial actions; and
(9) Retests.

Test results from each day's work period shall be submitted to the Project Manager prior to the start of the next day's work period. When required by the technical specifications, the Contractor shall maintain statistical quality control charts. The daily test reports shall be signed by the responsible quality control technician and the Program Administrator.

100-09 CORRECTIVE ACTION REQUIREMENTS. The Quality Control Program shall indicate the appropriate action to be taken when a process is deemed, or believed, to be out of control (out of tolerance) and detail what action will be taken to bring the process into control. The requirements for corrective action shall include both general requirements for operation of the Quality Control Program as a whole, and for individual items of work contained in the technical specifications.

The Quality Control Program shall detail how the results of quality control inspections and tests will be used for determining the need for corrective action and shall contain clear sets of rules to gauge when a process is out of control and the type of correction to be taken to regain process control.

When applicable or required by the technical specifications, the Contractor shall establish and utilize statistical quality control charts for individual quality control tests. The requirements for corrective action shall be linked to the control charts.

100-10 SURVEILLANCE BY THE PROJECT MANAGER. All items of material and equipment shall be subject to surveillance by the Project Manager at the point of production, manufacture or shipment to determine if the Contractor, producer, manufacturer or shipper maintains an adequate quality control system in conformance with the requirements detailed herein and the applicable technical specifications and plans. In addition, all items of materials, equipment and work in place shall be subject to surveillance by the Project Manager at the site for the same purpose.

Surveillance by the Project Manager does not relieve the Contractor of performing quality control inspections of either on-site or off-site Contractor's or subcontractor's work.

100-11 NON-COMPLIANCE.

a. The Project Manager will notify the Contractor of any non-compliance with any of the foregoing requirements. The Contractor shall, after receipt of such notice, immediately take corrective action. Any notice, when delivered by the Project Manager or his/her authorized representative to the Contractor or his/her authorized representative at the site of the work, shall be considered sufficient notice.

b. In cases where quality control activities do not comply with either the Contractor Quality Control Program or the contract provisions, or where the Contractor fails to properly operate and maintain an effective Quality Control Program, as determined by the Project Manager, the Project Manager may:

(1) Order the Contractor to replace ineffective or unqualified quality control personnel or subcontractors.

(2) Order the Contractor to stop operations until appropriate corrective actions are taken.

MODIFICATION OF STANDARDS - FAA SECTION GP-100

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[1] Indicated time associated with submittal of the QC Plan.

[2] Edited response time for the Program Administrator.

SECTION 130

REQUIRED BID AND CONTRACT PROVISIONS

PART I. REQUIREMENTS TO BE INCLUDED IN SOLICITATION FOR BIDS

PART II. WAGE AND LABOR PROVISIONS

PART III. EQUAL EMPLOYMENT OPPORTUNITY REQUIREMENTS

PART IV. MISCELLANEOUS CONTRACT PROVISIONS

PART V. REQUIREMENTS OF 49 CFR PART 26, DISAVANTAGED BUSINIESS ENTERPRISE PROGRAM

PART I. REQUIREMENTS TO BE INCLUDED IN SOLICITATION FOR BIDS

A. Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity (Executive Order 11246, as Amended).

a. The Offerer's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.

b. The goals and timetables for minority and female participation, expressed in percentage terms for the contractor's aggregate work force in each trade on all construction work in the covered area are as follows:

15.1%

These goals are applicable to all the contractor's construction work (whether or not it is Federal or Federally assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subjected to the goals for both its Federally involved and non-federally involved construction.

The contractor's compliance with the executive order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from contractor to contractor or from project to project, for the sole purpose of meeting the contractor's goals, shall be a violation of the contract, the Executive Order, and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

c. The contractor shall provide written notification to the Director, OFCCP, within ten (10) working days of award of any construction subcontract in excess of $10,000 at any tier of construction work under the contract resulting from this solicitation. The notification shall list the name, address, telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontracts; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

d. As used in this notice and in the contract resulting from this solicitation, the "covered area" is **Fulton County, Georgia**.

B. Requirement for Certification of Non-Segregated Facilities:

(1) Notice to Prospective Federally Assisted Construction Contractors.

(a) Certification of Non-segregated Facilities must be submitted prior to the award of a federally assisted construction contract exceeding $10,000 which is not exempt from the provisions of the Equal Opportunity Clause.

(b) Contractors receiving federally assisted construction contract awards exceeding $10,000 which are not exempt from the provisions of the Equal Opportunity Clause will be required to provide for the forwarding of the following notice to prospective subcontractors for supplies and construction contracts where the subcontracts exceed $10,000 and are not exempt from the provisions of the Equal Opportunity Clause. NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

(2) Notice to Prospective Subcontractors of Requirement for Certification of Non-segregated Facilities.

(a) A Certification of Non-segregated Facilities must be submitted prior to the award of subcontract exceeding $10,000 which is not exempt from the provisions of the Equal Opportunity Clause.

(b) Contractors receiving federally assisted construction subcontract awards exceeding $10,000 which are not exempt from the provisions of the Equal Opportunity Clause will be required to provide for the forwarding of the following notice to prospective subcontractors for supplies and construction contracts where the subcontracts exceed $10,000 and are not exempt from the provisions of the Equal Opportunity Clause. NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

CERTIFICATION TO BE SUBMITTED BY FEDERALLY ASSISTED CONSTRUCTION CONTRACTORS AND THEIR SUBCONTRACTORS (APPLICABLE TO FEDERALLY ASSISTED CONSTRUCTION CONTRACTS AND RELATED SUBCONTRACTS EXCEEDING $10,000 WHICH ARE NOT EXEMPT FROM THE EQUAL OPPORTUNITY CLAUSE)

CERTIFICATION OF NON-SEGREGATED FACILITIES

The Federally assisted construction contractor certifies that he does not maintain or provide, for his employees, any segregated facilities at any of his establishments and that he does not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. The Federally assisted construction contractor certifies that he will not maintain or provide, for his employees, segregated facilities at any of his establishments and that he will not permit his employees to perform their services at any location under his control where segregated facilities are maintained. The Federally assisted construction contractor agrees that a breach of this certification is a violation of the Equal Opportunity Clause in this contract. As used in this certification, the term "segregated facilities" means any waiting rooms,

work areas, restrooms and washrooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation and housing facilities provided for employees which are segregated by explicit directives or are, in fact, segregated on the basis of race, color, religion, or national origin because of habit, local custom, or any other reason. The Federally assisted construction contractor agrees that (except where he has obtained identical certifications from proposed subcontractors for specific time periods) he will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding $10,000 which are not exempt from the provisions of the Equal Opportunity Clause and that he will retain such certifications in his files.

CERTIFICATIONS OF NON-SEGREGATED FACILITIES BY SPONSORS OF FEDERAL ASSISTANCE WHO ARE THEMSELVES PERFORMING CONSTRUCTION CONTRACTS

The Sponsor certifies that it does not maintain or provide for its employees any segregated facilities at any of its establishments and that it does not permit its employees to perform their services at any location under its control where segregated facilities are maintained. It further certifies that it will not maintain or provide for its employees any segregated facilities at any of its establishments and that it will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The Sponsor agrees that a breach of this certification is a violation of the Equal Opportunity Clause in this contract. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating area, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directives or are, in fact, segregated on the basis of race, color, religion, or national origin because of habit, local customs, or any other reason. It further agrees that it will obtain identical certifications from proposed contractors prior to the award of contracts exceeding $10,000 which are not exempt from the provisions of the Equal Opportunity Clause; that it will retain such certifications in its files; and that it will forward the following notice to such proposed contractors:

NOTICE TO PROSPECTIVE CONTRACTORS OF REQUIREMENT FOR CERTIFICATION OF NON-SEGREGATED FACILITIES

A Certification of Non-Segregated Facilities must be submitted prior to the award of a contract or subcontract exceeding $10,000 which is not exempt from the provisions of the Equal Opportunity Clause. NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

PART II. WAGE AND LABOR PROVISIONS

1. Each sponsor entering into a construction contract over $2,000 for an airport development project is required to insert in the contract the following provisions from 29 CFR 5.5. Each contractor is to include these provisions in each construction subcontract.

    a. Minimum Wages.

        (1) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once

a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 31), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to laborers or mechanics, subject to the provisions of subparagraph a.(4) below; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly periods. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in paragraph d. of this clause. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under a.(2) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can easily be seen by the workers.

(2) (i) The contracting officer shall require that any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefor only when the following criteria have been met:

(A) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(B) The classification is utilized in the area by the construction industry; and

(C) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(ii) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives,

and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within thirty (30) days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB control number 1215-0140).

(iii) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator. The Administrator, or an authorized representative, will issue a determination within thirty (30) days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB control number 1215-0140).

(iv) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (2)(ii) or (iii) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(3) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(4) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided, that the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program. (Approved by the Office of Management and Budget under OMB control number 1215-0140).

b. Withholding. The FAA or the sponsor shall upon its own action or upon written request of an authorized representative of the Department of

Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of work, all or part of the wages required by the contract, the Federal Aviation Administration may after written notice to the contract, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

c. Payrolls and Basic Records.

(1) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under paragraph a.(4) of this clause that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual costs incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs. (Approved by the Office of Management and Budget under OMB control numbers 1215-0140 and 1215-0017).

(2) (i) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the applicant, sponsor, or owner, as the case may be, for transmission to the Federal Aviation Administration. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under paragraph c.(1) above. This information may be submitted in any form desired. Optional Form WH-347 is

available for this purpose and may be purchased from the Superintendent of Documents (Federal Stock Number 029-005-00014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. (Approved by the Office of Management and Budget under OMB control number 1215-0149).

(ii) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(A) That the payroll for the payroll period contains the information required to be maintained under paragraph c.(1) above and that such information is correct and complete;

(B) That each laborer and mechanic (including each helper, apprentice and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations 29 CFR Part 3;

(C) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(iii) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph c.(2)(ii) of this section.

(iv) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.

(3) The contractor or subcontractor shall make the records required under paragraph c.(1) of this section available for inspection, copying or transcription by authorized representatives of the sponsor, the Federal Aviation Administration or the Department of Labor, and shall permit such representatives to interview employees during work hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the Federal agency may, after written notice to the contractor, sponsor, applicant or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records

available may be grounds for debarment action pursuant to 29 CFR 5.12.

d. Apprentices and Trainees.

(1) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilized apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(2) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(3) Equal Employment Opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended and 29 CFR Part 30.

e. Compliance With Copeland Act Requirements. The contractor shall comply with the requirements of 29 CFR Part 3, which are incorporated by reference in this contract.

f. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses contained in paragraphs a. through j. of this contract and such other clauses as the Federal Aviation Administration may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

g. Contract Termination: Debarment. A breach of the contract clauses in paragraphs a. through j. of this clause and a. through e. of the second clause below may be grounds for termination of the contract, and for the debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

h. Compliance With Davis-Bacon and Related Act Requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract.

i. Disputes Concerning Labor Standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6 and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

j. Certification of Eligibility.

(1) By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(2) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(3) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

2. The following clauses in paragraphs a., b., c., d., and e. below, required by the Contract Work Hours and Safety Standards Act, will also be inserted in full in AIP construction contracts in excess of $2,000 in addition to the clauses required by 29 CFR 5.5(a) or 4.6 of Part 4 of Title 29. As used in the following, the term "laborers" and "mechanics" included watchmen and guards.

a. Overtime Requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek, whichever is greater.

b. Violation; Liability for Unpaid Wages; Liquidated Damages. In the event of any violation of the clause set forth in paragraph a. above, the contractor or any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States, (in the case of work done under contract for

the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph a. above, in the sum of $10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph a. above.

c. Withholding for Unpaid Wages and Liquidated Damages. The Federal Aviation Administration or the sponsor shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any monies payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph b. above.

d. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraphs a. through d. and also a clause requiring the subcontractor to include these clauses in any lower tier subcontracts. The prime shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs a. through d.

e. Working Conditions. No contractor or subcontractor may require any laborer or mechanic employed in the performance of any contract to work in surroundings or under working conditions that are unsanitary, hazardous or dangerous to his health or safety as determined under construction safety and health standards (29 CFR Part 1926) issued by the Department of Labor.

3. In addition to the provisions in 1 and 2 above for contracts in excess of $2,000, the following is to be included in all contracts for work on airport development projects involving labor:

Veteran's Preference. In the employment of labor (except in executive, administrative and supervisory positions), preference shall be given to veterans of the Vietnam era and disabled veterans. However, this preference shall apply only where the individuals are available and qualified to perform the work to which the employment relates.

PART III. EQUAL EMPLOYMENT OPPORTUNITY REQUIREMENTS

The Standard Federal Equal Employment Opportunity Construction Contract Specifications (Executive Order 11246, as amended) are to be included in all Federally assisted construction contracts or subcontracts (including the Solicitations for Bids) in excess of $10,000 to be performed in geographical areas designated by the Director, OFCCP. (41 CFR 60-4.3).

1. As used in these specifications:

   a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;

   b. "Director" means Director, Office of Federal Contract Compliance Programs (OFCCP), U.S. Department of Labor, or any person to who the Director delegates authority;

   c. "Employer identification number" means the Federal social security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941;

   d. "Minority" includes:

      (1) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);

      (2) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin regardless of race);

      (3) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast, Asia, the Indian Subcontinent, or the Pacific Islands); and

      (4) American Indian or Alaskan native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

2. Whenever the contractor, or any subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of $10,000 the provisions of these specifications and the notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.

3. If the contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the plan area (including goals and timetables) shall be in accordance with that plan for those trades which have unions participating in the plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each contractor or subcontractor participating in an approved plan is individually required to comply with its obligations under the EEO clauses and to make a good faith effort to achieve each goal under the plan in each trade in which it has employees. The overall good faith performance by other contractors or subcontractors toward a goal in an approved plan does not excuse any covered contractor's or subcontractor's failure to take good faith efforts to achieve the plan goals and timetables.

4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7.a through p. of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the

contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered construction contracts performing construction work in a geographical area where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.

5. Neither the provisions of any collective bargaining agreement nor the failure by a union with whom the contractor has a collective bargaining agreement to refer either minorities or women shall excuse the contractor's obligations under these specifications, Executive Order 11246, as amended, or the regulations promulgated pursuant thereto.

6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the contractor during the training period and the contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.

7. The contractor shall take specific affirmative actions to ensure EEO. The evaluation of the contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The contractor shall document these efforts fully and shall implement affirmative action steps at least as extensive as the following:

   a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the contractor's employees are assigned to work. The contractor, where possible, will assign two or more women to each construction project. The contractor shall specifically ensure that all foremen, superintendents, and other onsite supervisory personnel are aware of and carry out the contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.

   b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.

   c. Maintain a current file of the names, addresses, and telephone numbers of each minority and female off-the-street applicant and community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the contractor by the union or, if referred, not employed by the contractor, this shall be documented in the file with

the reason therefore along with whatever additional actions the contractor may have taken.

d. Provide immediate written notification to the Director when the union or unions with which the contractor has a collective bargaining agreement has not referred to the contractor a minority person or woman sent by the contractor, or when the contractor has other information that the union referral process has impeded the contractor's efforts to meet its obligations.

e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the contractor's employment needs, especially those programs funded or approved by the Department of Labor. The contractor shall provide notice of these programs to the sources compiled under 7b above.

f. Disseminate the contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination, or other employment decisions including specific review of these items with onsite supervisory personnel such as superintendents, general foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

h. Disseminate the contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the contractor's EEO policy with other contractors and subcontractors with whom the contractor does or anticipates doing business.

i. Direct its recruitment efforts, both oral and written, to minority, female, and community organizations; to schools with minority and female students; and to minority and female recruitment and training organizations serving the contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the contractor shall send written notification to organizations, such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer, and vacation employment to minority and female youth both on the site and in other areas of a contractor's workforce.

k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.

l. Conduct, at least annually, an inventory and evaluation, at least of all minority and female personnel, for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.

m. Ensure that seniority practices, job classifications, work assignments, and other personnel practices do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the contractor's obligations under these specifications are being carried out.

n. Ensure that all facilities and company activities are non-segregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.

o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.

p. Conduct a review, at least annually, of all supervisor's adherence to and performance under the contractor's EEO policies and affirmative action obligations.

8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7.a through p.). The efforts of a contractor association, joint contractor union, contractor community, or other similar groups of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7.a through p. of these specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the contractor. The obligation to comply, however, is the contractor's; and failure of such a group to fulfill an obligation shall not be a defense for the contractor's non-compliance.

9. A single goal for minorities and a separate single goal for women have been established. The contractor, however, is required to provide EEO and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the contractor may be in violation of the executive order if a particular group is employed in a substantially disparate manner (for example, even though the contractor has achieved its goals for women generally, the contractor may be in violation of the executive order if a specific minority group of women is under-utilized).

10. The contractor shall not use the goals and timetables or affirmative action standards to discriminate against any persons because of race, color, religion, sex, or national origin.

11. The contractor shall not enter into any subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246, as amended.

12. The contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination, and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the OFCCP. Any contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.

13. The contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7. of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the contractor fails to comply with the requirements of the executive order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.

14. The contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government, and to keep records. Records shall at least include for each employee, the name, address, telephone number, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

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

Contractor Contractual Requirements

During the performance of this contract, the contractor, for itself, its assignees and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

1. Compliance with Regulations. The contractor shall comply with the Regulations relative to nondiscrimination in federally assisted programs of the Department of Transportation (hereinafter, "DOT") Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time (hereinafter referred to as the

Regulations), which are herein incorporated by reference and made a part of this contract.

2. Nondiscrimination. The contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall not participate either directly or indirectly in the discrimination prohibited by section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.

3. Solicitations for Subcontracts, including Procurement of Materials and Equipment. In all solicitations either by competitive bidding or negotiation made by the contractor for work to be performed under a subcontract, including procurement of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the contractor of the contractor's obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin.

4. Information and Reports. The contractor shall provide all information and reports required by the Regulations or directives issued pursuant thereto and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Sponsor or the Federal Aviation Administration (FAA) to be pertinent to ascertain compliance with such regulations, orders, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish this information, the contractor shall so certify to the sponsor or the FAA, as appropriate, and shall set forth what efforts it has made to obtain the information.

5. Sanctions for Non-compliance. In the event of the contractor's non-compliance with the nondiscrimination provisions of this contract, the sponsor shall impose such contract sanctions as it or the FAA may determine to be appropriate, including, but limited to:

   a. Withholding of payments to the contractor under the contract until the contractor complies; and/or

   b. Cancellation, termination, or suspension of the contract, in whole or in part.

6. Incorporation of Provisions. The contractor shall include the provisions of paragraph 1. through 5. in every subcontract, including procurement of materials and leases of equipment, unless exempt by the Regulations or directives issued pursuant thereto. The contractor shall take such action with respect to any subcontract or procurement as the sponsor or the FAA may direct as a means of enforcing such provisions including sanctions for non-compliance. Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the contractor may request the Sponsor to enter into such litigation to protect the interests of the sponsor and, in addition, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

EQUAL EMPLOYMENT OPPORTUNITY CLAUSE

Include in all construction contracts in excess of $10,000.

During the performance of this contract, the contractor agrees as follows:

1. The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to, the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment compensation; and selection of transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

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

3. The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

4. The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

5. The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

6. In the event of the contractor's non-compliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

7. The contractor will include the portion of the sentence immediately preceding paragraph 1. and the provisions of paragraphs 1. through 7. in every

subcontractor purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions; including sanctions for non-compliance: Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

Notices to be Posted. The "Equal Employment Opportunity is the Law" poster is to be posted by the contractor in a conspicuous place available to employees and applicants for employment as required by paragraphs 1. and 3. of the EEO clause. Copies of this poster will be furnished to contractors at the preconstruction conference.

Required Reports.

(1) Monthly Employment Utilization Report. This report is to be prepared on Form CC 257 (Rev. 9-78) and sent to the Area Office, Federal Contract Compliance Program (OFCCP) that serves the geographical area in which this project is located. The report is due by the fifth day of each month after work has commenced. The contractor will be advised further regarding this report, including the address of the OFCCP Area Office, at the preconstruction conference.

(2) Annual EEO-1 Report. Contractors/subcontractors working on federally assisted airport construction projects are required to file annually, on or before March 31, complete and accurate reports on Standard Form 100 (Employee Information Report, EEO-1). The first such report is required within 30 days after award unless the contractor/subcontractor has submitted such a report within 12 months preceding the date of award (the FAA or Department of Labor OFCCP can designate other intervals). This form is normally furnished based on a mailing list, but can be obtained from the Joint Reporting Committee, 1800 G. Street, N.W., Washington, D.C. 20506. This report is required if a contractor or subcontractor meets all of the following conditions:

(a) Nonexempt. Contractors/subcontractors are not exempt based on 41 CFR 60-1.5; and

(b) Number of employees. Has 50 or more employees; and

(c) Contractor/Subcontractor. Is a prime contractor or first tier subcontractor; and

(d) Dollar Level. There is a contract, subcontract, or purchase order amounting to $50,000 or more or serves as a depository of government funds in any amount, or is a financial institution which is an issuing and paying agent for U.S. savings bonds and savings notes. Some subcontractors below the first tier who work at the site are required to file if they meet the requirements of 41 CFR 60-1.7.

(e) Records. The FAA or Department of Labor OFCCP may require a contractor to keep employment or other records and to furnish, in the form requested within reasonable limits, such information as necessary.

PART IV. MISCELLANEOUS CONTRACT PROVISIONS

A. Airport Improvement Program Project. The work in this contract is included in Airport Improvement Program Project No. APXXX-XXXX-XX(121) Fulton which is being undertaken and accomplished by the **Fulton County, Georgia** in accordance with the terms and conditions of a grant agreement between the **Fulton County, Georgia** and the United States, under the Airport and Airway improvement Act of 1982 and Part 152 of the Federal Aviation Regulations (14 CFR Part 152), pursuant to which the United States has agreed to pay a certain percentage of the costs of the project that are determined to be allowable project costs under that Act. The United States is not a party to this contract and no reference in this contract to the FAA or any representative thereof, or to any rights granted to the FAA or any representative thereof, or the United States, by the contract, makes the United States a party to this contract.

B. Consent to Assignment. The contractor shall obtain the prior written consent of the OWNER to any proposed assignment of any interest in or part of this contract.

C. Veterans Preference. In the employment of labor (except in executive, administrative, and supervisory positions), the contractor shall give preference to veterans of the Vietnam era and disabled veterans as defined in Section 515(c)(1) and (2) of the Airport and Airway Improvement Act of 1982.

D. FAA Inspection and Review. The contractor shall allow any authorized representative of the FAA to inspect and review any work or materials used in the performance of this contract.

E. Subcontracts. The contractor shall insert in each of his subcontracts the provisions contained in paragraphs A., C., and D., of this section and also a clause requiring the subcontractors to include these provisions in any lower tier subcontracts which they may enter into, together with a clause requiring this insertion in any further subcontracts that may in term be made.

F. Clean Air and Water Pollution Control Requirements for All Construction Contracts and Subcontracts Exceeding $100,000.

Contractors agree:

(1) That any facility to be used in the performance of the contract or to benefit from the contract is not listed on the Environmental Protection Agency (EPA) List of Violating Facilities.

(2) To comply with all the requirements of Section 114 of the Clean Air Act and Section 308 of the Federal Water Pollution Control Act and all regulations issued thereunder.

(3) That as a condition for award of a contract, they will notify the awarding official of the receipt of any communication from the EPA indicating that a

facility to be utilized for performance of or benefit from the contract is under consideration to be listed on the EPA List of Violating Facilities.

(4) To include in any subcontract which exceeds $100,000, the requirements of (1), (2), and (3) above.

PART V - REQUIREMENTS OF 49 CFR Part 26, DISADVANTAGE BUSINESS ENTERPRISE PROGRAM

A. Minority Business Enterprise Program.

(1) **The bidder shall make good faith efforts, as defined in Appendix A of 49 CFR Part 26, Regulations of the Office of the Secretary of Transportation, to subcontract 15.1% of the dollar value of the prime contract to small business concerns owned and controlled by socially and economically disadvantaged individuals (DBE).** In the event that the bidder for this solicitation qualifies as a DBE, the contract goal shall be deemed to have been met. Individuals who are reputably presumed to be socially and economically disadvantaged include women, Blacks, Hispanics, Native Americans, Asian-Pacific Americans, and Asian-Indian Americans. The apparent successful competitor will be required to submit (with the bid) information concerning the DBEs that will participate in this contract. The information will include the name and address of each DBE, a description of the work to be performed by each named firm, and the dollar value of the contract. If the bidder fails to achieve the contract goal stated herein, it will be required to provide (with the bid) documentation demonstrating that it made good faith efforts in attempting to do so. A bid that fails to meet these requirements will be considered unresponsive.

SECTION 8

GENERAL PROVISIONS

PART 2 – SUPPLEMENTARY CONDITIONS

SECTION 00800

SUPPLEMENTARY CONDITIONS

The following conditions amend or supplement the referenced "Standard Federal Aviation Administration General Provisions". All provisions which are not so amended or supplemented remain in full force and effect.

SECTION 10 - DEFINITION OF TERMS

SC-1 DELETE THE FOLLOWING DEFINITIONS AND REPLACE WITH THE FOLLOWING DEFINITIONS:

DELETE "10-06 AIRPORT"; REPLACE WITH:

10-06 AIRPORT. Any area of land or water which is used or intended for use, for the landing and takeoff of aircraft, and any appurtenant areas which are used, or intended for use, for airport buildings, pavements, and other facilities or rights of way; and airport buildings and facilities located thereon and as they may from time to time be revised, extended or defined.

DELETE "10-11 CALENDAR DAY"; REPLACE WITH:

10-11 CALENDAR DAY. A calendar day of 24 hours measured from midnight to the next midnight constituting a day.

DELETE "10-13 CONTRACT"; REPLACE WITH:

10-13 CONTRACT. The written agreement between the Owner and the Contractor covering the work to be performed. The awarded contract shall include, but is not limited to: The Advertisement; The Contract Form; The Proposal; The Performance Bond; The Payment Bond; any required insurance certificates; The General Provisions; The Special Provisions; The Specifications; The Plans, and any addenda issued to bidders; Change Orders and agreements which are required to complete the construction of the work in an acceptable manner, including authorized extensions thereof, all of which constitute one instrument.

DELETE "10-15 CONTRACT TIME"; REPLACE WITH:

10-15 CONTRACT TIME. The number of calendar days stated in the Bid, allowed for completion of the contract, including authorized time extensions. If a calendar date of completion is stated in the proposal, in lieu of a number of calendar days, the contract shall be completed by that date. When any period of time is referred to in the Contract Documents by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period fall on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

DELETE "10-18 PROJECT MANAGER"; REPLACE WITH:

10-18 PROJECT MANAGER. The person, firm or corporation named as such in the Agreement.

DELETE "10-22 FEDERAL SPECIFICATION"; REPLACE WITH:

10-22 FEDERAL SPECIFICATION. The Federal Specifications and Standards, and supplements, amendments, and indices thereto are prepared and issued by the General Services Administration of the Federal Government. They may be obtained from Standardization Documents - Order Desk, 700 Robbins Avenue, Building 4 - Section D, Philadelphia, Pennsylvania 19111-5094, Telephone (215) 697-2197.

DELETE "10-31 OWNER", REPLACE WITH:

10-31 OWNER. The term Owner shall mean the party of the first part or the contracting agency signatory to the contract. For AIP contracts, the term sponsor shall have the same meaning as the term Owner.

DELETE "10-32 PAYMENT BOND" REPLACE WITH:

10-32 PAYMENT BOND. The approved form of security furnished by the Contractor and his/her surety as a guaranty of good faith and ability on the part of the Contractor to execute the work in accordance with their terms of the Plans, Specifications, and Contract, and as a guaranty that he will pay in full all bills and accounts for materials and labor used in the construction of the work, as provided by law.

DELETE "10-41 SPONSOR"; REPLACE WITH:

10-41 SPONSOR. A public agency or a political subdivision of a State in whom rests the title to the airport at which the construction under this contract is to be performed. Political subdivision refers to a County, City, Village, Township, or any combination or authority thereof as provided by law for the construction and operation of airports. The Sponsor may also be referred to as the Owner in several parts of the contract.

DELETE "10-44 SUPERINTENDENT"; REPLACE WITH:

10-44 SUPERINTENDENT. The Contractor's executive representative, who shall be appointed by the Contractor by a letter and a resume and after receipt of Project Manager's approval, must be present on the work during progress, authorized to receive and fulfill instructions from the Project Manager, and who shall supervise and direct the construction.

DELETE "10-46 SURETY"; REPLACE WITH:

10-46 SURETY. The corporate body which is bound with the Contractor and which engages to be responsible for the Contractor and his acceptable performance of the work and his payment of all debts pertaining to the work.

DELETE "10-48 WORK"; REPLACE WITH:

10-48 WORK. The entire complete construction or the various separately identifiable parts thereof required to be furnished under the Contract Documents. Work is the result of performing services, furnishing labor and furnishing and incorporating materials and equipment into the construction, all as required by the Contract Documents.

SC-2 AFTER THE LAST DEFINITION OF SECTION 10, ADD THE FOLLOWING NEW DEFINITIONS:

10-50 ADVISORY CIRCULAR. A document issued by the FAA containing informational material and guidance. When referred to in the plans and specifications, advisory circulars shall have the same force as supplemental specifications.

10-51 GENERAL PROVISIONS. Standard FAA conditions of the Contract identified as Sections 10, 40, 50, 60, 70, 80, 90, 100, 110, and 120.

10-52 MIL SPECIFICATION. The Military Specifications and Standards, and indices thereto, are prepared and issued by the Department of Defense. They may be obtained from the same address noted in paragraph 10-22.

10-53 PRODUCTS. The materials, systems and equipment to be incorporated into the work.

10-54 PROJECT MANUAL. The bound documents comprising Bidding Requirements, Bid Forms, Contract Forms, General Conditions, Supplementary Conditions, Specifications, Addenda and modifications.

10- 55 SUBSTANTIAL COMPLETION. The Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer as evidenced by Project Manager's definitive certificate of Substantial Completion, it is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part) can be utilized for the purposes for which it is intended; or if there be no such certificate issued, when final payment is due in accordance with Section 90. The terms "substantially complete" and "substantially completed" as applied to any Work refer to "Substantial Completion thereof."

10-56 SPECIAL PROVISIONS. The part of the Contract Documents which amends or supplements these Standard FAA General Provisions.

10-57 SUBCONTRACTOR. The prequalified (where required) individual, partnership or corporation, or a combination thereof, undertaking the execution of a part of the work under the terms of the contract, by virtue of an agreement with the Contractor approved by the Owner.

10-61 SUPPLEMENTARY CONDITIONS. The part of the Contract Documents which amends or supplements these Standard FAA General Provisions.

SC-3 DELETE "10-52 WORKING DAY".

SECTION 20 - PROPOSAL REQUIREMENTS AND CONDITIONS

SC-4 IN ADDITION TO THE STANDARD GENERAL PROVISIONS, THE FOLLOWING SECTION SHALL BE USED IN LEIU OF SECTION 20:

"EXAMINATION OF PLANS, SPECIFICATIONS AND PHYSICAL CONDITIONS:

The Bidder is expected to carefully examine the site of the proposed work, the bid, plans, specifications, and contract forms. He shall satisfy himself as to the character, quality, and quantities of work to be performed, materials to be furnished, and as to the requirements of the proposed contract. The submission

of a bid shall be prima facie evidence that the Bidder has made such examination and is satisfied as to the conditions to be encountered in performing the work and as to the requirements of the proposed contract, plans, and specifications.

Boring logs and other records of subsurface investigations and tests are attached to these specifications. It is understood and agreed that such subsurface information was obtained and is intended for the Owner's design and estimating purposes only. Such information has been made available for the convenience of all Bidders. It is further understood and agreed that each Bidder is solely responsible for all assumptions, deductions, or conclusions which he may make or obtain from his examination of the boring logs and other records of subsurface investigations and tests that are furnished by the Owner."

SECTION 30 - AWARD AND EXECUTION OF CONTRACT

SC-5 IN ADDITION TO THE STANDARD GENERAL PROVISIONS, THE FOLLOWING SECTION SHALL BE USED IN LEIU OF SECTION 30:

"PERFORMANCE AND OTHER BONDS:

a. Contractor shall furnish Performance and Payment Bonds, each in an amount at least equal to the Contract Price as security for the faithful performance and payment of all Contractor's obligations under the Contract Documents. These Bonds shall remain in effect at least until one year after the date when final payment becomes due, except as otherwise provided by Law or Regulation or by the Contract Documents. Contractor shall also furnish such other Bonds as are required by the Supplementary Conditions. All Bonds shall be in the forms prescribed by the Contract Documents and be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Audit Staff Bureau of Accounts, U.S. Treasury Department. All Bonds signed by an agent must be accompanied by a certified copy of the authority to act.

b. If the Surety on any Bond furnished by Contractor is declared a bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located, or it ceases to meet the requirements of paragraph a. above, the Contractor shall within five days thereafter substitute another Bond and Surety, both of which must be acceptable to Owner."

SECTION 40 - SCOPE OF WORK

SC-6 ALTERATION OF WORK AND QUANTITIES

The Owner reserves and shall have the right to make such alterations in the work as may be necessary or desirable to complete the work originally intended in an acceptable manner. Unless otherwise specified herein, the Project Manager, shall be and is hereby authorized to make such alterations in the work as may increase or decrease the originally awarded contract quantities, provided that the aggregate of such alterations does not change the total contract cost, (total cost being based on the contract unit prices and proposal quantities in the awarded contract) or the total cost of any major contract item (a major item shall be construed as any item, the total cost of which is equal to or greater than or

greater than 20% of the total contract amount, computed on the basis of the proposal quantity and the contract unit price) by more than 25 percent. Alterations which do not exceed the 25 percent limitation shall not invalidate the contract nor release the surety, and the Contractor agrees to accept payment for such alterations at the awarded contract unit price as if the altered work had been a part of the original contract. These alterations that are for work within the general scope of the contract shall be covered by "Change Orders" issued by the Project Manager, and approved by the Owner. In no case shall the Contractor exceed the total contract cost without prior written approval from the Project Manager and Owner via Change Order. Any work performed that exceeds the total contract cost without prior written approval of the Project Manager and Owner will not be measured for payment and will be performed at the Contractor's expense. Change orders for altered work shall include extensions of contract time where, in the Project Manager's opinion, such extensions are commensurate with the amount and difficulty of added work.

All supplemental agreements shall require consent of the Contractor's surety and separate performance and payment bonds.

SC-7 ADD THE FOLLOWING PARAGRAPH TO THE END OF SUBSECTION 40-05 MAINTENANCE OF TRAFFIC":

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

SC-8 ADD THE FOLLOWING SUBSECTION TO THE END OF SECTION 40 "SCOPE OF WORK":

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

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

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

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

Contractor's vehicles, equipment, and materials may be stored in the area designated on the Plans, or by the Project Manager. Upon completion of the work, the storage area shall be cleaned up and returned to its original condition

to the satisfaction of the Project Manager. No special payment will be made for cleanup and restoration of the storage area.

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

SECTION 50 - CONTROL OF WORK

SC-9 DELETE PARAGRAPH 50-03 "COORDINATION OF CONTRACT, PLANS, AND SPECIFICATIONS" IN ITS ENTIRETY AND INSERT THE FOLLOWING:

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

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

The Contractor shall not take advantage of any apparent error or omission on the plans or specifications. In the event the Contractor discovers any apparent error or discrepancy, he shall immediately call upon the Project Manager for his interpretation and decision, and such decision shall be final.

SC-10 DELETE THE FIRST FOUR SUBPARAGRAPHS OF PARAGRAPH 50-06 CONSTRUCTION LAYOUT AND STAKES" IN ITS ENTIRETY AND INSERT THE FOLLOWING:

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

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

The Contractor shall not engage the services of any person or persons in the employ of the Project Manager for performance of layout work.

Adequate field notes and records shall be kept as layout work is accomplished. These field notes and records shall be available for review by the Project Manager as the work progresses and copies shall be furnished to the Project Manager at the time of completion of the project. Any inspection or checking of the Contractor's field notes or layout work by the Project Manager and the acceptance of all or any part thereof, shall not relieve the Contractor of his/her responsibility to achieve the lines, grades, and dimensions shown in the plans and specifications.

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

SC-11 ADD THE FOLLOWING PARAGRAPH TO THE END OF PARAGRAPH 50-16 "CLAIMS FOR ADJUSTMENT AND DISPUTES":

"The following documentation and information must be presented in order for the Project Manager to properly evaluate such claim:

a. Definition of the basis of the claim, including a detailed identification of which materials and what work is considered to represent a change to the original contract, an explanation of why the work or material is different than what was called for by the original contract, and an identification of the contract provisions and anything else which the Contractor relied upon;

b. An explanation of how and why the work which is considered a change will result in any additional cost or performance time for the Contractor;

c. An identification of the categories of additional costs which may be incurred, an estimate of the dollar magnitude of each, and a statement of the impact this work will have on the construction schedule, including the contract completion dates;

d. An indication of how the additional costs which is believed that may be incurred can be, and are to be, quantified;

e. Documentation of any actual additional costs and any actual impact to the construction schedule due to this work;

f. Documentation of the cost of performing all similar "unchanged" work, to provide the Project Manager a basis for comparison;

g. All backup and other documentation which is believed to support or relate to the claim;

h. Documentation quantifying the amount of work which is believed to constitute this "changed" work, and the time period and the areas where such work was or is to be performed."

SC-12 DELETE SUBSECTION 50-17 "COST REDUCTION INCENTIVE" IN ITS ENTIRETY.

SC-13 ADD THE FOLLOWING PARAGRAPHS TO THE END OF SECTION 50:

50-18 RETEST OF WORK When as provided for in the contract documents, the Owner performs sampling and tests of the work and the tests show a failure to meet the requirements of the contract documents, the expense of retesting, after reworking or substitution by the Contractor will be at the expense of the Contractor and such costs will be deducted from the payments otherwise due to the Contractor.

50-19 CORRECTION OF WORK AFTER FINAL PAYMENT. Neither the final certificate nor payment, nor any provision in the contract documents shall relieve the contractor of responsibility for faulty materials or workmanship and, unless otherwise specified, he shall remedy any defect due thereto and pay for any damage to other work resulting therefrom, which shall appear within a period of one year from date of final acceptance. Wherever the word "acceptance" occurs, it shall be understood to mean final acceptance.

The Owner shall give notice of observed defects with reasonable promptness. If the Contractor fails to remedy any failure, defect, or damage within a reasonable time after the receipt of notice, the Owner shall have the right to replace, repair, or otherwise remedy the failure, defect, or damage at the Contractor's expense. With respect to all warranties, expressed or implied, from subcontractors, manufacturer, or suppliers for work performed and materials furnished under this Contract, the Contractor shall:

a. Obtain all warranties that would be given in normal commercial practice;

b. Require all warranties to be executed, in writing, for the benefit of the Owner.

50-20 VENUE. This contract has been executed by, delivered to an accepted by the Owner (or the Authority) in the state where the Airport is located, and the provisions hereof shall be governed by the laws of that state. Any disputes arising out of or related to this contract shall be resolved in accordance with said laws.

The parties agree that any action or legal proceeding arising out of or related to this contract shall be brought in the state courts of the county in which the Airport lies, or in the federal court in the district where the Airport is located; and the parties hereby consent to and waive any objection to jurisdiction or venue in said courts.

SECTION 60 - CONTROL OF MATERIALS

SC-14 DELETE PARAGRAPH 60-02 "SAMPLES, TESTS, AND CITED SPECIFCIATION" IN ITS ENTIRETY AND INSERT THE FOLLOWING:

60-02 SAMPLES, TESTS AND CITED SPECIFICATIONS. All materials used in the work shall be inspected, tested, and approved by the Project Manager before incorporation in the work. Any work in which untested materials are used without approval or written permission of the Project Manager shall be performed at the Contractor's risk. Materials found to

be unacceptable and unauthorized will not be paid for and, if directed by the Project Manager, shall be removed at the Contractor's expense. Unless otherwise designated, tests in accordance with the cited standard methods of AASHTO of ASTM which are current on the date of advertisement for bids will be made by and at the expense of the Owner. All materials being used are subject to inspection, test, or rejection at any time prior to or during incorporation into the work. Copies of all tests will be furnished to the Contractor's representative at his request. In the event that any tests show a failure to meet the requirements of the contract documents, the expense of retesting, after substitution or modification by the Contractor will be at the expense of the Contractor and such costs will be deducted from the payments otherwise due to the Contractor. The Contractor shall furnish the required samples without charge. The Contractor shall give sufficient notification of the placing of orders for materials to permit testing.

SECTION 70 - LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC

SC-15 ADD THE FOLLOWING PARAGRAPH TO THE END OF PARAGRAPH 70-01 "LAWS TO BE OBSERVED":

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

SC-16 DELETE PARAGRAPH 70-02 IN ITS ENTIRETY AND INSERT THE FOLLOWING:

70-02 PERMITS AND INSPECTION FEES. Permits shall be secured by the Contractor and inspections will be required, but the County will not charge the Contractor for such permits and inspections obtained from the County. The Contractor shall secure and pay for any permits and inspection fees required by any other governmental entity or agency."

SC-17 DELETE PARAGRAPH 70-04 "RESORATION OF SURFACES DISTURBED BY OTHERS" IN ITS ENTIRETY AND INSERT THE FOLLOWING:

70-04 RESTORATION OF SURFACES DISTURBED BY OTHERS. The Owner reserves the right to authorize the construction, reconstruction, or maintenance of any public or private utility service, FAA or National Oceanic and Atmospheric Administration (NOAA) facility, or a utility service of another government agency at any time during the progress of the work. Except as listed on the plans or contract documents, the Contractor shall not permit any individual, firm or corporation to excavate or otherwise disturb such utility services or facilities located within the limits of the work without the written permission of the Project Project Manager.

Should the Owner of public or private utility service, FAA, or NOAA facility, or a utility service of another government agency be authorized to

construct, reconstruct, or maintain such utility service or facility during the progress of the work, the Contractor shall cooperate with such Owners by arranging and performing the work in this contract so as to facilitate such construction, reconstruction or maintenance by others. When ordered as extra work by the Project Manager, the Contractor shall make all necessary repairs to the work which is due to contract, plans, or specifications. It is understood and agreed that the Contractor shall not be entitled to make any claim for damages due to such authorized work by others or for any delay to the work resulting from such authorized work.

SC-18 ADD THE FOLLOWING PARAGRAPH TO THE END OF PARAGRAPH 70-05 "FEDERAL AND STATE AID PARTICIPATION":

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

SC-19 ADD THE FOLLOWING PARAGRAPHS TO THE END OF PARAGRAPH 70-07 "PUBLIC CONVENIENCE AND SAFEY":

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

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

SC-20 ADD THE FOLLOWING PARAGRAPH TO THE END OF SUBSECTION 70-08 "BARRICADES, WARNING SIGNS, AND HAZARD MARKINGS":

This work, including required materials and equipment, and labor, etc., shall be incidental to the various items of work and all costs hereto are to be included in the various unit bid items, except as otherwise provided for in the contract documents.

SC-21 DELETE SUBSECTION 70-09 "USE OF EXPLOSIVES" IN ITS ENTIRETY AND INSERT THE FOLLOWING:

70-09 USE OF EXPLOSIVES. Explosives will not be permitted.

SC-22 ADD THE FOLLOWING PARAGRAPHS TO THE END OF PARAGRAPH 70-10 "PROTECTION AND RESTORATION OF PROPERTY AND LANDSCAPE":

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

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

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

Where it is necessary to cut, alter, remove, or temporarily remove and replace existing property or equipment, the cost shall be included in the contract price for the item creating such work. It is recognized that the Owner will incur the costs for employees' salaries, engineering fees, and otherwise in connection with the damage and inspection and repair of any such damage caused by the Contractor; and that such expenses and loss of income are not measurable now and may not be reasonably ascertainable at the time of any incident caused by this Contractor. The Owner and the Contractor hereby agree to the assessment of liquidated damages in lieu of such expenses of other damages incurred by the Owner. In addition to the obligation of this Contractor to immediately repair any facilities damaged by the Contractor, as set forth above, the sum of not greater than $1,000.00 per incident may be deducted from any money due the Contractor, or if no money is due the Contractor, the Owner shall have the right to recover said sum or sums from the Contractor, from the surety or from both. The amount of these deductions is to cover liquidated damages to the sponsor incurred by additional inspection and other expenses and damages arising from the incident or incidents caused by the Contractor, and such deductions are not considered as penalties."

SC-23 DELETE SUBSECTION 70-11 "RESPONSIBILITY FOR DAMAGE CLAIMS" IN ITS ENTIRETY AND INSERT THE FOLLOWING:

70-11 RESPONSIBILITY FOR DAMAGE CLAIMS.

INSURANCE AND RISK MANAGEMENT PROVISIONS

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.

Upon award, the Contractor/Vendor must maintain at their expense, insurance with policy limits equal to or greater than the limits described below. 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	Each Occurrence	$1,000,000
(Other than Products/Completed Operations)	General Aggregate	$2,000,000
Products\Completed Operation	Aggregate Limit	$2,000,000
Personal and Advertising Injury	Limits	$1,000,000
Damage to Rented Premises	Limits	$100,000

3. **BUSINESS AUTOMOBILE LIABILITY INSURANCE**
   Combined Single Limits Each Occurrence $1,000,000
   (Including operation of non-owned, owned, and hired automobiles).

4. **UMBRELLA LIABILITY** Per Occurrence $1,000,000
   (In excess of above noted coverages)

Certificates of Insurance

Certificates shall state that the policy or policies shall not expire, be cancelled or altered without at least thirty (30) days prior written notice to Fulton County Government. Policies and Certificates of Insurance are to list Fulton County Government as an Additional Insured (except for Workers' Compensation) and shall conform to all terms and conditions (including coverage of the indemnification and hold harmless agreement) contained in the Insurance and Risk Management Provisions.

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 agrees to name the Owner and all other parties required of the Contractor/Vendor shall be included as additional insureds on the CGL, using ISO Additional Insured Endorsement forms CG 2010 11/85 or its equivalent coverage to the additional insureds. This insurance for the additional insureds shall be as broad as the coverage provided for the named Contractor. It 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.

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 **Insurance in no way Limits the Liability of the Contractor/Vendor.**

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.

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 t protect against potential hazards for the work being performed.

INDEMNIFICATION AND HOLD HARMLESS AGREEMENT

Contractor/Vendor hereby agrees to release, indemnify, defend and hold harmless Fulton County, its Commissioners, officers, employees, sub-consultants, successors, assigns and agents, from and against any and all losses (including death), claims, damages, liabilities, costs and expenses (including but not limited to all actions, proceedings, or investigations in respect thereof and any costs of judgments, settlements, court costs, attorney's fees or expenses, regardless of the outcome of any such action, proceeding, or investigation), caused by, relating to, based upon or arising out of any act or omission by Consultant, its directors, officers, employees, sub-consultants, successors, assigns or agents, or otherwise in connection (directly or indirectly) with its acceptance, or the performance, or nonperformance, of its obligations under these agreements. Such obligations shall not be construed to negate, abridge or otherwise reduce any other rights or obligations of indemnity which would otherwise exist as to any party or person as set forth in this paragraph.

Contractor/Vendor further agrees to protect, defend, indemnify and hold harmless Fulton County, its Commissioners, officers, employees, sub-consultants, successors, assigns and agents from and against any and all claims or liability for compensation under the Worker's Compensation Act, Disability Benefits Act, or any other employee benefits act arising out of injuries sustained by any employees of Consultant. These indemnities shall not be limited by reason of the listing of any insurance coverage.

CONTRACTOR/VENDOR ACKNOWLEDGES HAVING READ, UNDERSTANDING, AND AGREEING TO COMPLY WITH THIS INDEMNIFICATION AND HOLD HARMLESS AGREEMENT, 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: _____

No certificate will be accepted which exculpates the issuer or reduces any rights conferred on the Owner by the above certificates, nor will they be accepted unless the certificates bear a live signature of a direct representative of a company authorized to do business in the state where the work is located.

No certificate will be accepted unless the person signing the certificate certifies, in a separate letter, his exact relationship with the insurance carrier or carriers indicated in the certificate.

The Owner may, at his discretion, modify or waive any of the foregoing requirements.

No contract of insurance containing a "claims made" insuring agreement will be acceptable unless the contractor offering such insurance to fulfill the requirements of this Contract agrees that each such contract of insurance shall be renewed for the entire existence of the Contractor, their successors or assigns; and that on termination of such coverage which is not replaced by a similar contract with the required limits of liability, a "tail policy" will be purchased with limits not less than those required by this Contract."

SC-24 DELETE PARAGRAPH 70-13 "OPENING SECTION OF THE WORK TO TRAFFIC" IN ITS ENTIRETY AND INSERT THE FOLLOWING:

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

SC-25 DELETE PARAGRAPH 70-16 IN ITS ENTIRETY AND INSERT THE FOLLOWING:

70-16 LAND AND RIGHTS-OF-WAY.

Prior to entering on any land or right-of-way, the Contractor shall ascertain the requirements of applicable permits or easements obtained by the County, and shall conduct his work in accordance with requirements thereof including the giving of notice. The Contractor shall be fully responsible for performing work to the requirements of any permit or easement granting entity even though such requirements may exceed or be more stringent than otherwise required by the Contract Documents, and shall compensate the County fully for any loss or expense arising from failure of the Contractor to perform as required by such entity.

The Contractor shall provide at his own expense and without liability to the County any additional land and access thereto that the Contractor may desire for temporary construction facilities, or for storage of materials."

SC-26 ADD THE FOLLOWING PARAGRAPHS TO THE END OF PARAGRAPH 70-19 "ENVIRONMENTAL PROTECTION":

"In the event of conflict between Federal, State or local laws, codes, ordinances, rules and Regulations concerning pollution control, the most restrictive applicable ones shall apply.

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

(a) Clearing, grubbing, burning or other disposal.

(b) Stripping, excavation, and embankment.

(c) Drainage and ditching.

(d) Aggregate production, handling and placing.

(e) Cement, lime, or other stabilization.

(f) Concrete and bituminous materials handling, production, and paving.

(g) Seeding, fertilizing, mulching and use of herbicides or insecticides.

(h) Contractor's own housekeeping items; haul roads; sanitary facilities; water supply; equipment fueling; servicing and cleaning; job clean up and disposal.

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

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

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

(1) Control of Water Pollution and Siltation.

a. All work of water pollution and siltation control is subject to inspection by the local and/or state governmental enforcing agent.

b. All applicable regulations of fish and wildlife agencies and statutes relating to the prevention and abatement of pollution shall be complied with in the performance of the contract.

c. Construction operations shall be conducted in such manner as to reduce erosion to the practicable minimum and to prevent damaging siltation of watercourses, streams, lakes or reservoirs. The surface area of erodible land, either on or off the airport site, exposed to the elements by clearing, grubbing or grading operations, including gravel pits, waste or disposal areas and haul roads, at any one time, for this contract, shall be subject to approval of the Project Manager and the duration of such exposure prior to final trimming and finishing of the areas shall be held to the minimum practical. The Project Manager shall have full authority to order the suspension of grading and other operations pending adequate and proper performance of trimming, finishing and maintenance work or to restrict the area of erodible land exposed to the elements.

d. Materials used for permanent erosion control measures shall meet the requirements of the applicable specifications. Gravel or stone, consisting of durable particles of fines, shall be used for construction pads, haul roads and temporary roads in or across streams.

e. Where called for on the plans, a stilling basin shall be constructed to prevent siltation in the stream from construction operations.

f. The disturbance of lands and waters that are outside the limits of construction as staked is prohibited, except as found necessary and approved by the Project Manager.

g. The Contractor shall conduct his work in such manner as to prevent the entry of fuels, oils, bituminous materials, chemicals, sewage or other harmful materials into streams, rivers, lakes or reservoirs.

h. Water from aggregate washing or other operations containing sediment shall be treated by filtration, by use of a settling basin or other means to reduce the sediment content to a level acceptable to the local and/or state governmental enforcing agent.

i. All waterways shall be cleared as soon as practicable of falsework, piling, debris or other obstructions placed during construction operations and not part of the finished work. Care shall be taken during construction and removal of such barriers to minimize the muddying of a stream.

j. The Contractor shall care for the temporary erosion and siltation control measures during the period that the temporary measures are required and for the permanent erosion control measures until the contract has been completed and accepted. Such care shall consist of the repair of areas damaged by erosion, wind, fire or other causes.

k. Permanent and temporary erosion control work that is damaged due to the Contractor's operations or where the work required is attributed to the Contractor's negligence, carelessness, or failure

to install permanent controls at the proper time, shall be repaired at the Contractor's expense.

(2) Open Burning of Combustible Wastes (When Permitted).

a. The Contractor shall obtain a burning permit from local authorities, where applicable, prior to any burning.

b. All burning shall conform to the conditions of the permit, except that the conditions herein shall apply if they are more restrictive.

c. No tires, oils (except atomized fuels applied by approved equipment), asphalt, paint, or coated metals shall be permitted in combustible waste piles.

d. Burning will not be permitted within 1,000 feet of a residential or built-up area nor within 100 feet of any standing timber or flammable growth unless otherwise specified.

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

f. 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 or built-up area.

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

h. 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) Control of Other Air Pollutants.

a. Minimum possible areas of open grading, borrow or aggregate excavation shall be exposed at one time, consistent with the progress of the work.

b. Grading areas shall be kept at proper moisture conditions.

c. Sand or dust blows shall be temporarily mulched, with or without seeding, or otherwise controlled with stabilizing agents.

d. Temporary roads, haul routes, traffic or work areas shall be maintained so as to create no dust.

e. Cements, fertilizers, chemicals, volatiles, etc., shall be stored in proper containers or with proper coverings to prevent accidental discharge into the air.

f. Aggregate bins, cement bins, and dry material batch trucks shall be properly covered to prevent loss of material to the air.

g. Drilling, grinding, and sand blasting apparatus shall be equipped with water, chemical, or vacuum dust controlling systems.

h. Applications of chemicals and bitumens shall be held to recommended rates.

i. Bituminous mixing plants shall be equipped with dust collectors as noted in the specifications.

j. Quarrying, batching, and mixing operations and the transfer of materials between trucks, bins, or stockpiles shall be properly controlled to minimize dust diffusion.

k. When necessary, certain operations shall be delayed until proper wind or climatic conditions exist to dissipate or inhibit potential pollutants to the satisfaction of the Project Manager."

SC-27 ADD THE FOLLOWING SUBSECTION TO THE END OF SECTION 70 "LEGAL REGULATIONS AND RESPONSIBILITY TO PUBLIC":

70-21 NO DAMAGES FOR DELAY. In all cases where the Contractor is delayed, obstructed, or hindered in the execution of the work, or any part thereof, for any reason whatsoever, the Contractor shall not be entitled to claim or recover any damages or additional payment from the Owner or Project Manager. However, it is the intent of this Contract that in all cases where the Contractor is substantially delayed, obstructed, or hindered in the execution of the work through no fault of the Contractor and because of conditions beyond the Contractor's control, the Project Manager may recommend an extension on the contract time under Subsection 80-07 by such amount as conditions, in the judgment of the Project Manager, justify, and such extension of the contract time shall be the exclusive remedy of the Contractor for delay, hindrance or obstruction occurring through no fault of the Contractor and because of conditions beyond the Contractor's control.

SECTION 80 - PROSECUTION AND PROGRESS

SC-28 DELETE THE THIRD AND FOURTH SUBPARAGRAPHS OF PARAGRAPH 80-04 "LIMITS OF OPERATIONS" IN ITS ENTIRETY AND REPLACE WITH:

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

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

SC-29 ADD THE FOLLOWING PARAGRAPHS TO THE END OF SUBSECTION 80-05 "CHARACTER OF WORKERS, METHODS, AND EQUIPMENT":

Any person employed by the Contractor or by a subcontractor who, in the opinion of the Project Manager, does not perform his work in a proper and skillful manner or is intemperate or disorderly shall, at the written request of the Project Manager, be removed forthwith by the Contractor or subcontractor employing

such person, and shall not be employed again in any portion of the work without the approval of the Project Manager.

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

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

SC-30 ADD THE FOLLOWING PARAGRAPHS TO THE END OF PARAGRAPH 80-06 "TEMPORARY SUSPENSION OF THE WORK":

"If the Contractor requests a suspension of the work in whole or part for such period or periods as he may need, due to unsuitable weather or such other conditions as Contractor considers unfavorable for the prosecution of work, or if ordered by OWNER or PROJECT MANAGER due to inclement weather or the failure on the part of the Contractor to carry out orders given, or to perform any or all provisions of the contract, a suspension may be granted provided the Contractor shall perform the following without additional compensations:

1. Suitably store all materials.
2. Implement measures to protect existing work from damage or deterioration.
3. Erect such temporary structures and barricades as PROJECT MANAGER may require to provide for traffic on, to, or from the airport and air operations area.
4. Periodically inspect and maintain the work and temporary measures during the suspension period. Repair any damage to the work during the suspension period.
5. Pay all costs to OWNER associated with the suspension including but limited to cost of PROJECT MANAGER, inspection and OWNER'S testing laboratory to perform their contractual requirements with respect to the project during the work suspension.
6. Maintain all insurance and bond coverages.
7. Perform such other work as required by the Contract Documents with respect to the Project."

SC-31 DELETE PARAGRAPH 80-08 IN ITS ENTIRETY AND INSERT THE FOLLOWING:

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

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

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

80-08.1 LIQUIDATED DAMAGES.

Failure to complete the entire project within the Contract Time specified shall result in liquidated damages in the amount of $1,000.00 per calendar day or portion thereof.

SC-32 ADD THE FOLLOWING PARAGRAPH TO THE END OF SUBSECTION 80-10 "TERMINATION FOR NATIONAL EMERGENCIES":

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

SECTION 90 - MEASUREMENT AND PAYMENT

SC-33 DELETE SUBSECTION 90-05 "PAYMENT FOR EXTRA AND FORCE ACCOUNT WORK" IN ITS ENTIRETY AND INSERT THE FOLLOWING:

90-05 PAYMENT FOR EXTRA AND FORCE ACCOUNT WORK. Extra work, performed in accordance with subsection 40-04 EXTRA WORK, will be paid for at the contract prices or agreed prices specified in the change order or supplemental agreement authorizing the extra work. When the change order or supplemental agreement authorizing the extra work requires that it be done by force account, such force account shall be measured and paid for as follows:

a. Labor. For all labor (skilled and unskilled) and foremen in direct charge of a specific force account item, the Contractor shall receive the rate of wage (or scale) for every hour that such labor or foreman is actually engaged in the specified force account work. Such age (or scale) shall be agreed upon in writing before the beginning of the work.

The Contractor shall receive the actual costs paid to, or in behalf of, workers by reason of subsistence and travel allowances, health and welfare benefits, pension fund benefits or other benefits, when such amounts are required by collective bargaining agreement or other employment contract generally applicable to the classes of labor employed on the work.

An amount equal to fifteen percent (15%) of the sum of the above items will also be paid to the Contractor.

b. Insurance and Taxes. For property damage, liability, and workmen's compensation insurance premiums, unemployment insurance contributions, and social security taxes on the force account work the Contractor shall receive the actual cost, to which cost (sum) five percent

(5%) will be added. The Contractor shall furnish satisfactory evidence of the rate or rates paid for such insurance and taxes.

c. Materials. For materials accepted by the Project Manager and then used, the Contractor shall receive the actual cost of such material delivered on the work, including transportation charges paid by him (exclusive of machinery rentals as hereinafter set forth), to which cost (sum) fifteen percent (15%) will be added.

d. Equipment. For any machinery or special equipment (other than small tools) including fuel and lubricants, plus transportation costs, the use of which has been authorized by the Project Manager, the Contractor shall receive the rental rates agreed upon in writing before such work is begun for the actual time that such equipment is committed to the work, to which rental sum fifteen percent (15%) will be added.

e. Miscellaneous. No additional allowance will be made for general superintendence, the use of small tools, or other costs for which no specific allowance is herein provided.

f. Comparison of Record. The Contractor and the Project Manager shall compare records of the cost of force account work at the end of each day. Agreement shall be indicated by signature of the Contractor and the Project Manager or their duly authorized representatives.

g. Statement. No payment will be made for work performed on a force account basis until the Contractor has furnished the Project Manager with duplicate itemized statements of the cost of such force account work detailed as follows:

(1) Name, classification, date, daily hours, total hours, rate and extension for each laborer and foreman.

(2) Designation, dates, daily hours, total hours, rental rate, and extension for each unit of machinery and equipment

(3) Quantities of materials.

(4) Transportation of materials.

(5) Cost of property damage, liability and workman's compensation insurance premiums, unemployment insurance contributions, and social security tax.

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

The additional payment, based on the percentages specified above, shall constitute full compensation for all items of expense not specifically

provided for the force account work. The total payment made as provided above shall constitute full compensation for such work.

SC-34 DELETE PARAGRAPH 90-06 "PARTIAL PAYMENTS" IN ITS ENTIRETY AND INSERT THE FOLLOWING:

90-06 PROGRESS PAYMENTS.

Progress payments will be made once each month as the Work progresses. Said payments will be based upon estimates prepared by the Project Manager of the value of the work performed and materials complete in place in accordance with the contract, plans, and specifications. Such progress payments may also include the delivered actual cost of those materials stockpiled and stored in the accordance with the subsection titled PAYMENT FOR MATERIALS ON HAND of this section.

No progress payment will be made when the amount due the Contractor since the last estimate amounts to less than five hundred dollars.

From the total of the amount determined to be payable on a progress payment, ten percent (10%) of each progress payment shall be withheld as retainage until the value of fifty percent (50%) of the Contract Price, including change orders and other authorized additions provided in the Contract, is due. When fifty percent (50%) of the contract value, as described above, becomes due and the manner of completion of the contract work and its progress are reasonably satisfactory to FULTON COUNTY, GEORGIA, the withholding of retainage shall be discontinued. If after discontinuing the retention, FULTON COUNTY, GEORGIA determines that the Work is unsatisfactory or has fallen behind schedule, retention may be resumed at the previous level.

When not less than 95% of the work has been completed the Project Manager may, at his/her discretion and with the consent of the surety, prepare an estimate covering any remaining incomplete minor items from which will be retained an amount equal to two hundred percent (200%) of the value of each time. That retained amount shall be withheld until such items are completed. The remainder, less all previous payments and deductions, will then be certified for payment to the Contractor.

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

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

SC-35 THE FOLLOWING SUBSECTION SHALL BE ADDED TO PARAGRAPH 90-07 "PAYMENT FOR MATERIALS ON HAND":

"f. The value of the delivered material is to be used if one item of work exceeds $3,000.00 and is not scheduled to be incorporated into the work for 60 days after delivery."

SC-36 THE FOLLOWING PARAGRAPH SHALL BE ADDED AT THE END OF SECTION 90-09 "ACCEPTANCE AND FINAL PAYMENT":

"Prior to final payment the Contractor shall submit to the Owner a sworn affidavit that all bills for labor, materials, equipment, service, subcontractors and incidentals have been paid and that there are no suits pending in connection with the work done or labor and materials furnished under the contract."

SC-37 ADD THE FOLLOWING SUBSECTION TO THE END OF SECTION 90 "MEASUREMENT AND PAYMENT":

90-10 LIENS. Neither the final payment nor any part of the retained percentage shall become due until the Contractor delivers to the Owner: (a) an affidavit stating, if that be in fact, that all subcontractors and suppliers have been paid in full, or if the fact be otherwise, showing the name of each subcontractor and supplier who has not been paid in full and the amount due or to become due each for labor, service or material furnished; (b) consent of surety, if any, to final payment; and (c) if required by Owner, other data establishing payment for satisfaction of all obligations, such as receipt, releases, and waivers of lien arising out of the Contract to the extent and in such form as designated by the Owner.

SC-38 CONTRACT TIME

Construction contract time for **Obstruction Clearing**, if awarded, will be completed within **Ninety (90)** consecutive calendar days from the Notice to Proceed.

SC-39 COPIES OF CONSTRUCTION DOCUMENTS

PROJECT MANAGER will furnish at no charge to each Contractor five (5) complete sets of plans and specifications for Contractor's use during construction. One set shall be maintained as the Project Record Documents. Additional sets of plans and specifications or individual sheets of plans will be furnished to Contractor at cost of reproduction.

SECTION 120 – CONSTRUCTION CONTRACT CLAUSES AIRPORT DEVELOPMENT PROGRAM

SC-41 THE FOLLOWING PARAGRAPH SHALL BE ADDED AT THE END OF PART III

"MISCELLANEOUS CONTRACT PROVISIONS":

"After the last subsection, add the following new provisions

H. Non-Discrimination Assurance. The contractor, sub recipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the

County may deem appropriate.

I. Prompt Payment. The prime contractor shall certify in writing that all subcontractors, sub-consultants and suppliers have been paid for work and materials from previous progress payments received, less any retainage, by the prime contractor prior to receipt of any further progress payments. The prime contractor shall include a payment provision in their agreements with their various subcontractors, providing for payment within seven (7) calendar days after the prime contractor's receipt of payment from the Owner. The prime contractor shall also include a provision in their agreement with various subcontractors providing for payment of retainage to those subcontractors who have submitted an invoice for completed work accepted by the County within seven (7) calendar days. This provision in no way creates any contractual relationship between any subcontractor, sub-consultant or supplier and the Airport or any liability on the County for the contractor's failure to make timely payment to the subcontractor, sub-consultant or suppliers."

J. Contractor Reporting Requirements. The Prime Contractor shall submit, with each invoice, a report of DBE expenditures. The report shall show all DBE and non-DBE subcontractors, the amount of their subcontract, the amount earned to date, the amount earned for that respective invoice and the amount remaining to be earned. The report shall also have each DBE subcontractor verify the amounts earned and received by the DBE to date. The contractor's invoice may be delayed in processing payment or disapproved until the progress report is submitted as required.

K. Measurement and Payment. Measurement of Quantities – Unless otherwise specified, longitudinal measurements for length and area computations will be made **horizontally**, and no deductions will be made for individual fixtures (or leave-outs) having an area of 9 square feet or less. Unless otherwise specified, transverse measurements for length and area computations will be the neat dimensions shown on the plans or ordered in writing by the Project Manager. Note that quantities for Permanent and Temporary Erosion Control Matting will not be measured horizontally, but will be measured along the slope.

L. Federal Requirements. The following Federal provisions shall apply to this contract. In a case where these provisions conflict with other sections of the project documents, the more stringent requirement shall apply.

All Construction Contracts

- Lobbying and Influencing Federal Employees (49 CFR Part 20)
- Trade Restriction Clause (49 CFR Part 30)
- Access to Records and Reports (49 CFR Part 18.36(i))
- Rights to Inventions (49 CFR Part 18.36(i)(8))
- Buy American Preferences (Title 49 U.S.C. Chapter 501)
- Energy Conservation Requirements (49 CFR Part 18.36)
- Civil Rights Act of 1964, Title VI – Contractual Requirements (49 CFR Part 21)
- Airport and Airway Improvement Act of 1982 (Section 520-General

Civil Rights Provision)
- Veteran's Preference (Title U.S.C. 47112(c))

As Required by the Sponsor's Approved DBE Program

- Disadvantaged Business Enterprises (49 CFR Part 26) - Contract Assurance and Prompt Payment Clauses

$2,000 and Greater

- Davis Bacon Requirements (29 CFR Part 5.5)

$10,000 and Greater

- Equal Employment Opportunity Clause (41 CFR Part 60.1.4(b))
- Certification of Non-segregated Facilities – Notice for Subcontractors (41 CFR Part 60-1.8)
- Standard Federal Equal Employment Opportunity Construction Contract
  Specifications (41 CFR Part 60.4.3)
- E.E.O. Compliance (41 CFR Part 60-1.7)
- Requirement of Affirmative Actions to Ensure E.E.O. (41 CFR Part 60-2)
- Termination of Contract (49 CFR Part 18.36(i)(2))

$100,000 and Greater

- Breach of Contract Terms (49 CFR Part 18.36(i))
- Contract Work Hours and Safety Standards Act Requirements (29 CFR Part 5)
- Clean Air and Water Pollution Control (49 CFR Part 18.36(i)(12))

SECTION 9

SPECIAL CONDITIONS

MANDATORY FEDERAL CONTRACT PROVISIONS

REQUIRED BID AND CONTRACT PROVISIONS

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PART 2. ADDITIONAL PROVISIONS FOR CONSTRUCTION CONTRACTS EXCEEDING $2,000 SEE GP-130 PART II

2.1 Davis Bacon Requirements SEE GP-130 PART II

PART 3. ADDITIONAL PROVISIONS FOR CONSTRUCTION CONTRACTS EXCEEDING $10,000 SEE GP-130 PART III

3.1 Equal Employment Opportunity - 41 CFR PART 60-1.4(b).....
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3.2 Certification Of Nonsegregated Facilities – 41 CFR PART 60-1.8
.....SEE GP-130 PART III

3.3 Certification Of Nonsegregated Facilities SEE GP-130 PART III

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PART 1. PROVISIONS FOR ALL CONSTRUCTION CONTRACTS

1.1 Buy American Preferences

A. The Aviation Safety and Capacity Expansion Act of 1990 provides that preference be given to steel and manufactured products produced in the United States when funds are expended pursuant to a grant issued under the Airport Improvement Program. The following terms apply:

1. Steel and manufactured products. As used in this clause, steel and manufactured products include (1) steel produced in the United States or (2) a manufactured product produced in the United States, if the cost of its components mined, produced or manufactured in the United States exceeds 60 percent of the cost of all its components and final assembly has taken place in the United States. Components of foreign origin of the same class or kind as the products referred to in subparagraphs B (1) or (2) shall be treated as domestic.

2. Components. As used in this clause, components mean those articles, materials, and supplies incorporated directly into steel and manufactured products.

3. Cost of Components. This means the costs for production of the components, exclusive of final assembly labor costs.

B. The successful bidder will be required to assure that only domestic steel and manufactured products will be used by the Contractor, subcontractors, materialmen and suppliers in the performance of this contract, except those:

1. that the US Department of Transportation has determined, under the Aviation Safety and Capacity Expansion Act of 1990, are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality;

2. that the US Department of Transportation has determined, under the Aviation Safety and Capacity Expansion Act of 1990, that domestic preference would be inconsistent with the public interest; or

3. that inclusion of domestic material will increase the cost of the overall project contract by more than 25 percent.

Buy American Certificate

By submitting a bid/proposal under this solicitation, except for those items listed by the offer or below or on a separate and clearly identified attachment to this bid/proposal *(See Exhibit "A" in Contract Forms)*, the offer or certifies that steel and each manufactured product, are produced in the United States, as defined in the clause Buy American - Steel and Manufactured Products for Construction Contracts and that components of unknown origin are considered to have been produced or manufactured outside the United States.

Offerors may obtain from the owner a listing of articles, materials and supplies excepted from this provision.

Reference
Section 9129 of the Aviation Safety and Capacity Expansion Act of 1990
Title 49 U.S.C. Chapter 501
AIP Program Guidance Letter 91-3

Civil Rights Act Of 1964, Title Vi – Contractor Contractual Requirements
During the performance of this contract, the contractor, for itself, its assignees and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

A. **Compliance with Regulations.** The contractor shall comply with the Regulations relative to nondiscrimination in federally assisted programs of the Department of Transportation (hereinafter, "DOT") Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.

B. **Nondiscrimination.** The contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor shall not participate either directly or indirectly in the discrimination prohibited by section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.

C. **Solicitations for Subcontracts, Including Procurements of Materials and Equipment.** In all solicitations either by competitive bidding or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the contractor of the contractor's obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin.

D. **Information and Reports.** The contractor shall provide all information and reports required by the Regulations or directives issued pursuant thereto and shall permit access to its books, records, accounts, other sources of information and its facilities as may be determined by the Sponsor or the Federal Aviation Administration (FAA) to be pertinent to ascertain compliance with such Regulations, orders, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish this information, the contractor shall so certify to the sponsor or the FAA, as appropriate, and shall set forth what efforts it has made to obtain the information.

E. **Sanctions for Non-compliance.** In the event of the contractor's non-compliance with the nondiscrimination provisions of this contract, the sponsor shall impose such contract sanctions as it or the FAA may determine to be appropriate, including, but not limited to:

1. Withholding of payments to the contractor under the contract until the contractor complies, and/or
2. Cancellation, termination, or suspension of the contract, in whole or in part.

F. **Incorporation of Provisions.** The contractor shall include the provisions of paragraphs A through E in every subcontract, including procurements of

materials and leases of equipment, unless exempt by the Regulations or directives issued pursuant thereto. The contractor shall take such action with respect to any subcontract or procurement as the sponsor or the FAA may direct as a means of enforcing such provisions including sanctions for non-compliance. Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the contractor may request the Sponsor to enter into such litigation to protect the interests of the sponsor and, in addition, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

Reference

49 CFR PART 21
AC 150/5100-15

Airport and Airway Improvement Act Of 1982, Section 520 - General Civil Rights Provisions

The contractor assures that it will comply with pertinent statutes, Executive orders and such rules as are promulgated to assure that no person shall, on the grounds of race, creed, color, national origin, sex, age, or handicap be excluded from participating in any activity conducted with or benefiting from Federal assistance. This provision obligates the tenant/concessionaire/lessee or its transferee for the period during which Federal assistance is extended to the airport a program, except where Federal assistance is to provide, or is in the form of personal property or real property or interest therein or structures or improvements thereon. In these cases the provision obligates the party or any transferee for the longer of the following periods: (a) the period during which the property is used by the airport sponsor or any transferee for a purpose for which Federal assistance is extended, or for another purpose involving the provision of similar services or benefits or (b) the period during which the airport sponsor or any transferee retains ownership or possession of the property. In the case of contractors, this provision binds the contractors from the bid solicitation period through the completion of the contract. This provision is in addition to that required of Title VI of the Civil Rights Act of 1964.

Reference

Airport and Airway Improvement Act of 1982, Section 520
Title 49 47123
AC 150/5100-15, Para. 10.c.

Lobbying and Influencing Federal Employees

A. No Federal appropriated funds shall be paid, by or on behalf of the contractor, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the making of any Federal grant and the amendment or modification of any Federal grant.

B. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any Federal grant, the

contractor shall complete and submit Standard Form-LLL, "Disclosure of Lobby Activities," in accordance with its instructions.

Reference

49 CFR PART 20, Appendix A

Access To Records and Reports

The Contractor shall maintain an acceptable cost accounting system. The Contractor agrees to provide the Sponsor, the Federal Aviation Administration and the Comptroller General of the United States or any of their duly authorized representatives access to any books, documents, papers, and records of the contractor which are directly pertinent to the specific contract for the purpose of making audit, examination, excerpts and transcriptions. The Contractor agrees to maintain all books, records and reports required under this contract for a period of not less than three years after final payment is made and all pending matters are closed.

Reference

49 CFR PART 18.36(i)
FAA Order 5100.38

Disadvantaged Business Enterprises

Contract Assurance - The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR PART 26 in the award and administration of DOT assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy, as the recipient deems appropriate.

Prompt Payment - The prime contractor agrees to pay each subcontractor under this prime contract for satisfactory performance of its contract no later than **forty-five** ***(45)*** days from the receipt of each payment the prime contractor receives from the ***Owner.*** The prime contractor agrees further to return retainage payments to each subcontractor within **forty-five** ***(45)*** days after the subcontractor's work is satisfactorily completed. Any delay or postponement of payment from the above referenced time frame may occur only for good cause following written approval of the ***Owner.*** This clause applies to both DBE and non-DBE subcontractors.

Reference

49 CFR PART 26

Energy Conservation Requirements

The contractor agrees to comply with mandatory standards and policies relating to energy efficiency that are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Public Law 94-163).

Reference

49 CFR PART 18.36
Public Law 94-163

Breach of Contract Terms
Any violation or breach of terms of this contract on the part of the contractor or their subcontractors may result in the suspension or termination of this contract or such other action that may be necessary to enforce the rights of the parties of this agreement. The duties and obligations imposed by the Contract Documents and the rights and remedies available thereunder shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law.

Reference
49 CFR PART 18.36

Rights to Inventions
All rights to inventions and materials generated under this contract are subject to regulations issued by the FAA and the Sponsor of the Federal grant under which this contract is executed.

Reference
49 CFR PART 18.36(i)(8)
FAA Order 5100.38

Trade Restriction Clause
The contractor or subcontractor, by submission of an offer and/or execution of a contract, certifies that it:

a. is not owned or controlled by one or more citizens of a foreign country included in the list of countries that discriminate against U.S. firms published by the Office of the United States Trade Representative (USTR);

b. has not knowingly entered into any contract or subcontract for this project with a person that is a citizen or national of a foreign country on said list, or is owned or controlled directly or indirectly by one or more citizens or nationals of a foreign country on said list;

c. has not procured any product nor subcontracted for the supply of any product for use on the project that is produced in a foreign country on said list.

Unless the restrictions of this clause are waived by the Secretary of Transportation in accordance with 49 CFR 30.17, no contract shall be awarded to a contractor or subcontractor who is unable to certify to the above. If the contractor knowingly procures or subcontracts for the supply of any product or service of a foreign country on said list for use on the project, the Federal Aviation Administration may direct through the Sponsor cancellation of the contract at no cost to the Government.

Further, the contractor agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification without modification in each contract and in all lower tier subcontracts. The contractor may rely on the certification of a prospective subcontractor unless it has knowledge that the certification is erroneous.

The contractor shall provide immediate written notice to the sponsor if the contractor learns that its certification or that of a subcontractor was erroneous when submitted or has become erroneous by reason of changed circumstances. The subcontractor agrees

to provide written notice to the contractor if at any time it learns that its certification was erroneous by reason of changed circumstances.

This certification is a material representation of fact upon which reliance was placed when making the award. If it is later determined that the contractor or subcontractor knowingly rendered an erroneous certification, the Federal Aviation Administration may direct through the Sponsor cancellation of the contract or subcontract for default at no cost to the Government.

Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by this provision. The knowledge and information of a contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

This certification concerns a matter within the jurisdiction of an agency of the United States of America and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code, Section 1001.

Reference

49 CFR PART 30.13
FAA Order 5100.38

Veteran's Preference

In the employment of labor (except in executive, administrative, and supervisory positions), preference shall be given to Veterans of the Vietnam era and disabled veterans as defined in Section 515(c)(1) and (2) of the Airport and Airway Improvement Act of 1982. However, this preference shall apply only where the individuals are available and qualified to perform the work to which the employment relates.

Reference

Title 49 U.S.C. 47112(c)
Advisory Circular 150/5100-6d

PART 3. ADDITIONAL PROVISIONS FOR CONSTRUCTION CONTRACTS EXCEEDING $10,000

3.7 Termination of Contract

A. The Sponsor may, by written notice, terminate this contract in whole or in part at any time, either for the Sponsor's convenience or because of failure to fulfill the contract obligations. Upon receipt of such notice, services shall be immediately discontinued (unless the notice directs otherwise) and all materials as may have been accumulated in performing this contract, whether completed or in progress, delivered to the Sponsor.

B. If the termination is for the convenience of the Sponsor, an equitable adjustment in the contract price shall be made, but no amount shall be allowed for anticipated profit on unperformed services.

C. If the termination is due to failure to fulfill the contractor's obligations, the Sponsor may take over the work and prosecute the same to completion by contract or otherwise. In such case, the contractor shall be liable to the Sponsor for any additional cost occasioned to the Sponsor thereby.

D. If, after notice of termination for failure to fulfill contract obligations, it is determined that the contractor had not so failed, the termination shall be deemed to have been effected for the convenience of the Sponsor. In such event, adjustment in the contract price shall be made as provided in paragraph 2 of this clause.

E. The rights and remedies of the sponsor provided in this clause are in addition to any other rights and remedies provided by law or under this contract.

Reference

49 CFR PART 18.36(i)(2)
FAA Order 5100.38

PART 4. ADDITIONAL PROVISIONS FOR CONSTRUCTION CONTRACTS EXCEEDING $25,000

4.1 Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion

The bidder/offeror certifies, by submission of this proposal or acceptance of this contract, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency. It further agrees by submitting this proposal that it will include this clause without modification in all lower tier transactions, solicitations, proposals, contracts, and subcontracts. Where the bidder/offeror/contractor or any lower tier participant is unable to certify to this statement, it shall attach an explanation to this solicitation/ proposal.

Reference

49 CFR PART 29
FAA Order 5100.38

PART 5. ADDITIONAL PROVISIONS FOR CONSTRUCTION CONTRACTS EXCEEDING $100,000

5.1 Contract Workhours and Safety Standards Act Requirements 29 CFR PART 5

A. Overtime Requirements.

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic, including watchmen and guards, in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

B. Violation; Liability for Unpaid Wages; Liquidated Damages.

In the event of any violation of the clause set forth in paragraph (A) above, the contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (A) above, in the sum of $10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (A) above.

C. Withholding for Unpaid Wages and Liquidated Damages.

The Federal Aviation Administration or the Sponsor shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any monies payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (B) above.

D. Subcontractors.

The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraphs (A) through (D) and also a clause requiring the subcontractor to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (A) through (D) of this section.

Reference

29 CFR PART 5.5
Advisory Circular 150/5100-6d

EXHIBITS

Exhibit 1 – Davis Bacon Act Wages

Exhibit 2 – Drawings List

EXHIBIT 1

Davis Bacon Act - Wages

General Decision Number: GA130003 01/04/2013 GA3

Superseded General Decision Number: GA20120003

State: Georgia

Construction Type: Highway

Counties: Cherokee, Clayton, Cobb, Dekalb, Douglas, Fayette, Fulton, Gwinnett, Henry and Rockdale Counties in Georgia.

HIGHWAY CONSTRUCTION PROJECTS

Modification Number Publication Date
0 01/04/2013

SUGA2011-003 03/07/2011

	Rates	Fringes
CARPENTER	$ 11.16	
CEMENT MASON/CONCRETE FINISHER	$ 10.99	
LABORER		
Asphalt Raker	$ 11.00	
Asphalt Screed Person	$ 10.50	
Common or General	$ 9.00	
Form Setter	$ 10.35	
Guardrail Erector	$ 13.50	
Milling Machine Ground Person	$ 10.00	
Pipe Layer	$ 10.20	
Traffic Control Barricade Flagger	$ 10.00	
POWER EQUIPMENT OPERATOR:		
Asphalt Distributor	$ 14.10	
Asphalt Paver/Spreader	$ 12.28	
Backhoe/Excavator	$ 10.80	
Bulldozer	$ 11.60	
Compactor	$ 10.00	
Concrete Curb Machine	$ 16.45	
Crane/Dragline	$ 17.50	
Crusher	$ 14.00	

Front End Loader.....$ 10.70
Material Transfer Vehicle
(Shuttle Buggy).....$ 11.30
Mechanic.....$ 14.47
Milling Machine.....$ 12.37
Motorgrader Fine Grade.....$ 14.55
Motorgrader/Blade.....$ 14.39
Roller.....$ 10.00
Scraper-Pan.....$ 10.00
Sweeper Truck.....$ 14.21
Water Truck.....$ 11.25

TRUCK DRIVER
26,000 GVW & Under.....$ 10.76
26,001 GVW & Over.....$ 14.91

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

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

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

Union Identifiers

An identifier enclosed in dotted lines beginning with characters other than "SU" denotes that the union classification and rate have found to be prevailing for that classification. Example: PLUM0198-005 07/01/2011. The first four letters , PLUM, indicate the international union and the four-digit number, 0198, that follows indicates the local union number or district council number where applicable , i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination.

The date, 07/01/2011, following these characters is the effective date of the most current negotiated rate/collective bargaining agreement which would be July 1, 2011 in the above example.

Union prevailing wage rates will be updated to reflect any changes in the collective bargaining agreements governing the rates.

0000/9999: weighted union wage rates will be published annually each January.

Non-Union Identifiers

Classifications listed under an "SU" identifier were derived from survey data by computing average rates and are not union rates; however, the data used in computing these rates may include both union and non-union data. Example: SULA2004-007 5/13/2010. SU indicates the rates are not union majority rates, LA indicates the State of Louisiana; 2004 is the year of the survey; and 007 is an internal number used in producing the wage determination. A 1993 or later date, 5/13/2010, indicates the classifications and rates under that identifier were issued as a General Wage Determination on that date.

Survey wage rates will remain in effect and will not change until a new survey is conducted.

WAGE DETERMINATION APPEALS PROCESS

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

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

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

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

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

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

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

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

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

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

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

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END OF GENERAL DECISION

EXHIBIT 2

Drawings List

SHEET TITLE	DRAWING NO.
Cover Sheet	C-1
General Notes	GN-1
Summary of Quantities	SQ-1
Project Layout and Safety Plan	PLSP-1
Clearing and Grubbing Plans	CG-1 TO CG-2
Clearing and Grubbing Horizontal Control Tables	CGT-1 TO CGT-2
Erosion Control General Notes	ECGN-1
Erosion Control Plans	EC-1 TO EC-2
Erosion Control Details	ECD-1 TO ECD-3
Grassing Notes and Grassing Schedule	GS-1

SECTION 11

APPENDIX

U.S. Department
of Transportation

Federal Aviation
Administration

Advisory Circular

Subject: Operational Safety on Airports During Construction	**Date:** 9/29/11 **Initiated by:** AAS-100	**AC No:** 150/5370-2F

1. **Purpose.** This AC sets forth guidelines for operational safety on airports during construction.

2. **What this AC Cancels.** This AC cancels AC 150/5370-2E, Operational Safety on Airports During Construction, dated January 17, 2003.

3. **Whom This AC Affects.** This AC assists airport operators in complying with Title 14 Code of Federal Regulations (CFR) Part 139, Certification of Airports (Part 139). For those certificated airports, this AC provides one way, but not the only way, of meeting those requirements. The use of this AC is mandatory for those airport construction projects receiving funds under the Airport Improvement Program (AIP) or the Passenger Facility Charge (PFC) Program. See Grant Assurance No. 34, "Policies, Standards, and Specifications," and PFC Assurance No. 9, "Standard and Specifications." While we do not require non-certificated airports without grant agreements to adhere to these guidelines, we recommend that they do so to help these airports maintain operational safety during construction.

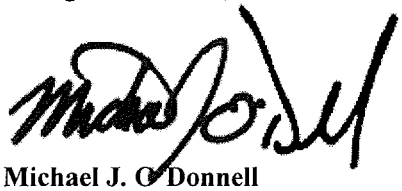
4. **Principal Changes.**

   a. Construction activities are prohibited in safety areas while the associated runway or taxiway is open to aircraft.

   b. Guidance is provided in incorporating Safety Risk Management.

   c. Recommended checklists are provided for writing Construction Safety and Phasing Plans and for daily inspections.

5. **Reading Material Related to this AC.** Numerous ACs are referenced in the text of this AC. These references do not include a revision letter, as they are to be read as referring to the latest version. Appendix 1 contains a list of reading material on airport construction, design, and potential safety hazards during construction, as well as instructions for obtaining these documents.



Michael J. O'Donnell
Director of Airport Safety and Standards

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Chapter 1. Planning an Airfield Construction Project

101. Overview. Airports are complex environments, and procedures and conditions associated with construction activities often affect aircraft operations and can jeopardize operational safety. Safety considerations are paramount and may make operational impacts unavoidable. However, careful planning, scheduling, and coordination of construction activities can minimize disruption of normal aircraft operations and avoid situations that compromise the airport's operational safety. The airport operator must understand how construction activities and aircraft operations affect one another to be able to develop an effective plan to complete the project. While the guidance in this AC is primarily used for construction operations, some of the concepts, methods and procedures described may also enhance the day-to-day airport maintenance operations, such as lighting maintenance and snow removal operations.

102. Plan for Safety. Safety, maintaining aircraft operations, and construction costs are all interrelated. Since safety must not be compromised, the airport operator must strike a balance between maintaining aircraft operations and construction costs. This balance will vary widely depending on the operational needs and resources of the airport and will require early coordination with airport users and the FAA. As the project design progresses, the necessary construction locations, activities, and associated costs will be identified. As they are identified, their impact to airport operations must be assessed. Adjustments are made to the proposed construction activities, often by phasing the project, and/or to airport operations in order to maintain operational safety. This planning effort will ultimately result in a project Construction Safety and Phasing Plan (CSPP). The development of the CSPP takes place through the following five steps:

a. Identify Affected Areas. The airport operator must determine the geographic areas on the airport affected by the construction project. Some, such as a runway extension, will be defined by the project. Others may be variable, such as the location of haul routes and material stockpiles.

b. Describe Current Operations. Identify the normal airport operations in each affected area for each phase of the project. This becomes the baseline from which the impact on operations by construction activities can be measured. This should include a narrative of the typical users and aircraft operating within the affected areas. It should also include information related to airport operations: the Aircraft Reference Code (ACRC) for each runway; Airplane Design Group (ADG) and Taxiway Design Group (TDG)[1] for each affected taxiway; designated approach visibility minimums; available approach and departure procedures; most demanding aircraft; declared distances; available air traffic control services; airport Surface Movement Guidance and Control System plan; and others. The applicable seasons, days and times for certain operations should also be identified as applicable.

c. Allow for Temporary Changes to Operations. To the extent practical, current airport operations should be maintained during the construction. In consultation with airport users, Aircraft Rescue and Fire Fighting (ARFF) personnel, and FAA Air Traffic Organization (ATO) personnel, the airport operator should identify and prioritize the airport's most important operations. The construction activities should be planned, through project phasing if necessary, to safely accommodate these operations. When the construction activities cannot be adjusted to safely maintain current operations, regardless of their importance, then the operations must be revised accordingly. Allowable changes include temporary revisions to approach procedures, restricting certain aircraft to specific runways and taxiways, suspension of certain operations, decreased weights for some aircraft due to shortened runways,

[1] Taxiway Design Group will be introduced in AC 150/5300-13A.

and other changes. An example of a table showing temporary operations versus current operations is shown in Table 3-1 Sample Operations Effects.

d. Take Required Measures to Revised Operations. Once the level and type of aircraft operations to be maintained are identified, the airport operator must determine the measures required to safely conduct the planned operations during the construction. These measures will result in associated costs, which can be broadly interpreted to include not only direct construction costs, but also loss of revenue from impacted operations. Analysis of costs may indicate a need to reevaluate allowable changes to operations. As aircraft operations and allowable changes will vary so widely among airports, this AC presents general guidance on those subjects.

e. Manage Safety Risk. Certain airport projects may require the airport operator to provide a Project Proposal Summary to help the FAA to determine the appropriate level of Safety Risk Management (SRM) documentation. The airport operator must coordinate with the appropriate FAA Airports Regional or District Office early in the development of the CSPP to determine the need for SRM documentation. See FAA Order 5200.11, FAA Airports (ARP) Safety Management System (SMS), for more information. If the FAA requires SRM documentation, the airport operator must at a minimum:

(1) Notify the appropriate FAA Airports Regional or District Office during the project "scope development" phase of any project requiring a CSPP.

(2) Provide documents identified by the FAA as necessary to conduct SRM.

(3) Participate in the SRM process for airport projects.

(4) Provide a representative to participate on the SRM panel.

(5) Ensure that all applicable SRM identified risks elements are recorded and mitigated within the CSPP.

103. Develop a Construction Safety and Phasing Plan (CSPP). Development of an effective CSPP will require familiarity with many other documents referenced throughout this AC. See Appendix 1, Related Reading Material for a list of related reading material.

a. List Requirements. A CSPP must be developed for each on-airfield construction project funded by the Airport Improvement Program (AIP) or the Passenger Facility Charge (PFC) program or located on an airport certificated under Part 139. As per Order 5200.11, such projects do not include construction, rehabilitation, or change of any facility that is entirely outside the air operations area, does not involve any expansion of the facility envelope and does not involve construction equipment, haul routes or placement of material in locations that require access to the air operations area, increase the facility envelope, or impact line-of-sight. Such facilities may include passenger terminals and parking or other structures. However, extraordinary circumstances may trigger the need for a Safety Assessment and a CSPP. The CSPP is subject to subsequent review and approval under the FAA's Safety Risk Management procedures (see paragraph 102.e above). Additional information may be found in Order 5200.11.

b. Prepare a Safety Plan Compliance Document. The Safety Plan Compliance Document (SPCD) details how the contractor will comply with the CSPP. Also, it will not be possible to determine all safety plan details (for example specific hazard equipment and lighting, contractor's points of contact, construction equipment heights) during the development of the CSPP. The successful contractor must define such details by preparing an SPCD that the airport operator reviews for approval prior to issuance of a notice-to-proceed. The SPCD is a subset of the CSPP, similar to how a shop drawing review is a subset to the technical specifications.

c. Assume Responsibility for the CSPP. The airport operator is responsible for establishing and enforcing the CSPP. The airport operator may use the services of an engineering consultant to help develop the CSPP. However, writing the CSPP cannot be delegated to the construction contractor. Only those details the airport operator determines cannot be addressed before contract award are developed by the contractor and submitted for approval as the SPCD. The SPCD does not restate nor propose differences to provisions already addressed in the CSPP.

104. Who Is Responsible for Safety During Construction?

a. Establish a Safety Culture. Everyone has a role in operational safety on airports during construction: the airport operator, the airport's consultants, the construction contractor and subcontractors, airport users, airport tenants, ARFF personnel, Air Traffic personnel, including Technical Operations personnel, FAA Airports Division personnel, and others. Close communication and coordination between all affected parties is the key to maintaining safe operations. Such communication and coordination should start at the project scoping meeting and continue through the completion of the project. The airport operator and contractor should conduct onsite safety inspections throughout the project and immediately remedy any deficiencies, whether caused by negligence, oversight, or project scope change.

b. Assess Airport Operator's Responsibilities. An airport operator has overall responsibility for all activities on an airport, including construction. This includes the predesign, design, preconstruction, construction, and inspection phases. Additional information on the responsibilities listed below can be found throughout this AC. The airport operator must:

(1) Develop a CSPP that complies with the safety guidelines of Chapter 2, Construction Safety and Phasing Plans, and Chapter 3, Guidelines for Writing a CSPP. The airport operator may develop the CSPP internally or have a consultant develop the CSPP for approval by the airport operator. For tenant sponsored projects, approve a CSPP developed by the tenant or its consultant.

(2) Require, review and approve the SPCD by the contractor that indicates how it will comply with the CSPP and provides details that cannot be determined before contract award.

(3) Convene a preconstruction meeting with the construction contractor, consultant, airport employees and, if appropriate, tenant sponsor and other tenants to review and discuss project safety before beginning construction activity. The appropriate FAA representatives should be invited to attend the meeting. See AC 150/5300-9, *Predesign, Prebid, and Preconstruction Conferences for Airport Grant Projects*. (Note "FAA" refers to the Airports Regional or District Office, the Air Traffic Organization, Flight Standards Service, and other offices that support airport operations, flight regulations, and construction/environmental policies.)

(4) Ensure contact information is accurate for each representative/point of contact identified in the CSPP and SPCD.

(5) Hold weekly or, if necessary, daily safety meetings with all affected parties to coordinate activities.

(6) Notify users, ARFF personnel, and FAA ATO personnel of construction and conditions that may adversely affect the operational safety of the airport via Notices to Airmen (NOTAM) and other methods, as appropriate. Convene a meeting for review and discussion if necessary.

(7) Ensure construction personnel know of any applicable airport procedures and of changes to those procedures that may affect their work.

(8) Ensure construction contractors and subcontractors undergo training required by the CSPP and SPCD.

(9) **Ensure vehicle and pedestrian operations** addressed in the CSPP and SPCD are coordinated with airport tenants, the airport traffic control tower (ATCT), and construction contractors.

(10) **At certificated airports,** ensure each CSPP and SPCD is consistent with Part 139.

(11) **Conduct inspections** sufficiently frequently to ensure construction contractors and tenants comply with the CSPP and SPCD and that there are no altered construction activities that could create potential safety hazards.

(12) **Resolve safety deficiencies immediately.** At airports subject to 49 CFR Part 1542, Airport Security, ensure construction access complies with the security requirements of that regulation.

(13) **Notify appropriate parties** when conditions exist that invoke provisions of the CSPP and SPCD (for example, implementation of low-visibility operations).

(14) **Ensure prompt submittal of a Notice of Proposed Construction or Alteration** (Form 7460-1) for conducting an aeronautical study of potential obstructions such as tall equipment (cranes, concrete pumps, other.), stock piles, and haul routes. A separate form may be filed for each potential obstruction, or one form may be filed describing the entire construction area and maximum equipment height. In the latter case, a separate form must be filed for any object beyond or higher than the originally evaluated area/height. The FAA encourages online submittal of forms for expediency. The appropriate FAA Airports Regional or District Office can provide assistance in determining which objects require an aeronautical study.

(15) **Promptly notify the FAA Airports Regional or District Office** of any proposed changes to the CSPP prior to implementation of the change. Changes to the CSPP require review and approval by the airport operator and the FAA. Coordinate with appropriate local and other federal government agencies, such as EPA, OSHA, TSA, and the state environmental agency.

c. **Define Construction Contractor's Responsibilities.** The contractor is responsible for complying with the CSPP and SPCD. The contractor must:

(1) **Submit a Safety Plan Compliance Document (SPCD)** to the airport operator describing how it will comply with the requirements of the CSPP and supplying any details that could not be determined before contract award. The SPCD must include a certification statement by the contractor that indicates it understands the operational safety requirements of the CSPP and it asserts it will not deviate from the approved CSPP and SPCD unless written approval is granted by the airport operator. Any construction practice proposed by the contractor that does not conform to the CSPP and SPCD may impact the airport's operational safety and will require a revision to the CSPP and SPCD and re-coordination with the airport operator and the FAA in advance.

(2) **Have available at all times copies** of the CSPP and SPCD for reference by the airport operator and its representatives, and by subcontractors and contractor employees.

(3) **Ensure that construction personnel** are familiar with safety procedures and regulations on the airport. Provide a point of contact who will coordinate an immediate response to correct any construction-related activity that may adversely affect the operational safety of the airport. Many projects will require 24-hour coverage.

(4) **Identify in the SPCD the contractor's on-site employees** responsible for monitoring compliance with the CSPP and SPCD during construction. At least one of these employees must be on-site whenever active construction is taking place.

(5) **Conduct inspections** sufficiently frequently to ensure construction personnel comply with the CSPP and SPCD and that there are no altered construction activities that could create potential safety hazards.

(6) **Restrict movement of construction vehicles and personnel** to permitted construction areas by flagging, barricading, erecting temporary fencing, or providing escorts, as appropriate and as specified in the CSPP and SPCD.

(7) **Ensure that no contractor employees,** employees of subcontractors or suppliers, or other persons enter any part of the air operations area (AOA) from the construction site unless authorized.

(8) **Ensure prompt submittal through the airport operator of Form 7460-1** for the purpose of conducting an aeronautical study of contractor equipment such as tall equipment (cranes, concrete pumps, other equipment), stock piles, and haul routes when different from cases previously filed by the airport operator. The FAA encourages online submittal of forms for expediency.

d. Define Tenant's Responsibilities if planning construction activities on leased property. Airport tenants, such as airline operators, fixed base operators, and FAA ATO/Technical Operations sponsoring construction must:

(1) **Develop, or have a consultant develop, a project specific CSPP** and submit it to the airport operator for certification and subsequent approval by the FAA. The approved CSPP must be made part of any contract awarded by the tenant for construction work.

(2) **In coordination with its contractor, develop an SPCD** and submit it to the airport operator for approval to be issued prior to issuance of a Notice to Proceed.

(3) **Ensure that construction personnel are familiar with safety procedures** and regulations on the airport.

(4) **Provide a point of contact** of who will coordinate an immediate response to correct any construction-related activity that may adversely affect the operational safety of the airport.

(5) **Identify in the SPCD the contractor's on-site employees** responsible for monitoring compliance with the CSPP and SPCD during construction. At least one of these employees must be on-site whenever active construction is taking place.

(6) **Ensure that no tenant or contractor employees,** employees of subcontractors or suppliers, or any other persons enter any part of the AOA from the construction site unless authorized.

(7) **Restrict movement of construction vehicles** to construction areas by flagging and barricading, erecting temporary fencing, or providing escorts, as appropriate, and as specified in the CSPP and SPCD.

(8) **Ensure prompt submittal through the airport operator of Form 7460-1** for the purpose of conducting an aeronautical study of contractor equipment such as tall equipment (cranes, concrete pumps, other.), stock piles, and haul routes. The FAA encourages online submittal of forms for expediency.

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Chapter 2. Construction Safety and Phasing Plans

Section 1. Basic Considerations

201. Overview. Aviation safety is the primary consideration at airports, especially during construction. The airport operator's Construction Safety and Phasing Plan (CSPP) and the contractor's Safety Plan Compliance Document (SPCD) are the primary tools to ensure safety compliance when coordinating construction activities with airport operations. These documents identify all aspects of the construction project that pose a potential safety hazard to airport operations and outline respective mitigation procedures for each hazard. They must provide all information necessary for the Airport Operations department to conduct airfield inspections and expeditiously identify and correct unsafe conditions during construction. All aviation safety provisions included within the project drawings, contract specifications, and other related documents must also be reflected in the CSPP and SPCD.

202. Assume Responsibility. Operational safety on the airport remains the airport operator's responsibility at all times. The airport operator must develop, certify, and submit for FAA approval each CSPP. It is the airport operator's responsibility to apply the requirements of the FAA approved CSPP. The airport operator must revise the CSPP when conditions warrant changes and must submit the revised CSPP to the FAA for approval. The airport operator must also require and approve a SPCD from the project contractor.

203. Submit the CSPP. Construction Safety and Phasing Plans should be developed concurrently with the project design. Milestone versions of the CSPP should be submitted for review and approval as follows. While these milestones are not mandatory, early submission will help to avoid delays. Submittals are preferred in 8.5 x 11 in or 11 x 17 in format for compatibility with the FAA's Obstruction Evaluation / Airport Airspace Analysis (OE / AAA) process.

a. Submit an Outline/Draft. By the time approximately 25% to 30% of the project design is completed, the principal elements of the CSPP should be established. Airport operators are encouraged to submit an outline or draft, detailing all CSPP provisions developed to date, to the FAA for review at this stage of the project design.

b. Submit a Construction Safety and Phasing Plan (CSPP). The CSPP should be formally submitted for FAA approval when the project design is 80% to 90% complete. Since provisions in the CSPP will influence contract costs, it is important to obtain FAA approval in time to include all such provisions in the procurement contract.

c. Submit a Safety Plan Compliance Document (SPCD). The contractor should submit the SPCD to the airport operator for approval to be issued prior to the Notice to Proceed.

d. Submit CSPP Revisions. All revisions to the CSPP or SPCD should be submitted to the FAA for approval as soon as required changes are identified.

204. Meet CSPP Requirements.

a. To the extent possible, the CSPP should address the following as outlined in Section 2, Plan Requirements and Chapter 3, Guidelines for Writing a CSPP, as appropriate. Details that cannot be determined at this stage are to be included in the SPCD.

(1) Coordination.

(a) Contractor progress meetings.

(b) Scope or schedule changes.

(c) FAA ATO coordination.

(2) Phasing.

(a) Phase elements.

(b) Construction safety drawings

(3) Areas and operations affected by the construction activity.

(a) Identification of affected areas.

(b) Mitigation of effects.

(4) Protection of navigation aids (NAVAIDs).

(5) Contractor access.

(a) Location of stockpiled construction materials.

(b) Vehicle and pedestrian operations.

(6) Wildlife management.

(a) Trash.

(b) Standing water.

(c) Tall grass and seeds.

(d) Poorly maintained fencing and gates.

(e) Disruption of existing wildlife habitat.

(7) Foreign Object Debris (FOD) management.

(8) Hazardous materials (HAZMAT) management

(9) Notification of construction activities.

(a) Maintenance of a list of responsible representatives/ points of contact.

(b) Notices to Airmen (NOTAM).

(c) Emergency notification procedures.

(d) Coordination with ARFF Personnel.

(e) Notification to the FAA.

(10) Inspection requirements.

(a) Daily (or more frequent) inspections.

(b) Final inspections.

(11) Underground utilities.

(12) Penalties.

(13) Special conditions.

(14) Runway and taxiway visual aids. Marking, lighting, signs, and visual NAVAIDs.

(a) General.

(b) Markings.

(c) Lighting and visual NAVAIDs.

(d) Signs.

(15) Marking and signs for access routes.

(16) Hazard marking and lighting.

(a) Purpose.

(b) Equipment.

(17) Protection. Of runway and taxiway safety areas, object free areas, obstacle free zones, and approach/departure surfaces

(a) Runway Safety Area (RSA).

(b) Runway Object Free Area (ROFA).

(c) Taxiway Safety Area (TSA).

(d) Taxiway Object Free Area (TOFA).

(e) Obstacle Free Zone (OFZ).

(f) Runway approach/departure surfaces.

(18) Other limitations on construction.

(a) Prohibitions.

(b) Restrictions.

b. The Safety Plan Compliance Document (SPCD) should include a general statement by the construction contractor that he/she has read and will abide by the CSPP. In addition, the SPCD must include all supplemental information that could not be included in the CSPP prior to the contract award. The contractor statement should include the name of the contractor, the title of the project CSPP, the approval date of the CSPP, and a reference to any supplemental information (that is, "I , Name of Contractor , have read the Title of Project CSPP, approved on Date , and will abide by it as written and with the following additions as noted:"). The supplemental information in the SPCD should be written to match the format of the CSPP indicating each subject by corresponding CSPP subject number and title. If no supplemental information is necessary for any specific subject, the statement, "No supplemental information," should be written after the corresponding subject title. The SPCD should not duplicate information in the CSPP:

(1) Coordination. Discuss details of proposed safety meetings with the airport operator and with contractor employees and subcontractors.

(2) Phasing. Discuss proposed construction schedule elements, including:

(a) Duration of each phase.

(b) Daily start and finish of construction, including "night only" construction.

(c) Duration of construction activities during:

(i) Normal runway operations.

(ii) Closed runway operations.

(iii) Modified runway "Aircraft Reference Code" usage.

(3) Areas and operations affected by the construction activity. These areas and operations should be identified in the CSPP and should not require an entry in the SPCD.

(4) Protection of NAVAIDs. Discuss specific methods proposed to protect operating NAVAIDs.

(5) Contractor access. Provide the following:

(a) Details on how the contractor will maintain the integrity of the airport security fence (gate guards, daily log of construction personnel, and other).

(b) Listing of individuals requiring driver training (for certificated airports and as requested).

(c) Radio communications.

(i) Types of radios and backup capabilities.

(ii) Who will be monitoring radios.

(iii) Whom to contact if the ATCT cannot reach the contractor's designated person by radio.

(d) Details on how the contractor will escort material delivery vehicles.

(6) Wildlife management. Discuss the following:

(a) Methods and procedures to prevent wildlife attraction.

(b) Wildlife reporting procedures.

(7) Foreign Object Debris (FOD) management. Discuss equipment and methods for control of FOD, including construction debris and dust.

(8) Hazardous material (HAZMAT) management. Discuss equipment and methods for responding to hazardous spills.

(9) Notification of construction activities. Provide the following:

(a) Contractor points of contact.

(b) Contractor emergency contact.

(c) Listing of tall or other requested equipment proposed for use on the airport and the timeframe for submitting 7460-1 forms not previously submitted by the airport operator.

(d) Batch plant details, including 7460-1 submittal.

(10) Inspection requirements. Discuss daily (or more frequent) inspections and special inspection procedures.

(11) Underground utilities. Discuss proposed methods of identifying and protecting underground utilities.

(12) Penalties. Penalties should be identified in the CSPP and should not require an entry in the SPCD.

(13) Special conditions. Discuss proposed actions for each special condition identified in the CSPP.

(14) Runway and taxiway visual aids. Including marking, lighting, signs, and visual NAVAIDs. Discuss proposed visual aids including the following:

(a) Equipment and methods for covering signage and airfield lights.

(b) Equipment and methods for temporary closure markings (paint, fabric, other).

(c) Types of temporary Visual Guidance Slope Indicators (VGSI).

(15) Marking and signs for access routes. Discuss proposed methods of demarcating access routes for vehicle drivers.

(16) Hazard marking and lighting. Discuss proposed equipment and methods for identifying excavation areas.

(17) Protection of runway and taxiway safety areas. including object free areas, obstacle free zones, and approach/departure surfaces. Discuss proposed methods of identifying, demarcating, and protecting airport surfaces including:

(a) Equipment and methods for maintaining Taxiway Safety Area standards.

(b) Equipment and methods for separation of construction operations from aircraft operations, including details of barricades.

(18) Other limitations on construction should be identified in the CSPP and should not require an entry in the SPCD.

Section 2. Plan Requirements

205. Coordination. Airport operators, or tenants conducting construction on their leased properties, should use predesign, prebid, and preconstruction conferences to introduce the subject of airport operational safety during construction (see AC 150/5300-9). In addition, the following should be coordinated as required:

a. Contractor Progress Meetings. Operational safety should be a standing agenda item for discussion during progress meetings throughout the project.

b. Scope or Schedule Changes. Changes in the scope or duration of the project may necessitate revisions to the CSPP and review and approval by the airport operator and the FAA.

c. FAA ATO Coordination. Early coordination with FAA ATO is required to schedule airway facility shutdowns and restarts. Relocation or adjustments to NAVAIDs, or changes to final grades in critical areas, may require an FAA flight inspection prior to restarting the facility. Flight inspections must be coordinated and scheduled well in advance of the intended facility restart. Flight inspections may require a reimbursable agreement between the airport operator and FAA ATO. Reimbursable agreements should be coordinated a minimum of 12 months prior to the start of construction. (See 213.e(3)(b) for required FAA notification regarding FAA owned NAVAIDs.)

206. Phasing. Once it has been determined what types and levels of airport operations will be maintained, the most efficient sequence of construction may not be feasible. In such a case, the sequence of construction may be phased to gain maximum efficiency while allowing for the required operations. The development of the resulting construction phases should be coordinated with local Air Traffic personnel and airport users. The sequenced construction phases established in the CSPP must be incorporated into the project design and must be reflected in the contract drawings and specifications.

a. Phase Elements. For each phase the CSPP should detail:

- Areas closed to aircraft operations

- Duration of closures
- Taxi routes
- ARFF access routes
- Construction staging areas
- Construction access and haul routes
- Impacts to NAVAIDs
- Lighting and marking changes
- Available runway length
- Declared distances (if applicable)
- Required hazard marking and lighting
- Lead times for required notifications

b. Construction Safety Drawings. Drawings specifically indicating operational safety procedures and methods in affected areas (that is, construction safety drawings) should be developed for each construction phase. Such drawings should be included in the CSPP as referenced attachments and should likewise be included in the contract drawing package.

207. Areas and Operations Affected by Construction Activity. Runways and taxiways should remain in use by aircraft to the maximum extent possible without compromising safety. Pre-meetings with the FAA Air Traffic Organization (ATO) will support operational simulations. See Chapter 3 for an example of a table showing temporary operations versus current operations.

a. Identification of Affected Areas. Identifying areas and operations affected by the construction will help to determine possible safety problems. The affected areas should be indentified in the construction safety drawings for each construction phase. (See 206.b above.) Of particular concern are:

(1) Closing, or partial closing, of runways, taxiways and aprons. When a runway is partially closed, a portion of the pavement is unavailable for any aircraft operation, meaning taxiing, landing, or taking off in either direction on that pavement is prohibited. A displaced threshold, by contrast, is established to ensure obstacle clearance and adequate safety area for landing aircraft. The pavement prior to the displaced threshold is available for take-off in the direction of the displacement and for landing and taking off in the opposite direction. Misunderstanding this difference, and issuance of a subsequently inaccurate NOTAM, can lead to a hazardous condition.

(2) Closing of Aircraft Rescue and Fire Fighting access routes.

(3) Closing of access routes used by airport and airline support vehicles.

(4) Interruption of utilities, including water supplies for fire fighting.

(5) Approach/departure surfaces affected by heights of objects.

(6) Construction areas, storage areas, and access routes near runways, taxiways, aprons, or helipads.

b. Mitigation of Effects. Establishment of specific procedures is necessary to maintain the safety and efficiency of airport operations. The CSPP must address:

(1) Temporary changes to runway and/or taxi operations.

(2) Detours for ARFF and other airport vehicles.

(3) **Maintenance of essential utilities.**

(4) **Temporary changes to air traffic control procedures. Such changes must be coordinated with the ATO.**

208. Navigation Aid (NAVAID) Protection. Before commencing construction activity, parking vehicles, or storing construction equipment and materials near a NAVAID, coordinate with the appropriate FAA ATO/Technical Operations office to evaluate the effect of construction activity and the required distance and direction from the NAVAID. (See paragraph 213.e(3) below.) Construction activities, materials/equipment storage, and vehicle parking near electronic NAVAIDs require special consideration since they may interfere with signals essential to air navigation. If any NAVAID may be affected, the CSPP and SPCD must show an understanding of the "critical area" associated with each NAVAID and describe how it will be protected. Where applicable, the operational critical areas of NAVAIDs should be graphically delineated on the project drawings. Pay particular attention to stockpiling material, as well as to movement and parking of equipment that may interfere with line of sight from the ATCT or with electronic emissions. Interference from construction equipment and activities may require NAVAID shutdown or adjustment of instrument approach minimums for low visibility operations. This condition requires that a NOTAM be filed (see paragraph 213.b below). Construction activities and materials/equipment storage near a NAVAID must not obstruct access to the equipment and instruments for maintenance. Submittal of a 7460-1 form is required for construction vehicles operating near FAA NAVAIDs. (See paragraph 213.e(1) below.)

209. Contractor Access. The CSPP must detail the areas to which the contractor must have access, and explain how contractor personnel will access those areas. Specifically address:

a. Location of Stockpiled Construction Materials. Stockpiled materials and equipment storage are not permitted within the RSA and OFZ, and if possible should not be permitted within the Object Free Area (OFA) of an operational runway. Stockpiling material in the OFA requires submittal of a 7460-1 form and justification provided to the appropriate FAA Airports Regional or District Office for approval. The airport operator must ensure that stockpiled materials and equipment adjacent to these areas are prominently marked and lighted during hours of restricted visibility or darkness. (See paragraph 218.b below.) This includes determining and verifying that materials are stabilized and stored at an approved location so as not to be a hazard to aircraft operations and to prevent attraction of wildlife and foreign object damage. See paragraphs 210 and 211 below.

b. Vehicle and Pedestrian Operations. The CSPP should include specific vehicle and pedestrian requirements. Vehicle and pedestrian access routes for airport construction projects must be controlled to prevent inadvertent or unauthorized entry of persons, vehicles, or animals onto the AOA. The airport operator should coordinate requirements for vehicle operations with airport tenants, contractors, and the FAA air traffic manager. In regard to vehicle and pedestrian operations, the CSPP should include the following, and detail associated training requirements:

(1) **Construction site parking.** Designate in advance vehicle parking areas for contractor employees to prevent any unauthorized entry of persons or vehicles onto the AOA. These areas should provide reasonable contractor employee access to the job site.

(2) **Construction equipment parking.** Contractor employees must park and service all construction vehicles in an area designated by the airport operator outside the OFZ and never in the safety area of an active runway or taxiway. Unless a complex setup procedure makes movement of specialized equipment infeasible, inactive equipment must not be parked on a closed taxiway or runway. If it is necessary to leave specialized equipment on a closed taxiway or runway at night, the equipment must be well lighted. Employees should also park construction vehicles outside the OFA when not in use by

construction personnel (for example, overnight, on weekends, or during other periods when construction is not active). Parking areas must not obstruct the clear line of sight by the ATCT to any taxiways or runways under air traffic control nor obstruct any runway visual aids, signs, or navigation aids. The FAA must also study those areas to determine effects on airport design criteria, surfaces established by 14 CFR Part 77, Safe, Efficient Use, and Preservation of the Navigable Airspace (Part 77), and on NAVAIDs and Instrument Approach Procedures (IAP). See paragraph 213.e(1) below for further information.

(3) Access and haul roads. Determine the construction contractor's access to the construction sites and haul roads. Do not permit the construction contractor to use any access or haul roads other than those approved. Access routes used by contractor vehicles must be clearly marked to prevent inadvertent entry to areas open to airport operations. Pay special attention to ensure that if construction traffic is to share or cross any ARFF routes that ARFF right of way is not impeded at any time, and that construction traffic on haul roads does not interfere with NAVAIDs or approach surfaces of operational runways.

(4) Marking and lighting of vehicles in accordance with AC 150/5210-5, Painting, Marking, and Lighting of Vehicles Used on an Airport.

(5) Description of proper vehicle operations on various areas under normal, lost communications, and emergency conditions.

(6) Required escorts.

(7) Training requirements for vehicle drivers to ensure compliance with the airport operator's vehicle rules and regulations. Specific training should be provided to those vehicle operators providing escorts. See AC 150/5210-20, Ground Vehicle Operations on Airports, for information on training and records maintenance requirements.

(8) Situational awareness. Vehicle drivers must confirm by personal observation that no aircraft is approaching their position (either in the air or on the ground) when given clearance to cross a runway, taxiway, or any other area open to airport operations. In addition, it is the responsibility of the escort vehicle driver to verify the movement/position of all escorted vehicles at any given time.

(9) Two-way radio communication procedures.

(a) General. The airport operator must ensure that tenant and construction contractor personnel engaged in activities involving unescorted operation on aircraft movement areas observe the proper procedures for communications, including using appropriate radio frequencies at airports with and without ATCT. When operating vehicles on or near open runways or taxiways, construction personnel must understand the critical importance of maintaining radio contact, as directed by the airport operator, with:

(i) Airport operations

(ii) ATCT

(iii) Common Traffic Advisory Frequency (CTAF), which may include UNICOM, MULTICOM.

(iv) Automatic Terminal Information Service (ATIS). This frequency is useful for monitoring conditions on the airport. Local air traffic will broadcast information regarding construction related runway closures and "shortened" runways on the ATIS frequency.

(b) Areas requiring two-way radio communication with the ATCT. Vehicular traffic crossing active movement areas must be controlled either by two-way radio with the ATCT, escort, flagman, signal light, or other means appropriate for the particular airport.

(c) Frequencies to be used. The airport operator will specify the frequencies to be used by the contractor, which may include the CTAF for monitoring of aircraft operations. Frequencies may also be assigned by the airport operator for other communications, including any radio frequency in compliance with Federal Communications Commission requirements. At airports with an ATCT, the airport operator will specify the frequency assigned by the ATCT to be used between contractor vehicles and the ATCT.

(d) Proper radio usage, including read back requirements.

(e) Proper phraseology, including the International Phonetic Alphabet.

(f) Light gun signals. Even though radio communication is maintained, escort vehicle drivers must also familiarize themselves with ATCT light gun signals in the event of radio failure. See the FAA safety placard "Ground Vehicle Guide to Airport Signs and Markings." This safety placard may be downloaded through the Runway Safety Program Web site at http://www.faa.gov/airports/runway_safety/publications/ (See "Signs & Markings Vehicle Dashboard Sticker".) or obtained from the FAA Airports Regional Office.

(10) Maintenance of the secured area of the airport, including:

(a) Fencing and gates. Airport operators and contractors must take care to maintain security during construction when access points are created in the security fencing to permit the passage of construction vehicles or personnel. Temporary gates should be equipped so they can be securely closed and locked to prevent access by animals and unauthorized people. Procedures should be in place to ensure that only authorized persons and vehicles have access to the AOA and to prohibit "piggybacking" behind another person or vehicle. The Department of Transportation (DOT) document DOT/FAA/AR-00/52, Recommended Security Guidelines for Airport Planning and Construction, provides more specific information on fencing. A copy of this document can be obtained from the Airport Consultants Council, Airports Council International, or American Association of Airport Executives.

(b) Badging requirements.

(c) Airports subject to 49 CFR Part 1542, Airport Security, must meet standards for access control, movement of ground vehicles, and identification of construction contractor and tenant personnel.

210. Wildlife Management. The CSPP and SPCD must be in accordance with the airport operator's wildlife hazard management plan, if applicable. See also AC 150/5200-33, Hazardous Wildlife Attractants On or Near Airports, and Certalert 98-05, Grasses Attractive to Hazardous Wildlife. Construction contractors must carefully control and continuously remove waste or loose materials that might attract wildlife. Contractor personnel must be aware of and avoid construction activities that can create wildlife hazards on airports, such as:

a. Trash. Food scraps must be collected from construction personnel activity.

b. Standing Water.

c. Tall Grass and Seeds. Requirements for turf establishment can be at odds with requirements for wildlife control. Grass seed is attractive to birds. Lower quality seed mixtures can contain seeds of plants (such as clover) that attract larger wildlife. Seeding should comply with the guidance in AC 150/5370-10, Standards for Specifying Construction of Airports, Item T-901, Seeding. Contact the local office of the United Sates Department of Agriculture Soil Conservation Service or the State University Agricultural Extension Service (County Agent or equivalent) for assistance and recommendations. These agencies can also provide liming and fertilizer recommendations.

d. Poorly Maintained Fencing and Gates. See 209.b(10)(a) above.

e. Disruption of Existing Wildlife Habitat. While this will frequently be unavoidable due to the nature of the project, the CSPP should specify under what circumstances (location, wildlife type) contractor personnel should immediately notify the airport operator of wildlife sightings.

211. Foreign Object Debris (FOD) Management. Waste and loose materials, commonly referred to as FOD, are capable of causing damage to aircraft landing gears, propellers, and jet engines. Construction contractors must not leave or place FOD on or near active aircraft movement areas. Materials capable of creating FOD must be continuously removed during the construction project. Fencing (other than security fencing) may be necessary to contain material that can be carried by wind into areas where aircraft operate. See AC 150/5210-24, Foreign Object Debris (FOD) Management.

212. Hazardous Materials (HAZMAT) Management. Contractors operating construction vehicles and equipment on the airport must be prepared to expeditiously contain and clean-up spills resulting from fuel or hydraulic fluid leaks. Transport and handling of other hazardous materials on an airport also requires special procedures. See AC 150/5320-15, Management of Airport Industrial Waste.

213. Notification of Construction Activities. The CSPP and SPCD must detail procedures for the immediate notification of airport users and the FAA of any conditions adversely affecting the operational safety of the airport. It must address the notification actions described below, as applicable.

a. List of Responsible Representatives/ points of contact for all involved parties, and procedures for contacting each of them, including after hours.

b. NOTAMs. Only the airport operator may initiate or cancel NOTAMs on airport conditions, and is the only entity that can close or open a runway. The airport operator must coordinate the issuance, maintenance, and cancellation of NOTAMs about airport conditions resulting from construction activities with tenants and the local air traffic facility (control tower, approach control, or air traffic control center), and must provide information on closed or hazardous conditions on airport movement areas to the FAA Flight Service Station (FSS) so it can issue a NOTAM. The airport operator must file and maintain a list of authorized representatives with the FSS. Refer to AC 150/5200-28, Notices to Airmen (NOTAMs) for Airport Operators, for a sample NOTAM form. Only the FAA may issue or cancel NOTAMs on shutdown or irregular operation of FAA owned facilities. Any person having reason to believe that a NOTAM is missing, incomplete, or inaccurate must notify the airport operator. See paragraph 207.a(1) above regarding issuing NOTAMs for partially closed runways versus runways with displaced thresholds.

c. Emergency notification procedures for medical, fire fighting, and police response.

d. Coordination with ARFF. The CSPP must detail procedures for coordinating through the airport sponsor with ARFF personnel, mutual aid providers, and other emergency services if construction requires:

- The deactivation and subsequent reactivation of water lines or fire hydrants, or
- The rerouting, blocking and restoration of emergency access routes, or
- The use of hazardous materials on the airfield.

e. Notification to the FAA.

(1) Part 77. Any person proposing construction or alteration of objects that affect navigable airspace, as defined in Part 77, must notify the FAA. This includes construction equipment and proposed

parking areas for this equipment (i.e. cranes, graders, other equipment) on airports. FAA Form 7460-1, Notice of Proposed Construction or Alteration, can be used for this purpose and submitted to the appropriate FAA Airports Regional or District Office. See Appendix 1, Related Reading Material, to download the form. Further guidance is available on the FAA web site at oeaaa.faa.gov.

(2) **Part 157.** With some exceptions, Title 14 CFR Part 157, Notice of Construction, Alteration, Activation, and Deactivation of Airports, requires that the airport operator notify the FAA in writing whenever a non-Federally funded project involves the construction of a new airport; the construction, realigning, altering, activating, or abandoning of a runway, landing strip, or associated taxiway; or the deactivation or abandoning of an entire airport. Notification involves submitting FAA Form 7480-1, Notice of Landing Area Proposal, to the nearest FAA Airports Regional or District Office. See Appendix 1, Related Reading Material to download the form.

(3) **NAVAIDS.** For emergency (short-notice) notification about impacts to both airport owned and FAA owned NAVAIDs, contact: 866-432-2622.

(a) Airport owned/FAA maintained. If construction operations require a shutdown of more than 24 hours, or more than 4 hours daily on consecutive days, of a NAVAID owned by the airport but maintained by the FAA, provide a 45-day minimum notice to FAA ATO/Technical Operations prior to facility shutdown.

(b) FAA owned.

(i) General. The airport operator must notify the appropriate FAA ATO Service Area Planning and Requirements (P&R) Group a minimum of 45 days prior to implementing an event that causes impacts to NAVAIDs. (Impacts to FAA equipment covered by a Reimbursable Agreement (RA) do not have to be reported by the airport operator.)

(ii) Coordinate work for an FAA owned NAVAID shutdown with the local FAA ATO/Technical Operations office, including any necessary reimbursable agreements and flight checks. Detail procedures that address unanticipated utility outages and cable cuts that could impact FAA NAVAIDs. In addition, provide seven days notice to schedule the actual shutdown.

214. Inspection Requirements.

a. Daily Inspections. Inspections should be conducted at least daily, but more frequently if necessary to ensure conformance with the CSPP. A sample checklist is provided in Appendix 3, Safety and Phasing Plan Checklist. See also AC 150/5200-18, Airport Safety Self-Inspection.

b. Final Inspections. New runways and extended runway closures may require safety inspections at certificated airports prior to allowing air carrier service. Coordinate with the FAA Airport Certification Safety Inspector (ACSI) to determine if a final inspection will be necessary.

215. Underground Utilities. The CSPP and/or SPCD must include procedures for locating and protecting existing underground utilities, cables, wires, pipelines, and other underground facilities in excavation areas. This may involve coordinating with public utilities and FAA ATO/Technical Operations. Note that "One Call" or "Miss Utility" services do not include FAA ATO/Technical Operations

216. Penalties. The CSPP should detail penalty provisions for noncompliance with airport rules and regulations and the safety plans (for example, if a vehicle is involved in a runway incursion). Such penalties typically include rescission of driving privileges or access to the AOA.

217. Special Conditions. The CSPP must detail any special conditions that affect the operation of the

airport and will require the activation of any special procedures (for example, low-visibility operations, snow removal, aircraft in distress, aircraft accident, security breach, Vehicle / Pedestrian Deviation (VPD) and other activities requiring construction suspension/resumption).

218. Runway and Taxiway Visual Aids. Includes marking, lighting, signs, and visual NAVAIDS. The CSPP must ensure that areas where aircraft will be operating are clearly and visibly separated from construction areas, including closed runways. Throughout the duration of the construction project, verify that these areas remain clearly marked and visible at all times and that marking, lighting, signs, and visual NAVAIDs remain in place and operational. The CSPP must address the following, as appropriate:

a. General. Airport markings, lighting, signs, and visual NAVAIDs must be clearly visible to pilots, not misleading, confusing, or deceptive. All must be secured in place to prevent movement by prop wash, jet blast, wing vortices, or other wind currents and constructed of materials that would minimize damage to an aircraft in the event of inadvertent contact.

b. Markings. Markings must be in compliance with the standards of AC 150/5340-1, Standards for Airport Markings. Runways and runway exit taxiways closed to aircraft operations are marked with a yellow X. The preferred visual aid to depict temporary runway closure is the lighted X signal placed on or near the runway designation numbers. (See paragraph 218.b(1)(b) below.)

(1) Closed Runways and Taxiways.

(a) Permanently Closed Runways. For runways, obliterate the threshold marking, runway designation marking, and touchdown zone markings, and place Xs at each end and at 1,000-foot (300 m) intervals.

(b) Temporarily Closed Runways. For runways that have been temporarily closed, place an X at the each end of the runway directly on or as near as practicable to the runway designation numbers. Figure 2-1 illustrates.

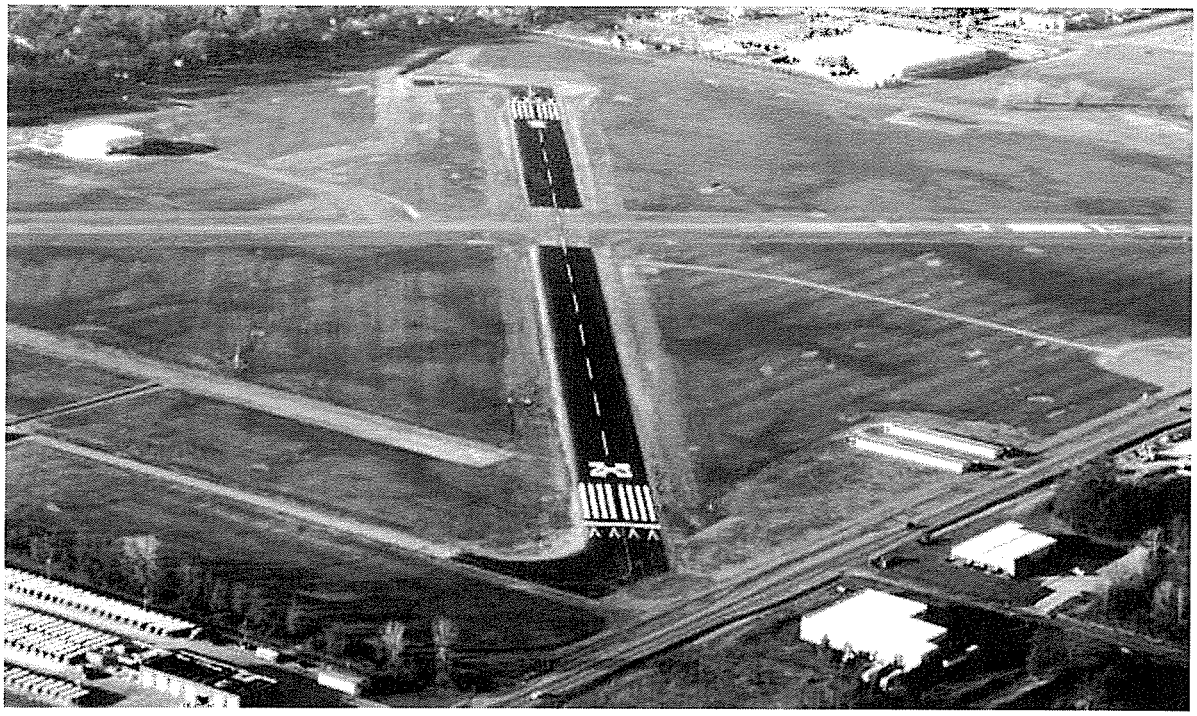

Figure 2-1 Markings for a Temporarily Closed Runway

(c) Partially Closed Runways and Displaced Thresholds. When threshold markings are needed to identify the temporary beginning of the runway that is available for landing, the markings must comply with AC 150/5340-1. An X is not used on a partially closed runway or a runway with a displaced threshold. See paragraph 207.a(1) above for the difference between partially closed runways and runways with displaced thresholds.

(i) Partially Closed Runways. Pavement markings for temporary closed portions of the runway consist of a runway threshold bar and yellow chevrons to identify pavement areas that are unsuitable for takeoff or landing (see AC 150/5340-1).

(ii) Displaced Thresholds. Pavement markings for a displaced threshold consist of a runway threshold bar and white arrowheads with and without arrow shafts. These markings are required to identify the portion of the runway before the displaced threshold to provide centerline guidance for pilots during approaches, takeoffs, and landing rollouts from the opposite direction. See AC 150/5340-1.

(d) Taxiways.

(i) Permanently Closed Taxiways. AC 150/5300-13 notes that it is preferable to remove the pavement, but for pavement that is to remain, place an X at the entrance to both ends of the closed section. Obliterate taxiway centerline markings, including runway leadoff lines, leading to the closed taxiway. Figure 2-2 illustrates.

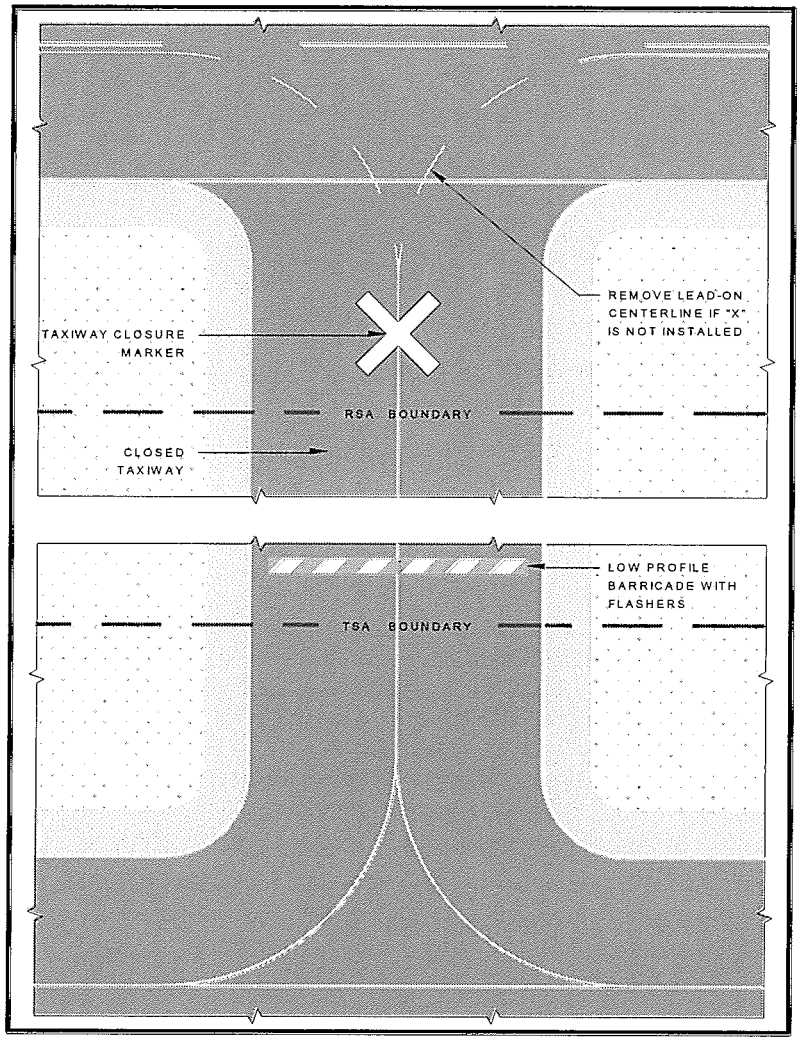

Figure 2-2 Taxiway Closure

(ii) Temporarily Closed Taxiways. Place barricades outside the safety area of intersecting taxiways. For runway/taxiway intersections, place an X at the entrance to the closed taxiway from the runway. If the taxiway will be closed for an extended period, obliterate taxiway centerline markings, including runway leadoff lines, leading to the closed section. If the centerline markings will be reused upon reopening the taxiway, it is preferable to paint over the marking. This will result in less damage to the pavement when the upper layer of paint is ultimately removed.

(e) Temporarily Closed Airport. When the airport is closed temporarily, mark all the runways as closed.

(2) If unable to paint temporary markings on the pavement, construct them from any of the following materials: fabric, colored plastic, painted sheets of plywood, or similar materials. They must be properly configured and appropriately secured to prevent movement by prop wash, jet blast, or other wind currents.

(3) It may be necessary to remove or cover runway markings, including but not limited to, runway designation markings, threshold markings, centerline markings, edge stripes, touchdown zone markings and aiming point markings, depending on the length of construction and type of activity at the airport. When removing runway markings, apply the same treatment to areas between stripes or numbers, as the cleaned area will appear to pilots as a marking in the shape of the treated area.

(4) If it is not possible to install threshold bars, chevrons, and arrows on the pavement, temporary outboard markings may be used. Locate them outside of the runway pavement surface on both sides of the runway. The dimension along the runway direction must be the same as if installed on the pavement. The lateral dimension must be at least one-half that of on-pavement markings. If the markings are not discernible on grass or snow, apply a black background with appropriate material over the ground to ensure they are clearly visible.

(5) The application rate of paint to mark a short-term temporary runway and taxiway markings may deviate from the standard (see Item P-620, "Runway and Taxiway Painting," in AC 150/5370-10), but the dimensions must meet the existing standards.

c. Lighting and Visual NAVAIDs. This paragraph refers to standard runway and taxiway lighting systems. See below for hazard lighting. Lighting must be in conformance with AC 150/5340-30, Design and Installation Details for Airport Visual Aids, and AC 150/5345-50, Specification for Portable Runway and Taxiway Lights. When disconnecting runway and taxiway lighting fixtures, disconnect the associated isolation transformers. Alternately, cover the light fixture in such a way as to prevent light leakage. Avoid removing the lamp from energized fixtures because an excessive number of isolation transformers with open secondaries may damage the regulators and/or increase the current above its normal value. Secure, identify, and place any above ground temporary wiring in conduit to prevent electrocution and fire ignition sources.

(1) Permanently Closed Runways and Taxiways. For runways and taxiways that have been permanently closed, disconnect the lighting circuits.

(2) Temporarily Closed Runways. If available, use a lighted X, both at night and during the day, placed at each end of the runway facing the approach. The use of a lighted X is required if night work requires runway lighting to be on. See AC 150/5345-55, Specification for L-893, Lighted Visual Aid to Indicate Temporary Runway Closure. For runways that have been temporarily closed, but for an extended period, and for those with pilot controlled lighting, disconnect the lighting circuits or secure switches to prevent inadvertent activation. For runways that will be opened periodically, coordinate procedures with the FAA air traffic manager or, at airports without an ATCT, the airport operator. Activate stop bars if available. Figure 2-3 shows a lighted X by day. Figure 2-4 shows a lighted X at night.

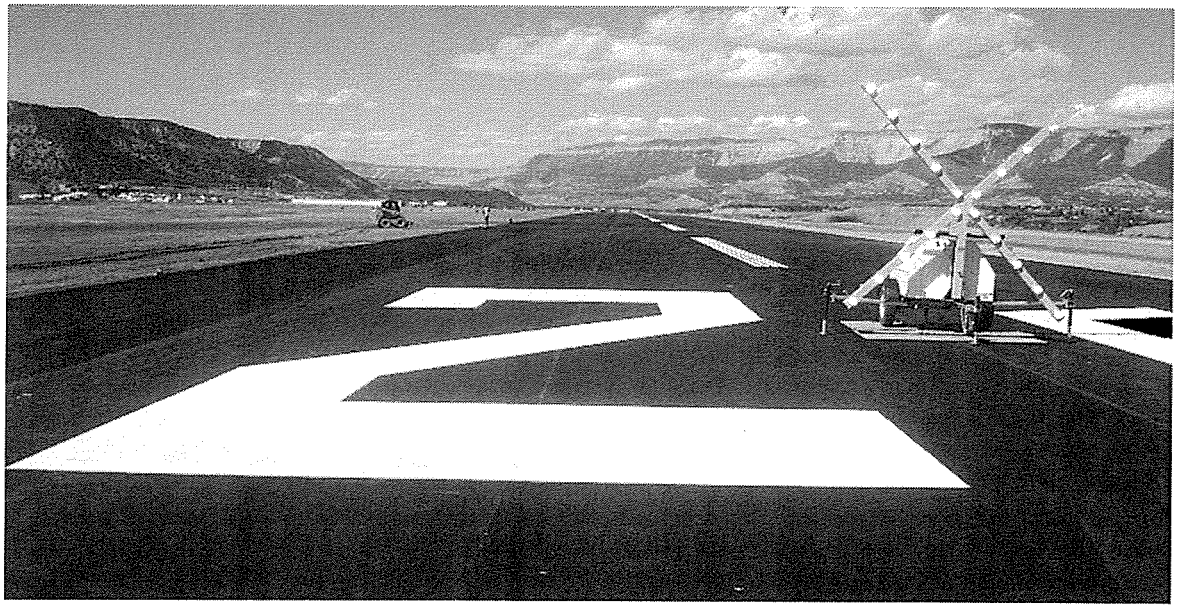

Figure 2-3 Lighted X in Daytime

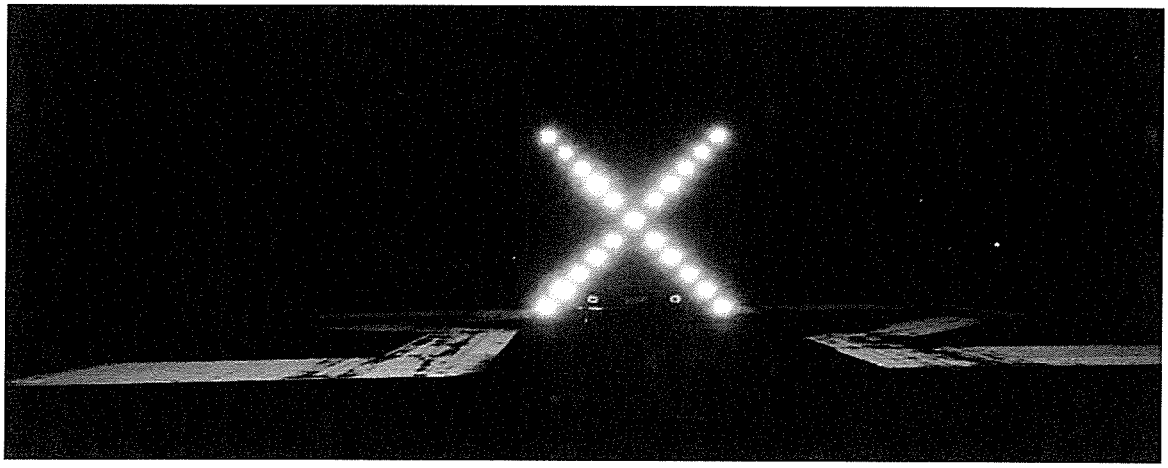

Figure 2-4 Lighted X at Night

(3) Partially Closed Runways and Displaced Thresholds. When a runway is partially closed, a portion of the pavement is unavailable for any aircraft operation, meaning taxiing and landing or

taking off in either direction. A displaced threshold, by contrast, is put in place to ensure obstacle clearance by landing aircraft. The pavement prior to the displaced threshold is available for takeoff in the direction of the displacement, and for landing and takeoff in the opposite direction. Misunderstanding this difference and issuance of a subsequently inaccurate NOTAM can result in a hazardous situation. For both partially closed runways and displaced thresholds, approach lighting systems at the affected end must be placed out of service

(a) Partially Closed Runways. Disconnect edge and threshold lights on that part of the runway at and behind the threshold (that is, the portion of the runway that is closed). Alternately, cover the light fixture in such a way as to prevent light leakage.

(b) Displaced Thresholds. Edge lighting in the area of the displacement emits red light in the direction of approach and yellow light in the opposite direction. Centerline lights are blanked out in the direction of approach if the displacement is 700 ft or less. If the displacement is over 700 ft, place the centerline lights out of service. See AC 150/5340-30 for details on lighting displaced thresholds.

(c) Temporary runway thresholds and runway ends must be lighted if the runway is lighted and it is the intended threshold for night landings or instrument meteorological conditions.

(d) A temporary threshold on an unlighted runway may be marked by retroreflective, elevated markers in addition to markings noted in paragraph 218.b(1)(c) above. Markers seen by aircraft on approach are green. Markers at the rollout end of the runway are red. At certificated airports, temporary elevated threshold markers must be mounted with a frangible fitting (see 14 CFR Part 139.309). At non-certificated airports, the temporary elevated threshold markings may either be mounted with a frangible fitting or be flexible. See AC 150/5345-39, Specification for L-853, Runway and Taxiway Retroreflective Markers.

(e) Temporary threshold lights and end lights and related visual NAVAIDs are installed outboard of the edges of the full-strength pavement only when they cannot be installed on the pavement. They are installed with bases at grade level or as low as possible, but not more than 3 in (7.6 cm) above ground. When any portion of a base is above grade, place properly compacted fill around the base to minimize the rate of gradient change so aircraft can, in an emergency, cross at normal landing or takeoff speeds without incurring significant damage. See AC 150/5370-10.

(f) Maintain threshold and edge lighting color and spacing standards as described in AC 150/5340-30. Battery powered, solar, or portable lights that meet the criteria in AC 150/5345-50 may be used. These systems are intended primarily for visual flight rules (VFR) aircraft operations but may be used for instrument flight rules (IFR) aircraft operations, upon individual approval from the Flight Standards Division of the applicable FAA Regional Office.

(g) Reconfigure yellow lenses (caution zone), as necessary. If the runway has centerline lights, reconfigure the red lenses, as necessary, or place the centerline lights out of service.

(h) Relocate the visual glide slope indicator (VGSI), such as VASI and PAPI; other airport lights, such as Runway End Identifier Lights (REIL); and approach lights to identify the temporary threshold. Another option is to disable the VGSI or any equipment that would give misleading indications to pilots as to the new threshold location. Installation of temporary visual aids may be necessary to provide adequate guidance to pilots on approach to the affected runway. If the FAA owns and operates the VGSI, coordinate its installation or disabling with the local ATO/Technical Operations Office. Relocation of such visual aids will depend on the duration of the project and the benefits gained from the relocation, as this can result in great expense.

(i) Issue a NOTAM to inform pilots of temporary lighting conditions.

(4) Temporarily Closed Taxiways. If possible, deactivate the taxiway lighting circuits. When deactivation is not possible (for example other taxiways on the same circuit are to remain open),

cover the light fixture in such a way as to prevent light leakage.

d. Signs. To the extent possible, signs must be in conformance with AC 150/5345-44, Specification for Runway and Taxiway Signs and AC 150/5340-18, Standard for Airport Sign Systems. Any time a sign does not serve its normal function; it must be covered or removed to prevent misdirecting pilots. Note that information signs identifying a crossing taxiway continue to perform their normal function even if the crossing taxiway is closed. For long term construction projects, consider relocating signs, especially runway distance remaining signs.

219. Marking and Signs for Access Routes. The CSPP should indicate that pavement markings and signs for construction personnel will conform to AC 150/5340-18 and, to the extent practicable, with the Federal Highway Administration Manual on Uniform Traffic Control Devices (MUTCD) and/or State highway specifications. Signs adjacent to areas used by aircraft must comply with the frangibility requirements of AC 150/5220-23, Frangible Connections, which may require modification to size and height guidance in the MUTCD.

220. Hazard Marking, Lighting and Signing.

a. Hazard Marking and Lighting Prevents Pilots from entering areas closed to aircraft, and prevents construction personnel from entering areas open to aircraft. The CSPP must specify prominent, comprehensible warning indicators for any area affected by construction that is normally accessible to aircraft, personnel, or vehicles. Hazard marking and lighting must also be specified to identify open manholes, small areas under repair, stockpiled material, waste areas, and areas subject to jet blast. Also consider less obvious construction-related hazards and include markings to identify FAA, airport, and National Weather Service facilities cables and power lines; instrument landing system (ILS) critical areas; airport surfaces, such as RSA, OFA, and OFZ; and other sensitive areas to make it easier for contractor personnel to avoid these areas.

b. Equipment.

(1) Barricades, including traffic cones, (weighted or sturdily attached to the surface) are acceptable methods used to identify and define the limits of construction and hazardous areas on airports. Careful consideration must be given to selecting equipment that poses the least danger to aircraft but is sturdy enough to remain in place when subjected to typical winds, prop wash and jet blast. The spacing of barricades must be such that a breach is physically prevented barring a deliberate act. For example, if barricades are intended to exclude vehicles, gaps between barricades must be smaller than the width of the excluded vehicles, generally 4 ft. Provision must be made for ARFF access if necessary. If barricades are intended to exclude pedestrians, they must be continuously linked. Continuous linking may be accomplished through the use of ropes, securely attached to prevent FOD.

(2) Lights must be red, either steady burning or flashing, and must meet the luminance requirements of the State Highway Department. Batteries powering lights will last longer if lights flash. Lights must be mounted on barricades and spaced at no more than 10 ft. Lights must be operated between sunset and sunrise and during periods of low visibility whenever the airport is open for operations. They may be operated by photocell, but this may require that the contractor turn them on manually during periods of low visibility during daytime hours.

(3) Supplement barricades with signs (for example "No Entry," "No Vehicles") as necessary.

(4) Air Operations Area – General. Barricades are not permitted in any active safety area. Within a runway or taxiway object free area, and on aprons, use orange traffic cones, flashing or steady burning red lights as noted above, collapsible barricades marked with diagonal, alternating orange and

white stripes; and/or signs to separate all construction/maintenance areas from the movement area. Barricades may be supplemented with alternating orange and white flags at least 20 by 20 in (50 by 50 cm) square and securely fastened to eliminate FOD. All barricades adjacent to any open runway or taxiway / taxilane safety area, or apron must be as low as possible to the ground, and no more than 18 in high, exclusive of supplementary lights and flags. Barricades must be of low mass; easily collapsible upon contact with an aircraft or any of its components; and weighted or sturdily attached to the surface to prevent displacement from prop wash, jet blast, wing vortex, or other surface wind currents. If affixed to the surface, they must be frangible at grade level or as low as possible, but not to exceed 3 in (7.6 cm) above the ground. Figure 2-5 and Figure 2-6 show sample barricades with proper coloring and flags.

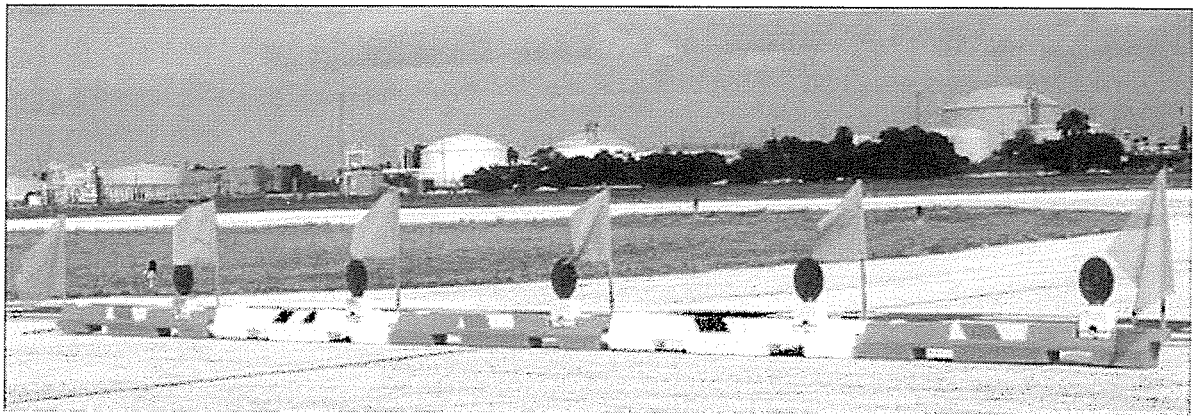

Figure 2-5 Interlocking Barricades

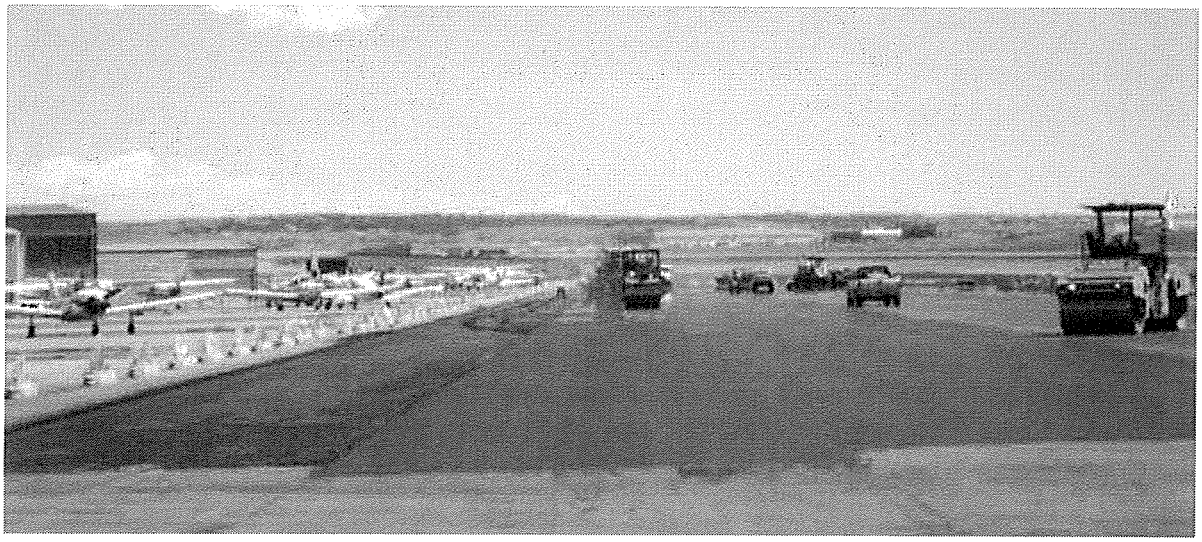

Figure 2-6 Low Profile Barricades

(5) Air Operations Area – Runway/Taxiway Intersections. Use highly reflective barricades with lights to close taxiways leading to closed runways. Evaluate all operating factors when determining how to mark temporary closures that can last from 10 to 15 minutes to a much longer period of time. However, even for closures of relatively short duration, close all taxiway/runway intersections with barricades. The use of traffic cones is appropriate for short duration closures.

(6) Air Operations Area – Other. Beyond runway and taxiway object free areas and

aprons, barricades intended for construction vehicles and personnel may be many different shapes and made from various materials, including railroad ties, sawhorses, jersey barriers, or barrels.

(7) **Maintenance.** The construction specifications must include a provision requiring the contractor to have a person on call 24 hours a day for emergency maintenance of airport hazard lighting and barricades. The contractor must file the contact person's information with the airport operator. Lighting should be checked for proper operation at least once per day, preferably at dusk.

221. Protection of Runway and Taxiway Safety Areas. Runway and taxiway safety areas, Obstacle Free zones (OFZ), object free areas (OFA), and approach surfaces are described in AC 150/5300-13. Protection of these areas includes limitations on the location and height of equipment and stockpiled material. An FAA airspace study may be required. Coordinate with the appropriate FAA Airports Regional or District Office if there is any doubt as to requirements or dimensions (See paragraph 213.e above.) as soon as the location and height of materials or equipment are known. The CSPP should include drawings showing all safety areas, object free areas, obstacle free zones and approach departure surfaces affected by construction.

a. Runway Safety Area (RSA). A runway safety area is the defined surface surrounding the runway prepared or suitable for reducing the risk of damage to airplanes in the event of an undershoot, overshoot, or excursion from the runway (see AC 150/5300-13). Construction activities within the existing RSA are subject to the following conditions:

(1) **No construction may occur within the existing RSA** while the runway is open for aircraft operations. The RSA dimensions may be temporarily adjusted if the runway is restricted to aircraft operations requiring an RSA that is equal to the RSA width and length beyond the runway ends available during construction. (see AC 150/5300-13). The temporary use of declared distances and/or partial runway closures may provide the necessary RSA under certain circumstances. Coordinate with the appropriate FAA Airports Regional or District Office to have declared distances information published. See AC 150/5300-13 for guidance on the use of declared distances.

(2) **The airport operator must coordinate** the adjustment of RSA dimensions as permitted above with the appropriate FAA Airports Regional or District Office and the local FAA air traffic manager and issue a NOTAM.

(3) **The CSPP and SPCD must provide procedures** for ensuring adequate distance for protection from blasting operations, if required by operational considerations.

(4) **Excavations.**

(a) Open trenches or excavations are not permitted within the RSA while the runway is open. If possible, backfill trenches before the runway is opened. If the runway must be opened before excavations are backfilled, cover the excavations appropriately. Covering for open trenches must be designed to allow the safe operation of the heaviest aircraft operating on the runway across the trench without damage to the aircraft.

(b) Construction contractors must prominently mark open trenches and excavations at the construction site with red or orange flags, as approved by the airport operator, and light them with red lights during hours of restricted visibility or darkness.

(5) **Erosion Control.** Soil erosion must be controlled to maintain RSA standards, that is, the RSA must be cleared and graded and have no potentially hazardous ruts, humps, depressions, or other surface variations, and capable, under dry conditions, of supporting snow removal equipment, aircraft rescue and fire fighting equipment, and the occasional passage of aircraft without causing structural damage to the aircraft.

b. Runway Object Free Area (ROFA). Construction, including excavations, may be permitted in the ROFA. However, equipment must be removed from the ROFA when not in use, and material should not be stockpiled in the ROFA if not necessary. Stockpiling material in the OFA requires submittal of a 7460-1 form and justification provided to the appropriate FAA Airports Regional or District Office for approval.

c. Taxiway Safety Area (TSA). A taxiway safety area is a defined surface alongside the taxiway prepared or suitable for reducing the risk of damage to an airplane unintentionally departing the taxiway. (See AC 150/5300-13.) Construction activities within the TSA are subject to the following conditions:

(1) No construction may occur within the TSA while the taxiway is open for aircraft operations. The TSA dimensions may be temporarily adjusted if the taxiway is restricted to aircraft operations requiring a TSA that is equal to the TSA width available during construction (see AC 150/5300-13, Table 4-1).

(2) The airport operator must coordinate the adjustment of the TSA width as permitted above with the appropriate FAA Airports Regional or District Office and the FAA air traffic manager and issue a NOTAM.

(3) The CSPP and SPCD must provide procedures for ensuring adequate distance for protection from blasting operations.

(4) Excavations.

(a) Open trenches or excavations are not permitted within the TSA while the taxiway is open. If possible, backfill trenches before the taxiway is opened. If the taxiway must be opened before excavations are backfilled, cover the excavations appropriately. Covering for open trenches must be designed to allow the safe operation of the heaviest aircraft operating on the taxiway across the trench without damage to the aircraft.

(b) Construction contractors must prominently mark open trenches and excavations at the construction site with red or orange flags, as approved by the airport operator, and light them with red lights during hours of restricted visibility or darkness.

(5) Erosion Control. Soil erosion must be controlled to maintain TSA standards, that is, the TSA must be cleared and graded and have no potentially hazardous ruts, humps, depressions, or other surface variations, and capable, under dry conditions, of supporting snow removal equipment, aircraft rescue and fire fighting equipment, and the occasional passage of aircraft without causing structural damage to the aircraft.

d. Taxiway Object Free Area (TOFA). Unlike the Runway Object Free Area, aircraft wings regularly penetrate the taxiway object free area during normal operations. Thus the restrictions are more stringent. Except as provided below, no construction may occur within the taxiway object free area while the taxiway is open for aircraft operations.

(1) The taxiway object free area dimensions may be temporarily adjusted if the taxiway is restricted to aircraft operations requiring a taxiway object free area that is equal to the taxiway object free area width available.

(2) Offset taxiway pavement markings may be used as a temporary measure to provide the required taxiway object free area. Where offset taxiway pavement markings are provided, centerline lighting or reflectors are required.

(3) Construction activity may be accomplished without adjusting the width of the taxiway object free area, subject to the following restrictions:

(a) Appropriate NOTAMs are issued.

(b) Marking and lighting meeting the provisions of paragraphs 218 and 220 above are implemented.

(c) Five-foot clearance is maintained between equipment and materials and any part of an aircraft (includes wingtip overhang). In these situations, flaggers must be used to direct construction equipment, and wing walkers will be necessary to guide aircraft. Wing walkers should be airline/aviation personnel rather than construction workers. If such clearance can only be maintained if an aircraft does not have full use of the entire taxiway width (with its main landing gear at the edge of the pavement), then it will be necessary to move personnel and equipment for the passage of that aircraft.

e. Obstacle Free Zone (OFZ). In general, personnel, material, and/or equipment may not penetrate the OFZ while the runway is open for aircraft operations. If a penetration to the OFZ is necessary, it may be possible to continue aircraft operations through operational restrictions. Coordinate with the FAA through the appropriate FAA Airports Regional or District Office.

f. Runway Approach/Departure Areas and Clearways. All personnel, materials, and/or equipment must remain clear of the applicable threshold siting surfaces, as defined in Appendix 2, "Threshold Siting Requirements," of AC 150/5300-13. Objects that do not penetrate these surfaces may still be obstructions to air navigation and may affect standard instrument approach procedures. Coordinate with the FAA through the appropriate FAA Airports Regional or District Office.

(1) Construction activity in a runway approach/departure area may result in the need to partially close a runway or displace the existing runway threshold. Partial runway closure, displacement of the runway threshold, as well as closure of the complete runway and other portions of the movement area also require coordination through the airport operator with the appropriate FAA air traffic manager (FSS if non-towered) and ATO/Technical Operations (for affected NAVAIDS) and airport users.

(2) Caution regarding partial runway closures. When filing a NOTAM for a partial runway closure, clearly state to OCC personnel that the portion of pavement located prior to the threshold is not available for landing and departing traffic. In this case, the threshold has been moved for both landing and takeoff purposes (this is different than a displaced threshold). There may be situations where the portion of closed runway is available for taxiing only. If so, the NOTAM must reflect this condition).

(3) Caution regarding displaced thresholds. : Implementation of a displaced threshold affects runway length available for aircraft landing over the displacement. Depending on the reason for the displacement (to provide obstruction clearance or RSA), such a displacement may also require an adjustment in the landing distance available and accelerate-stop distance available in the opposite direction. If project scope includes personnel, equipment, excavation, other work. within the existing RSA of any usable runway end, do not implement a displaced threshold unless arrivals and departures toward the construction activity are prohibited. Instead, implement a partial closure.

222. Other Limitations on Construction. The CSPP must specify any other limitations on construction, including but not limited to:

a. Prohibitions.

(1) No use of tall equipment (cranes, concrete pumps, and so on) unless a 7460-1 determination letter is issued for such equipment.

(2) No use of open flame welding or torches unless fire safety precautions are provided and the airport operator has approved their use.

(3) No use of electrical blasting caps on or within 1,000 ft (300 m) of the airport property.

See AC 150/5370-10.

(4) **No use of flare pots** within the AOA.

b. Restrictions.

(1) Construction suspension required during specific airport operations.

(2) Areas that cannot be worked on simultaneously.

(3) Day or night construction restrictions.

(4) Seasonal construction restrictions.

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Chapter 3. Guidelines for Writing a CSPP

301. General Requirements. The CSPP is a standalone document written to correspond with the subjects outlined in Chapter 2, Section 1, paragraph 204. The CSPP is organized by numbered sections corresponding to each subject listed in Chapter 2, Section 1, paragraph 204, and described in detail in Chapter 2, Section 2. Each section number and title in the CSPP matches the corresponding subject outlined in Chapter 2, paragraph 204 (for example, 1. Coordination, 2. Phasing, 3. Areas and Operations Affected by the Construction Activity, and so on.). With the exception of the project scope of work outlined in Section 2. Phasing, only subjects specific to operational safety during construction should be addressed.

302. Applicability of Subjects. Each section should, to the extent practical, focus on the specific subject. Where an overlapping requirement spans several sections, the requirement should be explained in detail in the most applicable section. A reference to that section should be included in all other sections where the requirement may apply. For example, the requirement to protect existing underground FAA Instrument Landing System (ILS) cables during trenching operations could be considered FAA ATO coordination (Section 1. Coordination, paragraph 205.c), an area and operation affected by the construction activity (Section 3. Areas and Operations Affected by the Construction Activity, paragraph 207.a(4)), a protection of a NAVAID (Section 4. Protection of Navigational Aids (NAVAIDs),paragraph 208), or a notification to the FAA of construction activities (Section 9. Notification of Construction Activities, paragraph 210.e(3)(b)). However, it is more specifically an underground utility requirement (Section 11. Underground Utilities, paragraph 215). The procedure for protecting underground ILS cables during trenching operations should therefore be described in Section 11: "*The contractor must coordinate with the local FAA System Support Center (SSC) to mark existing ILS cable routes along Runway 17-35. The ILS cables will be located by hand digging whenever the trenching operation moves within 10 feet of the cable markings.*" All other applicable sections should include a reference to Section 11: "*ILS cables shall be identified and protected as described in Section 11*" or "*See Section 11 for ILS cable identification and protection requirements.*" Thus, the CSPP should be considered as a whole, with no need to duplicate responses to related issues.

303. Graphical Representations. Construction safety drawings should be included in the CSPP as attachments. When other graphical representations will aid in supporting written statements, the drawings, diagrams, and/or photographs should also be attached to the CSPP. References should be made in the CSPP to each graphical attachment and may be made in multiple sections.

304. Reference Documents. The CSPP must not incorporate a document by reference unless reproduction of the material in that document is prohibited. In that case, either copies of or a source for the referenced document must be provided to the contractor.

305. Restrictions. The CSPP should not be considered as a project design review document. The CSPP should also avoid mention of permanent ("as-built") features such as pavements, markings, signs, and lighting, except when such features are intended to aid in maintaining operational safety during the construction.

306. Coordination. Include in this section a detailed description of conferences and meetings both before and during the project. Include appropriate information from AC 150/5300-9. Discuss coordination procedures and schedules for each required FAA ATO airway facility shutdown and restart and all required flight inspections.

307. Phasing. Include in this section a detailed scope of work description for the project as a whole and each phase of work covered by the CSPP. This includes all locations and durations of the work proposed. Attach drawings to graphically support the written scope of work. Detail in this section the sequenced phases of the proposed construction. Include a reference to paragraph 308 below, as appropriate.

308. Areas and Operations Affected By Construction. Focus in this section on identifying the areas and operations affected by the construction. Describe corresponding mitigation that is not covered in detail elsewhere in the CSPP. Include references to paragraphs below as appropriate. Attach drawings as necessary to graphically describe affected areas and mechanisms proposed. Tables and charts such as the following may be helpful in highlighting issues to be addressed.

Table 3-1 Sample Operations Effects

Project	Runway 15-33 Reconstruction	
Phase	Phase II: Reconstruct Runway 15 End	
Scope of Work	Reconstruct 1,000 ft of north end of Runway 15-33 with Portland Cement Concrete (PCC).	
Operational Requirements	**Normal (Existing)**	**Phase II (Anticipated)**
Runway 15 Average Aircraft Operations	Carrier: 52 /day GA: 26 /day Military: 11 /day	Carrier: 52 / day GA: 20 / day Military: 0 /day
Runway 33 Average Aircraft Operations	Carrier: 40 /day GA: 18 /day Military: 10 /day	Carrier: 20 /day GA: 5 /day Military: 0 /day
Runway 15-33 ARC	C-IV	C-IV
Runway 15 Approach Visibility Minimums	¾ mile	1 mile
Runway 33 Approach Visibility Minimums	¾ mile	1 mile
Runway 15 Declared Distances	TORA: 7,820	TORA: 6,420
	TODA: 7,820	TODA: 6,420
	ASDA: 7,820	ASDA: 6,420
	LDA: 7,820	LDA: 6,420
Runway 33 Declared Distances	TORA: 8,320	TORA: 6,920
	TODA: 8,320	TODA: 6,920
	ASDA: 8,320	ASDA: 6,920
	LDA: 7,820	LDA: 6,420
Runway 15 Approach Procedures	ILS	LOC only
	RNAV	N/A
	VOR	N/A
Runway 33 Approach Procedures	ILS	Visual only
	RNAV	N/A
	VOR	N/A
Runway 15 NAVAIDs	ILS/DME, MALSR, RVR	LOC/DME, PAPI (temp), RVR

Runway 33 NAVAIDs	ILS/DME, MALSF, PAPI, RVR	MALSF, PAPI, RVR
Taxiway G ADG	IV	IV (N/A between T/W H and R/W 15 end)
Taxiway E ADG	IV	IV
ATCT (hours open)	06:00 – 24:00 local	06:00 – 24:00 local
ARFF Index	D	D
Special Conditions	Air National Guard (ANG) military operations	Military operations relocated to alternate ANG Base
	Airline XYZ requires VGSI	Airline XYZ requires VGSI

Complete the following chart for each phase to determine the area that must be protected along the runway edges:

Runway	**Aircraft Approach Category* A, B, C, or D**	**Airplane Design Group* I, II, III, or IV**	**RSA Width in Feet Divided by 2***
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
*See AC 150/5300-13 to complete the chart for a specific runway.			

Complete the following chart for each phase to determine the area that must be protected before the runway threshold:

Runway End Number	**Airplane Design Group* I, II, III, or IV**	**Aircraft Approach Category* A, B, C, or D**	**Minimum Safety Area Prior to the Threshold***	**Minimum Distance to Threshold Based on Required Approach Slope***	
_____	_____	_____	_____ ft	_____ ft	_____: 1
_____	_____	_____	_____ ft	_____ ft	_____: 1
_____	_____	_____	_____ ft	_____ ft	_____: 1
_____	_____	_____	_____ ft	_____ ft	_____: 1
*See AC 150/5300-13 to complete the chart for a specific runway.					

309. Navigation Aid (NAVAID) Protection. List in this section all NAVAID facilities that will be affected by the construction. Identify NAVAID facilities that will be placed out of service at any time prior to or during construction activities. Identify individuals responsible for coordinating each shutdown and when each facility will be out of service. Include a reference to paragraph 306 above for FAA ATO NAVAID shutdown, restart, and flight inspection coordination. Outline in detail procedures to protect each NAVAID facility remaining in service from interference by construction activities. Include a reference to paragraph 314 for the issuance of NOTAMs as required. Include a reference to paragraph 316 for the protection of underground cables and piping serving NAVAIDs. If temporary visual aids are proposed to replace or supplement existing facilities, include a reference to paragraph 319. Attach drawings to graphically indicate the affected NAVAIDS and the corresponding critical areas.

310. Contractor Access. This will necessarily be the most extensive section of the CSPP. Provide

sufficient detail so that a contractor not experienced in working on airports will understand the unique restrictions such work will require. Due to this extent, it should be broken down into subsections as described below:

a. Location of Stockpiled Construction Materials. Describe in this section specific locations for stockpiling material. Note any height restrictions on stockpiles. Include a reference to paragraph 321 for hazard marking and lighting devices used to identify stockpiles. Include a reference to paragraph 311 for provisions to prevent stockpile material from becoming wildlife attractants. Include a reference to paragraph 312 for provisions to prevent stockpile material from becoming FOD. Attach drawings to graphically indicate the stockpile locations.

b. Vehicle and Pedestrian Operations. While there are many items to be addressed in this major subsection of the CSPP, all are concerned with one main issue: keeping people and vehicles from areas of the airport where they don't belong. This includes preventing unauthorized entry to the AOA and preventing the improper movement of pedestrians or vehicles on the airport. In this section, focus on mechanisms to prevent construction vehicles and workers traveling to and from the worksite from unauthorized entry into movement areas. Specify locations of parking for both employee vehicles and construction equipment, and routes for access and haul roads. In most cases, this will best be accomplished by attaching a drawing. Quote from AC 150/5210-5 specific requirements for contractor vehicles rather than referring to the AC as a whole, and include special requirements for identifying Hazardous Material (HAZMAT) vehicles. Quote from, rather than incorporate by reference, AC 150/5210-20 as appropriate to address the airport's rules for ground vehicle operations, including its training program. Discuss the airport's recordkeeping system listing authorized vehicle operators.

c. Two-Way Radio Communications. Include a special section to identify all individuals who are required to maintain communications with Air Traffic (AT) at airports with active towers, or monitor Common Traffic Advisory Frequencies (CTAF) at airports without or with closed ATCT. Include training requirements for all individuals required to communicate with AT. Individuals required to monitor AT frequencies should also be identified. If construction employees are also required to communicate by radio with Airport Operations, this procedure should be described in detail. Usage of vehicle mounted radios and/or portable radios should be addressed. Communication procedures for the event of disabled radio communication (that is, light signals, telephone numbers, others) must be included. All radio frequencies should by identified (Tower, Ground Control, CTAF, UNICOM, ATIS, and so on).

d. Airport Security. Address security as it applies to vehicle and pedestrian operations. Discuss TSA requirements, security badging requirements, perimeter fence integrity, gate security, and other needs. Attach drawings to graphically indicate secured and/or Security Identification Display Areas (SIDA), perimeter fencing, and available access points.

311. Wildlife Management. Discuss in this section wildlife management procedures. Describe the maintenance of existing wildlife mitigation devices, such as perimeter fences, and procedures to limit wildlife attractants. Include procedures to notify Airport Operations of wildlife encounters. Include a reference to paragraph 310 for security (wildlife) fence integrity maintenance as required.

312. Foreign Object Debris (FOD) Management. In this section, discuss methods to control and monitor FOD: worksite housekeeping, ground vehicle tire inspections, runway sweeps, and so on. Include a reference to paragraph 315 for inspection requirements as required.

313. Hazardous Materials (HAZMAT) Management. Describe in this section HAZMAT management procedures: fuel deliveries, spill recovery procedures, Material Safety Data Sheet (MSDS) availability, and other considerations. Any specific airport HAZMAT restrictions should also be

identified. Include a reference to paragraph 310 for HAZMAT vehicle identification requirements. Quote from, rather than incorporate by reference, AC 150/5320-15.

314. Notification of Construction Activities. List in this section the names and telephone numbers of points of contact for all parties affected by the construction project. We recommend a single list that includes all telephone numbers required under this section. Include emergency notification procedures for all representatives of all parties potentially impacted by the construction. Identify individual representatives – and at least one alternate – for each party. List both on-duty and off-duty contact information for each individual, including individuals responsible for emergency maintenance of airport construction hazard lighting and barricades. Describe procedures to coordinate immediate response to events that might adversely affect the operational safety of the airport (such as interrupted NAVAID service). Explain requirements for and the procedures for the issuance of Notices to Airmen (NOTAMs), notification to FAA required by 14 CFR Part 77 and Part 157 and in the event of affected NAVAIDs. For NOTAMs, identify an individual, and at least one alternate, responsible for issuing and cancelling each specific type of Notice to Airmen (NOTAM) required. Detail notification methods for police, fire fighting, and medical emergencies. This may include 911, but should also include direct phone numbers of local police departments and nearby hospitals. The local Poison Control number should be listed. Procedures regarding notification of Airport Operations and/or the ARFF Department of such emergencies should be identified, as applicable. If airport radio communications are identified as a means of emergency notification, include a reference to paragraph 310. Differentiate between emergency and nonemergency notification of ARFF personnel, the latter including activities that affect ARFF water supplies and access roads. Identify the primary ARFF contact person and at least one alternate. If notification is to be made through Airport Operations, then detail this procedure. Include a method of confirmation from the ARFF department.

315. Inspection Requirements. Describe in this section inspection requirements to ensure airfield safety compliance. Include a requirement for routine inspections by the resident engineer (RE) and the construction contractors. If the engineering consultants and/or contractors have a Safety Officer who will conduct such inspections, identify this individual. Describe procedures for special inspections, such as those required to reopen areas for aircraft operations. Part 139 requires daily airfield inspections at certificated airports, but these may need to be more frequent when construction is in progress. Discuss the role of such inspections on areas under construction. Include a requirement to immediately remedy any deficiencies, whether caused by negligence, oversight, or project scope change.

316. Underground Utilities. Explain how existing underground utilities will be located and protected. Identify each utility owner and include contact information for each company/agency in the master list. Address emergency response procedures for damaged or disrupted utilities. Include a reference to paragraph 314 above for notification of utility owners of accidental utility disruption as required.

317. Penalties. Describe in this section specific penalties imposed for noncompliance with airport rules and regulations, including the CSPP: SIDA violations, Vehicle/Pedestrian Deviations (VPD), and others.

318. Special Conditions. Identify any special conditions that may trigger specific safety mitigation actions outlined in this CSPP: low visibility operations, snow removal, aircraft in distress, aircraft accident, security breach, VPD, and other activities requiring construction suspension/resumption. Include a reference to paragraph 310 above for compliance with airport safety and security measures and for radio communications as required. Include a reference to paragraph 319 below for emergency notification of all involved parties, including police/security, ARFF, and medical services.

319. Runway and Taxiway Visual Aids. Include marking, lighting, signs, and visual NAVAIDS.

Detail temporary runway and taxiway marking, lighting, signs, and visual NAVAIDs required for the construction. Discuss existing marking, lighting, signs, and visual NAVAIDs that are temporarily, altered, obliterated, or shut down. Consider non-federal facilities and address requirements for reimbursable agreements necessary for alteration of FAA facilities and for necessary flight checks. Identify temporary TORA signs or runway distance remaining signs if appropriate. Identify required temporary visual NAVAIDs such as REIL or PAPI. Quote from, rather than incorporate by reference, AC 150/5340-1, Standards for Airport Markings, AC 150/5340-18, Standards for Airport Sign Systems, and AC 150/5340-30, as required. Attach drawings to graphically indicate proposed marking, lighting, signs, and visual NAVAIDs.

320. Marking and Signs for Access Routes. Detail plans for marking and signs for vehicle access routes. To the extent possible, signs should be in conformance with the Federal Highway Administration Manual on Uniform Traffic Control Devices (MUTCD) and/or State highway specifications, not hand lettered. Detail any modifications to the guidance in the MUTCD necessary to meet frangibility/height requirements.

321. Hazard Marking and Lighting. Specify all marking and lighting equipment, including when and where each type of device is to be used. Specify maximum gaps between barricades and the maximum spacing of hazard lighting. Identify one individual and at least one alternate responsible for maintenance of hazard marking and lighting equipment in the master telephone list. Include a reference to paragraph 314 above. Attach drawings to graphically indicate the placement of hazard marking and lighting equipment.

322. Protection of Runway and Taxiway Safety Areas. This section should focus exclusively on procedures for protecting all safety areas, including those altered by the construction: methods of demarcation, limit of access, movement within safety areas, stockpiling and trenching restrictions, and so on. Reference AC 150/5300-13: Airport Design as required. Include a reference to paragraph 310 above for procedures regarding vehicle and personnel movement within safety areas. Include a reference to paragraph 310 above for material stockpile restrictions as required. Detail requirements for trenching, excavations, and backfill. Include a reference to paragraph 321 for hazard marking and lighting devices used to identify open excavations as required. If runway and taxiway closures are proposed to protect safety areas, or if temporary displaced thresholds and/or revised declared distances are used to provide adequate Runway Safety Area, include a reference to paragraphs 314 and 319 above. Detail procedures for protecting the runway OFZ, runway OFA, taxiway OFA and runway approach surfaces including those altered by the construction: methods of demarcation, limit of cranes, storage of equipment, and so on. Quote from, rather than incorporate by reference, AC 150/5300-13: Airport Design as required. Include a reference to paragraph 323 for height (i.e. crane) restrictions as required. One way to address the height of equipment that will move during the project is to establish a three-dimensional "box" within which equipment will be confined that can be studied as a single object. Attach drawings to graphically indicate the safety area, OFZ, and OFA boundaries.

323. Other Limitations on Construction. This section should describe what limitations must be applied to each area of work and when each limitation will be applied: limitations due to airport operations, height (i.e. crane) restrictions, areas which cannot be worked at simultaneously, day/night work restrictions, winter construction, and other limitations. Include a reference to paragraph 307 above for project phasing requirements based on construction limitations as required.

Appendix 1. Related Reading Material

Obtain the latest version of the following free publications from the FAA on its Web site at http://www.faa.gov/airports/.

AC	Title and Description
AC 150/5200-28	Notices to Airmen (NOTAMs) for Airport Operators
	Guidance for using the NOTAM System in airport reporting.
AC 150/5200-30	Airport Winter Safety and Operations
	Guidance for airport owners/operators on the development of an acceptable airport snow and ice control program and on appropriate field condition reporting procedures.
AC 150/5200-33	Hazardous Wildlife Attractants On or Near Airports
	Guidance on locating certain land uses that might attract hazardous wildlife to public-use airports.
AC 150/5210-5	Painting, Marking, and Lighting of Vehicles Used on an Airport.
	Guidance, specifications, and standards for painting, marking, and lighting vehicles operating in the airport air operations areas.
AC 150/5210-20	Ground Vehicle Operations on Airports
	Guidance to airport operators on developing ground vehicle operation training programs.
AC 150/5300-13	Airport Design
	FAA standards and recommendations for airport design, establishes approach visibility minimums as an airport design parameter, and contains the Object Free area and the obstacle free-zone criteria.
AC 150/5310-24	Airport Foreign Object Debris Management
	Guidance for developing and managing an airport foreign object debris (FOD) program
AC 150/5220-4	Water Supply Systems for Aircraft Fire and Rescue Protection.
	Guidance on selecting a water source and meeting standards for a distribution system to support aircraft rescue and fire fighting service operations on airports.
AC 150/5320-15	Management of Airport Industrial Waste
	Basic information on the characteristics, management, and regulations of industrial wastes generated at airports. Guidance for developing a Storm Water Pollution Prevention Plan (SWPPP) that applies best management practices to eliminate, prevent, or reduce pollutants in storm water runoff with particular airport industrial activities.
AC 150/5340-1	Standards for Airport Markings
	FAA standards for markings used on airport runways, taxiways, and aprons.
AC 150/5340-18	Standards for Airport Sign Systems
	FAA standards for the siting and installation of signs on airport runways and taxiways.
AC 150/5345-28	Precision Approach Path Indicator (PAPI) Systems
	FAA standards for PAPI systems, which provide pilots with visual glide slope guidance during approach for landing.

AC	Title and Description
AC 150/5340-30	Design and Installation Details for Airport Visual Aids
	Guidance and recommendations on the installation of airport visual aids.
AC 150/5345-39	Specification for L-853, Runway and Taxiway Retroreflective Markers
AC 150/5345-44	Specification for Runway and Taxiway Signs
	FAA specifications for unlighted and lighted signs for taxiways and runways.
AC 150/5345-53	Airport Lighting Certification Program
	Details on the Airport Lighting Equipment Certification Program (ALECP).
AC 150/5345-50	Specification for Portable Runway and Taxiway Lights
	FAA standards for portable runway and taxiway lights and runway end identifier lights for temporary use to permit continued aircraft operations while all or part of a runway lighting system is inoperative.
AC 150/5345-55	Specification for L-893, Lighted Visual Aid to Indicate Temporary Runway Closure
AC 150/5370-10	Standards for Specifying Construction of Airports
	Standards for construction of airports, including earthwork, drainage, paving, turfing, lighting, and incidental construction.
FAA Order 5200.11	FAA Airports (ARP) Safety Management System (SMS)
	Basics for implementing SMS within ARP. Includes roles and responsibilities of ARP management and staff as well as other FAA lines of business that contribute to the ARP SMS.
FAA Certalert 98-05	Grasses Attractive to Hazardous Wildlife
	Guidance on grass management and seed selection.
FAA Form 7460-1	Notice of Proposed Construction or Alteration
FAA Form 7480-1	Notice of Landing Area Proposal

Obtain the latest version of the following free publications from the Electronic Code of Federal Regulations at http://ecfr.gpoaccess.gov/.

Title 14 CFR Part 139	Certification of Airports
Title 49 CFR Part 1542	Airport Security

Obtain the latest version of the Manual on Uniform Traffic Control Devices from the Federal Highway Administration at http://mutcd.fhwa.dot.gov/.

Appendix 2. Definition of Terms

Term	Definition
7460-1	Notice Of Proposed Construction Or Alteration. For on-airport projects, the form submitted to the FAA regional or airports division office as formal written notification of any kind of construction or alteration of objects that affect navigable airspace, as defined in 14 CFR Part 77, safe, efficient use, and preservation of the navigable airspace. (See guidance available on the FAA web site at oeaaa.faa.gov.) The form may be downloaded at http://www.faa.gov/airports/resources/forms/, or filed electronically at: https://oeaaa.faa.gov.
7480-1	Notice Of Landing Area Proposal. Form submitted to the FAA Airports Regional Division Office or Airports District Office as formal written notification whenever a project without an airport layout plan on file with the FAA involves the construction of a new airport; the construction, realigning, altering, activating, or abandoning of a runway, landing strip, or associated taxiway; or the deactivation or abandoning of an entire airport The form may be downloaded at http://www.faa.gov/airports/resources/forms/.
AC	Advisory Circular
ACRC	Aircraft Reference Code
ACSI	Airport Certification Safety Inspector
ADG	Airplane Design Group
AIP	Airport Improvement Program
ALECP	Airport Lighting Equipment Certification Program
ANG	Air National Guard
AOA	Air Operations Area. Any area of the airport used or intended to be used for the landing, takeoff, or surface maneuvering of aircraft. An air operations area includes such paved or unpaved areas that are used or intended to be used for the unobstructed movement of aircraft in addition to its associated runways, taxiways, or aprons.
ARFF	Aircraft Rescue and Fire Fighting
ARP	FAA Office of Airports
ASDA	Accelerate-Stop Distance Available
ATCT	Airport Traffic Control Tower
ATIS	Automatic Terminal Information Service
ATO	Air Traffic Organization
Certificated Airport	An airport that has been issued an Airport Operating Certificate by the FAA under the authority of 14 CFR Part 139, Certification of Airports.
CFR	Code of Federal Regulations
Construction	The presence and movement of construction-related personnel, equipment, and materials in any location that could infringe upon the movement of aircraft.
CSPP	Construction Safety And Phasing Plan. The overall plan for safety and phasing of a construction project developed by the airport operator, or developed by the airport operator's consultant and approved by the airport operator. It is included in the invitation for bids and becomes part of the project specifications.

Term	Definition
CTAF	Common Traffic Advisory Frequency
Displaced Threshold	A threshold that is located at a point on the runway other than the designated beginning of the runway. The portion of pavement behind a displaced threshold is available for takeoffs in either direction or landing from the opposite direction.
DOT	Department of Transportation
EPA	Environmental Protection Agency
FOD	Foreign Object Debris
HAZMAT	Hazardous Materials
IFR	Instrument Flight Rules
ILS	Instrument Landing System
LDA	Landing Distance Available
LOC	Localizer antenna array
Movement Area	The runways, taxiways, and other areas of an airport that are used for taxiing or hover taxiing, air taxiing, takeoff, and landing of aircraft, exclusive of loading aprons and aircraft parking areas (reference 14 CFR Part 139).
MSDS	Material Safety Data Sheet
MUTCD	Manual on Uniform Traffic Control Devices
NAVAID	Navigation Aid
NAVAID Critical Area	An area of defined shape and size associated with a NAVAID that must remain clear and graded to avoid interference with the electronic signal.
Non-Movement Area	The area inside the airport security fence exclusive of the Movement Area. It is important to note that the non-movement area includes pavement traversed by aircraft.
NOTAM	Notices to Airmen
Obstruction	Any object/obstacle exceeding the obstruction standards specified by 14 CFR Part 77, subpart C.
OE / AAA	Obstruction Evaluation / Airport Airspace Analysis
OFA	Object Free Area. An area on the ground centered on the runway, taxiway, or taxi lane centerline provided to enhance safety of aircraft operations by having the area free of objects except for those objects that need to be located in the OFA for air navigation or aircraft ground maneuvering purposes. (See AC 150/5300-13, for additional guidance on OFA standards and wingtip clearance criteria.)
OFZ	Obstacle Free Zone. The airspace below 150 ft (45 m) above the established airport elevation and along the runway and extended runway centerline that is required to be clear of all objects, except for frangible visual NAVAIDs that need to be located in the OFZ because of their function, in order to provide clearance protection for aircraft landing or taking off from the runway and for missed approaches. The OFZ is subdivided as follows: Runway OFZ, Inner Approach OFZ, Inner Transitional OFZ, and Precision OFZ. Refer to AC 150/5300-13 for guidance on OFZ.
OSHA	Occupational Safety and Health Administration
P&R	Planning and Requirements Group

Term	Definition
PAPI	Precision Approach Path Indicators
PFC	Passenger Facility Charge
PLASI	Pulse Light Approach Slope Indicators
Project Proposal Summary	A clear and concise description of the proposed project or change that is the object of Safety Risk Management.
RE	Resident Engineer
REIL	Runway End Identifier Lights
RNAV	Area Navigation
ROFA	Runway Object Free Area
RSA	Runway Safety Area. A defined surface surrounding the runway prepared or suitable for reducing the risk of damage to airplanes in the event of an undershoot, overshoot, or excursion from the runway, in accordance with AC 150/5300-13.
SIDA	Security Identification Display Area
SMS	Safety Management System
SPCD	Safety Plan Compliance Document. Details developed and submitted by a contractor to the airport operator for approval providing details on how the performance of a construction project will comply with the CSPP.
SRM	Safety Risk Management
Taxiway Safety Area	A defined surface alongside the taxiway prepared or suitable for reducing the risk of damage to an airplane unintentionally departing the taxiway, in accordance with AC 150/5300-13.
TDG	Taxiway Design Group
Temporary	Any condition that is not intended to be permanent.
Temporary Runway End	The beginning of that portion of the runway available for landing and taking off in one direction, and for landing in the other direction. Note the difference from a displaced threshold.
Threshold	The beginning of that portion of the runway available for landing. In some instances, the landing threshold may be displaced.
TODA	Takeoff Distance Available
TOFA	Taxiway Object Free Area
TORA	Takeoff Run Available. The length of the runway less any length of runway unavailable and/or unsuitable for takeoff run computations. See AC 150/5300-13 for guidance on declared distances.
TSA	Taxiway Safety Area Transportation Security Administration
UNICOM	A radio communications system of a type used at small airports.
VASI	Visual Approach Slope Indicators

Term	Definition
VGSI	Visual Glide Slope Indicator. A device that provides a visual glide slope indicator to landing pilots. These systems include precision approach path indicators (PAPI), visual approach slope indicators (VASI), and pulse light approach slope indicators (PLASI).
VFR	Visual Flight Rules
VOR	VHF Omnidirectional Radio Range
VPD	Vehicle / Pedestrian Deviation

Appendix 3. Safety and Phasing Plan Checklist

This appendix is keyed to Section 2. Plan Requirements. In the electronic version of this AC, clicking on the paragraph designation in the Reference column will access the applicable paragraph. There may be instances where the CSPP requires provisions that are not covered by the list in this appendix.

This checklist is intended as an aid, not as a required submittal.

Coordination	Reference	Addressed			Remarks
General Considerations					
Requirements for predesign, prebid, and preconstruction conferences to introduce the subject of airport operational safety during construction are specified.	205	☐ Yes	☐ No	☐ NA	
Operational safety is a standing agenda item for construction progress meetings.	205	☐ Yes	☐ No	☐ NA	
Scheduling of the construction phases is properly addressed.	206	☐ Yes	☐ No	☐ NA	
Areas and Operations Affected by Construction Activity					
Drawings showing affected areas are included.	207.a	☐ Yes	☐ No	☐ NA	
Closed or partially closed runways, taxiways, and aprons are depicted on drawings.	207.a(1)	☐ Yes	☐ No	☐ NA	
Access routes used by ARFF vehicles affected by the project are addressed.	207.a(2)	☐ Yes	☐ No	☐ NA	
Access routes used by airport and airline support vehicles affected by the project are addressed.	207.a(3)	☐ Yes	☐ No	☐ NA	
Underground utilities, including water supplies for fire fighting and drainage.	207.a(4)	☐ Yes	☐ No	☐ NA	
Approach/departure surfaces affected by heights of temporary objects are addressed.	207.a(5)	☐ Yes	☐ No	☐ NA	
Construction areas, storage areas, and access routes near runways, taxiways, aprons, or helipads are properly depicted on drawings.	207.a	☐ Yes	☐ No	☐ NA	
Temporary changes to taxi operations are addressed.	207.b(1)	☐ Yes	☐ No	☐ NA	

Coordination	Reference	Addressed			Remarks
Detours for ARFF and other airport vehicles are identified.	207.b(2)	☐ Yes	☐ No	☐ NA	
Maintenance of essential utilities and underground infrastructure is addressed.	207.b(3)	☐ Yes	☐ No	☐ NA	
Temporary changes to air traffic control procedures are addressed.	207.b(4)	☐ Yes	☐ No	☐ NA	
NAVAIDS					
Critical areas for NAVAIDs are depicted on drawings.	208	☐ Yes	☐ No	☐ NA	
Effects of construction activity on the performance of NAVAIDS, including unanticipated power outages, are addressed.	208	☐ Yes	☐ No	☐ NA	
Protection of NAVAID facilities is addressed.	208	☐ Yes	☐ No	☐ NA	
The required distance and direction from each NAVAID to any construction activity is depicted on drawings.	208	☐ Yes	☐ No	☐ NA	
Procedures for coordination with FAA ATO/Technical Operations, including identification of points of contact, are included.	208, 213.a, 213.e(3)(a), 218.a	☐ Yes	☐ No	☐ NA	
Contractor Access					
The CSPP addresses areas to which contractor will have access and how the areas will be accessed.	209	☐ Yes	☐ No	☐ NA	
The application of 49 CFR Part 1542 Airport Security, where appropriate, is addressed.	209	☐ Yes	☐ No	☐ NA	
The location of stockpiled construction materials is depicted on drawings.	209.a	☐ Yes	☐ No	☐ NA	
The requirement for stockpiles in the ROFA to be approved by FAA is included.	209.a	☐ Yes	☐ No	☐ NA	
Requirements for proper stockpiling of materials are included.	209.a	☐ Yes	☐ No	☐ NA	

Coordination	Reference	Addressed			Remarks
Construction site parking is addressed.	209.b(1)	☐ Yes	☐ No	☐ NA	
Construction equipment parking is addressed.	209.b(2)	☐ Yes	☐ No	☐ NA	
Access and haul roads are addressed.	209.b(3)	☐ Yes	☐ No	☐ NA	
A requirement for marking and lighting of vehicles to comply with AC 150/5210-5, Painting, Marking and Lighting of Vehicles Used on an Airport, is included.	209.b(4)	☐ Yes	☐ No	☐ NA	
Proper vehicle operations, including requirements for escorts, are described.	209.b(5), 209.b(6)	☐ Yes	☐ No	☐ NA	
Training requirements for vehicle drivers are addressed.	209.b(7)	☐ Yes	☐ No	☐ NA	
Two-way radio communications procedures are described.	209.b(9)	☐ Yes	☐ No	☐ NA	
Maintenance of the secured area of the airport is addressed.	209.b(10)	☐ Yes	☐ No	☐ NA	
Wildlife Management					
The airport operator's wildlife management procedures are addressed.	210	☐ Yes	☐ No	☐ NA	
Foreign Object Debris Management					
The airport operator's FOD management procedures are addressed.	211	☐ Yes	☐ No	☐ NA	
Hazardous Materials Management					
The airport operator's hazardous materials management procedures are addressed.	212	☐ Yes	☐ No	☐ NA	
Notification of Construction Activities					
Procedures for the immediate notification of airport user and local FAA of any conditions adversely affecting the operational safety of the airport are detailed.	213	☐ Yes	☐ No	☐ NA	

Coordination	Reference	Addressed			Remarks
Maintenance of a list by the airport operator of the responsible representatives/points of contact for all involved parties and procedures for contacting them 24 hours a day, seven days a week is specified.	213.a	☐ Yes	☐ No	☐ NA	
A list of local ATO/Technical Operations personnel is included.	213.a	☐ Yes	☐ No	☐ NA	
A list of ATCT managers on duty is included.	213.a	☐ Yes	☐ No	☐ NA	
A list of authorized representatives to the OCC is included.	213.b	☐ Yes	☐ No	☐ NA	
Procedures for coordinating, issuing, maintaining and cancelling by the airport operator of NOTAMS about airport conditions resulting from construction are included.	208, 213.b, 218.b(4)(i)	☐ Yes	☐ No	☐ NA	
Provision of information on closed or hazardous conditions on airport movement areas by the airport operator to the OCC is specified.	213.b	☐ Yes	☐ No	☐ NA	
Emergency notification procedures for medical, fire fighting, and police response are addressed.	213.c	☐ Yes	☐ No	☐ NA	
Coordination with ARFF personnel for non-emergency issues is addressed.	213.d	☐ Yes	☐ No	☐ NA	
Notification to the FAA under 14 CFR parts 77 and 157 is addressed.	213.e	☐ Yes	☐ No	☐ NA	
Reimbursable agreements for flight checks and/or design and construction for FAA owned NAVAIDs are addressed.	213.e(3)(b)	☐ Yes	☐ No	☐ NA	
Inspection Requirements					
Daily inspections by both the airport operator and contractor are specified.	214.a	☐ Yes	☐ No	☐ NA	
Final inspections at certificated airports are specified when required.	214.b	☐ Yes	☐ No	☐ NA	
Underground Utilities					
Procedures for protecting existing underground facilities in excavation areas are described.	215	☐ Yes	☐ No	☐ NA	

Coordination	Reference	Addressed			Remarks
Penalties					
Penalty provisions for noncompliance with airport rules and regulations and the safety plans are detailed.	216	☐ Yes	☐ No	☐ NA	
Special Conditions					
Any special conditions that affect the operation of the airport or require the activation of any special procedures are addressed.	217	☐ Yes	☐ No	☐ NA	
Runway and Taxiway Visual Aids - Marking, Lighting, Signs, and Visual NAVAIDs					
The proper securing of temporary airport markings, lighting, signs, and visual NAVAIDs is addressed.	218.a	☐ Yes	☐ No	☐ NA	
Frangibility of airport markings, lighting, signs, and visual NAVAIDs is specified.	218.a, 218.c, 219, 220.b(4)	☐ Yes	☐ No	☐ NA	
The requirement for markings to be in compliance with AC 150/5340-1, Standards for Airport Markings is specified.	218.b	☐ Yes	☐ No	☐ NA	
The requirement for lighting to conform to AC 150/5340-30, Design and Installation Details for Airport Visual Aids, AC 150/5345-50, Specification for Portable Runway and Taxiway Lights , and AC 150/5345-53 Airport Lighting Certification Program, is specified.	218.b(1)(f)	☐ Yes	☐ No	☐ NA	
The use of a lighted X is specified where appropriate.	218.b(1)(b), 218.b(3)	☐ Yes	☐ No	☐ NA	
The requirement for signs to conform to AC 150/5345-44, Specification for Runway and Taxiway Signs, AC 50/5340-18, Standards for Airport Sign Systems, and AC 150/5345-53, Airport Lighting Certification Program, is specified.	218.c	☐ Yes	☐ No	☐ NA	
Marking and Signs For Access Routes					
The CSPP specifies that pavement markings and signs intended for construction personnel should conform to AC 150/5340-18 and, to the extent practicable, with the MUTCD and/or State highway specifications.	219	☐ Yes	☐ No	☐ NA	
Hazard Marking and Lighting					
Prominent, comprehensible warning indicators for any area affected by construction that is normally accessible to aircraft, personnel, or vehicles are specified.	220.a	☐ Yes	☐ No	☐ NA	

Coordination	Reference	Addressed			Remarks
Hazard marking and lighting are specified to identify open manholes, small areas under repair, stockpiled material, and waste areas.	220.a	☐ Yes	☐ No	☐ NA	
The CSPP considers less obvious construction-related hazards.	220.a	☐ Yes	☐ No	☐ NA	
Equipment that poses the least danger to aircraft but is sturdy enough to remain in place when subjected to typical winds, prop wash and jet blast is specified.	220.b(1)	☐ Yes	☐ No	☐ NA	
The spacing of barricades is specified such that a breach is physically prevented barring a deliberate act.	220.b(1)	☐ Yes	☐ No	☐ NA	
Red lights meeting the luminance requirements of the State Highway Department are specified.	220.b(2)	☐ Yes	☐ No	☐ NA	
Barricades, temporary markers, and other objects placed and left in areas adjacent to any open runway, taxiway, taxi lane, or apron are specified to be as low as possible to the ground, and no more than 18 in high.	220.b(4)	☐ Yes	☐ No	☐ NA	
Barricades marked with diagonal, alternating orange and white stripes are specified to indicate construction locations in which no part of an aircraft may enter.	220.b(4)	☐ Yes	☐ No	☐ NA	
Highly reflective barriers with lights are specified to barricade taxiways leading to closed runways.	220.b(5)	☐ Yes	☐ No	☐ NA	
Markings for temporary closures are specified.	220.b(5)	☐ Yes	☐ No	☐ NA	
The provision of a contractor's representative on call 24 hours a day for emergency maintenance of airport hazard lighting and barricades is specified.	220.b(7)	☐ Yes	☐ No	☐ NA	
Protection of Runway and Taxiway Safety Areas					
The CSPP clearly states that no construction may occur within a safety area while the associated runway or taxiway is open for aircraft operations.	221.a(1), 221.c(1)	☐ Yes	☐ No	☐ NA	
The CSPP specifies that the airport operator coordinates the adjustment of RSA or TSA dimensions with the ATCT and the appropriate FAA Airports Regional or District Office and issues a local NOTAM.	221.a(2), 221.c(2)	☐ Yes	☐ No	☐ NA	

Coordination	Reference	Addressed			Remarks
Procedures for ensuring adequate distance for protection from blasting operations, if required by operational considerations, are detailed.	221.c(3)	☐ Yes	☐ No	☐ NA	
The CSPP specifies that open trenches or excavations are not permitted within a safety area while the associated runway or taxiway is open.	221.a(4)	☐ Yes	☐ No	☐ NA	
Appropriate covering of excavations in the RSA or TSA that cannot be backfilled before the associated runway or taxiway is open is detailed.	221.a(4)	☐ Yes	☐ No	☐ NA	
The CSPP includes provisions for prominent marking of open trenches and excavations at the construction site.	221.a(4)	☐ Yes	☐ No	☐ NA	
Grading and soil erosion control to maintain RSA/TSA standards are addressed.	221.c(5)	☐ Yes	☐ No	☐ NA	
The CSPP specifies that equipment is to be removed from the ROFA when not in use.	221.b	☐ Yes	☐ No	☐ NA	
The CSPP clearly states that no construction may occur within a taxiway safety area while the taxiway is open for aircraft operations.	221.c	☐ Yes	☐ No	☐ NA	
Appropriate details are specified for any construction work to be accomplished in a taxiway object free area.	221.d	☐ Yes	☐ No	☐ NA	
Measures to ensure that personnel, material, and/or equipment do not penetrate the OFZ or threshold siting surfaces while the runway is open for aircraft operations are included.	221.e	☐ Yes	☐ No	☐ NA	
Provisions for protection of runway approach/departure areas and clearways are included.	221.f	☐ Yes	☐ No	☐ NA	
Other Limitations on Construction					
The CSPP prohibits the use of open flame welding or torches unless adequate fire safety precautions are provided and the airport operator has approved their use.	222.a(2)	☐ Yes	☐ No	☐ NA	
The CSPP prohibits the use of flare pots within the AOA at any time.	222.a(4)	☐ Yes	☐ No	☐ NA	
The CSPP prohibits the use of electrical blasting caps on or within 1,000 ft (300 m) of the airport property.	222.a(3)	☐ Yes	☐ No	☐ NA	

Appendix 4. Construction Project Daily Safety Inspection Checklist

The situations identified below are potentially hazardous conditions that may occur during airport construction projects. Safety area encroachments, unauthorized and improper ground vehicle operations, and unmarked or uncovered holes and trenches near aircraft operating surfaces pose the most prevalent threats to airport operational safety during airport construction projects. The list below is one tool that the airport operator or contractor may use to aid in identifying and correcting potentially hazardous conditions. It should be customized as appropriate for each project.

Potentially Hazardous Conditions

Item	Action Required	or	None
Excavation adjacent to runways, taxiways, and aprons improperly backfilled.			☐
Mounds of earth, construction materials, temporary structures, and other obstacles near any open runway, taxiway, or taxi lane; in the related Object Free area and aircraft approach or departure areas/zones; or obstructing any sign or marking.			☐
Runway resurfacing projects resulting in lips exceeding 3 in (7.6 cm) from pavement edges and ends.			☐
Heavy equipment (stationary or mobile) operating or idle near AOA, in runway approaches and departures areas, or in OFZ.			☐
Equipment or material near NAVAIDs that may degrade or impair radiated signals and/or the monitoring of navigation and visual aids. Unauthorized or improper vehicle operations in localizer or glide slope critical areas, resulting in electronic interference and/or facility shutdown.			☐
Tall and especially relatively low visibility units (that is, equipment with slim profiles) — cranes, drills, and similar objects — located in critical areas, such as OFZ and approach zones.			☐
Improperly positioned or malfunctioning lights or unlighted airport hazards, such as holes or excavations, on any apron, open taxiway, or open taxi lane or in a related safety, approach, or departure area.			☐
Obstacles, loose pavement, trash, and other debris on or near AOA. Construction debris (gravel, sand, mud, paving materials) on airport pavements may result in aircraft propeller, turbine engine, or tire damage. Also, loose materials may blow about, potentially causing personal injury or equipment damage.			☐

Item	Action Required	or	None
Inappropriate or poorly maintained fencing during construction intended to deter human and animal intrusions into the AOA. Fencing and other markings that are inadequate to separate construction areas from open AOA create aviation hazards.			☐
Improper or inadequate marking or lighting of runways (especially thresholds that have been displaced or runways that have been closed) and taxiways that could cause pilot confusion and provide a potential for a runway incursion. Inadequate or improper methods of marking, barricading, and lighting of temporarily closed portions of AOA create aviation hazards.			☐
Wildlife attractants — such as trash (food scraps not collected from construction personnel activity), grass seeds, tall grass, or standing water — on or near airports.			☐
Obliterated or faded temporary markings on active operational areas.			☐
Misleading or malfunctioning obstruction lights. Unlighted or unmarked obstructions in the approach to any open runway pose aviation hazards.			☐
Failure to issue, update, or cancel NOTAMs about airport or runway closures or other construction related airport conditions.			☐
Failure to mark and identify utilities or power cables. Damage to utilities and power cables during construction activity can result in the loss of runway / taxiway lighting; loss of navigation, visual, or approach aids; disruption of weather reporting services; and/or loss of communications.			☐
Restrictions on ARFF access from fire stations to the runway / taxiway system or airport buildings.			☐
Lack of radio communications with construction vehicles in airport movement areas.			☐
Objects, regardless of whether they are marked or flagged, or activities anywhere on or near an airport that could be distracting, confusing, or alarming to pilots during aircraft operations.			☐
Water, snow, dirt, debris, or other contaminants that temporarily obscure or derogate the visibility of runway/taxiway marking, lighting, and pavement edges. Any condition or factor that obscures or diminishes the visibility of areas under construction.			☐
Spillage from vehicles (gasoline, diesel fuel, oil) on active pavement areas, such as runways, taxiways, aprons, and airport roadways.			☐

Item	Action Required	or	None
Failure to maintain drainage system integrity during construction (for example, no temporary drainage provided when working on a drainage system).			☐
Failure to provide for proper electrical lockout and tagging procedures. At larger airports with multiple maintenance shifts/workers, construction contractors should make provisions for coordinating work on circuits.			☐
Failure to control dust. Consider limiting the amount of area from which the contractor is allowed to strip turf.			☐
Exposed wiring that creates an electrocution or fire ignition hazard. Identify and secure wiring, and place it in conduit or bury it.			☐
Site burning, which can cause possible obscuration.			☐
Construction work taking place outside of designated work areas and out of phase.			☐

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