

**SPECIFICATIONS  
AND  
CONTRACT DOCUMENTS**

**FOR**

**Allison Hangar Apron and  
Taxilane Paving**

**GEORGETOWN COUNTY AIRPORT  
GEORGETOWN, SOUTH CAROLINA**

**SCAC NO: 23-XXX  
BID NO: 23-071**

**PREPARED FOR:  
GEORGETOWN COUNTY, SOUTH CAROLINA  
AND  
GEORGETOWN COUNTY AIRPORT COMMISSION**

**IN COOPERATION WITH:**

**SOUTH CAROLINA AERONAUTICS COMMISSION**

*Engineer:*  
**TALBERT & BRIGHT, INC.**  
*Engineering and Planning Consultants*  
**4810 Shelley Drive**  
**Wilmington NC 28405**  
**(910) 763-5350**

**TBI No. 2601-2303**  
**October 2023**

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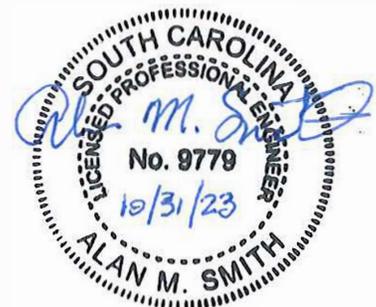
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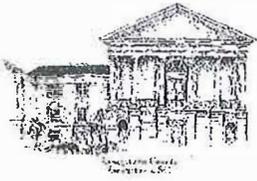
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# County of Georgetown, South Carolina

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715 Prince St., Suite 239 · Georgetown, SC 29440-3641  
Post Office Box 421270, Georgetown, SC 29442-4200  
(843)545-3076 · Fax (843)545-3500 · [purch@gtcounty.org](mailto:purch@gtcounty.org)

## INVITATION FOR BID (IFB)

**BID NUMBER:** 23-071

**ISSUE DATE:** Tuesday, November 28, 2023

**OPENING DATE:** Wednesday, January 3, 2024

**OPENING TIME:** 3:30PM(ET)

**Site Inspection:** VOLUNTARY – By Prior Appointment

Georgetown County Airport Terminal, 129 Airport Road, Georgetown, SC 29440

**PROCUREMENT FOR:** Allison Hangar Apron and Taxilane Paving at Georgetown County Airport (GGE)

All bids must be submitted electronically through the Purchasing Department's Vendor Registry webpage. Please click on the following link <http://www.georgetowncountysc.org/172/Purchasing> for instructions on how to submit bids electronically through this system. As always, emailed/faxed bids will not be accepted. Your bid must be submitted electronically through Georgetown County's Purchasing Vendor Registry page to ensure it remains sealed until the scheduled bid opening date and time.

Any scheduled bid openings will still be opened at the designated date and time as listed in the bid document or related addendum. However, at the time of this bid issuance, these bid openings may be conducted virtually, in-person, or by a hybrid method (both virtually and in person). See the timeline on page 3 for location and method specified. As always, bid openings will be accompanied by at least one witness and bid tabulation results will be posted online for the public's viewing after the bid opening.

**Purchasing Contacts:** **Nancy Silver**  
Phone: 843-545-3076  
Fax: 843-545-3500  
E-mail: [nsilver@gtcounty.org](mailto:nsilver@gtcounty.org)

This solicitation does not commit Georgetown County to award a contract, to pay any cost incurred in the preparation of the bid, or to procure or contract for goods or services. It is the responsibility of each bidder to see that they submit their bids on or before, the date and time specified for the bid opening. No bid will be accepted thereafter. Georgetown County reserves the right to reject any or all bids and to waive any informalities and technicalities in the bid process.



# Intent to Respond

**REF: Bid #23-071, Allison Hangar Apron and Taxilane Paving at Georgetown County Airport (GGE)**

If your company intends to respond to this solicitation, please complete and promptly return this form to assure that you can be included on the mailing list to receive all addenda regarding this project.

It is not necessary to return any other portion of the bid documents if you are not bidding.

Failure to return the Intent to Respond shall not be sufficient cause to rule a submittal as non-responsive; nor does the return of the form obligate an interested party to submit a response. Georgetown County's efforts to directly provide interested parties with addenda or additional information are provided as a courtesy only, and do not alleviate the respondent from their obligation to verify they have received and considered all addenda. All addenda are published and available on the county website at [www.gtcounty.org](http://www.gtcounty.org) select "Bid Opportunities" under Quick Links.

Our firm **does** intend on responding to this solicitation.

Our firm **does not** intend on responding to this solicitation.

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Contact Person: \_\_\_\_\_

Telephone: \_\_\_\_\_

FAX: \_\_\_\_\_

E-Mail: \_\_\_\_\_

How did you hear about this opportunity? \_\_\_\_\_

Reason if **not** responding: \_\_\_\_\_

**Please return this completed form to Nancy Silver, Purchasing Officer:**

- by e-mail to [nsilver@gtcounty.org](mailto:nsilver@gtcounty.org)
- or by FAX to (843)545-3500.

[End of Intent to Respond]

**Time Line: Invitation for Bid #23-071**

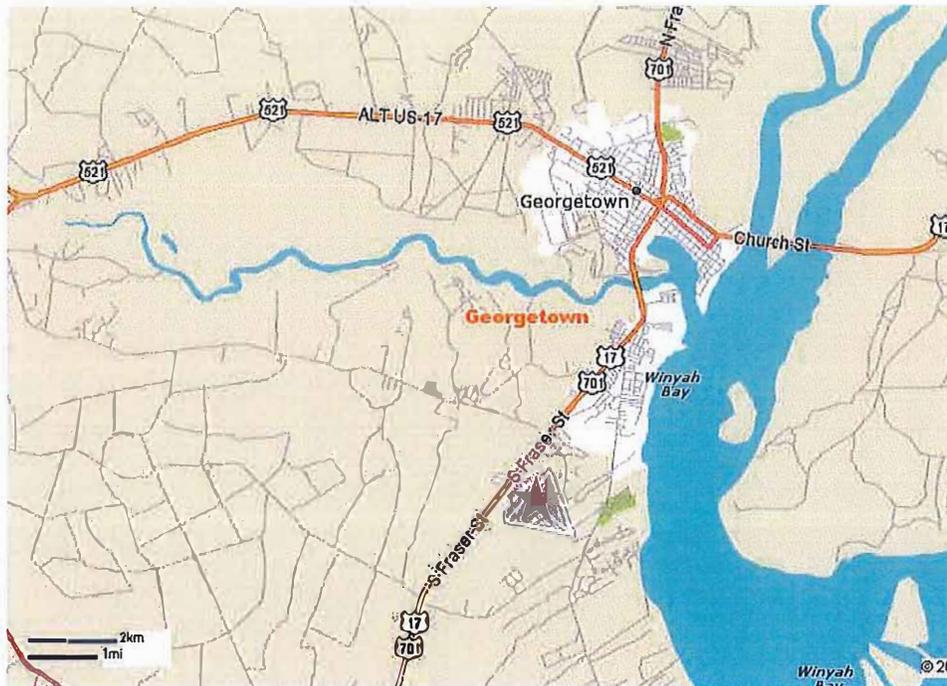
Item	Date	Time	Location*
<b>Advertised Date of Issue:</b>	Tuesday, November 28, 2023	n/a	n/a
<b>VOLUNTARY Site Inspection:</b>	By Prior Appointment	By Appointment	GC Airport
<b>Deadline for Questions:</b>	Wednesday, December 13, 2023	3:30 PM ET	n/a
<b>Bids Must be Received on/or Before:</b>	Wednesday, January 3, 2024	3:30 PM ET	Electronic
<b>Public Bid Opening &amp; Tabulation:</b>	Wednesday, January 3, 2024	3:30 PM ET	Hybrid

\*At the time of this posting, bid openings may be performed virtually, in-person, or by a hybrid method, see above location for method specified. A virtual meeting link will be posted under the bid number before the bid opening time so that members of the public may attend the meeting virtually. Vendors may also now attend the meeting in person at the Georgetown County Historic Courthouse, Purchasing Conference Room, 715 Prince St., Suite 239, 29440.

**Invitation for Bid #23-071**  
**Allison Hangar Apron and Taxilane Paving at Georgetown County Airport (GGE)**

**Scope of Work:**

The Allison Hangar Apron and Taxilane Paving project at the Georgetown County Airport includes site preparation and paving for a new apron and connecting taxilane for the Allison hangar. Work elements include erosion control installation, grading, aggregate base course placement, bituminous paving (SCDOT Bituminous Surface Course – Type ‘B’), seeding, and mulching. The project will be awarded to one Contractor in the best interests of Georgetown County, dependent on availability of local and state funding.



**VOLUNTARY Pre-Bid Site Inspection:**

There will not be a pre-bid conference, but bidders are encouraged to visit the site in person prior to bidding. Site inspections will be made available by PRIOR APPOINTMENT ONLY. Please contact Nancy Silver, Purchasing Officer at (843)545-3076 or by email at [nsilver@gtcounty.org](mailto:nsilver@gtcounty.org) to schedule an appointment. A prior request is necessary because the Airport Director oversees more than one field and may not always be at the GGE Airport site. The Georgetown County Airport Terminal is located at 129 Airport Road, Georgetown, SC 29440.

**Contractor's Site Inspection Responsibilities:**

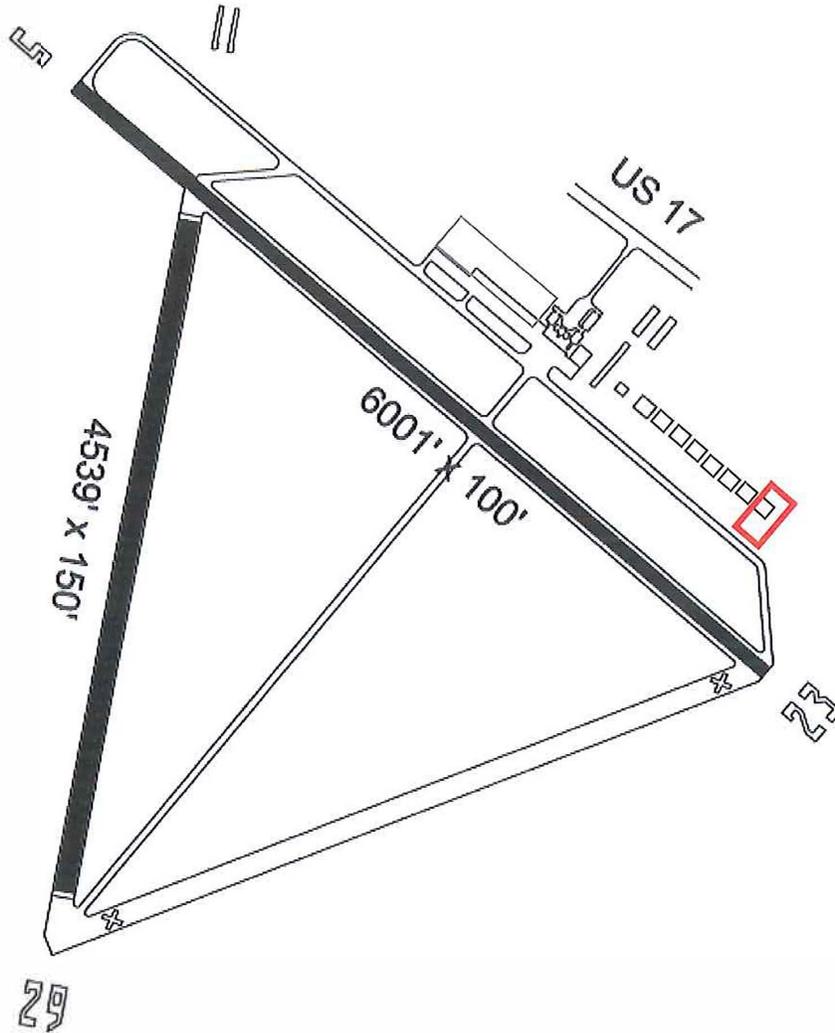
- 1) The bidder is expected to have become familiar with and take into consideration site conditions which may affect the work and to check all dimensions at the site.
- 2) Each bidder shall acquaint themselves thoroughly as to the character and nature of the work to be done. Each bidder furthermore shall make a careful examination of the site of the work and inform themselves fully as to the difficulties to be encountered in performance of the work, the facilities for delivering, storing, and placing materials and equipment and other conditions relating to construction and labor.
- 3) The bidder shall examine the premises and the site and compare them with any applicable drawings and specifications. He/she shall familiarize themselves with the existing conditions such as obstructive area levels and any problems related to erecting the required systems.
- 4) No plea of ignorance of conditions that exist or may hereafter exist on the site of the work, or difficulties that may be encountered in the execution of the work, as a result of failure to make necessary investigations and examinations, will be accepted as an excuse for any failure or omission on the part of the Contractor to fulfill in every detail all the requirements of the contract documents and to complete the work for the consideration set forth therein, or as a basis for any claim whatsoever.
- 5) Insofar as possible, the Contractor, in carrying out his/her work, must employ such methods or means as will not cause interruption of or interference with the work of any other Contractor, or County personnel at the site.
- 6) When boring data is provided by the Owner, the Bidder shall assume responsibility for any conclusions he/she may draw from such data. (S)he may employ his/her own consultants to analyze available information and shall be responsible for any conclusions drawn from that information. The cost of such employment shall be borne solely by the Bidder.

**Bid Security**

- 1) Each bid must be accompanied by a Bid Bond, for an amount equal to five percent (5%) of the total base bid as a guarantee that if the bid is accepted, the required Contract will be executed within fifteen (15) days after receipt of written notice of formal award of Contract. Bids not including such a bid bond will not be considered.
- 2) The successful offeror must provide a Performance Bond from a surety company qualified to do business under the laws of the State of South Carolina in the amount of 100 percent (100%) of the contract amount, within fifteen (15) days the after receipt of written notice of formal award of the Contract. Pricing for such Performance Bond should be indicated separately on the Vendor Bid Submission Form.
- 3) The successful offeror must provide a Payment and Material Bond from a surety company qualified to do business under the laws of the State of South Carolina in the amount of 100 percent (100%) of the contract amount, within fifteen (15) days after receipt of written notice of formal award of Contract.

**Project Location:**

The Allison Hangar is currently under construction and is in the northeastern hangar development at the Georgetown County Airport.



**Additional Contractor Responsibilities:**

- 1) The contractor is responsible for contacting the **Palmetto Utility Protection Service (P.U.P.S.)** at its **811** or toll-free number **(1-888-721-7877)** between the hours of 7:30 am (ET) and 5:30 pm (ET), Monday through Friday, 72 hours before starting the proposed work.
- 2) The contractor will be responsible for the disposal of any and all removed, unused and surplus materials and any fees and transportation costs associated with the disposal.
- 3) The contract time is thirty (30) calendar days for **Base Bid – Apron and Taxilane Paving**; and one (1) calendar day for **Removal of Erosion Control Items**. A liquidated damages fee of \$1,500 per calendar day applies for each day beyond the contract completion date.

**Project Funding and Grant Requirements:**

It is anticipated that this project will be funded, at least in part, through a grant from the South Carolina Aeronautics Association (SCAC).

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## Instructions for Bidders

**BID #23-071**

### **Allison Hangar Apron Paving and Taxilane Paving at Georgetown County Airport (GGE)**

**These are general instructions and conditions that accompany each bid package. If more specific instructions are given in the individual bid package, those instructions should prevail.**

#### 1. **Submission of Questions**

Questions must be submitted in writing via electronic mail, facsimile, or postal mail to the Issuing Officer no later than the "Deadline for Questions" cutoff identified in the Bid Timeline on page three (3) in order to generate an official answer. All written questions will receive an official written response from the Georgetown County Purchasing Office (GCPO) and will become addenda to the solicitation.

GCPO reserves the right to reject or deny any requests made by the provider.

Impromptu, unwritten questions are permitted, and verbal answers may be provided, but are only intended as general direction and will not represent the official GCPO position. The only official position of GCPO is that which is stated in writing and issued in the solicitation as addenda thereto.

No other means of communication, whether oral or written, shall be construed as a formal or official response/statement, and may not be relied upon. **SEND QUESTIONS TO:**

Nancy Silver, Purchasing Officer  
Post Office Box 421270, Georgetown, SC 29442-4200  
Fax: (843) 545-3500  
Email: [nsilver@gtcounty.org](mailto:nsilver@gtcounty.org)

2. Sealed bids to provide **Allison Hangar Apron and Taxilane Paving at Georgetown County Airport (GGE)** shall be received electronically through the County's Vendor Registry webpage until the cut-off time shown in the bid timeline on page three (3) of this document. Bids will then be promptly opened at the designated time by the Buyer. Bids that are not received prior to the stated opening date and time will be considered **NON RESPONSIVE**. An official authorized to bind the offer must sign all bids submitted.
3. **Inclement Weather/Closure of County Courthouse**  
Bid openings at the time of this issuance are being conducted virtually or hybrid and may occur from an alternate secure and/or remote location as needed. A virtual meeting link will be posted under the bid number before the bid opening time so that members of the public may attend the meeting virtually.
4. This solicitation does not commit Georgetown County to award a contract, to pay any cost incurred in the preparation of the bid, or to procure or contract for goods or services. It is the responsibility of each bidder to see that the Georgetown County Purchasing Office receives bids on, or before, the date and time specified for the bid opening. No bid will be accepted thereafter. The County assumes no responsibility for delivery of bids that are mailed. Georgetown County reserves the right to reject any or all bids and to waive any informalities and technicalities in the bid process.

5. NON-EXCLUSIVITY

Nothing herein is intended nor shall be construed as creating any exclusive arrangement with the Contractor. Any resulting contract shall not restrict the County from acquiring similar, equal or like goods and/or services from other entities or sources, when Staff determines internally that this resulting action is in the best interest of Georgetown County.

6. No Bidder may submit more than one bid. Multiple bids for different manufacturers but represented by the same firm will not be accepted. Bids offered directly from manufacturers shall indicate if a local dealer/representative will be involved.

7. Definitions:

- a) The terms “Proposer”, “Offeror”, “Vendor” or “Bidder” refer to those parties who are submitting sealed responses for the work set forth in this document to the OWNER, as distinct from a sub-bidder who provides a bid to the Bidder. The term “Contractor” refers to the successful Bidder.
- b) The term “Allison Hangar Apron and Taxilane Paving at Georgetown County Airport (GGE)” or “Work” refers to the **complete set of services** as specified in this document, in every aspect.
- c) The terms “Owner” and “County” refer to the County of Georgetown, South Carolina.
- d) Where the words “shall” or “must” are used, it signifies an absolute minimum function or capacity that, if not satisfied, may result in disqualification.
- e) Where the words “should”, “may”, or “is desirable” are used, it signifies desirable, but not mandatory functions or capacities. Bidders who are able to provide these functions or capacities may be evaluated more favorably than those who cannot.

8. Correction or Withdrawal of Bids; Cancellation of Awards

An offeror must submit in writing a request to either correct or withdraw a bid to the Procurement Officer. Each written request must document the fact that the offeror’s mistake is clearly an error that will cause him a substantial loss.

- a) Correction of awards : An offeror shall not be permitted to correct a bid mistake after bid opening that would cause such offeror to have the low bid unless the mistake in the judgment of the Procurement Officer is clearly evident from examining the bid document; for example, extension of unit prices or errors in addition.
- b) Cancellation of awards prior to performance: When it is determined after an award has been issued but before performance has begun that Georgetown County’s requirements for the goods or services have changed or have not been met, the award or contract may be canceled and either re-awarded or a new solicitation issued.

9. **Faxed or E-mailed bids will not be accepted by Georgetown County.**

10. If you need any reasonable accommodation for any type of disability in order to participate in this procurement, please contact the purchasing office as soon as possible.

11. Title VI of the Civil Rights Act of 1964: Georgetown County hereby gives public notice that it is the policy of the agency to assure full compliance with Title VI of the Civil Rights Act of 1964, the Civil Rights Restoration Act of 1987, Executive Order 12898 on Environmental Justice, and related statutes

and regulations in all programs and activities. Title VI requires that no person in the United States of America shall, on the grounds of race, color, or national origin, be excluded from the participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which Georgetown County receives federal financial assistance. Any person who believes they have been aggrieved by an unlawful discriminatory practice under Title VI has a right to file a formal complaint with Georgetown County. Any such complaint must be in writing and filed with Georgetown County's Title VI Coordinator within one hundred and eighty (180) days following the date of the alleged discriminatory occurrence. For more information, or to obtain a Title VI Discriminatory Complaint Form, please see our website at <http://www.gtcountry.org/about/faqs.html>.

12. Any deviations from the specifications or modification of this bid and any extra or incidental work or reductions in work shall be set forth in writing and signed by both parties prior to making such change. Any increase or decrease in the bid price resulting from such a change shall be included in writing.
13. Exceptions: The bidder shall list on a separate sheet of paper any variations from, or exceptions to, the conditions and specifications of this bid. This sheet shall be labeled "Exception(s) to Bid Conditions and Specifications," and shall be attached to the bid. When Proposers find instances where they must take exception with certain requirements or specifications of the bid, all exceptions shall be clearly identified. Written explanations shall include the scope of the exceptions, the ramifications of the exceptions for the County of Georgetown, and a description of the advantage to be gained or disadvantages to be incurred by the County as a result of these exceptions. If none, write "NONE".
14. Georgetown County reserves the right to reject any or all bids, and to waive as an informality any irregularities contained in any bid as may be deemed in the best interest of the County. Georgetown County further reserves the right to reject any bid submitted, at its sole option, that the vendor may not be able to meet the service requirements of the bid.
15. Publicity releases: Contractor agrees not to refer to award of any resulting contract in commercial advertising in such a manner as to state or imply that the products or services provided are endorsed or preferred by the user.
16. Material Safety Data Sheets: The County of Georgetown will not receive any materials, products, or chemicals which may be hazardous to an employee's health unless accompanied by a Material Data Sheet when received.
17. Ownership of Copyright: All right, title and interest in all copyrightable materials which vendor shall create in the performance of its obligations hereunder shall be the property of the procurer. The Vendor agrees to assign and hereby does assign any and all interest it has in and to such material to procurer. The Vendor agrees upon the request of procurer to execute all papers and perform all other such acts necessary to assist procurer to obtain and register copyrights on such materials. Where applicable, works of authorship created by the vendor in the performance of its obligations hereunder, shall be considered "works for hire" as defined in the U.S. Copyright Act.
18. Ownership of Documents: Any reports, studies, photographs, negatives, or other documents prepared by vendor in the performance of its obligations shall be the exclusive property of the procurer and all such material shall be remitted to the procurer by the vendor upon completion, termination or cancellation of this order. Vendor shall not use, willingly allow or cause to have such material used for any purpose other than performance of its obligations under this order without the prior written consent of the procurer.

19. Affirmative Action: The contractor will take affirmative action in complying with all Federal and State requirements concerning fair employment and employment of the handicapped, and concerning the treatment of all employees, without regard or discrimination by reason of age, race, color, religion, sex, national origin, or physical handicap. The following are incorporated herein by reference: 41 C.F.R. 60-1.4, 60-250.4 and 60-741.4.
20. Federally Funded Construction Contracts Over \$2,000:
- a) Davis-Bacon Requirements. These contracts need to include a provision for compliance with the Davis-Bacon Act (40 USC 276a to a—7) and the Department of Labor implementing regulations (29 CFR Part 5). Under this Act, Contractors are required to include the contract provisions in Section 5.5 (a) of 29 CFR Part 5, and to pay wages to laborers and mechanics at a rate not less than the minimum wages specified in the wage determination made by the Secretary of Labor. In addition, Contractors shall be required to pay wages not less than the minimum wages specified in the wage determination made by the Secretary of Labor. In addition, Contractors shall be required to pay wages not less often than once a week. Current Wage Determination for Georgetown County in South Carolina is available in Appendix ‘C’ of the specifications or on-line at: [https://beta.sam.gov/search?index=wd&keywords=Georgetown&sort=-relevance&wdType=dbra&page=1&date\\_filter\\_index=0&inactive\\_filter\\_values=false](https://beta.sam.gov/search?index=wd&keywords=Georgetown&sort=-relevance&wdType=dbra&page=1&date_filter_index=0&inactive_filter_values=false).
  - b) Contract Work Hours and Safety Standard Act Requirements. The contracts must include a provision for compliance with Sections 103 and 107 of the Contract Work Hours and Safety Standards Act (40 USC 327-330) as supplemented by the Department of Labor regulations (29 CFR Part 5). Under Section 103 of the Act, each Contractor shall be required to compute the wages of every mechanic and laborer on the basis of a standard workweek of 40 hours. Work in excess of the standard workweek is permissible provided that the worker is compensated at a rate not less than one times the basic rate of pay for all hours worked in excess of 40 hours in the workweek. Section 107 of the Act is applicable to construction work and provides that no laborer of mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to health and safety as determined under construction, safety and health standards promulgated by the Secretary of Labor. These requirements do not apply to the purchases of supplies, materials, or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.
  - c) Copeland “Anti-Kickback” Act Requirements. All construction contracts over \$2,000.00 must include a provision for compliance with the Copeland “Anti-Kickback” Act (18 U.S.C. 874) as supplemented in Department of Labor regulations (29 CFR Part 3). This act provides that each Contractor shall be prohibited from inducing, by any means, persons employed in the construction, completion, or repaid of public work to give up any part of their compensation.
21. Bidders must clearly mark as "confidential" each part of their bid which they consider to be proprietary information that could be exempt from disclosure under section 30-4-40, Code of Laws of South Carolina 1976, as amended (Freedom of Information Act). If any part is designated as confidential, there must be attached to that part an explanation of how this information fits within one or more categories listed in section 30-4-40. The County reserves the right to determine whether this information should be exempt from disclosure and no legal action may be brought against the County or its agents for its determination in this regard.

22. CERTIFICATION REGARDING DRUG-FREE WORKPLACE:

The contractor certifies that the vendor(s) will provide a “drug-free workplace” as that term is defined in Section 44-107-30 of the Code of Laws of South Carolina, 1976, as amended, by the complying with the requirements set forth in title 44, Chapter 107.

23. Certification of Non-Segregated Facilities

The 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 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.

24. Nothing herein is intended to exclude any responsible vendor, his product or service or in any way restrain or restrict competition. On the contrary, all responsible vendors are encouraged to bid and their bids are solicited.

25. Acknowledgement of Addenda

Each contractor is responsible to verify the number of total addenda issued prior to bid. **Failure to acknowledge all addenda may disqualify the bidder.** All addenda are posted by the County at the website located at [www.georgetowncountysc.org](http://www.georgetowncountysc.org), select “Bid Opportunities” from the Quick Links box, then “View Current Bid Solicitations”. It is each proposer’s responsibility to verify that all addenda have been received and acknowledged.

26. Form and Style of Bids

- a) Bids in the form of sealed proposals for the Construction of the Project will be received until the time and the date stated in the timeline of this Invitation for Bid.
- b) The Bid shall be submitted on the Bid Form provided; no other form is acceptable.
- c) The successful Bidder will be required to provide a verified breakdown of costs of all services and work in a manner acceptable to the Owner.
- d) All blanks on the Bid Form shall be filled in, either typed or printed in ink. The person signing the bid shall initial all corrections or erasures.
- e) Bid unit price on quantity specified -- extend and show total. In case of errors in extension, unit prices shall govern.

- f) Bidder shall quote all Alternates in the Bidding Documents. If Bidder fails to bid on all Alternates, then his/her Bid may be considered irregular, non-responsive and may be disqualified.
- g) Bids containing qualifications will be considered irregular, non-responsive and may be disqualified.
- h) A Bid Form submitted by a partnership shall list the names of all partners and shall be signed in the partnership name by one of the members of the partnership who is authorized to sign for the partnership.
- i) A Bid Form submitted by a corporation shall be executed in the legal name of the corporation, followed by the state of incorporation, and signed by the President or Vice President or other authorized officer. The name of each person signing the Bid Form shall be typed or printed below the signature.
- j) When the person signing for a corporation is other than the President or Vice President and when requested by the Owner, a resolution or other satisfactory evidence of the authority of the officer signing on behalf of the corporation shall be furnished for the Owner's records. The name of each person signing the Bid Form shall be typed or printed below the signature.

27. Insurance

The successful bidder shall procure, maintain, and provide proof of, insurance coverage for injuries to persons and/or property damage as may arise from or in conjunction with, the work performed on behalf of the County by the bidder, his agents, representatives, employees, or subcontractors. Proof of coverage as contained herein shall be submitted fifteen (15) days prior to the commencement of work and such coverage shall be maintained by the bidder for the duration of the contract period; for occurrence policies.

a. General Liability

Coverage shall be as broad as: Comprehensive General Liability endorsed to include Broad Form, Commercial General Liability form including Products/Completed Operations.

1. Minimum Limits

General Liability:  
 \$1,000,000 General Aggregate Limit  
 \$1,000,000 Products & Completed Operations  
 \$1,000,000 Personal and Advertising Injury  
 \$1,000,000 Each Occurrence Limit  
 \$50,000 Fire Damage Limit  
 \$5,000 Medical Expense Limit

b. Automobile Liability

Coverage sufficient to cover all vehicles owned, used, or hired by the bidder, his agents, representatives, employees or subcontractors.

1. Minimum Limits

Automobile Liability:  
 \$1,000,000 Combined Single Limit

\$1,000,000 Each Occurrence Limit  
\$5,000 Medical Expense Limit

c. Workers' Compensation

Limits as required by the Workers' Compensation Act of SC. Employers Liability, \$1,000,000.

d. Owners' & Contractors' Protective Liability

Policy will be in name of County. Minimum limits required are \$1,000,000.

e. Professional Liability (a/k/a Errors and Omissions)

The minimum limits are \$1,000,000 per occurrence.

f. Coverage Provisions

1. All deductibles or self-insured retention shall appear on the certificate(s).
2. The County of Georgetown, its officers/ officials, employees, agents, and volunteers shall be added as "additional insured" as their interests may appear. This provision does not apply to Professional Liability or Workers' Compensation/Employers' Liability.
3. The offeror's insurance shall be primary over any applicable insurance or self-insurance maintained by the County.
4. Shall provide 30 days written notice to the County before any cancellation, suspension, or void of coverage in whole or part, where such provision is reasonable.
5. All coverage for subcontractors of the bidder shall be subject to all of the requirements stated herein.
6. All deductibles or self-insured retention shall appear on the certificate(s) and shall be subject to approval by the County. At the option of the County, either; the insurer shall reduce or eliminate such deductible or self-insured retention; or the bidder shall be required to procure a bond guaranteeing payment of losses and related claims expenses.
7. Failure to comply with any reporting provisions of the policy(s) shall not affect coverage provided the County, its officers/officials, agents, employees, and volunteers.
8. The insurer shall agree to waive all rights of subrogation against the County, its officers/officials, agents, employees or volunteers for any act, omission, or condition of premises which the parties may be held liable by reason of negligence.
9. The bidder shall furnish the County certificates of insurance including endorsements affecting coverage. The certificates are to be signed by a person authorized by the insurance company(s) to bind coverage on its' behalf, if executed by a broker, notarized copy of authorization to bind, or certify coverage must be attached.
10. All insurance shall be placed with insurers maintaining an A.M. Best rating of no less than an A:VII. If the A.M. Best rating is less than A:VII, approval must be received from County's Risk Officer.

28. Workman's Compensation Coverage

Georgetown County, SC will require each contractor and service provider to maintain on file with the purchasing officer, a current Certificate of Insurance showing limits as required by the Workers' Compensation Act of SC: Employers Liability, \$1,000,000.

The law also recognizes "statutory employees." These are employees who work for a subcontractor who may be working for a business or another contractor. Employers should inquire whether or not a subcontractor working for them has workers' compensation insurance, regardless of the number of employees employed by the subcontractor. If the subcontractor does not, the subcontractor's injured employees would be covered under the employer's workers' compensation insurance. If the subcontractor does not carry workers' compensation insurance, then the owner or the principal contractor would be liable just as if the subcontractor's employee was one of their employees.

For answers to additional questions, visit the SC Worker's Compensation Commission website, at:

<http://www.wcc.sc.gov/Pages/FrequentlyAskedQuestions.aspx#empl>

29. Hold Harmless Clause

The Contractor shall, during the term of the contract including any warranty period, indemnify, defend, and hold harmless the County, its officials, employees, agents, and representatives thereof from all suits, actions, or claims of any kind, including attorney's fees, brought on account of any personal injuries, damages, or violations of rights, sustained by any person or property in consequence of any neglect in safeguarding contract work or on account of any act or omission by the contractor or his employees, or from any claims or amounts arising from violation of any law, bylaw, ordinance, regulation or decree. The vendor agrees that this clause shall include claims involving infringement of patent or copyright.

30. Condition of Items

All items shall be new, in first class condition, including containers suitable for shipment and storage, unless otherwise indicated herein. Verbal agreements to the contrary will not be recognized.

31. Workmanship and Inspection

All work under this contract shall be performed in a skillful and workmanlike manner. The County may, in writing, require the Contractor to remove any employee from work that the County deems incompetent or careless.

Further, the County may, from time to time, make inspections of the work performed under this contract. Any inspection by the County does not relieve the Contractor from any responsibility regarding defects or other failures to meet the contract requirements.

32. Invoicing and Payment

The Contractor shall submit invoices or progress payments on a frequency to be determined, as agreed upon by the County, for each payment requested. Such invoices or progress payments shall also include a detailed breakdown of all charges. All such invoices or progress payments will be paid within thirty (30) days unless any items thereon are questioned, in which event payment will be withheld pending verification of the amount claimed and the validity of the claim. The firm shall provide complete cooperation during any such investigation. All invoices shall be forwarded to the following address:

County of Georgetown  
Accounts Payable, Finance Dept.  
P.O. Box 421270  
Georgetown, SC 29442-4200

An IRS W-9 form must be on file with the Purchasing Office before any payment will be issued.

33. South Carolina Sales Tax

The County of Georgetown, SC is not exempt and pays the appropriate SC sales tax on all applicable purchases.

34. Assignment of Contract

This contract may not be assigned in whole or part without the written consent of the Purchasing Officer.

35. Termination

Subject to the provisions below, the contract may be terminated by the County upon sixty (60) days advance written notice to the other party; but if any work or service hereunder is in progress, but not completed as of the date of termination, then this contract may be extended upon written approval of the County until said work or services are completed and accepted.

a. Termination for Convenience

In the event that this contract is terminated or canceled upon request and for the convenience of the County, without the required sixty (60) days advance written notice, then the County shall negotiate reasonable termination costs, if applicable.

b. Termination for Cause

Termination by the County for cause, default or negligence on the part of the contractor shall be excluded from the foregoing provision; termination costs, if any, shall not apply. The sixty (60) days advance notice requirement is waived in the event of Termination for Cause.

c. Non-Appropriation:

It is understood and agreed by the parties that in the event funds are not appropriated in the current fiscal year or any subsequent fiscal years, this contract will become null and void and the County will only be required to pay for services completed to the satisfaction of the County.

36. Default

In case of default by the contractor, for any reason whatsoever, the County may procure the goods or services from another source and hold the contractor responsible for any resulting excess cost and may seek other remedies under law.

37. Severability

In the event that any provision shall be adjudged or decreed to be invalid, such ruling shall not invalidate the entire Agreement but shall pertain only to the provision in question and the remaining provisions shall continue to be valid, binding and in full force and effect.

38. Applicable Laws

This Agreement shall be governed by and construed in accordance with the laws of the State of South Carolina, U.S.A.

39. Claims and Disputes:

All claims, disputes, and other matters in question between parties arising out of, or relating to, this Agreement, or the breach thereof, shall be decided in the Circuit Court of the Fifteenth Judicial circuit in Georgetown County, South Carolina. By executing this Agreement, all parties specifically consent to venue and jurisdiction in Georgetown County, South Carolina and waive any right to contest jurisdiction and venue in said Court.

40. Rights of County

The County reserves the right to reject all or any part of any bid, waive informalities and award the contract to the lowest responsive and responsible bidder to best serve the interest of the County.

41. Award of Bid

In determining the lowest responsive and responsible bidder, in addition to price, there shall be considered the following:

- (a) The ability, capacity, and skill of the bidder to perform the contract.
- (b) Whether the bidder can perform the contract within the time specified, without delay of interference.
- (c) The character, integrity, reputation, judgment, experience, and efficiency of the bidder.
- (d) The quality of performance on previous contracts.
- (e) The previous and existing compliance by the bidder with laws and ordinances relating to the contract.

42. Notice of Award

A *Notice of Intent to Award* will be mailed to all respondents.

43. Protest

Bidders may refer to Sections 2-67, 2-73, and 2-74 of Ordinance #20-32, also known as the Georgetown County, South Carolina Purchasing Policy to determine their remedies concerning this competitive process. The failure to be awarded a bid shall not be valid grounds for protest.

44. Debarment

By submitting a bid, the offeror certifies to the best of its knowledge and belief, that it and its principals, sub-contractors and assigns are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal, State or local department or agency. A copy of the County's debarment procedure in accordance with Section 2-68 of Ordinance #20-32, also known as the Georgetown County, South Carolina Purchasing Policy is available upon request.

45. Firm Pricing for County Acceptance

The bid price must be firm for County acceptance for 120 days from bid opening date. "Discount from list," bids are not acceptable unless specifically requested.

46. Use of Brand Names (If Appropriate)

Unless otherwise stated in an Invitation for Bid, the name of a certain brand, make or manufacturer does not restrict bidders to the specific brand, make or manufacturer named; it conveys the general style, type, character, and quality of the article desired, and any article which the County in its sole discretion determines to be the equal of that specified, considering quality, workmanship, economy of operation, and suitability for the purpose intended, shall be accepted. Any catalog, brand name or manufacturer's reference used in bid invitation is descriptive - NOT restrictive - it is to indicate type and quality desired. Bids on brands of like nature and quality will be considered. If bidding on other than reference or specifications, bid must show manufacturer, brand or trade name, catalog number, etc. of article offered. If other than brand(s) specified is offered, illustrations and complete description must be submitted with bid. Samples may be required. If the bidder makes no other bid and takes no exception to specifications or reference data, he will be required to furnish brand names, numbers, etc., as specified. Bidders must certify that item(s) bid upon meet and/or exceed specifications.

47. Substitutions and Product Options

Written requests for changes in products, materials, equipment, and methods of construction required by the Contract Documents shall be submitted to the Owner prior to effecting such requested changes.

48. Permits

The successful Offeror must be responsible for obtaining all necessary city, county, and state permits/licenses and must comply with all local codes and ordinances. Copies of such permits/licenses shall be made available to the County upon request. Building contractors working within Georgetown County must also secure a Contractor's License from the Building Department. Work within the Georgetown City Limits may require a City Business License. For additional information, please review the "Forms and Fees" section of the Building and Planning web page at the link below: <http://www.georgetowncountysc.org/building/default.html>

49. Environmental Management:

Vendor/Supplier/Contractor will be responsible for complying with all federal, state, and local environmental regulations relating to transportation, handling, storage, spillage, and any other aspect of providing the services specified herein, as applicable.

50. Bid Tabulation Results

Vendors wishing to view the bid tabulation results may visit the Georgetown County, SC website at: <http://www.georgetowncountysc.org>. Select "Bid Opportunities" from the Quick Links box, then click on the "Expired" tab and double click the link under the individual bid listing.

51. The Bidder hereby certifies that he or she has carefully examined all of the Documents for the project, has carefully and thoroughly reviewed this Request for Bid/Quotation, has inspected the location of the project (if applicable), and understands the nature and scope of the work to be done; and that this Bid is based upon the terms, specifications, requirements, and conditions of the Request for Bid/Documents. The Bidder further agrees that the performance time specified is a reasonable time, having carefully considered the nature and scope of the project as aforesaid.

52. Any attempt by the vendor to influence the opinion of County Staff or County Council by discussion, promotion, advertising, misrepresentation of the submittal or purchasing process or any procedure to promote their offer will constitute a violation of the vendor submittal conditions and will cause the vendor's submittal to be declared null and void.

53. Apparent omission of a detailed description concerning any point, shall be regarded as meaning the best commercial practice is to prevail and that only material and workmanship of the finest quality are to be used.

54. Response Clarification

Georgetown County reserves the right to request additional written or oral information from Bidders in order to obtain clarification of their Responses.

55. Vendor Checklist

The items indicated below must be returned as a part of the Bid Submission package:

- Bid Bond
- Proposal Requirements & Conditions Agreement (A-1 to A-3)
- Form of Non-Collusion Affidavit (A-4)
- List of Prime and Subcontractors (A-5)
- Evidence of Competency and Financial Responsibility (A-6)
- Bid Form – Allison Hangar and Taxilane Paving (BF-1 and BF-2)
- Mandatory Bid Submittal Form
- Mandatory Exceptions Page

The successful proposer will be required to provide a Certificate of Insurance naming Georgetown County, SC as an additional insured and a signed IRS Form W-9. This must be on file with the Purchasing Department prior to any services being performed and must be on file within fifteen (15) days of written notification of award.

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**MANDATORY BID SUBMITTAL FORM**  
**IFB #23-071**

**Allison Hangar Apron and Taxilane Paving at Georgetown County**  
**Airport (GGE)**

The undersigned, on behalf of the vendor, certifies that: (1) this bid is made without previous understanding, agreement or connection with any person, firm or corporation making a bid on the same project; (2) is in all respects fair and without collusion or fraud; (3) the person whose signature appears below is legally empowered to bind the firm in whose name the bid is entered; (4) they have read the complete Request for Bid and understand and accept all provisions; (5) if accepted by the County, this bid is guaranteed as written and amended and will be implemented as stated; and (6) mistakes in writing of the submitted bid will be their responsibility.

The undersigned, having visited the site of the Work and having familiarized themselves with local conditions affecting the cost of the work and with all requirements of the proposed Construction Contract Documents, and duly issued Addenda to said documents, as acknowledged herein, propose to furnish and perform all labor, materials, necessary tools, expendable equipment, and all utility and transportation services necessary to perform and complete in a workmanlike manner all work required by said documents and Addenda.

1. Name of Company submitting bid \_\_\_\_\_
  
2. **Total BASE Bid, from Project Manual form BF-2:**        \$ \_\_\_\_\_
  
3. Bid cost must remain valid one hundred twenty (120) days from bid opening date.
  
4. Mobilization (number of days for mobilization after NTP): \_\_\_\_\_
  
5. Contact Address: \_\_\_\_\_  
\_\_\_\_\_
  
6. Contact Person: \_\_\_\_\_
  
7. Telephone Number: \_\_\_\_\_ Fax Number: \_\_\_\_\_
  
8. E-Mail address: \_\_\_\_\_
  
9. Remittance Address: \_\_\_\_\_  
\_\_\_\_\_
  
10. Accounting Contact: \_\_\_\_\_
  
11. Telephone Number: \_\_\_\_\_ Fax Number: \_\_\_\_\_
  
12. E-Mail address: \_\_\_\_\_

13. Suspension and Debarment

Federal guidelines require grant recipients to obtain sufficient assurance that vendors are not suspended or debarred from participating in federal programs when contracts exceed \$25,000. By signing below, you verify that no party to this agreement is excluded from receiving Federal contracts, certain subcontracts, and certain Federal financial and nonfinancial assistance and benefits, pursuant to the provisions of 31 U.S.C. 6101, note, E.O. 12549, E.O. 12689, 48 CFR 9.404, and each agency's codification of the Common Rule for Non-procurement suspension and debarment. [See <https://www.epls.gov/> for additional information.]

14. If the bid is accepted, the required Contract must be executed within fifteen (15) days after receipt of written notice of formal award of Contract and Certificate of Insurance (COI) and Payment and Performance Bonds must be received.

15. Will you honor the submitted prices and terms for purchase by other departments within Georgetown County and/or by other government entities who participate in cooperative purchasing with Georgetown County, South Carolina?

Yes       No

16. Acceptance of Invitation for Bid Content: The contents of the successful IFB/RFP are included as if fully reproduced herein. Therefore, the selected contractor must be prepared to be bound by his/her proposal as submitted.

17. RENEWAL OF CONTRACT

The continuation of the terms, conditions, and provisions of any resulting contract beyond the fiscal year is subject to approval and ratification by the Georgetown County Council and appropriation by them of the necessary money to fund said contract for each succeeding year.

18. CERTIFICATION REGARDING DRUG-FREE WORKPLACE:

The undersigned certifies that the vendor listed below will provide a "drug-free workplace" as that term is defined in Section 44-107-30 of the Code of Laws of South Carolina, 1976, as amended, by the complying with the requirements set forth in title 44, Chapter 107.

Yes       No

19. Any attempt by the vendor to influence the opinion of County Staff or County Council by discussion, promotion, advertising, misrepresentation of the submittal or purchasing process or any procedure to promote their offer will constitute a violation of the vendor submittal conditions and will cause the vendor's submittal to be declared null and void.

20. The lowest or any proposal will not necessarily be accepted, and the County reserves the right to award any portion thereof. I/We, the undersigned, hereby confirm that all the above noted documents for Bid/Request for Proposal No. 23-071 were received.

21. MINORITY PARTICIPATION      [INFORMATION ONLY]

(a) Is the bidder a South Carolina Certified Minority Business?

Yes       No

(b) Is the bidder a Minority Business certified by another governmental entity?

Yes       No

If so, please list the certifying governmental entity: \_\_\_\_\_

(c) Will any of the work under this contract be performed by a SC certified Minority Business as a subcontractor?

Yes       No

If so, what percentage of the total value of the contract will be performed by a SC certified Minority Business as a subcontractor? \_\_\_\_\_%

(d) Will any of the work under this contract be performed by a minority business certified by another governmental entity as a subcontractor?

Yes       No

If so, what percentage of the total value of the contract will be performed by a minority business certified by another governmental entity as a subcontractor?  
\_\_\_\_\_%

(e) If a certified Minority Business is participating in this contract, please indicate all categories for which the Business is certified:

- Traditional minority
- Traditional minority, but female
- Women (Caucasian females)
- Hispanic minorities
- DOT referral (Traditional minority)
- DOT referral (Caucasian female)
- Temporary certification
- SBA 8 (a) certification referral
- Other minorities (Native American, Asian, etc.)

(If more than one minority contractor will be utilized in the performance of this contract, please provide the information above for each minority business.)

22. ILLEGAL IMMIGRATION: Non-Construction (NOV. 2008): (An overview is available at [www.procurement.sc.gov](http://www.procurement.sc.gov)) By signing your offer, you certify that you will comply with the applicable requirements of Title 8, Chapter 14 of the South Carolina Code of Laws and agree to provide to the State upon request any documentation required to establish either: (a) that Title 8, Chapter 14 is inapplicable to you and your subcontractors or sub-subcontractors; or (b) that you and your subcontractors or sub-subcontractors are in compliance with Title 8, Chapter 14. Pursuant to Section 8-14-60, "A person who knowingly makes or files any false, fictitious, or fraudulent document, statement, or report pursuant to this chapter is guilty of a felony, and, upon conviction, must be fined within the discretion of the court or imprisoned for not more than five years, or both." You agree to include in any contracts with your subcontractors language requiring your subcontractors to (a) comply with the applicable requirements of Title 8, Chapter 14, and (b) include in their contracts with the sub-subcontractors language requiring the sub-subcontractors to comply with the applicable requirements of Title 8, Chapter 14. [07-7B097-1]

23.

INFORMATION ONLY:

Our company accepts VISA government procurement cards.

If yes, list any upcharge for P-Card Payment? \_\_\_\_\_

Our company does not accept VISA government procurement cards.

24. Printed Name of person binding bid \_\_\_\_\_

25. Signature (X) \_\_\_\_\_

26. Date \_\_\_\_\_

**NOTE: THE ENTIRE IFB PACKET NEED NOT BE RETURNED. Please be sure to provide all mandatory bid submittal forms as requested. Thank you.**

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# EXCEPTIONS PAGE

## MANDATORY BID SUBMISSION FORM

List any areas where you cannot or will not comply with the specifications or terms contained within the bid documentation. If none, write "NONE".

# **GENERAL CONDITIONS**

## SECTION 10

### DEFINITION OF TERMS

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

- 10-01 AASHTO.** The American Association of State Highway and Transportation Officials.
- 10-02 Access Road.** The right-of-way, the roadway and all improvements constructed thereon connecting the Airport to a public roadway.
- 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 Airport.** ~~Airport means an area of land or water which is used or intended to be used for the landing and takeoff of aircraft; an appurtenant area used or intended to be used for Airport buildings or other Airport facilities or rights of way; Airport buildings and facilities located in any of these areas, and a heliport.~~ See Supplemental General Conditions, Section 10-04.
- 10-05 Airport Improvement Program (AIP).** A grant-in-aid program administered by the Federal Aviation Administration (FAA).
- 10-06 Air Operations Area (AOA).** The term air operations area (AOA) 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.
- 10-07 Apron.** Area where aircraft are parked, unloaded, or loaded, fueled, and/or serviced.
- 10-08 ASTM International (ASTM).** Formerly known as the American Society for Testing and Materials (ASTM).
- 10-09 Award.** The Owner's notice to the successful bidder of the acceptance of the submitted bid.

- 10-10 Bidder.** Any individual, partnership, firm, or corporation, acting directly or through a duly authorized representative, who submits a proposal for the work contemplated.
- 10-11 Building Area.** An area at the Airport to be used, considered, or intended to be used for Airport buildings or other Airport facilities or rights-of-way together with all Airport buildings and facilities located thereon.
- 10-12 Calendar Day.** Every day shown on the calendar.
- 10-13 Certificate of Analysis (COA).** The COA is the manufacturer's Certificate of Compliance (COC) including all applicable test results required by the specifications.
- 10-14 Certificate of Compliance (COC).** The manufacturer's certification stating that materials or assemblies furnished fully comply with the requirements of the contract. The certificate shall be signed by the manufacturer's authorized representative.
- 10-15 Change Order.** A written order to the Contractor covering changes in the plans, specifications, or proposal quantities and establishing the basis of payment and contract time adjustment, if any, for work within the scope of the contract and necessary to complete the project.
- 10-16 Contract.** A written agreement between the Owner and the Contractor that establishes the obligations of the parties including but not limited to performance of work, furnishing of labor, equipment and materials and the basis of payment. The awarded contract includes but may not be limited to: Advertisement, Contract Form, Proposal, Performance Bond, payment Bond, General Provisions, certifications and representations, Technical Specifications, Plans, Supplemental Provisions, standards incorporated by reference and issued addenda.
- 10-17 Contract Item (Pay Item).** A specific unit of work for which a price is provided in the contract.
- 10-18 Contract Time.** ~~The number of calendar days or working days, stated in the proposal, allowed for completion of the contract, including authorized time extensions. If a calendar date of completion is stated in the proposal, in lieu of a number of calendar or working days, the contract shall be completed by that date. See Supplemental General Conditions, Section 10-18.~~

- 10-19 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.
- 10-20 Contractors Quality Control (QC) Facilities.** The Contractor's QC facilities in accordance with the Contractor Quality Control Program (CQCP).
- 10-21 Contractor Quality Control Program (CQCP)** Details the methods and procedures that will be taken to assure that all materials and completed construction required by the contract conform to contract plans, technical specifications, and other requirements, whether manufactured by the Contractor, or procured from subcontractors or vendors.
- 10-22 Control Strip.** A demonstration by the Contractor that the materials, equipment, and construction processes results in a product meeting the requirements of the specification.
- 10-23 Construction Safety and Phasing Plan (CSPP).** 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.
- 10-24 Drainage System.** The system of pipes, ditches, and structures by which surface or subsurface waters are collected and conducted from the Airport area.
- 10-25 Engineer.** ~~The individual, partnership, firm, or corporation duly authorized by the Owner to be responsible for engineering, inspection, and/or observation of the contract work and acting directly or through an authorized representative.~~ See Supplemental General Conditions, Section 10-25.
- 10-26 Equipment.** All machinery, together with the necessary supplies for upkeep and maintenance; and all tools and apparatus necessary for the proper construction and acceptable completion of the work.
- 10-27 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 Owner's ENGINEER to be necessary to complete the work within the intended scope of the contract as previously modified.
- 10-28 FAA.** The Federal Aviation Administration. When used to designate a person, FAA shall mean the Administrator or their duly authorized representative.

**10-29 Federal Specifications.** The federal specifications and standards, commercial item descriptions, and supplements, amendments, and indices prepared and issued by the General Services Administration.

**10-30 Force Account.** A. Contract Force Account - A method of payment that addresses extra work performed by the Contractor on a time and material basis. B. Owner Force Account - Work performed for the project by the Owner's employees.

**10-31 Intention of Terms.** ~~Whenever, in these specifications or on the plans, the words "directed," "required," "permitted," "ordered," "designated," "prescribed," or words of like import are used, it shall be understood that the direction, requirement, permission, order, designation, or prescription of the ENGINEER and/or is intended; and similarly, the words "approved," "acceptable," "satisfactory," or words of like import, shall mean approved by, or acceptable to, or satisfactory to the ENGINEER and/or RPR, subject in each case to the final determination of the Owner.~~

~~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. See Supplemental General Conditions. Section 10-31.~~

**10-32 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.

**10-33 Major and Minor Contract Items.** A major contract item shall be any item that is listed in the proposal, the total cost of which is equal to or greater than 20% of the total amount of the award contract. All other items shall be considered minor contract items.

**10-34 Materials.** Any substance specified for use in the construction of the contract work.

**10-35 Modification of Standards (MOS).** Any deviation from standard specifications applicable to material and construction methods in accordance with FAA Order 5300.1.

- 10-36 Notice to Proceed (NTP).** A written notice to the Contractor to begin the actual contract work on a previously agreed to date. If applicable, the Notice to Proceed shall state the date on which the contract time begins.
- 10-37 Owner.** The term "Owner" shall mean the party of the first part or the contracting agency signatory to the contract. Where the term "Owner" is capitalized in this document, it shall mean Airport Sponsor only. The Owner for this project is Georgetown County, 129 Screven Street, Suite 239, Georgetown, South Carolina 29440.
- 10-38 Passenger Facility Charge (PFC).** Per 14 Code of Federal Regulations (CFR) Part 158 and 49 United States Code (USC) § 40117, a PFC is a charge imposed by a public agency on passengers enplaned at a commercial service Airport it controls.
- 10-39 Pavement Structure.** The combined surface course, base course(s), and subbase course(s), if any, considered as a single unit.
- 10-40 Payment Bond.** The approved form of security furnished by the Contractor and their own surety as a guaranty that the Contractor will pay in full all bills and accounts for materials and labor used in the construction of the work.
- 10-41 Performance Bond.** The approved form of security furnished by the Contractor and their own surety as a guaranty that the Contractor will complete the work in accordance with the terms of the contract.
- 10-42 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. Plans may also be referred to as 'contract drawings.'
- 10-43 Project.** The agreed scope of work for accomplishing specific Airport development with respect to a particular Airport.
- 10-44 Proposal.** The written offer of the bidder (when submitted on the approved proposal form) to perform the contemplated work and furnish the necessary materials in accordance with the provisions of the plans and specifications.
- 10-45 Proposal Guaranty.** The security furnished with a proposal to guarantee that the bidder will enter into a contract if their own proposal is accepted by the Owner.

- 10-46 Quality Assurance (QA).** Owner's responsibility to assure that construction work completed complies with specifications for payment.
- 10-47 Quality Control (QC).** Contractor's responsibility to control material(s) and construction processes to complete construction in accordance with project specifications.
- 10-48 Quality Assurance (QA) Inspector.** An authorized representative of the ENGINEER assigned to make all necessary inspections, observations, tests, and/or observation of tests of the work performed or being performed, or of the materials furnished or being furnished by the Contractor.
- 10-49 Quality Assurance (QA) Laboratory.** ~~The official quality assurance testing laboratories of the Owner or such other laboratories may be designated by the ENGINEER or RPR. May also be referred to as ENGINEER's, Owner's, or QA Laboratory.~~ See Supplemental General Conditions, Section 10-49.
- 10-50 Resident Project Representative (RPR).** ~~The individual, partnership, firm, or corporation duly authorized by the Owner to be responsible for all necessary inspections, observations, tests, and/or observations of tests of the contract work performed or being performed, or of the materials furnished or being furnished by the Contractor and acting directly or through an authorized representative.~~ See Supplemental General Conditions, Section 10-50.
- 10-51 Runway.** The area at the Airport prepared for the landing and takeoff of aircraft.
- 10-52 Runway Safety Area (RSA).** A defined surface surrounding the runway prepared or suitable for reducing the risk of damage to aircraft. See the construction safety and phasing plan (CSPP) for limits of the RSA.
- 10-53 Safety Plan Compliance Document (SPCD).** Details how the Contractor will comply with the CSPP.
- 10-54 SCAC (South Carolina Aeronautics Commission).** When used to designate a person, SCAC shall mean the Executive Director or their duly authorized representative.
- 10-55 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.

- 10-56 Sponsor.** ~~A Sponsor is defined in 49 USC § 47102(24) as a public agency that submits to the FAA for an AIP grant; or a private Owner of a public-use Airport that submits to the FAA an application for an AIP grant for the Airport. See Supplemental General Conditions, Section 10-55.~~
- 10-57 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; navigational aids; buildings; vaults; and, other manmade features of the Airport that may be encountered in the work and not otherwise classified herein.
- 10-58 Subgrade.** The soil that forms the pavement foundation.
- 10-59 Superintendent.** ~~The Contractor's executive representative who is present on the work during progress, authorized to receive and fulfill instructions from the RPR, and who shall supervise and direct the construction. See Supplemental General Conditions, Section 10-58.~~
- 10-60 Supplemental Agreement.** A written agreement between the Contractor and the Owner that establishes the basis of payment and contract time adjustment, if any, for the work affected by the supplemental agreement. A supplemental agreement is required if: (1) in scope work would increase or decrease the total amount of the awarded contract by more than 25%; (2) in scope work would increase or decrease the total of any major contract item by more than 25%; (3) work that is not within the scope of the originally awarded contract; or (4) adding or deleting of a major contract item.
- 10-61 Surety.** The corporation, partnership, or individual, other than the Contractor, executing payment or performance bonds that are furnished to the Owner by the Contractor.
- 10-62 Taxilane.** A taxiway designed for low speed movement of aircraft between aircraft parking areas and terminal areas.
- 10-63 Taxiway.** 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, aircraft parking areas, and terminal areas.
- 10-64 Taxiway/Taxilane Safety Area (TSA).** A defined surface alongside the taxiway prepared or suitable for reducing the risk of damage to an aircraft. See the construction safety and phasing plan (CSPP) for limits of the TSA.

**10-65 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.

**10-66 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. When work is suspended for causes beyond the Contractor's control, it will not be counted as a working day. Saturdays, Sundays and holidays on which the Contractor's forces engage in regular work will be considered as working days.

**10-67 Owner Defined terms.** None

**END OF SECTION 10**

## SECTION 20

### PROPOSAL REQUIREMENTS AND CONDITIONS

**20-01 Advertisement (Notice to Bidders).** The official Notice to Bidders stating work to be undertaken and the time and place for the submission of proposals is contained in the Invitation to Bid / Instructions to Bidders.

**20-02 Qualification of Bidders.** ~~Each bidder shall submit evidence of competency and evidence of financial responsibility to perform the work to the Owner at the time of bid opening.~~

~~Evidence of competency, unless otherwise specified, shall consist of statements covering the bidder's past experience on similar work, and a list of equipment and a list of key personnel that would be available for the work.~~

~~Each bidder shall furnish the Owner satisfactory evidence of their financial responsibility. 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 bidder'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 their 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 the 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 they are prequalified with the State Highway Division and are on the current "bidder's list" of the state in which the proposed work is located. Evidence of State Highway Division prequalification may be submitted as evidence of financial responsibility in lieu of the certified statements or reports specified above. See Supplemental General Conditions, Section 20-02.~~

**20-03 Contents of Proposal Forms.** The Owner's proposal forms state the location and description of the proposed construction; the place, date, and time of opening of the proposals; and the estimated quantities of the various items of work to be performed and materials to be furnished for which unit bid prices are asked. The proposal form states the time in which the work must be completed, and the amount of the proposal guaranty that must accompany the proposal. The Owner will accept only those Proposals properly executed on physical forms or electronic forms provided by the Owner. Bidder actions that may cause the Owner to deem a proposal irregular are given in Paragraph 20-09 *Irregular Proposals*.

Mobilization is limited to 10 percent of the total project cost.

There will not be a pre-bid conference, but bidders are encouraged to visit the site in person prior to bidding. Site inspections will be made available by PRIOR APPOINTMENT ONLY. Please contact Nancy Silver, Purchasing Officer at (843)545-3076 or by email at [nsilver@gtcounty.org](mailto:nsilver@gtcounty.org) to schedule an appointment. A prior request is necessary because the Airport Director oversees more than one field and may not always be at the GGE Airport site. The Georgetown County Airport Terminal is located at 129 Airport Road, Georgetown, SC 29440.

**20-04 Issuance of Proposal Forms.** The Owner reserves the right to refuse to issue a proposal form to a prospective bidder if the bidder is in default for any of the following reasons:

**A.** Failure to comply with any prequalification regulations of the Owner, if such regulations are cited, or otherwise included, in the proposal as a requirement for bidding.

**B.** Failure to pay, or satisfactorily settle, all bills due for labor and materials on former contracts in force with the Owner at the time the Owner issues the proposal to a prospective bidder.

**C.** Documented record of Contractor default under previous contracts with the Owner.

**D.** Documented record of unsatisfactory work on previous contracts with the Owner.

**20-05 Interpretation of Estimated Proposal Quantities.** An estimate of quantities of work to be done and materials to be furnished under these specifications is given in the proposal. It is the result of careful calculations and is believed to be correct. It is given only as a basis for comparison of proposals and the award of the contract. The Owner does not expressly, or by implication, agree that the actual quantities involved will correspond exactly therewith; nor shall the bidder plead misunderstanding or deception because of such estimates of quantities, or of the character, location, or other conditions pertaining to the work. Payment to the Contractor will be made only for the actual quantities of work performed or materials furnished in accordance with the plans and specifications. It is understood that the quantities may be increased or decreased as provided in the Section 40, Paragraph 40-02, Alteration of Work and Quantities, without in any way invalidating the unit bid prices.

**20-06 Examination of Plans, Specifications, and Site.** The bidder is expected to carefully examine the site of the proposed work, the proposal, plans, specifications, and contract forms. Bidders shall satisfy themselves to the character, quality, and quantities of work to be performed, materials to be furnished, and to the requirements of the proposed contract. The submission of a proposal shall be prima facie evidence that the bidder has made such examination and is satisfied with the conditions to be encountered in performing the work and the requirements of the proposed contract, plans, and specifications.

**20-07 Preparation of Proposal.** The bidder shall submit their proposal on the forms furnished by the Owner. All blank spaces in the proposal forms, unless explicitly stated otherwise, 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 which they propose for each pay item furnished in the proposal. In case of conflict between words and numerals, the words, unless obviously incorrect, shall govern.

The bidder shall correctly sign the proposal in ink. If the proposal is made by an individual, their 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 proposal shall give the name of the state where the corporation was chartered and the name, titles, and business address of the president, secretary, and the treasurer. Anyone signing a proposal as an agent shall file evidence of their authority to do so and that the signature is binding upon the firm or corporation.

**20-08 Responsive and Responsible Bidder.** A responsive bid conforms to all significant terms and conditions contained in the Owner's invitation for bid. It is the Owner's responsibility to decide if the exceptions taken by a bidder to the solicitation are material or not and the extent of deviation it is willing to accept. A responsible bidder has the ability to perform successfully under the terms and conditions of a proposed procurement, as defined in 2 CFR § 200.318(h). This includes such matters as Contractor integrity, compliance with public policy, record of past performance, and financial and technical resources.

**20-09 Irregular Proposals.** Proposals shall be considered irregular for the following reasons:

**A.** If the proposal is on a form other than that furnished by the Owner, or if the Owner's form is altered, or if any part of the proposal form is detached.

**B.** If there are unauthorized additions, conditional or alternate pay items, or irregularities of any kind that make the proposal incomplete, indefinite, or otherwise ambiguous.

**C.** If the proposal does not contain a unit price for each pay item listed in the proposal, except in the case of authorized alternate pay items, for which the bidder is not required to furnish a unit price.

**D.** If the proposal contains unit prices that are obviously unbalanced.

**E.** If the proposal is not accompanied by the proposal guaranty specified by the Owner.

**F.** If the applicable Disadvantaged Business Enterprise information is incomplete.

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

**20-10 Bid Guarantee.** Each separate proposal shall be accompanied by a bid bond in the amount specified in the proposal form. Such bond, check, or collateral shall be made payable to the Owner.

**20-11 Delivery of Proposal.** ~~Each proposal submitted shall be placed in a sealed envelope plainly marked with the project number, location of Airport, and name and business address of the bidder on the outside. When sent by mail, preferably registered, the sealed proposal, marked as indicated above, should be enclosed in an additional envelope. No proposal will be considered unless received at the place specified in the advertisement or as modified by Addendum before the time specified for opening all bids. Proposals received after the bid opening time shall be returned to the bidder unopened. See Supplemental General Conditions, Section 20-11.~~

**20-12 Withdrawal or Revision of Proposals.** A bidder may withdraw or revise (by withdrawal of one proposal and submission of another) a proposal provided that the bidder's request for withdrawal is received by the Owner in writing or by fax before the time specified for opening bids. Revised proposals must be received at the place specified in the advertisement before the time specified for opening all bids.

**20-13 Public Opening of Proposals.** Proposals shall be opened and read publicly at the time and place specified in the advertisement. Bidders, their authorized agents, and other interested persons are invited to attend. Proposals that have been withdrawn (by written or by fax request) or received after the time specified for opening bids shall be returned to the bidder unopened.

**20-14 Disqualification of Bidders.** A bidder shall be considered disqualified for any of the following reasons:

**A.** Submitting more than one proposal from the same partnership, firm, or corporation under the same or different name.

**B.** Evidence of collusion among bidders. Bidders participating in such collusion shall be disqualified as bidders for any future work of the Owner until any such participating bidder has been reinstated by the Owner as a qualified bidder.

**C.** If the bidder is considered to be in "default" for any reason specified in Paragraph 20-04, *Issuance of Proposal Forms*, of this section.

**20-15 Discrepancies and Omissions.** A Bidder who discovers discrepancies or omissions with the project bid documents shall immediately notify the Owner's ENGINEER of the matter. A bidder that has doubt as to the true meaning of a project requirement may submit to the Owner's ENGINEER a written request for interpretation no later than **7** days prior to bid opening. See Invitation to Bid / Instructions to Bidders for additional information.

Any interpretation of the project bid documents by the Owner's ENGINEER will be by written addendum issued by the Owner. The Owner will not consider any instructions, clarifications, or interpretations of the bidding documents in any manner other than written addendum.

**END OF SECTION 20**

## Section 30

### AWARD AND EXECUTION OF CONTRACT

**30-01**      **Consideration of Proposals.** After the proposals are publicly opened and read, they will be compared on the basis of the summation of the products obtained by multiplying the estimated quantities shown in the proposal by the unit bid prices. If a bidder's proposal contains a discrepancy between unit bid prices written in words and unit bid prices written in numbers, the unit bid price written in words shall govern.

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

**A.** If the proposal is irregular as specified in Section 20, Paragraph 20-09, *Irregular Proposals*.

**B.** If the bidder is disqualified for any of the reasons specified Section 20, Paragraph 20-14, *Disqualification of Bidders*.

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

**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 proposals, unless otherwise specified herein.

If the Owner elects to proceed with an award of contract, the Owner will make award to the responsible bidder whose bid, conforming with all the material terms and conditions of the bid documents, is the lowest in price.

**30-03**      **Cancellation of Award.** The Owner reserves the right to cancel the award without liability to the bidder, except return of proposal guaranty, at any time before a contract has been fully executed by all parties and is approved by the Owner in accordance with Paragraph 30-07 *Approval of Contract*.

**30-04**      **Return of Proposal Guaranty.** All proposal guaranties, except those of the two lowest bidders, will be returned immediately after the Owner has made a comparison of bids as specified in the Paragraph 30-01, *Consideration of Proposals*. Proposal guaranties of the two lowest bidders will be retained by the Owner until such time as an award is made, at which time, the

unsuccessful bidder's proposal guaranty will be returned. The successful bidder's proposal guaranty will be returned as soon as the Owner receives the contract bonds as specified in Paragraph 30-05, *Requirements of Contract Bonds*.

**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 the surety guaranteeing the performance of the work and the payment of all legal debts that may be incurred by reason of the Contractor's performance of the work. The surety and the form of the bond or bonds shall be acceptable to the Owner. Unless otherwise specified in this subsection, the surety bond or bonds shall be in a sum equal to the full amount of the contract.

**30-06**      **Execution of Contract.** The successful bidder shall sign (execute) the necessary agreements for entering into the contract and return the signed contract to the Owner, along with the fully executed surety bond or bonds specified in Paragraph 30-05, *Requirements of Contract Bonds*, of this section, within **15** calendar days from the date mailed or otherwise delivered to the successful bidder.

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

**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 period specified in Paragraph 30-06, *Execution of Contract*, of this section shall be just cause for cancellation of the award and forfeiture of the proposal guaranty, not as a penalty, but as liquidated damages to the Owner.

**END OF SECTION 30**

## 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 the right to make such changes in quantities and work as may be necessary or desirable to complete, in a satisfactory manner, the original intended work. Unless otherwise specified in the Contract, the Owner's ENGINEER or RPR shall be and is hereby authorized to make, in writing, such in-scope alterations in the work and variation of quantities as may be necessary to complete the work, provided such action does not represent a significant change in the character of the work.~~

~~For purpose of this section, a significant change in character of work means: any change that is outside the current contract scope of work; any change (increase or decrease) in the total contract cost by more than 25%; or any change in the total cost of a major contract item by more than 25%.~~

~~Work alterations and quantity variances that do not meet the definition of significant change in character of work shall not invalidate the contract nor release the surety. Contractor agrees to accept payment for such work alterations and quantity variances in accordance with Section 90, Paragraph 90-03, *Compensation for Altered Quantities*.~~

~~Should the value of altered work or quantity variance meet the criteria for significant change in character of work, such altered work and quantity variance shall be covered by a supplemental agreement. Supplemental agreements shall also require consent of the Contractor's surety and separate performance and payment bonds. 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. See Supplemental General Conditions, Section 40-02.~~

**40-03** **Omitted Items.** ~~The Owner, the Owner's ENGINEER or the RPR may provide written notice to the Contractor to omit from the work any contract item that does not meet the definition of major contract item. 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 Section 90, Paragraph 90-04, *Payment for Omitted Items*. See Supplemental General Conditions, Section 40-03.~~

**40-04** **Extra Work.** ~~Should acceptable completion of the contract require the Contractor to perform an item of work not provided for in the awarded contract as previously modified by change order or supplemental agreement, Owner may issue a Change Order to cover the necessary extra work. Change orders for 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 RPR's opinion, is necessary for completion of the extra work.~~

~~When determined by the RPR to be in the Owner's best interest, the RPR may order the Contractor to proceed with extra work as provided in Section 90, Paragraph 90-05, *Payment for Extra Work*. 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 defined in Section 10, Paragraph 10-59, *Supplemental Agreement*.~~

~~If extra work is essential to maintaining the project critical path, RPR may order the Contractor to commence the extra work under a Time and Material contract method. Once sufficient detail is available to establish the level of effort necessary for the extra work, the Owner shall initiate a change order or supplemental agreement to cover the extra work.~~

~~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. See Supplemental General Conditions, Section 40-04.~~

**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. The Contractor shall maintain traffic in the manner detailed in the project plans and specifications..

**A.** It is understood and agreed that the Contractor shall provide for the free and unobstructed movement of aircraft in the air operations areas (AOAs) of the Airport with respect to their own operations and the operations of all subcontractors as specified in Section 80, Paragraph 80-04, *Limitation of Operations*. 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 Section 70, Paragraph 70-15, *Contractor's Responsibility for Utility Service and Facilities of Others*.

**B.** With respect to their own operations and the operations of all 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 in accordance with plan and specification requirements.

**C.** When the contract requires the maintenance of 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 the road, street, or highway open to all traffic and shall provide maintenance as may be required to accommodate traffic. The Contractor, at their expense, shall be responsible for the repair to equal or better than preconstruction conditions of any damage caused by the Contractor's equipment and personnel. The Contractor shall furnish, erect, and maintain barricades, warning signs, flag person, and other traffic control devices in reasonable conformity with the Manual on Uniform Traffic Control Devices (MUTCD) (<http://mutcd.fhwa.dot.gov/>), unless otherwise specified. 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.

#### 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 Resident Project Representative (RPR) shall be notified prior to disturbing such structure. The disposition of existing structures so encountered shall be immediately determined by the RPR in accordance with the provisions of the contract.~~

~~Except as provided in Section 40, Paragraph 40-07, *Rights in and Use of Materials Found in the Work*, 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 used in the work~~

~~as otherwise provided for in the contract and shall remain the property of the Owner when so used in the work. See Supplemental General Conditions, Section 40-06.~~

**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 embankment, the Contractor may at their own option either:~~

~~**A.** Use such material in another contract item, providing such use is approved by the RPR 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 RPR; or,~~

~~**C.** Use such material for the Contractor's 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., the Contractor shall request the RPR's approval in advance of such use.~~

~~Should the RPR 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 their 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 use of such material used in the work or removed from the site.~~

~~Should the RPR approve the Contractor's exercise of option A., the Contractor shall be paid, at the applicable contract price, for furnishing and installing such material in accordance with requirements of the contract item in which the material is used.~~

~~It is understood and agreed that the Contractor shall make no claim for delays by reason of their own 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. See Supplemental General Conditions, Section 40-07.~~

**40-08**

**Final Cleanup.** 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. The Contractor 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 the property Owner.

**END OF SECTION 40**

## Section 50

### CONTROL OF WORK

**50-01 Authority of the Resident Project Representative (RPR).** ~~The RPR has final authority regarding the interpretation of project specification requirements. The RPR shall determine acceptability of the quality of materials furnished, method of performance of work performed, and the manner and rate of performance of the work. The RPR does not have the authority to accept work that does not conform to specification requirements. See Supplemental General Conditions, Section 50-01.~~

**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 RPR 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 their opinion, result in a finished product having a level of safety, economy, durability, and workmanship acceptable to the Owner, the RPR will advise the Owner of their determination that the affected work be accepted and remain in place. The RPR will document the 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. Changes in the contract price must be covered by contract change order or supplemental agreement as applicable.~~

~~If the RPR 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 RPR's written orders.~~

~~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 RPR's responsibility to insist on strict compliance with the requirements of the contract, plans, and specifications during the Contractor's execution of the work, when, in the RPR's opinion, such compliance is essential to provide an acceptable finished portion of the work.~~

The term "reasonably close conformity" is also intended to provide the RPR with the authority, after consultation with the Sponsor and FAA, to use sound engineering judgment in their determinations to accept work that is not in strict conformity but will provide a finished product equal to or better than that required by the requirements of the contract, plans and specifications.

The RPR will not be responsible for the Contractor's means, methods, techniques, sequences, or procedures of construction or the safety precautions incident thereto. See Supplemental General Conditions, Section 50-02.

**50-03**      **Coordination of Contract, Plans, and Specifications.** The contract, plans, specifications, and all referenced standards cited are essential parts of the contract requirements. If electronic files are provided and used on the project and there is a conflict between the electronic files and hard copy plans, the hard copy plans shall govern. A requirement occurring in one is as binding as though occurring in all. They are intended to be complementary and to describe and provide 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 advisory circulars (ACs); contract general provisions shall govern over plans, cited standards for materials or testing, and cited ACs; plans shall govern over cited standards for materials or testing and cited ACs. If any paragraphs contained in the Special Provisions conflict with General Provisions or Technical Specifications, the Special Provisions shall govern.

From time to time, discrepancies within cited testing standards occur due to the timing of the change, edits, and/or replacement of the standards. If the Contractor discovers any apparent discrepancy within standard test methods, the Contractor shall immediately ask the RPR for an interpretation and decision, and such decision shall be final.

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, Contractor shall immediately notify the Owner or the designated representative in writing requesting their written interpretation and decision. See Supplemental General Conditions, Section 50-03.

**50-04**      **List of Special Provisions.** For Special Provisions applicable for this project, see 'Project Special Provisions' section of these specifications.

**50-05**      **Cooperation of Contractor.** The Contractor shall be supplied with five hard copies or an electronic PDF of the plans and specifications.

~~The Contractor shall have available on the construction site at all times one hardcopy each of the plans and specifications. Additional hard copies of plans and specifications may be obtained by the Contractor for the cost of reproduction.~~

~~The Contractor shall give constant attention to the work to facilitate the progress thereof and shall cooperate with the RPR and their inspectors and with other Contractors in every way possible. The Contractor shall have a competent superintendent on the work at all times who is fully authorized as their 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 RPR or their authorized representative. See Supplemental General Conditions, Section 50-05.~~

**50-06 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 the work 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 their own contract and shall protect and hold harmless the Owner from any and all damages or claims that may arise because of inconvenience, delays, or loss experienced because of the presence and operations of other Contractors working within the limits of the same project.

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

**50-07 Construction Layout and Stakes.** ~~The ENGINEER/RPR shall establish necessary horizontal and vertical control. The establishment of Survey Control and/or reestablishment of survey control shall be by a State Licensed Land Surveyor. Contractor is responsible for preserving integrity of horizontal and vertical controls established by ENGINEER/RPR. In case of negligence on the part of the Contractor or their employees, resulting in the destruction of any horizontal and vertical control, the resulting costs will be deducted as a liquidated damage against the Contractor.~~

~~Prior to the start of construction, the Contractor will check all control points~~

~~for horizontal and vertical accuracy and certify in writing to the RPR that the Contractor concurs with survey control established for the project. All lines, grades, and measurements from control points necessary for the proper execution and control of the work on this project will be provided to the RPR. The Contractor is responsible to establish all layout required for the construction of the project.~~

~~Copies of survey notes will be provided to the RPR for each area of construction and for each placement of material as specified to allow the RPR to make periodic checks for conformance with plan grades, alignments and grade tolerances required by the applicable material specifications. Surveys will be provided to the RPR prior to commencing work items that cover or disturb the survey staking. Survey(s) and notes shall be provided in the following format(s):~~

~~Laser, GPS, String line, or other automatic control shall be checked with temporary control as necessary. In the case of error, on the part of the Contractor, their surveyor, employees or subcontractors, resulting in established grades, alignment or grade tolerances that do not concur with those specified or shown on the plans, the Contractor is solely responsible for correction, removal, replacement and all associated costs at no additional cost to the Owner.~~

~~No direct payment will be made, unless otherwise specified in contract documents, for this labor, materials, or other expenses. The cost shall be included in the price of the bid for the various items of the Contract. See Supplemental General Conditions, Section 50-07.~~

**50-08 Authority and Duties of Quality Assurance (QA) Inspectors.** QA inspectors shall be authorized to inspect all work done and all material furnished. Such QA inspection may extend to all or any part of the work and to the preparation, fabrication, or manufacture of the materials to be used. QA inspectors are not authorized to revoke, alter, or waive any provision of the contract. QA inspectors are not authorized to issue instructions contrary to the plans and specifications or to act as foreman for the Contractor.

QA Inspectors are authorized to notify the Contractor or their 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 ENGINEER for a decision.

**50-09 Inspection of the Work.** ~~All materials and each part or detail of the work shall be subject to inspection. The RPR 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 RPR 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.~~

~~Provide advance written notice to the RPR of work the Contractor plans to perform each week and each day. Any work done or materials used without written notice and allowing opportunity for inspection by the RPR may be ordered removed and replaced at the Contractor's expense.~~

~~Should the contract work include relocation, adjustment, or any other modification to existing facilities, not the property of the (contract) Owner, authorized 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. See Supplemental General Conditions, Section 50-09.~~

#### **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 RPR as provided in Paragraph 50-02, *Conformity with Plans and Specifications*.~~

~~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 Section 70, Paragraph 70-14, *Contractor's Responsibility for Work*.~~

~~No removal work made under provision of this paragraph shall be done without lines and grades having been established by the RPR. Work done contrary to the instructions of the RPR, work done beyond the lines shown on the plans or as established by the RPR, except as herein specified, or any extra work done without authority, will be considered as unauthorized and will not be paid for under the provisions of the contract. Work so done may be ordered removed or replaced at the Contractor's expense.~~

~~Upon failure on the part of the Contractor to comply with any order of the RPR made under the provisions of this subsection, the RPR will have authority to cause unacceptable work to be remedied or removed and replaced; and unauthorized work to be removed and recover the resulting costs as a liquidated damage against the Contractor. See Supplemental General Conditions, Section 50-10.~~

- 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, at their own expense, shall be responsible for the repair to equal or better than preconstruction conditions of any damage caused by the Contractor's equipment and personnel.

- 50-12 Maintenance During Construction.** The Contractor shall maintain the work during construction and until the work is accepted. 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 Paragraph 50-12, *Maintenance During Construction*, the RPR shall immediately notify the Contractor of such noncompliance. 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 RPR's notification, the Owner 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 recovered as a liquidated damage against the Contractor. See Supplemental General Conditions, Section 50-13.

**50-14 Partial Acceptance.** If at any time during the execution of the project the Contractor substantially completes a usable unit or portion of the work, the occupancy of which will benefit the Owner, the Contractor may request the RPR to make final inspection of that unit. If the RPR finds upon inspection that the unit has been satisfactorily completed in compliance with the contract, the RPR may accept it as being complete, 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. See Supplemental General Conditions, Section 50-14.

**50-15 Final Acceptance.** Upon due notice from the Contractor of presumptive completion of the entire project, the RPR and Owner will conduct an inspection. If all construction provided for and contemplated by the contract is found to be complete in accordance with the contract, plans, and specifications, such inspection shall constitute the final inspection. The RPR 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 RPR will notify the Contractor and the Contractor shall correct the unsatisfactory work. 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 RPR will make the final acceptance and notify the Contractor in writing of this acceptance as of the date of final inspection. See Supplemental General Conditions, Section 50-15.

**50-16 Claims for Adjustment and Disputes.** If for any reason the Contractor deems that additional compensation is due for work or materials not clearly provided for in the contract, plans, or specifications or previously authorized as extra work, the Contractor shall notify the RPR in writing of their intention to claim such additional compensation before the Contractor begins the work on which the Contractor bases the claim. If such notification is not given or the RPR 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 RPR 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 a written claim to the RPR 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. See Supplemental General Conditions, Section 50-16.~~

**END OF SECTION 50**

## SECTION 60

### CONTROL OF MATERIALS

**60-01** **Source of Supply and Quality Requirements.** ~~The materials used in 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 documentation to the RPR as to the origin, composition, and manufacture of all materials to be used in the work. Documentation shall be furnished promptly after execution of the contract but, in all cases, prior to delivery of such materials.~~

~~At the RPR's option, materials may be approved at the source of supply before delivery. 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.~~

~~The Contractor shall furnish Airport lighting equipment that meets the requirements of the specifications; and is listed in AC 150/5345-53, *Airport Lighting Equipment Certification Program and Addendum*, that is in effect on the date of advertisement. See Supplemental General Conditions, Section 60-01.~~

**60-02** **Samples, Tests, and Cited Specifications.** ~~All materials used in the work shall be inspected, tested, and approved by the RPR before incorporation in the work unless otherwise designated. Any work in which untested materials are used without approval or written permission of the RPR 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 RPR, shall be removed at the Contractor's expense.~~

~~Unless otherwise designated, quality assurance tests will be made by and at the expense of the Owner in accordance with the cited standard methods of ASTM, American Association of State Highway and Transportation Officials (AASHTO), federal specifications, Commercial Item Descriptions, and all other cited methods, which are current on the date of advertisement for bids.~~

~~The testing organizations performing on site quality assurance field tests shall have copies of all referenced standards on the construction site for use by all technicians and other personnel. Unless otherwise designated, samples for quality assurance will be taken by a qualified representative of the RPR. 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 their request after review and approval of the RPR.~~

~~A copy of all Contractor QC test data shall be provided to the RPR 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 RPR showing all test data reports, plus an analysis of all results showing ranges, averages, and corrective action taken on all failing tests.~~

~~The Contractor shall employ a Quality Control (QC) testing organization to perform all Contractor required QC tests in accordance with Item C-100 Contractor Quality Control Program (CQCP). See Supplemental General Conditions, Section 60-02.~~

**60-03**

~~**Certification of Compliance/Analysis (COC/COA).** The RPR may permit the use, prior to sampling and testing, of certain materials or assemblies when accompanied by Manufacturer's COC 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. The COA is the Manufacturer's COC and includes all applicable test results.~~

~~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 RPR.~~

~~When a material or assembly is specified by "brand name or equal" and the Contractor elects to furnish the specified "or equal," 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:~~

~~**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.~~

~~The RPR shall be the sole judge as to whether the proposed "or equal" is suitable for use in the work.~~

~~The RPR reserves the right to refuse permission for use of materials or assemblies on the basis of certificates of compliance. See Supplemental General Conditions, Section 60-03.~~

**60-04** ~~**Plant Inspection.** The RPR or their 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 acceptance of the material or assembly.~~

~~Should the RPR conduct plant inspections, the following conditions shall exist:~~

~~**A.** The RPR shall have the cooperation and assistance of the Contractor and the producer with whom the Contractor has contracted for materials.~~

~~**B.** The RPR 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 RPR, the Contractor shall arrange for adequate office or working space that may be reasonably needed for conducting plant inspections. Place office or working space in a convenient location with respect to the plant.~~

~~It is understood and agreed that the Owner shall have the right to retest any material that has been tested and approved at the source of supply after it has been delivered to the site. The RPR shall have the right to reject only material which, when retested, does not meet the requirements of the contract, plans, or specifications. See Supplemental General Conditions, Section 60-04.~~

**60-05** ~~**Engineer/ Resident Project Representative (RPR) Field Office.** An ENGINEER/RPR field office is not required.~~

**60-06** ~~**Storage of Materials.** Materials shall be stored 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 to facilitate their prompt inspection. The Contractor shall coordinate the storage of all materials with the RPR. 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 and/or CSPP, the storage of materials and the location of the Contractor's plant and parked equipment or vehicles shall be as directed by the RPR. 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 RPR 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 their expense, except as otherwise agreed to (in writing) by the Owner or lessee of the property. See Supplemental General Conditions, Section 60-06.~~

**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 RPR.~~

~~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 RPR has approved its use in the work. See Supplemental General Conditions, Section 60-07.~~

**60-08** **Owner Furnished Materials.** The Contractor shall furnish all materials required to complete the work, except those specified, if any, to be furnished by the Owner. Owner-furnished materials shall be made available to the Contractor at the location specified.

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 that 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.

**END OF SECTION 60**

## SECTION 70

### LEGAL REGULATIONS AND RESPONSIBILITY TO THE 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. The Contractor 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 their 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 the Contractor or the Contractor's employees.
- 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 execution 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, the Contractor shall provide for such use by suitable legal agreement with the Patentee or Owner. The Contractor and the surety shall indemnify and hold 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 execution 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) must be shown on the plans and is indicated as follows:~~
- ~~Except as listed above, 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 RPR.~~

~~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 to facilitate such construction, reconstruction or maintenance by others whether or not such work by others is listed above. When ordered as extra work by the RPR, 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. See Supplemental General Conditions, Section 70-04.~~

**70-05 Federal Participation.** ~~The United States Government has agreed to reimburse the Owner for some portion of the contract costs. The contract work is subject to the inspection and approval of duly authorized representatives of the FAA Administrator. No requirement of this contract shall be construed as making the United States a party to the contract nor will any such requirement interfere, in any way, with the rights of either party to the contract. See Supplemental General Conditions, Section 70-05.~~

**70-06 Sanitary, Health, and Safety Provisions.** The Contractor's worksite and facilities shall comply with applicable federal, state, and local requirements for health, safety and sanitary provisions.

**70-07 Public Convenience and Safety.** ~~The Contractor shall control their operations and those of their 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 their own operations and those of their own subcontractors and all suppliers in accordance with Section 40, Paragraph 40-05, *Maintenance of Traffic*, and shall limit such operations for the convenience and safety of the traveling public as specified in Section 80, Paragraph 80-04, *Limitation of Operations*.~~

~~The Contractor shall remove or control debris and rubbish resulting from its work operations at frequent intervals, and upon the order of the RPR. If the RPR determines the existence of Contractor debris in the work site represents a hazard to Airport operations and the Contractor is unable to respond in a prompt and reasonable manner, the RPR reserves the right to assign the task of debris removal to a third party and recover the resulting costs as a liquidated damage against the Contractor. See Supplemental General Conditions, Section 70-07.~~

**70-08 Construction Safety and Phasing.** The Contractor shall complete the work in accordance with AC 150/5370-2G, Operational Safety on Airports During Construction.

**70-09 Use of Explosives.** The use of explosives is not permitted on this project.

**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 ENGINEER/RPR 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 execution of the work, resulting from any act, omission, neglect, or misconduct in manner or method of executing the work, or at any time due to defective work or materials, and said responsibility shall not be released until the project has 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, the Contractor shall restore, at their 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 the Contractor shall make good such damage or injury in an acceptable manner. See Supplemental General Conditions, Section 70-10.~~

**70-11 Responsibility for Damage Claims.** ~~The Contractor shall indemnify and hold harmless the ENGINEER/RPR and the Owner and their officers, agents, 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 their own contract considered necessary by the Owner for such purpose may be retained for the use of the Owner or, in case no money is due, their own surety may be held until such suits, actions, or claims for injuries or damages 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 or she is adequately protected by public liability and property damage insurance. See Supplemental General Conditions, Section 70-11.~~

**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 for 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.** ~~If it is 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 must be specified below and indicated on the approved Construction Safety and Phasing Plan (CSPP) and the project plans. When so specified, the Contractor shall complete such portions of the work on or before the date specified or as otherwise specified.~~

~~Upon completion of any portion of work listed above, such portion shall be accepted by the Owner in accordance with Section 50, Paragraph 50-14, *Partial Acceptance*.~~

~~No portion of the work may be opened by the Contractor until directed by the Owner in writing. Should it become necessary to open a portion of the work to traffic on a temporary or intermittent basis, such openings shall be made when, in the opinion of the RPR, 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 their expense.~~

~~The Contractor shall make their 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.~~

~~The Contractor must conform to safety standards contained AG 150/5370-2G and the approved CSPP.~~

~~Contractor shall refer to the plans, specifications, and the approved CSPP to identify barricade requirements, temporary and/or permanent markings, airfield lighting, guidance signs and other safety requirements prior to~~

~~opening up sections of work to traffic. See Supplemental General Conditions, Section 70-13.~~

**70-14 Contractor's Responsibility for Work.** ~~Until the RPR's final written acceptance of the entire completed work, excepting only those portions of the work accepted in accordance with Section 50, Paragraph 50-14, *Partial Acceptance*, 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.~~

~~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 their own 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, seeding, and sodding furnished under the contract, and shall take adequate precautions to protect new tree growth and other important vegetative growth against injury. See Supplemental General Conditions, Section 70-14.~~

**70-15 Contractor's Responsibility for Utility Service and Facilities of Others.** ~~As provided in Paragraph 70-04, *Restoration of Surfaces Disturbed by Others*, 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 their operations to prevent the unscheduled interruption of such utility services and facilities.~~

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

~~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 the 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 their plan of operations. Such notification shall be in writing addressed to "The Person to Contact" as provided in this paragraph and Paragraph 70-04, *Restoration of Surfaces Disturbed By Others*. A copy of each notification shall be given to the RPR.~~

~~In addition to the general written notification provided, it shall be the responsibility of the Contractor to keep such individual Owners advised of changes in their plan of operations that would affect such Owners.~~

~~Prior to beginning the work in the general vicinity of an existing utility service or facility, the Contractor shall again notify each such Owner of their 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 RPR.~~

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

~~Where the outside limits of an underground utility service have been located and staked on the ground, the Contractor shall be required to use hand excavation methods 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.~~

~~Should the Contractor damage or interrupt the operation of a utility service or facility by accident or otherwise, the Contractor shall immediately notify the proper authority and the RPR 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 RPR 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 their operations whether 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 their own surety. See Supplemental General Conditions, Section 70-15.~~

**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 execution 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 provide notice to the FAA Air Traffic Organization (ATO)/Technical Operations/System Support Center (SSC) Point-of-Contact through the Airport Manager a minimum of 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 execution of the project work requires a facility outage, the Contractor shall contact the FAA Point-of-Contact a minimum of 72 hours prior to the time of the required outage.

**D.** Any damage to FAA cables, access roads, or FAA facilities during construction caused by the Contractor's equipment or personnel whether by negligence or accident will require the Contractor to repair or replace the damaged cables, access road, or FAA facilities to FAA requirements. The Contractor shall not bear the cost to repair damage to underground facilities or utilities improperly located by the FAA.

**E.** If the project work requires the cutting or splicing of FAA owned cables, the FAA Point-of-Contact shall be contacted a minimum of 72 hours prior to the time the cable work commences. The FAA reserves the right to have a FAA 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 specifications and require approval by the FAA Point-of-Contact as a condition of acceptance by the Owner. The Contractor is hereby advised that FAA restricts the location of where splices may be installed. If a cable splice is required in a location that is not permitted by FAA, 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 by this contract, there shall be no liability upon the ENGINEER, RPR, their 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. See Supplemental General Conditions, Section 70-17.~~

**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 their surety, or both, such overpayment as may be sustained, or by failure on the part of the Contractor to fulfill their 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.

**70-19**      **Environmental Protection.** The Contractor shall comply with all federal, state, and local laws and regulations controlling pollution of the environment. The Contractor shall take necessary precautions to prevent pollution of streams, lakes, ponds, and reservoirs with fuels, oils, asphalts, 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 their operations, any building, part of a building, structure, or object that is incongruous with its surroundings, the Contractor shall immediately cease operations in that location and notify the RPR. The RPR will immediately investigate the Contractor's finding and~~

~~the Owner will direct the Contractor to either resume operations or to suspend operations as directed.~~

~~Should the Owner 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 change order or supplemental agreement as provided in Section 40, Paragraph 40-04, *Extra Work*, and Section 90, Paragraph 90-05, *Payment for Extra Work*. If appropriate, the contract change order or supplemental agreement shall include an extension of contract time in accordance with Section 80, Paragraph 80-07, *Determination and Extension of Contract Time*. See Supplemental General Conditions, Section 70-20.~~

**70-21 Insurance Requirements.** See Invitation to Bid / Instructions to Bidders, Instructions for Providers, Item 28 for Insurance Requirements.

**END OF SECTION 70**

## SECTION 80

### EXECUTION 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 Resident Project Representative (RPR).~~

~~The Contractor shall perform, with his organization, an amount of work equal to at least 25 percent of the total contract cost.~~

~~Should the Contractor elect to assign their 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.~~

~~**The Contractor shall provide copies of all subcontracts to the RPR 14 days prior to being utilized on the project. As a minimum, the information shall include the following:**~~

- ~~• Subcontractor's legal company name.~~
- ~~• Subcontractor's legal company address, including County name.~~
- ~~• Principal contact person's name, telephone and fax number.~~
- ~~• Complete narrative description, and dollar value of the work to be performed by the subcontractor.~~
- ~~• Copies of required insurance certificates in accordance with the specifications~~
- ~~• Minority/ non minority status.~~

~~See Supplemental General Conditions, Section 80-01~~

**80-02 Notice to Proceed (NTP).** ~~The Owner's notice to proceed will state the date on which contract time commences. The Contractor is expected to commence project operations within 10 days of the NTP date. The Contractor shall notify the RPR at least 24 hours in advance of the time contract operations begins. The Contractor shall not commence any actual operations prior to the date on which the notice to proceed is issued by the Owner. See Supplemental General Conditions, Section 80-02~~

80-03

**Execution and Progress.** Unless otherwise specified, the Contractor shall submit their coordinated construction schedule showing all work activities for the RPR's review and acceptance at least 10 days prior to the start of work. The Contractor's progress schedule, once accepted by the RPR, will represent the Contractor's baseline plan to accomplish the project in accordance with the terms and conditions of the Contract. The RPR will compare actual Contractor progress against the baseline schedule to determine that status of the Contractor's performance. The Contractor shall provide sufficient materials, equipment, and labor to guarantee the completion of the project in accordance with the plans and specifications within the time set forth in the proposal.

If the Contractor falls significantly behind the submitted schedule, the Contractor shall, upon the RPR's request, submit a revised schedule for completion of the work within the contract time and modify their operations to provide such additional materials, equipment, and labor necessary to meet the revised schedule. Should the execution of the work be discontinued for any reason, the Contractor shall notify the RPR at least 24 hours in advance of resuming operations.

The Contractor shall not commence any actual construction prior to the date on which the NTP is issued by the Owner.

The project schedule shall be prepared as a network diagram in Critical Path Method (CPM), Program Evaluation and Review Technique (PERT), or another format, or as otherwise specified. It shall include information on the sequence of work activities, milestone dates, and activity duration. The schedule shall show all work items identified in the project proposal for each work area and shall include the project start date and end date.

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. See Supplemental General Conditions, Section 80-03.

80-04

**Limitation of Operations.** The Contractor shall control their operations and the operations of their subcontractors and all suppliers to provide for the free and unobstructed movement of aircraft in the air operations areas (AOA) of the Airport.

When the work requires the Contractor to conduct their operations within an AOA of the Airport, the work shall be coordinated with Airport operations (through the RPR) at least 48 hours prior to commencement of such work. The Contractor shall not close an AOA until so authorized by the RPR and

~~until the necessary temporary marking, signage and associated lighting is in place as provided in Section 70, Paragraph 70-08, *Construction Safety and Phasing Plan (CSPP)*.~~

~~When the contract work requires the Contractor to work within an AOA of the Airport on an intermittent basis (intermittent opening and closing of the AOA), the Contractor shall maintain constant communications as specified; immediately obey all instructions to vacate the AOA; and immediately obey all instructions to resume work in such AOA. Failure to maintain the specified communications or to obey instructions shall be cause for suspension of the Contractor's operations in the AOA until satisfactory conditions are provided. The areas of the AOA identified in the Construction Safety Phasing Plan (CSPP) and as listed below, 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 as follows:~~

~~The Contractor shall be required to conform to safety standards contained in AC 150/5370-2G, Operational Safety on Airports During Construction and the approved CSPP. See Supplemental General Conditions, Section 80-04.~~

**80-04.1**      **Operational Safety on Airport During Construction.** All Contractors' operations shall be conducted in accordance with the approved project plans, specifications, and the provisions set forth within the current version of AC 150/5370-2G, Operational Safety on Airports During Construction.

The Contractor shall implement all necessary safety plan measures prior to commencement of any work activity. The Contractor shall conduct routine checks 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 approved project plans, specifications, and the provisions set forth within the current version of AC 150/5370-2G, Operational Safety on Airports During Construction and that they implement and maintain all necessary measures.

**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 or operational safety requirements and, in the opinion of the RPR, does not perform his work in a proper and skillful manner or is intemperate or disorderly shall, at the written request of the RPR, be removed immediately by the Contractor or subcontractor employing such person, and shall not be employed again in any portion of the work without approval of the RPR.~~

~~Should the Contractor fail to remove such person or persons or fail to furnish suitable and sufficient personnel for the proper execution of the work, the RPR 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 not cause injury to previously completed work, adjacent property, or existing Airport facilities due to its use.~~

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

~~When the contract specifies the use of certain methods and equipment, such methods and equipment shall be used unless otherwise authorized by the RPR. If the Contractor desires to use a method or type of equipment other than specified in the contract, the Contractor may request authority from the RPR 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 RPR 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 RPR 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 Paragraph. See Supplemental General Conditions, Section 80-05.~~

80-06

**Temporary Suspension of the Work.** The Owner shall have the authority to suspend the work wholly, or in part, for such period or periods the Owner may deem necessary, due to unsuitable weather, or other conditions considered unfavorable for the execution of the work, or for such time necessary due to the failure on the part of the Contractor to carry out orders given or perform any or all provisions of the contract.

In the event that the Contractor is ordered by the Owner, 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 written order to suspend work to the effective date of the written order to resume the work. Claims for such compensation shall be filed with the RPR within the time period stated in the RPR's order to resume work. The Contractor shall submit with their own claim information substantiating the amount shown on the claim. The RPR 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 or for any other delay provided for in the contract, plans, or specifications.

If it becomes 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. The Contractor 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. See Supplemental General Conditions, Section 80-06.

80-07

**Determination and Extension of Contract Time.** The number of calendar days shall be stated in the proposal and contract and shall be known as the Contract Time.

If the contract time requires extension for reasons beyond the Contractor's control, it shall be adjusted as specified in Section 80-07.1.

80-07.1

**Contract Time Based on Calendar Days.** 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 non-workdays. All calendar days elapsing between the effective dates of the Owner'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 proposal. 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 their own control to complete the work within the contract time as specified, or as extended in accordance with the provisions of this paragraph, the Contractor may, at any time prior to the expiration of the contract time as extended, make a written request to the Owner for an extension of time setting forth the reasons which the Contractor believes will justify the granting of their own request. Requests for extension of time, caused by inclement weather, shall be supported with National Weather Bureau data showing the actual amount of inclement weather exceeded what 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 supporting documentation justify the work was delayed because of conditions beyond the control and without the fault of the Contractor, the Owner may extend the time for completion by a change order that adjusts the contract time or completion date. The extended time for completion shall then be in full force and effect, the same as though it were the original time for completion.

**80-08**

**Failure to Complete on Time.** For each calendar day as specified in the contract, that any work remains uncompleted after the contract time (including all extensions and adjustments as provided in Paragraph 80-07, *Determination and Extension of Contract Time*) the sum specified in the contract and proposal as liquidated damages (LD) will be deducted from any money due or to become due the Contractor or their own surety. Such deducted sums shall not be deducted as a penalty but shall be considered as liquidation of a reasonable portion of damages including but not limited to additional engineering services that will be incurred by the Owner should the Contractor fail to complete the work in the time provided in their contract. See the Contract Time and liquidated damages for the project as specified in Table 1 below.

**TABLE 1 - CONTRACT TIME AND LIQUIDATED DAMAGES**

<b>Allison Hangar Apron and Taxilane Paving</b>			
<b>Work Phase</b>	<b>Contract Time</b>	<b>Allowable Hours of Operations</b>	<b>Liquidated Damages</b>
Allison Hangar Apron and Taxilane Paving	30 Calendar Days	24 Hours per Day	\$1,500 per Calendar Day
Removal of Erosion Control Items <sup>1</sup>	1 Calendar Days	24 Hours per Day	\$1,500 per Calendar Day

Notes:

1. "Removal of Erosion Control Items". The removal of erosion control items shall be scheduled after the site is stabilized with permanent grass. The Contractor shall periodically inspect the site until it is stabilized and notify the Engineer for a review. The contract time shown is not included in the Total Contract Time shown for the Allison Hangar Apron and Taxilane Paving.

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 wavier on the part of the Owner of any of its rights under the contract.

**80-09**      **Default and Termination of Contract.** ~~The Contractor shall be considered in default of their 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 and/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 execution 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 the Contractor 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 Owner consider the Contractor in default of the contract for any reason above, the Owner 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 10 days after such notice, does not proceed in accordance therewith, then the Owner will, upon written notification from the RPR 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 execution 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 RPR 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. See Supplemental General Conditions, Section 80-09.~~

## **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 execution 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 RPR.~~

~~Termination of the contract or a portion thereof shall neither relieve the Contractor of their responsibilities for the completed work nor shall it relieve their surety of its obligation for and concerning any just claim arising out of the work performed. See Supplemental General Conditions, Section 80-10.~~

**80-11**

**Work Area, Storage Area and Sequence of Operations.** ~~The Contractor shall obtain approval from the RPR 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 work in accordance with the approved CSPP and SPCD. See Supplemental General Conditions, Section 80-11.~~

**END OF SECTION 80**

## SECTION 90

### MEASUREMENT AND PAYMENT

**90-01 Measurement of Quantities.** ~~All work completed under the contract will be measured by the RPR, or their authorized representatives, using United States Customary Units of Measurement.~~

~~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. Unless otherwise specified, transverse measurements for area computations will be the neat dimensions shown on the plans or ordered in writing by the RPR.~~

~~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.~~

~~The term "lump sum" when used as an item of payment will mean complete payment for the work described in the contract. When a complete structure or structural unit (in effect, "lump sum" work) is specified as the unit of measurement, the unit will be construed to include all necessary fittings and accessories.~~

~~When requested by the Contractor and approved by the RPR 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 RPR and shall be agreed to by the Contractor before such method of measurement of pay quantities is used.~~

~~In computing volumes of excavation, the average end area method will be used unless otherwise specified.~~

~~The term "ton" will mean the short ton consisting of 2,000 pounds avoirdupois. All materials that are measured or proportioned by weights shall be weighed on accurate, independently certified scales by competent, qualified personnel at locations designated by the RPR. If material is shipped by rail, the car weight may be accepted provided that only the~~

~~actual weight of material is paid for. However, car weights will not be acceptable for material to be passed through mixing plants. Trucks used to haul material being paid for by weight shall be weighed empty daily at such times as the RPR directs, and each truck shall bear a plainly legible identification mark.~~

~~Materials to be measured by volume in the hauling vehicle shall be hauled in approved vehicles and measured therein at the point of delivery. Vehicles for this purpose may be of any size or type acceptable for the materials hauled, 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.~~

~~Asphalt materials will be measured by the gallon or ton. When measured by volume, such volumes will be measured at 60°F or will be corrected to the volume at 60°F using ASTM D1250 for asphalts. 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 asphalt material has been lost from the car or the distributor, wasted, or otherwise not incorporated in the work. When asphalt materials are shipped by truck or transport, net certified weights by volume, subject to correction for loss or foaming, will be used for computing quantities.~~

~~Cement will be measured by the ton or hundredweight.~~

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

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

~~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 inch.~~

~~When standard manufactured items are specified such as fence, wire, plates, rolled shapes, pipe conduit, etc., and these items are identified by gauge, 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 must be tested for accuracy and serviced before use. 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. Platform scales shall be installed and maintained with the platform level and rigid bulkheads at each end.~~

~~Scales shall be accurate within 0.5% of the correct weight throughout the range of use. The Contractor shall have the scales checked under the observation of the RPR 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 0.1% of the nominal rated capacity of the scale, but not less than one pound. The use of spring balances will not be permitted.~~

~~In the event inspection reveals the scales have been "overweighing" (indicating more than correct weight) they will be immediately adjusted. All materials received subsequent to the last previous correct weighting accuracy test will be reduced by the percentage of error in excess of 0.5%.~~

~~In the event inspection reveals the scales have been under weighing (indicating less than correct weight), they shall be immediately adjusted. No additional payment to the Contractor will be allowed for materials previously weighed and recorded.~~

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

~~Scale installations shall have available ten standard 50 pound weights for testing the weighing equipment or suitable weights and devices for other approved equipment.~~

~~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.~~

~~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 in connection with extra work will be measured as agreed in the change order or supplemental agreement authorizing such work as provided in Paragraph 90-05 Payment for Extra Work.~~

~~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 RPR. 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. See Supplemental General Conditions, Section 90-01.~~

**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 execution thereof, subject to the provisions of Section 70, Paragraph 70-18, *No Waiver of Legal Rights*.

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

**90-03**      **Compensation for Altered Quantities.** When the accepted quantities of work vary from the quantities in the proposal, the Contractor shall accept as payment in full, so far as contract items are concerned, payment at the original contract price for the accepted quantities of work actually completed and accepted. No allowance, except as provided for in Section 40, Paragraph 40-02, *Alteration of Work and Quantities*, 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 their own unbalanced allocation of overhead and profit among the contract items, or from any other cause.

**90-04**      **Payment for Omitted Items.** ~~As specified in Section 40, Paragraph 40-03, *Omitted Items*, the RPR 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 RPR 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 RPR'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 RPR's order will be paid for at the actual cost to the Contractor and shall thereupon become the property of the Owner.~~

~~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 RPR'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 the amount of such costs. See Supplemental General Conditions, Section 90-04.~~

**90-05**      **Payment for Extra Work.** Extra work, performed in accordance with Section 40, Paragraph 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.

**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 RPR, 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 Paragraph 90-07, *Payment for Materials on Hand*. No partial payment will be made when the amount due to the Contractor since the last estimate amounts to less than five hundred dollars.~~

~~[Retainage will not be withheld on this project. No retainage will be withheld by the Owner from progress payments due the prime Contractor. Retainage by the prime or subcontractors is prohibited, and no retainage will be held by the prime from progress due subcontractors.~~

~~The Contractor is required to pay all subcontractors for satisfactory performance of their contracts no later than 30 days after the Contractor has received a partial payment. A subcontractor's work is satisfactorily completed when all the tasks called for in the subcontract have been accomplished and documented as required by the Owner. When the Owner has made an incremental acceptance of a portion of a prime contract, the work of a subcontractor covered by that acceptance is deemed to be satisfactorily completed.~~

~~When at least 95% of the project work has been completed to the satisfaction of the RPR, the RPR shall, at the Owner's discretion and with the consent of the surety, prepare estimates of both the contract value and the cost of the remaining work to be done.~~

~~[No retainage will be held by the Owner from progress payments due the prime.~~

~~The Contractor is required to pay all subcontractors for satisfactory performance of their contracts no later than 30 days after the Contractor has received a partial payment. Contractor must provide the Owner evidence of prompt and full payment of retainage held by the prime Contractor to the subcontractor within 30 days after the subcontractor's work is satisfactorily completed. A subcontractor's work is satisfactorily completed when all the tasks called for in the subcontract have been accomplished and documented as required by the Owner. When the Owner has made an incremental acceptance of a portion of a prime contract, the work of a subcontractor covered by that acceptance is deemed to be satisfactorily completed.~~

~~When at least 95% of the project work has been completed to the satisfaction of the RPR, the RPR shall, at the Owner's discretion and with the consent of the surety, prepare estimates of both the contract value and the cost of the remaining work to be done.]~~

~~[From the total of the amount determined to be payable on a partial payment, [ insert amount of retainage, not to exceed 10% ] percent of such total amount will be deducted and retained by the Owner for protection of the Owner's interests. Unless otherwise instructed by the Owner, the amount retained by the Owner will be in effect until the final payment is made except as follows:~~

~~(1) Contractor may request release of retainage on work that has been partially accepted by the Owner in accordance with Section 50.14. Contractor must provide a certified invoice to the RPR that supports the value of retainage held by the Owner for partially accepted work.~~

~~(2) In lieu of retainage, the Contractor may exercise at its option the establishment of an escrow account per Paragraph 90.08.~~

~~The Contractor is required to pay all subcontractors for satisfactory performance of their contracts no later than 30 days after the Contractor has received a partial payment. Contractor must provide the Owner evidence of prompt and full payment of retainage held by the prime Contractor to the subcontractor within 30 days after the subcontractor's work is satisfactorily completed. A subcontractor's work is satisfactorily completed when all the tasks called for in the subcontract have been accomplished and documented as required by the Owner. When the Owner has made an incremental acceptance of a portion of a prime contract, the work of a subcontractor covered by that acceptance is deemed to be satisfactorily completed.~~

~~When at least 95% of the work has been completed to the satisfaction of the RPR, the RPR shall, at the Owner's discretion and with the consent of~~

~~the surety, prepare estimates of both the contract value and the cost of the remaining work to be done. The Owner may retain 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.~~

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

~~No partial payment shall bind the Owner to the acceptance of any materials or work in place as to quality or quantity. All partial payments are subject to correction at the time of final payment as provided in Paragraph 90-09, *Acceptance and Final Payment*.~~

~~The Contractor shall deliver to the Owner a complete release of all claims for labor and material arising out of this contract before the final payment is made. If any subcontractor or supplier fails to furnish such a release in full, the Contractor may furnish a bond or other collateral satisfactory to the Owner to indemnify the Owner against any potential lien or other such claim. The bond or collateral shall include all costs, expenses, and attorney fees the Owner may be compelled to pay in discharging any such lien or claim. See Supplemental General Conditions, Section 90-06.~~

**90-07**

~~**Payment for Materials on Hand.** Partial payments may be made to the extent of the delivered cost of materials to be incorporated in the work, provided that such materials meet the requirements of the contract, plans, and specifications and are delivered to acceptable sites on the Airport property or at other sites in the vicinity that are acceptable to the Owner. Such delivered costs of stored or stockpiled materials may be included in the next partial payment after the following conditions are met:~~

~~**A.** The material has been stored or stockpiled in a manner acceptable to the RPR at or on an approved site.~~

~~**B.** The Contractor has furnished the RPR with acceptable evidence of the quantity and quality of such stored or stockpiled materials.~~

~~**C.** The Contractor has furnished the RPR with satisfactory evidence that the material and transportation costs have been paid.~~

~~**D.** The Contractor has furnished the Owner legal title (free of liens or encumbrances of any kind) to the material stored or stockpiled.~~

~~E. The Contractor has furnished the Owner evidence that the material stored or stockpiled is insured against loss by damage to or disappearance of such materials at any time prior to use in the work.~~

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

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

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

~~The Contractor shall bear all costs associated with the partial payment of stored or stockpiled materials in accordance with the provisions of this paragraph. See Supplemental General Conditions, Section 90-07.~~

**90-08**

**Payment of Withheld Funds.** At the Contractor's option, if an Owner withholds retainage in accordance with the methods described in Paragraph 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 Section 50, Paragraph 50-15, *Final Acceptance*, the RPR will prepare the final estimate of the items of work actually performed. The Contractor shall approve the RPR's final estimate or advise the RPR of the Contractor's 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 RPR 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 RPR's final estimate. If, after such 30 day period, a dispute still exists, the Contractor may approve the RPR'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 Section 50, Paragraph 50-16; *Claims for Adjustment and Disputes*:~~

~~After the Contractor has approved, or approved under protest, the RPR's final estimate, and after the RPR's receipt of the project closeout documentation required in Paragraph 90-11, *Contractor Final Project Documentation*, 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 Section 50, Paragraph 50-16, *Claims for Adjustments and Disputes*, or under the provisions of this paragraph, 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. See Supplemental General Conditions, Section 90-09.~~

## 90-10

### **Construction Warranty.**

**A.** In addition to any other warranties in this contract, the Contractor warrants that work performed under this contract conforms to the contract requirements and is free of any defect in equipment, material, workmanship, or design furnished, or performed by the Contractor or any subcontractor or supplier at any tier.

**B.** This warranty shall continue for a period of one year from the date of final acceptance of the work, except as noted. If the Owner takes possession of any part of the work before final acceptance, this warranty shall continue for a period of one year from the date the Owner takes possession. However, this will not relieve the Contractor from corrective items required by the final acceptance of the project work. Light Emitting Diode emitting diode (LED) light fixtures with the exception of obstruction lighting, must be warranted by the Manufacturer for a minimum of four (4) years after date of installation inclusive of all electronics.

**C.** The Contractor shall remedy at the Contractor's expense any failure to conform, or any defect. In addition, the Contractor shall remedy at the Contractor's expense any damage to Owner real or personal property, when that damage is the result of the Contractor's failure to conform to contract requirements; or any defect of equipment, material, workmanship, or design furnished by the Contractor.

**D.** The Contractor shall restore any work damaged in fulfilling the terms and conditions of this clause. The Contractor's warranty with respect to work repaired or replaced will run for one year from the date of repair or replacement.

**E.** The Owner will notify the Contractor, in writing, within seven (7) days after the discovery of any failure, defect, or damage.

**F.** If the Contractor fails to remedy any failure, defect, or damage within 14 days after 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.

**G.** With respect to all warranties, express or implied, from subcontractors, Manufacturers, or suppliers for work performed and materials furnished under this contract, the Contractor shall: (1) Obtain all warranties that would be given in normal commercial practice; (2) Require all warranties to be executed, in writing, for the benefit of the Owner, as directed by the Owner, and (3) Enforce all warranties for the benefit of the Owner.

**H.** This warranty shall not limit the Owner's rights with respect to latent defects, gross mistakes, or fraud.

**90-11 Contractor Final Project Documentation.** ~~Approval of final payment to the Contractor is contingent upon completion and submittal of the items listed below. The final payment will not be approved until the RPR approves the Contractor's final submittal. The Contractor shall:~~

~~**A.** Provide two (2) copies of all Manufacturers warranties specified for materials, equipment, and installations.~~

~~**B.** Provide weekly payroll records (not previously received) from the general Contractor and all subcontractors.~~

~~**C.** Complete final cleanup in accordance with Section 40, Paragraph 40-08, *Final Cleanup*.~~

~~**D.** Complete all punch list items identified during the Final Inspection.~~

~~E. Provide complete release of all claims for labor and material arising out of the Contract.~~

~~F. Provide a certified statement signed by the subcontractors, indicating actual amounts paid to the Disadvantaged Business Enterprise (DBE) subcontractors and/or suppliers associated with the project.~~

~~G. When applicable per state requirements, return copies of sales tax completion forms.~~

~~H. Manufacturer's certifications for all items incorporated in the work.~~

~~I. All required record drawings, as-built drawings, or as-constructed drawings.~~

~~J. Project Operation and Maintenance (O&M) Manual(s).~~

~~K. Security for Construction Warranty.~~

~~L. Equipment commissioning documentation submitted, if required.~~

See Supplemental General Conditions, Section 90-11.

**END OF SECTION 90**

**SUPPLEMENTAL GENERAL  
CONDITIONS**

## SUPPLEMENTAL GENERAL CONDITIONS

### SECTION 10 - DEFINITION OF TERMS.

- 10-04 Airport.** Airport means an area of land or water which is used or intended to be used for the landing and takeoff of aircraft; an appurtenant area used or intended to be used for Airport buildings or other Airport facilities or rights of way; and Airport buildings and facilities located in any of these areas and includes a heliport. For this project, Airport shall refer to the Georgetown County Airport, 129 Airport Road, Georgetown, South Carolina 29440.
- 10-18 Contract Time.** The number of calendar days stated in the proposal, allowed for completion of the contract, including authorized time extensions.
- 10-25 Engineer.** The individual, partnership, firm, or corporation duly authorized by the OWNER to be responsible for engineering, construction administration, and for observation of the contract work and acting directly or through an authorized representative. For this project, ENGINEER shall refer to Talbert & Bright, Inc., 4810 Shelley Drive, Wilmington, North Carolina 28405.
- 10-31 Intention of Terms.** Whenever, in these specifications or on the plans, the words "directed," "required," "permitted," "ordered," "designated," "prescribed", or words of like import are used, it shall be understood that the direction, requirement, permission, order, designation, or prescription of the ENGINEER is intended; and similarly the words "approved," "acceptable," "satisfactory," or words of like import, shall mean approved by, or acceptable to, or satisfactory to the ENGINEER subject in each case to the final determination of the Owner.
- 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.
- 10-49 Quality Assurance (QA) Laboratory.** The official quality assurance testing laboratories of the Owner or such other laboratories may be designated by the ENGINEER. May also be referred to as ENGINEER's, Owner's, or QA Laboratory.
- 10-50 Resident Project Representative (RPR).** Not used for this project.
- 10-55 Sponsor.** A Sponsor is defined as a public agency that submits to the South Carolina Aeronautics Commission (SCAC) for an SCAC grant; or a private Owner of a public-use Airport that submits to the SCAC an application for an SCAC grant for the Airport. For this project, Sponsor shall refer to Georgetown County, 129 Screven Street Road, Georgetown, South Carolina 29440
- 10-58 Superintendent.** The Contractor's executive representative who is present on

the work during progress, authorized to receive and fulfill instructions from the ENGINEER and/or Airport Management, and who shall supervise and direct the construction.

## **SECTION 20 - PROPOSAL REQUIREMENTS AND CONDITIONS.**

**20-02 Qualification of Bidders.** Each bidder shall furnish the OWNER satisfactory evidence of his or her 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 or 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 bidder'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 or 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 the 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 or she is prequalified with the South Carolina Department of Transportation (SCDOT) and is on the current "bidder's list" of the South Carolina Department of Transportation. Such evidence of South Carolina Department of Transportation prequalification may be submitted as evidence of financial responsibility in lieu of the certified statements or reports specified above.

Bidders must also hold a South Carolina General Contractor License with the South Carolina Licensing Board of General Contractors. The License shall be current at the time of bid.

Each bidder shall submit "Evidence of Competency" and "Financial Responsibility" to the Owner at the time of the Bid opening.

**20-11 Delivery of Proposal.** All bids must be submitted electronically through the Purchasing Departments' Vendor Registry webpage. Please click on the following link <http://www.georgetowncountysc.org/172/Purchasing> for instructions on how to submit bids electronically through Georgetown County's Purchasing Vendor Registry page to ensure it remains sealed until the scheduled bid opening date and time.

## SECTION 40 - SCOPE OF WORK.

**40-02 Alteration of Work and Quantities.** The Owner reserves the right to make such changes in quantities and work as may be necessary or desirable to complete, in a satisfactory manner, the original intended work. Unless otherwise specified in the Contract, the Owner's ENGINEER shall be and is hereby authorized to make, in writing, such in-scope alterations in the work and variation of quantities as may be necessary to complete the work, provided such action does not represent a significant change in the character of the work.

For purpose of this section, a significant change in character of work means: any change that is outside the current contract scope of work; any change (increase or decrease) in the total contract cost by more than 25%; or any change in the total cost of a major contract item by more than 25%.

Work alterations and quantity variances that do not meet the definition of significant change in character of work shall not invalidate the contract nor release the surety. Contractor agrees to accept payment for such work alterations and quantity variances in accordance with Section 90, Paragraph 90-03, *Compensation for Altered Quantities*.

Should the value of altered work or quantity variance meet the criteria for significant change in character of work, such altered work and quantity variance shall be covered by a supplemental agreement. Supplemental agreements shall also require consent of the Contractor's surety and separate performance and payment bonds. 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.

**40-03 Omitted Items.** The Owner or the Owner's ENGINEER may provide written notice to the Contractor to omit from the work any contract item that does not meet the definition of major contract item. 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 Section 90, Paragraph 90-04, *Payment for Omitted Items*.

**40-04 Extra Work.** Should acceptable completion of the contract require the Contractor to perform an item of work not provided for in the awarded contract as previously modified by change order or supplemental agreement, Owner

may issue a Change Order to cover the necessary extra work. Change orders for 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 ENGINEER's opinion, is necessary for completion of the extra work.

When determined by the ENGINEER to be in the Owner's best interest, the ENGINEER may order the Contractor to proceed with extra work as provided in Section 90, Paragraph 90-05, *Payment for Extra Work*. 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 defined in Section 10, Paragraph 10-59, *Supplemental Agreement*.

If extra work is essential to maintaining the project critical path, the ENGINEER may order the Contractor to commence the extra work under a Time and Material contract method. Once sufficient detail is available to establish the level of effort necessary for the extra work, the Owner shall initiate a change order or supplemental agreement to cover the extra work.

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.

**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 be measured and paid for under a specified item or may not be measured or paid for directly but shall be included in the various contract items as specified.

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

Except as provided in Section 40, Paragraph 40-07, *Rights in and Use of Materials Found in the Work*, 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 used in the work as otherwise provided for in the contract and shall remain the property of the Owner when so used 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 embankment, the Contractor may at their own option either:

**A.** Use such material in another contract item, providing such use is approved by the ENGINEER and is in conformance with the contract specifications applicable to such use.

or,

**B.** Remove such material from the site, upon written approval of the ENGINEER.

or,

**C.** Use such material for the Contractor's 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., the Contractor shall request the ENGINEER's approval in advance of such use.

Should the ENGINEER 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 their 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 use of such material used in the work or removed from the site.

Should the ENGINEER approve the Contractor's exercise of Option A., the Contractor shall be paid, at the applicable contract price, for furnishing and installing such material in accordance with requirements of the contract item in which the material is used.

It is understood and agreed that the Contractor shall make no claim for delays by reason of their own 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.

## **SECTION 50 - CONTROL OF WORK.**

**50-01 Authority of the Engineer.** The ENGINEER has final authority regarding the interpretation of project specification requirements. The ENGINEER shall

determine acceptability of the quality of materials furnished, method of performance of work performed, and the manner and rate of performance of the work. The ENGINEER does not have the authority to accept work that does not conform to specification requirements.

**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 ENGINEER 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 their opinion, result in a finished product having a level of safety, economy, durability, and workmanship acceptable to the Owner, the ENGINEER will advise the Owner of their determination that the affected work be accepted and remain in place. The ENGINEER will document the 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. Changes in the contract price must be covered by contract change order or supplemental agreement as applicable.

If the ENGINEER 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 ENGINEER's written orders.

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 ENGINEER's responsibility to insist on strict compliance with the requirements of the contract, plans, and specifications during the Contractor's execution of the work, when, in the ENGINEER's opinion, such compliance is essential to provide an acceptable finished portion of the work.

The term "reasonably close conformity" is also intended to provide the ENGINEER with the authority, after consultation with the Sponsor and SCAC, to use sound engineering judgment in their determinations to accept work that is not in strict conformity but will provide a finished product equal to or better than that required by the requirements of the contract, plans and specifications.

The ENGINEER 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. If electronic files are provided and used on the project and there is a conflict between the electronic files and hard copy plans, the hard copy plans shall govern. 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 advisory circulars (ACs); contract general provisions shall govern over plans, cited standards for materials or testing, and cited ACs; plans shall govern over cited standards for materials or testing and cited ACs. If any paragraphs contained in the Special Provisions conflict with General Provisions or Technical Specifications, the Special Provisions shall govern.

From time to time, discrepancies within cited testing standards occur due to the timing of the change, edits, and/or replacement of the standards. If the Contractor discovers any apparent discrepancy within standard test methods, the Contractor shall immediately ask the ENGINEER for an interpretation and decision, and such decision shall be final.

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, Contractor shall immediately notify the Owner or the designated representative in writing requesting their written interpretation and decision.

**50-05 Cooperation of Contractor.** The Contractor shall be supplied with five hard copies or an electronic PDF of the plans and specifications. The Contractor shall have available on the construction site at all times one hard copy each of the plans and specifications. Additional hard copies of plans and specifications may be obtained by the Contractor for the cost of reproduction.

The Contractor shall give constant attention to the work to facilitate the progress thereof and shall cooperate with the ENGINEER and with other Contractors in every way possible. The Contractor shall have a competent superintendent on the work at all times who is fully authorized as their agent on the work. The superintendent shall be capable of reading and thoroughly understanding the plans and specifications and shall receive and fulfill instructions from the ENGINEER or their authorized representative.

**50-07 Construction Layout and Stakes.** The ENGINEER shall establish necessary horizontal and vertical control. The establishment of survey control and/or re-establishment of survey control shall be by a State Licensed Land Surveyor. Contractor is responsible for preserving integrity of horizontal and vertical controls established by ENGINEER. In case of negligence on the part of the Contractor or their employees, resulting in the destruction of any horizontal and vertical control, the resulting costs will be deducted as a liquidated damage

against the Contractor.

Prior to the start of construction, the Contractor will check all control points for horizontal and vertical accuracy and certify in writing to the ENGINEER that the Contractor concurs with survey control established for the project. All lines, grades, and measurements from control points necessary for the proper execution and control of the work on this project will be provided to the ENGINEER. The Contractor is responsible to establish all layout required for the construction of the project.

Copies of survey notes will be provided to the ENGINEER for each area of construction and for each placement of material as specified to allow the ENGINEER to make periodic checks for conformance with plan grades, alignments and grade tolerances required by the applicable material specifications. Surveys will be provided to the ENGINEER prior to commencing work items that cover or disturb the survey staking. Survey(s) and notes shall be provided in the following format(s): AutoCAD 2019 or older.

Laser, GPS, string line, or other automatic control shall be checked with temporary control as necessary. In the case of error, on the part of the Contractor, their surveyor, employees, or subcontractors, resulting in established grades, alignment or grade tolerances that do not concur with those specified or shown on the plans, the Contractor is solely responsible for correction, removal, replacement, and all associated costs at no additional cost to the Owner.

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

**50-09 Inspection of the Work.** All materials and each part or detail of the work shall be subject to inspection. The ENGINEER shall be allowed access to all parts of the work and shall be furnished with such information and assistance by the Contractor as is required to make a complete and detailed inspection.

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

Provide advance written notice to the ENGINEER of work the Contractor plans to perform each week and each day. Any work done or materials used without

written notice and allowing opportunity for observation by the ENGINEER may be ordered removed and replaced at the Contractor's expense.

Should the contract work include relocation, adjustment, or any other modification to existing facilities, not the property of the (contract) Owner, authorized representatives of the Owners of such facilities shall have the right to inspect such work. Such an 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 ENGINEER as provided in Paragraph 50-02, *Conformity with Plans and Specifications*.

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 Section 70, Paragraph 70-14, *Contractor's Responsibility for Work*.

No removal of work made under provision of this paragraph shall be done without lines and grades having been established by the Contractor. Work done contrary to the instructions of the ENGINEER, work done beyond the lines shown on the plans or as established by the ENGINEER, except as herein specified, or any extra work done without authority, will be considered as unauthorized and will not be paid for under the provisions of the contract. Work so done may be ordered removed or replaced at the Contractor's expense.

Upon failure on the part of the Contractor to comply with any order of the ENGINEER made under the provisions of this subsection, the ENGINEER will have authority to cause unacceptable work to be remedied or removed and replaced; and unauthorized work to be removed and recover the resulting costs as a liquidated damage against the Contractor.

**50-13 Failure to Maintain the Work.** Should the Contractor at any time fail to maintain the work as provided in Paragraph 50-12, *Maintenance During Construction*, the ENGINEER shall immediately notify the Contractor of such noncompliance. 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 ENGINEER's notification, the Owner 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 recovered as a liquidated damage against the Contractor.

**50-14 Partial Acceptance.** If at any time during the execution of the project the Contractor substantially completes a usable unit or portion of the work, the occupancy of which will benefit the Owner, the Contractor may request the ENGINEER to make final inspection of that unit. If the ENGINEER finds upon inspection that the unit has been satisfactorily completed in compliance with the contract, the ENGINEER may accept it as being complete, 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 ENGINEER and Owner will conduct an inspection. If all construction provided for and contemplated by the contract is found to be complete in accordance with the contract, plans, and specifications, such inspection shall constitute the final inspection. The ENGINEER 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 ENGINEER will notify the Contractor and the Contractor shall correct the unsatisfactory work. Upon correction of the work, another inspection will be made which shall constitute the final inspection, provided the work has been satisfactorily completed. In such event, the ENGINEER will make the final acceptance and notify the Contractor in writing of this acceptance as of the date of final inspection.

**50-16 Claims for Adjustment and Disputes.** If for any reason the Contractor deems that additional compensation is due for work or materials not clearly provided for in the contract, plans, or specifications or previously authorized as extra work, the Contractor shall notify the ENGINEER in writing of their intention to claim such additional compensation before the Contractor begins the work on which the Contractor bases the claim. If such notification is not given or the ENGINEER is not afforded proper opportunity by the Contractor for keeping strict account of actual cost as required, then the Contractor hereby agrees to waive any claim for such additional compensation. Such notice by the Contractor and the fact that the ENGINEER has kept account of the cost of the work shall not in any way be construed as proving or substantiating the validity of the claim. When the work on which the claim for additional compensation is based has been completed, the Contractor shall, within 10 calendar days, submit a written claim to the ENGINEER who will present it to the Owner for consideration in accordance with local laws or ordinances.

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

## SECTION 60 - CONTROL OF MATERIALS.

- 60-01 Source of Supply and Quality Requirements.** The materials used in 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 documentation to the engineering as to the origin, composition, and manufacture of all materials to be used in the work. Documentation shall be furnished promptly after execution of the contract but, in all cases, prior to delivery of such materials.

At the ENGINEER's option, materials may be approved at the source of supply before delivery. 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.

The Contractor shall furnish Airport lighting equipment that meets the requirements of the specifications and is listed in AC 150/5345-53D, *Airport Lighting Equipment Certification Program and Addendum*, that is in effect on the date of advertisement.

- 60-02 Samples, Tests, and Cited Specifications.** All materials used in the work shall be inspected, tested, and approved by the ENGINEER before incorporation in the work unless otherwise designated. Any work in which untested materials are used without approval or written permission of the ENGINEER shall be performed at the Contractor's risk. Materials found to be unacceptable and unauthorized will not be paid for and, if directed by the ENGINEER, shall be removed at the Contractor's expense.

Unless otherwise designated, quality assurance tests will be made by and at the expense of the Owner in accordance with the cited standard methods of ASTM, American Association of State Highway and Transportation Officials (AASHTO), federal specifications, Commercial Item Descriptions, and all other cited methods, which are current on the date of advertisement for bids.

The testing organizations performing on-site quality assurance field tests shall have copies of all referenced standards on the construction site for use by all technicians and other personnel. Unless otherwise designated, samples for quality assurance will be taken by a qualified representative of the ENGINEER. 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 their request after review and approval of the ENGINEER.

A copy of all Contractor QC test data shall be provided to the ENGINEER 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 ENGINEER showing all test data reports, plus an analysis of all results showing ranges, averages, and corrective action taken on all failing tests.

The Contractor may employ a Quality Control (QC) testing organization to perform all Contractor required QC tests in accordance with Item C-100 Contractor Quality Control Program (CQCP).

**60-03 Certification of Compliance/Analysis (COC/COA).** The ENGINEER may permit the use, prior to sampling and testing, of certain materials or assemblies when accompanied by Manufacturer's COC 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. The COA is the manufacturer's COC and includes all applicable test results.

Materials or assemblies used on the basis of Certificates of Compliance may be sampled and tested at any time and if found not to be in conformity with contract requirements will be subject to rejection whether in place or not.

The form and distribution of Certificates of Compliance shall be as approved by the ENGINEER.

When a material or assembly is specified by "brand name or equal" and the Contractor elects to furnish the specified "or equal," 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:

**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.

The ENGINEER shall be the sole judge as to whether the proposed "or equal" is suitable for use in the work.

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

**60-04 Plant Inspection.** The ENGINEER or their 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 acceptance of the material or assembly.

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

**A.** The ENGINEER shall have the cooperation and assistance of the Contractor and the producer with whom the Contractor has contracted for materials.

**B.** The ENGINEER 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 ENGINEER, the Contractor shall arrange for adequate office or working space that may be reasonably needed for conducting plant inspections. Place office or working space in a convenient location with respect to the plant.

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

**60-06 Storage of Materials.** Materials shall be stored 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 to facilitate their prompt inspection. The Contractor shall coordinate the storage of all materials with the ENGINEER. Materials to be stored on Airport property shall not create an obstruction to air navigation nor shall they interfere with the free and unobstructed movement of aircraft. Unless otherwise shown on the plans, the storage of materials and the location of the Contractor's plant and parked equipment or vehicles shall be as directed by the ENGINEER. Private property shall not be used for storage purposes without written permission of the Owner or lessee of such property. The Contractor shall make all arrangements and bear all expenses for the storage of materials on private property. Upon request, the Contractor shall furnish the ENGINEER a copy of the property Owner's permission.

All storage sites on private or Airport property shall be restored to their original condition by the Contractor at their 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 ENGINEER.

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

## **SECTION 70 - LEGAL REGULATIONS AND RESPONSIBILITY TO PUBLIC.**

**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) must be shown on the plans.

The Contractor shall not permit any individual, firm, or corporation to excavate or otherwise disturb such utility services or facilities located within the limits of the work without the written permission of the ENGINEER.

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 to facilitate such construction, reconstruction, or maintenance by others whether or not such work by others is listed above. When ordered as extra work by the ENGINEER, the Contractor shall make all necessary repairs to the work which are due to such authorized work by others, unless otherwise provided for in the contract, plans, or specifications. It is understood and agreed that the Contractor shall not be entitled to make any claim for damages due to such authorized work by others or for any delay to the work resulting from such authorized work.

**70-05 State Participation.** The South Carolina Aeronautics Commission (SCAC) has agreed to reimburse the Owner for some portion of the contract costs. The contract work is subject to the inspection and approval of duly authorized representatives of the SCAC. No requirement of this contract shall be construed as making the SCAC a party to the contract nor will any such requirement interfere, in any way, with the rights of either party to the contract.

**70-07 Public Convenience and Safety.** The Contractor shall control their operations and those of their 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 their own operations and those of their own subcontractors and all suppliers in accordance with Section 40, Paragraph 40-05, *Maintenance of Traffic*, and shall limit such operations for the convenience and safety of the traveling public as specified in Section 80, Paragraph 80-04, *Limitation of Operations*.

The Contractor shall remove or control debris and rubbish resulting from its work operations at frequent intervals, and upon the order of the ENGINEER. If the ENGINEER determines the existence of Contractor debris in the work site represents a hazard to Airport operations and the Contractor is unable to respond in a prompt and reasonable manner, the ENGINEER reserves the right to assign the task of debris removal to a third party and recover the resulting costs as a liquidated damage against the Contractor.

**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 ENGINEER has witnessed or otherwise referenced their location and shall not move them until directed.

The Contractor shall be responsible for all damage or injury to property of any character, during the execution of the work, resulting from any act, omission, neglect, or misconduct in manner or method of executing the work, or at any time due to defective work or materials, and said responsibility shall not be released until the project has 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, the Contractor shall restore, at their 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 the Contractor shall make good such damage or injury in an acceptable manner.

**70-11 Responsibility for Damage Claims.** The Contractor shall indemnify and hold harmless the ENGINEER and the Owner and their officers, agents, 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 their own contract considered necessary by the Owner for such purpose may be retained for the use of the Owner or, in case no money is due, their own surety may be held until such suits, actions, or claims for injuries or damages 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 or she is adequately protected by public liability and property damage insurance.

**70-13 Opening Sections of the Work to Traffic.** If it is 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 must be specified below and indicated on the approved Construction Safety and Phasing Plan (CSPP) and the project plans. When so specified, the Contractor shall complete such portions of the work on or before the date specified or as otherwise specified.

Upon completion of any portion of work listed above, such portion shall be accepted by the Owner in accordance with Section 50, Paragraph 50-14, *Partial Acceptance*.

No portion of the work may be opened by the Contractor until directed by the Owner in writing. Should it become necessary to open a portion of the work to traffic on a temporary or intermittent basis, such openings shall be made when, in the opinion of the ENGINEER, 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 their expense.

The Contractor shall make their 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.

The Contractor must conform to safety standards contained AC 150/5370-2G and the approved plans and specifications.

Contractor shall refer to the plans and specifications to identify barricade requirements, temporary and/or permanent markings, airfield lighting, guidance signs and other safety requirements prior to opening up sections of work to traffic.

**70-14 Contractor's Responsibility for Work.** Until the ENGINEER's final written acceptance of the entire completed work, excepting only those portions of the

work accepted in accordance with Section 50, Paragraph 50-14, *Partial Acceptance*, 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.

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 their own 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, seeding, and sodding furnished under the 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 Paragraph 70-04, *Restoration of Surfaces Disturbed by Others*, 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 their operations to prevent the unscheduled interruption of such utility services and facilities.

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

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 the 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 their plan of operations. Such notification shall be in writing addressed to "The

Person to Contact” as provided in this paragraph and Paragraph 70-04, *Restoration of Surfaces Disturbed by Others*. A copy of each notification shall be given to the ENGINEER. The Contact Person is:

Georgetown County Airport  
Jim Taylor, Airport Director  
129 Airport Road  
Georgetown, South Carolina 29440  
Phone: 843-545-3638 Email: [jtaylor@gtcounty.org](mailto:jtaylor@gtcounty.org)

In addition to the general written notification provided, it shall be the responsibility of the Contractor to keep such individual Owners advised of changes in their plan of operations that would affect such Owners.

Prior to beginning the work in the general vicinity of an existing utility service or facility, the Contractor shall again notify each such Owner of their plan of operation. If, in the Contractor’s opinion, the Owner’s assistance is needed to locate the utility service or facility or the presence of a representative of the Owner is desirable to observe the work, such advice should be included in the notification. Such notification shall be given by the most expeditious means to reach the utility owner’s “Person to Contact” no later than two normal business days prior to the Contractor’s commencement of operations in such general vicinity. The Contractor shall furnish a written summary of the notification to the ENGINEER.

The Contractor’s failure to give the two days’ notice shall be cause for the Owner to suspend the Contractor’s operations in the general vicinity of a utility service or facility.

Where the outside limits of an underground utility service have been located and staked on the ground, the Contractor shall be required to use hand excavation methods 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.

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

The Contractor shall bear all costs of damage and restoration of service to any utility service or facility due to their operations whether 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 their own surety.

**70-17 Personal Liability of Public Officials.** In carrying out any of the contract provisions or in exercising any power or authority granted by this contract, there shall be no liability upon the ENGINEER, their 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.

**70-20 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.

If archeological materials are encountered during the construction, the procedures codified at 33 CFR 800.13(b) will apply and South Carolina Department of Archives and History shall be contacted immediately. Construction operations are to cease immediately within a 100' radius of the discovery and the Contractor shall take steps to protect the discovery. Archeological materials consist of any items 50 years or older which were made or used by man. These items include, but are not limited to, stone projectile points (arrowheads), ceramic sherds, bricks, worked wood, bone and stone, metal and glass objects, and human skeletal remains.

The ENGINEER will immediately investigate the Contractor's finding and the Owner will direct the Contractor to either resume operations or to suspend operations as directed.

Should the Owner 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 change order or supplemental agreement as provided in Section 40, Paragraph 40-04, *Extra Work*, and Section 90, Paragraph 90-05, *Payment for Extra Work*. If appropriate, the contract change order or supplemental agreement shall include an extension of contract time in accordance with Section 80, Paragraph 80-07, *Determination and Extension of Contract Time*.

## **SECTION 80 - EXECUTION 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 ENGINEER.

The Contractor shall perform, with his organization, an amount of work equal to at least 25 percent of the total contract cost.

Should the Contractor elect to assign their 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.

**The Contractor shall provide copies of all subcontracts to the ENGINEER 14 days prior to being utilized on the project. As a minimum, the information shall include the following:**

- Subcontractor's legal company name.
- Subcontractor's legal company address, including County name.
- Principal contact person's name, telephone, and fax number.
- Complete narrative description, and dollar value of the work to be performed by the subcontractor.
- Copies of required insurance certificates in accordance with the specifications
- Minority/ non-minority status.

**80-02 Notice to Proceed (NTP).** The Owners notice to proceed will state the date on which contract time commences. The Contractor is expected to commence project operations within **10** days of the NTP date. The Contractor shall notify the ENGINEER at least 24 hours in advance of the time contract operations begin. The Contractor shall not commence any actual operations prior to the date on which the notice to proceed is issued by the Owner.

**80-03 Execution and Progress.** Unless otherwise specified, the Contractor shall submit their coordinated construction schedule showing all work activities for the ENGINEER's review and acceptance at least 10 days prior to the start of work. The Contractor's progress schedule, once accepted by the ENGINEER, will represent the Contractor's baseline plan to accomplish the project in accordance with the terms and conditions of the Contract. The ENGINEER will compare actual Contractor progress against the baseline schedule to determine that status of the Contractor's performance. The Contractor shall provide sufficient materials, equipment, and labor to guarantee the completion of the project in accordance with the plans and specifications within the time set forth in the proposal.

If the Contractor falls significantly behind the submitted schedule, the Contractor shall, upon the ENGINEER's request, submit a revised schedule for completion of the work within the contract time and modify their operations to provide such additional materials, equipment, and labor necessary to meet the

revised schedule. Should the execution of the work be discontinued for any reason, the Contractor shall notify the ENGINEER at least 24 hours in advance of resuming operations.

The Contractor shall not commence any actual construction prior to the date on which the NTP is issued by the Owner.

The project schedule shall be prepared as a network diagram in Critical Path Method (CPM), Program Evaluation and Review Technique (PERT), or other format, or as otherwise specified. It shall include information on the sequence of work activities, milestone dates, and activity duration. The schedule shall show all work items identified in the project proposal for each work area and shall include the project start date and end date.

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.

**80-04**    **Limitation of Operations.** The Contractor shall control their operations and the operations of their subcontractors and all suppliers to provide for the free and unobstructed movement of aircraft in the air operations areas (AOA) of the Airport.

When the work requires the Contractor to conduct their operations within an AOA of the Airport, the work shall be coordinated with Airport operations (through the ENGINEER) at least 48 hours prior to commencement of such work. The Contractor shall not close an AOA until so authorized by the ENGINEER and until the necessary temporary marking, signage and associated lighting is in place as provided in Section 70, Paragraph 70-08.

When the contract work requires the Contractor to work within an AOA of the Airport on an intermittent basis (intermittent opening and closing of the AOA), the Contractor shall maintain constant communications as specified; immediately obey all instructions to vacate the AOA; and immediately obey all instructions to resume work in such AOA. Failure to maintain the specified communications or to obey instructions shall be cause for suspension of the Contractor's operations in the AOA until satisfactory conditions are provided. The areas of the AOA identified in the project plans and specifications 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.

The Contractor shall be required to conform to safety standards contained in AC 150/5370-2G, Operational Safety on Airports During Construction.

**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 or operational safety requirements and, in the opinion of the ENGINEER, does not perform his work in a proper and skillful manner or is intemperate or disorderly shall, at the written request of the ENGINEER, be removed immediately by the Contractor or subcontractor employing such person, and shall not be employed again in any portion of the work without approval of the ENGINEER.

Should the Contractor fail to remove such person or persons or fail to furnish suitable and sufficient personnel for the proper execution of the work, the ENGINEER 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 not cause injury to previously completed work, adjacent property, or existing Airport facilities due to its use.

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

When the contract specifies the use of certain methods and equipment, such methods and equipment shall be used unless otherwise authorized by the ENGINEER. If the Contractor desires to use a method or type of equipment other than specified in the contract, the Contractor may request authority from the ENGINEER to do so. The request shall be in writing and shall include a full description of the methods and equipment proposed and of the reasons for desiring to make the change. If approval is given, it will be 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 ENGINEER determines that the work produced does not meet contract requirements, the Contractor shall discontinue the use of the substitute method or equipment and shall complete the remaining work with the specified methods and equipment. The Contractor shall remove any deficient work and

replace it with work of specified quality or take such other corrective action as the ENGINEER may direct. No change will be made in basis of payment for the contract items involved nor in contract time as a result of authorizing a change in methods or equipment under this paragraph.

**80-06 Temporary Suspension of the Work.** The Owner shall have the authority to suspend the work wholly, or in part, for such period or periods the Owner may deem necessary, due to unsuitable weather, or other conditions considered unfavorable for the execution of the work, or for such time necessary due to the failure on the part of the Contractor to carry out orders given or perform any or all provisions of the contract.

In the event that the Contractor is ordered by the Owner, 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 written order to suspend work to the effective date of the written order to resume the work. Claims for such compensation shall be filed with the ENGINEER within the time period stated in the ENGINEER's order to resume work. The Contractor shall submit with their own claim information substantiating the amount shown on the claim. The ENGINEER will forward the Contractor's claim to the Owner for consideration in accordance with local laws or ordinances. No provision of this article shall be construed as entitling the Contractor to compensation for delays due to inclement weather or for any other delay provided for in the contract, plans, or specifications.

If it becomes 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. The Contractor 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.

**80-09 Default and Termination of Contract.** The Contractor shall be considered in default of their 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 and/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 execution 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 the Contractor 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 Owner consider the Contractor in default of the contract for any reason above, the Owner 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 10 days after such notice, does not proceed in accordance therewith, then the Owner will, upon written notification from the ENGINEER of the facts of such delay, neglect, or default and the Contractor's failure to comply with such notice, have full power and authority without violating the contract, to take the execution of the work out of the hands of the Contractor. The Owner may appropriate or use any or all materials and equipment that have been mobilized for use in the work and are acceptable and may enter into an agreement for the completion of said contract according to the terms and provisions thereof or use such other methods as in the opinion of the ENGINEER will be required for the completion of said contract in an acceptable manner.

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

**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 execution of war or in the interest of national defense.

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

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

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

Termination of the contract or a portion thereof shall neither relieve the Contractor of their responsibilities for the completed work nor shall it relieve their 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 ENGINEER 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 work in accordance with the approved CSPP and SPCD.

## **SECTION 90 – MEASUREMENT AND PAYMENT.**

- 90-01 Measurement of Quantities.** All work completed under the contract will be measured by the ENGINEER, or their authorized representatives, using United States Customary Units of Measurement.

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. Unless otherwise

specified, transverse measurements for area computations will be the neat dimensions shown on the plans or ordered in writing by the ENGINEER.

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.

The term "lump sum" when used as an item of payment will mean complete payment for the work described in the contract. When a complete structure or structural unit (in effect, "lump sum" work) is specified as the unit of measurement, the unit will be construed to include all necessary fittings and accessories.

When requested by the Contractor and approved by the ENGINEER 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 ENGINEER and shall be agreed to by the Contractor before such method of measurement of pay quantities is used.

In computing volumes of excavation, the average end area method will be used unless otherwise specified.

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

Materials to be measured by volume in the hauling vehicle shall be hauled in approved vehicles and measured therein at the point of delivery. Vehicles for this purpose may be of any size or type acceptable for the materials hauled, 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.

Asphalt materials will be measured by the gallon or ton. When measured by volume, such volumes will be measured at 60°F or will be corrected to the volume at 60°F using ASTM D1250 for asphalts. 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 asphalt material has

been lost from the car or the distributor, wasted, or otherwise not incorporated in the work. When asphalt materials are shipped by truck or transport, net certified weights by volume, subject to correction for loss or foaming, will be used for computing quantities.

Cement will be measured by the ton or hundredweight.

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

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

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 inch.

When standard manufactured items are specified such as fence, wire, plates, rolled shapes, pipe conduit, etc., and these items are identified by gauge, 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 must be tested for accuracy and serviced before use. 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. Platform scales shall be installed and maintained with the platform level and rigid bulkheads at each end.

Scales shall be accurate within 0.5% of the correct weight throughout the range of use. The Contractor shall have the scales checked under the observation of the ENGINEER before beginning work and at such other times as requested. The intervals shall be uniform in spacing throughout the graduated or marked length of the beam or dial and shall not exceed 0.1% of the nominal rated capacity of the scale, but not less than one pound. The use of spring balances will not be permitted.

In the event inspection reveals the scales have been "overweighing" (indicating more than correct weight) they will be immediately adjusted. All materials received subsequent to the last previous correct weighting-accuracy test will be reduced by the percentage of error in excess of 0.5%.

In the event inspection reveals the scales have been under-weighing (indicating less than correct weight), they shall be immediately adjusted. No

additional payment to the Contractor will be allowed for materials previously weighed and recorded.

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

Scale installations shall have available ten standard 50-pound weights for testing the weighing equipment or suitable weights and devices for other approved equipment.

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.

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 in connection with extra work will be measured as agreed in the change order or supplemental agreement authorizing such work as provided in Paragraph 90-05 Payment for Extra Work.

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 ENGINEER. If revised dimensions result in an increase or decrease in the quantities of such work, the final quantities for payment will be revised in the amount represented by the authorized changes in the dimensions.

**90-04 Payment for Omitted Items.** As specified in Section 40, Paragraph 40-03, *Omitted Items*, the ENGINEER shall have the right to omit from the work (order nonperformance) any contract item, except major contract items, in the best interest of the Owner.

Should the ENGINEER omit or order nonperformance of a contract item or portion of such item from the work, the Contractor shall accept payment in full at the contract prices for any work actually completed and acceptable prior to the 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 ENGINEER's order will be paid for at the actual cost to the Contractor and shall thereupon become the property of the Owner.

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 ENGINEER's order. Such

additional costs incurred by the Contractor must be directly related to the deleted contract item and shall be supported by certified statements by the Contractor as to the nature the amount of such costs.

**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 Contractor and ENGINEER, 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 Paragraph 90-07, *Payment for Materials on Hand*. No partial payment will be made when the amount due to the Contractor since the last estimate amounts to less than five hundred dollars.

Retainage withheld shall be 10 percent.

From the total of the amount determined to be payable on a partial payment, ten (10) percent of such total amount will be deducted and retained by the Owner for protection of the Owner's interests. Unless otherwise instructed by the Owner, the amount retained by the Owner will be in effect until the final payment is made except as follows:

(1) Contractor may request release of retainage on work that has been partially accepted by the Owner in accordance with Section 50-03. Contractor must provide a certified invoice to the ENGINEER that supports the value of retainage held by the Owner for partially accepted work.

(2) In lieu of retainage, the Contractor may exercise at its option the establishment of an escrow account per Paragraph 90-08.

The Contractor is required to pay all subcontractors for satisfactory performance of their contracts no later than 30 days after the Contractor has received a partial payment. Contractor must provide the Owner evidence of prompt and full payment of retainage held by the prime Contractor to the subcontractor within 30 days after the subcontractor's work is satisfactorily completed. A subcontractor's work is satisfactorily completed when all the tasks called for in the subcontract have been accomplished and documented as required by the Owner. When the Owner has made an incremental acceptance of a portion of a prime contract, the work of a subcontractor covered by that acceptance is deemed to be satisfactorily completed.

When at least 95% of the work has been completed to the satisfaction of the ENGINEER, the ENGINEER shall, at the Owner's discretion and with the consent of the surety, prepare estimates of both the contract value and the cost of the remaining work to be done. The Owner may retain 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.

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

No partial payment shall bind the Owner to the acceptance of any materials or work in place as to quality or quantity. All partial payments are subject to correction at the time of final payment as provided in Paragraph 90-09, *Acceptance and Final Payment*.

The Contractor shall deliver to the Owner a complete release of all claims for labor and material arising out of this contract before the final payment is made. If any subcontractor or supplier fails to furnish such a release in full, the Contractor may furnish a bond or other collateral satisfactory to the Owner to indemnify the Owner against any potential lien or other such claim. The bond or collateral shall include all costs, expenses, and attorney fees the Owner may be compelled to pay in discharging any such lien or claim.

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

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

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

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

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

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

**90-09 Acceptance and Final Payment.** When the contract work has been accepted in accordance with the requirements of Section 50, Paragraph 50-15, *Final Acceptance*, the ENGINEER will prepare the final estimate of the items of work actually performed. The Contractor shall approve the ENGINEER's final estimate or advise the ENGINEER of the Contractor's 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 ENGINEER 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 ENGINEER's final estimate. If, after such 30-day period, a dispute still exists, the Contractor may approve the ENGINEER'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 Section 50, Paragraph 50-16, *Claims for Adjustment and Disputes*.

After the Contractor has approved, or approved under protest, the ENGINEER's final estimate, and after the ENGINEER's receipt of the project closeout documentation required in Paragraph 90-11, *Contractor Final Project Documentation*, 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 Section 50, Paragraph 50-16, *Claims for Adjustments and Disputes*, or under the provisions of this paragraph, 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.

**90-11 Contractor Final Project Documentation.** Approval of final payment to the Contractor is contingent upon completion and submittal of the items listed below. The final payment will not be approved until the ENGINEER approves the Contractor's final submittal. The Contractor shall:

**A.** Provide two (2) copies of all manufacturer's warranties specified for materials, equipment, and installations.

**B.** Provide weekly payroll records (not previously received) from the general Contractor and all subcontractors.

**C.** Complete final cleanup in accordance with Section 40, Paragraph 40-08, *Final Cleanup*.

**D.** Complete all punch list items identified during the Final Inspection.

**E.** Provide complete release of all claims for labor and material arising out of the Contract.

**F.** Provide a certified statement signed by the subcontractors, indicating actual amounts paid to the Disadvantaged Business Enterprise (DBE) subcontractors and/or suppliers associated with the project.

**G.** When applicable per state requirements, return copies of sales tax completion forms.

**H.** Manufacturer's certifications for all items incorporated in the work.

**I.** All required record drawings, as-built drawings, or as-constructed drawings.

**J.** Project Operation and Maintenance (O&M) Manual(s).

**K.** Security for Construction Warranty.

**L.** Equipment commissioning documentation submitted, if required.

**END OF SUPPLEMENTAL GENERAL CONDITIONS**

# **PROJECT SPECIAL PROVISIONS**

## PROJECT SPECIAL PROVISIONS

### PSP-1 PROJECT DESCRIPTION, PHASING, AND CONSTRUCTION SEQUENCE

The Allison Hangar Apron and Taxilane Paving project at the Georgetown County Airport has been developed to include construction of a new apron and extension of the existing taxilane adjacent to the apron area located in front of the existing Allison Hangar. Work elements include erosion control installation, grading, construction of stone base and bituminous surface (SCDOT Type B Surface), shoulder grading, seeding, sodding, and mulching.

A detailed Project Safety and Phasing Plan and Sequence of Construction has been developed for the project and is shown on the project plans. The Sequence of Construction has been developed to help the Contractor understand the operational needs of the Airport and surrounding active air operations areas.

### PSP-2 PRE-BID SITE INSPECTION

There will not be a pre-bid conference, but bidders are encouraged to visit the site in person prior to bidding. Site inspections will be made available by PRIOR APPOINTMENT ONLY. Please contact Nancy Silver, Purchasing Officer at (843)545-3076 or by email at [nsilver@gtcounty.org](mailto:nsilver@gtcounty.org) to schedule an appointment. A prior request is necessary because the Airport Director oversees more than one field and may not always be at the GGE Airport site. The Georgetown County Airport Terminal is located at 129 Airport Road, Georgetown, SC 29440.

### PSP-3 GENERAL REQUIREMENTS - SCHEDULE OF WORK

It is the intent of the Owner and these specifications that the Georgetown County Airport will remain open to air traffic, during the work accomplished under this project. ***The Contractor will be required to submit for approval a detailed Schedule of Work to the ENGINEER seven days prior to the Preconstruction Conference.*** After the ENGINEER approves the progress schedule, the Contractor will be required to follow the approved schedule of work unless deviations therefrom are approved by the ENGINEER.

The Contractor's attention is directed to the following requirements in developing his Schedule of Work:

1. The purpose of the Schedule of Work is to assure a safe area of operation for the Contractor and Airport traffic, to coordinate the efforts of various Contractors, to assure maintenance of traffic on the taxiways adjacent to the construction area, and to assure performance of the construction in an acceptable manner and time frame.
2. The Contractor shall develop a detailed schedule for all work areas to ensure that construction can be completed within the time allotted. Many of the work items will have to be constructed simultaneously.
3. There may be more than one Contractor working at the Georgetown County Airport

performing construction simultaneously. The Contractor will be required to coordinate all work with the ENGINEER to minimize conflicts with other Contractors.

4. The Contractor shall make his own estimate of the difficulties involved in arranging the work to comply with the above requirements and shall not claim any added compensation by reason of delay or increased cost due to these requirements.
5. The schedule shall include, but is not limited to, approximate dates and exact time intervals for performing each work task, sub-schedules for shop drawing submittals, review times, procurement schedules, and delivery dates.
6. If Contractor utilizes cranes, bucket trucks, or other equipment exceeding 25' in height, Contractor is responsible for filing a "Notice of Proposed Construction" (Form 7460) with FAA review and approval prior to erecting the equipment. **In order to avoid delaying the start of the work, Contractor shall submit 7460 within 14 days of notice of contract award.** Contractor should allow at least 45 days for FAA review. The notice may be filed on-line; detailed instructions can be found on the FAA website: <https://oeaaa.faa.gov/oeaaa/external/portal.jsp>.

FAA may require tall equipment to be lighted and flagged. Any tall equipment used for the project shall be lowered when not in use. Equipment over 25' cannot be utilized until such time as FAA has completed their review and determined that the proposed equipment does not pose a hazard to air navigation.

7. Except where otherwise specified, work shall be allowed during daylight hours only in all work areas.
8. Due to the tight project schedule for the project, the Contractor may be required to perform certain items prior to the actual beginning of construction. These items include mobilization of equipment and materials; setting up staging areas; and preliminary survey work. The surveyor will be required to work under radio control with the Airport. The surveyor may be required to abandon or vacate his position if instructed by Airport. No additional compensation will be considered if Contractor cannot work or must stop work due to movement of aircraft or weather conditions which may prohibit or prevent completion of preliminary survey work.

#### **PSP-4 APRON, TAXIWAY, and RUNWAY CLOSURES**

The Apron, Taxiways, and Runway 5-23 shall remain open at all times during the project.

#### **PSP-5 CONTRACT TIME AND LIQUIDATED DAMAGES**

Total Contract time allowed for completion the project and associated liquidated damages are shown in the Table 1 - Contract Time and Liquid Damages. The project Phasing and Safety Plans detail requirements for the project as indicated in the table below. The liquidated damages shown are minimum amounts that will be assessed. All actual cost associated with the Contractor's failure to complete specified work items within the time allotted, will be passed on to the Contractor. Note that Contract Time shown is based on

CALENDAR DAYS.

**TABLE 1 - CONTRACT TIME AND LIQUIDATED DAMAGES**

<b>Allison Hangar Apron and Taxilane Paving</b>			
<b>Work Phase</b>	<b>Contract Time</b>	<b>Allowable Hours of Operations</b>	<b>Liquidated Damages</b>
Allison Hangar Apron and Taxilane Paving	30 Calendar Days	24 Hours per Day	\$1,500 per Calendar Day
Removal of Erosion Control Items <sup>1</sup>	1 Calendar Days	24 Hours per Day	\$1,500 per Calendar Day

Notes:

1. "Removal of Erosion Control Items". The removal of erosion control items shall be scheduled after the site is stabilized with permanent grass. The Contractor shall periodically inspect the site until it is stabilized and notify the Engineer for a review. The contract time shown is not included in the Total Contract Time shown for the Allison Hangar Apron and Taxilane Paving.

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.

**PSP-6 ADJUSTMENT OF CONTRACT TIME**

Contract time for this project may be adjusted only by change order, when requested by the Contractor in writing and approved by the ENGINEER and Owner, for reasons outside of the Contractor's control, as follows:

- a. Strikes, lockouts, or other labor actions which delay delivery of critical materials or performance of critical segments of work.
- b. Natural disasters affecting the project site.
- c. Excessive rainfall during an entire calendar month, defined as total number of days with more than 0.1" of rainfall in excess of the normal number of such days for that calendar month. Normal values for Georgetown County shall be taken as published by the Temperature and Precipitation in the USDA Soil Survey for Georgetown County, South Carolina as shown below.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
7	6	7	4	6	8	9	8	7	5	4	6

- d. Extreme low temperatures, defined as the average daily temperatures falling below the normal average daily temperature for that date and below the minimum allowable temperature specified for a critical component of the work, for 15 days or more in a calendar month. Average daily temperature and normal average daily temperature values shall be as reported by the National Weather Services, the Southeast Regional Climate Center, or other reliable source provided by the Contractor and acceptable to the ENGINEER.
- e. Suspension of the work as ordered by the ENGINEER or Owner.
- f. Delays in critical work by others.
- g. Significant additions to the scope of work.

Time extension will not be granted for rain, wind, snow, or other natural phenomena of normal intensity for the locality where work is performed.

Daily weather logs shall be kept on the job site by the Contractor reflecting the effect of the weather on the progress of the work and initialed by the ENGINEER's representative. Time extensions for weather delays do not entitle the Contractor to "extended overhead" recovery.

The Contractor shall bear the burden of proof that a delay has been caused by factors outside his control, shall clearly demonstrate how the delay impacts the critical path of the work as shown on his work schedule as last revised, and shall demonstrate that he has made reasonable and prudent efforts to overcome the impact of the delay on the critical path.

Refer also to Section 80 of the General Conditions.

**PSP-7 NOTAMS**

- a. The Airport Management will issue the necessary NOTAMS to reflect hazardous conditions. It is important that NOTAMS be kept current and reflect the actual conditions with respect to construction situations. Active NOTAMS shall be reviewed periodically and revised to reflect the current conditions.
- b. Inspection - Frequent inspections may be made by the Airport Management during critical phases of the work to ensure that the Contractor is following the recommended safety procedures.

**PSP-8 NIGHTTIME CONSTRUCTION OPERATIONS**

Nighttime construction operations are not required for this project.

## **PSP-9 AIRPORT SAFETY PLAN AND PHASING PLAN**

An Airport Safety Plan and Phasing Plan has been prepared and included in the Contract Documents. This project involves construction on Airport property at the Georgetown County Airport. The Airport is open on a 24-hour, seven days per week basis, and is used by a variety of aircraft types, including jets and helicopters. The runway is served by instrument approach and departure procedures which allow aircraft operations during low visibility and low cloud ceiling conditions. The purpose of the Airport Safety Plan and Phasing Plan is to establish requirements intended to assure the safety of the public, aircraft operations, and construction operations on the Airport. The Contractor shall be responsible for implementation and compliance with the requirements of the Safety Plans. No separate measurement or payment will be made for labor, equipment or materials required to implement the Safety and Phasing Plan. All costs shall be included in the lump sum bid price for "Temporary Construction Items".

The Contractor shall provide initial and continuing instructions to all supervisors, employees, subcontractors, and suppliers to enable them to conduct their work in a manner that will provide the maximum safety with the least hindrance to air and ground traffic, the general public, Airport employees, and to the workmen employed on the site. All safety provisions specified by the plans and documents or received from the ENGINEER, and those required by laws, codes, and ordinances, shall be thoroughly disseminated, and enforced by the Contractor.

The Contractor is responsible for providing such barricades, warning signs and other measures as required to identify construction areas to aircraft traffic and the public and to protect the aircraft traffic and public from hazards.

The Contractor shall conduct his operations in such a manner as to assure that such operations do not impede access to any area of the Airport at any time for fire fighting vehicles and other emergency vehicles. The Contractor shall cooperate fully and immediately with any directives issued by Airport or emergency service/fire personnel relative to emergency access.

## **PSP-10 LOCATION OF SAFETY AND OBJECT FREE AREAS**

The Contractor shall locate and mark in the field the location of all taxiway object free areas in the vicinity of the project work areas as shown on the plans. These areas shall be identified with red top stakes, survey flagging, or other approved methods, so that the areas are clearly indicated to the Contractor's personnel. The intent is to minimize the potential for accidental/unauthorized entry into the "safety areas" by the Contractor's personnel.

## **PSP-11 AIRPORT ENTRY AND DEPARTURE PROCEDURES**

The Contractor shall coordinate ingress-egress requirements with the Airport Management. All open gates to secured airport areas shall be monitored by the Contractor's personnel to control access to secured area and shall be closed and locked

at the end of each day's operation. The Contractor's personnel shall not allow any unauthorized personnel to enter through construction gates. The Contractor shall be responsible for securing and/or locking all gates when not in use and at the end of each day's operations. **The Contractor will be required to supply a padlock to interlock with existing padlocks at all gates. The Contractor shall be required to provide copies of all keys to the Airport Management.**

All construction vehicles must be cleared for access by the Airport Management. Personal cars shall be parked outside of secured airfield areas. All vehicles operating in active air operation areas shall be lighted or flagged in accordance with FAA Advisory Circular 150/5370-2G. Copies of the Advisory Circular will be made available upon request.

#### **PSP-12      EMERGENCY VEHICLE ACCESS**

The Contractor shall conduct his operations in such a manner as to assure that such operations do not impede access to any area of the airfield at any time for emergency vehicles. The Contractor shall cooperate fully and immediately with any directive issued by Airport Management relative to emergency access.

#### **PSP-13      CONSTRUCTION GENERAL REQUIREMENTS**

The Contractor shall use equipment and construction methods appropriate for each work area. All debris shall be removed from the project area and disposed of off Airport property at a properly permitted site. It will be the responsibility of the Contractor to obtain all necessary permits and coordinate all activities with the appropriate agencies for disposal of debris and for traffic control on public roadways. The Contractor will be responsible for cleaning up and removing all debris at the completion of the project. All disturbed areas shall be smooth graded, seeded, and mulched. No ruts, depressions, holes, etc., will be allowed to be left on site.

#### **PSP-14      SUPERINTENDANT / FOREMAN EXPERIENCE**

The Superintendent / Foreman on the project responsible for each major work element (paving) shall be able to demonstrate experience with similar work on at least three other Airport projects.

#### **PSP-15      CONSTRUCTION LAYOUT AND CONTROL**

The ENGINEER shall furnish control points for horizontal control and benchmarks for vertical control as shown on the plans. It shall be the Contractor's responsibility to lay out the work from these points and to provide all other measurements to ensure positive horizontal and vertical control of the work. All survey work shall be performed under the supervision of a Registered Land Surveyor or a Registered Professional Engineer, in the State of South Carolina and shall be sealed.

The Contractor will be required to reference and maintain all control points and establish temporary benchmarks as required. The Contractor will be required to reinstall control

points as required during the project.

During the initial Mobilization, the Contractor shall verify by survey all control points provided for project as shown on plans, including tying the project control network to the PACS and SACS as required by Section 50-07 of the General Conditions. This work shall be performed by a Registered Land Surveyor and shall be considered part of "preliminary survey work". The Contractor shall immediately notify the ENGINEER of any discrepancies in the control network between the information shown on the Plan sheets and his survey. The Contractor shall provide survey notes or data files from verification survey to ENGINEER for review prior to beginning work. The Contractor shall verify in writing his acceptance of the existing survey prior to utilizing.

See Specification Section 50-07 CONSTRUCTION LAYOUT AND STAKES for specific requirements for verification of survey and layout.

As described here and contained in the individual specifications, the following topographic / drainage surveys shall be performed by the Contractor as required for documentation of grade control, quantities, and for as constructed drawings.

1. Top of Existing Ground/ Pavement
2. Areas of Undercut.
3. Top of Subgrade.
4. Top of Aggregate Base Course.
5. Top of Bituminous Surface Course.
6. Top of Proposed Final Ground and Bituminous Surface Course. (Required for Project Record Documents).

The Contractor shall provide the ENGINEER one (1) set of the survey notes or data files (AutoCAD 2019 format), point files, and plotted topographic maps for all surveys. The maps shall be plotted at a scale acceptable to the ENGINEER and shall be based on elevation shots taken at intervals not exceeding 50-foot stations. All sections for all surfaces shall be taken at same interval and location based established and referenced centerline stationing. Survey notes shall be in a format that is easily read and contain station, offsets, and elevations based on the established project baseline. All costs for performing these surveys shall be included in the price bid for the item which it pertains.

The Contractor will be allowed to complete initial layout and topographic surveys prior to the Notice to Proceed for beginning construction. The Contractor will be required to schedule the survey work in advance with the ENGINEER, who shall coordinate with the Airport Management. The Contractor shall provide a minimum 48-hour advance notice. All survey work shall be completed in accordance with the requirements of the Project Safety Plan, local airfield rules and regulations, and directives from Airfield Management.

#### **PSP-16 AS-CONSTRUCTED DRAWING**

The Contractor shall provide a sealed final as constructed topographic survey for the project (see requirements below). The as constructed drawing shall be provided in hard copy and electronic drawing format. The electronic drawing shall be in AutoCAD format.

The survey must be provided to the ENGINEER for review and will be used to calculate and measure applicable quantities for payment as required in the Technical Specifications. The as constructed drawing shall be provided within seven (7) days of project completion and prior to the final inspection.

**As-Constructed Survey Requirements:**

1. The Contractor shall provide an "As-Constructed" survey drawing prepared and certified by a Licensed South Carolina Public Land Surveyor.
2. The drawing shall provide final contours shown over the entire site at the same contour interval as shown on the plans. The electronic version shall provide the capability to depict the final contours and/or the spot elevations used to develop the as constructed drawing.
3. The drawing shall include grades and contours for all ditches and basins. Cross sections shall include ditch bottom elevations, top of bank elevations, and elevations 10 foot each side of top of bank. The ditch and basin survey shall also show contours, top and bottom of bank, bottom width, and the side slopes of the ditch and basins.
4. Provide elevations and dimensions of all structures, including pipe and orifice sizes, inverts diameters, weir elevations and dimensions, riser elevations and dimensions, top of structure elevations and dimensions, and locations and inverts for all pipes. Provide drainage pipes size, material, length, slope, and invert elevations.
5. The Survey shall include cross sections of the final surface course and grades taken at a minimum of 50-foot longitudinal spacings and at all longitudinal grade breaks. Minimum cross section grade points shall include the grade at centerline, at joint lines, at grade breaks, and at edges of pavement (on/off pavement). Shots in grassed areas shall not exceed 25' transverse spacing.
6. Provide an AutoCAD digital drawing and PDF file of the as-built drawing on SC State Plan Coordinate System NAD 83 Datum. The AutoCAD drawing file shall be in AutoCAD 2019 format. The Drawings shall be signed and sealed by a Registered Surveyor in the State of South Carolina.

All survey work must be tied to the Primary Airport Control Station (PACS) and the project baseline. Ties and monuments shall be shown on record drawings.

## **PSP-17 PROTECTION OF EXISTING FACILITIES**

All existing facilities, structures, and utilities to remain will be carefully protected by the Contractor (See also PSP-18). Any facilities damaged by the Contractor will be repaired immediately and restored to the original condition at the Contractor's cost. All runway lights, taxiway lights, signs, and paved/concrete surfaces shall be protected during grading, paving, and seeding and mulching operations by suitable means. All airfield lighting systems on open taxiways and Runway 5-23 shall be operational at all times.

## PSP-18 PROTECTION OF CABLES, CONTROLS, NAVAIDS, AND UTILITIES

1. The Contractor is hereby informed that there are installed on the Airport navigational aids (NAVAIDs), airfield lighting, other electric power cables serving other facilities, and other utilities. Such NAVAIDs, airfield lighting and other electric cables and other utilities to remain in service, and other utilities must be fully protected during the entire construction time unless shown otherwise on the plans. **It shall be the Contractor's responsibility to locate and protect all underground facilities along and in the work area at the Contractor's expense.**

Work under this Contract can be accomplished in the vicinity of these facilities and cables only at approved periods of time, which approval is subject to withdrawal at any time because of changes in the weather, emergency conditions on the existing airfield areas, anticipation of emergency conditions, and for any other reason as determined by the ENGINEER acting under the orders and instructions of the Airport Management. Any instructions to the Contractor to clear any given area, at any time, by the ENGINEER or the Airport Management, shall be immediately executed. Construction work will commence in the cleared area only when additional instructions are issued by the proper authorities.

2. The Contractor is responsible for arrangements to locate and mark in the field all power and control cables leading to and from any NAVAIDS, weather systems, electric power and communications cable, and other facilities and utilities before any work in the general vicinity is started. Thereafter, through the entire time of this construction, Contractor shall protect them from any possible damage, including crossing with unauthorized equipment, etc. Known facilities, utilities, and buried cables, and the approximate location thereof in the construction area, are shown on the plans.
3. These special provisions intend to make perfectly clear the need for protection of Airport NAVAIDS, weather equipment, utilities, and other facilities and cables by the Contractor at all times.
4. The Contractor shall immediately repair, with identical material by skilled workmen, any underground cables serving NAVAIDS, weather equipment, utilities and other Airport facilities which are damaged by his workmen, equipment, or work. Prior approval of the Airport must be obtained for the materials, workmen, time of day or night, method of repairs, for any temporary or permanent repairs the Contractor proposes to make to any NAVAIDS, Weather Bureau facilities, or other cables and controls serving such NAVAIDS and facilities damaged by the Contractor. Prior approval of the ENGINEER or of the representative designated by the Airport Management must be obtained for the materials, workmen, time of day or night, method of repairs, for any temporary or permanent repairs the Contractor proposes to make to any other Airport facilities and cables damaged by this Contractor.

## **PSP-19 STOCKPILE/ MATERIAL HANDLING REQUIREMENTS**

Location of stockpile areas shall be as shown on the plans and coordinated with and approved by the Owner. Stockpiles shall be neat in appearance and should be piled to a maximum height of eight feet. The Contractor will be required to manipulate and push up stockpiled materials as required, to promptly remove stockpiled waste materials from site for proper disposal to minimize stockpile ground areas, and to maintain piles in a neat and orderly fashion. When stockpiles are installed outside the limits of disturbance shown on the Plans, temporary silt fence shall be installed at the base of the stockpile on the downstream side of all stockpiles. There shall be no separate payment for multiple handling of materials by Contractor. See Plans for proposed location of stockpile areas and details for temporary silt fence installation.

## **PSP-20 DISPOSAL OF SOIL, DEBRIS, AND ASPHALT MILLINGS**

The Contractor shall promptly dispose of concrete debris, excess or unsuitable soil, silt excavation, debris from pipe and structure removal, asphalt millings, and other debris off Airport property in a properly permitted location in accordance with applicable laws and regulations. All costs for offsite disposal shall be included in the bid costs for the related items bid upon.

## **PSP-21 MATERIAL MANIPULATION**

The specifications for P-152, Excavation and Embankment and P-209 Crushed Aggregate Base Course require that these materials be compacted within specific limits of optimum moisture content. The Contractor shall be responsible for all efforts necessary to adjust the moisture content of soil materials in order to achieve stability and specified compaction. This includes but is not limited to proactive control of surface runoff and groundwater, soil drying efforts (spreading, scarifying, etc.) and watering. Soils which are found to be wet of optimum will not be considered unsuitable. All costs for soil moisture conditioning shall be incidental to the prices of items of work bid upon.

## **PSP-22 DUST CONTROL**

It is the intent of these specifications that the Contractor will, by watering, chemicals, vegetation, or other means, prevent the occurrence of dust which will be objectionable to the Airport or the residents of the area or violate existing laws or regulation or cause hazards to air traffic.

## **PSP-23 EROSION AND SEDIMENT CONTROL PERMIT REQUIREMENTS**

The Contractor will be installing temporary silt fence for the project. The responsibility for site inspection and maintenance requirements are hereby assigned to the Contractor. Site inspections and maintenance shall continue until a good stand of grass has been established at the site and the project has been closed out. The Contractor will be required to provide an "As-Built" survey/drawing for the project, including data and information below. All costs associated with this item shall be included in the item "Mobilization," and no other compensation will be made.

Erosion control measures shall be inspected daily during active construction. During times when construction is not on-going, erosion control measures shall be inspected weekly and after each rainfall event measuring ½" or more at a minimum.

Needed repairs/replacement shall be made immediately upon discovery or upon notification by the ENGINEER or Airport Management. The cost of all repairs shall be included in items bid upon.

The Contractor will be required to provide an as-built survey for the project as specified in Section PSP-16 As-Constructed Drawing.

#### **PSP-24 TESTING – GENERAL**

All testing required by the Contract specifications for acceptance of the work (except as noted in the individual specification sections and as explained below) will be initiated by the ENGINEER with the full cooperation of the Contractor. Quality assurance testing will be scheduled after the Contractor confirms to the ENGINEER that an area is ready for testing. **NOTE: Contractor is responsible for his own quality control testing and is not to request quality assurance testing until he has satisfied himself that the materials are ready for such testing. The Contractor will be required to pay for all retests of failing quality assurance tests taken throughout the project which are performed by the testing laboratory after the ENGINEER has been notified by the Contractor that the item is ready for testing.**

An independent QA testing laboratory will be used on the project, which laboratory technicians will be under the direction of the ENGINEER. There is no cost to the Contractor for QA testing under this heading (except as noted in the individual specifications section and as explained above). Testing to be completed during construction is indicated for each bid item in the individual sections.

The Contractor will be required, at his expense, to furnish proposed job mix formulas for the SCDOT Type 'B' Bituminous Surface Course to the ENGINEER for his approval at least thirty (30) days prior to the proposed date for use. The Contractor may be requested to submit the necessary materials to the designated laboratory for verification and will be required to furnish all required test data, graphs, etc., as required and specified in the item specifications. The cost for the materials and delivery of these items shall be included in the unit costs for the applicable items under this Contract.

The Contractor will also be required to furnish a density gauge for use on this project during paving. This density gauge shall be operated by a trained laboratory technician to provide for continuous monitoring of paving operations and their conformance with the specifications. The cost of furnishing the density gauge and the trained laboratory technician shall be borne by the Contractor. The density gauge is to be used by the Contractor as an aid in construction operations; the Owner will not use density gauge test results to determine acceptance and/or rejection of the bituminous pavement.

## PSP-25 SHOP DRAWINGS

The Contractor is responsible for the preparation of detailed shop drawings and data submittals necessary for the fabrication, erection, and construction of all parts of the work in conformity with the Contract Documents. ***Six (6) copies of shop drawings or a digital scanned copy submitted by email shall be submitted to the ENGINEER in accordance with the procedures described herein.***

"Shop Drawings", wherever referred to, shall be defined as drawings, diagrams, illustrations, schedules, catalog cuts, performance charts, brochures, and other data prepared by the Contractor or any Subcontractor, Manufacturer, supplier, or distributor, which illustrate how specific portions of the work shall be fabricated and/or installed.

Where it is difficult to provide "shop drawing transparencies such as for "catalog cuts", "brochures" or "photographs", the Contractor shall submit a minimum of six (6) copies of such "cuts", "brochures" or "photographs". Additional copies shall be supplied when required by the ENGINEER.

All submissions of shop drawings, brochures and catalog cuts shall be accompanied by a transmittal letter listing the drawings submitted by number and title.

Each shop drawing shall have listed on it all Contract references, drawing numbers, plus shop drawing numbers on related work by other Subcontractors, if available.

Non-reproducible shop drawings shall be submitted with a cover sheet containing all the information required on reproducible shop drawings.

Shop drawings shall be complete in every detail, including a location plan relating the work to space identification and column numbers. Materials, gauges, method of fastening, size and spacing of fastenings, connections with other work, cutting, fitting, drilling, and any and all other necessary information as per usual trade practice or as required for any specific purpose must be clearly shown.

***The Contractor shall check and approve all shop drawings to make sure that they conform to the drawings, specifications, and other Contract requirements, and correct the drawings found to be inaccurate or otherwise in error.*** The Contractor shall verify all field dimensions and criteria and shall be responsible for the coordination of work by all Subcontractors.

Shop drawings, at the time of submission, shall bear the signature of the Contractor's checker, date, and stamp of approval for submission to the ENGINEER as evidence that such drawings and/or details have been reviewed, checked, and approved by the Contractor. Drawings submitted without such stamp of approval will be returned to the Contractor unapproved and will require resubmission. In such event, it will be deemed that the Contractor has not complied with the requirements of this subsection and shall bear the risks of delays as if no drawings or details had been submitted. Both sepia and prints must bear Contractor's stamp.

The Contractor, by approving and submitting shop drawings, represents that he has determined and verified all field measurements and quantities, field construction criteria, materials, catalog numbers, and similar data, and that he has reviewed and coordinated the information in the shop drawings with the requirements of the work and the Contract documents.

At the time of submission, the Contractor shall inform the ENGINEER in writing of any deviation in the shop drawings or samples from the requirements of the Contract documents.

The ENGINEER will review and approve shop drawings and samples with reasonable promptness to minimize delay, but only for conformance with the design concept of the Contract and with the information given in the Contract documents. The ENGINEER'S approval of a separate item shall not indicate approval of an assembly in which the item functions. The ENGINEER will return the shop drawings transparency/sepia to the Contractor for his use and distribution.

The ENGINEER'S approval of shop drawings or samples shall not relieve the Contractor of responsibility for any deviation from the requirements of the Contract documents unless the Contractor has informed the ENGINEER in writing of such deviation at the time of submission and the ENGINEER has given written approval to the specific deviation, nor shall the ENGINEER'S approval relieve the Contractor from responsibility for errors or omissions in the shop drawings or samples.

No materials shall be ordered and no portion of the work requiring shop drawings or sample submission shall be commenced until the submission has been approved by the ENGINEER. All such materials and portions of work shall be in accordance with approved shop drawings and samples.

The Contractor shall, when requested by the ENGINEER in writing, submit additional shop drawings to those required by the technical specifications or special provisions.

The Contractor shall deliver to the ENGINEER three (3) complete sets of all maintenance manuals, parts list, operating instructions, and other necessary documents required for all installed materials, equipment, or machinery. Such documents shall be furnished concurrently with the installations of the respective materials, equipment, or machinery. All shop drawings submitted by the Contractor and approved by the ENGINEER become part of the Contract documents.

## **PSP-26 WEEKLY PROGRESS MEETING**

A Progress Meeting will be held weekly throughout the project. Progress meetings will be alternated on a weekly basis between a Zoom Meeting and an On-site Meeting. The weekly meeting(s) will be scheduled at the Pre-construction Meeting. The purpose of these meetings will be scheduling and coordination of the work between Contractors, review of project progress, and discussion of project work items and issues. The Contractor will be required to have a qualified representative at each of these meetings.

## **PSP-27 PAY ESTIMATE DOCUMENTATION**

The Contractor's attention is directed to various documentation requirements of the project. All documentation must be current as of the date of each partial pay estimate. Delinquent paperwork may result in delays in processing pay estimates. Documentation requirements include but are not limited to materials on-hand documentation (Section 90). A sample of the documents is contained in Appendix "C" - Forms, of the specifications.

## **PSP-28 COPIES OF CONSTRUCTION DOCUMENTS**

The ENGINEER will furnish at no charge to Contractor five (5) complete sets of plans and specifications including cross-sections 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 the cost of reproduction and postage.

## **PSP-29 CONTRACTS AND BONDS**

The Contractor's attention is directed to Appendix "B" which includes the form of the construction contract and performance and payment bonds. The contract form contains numerous important contract provisions including insurance requirements.

## **PSP-30 AS CONSTRUCTED DRAWINGS**

The Contractor will be required to maintain a set of "as constructed plans" on the project at all times, noting any changes, deviations, etc., with the responsibility to furnish the Owner, at the completion of the project, a set of as constructed plans. A set of sealed "as constructed plans" shall be delivered to the ENGINEER prior to final acceptance and payment and in addition to final cross-sections, pavement elevations/edges, and final as-built ground and pavement grades (see PSP-16 AS CONSTRUCTED DRAWING for as constructed drawing requirements). All survey work must be tied to the Primary Airport Control Station and shall be on the same datum as the plans.

## **PSP-31 WARRANTY**

A one-year warranty is applicable for all materials and workmanship for the completed project. The warranty includes the establishment and maintenance of a good stand of grass of uniform color and density as required in the specifications.

## **PSP-32 WATER FOR CONSTRUCTION OPERATIONS**

Water for the construction operations for this project shall be paid for by the Contractor. The Contractor will be required to obtain a permit and meter from the Georgetown County Water and Sewer District. The meter shall be installed at a hydrant located inside the fenced airport area. All water utilized for the project shall be obtained from the metered hydrant.

For permit required and meter, contact:

Michael Yip  
Georgetown County Water and Sewer District  
PO Box 2730  
456 Clearwater Drive  
Pawley's Island, SC 29585  
(843) 546-8408

The Contractor shall be responsible for any cost required for obtaining the permit and meter, and all water required for the project. The cost of water shall be included the cost of items for which it is used.

The Contractor shall use care when obtaining water for the project from the hydrant. The Contractor will be required to open the hydrant slowly to minimize the pressure drop in the system.

### **PSP-33 CAD DRAWING FILES**

CAD drawing files are available for the project. A Contractor who would like to receive a copy of the CAD drawing files shall complete the 'Release for CAD Files' form included in Appendix 'C', pages C-8 and C-9, and submit to [nsilver@gtcounty.org](mailto:nsilver@gtcounty.org). Once the 'Release for CAD Files' form is received, the CAD drawing files will be forwarded to the requesting party.

### **END OF PROJECT SPECIAL PROVISIONS**

# **TECHNICAL SPECIFICATIONS**

## ITEM C-102

### TEMPORARY AIR AND WATER POLLUTION, SOIL EROSION, AND SILTATION CONTROL

#### DESCRIPTION

- 102-1** This item shall consist of temporary control measures as shown on the plans or as ordered by the ENGINEER during the life of a contract to control pollution of air and water, soil erosion, and siltation through the use of silt fences, mulches, grasses, and other erosion control devices or methods.

Temporary erosion control shall be in accordance with the approved erosion control plan; the approved Construction Safety and Phasing Plan (CSPP) and AC 150/5370-2G, *Operational Safety on Airports During Construction*. The temporary erosion control measures contained herein shall be coordinated with the permanent erosion control measures specified as part of this contract to the extent practical to assure economical, effective, and continuous erosion control throughout the construction period.

Temporary control may include work outside the construction limits such as borrow pit operations, equipment and material storage sites, waste areas, and temporary plant sites.

Temporary control measures shall be designed, installed, and maintained to minimize the creation of wildlife attractants that have the potential to attract hazardous wildlife on or near public-use airports.

#### MATERIALS

- 102-2.1 Grass.** Grass that will not compete with the grasses sown later for permanent cover per Item T-901 shall be a quick-growing species (such as ryegrass, Italian ryegrass, or cereal grasses) suitable to the area providing a temporary cover. Selected grass species shall not create a wildlife attractant.
- 102-2.2 Mulches.** Mulches may be hay, straw, fiber mats, netting, bark, wood chips, or other suitable material reasonably clean and free of noxious weeds and deleterious materials per Item T-908. Mulches shall not create a wildlife attractant.
- 102-2.3 Fertilizer.** Fertilizer shall be a standard commercial grade and shall conform to all federal and state regulations and to the standards of the Association of Official Agricultural Chemists per Item T-901.

**102-2.4 Silt Fence.** Silt fence shall consist of polymeric filaments which are formed into a stable network such that filaments retain their relative positions. Synthetic filter fabric shall contain ultraviolet ray inhibitors and stabilizers to provide a minimum of six months of expected usable construction life. Silt fence shall meet the requirements of ASTM D6461.

**102-2.5 Other.** All other materials shall meet commercial grade standards and shall be approved by the ENGINEER before being incorporated into the project.

## **CONSTRUCTION REQUIREMENTS**

**102-3.1 General.** In the event of conflict between these requirements and pollution control laws, rules, or regulations of other federal, state, or local agencies, the more restrictive laws, rules, or regulations shall apply.

The ENGINEER shall be responsible for assuring compliance to the extent that construction practices, construction operations, and construction work are involved.

**102-3.2 Schedule.** Prior to the start of construction, the Contractor shall submit schedules in accordance with the specifications and the plans for accomplishment of temporary and permanent erosion control work for grading, construction; and paving. The Contractor shall also submit a proposed method of erosion and dust control on haul roads and borrow pits and a plan for disposal of waste materials. Work shall not be started until the erosion control schedules and methods of operation for the applicable construction have been accepted by the ENGINEER.

**102-3.3 Construction Details.** The Contractor will be required to incorporate all permanent erosion control features into the project at the earliest practicable time as outlined in the plans and specifications. Except where future construction operations will damage slopes, the Contractor shall perform the permanent seeding and mulching and other specified slope protection work in stages as soon as substantial areas of exposed slopes can be made available. Temporary erosion and pollution control measures will be used to correct conditions that develop during construction that were not foreseen during the design stage; or that are needed prior to installation of permanent control features; or that are needed temporarily to control erosion that develops during normal construction practices but are not associated with permanent control features on the project.

Where erosion may be a problem, schedule and perform grading operations so that permanent erosion control features can follow immediately if project conditions permit. Temporary erosion control measures are required if permanent measures cannot immediately follow grading operations. The ENGINEER shall limit the area of excavation, borrow, and embankment

operations in progress, commensurate with the Contractor's capability and progress in keeping the finish grading, mulching, seeding, and other such permanent control measures current with the accepted schedule. If seasonal limitations make such coordination unrealistic, temporary erosion control measures shall be taken immediately to the extent feasible and justified as directed by the ENGINEER.

The Contractor shall provide immediate permanent or temporary pollution control measures to minimize contamination of adjacent streams or other watercourses, lakes, ponds, or other areas of water impoundment as directed by the ENGINEER. If temporary erosion and pollution control measures are required due to the Contractor's negligence, carelessness, or failure to install permanent controls as a part of the work as scheduled or directed by the ENGINEER, the work shall be performed by the Contractor and the cost shall be incidental to this item.

The ENGINEER may increase or decrease the area of erodible earth material that can be exposed at any time based on an analysis of project conditions.

The erosion control features installed by the Contractor shall be maintained by the Contractor during the construction period.

Pollutants such as fuels, lubricants, bitumen, raw sewage, wash water from concrete mixing operations, and other harmful materials shall not be discharged into any waterways, impoundments or into natural or manmade channels.

**102-3.4 Installation, Maintenance and Removal of Silt Fence.** Silt fences shall extend a minimum of 16 inches and a maximum of 34 inches above the ground surface. Posts shall be set no more than 10 feet on center. Filter fabric shall be cut from a continuous roll to the length required minimizing joints where possible. When joints are necessary, the fabric shall be spliced at a support post with a minimum 12-inch overlap and securely sealed. A trench shall be excavated approximately 4 inches deep by 4 inches wide on the upslope side of the silt fence. The trench shall be backfilled, and the soil compacted over the silt fence fabric. The Contractor shall remove and dispose of silt that accumulates during construction and prior to establishment of permanent erosion control. The fence shall be maintained in good working condition until permanent erosion control is established. Silt fence shall be removed upon approval of the ENGINEER

#### **METHOD OF MEASUREMENT**

**102-4.1** Temporary erosion and pollution control work required will be performed as scheduled or directed by the ENGINEER. Completed and accepted work will be measured as follows:

- A. Temporary Seeding and Mulching will be measured by the acre.
- B. Removal of Existing Silt Fence will be measured by the linear foot,
- C. Installation and Removal of Temporary Silt Fence will be measured by the linear foot.
- D. Excelsior Matting shall be measured by the square yard.

**102-4.2** Control work performed for protection of construction areas outside the construction limits, such as borrow and waste areas, haul roads, equipment and material storage sites, and temporary plant sites, will not be measured and paid for directly but shall be considered as a subsidiary obligation of the Contractor.

### **BASIS OF PAYMENT**

**102-5.1** Accepted quantities of temporary water pollution, soil erosion, and siltation control work ordered by the ENGINEER and measured as provided in Paragraph 102-4.1 will be paid for under:

- Item C-102-5.1A Temporary Seeding and Mulching - per Acre
- Item C-102-5.1B Removal of Existing Silt Fence – per Linear Foot
- Item C-102-5.1C Installation and Removal of Silt Fence - per Linear Foot
- Item C-102-5.1D Excelsior Matting – per Square Yard

Where other directed work falls within the specifications for a work item that has a contract price, the units of work shall be measured and paid for at the contract unit price bid for the various items.

Temporary control features not covered by contract items that are ordered by the ENGINEER will be paid for in accordance with Section 90, Paragraph 90-05 *Payment for Extra Work*.

### **REFERENCES**

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

**Advisory Circulars (AC)**

AC 150/5200-33C      *Hazardous Wildlife Attractants on or Near Airports*

AC 150/5370-2G      *Operational Safety on Airports During Construction*

**ASTM International (ASTM)**

ASTM D6461          *Standard Specification for Silt Fence Materials*

**United States Department of Agriculture (USDA)**

FAA/USDA            *Wildlife Hazard Management at Airports, A Manual for  
Airport Personnel*

**END OF ITEM C-102**

## ITEM C-105

### MOBILIZATION

- 105-1 Description.** This item of work shall consist of, but is not limited to, work and operations necessary for the movement of personnel, equipment, material and supplies to and from the project site for work on the project except as provided in the contract as separate pay items.
- 105-2 Mobilization Limit.** Mobilization shall be limited to 10 percent of the total project cost.
- 105-3 ENGINEER'S / RPR Field Office.** An ENGINEER'S / RPR field office is not required.

### METHOD OF MEASUREMENT AND PAYMENT

- 105-5.1 Mobilization.** Based upon the contract lump sum price for "Mobilization" partial payments will be allowed as follows:
- A.** With first pay request, 25%.
  - B.** When 25% or more of the original contract is earned, an additional 25%.
  - C.** When 50% or more of the original contract is earned, an additional 40%.
  - D.** After Final Inspection, Staging area clean-up and delivery of all Project Closeout materials as required by Section 90, Paragraph 90-11, *Contractor Final Project Documentation*, the final 10%.

### BASIS OF PAYMENT

- 105-6 Payment will be Made Under:**
- Item C-105.6.1      Mobilization - per Lump Sum

**END OF ITEM C-105**

**TEMP TCI  
TEMPORARY CONSTRUCTION ITEMS**

**DESCRIPTION**

**TCI-1.1**      **General.** This item consists of furnishing all labor, materials, and equipment for temporary construction items necessary for the safe and proper execution of construction and not otherwise included in other Contract items. The Contractor will be expected to supply and utilize the items listed below and other items as required in the Construction Notes or as contained in the drawings and technical specifications. Temporary construction items include, but are not limited to providing and maintaining construction barricades, portable floodlighting, steel plates, temporary haul road construction and maintenance, maintenance of traffic, safety personnel, personnel training, temporary sanitary facilities, temporary drainage, temporary generator(s), waste disposal facilities, reworked/temporary materials, men and equipment as needed to keep all aircraft and/or vehicle traffic areas free of debris and ongoing construction activities.

**MATERIALS**

**TCI-2.1**      **Construction Barricades.** Construction barricades shall be High Density Polyethylene (HDPE) water-ballast barricades and shall be constructed in accordance with the details shown on the plans. Construction barricades shall be placed in accordance with the project plans and around all cranes, equipment, and staging areas on the paved areas.

**TCI-2.2**      **Portable Floodlighting.** Portable floodlighting shall be provided, as required, for construction operations during nighttime work. The Contractor shall provide sufficient units so that all work areas are illuminated to a level of 5 horizontal footcandles. The lighting levels shall be calculated and measured in accordance with the current standards of the Illumination Engineering Society.

**TCI-2.3**      **Lighted Runway Closure Marker.** Not required.

**TCI-2.4**      **Steel Plates.** Steel plates or similar protective material of adequate size and thickness shall be furnished as necessary to cover temporary excavations, unfinished structures or surfaces requiring protection or for safety purposes. Plates shall be securely fastened down and shall be adequate to safely support any anticipated loadings to be imposed.

**TCI-2.5**      **Haul Road Construction/Maintenance.** Contractor haul routes have been designated on the Plans and it shall be the Contractor's responsibility to protect and to maintain the haul route(s) in its current condition. It shall be

the Contractor's responsibility to inspect the existing conditions of the haul road prior to construction. During construction, the Contractor shall be responsible for maintaining and repairing the haul road as required or directed by the ENGINEER. Haul routes utilized for the project shall be restored to their original conditions at the conclusion of construction activities.

**TCI-2.6 Temporary Generator.** Temporary generator(s) operating rating shall be as indicated on the drawings, voltage to match existing service. Temporary generator(s) shall be a fully integrated mobile power generating system utilizing diesel fuel and shall include sound attenuated enclosure.

**TCI-2.7 Waste Disposal Facilities.** Provide waste-collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction.

### CONSTRUCTION METHODS

**TCI-3.1 Construction Barricades.** Barricades shall be placed in accordance with the construction plans and as needed and shall remain in place or moved as directed until completion of work in each phase or area. The contractor shall be responsible for maintaining the barricades in good working condition throughout the duration of the contract.

**TCI-3.2 Portable Floodlighting.** Portable floodlighting is required for construction during periods of limited visibility (i.e., nighttime). Illumination requirements shall be those contained in Paragraph 2.2. Portable floodlighting shall not penetrate any operational surfaces. Floodlighting shall be directed to avoid interference with Air Traffic Controllers or aircraft pilots. Hoods or shields may be required to prevent interference. See additional requirements on the plans.

**TCI-3.3 Construction Materials Stockpiling and Equipment Storage.** Stockpiling of construction materials and equipment storage is not permitted within operating taxiway object free areas or on the existing apron. Stockpiled material must be protected against jet blast. Stockpiled materials and equipment should be prominently marked and lighted during hours of restricted visibility or darkness if in the air operations area. Stockpiled material or equipment should not be stored near aircraft turning areas or operational movement areas, aprons, or excavations and trenches. The stockpiled construction materials and equipment shall not cause degraded or hazardous conditions to Airport operations safety. This includes determining and verifying that stockpiled materials and equipment are stored or parked at an approved location, that they are properly stowed to prevent foreign object debris (FOD), attraction by wildlife, or obstruction of

air operations either by their proximity to NAVAIDs or to aircraft movement areas.

- TCI-3.4 Foreign Object Debris (FOD) Management.** Waste and loose materials capable of causing damage to aircraft landing gear or propellers or capable of being ingested in jet engines should not be left or placed on or near active aircraft movement areas. Materials tracked onto these areas shall be continuously removed by the Contractor during the construction project. Waste or loose materials that could attract wildlife shall be carefully controlled and removed on a continuous basis. The Contractor shall have sufficient mechanized sweepers and covered trash containers on site to comply with this requirement at all times. The construction area shall be kept clean at all times of debris that may blow onto the airfield.

#### **METHOD OF MEASUREMENT**

- TCI-4.1 Temporary Construction Items:** No direct measurement will be made for this item as payment will be made on a lump sum basis.

#### **BASIS OF PAYMENT**

- TCI-5.1 Temporary Construction Items.** Payment will be made at the lump sum bid price for "Temporary Construction Items." This payment shall be full compensation for furnishing all materials and labor for placing, moving, and removing construction barricades; temporary sanitary facilities, maintenance of traffic; and for any other labor, materials, equipment, tools and incidentals necessary for temporary items required for construction of this project.

Payment for this item will be made in installments. The first payment of 10 percent of the lump sum price will be included in the payment following the construction notice to proceed (CNTF). The remaining 90 percent of the lump sum price will be included as installments in subsequent pay requests. Each such installment will be determined based on the ratio of the total work completed to date to the total contract amount.

Payment will be made under:

Item TCI-5.1-1                      Temporary Construction Items – per Lump Sum

**END OF ITEM TCI**

## ITEM P-101

### PREPARATION/REMOVAL OF EXISTING PAVEMENTS AND MISCELLANEOUS ITEMS

#### DESCRIPTION

- 101-1** This item shall consist of preparation of existing pavement surfaces for overlay, surface treatments, removal of existing pavement, and other miscellaneous items. The work shall be accomplished in accordance with these specifications and the applicable plans.

#### EQUIPMENT AND MATERIALS

- 101-2** All equipment and materials shall be specified here and in the following paragraphs or approved by the ENGINEER. The equipment shall not cause damage to the pavement to remain in place.

#### CONSTRUCTION

- 101-3.1 Removal of Existing Pavement.** Not used.
- A. Concrete Pavement Removal.** Not Used.
  - B. Asphalt Pavement Removal.** Not used.
  - C. Repair or Removal of Base, Subbase, and/or Subgrade.** Not Used.
  - D. Disposal of Excess Millings.** Excess millings from removal of the existing runway shall be disposed of off Airport property.
- 101-3.2 Preparation of Joints and Cracks Prior to Overlay/Surface Treatment.**  
Not Used.
- 101-3.3 Removal of Foreign Substances/Contaminates Prior to (Overlay) (Sealcoat) (Remarking).** Not Used.
- 101-3.4 Concrete Spall or Failed Asphaltic Concrete Pavement Repair.**
- A. Repair of Concrete Spalls in Areas to be Overlaid with Asphalt.** Not Used.
  - B. Asphalt Pavement Repair.** Not Used.

**101-3.5 Cold Milling.** Milling shall be performed with a power-operated milling machine or grinder, capable of producing a uniform finished surface. The milling machine or grinder shall operate without tearing or gouging the underlying surface. The milling machine or grinder shall be equipped with grade and slope controls, and a positive means of dust control. All millings shall be removed and disposed of off Airport property. If the Contractor mills or grinds deeper or wider than the plans specify, the Contractor shall replace the material removed with new material at the Contractor's Expense.

**A. Patching.** Not Used.

**B. Profiling, Grade Correction, or Surface Correction.** Not Used.

**C. Clean-Up.** The Contractor shall sweep the milled surface immediately after the milling until all residual materials are removed from the pavement surface. Prior to paving, the Contractor shall wet down the milled pavement and thoroughly sweep and/or blow off the surface to remove loose residual material. Waste materials shall be collected and removed from the pavement surface and adjacent areas by sweeping or vacuuming. Waste materials shall be removed and disposed of off Airport.

**101-3.6. Preparation of Asphalt Pavement Surfaces Prior to Surface Treatment.** Not Used.

**101-3.7 Maintenance.** The Contractor shall perform all maintenance work necessary to keep the pavement in a satisfactory condition until the full section is complete and accepted by the ENGINEER. The surface shall be kept clean and free from foreign material. The pavement shall be properly drained at all times. If cleaning is necessary or if the pavement becomes disturbed, any work repairs necessary shall be performed at the Contractor's expense.

**101-3.8 Preparation of Joints in Rigid Pavement Prior to Resealing.** Not Used.

**101-3.8.1 Removal of Existing Joint Sealant.** Not Used.

**101-3.8.2 Cleaning Prior to Sealing.** Not Used.

**101-3.8.3 Joint Sealant.** Not Used.

**101-3.9 Preparation of Cracks in Flexible Pavement Prior to Sealing.** Not Used.

**101-3.9.1 Preparation of Crack.** Not Used.

**101-3.9.2 Removal of Existing Crack Sealant.** Not Used.

**101-3.9.3 Crack Sealant.** Not Used.

**101-3.9.4 Removal of Pipe and other Buried Structures.** Not Used.

#### **METHOD OF MEASUREMENT**

**101-4.1 Pavement Removal.** Not used.

**101-4.2 Joint and Crack Repair.** Not Used.

**101-4.3 Removal of Foreign Substances/Contaminates.** Not Used.

**101-4.4 Spalled and Failed Asphalt Pavement Repair.** Not Used.

**101-4.5 Concrete Spall Repair.** Not Used.

**101-4.6 Cold Milling.** The unit of measure for 'Cold Milling – Preparation of Pavement Tie In' shall not be measured and will be paid for on a lump sum basis. The location and average depth of the cold milling shall be as shown on the plans. If the initial cut does not correct the condition, the Contractor shall re-mill the area and will be paid for the total depth of milling.

**101-4.7 Removal of Pipe and other Buried Structures.** Not Used.

#### **BASIS OF PAYMENT**

**101-5.1 Payment.** Payment shall be made at contract lump sum price for the area of pavement preparation shown on the project plans as specified above. This price shall be full compensation for furnishing all materials and for all preparation, hauling, and removal of the material and for all labor, equipment, tools, and incidentals necessary to complete this item.

Item P-101-5.1 Cold Milling, Preparation of Pavement Tie In – per Lump Sum

#### **REFERENCES**

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

##### **Advisory Circulars (AC)**

AC 150/5380-6C Guidelines and Procedures for Maintenance of Airport Pavements.

**ASTM International (ASTM)**

ASTM D6690      Standard Specification for Joint and Crack Sealants, Hot Applied, for Concrete and Asphalt Pavements

**END OF ITEM P-101**

## ITEM P-152

### EXCAVATION, SUBGRADE, AND EMBANKMENT

#### DESCRIPTION

**152-1.1** This item covers excavation, disposal, placement, and compaction of all materials within the limits of the work required to construct the apron, taxiway, and intermediate areas in accordance with these specifications and in conformity to the dimensions and typical sections shown on the plans.

**152-1.2 Classification.** All material excavated shall be classified as defined below:

**A. Unclassified Excavation.** Unclassified excavation shall consist of the excavation and disposal of all material, regardless of its nature which is not otherwise classified and paid for under one of the following items.

**B. Borrow Embankment.** Borrow Embankment shall consist of approved material required for the construction of embankments or for other portions of the work in excess of the quantity of usable material available from required excavations. Borrow material shall be obtained from areas outside of the airport boundaries. Borrow material shall consist of material classified as SC, SM, SP, or SW as approved by the ENGINEER.

**152-1.3 Unsuitable Excavation.** Unsuitable material shall be disposed in waste areas located off of Airport property. Materials containing vegetable or organic matter, such as muck, peat, organic silt, or sod shall be considered unsuitable for use in embankment construction. Material suitable for topsoil may be used on the embankment slope when approved by the ENGINEER.

#### CONSTRUCTION METHODS

**152-2.1 General.** The suitability of material to be placed in embankments shall be subject to approval by the ENGINEER. All unsuitable material shall be disposed of off Airport property in properly permitted location.

When the Contractor's excavating operations encounter artifacts of historical or archaeological significance, the operations shall be temporarily discontinued and the ENGINEER notified per Section 70, Paragraph 70-20. At the direction of the ENGINEER, the Contractor shall excavate the site in such a manner as to preserve the artifacts encountered and allow for their removal. Such excavation will be paid for as extra work.

Areas outside the limits of the pavement areas where the top layer of soil has become compacted by hauling or other Contractor activities shall be scarified and disked to a depth of 4 inches, to loosen and pulverize the soil. Stones or

rock fragments larger than 4 inches in their greatest dimension will not be permitted in the top 6 inches of the subgrade.

If it is necessary to interrupt existing surface drainage, sewers or under-drainage, conduits, utilities, or similar underground structures, the Contractor shall be responsible for and shall take all necessary precautions to preserve them or provide temporary services. When such facilities are encountered, the Contractor shall notify the ENGINEER, who shall arrange for their removal if necessary. The Contractor, at their own expense, shall satisfactorily repair or pay the cost of all damage to such facilities or structures that may result from any of the Contractor's operations during the period of the contract.

**A. Blasting.** Blasting shall not be allowed.

**152-2.2 Excavation.** No excavation shall be started until the work has been staked out by the Contractor and the ENGINEER has obtained from the Contractor, the survey notes of the elevations and measurements of the ground surface. The Contractor and ENGINEER shall agree that the original ground lines shown on the original topographic mapping are accurate or agree to any adjustments made to the original ground lines.

Digital terrain model (DTM) files of the existing surfaces finished surfaces and other various surfaces were used to develop the design plans.

Volumetric quantities were calculated by comparing DTM files of the applicable design surfaces and generating Triangle Volume Reports. Electronic copies of DTM files and a paper copy of the original topographic map will be issued to the successful bidder.

Existing grades on the design cross sections or DTM's, where they do not match the locations of actual spot elevations shown on the topographic map, were developed by computer interpolation from those spot elevations. Prior to disturbing original grade, Contractor shall verify the accuracy of the existing ground surface by verifying spot elevations at the same locations where original field survey data was obtained as indicated on the topographic map. Contractor shall recognize that, due to the interpolation process, the actual ground surface at any particular location may differ somewhat from the interpolated surface shown on the design cross sections or obtained from the DTM's. Contractor's verification of original ground surface, however, shall be limited to verification of spot elevations as indicated herein, and no adjustments will be made to the original ground surface unless the Contractor demonstrates that spot elevations shown are incorrect. For this purpose, spot elevations which are within 0.1 foot of the stated elevations for ground surfaces, or within 0.04 foot for hard surfaces (pavements, buildings, foundations, structures, etc.) shall be considered "no change". Only deviations in excess of these will be considered for adjustment of the original ground surface. If Contractor's verification

identifies discrepancies in the topographic map, Contractor shall notify the ENGINEER in writing at least two weeks before disturbance of existing grade to allow sufficient time to verify the submitted information and make adjustments to the design cross sections or DTM's. Disturbance of existing grade in any area shall constitute acceptance by the Contractor of the accuracy of the original elevations shown on the topographic map for that area.

All areas to be excavated shall be stripped of vegetation and topsoil. Topsoil shall be stockpiled for future use in areas designated on the plans or by the ENGINEER. All suitable excavated material shall be used in the formation of embankment, subgrade, or other purposes as shown on the plans. All unsuitable material shall be disposed of off Airport property in a properly permitted location.

The grade shall be maintained so that the surface is well drained at all times.

When the volume of the excavation exceeds that required to construct the embankments to the grades as indicated on the plans, the excess shall be used to grade the areas of ultimate development or disposed as directed by the ENGINEER. When the volume of excavation is not sufficient for constructing the embankments to the grades indicated, the deficiency shall be obtained from borrow areas.

**A. Selective Grading.** When selective grading is indicated on the plans, the more suitable material designated by the ENGINEER shall be used in constructing the embankment or in capping the pavement subgrade. If, at the time of excavation, it is not possible to place this material in its final location, it shall be stockpiled in approved areas until it can be placed. The more suitable material shall then be placed and compacted as specified. Selective grading shall be considered incidental to the work involved. The cost of stockpiling and placing the material shall be included in the various pay items of work involved.

**B. Undercutting.** Rock, shale, hardpan, loose rock, boulders, or other material unsatisfactory for subgrades, shoulders, or any areas intended for turf shall be excavated to a minimum depth of 12 inches below the subgrade or to the depth specified by the ENGINEER. Muck, peat, matted roots, or other yielding material, unsatisfactory for subgrade foundation, shall be removed to the depth specified. Unsuitable materials shall be disposed of off the Airport. The cost is incidental to this item. This excavated material shall be paid for at the contract unit price per cubic yard for Unclassified Excavation. The excavated area shall be backfilled with suitable material obtained from the grading operations or borrow areas and compacted to specified densities. The necessary backfill will constitute a part of the embankment.

**C. Over-Break.** Over-break, including slides, is that portion of any material displaced or loosened beyond the finished work as planned or authorized by the ENGINEER. All over-break shall be graded or removed by the Contractor and disposed of as directed by the ENGINEER. The ENGINEER shall determine if the displacement of such material was unavoidable and their own decision shall be final. Payment will not be made for the removal and disposal of over-break that the ENGINEER determines as avoidable. Unavoidable over-break will be classified as "Unclassified Excavation."

**D. Removal of Utilities.** The removal of existing structures and utilities required to permit the orderly progress of work will be accomplished by the Contractor as indicated on the plans. All existing foundations shall be excavated at least 2 feet below the top of subgrade or as indicated on the plans, and the material disposed of off Airport property as directed by the ENGINEER. All foundations thus excavated shall be backfilled with suitable material and compacted as specified for embankment or as shown on the plans.

**152-2.3 Borrow Excavation.** There are no borrow sources within the boundaries of the Airport property. The Contractor shall locate and obtain borrow sources, subject to the approval of the ENGINEER. The Contractor shall notify the ENGINEER at least 15 days prior to beginning the excavation so necessary measurements and tests can be made by the ENGINEER. All borrow pits shall be opened to expose the various strata of acceptable material to allow obtaining a uniform product. Borrow areas shall be drained and left in a neat, presentable condition with all slopes dressed uniformly. Borrow areas shall not create a hazardous wildlife attractant.

**152-2.4 Drainage Excavation.** Not Used.

**152-2.5 Preparation of Cut Areas or Areas Where Existing Pavement Has Been Removed.** In those areas on which a subbase or base course is to be placed, the top 12 inches of subgrade shall be compacted to not less than 100 % of maximum density for non-cohesive soils, and 95% of maximum density for cohesive soils as determined by ASTM D1557. As used in this specification, "non-cohesive" shall mean those soils having a plasticity index (PI) of less than 3 as determined by ASTM D4318.

**152-2.6 Preparation of Embankment Area.** All sod and vegetative matter shall be removed from the surface upon which the embankment is to be placed. The cleared surface shall be broken up by plowing or scarifying to a minimum depth of 6 inches and shall then be compacted per Paragraph 152-2.10.

Sloped surfaces steeper than one (1) vertical to four (4) horizontal shall be plowed, stepped, benched, or broken up so that the fill material will bond with the existing material. When the subgrade is part fill and part excavation or

natural ground, the excavated or natural ground portion shall be scarified to a depth of 12 inches and compacted as specified for the adjacent fill.

No direct payment shall be made for the work performed under this section. The necessary quantity of excavation removed will be paid for under the respective items of work.

**152-2.7 Control Strip.** The first half-day of construction of subgrade and/or embankment shall be considered as a control strip for the Contractor to demonstrate, in the presence of the ENGINEER's representative, that the materials, equipment, and construction processes meet the requirements of this specification. The sequence and manner of rolling necessary to obtain specified density requirements shall be determined. The maximum compacted thickness may be increased to a maximum of 12 inches upon the Contractor's demonstration that approved equipment and operations will uniformly compact the lift to the specified density. The ENGINEER's representative must witness this demonstration and approve the lift thickness prior to full production.

Control strips that do not meet specification requirements shall be reworked, re-compacted, or removed and replaced at the Contractor's expense. Full operations shall not begin until the control strip has been accepted by the ENGINEER. The Contractor shall use the same equipment, materials, and construction methods for the remainder of construction, unless adjustments made by the Contractor are approved in advance by the ENGINEER.

**152-2.8 Formation of Embankments.** The material shall be constructed in lifts as established in the control strip, but not less than 6 inches nor more than 12 inches of compacted thickness.

When more than one lift is required to establish the layer thickness shown on the plans, the construction procedure described here shall apply to each lift. No lift shall be covered by subsequent lifts until tests verify that compaction requirements have been met. The Contractor shall rework, re-compact and retest any material placed which does not meet the specifications.

The lifts shall be placed, to produce a soil structure as shown on the typical cross-section or as directed by the ENGINEER. Materials such as brush, hedge, roots, stumps, grass and other organic matter, shall not be incorporated or buried in the embankment.

Earthwork operations shall be suspended at any time when satisfactory results cannot be obtained due to rain, freezing, or other unsatisfactory weather conditions in the field. Frozen material shall not be placed in the embankment nor shall embankment be placed upon frozen material. Material shall not be placed on surfaces that are muddy, frozen, or contain frost. The Contractor

shall drag, blade, or slope the embankment to provide surface drainage at all times.

The material in each lift shall be within  $\pm 2\%$  of optimum moisture content before rolling to obtain the prescribed compaction. The material shall be moistened or aerated as necessary to achieve a uniform moisture content throughout the lift. Natural drying may be accelerated by blending in dry material or manipulation alone to increase the rate of evaporation.

The Contractor shall make the necessary corrections and adjustments in methods, materials, or moisture content to achieve the specified embankment density.

The ENGINEER will take samples of excavated materials which will be used in embankment for testing and develop a Moisture-Density Relations of Soils Report (Proctor) in accordance with ASTM D1557. A new Proctor shall be developed for each soil type based on visual classification.

Density tests will be taken by the ENGINEER for every 3,000 square yards of compacted embankment for each lift which is required to be compacted, or other appropriate frequencies as determined by the ENGINEER.

If the material has greater than 30% retained on the 3/4-inch sieve, follow AASHTO T-180 Annex Correction of maximum dry density and optimum moisture for oversized particles.

Rolling operations shall be continued until the embankment is compacted to not less than 100% of maximum density for non-cohesive soils, and 95% of maximum density for cohesive soils as determined by ASTM D1557. Under all areas to be paved, the embankments shall be compacted to a depth and to a density of not less than the percent of the maximum density as determined by ASTM D1557 as shown in the Table below. As used in this specification, "non-cohesive" shall mean those soils having a plasticity index (PI) of less than 3 as determined by ASTM D4318.

<b>Subgrade Compaction Requirements</b>		
<b>Percent Maximum Dry Density (%)</b>	<b>Depth of Compaction from Pavement Surface (inches)</b>	<b>Depth of Compaction from Top of Subgrade (inches)</b>
<b>Non-Cohesive Soil</b>		
100	0 – 28	0 – 16
95	28 – 48	16 – 37
<b>Cohesive Soil</b>		
95	0 – 26	0 – 14
90	26 – 41	14 – 29

On all areas outside of the pavement areas, no compaction will be required on the top 4 inches which shall be prepared for a seedbed in accordance with Item T-901.

The in-place field density shall be determined in accordance with ASTM D1556 or ASTM 6938 using Procedure A, the direct transmission method, and ASTM D6938 shall be used to determine the moisture content of the material. The machine shall be calibrated in accordance with ASTM D6938. The ENGINEER shall perform all density tests for acceptance. If the specified density is not attained, the area represented by the test or as designated by the ENGINEER shall be reworked and/or re-compacted and additional random tests made. This procedure shall be followed until the specified density is reached.

Compaction areas shall be kept separate, and no lift shall be covered by another lift until the proper density is obtained.

During construction of the embankment, the Contractor shall route all construction equipment evenly over the entire width of the embankment as each lift is placed. Lift placement shall begin in the deepest portion of the embankment fill. As placement progresses, the lifts shall be constructed approximately parallel to the finished pavement grade line.

When rock, concrete pavement, asphalt pavement, and other embankment material are excavated at approximately the same time as the subgrade, the material shall be incorporated into the outer portion of the embankment and the subgrade material shall be incorporated under the future paved areas. Stones, fragmentary rock, and recycled pavement larger than 4 inches in their greatest dimensions will not be allowed in the top 12 inches of the subgrade. Rockfill shall be brought up in lifts as specified or as directed by the ENGINEER and the finer material shall be used to fill the voids forming a dense, compact mass. Rock, cement concrete pavement, asphalt pavement, and other embankment

material shall not be disposed of except at places and in the manner designated on the plans or by the ENGINEER.

When the excavated material consists predominantly of rock fragments of such size that the material cannot be placed in lifts of the prescribed thickness without crushing, pulverizing or further breaking down the pieces, such material may be placed in the embankment as directed in lifts not exceeding 2 feet in thickness. Each lift shall be leveled and smoothed with suitable equipment by distribution of spalls and finer fragments of rock. The lift shall not be constructed above an elevation 4 feet below the finished subgrade.

There will be no separate measurement of payment for compacted embankment. All costs incidental to placing in lifts, compacting, discing, watering, mixing, sloping, and other operations necessary for construction of embankments will be included in the contract price for excavation, borrow embankment, or other items.

**152-2.9 Proof Rolling.** The purpose of proof rolling the subgrade is to identify any weak areas in the subgrade and not for compaction of the subgrade. After compaction is completed, the subgrade area shall be proof rolled with a 20-ton Tandem axle Dual Wheel Dump Truck loaded to the legal limit with tires inflated to 80/100/150 psi in the presence of the ENGINEER's representative. Apply a minimum of 2 coverages, or as specified by the ENGINEER, under pavement areas. A coverage is defined as the application of one tire print over the designated area. Soft areas of subgrade that deflect more than 1 inch or show permanent deformation greater than 1 inch shall be removed and replaced with suitable material or reworked to conform to the moisture content and compaction requirements in accordance with these specifications. Removal and replacement of soft areas is incidental to this item.

**152-2.10 Compaction Requirements.** The subgrade under areas to be paved shall be compacted to a depth of 12 inches and to a density of not less than 100 percent of the maximum dry density as determined by ASTM D1557. The subgrade in areas outside the limits of the pavement areas shall be compacted to a depth of 12 inches and to a density of not less than 95 percent of the maximum density as determined by ASTM D1557.

The material to be compacted shall be within  $\pm 2\%$  of optimum moisture content before being rolled to obtain the prescribed compaction (except for expansive soils). When the material has greater than 30 percent retained on the  $\frac{3}{4}$  inch sieve, follow the methods in ASTM D1157. Tests for moisture content and compaction will be taken at a minimum of 3,000 S.Y. of subgrade. All quality assurance testing shall be done by the ENGINEER for acceptance determination.

The in-place field density shall be determined in accordance with ASTM D1556 or ASTM D6938 using Procedure A, the direct transmission method, and ASTM D6938 shall be used to determine the moisture content of the material. The machine shall be calibrated in accordance with ASTM D6938 within 12 months prior to its use on this contract. The gage shall be field standardized daily.

Maximum density refers to maximum dry density at optimum moisture content unless otherwise specified.

If the specified density is not attained, the entire lot shall be reworked and/or re-compacted and additional random tests made. This procedure shall be followed until the specified density is reached.

All cut-and-fill slopes shall be uniformly dressed to the slope, cross-section, and alignment shown on the plans or as directed by the ENGINEER and the finished subgrade shall be maintained.

**152-2.11 Finishing and Protection of Subgrade.** Finishing and protection of the subgrade is incidental to this item. Grading and compacting of the subgrade shall be performed so that it will drain readily. All low areas, holes or depressions in the subgrade shall be brought to grade. Scarifying, blading, rolling and other methods shall be performed to provide a thoroughly compacted subgrade shaped to the lines and grades shown on the plans. All ruts or rough places that develop in the completed subgrade shall be graded, re-compacted, and retested. The Contractor shall protect the subgrade from damage and limit hauling over the finished subgrade to only traffic essential for construction purposes.

The Contractor shall maintain the completed course in satisfactory condition throughout placement of subsequent layers. No subbase, base, or surface course shall be placed on the subgrade until the subgrade has been accepted by the ENGINEER.

**152-2.12 Haul.** All hauling will be considered a necessary and incidental part of the work. The Contractor shall include the cost in the contract unit price for the pay of items of work involved. No payment will be made separately or directly for hauling on any part of the work.

The Contractor's equipment shall not cause damage to any excavated surface, compacted lift or to the subgrade as a result of hauling operations. Any damage caused as a result of the Contractor's hauling operations shall be repaired at the Contractor's expense.

The Contractor shall be responsible for providing, maintaining, and removing any haul roads or routes within or outside of the work area, and shall return the affected areas to their former condition, unless otherwise authorized in writing

by the Owner. No separate payment will be made for any work or materials associated with providing, maintaining, and removing haul roads or routes.

**152-2.13 Surface Tolerances.** In those areas on which a subbase or base course is to be placed, the surface shall be tested for smoothness and accuracy of grade and crown. Any portion lacking the required smoothness or failing in accuracy of grade or crown shall be scarified to a depth of at least 3 inches, reshaped and re-compacted to grade until the required smoothness and accuracy are provided to and approved by the ENGINEER. The Contractor shall perform all final smoothness and grade checks in the presence of the ENGINEER or ENGINEER's representative. Any deviation in surface tolerances shall be corrected by the Contractor at the Contractor's expense.

**A. Smoothness.** The finished surface shall not vary more than  $\pm 1/2$  inch when tested with a 12-foot straightedge applied parallel with and at right angles to the centerline. The straightedge shall be moved continuously forward at half the length of the 12-foot straightedge for the full length of each line on a 50-foot grid.

**B. Grade.** The grade and crown shall be measured on a 50-foot grid and shall be within  $\pm 0.05$  feet of the specified grade.

On safety areas, turfed areas, and other designated areas within the grading limits where no subbase or base is to be placed, grade shall not vary more than 0.10 feet from specified grade. Any deviation in excess of this amount shall be corrected by loosening, adding, or removing materials, and reshaping.

**152-2.14 Topsoil.** When topsoil is specified or required as shown on the plans or under Item T-905, it shall be salvaged from stripping or other grading operations. The topsoil shall meet the requirements of Item T-905. If, at the time of excavation or stripping, the topsoil cannot be placed in its final section of finished construction, the material shall be stockpiled at approved locations. Stockpiles shall be located as shown on the plans and shall not be placed on areas that subsequently will require any excavation or embankment fill. If, in the judgment of the ENGINEER, it is practical to place the salvaged topsoil at the time of excavation or stripping, the material shall be placed in its final position without stockpiling or further re-handling.

Upon completion of grading operations, stockpiled topsoil shall be handled and placed as shown on the plans and as required in Item T-905. Topsoil shall be paid for as provided in Item T-905. No direct payment will be made for topsoil under Item P-152.

## METHOD OF MEASUREMENT

- 152-3.1** Measurement for payment specified by the cubic yard shall be computed by the comparison of digital terrain model (DTM) surfaces for computation of neat line design quantities. The end area is that bound by the original ground line established by field cross-sections and the final theoretical pay line established by cross-sections shown on the plans, subject to verification by the ENGINEER.
- 152-3.2** The quantity of unclassified excavation shall be the number of cubic yards measured as specified in Section 152-3.1.
- 152-3.3** The quantity of borrow embankment in place shall be the number of cubic yards measured in its final position.
- 152-3.4** The quantity of Shoulder Grading to be paid for shall be the area of shoulder grading completed measured in square yards.

## BASIS OF PAYMENT

- 152-4.1** Unclassified Excavation payment shall be made at the contract unit price per cubic yard. This price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the item.
- 152-4.2** For Borrow Embankment, payment shall be made at the contract unit price per cubic yard. This price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the item.
- 152-4.3** Shoulder Grading shall be paid for on the basis of the number of square yards as completed. This price shall be full compensation for furnishing all materials, labor, equipment, tools, and incidentals necessary to complete the item.

Payment will be made under:

- |                 |  |
|-----------------|--|
| Item P-152-4.1  | Unclassified Excavation – per Cubic Yard |
| Item P-152-4.2  | Borrow Embankment – per Cubic Yard       |
| Item P-152-4.34 | Shoulder Grading – per Square Yard       |

## REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

**American Association of State Highway and Transportation Officials (AASHTO)**

AASHTO T-180 Standard Method of Test for Moisture-Density Relations of Soils Using a 10-lb Rammer and a 18-in. Drop

**ASTM International (ASTM)**

ASTM D698 Standard Test Methods for laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft<sup>3</sup>)

ASTM D1556 Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method

ASTM D1557 Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft<sup>3</sup>)

ASTM D6938 Standard Test Methods for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)

**Advisory Circulars (AC)**

AC 150/5370-2G Operational Safety on Airports During Construction Software

**Software**

**FAARFIELD – FAA Rigid and Flexible Iterative Elastic Layered Design**

**U.S. Department of Transportation**

FAA RD-76-66 Design and Construction of Airport Pavements on Expansive Soils

**END OF ITEM P-152**

**ITEM P-209**

**CRUSHED AGGREGATE BASE COURSE**

**DESCRIPTION**

**209-1.1** This item consists of a base course composed of crushed aggregate base constructed on a prepared course in accordance with these specifications and in conformity to the dimensions and typical cross-sections shown on the plans.

**MATERIALS**

**209-2.1 Crushed Aggregate Base.** Crushed aggregate shall consist of clean, sound, durable particles of crushed stone, crushed gravel, and shall be free from coatings of clay, silt, organic material, clay lumps or balls or other deleterious materials or coatings. The method used to produce the crushed gravel shall result in the fractured particles in the finished product as consistent and uniform as practicable. Fine aggregate portion, defined as the portion passing the No. 4 sieve shall consist of fines from the coarse aggregate crushing operation. The fine aggregate shall be produced by crushing stone, gravel that meet the coarse aggregate requirements for wear and soundness. Aggregate base material requirements are listed in the following table.

**Crushed Aggregate Base Material Requirements**

Material Test	Requirement	Standard
<b>Coarse Aggregate</b>		
Resistance to Degradation	Loss: 45% Maximum	ASTM C131
Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate	Loss After 5 Cycles: 12% Maximum Using Sodium Sulfate - or - 18% Maximum Using Magnesium Sulfate	ASTM C88
Percentage of Fractured Particles	Minimum 90% by Weight of Particles With at Least Two Fractured Faces and 98% With at Least One Fractured Face <sup>1</sup>	ASTM D5821
Flat Particles, Elongated Particles, or Flat and Elongated Particles	10% Maximum, by Weight, of Flat, Elongated, or Flat and Elongated Particles <sup>2</sup>	ASTM D4791
Clay Lumps and Friable Particles	Less Than or Equal to 3 Percent	ASTM C142
<b>Fine Aggregate</b>		
Liquid Limit	Less Than or Equal to 25	ASTM D4318
Plasticity Index	Not More than Five (5)	ASTM D4318

- 1 The area of each face shall be equal to at least 75% of the smallest mid-sectional area of the piece. When two fractured faces are contiguous, the angle between the planes of fractures shall be at least 30 degrees to count as two fractured faces.
- 2 A flat particle is one having a ratio of width to thickness greater than five (5); an elongated particle is one having a ratio of length to width greater than five (5).

**209-2.2 Gradation Requirements.** The gradation of the aggregate base material shall meet the requirements of the gradation given in the following table when tested per ASTM C117 and ASTM C136. The gradation shall be well graded from coarse to fine and shall not vary from the lower limit on one sieve to the high limit on an adjacent sieve or vice versa.

**Gradation of Aggregate Base**

Sieve Size	Design Range Percentage by Weight passing	Contractor's Final Gradation	Job Control Grading Band Tolerances <sup>1</sup> (Percent)
2 inches	100		0
1-1/2 inch	95-100		±5
1 inch	70-95		±8
3/4 inch	55-85		±8
No. 4	30-60		±8
No. 40 <sup>2</sup>	10-30		±5
No. 200 <sup>2</sup>	0-10		±3

<sup>1</sup> The "Job Control Grading Band Tolerances for Contractor's Final Gradation" in the table shall be applied to "Contractor's Final Gradation" to establish a job control grading band. The full tolerance still applies if application of the tolerances results in a job control grading band outside the design range.

<sup>2</sup> The fraction of material passing the No 200 sieve shall not exceed two-thirds the fraction passing the No 40 sieve.

**209-2.3 Sampling and Testing.**

**A. Aggregate Base Materials.** The Contractor shall take samples of the aggregate base in accordance with ASTM D75 to verify initial aggregate base requirements and gradation. Material shall meet the requirements in Paragraph 209-2.1. This sampling and testing will be the basis for approval of the aggregate base quality requirements.

**B. Gradation Requirements.** The Contractor shall take at least two aggregate base samples per day in the presence of the ENGINEER or ENGINEER's representative and complete gradation testing to check the final gradation. Sampling shall be per ASTM D75 and gradation testing shall per ASTM C117 and ASTM C136. Material shall meet the requirements in Paragraph 209-2.2. The samples shall be taken from the in-place, un-compacted material at sampling points and intervals designated by the ENGINEER.

**209-2.4 Separation Geotextile.** Not used.

## CONSTRUCTION METHODS

**209-3.1 Control Strip.** The first half-day of construction shall be considered the control strip. The Contractor shall demonstrate, in the presence of the ENGINEER or ENGINEER's representative, that the materials, equipment, and construction processes meet the requirements of the specification. The sequence and manner of rolling necessary to obtain specified density requirements shall be determined. The maximum compacted thickness may be increased to a maximum of 12 inches upon the Contractor's demonstration that approved equipment and operations will uniformly compact the lift to the specified density. The ENGINEER or ENGINEER's representative must witness this demonstration and approve the lift thickness prior to full production.

Control strips that do not meet specification requirements shall be reworked, re-compacted or removed and replaced at the Contractor's expense. Full operations shall not continue until the control strip has been accepted by the ENGINEER. The Contractor shall use the same equipment, materials, and construction methods for the remainder of construction, unless adjustments made by the Contractor are approved by the ENGINEER.

**209-3.2 Preparing Underlying Subgrade and/or Subbase.** The underlying subgrade and/or subbase shall be checked and accepted by the ENGINEER before base course placing and spreading operations begin. Re-proof rolling of the subgrade or proof rolling of the subbase in accordance with Item P-152, at the Contractor's expense, may be required by the ENGINEER if the Contractor fails to ensure proper drainage or protect the subgrade and/or subbase. Any ruts or soft, yielding areas due to improper drainage conditions, hauling, or any other cause, shall be corrected before the base course is placed. To ensure proper drainage, the spreading of the base shall begin along the centerline of the pavement on a crowned section or on the high side of the pavement with a one-way slope.

**209-3.3 Production.** The aggregate shall be uniformly blended and, when at a satisfactory moisture content per Paragraph 209-3.5, the approved material may be transported directly to the placement.

**209-3.4 Placement.** The aggregate shall be placed and spread on the prepared underlying layer by spreader boxes or other devices as approved by the ENGINEER, to a uniform thickness and width. The equipment shall have positive thickness controls to minimize the need for additional manipulation of the material. Dumping from vehicles that require re-handling shall not be permitted. Hauling over the uncompacted base course shall not be permitted.

The aggregate shall meet gradation and moisture requirements prior to compaction. The base course shall be constructed in lifts as established in the control strip, but not less than 4 inches nor more than 12 inches of compacted thickness.

When more than one lift is required to establish the layer thickness shown on the plans, the construction procedure described here shall apply to each lift. No lift shall be covered by subsequent lifts until tests verify that compaction requirements have been met. The Contractor shall rework, re-compact and retest any material placed which does not meet the specifications at the Contractor's expense.

**209-3.5 Compaction.** Immediately after completion of the spreading operations, compact each layer of the base course, as specified, with approved compaction equipment. The number, type, and weight of rollers shall be sufficient to compact the material to the required density within the same day that the aggregate is placed on the subgrade.

The field density of each compacted lift of material shall be at least 100% of the maximum density of laboratory specimens prepared from samples of the base material delivered to the jobsite. The laboratory specimens shall be compacted and tested in accordance with ASTM D1557. The moisture content of the material during placing operations shall be within  $\pm 2$  percentage points of the optimum moisture content as determined by ASTM D1557. Maximum density refers to maximum dry density at optimum moisture content unless otherwise specified.

**209-3.6 Weather Limitations.** Material shall not be placed unless the ambient air temperature is at least 40°F and rising. Work on base course shall not be conducted when the subgrade or subbase is wet or frozen or the base material contains frozen material.

**209-3.7 Maintenance.** The base course shall be maintained in a condition that will meet all specification requirements. When material has been exposed to excessive rain, snow, or freeze-thaw conditions, prior to placement of additional material, the Contractor shall verify that materials still meet all specification requirements. Equipment may be routed over completed sections of base course, provided that no damage results and the equipment is routed over the

full width of the completed base course. Any damage resulting to the base course from routing equipment over the base course shall be repaired by the Contractor at the Contractor's expense.

**209-3.8 Surface Tolerances.** After the course has been compacted, the surface shall be tested for smoothness and accuracy of grade and crown by the Contractor. The Contractor shall perform all final smoothness and grade checks in the presence of the ENGINEER or ENGINEER's representative. Any portion lacking the required smoothness or failing in accuracy of grade or crown shall be scarified to a depth of at least 3 inches, reshaped and recompacted to grade until the required smoothness and accuracy are provided to and approved by the ENGINEER. Any deviation in surface tolerances shall be corrected by the Contractor at the Contractor's expense. The smoothness and accuracy requirements specified here apply only to the top layer when base course is constructed in more than one layer.

**A. Smoothness.** The finished surface shall not vary more than 3/8-inch when tested with a 12-foot straightedge applied parallel with and at right angles to the centerline. The straightedge shall be moved continuously forward at half the length of the 12-foot straightedge for the full length of each line on a 50-foot grid.

**B. Grade.** The grade and crown shall be measured at 50 foot stations with shots taken at centerline and at pavement edge for taxilane, and on a 20 foot grid spacing and pavement edge for the apron and shall be within +0 and -1/2 inch of the specified grade.

**209-3.9 Acceptance Sampling and Testing.** Crushed aggregate base course shall be accepted for density and thickness on an area basis. Two tests shall be made for density and thickness for each 1200 square yards. Sampling locations will be determined on a random basis per ASTM D3665.

**A. Density.** The ENGINEER shall perform all density tests for acceptance.

Each area shall be accepted for density when the field density is at least 100% of the maximum density of laboratory specimens compacted and tested per ASTM D1557. The in-place field density shall be determined per ASTM D1556 or ASTM D6938 using Procedure A, the direct transmission method, and ASTM D6938 shall be used to determine the moisture content of the material. The machine shall be calibrated in accordance with ASTM D6938. If the specified density is not attained, the area represented by the failed test must be reworked and/or recompacted and two additional random tests made. This procedure shall be followed until the specified density is reached. Maximum density refers to maximum dry density at optimum moisture content unless otherwise specified.

**B. Thickness.** Depth tests shall be made by test holes at least 3 inches in diameter that extend through the base. The thickness of the base course shall be within +0 and -1/2 inch of the specified thickness as determined by depth tests taken by the Contractor in the presence of the ENGINEER's representative for each area. Where the thickness is deficient by more than 1/2-inch, the Contractor shall correct such areas at no additional cost by scarifying to a depth of at least 3 inches, adding new material of proper gradation, and the material shall be blended and recompact to grade. The Contractor shall replace, at his expense, base material where depth tests have been taken.

### **METHOD OF MEASUREMENT**

**209-4.1** The quantity of crushed aggregate base course will be determined by measurement of the number of cubic yards of material actually constructed and accepted by the ENGINEER as complying with the plans and specifications. Base materials shall not be included in any other excavation quantities.

### **BASIS OF PAYMENT**

**209-5.1** Payment shall be made at the contract unit price per cubic yard for crushed aggregate base course. This price shall be full compensation for furnishing all materials, for preparing and placing these materials, and for all labor, equipment tools, and incidentals necessary to complete the item.

Payment will be made under:

Item P-209-5.1 Crushed Aggregate Base Course - per Cubic Yard

### **REFERENCES**

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

#### **ASTM International (ASTM)**

ASTM C29	Standard Test Method for Bulk Density ("Unit Weight") and Voids in Aggregate
ASTM C88	Standard Test Method for Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate
ASTM C117	Standard Test Method for Materials Finer than 75- $\mu$ m (No. 200) Sieve in Mineral Aggregates by Washing

ASTM C131	Standard Test Method for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine
ASTM C136	Standard Test Method for Sieve or Screen Analysis of Fine and Coarse Aggregates
ASTM C142	Standard Test Method for Clay Lumps and Friable Particles in Aggregates
ASTM D75	Standard Practice for Sampling Aggregates
ASTM D1556	Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method
ASTM D1557	Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft <sup>3</sup> (2700 kN-m/m <sup>3</sup> ))
ASTM D3665	Standard Practice for Random Sampling of Construction Materials
ASTM D4318	Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils
ASTM D4491	Standard Test Methods for Water Permeability of Geotextiles by Permittivity
ASTM D4751	Standard Test Methods for Determining Apparent Opening Size of a Geotextile
ASTM D4791	Standard Test Method for Flat Particles, Elongated Particles, or Flat and Elongated Particles in Coarse Aggregate
ASTM D5821	Standard Test Method for Determining the Percentage of Fractured Particles in Coarse Aggregate
ASTM D6938	Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)

**American Association of State Highway and Transportation Officials  
(AASHTO)**

M288            Standard Specification for Geosynthetic Specification for  
Highway Applications

**END OF ITEM P-209**

## ITEM PMBP

### PLANT MIX BITUMINOUS PAVEMENTS

#### DESCRIPTION

- 1.1 This item shall consist of a surface course composed of mineral aggregate and bituminous material mixed in a central mixing plant and placed on a prepared course in accordance with these specifications and shall conform to the lines, grades, thicknesses, and typical cross sections shown on the plans. Each course shall be constructed to the depth, typical section, or elevation required by the plans and shall be rolled, finished, and approved before the placement of the next course. All materials, mix design requirements, production methods, construction methods, and acceptance testing shall be in accordance with Sections 401 "Asphalt Pavements"; Section 403 "HMA Surface Course"; Supplemental Technical Specification for Hot-Mix Asphalt Material Properties, SCDOT Designation SC-M-402; and Supplemental Technical Specification for Hot Mix Asphalt Quality Assurance SCDOT Designation SC-M-400 of the SCDOT Standard Specifications for Highway Construction unless otherwise modified by this specification.

#### MATERIALS

- 2.1 All aggregates, bituminous materials, and filler shall be provided in accordance with SCDOT Standard Specifications for Highway Construction Section 401 "Asphalt Pavement", Subsection 401.2 and Supplemental Technical Specification SC-M-402.

#### COMPOSITION

- 3.1 **COMPOSITION OF MIXTURE.** The bituminous plant mix shall be composed of a mixture of aggregate, filler if required, and bituminous material. The several aggregate fractions shall be sized, uniformly graded, and combined in such proportions that the resulting mixture meets the grading requirements of the job mix formula.
- 3.2 **JOB MIX FORMULA.** No bituminous mixture for payment shall be produced until a job mix formula has been approved by the ENGINEER. The formula shall be submitted in writing by the Contractor to the ENGINEER at least 15 days prior to the start of paving operations and shall indicate the definite percentage of each sieve fraction of aggregate, the percentage of bitumen, and the temperature of the completed mixture when discharged from the mixer. All test data used to develop the job mix formula shall also be submitted. The job mix formula for each mixture shall be in effect until modified in writing by the ENGINEER. Should a change in sources of materials be made, a new job mix formula must be established before the new material is used.

The bituminous mixture for the surface course shall meet all of the requirements of the South Carolina Department of Transportation requirements for Hot Mix Asphalt Surface Course Type B as defined in the Supplemental Technical Specification for Hot-Mix Asphalt Material Properties SCDOT Designation: SC-M-402.

- 3.2.1 GRADATION AND JOB MIX FORMULA.** The bituminous concrete aggregate gradation and job mix formula shall meet the requirements of the current South Carolina Department of Transportation requirements for Hot Mix Asphalt Surface Course Type B as defined in the Supplemental Technical Specification for Hot-Mix Asphalt Material Properties SCDOT Designation: SC-M-402.

### CONSTRUCTION METHODS

- 4.1** The Bituminous Concrete Surface Course shall be constructed, in accordance with the South Carolina Department of Transportation Standard Specifications, Section 401 "Asphalt Pavements", Subsection 401.4. This work shall include plant mixing, hauling, placement, compaction and acceptance testing and all other incidentals required to provide a complete bituminous surface course as required by Section 401 "Asphalt Pavements", Subsection 401.4, unless otherwise modified by this Specification.
- 4.2 WEATHER LIMITATIONS.** The bituminous mixture shall not be placed upon a wet surface or when the surface temperature of the underlying course is less than specified in Table 5. The temperature requirements may be waived, but only at the discretion of the ENGINEER.

**Table 5. Base Temperature Limitations**

<b>Mat Thickness</b>	<b>Base Temperature (Minimum Degrees F)</b>
Greater than 1 inch	45
1 inch or less	50

- 4.3 BITUMINOUS MIXING PLANT.** Plants used for the preparation of bituminous mixtures shall conform to the requirements of ASTM D 995 with the following changes:

**a. Requirements for All Plants.**

- (1) Truck Scales.** The bituminous mixture shall be weighed on approved scales furnished by the Contractor, or on public scales at the Contractor's expense. Such scales shall be inspected and sealed as often as the ENGINEER deems necessary to assure their accuracy. Scales shall conform to the requirements of Section 90.

- (2) **Testing Laboratory.** The Contractor or producer shall provide laboratory facilities for control and acceptance testing functions during periods of mix production, sampling, and testing and whenever materials subject to the provisions of these specifications are being supplied or tested. The laboratory shall provide adequate equipment, space, and utilities as required for the performance of the specified tests.
- (3) **Inspection of Plant.** The ENGINEER, or his/her authorized representative, shall have access at all times to all parts of the plant for checking adequacy of equipment and inspecting operation of the plant: verifying weights, proportions, and character of materials, and checking the temperatures maintained in the preparation of the mixtures.
- (4) **Storage Bins and Surge Bins.** Paragraph 3.9 of ASTM D 995 is deleted. Instead, the following applies. Use of surge bins or storage bins for temporary storage of hot bituminous mixtures will be permitted as follows:

- (1) The bituminous mixture may be stored in surge bins for period of time not to exceed 3 hours,
- (2) The bituminous mixture may be stored in insulated storage bins for a period of time not to exceed 24 hours, provided an inert gas atmosphere is maintained in the bin during the storage period.

The bins shall be such that mix drawn from them meets the same requirements as mix loaded directly into trucks.

If the ENGINEER determines that there is an excessive amount of heat loss, segregation or oxidation of the mixture due to temporary storage, no overnight storage will be allowed.

**4.4 HAULING EQUIPMENT.** Trucks used for hauling bituminous mixtures shall have tight, clean, and smooth metal beds. To prevent the mixture from adhering to them, the truck beds shall be lightly coated with a minimum amount of paraffin oil, lime solution, or other approved material. Each truck shall have a suitable cover to protect the mixture from adverse weather. When necessary, to ensure that the mixture will be delivered to the site at the specified temperature, truck beds shall be insulated and covers shall be securely fastened.

**4.5 BITUMINOUS PAVERS.** Bituminous pavers shall be self-contained, power-propelled units with an activated screed or strike-off assembly, heated if necessary, and shall be capable spreading and finishing courses of bituminous plant mix material which will meet the specified thickness, smoothness, and grade. Pavers used for shoulders and similar construction shall be capable of spreading and finishing courses of bituminous plant mix material in widths

shown on the plans.

The paver shall have a receiving hopper of sufficient capacity to permit a uniform spreading operation. The hopper shall be equipped with a distribution system to place the mixture uniformly in front of the screed. The screed or strike-off assembly shall effectively produce a finished surface of the required evenness and texture without tearing, shoving, or gouging the mixture.

The paver shall be capable of operating at forward speeds consistent with satisfactory laying of the mixture.

An automatic grade control device shall be used, and the paver shall be equipped with a control system capable of automatically maintaining the specified screed elevation. The control system shall be automatically actuated by mechanical sensors and a reference line.

The controls shall be capable of working in conjunction with any of the following attachments:

- a. Taut stringline (wire) set to grade.
- b. Ski-type device of not less than thirty (30') feet in length or as directed by the ENGINEER.
- c. Short ski or shoe.

If during construction, it is found that the spreading and finishing equipment in use leaves tracks or indented areas or produces other blemished areas in the pavement that are not satisfactorily corrected by the scheduled operations, the use of such equipment shall be discontinued, and satisfactory equipment shall be provided by the Contractor.

- 4.6** **ROLLERS.** Rollers of the vibratory, steel wheel, or pneumatic-tired type may be used. They shall be in good condition, capable of operating at slow speeds to avoid displacement of the bituminous mixture. The number, type, and weight of rollers shall be sufficient to compact the mixture to the required density while it is still in a workable condition.

The use of equipment which causes excessive crushing of the aggregate will not be permitted.

- 4.7** **PREPARATION OF BITUMINOUS MATERIAL.** The bituminous material shall be heated in a manner that will avoid local overheating and provide a continuous supply of the bituminous material to the mixer at a uniform temperature. The temperature of the bituminous material delivered to the mixer shall be sufficient to provide a suitable viscosity for adequate coating of the aggregate particles but shall not exceed 325° F.

**4.8 PREPARATION OF MINERAL AGGREGATE.** The aggregate for the mixture shall be dried and heated to the temperature designated by the job formula within the job tolerance specified. The maximum temperature and rate of heating shall be such that no permanent damage occurs to the aggregates. Particular care shall be taken that aggregates high in calcium or magnesium content are not damaged by overheating. The temperature shall not be lower than is required to obtain complete coating and uniform distribution on the aggregate particles and to provide a mixture of satisfactory workability.

**4.9 PREPARATION OF BITUMINOUS MIXTURE.** The aggregates and the bituminous material shall be weighed or metered and introduced into the mixer in the amount specified by the job mix formula.

The combined materials shall be mixed until the aggregate obtains a uniform coating of bitumen and is thoroughly distributed throughout the mixture. Wet mixing time shall be the shortest time that will produce a satisfactory mixture. It shall be established by the Contractor, based on the procedure for determining the percentage of coated particles described in ASTM D 2489, and approved by the ENGINEER for each individual plant and for each type of aggregate used. The minimum mixing time shall be 25 seconds. The mixing time will be set to achieve 95% of coated particles. For continuous mix plants, the minimum mixing time shall be determined by dividing the weight of its contents at operating level by the weight of the mixture delivered per second by the mixer. *The moisture content of the mix shall not exceed 1.0%.*

**4.10 TRANSPORTING, SPREADING, AND FINISHING.** The mixture shall be transported from the mixing plant to the point of use in vehicles conforming to the requirements of Section 4.4. Deliveries shall be scheduled so that spreading and rolling of all mixture prepared for one day's run can be completed during daylight. Hauling over freshly placed material shall not be permitted until the material has been compacted, as specified, and allowed to cool to atmospheric temperature.

Immediately before placing the bituminous mixture, the underlying course shall be cleared of all debris with power blowers, power brooms, or hand brooms as directed.

*The Contractor will be required to use automatic grade control sensors for this project.* On the first paving lane for each taxiway or taxilane, the Contractor shall use a taut stringline (wire) on both sides of the paver. On the remaining lanes the Contractor shall use a shoe on the previously placed paving lane and a stringline (wire) on the other side of the paver. The stringline (wire) shall have grade pins at twenty-five (25') feet on center (maximum).

The mix shall be placed at a temperature of not less than 250° F. Upon arrival, the mixture shall be spread to the full width by an approved bituminous paver. It

shall be struck off in a uniform layer of such depth that, when the work is completed, it shall have the required thickness and conform to the grade and contour indicated. The speed of the paver shall be regulated to eliminate pulling and tearing of the bituminous mat. Unless otherwise directed, placement of the mixture shall begin along the centerline of a crowned section or on the high side of areas with a one-way slope. The mixture shall be placed in consecutive adjacent strips having a minimum width of 10 feet except where edge lanes require less width to complete the area. The longitudinal joint in one layer shall offset that in the layer immediately below by at least 1 foot however, the joint in the top layer shall be at the centerline of the pavement. Transverse joints in one layer shall be offset by at least two (2') feet from transverse joints in the previous layer. Transverse joints in adjacent lanes shall be offset a minimum of ten (10') feet.

Edges of existing bituminous pavement abutting the new work shall be saw cut and carefully removed as shown on the drawings and painted with bituminous tack coat before new material is placed against it.

On areas where irregularities or unavoidable obstacles make the use of mechanical spreading and finishing equipment impractical, the mixture may be spread, raked, and luted by hand tools.

**4.11** **COMPACTION OF MIXTURE.** After spreading, the mixture shall be thoroughly and uniformly compacted by rolling. The surface shall be rolled when the mixture has attained sufficient stability so that the rolling does not cause undue displacement, cracking or shoving. The sequence of rolling operations and the type of rollers used shall be at the discretion of the Contractor.

The speed of the roller shall, at all times, be sufficiently slow to avoid displacement of the hot mixture. Any displacement occurring as a result of reversing the direction of the roller, or from any other cause, shall be corrected at once.

Sufficient rollers shall be furnished to handle the output of the plant. Rolling shall continue until all roller marks are eliminated, the surface is of uniform texture and true to grade and cross section, and the required field density is obtained.

To prevent adhesion of the mixture to the roller, the wheels shall be kept properly moistened, but excessive water will not be permitted.

In areas not accessible to the roller, the mixture shall be thoroughly compacted with hot hand tampers.

Any mixture that becomes loose and broken, mixed with dirt, or in any way defective shall be removed and replaced with fresh hot mixture and immediately compacted to conform to the surrounding area. This work shall be

done at the Contractor's expense. *Skin patching shall not be allowed.*

*The Contractor shall provide at his own expense a density gauge and an experienced operator to help establish the rolling pattern during all paving operations. This exercise will not serve as a density verification for determination of acceptance or payment, but only aids the Contractor in establishing the rolling pattern required to obtain the specified density.*

- 4.12 JOINTS.** The formation of all joints shall be made in such a manner as to ensure a continuous bond between old and new sections of the course. All joints shall have the same texture, density, and smoothness as other sections of the course.

The roller shall not pass over the unprotected end of the freshly laid mixture except when necessary to form a transverse joint. When necessary to form a transverse joint, it shall be made by means of placing a bulkhead or by tapering the course, in which case the edge shall be cut back to its full depth and width on a straight line to expose a vertical face. In both methods all contact surfaces shall be given a tack coat of bituminous material before placing any fresh mixture against the joint.

Longitudinal joints which are irregular, damaged, or otherwise defective shall be cut back to expose a clean, sound surface for the full depth of the course. All contact surfaces shall be given a tack coat of bituminous material prior to placing any fresh mixture against the joint.

- 4.13 ACCEPTANCE SAMPLING AND TESTING OF BITUMINOUS MIXTURE (DENSITY).** Bituminous concrete will be accepted for density on a random test location basis. Quality Assurance Testing shall be completed in accordance with Supplemental Technical Specification for Hot Mix Asphalt Quality Assurance, SCDOT Designation SC-M-400, Section 5 Acceptance Low Tonnage Paving.

- 4.14 SAMPLING PAVEMENT.** Samples for determination of thickness and density of completed pavements shall be obtained by the Contractor at no extra cost. The size, number, and locations of the samples will be as directed by the ENGINEER. Samples shall be neatly cut with a core drill, or other approved equipment. The Contractor shall furnish all tools, labor, and materials for cutting samples and replacing pavement.

All laboratory tests necessary to determine conformance with requirements specified herein will be performed without cost to the Contractor.

Samples shall be removed by the Contractor and delivered by the Contractor to the OWNER'S laboratory technician within four hours after the final rolling operation over the pavement from which the sample was taken, unless the ENGINEER authorizes the samples to be delivered the following day. Prior to

the cutting of samples, the area of pavement from which the samples will be taken shall be cooled with ice or by other appropriate means so that the removal will not damage the sample. The samples shall be delivered to the laboratory technician in an undamaged condition. If the ENGINEER authorizes delivery of a sample the following day, the sample shall be delivered to the laboratory technician prior to 9:00 a.m. All samples shall be appropriately marked or identified so that the exact location from which the sample was taken can be readily recorded by the laboratory technician. The tests conducted shall include stability, flow, unit weight, voids in the total mix and percent voids filled with bitumen. Tolerances cited previously are allowable for the continuation of plant production.

- 4.15 SURFACE TESTS.** Tests for conformity with the specified crown and grade shall be made by the Contractor immediately after initial compaction. Any variation shall be corrected by the removal or addition of materials and by continuous rolling.

The finished surface shall not vary more than ¼ inch for the surface course when tested with a twelve (12') foot straightedge applied parallel with, or at right angles to, the centerline. Prior to beginning paving operations, the Contractor shall provide a twelve (12') foot straightedge to be used in performing the surface tests.

After the completion of final rolling, the smoothness of the course shall be tested by the Contractor; humps or depressions exceeding the specified tolerances shall be immediately corrected by removing the defective work and replacing with new material, as directed by the ENGINEER. This shall be done at the Contractor's expense. The Contractor shall test the pavement surface in the presence of the ENGINEER whenever requested by the ENGINEER.

The finished surfaces of bituminous courses shall not vary from the grade line, elevations, and cross sections shown on the contract drawings by more than one half (½") inch. The Contractor shall correct pavement areas varying in excess of this amount by paving and replacing the defective work. Skin patching will not be permitted.

## METHOD OF MEASUREMENT

- 5.1** Plant mix bituminous concrete pavement shall be measured by the number of tons of bituminous mixture used in the accepted work. Recorded batch weights or truck scale weights will be used to determine the basis for the tonnage.

There will be no separate payment for asphalt binder. The cost for the asphalt binder shall be included in the per ton unit prices for Bituminous Pavement Surface Course (Type B).

## **BASIS OF PAYMENT**

- 6.1** Payment for an accepted bituminous concrete pavement shall be made at the full or adjusted contract unit price per ton. The price shall be full compensation for furnishing all materials, for all preparation, mixing, and placing of these materials, and for all labor, equipment, tools, and incidentals necessary to complete the item.

The total project payment for plant mix bituminous pavement shall not exceed 100 percent of the product of the contract unit price and the total number of tons of bituminous mixture used in the accepted work.

**Payment.** Payment will be made under:

Item PMBP 6.1 Hot Mix Asphalt Course (SCDOT Type B) - per Ton

**END OF ITEM PMBP**

## ITEM P-603

### EMULSIFIED ASPHALT TACK COAT

#### DESCRIPTION

- 603-1.1** This item shall consist of preparing and treating an asphalt or concrete surface with asphalt material in accordance with these specifications and in reasonably close conformity to the lines shown on the plans.

#### MATERIALS

- 603-2.1 Asphalt Materials.** The asphalt material shall be an emulsified asphalt as specified in ASTM D3628 as an asphalt application for tack coat appropriate to local conditions. The emulsified asphalt shall not be diluted. The Contractor shall provide a copy of the Manufacturer's Certificate of Analysis (COA) for the asphalt material to the ENGINEER before the asphalt material is applied for review and acceptance. The furnishing of COA for the asphalt material shall not be interpreted as a basis for final acceptance. The Manufacturer's COA may be subject to verification by testing the material delivered for use on the project.

#### CONSTRUCTION METHODS

- 603-3.1 Weather Limitations.** The tack coat shall be applied only when the existing surface is dry, and the atmospheric temperature is 50°F or above; the temperature has not been below 35°F for the 12 hours prior to application; and when the weather is not foggy or rainy. The temperature requirements may be waived when directed by the ENGINEER.
- 603-3.2 Equipment.** The Contractor shall provide equipment for heating and applying the emulsified asphalt material. The emulsion shall be applied with a Manufacturer-approved computer rate-controlled asphalt distributor. The equipment shall be in good working order and contain no contaminants or diluents in the tank. Spray bar tips must be clean, free of burrs, and of a size to maintain an even distribution of the emulsion. Any type of tip or pressure source is suitable that will maintain predetermined flow rates and constant pressure during the application process with application speeds under eight (8) miles per hour or seven hundred (700) feet per minute.

The equipment will be tested under pressure for leaks and to ensure proper set-up before use to verify truck set-up (via a test-shot area), including but not limited to, nozzle tip size appropriate for application, spray-bar height and pressure and pump speed, evidence of triple-overlap spray pattern, lack of leaks, and any other factors relevant to ensure the truck is in good working order before use.

The distributor truck shall be equipped with a minimum 12-foot spreader spray bar with individual nozzle control with computer-controlled application rates. The distributor truck shall have an easily accessible thermometer that constantly monitors the temperature of the emulsion and have an operable mechanical tank gauge that can be used to cross-check the computer accuracy. If the distributor is not equipped with an operable quick shutoff valve, the prime operations shall be started and stopped on building paper.

The distributor truck shall be equipped to effectively heat and mix the material to the required temperature prior to application as required. Heating and mixing shall be done in accordance with the Manufacturer's recommendations. Do not overheat or over mix the material.

The distributor shall be equipped with a hand sprayer.

Asphalt distributors must be calibrated annually in accordance with ASTM D2995. The Contractor must furnish a current calibration certification for the asphalt distributor truck from any State or other agency as approved by the ENGINEER.

A power broom and/or power blower suitable for cleaning the surfaces to which the asphalt tack coat is to be applied shall be provided.

**603-3.3 Application of Emulsified Asphalt Material.** The emulsified asphalt shall not be diluted. Immediately before applying the emulsified asphalt tack coat, the full width of surface to be treated shall be swept with a power broom and/or power blower to remove all loose dirt and other objectionable material.

The emulsified asphalt material shall be uniformly applied with an asphalt distributor at the rates appropriate for the conditions and surface specified in the table below. The type of asphalt material and application rate shall be approved by the ENGINEER prior to application.

#### Emulsified Asphalt

Surface Type	Residual Rate, gal/SY	Emulsion Application Bar Rate, gal/SY
New Asphalt	0.02-0.05	0.03-0.07
Existing Asphalt	0.04-0.07	0.06-0.11
Milled Surface	0.04-0.08	.06-0.12
Concrete	0.03-0.05	0.05-0.08

After application of the tack coat, the surface shall be allowed to cure without being disturbed for the period of time necessary to permit drying and setting of the tack coat. This period shall be determined by the ENGINEER. The Contractor shall protect the tack coat and maintain the surface until the next course has been placed. When the tack coat has been disturbed by the Contractor, tack coat shall be reapplied at the Contractor's expense

- 603-3.4 Freight and Waybills** The Contractor shall submit waybills and delivery tickets during progress of the work. Before the final statement is allowed, file with the RPR certified waybills and certified delivery tickets for all emulsified asphalt materials used in the construction of the pavement covered by the contract. Do not remove emulsified asphalt material from storage until the initial outage and temperature measurements have been taken. The delivery or storage units will not be released until the final outage has been taken.

#### **METHOD OF MEASUREMENT**

- 603-4.1** The emulsified asphalt material for tack coat shall not be measured separately and will be considered incidental to and included in the cost for paving operations and items.

#### **REFERENCES**

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

#### **ASTM International (ASTM)**

- |            |  |
|------------|--|
| ASTM D1250 | Standard Guide for Use of the Petroleum Measurement Tables   |
| ASTM D2995 | Standard Practice for Estimating Application Rate and Residual Application Rate of Bituminous Distributors |
| ASTM D3628 | Standard Practice for Selection and Use of Emulsified Asphalts   |

**END ITEM P-603**

**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 ENGINEER in accordance with these specifications.

**MATERIALS**

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

Seed shall be furnished separately or in mixtures in standard containers labeled in conformance with the Agricultural Marketing Service (AMS) Seed Act and applicable state seed laws 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 ENGINEER 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 six (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. Wet, moldy, or otherwise damaged seed will be rejected.

Seeds shall be applied as follows:

**Permanent Seed Mixes**

<b>Seed Mixture</b>	<b>Minimum Seed Purity (Percent)</b>	<b>Minimum Germination (Percent)</b>	<b>Rate of Application lb./acre (or lb./1,000 S.F.)</b>	<b>Seeding Dates</b>
Common Bermudagrass (Hulled)	80%	70%	70	March 1 – July 31
Common Bermudagrass (Unhulled)	80%	70%	70	August 1 – February 28
Rye (Grain)	80%	70%	120	

### Temporary Seed Mixtures

Seed Mixture	Minimum Seed Purity (Percent)	Minimum Germination (Percent)	Rate of Application lb/acre (or lb/1,000 S.F.)	Seeding Dates
Rye (Grain)	76%	70%	120	August 1 – February 28
Common Bermudagrass (Hulled)	80%	70%	70	March 1 – July 31

**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 4,000 pounds per acre. All liming materials shall conform to the requirements of ASTM C602.

**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 and shall meet the requirements of 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; or

**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 commercial fertilizer and shall be spread at the rate of 1,000 pounds per acre. For rye grass, use a starter fertilizer such as 18-24-6. For bermudagrass, use a turf grade fertilizer with a ration of 3-1-2 or 4-1-2.

**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 ENGINEER before being placed.

## **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 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 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 as a result of grading operations and, if immediately prior to seeding, the top 3 inches of soil is loose, friable, reasonably free from large clods, rocks, large roots, or other undesirable matter, and if shaped to the required grade.

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. Clods shall be broken, and the top 3 inches of soil shall be worked into a satisfactory seedbed by discing, or by use of cultipackers, rollers, drags, harrows, or other appropriate means.

### **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 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 fertilization. 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 of width for clay soil (or any soil tending to pack), and weighing 150 to 200 pounds per foot of width for sandy or light soils.

### 901-3.3 Wet Application Method.

**A. General.** The Contractor may elect to apply seed, fertilizer, and lime 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 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 per minute at a pressure of 100 pounds / square inch. 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 pipelines shall be capable of providing clearance for 5/8 inch 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. One shall be a

close-range ribbon nozzle, one a medium-range ribbon nozzle, and one a long-range jet nozzle. For ease 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 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 of lime shall be added to and mixed with each 100 gallons of water. Seed and fertilizer shall be mixed together in the relative proportions specified, but not more than a total of 220 pounds of these combined solids shall be added to and mixed with each 100 gallons 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. The Contractor shall identify to the ENGINEER all sources of water at least two (2) weeks prior to use. The ENGINEER or ENGINEER's representative 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 ENGINEER 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 two (2) hours from the time they were mixed, or they shall be wasted and disposed of at approved locations.

**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, 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 ensure 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 ENGINEER, 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.

- 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 ENGINEER. Surfaces gullied or otherwise damaged following seeding shall be repaired by regrading and reseeding as directed. The Contractor shall mow, water as needed or directed, and otherwise maintain seeded areas in a satisfactory condition until final inspection and acceptance of the work.

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 establish a good stand of grass of uniform color and density to the satisfaction of the ENGINEER. 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.

#### **METHOD OF MEASUREMENT**

- 901-4.1** The quantity of seeding 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, which price and payment shall be full compensation for furnishing and placing all material and for all labor, equipment, tools, and incidentals necessary to complete the work prescribed in this item.
- 901-5.2** Payment for Watering shall be made at the contract unit price per 1,000 gallons or fraction thereof, which price and payment shall be full compensation for furnishing and applying all water and for all labor, equipment, tools, and incidentals necessary to complete the work prescribed in this item.

Payment will be made under:

Item 901-5.1      Seeding – per Acre

## REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

### **ASTM International (ASTM)**

ASTM C602 Standard Specification for Agricultural Liming Materials

### **Federal Specifications (FED SPEC)**

FED SPEC JJJ-S-181, Federal Specification, Seeds, Agricultural

### **Advisory Circulars (AC)**

AC 150/5200-33C Hazardous Wildlife Attractants on or Near Airports

### **FAA/United States Department of Agriculture**

**Wildlife Hazard Management at Airports, A Manual for Airport Personnel**

END OF ITEM T-901

## ITEM T-905

### TOPSOIL

#### 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 ENGINEER.

#### 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. Brush and other vegetation that will not be incorporated with the soil during handling operations shall be cut and removed. Ordinary sod 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. Heavy sod or other cover, which cannot be incorporated into the topsoil by discing or other means, shall be removed. 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 sieve as determined by the wash test in accordance with ASTM C117.

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 ENGINEER shall be notified of the source of topsoil to be furnished by the Contractor. The topsoil shall be inspected 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 Paragraph 905-2.1.

## CONSTRUCTION METHODS

**905-3.1 General.** Areas to be topsoiled shall be shown on the plans. If topsoil is available on site, the location of the areas to be stripped of topsoil and the stripping depths are shown on the plans. Additional soil materials where required to meet final grades shall be obtained from off-site excavation sources.

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 ENGINEER 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 ENGINEER, to a minimum depth of 2 inches 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 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 compacted condition to prevent 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 ENGINEER. Heavy sod or other cover, which cannot be incorporated into the topsoil by discing or other means shall be removed.

The topsoil shall be spread on areas already tilled and smooth-graded or stockpiled in areas approved by the ENGINEER. Any topsoil stockpiled by the Contractor shall be rehandled and placed without additional compensation. Any topsoil that has been stockpiled on the site by others, and is required for topsoil 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.

When suitable topsoil is secured off the Airport site, the Contractor shall locate and obtain the supply, subject to the approval of the ENGINEER. The Contractor shall notify the ENGINEER 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 rehandled 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 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 turving 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 or more in diameter), roots, litter, or any foreign matter shall be raked up and disposed of by the Contractor. After spreading is completed, the topsoil shall be satisfactorily compacted by rolling with a cultipacker or by other means approved by the ENGINEER. 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 AND BASIS OF PAYMENT**

**905-4.1** Topsoiling shall be considered as incidental to site construction. There will be no direct measurement for payment for topsoiling. The cost of topsoiling shall be included in the cost of related bid items. The price included shall be full compensation for furnishing and spreading of all materials and for all labor, equipment, tools, and incidentals necessary to complete the work prescribed in this item.

#### **REFERENCES**

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

##### **ASTM International (ASTM)**

ASTM C117      Materials Finer than 75  $\mu\text{m}$  (No. 200) Sieve in Mineral Aggregates by Washing

**Advisory Circulars (AC)**

AC 150/5200-33C Hazardous Wildlife Attractants on or Near Airports

**FAA/United States Department of Agriculture**

Wildlife Hazard Management at Airports, A Manual for Airport Personnel

**END OF ITEM T-905**

## 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 ENGINEER.

#### 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. Mulch shall be free from noxious weeds, mold, and other deleterious materials. Mulch materials, which contain matured seed of species that would volunteer and be detrimental to the proposed over seeding, 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 in an air-dry condition and of proper consistency for placing with commercial mulch blowing equipment. Hay shall be sterile, containing no fertile seed.

**B. Straw.** Straw shall be the stalks from threshed plant residue of oats, wheat, barley, rye, or rice from which grain has been removed. Furnish in air-dry condition and of proper consistency for placing with commercial mulch blowing equipment. Straw shall contain no fertile seed.

**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 ENGINEER. 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.

**E. Asphalt Binder.** Asphalt binder material shall conform to the requirements of ASTM D977, Type SS-1 or RS-1.

**908-2.2 Inspection.** The ENGINEER 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 30 days before delivery to the project. These samples

may be used as standards with the approval of the ENGINEER 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 ENGINEER. Straw or hay shall be spread over the surface to a uniform thickness at the rate of 2 to 3 tons per acre to provide a loose depth of not less than 1-1/2 inches nor more than 3 inches. Other organic material shall be spread at the rate recommended by the Manufacturer. 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 or more in length. When mulches applied by the blowing method are cut, the loose depth in place shall be not less than one inch nor more than 2 inches.

**908-3.2 Securing Mulch.** The mulch shall be held in place by light discing, a very thin covering of topsoil, pins, stakes, wire mesh, asphalt binder, or other adhesive material approved by the ENGINEER. 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. When an application of asphalt binder material is used to secure the mulch, the Contractor must take every precaution to guard against damaging or disfiguring structures or property on or adjacent to the areas worked and will be held responsible for any such damage resulting from the operation.

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 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. Care shall consist of providing protection against traffic or other use by placing warning signs, as approved by the ENGINEER, and erecting any barricades that may be shown on the plans before or immediately after mulching has been completed on the designated areas.

**B.** The Contractor shall be required to repair or replace any mulch that is defective or becomes damaged until the project is finally accepted. When, in the judgment of the ENGINEER, 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.

**C.** 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 gallons per 1,000 square feet, or as directed by the ENGINEER, with a minimum of 6 gallons and a maximum of 10 gallons per 1,000 square feet depending on the type of mulch and the effectiveness of the binder securing it. Asphalt 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 from the surface of the mulch and uniform distribution of the asphalt material shall be required. A pump or an air compressor of adequate capacity shall be used to ensure uniform distribution of the asphalt material.

**D.** 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 gallons per 1,000 square feet or as directed by the ENGINEER, with a minimum of 6 gallons and a maximum of 10 gallons per 1,000 square feet depending on the type of mulch and the effectiveness of the binder securing it.

### **METHOD OF MEASUREMENT**

**908-4.1** Mulching shall be measured in acres on the basis of the actual surface area acceptably mulched.

### **BASIS OF PAYMENT**

**908-5.1** Payment will be made at the contract unit price per acre for mulching. 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.

Payment will be made under:

Item T-908-5.1 Mulching – per Acre



**APPENDIX 'A'**

**PROPOSAL REQUIREMENTS**  
**and**  
**BID FORM**

**PROPOSAL REQUIREMENTS AND CONDITIONS**

**ALLISON HANGAR APRON AND TAXILANE PAVING**

**GEORGETOWN COUNTY AIRPORT  
GEORGETOWN , SOUTH CAROLINA**

DATE: \_\_\_\_\_

In compliance with the Advertisement (Notice to Bidders), the undersigned hereby proposes to furnish the materials and perform the work for completion of all items, listed below in strict accordance with the Advertisement (Notice to Bidders), Plans, and General Provisions, Special Provisions of the Specifications, and all contract documents for the consideration of the price quoted in the following items and agrees, upon receipt of written notice of the acceptance of this Proposal, that within one hundred twenty (120) days after the date of the opening of the Proposals, that it will execute a contract in accordance with the Proposal as accepted, and give the required Performance and Payment Bond with good and sufficient surety or sureties, within fifteen (15) days after receipt of notice of formal award of contract and presentation of the prescribed forms.

**Bidder shall complete all line items and total amount for Allison Hangar Apron and Taxilane Paving.** Failure to submit prices and amount for each item shall be cause for rejection of Bid. The Owner reserves the right to reject any and all bids and to waive any and all technical defects in the execution and submission of any bid. It is the intent of the Owner to award one contract for all work depending on the availability of local, state, and federal funding.

Contract award will be made on the basis of the lowest responsive qualified bidder (at the time of initial award) for work in the best interest of the Owner and subject to the availability of local and state funding. The Owner reserves the right to reject any or all bids and to waive formalities and technicalities.

**IMPORTANT NOTICE**

**The undersigned understands that the entirety of Section 20 of these specifications shall be considered a part of the Proposal, and that if we are notified by the ENGINEER that we are the low bidder(s), we shall submit the information required, hereinafter related to these requirements, within time period of such notification as specified in the applicable sections of the specifications.**

It is understood that all workmanship and materials under all items of work are guaranteed for one year from the date of final acceptance, unless otherwise specified.

Wages not less than the minimum rates of wages, as predetermined for this project by the Secretary of Labor, were used in the preparation of this Proposal.

It is understood that the quantities of work to be done are approximate only and are intended principally to serve as a guide in evaluating Proposals.

The undersigned agrees that, if awarded the contract(s), it will commence work not later than the date set by the ENGINEER in the Notice(s) to Proceed, and that it will complete the work within the time specified above and in accordance with the Specifications.

Enclosed is security in the amount of 5% of the total base bid, consisting of a Bid Bond payable to Georgetown County, South Carolina.

\_\_\_\_\_  
Name of Bidder

BY: \_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Name and Title of Signing Official)

(Seal)

S.C. Contractor's License No. \_\_\_\_\_

**For Corporation, provide Name and Post Office Address for the President, Secretary, and Treasurer.**

**President**

Name \_\_\_\_\_  
Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Secretary**

Name \_\_\_\_\_  
Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Treasurer**

Name \_\_\_\_\_  
Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**For Partnership provide Name and Address for each Partner:**

Name \_\_\_\_\_  
Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Name \_\_\_\_\_  
Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Name \_\_\_\_\_  
Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Name \_\_\_\_\_  
Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**For Individual, provide Name and Post Office Address:**

Name \_\_\_\_\_  
Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Note: Failure to complete blank spaces may be grounds for rejecting bid.

**FORM OF NON-COLLUSION AFFIDAVIT**  
(This Affidavit is Part of the Proposal)

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

\_\_\_\_\_ being first duly sworn, deposes and says that he/she is

\_\_\_\_\_ *(Sole Owner, a partner, president, secretary, etc.)*

of \_\_\_\_\_ the party making the foregoing Proposal that such Proposal is genuine and not collusive or sham; that said Offeror has not colluded, conspired, connived, or agreed directly or indirectly, with any Offeror or person, to put in a sham Proposal, or that such other person shall refrain from submitting a proposal and has not in any manner, directly or indirectly sought by agreement or collusion, or communication or conference, with any person, to fix the proposal price of affiant or any other Offeror, or to fix any overhead, profit or cost element of said proposal price, or of that of any other Offeror or to secure any advantage against Owner any person interested in the proposed Contract; and that all statements in said Proposal are true; and further, that such Offeror has not, directly or indirectly submitted this proposal, or the contents thereof, or divulged information or data relative to any association or to any member or agent thereof.

\_\_\_\_\_  
*Signature of Offeror*

Sworn to and subscribed before me this \_\_\_\_\_ day of \_\_\_\_\_, 2023.

*(Official Seal)*

\_\_\_\_\_  
*Official Signature of Notary*

\_\_\_\_\_, Notary Public  
*Notary's Printed or Typed Name*

My Commission expires \_\_\_\_\_, 20\_\_.

**LIST OF PRIME AND SUBCONTRACTORS  
MANDATORY BID SUBMISSION FORM**

The undersigned states that the following is a full and complete list of proposed prime contractor and sub-contractors on this Project and the class of work to be performed by each, and that such list will not be added to nor altered without the written consent of the Owner.

<b>Prime Contractor, Subcontractor Consultants and Address</b>	<b>Class of Work to be Performed</b>
1) _____	_____
_____	_____
2) _____	_____
_____	_____
3) _____	_____
_____	_____
4) _____	_____
_____	_____
5) _____	_____
_____	_____
6) _____	_____
_____	_____

**Date:** \_\_\_\_\_ **Bidder/Proposer** \_\_\_\_\_

**Signed:** \_\_\_\_\_ **Title:** \_\_\_\_\_

**ATTACH**

**“EVIDENCE OF COMPETENCY”**

**and**

**“EVIDENCE OF FINANCIAL RESPONSIBILITY”**

**per**

**SECTION 20-02 OF THE GENERAL CONDITIONS**

Georgetown County Airport  
 Allison Hangar Apron and Taxilane Paving  
 TBI No. 2601-2303  
 Bid No. 23-071

Bidder:

Allison Hangar Apron and Taxilane Paving

Item	Spec.	Description	Unit Price in Words	Unit	Quantity	Unit Price	Ext. Total
1	C-102	Temporary Seeding and Mulching		Acre	1		
2	C-102	Removal of Existing Silt Fence		LF	300		
3	C-102	Installation and Removal of Temporary Silt Fence		LF	500		
4	C-102	Excelsior Matting		SY	400		
5	C-105	Mobilization		LS	1		
6	TCI	Temporary Construction Items		LS	1		
7	P-101	Cold Milling, Preparation of Pavement Tie In		LS	1		
8	P-152	Unclassified Excavation		CY	440		
9	P-152	Borrow Embankment		CY	100		
10	P-152	Shoulder Grading		SY	900		

Georgetown County Airport  
 Allison Hangar Apron and Taxilane Paving  
 TBI No. 2601-2303  
 Bid No. 23-071

Bidder: \_\_\_\_\_

Allison Hangar Apron and Taxilane Paving

Item	Spec.	Description	Unit Price in Words	Unit	Quantity	Unit Price	Ext. Total
11	P-209	Crushed Aggregate Base Course		CY	250		
12	PMBP	Hot Mix Asphalt Surface Course (SCDOT Type 'B')		Ton	140		
13	T-901	Seeding		Acre	1		
14	T-908	Mulching		Acre	1		

**Total Bid - Allison Hangar Apron and Taxilane Paving** \_\_\_\_\_

**Contract Time:** See Project Special Provisions - See Section PSP-5

**Liquidated Damages:** See Project Special Provisions - See Section PSP-5

**APPENDIX 'B'**  
**CONTRACT AND BONDS**



5. The Contractor's indemnity and defense obligations under this Contract shall be absolute notwithstanding any provision contained herein or elsewhere to the contrary, and shall survive Final Completion and Final Payment for a period equal to the statute of limitations for any action which could be brought against the Owner or its agents, officers, directors and employees and shall continue through the duration of any action brought during the applicable time periods.
6. The Contractor agrees to indemnify, defend and hold the Owner, and the Engineer, and each of their agents, representatives, officers, directors and employees, harmless from all costs, damages and expenses, including reasonable attorneys fees, incurred by the Owner and its consultants by virtue of any claim or claims filed by any Trade Subcontractor, mechanic, laborer, or materialman making claims arising from the performance of the Work by, through, or under the Contractor, provided the Contractor has received from the Owner all amounts properly due under this Contract concerning the claim. The Contractor shall execute and deliver to the Owner's title insurer similar indemnifications or such other document as such title insurer shall reasonably request in order to protect it against lien claims from Trade Subcontractors. The Contractor also hereby agrees to indemnify and hold harmless, protect and defend the Owner and its consultants from and against any liability, claim, judgment, loss or damage, including, but not limited, to direct damages, attorney's fees, court costs and expenses of collection, occasioned in whole or in part by the sole failure of the Contractor, and its Trade Subcontractors to comply with any of the terms or provisions of this Contract.
7. In any and all claims against the Owner, by any employee of the Contractor or Trade Subcontractor, anyone directly or indirectly employed by any of them, their agent or anyone for whose acts any of the Contractor or Trade Subcontractors may be liable, the indemnification obligation under this Paragraph 2 shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any Trade Subcontractor under workers' or workmen's compensation acts, disability benefit acts or other employee benefit acts.
8. The Owner hereby agrees to pay to the Contractor for the said work, when fully completed, the total sum of \$ \_\_\_\_\_ (the said sum being the total of the Contractor's bid, a copy of which is attached hereto and, pro tanto, made a part hereof for all purposes), subject to such additions and deductions as may be provided for in the Contract Documents. In the event the bid contains multiple pay items, it is understood that the amount to be paid shall be the total based on the unit prices, together with lump sum prices, contained in said bid, for the work actually completed. Payments on accounts will be made as customarily provided by the County and consistent with applicable County procedures. The Contractor shall submit bills for fees or other compensation for services or expenses in detail sufficient for a proper pre-audit and post audit thereof. Any unit of provision of goods and services must be approved in writing by the Owner prior to payment.
9. The Owner may unilaterally cancel this Contract and the goods and services there under in the event that the Contractor fails and refuses to allow public access to all documents, papers, letters, or other material subject to the provisions of the applicable South Carolina Code of Laws, made or received by the Contractor in conjunction with this Contract.
10. This Contract has been executed by the parties prior to the rendering of any goods or services by the Contractor.
11. The Contractor shall provide a payment and performance bond (the "Bond") to the Owner meeting the requirements of applicable South Carolina Code of Laws, The Georgetown County Procurement Ordinance, as amended, and associated bid documents referenced herein, which by virtue of executing this contract the Contractor has accepted in the sum of \$ \_\_\_\_\_ and shall cause

the Bond to be recorded with the Notice of Commencement in the Public Records of Georgetown County, South Carolina.

12. This Contract shall be subordinate to any rule, regulation, order or law of the United States of America, or the State of South Carolina, respectively.
13. Contractor and its employees shall promptly observe and comply with all applicable provisions of any Federal, State and local laws, ordinances, rules or regulations which govern or apply to the goods or services rendered by Contractor hereunder including the wages paid by Contractor to its employees. Contractors shall require all of its Subcontractors to comply with the provisions of this paragraph.
14. Contractor shall procure and keep in force during the term of this contract all necessary insurance (including but not limited to general liability, casualty, workers compensation, and automobile), licenses, registrations, certificates, permits and other authorizations as are required by law in order for Contractor to render its services hereunder. Contractor shall require all of its Subcontractors to comply with the provisions of this paragraph.
15. All remedies provided in this Contract shall be deemed cumulative and additional and not in lieu of or exclusive of each other or of any other remedy available to any party at law or in equity. In the event one party shall prevail in any action (including appellate proceedings), at law or in equity arising hereunder, the losing party will pay all costs, expense, reasonable attorneys' fees and all other actual and reasonable expenses incurred in the defense and/or prosecution of any legal or arbitration proceedings, including, but not limited to, those for paralegal, investigative, legal support services and actual fees charged by expert witnesses for testimony and analysis, incurred by the prevailing party referable thereto.
16. Contractor represents and warrants unto Owner that no officer, employee or agent of Owner has any interest, either directly or indirectly, in the business or property for/on which the Contractor to conduct activities hereunder. Contractor further represents and warrants to Owner that it has not employed or retained any third party person, other than a bona fide employee working solely for Contractor, to bid, solicit or secure this Contract, that it has not paid or agreed to any person, company, corporation, individual or firm, other than a bona fide employee working solely for Contractor, any fee, commission, percentage, gift, or any other consideration contingent upon or resulting from the award or making of this Contract, and that it has not agreed, as an express or implied condition for obtaining this Contract, to employ or retain the services of any firm or person in connection with carrying out this Contract. Contractor assures that it will insert the above provision in each of its Subcontractor agreements relating to the services to be performed hereunder.
17. The headings of the sections of this Contract are for the purpose of convenience only and shall not be deemed to expand or limit the provisions contained in such sections.
18. This Contract, including all Contract documents such as, but not limited to, bid documents and procurement packages, constitutes the entire agreement between the parties and shall supersede and replace all prior agreements or understandings, written or oral, relating to the matters set forth herein.
19. This Contract shall not be amended or modified other than in writing signed by the parties hereto. Notwithstanding the foregoing, any Amendments that are not being paid for, in whole or in part, with funds granted by the United States or State of South Carolina need not be approved by them.
20. The validity, interpretation, construction and effect of this Contract shall be in accordance with and be governed by the laws of the State of South Carolina. In the event any provision hereof shall be finally

determined to be unenforceable, or invalid, such unenforceability or invalidity shall not affect the remaining provisions of this Contract which shall remain in full force and effect.

21. Termination of Contract

- a) The Owner may, by written notice, terminate this Contract in whole or in part at any time, either for the Owner'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 performed this Contract, whether completed or in process, delivered to the Owner.
- b) If the termination is due to failure to fulfill the Contractor's obligations, the Owner 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 Owner for any additional cost occasioned to the Owner thereby.
- c) If, after notice of termination for failure to fulfill its Contract obligations, it is determined that the Contractor had not failed, the termination shall be deemed to have been effected for the convenience of the Owner. In such event, adjustment in the Contract price shall be made as provided in paragraph 21.a of this clause.
- d) The rights and remedies of the Owner provided in this clause are in addition to any other rights and remedies provided by law or under this Contract.
- e) Non-Appropriation:  
It is understood and agreed by the parties that in the event funds are not appropriated in the current fiscal year or any subsequent fiscal years, this contract will become null and void and the County will only be required to pay for services completed to the satisfaction of the County.

SAMPLE

22. Waiver or Forbearance

Any delay or failure of County to insist upon strict performance of any obligation under this Agreement or to exercise any right or remedy provided under this Agreement shall not be a waiver of County's right to demand strict compliance, irrespective of the number or duration of any delay(s) or failure(s). No term or condition imposed on Contractor under this Agreement shall be waived and no breach by Contractor shall be excused unless that waiver or excuse of a breach has been put in writing and signed by both parties. No waiver in any instance of any right or remedy shall constitute waiver of any other right or remedy under this Agreement. No consent to or forbearance of any breach or substandard performance of any obligation under this Agreement shall constitute consent to modification or reduction of the other obligations or forbearance of any other breach.

23. Title VI Compliance:

Georgetown County hereby gives public notice that it is the policy of the agency to assure full compliance with Title VI of the Civil Rights Act of 1964, the Civil Rights Restoration Act of 1987, Executive Order 12898 on Environmental Justice, and related statutes and regulations in all programs and activities. Title VI requires that no person in the United States of America shall, on the grounds of race, color, or national origin, be excluded from the participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which Georgetown County receives federal financial assistance. Any person who believes they have been aggrieved by an unlawful discriminatory practice under Title VI has a right to file a formal complaint with

Georgetown County. Any such complaint must be in writing and filed with Georgetown County's Title VI Coordinator within one hundred and eighty (180) days following the date of the alleged discriminatory occurrence. For more information, or to obtain a Title VI Discriminatory Complaint Form, please see our website at <http://www.gtcountry.org>.

IN WITNESS WHEREOF, the Owner and Contractor hereto have signed and sealed this Contract on the day and date first above written. To facilitate execution, this Agreement may be executed, including electronically, in as many counterparts as may be required. It shall not be necessary that the signature on behalf of both parties hereto appear on each counterpart hereof. All counterparts hereof shall collectively constitute a single agreement.

**APPROVED:**

**APPROVED:**

**VENDOR NAME**

**GEORGETOWN COUNTY**

By: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Angela Christian, County Administrator

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**SAMPLE**

**PERFORMANCE BOND**  
100% of the Contract Amount

KNOW ALL MEN BY THESE PRESENT that:

**CONTRACTOR NAME**  
**CONTRACTOR ADDRESS**

as Principal, hereinafter called Contractor and \_\_\_\_\_, a corporation duly organized in the State of \_\_\_\_\_ and licensed under laws of and authorized to do business in the State of South Carolina as Surety, hereinafter called Surety, are held firmly bound unto

**GEORGETOWN COUNTY**  
**129 SCREVEN STREET, SUITE 239**  
**GEORGETOWN, SOUTH CAROLINA 29440**

hereinafter called OWNER, in the amount of write in words (\$ amount) for the payment whereof Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firm by these present.

WHEREAS, Contractor has by written agreement dated \_\_\_\_\_ 2024, entered into a Contract with OWNER for **Allison Hangar Apron and Taxilane Paving** in accordance with drawings and specifications prepared by:

**TALBERT & BRIGHT, INC.**  
**4810 SHELLEY DRIVE**  
**WILMINGTON, NORTH CAROLINA 28405**

which contract is by reference made a part hereof and is hereinafter referred to as the CONTRACT.

NOW, THEREFORE, THE CONDITIONS OF THIS OBLIGATION are such that, if Contractor shall promptly and faithfully perform said Contract, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

The Surety hereby waives notice of any alteration or extension of time made by the OWNER and Contractor.

Whenever Contractor shall be, and declared by OWNER to be in default under the Contract, the OWNER having performed OWNER'S obligations thereunder, the Surety may promptly remedy the defaults, or shall promptly:

1. Complete the Contract in accordance with its terms and conditions, or
2. Obtain a bid or bids for completing the Contract in accordance with its terms and conditions, and upon determination by Surety of the lowest responsible bidder, or, if the OWNER elects, upon determination by the OWNER and the Surety jointly of the lowest responsible bidder, arrange for a Contract between such bidder and OWNER, and make available as work progresses (even though there should be a default or a succession of

defaults under the Contract or Contracts 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 amount set forth in the second paragraph hereof. The term "balance of contract price" as used in paragraph, shall mean the total amount payable by OWNER to Contractor under the Contract and any amendment thereto, less the amount properly paid by OWNER to Contractor. It is the intent for the contract to be completed within the contract time or liquidated damages will be assessed in accordance with the specifications.

Any suit under this bond must be instituted before the expiration of two (2) years from the date on which final payment under the Contract falls due.

No right of action shall accrue on this bond to or for the use of any person or corporation other than the OWNER named herein or the heirs, executors, administrators, or successors of the OWNER.

Signed and sealed this \_\_\_\_ day of \_\_\_\_\_ 2024.

**BY:**

\_\_\_\_\_  
Principal

\_\_\_\_\_  
Name (Seal)

\_\_\_\_\_  
Title

**WITNESS:**

\_\_\_\_\_

**BY:**

\_\_\_\_\_  
Surety

\_\_\_\_\_  
Name (Seal)

\_\_\_\_\_  
Title

**WITNESS:**

\_\_\_\_\_

**BY:**

\_\_\_\_\_  
Licensed Resident Agent (Signature)

\_\_\_\_\_  
Licensed Resident Agent (Typed)

\_\_\_\_\_  
Street Address

\_\_\_\_\_  
City, State, Zip

\_\_\_\_\_  
Telephone Number

**LABOR AND MATERIAL PAYMENT BOND**  
100% of the Contract Amount

KNOW ALL MEN BY THESE PRESENT: that

**CONTRACTOR NAME**  
**CONTRACTOR ADDRESS**

as Principal, hereinafter called Principal, and \_\_\_\_\_ corporation duly organized in the State of \_\_\_\_\_ and licensed under the laws of and authorized to do business in the State of South Carolina as Surety, hereinafter called Surety, are held firmly bound unto

**GEORGETOWN COUNTY**  
**129 SCREVEN STREET, SUITE 239**  
**GEORGETOWN, SOUTH CAROLINA 29440**

as Obligee, hereinafter called OWNER, for the use and benefit of claimants as herein below defined, in the amount of **write in words** (\$ **amount**) for the payment whereof Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firm by these present.

WHEREAS,

Principal has by written agreement dated \_\_\_\_\_ 2024 entered into a contract with OWNER for **Allison Hangar Apron and Taxilane Paving** in accordance with drawings and specifications prepared by:

**TALBERT & BRIGHT, INC.**  
**4810 SHELLEY DRIVE**  
**WILMINGTON, NORTH CAROLINA 28405**

which contract is by reference made a part hereof and is hereinafter referred to as the CONTRACT.

NOW, THEREFORE, THE CONDITIONS OF THIS OBLIGATION are such that, if Principal shall promptly make payment to all claimants as hereinafter defined, for all labor and material used or reasonably required for the use in the performance of the Contract, then this obligation shall be void; otherwise, it shall remain in full force and effect, subject, however, to the following conditions:

1. A claimant is defined as one having a direct contract with the Principal or with a subcontractor of the Principal for labor, material, or both, used or reasonably required for use in the performance of the Contract, labor and material being construed to include that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental of equipment directly applicable to the Contractor.

2. The above named Principal and Surety hereby jointly and severally agree with the OWNER that every claimant as herein defined, who has not been paid in full before the expiration of a period of ninety (90) days after the date on which the last of such claimant's work or labor was done or performed, or materials were furnished by such claimant, may sue on this bond for the use of such claimant, prosecute the suit to final judgement for such sum or sums as may be justly due claimant, and have execution thereon. The OWNER shall not be liable for the payment of any costs or expenses of any such suit.
3. No suit or action shall be commenced hereunder by any claimant:
  - a. Unless claimant, other than one having a direct contract with the Principal, shall have given written notice to any two of the following: the Principal, the OWNER, or the Surety above named, within ninety (90) days after such claimant did or performed the last of the work or labor, or furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to who the materials were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered mail or certified mail, postage prepaid, in an envelope addressed to the Principal, OWNER, or surety, at any place where an office is regularly maintained for the transaction of business, or served in the state in which the aforesaid project is located, save that such service need not be made by public officer.
  - b. After the expiration of one (1) year following the date of which Principal ceased work on said Contract, it being understood, however, that if any limitation embodied in this bond is prohibited by any law controlling the construction hereof such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.
  - c. Other than in a state court of competent jurisdiction in and for the county or other political subdivision of the state in which the Project, or any part thereof, is situated or in the United States District Court for the district in which the Project, or any part thereof, is situated, and not elsewhere.
4. The amount of this bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder, inclusive of the payment by Surety of mechanics' liens which may be filed of record against said improvement, whether or not claim for the amount of such lien be presented under and against this bond.

Signed and sealed this \_\_\_\_ day of \_\_\_\_\_ 2024.

**BY:**

**BY:**

\_\_\_\_\_  
Principal

\_\_\_\_\_  
Surety

\_\_\_\_\_  
Name (Seal)

\_\_\_\_\_  
Name (Seal)

\_\_\_\_\_  
Title

\_\_\_\_\_  
Title

**WITNESS:**

**WITNESS:**

**BY:**

\_\_\_\_\_  
Licensed Resident Agent (Signature)

\_\_\_\_\_  
Licensed Resident Agent (Typed)

\_\_\_\_\_  
Street Address

\_\_\_\_\_  
City, State, Zip

\_\_\_\_\_  
Telephone Number

# **APPENDIX 'C'**

## **FORMS**

TALBERT & BRIGHT, INC.  
CHANGE ORDER

NO.: \_\_\_\_\_

DATED \_\_\_\_\_

GRANT NO: \_\_\_\_\_ TBI NO: 2601-2303

PROJECT: Allison Hangar Apron and Taxilane Paving AIRPORT: Georgetown County Airport

OWNER: Georgetown County

CONTRACTOR: \_\_\_\_\_ ADDRESS: \_\_\_\_\_

CONTRACT FOR: \_\_\_\_\_ DATE: \_\_\_\_\_

TO: \_\_\_\_\_, (CONTRACTOR)

ORIGINAL CONTRACT AMOUNT \$ \_\_\_\_\_

PREVIOUS CHANGES \$ \_\_\_\_\_

CONTRACT AMOUNT PRIOR TO THIS CHANGE ORDER \$ \_\_\_\_\_

NET (INCREASE) (DECREASE) RESULTING FROM THIS CHANGE ORDER \$ \_\_\_\_\_

CURRENT CONTRACT AMOUNT INCLUDING THIS CHANGE ORDER \$ \_\_\_\_\_

NET CONTRACT (INCREASE) (DECREASE) RESULTING FROM THIS CHANGE ORDER \_\_\_\_\_ (WORKING DAYS)

CURRENT CONTRACT TIME INCLUDING THIS CHANGE ORDER \_\_\_\_\_ (WORKING DAYS)

- A. The aforementioned change and work affected thereby are subject to all contract stipulations and covenants;
- B. The rights of the Owner are not prejudiced; and
- C. All claims against the Owner which are incidental to or as a consequence of the aforementioned changes are satisfied.

RECOMMENDED FOR ACCEPTANCE: TALBERT & BRIGHT, INC.:

BY: \_\_\_\_\_ DATE: \_\_\_\_\_

ACCEPTED BY CONTRACTOR: \_\_\_\_\_  
\_\_\_\_\_, (CONTRACTOR NAME)

BY: \_\_\_\_\_ DATE: \_\_\_\_\_

ACCEPTED BY OWNER: \_\_\_\_\_, (OWNER NAME)

BY: \_\_\_\_\_ DATE: \_\_\_\_\_

APPROVED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

TITLE: \_\_\_\_\_

YOU ARE DIRECTED TO MAKE THE CHANGES NOTED BELOW IN THE SUBJECT CONTRACT:

ITEM	DESCRIPTION	ADDITIONS	DELETIONS
<b>NET ADDITIONS OR DELETIONS</b>			
<b>NET ADDITIONS OR DELETIONS</b>			

REASON FOR CHANGE:

---

ITEM NO -

---

ITEM NO -

---

ITEM NO -

---

ITEM No -

ATTACHMENTS:

**ESTIMATE OF PARTIAL PAYMENT**

No .

Application Date:	Period Ending:
Original Contract Price:	\$
Net Change Orders:	\$
Current Contract Price:	\$
Total Amount Earned:	\$
Retained Percentage (5%):	\$
Total Earned Less Retained:	\$
Total Previously Approved:	\$
Amount Due This Estimate:	\$
<b>Total Amount Due:</b>	<b>\$</b>

SCAC Grant No.: 24-xxx

TBI No.: 2601-2303

Project Name: Allison Hangar Apron and Taxilane Paving

Airport: Georgetown County Airport

Airport Sponsor:

Sponsor Address:

Contractor:

Contract Date:

Contract For:

**CERTIFICATE OF CONTRACTOR**

The undersigned certifies to the best of his knowledge and belief that all items, units, quantities and prices for work and material herein are correct; that all work has been performed and materials supplied in accordance with the terms and conditions of the Construction Contract and all authorized changes thereto; that the above is a true and correct statement of the contract up to and including the last day of the period of the estimate; that all previous payments received from the Owner for work performed under the Construction Contract have been applied to discharge all obligations incurred by the undersigned in connection with work covered by prior estimates for partial payment; and that all materials and equipment incorporated in the above project are free and clear of all liens, security interests and encumbrances.

**Contractor:** \_\_\_\_\_ **By:** \_\_\_\_\_

**Date:** \_\_\_\_\_ **Title:** \_\_\_\_\_

**CERTIFICATE OF OWNER'S ENGINEERS**

I certify that I have verified this Estimate for Partial Payment and that to the best of my knowledge and belief it is a true and correct statement of work performed materials supplied under the Contract.

TALBERT & BRIGHT, INC., WILMINGTON, NORTH  
CAROLINA

**Resident Observer**

**Project Engineer**

**Name:** \_\_\_\_\_ **Name:** \_\_\_\_\_

**Date:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**OWNER'S RECOMMENDATION FOR**  
Approved and Payment Recommended

**Owner:** \_\_\_\_\_ **By:** \_\_\_\_\_

**Date:** \_\_\_\_\_ **Title:** \_\_\_\_\_

OWNER: \_\_\_\_\_

Sheet \_\_\_\_ of \_\_\_\_ Sheets

No. And Description of Unit		Contract			Work Done This Period		Work Completed to Date		
Item # (1)	Detailed Estimate (2)	Quantity (3)	Unit Price (4)	Cost Estimate (5)	No. of Units (6)	Amount Earned (7)	No. of Units (8)	Amount Earned (9)	Percent Complete (10)
Totals									

**CONSENT OF SURETY COMPANY TO FINAL PAYMENT**

- OWNER
- ENGINEER
- CONTRACTOR
- SURETY
- OTHER

PROJECT (Name and Address): Allison Apron Hangar and Taxilane Paving  
Georgetown County Airport  
Georgetown, South Carolina

TO (Owner):  
 Engineer's Project No.: 2601-2303  
 SCAC No.: \_\_\_\_\_  
 Contract for: Georgetown County  
 Contract Date: \_\_\_\_\_

CONTRACTOR: \_\_\_\_\_

In accordance with the provisions of the Contract between the Owner and the Contractor as indicated above, the (insert name and address of Surety Company here)

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_, Surety Company

on bond of (here insert name and address of Contractor)

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_, Contractor

hereby approves of the final payment to the Contractor, and agrees that final payment to the Contractor shall not relieve the Surety Company of its obligations to (here insert name and address of Owner)

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_, Owner

as set forth in the said Surety Company's bond.

IN WITNESS WHEREOF,

the Surety Company has hereunto set its hand this \_\_\_\_ day of \_\_\_\_\_ 20\_\_.

Surety Company  
 Signature of Authorized Representative

Attest:  
 (Seal):

\_\_\_\_\_  
 Title

**CONTRACTOR'S AFFIDAVIT OF RELEASE OF LIENS**

- OWNER
- ENGINEER
- CONTRACTOR
- SURETY
- OTHER

TO (Owner):

Engineer's Project No.: 2601-2303

SCAC No.: \_\_\_\_\_

Contract for: Georgetown County

Contract Date: \_\_\_\_\_

PROJECT (Name and Address): Allison Hangar Apron and Taxilane Paving

Georgetown County Airport

Georgetown, South Carolina

State of: \_\_\_\_\_

County of: \_\_\_\_\_

The undersigned, pursuant to the General Conditions of the Contract for Construction, hereby certifies that to the best of his knowledge, information and belief, except as listed below, the Releases or Waivers of Lien attached hereto include the Contractor, all Subcontractors, all suppliers of materials and equipment, and all performers of Work, labor or services, who have or may have liens against any property of the Owner arising in any manner out of the performance of the Contract referenced above.

EXCEPTIONS: (If none, write "None". If required by the Owner, the Contractor shall furnish bond satisfactory to the Owner for each exception.)

CONTRACTOR: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

BY: \_\_\_\_\_

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_.

Notary Public: \_\_\_\_\_

My Commission Expires: \_\_\_\_\_

(Seal)



# TALBERT & BRIGHT

November 27, 2023

## RELEASE FOR CAD FILES

RE: Georgetown County Airport  
Hangar Taxilane Improvements and Hangar Sitework  
TBI No. 2601-2303

We are providing the listed electronic files for your convenience relative the referenced project. The electronic files are provided subject to the following terms and conditions:

Our electronic files are compatible with AutoCAD Release 2019. The project plans were prepared with extensive use of AutoCAD paper space and external reference capabilities. We make no representation as to the compatibility of these files with your hardware or software or that of your subs.

Data contained on these electronic files represents part of our instruments of service to the Georgetown County Airport and shall not be used by you or anyone else receiving these data through or from you for any purpose other than as a convenience and only in connection with the referenced project. No other use or reuse by you or by others will be permitted. This information will be held in confidence and not shared with anyone. You agree to make no claim and hereby waive, to the fullest extent permitted by law, any claim or cause of action of any nature against us, our officers, directors, employees, agents or subconsultants that may arise out of or in connection with your use of the electronic files.

Furthermore, you shall, to the fullest extent permitted by law, indemnify and hold us harmless against all damages, liabilities, or costs, including reasonable attorney's fees and defense costs, arising out of or resulting from your use of these electronic files.

These electronic files are not construction documents. Differences may exist between these electronic files and corresponding hard-copy construction documents. We make no representation regarding the accuracy or completeness of the electronic files you receive. In the event that a conflict arises between the signed or sealed hard-copy construction documents prepared by this office and the electronic files provided, you shall immediately advise this office. Any notice to this office of any conflict in the documents shall not create any responsibility on us to confirm or deny the existence of any conflict or to make any changes in the contract documents. You are responsible for determining if any conflict exists. By your use of these electronic files, you are not relieved of your duty to fully comply with the contract documents, including and without limitation, the need to check, confirm and coordinate all dimensions and details, take field measurements, verify field conditions, coordinate your work with that of other contractors for the project, and verify information provided to us by others used in the design of this project.

We are furnishing the following electronic files:

- 2601-2303: \_Base\_eTransmit.DWG

Under no circumstances shall delivery of these electronic files for use by you be deemed a sale by us, and we make no warranties, either express or implied, of merchantability and fitness for any particular purposes. In no event shall we be liable for any loss of profit or any consequential damages as a result of your use or reuse of these electronic files and the information and data contained in them.

Agreed as to terms:



Print Name: Alan M. Smith

Talbert & Bright, Inc.

Print Name: \_\_\_\_\_

Company Name: \_\_\_\_\_