This is an Agreement ("Agreement") between Broward County, a political subdivision of the State of Florida ("County"), and Environmental Science Associates (ESA)(Corporation), a California Corporation, authorized to transact business in the State of Florida ("Consultant") (collectively referred to as the "Parties").

IN CONSIDERATION of the mutual terms, conditions, promises, covenants, and payments hereinafter set forth, the Parties agree as follows:

ARTICLE 1.   DEFINITIONS AND IDENTIFICATIONS

For the purposes of this Agreement, reference to one gender shall include the other, use of the plural shall include the singular, and use of the singular shall include the plural. The following definitions and identifications set forth below apply unless the context in which the word or phrase is used requires a different definition:

1.1 Airport means the Broward County's Fort Lauderdale-Hollywood International Airport (FLL), located in Broward County, Florida, as described in the Master Plan Update, including such additional property that may be acquired to implement development as described therein.

1.2 Aviation Department or BCAD means the Broward County Aviation Department (BCAD), or any successor agency.

1.3 Board or Commission means the Board of County Commissioners of Broward County, Florida.

1.4 Contract Administrator means the Director of the Broward County Aviation Department, or his or her designee, pursuant to written delegation by the Director of the Broward County Aviation Department, or some other employee expressly designated as Contract Administrator in writing by the County Administrator.

1.5 County Administrator means the administrative head of the County pursuant to Sections 3.02 and 3.03 of the Broward County Charter.

1.6 County Attorney means the chief legal counsel for County appointed by the Board.
1.7 **County Business Enterprise ("CBE")** means a small business located in Broward County, Florida, which meets the criteria and eligibility requirements of Broward County's CBE Program and must be certified by Broward County's Office of Economic and Small Business Development.

1.8 **Disadvantaged Business Enterprise ("DBE")** means as defined in Title 49 CFR Part 26 or other applicable federal law in connection with a contract which is funded in whole or in part from federal governmental sources as specified in Title 49 CFR Part 26 Sec. 26.3.

1.9 **Lump Sum** means when the method of compensation is that of "Lump Sum," such phrase means that Consultant shall perform or cause to be performed the described services for total compensation in the stated amount.

1.10 **Master Plan Update** means the then current Master Plan Update for the Airport, as it may be amended from time to time.

1.11 **Maximum Amount Not-To-Exceed** means when the method of compensation is that of "Maximum Amount Not-To-Exceed" or "Maximum Not-To-Exceed Amount," such phrase means that Consultant shall perform or cause to be performed all services during the period set forth for total compensation based on actual hours and costs incurred, in the amount of, or less than, the stated amount.

1.12 **Notice To Proceed** means a written notice to proceed, authorizing the Consultant to commence work under this Agreement, or to proceed with a subsequent phase or task of work under this Agreement. The written Notice to Proceed that authorizes the Consultant to commence work under this Agreement shall be issued by the Contract Administrator. The written Notice(s) to Proceed for subsequent phases or tasks of the Project shall be issued by the Contractor Administrator.

1.13 **Project** means **FAR Part 150 Noise Compatibility Planning Consulting Services**

1.14 **Scope of Services** means the work and services described in Article 3, and on **Exhibit A** and other applicable exhibits hereto, or in a Work Authorization, as applicable.

1.15 **Subconsultant** means a firm, partnership, corporation, independent contractor (including 1099 individuals) or combination thereof providing services to the County through the Consultant for all or any portion of the advertised work.

1.16 **Work Authorization** means a written order issued by the Contract Administrator directing Consultant to perform services and detailing the terms of payment and scope of work.

**ARTICLE 2.  PREAMBLE**

In order to establish the background, context, and frame of reference for this Agreement and to generally express the objectives and intentions of the respective parties hereto, the following
statements, representations, and explanations shall be accepted as predicates for the undertakings and commitments included within the provisions which follow and may be relied upon by the parties as essential elements of the mutual considerations upon which this Agreement is based.

2.1 County has budgeted funds for the Project. It is anticipated that the Project may be eligible for federal grant funds, State of Florida grant funds, or Passenger Facility Charges (PFCs).

2.2 Award of this Agreement does not guarantee work will be authorized. A failure by the County to authorize work under this Agreement or to issue a Notice to Proceed shall not be deemed a breach of this Agreement.

2.3 Negotiations pertaining to the services to be performed by Consultant were undertaken between Consultant and members of County staff, and this Agreement incorporates the results of such negotiations.

2.4 If the term of this Agreement extends beyond a single fiscal year of County, the continuation of this Agreement beyond the end of any fiscal year shall be subject to the availability of funds from County in accordance with Chapter 129, Florida Statutes, as it may be amended.

ARTICLE 3.  SCOPE OF SERVICES

3.1 Consultant's services shall consist of the phases and tasks set forth in Exhibit A and any Work Authorization, including all necessary, incidental, and related activities and services. The parties recognize that additional work may subsequently be identified that falls within the Project due to scheduling or other requirements. If the County determines in its sole and exclusive discretion that such additional work may be included in this Agreement, then subject to negotiation and agreement of the parties as to the terms thereof, any such additional work shall be reflected in an amendment to this Agreement, or a Work Authorization, as appropriate.

3.2 The Scope of Services does not delineate every detail and minor work task required to be performed by Consultant to complete the Project. If, during the course of the performance of the services included in this Agreement, Consultant determines that work should be performed to complete the Project which is in Consultant's opinion outside the level of effort originally anticipated, whether or not the Scope of Services identifies the work items, Consultant shall notify Contract Administrator in writing in a timely manner before proceeding with the work. If Consultant proceeds with said work without notifying the Contract Administrator, said work shall be deemed to be within the original level of effort, whether or not specifically addressed in the Scope of Services. Notice to Contract Administrator does not constitute authorization or approval by County to Consultant to perform the work. Performance of work by Consultant outside the originally anticipated level of effort without prior written County approval is at Consultant's sole risk.

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3.3 County and Consultant acknowledge that Exhibit A and any Work Authorizations issued hereunder are for services related to the Project. The County may elect to negotiate for additional services needed for the Project that are beyond those described in Exhibit A. The County may procure said additional services from another vendor or consultant or the County may negotiate with the Consultant for additional scopes of services, compensation, time of performance and other related matters at County's sole option. County shall have the right at any time to immediately terminate any negotiations with Consultant for additional services at no cost to County and procure services from another source. Nothing in these provisions or this Agreement shall in any way be deemed to obligate the County to procure additional services from Consultant. In addition, the County shall have the right, at its sole and exclusive discretion, to terminate any one or more tasks or phases of service described in Exhibit A, or in this Agreement, from this Agreement, and to procure services from another source. In such event: (i) Consultant shall be paid for services performed through the date of termination, subject to other applicable provisions hereof; and (ii) any phases or tasks not terminated by such written notice shall continue to be covered by this Agreement and Consultant shall perform the services required by such phases or tasks pursuant to the terms and conditions of this Agreement.

3.4 Codes/Regulations. Consultant, as it relates to the services required to be performed under this Agreement, represents and acknowledges to the County that it and its subconsultants are knowledgeable as to any and all codes, rules and regulations applicable in the jurisdictions in which the Project is located and the funding sources for the Project, including without limitation, County and local ordinances and codes, Florida laws, rules, regulations and grant requirements, and Federal laws, rules, regulations, advisory circulars and grant requirements, including without limitation, PFC requirements, requirements of the Americans with Disabilities Act, and requirements of the Federal Aviation Administration ("FAA"), and the Federal Transportation Security Administration ("TSA") and the Florida Department of Transportation ("FDOT"). In the performance of services under this Agreement, the Consultant and its subconsultants shall comply with all such laws, codes, rules, regulations, advisory circulars and requirements now in effect and as may be amended or adopted at any time during the term of this Agreement, and shall further take into account in the performance of its services hereunder, all known or publicly announced pending changes to the foregoing. The Consultant and its subconsultants shall provide any and all certifications to the County as to compliance with such laws, codes, rules, regulations, advisory circulars and requirements, as may be required by any governmental body, including FAA, TSA, FDOT and County agencies, or as may be requested by the Aviation Department. The Consultant shall insert all required FAA, TSA and FDOT provisions in its subconsultant agreements for the Project. Consultant shall review all documents for conflicts between the rules, regulations and codes and provide a summary report of any conflicts and recommend a solution for review and approval by the Contract Administrator. The Consultant will incorporate the provisions of this Section without modification into all agreements with its subconsultants.

3.5 Licensing. Consultant represents that it and its subconsultants are experienced and fully qualified to perform the services contemplated by this Agreement, and that it and its
subconsultants are properly licensed pursuant to all applicable laws, rules and regulations to perform such services.

3.6 **Knowledge and Skills.** Consultant represents that it and its subconsultants have the knowledge and skills, either by training, experience, education, or a combination thereof, to completely and competently perform the duties, obligations, and services to be provided pursuant to this Agreement and to provide and perform such services to County's satisfaction for the agreed compensation.

3.6.1 Consultant shall perform its duties, obligations, and services under this Agreement in a skillful and professional manner, and shall cause its subconsultants to also perform their duties, obligations and services under this Agreement in a skillful and professional manner.

3.6.2 The quality of Consultant's and its subconsultants' performance and all interim and final product(s) provided to or on behalf of County shall be comparable to the best local and national standards.

3.6.3 Nothing in this Agreement shall relieve the Consultant of its prime and sole responsibility for the performance of the work under this Agreement. In addition to all other rights and remedies that County may have under this Agreement, Contract Administrator may require the Consultant to correct any deficiencies which result from Consultant's failure to perform in accordance with the above standards.

3.7 In order to avoid a duplication of effort or expense, Consultant agrees to utilize any County-provided information, including but not limited to, plans, specifications, information, data, reports or analyses that may be prepared or generated by other consultants retained by the County that may be required in connection with Consultant's services hereunder, subject to Consultant's independent review and revalidation, if necessary. In addition, County may provide any plans, specifications or any information, obtained or prepared by Consultant, including, but not limited to data, reports or analyses to other consultants retained by the County or to any other party. Consultant shall perform due diligence in connection with the use of such information.

3.8 The County shall have the right, at any time and in its sole discretion, to submit for review to other consultants engaged by the County any or all parts of the work performed by the Consultant, and the Consultant shall cooperate fully in such review.

3.9 **Work Authorizations.** All services identified in Exhibit A and any Optional Services to be performed under this Agreement shall be authorized through the issuance of Work Authorizations. The issuance of a Work Authorization by the Contract Administrator in substantially the form of Exhibit E shall be required before services may begin. Such services may be authorized by the Contract Administrator, in his or her sole discretion, subject to the
Maximum-Not-To-Exceed or Lump Sum amounts established for each item (as may be increased pursuant to the provisions hereof) and the maximum amount set forth in the Work Authorization.

3.9.1 Before any service is commenced pursuant to a Work Authorization, Consultant shall supply the Contract Administrator with a written proposal for all charges expected to be incurred for such service, which proposal shall be reviewed by the Contract Administrator.

3.9.2 All Work Authorizations shall contain, at a minimum, the following information and requirements:

3.9.2.1 A description of the work to be undertaken (which description must specify in detail the individual tasks and other activities to be performed by Consultant), a reference to this Agreement pursuant to which the work to be undertaken is authorized, and a statement of the method of compensation.

3.9.2.2 A budget establishing the amount of compensation, which amount shall constitute a maximum and shall not be exceeded unless prior written approval of Contract Administrator is obtained. The information contained in the budget shall be in sufficient detail so as to identify the various elements of costs.

3.9.2.2.a Salary costs in effect at the time of negotiation for each Work Authorization shall remain in effect throughout the life of the Work Authorization.

3.9.2.2.b With respect to any Maximum Not-To-Exceed service item, if additional work is required over the amount set forth in the Work Authorization, any additional compensation must be reflected in an amendment to the Work Authorization signed by the Contract Administrator and the Consultant, so long as the maximum amount established pursuant to this Agreement for such item is not exceeded. In the event the County does not approve an increase in the amount, and the need for such action is not the fault of the Consultant, the authorization shall be terminated and Consultant shall be paid in full for all work completed to that point, but, in no case, shall the Maximum-Not-To-Exceed amount be exceeded.

3.9.2.3 A time established for completion of the work or services undertaken by Consultant or for the submission to County of documents, reports, and other information pursuant to this Agreement.

3.9.2.4 Any other additional instructions or provisions relating to the work authorized pursuant to this Agreement.
3.9.2.5 Work Authorizations shall be dated, serially numbered, and signed.

3.9.3 At the conclusion of the term of this Agreement, no further Work Authorizations shall be issued. The Consultant shall be required however to complete all services under open Work Authorizations in accordance with the schedule for completion for each then outstanding Work Authorization. Pursuant to the Administrative Code, Section 21.31.g, a Work Authorization shall not extend a contract beyond the contract term without the approval of the Board.

ARTICLE 4. TIME FOR PERFORMANCE; DAMAGES FOR DELAY

4.1 The initial term of this Agreement shall be for the period beginning on the date of execution of this Agreement by the Board and ending three (3) years from that date ("Initial Term"). At its option, the County may renew this Agreement for two (2) additional one (1) year periods. The option to renew may be exercised by the County's Director of Purchasing by written notice of renewal to Consultant.

4.2 Consultant shall perform the services described in Exhibit A or any Work Authorization within the time periods specified therein. Such time periods shall commence from the date of the Notice to Proceed for such services.

4.3 Time of the Essence. Time shall be deemed to be of the essence in performing the duties, obligations and responsibilities required by this Agreement.

4.4 Prior to the commencement of any services under this Agreement (including commencing services under a Work Authorization), Consultant must receive a written Notice to Proceed from the Contract Administrator. Thereafter, Consultant must receive a written Notice to Proceed from the Contract Administrator prior to beginning the performance of services for any other phases or tasks under this Agreement. Prior to granting approval for Consultant to proceed to a subsequent phase or task, the Contract Administrator may, at his or her sole option, require Consultant to submit itemized deliverables/documents for the Contract Administrator’s review. The Consultant acknowledges and agrees that (1) the Project covered by this Agreement is one of several projects being administered at the Airport; (2) there must be coordination in the scheduling and implementation of all projects being administered at the Airport; and (3) in some circumstances, the commencement of certain phases or tasks associated with one or more of the projects will be tied to the completion of, or the schedules of, one or more phases or tasks of other projects. Accordingly, the Consultant acknowledges and agrees that the Contract Administrator may refuse to issue a Notice to Proceed with any phase or task of the Project or under a Work Authorization described by this Agreement, if such is deemed necessary in the coordination of other projects or in the implementation and scheduling of any other project. The parties acknowledge that, due to the nature and complexity of the Project, the Project schedule may require revision based upon subsequent circumstances. Therefore, the Project schedule may be revised with the prior written consent of the Contract Administrator. The Contract Administrator retains the final discretion to adjust the Project schedule or not.
4.5 In the event Consultant is unable to complete any services because of delays resulting from untimely review by County or other governmental authorities having jurisdiction over the Project, and such delays are not the fault of Consultant, or because of delays which were caused by factors outside the control of Consultant, County shall grant a reasonable extension of time for completion of the services and shall provide reasonable compensation, if appropriate. It shall be the responsibility of Consultant to notify the Contract Administrator promptly in writing whenever a delay in approval by a governmental agency is anticipated or experienced, and to inform the Contract Administrator of all facts and details related to the delay.

4.6 In the event Consultant fails to complete the phases and tasks of services identified in Exhibit A or identified in any Work Authorization, on or before the applicable time for performance, County shall deduct from monies otherwise due the Consultant the sum that is establish in each work authorization for each calendar day after the specified time for performance, plus approved time extensions thereof, until completion of the phase or task.

These amounts are not penalties but are liquidated damages to County due to Consultant's inability to proceed with, and complete, the applicable tasks or services in a timely manner pursuant to the agreed upon Project schedule. Liquidated damages are hereby fixed and agreed upon by the parties, recognizing the impossibility of precisely ascertaining the amount of damages that will be sustained by County as a consequence of such delay, and both parties desiring to obviate any question or dispute concerning the amount of said damages and the cost and effect of the failure of Consultant to complete the respective phases or tasks within the applicable time for performance. This provision shall not affect the rights and obligations of either party as set forth in Section 10.11, Indemnification of County.

ARTICLE 5. COMPENSATION AND METHOD OF PAYMENT

Absent amendment, the total cumulative amount authorized for all Work Authorizations issued under this Agreement to CONSULTANT may not exceed a total maximum not to exceed Agreement amount of Two Million Five Hundred Thousand Dollars ($2,500,000.00). The method of compensation to be paid under each individual Work Authorization shall be pursuant to one or a combination of the following:

5.1 AMOUNT AND METHOD OF COMPENSATION

5.1.1 Maximum Amount Not-To-Exceed Compensation. Compensation to Consultant for the performance of Basic Services identified in Exhibit A as payable on a "Maximum Amount Not-To-Exceed" basis, and as otherwise required by this Agreement, shall be based upon the Salary Costs as described in Section 5.2 up to a maximum amount not-to-exceed as approved in Work Authorizations. Consultant shall perform all services designated as Maximum Amount Not-To-Exceed set forth herein for total compensation in the amount of or less than that stated above.
For any phase or task that is identified as a Maximum Amount Not-To-Exceed, the Contract Administrator may transfer funds to any other phase or task. Notwithstanding, the receiving item may not be increased by an aggregate amount that is greater than the Director of Aviation's change order authority (as provided in Section 21.73(c) of the Administrative Code) unless Board approval is first obtained.

5.1.2 Lump Sum Compensation. Compensation to Consultant for the performance of all Basic Services identified in Exhibit A as payable on a “Lump Sum” basis, and as otherwise required by this Agreement, shall be not more than a total lump sum of Two Million One Hundred Twenty-Seven Thousand Four Hundred Twenty-Five Dollars ($2,127,425.00).

5.1.3 Optional Services. County has established an amount of One Hundred Seventy Eight Thousand Six Hundred Twenty-Two Dollars ($178,622.00) for potential Optional Services identified in Exhibit F which may be utilized pursuant to Article 6. Unused amounts of these Optional Services monies shall be retained by County.

5.1.4 Reimbursable Expenses. County has established a maximum amount not-to-exceed of One Hundred Ninety-Three Thousand Nine Hundred Fifty-Three Dollars ($193,953.00) for potential reimbursable expenses which may be utilized pursuant to Section 5.3. Unused amounts of those monies established for reimbursable expenses shall be retained by County.

5.1.5 Salary Rate. The maximum hourly rates payable by County for each of Consultant's employee categories are shown on Exhibit B and are further described in Section 5.2. County shall not pay Consultant any additional sum for reimbursable expenses, additional or optional services, if any, unless otherwise stated in Section 5.3 and Article 6.

If, for services designated as payable on a Maximum Amount Not-To-Exceed basis, Consultant has "lump sum" agreements with any subconsultant(s), then Consultant shall bill all "lump sum" subconsultant fees with no "markup." Likewise, Consultant shall bill, with no mark-up, all maximum not to exceed subconsultant fees using the employee categories for Salary Costs on Exhibit B as defined in Section 5.2 and Reimbursables defined in Section 5.3. All Subconsultant fees shall be billed in the actual amount paid by Consultant.

5.1.6 The dollar limitation set forth in Section 5.1 is a limitation upon, and describes the maximum extent of, County's obligation to Consultant, but does not constitute a limitation, of any sort, upon Consultant's obligation to incur such expenses in the performance of services hereunder.
5.2  **SALARY COSTS.** The term Salary Costs as used herein shall mean the hourly rate actually paid to all personnel engaged directly on the Project, as adjusted by an overall multiplier which consists of the following: 1) a fringe benefits factor; 2) an overhead factor; and, 3) an operating margin, as set forth on **Exhibit B**. Said Salary Costs are to be used only for time directly attributable to the Project. The fringe benefit and overhead factors shall be certified by an independent Certified Public Accountant in accordance with the Federal Acquisition Regulation ("FAR") guidelines. Said certification shall be dated within one hundred eighty (180) days after Consultant's most recently completed fiscal year. If the certification for the most recently completed fiscal year is not available at the time of contracting, the certification shall be provided when it becomes available; provided however, Consultant certifies that the rates and factors set forth herein are accurate, complete, and consistent with the FAR guidelines at the time of contracting. If applicable, **Exhibit B(s)** shall be modified to reflect any reduction in the FAR audited overhead and fringe benefit rates from the rates provided at the time of contracting. The modified **Exhibit B** shall be effective retroactive to the date of execution of the Agreement, and if applicable, the Consultant shall reimburse the County for any overbilling.

5.2.1 Consultant shall require all of its subconsultants to comply with the requirements of Section 5.2.

5.2.2 Salary Costs for Consultant and subconsultants as shown in **Exhibit B** are the Maximum Billing Rates and are provisional, subject to audit of actual costs. If the audit discloses that the actual costs are less than the costs set forth on **Exhibit B** for the Consultant or any subconsultant, the Consultant shall reimburse the County based upon the actual costs determined by the audit.

5.2.3 Unless otherwise noted, the Salary Costs stated above are based upon the Consultant's "home office" rates. Should it become appropriate during the course of the agreement that a "field office" rate be applied, then it is incumbent upon the Consultant to submit a supplemental **Exhibit B** reflective of such rates for approval by Contract Administrator and invoice the County accordingly.

5.2.4 The total hour’s payable by the County for any "exempt" or "non-exempt" personnel shall not exceed forty (40) hours per employee in any week. In the event the Work requires Consultant’s or subconsultant’s personnel to work in excess of 40 hours per week, additional hours must be authorized in advance, in writing, by the Contract Administrator. If approved, Salary Costs for additional hours of service provided by nonexempt (hourly) employees or exempt (salaried) employees shall be invoiced to the County in a manner consistent with the Consultant’s or subconsultant’s applicable certified FAR audit and all other provisions of Section 5.2. In the event a “Safe Harbor” rate is elected for use by the Consultant or subconsultant, then the additional hours are payable at no more than the maximum rates established in **Exhibit B**.
5.2.5 Consultant and any of its subconsultants may alternatively use a “Safe Harbor” combined fringe benefit and overhead rate of 110% in lieu of providing fringe benefit and overhead cost factors certified by an independent Certified Public Accountant in accordance with the Federal Acquisition Regulation (“FAR”) guidelines. The Safe Harbor rate, once elected, shall remain in place for the entire term of the Agreement, and be applicable for use as “home” and “field” fringe benefit and overhead rates, if applicable, and shall not be subject to audit under this Agreement. All other provisions of Section 5.2 remain in place.

5.3 REIMBURSABLES. For reimbursement of any travel costs, travel-related expenses, or other direct no salary expenses directly attributable to this Project permitted under this Agreement, Consultant agrees to adhere to Section 112.061, Florida Statutes, except to the extent, if any, that Exhibit B expressly provides to the contrary. County shall not be liable for any such expenses that have not been approved in advance, in writing, by the Contract Administrator. Reimbursable subconsultant expenses are limited as described herein when the subconsultant agreement provides for reimbursable expenses.

5.4 METHOD OF BILLING

5.4.1 For Maximum Amount Not-To-Exceed Compensation under Section 5.1.1. Consultant shall submit billings which are identified by the specific project number on a monthly basis in a timely manner for all Salary Costs and Reimbursables attributable to the Project. These billings shall identify the nature of the work performed, the total hours of work performed and the employee category of the individuals performing same. Billings shall itemize and summarize Reimbursables by category and identify same as to the personnel incurring the expense and the nature of the work with which such expense was associated. Where prior written approval by Contract Administrator is required for Reimbursables, a copy of said approval shall accompany the billing for such reimbursable. Billings shall also indicate the cumulative amount of CBE/DBE participation to date. The statement shall show a summary of Salary Costs and Reimbursables with accrual of the total and credits for portions paid previously. External Reimbursables and subconsultant fees must be documented by copies of invoices or receipts which describe the nature of the expenses and contain a project number or other identifier which clearly indicates the expense is identifiable to the Project. Subsequent addition of the identifier to the invoice or receipt by Consultant is not acceptable except for meals and travel expenses. Internal expenses must be documented by appropriate Consultant’s cost accounting forms with a summary of charges by category. When requested, Consultant shall provide backup for past and current invoices that records hours and Salary Costs by employee category, Reimbursables by category, subconsultant and subcontractor fees on a task basis, so that total hours and costs by task may be determined.

5.4.2 For Lump Sum Compensation under Section 5.1.2. Consultant shall submit billings which are identified by the specific project number on a monthly basis in a timely manner. These billings shall identify the nature of the work performed, the phase of work, and the
estimated percent of work accomplished. Billings for each phase shall not exceed the amounts allocated to said phase. Billings shall also indicate the cumulative amount of CBE/DBE participation to date. The statement shall show a summary of fees with accrual of the total and credits for portions paid previously. When requested, Consultant shall provide backup for past and current invoices that record hours, salary costs, and expense costs on a task basis, so that total hours and costs by task may be determined.

5.5 **METHOD OF PAYMENT**

5.5.1 County shall pay Consultant within thirty (30) calendar days from receipt of Consultant's proper statement, as defined by County's Prompt Payment Ordinance, ninety percent (90%) of the total shown to be due on such statement. When the services to be performed on each phase of the Project are fifty percent (50%) complete and upon written request by Consultant and written approval by the Contract Administrator that the Project is progressing in a satisfactory manner, the Contract Administrator, in his or her sole discretion, may authorize that subsequent payments for each phase may be increased to ninety-five percent (95%) of the total shown to be due on subsequent statements. No amount shall be withheld from payments for Reimbursables.

5.5.2 Upon Consultant's satisfactory completion of any task or phase of the Project or within a Work Authorization, and after the Contract Administrator's review and approval, and following receipt of all applicable deliverables, County shall remit to Consultant the amounts previously withheld. Final payment for the Project must be approved by the Director of the Broward County Purchasing Division.

5.5.3 Notwithstanding any provision of this Agreement to the contrary, the Consultant shall not be entitled to payment of any pay application unless the Contract Administrator is satisfied that the pay application reflects a level of effort and stage of completion of the respective deliverables that is in accordance with the schedules previously agreed to by the Consultant and the Contract Administrator, as set forth in Exhibit A, or in a Work Authorization.

5.5.4 Electronic payment will be issued to Consultant at the following location:

   **Account Name: Environmental Science Associates**
   **Bank Name: First American Bank**

5.5.5 Except as otherwise provided in Article 9, Consultant shall pay its subconsultants and suppliers within fifteen (15) calendar days following receipt of payment from the County for such work or supplies. Consultant agrees that if it withholds an amount as retainage from its subconsultants or suppliers, that it will release such retainage and pay same within fifteen (15) calendar days following receipt of payment of retained amounts from County.
5.5.6 Consultant agrees that nonpayment of any of its subconsultants or suppliers as required by this Article shall be a material breach of this Agreement and that County may, at its option, increase allowable retainage or withhold progress payments unless and until Consultant demonstrates timely payments of sums due to such subconsultants or suppliers. Consultant agrees that the presence of a "pay when paid" provision in a subconsultant contract shall not preclude County’s inquiry into allegations of nonpayment. The foregoing remedies shall not be employed when Consultant demonstrates that failure to pay results from a bona fide dispute with its subconsultant or supplier.

ARTICLE 6. OPTIONAL AND ADDITIONAL SERVICES; CHANGES IN SCOPE OF SERVICES

6.1 County or Consultant may request changes that would increase, decrease, or otherwise modify the Scope of Services to be provided under this Agreement. Such changes must be made in accordance with the provisions of the Broward County Procurement Code and must be contained in a written amendment executed by the parties hereto, with the same formality and of equal dignity herewith, prior to any deviation from the terms of this Agreement including the initiation of any additional services.

6.2 Costs of additional services identified by the Contract Administrator during the life of this agreement and as contained in a written amendment will be compensated on an hourly basis, or an agreed upon lump sum, or as a reimbursable, as provided in Article 5. Additional services authorized by the Contract Administrator shall include a required completion date for Consultant’s performance of those additional services.

6.3 In the event a dispute between the Contract Administrator and Consultant arises over whether requested services constitute additional services and such dispute cannot be resolved by the Contract Administrator and Consultant, such dispute shall be promptly presented to County’s committee which negotiated this Agreement, for resolution. The committee’s decision shall be final and binding on the parties. The resolution shall be set forth in a written document in accordance with Section 6.1 above. During the pendency of any dispute, Consultant shall promptly perform the disputed services.

6.4 Consultant may, at Contract Administrator's discretion, be authorized to perform the Optional Services delineated in Exhibit F, Optional Services, up to the maximum fee amount established for Optional Services under Article 5 and in Exhibit F. Any Optional Services to be performed by Consultant pursuant to the terms of this Agreement shall first be authorized by the Contract Administrator in writing by a "Work Authorization" in accordance with this Article. Prior to issuing a Work Authorization, the Contract Administrator must provide the County Attorney's Office with the written description of the work to be undertaken and obtain a written concurrence from the County Attorney's Office that the work proposed to be performed pursuant to the Work Authorization is within the scope of services of this Agreement.
6.4.1 For Optional Services not already within the scope of Section 5.1.3 and Exhibit F, Work Authorizations shall be processed as follows:

6.4.1.1 Any Optional Services Work Authorization that will cost County less than Thirty Thousand Dollars ($30,000.00) may be signed by Contract Administrator and Consultant.

6.4.1.2 Any Optional Services Work Authorization that will cost County at least Thirty Thousand Dollars ($30,000.00) but not more than One Hundred Thousand Dollars ($100,000.00) may be signed by County's Purchasing Director, and Consultant.

6.4.1.3 Any Work Authorization above the County's Purchasing Director's authority must be approved by the Board.

6.5 As provided in Article 9, each proposed contract modification request that, by itself or aggregated with previous modification requests, increases the contract value by ten percent (10%) or more of the initial contract value shall be reviewed by County for opportunities to include or increase DBE participation. Consultant shall demonstrate good faith efforts to include DBE participation in modified work and shall report such efforts to the Broward County Office of Economic and Small Business Development (OESBD).

ARTICLE 7. COUNTY'S RESPONSIBILITIES

7.1 Consultant may review public records relevant to the Scope of Work and request to review other information pertinent to the Project. County, in making information and documents available to the Consultant, does not certify the accuracy or completeness of such data. Any conclusions or assumptions drawn thereof by Consultant shall be the sole responsibility of the Consultant and subject to verification by Consultant.

7.2 Consultant shall arrange for access to, and make all provisions to enter upon public and private property as required for Consultant to perform its services.

ARTICLE 8. INSURANCE

8.1 Consultant at its sole cost, shall maintain at all times during the term of this Agreement (unless a different time period is otherwise stated herein), the minimum insurance coverage designated in Exhibit D in accordance with the terms and conditions stated in this Article.

8.2 Such policies shall be issued by companies authorized to do business in the State of Florida, with a minimum AM Best financial rating of A-. Coverage shall be afforded on a form no more restrictive than the latest edition of the respective Insurance Services Office policy. Consultant shall name Broward County as an additional insured under the primary and non-contributory Commercial General Liability policy, Business Automobile Liability policy as well as
on any Excess Liability policy. The official title of the certificate holder is Broward County. This official title shall be used in all insurance documentation.

8.2.1 Prior to the entrance into the airside area of the Airport by Consultant, its subconsultants and/or their employees, the limit of liability for automobile and commercial or comprehensive general liability insurance will be increased to Five Million Dollars ($5,000,000.00) each occurrence bodily injury and property damage combined single limit.

8.3 Consultant shall provide to County proof of insurance in form of Certificates of Insurance and endorsements evidencing all insurance required by this Article within fifteen (15) days of notification of award. County reserves the right to obtain a certified copy of any policies required by this Article upon request. Coverage is not to cease and is to remain in force until final acceptant by County. County shall be notified of any restriction or cancellation of coverage within thirty (30) days. If any of the insurance coverage will expire prior to the completion of the work, proof of insurance renewal shall be provided to County upon expiration.

8.4 County reserves the right to review and revise any insurance requirements at the time of renewal or amendment of this Agreement, including, but not limited to, deductibles, limits, coverage, and endorsements.

8.5 If Consultant uses a subconsultant, Consultant shall require subconsultant to name "Broward County" as an additional insured on any Commercial General Liability and the Business Automobile Liability policies.

ARTICLE 9. EEO AND DBE COMPLIANCE

9.1 DISADVANTAGED BUSINESS ENTERPRISE (DBE).

Project Funding: This Project will be funded in part by one or more grants from the Federal Aviation Administration (FAA) Airport Improvement Program (AIP) and this Project must comply with the FAA and United States Department of Transportation (USDOT) Rule 49 CFR Part 26 pertaining to compliance with DBE requirements.

Projects receiving such funding must comply with USDOT Code of Federal Regulations 49 CFR Part 26, the implementing rules of the above-noted agency, and with Broward County's Disadvantaged Business Enterprise Program and the Broward County Business Opportunity Act of 2012, Ordinance 2012-33, as may be amended from time to time.

The Consultant agrees that it shall not discriminate on the basis of race, color, national origin, or sex in the performance of this Agreement. The Consultant shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of USDOT-assisted contracts. Failure by the Consultant to carry out these requirements is a material breach of this Contract, which may result in the termination of this Consultant or such other remedy as Broward County may deem appropriate.

RFP# R1330212P1
FAR Part 150 Noise Compatibility Planning Consulting Services
Since this Project is funded at least in part using FAA funds, it is the policy of Broward County to ensure that Disadvantaged Business Enterprises (DBEs), as defined in 49 CFR Part 26, can compete fairly for opportunities to participate as subconsultants and suppliers on all contracts awarded by the County to ensure a level playing field.

Broward County fully supports the federal government's Disadvantaged Business Enterprises Program.

**The Consultant has committed to Sixteen (16%) DBE Participation.**

9.1.1 Prior approval of OESBD must be obtained to add or change a DBE subconsultant.

9.1.2 County shall review each proposed modification to this Agreement that, by itself or aggregated with previous modifications, increases the total contract price by ten percent (10%) or more of the initial total contract price or Fifty Thousand Dollars ($50,000.00), whichever is less, for opportunities to include or increase participation of DBE already involved in the Contract. The Consultant shall demonstrate that it makes good faith efforts to include DBE participation in work resulting from any such modification, and shall report such efforts to the OESBD.

9.1.3 On-site reviews to monitor the Consultant’s progress in achieving and maintaining contractual DBE obligations will be carried out by the Contract Administrator in conjunction with the Broward County Office of Economic and Small Business Development ("OESBD").

9.1.4 Nothing herein shall be construed to require the Consultant to award a subcontract to a DBE if the DBE did not submit the lowest responsive bid.

9.2 **Contract Assurances.** The following clauses pertaining to compliance with 49 CFR Part 26 are incorporated into and are a part of this Agreement, upon its award by the County, and are hereby incorporated into the terms of the Consultant's solicitations, subcontracts, material supply contracts and purchase orders. In the event the following clauses conflict with any other terms or provisions of this Agreement, or any of the terms of the Consultant's solicitations, subcontracts, material supply contracts and purchase orders, the clauses set forth in this Section shall control.

9.2.1 Compliance monitoring will be conducted to determine if the Consultant and its subconsultants are complying with the requirements of the DBE Program. Failure of the Consultant to comply with this provision may result in the County imposing penalties or sanctions pursuant to the provisions of the DBE regulation, 49 CFR Part 26 and the County's Business Opportunity Act of 2012, Ordinance 2012-33, as may be amended from time to time. Contract compliance will encompass monitoring for contract dollar achievement and DBE utilization. The OESBD shall have the authority to audit and monitor all contracts and contract related documents pertaining to Broward County projects.

RFP# R1330212P1
FAR Part 150 Noise Compatibility Planning Consulting Services
9.2.2 The Consultant shall be responsible for ensuring proper documentation with regard to its utilization and payment of DBE subconsultants.

9.2.3 The Consultant agrees to submit a Monthly DBE Utilization Report, Exhibit C-3, to the Contract Administrator with a copy to the OESBD, on DBE participation, which shall contain a record of payments made to its DBE subconsultants.

9.2.4 The Consultant agrees to submit a Final DBE Utilization Report, Exhibit C-4, containing the total amount paid to its DBE subconsultants. This report must be submitted with the Consultant's request for final payment and release of retainage.

9.2.5 Nondiscrimination – The Consultant or subconsultant shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Consultant shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of USDOT-assisted contracts. Failure by the Consultant to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate.

9.2.6 Prompt Payment – The Consultant hereby agrees to pay its DBE subconsultants, subcontractors and suppliers within thirty (30) calendar days following receipt of payment from the County for work satisfactorily completed by the subconsultants. Further, if Consultant has withheld retainage from its DBE subconsultants, subcontractors and suppliers, it shall release and pay such retainage within thirty (30) calendar days of the date the work was satisfactorily completed if County did not withhold retainage from Consultant or within thirty (30) calendar days after receipt of payment of the retained amounts from County. A finding of nonpayment to subconsultants and suppliers is a material breach of this contract.

ARTICLE 10. MISCELLANEOUS

10.1 Ownership Of Documents

10.1.1 All finished or unfinished documents, data, studies, surveys, drawings, maps, models, photographs, specifications and reports prepared or provided by Consultant in connection with this Agreement shall become the property of County, whether the Project for which they are made is completed or not, and shall be delivered by Consultant to County within fifteen (15) days of the receipt of the written request from the Contract Administrator or written notice of termination.

10.1.2 If any funding for this Agreement is provided by the Federal Aviation Administration (FAA) or any other federal agency, then all rights to inventions and materials generated under this contract are subject to regulations issued by the FAA or
any such other federal agency, and the sponsor of any grant under which this contract is executed. Information regarding these rights is available from the FAA and the sponsor.

10.1.3 Tangible items of non-consumed equipment, materials, supplies and furnishings purchased by the Consultant and its subconsultants, the costs of which have been reimbursed to the Consultant as a direct cost, shall be turned over to the County at completion or earlier termination of this Agreement, or disposed of as directed by the Contract Administrator, and the proceeds of any such disposal shall be credited to, or paid to, the County.

10.1.4 County may withhold any payments then due to Consultant until Consultant complies with the provisions of this Section.

10.2 Termination

10.2.1 This Agreement or any Work Authorization issued under this Agreement may be terminated for cause by the aggrieved party, if the party in breach has not corrected the breach within ten (10) days after written notice from the aggrieved party identifying the breach. This Agreement and any Work Authorization issued hereunder, or any part thereof, may also be terminated for convenience by County. Termination for convenience by County shall be effective on the termination date stated in written notice provided by County, which termination date shall be not less than thirty (30) days after the date of such written notice. If this Agreement or Work Authorization was entered into on behalf of County by someone other than the Board, termination by County may be by action of the County Administrator or the County representative (including his or her successor) who entered in this Agreement on behalf of County. This Agreement may also be terminated by the County Administrator upon such notice as the County Administrator deems appropriate under the circumstances in the event the County Administrator determines that termination is necessary to protect the public health or safety. The parties agree that if the County erroneously, improperly or unjustifiably terminates for cause, such termination shall be deemed a termination for convenience, which shall be effective thirty (30) days after such notice of termination for cause is provided.

10.2.2 This Agreement may be terminated for cause for reasons including, but not limited to, Consultant's repeated (whether negligent or intentional) submission for payment of false or incorrect bills or invoices, failure to suitably perform the work; or failure to continuously perform the work in a manner calculated to meet or accomplish the objectives as set forth in this Agreement or Work Authorization. The Agreement may also be terminated for cause if the Consultant is placed on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List created pursuant to Section 215.473, Florida Statutes, as amended or if the Consultant provides a false certification submitted pursuant to Section 287.135, Florida Statutes, as amended. This Agreement or a Work Authorization may also be terminated by County:
10.2.2.1 Upon the disqualification of Consultant as a DBE by County's Director of the Office of Economic and Small Business Development if Consultant's status as a DBE was a factor in the award of this Agreement or the Work Authorization, and such status was misrepresented by Consultant;

10.2.2.2 Upon the disqualification of Consultant by County's Director of the Office of Economic and Small Business Development due to fraud, misrepresentation, or material misstatement by Consultant in the course of obtaining this Agreement or the Work Authorization, or attempting to meet the CBE/DBE contractual obligations;

10.2.2.3 Upon the disqualification of one or more of Consultant's DBE participants by County's Director of the Office of Economic and Small Business Development if any such participant's status as a DBE firm was a factor in the award of this Agreement or the Work Authorization, and such status was misrepresented by Consultant or such participant;

10.2.2.4 Upon the disqualification of one or more of Consultant's DBE participants by County's Director of the Office of Economic and Small Business Development if such DBE participant attempted to meet its DBE contractual obligations through fraud, misrepresentation, or material misstatement; or

10.2.2.5 If Consultant is determined by County's Director of the Office of Economic and Small Business Development to have been knowingly involved in any fraud, misrepresentation, or material misstatement concerning the DBE status of its disqualified DBE participant.

10.2.3 Notice of termination shall be provided in accordance with the “Notices" Section of this Agreement except that notice of termination by the County Administrator which the County Administrator deems necessary to protect the public health or safety may be verbal notice that shall be promptly confirmed in writing in accordance with the "Notices" Section of this Agreement.

10.2.4 In the event this Agreement or a Work Authorization issued under this Agreement is terminated for convenience, Consultant shall be paid for any services properly performed under the Agreement or Work Authorization through the termination date specified in the written notice of termination. Consultant acknowledges and agrees that it has received good, valuable and sufficient consideration from County, the receipt and adequacy of which are hereby acknowledged by Consultant, for County's right to terminate this Agreement for convenience.
10.3 **Suspension.** County shall have the right to suspend the work and services of Consultant. The suspension will be by written notice to Consultant from the Contract Administrator. Consultant shall, upon receipt of written notice from the Contract Administrator, remove all equipment and personnel from the work area, or as otherwise directed in the written notice. Consultant will return to the work and continue the performance services under this Agreement upon receipt of a written Notice to Proceed from the Contract Administrator.

10.4 **Public Records.** County is a public agency subject to Chapter 119, Florida Statutes. To the extent Consultant is a contractor acting on behalf of the County pursuant to Section 119.0701, Florida Statutes, Consultant and its subconsultants and subcontractors shall:

10.4.1 Keep and maintain public records that ordinarily and necessarily would be required by County in order to perform the service;

10.4.2 Provide the public with access to such public records on the same terms and conditions that County would provide the records and at a cost that does not exceed that provided in Chapter 119, Florida Statutes, or as otherwise provided by law;

10.4.3 Ensure that public records that are exempt or that are confidential and exempt from public record requirements are not disclosed except as authorized by law; and

10.4.4 Meet all requirements for retaining public records and transfer to County, at no cost, all public records in its possession upon termination of the applicable contract and destroy any duplicate public records that are exempt or confidential and exempt. All records stored electronically must be provided to County in a format that is compatible with the information technology systems of County.

The failure of Consultant to comply with the provisions set forth in this Section shall constitute a default and breach of this Agreement, and County shall enforce the default in accordance with the provisions set forth in Section 10.2.

10.5 **Audit Rights, And Retention Of Records.** Consultant shall preserve all Contract Records (as defined below) for a minimum period of three (3) years after expiration or termination of this Agreement or until resolution of any audit findings, whichever is longer. Contract Records shall, upon reasonable notice, be open to County inspection and subject to audit and reproduction during normal business hours. County audits and inspections pursuant to this Section may be performed by any County representative (including any outside representative engaged by County). County may conduct audits or inspections at any time during the term of this Agreement and for a period of three years after the expiration or termination of the Agreement (or longer if required by law). County may, without limitation, verify information, payroll distribution, and amounts through interviews, written affirmations, and on-site inspection with Consultant's employees, Subconsultants, vendors, or other labor.
Contract Records include any and all information, materials and data of every kind and character, including without limitation, records, books, papers, documents, subscriptions, recordings, agreements, purchase orders, leases, contracts, commitments, arrangements, notes, daily diaries, drawings, receipts, vouchers and memoranda, and any and all other documents that pertain to rights, duties, obligations or performance under this Agreement. Contract Records include hard copy and electronic records, written policies and procedures, time sheets, payroll records and registers, cancelled payroll checks, estimating work sheets, correspondence, invoices and related payment documentation, general ledgers, insurance rebates and dividends, and any other records pertaining to rights, duties, obligations or performance under this Agreement, whether by Consultant or Subconsultants.

County shall have the right to audit, review, examine, inspect, analyze, and make copies of all Contract Records at a location within Broward County. County reserves the right to conduct such audit or review at Consultant’s place of business, if deemed appropriate by County, with seventy-two (72) hours’ advance notice. Consultant agrees to provide adequate and appropriate work space. Consultant shall provide County with reasonable access to the Consultant’s facilities, and County shall be allowed to interview all current or former employees to discuss matters pertinent to the performance of this Agreement.

Consultant shall, by written contract, require its Subconsultants and subcontractors to agree to the requirements and obligations of this Section.

Any incomplete or incorrect entry in such books, records, and accounts shall be a basis for County’s disallowance and recovery of any payment reliant upon such entry. If an audit or inspection in accordance with this Section discloses overpricing or overcharges to County of any nature by the Consultant or its Subconsultants in excess of five percent (5%) of the total contract billings reviewed by County, the reasonable actual cost of the County’s audit shall be reimbursed to the County by the Consultant in addition to making adjustments for the overcharges. Any adjustments and/or payments due as a result of such audit or inspection shall be made within thirty (30) days from presentation of County’s findings to Consultant.

10.6 Public Entity Crime Act. Consultant represents that it is familiar with the requirements and prohibitions under the Public Entity Crime Act, Section 287.133, Florida Statutes, and represents that its entry into this Agreement will not violate that Act. In addition to the foregoing, Consultant further represents that there has been no determination that it committed a “public entity crime” as defined by Section 287.133, Florida Statutes, and that it has not been formally charged with committing an act defined as a "public entity crime" regardless of the amount of money involved or whether Consultant has been placed on the convicted vendor list. Notwithstanding any provision in this Agreement to the contrary, if any representation stated in this paragraph is false, County shall have the right to immediately terminate this Agreement and recover all sums paid to Consultant under this Agreement.
10.7 **No Contingent Fee.** Consultant warrants that it has not employed or retained any company or person, other than a bona fide employee working solely for Consultant, to solicit or secure this Agreement and that it has not paid or agreed to pay any person, company, corporation, individual or firm, other than a bona fide employee working solely for Consultant any fee, commission, percentage, gift, or other consideration contingent upon or resulting from the award or making of this Agreement. For the breach or violation of this provision, County shall have the right to terminate the Agreement without liability at its discretion, or to deduct from the Agreement price, or otherwise recover, the full amount of such fee, commission, percentage, gift, or consideration.

10.8 **Subconsultants**

10.8.1 Consultant shall utilize the subconsultants identified in the proposal that were a material part of the selection of Consultant to provide the services for this Project. Consultant shall obtain written approval of Contract Administrator prior to changing or modifying the list of subconsultants submitted by Consultant. Where Consultant's failure to use subconsultant results in Consultant's noncompliance with DBE participation goals, such failure shall entitle the affected CBE/DBE firm to damages available under this Agreement and under local and State law. The list of subconsultants is provided on Exhibit C.

10.8.2 Consultant shall bind in writing each and every approved subconsultant to the terms stated in this Agreement, provided that this provision shall not, in and of itself, impose the insurance requirements set forth in Article 8 on Consultant's subconsultants. Broward County Risk Management Division, after taking into consideration the services to be provided by each of its subconsultants, will determine coverage necessary to protect the County's interests. Consultant shall require the proper licensing of each of its subconsultants and shall provide the insurance coverages as finally determined in the sole discretion of the Risk Management Division.

10.8.3 If any of the services outlined in this Agreement are furnished by Consultant by obtaining the services of subconsultants, Consultant, upon request shall provide County with proposals and contracts between the subconsultants and Consultant outlining the services to be performed and the charges for same, together with any other documentation required by County.

10.9 **Assignment And Performance.** Neither this Agreement nor any interest herein shall be assigned, transferred, or encumbered without the prior written consent of the Board. Consultant shall not subcontract any portion of the work required by this Agreement except as authorized pursuant to Section 10.8. County shall have the right to terminate this Agreement, effective immediately, if there is an assignment, or attempted assignment, transfer, or encumbrance of this Agreement or any right or interest herein by Consultant without County's written consent.
10.10 Representative Of County And Consultant. The parties recognize that questions in the
day-to-day conduct of the Project will arise. The Contract Administrator, upon Consultant's
request, shall advise Consultant in writing of one (1) or more County employees to whom all
communications pertaining to the day-to-day conduct of the Project shall be addressed.
Consultant shall inform the Contract Administrator in writing of Consultant's representative to
whom matters involving the conduct of the Project shall be addressed.

10.11 Indemnification Of County. Consultant shall indemnify and hold harmless County, its
officers and employees from liabilities, damages, losses, and costs, including, but not limited to,
reasonable attorneys' fees, to the extent caused by the negligence, recklessness or intentional
wrongful conduct of Consultant, and other persons employed or utilized by Consultant in the
performance of this Agreement. The provisions of this Section shall survive the expiration or
earlier termination of this Agreement. To the extent considered necessary by Contract
Administrator and County Attorney, any sums due Consultant under this Agreement may be
retained by County until all of County's claims for indemnification pursuant to this Agreement
have been settled or otherwise resolved, and any amount withheld shall not be subject to
payment of interest by County.

10.12 All Prior Agreements Superseded. This document incorporates and includes all prior
negotiations, correspondence, conversations, agreements or understandings applicable to the
matters contained herein; and the parties agree that there are no commitments, agreements or
understandings concerning the subject matter of this Agreement that are not contained in this
document. Accordingly, the parties agree that no deviation from the terms hereof shall be
predicated upon any prior representations or agreements whether oral or written.

10.13 No Conflicts

10.13.1 The employees and officers of Consultant, its subconsultants, and the
subsidiaries of Consultant and its subconsultants shall not, during the term of this
Agreement, serve as an expert witness against County in any legal or administrative
proceeding in which he or she or Consultant is not a party, unless compelled by court
process. Further, Consultant agrees that such persons shall not give sworn testimony or
issue a report or writing, as an expression of his or her expert opinion, which is adverse
or prejudicial to the interests of County or in connection with any such pending or
threatened legal or administrative proceeding. The limitations of this Section shall not
preclude such persons from representing themselves in any action or in any
administrative or legal proceeding.

10.13.2 Consultant, its subconsultants, and the subsidiaries, officers, and personnel of
Consultant and its subconsultants shall not acquire any interest in any parcel of land or
improvement thereon located within the Airport boundaries, as described in the Master
Plan Update, including such additional property that may need to be acquired to
implement the development described in the Master Plan Update.
10.13.3 Consultant, its subconsultants, and the subsidiaries, officers and personnel of Consultant and its subconsultants shall not perform consulting work or provide legal services that would in any way be in conflict with the Project or detrimental to the Project, or for any municipality, developer, tenant or landowner developing or having property within the Airport boundaries, as described in the Master Plan Update, including such additional property that may need to be acquired to implement the development described in the Master Plan Update. At least ten (10) calendar days prior to undertaking any such work, the Consultant shall provide the Contract Administrator with a written description of the contemplated work and the Contract Administrator shall promptly advise as to whether such work would be detrimental to the Project or in conflict therewith.

10.13.4 Consultant, its subconsultants, and the subsidiaries, officers, and personnel of Consultant and its subconsultants shall not have or hold any continuing or frequently recurring employment or contractual relationship that is substantially antagonistic or incompatible with such party's loyal and conscientious exercise of judgment and care related to its performance under this Agreement.

10.13.5 Consultant agrees to require its subconsultants, by written contract, to comply with the provisions of this Section.

10.14 Amendments. No modification, amendment or alteration in the terms or conditions contained herein shall be effective unless contained in a written document executed with the same formality and of equal dignity herewith.

10.15 Notices. Whenever either party desires to give notice to the other, such notice must be in writing, sent by certified United States Mail, postage prepaid, return receipt requested, or sent by commercial express carrier with acknowledgement of delivery, or by hand delivery with a request for a written receipt of acknowledgment of delivery, addressed to the party for whom it is intended at the place last specified. The place for giving notice shall remain the same as set forth herein until changed in writing in the manner provided in this Section. The parties designate the following as the respective places for giving of notice:

FOR COUNTY:
Michael P. Pacitto, Contract Administrator
Broward County Aviation Department
2200 SW 45th Street Suite 101
Dania, FL 33312

FOR CONSULTANT:
Michael Arnold, Senior Vice President
Environmental Science Associates
5401 South Kirkman Rd., Suite 405
Orlando, FL 32819
10.16 **Truth-In-Negotiation Certificate.** Consultant's compensation under this Agreement is based upon representations supplied to County by Consultant, and Consultant certifies that the information supplied, including without limitation in the negotiation of this Agreement, is accurate, complete, and current at the time of contracting. County shall be entitled to recover any damages it incurs to the extent such representation is untrue.

10.17 **Interpretation.** The language of this Agreement has been agreed to by both parties to express their mutual intent and no rule of strict construction shall be applied against either party hereto. The headings contained in this Agreement are for reference purposes only and shall not affect in any way the meaning or interpretation of this Agreement. All personal pronouns used in this Agreement shall include the other gender, and the singular shall include the plural, and vice versa, unless the context otherwise requires. Terms such as "herein," "hereof," "hereunder," and "hereinafter" refer to this Agreement as a whole and not to any particular sentence, paragraph, or section where they appear, unless the context otherwise requires. Whenever reference is made to a Section or Article of this Agreement, such reference is to the Section or Article as a whole, including all of the subsections of such Section, unless the reference is made to a particular subsection or subparagraph of such Section or Article.

10.18 **Consultant’s Staff.** Consultant will provide the key and core staff identified on Exhibit B-1 for the Project as long as said key and core staff are in Consultant's employment. Prior to changing any key staff set forth on Exhibit B-1, Consultant shall provide Contract Administrator with such information as necessary to determine the suitability of proposed new key staff. The Contract Administrator will be reasonable in evaluating the qualifications of any proposed key staff. The key employees will not be changed, removed, or replaced by the Consultant without the prior written approval of the Contract Administrator. The Consultant must provide written notice to the Contract Administrator of core staff changes, and provide the qualifications of any substituted core staff prior to any said substituted staff performing services on the Project. If Contract Administrator desires to request removal of any of Consultant’s staff, the Contract Administrator shall first meet with Consultant and provide reasonable justification for said removal.

10.19 **Drug-Free Workplace.** It is a requirement of County that it enter into contracts only with firms that certify the establishment of a drug-free work place in accordance with Chapter 21.31(a) of the Broward County Procurement Code. Execution of this Agreement by Consultant shall serve as Consultant’s required certification that it either has or that it will establish a drug-free work place in accordance with Chapter 21.31(a) of the Broward County Procurement Code and will continue to maintain same during the term of this Agreement.

10.20 **Independent Contractor; No Joint Relationship.** Consultant is an independent contractor under this Agreement. Services provided by Consultant shall be subject to the supervision of Consultant. In providing the services, Consultant or its agents shall not be acting and shall not be deemed as acting as officers, employees, or agents of County.
10.21 Third Party Beneficiaries. Neither Consultant nor County intends to directly or substantially benefit a third party by this Agreement. Therefore, the Parties acknowledge that there are no third party beneficiaries to this Agreement and that no third party shall be entitled to assert a right or claim against either of them based upon this Agreement.

10.22 Incorporation by Reference. The referenced Exhibits and Attachments are incorporated into and made a part of this Agreement.

10.23 Materiality And Waiver Of Breach. County and Consultant agree that each requirement, duty, and obligation set forth herein is substantial and important to the formation of this Agreement and, therefore, is a material term hereof. County's failure to enforce any provision of this Agreement shall not be deemed a waiver of such provision or modification of this Agreement. A waiver of any breach of a provision of this Agreement shall not be deemed a waiver of any subsequent breach and shall not be construed to be a modification of the terms of this Agreement.

10.24 Compliance With Laws. Consultant shall comply with all federal, state, and local laws, codes, ordinances, rules, and regulations in performing its duties, responsibilities, and obligations related to this Agreement.

10.25 Severability. In the event any part of this Agreement is found to be unenforceable by any court of competent jurisdiction, that part shall be deemed severed from this Agreement and the balance of this Agreement shall remain in full force and effect.

10.26 Priority Of Provisions. If there is a conflict or inconsistency between any term, statement, requirement, or provision of any exhibit attached hereto, any document or events referred to herein, or any document incorporated into this Agreement by reference and a term, statement, requirement, or provision of this Agreement, the term, statement, requirement, or provision contained in Articles 1 through 10 of this Agreement shall prevail and be given effect.

10.27 Joint Preparation. The parties acknowledge that they have sought and received whatever competent advice and counsel necessary for them to form a full and complete understanding of all rights and obligations herein and that the preparation of this Agreement has been their joint effort. The language agreed to expresses their mutual intent and the resulting document shall not, solely as a matter of judicial construction, be construed more severely against one of the parties than another.

10.28 Payable Interest

10.28.1 Payment of Interest. Unless required by the Broward County Prompt Payment Ordinance, any monies which are the subject of a dispute regarding this Agreement and which are not paid by County when claimed to be due shall not be subject to interest for any reason, whether as prejudgment interest or for any other purpose, and in furtherance thereof Consultant waives, rejects, disclaims and surrenders any and all entitlement it has
or may have to receive interest in connection with a dispute or claim based on or related
to this Agreement. All requirements inconsistent with this provision are hereby waived
by Consultant.

10.28.2  Rate of Interest. In any instance where the prohibition or limitations of the
foregoing subsection are determined to be invalid or unenforceable, the annual rate of
interest payable by County under this Agreement, whether as prejudgment interest or for
any other purpose, shall be .025 (.025%) percent simple interest (uncompounded).

10.29  Law, Jurisdiction, Venue, Waiver Of Jury Trial. This Agreement shall be interpreted and
construed in accordance with and governed by the laws of the state of Florida. The Parties agree
that the exclusive venue for any lawsuit arising from, related to, or in connection with this
Agreement shall be in the state courts of the Seventeenth Judicial Circuit in and for Broward
County, Florida. If any claim arising from, related to, or in connection with this Agreement must
be litigated in federal court, the Parties agree that the exclusive venue for any such lawsuit shall
be in the United States District Court or United States Bankruptcy Court for the Southern District
of Florida. **BY ENTERING INTO THIS AGREEMENT, SECOND PARTY AND COUNTY HEREBY
EXPRESSLY WAIVE ANY RIGHTS EITHER PARTY MAY HAVE TO A TRIAL BY JURY OF ANY CIVIL
LITIGATION RELATED TO THIS AGREEMENT. IF A PARTY FAILS TO WITHDRAW A REQUEST FOR
A JURY TRIAL IN A LAWSUIT ARISING OUT OF THIS AGREEMENT AFTER WRITTEN NOTICE BY
THE OTHER PARTY OF VIOLATION OF THIS SECTION, THE PARTY MAKING THE REQUEST FOR
JURY TRIAL SHALL BE LIABLE FOR THE REASONABLE ATTORNEYS' FEES AND COSTS OF THE
OTHER PARTY IN CONTESTING THE REQUEST FOR JURY TRIAL, AND SUCH AMOUNTS SHALL BE
AWARDED BY THE COURT IN ADJUDICATING THE MOTION.**

10.30  Re-Use Of Project. County may, at its option, and if applicable to the service or deliverable
provided, re-use (in whole or in part) the resulting end-product or deliverables resulting from
Consultant's professional services (including, but not limited to, reports, studies, analyses,
surveys, or other documents and services as described herein and in Exhibit A, Scope of Services
or a Work Authorization); and Consultant agrees to such re-use in accordance with this provision.
If County elects to re-use the services, reports, studies, analyses, surveys, or other documents, in
whole or in part, prepared for this Project for other projects on other sites, Consultant will not
be liable for any such re-use. The terms and conditions of this Agreement shall remain in force
for each re-use project, unless otherwise agreed by the parties in writing.

10.31  Representation Of Authority. Each individual executing this Agreement on behalf of a
party hereto hereby represents and warrants that he or she is, on the date he or she signs this
Agreement, duly authorized by all necessary and appropriate action to execute this Agreement
on behalf of such party and does so with full and legal authority.
10.32 Counterparts and Multiple Originals. This Agreement may be executed in multiple 
originals, and may be executed in counterparts, each of which shall be deemed to be an original, 
but all of which, taken together, shall constitute one and the same agreement.

IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement on the 
respective dates under each signature: Broward County, Florida through its Board of County 
Commissioners, signing by and through its Mayor or Vice-Mayor, authorized to execute same by 
Board action on the 24th day of April, 2016, and Environmental Science Associates 
(Corporation), a California Corporation, signing by and through its authorized representative.

COUNTY ADMINISTRATOR ATTEST: 
County Administrator and Ex-Officio Clerk of the Board of County Commissioners

Bertha Henry

Date

Mayor or Vice-Mayor

Date

COUNTY MAYOR or VICE-MAYOR:

COUNTY RISK MANAGER:
Approved as to surety company qualifications, insurance requirements and insurance documentation.

Tracy Meyer, Esq.

Date

COUNTY ATTORNEY:
Approved as to form by 
Joni Armstrong Coffey
Broward County Attorney
Aviation Office
2200 SW 45th Street, Suite 101
Dania Beach, Florida 33312
Telephone: (954) 359-6100
Telecopier: (954) 359-1292

Consultant:

Environmental Science Associates

Name of Consultant

Julie Sullivan, Vice President

Print Name and Title of Signer

Signature

Date

CORPORATE SECRETARY ATTEST: 
(Affix Corporate Seal or 2 Witnesses below)

Witness

Date

Print Name

Witness

Date

Print Name

RFP# R1330212P1
FAR Part 150 Noise Compatibility Planning Consulting Services
EXHIBIT A
SCOPE OF SERVICES/PHASES/TASKS

SCOPE OF SERVICES – PART 150 STUDY
Fort Lauderdale-Hollywood International Airport

Background
Broward County Aviation Department (BCAD) is undertaking a 14 CFR Part 150 Noise and Land Use Compatibility Study Update (Part 150 Study) to evaluate opportunities to improve the compatibility of FLL with the surrounding communities taking into consideration the recently completed upgrade to the south parallel runway and the resulting changes in operational capability. This Part 150 Study will be based on actual real-world operational data rather than the estimated operational conditions evaluated in the Runway 10R/28L EIS. The most recent Part 150 Study for FLL was completed in 1994 (approved in 1995) and included eight operational and four land use measures. An update was initiated in 2005, but was later suspended due to the ongoing EIS process. In its simplest form, 14 CFR Part 150 is a process that includes the development of Noise Exposure Maps (NEMs), preparation of a Noise Compatibility Program (NCP), and extensive public involvement. BCAD’s goals are to receive FAA acceptance of the NEMs and approval of the NCP noise mitigation and abatement measures that address community concerns, while preserving safety and the operational capabilities of the Airport, and to conduct a public outreach process that not only meets 14 CFR Part 150 requirements, but achieves the BCAD’s objective of conducting an open and transparent study process.

Once an Airport has conducted a Part 150 study, it is obligated to prepare an update whenever a major change in the operational character of the Airport takes place. Plans for initiation of the FLL Part 150 Study stem back to the development of the EIS for the upgrade of the South Runway (10R/28L). During development of the EIS, the FAA made the determination that BCAD’s proposed action could not be selected as the preferred action because it included noise abatement measures that had the potential to impact the capacity of the new runway. Specifically, the FAA indicated that it would not “consider the approval of a runway development project with noise abatement runway use procedures that would limit its capacity in the opening year without a study of alternative noise abatement measures such as required under 14 CFR Part 150.” As the result of a cooperative effort between the Airport and the surrounding communities, BCAD entered into an inter-local agreement with Dania Beach in 2011, later updated in 2013, that included a voluntary use restriction on the south runway from 10:30 PM until 6:00 AM daily and detailed initiation of a Part 150 Study no sooner than 18-months after the new runway opened. This 18-month stipulation allowed for the use of the new runway system to stabilize and provided a 12-month window of consistent operational data to be collected essential for use in carrying out the FLL Part 150 Study.
Concurrent with the Part 150 process, a master plan update and other planning efforts are being undertaken by BCAD. It is important that the Part 150 be coordinated and consistent with these planning efforts while ensuring that the community clearly understands what the Part 150 study will and won’t address.

This Part 150 scope was developed both to ensure compliance with federal regulations and in consideration of the conditions outlined above.

The ESA Team consists of Environmental Science Associates (ESA), Kimley Horn Associates (KHA), Vanasse Hangen Brustlin (VHB), Garth Solutions Incorporated (GSI), American Infrastructure Development (AID), Lewis Longman Walker (LLW), Arora Engineers (Arora), Planning Technology, Inc. (PTI). The participation of each firm is noted by subtask throughout the scope of work.

**Task 1: Project Team, Sponsor and Agency Coordination**

**Task 1.1: FLL Part 150 Study Project Kick-off Meeting**

*Description:* ESA will initiate the project and organize and lead a project team kick-off meeting involving key members of BCAD staff, the FAA, and the Consultant Team. At the kick-off meeting, key project goals will be reviewed, and the schedule and communication protocols will be discussed. Members of the project’s core team will be identified for participation in ongoing coordination meetings. ESA will prepare meeting notes documenting the agreed upon project goals, communication protocols, and core team members. Coincident with the external kickoff meeting, the ESA Team will conduct an internal kickoff meeting during which the project management plan and key issues related to project implementation will be outlined and reviewed.

**Meetings/ESA Team Participants:**
- 1 external kickoff meeting/up to 10 members of ESA Team
- 1 internal kickoff meeting/up to 10 members of ESA Team

**ESA Team Primary Participants:** ESA, KHA, VHB, GSI, AID, LLW, Arora, PTI

**Deliverable(s):** Pre-meeting coordination and scheduling, Kick-off meeting agenda, meeting handouts, and summarized meeting notes.

**Assumptions/BCAD Responsibilities:**
- BCAD to assist in meeting coordination, scheduling and material review.
- Assumes the external kick-off meeting will take place in BCAD Offices.

**Task 1.2: Develop Community Engagement and Communication Plan & Protocols**

The ESA Team will coordinate with BCAD and the FAA to develop a community engagement and communication plan document to assist in implementing the Part 150 Study. The plan will clarify roles and responsibilities of those involved in the study, outline communication protocols and define how community outreach will be implemented for the initial phase of the study. Upon completion of the first phase of outreach, the plan will be refined to outline a tailored outreach approach through the completion of the study. The plan is intended for the internal use of the ESA Team, the BCAD, and the FAA. A preliminary draft and
subsequent draft version of the plan will be circulated in MS Word format to both BCAD and FAA to allow digital review. A final PDF version of the plan will be developed incorporating comments on draft versions as appropriate. The document will include, but not be limited to:

1. Roles and responsibilities of stakeholders including but not limited to the BCAD, FAA Lines of Business, and Technical Advisory Committee (TAC)
2. Formation of TAC along with membership criteria
3. Details about public participation process and conflict resolution
4. FAA expectation management language to be provided at all public venues

Following the initial set of workshops, the community engagement plan will be revised to define further potential public workshops throughout the course of the project consistent with the concerns and needs of the community.

**ESA Team Primary Participants:** ESA, GSI (Secondary: AID, KHA, VHB)

**Deliverable(s):** Pre-Draft, Draft, Final and revised Final Community Engagement and Communication Plan & Protocols document in digital (.doc and .pdf) format.

**Assumptions/BCAD Responsibilities:**
- BCAD and FAA to provide input and timely review.

**Task 1.3: Project Team/Client Working Meetings**

**Description:** To ensure that the FLL Part 150 Update moves forward smoothly and on schedule, the ESA Team will schedule and participate in working group meetings with key BCAD staff. The working group meetings will be conducted according to the schedule set in Task 1.1. During the meetings, the working group will identify and resolve potential issues. Periodic conference calls will be held with key BCAD management as needed to resolve issues that may arise either prior to or subsequent to working group meetings. It is anticipated that up to ten (10) meetings and fifteen (15) calls may be required throughout the project.

**Meetings/ESA Team Participants:**
- Up to 10 meetings/up to 5 members of ESA Team
- Up to 15 calls or web meetings/up to 8 members of ESA Team

**ESA Team Primary Participants:** ESA, KHA, VHB, GSI, AID, LLW (Secondary: Arora, PTI)

**Deliverable(s):** Working group meeting coordination and scheduling. Working group meeting agendas, meeting handouts, and summarized meeting notes.

**Assumptions/BCAD Responsibilities:**
- BCAD to assist in meeting coordination and scheduling and material review.
- Assumes these meetings will take place in BCAD offices.
- Assumes meetings will be scheduled to allow multiple meetings to be accomplished during the same trip.
Task 1.4: Bi-Weekly Client/Consultant Coordination Calls

Description: The ESA Team will schedule and participate in bi-weekly coordination calls with key BCAD staff. The coordination calls will be conducted according to the schedule set in Task 1.2. During the meetings, milestones and action items will be reviewed and project progress will be monitored. Up to sixty (60) conference calls will be held with key FLL staff to monitor project progress and address issues that may arise.

Meetings/ESA Team Participants: Up to 60 calls/up to 4 members of ESA Team

ESA Team Primary Participants: ESA (Secondary: KHA, VHB, GSI)

Deliverable(s): Call coordination and scheduling. Coordination meeting agendas, meeting handouts, and action item summaries, and summarized meeting notes.

Assumptions/BCAD Responsibilities:
- BCAD to assist in meeting coordination and scheduling.
- Assumes calls will last up to one (1) hour.

Task 1.5: Bi-Weekly FAA Coordination Calls

The ESA Team will schedule and participate in bi-weekly coordination calls with key FAA staff. The working group meetings will be conducted according to the schedule set in Task 1.2. During the meetings, milestones and action items will be reviewed and project progress will be monitored. Up to thirty (30) conference calls will be held with key FAA staff to monitor project progress and address issues that may arise.

Meetings/ESA Team Participants: Up to 30 calls/up to 3 members of ESA Team

ESA Team Primary Participants: ESA (Secondary: VHB)

Deliverable(s): Call coordination and scheduling. Coordination meeting agendas, meeting handouts, action item summary, and summarized meeting notes.

Assumptions/BCAD Responsibilities:
- BCAD to assist in meeting coordination and scheduling.
- Assumes bi-weekly calls will transition to monthly calls periodically throughout the project.
- Assumes calls will last up to one (1) hour.

Task 1.6: BCAD Senior Management Briefings

Description: This task includes up to six (6) meetings/briefings with BCAD senior management as directed by the BCAD Project Manager. ESA will provide meeting materials to include handouts and a PowerPoint slideshow to update senior management on the status and findings of the study at key points throughout the project.
Meetings/ESA Team Participants: Up to 6 meetings/up to 4 members of ESA Team

ESA Team Primary Participants: ESA (Secondary: VHB, GSI, LLW)

Deliverable(s): Meeting coordination and scheduling, PowerPoint slideshows, meeting agendas, and meeting handouts.

Assumptions/BCAD Responsibilities:
- BCAD to assist in meeting coordination and scheduling and material review.
- Assumes these meetings will take place at BCAD offices.

Task 1.7: Coordination Meetings with FAA

Description: This task includes a series of meetings throughout the project with various FAA representatives to collect data, ensure accuracy and timely availability of information, and address any issues or questions that may arise throughout the course of the project. Up to five (5) meetings will be conducted with the Orlando ADO and up to five (5) additional meetings will be conducted with FAA ATC or TRACON personnel. Follow-up phone calls will take place throughout the project as required to obtain needed information and guidance.

Meetings/ESA Team Participants: Up to 5 meetings at Orlando ADO/up to 4 members of ESA Team
Up to 5 meetings with FLL ATC/up to 4 members of ESA Team

ESA Team Primary Participants: ESA (Secondary: VHB)

Deliverable(s): Meeting coordination and scheduling, PowerPoint slideshows, meeting agendas, meeting handouts, action item summaries and summarized meeting notes.

Assumptions/BCAD Responsibilities:
- BCAD to assist in meeting coordination and scheduling and material review.
- Assumes these meetings will take place at BCAD offices, FAA ATC Offices or FAA Orlando ADO Offices.

Task 1.8: Other Agency Coordination

The ESA Team will schedule and participate in meetings with key local agencies as directed by BCAD. The meetings, which may include agencies such as local land use planning departments and the MPO, will be conducted according to the schedule set in Task 1.1. The meetings will include project briefings and collection/verification of key project data. Up to four (4) meetings will be held with key agency representatives.

Meetings/ESA Team Participants: Up to 4 meetings/up to 4 members of ESA Team

ESA Team Primary Participants: ESA, KHA, VHB (Secondary: GSI, LLW, Arora)
Deliverable(s): Meeting coordination and scheduling. Coordination meeting agendas, meeting handouts, and summarized meeting notes.

Assumptions/BCAD Responsibilities:
• BCAD to assist in meeting coordination and scheduling and material review.
• Assumes these meeting will either take place at BCAD offices or the agencies Broward County offices.

Task 2: Community Outreach Program

Task 2.1: Public Workshops
Description: One initial set of informal open house style workshops will be held on five (5) consecutive nights at an appropriate time and location in association with the initiation of the study. These workshops, held at five (5) different locations throughout the community, will provide the opportunity for information sharing and input during the Part 150 project. At each workshop, the ESA project team will discuss (on a one-on-one basis) with those in attendance the FLL Part 150 Study Update process and noise information available for review. ESA will provide up to 30 30x40 inch presentation board mounted exhibits describing the Part 150 process, noise modeling, land use compatibility, the role of the FAA in the Part 150 process and other information as appropriate. In addition, the ESA Team will provide handouts, sign-in sheets, and comment forms for the workshops. A court reporter will be provided at each workshop to record private verbal comments. Up to twelve (12) members of the ESA Team will be available for each public workshop.

Following the initial set of workshops, the second phase of the community outreach plan will be revised as part of Task 1.2 to reflect the approach to further potential public workshops throughout the course of the project.

The ESA Team will support the BCAD in the selection of the locations for the workshop sites and will prepare draft public workshop advertisements to be placed within the local newspaper(s) of greatest circulation in the Airport area or those with specific targeted audiences. ESA will translate the advertisement into one alternate language and coordinate with the local news outlets to run one set of advertisements 30 days before the workshops and a second set of advertisements closer to the workshops (four (4) total advertisements, two (2) in English and two (2) in an alternate language). Workshop handouts (up to 5 pages) will be translated into up to one alternate language. Boards will not be translated, but the titles of each board will be translated and included in the handout.

Meetings/ESA Team Participants: Up to 5 workshop nights / up to 12 members of ESA Team

ESA Team Primary Participants: ESA, KHA, VHB, GSI, AID, LLW

Deliverable(s): Preparation of exhibits/boards, handouts, sign-in sheets, comment forms, and preparation of advertisements. Provision of a court reporter for each workshop to privately record verbal comments in English only. Translation of advertisement, handout and provision of up to one translator at each workshop. ESA will also provide signage, easels, and set up and break down breakdown of the workshop boards along with staff to man the workshop and the sign-in table.
Assumptions/BCAD Responsibilities:
• Includes translation of advertisement and workshop handout into one alternate language.
• Includes up to one on-site translator during each workshop.
• Assumes workshop meetings will be held on consecutive nights
• Subsequent rounds of workshops handled as additional services

Task 2.2: Coordination Meetings with Nearby Jurisdictions
Description: At the outset of the project, ESA will conduct up to five (5) coordination meetings with nearby jurisdictions to discuss the Part 150 Study. These meetings will be used to discuss the process, identify key points of contact with planning departments and other key agencies and discuss potential locations for future workshops. One TAC member representative will be solicited per jurisdiction to serve as the conduit for input into the TAC and to report back the deliberations and findings of the TAC to the parties they represent. It is assumed that these coordination meetings will be small group focused and no more than 2.5 hours in length.

Meetings/ESA Team Participants: Up to 5 meetings/ up to 3 members of ESA Team

ESA Team Primary Participants: ESA, GSI

Deliverable(s): Jurisdiction meeting coordination and scheduling, meeting agendas, meeting handouts, sign-in sheets, and summarized meeting notes.

Assumptions/BCAD Responsibilities:
• BCAD to assist in meeting coordination and scheduling and material review.
• BCAD to provide appropriate staff participation.
• Assumes meetings will be no longer than 2.5 hours in length and scheduled to allow multiple meetings to be accomplished during the same trip.
• Assumes meetings can be accommodated at jurisdiction facilities at no cost.

Task 2.3: NEM Public Workshop
Description: One informal open house style workshop will be held upon completion of the Draft NEMs. This workshop will provide the opportunity for the public to review the NEMs and provide input on measures that they would like to see evaluated as part of the NCP. At the workshop, the ESA project team will discuss (on a one-on-one basis) with those in attendance the FLL Part 150 Study Update process, the process undertaken to develop the NEM’s and the next steps of the project. ESA will provide up to 30 30x40 inch presentation board mounted exhibits describing the Part 150 process, NEM development, land use compatibility, next steps and other information as appropriate. In addition, the ESA Team will provide handouts, sign-in sheets, and comment forms for the workshop. Up to twelve (12) members of the ESA Team will be available for the public workshop.

The ESA Team will work with the BCAD in the selection of the location for the workshop site, likely the convention center, and will prepare draft public workshop advertisements to be placed within the local
newspaper(s) of greatest circulation in the Airport area or those with specific targeted audiences. ESA will translate the advertisement into one alternate language and coordinate with the local news outlets to run one set of advertisements 30 days before the workshop and a second set of advertisements closer to the workshop (four (4) total advertisements, two (2) in English and two (2) in an alternate language). Workshop handouts (up to 5 pages) will be translated into up to one alternate language. Boards will not be translated, but the titles of each board will be translated and included in the handout.

Meetings/ESA Team Participants: 
Up to 1 workshop night/ up to 12 members of ESA Team

ESA Team Primary Participants: ESA, KHA, VHB, GSI, AID, LLW

Deliverable(s): Preparation of exhibits/boards, handouts, sign-in sheets, comment forms, and preparation of advertisements. Translation of advertisement, handout and provision of one translator at the workshop. ESA will also provide signage, easels, and set up and break down breakdown of the workshop boards along with staff to man the workshop and the sign-in table.

Assumptions/BCAD Responsibilities:
- Includes translation of advertisement and workshop handout into one alternate language.
- Includes up to one on-site translator.

Task 2.4: Public Comment Management and Responses
Description: ESA will compile the public comments provided throughout the project and will catalogue them by topic into a comment matrix. Responses will be prepared for each topic and will be keyed back to the comment matrix. Individual responses will not be prepared for each individual letter; rather, the comments will be addressed broadly by topic. Responses will only be prepared for comments related to the noise study or noise related issues. The public comments, summary matrix and responses will be coordinated with the FAA and included in the final draft report.

ESA Team Primary Participants: ESA, GSI (Secondary: KHA, VHB, GSI, LLW)

Deliverable(s): Compilation of comments provided throughout the project and preparation of a comment matrix and responses by topic for inclusion in a report appendix. Overall statistics on comments received by community will be summarized.

Assumptions/BCAD Responsibilities:
- The level of effort for this task assumes processing of no more than 80 comment letters containing no more than 5 distinct comments each (400 comments total). It also assumes that all comments can be addressed with no more than 20 topic or category type responses. Comments received in excess of these limits may require additional budget depending on the nature and volume of comments received.
- BCAD to review and provide input on comment responses.
- BCAD to route comments to ESA to ensure they are included in database.
Task 2.5: Part 150 Technical Advisory Committee Meetings

Description: ESA will conduct up to eight (8) Technical Advisory Committee (TAC) meetings throughout the course of the project. Members will include those whose input is key to the technical quality of the study as well as certain interested parties. Participants may consist of experts in land use, Airport and aircraft operations, air traffic control, and community relations and may include the FAA, community representatives, airlines, Airport tenants, appointees by elected officials and others. Representatives are expected to provide informed technical feedback as well as communicate technical information discussed during the meetings back to their constituents. TAC meeting schedule and details will be defined in Task 1.1.

Meetings/ESA Team Participants: Up to 8 meetings/up to 6 members of ESA Team

ESA Team Primary Participants: ESA, KHA, VHB, GSI, LLW

Deliverable(s): Meeting coordination and scheduling, PowerPoint slideshows, meeting space, meeting agendas, meeting handouts, and summarized meeting notes.

Assumptions/BCAD Responsibilities:
- BCAD to assist in meeting coordination and scheduling and material review.
- Assumes meetings will be scheduled to allow multiple meetings to be accomplished during the same trip.

Task 2.6: Noise History and Educational PowerPoints

Description: To help communicate the history of the Airport and the steps the BCAD has taken to minimize potential noise concerns, ESA will review the BCAD’s Airport Noise and Overflights PowerPoint slideshow and modify as appropriate to provide additional detail on the measures that have been implemented in the past by the BCAD. A supplemental informational PowerPoint will also be developed that provides an overview of how noise is measured and regulated as well as detail the responsibilities of the various stakeholders.

ESA Team Primary Participants: ESA, VHB, GSI

Deliverable(s): Two stand-alone PowerPoint slideshows that can be used in public meetings and/or posted on the BCAD website for download by the public.

Assumptions/BCAD Responsibilities:
- BCAD to assist in data collection and slideshow review.

Task 2.7: Public Information Materials & Media Information Materials

Description: ESA will prepare up to six (6) periodic newsletters to be distributed in electronic format, to community representatives and elected officials. The newsletter will also be posted on the project website, which will be compliant with Section 508. The newsletter will provide project status, supporting text and visuals (charts, diagrams and other pictorial presentations) to convey technical information and data in the most compelling and easily understandable fashion. The ESA Team will coordinate with FLL’s Public Information Officer (PIO) prior to distributing material to the public. The ESA Team will also provide the BCAD’s Media Relations Office with background material and suggested responses or
“talking points” as needed. This task does not include the development of custom graphics or analysis solely for the purposes of media relations, but will rely on materials developed for other meetings and tasks. ESA will participate in phone interviews as requested by the PIO. ESA will also participate in face to face interviews conducted concurrently with the Public Workshop or Public Hearing.

ESA Team Primary Participants: ESA, GSI

Deliverable(s): Preparation of up to six (6) electronic newsletters and compilation of existing information for media briefings throughout the course of the project.

Assumptions/BCAD Responsibilities:
- The BCAD PIO will review materials prior to distribution to the public or media.
- Separate analysis will not be developed to address media questions, but will be provided from materials already produced.
- Assumes no separate trips are required to conduct interviews.

Task 2.8: Part 150 Public Website Development and Ongoing Update
Description: ESA will establish a publicly accessible website for the FLL Part 150 Study Update consistent with Broward County guidelines and requirements. The website may be a part of BCAD's existing website, or may be set up as a separate website maintained by ESA, but will have the look and feel for the existing BCAD/ noise website. The website will include the project schedule, a listing of the Study elements, identification of public workshop locations/dates/times, and documents approved by the PIO BCAD and the FAA for public release including PowerPoints and Study newsletters. Additionally, the website will allow the public to register their contact information in order to receive future notifications and information about upcoming meetings and workshops. The website will be maintained by ESA throughout the duration of the project and materials posted will be processed to meet Section 508 compliance (if required).

ESA Team Primary Participants: ESA, PFI

Deliverable(s): A publicly accessible website for the FLL Part 150 Study Update.

Assumptions/BCAD Responsibilities:
- BCAD to provide access to existing Airport website
- The FLL PIO will review materials prior to distribution to the public.
- The ESA Team will coordinate with Broward County for development of the website.
- Assumes comments will not be received through website, but via written comment at workshops and other public forums.
- Assumes materials on website will be in English or previously translated for other purposes.
- Duration of Project assumed to be no more than 3 years.
Task 2.9: Part 150 Public Hearing

Description: A duly advertised, formal Public Hearing will be held at an appropriate time and location upon the availability of the Draft Noise Compatibility Program report. The Consultant will develop a PowerPoint presentation and script for use in the formal public hearing. The Consultant will also prepare sign-in sheets, speaker cards and comment forms for the hearing. A verbatim transcript of the public hearing will be prepared for inclusion in the Final Draft Noise Compatibility Program document through the use of a court reporter. A PowerPoint presentation and script that summarizes the study process results, recommendations, and implementation mechanisms will be prepared. The presentation will include text, graphics and other types of illustrations utilized in the preparation of the Part 150 NEM and NCP. The PowerPoint presentation will be used for the public hearing and provided to the BCAD for its use in creation of individualized presentations for specific audiences. The ESA Team will coordinate with the PIO prior to finalizing any materials for the public. On the same evening as the public hearing, a pre-hearing workshop will be conducted to allow members of the public to view and discuss project exhibit boards with the consultant team. Up to 30 boards will be provided for this workshop. ESA will translate the advertisement into one alternate language and coordinate with the local news outlets to run one set of advertisements 30 days before the workshops and a second set of advertisements closer to the workshops (four (4) total advertisements, two (2) in English and two (2) in an alternate language). Workshop handouts (up to 5 pages) will be translated into up to one alternate language. Boards will not be translated, but the titles of each board will be translated and included in the handout.

Meetings/ESA Team Participants: 1 public hearing/workshop/up to 12 members of ESA Team

ESA Team Primary Participants: ESA, KHA, VHB, GSI, AID, LLW

Deliverable(s): Preparation of exhibits, handouts, sign-in sheets, comment forms, speaker cards and preparation of advertisements. Two court reporters will be provided and a formal transcript of the hearing will be prepared for inclusion in the final report. Up to 30 30x40 boards will be provided for the pre-Hearing workshop. Translation of advertisement and meeting handout. Provision of meeting space. ESA will also provide signage, easels, and set up and break down breakdown of the workshop boards along with staff to man the workshop and the sign-in table.

Assumptions/BCAD Responsibilities:
- The BCAD PIO will review materials developed for the public.
- BCAD to assist in meeting coordination and scheduling and material review.
- Includes translation of advertisement and workshop handout (5 pages) into one alternate language.
- Includes up to one on-site translator during public hearing.

Task 2.10: Meetings with County Administrator

Description: ESA will conduct up to three meetings with the County Administrator. Meetings will be scheduled to brief and coordinate with the County Administrator regarding upcoming meetings and workshops with elected officials. Meetings with the County Administrator will also present an opportunity to
provide status reports on the progress of the study and elicit any key feedback and guidance at key milestones. Timeline for meetings will be determined during Task 1.2.

**ESA Team Primary Participants:** ESA, GSI, LLW

**Meetings/ESA Team Participants:** Up to 3 individual meetings/ up to 2 members of ESA team

**Deliverable(s):** Meeting coordination and scheduling, PowerPoint slideshows, meeting agendas, meeting handouts, and summarized meeting notes.

**Assumptions/BCAD Responsibilities:**
- BCAD to assist in meeting coordination and scheduling and material review.

**Task 3: Develop a Comprehensive Database of Current Conditions**

**Task 3.1: Study Area Base Mapping**

**Description:** Base mapping associated with the Part 150 Study Update will be developed for several different geographical areas and will employ several different scales. One base map will be of a size to allow review of the DNL contour limits. Information to be displayed on this base map will include the Airport boundary, limits of political jurisdictions, and existing major roadways, rail corridors and significant water features.

A second base map will be developed showing a larger area of coverage. This base map will be used to graphically display flight corridors for the baseline condition and future alternatives. The map scale will not be less than 1"=2,000' as required by 14 CFR Part 150. Map extents will allow for flight tracks to be shown at least 30,000 feet from each runway end. This base map will also include the FLL property limits, major roadways, and other identifiable physical features (streams, coastline, rivers, major drainage canals) in order to relate flight tracks to known ground locations. Both base map graphics will be prepared utilizing the available GIS information from Broward County. This task does not include flying new aerial photogrammetry, but does assume the availability of the information being developed as a part of the FLL master plan Airports Geographical Information System (GIS) effort.

**ESA Team Primary Participants:** ESA, KHA, AID, Arora

**Deliverable(s):** Two (2) (one detailed and one expanded) appropriately scaled base maps of the study area for use in the report.

**Assumptions/BCAD Responsibilities:**
- BCAD to assist with data gathering.
- Assumes information available in digital format.
- Assumes no new aerial photogrammetry.
Task 3.2: Collection of Geographical Information Systems Data

Description: Data necessary for use in the impact analyses of the baseline and future land use conditions will be collected through the review of existing data layers contained in Broward County GIS files. This will include existing land use data, future land use data (as available), and existing zoning designations available in digital form from the BCAD or neighboring jurisdictions planning departments.

The following information will be collected for the coverage needed to document the Part 150 Study:

- Roadway Base Map
- Political Jurisdictions and boundaries
- Existing Land Use
- Future Land Use (as available)
- Current Zoning
- Noise Sensitive and Non Compatible Land Uses (Schools, places of worship, hospitals, etc.)
- Parcel Maps/Property Ownership

ESA Team Primary Participants: ESA, KHA, Arora

Deliverable(s): GIS database compiled from various sources.

Assumptions/BCAD Responsibilities:
- BCAD to assist with data gathering.

Task 3.3: Coordinate with Master Plan Team to Prepare Level of Derivative Detail in Forecast Data

Description: ESA will coordinate with the Master Plan Team to ensure the level of detail included in the forecasts being developed as part of the Master Plan Update is sufficient for development of the derivatives required for use in the noise modeling effort. Derivative forecasts typically focus on a level of fleet mix detail often not found in most master plan forecasts along with drilling down to specify flight stage lengths and aircraft engine types. Data gaps will be identified and potential approaches to resolution will be outlined. A technical memo will be prepared for submission to the FAA requesting formal concurrence on the use of the Master Plan Forecast in the Part 150 Study.

ESA Team Primary Participants: ESA, VHB

Deliverable(s): Technical Memo for submission to the FAA to obtain concurrence on use of Master Plan forecasts in Part 150 study.

Assumptions/BCAD Responsibilities:
- It is assumed that the Master Plan Update forecast will be approved by FAA prior to development of tech memo or the derivatives.
Task 3.4: Existing and Future Airfield Facilities

Description: Existing (baseline) and planned physical facilities will be identified based on the latest FLL Master Plan and/or Airport Layout Plan (ALP) and information available from other studies or the latest Joint Airport Capital Improvement Program (JACIP) as identified by the BCAD. This will include a description of the existing facilities and near-term proposed projects associated with improvements to the airfield, airside development, cargo and maintenance facilities, commuter and air carrier terminal development, etc. Those projects that may have an influence on runway use, engine run-up locations, or may in some way have the potential to alter the noise exposure in future years will be identified. It is noted that additional runways and/or changes in threshold locations are not currently anticipated as part of the master plan.

ESAs Team Primary Participants: ESA

Deliverable(s): Summary text and figures for inclusion in a Working Paper.

Assumptions/BCAD Responsibilities:
• BCAD to provide digital ALP and any pertinent planning studies.

Task 3.5: Land Use Planning and Zoning Inventory/Identification of Noise Sensitive Sites

Description: Consistent with 14 CFR Part 150 requirements, existing comprehensive plans, land use plans, zoning ordinances, subdivision regulations, building codes, easement terminology, overlay zoning and other documentation pertaining to land use planning and development in the vicinity of the Airport as readily available will be obtained and reviewed. This review will concentrate on identification of the mechanisms that are presently in place to enhance land use compatibility in the FLL environs. Provisions in ordinances, land development codes, and future land use plans that relate to future noise/land use compatibility will also be identified and discussed. ESA will identify the general land use type (residential, commercial, industrial, institutional), approximate density, and location of current land uses for existing and future land development (as determined from approved future off-Airport land use plans or zoning). The existing sound insulation program will also be included in this analysis.

Verification of recent changes to existing land uses that have occurred will be performed using the most current aerial photography available and supplemented with up to two (2) days of field verification. Identified changes will be incorporated into the GIS databases. Noise sensitive sites including schools, churches, hospitals, parks, recreation areas, and historic sites within the approximate 65 DNL contour will be verified through the most current aerial photography and supplemented during the field verification effort. The resulting field data will be input into the database and depicted on the study area base mapping.

Future land use will be derived based on the most current future land use planning documentation available for each jurisdiction within the study area. Where future land use plans are in progress (being revised, developed, etc.) at the time of data collection, ESA will, to the extent possible, identify potential options to address the uncertainty created by the pending nature of available data and discuss these with the BCAD PM to define a recommendation for addressing the necessary information. In cooperation with the BCAD PM and other relevant technical experts, ESA will coordinate with the specific jurisdiction(s), where a definitive
source of future land use issue has arisen, to develop a future land use concept for the five-year future condition consistent with the jurisdiction’s expectations.

**ESA Team Primary Participants:** KHA, AID, Arora, (Secondary: ESA)

**Deliverable(s):** Summary text for inclusion in a Working Paper. Base map overlays of the study area for existing land use, existing zoning, future land use plans, and noise sensitive site locations.

**Assumptions/BCAD Responsibilities:**
- BCAD to assist with data gathering and details related to existing sound insulation program.
- Assumes two (2) days of field verification is sufficient to validate data.
- Assumes existing and future land use data, zoning, comprehensive plans, etc., are available digitally.

### Task 3.6: Population/Socioeconomic Data

**Description:** Baseline population data will utilize the most recent census data (2010) available from the U.S. Census Bureau and/or available from Broward County. The mapping and tabular information evaluation within the base map coverage area will include the distribution of dwelling units, population, minority population, and low-income population based on census data. In addition, any recent population density documentation prepared locally for the FLL area will be used to supplement the census data, where applicable. Care will also be taken to utilize, and be as consistent as possible with, population data used in other recent studies completed by the BCAD.

**ESA Team Primary Participants:** KHA, Arora (Secondary: ESA)


**Assumptions/BCAD Responsibilities:**
- Population data collected will be limited to areas within the approximate 65 DNL contour.

### Task 3.7: Existing Land Use and Operational Measures

**Description:** The recommendations of the previous Part 150 Study will be reviewed and the status of implementation of elements of the approved noise abatement program will be identified. These will be separated into recommendations that have been implemented, those in the process of being implemented and those not currently proposed for implementation (and why they were not included in the implementation program).

Implemented noise mitigation measures, which are proposed to continue, will be listed and consideration of any changes or additions will be reviewed as alternative noise mitigation measures during the NCP phase of the study.

**ESA Team Primary Participants:** ESA, KHA

**Deliverable(s):** Summary text for inclusion in a Working Paper.
Assumptions/BCAD Responsibilities:
- Assumes previous measures are well documented and status can be readily determined.

Task 3.8: Assess Development Growth Risk
Future land use plans that incorporate residential uses or incompatible land uses as set forth in comprehensive plans, sector plan or development proposals along with projections of future population by census tract or block will be reviewed for the purposes of evaluating future growth risk and the possible introduction of additional incompatible uses. This effort will be limited to areas within the estimated 2022 65 DNL contour and its immediate vicinity.

ESAT Team Primary Participants: KHA


Assumptions/BCAD Responsibilities:
- Assumes local agencies have good documentation regarding the types of projects and details related to housing units, etc. required to understand project implications.
- BCAD to provide any information that they may have about future projects.

Task 3.9: Review of Noise Complaint Data
Description: This task will review noise complaint information maintained by the BCAD during the past five years with particular focus on complaints filed since the upgraded parallel runway opened. A statistical analysis of noise complaints will be prepared and key observations will be summarized. Relationships between noise complaint locations, aircraft flight corridors, and the implementation of past noise abatement procedures will be discussed. If adequate information is available in digital format, noise complaint information will be mapped to show its distribution throughout the Airport environs and coded to allow evaluation of complaint intensity. This assumes data from BCAD’s existing comments tracking.

ESAT Team Primary Participants: ESA, Arora

Deliverable(s): Summary text and supporting graphics, if appropriate, for inclusion in a Working Paper.

Assumptions/BCAD Responsibilities:
- BCAD to provide noise data in excel format suitable for processing, analyzing and mapping.
- Assumes information will be available from BCAD’s new noise comment software.

Task 3.10: Airspace/Air Traffic Control Data & ANOMS Data as Available
Description: Airport terminal area airspace and air traffic control procedures will be reviewed with Airport personnel and FAA management at the FLL Tower. Existing airspace sectoring and operational procedures, including air traffic related noise abatement procedures, and new procedures such as RNAVRNP which are currently in effect will be reviewed and discussed with Air Traffic Control management. Data from FLL’s ANOMS will be collected and used to facilitate these discussions.
ESA Team Primary Participants: ESA, VHB

Deliverable(s): Summary text and supporting graphics, if appropriate, for inclusion in a Working Paper.

Assumptions/BCAD Responsibilities:
• BCAD to provide a link and login to ANOMS throughout the course of the project to allow efficient data download and analysis.

Task 3.11: Prepare Background Information Documentation - Working Paper #1
A draft working paper will be prepared in report format detailing various aspects of the data collected in tasks 3.1 through 3.10 as appropriate to allow incorporation into the NEM report with limited restructuring or editing. The draft working paper will be circulated in both pdf and MS Word format to allow review and digital markup. Upon receipt of comments, a revised working paper will be prepared. Further comments will be addressed during the development of the pre-draft NEM report. In the event that one or more pieces of information are not available in a timely manner, the working paper will be prepared for review and the remaining information will be incorporated at the pre-draft stage.

ESA Team Primary Participants: ESA, KHA, VHB (Secondary: AID, Arora)

Deliverable(s): One draft and one final working paper in electronic format (MS Word and PDF).

Assumptions/BCAD Responsibilities:
• Assumes documents produced in English only.
• BCAD and FAA to provide consolidated review comments in track changes format.
• Only digital versions of this document will be submitted.

Task 4: Noise Contour Development & Impact Analysis

Task 4.1: Operations and Fleet Mix Analysis (Derivatives)
Description: The Master Plan Forecast will be used as the basis for determining the operational levels anticipated at the Airport in the initial year, 2017, and future year, 2022. A detailed fleet mix evaluation will be conducted which will involve processing 12 consecutive months of actual ANOMS operational data during 2015/2016. This analysis will include determination of the daytime/nighttime activity split by aircraft and engine type and operational stage lengths. ESA will then use the detailed 2015/2016 data along with projected fleet transitions outlined in the Master Plan Forecast to develop an estimated future fleet mix for 2017 and 2022 including daytime/nighttime activity split by aircraft and engine type and operational stage lengths.

Each aircraft/engine type will be assigned a specific aircraft type specific to the FAA’s noise model (Aviation Environmental Design Tool or AEDT). However, the database does not include all aircraft that are in operation today. For certain aircraft types, the FAA has identified pre-approved substitute aircraft for use in the model. For aircraft that are not in the AEDT or its pre-approved substitution database, an appropriate similar aircraft will be selected. It should be noted that the use of any non-standard inputs requires written
approval from the FAA. For these aircraft an appropriate substitute aircraft will be identified and documented in correspondence sent to the FAA’s Project Manager for distribution to the appropriate FAA departments for review and approval.

**ESA Team Primary Participants**: ESA, VHB (Secondary: KHA)

**Deliverables**: Summary text for inclusion in a Working Paper and modeling substitution documentation to be sent to the FAA for approval.

**Assumptions/BCAD Responsibilities**:
- BCAD to provide a link and login to the ANOMS throughout the course of the project to allow efficient data download and analysis.
- BCAD to assist in working with the ANOMS vendor to assist in resolving any data gaps.

**Task 4.2: Runway Use and Flight Track Analysis**

**Description**: ESA will use 12 consecutive months of 2015/2016 ANOMS data to prepare a series of baseline condition flight tracks for use in modeling aircraft activities. Flight track locations will be developed for both east and west flows and will include fixed wing and helicopter arrivals, departures, and traffic pattern operations, as appropriate. Flight track and runway use by aircraft category/type and time of day will be developed through analysis of the ANOMS data and verified through consultation with the ATCT and TRACON.

Flight track and runway use for the future 2017 condition is anticipated to be similar to the 2015/2016 actual condition. However, changes that are reasonably anticipated to be in place in 2017 and 2022 will be identified through consultation with FAA and reflected in usage and track assumptions for those years.

The actual climb or descent profiles utilized at the Airport may differ from the AEDT standard profiles. For example, an analysis of radar data may show that aircraft are climbing at a slower or faster rate, or that arriving aircraft are leveling-off during approach. Within the AEDT, the “procedure steps” defining the standard profile may be modified to better match aircraft altitudes and speeds shown in radar data. For departures, the user must define the altitude, climb rate, and speed along the profile. For arrivals, the user must define the altitude and speed along the profile.

Data will be collected from the BCAD’s ANOMS that identifies aircraft departure and arrival profiles for a selection of aircraft operating at the Airport. These data will be reviewed and modifications to certain AEDT standard profiles for specific aircraft may be identified, as necessary. User-defined profiles must be approved by the FAA’s Office of Environment and Energy. Documentation of the profile input parameters, resulting noise exposure levels compared to the standard profile, and validation from the aircraft manufacturer or operator must be submitted to the FAA for review and approval. The review process also requires a demonstration of the benefit of modeling the user-defined profiles instead of the standard profiles. It should be noted that in some cases, a user-defined profile may better reflect radar data, but have a negligible effect on the size/extent of DNL contours.
ESA Team Primary Participants: ESA, VHB

Deliverable(s): Summary text for inclusion in a Working Paper and documentation to be sent to the FAA supporting any requests for user defined profiles.

Assumptions/BCAD Responsibilities:
- BCAD to provide a link and login to the ANOMS system throughout the course of the project to allow efficient data download and analysis.
- BCAD to assist in working with the ANOMS vendor to assist in resolving any data gaps.
- Assumes that user defined profiles will be needed for no more than three (3) individual flight tracks.

Task 4.3: Existing Noise Exposure Levels (anticipated to be 2017 base year)

Description: Using the baseline 2017 operations and fleet mix data developed in a previous task, the latest version of FAA’s Aviation Environmental Design Tool (currently AEDT 2b SP2) will be used to determine current aircraft noise exposure levels in the FLL environs. Contours of equal exposure of the 65, 70 and 75 dB DNL will be calculated and overlaid on both large scale and small scale base mapping. DNL contours, when depicted on a land use base map, form the NEM. An NEM is a scaled, geographic depiction of an Airport, its noise contours, and existing land uses in surrounding areas that comply with map scale and data requirements as specified in paragraphs A150.101, A150.103, A150.105, and 150.21 of 14 CFR Part 150. Narrative discussion of assumptions, input data, and the characteristics of the existing noise exposure pattern will also be prepared and presented in written form. The resulting contours will be provided by ESA for certification by BCAD.

ESA Team Primary Participants: ESA (Secondary: VHB)

Deliverable(s): Summary text and graphics for inclusion in a Working Paper.

Assumptions/BCAD Responsibilities:
- Assumes no airspace or operational changes or changes to model input assumptions once modeling effort has been initiated.

Task 4.4: Future Noise Exposure Levels (anticipated to be 2022 five-year horizon)

Description: Future year (currently anticipated to be 2022) DNL contours will be prepared based on the projected conditions, operations and fleet mix identified under a previous task. Contours of equal exposure of 65, 70 and 75 dB DNL will be calculated and overlaid on both large scale and small scale base mapping. Narrative discussion of assumptions, input data, and the characteristics of the existing noise exposure pattern will also be prepared and presented in written form. The resulting contours will be provided by ESA for certification by BCAD.

ESA Team Primary Participants: ESA (Secondary: VHB)

Deliverable(s): Summary text and graphics for inclusion in a Working Paper.
Assumptions/BCAD Responsibilities:

- Assumes no airspace or operational changes or changes to model input assumptions once modeling effort has been initiated.

Task 4.5: Quantify Impacted Dwelling Units and Noise Sensitive Institutional Uses Inside 65 DNL Contour

Impacts will be determined relative to the land use compatibility guidelines contained in Part 150 of the Federal Aviation Regulations for both the 2017 and 2022 contours. Impacts to housing and other noise sensitive uses will be calculated identifying the numbers of dwellings and sensitive sites situated within each 5 dB contour range for 65 dB DNL and above associated with the baseline noise contours and will be depicted on the baseline noise exposure map using standard land use mapping classifications. The resulting impact totals will establish the baseline conditions against which future alternative Airport operating and land use alternatives will be compared.

ESA Team Primary Participants: ESA, KHA, Arora (Secondary: VHB)

Deliverable(s): Summary text and graphics for inclusion in a Working Paper.

Assumptions/BCAD Responsibilities:

- Assumes that noise sensitive use information was available in GIS format.

Task 4.6: Quantify Impacted Population by 5 DNL Contour Interval 65 DNL and Above

Impacts in terms of population will be calculated for 2017 and 2022 identifying the number of people situated within each 5 dB contour interval from 65 dB DNL to 75 dB DNL. This evaluation will be based on the 2017 and 2022 contours using geographic information system (GIS) software and U.S. Census Block Data for 2010 taking into account adjustments, if any, resulting as a part of Task 3.8. The resulting impact totals will establish the baseline conditions against which future alternative Airport operating and land use alternatives will be compared.

ESA Team Primary Participants: ESA, KHA, Arora (Secondary: VHB)

Deliverable(s): Summary text and graphics for inclusion in a Working Paper.

Assumptions/BCAD Responsibilities:

- Assumes that population information was available in GIS format.


A draft working paper will be prepared in report format detailing the analysis and findings outlined in Tasks 4.1 through 4.7 as appropriate to allow incorporation into the NEM report with limited restructuring or editing. The draft working paper will be circulated in both pdf and MS Word format to allow review and digital markup. Upon receipt of comments, a revised working paper will be prepared. Further comments will be addressed during the development of the pre-draft NEM report. In the event that one or more pieces of
information are not available in a timely manner, the working paper will be prepared for review and the remaining information will be incorporated at the pre-draft stage.

**ESA Team Primary Participants:** ESA, KHA, VHB, AID, LLW, Atora

**Deliverable(s):** One draft and one final working paper in electronic format (MS Word and PDF).

**Assumptions/BCAD Responsibilities:**
- Assumes documents produced in English only.
- BCAD and FAA to provide consolidated review comments in track changes format.
- Only digital versions of this document will be submitted.

**Task 5: Prepare and Submit NEM Report**

**Task 5.1: Pre-Draft NEM Report**

**Description:** Interim working papers, which will become the basis for chapters of the Draft NEM Report, will be submitted to the BCAD and FAA at strategic points throughout the Study for review and comment. As described above, working papers will be prepared for Tasks 3 and 4. These working papers will be incorporated into a complete Pre-Draft NEM Report.

**ESA Team Primary Participants:** ESA, KHA, VHB

**Deliverable(s):** One electronic copy of the Pre-Draft FLL NEM Report.

**Assumptions/BCAD Responsibilities:**
- BCAD to provide consolidated review comments in track changes format.
- Assumes document produced in English only.
- Only digital versions of this document will be submitted.

**Task 5.2: Preliminary Draft NEM Report**

**Description:** Following the second round of public workshops and completion of the review and comment of the Pre-Draft by BCAD and FAA, up to five (5) copies of a revised Preliminary Draft FLL NEM Report will be prepared and reviewed by BCAD and FAA. Comments from the public on the Draft NEM Maps will be incorporated into the Preliminary Draft.

**ESA Team Primary Participants:** ESA, KHA, VHB

**Deliverable(s):** One electronic copy, and up to five (5) printed copies of the Preliminary Draft FLL NEM Report. Full-size NEM drawings will only be provided in the appendix for two (2) report copies. All other full-size NEM drawings will be provided on a CD inserted in the appendix.

**Assumptions/BCAD Responsibilities:**
- BCAD and FAA to provide consolidated review comments in track changes format.
- Assumes document produced in English only.

**Task 5.3: Draft NEM Report**

**Description:** Upon completion of the review and comment of the Preliminary Draft, twenty (20) copies of the Draft NEM Report will be prepared and submitted to BCAD for review by the FAA, TAC and other agencies as appropriate. This includes preparation of the FAA NEM checklist and inclusion in the document appendix.

**ESA Team Primary Participants:** ESA, KHA, VHB

**Deliverable(s):** One electronic copy, and up to fifteen (15) printed copies of the Draft FLL NEM Report. Full-size NEM drawings will only be provided in the appendix for up to five (5) report copies. All other full-size NEM drawings will be provided on a CD inserted in the appendix.

**Assumptions/BCAD Responsibilities:**
- Assumes document produced in English only.
- BCAD and FAA to provide consolidated review comments in track changes format.

**Task 5.4: Respond to Sponsor, Committee and Agency Review Comments**

**Description:** Comments received on the Draft NEM Report from BCAD, TAC, FAA and other agencies will be consolidated and incorporated into a final draft or responded to as appropriate. Conflicting comments will be discussed with BCAD and the FAA as required to ensure resolution.

**ESA Team Primary Participants:** ESA, KHA, VHB

**Deliverable(s):** One master digital track changes version of the NEM Report that incorporates changes.

**Assumptions/BCAD Responsibilities:**
- BCAD to assist in ensuring comments are provided in timely manner.

**Task 5.5: Final Draft NEM Report**

**Description:** Upon completion of review of the Draft NEM Report and incorporation of review comments, eight (8) copies of the Final NEM Report will be provided to the BCAD for its use and for submittal to the FAA.

**ESA Team Primary Participants:** ESA (Secondary: KHA, VHB)

**Deliverable(s):** One electronic PDF file, all word files and up to eight (8) printed copies of the Final Draft NEM report will be prepared. Full-size NEM drawings will only be provided in the appendix for up to three (3) report copies. All other full-size NEM drawings will be provided on a CD inserted in the appendix.

**Assumptions/BCAD Responsibilities:**
• BCAD to provide consolidated review comments in track changes format.
• Assumes document produced in English only.

Task 5.6: Final NEM Report

Description: Upon completion of review of the Final Draft NEM Report by the FAA and incorporation of review comments, up to eight (8) copies of the Final NEM Report will be provided to the BCAD for its use and for submittal to the FAA. Upon FAA acceptance, the Final NEM report will be posted on the Project’s public website.

ESD Team Primary Participants: ESA (Secondary: KHA, VHB)

Deliverable(s): One electronic PDF file and up to eight (8) printed copies of the Final FLL NEM report will be prepared. Full-size NEM drawings will only be provided in the appendix for up to three (3) report copies. All other full-size NEM drawings will be provided on a CD inserted in the appendix.

Assumptions/BCAD Responsibilities:
• Assumes document produced in English only.

Task 5.7: NEM Notice of Availability

Description: Upon FAA acceptance of the NEM’s, ESA will prepare a notice of availability to be published in a local newspaper by BCAD three (3) times periodically during the subsequent months. The notice will be published in both English and one alternative language for a total of six (6) advertisements.

ESD Team Primary Participants: ESA, GSI

Deliverable(s): One electronic document for use in publishing the notice of availability of the NEM’s.

Assumptions/BCAD Responsibilities:
• BCAD to provide consolidated review comments in track changes format.

Task 6: Identify and Evaluate Noise Abatement Alternatives

Task 6.1: Examine Airport Plan Alternatives

Description: Alternatives associated with physical changes to the Airport facility will be considered and if deemed to be reasonable, these will be evaluated in this Task, including a review of Airport plan alternative recommendations from the previous Part 150 Study and the implementation status of those recommendations. Options to be considered will include such measures as runway/taxiway configurations, noise barriers, maintenance run-up activity locations, and threshold locations. Although changes are not expected as a result of the ongoing Master Plan, this will be verified during this task.

ESD Team Primary Participants: ESA, VHB
Deliverable(s): Summary text and graphics for inclusion in a Working Paper.

Assumptions/BCAD Responsibilities:
• Assumes level of effort is consistent with hours budgeted.

Task 6.2: Examine Airport and Airspace Use Alternatives
Description: Operational alternatives associated with changes to Airport and airspace use will be evaluated in this Task, including a review of any Airport and airspace use alternative recommendations from the previous Part 150 Study and the implementation status of those recommendations. Operational alternatives will be addressed which could improve air traffic control opportunities, reduce noise exposure on residences and other noise-sensitive land uses situated off of the ends of the existing runways, and improve the opportunity to meet mitigation commitments made to nearby residential areas. Alternatives will be identified in conjunction with representatives of the BCAD’s management and staff and ATCT personnel. The alternatives analysis will also address FAA identified requirements for analyzing operational alternatives under Part 150.

ESA Team Primary Participants: ESA, VHB

Deliverable(s): Summary text and graphics for inclusion in a Working Paper.

Assumptions/BCAD Responsibilities:
• Assumes level of effort is consistent with hours budgeted.

Task 6.3: Examine Aircraft Operational Alternatives
Description: This task focuses on aircraft arrival and departure procedures, especially noise abatement departure profile options under AC 91-53A, and will include review of alternative aircraft operational recommendations from the previous Part 150 Study and the implementation status of those recommendations. RNAV procedure issues and opportunities will also be identified as part of this task.

ESA Team Primary Participants: ESA, VHB

Deliverable(s): Summary text and graphics for inclusion in a Working Paper.

Assumptions/BCAD Responsibilities:
• Assumes level of effort is consistent with hours budgeted.

Task 6.4 Convene an Operations Technical Working Group and Review Alternatives
Description: A subset of the TAC will be assembled for the purposes of identifying and evaluating potential operational alternatives. This technical working group will consist primarily of technical experts including the aircraft operators and the FAA. The goal of this group is to identify a wide range of potential alternatives and then provide detailed technical input into factors influencing feasibility. The group will meet up to three (3) times with up to three (3) additional phone calls.

Meetings/ESA Team Participants: Up to 3 meetings/up to 5 members of ESA Team
Up to 3 calls or web meetings/up to 6 members of ESA Team

**ESQA Team Primary Participants:** ESA, VHB

**Deliverable(s):** Working group meeting coordination and scheduling, Working group meeting agendas, meeting handouts, and summarized meeting notes.

**Assumptions/BCAD Responsibilities:**
- BCAD to provide appropriate staff participation for successful meetings.
- BCAD to assist in meeting coordination and scheduling and material review.
- Assumes meetings will take place at BCAD offices.

**Task 6.5 Evaluate Feasibility, Costs and Benefits of Airport, Airspace, and Operations Alternatives**

**Description:** Using the scenarios resulting from Tasks 6.1 through 6.4, contours for 65, 70, and 75 dB DNL will be developed. Each alternative will be evaluated using the following evaluation factors:

- Community impacts including reduction in the number of residences and number of noise-sensitive non-residential uses within the 65 dB DNL contour and higher shown in 5 dB increments.
- Cost and ability to implement (flight/fuel consumption, construction, maintenance and staffing).
- Safety, capacity, and delay.
- Qualitative evaluation of Airspace/Air Traffic Control (ATC) capability through discussions with FAA's ATC personnel.
- Consistency with existing Airport Policies and other federal, state and local statutes.
- Summary presentation in matrix format of the operational benefits (reduction in non-compatible land uses, reduction in population affected etc.) and costs involved in the alternative procedures (fuel costs, capital expenditure requirements, etc.).
- Ability to monitor conformance with each alternative procedure.

Based on the results of the analysis and consultation with the BCAD, the recommended alternatives will be combined and up to two AEDT runs will be developed for the future 2022 conditions. The noise abatement benefits of the combined recommended procedures will be identified.

**ESQA Team Primary Participants:** ESA, VHB

**Deliverable(s):** Summary text and graphics for inclusion in a Working Paper.

**Assumptions/BCAD Responsibilities:**

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- Assumes level of effort is consistent with hours budgeted.
- BCAD to provide input on alternatives screening criteria.

**Task 6.6: Describe Implementation Issues for Noise Abatement Alternatives**

**Description:** An overview of the actions which will be needed to implement the recommended operational noise abatement program will be prepared. These may include:

- Aircraft operational management policies,
- Tower letters of agreement,
- Notices to Airmen,
- Implementation schedule,
- Funding requirements,
- Other documents needed for implementation.

In addition, the responsible entity for implementing each operational procedure will be identified and a schedule for implementation will be provided.

The detailed written agreements/noticees, etc., would be prepared during the implementation of recommendations following FAA approval and are not included in this scope.

**ESA Team Primary Participants:** ESA, VHB (Secondary: KHA)

**Deliverable(s):** Summary text and graphics for inclusion in a Working Paper.

**Assumptions/BCAD Responsibilities:**
- Assumes level of effort is consistent with hours budgeted.


A draft working paper will be prepared in report format detailing the analysis and findings outlined in Tasks 6.1 through 6.6 as appropriate to allow incorporation into the NCP report with limited restructuring or editing. The draft working paper will be circulated in both PDF and MS Word format to allow review and digital markup. Upon receipt of comments, a revised working paper will be prepared. Further comments will be addressed during the development of the pre-draft NEM report. In the event that one or more pieces of information are not available in a timely manner, the working paper will be prepared for review and the remaining information will be incorporated at the pre-draft stage.

**ESA Team Primary Participants:** ESA, VHB

**Deliverable(s):** One draft and one final working paper in electronic format (MS Word and PDF).

**Assumptions/BCAD Responsibilities:**
- BCAD and FAA to provide consolidated review comments in track changes format.
Task 7: Identify and Evaluate Compatible Land Use Alternatives

Task 7.1: Examine Corrective Strategies to Resolve Existing Land Use Incompatibilities

Description: Corrective strategies are those that can be implemented to mitigate the impact of aircraft noise on existing incompatible uses (such as schools, residences, places of worship). The existing land uses to be addressed represent those land uses considered to be incompatible with noise levels based on FAA guidelines. These guidelines state that residential land uses and other noise sensitive land uses may not be compatible within noise levels of 65 DNL and higher. Types of corrective land use changes include: property acquisition, redevelopment strategies and sound insulation of incompatible noise sensitive structures. The focus of this task will be any additional opportunities for sound insulation or purchase that are not included in BCAD’s current noise mitigation program. Specific areas to be considered for mitigation measures will be identified graphically. This effort will be limited to areas within the 2022 65 DNL contour and its immediate proximity.

ESA Team Primary Participants: KHA, AID, LLW (Secondary: ESA)

Deliverable(s): Summary text and graphics for inclusion in a Working Paper.

Assumptions/BCAD Responsibilities:
- Assumes level of effort is consistent with hours budgeted.
- Any efforts addressing areas beyond the 65 DNL contour will be handled as additional services.

Task 7.2: Examine Preventive Strategies to Discourage Future Land Use Incompatibilities

Description: Preventative strategies are those that discourage future land use incompatibilities. These actions are associated with changes in policy or in the implementation of plans and affiliated ordinances to preclude the establishment of new incompatible land uses in areas experiencing noise in excess of the 65 DNL level. ESA will review any preventive strategy recommendations from the previous Part 150 Study and document the status of those recommendations regarding implementation. ESA will also examine the applicability of future preventative strategies to discourage future land use incompatibilities to meet the requirements of Part 150. This effort will be limited to areas within the 2022 65 DNL contour and its immediate proximity.

Alternatives explored and related meetings under this task will be subject to the limitation of available budget.

ESA Team Primary Participants: KHA, AID, LLW (Secondary: ESA)

Deliverable(s): Summary text and graphics for inclusion in a Working Paper.

Assumptions/BCAD Responsibilities:
- Assumes level of effort is consistent with hours budgeted.
Any efforts addressing areas beyond the 65 DNL contour will be handled as additional services.

**Task 7.3: Convene Land Use Technical Working Group and Review Alternatives**

*Description*: A subset of the TAC will be assembled for the purposes of identifying and evaluating potential land use impact mitigation and preclusion alternatives. This technical working group will consist primarily of technical experts including land use planning professionals from Broward County, and municipalities within the Part 150 study area along with representatives from BCAD and the FAA. The goal of this group is to identify a wide range of potential alternatives regardless and then provide detailed technical input into factors influencing feasibility. The group will meet up to two (2) times with up to two (3) additional phone calls. This effort will be limited to areas within the 2022 65 DNL contour and its immediate proximity.

**Meetings/ESA Team Participants**: Up to 2 meetings/up to 5 members of ESA Team

**Up to 3 calls or web meetings/up to 5 members of ESA Team**

**ESA Team Primary Participants**: KHA, AID, LLW (Secondary: ESA)

**Deliverable(s)**: Working group meeting coordination and scheduling. Working group meeting agendas, meeting handouts, and summarized meeting notes.

**Assumptions/BCAD Responsibilities**:
- BCAD to provide appropriate staff participation for successful meetings.
- BCAD to assist in meeting coordination and scheduling and material review.
- Assumes meetings will take at BCAD offices.

**Task 7.4: Evaluate the Feasibility, Costs, and Benefits of Land Use Policies**

*Description*: This task will evaluate alternatives identified in task 7.1, 7.2, and 7.3. Evaluation criteria for land use related actions will be derived with input from the land use technical committee and are anticipated to include:

- Land use compatibility with noise exposure level,
- Compatibility with physical features of the environment,
- Compatibility with existing or future needs,
- Compatibility with community development goals such as housing, recreation, historic, or open space, and
- Compatibility with other Airport requirements.

More specific criteria for evaluating land use policies may include:

- Degree of noise reduction for sensitive land uses such as schools, residences, and hospitals,
- Cost of implementation and available funding,
- Effect on community tax base,
- Effect on neighborhood social and economic fabric,
- Effect on balance of land use in the area, and/or
- Relation of various land use strategies to the Part 150 program as a whole.

**ESA Team Primary Participants:** KHA, AID, LLW (Secondary: ESA)

**Deliverable(s):** Summary text for inclusion in a Working Paper.

**Assumptions/BCAD Responsibilities:**
- Assumes level of effort is consistent with hours budgeted.
- Any efforts addressing areas beyond the 65 DNL contour will be handled as additional services.
- BCAD to provide input on alternatives screening criteria.

**Task 7.5: Describe Implementation Issues for Each Land Use Strategy**

**Description:** An overview of the actions which will be needed to implement the recommended land use strategies will be prepared. These may include:

- Comprehensive Plan Amendments,
- Overlay zoning changes,
- Land use ordinance modifications,
- Property acquisition,
- Redevelopment techniques
- Sound insulation/avigation easement purchase program modifications.

Each action will be identified in terms of:

- The responsible agency,
- The nature of that responsibility, and
- The actions that must be taken to initiate implementation.

A schedule for implementing each action, including both beginning and ending years, will be defined in consultation with BCAD staff. Estimated costs for implementing each action will be calculated and potential sources of funds to defray these costs will be identified. This task will take into consideration that the BCAD has no land use authority, while meeting the Part 150 requirements.

This task does not include implementation of identified actions. These would be prepared under a separate scope of services subsequent to FAA review.

**ESA Team Primary Participants:** KHA, AID, LLW (Secondary: ESA)

**Deliverable(s):** Summary text for inclusion in a Working Paper.

**Assumptions/BCAD Responsibilities:**
- Assumes level of effort is consistent with hours budgeted.
• Any efforts addressing areas beyond the 65 DNL contour will be handled as additional services.


A draft working paper will be prepared in report format detailing the analysis and findings outlined in Tasks 7.1 through 7.4 as appropriate to allow incorporation into the NCP report with limited restructuring or editing. The draft working paper will be circulated in both pdf and MS Word format to allow review and digital markup. Upon receipt of comments, a revised working paper will be prepared. Further comments will be addressed during the development of the pre-draft NEM report. In the event that one or more pieces of information are not available in a timely manner, the working paper will be prepared for review and the remaining information will be incorporated at the pre-draft stage.

**ESA Team Primary Participants:** ESA, KHA, AID, LLW

**Deliverable(s):** One draft and one final working paper in electronic format (MS Word and PDF).

**Assumptions/BCAD Responsibilities:**
- Assumes documents produced in English only.
- Only digital versions of this document will be submitted.

**Task 8: Identify and Evaluate Administrative Measures**

**Task 8.1: Identify Administrative Measures & Responsibilities**

**Description:** This task focuses on reviewing various administrative measures including those related to implementing the noise program and maintaining a noise office, a noise roundtable, a noise comment line or website, a best practices user recognition program, and other administrative measures that assist in improving noise awareness or interactions with the community. This task will also identify the affiliated responsible parties for each of the measures that are defined.

**ESA Team Primary Participants:** ESA, KHA, VHB, GSI, AID

**Deliverable(s):** Summary text for inclusion in a Working Paper.

**Assumptions/BCAD Responsibilities:**
- Assumes level of effort is consistent with hours budgeted.

**Task 8.2: Identify the Feasibility, Costs, and Benefits of Administrative Measures**

**Description:** For each of the alternative administrative measures identified in Task 8.1, the benefits, costs, and feasibility will be identified.

**ESA Team Primary Participants:** ESA, KHA, VHB, GSI, AID
Task 8.3: Describe Implementation Considerations for Administrative Measures

Description: An overview of the actions which will be needed to implement the recommended administrative measures will be prepared.

- Implementation schedule,
- Responsible parties,
- Performance measures,
- Staffing/Funding requirements, and
- Other documents needed for implementation.

In addition, the responsible entity for implementing each will be identified.

ESA Team Primary Participants: ESA, KHA, VHB, GSI, AID


Assumptions/BCAD Responsibilities:
- Assumes level of effort is consistent with hours budgeted.

Task 8.4: Define Estimated Cost of Noise Compatibility Implementation/Administration

Description: A successful noise compatibility program requires dedication and effort on the part of the BCAD staff to ensure the program elements are successfully implemented. BCAD has the current responsibility for working with the FAA and operators at the Airport to establish and implement the NCP. As needed, the BCAD may assign staff to assist in this effort and should implement and manage the recommendations from this Study Update because of their familiarity with the development and implementation of the existing NCP. As a result, there are a series of ongoing costs related to the implementation and administration of the NCP. This task will estimate those costs.

ESA Team Primary Participants: ESA, KHA, VHB, GSI, AID


Assumptions/BCAD Responsibilities:
- Assumes level of effort is consistent with hours budgeted.

A draft working paper will be prepared in report format detailing the analysis and findings outlined in Tasks 8.1 through 8.4 as appropriate to allow incorporation into the NCP report with limited restructuring or editing. The draft working paper will be circulated in both PDF and MS Word format to allow review and digital markup. Upon receipt of comments, a revised working paper will be prepared. Further comments will be addressed during the development of the pre-draft NEM report. In the event that one or more pieces of information are not available in a timely manner, the working paper will be prepared for review and the remaining information will be incorporated at the pre-draft stage.

**ESAT Team Primary Participants**: ESA, KHA, VHB, GST, AID

**Deliverable(s)**: One draft and one final working paper in electronic format (MS Word and PDF).

**Assumptions/BCAD Responsibilities**:
- BCAD and FAA to provide consolidated review comments in track changes format.
- Assumes documents produced in English only.
- Only digital versions of this document will be submitted.

Task 9: Prepare and Submit NCP Documentation

Task 9.1: Prepare and Present Pre-Draft NCP Report

**Description**: Interim Working Papers 3 through 5 which were developed in Tasks 6 through 8 will become the basis for the chapters of the FLL NCP Report. The FLL Pre-Draft NCP Report will be prepared consistent with the requirements of Part 150. Five (5) printed copies of the Pre-Draft Part 150 NCP Report will be prepared for BCAD review. Based on the input received in response to the draft recommendations, the final Noise Compatibility Program recommendations will be made. These will be presented to senior BCAD management. This task is limited to the available budget. This task will include development of a consolidated action plan for implementation, enforcement, monitoring, and review of the FLL NCP. This will include the recommended procedures to implement each measure, responsible entities for implementing each measure, and schedules for implementing each measure.

**Meetings/ESA Team Participants**: 1 meeting/up to 5 members of ESA Team

**ESAT Team Primary Participants**: ESA, KHA, VHB

**Deliverable(s)**: Up to five (5) printed copies of the Pre-Draft report and presentation materials.

**Assumptions/BCAD Responsibilities**:
- BCAD to assist in meeting coordination and scheduling and material review.
- BCAD to provide meeting venue.
- BCAD and FAA to provide consolidated review comments in track changes format.
- Assumes document produced in English only.
Task 9.2: Prepare the Preliminary Draft NCP Report

Description: Following review and comment on the Pre-Draft by BCAD and FAA, up to five (5) copies of a revised Preliminary Draft FLL NCP Report will be prepared for review by BCAD and FAA.

ESA Team Primary Participants: ESA, KHA, VHB

Deliverable(s): One electronic copy, and up to five (5) printed copies of the Preliminary Draft FLL NCP Report along with the MS Word files.

Assumptions/BCAD Responsibilities:
- BCAD and FAA to provide consolidated review comments in track changes format.
- Assumes document produced in English only.

Task 9.3: Prepare the Draft NCP Report

Description: Upon completion of the review of the Pre-Draft, up to twenty (20) printed copies of the Draft Part 150 NCP Report will be prepared and made available for public review at least 30 days prior to the Public Hearing. Copies of the document will be placed in publicly accessible locations (such as libraries) and posted electronically on the project public website. The Draft will also be submitted to the FAA, TAC and other agencies as appropriate. A notice will be developed by ESA in Task 2.7 indicating the availability of the Draft NCP Report and the time and date of the Public Hearing. The public comment period will remain open for two (2) weeks after the date of the Public Hearing.

ESA Team Primary Participants: ESA (Secondary: KHA, VHB)

Deliverable(s): Public notice of availability in electronic format. Up to twenty (20) printed copies of the Draft report. One electronic PDF file of the Draft Part 150 NCP Report will be provided along with the MS Word files.

Assumptions/BCAD Responsibilities:
- BCAD and FAA to provide consolidated review comments in track changes format.
- Assumes document produced in English only.

Task 9.4: Review and Respond to Sponsor, Stakeholder and Agency Comments on Draft

Description: Comments received on the Draft NCP Report from BCAD, TAC, FAA and other agencies will be consolidated and incorporated into a final draft or responded to as appropriate. Changes resulting from public comments received in Task 2.2 during the public hearing will also be compiled into the revised master. Conflicting comments will be discussed with BCAD and the FAA as required to ensure resolution.

ESA Team Primary Participants: ESA (Secondary: KHA, VHB)

Deliverable(s): Compilation of comments provided by BCAD, TAC, FAA and other agencies throughout the NCP process and development of responses as appropriate.
Assumptions/BCAD Responsibilities:
- BCAD to assist in ensuring comments are provided in timely manner.

Task 9.5: Prepare Draft Final NCP Report for FAA Review

Description: After completion of the Public Hearing, corrections to text and graphics will be made and a Final Draft NCP Report will be prepared. The Final Draft will include the public hearing transcript, public comments and associated responses. Up to ten (10) copies of the Final Draft document will be submitted to BCAD and the FAA for preliminary review. Comments on the Final Draft will be incorporated into a Revised Final Draft and up to ten (10) copies of the Revised Final Draft document will be submitted to BCAD and the FAA for final review.

ESA Team Primary Participants: ESA (Secondary: KHA, VHB)

Deliverable(s): Up to ten (10) copies of the Final Draft NCP Report and up to an additional ten (10) copies of a Revised Final Draft NCP Report. One electronic PDF file each of the Final Draft NCP Report and Revised Final NCP Report will be provided along with the MS Word files.

Assumptions/BCAD Responsibilities:
- Assumes document produced in English only.
- BCAD and FAA to provide consolidated review comments in track changes format.

Task 9.6: Publication of the Final Report

Description: Upon receipt and incorporation of the FAA comments on the Revised Final NCP Report, up to ten (10) copies of the Final Report will be issued for BCAD use and for final review and determination by the FAA. Upon receipt of the Record of Approval (ROA) from the FAA, an additional twenty (20) copies will be printed incorporating the FAA’s ROA.

ESA Team Primary Participants: ESA

Deliverable(s): Up to ten (10) copies of the Final NCP Report incorporating FAA comments. One electronic PDF file of the Final Draft Part 150 NCP Report will be provided along with the MS Word files. Up to twenty (20) Copies of the Final NCP Report incorporating the FAA Record of Approval.

Assumptions/BCAD Responsibilities:
- Assumes document produced in English only.
- Assumes no additional comments from the FAA.
Task 10: Project Management/Coordination

Task 10.1: Project Management
Description: The Part 150 Study will be actively managed to ensure the project stays on track. These efforts may include, but are not limited to tracking project milestones and updating the project schedule, preparing quarterly status reports for the FAA, and preparing monthly invoices and progress reports.

ESATeam Primary Participants: ESA, KHA, VHB, GSI

Deliverable(s): Schedule, status reports and milestone tracking.

Assumptions/BCAD Responsibilities:
- BCAD will assist in timely completion of the project by providing responsive information and feedback throughout the course of the project.

Task 10.2: Project Team Meetings
Description: To ensure that the Part 150 Study progresses on schedule, the ESA Team will conduct internal team meetings and working group meetings. These meetings will be conducted on a recurring basis throughout the duration of the project. During the meetings, the team members will review current deliverables and deadlines and identify potential challenges.

Meetings/ESA Team Participants: Up to 3 meetings/up to 8 members of ESA Team
Up to 75 calls/up to 6 members of ESA Team

ESATeam Primary Participants: ESA, KHA, VHB, GSI, AID, LLW, Arora, PII

Deliverable(s):

Assumptions/BCAD Responsibilities:
- N/A

Task 10.3: Quality Assurance and Control Plan
Description: The Part 150 Study is a complex project with many moving parts. ESA’s Quality Assurance/Quality Control (QA/QC) process will be implemented for work products; making sure documents, data, and coordination between team members adhere to ESA’s rigorous standards. This includes review of project elements by staff not connected to the project to ensure that the work products are straightforward and easy to understand by the general public.

Deliverables: Editorial and technical review of each element of the Part 150 Study.

ESATeam Primary Participants: ESA, KHA, VHB, AID

Assumptions/BCAD Responsibilities:
• BCAD to comment as appropriate throughout the course of the Part 150 Study. Assist in resolving potential conflicts or issues identified during the QA/QC review process.

Task 10.4: FLL Part 150 Project Close Out

Description: To ensure that all of the project files (the NCP Report, PowerPoint Files, GIS Shape Files, AutoCAD files, AEDT Study Files, etc.) are transferred to the BCAD, ESA will schedule and lead a telephonic project close out meeting with key BCAD staff. ESA will prepare and circulate a project close out punch list and will incorporate the BCAD’s additions prior to the meeting. To the greatest extent possible, all of the project files will be transferred to the BCAD prior to the project close out meeting. During the meeting, the punch list will be reviewed and delivered items will be checked off. A schedule will be established for delivering any remaining project files to the BCAD prior to the BCAD’s final payment.

Meetings/ESA Team Participants: 1 call/up to 4 members of ESA Team

ESA Team Primary Participants: ESA, KHA, VHB, GSI, Arora, PTI

Deliverable(s): Pre-close out meeting coordination and scheduling. Close out punch list, meeting agenda, and summarized meeting notes with final delivery schedule. Delivery of all project file digital information.

Assumptions/BCAD Responsibilities:
• BCAD to participate in call and punch list process.
## Summary of Meetings

<table>
<thead>
<tr>
<th>Task</th>
<th>Task Description</th>
<th>Meetings (up to)</th>
<th>Calls (up to)</th>
<th>ESA Team Participants (up to)</th>
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<td>6</td>
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<td>10.4</td>
<td>FLL Part 150 Project Close Out</td>
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### Summary of Non-Meeting Related Deliverables

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<td>Noise History and Educational PowerPoints</td>
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# Identify and Evaluate Administrative Measures


## Prepare and Submit NCP Documentation

| 9.1 | Prepare and Present Pre-Draft NCP Report | 5 | Pre-Draft NCP Report |
| 9.2 | Prepare the Preliminary Draft NCP Report | 5 | Preliminary Draft NCP Report |
| 9.3 | Prepare the Draft NCP report | 20 | Draft NCP report |
| 9.5 | Prepare the Draft Final NCP Report for FAA Review | 10 | Draft Final and Revised Draft Final NCP Report |
| 9.6 | Publication of the Final Report | 10 | Final Report and Final Report including ROA |

## Project Management/Coordination

| 10.1 | Project Management | Schedule, status reports and milestone tracking |
| 10.4 | FLL Part 150 Project Closeout | 1 | Punch list and Digital file turnover |
### FEE ESTIMATE SUMMARY

**PART 150 NOISE AND LAND USE COMPATIBILITY STUDY**

**FORT LAUDERDALE INTERNATIONAL AIRPORT**

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<th>Task Description</th>
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*DBE = 17.36%*
### EXHIBIT B
### SALARY COSTS

Project No: R1330212P1

Project Title: FAR Part 150 Noise Compatibility Planning and Consulting Services

Consultant/Subconsultant Name: ESA/American Infrastructure Development, Inc.

---

**FILL IN POSITIONS AS APPLICABLE**

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<tr>
<th>TITLE</th>
<th>MAXIMUM HOURLY RATE ($/HR)</th>
<th>MULTIPLIER (X.XX)</th>
<th>MAXIMUM BILLING RATE ($/HR)</th>
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<td>Senior Aviation Planner</td>
<td>$50.00</td>
<td>(2.39)</td>
<td>$119.50</td>
</tr>
<tr>
<td>CAD Designer/Graphics</td>
<td>$25.00</td>
<td>(2.39)</td>
<td>$59.75</td>
</tr>
<tr>
<td>Administrative Assistant</td>
<td>$20.00</td>
<td>(2.39)</td>
<td>$47.80</td>
</tr>
</tbody>
</table>

Multiplier of 2.39 is calculated as follows:

OVERHEAD = HOURLY RATE X OVERHEAD (85.12)%

FRINGE = HOURLY RATE X FRINGE (32.37)%

OPERATING MARGIN = (HOURLY RATE + OVERHEAD + FRINGE) X OPERATING MARGIN (10)%

MULTIPLIER = (HOURLY RATE + OVERHEAD + FRINGE + OPERATING MARGIN) / HOURLY RATE

2.39
### EXHIBIT B
### SALARY COSTS

**Project No:** R1330212P1  
**Project Title:** FAR Part 150 Noise Compatibility Planning and Consulting Services  
**Consultant/Subconsultant Name:** ESA/Arora Engineers, Inc.

#### FILL IN POSITIONS AS APPLICABLE

<table>
<thead>
<tr>
<th>TITLE</th>
<th>MAXIMUM HOURLY RATE ($/HR)</th>
<th>MULTIPLIER</th>
<th>MAXIMUM BILLING RATE ($/HR)</th>
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<tbody>
<tr>
<td>Principal</td>
<td>$90.00</td>
<td>2.61</td>
<td>$234.90</td>
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<tr>
<td>QA/QC Manager</td>
<td>$85.00</td>
<td>2.61</td>
<td>$221.85</td>
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<tr>
<td>GIS Manager</td>
<td>$60.00</td>
<td>2.61</td>
<td>$156.60</td>
</tr>
<tr>
<td>Task Leader/Senior Planner</td>
<td>$52.50</td>
<td>2.61</td>
<td>$137.03</td>
</tr>
<tr>
<td>GIS/CAD/BIM Senior Specialist</td>
<td>$45.25</td>
<td>2.61</td>
<td>$118.10</td>
</tr>
<tr>
<td>GIS/CAD/BIM Junior Specialist</td>
<td>$36.00</td>
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<td>$93.96</td>
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<tr>
<td>GIS/CAD/BIM Senior Analyst</td>
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<td>$103.10</td>
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<tr>
<td>GIS/CAD/BIM Junior Analyst</td>
<td>$34.00</td>
<td>2.61</td>
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<tr>
<td>GIS/CAD/BIM Senior Technician</td>
<td>$30.50</td>
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<td>$79.61</td>
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<tr>
<td>GIS/CAD/BIM Junior Technician</td>
<td>$27.00</td>
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<td>$70.47</td>
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<tr>
<td>Administrative Assistant</td>
<td>$19.50</td>
<td>2.61</td>
<td>$50.90</td>
</tr>
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</table>

Multiplier of 2.61 is calculated as follows:

\[
\text{OVERHEAD} = \text{HOURLY RATE} \times \text{OVERHEAD (101.01)\%} \\
\text{FRINGE} = \text{HOURLY RATE} \times \text{FRINGE (36.58)\%} \\
\text{OPERATING MARGIN} = (\text{HOURLY RATE} + \text{OVERHEAD} + \text{FRINGE}) \times \text{OPERATING MARGIN (10.0)\%} \\
\text{MULTIPLIER} = \frac{\text{OVERHEAD} + \text{FRINGE} + \text{OPERATING MARGIN}}{\text{HOURLY RATE}}
\]

\[
\text{MULTIPLIER} = 2.61
\]
### EXHIBIT B
### SALARY COSTS

Project No: R1330212P1

**Project Title:** FAR Part 150 Noise Compatibility Planning and Consulting Services

**Consultant/Subconsultant Name:** Environmental Science Associates

### FILL IN POSITIONS AS APPLICABLE

<table>
<thead>
<tr>
<th>TITLE</th>
<th>MAXIMUM HOURLY RATE ($/HR)</th>
<th>MULTIPLIER</th>
<th>MAXIMUM BILLING RATE ($/HR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior Director</td>
<td>$98.44</td>
<td>(3.00)</td>
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<tr>
<td>Director</td>
<td>$78.75</td>
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<tr>
<td>Managing Associate</td>
<td>$68.25</td>
<td>(3.00)</td>
<td>$204.75</td>
</tr>
<tr>
<td>Senior Associate</td>
<td>$47.25</td>
<td>(3.00)</td>
<td>$141.75</td>
</tr>
<tr>
<td>Associate</td>
<td>$36.75</td>
<td>(3.00)</td>
<td>$110.25</td>
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<tr>
<td>Technician</td>
<td>$46.37</td>
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<tr>
<td></td>
<td>$0.00</td>
<td>(3.00)</td>
<td>$0.00</td>
</tr>
</tbody>
</table>

Multiplier of 3.00 is calculated as follows:

\[
\text{OVERHEAD} = \text{HOURLY RATE} \times \text{OVERHEAD (125.00)\%}
\]

\[
\text{FRINGE} = \text{HOURLY RATE} \times \text{FRINGE (50.00)\%}
\]

\[
\text{OPERATING MARGIN} = (\text{HOURLY RATE} + \text{OVERHEAD} + \text{FRINGE}) \times \text{OPERATING MARGIN (9.00)\%}
\]

\[
\text{MULTIPLIER} = \frac{(\text{HOURLY RATE} + \text{OVERHEAD} + \text{FRINGE} + \text{OPERATING MARGIN})}{\text{HOURLY RATE}} = 3.00
\]
EXHIBIT B
SALARY COSTS

Project No: R1330212P1
Project Title: FAR Part 150 Noise Compatibility Planning and Consulting Services
Consultant/Subconsultant Name: ESA/Garth Solutions, Inc.

FILL IN POSITIONS AS APPLICABLE

<table>
<thead>
<tr>
<th>TITLE</th>
<th>MAXIMUM HOURLY RATE ($/HR)</th>
<th>MULTIPLIER</th>
<th>MAXIMUM BILLING RATE ($/HR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal</td>
<td>$75.00</td>
<td>(3.00)</td>
<td>$225.00</td>
</tr>
<tr>
<td>Public Outreach Manager</td>
<td>$60.00</td>
<td>(3.00)</td>
<td>$180.00</td>
</tr>
<tr>
<td>Outreach Coordinator</td>
<td>$40.00</td>
<td>(3.00)</td>
<td>$120.00</td>
</tr>
<tr>
<td>Graphic Designer</td>
<td>$40.00</td>
<td>(3.00)</td>
<td>$120.00</td>
</tr>
<tr>
<td>Administrative Assistant</td>
<td>$25.00</td>
<td>(3.00)</td>
<td>$75.00</td>
</tr>
</tbody>
</table>

Multiplier of 3.0 is calculated as follows:
OVERHEAD = HOURLY RATE X OVERHEAD (131.05)%
FRINGE = HOURLY RATE X FRINGE (43.95)%
PROFIT = (HOURLY RATE + OVERHEAD + FRINGE) X PROFIT (9.00)%

MULTIPLIER = (HOURLY RATE + OVERHEAD + FRINGE + OPERATING MARGIN) / HOURLY RATE** 3.00
### EXHIBIT B

**SALARY COSTS**

Project No: RFP# R1330212P1  
Project Title: FAR Part 150 Noise Compatibility Planning Consulting Services  
Consultant/Subconsultant Name: ESA/Kimley-Horn and Associates, Inc.

### FILL IN POSITIONS AS APPLICABLE

<table>
<thead>
<tr>
<th>TITLE</th>
<th>MAXIMUM HOURLY RATE ($/HR)</th>
<th>X</th>
<th>MULTIPLIER</th>
<th>MAXIMUM BILLING RATE ($/HR)</th>
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<tbody>
<tr>
<td>Principal</td>
<td>$102.40</td>
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<td>Project Manager</td>
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<td>3.00</td>
<td>$274.08</td>
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<tr>
<td>Chief Professional</td>
<td>$84.14</td>
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<td>3.00</td>
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<tr>
<td>Senior Project Professional</td>
<td>$80.30</td>
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<td>$240.90</td>
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<tr>
<td>Professional</td>
<td>$64.44</td>
<td>3.00</td>
<td>3.00</td>
<td>$193.32</td>
</tr>
<tr>
<td>Planner</td>
<td>$69.72</td>
<td>3.00</td>
<td>3.00</td>
<td>$209.16</td>
</tr>
<tr>
<td>GIS Specialist</td>
<td>$45.20</td>
<td>3.00</td>
<td>3.00</td>
<td>$135.60</td>
</tr>
<tr>
<td>Junior Professional</td>
<td>$39.44</td>
<td>3.00</td>
<td>3.00</td>
<td>$118.32</td>
</tr>
<tr>
<td>Administrative Assistant</td>
<td>$30.30</td>
<td>3.00</td>
<td>3.00</td>
<td>$90.90</td>
</tr>
</tbody>
</table>

Multiplier of 3.00 is calculated as follows:

\[
\text{OVERHEAD} = \text{HOURLY RATE} \times \text{OVERHEAD (136.60\%)} \\
\text{FRINGE} = \text{HOURLY RATE} \times \text{FRINGE (38.63\%)} \\
\text{OPERATING MARGIN} = (\text{HOURLY RATE} + \text{OVERHEAD} + \text{FRINGE}) \times \text{OPERATING MARGIN (9.00\%)} \\
\text{MULTIPLIER} = \frac{(\text{HOURLY RATE} + \text{OVERHEAD} + \text{FRINGE} + \text{OPERATING MARGIN})}{\text{HOURLY RATE}}
\]

Multiplier = 3.00
EXHIBIT B
SALARY COSTS

Project No: R1330212P1

Project Title: FAR Part 150 Noise Compatibility Planning and Consulting Services

Consultant/Subconsultant Name: ESA/Lewis, Longman & Walker, P.A.

FILL IN POSITIONS AS APPLICABLE

<table>
<thead>
<tr>
<th>TITLE</th>
<th>MAXIMUM HOURLY RATE ($/HR)</th>
<th>MULTIPLIER (X.XX)</th>
<th>MAXIMUM BILLING RATE ($/HR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shareholder</td>
<td>$148.00</td>
<td>(2.31)</td>
<td>$341.88</td>
</tr>
<tr>
<td>Associate</td>
<td>$63.16</td>
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<tr>
<td>Paralegal</td>
<td>$45.77</td>
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<td>$105.73</td>
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</table>

Multiplier of 2.31 is calculated as follows:

OVERHEAD = HOURLY RATE X OVERHEAD (110.00)%
FRINGE = HOURLY RATE X FRINGE (X.XX) %
OPERATING MARGIN = (HOURLY RATE + OVERHEAD + FRINGE) X OPERATING MARGIN (10.00)%

MULTIPLIER = (HOURLY RATE + OVERHEAD + FRINGE + OPERATING MARGIN) / HOURLY RATE

2.31
**EXHIBIT B**  
**SALARY COSTS**

Project No: R1330212P1  
Project Title: FAR Part 150 Noise Compatibility Planning and Consulting Services  
Consultant/Subconsultant Name: ESA/Planning Technology, Inc.

<table>
<thead>
<tr>
<th>TITLE</th>
<th>MAXIMUM HOURLY RATE ($/HR)</th>
<th>MULTIPLIER</th>
<th>MAXIMUM BILLING RATE ($/HR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal</td>
<td>$60.68</td>
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<tr>
<td>Project Manager</td>
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<tr>
<td>Sr Specialist/Programmer</td>
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<tr>
<td>Specialist/Programmer</td>
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<td>Graphics/Comp Designer</td>
<td>$27.41</td>
<td>(2.31)</td>
<td>$63.32</td>
</tr>
<tr>
<td>Draftsman</td>
<td>$13.90</td>
<td>(2.31)</td>
<td>$32.11</td>
</tr>
</tbody>
</table>

Multiplier of 2.31 is calculated as follows:
OVERHEAD = HOURLY RATE X OVERHEAD (110.0)%
FRINGE = HOURLY RATE X FRINGE (0.0)%
OPERATING MARGIN = (HOURLY RATE + OVERHEAD + FRINGE) X OPERATING MARGIN (10.0)%

MULTIPLIER = (HOURLY RATE + OVERHEAD + FRINGE + OPERATING MARGIN) / HOURLY RATE  
2.31

RFP# R1330212P1  
FAR Part 150 Noise Compatibility Planning Consulting Services
### EXHIBIT B
### SALARY COSTS

**Project No:** R1330212P1

**Project Title:** FAR Part 150 Noise Compatibility Planning and Consulting

**Services Consultant/Subconsultant Name:** ESA/Vanasse Hangen Brustlin, Inc.

**FILL IN POSITIONS AS APPLICABLE**

<table>
<thead>
<tr>
<th>TITLE</th>
<th>MAXIMUM HOURLY</th>
<th>MULTIPLIER</th>
<th>MAXIMUM BILLING RATE ($/HR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal 3</td>
<td>$100.00</td>
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<tr>
<td>Principal 2</td>
<td>$81.75</td>
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<td>$235.44</td>
</tr>
<tr>
<td>Principal 1</td>
<td>$77.55</td>
<td>2.88</td>
<td>$223.34</td>
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<tr>
<td>Chief Scientist</td>
<td>$73.33</td>
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<td>$211.19</td>
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<tr>
<td>Director – Environmental</td>
<td>$67.69</td>
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<td>$194.95</td>
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<tr>
<td>Director – Transportation</td>
<td>$64.82</td>
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<tr>
<td>Senior Planner – Airports</td>
<td>$62.16</td>
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<td>$179.02</td>
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<tr>
<td>Project Manager</td>
<td>$52.89</td>
<td>2.88</td>
<td>$152.32</td>
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<tr>
<td>Senior Archaeologist</td>
<td>$49.10</td>
<td>2.88</td>
<td>$141.41</td>
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<tr>
<td>Senior Planner – Transportation</td>
<td>$46.53</td>
<td>2.88</td>
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<tr>
<td>Director – Sustainability</td>
<td>$43.18</td>
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<td>$124.36</td>
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<tr>
<td>GIS Specialist</td>
<td>$40.27</td>
<td>2.88</td>
<td>$115.98</td>
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<tr>
<td>Planner/Scientist</td>
<td>$33.89</td>
<td>2.88</td>
<td>$97.60</td>
</tr>
<tr>
<td>Junior Planner/Scientist</td>
<td>$25.25</td>
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<td>$72.72</td>
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</table>

Multiplier of 2.88 is calculated as follows:

\[
\text{OVERHEAD} = \text{HOURLY RATE} \times \text{OVERHEAD (94.43)}\%
\]
\[
\text{FRINGE} = \text{HOURLY RATE} \times \text{FRINGE (67.27)}\%
\]
\[
\text{OPERATING MARGIN} = (\text{HOURLY RATE} + \text{OVERHEAD} + \text{FRINGE}) \times \text{OPERATING MARGIN (10.00)}\%
\]

\[
\text{MULTIPLIER} = \frac{\text{HOURLY RATE} + \text{OVERHEAD} + \text{FRINGE} + \text{OPERATING MARGIN}}{\text{HOURLY RATE}}\]

\[
\text{MULTIPLIER} = 2.88
\]
### AMENDED EXHIBIT B

### SALARY COSTS

**Project No:**

**Project Title:**

**Consultant/Subconsultant Name:**

<table>
<thead>
<tr>
<th>TITLE</th>
<th>ORIGINAL MAXIMUM HOURLY RATE ($/HR)</th>
<th>AMENDED MAXIMUM RAW SALARY (X% Increase) ($/HR)</th>
<th>MULTIPLIER (X.XX)</th>
<th>AMENDED MAXIMUM BILLING RATE ($/HR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal</td>
<td>$0.00</td>
<td>$0.00</td>
<td>(X.XX)</td>
<td>$0.00</td>
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<tr>
<td>Project Manager</td>
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<td>(X.XX)</td>
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<tr>
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<td>$0.00</td>
<td>(X.XX)</td>
<td>$0.00</td>
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<tr>
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<td>(X.XX)</td>
<td>$0.00</td>
</tr>
<tr>
<td>Junior Technician</td>
<td>$0.00</td>
<td>$0.00</td>
<td>(X.XX)</td>
<td>$0.00</td>
</tr>
<tr>
<td>Drafter</td>
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<tr>
<td>Secretary</td>
<td>$0.00</td>
<td>$0.00</td>
<td>(X.XX)</td>
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</tr>
<tr>
<td>Clerk</td>
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<td>(X.XX)</td>
<td>$0.00</td>
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<tr>
<td>Senior Engineer</td>
<td>$0.00</td>
<td>$0.00</td>
<td>(X.XX)</td>
<td>$0.00</td>
</tr>
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</table>

Multiplier of X.XX is calculated as follows:

- **OVERHEAD** = HOURLY RATE \times OVERHEAD (X.XX)%
- **FRINGE** = HOURLY RATE \times FRINGE (X.XX) %
- **OPERATING MARGIN** = (HOURLY RATE + OVERHEAD + FRINGE) \times OPERATING MARGIN (X.XX)%

\[
MULTIPLIER = \frac{\text{HOURLY RATE} + \text{OVERHEAD} + \text{FRINGE} + \text{OPERATING MARGIN}}{\text{HOURLY RATE}}
\]

**Consultant**

__________________________  **County**

__________________________  Contract Administrator

Date:________________________  Date:________________________

---

RFP# R1330212P1
FAR Part 150 Noise Compatibility Planning Consulting Services

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## EXHIBIT B-1
### KEY STAFF
American Infrastructure Development, Inc.

<table>
<thead>
<tr>
<th>POSITION</th>
<th>NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Senior Aviation Planner</td>
<td>Lisa Mastroianni</td>
</tr>
<tr>
<td>2 CAD Designer/Graphics</td>
<td>Renee Culmer</td>
</tr>
<tr>
<td>3 Administrative Assistant</td>
<td>Mandi Raines</td>
</tr>
</tbody>
</table>

*Key staff job descriptions are attached.*
### EXHIBIT B-1
#### KEY STAFF
Arora Engineers, Inc

<table>
<thead>
<tr>
<th>POSITION</th>
<th>NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GIS Manager</td>
</tr>
<tr>
<td>2</td>
<td>Senior Planner</td>
</tr>
<tr>
<td>3</td>
<td>Senior Planner</td>
</tr>
</tbody>
</table>

*Key staff job descriptions are attached.*
### EXHIBIT B-1
**KEY STAFF**
Environmental Science Associates

<table>
<thead>
<tr>
<th>POSITION</th>
<th>NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Senior Dir.</td>
<td>Michael Arnold</td>
</tr>
<tr>
<td>2 Managing Asst.</td>
<td>Autumn Ward</td>
</tr>
<tr>
<td>3 Senior Asst.</td>
<td>Sean Burlingame</td>
</tr>
</tbody>
</table>

*Key staff job descriptions are attached.*
EXHIBIT B-1
KEY STAFF
Garth Solutions, Inc

<table>
<thead>
<tr>
<th>POSITION</th>
<th>NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Principal</td>
<td>Yvonne Garth</td>
</tr>
<tr>
<td>2 Public Outreach Manager</td>
<td>LaCheryl Fitzpatrick</td>
</tr>
<tr>
<td>3 Public Outreach Coordinator</td>
<td>Kimberly Jones</td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
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<tr>
<td>6</td>
<td></td>
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<tr>
<td>7</td>
<td></td>
</tr>
<tr>
<td>8</td>
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</tr>
</tbody>
</table>

*Key staff job descriptions are attached.*
EXHIBIT B-1
KEY STAFF
Kimley Horn and Associates

<table>
<thead>
<tr>
<th>POSITION</th>
<th>NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Project Manager</td>
<td>Dave Rickerson</td>
</tr>
<tr>
<td>2 Senior Project Professional</td>
<td>Jill Capelli</td>
</tr>
<tr>
<td>3 Professional</td>
<td>Kevin Clarke</td>
</tr>
</tbody>
</table>

*Key staff job descriptions are attached.*
**EXHIBIT B-1**

**KEY STAFF**

*Lewis, Longman & Walker, P.A.*

<table>
<thead>
<tr>
<th>POSITION</th>
<th>NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Shareholder</td>
</tr>
<tr>
<td>2</td>
<td>Associate</td>
</tr>
<tr>
<td>3</td>
<td>Paralegal</td>
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<td>4</td>
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<td>6</td>
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<td>7</td>
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<tr>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>

*Key staff job descriptions are attached.*
### EXHIBIT B-1
**KEY STAFF**
Planning Technology, Inc.

<table>
<thead>
<tr>
<th>POSITION</th>
<th>NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sr. Specialist</td>
</tr>
<tr>
<td>2</td>
<td>Sr. Specialist</td>
</tr>
<tr>
<td>3</td>
<td>Specialist</td>
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<td>8</td>
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</tr>
</tbody>
</table>

*Key staff job descriptions are attached.*
### EXHIBIT B-1
**KEY STAFF**
Vanasse Hangen Brustlin, Inc

<table>
<thead>
<tr>
<th>POSITION</th>
<th>NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Task Manager</td>
<td>Benjamin Siwinski</td>
</tr>
<tr>
<td>2 Planning Support</td>
<td>Sierra Gaenicke</td>
</tr>
<tr>
<td>3 Planning Support</td>
<td>Jennifer Hogan</td>
</tr>
</tbody>
</table>

*Key staff job descriptions are attached.*
EXHIBIT C
SCHEDULE OF SUBCONSULTANTS

Project No: R1330212P1
Project Title: FAR Part 150 Noise Compatibility Planning and Consulting Services
Facility Name: Fort Lauderdale International Airport

<table>
<thead>
<tr>
<th>No.</th>
<th>Firm Name</th>
<th>Discipline</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.</td>
<td>Garth Solutions, Inc.</td>
<td>Public Outreach and Strategic Communications</td>
</tr>
<tr>
<td>5.</td>
<td>Lewis, Longman and Walker, LLC.</td>
<td>Land Use Planning, Legal Support</td>
</tr>
</tbody>
</table>
EXHIBIT C-1

LETTERS OF INTENT

Broward County Board of County Commissioners

OFFICE OF ECONOMIC AND SMALL BUSINESS DEVELOPMENT

LETTER OF INTENT BETWEEN BIDDER/OFFEROR AND DISADVANTAGED BUSINESS ENTERPRISE (DBE) / AIRPORT CONCESSIONS DISADVANTAGED BUSINESS ENTERPRISE (ACDBE) SUBCONTRACTOR/SUPPLIER

(Form to be completed and signed for each DBE/ACDBE firm)

Solicitation Number: R1330212P1
Project Title: FAR Part 150 Noise Compatibility Planning and Consulting Services

Bidder/Offeror Name: ESA
Address: 5401 South Kirkman Road, Suite 405, Orlando, FL Zip 32819
Authorized Representative: Mike Arnold, Phone: 407-312-1294

DBE/ACDBE Subcontractor/Supplier Name: American Infrastructure Development, Inc.
Address: 3910 Northdale Blvd, Suite 170, Orlando, FL Zip 32824, Phone: 813-374-2200
Authorized Representative: Sabina Mohammadi

A. This is a letter of intent between the bidder/offeror on this project and a DBE/ACDBE firm for the DBE/ACDBE to perform subcontracting work on this project, consistent with Title 49 CFR Parts 26 or 23 as applicable.
B. By signing below, the bidder/offeror is committing to utilize the above-named DBE/ACDBE to perform the work described below.
C. By signing below, the above-named DBE/ACDBE is committing to perform the work described below.
D. By signing below, the bidder/offeror and DBE/ACDBE affirm that if the DBE/ACDBE subcontracts any of the work described below, it may only subcontract that work to another OBE/DBE if it wishes to receive OBE/ACDBE credit for said work.

<table>
<thead>
<tr>
<th>Description</th>
<th>NAICS</th>
<th>DBE/ACDBE Contract Amount</th>
<th>DBE/ACDBE Percentage of Total Project Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land Use Planning, Strategic Planning, Outreach</td>
<td>541611</td>
<td>4%</td>
<td>4%</td>
</tr>
</tbody>
</table>

AFFIRMATION: I hereby affirm that the information above is true and correct.

Bidder/Offeror Authorized Representative [Signature] (Title) 7-24-15

DBE/ACDBE Authorized Representative [Signature] (Title) 7-10-15

Visit http://www.census.gov/eos/www/naics/ to search. Match type of work with NAICS code as closely as possible.

To be provided only when the solicitation requires that bidder/offeror include a dollar amount in its bid offer.

In the event the bidder/offeror does not receive award of the prime contract, any and all representations in the Letter of Intent and Affirmation shall be null and void.

DBE/ACDBE Letter of Intent - Rev January 2013
**LETTER OF INTENT BETWEEN BIDDER/OFFER AND DISADVANTAGED BUSINESS ENTERPRISE (DBE) SUBCONTRACTOR/SUPPLIER**

<table>
<thead>
<tr>
<th>Solicitation Number:</th>
<th>R1330212P1</th>
<th>Project Title:</th>
<th>FAR Part 150 Noise Compatibility Planning and Consulting Services</th>
</tr>
</thead>
</table>

**Bidder/Offeror Name:** ESA  
**Address:** 5401 South Kirkman Road, Suite 405  
**City:** Orlando  
**State:** FL  
**Zip:** 32819  
**Authorized Representative:** Mike Arnold  
**Phone:** 407-312-1294

**DBE/ACDBE Subcontractor/Supplier Name:** Arora Engineers  
**Address:** 110 East Broward Blvd, Suite 1700  
**City:** Fort Lauderdale  
**State:** FL  
**Zip:** 33301  
**Phone:** 954-315-3824

**DBE**  
**Authorized Representative:** Minik Arora

A. This is a Letter of Intent between the bidder/offeree on this project and a DBE/ACDBE firm for the DBE/ACDBE to perform subcontracting work on this project, consistent with Title 49 CFR Parts 26 or 23 as applicable.

B. By signing below, the bidder/offeree is committing to utilize the above-named DBE/ACDBE to perform the work described below.

C. By signing below, the above-named DBE/ACDBE is committing to perform the work described below.

D. By signing below, the bidder/offeree and DBE/ACDBE affirm that if the DBE/ACDBE subcontract any of the work described below, it may only subcontract that work to another DBE/ACDBE if it wishes to receive DBE/ACDBE credit for said work.

**Work to be performed by DBE/ACDBE Firm**

<table>
<thead>
<tr>
<th>Description</th>
<th>NAICS**</th>
<th>DBE/ACDBE Contract Amount†</th>
<th>Percentage of Total Project Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>GIS Mapping</td>
<td>541370</td>
<td></td>
<td>9%</td>
</tr>
</tbody>
</table>

**AFFIRMATION:** I hereby affirm that the information above is true and correct.

**Bidder/Offeror Authorized Representative**  
**Signature**  
**Title/Position**  
**Date**

**DBE/ACDBE Subcontractor/Supplier Authorized Representative**  
**Signature**  
**Title/Position**  
**Date**

---

*Visit [http://www.census.gov/eos/www/naics](http://www.census.gov/eos/www/naics) to search. Match type of work with NAICS code as closely as possible.
†To be provided only when the solicitation requires that bidder/offeree include a dollar amount in its bid-offer.

In the event the bidder/offeree does not receive award of the prime contract, any and all representations in this Letter of Intent and Affirmation shall be null and void.

---

**EXHIBIT C-1**

**LETTERS OF INTENT**
LETTER OF INTENT BETWEEN BIDDER/OFFER OR AND DISADVANTAGED BUSINESS ENTERPRISE (DBE) / AIRPORT CONCESSIONS DISADVANTAGED BUSINESS ENTERPRISE (ACDBE) SUBCONTRACTOR/SUPPLIER

(From to be completed and signed for each DBE/ACDBE firm)

Solicitation Number: R1330212P1

Bidder/Offer Name: ESA
Address: 5401 South Kirkman Road, Suite 405
City: Orlando
State: FL Zip: 32819
Authorized Representative: Mike Arnold
Phone: 407-312-1294

DBE/ACDBE Subcontractor/Supplier Name: Garth Solutions, Inc.
Address: 7691 Riviera Blvd, Suite 411
City: Miramar
State: FL Zip: 33023
Phone: 954-727-3001

ACDBE Authorized Representative: Yvonne Geath

A. This is a letter of intent between the bidder/offeror on this project and a DBE/ACDBE firm for the DBE/ACDBE to perform subcontracting work on this project, consistent with Title 49 CFR Parts 26 or 23 as applicable.
B. By signing below, the bidder/offeror is committing to utilize the above-named DBE/ACDBE to perform the work described below.
C. By signing below, the above-named DBE/ACDBE is committing to perform the work described below.
D. By signing below, the bidder/offeror and DBE/ACDBE affirm that if the DBE/ACDBE subcontracts any of the work described below, it may only subcontract that work to another DBE/ACDBE if it wishes to receive DBE/ACDBE credit for said work.

Work to be performed by DBE/ACDBE Firm

<table>
<thead>
<tr>
<th>Description</th>
<th>NAICS Code</th>
<th>DBE/ACDBE Contract Amount</th>
<th>DBE/ACDBE Percentage of Total Project Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic Outreach and Public Communication</td>
<td>541820</td>
<td></td>
<td>9%</td>
</tr>
</tbody>
</table>

AFFIRMATION: I hereby affirm that the information above is true and correct.

Bidder/Offer or Authorized Representative
Signature

DBE/ACDBE Subcontractor/Supplier Authorized Representative
Signature

DATE

Visit http://www.navios.com/offer/noahp melee to search and match type of work with NAICS code as closely as possible.

To be provided only when the solicitation requires that bidder/offeror include a dollar amount in its bid-offer.
EXHIBIT C-2
CERTIFICATION OF PAYMENTS TO SUBCONSULTANTS AND SUPPLIERS

Contract No. _____________________  |
Project Title ______________________________ |

The undersigned Consultant hereby swears under penalty of perjury that:

1. Consultant has paid all subconsultants and suppliers all undisputed contract obligations for labor, services, or materials provided on this project through __________, 20__.  
2. The following subconsultants and suppliers have not been paid because of disputed contractual obligations; a copy of the notification sent to each, explaining the good cause why payment has not been made, is attached to this form:

<table>
<thead>
<tr>
<th>Subconsultant/Supplier name and address</th>
<th>Date of disputed invoice</th>
<th>Amount in dispute</th>
</tr>
</thead>
<tbody>
<tr>
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</table>

Dated __________, 20__

Consultant

By _______________________  By _______________________
(Signature)  (Name and Title)

STATE OF ____________________________
COUNTY OF ____________________________

Acknowledged before me this ______ day of ____________, 20__, by ____________________________ who is personally known to me or who has produced ____________________________ as identification and who did/did not take an oath.

WITNESS my hand and official seal, this ______ day of ____________, 20__.

(NOTARY SEAL) ________________________
(Signature of person taking acknowledgment)

(Print Name of officer taking acknowledgment)

(Title or rank)

(Serial number, if any)

My commission expires:

RFP# R1330212P1
FAR Part 150 Noise Compatibility Planning Consulting Services
OFFICE OF ECONOMIC AND SMALL BUSINESS DEVELOPMENT
MONTHLY DBE UTILIZATION REPORT

<table>
<thead>
<tr>
<th>CONTRACT#:</th>
<th>CONTRACT AMT.:</th>
<th>DATE FORM SUBMITTED:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROJECT:</td>
<td>PRIME CONTRACTOR:</td>
<td>PROJECT COMPLETION DATE:</td>
</tr>
<tr>
<td>TITLE:</td>
<td>CONTACT PERSON:</td>
<td>PERIOD ENDING:</td>
</tr>
<tr>
<td>Amt. Paid</td>
<td>TELEPHONE #:</td>
<td>FAX #:</td>
</tr>
<tr>
<td>To Prime:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SUBCONTRACTING INFORMATION
TO BE SUBMITTED MONTHLY TO BROWARD COUNTY OFFICE OF ECONOMIC AND SMALL BUSINESS DEVELOPMENT

<table>
<thead>
<tr>
<th>DBE Subcontractor Address</th>
<th>Description of Work</th>
<th>Original Agreed Price</th>
<th>Revised Agreed Price</th>
<th>% of Work Completed To Date</th>
<th>Amt. Paid This Period</th>
<th>Amt. Paid To Date</th>
<th>Gender</th>
<th>Ethnic Category</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
</tbody>
</table>

Total Amt. Paid to DBE Firms

<table>
<thead>
<tr>
<th>NON-DBE Subcontractor Address</th>
<th>Description of Work</th>
<th>Original Agreed Price</th>
<th>Revised Agreed Price</th>
<th>% of Work Completed To Date</th>
<th>Amt. Paid This Period</th>
<th>Amt. Paid To Date</th>
<th>Gender</th>
<th>Ethnic Category</th>
</tr>
</thead>
<tbody>
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</tr>
</tbody>
</table>

Total Amt. paid to Non-DBE Firms


I attest that the information submitted in this report is in fact true and correct to the best of my knowledge.

Signature: Date:

Note: The information provided herein is subject to verification by the Office of Economic and Small Business Development.
### Office of Economic and Small Business Development
#### Final DBE Utilization Report

(To be submitted with the final invoice)

**Contract #:**

**Contract Amount:**

**Date Form Submitted:**

**Project Title:**

**Prime Contractor:**

**Project Completion Date:**

**Date Period Ending:**

**Amount Paid To Prime:**

**Contact Person:**

**Telephone #:**

**Fax #:**

---

### SUBCONTRACTING INFORMATION

All Payments made to DBE Firms must be reported on this form.

<table>
<thead>
<tr>
<th>DBE Subcontractor</th>
<th>Address</th>
<th>Description of Work</th>
<th>Original Agreed Price</th>
<th>Revised Agreed Price</th>
<th>% of Work Completed To Date</th>
<th>Amt. Paid This Period</th>
<th>Amt. Paid To Date</th>
<th>Gender M</th>
<th>Gender F</th>
<th>Gender B</th>
<th>Ethnic Category</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

**Total Amt. Paid to DBE Firms**

<table>
<thead>
<tr>
<th>NON-DBE Subcontractor</th>
<th>Address</th>
<th>Description of Work</th>
<th>Original Agreed Price</th>
<th>Revised Agreed Price</th>
<th>% of Work Completed To Date</th>
<th>Amt. Paid This Period</th>
<th>Amt. Paid To Date</th>
<th>Gender M</th>
<th>Gender F</th>
<th>Gender B</th>
<th>Ethnic Category</th>
</tr>
</thead>
<tbody>
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</tr>
</tbody>
</table>

**Total Amt paid to Non-DBE Firms**


I attest that the information submitted in this report is true and correct to the best of my knowledge.

**Signature:**

**Title:**

**Date:**

Note: The information provided herein is subject to verification by the Office of Economic and Small Business Development.
Insurance Requirements for professional environmental planning/airport planning/acoustical consulting firm for the Part 150 Noise Compatibility Study. The following coverages are deemed appropriate for minimum insurance requirements for this project and will be required of the selected firm and identified in the negotiated agreement. Any deviation or change during the contract negotiation period shall be approved by Risk Management.

### TYPE OF INSURANCE

<table>
<thead>
<tr>
<th>Limits on Liability in Thousands of Dollars</th>
<th>Each Occurrence</th>
<th>Aggregate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GENERAL LIABILITY</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[x] Commercial General Liability</td>
<td>Bodily Injury</td>
<td></td>
</tr>
<tr>
<td>[x] Premises-Operations</td>
<td>Property Damage</td>
<td></td>
</tr>
<tr>
<td>[ ] Explosion &amp; Collapse Hazard</td>
<td>Bodily Injury and</td>
<td>$1 mil non-airside</td>
</tr>
<tr>
<td>[ ] Underground Hazard</td>
<td>Property Damage</td>
<td>$1 mil airside</td>
</tr>
<tr>
<td>[x] Products/Completed Operations Hazard</td>
<td>$1 mil airside</td>
<td></td>
</tr>
<tr>
<td>[x] Contractual Insurance</td>
<td>Personal Injury</td>
<td></td>
</tr>
<tr>
<td>[x] Broad Form Property Damage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[x] Independent Contractors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[x] Personal Injury</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>AUTO LIABILITY</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[x] Comprehensive Form</td>
<td>Bodily injury (each</td>
<td></td>
</tr>
<tr>
<td>[x] Owned</td>
<td>person)</td>
<td></td>
</tr>
<tr>
<td>[x] Hired</td>
<td>Bodily injury (each</td>
<td></td>
</tr>
<tr>
<td>[ ] Non-owned</td>
<td>accident)</td>
<td></td>
</tr>
<tr>
<td>[x] Any Auto if applicable</td>
<td>Property Damage</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bodily injury and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Property Damage Combined</td>
<td>$300 k non airside</td>
</tr>
<tr>
<td>[ ] POLLUTION &amp; ENVIRONMENTAL LIABILITY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[ ] WORKER’S COMPENSATION AND EMPLOYER’S LIABILITY (NOTE*)</td>
<td>Max Ded</td>
<td>$500K</td>
</tr>
<tr>
<td>[x] STATUTORY</td>
<td>(each accident)</td>
<td></td>
</tr>
<tr>
<td>[x] PROFESSIONAL LIABILITY - E&amp;I</td>
<td>Max. Ded. $10,000.00</td>
<td>$2 mil</td>
</tr>
<tr>
<td>[ ] PROPERTY COVERAGE / ALL RISK</td>
<td>Max. Ded.</td>
<td>Agreed value</td>
</tr>
<tr>
<td></td>
<td>Replacement Cost</td>
<td></td>
</tr>
<tr>
<td>[ ] PROPERTY COVERAGE, BUILDERS OR INSTALLATION FLOATER</td>
<td>Maximum Deductible $ 10K</td>
<td>Replacement Cost</td>
</tr>
<tr>
<td></td>
<td>Each Claim</td>
<td>Vendor Responsible for Deductible wind peril not to exceed 5% of project value</td>
</tr>
</tbody>
</table>

Contractor responsible for all tools, materials, equipment, machinery, etc., until completion and acceptance by County.

**NOTE** - If the Contractor is exempt from Workers’ Compensation Coverage, please provide a letter on company letterhead or a copy of the State’s exemption which documents this status and attaches to the Certificate of Insurance for approval. Any operations are to be undertaken on or about navigable waters. Coverage must be included for U.S. Longshoremen & Harbor Workers’ Act & Jones Act.

CANCELLATION: Thirty (30) Day written notice of cancellation required to the Certificate Holder:

Name & Address of Certificate Holder: Broward County
2200 S.W. 45th Street, Suite 101
Fort Lauderdale, FL 33314
RE: Airport Development

Digital Signature by Tracy Meyer
Aviation Department
Risk Insurance and Contracts Manager
Date Issued 7/24/14

RFP# R1330212P1
FAR Part 150 Noise Compatibility Planning Consulting Services

Page 93 of 115
BCF #403 (Rev. 06.09.15)
EXHIBIT E

Work Authorization No. ______________, RLI/RFP No. ______________

Consultant: 
Project No.: 
Project Title: 
RLI/RFP Title: 
Facility Name: 

This Work Authorization (WA) is issued pursuant to the Agreement between Broward County and ______________, for Consultant Services in Broward County, which was approved by the Board of County Commissioners on ______________. Except as provided for herein, nothing contained in this Work Authorization shall alter, modify or change in any way the terms and conditions of the Agreement with the County.

This Work Authorization provides for services consistent with the Agreement referenced above and as specifically described in the attached proposal and scope. Payment for such services shall be in accordance with the Agreement.

The time period for this Work Authorization shall consist of ________ (___) calendar days. Consultant’s deliverables, if any, are due as provided for in the proposal. This Work Authorization shall not extend beyond the Agreement term without the approval of the Board of County Commissioners, unless expressly provided for in the Agreement. [INSERT THE FOLLOWING IF DURING CONTRACT ADMIN PHASE AND IF APPLICABLE - In accordance with Article __ (4.1 or 4.2) of the Agreement, this Work Authorization shall not expire until the expiration of all warranty periods provided for in the construction contract(s) for the Project, unless it is terminated earlier as provided under applicable provisions of this Agreement.]

In consideration of the County’s issuance of, payment under this Work Authorization and the grant of _____ days for completion of the Work, Consultant waives and releases any and all claims associated with the performance of the Work described in this Work Authorization. This Work Authorization constitutes full accord and satisfaction of all claims for time and compensation associated with the Work authorized by this Work Authorization for events actions occurring prior to execution of this Work Authorization.

Budget Requisition Number Aviation Department Division

Fee Determination: Payment for services under this WA shall be as follows:

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<tr>
<th>Description</th>
<th>Lump Sum</th>
<th>Maximum Amount Not-to-Exceed</th>
<th>Total</th>
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<td><strong>Total</strong></td>
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County

Broward County

Recommended by:

Project Manager Date Contract Administrator Date

Consultant

Attest: By:

Secretary Date □President □Vice President Date

Corporate Seal

RFP# R1330212P1
FAR Part 150 Noise Compatibility Planning Consulting Services
Additional Project Elements

The Part 150 study at FLL is one of the largest and most complex projects in terms of both technical analysis and community outreach at the airport. While most of the elements of the project can be defined with a high level of certainty, it is fully expected that additional tasks will be required during the course of the project to bring the project to a successful and timely conclusion. These tasks will be further defined during the course of the project, but may include:

- Additional Technical analysis required to address data gaps, airspace and procedure changes or other operational factors or supplemental analysis such as noise measurements
- Additional Agency/Jurisdiction Coordination including addressing changes in policies or regulations
- Additional Public Outreach to both ensure responsiveness to evolving community concerns and ensure that the outreach fits the needs of the community (additional workshops, meetings, translation, etc.)
- BCAD and FAA requested efforts including additional analysis, cost estimating, legal support, etc.
ATTACHMENT I
NONDISCRIMINATION REQUIREMENTS

I. NONDISCRIMINATION - 49 CFR PART 21 REQUIREMENTS

During the performance of this contract, the Consultant/Contractor/Tenant/Concessionaire/Lessee/Permittee/Licensee for itself, its personal representatives, assigns and successors in interest (hereinafter referred to collectively as the "Contractor") agrees as follows:

(a) **Compliance With Regulations.** The Contractor shall comply with the Regulations relative to nondiscrimination in Federally Assisted Programs of the Department of Transportation (hereinafter, "DOT") Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.

(b) **Nondiscrimination.** The Contractor shall not discriminate on the grounds of race, color, religion, gender, national origin, age, marital status, political affiliation, familial status, physical or mental disability, or sexual orientation in the selection and retention of subconsultants, including procurement of materials and leases of equipment. The Contractor shall not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.

(c) **Solicitation for Subconsultants, Including Procurement of Materials and Equipment.** In all solicitation either by competitive bidding or negotiation made by the Contractor for work to be performed under a subcontract, including procurement of materials or leases of equipment, each potential subconsultant or supplier shall be notified by the Contractor of the Contractor's obligation under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, religion, gender, national origin, age, marital status, political affiliation, familial status, physical or mental disability, or sexual orientation.

(d) **Information and Reports.** The Contractor shall provide all information and reports required by the Regulations or directives issued pursuant thereto and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the County or the Federal Aviation Administration (FAA) to be pertinent to ascertain compliance with such Regulations, orders, and instructions. Where any information required of Contractor is in the exclusive possession of another who fails or refuses to furnish this information, the Contractor shall so certify to the County or the FAA, as appropriate, and shall set forth what efforts it has made to obtain the information.
Sanctions for Noncompliance. In the event of the Contractor's noncompliance with
the nondiscrimination provisions of this contract, the County shall impose such
contract sanctions as it or the FAA may determine to be appropriate, including, but
not limited to: (1) withholding of payments under the contract until there is
compliance, and/or (2) cancellation, termination, or suspension of the contract, in
whole or in part. In the event of cancellation or termination of the contract (if such
contract is a lease), the County shall have the right to re-enter the Premises as if said
lease had never been made or issued. These provisions shall not be effective until
the procedures of Title 49 CFR Part 21 are followed and completed, including exercise
or expiration of appeal rights.

Incorporation of Provisions. The Contractor shall include the provisions of
paragraphs (a) through (e), above, in every subcontract, including procurement of
materials and leases of equipment, unless exempt by the Regulations or directives
issued pursuant thereto. The Contractor shall take such action with respect to any
subcontract or procurement as the County or the FAA may direct as a means of
enforcing such provisions including sanctions for noncompliance. Provided,
however, that in the event Contractor becomes involved in, or is threatened with,
litigation with a subconsultant or supplier as a result of such direction, the Contractor
may request the County to enter into such litigation to protect the interests of the
County and, in addition, the Contractor may request the United States to enter into
such litigation to protect the interests of the United States.

The Contractor, as a part of the consideration hereof, does hereby covenant and
agree that in the event facilities are constructed, maintained, or otherwise operated
on the said property described in this contract, for a purpose for which a DOT
program or activity is extended or for another purpose involving the provision of
similar services or benefits, the Contractor shall maintain and operate such facilities
and services in compliance with all other requirements imposed pursuant to 49 CFR
Part 21, Nondiscrimination in Federally Assisted Programs of the Department of
Transportation, and as said Regulation may be amended.

The Contractor, as a part of the consideration hereof, does hereby covenant and
agree that: (1) no person on the grounds of race, color, religion, gender, national
origin, age, marital status, political affiliation, familial status, physical or mental
disability, or sexual orientation shall be excluded from participation in, denied the
benefits of, or be otherwise subjected to discrimination in the use of said facilities,
(2) that in the construction of any improvements on, over, or under the premises and
the furnishing of services thereon, no person on the grounds of race, color, religion,
gender, national origin, age, marital status, political affiliation, familial status,
physical or mental disability, or sexual orientation shall be excluded from
participation in, denied the benefits of, or otherwise be subjected to discrimination,
and (3) that the Contractor shall use the premises in compliance with all other
requirements imposed by or pursuant to 49 CFR Part 21, Nondiscrimination in Federally Assisted Programs of the Department of Transportation, and as said Regulations may be amended.

II. NONDISCRIMINATION - 14 CFR PART 152 REQUIREMENTS

During the performance of this contract, the Contractor, for itself, its assignees and successors in interest agrees as follows:

The Contractor agrees to undertake an affirmative action program as required by 14 CFR Part 152, Subpart E, to insure that no person shall on the grounds of race, color, religion, gender, national origin, age, marital status, political affiliation, familial status, physical or mental disability, or sexual orientation be excluded from participation in any employment, contracting, or leasing activities covered in 14 CFR Part 152, Subpart E. The Contractor agrees that no person shall be excluded on these grounds from participating in or receiving the services or benefits of any program or activity covered by this Subpart. The Contractor agrees that it will require its covered suborganizations to provide assurances to the Contractor that they similarly will undertake affirmative action programs and that they will require assurances from their suborganizations as required by 14 CFR Part 152, Subpart E, to the same effect.

The Contractor agrees to comply with any affirmative action plan or steps for equal employment opportunity required by 14 CFR Part 152, Subpart E, as part of the affirmative action program, and by any federal, state, County or local agency or court, including those resulting from a conciliation agreement, a consent decree, court order or similar mechanism. The Contractor agrees that state or County affirmative action plans will be used in lieu of any affirmative action plan or steps required by 14 CFR Part 152, Subpart E, only when they fully meet the standards set forth in 14 CFR 152.409. The Contractor agrees to obtain a similar assurance from its covered organizations, and to cause them to require a similar assurance of their covered suborganizations, as required by 14 CFR Part 152, Subpart E.

If required by 14 CFR Part 152, Contractor shall prepare and keep on file for review by the FAA Office of Civil Rights an affirmative action plan developed in accordance with the standards in Part 152. The Contractor shall similarly require each of its covered suborganizations (if required under Part 152) to prepare and to keep on file for review by the FAA Office of Civil Rights, an affirmative action plan developed in accordance with the standards in Part 152.

If Contractor is not subject to an affirmative action plan, regulatory goals and timetables, or other mechanism providing for short and long-range goals for equal employment opportunity under Part 152, then Contractor shall nevertheless make good faith efforts to recruit and hire minorities and women for its aviation workforce as vacancies occur, by taking any affirmative action steps required by Part 152. Contractor shall similarly require such affirmative action steps of any of its covered suborganizations, as required under Part 152.
Contractor shall keep on file, for the period set forth in Part 152, reports (other than those submitted to the FAA), records, and affirmative action plans, if applicable, that will enable the FAA Office of Civil Rights to ascertain if there has been and is compliance with this subpart, and Contractor shall require its covered suborganizations to keep similar records as applicable.

Contractor shall, if required by Part 152, annually submit to the County the reports required by Section 152.415 and Contractor shall cause each of its covered suborganizations that are covered by Part 152 to annually submit the reports required by Section 152.415 to the Contractor who shall, in turn, submit same to the County for transmittal to the FAA.

III. NONDISCRIMINATION - GENERAL CIVIL RIGHTS PROVISIONS

The Contractor, for itself, its assignees and successors in interest agrees that it will comply with pertinent statutes, Executive Orders and such rules as are promulgated to assure that no person shall, on the grounds of race, color, religion, gender, national origin, age, marital status, political affiliation, familial status, physical or mental disability, or sexual orientation be excluded from participating in any activity conducted with or benefiting from Federal assistance. This Provision obligates the Contractor or its transferee, for the period during which Federal assistance is extended to the airport program, except where Federal assistance is to provide, or is in the form of personal property or real property or interest therein or structures or improvements thereon. In these cases, the Provision obligates the party or any transferee for the longer of the following periods: (a) the period during which the property is used by the sponsor or any transferee for a purpose for which Federal assistance is extended, or for another purpose involving the provision of similar services or benefits; or (b) the period during which the airport sponsor or any transferee retains ownership or possession of the property. In the case of contractors, this Provision binds the contractors from the bid solicitation period through the completion of the contract.

IV. NONDISCRIMINATION - 49 CFR PART 26

Contractors shall not discriminate on the basis of race, color, religion, gender, national origin, age, marital status, political affiliation, familial status, physical or mental disability, or sexual orientation in the performance of this contract. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the County deems appropriate.
ATTACHMENT II

PROVISIONS PERTAINING TO AIRPORT PROJECTS
ALL CONSULTANTS/CONTRACTOR AGREEMENTS:

1. SECURITY

Airport Security Program and Aviation Regulations.
Consultant/contractor agrees to observe all security requirements and other requirements of the
Federal Aviation Regulations applicable to Consultant/contractor, including without limitation, all
regulations of the United States Department of Transportation, the Federal Aviation
Administration and the Transportation Security Administration. Consultant/contractor also
agrees to comply with the County's Airport Security Program and the Air Operations Area (AOA)
Vehicle Access Program, and any amendments thereto, and to comply with such other rules and
regulations as may be reasonably prescribed by the County, and to take such steps as may be
necessary or directed by the County to insure that subconsultants/subcontractors, employees,
invitees and guests of Consultant/contractor observe these requirements. If required by the
Aviation Department, Consultant/contractor shall conduct background checks of its employees in
accordance with applicable Federal Regulations. If as a result of the acts or omissions of
Consultant/contractor, its subconsultants/subcontractors, employees, invitees or guests, the
County incurs any fines and/or penalties imposed by any governmental agency, including without
limitation, the United States Department of Transportation, the Federal Aviation Administration
or the Transportation Security Administration, or any expense in enforcing any Federal regulations,
including without limitation, airport security regulations, or the rules or regulations of the County,
and/or any expense in enforcing the County's Airport Security Program, then
Consultant/contractor agrees to pay and/or reimburse to County all such costs and expenses,
including all costs of administrative proceedings, court costs, and attorney's fees and all costs
incurred by County in enforcing this provision. Consultant/contractor further agrees to rectify any
security deficiency or other deficiency as may be determined as such by the County or the United
States Department of Transportation, Federal Aviation Administration, the Transportation Security
Administration, or any other Federal agency with jurisdiction. In the event Consultant/contractor
fails to remedy any such deficiency, the County may do so at the sole cost and expense of
Consultant/contractor. The County reserves the right to take whatever action is necessary to
rectify any security deficiency or other deficiency.

(a) Access to Security Identification Display Areas and Identification Media. The
consultant/contractor shall be responsible for requesting the Aviation Department to issue
Airport Issued Identification Media to all employees who are authorized access to Security
Identification Display Areas ("SIDA") on the Airport, as designated in the Airport Security
Program. In addition, consultant/contractor shall be responsible for the immediate
reporting of all lost or stolen Airport Issued Identification Media and the immediate return
of the media of consultant/contractor's personnel transferred from the Airport, or
terminated from the employ of the consultant/contractor, or upon termination of this
Agreement. Before an Airport Issued Identification Media is issued to an employee, consultant/contractor shall comply with the requirements of applicable Federal regulations with regard to fingerprinting for criminal history record checks and security threat assessments, and shall require that each employee complete security training programs conducted by the Aviation Department. The consultant/contractor shall pay or cause to be paid to the Aviation Department such charges as may be established from time to time for lost or stolen Airport Issued Identification Media and those not returned to the Aviation Department in accordance with these provisions. The Aviation Department shall have the right to require the consultant/contractor to conduct background investigations and to furnish certain data on such employees before the issuance of Airport Issued Identification Media, which data may include the fingerprinting of employee applicants for such media.

(b) Operation of Vehicles on the AOA: Before the consultant/contractor shall permit any employee of consultant/contractor or of any subconsultant/subcontractor to operate a motor vehicle of any kind or type on the AOA (and unless escorted by an Aviation Department approved escort), the consultant/contractor shall ensure that all such vehicle operators possess current, valid, and appropriate Florida driver's licenses. In addition, any motor vehicles and equipment of consultant/contractor or of any subconsultant/subcontractor operating on the AOA must have an appropriate vehicle identification permit issued by the Aviation Department, which identification must be displayed as required by the Aviation Department.

(c) Consent to Search/Inspection: The consultant/contractor agrees that its vehicles, cargo, goods and other personal property are subject to being inspected and searched when attempting to enter or leave and while on the AOA. The consultant/contractor further agrees on behalf of itself and its subconsultant/subcontractors, that it shall not authorize any employee or other person to enter the AOA unless and until such employee or other person has executed a written consent-to-search/inspection form acceptable to the Aviation Department. Consultant/contractor acknowledges and understands that the foregoing requirements are for the protection of users of the Airport and are intended to reduce incidents of cargo tampering, aircraft sabotage, thefts and other unlawful activities at the Airport. For this reason, consultant/contractor agrees that persons not executing such consent-to-search/inspection form shall not be employed by the consultant/contractor or by any subconsultant/subcontractor at the Airport in any position requiring access to the AOA or allowed entry to the AOA by the consultant/contractor or by any subconsultant/subcontractor.

(d) Consultant/contractor understands and agrees that if any of its employees, or the employees of any of its subconsultants/subcontractors, are required in the course of the work to be performed under this Agreement to access or otherwise be in contact with Sensitive Security Information ("SSI") as defined and construed under Federal law, that
individual will be required to execute a Sensitive Security Information Non-Disclosure Agreement promulgated by the Aviation Department.

(e) The provisions hereof shall survive the expiration or any other termination of this Agreement.

2. **PROHIBITED INTERESTS**

If this Agreement is funded by any federal or state grants, then, in that event, no member, officer, or employee of County during his or her tenure or for two (2) years thereafter shall have any interest, direct or indirect, in this Agreement or the proceeds thereof.

Consultant/contractor agrees to insert the foregoing sentence in any agreements between consultant/contractor or subconsultants/subcontractors engaged to provide services pursuant to this Agreement.

If any such present or former member, officer, or employee has such an interest and if such interest as set forth above is immediately disclosed to the County, the County with prior approval of the funding agency, may waive the prohibition contained in this subsection; provided that any such present member, officer, or employee shall not participate in any action by the County relating to such Agreement.

3. **RECORDS**

Consultant/contractor shall keep such books, records and accounts and require any and all consultants/contractors or subconsultants/subcontractors to keep such books, records and accounts as may be necessary in order to record complete and correct entries as to personnel hours charged to the Project and any expenses for which consultant/contractor expects to be reimbursed. In addition, to the above, the consultant/contractor shall maintain an acceptable cost accounting system. All work, materials, payrolls, books, accounts, documents, and records relative to the Project, or directly pertinent to the specific contract for the purposes of making an audit, examination, excerpt or transcription shall be available at all reasonable times for examination and audit by County, and in the event such Agreement is subject to federal or state funding or grants, by the Federal Aviation Administration, the Comptroller General of the United States, the Florida Department of Transportation, or any of their duly authorized representatives. Such books, records and accounts shall be kept for the "Retention Period" (as hereinafter defined). Incomplete or incorrect entries in such books, records or accounts shall be grounds for County's disallowance of any fees or expenses based upon such entries. All books, records and accounts which are considered public records shall, pursuant to Chapter 119, Florida Statutes, be kept by consultant/contractor in accordance with such statutes. The "Retention Period" shall be defined as the greater of: (i) the required retention period of the Florida Public Records Act (Chapter 119, Fla. Stat.), if applicable, or (ii) for a period of three (3) years.
after final payment and the completion of all work to be performed pursuant to this Agreement, or if any audit has been initiated and audit findings have not been resolved at the end of the three years, the books and records shall be retained until resolution of the audit findings, or (iii) if this Project is subject to Florida Department of Transportation grants, for a period of five (5) years after final payment and the completion of all work to be performed pursuant to this Agreement, or if any audit has been initiated and audit findings have not been resolved at the end of the five years, the books and records shall be retained until resolution of the audit findings.

4. **PROTECTION OF RECORDS**

Consultant/contractor shall protect from harm and damage all data, drawings, specifications, designs, models, photographs, reports, surveys and other data created or provided in connection with this Agreement (collectively, "County Property"), while such data and materials are in consultant's/contractor's possession. Such duty may include, but is not limited to, making back-up copies of all data stored by electronic device on any media, taking reasonable actions to prevent damage by impending flood or storm (including, but not limited to, removing the County Property to a safe location), and establishing and enforcing such security measures as are reasonably available, considering the customary practice within consultant's/contractor's trade or profession. If requested by County, consultant/contractor shall furnish to County copies of any and all disks containing drawings and other pertinent data prepared by consultant/contractor in conjunction with this Agreement.

5. **BREACH OF CONTRACT TERMS - SANCTIONS**

Any violation or breach of the terms of this contract on the part of the consultant/contractor or subconsultant/subcontractor may result in the suspension or termination of this contract or such other action which may be necessary to enforce the rights of the parties of this agreement.

6. **RIGHT TO INVENTIONS**

All rights to inventions and materials generated under this contract are subject to regulations issued by the FAA and the County. Information regarding these rights is available from the FAA and the County.

7. **TRADE RESTRICTION CLAUSES TO BE INCLUDED IN ALL SOLICITATIONS, CONTRACTS, AND SUBCONTRACTS**

The consultant/contractor or subconsultant/subcontractor, by submission of an offer and/or execution of a contract, certifies that it:
a. Is not owned or controlled by one or more citizens of a foreign country included in the list of countries that discriminate against U.S. firms published by the Office of the United States Trade Representative (USTR); and

b. Has not knowingly entered into any contract or subcontract for this project with a person that is a citizen or national of a foreign country on said list, or is owned or controlled directly or indirectly by one or more citizens or nationals of a foreign country on said list; and

c. Has not procured any product nor subcontracted for the supply of any product for use on the project that is produced in a foreign country on said list.

Unless the restrictions of this clause are waived by Secretary of Transportation in accordance with 49 CFR 30.17, no contract shall be awarded to a consultant/contractor or subconsultant/subcontractor who is unable to certify to the above. If the consultant/contractor knowingly procures or subcontracts for the supply of any product or service of a foreign country on said list for use on the project, the Federal Aviation Administration may direct through the County cancellation of the contract at no cost to the Government.

Further, the consultant/contractor agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification without modification in each contract and in all lower tier subcontracts. The consultant/contractor may rely on the certification of a prospective subconsultant/subcontractor unless it has knowledge that the certification is erroneous.

The consultant/contractor shall provide immediate written notice to the County if the consultant/contractor learns that its certification or that of a subconsultant/subcontractor was erroneous when submitted or has become erroneous by reason of changed circumstances. The subconsultant/subcontractor agrees to provide written notice to the consultant/contractor if at any time it learns that its certification was erroneous by reason of changed circumstances.

This certification is a material representation of fact upon which reliance was placed when making the award. If it is later determined that the consultant/contractor or subconsultant/subcontractor knowingly rendered an erroneous certification, the Federal Aviation administration may direct through the County cancellation of the contract or subcontract for default at no cost to the Government.

Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by this provision. The knowledge and information of a consultant/contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
This certification concerns a matter within the jurisdiction of an agency of the United States of America and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code, Section 1001.

8. **TERMINATION OF CONTRACT (ALL CONTRACTS IN EXCESS OF TEN THOUSAND DOLLARS ($10,000.00))**

   a. The County may, by written notice, terminate this contract in whole or in part at any time, either for the County’s convenience or because of failure to fulfill the contract obligations. Upon receipt of such notice, services shall be immediately discontinued (unless the notice directs otherwise) and all materials as may have been accumulated in performing this contract, whether completed or in process, delivered to the County.

   b. If the termination is for the convenience of the County, an equitable adjustment in the contract price shall be made, but no amount shall be allowed for anticipated profit on unperformed services.

   c. If the termination is due to failure to fulfill the consultant’s/contractor’s obligations, the County may take over the work and prosecute the same to completion by contract or otherwise. In such case, the consultant/contractor shall be liable to the County for any additional cost occasioned to the County thereby.

   d. If, after notice of termination for failure to fulfill contract obligations, it is determined that the consultant/contractor had not so failed, the termination shall be deemed to have been effected for the convenience of the County. In such event, adjustment in the contract price shall be made as provided in paragraph b of this clause.

   e. The rights and remedies of the County provided in this clause are in addition to any other rights and remedies provided by law or under this contract.

9. **SUSPENSION AND DEBARMENT REQUIREMENTS FOR ALL CONTRACTS OVER TWENTY FIVE THOUSAND DOLLARS ($25,000.00) (AND FOR ALL CONTRACTS FOR AUDITING SERVICES REGARDLESS OF THE AMOUNT)**

The bidder/offeror/consultant/contractor certifies, by submission of this proposal or acceptance of this contract, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency. It further agrees by submitting this proposal that it will include this clause without modification in all lower tier transactions, solicitations, proposals, contracts, and subcontracts. Where the
bidder/offeror/consultant/contractor or any lower tier participant is unable to certify to this statement, it shall attach an explanation to this solicitation/proposal.

10.  **RESTRICTIONS ON LOBBYING**

The bidder/offeror/consultant/contractor agrees that no federal appropriated funds have been paid or will be paid by or on behalf of the bidder/offeror/consultant/contractor, to any person for influencing or attempting to influence any officer or employees of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment or modification of any federal contract, grant, loan or cooperative agreement.

If any funds other than federal appropriated funds have been paid by the bidder/offeror/consultant/contractor to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

Consultant/contractor agrees to insert the foregoing provisions in any agreements between consultant/contractor or subconsultants/subcontractors engaged to provide services pursuant to this Agreement and all bidders/offerors/consultants/contractors and subconsultants/subcontractors shall certify and disclose accordingly.

11.  **PROMPT PAYMENT - FOR FEDERALLY ASSISTED CONTRACTS**

If this Agreement is funded by any federal grants, then consultant/contractor hereby agrees to pay its subconsultants/subcontractors and suppliers within thirty (30) business days following receipt of payment from the County. Consultant/contractor further agrees, if consultant/contractor has withheld retainage from its subconsultants/subcontractors, to release such retainage and pay same within thirty (30) calendar days following receipt of payment of retained amounts from the County, or within thirty (30) calendar days after a subconsultant/subcontractor has satisfactorily completed its work, whichever shall first occur. This clause applies to both DBE and non-DBE subconsultant/subcontractors.

A finding of non-payment is a material breach of this contract. County may, at its option, increase allowable retainage or withhold progress payments unless and until the consultant/contractor demonstrates timely payments of sums due subconsultant/subcontractor. The presence of a "pay when paid" provision in a contract shall not preclude County inquiry into allegations of non-payment. Further that the remedies above shall not be employed when the consultant/contractor demonstrates that
failure to pay results from a bonafide dispute with its subconsultant/subcontractor or supplier. The consultant/contractor shall incorporate this provision into all subcontracts involving federally assisted contracts.

The Assistant Disadvantaged Business Enterprise Liaison Officer will conduct meetings with parties involved in prompt payment disputes to facilitate an amicable resolution.
ATTACHMENT III
ELECTRONIC MEDIA SUBMITTAL REQUIREMENTS

BROWARD COUNTY AVIATION DEPARTMENT (BCAD)
ELECTRONIC MEDIA SUBMITTAL REQUIREMENTS
Last Revised 12/4/13

Broward County Aviation Department (BCAD) utilizes electronic media as the principal way to develop, communicate and archive information concerning its various airport programs.

Prior to development of scope of services for any work authorization or commencing work under any Contract, the Consultant/Contractor must contact the contract administrator and/or designated project manager to verify they have a copy of the latest version of BCAD’s Electronic Media Submittal Requirements. BCAD modifies these requirements as needed to make corrections and/or to keep up with latest industry trends, best practices, guidelines, standards and regulations, as well as, to improve its internal processes. Some requirements below may not apply, or additional requirements may be needed, based on the nature of the scope of services and associated deliverables. Any deviations from the requirements below must be approved by BCAD’s contract administrator or the project manager designated to approve or deny such requests.

(A) General Requirements:

1) All Work, including surveying work, drawings, maps, details or other drawing information to be provided in electronic media by Consultant/Contractor shall be accomplished and developed using computer-aided design (CAD), geographic information system (GIS), and other software and procedures conforming to the following criteria. Electronic data submittals shall also include PDF versions of pages and documentation. The Consultant/Contractor shall expect to produce three primary sets of electronic deliverables:

   • CAD – Engineering Design Drawings
   • GIS – FAA AGIS Submittal, eALP, and BCAD GIS Use
   • PDF – Electronic Document Review and Storage/As-Builts

(B) CAD and GIS Formats:

1) Provide all CAD data in Autodesk, Inc.’s AutoCAD release 2010 or higher for Windows in native .dwg electronic digital format. Provide copies of all drawing sheets or other CAD produced documents intended for hardcopy plotting or printing in plot (.plt) and drawing web format (.dwf) versions of all sheets/documents, formatted to fit BCAD standard cover sheet and title block, as detailed in Section (C) below. All GIS data shall be delivered in formats compatible with ESRI ArcGIS version 9.3 or higher. Specific formats (e.g. shape file, layer files, geodatabase, and/or other file...
type/structure) shall be of BCAD's choosing to meet their internal needs as well as FAA requirements. All deliverables must include appropriate metadata conforming to BCAD and FAA standards. When requested, the Consultant/Contractor will be required to ensure that all GIS data is formatted for successful submission to the FAA AGIS portal without any additional changes required by BCAD staff. Consultant/Contractor GIS and CAD data deliverables shall conform to the latest BCAD and FAA standards and/or guidelines, including but not limited to: FAA Advisory Circulars (AC) 5300/150-16, 17 and 18, and US National CAD Standards.

2) Target OS platform: Windows operating system.

3) Ensure that all digital files and data (e.g., constructs, elements, base files, prototype drawings, reference files, blocks, attribute links, and other files external to the drawing itself) are compatible with the BCADs Target CAD and GIS systems (i.e., basic and advanced CAD and GIS software, platforms, database software/s, geodatabases, etc.), and adhere to the standards and requirements specified herein.

4) The term "compatible" means that data can be accessed directly by the target CAD and GIS software without translation, pre-processing, or post-processing of the electronic digital data files. It is the responsibility of Consultant/Contractor to ensure this level of compatibility.

5) Non-geospatial database delivered with CAD/GIS files must be provided in relational database format compatible with Microsoft Access 2007 or higher, and other compatible format requested by BCAD. Data shall be delivered in an ESRI geodatabase format of BCAD's choosing upon request.

6) Maintain all linkages of non-graphical data with graphic elements, relationships between database tables, and report formats. Consultant/Contractor should work with BCAD to ensure linkages will conform/match those already in place or generated to create such links.

7) All database tables: conform to the structure and field-naming guidance provided upon request by BCAD. Specifically, all database tables shall conform to applicable FAA and BCAD standards and guidelines. All databases shall be compliant with at least MS Access 2007 and/or other format (dbf, xml, ESRI geodatabase, other) as requested by BCAD. Formats may change, at BCADs request, depending on the particulars of the projects. Consultant/Contractor shall inform BCAD of the most suitable format for a given project and explain, in writing, the benefits of that format versus alternatives. BCAD has the final decision as to format regardless of Consultant's/Contractor's written explanation.
8) All CAD and GIS files shall meet FAA/NGS spatial accuracy requirements and be georeferenced as follows:

   North American Datum (NAD) 83, HARN, US Survey Feet
   State Plane Coordinate System, Florida East Zone
   North American Vertical Datum (NAVD) 88, US Survey Feet

9) All data collected shall meet or exceed data acquisition standards established in AC 5300/150-16, 17, and 18, if applicable.

(C) Standards:

1) Standard plotted drawing size: 22 inch x 34 inch sheets unless otherwise specified by BCAD. All drawings shall be formatted to use the BCAD standard Cover Page and Title Block.

2) Coordinate with BCAD concerning the standard file naming protocol to be utilized. Consultant/Contractor may be required to submit drawing files with several naming conventions to satisfy various submittal requirements.

3) Unless otherwise stated, all CAD files shall conform to US National CAD standards (BCADs adopted CAD standard) in addition to FAA standards for submission into the FAA AGIS system.

   a) All building floor plans/elevations shall be drawn and provided in Architectural Units (unless otherwise requested by BCAD).
   b) All other plans (site plans, airfield plans, ALPs, etc.) shall be submitted in Engineering Units (unless otherwise requested by BCAD).

4) Layering:

   a) Conform to the guidelines defined by the US National CAD Standards, appropriate FAA Advisory Circulars and standards, and BCAD standards.
   b) Provide an explanatory list of layers used for each drawing, including those which do not conform to the standards listed above. Submission of layers that do not conform to the standards listed above will require advance BCAD approval.
   c) Raster: All raster files (aerial photography, TIN, DEM, etc.) shall be delivered in georeferenced SID and TIFF formats as defined by BCAD. If files must be tiled, a reference map will be provided depicting the location of each tile image. All raster files shall be tiled if file size reaches a size in excess of what BCAD finds difficult to use.
5) Attribute Definitions:

   a) Obtain latest guidance from BCAD concerning attribute definition, database linking and other
      information embedding requirements prior to production of documents. All database
      information shall conform to the latest versions of FAA ACs 150/5300-16, 17, and 18, and other
      BCAD standards. Additional attributes may be required at the discretion of BCAD.

6) Conformance:

   a) Submit a written request for approval of any deviations from the established CAD/GIS
      standards. Pre-coordinate the development, use and submittal of 3-D modeling, Building
      Information Models (BIM), photorealistic renderings, animations, presentations and other
      visualization/ information tools utilized during the design and construction process to ensure
      compatibility of submittal with County’s uses and information systems.

   b) No deviations from BCADs established CAD/GIS standards will be permitted unless prior
      written approval of such deviation has been received from BCAD.

(D) Non-CAD/GIS Graphic Format:

   1) Provide digital photography files (unless required in an alternate format such as that needed for
      CAD/GIS) and other miscellaneous graphics in JPEG and TIFF formats. Photos shall be geotagged in
      accordance with BCAD standards, if applicable.

(E) Non-Graphic Format:

   1) Provide word processing files in Microsoft Word 2007 compatible file formats including all fonts,
      typefaces, bit-map and vector graphics and other information necessary for remote printing.

   2) Provide spreadsheet files in Microsoft Excel 2007 for windows compatible file formats including all
      fonts, typefaces, bitmap and vector graphics and other information necessary for remote printing.

   3) Provide database files in relational database format compatible with Microsoft Access 2007 or
      higher, and/or other compatible SQL format database including all tables, form and report formats,
      fonts, typefaces, bit-map and vector graphics and other information necessary for remote printing.
      Ensure integrity of relational database structure. Consultant/Contractor may be required to ensure
      that database formats conform and can be integrated with other BCAD legacy applications and
      systems.

(F) Delivery Media and Format:

   1) Submit copies of all CADD/GIS/PDF data and other electronic files developed under this contract
      on electronic digital media as required for project phase submittals.

   2) Provide electronic digital data and files shall be provided on DVD/CD or via secure file transfer
      protocol (FTP) site.
3) The electronic digital media shall be in the format which can be read and processed by the BCAD's target CAD/GIS systems.

4) The external label for each electronic digital media shall contain, as a minimum, the following information:
   a) The Project Number, Project Title and date
   b) The Facility Name
   c) The format and version of operating system software
   d) The name and version of utility software used for preparation (e.g., compression/decompression) and copying files to the media
   e) The sequence number of the digital media
   f) A list of the filenames
   g) All requirements to meet or exceed FAA and BCAD standards

5) Before all files are placed on the delivery electronic digital media, the following procedures shall be performed:
   a) Ensure that drawing sheets, viewports, paperspace, line weights, fonts, and other drawing components are correctly configured for BCAD's viewing and plotting.
   b) Make sure all reference files are attached without device or directory specifications.
   c) Compress and reduce all design files using compatible file compression/decompression software approved by BCAD. If the file compression/decompression software is different from that specified above, then an electronic digital media copy of the file compression/decompression software shall be purchased and licensed for BCAD and provided to BCAD with the delivery media.
   d) Include all files, both graphic and non-graphic, required for the project. All blocks not provided as BCAD-furnished materials must be provided to BCAD as a part of the electronic digital deliverables.
   e) Make sure that all support files, such as those listed above, are in the same directory and that references to those files do not include device or directory specifications.
   f) Include any standard sheets (i.e., abbreviation sheets, standard symbol sheets, or other listing) necessary for a complete project. These shall conform to BCAD standard cover sheet and title block pages.
   g) Document any fonts, tables, or other similar customized drawing element developed by Consultant/Contractor or not provided among BCAD furnished materials. The contractor shall obtain BCAD's approval before using anything other than BCAD's standard fonts, line types, tables, blocks, or other drawing elements available from BCAD.
(G) **Drawing Development Documentation:**

1. Provide the following information for each finished drawing:
   a) How the data were input (e.g., keyed in, downloaded from a survey total station instrument
      (include name and model), and other identification data).
   b) Brief drawing development history (e.g., date started, modification date(s) with brief
      description of item(s) modified, author’s name, and other identifying data).
   c) The names of the reference, blocks, symbols, details, tables, and schedule files required for the
      finished drawing.
   d) Layer assignments and lock settings.
   e) Text fonts, line styles\types used, and GIS layer file settings.
   f) Any additional information per FAA ACs and BCAD standards.

(H) **Submittal:**

1. Submit as Project Record Documents specified above and as required for project phase submittals
   and project record documents.
2. Submit electronic media with a transmittal letter containing, as a minimum, the following
   information:
   a) The information included on the external label of each media unit (label), along with the total
      number being delivered, and a list of the names and descriptions of the files on each one.
   b) Brief instructions for transferring the files from the media.
   c) Certification that all delivery media are free of known computer viruses. A statement including
      the name(s) and release date(s) of the virus-scanning software used to analyze the delivery
      media, the date the virus-scan was performed, and the operator’s name shall also be included
      with the certification. The release or version date of the virus-scanning software shall be the
      current version which has detected the latest known viruses at the time of delivery of the
      digital media.
   d) The following "File Development and Project Documentation Information" as an enclosure or
      attachment to the transmittal letter provided with each electronic digital media submittal.
      1) Documentation of the plot file for each drawing which will be needed to be able to
         duplicate the creation of the file by BCAD at a later date. This documentation shall include
         configuration settings (e.g., drawing size and configuration), and any other special
         instructions.
      2) List of any deviations from BCAD’s standard layer/level scheme and file-naming
         conventions.
      3) List of all new symbol blocks created for project, which was not provided to
         Consultant/Contractor with the BCAD-furnished materials.
(4) List of all new figures, symbols, tables, schedules, details, and other blocks created for the project, which were not provided to Consultant/Contractor with the BCAD-furnished materials, and any associated properties.

(5) List of all database files associated with each drawing, as well as a description and documentation of the database format and schema design. All information shall conform to FAA and BCAD standards.

(6) All metadata per BCAD, FAA, FDOT, or other entity standards.

(I) Ownership:

1) County will have ownership of all information and materials developed under these and other contractual requirements including but not limited to reports, and listings, and all other items pertaining to the work created or developed in connection with the services provided pursuant to the agreement with Broward County including any copyright.

2) Ownership rights under the contract are rights to use, re-use, duplicate, or disclose text, data, drawings, and information, in whole or in part in any manner and for any purpose whatsoever without compensation to or approval from Consultant/Contractor.

3) BCAD will at all reasonable times have the right to inspect the work and will have access to and the right to make copies of the above-mentioned items.

4) All text, electronic digital files, data, and other products generated under this contract shall become the property of County except where otherwise limited within the Contract.

5) All files/drawings shall be furnished to BCAD upon request from BCAD.

6) No portion of any "application" (e.g. database, GIS portal, web application, or customized document or tool) developed for BCAD shall be used as a template for non Broward County projects unless the prior approval in writing is obtained from BCAD.

(J) BCAD-Furnished Materials to the Consultant/Contractor:

1) BCAD and Consultant/Contractor may make various electronic files available to the Contractor during the Pre-Construction and Construction phases of the Project. To this end, Consultant/Contractor shall make the following information available to the Contractor in electronic format:

a) Work files: Selected work product files, reports, spreadsheets, databases, specifications, drawings and other documentation of Consultant's/Contractor's work in progress may be provided to the Contractor, Managing General Contractor, or other County consultant on an as required basis. Consultant/Contractor shall cooperate and facilitate the exchange of these electronic media documents.

b) Where electronic media submittals of final site surveys are required, Consultant will provide electronic copies of any existing site survey data already on electronic media.
c) Where Electronic Project Record Documents are required, Consultant will provide the Contractor one set of AutoCAD electronic file format contract drawings, to be used for as-built drawings at the Contractor's option. Make electronic file drawings available on DVD/CD-ROM media.

d) BCAD will supply Consultant/Contractor with all necessary BCAD standard cover page and title block files and formats.

(K) Other Digital Information:

1) A variety of digital information may be generated by participants in the design process including BCAD, Consultant, subconsultants, Contractor, subcontractors; BCAD's commissioning authority, local jurisdictional authorities and other project team members.

2) Consultant/Contractor shall facilitate and participate wherever possible in this digital exchange of information by conforming to the standards expressed.