

Foreign Object Debris Detection System

THIS SOFTWARE LICENSE, EQUIPMENT/DEVICES,, INSTALLATION, IMPLEMENTATION, INTEGRATION, MAINTENANCE, AND SUPPORT AGREEMENT ("AGREEMENT") IS MADE AND ENTERED INTO BY AND BETWEEN MIAMI-DADE COUNTY , A POLITICAL SUBDIVISION OF THE STATE OF FLORIDA, HAVING ITS PRINCIPAL OFFICE AT 111 N.W. 1ST STREET, MIAMI, FLORIDA 33128 (HEREINAFTER REFERRED TO AS THE "COUNTY"), AND ORGANIZATIONAL STRATEGIES, INC. A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF VIRGINIA, HAVING ITS PRINCIPAL OFFICE AT 8201 GREENSBORO, SUITE 214, MCLEAN, VIRGINIA 22102 (HEREINAFTER REFERRED TO AS THE "CONTRACTOR").

WITNESSETH:

WHEREAS, the Contractor has offered to provide a Foreign Object Debris Detection System and associated services on a non-exclusive basis, that shall conform to the Scope of Services (Appendix A); Miami-Dade County's Request for Proposals (RFP) No. 872 and all associated addenda and attachments, incorporated herein by reference; and the requirements of this Agreement; and,

WHEREAS, the Contractor has submitted a written proposal dated December 2, 2013, hereinafter referred to as the "Contractor's Proposal" which is incorporated herein by reference; and,

WHEREAS, the County desires to procure from the Contractor such Foreign Object Debris Detection System for the County, in accordance with the terms and conditions of this Agreement;

NOW, THEREFORE, in consideration of the mutual covenants and agreements herein contained, the parties hereto agree as follows:

ARTICLE 1. DEFINITIONS

The following words and expressions used in this Agreement shall be construed as follows, except when it is clear from the context that another meaning is intended:

- a) The words "Contract" or "Agreement" to mean collectively these terms and conditions, the Scope of Services (Appendix A), all other appendices and attachments hereto, all amendments issued hereto, RFP No. 872 and all associated addenda, and the Contractor's Proposal.
- b) The words "Contract Date" to mean the date on which this Agreement is effective.
- c) The words "Contract Manager" to mean Miami-Dade County's Director, Internal Services Department, or the duly authorized representative designated to manage the Contract.
- d) The word "Contractor" to mean Organizational Strategies, Inc. and its permitted successors and assigns.
- e) The word "Days" to mean Calendar Days.
- f) The word "Deliverables" to mean all documentation and any items of any nature submitted by the Contractor to the County's Project Manager for review and approval pursuant to the terms of this Agreement.
- g) The words "directed", "require d", "permitted", "ordered", "designated", "selected", "prescribed" or words of like import to mean respectively, the direction, requirement, permission, order, designation, selection or prescription of the County's Project Manager; and similarly the words "approved", "acceptable", "satisfactory", "equal", "necessary", or words of like import to mean respectively, approved by, or acceptable or satisfactory to, equal or necessary in the opinion of the County's Project Manager.
- h) The word "Documentation" to mean all manuals, user documentation, and other related materials pertaining to the Software which are furnished to the County in connection with the Software.
- i) The words "Equipment" or "Devices" to mean the hardware products identified on Appendix A, "Scope of Services" to be provided by the Contractor to the County under this Agreement.
- j) The words "Extra Work" or "Additional Work" to mean additions or deletions or modifications to the amount, type or value of the Work and Services as required in this Contract, as directed and/or approved by the County.

- k) The word "Maintenance" to mean the product updates and product upgrades required for the County to achieve optimal performance of the Software as outlined in Appendix A, "Scope of Services."
- l) The words "Project Manager" to mean the County Mayor or the duly authorized representative designated to manage the Project.
- m) The words "Scope of Services" to mean the document appended hereto as Appendix A, which details the work to be performed by the Contractor.
- n) The words "Software System" to mean the computer programs in machine readable object code form listed in Appendix A "Scope of Services" attached hereto and any subsequent error corrections or updates supplied to the County by the Contractor pursuant to this Agreement. Appendix A "Scope of Services" may be amended from time to time by the parties in writing.
- o) The words "Support" or "Technical Support" to mean the process to resolve reported incidents through error correction, patches, hot fixes, workarounds, replacements or any other type of correction or modification required to fully utilize the Software capabilities, as outlined in Appendix A, "Scope of Services."
- p) The word "subcontractor" or "subconsultant" to mean any person, entity, firm or corporation, other than the employees of the Contractor, who furnishes labor and/or materials, in connection with the Work, whether directly or indirectly, on behalf and/or under the direction of the Contractor and whether or not in privity of Contract with the Contractor.
- q) The word "System" to mean the Software System and Equipment as described in Appendix A, "Scope of Services."
- r) The words "Work", "Services" "Program", or "Project" to mean all matters and things required to be done by the Contractor in accordance with the provisions of this Contract.

ARTICLE 2. ORDER OF PRECEDENCE

If there is a conflict between or among the provisions of this Agreement, the order of precedence is as follows: 1) these terms and conditions, 2) any Attachments, Appendixes, or Exhibits thereto 3) the Miami-Dade County's RFP No. 872 and any associated addenda and attachments thereof, and 4) the Contractor's Proposal.

ARTICLE 3. RULES OF INTERPRETATION

- a) References to a specified Article, section or schedule shall be construed as reference to that specified Article, or section of, or schedule to this Agreement unless otherwise indicated.
- b) Reference to any agreement or other instrument shall be deemed to include such agreement or other instrument as such agreement or other instrument may, from time to time, be modified, amended, supplemented, or restated in accordance with its terms.
- c) The terms "hereof", "herein", "hereinafter", "hereby", "herewith", "hereto", and "hereunder" shall be deemed to refer to this Agreement.
- d) The titles, headings, captions and arrangements used in these Terms and Conditions are for convenience only and shall not be deemed to limit, amplify or modify the terms of this Contract, nor affect the meaning thereof.

ARTICLE 4. NATURE OF THE AGREEMENT

- a) This Agreement incorporates and includes all prior negotiations, correspondence, conversations, agreements, and understandings applicable to the matters contained in this Agreement. The parties agree that there are no commitments, agreements, or understandings concerning the subject matter of this Agreement that are not contained in this Agreement, and that this Agreement contains the entire agreement between the parties as to all matters contained herein. Accordingly, it is agreed that no deviation from the terms hereof shall be predicated upon any prior representations or agreements, whether oral or written. It is further agreed that any oral representations or modifications concerning this Agreement shall be of no force or effect, and that this Agreement may be modified, altered or amended only by a written amendment duly executed by both parties hereto or their authorized representatives.
- b) The Contractor shall provide the services set forth in the Scope of Services, and render full and prompt cooperation with the County in all aspects of the Services performed hereunder.
- c) The Contractor acknowledges that this Agreement requires the performance of all things necessary for or incidental to the effective and complete performance of all Work and Services under this Contract. All things not expressly mentioned in this Agreement but necessary to



carrying out its intent are required by this Agreement, and the Contractor shall perform the same as though they were specifically mentioned, described and delineated.

- d) The Contractor shall furnish all labor, materials, tools, supplies, and other items required to perform the Work and Services that are necessary for the completion of this Contract. All Work and Services shall be accomplished at the direction of and to the satisfaction of the County's Project Manager.
- e) The Contractor acknowledges that the County shall be responsible for making all policy decisions regarding the Scope of Services. The Contractor agrees to provide input on policy issues in the form of recommendations. The Contractor agrees to implement any and all changes in providing Services hereunder as a result of a policy change implemented by the County. The Contractor agrees to act in an expeditious and fiscally sound manner in providing the County with input regarding the time and cost to implement said changes and in executing the activities required to implement said changes.

ARTICLE 5. CONTRACT TERM

The Contract shall become effective on the date that it is signed by the County or the Contractor, whichever is later and shall continue through the last day of the 60th month. The County, at its sole discretion, reserves the right to exercise the option to renew this Contract for three (3) additional three (3) year periods. The County reserves the right to exercise its option to extend this Contract for up to one hundred-eighty (180) calendar days beyond the current Contract period and will notify the Contractor in writing of the extension. This Contract may be extended beyond the initial one hundred-eighty (180) calendar day extension period by mutual agreement between the County and the Contractor, upon approval by the Board of County Commissioners.

ARTICLE 6. GRANT OF LICENSE

6.1 License. Contractor agrees to provide the County with licensed Software System and Documentation in accordance with the provisions contained within this Agreement.

6.2 Contractor grants the County a limited, perpetual, non-transferable, non-exclusive license to use the licensed Software System and Documentation in accordance with the terms of this Agreement.

ARTICLE 7. NOTICE REQUIREMENTS

All notices required or permitted under this Agreement shall be in writing and shall be deemed sufficiently served if delivered by Registered or Certified Mail, with return receipt requested; or delivered personally; or delivered via fax or e-mail (if provided below) and followed with delivery of hard copy; and in any case addressed as follows:

(1) To the County Project Manager:

Miami-Dade Aviation Department
P. O. 025504
Miami, Florida 33102

Attention: Godofredo Lara
Phone: 305 876-0849
E-mail: GLARA@miami-airport.com

and to the Agreement Manager:

Miami-Dade County
Internal Services Department
Procurement Management Services
111 N.W. 1st Street, Suite 1300
Miami, FL 33128-1974

Attention: Director's Office
Phone: (305) 375- 5878
Fax: (305) 375- 5688
E-Mail: singer@miamidade.gov

(2) To the Contractor

Organizational Strategies, Inc.
8201 Greensboro Drive, Suite 214,
McLean, VA 22102

Attention: Jason Porter
Phone: (202) 536-8669
Fax: (703) 413-7710
E-mail: jporter@orgstrategies.com

Either party may at any time designate a different address and/or contact person by giving notice as provided above to the other party. Such notices shall be deemed given upon receipt by the addressee.

ARTICLE 8. DELIVERY

8.1 Delivery of the Solution shall be according to Appendix A "Scope of Services" and Appendix C "Project Timeline". All services performed under this Agreement are contingent upon final acceptance by the County.

8.2 Documentation. The Contractor shall provide electronic copies of the associated Documentation as provided by the developer of the System to the County upon Final System acceptance.

ARTICLE 9. SUPPORT AND MAINTENANCE SERVICES

Contractor shall provide the County with Technical Support and Maintenance Services in the manner outlined in Appendix A, "Scope of Services" for the System throughout the term of this Agreement, including any options or extensions exercised by the County.

ARTICLE 10. PROTECTION OF SOFTWARE

10.1 No Reverse Engineering. The County agrees not to modify, reverse engineer, disassemble, or decompile the Software, or any portion thereof.

10.2 Ownership. County further acknowledges that all copies of the Software System in any form provided by the Contractor are the sole property of the Contractor. The County shall not have any right, title, or interest to any such Software or copies thereof, except as provided in this Agreement, and further shall secure and protect all Software and Documentation consistent with maintenance of Contractor's proprietary rights therein.

ARTICLE 11. SOFTWARE MODIFICATIONS

11.1 Software Enhancements or Modifications. The County may, from time to time, request that the Contractor incorporate certain features, enhancements or modifications into the Software. When requested by the County, the Contractor shall provide the requested system enhancements/modifications including all relevant source code. Upon the County's request for such enhancements/modifications the County shall prepare a Statement of Work ("SOW") for the specific Project that shall define in detail the Services to be performed. The Contractor shall submit a cost and/or temporary revenue sharing proposal including all costs pertaining to furnishing the County with the enhancements/modifications.

- a) After the SOW has been accepted a detailed requirements and detailed design document shall be submitted illustrating the complete financial terms that govern the SOW, proposed Project staffing, anticipated Project schedule, and other information relevant to the Project. Each SOW executed hereunder shall automatically incorporate the terms and conditions of this Agreement. Such enhancements or modifications shall become the property of the County. Notwithstanding the foregoing, performance of any such modifications shall not compromise the Contractor's warranty obligations.
- b) Following the County's acceptance of all enhancements/modification, the Contractor shall provide the County, if so requested with written confirmation of the date the enhancements/modification was applied to the Software System, and any and all Documentation relating to the Software and or enhancements/modification thereto.

ARTICLE 12. IMPLEMENTATION SERVICES

- a) The County shall accept or reject the Software System and/or Equipment/Devices within fifteen business (15) days of receipt unless otherwise provided elsewhere in this Agreement.
- b) If the Contractor fails to provide deliverables within the time specified or if the Software System and/or Equipment/Devices delivered fails to conform to the requirements or are found to be defective in material or workmanship, then the County may reject the delivered Software System and/or Equipment/Devices or may accept any item of Software System and/or Equipment/Devices and reject the balance of the delivered Software System and/or Equipment/Devices. The County shall notify Contractor of such rejection in writing and specify in such notice, the reasons for such rejection. Contractor agrees to deliver a fix or workaround replacement for the Software System and/or Equipment/Devices for such items of rejected Software System and/or Equipment/Devices within fifteen (15) business days of Contractor's receipt of the County's rejection notice.
- c) The Contractor shall bear the risk of loss or damage to delivered Software System and/or Equipment/Devices until the time the Project Manager certifies that the System(s) has successfully completed the System Acceptance test whether such loss or damage arises from acts or omissions (whether negligent or not) of the Contractor or the County or from any other cause whatsoever, except loss or damage arising solely from the negligence or willful acts of the County.
- d) Contractor agrees to install the Software System at the County's facilities. Contractor agrees to commence installation of the Software System according to the Implementation Schedule unless a different time for implementation is otherwise mutually agreed upon by the parties hereto. All implementation services will be performed during normal business hours. Whenever possible, however some services to be provided may be required outside of normal business hours to accommodate County operations. Work to be performed outside normal business hours will be mutually agreed by both parties. Contractor shall diligently pursue and complete such implementation services in accordance with the Implementation Schedule, so that such Software System is in good working order and ready for use by the dates set forth in the Schedule.
- e) Contractor agrees to do all things necessary for proper implementation of the Software System and to perform its implementation obligations hereunder in an orderly, skillful and expeditious manner, with sufficient labor and materials to ensure efficient and timely completion of such obligations. If applicable, Contractor shall coordinate with the Project Manager all work with all other Contractors and/or County personnel performing work to complete Software System installation. The County shall be responsible for resolving all disputes relating to Site access between Contractor and/or County personnel. Contractor shall provide all materials necessary to properly implement the Software System. The County shall attempt to provide reasonable working and secure storage space for the performance by Contractor of the implementation services described herein.
- f) Unless otherwise agreed to by the County, Contractor agrees as part of the implementation to perform all required services to successfully achieve all objectives set forth in the scope of work, including, but not limited to, (a) system configuration; (b) interface development; (c) software testing; (d) acceptance and user acceptance testing; (e) training; (f) cooperating with all other vendors supplying peripheral or ancillary equipment that will interface with the System; and (g) any additional services necessary to ensure Contractor's compliance with this Article 12.
- g) System testing shall consist of the tests described in the Scope of Services which are to be conducted collectively by the Contractor and the County. The purpose of these tests is to demonstrate the complete operability of the Solution in conformance with the requirements of the Contract. This will include an actual demonstration of all required Solution functionality. All tests shall be in accordance with test plans and procedures prepared by Contractor and previously approved by the County. In the event of any outstanding deficiencies at the conclusion of installation testing, as determined by the County, Contractor shall be responsible for instituting necessary corrective measures, and for subsequently satisfactorily demonstrating and/or re-demonstrating system performance.

ARTICLE 13. TESTS

The Contractor shall configure and program the System to conform to the Scope of Services. The Software System and Equipment/Devices will be subject to several tests, including a System Acceptance test as further defined in the Scope of Services, Implementation Plan, and Acceptance Criteria to be developed and agreed by both parties. To assure System performance, the County's Project manager will coordinate all testing of the System and provide Final Acceptance upon completion of all milestones and deliverables as outlined in the Scope of Services.

Failure of the System to satisfy the acceptance criteria and conform to the requirements set forth in the Scope of Services by the timeframes set forth in the Implementation Timeline may result in the County withholding payment until satisfactory acceptance is granted to the Contractor.

After Final Acceptance is granted, any modifications, fixes, enhancements, and/or new releases of the System require separate testing periods and sign-off from the County Project Manager prior to migrating it into the production software. The testing protocol shall be as follows:

- a) Contractor's Project Manager will provide written notice to the County Project Manager of modifications, fixes, enhancements, and/or new releases of the software available for testing.
- b) The Contractor's Project Manager will coordinate all user acceptance testing dates, acceptance criteria, and training for the new functionality for the test group.
- c) The County will be granted five (5) business days or other timeframe agreed to by both parties in writing to perform testing based on the outlined functionality being delivered to the County on the Acceptance Criteria sign off sheet;
- d) The County's Project Manager will provide the Contractor with written notice of acceptance (sign-off) or rejection (with documented material nonconformities in the functionality) within 5 business days, unless more time is needed, in which case the County will notify the Contractor in writing accordingly;
- e) Deficiencies found will be noted on the Acceptance Criteria sign off sheet and the Contractor will be provided an opportunity to correct the issues. The Contractor will be required to provide the County with an updated timeline and work around (fix) within three (3) business days unless additional time is requested in writing and agreed by both parties;
- f) Once the release is accepted, the functionality will be moved into the production module. And updated documentation will be provided to the County;

ARTICLE 14. REVIEWING DELIVERABLES

The Contractor agrees to submit all Deliverables required to be submitted for review and approval by the County in accordance with the specific requirements in the Scope of Services, and as specified in Appendix D "Acceptance Criteria". The Contractor understands that the County shall have final approval on all Deliverables.

In reviewing the Deliverables, the Contractor understands that the County will provide the Contractor with:

- i. a written notification of the County's approval,
- ii. a written notification that each Deliverable is approved subject to the Contractor providing prompt correction of a minor deficiency, or,
- iii. in the case of a Deliverable that does not meet the requirements of the Agreement, a written notification of the County's disapproval. The County's disapproval notification will state with reasonable detail to sufficiently advise the Contractor of the basis on which the Deliverable was determined to be unacceptable.

The Contractor understands that failure by the County to provide a notice of approval does not constitute approval.

Furthermore:

- a) For each Deliverable made hereunder, the County shall have ten (10) business days, commencing on the first business day after receipt by the County of the Deliverable, to determine whether the Deliverable is approved as submitted, is approved subject to the correction by the Contractor of minor discrepancies, or whether it is unacceptable and therefore disapproved.
- b) Unless an extension of time has been granted by the County, within five business days after receipt of the County's notification of "disapproval", the Contractor shall deliver to the County the necessary revisions and/or modifications for a second review by the County.
- c) If after the second review period the Deliverable remains unacceptable for the County's approval, the County may direct the Contractor to:
 - i. Proceed with the Work subject to the correction of all outstanding deficiencies which led to the County's determination that a Deliverable was not acceptable for approval on or before a specific date established by the County for correcting such deficiency or deficiencies; or,
 - ii. Suspend all Work being performed in regard to the execution of the Agreement, except those services necessary for the correction of outstanding deficiencies, until such time that all such outstanding deficiencies have been corrected by the Contractor and resubmitted to the County for approval. Any suspension of the Work under this provision shall not alter the County's right to assess liquidated damages in the event that the Work are not completed in accordance with other provisions of this Agreement.

- d) The County shall have the right to approve or accept part of any Deliverable. Any such approval shall be regarded as partial and conditional upon the County's approval or acceptance of all aspects of the Deliverable. The Contractor must correct any deficiencies within the time the County specifies for such correction in the County's notice concerning a partial approval (including approvals subject to correction of minor deficiencies) or, if no time is given, promptly. If the County does not subsequently approve or accept all aspects of the Deliverable, the earlier conditional acceptance or approval may, in the sole absolute discretion of the County, be regarded as void and of no effect.
- e) Approval by the County does not relieve the Contractor from liability resulting from latent, concealed, or hidden defects in the deliverable.

ARTICLE 15. SYSTEM WARRANTY

The Contractor warrants, for a period of one (1) year from the County's Final System Acceptance, that the System and all related components provided by the Contractor under the performance of this Agreement shall:

- (i) Be free from defects in material and workmanship under normal use and remain in good working order, wear and tear excepted;
- (ii) Function properly and in conformity with the warranties in this Agreement;
- (iii) Meet the performance standards set forth in the Scope of Work and the Original Equipment Manufacturer's published specifications.

During the Warranty Period, Contractor agrees to use all reasonable efforts and resources to provide to the County all corrections and/or modifications necessary to correct problems with the Equipment/Devices provided by the Contractor that are reported to Contractor, at no additional cost to the price identified in the Price Schedule or to provide a full refund of any amounts paid under this contract and accept the return of the System in the sole discretion of the County.

During the Warranty Period, Contractor shall enforce the manufacturer's warranty and maintenance obligations relating to the Equipment/Devices and related Software it provides.

In the event the Software System does not satisfy the conditions of performance set forth in the Scope Of Services, Solicitation, and Contractor's proposal, the Contractor's obligation is to provide a Fix or a Work Around at the Contractor's cost and expense, or to provide different equipment, software and services required to attain the performance requirements set forth in the Scope Of Services, Solicitation, and Contractor's proposal or to provide a full refund of any amounts paid under this contract and accept the return of the System in the sole discretion of the County. Failure by the Contractor to comply with warranty provisions hereof may be deemed by the County as a breach of the Contractor's obligations hereof.

ARTICLE 16. THIRD PARTY WARRANTIES

In addition to the foregoing warranties, the Contractor hereby assigns to the County, and the County shall have the benefit of, any and all subcontractors' and suppliers' warranties and representations with respect to the Solution provided hereunder. In the Contractor's agreements with subcontractors and suppliers, the Contractor shall require that such parties (i) consent to the assignment of such warranties and representations to the County; (ii) agree that such warranties and representations are enforceable by the County in its own name; and (iii) furnish to the County, the warranties and obligations as set forth in Articles 15 "System Warranty".

ARTICLE 17. FEES AND PAYMENT

17.1 Fees. The County shall pay the Fees or other considerations for the Software, Equipment, and Documentation as set forth on Appendix B "Price Schedule" attached hereto. All amounts payable hereunder by the County shall be payable to the Contractor upon invoice as defined in Appendix B. The County shall have no obligation to pay the Contractor or any additional sum in excess of this amount, except for a change and/or modification to the Agreement, which is approved and executed in writing by the County and the Contractor. All Services undertaken by the Contractor prior to the County's approval of this Agreement shall be done at the Contractor's risk and expense.

17.2 Travel. With respect to travel costs and travel related expenses, the Contractor agrees to adhere to CH. 112.061 of the Florida Statutes as they pertain to out-of-pocket expenses including employee lodging, transportation, per diem, and all miscellaneous cost-and fees. The County shall not be liable for any such expenses that have not been approved in advance, in writing, by the County. Reimbursement for travel related expenses shall only apply to "optional services." All travel related to meeting the requirements of the Solicitation and resultant contract shall be included in the proposed price.

17.3 Fixed Pricing. Prices shall remain firm and fixed for the term of the Agreement, including any option or extension periods; however, the Contractor may offer incentive discounts to the County at any time during the Agreement term, including any renewal or extension thereof.

ARTICLE 18. METHOD AND TIMES OF PAYMENT

The Contractor agrees that under the provisions of this Agreement, as reimbursement for those actual, reasonable and necessary costs incurred by the Contractor, which are directly attributable or properly allocable to the Services, the Contractor may invoice the County periodically, pursuant to Appendix B – Price Schedule. All invoices shall be taken from the books of account kept by the Contractor, shall be supported by copies of payroll distribution, receipt bills or other documents reasonably required by the County, shall show the County's contract number, and shall have a unique invoice number assigned by the Contractor. It is the policy of Miami-Dade County that payment for all purchases by County agencies and the Public Health Trust shall be made in a timely manner and that interest payments be made on late payments. In accordance with Florida Statutes, Section 218.74 and Section 2-8.1.4 of the Miami-Dade County Code, the time at which payment shall be due from the County or the Public Health Trust shall be forty-five (45) days from receipt of a proper invoice. The time at which payment shall be due to small businesses shall be thirty (30) days from receipt of a proper invoice. All payments due from the County or the Public Health Trust, and not made within the time specified by this section shall bear interest from thirty (30) days after the due date at the rate of one percent (1%) per month on the unpaid balance. Further, proceedings to resolve disputes for payment of obligations shall be concluded by final written decision of the County Mayor, or his or her designee(s), not later than sixty (60) days after the date on which the proper invoice was received by the County or the Public Health Trust.

In accordance with Miami-Dade County Implementing Order 3-9, Accounts Receivable Adjustments, if money is owed by the Contractor to the County, whether under this Contract or for any other purpose, the County reserves the right to retain such amount from payment due by County to the Contractor under this Contract. Such retained amount shall be applied to the amount owed by the Contractor to the County. The Contractor shall have no further claim to such retained amounts which shall be deemed full accord and satisfaction of the amount due by the County to the Contractor for the applicable payment due herein.

Invoices and associated back-up documentation shall be submitted in duplicate by the Contractor to the County as follows:

Miami-Dade Aviation Department
P. O. 025504
Miami, Florida 33102

Attention: Godofredo Lara
Phone: 305 876-0849
E-mail: GLARA@miami-airport.com

The County may at any time designate a different address and/or contact person by giving written notice to the other party.

ARTICLE 19. INDEMNIFICATION AND INSURANCE

The Contractor shall indemnify and hold harmless the County and its officers, employees, agents and instrumentalities from any and all liability, losses or damages, including attorneys' fees and costs of defense, which the County or its officers, employees, agents or instrumentalities may incur as a result of claims, demands, suits, causes of actions or proceedings of any kind or nature arising out of, relating to or resulting from the performance of this Agreement by the Contractor or its employees, agents, servants, partners principals or subcontractors. The Contractor shall pay all claims and losses in connection therewith and shall investigate and defend all claims, suits or actions of any kind or nature in the name of the County, where applicable, including appellate proceedings, and shall pay all costs, judgments, and attorney's fees which may issue thereon. The Contractor expressly understands and agrees that any insurance protection required by this Agreement or otherwise provided by the Contractor shall in no way limit the responsibility to indemnify, keep and save harmless and defend the County or its officers, employees, agents and instrumentalities as herein provided.

Upon County's notification, the Contractor shall furnish to the Internal Services Department, Procurement Management Division, Certificates of Insurance that indicate that insurance coverage has been obtained, which meets the requirements as outlined below:

- A. Worker's Compensation Insurance for all employees of the Contractor as required by Florida Statute 440.
- B. Commercial General Liability Insurance in an amount not less than \$1,000,000 combined single limit per occurrence for bodily injury and property damage. Miami-Dade County must be shown as an additional insured with respect to this coverage.
- C. Automobile Liability Insurance covering all owned, non-owned and hired vehicles used in connection with the work, in an amount not less than *\$1,000,000 combined single limit per occurrence for bodily injury and property damage.

- D. Professional Liability Insurance in an amount not less than \$1,000,000 per claim.

*Under no circumstances are Contractors permitted on the Aviation Department, Aircraft Operating Airside (A.O.A) at Miami International Airport without increasing automobile coverage to \$5 million. Only vehicles owned or leased by a company will be authorized. Vehicles owned by individuals will not be authorized. \$1 million limit applies at all other airports.

The insurance coverage required shall include those classifications, as listed in standard liability insurance manuals, which most nearly reflect the operation of the Contractor. All insurance policies required above shall be issued by companies authorized to do business under the laws of the State of Florida with the following qualifications:

The company must be rated no less than "B" as to management, and no less than "Class V" as to financial strength by Best's Insurance Guide, published A.M. Best Company, Oldwick, New Jersey, or its equivalent, subject to the approval of the County Risk Management Division.

OR

The company must hold a valid Florida Certificate of Authority as shown in the latest "List of All Insurance Companies Authorized or Approved to Do Business in Florida", issued by the State of Florida Department of Financial Services and are members of the Florida Guaranty Fund.

Certificates of Insurance must indicate that for any cancellation of coverage before the expiration date, the issuing insurance carrier will endeavor to mail thirty (30) day written advance notice to the certificate holder. In addition, the Contractor hereby agrees not to modify the insurance coverage without thirty (30) days written advance notice to the County.

Compliance with the foregoing requirements shall not relieve the Contractor of this liability and obligation under this section or under any other section in this Agreement.

Award of this Contract is contingent upon the receipt of the insurance documents, as required, within ten (10) business days. If the insurance certificate is received within the specified timeframe but not in the manner prescribed in this Agreement, the Contractor shall have an additional five (5) business days to submit a corrected certificate to the County. If the Contractor fails to submit the required insurance documents in the manner prescribed in this Agreement within fifteen (15) business days, the Contractor shall be in default of the contractual terms and conditions and award of the Contract may be rescinded, unless such timeframe for submission has been extended by the County.

The Contractor shall be responsible for ensuring that the insurance certificates required in conjunction with this Section remain in force for the duration of the contractual period of the Contract, including any and all option years or extension periods that may be granted by the County. If insurance certificates are scheduled to expire during the contractual period, the Contractor shall be responsible for submitting new or renewed insurance certificates to the County at a minimum of thirty (30) calendar days in advance of such expiration. In the event that expired certificates are not replaced with new or renewed certificates which cover the contractual period, the County shall suspend the Contract until such time as the new or renewed certificates are received by the County in the manner prescribed herein; provided, however, that this suspended period does not exceed thirty (30) calendar days. Thereafter, the County may, at its sole discretion, terminate this contract.

ARTICLE 20. MANNER OF PERFORMANCE

- a) The Contractor shall provide the Services described herein in a competent and professional manner satisfactory to the County in accordance with the terms and conditions of this Agreement. The County shall be entitled to a satisfactory performance of all Services described herein and to full and prompt cooperation by the Contractor in all aspects of the Services. At the request of the County, the Contractor shall promptly remove from the project any Contractor's employee, subcontractor, or any other person performing Services hereunder. The Contractor agrees that such removal of any of its employees does not require the termination or demotion of any employee by the Contractor.
- b) The Contractor agrees to defend, hold harmless and indemnify the County and shall be liable and responsible for any and all claims, suits, actions, damages and costs (including attorney's fees and court costs) made against the County, occurring on account of, arising from or in connection with the removal and replacement of any Contractor's personnel performing services hereunder at the behest of the County. Removal and replacement of any Contractor's personnel as used in this Article shall not require the termination and or demotion of such Contractor's personnel.
- c) The Contractor agrees that at all times it will employ, maintain and assign to the performance of the Services a sufficient number of competent and qualified professionals and other personnel to meet the requirements to which reference is hereinafter made. The Contractor agrees to adjust its personnel staffing levels or to replace any its personnel if so directed upon reasonable request from the County, should the County make a determination, in its sole discretion, that said personnel staffing is inappropriate or that any individual is not performing in a manner consistent with the requirements for such a position.

- d) The Contractor warrants and represents that its personnel have the proper skill, training, background, knowledge, experience, rights, authorizations, integrity, character and licenses as necessary to perform the Services described herein, in a competent and professional manner.
- e) The Contractor shall at all times cooperate with the County and coordinate its respective work efforts to most effectively and efficiently maintain the progress in performing the Services.
- f) The Contractor shall comply with all provisions of all federal, state and local laws, statutes, ordinances, and regulations that are applicable to the performance of this Agreement.

ARTICLE 21. EMPLOYEES OF THE CONTRACTOR

All employees of the Contractor shall be considered to be, at all times, employees of the Contractor under its sole direction and not employees or agents of the County. The Contractor shall supply competent employees. Miami-Dade County may require the Contractor to remove an employee it deems careless, incompetent, insubordinate or otherwise objectionable and whose continued employment on County property is not in the best interest of the County. Each employee shall have and wear proper identification.

ARTICLE 22. INDEPENDENT CONTRACTOR RELATIONSHIP

The Contractor is, and shall be, in the performance of all work services and activities under this Agreement, an independent contractor, and not an employee, agent or servant of the County. All persons engaged in any of the work or services performed pursuant to this Agreement shall at all times, and in all places, be subject to the Contractor's sole direction, supervision and control. The Contractor shall exercise control over the means and manner in which it and its employees perform the work, and in all respects the Contractor's relationship and the relationship of its employees to the County shall be that of an independent contractor and not as employees and agents of the County.

The Contractor does not have the power or authority to bind the County in any promise, agreement or representation other than specifically provided for in this Agreement.

ARTICLE 23. AUTHORITY OF THE COUNTY'S PROJECT MANAGER

- a) The Contractor hereby acknowledges that the County's Project Manager will determine in the first instance all questions of any nature whatsoever arising out of, under, or in connection with, or in any way related to or on account of, this Agreement including without limitations: questions as to the value, acceptability and fitness of the Services; questions as to either party's fulfillment of its obligations under the Contract; negligence, fraud or misrepresentation before or subsequent to acceptance of the Contractor's Proposal; questions as to the interpretation of the Scope of Services; and claims for damages, compensation and losses.
- b) The Contractor shall be bound by all determinations or orders and shall promptly comply with every order of the Project Manager, including the withdrawal or modification of any previous order and regardless of whether the Contractor agrees with the Project Manager's determination or order. Where orders are given orally, they will be issued in writing by the Project Manager as soon thereafter as is practicable.
- c) The Contractor must, in the final instance, seek to resolve every difference concerning the Agreement with the Project Manager. In the event that the Contractor and the Project Manager are unable to resolve their difference, the Contractor may initiate a dispute in accordance with the procedures set forth in this Article. Exhaustion of these procedures shall be a condition precedent to any lawsuit permitted hereunder.
- d) In the event of such dispute, the parties to this Agreement authorize the County Mayor or designee, who may not be the Project Manager or anyone associated with this Project, acting personally, to decide all questions arising out of, under, or in connection with, or in any way related to or on account of the Agreement (including but not limited to claims in the nature of breach of contract, fraud or misrepresentation arising either before or subsequent to execution hereof) and the decision of each with respect to matters within the County Mayor's purview as set forth above shall be conclusive, final and binding on parties. Any such dispute shall be brought, if at all, before the County Mayor within 10 days of the occurrence, event or act out of which the dispute arises.
- e) The County Mayor may base this decision on such assistance as may be desirable, including advice of experts, but in any event shall base the decision on an independent and objective determination of whether Contractor's performance or any Deliverable meets the requirements of this Agreement and any specifications with respect thereto set forth herein. The effect of any decision shall not be impaired or waived by any negotiations or settlements or offers made in connection with the dispute, whether or not the County Mayor participated therein, or by any prior decision of others, which prior decision shall be deemed subject to review, or by any termination or cancellation of the Agreement. All such disputes shall be submitted in writing by the Contractor to the County Mayor for a decision,

together with all evidence and other pertinent information in regard to such questions, in order that a fair and impartial decision may be made. Whenever the County Mayor is entitled to exercise discretion or judgment or to make a determination or form an opinion pursuant to the provisions of this Article, such action shall be fair and impartial when exercised or taken. The County Mayor, as appropriate, shall render a decision in writing and deliver a copy of the same to the Contractor. Except as such remedies may be limited or waived elsewhere in the Agreement, Contractor reserves the right to pursue any remedies available under law after exhausting the provisions of this Article.

ARTICLE 24. MUTUAL OBLIGATIONS

- a) This Agreement, including attachments and appendices to the Agreement, shall constitute the entire Agreement between the parties with respect hereto and supersedes all previous communications and representations or agreements, whether written or oral, with respect to the subject matter hereto unless acknowledged in writing by the duly authorized representatives of both parties.
- b) Nothing in this Agreement shall be construed for the benefit, intended or otherwise, of any third party that is not a parent or subsidiary of a party or otherwise related (by virtue of ownership control or statutory control) to a party.
- c) In those situations where this Agreement imposes an indemnity obligation on the Contractor, the County may, at its expense, elect to participate in the defense if the County should so choose. Furthermore, the County may at its own expense defend or settle any such claims if the Contractor fails to diligently defend such claims, and thereafter seek indemnity for costs from the Contractor.

ARTICLE 25. QUALITY ASSURANCE/QUALITY ASSURANCE RECORD KEEPING

The Contractor shall maintain, and shall require that its subcontractors and suppliers maintain, complete and accurate records to substantiate compliance with the requirements set forth in the Scope of Services. The Contractor and its subcontractors and suppliers, shall retain such records, and all other documents relevant to the Services furnished under this Agreement for a period of three (3) years from the expiration date of this Agreement and any extension thereof.

ARTICLE 26. AUDITS

The County, or its duly authorized representatives or governmental agencies, shall until the expiration of three (3) years after the expiration of this Agreement and any extension thereof, have access to and the right to examine and reproduce any of the Contractor's books, documents, papers and records and of its subcontractors and suppliers which apply to all matters of the County. Such records shall subsequently conform to Generally Accepted Accounting Principles requirements, as applicable, and shall only address those transactions related to this Agreement.

Pursuant to Section 2-481 of the Miami-Dade County Code, the Contractor will grant access to the Commission Auditor to all financial and performance related records, property, and equipment purchased in whole or in part with government funds. The Contractor agrees to maintain an accounting system that provides accounting records that are supported with adequate documentation, and adequate procedures for determining the allowability and allocability of costs.

ARTICLE 27. SUBSTITUTION OF PERSONNEL

In the event the Contractor wishes to substitute personnel for the key personnel identified by the Contractor's Proposal, the Contractor must notify the County in writing and request written approval for the substitution at least ten (10) business days prior to effecting such substitution.

ARTICLE 28. CONSENT OF THE COUNTY REQUIRED FOR ASSIGNMENT

The Contractor shall not assign, transfer, convey or otherwise dispose of this Agreement, including its rights, title or interest in or to the same or any part thereof without the prior written consent of the County.

ARTICLE 29. SUBCONTRACTUAL RELATIONS

- a) If the Contractor will cause any part of this Agreement to be performed by a Subcontractor, the provisions of this Contract will apply to such Subcontractor and its officers, agents and employees in all respects as if it and they were employees of the Contractor; and the Contractor will not be in any manner thereby discharged from its obligations and liabilities hereunder, but will be liable hereunder for all acts and negligence of the Subcontractor, its officers, agents, and employees, as if they were employees of the Contractor. The services performed by the Subcontractor will be subject to the provisions hereof as if performed directly by the Contractor.
- b) The Contractor, before making any subcontract for any portion of the services, will state in writing to the County the name of the proposed Subcontractor, the portion of the Services which the Subcontractor is to do, the place of business of such Subcontractor, and such other

information as the County may require. The County will have the right to require the Contractor not to award any subcontract to a person, firm or corporation disapproved by the County.

- c) Before entering into any subcontract hereunder, the Contractor will inform the Subcontractor fully and completely of all provisions and requirements of this Agreement relating either directly or indirectly to the Services to be performed. Such Services performed by such Subcontractor will strictly comply with the requirements of this Contract.
- d) In order to qualify as a Subcontractor satisfactory to the County, in addition to the other requirements herein provided, the Subcontractor must be prepared to prove to the satisfaction of the County that it has the necessary facilities, skill and experience, and ample financial resources to perform the Services in a satisfactory manner. To be considered skilled and experienced, the Subcontractor must show to the satisfaction of the County that it has satisfactorily performed services of the same general type which is required to be performed under this Agreement.
- e) The County shall have the right to withdraw its consent to a subcontract if it appears to the County that the subcontract will delay, prevent, or otherwise impair the performance of the Contractor's obligations under this Agreement. All Subcontractors are required to protect the confidentiality of the County's and County's proprietary and confidential information. Contractor shall furnish to the County copies of all subcontracts between Contractor and Subcontractors and suppliers hereunder. Within each such subcontract, there shall be a clause for the benefit of the County in the event the County finds the Contractor in breach of this Contract, permitting the County to request completion by the Subcontractor of its performance obligations under the subcontract. The clause shall include an option for the County to pay the Subcontractor directly for the performance by such Subcontractor. Notwithstanding, the foregoing shall neither convey nor imply any obligation or liability on the part of the County to any subcontractor hereunder as more fully described herein.

ARTICLE 30. ASSUMPTION, PARAMETERS, PROJECTIONS, ESTIMATES AND EXPLANATIONS

The Contractor understands and agrees that any assumptions, parameters, projections, estimates and explanations presented by the County were provided to the Contractor for evaluation purposes only. However, since these assumptions, parameters, projections, estimates and explanations represent predictions of future events the County makes no representations or guarantees; and the County shall not be responsible for the accuracy of the assumptions presented; and the County shall not be responsible for conclusions to be drawn therefrom; and any assumptions, parameters, projections, estimates and explanations shall not form the basis of any claim by the Contractor. The Contractor accepts all risk associated with using this information.

ARTICLE 31. SEVERABILITY

If this Agreement contains any provision found to be unlawful, the same shall be deemed to be of no effect and shall be deemed stricken from this Agreement without affecting the binding force of this Agreement as it shall remain after omitting such provision.

ARTICLE 32. TERMINATION AND SUSPENSION OF WORK

- a) The County may terminate this Agreement if an individual or corporation or other entity attempts to meet its contractual obligation with the County through fraud, misrepresentation or material misstatement.
- b) The County may, as a further sanction, terminate or cancel any other contract(s) that such individual or corporation or other entity has with the County and that such individual, corporation or other entity shall be responsible for all direct and indirect costs associated with such termination or cancellation, including attorney's fees.
- c) The foregoing notwithstanding, any individual, corporation or other entity which attempts to meet its contractual obligations with the County through fraud, misrepresentation or material misstatement may be debarred from County contracting for up to five (5) years in accordance with the County debarment procedures. The Contractor may be subject to debarment for failure to perform and all other reasons set forth in Section 10-38 of the County Code.
- d) In addition to cancellation or termination as otherwise provided in this Agreement, the County may at any time, in its sole discretion, with or without cause, terminate this Agreement by written notice to the Contractor.
- e) In the event that the County exercises its right to terminate this Agreement, the Contractor shall, upon receipt of such notice, unless otherwise directed by the County:
 - i. stop work on the date specified in the notice ("the Effective Termination Date");
 - ii. take such action as may be necessary for the protection and preservation of the County's materials and property;

- iii. cancel orders;
 - iv. assign to the County and deliver to any location designated by the County any non-cancelable orders for Deliverables that are not capable of use except in the performance of this Agreement and has been specifically developed for the sole purpose of this Agreement and not incorporated in the Services;
 - v. take no action which will increase the amounts payable by the County under this Agreement; and
- f) In the event that the County exercises its right to terminate this Agreement, the Contractor will be compensated as stated in the payment Articles herein for the:
- i. portion of the Services completed in accordance with the Agreement up to the Effective Termination Date; and
 - ii. non-cancelable Deliverables that are not capable of use except in the performance of this Agreement and has been specifically developed for the sole purpose of this Agreement, but not incorporated in the Services.
- g) All compensation pursuant to this Article are subject to audit.

ARTICLE 32. EVENT OF DEFAULT

- a) An Event of Default shall mean a breach of this Agreement by the Contractor. Without limiting the generality of the foregoing, and in addition to those instances referred to herein as a breach, an Event of Default shall include the following:
- i. the Contractor has not delivered Deliverables on a timely basis;
 - ii. the Contractor has refused or failed to supply enough properly skilled staff personnel;
 - iii. the Contractor has failed to make prompt payment to subcontractors or suppliers for any Services;
 - iv. the Contractor has become insolvent (other than as interdicted by the bankruptcy laws), or has assigned the proceeds received for the benefit of the Contractor's creditors, or the Contractor has taken advantage of any insolvency statute or debtor/creditor law or if the Contractor's affairs have been put in the hands of a receiver;
 - v. the Contractor has failed to obtain the approval of the County where required by this Agreement;
 - vi. the Contractor has failed to provide "adequate assurances" as required under subsection b below;
 - vii. the Contractor has failed in the representation of any warranties stated herein.
- b) When, in the opinion of the County, reasonable grounds for uncertainty exist with respect to the Contractor's ability to perform the Services or any portion thereof, the County may request that the Contractor, within the timeframe set forth in the County's request, provide adequate assurances to the County, in writing, of the Contractor's ability to perform in accordance with the terms of this Agreement. Until the County receives such assurances, the County may request an adjustment to the compensation received by the Contractor for portions of the Services which the Contractor has not performed. In the event that the Contractor fails to provide to the County the requested assurances within the prescribed timeframe, the County may:
- i. treat such failure as a repudiation of this Agreement; and
 - ii. resort to any remedy for breach provided herein or at law, including but not limited to, taking over the performance of the Services or any part thereof either by itself or through others.
- c) In the event the County shall terminate this Agreement for default, the County or its designated representatives may immediately take possession of all applicable equipment, materials, products, documentation, reports and data.

ARTICLE 33. NOTICE OF DEFAULT – OPPORTUNITY TO CURE

If an Event of Default occurs in the determination of the County, the County may so notify the Contractor ("Default Notice"), specifying the basis for such default, and advising the Contractor that such default must be cured immediately or this Agreement with the County may be terminated.

Notwithstanding, the County may, in its sole discretion, allow the Contractor to rectify the default to the County's reasonable satisfaction within a thirty (30) day period. The County may grant an additional period of such duration as the County shall deem appropriate without waiver of any of the County's rights hereunder, so long as the Contractor has commenced curing such default and is effectuating a cure with diligence and continuity during such thirty (30) day period or any other period which the County prescribes. The default notice shall specify the date the Contractor shall discontinue the Services upon the Termination Date.

ARTICLE 34. REMEDIES IN THE EVENT OF DEFAULT

If an Event of Default occurs, the Contractor shall be liable for all damages resulting from the default, including but not limited to:

- a) lost revenues;
- b) the difference between the cost associated with procuring Services hereunder and the amount actually expended by the County for re-procurement of Services, including procurement and administrative costs; and
- c) such other direct damages.

The Contractor shall also remain liable for any liabilities and claims related to the Contractor's default. The County may also bring any suit or proceeding for specific performance or for an injunction.

ARTICLE 35. PATENT AND COPYRIGHT INDEMNIFICATION

- a) The Contractor shall not infringe on any copyrights, trademarks, service marks, trade secrets, patent rights, other intellectual property rights or any other third party proprietary rights in the performance of the Work.
- b) The Contractor warrants that all Deliverables furnished hereunder, including but not limited to: equipment, programs, documentation, software, analyses, applications, methods, ways, processes, and the like, do not infringe upon or violate any copyrights, trademarks, service marks, trade secrets, patent rights, other intellectual property rights or any other third party proprietary rights.
- c) The Contractor shall be liable and responsible for any and all claims made against the County for infringement of patents, copyrights, service marks, trade secrets or any other third party proprietary rights, by the use or supplying of any programs, documentation, software, analyses, applications, methods, ways, processes, and the like, in the course of performance or completion of, or in any way connected with, the Work, or the County's continued use of the Deliverables furnished hereunder. Accordingly, the Contractor at its own expense, including the payment of attorney's fees, shall indemnify, and hold harmless the County and defend any action brought against the County with respect to any claim, demand, cause of action, debt, or liability.
- d) In the event any Deliverable or anything provided to the County hereunder, or portion thereof is held to constitute an infringement and its use is or may be enjoined, the Contractor shall have the obligation to, at the County's option to (i) modify, or require that the applicable subcontractor or supplier modify, the alleged infringing item(s) at its own expense, without impairing in any respect the functionality or performance of the item(s), or (ii) procure for the County, at the Contractor's expense, the rights provided under this Agreement to use the item(s).
- e) The Contractor shall be solely responsible for determining and informing the County whether a prospective supplier or subcontractor is a party to any litigation involving patent or copyright infringement, service mark, trademark, violation, or proprietary rights claims or is subject to any injunction which may prohibit it from providing any Deliverable hereunder. The Contractor shall enter into agreements with all suppliers and subcontractors at the Contractor's own risk. The County may reject any Deliverable that it believes to be the subject of any such litigation or injunction, or if, in the County's judgment, use thereof would delay the Work or be unlawful.

ARTICLE 36. CONFIDENTIALITY

- a) **Acknowledgement.** As a political subdivision of the State of Florida, Miami-Dade County is subject to Florida's Public Records Law. All Developed Works and other materials, data, transactions of all forms, financial information, documentation, inventions, designs and methods obtained from the County in connection with the Services performed under this Agreement, made or developed by the Contractor or its subcontractors in the course of the performance of such Services, or the results of such Services, or which the County holds the proprietary rights, constitute Confidential Information and may not, without the prior written consent of the County, be used by the Contractor or its employees, agents, subcontractors or suppliers for any purpose other than for the benefit of the County, unless required by law. In addition to the foregoing, all County employee information and County financial information shall be considered Confidential Information and shall be subject to all the requirements stated herein. Neither the Contractor nor its employees, agents, subcontractors or suppliers may sell, transfer, publish, disclose, display, license or otherwise make available to others any part of such Confidential

Information without the prior written consent of the County. Additionally, the Contractor expressly agrees to be bound by and to defend, indemnify and hold harmless the County, and their officers and employees from the breach of any federal, state or local law in regard to the privacy of individuals.

- b) The Contractor shall advise each of its employees, agents, subcontractors and suppliers who may be exposed to such Confidential Information of their obligation to keep such information confidential and shall promptly advise the County in writing if it learns of any unauthorized use or disclosure of the Confidential Information by any of its employees or agents, or subcontractor's or supplier's employees, present or former. In addition, the Contractor agrees to cooperate fully and provide any assistance necessary to ensure the confidentiality of the Confidential Information.
- c) It is understood and agreed that in the event of a breach of this Article damages may not be an adequate remedy and the County shall be entitled to injunctive relief to restrain any such breach or threatened breach. Unless otherwise requested by the County, upon the completion of the Services performed hereunder, the Contractor shall immediately turn over to the County all such Confidential Information existing in tangible form, and no copies thereof shall be retained by the Contractor or its employees, agents, subcontractors or suppliers without the prior written consent of the County. A certificate evidencing compliance with this provision and signed by an officer of the Contractor shall accompany such materials.

ARTICLE 37. PROPRIETARY INFORMATION

As a political subdivision of the State of Florida, Miami-Dade County is subject to the stipulations of Florida's Public Records Law.

The Contractor acknowledges that all computer software in the County's possession may constitute or contain information or materials which the County has agreed to protect as proprietary information from disclosure or unauthorized use and may also constitute or contain information or materials which the County has developed at its own expense, the disclosure of which could harm the County's proprietary interest therein.

During the term of the contract, the Contractor will not use directly or indirectly for itself or for others, or publish or disclose to any third party, or remove from the County's property, any computer programs, data compilations, or other software which the County has developed, has used or is using, is holding for use, or which are otherwise in the possession of the County (hereinafter "Computer Software"). All third-party license agreements must also be honored by the contractors and their employees, except as authorized by the County and, if the Computer Software has been leased or purchased by the County, all hired party license agreements must also be honored by the contractors' employees with the approval of the lessor or Contractors thereof. This includes mainframe, minis, telecommunications, personal computers and any and all information technology software.

The Contractor will report to the County any information discovered or which is disclosed to the Contractor which may relate to the improper use, publication, disclosure or removal from the County's property of any information technology software and hardware and will take such steps as are within the Contractor's authority to prevent improper use, disclosure or removal.

ARTICLE 38. PROPRIETARY RIGHTS

- a) The Contractor hereby acknowledges and agrees that the County retains all rights, title and interests in and to all materials, data, documentation and copies thereof furnished by the County to the Contractor hereunder or furnished by the Contractor to the County and/or created by the Contractor for delivery to the County, even if unfinished or in process, as a result of the Services the Contractor performs in connection with this Agreement, including all copyright and other proprietary rights therein, which the Contractor as well as its employees, agents, subcontractors and suppliers may use only in connection with the performance of Services under this Agreement. The Contractor shall not, without the prior written consent of the County, use such documentation on any other project in which the Contractor or its employees, agents, subcontractors or suppliers are or may become engaged. Submission or distribution by the Contractor to meet official regulatory requirements or for other purposes in connection with the performance of Services under this Agreement shall not be construed as publication in derogation of the County's copyrights or other proprietary rights.
- b) All rights, title and interest in and to certain inventions, ideas, designs and methods, specifications and other documentation related thereto developed by the Contractor and its subcontractors specifically for the County, hereinafter referred to as "Developed Works" shall become the property of the County.
- c) Accordingly, neither the Contractor nor its employees, agents, subcontractors or suppliers shall have any proprietary interest in such Developed Works. The Developed Works may not be utilized, reproduced or distributed by or on behalf of the Contractor, or any employee, agent, subcontractor or supplier thereof, without the prior written consent of the County, except as required for the Contractor's performance hereunder.
- d) Except as otherwise provided in subsections a, b, and c above, or elsewhere herein, the Contractor and its subcontractors and suppliers hereunder shall retain all proprietary rights in and to all Licensed Software provided hereunder, that have not been customized to satisfy

the performance criteria set forth in the Scope of Services. Notwithstanding the foregoing, the Contractor hereby grants, and shall require that its subcontractors and suppliers grant, if the County so desires, a perpetual, irrevocable and unrestricted right and license to use, duplicate, disclose and/or permit any other person(s) or entity(ies) to use all such Licensed Software and the associated specifications, technical data and other Documentation for the operations of the County or entities controlling, controlled by, under common control with, or affiliated with the County, or organizations which may hereafter be formed by or become affiliated with the County. Such license specifically includes, but is not limited to, the right of the County to use and/or disclose, in whole or in part, the technical documentation and Licensed Software, including source code provided hereunder, to any person or entity outside the County for such person's or entity's use in furnishing any and/or all of the Deliverables provided hereunder exclusively for the County or entities controlling, controlled by, under common control with, or affiliated with the County, or organizations which may hereafter be formed by or become affiliated with the County. No such License Software, specifications, data, documentation or related information shall be deemed to have been given in confidence and any statement or legend to the contrary shall be void and of no effect.

ARTICLE 39. VENDOR REGISTRATION/CONFLICT OF INTEREST

a) Vendor Registration

The Contractor shall be a registered vendor with the County – Internal Services Department, Procurement Management Division, for the duration of this Agreement. In becoming a Registered Vendor with Miami-Dade County, the Contractor confirms its knowledge of and commitment to comply with the following:

1. **Miami-Dade County Ownership Disclosure Affidavit**
(Section 2-8.1 of the County Code)
2. **Miami-Dade County Employment Disclosure Affidavit**
(Section 2.8-1(d)(2) of the County Code)
3. **Miami-Dade Employment Drug-free Workplace Certification**
(Section 2-8.1.2(b) of the County Code)
4. **Miami-Dade Disability and Nondiscrimination Affidavit**
(Section 2-8.1.5 of the County Code)
5. **Miami-Dade County Debarment Disclosure Affidavit**
(Section 10.38 of the County Code)
6. **Miami-Dade County Vendor Obligation to County Affidavit**
(Section 2-8.1 of the County Code)
7. **Miami-Dade County Code of Business Ethics Affidavit**
(Section 2-8.1(i) and 2-11(b)(1) of the County Code through (6) and (9) of the County Code and Section 2-11.1(c) of the County Code)
8. **Miami-Dade County Family Leave Affidavit**
(Article V of Chapter 11 of the County Code)
9. **Miami-Dade County Living Wage Affidavit**
(Section 2-8.9 of the County Code)
10. **Miami-Dade County Domestic Leave and Reporting Affidavit**
(Article 8, Section 11A-60 11A-67 of the County Code)
11. **Subcontracting Practices**
(Ordinance 97-35)
12. **Subcontractor /Supplier Listing**
(Section 2-8.8 of the County Code)
13. **Environmentally Acceptable Packaging**
(Resolution R-738-92)
14. **W-9 and 8109 Forms**
(as required by the Internal Revenue Service)
15. **FEIN Number or Social Security Number**
In order to establish a file, the Contractor's Federal Employer Identification Number (FEIN) must be provided. If no FEIN exists, the Social Security Number of the owner or individual must be provided. This number becomes Contractor's "County Vendor Number". To comply with Section 119.071(5) of the Florida Statutes relating to the collection of an individual's Social Security Number, be aware that the County requests the Social Security Number for the following purposes:
 - Identification of individual account records
 - To make payments to individual/Contractor for goods and services provided to Miami-Dade County
 - Tax reporting purposes
 - To provide a unique identifier in the vendor database that may be used for searching and sorting departmental records
16. **Office of the Inspector General**
(Section 2-1076 of the County Code)
17. **Small Business Enterprises**
The County endeavors to obtain the participation of all small business enterprises pursuant to Sections 2-8.2, 2-8.2.3 and 2-8.2.4 of the County Code and Title 49 of the Code of Federal Regulations.
18. **Antitrust Laws**
By acceptance of any contract, the Contractor agrees to comply with all antitrust laws of the United States and the State of Florida.

b) Conflict of Interest

Section 2-11.1(d) of Miami-Dade County Code requires that any County employee or any member of the employee's immediate family who has a controlling financial interest, direct or indirect, with Miami-Dade County or any person or agency acting for Miami-Dade County, competing or applying for a contract, must first request a conflict of interest opinion from the County's Ethics Commission prior to their or their immediate family member's entering into any contract or transacting any business through a firm, corporation, partnership or business entity in which the employee or any member of the employee's immediate family has a controlling financial interest, direct or indirect, with Miami-Dade County or any person or agency acting for Miami-Dade County. Any such contract or business engagement entered in violation of this subsection, as amended, shall be rendered voidable. For additional information, please contact the Ethics Commission hotline at (305) 579-2593.

ARTICLE 40. LOCAL, STATE, AND FEDERAL COMPLIANCE REQUIREMENTS

Contractor agrees to comply, subject to applicable professional standards, with the provisions of any and all applicable Federal, State and the County orders, statutes, ordinances, rules and regulations which may pertain to the Services required under this Agreement, including, but not limited to:

- a) Equal Employment Opportunity (EEO), in compliance with Executive Order 11246 as amended and applicable to this Contract.
- b) Miami-Dade County Florida, Department of Small Business Development Participation Provisions, as applicable to this Contract.
- c) Environmental Protection Agency (EPA), as applicable to this Contract.
- d) Miami-Dade County Code, Chapter 11A, Article 3. All contractors and subcontractors performing work in connection with this Contract shall provide equal opportunity for employment without regard to race, religion, color, age, sex, national origin, sexual preference, disability or marital status. The aforesaid provision shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in a conspicuous place available for employees and applicants for employment, such notices as may be required by the Dade County Fair Housing and Employment Commission, or other authority having jurisdiction over the work setting forth the provisions of the nondiscrimination law.
- e) "Conflicts of Interest" Section 2-11 of the County Code, and Ordinance 01-199.
- f) Miami-Dade County Code Section 10-38 "Debarment".
- g) Miami-Dade County Ordinance 99-5, codified at 11A-60 et. seq. of Miami-Dade Code pertaining to complying with the County's Domestic Leave Ordinance.
- h) Miami-Dade County Ordinance 99-152, prohibiting the presentation, maintenance, or prosecution of false or fraudulent claims against Miami-Dade County.

The Contractor shall hold all licenses and/or certifications, obtain and pay for all permits and/or inspections, and comply with all laws, ordinances, regulations and building code requirements applicable to the work required herein. Damages, penalties, and/or fines imposed on the County or Contractor for failure to obtain and maintain required licenses, certifications, permits and/or inspections shall be borne by the Contractor. The Project Manager shall verify the certification(s), license(s), permit(s), etc. for the Contractor prior to authorizing work and as needed.

Notwithstanding any other provision of this Agreement, Contractor shall not be required pursuant to this Agreement to take any action or abstain from taking any action if such action or abstention would, in the good faith determination of the Contractor, constitute a violation of any law or regulation to which Contractor is subject, including but not limited to laws and regulations requiring that Contractor conduct its operations in a safe and sound manner.

ARTICLE 41. NONDISCRIMINATION

During the performance of this Contract, Contractor agrees to not discriminate against any employee or applicant for employment because of race, religion, color, sex, handicap, marital status, age or national origin, and will take affirmative action to ensure that they are afforded equal employment opportunities without discrimination. Such action shall be taken with reference to, but not limited to: recruitment, employment, termination, rates of pay or other forms of compensation, and selection for training or retraining, including apprenticeship and on the job training.

By entering into this Contract, the Contractor attests that it is not in violation of the Americans with Disabilities Act of 1990 (and related Acts) or Miami-Dade County Resolution No. R-385-95. If the Contractor or any owner, subsidiary or other firm affiliated with or related to the Contractor is found by the responsible enforcement agency or the County to be in violation of the Act or the Resolution, such violation shall render this Contract void. This Contract shall be void if the Contractor submits a false affidavit pursuant to this Resolution or the Contractor violates the Act or the Resolution during the term of this Contract, even if the Contractor was not in violation at the time it submitted its affidavit.

ARTICLE 42. CONFLICT OF INTEREST

The Contractor represents that:

- a) No officer, director, employee, agent, or other consultant of the County or a member of the immediate family or household of the aforesaid has directly or indirectly received or been promised any form of benefit, payment or compensation, whether tangible or intangible, in connection with the award of this Agreement.

- b) There are no undisclosed persons or entities interested with the Contractor in this Agreement. This Agreement is entered into by the Contractor without any connection with any other entity or person making a proposal for the same purpose, and without collusion, fraud or conflict of interest. No elected or appointed officer or official, director, employee, agent or other consultant of the County, or of the State of Florida (including elected and appointed members of the legislative and executive branches of government), or a member of the immediate family or household of any of the aforesaid:
- i) is interested on behalf of or through the Contractor directly or indirectly in any manner whatsoever in the execution or the performance of this Agreement, or in the services, supplies or work, to which this Agreement relates or in any portion of the revenues; or
 - ii) is an employee, agent, advisor, or consultant to the Contractor or to the best of the Contractor's knowledge any subcontractor or supplier to the Contractor.
- c) Neither the Contractor nor any officer, director, employee, agency, parent, subsidiary, or affiliate of the Contractor shall have an interest which is in conflict with the Contractor's faithful performance of its obligation under this Agreement; provided that the County, in its sole discretion, may consent in writing to such a relationship, provided the Contractor provides the County with a written notice, in advance, which identifies all the individuals and entities involved and sets forth in detail the nature of the relationship and why it is in the County's best interest to consent to such relationship.
- d) The provisions of this Article are supplemental to, not in lieu of, all applicable laws with respect to conflict of interest. In the event there is a difference between the standards applicable under this Agreement and those provided by statute, the stricter standard shall apply.
- e) In the event Contractor has no prior knowledge of a conflict of interest as set forth above and acquires information which may indicate that there may be an actual or apparent violation of any of the above, Contractor shall promptly bring such information to the attention of the County's Project Manager. Contractor shall thereafter cooperate with the County's review and investigation of such information, and comply with the instructions Contractor receives from the Project Manager in regard to remedying the situation.

ARTICLE 43. PRESS RELEASE OR OTHER PUBLIC COMMUNICATION

Under no circumstances shall the Contractor without the express written consent of the County:

- a) Issue or permit to be issued any press release, advertisement or literature of any kind which refers to the County, or the Work being performed hereunder, unless the Contractor first obtains the written approval of the County. Such approval may be withheld if for any reason the County believes that the publication of such information would be harmful to the public interest or is in any way undesirable; and
- b) Communicate in any way with any contractor, department, board, agency, commission or other organization or any person whether governmental or private in connection with the Services to be performed hereunder except upon prior written approval and instruction of the County; and
- c) Except as may be required by law, the Contractor and its employees, agents, subcontractors and suppliers will not represent, directly or indirectly, that any product or service provided by the Contractor or such parties has been approved or endorsed by the County.

ARTICLE 44. BANKRUPTCY

The County reserves the right to terminate this contract, if, during the term of any contract the Contractor has with the County, the Contractor becomes involved as a debtor in a bankruptcy proceeding, or becomes involved in a reorganization, dissolution, or liquidation proceeding, or if a trustee or receiver is appointed over all or a substantial portion of the property of the Contractor under federal bankruptcy law or any state insolvency law.

ARTICLE 45. GOVERNING LAW

This Contract, including appendices, and all matters relating to this Contract (whether in contract, statute, tort (such as negligence), or otherwise) shall be governed by, and construed in accordance with, the laws of the State of Florida. Venue shall be Miami-Dade County.

ARTICLE 46. FIRST SOURCE HIRING REFERRAL PROGRAM

Pursuant to Section 2-2113 of the Code of Miami-Dade County, for all contracts for goods and services, the Contractor, prior to hiring to fill each vacancy arising under a County contract shall (1) first notify the South Florida Workforce Investment Board ("SFWIB"), the designated Referral Agency, of the vacancy and list the vacancy with SFWIB according to the Code, and (2) make good faith efforts as determined by the County to fill a minimum of fifty percent (50%) of its employment needs under the County contract through the SFWIB. If no suitable candidates can be employed after a Referral Period of three to five days, the Contractor is free to fill its vacancies from other sources. Contractor will be required to provide quarterly reports to the SFWIB indicating the name and number of employees hired in the previous quarter, or why referred candidates were rejected. Sanctions for non-compliance shall include, but not be limited to: (i) suspension of contract until Contractor performs obligations, if appropriate; (ii) default and/or termination; and (iii) payment of \$1,500/employee, or the value of the wages that would have been earned given the noncompliance, whichever is less. Registration procedures and additional information regarding the FSHRP are available at <https://iapps.southfloridaworkforce.com/firstsource/>.

ARTICLE 47. SURVIVAL

The parties acknowledge that any of the obligations in this Agreement will survive the term, termination and cancellation hereof. Accordingly, the respective obligations of the Contractor and the County under this Agreement, which by nature would continue beyond the termination, cancellation or expiration thereof, shall survive termination, cancellation or expiration hereof.

ARTICLE 48. ANNUAL APPROPRIATION

The County's performance and obligation to pay under this Agreement is contingent upon an annual appropriation by the Board of County Commissioners. Cancellation will not cause any penalty or expense to the County, except as to the portions of payments agreed upon and for which funds have been appropriated and budgeted. Service/Maintenance can be cancelled at any time that the Contractor is notified in writing, at least thirty (30) days prior to cancellation. There will be no early termination charges from the Contractor for canceling service/maintenance during the year.

ARTICLE 49. FORCE MAJEURE

Except as otherwise expressly provided herein, neither party hereto shall be considered in default in the performance of its obligations hereunder to the extent that such performance is prevented or delayed by any cause, existing or future, which is not within the reasonable control of such party including, but not limited to, acts of God or the public enemy, fires, explosions, riots, strikes (not including strikes of the Contractor's staff personnel), terrorism or war. Notwithstanding the foregoing, the failures of any of the Contractor's suppliers, subcontractors, or the like shall not excuse the Contractor's performance except to the extent that such failures are due to any cause without the fault and reasonable control of such suppliers, subcontractors, or the like including, but not limited to, acts of God or the public enemy, fires, explosions, riots, strikes (not including strikes of the Contractor's staff personnel), terrorism or war.

ARTICLE 50. LIQUIDATED DAMAGES

The County and Contractor hereby agree that the delivery of completion of project milestones as outlined in Appendix A, "Scope of Services" are the essence of this Contract. Should the completion date described in Appendix C, "Implementation Timeline," not be achieved by the time specified (or as subsequently modified by mutual agreement of the parties), there may be deducted at the County's election, not as a penalty but as liquidated damages of Thirty-Five Thousand Dollars (\$35,000.00) per day for each and every calendar day of delay beyond the duration outlined in Appendix C.

Except with respect to defaults of Contractor's Subcontractors, the Contractor shall not be liable for liquidated damages when delays arise out of causes beyond the control and without the default or negligence of the Contractor, including delays resulting from the action or inaction of the County.

ARTICLE 51. TECHNICAL SUPPORT PERFORMANCE MEASURES

The County has established performance metrics in regards to the technical support and maintenance services to be provided under this Agreement. Should the Contractor not meet the required response or resolution timeframes for the reported issues, the County reserves the option of assessing penalties for failure of the Contractor to meet the response and resolution times required.

Performance measure penalties will be applied at the following rates:

	<u>Hourly Charge</u>
Response Time	\$200
Resolution Time	\$200

The County will advise the Contractor in writing of its intent to assess performance measure penalties within 5 days of becoming aware of occurrence of any delay. The time frame for measurement of response time and the resolution time shall begin at the exact time the problem was reported to the Contractor. The time frame for the repair shall begin as soon as the Contractor arrives at the site or begins work on the problem. Partial hours may be treated as whole hours at the discretion of County, and performance penalty amounts may be withheld from payments.

ARTICLE 52. PERFORMANCE AND PAYMENT BOND

The Contractor shall duly execute and deliver to the County a Performance and Payment Bond in an amount that represents 100% of the initial implementation cost of the System at Runway 8R-26L. Performance and Payment Bonds for future expansion shall be determined at the time of commencement. The Performance and Payment Bond Form supplied by the County shall be the only acceptable form for these bonds. No other form will be accepted. The completed form shall be delivered to the County within 15 calendar days after formal notice of award. If the Contractor fails to deliver the payment and performance bond within this specified time, including granted extensions, the County shall declare the Contractor in default of the contractual terms and conditions, and the County shall not accept any offer/bid/proposal from the Contractor for a twelve (12) month period following such default.

The following specifications shall apply to any bond provided:

- A. All bonds shall be written through surety insurers authorized to do business in the State of Florida as surety, with the following qualifications as to management and financial strength according to the latest edition of Best's Insurance Guide, published by A.M. Best Company, Oldwick, New Jersey:

<u>Bond Amount</u>	<u>Best Rating</u>
500,001 to 1,500,000	B V
1,500,001 to 2,500,000	A VI
2,500,001 to 5,000,000	A VII
5,000,001 to 10,000,000	A VIII
Over 10,000,000	A IX

No separate payment for the cost of the Performance and Payment Bonds shall be made by the County. The required Bonds shall be written by or through and shall be countersigned by, a licensed Florida agent of the surety insurer, pursuant to Section 624.425 of the Florida Statutes.

In the event the Surety on the Performance and Payment Bonds given by the Contractor becomes insolvent, or is placed in the hands of a receiver, or has its right to do business in its State of domicile or the State of Florida suspended or revoked as provided by law, the County shall withhold all payments under the provisions of these Contract Documents until the Contractor has given good and sufficient Bond(s) in lieu of Bond(s) executed by such Surety.

Cancellation of any Bond, or non-payment by the Contractor of any premium for any Bond required by this Contract shall constitute a breach of this Contract. In addition to any other legal remedies, the County at its sole option may terminate this Contract or pay such premiums, and deduct the costs thereof from any amounts that are or may be due to the Contractor.

ARTICLE 53. SOFTWARE ESCROW

The County requires that the Contractor maintain a software escrow account throughout the life of the Agreement to protect against failure of the Contractor to provide the agreed upon services. A copy of the Contractor's licensed software source code, and Contractor enhancements or modifications or customization or Developed Works of source code is to be kept by a trusted third party to ensure that the County will have access to the source code in the event that the Contractor is unable to support the software. The Contractor is required to maintain the most current version of the application with the escrow agent including, but not limited to all incremental releases and upgrades as well as any software customization or Developed Works created for the County. The terms and conditions associated with such software escrow services are outlined in Appendix E, "Escrow Agreement."

Solely in the event of a release event as defined under the Escrow Agreement, the Contractor grants to County, a non-exclusive, perpetual, paid in full license, to install, use, copy, publicly perform and digitally perform, modify and create derivative works, for the sole purpose of continuing the benefits afforded to the County under this Agreement, including the development of patches and upgrades solely for County's internal use. County shall have a right to modify and customize the Software, or to have the Software modified and customized by third-parties.

ARTICLE 54. INTERFERENCE WITH EXISTING UTILITIES, CONTROLS, FAA NAVAIDS, AND NOAA (WEATHER BUREAU) FACILITIES

- a) Attention of the Contractor is specifically directed to the need for careful control of all aspects of his work to prevent damage to cables, ducts, water mains, sewers, fire mains, telephone cables, fuel lines, radar cables, and any other underground utilities and structures.
- b) Before commencing work in any given area, the Contractor shall carefully review the Plans, survey and search the site for utility locations, and determine possible utility conflicts. All known above and underground utilities, including, but not limited to, electrical, telephone, communications, lighting cables, fuel lines, sewer, drainage and water pipes, and other existing structures, etc., are shown on the Plans, but no guarantee is implied that the information is accurate. It shall be the responsibility of the Contractor to verify the location of all such utilities, structures, etc., using magnetic and electronic detectors and by hand excavation or other appropriate measures before performing any work that could result in damage to such utilities or structures. The Contractor shall, in conjunction with the Project Manager, make a thorough search of the particular location for underground utilities, structures, etc., whether or not shown on the drawings, before excavation work is commenced in any particular location. To this end the Contractor shall provide and maintain throughout the term of the Contract, electronic and magnetic detecting devices capable of locating underground utilities, etc. The Contractor shall, after locating primary and critical existing utilities, mark their location with indelible material or other means satisfactory to the Project Manager and maintain above ground physical identification during the work.
- c) In the event of damage to, or accidental disruption of utilities or other facilities as a result of the Contractor's operations, the Contractor shall take immediate steps to repair or replace all damage and to restore all services. Further, the Contractor shall engage any additional outside services which may be necessary to prosecute repairs on a continuous "around the clock" basis until services are restored. The Contractor shall also provide and operate any supplemental temporary services to maintain uninterrupted use of the facilities. All costs involved in making repairs and restoring disrupted service resulting from the Contractor's work shall be borne by the Contractor and the Contractor shall be fully responsible for any and all claims resulting from the damage.
- f) The Contractor is hereby informed that there are installed on the Airport, and within the site, FAA NAVAIDS, including without limitations, FAA NAVAIDS such as ASR, IHF, and VHF receivers and transmitters, U.S. Weather Bureau Facilities, and electronic cables and controls relating to such NAVAIDS and facilities. Such NAVAIDS, Weather Bureau, and other facilities and electric cables are vital to the operation of the Airport and must be fully protected during the entire project. Work under this Contract can be accomplished in the vicinity of these facilities and cables only at approved periods of time. Approval is subject to withdrawal at any time because of changes in the weather, emergency conditions, and for any other reason determined by the Project Manager. Any instructions to the Contractor to clear any given area, at any time, given by the Project Manager or by any authority designated by the Project Manager such as the Federal Aviation Administration by any means including radio, shall be immediately executed. Construction work will resume in the cleared area only when such instructions are issued by the Project Manager.
- g) Power and control cables leading to and from any FAA NAVAIDS, Weather Bureau, or other facilities will be protected from any possible damage from the elements or due to any crossing of these facilities by equipment.
- h) The Contractor is hereby notified that he shall be required to immediately repair, at his own expense, with identical material by skilled workers, any underground cables serving FAA NAVAIDS, Weather Bureau and other existing FAA facilities which are damaged by his workers, equipment or work, and that prior approval of the FAA must be obtained for materials, workers, time of day or night, method of repairs, and for any temporary or permanent repairs the Contractor proposes to make to any FAA NAVAIDS and facilities damaged by the Contractor.
- i) Damaged FAA cables (controls, NAVAIDS and NOAA) shall be repaired in accordance with the requirements of FAA-SO-STD-71 Specifications "Installation and Splicing of Underground Cables". Prior approval of the Project Manager must be obtained for the materials, workers, time of day or night, and for the method of repairs for any temporary or permanent repairs the Contractor proposes to make to any Airport facilities, cables, or existing utilities damaged by the Contractor. The FAA Airways Facilities Sector Field Office (AFSFO) Manager shall have the discretion of determining who shall perform repairs of damaged cables.
- j) NAVAIDS shall be removed from service when construction activities occur within any NAVAIDS critical area, when the runways are closed or when the runway threshold is displaced. If a NAVAID must be removed from service for more than eight hours or for any period of time for three consecutive days, a minimum of fifty (50) day advance notice is required for coordinating the extended facility shutdown with the FAA. Facility shutdown coordination shall be initiated by the Contractor with the Project Manager; the County and the Project Manager will coordinate the facility shutdown with the FAA AFSFO Manager responsible for this facility.

ARTICLE 55. EXISTING UTILITIES AND STRUCTURES

- a) The Contractor shall not disrupt or disconnect any type of utility whatsoever without first obtaining the written permission of the Project Manager. If a suitable bypass of such utility cannot be provided, then the Project Manager may direct the Contractor to proceed with the

work on a twenty-four (24) hour per day basis until such interrupted utility services are completely restored. Requests for disconnection shall be submitted on a fully completed copy of the MDAD "Shut Down Form" delivered to the County, through the Project Manager for processing and approval at least five (5) working days prior to the time of the requested interruption, and shall state:

- A. The identity of the utility involved.
 - B. Justification of the requested disconnect.
 - C. The location of the requested disconnect.
 - D. The exact date and time at which the disconnect is requested.
 - E. The duration of the proposed disconnect.
- b) The Contractor shall take all necessary precautions when using steel treaded equipment or vehicles to protect the pavement surface from damage. Rubber tires or treads shall be used whenever possible. Any damage to pavement caused by Contractor's or Subcontractor's equipment or vehicles shall be repaired by the Contractor in a manner acceptable to the Project Manager, at no additional cost to the County.
- c) The Contractor shall provide protective shoring and sheet piling, as required, at all existing structures, etc., where they may be affected by installation of new work.
- d) During the construction of new structures, and other foundation work, conflicts may occur with existing underground utilities or structures. The Contractor shall call these conflicts to the attention of the Project Manager, in writing, immediately. The Project Manager will issue instructions regarding a solution to the conflict. The Contractor shall be responsible for all methods, means, materials, and processes necessary to protect all existing facilities, property, structures, equipment or finishes damaged in any manner through its negligence during execution of the work.
- e) In the event of damage to existing facilities or structures, proposed to remain, relocated or otherwise reused by the County as a result of the Contractor's operations, the Contractor shall take immediate steps to repair or replace all damage and to restore all services at its sole expense. Further, the Contractor shall, when directed by the Project Manager, engage any additional outside services which may be necessary to prosecute repairs on a continuous "around the clock" basis until facilities or structures are restored. The Contractor shall be solely and directly responsible to the owners and operators of such utilities for any damage, injury, expense, loss, inconvenience, or delay, caused by the Contractor's operations. All costs involved in making repairs and restoring disrupted service resulting from the Contractor's work shall be borne by the Contractor and the Contractor shall be fully responsible for any and all claims resulting from the damage.

ARTICLE 56. AIRFIELD OPERATIONS AREA (AOA) SECURITY

- a) Contractor acknowledges and accepts full responsibility for compliance with all applicable laws, rules and regulations including those of the Transportation Security Administration (TSA), Department of Homeland Security (DHS), Federal Aviation Administration (FAA), Customs and Border Protection (CBP) and MDAD as set forth from time to time relating to Contractor's activities at the Miami International Airport (MIA).
- b) In order to maintain high levels of security at MIA, Contractor must obtain MDAD photo identification badges for all Contractor employees working in the Secured/AOA/Security Identification Display Area (SIDA)/Sterile Areas or any other restricted areas of the Airport. MDAD issues two types of identification badges: photo identification badges and non-photo passes. All employees, except temporary workers (working less than two weeks), will be required to obtain photo identification badges and will be subject to Federal Bureau of Investigation (FBI) fingerprint-based Criminal History Records Check (CHRC). Temporary workers (working less than two weeks) will be issued non-photo passes. At no time will an employee bearing a non-photo identification badge be authorized in a secured MIA location without being escorted by an MDAD authorized Escort Authority that has been issued a badge with an escort seal by the MDAD ID Section. No other individuals are allowed to escort under any circumstances.
- c) The Contractor shall be responsible for requesting MDAD to issue identification badges to all employees who Contractor requests be authorized access to the Secured/AOA/SIDA/Sterile Areas or any other restricted areas of the Airport and shall be further responsible for the immediate reporting of all lost or stolen ID badges and the immediate return of the ID badges of all personnel transferred from Airport assignment or terminated from the employ of the Contractor or upon final acceptance of the Work or termination of this Contract. Contractor will be responsible for fees associated with lost and unaccounted for badges or passes as well as the fee(s) for fingerprinting and ID issuance.
- d) All employees of the Contractor, Subcontractors, or trade contractors who must work within MDAD Secured/AOA/SIDA/Sterile Areas or any other restricted areas at Miami International Airport shall be supplied with MDAD identification badges as specified above, which must be worn at all times while within the referenced areas. Badges shall be worn on outer garments above the waist so as to be clearly visible in order to distinguish, on sight, employees assigned to a particular contractor. MDAD issues the non-photo passes on a daily basis, not to exceed two weeks. In order to obtain a non-photo pass the Contractor must submit a 48 Hour Advance Notification form

with required information to the MDAD Security Division, ID Section for all temporary workers requiring access to the MDAD Secured/AOA/SIDA/Sterile Areas or other restricted areas of the airport. Non-photo passes will not be issued to temporary workers who have failed a criminal history records check, are in possession of an expired work permit and/or have an expired MDAD ID badge. Each employee must complete the SIDA training program conducted by MDAD and comply with all other TSA, DHS, CBP, FAA or MDAD requirements as specified by the MDAD at the time of application for the ID badge before an ID badge is issued. MDAD Security and Safety ID Section regularly provides SIDA Training.

- e) Contractor Ramp Permits will be issued to the Contractor authorizing vehicle entrance to the Airfield Operations Area (AOA) through specified Miami-Dade Aviation Department guard gates for the term of any Project. These permits will be issued only for those vehicles (including vehicles belonging to the Subcontractor) that must have access to the site during the performance of the Work. These permits will be only issued to company owned vehicles or to company leased vehicles (leased from a commercial leasing company). AOA decals, passes, or permits to operate within the Secured/AOA/SIDA will not be issued to privately owned or privately leased vehicles. All vehicles operating within the Secured/AOA/SIDA must have conspicuous company identification signs (minimum of three (3) inch lettering) displayed on both sides of the vehicle.

All vehicles operating within the Secured/AOA/SIDA must be provided with the Automobile Liability Insurance required elsewhere in these General Conditions. Proof of such insurance shall be provided to MDAD Airside Operations Division upon request.

- f) Vehicles delivering materials to the site will be given temporary passes at the appropriate guard gate. Such vehicles shall not be permitted to operate within the Secured/AOA/SIDA without MDAD escort to be provided by MDAD's Operations Division. To obtain an escort, the Contractor shall notify MDAD Airside Operations Division in writing twenty-four (24) hours in advance of such need. These passes shall be surrendered upon leaving the Secured/AOA/SIDA. All vehicles shall be marked with company name to ensure positive identification at all times while in the Secured/AOASIDA.
- g) Only Contractor management level staff, supervisors and foremen with pictured MDAD I.D. badges shall be allowed to operate a motor vehicle on the Secured/AOA/SIDA without MDAD escort except when operating a vehicle that requires a specialized license to operate (CDL). Such vehicles must be under MDAD Airside Operations escort when moving on the AOA unless said vehicle is operating in an approved Maintenance of Traffic (MOT). The Contractor shall require such employee to have a current, valid, appropriate Florida driver's license and to attend and successfully complete the AOA Driver Training Course conducted periodically by the Department. The privilege of a person to operate a motor vehicle on the Secured/AOA/SIDA may be withdrawn by the Department because of violation of AOA driving rules or loss of Florida driver's license.
- h) The Contractor agrees that its personnel, vehicles, cargo, goods, and other personal property are subject to being searched when attempting to enter, leave or while on the Secured/AOA/SIDA/Sterile Areas or other restricted areas of the airport. It is further agreed that the MDAD has the right to prohibit an individual, agent, or employee of the Contractor or Subcontractor from entering the Secured/AOA/SIDA/Sterile Areas or other restricted areas, based upon facts which would lead a person of reasonable prudence to believe that such individual might be inclined to engage in theft, cargo tampering, aircraft sabotage, or other unlawful activities, including repeated failure to comply with TSA, DHS,, FAA, CBP and MDAD SIDA/access control policies, rules and regulations. Any person denied access to the Secured/AOA/SIDA/Sterile areas or other restricted areas of the airport or whose prior authorization has been revoked or suspended on such grounds shall be entitled to a review hearing before the Director or his/her authorized designee within a reasonable time. Prior to such hearing, the person denied access to the Secured/AOA/SIDA/Sterile Areas or other restricted areas of the airport shall be advised, in writing, of the reasons for such denial.

The Contractor acknowledges and understands that these provisions are for the protection of all users of the Secured/AOA/SIDA/Sterile Areas and are intended to reduce the incidence of terrorism, thefts, cargo tampering, aircraft sabotage, and other unlawful activities at the Airport and to maximize compliance with TSA, DHS, CBP, FAA, and MDAD access control policies and procedures.

- i) The Contractor understands and agrees that vehicle and equipment shall not be parked/stored on the Secured/AOA/SIDA in areas not designated or authorized by MDAD nor in any manner contrary to any posted regulatory signs, traffic control devices, or pavement markings.
- j) The Contractor understands and agrees that all persons entering and working in or around arriving international aircraft and facilities used by the various Federal Inspection Services agencies may be subject to the consent and approval of such agencies. Persons not approved or consented to by the Federal Inspection Services agencies shall not be employed by the Contractor in areas under the jurisdiction or control of such agencies. Persons not approved or consented to by the Federal Inspection Services agencies who enter such areas are subject to fines, which shall be borne entirely by the persons and/or the Contractor.
- k) Prior to Substantial Completion or Beneficial Occupancy of any facility that will permit access to the Secured/AOA/SIDA/Sterile Areas via doors or gates, the Contractor shall either (a) keep all such doors and/or gates locked at all times or (b) position a security guard or designated employee to monitor any door and/or gate that must remain open. Keys to such doors and gates shall be limited and issued

only to company employees with a current MDAD picture ID. Door/gate keys shall be numbered and stamped "Do Not Duplicate." The Contractor shall keep a log of all keys issued and to whom. The log is subject to audit by the County. Employees must have their assigned key in their possession at the time of audit. Failure to comply with these requirements can result in monetary fines, loss of access to the Secured/AOA/SIDA/Sterile Areas, and/or termination of this Contract.

- l) Notwithstanding the specific provisions of this Article, the County shall have the right to add to, amend, or delete any portion hereof in order to meet reasonable security requirements of MDAD or of the TSA/DHS/CBP/FAA.
- m) The Contractor shall ensure that all employees so required participate in such safety, security, and other training and instructional programs, as MDAD or appropriate Federal agencies may from time to time require.
- n) Contractor agrees that it will include in all contracts and subcontracts with its MIA Subcontractors, service providers, and suppliers an obligation by such parties to comply with all security requirements applicable to their operations at the Airport. Contractor agrees that in addition to all remedies, penalties, and sanctions that may be imposed by TSA, DHS, CBP, FAA or the MDAD upon Contractor's Subcontractors, suppliers, and their individual employees for a violation of applicable security provisions, Contractor shall be responsible to the County for all such violations and shall indemnify and hold the County harmless for all costs, fines and penalties arising therefrom, such costs to include reasonable attorneys' fees.
- o) In addition to the foregoing, the Contractor shall be required to comply with the U.S. Customs and Border Protection (CBP) requirements for obtaining CBP seals for those Contractor employees that will be involved within the CBP/FIS environment at MIA. The Vendor shall be responsible for all related fees for required bonding, fingerprinting and background investigations of Contractor personnel.
- p) The employee(s) of the Contractor shall be considered to be at all times its employee(s), and not an employee(s) or agent(s) of the County or any of its departments. The Contractor shall provide employee(s) competent and physically capable of performing the Work as required. The County may require the Contractor to remove any employee it deems unacceptable.

ARTICLE 57. MAINTENANCE OF AIRPORT OPERATIONS

- a) The Contractor shall control its operations and the operations of its Subcontractors and suppliers so as not to compromise the airport's security, interfere with airport operations or with aircraft, vehicular or pedestrian traffic, except as may be provided for in the Contract Documents.
- b) The Contract is explicitly intended to provide for the maximum degree of safety to aircraft, the general public, airport personnel, equipment and associated facilities, and to the Contractor's personnel and equipment and suppliers, etc., but shall also provide for the minimum interference to the free and unobstructed movement of vehicles and/or personnel engaged in the day to day operation of the Airport and the general public. To this end the Contractor, its Subcontractors and suppliers shall observe all Airport rules and regulations, all other operational limitations which may be imposed from time to time by the MDAD, and shall provide whatever markings, lighting and/or various types of barricades, or other measures which are required to properly identify Contractor personnel, equipment, vehicles, storage areas and any Contractor's work areas or conditions which may be hazardous to the uninterrupted operation of aircraft, airport equipment, including but not limited to maintenance vehicles and fire rescue vehicles, other vehicles, or personnel or vehicles from any source operating on the Airport. In order to provide the maximum degree of safety on airports during construction, the Contractor shall comply with the provisions of FAA Advisory Circular AC 150/5370-2.
- c) The Contractor shall protect, and shall not interfere with, the operation of visual and electronic signals (including power supplies thereto) used in the guidance of aircraft while operating to, from, and within the AOA.
- d) When the Work requires the Contractor to work within the AOA, the Contractor shall coordinate its work with MDAD (through the Project Manager) at least 48 hours prior to the commencement of such work. The Contractor shall not close an AOA until so authorized by the Project Manager and until all necessary temporary markings and associated lighting are in place, as specified hereinafter.
- e) When the Work requires the Contractor to work within the AOA on an intermittent basis (intermittent opening and closing of the AOA), the Contractor shall maintain constant communications with the Project Manager and MDAD; obey all instructions to vacate the AOA; obey all instructions to resume work in such AOA. Failure to maintain the specified communications or to obey instructions shall be cause for suspension of the Contractor's operations within the AOA until the satisfactory conditions are provided.
- f) When the Contract requires the maintenance of vehicular traffic on an existing road, street, or highway during the Contractor's performance of work, the Contractor shall keep such road, street, or highway open to all traffic and shall provide such maintenance of traffic as may be required to accommodate traffic. The Contractor shall furnish, erect, and maintain barricades, warning signs, flaggers, and other traffic control devices (to protect the public and the work) in reasonable conformity with the Manual of Uniform Traffic Control

Devices for Streets and Highways (MUTCD) published by the Florida Department of Transportation. When used during periods of darkness, such barricades, warning signs, and hazard markings shall be suitably illuminated.

- g) When the work requires closing an air operations area of the airport or portion of such area, the Contractor shall furnish, erect, and maintain temporary markings and associated lighting conforming to the requirements of AC 150/5340-1, Standards for Airport Markings.
- h) The Contractor shall furnish, erect, and maintain markings and associated lighting of open trenches, excavations, temporary stockpiles, and its parked construction equipment that may be hazardous to the operation of emergency fire-rescue or maintenance vehicles on the airport in reasonable conformance to AC 150/5370-2, Operational Safety on Airports During Construction, current edition.
- i) The Contractor shall identify each motorized vehicle or piece of construction equipment in reasonable conformance to AC 150/5370-2, current edition.
- j) The Contractor shall furnish and erect all barricades, warnings signs, and markings for hazards prior to commencing work which requires such erection and shall maintain the barricades, warning signs, and markings for hazards until their dismantling is directed by the Project Manager, all as specified in Division 1 of the Project Manual.
- k) Open-flame type lights are not permitted.
- l) If the Contractor fails to maintain the markings, lighting and barricades as required above, the County shall cause such safety measures to be installed by others. The cost for such service by others in this regard shall be borne by the Contractor.
- m) The Contractor's responsibility for Maintenance of Traffic shall begin on the day the Contractor starts work on the project, or on the effective date of the Notice to Proceed, whichever comes first.

ARTICLE 57. DISADVANTAGED BUSINESS ENTERPRISE (DBE) COMPLIANCE

The County, in its sole discretion, may conduct post-award compliance reviews to ensure compliance with the DBE provisions of RFP No. 872. This may include verification that the named DBEs, submitted to and accepted by the County, perform work as assigned, and at least at the agreed price. Such reviews will be completed in accordance with Exhibits 1, 2, and 3 attached hereto.

ARTICLE 58. FEDERAL AVIATION ADMINISTRATION GRANT CONTRACTING REQUIREMENTS

This contract is partially funded by a U.S. Department of Transportation, Federal Aviation Administration Airport Improvement Program Grant requiring compliance by Contractor to specific terms and conditions as incorporated as Attachment No. 1 to the Agreement.

ARTICLE 59. PUBLIC RECORDS AND CONTRACTS FOR SERVICES PERFORMED ON BEHALF OF A PUBLIC AGENCY

The Contractor shall comply with the state of FL Public Records Law, s. 119.0701, F.S., specifically to: (1) keep and maintain public records that ordinarily and necessarily would be required by the public agency in order to perform the service; (2) provide the public with access to public records on the same terms and conditions that the public agency would provide the records and at a cost that does not exceed the cost provided in Chapter 119, F.S., or as otherwise provided by law; (3) ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law; and (4) meet all requirements for retaining public records and transfer, at no cost, to the public agency all public records in possession of the Contractor upon termination of the contract and destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. All records stored electronically must be provided to the public agency in a format that is compatible with the information technology systems of the public agency. If the Contractor does not comply with a public records request, the public agency shall enforce contract provisions in accordance with the contract.

IN WITNESS WHEREOF, the parties have executed this Agreement effective as of the contract date herein set forth below.

Contractor

By: *Nicolette Hendricks*
Name: NICOLETTE HENDRICKS

Title: PRESIDENT

Date: 5/19/15

Attest: *Riffat Bilal Khawaja*
Corporate Secretary/Notary Public

RIFFAT BILAL KHAWAJA
NOTARY PUBLIC 328371
COMMONWEALTH OF VIRGINIA
CORPORATE
COMMISSION EXPIRES JUNE 30, 2018

Miami-Dade County

By: *Carlos A. Gimenez*
Name: Carlos A. Gimenez

Title: Mayor

Date: 6/22/15

Attest: *[Signature]*
Clerk of the Board



Approved as to form
and legal sufficiency

[Signature]

ATTACHMENT NO. 1 - FEDERAL AVIATION ADMINISTRATION GRANT CONTRACTING REQUIREMENTS**1. CIVIL RIGHTS ACT OF 1964, TITLE VI – CONTRACTOR CONTRACTUAL REQUIREMENTS**

During the performance of this contract, the contractor, for itself, its assignees and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

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

1.2 Nondiscrimination. The contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor shall not participate either directly or indirectly in the discrimination prohibited by section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.

1.3 Solicitations for Subcontracts, Including Procurements of Materials and Equipment. In all solicitations either by competitive bidding or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the contractor of the contractor's obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin.

1.4 Information and Reports. The contractor shall provide all information and reports required by the Regulations or directives issued pursuant thereto and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the County or the Federal Aviation Administration (FAA) to be pertinent to ascertain compliance with such Regulations, orders, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish this information, the contractor shall so certify to the County or the FAA, as appropriate, and shall set forth what efforts it has made to obtain the information.

1.5 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:

- a. Withholding of payments to the contractor under the contract until the contractor complies, and/or
- b. Cancellation, termination, or suspension of the contract, in whole or in part.

1.6 Incorporation of Provisions. The contractor shall include the provisions of paragraphs 1 through 5 in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations or directives issued pursuant thereto. The contractor shall take such action with respect to any subcontract or procurement as the County or the FAA may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the contractor may request the 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.

2. AIRPORT AND AIRWAY IMPROVEMENT ACT OF 1982, SECTION 520 - GENERAL CIVIL RIGHTS PROVISIONS

The contractor assures that it will comply with pertinent statutes, Executive orders and such rules as are promulgated to assure that no person shall, on the grounds of race, creed, color, national origin, sex, age, or handicap be excluded from participating in any activity conducted with or benefiting from Federal assistance. This provision obligates the tenant/concessionaire/lessee or its transferee for the period during which Federal assistance is extended to the airport a program, except where Federal assistance is to provide, or is in the form of personal property or real property or interest therein or structures or improvements thereon. In these cases the provision obligates the party or any transferee for the longer of the following periods: (a) the period during which the property is used by the airport County 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 County or any transferee retains ownership or possession of the property. In the case of contractors, this provision binds the contractors from the bid solicitation period through the completion of the contract. This provision is in addition to that required of Title VI of the Civil Rights Act of 1964.

3. LOBBYING AND INFLUENCING FEDERAL EMPLOYEES

(1) No Federal appropriated funds shall be paid, by or on behalf of the contractor, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the making of any Federal grant and the amendment or modification of any Federal grant.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any Federal grant, the contractor shall complete and submit Standard Form-LLL, "Disclosure of Lobby Activities," in accordance with its instructions.

4. ACCESS TO RECORDS AND REPORTS

The Contractor shall maintain an acceptable cost accounting system. The Contractor agrees to provide the County, the Federal Aviation Administration and the Comptroller General of the United States or any of their duly authorized representatives access to any books, documents, papers, and records of the contractor which are directly pertinent to the specific contract for the purpose of making audit, examination, excerpts and transcriptions. The Contractor agrees to maintain all books, records and reports required under this contract for a period of not less than three years after final payment is made and all pending matters are closed.

5. DISADVANTAGED BUSINESS ENTERPRISES

Contract Assurance (§26.13) - The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy, as the recipient deems appropriate.

Prompt Payment (§26.29) - The prime contractor agrees to pay each subcontractor under this prime contract for satisfactory performance of its contract no later than **15** days from the receipt of each payment the prime contractor receives from the County. The prime contractor agrees further to return retainage payments to each subcontractor within [specify the same number as above] days after the subcontractor's work is satisfactorily completed. Any delay or postponement of payment from the above referenced time frame may occur only for good cause following written approval of the County. This clause applies to both DBE and non-DBE subcontractors.

6. ENERGY CONSERVATION REQUIREMENTS

The contractor agrees to comply with mandatory standards and policies relating to energy efficiency that are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Public Law 94-163)

7. RIGHTS TO INVENTIONS

All rights to inventions and materials generated under this contract are subject to regulations issued by the FAA and the County of the Federal grant under which this contract is executed.

8. TRADE RESTRICTION CLAUSE

The contractor or subcontractor, by submission of an offer and/or execution of a contract, certifies that it:

- a. is not owned or controlled by one or more citizens of a foreign country included in the list of countries that discriminate against U.S. firms published by the Office of the United States Trade Representative (USTR);
- b. has not knowingly entered into any contract or subcontract for this project with a person that is a citizen or national of a foreign country on said list, or is owned or controlled directly or indirectly by one or more citizens or nationals of a foreign country on said list;
- c. has not procured any product nor subcontracted for the supply of any product for use on the project that is produced in a foreign country on said list.

Unless the restrictions of this clause are waived by the Secretary of Transportation in accordance with 49 CFR 30.17, no contract shall be awarded to a contractor or subcontractor who is unable to certify to the above. If the contractor knowingly procures or subcontracts for the supply of any

product or service of a foreign country on said list for use on the project, the Federal Aviation Administration may direct through the County cancellation of the contract at no cost to the Government.

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

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

This certification is a material representation of fact upon which reliance was placed when making the award. If it is later determined that the contractor or subcontractor knowingly rendered an erroneous certification, the Federal Aviation Administration may direct through the 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 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.

9. VETERAN'S PREFERENCE

Veteran's Preference shall be included in all contracts for work on any project funded under this grant agreement which involves labor. Such provisions are necessary to insure that, in the employment of labor (except in executive, administrative, and supervisory positions), preference shall be given to Vietnam era veterans, Persian Gulf veterans, Afghanistan-Iraq war veterans, disabled veterans, and small business concerns owned and controlled by disabled veterans as defined in Title 49 United States Code, Section 47112. However, this preference shall apply only where the individuals are available and qualified to perform the work to which the employment relates.

10. DAVIS BACON REQUIREMENTS

1. Minimum Wages

(i) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by the Secretary of Labor under the Copeland Act (29 CFR Part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalent thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR Part 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided*, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under (1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can easily be seen by the workers.

(ii)(A) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

- (1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
- (2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(B) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(C) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(ii) (B) or (C) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, *Provided*, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2 Withholding.

The Federal Aviation Administration or the County shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of work, all or part of the wages required by the contract, the Federal Aviation Administration may, after written notice to the contractor, County, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records.

(i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual costs incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(ii)(A) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the (write in name of appropriate federal agency) if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant, sponsor, or owner, as the case may be, for transmission to the (write in name of agency). The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the (write in name of appropriate federal agency) if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit them to the applicant, sponsor, or owner, as the case may be, for transmission to the (write in name of agency), the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the sponsoring government agency (or the applicant, sponsor, or owner).

(B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be provided under § 5.5(a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under § 5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(2) That each laborer and mechanic (including each helper, apprentice and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations 29 CFR Part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (3)(ii)(B) of this section.

(D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under paragraph (3)(i) of this section available for inspection, copying or transcription by authorized representatives of the County, the Federal Aviation Administration or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the Federal agency may, after written notice to the contractor, sponsor, applicant or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and Trainees.

(i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the

applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal Employment Opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

5. Compliance With Copeland Act Requirements.

The contractor shall comply with the requirements of 29 CFR Part 3, which are incorporated by reference in this contract.

6. Subcontracts.

The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR Part 5.5(a)(1) through (10) and such other clauses as the Federal Aviation Administration may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR Part 5.5.

7. Contract Termination: Debarment.

A breach of the contract clauses in paragraph 1 through 10 of this section may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance With Davis-Bacon and Related Act Requirements.

All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes Concerning Labor Standards.

Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6 and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of Eligibility.

- (i) By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- (ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- (iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

11. EQUAL EMPLOYMENT OPPORTUNITY - 41 CFR PART 60-1.4(b)

During the performance of this contract, the Contractor agrees as follows:

1. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
2. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, or national origin.
3. The Contractor will send to each labor union or representative of workers with which s/he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
4. The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, as amended, and of the rules, regulations, and relevant orders of the Secretary of Labor.
5. The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
6. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedure authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
7. The Contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provision, including sanctions for noncompliance: *Provided, however*, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency the contractor may request the United States to enter into such litigation to protect the interests of the United States.

12. CERTIFICATION OF NONSEGREGATED FACILITIES - 41 CFR PART 60-1.8

Notice to Prospective Federally Assisted Construction Contractors

1. A Certification of Non-segregated Facilities shall be submitted prior to the award of a federally-assisted construction contract exceeding \$10,000 which is not exempt from the provisions of the Equal Opportunity Clause.
2. Contractors receiving federally-assisted construction contract awards exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity Clause will be required to provide for the forwarding of the following notice to prospective subcontractors for supplies and construction contracts where the subcontracts exceed \$10,000 and are not exempt from the provisions of the Equal Opportunity Clause.
NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

Notice to Prospective Subcontractors of Requirements for Certification of Non-Segregated Facilities

1. A Certification of Non-segregated Facilities shall be submitted prior to the award of a subcontract exceeding \$10,000, which is not exempt from the provisions of the Equal Opportunity Clause.
2. Contractors receiving subcontract awards exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity Clause will be required to provide for the forwarding of this notice to prospective subcontractors for supplies and construction contracts where the subcontracts exceed \$10,000 and are not exempt from the provisions of the Equal Opportunity Clause. NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

CERTIFICATION OF NONSEGREGATED FACILITIES

The federally-assisted construction contractor certifies that she or he does not maintain or provide, for his employees, any segregated facilities at any of his establishments and that she or he does not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. The federally-assisted construction contractor certifies that she or he will not maintain or provide, for his employees, segregated facilities at any of his establishments and that she or he will not permit his employees to perform their services at any location under his control where segregated facilities are maintained. The federally-assisted construction contractor agrees that a breach of this certification is a violation of the Equal Opportunity Clause in this contract.

As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms, and washrooms, restaurants and other eating areas, timeclocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directives or are, in fact, segregated on the basis of race, color, religion, or national origin because of habit, local custom, or any other reason. The federally-assisted construction contractor agrees that (except where she or he has obtained identical certifications from proposed subcontractors for specific time periods) she or he will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity Clause and that she or he will retain such certifications in his files.

13. NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION - 41 CFR PART 60-2

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Timetables

Goals for minority participation for each trade	(Vol. 45 Federal Register pg. 65984 10/3/80)
Goals for female participation in each trade	(6.9%)

These goals are applicable to all the contractor's construction work (whether or not it is Federal or federally-assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its Federally involved and non-federally involved construction.

The contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training shall be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from contractor to contractor or from project to project, for the sole purpose of meeting the contractor's goals, shall be a violation of the contract, the Executive Order, and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The contractor shall provide written notification to the Director, OFCCP, within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address, and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of subcontract; and the geographical area in which the subcontract is to be performed.

4. As used in this notice and in the contract resulting from this solicitation, the "covered area" is [insert description of the geographical areas where the contract is to be performed giving the state, county, and city, if any].

14. STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS - 41 CFR Part 60.4.3

1. As used in these specifications:

- a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
- b. "Director" means Director, Office of Federal Contract Compliance Programs (OFCCP), U.S. Department of Labor, or any person to whom the Director delegates authority;
- c. "Employer identification number" means the Federal social security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941;
- d. "Minority" includes:
 - (1) Black (all) persons having origins in any of the Black African racial groups not of Hispanic origin);
 - (2) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin regardless of race);
 - (3) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
 - (4) American Indian or Alaskan native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

2. Whenever the contractor, or any subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.

3. If the contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors shall be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each contractor or subcontractor participating in an approved plan is individually required to comply with its obligations under the EEO clause and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other contractors or subcontractors toward a goal in an approved Plan does not excuse any covered contractor's or subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.

4. The contractor shall implement the specific affirmative action standards provided in paragraphs 18.7a through 18.7p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered construction contractors performing construction work in a geographical area where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.

5. Neither the provisions of any collective bargaining agreement nor the failure by a union with whom the contractor has a collective bargaining agreement to refer either minorities or women shall excuse the contractor's obligations under these specifications, Executive Order 11246 or the regulations promulgated pursuant thereto.

6. In order for the non-working training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees shall be employed by the contractor during the training period and the contractor shall have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees shall be trained pursuant to training programs approved by the U.S. Department of Labor.

7. The contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The contractor shall document these efforts fully and shall implement affirmative action steps at least as extensive as the following:

- a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the contractor's employees are assigned to work. The contractor, where possible, will assign two or more women to each construction project. The contractor shall specifically ensure that all foremen, superintendents, and other onsite supervisory personnel are aware of and carry out the contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
- b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.
- c. Maintain a current file of the names, addresses, and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source, or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the contractor by the union or, if referred, not employed by the contractor, this shall be documented in the file with the reason therefore along with whatever additional actions the contractor may have taken.
- d. Provide immediate written notification to the Director when the union or unions with which the contractor has a collective bargaining agreement has not referred to the contractor a minority person or female sent by the contractor, or when the contractor has other information that the union referral process has impeded the contractor's efforts to meet its obligations.
- e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the contractor's employment needs, especially those programs funded or approved by the Department of Labor. The contractor shall provide notice of these programs to the sources compiled under 7b above.
- f. Disseminate the contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
- g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination, or other employment decisions including specific review of these items with onsite supervisory personnel such as superintendents, general foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
- h. Disseminate the contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the contractor's EEO policy with other contractors and subcontractors with whom the contractor does or anticipates doing business.
- i. Direct its recruitment efforts, both oral and written, to minority, female, and community organizations, to schools with minority and female students; and to minority and female recruitment and training organizations serving the contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the contractor shall send written notification to organizations, such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
- j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable provide after school, summer, and vacation employment to minority and female youth both on the site and in other areas of a contractor's workforce.
- k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
- l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel, for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.

- m. Ensure that seniority practices, job classifications, work assignments, and other personnel practices do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the contractor's obligations under these specifications are being carried out.
- n. Ensure that all facilities and company activities are non-segregated except that separate or single user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
- o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
- p. Conduct a review, at least annually, of all supervisor's adherence to and performance under the contractor's EEO policies and affirmative action obligations.
8. Contractors are encouraged to participate in voluntary associations, which assist in fulfilling one or more of their affirmative action obligations (18.7a through 18.7p). The efforts of a contractor association, joint contractor union, contractor community, or other similar groups of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 18.7a through 18.7p of these specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the contractor. The obligation to comply, however, is the contractor's and failure of such a group to fulfill an obligation shall not be a defense for the contractor's noncompliance.
9. A single goal for minorities and a separate single goal for women have been established. The contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, if the particular group is employed in a substantially disparate manner (for example, even though the contractor has achieved its goals for women generally,) the contractor may be in violation of the Executive Order if a specific minority group of women is underutilized.
10. The contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.
11. The contractor shall not enter into any subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
12. The contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination, and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
13. The contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 18.7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.
14. The contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government, and to keep records. Records shall at least include for each employee, the name, address, telephone number, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.
15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).
- 15. CONTRACT WORKHOURS AND SAFETY STANDARDS ACT REQUIREMENTS 29 CFR PART 5**

1. Overtime Requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic, including watchmen and guards, in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; Liability for Unpaid Wages; Liquidated Damages. In the event of any violation of the clause set forth in paragraph (1) above, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph 1 above, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph 1 above.

3. Withholding for Unpaid Wages and Liquidated Damages. The Federal Aviation Administration or the County shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any monies payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph 2 above.

4. Subcontractors. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraphs 1 through 4 and also a clause requiring the subcontractor to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1 through 4 of this section.

16. CLEAN AIR AND WATER POLLUTION CONTROL

Contractors and subcontractors agree:

- a. That any facility to be used in the performance of the contract or subcontract or to benefit from the contract is not listed on the Environmental Protection Agency (EPA) List of Violating Facilities;
- b. To comply with all the requirements of Section 114 of the Clean Air Act, as amended, 42 U.S.C. 1857 et seq. and Section 308 of the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq. relating to inspection, monitoring, entry, reports, and information, as well as all other requirements specified in Section 114 and Section 308 of the Acts, respectively, and all other regulations and guidelines issued thereunder;
- c. That, as a condition for the award of this contract, the contractor or subcontractor will notify the awarding official of the receipt of any communication from the EPA indicating that a facility to be used for the performance of or benefit from the contract is under consideration to be listed on the EPA List of Violating Facilities;
- d. To include or cause to be included in any construction contract or subcontract which exceeds \$ 100,000 the aforementioned criteria and requirements.

18. CERTIFICATION REGARDING DEBARMENT AND SUSPENSION (NON-PROCUREMENT) – TITLE 2 CFR PART 1200 AND TITLE 2 CFR PART 180, SUBPART C

The Contractor by administering each lower tier subcontract that exceeds \$25,000 as a "covered transaction" must verify each lower tier participant of a "covered transaction" under the project is not presently debarred or otherwise disqualified from participation in this federally assisted project.

The Contractor shall accomplish this by:

- i. Checking the System for Award Management at website: <http://www.sam.gov>
- ii. Collecting a certification statement similar to paragraph a.
- iii. Inserting a clause or condition in the covered transaction with the lower tier contract

If the FAA later determines that an individual failed to tell a higher tier that they were excluded or disqualified at the time they entered the covered transaction with that person, the FAA may pursue any available remedy, including suspension and debarment.

**EXHIBIT 2 – PROJECT SITE FORM
COMMERCIALLY USEFUL FUNCTION (CUF)
PROJECT SITE REVIEW**

Per 49 CFR 26.55, "A DBE performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. A DBE does not perform a CUF if its role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of DBE participation..." This form is for the purposes of reviewing DBEs for compliance with the CUF requirements for credit.

Minority Affairs field staff will perform CUF reviews on DBE subcontractors and Material Suppliers. Perform a minimum of one review for each DBE for each project with DBE goal. The review should be conducted when the DBE first begins work. Monitor compliance through the course of the project.

Project Name:	MDAD Reviewer:
Project No:	Reviewer Title:
Prime Contractor:	Review Date:

DBE Name:

DBE is performing as: The Prime Contractor A Subcontractor Another Tier Subcontractor
 Or Material Supplier: Manufacturer Regular Dealer Broker

Provide a brief description of the DBE's scope of work. (obtain copy of Subcontract Agreement and/or Purchase Order if needed.)

COMMENSURATE:	Yes	No
Is payment received by the DBE commensurate with the work being performed?	<input type="checkbox"/>	<input type="checkbox"/>

PERFORMING:	Yes	No
Does the DBE have employees on the job to perform the work?	<input type="checkbox"/>	<input type="checkbox"/>
Does the DBE employee (s) only work for the DBE?	<input type="checkbox"/>	<input type="checkbox"/>
Is the DBE working without assistance from the prime contractor or another subcontractor? <small>(Use of primes' equipment in an emergency is allowed but the cost associated with the use of the equipment cannot be credited towards the goal.)</small>	<input type="checkbox"/>	<input type="checkbox"/>
Is the DBE only using equipment it owns, rents, or leases? <small>(Attached equipment list and all ownership documents and rental/lease agreements.)</small>	<input type="checkbox"/>	<input type="checkbox"/>
Is the DBE performing at least 30% of their work?	<input type="checkbox"/>	<input type="checkbox"/>

Hauling:	Yes	No
Does the DBE hauling firm own or lease their trucks? (If so, obtain verification of ownership or lease documents in the name of the DBE.)	<input type="checkbox"/>	<input type="checkbox"/>
Does the DBE employ drivers for trucks owned by the company? (If leased trucks include operators, this should be indicated in the agreement.)	<input type="checkbox"/>	<input type="checkbox"/>
Does a review of the haul tickets associated with the project indicate that hauling is being performed by the DBE?	<input type="checkbox"/>	<input type="checkbox"/>

MATERIALS:	Yes	No
Does the DBE's name appear on all invoices, haul tickets, and/or bills of lading?	<input type="checkbox"/>	<input type="checkbox"/>
If joint checks are used, has the DBE Coordinator approved?	<input type="checkbox"/>	<input type="checkbox"/>
Are joint checks signed by the DBE? (Obtain canceled check copies.)	<input type="checkbox"/>	<input type="checkbox"/>

SUPERVISING:	Yes	No
Is the DBE supervising its employees and their work?	<input type="checkbox"/>	<input type="checkbox"/>
Is the supervisor a full-time employee of the DBE?	<input type="checkbox"/>	<input type="checkbox"/>

CUF:	Yes	No
Does the DBE appear to be performing a Commercially Useful Function (CUF)? (If no, provide comments.)	<input type="checkbox"/>	<input type="checkbox"/>

COMMENTS:

CUF DETERMINANTS

If any Red Flag Conditions are identified, contact Minority Affairs Office

PERFORMING

- DBE must be responsible for performing its own work on the project
- At least 30% of the work must be performed by the DBE with its own workforce
- The DBE keeps a regular workforce and has its own employees
- The DBE is utilizing its own equipment
- Operation of the equipment must be subject to the full control of the DBE

RED FLAGS

- A portion of the DBE's work being done by the Prime Contractor or jointly with another contractor
- Employee working for both the Prime and the DBE
- Equipment used by DBE belongs to the Prime Contractor or another contractor with no formal lease agreement
- Equipment signs and markings cover another contractor's identity

RECORDS/DOCUMENTS

- Subcontract Agreement or Purchase Order
- Equipment ownership, rental, or lease documents
- Certified payrolls

MATERIALS (For material credit)

- DBE is responsible for the delivery of the materials
- DBE is ordering the material and invoices indicate that DBE is the customer
- Material invoices indicate that DBE owner or Superintendent is the contact person
- A/E has approved use of joint checks

RED FLAGS

- Materials for DBE credited work are delivered by the Prime Contractor
- Materials are ordered, billed to, and/or paid by the Prime Contractor
- Invoices do not indicate that DBE is the customer
- Prime's employee is listed as the contact person on invoices
- Materials come from Prime's stockpiles

RECORDS/DOCUMENTS

- Invoices
- Haul tickets or Bills of Lading
- Material on Hand documentation
- Joint check agreement
- Cancelled checks

SUPERVISING

- DBE supervisor is a full-time employee of the DBE
- Employees are being supervised by DBE supervisor
- DBE is scheduling work operations

RED FLAGS

- DBE's employees are being supervised by Prime Contractor or another contractor
- DBE provides little or no supervision of work
- DBE supervisor is not a full-time employee of the DBE

RECORDS/DOCUMENTS

- Certified Payrolls
- Document communication with DBE owner or Superintendent



EXHIBIT 3 – AFFIDAVIT OF PAYMENT
Miami-Dade Aviation Department
Disadvantaged Business Enterprise (DBE) Program
Affidavit of DBE Subcontractor Payment

The Code of Federal Regulations 49, 26.37(b), requires the Miami-Dade Aviation Department (MDAD) to monitor and verify that work subcontracted to Disadvantaged Business Enterprise (DBE) firms is actually performed by the DBEs. Additionally, MDAD is required to report the DBE participation on each project. Therefore, it is MDAD's responsibility to discern whether payments are made to DBE firms. The following affidavit is to be completed and signed by the contractor within 15 days of the completion of the project. The affidavit seeks to verify actual payments made to DBE firms on the project. Each DBE firm must verify the actual payment amount.

Payment Period: _____ Project No. _____

► Interim [] Interim affidavits must be submitted for each DBE firm at the end of each fiscal year for multi-year projects.

► Final [] Final affidavits for each DBE firm must be submitted within 15 days of the completion of the project.

Prime Company Name _____

DBE Sub-Subcontractor _____ Payment _____

All amounts indicated must be cumulative

By signing below, the noted firms agree that the payment amounts recorded above are true and accurate as of the payment time period noted above. Furthermore, by signing, the noted firms attest to the fact that the DBE listed above has performed a "commercially useful function" and abided by all other requirements of the DBE Program as defined in Title 49 of the United States Code of Federal Regulations Part 26.

Prime's Signature/Title
NOTE: This affidavit must be notarized.
Sworn or affirmed and subscribed before me this _____ day of _____ 20____
Notary Signature _____

DBE Sub-subcontractor Signature/Title
NOTE: This affidavit must be notarized
Sworn or affirmed and subscribed before me this _____ day of _____ 20____
Notary Signature _____

Appendix A – Scope of Services

1.0 Scope of Work

iFerret™ is designed to detect FOD(s) in airport airside environment (runways and taxiways), using a network of remotely located Electro-Optical (EO) sensors. iFerret™ make use of Electro-Optical (EO) sensors as the primary (and sole) means for detection, location and identification of FOD(s) on runways and taxiways. Operating 24x7, it is capable of detecting multiple FOD items and pinpointing the precise locations of these multiple FOD items (on a geo-referenced GIS map) under both daytime and night time conditions.

Each EO sensor of the iFerret™ FOD Detection System will scan a pre-configured sector of the runway or taxiway. Images captured by the iFerret™ EO sensors are processed using Stratech's proprietary intelligent Vision software. The user interface on the Operator Display Console provides an overall view of the runway, with the locations of FOD items clearly marked on the runway image and on the geo-referenced GIS map. Visual and audio alerts will be generated to notify the operator of any detected FOD items.

iFerret™ provides capabilities for logging, storage, archival, retrieval and replay of current (live) and archived (historic) videos and images of FOD(s) (with date/time stamps). The "live" and recorded (historic) FOD videos and images could be displayed in Full HD resolution and color on the Operator Display Console.

iFerret™ also provides functions to facilitate FOD identification, classification, FOD risk assessment, FOD status tracking, FOD reporting and FOD removal.

iFerret™ enables the operator to perform efficient visual assessment of the FOD(s) in real-time with powerful optical zoom-in capability of the EO sensor (for capturing detailed telephoto FOD image in Full HD resolution and color). These features will enable the airport operator to assess the risk of the detected FOD(s) rapidly and efficiently and thus make better-informed decisions from the Air Traffic Control (ATC) tower and/or Ground Operations Control Centre (OCC).

A typical installation of the iFerret™ FOD Detection System for runway FOD monitoring comprises a network of EO sensors. Each EO sensor is located on top of a tower or airport building structure.

Each EO sensor scans approximately 984 ft (300 m) to 1,312 ft (400m) (under normal operation mode) of the runway segment length, and is capable of detecting small FOD (with minimum size of 1.7 inch (4.3 cm) diameter (as per FAA AC 150/5220-4) with high detection probability (at least 90%).

The iFerret™ FOD Detection System comprises the following major components:

- 9 x Electro-Optics Subsystem (EOS)
- 1 x Central Computer Subsystem (CCS)
- 6 x Operator Display Consoles (Client Computer Consoles)
- 2 x Mobile Display Devices (Apple iPad)

1.1 Central Computer Subsystem (CCS)

The iFerret Central Computer Subsystem (CCS) consists of the following key components:

- 1 x Management/Database Server (primary)
- 1 x Management/Database Server (secondary)
- 1 x Digital Video Recorder (DVR)
- 2 x Gigabit Ethernet Switches
- 1 x Mobile Communication Server (for communication with Mobile Display Device via 3G/4G mobile communication)
- 1 x Maintenance Console

Management/Database Server (primary) – serves as the central Application and Database Server (incorporating the system database) for video/image processing, system operation and system administration including access control, system configuration, operation control, FOD alert configuration and notification, video and image processing, FOD alert data processing, FOD status tracking and reporting, database storage, and data management.

Management/Database Server (secondary) – serves as the redundant Management/Database Server which will automatically take over in the event of failure of the primary Management/Database Server. It provides High Availability (HA) and redundancy for the iFerret™ Management/Database Server.

Maintenance Console - used for performing routines such as system configuration, system administration, system health checking, system diagnostics, corrective and preventive maintenance etc... Alerts will also be displayed on the Maintenance Console (and Operator Display Consoles) whenever the iFerret™ system monitoring tool detects any faults/problems with any of the key system components.

Digital Video Recorder (DVR) – provides continuous real-time digital video recording for the iFerret™ EO Sensors and video playback.

Gigabit Ethernet Switch – provides the Gigabit LAN connectivity for the backend equipment including the VPU's and the CCS equipment.

1.2 Operator Display Console (Client Computer Console)

Operator Display Console (Client Computer Console) – serves as the main Operator Console for the airport operator to operate and monitor the iFerret™ FOD Detection System and be alerted for any FOD item(s) detected. Examples of user tasks include:

- View live video, FOD images and panoramic runway view
- View FOD alerts (audio visual)
- Follow up on FOD alerts
- Track FOD status
- Confirm FODs through visual verification
- Control the EO Sensor unit(s)
- Perform optical zoom-in into detected FOD or area-of-interest on the runway
- Monitor the entire iFerret system status and health
- Generate FOD reports

1.3 Mobile Display Device

The Mobile Display Device (which is based on the new Apple iPad) – serves as a remote mobile FOD alert display device to enable the runway recovery team to receive FOD alerts (remotely via 3G/4G mobile communication) to locate and retrieve the detected FOD item(s). The FOD alert will be sent to the Mobile Display Device and will be displayed on the Mobile Display Device GUI. It will show the FOD location on a 2D runway map and the FOD image.

1.4 Network Requirement

An existing airport (Airside/Terminal) LAN would need to be in place for use by the iFerret™ system for the LAN connection between the CCS (located at Headend Equipment Room/Data Centre) and the 6 x Operator Display Consoles (located at the various locations). The recommended bandwidth for the LAN is at least 1 Gigabit.

The communication link between the CCS and the Mobile Display Device will make use of the local public 3G/4G mobile communication service available at the airport (3G/4G subscription cost provided by MIA).

1.5 Software Component

The iFerret™ FOD Detection System's application software is divided into the following main application modules:

- FOD Detection and Location Application
- Management Server Application
- Database Server Application
- Operator Console Application
- Mobile Display Device Application
- Digital Video Recorder (DVR) Application

1.5.1 FOD Detection and Location Application

The FOD Detection and Location Application runs on the Video Processor Unit (VPU).

The main functions of this application are as follows:

- Controlling of the network of Electro-Optical (EO) sensors which are deployed to scan the runway surface (for detection of FOD)
- Processing of video and images of runway surfaces (captured by the EO sensors)
- Automatic detection and location of FOD
- Sending of FOD data, alert and images to the Management/Database Server for further processing and storage

The FOD Detection and Location Application manages and controls the network of iFerret™ Electro-Optical (EO) EO Sensors to scan the runway surface continuously to capture images and video of the runway surface.

Based on advanced image and video processing technologies, the FOD Detection and Location Application will be able to detect the presence of FOD and determine its precise location on the runway.

Upon detection and location of FOD, it will be able to send the FOD alert, image and data (including FOD size, date/time/location) to the Management Server application for further processing and presentation (on the Operator Display Console).

1.5.2 Management Server Application

The Management Server Application runs on the Management/Database Server.

When an FOD is detected, the FOD Detection and Location Application will send the detected FOD (data and image) to the Management Server Application. The Management Server Application will further process the FOD data and present the FOD data and image on the Operator Display Console. It will also generate an audio and visual alert for the detected FOD.

The operator can also manually control the specific EO Sensor's Pan Tilt Zoom (PTZ) functionality (via the Operator Display Console application GUI) to perform optical zoom-in to specific area-of-interest on the runway or specific FOD. This is to enable visual verification of detected FOD. This is achieved by making use of the EO Sensor's powerful optical zoom capability.

The Management Server Application also manages user access control, operator control, FOD image/video/data processing, FOD reporting and various FOD related queries. The main functions of this application are as follows:

- User access control
- Operator control
- FOD video, image and data processing
- Image stitching (for panoramic image view of runway)
- Runway map and image presentation (on the Operator Display Console)
- Generation of FOD reports
- Sending of FOD alerts to the Operator Display Console for presentation on the GUI

1.5.3 Database Application

The Database Application runs on the Management/Database Server. The Database Application manages the storage, organization, retrieval and access to the iFerret System Database. The iFerret System Database consists of the following:

- FOD data (date/time of detection, location, size etc...)
- FOD images
- Reports (e.g. FOD incident reports, FOD statistics report, FOD clearance report)
- Other system data (system faults, operating status, etc)

1.5.4 Operator Console Application

The Operator Console Application runs on the Operator Display Console (Client Computer Console). The Operator Console Application provides the main Graphical User Interface (GUI) for the operator to operate and view the iFerret™ system. The operator can log-in to the System, monitor the system status, see the real-time image view from each EO Sensor, visually verify the detected FOD for clearance, clear FOD alerts and send the FOD information to the runway recovery team's Mobile Display Device (via 3G/4G mobile communication).

The main functions of the Operator Console application are as follows:

- Operator log-in
- Display of FOD alerts (audio and visual)
- Display of 2D GIS map of runway with precise FOD locations
- Display of panoramic runway image view
- Display of real-time image of runway sector

1.5.5 Mobile Display Device Application

The use of the Mobile Display Device allows the runway recovery team to receive FOD alert(s) from the iFerret™ CCS via wireless mobile communication (3G/4G). These alerts provide information of FOD location(s) and FOD image(s) to the runway recovery team to enable the team to rapidly locate and clear the detected FOD(s). The Mobile Display Device is the new Apple iPad running on iOS.

The Mobile Display Device Application which runs on the Mobile Display Device performs the following:

- Receives FOD alert(s) from the Management/Database Server (via 3G/4G mobile communication)
- Displays the FOD alert(s) on the Mobile Application GUI (on the Mobile Display Device)
- Accepts inputs from user on the action(s) taken e.g. FOD cleared
- Accepts and responds to user requests e.g. information pertaining to specific FOD incidents

1.5.6 Digital Video Recorder (DVR) Application

The Digital Video Recorder (DVR) Application runs on the DVR. Video captured by the network of iFerret™ EO sensors will be stored onto the Digital Video Recorder (DVR). The DVR would have storage capacity to allow the video storage for up to 30 days. The DVR allows the user to access the recorded video based on date, time, runway sector etc... Thus the user will be able to retrieve the video for a specific date/time/location and playback the video, which will be displayed on the Operator Display Console. This would be useful for post analysis and investigations (e.g. FOD incidents).

2.0 Proposed System Configuration/Customization

The iFerret™ FOD Detection System is a Commercial Off-the-Shelf (COTS) system based on proven technology. The portions of the iFerret™ System which requires configuration settings include the following iFerret Application Software modules:

- FOD Detection and Location Application
- Management Server Application
- Database Server Application
- Operator Console Application
- Digital Video Recorder (DVR) Application
- Mobile Display Device Application
- Lightning strike Damage/FOD assessment
 - The lightning strike damage/FOD assessment is provided as one time value added technology for MIA. The estimate value of this technology is \$268,000 and will be provided at no cost to MIA.

The appropriate configuration settings for these iFerret application modules would optimize the performance of the iFerret FOD Detection System for the specific operating environment. To illustrate, the appropriate configuration settings for the FOD Detection and Location Application would optimize the detection performance for the specific layout of the EO sensors for the specific runway(s).

For the implementation of the iFerret system, these configuration settings would be made during the system installation and setup phase. The configuration of the iFerret™ System would be performed by Stratech's project team jointly with OSI's project team.

There is no additional customization or development required for the supply, implementation, commissioning and deployment of the iFerret™ FOD Detection System for Miami International Airport (MIA).

2.1 Runway Damage Assessment due to Lightning

iFerret would be able to perform damage assessment on runway pavement due to lightning strike. The iFerret System would be linked with MIA's Lightning Warning System so that iFerret would be able to obtain a real-time signal (from MIA's Lightning Warning System) upon occurrence of lightning. The integration for linking will be through OSI's IDSM Infusion server. IDSM Infusion is designed for sharing of disparate datasets. IDSM Infusion will pass the alert to iFerret to initiate the assessment.

iFerret will be able to scan the runway pavement for damage(s) due to lightning strike. iFerret will be able to detect the damage caused by the lightning strike (on the spot where the lightning strikes the runway pavement). iFerret will also be able to detect the multiple debris due to lightning strike.

The runway damage (including the precise location of damage due to lightning strike) would be displayed on the Operator Console. These runway damage information would also be sent to the Mobile Device and displayed on the Mobile Device GUI.

This runway damage information would be useful for runway maintenance staff. This feature would enable MIA to save resources for runway maintenance.

By analyzing the location and spatial distribution of these multiple debris (form by lightning), iFerret will be able to detect the occurrence of lightning. Upon detection of lightning, iFerret will be able to generate Lightning Alert. The Lightning Alert will be displayed on the Operator Console. The Lightning Alert will also be send to the Mobile Device and will be displayed on the Mobile Device GUI.

Lightning strike on runway pavement typically generates multiple pieces of debris around the spot where the lightning strikes. iFerret would be able to detect such multiple debris due to lightning. iFerret will also be able to distinguish these debris (due to lightning) from typical FOD so that these debris (due to lightning) would not cause any false alarms

The lightning strike assessment capability is to be provided as a value added technology. This technology is normally an addition to the base iFerret system and comes with an additional cost. For MIA the technology is added at no cost to enhance the capability of the base system.

2.2 iFerret™ EO Sensors Locations for MIA

A total of 9 units of iFerret™ EO Sensor shall be installed for MIA for the coverage of the 8R/26L Runway. The total runway surveillance area which will be covered by the 9 x EO Sensors is 10,506 ft x 200 ft (3,202 m x 60 m). These 9 x iFerret™ EO Sensors (N1 ~ N9) will be located either on top of towers (to be erected) or on top of existing airport concourse D buildings. The final layout and locations of the towers will be mutually agreed upon following a detailed assessment by OSI, Inc. and MDAD and are subject to FAA review and approval.

Table 1 : Locations of iFerret™ EO Sensors for MIA

EO Sensor	iFerret™ EO Sensor Locations
N1	Frangible Tower behind ILS. 400 ft (122 m) from Runway centerline, Tower Height = 16.5 ft (5 m)
N2	Frangible Tower behind ILS. 400 ft (122 m) from Runway centerline), Tower Height = 16.5 ft (5 m)
N3	Tower (Near Midfield Fire Station) 860 ft (262 m) from Runway centerline, 165 ft (95.3 m) from Taxiway Tower Height = 36 ft (11 m)
N4	Tower (Near Midfield Fire Station) 860 ft (262 m) from Runway centerline, 165 ft (95.3 m) from Taxiway Tower Height = 44 ft (13.4 m)
N5	On top of Concourse D building (D50) 1270 ft (387 m) from Runway centerline, Structure Height = 59 ft (18 m)
N6	On top of Concourse D building (D40) 1260 ft (384 m) from Runway centerline), Structure Height = 59 ft (18 m)
N7	On top of Concourse D building (D25) 1510 ft (460 m) from Runway centerline, Structure Height = 59 ft (18 m)
N8	On top of Concourse D building (D14) 1180 ft (360 m) from Runway centerline, Structure Height = 49 ft (14.9 m)
N9	On top of Concourse D building (D2) 1170 ft (357 m) from Runway centerline, Structure Height = 49 ft (14.9 m)

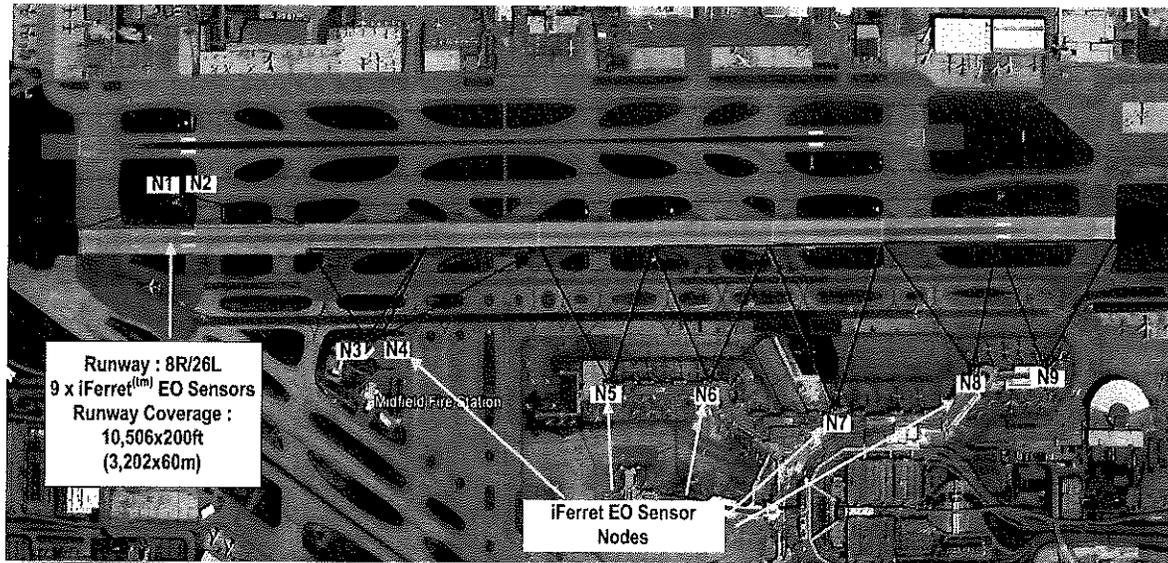


Figure 1 : Proposed Location of iFerret™ EO Sensors for MIA

2.3 Fiber Routes

- EO Sensor N1 and N2 fiber will return to the existing MIA fiber optic cabling at ILS
- EO Sensor N3 & N4 fiber will return to the Hostage building and Midfield Fire Stations.
- EO Sensors N5, N6, N7, N8 and N9 will return to the follow sites:
 - EO Sensor N5 at Gate D50 will utilize to the EBS Building Electrical Room for power and the Communication Room N1141 for fiber.
 - EO Sensor N6 at Gate D40 will utilize to the Electrical Room DD31266 for power and Communication Room DD31269 for fiber.
 - EO Sensor N7 at Gate D25 will utilize to room DB2142 for power and Communication Room DB21281
 - EO Sensor N8 at Gate D14 will utilize to Electrical Room DA1490 and Communication Room DA1491
 - EO Sensor N9 at Gate D2 will utilize to Electrical Room DA31214 for power and Communication Room DA31215 for fiber.

The FO cable grade utilized will be single mode 9/125.

2.4 Location of iFerret CCS and Operator Consoles

The iFerret backend Equipment (including the VPUs and the CCS equipment) will be located at the Headend Equipment Location. As per Tender Addendum 2, the Headend Equipment Location could be either one of the following:

- Headend Equipment Location 1 at North Terminal
- Headend Equipment Location 2 at Building 3030 (Alternate Location)

As per Tender Addendum 2, the 6 x Operator Consoles (Client Computer Consoles) will be located at the following locations:

- "E" Tower
- "J" Tower
- "D" Tower
- General Aviation Center (GAC)
- Ramp Supervisor

- Airside Director

The following table shows the basic hardware and software specifications of the iFerret computers (including the CCS servers and the Operator Display Consoles)

Table 2: Hardware Software for iFerret™ Central Computer System (CCS) and Operator Console

	iFerret Equipment	Qty	Hardware and Software Specs
	Central Computer Subsystem (CCS)		
C1	Management/Database Server (primary)	1	OS : Windows Server 2012 standard DBMS : Microsoft SQL Server 2012 Hardware : 1 x Intel Xeon 8core 2.6 GHz processor
C2	Management/Database Server (secondary)	1	OS : Windows Server 2012 standard DBMS : Microsoft SQL Server 2012 Hardware : 1 x Intel Xeon 8core 2.6 GHz processor
C3	Digital Video Recorder (DVR)	1	OS : Windows Server 2012 standard Hardware : 1 x Intel Xeon 8core 2.6 GHz processor
C5	Maintenance Console	1	OS : Windows 7 Professional Hardware : 1 x Xeon 6Core 2.6 GHz
C6	Mobile Communication Server	1	OS : Windows Server 2012 Hardware : 1 x Intel Xeon 6core 2.6 GHz processor
	Others		
B1	Operator Display Console	6	OS : Windows 7 Professional Hardware : 1 x Intel i7 QuadCore 2.4 GHz
B2	Mobile Display Device (iPad)	2	Apple New iPad (3G) OS : Apple IOS

3.0 Detection Equipment & Devices: iFerret EO Sensor Overview

Stratech's iFerret™ is a fully Electro-Optical (EO) based FOD detection system which is non-emissive and totally passive. It does not use any radio frequency or transmit any radio, microwave or radar signal. It does not cause interference with any existing and future aircraft or airport systems.

The iFerret detection subsystem is the Electro-Optics Subsystem (EOS) which consists of a network of EO Sensor units. The iFerret EO sensor is an ultra-low lux Full HD video camera. Each EO Sensor is connected to a dedicated Video Processor Unit (VPU) via Fiber Optic (FO) cabling. The VPU performs real-time video and image processing for automatic FOD detection. The VPU will transmit real-time video and FOD data to the backend Central Computer Subsystem (CCS).

Each EO Sensor and VPU is dedicated to capture and process video images to cover a specific runway sector for automatic FOD detection.

Each EO Sensor unit is mounted on a fixed location tower structure or on top of a building/ structure (e.g. concourse) to inspect a dedicated sector of the runway for FOD detection. The EO Sensor unit mounted on a fixed location tower structure (or building) is known as an EO Sensor node.

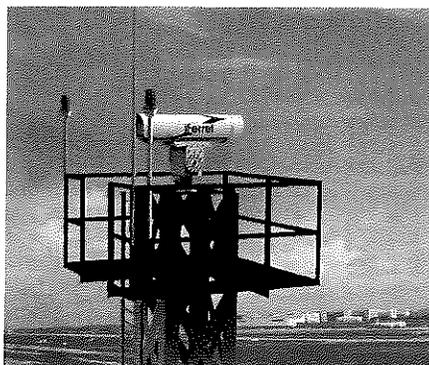


Figure 2 : iFerret™ EO Sensor on Tower (EO Sensor Node)

3.1 iFerret EO Sensor Redundancy

iFerret™, equipped with a network of EO Sensor units which scan the entire runway, also features EO Sensor redundancy to minimize system downtime.

In the event of failure of a specific EO Sensor node, the adjacent EO Sensor node will operate in failover mode to scan a wider sector of the runway to provide backup coverage for the “lost” sector that was previously covered by the failed EO Sensor node. This configuration ensures that the runway is still monitored by the iFerret™ System even when any one EO Sensor fails. In the event of any EO Sensor failure, an alert will be sent to the Central Computer Subsystem (CCS) and will be displayed on the Operator Display Console. The iFerret™ System will switch over the operation from the malfunctioning node to the adjacent functional nodes automatically. During the failover operation, the adjacent EO Sensors will operate at a scaled-down failover mode so as to detect larger FOD objects.

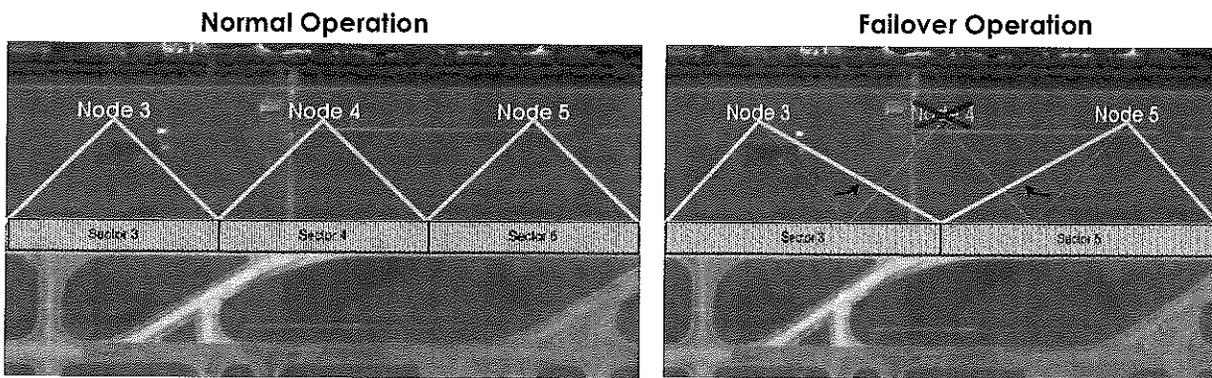


Figure 3 : iFerret EO Sensor Redundancy

3.3 Superior HD Color Image and Night Vision Capability

iFerret™ makes use of advanced image processing technologies and superior EO sensor to deliver superior Full High Definition (Full HD) color image under both day and night time. This superior night vision capability of the iFerret EO Sensor would enable iFerret™ to be able to accurately detect FODs even under low illumination conditions (e.g. night time).

3.4 Powerful Optical Zoom Feature

The iFerret™ EO Sensor incorporates a powerful optical zoom feature which provides the ability to capture telephoto zoom-in image and video of any detected FOD or any area-of-interest on the airside runway or taxiway in color and Full High Definition (Full HD) resolution. The EO sensor is equipped with powerful optical zoom lens which provides up to 70x zoom ratio. This feature would aid the user greatly in FOD visual verification and classification.

3.5 EOS for MIA

The following table shows the 9 units of iFerret Electro-Optic Subsystem (EOS) that will be installed at MIA on runway 8R/26L. Each iFerret EOS comprises a EO Sensor and a Video Processor Unit (VPU). A total of 9 units of iFerret EOS will be provided and deployed for the surveillance and FOD detection for the 8R/26L runway at MIA. These 9 units of iFerret EO Sensors will be mounted on top on towers or existing airport (concourse) buildings.

Table 3: Proposed iFerret Electro-Optics Subsystem (EOS) for MIA

A	Electro-Optics Subsystem (EOS) which comprises:	Qty
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A1	EO Sensor Unit	9
A2	Video Processing Unit (VPU)	9

3.6 Total Life of iFerret EO Sensor

The "total life" for which the iFerret EO Sensor is designed (assuming it is used and maintained in accordance with Stratech's recommendations) is 10 years.

4.0 Network Requirements

The iFerret backend Equipment (including the VPUs and the CCS equipment) will be located at the Headend Equipment Location. As per Tender Addendum 2, the Headend Equipment Location shall be one of the following:

- Potential Headend Equipment Location 1 at North Terminal
- Potential Headend Equipment Location 2 at Building 3030 (Alternate Location)

An existing airport (Airside/Terminal) Local Area Network (LAN) maybe needed for use by the iFerret™ system for the connection between the backend equipment (VPUs and Central Computer Subsystem (CCS) which are located at the Headend Equipment Location) and the 6 x Operator Consoles (Client Computer Consoles) which are located at the following locations:

- "E" Tower
- "J" Tower
- "D" Tower
- GAC
- Ramp Supervisor
- Airside Director

It may be necessary to install a LAN for the connection between the CCS (located at Headend Equipment Room) and the Operator Consoles at these various locations. The recommended bandwidth for the LAN is at least 1 Gigabit.

The communication link between the CCS and the 2 x Mobile Display Devices will make use of the local public 3G/4G mobile communication service available at the Miami International Airport. The subscription for the 3G/4G service would be provided by MIA.

4.1 Cabling Network Design and Specification

The cabling network design for the iFerret™ system is generally defined in two categories:

- Power cable (for electrical power supply to the EO Sensor nodes)
- Fiber Optics (FO) cable - for video/data communication between EO Sensors (located on top of towers or buildings) and the VPUs and CCS equipment (located at the Headend Equipment location).
- Laying of power and Fiber Optic (FO) cable is based on point-to-point method.

The recommendations (subjected to local site conditions and regulations) are:

- Cable routes using armored cable directly buried underground or through cable ducts.
- EO Sensor nodes to tap electrical power from existing power sources.
- The FO and power cabling would leverage on existing FO and power cabling available at the Airport (whenever possible)

4.2 Fiber Optic (FO) Cable

The bandwidth requirement for each Operator Display Console (located at the various locations) is about 50 – 100 Mbps for real-time view and video playback at 12 fps.

The FO, LAN and power cabling would leverage on existing FO, LAN and power cabling at the Airport (whenever possible).

4.3 Power Cable

The distances from where the AC electrical power is supplied will determine the length and size of the power cables due to voltage Drops. Stratech recommends the use of the BS6346 standard or equivalent, which will be endorsed by a LEW (Licensed Electrical Worker) or Professional Engineer (PE). Power supply voltage is 100 VAC ~ 240 VAC (50/60 Hz).

For each EO Sensor node at the tower, the recommended provision of power is 1.5 KVA.

For iFerret™ back-end equipment (including the CCS equipment), the recommended provision of power is about 15 KVA. Two server racks (42U) will be required for mounting the iFerret™ backend equipment.

Each Operator Display Console will require about 0.2 KVA.

The connectivity for all the iFerret EOS nodes should leverage on existing Miami International Airport's Fiber Optic (FO) network (whenever possible).

Hence the FO, LAN and power cabling would leverage on existing FO, LAN and power cabling at the Airport (whenever possible).

4.3 Computer Equipment and Backup

The iFerret FOD Detection System comprises the following Computers.

- 1 x primary Management/Database Server
- 1 x secondary Management/Database Server
- 1 x Digital Video Recorder (DVR)
- 1 x Maintenance Console
- 9 x Video Processor Units (VPU)
- 6x Operator Display Consoles (Client Computer Consoles)

iFerret Computers	Qty	Operating System	TSM Backup and Archive Client Software Required
Management/Database Server (primary)	1	Windows Server 2012 Standard	TSM EE* client for Windows TSM for System Backup and Recovery TSM for Database
Management/Database Server (secondary)	1	Windows Server 2012 Standard	TSM EE client for Windows TSM for System Backup and Recovery TSM for Database
Digital Video Recorder (DVR)	1	Windows Server 2012 Standard	TSM EE client for Windows TSM for System Backup and Recovery
Mobile Communication Server	1	Windows Server 2012 Standard	TSM EE client for Windows TSM for System Backup and Recovery
Maintenance Console	1	Windows 7 professional	TSM EE client for Windows TSM for System Backup and Recovery
Operator Consoles	6	Windows 7 professional	TSM EE client for Windows

iFerret Computers	Qty	Operating System	TSM Backup and Archive Client Software Required
			TSM for System Backup and Recovery
Video Processor Unit (VPU)	9	Windows 7 professional	TSM EE client for Windows TSM for System Backup and Recovery

*TSM EE – Tivoli Storage Manager Extended Edition

The data, program and applications on these various iFerret computers will be backed up on a regular basis (e.g. daily incremental backup and monthly (full backup) by the MDAD's backup server onto the MDAD's storage infrastructure. The iFerret system database (residing on the Management/Database Server) would also be backed up regularly (e.g. daily/weekly incremental/full backup) onto MDAD's storage infrastructure.

The scheduled backup of the iFerret computers will be handled by MDAD's backup infrastructure (including MDAD's backup server and storage infrastructure). All backup hardware, software and infrastructure is provided by MDAD.

The backup copy of the iFerret data, programs and database which are stored on MDAD's storage infrastructure would also be backed up onto removable media (e.g. tape media) and stored at an off-site location for Disaster Recovery. This would also be handled by MDAD. Off-site storage media and storage facilities (for the backup data) will be provided by MDAD.

The backup of the data and application will be handled by MDAD's backup and recovery software which is Tivoli Storage Manager (TSM). Hence, the TSM backup and recovery client software would need to be installed on these iFerret computers to enable the MDAD's TSM Server to perform regular centralized backup of these iFerret computers. The TSM Server is part of the existing MDAD backup infrastructure. .

The iFerret system database (which resides on the Management/Database Server) is based on Microsoft Server 2012 standard edition. Hence, the TSM client for database (Microsoft SQL Server 2012) would also need to be installed on the Management/Database Server to enable the regular backup of the iFerret system database.

MDAD's TSM Server and the TSM backup and recovery client software running on these various computers would also perform bare machine backup and recovery (i.e. backup and recovery of the computer OS) for these computers.

See table above for the list of TSM backup and recovery client software which is required to be installed at each of the iFerret computers.

As per Tender Addendum 2, all the TSM client software (as listed above) will be provided and maintained by MDAD.

The TSM backup and recovery client software (installed on these various computers) will work with MDAD's TSM backup server and storage infrastructure for the automatic scheduled centralized backup of the OS, software and data on the various iFerret computers. The TSM backup server and storage infrastructure will be provided by MDAD.

In event of a disaster, the recovery of the OS, programs and data for these iFerret computers could be performed using the TSM server (which is part of MDAD storage infrastructure) and the backup image/ data (stored on the MDAD's storage infrastructure). The iFerret system database could also be recovered by using the full backup of the system database stored on the MDAD's storage infrastructure.

Besides backup and recovery, the iFerret CCS also incorporates the following redundancy features to minimize downtime and loss of data.

All the iFerret computers will also be equipped with redundant hard disks (configured as RAID 1) for provide hard disk redundancy.

The Management/Database Server and DVR and will also be equipped with redundant power supply for power supply redundancy.

To provide for Management/Database Server redundancy, a primary Management/Database Server and a secondary Management/Database Server will be provided and deployed. The secondary Management/Database Server will automatically take over in the event of failure of the primary Management/Database Server. The iFerret system database (residing on the primary Management/Database Server) is also replicated on the secondary Management/Database Server. The database in the secondary Management/Database Server will be synchronized with the iFerret system database in the primary Management/Database Server. Thus this would also provide High Availability (HA) and minimize any data loss for the iFerret Central Computer Subsystem (CCS) in the event of failure of the primary Management/Database Server.

The proposed iFerret™ FOD Detection System is a standalone system hence does not require integration with other County's software systems. iFerret is designed based on Open System Architecture. Hence, iFerret could also be integrated with other County software system(s) when needed, with the use of the iFerret Application Program Interface (API). Do note that there could be additional effort (and cost) associated with the provision of iFerret API for the integration of iFerret system with other County software systems.

5.0 iFerret Operational Workflow

The following figure illustrates the operational workflow for the iFerret™ FOD Detection System.

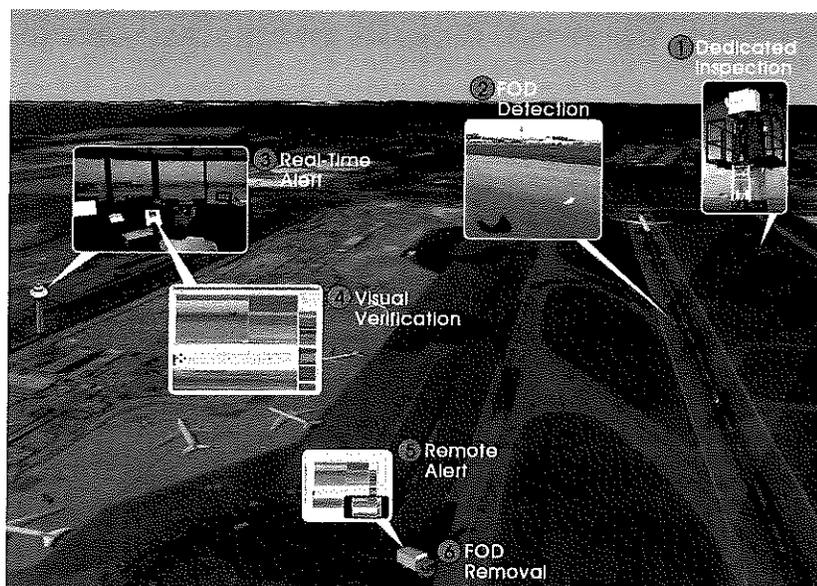


Figure 4: Operational Workflow for iFerret™ Runway FOD Detection

1. iFerret™ EO Sensors continuously scan and monitor defined Regions of Interest (ROI) which are pre-defined surveillance sectors on the runway surface.
2. The video and images (in Full HD resolution and color) from each EO Sensor are processed in real-time to enable automatic detection and location of FOD(s).

3. Real-time alerts with location information will be displayed on the Operator Display Consoles (Client Computer Consoles) located at the various locations ("E" Tower, "J" Tower, "D" Tower, General Aviation Center (GAC), Ramp Supervisor, Airside Director) in a single view for a complete assessment of the runway. Each alert is accompanied by a corresponding video or image in color and Full HD resolution.
4. Any FOD(s) detected is automatically highlighted on the Operator Display Console to alert the operator. A detailed optical zoom-in image of the detected FOD (in color and Full HD resolution) will also be displayed on the Operator Display Console for visual verification.
5. Remote alert(s) via wireless mobile communication services (4G/3G) will be sent to the runway recovery team's Mobile Display Device, providing information such as FOD location and date/timestamp.
6. Upon visual validation/confirmation, ATC halts aircraft takeoff and landing, and dispatches the runway recovery team to remove the FOD(s) from the runway. ATC operators can also monitor the recovery process and verify that runway is clear before re-opening the runway.
7. After the FOD removal is completed and the runway is re-opened for operation, the operator can retrieve the recorded video (in Full HD resolution) and generate reports of the FOD alerts for post-event analysis and investigation.

The proposed iFerret™ FOD detection System is designed to be highly scalable and could be expanded to cover additional runway(s) and/or other airport area(s) including taxiway(s) and apron(s) when required. There will be additional cost (due to additional hardware, software and effort required) associated with the expansion of the proposed iFerret FOD Detection System to cover additional runways, taxiways or other airport areas.

6.0 Frequencies used for Communication and Detection

The proposed iFerret™ FOD Detection System is based entirely on passive Electro-Optical (EO) sensors for runway surveillance and FOD detection. The iFerret system does not make use of any radio transmission, microwave or radar for surveillance and FOD detection.

7.0 On-Site Training (OST)

On-Site Training (OST) will be conducted after System Commissioning. The objective of OST is to equip Miami International Airport staff with the skills to operate the iFerret™ FOD Detection System and respond to FOD alerts, replay stored video etc... The OST will cover the GUI navigation on the Operator Console displays. OST will also cover basic maintenance of the iFerret system.

The OST topics include:

- Overview of iFerret FOD Detection System
- Main components of the iFerret FOD Detection System
- Basic operations and maintenance of the iFerret™ FOD Detection System

OST will also cover training for Field/Maintenance users. OST will cover both theoretical and practical work. Classroom facilities will be provided by the Miami International Airport. The maximum number of trainees is limited to 14.

OST will be conducted at the Miami International Airport.

7.0.1 Scope

The training will cover the operational aspect of the iFerret™ system. It shall include technical details on how to operate and navigate the functionalities of the system within their business operations. Demonstrations based on situational scenarios will also be presented to enable trainees to anticipate events that will occur during daily monitoring.

7.0.2 Audience

The training provided will cater for the Miami International Airport staffs who are responsible for operating, monitoring and supporting the iFerret™ system and responding to the recovery/removal of FOD.

7.0.3 Language

The training sessions will be held in English.

7.0.4 Course Outline

The course outline for each session is as follows:

- I. Course Objective
- II. Introduction to and Overview of iFerret™ FOD Detection System
- III. iFerret™ Functional Modules
- IV. Overview of Operational Workflow
 - a) System Response to FOD Alert
 - b) System Response to Short Runway Closure
 - c) System Response to Long Runway Closure
- V. Overview of Operator Console Graphical User Interface (GUI)
 - a) Color Coded System for EOS
 - b) Control Panel Functionalities
- VI. Step-by-step Guide to Operate the Operator Console
 - a) System in Operation with no FOD Detection
 - b) System in Operation with FOD Detection
 - c) Selection of FOD Thumbnail
 - d) Visual Verification before FOD Confirmation
 - e) Confirming FOD after Verification
 - f) Close Runway for FOD Recovery
 - g) Clear FOD upon Clearance on Runway
 - i. Resume System Operation
 - ii. System Redundancy
- VII. Demonstrations and Training
- VIII. Summary
- IX. Q & A Session

7.0.5 Training Materials

Stratech will provide a hard copy and a soft copy of the necessary training materials (including the Operator's Handbook) in English.

7.0.6 Venue

The training session will be conducted at the Miami International Airport after the iFerret system is commissioned. The exact date and time of the session shall be determined at a later stage.

7.0.7 Training Hours

The training will be held during normal office hours and will last approximately eight hours.

7.0.8 Recommended Class Size

The recommended maximum size of each session is up to 14 trainees.

7.0.9 Additional Video Based Training

Additional training will also be provided to MDAD staff. This additional training will be in the form of offline video based training. Training DVD will be provided to MDAD. The scope and content of the video based training will be similar to the scope and content of the OST.

8.0 Maintenance Support Services

This section provides an overview of the maintenance support services to be provided for the iFerret™ System. The OSI team will work with MIA to create knowledge sharing to ensure MIA gather a comprehensive understanding on how to maintain the system over time. This knowledge transfer may reduce contract maintenance support over time reducing maintenance cost for personnel.

The maintenance support is divided into 3 levels. These levels are defined as follows:

Table 4: Definitions of Maintenance Support Levels

Maintenance Support Level	Maintenance Support Level Definition	Responsibility
Level 1	Receive incident calls from customer/end user Gathering information required to clearly identify the incident/problem. Open an incident record Identify and classify the incident priority as High, Medium or Low as determined by information gathered from the customer Provide work around for known errors, if applicable Provide initial corrective maintenance to resolve incident/problem including initial fault troubleshooting, diagnostics and rectification. Include replacing faulty components with spares (onsite inventory) whenever necessary Include on-site support whenever necessary Escalate incident to Level 2 Maintenance when incident/problem cannot be resolved by Level 1 Maintenance Preventive Maintenance Perform scheduled Level 1 preventive maintenance. Generate preventive maintenance report	OSI, DEI, TYLI and CNP with support from SSL
Level 2	Receive Level 1 Maintenance calls for incident Confirm incident/problem description and work with customer to gather additional information required to more clearly identify the incident/problem (if necessary) Identify a workaround solution if possible Provide corrective maintenance to resolve incident/problem including fault troubleshooting, diagnostics and rectification. Include replacing faulty components with spares (onsite inventory) whenever necessary Include on-site support whenever necessary. Escalate incident to Level 3 Maintenance when incident/problem cannot be resolved by Level 2 Maintenance Preventive Maintenance Perform scheduled Level 2 preventive maintenance. Generate preventive maintenance report	OSI, DEI, TYLI and CNP with support from SSL
Level 3	Receive Level 2 Maintenance calls for incident	SSL

Maintenance Support Level	Maintenance Support Level Definition	Responsibility
	<p>Level 3 will review the problem descriptions (as reported by Level 2) and ensure the necessary information are available for further problem analysis. Request for additional information to identify the incident/problem (if necessary) Provide further corrective maintenance to resolve incident/problem including fault troubleshooting, diagnostics and rectification Software maintenance includes: Provide software patches and fixes including defect resolution/bug fixes Exclude major release/version upgrade</p> <p>Level 3 maintenance support will be remote i.e. via email, phone and remote access to the iFerret System (via VPN)</p>	

Under this maintenance support model, MIA will manage the airport runway operational environment. OSI together with DEI, TYLI, CNP will provide Level 1 and Level 2 maintenance support (including on-site support whenever necessary) with support from SSL.

Stratech Systems (SSL) will provide Level 3 maintenance support (which is remote support via phone, email and remote system access via VPN). Stratech maintenance team will be able to remotely access the iFerret System (via MDAD's VPN Gateway) to perform remote health monitoring, fault detection, diagnostics, and fault isolation for the iFerret FOD Detection System.

8.1 Preventive Maintenance

Scheduled activities for Preventive Maintenance for the proposed iFerret System include but are not limited to the following:

- iFerret System Health Check by making use of the iFerret system monitoring tool
- Visual Inspection of EO sensor's Field-of-View and video quality check
- EOS inspection by making use of the system monitoring tools
- Aircraft Warning light check and lightning arrester check
- Operator Display Console inspection UPS health check
- Management/Database server housekeeping
- Server and workstation log file check
- iFerret system database health check and data archiving (if necessary)
- DVR check and video archiving (if necessary)
- Apply software patches and fixes

8.2 Corrective Maintenance

Corrective maintenance activities for the proposed iFerret system shall include but are not limited to the following:

8.2.1 Local diagnostics, fault isolation and rectification.

This will be performed by the maintenance support team of OSI, CNP, DEI, TYLI (with support from SSL).

This also include replacement faulty hardware with spares (from the On-site Inventory spare list), applying software fixes and patches, updates etc.

8.2.2 Remote diagnostics and fault isolation

This will be performed by SSL’s maintenance support team located in Singapore. SSL’s Singapore based maintenance support team will be able to remotely access the iFerret System (via VPN) to perform the following remotely for Level 3 maintenance support:

- System health check
- Fault detection and isolation
- Server performance monitoring
- Monitoring of availability of key system components (servers, computers, switches, VPU’s etc...)
- Checking of server and computers (including VPU’s) log files (including event logs and fault logs)
- iFerret application software health monitoring and fault detection

8.3 Maintenance Support Team Organization Structure

Team OSI will provide support services related to the entire FOD System. OSI intends to utilize local support as the primary point of contact and first responder for any system failure during the 5 year warranty/maintenance period. The team will remain intact and OSI will continue with local support during any optional renewal periods. This team will provide technicians and engineering support with staff employees that are certified in each of the supported subsystems that are incorporated in the FOD system.

Team OSI will maintain the follow schedule for routine maintenance.

Scheduled Routine Maintenance	Team OSI Support	
	Monthly	Quarterly
System Health Check	X	
Event (system & security) log check	X	
iFerret Application event/log check	X	
UPS6 Check	X	X
Database Check & Archive	X	X
Tower & EOS inspection & system health check	X	X
Rack inspection		X
Monitoring console inspection		X
UPS Test		X
Generate Maintenance Reports	X	X

Non-Routine Maintenance	Team OSI Support
Respond to Level 1 and Level 2 support	X
Corrective Maintenance	X
Response to system fault	X
Weekly FOD alert analysis	X
Remove & replace UPS batteries if necessary	X
Remove & replace faulty components	X
Remove & replace faulty fiber, power, lights etc...	X

Response Time Matrix

Severity	Definition	Response Time	Resolution Time	State Update
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1=Critical	A major component of the system is in a non-responsive state and severely affects MOAD productivity or operations. A high impact problem, which affects MOAD.	One (1) Hour	Four (4) Hours	One (1) Hour
2=Urgent	Any component failure or loss of functionality not covered in Severity 1. Which is hindering operations, such as but not limited to: excessively slow response time; functionality, degradation error message; backup problems; or issues affecting the use of a module or the data.	Two (2) Hours	Eight (8) Hours	Two (2) Hours
3=Important	Lesser issues, questions, or items that minimally impact the work flow or require a work around.	Four (4) Hours	Seventy-two (72) Hours	Four (4) Hours
4=Minor	Issues, questions or items that don't impact work flow; issues that can easily be scheduled such as an upgrade or patch.	Twenty-four (24) Hours	One (1) Month for an acceptable work around until final resolution.	Weekly status call.

SSL's Maintenance Support Team comprises:

SSL's US Based Maintenance Support Team

SSL's US based Maintenance Support team comprise of the following staff:

- Grant Bishop – Maintenance Support Manager
- William Laboy – Senior Maintenance Support Engineer

SSL's US team will also provide backup technical support for the maintenance support team of OSI, DEI, TYLI and CNP (who will be providing the Level 1 and Level 2 technical support including on-site support for the warranty and 5 year maintenance).

SSL's Singapore Based Maintenance Support Team

SSL's Singapore Based Maintenance Support Team comprises the following staff:

- Maintenance Support Manager
- Maintenance Support Engineer (Software)
- Maintenance Support Engineer (Hardware)
- Maintenance Support Engineer (System)

SSL's Singapore based maintenance support team will provide remote technical support to MIA via phone, email and remote access to the iFerret System (via VPN).

SSL's Singapore based maintenance support team will also provide technical support to the maintenance support team of OSI, DEI, TYLI and CNP (who will be providing the Level 1 and Level 2 technical support including on-site support).

SSL's Singapore based maintenance support team will also provide backup technical support (including technical advise, problem resolution etc.) to Stratech's US based maintenance support team.

8.4 Maintenance without Disruptions to Runway

The regular preventive and ad-hoc corrective maintenance activities could be carried out at any time for the iFerret™ EO sensors without interference to runway activities as the EO sensor installation location is far away from the runway and is easily accessible without requiring any runway closure at all. Hence, the maintenance of any of the iFerret™ EO Sensors do not require runway closure and will not affect runway operation at all.

8.5 Runway Coverage during EO Sensor Maintenance

The iFerret™ FOD Detection System will continue to provide full coverage operation even when any maintenance activities is performed on any single EO sensor. This is because the iFerret™ system incorporates built-in redundancy. The adjacent EO Sensor (operating in failover mode) will cover the runway sector covered by the particular EO Sensor under maintenance.

9.0 Stratech Software Release Management

The following section describes Stratech's Software Release Management process.

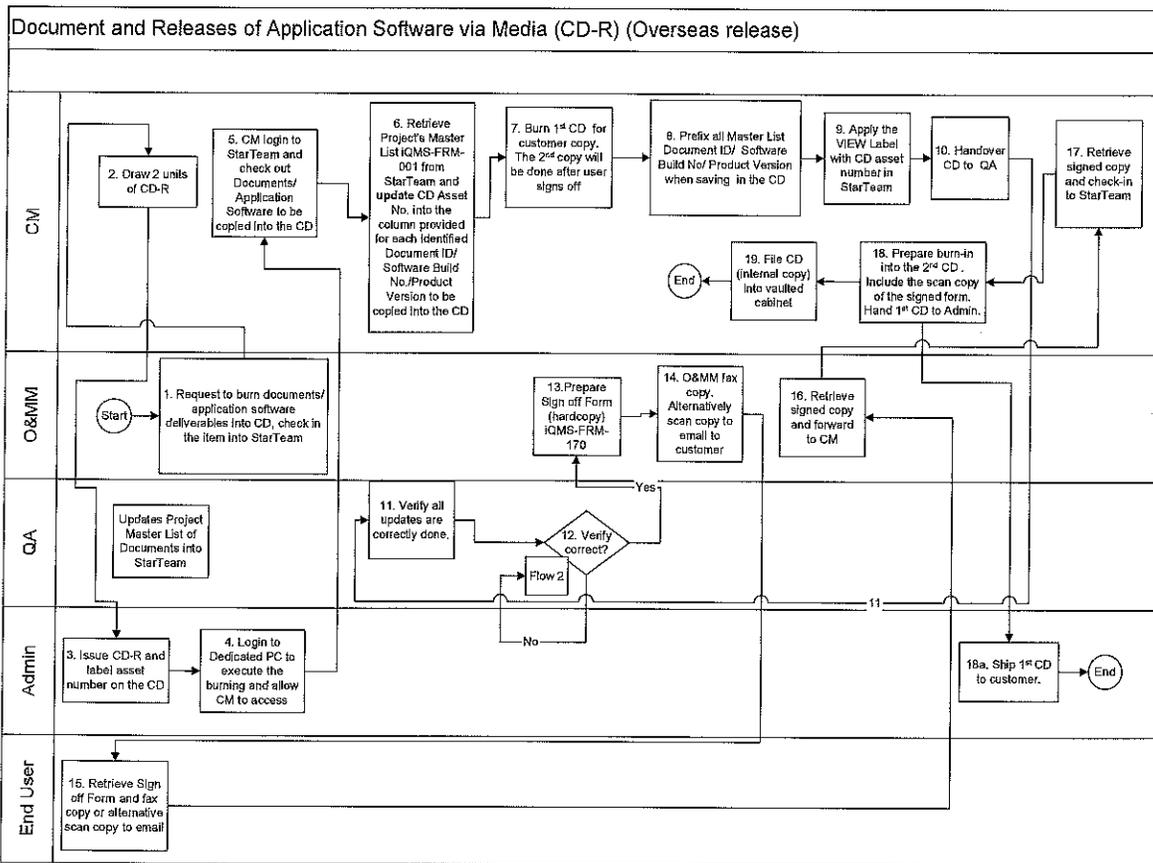


Figure 5: Stratech Software and Document Release Process

Table 5: Release Management Process

Process No	Process Description	Process Role
1	The Operations & Maintenance Manager (O&MM) shall check in all the deliverables to StarTeam for CM to burn onto a CD-R disc.	O&MM

Process No	Process Description	Process Role
	PM shall send a formal request via email to CM to create the CD-R copy.	
2	CM shall Draw out 2 CD-R discs from the administrator for the creation of the copies.	CM
3	The administrator shall label the asset number onto each CD-R disc and keep a record of the asset numbers.	Admin
4	The administrator shall assign a PC for the CM to execute the CD-R burning process.	Admin
5	CM shall check out the required documents/software that are to be burnt onto the CD-R discs.	CM
6	CM shall retrieve the project's Master List iQMS-FRM-001 from StarTeam and update the CD Asset No. into the column provided, for each identified Document ID/Software Build No./Product Version to be copied into the CD-R disc.	CM
7	CM shall start to burn the 1st CD-R disc.	CM
8	When saving the software filename onto the CD-R disc, CM shall use the following convention for the filename: <project code>-<customer name>-<document abbreviation>-<document running number>-<document version number>-<StarTeam vault branch version number> For example, i2MAS-ABC-MM-002-v1.0-2.doc	CM
9,10	CM shall apply the view label with CD asset number in StarTeam. CM shall hand over to QA for verification.	CM
11,12	QA shall verify if the contents on the CD-R disc match the items in the Project Master List.	QA
13, 14	O&MM prepares signed off copy for the deliverables and either faxes it to the end user or emails the scanned copy to the end user.	O&MM
15	End user shall receive the copy via fax or email and respond to SSL with signatories using the same communication method.	End user
16	O&MM retrieves the signed copy and forwards the copy to CM.	O&MM, CM
17	CM checks in the signed copy to StarTeam.	CM
18	CM issues the second CD-R disc for backup purposes and hands the first CD-R disc to Admin.	CM
18a	Admin sends the first CD-R disc to the customer.	Admin

9.1 Version Controller

The Configuration Management Office plays the role of Version Controller. The role of a version controller is to safeguard the source codes, making sure that there are no unauthorized changes to the codes. All changes are also documented and filed.

10.0 On-Site Inventory

The spares will be stored on-site at a local storage facility in the airport provided by MIA. These spares would be consumed by the maintenance support team (OSI, SSL, CNP, DEI) whenever necessary during the 5 years of maintenance support service (e.g. to replace faulty hardware components/equipment/parts of the iFerret System during on-site maintenance).

The following is the list of spares (spares package) which will be provided for the on-site inventory (spares package).

iFerret Spare Equipment/Components	Qty
Electro-Optic Sensor SubSystem (EOS equipment, exclude EOS software)	1
Management/Database Server (server hardware only, exclude CCS software)	1
Operator Display Console	1
Fiber Optic Transmitter	1
Fiber Optic Receiver	1
Mobile Display Device	1
Maintenance Console	1
Digital Video Recorder – (DVR hardware only)	1
Gigabit Ethernet Switch	1
Mobile Communication Server	1
Hard Drive 2 TB 7.2KRPM SATA	6
Hard Drive 600 GB 15KRPM SAS	2

11.0 Built-In Test and Comprehensive System Monitoring Capabilities

iFerret is equipped with powerful Built-in Test (BIT) and comprehensive system monitoring functions which include the following:

- Passive Monitors – listen for external signals (e.g. SNMP traps) to identify and alert upon any system problems or faults as they occur
- Active Monitors – monitors the availability and health of the critical system components and are extremely useful for minimizing any downtime due to failure of system components

The list of monitors can be configured for immediate alert upon detection of faults so that sufficient lead time is provided for corrective and preventive maintenance to minimize any system downtime.

The iFerret BIT and system monitoring functional capabilities cover hardware, system software (operating system, database) and application software components.

Hardware Monitoring - it monitors the availability and health of key hardware components and generates alerts upon detection of hardware component failure or fault. The list of hardware includes: EO Sensor (camera), Video Processor Unit (VPU), Management/Database Server, Operator Consoles, Digital Video Recorder (DVR), Mobile Communication Server, switches etc...

Server performance monitoring – monitors the key performance parameters of the Management/database Server (processor utilization, memory utilization, disk utilization etc) and generates alerts when any of these monitored performance parameters exceed threshold levels. Also monitors the server's log files for events and faults.

Network Monitoring – monitors the availability of the entire iFerret network including the Gigabit Ethernet switches.

Application Software - monitors the availability of the key application software modules (e.g. FOD detection and location module, database server module, operator console module, management server module, etc).

Alerts will automatically be generated whenever any faults are detected. These alerts would be displayed on the Maintenance Console. Alerts could also be displayed on the Operator Display Consoles.

Remote alerts (via SMS) could also be generated to alert operation and maintenance support staff upon detection of any system problems or faults.

12.0 User-friendliness and Ease of Operation

Based on Stratech's advanced intelligent vision technologies, iFerret™ is simple and easy to operate. The airport operators do not require special technical skills to operate the iFerret™ FOD Detection System. The powerful visual verification capabilities of iFerret™ enable the operator to filter out invalid alerts to prevent any false alarms. As defined in the FAA Advisory Circular (AC) 150/5220-24 dated 30 Sep 2009 (Reference 1), a false alarm is defined as "an alert causing the airport operator to take action to remove a FOD object which does not exist". Hence, unlike other FOD detection systems that use emissive detection technologies (e.g. Millimeter Wave Radar), the operation of iFerret™ does not require interpretation of complex signal/data acquired (e.g. radar signals). The operation of iFerret™ is as simple as looking at FOD images directly on the Operator Display Console (i.e. What You See is What You Get). Hence, iFerret™ is an extremely user-friendly and efficient FOD Detection System.

The iFerret™ FOD detection system has no need for secondary detection systems/sensors using disparate technologies, thus avoiding an additional layer of acquisition lag time. The iFerret™ FOD Detection System uses entirely Electro-Optical (EO) sensor technologies for FOD detection, location and identification which provide a clear visual detailed image with every FOD alert (in color and HD resolution). Each EO sensor is equipped with a powerful optical zoom lens providing up to 70 x zoom ratio. Thus, the operator can visually verify the FOD image instantly with the use of the powerful optical zoom-in feature) upon detection of the FOD. iFerret™ is designed with the use of powerful EO sensors and advanced image processing software technologies to facilitate efficient user verification of FOD(s) and elimination of all invalid alerts thus preventing false alarms.

13.0 Value Added Features

iFerret™ is designed to detect FOD in airport airside environment (runways and taxiways), using a network of remotely located Electro-Optical (EO) sensors. iFerret™ make use of Electro-Optical (EO) sensors as the primary (and sole) means for detection, location and identification of FOD(s) on runways and taxiways. Operating 24x7, it is capable of detecting and identifying multiple FOD items and pinpointing the precise locations of these multiple FOD items (on a geo-referenced GIS map) under both daytime and night time conditions. iFerret™ logs FOD incidences or events (in the form of FOD reports which include the FOD videos and images in color and Full HD resolution). It also provides the operator with audio and visual alerts.

The iFerret FOD Detection System make use of entirely passive Electro-Optical (EO) Sensors for FOD. The iFerret System will not emit or transmit any radar signal, microwave signal, radio frequencies or laser beams or LIDAR beams or infrared beams or visible spectrum light beams. The iFerret System will not transmit any other forms of transmission which could potentially interfere with other equipment/system in the airport or aircraft (such as radar, UHF/VHF wireless communication, aircraft navigation system etc...). These include current and future airport and aircraft equipment/systems

iFerret™ also enables the user to perform efficient visual assessment of the FOD(s) in real-time with powerful optical zoom-in capability of the EO sensor (for capturing detailed telephoto FOD images in Full HD resolution and color). These features will enable the airport operator to assess the risk of the detected FOD(s) efficiently and thus make better-informed decisions from the Air Traffic Control (ATC) tower and/or Ground Operations Control Centre (OCC).

14.0 Comprehensive Detection Data and Alerts

Besides the FOD image, location, date and time stamp report of FOD occurrence, iFerret™ is also able to keep track of FOD status by maintaining records of the time and date of the FOD clearance for each FOD. iFerret™ also allows the airport operator to sort and analyze the occurrence by FOD status (e.g. confirmed, invalid, cleared), FOD size, type and location.

All that FOD information is logged and stored in a central iFerret system database. The stored FOD data, image/video can be retrieved and replayed for post investigation and analysis. The data can be exported to Microsoft Excel format for further graph plotting and trend analysis so that the operator can determine when, where and what commonly occur in the runway and perform efficient FOD risk assessment. Such statistical analyses will enable the airport operator to take preventive action, improve airport FOD risk management, and even facilitate the identification of root causes of FOD events.

15.0 All Weather 24x7 Day/Night Continuous Operation

iFerret™ operates continuously in day and night for 24 hours by 7 days a week (24x7) under all weather conditions to facilitate the detection, location, identification and clearance of FOD hazards from the airport's airside areas (runways, taxiways). It is an integration of Stratech's superior EO sensors, advanced proprietary video and image processing technologies and real-time FOD detection technologies which enable the iFerret™ system to "see" and detect small objects even during night operations.

A color image of the detected FOD in Full HD resolution is provided (and displayed on the Operator Display Console) for visual verification of detected FOD by user.

Unlike millimeter wave radar (MWR) based detection system (which the performance could be affected by rain), iFerret™ is able to reliably detect FODs even under rain conditions. The performance of iFerret™ under rain conditions had been verified by CEAT. iFerret™ achieved detection rate of 94.4% under 28 mm/hour rain. Refer to the report titled "Acceptance Testing for the Stratech iFerret™ FOD Detection System at Singapore's Changi Airport" by Edwin Herrick dated 29 May 2009 for details.

16.0 Visual Verification

Using intelligent vision technologies for FOD detection, iFerret™ offers a visual means of verification upon detecting an FOD item. The System captures and displays a high resolution (Full HD) color image of each FOD item detected, and issues both visual and audio alerts at the Operator Display Console and the Mobile Display Device. At the same time, the Operator Display Console provides functions to allow computer-assisted or automatic optical zoom-in view of the specific runway sector where the FOD item is detected. The EO sensor is equipped with powerful zoom capabilities (with optical zoom lens which provides up to 70x zoom ratio). The operator can visually verify the presence of FOD through these zoom-in images and assess the risk associated with the FOD before initiating a runway closure procedure from the ATC. In addition, the operator can also visually verify that all FOD items identified are found and removed during recovery operation.

16.1 Locating of FOD with Pinpoint Accuracy

iFerret™ can pinpoint the exact location of any FOD(s) detected and display its precise location on a 2-dimensional (2D) geo-referenced Graphical Information System (GIS) map. The Operator Display Console will show a 2-D plan view of the runway, clearly marked with location identification codes, and highlights the location(s) of FOD(s) detected. iFerret™ is able to locate FOD(s) with a high position accuracy of +/- 1m (average). With this precise location information, the runway recovery team knows exactly where to search for the detected FOD so that runway operation can be resumed as rapidly as possible. Having a high accuracy of +/- 1 m (average) is particularly useful since it reduces the runway recovery team's distress in searching for FOD, and can also aid in faster FOD removal and shorter runway closure times.

16.2 FOD Alerts

An FOD alert will be generated whenever iFerret™ detects an FOD. The FOD alert will be in the form of both visual and audio alert. For visual alert the FOD image and its precise location on the runway will be displayed on the Operator Display Console. The FOD's precise location will be shown on the 2D runway GIS map.

FOD alerts could also be automatically sent to Mobile Display Device via mobile communication. The FOD alert will be displayed on the Mobile Device GUI. The remote FOD alert would also include the precise location of the FOD on the 2D runway map, FOD image, status etc. This could enable the field engineers to rapidly locate and clear the FOD.

17.0 Video Recording and Playback for Post-Event Analysis/Investigation

As iFerret™ captures runway video and images continuously, FOD incidents will be logged and indexed, and could be retrieved for reporting, post analysis or investigation. The FOD video and images will also be stored and could be retrieved for replay.

The System offers two levels of video recording, one for continuous recording of each runway sector, and another for event-based recording (e.g. FOD detected event).

The iFerret™ FOD Detection System's data logging and archiving capability stores images and FOD alert information pertaining to the detected FOD items. Video will be stored on the Digital Video Recorder (DVR). This enables video and image replay to facilitate post-incident/event investigation, analysis and FOD reporting. The FOD video and images could be replayed on the Operator Display Console. The video/image replay will be in synchronization with FOD incident reports based on selected FOD incidents, date/time, runway sector etc.

Images stored over a certain period (typically up to 30 days) could be programmed to be overwritten by new images.

FOD images and video could also be saved/archived onto removable DVD-ROM media. The videos can be exported from the Digital Video Recorder (DVR) to video clips in AVI format.

The proposed DVR provides storage capacity for up to 30 days of video recording

17.1 FOD Status Tracking and Reporting

The iFerret System is able to keep track of FOD status (e.g. detected, confirmed, cleared). FOD reports could also be generated based on FOD status, date/time of detection, date/time of clearance etc. The user can also input data into the FOD status report for specific FOD incidents (e.g. dispatch recovery team A to clear FOD item X). These user data will be stored in the FOD database and used for FOD reporting.

Appendix B – Payment Schedule

Deliverable	Description	Milestone Percentage	Total Amount Due
1	System Design Documents/ Engineering Plans Acceptance by MDAD	10%	\$438,948
2	Factory Acceptance Testing	10%	\$438,948
3	System Reliability / Integration Testing	10%	\$438,948
4	Installation/Commissioning Phase	15%	\$658,422
5	Completion of Training	5%	\$219,474
6	User Acceptance Testing "Go Live"	10%	\$438,948
7	Final System Acceptance	40%	\$1,490,312

**Total amount due for Milestone Percentages based on installation/implementation costs inclusive of the one-time discount but excludes maintenance and support fees.*

Price Breakdown

Description	Annual Fee
Software License Fee	\$1,245,112
Equipment / Devices	\$1,831,259
Professional Services	\$615,984
Testing and Implementation Services	\$838,785
Training	\$18,350
Inventory	\$409,924
Subtotal for Initial Five Year Term	\$4,959,414
Maintenance and Technical Support Services – Year 1	Included
Maintenance and Technical Support Services – Year 2	\$138,344
Maintenance and Technical Support Services – Year 3	\$184,458
Maintenance and Technical Support Services – Year 4	\$194,166
Maintenance and Technical Support Services – Year 5	\$204,386
Maintenance & Support Total for Initial Five Year Term:	\$721,354
Software Escrow Year 1	\$2,371
Software Escrow Year 2	\$2,371
Software Escrow Year 3	\$2,371
Software Escrow Year 4	\$2,371
Software Escrow Year 5	\$2,371
Software Escrow Total for Initial Five Year Term:	\$11,855
Total cost for the Initial Five Year Term:	\$5,692,623
One time special discount	(\$1,568,623)
FINAL COST FOR INITIAL FIVE YEAR TERM	\$ 4,124,000

B. OPTIONAL YEARS TO RENEW (OTR)

1. Maintenance and Support Fees

Description	Annual Fee	Extended Total
OTR 1 –Maintenance and Technical Support Service Fees (Years 6 - 8)		\$731,645
Maintenance and Technical Support Service Fees - <i>Contract Year 6</i>	\$215,143	
Maintenance and Technical Support Service Fees - <i>Contract Year 7</i>	\$251,629	
Maintenance and Technical Support Service Fees - <i>Contract Year 8</i>	\$264,873	
OTR 2 – Maintenance, and Technical Support Service Fees (Years 9 - 11)		\$881,237
Maintenance and Technical Support Service Fees - <i>Contract Year 9</i>	\$278,814	
Maintenance and Technical Support Service Fees - <i>Contract Year 10</i>	\$293,488	
Maintenance and Technical Support Service Fees - <i>Contract Year 11</i>	\$308,935	
OTR 3 –Maintenance and Technical Support Service Fees (Years 12 - 14)		\$1,027,833
Maintenance and Technical Support Service Fees - <i>Contract Year 12</i>	\$325,195	
Maintenance and Technical Support Service Fees - <i>Contract Year 13</i>	\$342,311	
Maintenance and Technical Support Service Fees - <i>Contract Year 14</i>	\$360,327	

2. Software Escrow Fees

Description	Annual Fee	Extended Total
OTR 1 – SOFTWARE ESCROW FEES - (Years 6 - 8)		\$7,113
Software Escrow Fees - <i>Contract Year 6</i>	\$2,371	
Software Escrow Fees - <i>Contract Year 7</i>	\$2,371	
Software Escrow Fees - <i>Contract Year 8</i>	\$2,371	
OTR 2 – SOFTWARE ESCROW FEES - (Years 9 - 11)		\$7,113
Software Escrow Fees - <i>Contract Year 9</i>	\$2,371	
Software Escrow Fees - <i>Contract Year 10</i>	\$2,371	
Software Escrow Fees - <i>Contract Year 11</i>	\$2,371	
OTR 3 – SOFTWARE ESCROW FEES - (Years 12 - 14)		\$7,113
Software Escrow Fees - <i>Contract Year 12</i>	\$2,371	
Software Escrow Fees - <i>Contract Year 13</i>	\$2,371	
Software Escrow Fees - <i>Contract Year 14</i>	\$2,371	

C. OPTIONAL ITEMS

1. Professional Service Fee Schedule:

During the term of the resultant contract, should the County wish to employ the Contractor for projects or services outside the scope of the services, all work performed will be billed on a time and materials basis as defined in the below rate schedule:

Service	Proposed Hourly Rate
Project Manager	\$ 211
Programmer	\$ 123
Junior Programmer	\$ 105
Web Developer	\$ 105
Trainer	\$ 158
System Administrator	\$ 123
Database Administrator	\$ 123
On-Site Training (Per Day)	\$ 158

Service	Proposed Hourly Rate
EOS Engineer	\$ 158
CCS Engineer	\$ 141
Civil M&E Consultant	\$ 141

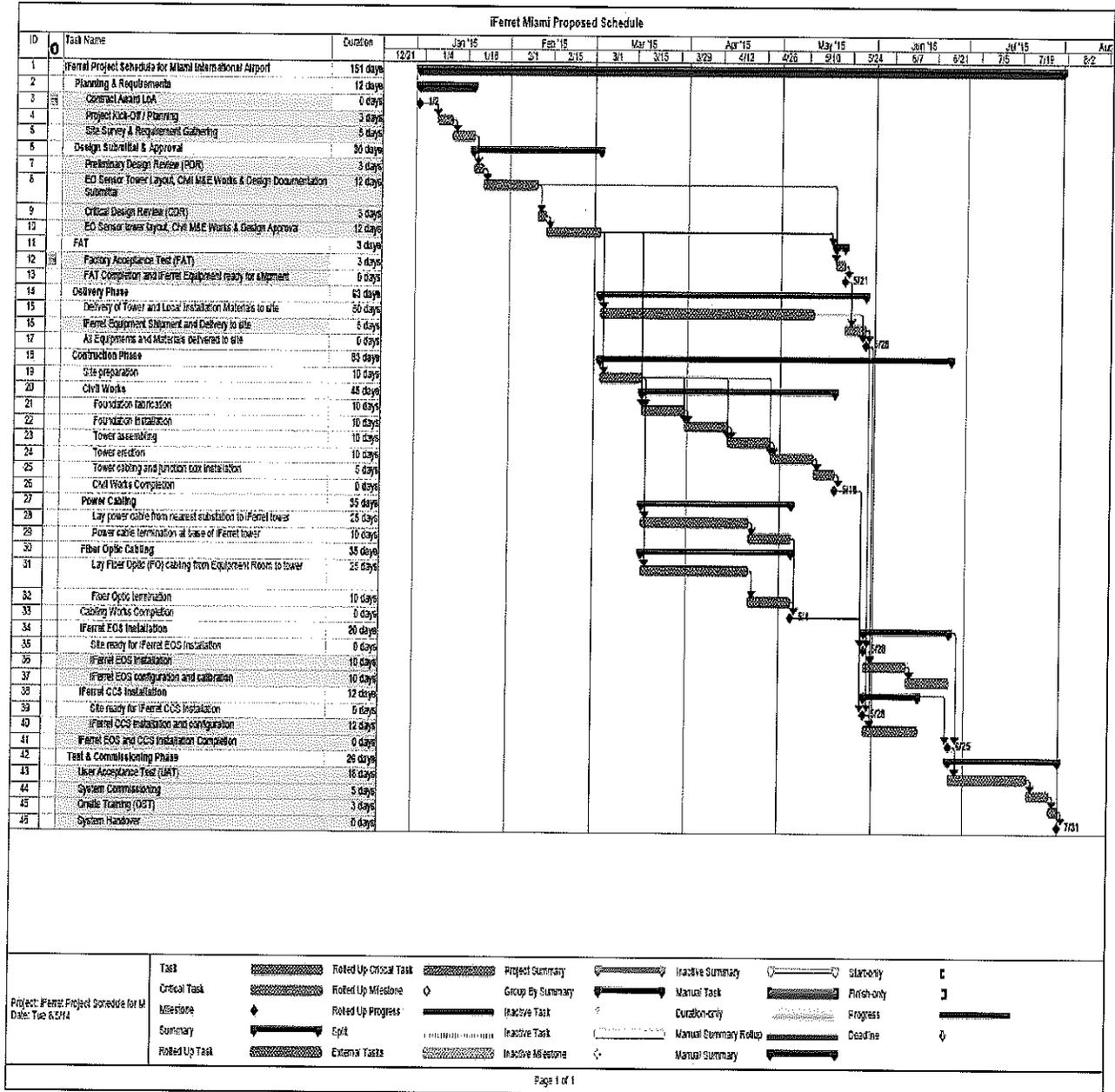
2. Optional Devices, Consumables, and Software Features:

During the term of the resultant contract, should the County wish to purchase additional software functionality, equipment, or consumables from the Contractor the following rates, subject to negotiation, shall apply as defined below:

Description	Unit Cost
Independent Performance Assessment by Professor Ed Herricks	\$116,400.00
Consultancy on Concept of Operations by Professor Ed Herricks	\$116,400.00
Lightning Strike Damage / FOD Assessment	\$268,000.00
Year 1 – Annual Performance Verification (APV) by Stratech – during warranty period upon system acceptance	\$88,529.96
APV – Year 2	\$93,189.84
APV – Year 3	\$98,095.13
APV – Year 4	\$103,257.47
APV – Year 5	\$108,692.38
APV – Year 6	\$114,413.44
APV – Year 7	\$120,435.20
APV – Year 8	\$126,773.18
APV – Year 9	\$133,445.81
APV – Year 10	\$140,469.58
APV – Year 11	\$147,862.92
APV – Year 12	\$155,645.23
APV – Year 13	\$163,836.88
APV – Year 14	\$172,460.18

Prior to initiating work on these optional items, the County and Contractor will define the scope of work via a work order issued under this Agreement. The County reserves the right to negotiate each order with the Contractor. Addition of facilities shall require a Contract Amendment to be executed by both parties.

Appendix C – Project Timeline



Appendix D – Acceptance Criteria

DELIVERABLE ACCEPTANCE PROCEDURES

The parties intend for the Solution to be brought into Production Mode, as defined below, in stages, as each of the functional components of the System are deployed as set forth in Appendix A "Scope of Services" project timeline. Each functional component will be subjected to its own testing and Final Acceptance will be deemed to have occurred for that component upon the component (i) satisfying the Final Acceptance Criteria (which will be agreed to by the parties and (ii) module being used in Production Mode.

Contractor will notify County in writing (via email) when the Deliverables for a functional component of the System are ready for acceptance testing. County will commence testing on such Deliverables within three (3) County Work Days of being notified by Contractor, provided County has been given access to such Deliverables. County will have up to five (5) days, in its own discretion, to conduct its first round of acceptance tests and will use reasonable measures to determine whether the Deliverables are in conformance with the Final Acceptance Criteria for the applicable functional component, and will notify Contractor in writing as to any deficiency, in list form (to be incorporated by mutual agreement into a punch list during the System acceptance periods described in Appendix C "Project Timeline"). Contractor will promptly commence work on resolving such punch list issues and will, as necessary, redeliver such Deliverables for further testing, which County will commence within two (2) days of receiving Contractor's notice that the Deliverables are ready for such further testing. The parties shall agree, upon such redelivery, as to the time County requires to complete the additional acceptance testing. The process will be repeated until either the functional component has substantially conformed to the Final Acceptance Criteria or County decides to accept the functional component as is and the functional component is put into Production Mode.

The above process will be repeated for each functional component delivered hereunder provided that functional components may be tested in tandem as set forth in Appendix C "Project Timeline."

Final Acceptance of the System will be deemed to have occurred on the Deliverables meeting the Final Acceptance Criteria (which the parties will mutually agree to and develop from the functional and technical requirements as set forth in the contract documents, provided that the parties recognize that the development of the CCS Documents may result in the parties clarifying such requirements). Such Final Acceptance shall be evidenced by (i) a written acknowledgement by the County Project Manager (which acknowledgement shall not be arbitrarily or unreasonably withheld) that the System meets all such functional and technical requirements or (ii) County's use of the System in a Production Mode. "Production Mode" means any use by the County of the System or any of its modules to process any day-to-day business activity on behalf of the County.

**DELIVERABLE ACCEPTANCE FORM
USER ACCEPTANCE TEST****PROJECT: FOREIGN OBJECT DEBRIS (FOD) DETECTION SYSTEM**

In compliance with the requirements detailed in the above contract (including any modifications or amendments), the following project deliverable has been delivered, reviewed and formally accepted by the County and the Contractor. This document constitutes full acknowledgment by the County of acceptance and delivery of the deliverable detailed below.

It is understood that any future changes to this deliverable after this acceptance is given will require a formal Change Request Form be submitted.

DELIVERABLE NAME: USER ACCEPTANCE TEST (UAT)

Deliverable Description: During the User Acceptance Test period, the Contractor and the County collectively will check, verify, and adjust the System as needed to meet the operational specifications listed in RFP872 and the attached UAT report. During the User Acceptance Test period, the Contractor is required to:

- Verify and update the test scenarios
- Ensure configurations are working properly
- Train County personnel on the operation of the Solution and associated components
- Conduct final functionality control tests, additions/modifications, and software integration
- Verify the normal operation of the System and ensure compatibility of peripheral and system applications
- Resolve user problems and/or deficiencies identified by the County
- Correct and manage errors
- Update the System documentation

The follow information is test criteria for the iFerret system to be deployed for MIA. These criteria will be finalized upon completion of the detailed assessment after contract award.

FOD Detection and FOD Alerts

- The iFerret System is able to detect single and multiple FODs (e.g. 20 FODs) placed within the coverage area of a selected EO Sensor, under both day and night conditions.
- The iFerret System is able to generate an FOD alert which includes visual alert and audible alert immediately upon FOD detection.
- For each FOD alert, the FOD location will be displayed on the runway map. The FOD image, size and thumbnail image with unique FOD ID will be displayed on the Operator Display Console GUI.
- The user is able to confirm the FOD by clicking on the "Confirm FOD" button on the Operator Display Console GUI.
- The user is able to clear the FOD by clicking on the "Clear FOD" button on the Operator Display Console GUI. The cleared FOD will be removed from the FOD List View.

Generate FOD Report

- The user is able to generate FOD Report by clicking on the "FOD Report" button on the Operator Display Console GUI.
- The user is able to specify the FOD Report content by selecting the data fields to be included in the FOD Report including Location, Status, Start Date, Start Time, End Date, End Time, FOD Categories. The FOD Report shall display the following data fields for each FOD record :
 - Runway
 - EO Sensor ID
 - Date/Time FOD Detected
 - Date/Time FOD Confirmed
 - Date/Time FOD Cleared
 - FOD Status
 - FOD Size
 - FOD Category
 - FOD Details
- The user is able to generate the FOD Report in pdf format.
- The user is able to select to plot a graph of FOD occurrences vs EO Sensor ID.

- The user is able to select to plot a graph of FOD occurrences vs runway.
- The user is able to select to plot a graph of FOD occurrences vs date.
- The user is able to select to plot a graph of FOD occurrences vs specific time period.

EO Sensor Control

- The user is able to start FOD detection for selected EO Sensor by clicking on "Start FOD Detection" button for the selected EO sensor on the Operator Display Console GUI.
- The user is able to stop FOD detection for selected EO Sensor by clicking on "Stop FOD Detection" button for the selected EO sensor on the Operator Display Console GUI.
- The user is able to control the selected EO sensor to pan left/right by clicking on the "Pan Left" or "Pan Right" button for the selected EO sensor on the Operator Display Console GUI.
- The user is able to control the selected EO sensor to tilt up/down by clicking on the "Tilt Up" or "Tilt Down" button for the selected EO sensor on the Operator Display Console GUI.
- The user is able to control the selected EO sensor to optically zoom-in/zoom-out by clicking on the "Zoom-in" or "Zoom-out" button for the selected EO sensor on the Operator Display Console GUI.
- The user is able to control the selected EO sensor to focus near/far by clicking on the "Focus Near/Far" button for the selected EO sensor on the Operator Display Console GUI.
- The user is able to control the selected EO sensor to move the next, previous, first or last subsector by clicking on the appropriate button on the Operator Display Console GUI.

EOS Enclosure Control

- The user is able to control the EOS enclosure to switch the wiper on/off by clicking on the "Wiper On/Off" button on the Operator Display Console GUI.

Runway Map Display and Movement

- The runway map is displayed on the Operator Display Console GUI.
- The user is able to move the runway map left/right/up/down by moving the mouse over the runway map on the Operator Display Console GUI.

Runway Panoramic View Display and Movement

- The runway panoramic view in Full HD resolution is displayed on the Operator Display Console GUI.
- The user is able to zoom-in and zoom-out of runway panoramic view by scrolling the mouse on the Operator Display Console GUI.
- The user is able to move left/right/up/down on the runway panoramic view by moving the mouse over the runway panoramic view on the Operator Display Console GUI.

Mobile Device

- The user is able to receive FOD alert(s) on the Mobile Device (iPAD).
- Each received FOD alert will be displayed on the Mobile Device GUI which include FOD details, FOD size, FOD image, FOD position, FOD location on runway map.
- The user is able to Acknowledge the FOD Alert on the Mobile Device GUI. The date/time of Alert Acknowledgement is recorded.
- The user is able to update the FOD status for selected FOD alert as "Cleared" on the Mobile Device GUI. The date/time of status update is recorded.
- The user is able to view FOD image and FOD details by selecting an FOD alert on the Mobile Device GUI.
- The user is able to capture new image of FOD by clicking on the "Capture Image" button on the Mobile Device GUI and taking a picture of the FOD using the Mobile Device's built-in camera.
- The user is able to view and modify FOD details by selecting the specific FOD Alert on the Mobile Device GUI.

Deliverable Date: _____

Accepted Unconditionally: Yes / No

Accepted Conditionally: Yes / No

Acceptance Conditions: _____

Not Accepted: _____

Reason: _____

General Comments: _____

Delivered By:

Signature	Name	Date

Accepted By:

Signature	Name	Date



FINAL SYSTEM ACCEPTANCE FORM

PROJECT: FOREIGN OBJECT DEBRIS (FOD) DETECTION SYSTEM

In compliance with the requirements detailed in the above contract (including any modifications or amendments), the following project deliverable has been delivered, reviewed and formally accepted by the County and the Contractor. This document constitutes full acknowledgment by the County of acceptance and delivery of the deliverable detailed below. The system must successfully pass a 30 Day Reliability Period that starts on the system "Go Live" date prior to MDAD granting the Final System Acceptance.

It is understood that any future changes to this deliverable after this acceptance is given will require a formal Change Request Form be submitted.

The Warranty Period on this deliverable starts on: _____ and is valid for a twelve month period.

DELIVERABLE NAME: FINAL SYSTEM ACCEPTANCE

Deliverable Description: The delivered system meets the business requirements of the County as detailed in the Final System Acceptance Report. The Contractor has successfully completed the required System setup and integration for the Solution satisfies the criteria as specified in the scope of services for RFP872.

Deliverable Date: _____

Accepted Unconditionally: Yes / No

Accepted Conditionally: Yes / No

Passed 30 Day Reliability Period: Yes / No

Acceptance Conditions: _____

Not Accepted: _____

Reason: _____

General Comments: _____

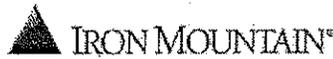
Delivered By:

Signature Name Date

Accepted By:

Signature Name Date

APPENDIX E – ESCROW AGREEMENT



Effective Date	
Deposit Account Number	
*Effective Date and Deposit Account Number to be supplied by Iron Mountain only.	

Three-Party Escrow Service Agreement

1. Introduction

This Three Party Escrow Service Agreement (the "Agreement") is entered into by and between Stratech Systems Limited (the "Depositor"), and by Miami-Dade County (the "Beneficiary") and by Iron Mountain Intellectual Property Management, Inc. ("Iron Mountain"). Depositor, Beneficiary, and Iron Mountain may be referred to individually as a "Party" or collectively as the "Parties" throughout this Agreement.

- (a) The use of the term services in this Agreement shall refer to Iron Mountain services that facilitate the creation, management, and enforcement of software or other technology escrow accounts as described in Exhibit A attached to this Agreement ("Services"). A Party shall request Services under this Agreement by selecting such Service on Exhibit A upon execution of the Agreement or by submitting a work request for certain Iron Mountain Services ("Work Request") via written instruction or the online portal maintained at the website located at www.ironmountainconnect.com or other websites owned or controlled by Iron Mountain that are linked to that website (collectively the "Iron Mountain Website").
- (b) The Beneficiary and Depositor have, or will have, entered into a license agreement or other agreement ("License Agreement") conveying intellectual property rights to the Beneficiary, and the Parties intend this Agreement to be considered as supplementary to such agreement, pursuant to Title 11 United States [Bankruptcy] Code, Section 365(n).

2. Depositor Responsibilities and Representations

- (a) It shall be solely the Depositor's responsibility to: (i) make an initial deposit of all proprietary technology and other materials covered under this Agreement "Deposit Material" to Iron Mountain within thirty (30) days of the Effective Date; (ii) make any required updates to the Deposit Material during the Term (as defined below) of this Agreement; and (iii) ensure that a minimum of one (1) copy of Deposit Material is deposited with Iron Mountain at all times. At the time of each deposit or update, Depositor will provide an accurate and complete description of all Deposit Material sent to Iron Mountain using the form attached to this Agreement as Exhibit B.
- (b) Depositor represents that it lawfully possesses all Deposit Material provided to Iron Mountain under this Agreement and that any current or future Deposit Material liens or encumbrances will not prohibit, limit, or alter the rights and obligations of Iron Mountain under this Agreement. Depositor warrants that with respect to the Deposit Material, Iron Mountain's proper administration of this Agreement will not violate the rights of any third parties.
- (c) Depositor represents that all Deposit Material is readable and useable in its then current form; if any portion of such Deposit Material is encrypted, the necessary decryption tools and keys to read such material are deposited contemporaneously.

3. Beneficiary Responsibilities and Representations

- (a) Beneficiary acknowledges that, as between Iron Mountain and Beneficiary, Iron Mountain's obligation is to maintain the Deposit Material as delivered by the Depositor and that, other than Iron Mountain's inspection of the Deposit Material (as described in Section 4) and the performance of any of the optional verification Services listed in Exhibit A, Iron Mountain has no other obligation regarding the completeness, accuracy, or functionality of the Deposit Material.
- (b) It shall be solely the Beneficiary's responsibility to monitor whether a deposit or deposit update has been accepted by Iron Mountain.

4. Iron Mountain Responsibilities and Representations

- (a) Iron Mountain agrees to use commercially reasonable efforts to provide the Services requested by Authorized Person(s) (as identified in the "Authorized Person(s)/Notices Table" below) representing the Depositor or Beneficiary in a Work Request. Iron Mountain may reject a Work Request (in whole or in part) that does not contain all required information at any time upon notification to the Party originating the Work Request.
- (b) Iron Mountain will conduct a visual inspection upon receipt of any Deposit Material and associated Exhibit B. If Iron Mountain determines that the Deposit Material does not match the description provided by Depositor represented in Exhibit B, Iron Mountain will notify Depositor of such discrepancy.
- (c) Iron Mountain will provide notice to the Beneficiary of all Deposit Material that is accepted and deposited into the escrow account under this Agreement. Unless Depositor or Beneficiary submits a Work Request for "Deposit Tracking



Notification as described in Exhibit A, Iron Mountain shall not have any obligation to prompt the Depositor to make a deposit, nor shall it have an obligation to notify the Beneficiary of the Depositor's failure to make a deposit or deposit update. Notwithstanding the foregoing, either Depositor or Beneficiary may obtain information regarding deposits or deposit updates upon request or through the Iron Mountain Website.

- (d) Iron Mountain will follow the provisions of Exhibit C attached to this Agreement in administering the release of Deposit Material.
- (e) Iron Mountain will hold and protect Deposit Material in physical or electronic vaults that are either owned or under the control of Iron Mountain, unless otherwise agreed to by the Parties.
- (f) Upon receipt of written instructions by both Depositor and Beneficiary, Iron Mountain will permit the replacement or removal of previously submitted Deposit Material. The Party making such request shall be responsible for getting the other Party to approve the joint instructions. Any Deposit Material that is removed from the deposit account will be either returned to Depositor or destroyed in accordance with Depositor's written instructions.
- (g) Should transport of Deposit Material be necessary for Iron Mountain to perform Services requested by Depositor or Beneficiary under this Agreement or following the termination of this Agreement, Iron Mountain will use a commercially recognized overnight carrier such as Federal Express or United Parcel Service. Iron Mountain will not be responsible for any loss or destruction of, or damage to, such Deposit Material while in the custody of the common carrier.

5. Deposit Material Verification

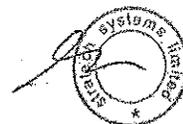
- (a) Beneficiary may submit a verification Work Request to Iron Mountain for one or more of the Services defined in Exhibit A attached to this Agreement and Depositor consents to Iron Mountain's performance of any level(s) of such Services. Upon request by Iron Mountain and in support of Beneficiary's request for verification Services, Depositor shall promptly complete and return an escrow deposit questionnaire and reasonably cooperate with Iron Mountain by providing reasonable access to its technical personnel whenever reasonably necessary.
- (b) The Parties consent to Iron Mountain's use of a subcontractor to perform verification Services. Such subcontractor shall be bound by the same confidentiality obligations as Iron Mountain and shall not be a direct competitor to either Depositor or Beneficiary. Iron Mountain shall be responsible for the delivery of Services of any such subcontractor as if Iron Mountain had performed the Services. Depositor warrants and Beneficiary warrants that any material it supplies for verification Services is lawful, does not violate the rights of any third parties and is provided with all rights necessary for Iron Mountain to perform verification of the Deposit Material.
- (c) Iron Mountain will work with a Party who submits any verification Work Request for Deposit Material covered under this Agreement to either fulfill any standard verification Services Work Request or develop a custom Statement of Work ("SOW"). Iron Mountain and the requesting Party will mutually agree in writing to an SOW on terms and conditions that include but are not limited to: description of Deposit Material to be tested; description of verification testing; requesting Party responsibilities; Iron Mountain responsibilities; Service Fees; invoice payment instructions; designation of the paying Party; designation of authorized SOW representatives for both the requesting Party and Iron Mountain with name and contact information; and description of any final deliverables prior to the start of any fulfillment activity. Provided that the requesting Party has identified in the verification Work Request or SOW that the Deposit Material is subject to the regulations of the International Traffic in Arms Regulations (22 CFR 120)(hereinafter "ITAR"), Iron Mountain shall ensure that any subcontractor who is granted access to the Deposit Material for the performance of verification Services shall be a U.S. Person as defined in 8 U.S.C. 1101(a)(20) or who is a protected person as defined in 8 U.S.C. 1324b(a)(3). After the start of fulfillment activity, each SOW may only be amended or modified in writing with the mutual agreement of both Parties, in accordance with the change control procedures set forth in the SOW. If the verification Services extend beyond those described in Exhibit A, the Depositor shall be a necessary Party to the SOW governing the Services.

6. Payment

The Party responsible for payment designated in the Paying Party Billing Contact Table ("Paying Party") shall pay to Iron Mountain all fees as set forth in the Work Request ("Service Fees"). All Service Fees are due within thirty (30) calendar days from the date of invoice in U.S. currency and are non-refundable. Iron Mountain may update Service Fees with a ninety (90) calendar day written notice to the Paying Party during the Term of this Agreement (as defined below). The Paying Party is liable for any taxes (other than Iron Mountain income taxes) related to Services purchased under this Agreement or shall present to Iron Mountain an exemption certificate acceptable to the taxing authorities. Applicable taxes shall be billed as a separate item on the invoice. Any Service Fees not collected by Iron Mountain when due shall bear interest until paid at a rate of one percent (1%) per month (12% per annum) or the maximum rate permitted by law, whichever is less. Notwithstanding the non-performance of any obligations of Depositor to deliver Deposit Material under the License Agreement or this Agreement, Iron Mountain is entitled to be paid all Service Fees that accrue during the Term of this Agreement.

7. Term and Termination

- (a) The term of this Agreement is for a period of one (1) year from the Effective Date ("Initial Term") and will automatically renew for additional one (1) year terms ("Renewal Term") (collectively the "Term"). This Agreement shall continue in full force and effect until one of the following events occur: (i) Depositor and Beneficiary provide Iron Mountain with sixty (60) days' prior written joint notice of their intent to terminate this Agreement; (ii) Beneficiary provides Iron Mountain



and Depositor with sixty (60) days' prior written notice of its intent to terminate this Agreement; (iii) the Agreement terminates under another provision of this Agreement; or (iv) any time after the Initial Term, Iron Mountain provides sixty (60) days' prior written notice to the Depositor and Beneficiary of Iron Mountain's intent to terminate this Agreement. The Effective Date and the Deposit Account Number shall be supplied by Iron Mountain only. The Effective Date supplied by Iron Mountain and specified above shall be the date Iron Mountain sets up the escrow account.

- (b) Unless the express terms of this Agreement provide otherwise, upon termination of this Agreement, Iron Mountain shall return physical Deposit Material to the Depositor and erase electronically submitted Deposit Material. If reasonable attempts to return the physical Deposit Material to Depositor are unsuccessful, Iron Mountain shall destroy the Deposit Material.
- (c) In the event of the nonpayment of undisputed Service Fees owed to Iron Mountain, Iron Mountain shall provide all Parties to this Agreement with written notice of Iron Mountain's intent to terminate this Agreement. Any Party to this Agreement shall have the right to make the payment to Iron Mountain to cure the default. If the past due payment is not received in full by Iron Mountain within thirty (30) calendar days of the date of such written notice, then Iron Mountain shall have the right to terminate this Agreement at any time thereafter by sending written notice to all Parties. Iron Mountain shall have no obligation to perform the Services under this Agreement (except those obligations that survive termination of this Agreement, which includes the confidentiality obligations in Section 10) so long as any undisputed Service Fees due Iron Mountain under this Agreement remain unpaid.

8. **Infringement Indemnification**

Anything in this Agreement to the contrary notwithstanding, Depositor at its own expense shall defend, indemnify and hold Iron Mountain fully harmless against any claim or action asserted against Iron Mountain (specifically including costs and reasonable attorneys' fees associated with any such claim or action) to the extent such claim or action is based on an assertion that Iron Mountain's administration of this Agreement infringes any patent, copyright, license or other proprietary right of any third party. When Iron Mountain has notice of a claim or action, it shall promptly notify Depositor in writing. Depositor may elect to control the defense of such claim or action or enter into a settlement agreement, provided that no such settlement or defense shall include any admission or implication of wrongdoing on the part of Iron Mountain without Iron Mountain's prior written consent, which consent shall not be unreasonably delayed or withheld. Iron Mountain shall have the right to employ separate counsel and participate in the defense of any claim at its own expense.

9. **Warranties**

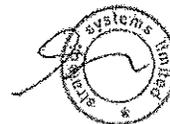
IRON MOUNTAIN WARRANTS ANY AND ALL SERVICES PROVIDED HEREUNDER SHALL BE PERFORMED IN A COMMERCIALY REASONABLE MANNER CONSISTENT WITH INDUSTRY STANDARDS. EXCEPT AS SPECIFIED IN THIS SECTION, ALL CONDITIONS, REPRESENTATIONS, AND WARRANTIES INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, SATISFACTORY QUALITY, OR ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE, ARE HEREBY EXCLUDED TO THE EXTENT ALLOWED BY APPLICABLE LAW. AN AGGRIEVED PARTY MUST NOTIFY IRON MOUNTAIN PROMPTLY UPON LEARNING OF ANY CLAIMED BREACH OF ANY WARRANTY AND, TO THE EXTENT ALLOWED BY APPLICABLE LAW, SUCH PARTY'S REMEDY FOR BREACH OF THIS WARRANTY SHALL BE SUBJECT TO THE LIMITATION OF LIABILITY AND CONSEQUENTIAL DAMAGES WAIVER IN THIS AGREEMENT. THIS DISCLAIMER AND EXCLUSION SHALL APPLY EVEN IF THE EXPRESS WARRANTY AND LIMITED REMEDY SET FORTH ABOVE FAILS OF ITS ESSENTIAL PURPOSE.

10. **Confidential Information**

Iron Mountain shall have the obligation to implement and maintain safeguards designed to protect the confidentiality of the Deposit Material and use at least the same degree of care to safeguard the confidentiality of the Deposit Material as it uses to protect its own confidential information, but in no event less than a reasonable degree of care. Except as provided in this Agreement Iron Mountain shall not use or disclose the Deposit Material. Iron Mountain shall not disclose the terms of this Agreement to any third party other than its financial, technical, or legal advisors, or its administrative support service providers. Any such third party shall be bound by the same confidentiality obligations as Iron Mountain. If Iron Mountain receives a subpoena or any other order from a court or other judicial tribunal pertaining to the disclosure or release of the Deposit Material, Iron Mountain will promptly notify the Parties to this Agreement unless prohibited by law. After notifying the Parties, Iron Mountain may comply in good faith with such order. It shall be the responsibility of Depositor or Beneficiary to challenge any such order; provided, however, that Iron Mountain does not waive its rights to present its position with respect to any such order. Iron Mountain will cooperate with the Depositor or Beneficiary, as applicable, to support efforts to quash or limit any subpoena, at such Party's expense.

11. **Limitation of Liability**

EXCEPT FOR: (I) LIABILITY FOR DEATH OR BODILY INJURY; (II) PROVEN GROSS NEGLIGENCE OR WILLFUL MISCONDUCT; OR (III) THE INFRINGEMENT INDEMNIFICATION OBLIGATIONS OF SECTION 8, ALL OTHER LIABILITY RELATED TO THIS AGREEMENT, IF ANY, WHETHER ARISING IN CONTRACT, TORT (INCLUDING NEGLIGENCE) OR OTHERWISE, OF ANY PARTY TO THIS AGREEMENT SHALL BE LIMITED TO THE AMOUNT EQUAL TO ONE YEAR OF FEES PAID TO IRON MOUNTAIN UNDER THIS AGREEMENT. IF CLAIM OR LOSS IS MADE IN RELATION TO A SPECIFIC DEPOSIT OR DEPOSITS, SUCH LIABILITY SHALL BE LIMITED TO THE FEES RELATED SPECIFICALLY TO SUCH DEPOSITS.

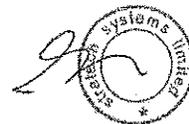


12. Consequential Damages Waiver

IN NO EVENT SHALL ANY PARTY TO THIS AGREEMENT BE LIABLE FOR ANY INCIDENTAL, SPECIAL, PUNITIVE OR CONSEQUENTIAL DAMAGES, LOST PROFITS, ANY COSTS OR EXPENSES FOR THE PROCUREMENT OF SUBSTITUTE SERVICES (EXCLUDING SUBSTITUTE ESCROW SERVICES), OR ANY OTHER INDIRECT DAMAGES, WHETHER ARISING IN CONTRACT, TORT (INCLUDING NEGLIGENCE) OR OTHERWISE EVEN IF THE POSSIBILITY THEREOF MAY BE KNOWN IN ADVANCE TO ONE OR MORE PARTIES.

13. General

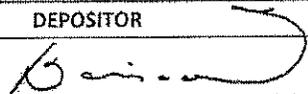
- (a) Purchase Orders. In the event that the Paying Party issues a purchase order or other instrument used to pay Service Fees to Iron Mountain, any terms and conditions set forth in the purchase order which constitute terms and conditions which are in addition to those set forth in this Agreement or which establish conflicting terms and conditions to those set forth in this Agreement are expressly rejected by Iron Mountain.
- (b) Right to Make Copies. Iron Mountain shall have the right to make copies of all Deposit Material as reasonably necessary to perform the Services. Iron Mountain shall copy all copyright, nondisclosure, and other proprietary notices and titles contained on Deposit Material onto any copies made by Iron Mountain. Any copying expenses incurred by Iron Mountain as a result of a Work Request to copy will be borne by the requesting Party. Iron Mountain may request Depositor's reasonable cooperation in promptly copying Deposit Material in order for Iron Mountain to perform this Agreement.
- (c) Choice of Law. The validity, interpretation, and performance of this Agreement shall be construed under the laws of the Commonwealth of Massachusetts, USA, without giving effect to the principles of conflicts of laws.
- (d) Authorized Person(s). Depositor and Beneficiary must each authorize and designate one person whose actions will legally bind such Party ("Authorized Person" who shall be identified in the Authorized Person(s) Notices Table of this Agreement or such Party's legal representative) and who may manage the Iron Mountain escrow account through the Iron Mountain website or written instruction. Depositor and Beneficiary warrant that they shall maintain the accuracy of the name and contact information of their respective designated Authorized Person during the Term of this Agreement by providing Iron Mountain with a written request to update its records for the Party's respective Authorized Person which includes the updated information and applicable deposit account number(s).
- (e) Right to Rely on Instructions. With respect to release of Deposit Material or the destruction of Deposit Material, Iron Mountain shall rely on instructions from a Party's Authorized Person. In all other cases, Iron Mountain may act in reliance upon any instruction, instrument, or signature reasonably believed by Iron Mountain to be genuine and from an Authorized Person, officer, or other employee of a Party. Iron Mountain may assume that such representative of a Party to this Agreement who gives any written notice, request, or instruction has the authority to do so. Iron Mountain will not be required to inquire into the truth of, or evaluate the merit of, any statement or representation contained in any notice or document reasonably believed to be from such representative.
- (f) Force Majeure. No Party shall be liable for any delay or failure in performance due to events outside the defaulting Party's reasonable control, including without limitation acts of God, strikes, riots, war, acts of terrorism, fire, epidemics, or delays of common carriers or other circumstances beyond its reasonable control. The obligations and rights of the excused Party shall be extended on a day-to-day basis for the time period equal to the period of the excusable delay.
- (g) Notices. Iron Mountain shall have the right to rely on the last known address provided by each the Depositor and Beneficiary for its respective Authorized Person and Billing Contact as set forth in this Agreement or as subsequently provided as an update to such address. All notices regarding Exhibit C (Release of Deposit Material) shall be sent by commercial express mail or other commercially appropriate means that provide prompt delivery and require proof of delivery. All other correspondence, including but not limited to invoices and payments, may be sent electronically or by regular mail. The Parties shall have the right to rely on the last known address of the other Parties. Any correctly addressed notice to the last known address of the other Parties, that is refused, unclaimed, or undeliverable shall be deemed effective as of the first date that said notice was refused, unclaimed, or deemed undeliverable by electronic mail, the postal authorities, or commercial express mail.
- (h) No Waiver. No waiver of any right under this Agreement by any Party shall constitute a subsequent waiver of that or any other right under this Agreement.
- (i) Assignment. No assignment of this Agreement by Depositor or Beneficiary or any rights or obligations of Depositor or Beneficiary under this Agreement is permitted without the written consent of Iron Mountain, which shall not be unreasonably withheld or delayed. Iron Mountain shall have no obligation in performing this Agreement to recognize any successor or assign of Depositor or Beneficiary unless Iron Mountain receives clear, authoritative and conclusive written evidence of the change of Parties.
- (j) Severability. In the event any of the terms of this Agreement become or are declared to be illegal or otherwise unenforceable by any court of competent jurisdiction, such term(s) shall be null and void and shall be deemed deleted from this Agreement. All remaining terms of this Agreement shall remain in full force and effect.
- (k) Independent Contractor Relationship. Depositor and Beneficiary understand, acknowledge, and agree that Iron Mountain's relationship with Depositor and Beneficiary will be that of an independent contractor and that nothing in this Agreement is intended to or should be construed to create a partnership, joint venture, or employment relationship.



- (l) Attorneys' Fees. Any costs and fees incurred by Iron Mountain in the performance of obligations imposed upon Iron Mountain solely by virtue of its role as escrow service provider including, without limitation, compliance with subpoenas, court orders, discovery requests, and disputes arising solely between Depositor and Beneficiary, including, but not limited to, disputes concerning a release of the Deposit Material shall, unless adjudged otherwise, be divided equally and paid by Depositor and Beneficiary.
- (m) No Agency. No Party has the right or authority to, and shall not, assume or create any obligation of any nature whatsoever on behalf of the other Parties or bind the other Parties in any respect whatsoever.
- (n) Disputes. Any dispute, difference or question arising among any of the Parties concerning the construction, meaning, effect or implementation of this Agreement or the rights or obligations of any Party will be submitted to, and settled by arbitration by a single arbitrator chosen by the corresponding Regional Office of the American Arbitration Association in accordance with the Commercial Rules of the American Arbitration Association. The Parties shall submit briefs of no more than 10 pages and the arbitration hearing shall be limited to two (2) days maximum. Arbitration will take place in Boston, Massachusetts, USA. Any court having jurisdiction over the matter may enter judgment on the award of the arbitrator. Service of a petition to confirm the arbitration award may be made by regular mail or by commercial express mail, to the attorney for the Party or, if unrepresented, to the Party at the last known business address.
- (o) Interpleader. Anything to the contrary notwithstanding, in the event of any dispute regarding the interpretation of this Agreement, or the rights and obligations with respect to the Deposit Material in escrow or the propriety of any action contemplated by Iron Mountain hereunder, then Iron Mountain may, in its sole discretion, file an interpleader or similar action in any court of competent jurisdiction to resolve any such dispute.
- (p) Regulations. Depositor and Beneficiary are responsible for and warrant, to the extent of their individual actions or omissions, compliance with all applicable laws, rules and regulations, including but not limited to: customs laws; import; export and re-export laws; and government regulations of any country from or to which the Deposit Material may be delivered in accordance with the provisions of this Agreement. Depositor represents and warrants that the establishment of a deposit account containing ITAR regulated Deposit Material for the Beneficiary, and Iron Mountain's subsequent release of such Deposit Material under the terms of this Agreement will be lawful under any applicable U.S. export control regulations and laws, including ITAR. Conversely, Depositor shall refrain from establishing a deposit account containing ITAR regulated Deposit Material for the Beneficiary if the release of such Deposit Material to the Beneficiary, under the terms of this Agreement, would be in violation of any applicable U.S. export control regulations and laws, including ITAR. With respect to Deposit Material containing personal information and data, Depositor agrees to (i) procure all necessary consents in relation to personal information and data; and (ii) otherwise comply with all applicable privacy and data protection laws as they relate to the subject matter of this Agreement. Iron Mountain is responsible for and warrants, to the extent of their individual actions or omissions, compliance with all applicable laws, rules and regulations to the extent that it is directly regulated by the law, rule or regulation and to the extent that it knows or has been advised that, as a result of this Agreement, its activities are subject to the law, rule or regulation. Notwithstanding anything in this Agreement to the contrary, if an applicable law or regulation exists or should be enacted which is contrary to the obligations imposed upon Iron Mountain hereunder, and results in the activities contemplated hereunder unlawful, Depositor and/or Beneficiary will notify Iron Mountain and Iron Mountain will be relieved of its obligations hereunder unless and until such time as such activity is permitted.
- (q) No Third Party Rights. This Agreement is made solely for the benefit of the Parties to this Agreement and their respective permitted successors and assigns, and no other person or entity shall have or acquire any right by virtue of this Agreement unless otherwise agreed to by all of the Parties.
- (r) Entire Agreement. The Parties agree that this Agreement, which includes all attached Exhibits and all valid Work Requests and SOWs submitted by the Parties, is the complete agreement between the Parties concerning the subject matter of this Agreement and replaces any prior or contemporaneous oral or written communications between the Parties. There are no conditions, understandings, agreements, representations, or warranties, expressed or implied, which are not specified in this Agreement. Each of the Parties warrant that the execution, delivery, and performance of this Agreement has been duly authorized and signed by a person who meets statutory or other binding approval to sign on behalf of its organization as named in this Agreement. This Agreement may be modified only by mutual written agreement of all the Parties.
- (s) Counterparts. This Agreement may be executed electronically in accordance with applicable law or in any number of counterparts, each of which shall be an original, but all of which together shall constitute one instrument.
- (t) Survival. Sections 7 (Term and Termination), 8 (Infringement Indemnification), 9 (Warranties), 10 (Confidential Information), 11 (Limitation of Liability), 12 (Consequential Damages Waiver), and 13 (General) of this Agreement shall survive termination of this Agreement or any Exhibit attached to this Agreement.



IN WITNESS WHEREOF, the Parties have duly executed this Agreement as of the Effective Date by their authorized representatives:

DEPOSITOR		BENEFICIARY	
Signature		Signature	
Print Name	Dr. David K.M. Chew	Print Name	Melissa Adames
Title	Executive Chairman	Title	Procurement Contracting Manager
Date	3 June 2015	Date	

IRON MOUNTAIN INTELLECTUAL PROPERTY MANAGEMENT, INC.	
Signature	
Print Name	
Title	
Date	



Authorized Person Notices Table			
Please provide the names and contact information of the Authorized Persons under this Agreement. Please complete all information as applicable. Incomplete information may result in a delay of processing.			
DEPOSITOR (Required information)		BENEFICIARY (Required information)	
Print Name	Stratech Systems Limited	Print Name	Melissa Adames
Title	-	Title	Procurement Contracting Manager
Email Address	David_km_chew@stratechsystems.com	Email Address	madames@miamidade.gov
Street Address	31 International Business Park #02-02, Creative Resource	Street Address	111 N.W. 1st Street, Suite 2340
City	Singapore	City	Miami
State/Province	-	State/Province	Florida
Postal/Zip Code	609921	Postal/Zip Code	33128
Phone Number	+65 63232188	Phone Number	305.375.4029
Fax Number	+65 63232177	Fax Number	305.375.5688

Paying Party Billing Contact Information Table (Required information)	
Please provide the name and contact information of the Billing Contact for the Paying Party under this Agreement. All Invoices will be sent to this individual at the address set forth below. Incomplete information may result in a delay of processing.	
Company Name	Stratech Systems Limited
Print Name	David K.M. Chew
Title	Dr.
Email Address	David_km_chew@stratechsystems.com
Street Address	31 International Business Park #02-02, Creative Resource
City	Singapore
State/Province	-
Postal/Zip Code	609921
Phone Number	+65 63232188
Fax Number	+65 63232177
Purchase Order #	

IRON MOUNTAIN INTELLECTUAL PROPERTY MANAGEMENT, INC.

All notices should be sent to ipmclientservices@ironmountain.com OR Iron Mountain Intellectual Property Management, Inc., Attn: Client Services, 2100 Norcross Parkway, Suite 150, Norcross, Georgia, 30071, USA. Telephone: 800-875-5669. Facsimile: 770-239-9201



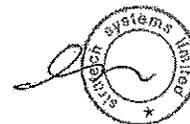
Exhibit A
Escrow Services Fee Schedule – Work Request

Deposit Account Number

Service	Service Description - Three-Party Escrow Service Agreement	One-Time Fees	Annual Fees
<input checked="" type="checkbox"/> Setup Fee (Required)	Iron Mountain will setup a new escrow deposit account using a standard escrow agreement.	\$2550	
<input checked="" type="checkbox"/> Deposit Account Fee (Required)	Iron Mountain will set up one deposit account to manage and administrate access to Deposit Material to be secured in a controlled storage environment. Iron Mountain will provide account services that include unlimited deposits, electronic vaulting, access to Iron Mountain Connect™ Escrow Management Center for secure online account management, submission of electronic Work Requests, and communication of status. Release of deposit material is also included in the annual fee. An oversize fee of \$200 USD per 1.2 cubic foot will be charged for deposits that exceed 2.4 cubic feet.		\$1,100
<input checked="" type="checkbox"/> Beneficiary Fee (Required)	Iron Mountain will fulfill a Work Request to add a Beneficiary to an escrow deposit account and manage account access rights. Beneficiary will have access to Iron Mountain Connect™ Escrow Management Center for secure online account management, submission of electronic Work Requests, and communication of status.		\$825
<input type="checkbox"/> File List Report	Iron Mountain will perform a File List Test, which includes a Deposit Material media readability analysis, a file listing, a file classification table, virus scan outputs, and confirmation of the presence or absence of a completed escrow deposit questionnaire. A final report will be sent to the requesting Party regarding the Deposit Material. Deposit must be provided on CD, DVD-R, or deposited electronically.	\$2,500	N/A
<input type="checkbox"/> Level 1 Inventory and Analysis Test	Iron Mountain will perform an Inventory and Analysis Test on the initial deposit, which includes the outputs of the File Listing test, identifying the presence/absence of build, setup and design documentation (including the presence or absence of a completed escrow deposit questionnaire), and identifying materials required to recreate the Depositor's application development and production environments. Output includes a report that includes compile and setup documentation, file classification tables and file listings. The report will list required software development materials, including, without limitation, required source code languages and compilers, third-party software, libraries, operating systems, and hardware, and Iron Mountain's analysis of the deposit. A final report will be sent to the requesting Party regarding the Deposit Material.	\$5,000 or based on SOW if custom work required	N/A
<input type="checkbox"/> Deposit Tracking	At least semi-annually, Iron Mountain will send a reminder to Depositor to update Deposit Material. Thereafter, Beneficiary will be notified of last deposit.	N/A	\$450
<input type="checkbox"/> Dual Vaulting	Iron Mountain will fulfill a Work Request to store and manage a redundant copy of the Deposit Material in one (1) additional location. All Deposit Material (original and copy) must be provided by the Depositor.	N/A	\$500
<input type="checkbox"/> Remote Vaulting	Iron Mountain will fulfill a Work Request to store and manage the Deposit Material in a remote location, designated by the client, outside of Iron Mountain's primary escrow vaulting location. All Deposit Material (original and copy) must be provided by the Depositor.	N/A	\$500
<input type="checkbox"/> Custom Contract Fee	Custom contracts are subject to the Custom Contract Fee, which covers the review and processing of custom or modified contracts.	\$750	N/A
Additional Verification Services (Fees based on Statement of Work)			
Level 2 Deposit Compile Test	Iron Mountain will fulfill a Statement of Work (SOW) to perform a Deposit Compile Test, which includes the outputs of the Level 1 - Inventory and Analysis Test, plus recreating the Depositor's software development environment, compiling source files and modules, linking libraries and recreating executable code, providing a pass/fail determination, and creation of comprehensive compilation documentation with a final report sent to the Paying Party regarding the Deposit Material. The requesting Party and Iron Mountain will agree on a custom SOW prior to the start of fulfillment. A completed escrow deposit questionnaire is required for execution of this test.		
Level 3 Binary Comparison Test	Iron Mountain will fulfill a Statement of Work (SOW) to perform one Binary Comparison Test - Binary Comparison, which includes the outputs of the Level 2 test, a comparison of the executable files built from the Deposit Compile Test to the actual executable files in use by the Beneficiary to ensure a full binary-level match, with a final report sent to the Requesting Party regarding the Deposit Material. The Paying Party and Iron Mountain will agree on a custom SOW prior to the start of fulfillment. A completed escrow deposit questionnaire is required for execution of this test.		
Level 4 Full Usability Test	Iron Mountain will fulfill a Statement of Work (SOW) to perform one Deposit Usability Test - Full Usability, which includes which includes the outputs of the Level 1 and Level 2 tests (if applicable). Iron Mountain will confirm that the deposited application can be setup, installed and configured and, when installed, will execute functional tests, based on pre-determined test scripts provided by the Parties, and create comprehensive setup and installation documentation. A final report will be sent to the Paying Party regarding the Deposit Material. The Paying Party and Iron Mountain will agree on a custom SOW prior to the start of fulfillment. A completed escrow deposit questionnaire is required for execution of this test.		

Pursuant to the Agreement, the undersigned hereby issues this Work Request for performance of the Service(s) selected above.

Paying Party – For Future Work Request Use Only	
Paying Party Name	
Signature	
Print Name	
Title	
Date	



IRON MOUNTAIN INTELLECTUAL PROPERTY MANAGEMENT, INC.

All Work Requests should be sent to ipmclientservices@ironmountain.com OR Iron Mountain Intellectual Property Management, Inc., Attn: Client Services, 2100 Norcross Parkway, Suite 150, Norcross, Georgia, 30071, USA. Telephone: 800-875-5669. Facsimile: 770-239-9201

Exhibit B

Deposit Material Description

(This document must accompany each submission of Deposit Material)

Company Name	Deposit Account Number
Deposit Name	Deposit Version

(Deposit Name will appear in account history reports)

Deposit Media

(Please Label All Media with the Deposit Name Provided Above)

Media Type	Quantity	Media Type	Quantity
<input type="checkbox"/> CD-ROM / DVD		<input type="checkbox"/> USB Drive	
<input type="checkbox"/> DLT Tape		<input type="checkbox"/> Documentation	
<input type="checkbox"/> DAT Tape(4mm/8mm)		<input type="checkbox"/> Hard Drive / CPU	
<input type="checkbox"/> LTO Tape		<input type="checkbox"/> Circuit Board	
<input type="checkbox"/> Other (please describe):			

	Total Size of Transmission (specify in bytes)	# of Files	# of Folders
<input type="checkbox"/> Electronic Deposit			

Deposit Encryption

(Please check either "Yes" or "No" below and complete as appropriate)

Is the media or are any of the files encrypted? Yes or No

If yes, please include any passwords and decryption tools description below. Please also deposit all necessary encryption software with this deposit. Depositor at its option may submit passwords on a separate Exhibit B.

Encryption tool name	Version
Hardware required	
Software required	
Other required information	

Deposit Certification (Please check the box below to certify and provide your contact information)

<input type="checkbox"/> I certify for Depositor that the above described Deposit Material has been transmitted electronically or sent via commercial express mail carrier to Iron Mountain at the address below.	<input type="checkbox"/> Iron Mountain has inspected and accepted the above described Deposit Material either electronically or physically. Iron Mountain will notify Depositor of any discrepancies.
Print Name	Name
Date	Date
Email Address	
Telephone Number	

Note: If Depositor is physically sending Deposit Material to Iron Mountain, please label all media and mail all Deposit Material with the appropriate Exhibit B via commercial express carrier to the following address:

Iron Mountain Intellectual Property Management, Inc.
 Attn: Vault Administration
 2100 Norcross Parkway, Suite 150
 Norcross, GA 30071
 Telephone: 800-875-5669
 Facsimile: 770-239-9201

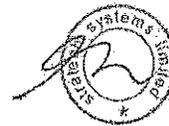


Exhibit C
Release of Deposit Material

Deposit Account Number

Iron Mountain will use the following procedures to process any Beneficiary Work Request to release Deposit Material. All notices under this Exhibit C shall be sent pursuant to the terms of Section 13(g) Notices.

1. Release Conditions.

Depositor and Beneficiary agree that a Work Request for the release of the Deposit Material shall be based solely on one or more of the following conditions (defined as "Release Conditions"):

- (i) Failure of the Depositor to function as a going concern or operate in the ordinary course; or
- (ii) Depositor is subject to voluntary or involuntary bankruptcy.

2. Release Work Request.

A Beneficiary may submit a Work Request to Iron Mountain to release the Deposit Material covered under this Agreement. To the extent that the Deposit Material is subject to applicable U.S. export control regulations and laws, including ITAR, the Beneficiary Work Request to release the Deposit Material must include Beneficiary's certification that such release would be compliant with the applicable U.S. export control regulations and laws, including ITAR. Iron Mountain will send a written notice of this Beneficiary Work Request within five (5) business days to the Depositor's Authorized Person.

3. Contrary Instructions.

From the date Iron Mountain mails written notice of the Beneficiary Work Request to release Deposit Material covered under this Agreement, Depositor's Authorized Person shall have ten (10) business days to deliver to Iron Mountain contrary instructions. Contrary instructions shall mean the written representation by Depositor that a Release Condition has not occurred or has been cured ("Contrary Instructions"). Contrary Instructions shall be on company letterhead and signed by a Depositor Authorized Person. Upon receipt of Contrary Instructions, Iron Mountain shall promptly send a copy to Beneficiary's Authorized Person. Additionally, Iron Mountain shall notify both Depositor and Beneficiary Authorized Persons that there is a dispute to be resolved pursuant to the Disputes provisions of this Agreement. Iron Mountain will continue to store Deposit Material without release pending (i) instructions from Depositor to release the Deposit Material to Beneficiary; or (ii) dispute resolution pursuant to the Disputes provisions of this Agreement; or (iii) withdrawal of Contrary Instructions from Depositor's Authorized Person or legal representative; or (iv) receipt of an order from a court of competent jurisdiction.

4. Release of Deposit Material.

If Iron Mountain does not receive timely Contrary Instructions from a Depositor Authorized Person or written instructions directly from Depositor's Authorized Person to release a copy of the Deposit Materials to the Beneficiary, Iron Mountain is authorized to release Deposit Material to the Beneficiary. Iron Mountain is entitled to receive any undisputed, unpaid Service Fees due Iron Mountain from the Parties before fulfilling the Work Request to release Deposit Material covered under this Agreement. Any Party may cure a default of payment of Service Fees.

5. Termination of Agreement Upon Release.

This Agreement will terminate upon the release of Deposit Material held by Iron Mountain.

6. Right to Use Following Release.

Beneficiary has the right under this Agreement to use the Deposit Material for the sole purpose of continuing the benefits afforded to Beneficiary by the License Agreement. Notwithstanding, the Beneficiary shall not have access to the Deposit Material unless there is a release of the Deposit Material in accordance with this Agreement. Beneficiary shall be obligated to maintain the confidentiality of the released Deposit Material.

