FIFTH AMENDMENT TO AGREEMENT

Between

BROWARD COUNTY

And

AECOM Technical Services, Inc. (f/k/a DMJM Aviation, Inc.)

for

PROGRAM MANAGEMENT SERVICES FOR
NEW SOUTH RUNWAY, TERMINAL 4 REPLACEMENT AND ENABLING
PROJECTS
FORT LAUDERDALE-HOLLYWOOD INTERNATIONAL AIRPORT
IN BROWARD COUNTY, FLORIDA

This is the Fifth Amendment to the Agreement between: BROWARD COUNTY, a political subdivision of the State of Florida, its successors and assigns, hereinafter referred to as "County," through its Board of County Commissioners,

AND

AECOM Technical Services, Inc. (f/k/a DMJM Aviation, Inc.) a California Corporation, authorized to do business in Florida, its successors and assigns, hereinafter referred to as "Program Manager."

WITNESSETH

WHEREAS the deliberately phased Agreement was awarded between County and Program Manager January 6, 2009, and was amended by Amendment 1 on February 9, 2010, was amended by Amendment 2 on December 7, 2010, was amended and restated on December 4, 2012, and was amended by Amendment 4 on October 13, 2015.

Whereas, Broward County and Program Manager desire to amend the Agreement to provide for the continuation of Program Management Services for New South Runway, Terminal 4 Replacement and Enabling Projects at the Airport through the end of all warranty periods provided for in the contract(s) for the Program, inclusive of Revised Exhibit B-3, and to increase the amount for Basic Services ("Fifth Amendment"):

NOW, THEREFORE, in consideration of the mutual terms and conditions, promises, covenants and payments hereinafter set forth, Broward County and AECOM Technical Services, Inc. agree as follows:

- Subsection 2.3 is hereby amended to read as follows:
 - 2.3 The Basic Services to be performed by Program Manager shall consist of the services set forth in this Article 2 and in Revised Exhibit B-3 and Revised Exhibit B-3.1, including all necessary, incidental, and related activities and services reasonably inferred by this Article 2 and Revised Exhibit B-3 and collectively referred to as "Basic Services." Revised Exhibit B-3 describes the range of services that the Program Manager shall provide during the years 2013 through 2015 Phases II and III. Deliverables for the years 2013 through 2015 Phases II and III are listed in Revised Exhibit 8-3.1 and shall be delivered by the Program Manager as provided for therein. Revised Exhibit B-3.2 is the CPM (Critical Path Method) Schedule for years 2013 through 2015 Phases II and III. and Exhibit B-3.3 is a Cash flow by Quarter for years 2013 through 2015. Program Manager shall be bound to these schedules; however, these schedules may be modified for good cause as provided for in Section 6.1.1 or as set forth herein. Program Manager agrees to complete each task identified in Revised Exhibit B-3 of the Agreement within the time frame specified in the Notice to Proceed issued by the County. In the event Program Manager is unable to complete any of the tasks within the time frames identified in the Notice to Proceed because of delays resulting from untimely review by Program Manager or other governmental authorities having jurisdiction over the Project and such delays are not the fault of Program Manager, or because of delays which were caused by factors outside the control of Program Manager, the County at its sole discretion, may grant a reasonable extension of time for completion of the tasks; provided, however, that no extension of time for completion of any tasks shall be given which exceeds the termination date of the Agreement, as amended herein.

Subsection 4.1 is hereby amended to read as follows:

4.1 The term of this Agreement shall commence as provided for herein and shall continue for a period of ten (10) years, or until completion of the Projects, whichever is earlier—until the end of all warranty periods provided for in the contract(s) for the Program, subject to the termination rights set forth in Section 9.3, below. In addition to the bases for termination set forth in Section 9.3, this Agreement shall terminate if funds for payment of the services set forth herein for any subsequent County fiscal year are not budgeted and made available by the Commission. Any extension of this Agreement requires Commission approval. Prior to the commencement of any services under this Agreement, Program Manager must receive a Notice to Proceed from the Contract Administrator. Program Manager's services shall be performed timely to accomplish the Projects in accordance with the Program Schedule that is agreed to in writing by the Contract Administrator. The parties acknowledge that, due to the nature and complexity of the Program, the Program Schedule may require revision based on subsequent circumstances. The Program Schedule may be revised

with the prior written consent of the Contract Administrator.

- 3. Subsection 6.1.1 is hereby amended to read as follows:
 - 6.1.1 Basic Services by Program Manager, following commencement of this Agreement on January 7, 2009, and through the length of Phases I, II and III, are expected to be performed through December 31, 2018 end of all warranty periods provided for in the contract(s) for the Program, the County agrees to pay the Program Manager Salary Costs, as defined in Section 6.3 Salary Costs, up to a maximum Amount Not-To-Exceed \$63,522,587.35 \$69,487,370.50 and to reimburse Program Manager for Reimbursables, as set forth in Section 6.4, up to a Maximum Amount Not-To-Exceed \$1,348,024,11. for а total Maximum . Amount Exceed \$64.870.611.46 \$70,835,394.61 for Basic Services. The Program Manager shall be paid for Phase I, II and III, of this Agreement for the work completed as set forth in the scope of work established in Revised Exhibit B-3, Basic Services, and Revised Exhibit B-3.1, Deliverables.
- 4. Exhibit B-3 of the Agreement, as amended, is hereby replaced in its entirety by Revised Exhibit B-3, attached hereto.
- 5. Exhibit B-3.1 of the Agreement, as amended, is hereby replaced in its entirety by Revised Exhibit B-3.1, attached hereto.
- 6. Exhibit B-3.2 of the Agreement, as amended, is hereby replaced in its entirety by Revised Exhibit B-3.2, attached hereto.
- 7. Exhibit C-3 of the Agreement, as amended, is hereby replaced in its entirety by Revised Exhibit C-3, attached hereto.
- 8. Exhibit D-3 of the Agreement, as amended, is hereby replaced in its entirety by Revised Exhibit D-3, attached hereto.
- 9. Exhibit E-3.1 of the Agreement, as amended, is hereby replaced in its entirety by Revised Exhibit E-3.1, attached hereto.

FIFTH AMENDMENT TO AGREEMENT BETWEEN BROWARD COUNTY AND AECOM TECHNICAL SERVICES, INC. FOR PROGRAM MANAGEMENT SERVICES FOR NEW SOUTH RUNWAY, TERMINAL 4 REPLACEMENT AND ENABLING PROJECTS AT THE FORT LAUDERDALE—HOLLYWOOD INTERNATIONAL AIRPORT (FLL) IN BROWARD COUNTY, FLORIDA.

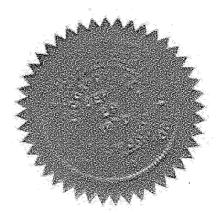
IN WITNESS WHEREOF, the parties hereto have made and executed this Amendment
to Agreement on the respective dates under each signature: BROWARD COUNTY
through its BOARD OF COUNTY COMMISSIONERS, signing by and through its Mayor
or Vice-Mayor, authorized to execute same by Board action on the day of
, 20, and AECOM TECHNICAL SERVICES, INC. signing by and
through its representative duly authorized to execute same.

COUNTY

ATTEST:	BROWARD COUNTY, by and through its Board of County Commissioners
Bertha Henry Date County Administrator, as Ex-Officio Clerk of the Board of County Commissioners of Broward County, Florida	Mayor or Vice-Mayorday of, 20
Insurance requirements approved by Broward County Risk Management Division Tracy Meyer, Esq. Date Risk Manager	COUNTY ATTORNEY: Approved as to form by Office of the County Attorney for Broward County, Florida Joni Armstrong Coffey, County Attorney Aviation Office 2200 SW 45th Street, Suite 101 Dania Beach, Florida 33312 Telephone: (954) 359-6100 Telecopie/: (954) 359/1292/ Alexander J. Williams Date Assistant County Attorney

FIFTH AMENDMENT TO AGREEMENT BETWEEN BROWARD COUNTY AND AECOM TECHNICAL SERVICES, INC. FOR PROGRAM MANAGEMENT SERVICES FOR NEW SOUTH RUNWAY, TERMINAL 4 REPLACEMENT AND ENABLING PROJECTS AT THE FORT LAUDERDALE—HOLLYWOOD INTERNATIONAL AIRPORT (FLL) IN BROWARD COUNTY, FLORIDA.

CORPORATE SECRETARY ATTEST:(Affix	CONSULTANI AFOOM TESTAMON SERVICES INC
Corporate Seal and Corporate Secretary Signature) Secretary	AECOM TECHNICAL SERVICES, INC. By Co.
	(Signature President/Arice (President)
37 The	Authorized Signatory
(Signature)	Carlos Garcia
Preston Hopson	(Please print Name of President/Vice President)
(Printed Name of Secretary) (CORPORATE SEAL)	Authorized Signator
	Authorized Signatory
OR TWO WITHESSES	Title of Signing Party
Witness	14th day or Angust 2017
Witness	
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REVISED EXHIBIT B-3 AMENDMENT No. 5

PROGRAM MANAGEMENT SERVICES FOR NEW SOUTH RUNWAY, TERMINAL 4 REPLACEMENT AND ENABLING PROJECTS FORT LAUDERDALE-HOLLYWOOD INTERNATIONAL AIRPORT INBROWARD COUNTY, FLORIDA

Phases II and III

BASIC SERVICES

The Airport Expansion Program's (Program) Program Management Office (PMO) is staffed by the Program Manager; and is an extension of BCAD staff to manage the Program, and to assist in the coordination of planning, budget development, scheduling, design, construction, and public outreach to meet the needs of the Aviation Department. In order to perform the tasks listed above, the Program Manager's services are separated into Basic Services and Optional Services. This Exhibit contains Basic Services that the Program Manager will perform during the period of time identified in the Notice To Proceed authorization issued by the Contract Administrator. Optional Services are those services identified in Exhibit F-3, and are contemplated to be performed by the Program Manager under separate Work Authorization(s) issued by the Contract Administrator.

This Exhibit will provide a framework for administering the Program in accordance with BCAD requirements and will establish relationships between BCAD, the Program Manager, Consultants, CPM's and Contractors for the Phases of this Amendment. It is anticipated that these services will be performed as authorized pursuant to the terms of this Agreement. Revised Exhibit B-3.1 provides for the Deliverables for Phase II and Phase III.

1.0 General Services

1.1 Updating Program Management Plans

Upon BCAD's issuance of a Notice To Proceed for Amendment No. 3, the Program Manager will update the QMP and submit to BCAD within 90 calendar days. In addition, the Program Manager shall update from time to time, the Program Management Plan and the Quality Management Plan as required.

1.2 Third Party Coordination

The Program Manager shall, through BCAD, coordinate the efforts and elements of the Program with stakeholders, including but not limited to: all Airport tenants excluding Fuel Hydrant System and Airport Operations personnel, state, local and federal agencies, as required for implementation of the Program. The Program Manager, through BCAD, shall monitor all tenant design activities and construction activities, through the CPM as required, and shall assess the impact of this work on other Program projects or elements. BCAD shall be responsible for managing the Third Party contracts and the Third Parties. Meetings between BCAD, the PM and third parties shall be documented in accordance with Section 2.14, <u>Program Meetings</u>, of the Agreement.

1.3 <u>Program Implementation</u>

PM shall coordinate the Program projects to provide scope and schedule so that the various projects provide a seamless and timely fit and completion in accordance with the Program schedule.

1.4 Coordinate Technical Advisory Committee (TAC)

A Technical Advisory Committee (TAC) has been established by BCAD. The TAC will be under the direction of BCAD Director AEP and serve as a forum for reporting the status of the Program and associated activities to senior BCAD staff. The composition of the TAC shall include, but will not be limited to the following members: BCAD Director, BCAD Assistant Director - Admin/Finance, BCAD Director - Administration, BCAD Assistant Director of Aviation - Airport Development, BCAD Director - AEP, BCAD Director - Planning, BCAD Director Capital Improvements Program, BCAD Director of Operations, BCAD Director of Maintenance, the Program Manager and other BCAD staff as required. The TAC will meet on a bi-monthly basis, or as deemed appropriate by BCAD. TAC meeting establishment or cancellation will be at the discretion of the BCAD Director AEP.

1.5 <u>Miscellaneous Services</u>

In addition, as related to the Program, Program Manager Services shall include, but shall not be limited to:

 Assist BCAD in the coordination of Sunshine negotiation meetings, and prepare the meeting minutes based on the BCAD recordings of the negotiations; Assist BCAD, as requested in writing, with preparation and research for all public record requests.

2.0 Planning Management

2.1 The Program Manager shall continue to coordinate with BCAD Planning and CIP for services provided by BCAD Planning and CIP which include the following: Airport Master Plan, Environment Impact Statement (EIS), Part 150 Noise Study, Stormwater Master Plan, utility master plans and General Planning Contracts. Program Manager shall coordinate/oversee the environmental and engineering services, provided by others, which are required due to the development of the runway, Terminal 4 and enabling projects.

This coordination/oversight shall also include, but shall not be limited to:

- Program planning;
- Pre-design project criteria/definition;
- Implementation Planning/User Coordination;
- Annual CIP budget preparation;
- Coordination with Federal, state, county, and local agencies.
- 2.2 The Program Manager shall support BCAD Planning with the processing of the FAA Form 7460 documentation for approval and submittal, by BCAD Planning, to the FAA. The preparation of the FAA 7460 shall be prepared by contractors or designers.

3.0 Design/Engineering and Construction Support

3.1 Program Management Services During Design

Program Manager shall manage the scope coordination of the various design contracts for the Program. The Program Manager has been designated as the County's representative, under the separate design contracts with the County for the Program. Therefore, the Program Manager shall manage the work of the Design Professionals. In performing these services Program Manager shall oversee and coordinate activities of Design Professionals in the development and production of plans and specifications for the individual projects. Such oversight shall include, but not be limited to, establishing design review meetings, and collecting and reconciling comments on the design submittals.

Direction, communication, documentation, and correspondence relative to the technical work of Design Professionals shall be through the designated PMO Project Manager. All such communications shall also be provided to the BCAD AEP Staff assigned to the project. Design/Engineering Support shall also include, but shall not be limited to:

- Program Issues The Program Manager shall identify the relationship between known ongoing County and tenant studies and propose additional studies as required to define design program criteria.
- Special Study Tasks Upon written request by the Contract Administrator, and using Optional Services, the Program Manager shall develop and support additional data gathering efforts and special studies including, but not limited to: utility infrastructure, computer modeling/simulations, mitigation programs and mitigation banking strategies.
- Environmental Issues The Program Manager shall assist in the coordination and oversight of any environmental assessment or impact statement efforts required for the Program, as requested by the County. The Program Manager, based on information provided by BCAD and its environmental consultants, shall develop a program and implement a schedule for obtaining all regulatory permits and approvals as required to meet the Program schedule, including interagency and municipal coordination, environmental permits and land use approvals from all relevant local, state and federal regulatory agencies. This Permit Coordination function must be fully integrated into the other areas of the Program, particularly public outreach, building permits, and land acquisition.

3.2 Traffic Coordination

The Program Manager, as approved by the Contract Administrator, will provide traffic coordination services as it relates to the Runway projects and their interaction with surrounding/adjacent construction projects being performed by others off airport property. As part of these transportation coordination services, the Program Manager will coordinate with all other consultants and contractors working on projects at FLL that may impact the travelling public; coordinate in accordance with Section 1.2, herein, as well as FEC Railroad, and any other private entity that may have a project that will impact the travelling public in and around FLL; review MOT plans, lane closures and schedules for surrounding projects and make recommendations to BCAD on solutions to minimize impact to traveling public; assist BCAD PIO by preparing and disseminating information to the public in coordination with the PIO, elected officials and media of upcoming projects affecting the travelling public in and around FLL.

3.3 Procurement of Design and Consultant Services

Program Manager shall assist the County, as directed in writing by BCAD, with preparation of RLI's, RFP's or with the solicitation method chosen by the County, and coordinate the incorporation of all contract documents for

various Program Projects identified within Exhibit A-3. The Program Manager shall assist the County, as directed, in the timely procurement of professional design or consulting services as required to complete each project. Program Manager shall assist BCAD with the evaluation of all responses to RLI's including but not limited to Statements of Qualifications and Technical Evaluations. Service shall include but may not be limited to: Assemblage of documents for distribution, preparation of objective evaluation matrices for use by the Evaluation or Selection Committee (E/SC) members, and in the presentations to E/SC's and other assistance as required by the County. Services include coordination activities of County staff, providing necessary documentation, technical evaluations, qualification reviews, and submittals, reference checks, requesting followup responses from proposers, coordinating E/SC activities, technical analysis, and preparing and administering addenda. Work effort shall be provided in a timely manner consistent with the selection and negotiation schedule for each of the procurements.

Following selection of a Design Professional, or a Consultant, for a project the Program Manager shall manage the Design Professional's work, or Consultant's work, in accordance with the Professional Services Agreement, or work authorization, approved by the County.

3.4 Design Professionals' and Consultants' Invoice Review

Program Manager shall review Design Professionals', or Consultants', invoices to compare actual work done to what is being invoiced. Such review shall include reviewing the Scope(s) of Services of the agreement(s), time sheet input (if applicable), monthly progress report(s). other progress reports and applicable schedules. If work performed is consistent with the contract requirements and invoiced amount, and establishes value earned, Program Manager shall certify the Payment Application and recommend payment by the County. Program Manager shall request revisions or additional information regarding Design Professionals' or Consultants' invoices as may be necessary or as required by the County in order to substantiate value earned. If the work performed is not consistent with the invoiced amount, the Program Manager shall identify the nonconforming amounts and recommend a reduction in the invoice for BCAD approval. The Program Manager shall complete the review of each invoice in accordance with the BCAD Invoice Checklist within four and one-half (4-1/2) business days from receipt of the invoice from AEP Document Control to allow BCAD and Broward County to make payments, or reject the invoice as may be necessary, in accordance with the State of Florida's Prompt Payment Act.

3.4.1 Program Manager shall also review Design Professionals', or Consultants', requests for additional fees and advise on the

- appropriateness thereof. Such review shall evaluate the Scope of Services, Agreement requirements, and other applicable documents that are the basis of the request.
- 3.4.2 Program Manager will review and certify Design Professionals' or Consultants' invoices to assure that work complies with the contract.

3.5 <u>Design Review</u>

Program Manager shall oversee reviews of the Design Professionals' plans and specifications for all phases of the design process. Program Manager shall verify that the coordination, configuration, criteria and limits of the original approved concepts are retained into the design process. Program Manager shall manage the design review process and will document reviewer comments and resolution of comments to address the design's conformance to established criteria and the intended use for the program element. Program Manager shall coordinate between the Design Professionals and BCAD to promote a free flow of information on design of the specific projects.

Program Manager shall use Design Review procedures incorporated in the Program Management Plan to perform the review and design evaluation. Design review comments shall be noted in spread sheet form for purposes of tracking and resolving review comments. Program Manager shall complete applicable checklists as required in the review procedures.

Formal design reviews will be accomplished for each design submittal made by the Design Professionals. Program Manager shall schedule and coordinate design meetings as a means to facilitate the exchange of information and resolution of design issues resulting from the review process. At the completion of each design review of the submittals made by the various Design Professionals, and the Program Manager as applicable, the Program Manager will provide a written report which will include all written comments by the reviewers, responses by the Design professional, and disposition/reconciliation of all comments. The report will also address the design's conformance to contractual requirements/criteria and the design's intended use.

Program Manager, Design Professional, and BCAD shall participate in maintainability reviews of systems and equipment during the design phase to determine that the designed and specified materials and equipment adequately provide maintainability, reliability and that it will be compatible with existing Airport systems and equipment.

Where FAA or FDOT Grant Funding is being used to fund specific projects, the Program Manager shall obtain, from each design professional, an executed FAA or FDOT Sponsor Certificate for project plans and specification, as required by the Design Professional's agreement with the County.

3.6 <u>Design Estimating</u>

The Design Professionals, or other Consultants, shall provide the Program Manager estimates at the conclusion of the Schematic Design and the Design Development phases performed. The Design Development Estimate will be submitted to BCAD, and accompanied by a report prepared by the Program Manager to the BCAD AEP Director identifying variances with the then current approved Program budget for Projects and making recommendations for appropriate corrective action, if required.

3.7 <u>Tenant Coordination</u>

BCAD shall be responsible for managing the Tenant contracts. BCAD retains all final decision making and approvals with Tenants.

3.8 Agency Coordination

BCAD shall be responsible for managing the Agency contracts. BCAD retains all final decision making and approvals with Agencies.

3.9 <u>Design Phase Schedules and Coordination</u>

The Design Professionals shall develop the Design Phase Schedules to be consistent with the Program Schedule and through the Program Manager, obtain BCAD approval of design phase schedules that are coordinated with the Program schedule. The Program Manager shall also monitor the design phase schedule updates and make reports to BCAD through the monthly Progress Reports and the Baseline Master Schedule Updates. The Design Professional, as required by the Professional Services Agreement or Work Authorization, shall advise the Program Manager and County when potential or actual constraints to the schedule become apparent, and make recommendations for corrective action.

The Program Manager shall provide the following design coordination and management services:

- Monitor schedules of Design Activities required by the Professional Services Agreement or Work Authorization;
- b. Review and comment on work scopes status for individual Projects;

- c. Identify and resolve functional, operational, and maintenance issues;
- d. Coordinate staging and phasing, traffic control, and operational safety plans through the Construction Logistics Plan requirements;
- e. When alternatives are required, assist BCAD in selecting the most cost effective design alternatives;
- f. Monitoring Design documents, during the Design Phases and verify status complies with the design phase schedule;
- g. Coordinate/oversee plan review and schedule required by development of the Runway, Terminal and enabling Projects;
- h. Coordinate the design scopes among the Program and BCAD Capital Improvement projects to ensure that the projects are properly scoped and when complete, provide a seamless interface among projects.

3.10 Construction Project Manager (CPM) Oversight

The Program Manager has been designated as the County's representative under separate contracts with the County on the projects. Therefore, the Program Manager shall manage the work of the CPMs. The CPM will be responsible for all site inspections, coordination of materials testing and shall provide all reports to the Program Manager. The Program Manager shall monitor and coordinate the master construction schedule(s) developed by the Contractor and advise the CPMs for compliance with the Baseline Master Schedule prepared and updated by the Program Manager.

The Program Manager shall review daily and monthly construction progress reports prepared by the CPMs to ensure that the CPM's are performing in accordance with their contracts and that the project progress is properly documented. The PMO·shall provide a summary of the CPMs progress and report requirements in the PMO's Monthly Status Report.

Program Manager will attend CPM construction progress meetings and review CPM's work product, including site visits and periodic review of CPM's daily reports to ensure that CPM's performance is in compliance with contractual obligations. Program Manager will report significant schedule or budget variances or other material deficiencies in CPM's performance as part of Program Manager's monthly invoice status report.

The Program Manager shall oversee the implementation of the procedures defined in the Program Management Plan used during construction for RFIs, change management, and submittals. Direction,

communication, documentation, and correspondence relative to the technical work shall be through the designated PMO representatives. All such communications shall also be provided to the BCAD AEP Staff assigned to the project.

The Program Manager, through the CPMs, shall implement a process to monitor the quality of the various construction Contractors, to assist BCAD in its endeavor to eliminate contractors' Work that does not conform to the requirements of the contract documents for the Program projects.

4.0 Program Control Services

Program Manager shall implement program control functions to direct and organize the work. The control functions shall include development and maintenance of a master schedule, cost control, budget management, Program reporting, and implementation of a program management control system (PMCS).

Program Manager, as part of Phase I, mobilization activities, provided a Program Management Plan, approved by BCAD in April 2009, and Baseline Master Schedule with major milestones for Phases I, II and III. The Program Management Plan shall be updated during initiation of Phase II.

4.1 Program Management Control System (PMCS)

Program Manager shall utilize Prolog (cost control), Primavera (schedule control), and the BCAD-managed and maintained AEP Document Control System that resides on the BCAD-provided SharePoint platform. The PMCS will consist of the aforementioned applications plus BCAD owned, operated, and maintained applications as follows:

- Advantage (accounting);
- Contract Central (project information);
- SharePoint Platform: and
- Other applications as may be included by BCAD.

The maintenance of SharePoint Platform, Contract Central, Advantage, and other County applications that are part of the PMCS will be performed by BCAD. Maintenance of Prolog and Primavera will be by the Program Manager in coordination with BCAD. Any integration between the above named applications shall be implemented and maintained by BCAD. Other applications, such as OESBD monitoring applications, and federal and state Grant and PFC management/monitoring applications may be integrated into the PMCS by BCAD as desired.

The Program Manager shall provide desktop support services for the Program Manager's desktop computers, software applications, and office

copiers and printers/plotters. The Program Manager will provide these services in a manner consistent with established BCAD standards, policies, and procedures.

4.2 <u>Independent Fee Estimate Analysis</u>

The Program Manager shall provide fee estimating and analysis services in support of BCAD efforts to retain Consultants for the Program projects. These services include preparation of independent fee estimates for professional services based on a scope of work and schedule provided by BCAD, or the evaluation and analysis of independent fee estimates prepared by others and Design Professional proposals to assist BCAD in fee negotiations with the Design Professionals. Independent Fee estimation shall be authorized by BCAD in writing prior to the work being performed.

4.3 Cost Estimating Support

The Program Manager shall provide cost estimating and analysis services in support of the Program. These services may include preparation of cost estimates for the construction contracts that comprise the Program's Work Packages, or the evaluation and analysis of construction cost estimates prepared by the Design Professionals, CPMs, or Construction Contractors to assist BCAD in the establishment of construction budgets, reconciliation of cost estimates prepared by others, and reconciliation of estimates and proposals during negotiations of changes to the construction contracts. Cost Estimate requirements shall be authorized by BCAD in writing prior to the work being performed.

4.4 Program Cost, Control and Budget Management

The Program Manager will provide cost reporting and forecasting to the County for the Program. The scope of services will include oversight of the Program budget and cost forecasts for Program projects, verification of the Program's invoices from consultants and contractors, cash flow projections, recording of cost data within the cost control system (Prolog) based on the currently BCAD approved Work Breakdown Structure (WBS). Program Manager shall provide information on project status, schedule progress to assist in projecting future cost for the work that has been committed based on current status, and to comply with budget requirements being met based on total projected costs.

These services shall include:

 Assist BCAD in the preparation of the annual CIP Budget relative to the Program;

- Assist BCAD in the preparation of Federal and State Grant Applications relative to the Program;
- Validate budgets and assist in budget preparation both long term and short term; and
- Prepare reconciliation of Program cost information, in accordance with the PMP.

The Program Manager shall work with BCAD to continue to implement and maintain a contract (both professional services and construction) change order procedure and report form that controls and reports on change orders and that will be coordinated with and be reflected in the project cost report. The Program Manager shall utilize Prolog to maintain the change order status report(s), and provide those reports at CRC. Program Manager shall coordinate its activity with the Advantage System, and report and reconcile the Program Manager's system to the County's system.

4.5 Program Schedule Control

Program Manager developed a Baseline Master Program Schedule (Baseline Master Schedule) that identifies the Projects major components as referenced in Exhibit A-3 and also identifies other projects that will have impact or interface with the major Projects. The Program Manager shall coordinate with Design Professionals, Consultants, CPMs, Contractors, and other Program participants in developing detailed project schedules that conform with the updated Program schedule.

The Master Schedule shall be updated on a monthly basis. The updated Monthly Master Schedule will be compared to the approved Baseline Master Schedule. The Program Manager shall continue to submit a summary of the schedule review in the Monthly Program Report explaining any delays and the steps to be taken to mitigate those delays.

The Program Manager shall also integrate into the previous month's updated Schedule, Design Professionals' and CPMs' current schedules to maintain the updated Schedule.

4.6 <u>Document Control</u>

The Program Manager shall provide staff to operate the AEP Document Control system under the administration and management of BCAD. The PMO shall continue to maintain Technical Files to be turned over to BCAD at the end of the Program.

4.7 Information Systems/Computer Networks/Communications Systems

- 4.7.1 The Program Manager shall provide staff extension to BCAD's Information Systems (IS) Division to support the Program. Program Manager's staff extension is required to support the development and maintenance of management systems for the Program (see services listed below). PMCS services shall include but shall not be limited to:
 - Program Management office connectivity and office systems services
 - MIS support
 - o Applications Support
 - o Desktops Support
 - o Server Administration as delegated by and coordinated with BCAD

Applications shall include:

- Primavera Used for developing the master schedule as well as cash flow requirements and short term scheduling studies.
- Prolog In coordination with BCAD
- Other applications approved and provided by BCAD

4.8 Program Reviews and Reporting

The Program Manager shall schedule monthly Program review status meetings, and assist and advise the AEP Director in conducting such meetings. The Program Manager shall also prepare review meeting presentation materials and agendas for use in the status meetings.

- 4.8.1 The Program Manager shall chair or participate in the following regularly scheduled Program meetings to further the coordination and to provide an effective means of communication between the Program participants. A listing of the Program meetings is as follows, and Attachment A-3 provides further definition of these meetings:
 - Design Oversight/Focus Group (as required)
 - FAA Joint Planning (as required)
 - TAC
 - Runway Project Design Coordination
 - T-4 Project Design Coordination
 - Coordination between the Runway and T-4 Projects

In addition, the Program Manager's Project Managers shall chair regularly scheduled Project Design Progress Meetings attended by the Design Professionals and CPMs.

The meetings listed above shall have minutes prepared by the Program Manager for distribution to the attendees and other stakeholders as recommended by the Program Manager, and approved by BCAD.

4.8.2 Monthly Program Reporting shall be in the format previously approved by BCAD. The Program Manager shall continue to record the progress of the Program/Projects and submit written progress reports to the County on a monthly basis. Monthly reports include, at a minimum, overall program status by Project, critical Project elements, cost data reflecting budget, commitments, changes, expenditures and activities, and other data, which may be requested by the County, for the reporting period. The monthly report will also address Project schedule status. All cost data contained in the monthly report will be reconciled to the County's financial system. The monthly report is produced on both electronic media (pdf) and as a hardcopy document. The monthly report is distributed in accordance with directions from BCAD.

The report provides:

- a. An Executive Summary including a status of the AEP level budget, cost and schedule, earned value, estimates at completion, and will include a summary of the status of deliverables for the AEP by Project;
- A summary of issues that impact the critical path or budget of the Program and a description of actions taken to mitigate the issues;
- c. A Work Package level status of budget, cost, schedule, earned value, estimates at completion, and deliverables by Work Package and will include a description of and an activity report for each Project; and
- d. A detailed overview of each Stage (i.e. planning, design, construction, etc.) of the Projects from a budget, cost, schedule, earned value, estimates at completion, and deliverables perspective.

Monthly reporting of funding sources, federal and state grants, and OESBD requirements will be provided by BCAD through applications developed and managed by BCAD.

5.0 Program and Contract Administration

5.1 Administrative and Technical Controls

Develop, update and implement administrative and technical control procedures as defined in the approved Program Management Plan. The

Program Manager shall develop and maintain appropriate administrative and technical control procedures, with input, participation, and approval by BCAD. These may include, but shall not be limited to the following:

- a. Invoicing: The Program Manager shall incorporate BCAD's invoice review and approval process.
- b. Assure Program compliance with federal, state, and local regulations.
- c. Coordinate the FAA and FDOT technical grant assurances with the Design Professionals, as applicable.
- Facilitate effective communication with other members of the Program Management team.
- e. Perform primary review, certify, and recommend for BCAD approval, all payment applications from CPMs, Design Professionals and consultants.
- f. Review and make recommendations to BCAD on amendments, optional services work authorizations, change orders, CPEAMs, claims and other contract price adjustments; and assist BCAD in the preparation of documentation.
- g. Assist in review of RFI's and responses to assure Program compliance with budget and schedule.
- h. Assist with negotiations on change management with CPMs, Design Professionals, Contractors and Consultants.
- i. Assist and advise BCAD, the Design Professionals, and the CPMs, to insure that construction schedules, schedule of values, NTP's, submittals and shop drawings are submitted in a timely manner and comply with the Program's master schedule.
- j. Obtain all contract close-out documents from the CPMs, and assure all required warranties, guarantees, operations and management manuals, documents and spare parts/attic stock are provided to the BCAD.
- k. Provide assistance in the solicitation, award, and administration of contracts.
- I. Practice Claims Avoidance Management.

5.2 Safety Program

Program Manager shall coordinate, through the OCIP Administrator and CPMs, the County's Owner Controlled Insurance Program (OCIP) with all contractors eligible for the OCIP coverage. The Program Manager, when on the construction sites, shall notify BCAD of any observed inadequacies in CPMs' or Contractors' performance relative to safety and shall notify BCAD of instances of noncompliance that the Program Manager becomes aware of throughout the performance of its duties as Program Manager. Program Manager's responsibilities for review and coordination of construction safety program shall not include field monitoring relative to safety nor extend to direct control over or charge of the acts or omissions

of the CPMs or Contractors or any person not directly employed by Program Manager.

5.3 Bidding Procedures

Program Manager shall assist the County, as directed in writing by BCAD in preparing construction bid documents utilizing Standard County forms, the Invitation to Bid, the Form of Proposal, the General Conditions, the Supplementary Conditions, and the Special Conditions for the contracts and contract forms in preparing design and construction solicitation documents for the County. These documents shall include FAA, FDOT, TSA and other required agency contract provisions as otherwise provided by the County.

Program Manager shall assist the County, by making recommendations, in the development of prequalification criteria for bidders. Such criteria will consider the expected scope of work, which represents the complexity or level of service which the designers, consultants or bidders are expected to have in order to deliver the project on time and within budget. Program Manager shall establish bidding schedules based on County input and historical processing times, and assist BCAD and County Purchasing in issuing bidding documents, through the Design Professionals, to bidders. The Program Manager shall develop an agenda and participate in pre-bid conferences, chaired by the County, to familiarize bidders with the bidding documents and management techniques and with any special systems, materials or methods. Program Manager shall assist the Design Professionals and the County with responses to questions from bidders, issuance of addenda, and review bid analyses and recommendation of award prepared by the Design Professionals.

5.4 Construction Contracts Review

When construction contracts are being developed, Program Manager shall review the standard Broward County construction contract, i.e., CAF #170, and make recommendations for its modification. Such modification may be necessary to coordinate the other Contract Documents proposed for a solicitation package (i.e., Division 1 and technical specifications), identify conflicting language, clarify ambiguous language, and identify additional supplemental language required to comply with funding requirements. The Form of Agreement, provided by the County, will contain various construction time/cost control provisions for each construction phase, which in general will provide better control and options to expedite the construction utilizing the presence of the Program Manager. PMO shall obtain prior written approval by the Contract Administrator before performing contract review.

5.5 Project Administration

Program Manager shall provide administration, management and related services as required, to coordinate work between the Design Professionals, CPMs, QAMTs, and other Consultants, with each other and with the activities and responsibilities of BCAD in order to complete the Program in accordance with BCAD's objectives for cost, time and quality.

5.6 Contract Administration

Program Manager shall oversee the contracts for the Design Professionals, CPMs and other consultants participating in the Program. Such oversight shall include evaluating various actions or requests made by such parties against the contract requirements, and provide a recommendation to BACD as a result of the evaluation.

Program Manager shall recommend necessary or desirable changes to the County, and shall oversee the Design Professional and CPM review of requests for changes, negotiations with a Contractor's proposals for changes, submittal of recommendations, and preparation of Change Orders for the County's approval.

5.7 Bid-Award and Construction Contract Administration

- 5.7.1 Program Manager shall review the work to be accomplished under the Program and advise BCAD on contracting strategies that will optimize the number and scope of construction contracts and take advantage of economics, phasing and sequencing of construction activities. Program Manager shall make recommendations to BCAD on criteria and methods to be used to select, evaluate, and recommend CPMs and contractors.
- 5.7.2 Program Manager shall assist BCAD with the administration, and coordination of the County's RLI process and SC process including issuance of addenda. Services included are, but not limited to, RLI advertisements, proposal evaluations, reference checking, technical analysis, and any presentations to the SC and Board.

The County has chosen to design and construct Projects under Managing General Contractor, Design/Build Contractor or Design-Bid-Build approach, the Program Manager will provide RLI and SC support services as indicated above and assist the County in all means possible so it can select and contract in the best interests of BCAD.

5.7.3 Program Manager shall assist in conducting Pre-Bid or Pre-Submittal Conferences to provide a means for all bidders to make site visits, ask questions, and review the contracting requirements with BCAD and to receive a briefing from the Design Professional. Program Manager shall work with the Design Professional to release any required addenda and to ensure that any required changes are incorporated into the plans and specifications.

Once construction bids are received and the County review is completed, the PMO shall coordinate the review by the Design Professional, on a County-provided Bid Comparison Sheet containing all bids tabulated, including any acceptable substitutions, additive or deductive alternates with recommendations by the Design Professional to BCAD for award. The Program Manager will assist BCAD in the decision making process.

5.7.4 Program Manager shall monitor the CPM contracts to verify the CPMs are in compliance with procedures and provisions required by the contract. The Program Manager will report any deviations or breaches of the CPM contract to the Contract Administrator immediately.

5.8 Variances

Program Manager shall identify variances between actual and budgeted or estimated costs on each Project. Project Manager shall advise, in writing, the BCAD Contract Administrator and Design Professional or CPM whenever projected costs exceed budgeted or estimated costs, or other level of measurement to be provided by BCAD for the Projects.

- 5.8.1 Schedule variances from the approved Baseline shall be identified and analyzed each month during the schedule update process. Identify variances and determine the cause, criticality, and impacts to the project schedule and the overall Program schedule. Detailed schedule variances identified shall be discussed in the current month's Monthly Program Report in Appendix B 90 Day Look Ahead Schedule. A summary of the variances shall be provided in the applicable project section. In addition, the Schedule Report shall identify schedule recovery solutions.
- 5.8.2 Mitigation of schedule and cost variances shall be developed by the Program Manager, in coordination with the Design Professionals and the CPMs, and shall utilize a variety of processes and methods. Schedule mitigation may be achieved by developing recovery schedules through changes in approach, coordination,

resources and/or activity sequencing. Cost mitigation may be recommended through value engineering, change management analysis, contingency planning, and through early identification and impact avoidance.

5.9 Project Documentation

Program Manager shall coordinate the preparation and submittal of Project documents to the County for file, review, approval and execution, as required for each type of contract being administered as part of the Program.

5.10 Quality Management Plan

The Program Manager shall update, as needed, the Quality Management Plan (QMP), which is an integral part of, and built into, the Program Management Plan processes for Design Management and Construction. The QMP will be continuously updated and will incorporate specific detailed procedures and method for future use by all project designers, contractors and suppliers. The system will be based on specific, quantifiable, and written descriptions of the level of "quality" required for the Project, in both the design and construction phases as set forth in the various contracts.

5.11 Claims Prevention and Settlement

Potential changes, changes, claims, disputes, and other matters in question between BCAD and Contractors, the CPM, or the Design Professionals shall be addressed through the BCAD approved Change Management Process, as may be modified from time to time, that has been established as part of the PMP Policies and Procedures.

6.0 Commissioning Management

The Program Manager shall support the commissioning of the New South Runway and T-4 Projects in accordance with the CPM Commissioning Plans.

The Program Manager shall review and comment on the final draft and final Commissioning Plans developed by the CPMs.

7.0 Public Outreach Services

The Program Manager shall provide support staff and expertise to BCAD Public Information Office (PIO) for a comprehensive and proactive public outreach program. At the direction of BCAD PIO, through the Contract Administrator, the Program Manager shall develop and disseminate up-to-date program information

to relevant stakeholders including but not limited to local communities, internal audiences, government agencies, media, traveling public and general public.

The Program Manager shall utilize a variety of integrated media tools to assist BCAD PIO with proactively informing stakeholders throughout the term of the Program. Public outreach elements may include but not be limited to:

- Social Media (i.e. Facebook, Twitter, YouTube)
- Briefings and Public Meetings
- Collateral materials such as brochures, flyers, signage, and newsletters
- Support presentations to business and civic groups

The Program Manager, in collaboration with the PIO and at the direction of the BCAD Contract Administrator, shall develop a documented Public Outreach Plan (Plan) that will serve as the implementation guideline for public outreach initiatives throughout the program. The Plan shall describe the implementation approach for each proposed element. The Plan shall define the deliverables and schedule necessary to effectively implement the five elements identified above.

The Program Manager will provide the staff support and expertise required to implement above scope and deliverables.

8.0 Program Close-Out

The PMO shall obtain all project documents controlled by Consultants or Designers and have the documents submitted to Document Control. Such documentation shall include, but is not limited to:

- All warranties and warranty bonds
- As-Built drawings and record drawings
- Training of BCAD staff (training materials and sign-in sheets)
- Warranty inspection reports

PMO shall also assist BCAD in close-out of applicable program grants.

9.0 Scope of Services To Be Provided By Others

The County will obtain services, under separate contracts, unless otherwise specified herein, from a variety of consultant resources and services including, but not limited to the following:

- Public Outreach Services to be performed by BCAD per BCAD's March 2012 Communications Plan
- Implementation of the O.R. Plan shall be by BCAD and the CPMs
- Construction Project Management (CPM)
- Architectural and Engineering firms to provide design and engineering services for the Program
- Construction Field Supervision and Inspection Services for the Program

- Materials Testing, Construction Surveying, and Quality Assurance/ Quality Control Consultants as required to ensure the integrity of the design and construction for the Program
- Environmental Consultants
- Planning Consultants
- Land Acquisition/Noise Mitigation Specialty Consultants
- Outside Legal Counsel
- Land Surveys
- Geotechnical Services
- Safety Program Services and OCIPAdministration.

The Program Manager will assist BCAD in providing schedules, project controls, and coordination of technical work, management and oversight of the services identified above as being performed by BCAD or other consultant teams, and as requested by BCAD.

REVISED EXHIBIT B-3.1

Amendment No. 5

Deliverables

PROGRAM MANAGEMENT SERVICES FOR NEW SOUTH RUNWAY, TERMINAL 4 REPLACEMENT AND ENABLING PROJECTS FORT LAUDERDALE - HOLLYWOOD INTERNATIONAL AIRPORT IN BROWARD COUNTY, FLORIDA

Phases II and III

The deliverables envisioned to support the schedule of activities are as follows:

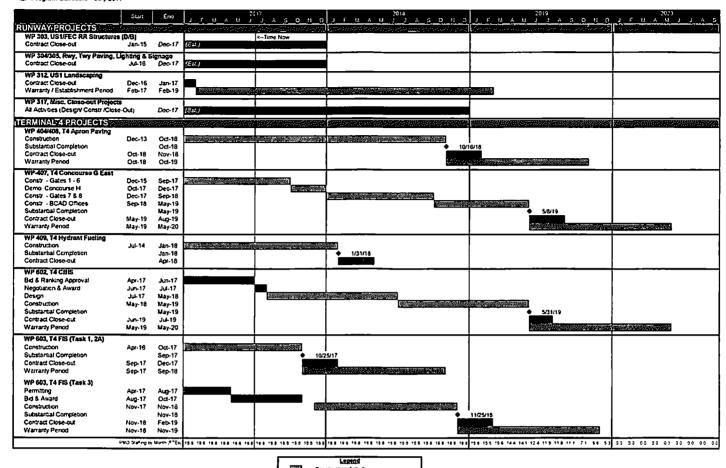
- 1. <u>Monthly Program Status Report</u> This deliverable provides, on a monthly basis, a high level of the AEP focusing on budget, cost, schedule, earned value, estimates at completion, and status of deliverables for each identified as part of the Program. The report will provide:
 - a. an Executive Summary including a status of the AEP level budget, cost and schedule, earned value, estimates at completion, and will include a summary of the status of deliverables for the AEP by Element;
 - an Element level status of budget, cost, schedule, earned value, estimates at completion, and deliverables by Project and will include a description of and an activity report for each Project; and
 - c. a detailed overview of each stage (i.e. planning, design, construction, etc.) of the Projects from a budget, cost, schedule, earned value, estimates at completion, and deliverables perspective.
 - 2. Program Management Services Monthly Status Report This deliverable provides a monthly overview of the services provided by the Program Management team as part of the monthly invoice. The report will include invoicing/cost data, DBE participation information, discussion of contract issues, and staffing. This report will be submitted as part of the invoice submittal package.
 - 3. Monthly Baseline Schedule Update Report This deliverable, a part of the Monthly Program Status Report, provides a monthly update of the Program activities and milestones, changes to the Program schedule, and a narrative detailing all changes made to the Baseline Schedule over the previous month's report. The report will include operational readiness plan minimum milestone requirements for each project.

- 4. Monthly Cost Reconciliation Report This deliverable provides a monthly summary of reconciliation of the Prolog and Advantage systems used by the Program Manager for cost control/forecasting, and by BCAD for cost accounting, respectively. It is to be used by both entities to ensure ALL Program related costs are captured in the respective systems and reported accordingly.
- 5. <u>Design Review Reports</u> At the completion of each design review of the submittals made by the various Design Professionals, and the Program Manager as applicable, the Program Manager will provide a written report which will include all written comments by the reviewers, responses by the Design Professional, and disposition/reconciliation of all comments. The report will also address the design's conformance to contractual requirements/criteria and the design's intended use. This deliverable will be provided to the Contract Administrator with a copy to the appropriate BCAD Expansion Project Administrator within 14 calendar-days following the design review reconciliation meeting. The Program Manager will coordinate and facilitate the closure of all comments for each project and each review.
- 6. Quality Management Plan The Program Manager shall review the Quality Management Plan (QMP) annually and update on an as-needed basis for the term of this Amendment.
- 7. <u>Design Development Estimate Reports</u> The Design Development Estimate, prepared by the Design Professional for each project, will be accompanied by a report prepared by the Program Manager to the BCAD AEP Director identifying variances with the original budget for projects and making recommendations for appropriate corrective action, if required.
- 8. Other Deliverables Other deliverables that will be provided from time to time, and as needed are listed below:
 - a. Meeting Minutes
 - b. Non-Conformance Reports/Logs
 - c. Potential Change Order Logs
 - d. Request for Information (RFI) Logs
 - e. Action Item Status Logs
 - f. "White Papers"

Revised Exhibit B-3.2

New South Runway, Terminal 4 & Enabling Projects

AEP Program Schedule - July 2017



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Class-out or Non-Construction Activity

Construction Warranty Period

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AECOM Technical Services, Inc

REVISED EXHIBIT C-3

Amendment No. 5

Key Employees

PROGRAM MANAGEMENT SERVICES FOR NEW SOUTH RUNWAY, TERMINAL 4 REPLACEMENT AND ENABLING

PROJECTS

FORT LAUDERDALE – HOLLYWOOD INTERNATIONAL AIRPORT IN BROWARD COUNTY, FLORIDA

Phases II and III

	POSITION	NAME
1	PROGRAM DIRECTOR	John M. Craig
2	DIRECTOR - CONTROLS & SUPPORT SERVICES	Alan J. Pattison
3	PROJECT MANAGER – SENIOR (TERMINAL 4)	Aaron Pankonin

REVISED EXHIBIT D-3

Amendment No. 5

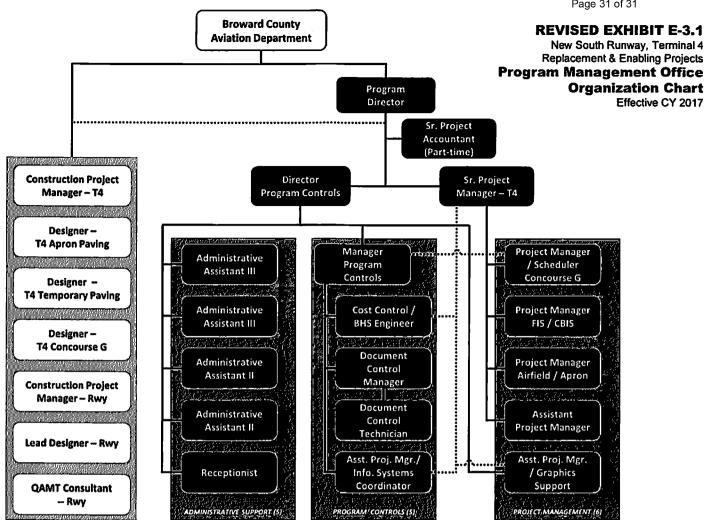
Core Staff

PROGRAM MANAGEMENT SERVICES FOR NEW SOUTH RUNWAY, TERMINAL 4 REPLACEMENT AND ENABLING PROJECTS

FORT LAUDERDALE – HOLLYWOOD INTERNATIONAL AIRPORT IN BROWARD COUNTY, FLORIDA

Phases II and III

	POSITION	NAME
1	PROGRAM CONTROLS MANAGER	John <u>Leff-</u> Kelapire
2	DOCUMENT CONTROL MANAGER	Virginia Horty
3	PROJECT MANAGER / SCHEDULER (T-4 FACILITIES)	Giuseppe Santoro
4	PROJECT MANAGER (<u>FIS / CBIS</u>)	Marcos Souza
5	PROJECT MANAGER (APRON PAVING)	Theresa Jablonski
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