CBRE, Inc.

Bid Contact **Peter Jansen**
mike.weiss@cbre.com
Ph 512-499-4902

Address **100 Congress Ave, Suite 500**
Austin, TX 20001

Item #	Line Item	Notes	Unit Price	Qty/Unit	Attch.	Docs
PNC2120437P1--01-01	Professional Consultant Services	**Supplier Product Code:**	**First Offer -**	1 / contract	**Y**	**Y**

Supplier Total **$0.00**

CBRE, Inc.

Item: **Professional Consultant Services**

Attachments

CBRE Broward Solicitation PNC2120437P1 .pdf

CBRE Broward Evaluation Criteria.042121.docx

BROWARD COUNTY FLORIDA



SOLICITATION PNC2120437P1

PROFESSIONAL CONSULTANT SERVICES FOR FLL AND HWO AIRPORTS, BUILDING PROJECTS

BROWARD COUNTY BOARD OF COUNTY COMMISSIONERS

FORT LAUDERDALE-HOLLYWOOD INTERNATIONAL AIRPORT
BROWARD COUNTY, FLORIDA

NORTH PERRY AIRPORT
BROWARD COUNTY, FLORIDA

APRIL 21, 2021

CBRE

TABLE OF CONTENTS

INTRODUCTION

EVALUATION CRITERIA

SECTION 1 - Ability of Professional Personnel

SECTION 2 - Project Approach

SECTION 3 - Past Performance

SECTION 4 - Workload of the Firm

SECTION 5 - Location

SECTION 6 - Willingness to Meet Time & Budget Requirements

SECTION 7 - Volume of Previous Work with County

Appendix - Licenses and Copies of Required Forms

REQUIREMENTS SUBMITTED VIA BIDSYNC

Lobbyist Registration Lobbyist Registration Requirement Certification

Litigation History Litigation History Form/Subcontractor Litigation

Financial Information Financial Statements

Authority to Conduct Business in Florida Vendor Questionnaire and Standard Certifications Form

Affiliated Entities of Principal Affiliated Entities of The Principal(s) Certification Form

Insurance Requirements Insurance Certificates

Standard Certifications

Subcontractors/Suppliers Requirement Subcontractors/Subconsultants/Suppliers Information Form

Tiebreaker Criteria Local Certification Form
Domestic Partnership Certification
Volume of Work over past 5 years



INTRODUCTION

BROWARD COUNTY
FLORIDA

INTRODUCTION

CBRE

7650 Corporate Center Drive
Suite 302
Miami, FL 33126

+1 404 946 2367 Tel
karen.mccallum@cbre.com
www.cbre.us

April 20, 2021

Broward County Aviation Department
320 Terminal Dr, Suite 200
Fort Lauderdale, FL 33315
Submitted via BidSync

RE: Solicitation PNC2120437P1

CBRE Heery Inc. ("CBRE") appreciates the opportunity to submit our response to Solicitation PNC2120437P1to perform Professional Consultant Services for the Fort Lauderdale-Hollywood International ("FLL") and North Perry ("HWO") Airports, Building Projects. Our team is comprised of designers, construction managers, engineers, real estate management, in-field surveyors and inspectors with a depth of experience in aviation sectors that are highly qualified to carry out the scope of services and potential projects described in the solicitation.

CBRE has assembled a team of national and local consultants for this opportunity that bring the critical skill sets necessary for successful projects. A team that can develop a bold concept by examining all possible scenarios; a team adept at quantifying and analyzing risks in order to avoid future pitfalls; and a team that will detail your selected alternate so you have confidence in your budgetary planning process. Our national aviation experience paired with our local business partners have the capability to deliver and execute projects that will benefit the airport.

A PROVEN TRACK RECORD – CBRE and the assembled subcontractors has broad experience of over $12 Billion at airports across the country, including projects at FLL and HWO. As evidenced by our high rate of repeat clients, we offer superior client attention, high quality services, and consistent follow-through. Our teaming partners have extensive experience in aviation planning, design and construction services for complex projects across the country.

A COLLABORATIVE PROCESS ALIGNING WITH YOUR GOALS – Our team engages in identifying milestones and anticipating obstacles early on by keeping all stakeholders informed and by offering collaborative solutions. Working with FLL & HWO management our dedicated professionals and proven experts in airport facilities will lead the project team and will stay through its completion. Our team will use our proven tools and methodology to ensure the latest technology and necessary infrastructure are included in support of any of the project assignments that are given to our team from this procurement.

TOP TALENT AND LOCAL EXPERTISE TO PROVIDE A UNIQUE APPROACH – We conceive environments and fully develop designs that enhance user experience and performance, revitalizing people and organizations in ways that are both exciting and sustainable. With over 25 design awards in the last five years, as well as over 15 airport awards in the last 10 years, CBRE will work in tandem with our partnering firms to successfully implement standards set forth by the Broward County Aviation Department. With our national expertise and local knowledge of regions and airports we will provide efficient engineering solutions that will meet the demand for the project execution.

We look forward to further discussions and stand readily available to assist all stakeholders to deliver a first-class experience in achieving your aviation goals for Broward County.

Sincerely,

K. McCallum

Karen McCallum
Senior Director
CBRE | Design
T. 404 946 2367
karen.mccallum@cbre.com



INTRODUCTION

OUR TEAM APPROACH IS FUELED BY EXTENSIVE EXPERIENCE AT FLL/HWO

	T2 civil engineering design and permitting of the airside and landside water distribution and sanitary sewer improvements, as well as the paving and drainage improvements
KEITH	Obstruction Analysis/Survey 10R-28L
KEITH	Terminal 1 to Terminal 2 Connector Bridge
KEITH	Cell Lot and Perimeter Rd Improvements
KEITH	FLL & HWO - Permanent Garage TNC Operations
KEITH	Crosswalk Signalization
AERO Systems Engineering	Replacement 1 Gate & Relocate PCA & 400 Hz for Delta Air Lines
AERO Systems Engineering	Replace Hobart 312 MG with Jetway JetPower Plus 312 for Delta Air Lines
AERO Systems Engineering	Construction Services for Delta Air Lines
AERO Systems Engineering	PCA Feasibility Study for Delta Air Lines
AERO Systems Engineering	Project Development, Design and CM for B777/B767-400 aircraft gating expansion
AERO Systems Engineering	Central 400 Hz/PCA Design for Delta Air Lines
AERO Systems Engineering	PBB Foundation verifications at Gates D3 & D4
AERO Systems Engineering	Cooling Tower Screen Enclosure Design and CM for Delta Air Lines
AERO Systems Engineering	Engineering Services to determine available power for AirTran for Fixed GSE additions
AERO Systems Engineering	Design for 3 PBB Replacement
AERO Systems Engineering	Design Services 2 PBB Replacements
AERO Systems Engineering	Design PBB Relocate at Gates F-7 & F-9



INTRODUCTION

OUR TEAM APPROACH IS FUELED BY EXTENSIVE EXPERIENCE AT FLL/HWO

SAMPLE FLL/HWO PROJECTS	
TEAM MEMBER	**SERVICE PROVIDED**
AERO Systems Engineering	Design for 1 Walkway Connector with Installation CA services for BCAD
AERO Systems Engineering	Site Survey - 2 Gates for American Airlines
AERO Systems Engineering	Design for one Gate Relocate for BCAD
AERO Systems Engineering	Survey Services for Gate D5 for Delta Air Lines
Messam Construction	Delta Airlines Terminal 2 Program Management
Messam Construction	Terminal 4 Expansion
Chappell	Environmental Assessments, Wildlife Surveys & Due Diligence Services
Chappell	Westside Dry Detention Pond
Chappell	Taxicab Lot
Chappell	NE 10th Avenue Extension
Lakdas/Yohalem	Upper-Level Strengthening Renovation
Lakdas/Yohalem	Terminal 2 Design & Existing Structure Evaluation
Lakdas/Yohalem	BCAD/BSO Parking Improvements
Lakdas/Yohalem	Terminal 3 Expansion and Renovations
Lakdas/Yohalem	Habiscus Parkig Garage Renovations
Lakdas/Yohalem	Threshold Inspection Services
Lakdas/Yohalem	Upper-Level Strengthening Renovation
Lakdas/Yohalem	Terminal 2 Expansion and Renovations
Lakdas/Yohalem	Exit Roadway & Velvet Routing Improvements
Lakdas/Yohalem	Terminal 2 Delta Sky Club
Lakdas/Yohalem	Baggage Screening Building Expansion
Lakdas/Yohalem	Chiller Support: Terminals 2, 3 & 4

INTRODUCTION

CBRE's AVIATION FOCUS

CBRE has tens of thousands of professionals world-wide managing capital improvement programs, projects, portfolios and multi-market assignments as part of an integrated offering with CBRE's full suite of real estate services.



47K+	125+	7,216	$92B	100+
PROJECTS MANAGED	DESIGN PROFESSIONALS	PROJECT MANAGEMENT PERSONNEL	CAPITAL EXPENSES MANAGED	DESIGN AWARDS

CBRE|Design ("CBRE") is a full-service architecture, interior design, engineering and program management firm nationwide with over 70 professionals currently reporting to the CBRE Miami office. At CBRE, we believe in being relentless advocates for our clients. We provide architecture, interior design, engineering, project management, scheduling, cost estimating and commissioning services so we can serve our clients with an integrated and comprehensive design solution. To this end, we bring an extraordinary depth of talent, expertise, and thought leadership to our projects. The quality of our services has been recognized by our clients and industry peers, leading to more than 100 industry awards for design and project excellence. We are consistently ranked among the top professional services firms by industry publications such as Engineering News-Record.

INTRODUCTION

COMPLETE SERVICES TO MAXIMIZE VALUE IN AIRPORT CAPITAL PROGRAMS

CBRE has over 7,216 project management professionals managing capital improvements programs, projects, portfolios and multi-market assignments both as a standalone service and as part of an integrated offering. Regardless of size, industry or geographic location, our project management services can be scaled up or down and tailored to suit any organization's unique business objectives. There's never been a better time to partner with us and leverage these services to Broward County's advantage. We are transformative, powerful and scalable.



PROFESSIONAL SERVICES PROVIDED BY CBRE



PROGRAM MANAGEMENT

As a pioneering developer of program management, CBRE is recognized for a number of innovations, such as procedures associated with cost estimating, analysis, scheduling & claims analysis.



ARCHITECTURE

Our offering includes expertise in aviation, corporate, government & hospitality projects, and is known for its innovative solutions to the needs of our clients.



ENGINEERING

Our engineering expertise includes civil, structural, MEP and HVAC systems; fire protection and life safety; energy consulting; and commissioning.



COMMISSIONING

We provide commissioning services for both new construction and tenant improvement as well as retro-commissioning and recommissioning services for existing buildings.



INTERIOR DESIGN

Our interior design goes beyond finishes and furnishings selection to reimagine the way space works and functions in daily life.



REAL ESTATE

CBRE is a full service commercial real estate firm providing solutions to property owners, investors and occupiers.

INTRODUCTION

CBRE'S AVIATION GROUP



CBRE Aviation projects include new terminal design, concourse expansions and renovations, innovative rental car and people moving systems, concession spaces, tenant relocations as well as extensive HVAC systems design for some of the busiest airports in the world including Atlanta, Miami, Chicago, Seattle, St. Lucia, Ontario, Boise, Spokane, and the Lafayette Regional Airport. We focus on the following areas within the aviation industry:

AIRPORT PLANNING and DESIGN



AIRPORT CONCESSIONS



AIRLINE SUPPORT SPACES and VIP CLUBS



AIRPORT CARGO



AIRPORT BAGGAGE HANDLING

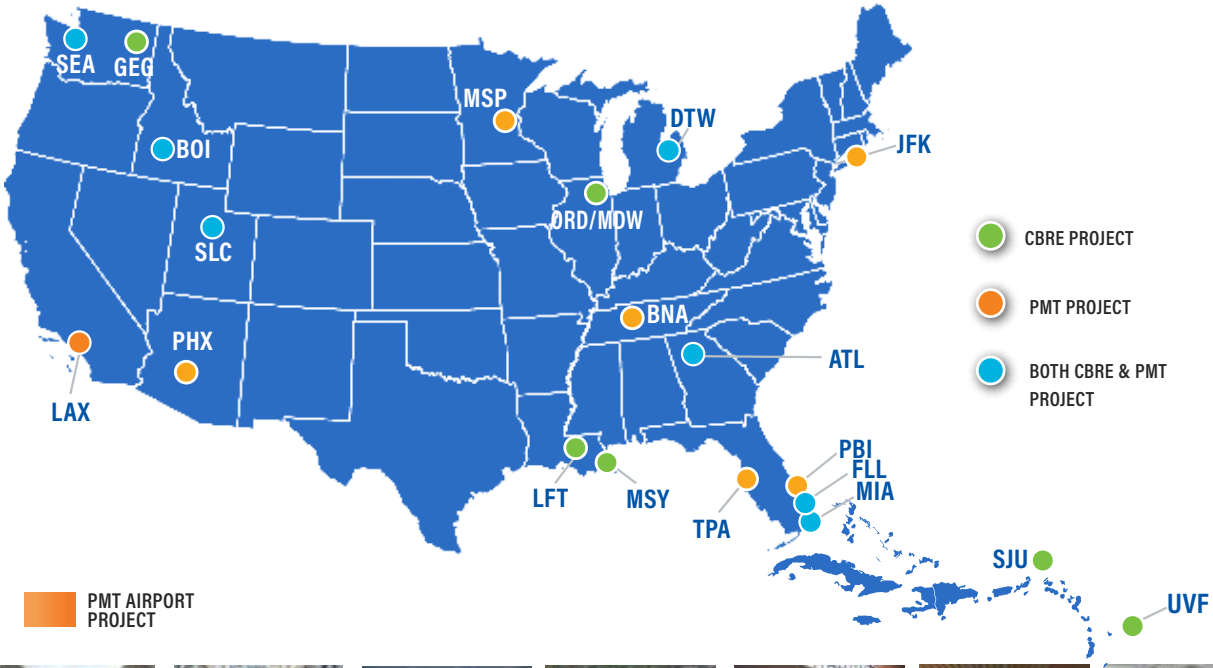


AIRPORT HOTELS and LAND ACQUISITION



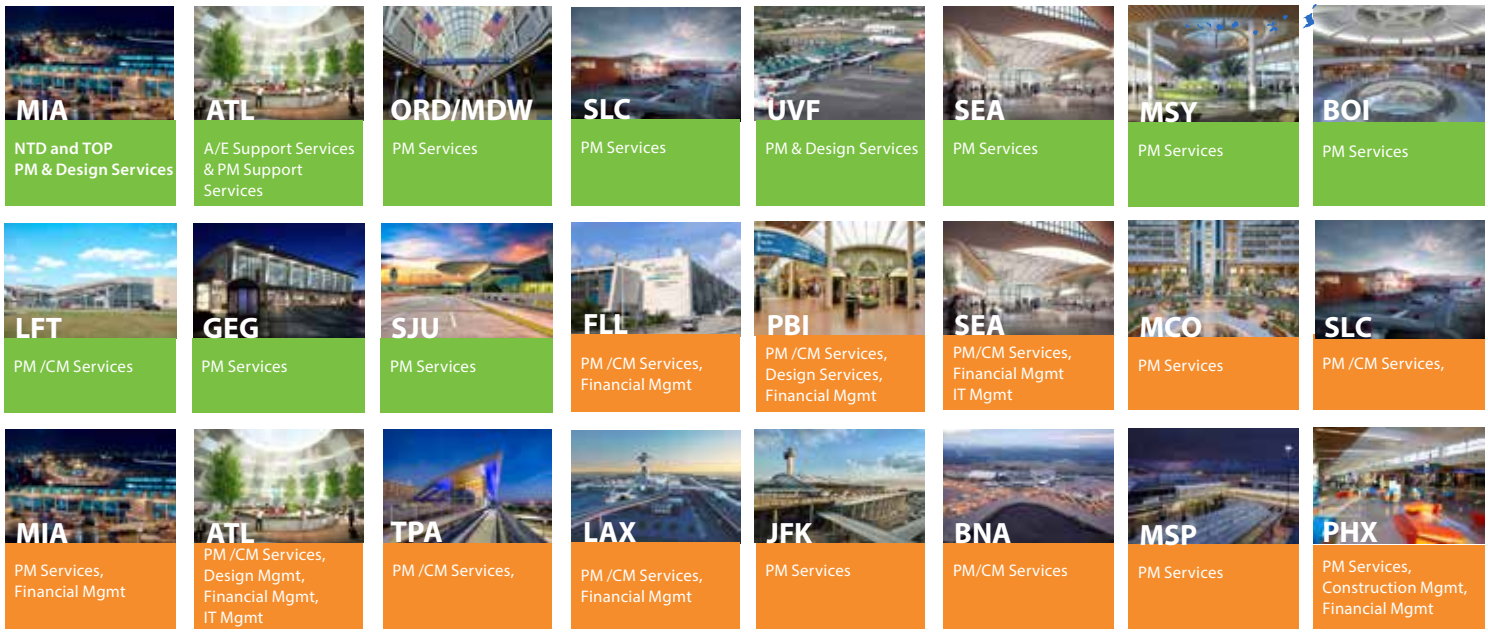
AVIATION PROGRAM MANAGEMENT

Having provided multi-disciplinary services for more than $11 billion in aviation projects, CBRE pioneered the use of program and construction management for large public sector projects and was involved in creating many of the tools currently used to help control the time, cost, and quality of design and construction. For the FLL/ HWO assignment, CBRE will lead the engineering services components, providing an oversight role for the overall assignment, with PM Technologies (PMT) serving as the program management and construction management lead. PMT has an extensive record of providing client representation and consulting services to the air transportation industry for the past 20 years. (PMT's overview and experience is further detailed beginning on page 12).



CBRE AIRPORT PROJECT

PMT AIRPORT PROJECT



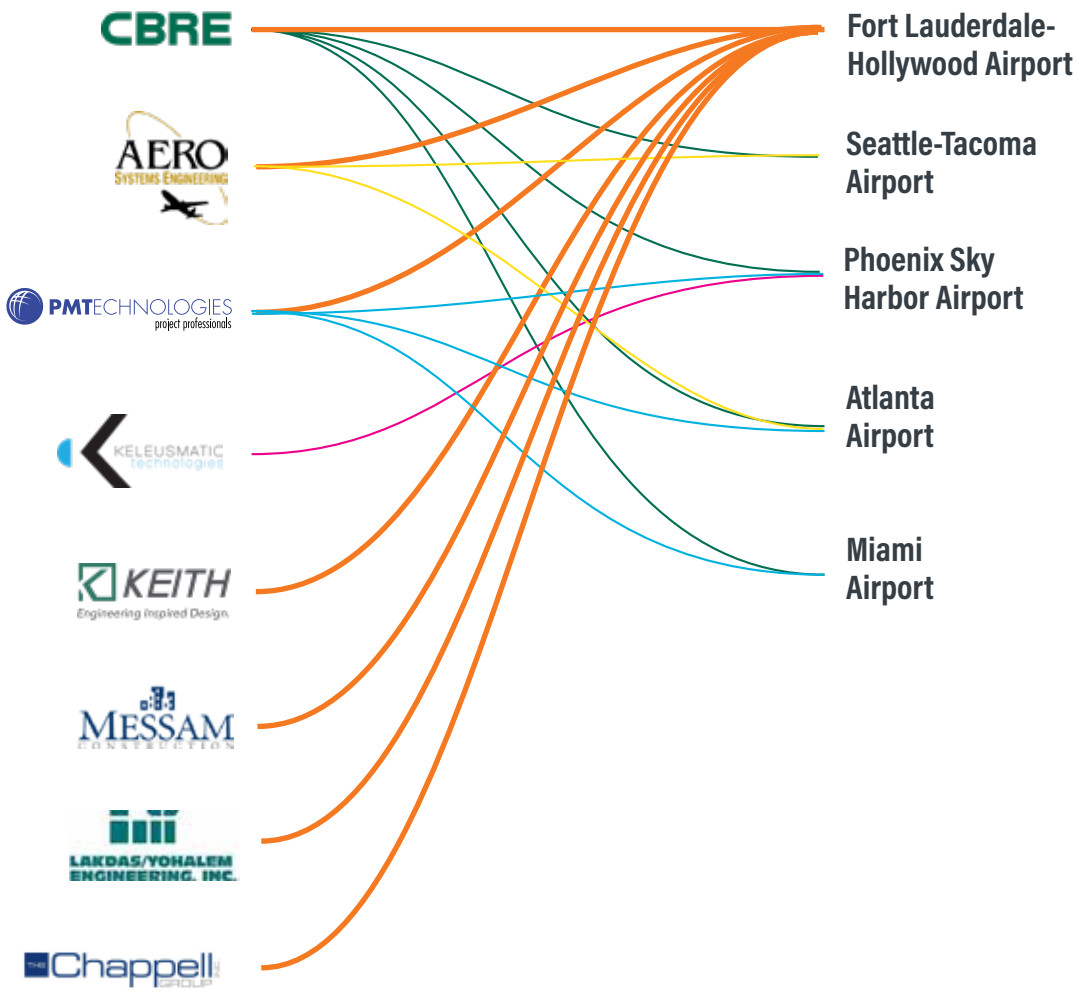
INTRODUCTION

A COLLABORATIVE TEAM; EXPERIENCED WORKING TOGETHER

The CBRE team is organized with clear and simple lines of authority, driving the decision-making process to the appropriate team members. Generally, the decision-making process is set at the lowest practical level with clear guidance for elevating any issues though the project management structure. We believe in empowering personnel to become problem solvers in lieu of problem finders. This practice has allowed us to provide our clients with quality experiences time after time.

During the design and construction process, the team, will meet on a daily and/or weekly basis through a combination of face-to-face, and if necessary, video conference, and Zoom meetings to develop and refine the design, schedule, and budgetary documents.

Importantly, our assembled team will begin the Broward County assignment with a level of synergy already in place. As demonstrated below, many of the firms involved have worked with each other at the Fort Lauderdale International Airport as well ast several airports throughout the country.





INTRODUCTION

EXPERTISE FOR EVERY SERVICE

Services to be Performed at FLL/HWO	Team Member	Status
Building Assessments	CBRE/Keleusmatic/Lakdas	CBE
40 Year Building Inspections	CBRE/Messam/Lakdas	CBE
Rehabilitation and upgrades of the Hibiscus Garage and Cypress/ RCC Garage	All Team Members	CBE
Rehabilitation of the North, East and West Airport Buildings, including HWO Buildings	All Team Members	CBE
Rental Car Center and Garage Upgrades	All Team Members	CBE
Vacant / Abandoned Building Demolition	CBRE/PMT	SBE
Enhancement on security employee and vehicular screening infrastructure project	CBRE/Keleusmatic/KEITH/PMT	CBE
Security Infrastructure Improvements	CBRE/Keleusmatic/PMT	CBE
In-line Baggage Systems	CBRE/PMT	SBE
Terminal and Building Modernization/Upgrades	All Team Members	CBE
Pedestrian Boarding Bridges Replacements	CBRE/AERO/PMT	SBE
Long-term Infrastructure Equipment	CBRE/AERO/KEITH/Keleusmatic/ Lakdas	CBE

Scope of Professional Services	Team Member	Status	Nearest Office
Architectural Design Services	CBRE	None	Broward
Interior Design	CBRE	None	Broward
Civil Engineering	AERO & KEITH	None	Broward
Structural Engineering	CBRE & Lakdas	CBE	Broward
Electrical, Mechanical and Plumbing Engineering	CBRE	None	Broward
Geotechnical Engineering	Lakdas	CBE	Broward
Environmental engineering	Chappell Group	CBE	Broward
Surveying	KEITH & Chappell Group	CBE	Broward
Subsurface Utility Engineering (SUE)	KEITH	None	Broward
Fire Protection Design	CBRE	None	Broward
Telecommunication, CCTV, and Data Engineering	Keleusmatic	CBE	Broward
Fuel System Design	AERO	None	Atlanta
Lighting System Design	CBRE	None	Broward
Permitting/Obtaining Jurisdiction Approvals	PMT	SBE	Broward
Cost Estimate	PMT	SBE	Broward
Preparing 3D Renderings	CBRE	None	Broward
Bid and Award Assistance	CBRE & PMT	SBE	Broward
Commissioning, including LEED certification	CBRE	None	Broward
Infrastructure/ Equipment Evaluations	CBRE/AERO/KEITH/Keleusmatic/Lakdas	CBE	Broward
Building Information Modeling (BIM)	All Team Members	CBE	Broward
Construction Inspections Services	Messam & Lakdas	CBE	Broward
Blast Analysis and Design Services	CBRE & Lakdas	CBE	Broward
Building Flood Proofing Design Services	CBRE & KEITH	None	Broward
Feasibility assessments	All Team Members	CBE	Broward

PM Technolgies

SUBCONTRACTOR

- Construction Management
- Tenant Facility Relocations
- Project Inspections
- Cost Estimating
- Program Management



PMTECHNOLOGIES
project professionals

6 US OFFICES

HEADQUARTERS
PM Technologies, Inc.
980 Hammond Drive
Atlanta GA, 30328

FLORIDA OFFICE
100 Terminal Dr.
Fort Lauderdale, FL 33315

SERVICES

- Program Management
- Facilities Planning, Engineering & Management
- Design and Construction Management
- Contract Administration
- IT Management
- Estimating and Cost Analysis
- Project Scheduling
- FAA standards, regulations
- Negotiations
- Documents review and submittals for compliance and owners best interest
- Overseeing change management of scope, budget and schedule
- Client Representation and Liaison
- Financial Management and Reporting
- Stakeholder Management

FIRM OVERVIEW

PM Technologies (PMT) offers professional project management services to increase corporate project performance. Our organization has an extensive record of providing client representation and consulting services to the air transportation industry for the past 20 years.

PMT has a reputation of taking a proactive leadership role in facilitating decisions and looking ahead to avoid challenges rather than managing projects in the rearview mirror. We understand the significance of managing scope, schedule, and budget, as well as the necessity to facilitate a comprehensive team with a common objective – delivering successful results to our clients.

PMT was established by former principles and key employees of Project Management Services, which provided client liaison and project management consulting to Delta Air Lines during the 1990s. As a result, our executive team has an average of 20 years experience working in aviation. Additionally, PMT has managed over 50+ air transport projects for SITA over the past 19 years, which gives us extensive knowledge of airport IT requirements. PMT professional staff possesses a wide range of experience working in the air transport industry. PMT's experienced team has managed projects for over 250 airport locations, both domestic and internationally.

PM Technologies has a long history working at Miami International Airport (MIA) & Fort Lauderdale International Airport (FLL). We have a team of nine working in Florida and a team of 30 working in Atlanta as human capital resources that have worked in both airports over the course of several years and are available for support. Our experience in MIA extends from initial submission to the real estate management group, through approval and assignment of the project manager from MDAD to be able to realize the project to permit, through construction to closeout procedures with MDAD. PMT has worked with many architect firms and contractors that have had a long history of working at various Florida airports and know the methods for badging, access and other required standards required to work within the routine procedures and the requirements for US customs access as needed.

PMT plans to engage a baggage consultant as subcontractor for the baggage scope.



PMT'S APPROACH TO WORK

The PMT project management methodology is based on the Project Management Institute® (PMI) Project Management Body of Knowledge® (PMBOK), which provides a comprehensive structure for the overall scope of project management activities. PMT will serve as primary point of contact for the program team and provide coordination between the airlines and program team members.

ADDITIONAL PROJECT EXPERIENCE

- Curbside Check-in Automation (80+ Airports)
- RF Baggage Scanning Systems (12 Airports)
- Airport Renewal (80+ Airports)
- Gate and Boarding Projects (80+ Airports)
- FIDS Renewal (7 Airports)
- GIDS Deployment (6 Airports)
- Macau International Airport Terminal Renovation
- Hartsfield Sky Club Renovation (Multiple Terminals)
- LAX T5 Terminal Renovation - T2,3,4,6 Programs
- PBI BHS / Cargo Design Facilitation
- Delta Headquarters Modernization - ATL
- BNA Sky Club Renovation
- ATL Fiber Optic Upgrade, WIFI
- Cargo Renewal (30 Airports)
- Hartsfield Terminal A & B Renovation
- Hartsfield Jackson International Airport South Security Checkpoint Expansion
- FLL T2 Redevelopment Program
- SEATAC FIDS and Common Use System
- GTAA Terminal 1 Common Use System and Baggage Reconciliation System
- Delta Sky Clubs Program - Multiple States
- ATL: Endeavor, A Tower SkyWest, GSE
- RFID Sortation ATL/DTW/MSP/JFK
- ATL New Test Cell Fiber & Ductbank Relocation
- FL Lounges/Clubs - PBI, MCO, TPA, FLL, MIA

PMT specializes in the 'Big Picture' view of renovation, expansion, and IT implementation programs in order to execute a complex orchestra of Airport Program projects.

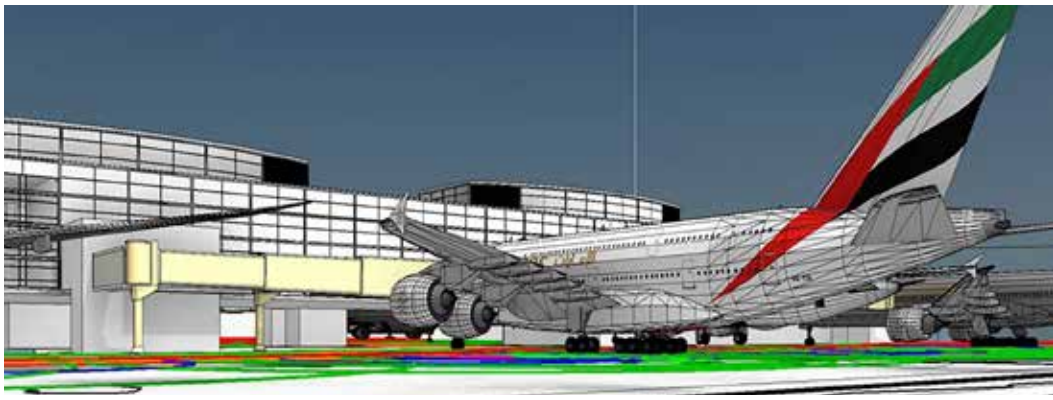
learn more about us at www.pmtechno.com



AERO SYSTEMS ENGINEERING

SUBCONTRACTOR

- Airside Civil Engineering
- Roadway Design
- Aircraft Fueling Engineering/Design
- Runway/Taxiway Design
- Airside Gate Systems Engineering



AERO SYSTEMS ENGINEERING

HEADQUARTERS
2700 Delk Road SE, Suite 100
Marietta, GA 30067

BRANCH OFFICES
Los Angeles, CA
Seattle, WA
Chicago, IL
Boston, MA
Salt Lake City, UT
Dallas, TX

200+
AIRPORTS
Including FLL since 1998

2,000+
PROJECTS
Including 30+ projects at FLL since 1998

15,000+
GATES

FIRM OVERVIEW

We design and Engineer the Finest Aviation Fixed Ground-Support Systems for the Aviation Industry

AERO Systems Engineering (ASE) is a full service, multi-disciplined planning, engineering, and design company specializing SOLELY in commercial aviation airside design. ASE's primary objective is strengthening our client relationships. With unmatched experience in the aviation industry, we have attracted and retained clients by providing superior customer value. Our airside engineering and planning capabilities deliver long-term performance and safety in a cost-effective manner. This maximizes your resources and keeps you competitive in today's challenging market.

Since 1997, ASE has provided analysis, planning, design and construction services for 15,000+ airport terminal gates at 200+ airports, as a part of 2,000+ projects across the U.S. With projects at nearly every airport in the U.S., we have a unique depth and range of experience that allows us to deliver these complex aviation projects on time and within budget.

ASE's capabilities for fixed ground-support gate systems have gained the firm national recognition.

- Unmatched experience in airside gate-system engineering
- Multiple project delivery methods including engineer-led project delivery
- Incomparable engineering talent
- Core business concentrated on aviation fixed ground-support systems
- Maintain long-term client relationships
- Coast-to-coast work coverage
- Proprietary engineering and construction technology
- Single gate to large-scale, multi-airport projects
- New and existing gate-system experience

ASE Expertise

AERO Systems Engineering specializes in sophisticated aviation fixed ground-support systems including, but not limited to, passenger boarding bridge (PBB), 400Hz ground power, preconditioned air, potable water, aircraft docking, fuel storage and delivery systems. We are a full-service firm with services ranging from systems consultation to turnkey design-build projects to commissioning services and repairs. We offer our customers a conservative engineering approach, while utilizing modern technology to its maximum benefit. We provide design services for single gate systems as well as complete new facility airsides and reconfigurations.

Airside Engineering and Consulting Services
ASE has professional licensed engineers in all 50 states specializing in the engineering, design, evaluation, and layout of the following:

- **Airside**
- **Aircraft parking**
- **Passenger boarding bridge (PBB)**
- **400 Hz systems (point-of-use and centralized)**
- **28.5VDC systems**
- **Preconditioned air systems**
- **Aircraft Docking Systems (VDGS)**
- **Hydrant fueling systems**
- **Aircraft docking systems**
- **GSE battery charging systems**
- **Apron area lighting**
- **In-house civil, electrical, mechanical, structural**

Airside Planning Services
At AERO Systems Engineering, our team of engineers and planning strategists know how to meet the stringent demands of airside planning design, to include:

- **Aircraft maneuvering**
- **Passenger boarding bridges (PBB)**
- **Aircraft parking and fueling**
- **Aircraft ground-servicing equipment coordianation (GSE)**
- **Jet blast analysis and remediation**
- **Aircraft hangars**
- **Ground load operations**
- **Bussing operations**
- **Diversion and IROP preparations**
- **Taxi lanes and taxiways**
- **FAA Part 77 analysis**
- **Non-licensed vehicle roadways (NLVR)**
- **Vehical service roadways (VSR)**



SUBCONTRACTOR

- Landside Civil Engineering
- Suburban Utility Engineering
- Drainage & Stormwater Projects
- Roadway Design
- Parking Facility Design & Construction
- Landscape Architectire



KEITH
Engineering Inspired Design.

6 FLORIDA OFFICES

HEADQUARTERS
301 E Atlantic Blvd
Pompano Beach, FL 33060

KEITH PRACTICES

KEITH Facility:
Infrastructure: Providing safety and support to create the essential backbone of our community.

KEITH Access
Connecting: People with people; goods with people; industries with people.

KEITH Life:
Stories: We create the stage for everyday moments; expected and unexpected.

KEITH Play:
Activity: Creating dynamic experiences to engage all ages in exploration, interaction, learning and movement.

KEITH Campus:
Gathering: Creating environments to learn, to worship, to debate, and to heal.

FIRM OVERVIEW

The KEITH story began when we first started serving the Broward County community 60 years ago. KEITH has csince ollaborated with more than 75 municipalities throughout Florida. Through our work and our partnerships in the area, we create the stage for everyday moments; expected and unexpected. Our projects are interconnected, touching lives and contributing to the resilience of communities.

KEITH takes what might be considered mundane and transforms it by considering it through our unique lens. With the task at hand in focus our work becomes more than simply streets, parks, or utilities. Each task becomes an exceptional space where we work, live and play. KEITH employs its more than six decades of experience to reshape each project so that it more than works, it works into the future, positively affecting our communities, and all achieved within the parameters provided by our clients. As a result, our expansive body of award-winning work is what we call Engineering Inspired Design.

The Team at KEITH combines the technical experience of a diverse pool of professionals possessing an encyclopedic working knowledge of local and regional projects, emphasizing municipal land development and re-purposing activities. This synergy results in the development of important relationships with key agencies. This tremendous database of knowledge, information and skill is an invaluable asset for our clients.

KEITH was incorporated as a Florida corporation in 1998. As a mid-size close-knit firm of over 180 professionals, we provide surveying and mapping, subsurface utility engineering, planning, civil engineering, traffic engineering, landscape architecture, construction management, and virtual design and construction services. The firm was founded on the principle of achieving success by combining the latest technology with client-oriented business practices, and a staff of experienced and talented professionals.

KEITH understands the importance of community involvement and the necessity of working with local, state, and federal agencies in a hands-on cooperative manner to build consensus and receive subsequent approval of highly sensitive projects. This approach represents an underlying philosophy of the firm which results in a quality product, with emphasis on scheduling and cost effectiveness through team-oriented management and quality control.

KELEUSMATIC TECHNOLOGIES

SUBCONTRACTOR

Telecommunications & Data Engineering
Technology Solutions
Low Voltage/IT/Security



KELEUSMATIC technologies

HEADQUARTERS

8362 Pines Boulevard, Suite 131
Pembroke Pines, Florida 33024

SERVICES

- Airport Technology Design
- Technology Systems Delivery
- Master Systems Integration (MSI)
- Technology ORAT and Commissioning

AIRPORT EXPERIENCE

80	6
AIRPORTS	CONTINENTS

RECENT PROJECT HIGHLIGHTS

- BNA - IAF
  Design Assist
- PHX T3 Modernization
  Design and Delivery
- SAN – T2 Federal Inspection Station (FIS)
  Design Assist

FIRM OVERVIEW

Keleusmatic Technologies provides technology solutions for all of our client partners. While technology can be straightforward; the design, implementation and integration to yield the desired results can be illusive.

Airport Consultancy

Operating an airport is an orchestration, before the addition of refreshing, expansions and improvements. Our Airport Consultancy Services include assistance and advisement of Capital Improvement Project Management, Airline Liaisons, Technology Systems Design, Upgrades and Integration.

Network Design and Implementation

Network Infrastructure is a now crucial commodity forming the foundation of any business operation regardless of the product or services that are provided. It is the means by which transactions are carried and provides the means by which business is conducted. In listening to our client partners' requirements and desires, we can design and tailor an infrastructure to our client partners, instead of just implementing the newest and latest networking technology and trend. With the design in place, we can either procure and implement the solution, or assist our client partners in the procurement of the solution.

Technology Services Integration

In a world of network hyper connected devices, just connecting devices to the network is only the first step. Ensuring secure network communication, through network design, segmentation and implementation is paramount to successful system deployment and operational systems. We assist in the coordination of applications development ensuring all components function as designed.

Delivery Oversight

Successful project completion is the goal for all corporations, small businesses, and individuals in general. Project Management, as a discipline is the way most entities try to ensure the proper outcome. Delivery Oversight not only completes the project management tasks, but also fills in the coordination gaps between stakeholders and implementation teams. In the construction general contracting world, we assist by filling a role that equates a Project and Technology-specific entity combining all the functions of a Designer, Project Manger, Project Engineer and Discipline-specific Site Superintendent into a single streamlined group, allowing for the ability for everyone to speak the same language.

MESSAM CONSTRUCTION

SUBCONTRACTOR

Construction Management

Inspection Services



MESSAM
CONSTRUCTION

BROWARD COUNTY OFFICE
3600 Red Road, Suite 303
Miramar, FL 3302

CONSTRUCTION MANAGEMENT

- Project Management
- Construction Management at Risk
- Project Scope Development
- Contract Administration
- Construction Engineering & Inspection
- Quality Control
- Value Engineering

GENERAL CONSTRUCTION

- Scheduling
- Estimating
- Owner Project Representation
- Subcontractor Coordination
- Interior Steel Framing
- Drywall Installation & Finish
- Interior Build Out Services

FIRM OVERVIEW

Messam Construction, founded in 2003, is a statewide construction firm with offices in Miami, Miramar, Florida - Broward County, South Bay, Florida - Palm Beach County. The firm brings together the elements of general construction and construction management in every project. This offers our clients a firm of seasoned professionals who are leaders in the construction industry.

The firm specializes in commercial construction projects in Florida. Their approach is best characterized by a "Partnering Relationship." We dedicate ourselves to turning our client's designs and construction documents to life. Messam is committed to sustainable construction practices; that commitment is evidenced by the LEED Accredited Professional designation held by both Wayne Messam, CGC, LEED AP, BD+C & Angela Messam, LEED AP, BD+C, the principals of Messam Construction.

Messam's client list includes federal government agencies, school districts, county and municipal governments and many private corporations. Messam Construction has also established strategic alliances with many of the country's largest builders providing them with construction management staff support and LEED Accredited Professionals. Our alliances have contributed to and built many iconic projects throughout South Florida.

Led by Wayne M. Messam, CGC, LEED AP, BD+C and Angela T. Messam, LEED AP, BD+C, Messam Construction has successfully completed projects for public clients including Palm Beach School District, University of Miami and Miami Dade College, with projects that include Broward County's New Civil/Family Courthouse, Miami Dade College Wolfson Campus and Fort Lauderdale International Airport Terminal 4 Expansion.

With her LEED AP®, BD+C credential by the United States Green Building Council, Mrs. Messam has demonstrated her knowledge of promoting sustainable construction principles in projects. This unique qualification, as a principal, adds to her ability to provide executive leadership on any project seeking LEED Certification.

In addition to his professional leadership to his firm, Mr. Messam is very involved in the community. He serves on several national, state and local boards championing the concerns of small and minority businesses, environment and the urban youth.

LAKDAS/YOHALEM ENGINEERING

SUBCONTRACTOR

Geotechnical Engineering
Structural Engineering
Inspection Services



LAKDAS/YOHALEM ENGINEERING, INC.

HEADQUARTERS

2211 NE 54th St
Fort Lauderdale, FL 33308

FIELD OF SERVICES

- General Structural Engineering
- Building Structural Engineering
- Marine and Seawalls
- Wind Mitigation & Hurricane Hardening
- Signage Structures
- Communication Towers
- Light Poles & Mass Arm Structures
- Bridge Engineering
- Water & Wastewater Treatment Structures
- Water Control Structures

INSPECTION SERVICES

- Threshold and Special Inspection Services
- Re-roofing
- Life Cycle Cost Analysis
- Value Engineering Services
- Independent damage assessment for insurance claims and settlements
- 40-year Certification for Existing Buildings for Code Compliance

FIRM OVERVIEW

Lakdas/Yohalem Engineering, Inc. (LYE) is a medium-sized professional civil and structural engineering firm that has been operating in South Florida since 1970 (Broward County). LYE provides Structural Engineering Services for building facilities in the tri-counties (Palm Beach, Broward and Miami Dade. These facilities include:

- Seaport Terminals
- Airport Terminals
- Support Facilities (Publics Works Complexes)
- Local Government Building Facilities (Fire Stations, City Complexes and Libraries)
- Hotels and Resorts
- Schools
- Hospital building Facilities.
- Marine Structures
- Water Treatment Structures
- Water Control Structures
- First Responder Facilities
- Petroleum Facilities
- Bridges (both pedestrian and heavy use)

LYE has completed over 4,500 projects with over 2,800 commercial and public buildings, 12 major water and wastewater treatment plants, 46 water control pump station structures, 84 marinas and major seawall projects during the past 50 years in the US and on several islands in the Caribbean Basin. We are certified Building and Threshold Inspectors. Lakdas Nanayakkara and two of their staff members are professional Engineers as well as state certified General Contractors who have in depth knowledge of design, inspection and constructability of building and water treatment projects. Lakdas/Yohalem Engineering, Inc. offers a variety of inspection and engineering services which include feasibility studies, design and condition survey of structures, threshold and site inspections, restoration damage assessments, value engineering and constructability review.

Recent Broward County Engineering Projects Include:

• Broward County Airport	Design and Threshold Inspections
• Broward County Port Everglades	Design and Threshold Inspections
• Town of Davie	Design and Special Inspections
• City of Lauderhill	Design and Threshold Inspections
• City of Fort Lauderdale	Design and Special Inspections
• City of Pompano Beach	Design and Threshold Inspections
• City of Margate	Design and Special Inspections

SUBCONTRACTOR - LAKDAS/YOHALEM ENGINEERING

Lakdas/Yohalem Engineering, Inc. (LYE) has successfully completed over 4,500 projects in 9 countries. Our design project construction cost ranges from $5k to $300M per project.

LYE is Certified by the State of Florida as a Minority Business.

LYE is Certified by Broward County as a DBE and CBE Firm for Professional Engineering Services.

LYE is FDOT certified for the following categories:

- Group 3: Highway Design Roadway
  3.1 Minor Highway Design
- Group 4: Highway Design – Bridges
  4.1.1 Miscellaneous Structures
  4.1.2 Minor Design Bridges
- Group 10: Construction Engineering Inspection
  10.1 Roadway Construction Engineering Inspections

LIST OF AIRPORT PROJECTS
PERFORMED BY: LAKDAS/YOHALEM ENGINEERING, INC.

- **Fort Lauderdale Airport Threshold Inspection Services General Engineering Services Ongoing Bases**
- **Fort Lauderdale Airport Upper-Level Strengthening Renovation**
- **Fort Lauderdale Airport Terminal 2 & 3 Expansion and Renovations**
- **Fort Lauderdale Airport Hibiscus Parking Garage**
- **Fort Lauderdale Airport Exit Roadway & Velvet Routing Improvements**
- **Fort Lauderdale Terminal 2 Delta Sky Club**
- **Fort Lauderdale Airport (Baggage Screening Building Expansion)**
- **Fort Lauderdale Airport Chiller Support: Terminal 2**
- **Fort Lauderdale Airport Chiller Support: Terminal 3**
- **Fort Lauderdale Airport Chiller Support: Terminal 4**
- **Throat Expansion Concourse: Concourse "F"**
- **Throat Expansion Concourse: Concourse "G"**
- **Throat Expansion Concourse: Concourse "H"**
- **Maintenance Building: Design & Threshold Inspection Services**
- **New Infield Hibiscus Parking Garage: Value Engineering Study Constructability Review Threshold Inspections Cargo Handling Building: Threshold Inspection**
- **Vehical Service Roadways (VSR)**



THE CHAPPELL GROUP

SUBCONTRACTOR

Environmental Engineering

Land Surveying



BROWARD COUNTY OFFICE
714 East McNab Road
Pompano Beach, FL 33060

SERVICES

- Environmental Permitting
- Coastal Engineering & Design
- Wetlands Delineation, Permitting, Mitigation and Monitoring
- Environmental Impact Statements
- Endangered Species Surveys
- Benthic Surveys
- Mitigation Design & Monitoring
- Chemical & Physical Analysis
- Environmental/Construction Coordination

FIRM OVERVIEW

The Chappell Group, Inc. (TCG) was founded in 2005 and provides environmental consulting services to both the public and private sectors serving the South Florida area and the Caribbean. TCG is headquartered in Pompano Beach and has an office in Miami Shores.

TCG is a certified DBE/MBE/CBE/SBE firm that covers the specialized fields of wetlands delineation, marina and wetland permitting, marina design, wetland mitigation, and monitoring; threatened and endangered species surveys and habitat management plans; environmental impact assessments; Phase I environmental site assessments; benthic surveys; and all forms of environmental permitting and compliance for Federal, State, and local agencies.

Environmental Permitting

For over 15 years, TCG has provided environmental permitting services for various projects, project phases and permit compliance. TCG coordinates with various local, state, and federal agencies during the pre-application process, the permitting processes, and the compliance phase. We have experience with agencies such as United States Army Corps of Engineers, South Florida Water Management District, Florida Department of Environmental Protection, Florida Game and Freshwater Fish Commission, and United States Fish and Wildlife Service

Coastal Engineering & Design

TCG specializes in the structural design and permitting of mid to large scale commercial and residential marinas, single family docks, seawalls, breakwaters, wave attenuation devices, and all types of dredging projects. TCG has provided numerous clients with value engineering based on the needs of the client and the limitations of the project parameters. TCG is an industry leader in the facilitation of permitting of docks and marinas throughout the state of Florida and is capable of providing all services required by regulatory agencies for approval. TCG provides our clients with a complete project management style that includes design, benthic and analytical surveys, permitting, construction inspection, and final completion certifications for coastal and marine projects.

Wetlands Delineation, Permitting, Mitigation, and Monitoring

Various federal, state, and local agencies have requirements for the protection of wetlands, wetland permitting, mitigation design, and monitoring. TCG conducts jurisdictional wetland determinations and delineations; wetland permitting; wetland restoration, creation, or enhancement projects in association with mitigation sites; and monitoring of wetland mitigation sites to meet wetland permit success criteria. TCG identifies and provides mortality assessment/counts of plants, oversight of maintenance and exotic removal, and assessment of general health and progress of sites.

Endangered Species Surveys

TCG conducts threatened and endangered species surveys according to agency and scientific protocols. TCG has the capability of locating fixed features such as nests and burrows through the use of sub-meter accurate GPS. TCG utilizes regulatory and scientific methods for appropriate relocation or preservation measures. Permitting and coordinating through applicable agencies may be sought and a habitat management plan devised if warranted.

Environmental Impact Statements

TCG has performed various Environmental Impact Assessments in accordance with N.E.P.A. requirements. These studies involve a wide range of issues including social, economic, cultural, historical, natural, and physical impact evaluations. Some issues considered during these studies are contamination, wetlands, water quality, air quality, noise, endangered species, archeological, and historical sites.

Benthic Surveys

TCG also performs benthic resource surveys (sea grass, corals etc.) via agency and scientific protocols for use with impact assessments, permitting, and mitigation requirements. TCG has experience in providing input to design and construction activities which might minimize impacts and costs for projects which involve sensitive features.

Mitigation Design & Monitoring

TCG provides earthwork and planting design for small to large scale mitigation projects associated with residential, commercial, industrial, and marina projects. TCG provides our clients with detailed engineered drawings which include grading, planting schemes, maintenance and monitoring plans, and cost estimates for all types of mitigation projects. TCG designs freshwater, tidal, benthic, and stormwater improvement mitigation projects for various clients to offset the unavoidable impacts that projects can require for a proposed development to succeed in the regulatory process.

Chemical & Physical Analysis

TCG performs water quality sampling based on the required field parameters and analytical results required for marina projects in the State of Florida. TCG uses state of the art Quanta sampling equipment to determine the pH, dissolved oxygen, temperature, salinity, conductivity, and turbidity of the tidal or freshwater system. TCG also provides water quality and sediment sampling for heavy metals, hydrocarbons, nutrients, and microbiological levels specific to the needs of the project.



SAMPLE PROJECTS

Project Name	Client	Location	Task(s)
Port Everglades Turning Notch Extension	Broward County Seaport Construction	Port Everglades, FL	Environmental Design, Permitting, Construction Observation, Mitigation Design & Permitting, Mitigation Monitoring
Pompano Fishing Fleet	City of Pompano Beach	Pompano Beach, FL	Environmental Permitting, Benthic Survey
Port Everglades Environmental Inventory	Broward County Seaport Construction	Port Everglades, FL	Environmental Assessment
Las Olas Marina/ Hall of Fame Marina	City of Fort Lauderdale	Fort Lauderdale, FL	Benthic Survey, Bathymetric Survey
The Ocean Hotel	City of Deerfield Beach	Deerfield Beach, FL	Marine Turtle Lighting Review, Coastal Construction Line Permitting
Daytona Beach Marina	Bluewater VI	Daytona Beach, FL	Marina Design, Regulatory Permitting, Environmental Site Assessment
Deerfield Beach Pier	City of Deerfield Beach	Deerfield Beach, FL	Marine Turtle Lighting Review, Coastal Construction Line Permitting
FDEP State Parks Coastal Engineering Continuing Services	Florida Department of Environmental Protection	State of Florida	Design & Permitting of Recreational Amenities & Infrastructure
Harbour Towne Marina	City of Dania Beach	Dania Beach, FL	Environmental Permitting, Benthic Survey, DRC Assistance, Marina Design



SOLICITATION PNC2120437P1

EVALUATION CRITERIA

BROWARD COUNTY FLORIDA

CBRE

Section 1
ABILITY OF PROFESSIONAL PERSONNEL

1a. Organization Chart

1b. Qualifications, Licenses & Experience of Key Staff

1c. Project Manager Qualifications

EVALUATION CRITERIA

Ability of Professional Personnel

1a. ORGANIZATIONAL CHART

BROWARD COUNTY FLORIDA

PRIME

CBRE

EXECUTIVE ADVISOR
FERNANDO GAVARRETE
Managing Director

KAREN MCCALLUM
Architecture & Interior Design
Architecture
Interior Design
Lighting Design

MICHAEL ROMETO
Engineering
Engineering (MEP/FP & Structural)
LEED Services

SUBCONTRACTORS

AERO SYSTEMS ENGINEERING

CHRIS BRITTON
V.P. / Lead Engineer
Airside Civil Engineering
Airside Gate Systems Engineering

PM TECHNOLOGIES

CHRIS DAVIS
Program Manager
Construction & Project Management
Cost Estimating

KEITH

ALEX LAZOWICK
President
Landside Civil Engineering
Subsurface Utility Engineering
Landscape Architecture

CBE SUBCONTRACTORS

KELEUSMATIC TECHNOLOGIES

MICHAEL YU
Principal Technology Systems Solutions Engineer
Telecommunications & Data Engineering
Low-Voltage Design

MESSAM CONSTRUCTION

WAYNE MARTIN MESSAM
Partner
Construction Management
Inspection Services

THE CHAPPELL GROUP

TYLER CHAPPELL
Vice President
Environmental Engineering
Land Surveying

LAKDAS AND YOHELEM ENGINEERING

LAKDAS NANAYAKKARA
Principal
Geotechnical & Structural Engineering
Inspection Services

1b. QUALIFICATION, LICENSES & EXPERIENCE OF KEY STAFF

COPY OF RELEVANT LICENSES PROVIDED IN APPENDIX



CBRE

KAREN MCCALLUM, ASID, LEED AP BD+C
Senior Director
Design

+1 404-946 2367
karen.mccallum@cbre.com

An award-winning expert in the field with 17 years of experience, Karen leads CBRE Design. She has a keen understanding of how design influences airports and the crucial, initial steps involved in visioning sessions, programming, and analysis. Karen brings creative solutions unique to your requirements and reflective of your brand and culture. The success of this "best practice" approach can be seen in her completed aviation projects across a variety of markets. In her time with CBRE she has brought home over 21 awards for design excellence from both industry associations and her peers.



CBRE

MICHAEL ROMETO, PE
Managing Director
PJM Engineering

+1 404-946 2367
michael.rometo@cbre.com

CERTIFIED ENGINEER IN STATE OF FLORIDA

As Managing Director of CBRE Engineering, with over 20 years of experience, Michael Rometo is responsible for management of all engineering disciplines within CBRE and will be the primary project manager for this assignment. He has served as Design Project Manager, Engineering Project Manager, and Structural Project Engineer on many of the firm's major projects, and his experience encompasses a wide range of facility types including a significant number of airport projects. This vast experience will ensure the quality delivery of services by the entire team and implementation of best practices.



CBRE

PAUL KANG, PE, LEED AP
Engineering Discipline Manager

+1 917 750 4888
paul.kang1@cbre.com

CERTIFIED ENGINEER IN STATE OF FLORIDA

Mr. Kang has over 15 years of experience designing electrical system infrastructure and analyzing electrical systems for various types of facilities. He is responsible for successful project delivery, setting design standards, and leading projects from conception to completion. His responsibilities include electrical system design, engineering review and consulting services, engineering assessments, engineering studies, and coordination. Mr. Kang also provides construction support services, such as shop drawing review, answering RFIs, change order reviews, site visits, and performing final punchlist. He brings extensive project experience with the renovation of existing facilities and new aviation construction.

EVALUATION CRITERIA

Ability of Professional Personnel



CBRE

ERNESTO GARCIA
Architecture/Construction Administration

+1 305 514 3120
ernie.garcia@cbre.com

Ernesto Garcia has 35+ years of experience in all facets of architectural design and construction administration within the aviation sector. His experience includes managing complex, multi-project construction programs including the Hewanorra International Airport new terminal development with multiple stakeholders, consultants, and partners as well as experience working on the A Concourse to B Concourse In-Fill Project for the North Terminal Development at Miami International Airport.



CBRE

LUIS RODRIGUEZ, RA, NCARB
Architecture/Construction Administration

+1 305 441 1546
luis.rodriguez2@cbre.com

Luis has 24 years of experience in all facets of architectural design and construction administration specializing in aviation type projects. As manager and project architect for MIA Concourse E Satellite and Low Concourse E terminal upgrades and renovations, various key projects under the North Terminal Development (NTD) Program and Terminal Optimization Program (TOP), Luis' experience provides a profound understanding of design and its execution during construction at various airport authorities.



CBRE

LYDIA O'NEAL, IIDA, NCIDQ
Interior Design Lead

+1 404 946 2365
lydia.oneal@cbre.com

Lydia has a broad and versatile range of project experience, ranging from sports design to corporate spaces with more than a decade of Interior Design experience. Her vision, design abilities, presentation skills, and ability to work with all the parties involved makes her an invaluable part of the team. Lydia has had the privilege to be honored by her peers with a Design Excellence Award from ASID for various projects and an Award of Merit from IIDA.



CBRE

AMY GRIFFIN
Interior Design

+1 404 946 2530
amy.griffin@cbre.com

Amy Griffin has a history of working with Delta and recently completed a project at Hartsfield-Jackson International Airport. In addition to having both a Master's and Bachelor's degree in Interior Design, she is also a NCIDQ certified Interior Designer. Amy's nine years of experience have been spent working with CBRE Design's corporate, hospitality, higher education, and healthcare clients providing thoughtful solutions to project needs.



CBRE

DAVID WALTERS
ADA Accessibility

+1 305 514 3113
david.walters2@cbre.com

David Walters has over 28 years' experience in all facets of architectural planning and design through construction administration of airport related building type projects. His experience ranges from new airport terminal and renovation construction projects to restaurants and retail concession design and implementation. He has a unique knowledge of the building codes and construction requirements in South Florida. Mr. Walters is a proficient project manager who can see a project from concept to completion.

Ability of Professional Personnel



CBRE

JOSHUA GILLESPIE, PE, LEED AP
Fire Protection Engineer

+1 404 946 2162
joshua.gillespie@cbre.com

Joshua designs, commissions, and analyzes building energy systems. He has commissioned aviation, hospitality, healthcare, campus central plant, and higher educational facilities. Joshua has designed HVAC and plumbing systems for a variety of buildings including higher education, chiller plants, military, corporation and health care facilities. He has provided feasibility services to approximately 10 million SF for energy-saving construction projects, including co-generation and renewable energy solutions.



CBRE

DARREN HOYLE
Senior Plumbing Designer

darren.hoyle@cbre.com

Darren has a variety of experience with plumbing design and HVAC system engineering for commercial, industrial, municipal, federal, educational, sports, and institutional facilities. He has experience with new facilities as well as renovations and additions. His responsibilities include providing technical direction for the mechanical, plumbing and fire protection department, project management, performing quality assurance, and multi-discipline coordination reviews.



CBRE

PETER BARRON, PE, LEED AP BD+C
Discipline Manager
Mechanical Engineer

+1 404 881 9880
peter.barron2@cbre.com

CERTIFIED ENGINEER IN STATE OF FLORIDA

As Senior Engineer and Practice Lead for CBRE's Mechanical Engineering group, Peter is responsible for management of all Mechanical engineering disciplines within CBRE, including HVAC, Energy, Plumbing, and Fire Protection. He is tasked with overseeing a staff of engineers, designers, and BIM operators, establishing design concepts, maintaining technical design quality, and ensuring accurate production of design documents.



CBRE

MICHAEL TRINKER, EIT, LEED AP
Senior Electrical Engineer

+1 404 946 2140
michael.trinker@cbre.com

Michael is an Electrical Designer with 36 years of experience participating in the design and construction of a variety of building services projects. He has extensive experience with Power, Lighting, Emergency Power, Fire Alarm and Low-Voltage Electrical Systems, code compliance, and project constructability. As a Senior Designer he is responsible for assisting in successful project delivery, overall technical proficiency, and is actively mentoring and working with young engineers to improve their knowledge and proficiency. Additionally, he has extensive experience as an electrical designer for our long-term contract at Hartsfield-Jackson Atlanta International Airport.

EVALUATION CRITERIA

Ability of Professional Personnel



CHRIS DAVIS
Program Manager

+1 678 323 1600
cdavis@pmtechno.com

PMTECHNOLOGIES project professionals

Chris Davis will serve as the lead for the PMT team for Construction and Project Management, as well as Cost Estimating. As a Senior Project Manager with 17 years' experience managing multi-phase, fast track projects with multiple stakeholders, Mr. Davis has been working consistently in the aviation field. His project experience ranges from IT common-use implementations to construction builds and he specializes in working with multiple departmental teams within the airlines and the airport authority to accomplish program goals.



CHRIS BRITTON, PE, PMP, ENV SP
V.P. / Lead Engineer

+1 770 423 4200
chris.britton@aerosys.net

CERTIFIED ENGINEER IN STATE OF FLORIDA

AERO SYSTEMS ENGINEERING

Chris will lead Aero Systems Engineering (ASE) contributions for Airside Gate Systems Engineering, Civil Engineering, Roadway Design and Runway/Taxiway Construction. ASE has provided analysis, planning, design and construction services for 15,000+ airport terminal gates at 200+ airports, as a part of 2,000+ projects across the U.S. Chris has been involved with multiple airport projects and is experienced in engineering and project management for central and point of use 400Hz and PCA system upgrades, PBB replacement, lighting, and ramp security, as well as electrical design and analysis experience, from low voltage control systems up to 500kV class equipment.



ALEX LAZOWICK, PE, PMP
President

+1 954 788 3400
alazowick@keithteam.com

CERTIFIED ENGINEER IN STATE OF FLORIDA

KEITH Engineering Inspired Design

Alex Lazowick and the Florida-based KEITH team will be engaged for Landside Civil Engineering, Subsurface Utility Engineering, Transportation & Traffic/Roadway Engineering, Landscape Architecture, Drainage & Stormwater Projects, and Parking Facility Design & Construction. KEITH has collaborated with more than 75 municipalities throughout Florida and in addition to their experience with civil engineering design projects, they are also experienced in permitting, and construction administration services. Additionally, KEITH has been engaged for muiltiple projects at the Fort Lauderdale - Hollywood International Airport including a new water main extension, expansion of runway 9R-27L and exit roadway/valet routing improvements.



MICHAEL YU, RCDD
Principal Technology Systems Solutions Engineer

+1 954 543 5701
michael.yu@keleusmatic.com

KELEUSMATIC Technologies

On behalf of Keleusmatic Technologies, Michael Yu will be providing technology solutions and low voltage/IT/ telecommunications/security guidance to this assignment. Keleusmatic Technologies has a strong focus on aviation with projects completed at more than 75 airports across the globe. Michael has 19 years experience in the Air Transportation Industry and 26 years experience in the Telecommunications Industry. He has been responsible for the design and delivery of multi-faceted systems integration projects including Master Systems Integration (MSI), Design-Build, Design-Bid-Build, and Construction Manager at Risk (CMAR) projects.

EVALUATION CRITERIA

Ability of Professional Personnel



WAYNE M. MESSAM, CGC, LEED AP, BD+C
Partner

+1 877 963 7726
wayne@messamconstruction.com

Experienced as a Partner at Messam Construction, Mr. Messam will provide Construction Management and Inspection Services. Messam Construction's track record includes Palm Beach School District, University of Miami and Miami Dade College. Recent projects won in association with their partners, include Broward County's New Civil/ Family Courthouse Construction Project Manager (Weitz) budgeted at $200,000,000, Miami-Dade College Wolfson Campus Student Union Construction Manager at Risk (Suffolk) budgeted at $25,000,000 and Fort Lauderdale International Airport Terminal 4 Expansion Project budgeted at $100,000,000. Mr. Messam also serves on several national, state and local boards championing the concerns of small and minority businesses, environment and the urban youth.



TYLER CHAPPELL
Vice President

+1 954 782-1908
tyler@thechappellgroup.com

The Chappell Group will provide Environmental Engineering and Surveying. Mr. Chappell's capabilities include wetland jurisdictional determinations, environmental feasibility studies, seagrass surveys, gopher tortoise surveys, environmental permitting, mitigation design, and mitigation monitoring. Mr. Chappell has performed a number of endangered and threatened species surveys, jurisdictional determinations, and environmental monitoring reports. Mr. Chappell has also conducted construction compliance inspections including turbidity monitoring for wetland and coastal projects. He has over eighteen years of experience in many types of environmental permitting, including residential docks, marinas and coastal development.



LAKDAS NANAYAKKARA, PE
Principal

+1 954 771 0630
lye@lyengineering.com

CERTIFIED ENGINEER IN STATE OF FLORIDA

Lakdas Nanayakkara is a Principal and Structural Engineer with Lakdas/Yohalem Engineering Inc., who will be providing Geotechnical & Structural Engineering and Inspection Services for the Broward County assignment. Lakdas/Yohalem carries the Peer Reviewed distinction for engineering quality and has been in business for over 55 years. They offer a variety of civil and structural engineering services which include: feasibility studies, design, site inspections, condition survey of structures prior to purchase, restoration damage assessments, value engineering and land development. Their experience includes multiple projects at the Fort Lauderdale Airport and Port Everglades.

MICHAEL ROMETO, PE

MANAGING DIRECTOR
PJM ENGINEERING



CBRE

PROFESSIONAL BACKGROUND

Mike Rometo serves as both the Director of Structural Engineering and the Director of Engineering for CBRE. He manages a team of over 30 registered engineers in civil, structural, mechanical, electrical, plumbing and fire protection engineering, with the breadth of resources to address all aspects of any technical challenge. In addition to performing his Engineer of Record and Director responsibilities, he is also the Project Manager for several CBRE-led designs and manages the commissioning team responsible for the Southeast region of the United States.

Airport Terminal Improvements Program Experience:

« Hartsfield-Jackson Atlanta International Airport Program Management
« Dallas Fort Worth Airport Structural Assessment
« Austin-Bergstrom International Airport Delta Sky Club

RELEVANT PROJECTS

Hartsfield-Jackson Atlanta International Airport APM Tunnel Structural Repairs
Atlanta, Georgia
Senior Structural Engineer
CBRE was the lead partner in a joint-venture called the Hartsfield Support Services Team (HSST) to provide architecture and engineering services to Hartsfield-Jackson Atlanta International Airport. As part of our support services, the CBRE team provided structural engineering services for the automated people mover (APM) tunnel structural repairs. CBRE led a team of structural engineers in surveying approximately 12,000 linear feet of APM tunnel. A report was prepared prioritizing all of the deficiencies in terms of severity to allow phased construction. Construction documents were prepared detailing deficiencies and repairs. Completed in two phases, the project was completed under budget and ahead of schedule. CBRE performed construction inspection for compliance with documents.

Hartsfield-Jackson Atlanta International Airport Terminal HVAC Upgrade
Atlanta, Georgia
Senior Structural Engineer
This task order involved the repair and upgrade of the existing HVAC system and supporting systems serving the Main North and South Terminals and the T Concourse, approximately 1,200,000 SF. The design project consisted of replacing major air handler components, terminal units, and chilled water and hot water distribution systems serving baggage claim and airline tenant spaces. Additionally, the project included upgrading the tug and baggage handling area ventilation system. The total project budget was $70 million with alternates and packages sub-budgeted.

YEARS OF EXPERIENCE

CBRE: 20 Years
Total: 20 Years

EDUCATION

Bachelor of Architectural Engineering
Pennsylvania State University, 2000

Master of Architectural Engineering Pennsylvania State University, 2000

Licenses/Certification

Professional Engineer: FL, GA, IA, KY, MO, NC, NJ, OH, PA, SC, SD, TN, TX, VA, WV

SUITABILITY FOR ROLE

Mike served as Senior Structural Engineer for many aviation projects including Hartsfield-Jackson Atlanta International Airport, Dallas Fort Worth Airport, and Delta Sky Club - Austin.

PROFESSIONAL MEMBERSHIP

AISC

CONTINUING PROFESSIONAL EDUCATION (LAST 3 YEARS)

52 PDHs

STRUCTURAL ENGINEER

MIKE ROMETO, PE

Hartsfield-Jackson Atlanta International Airport Vertical Transportation Upgrades
Atlanta, Georgia
Senior Structural Engineer

Design of ventilation/conditioning systems for elevator machine rooms as part of an open-ended contract for support services.

Hartsfield-Jackson Atlanta International Airport Parking Garages Assessment
Atlanta, Georgia
Senior Structural Engineer

As part of an open-ended contract for support services, CBRE performed an assessment of over 4.4 million SF of parking decks. The work included an assessment of 100,000 SF of parking deck on former Hertz property and an approximately 12,000-SF building.

Dallas Fort Worth Airport Structural Assessment
Dallas, Texas
Project Manager

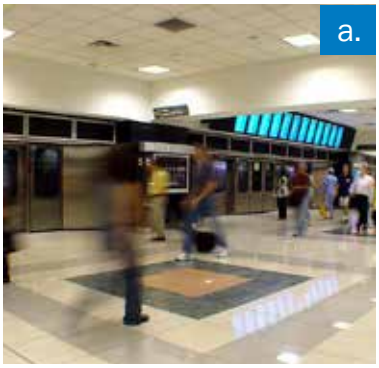
CBRE provided structural assessments and created a report for parking garage at Dallas Fort Worth Airport.

Austin-Bergstrom International Airport, Delta Sky Club
Austin, Texas
Senior Structural Engineer

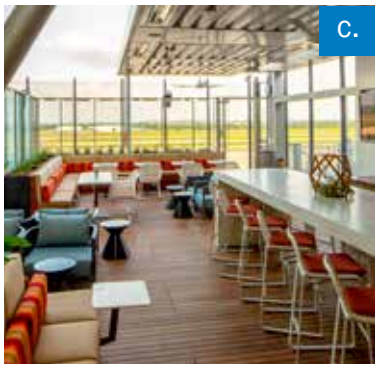
The new 8,926-SF space is located on the third level above the boarding area and includes a 905-SF outdoor patio. The club's design includes a modern and open entrance, while maintaining the surrounding terminal design and Delta brand features. The scope of work encompasses a redesign of the current elevated club mezzanine and enclosing portions of the existing plazas.

Homestead Air Reserve Park
Homestead, FL
Structural Engineer

The project consists of the verification of the master plan prepared by the Park and Recreation Department, design of a field center that includes a meeting hall, park manager's office, athletic equipment storage room, food vending facility, maintenance storage/ garage of equipment, and public restrooms. The other facilities in the park include four picnic shelters and one free standing restroom facility with two 64-space parking lots, and two soccer fields with a 134-space parking lot.







a. Hartsfield-Jackson International Airport Support Services Contract
b. DFW Parking Garage Structural Assessment
c. Austin-Bergstrom International Airport Delta Sky Club

KAREN MCCALLUM, ASID, LEED AP BD+C

SENIOR DIRECTOR
DESIGN



CBRE

PROFESSIONAL BACKGROUND

An award-winning expert in the field with 17 years of experience, Karen leads CBRE Design's design practice. She has a keen understanding of how design influences organizations and the crucial, initial steps involved in visioning sessions, programming, and analysis. Each project is an opportunity to provide clients with creative solutions unique to their requirements and reflective of their brand or culture. The success of this "best practice" approach can be seen in her completed projects across a variety of market sectors, from aviation hospitality to corporate, and higher education to sports.

A natural leader and champion for passionate design, Karen serves as a collaborative partner within CBRE's Space Enablement services. The culture of her team is one of design excellence, dedication to each other, and exceptional service – all of which is consistently reflected by Karen herself. Her collaborative nature and years of expertise results in thoughtful design solutions that make each client feel truly heard. Karen is passionate about going beyond furniture and finishes to get to the heart of a client's needs. In her time with the company, she has brought home over 21 awards for design excellence from both industry associations and her peers.

Karen McCallum joined CBRE Design, previously Heery International, directly after graduating with a Bachelors Degree in Design from the University of Florida in 2004. As a young Designer, Karen learned how trust her instincts, create thoughtful design, and know when to go back to the drawing board. As she grew in her career, she honed her collaborative leadership style, trusting that all designers should have a voice, no matter their years of experience. Over her 16 years of design, Karen has managed many unique projects, with focus in workplace design, aviation, higher education, and hospitality. Her range of expertise has proven invaluable in her day-to-day as Practice Lead in the Southeast.

RELEVANT PROJECTS

Delta Sky Club Design Services - AUS | Austin, TX

Delta Sky Club Design Services - AZ | Phoenix, AZ

Delta Sky Club Design Services - FLL | Ft. Lauderdale, FL

Delta Sky Club - ATL - In-Flight Services | Atlanta, GA

Delta Sky Club - ATL - Centerpoint A Club | Atlanta, GA

Delta Sky Club - ATL - B Club | Atlanta, GA

YEARS OF EXPERIENCE

CBRE: 17 Years
Total: 17 Years

EDUCATION

Bachelor of Design, University of Florida

LICENSES/CERTIFICATION

NCIDQ Certified
LEED AP BD+C

AFFILIATIATIONS

ASID
CoreNet
ALSD

FERNANDO GAVARRETE, AIA, NCARB

EXECUTIVE ADVISOR



CBRE

PROFESSIONAL BACKGROUND

As Vice President and South Florida Area Manager, Fernando has led CBRE in completing numerous successful projects including major capital improvement programs for various public clients. With 40+ years involved in aviation and aviation related facilities, he has been responsible for some of the most significant developments such as the Miami International Airport (MIA), and responsible for more than 120 projects commissioned by airlines, tenants, and federal authorities. Fernando's hallmark trait is personal involvement during planning, design and construction

Recent Aviation Projects:

« Delta Sky Club Design Services - FLL | Fort Lauderdale, FL
« AA Early Baggage Storage Facility - MIA - North Terminal | Miami, FL
« North Terminal Development - MIA | Miami, FL
« CD Infill Interior Finish-out - MIA - North Terminal | Miami, FL
« Hewanorra International Airport Terminal - UVF | Vieux Fort, St. Lucia
« Miami International Airport Terminal Optimization Program (TOP) | Miami, FL

RELEVANT PROJECTS

Miami International Airport (MIA)

North Terminal Development (NTD) Program Management Services
$3.1B
Miami, Florida
ROLE: Principal-in-Charge

The NTD Project is one of the largest renovation, re-development and expansion programs ever undertaken at an operational airport. Our services included master planning, design management, program management, phasing, scheduling and cost control. NTD spans more than a mile in length and covers 3.2 million SF, while offering 50 combined domestic and international gates, a four station sky train*, more than 140,000 SF of retail and concession spaces and an innovative baggage handling system with more than 10 miles of conveyors. The project team essentially transformed the north terminal from a piers configuration to a linear terminal, which in turn allowed the airline to double the number of flights per day.

American Airlines Hub Expansion- Luis Marin Munoz International Airport

Program Management Services$350M
San Juan, Puerto Rico
ROLE: Principal-in-Charge

The principle effort was the conversion of the existing terminal to accommodate the planned HUB operations of our client. As part of the expansion program a new Federal Inspection Service Facility capable of processing 2,400 passengers per hour as well as a new 12 gate concourse. Other projects within the airport included: VIP Clubs, security check points, ramp services, baggage handling, executive airlines offices, lounges and other vital airport functions. The services included those of chief designers and program managers for the major expansion and remodeling of the West Terminal for American airlines. The project was approximately 240,000 SF in size.

YEARS OF EXPERIENCE

CBRE: 34 Years
Total: 40 Years

EDUCATION

Master of Architecture, University of Florida

Graduate Studies in Building Construction, University of Florida

Bachelor of Design in Architecture, University of Florida

LICENSES/CERTIFICATION

Registered Architect: GA, FL, IL, MS, MN, NY, NC, OH, TX

AFFILIATIONS

American Institute of Architects

PAUL KANG, PE, LEED AP

ENGINEERING
DISCIPLINE MANAGER



CBRE

PROFESSIONAL BACKGROUND

Mr. Kang has over 15 years of experience designing electrical system infrastructure and analyzing electrical systems for various types of facilities. He is responsible for successful project delivery, setting design standards, leading project from conception to completion, and mentoring and developing young engineers. His responsibilities include electrical system design, engineering review and consulting services, engineering assessments, engineering studies, and coordination. Mr. Kang also provides construction support services, such as shop drawing review, answering RFIs, change order reviews, site visits, and performing final punchlist. His vast project experience consists of the renovation of existing facilities and new construction for aviation, governmental, commercial, educational, healthcare, and institutional facilities.

RELEVANT PROJECTS

Sr. Electrical Engineer, Delta Air Lines - LaGuardia Airport HVAC Optimization, Queens, NY*

Mr. Kang served as senior electrical engineer for required emergency repairs of the existing HVAC systems at Delta Air Lines Terminals C & D at LaGuardia Airport. The scope of work required replacement of existing cooling tower, air handlers and associated condensing units, as well as VAV boxes in Terminals C & D. The electrical design supported re-circuiting of new and replacement of HVAC equipment, as well as conduit routing to respective new locations. Mr. Kang provided construction administration services to include shop drawing review, responding to RFIs, site investigations, and punch list.

Power Sytems Engineer, Delta Air Lines, JFK Terminal 4 Extension, Jamaica, NY*

Mr. Kang served as power systems engineer for the JFK Terminal 4 Extension project. He reviewed on-line diagram and bill of materials as well as provided an electrical distribution model based on EasyPower software. Mr. Kang also performed short circuit calculations to see if new equipment was adequately sized to mitigate maximum fault current value. He provided coordination analysis for protective devices and the settings to be implemented for adjustable trip units and adjustable circuit breakers. Additionally, Mr. Kang worked on the arc flash labels to be applied to equipment.

Sr. Electrical Engineer, Naval Station Newport, Energy Systems Integration, Newport, RI*

Mr. Kang served as senior electrical engineer to model base-wide power distribution system on SKM software for load flow and short circuit analysis. The project involved analysis of the existing electrical distribution system and evaluate potential installation of utility scale solar photovoltaics (up to 15MW) in an abandoned part of the base for master plan approach toward future base-wide microgrid. Mr. Kang provided extensive field investigation for data gathering used to build the power distribution model.

YEARS OF EXPERIENCE

CBRE: 1 Year
Total: 15 Years

EDUCATION

Bachelor of Science/ Electrical Engineering/New York University - Polytechnic School of Engineering/2004

Graduate Certificate - Energy Innovation and Emerging Tech./Stanford University

REGISTRATIONS

LEED AP BD+C
Professional Engineer/ FL, GA, NY, SC

PROFESSIONAL MEMBERSHIPS

IEEE
USGBC

CONTINUING PROFESSIONAL EDUCATION (LAST 3 YEARS)

42 PDHs

PAUL KANG, PE

Electrical Engineer, Brooklyn Army Terminal - Smart Grid Project, Brooklyn, NY*

Mr. Kang served as electrical design engineer for this pilot smart grid project to integrate 100kW of solar PV and 100kW of battery systems to mitigate peak demand power for the existing building. He developed construction drawings, including equipment layout, riser diagram for power distribution and tie-in with existing service busduct, as well as fire alarm drawings for new battery room. Mr. Kang also coordinated with the mechanical trade for proper branch circuit and overcurrent protection sizing.

Electrical Engineer, Delta Air Lines - LaGuardia Airport New Terminal, Queens, NY*

Mr. Kang provided the electrical design and construction support for initial enabling projects, Concourse G and Headhouse projects. The design included main 27kV and 5kV underground electrical infrastructure to Rooftop East Substation (RES) and Concourse G. He provided the schematic design for Headhouse electrical power distribution, and reconfiguration of underground telecommunication infrastructure. Power system study performed for the RES buildout. The Delta Air Lines Airfield Reconfiguration program included the demolition of existing Terminals C & D and Parking Lots P4 & P5 and replaced them with a new terminal Headhouse with four concourses totaling approximately 1.2 million SF.

Deicing Station | Delta Air Lines (Delta)*

John F. Kennedy International Airport, Queens, New York | Construction: 2017. Electrical Engineering and Construction Support Services Mr. Kang furnished electrical engineering and construction services for a new deicing station adjacent to Hangar 19 at John F. Kennedy International Airport for Delta Air Lines. The deicing station will provide three stations in which deicing trucks can fill up so they can service Delta aircraft. The design consisted of extended the existing power distribution system to the new station. Mr. Kang provided electrical construction support services including shop drawing review, answering RFIs, change order reviews, site visits, and final punch list.

C3 Concourse Mezzanine Business First Lounge| United Airlines (UAL)*

Newark Liberty International Airport, Newark, New Jersey | Design: 2020 (Est.). Electrical Engineering Services Mr. Kang provided electrical design for a new Business First Lounge for United Airlines at Newark Liberty International Airport. United Airlines would like to add a Business First United Club at EWR to mainly target the Business Class and accommodate the need at the Terminal. The Concourse C3 has a double height ceiling space that accommodates a mezzanine level FIS hall along the perimeter of the south side. The new club location would be along the north perimeter of the concourse, above the existing retail locations extending from Gate 123 to Gate 126 and will be approximately 30,000 square feet. The project will be permitted and constructed in two phases: Core & Shell and Fit-out.

ReBranding Program | American Airlines (AA)*

JFK Airport, Jamaica, New York | Construction: 2016. Electrical Engineering and Construction Support Services Mr. Kang furnished electrical engineering and construction support services for the rebranding of American Airlines at Terminal 8 at John F. Kennedy Airport. The project included renovation of the American Airlines airport ticket counters, kiosks, service office and gate counters, in addition to the new construction of charging tables. Provided on-site construction observation, management, and coordination services for the AA Project Management Office.

Terminal 4 OS Baggage Handling System | Vanderlande*

John F. Kennedy International Airport, Queens, NY | Construction: 2019. Mr. Kang provided electrical engineering support required to upgrade existing oversized bag facilities with new scanning systems in two of the oversized bag rooms located in headhouse of Terminal 4. JFK IAT. to build the power distribution model.

*Prior to CBRE

ERNESTO GARCIA

**ARCHITECTURE/
CONSTRUCTION ADMINISTRATION**



CBRE

YEARS OF EXPERIENCE

35+ Years

EDUCATION

Master of Architecture,
Florida International
University

PROFESSIONAL BACKGROUND

Ernesto Garcia has 35+ years of experience in all facets of architectural design and construction administration within the aviation sector. His experience includes managing complex, multi-project construction programs including the Hewanorra International Airport new terminal development with multiple stakeholders, consultants, and partners as well as experience working on the A Concourse to B Concourse In-Fill Project for the North Terminal Development at Miami International Airport. Ernie's knowledge & architectural background provides a deep understanding of the design and fast track delivery of construction documents and phasing during the construction, and whose experience in the various components that make-up airports bring an inherent value to the teams offering for the Key West International Airport Concourse A and Terminal Improvements Program.

Airport Terminal Improvements Program Experience:

- Hewanorra International Airport
- Bimini International Airport Improvements
- Miami Intermodal Center Rental Car Facility
- American Airlines Early Baggage Storage Facility

RELEVANT PROJECTS

Hewanorra International Airport, Master Plan and New Terminal Building

Vieux Fort, St. Lucia

Designer & Senior Project Manager

This Project consists of Master Planning, Schematic Design, Design Development, Construction Documents, and Construction Administration for a new airport terminal and facility. The new 337,000 SF proposed Hewanorra International Airport terminal, is a $250 million dollar airport facility comprising of five new contact gates and one hardstand position served from 5 new jet bridges and an apron injection point. The facility incorporates the ability for future expansion of the hold rooms, make-up area and ramp to 8 gates, a grand open-air Ticketing Hall and covered Curbside. The concourse level, which is accessed through a central vertical circulation core, includes natural light filled departure lounges linked by a skylight central circulation strand which is served by a number of concessions including restaurant, beverage, duty free and other retail facilities. A VIP Lounge and Executive Club Lounge are also included as part of the departure lounge area accessed from the strand and a new Immigration and Customs Inspection Facility and Baggage Claim Hall. The New Master Plan for the airport also includes expansion of the existing cargo operations by relocating the current cargo facilities to operate from the presently unused runway. Cargo facilities for six handlers and apron parking for 4 wide body aircraft are to be provided in the initial phase.

Bimini International Airport

South Bimini, Bahamas

Project Manager

Project consists of Master Planning and Schematic Design for a new 30,000 SF terminal facility, a 15,000 SF FBO, (4) 45,000 SF hangars, new marina for water taxi transportation, and runway expansion with an estimated construction cost of $35,000,000.

ARCHITECTURE/CONSTRUCTION ADMINISTRATION

ERNESTO GARCIA

Miami International Airport, North Terminal Development (NTD) Program, A - B Infill Project Definition Package (PDP)

Miami, Florida

Team Coordinator

Responsible for producing the Project Definition Package (PDP) for A-B Terminal Shell and Interiors, part of the North Terminal Development Program. Overall project budget over $2.9 Billion, A-B Terminal cost over $200 Million.

Miami Intermodal Center (MIC), Rental Car Facility

Miami, Florida

Project Manager

Ernesto was responsible for the $355 million Rental Car Center (RCC) that consolidates rental car companies serving Miami International Airport in one location. The project consists of a four level structure approximately 3,400,000 SF. This facility was designed to incorporate a certain amount of transparency and translucency through the use of metal screening devices. The RCC consists of a Central Customer Service Lobby, a Quick Turn Around (QTA) area, a Ready Return (RR) area, parking for 6,500+ cars with multi-level fueling, light maintenance areas, a support building (includes an emergency generator, offices, and a chiller plant) and access ramps. The QTA and RR areas have a ventilation system that can provide 6 air changes per hour. The QTA includes 120 fuel dispensers and 42 car wash bays with a reverse osmosis system.

Miami International Airport, American Airlines, Early Baggage Storage Facility

Miami, FL

Project Manager

This 50,000 SF facility is a $4.5 million construction project that was commissioned by American Airlines. It is approximately 50,000 SF facility that serves as American Airlines primary baggage sorting & storage facility for "early arriving passenger's luggage". Early arriving luggage is sorted and stored prior to the aircraft arrival at the designated gate. The EBS also subscribes to inbound luggage handling capabilities for those passengers arriving via cruise line transport. This facility utilizes a complex conveyor system in the main warehouse space along with employees lounge, restrooms, and equipment rooms serving the EBS and adjacent facility.

American Airlines, Miami International Airport, GSE Breakrooms

Miami, Florida

Project Manager

This project consists of renovating the existing GSE Shop Breakroom to receive new FFE American Airlines standards throughout, i.e. flooring, lighting, paint and wainscot; new American Airlines furniture standards; reconfiguration of existing lockers; new infrastructure for plumbing for a sink and new kitchen millwork to accommodate new appliances and sink; new computer work station millwork; remodeling of existing managers offices. This project has completed CD phase and is awaiting permitting. This project consists of 780 SF. Coordination with AA GSE shop operations and CRE was a major component of this project, as well as bringing in all the airports stakeholders at an early stage to make the process and approvals a success.







a. Hewanorra International Airport - New Terminal Development

b. Miami Intermodal Center Rental Car Facility

c. Miami International Airport - North Terminal Development (NTD) Program

LUIS RODRIGUEZ, RA, NCARB

ARCHITECTURE/ CONSTRUCTION ADMINISTRATION



CBRE

YEARS OF EXPERIENCE
35+ Years

EDUCATION
Master of Architecture
University of Miami, 1997
Bachelor of Design in Architecture
University of Florida, 1994

LICENSES/ CERTIFICATION
Registered Architect: Florida
NCARB Certificate

PROFESSIONAL BACKGROUND

Luis has 24 years of experience in all facets of architectural design and construction administration specializing in aviation type projects. As manager and project architect for Concourse E Satellite and Low Concourse E terminal upgrades and renovations, various key projects under the North Terminal Development (NTD) Program and Terminal Optimization Program (TOP), Luis' experience is extensive and his understanding of the many stakeholders and inter-departmental relationships is vast. Luis' architectural background provides a profound understanding of design and its execution during construction making him thrive. In his role as senior project manager assisting various airport authorities, Luis with his get-it-done attitude, works well under pressure has been a part of the airport departments as extension of staff for many years. He will be an invaluable asset to the program for Key West International Airport.

Airport Terminal Improvements Program Experience:

« Hewanorra International Airport
« Miami International Airport Terminal Optimization Program (TOP)
« Miami International Airport North Terminal Development (NTD) Program

RELEVANT PROJECTS

Hewanorra International Airport, Master Plan and New Terminal Building
Vieux Fort, Saint Lucia
Project Architect
This Project consists of Master Planning, Schematic Design, Design Development, Construction Documents, and Construction Administration for a new airport terminal and facility. The new 337,000 SF proposed Hewanorra International Airport terminal, is a $250 million dollar airport facility comprising of five new contact gates and one hardstand position served from 5 new jet bridges and an apron injection point. The facility incorporates the ability for future expansion of the hold rooms, make-up area and ramp to 8 gates, a grand open-air Ticketing Hall and covered Curbside. The concourse level, which is accessed through a central vertical circulation core, includes natural light filled departure lounges linked by a skylight central circulation strand which is served by a number of concessions including restaurant, beverage, duty free and other retail facilities. A VIP Lounge and Executive Club Lounge are also included as part of the departure lounge area accessed from the strand and a new Immigration and Customs Inspection Facility and Baggage Claim Hall. The New Master Plan for the airport also includes expansion of the existing cargo operations by relocating the current cargo facilities to operate from the presently unused runway. Cargo facilities for six handlers and apron parking for 4 wide body aircraft are to be provided in the initial phase.

Miami International Airport, Terminal Optimization Program, E Satellite Renovation
Miami, Florida
Site Manager
In order to support the airlines continued growth plans at MIA and to accommodate the

ARCHITECTURE/CONSTRUCTION ADMINISTRATION

LUIS RODRIGUEZ, RA, NCARB

continued increasing gate needs, the Terminal Optimization Program was created. The $1.1 billion program consists of numerous projects including the Concourse E Program, Utilities Program, South Terminal Program and miscellaneous projects. Projects included but were not limited to repairs, renovations, modifications, and modernization to meet code and make it adequate to support airline operations and passenger flow. CBRE was responsible for program management, design management, schedule, budge, and supervision of the building contractors and multiple architects/engineers of record. The team was also responsible for coordination and implementation of all the Terminal Optimization Program elements.

Miami International Airport, Terminal Optimization Program (TOP), Lower Concourse E Interior Renovation Project

Miami, Florida

Project Manager

Responsible for design development and construction documents. Also responsible for construction coordination between the construction manager and MDAD for the Lower E Concourse Renovation, which involved improvements of Lower E circulation areas, gates and hold rooms.

Miami International Airport, North Terminal Development (NTD) Program

Miami, Florida

Site Manager

Responsible for on-site construction coordination between the construction manager and MDAD for the B-C Infill Project of the NTD Program. The project also included American Airlines administrative offices, which is comprised of pilot and support offices. Responsible for program management, design management, schedule, budget and supervision of the building contractors and multiple architects/engineers of record. The NTD Project is one of the largest renovation, re-development and expansion programs ever undertaken at an operational airport. Our services included master planning, design management, program management, phasing, scheduling and cost control. NTD spans more than a mile in length and covers 3.2 million SF, while offering 50 combined domestic and international gates, a four station sky train, more than 140,000 SF of retail and concession spaces and an innovative baggage handling system with more than 10 miles of conveyors. The project team essentially transformed the north terminal from a piers configuration to a linear terminal, which in turn allowed the airline to double the number of flights per day.

Miami International Airport, Belly Cargo Building Complex, Buildings #2130, #2134, Chiller Plant, Ramps & Bridges

Miami, Florida

Project Manager

Responsible for all aspects of design, production of construction documents and construction administration. This $4M Belly Cargo Building Complex consisted of two air cargo buildings, each with over 150,000 SF of warehouse and office area.

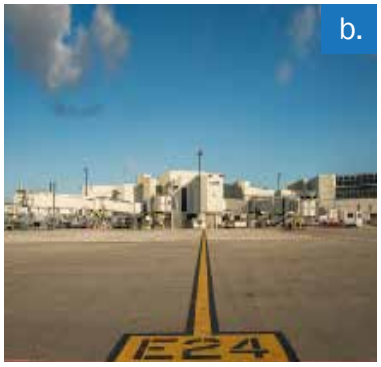
Miami International Airport NTD Program C-D Infill and D-Extension

Miami, Florida

Designer/Drafter

Responsible for development of preliminary design packages. He completed the design development documents, including, but not limited to, the architectural plans/section packages within the C-D infill and D extension.







a. Hewanorra International Airport - New Terminal Development

b. Miami International Airport - Concourse E

c. Miami International Airport - North Terminal Development (NTD) Program

LYDIA O'NEIL, IIDA, NCIDQ

INTERIOR DESIGN



CBRE

PROFESSIONAL BACKGROUND

Lydia has a broad and versatile range of project experience, ranging from sports design to corporate spaces with more than a decade of Interior Design experience. Her vision, design abilities, presentation skills, and ability to work with all the parties involved makes her an invaluable part of the team. Lydia has had the privilege to be honored by her peers with a Design Excellence Award from ASID for various projects and an Award of Merit from IIDA.

Airport Terminal Improvements Program Experience:

« Hartsfield-Jackson Atlanta International Airport

« Delta Sky Clubs

RELEVANT PROJECTS

Fort Lauderdale-Hollywood International Airport, Delta Sky Club
Fort Lauderdale, FL
Project Manager
The Delta Sky Club project at Fort Lauderdale-Hollywood International Airport (FLL) is 9,300 sf of luxurious hospitality spread over (3) levels, the main lounge; totaling in at 7,400 sf; occupying the prominent all glass mezzanine location of the new terminal 2 expansion, which is currently under construction. There are multiple lounges within the club that caters to the travelers needs, such as dining, business, and quiet relaxation. These services are supported with (2) back of house kitchens and designed by our inhouse engineering team, along with consultants for interior, lighting, acoustical, and food service. The challenges of this project were to design and provide a high-caliber lounge experience for Delta Sky Club guests that incorporated Delta Sky Club's new standards, concealed all mechanical services without engaging the airport's new barrel vaulted ceiling, and incorporate the essence that is Fort Lauderdale Florida.

Austin-Bergstrom International Airport, Delta Sky Club
Austin, TX
Project Manager
This project consists of a brand new club space cosisting of 9,800 SF at the new South Terminal. This club offers the latest in lounge accomodations with new FFE Delta Air Ways standards throughout,The program consists of a lobby reception, various lounge seating areas, buffet dining area, bar lounge area, restroom area, back of house kitchen and staff office/breakroom. Cordination with Delta Sky Lounge Team and CRE was a major component of this project, as well as bringing in all the airports stakeholders at an early stage to make the process and approvals a success.

YEARS OF EXPERIENCE
18 Years

REGISTRATIONS:
NCIDQ Certified/GA/2009

CPR/AED Certification/2011

EDUCATION:
Bachelor of Fine Arts/ Interior Design/Art Institute of Atlanta/2005

Coursework/Interior Design/ Atlanta College of Art/2001

Coursework/Interior Design/ North Carolina State University/1999

AFFILIATIONS:
IIDA Member

Member, North American Association of Sports Economists (NASSE)

Member, National Association of Collegiate Women Athletics Administrators

NEWH Member (Network of Executive Women in Hospitality).

INTERIOR DESIGN

LYDIA O'NEAL, IIDA, NCIDQ

Phoenix Sky Harbor International Airport, Delta Sky Club

Phoenix, AZ

Interiors Project Manager

CBRE provided architecture and interior design services for the renovation to the entry, entry lounge, cafe dining, main lounge area, and bar. The Delta Air Lines Sky Club project in the Phoenix Sky Harbor International Airport (PHX) represents an exciting addition in the new Terminal 3 South Concourse. The 6,600-SF space is constructed concurrently with the new concourse in which it is located.

Hartsfield-Jackson Atlanta International Airport - Enforcement Office Design

Atlanta, GA

Interior Design

CBRE provided engineering services to perform a MEP facility condition assessment for the Department of Aviation / City of Atlanta on the Motor Transport Building at Hartsfield-Jackson Atlanta International Airport.

TPA Group- 3400 Overton Park Drive

Atlanta, GA

Project Manager

CBRE Design provided architectural, interior and engineering design services for ICE's new corporate headquarters in Atlanta. The 14-story renovation included executive offices, supplementary offices for accounting, programmers and developers. Additional space includes a 24-hour help desk, conference and training rooms, fitness, cafeteria and sundry shop. The 25 year old existing building required infrastructure improvements, parking deck repairs, improved site circulation and secure access. The interior fit-up was a complete renovation for most areas with ICE ultimately occupying the entire building.

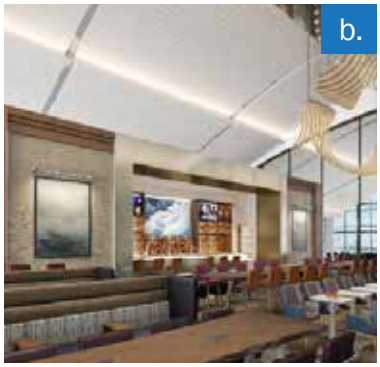
Intercontinental Exchange Corporate Office

Atlanta, GA

Project Manager

Intercontinental Exchange (ICE) is the leading network of regulated exchanges and clearinghouses for financial and commodity markets. ICE owns and operates 23 regulated exchanges and marketplaces including the New York Stock Exchange. The new headquarters houses ICE business operations which are central to the functioning of the financial markets in the United States and internationally. CBRE provided architectural, interior and engineering design services for ICE's new corporate headquarters in Atlanta.







a. Hartsfield-Jackson Atlanta International Airport

b. Delta Sky Club, Fort Lauderdale International Airport

c. Delta Sky Club, Austin-Bergstrom International Airport

AMY GRIFFIN, IIDA

DESIGNER II



CBRE

YEARS OF EXPERIENCE
9 Years

EDUCATION

Master of Fine Arts in Interior Design, Florida State University

Bachelor of Science, Interior Design, Florida State University

REGISTRATION

NCIDQ Certified

AFFILIATIONS

IIDA

PROFESSIONAL BACKGROUND

Amy Griffin has a history of working with Delta and recently completed a project at Hartsfield-Jackson International Airport. In addition to having both a Master's and Bachelor's degree in Interior Design, she is also a NCIDQ certified Interior Designer. Amy's nine years of experience have been spent working with CBRE Design's corporate, hospitality, higher education, and healthcare clients providing thoughtful solutions to project needs.

Throughout her career, Amy has been involved in every phase of design including concept design, programming, space planning, finish selection, furniture specification, construction documentation, MEP coordination, and construction administration. Although she excels in each phase of design, her true passion for design comes alive in the schematic design phase. She thrives on customizing the design of a space to reflect the unique fingerprint of each client organization and creating a concept provides a visual story.

On several projects, Amy has developed furniture packages for six-figure budgets. This included selecting and specifying furnishings, working directly with furniture dealers from the early budgetary stages through installation. She has also been the main point of contact in construction administration, performing tasks such as reviewing submittals, responding to and distributing RFI's, construction coordination, and architectural punch.

Amy graduated from Florida State University with a Bachelor of Science in Interior Design in 2011, with a Master's degree in Interior Design soon following. She began her career at a small higher education firm in Atlanta and then joined CBRE Design (previously Heery International) in 2014. In her time with the firm, Amy has expanded her capabilities significantly by working with a variety of clients and touching all aspects of design.

Airport Terminal Improvements Program Experience:

« Delta Sky Club - ATL - ATL-ACPT | Atlanta, GA
« Delta Sky Club - ATL - ATL-B | Atlanta, GA
« Delta Sky Club - ATL - ADA Assessment of Restrooms | Atlanta, GA
« Delta Sky Club - MSP - MSP-C | Minneapolis, MN
« Delta Sky Club Design Services - AUS | Austin, TX
« Delta Air Lines - ATL - In-Flight Services Lounge | Atlanta, GA
« Delta Sky Club - MSP - MSP-G | Minneapolis, MN
« Delta Sky Club - MSP - MSP-C | Minneapolis, MN

DAVID WALTERS

ADA ACCESSIBILITY



CBRE

YEARS OF EXPERIENCE
28 Years

EDUCATION

Bachelor of Architecture
Howard University, 1992

Associates in Arts of Architecture Studies,
University of Technology, 1987

PROFESSIONAL BACKGROUND

David Walters has over 28 years' experience in all facets of architectural planning and design through construction administration of airport related building type projects. His experience ranges from new airport terminal and renovation construction projects to restaurants and retail concession design and implementation. He has a unique knowledge of the building codes and construction requirements in South Florida. Mr. Walters is a proficient project manager who can see a project from concept to completion.

Airport Terminal Improvements Program Experience:

« Hewanorra International Airport

« Miami International Airport North Terminal Development (NTD) Program

RELEVANT PROJECTS

Hewanorra International Airport
Vieux Fort, St. Lucia
Project Coordinator/CAD Technician
This Project consists of Master Planning, Schematic Design, Design Development, Construction Documents, and Construction Administration for a new airport terminal and facility. The new 337,000 SF proposed Hewanorra International Airport terminal, is a $250 million dollar airport facility comprising of five new contact gates and one hardstand position served from 5 new jet bridges and an apron injection point. The facility incorporates the ability for future expansion of the hold rooms, make-up area and ramp to 8 gates, a grand open-air Ticketing Hall and covered Curbside. The concourse level, which is accessed through a central vertical circulation core, includes natural light filled departure lounges linked by a skylight central circulation strand which is served by a number of concessions including restaurant, beverage, duty free and other retail facilities. A VIP Lounge and Executive Club Lounge are also included as part of the departure lounge area accessed from the strand and a new Immigration and Customs Inspection Facility and Baggage Claim Hall. The New Master Plan for the airport also includes expansion of the existing cargo operations by relocating the current cargo facilities to operate from the presently unused runway. Cargo facilities for six handlers and apron parking for 4 wide body aircraft are to be provided in the initial phase.

Miami International Airport, Terminal Optimization Program (TOP), E Satellite Improvement Project
Miami, Florida
Site Manager
Responsible for design development and construction documents for the Terminal Optimization Program. The $1.1 billion program consists of numerous projects including the Concourse E Program, Utilities Program, South Terminal Program and miscellaneous projects. Projects included but were not limited to repairs, renovations, modifications, and modernization to meet code and make it adequate to support airline operations and passenger flow. CBRE was responsible for program management, design

ADA ACCESSIBILITY

DAVID WALTERS

management, schedule, budge, and supervision of the building contractors and multiple architects/engineers of record. The team was also responsible for coordination and implementation of all the Terminal Optimization Program elements.

Miami International Airport, Terminal Optimization Program (TOP), Lower Concourse E Interior Renovation Project

Miami, Florida

Project Coordinator/Cadd Technician

Responsible for design development and construction documents for the Lower E Concourse Renovation, which involved improvements of Lower E circulation areas, gates and hold rooms.

Tampa International Aiport, The Shoppes at Bayshore

Tampa, Florida

Project Manager

This project is a 6,300 SF mini department store located within the main terminal at Tampa International Airport. The project construction cost was $850,000. The stores featured are local brands, boutique brands, books and news, with a central bakery. CBRE task on this project was to provide limited design assistance, construction documents, and construction administration.

Miami Intermodal Center, Rental Car Facility

Miami, FL

Project Coordinator/CAD Technician

Responsible for project coordination and construction documents on the Miami Intermodal Center's Rental Car Center (MIC-RCC), to provide design integration, construction documents and construction administration. This facility consolidates all rental car agencies under one structure whose purpose is to serve passengers arriving and departing from Miami International Airport. The design of the Rental Car Facility is the first of its kind nationwide, and is one of the Miami Intermodal Center's signature structures acting as the "gateway" to the Greater Miami Area. For visitors and residents alike of Miami-Dade County/ South Florida region, the RCC offers passengers rapid transportation to and from the airport, the facility provides convenient access and connection to various transportation systems, such as Miami-Dade Metrorail, Amtrak, Tri-Rail, MIA Mover, buses, taxicabs, rental cars and private automobiles. The RCC is vast; with 4 levels covering 3.4 million SF the structure provides parking for 6,500 vehicles. It consists of three major building elements: the ready return (RR), the quick turnaround areas (QTA), and the customer service lobby (CSL).

Miami International Airport, MIA Hotel Renovation

Miami, Florida

Project Manager

This Project consisted of reconfiguring and remodeling the existing MIA Hotel Lobby area and adjacent concession and terminal spaces of approximately 10,300 SF as well as the 8th floor existing lounge area of approximately 4,900 SF. Construction budget $3,000,000.







a. Tampa International Airport - The Shoppes at Bayshore
b. Hewanorra International Airport
c. Miami International Airport - Concourse E

JOSHUA GILLESPIE, LEED AP BD+C, PE

SENIOR MECHANICAL ENGINEER



CBRE

PROFESSIONAL BACKGROUND

Mr. Gillespie has designed HVAC and plumbing systems for a variety of buildings including educational facilities, hotels, apartments, high-rise tenant upfits, large chiller plants, retail centers, and operational headquarters for military and corporate clients using Autodesk Building Systems. He has performed energy analysis using Carrier's HAP program to produce LEED Silver qualified energy savings. Also, Mr. Gillespie has performed energy audits for more than 3 Million SF of military installations and provided feasibility studies for energy saving construction projects.

RELEVANT PROJECTS

Fire Protection Design Reviewer: Atlanta Airlines Terminal Company Office Renovation, Atlanta, GA

Fire Protection Design Reviewer: Atlanta Airlines Terminal Company Office Renovation, Atlanta, GA. Fire Protection Project Engineer - Mr. Gillespie provided fire protection design review services.

Senior Mechanical Engineer: Delta Boston E Sky Club Design, Boston, MA

Senior Mechanical Engineer: Delta Sky Club - Austin, Austin, TX

The Delta Airlines Sky Club project opened late 2018 in the new terminal at Austin-Bergstrom International Airport. The new 8,926-SF space is located on the third level above the boarding area and includes a 905-SF outdoor patio. The club's design includes a modern and open entrance, while maintaining the surrounding terminal design and Delta brand features.

The scope of work encompasses a redesign of the current elevated club mezzanine and enclosing portions of the existing plazas

Senior Mechanical Engineer: Delta Sky Club Atlanta Terminal A - Centerpoint Infill & Expansion, Atlanta, GA

Engineer, Senior Mechanical Engineer: Delta Sky Club Seattle Concourse A, Seattle, WA.

Project Manager: Hartsfield-Jackson Atlanta International Airport Terminal HVAC Upgrade, Atlanta, GA

This task order involved the repair and upgrade of the existing HVAC system and supporting systems serving the Main North and South Terminals and the T Concourse, approximately 1,200,000-SF. The design project consisted of replacing major air handler components, terminal units, and chilled water and hot water distribution systems serving baggage claim and airline tenant spaces. Additionally, the project includes upgrading the tug and baggage handling area ventilation system. The total project budget was $70 million with alternates and packages sub-budgeted.

Project Manager: Hartsfield-Jackson Atlanta International Airport Pedestrian Crossings, Atlanta, GA

Design of new pedestrian crossings linking existing parking garages on North and South sides of airport to terminal and creating a new pathway to terminal via tunnel level thereby eliminating access to terminal from garages across main roadway to ticketing and baggage level. Total budget at the time of the final estimate was $21 Million.

YEARS OF EXPERIENCE

CBRE: 12 Years
Total: 19 Years

EDUCATION

Master of Engineering/ Georgia Institute of Technology/2004

Bachelor of Mechanical Engineering/Georgia Institute of Technology/2002

REGISTRATIONS

LEED AP BD+C/2014

LEED Green Associate/ GA/2013

Professional Engineer/ GA/2007

PROFESSIONAL MEMBERSHIPS

NFPA
ASHRAE
USGBC
AAE

CONTINUING PROFESSIONAL EDUCATION (LAST 3 YEARS)

53 PDHs

JOSHUA GILLESPIE, LEED AP BD+C, PE

Senior Mechanical Engineer: Hartsfield-Jackson Atlanta International Airport Vertical Transportation Upgrades Phase 3, Atlanta, GA

Phase 3 of the vertical transportation upgrades project and part of an open-ended contract for support services. CBRE is the lead partner in a joint-venture with two other firms called the Hartsfield Support Services Team (HSST) to provide architecture and engineering services to Hartsfield-Jackson Atlanta International Airport. CBRE will provide services for renovation and addition projects currently budgeted at approximately $800 Million.

Mechanical Engineer: Hartsfield-Jackson Atlanta International Airport - Program Management Support Services Contract (A3), Atlanta, GA

As a member of the Atlanta Aviation Associates (A3) joint venture, CBRE provides Program Management Support Services for the City of Atlanta, Department of Aviation for delivery of the Hartsfield-Jackson Atlanta International Airport's (H-JAIA) anticipated $6-billion ATLNext capital development program that implements its 2030 Master Plan. A3 works with H-JAIA management as a unified team and organization. Responsibilities include providing staff augmentation and specialty services to the Department of Aviation.

Fire Protection Design Reviewer: Hartsfield Jackson Atlanta International Airport - Passenger Screening Checkpoint Expansion, Atlanta, GA

Hartsfield-Jackson Atlanta International Airport (H-JAIA) is the world's busiest airport, handling nearly 90 million passengers and one million takeoffs and landings each year. In 2002, when the need for extensive renovations to H-JAIA became apparent, the City of Atlanta Department of Aviation (DOA) sought out A/E support services. CBRE formed a joint venture with two local firms—minority-owned Matrix-3D and woman-owned Richard Wittschiebe Hand Architects—to create the Hartsfield Support Services Team (HSST). HSST is providing renovation, addition, demolition and upgrading services, as well as architecture, engineering, cost estimating and scheduling services for the Hartsfield-Jackson Development Program under an indefinite delivery contract. All HSST projects within the H-JAIA program have been completed on time and within budget, due largely to HSST's innovative scheduling and precise timing of the work. CBRE provided design review services for the H-JAIA South Checkpoint Expansion Project. Fire Protection Project Engineer - Mr. Gillespie provided fire protection design review services for the H-JAIA South Checkpoint Expansion Project.

DARREN HOYLE

**SENIOR
PLUMBING DESIGNER**



CBRE

PROFESSIONAL BACKGROUND

Darren has a variety of experience with plumbing design system engineering for commercial, industrial, municipal, federal, educational, sports, institutional, healthcare, correctional, forensics, and culturally sensitive facilities. He has experience with new facilities as well as renovations and additions. His responsibilities include providing technical direction for the plumbing and fire protection department, project management, as well as performing quality assurance and multi-discipline coordination reviews..

RELEVANT PROJECTS

Senior Plumbing Designer: Atlanta Airlines Terminal Company Office Renovation, Atlanta, GA

Senior Plumbing Designer: Delta Boston E Sky Club Design, Boston, MA

Plumbing Designer: Delta Sky Club - Austin, Austin, TX

The Delta Airlines Sky Club project is scheduled to open late 2018 in the new terminal at Austin-Bergstrom International Airport. The new 8,926-SF space is located on the third level above the boarding area and includes a 905-SF outdoor patio. The club's design includes a modern and open entrance, while maintaining the surrounding terminal design and Delta brand features. The scope of work encompasses a redesign of the current elevated club mezzanine and enclosing portions of the existing plazas.

Plumbing Designer: Delta Sky Club - O'Hare Airport, Chicago, IL

Plumbing Designer: Delta Sky Club - Phoenix, Phoenix, AZ

CBRE provided architecture and interior design services for the renovation to the entry, entry lounge, cafe dining, main lounge area, and bar. The Delta Air Lines Sky Club project in the Phoenix Sky Harbor International Airport (PHX) represents an exciting addition in the new Terminal 3 South Concourse. The 6,600-SF space is constructed concurrently with the new concourse in which it is located.

Senior Plumbing Designer: Delta Sky Club - Seattle - Conceptual Design Terminal A, Seattle, WA

CBRE provided architecture, conceptual design, engineering, and interior design services for the renovation of the Seattle Sky Club Terminal A. The project was to expand the space from 3,000 SF to 15,000 SF

Senior Plumbing Designer: Delta Sky Club Atlanta B - Expansion and Renovation, Atlanta, GA

Senior Plumbing Designer: Delta Sky Club Atlanta Terminal A - Centerpoint Infill and Expansion, Atlanta, GA

Senior Plumbing Designer: Delta Sky Club Orlando - Expansion and Renovation, Atlanta, GA

YEARS OF EXPERIENCE

CBRE: 3 Year
Total: 27 Years

EDUCATION

Bachelor of Science/ Mathematics/Morehouse College/1984

Certificate/AutoCAD MEP Training/2009

AFFILIATIONS

Member, American Society of Plumbing Engineers (ASPE)

DARREN HOYLE

Senior Designer: Delta Sky Club Seattle Concourse A, Seattle, WA

Plumbing Designer: Hartsfield-Jackson International Airport - Concourse F, Atlanta, GA

Senior Plumbing Designer: Hartsfield Jackson Atlanta International Airport - Consolidated City Offices Relocation, Atlanta, GA

Plumbing Designer: Hartsfield-Jackson International Airport - A Emergency Generator, Atlanta, GA

As part of CBRE's ongoing experience with Hartsfield-Jackson Atlanta International Airport, the engineering team assisted the Department of Aviation with a review of existing generator capacity and the improvements needed to increase capacity to power 100 percent of the concourses and terminals. The project resulted in planning and schematic level design for the installation of 21 – 3 Meg or 4 Meg generators at a project budget of $130 million. The project moved to the subsequent phase involving a design-bid-build contract in which CBRE is part of the City of Atlanta's team to review the design and bids for the work.

Senior Plumbing Designer: Hartsfield-Jackson Atlanta International Airport - Enforcement Office Design, Atlanta, GA

CBRE provided engineering services to perform a MEP facility condition assessment for the Department of Aviation/City of Atlanta on the Motor Transport Building at Hartsfield-Jackson Atlanta International Airport.

Senior Plumbing Designer: Hartsfield-Jackson Atlanta International Airport - K9 Facility Assessment, Atlanta, GA

CBRE provided engineering services to perform a MEP facility condition assessment for the Department of Aviation/City of Atlanta on the K9 Facility at Hartsfield-Jackson Atlanta International Airport.

Senior Plumbing Designer: Hartsfield-Jackson Atlanta International Airport - Aircraft Rescue and Fire Fighting Facility Condition Assessment, Atlanta, GA

Senior Plumbing Designer: Hartsfield Jackson Atlanta International Airport - Passenger Screening Checkpoint Expansion, Atlanta, GA

Hartsfield-Jackson Atlanta International Airport (H-JAIA) is the world's busiest airport, handling nearly 90 million passengers and one million takeoffs and landings each year. In 2002, when the need for extensive renovations to H-JAIA became apparent, the City of Atlanta Department of Aviation (DOA) sought out A/E support services. CBRE formed a joint venture with two local firms—minority-owned Matrix-3D and woman-owned Richard Wittschiebe Hand Architects—to create the Hartsfield Support Services Team (HSST). HSST is providing renovation, addition, demolition and upgrading services, as well as architecture, engineering, cost estimating and scheduling services for the Hartsfield-Jackson Development Program under an indefinite delivery contract. All HSST projects within the H-JAIA program have been completed on time and within budget, due largely to HSST's innovative scheduling and precise timing of the work. CBRE provided design review services for the H-JAIA South Checkpoint Expansion Project.

PETER BARRON, PE, LEED AP BD+C

DISCIPLINE MANAGER
MECHANICAL ENGINEER



CBRE

PROFESSIONAL BACKGROUND

Mr. Barron has extensive project management experience in the disciplines of mechanical engineering, plumbing engineering, medical gases engineering, and fire protection engineering. His project experience has involved clients from domestic and international private corporations, Federal DOD, and non-DOD agencies, municipal, county and state governments.

In addition, Mr. Barron's projects have included a broad base of facility types, including hospitals and medical office buildings, office and administrative facilities, retail, warehouse and distribution facilities, criminal justice facilities, aviation facilities including control towers and emergency fire response, vehicle maintenance facilities, training facilities, multi-family housing and hotels, manufacturing and assembly facilities, waste facilities, leisure and recreation facilities, microwave communication facilities, data centers, and religious facilities. Existing building condition evaluations, feasibility studies, master planning, programming, building systems upgrades, building renovations, and HVAC design and specification for new construction are all project experience processes with which Mr. Barron is extensively familiar and has managed successfully.

RELEVANT PROJECTS

Project Manager, Senior Mechanical Engineer: Atlanta Airlines Terminal Corporation - Office Electrical Modification, Atlanta, GA

CBRE provided minor modifications to the electrical unit to accommodate revisions to the AATC security control desk..

Project Manager: Central Passenger Terminal Complex - Concourse A and B, Atlanta, GA

As-built conditions for restrooms in concourse A and concourse B.

Senior Mechanical Engineer: Delta Sky Club - Austin, Austin, TX

The Delta Airlines Sky Club project opened in late 2018 in the new terminal at Austin-Bergstrom International Airport. The new 8,926-SF space is located on the third level above the boarding area and includes a 905-SF outdoor patio. The club's design includes a modern and open entrance, while maintaining the surrounding terminal design and Delta brand features. The scope of work encompasses a redesign of the current elevated club mezzanine and enclosing portions of the existing plazas.

Mechanical Engineer, Senior Mechanical Engineer: Delta Sky Club - Phoenix, Phoenix, AZ

CBRE provided architecture and interior design services for the renovation to the entry, entry lounge, cafe dining, main lounge area, and bar. The Delta Air Lines Sky Club project in the Phoenix Sky Harbor International Airport (PHX) represents an exciting addition in the new Terminal 3 South Concourse. The 6,600-SF space is constructed concurrently with the new concourse in which it is located.

YEARS OF EXPERIENCE

CBRE: 23 Years
Total: 38 Years

EDUCATION

Bachelor of Engineering/ Mechanical Engineering/ Georgia Institute of Technology/1983

Bachelor of Arts/Liberal Arts/ Maryville College/1982

REGISTRATIONS

LEED AP BD+C/2007

Professional Engineer/ FL/2009

Professional Engineer/ GA/1992

PROFESSIONAL MEMBERSHIPS

ASHRAE

USGBC

CONTINUING PROFESSIONAL EDUCATION (LAST 3 YEARS)

60 PDHs

PETER BARRON, PE, LEED AP BD+C

Senior Mechanical Engineer: Delta Sky Club - Seattle - Conceptual Design Terminal A, Seattle, WA

CBRE provided architecture, conceptual design, engineering, and interior design services for the renovation of the Seattle Sky Club Terminal A. The project was to expand the space from 3,000-SF to 15,000-SF.

Mechanical Engineer: Hartsfield-Jackson Atlanta International Airport Parking Deck Study, Atlanta, GA

As part of an open-ended joint venture contract with the City of Atlanta, CBRE performed a parking deck lighting study for H-JAIA. CBRE provided electrical engineering services to assess the existing lighting problems at the two main parking decks at the airport. As a result of the study and field measurements, CBRE was then commissioned to design a complete retrofit power and lighting system to correct the existing deficiencies. Responsible for HVAC Design.

Mechanical Engineer: Hartsfield-Jackson Atlanta International Airport FAA ATCT Demolition, Atlanta, GA

CBRE provided architectural and engineering services associated with the demolition of the old aircraft control tower at Hartsfield-Jackson Atlanta International Airport. A new, modern tower was required for the new 5th runway project. When the newly constructed tower became fully operational in 2006, demolition work on the existing tower had to proceed as quickly as possible so the site would be available for construction of a new international terminal. CBRE worked closely with the FAA and airport personnel to develop a demolition plan that would not negatively impact the operations of the airport or surrounding facilities. CBRE eery assisted with the selection of the specialty contractors and provided construction administration services as the project was successfully completed $1 Million under budget and met all safety and vibration criteria. Responsible for HVAC Design.

Mechanical Engineer: Hartsfield-Jackson Atlanta International Airport Concourse A, Atlanta, GA

CBRE is the lead partner in a joint-venture called the Hartsfield Support Services Team (HSST) to provide architecture and engineering services to Hartsfield-Jackson Atlanta International Airport. The HSST team was responsible for the concept design and contract documents for the new flooring, wall and column covers and restroom upgrades for Concourse A. This work had to be carefully coordinated with the airlines as well as the other ongoing projects in the concourses. A number of restrooms were expanded by moving exterior walls and cantilevering them over the airfield, this was executed without impacting the aircraft operations and movements. The flooring work was performed during the late-night hours with HSST providing site observation services and quality assurance monitoring. Responsible for HVAC Design.

Project Manager: Hartsfield-Jackson Atlanta International Airport Concourse T North Gate Expansions, Atlanta, GA

Architectural, engineering, and aircraft systems' design for two new gates and aircraft parking positions. Boarding level space and operations are reconfigured for the gate positions for American Airlines and United Airlines. Relocation of concessions, large scale art displays, and communication systems are included in the complete cosmetic replacement of all finishes. Apron level activities included all new passenger loading and fixed bridge connections to the concourse, stripping for repositioned aircraft gates, and the addition and extension of fuel lines and pits. Apron level airline operations' space was reconfigured for the consolidation of Continental and United Airlines. Third level design included shell space for a new passenger lounge for United Airlines. American Airlines' station manager was relocated to the upper level. New vertical transportation and emergency exiting were incorporated as part of the project area of approximately 40,500-SF. This project was part of an open-ended contract for support services, in which CBRE is the lead partner in a joint-venture called the Hartsfield Support Services Team (HSST) to provide architecture and engineering services to the airport.

MICHAEL TRINKER, EIT, LEED AP

SENIOR
ELECTRICAL ENGINEER



CBRE

PROFESSIONAL BACKGROUND

Mr. Trinker's responsibilities include design of electrical lighting, power and signal systems, and site analysis of conditions and inspections. He has worked with projects as diverse as a new dormitory for the College of Charleston to a rapid transit station in Atlanta, Georgia. Other projects include military operations and maintenance, retail, correctional facilities, health care, airports, financial institutions, and government office buildings.

RELEVANT PROJECTS

Senior Electrical Engineer: Atlanta Airlines Terminal Corporation - Office Electrical Modification, Atlanta, GA.

CBRE provided minor modifications to the electrical unit to accommodate revisions to the AATC security control desk.

Senior Electrical Engineer: Delta Sky Club - Austin, Austin, TX

The Delta Airlines Sky Club project is scheduled to open late 2018 in the new terminal at Austin-Bergstrom International Airport. The new 8,926-SF space is located on the third level above the boarding area and includes a 905-SF outdoor patio. The club's design includes a modern and open entrance, while maintaining the surrounding terminal design and Delta brand features. The scope of work encompasses a redesign of the current elevated club mezzanine and enclosing portions of the existing plazas.

Electrical Engineer: Hartsfield-Jackson Atlanta International Airport North and South Parking Decks Power Distribution, Atlanta, GA

HSST provided engineering design for parking deck lighting replacement, new branch circuits and lighting control. Also, design for new power distribution system from branch circuit panel boards to new service entrance switchboards. Design for new emergency power supply system including generators, automatic transfer switches and emergency system distribution systems. Structural analysis of existing parking deck capacity to support new electrical masonry enclosures. Architectural design for small masonry buildings and individual enclosures to accommodate new service entrance switchboards and panel boards. CBRE provided an estimate of probable cost and a CPM schedule

Electrical Engineer: Hartsfield-Jackson Atlanta International Airport TPP3 Lite/West Terminal Expansion Concept Development, Atlanta, GA

CBRE is the lead partner in a joint-venture called the Hartsfield Support Services Team (HSST) to provide architecture and engineering services to Hartsfield-Jackson Atlanta International Airport. The HSST team was engaged to review, comment, and provide alternatives on the third version of the Terminal Plan and Program (TPP3) for the airport as a task order under the support services contract. The TPP3 had been developed by the long-time incumbent master planning team and it was their third attempt at revising and updating the master plan. The airport wanted a fresh perspective on the master plan and program, and HSST provided a number of conceptual planning options. HSST worked closely with the airport and the major carriers to explore a number of alternate scenarios and plans, especially in light of the 9/11 and recent events which affected the future growth projections and future security requirements. The bulk of HSST's work occurred in the western part of the main terminal in evaluating PAX circulation and security, APM expansion, ticketing, and baggage operations, and also interfaced with the on-site parking decks and pedestrian connections. A number of planning scenarios were developed and analyzed in a round table format, then were conceptually estimated for cost and schedule implications. The end result of this effort rolled into the revised master plan with a number of new projects that became part of the next phase of the airport's capital expansion program.

YEARS OF EXPERIENCE

CBRE: 32 Years
Total: 37 Years

EDUCATION

Bachelor of Mechanical Engineering/Georgia Institute of Technology/1983

Non-Degree Studies/ Electrical Engineering/ Georgia Institute of Technology/1989

Non-Degree Studies/ Electrical Engineering/ Southern College of Technology/1984

REGISTRATIONS

LEED AP BD+C/2009

Engineer-in-Training/ GA/1983

AFFILIATIONS

Member, Illumination Engineering Society of North America (IESNA) - 632258

MICHAEL TRINKER, EIT, LEED AP

Electrical Engineer: Hartsfield-Jackson Atlanta International Airport Terminal HVAC Upgrade, Atlanta, GA

This task order involved the repair and upgrade of the existing HVAC system and supporting systems serving the Main North and South Terminals and the T Concourse, approximately 1,200,000-SF. The design project consisted of replacing major air handler components, terminal units, and chilled water and hot water distribution systems serving baggage claim and airline tenant spaces. Additionally, the project includes upgrading the tug and baggage handling area ventilation system. The total project budget was $70 million with alternates and packages sub-budgeted.

Electrical Engineer: Hartsfield-Jackson Atlanta International Airport Pedestrian Crossings, Atlanta, GA

Design of new pedestrian crossings linking existing parking garages on North and South sides of airport to terminal and creating a new pathway to terminal via tunnel level thereby eliminating access to terminal from garages across main roadway to ticketing and baggage level. Total budget at the time of the final estimate was $21 Million.

Electrical Engineer: Hartsfield-Jackson Atlanta International Airport Vertical Transportation Upgrades Phase 3, Atlanta, GA

Phase 3 of the vertical transportation upgrades project and part of an open-ended contract for support services. CBRE is the lead partner in a joint-venture with two other firms called the Hartsfield Support Services Team (HSST) to provide architecture and engineering services to Hartsfield-Jackson Atlanta International Airport. CBRE will provide services for renovation and addition projects currently budgeted at approximately $800 Million.

Electrical Designer: Hartsfield-Jackson Atlanta International Airport Concourse T North Gate Expansions, Atlanta, GA

Architectural, engineering, and aircraft systems' design for two new gates and aircraft parking positions. Boarding level space and operations are reconfigured for the gate positions for American Airlines and United Airlines. Relocation of concessions, large scale art displays, and communication systems are included in the complete cosmetic replacement of all finishes. Apron level activities included all new passenger loading and fixed bridge connections to the concourse, stripping for repositioned aircraft gates, and the addition and extension of fuel lines and pits. Apron level airline operations' space was reconfigured for the consolidation of Continental and United Airlines. Third level design included shell space for a new passenger lounge for United Airlines. American Airlines' station manager was relocated to the upper level. New vertical transportation and emergency exiting were incorporated as part of the project area of approximately 40,500-SF. This project was part of an open-ended contract for support services, in which CBRE is the lead partner in a joint-venture called the Hartsfield Support Services Team (HSST) to provide architecture and engineering services to the airport.

Electrical Engineer: Hartsfield-Jackson Atlanta International Airport AATO Ticket Relocation and Food Court, Atlanta, GA

CBRE is the lead partner in a joint-venture called the Hartsfield Support Services Team (HSST) to provide architecture and engineering services to Hartsfield-Jackson Atlanta International Airport. The venture is providing architecture and engineering services for the relocation of ticket counters, airline ticket offices and associated queue lines. The vacated space is being designed as a shell area for future concessions food court. Closure and reactivation of existing baggage conveyor lines, new grease inceptors and removal of many utility and communication systems are being replaced.

EVAN BARRON, PMP

SENIOR
PROJECT MANAGER



PMTECHNOLOGIES
project professionals

PROFESSIONAL BACKGROUND

Mr Barron is a Project Manager with 11 years' experience working in a multitude of industries across the United States. He has worked on aviation programs since 2011 and covered general commercial, industrial, and IT programs to date. Mr. Barron has managed the design, procurement, contracting, execution, and the completion of projects with multiple stakeholder-groups through the life-cycle of programs ranging from $50k to $1.9B.

SELECT PROJECT WORK

Fort Lauderdale-Hollywood International Airport - T2 Sky Club Lounge
Sr. Project Manager - $20M, 15,000 sqft - build out & expansion of space
IT scope: new Fiber, com-room, upgrades, IDF/MDF fiber, kiosks procurement/configuration/ networking.

Miami- Dade International Airport - Con H - Sky Club Lounge
Sr. Project Manager - 10,000 sqft renovation & build out of space with IT scope

Phoenix Sky Harbor Airport - T3 Sky Club Lounge
Project Manager - 8,000 sqft - relocation and build out.

Phoenix Sky Harbor Airport - Terminal move & Common-Use upgrades
Project Manager - relocation and IT - RFID replacment and upgrades

Terminal 5-6 Modernization - Los Angeles International Airport
Project Manager - terminal renovation and build out - CA Green Law
39 landside project, Including In-line baggage and FIS

Terminal 2-3 Relocation Program - Los Angeles International Airport
Sr. Project Manager - planning and design for 28 tenant relocation - common-use infrastructure, 6 day move

Terminal 2-3 - Mondernization - Los Angeles International Airport
Project Manager - terminal renovation and build out - CA Green Law
In-line baggage and FIS

EXPERIENCE

11 years' Project and Construction
10 year's Avation

EDUCATION

Carnegie Mellon University
Bachelor's Degree-
College of Fine Arts
Tepper School of Business
Minor in Business Administration

COMPUTER SKILLS

Procore, Prologue, newforma, MS Project, and Bluebeam, Projectmates, Ebuilders,SAP, CLM, MS products, Adobe products, FTP, and HTML ResumeWorks

PROFESSIONAL

P.M.P.
CMAA – Southern Ca
OSHA 10
OSHA 30

CHRISTOPHER DAVIS

SENIOR
PROJECT MANAGER



PMTECHNOLOGIES
project professionals

EXPERIENCE

17 years Program Management

EDUCATION

American Intercontinental University,
Business Management &
Project Management

PROFESSIONAL BACKGROUND

Mr. Davis is a Senior Project Manager with 17 years' experience managing multi-phase, fast track projects with multiple stakeholders. He has been working consistently in the aviation field in projects ranging from IT common-use implementations to construction builds and specializes in working with multiple departmental teams within the airlines and the airport authority to accomplish program goals.

SELECT PROJECT WORK

Fort Lauderdale International Airport | T2 Modernization

Program Manager -$147M, 115K sqft multi-level addition and 40K sqft renovation to existing Terminal, while occupied.

Fort Lauderdale International Airport | T2 Baggage Project

Program Manager - Amadeus common-use provider, and TSA representatives to implement the PGDS compliant baggage system and renovation of the ticketing lobby.

Delta Air Lines | Kiosks roll out | System-wide - N. America

Project Manager for system wide rollout of Kiosks for Delta Air Lines. Including bidding, construction, installation, and IT layout for airports with common-use and proprietary networks.

Hartsfield-Jackson Atlanta International Airport | Delta FIDS Roll-out

Project Manager for Delta FIDS system rollout Hartsfield International Airport. Including bidding, design, layout, installation and testing.

Hartsfield-Jackson Atlanta International Airport | SITA Wireless System

Project manager for the installation of all LAN/WAN and wireless equipment, cabling, software and configuration for the Hartsfield-Jackson Atlanta International Airport (HJAIA) wireless project. The project consisted of 5.6M SF of wireless LAN coverage and a DAS (cellular) system for eight cellular carriers at the world largest airport.

PAUL RIDGE

SENIOR
PROJECT MANAGER



PMTECHNOLOGIES
project professionals

PROFESSIONAL BACKGROUND

Mr. Ridge is results-oriented leader with 13 years of expertise in construction management and 18 years of experience in the construction industry. A well-regarded leader with high emotional intelligence and passion for winning, with equal interest in customer satisfaction and employee motivation.

SELECT PROJECT WORK

Fort Lauderdale International Airport | T2 Modernization

Project Manager - Modernizations program- $147M, 115K sqft multi-level addition and 40K sqft renovation to existing Terminal, while occupied.

Fort Lauderdale International Airport | T2 Baggage Project

Project Manager - implemented the PGDS compliant baggage system and renovation of the ticketing lobby.

Humphrey Rich Construction Group, Inc.

Superintendent/Assistant Project Manager - Prepared and updated project work schedules on multiple high-pace hotel renovations. Coordination, monitoring and directing subcontractors. Developed detailed cost estimates by soliciting specific pricing from subcontractors and vendors

James G. Davis Construction Corp.

Assistant Superintendent - supervised subcontractors in the construction of a 12 story condominium building. Coordinated work between owners and subcontractors to successfully complete punch lists for 158 condominiums. Tracked outstanding QA/QC items through the use of Latista and Prolog for 210 condominiums.

Skanska USA Building Corp. - T.F. Green Airport, Warwick, RI

Assistant Superintendent/ Project Engineer - Remodel of airport. Determined benchmarks and building elevations through the use of total stations and theodolites.

EXPERIENCE

13 years Construction Management

EDUCATION

Florida International University
Master of Architecture
Bachelor of Architecture

SOFTWARE

Excel, Word, PowerPoint, Project, Corecon, Latista, Prolog, Primavera P6. AutoCAD, Vectorworks, SketchUp

PRISCILA VILLAVERDE

DESIGN MANAGER



PMTECHNOLOGIES
project professionals

PROFESSIONAL BACKGROUND

Ms. Villaverde is a professional with 12 years of experience in design management and includes skills in project engineering, LEED, AutoCAD and project management. She has been in the aviation environement for 3 years'. Her design role involves her in all construction related documents including drawings, specifications, RFI's, and reports. She is detail-oriented with strong analytical and reporting skills. Ms.Villaverde has proven success in working across multiple departmental teams and stakeholders.

SELECT PROJECT WORK

Fort Lauderdale International Airport | T2 Modernization

Project Engineer - review all design related documentation for construction. Mange RFI's and project submittals, change and revision management, closeout and punch-list, daily site-visit and communications.

Permasteelisa North America - Miami, FL

System Designer - Curtainwall, window and door industry. Managed design process. Coordinated the approval process with the Building Code Compliance Office for projects' testing & city approval.

RC Aluminum Industries - Miami, FL

Jr.Designer & LEED Consultant - Consulted with clients in reaching and surpassing their energy efficiency expectations complying with LEED certifications by simulating thermal values.

EXPERIENCE

12 years Design Management

EDUCATION

Wentworth Institute of Technology
B.S. Construction Management Technology

SOFTWARE

Procore, Plangrid & Bluebeam Revu, AutoCAD, Solidworks Rhinoceros 4.0, Sketch-up, Autodesk Max & Viz Render 2006-2020: Digital Modeling, High Quality Rendering and Animations, Adobe Photoshop, MS Office

PROFESSIONAL

LEED Accredited Professional - LEED NC v2.2
Bilingual English/ Spanish

TYLER BRADFORD

PROJECT ENGINEER



PMTECHNOLOGIES project professionals

PROFESSIONAL BACKGROUND

Mr. Bradford is a Project Engineer with 6 years' experience managing different phases of projects with multiple stakeholders. He has been working in the aviation field in projects ranging from IT implementations to construction while working with multiple departmental teams within the airlines to accomplish program goals. Prior to working with PM Technologies, Mr. Bradford was a Technical Analyst with ThyssenKrupp.

SELECT PROJECT WORK

Fort Lauderdale International Airport | T2 Modernization

Project Engineer -$147M, 115K sqft multi-level addition and 40K sqft renovation to existing Terminal, while occupied.

Delta Air Lines, Inc. | Techincal Operations Center Modernization

Project Manager - $17M, 223,059 sqft renovation - multiple business unit relocations and modernizations for Delta Air Lines TOC management for 5 different locations.

Thyssenkrup Elevator

IT Business Analyst responsible for the implementation of new software program with all divisions and stakeholders in North America, Poland and the Netherlands.

EXPERIENCE

6 Years Construction/Aviation

EDUCATION

Shorter University
Bachelor Business Administration

SOFTWARE

Excel, Word, PowerPoint, Project, Corecon, Latista, Prolog, Primavera P6, AutoCAD/BIM, Vectorworks, SketchUp, RBIT, Bluebeam

JENNIFER ARREDONDO

PROJECT COORDINATOR



PMTECHNOLOGIES project professionals

PROFESSIONAL BACKGROUND

Ms. Arredondo is a Project Coordinator with over 25 years' experience managing airline/airport operations. And 2 years' experience in project management in multi-phase, fast track projects with multiple stakeholders. Jennifer has been working consistently in the aviation field in projects ranging from scheduling and coordinating daily work activities and specializes in working with multiple departmental teams within the airlines and the airport authority to accomplish program goals.

Prior to working with PM Technologies, Ms. Arredondo was a Ramp Tower Coordinator at DFW International Airport. She also specialized in airport emergency management and airport/airline operations which includes safety; customer service leadership; planning; operations and emergency preparedness.

SELECT PROJECT WORK

Fort Lauderdale International Airport | T2 Modernization

Project Coordinator -$147M, 115K sqft multi-level addition and 40K sqft renovation to existing Terminal, while occupied.

Dallas Forth Worth International Airport

Internal Flight Operations Manager, Emergency Operations Coordinator, Incident Commander. Developed and facilitated training exercises for various departments, including mandated FAA LifeSaver drills, and general training for staff and partners.

EXPERIENCE

2 Years Project Manager
25 Years Aiport Operations

EDUCATION

American Military University
BA Emergency and Disaster Management

PROFESSIONAL

Center for Domestic Preparedness
Mass Casualty Incident and CBRNE/HAZMAT Training
September 2012

FEMA Emergency Management Institute
Incident Command System Training
August 2011

CHRIS BRITTON, PE, PMP, ENV SP

VP, SE US OPERATIONS



PROFESSIONAL BACKGROUND

- Provides engineering and project management for central and point of use 400Hz and PCA system upgrades, PBB replacement, lighting, and ramp security
- Extensive electrical design and analysis experience, from low voltage control systems up to 500kV class equipment
- Experienced in transformer protection, grounding and lightning protection, motor starter and motor protection, breaker coordination analysis, main electrical distribution design using transformers, transfer switches, diesel gensets, motor control centers, and distribution panels

RELEVANT PROJECTS

AATC/DOA Passenger Boarding Bridge Replacement and Upgrade Project (137 Gates) – Atlanta Hartsfield-Jackson International Airport – Atlanta, Georgia (ATL)

Role: Project Manager Design/Engineer
Completion Date: 2018 (design), 2020 (construction)
Client Contact: Shawn Craig, 678.749.9443

Complete airside design, commissioning, and construction administration for airfield layout, aircraft parking planning, PBBs, 400Hz ground power (POU and central), PCA systems (POU and central), electric GSE battery charging, baggage valets, aircraft docking systems upgrades for AATC/DOA at Terminals T, A, B, C, D, and E.

Power Distribution, Loading Bridge Replacement, and Structural Foundation Project (13 Gates) – Dane County Regional Airport – Madison, Wisconsin (MSN)

Role: Project Manager Design/Engineering
Completion Date: 2017 (design), 2019 (construction)
Client Contact: Bill LeGore, 941.359.2770

Design and construction administration services for the replacement of all PBBs, GPUs, and PCAs, electrical infrastructure upgrades, airside design, and baggage valets.

Passenger Boarding Bridge Replacement Project (27 Gates) Southwest Florida International Airport - Fort Meyers, FL (RSW)

Role: Project Manager/Engineering
Completion Date: Ongoing
Client Contact: George Ghorayeb, E.I., 239.590.4626

Replacement of PBBs at 27 existing gates, including new aircraft parking and planning, new point-of-use PCA, point-of- use 400Hz GPU, new building infrastructure for a networked gate equipment monitoring system and new camera systems that tie in the PBB 4-way cameras into the security system.

AERO Systems Engineering, Inc. VP, Southeastern U.S. Operations

PAST RELEVANT EMPLOYMENT

Commonwealth Associates, Electrical Engineer, 2015

ENERCON Services, Electrical Engineer, 2007-2014

EDUCATION

MBA, Finance,
Georgia State University

BS, Electrical Engineering,
Georgia Institute of Technology

REGISTRATIONS

Professional Electrical Engineer - 18 States (including FL #79800)

DAVID MARTURELLO

AIRPORT PLANNING DIRECTOR



AERO Systems Engineering, Inc. Director of Airport Planning

PROFESSIONAL BACKGROUND

For more than 35 years, David has dedicated his career to airport parking planning and PBB design. Having revolutionized this specialty, David has worked domestically and internationally on more than 4,000 airport projects. As Director of Airport Planning, David leads ASE's Airport Planning Division, lending his expert experience in airport, aircraft parking, and GSE operations planning as well as fleet mix/flight schedule analysis.

RELEVANT PROJECTS

Terminal 3, A380 Passenger Boarding Bridge Modifications - Toronto Pearson International Airport – Toronto, Ontario (YYZ)
Role: Airport Planning Director
Completion Date: 2019 (design)
Client Contact: Jonathan Kwan, 416.776.5489

ASE was selected to provide a project feasibility report and ultimately perform the complete airside re-design of Gates C30 and C31 to allow for dual Passenger Boarding Bridge servicing of Code F Aircraft (ADG-VI) at C30. The project included the relocation of the existing C31 PBB and installation of new walkway, along with a new walkway and dual PBBs at C30.

Salt Lake City Terminal Redevelopment Project (38 Gates) – Salt Lake City International Airport – Salt Lake City, Utah (SLC)
Role: Airport Planning Director
Completion Date: 2017 (design), 2022
Client Contact (Construction): Thom Lang, 404.636.6427

Complete airside design services and construction administration for airfield layout, aircraft parking planning, PBBs, 400Hz ground power, PCA systems, electric GSE battery charging, baggage valets, and aircraft docking systems for a new 38-gate terminal complex (expandable to 47 gates) comprised of three buildings: North Concourse West, South Concourse West and South Concourse East.

Mickey Leland International Terminal D Replacement Project (28 Gates)– George Bush Intercontinental Airport – Houston, Texas (IAH)
Role: Airport Planning Director
Completion Date: 2019 (design), 2024
Client Contact (Construction): Thom Theobald, 303.589.3359

Aircraft parking, PBB planning, and airside design services for the new Mickey Leland International Terminal. Develop drawings and specifications for all airside aircraft parking, aircraft maneuvering modeling, specialty equipment and systems including PBBs, walkways, PCA equipment/systems, 400Hz equipment/systems, potable water equipment, aircraft docking guidance units, and eGSE battery charging equipment. Project includes A380 gates.

EDUCATION

AA, Weber State College

ERIK STRAND, PE

CIVIL ENGINEER



PROFESSIONAL BACKGROUND

Erik is a Senior Project Manager with over 17 years of extensive experience in airport engineering, engineering in support of airport planning and aviation consulting services. He is responsible for management of engineering projects from inception through closeout. Erik has been working in the field of aviation since 2001 and has successfully managed and assisted clients in the completion several of the largest projects in New England. He has worked at MHT, ASH, HYA, MVY, ACK, GHG, AQW, CQX, 1B9, 0B5, GDM, BVY, BAF BOS and ORH and as well as several other airports throughout New England. Erik is a licensed professional engineer in 8 states.

RELEVANT PROJECTS

Pre-Conditioned Air (PCA) Upgrade Project (13 Gates) Pittsburgh International Airport - Pittsburgh, PA (PIT)
Role: Project Manager
Completion Date: Ongoing
Client Contact: Benton Rudolph, 202.776.7650

ASE is contracted with Gensler and is working with the electrical design firm, Sigma. The scope of this project is to replace the Central PCA equipment at Concourses C & D with Point of Use PCA.

Delta Air Lines Terminal 4 Expansion Project (18 Gates) John F. Kennedy International Airport - Queens, NY (JFK)
Role: Project Manager
Completion Date: Ongoing
Client Contact: Ryan Marzuloo (Delta), 404.715.2600

The T4 Phase 3 Redevelopment is a capacity enhancement project whose aim is to right-size the terminal for projected future demand. This project aims to better accommodate current demands passenger flow and to accommodate future increases. A primary goal of the project is to enable the closure of Terminal 2, with T2 operations relocated to the expanded T4, fully consolidating Delta's operations at JFK within Terminal 4.

Concourse C/D Hydrant Fueling and Pavement Rehabilitation Dulles International Airport - Dulles, VA (IAD)
Role: Civil Engineer
Completion Date: Ongoing
Client Contact: Gary Spitalsky, 240.455.1431

Scope included 5 new isolation valve pits with DBB isolation valves, removal of 6 existing butterfly valve pits in sections of the existing 12-inch underground aviation fuel distribution piping, new hydrant fuel locations at several of the gates and rehabilitation and replacement of distressed pavement in the airfield pavement system.

AERO Systems Engineering, Inc. VP, Southeastern U.S. Operations

PAST RELEVANT EMPLOYMENT

Jacobs Engineering Group
Sr. Project Manager (2017-2019)

Gale Associates, Inc.
Sr. Project Manager (2001-2017)

EDUCATION

M.S., Civil Engineering, University of Massachusetts

B.S., Civil Engineering, University of Massachusetts

REGISTRATIONS

Professional Civil Engineer - 8 States (including FL #80898)

- NCEES Certified
- AAAE - NEC
- Florida Airports Council (FAC)

J. BARTLEY COBB, PE

FUELING ENGINEER



AERO SYSTEMS ENGINEERING

AERO Systems Engineering, Inc., Southeastern U.S. Operations

PROFESSIONAL BACKGROUND

Mr. Cobb has over 30 years of experience in the fields of mechanical engineering and construction. Bart is actively involved in all of AERO's aircraft fueling projects. His unique comprehension of construction techniques and identification of issues and details, coupled with his ability to grasp complex engineering solutions, ensures these projects are performed accurately, on time, and within budget.

His experience includes fuel system upgrades and fuel pit installations at more than 35 airports, which include over 100 fuel pit installations

RELEVANT PROJECTS

Concourse Modernization Project (75 Gates)

Memphis/ Shelby County Airport–Memphis, Tennessee (MEM)

Description: Study and design to modify existing gate arrangement at Concourses A, B and C for eventual demolition of Concourses A and C and tenant relocation to modernized and expanded Concourse B; multi-phased PBB replacement/refurbishment to minimize tenant movements while meeting project objectives; Conversion of all Concourse B 400Hz and PCA to POU Systems.

Role: Project Manager Design/Engineering Completion Date: 2017 (design), 2021 (construction)

Client Contact: Nathan Luce, 901-922-8030

Concourse E Fueling Systems Project

Hartsfield-Jackson Atlanta International Airport–Atlanta, Georgia (ATL)

Description: Design of the new fuel system to serve the Concourse E International gates. Comprehensive design including new fuel tank, all new pumping and filtration system, fuel distribution piping, including cathodic protection and leak detection, boring and jacking beneath active runways and taxiways, new fuel pits, and EFSO system.

Role: Fueling Engineer

Completion Date: 2019 (design), 2023 (construction) Client Contact: Jacobus Claassens, 404-714-9478

Concourse D Airside Design/Construction Project

Hartsfield-Jackson Atlanta International Airport–Atlanta, Georgia (ATL)

Description: Complete Airisde Design and Construction Administration, Aircraft Parking Layouts, and Passenger Boarding Bridges with related fixed ground support systems. Project is highlighted by hydrant fueling design for the new concourse.

Role: Fueling Engineer Completion Date: 2009

Client Contact: John Head, 404-715-2544

EDUCATION

BM, ET - Southern Technical Institute
BS, ME - Kennesaw State University

REGISTRATIONS

Licensed Professional Engineer - 10 States (including FL #90626)

VERN LANDRUM, PE

LEAD MECHANICAL ENGINEER



AERO Systems Engineering, Inc., Southeastern U.S. Operations

PAST RELEVANT EMPLOYMENT

Aviation Systems, Inc
Mechanical Engineer (1993-1997)

EDUCATION

B.S., Mechanical Engineering, Tennessee Technical University

REGISTRATIONS

Licensed Mechanical Engineer - Multiple States (including FL #59022)

PROFESSIONAL BACKGROUND

- Founder of AERO Systems Engineering
- Directed project management and engineering for more than 15,000+ gate positions at 200+ domestic airports nationwide
- Provides engineering and project management for central and point of use PCA, PBB replacements, aircraft planning, and other aircraft ground support systems
- Involved with design and engineering of central PCA and point-of- use systems at over 30 domestic and international airports
- Expertise in aircraft support including PBBs, PCA systems, fueling, aircraft docking systems, potable water, aircraft and GSE layout
- Co-authored the Air Transport Association's Facility Planning Guidelines for Preconditioned Air, 400 Hz Ground Power and Passenger Bridges
- Co-authored the National Acadmey's Transportation Research Board ACRP report, Evalutaing Alternatives for Aircraft Ground Power, Heating and Air Conditioning

RELEVANT PROJECTS

Salt Lake City Terminal Redevelopment Project (38 Gates) – Salt Lake City International Airport – Salt Lake City, Utah (SLC)
Role: Senior Mechanical Design/Engineering
Completion Date: 2017 (design), 2022
Client Contact: Thom Lang, 404.626.6427

Complete airside design services and construction administration for airfield layout, aircraft parking planning, PBBs, 400Hz ground power, PCA systems, electric GSE battery charging, baggage valets, and aircraft docking systems for a new 38-gate terminal complex (expandable to 47 gates) comprised of three buildings: North Concourse West, South Concourse West and South Concourse East.

Delta Air Lines – NWA Fleet Integration and Boeing Fleet Winglet Project (440 Gates) – MEM, LAX, MSP, DTW and ATL – Multi-Hub Cities

Role: Senior Mechanical Design/Engineering
Completion Date: 2014 (design), 2015
Client Contact: John Head, 404.715.2544

Aircraft parking layouts, PBBs and related aviation fixed ground support system engineering for the integration of the NWA fleet into the DAL fleet mix and the Boeing fleet winglet modification.

Airline Relocation and Terminal Redevelopment Project (56 Gates) – Los Angeles International Airport – Los Angeles, California (LAX)
Role: Senior Mechanical Design/Engineering
Completion Date: 2019 (deisgn), 2023
Client Contact: Jacobus Claassens, 404.714.9478

Airside design and construction services for PBBs, PCA, 400Hz, potable water, RIDS, ADGUs and other related aviation fixed ground support system upgrades at Terminals 2, 3, 5, 6, and TBIT, to include 56 gates and 25 hardstand positions for Delta Air Lines' relocation operation. The largest airline/terminal relocation project in the history of commercial aviation, resulted in shifting 40% of total airline capacity at LAX.

ALEX LAZOWICK, PE, PMP

PRESIDENT



KEITH
Engineering Inspired Design.

PROFESSIONAL BACKGROUND

Mr. Lazowick was introduced to civil engineering and construction by his grandfather, Mr. Bill Keith, founder of the firm. He is eager for the challenge to be the third family generation professional working to provide quality developments within the South Florida community. Mr. Lazowick has gained experience in civil engineering design projects including water, sewer and drainage systems, roadway design, permitting, and construction administration services. He understands the importance of working together as a team to quickly identify and establish project goals and achieve successful results in the most expedient and cost effective manner. His qualifications include knowledge with AutoCAD Civil 3D, Navisworks, Revit, BIM, Microsoft Office, computer networking, and he possesses excellent communication skills.

RELEVANT PROJECTS

FLL North Perimeter Road Water Main Extension, Fort Lauderdale, FL

Fort Lauderdale/Hollywood International Airport (FLL) is running a new water main line along N Perimeter Road, under the I-595 overpass and through the Fixed-base Operator (FBO) parking area. The water main being installed spans a little over 2 miles in length. KEITH provided a full MOT plan in conjunction with the approximate 300 FT of water main installation per day. The MOT plan had to change for each day of installation throughout the 2 mile route. Some MOT features included lane closures near an intersection.

FLL Expansion of Runway 9R-27L, Fort Lauderdale, FL

KEITH is providing professional design services for this expansion project. The project included civil engineering design for the stormwater management system and the water sanitary sewer systems to accommodate the construction of an 8,000 foot runway on the current footprint of the existing 9R/27L general aviation runway. The project required the design to include the construction of multiple tunnels and bridge segments crossing over the airport perimeter road, FEC Railroad tracks and the U.S. 1 roadway corridor, over which the new runway was constructed. The design required approximately 7 million cubic yards of imported fill and raised the east end of the runway to approximately 60 feet high. KEITH provided the complete redesign of the existing utilities as well as coordination with all utility stakeholders. We are also directly responsible for Project Definition Document (PDD) Validation Report, preparation of the Design Criteria Package, Utility Corridor Report, Preliminary Engineering Report, and development of the Earthwork Management Plan coordinating the import and placement of 6.5 million cubic yards of fill during construction, as well as providing engineer's estimate of probable construction costs for use in the Life Cycle Cost Analysis Report.

YEARS OF EXPERIENCE

KEITH: 11 Years
Total: 12 Years

EDUCATION

B.S. Civil Engineering,
University of North Florida
2010

REGISTRATIONS

Professional Engineer
#78625 Florida

Project Management
Professional PMP
2554175

AFFILIATIONS

Parkland Advisory Board Member

Planning and Zoning Advisory Board Member

ALEX LAZOWICK, PE, PMP

FLL-HWO Exit Roadway and Valet Routing Improvements, Fort Lauderdale, FL

As a part of our professional consultant services contract with the Broward County Aviation Department and for the Fort Lauderdale-Hollywood International Airport and North Perry Airport, the KEITH Team was retained to provide design of the pedestrian crosswalk signalization at both arrival and departure levels. Services included civil engineering, surveying & mapping, subsurface utility engineering, traffic engineering, and landscape architecture. The project will include the following project elements: Two exit lanes from the Cypress Garage/Rental Car Center (RCC) Helix, which run along the southern edge of the Hibiscus Garage to tie into the exit roadway system closer towards the existing toll plaza exit. A restricted emergency access to the Hibiscus Garage will also be provided along this route. Verification of structural and constructability aspects of retrofitting the exits from the Cypress Garage Helix. Verification of traffic control concept that accommodates structure work of the Helix. New valet roadway constructed around the Cypress Garage, and a potential valet access lane. Demolition of the abandoned toll plaza, BCAD Credentialing Office and associated facilities to the south of the Hibiscus Garage. Construction of a new surface parking lot south of the Hibiscus Garage to be used for Valet Parking. Wayfinding signage for the associated roadways compatible with the Airport Graphics Program. Evaluate restriping of recirculation roadway ramp to provide 2 lanes (currently single lane).

Fort Lauderdale-Hollywood International Airport (FLL), Fort Lauderdale, FL

Professional Consultant Services for Fort Lauderdale-Hollywood International and North Perry Airports, Utilities and Pavement Projects (Prime Consultant): KEITH is providing professional services for design, engineering and resident project representative (RPR) services during construction for airport utility and pavement projects, which include construction, rehabilitations and renovation activities. Some of the assigned projects include:

12" Westside Water Main Loop
16" Water Transmission Main North Perimeter Road
FLL Runway 10R-28L Settle Monitor
FLL 10L-28R Pavement Restoration
FLL South Runway Drainage Mitigation
FLL Short Term Traffic/Parking Improvements

Fort Lauderdale-Hollywood International Airport (FLL) High Speed Taxiways, Fort Lauderdale, FL:

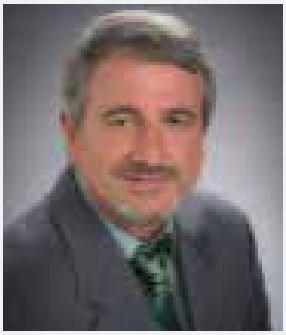
Mr. Lazowick was responsible for the coordinating and overseeing of the asphalt milling, resurfacing and placement of for several thousand square yards of newly constructed asphalt on the primary runway at Fort Lauderdale/Hollywood International Airport. His duties included construction observation and reporting, providing yield calculations, collection of representative sample plates, measuring the asphalt for temperature range and consistency, as well as general oversight of the contractor's means and methods during construction. 90% of the work occurred at night making the job inherently difficult.

Fort Lauderdale-Hollywood International Airport (FLL) Airside Movement Escorting, Fort Lauderdale, FL

Mr. Lazowick was responsible for escorting and monitoring airside field personnel for various airfield projects. He has experience with both day and night construction and survey efforts including operations requirements and policies regarding accessing, traversing and pull-backs for the runways, multiple taxiways and the critical cross intersections.

JAMES THIELE, PE

PROJECT MANAGER III



KEITH
Engineering Inspired Design.

YEARS OF EXPERIENCE
KEITH: 10 Years
Total: 38 Years

EDUCATION
B.S. Civil Engineering,
University of Miami 1978

REGISTRATIONS
#33256 State of Florida
Professional Engineer

PROFESSIONAL BACKGROUND

Mr. Thiele has nearly 40 years of experience in performing land development civil engineering in South and Central Florida as well as central Pennsylvania. His experience includes all aspects of site planning, grading and drainage, sanitary sewer collection, water distribution system design and construction supervision services. His experience includes senior level project oversight and management of multi-stage design and development processes for residential, recreational, commercial, industrial, and institutional developments. His ability to reduce complex technical language to readily understandable terms has afforded him numerous assignments representing governmental bodies for the firms with whom he has worked. All the projects Mr. Thiele has worked on required interaction and coordination with multiple governing agencies as well as other professional disciplines. Knowing the process from conception to project close-out affords him the ability to foresee issues which affect costs, schedule, and quality of a project. He uses this knowledge and experience to quickly address and solve any problems that inevitably arise during a project and proactively seeks to remediate any issues for the client's best interest.

RELEVANT PROJECTS

FLL North Perimeter Road Water Main Extension, Fort Lauderdale, FL

Fort Lauderdale/Hollywood International Airport (FLL) is running a new water main line along N Perimeter Road, under the I-595 overpass and through the Fixed-base Operator (FBO) parking area. The water main being installed spans a little over 2 miles in length. KEITH provided a full MOT plan in conjunction with the approximate 300 FT of water main installation per day. The MOT plan had to change for each day of installation throughout the 2 mile route.

FLL Expansion of Runway 9R-27L, Fort Lauderdale, FL

KEITH is providing professional design services for the Expansion of Runway 9R/27L as a sub-consultant to PBS&J. The project includes civil engineering design for the stormwater management system and the water sanitary sewer systems to accommodate the construction of an 8,000 foot runway on the current footprint of the existing 9R/27L general aviation runway. The overall length of the proposed runway requires the design to include the construction of multiple tunnels and bridge segments crossing over the airport perimeter road, FEC Railroad tracks and the U.S. 1 roadway corridor, over which the new runway will be constructed. The design will require approximately 7 million cubic yards of imported fill and will raise the east end of the runway to approximately 60 feet high. KEITH is responsible for the complete redesign of the existing utilities as well as coordination with all utility stakeholders. We are also directly responsible for Project Definition Document (PDD) Validation Report, preparation of the Design Criteria Package, Utility Corridor Report, Preliminary Engineering Report, development of the Earthwork Management Plan to coordinate the import and placement of 6.5 million cubic yards of fill during construction, as well as providing engineer's estimate of probable construction costs for use in the Life Cycle Cost Analysis Report.

JAMES THIELE, PE

Lynxs Bell Hangar, Fort Lauderdale, FL

KEITH is providing professional engineering services for the Fort Lauderdale-Hollywood International Airport Lynxs/Bell Helicopter projects. KEITH is providing a preliminary site plan including all buildings, parking, circulation, amenity, and open space features. KEITH provided a final site plan and assisted in the preparation of documentation and application. The Site Plan was coordinated through Broward County Development Review Committee (DRC). Preliminary engineering plans include water and sewer distribution and layouts and storm water routing, a preliminary storm water analysis, cost estimates and earthwork analysis, as well as storm water management design and calculations, paving, grading, and drainage plans, pavement design, water/wastewater plans, pavement marking and signing plans, a horizontal control plan, and pollution prevention plans, and permitting for onsite and offsite facilities with BCWWS, FDEP, Broward County Water and Waste Water Services, Broward County EPGMD, and Broward County Highway Construction and Engineering (HCED). Landscape architectural services included tree inventory and appraisal, a tree disposition plan, and landscape and irrigation plans.

Fort Lauderdale-Hollywood International Airport (FLL) Utility Atlas and Miscellaneous Services, Fort Lauderdale, FL

KEITH, as subconsultant partner to RS&H, was tasked with providing record research, surveying and subsurface utility engineering (SUE) services. This was an extensive 550 + acres project consisting of establishing geodetic and vertical networks control, engineering design surveys, drainage as-builts, subsurface utility engineering and aerial photography survey support. The utility atlas is an ongoing BCAD CIP effort compiling years of historic as-built and record drawing information while verifying and incorporating current surface and subsurface utility infrastructure design and survey data. New record drawing and as-built information from ongoing construction projects throughout the airport is being continuously added to the atlas and made available to the airport's consultants and contractors to assist in their design and construction needs.

Fort Lauderdale-Hollywood International Airport (FLL) T2 Modernization, Fort Lauderdale, FL

KEITH worked as a subconsultant partner to Gresham, Smith, and Partners, and was responsible for the civil engineering design and permitting of the airside and landside water distribution and sanitary sewer improvements, as well as the paving and drainage improvements that were proposed landside. KEITH also provided topographic surveying services and sub-surface utility engineering services to provide current existing data on the existing facilities to support the design effort. Our excellent working relationship with the staff at Broward County Water and Wastewater Services (BCWWS) has afforded us the ability to preview our proposed design work with them and obtain a fire flow modeling results from their staff early in the process. Numerous other sub-consultants were involved in this project team. KEITH coordinated and worked closely with many of them in the mutual development of the designed and construction drawings.

civil engineering design and permitting of the airside and landside water distribution and sanitary sewer improvements, as well as the paving and drainage improvements that were proposed landside

MICHAEL MOSSEY, PSM

SENIOR SURVEYOR AND MAPPER



KEITH
Engineering Inspired Design.

YEARS OF EXPERIENCE

KEITH: 3 Years
Total: 41 Years

EDUCATION

B.A. , Maryville College

REGISTRATIONS

LS5660 Professional Surveyor and Mappers - Florida

PROFESSIONAL BACKGROUND

Mr. Mossey has 41 years of surveying and mapping experience in South Florida. The last 20 years, Mr. Mossey has been the Project Manager for various government agencies including the City of Fort Lauderdale Aviation Department and the Broward County Aviation Department. The aviation projects Mr. Mossey has managed have ranged from airside construction to ALP/Airspace Analysis Surveys. His knowledge of the FAA circulars and airport / airfield protocol will be a valuable asset to the team.

RELEVANT PROJECTS

FLL Expansion of Runway 9R-27L, Fort Lauderdale, FL

KEITH is providing professional design services for the Expansion of Runway 9R/27L as a sub-consultant to PBS&J. The proposed project includes civil engineering design for the stormwater management system and the water sanitary sewer systems to accommodate the construction of an 8,000 foot runway on the current footprint of the existing 9R/27L general aviation runway. The overall length of the proposed runway requires the design to include the construction of multiple tunnels and bridge segments crossing over the airport perimeter road, FEC Railroad tracks and the U.S. 1 roadway corridor, over which the new runway will be constructed. The design will require approximately 7 million cubic yards of imported fill and will raise the east end of the runway to approximately 60 feet high.KEITH is responsible for the complete redesign of the existing utilities as well as coordination with all utility stakeholders. We are also directly responsible for Project Definition Document (PDD) Validation Report, preparation of the Design Criteria Package, Utility Corridor Report, Preliminary Engineering Report, development of the Earthwork Management Plan to coordinate the import and placement of 6.5 million cubic yards of fill during construction, as well as providing engineer's estimate of probable construction costs for use in the Life Cycle Cost Analysis Report.

MICHAEL MOSSEY, PPM

FLL Obstruction Analysis/Survey 10R-28L, Fort Lauderdale, FL

KEITH provided surveying and GIS services to facilitate the 2011 updating of the Airport Layout Plan (ALP) for FLL, performing an Obstruction Analysis, Runway Data Acquisition and Navigation Aide Locations, as sub-consultant partner to RS&H. The below described tasks were included for all three existing runways, previously known as 9R/27L, 13/31 and 9L/27R, and all work was performed in accordance with the Federal Aviation Administration's Circulars 150_5300_16A, 150_5300_17B, and 150_5300_18B.

- Provide a Survey and Quality Control Plan
- Validate Airport Geodetic Control document and report the tie to National Spatial Reference System (NSRS)
- Survey and monument runway ends, thresholds and any displaced thresholds, and supply the supporting documentation
- Determine and document the runway lengths, runway widths, runway profiles using 10-foot stations, Touchdown Zone Elevations (TDZE), runway true azimuths, taxiway intersection to threshold distances, position of navigational aids, and runway abeam points of the navigational aids
- Perform and document an airport airspace analysis
- Collect and document airport planimetric data
- Determine the elevation of the air traffic control tower cab floor
- Validate existing topographic information
- Collect cultural an natural features of landmark value
- Determine elevation of roadways at the intersection point of the Runway Protection Zone (RPZ) or the runway centerline extended
- Document features requiring digital photographs, sketches, and photo ID points
- Collect position and type of runway markings
- Provide a final report KEITH is currently preparing to perform the Instrument Procedure Development Survey which will be required for the opening of the new 10R/28L South Runway

Fort Lauderdale-Hollywood International Airport (FLL) Utility Atlas and Miscellaneous Services, Fort Lauderdale, FL

KEITH, as subconsultant partner to RS&H, was tasked with providing record research, surveying and subsurface utility engineering (SUE) services. This was an extensive 550 + acres project consisting of establishing geodetic and vertical networks control, engineering design surveys, drainage as-builts, subsurface utility engineering and aerial photography survey support. The utility atlas is an ongoing BCAD CIP effort compiling years of historic as-built and record drawing information while verifying and incorporating current surface and subsurface utility infrastructure design and survey data. New record drawing and as-built information from ongoing construction projects throughout the airport is being continuously added to the atlas and made available to the airport's consultants and contractors to assist in their design and construction needs.

Fort Lauderdale-Hollywood International Airport (FLL) T2 Modernization, Fort Lauderdale, FL

KEITH worked as a subconsultant partner to Gresham, Smith, and Partners, and was responsible for the civil engineering design and permitting of the airside and landside water distribution and sanitary sewer improvements, as well as the paving and drainage improvements that were proposed landside. KEITH also provided topographic surveying services and sub-surface utility engineering services to provide current existing data on the existing facilities to support the design effort. Our excellent working relationship with the staff at Broward County Water and Wastewater Services (BCWWS) has afforded us the ability to preview our proposed design work with them and obtain a fire flow modeling results from their staff early in the process. Numerous other sub-consultants were involved in this project team. KEITH coordinated and worked closely with many of them in the mutual development of the designed and construction drawings.

MICHAEL CARTOSSA, EI

PROJECT MANAGER I



KEITH
Engineering Inspired Design.

PROFESSIONAL BACKGROUND

Mr. Michael Cartossa has over six years of experience as a civil engineer. Since 2012, he has worked on numerous land development projects in both the private and public sectors. His background in land development includes both residential and commercial projects such as shopping aviation facilities, plazas, gas stations, banks, car dealerships, restaurants and storage facilities. He is proficient in performing due diligence, site planning, civil engineering design, permitting, and project closeout. In addition to his engineering experience, Mr. Cartossa is proficient in a variety of software and programs including: AutoCAD, ICPR, Cascade, EPANET, MicroStation, MS Excel, MS Project, MS Office, Quattro Pro, and WordPerfect.

RELEVANT PROJECTS

FLL Terminal Connector Bridge, Fort Lauderdale, FL

As a subconsultant, the scope includes the Terminal 1 Bump Out, the Terminal 1 to Terminal 2 Connector, and the Terminal 2 to Terminal 3 Connector. This project will follow LEED best practices. KEITH provided survey, subsurface utility engineering, civil engineering, and CEI services. KEITH provided a topographic survey, horizontal designations, vacuum excavation services, civil engineering services including schematic drawings, 75% and 100% construction drawings for required sanitary sewer and water distribution system removal and replacement components.

FLL-HWO Exit Roadway and Valet Routing Improvements, Fort Lauderdale, FL

As a part of our professional consultant services contract with the Broward County Aviation Department, the KEITH Team was retained to provide design of the pedestrian crosswalk signalization at both arrival and departure levels. Services included civil engineering, surveying & mapping, subsurface utility engineering, traffic engineering, and landscape architecture. The project included: Two exit lanes from the Cypress Garage/Rental Car Center (RCC) Helix; A restricted emergency access to the Hibiscus Garage; Verification of structural and constructability aspects of retrofitting the exits from the Cypress Garage Helix; Verification of traffic control concept that accommodates structure work of the Helix; New valet roadway constructed around the Cypress Garage, and a potential valet access lane; Demolition of the abandoned toll plaza, BCAD Credentialing Office and associated facilities to the south of the Hibiscus Garage; Construction of a new surface parking lot south of the Hibiscus Garage to be used for Valet Parking; Wayfinding signage for the associated roadways compatible with the Airport Graphics Program; Evaluate restriping of recirculation roadway ramp to provide 2 lanes.

Lynxs Bell Hangar, Fort Lauderdale, FL

KEITH is providing professional engineering services for the Fort Lauderdale-Hollywood International Airport Lynxs/Bell Helicopter projects. KEITH tasks include: Site plan including all buildings, parking, circulation, amenity, and open space features. The Site Plan is being coordinated through Broward County Development Review Committee (DRC). Preliminary engineering plans include water and sewer distribution and layouts and storm water routing, storm water analysis, cost estimates and earthwork analysis, as well as storm water management design and calculations, paving, grading, and drainage plans, pavement design, water/wastewater plans, pavement marking and signing plans, a horizontal control plan, and pollution prevention plans, and permitting for onsite and offsite facilities . Landscape architectural services include tree inventory and appraisal, a tree disposition plan, and landscape and irrigation plans.

YEARS OF EXPERIENCE

KEITH: 5 Years
Total: 9 Years

EDUCATION

B.S. Civil Engineering,
Florida Atlantic University
2012

REGISTRATIONS

1100016973 State of Florida
Engineering Intern - Florida

PRAMOD CHOUDHARY, PE, PTOE

DIRECTOR OF TRAFFIC ENGINEERING



KEITH
Engineering Inspired Design.

PROFESSIONAL BACKGROUND

Mr. Choudhary over twenty-six (26) years of extensive experience in Transportation Planning and Traffic Operations & Management. Pramod has strong project management capabilities reflected through the successful handling of a wide range of traffic, transportation and roadway design projects in Florida, Georgia, Texas, Louisiana, California, Puerto Rico, and the Grand Bahamas. Mr. Choudhary manages projects on time, within budget, and to the Client's complete satisfaction. Areas of expertise include traffic operations and corridor studies, transportation planning studies, traffic and toll plaza simulation, interchange operational analysis, PD&E studies, safety studies, roadway lighting design, signal design, bicycle and pedestrian plans, parking studies, design traffic and equivalent single axle load, travel time and delay studies, and traffic engineering support for various FDOT Districts, Counties, and Cities.

RELEVANT PROJECTS

Fort Lauderdale Police Headquarters, Fort Lauderdale, FL

As subconsultant, KEITH provides survey, sub-surface utility locating, planning, civil engineering and landscape architecture services for the Fort Lauderdale Police Headquarters. The Police Headquarters shall be built in phases.1) Parking Garage (including Firing Range) and perimeter landscape buffers to residential neighborhoods2) Initial Site Development: SW 13th Avenue extending up to existing Fleet Maintenance Facility; Restriping of existing surface parking; and Replacement of Radio Tower3) Demolition of outparcel residential buildings and Construction of new Police Headquarters (including Central Plant)4) Demolition of existing Police Headquarters and portion of Fleet Maintenance Facility (if not able to demolish entire facility)5) Final Site Development: Extension of SW 13th Avenue to Broward Boulevard; Create Linear Park along Broward Boulevard; and Remove all surface parking and outparcel buildings as possible

Sears Town Development, Fort Lauderdale, FL

KEITH is providing services associated with the development of three parcels of land in Fort Lauderdale, generally known as Sears Town. The project is set within the RAC zoning in Fort Lauderdale and is positioned to be a signature development within the City. The project will include a series of high rise towers, parking structures, and a series of connected public realm areas that will create the atmosphere at the ground level. KEITH is providing site plan approval with the City of Fort Lauderdale. KEITH has included services for planning, civil engineering, traffic engineering, and landscape architecture.

Interchange Operational Analysis for SOAR SR 528 (IJR, IMR, IOAR, SOAR, IAJR), Brevard County, FL

Mr. Choudhary was the Project Manager for a number of projects involving interchange operational analysis needed to prepare IJRs, IMRs, IOARs, SOARs, and IAJRs in Florida and Texas and obtain approval from pertinent agencies; most recently for SOAR for SR 528 in Brevard County, Florida.

General Transportation Planning Consultant Contract, FDOT District One, FL

Mr. Choudhary managed this task order based contract and provided support to FDOT on various planning projects ranging from corridor studies to PD&E projects. He also assisted the Department in reviewing project documents prepared by other consultants.

Districtwide Traffic and Safety Studies, FDOT District Six, FL

Pramod was Project Manager, responsible for leading a team of Traffic Engineers for a 5-year contract with FDOT District 6 for Districtwide Traffic and Safety Studies.

YEARS OF EXPERIENCE

KEITH: 1 Year
Total: 26 Years

EDUCATION

M.S. Transportation Engineering, University of Central Florida 1993

B.S. Civil Engineering, Birla Institute of Technology 1985

REGISTRATIONS

61641 - FLORIDA

38262 - GEORGIA

IMSA LEVEL 1 TECHNICIAN
PROFESSIONAL TRAFFIC OPERATIONS ENGINEER (ITE)

TIM GRAY, PSM, CFM

PROJECT SURVEYOR II



KEITH
Engineering Inspired Design.

PROFESSIONAL BACKGROUND

Mr. Gray is a Surveyor & Mapper with over 20 years of experience with surveying in South Florida. He is a graduate of the University of Florida's Geomatics Program. His experience includes a variety of surveying assignments, including: Right-of-Way mapping, chain of title research and review, computations, topographic surveys, drainage surveys, ACSM/ALTA surveys, digital terrain models (DTMs), condominium surveys, and calculated parcel/construction stake outs. His experience has included projects for both public and private sector clients. Mr. Gray is proficient in the industry's software including MicroStation XM, Leica Level-pac, GeoPak, Caice, and AutoCAD. He is also proficient in the processing of survey data including both Electronic Field Book (EFB) and Tripod Data Systems (TDS) Data collection.

RELEVANT PROJECTS

Bombardier Aircraft Service Center, Miami-Opalocka Airport, Miami, FL

Engineer of Record. The project consists of approximately 5.71-acres of hangar and office area, including a 226 space parking lot, and an 11.52-acre apron. The design for this project accounts for an addition 1.34-acre hangar expansion for a total of 7.05-acres of building area. KEITH is providing survey, planning, and civil engineering services including the site plan preparation and processing, water, sewer, paving for both airside and landside, Aqueous Film Forming Foam (AFFF) storage, airside pollution prevention system, grading, and drainage design.

FLL-HWO Exit Roadway and Valet Routing Improvements, Fort Lauderdale, FL

As a part of our professional consultant services contract with the Broward County Aviation Department, the KEITH Team was retained to provide design of the pedestrian crosswalk signalization at both arrival and departure levels. Services included civil engineering, surveying & mapping, subsurface utility engineering, traffic engineering, and landscape architecture. The project included: Two exit lanes from the Cypress Garage/Rental Car Center (RCC) Helix; A restricted emergency access to the Hibiscus Garage; Verification of structural and constructability aspects of retrofitting the exits from the Cypress Garage Helix; Verification of traffic control concept that accommodates structure work of the Helix; New valet roadway constructed around the Cypress Garage, and a potential valet access lane; Demolition of the abandoned toll plaza, BCAD Credentialing Office and associated facilities to the south of the Hibiscus Garage; Construction of a new surface parking lot south of the Hibiscus Garage to be used for Valet Parking; Wayfinding signage for the associated roadways compatible with the Airport Graphics Program; Evaluate restriping of recirculation roadway ramp to provide 2 lanes.

Lynxs Bell Hangar, Fort Lauderdale, FL

KEITH is providing professional engineering services for the Fort Lauderdale-Hollywood International Airport Lynxs/Bell Helicopter projects. KEITH tasks include: Site plan including all buildings, parking, circulation, amenity, and open space features. The Site Plan is being coordinated through Broward County Development Review Committee (DRC). Preliminary engineering plans include water and sewer distribution and layouts and storm water routing, storm water analysis, cost estimates and earthwork analysis, as well as storm water management design and calculations, paving, grading, and drainage plans, pavement design, water/wastewater plans, pavement marking and signing plans, a horizontal control plan, and pollution prevention plans, and permitting for onsite and offsite facilities with BCWWS, Florida Department of Environmental Protection, Broward County Water and Waste Water Services, Broward County EPGMD, and Broward County Highway Construction and Engineering (HCED). Landscape architectural services include tree inventory and appraisal, a tree disposition plan, and landscape and irrigation plans.

YEARS OF EXPERIENCE

KEITH: 5 Years
Total: 22 Years

EDUCATION

B.S. Geomatics,
University of Florida 1999

REGISTRATIONS

LS6604 - Florida

ASFPM Certified Floodplain Manager

SEAN HALSEY

**SUBSURFACE UTILITY ENGINEERING
PROJECT MANAGER**



KEITH
Engineering Inspired Design.

YEARS OF EXPERIENCE

KEITH: 3 Years
Total: 21 Years

REGISTRATIONS FDOT
Maintenance of Traffic - Intermediate Level

PROFESSIONAL BACKGROUND

As a Utility Project Manager for KEITH Location Services Department, Mr. Halsey is responsible for scheduling and supervising field crews, conducting utility field meetings, utility records research, conflict analysis and determining if additional utility investigation is needed for assigned projects in South Florida. With over 20 years of experience, he has completed projects from beginning phases to final delivery; which included preparing and submitting fee proposals, coordinating with clients, being able to setup projects for field crews and conducting field visits when trouble shooting is required; download and process collected data; performed quality control and finalize for delivery while keeping clients informed on a daily basis. Mr. Halsey has extensive knowledge in the performance and use of GPR (Mala Geoscience, GSSI, Radio Detection, Nogin, etc.), Electro-Magnetic Induction (Radio Detection, Vivax, Fischer), Magnetometers, Vacuum Excavation Trailer and Portable Systems, Pipeline Inspection, Conductivity Scanning, Multi-testers and Fault Detection experience.

RELEVANT PROJECTS

Bombardier Aircraft Service Center, Miami-Opalocka Airport, Miami, FL

Engineer of Record. The project consists of approximately 5.71-acres of hangar and office area, including a 226 space parking lot, and an 11.52-acre apron. The design for this project accounts for an addition 1.34-acre hangar expansion for a total of 7.05-acres of building area. KEITH is providing survey, planning, and civil engineering services including the site plan preparation and processing, water, sewer, paving for both airside and landside, Aqueous Film Forming Foam (AFFF) storage, airside pollution prevention system, grading, and drainage design.

FLL North Perimeter Road Water Main Extension, Fort Lauderdale, FL

Fort Lauderdale/ Hollywood International Airport (FLL) is running a new water main line along N Perimeter Road, under the I-595 overpass and through the Fixed-base Operator (FBO) parking area. The water main being installed spans a little over 2 miles in length. KEITH provided a full MOT plan in conjunction with the approximate 300 FT of water main installation per day. The MOT plan had to change for each day of installation throughout the 2 mile route. Some MOT features included lane closures near an intersection.

FLL-HWO Exit Roadway and Valet Routing Improvements, Fort Lauderdale, FL

As a part of our professional consultant services contract with the Broward County Aviation Department, the KEITH Team was retained to provide design of the pedestrian crosswalk signalization at both arrival and departure levels. Services included civil engineering, surveying & mapping, subsurface utility engineering, traffic engineering, and landscape architecture. The project included: Two exit lanes from the Cypress Garage/Rental Car Center (RCC) Helix; A restricted emergency access to the Hibiscus Garage; Verification of structural and constructability aspects of retrofitting the exits from the Cypress Garage Helix; Verification of traffic control concept that accommodates structure work of the Helix; New valet roadway constructed around the Cypress Garage, and a potential valet access lane; Demolition of the abandoned toll plaza, BCAD Credentialing Office and associated facilities to the south of the Hibiscus Garage; Construction of a new surface parking lot south of the Hibiscus Garage to be used for Valet Parking; Wayfinding signage for the associated roadways compatible with the Airport Graphics Program; Evaluate restriping of recirculation roadway ramp to provide 2 lanes.

DEAN KOGGAN, PE

PROJECT MANAGER I



KEITH
Engineering Inspired Design.

PROFESSIONAL BACKGROUND

Mr. Koggan is a Senior Project Engineer with experience working on various specialized engineering projects. Mr. Koggan has aided in the production and submittal of plans, several reports, as well as different in person inspections and cost estimations. Mr. Koggan's involvement in the private and public sector includes design for new development and redevelopment projects with associated drainage and utility design throughout South Florida. Mr. Koggan, while working with different professional engineers and city officials, has obtained the necessary skills that qualify him as a great addition to the KEITH team.

RELEVANT PROJECTS

FLL North Perimeter Road Water Main Extension, Fort Lauderdale, FL

Fort Lauderdale/ Hollywood International Airport (FLL) is running a new water main line along N Perimeter Road, under the I-595 overpass and through the Fixed-base Operator (FBO) parking area. The water main being installed spans a little over 2 miles in length. KEITH provided a full MOT plan in conjunction with the approximate 300 FT of water main installation per day. The MOT plan had to change for each day of installation throughout the 2 mile route. Some MOT features included lane closures near an intersection.

FLL-HWO Exit Roadway and Valet Routing Improvements, Fort Lauderdale, FL

As a part of our professional consultant services contract with the Broward County Aviation Department, the KEITH Team was retained to provide design of the pedestrian crosswalk signalization at both arrival and departure levels. Services included civil engineering, surveying & mapping, subsurface utility engineering, traffic engineering, and landscape architecture. The project included: Two exit lanes from the Cypress Garage/Rental Car Center (RCC) Helix; A restricted emergency access to the Hibiscus Garage; Verification of structural and constructability aspects of retrofitting the exits from the Cypress Garage Helix; Verification of traffic control concept that accommodates structure work of the Helix; New valet roadway constructed around the Cypress Garage, and a potential valet access lane; Demolition of the abandoned toll plaza, BCAD Credentialing Office and associated facilities to the south of the Hibiscus Garage; Construction of a new surface parking lot south of the Hibiscus Garage to be used for Valet Parking; Wayfinding signage for the associated roadways compatible with the Airport Graphics Program; Evaluate restriping of recirculation roadway ramp to provide 2 lanes.

FLL Terminal Connector Bridge, Fort Lauderdale, FL

As a subconsultant, the scope includes the Terminal 1 Bump Out, the Terminal 1 to Terminal 2 Connector, and the Terminal 2 to Terminal 3 Connector. This project will follow LEED best practices. KEITH provided survey, subsurface utility engineering, civil engineering, and CEI services. KEITH provided a topographic survey, horizontal designations, and vacuum excavation services, civil engineering services including schematic drawings, 75% and 100% construction drawings for required sanitary sewer and water distribution system removal and replacement components.

YEARS OF EXPERIENCE

KEITH: 3 Years
Total: 6 Years

EDUCATION

M.S. Civil Engineering,
University of Florida 2015

B.S. Civil Engineering,
University of Florida 2012

REGISTRATIONS

86612 - Florida

MARK MITCHELL

DIRECTOR OF SUBSURFACE UTILITY ENGINEERING



KEITH
Engineering Inspired Design.

YEARS OF EXPERIENCE

KEITH: 8 Years
Total: 22 Years

PROFESSIONAL BACKGROUND

As a Subsurface Utility Engineering Senior Project Manager for KEITH's Utilities Division, Mr. Mark Mitchell is responsible for scheduling and supervising field crews, conducting utility field meetings, utility records research, conflict analysis and determining if additional utility investigation is needed for assigned projects in South Florida. He completed projects from beginning phases to final delivery; which included preparing and submitting fee proposals, coordinating with clients, being able to setup projects for field crews and conducting field visits when trouble shooting is required; download and process collected data; performed quality control and finalize for delivery while keeping clients informed on a daily basis. His experience also includes creating DTM's, Topo's, Tin Models, PNC's and Test Hole summary spread sheets. Mr. Mitchell provides a liaison between designers, utility agencies and owners on behalf of clients to provide utility coordination services, providing documentation, inter-coordination and maintenance of files of all activities for each utility agency.

RELEVANT PROJECTS

Bombardier Aircraft Service Center, Miami-Opalocka Airport, Miami, FL

Engineer of Record. The project consists of approximately 5.71-acres of hangar and office area, including a 226 space parking lot, and an 11.52-acre apron. The design for this project accounts for an addition 1.34-acre hangar expansion for a total of 7.05-acres of building area. KEITH is providing survey, planning, and civil engineering services including the site plan preparation and processing, water, sewer, paving for both airside and landside, Aqueous Film Forming Foam (AFFF) storage, airside pollution prevention system, grading, and drainage design.

FLL Expansion of Runway 9R-27L, Fort Lauderdale, FL

KEITH is providing professional design services for this expansion project. The project included civil engineering design for the stormwater management system and the water sanitary sewer systems to accommodate the construction of an 8,000 foot runway on the current footprint of the existing 9R/27L general aviation runway. The project required the design to include the construction of multiple tunnels and bridge segments crossing over the airport perimeter road, FEC Railroad tracks and the U.S. 1 roadway corridor, over which the new runway was constructed. The design required approximately 7 million cubic yards of imported fill and raised the east end of the runway to approximately 60 feet high. KEITH provided the complete redesign of the existing utilities as well as coordination with all utility stakeholders. We are also directly responsible for Project Definition Document (PDD) Validation Report, preparation of the Design Criteria Package, Utility Corridor Report, Preliminary Engineering Report, and development of the Earthwork Management Plan coordinating the import and placement of 6.5 million cubic yards of fill during construction, as well as providing engineer's estimate of probable construction costs for use in the Life Cycle Cost Analysis Report.

FLL North Perimeter Road Water Main Extension, Fort Lauderdale, FL

Fort Lauderdale/ Hollywood International Airport (FLL) is running a new water main line along N Perimeter Road, under the I-595 overpass and through the Fixed-base Operator (FBO) parking area. The water main being installed spans a little over 2 miles in length. KEITH provided a full MOT plan in conjunction with the approximate 300 FT of water main installation per day. The MOT plan had to change for each day of installation throughout the 2 mile route. Some MOT features included lane closures near an intersection.

LORI TREVIRANUS, PE

VICE PRESIDENT
OF TRANSPORTATION



KEITH
Engineering Inspired Design.

PROFESSIONAL BACKGROUND

Ms. Lori Treviranus has over 19 years of experience in civil engineering, providing the highest quality infrastructure and facility solutions to transportation agencies, local governments, private developers and institutional clients. She is experienced in roadway design, intersection development, super-elevation transitions, roadway modeling, cross-sections, pedestrian/ bike paths, master planning, hydrology/hydraulic studies, cost estimation, stormwater control plans preparation, drainage and utility design, NPDES permitting and SWPPP preparation and implementation. In addition, she is familiar with the surveying aspect of civil engineering and has experience working with sustainable designs. Typical scopes of work she has been responsible for include acquisition and due diligence tasks, creation of conceptual plans and assistance with funding throughout the project phases and public outreach activities.

RELEVANT PROJECTS

FLL North Perimeter Road Water Main Extension, Fort Lauderdale, FL

Fort Lauderdale/ Hollywood International Airport (FLL) is running a new water main line along N Perimeter Road, under the I-595 overpass and through the Fixed-base Operator (FBO) parking area. The water main being installed spans a little over 2 miles in length. KEITH provided a full MOT plan in conjunction with the approximate 300 FT of water main installation per day. The MOT plan had to change for each day of installation throughout the 2 mile route. Some MOT features included lane closures near an intersection.

FLL Cell Lot and Perimeter Road Improvements, Fort Lauderdale, FL

KEITH provided professional engineering consultant services for design, engineering, and resident project representative services during construction of airport utility and pavement projects. The projects were a grouping of construction, rehabilitation, and renovation activities. KEITH performed work located landside and airside for FLL and HWO.

FLL Permanent Garage TNC Operation, Fort Lauderdale, FL

KEITH is providing services for design, engineering, and resident project representative services during construction for airport utility and pavement projects. These projects are a grouping of substantially similar construction, rehabilitation, or renovation activities. The work being performed is located landside and airside at the Fort Lauderdale-Hollywood International Airport and North Perry Airport.

FLL Terminal 2 Modernization - T2 Bumpouts, Fort Lauderdale, FL

This extensive modernization project was estimated at a construction cost of $49.8 million for Terminal 2 and $38.3 million for Terminal 3. KEITH, working as a subconsultant partner to Gresham, Smith and Partners, was responsible for the survey, subsurface utility investigations, the civil engineering design and permitting of the airside and landside water distribution and sanitary sewer improvements as well as the paving and drainage improvements that are proposed landside. Our excellent working relationship with the staff at Broward County Water and Wastewater Services (BCWWS) afforded us the ability to preview our proposed design work with them and obtain a fire flow evaluation from their staff early in the process. Numerous other subconsultants were involved in this project team. KEITH also assisted with modeling the existing structure and integrating the proposed designs. This is the first BIM project to utilize the BCAD BIM standard. State-of-the-art survey equipment and 3D laser scanner were utilized. KEITH created a model of the improvements using Revit & AutoCAD Civil 3D. Navisworks was utilized to run clash detections for the entire site. The team created and populated the COBie data set that will be part of the BIM deliverable.

YEARS OF EXPERIENCE

KEITH: 4 Years
Total: 19 Years

EDUCATION

B.S. Civil Engineering,
University of Florida 2000

REGISTRATIONS

73684 - Florida

FDOT Advance MOT Certification 33124 Qualified SWPPP Development/ Practitioner 66408

AFFILIATIONS

American Society of Civil Engineers Member

Women in Transportation Member

CECILIA VILLORIA, PE

SENIOR PROJECT MANAGER



KEITH
Engineering Inspired Design.

PROFESSIONAL BACKGROUND

Cecilia has 28 years of progressive experience in planning, executing, designing, and managing engineering projects. She has been involved in all aspects of project management, scheduling, engineering design services (pavement markings and signage, signalization, drainage, Maintenance of Traffic (MOT), specifications packages), preparation of project design reports, development of masterplans, construction inspection services and management of CEI staff. Cecilia has oversaw engineering design projects for municipalities, FDOT, Broward County Aviation Department, and Florida Turnpike Enterprise clients. Her project experience ranges from minor roadway improvement projects to highway design.

RELEVANT PROJECTS

FLL BSO Parking, Fort Lauderdale, FL

Cecilia was the Project Manager & EOR for the design and preparation of construction drawings to construct 16 parking spaces, at the four terminals, designated for Broward Sheriff's Office or Broward County Aviation Department Staff adjacent to the outside through lane of Terminal Drive on the Arrivals Level of Terminal Drive. The scope of work included preparation of plans and specifications, cost tabulation, permitting submittal and coordination with on-call Contractor. Plans were developed at 30% Schematic Design, 60% Design Development and 90% Construction Drawing levels for review by BCAD staff. Phasing of the work as well as Maintenance of Traffic detailing was included in the design drawings. Safety of the pedestrian traffic was paramount in the design drawings since these parking improvements will be positioned in proximity to the crosswalks. The phasing plan considered other proposed work activities that BCAD may have sequenced in the same time frame as this construction work. Scope of work also included construction engineering inspection services and post design services.

FLL Crosswalk Signalization, Fort Lauderdale, FL

Project Manager & EOR for the design of signalized crosswalks at three locations within the FLL internal loop road for arriving flights. The primary goals of the project are to increase pedestrian safety and improve vehicular traffic flow. The scope of the design includes: layout of traffic signal control equipment; traffic signal wiring; pedestrian signalization and push buttons; ADA ramps; design of bulb-out for pedestrian refuge along the terminal side of the crosswalk; development of coordinated signal phasing and timing of the three signalized crosswalks; emergency vehicle preemption; signing; LED lighting; pavement markings and rumble stripes. The development of the design plans and bid package were completed within a restricted schedule due to contracting requirements for FLL and the need for construction to be completed during off-peak tourist periods.

D4 - Washington Street & 72nd Avenue - Mobility Improvements, Hollywood, FL

KEITH was selected by the Florida Department of Transportation for this design project which will add bicycle lanes and pedestrian improvements to each corridor. The KEITH team will provide roadway, drainage, signing and pavement marking, landscaping, survey, SUE, utility coordination, Geotech, and public involvement services to the Department for the project. This is a Broward County Metropolitan Planning Organization (MPO) funded project and FDOT District 4 is the client and project facilitator. Our team's extensive experience coordinating with multiple agencies and stakeholders are key factors in the successful completion of this project.

YEARS OF EXPERIENCE

KEITH: 1 Years
Total: 28 Years

EDUCATION

B.S. Civil Engineering, Florida International University 1993

B.S. Biology, University of South Tampa 1989

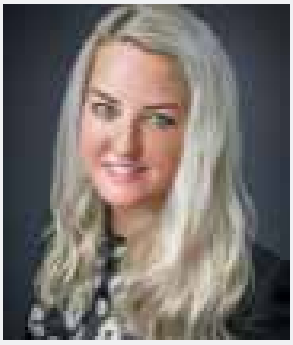
REGISTRATIONS

62866 - Florida

FDOT Advanced Maintenance of Traffic Flexible Pavement Design Specifications

ASHLEY HAGAN BINDER, RLA, LEED

**LANDSCAPING PLANNER &
DIRECTOR OF STRATEGIC DEVELOPMENT**



KEITH
Engineering Inspired Design.

PROFESSIONAL BACKGROUND

Ashley Hagan Binder has extensive experience in Landscape Architecture, working in both the public and private sectors throughout the State of Florida. Ashley joined KEITH from the Florida Department of Transportation, where she managed the Florida Scenic Highways Program and the Landscape Program, approximately a $60 million annual budget. Ashley is a specialist in Government projects, particularly State Agencies' structure, organization, legal and statuatory requirements. Ashley is focused on bringing the best possible solution to each project, through detailed analysis of the site, its users, project needs, and the environment.

RELEVANT PROJECTS

Park in the Parking Lot, Leon County, FL

FDOT, in coordination with Blueprint Tallahassee and Wood and Partners, designed and installed a landscape project and irrigation design for an employee parking lot adjacent to Cascades Park. Dubbed 'Park in the Parking Lot', the project served as overflow parking for events at Cascades Park amphitheatre, and work week parking for FDOT Burns Building employees. The design focused on a diverse palette of native and naturally-occurring North Florida shade tree species.

FLL Expansion of Runway 9R-27L, Fort Lauderdale, FL

The City of Parkland engaged KEITH to provide assistance with the development of a new passive park project. The park project called "Covered Bridges Park" is located in Parkland, Florida. The City has developed a conceptual plan and KEITH is guiding the development of the detailed design documents. The conceptual site plan will serve as the basis for design. KEITH's services include boundary and topographic survey, sketch and legal description, tree inventory and appraisal by KEITH's Certified Arborist, percolation tests, traffic and parking analysis, site plan preparation and coordination, public outreach, civil engineering design development, landscape architecture plans, water foundation designs, cost estimating, paving, grading and drainage plans, pavement marking and signing plans, erosion control plans, demolition plans, bidding services, and construction administration and observation. .

D4 Continuing Services for Landscape Design/Production, Fort Lauderdale, FL

As a Prime consultant, KEITH is providing design services for standalone landscape transportation projects associated with the District on a continuing services basis. Each set of design plans include landscape, hardscape, and irrigation design as a standalone landscape project described and authorized by a TWO basis.

Florida Scenic Highways Program, Tallahassee, FL

Assisted FDOT with the facilitation of the Florida Scenic Highways Progam. Coordinated with local SHs, including Big Bend Scenic Byway, in Leon, Franklin and Wakulla counties to assure program meets the needs of volunteer organizations. Successfully coordinated with the Outdoor Advertising Industry to assure impacts to Scenic Highways are minimized. Facilitated and assisted with Federal funding to SHs, including wayfinding and informational kiosks for the Big Bend National Scenic Byway.

YEARS OF EXPERIENCE

KEITH: 1 Years
Total: 15 Years

EDUCATION

M.S. Landscape Architecture, University of Texas at Austin 2009

B.A. Anthropology, University of Florida 2005

REGISTRATIONS

LA6667148 Registered Landscape Architecture - Florida

LEED AP Green Associate

AFFILIATIONS

American Society of Landscape Architects (ASLA), Florida Chapter, Government Affairs Committee, 2020-current

National Academies of Sciences, National Cooperative Highway Research Program, Transportation Research Board, Panel Member (2016-2020)

Board Member, Citizens for a Scenic Florida, 2021-current

Secretary, Big Bend National Scenic Byway Organization, 2020-current

MICHAEL YU, RCDD

PRINCIPAL TECHNOLOGY SYSTEMS SOLUTIONS ENGINEER



KELEUSMATIC technologies

YEARS OF EXPERIENCE
19 Years

EDUCATION
Bachelor of Electrical Engineering, Telecommunications Concentration

Georgia Institute of Technology (1997)

REGISTRATIONS
Registered Communications Distribution Designer (RCDD)

Building Industry Consulting Service International (BICSI)

AFFILIATIONS
Institute of Electrical and Electronic Engineers (IEEE) Member

PROFESSIONAL BACKGROUND

Mr. Michael Yu has 19-years' experience in the Air Transportation Industry (ATI) and 26-years' experience in the Telecommunications Industry. Michael has been responsible for the design and delivery of multi-faceted systems integration projects including Master Systems Integration (MSI), Design-Build, Design-Bid-Build, and Construction Manager at Risk (CMAR) projects.

ATI EXPERIERNCE

Technology Consultant – Nashville International Airport (BNA) – Nashville, TN
Terminal Lobby and International Arrivals Facility (IAF)

Technology Consultant for Hensel Phelps Construction – Delivered design oversight, review, and assist for Hensel Phelps over a Burns Engineering systems design. Provided initial delivery oversight coordination with the MNAA and technology systems subcontractor delivering the common use and airport operational database applications. Other systems included passenger processing, airport operations, infrastructure, building management, security, and life safety systems.

Airline Relocation Delivery Manager – Phoenix Sky Harbor International Airport (PHX) – Phoenix, AZ
Terminal 3 Modernization Program – Design- Build Project

Airline Relocation Delivery Manager for the Hunt-Austin, A Joint Venture (HAJV) – Responsibilities included planning, coordination, design, and delivery of airline technologies systems for proprietary operational and common use applications. Airlines for this project include DL (Delta), B6 (Jet Blue), HA (Hawaiian), SY (Sun Country), NK (Spirit), 4B (Boutique), and ZK (Great Lakes).

Special Systems Engineer – San Diego International Airport (SAN) – San Diego, CA
Federal Inspection Station (FIS) Project at the New International Arrivals facility at Terminal 2

Special Systems Engineer for Turner Construction – Responsibilities included delivery management of the special systems, management of systems testing and commissioning, management of close-out documentation and drawings, management of subcontractors.

Lead Designer – Special Systems – Phoenix Sky Harbor International Airport (PHX) – Phoenix, AZ
Terminal 4 Node 4 (T4N4) FIS Project – CMAR Project

Customs Border Protection) and baggage recheck areas and the development of 30, 60, 100% design drawings and functional specifications. Systems included: Communication Systems (LAN, WLAN, and Structured Cabling), Airport Operations Systems (PAS, EVIDs), Passenger Processing Systems (APC kiosks), and CBP proprietary systems.

MICHAEL YU, RCDD

IT Manager – San Francisco International Airport (SFO), San Francisco, CA.

Terminal 1 – Redevelopment Program (Interim Boarding Area B)

IT Manager for Hill International – Responsibilities included the management over the development of the design documentation and drawings, and the development of the Test Strategy Methodology and the individual System and Integration Test Plans. Work Packages included: Communication Systems (LAN, WLAN, DAS, and Structured Cabling), Airport Operations Systems (EVIDs, Visual Paging, PAS), Security & Life Safety (ACS, CCTV, FAS), and Facility Systems (BMS).

Lead Designer – Phoenix Sky Harbor International Airport (PHX), Phoenix, AZ

Terminal 3 Modernization Program – Design- Build

Special Systems Lead Designer for the Hunt-Austin, A Joint Venture (HAJV) – Responsibilities included the Design of Special Systems, the development of 30%, 60%, 95%, and 100% design drawings and functional specifications, lead coordination with the PHX DCS, Technology, Operations, and Facilities divisions. Work Packages included: Communication Systems (LAN, WLAN, Structured Cabling), Airport Operations Systems (AODB, RMS, EVIDs, Visual Paging, PAS), Passenger Processing Systems (CUPPS, CUSS), and Parking Systems (AVI).

Technical Design Authority – Baku International Airport (GYD), Baku, Azerbaijan

New Terminal 2 – Design & Build Program

Lead Designer for the Terminal Design Consultants for the Design-Build for the new Terminal 4 at São Paulo/Guarulhos International Airport (GRU). Contracted to as the Terminal Design Consultants for the development of system functional specifications of twenty-five (25) Work Packages including the subset below:

1. Communication Systems – LAN, WLAN, IPT, Distributed Antenna System – DAS, and Structured Cabling System – Backbone and Horizontal
2. Airport Operations Systems – AODB, RMS, EVIDs, Visual Paging, A-CDM – Airport Collaborative Decision Making
3. Passenger Processing Systems – CUPPS, CUSS
4. Baggage Processing Systems – Baggage System Messaging

Other Notable Airport Projects

BAA – IT Outsource Program – Development of Managed Service offerings for the BAA managed airports

SITA – Airport HUB Program – Design / Delivery of Network Infrastructure Project encompassing 120+ tier-1 and tier-2 airports, across 6 continents

SITA – Airport HUB Program – The planning, coordination, solution design, and delivery of 2500+ Airline WAN/LAN migrations as part of the AirportHUB Program

BOM – Chhatrapati Shivaji International Airport – Mumbai, India – Airline Relocations

BOM – Chhatrapati Shivaji International Airport – Mumbai, India – Core Room Relocation

JFK – John F. Kennedy International Airport – New York, New York – Voice Services Specialist

YYZ – Lester B. Pearson International Airport – Toronto, Canada – Delivery Manager - Voice Communications

YYZ – Lester B. Pearson International Airport – Toronto, Canada – Service Delivery Agent (SDA) Program

MATTHEW RHETT

LEAD DESIGNER



KELEUSMATIC technologies

PROFESSIONAL BACKGROUND

Mr. Matthew Rhett has 10 years of experience in the Transportation industry and 6 years of experience in the Hospitality industry. Matthew has been responsible for the design and delivery of complex infrastructure projects including Domestic and International, Multi-site, Converged Networks, Voice and Video over IP, and Wireless. Matthew experience includes the design and delivery of complex telecommunication systems as part of major Design-Build and CMAR construction projects.

ATI EXPERIENCE

Lead Designer – Telecommunication Systems – Quebec City Jean Lesage International Airport (YQB), Quebec City, Canada

YQB 2018 Program - Terminal Expansion

Lead Designer for SITA and the Airport Authority (Aéroport de Québec Inc) – Responsibilities included being the Design Lead for the Communications Work Packages as part of an 8-person Design Team. Collection and validation of business, operational, and technical requirements. Coordination of efforts with the Airport Authority, SITA Solution Design and Centers of Excellence (CoE), Terminal Construction Trade Contractors, and 3rd party partners to develop the functional specifications for the Communication work packages included: LAN, WLAN, Telephony, DAS, and Structured Cabling System.

Technical Design Authority – Baku International Airport (GYD), Baku, Azerbaijan

New Terminal 2 – Design-Build Program

Technical Design Authority for the SITA – Responsibilities included the Design of Special Systems, the development of 30%, 50%, 90%, and 100% design drawings and functional specifications, and Delivery of Special Systems. Work Packages included: Communication Systems (LAN, WLAN, IPT, Structured Cabling System – Backbone and Horizontal), Airport Operations Systems (AODB, RMS, EVIDs, VDGS), and Passenger Processing Systems (CUPPS, CUSS).

Lead Designer – São Paulo/Guarulhos International Airport (GRU), São Paulo, Brazil

New Terminal 4 – Design & Build Program

Lead Designer (Communication Systems) for the Terminal Design Consultants for the Design-Build for the new Terminal 4 at São Paulo/Guarulhos International Airport (GRU). Contracted to as the Terminal Design Consultants for the development of system functional specifications for the communication system work packages. Work Packages included: LAN, WLAN, IPT, Distributed Antenna System – DAS, and Structured Cabling System – Backbone and Horizontal

Other Notable Projects

Network Engineer – Dublin International Airport (DUB), Dublin, Ireland

Responsibilities included the systems testing and commissioning as part of the Airport's ORAT – Operations Readiness Acceptance Team

YEARS OF EXPERIENCE

10 Years

EDUCATION

A.A.S Computer Information Technology, Central Lakes College (2006)

REGISTRATIONS

Cisco Certified:

- Network Professional
- Security Professional
- Design Associate
- Network Associate
  *NOTE: The Cisco certification program and certificates will change as of February 2020; recertification in accordance with the new program is planned

MATTHEW RHETT

Network Design Engineer - Airport HUB Program

Responsibilities included the Design and Delivery of Network Infrastructure Project encompassing 120+ tier-1 and tier-2 airports, across 6 continents

Maricopa County (AZ) – Design Manager – Design Management and Lead Designer of the Telecommunication systems in support of the construction (CMAR) of the ITR (Intake, Transfer, Release) Facility for Maricopa County (AZ). The ITR Facility represents a first for Maricopa County, a shared Correctional facility in which the Corrections, Sheriff Office, Health Services, Mental Services, and three (3) Judicial Courts will operate from a shared facility.

Maricopa County (AZ) – Design Manager – Design Management and Lead Designer of the Telecommunication systems in support of the construction (CMAR) of the 225 Madison Facility for Maricopa County (AZ). The 225 Madison project is the demolition and renovation of the Madison Street Jail to new home of the Maricopa County's Attorney's offices.

Lead Engineer –Sheraton Vistana Resort Data Center (Orlando, FL) – Data Center Design and Install

Lead Engineer – Orlando Operations Center (Orlando, FL) – Design/Configure/Install WLAN

Lead Engineer – Starwood Vacation Ownership (Orlando, FL) – Design/Configure/Install Property LAN, WLAN, and Security Appliances.

Airport Experience

North America
JFK, MCO, PHX, SFO, TPA, YQB

Latin America & South America
GRU, MVD

Europe
CGN, DUB

Asia & Middle East
BOM, DEL, KUL, PEK, SGN, TPE, GYD

Hospitality Experience

North America

- Sheraton Vistana Villages – Orlando, FL
- Sheraton Vistana Resort – Orlando, FL
- Vistana Beach Club – Jensen Beach, FL
- Sheraton PGA Vacation Resort – Port St. Lucie, FL
- Sheraton Broadway Plantation – Myrtle Beach, SC
- The Westin St. John Ocean Resort – St. John, USVI
- Sheraton Mountain Vista – Avon, CO
- The Westin Riverfront Villas – Avon, CO
- Sheraton Desert Oasis – Phoenix, AZ
- The Westin Kierland Villas – Phoenix, AZ
- The Westin Desert Willow – Palm Springs, CA
- The Westin Mission Hills – Palm Springs, CA
- The Westin Lagunamar Ocean Resort – Cancun, Mexico

TYLER CHAPPELL

VICE PRESIDENT



PROFESSIONAL BACKGROUND

Mr. Chappell's capabilities include wetland jurisdictional determinations, environmental feasibility studies, seagrass surveys, gopher tortoise surveys, environmental permitting, mitigation design, and mitigation monitoring. Mr. Chappell has performed a number of endangered and threatened species surveys, jurisdictional determinations, and environmental monitoring reports. Mr. Chappell has also conducted construction compliance inspections including turbidity monitoring for wetland and coastal projects. He has over eighteen years of experience in many types of environmental permitting, including residential docks, marinas and coastal development.

RELEVANT EXPERIENCE

The Chappell Group, Inc. Pompano Beach, Florida

Vice president - 2005-Present

Responsibilities include wetland jurisdictional determinations, environmental feasibility studies, Phase I ESA's, seagrass surveys, gopher tortoise surveys, environmental permitting with all agencies, mitigation design, and mitigation monitoring. Residential and commercial marina permitting and design including all aspects of sovereign submerged land regulations with the Division of State Lands. Construction compliance inspections including turbidity monitoring for wetland and coastal projects.

Craven Thompson & Associates, Inc., Fort Lauderdale, Florida

Director, Environmental Services - 1998-2005

Responsibilities include wetland jurisdictional determinations, environmental feasibility studies, Phase I ESA's, seagrass surveys, gopher tortoise surveys, environmental permitting with all agencies, mitigation design, and mitigation monitoring. Residential and commercial marina permitting and design including all aspects of sovereign submerged land regulations with the Division of State Land.

PARTIAL LIST OF PROJECTS

- Fort Lauderdale Hollywood International Airport, Broward County
- Gateway Hotel & Marina, Daytona Beach
- Harbour Towne Marina – Dania Beach
- Sunrise Harbor Marina, Fort Lauderdale
- Port Everglades Bridge over the FPL Discharge Canal, Port Everglades
- Boca Raton Beach Club & Marina, Boca Raton
- Ocean Express Pipeline, Dania Beach/ Bahamas
- Miramar Regional Park, Miramar
- Dania Beach Port Casino, Dania Beach
- Border Patrol Center, Hollywood, FL
- Heron Bay, Parkland
- White Bay Cay, Exumas
- Hall of Fame Marina, Fort Lauderdale
- Broward County Mitigation Monitoring, BC Waste & Recycling Services
- Pembroke Road over I-75, Broward County
- Sheridan Street, Broward County
- Deerfield Beach Pier Renovation, Deerfield Beach, FL
- Radisson Riverwalk Hotel, Tampa
- Port Everglades Turning Notch Expansion, Fort Lauderdale, FL
- Dania Beach Marina, Dania Beach, FL
- Broward County Segment II Beach Renourishment

The Chappell Group

EDUCATION

Texas Christian University- Fort Worth, Texas, Bachelor of Science, August 1997, Environmental Science

CERTIFICATION

- ISA Certified Arborist

AFFILIATIONS

- South Florida Association of Environmental Professionals, Past President
- Florida Association of Environmental Professionals, Past Board Member
- Leadership Broward Graduate, Class XIX
- Marine Industries Association of South Florida, Board of Directors
- Florida Inland Navigation District, Past Broward Commissioner
- Riverwalk Trust, Past Board Member
- Broward Alliance, Past Investor
- International Society of Arboriculture, Certified Arborist, Member
- Hillsboro Inlet District, Broward Commissioner

JENA ROBBINS

SENIOR PROJECT BIOLOGIST



PROFESSIONAL BACKGROUND

Ms. Robbins' capabilities include wetland jurisdictional determinations, environmental feasibility studies, seagrass surveys, environmental permitting, mitigation design, and mitigation monitoring. Ms. Robbins has experience with endangered and threatened species surveys, jurisdictional determinations, and environmental monitoring reports. Ms. Robbins has performed field work involving the removal and relocation of coral species and has applied aquaculture methods to sustain coral life in a laboratory setting. As a member of The Chappell Group, Inc.'s team, Ms. Robbins is handling environmental permitting, including residential docks, marinas and coastal development projects.

RELEVANT EXPERIENCE

The Chappell Group, Inc. Pompano Beach, Florida

Senior Project Biologist - 2018-Present

Responsibilities include wetland jurisdictional determinations, environmental feasibility studies, benthic resource surveys, environmental permitting with all agencies, mitigation design, and mitigation monitoring. Residential and commercial marina permitting and design including all aspects of sovereign submerged land regulations with the Division of State Lands.

Nova Southeastern University, Dania Beach, Florida

Research Assistant - 2016-2018

Conducted laboratory research in the Marine Larval Ecology Laboratory to investigate global and local anthropogenic stressors on coral species. Performed field work involving the removal and relocation of coral species along Florida's coastline and laboratory work involving assembly of aquaria systems, maintenance, and experiments. Performed statistical data analyses for research using R programming language. Prepared and revised research manuscripts for publicatio

PARTIAL LIST OF PROJECTS

- Boca Raton Beach Club & Resort, Boca Raton
- North Fork Riverfront Park, Fort Lauderdale
- Port Everglades Turning Notch Expansion, Port Everglades
- Private client, single family home dock design and permitting
- River Oaks, Fort Lauderdale
- West Side Dry Retention Pond, Fort Lauderdale

The Chappell Group

EDUCATION

Salisbury University, Salisbury, MD, 2011-2015
B.S. Biology

University of Maryland Eastern Shore, Princess Anne, MD, 2011-2015
B.S. Environmental Science, Concentration in Marine Science

Nova Southeastern University, Dania Beach, FL, 2016-2018

CERTIFICATIONS

- PADI Advanced Open Water SCUBA
- PADI Rescue Diver
- PADI Enriched Air Nitrox Diver

KATHRYN BONGARZONE

SENIOR PROJECT BIOLOGIST



PROFESSIONAL BACKGROUND

Ms. Bongarzone's capabilities include wetland jurisdictional determinations, environmental feasibility studies, seagrass surveys, environmental permitting, mitigation design, and mitigation monitoring. Ms. Bongarzone has experience with endangered and threatened species surveys, jurisdictional determinations, and environmental monitoring reports. As a member of The Chappell Group, Inc.'s team, Ms. Bongarzone is handling environmental permitting, including residential docks, marinas and coastal development projects.

RELEVANT EXPERIENCE

The Chappell Group, Inc. Pompano Beach, Florida

Senior Project Biologist - 2014-Present

Responsibilities include wetland jurisdictional determinations, environmental feasibility studies, seagrass surveys, environmental permitting with all agencies, mitigation design, and mitigation monitoring. Residential and commercial marina permitting and design including all aspects of sovereign submerged land regulations with the Division of State Lands.

Newfound Harbor Marine Institute at Seacamp Association

Head Unit Leader/Instructor - 2012-2014

Taught students through lecture, laboratory and field lessons in interpretive tropical marine science both on land and on water. Additionally, captained a 26 ft. USCG designated research vessel, acted as an ARC lifeguard, NAUI skin diving leader, and participant in hospitality services necessary to a residential facility.

PARTIAL LIST OF PROJECTS

- Port Everglades Turning Notch Expansion, Port Everglades
- Dania Beach Marina, Dania Beach
- Yachts Miami Beach Boat show, Miami Beach
- Harbor Towne Marina, Dania Beach
- Lauderdale Marine Center, Fort Lauderdale
- Pier 66 Marina, Fort Lauderdale
- Sunrise Parks, City of Sunrise
- Cooper City Soccer Park, Cooper City
- Alsdorf Park, Pompano Beach
- Private client, single family home dock design and permitting
- Tortuga Music Festival

THE Chappell GROUP

EDUCATION

Averett University, Danville Virginia 2007-2010
B.S. Environmental Science, minor Political Science, Magna Cum Lade

CERTIFICATIONS

- ISA Certified Arborist
- USCG OUVP Licensed Captain with Towing Endorsement
- ARC Lifeguard, First Aid and CPR certified
- ARC Lifeguard, First Aid and CPR Instructor
- PADI Open water SCUBA certified

AFFILIATIONS

- South Florida Association of Environmental Professionals, Member
- Leadership Broward, Class XXXVII
- International Society of Arboriculture, Certified Arborist, Member

LAKDAS NANAYAKKARA, PE

PRINCIPAL
STRUCTURAL ENGINEER



LAKDAS/YOHALEM ENGINEERING, INC.

PROFESSIONAL BACKGROUND

Lakdas Nanayakkara has remained a licensed Professional Engineer in the state of Florida for the last thirty-five with over forty-three years as a Professional Structural Engineer in total. Lakdas leads the structural engineering services at Lakdas/Yohalem Engineering Inc.

Lakdas' Experiences Includes Structural Design, Permitting and Construction Phase Engineering Services for the following:

- Building Structures
- Major Water and Wastewater Treatment Plants and Water Control Structures
- Bridge Engineering Structures
- High Visible and Miscellaneous Public Project

Lakdas has completed over 1200 projects in South Florida and the Caribbean Basin during the last 34 years.

Value Engineering: Lakdas has participated as a structural expert for over 31 value -engineering sessions for both FDOT and County's major projects in building, bridges and water and wastewater treatment plants.

Our Value-Engineering services has saved:

- Bridge projects over $4.5 Million
- Building Projects, saved over #4.1 Million.
- Water & Wastewater Treatment Plants saved over $4.6 Million.

Structural Failure Analysis and Expert Witness; Construction Related Litigation

- 12 Commercial Building Projects
- 58 Residential Projects

RELEVANT PROJECT EXPERIENCE

Ft. Lauderdale Airport Upper-Level Strengthening Renovation, Fort Lauderdale, FL

Evaluate 4055 long elevated bridge structure (elevated deck) deck for new passenger coaches and improve the strength of the entire structure to withstand new loading, Replace all expansion joints of the deck and girders. Repair all structural defects, bridge engineering design condition, survey, and design services. Lakdas served as the Principal and was responsible for the design services. Lakdas designed and review all relevant shop drawings. Also, Lakdas was responsible for inspection services.

Fort Lauderdale Airport Terminal 2 Expansion and Renovations, Fort Lauderdale, FL

Evaluation of the existing structure for the new building code and design services for 120,000 sqft expansion. Lakdas served as the Principal and was responsible for the design services. Lakdas designed and review all relevant shop drawings. Also, Lakdas was responsible for inspection services trouble shooting, and final certification for the structures.

EDUCATION

Post Graduate Diploma in Structural Engineering London England, UK

Bachelor of Science Honors Degree in Civil Engineering with Structural Engineering Major University of Hartford England, UK

Higher National Certificate in Civil Engineering Hertfordshire College of Building England, United Kingdom

REGISTRATIONS

Engineering

Charted Structural Engineering, London, England – 1981

Florida #037590

South Dakota – 4058

Minnesota - #17947

Structural Engineering Expert of Unsafe Structure Board – City of Margate Since 2001

Construction

Florida Certified General Contractor – GC 044303

Inspection

Certified Structural Masonry Inspector – 1992

Certified Threshold Inspector – 1987

Certified Uniform Building Code Inspector – 69

CIVIC ORGANIZATIONS

Member of Broward County Construction Executive Association and Member of Florida Consulting Engineers

LAKDAS NANAYAKKARA, PE

Fort Lauderdale Airport Terminal 3 Expansion and Renovations, Fort Lauderdale,

Evaluation of the existing structure for the new building code and design services for 120,000 sqft expansion. Lakdas served as the Principal and was responsible for the design services. Lakdas designed and review all relevant shop drawings. Also, Lakdas was responsible for inspection services trouble shooting, and final certification for the structures.

Port Everglades New Gantry Crane Rails and Crane Maintenance Facility, Fort Lauderdale, FL

Demolition of the existing buildings and new 2-story maintenance facility. Lakdas served as the Principal and was responsible for the design services. Lakdas designed and review all relevant shop drawings. Also, Lakdas was responsible for inspection services trouble shooting, and final certification for the structures

Radius Parking Garage (over 20 Buildings and Parking Garages), City of Fort Lauderdale, FL

Lakdas serviced as the structural engineer of record for structural condition survey and load rating analysis, analyzed and designed construction documents for the renovation and phased construction engineering inspections and certification.

Fort Lauderdale Airport Hibiscus Parking Garage, Fort Lauderdale, FL

Parking Garage Renovations. Lakdas served as the Principal and was responsible for the design services. Lakdas designed and review all relevant shop drawings. Also, Lakdas was responsible for inspection services trouble shooting, and final certification for the structures..

Van Buren Parking Garage, City of Hollywood, FL

6-story parking garage constructed with beams, columns, and double T precast concrete deck. Design new connection to enhance the structural stability to comply with new wind requirements. Lakdas served as the Principal and was responsible for the design services. Lakdas designed and review all relevant shop drawings. Also, Lakdas was responsible for inspection services trouble shooting, and final certification for the structures.

Fort Lauderdale Airport Exit Roadway & Valet Routing Improvements, Fort Lauderdale, FL

New bridge, helix ramp, new roadway, overhead signage and retain wall structural design and permitting. Lakdas served as the Principal and was responsible for the design services. Lakdas designed and review all relevant shop drawings. Also, Lakdas was responsible for inspection services trouble shooting, permit assist and final certification for the structures..

Port Everglades, Terminal 18, Fort Lauderdale, FL

Terminal 18 is a dual-purpose facility handling both cargo and cruise operations. New terminal was built to accommodate the Oasis of the Sea, the world largest cruise ship in the world. The terminal consists of covered passenger drop off, passenger seating, two sets of restrooms, mezzanine, two elevators, two escalators, baggage handling, covered passenger loading bridges. Lakdas served as the Principal and was responsible for the design services. Lakdas designed and review all relevant shop drawings. Also, Lakdas was responsible for inspection services and trouble shooting at the site.

Port Everglades, Terminal 2, Fort Lauderdale, FL

Terminal 2 is a dual-purpose facility handling both cargo and cruise operations. The existing terminal obtained addition and renovations to accommodate Princess Cruise. Lakdas served as the Principal and was responsible for the design services. Lakdas designed and review all relevant shop drawings. Also, Lakdas was responsible for inspection services and trouble shooting at the site.

LUAN NGUYEN, M. SC.

STRUCTURAL ENGINEER



LAKDAS/YOHALEM ENGINEERING, INC.

PROFESSIONAL BACKGROUND

Luan Nguyen has over 15 years of engineering experience and is responsible for structural design services at LYE. Luan provides design, permitting and construction phase engineering services.

Luan's Experiences Includes structural analysis and design services for the following types of projects:

- Educational Facilities
- City Complexes, Police Stations and Libraries
- Water Control Structures
- Wastewater and Water Treatment Plants
- Mast Arm Structures
- High Visible and Miscellaneous Public Projects

RELEVANT PROJECT EXPERIENCE

Fort Lauderdale Airport Terminal 2 Expansion and Renovations, Fort Lauderdale, FL

Evaluation of the existing structure for the new building code and design services for 120,000 sqft expansion. Luan serviced as the Project Engineer and was responsible for the foundation and miscellaneous structural design services for this project.

Port Everglades New Gantry Crane Rails and Crane Maintenance Facility, Fort Lauderdale, FL

Demolition of the existing buildings and new 2-story maintenance facility. Luan served as the Project Engineer and was responsible for the condition survey and the structural design services for this project.

Fort Lauderdale Airport Exit Roadway & Valet Routing Improvements, Fort Lauderdale, FL

New bridge, helix ramp, new roadway, overhead signage and retain wall structural design and permitting. Luan served as the Project Engineer and was responsible for the condition survey and the structural design services for this project.

Port Everglades, Terminal 18, Fort Lauderdale, FL

Terminal 18 is a dual-purpose facility handling both cargo and cruise operations. New terminal was built to accommodate the Oasis of the Sea, the world largest cruise ship in the world. The terminal consists of covered passenger drop off, passenger seating, two sets of restrooms, mezzanine, two elevators, two escalators, baggage handling, covered passenger loading bridges. Luan served as the Project Engineer and was responsible for the condition survey and the structural design services for this project.

Port Everglades, Terminal 2, Fort Lauderdale, FL

Terminal 2 is a dual-purpose facility handling both cargo and cruise operations. The existing terminal obtained addition and renovations to accommodate Princess Cruise. Luan served as the Project Engineer and was responsible for the condition survey and the structural design services for this project.

EDUCATION

Master of Science in Structural Engineering, University of Florida, 2002

Bachelor of Science in Civil Engineering, University of Florida, 2000

REGISTRATIONS

Engineer-in-Training (EIT), US Florida Tallahassee Certification

LUIS BELTRAN ROSSI, B.SC. ENG.

STRUCTURAL ENGINEER



LAKDAS/YOHALEM ENGINEERING, INC.

PROFESSIONAL BACKGROUND

Luis Beltran Rossi has over twenty plus years of experience in structural design and coordination if residential, commercial, and offices facilities projects. Luis has an extensive experience as a Structural AutoCAD Drafter. He is responsible for design services at Lakdas/Yohalem Engineering Inc.

Luis's Experience includes Structural Design, Field Evaluation and Resident Engineer for the following project types:

- Public Sector Buildings
- Port and Airport Facilities
- Water and Wastewater Treatment Plans
- Water Control Structures

RELEVANT PROJECT EXPERIENCE

Radius Parking Garage (over 20 Buildings and Parking Garages), City of Fort Lauderdale, FL

Luis served as the Structural Engineer and was responsible for the structural design services for this project.

Fort Lauderdale Airport Hibiscus Parking Garage, Fort Lauderdale, FL

Luis served as the Structural Engineer and was responsible for the structural design services for this project.

Van Buren Parking Garage, City of Hollywood, FL

6-story parking garage constructed with beams, columns, and double T precast concrete deck. Design new connection to enhance the structural stability to comply with new wind requirements. Luis served as the Structural Engineer and was responsible for the structural design services for this project. .

Port Everglades New Gantry Crane Rails and Crane Maintenance Facility, Fort Lauderdale, FL

Demolition of the existing buildings and new 2-story maintenance facility Luis served as the Structural Engineer and was responsible for the structural design services for this project.

EDUCATION

Bachelor of Civil Engineering, University of Carabobo, Venezuela

REGISTRATIONS

Board of Engineers of Venezuela. License No:55.753

ADDITIONAL TRAINING

Welding and Inspection

Hydraulic Fire System Design

Preparation, Repair and Protection of Structures

Sika Construction Products Application

PRAVIN NANAYAKKARA, M.B.A., M. SC.

PROJECT MANAGER



LAKDAS/YOHALEM ENGINEERING, INC.

PROFESSIONAL BACKGROUND

Pravin Nanayakkara has over eight years of engineering experience. He is responsible for Project Management at LYE.

Pravin has provided Project Management, Site Inspections, Project Coordination, Design and Calculations for structural and civil engineers projects.

Pravin's Experience includes Structural Design, Field Evaluation and Resident Engineer for the following project types:

- Public Sector Buildings
- Port and Airport Facilities
- Water and Wastewater Treatment Plans
- Water Control Structures

RELEVANT PROJECT EXPERIENCE

Fort Lauderdale Airport Terminal 2 Expansion and Renovations, Fort Lauderdale, FL

Evaluation of the existing structure for the new building code and design services for 120,000 sqft expansion. Pravin served as the Project Manager and was responsible for the condition survey, and construction phase services for this project.

Fort Lauderdale Airport Terminal 3 Expansion and Renovations, Fort Lauderdale, FL

Evaluation of the existing structure for the new building code and design services for 120,000 sqft expansion. Pravin served as the Project Manager and was responsible for the condition survey, and construction phase services for this project.

Port Everglades New Gantry Crane Rails and Crane Maintenance Facility, Fort Lauderdale, FL

Demolition of the existing buildings and new 2-story maintenance facility. Pravin served as the Project Manager and was responsible for the design, and construction phase services for this project.

Radius Parking Garage (over 20 Buildings and Parking Garages), City of Fort Lauderdale, FL

Pravin served as the Project Manager and was responsible for the condition survey, design, and construction phase services for this project.

Fort Lauderdale Airport Hibiscus Parking Garage, Fort Lauderdale, FL

Parking Garage Renovations Pravin served as the Project Manager and was responsible for the condition survey and design services for this project.

Van Buren Parking Garage, City of Hollywood, FL

6-story parking garage constructed with beams, columns, and double T precast concrete deck. Design new connection to enhance the structural stability to comply with new wind requirements. Pravin served as the Project Manager and was responsible for the condition survey, design, and construction phase services for this project.

EDUCATION

Bachelor of Science in Biology, University of Central Florida

Master of Business Administration, University of Florida

Bachelor's in Civil Engineering, Florida Atlantic University

Master of Science in Finance University of Miami

ROY BODMAN, B. SC. ENG.

PROJECT ENGINEER



LAKDAS/YOHALEM ENGINEERING, INC.

PROFESSIONAL BACKGROUND

Roy Bodman has over eight years of engineering experience. He is responsible for design and construction services at Lakdas/Yohalem Engineering Inc.

Roy has provided Project Management RPR Services, Site Inspections, Project Coordination, Structural Engineering Design Services.

Roy's Experience includes Structural Design, Field Evaluation and Resident Engineer for the following project types:

- Public Sector Buildings
- Port and Airport Facilities
- Water and Wastewater Treatment Plans
- Water Control Structures

RELEVANT PROJECT EXPERIENCE

Ft. Lauderdale Airport Upper-Level Strengthening Renovation, Fort Lauderdale, FL

Evaluate 4055 long elevated bridge structure (elevated deck) deck for new passenger coaches and improve the strength of the entire structure to withstand new loading, Replace all expansion joints of the deck and girders. Repair all structural defects, bridge engineering design condition, survey, and design services. Roy serviced as the Project Engineer and was responsible for the condition survey and construction services for this project.

Fort Lauderdale Airport Terminal 2 Expansion and Renovations, Fort Lauderdale, FL

Evaluation of the existing structure for the new building code and design services for 120,000 sqft expansion. Roy serviced as the Project Engineer and was responsible for the condition survey and construction services for this project.

Fort Lauderdale Airport Terminal 3 Expansion and Renovations, Fort Lauderdale, FL

Evaluation of the existing structure for the new building code and design services for 120,000 sqft expansion. Roy serviced as the Project Engineer and was responsible for the condition survey and construction services for this project.

Port Everglades New Gantry Crane Rails and Crane Maintenance Facility, Fort Lauderdale, FL

Demolition of the existing buildings and new 2-story maintenance facility. Roy serviced as the Project Engineer and was responsible for the construction services for this project.

EDUCATION

Bachelor of Science in Petroleum Engineering, University of Kansas

Bachelor of Science in Civil Engineering, University of Florida

REGISTRATIONS

Engineer-in-Training (EIT), US Florida Tallahassee Certification

CRAIG GORDON

PROJECT MANAGER / QA/QC



MESSAM CONSTRUCTION

PROFESSIONAL BACKGROUND

As Project Manager, Craig is responsible for coordinating and managing the necessary team resources throughout the entire project, from preconstruction through closeout.

This would include phasing analysis of the programs within any project assigned to Messam and coordinating our specialty teams. He will ensure that both your's and Messam's expectations and budgetary guidelines are met or exceeded.

Craig manages the project teams from beginning to end including budget, costs, schedule, risk management, insurance, general work performance and quality, and overall progress against the plan.

SAMPLE PROJECT EXPERIENCE

Broward County New Judicial Center
Ft. Lauderdale, FL
$130,000,000
Owner Representative

Northeast High School
Ft. Lauderdale, FL
$9,000,000
Asst. Project Manager

Ft. Lauderdale International Airport
Delta Airlines Terminal 2
West Palm Beach, FL
$110,000,000
Program Management – Partner

Gove Elementary Modernization
Belle Glade, FL
$29,000,000
CM@Risk Partner
Asst. Project Manager

Program Management – Partner
North Palm Beach Elementary
Village of North Palm Beach, FL
$21,000,000
Asst. Project Manager







YEARS OF EXPERIENCE
Messam: 8 Years
Total: 14 Years

EDUCATION
Bachelor of Science in Construction Management, North Carolina A&T University, Greensboro, NC – 2005

CERTIFICATIONS
- OSHA 30
- NCCER Trained
- LEED Green Associate (Candidate)

KEY STRENGTHS
- PROGRAM MANAGEMENT
- OWNER REPRESENTATION
- NEW CONSTRUCTION
- MEP UPGRADES
- OCCUPIED SITE
- RENOVATIONS
- LEED GA CANDIDATE

KARLENE CHUNG

DOCUMENT CONTROL MANAGER



MESSAM CONSTRUCTION

PROFESSIONAL BACKGROUND

Karlene offers overall support to the Construction/Project Management team. She brings a wealth of document control and project management experience providing document control management for government and institutional clients. Her current tasks include processing and archiving all communications, documents and project forms using, Prolog, Textura and other systems for government and private projects throughout Broward County. Specifically, Karlene's ability to interface with Project Managers, A/E, Trade Subcontractors and Owners to process communications and construction documents is her strength.

Karlene has a diverse background of work experience being a former Project Manager, Project Administrator and Account Manager, and Grant Writer in non-profit field for most of her professional career.

SAMPLE EXPERIENCE

PROJECTS EXPERIENCE

Jackson North Medical Center Modernization
North Miami Beach, FL
$68,000,000
Project Coordinator

PROGRAM MANAGEMENT PROJECTS

Ft. Lauderdale International Airport
Delta Airlines Terminal 2
Fort Lauderdale, FL
$110,000,000
Document Control Manager







YEARS OF EXPERIENCE

Messam: 3 Years
Total: 8 Years

EDUCATION

Masters of Science:
Business Leadership, 2009
Nova Southeastern University

Bachelors of Science:
Exercise Science 2005
Florida State University

SOFTWARE

Prolog, Textura, Microsoft Office, Scheduling

KEY STRENGTHS

- DOCUMENT CONTROL
- M/WBE OUTREACH
- PROJECT COORDINATION
- PROLOG
- SHAREPOINT

1c. QUALIFICATIONS, & AIRPORT EXPERIENCE PROJECT MANAGER



PMTECHNOLOGIES project professionals

CHRIS DAVIS - PROGRAM MANAGER

The project management staff included for the Professional Consultant services for FLL/HWO has been hand-selected, not just for their local knowledge of the Fort Lauderdale International Airport, but also their general depth of airport and airline experience. This project management team includes overall experience in airport renovation, BHS system planning, installation and certification, airport construction (both updating and new), FIS construction, airport technology, and airline & operational experience.

Chris Davis, as the main program manager, was chosen for this proposal due to his 20+ years working in the airline industry in technology, security, and construction. ***Chris has completed over $200M in projects at FLL and completed 200,000 SF of renovations.*** His most recent experience working as the program and project manager at the Fort Lauderdale International Airport's Terminal 2 BHS System Project, and the Terminal 2 Terminal Modernization provides a thorough knowledge of the airport's requirements, processes, and unique challenges. Other projects include the LAX T5 FIS construction, certification, and turnover. Various airline and airport technology systems projects including DAS, Wi-Fi, PA systems, common use rollout, Club design, and overall project management from initial concept and planning, through construction and closeout. His extensive knowledge will be invaluable in assisting the airports and the team from planning through execution. As the main program and project manager, his time will be balanced across various projects and will depend upon the airports' needs and assignments.

Chris's track record as a consultant to both airlines and airports provides our team with a unique perspective on how to look at the overall program, providing insight and management for constructability, maintenance, phasing, bidding and delivery - all while maintaining the delicate and unique balance between the project deliverables, airport/airline operations and the overall customer experience. His expertise will benefit the Airports from conceptual design, phasing, delivering, and managing that demanding balance.

The project manager and supporting project management staff have decades of experience in successfully bringing the overall design, phasing, and implementation together into projects that will allow Broward County to realize their vision for the Fort Lauderdale International and North Perry Airports.

Section 2
PROJECT APPROACH

2a. Approach to the Project

2b. Subcontractor Coordination

2c. Technology

2a. APPROACH TO THE PROJECT

CBRE | DESIGN PHILOSOPHY

Airport terminals represent the character and ethos of the regions they serve. Airports are in the people business and a great experience doesn't happen by chance, it is designed. Our understanding of design integrates not only a secure environment, but creates a passenger journey with amenities that provide an efficient experience that feels personalized. Our design process is thoughtful and considerate, involving a broad collaboration of stakeholders to ensure airport terminals, as placemaking public art and welcoming gateways, are as efficient and functional as they are aesthetically appealing.

Our experience encompasses airport owners, airlines, tenants and federal agencies such as CBP, TSA and FAA for multiple sites and multiple building programs. CBRE understands the issues and challenges involved in undertaking today's massive multi-billion-dollar airport renewal projects, as well as smaller, discreet projects that are often part of an airport development.

Broward County is seeking a professional services partner to deliver strategic and thoughtful solutions to a variety of capital improvement projects at both FLL and HWO airports. CBRE Design has throughly reviewed the Packet for Bid solicitation and has provided the same specialized services Broward County is seeking for numerous airports in our past experience. Here is how we will approach these projects:

DESIGN APPROACH

The team that is proposed has been working locally with Broward County and BCAD for over 50 years. We collectively understand the interactions of the various departments, organizations, and private entities that have operated in and around the FLL as the airport has grown over the decades. We plan to approach this project from a design perspective by utilizing our local knowledge into the design criteria. Our intent is to **balance the vision of BCAD with a design focused on longevity, maintenance and reliability.** We will be the vehicle in which BCAD uses to move the master plan forward with the personnel, the knowledge basis, and the right design standards. Critical factors for the design approach include improving the design details, implementing logical technology initiatives, and keeping the customer experience in the forefront. We understand the difficulties of a growing airport because our team has executed similar initiatives around the United States. We can help BCAD aviation, BCS, and it's board of directors execute that vision to grow.

PROJECT MANAGEMENT

This team is made up of local talent that has been a part of the growth of the FLL airport for various programs across the entire campus. We understand the intricacies of airline and airport operations. Our experience and relationships with the airline partners complements the understanding of how to execute work in the terminals and other areas of the airport. Our approach to project management provides the strength of nation-wide design firms with the detailed local knowledge of how FLL operates. Without a local team, no one would be successful. It is the project management teams job to have the heart of the operation in mind when the vision of growth is executed. Without that understanding, initiatives drag on create animosity in a 24/7 environment that is dependent on communication with one another. From knowing where ramp-level plumbing clean-outs are located to knowing what aircraft RON at night, our project management teammates commit their time, regardless of hour, to be the first ones in and last ones out when it comes to getting the job done.

Project Approach

FLEXIBILITY

We will fit our services to your needs. The flexibility of our team to provide Broward County with the sevices and staff that are required on each project helps to ensure that FLL & HWO will receive expert services, when and where they are needed.

We deliver specialized design services that lead to an elevated passenger and airport operations experience.

We assist our clients in implementing a more meaningful and memorable design that is reflective of their culture and brand. With an emphasis on shaping fresh and exclusive experiences combining transportation & hospitality design that elevate the passenger experience. We understand the evolving airport environment and passenger offering needed to stay competitive in this industry.

Our team implements diligent technical quality review, ensuring consistency and accuracy in the documents from multiple points of view.

Our team believes that "quality control" begins at the conception of the project and is maintained throughout every phase of the decision-making process until completion. The method of implementing and assuring quality control is continually measured by establishing a well-defend work plan in the initial phase of the project for all team members.

Our process encourages timely and accurate decision making, allowing for consistent schedule adherence.

The key to meeting schedule requirements is to clearly define what must be accomplished in each task of the project, understand the goals of that task, and make a personal commitment to meeting the schedule in terms of manpower allocation and personnel involvement. Each of the team members identified are ready to make that personal commitment.



We will work with FLL and HWO Airport Staff to develop and continually update a project milestone schedule that provides tasks and durations for drawing deliverables, owner reviews, design presentations, pricing periods, permitting, and construction kick-off. The key to a successful implemented project is an integrated communication approach with the Broward County's designated project team and all key stakeholders representing each layer of the organization. At the beginning of the project, this conversation will outline all project priorities driving each fundamental element, including function, aesthetics, and quality requirements. At every phase within our process, we are reevaluating the priority outline created with the entire team to ensure all goals that were previously set during programming/planning and schematic design, are being maintained and executed above expectations.

The team will continue to infuse our intimate understanding of the airport and the BCAD expectation to integrate our professional knowledge in creating and modernizing exceptional sustainable spaces for the airport.

We provide the highest value in the market by leveraging creative design professionals, an integrated approach, and supply chain resources.

Early collaboration during the design process leads to a better-informed design product, a better set of construction documents, and a better understanding of the final product intended and its ultimate cost. Once the project budget is fully developed and confirmed, we design to the budget, instead of a traditional approach whereby the design is completed, and then the actual costs are determined. Our partnership with US Cost will provide independent cost estimating services throughout all phases of the project lifecycle. This will ensure the established project budget is attainable and strictly maintained through project completion.



PRE-DESIGN: VISIONING/PROGRAMMING

The Design Team will engage Broward County through a two-step process for the visioning and programming phase of the project.

VISIONING WORKSHOP

Our team is fully committed to this process. Design is about creating an environment that supports the activity within the space. To do this, each firm will become infused in learning and understanding Broward County's mission and goals for the specific project at hand. The Design Team will facilitate a face to face discussion as an opportunity for leadership to get together and articulate these goals and vision.

It defines expectations and puts all stakeholders on the same page.

It bridges the language between designer and client.

It defines the guiding principles for your project.

It allows for key stakeholders to sit together and share ideas.

It defines priorities. When the project is complete, what, for YOU, is the "biggest win" resulting from this project/process?

DATA GATHERING – SURVEY SESSIONS

These sessions are intended to document the physical requirements and needs associated with the variety of work activities that make up the business. It is a "bottom up" perspective regarding the specific needs of individuals and groups. In front of these sessions, our team members will collaborate in issuing a survey to designated staff in order to collect basic information and data. The face-to-face sessions are then an opportunity to clarify these responses and probe deeper into the questions.

The long-term cost benefits of a properly designed, user friendly environment should be factored into any initial cost considerations.

PRESENT RESEARCH & RECOMMENDATIONS

To help transfer our research findings and ensure alignment among the project team and key stakeholders on the outcomes of the research, we will develop and lead a presentation to discuss the findings and recommendations. The session will provide an opportunity to discuss how the research can help inform successful implementation, inform design and transition into the new space.

Project Approach

SCHEMATIC DESIGN

After verifying the approved program, our team will continue the schematic design phase as necessary to further refine elements reflecting the County's mission and goals. Within this preliminary Schematic Design Presentation, our team will:

- Coordinate any updates to the concept design based on Initial Visioning Workshop with stakeholders
- Further develop floor plans and elevations as necessary
- Review options for finishes, furniture, lighting and other key design components within the space
- Allow for initial coordination of work with engineers and consultants
- Modify the package per comments received during the initial workshop and develop a final deliverable
- Coordinate requirements from the fire department, BCS, and other plan check agencies in a collaborative effort to reach goals quickly

DESIGN DEVELOPMENT

We will refine the concept design developed and approved in Schematic Design to expand on each project component and re-evaluate them in fine detail. We will conduct a Design Development Presentation, where with your team, our team will review:

- Further develop plans, exterior & interior elevations, sections, details, schedules, specifications, and cost estimates
- Modify the design to the CMAR and FLL & HWO's Airport Team comments and again ensure alignment with the mission and goals by tracking with the Design Development
- Finalize selections for finishes, furniture, lighting and other key design components within the space
- Provide photo-realistic 3D renderings to visualize the space
- Ensure code compliance of design
- Allow for detailed coordination of work with engineers and consultants

CONSTRUCTION DOCUMENTS

We document the final approved design with detailed drawings that allow the project to be competitively bid, to be submitted for permit, and to provide information for construction. Our team will:

- Finalize all plans, exterior & interior elevations, sections, details, schedules, specifications, and cost estimates during this phase helps minimize project costs during construction
- Long lead items are identified to help minimize any impact on the project construction schedule
- Clearly addressed life safety issues to allow for a smooth permitting process
- Carefully coordinated all engineering and consultant work with the overall design to minimize changes and costs during construction
- Ensure the final construction document submittal is fully coordinated, which will also include a 100% detail total project cost summary

CONSTRUCTION ADMINISTRATION

During construction, our team will work closely with the CMAR to ensure that the design intent is met throughout the process. Our team will respond to construction questions, review shop drawings and submittals, make regular site visits to evaluate the construction progress and approve pay applications from the contractor. Our team will:

- Ensure the design intent is carried out through the construction process
- Be a resource to the contractor and client for questions and issues that may arise during the construction process



PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5
Visioning and Programming	Schematic Design	Design Development	Construction Documents	Construction Administration and Project Close-Out

2b. COORDINATION OF SUBCONTRACTORS

The Coordination with the engineering disciplines and other specialty consultants is critical to the success of the project. During the schematic phase of design, CBRE sits down with the engineering team to discuss the proposed plan, space requirements, and existing infrastructure components of the building. This allows the designers to take the team's input and address them early in the process by:

- Establishing reoccurring "team integration design charrettes"
- Defining roles, responsibilities & define priorities
- Continually reviewing individual team goals & performance
- Conducting Visioning Workshops

The design team, subconsultants, CMAR and owner actively participate in the design documentation process. Live, shared, interactive BIM models are used for on-site and online coordination meetings in order to depict accurate, real-time project details to run clash detections, which minimize costly and time consuming changes in the field and allows the design team to maximize every square inch of the building.

DESIGN DEVELOPMENT PHASE

During design development, we work with the engineering team to coordinate any unique or problematic issues that were identified during schematic design. For complex projects, our team will request a design narrative from each of the engineering disciplines at the end of each percentage of Design Development that is established in the schedule that can be used for cost estimating throughout the progress of the design. These independent disciplines are combined during the Design Development phase to create an interdependent representation of the building and an initial pricing exercise is performed.

CONSTRUCTION DOCUMENTS PHASE

Throughout the construction document phase, collaboration and a formal QA set of drawings will be reviewed at various percentages of the work prior to issuance final permit documents ensuring the design is coordinated with all engineering disciplines. Since the project will be executed in BIM software, a "clash detection" session is held at various established milestones in the schedule where the entire design and engineering teams go through the BIM model and discuss any conflicts.

Again, at the end of Construction Documents, the model is transferred to the Construction Manager to coordinate with the Owner and other subconsultants to avoid field conflicts. During the Construction Documentation phase, the subconsultants extract information from the base model to create shop drawings which accelerates the review and approval process.



2c. USE OF TECHNOLOGY

Digital technology and data analytics play a critical role in CBRE's overall business. They are key to how we deliver services and differentiate our offerings—and are central to our long-range growth strategy. CBRE believes the best program outcomes are achieved when data is connected and integrated across a scalable technology environment supported by strong data governance. Our architecture and data governance process combine to enable truly integrated reporting, while also remaining flexible and scalable. Our vision is to drive positive program outcomes by combining data from internal, external, and third party sources, thereby improving visibility into operations and enabling more informed decisions.

CBRE has the ability to rapidly design and deploy a suite of world-class templates that we can tailor to Broward County's specific requirements of the program. Our combined data integration processes and analytics/reporting templates deliver business-centric, industry-leading data visualizations that seamlessly navigate the portfolio and identify opportunities for action. One platform that is readily available for FLL & HWO's consideration is CBRE's Technology Platform "Kahua." Kahua is a Project Management Information System (PMIS) that allows CBRE to streamline, collect, and share data and provides a consistent financial language across the globe. Kahua has been used to create our Fit-Out Cost Guides, and allows our team to fully understand and communicate detailed information throughout project delivery.

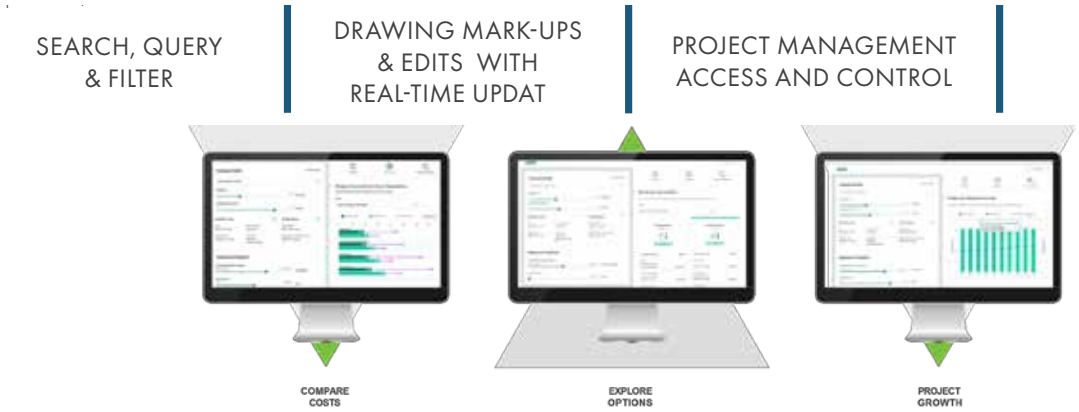
We believe effective client reporting begins with a deep understanding of who the client is, their business needs, goals, objectives, and challenges—and the role reporting plays in enabling them to manage and optimize their business. In our experience, the best client reporting begins with client engagement. We support many clients in taking a step back to look at their overall client relationship management (CRM) program, process and approach. With this wide-angle lens, we can refine the overall program, including clarifying and confirming the role and value of reporting and analytics within this context.

PROJECT MANAGEMENT ACTIVITY:
Enhanced visibility into projects to manage risk, cost and current status.

PROJECT PLANNING:
Reduce schedule risk by monitoring past due and upcoming project milestones.

PROJECT BUDGET ADHERENCE:
Reduce budget risk by tracking how much remains to be approved, invoiced, and/or paid by the end of the project.

PROJECT DETAIL:
Provide individual project details to manage schedule, cost and risk.





Mobile Access

CBRE can develop a web-based tool that visualizes a project's position via any mobile device (tablets, iPads, and mobile phones). This provides convenient, quick answers to many stakeholder questions, such as:

- **What projects have been committed to the program?**
- **How much is the construction budget for the project?**
- **What is the current status of the program/projects?**
- **What areas of the airport are impacted?**

RENDERINGS

Visualizing a built-out space, even with the help of plans, elevations, and sketches, can be a challenge. Clients want to understand what it will look like, how it will 'feel' and how it will serve their business.

Once the design scope has been finalized, the CBRE Build team will work with the design team to create renderings allowing you to envision your future space. This has proven to be a useful tool in our process in order to capture any last-minute changes before the design has been finalized. These renderings also serve as a tool for the airports to visualize the change to their future environments. CBRE Build can provide high quality, photo-realistic renderings to communicate design intent and help our clients make better-informed decisions on their projects.

For project marketing purposes, CBRE Design can also provide 3D fly-throughs upon request.

CBRE's Build team has developed PlansPro, turning test-fits and CAD drawings into bespoke 3D virtual experiences. 3D rendered spaces are delivered and explored via an easy to access and shareable website. This proprietary software allows our clients to imagine possibilities, experiment with space and turn ideas into reality. The visualizations are immersive experiences, complete with accurate panoramic views and customizable design themes.

Click to see example of our BUILD technology



Section 3

PAST PERFORMANCE

3a. Prime's Experience and Adherence to Timing & Budget

3b. Experience & Capabilities in CAD/BIM

3c. Experience in Dealing with Regulatory Agencies

3d. Experience Providing Inspections



NEW TERMINAL DEVELOPMENT

HEWANORRA INTERNATIONAL AIRPORT







PRIME CONSULTANT

CBRE

Year Completed

2018-2021

Location

P.O.Box 651, Manoel Street
Castries Saint Lucia

Size

350,000 SF

Services Provided

« Master Planning
« Overall Design
« Architect of Record
« Construction Administration

Key Staff Involved

« Fernando Gavarrete
« Rob Chomiak
« Daniel Diez
« Alicia Bache-Wiig
« Eduardo Luaces
« Luis Rodriguez
« Ernie Garcia
« Sasha Kayal
« David Walters
« Robert Sequeira

THE DETAILS

Hewanorra International Airport (IATA: UVF) is managed and operated by the Saint Lucia Air and Seaports Authority (SLASPA). It handled over 700,000 passengers and 1,441t of cargo in 2019. The growing demand for air transportation forced the airport authorities to redevelop the airport in accordance with the demand forecast.

The new airport terminal design reflects the splendor of the island's tropical rain forest, by reinterpreting the Calabash Tree, the country's national tree and lush canopy through the use of arborescent columns and wood slat ceilings throughout. The 337,000 SF proposed terminal, is a $250 million dollar airport facility comprising of five new contact gates and one hardstand position served from 5 new passenger loading bridges and two apron injection points. The facility features more than 1,500 passenger seats in the hold rooms, make-up area and ramp to 8 gates, a grand open-air Ticketing Hall and covered Curbside with flexibility in the structure to allow for future expansion. The concourse level, which is accessed through a central vertical circulation core, includes natural light-filled departure lounges linked by a skylight central circulation strand which is served by a number of concessions including restaurant, beverage, duty free and other retail facilities. A VIP Lounge Club Lounge, new Immigration and Customs Inspection Facility and Baggage Claim Hall are part of the program. The New Master Plan for also includes a car park for 250 spaces and additional area for GSE parking; expansion of the existing cargo operations by relocating the current cargo facilities to operate from the presently unused runway. Cargo facilities for six handlers and apron parking for 4 wide body aircraft are to be provided in the initial phase.

This Terminal offers the first of its kind Arrival Hall in the Caribbean, with a fully air-conditioned space, an interior garden backdrop, boasting 25 rental car kiosks, four resort lounge areas, a large restaurant with exterior seating, and restrooms. The curbside pick-up area is covered by the upper drive and allows for all transportation activity to take place in an efficient and comfortable.

Project Reference

NAME(S): Daren Cenac, General Manager

GOVERNMENT ENTITY: Saint Lucia Air and Sea Ports Authority

PHONE NUMBER(S): 758.457.6120

EMAIL: Daren.Cenac@slaspa.com

NEW TERMINAL DEVELOPMENT

HEWANORRA INTERNATIONAL AIRPORT







RELEVANCE TO FLL/HWO PROGRAM

- [✈] 337,000 SF proposed terminal
- [✈] 700,000 passengers
- [✈] Five new contact gates
- [✈] One hardstand position
- [✈] Five new passenger loading bridges
- [✈] Two apron injection points
- [✈] 1,500 passenger seats in the hold rooms
- [✈] Make-up area and ramp to 8 gates
- [✈] Open modern Ticketing Hall
- [✈] Covered Curbside
- [✈] Expansion of the existing cargo operations
- [✈] Cargo facilities for six handlers
- [✈] Apron parking for 4 wide body aircrafts
- [✈] An interior garden backdrop
- [✈] 25 rental car kiosks
- [✈] Four resort lounge areas
- [✈] Car park for 250 spaces
- [✈] 51,000 SF of GSE parking and staging
- [✈] Taxi queuing area
- [✈] 32 bus parking area
- [✈] Upper drive

HIGH E SATELLITE CONCOURSE RENOVATION

MIAMI INTERNATIONAL AIRPORT







PRIME CONSULTANT

CBRE

Year Completed

2017

Location

Miami, FL

Size

120,000 SF

Services Provided

« Architect of Record
« Program Management
« Construction Management
« Quality Assurance Oversight
« Funding Management
« Resident Inspection/Testing
« Owner's Representation
« Contract Administration
« Scheduling/Doc. Control

Key Staff Involved

« Fernando Gavarrete
« Daniel Diez
« Eduardo Luaces
« Luis Rodriguez
« David Walters

THE DETAILS

The Satellite E Concourse Renovation was one of the numerous projects that were part of a $1.1 billion Terminal Optimization Capital Program targeted as an overhaul of the central terminals at Miami International Airport. The project was initiated to support the various airlines' continued growth plans at the Airport in order to accommodate the increasing gate needs. The existing E Concourse was built in the 1970s and includes nine gates, four main hold room areas, and various concession spaces. Renovations, modifications, and repairs were made to the entire concourse to modernize finishes, meet updated codes, provide adequate support for airline operations, and improve passenger flow.

The interior renovation of the 120,000 SF project involved replacing all ceiling, flooring, wall treatments and miscellaneous finishes to meet MIA standards and maintain continuity between terminals. The HVAC, fire protection and lighting systems were also upgraded to meet the latest codes and performance standards. Four new elevators were incorporated at strategic locations throughout the terminal to meet life safety codes and accessibility requirements. On the exterior the entire glazing system was replaced by a Hurricane Impact Resistant storefront system to meet current codes, and various roof repairs were included to mitigate any further water infiltration.

Overall, the modernization proved to enhance passenger experience, optimize the performance of the concourse, minimize maintenance efforts, and create uniformity with the newer which added true value to the operating concourse.

Project Reference

NAME(S): Felix Pereira, Chef of Design

GOVERNMENT ENTITY: Miami-Dade Aviation Department

PHONE NUMBER(S): 305-869-1622

EMAIL: fpereira@miami-airport.com

HIGH E SATELLITE CONCOURSE RENOVATION

MIAMI INTERNATIONAL AIRPORT







RELEVANCE TO FLL/HWO PROGRAM

- [✈] Built in the 1970s
- [✈] Includes nine gates
- [✈] Four main hold room areas
- [✈] Various concession spaces
- [✈] 120,000 SF interior renovation project
- [✈] The HVAC and fire protection systems upgrades
- [✈] Four new elevators
- [✈] Exterior glazing system was replaced to code
- [✈] Enhance passenger experience
- [✈] Optimize systems performance
- [✈] Minimize maintenance efforts
- [✈] Created uniformity with the newer terminals at MIA

LOWER E CONCOURSE RENOVATION

MIAMI INTERNATIONAL AIRPORT







PRIME CONSULTANT

CBRE

Year Completed

2015

Location

4200 NW 36th St.
Miami, FL 33166

Size

83,000 SF

Services Provided

« Architect of Record
« Program Management
« Construction Management
« Quality Assurance Oversight
« Funding Management
« Resident Inspection/Testing
« Owner's Representation
« Contract Administration
« Scheduling/Doc. Control

Key Staff Involved

« Fernando Gavarrete
« Daniel Diez
« Eduardo Luaces
« Luis Rodriguez
« David Walters

THE DETAILS

To support the airlines' continued growth plans at Miami International Airport and to accommodate the continued increasing gate needs, the $1.1 billion Terminal Optimization Program was created. The Lower E Concourse Renovation was one of the numerous projects that were part of the MIA's Terminal Optimization Program. The existing E Concourse was built in the 1970s and includes eight gates, six main hold room areas, and numerous concession spaces. Renovations, modification, and repairs were made to the entire concourse to modernize, meet updated codes, provide adequate support for airline operations, and improve passenger flow.

The project's interior renovation of 83,000 SF replaced all ceiling, flooring, and miscellaneous finishes to meet MIA standards and maintained continuity between terminals. The HVAC and fire protection systems were upgraded to meet the latest codes and performance standards, while the APM lobby was fully renovated to match the NTD APM standards.

This modernization enhanced passenger experience, optimized concourse performance, and minimized maintenance efforts, which added real value to the operating concourse.

The Lower E Concourse Renovation was performed under an accelerated schedule with a double shift work load. The accelerated schedule on the project was required to meet the gate demand and minimize the impact to the passenger flow during the renovation of each particular section of the lower and E satellites. The safety requirements of the passengers was also achieved by a reduction of the schedule and creating an overlap for the mechanical, electrical and plumbing subcontractor and closely coordinating each construction trade.

Project Reference

NAME(S): Felix Pereira, Chef of Design
PHONE NUMBER(S): 305-869-1622
GOVERNMENT ENTITY: Miami-Dade Aviation Department
EMAIL: fpereira@miami-airport.com

LOWER E CONCOURSE RENOVATION

MIAMI INTERNATIONAL AIRPORT









RELEVANCE TO FLL/HWO PROGRAM

[✈] Built in the 1970s
[✈] Includes eight gates
[✈] Six main hold room areas
[✈] Numerous concession spaces
[✈] Entire concourse renovations, modification, and repairs
[✈] Updated codes
[✈] Provided adequate support for airline operations
[✈] Improve passenger flow.

SUPPORT SERVICES CONTRACT

HARTSFIELD-JACKSON ATLANTA INTERNATIONAL AIRPORT



PRIME CONSULTANT

CBRE

Year Completed

2015-Ongoing

Location

Atlanta, GA

Size

100,000 SF

Services Provided

« Architecture
« Engineering
« Programming and Planning
« Quality assurance oversight
« Project controls
« Owner's representation/ Inspections
« Contract Admnistration

Key Staff Involved

« Mike Rometo
« Peter Barron

THE DETAILS

The CBRE team is providing architecture, engineering, cost estimating and scheduling services for the renovation, addition, demolition and upgrading services for the Hartsfield-Jackson Development Program.

West Terminal Expansion - We preformed existing conditions documentation and studies, code studies and analysis, architectural and engineering studies, and scope and cost estimates of numerous options were included. Several enabling projects were anticipated in preparation of the expansion of the existing terminal.

North & South Terminal and T-Concourse Upgrades - We provided HVAC design for repair and upgrade of the existing HVAC system and supporting systems serving the Main North and South Terminals and the T-Concourse, approximately 1,200,000 square feet, including HVAC design for Concourse A, Parking Deck Study, Concourse B, and the FAA ATCT Demolition. Concourses A, B, and Automated People Mover (APM) Station Upgrades. Aero Systems Engineering also worked alongside PMT on this project.

"T" Terminal Demolition - We developed demolition plans complete with detailed phasing for the third floor of the south end of the T terminal, while preserving ongoing operations and passenger movement on the floors below. All three gates on the second floor beneath this demolition area remained active during this program.

Vertical Transportation Upgrades - The vertical transportation project is a multi-stage project modernizing the Airport's airside vertical transportation system of elevators, escalators and moving walks. The scope includes replacing units and components with a complete modernization which will bring them to a 'like new' condition.

Parking Deck Electrical/Structural Study - HSST provided electrical and structural engineering services to assess 4.4 million SF of parking decks. As a result of the study and field measurements, HSST was then commissioned to design a complete retrofit power and lighting system to correct the existing deficiencies.

As well as numerous other projects such as:
-North and South Parking -Rescue and Fire Station #33 -Control Tower Demolition
-Terminal Central Utility Plant Chiller Renovation

Project Reference

NAME(S): Todd A. Butler, President, Comprehensive Program Services
PHONE NUMBER(S): 770.451.7670
GOVERNMENT ENTITY: City of Atlanta Department of Aviation
EMAIL: tbutler@cps-atlanta.com

SUPPORT SERVICES CONTRACT

HARTSFIELD-JACKSON ATLANTA INTERNATIONAL AIRPORT







RELEVANCE TO FLL/HWO PROGRAM

- [✈] Staff augmentation & specialty services to the Department of Aviation
- [✈] Extensive renovations to the terminal and concourses
- [✈] Replacement and expansion of structured parking decks
- [✈] On-site hotel
- [✈] Construction of additional end-around taxiways
- [✈] Possible sixth runway
- [✈] Adding parking for passengers and employees
- [✈] Expanding air cargo facilities

.



PAST PERFORMANCE





Fort Lauderdale – Hollywood International Airport

INLINE BAGGAGE & TERMINAL ENHANCEMENTS

PMTECHNOLOGIES project professionals

PRIME CONSULTANT
PMT

Year Completed
2013-2021(Dec)

Client
Delta Air Lines, Inc.

Size
40,000 SF Terminal

Cost
$32 M (Baggage)
$15 M (Sky Club)

Services Provided
« Program & Project Management
« Airline Liaison Services
« Design/Construction Management
« Program Reporting
« Document Controls
« Finance Management

Related Scope
« Common Use IT
« Terminal-Building Modernizations
« Baggage Program (BHS)
« Club Build

Worked With
CBRE, AERO Systems Engineering, KEITH, Messam, Tierra, Lakdas

TERMINAL 2 MODERNIZATION PROGRAM
As part of phase 1, PMT managed the installation of a new In-Line Baggage Screening System in order to automate the checked bag security screening process. The checked bag security screening/conveyor system was replaced and streamlined to meet current TSA requirements while maintaining normal operations. This enabled sections of the ticket lobby to be reclaimed as a number of screening machines were eliminated from the lobby areas. The result was a more reliable, consistent, safe and seamless passenger experience. Phase two, required PMT to manage all aspects of the modernization of Terminal 2. This includes significant planning and implementation of the pre-construction, construction and closeout of each project of the Modernization effort as well as assuring the program meets all deadlines, budget sand CBE goals. The project has been on-going in an operational airport environment.

CURRENT PROJECTS
Lobby Renovation
Concessions Program
Restroom and Gate Enhancements
New Vertical Transportation
Mezzanine Level Sky Club

TERMINAL 2 SKY CLUB
The FLL Sky Club is a 9,332 SF new facility with a high-level of hospitality-driven finish on a new poured structure mezzanine deck. This new structure sits directly within the on-going modernization program for the Terminal 2 Fort Lauderdale International airport by BCAD. The scope of services for this program included design management, building department submission, airport authority coordination, construction management, financial control, and project management from lifecycle of 60% design through substantial completion + closeout. The construction included finishes from 12 different countries and was substantially completed within 7 months; a new record for the fastest built Sky Club within the Delta system. The facility housed 2 separate kitchens, multi-office space, expanded back-of-house preparations, and an open-concept common-space with feature lighting fixtures throughout the upper deck. Estimated total value of $15M.



Fort Lauderdale – Hollywood International Airport

FLL TERMINAL 2 MODERNIZATION CONSTRUCTION

KEITH
Engineering Inspired Design.

Year Completed
2019

Client
Gresham Smith

Services Provided

« Subsurface Utility Engineering

« Construction Engineering Inspection

« Civil Engineering

PROJECT DETAILS

This extensive modernization project is part of the Fort Lauderdale-Hollywood International Airport Improvements and Renovations Program (FLLAIR). Terminal 2 dates back to the early 1980's. To meet current design standards, the building needed to grow by approximately 20,000 square feet to accommodate concessions, security and restrooms. This increase in square footage cannot impact the aircraft apron, which surrounds the building. To meet the needs of the requisite improvements, the unutilized portion of the exterior building footprint was in-filled. The design also calls for a mezzanine level in the gate area. A clerestory ceiling was designed to create a bright, modern environment. KEITH, working as a subconsultant partner, provided the civil engineering design and permitting of the airside and landside water distribution and sanitary sewer improvements, as well as the paving and drainage improvements. KEITH is also providing topographic surveying services and subsurface utility engineering services.

Our excellent working relationship with the staff at Broward County Water and Wastewater Services (BCWWS) afforded us the ability to obtain fire flow modeling results from their staff early in the process. Numerous other subconsultants are involved in this project team and we have been coordinating and working closely with many of them in the mutual development of the design and construction drawings. In addition to the typical civil engineering design role, we are assisting with 3D modeling of the existing structure and integrating the proposed designs. This is one of the first BIM project to utilize the newly adopted BCAD BIM standard. To establish the base for the model, we utilized state-of-the-art survey equipment and a 3D laser scanner. The scanner shoots over 100,000 points a second while creating a complete 3D point cloud of existing conditions. The point cloud was utilized to start modeling the existing building and establish a state-plane coordinate base location. KEITH created a model of the proposed improvements and some of the existing using Revit & AutoCAD Civil 3D. Navisworks was utilized to run clash detections for the entire site. The team is currently beginning to create and populate the COBie data set that will be part of the BIM deliverable. Along with the COBie data set IFC files are also required. These files have been populated and will be sent along with the BIM deliverable.



Fort Lauderdale – Hollywood International Airport

TERMINAL 3 MODERNIZATION

KEITH
Engineering Inspired Design.

Year Completed
2019

Client
Gresham Smith

Services Provided
- Surveying
- Subsurface Utility Engineering
- Construction Engineering Inspection
- Civil Engineering

PROJECT DETAILS

The major goal of the Terminal 3 Modernization is to improve passenger experience by relocating and expanding the security check points in its two Concourses E and F, changing the shops and restaurants on Las Olas Blvd from pre-security to post security, adding new restaurants and shops for passengers post security, overall enhancement of the terminal's appearance and adding new restrooms and renovating existing restrooms. The FLLAIR's main goal is to provide a better customer experience through modern facilities.

KEITH, working as a subconsultant, is responsible for the landside civil engineering design services and airside water distribution and sanitary sewer collection system design services. KEITH is also providing Vacuum Excavation (Impervious-Airside) with the supporting Surveying services. Design challenges include modification of water and sanitary sewer systems that have been recently installed for the Terminal 3 Baggage System (CBIS) project. Our excellent working relationship with the staff at Broward County Water and Wastewater Services (BCWWS) has afforded us the ability to preview our proposed design work with them and obtain the fire flow modeling results from their staff early in the process. Numerous other subconsultants are involved in this project team and we have been coordinating and working closely with many of them in the mutual development of the design and construction drawings. In addition to the typical civil engineering design role, we are assisting with 3D modeling of the existing structure and integrating the proposed designs.



Fort Lauderdale – Hollywood International Airport

TERMINAL 4 CPM SERVICES DEVELOPMENT PROJECT

KEITH
Engineering Inspired Design.

Year Completed
2015

Client
Broward County Aviation Department

Services Provided
« Construction Engineering Inspection
« CM/PM

PROJECT DETAILS

Construction Project Services - Extension of Broward County Aviation Department staff responsible for managing the Construction Manager at Risk construction project as the Owner's Representative; responsible for quality assurance, design and safety oversight, and contract compliance associated with completing renovation and expansion construction work for: New airline ticket counters and airline ticket offices (ATO); xxpanded Customs and Federal Inspection Services (FOS) areas with new vertical circulation cores; miscellaneous tenant build-out and associated relocations; and elevator and escalator replacements.

As CBE prime consultant, KEITH was responsible for project oversight to include construction administrative services, managing design schedules and design packages, assisting with logistics, planning, monitoring, permitting, safety coordination, security compliance, field inspections, invoice review, change management, cost performance, quality assurance and control, from start-up through final completion including commissioning all warranties, as-builts, and record drawings.



Fort Lauderdale – Hollywood International Airport

ENVIRONMENTAL ASSESSMENTS, WILDLIFE SURVEYS, & DUE DILIGENCE SERVICES

Year Completed
2013

Client
EAC Consulting, Inc.

Services Provided
« Environmental Assessments
« Wildlife Surveys
« Due Diligence Services

Construction Cost
$100 Million

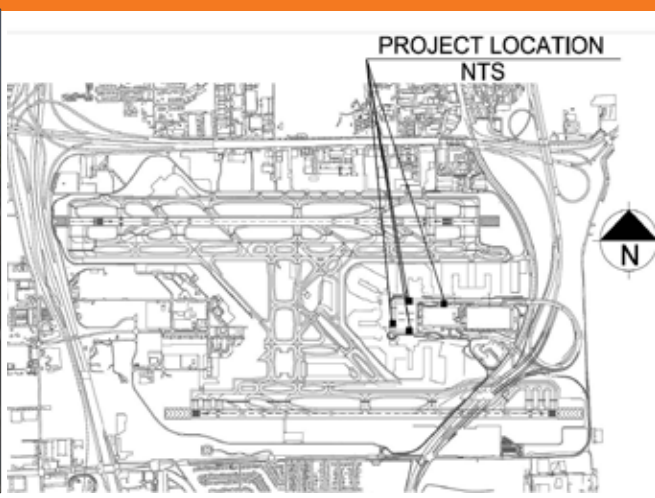
PROJECT DETAILS

The Chappell Group, in conjunction with EAC Consulting, Inc. (EAC) was contracted to perform General Engineering Services for the Fort Lauderdale/Hollywood International Airport for Broward County Aviation Department (BCAD). TCG was responsible for all environmental assessments, wildlife surveys, and due diligence services for the Terminal and Interchange Improvements at the airport.

Assessment and due diligence services included the site inspection, records review and preparation of demolition and asbestos abatement specifications for the existing Key Power facility building at North Perry Airport. The Chappell Group, Inc. performed these tasks for EAC Consulting by March 2013.

PAST PERFORMANCE





Fort Lauderdale & North Perry Airports

ROADWAYS, VALET & PARKING

LAKDAS/YOHALEM ENGINEERING, INC.

Services Provided

« Structural Engineer of Record
« Structural Engineering Design Services
« Pre-Construction and Construction Phase Services
« Threshold Inspection Services
« Design Development
« Construction Drawings
« Coordination with On-Call Contractor

EXIT ROADWAYS AND VALET ROUTING IMPROVEMENTS

Lakdas/Yohalem, Inc. acted as Structural Engineer on Record for design improvements for the Hollywood-Fort Lauderdale International Airport.

- Approximately 40' long bridge structure with 10' cantilevers adjacent to the existing helix ramp structure.
- Approximately 90' long MSE (Reinforced Cantilever) Ramp
- 5 Overhead signage structures
- Light poles
- Partial demolition of existing Helix Ramp

BCAD/BSO PARKING IMPROVEMENTS

Lakdas/Yohalem, Inc. acted as Structural Engineer on Record for renovations and parking improvements at the Fort Lauderdale-Hollywood International Airport and North Perry Airport.

Verified available existing survey and supplemented with new survey data for a complete representation of existing conditions. Improved overall schematic design and designed new parking area at each terminal for Broward County Sherriff Office Parking.



Los Angeles International Airport

TERMINAL 5 RENOVATIONS/MOVE

PMTECHNOLOGIES project professionals

PRIME CONSULTANT
PMT

Year Completed
2013 - 2018

Client
Delta Air Lines, Inc

Services Provided
« Capital Improvement
« Coordination
« Program Management
« Owner Representation
« Design/Construction Management
« Financial Management

Related Scope
« Passanger Boarding Bridges
« FIS/CBP/Security Checkpoint Lanes
« Terminal Move
« Baggage Systems
« Lounge & Terminal Renovations
« Common Use IT

TERMINAL 5 MODERNIZATION AND PBB TERMINAL MOVE:

For over six years, PM Technologies (PMT) worked in conjunction with Delta Air Lines, Inc. to coordinate the renovation of Terminal 5 at Los Angeles International Airport. This project was ongoing in an active airport environment. CA Green Law and seismic enhancements were incorporated into the program. PMT assisted with an internally-funded Delta One and Sky Club Refresh on the terminal as well as the 35 major projects' completed phases that included baggage systems, FIS, PBB, SSCP lobby renovations, switchgear, IT and other initiatives. T5 had four phases of PBB, a total of 13 PBB in an ongoing operational environment. Aero Systems Engineering also worked alongside PMT on the LAX project.

TERMINAL 2,3,5,5 PBB & T6 HOLDROOMS

At the time of the operations of Delta Air Lines in Terminal 5 (additionally 2-3 and 6), the need for replacing of the legacy system boarding bridges and other ancillary components on the apron were identified. PMT was involved in managing and coordinating the project. Completed phases included T6 Boarding bridges 68A, 68B, 69B, coordination with Westfield Concessions, hold-room improvements, T2/3 TBIT PBB, and the Peoples Tunnel connecting T5 to T6. All of the above activities were carefully coordinated with the airline's peak travel time to limit the impact to operations.

T2/3 TENANT RELOCATION PROGRAM

The Delta Terminal 2 and 3 Relocation project consisted of the relocation of 28 airlines and vendors across multi-terminals at LAX in a six-day time frame. The design initiated over 300+ LADBS base building permits and hundreds of supplemental permits. Due to the location and land restraints within the airport, the options for temporary locations were not possible. With this constraint, airlines were swapping entire operations locations overnight. During the short window of a vacated space, all associated trades, from MEP to floor and drywall, were completing a renovation of an average of 60-rooms per night. Other scope components included new com rooms, new fuel pits, new boarding bridges, new premium clubs, new vertical transportation, new hold room spaces, building expansions, entitlements, new MEP's, new support spaces, new bus-gate, and more.

Leading up to the move-date, the anticipated man-count reached nearly 1,000 per day. The end result of this successful project and relocation is credited with the largest relocation in aviation history.



Phoenix Sky Harbor International Airport

TERMINAL/SKY CLUB MOVE & RENOVATION

PMTECHNOLOGIES project professionals

PRIME CONSULTANT
PMT

Year Completed
2018

Client
Delta Air Lines, Inc.

Services Provided
« Project Management
« Owner Representation
« Design Management
« Construction Management
« Financial Management

Related Scope
« Terminal Move
« Common Use IT
« Apron impacts (GSE and gate planning)
« Gate planning
« Above and Below Wing renovations
« Baggage Programs
« Signage Improvements
« Gate Improvements
« Lounge Move and Renovations

T3 SOUTH CONCOURSE - TERMINAL MOVE AND SKY CLUB:

In representing Delta Air Lines, PM Technologies (PMT) acted as the program manager to ensure successful operations in the relocation from PHX Terminal 3 North Concourse to Terminal 3 South Concourse. This relocation involved moving a category-A sized operations with 6 gates to a new concourse with 10 common-use preferred gates. The relocation included various tenant improvement projects, a new Sky Club, all new below-wing operations, above-wing SITA common-use operations, a new common-use and proprietary BHS system, new RFID roll-out, identifying missing scope from the airport base-building, roll-out of new MDF's/IDF's for Delta IT, new circuit orders from Telcom's, new signage/branding, new GSE and Line Maintenance lease spaces, ACS support spaces, keying schedules, GSE equipment relocation, gate plotting plans, and gate fit plans for all aircraft in the system. The relocation went successfully with no impact to operations and Day-1 flight schedules occurred as normal. PM Technologies coordinated all construction and communicated all move-plans, schedules, and relocation activities.

SKY CLUB:

PM Technologies was contracted to manage the completion of a full renovation of a 9,000 SF facility at Sky Harbor International Airport for Delta Air Lines. The renovation includes new finishes, MEP's, owner-furnished items, branding, kitchen equipment, corporate standards, vendor equipment, IT infrastructure, WIFI, and design inspirations with local artwork. This installation, among the other flagship Delta Sky Clubs, incorporates the brand standards seen throughout the country while maintaining a design feel unique to Terminal 3 at PHX Airport.

WORKED WITH:
CBRE
Keleusmatic Technologies



Sarasota-Bradenton International Airport

PBB REPLACEMENT & POWER DISTRIBUTION UPGRADE (13 GATES)

PRIME CONSULTANT
AERO Systems Engineering

Year Completed
2017 - 2019

Client
Sarasota Manatee Airport Authority

Services Provided
« Design
« Construction

ASSIGNMENT

The complete airside planning and redesign of SRQ's existing terminal highlights ASE's ability to develop and implement a design in a timely and cost-effective manner. ASE provided design and construction administration services for the replacement of all PBBs, GPUs, and PCAs, electrical infrastructure upgrades, airside design, and LED ramp lighting upgrades

SCOPE

- Complete airside planning and design of all 13 gates
- Fleet mix/flight and carrier analysis
- Aircraft parking layouts
- Site surveys; aircraft parking planning
- PBBs
- Structural foundations analysis
- Point of use PCA units
- Point of use 400Hz
- Terminal electrical infrastructure to each gate, including new distribution panels in terminal
- Ramp lighting upgrades
- Construction administration

CHALLENGES & ACCOMPLISHMETS

- Electrical distribution upgrades throughout terminal to accommodate new point of use PCA units
- Equipment reutilization plan
- Modified striping and equipment sizes to increase the fleet mix at multiple gates
- Analyzed and designed conversion of existing ramp lighting to LEDs
- Provided full CA services, including bid evaluations and recommendations



Newark International Airport – Newark, NJ (EWR)

TERMINAL ONE / TERMINAL A REPLACEMENT PROJECT - (33 GATES)

PRIME CONSULTANT
AERO Systems Engineering

Client
Tutor Perini/ Parsons

Project Cost
$4 Million

ASSIGNMENT
ASE was the Civil Engineer of Record for this project at EWR which replaces the older, existing Terminal A and adds 33 new gates. The concourse is approximately 1.2M square feet and includes three levels. Landside improvements include a new pedestrian bridge, departure level frontage bridge, and at-grade roadway improvements. Integration with larger program improvements include new taxiways, parking garage, generator building and demolition of the old terminal satellite councourses.

SCOPE
- Complete airside planning and design of 33 new gates
- 33 new passenger boarding bridges
- Concrete roadside pavement
- Fuel system design including vaults
- Structural foundation design for PBBs and walkways
- Portland cement concrete apron pavement
- Cathodic protection system
- Apron grading
- Airfield markings
- Asphalt pavement

CHALLENGES & ACCOMPLISHMETS
- Incorporated future airline fleet mix needs and ramps striping standards to support post-move requirements
- Coordination with other concurrent projects which were part of the program were ongoing throughout design
- Utility coordination, pavement elevations and phasing of the project required a tightly coordinated effort
- Project area of direct design encompassed over 43 acres of civil and airside design



Hartsfield-Jackson Atlanta International Airport

PBB REPLACEMENT AND UPGRADE PROJECT (116 GATES)

AERO SYSTEMS ENGINEERING

PRIME CONSULTANT
AERO Systems Engineering

Year Completed
Design: 2018
Construction: 2020

Client
City of Atlanta Department of Aviation

Project Cost
$75 Million

ASSIGNMENT

ASE provided design and construction of the single largest aviation fixed ground support system project in history. The project included design and replacement of 116 PBBs, 91 400Hz gateboxes, 59 PCA AHUs, 15 POU 400Hz units, eight POU PCA units, building electrical upgrades, central PCA plants, central 400Hz plants, GSE communication buses, and building egress systems across seven concourses. It impacted every gate and every airline operating at the world's busiest airport.

SCOPE

- Full site surveys, complete airside, planning, design, and construction
- Aircraft parking planning and layouts
- Renovation, relocation, and upgrades of 116 gate positions
- PBBs and fixed ground support systems
- Construction and installation of terminal doors and structural foundations
- PCA, 400Hz, 28.5VDC
- Terminal electrical/mechanical infrastructure and security access upgrades, including emergency egress modifications

CHALLENGES & ACCOMPLISHMETS

- Met requirements of DOA and all impacted airlines
- Fast-paced, phased design schedule
- Schedule analysis achieved gate flexibility to serve multiple airlines with operational requirements at individual gates simultaneously
- Aircraft parking changes to accommodate new generation PBBs
- Gate construction required significant coordination and phasing to minimize impacts on adjacent gate operations



Salt Lake City International Airport - Salt Lake City, Utah

REDEVELOPMENT PROJECT (TRIP) (38 GATES)

PRIME CONSULTANT
AERO Systems Engineering

Year Completed
2017

Client
HOK Architects

Project Cost
$1.8 Billion

ASSIGNMENT

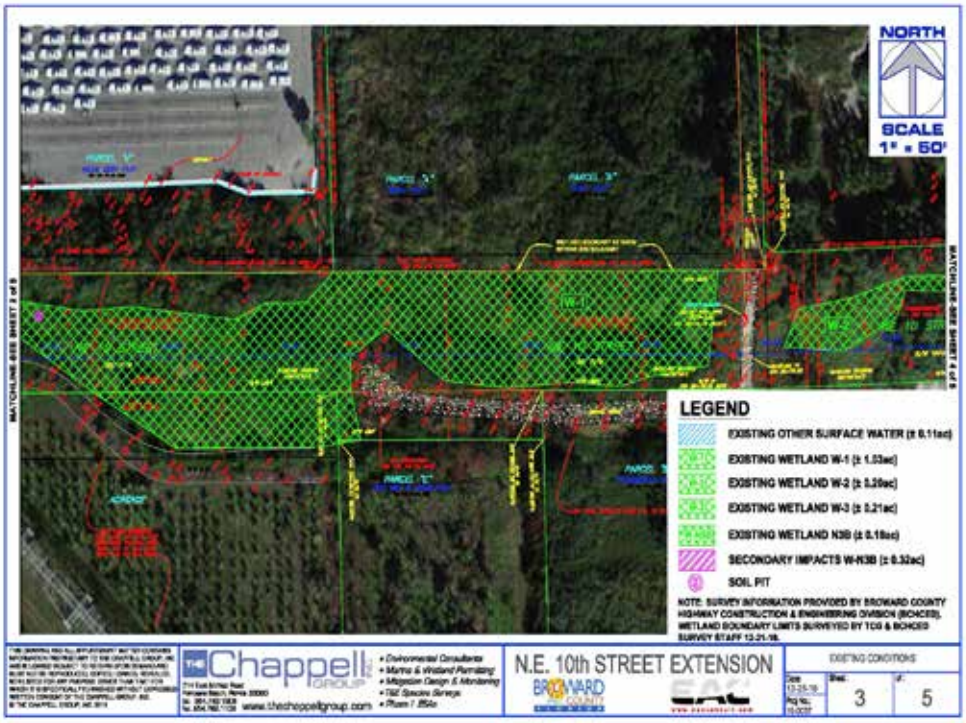
ASE provided complete airside designs for three concourses (SCW, SCE and NCW), complete airside aircraft maneuvering and parking, taxiways/ lanes, 38 gates (expandable to 47), PBBs, 400Hz ground power, three central PCA system plants, full facility eGSE battery charging, baggage valets, aircraft docking systems and potable water systems.

SCOPE

- Full site surveys, complete airside, planning, design and construction
- Aircraft parking planning, ramp striping and layouts
- PBBs and related fixed ground support systems
- 4-pipe central PCA systems with 8,240 ton-hours of thermal storage
- Gate-located PCA and 400Hz systems, baggage valets
- Aircraft docking, RIDS, and GSE charging and monitoring
- Terminal electrical/mechanical infrastructure and security interfaces

CHALLENGES & ACCOMPLISHMETS

- Met requirements of the Department of Aviation (DOA) and airlines
- PCA studies of available systems
- Central PCA systems instrumental in obtaining LEED Gold® certification
- Full BIM analysis using REVIT and clash detect
- Phased construction to maintain operations of existing facilities
- Met all applicable SLCIA Airport Authority standards and those of multiple tenants, the FAA, Transportation Security
- Administration (TSA), and Customs and Border Protection (CBP)



NE 10th Street Extension

THE Chappell GROUP

Client
Broward County Highway Construction & Engineering Division

Services Provided

« Preliminary Environmental Assessment

« Wetland Boundary Survey Delineation

« Jurisdictional Wetland Determination

« Regulatory Permitting

« Mitigation Credit Determination & Allocation

Construction Cost

$50 Million

PROJECT DETAILS

The proposed project consists of the proposed extension of NE 10th Street/Taylor Road east from US Highway 1 to the existing NE 7th Avenue. The proposed roadway extension and associated surface water management system is a component of the overall Ft. Lauderdale-Hollywood International Airport runway expansion project currently being undertaken by Broward County.

The project scope included preliminary environmental assessments, wetland boundary survey delineations, formal wetland determinations and regulatory permitting through the Broward County Environmental Protection and Growth Management Department (BCEPGMD), South Florida Water Management District (SFWMD) and U.S. Army Corps of Engineers (USACOE). The Chappell Group, Inc. was responsible for all environmental services related to the design and permitting of the roadway extension, including mitigation credit determination and allocation associated with the existing Broward County Everglades Restoration Area.





Port Everglades, Broward County

WETLAND ENHANCEMENT

THE Chappell GROUP

Client
Seaport Engineering & Construction Division – Port Everglades

Services Provided

« Environmental Permitting
« Benthic Survey
« Construction Observation
« Turbidity Monitoring
« Water Quality Analysis
« Permit Compliance
« Plant Inspections
« Erosion Control Inspection
« Sediment Quality Analysis
« Mitigation Permitting and Design
« Mitigation Monitoring

PROJECT DETAILS

The Chappell Group Inc. (TCG) is the lead environmental consulting firm for the design, permitting, monitoring, and construction inspection for the Port Everglades Wetland Enhancement project. The project was the creation of a 16.5-acre wetland enhancement area related to the release of a portion of the existing 8-acre conservation easement that will allow the Port to expand the Southport Turning Notch. The wetland enhancement project included the planting of over 53,000 mangroves, and over 17,000 Florida native transitional buffer plants. TCG prepared and processed the environmental applications for the mitigation and design of the wetland enhancement area to offset impacts associated with the proposed turning notch expansion. TCG also conducted construction inspection services including turbidity monitoring during in-water work, plant inspections of the mangroves and transitional buffer plants delivered, permit compliance, plan review, and erosion control inspections.

TCG is currently conducting mitigation monitoring of the wetland enhancement area, coordinating nuisance/exotic removal to maintain permit compliance, and preparing monitoring reports to submit to the environmental regulatory agencies.

Vendor Reference Verification Form

Broward County Solicitation No. and Title:

PNC2120437P1, Professional Consultant Services for FLL and HWO Airports, Building Projects

Reference for: CBRE-HEERY, INC. [f/k/a Heery International, Inc.]

Organization/Firm Name providing reference:

Hartsfield-Jackson Atlanta International Airport (ATL), City of Atlanta Department of Aviation, Planning

Contact Name: ERIC HALL Title: Principal Mechanica Reference date:

Contact Email: ERIC.HALL@atl.com Contact Phone: (404) 558-9022

Name of Referenced Project: PROGRAM PLANNING SERVICES

Contract No.	Date Services Provided:			Project Amount:
FC-9000/ RA 17-01-1017	05/12/2017	to	05/12/2022	$ 1,200,000.00

Vendor's role in Project: ☐ Prime Vendor ☒ Subconsultant/Subcontractor

Would you use this vendor again? ☒ Yes ☐ No If No, please specify in Additional Comments (below).

Description of services provided by Vendor:

Engineering design and planning services, including Mechanical, Plumbing, Electrical, Fire Protection, and Communications. Multiple Task Orders (19 to date) over the first 3 years of a 5 year contract.

Please rate your experience with the referenced Vendor:	Needs Improvement	Satisfactory	Excellent	Not Applicable
1. Vendor's Quality of Service				
a. Responsive	☐	☐	☒	☐
b. Accuracy	☐	☐	☒	☐
c. Deliverables	☐	☐	☒	☐
2. Vendor's Organization:				
a. Staff expertise	☐	☐	☒	☐
b. Professionalism	☐	☐	☒	☐
c. Turnover	☐	☒	☐	☐
3. Timeliness of:				
a. Project	☐	☐	☐	☒
b. Deliverables	☐	☐	☒	☐
4. Project completed within budget	☐	☐	☐	☒
5. Cooperation with:				
a. Your Firm	☐	☒	☐	☐
b. Subcontractor(s)/Subconsultant(s)	☐	☐	☒	☐
c. Regulatory Agency(ies)	☐	☐	☐	☒

Additional Comments: (provide on additional sheet if needed)

Overall, An excellent group with which to work.

THIS SECTION FOR COUNTY USE ONLY

Verified via: ____EMAIL ____VERBAL Verified by: _____ Division: _____ Date: _____

All information provided to Broward County is subject to verification. Vendor acknowledges that inaccurate, untruthful, or incorrect statements made in support of this response may be used by the County as a basis for rejection, rescission of the award, or termination of the contract and may also serve as the basis for debarment of Vendor pursuant to Section 21.119 of the Broward County Procurement Code.

BROWARD COUNTY FLORIDA

Vendor Reference Verification Form

Broward County Solicitation No. and Title:

PNC2120437P1, Professional Consultant Services for FLL and HWO Airports, Building Projects

Reference for: CBRE-Heery, Inc. [f/k/a Heery International, Inc.]

Organization/Firm Name providing reference:

BROWARD COUNTY - FACILITIES MANAGEMENT DIVISION

Contact Name: Dory Khater Title: Expansion Project A Reference date: 04/09/2021

Contact Email: DKAHATER@broward.org Contact Phone: (954) 873-2558

Name of Referenced Project: BROWARD COUNTY COURTHOUSE

Contract No.	Date Services Provided:			Project Amount:
60102128	06/14/2005	to	12/31/2023	$ 6,500,000.00

Vendor's role in Project: [▯] Prime Vendor [ ] Subconsultant/Subcontractor

Would you use this vendor again? [▯] Yes [ ] No If No, please specify in Additional Comments (below).

Description of services provided by Vendor:

Design services as part of a three (3) team Joint Venture, including Architecture, Mechanical, Electrical, Communications, and LEED. Multiple Projects awarded via several amendments.

Please rate your experience with the referenced Vendor:	Needs Improvement	Satisfactory	Excellent	Not Applicable
1. Vendor's Quality of Service				
a. Responsive	[ ]	[▯]	[ ]	[ ]
b. Accuracy	[ ]	[▯]	[ ]	[ ]
c. Deliverables	[ ]	[▯]	[ ]	[ ]
2. Vendor's Organization:				
a. Staff expertise	[ ]	[ ]	[▯]	[ ]
b. Professionalism	[ ]	[ ]	[▯]	[ ]
c. Turnover	[▯]	[ ]	[ ]	[ ]
3. Timeliness of:				
a. Project	[ ]	[▯]	[ ]	[ ]
b. Deliverables	[ ]	[▯]	[ ]	[ ]
4. Project completed within budget	[▯]	[ ]	[ ]	[ ]
5. Cooperation with:				
a. Your Firm	[ ]	[ ]	[▯]	[ ]
b. Subcontractor(s)/Subconsultant(s)	[ ]	[ ]	[▯]	[ ]
c. Regulatory Agency(ies)	[ ]	[ ]	[▯]	[ ]

Additional Comments: (provide on additional sheet if needed)

THIS SECTION FOR COUNTY USE ONLY

Verified via: ___EMAIL ___VERBAL Verified by: DORY KHATER Digitally signed by DORY KHATER Date: 2021.04.09 08:21:47 -04'00' Division: _____ Date: _____

All information provided to Broward County is subject to verification. Vendor acknowledges that inaccurate, untruthful, or incorrect statements made in support of this response may be used by the County as a basis for rejection, rescission of the award, or termination of the contract and may also serve as the basis for debarment of Vendor pursuant to Section 21.119 of the Broward County Procurement Code.

Vendor Reference Verification Form

Broward County Solicitation No. and Title:
PNC2120437P1, Professional Consultant Services for FLL and HWO Airports, Building Projects

Reference for: CBRE-HEERY, INC. [f/k/a Heery International, Inc.]

Organization/Firm Name providing reference:
RICONDO & ASSOICATES/THE CREATIVE EYE JOINT VENTURE

Contact Name: STEVE RYAN Title: DIRECTOR Reference date: 04/07/2021

Contact Email: SRYAN@RICONDO.COM Contact Phone: (859) 512-1411

Name of Referenced Project: PROGRAM PLANNING SERVICES

Contract No.	Date Services Provided:			Project Amount:
FC-9000/ RA 17-01-1017	05/12/2017	to	05/12/2022	$ 1,200,000.00

Vendor's role in Project: ☐ Prime Vendor ☒ Subconsultant/Subcontractor

Would you use this vendor again? ☒ Yes ☐ No If No, please specify in Additional Comments (below).

Description of services provided by Vendor:
Engineering design and planning services, including Mechanical, Plumbing, Electrical, Fire Protection, and Communications. Multiple Task Orders (19 to date) over the first 3 years of a 5 year contract.

Please rate your experience with the referenced Vendor:	Needs Improvement	Satisfactory	Excellent	Not Applicable
1. Vendor's Quality of Service				
a. Responsive	☐	☐	☒	☐
b. Accuracy	☐	☐	☒	☐
c. Deliverables	☐	☐	☒	☐
2. Vendor's Organization:				
a. Staff expertise	☐	☐	☒	☐
b. Professionalism	☐	☐	☒	☐
c. Turnover	☐	☐	☒	☐
3. Timeliness of:				
a. Project	☐	☐	☒	☐
b. Deliverables	☐	☐	☒	☐
4. Project completed within budget	☐	☐	☒	☐
5. Cooperation with:				
a. Your Firm	☐	☐	☒	☐
b. Subcontractor(s)/Subconsultant(s)	☐	☐	☒	☐
c. Regulatory Agency(ies)	☐	☐	☒	☐

Additional Comments: (provide on additional sheet if needed)

CBRE Heery has supported Ricondo's work on two on-call planning contracts for Hartsfield-Jackson Atlanta International Airport. They have worked seamlessly with our entire team and have provided technically sound analysis. Their recommendations have been well received by the Airport's staff and they are viewed as a trusted resource.

THIS SECTION FOR COUNTY USE ONLY

Verified via: ____EMAIL ____VERBAL Verified by: _____ Division: _____ Date: _____

All information provided to Broward County is subject to verification. Vendor acknowledges that inaccurate, untruthful, or incorrect statements made in support of this response may be used by the County as a basis for rejection, rescission of the award, or termination of the contract and may also serve as the basis for debarment of Vendor pursuant to Section 21.119 of the Broward County Procurement Code.

BROWARD COUNTY FLORIDA

Vendor Reference Verification Form

Broward County Solicitation No. and Title:

PNC2120437P1, Professional Consultant Services for FLL and HWO Airports, Building Projects

Reference for: Keith and Associates, Inc., dba KEITH

Organization/Firm Name providing reference:

Holland Builders

Contact Name: John Sobol Title: Director of Constru Reference date: 03/16/2021

Contact Email: jos@hollanbuilders.com Contact Phone: 954-771-2210

Name of Referenced Project: FXE Parcel 16-C Hanger

Contract No.	Date Services Provided:		Project Amount:
	02/01/2017	to 03/01/2019	$ 9,112.00

Vendor's role in Project: ☐ Prime Vendor ☑ Subconsultant/Subcontractor

Would you use this vendor again? ☑ Yes ☐ No If No, please specify in Additional Comments (below).

Description of services provided by Vendor:

KEITH provided surveying and civil engineering design and permitting for landside and airside site improvements for the Shelter Facility located on Parcel 16-C at the Fort Lauderdale Executive Airport (FXE). KEITH is providing surveying and conceptual engineering plans including zoning, land use designation, signage and markings, drainage inlets, conveyance pipes, exfiltration trench and retention areas, and conceptual opinions of construction costs. The KEITH Team also provided AAB and DRC site plan reviews. Upon approval, the team prepared construction plans and specifications. KEITH also provided schematic landscape architectural services including landscape, hardscape and irrigation plans, as well as permitting applications.

Please rate your experience with the referenced Vendor:	Needs Improvement	Satisfactory	Excellent	Not Applicable
1. Vendor's Quality of Service				
a. Responsive	☐	☐	☑	☐
b. Accuracy	☐	☑	☐	☐
c. Deliverables	☐	☐	☑	☐
2. Vendor's Organization:				
a. Staff expertise	☐	☐	☑	☐
b. Professionalism	☐	☐	☑	☐
c. Turnover	☐	☐	☐	☑
3. Timeliness of:				
a. Project	☐	☑	☐	☐
b. Deliverables	☐	☐	☑	☐
4. Project completed within budget	☐	☐	☑	☐
5. Cooperation with:				
a. Your Firm	☐	☐	☑	☐
b. Subcontractor(s)/Subconsultant(s)	☐	☐	☑	☐
c. Regulatory Agency(ies)	☐	☐	☑	☐

Additional Comments: (provide on additional sheet if needed)

Continue to use them.

THIS SECTION FOR COUNTY USE ONLY

Verified via: ___EMAIL ___VERBAL Verified by: _____ Division: _____ Date: _____

All information provided to Broward County is subject to verification. Vendor acknowledges that inaccurate, untruthful, or incorrect statements made in support of this response may be used by the County to cause basis for rejection, rescission of the award, or termination of the contract and may also serve as the basis for debarment of Vendor pursuant to Section 21.119 of the Broward County Procurement Code.

3/16/2021 p. 28

3b. PRIME & SUBCONTRACTORS EXPERIENCE WITH CAD/BIM FOR VERTICAL BUILDINGS

CBRE and our partnering firms are comprised of staff members with extensive experience that are highly capable of utilizing CAD/BIM and Revit for vertical buildings and construction within the airport environment. We are confident in our ability to meet all requirements for the projects outlined related to BIM scope of services. We are fully prepared to participate in the BIM process and provide both 2D and 3D designs via AutoCAD, AutoDesk REVIT, AutoDesk Civil 3D, AutoDesk Navisworks, AutoDesk BIM 360, and AutoDesk DESKTOP CONNECTOR, as needed.

Our team integrate seamless technology solutions into each of our designs. The design and engineering team uses BIM 360 to provide instant collaboration with consultants, clients and contractors. Through this web-based platform, Revit building models, drawing sets, Navisworks clash detection and CAD backgrounds can be shared seamlessly with all participants without any lag time or purchase of the software. BIM 360 can also serve as a construction administration tool for RFI submissions and punch list documentation. Use of BIM 360 technology has transformed the efficiency and speed in which projects can be delivered.

The use of our BIM model starts in the Schematic Design phase and stretches through construction and is then transferred to the client (if needed). Through detailed BIM libraries and components, model accuracy is elevated to a level of design that is constructable with clear and concise descriptions to produce legible construction documents. The design team, subconsultants, builder and owner actively participate in the design documentation process. Live, shared, interactive BIM models are used for on-site and online coordination meetings in order to depict accurate, real-time project details to run clash detections, which minimize costly and time consuming changes in the field and allows the design team to maximize every square inch of the building. These independent disciplines are combined during the Design Development phase to create an interdependent representation of the building and an initial pricing exercise is performed. During the Construction Documentation phase, the subconsultants extract information from the base model to create shop drawings which accelerates the review and approval process. At the end of CDs, the model is transferred to the Construction Manager to coordinate with the Owner, Architect, and other subconsultants to avoid field conflicts.

PAST PERFORMANCE



For all projects requiring BIM support, team will assign "BIM manager", who will serve as the main point of contact for the duration of the project. BIM manager will manage all BIM related issues and coordination for the prime and subconsultants. BIM Manager has many responsibilities. They include, but are not limited to:

- Overseeing the transfer/submission of model files from one party to another
- Validating the level of detail and controls as defined for each project phase
- Validating modeling content during each phase
- Combining or linking multiple models
- Participating in design review and model coordination sessions
- Monitoring adherence to project standards, including file names, worksets, model categories, etc.
- Properly storing the models in the collaborative project management system
- Coordinating model requirements with other team members and disciplines
- Provide production support in meeting digital delivery requirements
- Preparation of progress reporting and other digital deliverables
- Ongoing model review for compliance and coordination

Our team have successfully participated in a number of project-specific BIM Execution Plans and has worked closely with BIM project team members to utilize the full power of BIM where it applies to design and construction process.

3c. PRIME & SUB EXPERIENCE WITH REGULATORY AGENCIES

Every firm making up our assembled team has developed outstanding working relationships with many regulatory agencies/ divisions including all that are listed in this solicitation: South Florida Water Management District (SFWMD), Broward County Environmental Protection and Growth Management Department (BCEPGMD), Florida Department of Transportation (FDOT), Federal Aviation Administration (FAA), Broward County Water and Wastewater Services (BCWWS), Federal Emergency Management Agency (FEMA), and Florida Department of Environmental Protection (FDEP).

Our team members were chosen for their strong background with airport facilities and bring a depth of experience in proactively resolving any construction, phasing, life safety and permitting challenges that could arise with any regulatory agencies. With 7 of our 8 team member firms with offices in Broward County, and the 8th (AERO) consistently active in the market (including 30+ projects at FLL), we have consistently demonstrated how coordination among our team member firms and our collective relationships with these agencies on local aviation assignments is the key to enable us to be successful in executing work quickly. CBRE's Public Institution & Education Solutions Group, which is solely dedicated to public sector assignments and includes a former Director of Real Estate for the State of Florida and a former Director of Real Estate for Denver International Airport, will also serve as a valuable resource for connections and insight.



Our coordination work with these various entities isn't just met during construction, but, often enough, within the early stages of design. Our work with the Broward County Environmental group and approvals from the Florida Department of Transportation is a precursor to a permit being approved for construction. Ensuring that those departments are not overlooked will ensure that the Broward County Code Services finals stamps are met with timely approvals.

Additionally, one of the ways that our team stands apart from other firms is in our ability to understand the design process in the field with multiple AHJ's. Our design management services greatly improve the field coordination for engineering and verification of existing conditions. Often schedule delays with most A&E firms revolve around the inability to access tenant rooms, mechanical/electrical rooms, and other coordination issues that plague RTI's/permits being issued. With our institutional knowledge of the process, the chances of tenant/ airline coordination for design development is much more achievable.

The following chart gives a small sampling of our experience with each of the agencies being addressed in this RFP.

SAMPLE AGENCY EXPERIENCE

SFWMD	KEITH	KEITH has permitted Environmental Resource Permits (Minor and Major Modifications) as well as Water Use Permits for dewatering with SFWMD. They have different sections, who all contribute to assisting in the review when applicable to their division. Reviews are received within the 30 day allotment window they have to provide comments. We typically anticipate a 90 day permitting schedule when going through this agency. Pre-application meetings are extremely helpful in outlining direction of approach to the design
BCEPGMD	KEITH	KEITH typically goes through Broward County Environmental Protection and Growth Management Department (BCEPGMD) when processing Surface Water Management License modifications, which is through their Environmental Engineering and Permitting Division (BCEEPD). Similar to SFWMD, pre-application meetings are very helpful and we anticipate the same 90 day permitting schedule. Surface Water Management Licenses require recertification of the stormwater system after 5 years to ensure proper maintenance and functionality of the system.
FDOT	AERO	AERO has successfully completed several projects at Florida airports, including SRQ, FLL, TPA, RSW and MCO that have been performed in conjunction with the FDOT. We have experience working with FDOT and their requirements at airports throughout Florida.
FAA	AERO	AERO has successfully completed several projects with airports, including PIT, PHL, IAD, and many others across the U.S. that have been performed in conjunction with the FAA. We are currently working on several FAA project funded through the VALE program at PIT, PHL and IAD. AERO has a wealth of experience and knowledge with FAA requirements through past project experience. We understand the FAA funding process, from the CIP planning phase all the way through the grant closeout of a project.
		BCWWS permitting includes a four step process through a Utility Connection Permit. These steps include 1. Plan approval, 2. Request for permit, 3. Permit (Connection Construction approval), and 4. Release for Service. Parts 1 through 3 can range in timeframe based on the complexity of the project and can depend on processing variance requests. KEITH has a good working relationship with WWS which helps when working through design comments and the need for variances, which are typical considering the site requirements of the FLL facility.
FEMA	CBRE	CBRE has a long history of FEMA coordination following natural disasters, including hurricanes and flood mitigation impacting the operations at major airports, school districts, government agencies and local municipalities. We have quickly mobilized teams to respond to the recovery efforts of over 50 projects. Recently, we assisted Lafayette Regional Airport with hurricane disaster mitigation on one of their active runways. Also, CBRE will be assisting Puerto Rico Department of Education (PRDE) with their FEMA recovery program.
FDEP	CHAPPELL GROUP	For over 15 years, The Chappell Group has provided environmental permitting services for various projects, project phases and permit compliance. TCG coordinates with various local, State, and Federal agencies during the pre-application process, the permitting processes, and the compliance phase. We have experience with agencies such as United States Army Corps of Engineers, South Florida Water Management District, Florida Department of Environmental Protection, Florida Game and Freshwater Fish Commission, and United States Fish and Wildlife Service.

3d. PRIME & SUBCONSULTANTS EXPERIENCE PROVIDING CONSTRUCTION ADMINISTRATION & ENGINEERING INSPECTIONS

Construction administration and engineering inspections at FLL and HWO require a great deal of understanding of the airport's needs and requirements. From operational and security requirements, combined with unanticipated conditions makes every site inspection high profile and thus requiring understanding and experience.

The CBRE design and engineering team will stay engaged throughout the construction process to ensure that the goals and vision identified at the start of the project are fully realized when construction is complete. Services include review of construction submittals, shop drawings, responses to requests for information and site visits to confirm installation aligns with design intent. At substantial completion, a final "punch" list of incomplete or deficient items will be generated to ensure that all loose ends are closed up

AERO Systems Engineering, Inc (ASE) has extensive experience in delivering Construction Administrative (CA) services and engineering inspections during the construction phase on airport projects throughout Florida and the entire United States. ASE routinely provides CA and inspection services at medium and large hub airports, with most projects occurring on active airfields, and while active flight operations are ongoing at surrounding gate areas.

Typically provided CA services and activities include the following:

- Ongoing RFI response through construction
- Contractor and vendor submittal and shop drawing review
- Review field change actions and redline documentation during construction
- Construction schedule review/updates and assistance with phasing
- Creation of exhibits to assist contractor and Owner with making construction decisions
- Participate in regular construction project meetings and provide engineering guidance to ensure design intent is being met on a daily basis
- Onsite inspection of equipment installation at progress intervals to validate drawing and specification compliance
- Final inspection of equipment and installation at time of commissioning and turn-over
- Inspection deficiency reporting
- Project close out processes and documents, including as-built drawing preparation

ASE also provides inspection services during construction to ensure contractor compliance with contract drawings and specifications. ASE engineers will visit the construction area at scheduled construction milestones to review contractor progress and inspect the work being carried out. Engineering staff will review MEP system installation and civil construction and report on any observed deficiencies. ASE will also review all independent 3rd party testing and inspection reports to ensure compliance with project requirements.

ASE is currently providing, or has recently provided CA and engineering inspection services at the following airports:
RSW, SRQ, TPA, MLB, ATL, MEM, BNA, EWR, JFK, LGA, SLC, DFW, SEA, SFO, LAX, SEA, and PIT

PAST PERFORMANCE

KEITH
Engineering Inspired Design.

CONSTRUCTION MANAGEMENT

KEITH has provided construction related services for projects ranging from airport facilities, residential communities, commercial projects, and recreational parks including structures, terminals, roadways, parking lots, and utility infrastructures. The best construction management practice is to maintain a close working relationship with all parties involved and to respond quickly and effectively to any issues that may arise. This approach coupled with our experience and knowledge, offers our clients the opportunity to minimize cost overruns and delays during construction through pre-design services, design and construction oversight, and construction administrative services.

KEITH is committed to delivering an effective level of oversight and stewardship of any construction program. We focus on program practices and techniques that add value and help to ensure effective oversight and acceptable accountability.

CONSTRUCTION ENGINEERING INSPECTION (CEI)

KEITH has experienced and qualified staff, trained in providing CEI services. Our inspection staff members are Construction Technician Qualification Program (CTQP) certified. From construction managers to technical inspection personnel, our highly efficient team has the flexibility to support private development clients as well as governmental municipalities and State agencies (FDOT). We provide an array of Construction Engineering and Inspection services including contract administration, construction management, document control, utility coordination, observations / inspections, schedule and cost controls and contract close-out certifications. The unique ability to understand and recognize both construction constraints and the processes required for a successful project is what defines the KEITH CEI Team.

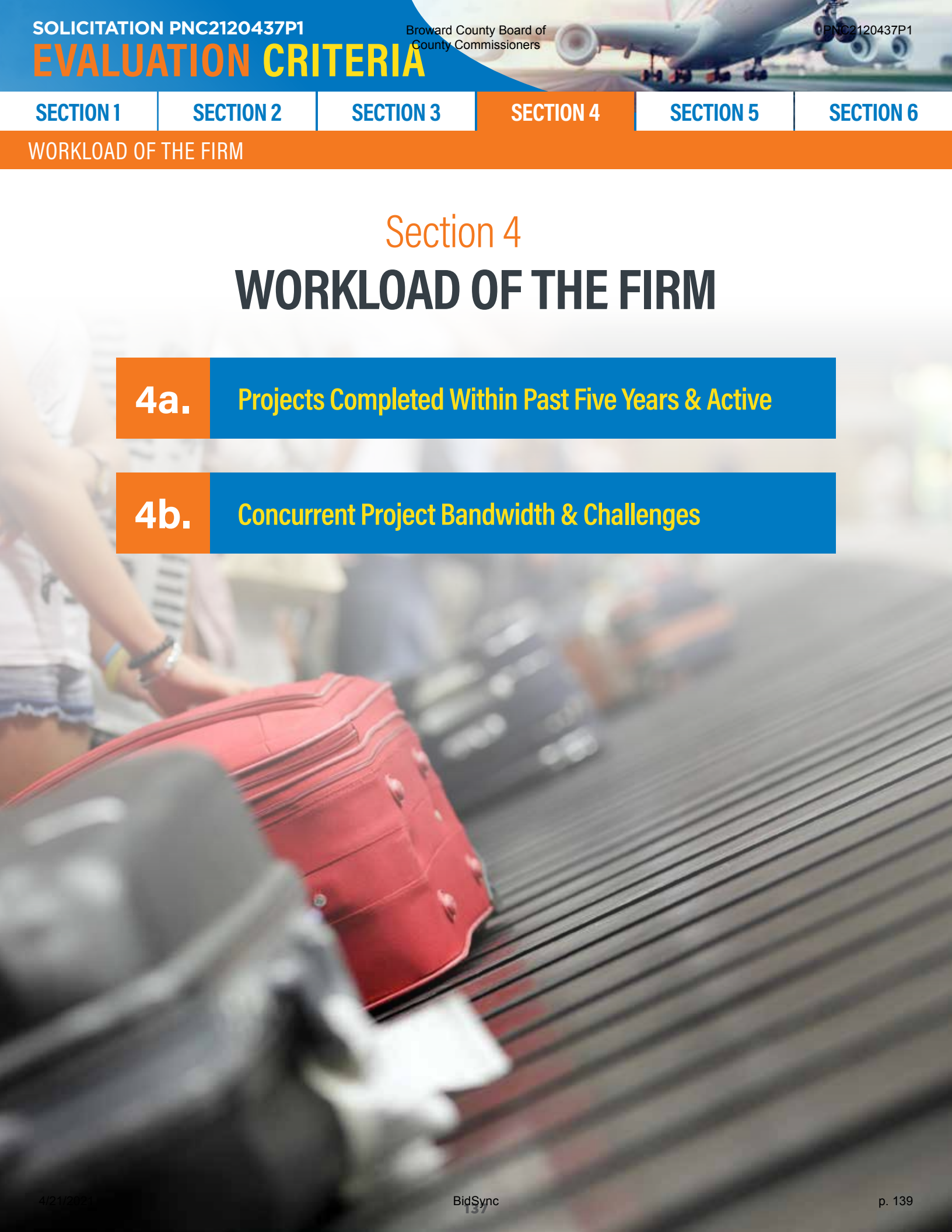
LAKDAS/YOHALEM ENGINEERING, INC.

LYE has been providing engineering inspection services for over 50 years. We are certified threshold and building inspectors. LYE's inspection team has successfully completed over 4,800 projects in which inspection services were required. Currently we have inspection services for the switch gear building, crane rail expansion, and hurricane tiedown base production at Port Everglades Terminal 2 Expansion and Elevated Roadway renovations at Fort Lauderdale Airport. The range of services provided for the Port Everglades project include Special inspector for the construction of the switch gear building, structural inspection for reinforcement for the crane rail and welding inspection for the hurricane Tie down base fabrication. LYE's inspection team is versatile and has proven experience with the tri counties of performing at a professional level.

Section 4
WORKLOAD OF THE FIRM

4a. Projects Completed Within Past Five Years & Active

4b. Concurrent Project Bandwidth & Challenges



ACTIVE & COMPLETED AVIATION PROJECTS (5 YEARS)

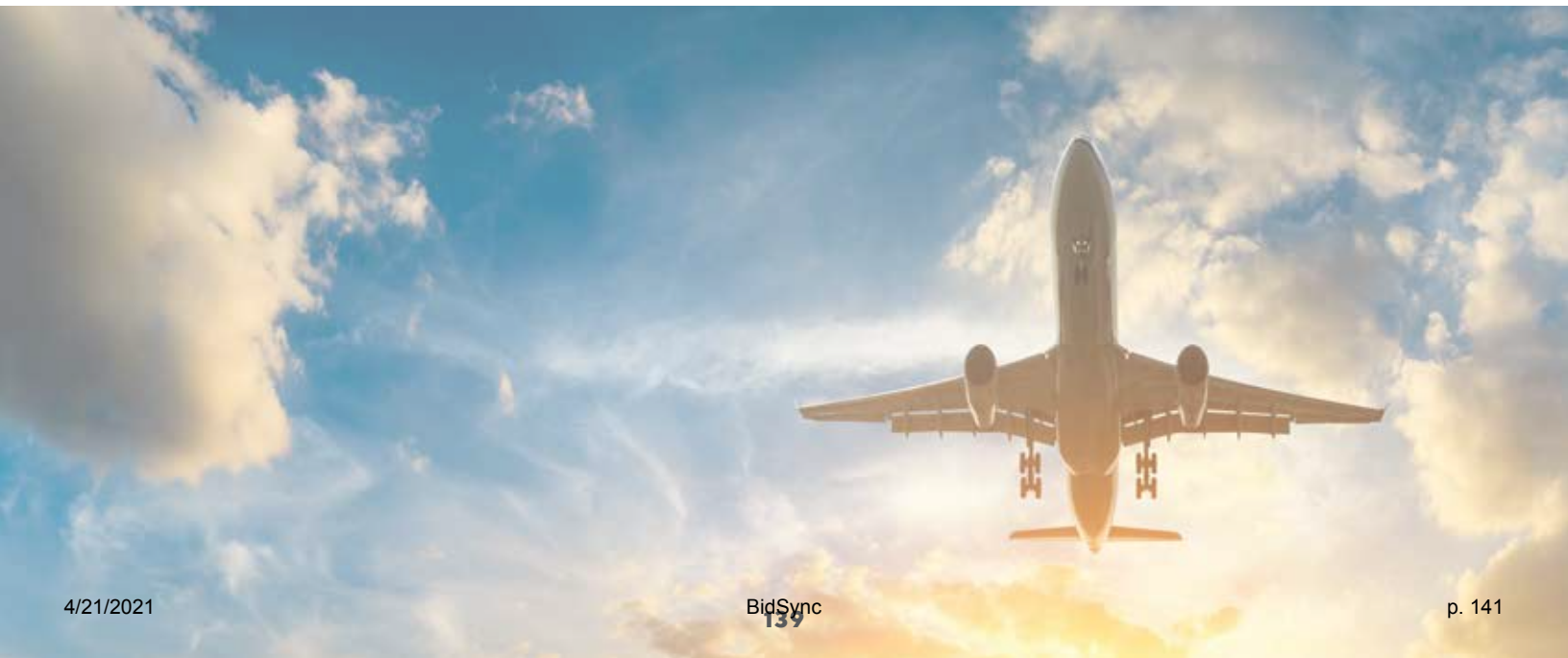
PROJECT NAME/DESCRIPTION	ACTIVE/COMPLETED	PM/DESIGN
Port of Seattle - North Satellite PM Services	Active	PM
HJAIA - Employee Security Screening, Phase 1 & 2	Completed	Design
HJAIA - Concourse T-N Expansion PDR	Completed	Design
HJAIA - Concourse D Expansion PDR	Completed	Design
HJAIA - RCC Repair Design	Completed	Design
HJAIA - Deck Reconstruction Study	Completed	Design
MIA - NTD Program Management Services, Multiple Task	Completed	PM
MIA - AA Hangar Building	Completed	Design
MIA - North Terminal FIS Easy Pass	Completed	Design
MIA - Satellite E Additional Services	Completed	Design
MIA - Satellite E Breakrooms	Completed	Design
MIA - 2nd Employee Checkpoint	Completed	Design
MIA - Refurbish and Upgrade ESS	Completed	Design
RDU - Master Plan Study - Central Plant	Completed	Design
LFT - Program Managemet Services, Multiple Task Orders	Completed	PM
ATL - Program Managemet Services, Multiple Task Orders	Completed	PM
HJAIA - AA Employee Security Checkpoint	Completed	Design
HJAIA - AATC Office Reconfiguration	Completed	Design
HJAIA - Plane-Train Turnaround	Completed	Design
HJAIA - E-CUP Chiller/Cooling Tower/Boiler Replacement Study	Completed	Design
HJAIA - T-CUP Heating HW Generation and Efficiency Upgrades	Completed	Design
HJAIA - Smart Lanes, North, Sourth & Main TSA Checkpoints	Completed	Design
HJAIA - Emergency Generator Planning	Completed	Design
HJAIA - Sheraton Parking Garage Conversion Plan	Completed	Design
HJAIA = North Pickup Area	Completed	Design
SEA - Port of Seattle IDIQ for Construction Services	Active	PM
Delta Sky Club - Austin	Completed	Design
Delta Sky Club - Phoenix	Completed	Design
Delta IFS Flight Lounge	Completed	Design
MIA - Rebrand Next Gen	Completed	Design
SLCDA - Program Managemet Services, Multiple Task Orders	Completed	PM
Spokane Airport Construction Management On-Call Services	Completed	PM
Hewanorra International Airport - New Terminal	Active	Design
DFW - Structural Assessment	Completed	Design
Delta Sky Club - Orlando	Active	Design
Delta Sky Club - Miami	Active	Design
Delta Sky Club - Fort Lauderdale	Active	Design
Delta Sky Club - Chicago	Active	Design
Delta Sky Club - Bos-E	Active	Design
Delta Sky Club - MSP-G	Active	Design
Delta Sky Club - Seattle	Active	Design
Delta Sky Club - CLT	Active	Design
Delta Sky Club - ATL-B	Active	Design
ATL - Enforcement Office Design	Active	Design
SIA - Rental Car Renovations	Completed	PM
HJAIA - Concourse E HVAC Study	Completed	Design
HJAIA - Pedestrian Bridge Vertical Circulation Study	Completed	Design
HJAIA - Passenger Screening South Checkpoint Expansion	Completed	Design
MDAD - SO 1 Building 3030 and Exec Offices	Active	Design
Delta Baggage ERGO - ATL	Completed	Design
HJAIA - T3 DAS Extension PDR	Active	Design
HJAIA - GA Power, Concourse F	Active	Design
BIMINI Airport Prelim Design	Active	Design

4b. CHALLENGES OF CONCURRENT PROJECTS

CBRE has many years of experience managing multiple projects concurrently. We have the ability and necessary resources to provide professional consultant services to successfully manage concurrent projects. Based on our current workload and backlog, we do not expect any challenges in carrying out scope of services defined.

Current workloads and projections assure that the individuals assigned to the project team will be available to begin work as scheduled. The size of our staff ensures our capability to commit the necessary resources to perform professional services on time.

Our team consists of architecture, interior design, engineering, project management and in-field personnel who have worked together on multiple projects. These team members share CBRE's commitment to superior client service. As an integrated multi-disciplinary design practice, we are able to respond promptly and efficiently to client requests by eliminating some administrative burdens. We also have ready access to additional professional expertise in-house when needed, whether it is anticipated at the outset of a project or not. Delivering creative solutions to client and end-user needs in a comprehensive manner is rooted in our culture and processes.



Section 5
LOCATION

5

Location Certification Form
Uploaded to BidSync on Separate Form as Requested

TEAM'S LOCAL OFFICES:

CBRE - Miami Office
7650 Corporate Center Drive
Suite 302
Miami, FL 33126

CBRE - Ft Lauderdale Office
401 E Las Olas Blvd., Ste 1500
Fort Lauderdale, FL 33301

KEITH
301 E Atlantic Blvd
Pompano Beach, FL 33060

PM Technologies
100 Terminal Dr.
Fort Lauderdale, FL 33315

Messam Construction
3600 Red Road, Suite 303
Miramar, FL 3302

Keleusmatic Technologies
8362 Pines Boulevard, Suite 131
Pembroke Pines, Florida 33024

Chappell Group
714 East McNab Road
Pompano Beach, FL 33060

Lakdas/Yohalem
2211 NE 54th St
Fort Lauderdale, FL 33308

Section 6

WILLINGNESS TO MEET TIME AND BUDGET REQUIREMENTS

6a. Firm's Approach in Meeting "Project Specific" Time and Budget Requirements



6a. WILLINGNESS TO MEET TIME & BUDGET REQUIREMENTS

Management of the project scope and budget is a continual process that occurs in each phase with a strong partnership with CBRE, our consultants and the key stakeholders. Starting with clear communication, statement of project goals, and hard targets for budget and scope, the project team can establish criteria for project performance at every phase.

For each project, we work with the client to develop and continually update a project milestone schedule providing summaries of major activities in each design phase. This schedule overview provides tasks and durations for items such as drawing deliverables, owner reviews, design presentations, pricing periods, and into permitting and construction kick-off.

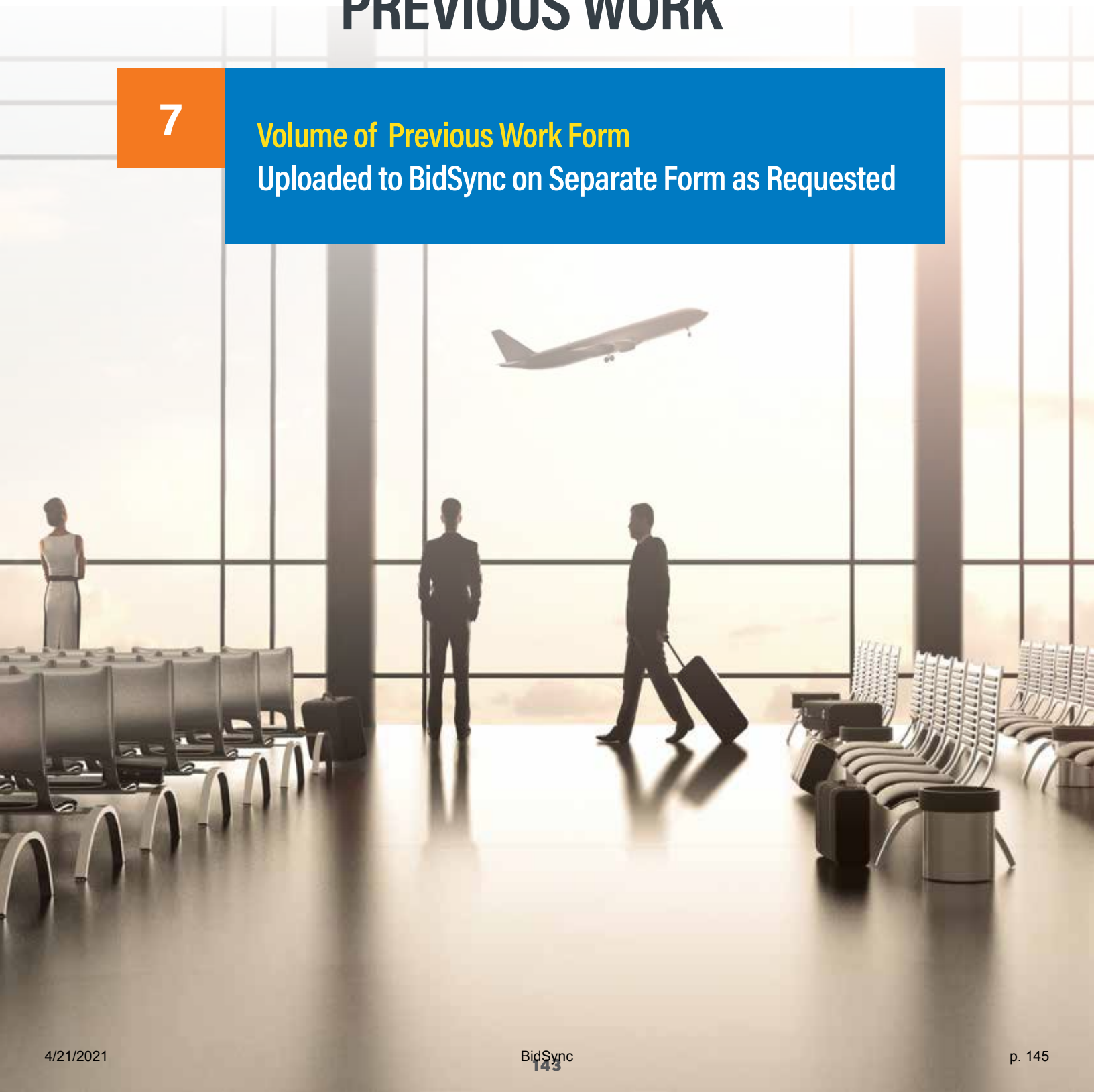
In addition to this, we will work with the team to create a detailed project schedule that will provide additional information into more granular project activities within each phase of the project. Beyond creative design solutions and beautiful placemaking, we have developed tools and processes to ensure projects remain on schedule, within budget, properly coordinated with our consultants while always responding to our client's needs.

Our team is committed to meet time and budget requirements as they are identified under the agreement.

Section 7
PREVIOUS WORK

7

Volume of Previous Work Form
Uploaded to BidSync on Separate Form as Requested





APPENDIX

- LICENSES
- COPIES OF SUBMITTED FORMS

BROWARD COUNTY FLORIDA

Ability of Professional Personnel

CBRE

Ron DeSantis, Governor

FBPE FLORIDA BOARD OF PROFESSIONAL ENGINEERS

STATE OF FLORIDA

BOARD OF PROFESSIONAL ENGINEERS

THE PROFESSIONAL ENGINEER HEREIN IS LICENSED UNDER THE PROVISIONS OF CHAPTER 471, FLORIDA STATUTES

ROMETO, MICHAEL A.
661 HOME AVENUE SE
ATLANTA GA 30312

LICENSE NUMBER: PE79912
EXPIRATION DATE: FEBRUARY 28, 2023
Always verify licenses online at MyFloridaLicense.com

Do not alter this document in any form.
This is your license. It is unlawful for anyone other than the licensee to use this document.

Ron DeSantis, Governor

FBPE FLORIDA BOARD OF PROFESSIONAL ENGINEERS

STATE OF FLORIDA

BOARD OF PROFESSIONAL ENGINEERS

THE PROFESSIONAL ENGINEER HEREIN IS LICENSED UNDER THE PROVISIONS OF CHAPTER 471, FLORIDA STATUTES

KANG, PAUL
901 BROADWAY
NORWOOD NJ 07648

LICENSE NUMBER: PE90293
EXPIRATION DATE: FEBRUARY 28, 2023
Always verify licenses online at MyFloridaLicense.com

Do not alter this document in any form.
This is your license. It is unlawful for anyone other than the licensee to use this document.

Ron DeSantis, Governor
Halsey Beshears, Secretary

Florida dbpr

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

DIVISION OF REAL ESTATE

THE BRANCH OFFICE HEREIN HAS REGISTERED UNDER THE PROVISIONS OF CHAPTER 475, FLORIDA STATUTES

CBRE INC
401 EAST LAS OLAS BLVD, SUITE 1500
FT LAUDERDALE FL 33301

LICENSE NUMBER: BO2033364
EXPIRATION DATE: MARCH 31, 2022
Always verify licenses online at MyFloridaLicense.com

Do not alter this document in any form.
This is your license. It is unlawful for anyone other than the licensee to use this document.

Ron DeSantis, Governor
Halsey Beshears, Secretary

Florida dbpr

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

CONSTRUCTION INDUSTRY LICENSING BOARD

THE GENERAL CONTRACTOR HEREIN IS CERTIFIED UNDER THE PROVISIONS OF CHAPTER 489, FLORIDA STATUTES

SMITH, LINDA JOY
CBRE HEERY, INC.
3550 LENOX RD., SUITE 2300
ATLANTA GA 30326

LICENSE NUMBER: CGC1510951
EXPIRATION DATE: AUGUST 31, 2022
Always verify licenses online at MyFloridaLicense.com

Do not alter this document in any form.
This is your license. It is unlawful for anyone other than the licensee to use this document.

Ron DeSantis, Governor
Halsey Beshears, Secretary

Florida dbpr

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

BOARD OF ARCHITECTURE & INTERIOR DESIGN

THE ARCHITECT HEREIN IS LICENSED UNDER THE PROVISIONS OF CHAPTER 481, FLORIDA STATUTES

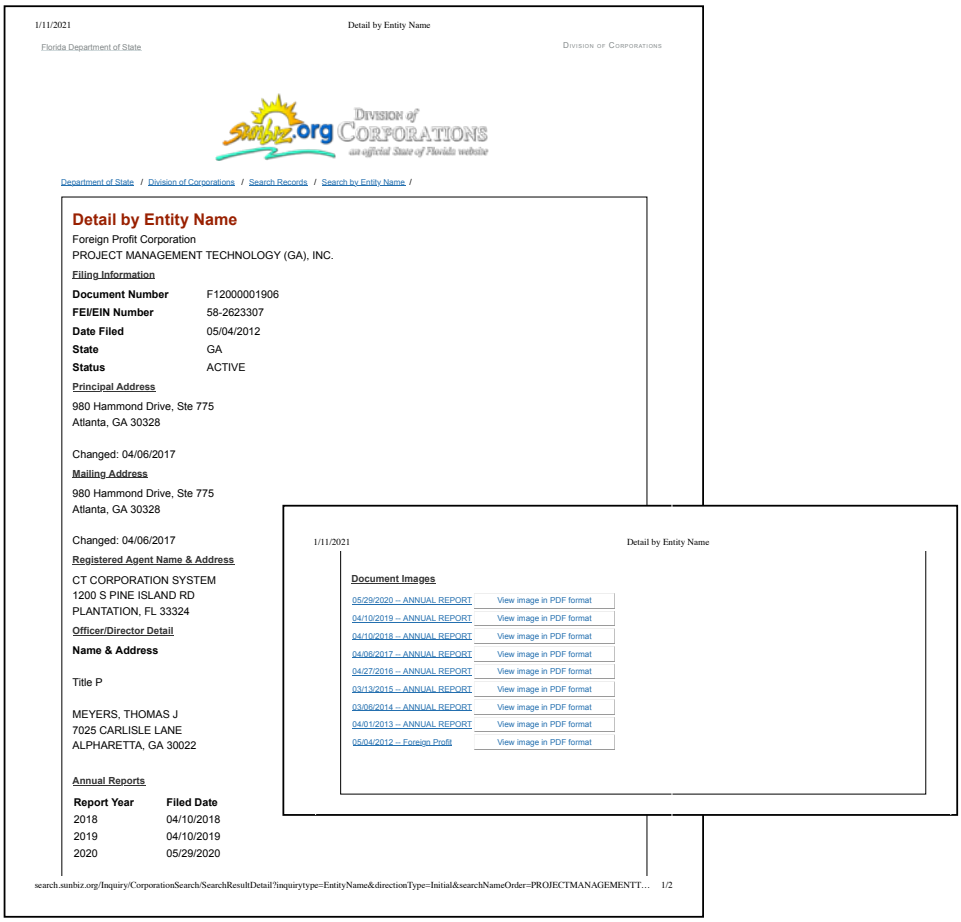
GAVARRETE, FERNANDO
SEQUEIRA & GAVARRETE INC
CBRE HEERY, INC
7650 CORPORATE CENTER DRIVE
SUITE 302
MIAMI FL 33126

LICENSE NUMBER: AR0009014
EXPIRATION DATE: FEBRUARY 28, 2023
Always verify licenses online at MyFloridaLicense.com

Do not alter this document in any form.
This is your license. It is unlawful for anyone other than the licensee to use this document.

Ability of Professional Personnel

PMTECHNOLOGIES project professionals



1/11/2021 Detail by Entity Name

Florida Department of State — Division of Corporations

Sunbiz.org Division of Corporations — an official State of Florida website

Department of State / Division of Corporations / Search Records / Search by Entity Name /

Detail by Entity Name

Foreign Profit Corporation
PROJECT MANAGEMENT TECHNOLOGY (GA), INC.

Filing Information

Document Number	F12000001906
FEI/EIN Number	58-2623307
Date Filed	05/04/2012
State	GA
Status	ACTIVE

Principal Address

980 Hammond Drive, Ste 775
Atlanta, GA 30328

Changed: 04/06/2017

Mailing Address

980 Hammond Drive, Ste 775
Atlanta, GA 30328

Changed: 04/06/2017

Registered Agent Name & Address

CT CORPORATION SYSTEM
1200 S PINE ISLAND RD
PLANTATION, FL 33324

Officer/Director Detail

Name & Address

Title P

MEYERS, THOMAS J
7025 CARLISLE LANE
ALPHARETTA, GA 30022

Annual Reports

Report Year	Filed Date
2018	04/10/2018
2019	04/10/2019
2020	05/29/2020

search.sunbiz.org/Inquiry/CorporationSearch/SearchResultDetail?inquirytype=EntityName&directionType=Initial&searchNameOrder=PROJECTMANAGEMENTT… 1/2

1/11/2021 Detail by Entity Name

Document Images

05/29/2020 -- ANNUAL REPORT	View image in PDF format
04/10/2019 -- ANNUAL REPORT	View image in PDF format
04/10/2018 -- ANNUAL REPORT	View image in PDF format
04/06/2017 -- ANNUAL REPORT	View image in PDF format
04/27/2016 -- ANNUAL REPORT	View image in PDF format
03/13/2015 -- ANNUAL REPORT	View image in PDF format
03/06/2014 -- ANNUAL REPORT	View image in PDF format
04/01/2013 -- ANNUAL REPORT	View image in PDF format
05/04/2012 -- Foreign Profit	View image in PDF format

MESSAM CONSTRUCTION



Ron DeSantis, Governor — Halsey Beshears, Secretary — dbpr

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

CONSTRUCTION INDUSTRY LICENSING BOARD

THE GENERAL CONTRACTOR HEREIN IS CERTIFIED UNDER THE PROVISIONS OF CHAPTER 489, FLORIDA STATUTES

MESSAM, WAYNE MARTIN
ASSET BUILDERS LLC
3600 RED ROAD STE. 303
MIRAMAR FL 33025

LICENSE NUMBER: CGC1512276
EXPIRATION DATE: AUGUST 31, 2022
Always verify licenses online at MyFloridaLicense.com

Do not alter this document in any form.
This is your license. It is unlawful for anyone other than the licensee to use this document.

Ability of Professional Personnel

AERO SYSTEMS ENGINEERING

THE Chappell GROUP

State of Florida
Department of State

I certify from the records of this office that AERO SYSTEMS ENGINEERING, INC. is a Georgia corporation authorized to transact business in the State of Florida, qualified on March 25, 2002.

The document number of this corporation is F02000001577.

I further certify that said corporation has paid all fees due this office through December 31, 2017, that its most recent annual report/uniform business report was filed on April 28, 2017, and that its status is active.

I further certify that said corporation has not filed a Certificate of Withdrawal.

Given under my hand and the Great Seal of the State of Florida at Tallahassee, the Capital, this the Second day of February, 2018

Ken Detzner
Secretary of State

Tracking Number: CU8262969897

To authenticate this certificate,visit the following site,enter this number, and then follow the instructions displayed.

https://services.sunbiz.org/Filings/CertificateOfStatus/CertificateAuthentication

State of Florida
Department of State

I certify from the records of this office that THE CHAPPELL GROUP, INC. is a corporation organized under the laws of the State of Florida, filed on April 14, 2005.

The document number of this corporation is P05000055901.

I further certify that said corporation has paid all fees due this office through December 31, 2021, that its most recent annual report/uniform business report was filed on February 17, 2021, and that its status is active.

I further certify that said corporation has not filed Articles of Dissolution.

Given under my hand and the Great Seal of the State of Florida at Tallahassee, the Capital, this the Seventeenth day of February, 2021

Secretary of State

Tracking Number: 0847756586CC

To authenticate this certificate,visit the following site,enter this number, and then follow the instructions displayed.

https://services.sunbiz.org/Filings/CertificateOfStatus/CertificateAuthentication

KEITH
Engineering Inspired Design.

ASSOCIATION OF STATE
FLOODPLAIN MANAGERS, INC.
CERTIFICATION BOARD OF REGENTS

HEREBY CERTIFIES THAT PURSUANT TO THE PROVISIONS OF THE CHARTER FOR THE CERTIFIED FLOODPLAIN MANAGER PROGRAM

Timothy H. Gray, CFM

IS DULY REGISTERED AS AN

ASFPM CERTIFIED FLOODPLAIN MANAGER

IN TESTIMONY WHEREOF THIS CERTIFICATE HAS BEEN ISSUED BY THE AUTHORITY OF THE CERTIFICATION BOARD OF REGENTS, CERTIFICATE NO. US-90-11725, ISSUED 10/15/2010. THIS CERTIFICATE SHALL EXPIRE 1/31/2022, UNLESS RENEWED ACCORDING TO THE RULES OF THIS BOARD.

CERTIFICATION BOARD OF REGENTS
PRESIDENT, LOUIS T. GREENWELL, GISP, CFM

ASSOCIATION OF STATE FLOODPLAIN MANAGERS
EXECUTIVE DIRECTOR, CHAD M. BERGINNIS, CFM

ASFPM CFM CERTIFIED

Ron DeSantis, Governor

FBPE FLORIDA BOARD OF PROFESSIONAL ENGINEERS

STATE OF FLORIDA

BOARD OF PROFESSIONAL ENGINEERS

THE PROFESSIONAL ENGINEER HEREIN IS LICENSED UNDER THE PROVISIONS OF CHAPTER 471, FLORIDA STATUTES

KOGGAN, DEAN EDWARD
10496 FISHPOND COURT
WELLINGTON FL 33414

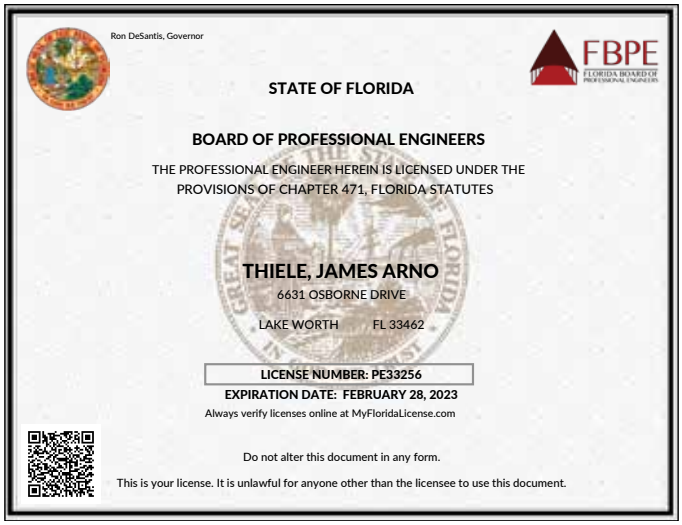
LICENSE NUMBER: PE86612
EXPIRATION DATE: FEBRUARY 28, 2023
Always verify licenses online at MyFloridaLicense.com

Do not alter this document in any form.

This is your license. It is unlawful for anyone other than the licensee to use this document.

Ability of Professional Personnel

KEITH
Engineering Inspired Design.



Ron DeSantis, Governor

FBPE
FLORIDA BOARD OF PROFESSIONAL ENGINEERS

STATE OF FLORIDA

BOARD OF PROFESSIONAL ENGINEERS

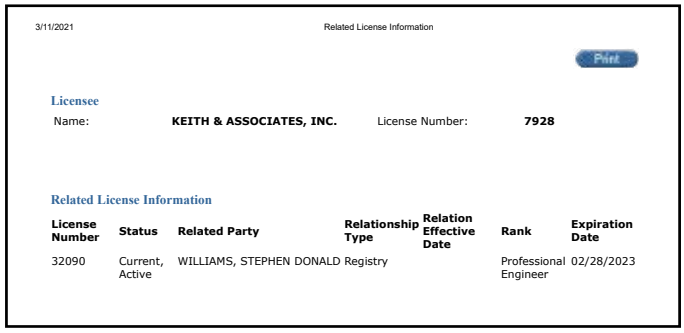
THE PROFESSIONAL ENGINEER HEREIN IS LICENSED UNDER THE PROVISIONS OF CHAPTER 471, FLORIDA STATUTES

THIELE, JAMES ARNO
6631 OSBORNE DRIVE
LAKE WORTH FL 33462

LICENSE NUMBER: PE33256
EXPIRATION DATE: FEBRUARY 28, 2023
Always verify licenses online at MyFloridaLicense.com

Do not alter this document in any form.

This is your license. It is unlawful for anyone other than the licensee to use this document.



3/11/2021 Related License Information

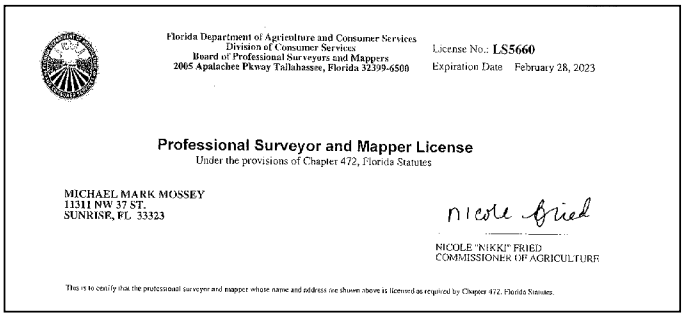
Print

Licensee

Name: KEITH & ASSOCIATES, INC. License Number: 7928

Related License Information

License Number	Status	Related Party	Relationship Type	Relation Effective Date	Rank	Expiration Date
32090	Current, Active	WILLIAMS, STEPHEN DONALD	Registry		Professional Engineer	02/28/2023



Florida Department of Agriculture and Consumer Services
Division of Consumer Services
Board of Professional Surveyors and Mappers
2005 Apalachee Pkway Tallahassee, Florida 32399-6500

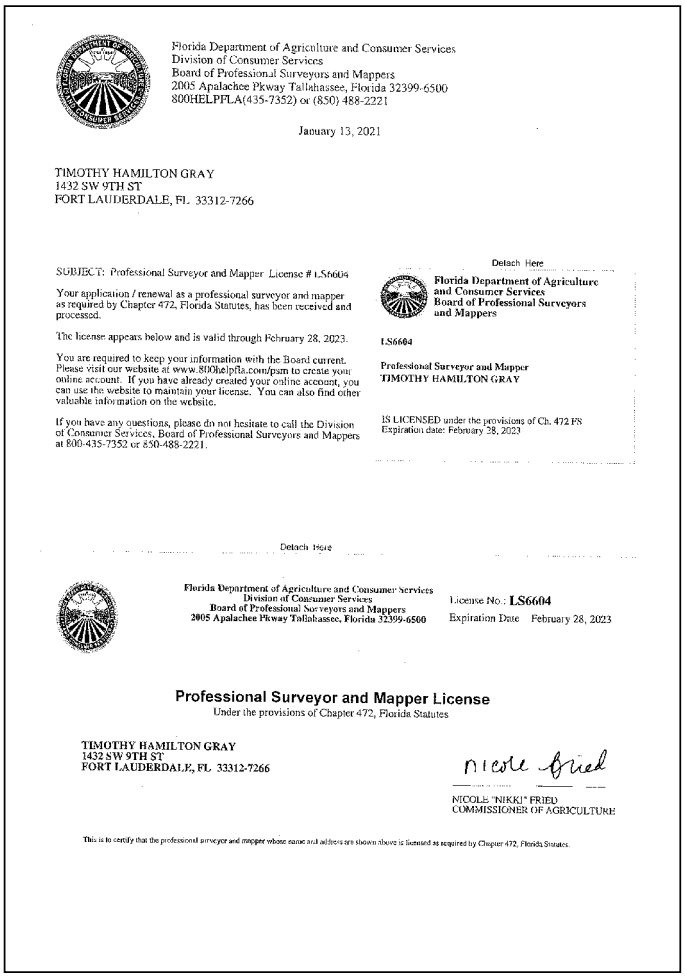
License No.: LS5660
Expiration Date February 28, 2023

Professional Surveyor and Mapper License
Under the provisions of Chapter 472, Florida Statutes

MICHAEL MARK MOSSEY
11311 NW 37 ST.
SUNRISE, FL 33323

NICOLE "NIKKI" FRIED
COMMISSIONER OF AGRICULTURE

This is to certify that the professional surveyor and mapper whose name and address are shown above is licensed as required by Chapter 472, Florida Statutes.



Florida Department of Agriculture and Consumer Services
Division of Consumer Services
Board of Professional Surveyors and Mappers
2005 Apalachee Pkway Tallahassee, Florida 32399-6500
800HELPFLA(435-7352) or (850) 488-2221

January 13, 2021

TIMOTHY HAMILTON GRAY
1432 SW 9TH ST
FORT LAUDERDALE, FL 33312-7266

SUBJECT: Professional Surveyor and Mapper License # LS6604

Your application / renewal as a professional surveyor and mapper as required by Chapter 472, Florida Statutes, has been received and processed.

The license appears below and is valid through February 28, 2023.

You are required to keep your information with the Board current. Please visit our website at www.800helpfla.com/pam to create your online account. If you have already created your online account, you can use the website to maintain your license. You can also find other valuable information on the website.

If you have any questions, please do not hesitate to call the Division of Consumer Services, Board of Professional Surveyors and Mappers at 800-435-7352 or 850-488-2221.

Detach Here

Florida Department of Agriculture and Consumer Services
Board of Professional Surveyors and Mappers

LS6604

Professional Surveyor and Mapper
TIMOTHY HAMILTON GRAY

IS LICENSED under the provisions of Ch. 472 FS
Expiration date: February 28, 2023

Detach Here

Florida Department of Agriculture and Consumer Services
Division of Consumer Services
Board of Professional Surveyors and Mappers
2005 Apalachee Pkway Tallahassee, Florida 32399-6500

License No.: LS6604
Expiration Date February 28, 2023

Professional Surveyor and Mapper License
Under the provisions of Chapter 472, Florida Statutes

TIMOTHY HAMILTON GRAY
1432 SW 9TH ST
FORT LAUDERDALE, FL 33312-7266

NICOLE "NIKKI" FRIED
COMMISSIONER OF AGRICULTURE

This is to certify that the professional surveyor and mapper whose name and address are shown above is licensed as required by Chapter 472, Florida Statutes.



State of Florida
Department of State

I certify from the records of this office that KEITH AND ASSOCIATES, INC. is a corporation organized under the laws of the State of Florida, filed on January 20, 1998, effective January 16, 1998.

The document number of this corporation is P98000006011.

I further certify that said corporation has paid all fees due this office through December 31, 2021, that its most recent annual report/uniform business report was filed on January 4, 2021, and that its status is active.

I further certify that said corporation has not filed Articles of Dissolution.

Given under my hand and the Great Seal of the State of Florida at Tallahassee, the Capital, this the Fourth day of January, 2021

Secretary of State

Tracking Number: 4430818532CC

To authenticate this certificate,visit the following site,enter this number, and then follow the instructions displayed.

https://services.sunbiz.org/Filings/CertificateOfStatus/CertificateAuthentication

Ability of Professional Personnel

KELEUSMATIC technologiE

State of Florida
Department of State

I certify from the records of this office that KELEUSMATIC TECHNOLOGIES, INC is a corporation organized under the laws of the State of Florida, filed on November 4, 2014, effective November 4, 2014.

The document number of this corporation is P14000090142.

I further certify that said corporation has paid all fees due this office through December 31, 2021, that its most recent annual report/uniform business report was filed on April 15, 2021, and that its status is active.

I further certify that said corporation has not filed Articles of Dissolution.

Given under my hand and the Great Seal of the State of Florida at Tallahassee, the Capital, this the Fifteenth day of April, 2021

Secretary of State

Tracking Number: 7578239289CC

To authenticate this certificate,visit the following site,enter this number, and then follow the instructions displayed.

https://services.sunbiz.org/Filings/CertificateOfStatus/CertificateAuthentication

Building Industry Consulting Service International

THE PROFESSIONAL DESIGNATION OF

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER®

IS AWARDED TO

Michael K Yu

by BICSI in recognition of having successfully completed BICSI's registration and examination requirements.

Designation Number: 297454
Registration Start Date: 08-28-2020
Registration End Date: 12-31-2023

Chair, Registrations & Credentials Supervision Committee

BICSI RCDD Since 08-28-202(

Director of Credentialing

BROWARD COUNTY FLORIDA

Office of Economic and Small Business Development

Governmental Center Annex
115 S. Andrews Avenue, Room A480 • Fort Lauderdale, Florida 33301 • 954-357-6400 • FAX 954-357-5674 • TTY 954-357-5664

This Certificate is Awarded to:

KELEUSMATIC TECHNOLOGIES, INC.

County Business Enterprise (CBE)
Small Business Enterprise (SBE)
Anniversary Date: August 11th

Ability of Professional Personnel

LAKDAS/YOHALEM ENGINEERING, INC.

Ron DeSantis, Governor

FBPE FLORIDA BOARD OF PROFESSIONAL ENGINEERS

STATE OF FLORIDA

BOARD OF PROFESSIONAL ENGINEERS

THE PROFESSIONAL ENGINEER HEREIN IS LICENSED UNDER THE PROVISIONS OF CHAPTER 471, FLORIDA STATUTES

SPECIAL INSPECTOR NUMBER: 0690

NANAYAKKARA, LAKDAS
2211 NE 54TH ST
FT LAUDERDALE FL 333083226

LICENSE NUMBER: PE37590
EXPIRATION DATE: FEBRUARY 28, 2023
Always verify licenses online at MyFloridaLicense.com

Do not alter this document in any form.
This is your license. It is unlawful for anyone other than the licensee to use this document.

FDOT
Florida Department of Transportation

RON DESANTIS
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

KEVIN J. THIBAULT, P.E.
SECRETARY

September 24, 2020

Lakdas Nanayakkara, President
LAKDAS/YOHALEM ENGINEERING, INC.
2211 NE 54th Street
Fort Lauderdale, Florida 33308

Dear Mr. Nanayakkara:

The Florida Department of Transportation has reviewed your application for prequalification package and determined that the data submitted is adequate to technically prequalify your firm for the following types of work:

Group 3 - Highway Design - Roadway
3.1 - Minor Highway Design
Group 4 - Highway Design - Bridges
4.1.1 - Miscellaneous Structures
4.1.2 - Minor Bridge Design
Group 10 - Construction Engineering Inspection
10.1 - Roadway Construction Engineering Inspection

Your firm is now technically prequalified with the Department for Professional Services in the above referenced work types. Your firm may pursue projects in the referenced work types with fees estimated at less than $500,000.00. This status shall be valid until September 24, 2021 for contracting purposes.

Should you have any questions, please feel free to contact me by email at carliayn.kell@dot.state.fl.us or by phone at 850-414-4597.

Sincerely,

Carliayn Kell
Professional Services
Qualification Administrator

CBHK/kw

Safety, Mobility, Innovation
www.fdot.gov

State of Florida
Department of State

I certify from the records of this office that LAKDAS/YOHALEM ENGINEERING, INC. is a corporation organized under the laws of the State of Florida, filed on November 9, 1987.

The document number of this corporation is K01968.

I further certify that said corporation has paid all fees due this office through December 31, 2021, that its most recent annual report/uniform business report was filed on January 15, 2021, and that its status is active.

I further certify that said corporation has not filed Articles of Dissolution.

Given under my hand and the Great Seal of the State of Florida at Tallahassee, the Capital, this the Fifteenth day of January, 2021

Secretary of State

Tracking Number: 5754353551CC

To authenticate this certificate,visit the following site,enter this number, and then follow the instructions displayed.

https://services.sunbiz.org/Filings/CertificateOfStatus/CertificateAuthentication

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

December 14, 2020

REGISTERED VENDOR NO.: 100200

Lakdas Nanayakkara, President
Lakdas -Yohalem Engineering, Inc.
2211 NE 54th Street
Fort Lauderdale, FL 33308

CERTIFICATION EFFECTIVE DATE:
January 30, 2021

CERTIFICATION EXPIRATION DATE:
January 30, 2024

Dear Mr. Nanayakkara:

Congratulations, the South Florida Water Management District (District) has recertified your firm as a Small Business Enterprise (SBE). This certification is valid for three (3) years and may **only** be applied when business is conducted in the following area(s):

Professional Engineering Services

Your submittal of bids or proposals to supply other products or services outside of the specialty area(s) noted above will not count toward SBE participation. If you require certification in other specialty areas, please contact the Procurement Bureau, SBE Section, for additional information.

Renewal is required every three (3) years and should be requested a minimum of 45 days prior to the above expiration date.

If any changes occur within your company during the certification period such as ownership, affiliate company status, address, telephone number, licensing status, gross revenue, or any information that relates to your SBE Certification status, you must notify this office in writing immediately. It is imperative that we maintain current information on your company at all times.

Certification is not a guarantee that your firm will receive work, nor an assurance that your firm will remain in the District's vendor database.

We look forward to a mutually beneficial working relationship.

Sincerely,

Joni Lynn Fox
Sr. Contract Compliance Specialist
Procurement Bureau

JLF/kk



REQUIRED FORMS

Supplier Response Form

LITIGATION HISTORY FORM

The completed form(s) should be returned with the Vendor's submittal. If not provided with submittal, the Vendor must submit within three business days of County's request. Vendor may be deemed non-responsive for failure to fully comply within stated timeframes.

☐ There are no material cases for this Vendor; or
☐ Material Case(s) are disclosed below:

Is this for a: (check type) ☐ Parent, ☐ Subsidiary, or ☐ Predecessor Firm?	If Yes, name of Parent/Subsidiary/Predecessor: Or No ☐
Party	
Case Number, Name, and Date Filed	
Name of Court or other tribunal	
Type of Case	Bankruptcy ☐ Civil ☐ Criminal ☐ Administrative/Regulatory ☐
Claim or Cause of Action and Brief description of each Count	
Brief description of the Subject Matter and Project Involved	
Disposition of Case (Attach copy of any applicable Judgment, Settlement Agreement and Satisfaction of Judgment.)	Pending ☐ Settled ☐ Dismissed ☐ Judgment Vendor's Favor ☐ Judgment Against Vendor ☐ If Judgment Against, is Judgment Satisfied? ☐ Yes ☐ No
Opposing Counsel	Name: Email: Telephone Number:

Vendor Name: CBRE, Inc.

Please enter your password below and click Save to update your response.
Please be aware that typing in your password acts as your electronic signature, which is just as legal and binding as an original signature. (See Electronic Signatures in Global and National Commerce Act for more information.)

To take exception:
1) Click Take Exception.
2) Create a Word document detailing your exceptions.
3) Upload exceptions as an attachment to your offer on BidSync's system.

https://www.bidsync.com/DPXViewer/RLI_-_RFP_-_RFQ_Litigation_History_Form.htm... 4/20/2021

By completing this form, your bid has not yet been submitted. Please click on the place offer button to finish filling out your bid.

Username **Heery2018**
Password *

Save | Take Exception | Close

* Required fields



REQUIRED FORMS

Supplier Response Form

LOBBYIST REGISTRATION REQUIREMENT CERTIFICATION FORM

The completed form should be submitted with the solicitation response but must be submitted within three business days of County's request. Vendor may be deemed non-responsive for failure to fully comply within stated timeframes.

The Vendor certifies that it understands if it has retained a lobbyist(s) to lobby in connection with a competitive solicitation, it shall be deemed non-responsive unless the firm, in responding to the competitive solicitation, certifies that each lobbyist retained has timely filed the registration or amended registration required under Broward County Lobbyist Registration Act, Section 1-262, Broward County Code of Ordinances; and it understands that if, after awarding a contract in connection with the solicitation, the County learns that the certification was erroneous, and upon investigation determines that the error was willful or intentional on the part of the Vendor, the County may, on that basis, exercise any contractual right to terminate the contract for convenience.

The Vendor hereby certifies that: (select one)

☐ It has not retained a lobbyist(s) to lobby in connection with this competitive solicitation; however, if retained after the solicitation, the County will be notified.

☐ It has retained a lobbyist(s) to lobby in connection with this competitive solicitation and certified that each lobbyist retained has timely filed the registration or amended registration required under Broward County Lobbyist Registration Act, Section 1-262, Broward County Code of Ordinances.

It is a requirement of this solicitation that the names of any and all lobbyists retained to lobby in connection with this solicitation be listed below:

Name of Lobbyist:
Lobbyist's Firm:
Phone:
E-mail:

Name of Lobbyist:
Lobbyist's Firm:
Phone:
E-mail:

Authorized Signature/Name: Sarah Friedfeld **Date:** 4/20/2021

Title: National Business Development Manager

Vendor Name: CBRE, Inc.

Please enter your password below and click Save to update your response.
Please be aware that typing in your password acts as your electronic signature, which is just as legal and binding as an original signature. (See Electronic Signatures in Global and National Commerce Act for more information.)

To take exception:
1) Click Take Exception.

2) Create a Word document detailing your exceptions.
3) Upload exceptions as an attachment to your offer on BidSync's system.
By completing this form, your bid has not yet been submitted. Please click on the place offer button to finish filling out your bid.

Username **Heery2018**
Password *

Save | Take Exception | Close

* Required fields

Supplier Response Form

VENDOR QUESTIONNAIRE AND STANDARD CERTIFICATIONS
Request for Proposals, Request for Qualifications, or Request for Letters of Interest

Vendor should complete questionnaire and complete and acknowledge the standard certifications and submit with the solicitation response. If not submitted with solicitation response, it must be submitted within three business days of County's request. Failure to timely submit may affect Vendor's evaluation.

If a response requires additional information, the Vendor should upload a written detailed response with submittal; each response should be numbered to match the question number. The completed questionnaire and attached responses will become part of the procurement record. It is imperative that the person completing the Vendor Questionnaire be knowledgeable about the proposing Vendor's business and operations.

1. Legal business name: CBRE Heery Inc.
2. Doing Business As/Fictitious Name (if applicable): CBRE
3. Federal Employer I.D. no. (FEIN): 58-0827945
4. Dun and Bradstreet No.:
5. Website address (if applicable): www.heery.com
6. Principal place of business address: 7650 Corporate Center Drive, Suite 302 Miami, FL 33126
7. Office location responsible for this project: 7650 Corporate Center Drive, Suite 302 Miami, FL 33126
8. Telephone no.: 954-462-5655 Fax no.: 954-468-3069
9. Type of business (check appropriate box):
   - ☐ Corporation (specify the state of incorporation): GA
   - ☐ Sole Prioprietor
   - ☐ Limited Liability Company (LLC)
   - ☐ Limited Partnership
   - ☐ General Partnership (State and County filled in)
   - ☐ Other – Specify
10. List Florida Department of State, Division of Corporations document number (or registration number if fictitious name):
11. List name and title of each principal, owner, officer, and major shareholder:
    a) Fernando Gavarrete
    b) Michael Rometo
    c) Karen McCallum
    d)
12. AUTHORIZED CONTACT(S) FOR YOUR FIRM:
    Name: Michael Rometo
    Title: Managing Director
    E-mail: michael.rometo@cbre.com
    Telephone No.: 404-946-2367

    Name: Karen McCallum
    Title: Senior Director, Design
    E-mail: karen.mccallum@cbre.com
    Telephone No.: 404-946-2294
13. Has your firm, its principals, officers or predecessor organization(s) been debarred or suspended by any government entity within the last three years? If yes, specify details in an attached written response. ☐ Yes ☐ No

14. Has your firm, its principals, officers or predecessor organization(s) ever been debarred or suspended by any government entity? If yes, specify details in an attached written response, including the reinstatement date, if granted. ☐ Yes ☐ No
15. Has your firm ever failed to complete any services and/or delivery of products during the last three (3) years? If yes, specify details in an attached written response. ☐ Yes ☐ No
16. Is your firm or any of its principals or officers currently principals or officers of another organization? If yes, specify details in an attached written response. ☐ Yes ☐ No
17. Have any voluntary or involuntary bankruptcy petitions been filed by or against your firm, its parent or subsidiaries or predecessor organizations during the last three years? If yes, specify details in an attached written response. ☐ Yes ☐ No
18. Has your firm's surety ever intervened to assist in the completion of a contract or have Performance and/or Payment Bond claims been made to your firm or its predecessor's sureties during the last three years? If yes, specify details in an attached written response, including contact information for owner and surety. ☐ Yes ☐ No
19. Has your firm ever failed to complete any work awarded to you, services and/or delivery of products during the last three (3) years? If yes, specify details in an attached written response. ☐ Yes ☐ No
20. Has your firm ever been terminated from a contract within the last three years? If yes, specify details in an attached written response. ☐ Yes ☐ No
21. Living Wage solicitations only: In determining what, if any, fiscal impact(s) are a result of the Ordinance for this solicitation, provide the following for informational purposes only. Response is not considered in determining the award of the contract.

    Living Wage had an effect on the pricing Yes ☐ No ☐
    If yes, Living Wage increased the pricing by _____ % or decreased the pricing by _____ %.
22. Participation in Solicitation Development:

    ☐ I have not participated in the preparation or drafting of any language, scope, or specification that would provide my firm or any affiliate an unfair advantage of securing this solicitation that has been let on behalf of Broward County Board of County Commissioners.

    ☐ I have provided information regarding the specifications and/or products listed in this solicitation that has been let on behalf of Broward County Board of County Commissioners.
    If this box is checked, provide the following:
    Name of Person the information was provided: _____
    Title: _____
    Date information provided: _____
    For what purpose was the information provided? _____

Cone of Silence Requirement Certification:
The Cone of Silence Ordinance, Section 1-266, Broward County Code of Ordinances prohibits certain communications among Vendors, Commissioners, County staff, and Selection or Evaluation Committee members. Identify on a separate sheet any violations of this Ordinance by any members of the responding firm or its joint ventures. After the application of the Cone of Silence, inquiries regarding this solicitation should be directed to the Director of Purchasing or designee. The Cone of Silence terminates when the County Commission or other awarding authority takes action which ends the solicitation.

The Vendor hereby certifies that: (check each box)

☐ The Vendor has read Cone of Silence Ordinance, Section 1-266, Broward County Code of Ordinances; and

☐ The Vendor understands that the Cone of Silence for this competitive solicitation shall be in effect beginning upon the appointment of the Selection or Evaluation Committee, for communication regarding this solicitation with the County Administrator, Deputy County Administrator, Assistant County Administrators, and Assistants to the County Administrator and their respective support staff or any person, including Evaluation or Selection

Committee members, appointed to evaluate or recommend selection in this RFP/RLI process. For Communication with County Commissioners and Commission staff, the Cone of Silence allows communication until the initial Evaluation or Selection Committee Meeting.

☐ The vendor understands that they may communicate with a representative of the Office of Economic and Small Business Development ("OESBD") at any time regarding a solicitation or regarding participation of Small Business Enterprises or County Business Enterprises in a solicitation. OESBD may be contacted at (954) 357- 6400. The Cone of Silence also permits communication with certain other County employees (refer to the Cone of Silence Ordinance).

☐ The Vendor agrees to comply with the requirements of the Cone of Silence Ordinance.

Drug-Free Workplace Requirements Certification:
Section 21.31.a. of the Broward County Procurement Code requires awards of all competitive solicitations requiring Board award be made only to firms certifying the establishment of a drug free workplace program. The program must consist of:

1. Publishing a statement notifying its employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the offeror's workplace, and specifying the actions that will be taken against employees for violations of such prohibition;

2. Establishing a continuing drug-free awareness program to inform its employees about:
   a. The dangers of drug abuse in the workplace;
   b. The offeror's policy of maintaining a drug-free workplace;
   c. Any available drug counseling, rehabilitation, and employee assistance programs; and
   d. The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;

3. Giving all employees engaged in performance of the contract a copy of the statement required by subparagraph 1;

4. Notifying all employees, in writing, of the statement required by subparagraph 1, that as a condition of employment on a covered contract, the employee shall:
   a. Abide by the terms of the statement; and
   b. Notify the employer in writing of the employee's conviction of, or plea of guilty or nolo contendere to, any violation of Chapter 893 or of any controlled substance law of the United States or of any state, for a violation occurring in the workplace NO later than five days after such conviction.

5. Notifying Broward County government in writing within 10 calendar days after receiving notice under subdivision 4.b above, from an employee or otherwise receiving actual notice of such conviction. The notice shall include the position title of the employee;

6. Within 30 calendar days after receiving notice under subparagraph 4 of a conviction, taking one of the following actions with respect to an employee who is convicted of a drug abuse violation occurring in the workplace:
   a. Taking appropriate personnel action against such employee, up to and including termination; or
   b. Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a federal, state, or local health, law enforcement, or other appropriate agency; and

7. Making a good faith effort to maintain a drug-free workplace program through implementation of subparagraphs 1 through 6.

The Vendor hereby certifies that: (check box)

☐ The Vendor certifies that it has established a drug free workplace program in accordance with the above requirements.

Non-Collusion Certification:
Vendor shall disclose, to their best knowledge, any Broward County officer or employee, or any relative of any such officer or employee as defined in Section 112.3135 (1) (c), Florida Statutes, who is an officer or director of, or has a material interest in, the Vendor's business, who is in a position to influence this procurement. Any Broward County officer or employee who has any input into the writing of specifications or requirements, solicitation of offers, decision to award, evaluation of offers, or any other activity pertinent to this procurement is presumed, for purposes hereof, to be in a position to influence this procurement. Failure of a Vendor to disclose any relationship described herein shall be reason for debarment in accordance with the provisions of the Broward County Procurement Code.

The Vendor hereby certifies that: (select one)

☐ The Vendor certifies that this offer is made independently and free from collusion; or

☐ The Vendor is disclosing names of officers or employees who have a material interest in this procurement and is in a position to influence this procurement. Vendor must include a list of name(s), and relationship(s) with its submittal.

REQUIRED FORMS

Public Entities Crimes Certification:
In accordance with Public Entity Crimes, Section 287.133, Florida Statutes, a person or affiliate placed on the convicted vendor list following a conviction for a public entity crime may not submit on a contract: to provide any goods or services; for construction or repair of a public building or public work; for leases of real property to a public entity; and may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity; and may not transact business with any public entity in excess of the threshold amount provided in s.
287.017 for Category Two for a period of 36 months following the date of being placed on the convicted vendor list.

The Vendor hereby certifies that: (check box)

☐ The Vendor certifies that no person or affiliates of the Vendor are currently on the convicted vendor list and/or has not been found to commit a public entity crime, as described in the statutes.

Scrutinized Companies List Certification:
Any company, principals, or owners on the Scrutinized Companies with Activities in Sudan List, the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or the Scrutinized Companies that Boycott Israel List is prohibited from submitting a response to a solicitation for goods or services in an amount equal to or greater than
$1 million.

The Vendor hereby certifies that: (check each box)

☐ The Vendor, owners, or principals are aware of the requirements of Sections 287.135, 215.473, and 215.4275, Florida Statutes, regarding Companies on the Scrutinized Companies with Activities in Sudan List the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or the Scrutinized Companies that Boycott Israel List; and

☐ The Vendor, owners, or principals, are eligible to participate in this solicitation and are not listed on either the Scrutinized Companies with Activities in Sudan List, the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or the Scrutinized Companies that Boycott Israel List; and

☐ If awarded the Contract, the Vendor, owners, or principals will immediately notify the County in writing if any of its principals are placed on the Scrutinized Companies with Activities in Sudan List, the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or the Scrutinized Companies that Boycott Israel List.

I hereby certify the information provided in the Vendor Questionnaire and Standard Certifications:

Karen McCullum	Senior Director	4/20/2021
*AUTHORIZED SIGNATURE/NAME	TITLE	DATE

Vendor Name: CBRE

* I certify that I am authorized to sign this solicitation response on behalf of the Vendor as indicated in Certificate as to Corporate Principal, designation letter by Director/Corporate Officer, or other business authorization to bind on behalf of the Vendor. As the Vendor's authorized representative, I attest that any and all statements, oral, written or otherwise, made in support of the Vendor's response, are accurate, true and correct. I also acknowledge that inaccurate, untruthful, or incorrect statements made in support of the Vendor's response may be used by the County as a basis for rejection, rescission of the award, or termination of the contract and may also serve as the basis for debarment of Vendor pursuant to Section 21.119 of the Broward County Procurement Code. I certify that the Vendor's response is made without prior understanding, agreement, or connection with any corporation, firm or person submitting a response for the same items/services, and is in all respects fair and without collusion or fraud. I also certify that the Vendor agrees to abide by all terms and conditions of this solicitation, acknowledge and accept all of the solicitation pages as well as any special instructions sheet(s).

Please enter your password below and click Save to update your response.
Please be aware that typing in your password acts as your electronic signature, which is just as legal and binding as an original signature. (See Electronic Signatures in Global and National Commerce Act for more information.)

To take exception:
1) Click Take Exception.
2) Create a Word document detailing your exceptions.
3) Upload exceptions as an attachment to your offer on BidSync's system.
By completing this form, your bid has not yet been submitted. Please click on the place offer button to finish filling out your bid.

Username **Heery2018**
Password *

Save | Take Exception | Close

* Required fields

REQUIRED FORMS

Supplier Response Form
Supplier Response Form

AFFILIATED ENTITIES OF THE PRINCIPAL(S) CERTIFICATION FORM
AFFILIATED ENTITIES OF THE PRINCIPAL(S) CERTIFICATION FORM

The completed form should be submitted with the solicitation response but must be submitted within three business days of County's request. Vendor may be deemed non-responsive for failure to fully comply within stated timeframes.
The completed form should be submitted with the solicitation response but must be submitted within three business days of County's request. Vendor may be deemed non-responsive for failure to fully comply within stated timeframes.

a. All Vendors are required to disclose the names and addresses of "affiliated entities" of the Vendor's principal(s) over the last five (5) years (from the solicitation opening deadline) that have acted as a prime Vendor with the County.
a. All Vendors are required to disclose the names and addresses of "affiliated entities" of the Vendor's principal(s) over the last five (5) years (from the solicitation opening deadline) that have acted as a prime Vendor with the County.

b. The County will review all affiliated entities of the Vendor's principal(s) for contract performance evaluations and the compliance history with the County's Small Business Program, including CBE, DBE and SBE goal attainment requirements. "Affiliated entities" of the principal(s) are those entities related to the Vendor by the sharing of stock or other means of control, including but not limited to a subsidiary, parent or sibling entity.
b. The County will review all affiliated entities of the Vendor's principal(s) for contract performance evaluations and the compliance history with the County's Small Business Program, including CBE, DBE and SBE goal attainment requirements. "Affiliated entities" of the principal(s) are those entities related to the Vendor by the sharing of stock or other means of control, including but not limited to a subsidiary, parent or sibling entity.

c. The County will consider the contract performance evaluations and the compliance history of the affiliated entities of the Vendor's principals in its review and determination of responsibility.
c. The County will consider the contract performance evaluations and the compliance history of the affiliated entities of the Vendor's principals in its review and determination of responsibility.

The Vendor hereby certifies that: (select one)
The Vendor hereby certifies that: (select one)

☐ No principal of the proposing Vendor has prior affiliations that meet the criteria defined as "Affiliated entities"
☐ No principal of the proposing Vendor has prior affiliations that meet the criteria defined as "Affiliated entities"

☐ Principal(s) listed below have prior affiliations that meet the criteria defined as "Affiliated entities"
☐ Principal(s) listed below have prior affiliations that meet the criteria defined as "Affiliated entities"

Principal's Name:
Principal's Name:

Names of Affiliated Entities:
Names of Affiliated Entities:

Principal's Name:
Principal's Name:

Names of Affiliated Entities:
Names of Affiliated Entities:

Principal's Name:
Principal's Name:

Names of Affiliated Entities:
Names of Affiliated Entities:

Authorized Signature Name: Sarah Friedfeld
Authorized Signature Name: Sarah Friedfeld

Title: National Business Development Manager
Title: National Business Development Manager

Vendor Name: CBRE, Inc
Vendor Name: CBRE, Inc

Date: 4/20/2021
Date: 4/20/2021

Please enter your password below and click Save to update your response.
Please enter your password below and click Save to update your response.

Please be aware that typing in your password acts as your electronic signature which is just as legal and binding as an original signature (See Electronic Signatures in Global and National Commerce Act for more information).
Please be aware that typing in your password acts as your electronic signature which is just as legal and binding as an original signature (See Electronic Signatures in Global and National Commerce Act for more information).

To take exception:
1) Click Take Exception.
2) Create a Word document detailing your exceptions.

By completing this form, your bid has not yet been submitted. Please click on the place offer button to finish filling out your bid.

Username **Heery2018**

Password *

4/21/2021 Save Take Exception Close BidSync p. 162

REQUIRED FORMS

CERTIFICATE OF LIABILITY INSURANCE

DATE(MM/DD/YYYY) 03/30/2021

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
Aon Risk Services Northeast, Inc.
Stamford CT Office
1600 Summer Street
Stamford CT 06907-4907 USA

CONTACT NAME:
PHONE (A/C. No. Ext): (866) 283-7122
FAX (A/C. No.): (800) 363-0105
E-MAIL ADDRESS:

INSURER(S) AFFORDING COVERAGE		NAIC #
INSURER A:	Zurich American Ins Co	16535
INSURER B:	American Zurich Ins Co	40142
INSURER C:		
INSURER D:		
INSURER E:		
INSURER F:		

INSURED
CBRE Group, Inc. and Subsidiaries
2100 McKinney Avenue
Suite 1250
Dallas TX 75201 USA

COVERAGES **CERTIFICATE NUMBER:** 570086690145 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

Limits shown are as requested

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY	Y		GL0838419919	03/01/2021	03/01/2022	EACH OCCURRENCE	$5,000,000
	CLAIMS-MADE X OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	$50,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						MED EXP (Any one person)	$10,000
	POLICY PRO-JECT X LOC						PERSONAL & ADV INJURY	$5,000,000
	OTHER:						GENERAL AGGREGATE	$5,000,000
							PRODUCTS - COMP/OP AGG	$5,000,000
	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	
	ANY AUTO						BODILY INJURY (Per person)	
	OWNED AUTOS ONLY / SCHEDULED AUTOS						BODILY INJURY (Per accident)	
	HIRED AUTOS ONLY / NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	
	UMBRELLA LIAB OCCUR						EACH OCCURRENCE	
	EXCESS LIAB CLAIMS-MADE						AGGREGATE	
	DED RETENTION							
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY			WC838419522 All Other States	03/01/2021	03/01/2022	X PER STATUTE OTH-ER	
A	ANY PROPRIETOR / PARTNER / EXECUTIVE OFFICER/MEMBER EXCLUDED? Y/N: N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N / A		WC914173615 Wisconsin	03/01/2021	03/01/2022	E.L. EACH ACCIDENT	$1,000,000
							E.L. DISEASE-EA EMPLOYEE	$1,000,000
							E.L. DISEASE-POLICY LIMIT	$1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CBRE Heery, Inc. is a subsidiary of CBRE Group, Inc. RE: Solicitation PNC2120437P1; Professional Consultant Services for FLL and HWO Airports, Building Projects; Project Manager: Mariana Pitiriciu, Construction Project Management Supervisor. Broward County is included as Additional Insured in accordance with the policy provisions of the General Liability policy.

CERTIFICATE HOLDER

Broward County
2200 SW 45th Street, Suite #101
Dania Beach FL 33312 USA

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Aon Risk Services Northeast, Inc.

Holder Identifier : A

Certificate No : 570086690145

©1988-2015 ACORD CORPORATION. All rights reserved.

ACORD 25 (2016/03) The ACORD name and logo are registered marks of ACORD

REQUIRED FORMS

ACORD

CERTIFICATE OF LIABILITY INSURANCE

DATE(MM/DD/YYYY) 03/30/2021

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
Aon Risk Services Northeast, Inc.
Stamford CT Office
1600 Summer Street
Stamford CT 06907-4907 USA

CONTACT NAME:
PHONE (A/C. No. Ext): (866) 283-7122 **FAX (A/C. No.):** 8003630105
E-MAIL ADDRESS:

INSURER(S) AFFORDING COVERAGE		NAIC #
INSURER A:	American International Group UK Ltd	AA1120187
INSURER B:		
INSURER C:		
INSURER D:		
INSURER E:		
INSURER F:		

INSURED
CBRE Group, Inc. and Subsidiaries
2100 McKinney Avenue
Suite 1250
Dallas TX 75201 USA

COVERAGES **CERTIFICATE NUMBER:** 570086689597 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS,

Limits shown are as requested

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
	COMMERCIAL GENERAL LIABILITY						EACH OCCURRENCE	
	CLAIMS-MADE / OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	
							MED EXP (Any one person)	
							PERSONAL & ADV INJURY	
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	
	POLICY / PRO-JECT / LOC						PRODUCTS - COMP/OP AGG	
	OTHER:							
	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	
	ANY AUTO						BODILY INJURY (Per person)	
	OWNED AUTOS ONLY / SCHEDULED AUTOS						BODILY INJURY (Per accident)	
	HIRED AUTOS ONLY / NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	
	UMBRELLA LIAB / OCCUR						EACH OCCURRENCE	
	EXCESS LIAB / CLAIMS-MADE						AGGREGATE	
	DED / RETENTION							
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY						PER STATUTE / OTH-ER	
	ANY PROPRIETOR / PARTNER / EXECUTIVE OFFICER/MEMBER (Mandatory in NH) Y / N / N / A						E.L. EACH ACCIDENT	
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE-EA EMPLOYEE	
							E.L. DISEASE-POLICY LIMIT	
A	E&O-PL-Primary			PSDEF2000558 Errors & Omissions SIR applies per policy terms & conditions	11/01/2020	11/01/2021	Per Claim/Aggregate SIR	$10,000,000 $20,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CBRE Heery, Inc. is a subsidiary of CBRE Group, Inc. RE: Solicitation PNC2120437P1; Professional Consultant Services for FLL and HWO Airports, Building Projects; Project Manager: Mariana Pitiriciu, Construction Project Management Supervisor.

CERTIFICATE HOLDER

Broward County
2200 SW 45th Street, Suite #101
Dania Beach FL 33312 USA

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Aon Risk Services Northeast, Inc.

Holder Identifier :

Certificate No : 570086689597

©1988-2015 ACORD CORPORATION. All rights reserved

ACORD 25 (2016/03) The ACORD name and logo are registered marks of ACORD



REQUIRED FORMS

ACORD®

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 03/30/2021

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME: Willis Towers Watson Certificate Center
Willis Towers Watson Northeast, Inc. c/o 26 Century Blvd P.O. Box 305191 Nashville, TN 372305191 USA	PHONE (A/C, No, Ext): 1-877-945-7378 FAX (A/C, No): 1-888-467-2378 E-MAIL ADDRESS: certificates@willis.com
INSURED CBRE Group, Inc. and its subsidiaries 2100 McKinney Avenue, Suite 1250 Dallas, TX 75201	INSURER(S) AFFORDING COVERAGE — NAIC # INSURER A: Zurich American Insurance Company — 16535 INSURER B: INSURER C: INSURER D: INSURER E: INSURER F:

COVERAGES **CERTIFICATE NUMBER:** W20488644 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
	COMMERCIAL GENERAL LIABILITY						EACH OCCURRENCE	$
	☐ CLAIMS-MADE ☐ OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	$
							MED EXP (Any one person)	$
							PERSONAL & ADV INJURY	$
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	$
	☐ POLICY ☐ PRO-JECT ☐ LOC						PRODUCTS - COMP/OP AGG	$
	☐ OTHER:							$
A	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	$ 5,000,000
	☒ ANY AUTO						BODILY INJURY (Per person)	$
	☐ OWNED AUTOS ONLY ☐ SCHEDULED AUTOS			BAP 8384200-19	03/01/2021	03/01/2022	BODILY INJURY (Per accident)	$
	☐ HIRED AUTOS ONLY ☐ NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	$
								$
	UMBRELLA LIAB ☐ OCCUR						EACH OCCURRENCE	$
	EXCESS LIAB ☐ CLAIMS-MADE						AGGREGATE	$
	☐ DED ☐ RETENTION $							$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y / N						☐ PER STATUTE ☐ OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? ☐ (Mandatory in NH)	N / A					E.L. EACH ACCIDENT	$
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$
							E.L. DISEASE - POLICY LIMIT	$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

RE: Solicitation PNC2120437P1; Professional Consultant Services for FLL and HWO Airports, Building Projects; Project Manager: Mariana Pitiriciu, Construction Project Management Supervisor

CERTIFICATE HOLDER

Broward County
2200 SW 45th Street, Suite #101
Dania Beach, FL 33312

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE



© 1988-2016 ACORD CORPORATION. All rights reserved.

ACORD 25 (2016/03) **The ACORD name and logo are registered marks of ACORD**

SR ID: 20910934 BATCH: 2038509

Supplier Response Form

SUBCONTRACTORS/SUBCONSULTANTS/SUPPLIERS REQUIREMENT FORM
Request for Proposals, Request for Qualifications, or Request for Letters of Interest

The following forms and supporting information (if applicable) should be returned with Vendor's submittal. If not provided with submittal, the Vendor must submit within three business days of County's request. Failure to timely submit may affect Vendor's evaluation.

A. The Vendor shall submit a listing of all subcontractors, subconsultants and major material suppliers (firms), if any, and the portion of the contract they will perform. A major material supplier is considered any firm that provides construction material for construction contracts, or commodities for service contracts in excess of $50,000, to the Vendor.

B. If participation goals apply to the contract, only non-certified firms shall be identified on the form. A non-certified firm is a firm that is not listed as a firm for attainment of participation goals (ex. County Business Enterprise or Disadvantaged Business Enterprise), if applicable to the solicitation.

C. This list shall be kept up-to-date for the duration of the contract. If subcontractors, subconsultants or suppliers are stated, this does not relieve the Vendor from the prime responsibility of full and complete satisfactory performance under any awarded contract.

D. After completion of the contract/final payment, the Vendor shall certify the final list of non-certified subcontractors, subconsultants, and suppliers that performed or provided services to the County for the referenced contract.

E. The Vendor has confirmed that none of the recommended subcontractors, subconsultants, or suppliers' principal (s), officer(s), affiliate(s) or any other related companies have been debarred from doing business with Broward County or any other governmental agency.

If none, state "none" on this form. Use additional sheets as needed. Vendor should scan and upload any additional form(s) in BidSync.

1. Subcontracted Firm's Name: PM Technologies

   Subcontracted Firm's Address: 100 Terminal Dr. Ft. Lauderdale, FL 3

   Subcontracted Firm's Telephone Number: 770-363-1496

   Contact Person's Name and Position: Evan Barron, Senior Project Manager

   Contact Person's E-Mail Address: ebarron@pmtechno.com

   Estimated Subcontract/Supplies Contract Amount: 560,000

   Type of Work/Supplies Provided: Construction & Project Management

2. Subcontracted Firm's Name: KEITH

   Subcontracted Firm's Address: 2312 S Andrews Ave, Ft. Lauderdale,

   Subcontracted Firm's Telephone Number: 954-788-3400

   Contact Person's Name and Position: Alex Lazowick, President

   Contact Person's E-Mail Address: alazowick@keithteam.com

   Estimated Subcontract/Supplies Contract Amount: 420,000

   Type of Work/Supplies Provided: Landside Civil and Subsurface Utility E

3. Subcontracted Firm's Name: AERO Systems Engineering



REQUIRED FORMS

Subcontracted Firm's Address: 2700 Delk Rd, Ste 100. Marietta, GA

Subcontracted Firm's Telephone Number: 770-423-4200

Contact Person's Name and Position: Chris Britton, Vice President

Contact Person's E-Mail Address: chris.britton@aerosys.net

Estimated Subcontract/Supplies Contract Amount: 300,000

Type of Work/Supplies Provided: Airside Civil and Gate Systems Engine

4. Subcontracted Firm's Name:

Subcontracted Firm's Address:

Subcontracted Firm's Telephone Number:

Contact Person's Name and Position:

Contact Person's E-Mail Address:

Estimated Subcontract/Supplies Contract Amount:

Type of Work/Supplies Provided:

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

Karen McCullum	Senior Director	CBRE, Inc.	4/20/2021
Authorized Signature/Name	**Title**	**Vendor Name**	**Date**

Please enter your password below and click Save to update your response.
Please be aware that typing in your password acts as your electronic signature, which is just as legal and binding as an original signature. (See Electronic Signatures in Global and National Commerce Act for more information.)

To take exception:
1) Click Take Exception.
2) Create a Word document detailing your exceptions.
3) Upload exceptions as an attachment to your offer on BidSync's system.
By completing this form, your bid has not yet been submitted. Please click on the place offer button to finish filling out your bid.

Username **Heery2018**
Password *

Save | Take Exception | Close

* Required fields

Supplier Response Form

AGREEMENT EXCEPTION FORM

The completed form(s) should be returned with the Vendor's submittal. If not provided with submittal, it shall be deemed an affirmation by the Vendor that it accepts the terms and conditions of the County's Agreement as disclosed in the solicitation.

The Vendor must either provide specific proposed alternative language on the form below. Additionally, a brief justification specifically addressing each provision to which an exception is taken should be provided.

☐ There are no exceptions to the terms and conditions of the County Agreement as referenced ir solicitation; or

☐ The following exceptions are disclosed below: (use additional forms as needed; separate each Article/ Section number)

Term or Condition Article / Section	Insert version of exception or specific proposed alternative language	Provide brief justification for change
1.8	Performance of the Services	Scope clarification
3.1	Consultant's scope shall not	Scope clarification
3.4	Modify to also allow Consult	Standard commer
Article 9	Modify terms to require high	Standard commer
11.8	Modify indemnity terms to n	Standard commer

Vendor Name: CBRE, Inc.

Please enter your password below and click Save to update your response.
Please be aware that typing in your password acts as your electronic signature, which is just as legal and binding as an original signature. (See Electronic Signatures in Global and National Commerce Act for more information.)

To take exception:
1) Click Take Exception.
2) Create a Word document detailing your exceptions.
3) Upload exceptions as an attachment to your offer on BidSync's system.

By completing this form, your bid has not yet been submitted. Please click on the place offer button to finish filling out your bid.

Username **Heery2018**

Password *

Save | Take Exception | Close

* Required fields

AGREEMENT EXCEPTION FORM

The completed form(s) should be returned with the Vendor's submittal. If not provided with submittal, it shall be deemed an affirmation by the Vendor that it accepts the terms and conditions of the County's Agreement as disclosed in the solicitation.

The Vendor must either provide specific proposed alternative language on the form below. Additionally, a brief justification specifically addressing each provision to which an exception is taken should be provided.

☐ There are no exceptions to the terms and conditions of the County Agreement as referenced in the solicitation; or

☒ The following exceptions are disclosed below: (use additional forms as needed; separate each Article/ Section number)

Term or Condition Article / Section	Insert version of exception or specific proposed alternative language	Provide brief justification for change
	New additional provision as follows: Neither Party shall be liable for any lost or , incide ased in contract, warranty, indemnity, negligence, strict liability or other tort or otherwise, regardless of the foreseeability or the cause thereof. Excepting liability to the extent of bodily injury, death or personal property damage to the ' sul- tant in unt of fees received by Consultant under this Agreement.	
		t

Vendor Name:

Supplier Response Form

LOCATION CERTIFICATION FORM

Refer to applicable sections for submittal instructions. Failure to submit required forms or information by stated timeframes will deem vendor ineligible for local preference or location tiebreaker.

Broward County Code of Ordinances, Section 1-74, et seq., provides certain preferences to Local Businesses, Locally Based Businesses, and Locally Based Subsidiaries, and the Broward County Procurement Code provides location as the first tiebreaker criteria. Refer to the ordinance for additional information regarding eligibility for local preference.

For Invitation for Bids:

To be eligible for the Local Preference best and final offer ("BAFO") and location tiebreaker, the Vendor **must** submit this fully completed form and a copy of its Broward County local business tax receipt **at the same time it submits its bid**. **Vendors who fail to comply with this submittal deadline will not be eligible for either the BAFO or the location tiebreaker.**

For Request for Proposals (RFPs), Request for Letters of Interest (RLIs), or Request for Qualifications (RFQs):

For Local Preference eligibility, the Vendor **should** submit this fully **completed form** and **all Required Supporting Documentation** (as indicated below) at the time Vendor submits its response to the procurement solicitation. If not provided with submittal, the Vendor **must** submit within three business days after County's written request. Failure to submit required forms or information by stated timeframes will deem the Vendor ineligible for local preference.

To be eligible for the location tiebreaker, **the Vendor must submit this fully completed form and a copy of its Broward County local business tax receipt at the same time it submits its response.** Vendors who fail to comply with this submittal deadline will not be eligible for the location tiebreaker.

The undersigned Vendor hereby certifies that (check the box for only one option below):

☐ **Option 1:** The Vendor is a **Local Business,** but does not qualify as a **Locally Based Business** or a **Locally Based Subsidiary**, as each term is defined by Section 1-74, Broward County Code of Ordinances. The Vendor further certifies that:

A. It has continuously maintained, for at least the one (1) year period immediately preceding the bid posting date (i.e., the date on which the solicitation was advertised),

i. a physical business address located within the limits of Broward County, listed on the Vendor's valid business tax receipt issued by Broward County (unless exempt from business tax receipt requirements),

ii. in an area zoned for the conduct of such business,

iii. that the Vendor owns or has the legal right to use, and

iv. from which the Vendor operates and performs on a day-to-day basis business that is a substantial component of the goods or services being offered to Broward County in connection with the applicable competitive solicitation (as so defined, the "Local Business Location").

If Option 1 selected, indicate **Local Business Location**:

7650 Corporate Center Drive, Suite 302
Miami, FL 33126

☐ **Option 2:** The Vendor is both a **Local Business** and a **Locally Based Business** as each term is defined by Section 1-74, Broward County Code of Ordinances. The Vendor further certifies that:

A. The Vendor has continuously maintained, for at least the one (1) year period immediately preceding the bid posting date (i.e., the date on which the solicitation was advertised),
   i. a physical business address located within the limits of Broward County, listed on the Vendor's valid business tax receipt issued by Broward County (unless exempt from business tax receipt requirements),
   ii. in an area zoned for the conduct of such business,
   iii. that the Vendor owns or has the legal right to use, and
   iv. from which the Vendor operates and performs on a day-to-day basis business that is a substantial component of the goods or services being offered to Broward County in connection with the applicable competitive solicitation as so defined, the "Local Business Location");

B. The Local Business Location is the primary business address of the majority of the Vendor's employees as of the bid posting date, and/or the majority of the work under the solicitation, if awarded to the Vendor, will be performed by employees of the Vendor whose primary business address is the Local Business Location;

C. The Vendor's management directs, controls, and coordinates all or substantially all of the day-to-day activities of the entity (such as marketing, finance, accounting, human resources, payroll, and operations) from the Local Business Location;

D. The Vendor has not claimed any other location as its principal place of business within the one (1) year period immediately preceding the bid posting date; and

E. Less than fifty percent (50%) of the total equity interests in the business are owned, directly or indirectly, by one or more entities with a principal place of business located outside of Broward County. The Vendor certifies that the total equity interests in the Vendor owned, directly or indirectly, by one or more entities with a principal place of business located outside of Broward County is ☐.

If Option 2 selected, indicate **Local Business Location**:

☐ **Option 3:** The Vendor is both a **Local Business** and a **Locally Based Subsidiary** as each term is defined by Section 1-74, Broward County Code of Ordinances. The Vendor further certifies that:

A. The Vendor has continuously maintained:
   i. for at least the one (1) year period immediately preceding the bid posting date (i.e., the date on which the solicitation was advertised),
   ii. a physical business address located within the limits of Broward County, listed on the Vendor's valid business tax receipt issued by Broward County (unless exempt from business tax receipt requirements),
   iii. in an area zoned for the conduct of such business,
   iv. that the Vendor owns or has the legal right to use, and
   v. from which the Vendor operates and performs on a day-to-day basis business that is a substantial component of the goods or services being offered to Broward County in connection with the applicable competitive solicitation (as so defined, the "Local Business Location");

B. The Local Business Location is the primary business address of the majority of the Vendor's employees as of the bid posting date, and/or the majority of the work under the solicitation, if awarded to the Vendor, will be performed by employees of the Vendor whose primary business address is the Local Business Location;

C. The Vendor's management directs, controls, and coordinates all or substantially all of the day-to-day activities of the entity (such as marketing, finance, accounting, human resources, payroll, and operations) from the Local Business Location;

D. The Vendor has not claimed any other location as its principal place of business within the one (1) year period immediately preceding the bid posting date; and

E. At least fifty percent (50%) of the total equity interests in the business are owned, directly or indirectly, by one or more entities with a principal place of business located outside of Broward County. The Vendor certifies that the total equity interests in the Vendor owned, directly or indirectly, by one or more entities with a principal place of business located outside of Broward County is [ ].

If Option 3 selected, indicate **Local Business Location**:

[ ]

☐ **Option 4:** The Vendor is a **joint venture** composed of one or more Local Businesses, Locally Based Businesses, or Locally Based Subsidiaries, as each term is defined by Section 1-74, Broward County Code of Ordinances. Fill in blanks with percentage equity interest or list "N/A" if section does not apply. The Vendor further certifies that:

A. The proportion of equity interests in the joint venture owned by **Local Business(es)** (each Local Business must comply with all of the requirements stated in Option 1) is [ ]% of the total equity interests in the joint venture; and/or

B. The proportion of equity interests in the joint venture owned by **Locally Based Business (es)** (each Locally Based Business must comply with all of the requirements stated in Option 2) is [ ]% of the total equity interests in the joint venture; and/or

REQUIRED FORMS

True and Correct Attestations:
Any misleading, inaccurate, or false information or documentation submitted by any party affiliated with this procurement may lead to suspension and/or debarment from doing business with Broward County as authorized by the Broward County Procurement Code. The Vendor understands that, if after contract award, the County learns that any of the information provided by the Vendor on this form was false, and the County determines, upon investigation, that the Vendor's provision of such false information was willful or intentional, the County may exercise any contractual right to terminate the contract. The provision of false or fraudulent information or documentation by a Vendor may subject the Vendor to civil and criminal penalties.

AUTHORIZED SIGNATURE/NAME: Sarah Friedfeld

TITLE: National Business Development M

VENDOR NAME: CBRE, Inc.

DATE: 4/20/2021

Please enter your password below and click Save to update your response.
Please be aware that typing in your password acts as your electronic signature, which is just as legal and binding as an original signature. (See Electronic Signatures in Global and National Commerce Act for more information.)

To take exception:
1) Click Take Exception.
2) Create a Word document detailing your exceptions.
3) Upload exceptions as an attachment to your offer on BidSync's system.
By completing this form, your bid has not yet been submitted. Please click on the place offer button to finish filling out your bid.

Username **Heery2018**
Password *

Save | Take Exception | Close

* Required fields

REQUIRED FORMS

BROWARD COUNTY LOCAL BUSINESS TAX RECEIPT

115 S. Andrews Ave., Rm. A-100, Ft. Lauderdale, FL 33301-1895 – 954-831-4000
VALID OCTOBER 1, 2020 THROUGH SEPTEMBER 30, 2021

DBA:
Business Name: CBRE INC

Receipt #: 318-258147
Business Type: REAL ESTATE CORP/COMPNY/BROKER (REAL ESTATE BRANCH OFFICE)

Owner Name: ROBERT SULENTIC
Business Location: 200 E LAS OLAS BLVD STE 1620 FT LAUDERDALE
Business Phone: 954-462-5655

Business Opened: 12/27/2007
State/County/Cert/Reg: B02020677
Exemption Code:

Rooms	Seats	Employees	Machines	Professionals
		50		

For Vending Business Only
Number of Machines: **Vending Type:**

Tax Amount	Transfer Fee	NSF Fee	Penalty	Prior Years	Collection Cost	Total Paid
45.00	0.00	0.00	0.00	0.00	0.00	45.00

THIS RECEIPT MUST BE POSTED CONSPICUOUSLY IN YOUR PLACE OF BUSINESS

THIS BECOMES A TAX RECEIPT

WHEN VALIDATED

This tax is levied for the privilege of doing business within Broward County and is non-regulatory in nature. You must meet all County and/or Municipality planning and zoning requirements. This Business Tax Receipt must be transferred when the business is sold, business name has changed or you have moved the business location. This receipt does not indicate that the business is legal or that it is in compliance with State or local laws and regulations.

Mailing Address:

ROBERT SULENTIC
2100 ROSS AVE STE 1500
DALLAS, TX 75201

Receipt #WWW-19-00215754
Paid 09/25/2020 45.00

2020 - 2021

BROWARD COUNTY LOCAL BUSINESS TAX RECEIPT

115 S. Andrews Ave., Rm. A-100, Ft. Lauderdale, FL 33301-1895 – 954-831-4000
VALID OCTOBER 1, 2020 THROUGH SEPTEMBER 30, 2021

DBA:
Business Name: CBRE INC

Receipt #: 318-258147
Business Type: REAL ESTATE CORP/COMPNY/BROKER (REAL ESTATE BRANCH OFFICE)

Owner Name: ROBERT SULENTIC
Business Location: 200 E LAS OLAS BLVD STE 1620 FT LAUDERDALE
Business Phone: 954-462-5655

Business Opened: 12/27/2007
State/County/Cert/Reg: B02020677
Exemption Code:

Rooms	Seats	Employees	Machines	Professionals
		50		

Signature

For Vending Business Only
Number of Machines: **Vending Type:**

Tax Amount	Transfer Fee	NSF Fee	Penalty	Prior Years	Collection Cost	Total Paid
45.00	0.00	0.00	0.00	0.00	0.00	45.00

Receipt #WWW-19-00215754
Paid 09/25/2020 45.00


001390

Local Business Tax Receipt
Miami-Dade County, State of Florida
-THIS IS NOT A BILL - DO NOT PAY

LBT

4470043

BUSINESS NAME/LOCATION
CBRE HEERY INC
7650 CORPORATE CENTER DR STE 302
MIAMI FL 33126

RECEIPT NO.
RENEWAL
4666500

EXPIRES
SEPTEMBER 30, 2021
Must be displayed at place of business
Pursuant to County Code
Chapter 8A – Art. 9 & 10

OWNER
CBRE HEERY INC

SEC. TYPE OF BUSINESS
212 P.A./CORP/PARTNERSHIP/FIRM
AA0002293

PAYMENT RECEIVED BY TAX COLLECTOR
$75.00 09/28/2020
CREDITCARD-20-082664

Employee(s) 1

2020

This Local Business Tax Receipt only confirms payment of the Local Business Tax. The Receipt is not a license, permit, or a certification of the holder's qualifications, to do business. Holder must comply with any governmental or nongovernmental regulatory laws and requirements which apply to the business.

The RECEIPT NO. above must be displayed on all commercial vehicles – Miami-Dade Code Sec 8a-276.

For more information: miamidade.gov/taxcollector

Supplier Response Form

DOMESTIC PARTNERSHIP ACT CERTIFICATION FORM (REQUIREMENT AND TIEBREAKER)

Refer to Special Instructions to identify if Domestic Partnership Act is a requirement of the solicitation or acts only as a tiebreaker. If Domestic Partnership is a requirement of the solicitation, the completed and signed form should be returned with the Vendor's submittal. If the form is not provided with submittal, the Vendor must submit within three business days of County's request. Vendor may be deemed non-responsive for failure to fully comply within stated timeframes. To qualify for the Domestic Partnership tiebreaker criterion, the Vendor must currently offer the Domestic Partnership benefit and the completed and signed form must be returned at time of solicitation submittal.

The Domestic Partnership Act, Section 16 ½ -157, Broward County Code of Ordinances, requires all Vendors contracting with the County, in an amount over $100,000 provide benefits to Domestic Partners of its employees, on the same basis as it provides benefits to employees' spouses, with certain exceptions as provided by the Ordinance.

For all submittals over $100,000.00, the Vendor, by virtue of the signature below, certifies that it is aware of the requirements of Broward County's Domestic Partnership Act, Section 16-½ -157, Broward County Code of Ordinances; and certifies the following: (check only one below).

☐ 1. The Vendor currently complies with the requirements of the County's Domestic Partnership Act and provides benefits to Domestic Partners of its employees on the same basis as it provides benefits to employees' spouses

☐ 2. The Vendor will comply with the requirements of the County's Domestic Partnership Act at time of contract award and provide benefits to Domestic Partners of its employees on the same basis as it provides benefits to employees' spouses.

☐ 3. The Vendor will not comply with the requirements of the County's Domestic Partnership Act at time of award.

☐ 4. The Vendor does not need to comply with the requirements of the County's Domestic Partnership Act at time of award because the following exception(s) applies: **(check only one below)**.

- ☐ The Vendor is a governmental entity, not-for-profit corporation, or charitable organization.
- ☐ The Vendor is a religious organization, association, society, or non-profit charitable or educational institution.
- ☐ The Vendor provides an employee the cash equivalent of benefits. (Attach an affidavit in compliance with the Act stating the efforts taken to provide such benefits and the amount of the cash equivalent).
- ☐ The Vendor cannot comply with the provisions of the Domestic Partnership Act because it would violate the laws, rules or regulations of federal or state law or would violate or be inconsistent with the terms or conditions of a grant or contract with the United States or State of Florida. Indicate the law, statute or regulation (State the law, statute or regulation and attach explanation of its applicability).

Sarah Friedfeld	National Business Deve	CBRE, Inc.	4/20/2021
Authorized Signature/Name	**Title**	**Vendor Name**	**Date**

REQUIRED FORMS

The Vendor attests to the following:

Item No.	Project Title	Contract No.	Department/ Division	Date Awarded	JV Equity Percent	Prime: Paid to Date	CBE: Paid to Date
1.	Broward County Court Facility Consultant	20030904-0-CM-01	Construction Management	June 14, 200	33%	4,470,772	715,679
2.							
3.							
4.							
5.							
6.							
7.							
8.							
					Grand Total	4,470,772	715,679

Vendor is required to submit an executed Joint Venture agreement(s) and any amendments for each project listed above. Each agreement must be executed prior to the opening date of this solicitation.

Vendor Name: CBRE, Inc.

Sarah Friedfeld	National Business Development M	04/20/2021
Authorized Signature/Name	**Title**	**Date**

Please enter your password below and click Save to update your response.
Please be aware that typing in your password acts as your electronic signature, which is just as legal and binding as an original signature. (See Electronic Signatures in Global and National Commerce Act for more information.)

To take exception:
1) Click Take Exception.
2) Create a Word document detailing your exceptions.
3) Upload exceptions as an attachment to your offer on BidSync's system.
By completing this form, your bid has not yet been submitted. Please click on the place offer button to finish filling out your bid.

Username **Heery2018**
Password *

Save | Take Exception | Close

* Required fields



BROWARD COUNTY FLORIDA
OFFICE OF ECONOMIC AND SMALL BUSINESS DEVELOPMENT

LETTER OF INTENT

BETWEEN BIDDER/OFFEROR AND
COUNTY BUSINESS ENTERPRISE (CBE) FIRM/SUPPLIER

This form is to be completed and signed for each CBE firm. If the PRIME is a CBE firm, please indicate the percentage performing with your own forces.

Solicitation No.: PNC2120437P1

Project Title: Professional Consultant Services for FLL and HWO Airports, Building Project

Bidder/Offeror Name: CBRE

Address: 7650 Corporate Center Drive, Suite 302 City: Miami State: FL Zip: 33126

Authorized Representative: Michael Rometo Phone: 404 946 2367

CBE Firm/Supplier Name: The Chappell Group

Address: 714 East McNab Road City: Pompano Beach State: FL Zip: 33060

Authorized Representative: Tyler Chappell Phone: 954 782 1908

A. This is a letter of intent between the bidder/offeror on this project and a CBE firm for the CBE to perform work on this project.

B. By signing below, the bidder/offeror is committing to utilize the above-named CBE to perform the work described below.

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

D. By signing below, the bidder/offeror and CBE affirm that if the CBE subcontracts any of the work described below, it may only subcontract that work to another CBE.

Work to be performed by CBE Firm

Description	NAICS[1]	CBE Contract Amount[2]	CBE Percentage of Total Project Value
Environmental Engineering and Surveying	541340, 541620		4 %
	541690, 541990		%
			%

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

CBE Firm/Supplier Authorized Representative

Signature: Tyler Chappell Title: President Date: 04/19/21

Bidder/Offeror Authorized Representative

Signature: Michael Rometo Title: Managing Director Date: 04/19/21

[1] Visit Census.gov and select NAICS to search and identify the correct codes. Match type of work with NAICS code as closely as possible.
[2] To be provided only when the solicitation requires that bidder/offeror include a dollar amount in its bid/offer.

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

Rev.: June 2018 **Compliance Form No. 004**

LETTER OF INTENT

BETWEEN BIDDER/OFFEROR AND
COUNTY BUSINESS ENTERPRISE (CBE) FIRM/SUPPLIER

This form is to be completed and signed for each CBE firm. If the PRIME is a CBE firm, please indicate the percentage performing with your own forces.

Solicitation No.: PNC2120437P1

Project Title: Professional Consultant Services for FLL and HWO Airports, Building Project

Bidder/Offeror Name: CBRE

Address: 7650 Corporate Center Drive, Suite 302 City: Miami State: FL Zip: 33126

Authorized Representative: Michael Rometo Phone: +1(404) 946-2367

CBE Firm/Supplier Name: Keleusmatic Technologies, Inc

Address: 8362 Pines Boulevard, Suite 131 City: Pembroke Pines State: FL Zip: 33024

Authorized Representative: Michael Yu Phone: +1(954) 543-5701

A. This is a letter of intent between the bidder/offeror on this project and a CBE firm for the CBE to perform work on this project.

B. By signing below, the bidder/offeror is committing to utilize the above-named CBE to perform the work described below.

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

D. By signing below, the bidder/offeror and CBE affirm that if the CBE subcontracts any of the work described below, it may only subcontract that work to another CBE.

Work to be performed by CBE Firm

Description	NAICS[1]	CBE Contract Amount[2]	CBE Percentage of Total Project Value
IT/Security/Low Voltage Design & Commissioning	238210, 541512, 541518		10 %
			%
			%

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

CBE Firm/Supplier Authorized Representative

Signature: _____ Title: President Date: 19 April 2021

Bidder/Offeror Authorized Representative

Signature: _____ Title: Managing Director Date: 04/19/21

[1] Visit Census.gov and select NAICS to search and identify the correct codes. Match type of work with NAICS code as closely as possible.
[2] To be provided only when the solicitation requires that bidder/offeror include a dollar amount in its bid/offer.

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

Rev.: June 2018 **Compliance Form No. 004**

LETTER OF INTENT

BETWEEN BIDDER/OFFEROR AND
COUNTY BUSINESS ENTERPRISE (CBE) FIRM/SUPPLIER

This form is to be completed and signed for each CBE firm. If the PRIME is a CBE firm, please indicate the percentage performing with your own forces.

Solicitation No.: PNC2120437P1

Project Title: Professional Consultant Services for FLL and HWO Airports, Building Projects

Bidder/Offeror Name: CBRE

Address: 7650 Corporate Center Drive, Suite 302 City: Miami State: FL Zip: 33126

Authorized Representative: Michael Rometo Phone: 404 946 2367

CBE Firm/Supplier Name: Messam Construction

Address: 3600 Red Road, Suite 303 City: Miramar State: FL Zip: 33025

Authorized Representative: Wayne Martin Messam Phone: 877 963 7726

A. This is a letter of intent between the bidder/offeror on this project and a CBE firm for the CBE to perform work on this project.

B. By signing below, the bidder/offeror is committing to utilize the above-named CBE to perform the work described below.

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

D. By signing below, the bidder/offeror and CBE affirm that if the CBE subcontracts any of the work described below, it may only subcontract that work to another CBE.

Work to be performed by CBE Firm

Description	NAICS[1]	CBE Contract Amount[2]	CBE Percentage of Total Project Value
Construction Management and Inspection Services	236220, 541611		10 %
			%
			%

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

CBE Firm/Supplier Authorized Representative

Signature: Wayne M Messam Title: Partner Date: 4/20/2021

Bidder/Offeror Authorized Representative

Signature: Michael Rometo Title: Managing Director Date: 04/19/21

[1] Visit Census.gov and select NAICS to search and identify the correct codes. Match type of work with NAICS code as closely as possible.
[2] To be provided only when the solicitation requires that bidder/offeror include a dollar amount in its bid/offer.

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

Rev.: June 2018 **Compliance Form No. 004**

REQUIRED FORMS

LETTER OF INTENT
BETWEEN BIDDER/OFFEROR AND COUNTY BUSINESS ENTERPRISE (CBE) FIRM/SUPPLIER

This form is to be completed and signed for each CBE firm. If the PRIME is a CBE firm, please indicate the percentage performing with your own forces.

Solicitation No.: PNC2120437P1

Project Title: Professional Consultant Services for FLL and HWO Airports, Building Projects

Bidder/Offeror Name: CBRE

Address: 7650 Corporate Center Drive, Suite 302 City: Miami State: FL Zip: 33126

Authorized Representative: Michael Rometo Phone: 404 946 2367

CBE Firm/Supplier Name: Lakdas/Yohalem Engineering, Inc.

Address: 2711 NE 54th Street City: Fort Lauderdale State: FL Zip: 33308

Authorized Representative: Lakdas Nanayakkara Phone: 954 771 0630

A. This is a letter of intent between the bidder/offeror on this project and a CBE firm for the CBE to perform work on this project.

B. By signing below, the bidder/offeror is committing to utilize the above-named CBE to perform the work described below.

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

D. By signing below, the bidder/offeror and CBE affirm that if the CBE subcontracts any of the work described below, it may only subcontract that work to another CBE.

Work to be performed by CBE Firm

Description	NAICS[1]	CBE Contract Amount[2]	CBE Percentage of Total Project Value
Geotechnical & Structural Engineering and Inspection Services	541330, 541340		10 %
	541350, 541990		10 %
			%

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

CBE Firm/Supplier Authorized Representative

Signature: _____ Title: President Date: 04-19-2021

Bidder/Offeror Authorized Representative

Signature: _____ Title: Managing Director Date: 04/19/21

[1] Visit Census.gov and select NAICS to search and identify the correct codes. Match type of work with NAICS code as closely as possible.

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

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

Rev.: June 2018 **Compliance Form No. 004**

THANK YOU!

BROWARD COUNTY
FLORIDA

FORT LAUDERDALE-HOLLYWOOD
INTERNATIONAL AIRPORT
BROWARD COUNTY, FLORIDA

NORTH PERRY AIRPORT
BROWARD COUNTY, FLORIDA



CBRE

BROWARD COUNTY FLORIDA



SOLICITATION PNC2120437P1

PROFESSIONAL CONSULTANT SERVICES FOR FLL AND HWO AIRPORTS, BUILDING PROJECTS

BROWARD COUNTY BOARD OF COUNTY COMMISSIONERS

FORT LAUDERDALE-HOLLYWOOD INTERNATIONAL AIRPORT
BROWARD COUNTY, FLORIDA

NORTH PERRY AIRPORT
BROWARD COUNTY, FLORIDA

APRIL 21, 2021

CBRE

TABLE OF CONTENTS

EVALUATION CRITERIA

SECTION 1 - Ability of Professional Personnel

SECTION 2 - Project Approach

SECTION 3 - Past Performance

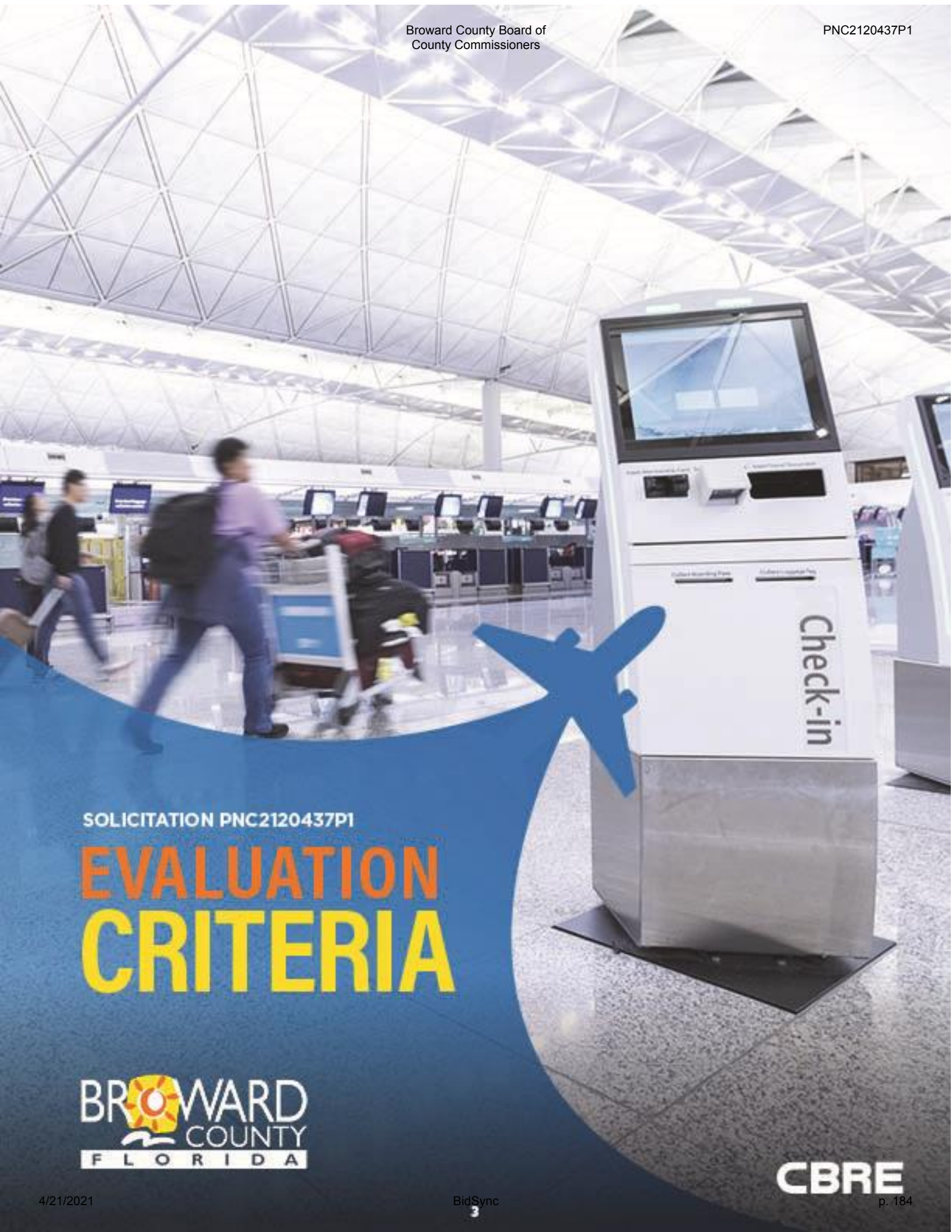
SECTION 4 - Workload of the Firm

SECTION 5 - Location

SECTION 6 - Willingness to Meet Time & Budget Requirements

SECTION 7 - Volume of Previous Work with County

Appendix - Licenses



SOLICITATION PNC2120437P1

EVALUATION CRITERIA

BROWARD COUNTY FLORIDA

CBRE

Section 1
ABILITY OF PROFESSIONAL PERSONNEL

1a. Organization Chart

1b. Qualifications, Licenses & Experience of Key Staff

1c. Project Manager Qualifications

EVALUATION CRITERIA

Ability of Professional Personnel

1a. ORGANIZATIONAL CHART

BROWARD COUNTY FLORIDA

PRIME

CBRE

EXECUTIVE ADVISOR
FERNANDO GAVARRETE
Managing Director

KAREN MCCALLUM
Architecture & Interior Design
Architecture
Interior Design
Lighting Design

MICHAEL ROMETO
Engineering
Engineering (MEP/FP & Structural) LEED Services

SUBCONTRACTORS

AERO SYSTEMS ENGINEERING

CHRIS BRITTON
V.P. / Lead Engineer
Airside Civil Engineering
Airside Gate Systems

PM TECHNOLOGIES

CHRIS DAVIS
Program Manager
Construction & Project Management
Cost Estimating

KEITH

ALEX LAZOWICK
President
Landside Civil Engineering
Subsurface Utility

CBE SUBCONTRACTORS

KELEUSMATIC TECHNOLOGIES

MESSAM CONSTRUCTION

THE CHAPPELL GROUP

LAKDAS AND YOHELEM ENGINEERING

MICHAEL YU
Principal Technology Systems Solutions Engineer
Telecommunications & Data Engineering

WAYNE MARTIN MESSAM
Partner
Construction Management Inspection Services

TYLER CHAPPELL
Vice President
Environmental Engineering Land Surveying

LAKDAS NANAYAKKARA
Principal
Geotechnical & Structural Engineering Inspection

1b. QUALIFICATION, LICENSES & EXPERIENCE OF KEY STAFF

COPY OF RELEVANT LICENSES PROVIDED IN APPENDIX



KAREN MCCALLUM, ASID, LEED AP BD+C
Senior Director
Design

+1 404-946 2367
karen.mccallum@cbre.com

CBRE

An award-winning expert in the field with 17 years of experience, Karen leads CBRE Design. She has a keen understanding of how design influences airports and the crucial, initial steps involved in visioning sessions, programming, and analysis. Karen brings creative solutions unique to your requirements and reflective of your brand and culture. The success of this "best practice"approach can be seen in her completed aviation projects across a variety of markets. In her time with CBRE she has brought home over 21 awards for design excellence from both industry associations and her peers.



MICHAEL ROMETO, PE
Managing Director
PJM Engineering

+1 404-946 2367
michael.rometo@cbre.com

CERTIFIED ENGINEER IN STATE OF FLORIDA

CBRE

As Managing Director of CBRE Engineering, with over 20 years of experience, Michael Rometo is responsible for management of all engineering disciplines within CBRE and will be the primary project manager for this assignment. He has served as Design Project Manager, Engineering Project Manager, and Structural Project Engineer on many of the firm's major projects, and his experience encompasses a wide range of facility types including a significant number of airport projects. This vast experience will ensure the quality delivery of services by the entire team and implementation of best practices.



PAUL KANG, PE, LEED AP
Engineering Discipline Manager

+1 917 750 4888
paul.kang1@cbre.com

CERTIFIED ENGINEER IN STATE OF FLORIDA

CBRE

Mr. Kang has over 15 years of experience designing electrical system infrastructure and analyzing electrical systems for various types of facilities. He is responsible for successful project delivery, setting design standards, and leading projects from conception to completion. His responsibilities include electrical system design, engineering review and consulting services, engineering assessments, engineering studies, and coordination. Mr. Kang also provides construction support services, suchas shop drawing review, answering RFIs, change order reviews, site visits, and performing final punchlist. He brings extensive project experience with the renovationof existing facilities and new aviation construction.



Ability of Professional Personnel



CBRE

ERNESTO GARCIA
Architecture/Construction Administration

+1 305 514 3120
ernie.garcia@cbre.com

Ernesto Garcia has 35+ years of experience in all facets of architectural design and construction administration within the aviation sector. His experience includes managing complex, multi-project construction programs including the Hewanorra International Airport new terminal development with multiple stakeholders, consultants, and partners as wellas experience working on the A Concourse to B Concourse In-Fill Project for the North Terminal Development at Miami International Airport.



CBRE

LUIS RODRIGUEZ, RA, NCARB
Architecture/Construction Administration

+1 305 441 1546
luis.rodriguez2@cbre.com

Luis has 24 years of experience in all facets of architectural design and construction administration specializing in aviation type projects. As manager and project architect for MIA Concourse E Satellite and Low Concourse E terminal upgrades and renovations, various key projects under the North Terminal Development (NTD) Program and Terminal Optimization Program (TOP), Luis' experience provides a profound understanding of design and its execution during construction at various airport authorities.



CBRE

LYDIA O'NEAL, IIDA, NCIDQ
Interior Design Lead

+1 404 946 2365
lydia.oneal@cbre.com

Lydia has a broad and versatile range of project experience, ranging from sports design to corporate spaces with more than a decade of Interior Design experience. Her vision, design abilities, presentation skills, and ability to work with all the parties involved makes her an invaluable part of the team. Lydia has had the privilege to be honored by her peers with a Design Excellence Award from ASID for various projects and an Award of Merit from IIDA.



CBRE

AMY GRIFFIN
Interior Design

+1 404 946 2530
amy.griffin@cbre.com

Amy Griffin has a history of working with Delta and recently completed a project at Hartsfield-Jackson International Airport. In addition to having both a Master's and Bachelor's degree in Interior Design, she is also a NCIDQ certified Interior Designer. Amy's nine years of experience have been spent working with CBRE Design's corporate, hospitality, higher education, and healthcare clients providing thoughtful solutions to project needs.

David Walters has over 28 years' experience in all facets of architectural planning and design through construction administration of airport related building type projects. His experience ranges from new airport terminal and renovation construction projects to restaurants and retail concession design and implementation. He has a unique knowledge of the building codes and construction requirements in South Florida. Mr. Walters is a proficient project manager who can see a project from concept to completion.



CBRE

DAVID WALTERS
ADA Accessibility

+1 305 514 3113
david.walters2@cbre.com

Ability of Professional Personnel



JOSHUA GILLESPIE, PE, LEED AP
Fire Protection Engineer

+1 404 946 2162
joshua.gillespie@cbre.com

CBRE

Joshua designs, commissions, and analyzes building energy systems. He has commissioned aviation, hospitality, healthcare, campus central plant, and higher educational facilities. Joshua has designed HVAC and plumbing systems for a variety of buildings including higher education, chiller plants, military, corporation and health care facilities. He has provided feasibility services to approximately
10 million SF for energy-saving construction projects, including co-generation and renewable energy solutions.



DARREN HOYLE
Senior Plumbing Designer

darren.hoyle@cbre.com

CBRE

Darren has a variety of experience with plumbing design and HVAC system engineering for commercial, industrial, municipal, federal, educational, sports, and institutional facilities. He has experience with new facilities as well as renovations and additions. His responsibilities include providing technical direction for the mechanical, plumbing and fire protection department, project management, performing quality assurance, and multi- discipline coordination reviews.



PETER BARRON, PE, LEED AP BD+C
Discipline Manager
Mechanical Engineer

+1 404 881 9880
peter.barron2@cbre.com

CERTIFIED ENGINEER IN STATE OF FLORIDA

CBRE

As Senior Engineer and Practice Lead for CBRE's Mechanical Engineering group, Peter is responsible for management of all Mechanical engineering disciplines within CBRE, including HVAC, Energy, Plumbing, and Fire Protection. He is tasked with overseeing a staff of engineers, designers, and BIM operators, establishing design concepts, maintaining technical design quality, and ensuring accurate production of design documents.



MICHAEL TRINKER, EIT, LEED AP
Senior Electrical Engineer

+1 404 946 2140
michael.trinker@cbre.com

CBRE

Michael is an Electrical Designer with 36 years of experience participating in the design and construction of a variety of building services projects. He has extensive experience with Power, Lighting, Emergency Power, Fire Alarm and Low-Voltage Electrical Systems, code compliance, and project constructability. As a Senior Designer he is responsible for assisting in successful project delivery, overall technical proficiency, and is actively mentoring and working with young engineers to improve their knowledge and proficiency. Additionally,he has extensive experience as an electrical designer for our long-term contract at Hartsfield-Jackson Atlanta International Airport.

Ability of Professional Personnel



CHRIS DAVIS
Program Manager

+1 678 323 1600
cdavis@pmtechno.com

PMTECHNOLOGIES project professionals

Chris Davis will serve as the lead for the PMT team for Construction and Project Management, as well as Cost Estimating. As a Senior Project Manager with 17 years' experience managing multi-phase, fast track projects with multiple stakeholders, Mr. Davis has been working consistently in the aviation field. His project experience ranges from IT common-use implementations to construction builds and he specializes in working with multiple departmental teams within the airlines and the airport authority to accomplish program goals.



CHRIS BRITTON, PE, PMP, ENV SP
V.P. / Lead Engineer

+1 770 423 4200
chris.britton@aerosys.net

CERTIFIED ENGINEER IN STATE OF FLORIDA

AERO SYSTEMS ENGINEERING

Chris will lead Aero Systems Engineering (ASE) contributions for Airside Gate Systems Engineering, Civil Engineering, Roadway Design and Runway/Taxiway Construction. ASE hasprovided analysis, planning, design and construction services for 15,000+ airport terminal gates at 200+ airports, as a part of 2,000+ projects across the U.S. Chris has been involved with multiple airport projects and is experienced in engineering and project management for central and point of use 400Hz and PCA system upgrades, PBB replacement, lighting, and ramp security, as well as electrical design and analysis experience, from low voltage control systems up to 500kV class equipment.



ALEX LAZOWICK, PE, PMP
President

+1 954 788 3400
alazowick@keithteam.com

CERTIFIED ENGINEER IN STATE OF FLORIDA

KEITH Engineering Inspired Design.

Alex Lazowick and the Florida-based KEITH team will be engaged for Landside Civil Engineering, Subsurface Utility Engineering, Transportation & Traffic/Roadway Engineering, Landscape Architecture, Drainage & Stormwater Projects, and Parking Facility Design & Construction. KEITH has collaborated with more than 75 municipalities throughout Florida and in addition to their experience with civil engineering design projects, they are also experienced in permitting, and construction administration services. Additionally, KEITH has been engaged for muiltiple projects at the Fort Lauderdale - Hollywood International Airport including a new water main extension, expansion of runway 9R-27L and exit roadway/valet routing improvements.



MICHAEL YU, RCDD
Principal Technology Systems Solutions Engineer

+1 954 543 5701
michael.yu@keleusmatic.com

KELEUSMATIC technologies

On behalf of Keleusmatic Technologies, Michael Yu will be providing technology solutions and low voltage/IT/ telecommunications/security guidance to this assignment. Keleusmatic Technologies has a strong focus on aviation with projects completed at more than 75 airports across the globe. Michael has 19 years experience in the Air Transportation Industry and 26 years experience in the Telecommunications Industry. He has been responsible for the design and delivery of multi-faceted systems integration projects including Master Systems Integration (MSI), Design-Build, Design-Bid-Build, and Construction Manager at Risk (CMAR) projects.

Ability of Professional Personnel



MESSAM CONSTRUCTION

WAYNE M. MESSAM, CGC, LEED AP, BD+C
Partner

+1 877 963 7726
wayne@messamconstruction.com

Experienced as a Partner at Messam Construction, Mr. Messam will provide Construction Management and Inspection Services. Messam Construction's track record includes Palm Beach School District, University of Miami and Miami Dade College. Recent projects won in association with their partners, include Broward County's New Civil/ Family Courthouse Construction Project Manager (Weitz) budgeted at $200,000,000, Miami-Dade College Wolfson Campus Student Union Construction Manager at Risk (Suffolk) budgeted at $25,000,000 and Fort Lauderdale International Airport Terminal 4 Expansion Project budgeted at $100,000,000. Mr. Messam also serves on several national, state and local boards championing the concerns of small and minority businesses, environment and the urban youth.



The Chappell Group

TYLER CHAPPELL
Vice President

+1 954 782-1908
tyler@thechappellgroup.com

The Chappell Group will provide Environmental Engineering and Surveying. Mr. Chappell's capabilities include wetland jurisdictional determinations, environmental feasibility studies, seagrass surveys, gopher tortoise surveys, environmental permitting, mitigation design, and mitigation monitoring. Mr. Chappell has performed a number of endangered and threatened species surveys, jurisdictional determinations, and environmental monitoring reports. Mr. Chappell has also conducted construction compliance inspections including turbidity monitoring for wetland and coastal projects. He has over eighteen years of experience in many types of environmental permitting, including residential docks, marinas and coastal development.



LAKDAS/YOHALEM ENGINEERING, INC.

LAKDAS NANAYAKKARA, PE
Principal

+1 954 771 0630
lye@lyengineering.com

CERTIFIED ENGINEER IN STATE OF FLORIDA

Lakdas Nanayakkara is a Principal and Structural Engineer with Lakdas/Yohalem Engineering Inc., who will be providing Geotechnical & Structural Engineering and Inspection Services for the Broward County assignment. Lakdas/Yohalem carries the Peer Reviewed distinction for engineering quality and has been in business for over 55 years. They offer a variety of civil and structural engineering services which include: feasibility studies, design, site inspections, condition survey of structures prior to purchase, restoration damage assessments, value engineering and land development. Their experience includes multiple projects at the Fort Lauderdale Airport and Port Everglades.

MICHAEL ROMETO, PE

MANAGING DIRECTOR PJM ENGINEERING



CBRE

PROFESSIONAL BACKGROUND

Mike Rometo serves as both the Director of Structural Engineering and the Director of Engineering for CBRE. He manages a team of over 30 registered engineers in civil, structural, mechanical, electrical, plumbing and fire protection engineering, with the breadth of resources to address all aspects of any technical challenge. In addition to performing his Engineer of Record and Director responsibilities, he is also the Project Manager for several CBRE-led designs and manages the commissioning team responsible for the Southeast region of the United States.

Airport Terminal Improvements Program Experience:

« Hartsfield-Jackson Atlanta International Airport Program Management
« Dallas Fort Worth Airport Structural Assessment
« Austin-Bergstrom International Airport Delta Sky Club

RELEVANT PROJECTS

Hartsfield-Jackson Atlanta International Airport APM Tunnel Structural Repairs Atlanta, Georgia

Senior Structural Engineer

CBRE was the lead partner in a joint-venture called the Hartsfield Support Services Team (HSST) to provide architecture and engineering services to Hartsfield-Jackson Atlanta International Airport. As part of our support services, the CBRE team provided structural engineering services for the automated people mover (APM) tunnel structural repairs. CBRE led a team of structural engineers in surveying approximately 12,000 linear feet of APM tunnel. A report was prepared prioritizing all of the deficiencies in terms of severity to allow phased construction. Construction documents were prepared detailing deficiencies and repairs. Completed in two phases, the project was completed under budget and ahead of schedule. CBRE performed construction inspection for compliance with documents.

Hartsfield-Jackson Atlanta International Airport Terminal HVAC Upgrade

Atlanta, Georgia

Senior Structural Engineer

This task order involved the repair and upgrade of the existing HVAC system and supporting systems serving the Main North and South Terminals and the T Concourse, approximately 1,200,000 SF. The design project consisted of replacing major air handler components, terminal units, and chilled water and hot water distribution systems serving baggage claim and airline tenant spaces. Additionally, the project included upgrading the tug and baggage handling area ventilation system. The total project budget was $70 million with alternates and packages sub-budgeted.

YEARS OF EXPERIENCE

CBRE: 20 Years
Total: 20 Years

EDUCATION

Bachelor of Architectural Engineering
Pennsylvania State University, 2000

Master of Architectural Engineering Pennsylvania State University, 2000

Licenses/Certification

Professional Engineer: FL, GA, IA, KY, MO, NC, NJ, OH, PA, SC, SD, TN, TX, VA, WV

SUITABILITY FOR ROLE

Mike served as Senior Structural Engineer for many aviation projects including Hartsfield-Jackson Atlanta International Airport, Dallas Fort Worth Airport, and Delta Sky Club - Austin.

PROFESSIONAL MEMBERSHIP

AISC

CONTINUING PROFESSIONAL EDUCATION (LAST 3 YEARS)

52 PDHs

STRUCTURAL ENGINEER

MIKE ROMETO, PE

Hartsfield-Jackson Atlanta International Airport Vertical Transportation Upgrades
Atlanta, Georgia
Senior Structural Engineer

Design of ventilation/conditioning systems for elevator machine rooms as part of an open-ended contract for support services.

Hartsfield-Jackson Atlanta International Airport Parking Garages Assessment
Atlanta, Georgia
Senior Structural Engineer

As part of an open-ended contract for support services, CBRE performed an assessment of over 4.4 million SF of parking decks. The work included an assessment of 100,000 SF of parking deck on former Hertz property and an approximately 12,000-SF building.

Dallas Fort Worth Airport Structural Assessment
Dallas, Texas
Project Manager

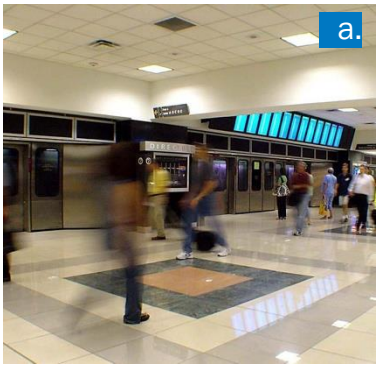
CBRE provided structural assessments and created a report for parking garage at Dallas Fort Worth Airport.

Austin-Bergstrom International Airport, Delta Sky Club
Austin, Texas
Senior Structural Engineer

The new 8,926-SF space is located on the third level above the boarding area and includes a 905-SF outdoor patio. The club's design includes a modern and open entrance, while maintaining the surrounding terminal design and Delta brand features. The scope of work encompasses a redesign of the current elevated club mezzanine and enclosing portions of the existing plazas.

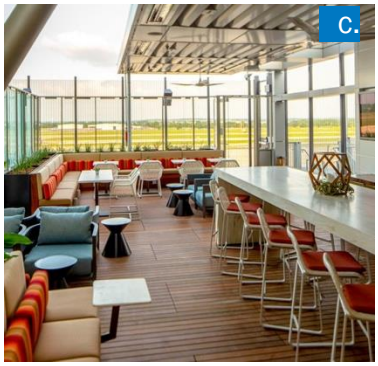
Homestead Air Reserve Park
Homestead, FL
Structural Engineer

The project consists of the verification of the master plan prepared by the Park and Recreation Department, design of a field center that includes a meeting hall, park manager's office, athletic equipment storage room, food vending facility, maintenance storage/garage of equipment, and public restrooms. The other facilities in the park include four picnic shelters and one free standing restroom facility with two 64-space parking lots, and two soccer fields with a 134-space parking lot.


a.



b.


c.

a. Hartsfield-Jackson International Airport Support Services Contract
b. DFW Parking Garage Structural Assessment
c. Austin-Bergstrom International Airport Delta Sky Club

KAREN MCCALLUM, ASID, LEED AP BD+C

SENIOR DIRECTOR DESIGN



CBRE

PROFESSIONAL BACKGROUND

An award-winning expert in the field with 17 years of experience, Karen leads CBRE Design's design practice. She has a keen understanding of how design influences organizations and the crucial, initial steps involved in visioning sessions, programming, and analysis. Each project is an opportunity to provide clients with creative solutions unique to their requirements and reflective of their brand or culture. The success of this "best practice" approach can be seen in her completed projects across a variety of market sectors, from aviation hospitality to corporate, and higher education to sports.

A natural leader and champion for passionate design, Karen serves as a collaborative partner within CBRE's Space Enablement services. The culture of her team is one of design excellence, dedication to each other, and exceptional service – all of which is consistently reflected by Karen herself. Her collaborative nature and years of expertise results in thoughtful design solutions that make each client feel truly heard. Karen is passionate about going beyond furniture and finishes to get to the heart of a client's needs. In her time with the company, she has brought home over 21 awards for design excellence from both industry associations and her peers.

Karen McCallum joined CBRE Design, previously Heery International, directly after graduating with a Bachelors Degree in Design from the University of Florida in 2004. As a young Designer, Karen learned how trust her instincts, create thoughtful design, and know when to go back to the drawing board. As she grew in her career, she honed her collaborative leadership style, trusting that all designers should have a voice, no matter their years of experience. Over her 16 years of design, Karen has managed many unique projects, with focus in workplace design, aviation, higher education, and hospitality. Her range of expertise has proven invaluable in her day-to-day as Practice Lead in the Southeast.

RELEVANT PROJECTS

Delta Sky Club Design Services - AUS | Austin, TX

Delta Sky Club Design Services - AZ | Phoenix, AZ

Delta Sky Club Design Services - FLL | Ft. Lauderdale, FL

Delta Sky Club - ATL - In-Flight Services | Atlanta, GA

Delta Sky Club - ATL - Centerpoint A Club | Atlanta, GA

Delta Sky Club - ATL - B Club | Atlanta, GA

YEARS OF EXPERIENCE

CBRE: 17 Years
Total: 17 Years

EDUCATION

Bachelor of Design, University of Florida

LICENSES/CERTIFICATION

NCIDQ Certified
LEED AP BD+C

AFFILIATIATIONS

ASID
CoreNet
ALSD

FERNANDO GAVARRETE, AIA, NCARB

EXECUTIVE ADVISOR



CBRE

PROFESSIONAL BACKGROUND

As Vice President and South Florida Area Manager, Fernando has led CBRE in completing numerous successful projects including major capital improvement programs for various public clients. With 40+ years involved in aviation and aviation related facilities, he has been responsible for some of the most significant developments such as the Miami International Airport (MIA), and responsible for more than 120 projects commissioned by airlines, tenants, and federal authorities. Fernando's hallmark trait is personal involvement during planning, design and construction

Recent Aviation Projects:

« Delta Sky Club Design Services - FLL | Fort Lauderdale, FL

« AA Early Baggage Storage Facility - MIA - North Terminal | Miami, FL

« North Terminal Development - MIA | Miami, FL

« CD Infill Interior Finish-out - MIA - North Terminal | Miami, FL

« Hewanorra International Airport Terminal - UVF | Vieux Fort, St. Lucia

« Miami International Airport Terminal Optimization Program (TOP) | Miami, FL

RELEVANT PROJECTS

Miami International Airport (MIA)

North Terminal Development (NTD) Program Management Services
$3.1B
Miami, Florida
ROLE: Principal-in-Charge

The NTD Project is one of the largest renovation, re-development and expansion programs ever undertaken at an operational airport. Our services included master planning, design management, program management, phasing, scheduling and cost control. NTD spans more than a mile in length and covers 3.2 million SF, while offering 50 combined domestic and international gates, a four station sky train*, more than 140,000 SF of retail and concession spaces and an innovative baggage handling system with more than 10 miles of conveyors. The project team essentially transformed the north terminal from a piers configuration to a linear terminal, which in turn allowed the airline to double the number of flights per day.

American Airlines Hub Expansion- Luis Marin Munoz International Airport

Program Management Services$350M
San Juan, Puerto Rico
ROLE: Principal-in-Charge

The principle effort was the conversion of the existing terminal to accommodate the planned HUB operations of our client. As part of the expansion program a new Federal Inspection Service Facility capable of processing 2,400 passengers per hour as well as a new 12 gate concourse. Other projects within the airport included: VIP Clubs, security check points, ramp services, baggage handling, executive airlines offices, lounges and other vital airport functions. The services included those of chief designers and program managers for the major expansion and remodeling of the West Terminal for American airlines. The project was approximately 240,000 SF in size.

YEARS OF EXPERIENCE

CBRE: 34 Years
Total: 40 Years

EDUCATION

Master of Architecture, University of Florida

Graduate Studies in Building Construction, University of Florida

Bachelor of Design in Architecture, University of Florida

LICENSES/CERTIFICATION

Registered Architect: GA, FL, IL, MS, MN, NY, NC, OH, TX

AFFILIATIONS

American Institute of Architects

PAUL KANG, PE, LEED AP

ENGINEERING DISCIPLINE MANAGER



CBRE

PROFESSIONAL BACKGROUND

Mr. Kang has over 15 years of experience designing electrical system infrastructure and analyzing electrical systems for various types of facilities. He is responsible for successful project delivery, setting design standards, leading project from conception to completion, and mentoring and developing young engineers. His responsibilities include electrical system design, engineering review and consulting services, engineering assessments, engineering studies, and coordination. Mr. Kang also provides construction support services, such as shop drawing review, answering RFIs, change order reviews, site visits, and performing final punchlist. His vast project experience consists of the renovation of existing facilities and new construction for aviation, governmental, commercial, educational, healthcare, and institutional facilities.

RELEVANT PROJECTS

Sr. Electrical Engineer, Delta Air Lines - LaGuardia Airport HVAC Optimization, Queens, NY*

Mr. Kang served as senior electrical engineer for required emergency repairs of the existing HVAC systems at Delta Air Lines Terminals C & D at LaGuardia Airport. The scope of work required replacement of existing cooling tower, air handlers and associated condensing units, as well as VAV boxes in Terminals C & D. The electrical design supported re-circuiting of new and replacement of HVAC equipment, as well as conduit routing to respective new locations. Mr. Kang provided construction administration services to include shop drawing review, responding to RFIs, site investigations, and punch list.

Power Sytems Engineer, Delta Air Lines, JFK Terminal 4 Extension, Jamaica, NY*

Mr. Kang served as power systems engineer for the JFK Terminal 4 Extension project. He reviewed on-line diagram and bill of materials as well as provided an electrical distribution model based on EasyPower software. Mr. Kang also performed short circuit calculations to see if new equipment was adequately sized to mitigate maximum fault current value. He provided coordination analysis for protective devices and the settings to be implemented for adjustable trip units and adjustable circuit breakers. Additionally, Mr. Kang worked on the arc flash labels to be applied to equipment.

Sr. Electrical Engineer, Naval Station Newport, Energy Systems Integration, Newport, RI*

Mr. Kang served as senior electrical engineer to model base-wide power distribution system on SKM software for load flow and short circuit analysis. The project involved analysis of the existing electrical distribution system and evaluate potential installation of utility scale solar photovoltaics (up to 15MW) in an abandoned part of the base for master plan approach toward future base-wide microgrid. Mr. Kang provided extensive field investigation for data gathering used to build the

YEARS OF EXPERIENCE

CBRE: 1 Year
Total: 15 Years

EDUCATION

Bachelor of Science/ Electrical Engineering/New York University - Polytechnic School of Engineering/2004

Graduate Certificate - Energy Innovation and Emerging Tech./Stanford University

REGISTRATIONS

LEED AP BD+C
Professional Engineer/ FL, GA, NY, SC

PROFESSIONAL MEMBERSHIPS

IEEE
USGBC

CONTINUING PROFESSIONAL EDUCATION (LAST 3 YEARS)

42 PDHs

PAUL KANG, PE

Electrical Engineer, Brooklyn Army Terminal - Smart Grid Project, Brooklyn, NY*

Mr. Kang served as electrical design engineer for this pilot smart grid project to integrate 100kW of solar PV and 100kW of battery systems to mitigate peak demand power for the existing building. He developed construction drawings, including equipment layout, riser diagram for power distribution and tie-in with existing service busduct, as well as fire alarm drawings for new battery room. Mr. Kang also coordinated with the mechanical trade for proper branch circuit and overcurrent protection sizing.

Electrical Engineer, Delta Air Lines - LaGuardia Airport New Terminal, Queens, NY*

Mr. Kang provided the electrical design and construction support for initial enabling projects, Concourse G and Headhouse projects. The design included main 27kV and 5kV underground electrical infrastructure to Rooftop East Substation (RES) and Concourse G. He provided the schematic design for Headhouse electrical power distribution, and reconfiguration of underground telecommunication infrastructure. Power system study performed for the RES buildout. The Delta Air Lines Airfield Reconfiguration program included the demolition of existing Terminals C & D and Parking Lots P4 & P5 and replaced them with a new terminal Headhouse with four concourses totaling approximately 1.2 million SF.

Deicing Station | Delta Air Lines (Delta)*

John F. Kennedy International Airport, Queens, New York | Construction: 2017. Electrical Engineering and Construction Support Services Mr. Kang furnished electrical engineering and construction services for a new deicing station adjacent to Hangar 19 at John F. Kennedy International Airport for Delta Air Lines. The deicing station will provide three stations in which deicing trucks can fill up so they can service Delta aircraft. The design consisted of extended the existing power distribution system to the new station. Mr. Kang provided electrical construction support services including shop drawing review, answering RFIs, change order reviews, site visits, and final punch list.

C3 Concourse Mezzanine Business First Lounge| United Airlines (UAL)*

Newark Liberty International Airport, Newark, New Jersey | Design: 2020 (Est.). Electrical Engineering Services Mr. Kang provided electrical design for a new Business First Lounge for United Airlines at Newark Liberty International Airport. United Airlines would like to add a Business First United Club at EWR to mainly target the Business Class and accommodate the need at the Terminal. The Concourse C3 has a double height ceiling space that accommodates a mezzanine level FIS hall along the perimeter of the south side. The new club location would be along the north perimeter of the concourse, above the existing retail locations extending from Gate 123 to Gate 126 and will be approximately 30,000 square feet. The project will be permitted and constructed in two phases: Core & Shell and Fit-out.

ReBranding Program | American Airlines (AA)*

JFK Airport, Jamaica, New York | Construction: 2016. Electrical Engineering and Construction Support Services Mr. Kang furnished electrical engineering and construction support services for the rebranding of American Airlines at Terminal 8 at John F. Kennedy Airport. The project included renovation of the American Airlines airport ticket counters, kiosks, service office and gate counters, in addition to the new construction of charging tables. Provided on-site construction observation, management, and coordination services for the AA Project Management Office.

Terminal 4 OS Baggage Handling System | Vanderlande*

John F. Kennedy International Airport, Queens, NY | Construction: 2019. Mr. Kang provided electrical engineering support required to upgrade existing oversized bag facilities with new scanning systems in two of the oversized bag rooms located in headhouse of Terminal 4. JFK IAT. to build the power distribution model.

*Prior to CBRE

ERNESTO GARCIA

ARCHITECTURE/CONSTRUCTION ADMINISTRATION



CBRE

YEARS OF EXPERIENCE

35+ Years

EDUCATION

Master of Architecture,
Florida International
University

PROFESSIONAL BACKGROUND

Ernesto Garcia has 35+ years of experience in all facets of architectural design and construction administration within the aviation sector. His experience includes managing complex, multi-project construction programs including the Hewanorra International Airport new terminal development with multiple stakeholders, consultants, and partners as well as experience working on the A Concourse to B Concourse In-Fill Project for the North Terminal Development at Miami International Airport. Ernie's knowledge & architectural background provides a deep understanding of the design and fast track delivery of construction documents and phasing during the construction, and whose experience in the various components that make-up airports bring an inherent value to the teams offering for the Key West International Airport Concourse A and Terminal Improvements Program.

Airport Terminal Improvements Program Experience:

« Hewanorra International Airport
« Bimini International Airport Improvements
« Miami Intermodal Center Rental Car Facility
« American Airlines Early Baggage Storage Facility

RELEVANT PROJECTS

Hewanorra International Airport, Master Plan and New Terminal Building

Vieux Fort, St. Lucia
Designer & Senior Project Manager

This Project consists of Master Planning, Schematic Design, Design Development, Construction Documents, and Construction Administration for a new airport terminal and facility. The new 337,000 SF proposed Hewanorra International Airport terminal, is a $250 million dollar airport facility comprising of five new contact gates and one hardstand position served from 5 new jet bridges and an apron injection point. The facility incorporates the ability for future expansion of the hold rooms, make-up area and ramp to 8 gates, a grand open-air Ticketing Hall and covered Curbside. The concourse level, which is accessed through a central vertical circulation core, includes natural light filled departure lounges linked by a skylight central circulation strand which is served by a number of concessions including restaurant, beverage, duty free and other retail facilities. A VIP Lounge and Executive Club Lounge are also included as part of the departure lounge area accessed from the strand and a new Immigration and Customs Inspection Facility and Baggage Claim Hall. The New Master Plan for the airport also includes expansion of the existing cargo operations by relocating the current cargo facilities to operate from the presently unused runway. Cargo facilities for six handlers and apron parking for 4 wide body aircraft are to be provided in the initial phase.

Bimini International Airport

South Bimini, Bahamas
Project Manager

Project consists of Master Planning and Schematic Design for a new 30,000 SF terminal facility, a 15,000 SF FBO, (4) 45,000 SF hangars, new marina for water taxi transportation, and runway expansion with an estimated construction cost of $35,000,000.

ARCHITECTURE/CONSTRUCTION ADMINISTRATION

ERNESTO GARCIA

Miami International Airport, North Terminal Development (NTD) Program, A - B Infill Project Definition Package (PDP)

Miami, Florida

Team Coordinator

Responsible for producing the Project Definition Package (PDP) for A-B Terminal Shell and Interiors, part of the North Terminal Development Program. Overall project budget over $2.9 Billion, A-B Terminal cost over $200 Million.

Miami Intermodal Center (MIC), Rental Car Facility

Miami, Florida

Project Manager

Ernesto was responsible for the $355 million Rental Car Center (RCC) that consolidates rental car companies serving Miami International Airport in one location. The project consists of a four level structure approximately 3,400,000 SF. This facility was designed to incorporate a certain amount of transparency and translucency through the use of metal screening devices. The RCC consists of a Central Customer Service Lobby, a Quick Turn Around (QTA) area, a Ready Return (RR) area, parking for 6,500+ cars with multi-level fueling, light maintenance areas, a support building (includes an emergency generator, offices, and a chiller plant) and access ramps. The QTA and RR areas have a ventilation system that can provide 6 air changes per hour. The QTA includes 120 fuel dispensers and 42 car wash bays with a reverse osmosis system.

Miami International Airport, American Airlines, Early Baggage Storage Facility

Miami, FL

Project Manager

This 50,000 SF facility is a $4.5 million construction project that was commissioned by American Airlines. It is approximately 50,000 SF facility that serves as American Airlines primary baggage sorting & storage facility for “early arriving passenger’s luggage”. Early arriving luggage is sorted and stored prior to the aircraft arrival at the designated gate. The EBS also subscribes to inbound luggage handling capabilities for those passengers arriving via cruise line transport. This facility utilizes a complex conveyor system in the main warehouse space along with employees lounge, restrooms, and equipment rooms serving the EBS and adjacent facility.

American Airlines, Miami International Airport, GSE Breakrooms

Miami, Florida

Project Manager

This project consists of renovating the existing GSE Shop Breakroom to receive new FFE American Airlines standards throughout, i.e. flooring, lighting, paint and wainscot; new American Airlines furniture standards; reconfiguration of existing lockers; new infrastructure for plumbing for a sink and new kitchen millwork to accommodate new appliances and sink; new computer work station millwork; remodeling of existing managers offices. This project has completed CD phase and is awaiting permitting. This project consists of 780 SF. Coordination with AA GSE shop operations and CRE was a major component of this project, as well as bringing in all the airports stakeholders at an early stage to make the process and approvals a success.







a. Hewanorra International Airport - New Terminal Development

b. Miami Intermodal Center Rental Car Facility

c. Miami International Airport - North Terminal Development (NTD) Program

LUIS RODRIGUEZ, RA, NCARB

ARCHITECTURE/CONSTRUCTION ADMINISTRATION



CBRE

YEARS OF EXPERIENCE

EDUCATION

Master of Architecture University of Miami, 1997Bachelor of Design in Architecture

University of Florida, 1994

LICENSES/ CERTIFICATION

PROFESSIONAL BACKGROUND

Luis has 24 years of experience in all facets of architectural design and construction administration specializing in aviation type projects. As manager and project architect for Concourse E Satellite and Low Concourse E terminal upgrades and renovations, various key projects under the North Terminal Development (NTD) Program and Terminal Optimization Program (TOP), Luis' experience is extensive and his understanding of the many stakeholders and inter-departmental relationships is vast. Luis' architectural background provides a profound understanding of design and its execution during construction making him thrive. In his role as senior project manager assisting various airport authorities, Luis with his get-it-done attitude, works well under pressure has been a part of the airport departments as extension of staff for many years. He will be an invaluable asset to the program for Key West International Airport.

Airport Terminal Improvements Program Experience:

« Hewanorra International Airport

« Miami International Airport Terminal Optimization Program (TOP)

« Miami International Airport North Terminal Development (NTD) Program

RELEVANT PROJECTS

Hewanorra International Airport, Master Plan and New Terminal Building

Vieux Fort, Saint Lucia

Project Architect

This Project consists of Master Planning, Schematic Design, Design Development, Construction Documents, and Construction Administration for a new airport terminal and facility. The new 337,000 SF proposed Hewanorra International Airport terminal, is a $250 million dollar airport facility comprising of five new contact gates and one hardstand position served from 5 new jet bridges and an apron injection point. The facility incorporates the ability for future expansion of the hold rooms, make-up area and ramp to 8 gates, a grand open-air Ticketing Hall and covered Curbside. The concourse level, which is accessed through a central vertical circulation core, includes natural light filled departure lounges linked by a skylight central circulation strand which is served by a number of concessions including restaurant, beverage, duty free and other retail facilities. A VIP Lounge and Executive Club Lounge are also included as part of the departure lounge area accessed from the strand and a new Immigration and Customs Inspection Facility and Baggage Claim Hall. The New Master Plan for the airport also includes expansion of the existing cargo operations by relocating the current cargo facilities to operate from the presently unused runway. Cargo facilities for six handlers and apron parking for 4 wide body aircraft are to be provided in the initial phase.

Miami International Airport, Terminal Optimization Program, E Satellite RenovationMiami, Florida

Site Manager

In order to support the airlines continued growth plans at MIA and to accommodate the continued increasing gate needs, the Terminal Optimization Program was created. The $1.1 billion program consists of numerous projects including the Concourse E Program, Utilities Program, South Terminal Program and miscellaneous projects. Projects included but were not limited to repairs, renovations, modifications, and modernization to meet code and make it adequate to support airline operations and passenger flow. CBRE was responsible for

ARCHITECTURE/CONSTRUCTION ADMINISTRATION

LUIS RODRIGUEZ, RA, NCARB

program management, design management, schedule, budge, and supervision of the building contractors and multiple architects/ engineers of record. The team was also responsible for coordination and implementation of all the Terminal Optimization Program elements.

Miami International Airport, Terminal Optimization Program (TOP), Lower Concourse E Interior Renovation Project
Miami, Florida
Project Manager

Responsible for design development and construction documents. Also responsible for construction coordination between the construction manager and MDAD for the Lower E Concourse Renovation, which involved improvements of Lower E circulation areas, gates and hold rooms.

Miami International Airport, North Terminal Development (NTD) Program
Miami, Florida
Site Manager

Responsible for on-site construction coordination between the construction manager and MDAD for the B-C Infill Project of the NTD Program. The project also included American Airlines administrative offices, which is comprised of pilot and support offices. Responsible for program management, design management, schedule, budget and supervision of the building contractors and multiple architects/ engineers of record. The NTD Project is one of the largest renovation, re-development and expansion programs ever undertaken at an operational airport. Our services included master planning, design management, program management, phasing, scheduling and cost control. NTD spans more than a mile in length and covers 3.2 million SF, while offering 50 combined domestic and international gates, a four station sky train, more than 140,000 SF of retail and concession spaces and an innovative baggage handling system with more than 10 miles of conveyors. The project team essentially transformed the north terminal from a piers configuration to a linear terminal, which in turn allowed the airline to double the number of flights per day.

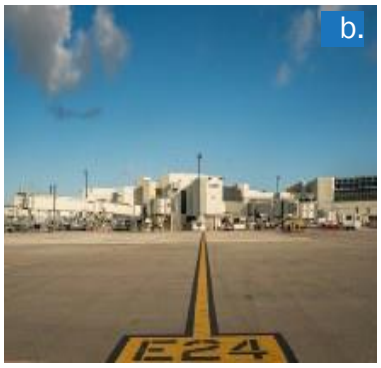
Miami International Airport, Belly Cargo Building Complex, Buildings #2130, #2134, Chiller Plant, Ramps & Bridges
Miami, Florida
Project Manager

Responsible for all aspects of design, production of construction documents and construction administration. This $4M Belly Cargo Building Complex consisted of two air cargo buildings, each with over 150,000 SF of warehouse and office area.

Miami International Airport NTD Program C-D Infill and D-Extension
Miami, Florida
Designer/Drafter

Responsible for development of preliminary design packages. He completed the design development documents, including, but not limited to, the architectural plans/section packages within the C-D infill and D extension.







a. Hewanorra International Airport - New Terminal Development
b. Miami International Airport - Concourse E
c. Miami International Airport - North Terminal Development (NTD) Program

LYDIA O'NEIL, IIDA, NCIDQ

INTERIOR DESIGN



CBRE

YEARS OF EXPERIENCE
18 Years

REGISTRATIONS:
NCIDQ
Certified/GA/2009

EDUCATION:
Bachelor of Fine Arts/ Interior Design/Art Institute of Atlanta/2005

Coursework/Interior Design/Atlanta College of Art/2001

Coursework/Interior

AFFILIATIONS:
IIDA Member

Member, North American Association of Sports Economists (NASSE)

Member, National Association of Collegiate Women Athletics Administrators

NEWH Member (Network

PROFESSIONAL BACKGROUND

Lydia has a broad and versatile range of project experience, ranging from sports design to corporate spaces with more than a decade of Interior Design experience. Her vision, design abilities, presentation skills, and ability to work with all the parties involved makes her an invaluable part of the team. Lydia has had the privilege to be honored by her peers with a Design Excellence Award from ASID for various projects and an Award of Merit from IIDA.

Airport Terminal Improvements Program Experience:

« Hartsfield-Jackson Atlanta International Airport
« Delta Sky Clubs

RELEVANT PROJECTS

Fort Lauderdale-Hollywood International Airport, Delta Sky Club

Fort Lauderdale, FL
Project Manager

The Delta Sky Club project at Fort Lauderdale-Hollywood International Airport (FLL) is 9,300 sf of luxurious hospitality spread over (3) levels, the main lounge; totaling in at 7,400 sf; occupying the prominent all glass mezzanine location of the new terminal 2 expansion, which is currently under construction. There are multiple lounges within the club that caters to the travelers needs, such as dining, business, and quiet relaxation. These services are supported with (2) back of house kitchens and designed by our inhouse engineering team, along with consultants for interior, lighting, acoustical, and food service. The challenges of this project were to design and provide a high-caliber lounge experience for Delta Sky Club guests that incorporated Delta Sky Club's new standards, concealed all mechanical services without engaging the airport's new barrel vaulted ceiling, and incorporate the essence that is Fort Lauderdale Florida.

Austin-Bergstrom International Airport, Delta Sky Club

Austin, TX
Project Manager

This project consists of a brand new club space cosisting of 9,800 SF at the new South Terminal. This club offers the latest in lounge accomodations with new FFE Delta Air Ways standards throughout,The program consists of a lobby reception, various lounge seating areas, buffet dining area, bar lounge area, restroom area, back of house kitchen and staff office/breakroom. Cordination with Delta Sky Lounge Team and CRE was a major component of this project, as well as bringing in all the airports stakeholders at an early stage to make the process and approvals a success.

INTERIOR DESIGN

LYDIA O'NEAL, IIDA, NCIDQ

Phoenix Sky Harbor International Airport, Delta Sky Club
Phoenix, AZ
Interiors Project Manager

CBRE provided architecture and interior design services for the renovation to the entry, entry lounge, cafe dining, main lounge area, and bar. The Delta Air Lines Sky Club project in the Phoenix Sky Harbor International Airport (PHX) represents an exciting addition in the new Terminal 3 South Concourse. The 6,600-SF space is constructed concurrently with the new concourse in which it is located.

Hartsfield-Jackson Atlanta International Airport - Enforcement Office Design
Atlanta, GA
Interior Design

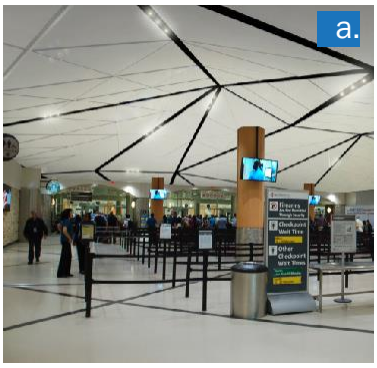
CBRE provided engineering services to perform a MEP facility condition assessment for the Department of Aviation / City of Atlanta on the Motor Transport Building at Hartsfield-Jackson Atlanta International Airport.

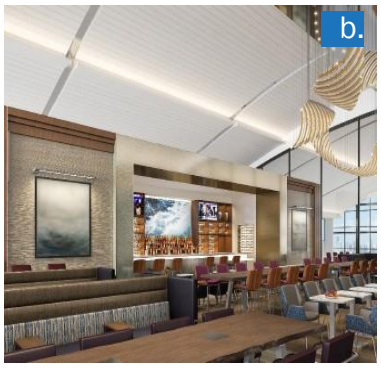
TPA Group- 3400 Overton Park Drive
Atlanta, GA
Project Manager

CBRE Design provided architectural, interior and engineering design services for ICE's new corporate headquarters in Atlanta. The 14-story renovation included executive offices, supplementary offices for accounting, programmers and developers. Additional space includes a 24-hour help desk, conference and training rooms, fitness, cafeteria and sundry shop. The 25 year old existing building required infrastructure improvements, parking deck repairs, improved site circulation and secure access. The interior fit-up was a complete renovation for most areas with ICE ultimately occupying the entire building.

Intercontinental Exchange Corporate Office
Atlanta, GA
Project Manager

Intercontinental Exchange (ICE) is the leading network of regulated exchanges and clearinghouses for financial and commodity markets. ICE owns and operates 23 regulated exchanges and marketplaces including the New York Stock Exchange. The new headquarters houses ICE business operations which are central to the functioning of the financial markets in the United States and internationally. CBRE provided architectural, interior and engineering design services for ICE's new corporate headquarters in Atlanta.







a. Hartsfield-Jackson Atlanta International Airport

b. Delta Sky Club, Fort Lauderdale International Airport

c. Delta Sky Club, Austin-Bergstrom International Airport

AMY GRIFFIN, IIDA

DESIGNER II



CBRE

YEARS OF EXPERIENCE

EDUCATION

Master of Fine Arts in Interior Design, Florida State University

Bachelor of Science, Interior Design, Florida State University

REGISTRATION

NCIDQ Certified

AFFILIATIONS

PROFESSIONAL BACKGROUND

Amy Griffin has a history of working with Delta and recently completed a project at Hartsfield-Jackson International Airport. In addition to having both a Master's and Bachelor's degree in Interior Design, she is also a NCIDQ certified Interior Designer. Amy's nine years of experience have been spent working with CBRE Design's corporate, hospitality, higher education, and healthcare clients providing thoughtful solutions to project needs.

Throughout her career, Amy has been involved in every phase of design including concept design, programming, space planning, finish selection, furniture specification, construction documentation, MEP coordination, and construction administration. Although she excels in each phase of design, her true passion for design comes alive in the schematic design phase. She thrives on customizing the design of a space to reflect the unique fingerprint of each client organization and creating a concept provides a visual story.

On several projects, Amy has developed furniture packages for six-figure budgets. This included selecting and specifying furnishings, working directly with furniture dealers from the early budgetary stages through installation. She has also been the main point of contact in construction administration, performing tasks such as reviewing submittals, responding to and distributing RFI's, construction coordination, and architectural punch.

Amy graduated from Florida State University with a Bachelor of Science in Interior Design in 2011, with a Master's degree in Interior Design soon following. She began her career at a small higher education firm in Atlanta and then joined CBRE Design (previously Heery International) in 2014. In her time with the firm, Amy has expanded her capabilities significantly by working with a variety of clients and touching all aspects of design.

Airport Terminal Improvements Program Experience:

« Delta Sky Club - ATL - ATL-ACPT | Atlanta, GA
« Delta Sky Club - ATL - ATL-B | Atlanta, GA
« Delta Sky Club - ATL - ADA Assessment of Restrooms | Atlanta, GA
« Delta Sky Club - MSP - MSP-C | Minneapolis, MN
« Delta Sky Club Design Services - AUS | Austin, TX
« Delta Air Lines - ATL - In-Flight Services Lounge | Atlanta, GA
« Delta Sky Club - MSP - MSP-G | Minneapolis, MN
« Delta Sky Club - MSP - MSP-C | Minneapolis, MN

DAVID WALTERS

ADA ACCESSIBILITY



CBRE

YEARS OF EXPERIENCE

EDUCATION

Bachelor of Architecture
Howard University, 1992

Associates in Arts of Architecture

David Walters has over 28 years' experience in all facets of architectural planning and design through construction administration of airport related building type projects. His experience ranges from new airport terminal and renovation construction projects to restaurants and retail concession design and implementation. He has a unique knowledge of the building codes and construction requirements in South Florida. Mr. Walters is a proficient project manager who can see a project from concept to completion.

Airport Terminal Improvements Program Experience:

« Hewanorra International Airport
« Miami International Airport North Terminal Development (NTD) Program

RELEVANT PROJECTS

Hewanorra International Airport
Vieux Fort, St. Lucia
Project Coordinator/CAD Technician

This Project consists of Master Planning, Schematic Design, Design Development, Construction Documents, and Construction Administration for a new airport terminal and facility. The new 337,000 SF proposed Hewanorra International Airport terminal, is a $250 million dollar airport facility comprising of five new contact gates and one hardstand position served from 5 new jet bridges and an apron injection point. The facility incorporates the ability for future expansion of the hold rooms, make-up area and ramp to 8 gates, a grand open-air Ticketing Hall and covered Curbside. The concourse level, which is accessed through a central vertical circulation core, includes natural light filled departure lounges linked by a skylight central circulation strand which is served by a number of concessions including restaurant, beverage, duty free and other retail facilities. A VIP Lounge and Executive Club Lounge are also included as part of the departure lounge area accessed from the strand and a new Immigration and Customs Inspection Facility and Baggage Claim Hall. The New Master Plan for the airport also includes expansion of the existing cargo operations by relocating the current cargo facilities to operate from the presently unused runway. Cargo facilities for six handlers and apron parking for 4 wide body aircraft are to be provided in the initial phase.

Miami International Airport, Terminal Optimization Program (TOP), E Satellite Improvement Project
Miami, Florida
Site Manager

Responsible for design development and construction documents for the Terminal Optimization Program. The $1.1 billion program consists of numerous projects including the Concourse E Program, Utilities Program, South Terminal Program and miscellaneous projects. Projects included but were not limited to repairs, renovations, modifications, and modernization to meet code and make it adequate to support airline operations and passenger flow. CBRE was responsible for program management, design management, schedule, budge, and supervision of the building contractors and multiple architects/engineers of record. The team was also responsible for coordination and implementation of all the Terminal Optimization Program elements.

ADA ACCESSIBILITY

DAVID WALTERS

Miami International Airport, Terminal Optimization Program (TOP), Lower Concourse E Interior Renovation Project

Miami, Florida

Project Coordinator/Cadd Technician

Responsible for design development and construction documents for the Lower E Concourse Renovation, which involved improvements of Lower E circulation areas, gates and hold rooms.

Tampa International Aiport, The Shoppes at Bayshore

Tampa, Florida

Project Manager

This project is a 6,300 SF mini department store located within the main terminal at Tampa International Airport. The project construction cost was $850,000. The stores featured are local brands, boutique brands, books and news, with a central bakery. CBRE task on this project was to provide limited design assistance, construction documents, and construction administration.

Miami Intermodal Center, Rental Car Facility

Miami, FL

Project Coordinator/CAD Technician

Responsible for project coordination and construction documents on the Miami Intermodal Center's Rental Car Center (MIC-RCC), to provide design integration, construction documents and construction administration. This facility consolidates all rental car agencies under one structure whose purpose is to serve passengers arriving and departing from Miami International Airport. The design of the Rental Car Facility is the first of its kind nationwide, and is one of the Miami Intermodal Center's signature structures acting as the "gateway" to the Greater Miami Area. For visitors and residents alike of Miami-Dade County/ South Florida region, the RCC offers passengers rapid transportation to and from the airport, the facility provides convenient access and connection to various transportation systems, such as Miami-Dade Metrorail, Amtrak, Tri-Rail, MIA Mover, buses, taxicabs, rental cars and private automobiles. The RCC is vast; with 4 levels covering 3.4 million SF the structure provides parking for 6,500 vehicles. It consists of three major building elements: the ready return (RR), the quick turnaround areas (QTA), and the customer service lobby (CSL).

Miami International Airport, MIA Hotel Renovation

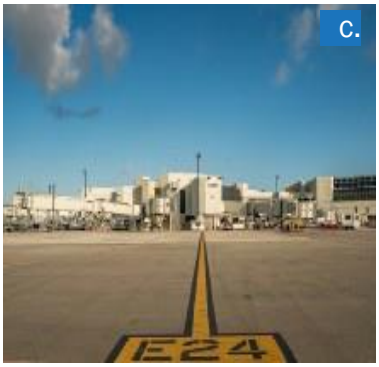
Miami, Florida

Project Manager

This Project consisted of reconfiguring and remodeling the existing MIA Hotel Lobby area and adjacent concession and terminal spaces of approximately 10,300 SF as well as the 8th floor existing lounge area of approximately 4,900 SF. Construction budget $3,000,000.



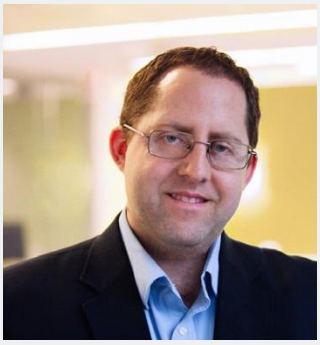




a. Tampa International Airport - The Shoppes at Bayshore
b. Hewanorra International Airport
c. Miami International Airport - Concourse E

JOSHUA GILLESPIE, LEED AP BD+C, PE

SENIOR MECHANICAL ENGINEER



CBRE

YEARS OF EXPERIENCE

CBRE: 12 Years
Total: 19 Years

EDUCATION

Master of Engineering/ Georgia Institute of Technology/2004

Bachelor of Mechanical Engineering/Georgia Institute of Technology/2002

REGISTRATIONS

LEED AP BD+C/2014

LEED Green Associate/ GA/2013

Professional Engineer/ GA/2007

PROFESSIONAL MEMBERSHIPS

NFPA

ASHRAE

USGBC

AAE

CONTINUING PROFESSIONAL EDUCATION (LAST 3 YEARS)

53 PDHs

PROFESSIONAL BACKGROUND

Mr. Gillespie has designed HVAC and plumbing systems for a variety of buildings including educational facilities, hotels, apartments, high-rise tenant upfits, large chiller plants, retail centers, and operational headquarters for military and corporate clients using Autodesk Building Systems. He has performed energy analysis using Carrier's HAP program to produce LEED Silver qualified energy savings. Also, Mr. Gillespie has performed energy audits for more than 3 Million SF of military installations and provided feasibility studies for energy saving construction projects.

RELEVANT PROJECTS

Fire Protection Design Reviewer: Atlanta Airlines Terminal Company Office Renovation, Atlanta, GA

Fire Protection Design Reviewer: Atlanta Airlines Terminal Company Office Renovation, Atlanta, GA.

Fire Protection Project Engineer - Mr. Gillespie provided fire protection design review services.

Senior Mechanical Engineer: Delta Boston E Sky Club Design, Boston, MA

Senior Mechanical Engineer: Delta Sky Club - Austin, Austin, TX

The Delta Airlines Sky Club project opened late 2018 in the new terminal at Austin-Bergstrom International Airport. The new 8,926-SF space is located on the third level above the boarding area and includes a 905-SF outdoor patio. The club's design includes a modern and open entrance, while maintaining the surrounding terminal design and Delta brand features.

The scope of work encompasses a redesign of the current elevated club mezzanine and enclosing portions of the existing plazas

Senior Mechanical Engineer: Delta Sky Club Atlanta Terminal A - Centerpoint Infill & Expansion, Atlanta, GA

Engineer, Senior Mechanical Engineer: Delta Sky Club Seattle Concourse A, Seattle, WA.

Project Manager: Hartsfield-Jackson Atlanta International Airport Terminal HVAC Upgrade, Atlanta, GA

This task order involved the repair and upgrade of the existing HVAC system and supporting systems serving the Main North and South Terminals and the T Concourse, approximately 1,200,000-SF. The design project consisted of replacing major air handler components, terminal units, and chilled water and hot water distribution systems serving baggage claim and airline tenant spaces. Additionally, the project includes upgrading the tug and baggage handling area ventilation system. The total project budget was $70 million with alternates and packages sub-budgeted.

Project Manager: Hartsfield-Jackson Atlanta International Airport Pedestrian Crossings, Atlanta, GA

Design of new pedestrian crossings linking existing parking garages on North and South sides of airport to terminal and creating a new pathway to terminal via tunnel level thereby eliminating access to terminal from garages across main roadway to ticketing and baggage level. Total budget at the time of the final estimate was $21 Million.

JOSHUA GILLESPIE, LEED AP BD+C, PE

Senior Mechanical Engineer: Hartsfield-Jackson Atlanta International Airport Vertical Transportation Upgrades Phase 3, Atlanta, GA

Phase 3 of the vertical transportation upgrades project and part of an open-ended contract for support services. CBRE is the lead partner in a joint-venture with two other firms called the Hartsfield Support Services Team (HSST) to provide architecture and engineering services to Hartsfield-Jackson Atlanta International Airport. CBRE will provide services for renovation and addition projects currently budgeted at approximately $800 Million.

Mechanical Engineer: Hartsfield-Jackson Atlanta International Airport - Program Management Support Services Contract (A3), Atlanta, GA

As a member of the Atlanta Aviation Associates (A3) joint venture, CBRE provides Program Management Support Services for the City of Atlanta, Department of Aviation for delivery of the Hartsfield-Jackson Atlanta International Airport's (H-JAIA) anticipated $6-billion ATLNext capital development program that implements its 2030 Master Plan. A3 works with H-JAIA management as a unified team and organization. Responsibilities include providing staff augmentation and specialty services to the Department of Aviation.

Fire Protection Design Reviewer: Hartsfield Jackson Atlanta International Airport - Passenger Screening Checkpoint Expansion, Atlanta, GA

Hartsfield-Jackson Atlanta International Airport (H-JAIA) is the world's busiest airport, handling nearly 90 million passengers and one million takeoffs and landings each year. In 2002, when the need for extensive renovations to H-JAIA became apparent, the City of Atlanta Department of Aviation (DOA) sought out A/E support services. CBRE formed a joint venture with two local firms—minority-owned Matrix-3D and woman-owned Richard Wittschiebe Hand Architects—to create the Hartsfield Support Services Team (HSST). HSST is providing renovation, addition, demolition and upgrading services, as well as architecture, engineering, cost estimating and scheduling services for the Hartsfield-Jackson Development Program under an indefinite delivery contract. All HSST projects within the H-JAIA program have been completed on time and within budget, due largely to HSST's innovative scheduling and precise timing of the work. CBRE provided design review services for the H-JAIA South Checkpoint Expansion Project. Fire Protection Project Engineer - Mr. Gillespie provided fire protection design review services for the H-JAIA South Checkpoint Expansion Project.

DARREN HOYLE

SENIOR PLUMBING DESIGNER



CBRE

YEARS OF EXPERIENCE

CBRE: 3 Year
Total: 27 Years

EDUCATION

Bachelor of Science/ Mathematics/Morehouse College/1984

Certificate/AutoCAD MEP Training/2009

AFFILIATIONS

Member, American Society of Plumbing Engineers (ASPE)

PROFESSIONAL BACKGROUND

Darren has a variety of experience with plumbing design system engineering for commercial, industrial, municipal, federal, educational, sports, institutional, healthcare, correctional, forensics, and culturally sensitive facilities. He has experience with new facilities as well as renovations and additions. His responsibilities include providing technical direction for the plumbing and fire protection department, project management, as well as performing quality assurance and multi-discipline coordination reviews..

RELEVANT PROJECTS

Senior Plumbing Designer: Atlanta Airlines Terminal Company Office Renovation, Atlanta, GA

Senior Plumbing Designer: Delta Boston E Sky Club Design, Boston, MA

Plumbing Designer: Delta Sky Club - Austin, Austin, TX

The Delta Airlines Sky Club project is scheduled to open late 2018 in the new terminal at Austin-Bergstrom International Airport. The new 8,926-SF space is located on the third level above the boarding area and includes a 905-SF outdoor patio. The club's design includes a modern and open entrance, while maintaining the surrounding terminal design and Delta brand features. The scope of work encompasses a redesign of the current elevated club mezzanine and enclosing portions of the existing plazas.

Plumbing Designer: Delta Sky Club - O'Hare Airport, Chicago, IL

Plumbing Designer: Delta Sky Club - Phoenix, Phoenix, AZ

CBRE provided architecture and interior design services for the renovation to the entry, entry lounge, cafe dining, main lounge area, and bar. The Delta Air Lines Sky Club project in the Phoenix Sky Harbor International Airport (PHX) represents an exciting addition in the new Terminal 3 South Concourse. The 6,600-SF space is constructed concurrently with the new concourse in which it is located.

Senior Plumbing Designer: Delta Sky Club - Seattle - Conceptual Design Terminal A, Seattle, WA

CBRE provided architecture, conceptual design, engineering, and interior design services for the renovation of the Seattle Sky Club Terminal A. The project was to expand the space from 3,000 SF to 15,000 SF

Senior Plumbing Designer: Delta Sky Club Atlanta B - Expansion and Renovation, Atlanta, GA

Senior Plumbing Designer: Delta Sky Club Atlanta Terminal A - Centerpoint Infill and Expansion, Atlanta, GA

Senior Plumbing Designer: Delta Sky Club Orlando - Expansion and Renovation, Atlanta, GA

DARREN HOYLE

Senior Designer: Delta Sky Club Seattle Concourse A, Seattle, WA

Plumbing Designer: Hartsfield-Jackson International Airport - Concourse F, Atlanta, GA

Senior Plumbing Designer: Hartsfield Jackson Atlanta International Airport - Consolidated City Offices Relocation, Atlanta, GA

Plumbing Designer: Hartsfield-Jackson International Airport - A Emergency Generator, Atlanta, GA

As part of CBRE's ongoing experience with Hartsfield-Jackson Atlanta International Airport, the engineering team assisted the Department of Aviation with a review of existing generator capacity and the improvements needed to increase capacity to power 100 percent of the concourses and terminals. The project resulted in planning and schematic level design for the installation of 21 – 3 Meg or 4 Meg generators at a project budget of $130 million. The project moved to the subsequent phase involving a design-bid-build contract in which CBRE is part of the City of Atlanta's team to review the design and bids for the work.

Senior Plumbing Designer: Hartsfield-Jackson Atlanta International Airport - Enforcement Office Design, Atlanta, GA

CBRE provided engineering services to perform a MEP facility condition assessment for the Department of Aviation/City of Atlanta on the Motor Transport Building at Hartsfield-Jackson Atlanta International Airport.

Senior Plumbing Designer: Hartsfield-Jackson Atlanta International Airport - K9 Facility Assessment, Atlanta, GA

CBRE provided engineering services to perform a MEP facility condition assessment for the Department of Aviation/City of Atlanta on the K9 Facility at Hartsfield-Jackson Atlanta International Airport.

Senior Plumbing Designer: Hartsfield-Jackson Atlanta International Airport - Aircraft Rescue and Fire Fighting Facility Condition Assessment, Atlanta, GA

Senior Plumbing Designer: Hartsfield Jackson Atlanta International Airport - Passenger Screening Checkpoint Expansion, Atlanta, GA

Hartsfield-Jackson Atlanta International Airport (H-JAIA) is the world's busiest airport, handling nearly 90 million passengers and one million takeoffs and landings each year. In 2002, when the need for extensive renovations to H-JAIA became apparent, the City of Atlanta Department of Aviation (DOA) sought out A/E support services. CBRE formed a joint venture with two local firms—minority-owned Matrix-3D and woman-owned Richard Wittschiebe Hand Architects—to create the Hartsfield Support Services Team (HSST). HSST is providing renovation, addition, demolition and upgrading services, as well as architecture, engineering, cost estimating and scheduling services for the Hartsfield-Jackson Development Program under an indefinite delivery contract. All HSST projects within the H-JAIA program have been completed on time and within budget, due largely to HSST's innovative scheduling and precise timing of the work. CBRE provided design review services for the H-JAIA South Checkpoint Expansion Project.

PETER BARRON, PE, LEED AP BD+C

DISCIPLINE MANAGER MECHANICAL ENGINEER



CBRE

PROFESSIONAL BACKGROUND

Mr. Barron has extensive project management experience in the disciplines of mechanical engineering, plumbing engineering, medical gases engineering, and fire protection engineering. His project experience has involved clients from domestic and international private corporations, Federal DOD, and non-DOD agencies, municipal, county and state governments.

In addition, Mr. Barron's projects have included a broad base of facility types, including hospitals and medical office buildings, office and administrative facilities, retail, warehouse and distribution facilities, criminal justice facilities, aviation facilities including control towers and emergency fire response, vehicle maintenance facilities, training facilities, multi-family housing and hotels, manufacturing and assembly facilities, waste facilities, leisure and recreation facilities, microwave communication facilities, data centers, and religious facilities. Existing building condition evaluations, feasibility studies, master planning, programming, building systems upgrades, building renovations, and HVAC design and specification for new construction are all project experience processes with which Mr. Barron is extensively familiar and has managed successfully.

RELEVANT PROJECTS

Project Manager, Senior Mechanical Engineer: Atlanta Airlines Terminal Corporation - Office Electrical Modification, Atlanta, GA

CBRE provided minor modifications to the electrical unit to accommodate revisions to the AATC security control desk..

Project Manager: Central Passenger Terminal Complex - Concourse A and B, Atlanta, GA

As-built conditions for restrooms in concourse A and concourse B.

Senior Mechanical Engineer: Delta Sky Club - Austin, Austin, TX

The Delta Airlines Sky Club project opened in late 2018 in the new terminal at Austin-Bergstrom International Airport. The new 8,926-SF space is located on the third level above the boarding area and includes a 905-SF outdoor patio. The club's design includes a modern and open entrance, while maintaining the surrounding terminal design and Delta brand features. The scope of work encompasses a redesign of the current elevated club mezzanine and enclosing portions of the existing plazas.

Mechanical Engineer, Senior Mechanical Engineer: Delta Sky Club - Phoenix, Phoenix, AZ

CBRE provided architecture and interior design services for the renovation to the entry, entry lounge, cafe dining, main lounge area, and bar. The Delta Air Lines Sky Club project in the Phoenix Sky Harbor International Airport (PHX) represents an exciting addition in the new Terminal 3 South Concourse. The 6,600-SF space is constructed concurrently with the new concourse in which it is located.

YEARS OF EXPERIENCE

CBRE: 23 Years
Total: 38 Years

EDUCATION

Bachelor of Engineering/ Mechanical Engineering/ Georgia Institute of Technology/1983

Bachelor of Arts/Liberal Arts/ Maryville College/1982

REGISTRATIONS

LEED AP BD+C/2007

Professional Engineer/ FL/2009

Professional Engineer/ GA/1992

PROFESSIONAL MEMBERSHIPS

ASHRAE

USGBC

CONTINUING PROFESSIONAL EDUCATION (LAST 3 YEARS)

60 PDHs

PETER BARRON, PE, LEED AP BD+C

Senior Mechanical Engineer: Delta Sky Club - Seattle - Conceptual Design Terminal A, Seattle, WA

CBRE provided architecture, conceptual design, engineering, and interior design services for the renovation of the Seattle Sky Club Terminal A. The project was to expand the space from 3,000-SF to 15,000-SF.

Mechanical Engineer: Hartsfield-Jackson Atlanta International Airport Parking Deck Study, Atlanta, GA

As part of an open-ended joint venture contract with the City of Atlanta, CBRE performed a parking deck lighting study for H-JAIA. CBRE provided electrical engineering services to assess the existing lighting problems at the two main parking decks at the airport. As a result of the study and field measurements, CBRE was then commissioned to design a complete retrofit power and lighting system to correct the existing deficiencies. Responsible for HVAC Design.

Mechanical Engineer: Hartsfield-Jackson Atlanta International Airport FAA ATCT Demolition, Atlanta, GA

CBRE provided architectural and engineering services associated with the demolition of the old aircraft control tower at Hartsfield-Jackson Atlanta International Airport. A new, modern tower was required for the new 5th runway project. When the newly constructed tower became fully operational in 2006, demolition work on the existing tower had to proceed as quickly as possible so the site would be available for construction of a new international terminal. CBRE worked closely with the FAA and airport personnel to develop a demolition plan that would not negatively impact the operations of the airport or surrounding facilities. CBRE eery assisted with the selection of the specialty contractors and provided construction administration services as the project was successfully completed $1 Million under budget and met all safety and vibration criteria. Responsible for HVAC Design.

Mechanical Engineer: Hartsfield-Jackson Atlanta International Airport Concourse A, Atlanta, GA

CBRE is the lead partner in a joint-venture called the Hartsfield Support Services Team (HSST) to provide architecture and engineering services to Hartsfield-Jackson Atlanta International Airport. The HSST team was responsible for the concept design and contract documents for the new flooring, wall and column covers and restroom upgrades for Concourse A. This work had to be carefully coordinated with the airlines as well as the other ongoing projects in the concourses. A number of restrooms were expanded by moving exterior walls and cantilevering them over the airfield, this was executed without impacting the aircraft operations and movements. The flooring work was performed during the late-night hours with HSST providing site observation services and quality assurance monitoring. Responsible for HVAC Design.

Project Manager: Hartsfield-Jackson Atlanta International Airport Concourse T North Gate Expansions, Atlanta, GA

Architectural, engineering, and aircraft systems' design for two new gates and aircraft parking positions. Boarding level space and operations are reconfigured for the gate positions for American Airlines and United Airlines. Relocation of concessions, large scale art displays, and communication systems are included in the complete cosmetic replacement of all finishes. Apron level activities included all new passenger loading and fixed bridge connections to the concourse, stripping for repositioned aircraft gates, and the addition and extension of fuel lines and pits. Apron level airline operations' space was reconfigured for the consolidation of Continental and United Airlines. Third level design included shell space for a new passenger lounge for United Airlines. American Airlines' station manager was relocated to the upper level. New vertical transportation and emergency exiting were incorporated as part of the project area of approximately 40,500-SF. This project was part of an open-ended contract for support services, in which CBRE is the lead partner in a joint-venture called the Hartsfield Support Services Team (HSST) to provide architecture and engineering services to the airport.

MICHAEL TRINKER, EIT, LEED AP

SENIOR ELECTRICAL ENGINEER



CBRE

YEARS OF EXPERIENCE

CBRE: 32 Years
Total: 37 Years

EDUCATION

Bachelor of Mechanical Engineering/Georgia Institute of Technology/1983

Non-Degree Studies/ Electrical Engineering/ Georgia Institute of Technology/1989

Non-Degree Studies/ Electrical Engineering/ Southern College of Technology/1984

REGISTRATIONS

LEED AP BD+C/2009

Engineer-in-Training/ GA/1983

AFFILIATIONS

Member, Illumination Engineering Society of North America (IESNA) - 632258

PROFESSIONAL BACKGROUND

Mr. Trinker's responsibilities include design of electrical lighting, power and signal systems, and site analysis of conditions and inspections. He has worked with projects as diverse as a new dormitory for the College of Charleston to a rapid transit station in Atlanta, Georgia. Other projects include military operations and maintenance, retail, correctional facilities, health care, airports, financial institutions, and government office buildings.

RELEVANT PROJECTS

Senior Electrical Engineer: Atlanta Airlines Terminal Corporation - Office Electrical Modification, Atlanta, GA.

CBRE provided minor modifications to the electrical unit to accommodate revisions to the AATC security control desk.

Senior Electrical Engineer: Delta Sky Club - Austin, Austin, TX

The Delta Airlines Sky Club project is scheduled to open late 2018 in the new terminal at Austin-Bergstrom International Airport. The new 8,926-SF space is located on the third level above the boarding area and includes a 905-SF outdoor patio. The club's design includes a modern and open entrance, while maintaining the surrounding terminal design and Delta brand features. The scope of work encompasses a redesign of the current elevated club mezzanine and enclosing portions of the existing plazas.

Electrical Engineer: Hartsfield-Jackson Atlanta International Airport North and South Parking Decks Power Distribution, Atlanta, GA

HSST provided engineering design for parking deck lighting replacement, new branch circuits and lighting control. Also, design for new power distribution system from branch circuit panel boards to new service entrance switchboards. Design for new emergency power supply system including generators, automatic transfer switches and emergency system distribution systems. Structural analysis of existing parking deck capacity to support new electrical masonry enclosures. Architectural design for small masonry buildings and individual enclosures to accommodate new service entrance switchboards and panel boards. CBRE provided an estimate of probable cost and a CPM schedule

Electrical Engineer: Hartsfield-Jackson Atlanta International Airport TPP3 Lite/West Terminal Expansion Concept Development, Atlanta, GA

CBRE is the lead partner in a joint-venture called the Hartsfield Support Services Team (HSST) to provide architecture and engineering services to Hartsfield-Jackson Atlanta International Airport. The HSST team was engaged to review, comment, and provide alternatives on the third version of the Terminal Plan and Program (TPP3) for the airport as a task order under the support services contract. The TPP3 had been developed by the long-time incumbent master planning team and it was their third attempt at revising and updating the master plan. The airport wanted a fresh perspective on the master plan and program, and HSST provided a number of conceptual planning options. HSST worked closely with the airport and the major carriers to explore a number of alternate scenarios and plans, especially in light of the 9/11 and recent events which affected the future growth projections and future security requirements. The bulk of HSST's work occurred in the western part of the main terminal in evaluating PAX circulation and security, APM expansion, ticketing, and baggage operations, and also interfaced with the on-site parking decks and pedestrian connections. A number of planning scenarios were developed and analyzed in a round table format, then were conceptually estimated for cost and schedule implications. The end result of this effort rolled into the revised master plan with a number of new projects that became part of the next phase of the airport's capital expansion program.

MICHAEL TRINKER, EIT, LEED AP

Electrical Engineer: Hartsfield-Jackson Atlanta International Airport Terminal HVAC Upgrade, Atlanta, GA

This task order involved the repair and upgrade of the existing HVAC system and supporting systems serving the Main North and South Terminals and the T Concourse, approximately 1,200,000-SF. The design project consisted of replacing major air handler components, terminal units, and chilled water and hot water distribution systems serving baggage claim and airline tenant spaces. Additionally, the project includes upgrading the tug and baggage handling area ventilation system. The total project budget was $70 million with alternates and packages sub-budgeted.

Electrical Engineer: Hartsfield-Jackson Atlanta International Airport Pedestrian Crossings, Atlanta, GA

Design of new pedestrian crossings linking existing parking garages on North and South sides of airport to terminal and creating a new pathway to terminal via tunnel level thereby eliminating access to terminal from garages across main roadway to ticketing and baggage level. Total budget at the time of the final estimate was $21 Million.

Electrical Engineer: Hartsfield-Jackson Atlanta International Airport Vertical Transportation Upgrades Phase 3, Atlanta, GA

Phase 3 of the vertical transportation upgrades project and part of an open-ended contract for support services. CBRE is the lead partner in a joint-venture with two other firms called the Hartsfield Support Services Team (HSST) to provide architecture and engineering services to Hartsfield-Jackson Atlanta International Airport. CBRE will provide services for renovation and addition projects currently budgeted at approximately $800 Million.

Electrical Designer: Hartsfield-Jackson Atlanta International Airport Concourse T North Gate Expansions, Atlanta, GA

Architectural, engineering, and aircraft systems' design for two new gates and aircraft parking positions. Boarding level space and operations are reconfigured for the gate positions for American Airlines and United Airlines. Relocation of concessions, large scale art displays, and communication systems are included in the complete cosmetic replacement of all finishes. Apron level activities included all new passenger loading and fixed bridge connections to the concourse, stripping for repositioned aircraft gates, and the addition and extension of fuel lines and pits. Apron level airline operations' space was reconfigured for the consolidation of Continental and United Airlines. Third level design included shell space for a new passenger lounge for United Airlines. American Airlines' station manager was relocated to the upper level. New vertical transportation and emergency exiting were incorporated as part of the project area of approximately 40,500-SF. This project was part of an open-ended contract for support services, in which CBRE is the lead partner in a joint-venture called the Hartsfield Support Services Team (HSST) to provide architecture and engineering services to the airport.

Electrical Engineer: Hartsfield-Jackson Atlanta International Airport AATO Ticket Relocation and Food Court, Atlanta, GA

CBRE is the lead partner in a joint-venture called the Hartsfield Support Services Team (HSST) to provide architecture and engineering services to Hartsfield-Jackson Atlanta International Airport. The venture is providing architecture and engineering services for the relocation of ticket counters, airline ticket offices and associated queue lines. The vacated space is being designed as a shell area for future concessions food court. Closure and reactivation of existing baggage conveyor lines, new grease inceptors and removal of many utility and communication systems are being replaced.

EVAN BARRON, PMP

SENIOR PROJECT MANAGER



PMTECHNOLOGIES
project professionals

PROFESSIONAL BACKGROUND

Mr Barron is a Project Manager with 11 years' experience working in a multitude of industries across the United States. He has worked on aviation programs since 2011 and covered general commercial, industrial, and IT programs to date. Mr. Barron has managed the design, procurement, contracting, execution, and the completion of projects with multiple stakeholder-groups through the life-cycle of programs ranging from $50k to $1.9B.

SELECT PROJECT WORK

Fort Lauderdale-Hollywood International Airport - T2 Sky Club Lounge
Sr. Project Manager - $20M, 15,000 sqft - build out & expansion of space
IT scope: new Fiber, com-room, upgrades, IDF/MDF fiber, kiosks procurement/configuration/ networking.

Miami- Dade International Airport - Con H - Sky Club Lounge
Sr. Project Manager - 10,000 sqft renovation & build out of space with IT scope

Phoenix Sky Harbor Airport - T3 Sky Club Lounge
Project Manager - 8,000 sqft - relocation and build out.

Phoenix Sky Harbor Airport - Terminal move & Common-Use upgrades
Project Manager - relocation and IT - RFID replacment and upgrades

Terminal 5-6 Modernization - Los Angeles International Airport
Project Manager - terminal renovation and build out - CA Green Law
39 landside project, Including In-line baggage and FIS

Terminal 2-3 Relocation Program - Los Angeles International Airport
Sr. Project Manager - planning and design for 28 tenant relocation - common-use infrastructure, 6 day move

Terminal 2-3 - Mondernization - Los Angeles International Airport
Project Manager - terminal renovation and build out - CA Green Law
In-line baggage and FIS

EXPERIENCE
11 years' Project and Construction

EDUCATION
Carnegie Mellon University Bachelor's Degree- College of Fine Arts **Tepper School of Business**

COMPUTER SKILLS
Procore, Prologue, newforma, MS Project, and Bluebeam, Projectmates, Ebuilders,SAP, CLM, MS products, Adobe products, FTP,and HTML ResumeWorks

PROFESSIONAL
P.M.P.
CMAA – Southern
CaOSHA 10

CHRISTOPHER DAVIS

SENIOR PROJECT MANAGER



PMTECHNOLOGIES
project professionals

PROFESSIONAL BACKGROUND

Mr. Davis is a Senior Project Manager with 17 years' experience managing multi-phase, fast track projects with multiple stakeholders. He has been working consistently in the aviation field in projects ranging from IT common-use implementations to construction builds and specializes in working with multiple departmental teams within the airlines and the airport authority to accomplish program goals.

SELECT PROJECT WORK

Fort Lauderdale International Airport | T2 Modernization

Program Manager -$147M, 115K sqft multi-level addition and 40K sqft renovation to existing Terminal, while occupied.

Fort Lauderdale International Airport | T2 Baggage Project

Program Manager - Amadeus common-use provider, and TSA representatives to implement the PGDS compliant baggage system and renovation of the ticketing lobby.

Delta Air Lines | Kiosks roll out | System-wide - N. America

Project Manager for system wide rollout of Kiosks for Delta Air Lines. Including bidding, construction, installation, and IT layout for airports with common-use and proprietary networks.

Hartsfield-Jackson Atlanta International Airport | Delta FIDS Roll-out

Project Manager for Delta FIDS system rollout Hartsfield International Airport. Including bidding, design, layout, installation and testing.

Hartsfield-Jackson Atlanta International Airport | SITA Wireless System

Project manager for the installation of all LAN/WAN and wireless equipment, cabling, software and configuration for the Hartsfield-Jackson Atlanta International Airport (HJAIA) wireless project. The project consisted of 5.6M SF of wireless LAN coverage and a DAS (cellular) system for eight cellular carriers at the world largest airport.

EXPERIENCE

17 years Program

EDUCATION

American Intercontinental University,
Business Management &

PAUL RIDGE

SENIOR PROJECT MANAGER



PMTECHNOLOGIES
project professionals

PROFESSIONAL BACKGROUND

Mr. Ridge is results-oriented leader with 13 years of expertise in construction management and 18 years of experience in the construction industry. A well-regarded leader with high emotional intelligence and passion for winning, with equal interest in customer satisfaction and employee motivation.

SELECT PROJECT WORK

Fort Lauderdale International Airport | T2 Modernization

Project Manager - Modernizations program- $147M, 115K sqft multi-level addition and 40K sqft renovation to existing Terminal, while occupied.

Fort Lauderdale International Airport | T2 Baggage Project

Project Manager - implemented the PGDS compliant baggage system and renovation of the ticketing lobby.

Humphrey Rich Construction Group, Inc.

Superintendent/Assistant Project Manager - Prepared and updated project work schedules on multiple high-pace hotel renovations. Coordination, monitoring and directing subcontractors. Developed detailed cost estimates by soliciting specific pricing from subcontractors and vendors

James G. Davis Construction Corp.

Assistant Superintendent - supervised subcontractors in the construction of a 12 story condominium building. Coordinated work between owners and subcontractors to successfully complete punch lists for 158 condominiums. Tracked outstanding QA/QC items through the use of Latista and Prolog for 210 condominiums.

Skanska USA Building Corp. - T.F. Green Airport, Warwick, RI

Assistant Superintendent/ Project Engineer - Remodel of airport. Determined benchmarks and building elevations through the use of total stations and theodolites.

EXPERIENCE

13 years Construction

EDUCATION

Florida International University

Master of Architecture

SOFTWARE

Excel, Word, PowerPoint, Project, Corecon, Latista, Prolog, Primavera P6. AutoCAD,Vectorworks,

PRISCILA VILLAVERDE

DESIGN MANAGER



PMTECHNOLOGIES
project professionals

PROFESSIONAL BACKGROUND

Ms. Villaverde is a professional with 12 years of experience in design management and includes skills in project engineering, LEED, AutoCAD and project management. She has been in the aviation environement for 3 years'. Her design role involves her in all construction related documents including drawings, specifications, RFI's, and reports. She is detail-oriented with strong analytical and reporting skills. Ms.Villaverde has proven success in working across multiple departmental teams and stakeholders.

SELECT PROJECT WORK

Fort Lauderdale International Airport | T2 Modernization

Project Engineer - review all design related documentation for construction. Mange RFI's and project submittals, change and revision management, closeout and punch-list, daily site-visit and communications.

Permasteelisa North America - Miami, FL

System Designer - Curtainwall, window and door industry. Managed design process. Coordinated the approval process with the Building Code Compliance Office for projects' testing & city approval.

RC Aluminum Industries - Miami, FL

Jr.Designer & LEED Consultant - Consulted with clients in reaching and surpassing their energy efficiency expectations complying with LEED certifications by simulating thermal values.

EXPERIENCE

12 years Design

EDUCATION

Wentworth Institute of Technology

B.S. Construction ManagementTechnology

SOFTWARE

Procore, Plangrid & Bluebeam Revu, AutoCAD, Solidworks Rhi- noceros 4.0, Sketch-up, AutodeskMax & Viz Render 2006-2020: Digital Modeling, High Quality Rendering and Animations, Adobe Photoshop, MS Office

PROFESSIONAL

LEED Accredited

CHRIS BRITTON, PE, PMP, ENV SP

VP, SE US OPERATIONS



AERO SYSTEMS ENGINEERING

AERO Systems Engineering, Inc. VP, Southeastern U.S. Operations

PAST RELEVANT EMPLOYMENT

Commonwealth Associates, Electrical Engineer, 2015

ENERCON Services, Electrical Engineer, 2007-2014

EDUCATION

MBA, Finance,
Georgia State University

BS, Electrical Engineering,
Georgia Institute of Technology

REGISTRATIONS

Professional Electrical Engineer - 18 States (including FL #79800)

PROFESSIONAL BACKGROUND

- Provides engineering and project management for central and point of use 400Hz and PCA system upgrades, PBB replacement, lighting, and ramp security
- Extensive electrical design and analysis experience, from low voltage control systems up to 500kV class equipment
- Experienced in transformer protection, grounding and lightning protection, motor starter and motor protection, breaker coordination analysis, main electrical distribution design using transformers, transfer switches, diesel gensets, motor control centers, and distribution panels

RELEVANT PROJECTS

AATC/DOA Passenger Boarding Bridge Replacement and Upgrade Project (137 Gates) – Atlanta Hartsfield-Jackson International Airport – Atlanta, Georgia (ATL)

Role: Project Manager Design/Engineer
Completion Date: 2018 (design), 2020 (construction) Client Contact: Shawn Craig, 678.749.9443

Complete airside design, commissioning, and construction administration for airfield layout, aircraft parking planning, PBBs, 400Hz ground power (POU and central), PCA systems (POU and central), electric GSE battery charging, baggage valets, aircraft docking systems upgrades for AATC/DOA at Terminals T, A, B, C, D, and E.

Power Distribution, Loading Bridge Replacement, and Structural Foundation Project (13 Gates) – Dane County Regional Airport – Madison, Wisconsin (MSN)

Role: Project Manager Design/Engineering
Completion Date: 2017 (design), 2019 (construction) Client Contact: Bill LeGore, 941.359.2770

Design and construction administration services for the replacement of all PBBs, GPUs, and PCAs, electrical infrastructure upgrades, airside design, and baggage valets.

Passenger Boarding Bridge Replacement Project (27 Gates) Southwest Florida International Airport - Fort Meyers, FL (RSW)

Role: Project Manager/Engineering
Completion Date: Ongoing
Client Contact: George Ghorayeb, E.I., 239.590.4626

Replacement of PBBs at 27 existing gates, including new aircraft parking and planning, new point- of-use PCA, point-of- use 400Hz GPU, new building infrastructure for a networked gate equipment monitoring system and new camera systems that tie in the PBB 4-way cameras into the security system.

DAVID MARTURELLO

AIRPORT PLANNING DIRECTOR



AERO Systems Engineering, Inc. Director of Airport Planning

EDUCATION

AA, Weber State College

PROFESSIONAL BACKGROUND

For more than 35 years, David has dedicated his career to airport parking planning and PBB design. Having revolutionized this specialty, David has worked domestically and internationally on more than 4,000 airport projects. As Director of Airport Planning, David leads ASE's Airport Planning Division, lending his expert experience in airport, aircraft parking, and GSE operations planning as well as fleet mix/flight schedule analysis.

RELEVANT PROJECTS

Terminal 3, A380 Passenger Boarding Bridge Modifications - Toronto Pearson International Airport – Toronto, Ontario (YYZ)

Role: Airport Planning Director
Completion Date: 2019 (design)
Client Contact: Jonathan Kwan, 416.776.5489

ASE was selected to provide a project feasibility report and ultimately perform the complete airside re-design of Gates C30 and C31 to allow for dual Passenger Boarding Bridge servicing of Code F Aircraft (ADG-VI) at C30. The project included the relocation of the existing C31 PBB and installation of new walkway, along with a new walkway and dual PBBs at C30.

Salt Lake City Terminal Redevelopment Project (38 Gates) – Salt Lake City International Airport – Salt Lake City, Utah (SLC)

Role: Airport Planning Director
Completion Date: 2017
(design), 2022
Client Contact (Construction): Thom Lang, 404.636.6427

Complete airside design services and construction administration for airfield layout, aircraft parking planning, PBBs, 400Hz ground power, PCA systems, electric GSE battery charging, baggage valets, and aircraft docking systems for a new 38-gate terminal complex (expandable to 47 gates) comprised of three buildings: North Concourse West, South Concourse West and South Concourse East.

Mickey Leland International Terminal D Replacement Project (28 Gates)– George Bush Intercontinental Airport – Houston, Texas (IAH)

Role: Airport Planning Director
Completion Date: 2019
(design), 2024
Client Contact (Construction): Thom Theobald, 303.589.3359

Aircraft parking, PBB planning, and airside design services for the new Mickey Leland International Terminal. Develop drawings and specifications for all airside aircraft parking, aircraft maneuvering modeling, specialty equipment and systems including PBBs, walkways, PCA equipment/systems, 400Hz equipment/systems, potable water equipment, aircraft docking guidance units, and eGSE battery charging equipment. Project includes A380 gates.

ERIK STRAND, PE

CIVIL ENGINEER



AERO SYSTEMS ENGINEERING

AERO Systems Engineering, Inc. VP, Southeastern U.S. Operations

PAST RELEVANT EMPLOYMENT

Jacobs Engineering Group
Sr. Project Manager (2017-2019)

Gale Associates, Inc.
Sr. Project Manager (2001-2017)

EDUCATION

M.S., Civil Engineering,
University of Massachusetts

B.S., Civil Engineering,
University of Massachusetts

REGISTRATIONS

Professional Civil Engineer - 8 States (including FL #80898)

- NCEES Certified
- AAAE - NEC
- Florida Airports Council (FAC)

PROFESSIONAL BACKGROUND

Erik is a Senior Project Manager with over 17 years of extensive experience in airport engineering, engineering in support of airport planning and aviation consulting services. He is responsible for management of engineering projects from inception through closeout. Erik has been working in the field of aviation since 2001 and has successfully managed and assisted clients in the completion several of the largest projects in New England. He has worked at MHT, ASH, HYA, MVY, ACK, GHG, AQW, CQX, 1B9, 0B5, GDM, BVY, BAF BOS and ORH and as well as several other airports throughout New England. Erik is a licensed professional engineer in 8 states.

RELEVANT PROJECTS

Pre-Conditioned Air (PCA) Upgrade Project (13 Gates) Pittsburgh International Airport - Pittsburgh, PA (PIT)

Role: Project Manager
Completion Date: Ongoing
Client Contact: Benton Rudolph, 202.776.7650

ASE is contracted with Gensler and is working with the electrical design firm, Sigma. The scope of this project is to replace the Central PCA equipment at Concourses C & D with Point of Use PCA.

Delta Air Lines Terminal 4 Expansion Project (18 Gates) John F. Kennedy International Airport - Queens, NY (JFK)

Role: Project Manager
Completion Date:
Ongoing
Client Contact: Ryan Marzuloo (Delta), 404.715.2600

The T4 Phase 3 Redevelopment is a capacity enhancement project whose aim is to right-size the terminal for projected future demand. This project aims to better accommodate current demands passenger flow and to accommodate future increases. A primary goal of the project is to enable the closure of Terminal 2, with T2 operations relocated to the expanded T4, fully consolidating Delta's operations at JFK within Terminal 4.

Concourse C/D Hydrant Fueling and Pavement Rehabilitation Dulles International Airport - Dulles, VA (IAD)

Role: Civil Engineer
Completion Date:
Ongoing
Client Contact: Gary Spitalsky, 240.455.1431

Scope included 5 new isolation valve pits with DBB isolation valves, removal of 6 existing butterfly valve pits in sections of the existing 12-inch underground aviation fuel distribution piping, new hydrant fuel locations at several of the gates and rehabilitation and replacement of distressed pavement in the airfield pavement system.

J. BARTLEY COBB, PE

FUELING ENGINEER



AERO Systems Engineering, Inc., Southeastern U.S. Operations

PROFESSIONAL BACKGROUND

Mr. Cobb has over 30 years of experience in the fields of mechanical engineering and construction. Bart is actively involved in all of AERO's aircraft fueling projects. His unique comprehension of construction techniques and identification of issues and details, coupled with his ability to grasp complex engineering solutions, ensures these projects are performed accurately, on time, and within budget.

His experience includes fuel system upgrades and fuel pit installations at more than 35 airports, which include over 100 fuel pit installations

RELEVANT PROJECTS

Concourse Modernization Project (75 Gates)

Memphis/ Shelby County Airport–Memphis, Tennessee (MEM)

Description: Study and design to modify existing gate arrangement at Concourses A, B and C for eventual demolition of Concourses A and C and tenant relocation to modernized and expanded Concourse B; multi-phased PBB replacement/refurbishment to minimize tenant movements while meeting project objectives; Conversion of all Concourse B 400Hz and PCA to POU Systems.

Role: Project Manager Design/Engineering Completion Date: 2017 (design), 2021 (construction)

Client Contact: Nathan Luce, 901-922-8030

Concourse E Fueling Systems Project

Hartsfield-Jackson Atlanta International Airport–Atlanta, Georgia (ATL)

Description: Design of the new fuel system to serve the Concourse E International gates. Comprehensive design including new fuel tank, all new pumping and filtration system, fuel distribution piping, including cathodic protection and leak detection, boring and jacking beneath active runways and taxiways, new fuel pits, and EFSO system.

Role: Fueling Engineer

Completion Date: 2019 (design), 2023 (construction) Client Contact: Jacobus Claassens, 404-714-9478

Concourse D Airside Design/Construction Project

Hartsfield-Jackson Atlanta International Airport–Atlanta, Georgia (ATL)

Description: Complete Airisde Design and Construction Administration, Aircraft Parking Layouts, and Passenger Boarding Bridges with related fixed ground support systems. Project is highlighted by hydrant fueling design for the new concourse.

Role: Fueling Engineer Completion Date: 2009

Client Contact: John Head, 404-715-2544

EDUCATION

BM, ET - Southern Technical Institute
BS, ME - Kennesaw State University

REGISTRATIONS

Licensed Professional Engineer - 10 States (including FL #90626)

VERN LANDRUM, PE

LEAD MECHANICAL ENGINEER



AERO Systems Engineering, Inc., Southeastern U.S. Operations

PAST RELEVANT EMPLOYMENT

Aviation Systems, Inc
Mechanical Engineer (1993-1997)

EDUCATION

B.S., Mechanical Engineering, Tennessee Technical University

REGISTRATIONS

Licensed Mechanical Engineer - Multiple States (including FL #59022)

PROFESSIONAL BACKGROUND

•Founder of AERO Systems Engineering
•Directed project management and engineering for more than 15,000+ gate positions at 200+ domestic airports nationwide
•Provides engineering and project management for central and point of use PCA, PBB replacements, aircraft planning, and other aircraft ground support systems
•Involved with design and engineering of central PCA and point-of- use systems at over 30 domestic and international airports
•Expertise in aircraft support including PBBs, PCA systems, fueling, aircraft docking systems, potable water, aircraft and GSE layout
•Co-authored the Air Transport Association's Facility Planning Guidelines for Preconditioned Air, 400 Hz Ground Power and Passenger Bridges
•Co-authored the National Acadmey's Transportation Research Board ACRP report, Evalutaing Alternatives for Aircraft Ground Power, Heating and Air Conditioning

RELEVANT PROJECTS

Salt Lake City Terminal Redevelopment Project (38 Gates) – Salt Lake City International Airport – Salt Lake City, Utah (SLC)

Role: Senior Mechanical Design/Engineering
Completion Date: 2017 (design), 2022

Complete airside design services and construction administration for airfield layout, aircraft parking planning, PBBs, 400Hz ground power, PCA systems, electric GSE battery charging, baggage valets, and aircraft docking systems for a new 38-gate terminal complex (expandable to 47 gates) comprised of three buildings: North Concourse West, South Concourse West and South Concourse East.

Delta Air Lines – NWA Fleet Integration and Boeing Fleet Winglet Project (440 Gates) – MEM, LAX, MSP, DTW and ATL – Multi-Hub Cities

Role: Senior Mechanical Design/Engineering
Completion Date: 2014 (design), 2015

Aircraft parking layouts, PBBs and related aviation fixed ground support system engineering for the integration of the NWA fleet into the DAL fleet mix and the Boeing fleet winglet modification.

Airline Relocation and Terminal Redevelopment Project (56 Gates) – Los Angeles International Airport – Los Angeles, California (LAX)

Role: Senior Mechanical Design/Engineering
Completion Date: 2019 (deisgn), 2023

Airside design and construction services for PBBs, PCA, 400Hz, potable water, RIDS, ADGUs and other related aviation fixed ground support system upgrades at Terminals 2, 3, 5, 6, and TBIT, to include 56 gates and 25 hardstand positions for Delta Air Lines' relocation operation. The largest airline/terminal relocation project in the history of commercial aviation, resulted in shifting 40% of total airline capacity at LAX.

ALEX LAZOWICK, PE, PMP

PRESIDENT



KEITH
Engineering Inspired Design.

PROFESSIONAL BACKGROUND

Mr. Lazowick was introduced to civil engineering and construction by his grandfather, Mr. Bill Keith, founder of the firm. He is eager for the challenge to be the third family generation professional working to provide quality developments within the South Florida community. Mr. Lazowick has gained experience in civil engineering design projects including water, sewer and drainage systems, roadway design, permitting, and construction administration services. He understands the importance of working together as a team to quickly identify and establish project goals and achieve successful results in the most expedient and cost effective manner. His qualifications include knowledge with AutoCAD Civil 3D, Navisworks, Revit, BIM, Microsoft Office, computer networking, and he possesses excellent communication skills.

RELEVANT PROJECTS

FLL North Perimeter Road Water Main Extension, Fort Lauderdale, FL

Fort Lauderdale/Hollywood International Airport (FLL) is running a new water main line along N Perimeter Road, under the I-595 overpass and through the Fixed-base Operator (FBO) parking area. The water main being installed spans a little over 2 miles in length. KEITH provided a full MOT plan in conjunction with the approximate 300 FT of water main installation per day. The MOT plan had to change for each day of installation throughout the 2 mile route. Some MOT features included lane closures near an intersection.

FLL Expansion of Runway 9R-27L, Fort Lauderdale, FL

KEITH is providing professional design services for this expansion project. The project included civil engineering design for the stormwater management system and the water sanitary sewer systems to accommodate the construction of an 8,000 foot runway on the current footprint of the existing 9R/27L general aviation runway. The project required the design to include the construction of multiple tunnels and bridge segments crossing over the airport perimeter road, FEC Railroad tracks and the U.S. 1 roadway corridor, over which the new runway was constructed. The design required approximately 7 million cubic yards of imported fill and raised the east end of the runway to approximately 60 feet high. KEITH provided the complete redesign of the existing utilities as well as coordination with all utility stakeholders. We are also directly responsible for Project Definition Document (PDD) Validation Report, preparation of the Design Criteria Package, Utility Corridor Report, Preliminary Engineering Report, and development of the Earthwork Management Plan coordinating the import and placement of 6.5 million cubic yards of fill during construction, as well as providing engineer's estimate of probable construction costs for use in the Life Cycle Cost Analysis Report.

YEARS OF EXPERIENCE

KEITH: 11 Years
Total: 12 Years

EDUCATION

B.S. Civil Engineering,
University of North Florida

REGISTRATIONS

Professional Engineer
#78625 Florida

Project Management
Professional PMP
2554175

AFFILIATIONS

Parkland Advisory Board Member

Planning and Zoning Advisory Board Member

ALEX LAZOWICK, PE, PMP

FLL-HWO Exit Roadway and Valet Routing Improvements, Fort Lauderdale, FL

As a part of our professional consultant services contract with the Broward County Aviation Department and for the Fort Lauderdale-Hollywood International Airport and North Perry Airport, the KEITH Team was retained to provide design of the pedestrian crosswalk signalization at both arrival and departure levels. Services included civil engineering, surveying & mapping, subsurface utility engineering, traffic engineering, and landscape architecture. The project will include the following project elements: Two exit lanes from the Cypress Garage/Rental Car Center (RCC) Helix, which run along the southern edge of the Hibiscus Garage to tie into the exit roadway system closer towards the existing toll plaza exit. A restricted emergency access to the Hibiscus Garage will also be provided along this route. Verification of structural and constructability aspects of retrofitting the exits from the Cypress Garage Helix. Verification of traffic control concept that accommodates structure work of the Helix. New valet roadway constructed around the Cypress Garage, and a potential valet access lane. Demolition of the abandoned toll plaza, BCAD Credentialing Office and associated facilities to the south of the Hibiscus Garage. Construction of a new surface parking lot south of the Hibiscus Garage to be used for Valet Parking. Wayfinding signage for the associated roadways compatible with the Airport Graphics Program. Evaluate restriping of recirculation roadway ramp to provide 2 lanes (currently single lane).

Fort Lauderdale-Hollywood International Airport (FLL), Fort Lauderdale, FL

Professional Consultant Services for Fort Lauderdale-Hollywood International and North Perry Airports, Utilities and Pavement Projects (Prime Consultant): KEITH is providing professional services for design, engineering and resident project representative (RPR) services during construction for airport utility and pavement projects, which include construction, rehabilitations and renovation activities. Some of the assigned projects include:

12” Westside Water Main Loop
16” Water Transmission Main North Perimeter Road
FLL Runway 10R-28L Settle Monitor
FLL 10L-28R Pavement Restoration
FLL South Runway Drainage Mitigation
FLL Short Term Traffic/Parking Improvements

Fort Lauderdale-Hollywood International Airport (FLL) High Speed Taxiways, Fort Lauderdale, FL:

Mr. Lazowick was responsible for the coordinating and overseeing of the asphalt milling, resurfacing and placement of for several thousand square yards of newly constructed asphalt on the primary runway at Fort Lauderdale/Hollywood International Airport. His duties included construction observation and reporting, providing yield calculations, collection of representative sample plates, measuring the asphalt for temperature range and consistency, as well as general oversight of the contractor’s means and methods during construction. 90% of the work occurred at night making the job inherently difficult.

Fort Lauderdale-Hollywood International Airport (FLL) Airside Movement Escorting, Fort Lauderdale, FL

Mr. Lazowick was responsible for escorting and monitoring airside field personnel for various airfield projects. He has experience with both day and night construction and survey efforts including operations requirements and policies regarding accessing, traversing and pull-backs for the runways, multiple taxiways and the critical cross intersections.

JAMES THIELE, PE

PROJECT MANAGER III



KEITH
Engineering Inspired Design.

YEARS OF EXPERIENCE

KEITH: 10 Years
Total: 38 Years

EDUCATION

B.S. Civil Engineering,
University of Miami 1978

REGISTRATIONS

#33256 State of Florida
Professional Engineer

PROFESSIONAL BACKGROUND

Mr. Thiele has nearly 40 years of experience in performing land development civil engineering in South and Central Florida as well as central Pennsylvania. His experience includes all aspects of site planning, grading and drainage, sanitary sewer collection, water distribution system design and construction supervision services. His experience includes senior level project oversight and management of multi-stage design and development processes for residential, recreational, commercial, industrial, and institutional developments. His ability to reduce complex technical language to readily understandable terms has afforded him numerous assignments representing governmental bodies for the firms with whom he has worked. All the projects Mr. Thiele has worked on required interaction and coordination with multiple governing agencies as well as other professional disciplines. Knowing the process from conception to project close-out affords him the ability to foresee issues which affect costs, schedule, and quality of a project. He uses this knowledge and experience to quickly address and solve any problems that inevitably arise during a project and proactively seeks to remediate any issues for the client's best interest.

RELEVANT PROJECTS

FLL North Perimeter Road Water Main Extension, Fort Lauderdale, FL

Fort Lauderdale/Hollywood International Airport (FLL) is running a new water main line along N Perimeter Road, under the I-595 overpass and through the Fixed-base Operator (FBO) parking area. The water main being installed spans a little over 2 miles in length. KEITH provided a full MOT plan in conjunction with the approximate 300 FT of water main installation per day. The MOT plan had to change for each day of installation throughout the 2 mile route.

FLL Expansion of Runway 9R-27L, Fort Lauderdale, FL

KEITH is providing professional design services for the Expansion of Runway 9R/27L as a sub-consultant to PBS&J. The project includes civil engineering design for the stormwater management system and the water sanitary sewer systems to accommodate the construction of an 8,000 foot runway on the current footprint of the existing 9R/27L general aviation runway. The overall length of the proposed runway requires the design to include the construction of multiple tunnels and bridge segments crossing over the airport perimeter road, FEC Railroad tracks and the U.S. 1 roadway corridor, over which the new runway will be constructed. The design will require approximately 7 million cubic yards of imported fill and will raise the east end of the runway to approximately 60 feet high. KEITH is responsible for the complete redesign of the existing utilities as well as coordination with all utility stakeholders. We are also directly responsible for Project Definition Document (PDD) Validation Report, preparation of the Design Criteria Package, Utility Corridor Report, Preliminary Engineering Report, development of the Earthwork Management Plan to coordinate the import and placement of 6.5 million cubic yards of fill during construction, as well as providing engineer's estimate of probable construction costs for use in the Life Cycle Cost Analysis Report.

JAMES THIELE, PE

Lynxs Bell Hangar, Fort Lauderdale, FL

KEITH is providing professional engineering services for the Fort Lauderdale-Hollywood International Airport Lynxs/Bell Helicopter projects. KEITH is providing a preliminary site plan including all buildings, parking, circulation, amenity, and open space features. KEITH provided a final site plan and assisted in the preparation of documentation and application. The Site Plan was coordinated through Broward County Development Review Committee (DRC). Preliminary engineering plans include water and sewer distribution and layouts and storm water routing, a preliminary storm water analysis, cost estimates and earthwork analysis, as well as storm water management design and calculations, paving, grading, and drainage plans, pavement design, water/wastewater plans, pavement marking and signing plans, a horizontal control plan, and pollution prevention plans, and permitting for onsite and offsite facilities with BCWWS, FDEP, Broward County Water and Waste Water Services, Broward County EPGMD, and Broward County Highway Construction and Engineering (HCED). Landscape architectural services included tree inventory and appraisal, a tree disposition plan, and landscape and irrigation plans.

Fort Lauderdale-Hollywood International Airport (FLL) Utility Atlas and Miscellaneous Services, Fort Lauderdale, FL

KEITH, as subconsultant partner to RS&H, was tasked with providing record research, surveying and subsurface utility engineering (SUE) services. This was an extensive 550 + acres project consisting of establishing geodetic and vertical networks control, engineering design surveys, drainage as-builts, subsurface utility engineering and aerial photography survey support. The utility atlas is an ongoing BCAD CIP effort compiling years of historic as-built and record drawing information while verifying and incorporating current surface and subsurface utility infrastructure design and survey data. New record drawing and as-built information from ongoing construction projects throughout the airport is being continuously added to the atlas and made available to the airport's consultants and contractors to assist in their design and construction needs.

Fort Lauderdale-Hollywood International Airport (FLL) T2 Modernization, Fort Lauderdale, FL

KEITH worked as a subconsultant partner to Gresham, Smith, and Partners, and was responsible for the civil engineering design and permitting of the airside and landside water distribution and sanitary sewer improvements, as well as the paving and drainage improvements that were proposed landside. KEITH also provided topographic surveying services and sub-surface utility engineering services to provide current existing data on the existing facilities to support the design effort. Our excellent working relationship with the staff at Broward County Water and Wastewater Services (BCWWS) has afforded us the ability to preview our proposed design work with them and obtain a fire flow modeling results from their staff early in the process. Numerous other sub-consultants were involved in this project team. KEITH coordinated and worked closely with many of them in the mutual development of the designed and construction drawings.

civil engineering design and permitting of the airside and landside water distribution and sanitary sewer improvements, as well as the paving and drainage improvements that were proposed landside

MICHAEL MOSSEY, PSM

SENIOR SURVEYOR AND MAPPER



KEITH
Engineering Inspired Design.

PROFESSIONAL BACKGROUND

Mr. Mossey has 41 years of surveying and mapping experience in South Florida. The last 20 years, Mr. Mossey has been the Project Manager for various government agencies including the City of Fort Lauderdale Aviation Department and the Broward County Aviation Department. The aviation projects Mr. Mossey has managed have ranged from airside construction to ALP/ Airspace Analysis Surveys. His knowledge of the FAA circulars and airport / airfield protocol will be a valuable asset to the team.

RELEVANT PROJECTS

FLL Expansion of Runway 9R-27L, Fort Lauderdale, FL

KEITH is providing professional design services for the Expansion of Runway 9R/27L as a sub-consultant to PBS&J. The proposed project includes civil engineering design for the stormwater management system and the water sanitary sewer systems to accommodate the construction of an 8,000 foot runway on the current footprint of the existing 9R/27L general aviation runway. The overall length of the proposed runway requires the design to include the construction of multiple tunnels and bridge segments crossing over the airport perimeter road, FEC Railroad tracks and the U.S. 1 roadway corridor, over which the new runway will be constructed. The design will require approximately 7 million cubic yards of imported fill and will raise the east end of the runway to approximately 60 feet high.KEITH is responsible for the complete redesign of the existing utilities as well as coordination with all utility stakeholders. We are also directly responsible for Project Definition Document (PDD) Validation Report, preparation of the Design Criteria Package, Utility Corridor Report, Preliminary Engineering Report, development of the Earthwork Management Plan to coordinate the import and placement of 6.5 million cubic yards of fill during construction, as well as providing engineer's estimate of probable construction costs for use in the Life Cycle Cost Analysis Report.

YEARS OF EXPERIENCE

KEITH: 3 Years
Total: 41 Years

EDUCATION

B.A. , Maryville College

REGISTRATIONS

LS5660 Professional Surveyor and Mappers - Florida

MICHAEL MOSSEY, PPM

FLL Obstruction Analysis/Survey 10R-28L, Fort Lauderdale, FL

KEITH provided surveying and GIS services to facilitate the 2011 updating of the Airport Layout Plan (ALP) for FLL, performing an Obstruction Analysis, Runway Data Acquisition and Navigation Aide Locations, as sub-consultant partner to RS&H. The below described tasks were included for all three existing runways, previously known as 9R/27L, 13/31 and 9L/27R, and all work was performed in accordance with the Federal Aviation Administration's Circulars 150_5300_16A, 150_5300_17B, and 150_5300_18B.

- Provide a Survey and Quality Control Plan
- Validate Airport Geodetic Control document and report the tie to National Spatial Reference System (NSRS)
- Survey and monument runway ends, thresholds and any displaced thresholds, and supply the supporting documentation
- Determine and document the runway lengths, runway widths, runway profiles using 10-foot stations, Touchdown Zone Elevations (TDZE), runway true azimuths, taxiway intersection to threshold distances, position of navigational aids, and runway abeam points of the navigational aids
- Perform and document an airport airspace analysis
- Collect and document airport planimetric data
- Determine the elevation of the air traffic control tower cab floor
- Validate existing topographic information
- Collect cultural an natural features of landmark value
- Determine elevation of roadways at the intersection point of the Runway Protection Zone (RPZ) or the runway centerline extended
- Document features requiring digital photographs, sketches, and photo ID points
- Collect position and type of runway markings
- Provide a final report KEITH is currently preparing to perform the Instrument Procedure Development Survey which will be required for the opening of the new 10R/28L South Runway

Fort Lauderdale-Hollywood International Airport (FLL) Utility Atlas and Miscellaneous Services, Fort Lauderdale, FL

KEITH, as subconsultant partner to RS&H, was tasked with providing record research, surveying and subsurface utility engineering (SUE) services. This was an extensive 550 + acres project consisting of establishing geodetic and vertical networks control, engineering design surveys, drainage as-builts, subsurface utility engineering and aerial photography survey support. The utility atlas is an ongoing BCAD CIP effort compiling years of historic as-built and record drawing information while verifying and incorporating current surface and subsurface utility infrastructure design and survey data. New record drawing and as-built information from ongoing construction projects throughout the airport is being continuously added to the atlas and made available to the airport's consultants and contractors to assist in their design and construction needs.

Fort Lauderdale-Hollywood International Airport (FLL) T2 Modernization, Fort Lauderdale, FL

KEITH worked as a subconsultant partner to Gresham, Smith, and Partners, and was responsible for the civil engineering design and permitting of the airside and landside water distribution and sanitary sewer improvements, as well as the paving and drainage improvements that were proposed landside. KEITH also provided topographic surveying services and sub-surface utility engineering services to provide current existing data on the existing facilities to support the design effort. Our excellent working relationship with the staff at Broward County Water and Wastewater Services (BCWWS) has afforded us the ability to preview our proposed design work with them and obtain a fire flow modeling results from their staff early in the process. Numerous other sub-consultants were involved in this project team. KEITH coordinated and worked closely with many of them in the mutual development of the designed and construction drawings.

MICHAEL CARTOSSA, EI

PROJECT MANAGER I



KEITH
Engineering Inspired Design.

PROFESSIONAL BACKGROUND

Mr. Michael Cartossa has over six years of experience as a civil engineer. Since 2012, he has worked on numerous land development projects in both the private and public sectors. His background in land development includes both residential and commercial projects such as shopping aviation facilities, plazas, gas stations, banks, car dealerships, restaurants and storage facilities. He is proficient in performing due diligence, site planning, civil engineering design, permitting, and project closeout. In addition to his engineering experience, Mr. Cartossa is proficient in a variety of software and programs including: AutoCAD, ICPR, Cascade, EPANET, MicroStation, MS Excel, MS Project, MS Office, Quattro Pro, and WordPerfect.

RELEVANT PROJECTS

FLL Terminal Connector Bridge, Fort Lauderdale, FL

As a subconsultant, the scope includes the Terminal 1 Bump Out, the Terminal 1 to Terminal 2 Connector, and the Terminal 2 to Terminal 3 Connector. This project will follow LEED best practices. KEITH provided survey, subsurface utility engineering, civil engineering, and CEI services. KEITH provided a topographic survey, horizontal designations, vacuum excavation services, civil engineering services including schematic drawings, 75% and 100% construction drawings for required sanitary sewer and water distribution system removal and replacement components.

FLL-HWO Exit Roadway and Valet Routing Improvements, Fort Lauderdale, FL

As a part of our professional consultant services contract with the Broward County Aviation Department, the KEITH Team was retained to provide design of the pedestrian crosswalk signalization at both arrival and departure levels. Services included civil engineering, surveying & mapping, subsurface utility engineering, traffic engineering, and landscape architecture. The project included: Two exit lanes from the Cypress Garage/Rental Car Center (RCC) Helix; A restricted emergency access to the Hibiscus Garage; Verification of structural and constructability aspects of retrofitting the exits from the Cypress Garage Helix; Verification of traffic control concept that accommodates structure work of the Helix; New valet roadway constructed around the Cypress Garage, and a potential valet access lane; Demolition of the abandoned toll plaza, BCAD Credentialing Office and associated facilities to the south of the Hibiscus Garage; Construction of a new surface parking lot south of the Hibiscus Garage to be used for Valet Parking; Wayfinding signage for the associated roadways compatible with the Airport Graphics Program; Evaluate restriping of recirculation roadway ramp to provide 2 lanes.

Lynxs Bell Hangar, Fort Lauderdale, FL

KEITH is providing professional engineering services for the Fort Lauderdale-Hollywood International Airport Lynxs/Bell Helicopter projects. KEITH tasks include: Site plan including all buildings, parking, circulation, amenity, and open space features. The Site Plan is being coordinated through Broward County Development Review Committee (DRC). Preliminary engineering plans include water and sewer distribution and layouts and storm water routing, storm water analysis, cost estimates and earthwork analysis, as well as storm water management design and calculations, paving, grading, and drainage plans, pavement design, water/wastewater plans, pavement marking and signing plans, a horizontal control plan, and pollution prevention plans, and permitting for onsite and offsite facilities . Landscape architectural services include tree inventory and appraisal, a tree disposition plan, and landscape and irrigation plans.

YEARS OF EXPERIENCE

KEITH: 5 Years
Total: 9 Years

EDUCATION

B.S. Civil Engineering,
Florida Atlantic University

REGISTRATIONS

1100016973 State of Florida
Engineering Intern - Florida

PRAMOD CHOUDHARY, PE, PTOE

DIRECTOR OF TRAFFIC ENGINEERING



KEITH
Engineering Inspired Design.

PROFESSIONAL BACKGROUND

Mr. Choudhary over twenty-six (26) years of extensive experience in Transportation Planning and Traffic Operations & Management. Pramod has strong project management capabilities reflected through the successful handling of a wide range of traffic, transportation and roadway design projects in Florida, Georgia, Texas, Louisiana, California, Puerto Rico, and the Grand Bahamas. Mr. Choudhary manages projects on time, within budget, and to the Client's complete satisfaction. Areas of expertise include traffic operations and corridor studies, transportation planning studies, traffic and toll plaza simulation, interchange operational analysis, PD&E studies, safety studies, roadway lighting design, signal design, bicycle and pedestrian plans, parking studies, design traffic and equivalent single axle load, travel time and delay studies, and traffic engineering support for various FDOT Districts, Counties, and Cities.

RELEVANT PROJECTS

Fort Lauderdale Police Headquarters, Fort Lauderdale, FL

As subconsultant, KEITH provides survey, sub-surface utility locating, planning, civil engineering and landscape architecture services for the Fort Lauderdale Police Headquarters. The Police Headquarters shall be built in phases.1) Parking Garage (including Firing Range) and perimeter landscape buffers to residential neighborhoods2) Initial Site Development: SW 13th Avenue extending up to existing Fleet Maintenance Facility; Restriping of existing surface parking; and Replacement of Radio Tower3) Demolition of outparcel residential buildings and Construction of new Police Headquarters (including Central Plant)4) Demolition of existing Police Headquarters and portion of Fleet Maintenance Facility (if not able to demolish entire facility)5) Final Site Development: Extension of SW 13th Avenue to Broward Boulevard; Create Linear Park along Broward Boulevard; and Remove all surface parking and outparcel buildings as possible

Sears Town Development, Fort Lauderdale, FL

KEITH is providing services associated with the development of three parcels of land in Fort Lauderdale, generally known as Sears Town. The project is set within the RAC zoning in Fort Lauderdale and is positioned to be a signature development within the City. The project will include a series of high rise towers, parking structures, and a series of connected public realm areas that will create the atmosphere at the ground level. KEITH is providing site plan approval with the City of Fort Lauderdale. KEITH has included services for planning, civil engineering, traffic engineering, and landscape architecture.

Interchange Operational Analysis for SOAR SR 528 (IJR, IMR, IOAR, SOAR, IAJR), Brevard County, FL

Mr. Choudhary was the Project Manager for a number of projects involving interchange operational analysis needed to prepare IJRs, IMRs, IOARs, SOARs, and IAJRs in Florida and Texas and obtain approval from pertinent agencies; most recently for SOAR for SR 528 in Brevard County, Florida.

General Transportation Planning Consultant Contract, FDOT District One, FL

Mr. Choudhary managed this task order based contract and provided support to FDOT on various planning projects ranging from corridor studies to PD&E projects. He also assisted the Department in reviewing project documents prepared by other consultants.

Districtwide Traffic and Safety Studies, FDOT District Six, FL

Pramod was Project Manager, responsible for leading a team of Traffic Engineers for a 5-year contract with FDOT District 6 for District-wide Traffic and Safety Studies.

YEARS OF EXPERIENCE

KEITH: 1 Year
Total: 26 Years

EDUCATION

M.S. Transportation Engineering, University of Central Florida 1993

B.S. Civil Engineering, Birla Institute of Technology 1985

REGISTRATIONS

61641 - FLORIDA

38262 - GEORGIA

IMSA LEVEL 1 TECHNICIAN
PROFESSIONAL TRAFFIC OPERATIONS ENGINEER (ITE)

TIM GRAY, PSM, CFM

PROJECT SURVEYOR II



KEITH
Engineering Inspired Design.

YEARS OF EXPERIENCE

KEITH: 5 Years

Total: 22 Years

EDUCATION

B.S. Geomatics,

REGISTRATIONS

LS6604 - Florida

ASFPM Certified Floodplain Manager

PROFESSIONAL BACKGROUND

Mr. Gray is a Surveyor & Mapper with over 20 years of experience with surveying in South Florida. He is a graduate of the University of Florida's Geomatics Program. His experience includes a variety of surveying assignments, including: Right-of-Way mapping, chain of title research and review, computations, topographic surveys, drainage surveys, ACSM/ALTA surveys, digital terrain models (DTMs), condominium surveys, and calculated parcel/construction stake outs. His experience has included projects for both public and private sector clients. Mr. Gray is proficient in the industry's software including MicroStation XM, Leica Level-pac, GeoPak, Caice, and AutoCAD. He is also proficient in the processing of survey data including both Electronic Field Book (EFB) and Tripod Data Systems (TDS) Data collection.

RELEVANT PROJECTS

Bombardier Aircraft Service Center, Miami-Opalocka Airport, Miami, FL

Engineer of Record. The project consists of approximately 5.71-acres of hangar and office area, including a 226 space parking lot, and an 11.52-acre apron. The design for this project accounts for an addition 1.34-acre hangar expansion for a total of 7.05-acres of building area. KEITH is providing survey, planning, and civil engineering services including the site plan preparation and processing, water, sewer, paving for both airside and landside, Aqueous Film Forming Foam (AFFF) storage, airside pollution prevention system, grading, and drainage design.

FLL-HWO Exit Roadway and Valet Routing Improvements, Fort Lauderdale, FL

As a part of our professional consultant services contract with the Broward County Aviation Department, the KEITH Team was retained to provide design of the pedestrian crosswalk signalization at both arrival and departure levels. Services included civil engineering, surveying & mapping, subsurface utility engineering, traffic engineering, and landscape architecture. The project included: Two exit lanes from the Cypress Garage/Rental Car Center (RCC) Helix; A restricted emergency access to the Hibiscus Garage; Verification of structural and constructability aspects of retrofitting the exits from the Cypress Garage Helix; Verification of traffic control concept that accommodates structure work of the Helix; New valet roadway constructed around the Cypress Garage, and a potential valet access lane; Demolition of the abandoned toll plaza, BCAD Credentialing Office and associated facilities to the south of the Hibiscus Garage; Construction of a new surface parking lot south of the Hibiscus Garage to be used for Valet Parking; Wayfinding signage for the associated roadways compatible with the Airport Graphics Program; Evaluate restriping of recirculation roadway ramp to provide 2 lanes.

Lynxs Bell Hangar, Fort Lauderdale, FL

KEITH is providing professional engineering services for the Fort Lauderdale-Hollywood International Airport Lynxs/Bell Helicopter projects. KEITH tasks include: Site plan including all buildings, parking, circulation, amenity, and open space features. The Site Plan is being coordinated through Broward County Development Review Committee (DRC). Preliminary engineering plans include water and sewer distribution and layouts and storm water routing, storm water analysis, cost estimates and earthwork analysis, as well as storm water management design and calculations, paving, grading, and drainage plans, pavement design, water/wastewater plans, pavement marking and signing plans, a horizontal control plan, and pollution prevention plans, and permitting for onsite and offsite facilities with BCWWS, Florida Department of Environmental Protection, Broward County Water and Waste Water Services, Broward County EPGMD, and Broward County Highway Construction and Engineering (HCED). Landscape architectural services include tree inventory and appraisal, a tree disposition plan, and landscape and irrigation plans.

SEAN HALSEY

SUBSURFACE UTILITY ENGINEERING PROJECT MANAGER



KEITH
Engineering Inspired Design.

YEARS OF EXPERIENCE
KEITH: 3 Years

REGISTRATIONS
FDOT
Maintenance of Traffic -

PROFESSIONAL BACKGROUND

As a Utility Project Manager for KEITH Location Services Department, Mr. Halsey is responsible for scheduling and supervising field crews, conducting utility field meetings, utility records research, conflict analysis and determining if additional utility investigation is needed for assigned projects in South Florida. With over 20 years of experience, he has completed projects from beginning phases to final delivery; which included preparing and submitting fee proposals, coordinating with clients, being able to setup projects for field crews and conducting field visits when trouble shooting is required; download and process collected data; performed quality control and finalize for delivery while keeping clients informed on a daily basis. Mr. Halsey has extensive knowledge in the performance and use of GPR (Mala Geoscience, GSSI, Radio Detection, Nogin, etc.), Electro-Magnetic Induction (Radio Detection, Vivax, Fischer), Magnetometers, Vacuum Excavation Trailer and Portable Systems, Pipeline Inspection, Conductivity Scanning, Multi-testers and Fault Detection experience.

RELEVANT PROJECTS

Bombardier Aircraft Service Center, Miami-Opalocka Airport, Miami, FL

Engineer of Record. The project consists of approximately 5.71-acres of hangar and office area, including a 226 space parking lot, and an 11.52-acre apron. The design for this project accounts for an addition 1.34-acre hangar expansion for a total of 7.05-acres of building area. KEITH is providing survey, planning, and civil engineering services including the site plan preparation and processing, water, sewer, paving for both airside and landside, Aqueous Film Forming Foam (AFFF) storage, airside pollution prevention system, grading, and drainage design.

FLL North Perimeter Road Water Main Extension, Fort Lauderdale, FL

Fort Lauderdale/ Hollywood International Airport (FLL) is running a new water main line along N Perimeter Road, under the I-595 overpass and through the Fixed-base Operator (FBO) parking area. The water main being installed spans a little over 2 miles in length. KEITH provided a full MOT plan in conjunction with the approximate 300 FT of water main installation per day. The MOT plan had to change for each day of installation throughout the 2 mile route. Some MOT features included lane closures near an intersection.

FLL-HWO Exit Roadway and Valet Routing Improvements, Fort Lauderdale, FL

As a part of our professional consultant services contract with the Broward County Aviation Department, the KEITH Team was retained to provide design of the pedestrian crosswalk signalization at both arrival and departure levels. Services included civil engineering, surveying & mapping, subsurface utility engineering, traffic engineering, and landscape architecture. The project included: Two exit lanes from the Cypress Garage/Rental Car Center (RCC) Helix; A restricted emergency access to the Hibiscus Garage; Verification of structural and constructability aspects of retrofitting the exits from the Cypress Garage Helix; Verification of traffic control concept that accommodates structure work of the Helix; New valet roadway constructed around the Cypress Garage, and a potential valet access lane; Demolition of the abandoned toll plaza, BCAD Credentialing Office and associated facilities to the south of the Hibiscus Garage; Construction of a new surface parking lot south of the Hibiscus Garage to be used for Valet Parking; Wayfinding signage for the associated roadways compatible with the Airport Graphics Program; Evaluate restriping of recirculation roadway ramp to provide 2 lanes.

DEAN KOGGAN, PE

PROJECT MANAGER I



KEITH
Engineering Inspired Design.

PROFESSIONAL BACKGROUND

Mr. Koggan is a Senior Project Engineer with experience working on various specialized engineering projects. Mr. Koggan has aided in the production and submittal of plans, several reports, as well as different in person inspections and cost estimations. Mr. Koggan's involvement in the private and public sector includes design for new development and redevelopment projects with associated drainage and utility design throughout South Florida. Mr. Koggan, while working with different professional engineers and city officials, has obtained the necessary skills that qualify him as a great addition to the KEITH team.

RELEVANT PROJECTS

FLL North Perimeter Road Water Main Extension, Fort Lauderdale, FL

Fort Lauderdale/ Hollywood International Airport (FLL) is running a new water main line along N Perimeter Road, under the I-595 overpass and through the Fixed-base Operator (FBO) parking area. The water main being installed spans a little over 2 miles in length. KEITH provided a full MOT plan in conjunction with the approximate 300 FT of water main installation per day. The MOT plan had to change for each day of installation throughout the 2 mile route. Some MOT features included lane closures near an intersection.

FLL-HWO Exit Roadway and Valet Routing Improvements, Fort Lauderdale, FL

As a part of our professional consultant services contract with the Broward County Aviation Department, the KEITH Team was retained to provide design of the pedestrian crosswalk signalization at both arrival and departure levels. Services included civil engineering, surveying & mapping, subsurface utility engineering, traffic engineering, and landscape architecture. The project included: Two exit lanes from the Cypress Garage/Rental Car Center (RCC) Helix; A restricted emergency access to the Hibiscus Garage; Verification of structural and constructability aspects of retrofitting the exits from the Cypress Garage Helix; Verification of traffic control concept that accommodates structure work of the Helix; New valet roadway constructed around the Cypress Garage, and a potential valet access lane; Demolition of the abandoned toll plaza, BCAD Credentialing Office and associated facilities to the south of the Hibiscus Garage; Construction of a new surface parking lot south of the Hibiscus Garage to be used for Valet Parking; Wayfinding signage for the associated roadways compatible with the Airport Graphics Program; Evaluate restriping of recirculation roadway ramp to provide 2 lanes.

FLL Terminal Connector Bridge, Fort Lauderdale, FL

As a subconsultant, the scope includes the Terminal 1 Bump Out, the Terminal 1 to Terminal 2 Connector, and the Terminal 2 to Terminal 3 Connector. This project will follow LEED best practices. KEITH provided survey, subsurface utility engineering, civil engineering, and CEI services. KEITH provided a topographic survey, horizontal designations, and vacuum excavation services, civil engineering services including schematic drawings, 75% and 100% construction drawings for required sanitary sewer and water distribution system removal and replacement components.

YEARS OF EXPERIENCE

KEITH: 3 Years
Total: 6 Years

EDUCATION

M.S. Civil Engineering,
University of Florida 2015

B.S. Civil Engineering,

REGISTRATIONS

86612 - Florida

MARK MITCHELL

DIRECTOR OF SUBSURFACE UTILITY ENGINEERING



KEITH
Engineering Inspired Design.

YEARS OF EXPERIENCE
KEITH: 8 Years

PROFESSIONAL BACKGROUND

As a Subsurface Utility Engineering Senior Project Manager for KEITH's Utilities Division, Mr. Mark Mitchell is responsible for scheduling and supervising field crews, conducting utility field meetings, utility records research, conflict analysis and determining if additional utility investigation is needed for assigned projects in South Florida. He completed projects from beginning phases to final delivery; which included preparing and submitting fee proposals, coordinating with clients, being able to setup projects for field crews and conducting field visits when trouble shooting is required; download and process collected data; performed quality control and finalize for delivery while keeping clients informed on a daily basis. His experience also includes creating DTM's, Topo's, Tin Models, PNC's and Test Hole summary spread sheets. Mr. Mitchell provides a liaison between designers, utility agencies and owners on behalf of clients to provide utility coordination services, providing documentation, inter-coordination and maintenance of files of all activities for each utility agency.

RELEVANT PROJECTS

Bombardier Aircraft Service Center, Miami-Opalocka Airport, Miami, FL

Engineer of Record. The project consists of approximately 5.71-acres of hangar and office area, including a 226 space parking lot, and an 11.52-acre apron. The design for this project accounts for an addition 1.34-acre hangar expansion for a total of 7.05-acres of building area. KEITH is providing survey, planning, and civil engineering services including the site plan preparation and processing, water, sewer, paving for both airside and landside, Aqueous Film Forming Foam (AFFF) storage, airside pollution prevention system, grading, and drainage design.

FLL Expansion of Runway 9R-27L, Fort Lauderdale, FL

KEITH is providing professional design services for this expansion project. The project included civil engineering design for the stormwater management system and the water sanitary sewer systems to accommodate the construction of an 8,000 foot runway on the current footprint of the existing 9R/27L general aviation runway. The project required the design to include the construction of multiple tunnels and bridge segments crossing over the airport perimeter road, FEC Railroad tracks and the U.S. 1 roadway corridor, over which the new runway was constructed. The design required approximately 7 million cubic yards of imported fill and raised the east end of the runway to approximately 60 feet high. KEITH provided the complete redesign of the existing utilities as well as coordination with all utility stakeholders. We are also directly responsible for Project Definition Document (PDD) Validation Report, preparation of the Design Criteria Package, Utility Corridor Report, Preliminary Engineering Report, and development of the Earthwork Management Plan coordinating the import and placement of 6.5 million cubic yards of fill during construction, as well as providing engineer's estimate of probable construction costs for use in the Life Cycle Cost Analysis Report.

FLL North Perimeter Road Water Main Extension, Fort Lauderdale, FL

Fort Lauderdale/ Hollywood International Airport (FLL) is running a new water main line along N Perimeter Road, under the I-595 overpass and through the Fixed-base Operator (FBO) parking area. The water main being installed spans a little over 2 miles in length. KEITH provided a full MOT plan in conjunction with the approximate 300 FT of water main installation per day. The MOT plan had to change for each day of installation throughout the 2 mile route. Some MOT features included lane closures near an intersection.

LORI TREVIRANUS, PE

VICE PRESIDENT OF TRANSPORTATION



KEITH
Engineering Inspired Design.

PROFESSIONAL BACKGROUND

Ms. Lori Treviranus has over 19 years of experience in civil engineering, providing the highest quality infrastructure and facility solutions to transportation agencies, local governments, private developers and institutional clients. She is experienced in roadway design, intersection development, super-elevation transitions, roadway modeling, cross-sections, pedestrian/ bike paths, master planning, hydrology/hydraulic studies, cost estimation, stormwater control plans preparation, drainage and utility design, NPDES permitting and SWPPP preparation and implementation. In addition, she is familiar with the surveying aspect of civil engineering and has experience working with sustainable designs. Typical scopes of work she has been responsible for include acquisition and due diligence tasks, creation of conceptual plans and assistance with funding throughout the project phases and public outreach activities.

RELEVANT PROJECTS

FLL North Perimeter Road Water Main Extension, Fort Lauderdale, FL

Fort Lauderdale/ Hollywood International Airport (FLL) is running a new water main line along N Perimeter Road, under the I-595 overpass and through the Fixed-base Operator (FBO) parking area. The water main being installed spans a little over 2 miles in length. KEITH provided a full MOT plan in conjunction with the approximate 300 FT of water main installation per day. The MOT plan had to change for each day of installation throughout the 2 mile route. Some MOT features included lane closures near an intersection.

FLL Cell Lot and Perimeter Road Improvements, Fort Lauderdale, FL

KEITH provided professional engineering consultant services for design, engineering, and resident project representative services during construction of airport utility and pavement projects. The projects were a grouping of construction, rehabilitation, and renovation activities. KEITH performed work located landside and airside for FLL and HWO.

FLL Permanent Garage TNC Operation, Fort Lauderdale, FL

KEITH is providing services for design, engineering, and resident project representative services during construction for airport utility and pavement projects. These projects are a grouping of substantially similar construction, rehabilitation, or renovation activities. The work being performed is located landside and airside at the Fort Lauderdale-Hollywood International Airport and North Perry Airport.

FLL Terminal 2 Modernization - T2 Bumpouts, Fort Lauderdale, FL

This extensive modernization project was estimated at a construction cost of $49.8 million for Terminal 2 and $38.3 million for Terminal 3. KEITH, working as a subconsultant partner to Gresham, Smith and Partners, was responsible for the survey, subsurface utility investigations, the civil engineering design and permitting of the airside and landside water distribution and sanitary sewer improvements as well as the paving and drainage improvements that are proposed landside. Our excellent working relationship with the staff at Broward County Water and Wastewater Services (BCWWS) afforded us the ability to preview our proposed design work with them and obtain a fire flow evaluation from their staff early in the process. Numerous other subconsultants were involved in this project team. KEITH also assisted with modeling the existing structure and integrating the proposed designs. This is the first BIM project to utilize the BCAD BIM standard. State-of-the-art survey equipment and 3D laser scanner were utilized. KEITH created a model of the improvements using Revit & AutoCAD Civil 3D. Navisworks was utilized to run clash detections for the entire site. The team created and populated the COBie data set that will be part of the BIM deliverable.

YEARS OF EXPERIENCE

KEITH: 4 Years
Total: 19 Years

EDUCATION

B.S. Civil Engineering,

REGISTRATIONS

73684 - Florida

FDOT Advance MOT Certification 33124 Qualified SWPPP Development/ Practitioner 66408

AFFILIATIONS

American Society of Civil Engineers Member

Women in Transportation Member

CECILIA VILLORIA, PE

SENIOR PROJECT MANAGER



KEITH
Engineering Inspired Design.

YEARS OF EXPERIENCE

KEITH: 1 Years
Total: 28 Years

EDUCATION

B.S. Civil Engineering, Florida International University 1993

B.S. Biology, University of South Tampa 1989

REGISTRATIONS

62866 - Florida

FDOT Advanced Maintenance of Traffic Flexible Pavement Design Specifications

PROFESSIONAL BACKGROUND

Cecilia has 28 years of progressive experience in planning, executing, designing, and managing engineering projects. She has been involved in all aspects of project management, scheduling, engineering design services (pavement markings and signage, signalization, drainage, Maintenance of Traffic (MOT), specifications packages), preparation of project design reports, development of masterplans, construction inspection services and management of CEI staff. Cecilia has oversaw engineering design projects for municipalities, FDOT, Broward County Aviation Department, and Florida Turnpike Enterprise clients. Her project experience ranges from minor roadway improvement projects to highway design.

RELEVANT PROJECTS

FLL BSO Parking, Fort Lauderdale, FL

Cecilia was the Project Manager & EOR for the design and preparation of construction drawings to construct 16 parking spaces, at the four terminals, designated for Broward Sheriff's Office or Broward County Aviation Department Staff adjacent to the outside through lane of Terminal Drive on the Arrivals Level of Terminal Drive. The scope of work included preparation of plans and specifications, cost tabulation, permitting submittal and coordination with on-call Contractor. Plans were developed at 30% Schematic Design, 60% Design Development and 90% Construction Drawing levels for review by BCAD staff. Phasing of the work as well as Maintenance of Traffic detailing was included in the design drawings. Safety of the pedestrian traffic was paramount in the design drawings since these parking improvements will be positioned in proximity to the crosswalks. The phasing plan considered other proposed work activities that BCAD may have sequenced in the same time frame as this construction work. Scope of work also included construction engineering inspection services and post design services.

FLL Crosswalk Signalization, Fort Lauderdale, FL

Project Manager & EOR for the design of signalized crosswalks at three locations within the FLL internal loop road for arriving flights. The primary goals of the project are to increase pedestrian safety and improve vehicular traffic flow. The scope of the design includes: layout of traffic signal control equipment; traffic signal wiring; pedestrian signalization and push buttons; ADA ramps; design of bulb-out for pedestrian refuge along the terminal side of the crosswalk; development of coordinated signal phasing and timing of the three signalized crosswalks; emergency vehicle preemption; signing; LED lighting; pavement markings and rumble stripes. The development of the design plans and bid package were completed within a restricted schedule due to contracting requirements for FLL and the need for construction to be completed during off-peak tourist periods.

D4 - Washington Street & 72nd Avenue - Mobility Improvements, Hollywood, FL

KEITH was selected by the Florida Department of Transportation for this design project which will add bicycle lanes and pedestrian improvements to each corridor. The KEITH team will provide roadway, drainage, signing and pavement marking, landscaping, survey, SUE, utility coordination, Geotech, and public involvement services to the Department for the project. This is a Broward County Metropolitan Planning Organization (MPO) funded project and FDOT District 4 is the client and project facilitator. Our team's extensive experience coordinating with multiple agencies and stakeholders are key factors in the successful completion of this project.

ASHLEY HAGAN BINDER, RLA, LEED

LANDSCAPING PLANNER & DIRECTOR OF STRATEGIC DEVELOPMENT



KEITH
Engineering Inspired Design.

PROFESSIONAL BACKGROUND

Ashley Hagan Binder has extensive experience in Landscape Architecture, working in both the public and private sectors throughout the State of Florida. Ashley joined KEITH from the Florida Department of Transportation, where she managed the Florida Scenic Highways Program and the Landscape Program, approximately a $60 million annual budget. Ashley is a specialist in Government projects, particularly State Agencies' structure, organization, legal and statuatory requirements. Ashley is focused on bringing the best possible solution to each project, through detailed analysis of the site, its users, project needs, and the environment.

RELEVANT PROJECTS

Park in the Parking Lot, Leon County, FL

FDOT, in coordination with Blueprint Tallahassee and Wood and Partners, designed and installed a landscape project and irrigation design for an employee parking lot adjacent to Cascades Park. Dubbed 'Park in the Parking Lot', the project served as overflow parking for events at Cascades Park amphitheatre, and work week parking for FDOT Burns Building employees. The design focused on a diverse palette of native and naturally-occurring North Florida shade tree species.

FLL Expansion of Runway 9R-27L, Fort Lauderdale, FL

The City of Parkland engaged KEITH to provide assistance with the development of a new passive park project. The park project called "Covered Bridges Park" is located in Parkland, Florida. The City has developed a conceptual plan and KEITH is guiding the development of the detailed design documents. The conceptual site plan will serve as the basis for design. KEITH's services include boundary and topographic survey, sketch and legal description, tree inventory and appraisal by KEITH's Certified Arborist, percolation tests, traffic and parking analysis, site plan preparation and coordination, public outreach, civil engineering design development, landscape architecture plans, water foundation designs, cost estimating, paving, grading and drainage plans, pavement marking and signing plans, erosion control plans, demolition plans, bidding services, and construction administration and observation. .

D4 Continuing Services for Landscape Design/Production, Fort Lauderdale, FL

As a Prime consultant, KEITH is providing design services for standalone landscape transportation projects associated with the District on a continuing services basis. Each set of design plans include landscape, hardscape, and irrigation design as a standalone landscape project described and authorized by a TWO basis.

Florida Scenic Highways Program, Tallahassee, FL

Assisted FDOT with the facilitation of the Florida Scenic Highways Progam. Coordinated with local SHs, including Big Bend Scenic Byway, in Leon, Franklin and Wakulla counties to assure program meets the needs of volunteer organizations. Successfully coordinated with the Outdoor Advertising Industry to assure impacts to Scenic Highways are minimized. Facilitated and assisted with Federal funding to SHs, including wayfinding and informational kiosks for the Big Bend National Scenic Byway.

YEARS OF EXPERIENCE

KEITH: 1 Years
Total: 15 Years

EDUCATION

M.S. Landscape Architecture, University of Texas at Austin 2009

B.A. Anthropology, University of Florida 2005

REGISTRATIONS

LA6667148 Registered Landscape Architecture - Florida

LEED AP Green Associate

AFFILIATIONS

American Society of Landscape Architects (ASLA), Florida Chapter, Government Affairs Committee, 2020-current

National Academies of Sciences, National Cooperative Highway Research Program, Transportation Research Board, Panel Member (2016-2020)

Board Member, Citizens for a Scenic Florida, 2021-current

Secretary, Big Bend National Scenic Byway Organization, 2020-current

MICHAEL YU, RCDD

PRINCIPAL TECHNOLOGY SYSTEMS SOLUTIONS ENGINEER



KELEUSMATIC technologies

PROFESSIONAL BACKGROUND

Mr. Michael Yu has 19-years' experience in the Air Transportation Industry (ATI) and 26-years' experience in the Telecommunications Industry. Michael has been responsible for the design and delivery of multi-faceted systems integration projects including Master Systems Integration (MSI), Design-Build, Design-Bid-Build, and Construction Manager at Risk (CMAR) projects.

ATI EXPERIERNCE

Technology Consultant – Nashville International Airport (BNA) – Nashville, TN

Terminal Lobby and International Arrivals Facility (IAF)

Technology Consultant for Hensel Phelps Construction – Delivered design oversight, review, and assist for Hensel Phelps over a Burns Engineering systems design. Provided initial delivery oversight coordination with the MNAA and technology systems subcontractor delivering the common use and airport operational database applications. Other systems included passenger processing, airport operations, infrastructure, building management, security, and life safety systems.

Airline Relocation Delivery Manager – Phoenix Sky Harbor International Airport (PHX) – Phoenix, AZ

Terminal 3 Modernization Program – Design- Build Project

Airline Relocation Delivery Manager for the Hunt-Austin, A Joint Venture (HAJV) – Responsibilities included planning, coordination, design, and delivery of airline technologies systems for proprietary operational and common use applications. Airlines for this project include DL (Delta), B6 (Jet Blue), HA (Hawaiian), SY (Sun Country), NK (Spirit), 4B (Boutique), and ZK (Great Lakes).

Special Systems Engineer – San Diego International Airport (SAN) – San Diego, CA

Federal Inspection Station (FIS) Project at the New International Arrivals facility a Terminal

Special Systems Engineer for Turner Construction – Responsibilities included delivery management of the special systems, management of systems testing and commissioning, management of close-out documentation and drawings, management of subcontractors.

Lead Designer – Special Systems – Phoenix Sky Harbor International Airport (PHX) – Phoenix, AZ

Terminal 4 Node 4 (T4N4) FIS Project – CMAR Project

Customs Border Protection) and baggage recheck areas and the development of 30, 60, 100% design drawings and functional specifications. Systems included: Communication Systems (LAN, WLAN, and Structured Cabling), Airport Operations Systems (PAS, EVIDs), Passenger Processing Systems (APC kiosks), and CBP proprietary systems.

YEARS OF EXPERIENCE

EDUCATION

Bachelor of Electrical Engineering, Telecommunications Concentration

Georgia Institute of Technology (1997)

REGISTRATIONS

Registered Communications Distribution Designer (RCDD)

Building Industry Consulting Service International (BICSI)

AFFILIATIONS

Institute of Electrical and Electronic Engineers (IEEE) Member

MICHAEL YU, RCDD

IT Manager – San Francisco International Airport (SFO), San Francisco, CA.
Terminal 1 – Redevelopment Program (Interim Boarding Area B)

IT Manager for Hill International – Responsibilities included the management over the development of the design documentation and drawings, and the development of the Test Strategy Methodology and the individual System and Integration Test Plans. Work Packages included: Communication Systems (LAN, WLAN, DAS, and Structured Cabling), Airport Operations Systems (EVIDs, Visual Paging, PAS), Security & Life Safety (ACS, CCTV, FAS), and Facility Systems (BMS).

Lead Designer – Phoenix Sky Harbor International Airport (PHX), Phoenix, AZ
Terminal 3 Modernization Program – Design- Build

Special Systems Lead Designer for the Hunt-Austin, A Joint Venture (HAJV) – Responsibilities included the Design of Special Systems, the development of 30%, 60%, 95%, and 100% design drawings and functional specifications, lead coordination with the PHX DCS, Technology, Operations, and Facilities divisions. Work Packages included: Communication Systems (LAN, WLAN, Structured Cabling), Airport Operations Systems (AODB, RMS, EVIDs, Visual Paging, PAS), Passenger Processing Systems (CUPPS, CUSS), and Parking Systems (AVI).

Technical Design Authority – Baku International Airport (GYD), Baku, Azerbaijan
New Terminal 2 – Design & Build Program

Lead Designer for the Terminal Design Consultants for the Design-Build for the new Terminal 4 at São Paulo/Guarulhos International Airport (GRU). Contracted to as the Terminal Design Consultants for the development of system functional specifications of twenty-five (25) Work Packages including the subset below:

1. Communication Systems – LAN, WLAN, IPT, Distributed Antenna System – DAS, and Structured Cabling System – Backbone and Horizontal
2. Airport Operations Systems – AODB, RMS, EVIDs, Visual Paging, A-CDM – Airport Collaborative Decision Making
3. Passenger Processing Systems – CUPPS, CUSS
4. Baggage Processing Systems – Baggage System Messaging

Other Notable Airport Projects

BAA – IT Outsource Program – Development of Managed Service offerings for the BAA managed airports

SITA – Airport HUB Program – Design / Delivery of Network Infrastructure Project encompassing 120+ tier-1 and tier-2 airports, across 6 continents

SITA – Airport HUB Program – The planning, coordination, solution design, and delivery of 2500+ Airline WAN/LAN migrations as part of the AirportHUB Program

BOM – Chhatrapati Shivaji International Airport – Mumbai, India – Airline Relocations

BOM – Chhatrapati Shivaji International Airport – Mumbai, India – Core Room Relocation

JFK – John F. Kennedy International Airport – New York, New York – Voice Services Specialist

YYZ – Lester B. Pearson International Airport – Toronto, Canada – Delivery Manager - Voice Communications

YYZ – Lester B. Pearson International Airport – Toronto, Canada – Service Delivery Agent (SDA) Program

MATTHEW RHETT

LEAD DESIGNER



KELEUSMATIC technologies

PROFESSIONAL BACKGROUND

Mr. Matthew Rhett has 10 years of experience in the Transportation industry and 6 years of experience in the Hospitality industry. Matthew has been responsible for the design and delivery of complex infrastructure projects including Domestic and International, Multi-site, Converged Networks, Voice and Video over IP, and Wireless. Matthew experience includes the design and delivery of complex telecommunication systems as part of major Design-Build and CMAR construction projectS.

ATI EXPERIENCE

Lead Designer – Telecommunication Systems – Quebec City Jean Lesage International Airport (YQB), Quebec City, Canada

YQB 2018 Program - Terminal Expansion

Lead Designer for SITA and the Airport Authority (Aéroport de Québec Inc) – Responsibilities included being the Design Lead for the Communications Work Packages as part of an 8-person Design Team. Collection and validation of business, operational, and technical requirements. Coordination of efforts with the Airport Authority, SITA Solution Design and Centers of Excellence (CoE), Terminal Construction Trade Contractors, and 3rd party partners to develop the functional specifications for the Communication work packages included: LAN, WLAN, Telephony, DAS, and Structured Cabling System.

Technical Design Authority – Baku International Airport (GYD), Baku, Azerbaijan

New Terminal 2 – Design-Build Program

Technical Design Authority for the SITA – Responsibilities included the Design of Special Systems, the development of 30%, 50%, 90%, and 100% design drawings and functional specifications, and Delivery of Special Systems. Work Packages included: Communication Systems (LAN, WLAN, IPT, Structured Cabling System – Backbone and Horizontal), Airport Operations Systems (AODB, RMS, EVIDs, VDGS), and Passenger Processing Systems (CUPPS, CUSS).

Lead Designer – São Paulo/Guarulhos International Airport (GRU), São Paulo, Brazil

New Terminal 4 – Design & Build Program

Lead Designer (Communication Systems) for the Terminal Design Consultants for the Design-Build for the new Terminal 4 at São Paulo/Guarulhos International Airport (GRU). Contracted to as the Terminal Design Consultants for the development of system functional specifications for the communication system work packages. Work Packages included: LAN, WLAN, IPT, Distributed Antenna System – DAS, and Structured Cabling System – Backbone and Horizontal

Other Notable Projects

Network Engineer – Dublin International Airport (DUB), Dublin, Ireland Responsibilities included the systems testing and commissioning as part of the Airport'sORAT – Operations Readiness Acceptance Team

Network Design Engineer - Airport HUB Program

Responsibilities included the Design and Delivery of Network Infrastructure Project encompassing 120+ tier-1 and tier-2 airports, across 6 continents

YEARS OF EXPERIENCE

EDUCATION

A.A.S Computer Information Technology, Central Lakes College (2006)

REGISTRATIONS

Cisco Certified:

- Network Professional
- Security Professional
- Design Associate
- Network Associate
  *NOTE: The Cisco certification program and certificates will change as of February 2020; recertification in accordance with the new program is planned

MATTHEW RHETT

Maricopa County (AZ) – Design Manager – Design Management and Lead Designer of the Telecommunication systems in support of the construction (CMAR) of the ITR (Intake, Transfer, Release) Facility for Maricopa County (AZ). The ITR Facility represents a first for Maricopa County, a shared Correctional facility in which the Corrections, Sheriff Office, Health Services, Mental Services, and three (3) Judicial Courts will operate from a shared facility.

Maricopa County (AZ) – Design Manager – Design Management and Lead Designer of the Telecommunication systems in support of the construction (CMAR) of the 225 Madison Facility for Maricopa County (AZ). The 225 Madison project is the demolition and renovation of the Madison Street Jail to new home of the Maricopa County's Attorney's offices.

Lead Engineer –Sheraton Vistana Resort Data Center (Orlando, FL) – Data Center Design and Install

Lead Engineer – Orlando Operations Center (Orlando, FL) – Design/Configure/Install WLAN

Lead Engineer – Starwood Vacation Ownership (Orlando, FL) – Design/Configure/Install Property LAN, WLAN, and Security Appliances.

Airport Experience

North America
JFK, MCO, PHX, SFO, TPA, YQB

Latin America & South America
GRU, MVD

Europe
CGN, DUB

Asia & Middle East
BOM, DEL, KUL, PEK, SGN, TPE, GYD

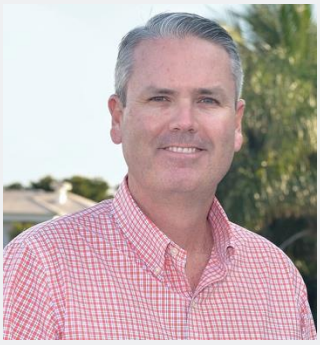
Hospitality Experience

North America

- Sheraton Vistana Villages – Orlando, FL
- Sheraton Vistana Resort – Orlando, FL
- Vistana Beach Club – Jensen Beach, FL
- Sheraton PGA Vacation Resort – Port St. Lucie, FL
- Sheraton Broadway Plantation – Myrtle Beach, SC
- The Westin St. John Ocean Resort – St. John, USVI
- Sheraton Mountain Vista – Avon, CO
- The Westin Riverfront Villas – Avon, CO
- Sheraton Desert Oasis – Phoenix, AZ
- The Westin Kierland Villas – Phoenix, AZ
- The Westin Desert Willow – Palm Springs, CA
- The Westin Mission Hills – Palm Springs, CA
- The Westin Lagunamar Ocean Resort – Cancun, Mexico

TYLER CHAPPELL

VICE PRESIDENT



PROFESSIONAL BACKGROUND

Mr. Chappell's capabilities include wetland jurisdictional determinations, environmental feasibility studies, seagrass surveys, gopher tortoise surveys, environmental permitting, mitigation design, and mitigation monitoring. Mr. Chappell has performed a number of endangered and threatened species surveys, jurisdictional determinations, and environmental monitoring reports. Mr. Chappell has also conducted construction compliance inspections including turbidity monitoring for wetland and coastal projects. He has over eighteen years of experience in many types of environmental permitting, including residential docks, marinas and coastal development.

RELEVANT EXPERIENCE

The Chappell Group, Inc. Pompano Beach, Florida

Vice president - 2005-Present

Responsibilities include wetland jurisdictional determinations, environmental feasibility studies, Phase I ESA's, seagrass surveys, gopher tortoise surveys, environmental permitting with all agencies, mitigation design, and mitigation monitoring. Residential and commercial marina permitting and design including all aspects of sovereign submerged land regulations with the Division of State Lands. Construction compliance inspections including turbidity monitoring for wetland and coastal projects.

Craven Thompson & Associates, Inc., Fort Lauderdale, Florida

Director, Environmental Services - 1998-2005

Responsibilities include wetland jurisdictional determinations, environmental feasibility studies, Phase I ESA's, seagrass surveys, gopher tortoise surveys, environmental permitting with all agencies, mitigation design, and mitigation monitoring. Residential and commercial marina permitting and design including all aspects of sovereign submerged land regulations with the Division of State Land.

PARTIAL LIST OF PROJECTS

- Fort Lauderdale Hollywood International Airport, Broward County
- Gateway Hotel & Marina, Daytona Beach
- Harbour Towne Marina – Dania Beach
- Sunrise Harbor Marina, Fort Lauderdale
- Port Everglades Bridge over the FPL Discharge Canal, Port Everglades
- Boca Raton Beach Club & Marina, Boca Raton
- Ocean Express Pipeline, Dania Beach/ Bahamas
- Miramar Regional Park, Miramar
- Dania Beach Port Casino, Dania Beach
- Border Patrol Center, Hollywood, FL
- Heron Bay, Parkland
- White Bay Cay, Exumas
- Hall of Fame Marina, Fort Lauderdale
- Broward County Mitigation Monitoring, BC Waste & Recycling Services
- Pembroke Road over I-75, Broward County
- Sheridan Street, Broward County
- Deerfield Beach Pier Renovation, Deerfield Beach, FL
- Radisson Riverwalk Hotel, Tampa
- Port Everglades Turning Notch Expansion, Fort Lauderdale, FL
- Dania Beach Marina, Dania Beach, FL
- Broward County Segment II Beach Renourishment

THE Chappell GROUP INC

EDUCATION

Texas Christian University-Fort Worth, Texas, Bachelor of Science, August 1997, Environmental Science

CERTIFICATION

- ISA Certified Arborist

AFFILIATIONS

- South Florida Association of Environmental Professionals, Past President
- Florida Association of Environmental Professionals, Past Board Member
- Leadership Broward Graduate, Class XIX
- Marine Industries Association of South Florida, Board of Directors
- Florida Inland Navigation District, Past Broward Commissioner
- Riverwalk Trust, Past Board Member
- Broward Alliance, Past Investor
- International Society of Arboriculture, Certified Arborist, Member
- Hillsboro Inlet District, Broward Commissioner

KATHRYN BONGARZONE

SENIOR PROJECT BIOLOGIST



PROFESSIONAL BACKGROUND

Ms. Bongarzone's capabilities include wetland jurisdictional determinations, environmental feasibility studies, seagrass surveys, environmental permitting, mitigation design, and mitigation monitoring. Ms. Bongarzone has experience with endangered and threatened species surveys, jurisdictional determinations, and environmental monitoring reports. As a member of The Chappell Group, Inc.'s team, Ms. Bongarzone is handling environmental permitting, including residential docks, marinas and coastal development projects.

RELEVANT EXPERIENCE

The Chappell Group, Inc. Pompano Beach, Florida

Senior Project Biologist - 2014-Present

Responsibilities include wetland jurisdictional determinations, environmental feasibility studies, seagrass surveys, environmental permitting with all agencies, mitigation design, and mitigation monitoring. Residential and commercial marina permitting and design including all aspects of sovereign submerged land regulations with the Division of State Lands.

Newfound Harbor Marine Institute at Seacamp Association

Head Unit Leader/Instructor - 2012-2014

Taught students through lecture, laboratory and field lessons in interpretive tropical marine science both on land and on water. Additionally, captained a 26 ft. USCG designated research vessel, acted as an ARC lifeguard, NAUI skin diving leader, and participant in hospitality services necessary to a residential facility.

PARTIAL LIST OF PROJECTS

- Port Everglades Turning Notch Expansion, Port Everglades
- Dania Beach Marina, Dania Beach
- Yachts Miami Beach Boat show, Miami Beach
- Harbor Towne Marina, Dania Beach
- Lauderdale Marine Center, Fort Lauderdale
- Pier 66 Marina, Fort Lauderdale
- Sunrise Parks, City of Sunrise
- Cooper City Soccer Park, Cooper City
- Alsdorf Park, Pompano Beach
- Private client, single family home dock design and permitting

EDUCATION

Averett University, Danville Virginia 2007-2010
B.S. Environmental Science, minor Political Science, Magna Cum Lade

CERTIFICATIONS

- ISA Certified Arborist
- USCG OUVP Licensed Captain with Towing Endorsement
- ARC Lifeguard, First Aid and CPR certified
- ARC Lifeguard, First Aid and CPR Instructor
- PADI Open water SCUBA certified

AFFILIATIONS

- South Florida Association of Environmental Professionals, Member
- Leadership Broward, Class XXXVII
- International Society of Arboriculture, Certified Arborist, Member

LAKDAS NANAYAKKARA, PE

PRINCIPAL / STRUCTURAL ENGINEER



LAKDAS/YOHALEM ENGINEERING, INC.

PROFESSIONAL BACKGROUND

Lakdas Nanayakkara has remained a licensed Professional Engineer in the state of Florida for the last thirty-five with over forty-three years as a Professional Structural Engineer in total. Lakdas leads the structural engineering services at Lakdas/Yohalem Engineering Inc.

Lakdas' Experiences Includes Structural Design, Permitting and Construction Phase Engineering Services for the following:

- Building Structures
- Major Water and Wastewater Treatment Plants and Water Control Structures
- Bridge Engineering Structures
- High Visible and Miscellaneous Public Project

Lakdas has completed over 1200 projects in South Florida and the Caribbean Basin during the last 34 years.

Value Engineering: Lakdas has participated as a structural expert for over 31 value -engineering sessions for both FDOT and County's major projects in building, bridges and water and wastewater treatment plants.

Our Value-Engineering services has saved:

- Bridge projects over $4.5 Million
- Building Projects, saved over #4.1 Million.
- Water & Wastewater Treatment Plants saved over $4.6 Million.

Structural Failure Analysis and Expert Witness; Construction Related Litigation

- 12 Commercial Building Projects
- 58 Residential Projects

RELEVANT PROJECT EXPERIENCE

Ft. Lauderdale Airport Upper-Level Strengthening Renovation, Fort Lauderdale, FL

Evaluate 4055 long elevated bridge structure (elevated deck) deck for new passenger coaches and improve the strength of the entire structure to withstand new loading, Replace all expansion joints of the deck and girders. Repair all structural defects, bridge engineering design condition, survey, and design services. Lakdas served as the Principal and was responsible for the design services. Lakdas designed and review all relevant shop drawings. Also, Lakdas was responsible for inspection services.

Fort Lauderdale Airport Terminal 2 Expansion and Renovations, Fort Lauderdale, FL

Evaluation of the existing structure for the new building code and design services for 120,000 sqft expansion. Lakdas served as the Principal and was responsible for the design services. Lakdas designed and review all relevant shop drawings. Also, Lakdas was responsible for inspection services trouble shooting, and final certification for the structures.

EDUCATION

Post Graduate Diploma in Structural Engineering London England, UK

Bachelor of Science Honors Degree in Civil Engineering with Structural Engineering Major University of Hartford England, UK

Higher National Certificate in Civil Engineering Hertfordshire College of Building England, United Kingdom

REGISTRATIONS

Engineering

Charted Structural Engineering, London, England – 1981

Florida #037590

South Dakota – 4058

Minnesota - #17947

Structural Engineering Expert of Unsafe Structure Board – City of Margate Since 2001

Construction

Florida Certified General Contractor – GC 044303

Inspection

Certified Structural Masonry Inspector – 1992

Certified Threshold Inspector – 1987

Certified Uniform Building Code Inspector – 69

CIVIC ORGANIZATIONS

Member of Broward County Construction Executive Association and Member of Florida Consulting Engineers

LAKDAS NANAYAKKARA, PE

Fort Lauderdale Airport Terminal 3 Expansion and Renovations, Fort Lauderdale,

Evaluation of the existing structure for the new building code and design services for 120,000 sqft expansion. Lakdas served as the Principal and was responsible for the design services. Lakdas designed and review all relevant shop drawings. Also, Lakdas was responsible for inspection services trouble shooting, and final certification for the structures.

Port Everglades New Gantry Crane Rails and Crane Maintenance Facility, Fort Lauderdale, FL

Demolition of the existing buildings and new 2-story maintenance facility. Lakdas served as the Principal and was responsible for the design services. Lakdas designed and review all relevant shop drawings. Also, Lakdas was responsible for inspection services trouble shooting, and final certification for the structures

Radius Parking Garage (over 20 Buildings and Parking Garages), City of Fort Lauderdale, FL

Lakdas serviced as the structural engineer of record for structural condition survey and load rating analysis, analyzed and designed construction documents for the renovation and phased construction engineering inspections and certification.

Fort Lauderdale Airport Hibiscus Parking Garage, Fort Lauderdale, FL

Parking Garage Renovations. Lakdas served as the Principal and was responsible for the design services. Lakdas designed and review all relevant shop drawings. Also, Lakdas was responsible for inspection services trouble shooting, and final certification for the structures..

Van Buren Parking Garage, City of Hollywood, FL

6-story parking garage constructed with beams, columns, and double T precast concrete deck. Design new connection to enhance the structural stability to comply with new wind requirements. Lakdas served as the Principal and was responsible for the design services. Lakdas designed and review all relevant shop drawings. Also, Lakdas was responsible for inspection services trouble shooting, and final certification for the structures.

Fort Lauderdale Airport Exit Roadway & Valet Routing Improvements, Fort Lauderdale, FL

New bridge, helix ramp, new roadway, overhead signage and retain wall structural design and permitting. Lakdas served as the Principal and was responsible for the design services. Lakdas designed and review all relevant shop drawings. Also, Lakdas was responsible for inspection services trouble shooting, permit assist and final certification for the structures..

Port Everglades, Terminal 18, Fort Lauderdale, FL

Terminal 18 is a dual-purpose facility handling both cargo and cruise operations. New terminal was built to accommodate the Oasis of the Sea, the world largest cruise ship in the world. The terminal consists of covered passenger drop off, passenger seating, two sets of restrooms, mezzanine, two elevators, two escalators, baggage handling, covered passenger loading bridges. Lakdas served as the Principal and was responsible for the design services. Lakdas designed and review all relevant shop drawings. Also, Lakdas was responsible for inspection services and trouble shooting at the site.

Port Everglades, Terminal 2, Fort Lauderdale, FL

Terminal 2 is a dual-purpose facility handling both cargo and cruise operations. The existing terminal obtained addition and renovations to accommodate Princess Cruise. Lakdas served as the Principal and was responsible for the design services. Lakdas designed and review all relevant shop drawings. Also, Lakdas was responsible for inspection services and trouble shooting at the site.

LUAN NGUYEN, M. SC.

STRUCTURAL ENGINEER



LAKDAS/YOHALEM ENGINEERING, INC.

PROFESSIONAL BACKGROUND

Luan Nguyen has over 15 years of engineering experience and is responsible for structural design services at LYE. Luan provides design, permitting and construction phase engineering services.

Luan's Experiences Includes structural analysis and design services for the following types of projects:

- Educational Facilities
- City Complexes, Police Stations and Libraries
- Water Control Structures
- Wastewater and Water Treatment Plants
- Mast Arm Structures
- High Visible and Miscellaneous Public Projects

RELEVANT PROJECT EXPERIENCE

Fort Lauderdale Airport Terminal 2 Expansion and Renovations, Fort Lauderdale, FL

Evaluation of the existing structure for the new building code and design services for 120,000 sqft expansion. Luan serviced as the Project Engineer and was responsible for the foundation and miscellaneous structural design services for this project.

Port Everglades New Gantry Crane Rails and Crane Maintenance Facility, Fort Lauderdale, FL

Demolition of the existing buildings and new 2-story maintenance facility. Luan served as the Project Engineer and was responsible for the condition survey and the structural design services for this project.

Fort Lauderdale Airport Exit Roadway & Valet Routing Improvements, Fort Lauderdale, FL

New bridge, helix ramp, new roadway, overhead signage and retain wall structural design and permitting. Luan served as the Project Engineer and was responsible for the condition survey and the structural design services for this project.

Port Everglades, Terminal 18, Fort Lauderdale, FL

Terminal 18 is a dual-purpose facility handling both cargo and cruise operations. New terminal was built to accommodate the Oasis of the Sea, the world largest cruise ship in the world. The terminal consists of covered passenger drop off, passenger seating, two sets of restrooms, mezzanine, two elevators, two escalators, baggage handling, covered passenger loading bridges. Luan served as the Project Engineer and was responsible for the condition survey and the structural design services for this project.

EDUCATION

Master of Science in Structural Engineering, University of Florida, 2002

Bachelor of Science in Civil Engineering, University of Florida, 2000

REGISTRATIONS

Engineer-in-Training (EIT), US Florida Tallahassee Certification

LUIS BELTRAN ROSSI, B.SC. ENG.

STRUCTURAL ENGINEER



LAKDAS/YOHALEM ENGINEERING, INC.

PROFESSIONAL BACKGROUND

Luis Beltran Rossi has over twenty plus years of experience in structural design and coordination if residential, commercial, and offices facilities projects. Luis has an extensive experience as a Structural AutoCAD Drafter. He is responsible for design services at Lakdas/Yohalem Engineering Inc.

Luis's Experience includes Structural Design, Field Evaluation and Resident Engineer for the following project types:

- Public Sector Buildings
- Port and Airport Facilities
- Water and Wastewater Treatment Plans
- Water Control Structures

RELEVANT PROJECT EXPERIENCE

Radius Parking Garage (over 20 Buildings and Parking Garages), City of Fort Lauderdale, FL

Luis served as the Structural Engineer and was responsible for the structural design services for this project.

Fort Lauderdale Airport Hibiscus Parking Garage, Fort Lauderdale, FL

Luis served as the Structural Engineer and was responsible for the structural design services for this project.

Van Buren Parking Garage, City of Hollywood, FL

6-story parking garage constructed with beams, columns, and double T precast concrete deck. Design new connection to enhance the structural stability to comply with new wind requirements. Luis served as the Structural Engineer and was responsible for the structural design services for this project. .

Port Everglades New Gantry Crane Rails and Crane Maintenance Facility, Fort Lauderdale, FL

Demolition of the existing buildings and new 2-story maintenance facility Luis served as the Structural Engineer and was responsible for the structural design services for this project.

EDUCATION

Bachelor of Civil Engineering, University of Carabobo, Venezuela

REGISTRATIONS

Board of Engineers of Venezuela. License No:55.753

ADDITIONAL TRAINING

Welding and Inspection

Hydraulic Fire System Design

Preparation, Repair and Protection of Structures

Sika Construction Products Application

PRAVIN NANAYAKKARA, M.B.A., M. SC.

PROJECT MANAGER



LAKDAS/YOHALEM ENGINEERING, INC.

PROFESSIONAL BACKGROUND

Pravin Nanayakkara has over eight years of engineering experience. He is responsible for Project Management at LYE.

Pravin has provided Project Management, Site Inspections, Project Coordination, Design and Calculations for structural and civil engineers projects.

Pravin's Experience includes Structural Design, Field Evaluation and Resident Engineer for the following project types:

- Public Sector Buildings
- Port and Airport Facilities
- Water and Wastewater Treatment Plans
- Water Control Structures

RELEVANT PROJECT EXPERIENCE

Fort Lauderdale Airport Terminal 2 Expansion and Renovations, Fort Lauderdale, FL

Evaluation of the existing structure for the new building code and design services for 120,000 sqft expansion. Pravin served as the Project Manager and was responsible for the condition survey, and construction phase services for this project.

Fort Lauderdale Airport Terminal 3 Expansion and Renovations, Fort Lauderdale, FL

Evaluation of the existing structure for the new building code and design services for 120,000 sqft expansion. Pravin served as the Project Manager and was responsible for the condition survey, and construction phase services for this project.

Port Everglades New Gantry Crane Rails and Crane Maintenance Facility, Fort Lauderdale, FL

Demolition of the existing buildings and new 2-story maintenance facility. Pravin served as the Project Manager and was responsible for the design, and construction phase services for this project.

Radius Parking Garage (over 20 Buildings and Parking Garages), City of Fort Lauderdale, FL

Pravin served as the Project Manager and was responsible for the condition survey, design, and construction phase services for this project.

Fort Lauderdale Airport Hibiscus Parking Garage, Fort Lauderdale, FL

Parking Garage Renovations Pravin served as the Project Manager and was responsible for the condition survey and design services for this project.

Van Buren Parking Garage, City of Hollywood, FL

6-story parking garage constructed with beams, columns, and double T precast concrete deck. Design new connection to enhance the structural stability to comply with new wind requirements. Pravin served as the Project Manager and was responsible for the condition survey, design, and construction phase services for this project.

EDUCATION

Bachelor of Science in Biology, University of Central Florida

Master of Business Administration, University of Florida

Bachelor's in Civil Engineering, Florida Atlantic University

Master of Science in Finance University of Miami

ROY BODMAN, B. SC. ENG.

PROJECT ENGINEER



LAKDAS/YOHALEM ENGINEERING, INC.

PROFESSIONAL BACKGROUND

Roy Bodman has over eight years of engineering experience. He is responsible for design and construction services at Lakdas/Yohalem Engineering Inc.

Roy has provided Project Management RPR Services, Site Inspections, Project Coordination, Structural Engineering Design Services.

Roy's Experience includes Structural Design, Field Evaluation and Resident Engineer for the following project types:

- Public Sector Buildings
- Port and Airport Facilities
- Water and Wastewater Treatment Plans
- Water Control Structures

RELEVANT PROJECT EXPERIENCE

Ft. Lauderdale Airport Upper-Level Strengthening Renovation, Fort Lauderdale, FL

Evaluate 4055 long elevated bridge structure (elevated deck) deck for new passenger coaches and improve the strength of the entire structure to withstand new loading, Replace all expansion joints of the deck and girders. Repair all structural defects, bridge engineering design condition, survey, and design services. Roy serviced as the Project Engineer and was responsible for the condition survey and construction services for this project.

Fort Lauderdale Airport Terminal 2 Expansion and Renovations, Fort Lauderdale, FL

Evaluation of the existing structure for the new building code and design services for 120,000 sqft expansion. Roy serviced as the Project Engineer and was responsible for the condition survey and construction services for this project.

Fort Lauderdale Airport Terminal 3 Expansion and Renovations, Fort Lauderdale, FL

Evaluation of the existing structure for the new building code and design services for 120,000 sqft expansion. Roy serviced as the Project Engineer and was responsible for the condition survey and construction services for this project.

Port Everglades New Gantry Crane Rails and Crane Maintenance Facility, Fort Lauderdale, FL

Demolition of the existing buildings and new 2-story maintenance facility. Roy serviced as the Project Engineer and was responsible for the construction services for this project.

EDUCATION

Bachelor of Science in Petroleum Engineering, University of Kansas

Bachelor of Science in Civil Engineering, University of Florida

REGISTRATIONS

Engineer-in-Training (EIT), US Florida Tallahassee Certification

CRAIG GORDON

PROJECT MANAGER / QA/QC



MESSAM CONSTRUCTION

PROFESSIONAL BACKGROUND

As Project Manager, Craig is responsible for coordinating and managing the necessary team resources throughout the entire project, from preconstruction through closeout.

This would include phasing analysis of the programs within any project assigned to Messam and coordinating our specialty teams. He will ensure that both your's and Messam's expectations and budgetary guidelines are met or exceeded.

Craig manages the project teams from beginning to end including budget, costs, schedule, risk management, insurance, general work performance and quality, and overall progress against the plan.

SAMPLE PROJECT EXPERIENCE

Broward County New Judicial Center
Ft. Lauderdale, FL
$130,000,000
Owner Representative

Ft. Lauderdale International Airport
Delta Airlines Terminal 2
West Palm Beach, FL
$110,000,000
Program Management – Partner

Program Management – Partner
North Palm Beach Elementary
Village of North Palm Beach, FL
$21,000,000
Asst. Project Manager

Northeast High School
Ft. Lauderdale, FL
$9,000,000
Asst. Project Manager

Gove Elementary Modernization
Belle Glade, FL
$29,000,000
CM@Risk Partner
Asst. Project Manager

YEARS OF EXPERIENCE
Messam: 8 Years
Total: 14 Years

EDUCATION
Bachelor of Science in Construction Management, North Carolina A&T University, Greensboro, NC – 2005

CERTIFICATIONS
- OSHA 30
- NCCER Trained
- LEED Green Associate (Candidate)

KEY STRENGTHS
- PROGRAM MANAGEMENT
- OWNER REPRESENTATION
- NEW CONSTRUCTION
- MEP UPGRADES
- OCCUPIED SITE
- RENOVATIONS
- LEED GA CANDIDATE





KARLENE CHUNG

DOCUMENT CONTROL MANAGER



MESSAM CONSTRUCTION

PROFESSIONAL BACKGROUND

Karlene offers overall support to the Construction/Project Management team. She brings a wealth of document control and project management experience providing document control management for government and institutional clients. Her current tasks include processing and archiving all communications, documents and project forms using, Prolog, Textura and other systems for government and private projects throughout Broward County. Specifically, Karlene's ability to interface with Project Managers, A/E, Trade Subcontractors and Owners to process communications and construction documents is her strength.

Karlene has a diverse background of work experience being a former Project Manager, Project Administrator and Account Manager, and Grant Writer in non-profit field for most of her professional career.

SAMPLE EXPERIENCE

PROJECTS EXPERIENCE

Jackson North Medical Center Modernization
North Miami Beach, FL
$68,000,000
Project Coordinator

PROGRAM MANAGEMENT PROJECTS

Ft. Lauderdale International Airport
Delta Airlines Terminal 2
Fort Lauderdale, FL
$110,000,000
Document Control Manager

YEARS OF EXPERIENCE

Messam: 3 Years
Total: 8 Years

EDUCATION

Masters of Science:
Business Leadership, 2009
Nova Southeastern University

Bachelors of Science:
Exercise Science 2005
Florida State University

SOFTWARE

Prolog, Textura, Microsoft Office, Scheduling

KEY STRENGTHS

- DOCUMENT CONTROL
- M/WBE OUTREACH
- PROJECT COORDINATION
- PROLOG
- SHAREPOINT









1c. QUALIFICATIONS, & AIRPORT EXPERIENCE PROJECT MANAGER



PMTECHNOLOGIES
project professionals

CHRIS DAVIS - PROJECT MANAGER

The project management staff included for the Professional Consultant services for FLL/HWO has been hand-selected, not just for their local knowledge of the Fort Lauderdale International Airport, but also their general depth of airport and airline experience. This project management team includes overall experience in airport renovation, BHS system planning, installation and certification, airport construction (both updating and new), FIS construction, airport technology, and airline & operational experience.

Chris Davis, as the main program manager, was chosen for this proposal due to his 20+ years working in the airline industry in technology, security, and construction. ***Chris has completed over $200M in projects at FLL and completed 200,000 SF of renovations.*** His most recent experience working as the program and project manager at the Fort Lauderdale International Airport's Terminal 2 BHS System Project, and the Terminal 2 Terminal Modernization provides a thorough knowledge of the airport's requirements, processes, and unique challenges. Other projects include the LAX T5 FIS construction, certification, and turnover. Various airline and airport technology systems projects including DAS, Wi-Fi, PA systems, common use rollout, Club design, and overall project management from initial concept and planning, through construction and closeout. His extensive knowledge will be invaluable in assisting the airports and the team from planning through execution. As the main program and project manager, his time will be balanced across various projects and will depend upon the airports' needs and assignments.

Chris's track record as a consultant to both airlines and airports provides our team with a unique perspective on how to look at the overall program, providing insight and management for constructability, maintenance, phasing, bidding and delivery - all while maintaining the delicate and unique balance between the project deliverables, airport/airline operations and the overall customer experience. His expertise will benefit the Airports from conceptual design, phasing, delivering, and managing that demanding balance.

The project manager and supporting project management staff have decades of experience in successfully bringing the overall design, phasing, and implementation together into projects that will allow Broward County to realize their vision for the Fort Lauderdale International and North Perry Airports.

72

Section 2
PROJECT APPROACH

2a. Approach to the Project

2b. Subcontractor Coordination

2c. Technology

2a. APPROACH TO THE PROJECT

CBRE | DESIGN PHILOSOPHY

Airport terminals represent the character and ethos of the regions they serve. Airports are in the people business and a great experience doesn't happen by chance, it is designed. Our understanding of design integrates not only a secure environment, but creates a passenger journey with amenities that provide an efficient experience that feels personalized. Our design process is thoughtful and considerate, involving a broad collaboration of stakeholders to ensure airport terminals, as placemaking public art and welcoming gateways, are as efficient and functional as they are aesthetically appealing.

Our experience encompasses airport owners, airlines, tenants and federal agencies such as CBP, TSA and FAA for multiple sites and multiple building programs. CBRE understands the issues and challenges involved in undertaking today's massive multi-billion-dollar airport renewal projects, as well as smaller, discreet projects that are often part of an airport development.

Broward County is seeking a professional services partner to deliver strategic and thoughtful solutions to a variety of capital improvement projects at both FLL and HWO airports. CBRE Design has throughly reviewedthe Packet for Bid solicitation and has provided the same specialized services Broward County is seeking for numerous airports in our past experience. Here is how we will approach these projects:

DESIGN APPROACH

The team that is proposed has been working locally with Broward County and BCAD for over 50 years. We collectively understand the interactions of the various departments, organizations, and private entities that have operated in and around the FLL as the airport has grown over the decades. We plan to approach this project from a design perspective by utilizing our local knowledge into the design criteria. Our intentis to balance the vision of BCAD with a design focused on longevity, maintenance and reliability. We will be the vehicle in which BCAD uses to move the master plan forwardwith the personnel, the knowledge basis, and the right design standards. Critical factors for the design approach include improving the design details, implementing logical technology initiatives, and keeping the customer experience in the forefront. We understand the difficulties of a growing airport because our team has executed similar initiatives around the United States. We can help BCAD aviation, BCS, and it's board of directors execute that vision to grow.

PROJECT MANAGEMENT

This team is made up of local talent that has been a part of the growth of the FLL airport for various programs across the entire campus. We understand the intricacies of airline and airport operations. Our experience and relationships with the airline partners complements the understanding of how to execute work in the terminals and other areas of the airport. Our approach to project management provides the strength of nation-wide design firms with the detailed local knowledge of how FLL operates. Without a local team, no one would be successful. It is the project management teams job to have the heart of the operation in mind when the vision of growthis executed. Without that understanding, initiatives drag on create animosity in a 24/7 environment that is dependent on communication with one another. From knowing where ramp-level plumbing clean-outs are located to knowing what aircraft RON at night, our project management teammates commit their time, regardless of hour, to be the first ones in and last ones out when it comes to getting the job done.

Project Approach

FLEXIBILITY

We will fit our services to your needs. The flexibility of our team to provide Broward County with the sevices and staff that arerequired on each project helps to ensure that FLL & HWO will receive expert services, when and where they are needed.

We deliver specialized design services that lead to an elevated passenger and airport operations experience.

We assist our clients in implementing a more meaningful and memorable design that is reflective of their culture andbrand. With an emphasis on shaping fresh and exclusive experiences combining transportation & hospitality design that elevate the passenger experience. We understand the evolving airport environment and passenger offering needed to stay competitive in this industry.

Our team implements diligent technical quality review, ensuring consistency and accuracy in the documents from multiple points of view.

Our team believes that "quality control" begins at the conception of the project and is maintained throughout every phase of the decision-making process until completion. The method of implementing and assuring quality control is continually measured by establishing a well-defend work plan in the initial phase of the project for all team members.

Our process encourages timely and accurate decisionmaking, allowing for consistent schedule adherence.

The key to meeting schedule requirements is to clearly define what must be accomplished in each task of theproject, understand the goals of that task, and make apersonal commitment to meeting the schedule in manpower allocation and personnel involvement. Eachof the team members identified are ready to make that personal commitment.



We will work with FLL and HWO Airport Staff to develop and continually update a project milestone schedule that provides tasks and durations for drawing deliverables, owner reviews, design presentations, pricing periods, permitting, and construction kick-off. The key to a successful implemented project is an integrated communication approach with the Broward County's designated project team and all key stakeholders representing each layer of the organization. At the beginning of the project, this conversation will outline all project priorities driving each fundamental element, including function, aesthetics, and quality requirements. At every phase within our process, we are reevaluating the priority outline created with the entire team to ensure all goals that were previously set during programming/planning and schematic design, are being maintained and executed above expectations.

The team will continue to infuse our intimate understanding of the airport and the BCAD expectation to integrate our professional knowledge in creating and modernizing exceptional sustainable spaces for the airport.

We provide the highest value in the market by leveraging creative design professionals, an integrated approach, and supply chain resources.

Early collaboration during the design process leads to a better-informed design product, a better set of construction documents, and a better understanding of the final product intended and its ultimate cost. Once the

project budget is fully developed and confirmed, we design to the budget,instead of a traditional approach whereby the design is completed, and then the actual costs are determined. Ourpartnership with US Cost will provide independent cost estimating services throughout all phases of the projectlifecycle. This will ensure the established project budgetis attainable and strictly maintained through project completion.



PRE-DESIGN: VISIONING/PROGRAMMING

The Design Team will engage Broward County through a two-step process for the visioning and programming phase of the project.

VISIONING WORKSHOP

Our team is fully committed to this process. Design is about creating an environment that supports the activity within the space. To do this, each firm will become infused in learning and understanding Broward County's mission and goals for the specific project at hand. The Design Team will facilitate a face to face discussion as an opportunity for leadership to get together and articulate these goals and vision.

It defines expectations and puts all stakeholders on the same page.It bridges the language between designer and client.

It defines the guiding principles for your project.

It allows for key stakeholders to sit together and share ideas.

It defines priorities. When the project is complete, what, for YOU, is the "biggest win" resulting from this project/process?

DATA GATHERING – SURVEY SESSIONS

These sessions are intended to document the physical requirements and needs associated with the variety of work activities that make up the business. It is a "bottom up" perspective regarding the specific needs of individuals and groups. In front of these sessions, ourteam members will collaborate in issuing a survey to designated staff in order to collect basic information and data. The face-to-face sessions are then an opportunity to clarify these responses and probe deeper into the questions.

The long-term cost benefits of a properly designed, user friendly environment should be factored into any initial cost considerations.

PRESENT RESEARCH & RECOMMENDATIONS

To help transfer our research findings and ensure alignment among the project team and key stakeholders on the outcomes ofthe research, we will develop and lead a presentation to discuss

the findings and recommendations. The session will provide an opportunity to discuss how the research can help inform successful implementation, inform design and transition into the new space.

Project Approach

SCHEMATIC DESIGN

After verifying the approved program, our team will continue the schematic design phase as necessary to further refine elementsreflecting the County's mission and goals. Within this preliminary Schematic Design Presentation, our team will:

- Coordinate any updates to the concept design based on Initial Visioning Workshop with stakeholders
- Further develop floor plans and elevations as necessary
- Review options for finishes, furniture, lighting and other key design components within the space
- Allow for initial coordination of work with engineers and consultants
- Modify the package per comments received during the initial workshop and develop a final deliverable
- Coordinate requirements from the fire department, BCS, and other plan check agencies in a collaborative effort to reach goals quickly

DESIGN DEVELOPMENT

We will refine the concept design developed and approved in Schematic Design to expand on each project component andre-evaluate them in fine detail. We will conduct a Design Development Presentation, where with your team, our team will review:

- Further develop plans, exterior & interior elevations, sections, details, schedules, specifications, and cost estimates
- Modify the design to the CMAR and FLL & HWO's Airport Team comments and again ensure alignment with the missionand goals by tracking with the Design Development
- Finalize selections for finishes, furniture, lighting and other key design components within the space
- Provide photo-realistic 3D renderings to visualize the space
- Ensure code compliance of design
- Allow for detailed coordination of work with engineers and consultants

CONSTRUCTION DOCUMENTS

We document the final approved design with detailed drawings that allow the project to be competitively bid, to be submitted forpermit, and to provide information for construction. Our team will:

- Finalize all plans, exterior & interior elevations, sections, details, schedules, specifications, and cost estimates during this phasehelps minimize project costs during construction
- Long lead items are identified to help minimize any impact on the project construction schedule
- Clearly addressed life safety issues to allow for a smooth permitting process
- Carefully coordinated all engineering and consultant work with the overall design to minimize changes and costs duringconstruction
- Ensure the final construction document submittal is fully coordinated, which will also include a 100% detail total project cost summary

CONSTRUCTION ADMINISTRATION

During construction, our team will work closely with the CMAR to ensure that the design intent is met throughout the process. Our team will respond to construction questions, review shop drawings and submittals, make regular site visits to evaluatethe construction progress and approve pay applications from the contractor. Our team will:

- Ensure the design intent is carried out through the construction process
- Be a resource to the contractor and client for questions and issues that may arise during the construction process

Visioning and Programming	Schematic Design	Design Development	Construction Documents	Construction Administration and Project Close-Out

2b. COORDINATION OF SUBCONTRACTORS

The Coordination with the engineering disciplines and other specialty consultants is critical to the success of the project. During the schematic phase of design, CBRE sits down with the engineering team to discuss the proposed plan, space requirements, and existing infrastructure components of the building. This allows the designers to take the team's input and address them early in the process by:

- Establishing reoccurring "team integration design charrettes"
- Defining roles, responsibilities & define priorities
- Continually reviewing individual team goals & performance
- Conducting Visioning Workshops

The design team, subconsultants, CMAR and owner actively participate in the design documentation process. Live, shared, interactive BIM models are used for on-site and online coordination meetings in order to depict accurate, real-time project details to run clash detections, which minimize costly and time consuming changes in the field and allows the design team to maximize every square inch of the building.

DESIGN DEVELOPMENT PHASE

During design development, we work with the engineering team to coordinate any unique or problematic issues thatwere identified during schematic design. For complex projects, our team will request a design narrative from each of the engineering disciplines at the end of each percentage of Design Development that is established in the schedule that can be used for cost estimating throughout the progress of the design. These independent disciplines are combined during the Design Development phase to create an interdependent representation of the building and an initial pricing exercise is performed.

CONSTRUCTION DOCUMENTS PHASE

Throughout the construction document phase, collaboration and a formal QA set of drawings will be reviewed at various percentages of the work prior to issuance final permit documents ensuring the design is coordinated with all engineering disciplines. Since the project will be executed in BIM software, a "clash detection" session is held at various established milestones in the schedule where the entire design and engineering teams go through the BIM model and discuss any conflicts.



2c. USE OF TECHNOLOGY

Digital technology and data analytics play a critical role in CBRE's overall business. They are key to how we deliver services and differentiate our offerings—and are central to our long-range growth strategy. CBRE believes the best program outcomes are achieved when data is connected and integrated across a scalable technology environment supported by strong data governance. Our architecture and data governance process combine to enable truly integrated reporting, while also remaining flexible and scalable. Our vision is to drive positive program outcomes by combining data from internal, external, and third party sources, thereby improving visibility into operations and enabling more informed decisions.

CBRE has the ability to rapidly design and deploy a suite of world-class templates that we can tailor to Broward County's specific requirements of the program. Our combined data integration processes and analytics/reporting templates deliver business-centric, industry-leading data visualizations that seamlessly navigate the portfolio and identify opportunities for action. One platform that is readily available for FLL & HWO's consideration is CBRE's Technology Platform "Kahua." Kahua is a Project Management Information System (PMIS) that allows CBRE to streamline, collect, and share data and provides a consistent financial language across the globe. Kahua has been used to create our Fit-Out Cost Guides, and allows our team to fully understand and communicate detailed information throughout project delivery.

We believe effective client reporting begins with a deep understanding of who the client is, their business needs, goals, objectives, and challenges—and the role reporting plays in enabling them to manage and optimize their business. In our experience, the best client reporting begins with client engagement. We support many clients in taking a step back to look at their overall client relationship management (CRM) program, process and approach. With this wide-angle lens, we can refine the overall program, including clarifying and confirming the role and value of reporting and analytics within this context.

PROJECT MANAGEMENT ACTIVITY:
Enhanced visibility into projectsto manage risk, cost and current status.

PROJECT PLANNING:
Reduce schedule risk by monitoringpast due and upcoming project milestones.

PROJECT BUDGET ADHERENCE:
Reduce budget risk by tracking how much remains to be approved, invoiced, and/or paidby the end of the project.

PROJECT DETAIL:
Provide individual project details to manage schedule,cost and risk.

SEARCH, QUERY & FILTER | DRAWING MARK-UPS & EDITS WITH REAL-TIME UPDAT | PROJECT MANAGEMENT ACCESS AND CONTROL | REPORTING & DASHBOARD PRODUCING


COMPARE
COSTS
EXPLORE
OPTIONS
PROJECT
GROWTH

Mobile Access

CBRE can develop a web-based tool that visualizes a project's position via any mobile device (tablets, iPads, and mobile phones). This provides convenient, quick answers to many stakeholder questions, such as:

- **What projects have been committed to the program?**
- **How much is the construction budget for the project?**
- **What is the current status of the program/projects?**
- **What areas of the airport are impacted?**

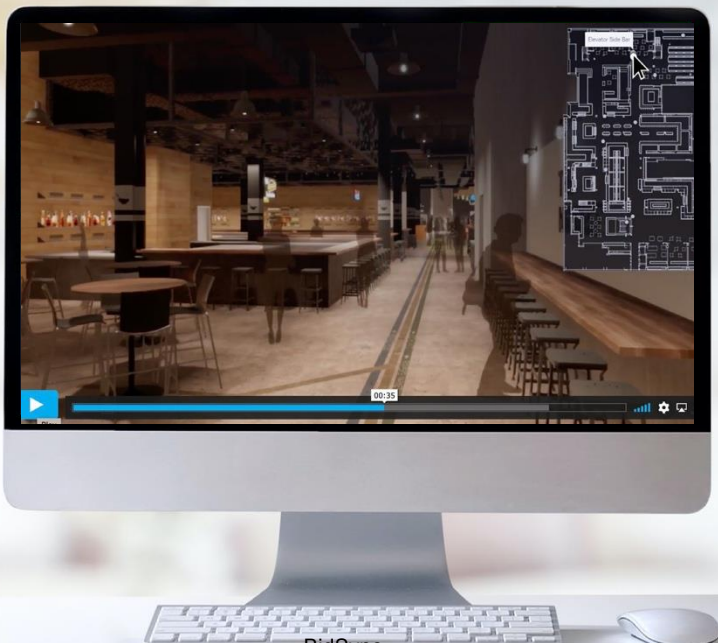
RENDERINGS

Visualizing a built-out space, even with the help of plans, elevations, and sketches, can be a challenge. Clients want to understand what it will look like, how it will 'feel' and how it will serve their business.

Once the design scope has been finalized, the CBRE Build team will work with the design team to create renderings allowing you to envision your future space. This has proven to be a useful tool in our process in order to capture any last-minute changes before the design has been finalized. These renderings also serve as a tool for the airports to visualize the change to their future environments. CBRE Build can provide high quality, photo-realistic renderings to communicate design intent and help our clients make better-informed decisions on their projects.

CBRE's Build team has developed PlansPro, turning test-fits and CAD drawings into bespoke 3D virtual experiences. 3D rendered
spaces are delivered and explored via an easy to access and shareable website. This proprietary software allows our clients to imagine possibilities, experiment with space and turn ideas into reality.

CBRE's BUILD technology



Section 3
PAST PERFORMANCE

3a. Prime's Experience and Adherence to Timing & Budget

3b. Experience & Capabilities in CAD/BIM

3c. Experience in Dealing with Regulatory Agencies

3d. Experience Providing Inspections



NEW TERMINAL DEVELOPMENT

HEWANORRA INTERNATIONAL AIRPORT







PRIME CONSULTANT

CBRE

Year Completed

2018-2021

Location

P.O.Box 651, Manoel StreetCastries Saint Lucia

Size

350,000 SF

Services Provided

« Master Planning
« Overall Design
« Architect of Record
« Construction Administration

Key Staff Involved

« Fernando Gavarrete
« Rob Chomiak
« Daniel Diez
« Alicia Bache-Wiig
« Eduardo Luaces
« Luis Rodriguez
« Ernie Garcia
« Sasha Kayal
« David Walters
« Robert Sequeira

THE DETAILS

Hewanorra International Airport (IATA: UVF) is managed and operated by the Saint Lucia Air and Seaports Authority (SLASPA). It handled over 700,000 passengers and 1,441t of cargo in 2019. The growing demand for air transportation forced the airport authorities to redevelop the airport in accordance with the demand forecast.

The new airport terminal design reflects the splendor of the island's tropical rain forest, by reinterpreting the Calabash Tree, the country's national tree and lush canopy through the use of arborescent columns and wood slat ceilings throughout. The 337,000 SF proposed terminal, is a $250 million dollar airport facility comprising of five new contact gates and one hardstand position served from 5 new passenger loading bridges and two apron injection points. The facility features more than 1,500 passenger seats in the hold rooms, make-up area and ramp to 8 gates, a grand open-air Ticketing Hall and covered Curbside with flexibility in the structure to allow for future expansion. The concourse level, which is accessed through a central vertical circulation core, includes natural light-filled departure lounges linked by a skylight central circulation strand which is served by a number of concessions including restaurant, beverage, duty free and otherretail facilities. A VIP Lounge Club Lounge, new Immigration and Customs Inspection Facility and Baggage Claim Hall are part of the program. The New Master Plan for also includes a car park for 250 spaces and additional area for GSE parking; expansion of the existing cargo operations by relocating the current cargo facilities to operate from the presently unused runway. Cargo facilities for six handlers and apron parking for 4 wide body aircraft are to be provided in the initial phase.

This Terminal offers the first of its kind Arrival Hall in the Caribbean, with a fully air-conditioned space, an interior garden backdrop, boasting 25 rental car kiosks, four resort lounge areas, a large restaurant with exterior seating, and restrooms. The curbside pick-up area is covered by the upper drive and allows for all transportation activity to take place in an efficient



and comfortable.

Project Reference

NAME(S): Daren Cenac, General Manager

GOVERNMENT ENTITY: Saint Lucia Air and Sea Ports Authority

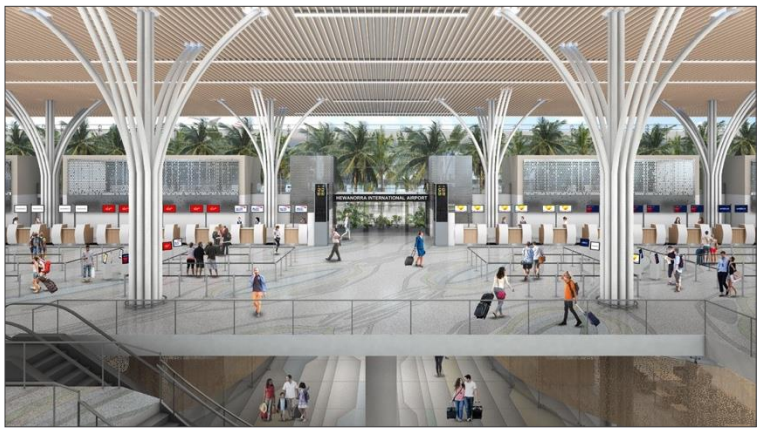
PHONE NUMBER(S): 758.457.6120

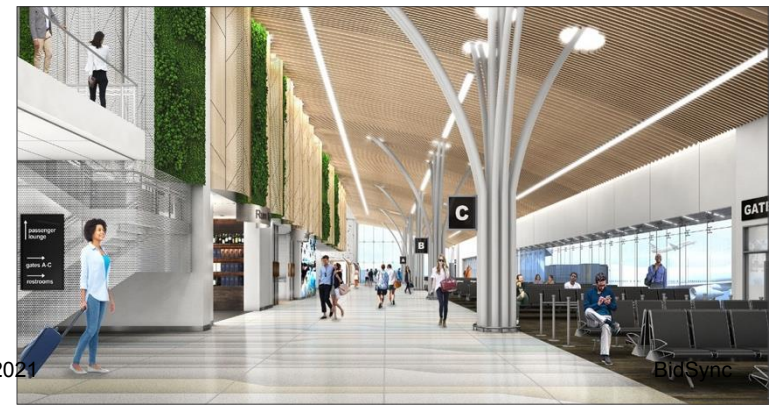
EMAIL: Daren.Cenac@slaspa.com

NEW TERMINAL DEVELOPMENT

HEWANORRA INTERNATIONAL AIRPORT





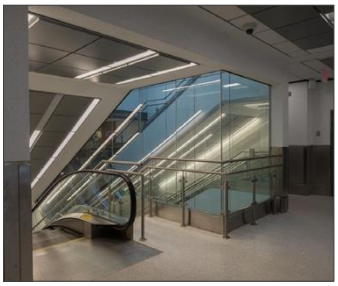


RELEVANCE TO FLL/HWO PROGRAM

[✈] 337,000 SF proposed terminal
[✈] 700,000 passengers
[✈] Five new contact gates[✈] One hardstand position
[✈] Five new passenger loading bridges
[✈] Two apron injection points
[✈] 1,500 passenger seats in the hold rooms
[✈] Make-up area and ramp to 8 gates
[✈] Open modern Ticketing Hall
[✈] Covered Curbside
[✈] Expansion of the existing cargo operations
[✈] Cargo facilities for six handlers
[✈] Apron parking for 4 wide body aircrafts
[✈] An interior garden backdrop
[✈] 25 rental car kiosks
[✈] Four resort lounge areas
[✈] Car park for 250 spaces
[✈] 51,000 SF of GSE parking and staging
[✈] Taxi queuing area [✈] 32 bus parking area[✈] Upper drive

HIGH E SATELLITE CONCOURSE RENOVATION

MIAMI INTERNATIONAL AIRPORT







PRIME CONSULTANT
CBRE

Year Completed
2017

Location
Miami, FL

Size
120,000 SF

Services Provided
« Architect of Record
« Program Management
« Construction Management
« Quality Assurance Oversight
« Funding Management
« Resident Inspection/Testing
« Owner's Representation
« Contract Administration
« Scheduling/Doc. Control

Key Staff Involved
« Fernando Gavarrete
« Daniel Diez
« Eduardo Luaces
« Luis Rodriguez
« David Walters



THE DETAILS

The Satellite E Concourse Renovation was one of the numerous projects that were part of a $1.1 billion Terminal Optimization Capital Program targeted as an overhaul of the central terminals at Miami International Airport. The project was initiated to support the various airlines' continued gate needs. The existing E Concourse was built in the 1970s and includes nine gates, four [illegible] hold room areas, and various concession spaces. Renovations, modifications, and repairs were made to the entire concourse to modernize finishes, meet updated codes, provide adequate support for airline operations, andimprove passenger flow.

The interior renovation of the 120,000 SF project involved replacing all ceiling, flooring, wall treatments and miscellaneous finishes to meet MIA standards and maintain continuity between terminals. The HVAC, fire protection and lighting systems were also upgraded to meet the latest codes and performance standards. Four new elevators were incorporated at strategic locations throughout the terminal to meet life safety codes and accessibility requirements. On the exterior the entire glazing system was replaced by a Hurricane Impact Resistant storefront system to meet current codes, and various roof repairs were included to mitigate any further water infiltration.

Overall, the modernization proved to enhance passenger experience, optimize the performance of the concourse, minimize maintenance efforts, and create uniformity with the newer which added true value to the operating concourse.

Project Reference

NAME(S): Felix Pereira, Chef of Design

GOVERNMENT ENTITY: Miami-Dade Aviation Department

PHONE NUMBER(S): 305-869-1622

EMAIL: fpereira@miami-airport.com

HIGH E SATELLITE CONCOURSE RENOVATION

MIAMI INTERNATIONAL AIRPORT







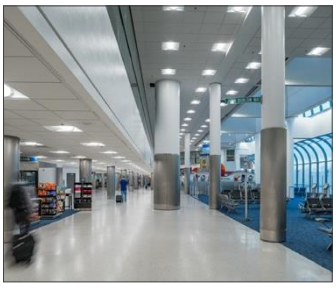
RELEVANCE TO FLL/HWO PROGRAM

[✈] Built in the 1970s
[✈] Includes nine gates
[✈] Four main hold room areas
[✈] Various concession spaces
[✈] 120,000 SF interior renovation project
[✈] The HVAC and fire protection systems upgrades
[✈] Four new elevators
[✈] Exterior glazing system was replaced to code
[✈] Enhance passenger experience [✈] Optimize systems performance [✈] Minimize maintenance efforts
[✈] Created uniformity with the newer terminals at MIA

LOWER E CONCOURSE RENOVATION

MIAMI INTERNATIONAL AIRPORT







PRIME CONSULTANT
CBRE

Year Completed
2015

Location
4200 NW 36th St.
Miami, FL 33166

Size
83,000 SF

Services Provided
« Architect of Record
« Program Management
« Construction Management
« Quality Assurance Oversight
« Funding Management
« Resident Inspection/Testing
« Owner's Representation
« Contract Administration
« Scheduling/Doc. Control

Key Staff Involved
« Fernando Gavarrete
« Daniel Diez
« Eduardo Luaces
« Luis Rodriguez
« David Walters



THE DETAILS

To support the airlines' continued growth plans at Miami International Airport and to accommodate the continued increasing gate needs, the $1.1 billion Terminal Optimization Program was created. The Lower E Concourse Renovation was one of the numerous projects that were part of the MIA's Terminal Optimization Program. The existing E Concourse was [illegible] numerous concession spaces. Renovations, modification, and repairs were made to the entire concourse to modernize, meet updated codes, provide adequate support for airline operations, and improve passenger flow.

The project's interior renovation of 83,000 SF replaced all ceiling, flooring, and miscellaneous finishes to meet MIA standards and maintained continuity between terminals. The HVAC and fire protection systems were upgraded to meet the latest codes and performance standards, while the APM lobby was fully renovated to match the NTD APM standards.

This modernization enhanced passenger experience, optimized concourse performance, and minimized maintenance efforts, which added real value to the operating concourse.

The Lower E Concourse Renovation was performed under an accelerated schedule with a double shift work load. The accelerated schedule on the project was required to meet the gate demand and minimize the impact to the passenger flow during the renovation of each particular section of the lower and E satellites. The safety requirements of the passengers was also achieved by a reduction of the schedule and creating an overlap for the mechanical, electrical and plumbing subcontractor and closely coordinating each construction trade.

Project Reference

NAME(S): Felix Pereira, Chef of Design

GOVERNMENT ENTITY: Miami-Dade Aviation Department

PHONE NUMBER(S): 305-869-1622

EMAIL: fpereira@miami-airport.com

LOWER E CONCOURSE RENOVATION

MIAMI INTERNATIONAL AIRPORT









RELEVANCE TO FLL/HWO PROGRAM

[✈] Built in the 1970s
[✈] Includes eight gates
[✈] Six main hold room areas
[✈] Numerous concession spaces
[✈] Entire concourse renovations, modification, and repairs
[✈] Updated codes
[✈] Provided adequate support for airline operations
[✈] Improve passenger flow.

SUPPORT SERVICES CONTRACT

HARTSFIELD-JACKSON ATLANTA INTERNATIONAL AIRPORT



Project Reference

PRIME CONSULTANT
CBRE

Year Completed
2015-Ongoing

Location
Atlanta, GA

Size
100,000 SF

Services Provided
« Architecture
« Engineering
« Programming and Planning
« Quality assurance oversight
« Project controls
« Owner's representation/ Inspections
« Contract Admnistration

Key Staff Involved
« Mike Rometo
« Peter Barron



THE DETAILS

The CBRE team is providing architecture, engineering, cost estimating and scheduling services for the renovation, addition, demolition and upgrading services for the Hartsfield-Jackson Development Program.
West Terminal Expansion - We preformed existing conditions documentation and studies, code studies and analysis, architectural and engineering studies, and scope and cost estimates of numerous options were included. Several enabling projects were anticipated in preparation of the expansion of the existing terminal.
North & South Terminal and T-Concourse Upgrades - We provided HVAC design for repair and upgrade of the existing HVAC system and supporting systems serving the Main North and South Terminals and the T-Concourse, approximately 1,200,000 square feet, including HVAC design for Concourse A, Parking Deck Study, Concourse B, and the FAA ATCT Demolition. Concourses A, B, and Automated People Mover (APM) Station Upgrades. Aero Systems Engineering also worked alongside PMT on this project.
"T" Terminal Demolition - We developed demolition plans complete with detailed phasing for the third floor of the south end of the T terminal, while preserving ongoing operations and passenger movement on the floors below. All three gates on the second floor beneath this demolition area remained active during this program.
Vertical Transportation Upgrades - The vertical transportation project is a multi-stage project modernizing the Airport's airside vertical transportation system of elevators, escalators and moving walks. The scope includes replacing units and components with a complete modernization which will bring them to a 'like new' condition.
Parking Deck Electrical/Structural Study - HSST provided electrical and structural engineering services to assess 4.4 million SF of parking decks. As a result of the study and field measurements, HSST was then commissioned to design a complete retrofit power and lighting system to correct the existing deficiencies.

As well as numerous other projects such as:
-North and South Parking -Rescue and Fire Station #33 -Control Tower Demolition -Terminal Central Utility Plant Chiller Renovation

NAME(S): Todd A. Butler, President, Comprehensive Program Services

GOVERNMENT ENTITY: City of Atlanta Department of Aviation

PHONE NUMBER(S): 770.451.7670

EMAIL: tbutler@cps-atlanta.com

SUPPORT SERVICES CONTRACT

HARTSFIELD-JACKSON ATLANTA INTERNATIONAL AIRPORT





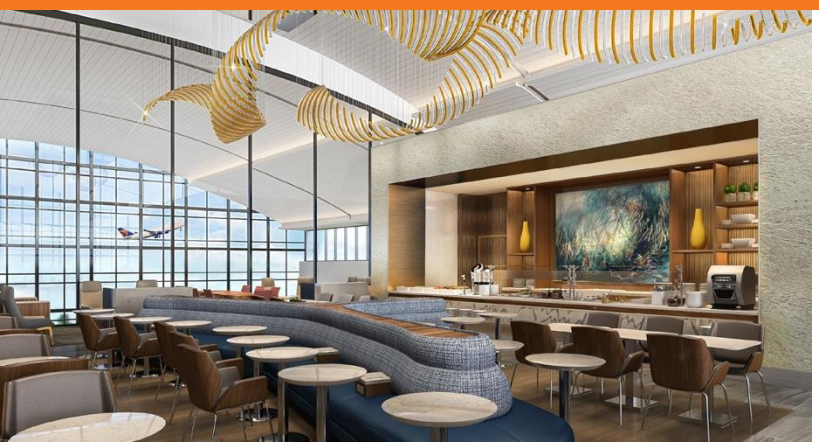


RELEVANCE TO FLL/HWO PROGRAM

[✈] Staff augmentation & specialty services to theDepartment of Aviation
[✈] Extensive renovations to the terminal and concourses [✈] Replacement and expansion of structured parking decks[✈] On-site hotel
[✈] Construction of additional end-around taxiway
[✈] Possible sixth runway
[✈] Adding parking for passengers and employees
[✈] Expanding air cargo facilities
.



PAST PERFORMANCE





Fort Lauderdale – Hollywood International Airport

INLINE BAGGAGE & TERMINAL ENHANCEMENTS

PMTECHNOLOGIES project professionnls

TERMINAL 2 MODERNIZATION PROGRAM

As part of phase 1, PMT managed the installation of a new In-Line Baggage Screening System

Engineering, KEITH, Messam,Tierra, Lakdas

PRIME CONSULTANT
PMT

Year Completed
2013-2021(Dec)

Client
Delta Air Lines, Inc.

Size
40,000 SF Terminal

Cost
$32 M (Baggage)
$15 M (Sky Club)

Services Provided
« Program & Project Management
« Airline Liaison Services
« Design/Construction Management
« Program Reporting
« Document Controls
« Finance Management

Related Scope
« Common Use IT
« Terminal-Building Modernizations
« Baggage Program (BHS)
« Club Build

Worked With
CBRE, AERO Systems

in order to automate the checked bag security screening process. The checked bag security screening/conveyor system was replaced and streamlined to meet current TSA requirements while maintaining normal operations. This enabled sections of the ticket lobby to be reclaimed as a number of screening machines were eliminated from the lobby areas. The result was a more reliable, consistent, safe and seamless passenger experience. Phase two, required PMT to manage all aspects of the modernization of Terminal 2. This includes significant planning and implementation of the pre-construction, construction and closeout of each project of the Modernization effort as well as assuring the program meets all deadlines, budget sand CBE goals. The project has been on-going in an operational airport environment.

CURRENT PROJECTS

Lobby Renovation
Concessions Program
Restroom and Gate Enhancements
New Vertical Transportation
Mezzanine Level Sky Club

TERMINAL 2 SKY CLUB

The FLL Sky Club is a 9,332 SF new facility with a high-level of hospitality-driven finish on a newpoured structure mezzanine deck. This new structure sits directly within the on-going modernization program for the Terminal 2 Fort Lauderdale International airport by BCAD. The scope of services for this program included design management, building department submission, airport authority coordination, construction management, financial control, and project management from lifecycle of 60% design through substantial completion + closeout. The construction included finishes from 12 different countries and was substantially completed within 7 months; a new record for the fastest built Sky Club within the Delta system. The facility housed 2 separate kitchens, multi-office space, expanded back-of-house preparations, and an open-concept common-space with feature lighting fixtures throughout the upper deck. Estimated total value of $15M.



Fort Lauderdale – Hollywood International Airport

FLL TERMINAL 2 MODERNIZATION CONSTRUCTION

KEITH
Engineering Inspired Design.

Year Completed
2019

Client
Gresham Smith

Services Provided

« Subsurface Utility Engineering

« Construction EngineeringInspection

« Civil Engineering

PROJECT DETAILS

This extensive modernization project is part of the Fort Lauderdale-Hollywood International Airport Improvements and Renovations Program (FLLAIR). Terminal 2 dates back to the early 1980's. To meet current design standards, the building needed to grow by approximately 20,000 square feet to accommodate concessions, security and restrooms. This increase in square footage cannot impact the aircraft apron, which surrounds the building. To meet the needs of the requisite improvements, the unutilized portion of the exterior building footprint was in-filled. The design also calls for a mezzanine level in the gate area. A clerestory ceiling was designed to create a bright, modern environment. KEITH, working as a subconsultant partner, provided the civil engineering design and permitting of the airside and landside water distribution and sanitary sewer improvements, as well as the paving and drainage improvements. KEITH is also providing topographic surveying services and subsurface utility engineering services.

Our excellent working relationship with the staff at Broward County Water and Wastewater Services (BCWWS) afforded us the ability to obtain fire flow modeling results from their staff early in the process. Numerous other subconsultants are involved in this project team and we have been coordinating and working closely with many of them in the mutual development of the design and construction drawings. In addition to the typical civil engineering design role, we are assisting with 3D modeling of the existing structure and integrating the proposed designs. This is one of the first BIM project to utilize the newly adopted BCAD BIM standard. To establish the base for the model, we utilized state-of-the-art survey equipment and a 3D laser scanner. The scanner shoots over 100,000 points a second while creating a complete 3D point cloud of existing conditions. The point cloud was utilized to start modeling the existing building and establish a state-plane coordinate base location. KEITH created a model of the

proposed improvements and some of the existing using Revit & AutoCAD Civil 3D. Navisworks was utilized to run clash detections for the entire site. The team is currently beginning to create and populate the COBie data set that will be part of the BIM deliverable. Along with the COBie data set IFC files are also required. These files have been populated and will be sent along with the BIM deliverable.



Fort Lauderdale – Hollywood International Airport

TERMINAL 3 MODERNIZATION

KEITH
Engineering Inspired Design.

Year Completed
2019

Client
Gresham Smith

Services Provided

« Surveying

« Subsurface Utility Engineering

« Construction EngineeringInspection

« Civil Engineering

PROJECT DETAILS

The major goal of the Terminal 3 Modernization is to improve passenger experience by relocating and expanding the security check points in its two Concourses E and F, changing the shops and restaurants on Las Olas Blvd from pre-security to post security, adding newrestaurants and shops for passengers post security, overall enhancement of the terminal's appearance and adding new restrooms and renovating existing restrooms. The FLLAIR's main goal is to provide a better customer experience through modern facilities.

KEITH, working as a subconsultant, is responsible for the landside civil engineering design services and airside water distribution and sanitary sewer collection system design services. KEITH is also providing Vacuum Excavation (Impervious-Airside) with the supporting Surveying services. Design challenges include modification of water and sanitary sewer systems that have been recently installed for the Terminal 3 Baggage System (CBIS) project. Our excellent working relationship with the staff at Broward County Water and Wastewater Services (BCWWS) has afforded us the ability to preview our proposed design work with them and obtain the fire flow modeling results from their staff early in the process. Numerous other subconsultants are involved in this project team and we have been coordinating and working closely with many of them in the mutual development of the design and construction drawings. In addition to the typical civil engineering design role, we are assisting with 3D modeling of the existing structure and integrating the proposed designs.



Fort Lauderdale – Hollywood International Airport

TERMINAL 4 CPM SERVICES DEVELOPMENT PROJECT

KEITH
Engineering Inspired Design.

Year Completed
2015

Client
Broward County Aviation Department

Services Provided
« Construction Engineering Inspection
« CM/PM

PROJECT DETAILS

Construction Project Services - Extension of Broward County Aviation Department staff responsible for managing the Construction Manager at Risk construction project as the Owner's Representative; responsible for quality assurance, design and safety oversight, and contract compliance associated with completing renovation and expansion construction work for: New airline ticket counters and airline ticket offices (ATO); xxpanded Customs and Federal Inspection Services (FOS) areas with new vertical circulation cores; miscellaneous tenant build-out and associated relocations; and elevator and escalator replacements.

As CBE prime consultant, KEITH was responsible for project oversight to include construction administrative services, managing design schedules and design packages, assisting with logistics, planning, monitoring, permitting, safety coordination, security compliance, field inspections, invoice review, change management, cost performance, quality assurance and control, from start-up through final completion including commissioning all warranties, as-builts, and record drawings.



Fort Lauderdale – Hollywood International Airport

ENVIRONMENTAL ASSESSMENTS, WILDLIFE SURVEYS, & DUE DILIGENCE SERVICES

THE Chappell GROUP INC.

Year Completed
2013

Client
EAC Consulting, Inc.

Services Provided
« Environmental Assessments
« Wildlife Surveys
« Due Diligence Services

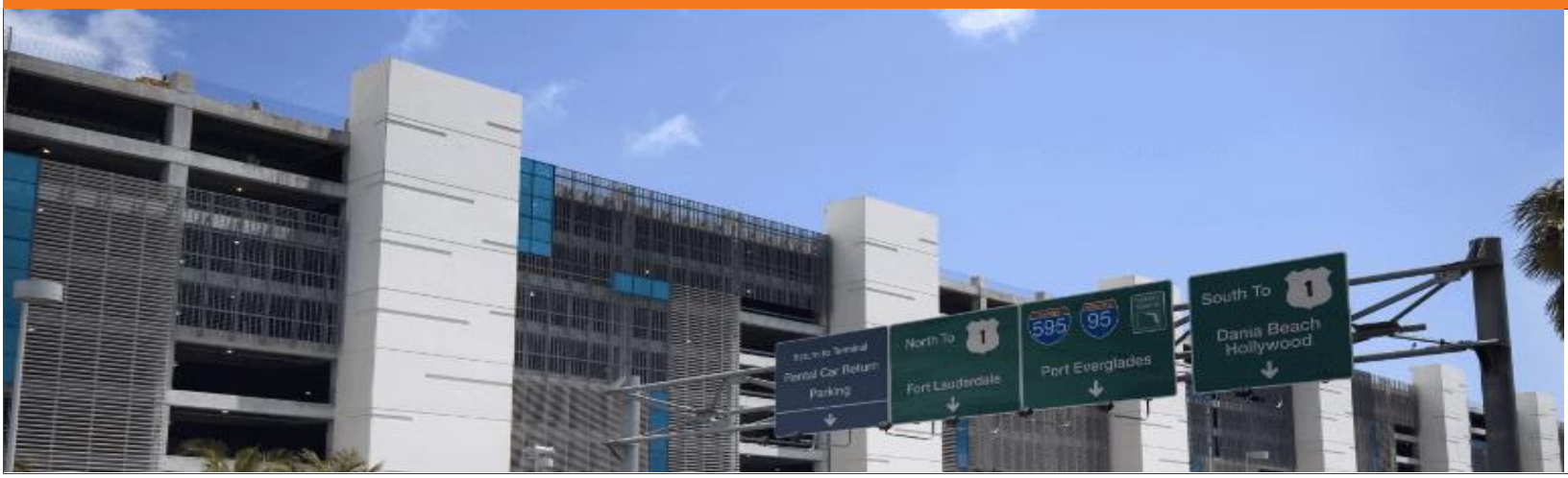
Construction Cost
$100 Million

PROJECT DETAILS

The Chappell Group, in conjunction with EAC Consulting, Inc. (EAC) was contracted to perform General Engineering Services for the Fort Lauderdale/Hollywood International Airport for Broward County Aviation Department (BCAD). TCG was responsible for all environmental assessments, wildlife surveys, and due diligence services for the Terminal and Interchange Improvements at the airport.

Assessment and due diligence services included the site inspection, records review and preparation of demolition and asbestos abatement specifications for the existing Key Power facility building at North Perry Airport. The Chappell Group, Inc. performed these tasks for EAC Consulting by March 2013.

PAST PERFORMANCE



Fort Lauderdale & North Perry Airports

ROADWAYS, VALET & PARKING

LAKDAS/YOHALEM ENGINEERING, INC.

Services Provided

« Structural Engineer of Record
« Structural Engineering DesignServices
« Pre-Construction and Construction Phase Services
« Threshold Inspection Services
« Design Development
« Construction Drawings
« Coordination with On-CallContractor

EXIT ROADWAYS AND VALET ROUTING IMPROVEMENTS

Lakdas/Yohalem, Inc. acted as Structural Engineer on Record for design improvements for the Hollywood-Fort Lauderdale International Airport.

- Approximately 40' long bridge structure with 10' cantilevers adjacent to the existing helix ramp structure.
- Approximately 90' long MSE (Reinforced Cantilever) Ramp
- 5 Overhead signage structures
- Light poles
- Partial demolition of existing Helix Ramp

BCAD/BSO PARKING IMPROVEMENTS

Lakdas/Yohalem, Inc. acted as Structural Engineer on Record for renovations and parking improvements at the Fort Lauderdale-Hollywood International Airport and North Perry Airport.

Verified available existing survey and supplemented with new survey data for a complete representation of existing conditions. Improved overall schematic design and designed new parking area at each terminal for Broward County Sherriff Office Parking.

PAST PERFORMANCE



Los Angeles International Airport

TERMINAL 5 RENOVATIONS/MOVE

PMTECHNOLOGIES project professionals

PRIME CONSULTANT
PMT

Year Completed
2013 - 2018

Client
Delta Air Lines, Inc

Services Provided
« Capital Improvement
« Coordination
« Program Management
« Owner Representation
« Design/Construction Management
« Financial Management

Related Scope
« Passanger Boarding Bridges
« FIS/CBP/Security Checkpoint Lanes
« Terminal Move
« Baggage Systems
« Lounge & Terminal Renovations

TERMINAL 5 MODERNIZATION AND PBB TERMINAL MOVE:
For over six years, PM Technologies (PMT) worked in conjunction with Delta Air Lines, Inc. to coordinate the renovation of Terminal 5 at Los Angeles International Airport. This project
« Common Use IT

was ongoing in an active airport environment. CA Green Law and seismic enhancements were incorporated into the program. PMT assisted with an internally-funded Delta One and Sky Club Refresh on the terminal as well as the 35 major projects' completed phases that included baggage systems, FIS, PBB, SSCP lobby renovations, switchgear, IT and other initiatives. T5 had four phases of PBB, a total of 13 PBB in an ongoing operational environment. Aero Systems Engineering also worked alongside PMT on the LAX project.

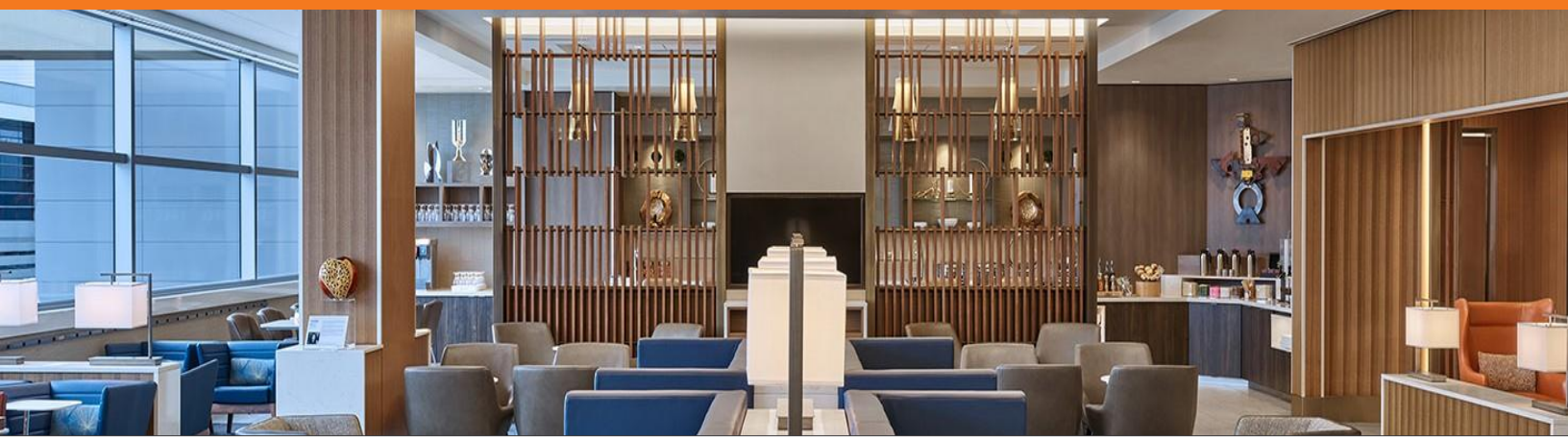
TERMINAL 2,3,5,5 PBB & T6 HOLDROOMS

At the time of the operations of Delta Air Lines in Terminal 5 (additionally 2-3 and 6), the need for replacing of the legacy system boarding bridges and other ancillary components on the apron were identified. PMT was involved in managing and coordinating the project. Completed phases included T6 Boarding bridges 68A, 68B, 69B, coordination with Westfield Concessions, hold-room improvements, T2/3 TBIT PBB, and the Peoples Tunnel connecting T5 to T6. All of the above activities were carefully coordinated with the airline's peak travel time to limit the impact to operations.

T2/3 TENANT RELOCATION PROGRAM

The Delta Terminal 2 and 3 Relocation project consisted of the relocation of 28 airlines and vendors across multi-terminals at LAX in a six-day time frame. The design initiated over 300+ LADBS base building permits and hundreds of supplemental permits. Due to the location and land restraints within the airport, the options for temporary locations were not possible. With this constraint, airlines were swapping entire operations locations overnight. During the short window of a vacated space, all associated trades, from MEP to floor and drywall, were completing a renovation of an average of 60-rooms per night. Other scope components included new com rooms, new fuel pits, new boarding bridges, new premium clubs, new vertical transportation, new hold room spaces, building expansions, entitlements, new MEP's, new support spaces, new bus-gate, and more.

Leading up to the move-date, the anticipated man-count reached nearly 1,000 per day. The end result of this successful project and relocation is credited with the largest relocation in aviation history.



Phoenix Sky Harbor International Airport

TERMINAL/SKY CLUB MOVE & RENOVATION

PMTECHNOLOGIES project professionals

PRIME CONSULTANT
PMT

Year Completed
2018

Client
Delta Air Lines, Inc.

Services Provided
« Project Management
« Owner Representation
« Design Management
« Construction Management
« Financial Management

Related Scope
« Terminal Move
« Common Use IT
« Apron impacts (GSE and gateplanning)
« Gate planning
« Above and Below Wingrenovations
« Baggage Programs
« Signage Improvements
« Gate Improvements
« Lounge Move and Renovations

T3 SOUTH CONCOURSE - TERMINAL MOVE AND SKY CLUB:

In representing Delta Air Lines, PM Technologies (PMT) acted as the program manager to ensure successful operations in the relocation from PHX Terminal 3 North Concourse to Terminal 3 South Concourse. This relocation involved moving a category-A sized operations with 6 gates to a new concourse with 10 common-use preferred gates. The relocation included various tenant improvement projects, a new Sky Club, all new below- wing operations, above-wing SITA common-use operations, a new common-use and proprietary BHS system, new RFID roll-out, identifying missing scope from the airport base- building, roll-out of new MDF's/IDF's for Delta IT, new circuit orders from Telcom's, new signage/branding, new GSE and Line Maintenance lease spaces, ACS support spaces, keying schedules, GSE equipment relocation, gate plotting plans, and gate fit plans for all aircraft in the system. The relocation went successfully with no impact to operations and Day-1 flight schedules occurred as normal. PM Technologies coordinated all construction and communicated all move-plans, schedules, and relocation activities.

SKY CLUB:

PM Technologies was contracted to manage the completion of a full renovation of a 9,000 SF facility at Sky Harbor International Airport for Delta Air Lines. The renovation includes new finishes, MEP's, owner-furnished items, branding, kitchen equipment, corporate standards, vendor equipment, IT infrastructure, WIFI, and design inspirations with local artwork. This installation, among the other flagship Delta Sky Clubs, incorporates the brand standards seen throughout the country while maintaining a design feel unique to Terminal 3 at PHX Airport.

WORKED WITH:
CBRE
Keleusmatic Technologies



Sarasota-Bradenton International Airport

PBB REPLACEMENT & POWER DISTRIBUTION UPGRADE (13 GATES)

PRIME CONSULTANT
AERO Systems Engineering

Year Completed
2017 - 2019

Client
Sarasota Manatee Airport Authority

Services Provided
« Design
« Construction

ASSIGNMENT

The complete airside planning and redesign of SRQ's existing terminal highlights ASE's ability to develop and implement a design in a timely and cost-effective manner. ASE provided design and construction administration services for the replacement of all PBBs, GPUs, and PCAs, electrical infrastructure upgrades, airside design, and LED ramp lighting upgrades

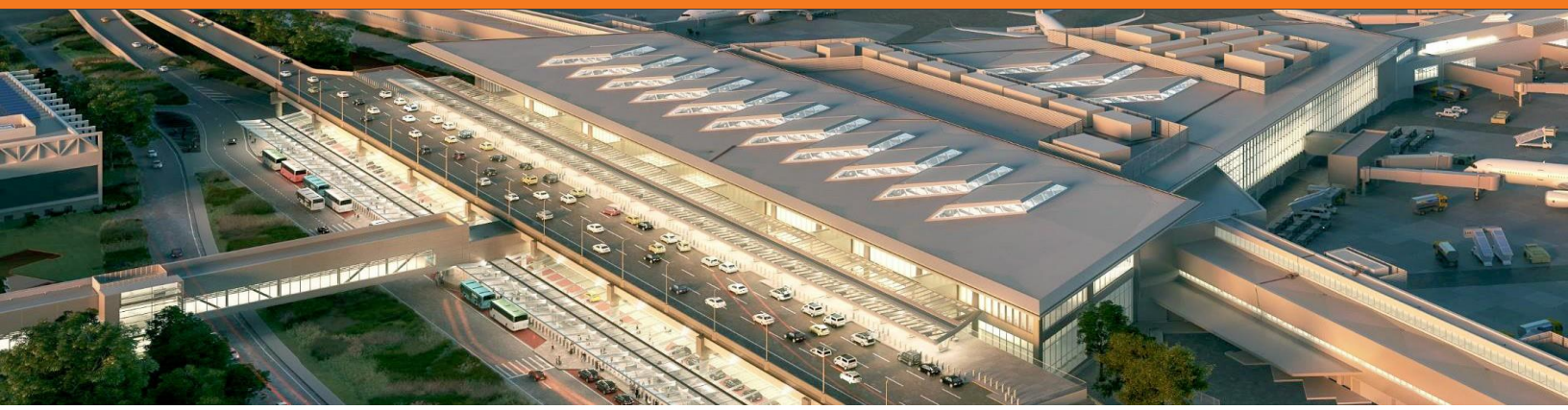
SCOPE

- Complete airside planning and design of all 13 gates
- Fleet mix/flight and carrier analysis
- Aircraft parking layouts
- Site surveys; aircraft parking planning
- PBBs
- Structural foundations analysis
- Point of use PCA units
- Point of use 400Hz
- Terminal electrical infrastructure to each gate, including new distribution panels in terminal
- Ramp lighting upgrades
- Construction administration

CHALLENGES & ACCOMPLISHMETS

- Electrical distribution upgrades throughout terminal to accommodate new point of use PCA units
- Equipment reutilization plan
- Modified striping and equipment sizes to increase the fleet mix at multiple gates
- Analyzed and designed conversion of existing ramp lighting to LEDs

- Provided full CA services, including bid evaluations and recommendations



Newark International Airport – Newark, NJ (EWR)

TERMINAL ONE / TERMINAL A REPLACEMENT PROJECT - (33 GATES)

PRIME CONSULTANT
AERO Systems Engineering

Client
Tutor Perini/ Parsons

Project Cost
$4 Million

ASSIGNMENT
ASE was the Civil Engineer of Record for this project at EWR which replaces the older, existing Terminal A and adds 33 new gates. The concourse is approximately 1.2M square feet and includes three levels. Landside improvements include a new pedestrian bridge, departure level frontage bridge, and at-grade roadway improvements. Integration with larger program improvements include new taxiways, parking garage, generator building and demolition of the old terminal satellite
councourses.

SCOPE
- Complete airside planning and design of 33 new gates
- 33 new passenger boarding bridges
- Concrete roadside pavement
- Fuel system design including vaults
- Structural foundation design for PBBs and walkways
- Portland cement concrete apron pavement
- Cathodic protection system
- Apron grading
- Airfield markings
- Asphalt pavement

CHALLENGES & ACCOMPLISHMETS
- Incorporated future airline fleet mix needs and ramps striping standards to support post-move requirements
- Coordination with other concurrent projects which were part of the program were ongoing throughout design
- Utility coordination, pavement elevations and phasing of the project required a tightly

coordinated effort

- Project area of direct design encompassed over 43 acres of civil and airside design



Hartsfield-Jackson Atlanta International Airport

PBB REPLACEMENT AND UPGRADE PROJECT (116 GATES)

AERO SYSTEMS ENGINEERING

PRIME CONSULTANT
AERO Systems Engineering

Year Completed
Design: 2018
Construction: 2020

Client
City of Atlanta Department ofAviation

Project Cost
$75 Million

ASSIGNMENT

ASE provided design and construction of the single largest aviation fixed ground support system project in history. The project included design and replacement of 116 PBBs, 91 400Hz gateboxes, 59 PCA AHUs, 15 POU 400Hz units, eight POU PCA units, building electricalupgrades, central PCA plants, central 400Hz plants, GSE communication buses, and building egress systems across seven concourses. It impacted every gate and every airline operating at the world's busiest airport.

SCOPE

- Full site surveys, complete airside, planning, design, and construction
- Aircraft parking planning and layouts
- Renovation, relocation, and upgrades of 116 gate positions
- PBBs and fixed ground support systems
- Construction and installation of terminaldoors and structural foundations
- PCA, 400Hz, 28.5VDC
- Terminal electrical/mechanical infrastructure and security access upgrades, includingemergency egress modifications

CHALLENGES & ACCOMPLISHMETS

- Met requirements of DOA and all impacted airlines
- Fast-paced, phased design schedule
- Schedule analysis achieved gate flexibility to serve multiple airlines with operational requirements at individual gates simultaneously
- Aircraft parking changes to accommodate new generation PBBs
- Gate construction required significant coordination and phasing to minimize impacts on adjacent gate operations

PAST PERFORMANCE



Salt Lake City International Airport - Salt Lake City, Utah

REDEVELOPMENT PROJECT (TRIP) (38 GATES)

AERO SYSTEMS ENGINEERING

PRIME CONSULTANT
AERO Systems Engineering

Year Completed
2017

Client
HOK Architects

Project Cost
$1.8 Billion

ASSIGNMENT

ASE provided complete airside designs for three concourses (SCW, SCE and NCW), complete airside aircraft maneuvering and parking, taxiways/ lanes, 38 gates (expandable to 47), PBBs, 400Hz ground power, three central PCA system plants, full facility eGSE battery charging, baggage valets, aircraft docking systems and potable water systems.

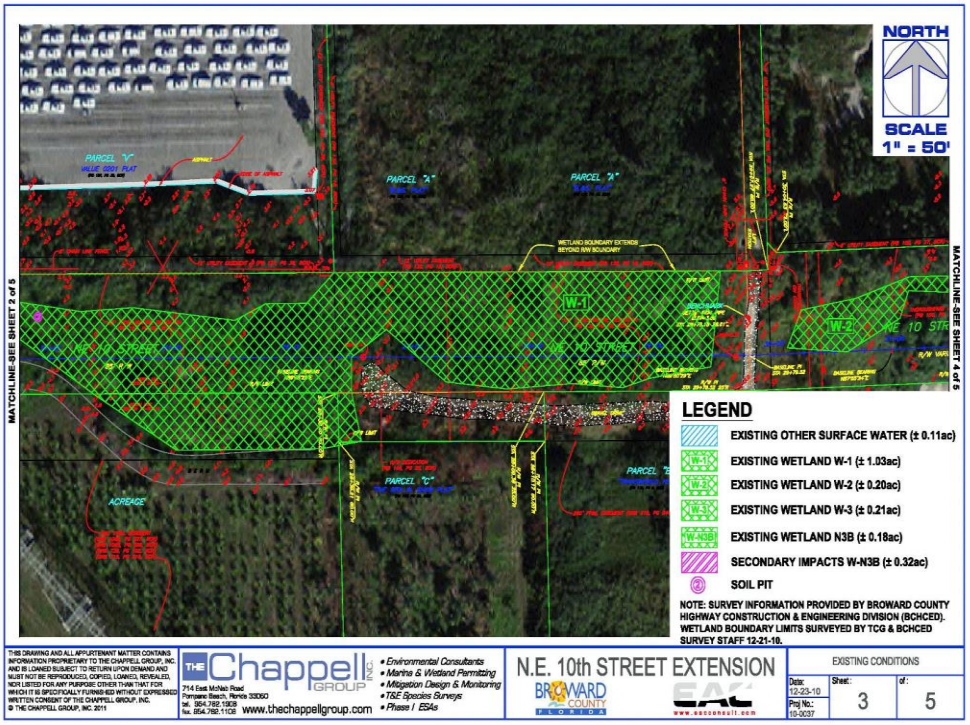
SCOPE

- Full site surveys, complete airside, planning, design and construction
- Aircraft parking planning, ramp striping and layouts
- PBBs and related fixed ground support systems
- 4-pipe central PCA systems with 8,240 ton-hours of thermal storage
- Gate-located PCA and 400Hz systems, baggage valets
- Aircraft docking, RIDS, and GSE charging and monitoring
- Terminal electrical/mechanical infrastructure and security interfaces

CHALLENGES & ACCOMPLISHMETS

- Met requirements of the Department of Aviation (DOA) and airlines
- PCA studies of available systems
- Central PCA systems instrumental in obtaining LEED Gold® certification
- Full BIM analysis using REVIT and clash detect
- Phased construction to maintain operations of existing facilities
- Met all applicable SLCIA Airport Authority standards and those of multiple tenants, the FAA, Transportation Security
- Administration (TSA), and Customs and Border Protection (CBP)

PAST PERFORMANCE



NE 10th Street Extension

THE Chappell GROUP INC

Client
Broward County Highway Construction & EngineeringDivision

Services Provided
- Preliminary Environmental Assessment
- Wetland Boundary SurveyDelineation
- Jurisdictional Wetland Determination
- Regulatory Permitting
- Mitigation Credit Determination & Allocation

Construction Cost
$50 Million

PROJECT DETAILS

The proposed project consists of the proposed extension of NE 10th Street/Taylor Road east from US Highway 1 to the existing NE 7th Avenue. The proposed roadway extension and associated surface water management system is a component of the overall Ft. Lauderdale-Hollywood International Airport runway expansion project currently being undertaken by Broward County.

The project scope included preliminary environmental assessments, wetland boundary survey delineations, formal wetland determinations and regulatory permitting through the Broward County Environmental Protection and Growth Management Department (BCEPGMD), South Florida Water Management District (SFWMD) and U.S. Army Corps of Engineers (USACOE). The Chappell Group, Inc. was responsible for all environmental services related to the design and permitting of the roadway extension, including mitigation credit determination and allocation associated with the existing Broward County Everglades Restoration Area.





Port Everglades, Broward County

WETLAND ENHANCEMENT

THE Chappell GROUP INC.

Client
Seaport Engineering & Construction Division – PortEverglades

Services Provided

« Environmental Permitting
« Benthic Survey
« Construction Observation
« Turbidity Monitoring
« Water Quality Analysis
« Permit Compliance
« Plant Inspections
« Erosion Control Inspection
« Sediment Quality Analysis
« Mitigation Permitting and Design
« Mitigation Monitoring

PROJECT DETAILS

The Chappell Group Inc. (TCG) is the lead environmental consulting firm for the design, permitting, monitoring, and construction inspection for the Port Everglades Wetland Enhancement project. The project was the creation of a 16.5-acre wetland enhancement area related to the release of a portion of the existing 8-acre conservation easement that will allow the Port to expand the Southport Turning Notch. The wetland enhancement project included the planting of over 53,000 mangroves, and over 17,000 Florida native transitional buffer plants. TCG prepared and processed the environmental applications for the mitigation and design of the wetland enhancement area to offset impacts associated with the proposed turning notch expansion. TCG also conducted construction inspection services including turbidity monitoring during in-water work, plant inspections of the mangroves and transitional buffer plants delivered, permit compliance, plan review, and erosion control inspections.

TCG is currently conducting mitigation monitoring of the wetland enhancement area, coordinating nuisance/exotic removal to maintain permit compliance, and preparing monitoring reports to submit to the environmental regulatory agencies.

Vendor Reference Verification Form

Broward County Solicitation No. and Title:

PNC2120437P1, Professional Consultant Services for FLL and HWO Airports, Building Projects

Reference for: CBRE-HEERY, INC. [f/k/a Heery International, Inc.]

Organization/Firm Name providing reference:

Hartsfield-Jackson Atlanta International Airport (ATL), City of Atlanta Department of Aviation, Planning

Contact Name: ERIC HALL Title: Principal Mechanica Reference date:

Contact Email: ERIC.HALL@atl.com Contact Phone: (404) 558-9022

Name of Referenced Project: PROGRAM PLANNING SERVICES

Contract No.	Date Services Provided:		Project Amount:
FC-9000/ RA 17-01-1017	05/12/2017	to 05/12/2022	$ 1,200,000.00

Vendor's role in Project: ☐ Prime Vendor ☒ Subconsultant/Subcontractor

Would you use this vendor again? ☒ Yes ☐ No If No, please specify in Additional Comments (below).

Description of services provided by Vendor:

Engineering design and planning services, including Mechanical, Plumbing, Electrical, Fire Protection, and Communications. Multiple Task Orders (19 to date) over the first 3 years of a 5 year contract.

Please rate your experience with the referenced Vendor:	**Needs Improvement**	**Satisfactory**	**Excellent**	**Not Applicable**
1. Vendor's Quality of Service				
a. Responsive	☐	☐	☒	☐
b. Accuracy	☐	☐	☒	☐
c. Deliverables	☐	☐	☒	☐
2. Vendor's Organization:				
a. Staff expertise	☐	☐	☒	☐
b. Professionalism	☐	☐	☒	☐
c. Turnover	☐	☒	☐	☐
3. Timeliness of:				
a. Project	☐	☐	☐	☒
b. Deliverables	☐	☐	☒	☐
4. Project completed within budget	☐	☐	☐	☒
5. Cooperation with:				
a. Your Firm	☐	☒	☐	☐
b. Subcontractor(s)/Subconsultant(s)	☐	☐	☒	☐
c. Regulatory Agency(ies)	☐	☐	☐	☒

Additional Comments: (provide on additional sheet if needed)

Overall, An excellent group with which to work.

THIS SECTION FOR COUNTY USE ONLY

Verified via:_____EMAIL____

All information provided to Broward County is subject to verification. Vendor acknowledges that inaccurate, untruthful, or incorrect statements made in support of this response may be used by the County as a basis for rejection, rescission of the award, or termination of the contract and may also serve as the basis for debarment of Vendor pursuant to Section 21.119 of the Broward County Procurement Code.

Division: _____ Date: _____

All information provided to Broward County is subject to verification. Vendor acknowledges that inaccurate, untruthful, or incorrect statements made in support of this response may be used by the County as a basis for rejection, rescission of the award, or termination of the contract and may also serve as the basis for debarment of Vendor pursuant to Section 21.119 of the Broward County Procurement Code.

Vendor Reference Verification Form

Broward County Solicitation No. and Title:

PNC2120437P1, Professional Consultant Services for FLL and HWO Airports, Building Projects

Reference for: CBRE-Heery, Inc. [f/k/a Heery International, Inc.]

Organization/Firm Name providing reference:

BROWARD COUNTY - FACILITIES MANAGEMENT DIVISION

Contact Name: Dory Khater Title: Expansion Project A Reference date: 04/09/2021

Contact Email: DKAHATER@broward.org Contact Phone: (954) 873-2558

Name of Referenced Project: BROWARD COUNTY COURTHOUSE

Contract No.	Date Services Provided:			Project Amount:
60102128	06/14/2005	to	12/31/2023	$ 6,500,000.00

Vendor's role in Project: ☒ Prime Vendor ☐ Subconsultant/Subcontractor

Would you use this vendor again? ☒ Yes ☐ No If No, please specify in Additional Comments (below).

Description of services provided by Vendor:

Design services as part of a three (3) team Joint Venture, including Architecture, Mechanical, Electrical, Communications, and LEED. Multiple Projects awarded via several amendments.

Please rate your experience with the referenced Vendor:	**Needs Improvement**	**Satisfactory**	**Excellent**	**Not Applicable**
1. Vendor's Quality of Service				
a. Responsive	☐	☒	☐	☐
b. Accuracy	☐	☒	☐	☐
c. Deliverables	☐	☒	☐	☐
2. Vendor's Organization:				
a. Staff expertise	☐	☐	☒	☐
b. Professionalism	☐	☐	☒	☐
c. Turnover	☒	☐	☐	☐
3. Timeliness of:				
a. Project	☐	☒	☐	☐
b. Deliverables	☐	☒	☐	☐
4. Project completed within budget	☒	☐	☐	☐
5. Cooperation with:				
a. Your Firm	☐	☐	☒	☐
b. Subcontractor(s)/Subconsultant(s)	☐	☐	☒	☐
c. Regulatory Agency(ies)	☐	☐	☐	☐

Additional Comments: (provide on additional sheet if needed)

DORY KHATER Digitally signed by DORY KHATER Date: 2021.04.09 08:15:44 -04'00' Verified via: ☒ EMAIL ☐ VERBAL***THIS SECTION FOR COUNTY USE ONLY***

Division:

All information provided to Broward County is subject to verification. Vendor acknowledges that inaccurate, untruthful, or incorrect statements made in support of this response may be used by the County as a basis for rejection, rescission of the award, or termination of the contract and may also serve as the basis for debarment of Vendor pursuant to Section 21.119 of the Broward County Procurement Code.

Verified by:

_____ Date: _____

Vendor Reference Verification Form

Broward County Solicitation No. and Title:

PNC2120437P1, Professional Consultant Services for FLL and HWO Airports, Building Projects

Reference for: CBRE-HEERY, INC. [f/k/a Heery International, Inc.]

Organization/Firm Name providing reference:

RICONDO & ASSOICATES/THE CREATIVE EYE JOINT VENTURE

Contact Name: STEVE RYAN Title: DIRECTOR Reference date: 04/07/2021

Contact Email: SRYAN@RICONDO.COM Contact Phone: (859) 512-1411

Name of Referenced Project: PROGRAM PLANNING SERVICES

Contract No.	Date Services Provided:			Project Amount:
FC-9000/ RA 17-01-1017	05/12/2017	to	05/12/2022	$ 1,200,000.00

Vendor's role in Project: ☐ Prime Vendor ☒ Subconsultant/Subcontractor

Would you use this vendor again? ☒ Yes ☐ No If No, please specify in Additional Comments (below).

Description of services provided by Vendor:

Engineering design and planning services, including Mechanical, Plumbing, Electrical, Fire Protection, and Communications. Multiple Task Orders (19 to date) over the first 3 years of a 5 year contract.

Please rate your experience with the referenced Vendor:	**Needs Improvement**	**Satisfactory**	**Excellent**	**Not Applicable**
1. Vendor's Quality of Service				
a. Responsive	☐	☐	☒	☐
b. Accuracy	☐	☐	☒	☐
c. Deliverables	☐	☐	☒	☐
2. Vendor's Organization:				
a. Staff expertise	☐	☐	☒	☐
b. Professionalism	☐	☐	☒	☐
c. Turnover	☐	☐	☒	☐
3. Timeliness of:				
a. Project	☐	☐	☒	☐
b. Deliverables	☐	☐	☒	☐
4. Project completed within budget	☐	☐	☒	☐
5. Cooperation with:				
a. Your Firm	☐	☐	☒	☐
b. Subcontractor(s)/Subconsultant(s)	☐	☐	☒	☐
c. Regulatory Agency(ies)	☐	☐	☒	☐

Additional Comments: (provide on additional sheet if needed)

CBRE Heery has supported Ricondo's work on two on-call planning contracts for Hartsfield-Jackson Atlanta International Airport. They have worked seamlessly with our entire team and have provided technically sound analysis. Their recommendations have been well received by the Airport's staff and they are viewed as a trusted resource.

THIS SECTION FOR COUNTY USE ONLY

Verified via:_____EMAIL____

All information provided to Broward County is subject to verification. Vendor acknowledges that inaccurate, untruthful, or incorrect statements made in support of this response may be used by the County as a basis for rejection, rescission of the award, or termination of the contract and may also serve as the basis for debarment of Vendor pursuant to Section 21.119 of the Broward County Procurement Code.

Division: _____ Date: _____

All information provided to Broward County is subject to verification. Vendor acknowledges that inaccurate, untruthful, or incorrect statements made in support of this response may be used by the County as a basis for rejection, rescission of the award, or termination of the contract and may also serve as the basis for debarment of Vendor pursuant to Section 21.119 of the Broward County Procurement Code.

BROWARD COUNTY FLORIDA

Vendor Reference Verification Form

Broward County Solicitation No. and Title:
PNC2120437P1, Professional Consultant Services for FLL and HWO Airports, Building Projects

Reference for: Keith and Associates, Inc., dba KEITH

Organization/Firm Name providing reference:
Holland Builders

Contact Name: John Sobol Title: Director of Construc Reference date: 03/16/2021

Contact Email: jos@hollanbuilders.com Contact Phone: 954-771-2210

Name of Referenced Project: FXE Parcel 16-C Hanger

Contract No.	Date Services Provided:		Project Amount:
	02/01/2017	to 03/01/2019	$ 9,112.00

Vendor's role in Project: ☐ Prime Vendor ☑ Subconsultant/Subcontractor

Would you use this vendor again? ☑ Yes ☐ No If No, please specify in Additional Comments (below).

Description of services provided by Vendor:

KEITH provided surveying and civil engineering design and permitting for landside and airside site improvements for the Sheltair Facility located on Parcel 16-C at the Fort Lauderdale Executive Airport (FXE). KEITH is providing surveying and conceptual engineering plans including zoning, land use designation, signage and markings, drainage inlets, conveyance pipes, exfiltration trench and retention areas, and conceptual opinions of construction costs. The KEITH Team also provided AAB and DRC site plan reviews. Upon approval, the team prepared construction plans and specifications. KEITH also provided schematic landscape architectural services including landscape, hardscape and irrigation plans, as well as permitting applications.

Please rate your experience with the referenced Vendor:	**Needs Improvement**	**Satisfactory**	**Excellent**	**Not Applicable**
1. Vendor's Quality of Service				
a. Responsive	☐	☐	☑	☐
b. Accuracy	☐	☑	☐	☐
c. Deliverables	☐	☐	☑	☐
2. Vendor's Organization:				
a. Staff expertise	☐	☐	☑	☐
b. Professionalism	☐	☐	☑	☐
c. Turnover	☐	☐	☐	☑
3. Timeliness of:				
a. Project	☐	☑	☐	☐
b. Deliverables	☐	☐	☑	☐
4. Project completed within budget	☐	☐	☑	☐
5. Cooperation with:				
a. Your Firm	☐	☐	☑	☐
b. Subcontractor(s)/Subconsultant(s)	☐	☐	☑	☐
c. Regulatory Agency(ies)	☐	☐	☑	☐

Additional Comments: (provide on additional sheet if needed)

Continue to use them.

THIS SECTION FOR COUNTY USE ONLY

Verified via: ____EMAIL ____VERBAL Verified by: _____ Division: _____ Date: _____

All information provided to Broward County is subject to verification. Vendor acknowledges that inaccurate, untruthful, or incorrect statements made in support of this response may be used by the County as a basis for rejection, rescission of the award, or termination of the contract and may also serve as the basis for debarment of Vendor pursuant to Section 21.119 of the Broward County Procurement Code.

3/17/2021 6:15 AM p. 28

3b. PRIME & SUBCONTRACTORS EXPERIENCE WITH CAD/BIM FOR VERTICAL BUILDINGS

CBRE and our partnering firms are comprised of staff members with extensive experience that are highly capable of utilizing CAD/BIM and Revit for vertical buildings and construction within the airport environment. We are confident in our ability to meet all requirements for the projects outlined related to BIM scope of services. We are fully prepared to participate in the BIM process and provide both 2D and 3D designs via AutoCAD, AutoDesk REVIT, AutoDesk Civil 3D, AutoDesk Navisworks, AutoDesk BIM 360, and AutoDesk DESKTOP CONNECTOR, as needed.

Our team integrate seamless technology solutions into each of our designs. The design and engineering team uses BIM 360 to provide instant collaboration with consultants, clients and contractors. Through this web-based platform, Revit building models, drawing sets, Navisworks clash detection and CAD backgrounds can be shared seamlessly with all participants without any lag time or purchase of the software. BIM 360 can also serve as a construction administration tool for RFI submissions and punch list documentation. Use of BIM 360 technology has transformed the efficiency and speed in which projects can be delivered.

The use of our BIM model starts in the Schematic Design phase and stretches through construction and is then transferred to the client (if needed). Through detailed BIM libraries and components, model accuracy is elevated to a level of design that is constructable with clear and concise descriptions to produce legible construction documents. The design team, subconsultants, builder and owner actively participate in the design documentation process. Live, shared, interactive BIM models are used for on-site and online coordination meetings in order to depict accurate, real-time project details to run clash detections, which minimize costly and time consuming changes in the field and allows the design team to maximize every square inch of the building. These independent disciplines are combined during the Design Development phase to create an interdependent representation of the building and an initial pricing exercise is performed. During the Construction Documentation phase, the subconsultants extract information from the base model to create shop drawings which accelerates the review and approval process. At the end of CDs, the model is transferred to the Construction Manager to coordinate with the Owner, Architect, and other

subconsultants to avoid field conflicts.

PAST PERFORMANCE



For all projects requiring BIM support, team will assign "BIM manager", who will serve as the main point of contact for the duration of the project. BIM manager will manage all BIM related issues and coordination for the prime and subconsultants. BIM Manager has many responsibilities. They include, but are not limited to:

- Overseeing the transfer/submission of model files from one party to another
- Validating the level of detail and controls as defined for each project phase
- Validating modeling content during each phase
- Combining or linking multiple models
- Participating in design review and model coordination sessions
- Monitoring adherence to project standards, including file names, worksets, model categories, etc.
- Properly storing the models in the collaborative project management system
- Coordinating model requirements with other team members and disciplines
- Provide production support in meeting digital delivery requirements
- Preparation of progress reporting and other digital deliverables
- Ongoing model review for compliance and coordination

Our team have successfully participated in a number of project-specific BIM Execution Plans and has worked closely with BIM project team members to utilize the full power of BIM where it applies to design and construction process.

3c. PRIME & SUB EXPERIENCE WITH REGULATORY AGENCIES

Every firm making up our assembled team has developed outstanding working relationships with many regulatory agencies/ divisions including all that are listed in this solicitation: South Florida Water Management District (SFWMD), Broward County Environmental Protection and Growth Management Department (BCEPGMD), Florida Department of Transportation (FDOT), Federal Aviation Administration (FAA), Broward County Water and Wastewater Services (BCWWS), Federal Emergency Management Agency (FEMA), and Florida Department of Environmental Protection (FDEP).

Our team members were chosen for their strong background with airport facilities and bring a depth of experience in proactively resolving any construction, phasing, life safety and permitting challenges that could arise with any regulatory agencies. With 7 of our 8 team member firms with offices in Broward County, and the 8th consistently active in the market (including 30+ projects at FLL), we have consistently demonstrated how coordination among our team member firms and our collective relationships with these agencies on local aviation assignments is the key to enable us to be successful in executing work quickly.

CBRE's Public Institution & Education Solutions Group, which is solely dedicated to public sector assignments and includes a former Director of Real Estate for the State of Florida and a former Director of Real Estate for Denver International Airport, will serve as a valuable resource for connections and insight.



Our coordination work with these various entities isn't just met during construction, but, often enough, within the early stages of design. Our work with the Broward County Environmental group and approvals from the Florida Department of Transportation is a precursor to a permit being approved for construction. Ensuring that those departments are not overlooked will ensure that the Broward County Code Services finals stamps are met with timely approvals.

Additionally, one of the ways that our team stands apart from other firms is in our ability to understand the design process in the field with multiple AHJ's. Our design management services greatly improve the field coordination for engineering and verification of existing conditions. Often schedule

delays with most A&E firms revolve around the inability to access tenant rooms, mechanical/electrical rooms, and other coordination issues that plague RTI's/permits being issued. With our institutional knowledge of the process, the chances of tenant/ airline coordination for design development is much more achievable.

The following chart gives a small sampling of our experience with each of the agencies being addressed in this RFP.

SAMPLE AGENCY EXPERIENCE

AGENCY	FIRM	SAMPLE EXPERIENCE
SFWMD	KEITH	KEITH has permitted Environmental Resource Permits (Minor and Major Modifications) as well as Water Use Permits for dewatering with SFWMD. They have different sections, who all contribute to assisting in the review when applicable to their division. Reviews are received within the 30 day allotment window they have to provide comments. We typically anticipate a 90 day permitting schedule when going through this agency. Pre-application meetings are extremely helpful in outlining direction of approach to the design
BCEPGMD	KEITH	KEITH typically goes through Broward County Environmental Protection and Growth Management Department (BCEPGMD) when processing Surface Water Management License modifications, which is through their Environmental Engineering and Permitting Division (BCEEPD). Similar to SFWMD, pre-application meetings are very helpful and we anticipate the same 90 day permitting schedule. Surface Water Management Licenses require recertification of the stormwater system after 5 years to ensure proper maintenance and functionality of the system.
FDOT	AERO	AERO has successfully completed several projects at Florida airports, including SRQ, FLL, TPA, RSW and MCO that have been performed in conjunction with the FDOT. We have experience working with FDOT and their requirements at airports throughout Florida.
FAA	AERO	AERO has successfully completed several projects with airports, including PIT, PHL, IAD, and many others across the U.S. that have been performed in conjunction with the FAA. We are currently working on several FAA project funded through the VALE program at PIT, PHL and IAD. AERO has a wealth of experience and knowledge with FAA requirements through past project experience. We understand the FAA funding process, from the CIP planning phase all the way through the grant closeout of a project.
BCWWS	KEITH	BCWWS permitting includes a four step process through a Utility Connection Permit. These steps include 1. Plan approval, 2. Request for permit, 3. Permit (Connection Construction approval), and 4. Release for Service. Parts 1 through 3 can range in timeframe based on the complexity of the project and can depend on processing variance requests. KEITH has a good working relationship with WWS which helps when working through design comments and the need for variances, which are typical considering the site requirements of the FLL facility.
FEMA	CBRE	CBRE has a long history of FEMA coordination following natural disasters, including hurricanes and flood mitigation impacting the operations at major airports, school districts, government agencies and local municipalities. We have quickly mobilized teams to respond to the recovery efforts of over 50 projects. Recently, we assisted Lafayette Regional Airport with hurricane disaster mitigation on one of their active runways. Also, CBRE will be assisting Puerto Rico Department of Education (PRDE) with their FEMA recovery program.
FDEP	CHAPPELL GROUP	For over 15 years, The Chappell Group has provided environmental permitting services for various projects, project phases and permit compliance. TCG coordinates with various local, State, and Federal agencies during the pre-application process, the permitting processes, and the compliance phase. We have experience with agencies such as United States Army Corps of Engineers, South Florida Water Management District, Florida Department of Environmental Protection, Florida Game and Freshwater Fish Commission, and United States Fish and Wildlife Service.

3d. PRIME & SUBCONSULTANTS EXPERIENCE PROVIDING CONSTRUCTION ADMINISTRATION & ENGINEERING INSPECTIONS

Construction administration and engineering inspections at FLL and HWO require a great deal of understanding of the airport's needs and requirements. From operational and security requirements, combined with unanticipated conditions makes every site inspection high profile and thus requiring understanding and experience.

The CBRE design and engineering team will stay engaged throughout the construction process to ensure that the goals and vision identified at the start of the project are fully realized when construction is complete. Services include review of construction submittals, shop drawings, responses to requests for information and site visits to confirm installation aligns with design intent. At substantial completion,

AERO SYSTEMS ENGINEERING

a final "punch" list of incomplete or deficient items will be generated to ensure that all loose ends are closed up

AERO Systems Engineering, Inc (ASE) has extensive experience in delivering Construction Administrative (CA) services and engineering inspections during the construction phase on airport projects throughout Florida and the entire United States. ASE routinely provides CA and inspection services at medium and large hub airports, with most projects occurring on active airfields, and while active flight operations are ongoing at surrounding gate areas.

Typically provided CA services and activities include the following:

- Ongoing RFI response through construction
- Contractor and vendor submittal and shop drawing review
- Review field change actions and redline documentation during construction
- Construction schedule review/updates and assistance with phasing
- Creation of exhibits to assist contractor and Owner with making construction decisions
- Participate in regular construction project meetings and provide engineering guidance to ensure design intent is being met on a daily basis
- Onsite inspection of equipment installation at progress intervals to validate drawing and specification compliance
- Final inspection of equipment and installation at time of commissioning and turn-over
- Inspection deficiency reporting
- Project close out processes and documents, including as-built drawing preparation

ASE also provides inspection services during construction to ensure contractor compliance with contract drawings and specifications. ASE engineers will visit the construction area at scheduled construction milestones to review contractor progress and inspect the work being carried out. Engineering staff will

review MEP system installation and civil construction and report on any observed deficiencies. ASE will also review all independent 3rd party testing and inspection reports to ensure compliance with project requirements.

ASE is currently providing, or has recently provided CA and engineering inspection services at the following airports: RSW, SRQ, TPA, MLB, ATL, MEM, BNA, EWR, JFK, LGA, SLC, DFW, SEA, SFO, LAX, SEA, and PIT

PAST PERFORMANCE

KEITH
Engineering Inspired Design.

CONSTRUCTION MANAGEMENT

KEITH has provided construction related services for projects ranging from airport facilities, residential communities, commercial projects, and recreational parks including structures, terminals, roadways, parking lots, and utility infrastructures. The best construction management practice is to maintain a close working relationship with all parties involved and to respond quickly and effectively to any issues that may arise. This approach coupled with our experience and knowledge, offers our clients the opportunity to minimize cost overruns and delays during construction through pre-design services, design and construction oversight, and construction administrative services.

KEITH is committed to delivering an effective level of oversight and stewardship of any construction program. We focus on program practices and techniques that add value and help to ensure effective oversight and acceptable accountability.

CONSTRUCTION ENGINEERING INSPECTION (CEI)

KEITH has experienced and qualified staff, trained in providing CEI services. Our inspection staff members are Construction Technician Qualification Program (CTQP) certified. From construction managers to technical inspection personnel, our highly efficient team has the flexibility to support private development clients as well as governmental municipalities and State agencies (FDOT). We provide an array of Construction Engineering and Inspection services including contract administration, construction management, document control, utility coordination, observations / inspections, schedule and cost controls and contract close-out certifications. The unique ability to understand and recognize both construction constraints and the processes required for a successful project is what defines the KEITH CEI Team.

LAKDAS/YOHALEM ENGINEERING, INC.

LYE has been providing engineering inspection services for over 50 years. We are certified threshold and building inspectors. LYE's inspection team has successfully completed over 4,800 projects in which inspection services were required. Currently we have inspection services for the switch gear building, crane rail expansion, and hurricane tiedown base production at Port Everglades Terminal 2 Expansion and Elevated Roadway renovations at Fort Lauderdale Airport. The range of services provided for the Port Everglades project includeSpecial inspector for the construction of the switch gear building, structural inspection for reinforcement for the crane rail and welding inspection for the hurricane Tie down base fabrication. LYE's inspection team isversatile and has proven experience with the tri counties of performing at a professional level.

Section 4
WORKLOAD OF THE FIRM

4a. Projects Completed Within Past Five Years & Active

4b. Concurrent Project Bandwidth & Challenges



ACTIVE & COMPLETED AVIATION PROJECTS (5 YEARS)

PROJECT NAME/DESCRIPTION	ACTIVE/COMPLETED	PM/DESIGN
Port of Seattle - North Satellite PM Services	Active	PM
HJAIA - Employee Security Screening, Phase 1 & 2	Completed	Design
HJAIA - Concourse T-N Expansion PDR	Completed	Design
HJAIA - Concourse D Expansion PDR	Completed	Design
HJAIA - RCC Repair Design	Completed	Design
HJAIA - Deck Reconstruction Study	Completed	Design
MIA - NTD Program Management Services, Multiple Task	Completed	PM
MIA - AA Hangar Building	Completed	Design
MIA - North Terminal FIS Easy Pass	Completed	Design
MIA - Satellite E Additional Services	Completed	Design
MIA - Satellite E Breakrooms	Completed	Design
MIA - 2nd Employee Checkpoint	Completed	Design
MIA - Refurbish and Upgrade ESS	Completed	Design
RDU - Master Plan Study - Central Plant	Completed	Design
LFT - Program Managemet Services, Multiple Task Orders	Completed	PM
ATL - Program Managemet Services, Multiple Task Orders	Completed	PM
HJAIA - AA Employee Security Checkpoint	Completed	Design
HJAIA - AATC Office Reconfiguration	Completed	Design
HJAIA - Plane-Train Turnaround	Completed	Design
HJAIA - E-CUP Chiller/Cooling Tower/Boiler Replacement Study	Completed	Design
HJAIA - T-CUP Heating HW Generation and Efficiency Upgrades	Completed	Design
HJAIA - Smart Lanes, North, Sourth & Main TSA Checkpoints	Completed	Design
HJAIA - Emergency Generator Planning	Completed	Design
HJAIA - Sheraton Parking Garage Conversion Plan	Completed	Design
HJAIA = North Pickup Area	Completed	Design
SEA - Port of Seattle IDIQ for Construction Services	Active	PM
Delta Sky Club - Austin	Completed	Design
Delta Sky Club - Phoenix	Completed	Design
Delta IFS Flight Lounge	Completed	Design
MIA - Rebrand Next Gen	Completed	Design
SLCDA - Program Managemet Services, Multiple Task Orders	Completed	PM
Spokane Airport Construction Management On-Call Services	Completed	PM
Hewanorra International Airport - New Terminal	Active	Design
DFW - Structural Assessment	Completed	Design
Delta Sky Club - Orlando	Active	Design
Delta Sky Club - Miami	Active	Design
Delta Sky Club - Fort Lauderdale	Active	Design
Delta Sky Club - Chicago	Active	Design
Delta Sky Club - Bos-E	Active	Design
Delta Sky Club - MSP-G	Active	Design
Delta Sky Club - Seattle	Active	Design
Delta Sky Club - CLT	Active	Design
Delta Sky Club - ATL-B	Active	Design
ATL - Enforcement Office Design	Active	Design
SIA - Rental Car Renovations	Completed	PM
HJAIA - Concourse E HVAC Study	Completed	Design
HJAIA - Pedestrian Bridge Vertical Circulation Study	Completed	Design
HJAIA - Passenger Screening South Checkpoint Expansion	Completed	Design
MDAD - SO 1 Building 3030 and Exec Offices	Active	Design
Delta Baggage ERGO - ATL	Completed	Design
HJAIA - T3 DAS Extension PDR	Active	Design
HJAIA - GA Power, Concourse F	Active	Design

BIMINI Airport Prelim Design	Active	Design

4b. CHALLENGES OF CONCURRENT PROJECTS

CBRE has many years of experience managing multiple projects concurrently. We have the ability and necessary resources to provide professional consultant services to successfully manage concurrent projects. Based on our current workload and backlog, we do not expect any challenges in carrying out scope of services defined.

Current workloads and projections assure that the individuals assigned to the project team will be available to begin work as scheduled. The size of our staff ensures our capability to commit the necessary resources to perform professional services on time.

Our team consists of architecture, interior design, engineering, project management and in-field personnel who have worked together on multiple projects. These team members share CBRE's commitment to superior client service. As an integrated multi-disciplinary design practice, we are able to respond promptly and efficiently to client requests by eliminating some administrative burdens. We also have ready access to additional professional expertise in-house when needed, whether it is anticipated at the outset of a project or not. Delivering creative solutions to client and end-user needs in a comprehensive manner is rooted in our culture and processes.

Section 5
LOCATION

5

Location Certification Form
Uploaded to BidSync on Separate Form as Requested

TEAM'S LOCAL OFFICES:

CBRE - Miami Office
7650 Corporate Center Drive
Suite 302
Miami, FL 33126

CBRE - Ft Lauderdale Office
401 E Las Olas Blvd., Ste 1500
Fort Lauderdale, FL 33301

KEITH
301 E Atlantic Blvd
Pompano Beach, FL 33060

PM Technologies
100 Terminal Dr.
Fort Lauderdale, FL 33315

Messam Construction
3600 Red Road, Suite 303
Miramar, FL 3302

Keleusmatic Technologies
8362 Pines Boulevard, Suite 131
Pembroke Pines, Florida 33024

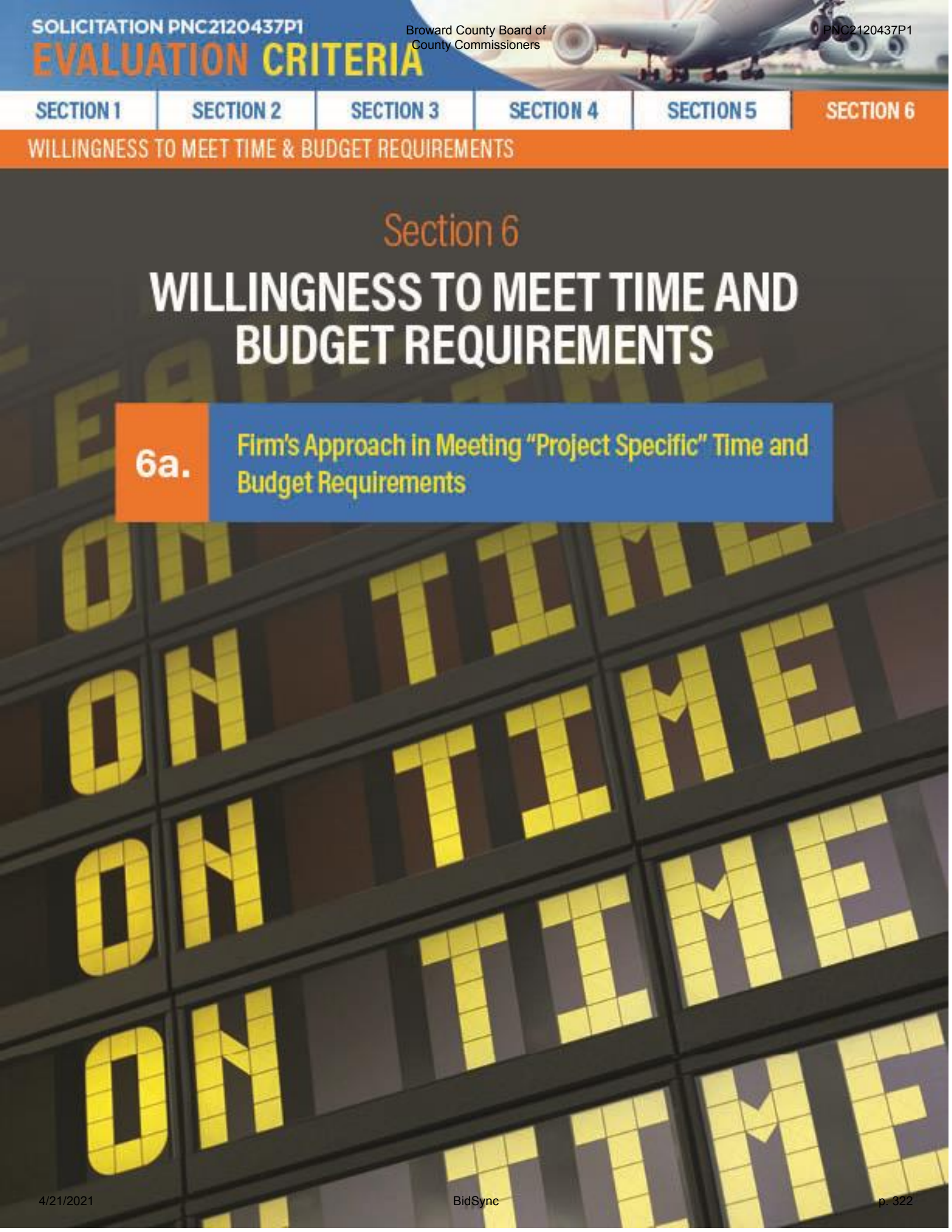
Chappell Group
714 East McNab Road
Pompano Beach, FL 33060

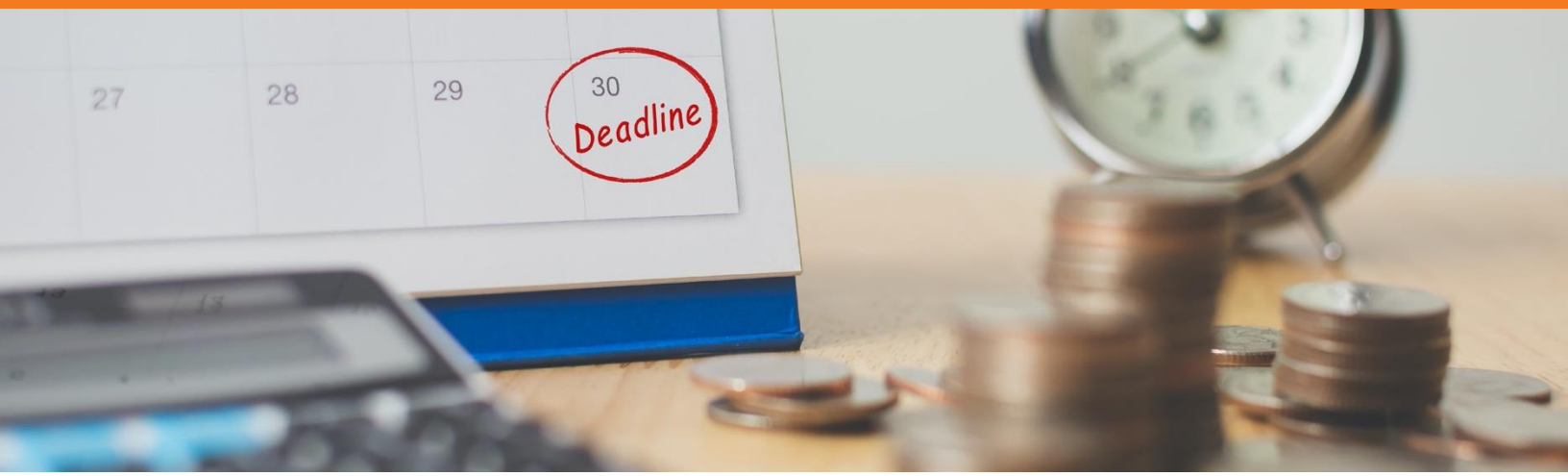
Lakdas/Yohalem
2211 NE 54th St
Fort Lauderdale, FL 33308

Section 6

WILLINGNESS TO MEET TIME AND BUDGET REQUIREMENTS

6a. Firm's Approach in Meeting "Project Specific" Time and Budget Requirements





6a. WILLINGNESS TO MEET TIME & BUDGET REQUIREMENTS

Management of the project scope and budget is a continual process that occurs in each phase with a strong partnership with CBRE, our consultants and the key stakeholders. Starting with clear communication, statement of project goals, and hard targets for budget and scope, the project team can establish criteria for project performance at every phase.

For each project, we work with the client to develop and continually update a project milestone schedule providing summaries of major activities in each design phase. This schedule overview provides tasks and durations for items such as drawing deliverables, owner reviews, design presentations, pricing periods, and into permitting and construction kick-off.

In addition to this, we will work with the team to create a detailed project schedule that will provide additional information into more granular project activities within each phase of the project. Beyond creative design solutions and beautiful placemaking, we have developed tools and processes to ensure projects remain on schedule, within budget, properly coordinated with our consultants while always responding to our client's needs.

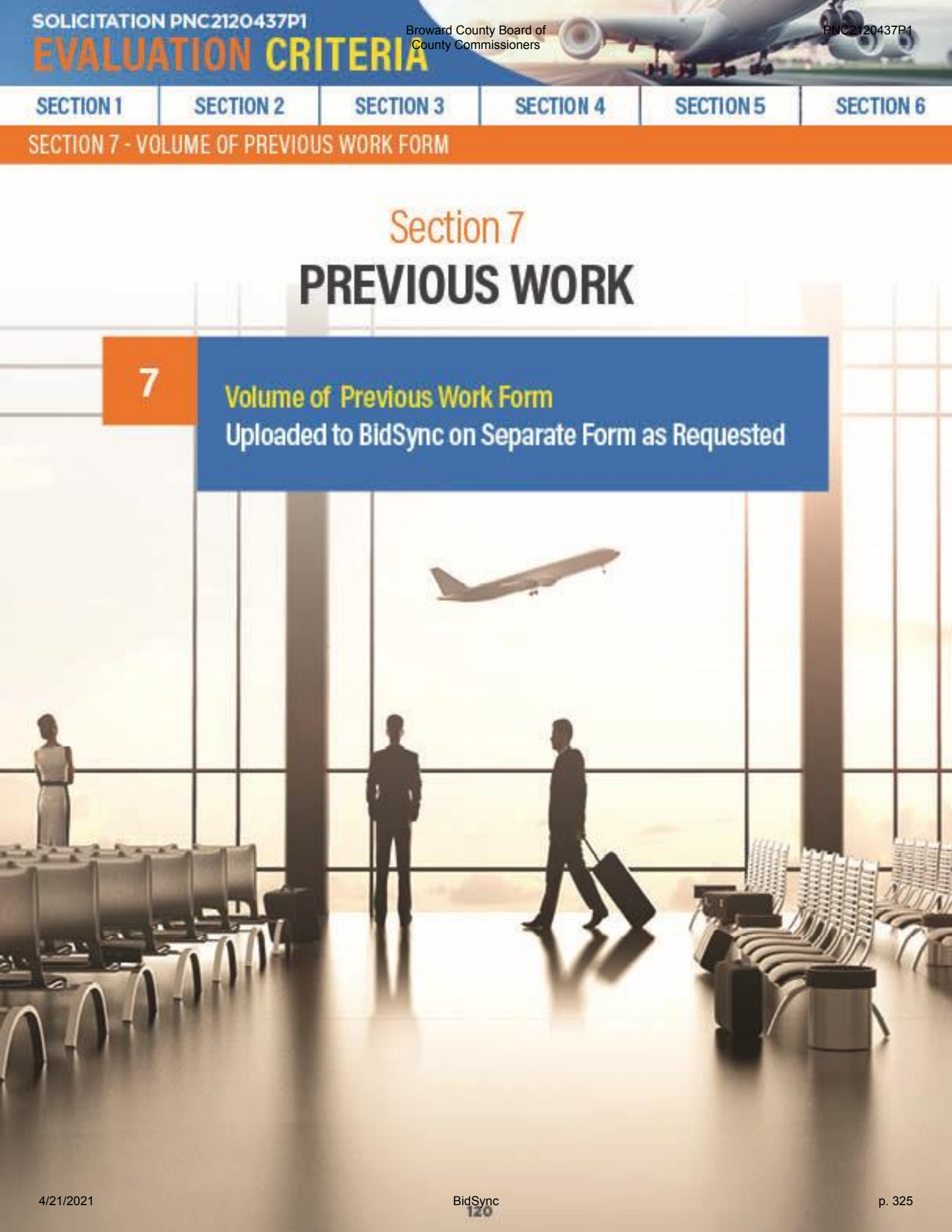
Our team is committed to meet time and budget requirements as they are identified under the agreement.

119

Section 7
PREVIOUS WORK

7

Volume of Previous Work Form
Uploaded to BidSync on Separate Form as Requested





APPENDIX

- LICENSES

BROWARD COUNTY FLORIDA

CBRE

Ron DeSantis, Governor

FBPE FLORIDA BOARD OF PROFESSIONAL ENGINEERS

STATE OF FLORIDA

BOARD OF PROFESSIONAL ENGINEERS

THE PROFESSIONAL ENGINEER HEREIN IS LICENSED UNDER THE PROVISIONS OF CHAPTER 471, FLORIDA STATUTES

ROMETO, MICHAEL A.
661 HOME AVENUE SE
ATLANTA GA 30312

LICENSE NUMBER: PE79912
EXPIRATION DATE: FEBRUARY 28, 2023
Always verify licenses online at MyFloridaLicense.com

Do not alter this document in any form.
This is your license. It is unlawful for anyone other than the licensee to use this document.

Ron DeSantis, Governor

FBPE FLORIDA BOARD OF PROFESSIONAL ENGINEERS

STATE OF FLORIDA

BOARD OF PROFESSIONAL ENGINEERS

THE PROFESSIONAL ENGINEER HEREIN IS LICENSED UNDER THE PROVISIONS OF CHAPTER 471, FLORIDA STATUTES

KANG, PAUL
901 BROADWAY
NORWOOD NJ 07648

LICENSE NUMBER: PE90293
EXPIRATION DATE: FEBRUARY 28, 2023
Always verify licenses online at MyFloridaLicense.com

Do not alter this document in any form.
This is your license. It is unlawful for anyone other than the licensee to use this document.

Ron DeSantis, Governor
Halsey Beshears, Secretary

Florida dbpr

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

DIVISION OF REAL ESTATE

THE BRANCH OFFICE HEREIN HAS REGISTERED UNDER THE PROVISIONS OF CHAPTER 475, FLORIDA STATUTES

CBRE INC
401 EAST LAS OLAS BLVD, SUITE 1500
FT LAUDERDALE FL 33301

LICENSE NUMBER: BO2033364
EXPIRATION DATE: MARCH 31, 2022
Always verify licenses online at MyFloridaLicense.com

Do not alter this document in any form.
This is your license. It is unlawful for anyone other than the licensee to use this document.

Ron DeSantis, Governor
Halsey Beshears, Secretary

Florida dbpr

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

CONSTRUCTION INDUSTRY LICENSING BOARD

THE GENERAL CONTRACTOR HEREIN IS CERTIFIED UNDER THE PROVISIONS OF CHAPTER 489, FLORIDA STATUTES

SMITH, LINDA JOY
CBRE HEERY, INC.
3550 LENOX RD., SUITE 2300
ATLANTA GA 30326

LICENSE NUMBER: CGC1510951
EXPIRATION DATE: AUGUST 31, 2022
Always verify licenses online at MyFloridaLicense.com

Do not alter this document in any form.
This is your license. It is unlawful for anyone other than the licensee to use this document.

Ron DeSantis, Governor
Halsey Beshears, Secretary

Florida dbpr

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

BOARD OF ARCHITECTURE & INTERIOR DESIGN

THE ARCHITECT HEREIN IS LICENSED UNDER THE PROVISIONS OF CHAPTER 481, FLORIDA STATUTES

GAVARRETE, FERNANDO
SEQUEIRA & GAVARRETE INC
CBRE HEERY, INC
7650 CORPORATE CENTER DRIVE
SUITE 302
MIAMI FL 33126

LICENSE NUMBER: AR0009014
EXPIRATION DATE: FEBRUARY 28, 2023
Always verify licenses online at MyFloridaLicense.com

Do not alter this document in any form.
This is your license. It is unlawful for anyone other than the licensee to use this document.

PMTECHNOLOGIES
project professionals

1/11/2021 Detail by Entity Name

Florida Department of State Division of Corporations

Sunbiz.org Division of Corporations an official State of Florida website

Department of State / Division of Corporations / Search Records / Search by Entity Name /

Detail by Entity Name

Foreign Profit Corporation
PROJECT MANAGEMENT TECHNOLOGY (GA), INC.

Filing Information

Document Number	F12000001906
FEI/EIN Number	58-2623307
Date Filed	05/04/2012
State	GA
Status	ACTIVE

Principal Address

980 Hammond Drive, Ste 775
Atlanta, GA 30328

Changed: 04/06/2017

Mailing Address

980 Hammond Drive, Ste 775
Atlanta, GA 30328

Changed: 04/06/2017

Registered Agent Name & Address

CT CORPORATION SYSTEM
1200 S PINE ISLAND RD
PLANTATION, FL 33324

Officer/Director Detail

Name & Address

Title P

MEYERS, THOMAS J
7025 CARLISLE LANE
ALPHARETTA, GA 30022

Annual Reports

Report Year	Filed Date
2018	04/10/2018
2019	04/10/2019
2020	05/29/2020

search.sunbiz.org/Inquiry/CorporationSearch/SearchResultDetail?inquirytype=EntityName&directionType=Initial&searchNameOrder=PROJECTMANAGEMENTT… 1/2

1/11/2021 Detail by Entity Name

Document Images

05/29/2020 -- ANNUAL REPORT	
04/10/2019 -- ANNUAL REPORT	View image in PDF format
04/10/2018 -- ANNUAL REPORT	View image in PDF format
04/06/2017 -- ANNUAL REPORT	View image in PDF format
04/27/2016 -- ANNUAL REPORT	View image in PDF format
03/13/2015 -- ANNUAL REPORT	View image in PDF format
03/06/2014 -- ANNUAL REPORT	View image in PDF format
04/01/2013 -- ANNUAL REPORT	View image in PDF format
05/04/2012 -- Foreign Profit	View image in PDF format
	View image in PDF format

MESSAM CONSTRUCTION

Ron DeSantis, Governor — Halsey Beshears, Secretary — Florida dbpr

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

CONSTRUCTION INDUSTRY LICENSING BOARD

THE GENERAL CONTRACTOR HEREIN IS CERTIFIED UNDER THE PROVISIONS OF CHAPTER 489, FLORIDA STATUTES

MESSAM, WAYNE MARTIN

ASSET BUILDERS LLC
3600 RED ROAD STE. 303
MIRAMAR FL 33025

LICENSE NUMBER: CGC1512276
EXPIRATION DATE: AUGUST 31, 2022
Always verify licenses online at MyFloridaLicense.com

Do not alter this document in any form.

This is your license. It is unlawful for anyone other than the licensee to use this document.

AERO SYSTEMS ENGINEERING

THE Chappell GROUP INC

State of Florida
Department of State

I certify from the records of this office that AERO SYSTEMS ENGINEERING, INC. is a Georgia corporation authorized to transact business in the State of Florida, qualified on March 25, 2002.

The document number of this corporation is F02000001577.

I further certify that said corporation has paid all fees due this office through December 31, 2017, that its most recent annual report/uniform business report was filed on April 28, 2017, and that its status is active.

I further certify that said corporation has not filed a Certificate of Withdrawal.

Given under my hand and the Great Seal of the State of Florida at Tallahassee, the Capital, this the Second day of February, 2018

Secretary of State

Tracking Number: CU8262969897

To authenticate this certificate,visit the following site,enter this number, and then follow the instructions displayed.

https://services.sunbiz.org/Filings/CertificateOfStatus/CertificateAuthentication

State of Florida
Department of State

I certify from the records of this office that THE CHAPPELL GROUP, INC. is a corporation organized under the laws of the State of Florida, filed on April 14, 2005.

The document number of this corporation is P05000055901.

I further certify that said corporation has paid all fees due this office through December 31, 2021, that its most recent annual report/uniform business report was filed on February 17, 2021, and that its status is active.

I further certify that said corporation has not filed Articles of Dissolution.

Given under my hand and the Great Seal of the State of Florida at Tallahassee, the Capital, this the Seventeenth day of February, 2021

Secretary of State

Tracking Number: 0847756586CC

To authenticate this certificate,visit the following site,enter this number, and then follow the instructions displayed.

https://services.sunbiz.org/Filings/CertificateOfStatus/CertificateAuthentication

KEITH
Engineering Inspired Design.

ASSOCIATION OF STATE FLOODPLAIN MANAGERS, INC.

CERTIFICATION BOARD OF REGENTS

HEREBY CERTIFIES THAT PURSUANT TO THE PROVISIONS OF THE CHARTER FOR THE CERTIFIED FLOODPLAIN MANAGER PROGRAM

Timothy H. Gray, CFM

IS DULY REGISTERED AS AN

ASFPM CERTIFIED FLOODPLAIN MANAGER

IN TESTIMONY WHEREOF THIS CERTIFICATE HAS BEEN ISSUED BY THE AUTHORITY OF THE CERTIFICATION BOARD OF REGENTS, CERTIFICATE NO. US-20-11725, ISSUED 10/15/2020. THIS CERTIFICATE SHALL EXPIRE 1/31/2025, UNLESS RENEWED ACCORDING TO THE RULES OF THIS BOARD.

CERTIFICATION BOARD OF REGENTS
PRESIDENT, LOUIS T. GREENWELL, GISP, CFM

ASSOCIATION OF STATE FLOODPLAIN MANAGERS
EXECUTIVE DIRECTOR, CHAD M. BERGINNIS, CFM

ASFPM CFM CERTIFIED

Ron DeSantis, Governor

FBPE FLORIDA BOARD OF PROFESSIONAL ENGINEERS

STATE OF FLORIDA

BOARD OF PROFESSIONAL ENGINEERS

THE PROFESSIONAL ENGINEER HEREIN IS LICENSED UNDER THE PROVISIONS OF CHAPTER 471, FLORIDA STATUTES

KOGGAN, DEAN EDWARD

10496 FISHPOND COURT
WELLINGTON FL 33414

LICENSE NUMBER: PE86612
EXPIRATION DATE: FEBRUARY 28, 2023

Always verify licenses online at MyFloridaLicense.com

Do not alter this document in any form.

This is your license. It is unlawful for anyone other than the licensee to use this document.

KEITH
Engineering Inspired Design.

Ron DeSantis, Governor

FBPE FLORIDA BOARD OF PROFESSIONAL ENGINEERS

STATE OF FLORIDA

BOARD OF PROFESSIONAL ENGINEERS

THE PROFESSIONAL ENGINEER HEREIN IS LICENSED UNDER THE PROVISIONS OF CHAPTER 471, FLORIDA STATUTES

THIELE, JAMES ARNO
6631 OSBORNE DRIVE
LAKE WORTH FL 33462

LICENSE NUMBER: PE33256
EXPIRATION DATE: FEBRUARY 28, 2023
Always verify licenses online at MyFloridaLicense.com

Do not alter this document in any form.

This is your license. It is unlawful for anyone other than the licensee to use this document.

3/11/2021 Related License Information

Print

Licensee

Name:	KEITH & ASSOCIATES, INC.	License Number:	7928
Rank:	Registry	License Expiration Date:	
Primary Status:	Current	Original License Date:	04/03/1998

Related License Information

License Number	Status	Related Party	Relationship Type	Relation Effective Date	Rank	Expiration Date
32090	Current, Active	WILLIAMS, STEPHEN DONALD	Registry		Professional Engineer	02/28/2023

Florida Department of Agriculture and Consumer Services
Division of Consumer Services
Board of Professional Surveyors and Mappers
2005 Apalachee Pkway Tallahassee, Florida 32399-6500
800HELPFLA(435-7352) or (850) 488-2221

January 13, 2021

TIMOTHY HAMILTON GRAY
1432 SW 9TH ST
FORT LAUDERDALE, FL 33312-7266

SUBJECT: Professional Surveyor and Mapper License # LS6604

Your application / renewal as a professional surveyor and mapper as required by Chapter 472, Florida Statutes, has been received and processed.

The license appears below and is valid through February 28, 2023.

You are required to keep your information with the Board current. Please visit our website at www.800helpfla.com/psm to create your online account. If you have already created your online account, you can use the website to maintain your license. You can also find other valuable information on the website.

If you have any questions, please do not hesitate to call the Division of Consumer Services, Board of Professional Surveyors and Mappers at 800-435-7352 or 850-488-2221.

Detach Here

Florida Department of Agriculture and Consumer Services
Board of Professional Surveyors and Mappers

LS6604

Professional Surveyor and Mapper
TIMOTHY HAMILTON GRAY

IS LICENSED under the provisions of Ch. 472 FS
Expiration date: February 28, 2023

Detach Here

Florida Department of Agriculture and Consumer Services
Division of Consumer Services
Board of Professional Surveyors and Mappers
2005 Apalachee Pkway Tallahassee, Florida 32399-6500

License No.: LS6604
Expiration Date February 28, 2023

Professional Surveyor and Mapper License
Under the provisions of Chapter 472, Florida Statutes

TIMOTHY HAMILTON GRAY
1432 SW 9TH ST
FORT LAUDERDALE, FL 33312-7266

nicole fried

NICOLE "NIKKI" FRIED
COMMISSIONER OF AGRICULTURE

This is to certify that the professional surveyor and mapper whose name and address are shown above is licensed as required by Chapter 472, Florida Statutes.

Florida Department of Agriculture and Consumer Services
Division of Consumer Services
Board of Professional Surveyors and Mappers
2005 Apalachee Pkway Tallahassee, Florida 32399-6500

License No.: LS5660
Expiration Date February 28, 2023

Professional Surveyor and Mapper License
Under the provisions of Chapter 472, Florida Statutes

MICHAEL MARK MOSSEY
11311 NW 37 ST.
SUNRISE, FL 33323

nicole fried

NICOLE "NIKKI" FRIED
COMMISSIONER OF AGRICULTURE

This is to certify that the professional surveyor and mapper whose name and address are shown above is licensed as required by Chapter 472, Florida Statutes.

State of Florida
Department of State

I certify from the records of this office that KEITH AND ASSOCIATES, INC. is a corporation organized under the laws of the State of Florida, filed on January 20, 1998, effective January 16, 1998.

The document number of this corporation is P98000006011.

I further certify that said corporation has paid all fees due this office through December 31, 2021, that its most recent annual report/uniform business report was filed on January 4, 2021, and that its status is active.

I further certify that said corporation has not filed Articles of Dissolution.

Given under my hand and the Great Seal of the State of Florida at Tallahassee, the Capital, this the Fourth day of January, 2021

Secretary of State

Tracking Number: 4430818532CC

To authenticate this certificate,visit the following site,enter this number, and then follow the instructions displayed.

https://services.sunbiz.org/Filings/CertificateOfStatus/CertificateAuthentication

Ability of Professional Personnel

KELEUSMATIC technologies

State of Florida
Department of State

I certify from the records of this office that KELEUSMATIC TECHNOLOGIES, INC is a corporation organized under the laws of the State of Florida, filed on November 4, 2014, effective November 4, 2014.

The document number of this corporation is P14000090142.

I further certify that said corporation has paid all fees due this office through December 31, 2021, that its most recent annual report/uniform business report was filed on April 15, 2021, and that its status is active.

I further certify that said corporation has not filed Articles of Dissolution.

Given under my hand and the Great Seal of the State of Florida at Tallahassee, the Capital, this the Fifteenth day of April, 2021

Secretary of State

Tracking Number: 7578239289CC

To authenticate this certificate, visit the following site, enter this number, and then follow the instructions displayed.

https://services.sunbiz.org/Filings/CertificateOfStatus/CertificateAuthentication

Building Industry Consulting Service International

The Professional Designation of

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER®

Is awarded To

Michael K Yu

by BICSI in recognition of having successfully completed BICSI's registration and examination requirements.

Designation Number: 297454
Registration Start Date: 08-28-2020
Registration End Date: 12-31-2023

Chair, Registrations & Credentials Supervision Committee

BICSI RCDD Since 08-28-202

Director of Credentialing

BROWARD COUNTY FLORIDA

Office of Economic and Small Business Development

Governmental Center Annex
115 S. Andrews Avenue, Room A680 • Fort Lauderdale, Florida 33301 • 954-357-6400 • FAX 954-357-5674 • TTY 954-357-5664

This Certificate is Awarded to:

KELEUSMATIC TECHNOLOGIES, INC.

As set forth in the Broward County Business Opportunity Act of 2012, the certification requirements have been met for:

County Business Enterprise (CBE)
Small Business Enterprise (SBE)
Anniversary Date: August 11th

Authorized Representative

The Office of Economic and Small Business Development must be notified within 30 days of any material changes in the business which may affect ownership and control. Failure to do so may result in the revocation of this certificate and/or imposition of other sanctions.

A Service of the Broward County Board of County Commissioners
www.broward.org/smallbusiness

LAKDAS/YOHALEM ENGINEERING, INC.

Ron DeSantis, Governor

STATE OF FLORIDA

FBPE FLORIDA BOARD OF PROFESSIONAL ENGINEERS

BOARD OF PROFESSIONAL ENGINEERS

THE PROFESSIONAL ENGINEER HEREIN IS LICENSED UNDER THE PROVISIONS OF CHAPTER 471, FLORIDA STATUTES

SPECIAL INSPECTOR NUMBER: 0690

NANAYAKKARA, LAKDAS
2211 NE 54TH ST
FT LAUDERDALE FL 333083226

LICENSE NUMBER: PE37590
EXPIRATION DATE: FEBRUARY 28, 2023

Always verify licenses online at MyFloridaLicense.com

Do not alter this document in any form.

This is your license. It is unlawful for anyone other than the licensee to use this document.

FDOT
Florida Department of Transportation

RON DESANTIS
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

KEVIN J. THIBAULT, P.E.
SECRETARY

September 24, 2020

Lakdas Nanayakkara, President
LAKDAS/YOHALEM ENGINEERING, INC.
2211 NE 54th Street
Fort Lauderdale, Florida 33308

Dear Mr. Nanayakkara:

The Florida Department of Transportation has reviewed your application for prequalification package and determined that the data submitted is adequate to technically prequalify your firm for the following types of work:

Group 3 - Highway Design - Roadway

3.1 - Minor Highway Design

Group 4 - Highway Design - Bridges

4.1.1 - Miscellaneous Structures
4.1.2 - Minor Bridge Design

Group 10 - Construction Engineering Inspection

10.1 - Roadway Construction Engineering Inspection

Your firm is now technically prequalified with the Department for Professional Services in the above referenced work types. Your firm may pursue projects in the referenced work types with fees estimated at less than $500,000.00. This status shall be valid until September 24, 2021 for contracting purposes.

Should you have any questions, please feel free to contact me by email at carliayn.kell@dot.state.fl.us or by phone at 850-414-4597.

Sincerely,

Carliayn Kell
Professional Services
Qualification Administrator

CBHK/kw

Safety, Mobility, Innovation
www.fdot.gov

State of Florida
Department of State

I certify from the records of this office that LAKDAS/YOHALEM ENGINEERING, INC. is a corporation organized under the laws of the State of Florida, filed on November 9, 1987.

The document number of this corporation is K01968.

I further certify that said corporation has paid all fees due this office through December 31, 2021, that its most recent annual report/uniform business report was filed on January 15, 2021, and that its status is active.

I further certify that said corporation has not filed Articles of Dissolution.

Given under my hand and the Great Seal of the State of Florida at Tallahassee, the Capital, this the Fifteenth day of January, 2021

Secretary of State

Tracking Number: 5754353551CC

To authenticate this certificate,visit the following site,enter this number, and then follow the instructions displayed.

https://services.sunbiz.org/Filings/CertificateOfStatus/CertificateAuthentication

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

December 14, 2020

REGISTERED VENDOR NO.: 100200

Lakdas Nanayakkara, President
Lakdas -Yohalem Engineering, Inc.
2211 NE 54th Street
Fort Lauderdale, FL 33308

CERTIFICATION EFFECTIVE DATE:
January 30, 2021

CERTIFICATION EXPIRATION DATE:
January 30, 2024

Dear Mr. Nanayakkara:

Congratulations, the South Florida Water Management District (District) has recertified your firm as a Small Business Enterprise (SBE). This certification is valid for three (3) years and may **only** be applied when business is conducted in the following area(s):

Professional Engineering Services

Your submittal of bids or proposals to supply other products or services outside of the specialty area(s) noted above will not count toward SBE participation. If you require certification in other specialty areas, please contact the Procurement Bureau, SBE Section, for additional information.

Renewal is required every three (3) years and should be requested a minimum of 45 days prior to the above expiration date.

If any changes occur within your company during the certification period such as ownership, affiliate company status, address, telephone number, licensing status, gross revenue, or any information that relates to your SBE Certification status, you must notify this office in writing immediately. It is imperative that we maintain current information on your company at all times.

Certification is not a guarantee that your firm will receive work, nor an assurance that your firm will remain in the District's vendor database.

We look forward to a mutually beneficial working relationship.

Sincerely,

Joni Lynn Fox
Sr. Contract Compliance Specialist
Procurement Bureau

JLF/kk

3301 Gun Club Road, West Palm Beach, Florida 33406 • (561) 686-8800 • 1-800-432-2045
Mailing Address: P.O. Box 24680, West Palm Beach, FL 33416-4680 • www.sfwmd.gov

THANK YOU!

BROWARD COUNTY
FLORIDA

FORT LAUDERDALE-HOLLYWOOD INTERNATIONAL AIRPORT
BROWARD COUNTY, FLORIDA

NORTH PERRY AIRPORT
BROWARD COUNTY, FLORIDA



CBRE

Supplier: **CBRE, Inc.**

Standard Instructions to Vendors
Request for Proposals, Request for Qualifications, or Request for Letters of Interest

Vendors are instructed to read and follow the instructions carefully, as any misinterpretation or failure to comply with instructions may lead to a Vendor's submittal being rejected.

Vendor MUST submit its solicitation response electronically and MUST confirm its submittal in order for the County to receive a valid response through BidSync. Refer to the Purchasing Division website or contact BidSync for submittal instructions.

A. Responsiveness Criteria:

In accordance with Broward County Procurement Code Section 21.8.b.65, a Responsive Bidder [Vendor] means a person who has submitted a proposal which conforms in all material respects to a solicitation. The solicitation submittal of a responsive Vendor must be submitted on the required forms, which contain all required information, signatures, notarizations, insurance, bonding, security, or other mandated requirements required by the solicitation documents to be submitted at the time of proposal opening.

Failure to provide the information required below at the time of submittal opening may result in a recommendation Vendor is non-responsive by the Director of Purchasing. The Selection or Evaluation Committee will determine whether the firm is responsive to the requirements specified herein. The County reserves the right to waive minor technicalities or irregularities as is in the best interest of the County in accordance with Section 21.30.f.1(c) of the Broward County Procurement Code.

Below are standard responsiveness criteria; refer to **Special Instructions to Vendors**, for Additional Responsiveness Criteria requirement(s).

1. **Lobbyist Registration Requirement Certification**
   Refer to Lobbyist Registration Requirement Certification. The completed form should be submitted with the solicitation response but must be submitted within three business days of County's request. Vendor may be deemed non-responsive for failure to fully comply within stated timeframes.

2. **Addenda**
   The County reserves the right to amend this solicitation prior to the due date. Any change(s) to this solicitation will be conveyed through the written addenda process. Only written addenda will be binding. If a "must" addendum is issued, Vendor must follow instructions and submit required information, forms, or acknowledge addendum, as instructed therein. It is the responsibility of all potential Vendors to monitor the solicitation for any changing information, prior to submitting their response.

B. Responsibility Criteria:

Definition of a Responsible Vendor: In accordance with Section 21.8.b.64 of the Broward County Procurement Code, a Responsible Vendor means a Vendor who has the capability in all respects to perform the contract requirements, and the integrity and reliability which will assure good faith performance.

The Selection or Evaluation Committee will recommend to the awarding authority a determination of a Vendor's responsibility. At any time prior to award, the awarding authority may find that a Vendor is not responsible to receive a particular award.

Failure to provide any of this required information and in the manner required may result in a recommendation by the Director of Purchasing that the Vendor is non-responsive.

Below are standard responsibility criteria; refer to **Special Instructions to Vendors**, for Additional Responsibility Criteria requirement(s).

1. **Litigation History**

a. All Vendors are required to disclose to the County all "material" cases filed, pending, or resolved during the last three (3) years prior to the solicitation response due date, whether such cases were brought by or against the Vendor, any parent or subsidiary of the Vendor, or any predecessor organization. Additionally, all Vendors are required to disclose to the County all "material" cases filed, pending, or resolved against any principal of Vendor, regardless of whether the principal was associated with Vendor at the time of the "material" cases against the principal, during the last three (3) years prior to the solicitation response. A case is considered to be "material" if it relates, in whole or in part, to any of the following:

i. A similar type of work that the vendor is seeking to perform for the County under the current solicitation;
ii. An allegation of fraud, negligence, error or omissions, or malpractice against the vendor or any of its principals or agents who would be performing work under the current solicitation;
iii. A vendor's default, termination, suspension, failure to perform, or improper performance in connection with any contract;
iv. The financial condition of the vendor, including any bankruptcy petition (voluntary and involuntary) or receivership; or
v. A criminal proceeding or hearing concerning business-related offenses in which the vendor or its principals (including officers) were/are defendants.

b. For each material case, the Vendor is required to provide all information identified in the **Litigation History Form**. Additionally, the Vendor shall provide a copy of any judgment or settlement of any material case during the last three (3) years prior to the solicitation response. Redactions of any confidential portions of the settlement agreement are only permitted upon a certification by Vendor that all redactions are required under the express terms of a pre-existing confidentiality agreement or provision.

c. The County will consider a Vendor's litigation history information in its review and determination of responsibility.

d. If the Vendor is a joint venture, the information provided should encompass the joint venture and each of the entities forming the joint venture.

e. A vendor is required to disclose to the County any and all cases(s) that exist between the County and any of the Vendor's subcontractors/subconsultants proposed to work on this project during the last five (5) years prior to the solicitation response.

f. Failure to disclose any material case, including all requested information in connection with each such case, as well as failure to disclose the Vendor's subcontractors/subconsultants litigation history against the County, may result in the Vendor being deemed non-responsive.

2. **Financial Information**

a. All Vendors are required to provide the Vendor's financial statements at the time of submittal in order to demonstrate the Vendor's financial capabilities.

b. Each Vendor shall submit its most recent two years of financial statements for review. The financial statements are not required to be audited financial statements. The annual financial statements will be in the form of:

i. Balance sheets, income statements and annual reports; or
ii. Tax returns; or
iii. SEC filings.

If tax returns are submitted, ensure it does not include any personal information (as defined under Florida Statutes Section 501.171, Florida Statutes), such as social security numbers, bank account or credit card numbers, or any personal pin numbers. If any personal information data is part of financial statements, redact information prior to submitting a response the County.

c. If a Vendor has been in business for less than the number of years of required financial statements, then the Vendor must disclose all years that the Vendor has been in business, including any partial year-to-date financial statements.

d. The County may consider the unavailability of the most recent year's financial statements and whether the Vendor acted in good faith in disclosing the financial documents in its evaluation.

e. Any claim of confidentiality on financial statements should be asserted at the time of submittal. Refer to **Standard Instructions to Vendors**, Confidential Material/ Public Records and Exemptions for instructions on submitting confidential financial statements. The Vendor's failure to provide the information as instructed may lead to the information becoming public.

f. Although the review of a Vendor's financial information is an issue of responsibility, the failure to either provide the financial documentation or correctly assert a confidentiality claim pursuant the Florida Public Records Law and the solicitation requirements (Confidential Material/ Public Records and Exemptions section) may result in a recommendation of non-responsiveness by the Director of Purchasing.

3. **Authority to Conduct Business in Florida**

a. A Vendor must have the authority to transact business in the State of Florida and be in good standing with the Florida Secretary of State. For further information, contact the Florida Department of State, Division of Corporations.

b. The County will review the Vendor's business status based on the information provided in response to this solicitation.

c. It is the Vendor's responsibility to comply with all state and local business requirements.

d. Vendor should list its active Florida Department of State Division of Corporations Document Number (or Registration No. for fictitious names) in the Vendor Questionnaire, Question No. 10.

e. If a Vendor is an out-of-state or foreign corporation or partnership, the Vendor must obtain the authority to transact business in the State of Florida or show evidence of application for the authority to transact business in the State of Florida, upon request of the County.

f. A Vendor that is not in good standing with the Florida Secretary of State at the time of a submission to this solicitation may be deemed non-responsible.

g. If successful in obtaining a contract award under this solicitation, the Vendor must remain in good standing throughout the contractual period of performance.

4. Affiliated Entities of the Principal(s)

a. All Vendors are required to disclose the names and addresses of "affiliated entities" of the Vendor's principal(s) over the last five (5) years (from the solicitation opening deadline) that have acted as a prime Vendor with the County. The Vendor is required to provide all information required on the Affiliated Entities of the Principal(s) Certification Form.

b. The County will review all affiliated entities of the Vendor's principal(s) for contract performance evaluations and the compliance history with the County's Small Business Program, including CBE, DBE and SBE goal attainment requirements. "Affiliated entities" of the principal(s) are those entities related to the Vendor by the sharing of stock or other means of control, including but not limited to a subsidiary, parent or sibling entity.

c. The County will consider the contract performance evaluations and the compliance history of the affiliated entities of the Vendor's principals in its review and determination of responsibility.

5. Insurance Requirements

The **Insurance Requirement Form** reflects the insurance requirements deemed necessary for this project. It is not necessary to have this level of insurance in effect at the time of submittal, but it is necessary to submit certificates indicating that the Vendor currently carries the insurance or to submit a letter from the carrier indicating it can provide insurance coverages.

C. Additional Information and Certifications

The following forms and supporting information (if applicable) should be returned with Vendor's submittal. If not provided with submittal, the Vendor must submit within three business days of County's request. Failure to timely submit may affect Vendor's evaluation.

1. Vendor Questionnaire

Vendor is required to submit detailed information on their firm. Refer to the **Vendor Questionnaire** and submit as instructed.

2. Standard Certifications

Vendor is required to certify to the below requirements. Refer to the **Standard Certifications** and submit as instructed.

a. **Cone of Silence Requirement Certification**
b. **Drug-Free Workplace Certification**
c. **Non-Collusion Certification**
d. **Public Entities Crimes Certification**
e. **Scrutinized Companies List Certification**

3. Subcontractors/Subconsultants/Suppliers Requirement

The Vendor shall submit a listing of all subcontractors, subconsultants, and major material suppliers, if any, and the portion of the contract they will perform. Vendors must follow the instructions included on the **Subcontractors/Subconsultants/Suppliers Information Form** and submit as instructed.

D. Standard Agreement Language Requirements

1. The acceptance of or any exceptions taken to the terms and conditions of the County's Agreement shall be considered a part of a Vendor's submittal and will be considered by the Selection or Evaluation Committee.

2. The applicable Agreement terms and conditions for this solicitation are indicated in the Special Instructions to Vendors.

3. Vendors are required to review the applicable terms and conditions and submit the Agreement Exception Form. If the Agreement Exception Form is not provided with the submittal, it shall be deemed an affirmation by the Vendor that it accepts the Agreement terms and conditions as disclosed in the solicitation.

4. If exceptions are taken, the Vendor must specifically identify each term and condition with which it is taking an exception. Any exception not specifically listed is deemed waived. Simply identifying a section or article number is not sufficient to state an exception. Provide either a redlined version of the specific change(s) or specific proposed alternative language. Additionally, a brief justification specifically addressing each provision to which an exception is taken should be provided.

5. Submission of any exceptions to the Agreement does not denote acceptance by the County. Furthermore, taking exceptions to the County's terms and conditions may be viewed unfavorably by the Selection or Evaluation Committee and ultimately may impact the overall evaluation of a Vendor's submittal.

E. Evaluation Criteria

1. The Selection or Evaluation Committee will evaluate Vendors as per the **Evaluation Criteria.** The County reserves the right to obtain additional information from a Vendor.

2. Vendor has a continuing obligation to inform the County in writing of any material changes to the information it has previously submitted. The County reserves the right to request additional information from Vendor at any time.

3. For Request for Proposals, the following shall apply:

   a. The Director of Purchasing may recommend to the Evaluation Committee to short list the most qualified firms prior to the Final Evaluation.

   b. The Evaluation Criteria identifies points available; a total of 100 points is available.

   c. If the Evaluation Criteria includes a request for pricing, the total points awarded for price is determined by applying the following formula:

      (Lowest Proposed Price/Vendor's Price) x (Maximum Number of Points for Price)
      = Price Score

d. After completion of scoring, the County may negotiate pricing as in its best interest.

4. For Requests for Letters of Interest or Request for Qualifications, the following shall apply:

   a. The Selection or Evaluation Committee will create a short list of the most qualified firms.
   b. The Selection or Evaluation Committee will either:

      i. Rank shortlisted firms; or

ii. If the solicitation is part of a two-step procurement, shortlisted firms will be requested to submit a response to the Step Two procurement.

F. Demonstrations

If applicable, as indicated in Special Instructions to Vendors, Vendors will be required to demonstrate the nature of their offered solution. After receipt of submittals, all Vendors will receive a description of, and arrangements for, the desired demonstration. In accordance with Section 286.0113 of the Florida Statutes and pursuant to the direction of the Broward County Board of Commissioners, demonstrations are closed to only the vendor team and County staff.

G. Presentations

Vendors that are found to be both responsive and responsible to the requirements of the solicitation and/or shortlisted (if applicable) will have an opportunity to make an oral presentation to the Selection or Evaluation Committee on the Vendor's approach to this project and the Vendor's ability to perform. The committee may provide a list of subject matter for the discussion. All Vendor's will have equal time to present but the question-and-answer time may vary. In accordance with Section 286.0113 of the Florida Statutes and the direction of the Broward County Board of Commissioners, presentations during Selection or Evaluation Committee Meetings are closed. Only the Selection or Evaluation Committee members, County staff and the vendor and their team scheduled for that presentation will be present in the Meeting Room during the presentation and subsequent question and answer period.

H. Public Art and Design Program

If indicated in **Special Instructions to Vendors,** Public Art and Design Program, Section 1-88, Broward County Code of Ordinances, applies to this project. It is the intent of the County to functionally integrate art, when applicable, into capital projects and integrate artists' design concepts into this improvement project. The Vendor may be required to collaborate with the artist(s) on design development within the scope of this request. Artist(s) shall be selected by Broward County through an independent process. For additional information, contact the Broward County Cultural Division.

I. Committee Appointment

The Cone of Silence shall be in effect for County staff at the time of the Selection or Evaluation Committee appointment and for County Commissioners and Commission staff at the time of the Shortlist Meeting of the Selection Committee or the Initial Evaluation Meeting of the Evaluation Committee. The committee members appointed for this solicitation are available on the Purchasing Division's website under Committee Appointment.

J. Committee Questions, Request for Clarifications, Additional Information

At any committee meeting, the Selection or Evaluation Committee members may ask questions, request clarification, or require additional information of any Vendor's submittal or proposal. It is highly recommended Vendors attend to answer any committee questions (if requested), including a Vendor representative that has the authority to bind.

Vendor's answers may impact evaluation (and scoring, if applicable). Upon written request to the Purchasing Agent prior to the meeting, a conference call number will be made available for Vendor participation via teleconference. Only Vendors that are found to be both responsive and responsible to the requirements of the solicitation and/or shortlisted (if applicable) are requested to participate in a final (or presentation) Selection or Evaluation committee meeting.

K. Vendor Questions

The County provides a specified time for Vendors to ask questions and seek clarification regarding solicitation requirements. All questions or clarification inquiries must be submitted through BidSync by the date and time referenced in the solicitation document (including any addenda). The County will respond to questions via Bid Sync.

L. Confidential Material/ Public Records and Exemptions

1. Broward County is a public agency subject to Chapter 119, Florida Statutes. Upon receipt, all submittals become "public records" and shall be subject to public disclosure consistent with Chapter 119, Florida Statutes. Submittals may be posted on the County's public website or included in a public records request response unless there is a declaration of "confidentiality" pursuant to the public records law and in accordance with the procedures in this section.

2. Any confidential material(s) the Vendor asserts is exempt from public disclosure under Florida Statutes must be labeled as "Confidential", and marked with the specific statute and subsection asserting exemption from Public Records.

3. To submit confidential material, three hardcopies must be submitted in a sealed envelope, labeled with the solicitation number, title, date and the time of solicitation opening to:

   Broward County Purchasing Division
   115 South Andrews Avenue, Room 212
   Fort Lauderdale, FL 33301

4. Material will not be treated as confidential if the Vendor does not cite the applicable Florida Statute(s) allowing the document to be treated as confidential.

5. Any materials that the Vendor claims to be confidential and exempt from public records must be marked and separated from the submittal. If the Vendor does not comply with these instructions, the Vendor's claim for confidentiality will be deemed as waived.

6. Submitting confidential material may impact full discussion of your submittal by the Selection or Evaluation Committee because the Committee will be unable to discuss the details contained in the documents cloaked as confidential at the publicly noticed Committee meeting.

M. Copyrighted Materials

Copyrighted material is not exempt from the Public Records Law, Chapter 119, Florida Statutes. Submission of copyrighted material in response to any solicitation will constitute a license and permission for the County to make copies (including electronic copies) as reasonably necessary for the use by County staff and agents, as well as to make the materials available for inspection or production pursuant to Public Records Law, Chapter 119, Florida Statutes.

N. State and Local Preferences

If the solicitation involves a federally funded project where the fund requirements prohibit the use of state and/or local preferences, such preferences contained in the Local Preference Ordinance and Broward County Procurement Code will not be applied in the procurement process.

O. Local Preference

The following local preference provisions shall apply except where otherwise prohibited by federal or state law or other funding source restrictions.

For all competitive solicitations in which objective factors used to evaluate the responses from vendors are assigned point totals:

a. Five percent (5%) of the available points (for example, five points of a total 100 points) shall be awarded to each locally based business and to each joint venture composed solely of locally based businesses, as applicable;
b. Three percent (3%) of the available points shall be awarded to each locally based subsidiary and to each joint venture that is composed solely of locally based subsidiaries, as applicable; and
c. For any other joint venture, points shall be awarded based upon the respective proportion of locally based businesses' and locally based subsidiaries' equity interests in the joint venture.

If, upon the completion of final rankings (technical and price combined, if applicable) by the evaluation committee, a nonlocal vendor is the highest ranked vendor and one or more Local Businesses (as defined by Section 1-74 of the Broward County Code of Ordinances) are within five percent (5%) of the total points obtained by the nonlocal vendor, the highest ranked Local Business shall be deemed to be the highest ranked vendor overall, and the County shall proceed to negotiations with that vendor. If impasse is reached, the County shall next proceed to negotiations with the next highest ranked Local Business that was within five percent (5%) of the total points obtained by the nonlocal vendor, if any.

Refer to Section 1-75 of the Broward County Local Preference Ordinance and the **Location Certification Form** for further information.

P. Tiebreaker Criteria

In accordance with Section 21.31.d of the Broward County Procurement Code, the tiebreaker criteria shall be applied based upon the information provided in the Vendor's response to the solicitation. In order to receive credit for any tiebreaker criterion, complete and accurate information must be contained in the Vendor's submittal.

1. Local Certification Form;
2. Domestic Partnership Act Certification (Requirement and Tiebreaker);
3. Tiebreaker Criteria Form: Volume of Work Over Five Years

Q. Posting of Solicitation Results and Recommendations

The Broward County Purchasing Division's website is the location for the County's posting of all solicitations and contract award results. It is the obligation of each Vendor to monitor the website in order to obtain complete and timely information.

R. Review and Evaluation of Responses

A Selection or Evaluation Committee is responsible for recommending the most qualified Vendor(s). The process for this procurement may proceed in the following manner:

1. The Purchasing Division delivers the solicitation submittals to agency staff for summarization for the committee members. Agency staff prepares a report, including a matrix of responses submitted by the Vendors. This may include a technical review, if applicable.

2. Staff identifies any incomplete responses. The Director of Purchasing reviews the information and makes a recommendation to the Selection or Evaluation Committee as to each Vendor's responsiveness to the requirements of the solicitation. The final determination of responsiveness rests solely on the decision of the committee.

3. At any time prior to award, the awarding authority may find that a Vendor is not responsible to receive a particular award. The awarding authority may consider the following factors, without limitation: debarment or removal from the authorized Vendors list or a final decree, declaration or order by a court or administrative hearing officer or tribunal of competent jurisdiction that the Vendor has breached or failed to perform a contract, claims history of the Vendor, performance history on a County contract(s), an unresolved concern, or any other cause under this code and Florida law for evaluating the responsibility of a Vendor.

S. Vendor Protest

Sections 21.118 and 21.120 of the Broward County Procurement Code set forth procedural requirements that apply if a Vendor intends to protest a solicitation or proposed award of a contract and state in part the following:

1. Any protest concerning the solicitation or other solicitation specifications or requirements must be made and received by the County within seven business days from the posting of the solicitation or addendum on the Purchasing Division's website. Such protest must be made in writing to the Director of Purchasing. Failure to timely protest solicitation specifications or requirements is a waiver of the ability to protest the specifications or requirements.

2. Any protest concerning a solicitation or proposed award above the award authority of the Director of Purchasing, after the RLI or RFP opening, shall be submitted in writing and received by the Director of Purchasing within five business days from the posting of the recommendation of award for Invitation to Bids or the final recommendation of ranking for Request for Letters of Interest and Request for Proposals on the Purchasing Division's website.

3. Any actual or prospective Vendor who has a substantial interest in and is aggrieved in connection with the proposed award of a contract that does not exceed the amount of the award authority of the Director of Purchasing, may protest to the Director of Purchasing. The protest shall be submitted in writing and received within three (3) business days from the posting of the recommendation of award for Invitation to Bids or the final recommendation of ranking for Request for Letters of Interest and Request for Proposals on the Purchasing Division's website.

4. For purposes of this section, a business day is defined as Monday through Friday between 8:30 a.m. and 5:00 p.m. Failure to timely file a protest within the time prescribed for a proposed contract award shall be a waiver of the Vendor's right to protest.

5. As a condition of initiating any protest, the protestor shall present the Director of Purchasing a nonrefundable filing fee in accordance with the table below.

Estimated Contract Amount	Filing Fee
$30,000 - $250,000	$ 500
$250,001 - $500,000	$1,000
$500,001 - $5 million	$3,000
Over $5 million	5,000

If no contract proposal amount was submitted, the estimated contract amount shall be the County's estimated contract price for the project. The County may accept cash, money order, certified check,

or cashier's check, payable to Broward County Board of Commissioners.

T. Right of Appeal

Pursuant to Section 21.83.d of the Broward County Procurement Code, any Vendor that has a substantial interest in the matter and is dissatisfied or aggrieved in connection with the Selection or Evaluation Committee's determination of responsiveness may appeal the determination pursuant to Section 21.120 of the Broward County Procurement Code.

1. The appeal must be in writing and sent to the Director of Purchasing within ten (10) calendar days of the determination by the Selection or Evaluation Committee to be deemed timely.

2. As required by Section 21.120, the appeal must be accompanied by an appeal bond by a Vendor having standing to protest and must comply with all other requirements of this section.

3. The institution and filing of an appeal is an administrative remedy to be employed prior to the institution and filing of any civil action against the County concerning the subject matter of the appeal.

U. Rejection of Responses

The Selection or Evaluation Committee may recommend rejecting all submittals as in the best interests of the County. The rejection shall be made by the Director of Purchasing, except when a solicitation was approved by the Board, in which case the rejection shall be made by the Board.

V. Negotiations

The County intends to conduct the first negotiation meeting no later than two weeks after approval of the final ranking as recommended by the Selection or Evaluation Committee. At least one of the representatives for the Vendor participating in negotiations with the County must be authorized to bind the Vendor. In the event that the negotiations are not successful within a reasonable timeframe (notification will be provided to the Vendor) an impasse will be declared and negotiations with the first-ranked Vendor will cease. Negotiations will begin with the next ranked Vendor, etc. until such time that all requirements of Broward County Procurement Code have been met. In accordance with Section 286.0113 of the Florida Statutes and the direction of the Broward County Board of Commissioners, negotiations resulting from Selection or Evaluation Committee Meetings are closed. Only County staff and the selected vendor and their team will be present during negotiations.

W. Submittal Instructions:

1. Broward County does not require any personal information (as defined under Section 501.171, Florida Statutes), such as social security numbers, driver license numbers, passport, military ID, bank account or credit card numbers, or any personal pin numbers, in order to submit a response for ANY Broward County solicitation. DO NOT INCLUDE any personal information data in any document submitted to the County. If any personal information data is part of a submittal, this information must be redacted prior to submitting a response to the County.

2. Vendor MUST submit its solicitation response electronically and MUST confirm its submittal in order for the County to receive a valid response through BidSync. It is the Vendor's sole responsibility to assure its response is submitted and received through BidSync by the date and time specified in the solicitation.

3. The County will not consider solicitation responses received by other means. Vendors are encouraged to submit their responses in advance of the due date and time specified in the solicitation document. In

the event that the Vendor is having difficulty submitting the solicitation document through Bid Sync, immediately notify the Purchasing Agent and then contact BidSync for technical assistance.

4. Vendor must view, submit, and/or accept each of the documents in BidSync. Web-fillable forms can be filled out and submitted through BidSync.

5. After all documents are viewed, submitted, and/or accepted in BidSync, the Vendor must upload additional information requested by the solicitation (i.e. Evaluation Criteria and Financials Statements) in the Item Response Form in BidSync, under line one (regardless if pricing requested).

6. Vendor should upload responses to Evaluation Criteria in Microsoft Word or Excel format.

7. If the Vendor is declaring any material confidential and exempt from Public Records, refer to Confidential Material/ Public Records and Exemptions for instructions on submitting confidential material.

8. After all files are uploaded, Vendor must submit and CONFIRM its offer (by entering password) for offer to be received through BidSync.

9. If a solicitation requires an original Proposal Bond (per Special Instructions to Vendors), Vendor must submit in a sealed envelope, labeled with the solicitation number, title, date and the time of solicitation opening to:

    Broward County Purchasing Division
    115 South Andrews Avenue, Room 212
    Fort Lauderdale, FL 33301

A copy of the Proposal Bond should also be uploaded into Bid Sync; this does not replace the requirement to have an original proposal bond. Vendors must submit the original Proposal Bond, by the solicitation due date and time.

Supplier: CBRE, Inc.

Office of Economic and Small Business Requirements: CBE Goal Participation

A. In accordance with the Broward County Business Opportunity Act of 2012, Section 1-81, Code of Ordinances, as amended (the "Business Opportunity Act"), the County Business Enterprise (CBE) Program is applicable to this contract. All Vendors responding to this solicitation are required to utilize CBE firms to perform the assigned participation goal for this contract.

B. The CBE participation goal will be established based on the expected expenditure amount for the proposed scope of services for the project. The Office of Economic and Small Business Development (OESBD) will not include alternate items, optional services or allowances when establishing the CBE participation goal. If the County subsequently chooses to award any alternate items, optional services or allowances as determined by OESBD and the Contract Administrator to be related to the scope of services, OESBD may apply the established CBE participation goal. In such an instance, the County will issue a written notice to the successful Vendor that the CBE participation goal will also apply to the alternate items, optional services or allowances. Vendor shall submit all required forms pertaining to its compliance with the CBE participation goal, as applicable. Failure by Vendor to submit the required forms may result in the rejection of Vendor's solicitation submittal prior to the award or failure to comply with the contract requirements may have an impact on the vendor performance evaluation post award, as applicable.

C. CBE Program Requirements: Compliance with CBE participation goal requirements is a matter of responsibility; Vendor should submit all required forms and information with its solicitation submittal. If the required forms and information are not provided with the Vendor's solicitation submittal, then Vendor must supply the required forms and information no later than three (3) business days after request by OESBD. Vendor may be deemed non-responsible for failure to fully comply with CBE Program Requirements within these stated timeframes.

1. Vendor should include in its solicitation submittal a **Letter Of Intent Between Bidder/Offeror and County Business Enterprise (CBE) Subcontractor/Supplier** for each CBE firm the Vendor intends to use to achieve the assigned CBE participation goal. The form is available at the following link: http://www.broward.org/EconDev/Documents/CBELetterOfIntent.pdf

2. If Vendor is unable to attain the CBE participation goal, Vendor should include in its solicitation submittal an **Application for Evaluation of Good Faith Efforts** and all of the required supporting information. The form is available at the following link: http://www.broward.org/EconDev/WhatWeDo/Documents/GoodFaithEffortEval.pdf

D. OESBD maintains an online directory of CBE firms. The online directory is available for use by Vendors at https://webapps4.broward.org/smallbusiness/sbdirectory.aspx.

E. For detailed information regarding the CBE Program contact the OESBD at (954) 357-6400 or visit the website at: http://www.broward.org/EconDev/SmallBusiness/

F. If awarded the contract, Vendor agrees to and shall comply with all applicable requirements of the Business Opportunity Act and the CBE Program in the award and administration of the contract.

1. No party to this contract may discriminate on the basis of race, color, sex, religion, national origin, disability, age, marital status, political affiliation, sexual orientation, pregnancy, or gender identity and expression in the performance of this contract.

2. All entities that seek to conduct business with the County, including Vendor or any Prime Contractors, Subcontractors, and Bidders, shall conduct such business activities in a fair and

reasonable manner, free from fraud, coercion, collusion, intimidation, or bad faith. Failure to do so may result in the cancellation of this solicitation, cessation of contract negotiations, revocation of CBE certification, and suspension or debarment from future contracts.

3. If Vendor fails to meet or make Good Faith Efforts (as defined in the Business Opportunity Act) to meet the CBE participation commitment (the "Commitment"), then Vendor shall pay the County liquidated damages in an amount equal to fifty percent (50%) of the actual dollar amount by which Vendor failed to achieve the Commitment, up to a maximum amount of ten percent (10%) of the total contract amount, excluding costs and reimbursable expenses. An example of this calculation is stated in Section 1-81.7, Broward County Code of Ordinances.

4. Vendor shall comply with all applicable requirements of the Business Opportunity Act in the award of this contract. Failure by Vendor to carry out any of these requirements shall constitute a material breach of the contract, which shall permit the County to terminate this contract or to exercise any other remedy provided under this contract, the Broward County Code of Ordinances, the Broward County Administrative Code, or other applicable laws, with all such remedies being cumulative.

5. Vendor shall pay its CBE subcontractors and suppliers, within fifteen (15) days following receipt of payment from the County, for all completed subcontracted work and supplies. If Vendor withholds an amount from CBE subcontractors or suppliers as retainage, such retainage shall be released and paid within fifteen (15) days following receipt of payment of retained amounts from the County.

6. Vendor understands that the County will monitor Vendor's compliance with the CBE Program requirements. Vendor must provide OESBD with a Monthly Utilization Report (MUR) to confirm its compliance with the Commitment agreed to in the contract; timely submission of the MUR every month throughout the term of the contract, including amendment and extension terms, is a condition precedent to the County's payment of Vendor under the contract.

Supplier: **CBRE, Inc.**

VENDOR QUESTIONNAIRE AND STANDARD CERTIFICATIONS
Request for Proposals, Request for Qualifications, or Request for Letters of Interest

Vendor should complete questionnaire and complete and acknowledge the standard certifications and submit withthe solicitation response. If not submitted with solicitation response, it must be submitted within three business days of County's request. Failure to timely submit may affect Vendor'sevaluation.

If a response requires additional information, the Vendor should upload a written detailed response with submittal; each response should be numbered to match the question number. The completed questionnaire and attached responses will become part of the procurement record. It is imperative that the person completing the Vendor Questionnaire be knowledgeable about the proposing Vendor's business and operations.

1. Legal business name: **CBRE Heery Inc.**
2. Doing Business As/Fictitious Name (if applicable): **CBRE**
3. Federal Employer I.D. no. (FEIN): **58-0827945**
4. Dun and Bradstreet No.:
5. Website address (if applicable): **www.heery.com**
6. Principal place of business address: **7650 Corporate Center Drive, Suite 302 Miami, FL 33126**
7. Office location responsible for this project: **7650 Corporate Center Drive, Suite 302 Miami, FL 33126**
8. Telephone no.: **954-462-5655**Fax no.: **954-468-3069**
9. Type of business (check appropriate box):
   - ☑ Corporation (specify the state of incorporation): **GA**
   - ☐ Sole Prioprietor
   - ☐ Limited Liability Company (LLC)
   - ☐ Limited Partnership
   - ☐ General Partnership (State and County filled in)
   - ☐ Other – Specify
10. List Florida Department of State, Division of Corporations document number (or registration number if fictitious name):
11. List name and title of each principal, owner, officer, and major shareholder:
    a) **Fernando Gavarrete**
    b) **Michael Rometo**
    c) **Karen McCallum**
    d)
12. AUTHORIZED CONTACT(S) FOR YOUR FIRM:
    Name: **Michael Rometo**
    Title: **Managing Director**
    E-mail: **michael.rometo@cbre.com**
    Telephone No.: **404-946-2367**

    Name: **Karen McCallum**
    Title: **Senior Director, Design**
    E-mail: **karen.mccallum@cbre.com**
    Telephone No.: **404-946-2294**
13. Has your firm, its principals, officers or predecessor organization(s) been debarred or suspended by any government entity within the last three years? If yes, specify details in an attached written response. ☐ Yes ☑ No
14. Has your firm, its principals, officers or predecessor organization(s) ever been debarred or suspended by any government entity? If yes, specify details in an attached written response, including the reinstatement date, if granted. ☐ Yes ☑ No
15. Has your firm ever failed to complete any services and/or delivery of products during the last three (3) years? If yes, specify details in an attached written response. ☐ Yes ☑ No
16. Is your firm or any of its principals or officers currently principals or officers of another organization? If yes, specify details in an attached written response. ☐ Yes ☑ No
17. Have any voluntary or involuntary bankruptcy petitions been filed by or against your firm, its parent or subsidiaries or predecessor organizations during the last three years? If yes, specify details in an attached written response. ☐ Yes ☑ No
18. Has your firm's surety ever intervened to assist in the completion of a contract or have Performance and/or Payment Bond claims been made to your firm or its predecessor's sureties during the last three years? If yes, specify details in an

attached written response, including contact information for owner and surety. ☐ Yes ☑ No

19. Has your firm ever failed to complete any work awarded to you, services and/or delivery of products during the last three (3) years? If yes, specify details in an attached written response. ☐ Yes ☑ No
20. Has your firm ever been terminated from a contract within the last three years? If yes, specify details in an attached written response. ☐ Yes ☑ No
21. Living Wage solicitations only: In determining what, if any, fiscal impact(s) are a result of the Ordinance for this solicitation, provide the following for informational purposes only. Response is not considered in determining the award of the contract.

    Living Wage had an effect on the pricing Yes ☐ No ☐
    If yes, Living Wage increased the pricing by % or decreased the pricing by %.
22. Participation in Solicitation Development:

    ☑ I have not participated in the preparation or drafting of any language, scope, or specification that would provide my firm or any affiliate an unfair advantage of securing this solicitation that has been let on behalf of Broward County Board of County Commissioners.

    ☐ I have provided information regarding the specifications and/or products listed in this solicitation that has been let on behalf of Broward County Board of County Commissioners.
    If this box is checked, provide the following:
    Name of Person the information was provided:
    Title:
    Date information provided:
    For what purpose was the information provided?

Cone of Silence Requirement Certification:
The Cone of Silence Ordinance, Section 1-266, Broward County Code of Ordinances prohibits certain communications among Vendors, Commissioners, County staff, and Selection or Evaluation Committee members. Identify on a separate sheet any violations of this Ordinance by any members of the responding firm or its joint ventures. After the application of the Cone of Silence, inquiries regarding this solicitation should be directed to the Director of Purchasing or designee. The Cone of Silence terminates when the County Commission or other awarding authority takes action which ends the solicitation.

The Vendor hereby certifies that: (check each box)

☑ The Vendor has read Cone of Silence Ordinance, Section 1-266, Broward County Code of Ordinances; and

☑ The Vendor understands that the Cone of Silence for this competitive solicitation shall be in effect beginning upon the appointment of the Selection or Evaluation Committee, for communication regarding this solicitation with the County Administrator, Deputy County Administrator, Assistant County Administrators, and Assistants to the County Administrator and their respective support staff or any person, including Evaluation or Selection

Committee members, appointed to evaluate or recommend selection in this RFP/RLI process. For Communication with County Commissioners and Commission staff, the Cone of Silence allows communication until the initial Evaluation or Selection Committee Meeting.

☑ The vendor understands that they may communicate with a representative of the Office of Economic and Small Business Development ("OESBD") at any time regarding a solicitation or regarding participation of Small Business Enterprises or County Business Enterprises in a solicitation. OESBD may be contacted at (954)357- 6400. The Cone of Silence also permits communication with certain other County employees (refer to the Cone of Silence Ordinance).

☑ The Vendor agrees to comply with the requirements of the Cone of Silence Ordinance.

Drug-Free Workplace Requirements Certification:
Section 21.31.a. of the Broward County Procurement Code requires awards of all competitive solicitations requiring Board award be made only to firms certifying the establishment of a drug free workplace program. The program must consist of:

1. Publishing a statement notifying its employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the offeror's workplace, and specifying the actions that will be taken against employees for violations of such prohibition;

2. Establishing a continuing drug-free awareness program to inform its employees about:
    a. The dangers of drug abuse in the workplace;
    b. The offeror's policy of maintaining a drug-free workplace;
    c. Any available drug counseling, rehabilitation, and employee assistance programs; and
    d. The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;

3. Giving all employees engaged in performance of the contract a copy of the statement required by subparagraph 1;

4. Notifying all employees, in writing, of the statement required by subparagraph 1, that as a condition of employment on a covered contract, the employee shall:
   a. Abide by the terms of the statement; and
   b. Notify the employer in writing of the employee's conviction of, or plea of guilty or nolo contendere to, any violation of Chapter 893 or of any controlled substance law of the United States or of any state, for a violation occurring in the workplace NO later than five days after such conviction.

5. Notifying Broward County government in writing within 10 calendar days after receiving notice under subdivision 4.b above, from an employee or otherwise receiving actual notice of such conviction. The notice shall include the position title of the employee;

6. Within 30 calendar days after receiving notice under subparagraph 4 of a conviction, taking one of the following actions with respect to an employee who is convicted of a drug abuse violation occurring in the workplace:
   a. Taking appropriate personnel action against such employee, up to and including termination; or
   b. Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a federal, state, or local health, law enforcement, or other appropriate agency; and

7. Making a good faith effort to maintain a drug-free workplace program through implementation of subparagraphs 1 through 6.

The Vendor hereby certifies that: (check box)

☑ The Vendor certifies that it has established a drug free workplace program in accordance with the above requirements.

Non-Collusion Certification:
Vendor shall disclose, to their best knowledge, any Broward County officer or employee, or any relative of any such officer or employee as defined in Section 112.3135 (1) (c), Florida Statutes, who is an officer or director of, or has a material interest in, the Vendor's business, who is in a position to influence this procurement. Any Broward County officer or employee who has any input into the writing of specifications or requirements, solicitation of offers, decision to award, evaluation of offers, or any other activity pertinent to this procurement is presumed, for purposes hereof, to be in a position to influence this procurement. Failure of a Vendor to disclose any relationship described herein shall be reason for debarment in accordance with the provisions of the Broward County Procurement Code.

The Vendor hereby certifies that: (select one)

☑ The Vendor certifies that this offer is made independently and free from collusion; or

☐ The Vendor is disclosing names of officers or employees who have a material interest in this procurement and is in a position to influence this procurement. Vendor must include a list of name(s), and relationship(s) with its submittal.

Public Entities Crimes Certification:
In accordance with Public Entity Crimes, Section 287.133, Florida Statutes, a person or affiliate placed on the convicted vendor list following a conviction for a public entity crime may not submit on a contract: to provide any goods or services; for construction or repair of a public building or public work; for leases of real property to a public entity; and may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity; and may not transact business with any public entity in excess of the threshold amount provided in s.
287.017 for Category Two for a period of 36 months following the date of being placed on the convicted vendor list.

The Vendor hereby certifies that: (check box)

☑ The Vendor certifies that no person or affiliates of the Vendor are currently on the convicted vendor list and/or has not been found to commit a public entity crime, as described in the statutes.

Scrutinized Companies List Certification:
Any company, principals, or owners on the Scrutinized Companies with Activities in Sudan List, the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or the Scrutinized Companies that Boycott Israel List is prohibited from submitting a response to a solicitation for goods or services in an amount equal to or greater than
$1 million.

The Vendor hereby certifies that: (check each box)

☑ The Vendor, owners, or principals are aware of the requirements of Sections 287.135, 215.473, and 215.4275, Florida Statutes, regarding Companies on the Scrutinized Companies with Activities in Sudan List the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or the Scrutinized Companies that Boycott Israel List; and

☑ The Vendor, owners, or principals, are eligible to participate in this solicitation and are not listed on either the Scrutinized Companies with Activities in Sudan List, the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or the Scrutinized Companies that Boycott Israel List; and

☑ If awarded the Contract, the Vendor, owners, or principals will immediately notify the County in writing if any of its principals are placed on the Scrutinized Companies with Activities in Sudan List, the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or the Scrutinized Companies that Boycott Israel List.

I hereby certify the information provided in the Vendor Questionnaire and Standard Certifications:

Karen McCullum	**Senior Director**	**4/20/2021**
*AUTHORIZED SIGNATURE/NAME	TITLE	DATE

Vendor Name: **CBRE**

* I certify that I am authorized to sign this solicitation response on behalf of the Vendor as indicated in Certificate asto Corporate Principal, designation letter by Director/Corporate Officer, or other business authorization to bind on behalf of the Vendor. As the Vendor's authorized representative, I attest that any and all statements, oral, written or otherwise, made in support of the Vendor's response, are accurate, true and correct. I also acknowledge that inaccurate, untruthful, or incorrect statements made in support of the Vendor's response may be used by the County as a basis for rejection, rescission of the award, or termination of the contract and may also serve as the basis for debarment of Vendor pursuant to Section 21.119 of the Broward County Procurement Code. I certify that the Vendor's response is made without prior understanding, agreement, or connection with any corporation, firm or person submitting a response for the same items/services, and is in all respects fair and without collusion or fraud. I also certify that the Vendor agrees to abide by all terms and conditions of this solicitation, acknowledge and accept all of the solicitation pages as well as any special instructions sheet(s).

Supplier: **CBRE, Inc.**

LOBBYIST REGISTRATION REQUIREMENT CERTIFICATION FORM

The completed form should be submitted with the solicitation response but must be submitted within three business days of County's request. Vendor may be deemed non-responsive for failure to fully comply within stated timeframes.

The Vendor certifies that it understands if it has retained a lobbyist(s) to lobby in connection with a competitive solicitation, it shall be deemed non-responsive unless the firm, in responding to the competitive solicitation, certifies that each lobbyist retained has timely filed the registration or amended registration required under Broward County Lobbyist Registration Act, Section 1-262, Broward County Code of Ordinances; and it understands that if, after awarding a contract in connection with the solicitation, the County learns that the certification was erroneous, and upon investigation determines that the error was willful or intentional on the part of the Vendor, the County may, on that basis, exercise any contractual right to terminate the contract for convenience.

The Vendor hereby certifies that: (select one)

☑ It has not retained a lobbyist(s) to lobby in connection with this competitive solicitation; however, if retained after the solicitation, the County will be notified.

☐ It has retained a lobbyist(s) to lobby in connection with this competitive solicitation and certified that each lobbyist retained has timely filed the registration or amended registration required under Broward County Lobbyist Registration Act, Section 1-262, Broward County Code of Ordinances.

It is a requirement of this solicitation that the names of any and all lobbyists retained to lobby in connection with this solicitation be listed below:

Name of Lobbyist:

Lobbyist's Firm:

Phone:

E-mail:

Name of Lobbyist:

Lobbyist's Firm:

Phone:

E-mail:

Authorized Signature/Name: Sarah Friedfeld Date: 4/20/2021

Title: National Business Development Manager

Vendor Name: CBRE, Inc.

Supplier: **CBRE, Inc.**

LITIGATION HISTORY FORM

The completed form(s) should be returned with the Vendor's submittal. If not provided with submittal, the Vendor must submit within three business days of County's request. Vendor may be deemed non-responsive for failure to fully comply within stated timeframes.

☑ There are no material cases for this Vendor; or
☐ Material Case(s) are disclosed below:

Is this for a: (check type) ☐ Parent, ☐ Subsidiary, or ☐ Predecessor Firm?	If Yes, name of Parent/Subsidiary/Predecessor: Or No ☐
Party	
Case Number, Name, and Date Filed	
Name of Court or other tribunal	
Type of Case	Bankruptcy ☐ Civil ☐ Criminal ☐ Administrative/Regulatory ☐
Claim or Cause of Action and Brief description of each Count	
Brief description of the Subject Matter and Project Involved	
Disposition of Case (Attach copy of any applicable Judgment, Settlement Agreement and Satisfaction of Judgment.)	Pending ☐ Settled ☐ Dismissed ☐ Judgment Vendor's Favor ☐ Judgment Against Vendor ☐ If Judgment Against, is Judgment Satisfied? ☐ Yes ☐ No
Opposing Counsel	Name: Email: Telephone Number:

Vendor Name: CBRE, Inc.

Supplier: **CBRE, Inc.**

DOMESTIC PARTNERSHIP ACT CERTIFICATION FORM (REQUIREMENT AND TIEBREAKER)

Refer to Special Instructions to identify if Domestic Partnership Act is a requirement of the solicitation or acts only as a tiebreaker. If Domestic Partnership is a requirement of the solicitation, the completed and signed form should be returned with the Vendor's submittal. If the form is not provided with submittal, the Vendor must submit within three business days of County's request. Vendor may be deemed non-responsive for failure to fully comply within stated timeframes. To qualify for the Domestic Partnership tiebreaker criterion, the Vendor must currently offer the Domestic Partnership benefit and the completed and signed form must be returned at time of solicitation submittal.

The Domestic Partnership Act, Section 16 ½ -157, Broward County Code of Ordinances, requires all Vendors contracting with the County, in an amount over $100,000 provide benefits to Domestic Partners of its employees, on the same basis as it provides benefits to employees' spouses, with certain exceptions as provided by the Ordinance.

For all submittals over $100,000.00, the Vendor, by virtue of the signature below, certifies that it is aware of the requirements of Broward County's Domestic Partnership Act, Section 16-½ -157, Broward County Code of Ordinances; and certifies the following: (check only one below).

- [x] 1. The Vendor currently complies with the requirements of the County's Domestic Partnership Act and provides benefits to Domestic Partners of its employees on the same basis as it provides benefits to employees' spouses
- [ ] 2. The Vendor will comply with the requirements of the County's Domestic Partnership Act at time of contract award and provide benefits to Domestic Partners of its employees on the same basis as it provides benefits to employees' spouses.
- [ ] 3. The Vendor will not comply with the requirements of the County's Domestic Partnership Act at time of award.
- [ ] 4. The Vendor does not need to comply with the requirements of the County's Domestic Partnership Act at time of award because the following exception(s) applies: **(check only one below)**.
  - [ ] The Vendor is a governmental entity, not-for-profit corporation, or charitable organization.
  - [ ] The Vendor is a religious organization, association, society, or non-profit charitable or educational institution.
  - [ ] The Vendor provides an employee the cash equivalent of benefits. (Attach an affidavit in compliance with the Act stating the efforts taken to provide such benefits and the amount of the cash equivalent).
  - [ ] The Vendor cannot comply with the provisions of the Domestic Partnership Act because it would violate the laws, rules or regulations of federal or state law or would violate or be inconsistent with the terms or conditions of a grant or contract with the United States or State of Florida. Indicate the law, statute or regulation (State the law, statute or regulation and attach explanation of its applicability).

Sarah Friedfeld	National Business Development Manager	CBRE, Inc.	4/20/2021
Authorized Signature/Name	**Title**	**Vendor Name**	**Date**

Supplier: **CBRE, Inc.**

AFFILIATED ENTITIES OF THE PRINCIPAL(S) CERTIFICATION FORM

The completed form should be submitted with the solicitation response but must be submitted within three business days of County's request. Vendor may be deemed non-responsive for failure to fully comply within stated timeframes.

a. All Vendors are required to disclose the names and addresses of "affiliated entities" of the Vendor's principal(s) over the last five (5) years (from the solicitation opening deadline) that have acted as a prime Vendor with the County.

b. The County will review all affiliated entities of the Vendor's principal(s) for contract performance evaluations and the compliance history with the County's Small Business Program, including CBE, DBE and SBE goal attainment requirements. "Affiliated entities" of the principal(s) are those entities related to the Vendor by the sharing of stock or other means of control, including but not limited to a subsidiary, parent or sibling entity.

c. The County will consider the contract performance evaluations and the compliance history of the affiliated entities of the Vendor's principals in its review and determination of responsibility.

The Vendor hereby certifies that: (select one)

☑ No principal of the proposing Vendor has prior affiliations that meet the criteria defined as "Affiliated entities"

☐ Principal(s) listed below have prior affiliations that meet the criteria defined as "Affiliated entities"

Principal's Name:

Names of Affiliated Entities:

Principal's Name:

Names of Affiliated Entities:

Principal's Name:

Names of Affiliated Entities:

Authorized Signature Name: **Sarah Friedfeld**

Title: **National Business Development Manager**

Vendor Name: **CBRE, Inc**

Date: **4/20/2021**

Supplier: **CBRE, Inc.**

LOCATION CERTIFICATION FORM

Refer to applicable sections for submittal instructions. Failure to submit required forms or information by stated timeframes will deem vendor ineligible for local preference or location tiebreaker.

Broward County Code of Ordinances, Section 1-74, et seq., provides certain preferences to Local Businesses, Locally Based Businesses, and Locally Based Subsidiaries, and the Broward County Procurement Code provides location as the first tiebreaker criteria. Refer to the ordinance for additional information regarding eligibility for local preference.

For Invitation for Bids:

To be eligible for the Local Preference best and final offer ("BAFO") and location tiebreaker, the Vendor **must** submit this fully completed form and a copy of its Broward County local business tax receipt **at the same time it submits its bid**. **Vendors who fail to comply with this submittal deadline will not be eligible for either the BAFO or the location tiebreaker.**

For Request for Proposals (RFPs), Request for Letters of Interest (RLIs), or Request for Qualifications (RFQs):

For Local Preference eligibility, the Vendor **should** submit this fully **completed form** and **all Required Supporting Documentation** (as indicated below) at the time Vendor submits its response to the procurement solicitation. If not provided with submittal, the Vendor **must** submit within three business days after County's written request. Failure to submit required forms or information by stated timeframes will deem the Vendor ineligible for local preference.

To be eligible for the location tiebreaker, **the Vendor must submit this fully completed form and a copy of its Broward County local business tax receipt at the same time it submits its response.** Vendors who fail to comply with this submittal deadline will not be eligible for the location tiebreaker.

The undersigned Vendor hereby certifies that (check the box for only one option below):

☑ **Option 1:** The Vendor is a **Local Business,** but does not qualify as a **Locally Based Business** or a **Locally Based Subsidiary**, as each term is defined by Section 1-74, Broward County Code of Ordinances. The Vendor further certifies that:

A. It has continuously maintained, for at least the one (1) year period immediately preceding the bid posting date (i.e., the date on which the solicitation was advertised),
   i. a physical business address located within the limits of Broward County, listed on the Vendor's valid business tax receipt issued by Broward County (unless exempt from business tax receipt requirements),
   ii. in an area zoned for the conduct of such business,
   iii. that the Vendor owns or has the legal right to use, and
   iv. from which the Vendor operates and performs on a day-to-day basis business that is a substantial component of the goods or services being offered to Broward County in connection with the applicable competitive solicitation (as so defined, the "Local Business Location").

If Option 1 selected, indicate **Local Business Location**:

7650 Corporate Center Drive, Suite 302
Miami, FL 33126
Broward County Code of Ordinances, Section 1-78 - Reciprocity.

☐ **Option 2:** The Vendor is both a **Local Business** and a **Locally Based Business** as each term is defined by Section 1-74, Broward County Code of Ordinances. The Vendor further certifies that:

A. The Vendor has continuously maintained, for at least the one (1) year period immediately preceding the bid posting date (i.e., the date on which the solicitation was advertised),
   i. a physical business address located within the limits of Broward County, listed on the Vendor's valid business tax receipt issued by Broward County (unless exempt from business tax receipt requirements),
   ii. in an area zoned for the conduct of such business,
   iii. that the Vendor owns or has the legal right to use, and
   iv. from which the Vendor operates and performs on a day-to-day basis business that is a substantial component of the goods or services being offered to Broward County in connection with the applicable competitive solicitation as so defined, the "Local Business Location");

B. The Local Business Location is the primary business address of the majority of the Vendor's employees as of the bid posting date, and/or the majority of the work under the solicitation, if awarded to the Vendor, will be performed by employees of the Vendor whose primary business address is the Local Business Location;

C. The Vendor's management directs, controls, and coordinates all or substantially all of the day-to-day activities of the entity (such as marketing, finance, accounting, human resources, payroll, and operations) from the Local Business Location;

D. The Vendor has not claimed any other location as its principal place of business within the one (1) year period immediately preceding the bid posting date; and

E. Less than fifty percent (50%) of the total equity interests in the business are owned, directly or indirectly, by one or more entities with a principal place of business located outside of Broward County. The Vendor certifies that the total equity interests in the Vendor owned, directly or indirectly, by one or more entities with a principal place of business located outside of Broward County is .

If Option 2 selected, indicate **Local Business Location**:

☐ **Option 3:** The Vendor is both a **Local Business** and a **Locally Based Subsidiary** as each term is defined by Section 1-74, Broward County Code of Ordinances. The Vendor further certifies that:

A. The Vendor has continuously maintained:
   i. for at least the one (1) year period immediately preceding the bid posting date (i.e., the date on which the solicitation was advertised),
   ii. a physical business address located within the limits of Broward County, listed on the Vendor's valid business tax receipt issued by Broward County (unless exempt from business tax receipt requirements),
   iii. in an area zoned for the conduct of such business,

iv. that the Vendor owns or has the legal right to use, and

v. from which the Vendor operates and performs on a day-to-day basis business that is a substantial component of the goods or services being offered to Broward County in connection with the applicable competitive solicitation (as so defined, the "Local Business Location");

B. The Local Business Location is the primary business address of the majority of the Vendor's employees as of the bid posting date, and/or the majority of the work under the solicitation, if awarded to the Vendor, will be performed by employees of the Vendor whose primary business address is the Local Business Location;

C. The Vendor's management directs, controls, and coordinates all or substantially all of the day-to-day activities of the entity (such as marketing, finance, accounting, human resources, payroll, and operations) from the Local Business Location;

D. The Vendor has not claimed any other location as its principal place of business within the one (1) year period immediately preceding the bid posting date; and

E. At least fifty percent (50%) of the total equity interests in the business are owned, directly or indirectly, by one or more entities with a principal place of business located outside of Broward County. The Vendor certifies that the total equity interests in the Vendor owned, directly or indirectly, by one or more entities with a principal place of business located outside of Broward County is .

If Option 3 selected, indicate **Local Business Location**:

☐ **Option 4:** The Vendor is a **joint venture** composed of one or more Local Businesses, Locally Based Businesses, or Locally Based Subsidiaries, as each term is defined by Section 1-74, Broward County Code of Ordinances. Fill in blanks with percentage equity interest or list "N/A" if section does not apply. The Vendor further certifies that:

A. The proportion of equity interests in the joint venture owned by **Local Business(es)** (each Local Business must comply with all of the requirements stated in Option 1) is % of the total equity interests in the joint venture; and/or

B. The proportion of equity interests in the joint venture owned by **Locally Based Business(es)** (each Locally Based Business must comply with all of the requirements stated in Option 2) is % of the total equity interests in the joint venture; and/or

C. The proportion of equity interests in the joint venture owned by **Locally Based Subsidiary(ies)** (each Locally Based Subsidiary must comply with all of the requirements stated in Option 3) is % of the total equity interests in the joint venture.

If Option 4 selected, indicate the Local Business Location(s) (es) on separate sheet.

☐ **Option 5:** Vendor is not a Local Business, a Locally Based Business, or a Locally Based Subsidiary, as each term is defined by Section 1-74, Broward County Code of Ordinances.

Required Supporting Documentation (in addition to this form):

Option 1 or 2 (**Local Business** or **Locally Based Business**):

1. Broward County local business tax receipt.

Option 3 (**Locally Based Subsidiary**)

1. Broward County local business tax receipt.

2. Documentation identifying the Vendor's vertical corporate organization and names of parent entities if the Vendor is a Locally Based Subsidiary.

Option 4 (**joint venture** composed of one or more Local Business(es), Locally Based Business(es), or Locally Based Subsidiary(ies):

1. Broward County local business tax receipt(s) for each Local Business(es), Locally Based Business(es), and/or Locally Based Subsidiary(ies).
2. Executed joint venture agreement, if the Vendor is a joint venture.
3. If joint venture is comprised of one or more Locally Based Subsidiary(ies), submit documentation identifying the vertical corporate organization and parent entities name(s) of each Locally Based Subsidiary.

If requested by County (any option):

1. Written proof of the Vendor's ownership or right to use the real property at the Local Business Location.
2. Additional documentation relating to the parent entities of the Vendor.
3. Additional documentation demonstrating the applicable percentage of equity interests in the joint venture, if not shown in the joint venture agreement.
4. Any other documentation requested by County regarding the location from which the activities of the Vendor are directed, controlled, and coordinated.

By submitting this form, the Vendor certifies that if awarded a contract, it is the intent of the Vendor to remain at the Local Business Location address listed below (or another qualifying Local Business Location within Broward County) for the duration of the contract term, including any renewals or extensions. (If nonlocal Vendor, leave Local Business Location blank.)

Indicate Local Business Location:

True and Correct Attestations:

Any misleading, inaccurate, or false information or documentation submitted by any party affiliated with this procurement may lead to suspension and/or debarment from doing business with Broward County as authorized by the Broward County Procurement Code. The Vendor understands that, if after contract award, the County learns that any of the information provided by the Vendor on this form was false, and the County determines, upon investigation, that the Vendor's provision of such false information was willful or intentional, the County may exercise any contractual right to terminate the contract. The provision of false or fraudulent information or documentation by a Vendor may subject the Vendor to civil and criminal penalties.

AUTHORIZED SIGNATURE/NAME: **Sarah Friedfeld**

TITLE: **National Business Development Manager**

VENDOR NAME: **CBRE, Inc.**

DATE: **4/20/2021**

Supplier: **CBRE, Inc.**

AGREEMENT EXCEPTION FORM

The completed form(s) should be returned with the Vendor's submittal. If not provided with submittal, it shall be deemed an affirmation by the Vendor that it accepts the terms and conditions of the County's Agreement as disclosed in the solicitation.

The Vendor must either provide specific proposed alternative language on the form below. Additionally, a brief justification specifically addressing each provision to which an exception is taken should be provided.

☐ There are no exceptions to the terms and conditions of the County Agreement as referenced in the solicitation; or

☑ The following exceptions are disclosed below: (use additional forms as needed; separate each Article/ Section number)

Term or Condition Article / Section	Insert version of exception or specific proposed alternative language	Provide brief justification for change
1.8	Performance of the Services will not impose upon Consultant the performance obligations of the Contractor, other vendors, contractors and consultants under separate contract with County, including construction means and methods related to each such party.	Scope clarification is needed.
3.1	Consultant's scope shall not include the detection, presence, verification, disposal or remediation of hazardous materials or pre-existing conditions at a project location.	Scope clarification is needed.
3.4	Modify to also allow Consultant to reasonably rely upon the information provided by the County to Consultant for performance of the Services.	Standard commercial terms/clarification of scope.
Article 9	Modify terms to require higher coverage limits but not minimum limits and without access to the entirety of Consultant's limits. Strike the provision requiring certified copies of policies as these are proprietary. Qualify additional insured and primary/non-contributory status to the extent of loss attributable to the negligence of Consultant. Modify to require approval of all deductibles or retentions prior to contracting. Make subrogation waiver mutual as between the parties and have a sta	Standard commercial terms.
11.8	Modify indemnity terms to make mutual and reciprocal.	Standard commercial terms.

Vendor Name: CBRE, Inc.

Supplier: **CBRE, Inc.**

SUBCONTRACTORS/SUBCONSULTANTS/SUPPLIERS REQUIREMENT FORM
Request for Proposals, Request for Qualifications, or Request for Letters of Interest

The following forms and supporting information (if applicable) should be returned with Vendor's submittal. If not provided with submittal, the Vendor must submit within three business days of County's request. Failure to timely submit may affect Vendor's evaluation.

A. The Vendor shall submit a listing of all subcontractors, subconsultants and major material suppliers (firms), if any, and the portion of the contract they will perform. A major material supplier is considered any firm that provides construction material for construction contracts, or commodities for service contracts in excess of $50,000, to the Vendor.

B. If participation goals apply to the contract, only non-certified firms shall be identified on the form. A non-certified firm is a firm that is not listed as a firm for attainment of participation goals (ex. County Business Enterprise or Disadvantaged Business Enterprise), if applicable to the solicitation.

C. This list shall be kept up-to-date for the duration of the contract. If subcontractors, subconsultants or suppliers are stated, this does not relieve the Vendor from the prime responsibility of full and complete satisfactory performance under any awarded contract.

D. After completion of the contract/final payment, the Vendor shall certify the final list of non-certified subcontractors, subconsultants, and suppliers that performed or provided services to the County for the referenced contract.

E. The Vendor has confirmed that none of the recommended subcontractors, subconsultants, or suppliers' principal(s), officer(s), affiliate(s) or any other related companies have been debarred from doing business with Broward County or any other governmental agency.

If none, state "none" on this form. Use additional sheets as needed. Vendor should scan and upload any additional form(s) in BidSync.


bold line seperating sections

1. Subcontracted Firm's Name: **PM Technologies**

   Subcontracted Firm's Address: **100 Terminal Dr. Ft. Lauderdale, FL 33125**

   Subcontracted Firm's Telephone Number: **770-363-1496**

   Contact Person's Name and Position: **Evan Barron, Senior Project Manager**
   Contact Person's E-Mail Address: **ebarron@pmtechno.com**

   Estimated Subcontract/Supplies Contract Amount: **560,000**

   Type of Work/Supplies Provided: **Construction & Project Management**

bold line seperating sections

2. Subcontracted Firm's Name: **KEITH**

   Subcontracted Firm's Address: **2312 S Andrews Ave, Ft. Lauderdale, FL 33316**

   Subcontracted Firm's Telephone Number: **954-788-3400**

   Contact Person's Name and Position: **Alex Lazowick, President**

   Contact Person's E-Mail Address: **alazowick@keithteam.com**

   Estimated Subcontract/Supplies Contract Amount: **420,000**

   Type of Work/Supplies Provided: **Landside Civil and Subsurface Utility Engineering**

3. Subcontracted Firm's Name: **AERO Systems Engineering**

   Subcontracted Firm's Address: **2700 Delk Rd, Ste 100. Marietta, GA 30067**

   Subcontracted Firm's Telephone Number: **770-423-4200**

   Contact Person's Name and Position: **Chris Britton, Vice President**

   Contact Person's E-Mail Address: **chris.britton@aerosys.net**

   Estimated Subcontract/Supplies Contract Amount: **300,000**

   Type of Work/Supplies Provided: **Airside Civil and Gate Systems Engineering**

bold line seperating sections

4. Subcontracted Firm's Name:

   Subcontracted Firm's Address:

   Subcontracted Firm's Telephone Number:

   Contact Person's Name and Position:

   Contact Person's E-Mail Address:

   Estimated Subcontract/Supplies Contract Amount:

   Type of Work/Supplies Provided:

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

Karen McCullum	**Senior Director**	**CBRE, Inc.**	**4/20/2021**
Authorized Signature/Name	**Title**	**Vendor Name**	**Date**

Supplier: **CBRE, Inc.**

VOLUME OF PREVIOUS WORK ATTESTATION FORM

The completed and signed form should be returned with the Vendor's submittal. If not provided with submittal, the Vendor must submit within three business days of County's request. Failure to provide timely may affect the Vendor's evaluation.

This completed form MUST be included with the Vendor's submittal at the time of the opening deadline to be considered for a Tie Breaker criterion (if applicable).

Points assigned for Volume of Previous Work will be based on the amount paid-to-date by the County to a prime Vendor **MINUS** the Vendor's confirmed payments paid-to-date to approved certified County Business Enterprise (CBE) firms performing services as Vendor's subcontractor/subconsultant to obtain the CBE goal commitment as confirmed by County's Office of Economic and Small Business Development. Reporting must be within five (5) years of the current solicitation's opening date.

Vendor must list all received payments paid-to-date by contract as a prime vendor from Broward County Board of County Commissioners. Reporting must be within five (5) years of the current solicitation's opening date.

Vendor must also list all total confirmed payments paid-to-date by contract, to approved certified CBE firms utilized to obtain the contract's CBE goal commitment. Reporting must be within five (5) years of the current solicitation's opening date.

In accordance with Section 21.31.d. of the Broward County Procurement Code, the Vendor with the lowest dollar volume of work previously paid by the County over a five-year period from the date of the submittal opening will receive the Tie Breaker.

The Vendor attests to the following:

Item No.	Project Title	Contract No.	Department/ Division	Date Awarded	Prime: Paid to Date	CBE: Paid to Date
1.						
2.						
3.						
4.						
5.						
6.						
7.						
				Grand Total	**0**	**0**

Has the Vendor been a member/partner of a Joint Venture firm that was awarded a contract by the County?

Yes ☑ No ☐

If Yes, Vendor must submit a **Joint Vendor Volume of Work Attestation Form**.

Vendor Name: CBRE, Inc.

Sarah Friedfeld	**National Business Development Manager**	**04/20/2021**
Authorized Signature/Name	**Title**	**Date**

VOLUME OF PREVIOUS WORK ATTESTATION JOINT VENTURE FORM

If applicable, this form and additional required documentation should be submitted with the Vendor's submittal. If not provided with submittal, the Vendor must submit within three business days of County's request. Failure to timely submit this form and supporting documentation may affect the Vendor's evaluation.

If a Joint Venture, the payments paid-to-date by contract provided must encompass the Joint Venture and each of the entities forming the Joint Venture. Points assigned for Volume of Previous Work will be based on the amount paid-to-date by contract to the Joint Venture firm **MINUS** all confirmed payments paid-to-date to approved certified CBE firms utilized to obtain the CBE goal commitment. Reporting must be within five (5) years of the current solicitation's opening date. Amount will then be multiplied by the member firm's equity percentage.

In accordance with Section 21.31.d. of the Broward County Procurement Code, the Vendor with the lowest dollar volume of work previously paid by the County over a five-year period from the date of the submittal opening will receive the Tie Breaker.

The Vendor attests to the following:

Item No.	Project Title	Contract No.	Department/ Division	Date Awarded	JV Equity Percent	Prime: Paid to Date	CBE: Paid to Date
1.	**Broward County Court Facility Consultant Services**	**20030904-0-CM-01**	**Construction Management**	**June 14, 2005**	**33%**	**4,470,772**	**715,679**
2.							
3.							
4.							
5.							
6.							
7.							
8.							
					Grand Total	**4,470,772**	**715,679**

Vendor is required to submit an executed Joint Venture agreement(s) and any amendments for each project listed above. Each agreement must be executed prior to the opening date of this solicitation.

Vendor Name: CBRE, Inc.

Sarah Friedfeld	**National Business Development Manager**	**04/20/2021**
Authorized Signature/Name	**Title**	**Date**

Supplier: **CBRE, Inc.**

Finance and Administrative Services Department
PURCHASING DIVISION
115 S. Andrews Avenue, Room 212 • Fort Lauderdale, Florida 33301 • 954-357-6066 • FAX 954-357-8535

Summary of Vendor Rights Regarding Broward County Competitive Solicitations

The purpose of this document is to provide vendors with a summary of their rights to object to or protest a proposed award or recommended ranking of vendors in connection with Broward County competitive solicitations. These rights are fully set forth in the Broward County Procurement Code, which is available here: https://www.broward.org/purchasing.

1. Right to Object

The right to object is available for solicitations conducted through Requests for Proposals ("RFPs") or Requests for Letters of Interest ("RLIs"). In such solicitations, vendors may object in writing to a proposed recommendation of ranking made by a Selection or Evaluation Committee. Objections must be filed within three (3) business days after the proposed recommendation is posted on the Purchasing Division's website. The contents of an objection must comply with the requirements set forth in Section 21.84 of the Procurement Code. Failure to timely and fully meet any requirement will result in a loss of the right to object.

2. Right to Protest

The right to protest is available for RFPs and RLIs and in solicitations conducted through Invitations to Bid ("ITBs"). In RFPs and RLIs, vendors may protest a final recommendation of ranking made by a Selection or Evaluation Committee. In ITBs, vendors may protest a final recommendation for award made by the Broward County Purchasing Division.

In all cases, protests must be filed in writing within three (3) or five (5) business days after a recommended ranking or recommendation for award is posted on Purchasing Division's website. The timeframe for filing (*i.e.,* 3 or 5 business days) depends on the monetary value of the procurement. Additional requirements for a protest are set forth in Section 21.118 of the Procurement Code. Failure to timely and fully meet any requirement will result in a loss of protest rights.

Vendors may appeal the denial of a protest. Appeals may require payment of an appeal bond. Additional requirements for an appeal are set forth in Section 21.120 of the Procurement Code. Failure to timely and fully meet any requirement will result in a loss of appeal rights.

3. Cone of Silence; Right to Contact OESBD

Please be aware that a Cone of Silence remains in effect for competitive solicitations until a solicitation is completed or a contract is awarded. During that time period, vendors may not contact certain County officials and employees regarding a solicitation. Substantial penalties may result from even an unintentional violation. For further information, please contact the Purchasing Division at 954-357-6066 or refer to the Cone of Silence Ordinance which is available here: https://www.broward.org/Purchasing/Documents/ConeOfSilence.pdf.

However, vendors may communicate with a representative of the Office of Economic and Small Business Development ("OESBD") at any time regarding a solicitation or regarding participation of Small Business Enterprises or County Business Enterprises in a solicitation. OESBD may be contacted at (954) 357-6400. The Cone of Silence also permits communication with certain other County employees (please see the Cone of Silence Ordinance at the above link for further details).

Broward County Board of County Commissioners
Mark D. Bogen • Lamar P. Fisher • Beam Furr • Steve Geller • Dale V.C. Holness • Nan H. Rich • Tim Ryan • Barbara Sharief • Michael Udine
www.broward.org