Miami Dade Aviation Department
P O Box 025504
Miami, Florida 33102-5504

RECEIVED BY CLERK
Circuit & County Courts
Miami-Dade County, Florida
FILED FOR RECORD
12:25 pm, 12/17/202
CLERK OF THE BOARD

December 17, 2021

Clay Ratliff
TK AIRPORT SOLUTIONS INC
3201 North Sylvania Avenue
Suite 117, Fort Worth, TX 76111

Re: Recommendation for Award for ITQ No. MDAD-PBB 15-1020
2021 15 PBB's Replacement at Concourses D, E, F & H

Dear Clay Ratliff,

In accordance with Sections 2-8.3 and 2-8.4 of the Code of Miami-Dade County and Implementing Order 3-21, this letter serves to notify you that your firm has been recommended for award of the referenced Invitation to Quote (ITQ) based on the bid submitted on Monday 22ND November 2021. Pursuant to the referenced legislation, the three (3) day protest period shall commence upon the filing of this recommendation to award with the Clerk of the Board. This contract award will be effective only in accordance with the conditions of the solicitation, which requires execution by both parties of the Notice to Proceed (NTP).

The value at award is **$24,344,002.80**. This includes your base **discounted** bid amount of **$20,286,669.00,** a **Dedicated allowance** amount of **$2,028,666.90** and a **Contingency** amount of **$2,028,666.90**. The contract term is **350** calendar days. The award is contingent upon the submission and approval of Insurance Certificates listing the required coverage for General Liability, Auto Liability (Owned, Non-owned and Hired Vehicles) and Workers Compensation as required by Florida Statue Chapter 440 (refer to Part II, Section 3 of the ITQ). Additional documents may be required as listed below:

1. Per Part II Section 4 of the ITQ, the awarded Bidder will be required to furnish Performance and Payment Bond, in accordance with the provisions of the Bid Documents. The amount of bond shall be for the Total Maximum Contract Amount **$24,344,002.80.**

2. Sign and return Non-Collusion Affidavit (Attachment 1) attached to this award letter.

3. VERIFICATION OF EMPLOYMENT ELIGIBILITY (E-VERIFY)
By entering the Contract, the Awarded Bidder becomes obligated to comply with the provisions of Section 448.095, Florida Statute, titled "Verification of Employment Eligibility." This includes but is not limited to utilization of the U.S. Department of Homeland Security's E-Verify System to verify the employment eligibility of all newly hired employees by the Awarded Bidder effective, January 1, 2021, and requiring all Subcontractors to provide an affidavit attesting that the Subcontractor does not employ, contract with, or subcontract with, an unauthorized alien. Failure to comply may lead to termination of this Awarded Bidder, or if a Subcontractor knowingly violates the statute, the subcontract must be terminated immediately. Any challenge to termination under this provision must be filed in the Circuit Court no later than twenty (20) calendar days after the date of termination. If this Contract is terminated for a violation of the statute by the Awarded Bidder, the Awarded Bidder may not be awarded a public contract for a period of one year after the date of termination, and the Awarded Bidder may be liable for any additional costs incurred

Miami Dade Aviation Department
P O Box 025504
Miami, Florida 33102-5504

by the County resulting from the termination of the Contract. Public and private employers must enroll in the E-Verify System (http://www.uscis.gov/e-verify) and retain the I-9 Forms for inspection

The preceding Documents are required as outlined within the ITQ project specification. They must be submitted to the Aviation Department within **5 business** days of receipt of this letter.

This letter shall also serve as a reminder that all work must be performed in accordance with the scope of work and contract terms and conditions, all permits and inspections and in accordance with all applicable Federal, State, and local laws, codes and regulations.

Should you have any questions please contact Aazam Piprawala at 305-876-0566 or email: apiprawala@flymia.com

Thank you,

AAZAM PIPRAWALA
Airport Purchasing Specialist

MIAMI-DADE COUNTY

# NON-COLLUSION AFFIDAVIT

***(In accordance with Sections 2-8.1.1 and 10-33.02.1 of the Code of Miami-Dade County)***

I, the undersigned, am over 18 years of age, have personal knowledge of the facts stated in the Non-Collusion Affidavit *(this Affidavit)* and I am an owner, officer, director, principal shareholder and/or otherwise authorized to bind the Bidder/Proposer of this solicitation.

A. I have reviewed the list of respondents attached to this Affidavit. I state that the Bidder/Proposer of this competitive solicitation (check one):

X is **not related** to any of the other respondents submitting a Bid/Proposal in the competitive solicitation.

☐ is **related** to the following respondents who submitted a Bid/Proposal in the competitive solicitation, which are identified and listed below:

B. I state that the Bidder/Proposer of this competitive solicitation:

1. has prepared this Bid/Proposal independently without consultation, communication, agreement or arrangement with any other Bidder/Proposer or competitor for the purpose of restricting competition;
2. has submitted the Bid/Proposal in its own behalf, and not in the interest or on behalf of any person not therein named;
3. has not, directly or indirectly, induced or solicited any other Bidder/Proposer to put in a sham proposal, or any other person, firm, or corporation to refrain from proposing;
4. has not in any manner sought by collusion to secure an advantage over any other Bidder/Proposer.

**Note**: Any person or entity that fails to submit this executed Affidavit shall be ineligible for contract award. In accordance with Section 2-8.1.1 of the Code of Miami-Dade County, where two or more related parties, as defined herein, each submit a Bid for any contract, such Bids shall be presumed to be collusive. The foregoing presumption may be rebutted by the presentation of evidence as to the extent of ownership, control and management of such related parties in preparation and submittal of such Bids. **Related parties** shall mean the Bidder/Proposer; the principals, corporate officers, and managers of a Bidder/Proposer; or the spouse, domestic partner, parents, stepparents, siblings, children or stepchildren of a Bidder/Proposer or the principals, corporate officers and managers thereof which have a direct or indirect ownership interest in another Bidder/Proposer for the same contract or in which a parent company or the principals thereof of one Bidder/Proposer have a direct or indirect ownership interest in another Bidder/Proposer for the same contract. Bid/Proposal found to be collusive shall be rejected. Bidder/Proposer who has been found to have engaged in collusion may be considered non-responsible, and may be suspended or debarred, and any contract resulting from collusive bidding may be terminated for default.

**Written Declaration:** Pursuant to §92.525, Florida Statutes, under penalties of perjury, I declare that I have read the foregoing Affidavit and that the facts stated in it are true, accurate, and complete.

Solicitation No.: MDAD-PBB 15-1020 Solicitation Title: 15 PBB's Replacement at Concourses D, E, F & H

By: _____ Date: December 17, 2021
Signature of Affiant

Matthew Watkins, Managing Director
Printed Name of Affiant and Title

52-2089962
Federal Employer Identification Number

TK Airport Solutions, Inc.
Printed Name of Bidder/Proposer

3201 N. Sylvania Avenue, Suite 117, Fort Worth, TX 76111
Address of Bidder/Proposer

# CERTIFICATE OF LIABILITY INSURANCE

DATE(MM/DD/YYYY): 12/23/2021

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<br>Aon Risk Services Central, Inc.<br>Chicago IL Office<br>200 East Randolph<br>Chicago IL 60601 USA | CONTACT NAME:<br>PHONE (A/C. No. Ext): (866) 283-7122 FAX (A/C. No.): (800) 363-0105<br>E-MAIL ADDRESS: |

| INSURER(S) AFFORDING COVERAGE | | NAIC # |
|---|---|---|
| INSURER A: | HDI Global Insurance Company | 41343 |
| INSURER B: | ACE American Insurance Company | 22667 |
| INSURER C: | Indemnity Insurance Co of North America | 43575 |
| INSURER D: | | |
| INSURER E: | | |
| INSURER F: | | |

INSURED
TK Airport Solutions, Inc.
3201 N. Sylvania Avenue
Fort Worth TX 76111 USA

**COVERAGES** **CERTIFICATE NUMBER:** 570090802865 **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<br>CLAIMS-MADE X OCCUR<br>GEN'L AGGREGATE LIMIT APPLIES PER:<br>X POLICY PRO-JECT LOC<br>OTHER: | | | GLD5668801<br>SIR applies per policy terms & conditions | 10/01/2021 | 10/01/2022 | EACH OCCURRENCE<br>DAMAGE TO RENTED PREMISES (Ea occurrence)<br>MED EXP (Any one person)<br>PERSONAL & ADV INJURY<br>GENERAL AGGREGATE<br>PRODUCTS - COMP/OP AGG | $5,000,000<br>$100,000<br>$5,000<br>$5,000,000<br>$5,000,000<br>$5,000,000 |
| B | AUTOMOBILE LIABILITY<br>X ANY AUTO<br>OWNED AUTOS ONLY<br>HIRED AUTOS ONLY<br>SCHEDULED AUTOS<br>NON-OWNED AUTOS ONLY | | | ISA H25555594 | 10/01/2021 | 10/01/2022 | COMBINED SINGLE LIMIT (Ea accident)<br>BODILY INJURY ( Per person)<br>BODILY INJURY (Per accident)<br>PROPERTY DAMAGE (Per accident) | $4,000,000 |
| A | X UMBRELLA LIAB X OCCUR<br>EXCESS LIAB CLAIMS-MADE<br>DED X RETENTION $25,000 | | | CUD5669101 | 10/01/2021 | 10/01/2022 | EACH OCCURRENCE<br>AGGREGATE | $1,000,000<br>$1,000,000 |
| C | WORKERS COMPENSATION AND EMPLOYERS' LIABILITY<br>ANY PROPRIETOR / PARTNER / EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N: N N/A<br>If yes, describe under DESCRIPTION OF OPERATIONS below | | | WLRC67816997 | 10/01/2021 | 10/01/2022 | X PER STATUTE OTH-ER<br>E.L. EACH ACCIDENT<br>E.L. DISEASE-EA EMPLOYEE<br>E.L. DISEASE-POLICY LIMIT | $1,000,000<br>$1,000,000<br>$1,000,000 |

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

RE: MDAD-PBB-1020
Miami-Dade County is included as Additional Insured in accordance with the policy provisions of the General Liability and Automobile Liability policies.

APPROVED
DEC 27 2021
AVIATION AND SUPPORT SERVICES

**CERTIFICATE HOLDER**

Miami Dade Aviation Department
Attn.: Risk Management Division
PO Box 025504
Miami FL 33102 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
Milford Cockfield
Aon Risk Services Central Inc.

Holder Identifier :

Certificate No : 570090802865


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# Notice to Proceed

Miami-Dade Aviation Department
P.O. Box 592075
Miami, Florida 33159
T 305-876-7000 F 305-876-0948
www.miami-airport.com

miamidade.gov

Date: January 3, 2022

To: CLAY RATLIFF/JAMES DUCHAN
TK AIRPORT SOLUTIONS
3201 N Sylvania Ave, Suite 117,
Fort Worth, TX 76111

Re: Notice to Proceed for ITQ No. MDAD- PBB 15-1020
2021 15 PBBs Replacement at Concourses D, E, F, and H

Dear Clay Ratliff/James Duchan

This letter will serve as your notification that you are to proceed with the work described in ITQ No. MDAD- PBB 15-1020 **EFFECTIVE, JANUARY 10TH 2022**, and that all work must be completed on schedule and in accordance with the contract documents. The time allotted for the contract is **350** consecutive calendar days. In the event the project is not completed by the scheduled completion date and a time extension has not been granted, your firm shall be subject to any liquidated and or stipulated damages as defined in the contract documents for this project.

The complete execution of this notice to proceed shall constitute a contract for the work described in the subject ITQ under Pool No. 9427-1/21-1. Failure to properly execute and return this document within five (5) calendar days of the date of this letter may result in the County rescinding the award to your firm and awarding the subject project to the next lowest responsive and responsible bidder.

The terms and conditions applicable to this contract are in Pool No. 9427-1/21-1, and the totality of the contract documents (including but not limited to the ITQ including any special provisions contained therein, drawings and specifications, addenda, and any contract modifications or change orders etc.).

This letter will also serve as a reminder that all work must be performed in accordance with the contract documents and in accordance with all applicable Federal, State and local laws, codes and regulations. In accordance with the contract procedure, the Miami-Dade County Aviation Department Purchase Order Release Number is 54671.

The Project Schedule to be completed under the scope of this project and to the level of detail required by MDAD to adequately track the progress of the work is attached for reference. An updated Project Schedule with narrative shall be submitted pursuant to Part III, Section 3 ("Schedule") of the ITQ.

Virtual or in-person meetings will be held on a bi-weekly basis wherein the owner shall be updated on field progress, upcoming work via a 3 week look ahead schedule.

If you have any questions, please contact the MDAD Project Manager assigned, Eugene Strozier, at 305-876-0270 or email: estrozier@flymia.com.

Regards,

Aazam Piprawala,
Airport Purchasing Specialist,
305-876-0566 Phone
apiprawala@flymia.com

TO BE COMPLETED BY THE CONTRACTING FIRM

I understand and accept the terms and conditions for the ITQ No. MDAD- PBB 15-1020 referenced above **and hereby acknowledge the Notice to Proceed date of 01/10/2022.**

Accepted by: Company Name: TK Airport Solutions, Inc.

Authorized Representative Name: Matt Watkins ,Valentin Salazar

Authorized Representative Signature: _____ Date: 1/4/2021

The foregoing was sworn and subscribed before me this 4th day of January 2022

by Matt Watkins ; Valentin Salazar, who is personally known to me or who has produced Drivers License as identification who being duly sworn, deposes and says

that the above is true to the best of his knowledge, information and belief.

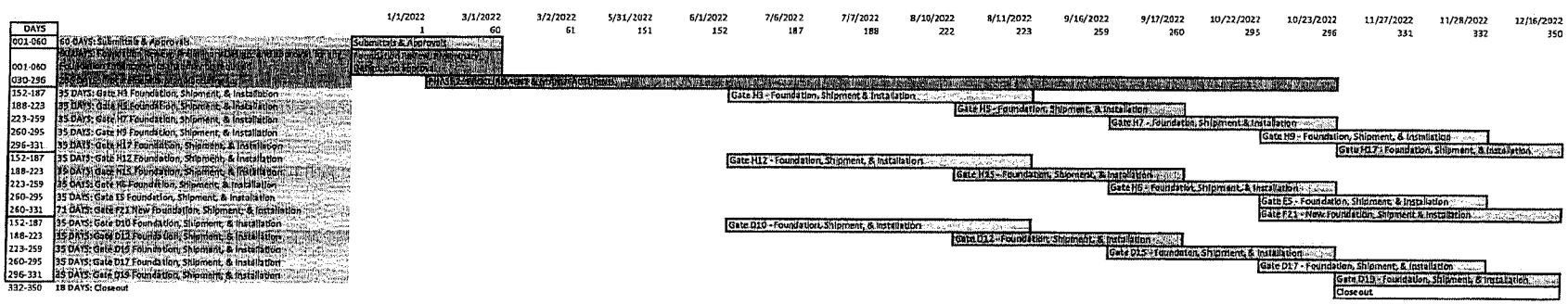
May Commission expires: 11/05/2023

NOTARY PUBLIC
STATE OF ~~FLORIDA~~ Texas

NICOLE GROSS
Notary Public, State of Texas
Comm. Expires 11-05-2023
Notary ID 132239905

**Note: Whoever is signing above is authorized to bind the corporation and must be an officer of the corporation as verified through the Florida Division of Corporations.**

## EXHIBIT 1 - PRELIMINARY SCHEDULE




**Notes:**

1. There is a 35 day maximum continuous closure at each Gate location for the old PBB removal and new installation.
2. Phase 2 includes final foundation enhancement design approval as well.
3. Foundation work shall be scheduled to be complete prior to anticipated PBB turnover to MDAD

# SURETY PERFORMANCE BOND

By this Bond, We TK Airport Solutions, Inc., as Principal, whose principal business address is *, as Contractor under the contract dated January 10, 20 22, between Principal and Miami-Dade County for the construction of PASSENGER BOARDING BRIDGES Bid No. MDAD-PBB 15-1020 (herein after referred to as "Contract") the terms of which Contract are incorporated by reference in its entirety into this Bond and Nationwide Mutual Insurance Company, a corporation, whose principal business address is One West Nationwide Blvd., Frnp Solutions, Columbus, OH 43215-2220 as Surety, are bound to Miami-Dade County (hereinafter referred to as "County") in the sum of Twenty Four Million Three Hundred Forty Four Thousand Three (U.S. dollars) $ ($24,344,003.00),[1] for payment of which we bind ourselves, our heirs, personal representatives, successors, and assigns, jointly and severally.

THE CONDITION OF THIS BOND is that if Principal:

1. Performs all the work under the Contract, including but not limited to guarantees, warranties and the curing of latent defects, said Contract being made a part of this bond by reference, and in the times and in the manner prescribed in the Contract, including any and all damages for delay; and

2. Pays County all losses, damages, including damages for delay, expenses, costs and attorney's fees, including appellate proceedings, that County sustains because of a default by Principal under the Contract, including but not limited to a failure to honor all guarantees and warranties or to cure latent defects in its work or materials within the time period provided in Section 95.11(3)(c), Florida Statutes; and

3. Performs the guarantee of all work and materials furnished under the contract for the time specified in the Contract, including all warranties and curing all latent defects within the time period provided in Section 95.11(3)(c), Florida Statutes;

then this bond is void; otherwise it remains in full force.

Surety specifically assumes liability for any and all delay damages arising from Principal's default of the Contract, as well as all latent defects uncovered in the work of the Principal after final acceptance of the work by the County.

Any changes in or under the Contract Documents and compliance or noncompliance with any formalities connected with the Contract or the changes does not affect Surety's obligation under this Bond.

This Bond shall remain in full force and effect for such period or periods of time after the date of acceptance by the County of the Contract work as are provided for in the Contract by which Principal guarantees to repair or replace any or all work performed or materials and equipment furnished, which were not performed or furnished according to the terms of the Contract. If no specific periods of warranty are stated in the Contract for any particular item or work, material or equipment, the warranty shall be deemed to be a period of one (1) year from the date of final acceptance by the County; provided however, that this limitation does not apply to suits seeking damages for latent defects in materials or workmanship, such actions being subject to the limitations found in Section 95.11(2)(b), Florida Statutes.

*3201 N. Sylvania Avenue, Suite 117, Fort Worth, TX 76111

**SURETY PERFORMANCE BOND (Cont'd)**

IN WITNESS WHEREOF, the above bounden parties have caused this Bond to be executed by their appropriate officials as of the 28th day of December, 20 21.

CONTRACTOR

TK Airport Solutions, Inc.
(Contractor Name)

BY: _____
(President) (Managing Partner or Joint Venturer)

(SEAL)

COUNTERSIGNED BY RESIDENT FLORIDA AGENT OF SURETY:

_____
(Copy of Agent's current Identification Card as issued by State of Florida Insurance Commissioner must be attached)

Gentry Julia Stewart
FL Non Resident Agent License Number: W697101

SURETY:
Nationwide Mutual Insurance Company

By: _____
Alexis R. Apostolidis, Attorney-in-Fact

(CORPORATE SEAL)

(Power of Attorney must be attached)

[1] **Performance Bond must be equivalent to one hundred percent (100%) of the Contract price.**

**Power of Attorney**

KNOW ALL MEN BY THESE PRESENTS THAT:

Nationwide Mutual Insurance Company, an Ohio corporation

hereinafter referred to severally as the "Company" and collectively as "the Companies" does hereby make, constitute and appoint:

AIMEE R. PERONDINE; DONNA M. PLANETA; JOSHUA SANFORD; MICHELLE ANNE MCMAHON; NICHOLAS TURECAMO; REBECCA M. JOSEPHSON; ALEXIS R. APOSTOLIDIS; AMANDA PIERINA D'ANGELO; CASSANDRA BAEZ; ERIC STRBA; GENTRY STEWART; JACQUELINE ROSE SUSCO; JENNIFER GAIL GODERE; KATHRYN PRYOR

each in their individual capacity, its true and lawful attorney-in-fact, with full power and authority to sign, seal, and execute on its behalf any and all bonds and undertakings, and other obligatory instruments of similar nature, in penalties not exceeding the sum of

UNLIMITED

and to bind the Company thereby, as fully and to the same extent as if such instruments were signed by the duly authorized officers of the Company; and all acts of said Attorney pursuant to the authority given are hereby ratified and confirmed.

This power of attorney is made and executed pursuant to and by authority of the following resolution duly adopted by the board of directors of the Company:

"RESOLVED, that the president, or any vice president be, and each hereby is, authorized and empowered to appoint attorneys-in-fact of the Company, and to authorize them to execute and deliver on behalf of the Company any and all bonds, forms, applications, memorandums, undertakings, recognizances, transfers, contracts of indemnity, policies, contracts guaranteeing the fidelity of persons holding positions of public or private trust, and other writings obligatory in nature that the business of the Company may require; and to modify or revoke, with or without cause, any such appointment or authority; provided, however, that the authority granted hereby shall in no way limit the authority of other duly authorized agents to sign and countersign any of said documents on behalf of the Company."

"RESOLVED FURTHER, that such attorneys-in-fact shall have full power and authority to execute and deliver any and all such documents and to bind the Company subject to the terms and limitations of the power of attorney issued to them, and to affix the seal of the Company thereto; provided, however, that said seal shall not be necessary for the validity of any such documents."

This power of attorney is signed and sealed under and by the following bylaws duly adopted by the board of directors of the Company.

Execution of Instruments. Any vice president, any assistant secretary or any assistant treasurer shall have the power and authority to sign or attest all approved documents, instruments, contracts, or other papers in connection with the operation of the business of the company in addition to the chairman of the board, the chief executive officer, president, treasurer or secretary; provided, however, the signature of any of them may be printed, engraved, or stamped on any approved document, contract, instrument, or other papers of the Company.

IN WITNESS WHEREOF, the Company has caused this instrument to be sealed and duly attested by the signature of its officer the 20th day of August, 2021.

Antonio C. Albanese, **Vice President** of Nationwide Mutual Insurance Company

**ACKNOWLEDGMENT**

STATE OF NEW YORK COUNTY OF NEW YORK: ss

On this 20th day of August, 2021, before me came the above-named officer for the Company aforesaid, to me personally known to be the officer described in and who executed the preceding instrument, and he acknowledged the execution of the same, and being by me duly sworn, deposes and says, that he is the officer of the Company aforesaid, that the seal affixed hereto is the corporate seal of said Company, and the said corporate seal and his signature were duly affixed and subscribed to said instrument by the authority and direction of said Company.

Stephanie Rubino McArthur
Notary Public, State of New York
No. 02MC6270117
Qualified in New York County
Commission Expires October 19, 2024

Notary Public
My Commission Expires
October 19, 2024

**CERTIFICATE**

I, Laura B. Guy, Assistant Secretary of the Company, do hereby certify that the foregoing is a full, true and correct copy of the original power of attorney issued by the Company; that the resolution included therein is a true and correct transcript from the minutes of the meetings of the boards of directors and the same has not been revoked or amended in any manner; that said Antonio C. Albanese was on the date of the execution of the foregoing power of attorney the duly elected officer of the Company, and the corporate seal and his signature as officer were duly affixed and subscribed to the said instrument by the authority of said board of directors; and the foregoing power of attorney is still in full force and effect.

IN WITNESS WHEREOF, I have hereunto subscribed my name as Assistant Secretary, and affixed the corporate seal of said Company this 28th day of December, 2021.

Assistant Secretary

BDJ 1(08-21)00

## FLORIDA DEPARTMENT OF FINANCIAL SERVICES

*GENTRY JULIA STEWART*

*License Number : W697101*

| Non Resident Insurance License | Issue Date |
|---|---|
| *0920 – NONRES GEN LINES (PROP & CAS) | 11/04/2020 |

NOTICE - This non-resident license is limited to the classes of insurance reflected above and is further limited to ONLY those classes of insurance for which you are licensed in your home state.

Jimmy Patronis
Chief Financial Officer
State of Florida

**Please Note**

A licensee may only transact insurance with an active appointment by an eligible insurer or employer. If you are acting as a surplus lines agent, public adjuster, or reinsurance intermediary manager/broker, you should have an appointment recorded in your own name on file with the Department. If you are unsure of your license status you should contact the Florida Department of Financial Services immediately. This license will expire if more than 48 months elapse without an appointment for each class of insurance listed. If such expiration occurs, the individual will be required to re-qualify as a first-time applicant. If this license was obtained by passing a licensure examination offered by the Florida Department of Financial Services, the licensee is required to comply with continuing education requirements contained in 626.2815 or 648.385, Florida Statutes. A licensee may track their continuing education requirements completed or needed in their MyProfile account at https://dice.fldfs.com. To validate the accuracy of this license you may review the individual license record under "Licensee Search" on the Florida Department of Financial Services website at http://www.MyFloridaCFO.com/Division/Agents

# SURETY PAYMENT BOND

By this Bond, We TK Airport Solutions, Inc., as Principal, whose principal business address is 3201 N. Sylvania Avenue, Suite 117, Fort Worth, TX 76111, as Contractor under the contract dated January 10, 20 22, between Principal and Miami-Dade County for the construction of Project: PASSENGER BOARDING BRIDGES Bid No: MDAD-PBB 15-1020 (herein after referred to as "Contract") the terms of which Contract are incorporated by reference in its entirety into this Bond and Nationwide Mutual Insurance Company, a corporation, whose principal business address is One West Nationwide Blvd.,* as Surety, are bound to Miami-Dade County (hereinafter referred to as "County") in the sum of Twenty Four Million Three Hundred Forty Four Thousand Three (U.S. dollars) $ ($24,344,003.00),[1] for payment of which we bind ourselves, our heirs, personal representatives, successors, and assigns, jointly and severally.

THE CONDITION OF THIS BOND is that if Principal:

1.Promptly makes payments to all claimants, as defined in Section 255.05(1), Florida Statutes, supplying Principal with labor, materials, or supplies, used directly or indirectly by Principal in the prosecution of the Work provided for in the Contract; provided, however, that any action instituted by such claimant under this paragraph for payment must be in accordance with notice and time limitation provisions in Section 255.05(2), Florida Statutes; and

2. Pays County all losses, damages, expenses, costs and attorney's fees, including appellate proceedings, that County sustains because of a failure by Principal to make any such payments;

then this bond is void; otherwise it remains in full force.

A claimant shall have a right of action against the Principal and the Surety for the amount due it. Such action shall not involve the County in any expense.

A claimant, except a laborer, who is not in privity with the Principal and who has not received payment for its labor, materials, or supplies shall, within 45 days after beginning to furnish labor, materials, or supplies for the prosecution of the work, furnish the Principal with a notice that it intends to look to the bond for protection. A claimant who is not in privity with the Principal and who has not received payment for its labor, materials, or supplies shall, within 90 days after performance of the labor or after complete delivery of the materials or supplies, deliver to the Principal and to the Surety written notice of the performance of the labor or delivery of the materials or supplies and of the nonpayment.

No action for labor, materials or supplies may be instituted against the Principal or the Surety unless both notices have been given. No action shall be instituted against the Principal or the Surety on the bond after one (1) year from the performance of the labor or completion of delivery of the materials or supplies. A claimant may not waive in advance its right to bring an action under the bond against the surety.

Any changes in or under the Contract Documents and compliance or non-compliance with any formalities connected with the Contract or the changes does not affect Surety's obligation under this Bond.

*Frap Solutions, Columbus, OH 43215-2220

## SURETY PAYMENT BOND (Cont'd)

IN WITNESS WHEREOF, the above bounden parties have caused this Bond to be executed by their appropriate officials as of the 28th day of December, 20 21.

(CONTRACTOR)

TK Airport Solutions, Inc.
(Contractor Name)

BY: _____
(President) (Managing Partner or Joint Venturer)

COUNTERSIGNED BY RESIDENT FLORIDA AGENT OF SURETY:

SURETY: Nationwide Mutual Insurance Company

_____
Gentry Julia Stewart, FL Non Resident Agent License Number: W697101
(Copy of Agent's current Identification Card as issued by State of Florida Insurance Commissioner must be attached)

By: _____
Alexis R. Apostolidis, Attorney-in-Fact

(CORPORATE SEAL)

(Power of Attorney must be attached)

[1] **Surety Payment Bond must be equivalent to one hundred percent (100%) of the Contract price.**

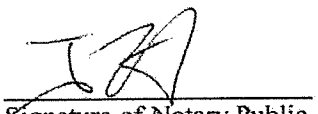
## NOTARY ACKNOWLEDGMENT OF SURETY:

State of Connecticut

County of Hartford ss.

On this the 28th day of December, 20 21, before me, Timothy S. Huffman, the undersigned officer, personally appeared Alexis R. Apostolidis, known to me (or satisfactorily proven) to be the person whose name is subscribed as Attorney-In-Fact for Nationwide Mutual Insurance Company, and acknowledged that s/he executed the same as the act of his/her principal for the purposes therein contained.

In witness whereof I hereunto set my hand.



Signature of Notary Public
Date Commission Expires: February 28, 2026
Timothy S. Huffman
Printed Name of Notary

TIMOTHY S. HUFFMAN
*NOTARY PUBLIC - CT 183092*
My Commission Expires Feb. 28, 2026

**Power of Attorney**

KNOW ALL MEN BY THESE PRESENTS THAT:

Nationwide Mutual Insurance Company, an Ohio corporation

hereinafter referred to severally as the "Company" and collectively as "the Companies" does hereby make, constitute and appoint:

AIMEE R. PERONDINE; DONNA M. PLANETA; JOSHUA SANFORD; MICHELLE ANNE MCMAHON; NICHOLAS TURECAMO; REBECCA M. JOSEPHSON; ALEXIS R. APOSTOLIDIS; AMANDA PIERINA D'ANGELO; CASSANDRA BAEZ; ERIC STRBA; GENTRY STEWART; JACQUELINE ROSE SUSCO; JENNIFER GAIL GODERE; KATHRYN PRYOR

each in their individual capacity, its true and lawful attorney-in-fact, with full power and authority to sign, seal, and execute on its behalf any and all bonds and undertakings, and other obligatory instruments of similar nature, in penalties not exceeding the sum of

UNLIMITED

and to bind the Company thereby, as fully and to the same extent as if such instruments were signed by the duly authorized officers of the Company; and all acts of said Attorney pursuant to the authority given are hereby ratified and confirmed.

This power of attorney is made and executed pursuant to and by authority of the following resolution duly adopted by the board of directors of the Company:

"RESOLVED, that the president, or any vice president be, and each hereby is, authorized and empowered to appoint attorneys-in-fact of the Company, and to authorize them to execute and deliver on behalf of the Company any and all bonds, forms, applications, memorandums, undertakings, recognizances, transfers, contracts of indemnity, policies, contracts guaranteeing the fidelity of persons holding positions of public or private trust, and other writings obligatory in nature that the business of the Company may require; and to modify or revoke, with or without cause, any such appointment or authority; provided, however, that the authority granted hereby shall in no way limit the authority of other duly authorized agents to sign and countersign any of said documents on behalf of the Company."

"RESOLVED FURTHER, that such attorneys-in-fact shall have full power and authority to execute and deliver any and all such documents and to bind the Company subject to the terms and limitations of the power of attorney issued to them, and to affix the seal of the Company thereto; provided, however, that said seal shall not be necessary for the validity of any such documents."

This power of attorney is signed and sealed under and by the following bylaws duly adopted by the board of directors of the Company.

Execution of Instruments. Any vice president, any assistant secretary or any assistant treasurer shall have the power and authority to sign or attest all approved documents, instruments, contracts, or other papers in connection with the operation of the business of the company in addition to the chairman of the board, the chief executive officer, president, treasurer or secretary; provided, however, the signature of any of them may be printed, engraved, or stamped on any approved document, contract, instrument, or other papers of the Company.

IN WITNESS WHEREOF, the Company has caused this instrument to be sealed and duly attested by the signature of its officer the 20th day of August, 2021.

Antonio C. Albanese, **Vice President** of Nationwide Mutual Insurance Company

**ACKNOWLEDGMENT**

STATE OF NEW YORK COUNTY OF NEW YORK: ss

On this 20th day of August, 2021, before me came the above-named officer for the Company aforesaid, to me personally known to be the officer described in and who executed the preceding instrument, and he acknowledged the execution of the same, and being by me duly sworn, deposes and says, that he is the officer of the Company aforesaid, that the seal affixed hereto is the corporate seal of said Company, and the said corporate seal and his signature were duly affixed and subscribed to said instrument by the authority and direction of said Company.

Stephanie Rubino McArthur
Notary Public, State of New York
No. 02MC6270117
Qualified in New York County
Commission Expires October 19, 2024

Notary Public
My Commission Expires
October 19, 2024

**CERTIFICATE**

I, Laura B. Guy, Assistant Secretary of the Company, do hereby certify that the foregoing is a full, true and correct copy of the original power of attorney issued by the Company; that the resolution included therein is a true and correct transcript from the minutes of the meetings of the boards of directors and the same has not been revoked or amended in any manner; that said Antonio C. Albanese was on the date of the execution of the foregoing power of attorney the duly elected officer of the Company, and the corporate seal and his signature as officer were duly affixed and subscribed to the said instrument by the authority of said board of directors; and the foregoing power of attorney is still in full force and effect.

IN WITNESS WHEREOF, I have hereunto subscribed my name as Assistant Secretary, and affixed the corporate seal of said Company this 28th day of December, 2021.

Laura B. Guy

Assistant Secretary

BDJ 1(08-21)00

## FLORIDA DEPARTMENT OF FINANCIAL SERVICES

*GENTRY JULIA STEWART*

*License Number: W697101*

| Non Resident Insurance License | Issue Date |
|---|---|
| *0920 - NONRES GEN LINES (PROP & CAS) | 11/04/2020 |

NOTICE - This non-resident license is limited to the classes of insurance reflected above and is further limited to ONLY those classes of insurance for which you are licensed in your home state.

Jimmy Patronis
Chief Financial Officer
State of Florida

### Please Note

A licensee may only transact insurance with an active appointment by an eligible insurer or employer. If you are acting as a surplus lines agent, public adjuster, or reinsurance intermediary manager/broker, you should have an appointment recorded in your own name on file with the Department. If you are unsure of your license status you should contact the Florida Department of Financial Services immediately. This license will expire if more than 48 months elapse without an appointment for each class of insurance listed. If such expiration occurs, the individual will be required to re-qualify as a first-time applicant. If this license was obtained by passing a licensure examination offered by the Florida Department of Financial Services, the licensee is required to comply with continuing education requirements contained in 626.2815 or 648.385, Florida Statutes. A licensee may track their continuing education requirements completed or needed in their MyProfile account at https://dice.fldfs.com. To validate the accuracy of this license you may review the individual license record under "Licensee Search" on the Florida Department of Financial Services website at http://www.MyFloridaCFO.com/Division/Agents



Nationwide®

# Nationwide Mutual Insurance Company

1100 Locust St, Dept. 2006
Des Moines, Iowa 50391-2006
Attn: Surety Claims Manager
Tel. 866-387-0457

## Surety Claim Notification

Claim notices should be sent to the attention of the Surety Claims Manager via e-mail to bondclms@nationwide.com or via mail to the address above.

All other notices should be sent to the attention of the Surety Underwriting Department via e-email to bondcomm@nationwide.com or via mail to the address above.

Thank you for your cooperation.

Nationwide Mutual Insurance Company, Surety Department

# BID TALLY SHEET

**Solicitation Number:** MDAD-PBB 15-1020
**Summary Description:** 2021 15 PBBs Replacement at Concourses D, E, F, and H
**Solicitation Opening/ Closing Date:** 10/21/2021-11/22/2021 @2:00PM
**Prepared by:** AAZAM PIPRAWALA
**Verified by:**
**Note:** Only one bid was received

| | TK AIRPORT SOLUTIONS INC. | | | |
|---|---|---|---|---|
| | SUBMITTED BID | | FINAL NEGOTIATED BID | |
| Vendor Name: | | | | |
| Is the bid responsive (if no, state reason below): | | YES | | YES |
| Indicate SBE Certification | | NO | | NO |
| Indicate Veteran certification: | | NO | | NO |
| Registered vendor (yes/ no): | | YES | | YES |
| Incumbent vendor (yes/no): | | NO | | NO |
| Local Vendor (yes/no, if yes, indicate county): | | NO | | NO |

| Items being procured per current solicitation | | | | Unit | Extended | Unit | Extended |
|---|---|---|---|---|---|---|---|
| Item no. | Description | Quantity | UOM | Price | Price | Price | Price |
| 1 | Foundation Design & Installation F21 PBB per Lump Sum | 1 | EA | $250,000.00 | $250,000.00 | $241,508 | $241,508 |
| 2 | Deliver Gate D10 PBB per Lump Sum | 1 | EA | $1,161,379.00 | $1,161,379.00 | $1,136,291 | $1,136,291 |
| 3 | Deliver Gate D12 PBB per Lump Sum | 1 | EA | $975,278.00 | $975,278.00 | $953,997 | $953,997 |
| 4 | Deliver Gate D15 PBB per Lump Sum | 1 | EA | $915,503.00 | $915,503.00 | $896,253 | $896,253 |
| 5 | Deliver Gate D17 PBB per Lump Sum | 1 | EA | $909,979.00 | $909,979.00 | $890,916 | $890,916 |
| 6 | Deliver Gate D19 PBB per Lump Sum | 1 | EA | $931,574.00 | $931,574.00 | $911,778 | $911,778 |
| 7 | Deliver Gate E5 PBB per Lump Sum | 1 | EA | $891,561.00 | $891,561.00 | $873,124 | $873,124 |
| 8 | Deliver Gate F21 PBB per Lump Sum | 1 | EA | $1,111,041.00 | $1,111,041.00 | $1,087,534 | $1,087,534 |
| 9 | Deliver Gate H3 PBB per Lump Sum | 1 | EA | $967,451.00 | $967,451.00 | $947,229 | $947,229 |
| 10 | Deliver Gate H5 PBB per Lump Sum | 1 | EA | $920,899.00 | $920,899.00 | $902,259 | $902,259 |
| 11 | Deliver Gate H6 PBB per Lump Sum | 1 | EA | $944,818.00 | $944,818.00 | $925,365 | $925,365 |
| 12 | Deliver Gate H7 PBB per Lump Sum | 1 | EA | $939,576.00 | $939,576.00 | $920,301 | $920,301 |
| 13 | Deliver Gate H9 PBB per Lump Sum | 1 | EA | $920,736.00 | $920,736.00 | $902,101 | $902,101 |
| 14 | Deliver Gate H12 PBB per Lump Sum | 1 | EA | $993,253.00 | $993,253.00 | $973,711 | $973,711 |
| 15 | Deliver Gate H15 PBB per Lump Sum | 1 | EA | $1,053,129.00 | $1,053,129.00 | $1,030,955 | $1,030,955 |
| 16 | Deliver Gate H17 PBB per Lump Sum | 1 | EA | $1,367,564.00 | $1,367,564.00 | $1,335,666 | $1,335,666 |
| 17 | Install & Commission Gate D10 PBB per Lump Sum | 1 | EA | $389,879.00 | $389,879.00 | $376,634 | $376,634 |
| 18 | Install & Commission Gate D12 PBB per Lump Sum | 1 | EA | $377,318.00 | $377,318.00 | $364,500 | $364,500 |
| 19 | Install & Commission Gate D15 PBB per Lump Sum | 1 | EA | $349,330.00 | $349,330.00 | $337,463 | $337,463 |
| 20 | Install & Commission Gate D17 PBB per Lump Sum | 1 | EA | $349,554.00 | $349,554.00 | $337,678 | $337,678 |
| 21 | Install & Commission Gate D19 PBB per Lump Sum | 1 | EA | $349,554.00 | $349,554.00 | $337,678 | $337,678 |
| 22 | Install & Commission Gate E5 PBB per Lump Sum | 1 | EA | $349,554.00 | $349,554.00 | $337,678 | $337,678 |
| 23 | Install & Commission Gate F21 PBB per Lump Sum | 1 | EA | $390,933.00 | $390,933.00 | $377,652 | $377,652 |
| 24 | Install & Commission Gate H3 PBB per Lump Sum | 1 | EA | $354,733.00 | $354,733.00 | $342,682 | $342,682 |
| 25 | Install & Commission Gate H5 PBB per Lump Sum | 1 | EA | $354,733.00 | $354,733.00 | $342,682 | $342,682 |
| 26 | Install & Commission Gate H6 PBB per Lump Sum | 1 | EA | $354,733.00 | $354,733.00 | $342,682 | $342,682 |
| 27 | Install & Commission Gate H7 PBB per Lump Sum | 1 | EA | $354,733.00 | $354,733.00 | $342,682 | $342,682 |
| 28 | Install & Commission Gate H9 PBB per Lump Sum | 1 | EA | $354,956.00 | $354,956.00 | $342,897 | $342,897 |
| 29 | Install & Commission Gate H12 PBB per Lump Sum | 1 | EA | $359,300.00 | $359,300.00 | $347,094 | $347,094 |
| 30 | Install & Commission Gate H15 PBB per Lump Sum | 1 | EA | $395,282.00 | $395,282.00 | $381,853 | $381,853 |
| 31 | Install & Commission Gate H17 PBB per Lump Sum | 1 | EA | $461,505.00 | $461,505.00 | $445,826 | $445,826 |
| | DEDICATED ALLOWANCE ACCOUNT: SITE CONDITIONS (10% OF TOTAL BID FOR ITEMS 1-31) | 1 | EA | | $2,079,983.80 | | $2,028,666.90 |
| | CONTINGENCY ALLOWANCE ACCOUNT (10% OF TOTAL BID FOR ITEMS 1-31) | 1 | EA | | $2,079,983.80 | | $2,028,666.90 |

| | | |
|---|---|---|
| Total Raw Price: | $20,799,838.00 | $20,286,669.00 |
| Evaluation Adjustment SBE Tier Preference: | N/A | N/A |
| Evaluation Adjustment 5 % Veteran Preference: | N/A | N/A |
| Total Evaluated Price: | $20,799,838.00 | $20,286,669.00 |

Optional Items (not included in evaluated price)

| |
|---|
| Identify Non-responsive vendors and reason: |
| |

**THIS TALLY SHEET IS AN INDICATION OF PRICES ONLY AND IS NOT A DETERMINATION OF THE LOWEST RESPONSIVE/RESPONSIBLE BIDDER(S)**

# REVISED
# INVITATION TO QUOTE (ITQ)

## PART IV. PRICING FORM

A. **The Bidder's prices per this Section, shall be inclusive of all costs associated with providing the services herein, which shall include at minimum the removal and legal disposal of existing fixed walkway and PBBs, manufacturing, delivery and installation of new PBBs, fixed walkway, support columns, foundations (if necessary), repairs to and upgrades to existing systems where required, Preconditioned Air Handling Units, 400 Hz ground power units, Service Transfer Units (STU), Boom-air hose management systems, fixed walkway and PBB pre-cool system, baggage chutes, mechanical, electrical work, and commissioning of the PBBs, and associated equipment.**

1. Mobilization shall consist of the preparatory work and operations for beginning work on the Project; costs of bonds and required insurance; costs of operations necessary to move personnel, badging, equipment, supplies, and incidentals to the site; costs of establishment of temporary offices, shops, safety equipment and first aid supplies; and other costs associated with or required by the Contract Documents and any Federal, State, and/or local laws and regulations. No separate cost will be paid for mobilization. All costs related to mobilization shall be considered incidental to and included in the unit cost prices.
2. The Bidder's prices shall include all engineering, labor, permit(s), materials, tools, and equipment; all other direct and indirect costs necessary to complete the item of Work and to coordinate it with adjacent work; and shall include all overhead and profit.
3. All handling or storage costs incurred by the Contractor shall be considered incidental to the installation of the equipment and as such will not be considered for additional compensation.

| ITEM | QTY | UOM | DESCRIPTION | PRICE |
|---|---|---|---|---|
| 1 | 1 | EA | Foundation Design & Installation F21 PBB per Lump Sum | $250,000 |
| 2 | 1 | EA | Deliver Gate D10 PBB per Lump Sum | $1,161,379 |
| 3 | 1 | EA | Deliver Gate D12 PBB per Lump Sum | $975,278 |
| 4 | 1 | EA | Deliver Gate D15 PBB per Lump Sum | $915,503 |
| 5 | 1 | EA | Deliver Gate D17 PBB per Lump Sum | $909,979 |
| 6 | 1 | EA | Deliver Gate D19 PBB per Lump Sum | $931,574 |
| 7 | 1 | EA | Deliver Gate E5 PBB per Lump Sum | $891,561 |
| 8 | 1 | EA | Deliver Gate F21 PBB per Lump Sum | $1,111,041 |
| 9 | 1 | EA | Deliver Gate H3 PBB per Lump Sum | $967,451 |
| 10 | 1 | EA | Deliver Gate H5 PBB per Lump Sum | $920,899 |
| 11 | 1 | EA | Deliver Gate H6 PBB per Lump Sum | $944,818 |
| 12 | 1 | EA | Deliver Gate H7 PBB per Lump Sum | $939,576 |
| 13 | 1 | EA | Deliver Gate H9 PBB per Lump Sum | $920,736 |
| 14 | 1 | EA | Deliver Gate H12 PBB per Lump Sum | $993,253 |
| 15 | 1 | EA | Deliver Gate H15 PBB per Lump Sum | $1,053,129 |
| 16 | 1 | EA | Deliver Gate H17 PBB per Lump Sum | $1,367,564 |
| 17 | 1 | EA | Install & Commission Gate D10 PBB per Lump Sum | $389,879 |
| 18 | 1 | EA | Install & Commission Gate D12 PBB per Lump Sum | $377,318 |

# REVISED
# INVITATION TO QUOTE (ITQ)

| | | | | |
|---|---|---|---|---|
| 19 | 1 | EA | Install & Commission Gate D15 PBB per Lump Sum | $349,330 |
| 20 | 1 | EA | Install & Commission Gate D17 PBB per Lump Sum | $349,554 |
| 21 | 1 | EA | Install & Commission Gate D19 PBB per Lump Sum | $349,554 |
| 22 | 1 | EA | Install & Commission Gate E5 PBB per Lump Sum | $349,554 |
| 23 | 1 | EA | Install & Commission Gate F21 PBB per Lump Sum | $390,933 |
| 24 | 1 | EA | Install & Commission Gate H3 PBB per Lump Sum | $354,733 |
| 25 | 1 | EA | Install & Commission Gate H5 PBB per Lump Sum | $354,733 |
| 26 | 1 | EA | Install & Commission Gate H6 PBB per Lump Sum | $354,733 |
| 27 | 1 | EA | Install & Commission Gate H7 PBB per Lump Sum | $354,733 |
| 28 | 1 | EA | Install & Commission Gate H9 PBB per Lump Sum | $354,956 |
| 29 | 1 | EA | Install & Commission Gate H12 PBB per Lump Sum | $359,300 |
| 30 | 1 | EA | Install & Commission Gate H15 PBB per Lump Sum | $395,282 |
| 31 | 1 | EA | Install & Commission Gate H17 PBB per Lump Sum | $461,505 |
| DEDICATED ALLOWANCE ACCOUNT: SITE CONDITIONS (10% OF TOTAL BID FOR ITEMS 1-31) | | | | MDAD WILL FILL IN AT TIME OF AWARD |
| CONTINGENCY ALLOWANCE ACCOUNT (10% OF TOTAL BID FOR ITEMS 1-31) | | | | MDAD WILL FILL IN AT TIME OF AWARD |

# REVISED
# INVITATION TO QUOTE (ITQ)

## PART V. SUBMITTAL FORM

| Bidder's Legal Name (include d/b/a if applicable): | Federal Tax Identification Number: |
|---|---|
| TK Airport Solutions, Inc. | 52-2089962 |

### A. SMALL BUSINESS ENTERPRISE CONTRACT MEASURES (if applicable):

A Small Business Enterprise (SBE) must be certified by the Small Business Development Division (SBD) for the type of goods and/or services the Bidder provides in accordance with the applicable Commodity Code(s) for this Solicitation. For certification information, contact SBD at (305) 375-3111 or access http://www.miamidade.gov/smallbusiness/certification-programs.asp. The SBE must be certified by this Solicitation's submission deadline, at Contract award, and for the duration of the Contract to remain eligible for the preference. Firms that graduate from the SBE Program during the Contract may remain on the Contract.

☐ Place a check mark here **only** if affirming Bidder is a Miami-Dade County Certified Small Business Enterprise.

**IN ACCORDANCE WITH CFR 200.319 (b), SMALL BUSINESS ENTERPRISE MEASURES SHALL NOT APPLY TO FEDERALLY FUNDED PURCHASES.**

### B. LOCAL PREFERENCE CERTIFICATION:

For the purpose of this certification, and pursuant to Section 2-8.5 of the Code of Miami-Dade County, a "local business" is a business located within the limits of Miami-Dade County that has a valid Local Business Tax Receipt issued by Miami-Dade County at least one year prior to bid submission; has a physical business address located within the limits of Miami-Dade County from which business is performed and which served as the place of employment for at least three full time employees for the continuous period of one year prior to bid submittal (by exception, if the business is a certified Small Business Enterprise, the local business location must have served as the place of employment for one full time employee); and contributes to the economic development of the community in a verifiable and measurable way. This may include, but not be limited to, the retention and expansion of employment opportunities and the support and increase to the County's tax base.

☐ Place a check mark here **only** if affirming the Bidder meets requirements for Local Preference. **Failure to complete this certification at this time may render the vendor ineligible for Local Preference.**

**IN ACCORDANCE WITH CFR 200.319 (b), LOCAL PREFERENCE SHALL NOT APPLY TO FEDERALLY FUNDED PURCHASES.**

### C. LOCAL CERTIFIED VETERAN'S BUSINESS ENTERPRISE CERTIFICATION:

A Local Certified Veteran's Business Enterprise is a firm that is: (a) a local business pursuant to Section 2-8.5 of the Code of Miami-Dade County, and (b) prior to bid submission is certified by the State of Florida Department of Management Services as a veteran business enterprise pursuant to Section 295.187 of the Florida Statues.

☐ Place a check mark here **only** if affirming the Bidder is a Local Certified Veteran's Business Enterprise. **A copy of the certification must be submitted with the bid.**

**IN ACCORDANCE WITH CFR 200.319 (b), LOCAL CERTIFIED VETERAN'S BUSINESS ENTERPRISE PREFERENCE SHALL NOT APPLY TO FEDERALLY FUNDED PURCHASES.**

### D. LOCALLY HEADQUARTERED BUSINESS CERTIFICATION:

For the purpose of this certification, and pursuant to Section 2-8.5 of the Code of Miami-Dade County, a "locally headquartered business" is a Local Business as defined above, which has a "principal place of business" in Miami-Dade County. "Principal place of business" means the nerve center or the center of overall direction, control, and coordination of activities of the Bidder. If the Bidder has only one business location, such business location shall be its principal place of business.

☐ Place a check mark here **only** if affirming the Bidder meets requirements for the Locally Headquartered Preference (LHP). **Failure to affirm this certification at this time may render the vendor ineligible for the LHP.** The address of the Locally Headquartered office is:

# REVISED
# INVITATION TO QUOTE (ITQ)

**IN ACCORDANCE WITH CFR 200.319 (b), LOCALLY HEADQUARTERED BUSINESS PREFERENCE SHALL NOT APPLY TO FEDERALLY FUNDED PURCHASES.**

**E. CONVICTION DISCLOSURE:**

Pursuant to Section 2-8.6 of the Code of Miami-Dade County, any individual, corporation, partnership, joint venture or other legal entity having an officer, director, or executive who has been convicted of a felony during the past ten (10) years shall disclose this information at the time of bid submittal.

☐ Place a check mark here **only** if the Bidder has such conviction to disclose to comply with this requirement.

**F. CONFLICT OF INTEREST DISCLOSURE:**

Pursuant to Section 2-11.1 (c) and (d) of the Code of Miami-Dade County, please respond to the following questions posed.

1. ARE ANY OWNERS/PRINCIPALS/PERSONS WITH OWNERSHIP INTEREST IN THE COMPANY, A MIAMI-DADE COUNTY ELECTED OFFICIAL, AGENCY BOARD MEMBER OR EMPLOYEE(S)?

☐ **YES** or ☑ **NO**

**If Yes, attach Conflict-of-Interest Opinion provided by Miami-Dade County Commission on Ethics and Public Trust.**

2. ARE ANY IMMEDIATE FAMILY MEMBERS OF THE COMPANY'S OWNERS/PRINCIPALS/PERSONS WITH OWNERSHIP INTEREST IN THE COMPANY, A MIAMI-DADE COUNTY ELECTED OFFICIAL, AGENCY BOARD MEMBER OR EMPLOYEE?

☐ **YES** or ☑ **NO**

**If Yes, attach Conflict-of-Interest Opinion provided by Miami-Dade County Commission on Ethics and Public Trust.**

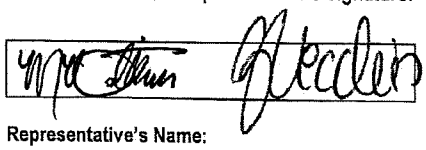
**G. WAIVER OF CONFIDENTIALITY AND TRADE SECRET TREATMENT OF BID:**

The Bidder acknowledges and agrees that the submittal of the Bid is governed by Florida's Government in the Sunshine Laws and Public Records Laws, as set forth in Florida Statutes Section 286.011and Chapter 119. As such, all material submitted as part of, or in support of, the Bid will be available for public inspection after opening of bids and may be considered by the County in public.

**By submitting a bid pursuant to the Solicitation, Bidder agrees that all such materials may be considered public records. The Bidder shall not submit any information in response to the Solicitation which the Bidder considers to be a trade secret, proprietary or confidential.** If the Bid contains a claim that all or a portion of the Bid submitted contains confidential, proprietary or trade secret information, the Bidder, **by signing below**, knowingly and expressly **waives** all claims made that the Bid, or any part thereof no matter how indicated, is confidential, proprietary or a trade secret and authorizes the County to release such information to the public for any reason.

**Acknowledgment of Waiver:**

**Bidder's Authorized Representative's Signature:**



**Date:** 11/21/2021

**Representative's Name:** Matt Watkins, Barbara Vecchio

**Representative's Title:** President, Treasurer

**H. BIDDER'S CONTACT INFORMATION**

**Bidder's Contact Person:** Wm Clay Ratliff

**Email Address:** clay.ratliff@tkelevator.com

**Phone Number (include area code):** 682-328-9165

# REVISED
# INVITATION TO QUOTE (ITQ)

I. ACKNOWLEDGEMENT OF BINDING OFFER

**The execution of this form constitutes the consent of the Bidder to be bound by the terms of its Bid and the Solicitation. Failure to sign where indicated below by an authorized representative shall render the Bid non-responsive. The County may, however, in its sole discretion, accept any response that includes an executed document which unequivocally binds the Bidder to the terms of its Bid and the Solicitation.**

**Bidder's Authorized Representative's Signature:**

**Date:**

11/21/2021

**Representative's Name:**

Matt Watkins, Barbara Vecchio

**Representative's Title:**

President, Treasurer

**This ITQ includes the following attachments and exhibits:**

Attachment A - SECTION 14950 - AIRCRAFT PASSENGER BOARDING BRIDGES - APRON DRIVE
Attachment B - Contractor Due Diligence Affidavit (if award is over $1,000,000)
Attachment C – Subcontracting Form

Exhibit 1 – Preliminary Schedule
Exhibit 2 - PBB Locations
Exhibit 3 - Shut-down Request Procedures and forms
Exhibit 4 - Hot Work Permit

ATTACHMENT C

**SUBCONTRACTING FORM**

**Solicitation Number** MDAD-PBB 15-1020

**Vendor Name** TK Airport Solutions, Inc. **FEIN #** 52-2089962

**Complete "A" or "B":**

A. ☐ **No subcontractors or direct suppliers will be utilized pursuant to this solicitation.**

B. ☒ **The below listed subcontractors and/or suppliers will be utilized pursuant to this solicitation:**

| Business Name and Address of First Tier Subcontractor/ Subconsultant | Name of Principal Owner | Scope of Work to be Performed by Subcontractor /Subconsultant | Subcontractor / Subconsultant License (if applicable) |
|---|---|---|---|
| AERO Bridgeworks Inc. | AERO Bridgeworks Employee Stock Ownership plan | Installer | N/A |
| | | | |
| | | | |
| | | | |

| Business Name and Address of First Tier Direct Supplier | Name of Principal Owner | Supplies, Materials, and/or Services to be Provided by Supplier |
|---|---|---|
| Twist Aero | Joe Wright | Boom Air Hose Management Supplier |
| Engineered Air | Richard Rambacher | AHU supplier |
| Semler Industries | Loren Semler | PWC Supplier |
| Cavotec | Publicly Traded | AHU, Gate Box Supplier |

And

| Below and/or attached is a detailed statement of the firm's policies and procedures for awarding subcontractors: |
|---|
| See Attached |
| |
| |
| |

(Duplicate this form if additional space is needed to provide the required information)

When Subcontracting is allowed and subcontractors will be utilized, the Contractor shall comply with Section 2-8.8 of the Code – Fair Subcontracting Practices: (1) Prior to contract award, the Bidder shall provide a detailed statement of its policies and procedures for awarding subcontracts and (2) As a condition of final payment under a contract, the Contractor shall identify subcontractors used in the work, the amount of each subcontract, and the amount paid and to be paid to each subcontractor via the BMWS at http://mdcsbd.gob2g.com.

Pursuant to Section 2-8.1(f) of the Code – Listing of subcontractors required on certain contracts, for all contracts which involve the expenditure of one hundred thousand dollars ($100,000) or more, the entity contracting with the County must report to the County the race, gender, and ethnic origin of the owners and employees of its first tier subcontractors and suppliers via the BMWS at http://mdcsbd.gob2g.com. The race, gender, and ethnic information must be submitted via BMWS as soon as reasonably available and, in any event, prior to final payment under the Contract. The Contractor shall not change or substitute first tier subcontractors or direct suppliers or the portions of the Contract work to be performed or materials to be supplied from those identified except upon written approval of the County.

*I certify that the information contained in this form is to the best of my knowledge true and accurate.*

| Signature of Vendor's Representative | Matt Watkins, Barbara Vecchio | President, Treasurer | 1/19/2021 |
|---|---|---|---|
| | **Print Name** | **Print Title** | **Date** |

# TK Airport Solutions, Inc.
# Subcontractor Policies and Procedures

To ensure that both TK Airport Solutions, Inc. and our Subcontractors are in compliance with Federal and State reporting requirements, a) the following steps must be completed in the order they appear and b) all required information is to be provided prior to any Subcontractor performing services on behalf of our firm.

1. W-9 Requirement – Before issuance of a subcontractor or Purchase Order, all suppliers must provide a W-9 form to TKAS.
2. Subcontractor Agreement – Before commencing any work on behalf of TK Airport Solutions, Inc., all subcontractors must execute the TK Airport Solutions Subcontractor Agreement.
3. Insurance Requirements –General Liability and Workers Compensation Insurance Certificates are required prior to performing any work at a TK Airport Solutions job site, TK Airport Solutions, Inc. must be included as an additional insured on all certificates, the Project must be named on the certificate, all certificates must contain "Waiver of Subrogation" and "Hold Harmless" clauses. Project specific Certificate Holder and Additional Insureds information will be provided prior to your start on any project. Thirty (30) days' notice is required for all cancelled policies.
4. Application for Payment – Please provide along with each invoice a completed application for payment via form AIA G702. Applications for Payment that have been approved will be paid by check the following 1st or 15th of the month. Please be advised in order to process payment for services, all insurance must be current.
5. Waiver of Lien Certificates - All vendors/subcontractors shall submit, as appropriate, a Partial or Full Waiver of Lien Certificate with each Application for Payment. These certificates must be notarized.

ATTACHMENT B

*Miami-Dade County*
Contractor Due Diligence Affidavit

Per Miami-Dade County Board of County Commissioners (Board) Resolution No. R-63-14, County Vendors and Contractors shall disclose the following as a condition of award for any contract that exceeds one million dollars ($1,000,000) or that otherwise must be presented to the Board for approval:

(1) Provide a list of all lawsuits in the five (5) years prior to bid or proposal submittal that have been filed against the firm, its directors, partners, principals and/or board members based on a breach of contract by the firm; include the case name, number and disposition; None

(2) Provide a list of any instances in the five (5) years prior to bid or proposal submittal where the firm has defaulted; include a brief description of the circumstances; N/A

(3) Provide a list of any instances in the five (5) years prior to bid or proposal submittal where the firm has been debarred or received a formal notice of non-compliance or non-performance, such as a notice to cure or a suspension from participating or bidding for contracts, whether related to Miami-Dade County or not. See attached.

All of the above information shall be attached to the executed affidavit and submitted to the Procurement Contracting Officer (PCO) Coordinator overseeing this solicitation. The Vendor/Contractor attests to providing all of the above information, if applicable, to the PCO.

**Contract No.:** ITQ No. : MDAD-PBB 15-1020 **Federal Employer Identification Number (FEIN):** 52-2089962

**Contract Title:** TTQ Title: 2021 15PBBs Replacement of Concourses D, E, F, and H

| Matt Watkins, Barbara Vecchio | President, Treasurer | |
|---|---|---|
| Printed Name of Affiant | Printed Title of Affiant | Signature of Affiant |
| TK Airport Solutions, Inc. | | 11/19/2021 |
| Name of Firm | | Date |
| 3201 N. Sylvania Ave. Suite 117, Fort Worth, | Texas | 76111 |
| Address of Firm | State | Zip Code |

***Notary Public Information***

Notary Public – State Of: Texas County Of: Tarrant

***Subscribed and sworn to*** (or affirmed) before me this 19 day of November 20 21

By Matt Watkins, Barbara Vecchio He or she is personally known to me ☑ Or has produced identification ☐

Type of Identification produced: personally Known

Signature of Notary Public

132239905
Serial Number

Nicole Gross
Print or Stamp of Notary Public

11-5-23
Expiration Date

Notary Public Seal

NICOLE GROSS
Notary Public, State of Texas
Comm. Expires 11-05-2023
Notary ID 132239905

# Purchase Order

**AVIATION DEPARTMENT**
4200 NW 36TH Street
Miami FL 33102
United States

**Supplier:** 0000005128
TK AIRPORT SOLUTIONS INC
400 White Clay Center Drive
Lockbox #8733
Newark DE 19711

**Dispatch via Print**

| Purchase Order | Date | Revision | Page |
|---|---|---|---|
| AVIAT-0000054671 | 12/22/2021 | | 1 |
| **Payment Terms** | **Freight Terms** | | **Ship Via** |
| N30 | Destination | | Common Carrier |
| **Buyer** | **Phone** | | **Currency** |
| AAZAM PIPRAWALA-MDAD | | | |

**Ship To:** 1C30401C
Warehouse Bldg 3040
4331 NW 22nd Street
Miami FL 33122
United States

**Attention:** Odette Rogbeer -MDAD

**Bill To:** Accounts Payable
P.O. Box 526624
MIAMI FL 33152-6624
United States

**Tax Exempt?** Y **Tax Exempt ID:** 59-6000573 **Replenishment Option:** Standard

| Line-Sch | Item/Description | Mfg ID | Quantity | UOM | PO Price | Extended Amt | Due Date |
|---|---|---|---|---|---|---|---|
| 1- 1 | Foundation Design & Installation<br>F21 PBB Per Lump<br>Sum $250,000.00 | | 1.00 | EA | 241,508.00 | 241,508.00 | 12/22/2021 |
| | Contract ID: 9427-1/21-1 | | Contract Line: 0 | | Category Line: 0 | Release: 23 | |
| | **Item Total** | | | | | 241,508.00 | |
| 2- 1 | Deliver Gate D10 Per Lump Sum | | 1.00 | EA | 1,136,291.00 | 1,136,291.00 | 12/22/2021 |
| | Contract ID: 9427-1/21-1 | | Contract Line: 0 | | Category Line: 0 | Release: 24 | |
| | **Item Total** | | | | | 1,136,291.00 | |
| 3- 1 | Deliver Gate D12 Per Lump Sum | | 1.00 | EA | 953,997.00 | 953,997.00 | 12/22/2021 |
| | Contract ID: 9427-1/21-1 | | Contract Line: 0 | | Category Line: 0 | Release: 25 | |
| | **Item Total** | | | | | 953,997.00 | |
| 4- 1 | Deliver Gate D15 Per Lump Sum | | 1.00 | EA | 896,253.00 | 896,253.00 | 12/22/2021 |
| | Contract ID: 9427-1/21-1 | | Contract Line: 0 | | Category Line: 0 | Release: 26 | |
| | **Item Total** | | | | | 896,253.00 | |
| 5- 1 | Deliver Gate D17 Per Lump Sum | | 1.00 | EA | 890,916.00 | 890,916.00 | 12/22/2021 |
| | Contract ID: 9427-1/21-1 | | Contract Line: 0 | | Category Line: 0 | Release: 27 | |
| | **Item Total** | | | | | 890,916.00 | |
| 6- 1 | Deliver Gate D19 Per Lump Sum | | 1.00 | EA | 911,778.00 | 911,778.00 | 12/22/2021 |

**Note:** All Chemical and hazardous material orders must be delivered with a copy of the most recent available MSDS for the product. Failure to do so, may result in the refusal of acceptance of the material or product.

**Authorized Signature**

# Purchase Order

**AVIATION DEPARTMENT**
4200 NW 36TH Street
Miami FL 33102
United States

**Supplier:** 0000005128
TK AIRPORT SOLUTIONS INC
400 White Clay Center Drive
Lockbox #8733
Newark DE 19711

**Dispatch via Print**

| Purchase Order | Date | Revision | Page |
|---|---|---|---|
| AVIAT-0000054671 | 12/22/2021 | | 2 |
| **Payment Terms** | **Freight Terms** | | **Ship Via** |
| N30 | Destination | | Common Carrier |
| **Buyer** | **Phone** | | **Currency** |
| AAZAM PIPRAWALA-MDAD | | | |

**Ship To:** 1C30401C
Warehouse Bldg 3040
4331 NW 22nd Street
Miami FL 33122
United States

**Attention:** Odette Rogbeer -MDAD

**Bill To:** Accounts Payable
P.O. Box 526624
MIAMI FL 33152-6624
United States

**Tax Exempt?** Y **Tax Exempt ID:** 59-6000573 **Replenishment Option:** Standard

| Line-Sch | Item/Description | Mfg ID | Quantity UOM | PO Price | Extended Amt | Due Date |
|---|---|---|---|---|---|---|
| | Contract ID: 9427-1/21-1 | | Contract Line: 0 | Category Line: 0 | Release: 28 | |
| | | | **Item Total** | | 911,778.00 | |
| 7- 1 | Deliver Gate E5 Per Lump Sum | | 1.00 EA | 873,124.00 | 873,124.00 | 12/22/2021 |
| | Contract ID: 9427-1/21-1 | | Contract Line: 0 | Category Line: 0 | Release: 29 | |
| | | | **Item Total** | | 873,124.00 | |
| 8- 1 | Deliver Gate F21 Per Lump Sum | | 1.00 EA | 1,087,534.00 | 1,087,534.00 | 12/22/2021 |
| | Contract ID: 9427-1/21-1 | | Contract Line: 0 | Category Line: 0 | Release: 30 | |
| | | | **Item Total** | | 1,087,534.00 | |
| 9- 1 | Deliver Gate H3 Per Lump Sum | | 1.00 EA | 947,229.00 | 947,229.00 | 12/22/2021 |
| | Contract ID: 9427-1/21-1 | | Contract Line: 0 | Category Line: 0 | Release: 31 | |
| | | | **Item Total** | | 947,229.00 | |
| 10- 1 | Deliver Gate H5 Per Lump Sum | | 1.00 EA | 902,259.00 | 902,259.00 | 12/22/2021 |
| | Contract ID: 9427-1/21-1 | | Contract Line: 0 | Category Line: 0 | Release: 32 | |
| | | | **Item Total** | | 902,259.00 | |
| 11- 1 | Deliver Gate H6 Per Lump Sum | | 1.00 EA | 925,365.00 | 925,365.00 | 12/22/2021 |
| | Contract ID: 9427-1/21-1 | | Contract Line: 0 | Category Line: 0 | Release: 33 | |
| | | | **Item Total** | | 925,365.00 | |

**Note:** All Chemical and hazardous material orders must be delivered with a copy of the most recent available MSDS for the product. Failure to do so, may result in the refusal of acceptance of the material or product.

**Authorized Signature**

# Purchase Order

**AVIATION DEPARTMENT**
4200 NW 36TH Street
Miami FL 33102
United States

**Supplier:** 0000005128
TK AIRPORT SOLUTIONS INC
400 White Clay Center Drive
Lockbox #8733
Newark DE 19711

**Dispatch via Print**

| Purchase Order | Date | Revision | Page |
|---|---|---|---|
| AVIAT-0000054671 | 12/22/2021 | | 3 |
| **Payment Terms** | **Freight Terms** | | **Ship Via** |
| N30 | Destination | | Common Carrier |
| **Buyer** | **Phone** | | **Currency** |
| AAZAM PIPRAWALA-MDAD | | | |

**Ship To:** 1C30401C
Warehouse Bldg 3040
4331 NW 22nd Street
Miami FL 33122
United States

**Attention:** Odette Rogbeer -MDAD

**Bill To:** Accounts Payable
P.O. Box 526624
MIAMI FL 33152-6624
United States

**Tax Exempt?** Y **Tax Exempt ID:** 59-6000573 **Replenishment Option:** Standard

| Line-Sch | Item/Description | Mfg ID | Quantity UOM | PO Price | Extended Amt | Due Date |
|---|---|---|---|---|---|---|
| 12- 1 | Deliver Gate H7 Per Lump Sum | | 1.00EA | 920,301.00 | 920,301.00 | 12/22/2021 |
| | Contract ID: 9427-1/21-1 | | Contract Line: 0 | Category Line: 0 | Release: 34 | |
| | **Item Total** | | | | 920,301.00 | |
| 13- 1 | Deliver Gate H9 Per Lump Sum | | 1.00EA | 902,101.00 | 902,101.00 | 12/22/2021 |
| | Contract ID: 9427-1/21-1 | | Contract Line: 0 | Category Line: 0 | Release: 35 | |
| | **Item Total** | | | | 902,101.00 | |
| 14- 1 | Deliver Gate H12 Per Lump Sum | | 1.00EA | 973,711.00 | 973,711.00 | 12/22/2021 |
| | Contract ID: 9427-1/21-1 | | Contract Line: 0 | Category Line: 0 | Release: 36 | |
| | **Item Total** | | | | 973,711.00 | |
| 15- 1 | Deliver Gate H15 Per Lump Sum | | 1.00EA | 1,030,955.00 | 1,030,955.00 | 12/22/2021 |
| | Contract ID: 9427-1/21-1 | | Contract Line: 0 | Category Line: 0 | Release: 37 | |
| | **Item Total** | | | | 1,030,955.00 | |
| 16- 1 | Deliver Gate H17 Per Lump Sum | | 1.00EA | 1,335,666.00 | 1,335,666.00 | 12/22/2021 |
| | Contract ID: 9427-1/21-1 | | Contract Line: 0 | Category Line: 0 | Release: 38 | |
| | **Item Total** | | | | 1,335,666.00 | |
| 17- 1 | Install and Commission D10 per Lump Sum | | 1.00EA | 376,634.00 | 376,634.00 | 12/22/2021 |

**Note:** All Chemical and hazardous material orders must be delivered with a copy of the most recent available MSDS for the product. Failure to do so, may result in the refusal of acceptance of the material or product.

**Authorized Signature**

# Purchase Order

**AVIATION DEPARTMENT**
4200 NW 36TH Street
Miami FL 33102
United States

**Supplier:** 0000005128
TK AIRPORT SOLUTIONS INC
400 White Clay Center Drive
Lockbox #8733
Newark DE 19711

**Dispatch via Print**

| Purchase Order | Date | Revision | Page |
|---|---|---|---|
| AVIAT-0000054671 | 12/22/2021 | | 4 |
| **Payment Terms** | **Freight Terms** | | **Ship Via** |
| N30 | Destination | | Common Carrier |
| **Buyer** | **Phone** | | **Currency** |
| AAZAM PIPRAWALA-MDAD | | | |

**Ship To:** 1C30401C
Warehouse Bldg 3040
4331 NW 22nd Street
Miami FL 33122
United States

**Attention:** Odette Rogbeer -MDAD

**Bill To:** Accounts Payable
P.O. Box 526624
MIAMI FL 33152-6624
United States

**Tax Exempt?** Y **Tax Exempt ID:** 59-6000573 **Replenishment Option:** Standard

| Line-Sch | Item/Description | Mfg ID | Quantity UOM | PO Price | Extended Amt | Due Date |
|---|---|---|---|---|---|---|
| | Contract ID: 9427-1/21-1 | | Contract Line: 0 | Category Line: 0 | Release: 39 | |
| | | | **Item Total** | | 376,634.00 | |
| 18- 1 | Install and Commission D12 per Lump Sum | | 1.00EA | 364,500.00 | 364,500.00 | 12/22/2021 |
| | Contract ID: 9427-1/21-1 | | Contract Line: 0 | Category Line: 0 | Release: 40 | |
| | | | **Item Total** | | 364,500.00 | |
| 19- 1 | Install and Commission D15 per Lump Sum | | 1.00EA | 337,463.00 | 337,463.00 | 12/22/2021 |
| | Contract ID: 9427-1/21-1 | | Contract Line: 0 | Category Line: 0 | Release: 41 | |
| | | | **Item Total** | | 337,463.00 | |
| 20- 1 | Install and Commission D17 per Lump Sum | | 1.00EA | 337,678.00 | 337,678.00 | 12/22/2021 |
| | Contract ID: 9427-1/21-1 | | Contract Line: 0 | Category Line: 0 | Release: 42 | |
| | | | **Item Total** | | 337,678.00 | |
| 21- 1 | Install and Commission D19 per Lump Sum | | 1.00EA | 337,678.00 | 337,678.00 | 12/22/2021 |
| | Contract ID: 9427-1/21-1 | | Contract Line: 0 | Category Line: 0 | Release: 43 | |
| | | | **Item Total** | | 337,678.00 | |
| 22- 1 | Install and Commission E5 per Lump Sum | | 1.00EA | 337,678.00 | 337,678.00 | 12/22/2021 |

**Note:** All Chemical and hazardous material orders must be delivered with a copy of the most recent available MSDS for the product. Failure to do so, may result in the refusal of acceptance of the material or product.

**Authorized Signature**

# Purchase Order

**AVIATION DEPARTMENT**
4200 NW 36TH Street
Miami FL 33102
United States

**Supplier:** 0000005128
TK AIRPORT SOLUTIONS INC
400 White Clay Center Drive
Lockbox #8733
Newark DE 19711

**Dispatch via Print**

| Purchase Order | Date | Revision | Page |
|---|---|---|---|
| AVIAT-0000054671 | 12/22/2021 | | 5 |
| **Payment Terms** | **Freight Terms** | | **Ship Via** |
| N30 | Destination | | Common Carrier |
| **Buyer** | **Phone** | | **Currency** |
| AAZAM PIPRAWALA-MDAD | | | |

**Ship To:** 1C30401C
Warehouse Bldg 3040
4331 NW 22nd Street
Miami FL 33122
United States

**Attention:** Odette Rogbeer -MDAD

**Bill To:** Accounts Payable
P.O. Box 526624
MIAMI FL 33152-6624
United States

**Tax Exempt?** Y **Tax Exempt ID:** 59-6000573 **Replenishment Option:** Standard

| Line-Sch | Item/Description | Mfg ID | Quantity UOM | PO Price | Extended Amt | Due Date |
|---|---|---|---|---|---|---|
| | Contract ID: 9427-1/21-1 | | Contract Line: 0 | Category Line: 0 | Release: 44 | |
| | | | **Item Total** | | 337,678.00 | |
| 23- 1 | Install and Commission F21 per Lump Sum | | 1.00 EA | 377,652.00 | 377,652.00 | 12/22/2021 |
| | Contract ID: 9427-1/21-1 | | Contract Line: 0 | Category Line: 0 | Release: 45 | |
| | | | **Item Total** | | 377,652.00 | |
| 24- 1 | Install and Commission H3 per Lump Sum | | 1.00 EA | 342,682.00 | 342,682.00 | 12/22/2021 |
| | Contract ID: 9427-1/21-1 | | Contract Line: 0 | Category Line: 0 | Release: 46 | |
| | | | **Item Total** | | 342,682.00 | |
| 25- 1 | Install and Commission H5 per Lump Sum | | 1.00 EA | 342,682.00 | 342,682.00 | 12/22/2021 |
| | Contract ID: 9427-1/21-1 | | Contract Line: 0 | Category Line: 0 | Release: 47 | |
| | | | **Item Total** | | 342,682.00 | |
| 26- 1 | Install and Commission H6 per Lump Sum | | 1.00 EA | 342,682.00 | 342,682.00 | 12/22/2021 |
| | Contract ID: 9427-1/21-1 | | Contract Line: 0 | Category Line: 0 | Release: 48 | |
| | | | **Item Total** | | 342,682.00 | |
| 27- 1 | Install and Commission H7 per Lump Sum | | 1.00 EA | 342,682.00 | 342,682.00 | 12/22/2021 |

**Note:** All Chemical and hazardous material orders must be delivered with a copy of the most recent available MSDS for the product. Failure to do so, may result in the refusal of acceptance of the material or product.

**Authorized Signature**

# Purchase Order

**AVIATION DEPARTMENT**
4200 NW 36TH Street
Miami FL 33102
United States

**Supplier:** 0000005128
TK AIRPORT SOLUTIONS INC
400 White Clay Center Drive
Lockbox #8733
Newark DE 19711

**Dispatch via Print**

| Purchase Order | Date | Revision | Page |
|---|---|---|---|
| AVIAT-0000054671 | 12/22/2021 | | 6 |
| **Payment Terms** | **Freight Terms** | | **Ship Via** |
| N30 | Destination | | Common Carrier |
| **Buyer** | **Phone** | | **Currency** |
| AAZAM PIPRAWALA-MDAD | | | |

**Ship To:** 1C30401C
Warehouse Bldg 3040
4331 NW 22nd Street
Miami FL 33122
United States

**Attention:** Odette Rogbeer -MDAD

**Bill To:** Accounts Payable
P.O. Box 526624
MIAMI FL 33152-6624
United States

**Tax Exempt?** Y **Tax Exempt ID:** 59-6000573 **Replenishment Option:** Standard

| Line-Sch | Item/Description | Mfg ID | Quantity | UOM | PO Price | Extended Amt | Due Date |
|---|---|---|---|---|---|---|---|
| | Contract ID: 9427-1/21-1 | | Contract Line: 0 | | Category Line: 0 | Release: 49 | |
| | **Item Total** | | | | | 342,682.00 | |
| 28- 1 | Install and Commission H9 per Lump Sum | | 1.00 | EA | 342,897.00 | 342,897.00 | 12/22/2021 |
| | Contract ID: 9427-1/21-1 | | Contract Line: 0 | | Category Line: 0 | Release: 50 | |
| | **Item Total** | | | | | 342,897.00 | |
| 29- 1 | Install and Commission H12 per Lump Sum | | 1.00 | EA | 347,094.00 | 347,094.00 | 12/22/2021 |
| | Contract ID: 9427-1/21-1 | | Contract Line: 0 | | Category Line: 0 | Release: 51 | |
| | **Item Total** | | | | | 347,094.00 | |
| 30- 1 | Install and Commission H15 per Lump Sum | | 1.00 | EA | 381,853.00 | 381,853.00 | 12/22/2021 |
| | Contract ID: 9427-1/21-1 | | Contract Line: 0 | | Category Line: 0 | Release: 52 | |
| | **Item Total** | | | | | 381,853.00 | |
| 31- 1 | Install and Commission H17 per Lump Sum | | 1.00 | EA | 445,826.00 | 445,826.00 | 12/22/2021 |
| | Contract ID: 9427-1/21-1 | | Contract Line: 0 | | Category Line: 0 | Release: 53 | |
| | **Item Total** | | | | | 445,826.00 | |
| 32- 1 | Contingence allowance account sit of Total Bid Items 1-31 10% | | 1.00 | EA | 2,028,666.90 | 2,028,666.90 | 12/22/2021 |

**Note:** All Chemical and hazardous material orders must be delivered with a copy of the most recent available MSDS for the product. Failure to do so, may result in the refusal of acceptance of the material or product.

**Authorized Signature**

# Purchase Order

**AVIATION DEPARTMENT**
4200 NW 36TH Street
Miami FL 33102
United States

**Supplier:** 0000005128
TK AIRPORT SOLUTIONS INC
400 White Clay Center Drive
Lockbox #8733
Newark DE 19711

**Dispatch via Print**

| Purchase Order | Date | Revision | Page |
|---|---|---|---|
| AVIAT-0000054671 | 12/22/2021 | | 7 |
| **Payment Terms** | **Freight Terms** | | **Ship Via** |
| N30 | Destination | | Common Carrier |
| **Buyer** | **Phone** | | **Currency** |
| AAZAM PIPRAWALA-MDAD | | | |

**Ship To:** 1C30401C
Warehouse Bldg 3040
4331 NW 22nd Street
Miami FL 33122
United States

**Attention:** Odette Rogbeer -MDAD

**Bill To:** Accounts Payable
P.O. Box 526624
MIAMI FL 33152-6624
United States

**Tax Exempt?** Y **Tax Exempt ID:** 59-6000573 **Replenishment Option:** Standard

| Line-Sch | Item/Description | Mfg ID | Quantity UOM | PO Price | Extended Amt | Due Date |
|---|---|---|---|---|---|---|
| | Contract ID: 9427-1/21-1 | | Contract Line: 0 | Category Line: 0 | Release: 54 | |
| | **Item Total** | | | | 2,028,666.90 | |
| 33- 1 | Allowance Account site condition total Bid Items 1-31 10% | | 1.00EA | 2,028,666.90 | 2,028,666.90 | 12/22/2021 |
| | Contract ID: 9427-1/21-1 | | Contract Line: 0 | Category Line: 0 | Release: 55 | |
| | **Item Total** | | | | 2,028,666.90 | |
| | **Total PO Amount** | | | | 24,344,002.80 | |

**Note:** All Chemical and hazardous material orders must be delivered with a copy of the most recent available MSDS for the product. Failure to do so, may result in the refusal of acceptance of the material or product.

**Authorized Signature**

Po 54671

MIAMI INTERNATIONAL AIRPORT
Tax ID: 59-6000873
DUNS: 790545499

**Miami-Dade Aviation Department**
**Requisition**

MIAMI-DADE COUNTY



| | | | |
|---|---|---|---|
| **Business Unit:** | AVIAT | **OperID:** | OROGBEE |
| **Requisition:** | 0000066282 | **Entered By:** | Odette Rogbeer -MDAD |
| **Requisition Name:** | 051 PBB 15 PN09 PURCHASE PRT 1 | **Entered Date:** | 12/14/21 |
| **Status:** | Pending Approval | **Buyer:** | e325876 |
| **Requisition Total:** | 18,083,634.00 | **Ship To ID:** | 1C30401C |
| | | **Req Requester By :** | STROZIER,EUGENE |

**Header Comments:** PASSENGER LOADING BRIDGE PURCHASE AND INSTALLATION D10, D12,D15, D17, D19. E5,F21,H3,H5,H6, H7,H9,H12,H15,H17. EUGENE STROZIER 3058760270. WO 10269175. AMENDED 12/21/21.

**Requisition Line Information**

| Ln | Description | Qty | UOM | Unit Price | Total Line | Line Status | Work Order ID |
|---|---|---|---|---|---|---|---|
| 1 | Foundation Design & Installation F21 PBB Per Lump Sum $250,000.00 ITEM# | 1.00 | EA | 241,507.00 | 241,507.00 | Pending | 10269175-10 |

**Distribution**

| Dist | Fund | Acct | Org | O&M | Location | Project | Activity | Category | SubCat | Amount |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EA502 | 950304 | AV3201 | 468 | 11 | W099A | W099A-C | 940 | 9406 | 241,507.00 |

| Ln | Description | Qty | UOM | Unit Price | Total Line | Line Status | Work Order ID |
|---|---|---|---|---|---|---|---|
| 2 | Deliver Gate D10 Per Lump Sum ITEM# | 1.00 | EA | 1,136,291.00 | 1,136,291.00 | Pending | 10269175-10 |

**Distribution**

| Dist | Fund | Acct | Org | O&M | Location | Project | Activity | Category | SubCat | Amount |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EA502 | 950304 | AV3201 | 468 | 11 | W099A | W099A-C | 940 | 9406 | 1,136,291.00 |

| Ln | Description | Qty | UOM | Unit Price | Total Line | Line Status | Work Order ID |
|---|---|---|---|---|---|---|---|
| 3 | Deliver Gate D12 Per Lump Sum ITEM# | 1.00 | EA | 953,997.00 | 953,997.00 | Pending | 10269175-10 |

**Distribution**

| Dist | Fund | Acct | Org | O&M | Location | Project | Activity | Category | SubCat | Amount |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EA502 | 950304 | AV3201 | 468 | 11 | W099A | W099A-C | 940 | 9406 | 953,997.00 |

| Ln | Description | Qty | UOM | Unit Price | Total Line | Line Status | Work Order ID |
|---|---|---|---|---|---|---|---|
| 4 | Deliver Gate D15 Per Lump Sum ITEM# | 1.00 | EA | 896,253.00 | 896,253.00 | Pending | 10269175-10 |

**Distribution**

| Dist | Fund | Acct | Org | O&M | Location | Project | Activity | Category | SubCat | Amount |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EA502 | 950304 | AV3201 | 468 | 11 | W099A | W099A-C | 940 | 9406 | 896,253.00 |

| Ln | Description | Qty | UOM | Unit Price | Total Line | Line Status | Work Order ID |
|---|---|---|---|---|---|---|---|
| 5 | Deliver Gate D17 Per Lump Sum ITEM# | 1.00 | EA | 890,916.00 | 890,916.00 | Pending | 10269175-10 |

**Distribution**

| Dist | Fund | Acct | Org | O&M | Location | Project | Activity | Category | SubCat | Amount |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EA502 | 950304 | AV3201 | 468 | 11 | W099A | W099A-C | 940 | 9406 | 890,916.00 |

| Ln | Description | Qty | UOM | Unit Price | Total Line | Line Status | Work Order ID |
|---|---|---|---|---|---|---|---|
| 6 | Deliver Gate D19 Per Lump Sum ITEM# | 1.00 | EA | 911,778.00 | 911,778.00 | Pending | 10269175-10 |

**Distribution**

| Dist | Fund | Acct | Org | O&M | Location | Project | Activity | Category | SubCat | Amount |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EA502 | 950304 | AV3201 | 468 | 11 | W099A | W099A-C | 940 | 9406 | 911,778.00 |

| Ln | Description | Qty | UOM | Unit Price | Total Line | Line Status | Work Order ID |
|---|---|---|---|---|---|---|---|
| 7 | Deliver Gate E5 Per Lump Sum ITEM# | 1.00 | EA | 873,124.00 | 873,124.00 | Pending | 10269175-10 |

**Distribution**

| Dist | Fund | Acct | Org | O&M | Location | Project | Activity | Category | SubCat | Amount |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EA502 | 950304 | AV3201 | 468 | 11 | W099A | W099A-C | 940 | 9406 | 873,124.00 |

| Ln | Description | Qty | UOM | Unit Price | Total Line | Line Status | Work Order ID |
|---|---|---|---|---|---|---|---|
| 8 | Deliver Gate F21 Per Lump Sum ITEM# | 1.00 | EA | 1,087,534.00 | 1,087,534.00 | Pending | 10269175-10 |

**Distribution**

| Dist | Fund | Acct | Org | O&M | Location | Project | Activity | Category | SubCat | Amount |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EA502 | 950304 | AV3201 | 468 | 11 | W099A | W099A-C | 940 | 9406 | 1,087,534.00 |

| Ln | Description | Qty | UOM | Unit Price | Total Line | Line Status | Work Order ID |
|---|---|---|---|---|---|---|---|
| 9 | Deliver Gate H3 Per Lump Sum ITEM# | 1.00 | EA | 947,229.00 | 947,229.00 | Pending | 10269175-10 |

**Distribution**

| Dist | Fund | Acct | Org | O&M | Location | Project | Activity | Category | SubCat | Amount |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EA502 | 950304 | AV3201 | 468 | 11 | W099A | W099A-C | 940 | 9406 | 947,229.00 |

| Ln | Description | Qty | UOM | Unit Price | Total Line | Line Status | Work Order ID |
|---|---|---|---|---|---|---|---|
| 10 | Deliver Gate H5 Per Lump Sum ITEM# | 1.00 | EA | 902,259.00 | 902,259.00 | Pending | 10269175-10 |

**Distribution**

| Dist | Fund | Acct | Org | O&M | Location | Project | Activity | Category | SubCat | Amount |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EA502 | 950304 | AV3201 | 468 | 11 | W099A | W099A-C | 940 | 9406 | 902,259.00 |

| Ln | Description | Qty | UOM | Unit Price | Total Line | Line Status | Work Order ID |
|---|---|---|---|---|---|---|---|
| 11 | Deliver Gate H6 Per Lump Sum ITEM# | 1.00 | EA | 925,365.00 | 925,365.00 | Pending | 10269175-10 |

**Distribution**

| Dist | Fund | Acct | Org | O&M | Location | Project | Activity | Category | SubCat | Amount |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EA502 | 950304 | AV3201 | 468 | 11 | W099A | W099A-C | 940 | 9406 | 925,365.00 |

| Ln | Description | Qty | UOM | Unit Price | Total Line | Line Status | Work Order ID |
|---|---|---|---|---|---|---|---|
| 12 | Deliver Gate H7 Per Lump Sum ITEM# | 1.00 | EA | 920,301.00 | 920,301.00 | Pending | 10269175-10 |

**Distribution**

| Dist | Fund | Acct | Org | O&M | Location | Project | Activity | Category | SubCat | Amount |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EA502 | 950304 | AV3201 | 468 | 11 | W099A | W099A-C | 940 | 9406 | 920,301.00 |

| Ln | Description | Qty | UOM | Unit Price | Total Line | Line Status | Work Order ID |
|---|---|---|---|---|---|---|---|
| 13 | Deliver Gate H9 Per Lump Sum ITEM# | 1.00 | EA | 902,101.00 | 902,101.00 | Pending | 10269175-10 |

**Distribution**

| Dist | Fund | Acct | Org | O&M | Location | Project | Activity | Category | SubCat | Amount |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EA502 | 950304 | AV3201 | 468 | 11 | W099A | W099A-C | 940 | 9406 | 902,101.00 |

| Ln | Description | Qty | UOM | Unit Price | Total Line | Line Status | Work Order ID |
|---|---|---|---|---|---|---|---|
| 14 | Deliver Gate H12 Per Lump Sum ITEM# | 1.00 | EA | 973,711.00 | 973,711.00 | Pending | 10269175-10 |

**Distribution**

| Dist | Fund | Acct | Org | O&M | Location | Project | Activity | Category | SubCat | Amount |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EA502 | 950304 | AV3201 | 468 | 11 | W099A | W099A-C | 940 | 9406 | 973,711.00 |

| Ln | Description | Qty | UOM | Unit Price | Total Line | Line Status | Work Order ID |
|---|---|---|---|---|---|---|---|
| 15 | Deliver Gate H15 Per Lump Sum ITEM# | 1.00 | EA | 1,030,955.00 | 1,030,955.00 | Pending | 10269175-10 |

**Distribution**

| Dist | Fund | Acct | Org | O&M | Location | Project | Activity | Category | SubCat | Amount |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EA502 | 950304 | AV3201 | 468 | 11 | W099A | W099A-C | 940 | 9406 | 1,030,955.00 |

| Ln | Description | Qty | UOM | Unit Price | Total Line | Line Status | Work Order ID |
|---|---|---|---|---|---|---|---|
| 16 | Deliver Gate H17 Per Lump Sum ITEM# | 1.00 | EA | 1,335,666.00 | 1,335,666.00 | Pending | 10269175-10 |

**Distribution**

| Dist | Fund | Acct | Org | O&M | Location | Project | Activity | Category | SubCat | Amount |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EA502 | 950304 | AV3201 | 468 | 11 | W099A | W099A-C | 940 | 9406 | 1,335,666.00 |

| Ln | Description | Qty | UOM | Unit Price | Total Line | Line Status | Work Order ID |
|---|---|---|---|---|---|---|---|
| 17 | Install and Commission D10 per Lump Sum ITEM# | 1.00 | EA | 376,634.00 | 376,634.00 | Pending | 10269175-10 |

**Distribution**

| Dist | Fund | Acct | Org | O&M | Location | Project | Activity | Category | SubCat | Amount |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EA502 | 950304 | AV3201 | 468 | 11 | W099A | W099A-C | 940 | 9406 | 376,634.00 |

| Ln | Description | Qty | UOM | Unit Price | Total Line | Line Status | Work Order ID |
|---|---|---|---|---|---|---|---|
| 18 | Install and Commission D12 per Lump Sum ITEM# | 1.00 | EA | 364,500.00 | 364,500.00 | Pending | 10269175-10 |

**Distribution**

| Dist | Fund | Acct | Org | O&M | Location | Project | Activity | Category | SubCat | Amount |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EA502 | 950304 | AV3201 | 468 | 11 | W099A | W099A-C | 940 | 9406 | 364,500.00 |

| Ln | Description | Qty | UOM | Unit Price | Total Line | Line Status | Work Order ID |
|---|---|---|---|---|---|---|---|
| 19 | Install and Commission D15 per Lump Sum ITEM# | 1.00 | EA | 337,463.00 | 337,463.00 | Pending | 10269175-10 |

**Distribution**

| Dist | Fund | Acct | Org | O&M | Location | Project | Activity | Category | SubCat | Amount |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EA502 | 950304 | AV3201 | 468 | 11 | W099A | W099A-C | 940 | 9406 | 337,463.00 |

| Ln | Description | Qty | UOM | Unit Price | Total Line | Line Status | Work Order ID |
|---|---|---|---|---|---|---|---|
| 20 | Install and Commission D17 per Lump Sum ITEM# | 1.00 | EA | 337,678.00 | 337,678.00 | Pending | 10269175-10 |

**Distribution**

| Dist | Fund | Acct | Org | O&M | Location | Project | Activity | Category | SubCat | Amount |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EA502 | 950304 | AV3201 | 468 | 11 | W099A | W099A-C | 940 | 9406 | 337,678.00 |

| Ln | Description | Qty | UOM | Unit Price | Total Line | Line Status | Work Order ID |
|---|---|---|---|---|---|---|---|
| 21 | Install and Commission D19 per Lump Sum ITEM# | 1.00 | EA | 337,678.00 | 337,678.00 | Pending | 10269175-10 |

**Distribution**

| Dist | Fund | Acct | Org | O&M | Location | Project | Activity | Category | SubCat | Amount |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EA502 | 950304 | AV3201 | 468 | 11 | W099A | W099A-C | 940 | 9406 | 337,678.00 |

| Ln | Description | Qty | UOM | Unit Price | Total Line | Line Status | Work Order ID |
|---|---|---|---|---|---|---|---|
| 22 | Install and Commission E5 per Lump Sum ITEM# | 1.00 | EA | 337,678.00 | 337,678.00 | Pending | 10269175-10 |

**Distribution**

| Dist | Fund | Acct | Org | O&M | Location | Project | Activity | Category | SubCat | Amount |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EA502 | 950304 | AV3201 | 468 | 11 | W099A | W099A-C | 940 | 9406 | 337,678.00 |

| Ln | Description | Qty | UOM | Unit Price | Total Line | Line Status | Work Order ID |
|---|---|---|---|---|---|---|---|
| 23 | Install and Commission F21 per Lump Sum ITEM# | 1.00 | EA | 377,652.00 | 377,652.00 | Pending | 10269175-10 |

**Distribution**

| Dist | Fund | Acct | Org | O&M | Location | Project | Activity | Category | SubCat | Amount |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EA502 | 950304 | AV3201 | 468 | 11 | W099A | W099A-C | 940 | 9406 | 377,652.00 |

| Ln | Description | Qty | UOM | Unit Price | Total Line | Line Status | Work Order ID |
|---|---|---|---|---|---|---|---|
| 24 | Install and Commission H3 per Lump Sum ITEM# | 1.00 | EA | 342,682.00 | 342,682.00 | Pending | 10269175-10 |

**Distribution**

| Dist | Fund | Acct | Org | O&M | Location | Project | Activity | Category | SubCat | Amount |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EA502 | 950304 | AV3201 | 468 | 11 | W099A | W099A-C | 940 | 9406 | 342,682.00 |

| Ln | Description | Qty | UOM | Unit Price | Total Line | Line Status | Work Order ID |
|---|---|---|---|---|---|---|---|
| 25 | Install and Commission H5 per Lump Sum ITEM# | 1.00 | EA | 342,682.00 | 342,682.00 | Pending | 10269175-10 |

**Distribution**

| Dist | Fund | Acct | Org | O&M | Location | Project | Activity | Category | SubCat | Amount |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EA502 | 950304 | AV3201 | 468 | 11 | W099A | W099A-C | 940 | 9406 | 342,682.00 |

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MIAMI INTERNATIONAL AIRPORT
Tax ID: 59-6000573
DUNS: 796545499

**Miami-Dade Aviation Department**
**Requisition**

MIAMI-DADE COUNTY



| | | | |
|---|---|---|---|
| **Business Unit:** | AVIAT | **OperID:** | OROGBEE |
| **Requisition:** | 0000066285 | **Entered By:** | Odette Rogbeer -MDAD |
| **Requisition Name:** | 051 PBB 15 PN09 PURCHASE PRT 2 | **Entered Date:** | 12/14/21 |
| **Status:** | Pending Approval | **Buyer:** | e325876 |
| **Requisition Total:** | 6,260,368.00 | **Ship To ID:** | 1C30401C |
| | | **Req Requester By :** | STROZIER,EUGENE |

**Header Comments:** Passenger Boarding Bridge Purchase and Installation for D10, D12, D15, D17, D19, E5, F21, H3, H5, H6, H7, H9, H12, H15, H17. EUGENE STROZIER 3058760270. WO 10269175. AMENDED 12/21/21per PRICE CHANGES PLB.

**Requisition Line Information**

| Ln | Description | Qty | UOM | Unit Price | Total Line | Line Status | Work Order ID |
|---|---|---|---|---|---|---|---|
| 1 | Install and Commission H6 per Lump Sum ITEM# | 1.00 | EA | 342,682.00 | 342,682.00 | Pending | 10269175-10 |

**Distribution**

| Dist | Fund | Acct | Org | O&M | Location | Project | Activity | Category | SubCat | Amount |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EA502 | 950304 | AV3201 | 468 | 11 | W099A | W099A-C | 940 | 9406 | 342,682.00 |

| Ln | Description | Qty | UOM | Unit Price | Total Line | Line Status | Work Order ID |
|---|---|---|---|---|---|---|---|
| 2 | Install and Commission H7 per Lump Sum ITEM# | 1.00 | EA | 342,682.00 | 342,682.00 | Pending | 10269175-10 |

**Distribution**

| Dist | Fund | Acct | Org | O&M | Location | Project | Activity | Category | SubCat | Amount |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EA502 | 950304 | AV3201 | 468 | 11 | W099A | W099A-C | 940 | 9406 | 342,682.00 |

| Ln | Description | Qty | UOM | Unit Price | Total Line | Line Status | Work Order ID |
|---|---|---|---|---|---|---|---|
| 3 | Install and Commission H9 per Lump Sum ITEM# | 1.00 | EA | 342,897.00 | 342,897.00 | Pending | 10269175-10 |

**Distribution**

| Dist | Fund | Acct | Org | O&M | Location | Project | Activity | Category | SubCat | Amount |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EA502 | 950304 | AV3201 | 468 | 11 | W099A | W099A-C | 940 | 9406 | 342,897.00 |

| Ln | Description | Qty | UOM | Unit Price | Total Line | Line Status | Work Order ID |
|---|---|---|---|---|---|---|---|
| 4 | Install and Commission H12 per Lump Sum ITEM# | 1.00 | EA | 347,094.00 | 347,094.00 | Pending | 10269175-10 |

**Distribution**

| Dist | Fund | Acct | Org | O&M | Location | Project | Activity | Category | SubCat | Amount |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EA502 | 950304 | AV3201 | 468 | 11 | W099A | W099A-C | 940 | 9406 | 347,094.00 |

| Ln | Description | Qty | UOM | Unit Price | Total Line | Line Status | Work Order ID |
|---|---|---|---|---|---|---|---|
| 5 | Install and Commission H15 per Lump Sum ITEM# | 1.00 | EA | 381,853.00 | 381,853.00 | Pending | 10269175-10 |

**Distribution**

| Dist | Fund | Acct | Org | O&M | Location | Project | Activity | Category | SubCat | Amount |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EA502 | 950304 | AV3201 | 468 | 11 | W099A | W099A-C | 940 | 9406 | 381,853.00 |

| Ln | Description | Qty | UOM | Unit Price | Total Line | Line Status | Work Order ID |
|---|---|---|---|---|---|---|---|
| 6 | Install and Commission H17 per Lump Sum ITEM# | 1.00 | EA | 445,826.00 | 445,826.00 | Pending | 10269175-10 |

**Distribution**

| Dist | Fund | Acct | Org | O&M | Location | Project | Activity | Category | SubCat | Amount |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EA502 | 950304 | AV3201 | 468 | 11 | W099A | W099A-C | 940 | 9406 | 445,826.00 |

| Ln | Description | Qty | UOM | Unit Price | Total Line | Line Status | Work Order ID |
|---|---|---|---|---|---|---|---|
| 7 | Contingence allowance account sit of Total Bid Items 1-31 10% ITEM# | 1.00 | EA | 2,028,667.00 | 2,028,667.00 | Pending | 10269175-10 |

**Distribution**

| Dist | Fund | Acct | Org | O&M | Location | Project | Activity | Category | SubCat | Amount |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EA502 | 950304 | AV3201 | 468 | 11 | W099A | W099A-C | 940 | 9406 | 2,028,667.00 |

MIAMI INTERNATIONAL AIRPORT
Tax ID: 59-6000573
DUNS: 790545499

## Miami-Dade Aviation Department
## Requisition

MIAMI-DADE COUNTY



| Ln | Description | Qty | UOM | Unit Price | Total Line | Line Status | Work Order ID |
|---|---|---|---|---|---|---|---|
| 8 | Allowance Account site condition total Bid Items 1-31 10%<br>ITEM# | 1.00 | EA | 2,028,667.00 | 2,028,667.00 | Pending | 10269175-10 |

**Distribution**

| Dist | Fund | Acct | Org | O&M | Location | Project | Activity | Category | SubCat | Amount |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EA502 | 950304 | AV3201 | 468 | 11 | W099A | W099A-C | 940 | 9406 | 2,028,667.00 |

| Ln | Description | Qty | UOM | Unit Price | Total Line | Line Status | Work Order ID |
|---|---|---|---|---|---|---|---|
| 9 | No performance bond<br>ITEM# | 1.00 | EA | 0.00 | 0.00 | Pending | 10269175-10 |

**Distribution**

| Dist | Fund | Acct | Org | O&M | Location | Project | Activity | Category | SubCat | Amount |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | EA502 | 950304 | AV3201 | 468 | 11 | W099A | W099A-C | 940 | 9406 | 0.00 |

# Pre-Award Supplier/Vendor Compliance Checklist

| | |
|---|---|
| Supplier/Vendor Name: | TK AIRPORT SOLUTIONS INC |
| Fictitious Name: | |
| FEIN: | 522089962 |
| Contract/Bid/Pool No.: | 9427-1/2-1 // MDAD-PBB 15-1020 // GROUP 1 |

## Is Supplier/Vendor Registration Application Current?

| | |
|---|---|
| ***NOTE:*** *If vendor is a* ***Bidder****, reach out to VOSS to assist with vendor conversion to* ***Supplier****.* | **Suppliers**<br>**Navigation:** Finance/Supply Chain (FSCM > Supplier Administration > Maintain Supplier > Maintain Supplier |
| Confirm Supplier/Vendor Registration Status | SUPPLIER SUMMARY:<br>**-STATUS**<br>**-OPEN FOR ORDERING**<br>Yes ☑ No ☐ |
| Confirm Supplier/Vendor DBA Status *(if applicable)* | Address Tab:<br>**-Payment/Withholding Alt Names**<br>**-Payment Alternate Name (expand)**<br>Yes ☐ No ☑ |
| Confirm Supplier/Vendor Mail Code Status | Address/Contact Tabs:<br>Yes ☑ No ☐ |

## Does Supplier/Vendor Appear on the Following:

| | |
|---|---|
| SBD Certified Firms | Identifying Information Tab: *(Interface from B2G )*<br>**-Additional Reporting Elements (expand)**<br>Yes ☐ No ☑<br>Comments: |
| Debarred Contractors | Identifying Information Tab:<br>**-Government Classification**<br>**-Government Sources**<br>**-Certification Source (DEBARRED)**<br>Yes ☐ No ☑<br>Comments: |
| Non Performance History | Identifying Information Tab:<br>**-Government Classification**<br>**-Government Sources**<br>**Certification Source (TBD)**<br>Yes ☐ No ☑<br>Comments: |
| Completed Affidavits | Affidavits Tab:<br>Yes ☑ No ☐<br>Comments: |
| **NOTE:** Print Screen of all Affidavits (1-13) and include as part of Compliance Package. | |
| Conflict of Interest - Immediate Family | Additional Information Tab:<br>**-Conflict of Interest & Code of Ethics Ord.**<br>Yes ☐ No ☑<br>Comments: |
| Local Business and Property Taxes | Identifying Information Tab:<br>**-Government Classification**<br>**-Government Sources**<br>**Certification Source (LBT)**<br>**NOTE:** *Partial information, INFORMS doesn't provide status (arrears) nor Property Taxes*<br>Yes ☐ No ☑<br>Comments: |
| **NOTE:** Pursuant to Section 2-8.1(c), any property or business taxes due to the County must be paid, as a condition of contract award/pool inclusion. Print Screen of taxes due and inform Supplier/Vendor. Advise Manager, who will consult with CPO for determination of Supplier/Vendor responsiblity. Suppliers/Vendors affirming Local or Locally Headquartered Preference must have LBT or provide exemption. | |
| State of Florida Corporations (Sun Biz) | Yes ☑ No ☐<br>Comments: |

| | | |
|---|---|---|
| Compliance Report and/or Workforce Violations (SBD) | Yes ☐ | No ☑ |
| | Comments: | |
| Florida Convicted Vendor List | Yes ☐ | No ☑ |
| | Comments: | |
| Delinquent Contractor | Yes ☐ | No ☑ |
| | Comments: | |
| Suspended Contractors | Yes ☐ | No ☑ |
| | Comments: | |
| Florida Suspended Contractors | Yes ☐ | No ☑ |
| | Comments: | |
| Scrutinized Companies - 287.135, FS | Yes ☐ | No ☑ |
| | Comments: | |
| Scrutinized Companies that Boycott Israel - 215.4725, FS | Yes ☐ | No ☑ |
| | Comments: | |
| System for Award Management (SAM) | Yes ☐ | No ☑ |
| | Comments: | |
| Google Search | Yes ☑ | No ☐ |
| | Comments: | |
| **NOTE: Only Suppliers/Vendors being considered for award or establishment of Pool requiring BCC approval.** Search parent company, subsidiary, related company and affiliates, **using key words:** fraud, contract breach, settlements, judgements, termination. | | |
| Department of Justice | Yes ☐ | No ☑ |
| | Comments: | |
| Local Certified Veteran Business Enterprise | Yes ☐ | No ☑ |
| | Comments: | |
| Find E-Verify Participant Employers | Yes ☑ | No ☐ |
| | Comments: | |
| Use E-Verify website to confirm that recommended vendor is a participant employer. **NOTE: Applicable to awards/modifications/renewals/confirmations, as well as Pool initial establishment, and addition of vendor to Pool.** | | |
| OSHA Enforcement Inspections | Yes ☐ | No ☑ |
| | Comments: | |
| **NOTE:** Applicable to Construction Contracts, Master Developer and Design-Build Agreements. | | |
| Verified by: | Date: 12/01/2021 | |

informs

# Supplier Administration

New Window | Help | Personalize Page

Summary | Identifying Information | Address | Contacts | Location | Affidavits | Additional Information | Custom

| | |
|---|---|
| SetID | MDC |
| Supplier ID | 0000007057 |
| Supplier Short Name | TK AIRPORT TK AIRPORT-001 |
| Supplier Name | TK AIRPORT SOLUTIONS INC |
| Order | TK AIRPORT-001<br>3201 N SYLVANIA AVENUE<br>FORT WORTH, TX 76111 |
| Remit To | TK AIRPORT-001<br>PO BOX 7247-8733<br>PHILADELPHIA, PA 19170-8733 |
| Status | Approved Approval History |
| Persistence | Regular |
| Classification | C Corp |
| HCM Class | |
| Open for Ordering | Yes |
| **Withholding** | Yes |
| VAT | No |

| | |
|---|---|
| Last Modified By | E303675 |
| Last modified date | 07/15/2021 12:27PM |
| Created By | ZINA |
| Created Date/time | 03/11/1999 12:00AM |
| Last Activity Date | 07/15/2021 |

Save | Return to Search | Notify | Add | Update/Display | Include History

Summary | Identifying Information | Address | Contacts | Location | Affidavits | Additional Information | Custom

Address ID 1

Description 02 PURCHASE ORDER ADDRESS

**Details**

1 of 1 Vie

Effective Date 01/01/1901

Effective Status Active

Country USA United States

Address 1 3201 N SYLVANIA AVENUE

Address 2

Address 3:

City FORT WORTH

County

Postal 76111

State TX Texas

Email ID GARY.WATTS@THYSSENKRUPP.COM

Payment/Withholding Alt Names

Payment Alternate name

Name 1

Name 2

Withholding Alternate name

Withholding Name 1

Withholding Name 2

Summary | Identifying Information | Address | **Contacts** | Location | Affidavits | Additional Information | Custom

SetID MDC
Supplier ID 0000007057 Short Supplier Name TK AIRPORT-001 Supplier TK AIRPORT SOLUTIONS INC

**Supplier Contact** 1 of 1 View All

Contact ID 1
Description

**Details** 1 of 1 View All

Effective Date 01/01/1901
Effective Status Active
Type
Name GARY WATTS
Title
Address 1 02 PURCHASE ORDER ADDRESS
3201 N SYLVANIA AVENUE
FORT WORTH, TX 76111
Internet http:// View Internet Address
Email ID GARY.WATTS@THYSSENKRUPP.COM

Phone Information

1-1 of 1

| Type | Prefix | Telephone | Extension |
|---|---|---|---|
| Business Phone | | 817/210-5000 | |

informs

# Supplier Administration

New Window | Help | Personalize Page

ummary | Identifying Information | **Address** | Contacts | Location | Affidavits | Additional Information | Custom

SetID MDC

Supplier Address Search

Supplier ID 0000007057

Short Supplier Name TK AIRPORT-001

Supplier TK AIRPORT SOLUTIONS INC

## upplier Address

1 of 2

Address ID 1

Description 02 PURCHASE ORDER ADDRESS

## Details

1 of 1

Effective Date 01/01/1901

Effective Status Active

Country USA United States

Address 1 3201 N SYLVANIA AVENUE

Address 2

Address 3:

City FORT WORTH

County

Postal 76111

State TX Texas

Email ID GARY.WATTS@THYSSENKRUPP.COM

▼ Payment/Withholding Alt Names

Payment Alternate name

Name 1

Name 2

Corporate Supplier

Corporate SetID MDC

Corporate Supplier ID 0000007057

TK AIRPORT SOLUTIONS INC

InterUnit Supplier

InterUnit Supplier ID

Supplier Hierarchy Supplier 360

Create Bill-To Customer

Create Bill To Customer

- Supplier Rating
- Supplier Logo
- Additional ID Numbers
- Duplicate Invoice Settings
- Government Classifications
- Standard Industry Codes
- Additional Reporting Elements

Common Parent's TIN

Type of Contractor

Airport Concessionaire DBE (ACDBE)

Disadvantaged Business Enterprise (DBE)

Local Developing Business (LDB)

Veteran

Common Parent's Name

SBE Architectural & Engineering

SBE Construction

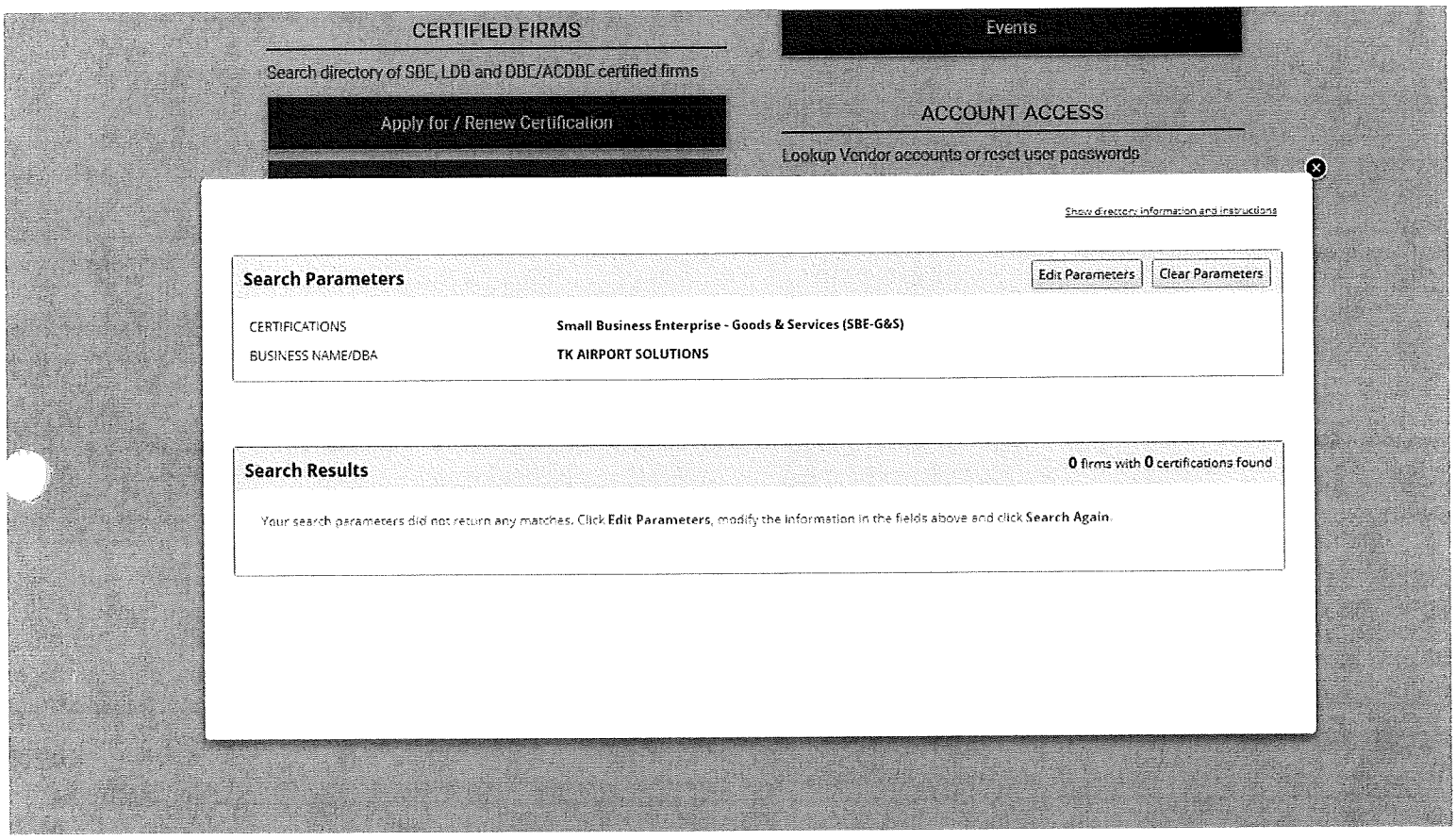
SBE Goods & Services

- Financial Sanctions Status
- Comments

Expand All | Collapse All

Save | Return to Search | Notify

Add | Update/Display | Include History


CERTIFIED FIRMS
Search directory of SDE, LDB and DDE/ACDDE certified firms
Apply for / Renew Certification
Events
ACCOUNT ACCESS
Lookup Vendor accounts or reset user passwords
Show directory information and instructions
Search Parameters
Edit Parameters
Clear Parameters
CERTIFICATIONS
Small Business Enterprise - Goods & Services (SBE-G&S)
BUSINESS NAME/DBA
TK AIRPORT SOLUTIONS
Search Results
0 firms with 0 certifications found
Your search parameters did not return any matches. Click Edit Parameters, modify the information in the fields above and click Search Again.

Create Bill-To Customer

Create Bill To Customer

- Supplier Rating
- Supplier Logo
- Additional ID Numbers
- Duplicate Invoice Settings
- Government Classifications

EEO Certification Date

HUB Zone

**Government Sources** 1 of 1 View All

Certification Source

**Government Classifications** 1 of 1 View All

Effective Date 11/30/2021

Certificate Begin Date

Government Classification

Certification Number

Certificate Expiration

- Standard Industry Codes
- Additional Reporting Elements
- Financial Sanctions Status
- Comments

Expand All | Collapse All

Save | Return to Search | Notify

Add | Update/Display | Include History

Affidavit

**SetID** MDC

**Supplier ID** 0000007057 **Short Supplier Name** TK AIRPORT-001 **Supplier** TK AIRPORT SOLUTIONS INC

**1. MIAMI-DADE COUNTY OWNERSHIP DISCLOSURE AFFIDAVIT**
(Sec. 2-8.1 of the Miami-Dade County Code)

Firms registered to do business with Miami-Dade County, shall require the person contracting or transacting such business with the County to disclose under oath his or her full legal name, and business address. Such contract or transaction shall also require the disclosure under oath of the full legal name and business address of all individuals having any interest (legal, equitable, beneficial or otherwise) in the contract other than subcontractors, material men, suppliers, laborers or lenders. Post office box addresses shall not be accepted hereunder. If the contract or business transaction is with a corporation the foregoing information shall be provided for each officer and director and each stockholder holding, directly or indirectly, five (5) percent or more of the outstanding stock in the corporation. If the contract or business transaction is with a partnership, the foregoing information shall be provided for each partner. If the contract or business transaction is with a trust, the foregoing information shall be provided for the trustee and each beneficiary of the trust. The foregoing disclosure requirements shall not apply to contracts with publicly-traded corporations, or to contracts with the United States or any department or agency thereof, the State or any political subdivision or agency thereof, or any municipality of self-State.

**If no officer, director or stockholder owns (5%) or more of stock, you may leave that section empty.**

Select Principals or Owners or Other Corporation to enter details.

Principals Owners Other Corporations

+Add new Principal

1-1 of 1

| | Full Legal Name | Title | Address |
|---|---|---|---|
| 1 | . | . | . |

**2. MIAMI-DADE COUNTY EMPLOYMENT DISCLOSURE AFFIDAVIT**
(County Ordinance no. 90-133, amending Section 2.8-1(d)(2) of the Miami-Dade County Code)

The following information is for compliance with all items in the aforementioned Section:
1. Does your firm have a collective bargaining agreement with its employees?

Yes No

2. Does your firm provide paid health benefits for its employees?

Yes No

3. Provide a current breakdown (number of persons) in your firm's work force indicating race, national origin and gender.

| | Number of Employees | |
|---|---|---|
| | Males | Females |
| White Employee | 31 | 12 |
| Black Employee | 11 | 1 |
| Hispanic Employee | 47 | 6 |
| Asian Pacific Employee | 27 | 5 |
| Native American Employee | | 1 |
| Other Employee | 1 | |
| Total Employee | 117 | 25 |

**3. MIAMI-DADE COUNTY EMPLOYMENT DRUG-FREE WORKPLACE CERTIFICATION**
(Section 2.8.1.2(b) of the Miami-Dade County Code)

All persons and entities that contract with Miami-Dade County are required to certify that they will maintain a drug-free workplace and such persons

All persons and entities that contract with Miami-Dade County are required to certify that they will maintain a drug free workplace and such persons and entities are required to provide notice to employees and to impose sanctions for drug violations occurring in the workplace.

In compliance with Ordinance No. 92-15 of the Code of Miami-Dade County, the above-named firm is providing a drug-free workplace. A written statement to each employee shall inform the employee about:

1. Danger of drug abuse in the workplace.

2. The firm's policy of maintaining a drug-free environment at all workplaces.

3. Availability of drug counseling, rehabilitation and employee assistance programs.

4. Penalties that may be imposed upon employees for drug abuse violations.

The firm shall also require an employee to sign a statement, as a condition of employment that the employee will abide by the terms of the drug-free workplace policy and notify the employer of any criminal drug conviction occurring no later than five (5) days after receiving notice of such conviction and impose appropriate personnel action against the employee up to and including termination. Firms may also comply with the County's Drug-free Workplace Certification where a person or entity is required to have a drug-free workplace policy by another local, state or federal agency, or maintains such a policy of its own accord and such policy meet's the intent of the ordinance.

☐ **I, confirm** to Affidavit-3

---

**4. MIAMI-DADE COUNTY DISABILITY AND NON-DISCRIMINATION AFFIDAVIT**
(Resolution R-182-00 amending Resolution R-385-95)
(Section 2-8.1.5 of the Miami-Dade County Code)
Firms transacting business with Miami-Dade County shall provide an affirmation indication compliance with all requirements of the Americans with Disabilities Act (A.D.A.)

☐ **I, state that this firm,** is in compliance with and agrees to continue to comply with, and assure that any subcontractor, or third party contractor shall comply with all applicable requirements of the laws including, but not limited to, those provisions pertaining to employment, provision of programs and services, transportation, communications, access to facilities, renovations, and new construction.

The American with Disabilities Act of 1990 (A.D.A.), Pub. L. 101-336, 104 Stat 327, 42 U.S.C Sections 225 and 611 including Titles I, II, III, IV and V.

The Rehabilitation Act of 1973, 29 U.S.C Section 794.

The Federal Transit Act, as amended, 49 U.S.C. Section 1612.

The Fair Housing Act as amended, 42 U.S.C. Section 3601-3631.

☐ **I, hereby affirm** that I am in compliance with the below sections:

Section 2-8.1.5 of the Code of Miami-Dade County, which requires that firms that have annual gross revenues in excess of five (5) million dollars have an affirmative action plan and procurement policy. Firms that have a Board of Directors that are representative of the population make-up of the nation may be exempt.

---

**5. MIAMI-DADE COUNTY DEBARMENT DISCLOSURE AFFIDAVIT**
(Section 10.38 of the Miami-Dade County Code)

Firms wishing to do business with Miami-Dade County must certify that its contractors, subcontractors, officers, principals, stockholders, or affiliates are not debarred by the County before submitting a bid.

☐ **I, confirm** that none of this firms agents, officers, principals, stockholders, subcontractors or their affiliates are debarred by Miami-Dade County.

---

**6. MIAMI-DADE COUNTY VENDOR OBLIGATION TO COUNTY AFFIDAVIT**
(Section 2-8.1 of the Miami-Dade County Code)

Firms wishing to transact business with Miami-Dade County must certify that all delinquent and currently due fees, taxes and parking tickets have been paid and no individual or entity in arrears under a contract, promissory note or document with the County shall be allowed to receive any new business.

☐ **I, confirm** that all delinquent and current due fees or taxes including, but not limited to, real and personal property taxes, convention and tourist development taxes, utility taxes, and Local Business Tax Receipt collected in the normal course by the Miami-Dade County Tax Collector and County issued parking tickets for vehicles registered in the name of the above firm, have been paid.

---

**7. MIAMI-DADE COUNTY CODE OF BUSINESS ETHICS AFFIDAVIT**
(Article 1, Section 2-8.1(i) of the Code of Miami-Dade County)

A firm seeking to transact business with Miami-Dade County must certify that it has adopted a Code of Business Ethics (Code) which complies with the requirements of Section 2-8.1 of the Code of Miami-Dade County. The Code shall apply to all business that firm/contractor transacts with the County and shall, at a minimum, require the firm/contractor to comply with all applicable governmental rules and regulations.

**I certify** that this firm has adopted a Code which complies with the requirements of Section 2-8.1 of the Code of Miami-Dade County, and that such Code shall apply to all business that this firm/contractor transacts with the County and shall, at a minimum, require this firm/contractor to comply with all applicable governmental rules and regulations.

**8. MIAMI-DADE COUNTY FAMILY LEAVE AFFIDAVIT**
(Article V of Chapter 11, of the Miami-Dade County Code)

Firms contracting business with Miami-Dade County, which have more than fifty (50) employees for each working day during each of twenty (20) or more work weeks in the current or preceding calendar year, are required to certify that they provide family leave to their employees.

Firms with less than the number of employees indicated above are exempt from this requirement.

**I, confirm** that if applicable, this firm complies with Article V of Chapter 11 of the County Code, which requires that firms contracting business with Miami-Dade County which have more than fifty (50) employees each working day during each of twenty (20) or more work weeks un the current or preceding calendar year are required to certify that they provide family leave to their employees.

**9. MIAMI-DADE COUNTY LIVING WAGE AFFIDAVIT**
(Section 2-8.9 of the Miami-Dade County Code)

All applicable contractors/employers entering into a contract with the County shall agree to pay the prevailing living wage required by this section of the County Code.

**I, confirm** that if applicable, this firm complies with Section 2-8.9 of the County Code, which requires that all applicable contractors/employers entering into a contract with Miami-Dade County shall pay the prevailing living wage required by the section of the County Code.

**10. MIAMI-DADE COUNTY DOMESTIC LEAVE AND REPORTING AFFIDAVIT**
(Article 8, Section 11A-60 – 11A-67 of the Miami-Dade County Code)

Firms wishing to transact business with Miami-Dade County must certify that it is in compliance with the Domestic Leave Ordinance.

**I, confirm** that if applicable, this firm complies with the Domestic Leave Ordinance. This ordinance applies to employers that have, in the regular course of business, fifty (50) or more employees working in Miami-Dade County for each working day during the current or preceding calendar year.

**11. MIAMI-DADE COUNTY E-VERIFY AFFIDAVIT**
Obligation for State Funded Contracts:

Executive Order 11-116, which supersedes Executive Order 11-02, directs all agencies under the direction of the Governor to verify the employment eligibility of all new agency employees through the U.S. Department of Homeland Security's E-Verify system. Further, agencies are directed to include as a condition of all contracts for the provision of goods or services to the state in excess of nominal value, an express requirement that contractors utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the contractor during the contract term, and an express requirement that contractors include in such subcontracts the requirement that subcontractors performing work or providing services pursuant to the state contract utilize the E-Verify system to verify the employment eligibility of all new employees hired by the subcontractor during the contract term.

In accordance with Executive Order 11-116, Miami-Dade County requires all vendors doing business with the County who are awarded state-funded contracts to verify employee eligibility using the E-Verify system. It is the responsibility of the awarded vendor to insure compliance with E-verify requirements (as applicable). To enroll in E-Verify, employers should visit the E-Verify website (http://www.uscis.gov/e-verify) and follow the instructions. The employer must, as usual, retain the I-9 Forms for inspection.

**I, confirm** to E-Verify Affidavit

**12. MIAMI-DADE COUNTY PAY PARITY AFFIDAVIT**
(Resolution R-1072-17)

All persons or entities contracting with Miami-Dade County shall provide an affidavit indicating compliance with all requirements stated below.

**I, hereby affirm** that this firm pledges to pay men and women equal wages for equal work, and is in compliance with, agrees to continue to comply with, and assure that any subcontractor or third party contractor shall comply with all applicable requirements of:

1. The Equal Pay Act of 1963, as amended (29 U.S.C. 206(d));

2. Section 448.07 of the Florida Statutes;

3. Chapter 11A of the Code of Miami-Dade County (§ 11A-1 et. seq.);

4. Chapter 22 of the Code of Miami-Dade County (§ 22-1 et seq.);

5. Chapter 8A, Article XIX, of the Code of Miami-Dade County (§ 8A-400 et seq.); and

6. Any other laws prohibiting wage rate discrimination based on sex.

**13. MIAMI-DADE COUNTY SUSPECTED WORKERS' COMPENSATION FRAUD AFFIDAVIT**
(Resolution No. R-919-18)

All persons or entities contracting with Miami-Dade County shall provide an affidavit indicating compliance with all requirements stated below.

**I, hereby affirm** that this firm pledges to provide written notice and disclosures to all workers, on how to report any suspected workers' compensation fraud to the State of Florida Bureau of Workers' Compensation Fraud, and is in compliance with, agrees to continue to comply with, and assure that any subcontractor or third party contractor shall comply with all applicable requirements.

**AFFIRMATION**
I, being duly sworn, do attest under penalty of perjury that the entity is in compliance with all requirements outlined in these Miami-Dade County Vendor Affidavits.

I agree, and it is my intent, to sign this record/document by pressing the "I Affirm" button and by electronically submitting this record/document to Miami-Dade County. I understand that my signing and submitting this record/document in this fashion is the legal equivalent of having placed my handwritten signature on the submitted record/document and this affirmation. I understand and agree that by electronically signing and submitting this record/document in this fashion I am affirming to the truth of the information contained therein.

I also attest that I will comply with and keep current all statements sworn to in the above affidavits and registration application. I will notify the Miami-Dade County, Vendor Services Section immediately if any of the statements attested here to are no longer valid.

**Person Name:** WILLIAM RATLIFF **Title:** DIRECTOR **Date:** 05/17/2021

I Affirm

Save | Return to Search | Notify | Add | Update/Display

Additional Information

**SetID** MDC

**Supplier ID** 0000007057 **Short Supplier Name** TK AIRPORT-001 **Supplier** TK AIRPORT SOLUT

**THE MIAMI-DADE COUNTY (MDC) CONFLICT OF INTEREST AND CODE OF ETHICS ORDINANCE 2-11.1** requires all Miami-Dade County employees, board members and elected officials to seek a conflict of interest opinion prior to submittal of a bid, response or application of any type to contract with Miami-Dade County by the person or any member of his or her immediate family. Immediate family is defined as spouse, domestic partner, parents, stepparents, children and stepchildren. Pursuant to the ordinance, Miami-Dade County may not award a contract to any covered person who has not received a written ethics opinion or a waiver from the Board of County Commissioners.

If you answer yes to questions A or B below, you are required to obtain a Conflict of Interest Opinion from the Miami-Dade County Commission on Ethics and Public Trust (COE) concerning the relationship of the County employee, board member and/or elected official, to the officers or principals of your firm. An opinion from the COE is required prior to the receipt or approval of the vendor application by the Miami-Dade County, Internal Services Department, Strategic Procurement Division. Submit request for a written Conflict of Interest Opinion to: Miami-Dade County Commission on Ethics and Public Trust, 19 West Flagler Street, Suite #820, Miami, Florida, 33130 or fax to (305) 579-0273. Please contact the COE at 1-800-829-4933 for further information. **It is the responsibility of the vendor to upload the written Conflict of Interest Opinion from the COE along with all other required information for processing.**

A. ARE ANY OF THE OWNERS/PRINCIPALS IN THE FIRM, A MIAMI-DADE COUNTY ELECTED OFFICIAL, BOARD MEMBER OR MIAMI-DADE COUNTY EMPLOYEE(S)?

Yes No

B. ARE ANY IMMEDIATE FAMILY MEMBERS OF THE OWNERS/PRINCIPALS IN THE FIRM, A MIAMI-DADE COUNTY ELECTED OFFICIAL, BOARD MEMBER OR MIAMI-DADE COUNTY EMPLOYEE?
Immediate family is defined as spouse, domestic partner, parents, stepparents, children, and stepchildren.

Yes No

Doing Business As

1-1 of 1 | View All

| | DBA Name | Address Sequence Number | Address Description |
|---|---|---|---|
| 1 | | | |

**Documents/Additional Forms**

**1. Submit copy of current Local Business Tax Receipt** (formerly the Miami-Dade County Occupational License) for businesses physically located in Miami-Dade County. Contact the Miami-Dade County Tax Collector's Office at www.miamidade.gov/taxcollector for payment of license, request a new license or any additional information.

1-1 of 1 | View All

| | Attached File | Attachment Description | Upload | View |
|---|---|---|---|---|
| 1 | | | Upload | View |

Help for Documents

**2. Submit copy of Certificate if your company is under one of the following:**

- Corporation
- Trademarks
- Limited Partnerships
- Limited Liability Company
- Limited Liability & General Partnerships
- Fictitious Business Name(s), if required

**Note:** Miami-Dade County will confirm the validity of Certificates with the applicable state authority. For companies located in Florida and registered with the Florida Department of State, Division of Corporations, the company's Federal Employer Identification Number (FEIN) must be posted on the Florida Division of Corporation's website. To confirm that your FEIN is posted, visit the State website at www.sunbiz.org Under "Document Search", press "Inquire by Name" or "Inquire by Federal Employer Identification Number (FEIN)" to produce the corresponding report. For companies located in other states, use Corporations-Online-All States.

If your company's Federal Employer Identification Number (FEIN) is not posted, contact the Florida Department of State, Division of Corporations via email at corphelp@dos.state.fl.us, or contact the agency at 1-820-245-6052 for additional information.

1-1 of 1 | View All

| | Attached File | Attachment Description | Upload | View |
|---|---|---|---|---|
| 1 | | | Upload | View |

**3. Submit one of the following that apply to your entity or business.**

- Obtain any of the below forms and instructions from www.irs.gov.
- W-9 Request for Taxpayer ID Number and Certification.
- W-8ECI Form Certificate of Foreign Person's Claim for Exemption from Withholding on Income Effectively Connected with the Conduct of a Trade or Business in the United States.
- W-8BEN Certificate of Foreign Status of Beneficial Owner for Unites States Tax Withholding.
- W-8EXP Certificate of Foreign Government or Other Foreign Organization for United States Tax Withholding.
- W-8IMY Certificate of foreign Intermediary, Foreign, Flow-Through Entity, or Certain U.S. Branches for United States Tax Withholding.

1-1 of 1 | View All

| | Attached File | Attachment Description | Upload | View |
|---|---|---|---|---|
| 1 | | | Upload | View |

**4. Submit copy of IRS letter 147C,** verifying your business name and FEIN or any other pre-printed IRS form issued by the IRS identifying your business name and FEIN.

1-1 of 1 | View All

| | Attached File | Attachment Description | Upload | View |
|---|---|---|---|---|
| 1 | | | Upload | View |

**5. Other Documents**

1-1 of 1 | View All

| | Attached File | Attachment Description | Upload | View |
|---|---|---|---|---|
| 1 | THYSSENKRUPP_AIRPORT_SYSTEMS_INC_NC.pdf | Change Form | Upload | View |

**6. Notarized Summary page** Click on the Summary button at the bottom of this page to view/print summary page. The notarized summary page must be attached in this section to complete the registration application. Original Notarized Summary page must be attached to the online vendor application (Required to complete the approval of your application).

1-1 of 1 | View All

| | Attached File | Attachment Description | Upload | View |
|---|---|---|---|---|
| 1 | | | Upload | View |

Summary

Save | Return to Search | Notify | Add | Update/Display | I

Summary | Identifying Information | Address | Contacts | Location | Affidavits | Additional Information | Custom






# Detail by Entity Name

Foreign Profit Corporation
TK AIRPORT SOLUTIONS, INC.

**Filing Information**

| | |
|---|---|
| **Document Number** | F98000005331 |
| **FEI/EIN Number** | 52-2089962 |
| **Date Filed** | 09/23/1998 |
| **State** | DE |
| **Status** | ACTIVE |
| **Last Event** | NAME CHANGE AMENDMENT |
| **Event Date Filed** | 04/06/2021 |
| **Event Effective Date** | NONE |

**Principal Address**

3201 N. SYLVANIA AVENUE
SUITE 117
FORT WORTH, TX 76111

Changed: 04/28/2016

**Mailing Address**

3201 N. SYLVANIA AVENUE
SUITE 117
FORT WORTH, TX 76111

Changed: 04/28/2016

**Registered Agent Name & Address**

CORPORATION SERVICE COMPANY
1201 HAYS STREET
TALLAHASSEE, FL 32301-2525

**Officer/Director Detail**

**Name & Address**

Title Secretary, Treasurer

Vecchio, Barbara
3201 N. SYLVANIA AVENUE
SUITE 117
FORT WORTH, TX 76111

Title President, Director

Watkins, Matthew
3201 N. SYLVANIA AVENUE
SUITE 117
FORT WORTH, TX 76111

Title Director

Alvarez, Manuel
3201 N. SYLVANIA AVENUE
SUITE 117
FORT WORTH, TX 76111

**Annual Reports**

| Report Year | Filed Date |
|---|---|
| 2019 | 04/25/2019 |
| 2020 | 04/21/2020 |
| 2021 | 04/23/2021 |

**Document Images**

| | |
|---|---|
| 04/23/2021 -- ANNUAL REPORT | View image in PDF format |
| 04/06/2021 -- Name Change | View image in PDF format |
| 04/21/2020 -- ANNUAL REPORT | View image in PDF format |
| 04/25/2019 -- ANNUAL REPORT | View image in PDF format |
| 04/26/2018 -- ANNUAL REPORT | View image in PDF format |
| 04/14/2017 -- ANNUAL REPORT | View image in PDF format |
| 04/28/2016 -- ANNUAL REPORT | View image in PDF format |
| 04/24/2015 -- ANNUAL REPORT | View image in PDF format |
| 04/28/2014 -- ANNUAL REPORT | View image in PDF format |
| 04/23/2013 -- ANNUAL REPORT | View image in PDF format |
| 04/09/2012 -- ANNUAL REPORT | View image in PDF format |
| 04/15/2011 -- ANNUAL REPORT | View image in PDF format |
| 01/07/2010 -- ANNUAL REPORT | View image in PDF format |
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| 07/15/2008 -- ANNUAL REPORT | View image in PDF format |
| 01/16/2007 -- ANNUAL REPORT | View image in PDF format |
| 03/07/2006 -- ANNUAL REPORT | View image in PDF format |
| 05/02/2005 -- ANNUAL REPORT | View image in PDF format |
| 05/03/2004 -- ANNUAL REPORT | View image in PDF format |
| 03/05/2004 -- Name Change | View image in PDF format |
| 05/19/2003 -- ANNUAL REPORT | View image in PDF format |
| 04/30/2002 -- ANNUAL REPORT | View image in PDF format |
| 04/27/2000 -- ANNUAL REPORT | View image in PDF format |
| 03/01/1999 -- ANNUAL REPORT | View image in PDF format |
| 09/23/1998 -- Foreign Profit | View image in PDF format |

https://www.e-verify.gov/about-e-verify/e-verify-data/how-to-find-participating-employers?business-name=TK%20AIRPORT%20SOLUTIONS%20INC&field_account_status_value=All&items_per_pa...

nrollment | BTS | time & labor | Google Maps | AWARDED CONTRA... | Employee Portal | INFORMS | Miami-Dade Count... | SBE | PRE BID MEETING | INFORMS | SAM.gov | Se...

Business Name

TK AIRPORT SOLUTIONS INC

Primary Industry Type

Select Industry Type(s)

Hiring Site Locations (by state)

Select State(s)

Account Status

- Any -

Items per page

10

SEARCH RESET

| Employer | Doing Business As | Account Status | Date Enrolled | Date Terminated | Workforce Size | Number of Hiring Sites | Hiring Site Locations (by state) |
|---|---|---|---|---|---|---|---|
| TK Airport Solutions Inc. | | Open | 02/18/2019 | | 100 to 499 | 1 | TX |

Showing 1 to 1 of 1 entries. CSV

UNITED STATES
DEPARTMENT OF LABOR

Occupational Safety and Health Administration

CONTACT US FAQ A TO Z INDEX ENGLISH ESPAÑOL

OSHA STANDARDS ENFORCEMENT TOPICS HELP AND RESOURCES NEWS SEARCH OSHA

# Establishment Search

**Reflects inspection data through 11/26/2021**

This page enables the user to search for OSHA enforcement inspections by the name of the establishment. Information may also be obtained for a specified inspection or inspections within a specified SIC.

**Note**: Please read important information below regarding interpreting search results before using.

Search By

***Your search did not return any results.***

Establishment: TK AIRPORT SOLUTIONS INC
*(This box can also be used to search for a State Activity Number for the following states: NC, SC, KY, IN, OR and WA)*

**State**: All States | Fed & State

**OSHA Office**: All Offices

**Site Zip Code**:

Case Status: (•) All ( ) Closed ( ) Open

**Violation Status**: (•) All ( ) With Violations ( ) Without Violations

Inspection Date

**Start Date**: November | 30 | 2016

**End Date**: November | 30 | 2021

# ADDENDUM NO. 1

**DATE: OCTOBER 29, 2021**

**TO: ALL PROSPECTIVE BIDDERS**

**SUBJECT: Solicitation No. MDAD- PBB 15-1020**

**TITLE: 2021 15 PBBs Replacement at Concourses D, E, F, and H**

This Addendum becomes a part of the subject solicitation.

A. The following are changes to the solicitation.

The following attached documents replace Part 1 "General", Section 1.01.A and 1.01.B of Attachment A - SECTION 14950 - AIRCRAFT PASSENGER BOARDING BRIDGES - APRON DRIVE:

- Sections 238121 Centralized Pre-Conditioned Air Handling Units, STU's, and Equipment;
- Section 238122 Point-Of-Use Pre-Conditioned DX Units, Service Transport Units (STU's), and Equipment;
- Section 263226 Frequency Converters- Central Plant 400-Hz Systems; and
- Section 263543 Static Frequency Converters – Point of Use 400 HZ Systems

**All other information remains the same.**

Miami-Dade County,

Sylvia Novela for Aazam Piprawala
Aviation Purchasing Specialist

c: Clerk of the Board

## Piprawala, Aazam (Aviation)

**From:** Novela, Sylvia (Aviation)
**Sent:** Friday, October 29, 2021 6:09 PM
**To:** MWESTPHAL@ADELTE.COM; Jay Grantham; CLAY.RATLIFF@TKELEVATOR.COM
**Cc:** Clerk of the Board (COC); Kurt Dobbrunz; Strozier, Eugene (Aviation); Garcia, Neivy (Aviation); Finol, Ana (Aviation); Piprawala, Aazam (Aviation)
**Subject:** RE: MDAD ITQ No. MDAD-PBB15-1020 (Addendum No.1)
**Attachments:** Addendum No. 1 (MDAD-PBB15-1020).pdf; PBB_SECTION_238121_PCA_AHUs, _STUs_and_EQPT_17.04.12.pdf; PBB_SECTION_238122_POU_PCA_AHUs_STUs_and_EQPT_ 17.04.12.pdf; PBB_SECTION_263226_CP_17.04.12.pdf; PBB_SECTION_263543_POU -400HZ.pdf

**Importance:** High

Hello, please review Addendum No.1 for the subject solicitation.

Thank you,

*Sylvia Novela*
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**Subject:** RE: MDAD ITQ No. MDAD-PBB15-1020
**Importance:** High

Hello Everyone!
Kindly see attached ITQ for your perusal WITH attachments and Exhibits.

*Thank You!*

**Aazam Piprawala,** Airport Purchasing Specialist
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# SECTION 238121 - CENTRALIZED PRE-CONDITIONED AIR HANDLING UNITS, SERVICE TRANSPORT UNITS (STU'S), AND EQUIPMENT

## PART 1 – GENERAL

### 1.1 RELATED DOCUMENTS

A. General and Supplementary Conditions and Division 01 Specifications Sections apply to this Section.

### 1.2 GENERAL DESCRIPTION

A. This Section covers new aircraft pre-conditioned air handling units, Passenger Boarding Bridges (PBB's) and Fixed Walkway air handling units. It also covers the installation of a Boom-Air hose management system.

### 1.3 SCOPE OF WORK

A. Provide new PCA units to service aircraft, at Passenger Boarding Bridges (PBB's) and Fixed Walkways as specified herein.

B. Provide new Hose Management System (Boom-Air) unit as specified herein.

C. The Vendor shall employ a Professional Engineer registered in the State of Florida to prepare calculations and construction documents for centralized pre-conditioned air handling units, service transport units (STUs), and associated equipment. The Delegated Engineer shall have a minimum of 5-years' experience in the design of this type of work.

### 1.4 SUBMITTALS

A. General: Submit the following manufacturer's data and shop drawings before ordering of any materials, equipment, or commencement of the Work:

1) Product data for selected model, including specialties, accessories and the following:

a) AHU performance curve with system operating conditions indicated.

b) Motor ratings and electrical characteristics plus motor and fan accessories.

c) Variable Frequency Drives.

d) Material, gages, and finishes.

e) Dampers, including housings, linkages, and operators.

f) Submit air filter manufacturer's technical product data including dimensions, weight, required clearances and access, flow capacity including initial and final pressure drop at rated air flow, efficiency and test method, fire classification, and installation instructions.

g) NEBB test apparatus certification report.

h) Unit air flow control, capacity control and defrost control.

i) Service Transport Units.

j) Hose Management System Unit (Boom-Air).

k) Flexible hoses.

l) PBB air ducts.

m) PBB interface with air-handlers: Installation details, field measurements, and support details.

2) Shop drawing from manufacturer detailing equipment assemblies and indicating dimensions, weight, required clearance, components, and location and size of field connections.

3) Wiring diagrams that detail power, signal and control wiring. Differentiate between manufacturer-installed wiring and field installed wiring.

4) Maintenance data for air-handling unit controller and filters for inclusion in Operating and Maintenance Manual.

5) Maintenance data for complete air handler unit with controller.

6) Maintenance data for complete Boom-Air Hose Management System.

7) Maintenance data for all components.

1.5 COMPLIANCE REQUIREMENTS

A. ARI Compliance: Air filter equipment shall comply with ARI 850.

B. ASHRAE Compliance: Air filters shall comply with ASHRAE Standard 52 for method of testing, and for recording and calculating air flow rates.

C. NFPA Compliance: Comply with applicable portions of NFPA 70, for components and installation of air handling units.

D. NEMA Compliance: Motors, enclosures and electrical accessories shall comply with NEMA standards.

E. ETL Compliance: All components used in the air handler unit shall be ETL or CSA listed or recognized.

F. Comply with the Florida Building Code – current edition.

G. Comply with MDAD Design Guidelines Manual (DGM) – current edition.

1.6 QUALITY ASSURANCE

A. It is the intent of this Contract that air handling units for the aircraft, PBBs, and Fixed Walkways be supplied from a single manufacturer. The manufacturer shall have experience in all areas of equipment design, aircraft cooling system design and analysis by in-house engineering and programming, development of complete integrated monitoring and control systems. This experience shall include systems where the manufacturer has provided system analysis, design, supply of all major equipment, programming, testing, system start-up and training. All data base generation and other programming efforts shall be accomplished by in-house engineering/programming personnel in the direct employ of the Vendor.

B. The Vendor shall submit a record of experience for successfully completed and operating systems that provide sub-freezing air to aircraft utilizing central ethylene glycol systems with thermal storage. The experience list shall include a summary of that Vendor's experience, including system location, Owner, major subcontractors and equipment suppliers used, on-line date and contact name and telephone number. The summary shall also name the individual engineers and programmers that the Vendor has utilized to be involved in the project, their assignments and responsibilities for the three prior projects. The Vendor shall be responsible for direct supervision of the installation of all bridge mounted equipment and controls. This supervision effort shall be performed by an employ of the Vendor and not be subcontracted to a third party.

1) This coordination shall cover installation of equipment as well as interface of piping, power, and controls, etc. The Vendor shall ensure the resulting installed system functions as specified in all respects.

2) Inasmuch as possible, all work related to attaching support brackets, members, etc. to the PBBs shall be done at the passenger boarding bridge factory. All of this work, which must be field retrofitted, must be strictly coordinated with and performed under the direct supervision of the PBB manufacturer.

C. The Vendor shall coordinate all work with the MDAD Project Manager/representative as required during the installation to ensure that the resulting installed system functions as specified in all aspects. This coordination shall cover installation of equipment as well as interfaces with piping, power and controls.

D. Temperature control systems shall be warranted to be new and free of defects in material and workmanship under normal service and use for a period of 12 months from the date of acceptance. If, within this period, any equipment proves defective, it shall be repaired or replaced at no cost to MDAD.

E. Equipment and material shall be catalogued products of manufacturers regularly engaged in the productions of temperature control systems. Products shall be manufacturer's latest standard design and must have been tested and proven in actual use for low temperature systems.

F. It is the intention that certain items of major equipment, air handler units, process instrumentation and control valves be standardized throughout all parts of the system. The Vendor shall include in the equipment and material submittals evidence of such coordination between major equipment suppliers, including Trane/Cristopia, BRDG-TNDR Corporation, Honeywell, and Cavotec-Inet Airport Systems.

G. ARI Compliance: Air filter equipment shall comply with ARI 850.

H. ASHRAE Compliance: Air filters shall comply with ASHRAE Standard 52 for method of testing, and for recording and calculating air flow rates.

I. NFPA Compliance: Comply with applicable portions of NFPA 70, for components and installation of air handling units.

J. NEMA Compliance: Motors, enclosures and electrical accessories shall comply with NEMA Standards.

K. UL Compliance: Air handler units shall be UL-listed and labeled.

L. Comply with the Florida Building Code – current edition.

M. Comply with MDAD Design Guidelines Manual (DGM).

1.7 DELIVERY, STORAGE AND HANDLING

A. Lift and support units with the manufacturer suggested lifting supporting point. Replace any supports that are damaged or rusted.

B. Provide units that do not require any disassembly and reassembly for movement into the final location following manufacturer's written instruction.

C. Deliver units as a factory-assembled to the extent allowable by shipping limitations, with protective crating and covering.

PART 2 – PRODUCT

2.1 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following.

1) Aircraft Pre-Conditioned Air Handling Units:

a) Cavotec/INET US, Inc.

2) Air Filters:

a) American Air Filter Company.

b) Farr Company.

c) Eco Air.

3) PBB and Fixed Walkway air handling units:

a) Temptrol.

b) Unico.

4) Aircraft Adapter Nozzle:

a) Cavotec/INET US, Inc.

b) Trilectron Industries, Inc.

c) BFM Transport Dynamics Corporation.

d) Devtec Corporation.

e) J&B Aviation Services, Inc.

5) Pressure Independent Control Valves:

a) Belimo

b) Bray

c) Griswold

d) Delta P Valve

6) Preconditioned Air Hose Baskets:

a) Cavotec/INET US, Inc.

b) AirTech, Inc.

c) Trilectron Industries, Inc.

d) Aviation Systems, Inc.

e) BFM Transport Dynamics Corporation.

f) J&B Aviation Services, Inc.

7) Ethylene Glycol Hoses:

a) Goodyear Petroleum.

b) Parker Hannifin.

c) Cavotec/INET US, Inc.

2.2 GENERAL DESCRIPTION

A. The Vendor shall field verify existing conditions at the locations for new PBBs.

B. Provide a compact, light-weight, and low-noise insulated, glycol air handling unit that can be mounted under the PBB such that the operational characteristics of the PBB are unrestricted and the PBB's structural integrity is uncompromised. It is MDAD's intent to have the air handling units hung underneath the PBB to the maximum extent possible. Acceptable location for mounting underneath the bridge include behind or in front of the bogie wheels. An alternate unit location of mounting on the bridge rotunda shall be allowed only where the maximum weight limitations of the PBB tunnels is exceeded.

C. The air-handling units shall have a minimum of two distinct assemblies:

1) A control assembly that contains the low voltage (Class II) logic and control circuits and,

2) A blower/coil unit containing a blower, variable frequency drive, cooling coil, filters, complete motor starting equipment, outlet plenum and condensate drain pan to provide the required cooled or ventilated air to maintain the aircraft cabin temperature specified.

D. The air handling units shall have the capacity required to sufficiently cool the largest identified designed aircraft, parked at each gate. Units serving wide-body gates shall also operate properly when serving a narrow-body aircraft at the same gate.

E. The blower shall be of the centrifugal type and sized for the appropriate volume airflow requirements. The unit size shall be selected so that the fan brake horsepower does not exceed the maximum required over the design operating range of the unit at the total static pressure.

F. Unit external static pressure shall be defined as the gauge pressure measured at the outlet of the air handling unit. The Vendor shall present the gauge pressure this air handling unit can produce at the outlet of the air handling unit and at the aircraft connection through 100 feet of hose and with an aircraft adapter nozzle in his shop drawing submittal.

G. Horsepower shall be selected based on the equipment that affects the external resistance

of the system. The Vendor shall furnish the fan motor and unit size adequate for final total static pressure and maximum brake horsepower requirements.

H. The construction of the unit shall be of a material sufficient to provide adequate structural rigidity for frame and enclosure; of a non-corrosive nature; and provided with thermal insulation for conditions encountered in normal usage. Equipment exterior shall be primed and painted to match the PBB color. Equipment interior shall be manufacturer's standard. All hardware shall be corrosion resistant, suitable for exterior use exposed to all weather conditions.

I. The maximum sound level for the air handling units at maximum cooling shall not exceed 85 dBA at a distance of 14 feet from the unit. Sound power level radiated by the unit outlet and at the unit inlet when the unit is operated at the designated capacity shall be furnished as part of the shop drawing submittal.

J. The air handler units are required to provide discharge air temperatures at less than 32 degrees F.

K. Capacity control and defrost control shall be identified and explained in the shop drawing submittal.

L. Return air to the unit shall not be utilized.

M. Capacity control and defrost control shall be identified and explained in the shop drawing submittal.

N. Manufacturer's standard casing construction, having corrosion protection coating, and exterior finish. Blower, Coil, and Discharge Plenum Sections shall be constructed per Rectangular Industrial Duct Construction Standards (SMACNA latest edition). Casings shall have removable panels or access doors for inspection and access to internal parts, a minimum of 1-inch-thick manufacturer's standard thermal insulation, knockouts for electrical and exterior condensate drain connection, and lifting lugs. Insulation shall meet requirements of NFPA 90A and ASHRAE 90.1. All sheet metal parts shall be prime coated prior to final assembly. Exterior casing surfaces shall have a baked enamel finish coat after assembly. Color shall match custom color selected for existing PBB. Provide maintenance access to the following items:

1) Blower/damper.

2) Air filters.

3) Coils.

4) Controls.

O. A condensate pump and drain pan shall be provided for each air handling unit. The condensate pump shall be lightweight, self-priming, and capable of running dry. Minimum

pump rating shall be 3 gpm with a 40-foot head, 1/3 hp or as required by the specific PBB configuration. Position the drain pan under the coil section. Drain pan shall be fabricated of stainless steel with capability of complete drainage leaving no standing water in pan. Condensate pump shall be provided with a summer/winter switch or internal float switch actuated assembly.

P. An ethylene glycol booster pump shall be provided for all bridge air handlers if required. The pump shall be integral to the unit with a single point electrical connection.

Q. All air handling units shall be prepared with all necessary rails and mounting assemblies to be hung from the underside of the PBBs.

## 2.3 AHU CONTROL ASSEMBLY

The AHU controller assembly for the air handler unit shall be designed for mounting directly onto the blower/coil unit or for mounting remotely from the blower/coil unit.

A. The air handler controller shall contain the following door mounted controls and displays:

1) Lighted ON and OFF push buttons. The ON push button shall be operable in the AHU manual mode only.

2) Summary FAULT indicator (overload).

3) "Change Filter" light.

B. The controller shall contain the following operator controls located within the controller cabinet.

1) Auto/Manual Mode Switch.

2) Manual override controls (dials or keypad) to manually very the outlet air temperature and air flow.

3) Manual secondary hose damper switch to open or close the second hose damper (for jumbo gate air handler units only).

4) Connections for remote on/off push-button, aircraft type selector switch, cabin temperature sensor and remote monitoring system.

5) Connection for shutdown and display of smoke alarm indication.

6) Connection for PBB cooling functions and system network cabling.

C. The air handler controller shall utilize direct digital control (DDC) using microprocessor technology for all control, regulation, modulation, alarm shut-down, and response to/from remote signals.

D. The controller shall automatically control the AHU outlet air temperature in response to the cabin temperature as sensed by the companion cabin temperature sensor.

E. The controller shall automatically sense a failure of the cabin temperature sensor and automatically begin outlet air temperature control based upon sensed inlet ambient temperature. During this backup mode of automatic temperature control, the remote monitoring system shall be supplied with a signal indicating the failure of the cabin temperature sensor.

F. The controller shall, in addition to the above functions, provide for local data display and program updates with laptop computer connected directly to the controller. In addition, the controller shall provide full networking capabilities and built-in control and monitoring communication means with remote devices including, as a minimum, the following points:

1) Air handler ON and OFF status and SUMMARY ALARM.

2) STOP Switch.

3) Designation of each alarm condition, by type.

4) Air outlet and ambient temperatures.

5) Position of gate EG/W modulating valve.

6) Motor speed as % of full rated speed if VFD.

7) Totalized AHU running time.

8) Running time since last air filter change-out.

9) Readout of, and control of, cabin temperature set point.

10) Readout of actual cabin temperature as measured by cabin temperature probe used by the controller logic.

11) Signal to prohibit starting the AHU (enable/disable).

12) Readout of and control of, mode changeover points and slope versus ambient temperature (backup temperature control in event of cabin temperature sensor failure).

13) Control of auto filter alarm timer set point.

14) Second hose status (open/closed) - Jumbo gates only.

15) Nighttime cabin temperature set-up mode control including on/off control, set-up temperature set point, mode automatic start and stop times and remote override

capabilities to adjust start and stop times.

16) 400 Hertz gate box on/off and fault status.

17) AHU mode of operation, i.e., aircraft cooling or PBB cooling.

18) Coil freeze up.

19) Return EG/W temperature.

G. The AHU controller shall contain an internal read-time clock with battery of minimum 30-day life. The battery shall be capable of being changed without losing any internal history, such as total running time or time since last filter change.

H. The controller shall be capable of stand-alone automatic operation in the event of failure of the data/control network.

I. The controller assembly shall be housed in a NEMA 3R gasketed enclosure and be suitable for direct mounting on the blower/coil unit or remotely mounted.

## 2.4 CABIN TEMPERATURE CONTROL

A. Each gate shall be equipped with controls to automatically maintain the set cabin temperature within ± 2 deg F at the sensing point. This shall be by use of a small temperature probe connected to the system by way of a small cable and jack in the PBB cab.

B. The PCA Cabin Temperature Sensor assembly shall consist of a cord mounted sensor element mounted in a Delrin Plastic housing and a mating wall receptacle design for mounting in the cab of a PBB.

1) The sensor element shall be rated for ambient temperatures listed on ASHRAE Climatic Region Tables most stringent column, be an RTD or solid state element type and be fully compatible with the specified AHU controller.

2) The sensor shall be housed in the Delrin plastic housing and provide full sealing of the sensor against all weather conditions. The upper end of the housing shall provide openings sufficient to provide necessary air flow across the sensor element while protecting the element from damage when in use or being stored. The sensor shall be connected to a neoprene retractable cable, 0.2" in diameter, with three 2.3 AWG conductors. The cable length shall be approximately four feet retracted and twenty feet extended and be retrained to the sensor housing by a screw-on type waterproof strain relief with O-ring seat.

The receptacle mating end of the cable shall be terminated with a 90 deg angle, waterproof type plug with a screw cap for securing to the wall receptacle. The mating

receptacle shall be mounted on a stainless steel cover plate. A bracket shall be provided in the PBB cab next to the cover plate for easy storage of the sensor assembly when not in use.

2.5 PERFORMANCE SPECIFICATION OF PCA AIR HANDLING UNITS

A. Specification of glycol air handling units.

1) A wide-body glycol air handling unit shall be capable of delivering a minimum of 244 lb/min of 26 deg F air. The unit shall be capable of a 28-inch gage pressure, minimum at the outlet of the air handling unit at the above flow and temperature conditions at summer design inlet conditions when supplied with the specified EG/W to the coil at the flow and temperature as specified by the Delegated Engineer.

2) A Jumbo (A380 or similar) air handling unit shall be capable of delivering a minimum of 440 lb/min of 26 deg F air at the outlet of the unit. The unit shall be capable of a 31-inch gauge pressure, minimum, at the outlet of the air handler unit at the above flow and temperature conditions at summer design inlet conditions when supplied with the specified EG/W to the coil at the flow and temperature as specified by the Delegated Engineer.

B. All air handling units shall be capable of a 45 minute "pull down" for their respective heat "soaked" aircraft from a temperature of 100 deg F to 80 deg F.

2.6 BLOWER/COIL UNIT COMPONENTS

A. Casing: Manufacturer's standard casing construction, having corrosion protection coating, and exterior finish. Where the air handler unit is provided in a unitized enclosure, the casing shall have removable panels or access doors for inspection and access to internal parts; provide manufacturer's standard thermal insulation, knockouts for electrical and exterior condensate drain connection, and lifting provisions.

B. Blower:

1) General: Provide blower that is factory fabricated and assembled, factory tested and factory finished, with required capacities and characteristics.

2) Blower and Shafts: Statically and dynamically balanced and designed for continuous operation at the maximum rated fan speed and motor horsepower. Blower Shaft: Turned, ground and polished steel designed to operate at no more than 70% of the first critical speed at the top of the speed range of the fan's class.

3) Shaft Bearings: Provide bearings having a median life "Rating Life" (AFBMA L50) of 200,000 hours of use calculated in accordance with AFBMA 9 for ball bearings or AFBMA 11 for roller bearings.

4) Factory Finish:

a) Exterior Sheet Metal Parts: Prime coating prior to final assembly. Final color to match PBB color.

b) Interior Surface: Manufacturer's standard finish is acceptable.

5) Blower: Forward-curved, centrifugal, direct drive fans; and permanently lubricated motor bearings where bearings are not accessible for greasing.

C. Coils:

1) Aluminum plate fins and seamless copper tube type, minimum 5/8 inch O.D. Fins shall have collar drawn, belled and firmly bonded to the tubes by means of mechanical or hydraulic-expansion of the tubes. No soldering or tinning shall be used in the bonding process. Coils shall have a galvanized steel casing. Fin spacing shall be 12 fins/inch on the first stage and 8 fins/inch on the second stage. Coils shall be mounted on the coil casing with same end connections accessible for service. Coils shall be removable from the unit. Coil section shall be completely insulated.

2) The number of tubes and fin spacing shall be submitted on shop drawings based on the coil selections made. Coils shall be constructed and tested in general accordance with ASHRE 15 and ARI 410.

3) Coils shall be proof tested at 400 psig and leak tested at 250 psig tested with air pressure under water.

D. Airflow Control: Airflow control shall be by variable frequency drive control.

E. Inlet Air Filters: Provide medium efficiency pleated disposable air filters suitable for installation in holding frames; two-inch-thick minimum for WB or NB units, four-inch-thick minimum for jumbo units; constructed of non-woven cotton fabric type. The enclosing frame shall be constructed of rigid, heavy duty, high wet-strength beverage board to the filter pack materials. The filter media internal support shall have welded wire grid. Holding frames shall be fabricated completely of metal construction. For WB and NB units, provide filter with rated face velocity of 500 fpm, initial resistance of not greater than 0.30 inches' water gauge, final rated resistance of a 0.50-inch water gauge and average arrestance of 80%. For jumbo units, provide filters with rated face velocity of 600 fpm. The holding frame and filters shall be sized such that the rate face velocity of the filters shall be sized such that the rated face velocity of the filters is not exceeded at specified AHU mass flow and design inlet ambient temperature conditions.

## 2.7 BRIDGE DELIVERY EQUIPMENT

A. Each PBB with the AHU at the cab end, shall be provided with a Service Transport Unit (STU). Each STU shall carry services like Ethylene glycol/water (EG/W) pipes, 400 Hz cables, condensate drain hoses, power to air handler, data/communication control, etc., to

bridge end in a single, low profile package. Refer to Service Transport Units for further specifications.

B. Moving parts within the slide assembly of the STU shall be minimized. Cables and pulleys are not allowed in the operation of the STU. The STU shall be designed to allow easy access for maintenance and inspection at the ramp level.

C. All gates with WB or NB air handler units shall be provided with a single primary air delivery hose. All gates with jumbo air handler units shall be provided with a primary and secondary hose. Each hose end shall be provided with an aircraft PCA connection nozzle, Milo mini-adapter, or equal, approved for use by MDAD. In addition, all gates shall be provided with MD-80 extension hoses of suitable length to reach the aircraft PCA connection with a quick connect fitting to mate with the primary hose nozzle. The other end of the extension, hose shall include a sewn "ell/reducer" hose to minimize kinking of the hose when connected to the MD-80 aircraft and terminated with the same type of nozzle as the primary hose.

D. Air flexible hose shall be of the lightweight insulated type, maximum thermal conductance of 1.28 BTU/Hr /Ft /deg F, pressure rated for 50 inches of water maximum. Hose shall be flat when not in use, manufacturer by Flex-fab, Air Tech, Inc., or similar approved quality, 14-inch diameter flat type. Hose is to be supplied in sections of no more than 25 feet in length, connected by a closed nylon zipper device, or Velcro connectors with a 14 inch to 8-inch diameter reducing adapter on the end section.

E. BOOM AIR Hose Management System (hose storage and retrieval system) shall be provided for each PPB. Fully integrate in the installation of units for A380 service and other aircraft to be serviced by the PBB.

F. Ethylene Glycol/water and condensate drain flexible hoses, for STU application, shall be of reinforced tube with minimum design operating pressure of 150 psi. Hoses shall be of high-tensile polyester cord spiral with a layer of natural rubber resistant to abrasion, weathering, sun-checking, and water-absorption. Hoses shall maintain a bending radius of 4 inches for 1 1/2-inch hose and 5 inches for 2 1/2-inch hose.

G. For Fixed Walkways, service pipes shall be rigid pipes with flexible hoses at AHU connections and where Fixed Walkway mounted supply and return piping mates with movable PBB mounted piping. The length of the flexible connections shall provide for full PBB movement and be provided with additional mid-span supports as necessary to ensure that hoses do not interfere with other equipment at the PBB foundation.

## 2.8 BRIDGE TRANSPORT UNIT

A. The Service Transport Unit (STU) shall meet the mechanical and electrical requirements for an Across the Bridge Service Transport Unit designed for top mounting on a two or three tunnel telescoping ramp drive PBB.

B. The general design and construction of the STU shall be in conformance with sound engineering practices and all equipment and material shall be new.

C. There shall be no cables and pulleys used in the operation of the device. The STU shall be mounted on the side or top of the PBB.

D. The complete STU shall be fully operational under the logical combinations of the following conditions:

1) Blowing winds up to 60 MPH in the operation mode and 186 MPH in the non-operational mode.

2) Ambient temperature range: 32 degF to 120 degF.

3) All components and connections shall be designed according to FBC-2014 and ASCE - 7 – current edition.

E. The STU shall be capable of containing, protecting and transporting across the telescoping tunnels of the bridge factory-installed EG/W hoses, AHU power cable 400 HZ power cable AHU condensate drain hose, network cable and control cable.

F. The assembly shall consist of two (for 3 tunnel bridges) identical sliding tubes within a main box, designed to mount at three (3) tunnel PBB. The sliding tubes and box will extend and retract in synchronism with the movements of the PBB.

G. When installed on the PBB, the STU shall permit the bridge to fully extend and retract (within normal operating limits) without limiting or restricting bridge movement or imposing excessive loads on the PBB structure.

H. The main box and sliding tube shall be constructed of aluminum.

I. The main box shall have a three-piece top cover. The top shall be made of aluminum sheet. The top shall be removable for ease of access to interior components.

J. Each sliding tube shall have sealed ball bearings mounted under the inboard side of the tube to allow for smooth movement.

K. The brackets that support the STU shall be designed to be welded or bolted to the structural members of each PBB tunnel.

L. The STU shall be complete with mounting brackets, support assemblies and hardware to secure to the PBB, either in the field or at the bridge factory. Each bolted joint shall be provided with washers and lock nuts.

M. The exterior surfaces of the STU shall be painted to match the PBB.

N. PCA AHU Power Cable

1) The air handler power cable shall be compatible with the size and configuration of the AHU, design ambient temperature conditions and local codes and standards. Cable to be Type W Round with EP insulation, neoprene jacket rated 600/2000 volt, UL listed and 4 conductor #1/0 AWG max.

2) The cable shall be continuous from a junction box on the exterior face of the Terminal building to a junction box at the aircraft end of the PBB.

O. 400 Hertz Power Cable

1) The 400 Hertz power cable shall be compatible with the size and configuration of the 400 Hertz central system power, design ambient temperature conditions and local codes and standards. Cable to be Type W round with EP insulation, neoprene jacket and rated 600/2000 volt, 4 conductors 2/0 AWG max.

2) The cable shall be continuous from a junction box on the exterior face of the Terminal building to the Aircraft Service Cabinet at the aircraft end of the PBB.

P. Network Cable

1) A cable shall be provided for system monitoring of the Pre-Conditioned Air System and PBB and Fixed Walkway units. The cable shall consist of three (3) twisted shielded pair single jacket daisy chain installed in conduit. Conduit size of one inch (1") diameter, minimum (larger diameter where required). The cable shall be Belden 9773-18/3TSP. Provide Belden 9774 18/4 TSP from J -Box to STU. All cables to be UL rated.

2) The cable shall be continuous from the network terminal box at the building to a terminal box or AHU controller located at the aircraft end of the PBB.

Q. Control Cable

1) A single control cable shall be provided for control of components located external to the AHU, including any PBB exhaust fans, smoke detectors, booster pumps and control valves. The cable shall provide the required number and type of conductors to provide control of those devices.

R. EG/W Supply and Return Hoses

1) The hoses shall be capable of transferring a maximum mixture of 30% ethylene glycol and 70% water by weight with an operating temperature of 10 deg F to 160 deg F and an ambient from 32 deg. F to 160 degF. The hose must be capable of minimum bending radius of 6 inches during all designed operating conditions and working pressure of 150 psi. The hose shall not grow in length over 1 -1/2% (in length) when pressurized to 100 PSIG from 0 PSIG.

2) The EG/W hoses outside of the main box shall be insulated with 2" wall closed cell elastomeric insulation. The insulation shall have a flame spread rating if less than 25 and a smoke density rating of less than 50. The insulation shall maintain flexibility under normal bridge operations.

3) The EG/W hoses shall be provided with barbed male brass couplings attached to both ends. The couplings shall be double banded and rated to 150 psi.

4) EG/W hoses shall be 2", 2 ½", or 3" inches.

2.10 PBB AND FIXED WALKWAY COOLING

A. The Vendor shall furnish cooling for PBB and Fixed Walkways. The Vendor shall install special ethylene glycol/water air handling units to accomplish PBB and Fixed Walkway cooling as designed by the Delegated Engineer.

B. Controls for PBB and Fixed Walkway units shall be located at the entrance to the PBB.

C. Temperature controls shall be protected from damage.

2.11 GATE EG/W MODULATING VALVES

A. The Vendor shall provide new modulating valves, actuators control and power wiring for each unit.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine areas and conditions for compliance with requirements for installation tolerances and other conditions affecting performance of the air handling units.

3.2 INSTALLATION, GENERAL

A. Furnish all necessary support, brackets, guard posts, safety rails, etc. for properly installing all air-handling units. Field verify bridge connection points prior to manufacturer of supports.

B. Install units to provide access space around PCA units for service and maintenance.

C. The air-handling units shall be properly aligned, adjusted and lubricated and field tested before final acceptance.

D. Perform water and air system testing and balancing.

E. Apply color coded physical hazard stripe on PCA unit in accordance with manufacturer's suggested practice.

3.3 CONNECTIONS

A. Connect unit to Ethylene Glycol/Water Piping and condensate drain piping.

B. Connect unit to electrical power wiring.

C. Connect unit to control system.

D. Coordinate location of outside air louvers with bridge stairs prior to installing PCA units. On 3-tunnel bridges outside air intake shall be opposite to bridge stairs.

3.4 FIELD QUALITY CONTROL

A. Manufacturer's Field Inspection: Arrange and pay for a factory authorized service representative to perform the following:

1) Inspect the field assembly of components and installation of air handling units including ductwork and electrical connections.

2) Prepare a written report on findings and recommended corrective actions.

3.5 ADJUSTING, CLEANING, AND PROTECTING

A. Check dampers for proper damper operation.

B. Clean unit cabinet interiors to remove foreign material and construction dirt and dust. Vacuum clean fan wheel and cabinet.

C. Provide factory paint touch kits and remove any surface rust and re-finish as required to prevent corrosion and rust.

D. Insulate unit cabinet to prevent condensation.

E. Check and adjust condensate float switch. Check that hose is not obstructed in anyway.

F. Clean and comb EG/W cooling coil fins.

3.6 COMMISSIONING (Refer to Section 019113)

A. Final checks before start-up: perform the following operations and checks before start-up:

1) Remove shipping, blocking and bracing.

2) Verify unit is secure on mountings and supporting devices and that connections for piping, ductwork, and electrical wiring are complete. Verify proper thermal overload protection is installed in motors, starters and disconnects.

3) Perform cleaning and adjusting.

4) Lubricate bearings and other moving parts with factory-recommended lubricants.

5) Verify manual and automatic volume control.

6) Disable automatic temperature control operators. Reconnect and verify operation.

B. Starting Procedures for Blowers:

1) Energize motor: verify proper operation of motor, drive system, and blower wheel. Replace blower and motor as required to achieve the design requirements.

2) Measure and record motor electrical value for voltage and amperage.

3) Check and demonstrate automatic operation of smoke detectors.

4) Check and demonstrate variable frequency drive operation for wide body and narrow body aircraft.

C. Refer to Division 23, Section 230594 – PCA Test and Balance for procedures for testing, adjusting and balancing PCA cooling systems, PBB and Fixed Walkways cooling systems.

## 3.7 DEMONSTRATION

A. Demonstration Services: The Vendor shall arrange and pay for a factory-authorized service representative to train MDAD's Facilities Maintenance personnel on the following:

1) Procedures and schedules related to start-up and shutdown, troubleshooting, servicing, preventative maintenance, and how to obtain replacement parts.

2) Familiarization with contents of Operating and Maintenance Manuals specified in Division 23, Section 230010, PCA General Requirements.

B. Schedule training with MDAD Project Manager/representative at least seven (7) days advance notice.

## 3.8 TRAINING

A. During the checkout and test phases, the appropriate MDAD personnel shall be invited to witness and to receive over-the-shoulder operation/ adjustment training. Immediately prior to or within one week after system acceptance tests or beneficial use if the system,

whichever comes first, the Vendor shall conduct a five-day training class for up to 12 MDAD Maintenance Personnel. The class shall consist of 50% classroom and 50% hands-on operation. This class shall be aimed at operating and maintenance personnel for basic operation, preventative maintenance, adjustments, and initial fault response.

B. Vendor shall arrange and pay for a factory authorized representative to assist in training.

END OF SECTION

# SECTION 263226 - FREQUENCY CONVERTERS – CENTRAL PLANT 400-HZ SYSTEMS

## PART 1 - GENERAL

### 1.1 SCOPE OF WORK

A. This specification describes and defines the performance and documentation required to be provided by the Vendor to furnish, install, and test the completed system, including all required design documents and plans necessary to provide 400-HZ power to Passenger Boarding Bridges (PBB) at Miami International Airport (MIA).

B. This Section applies only where the use of an existing 400-HZ central plant system has been approved for use to provide service to a PBB, as further detailed elsewhere in the specifications.

C. This Section includes furnishing and installing, but is not necessarily limited to, materials, equipment, labor and all other items necessary to deliver a complete and operable 400-HZ power source to new PBBs as directed by MDAD.

D. All codes, standards, and similar publications referenced in this Section shall be understood to be the latest version adopted by the issuing organization.

### 1.2 REFERENCE

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

1) Anti-Friction Bearing Manufacturers Association, Inc. (AFBMA). AFBMA 9 Load Rating and Fatigue Life for Ball Bearings.

2) American National Standards Institute, Inc. (ANSI).
ANSI C2 National Electrical Safety Code.
ANSI C 12.11 2007 Instrument Transformers for Revenue Metering.

3) Federal Communication Commission (FCC).
FCC, PART 18, CFR TITLE 47, Radio Frequency Interference Suppression.

4) International Electrical Testing Association (NETA)
Acceptance testing Specifications for Electrical Power Distribution Equipment and Systems.

5) National Electrical Manufacturers Association (NEMA).

NEMA AB 1 Molded Case Circuit Breakers.

NEMA ICS 1 Industrial Control and Systems: General Requirements.

NEMA ICS 6 Enclosures.

NEMA WD 1 Wiring Devices.

NEMA WD 6 Wiring Devices -Dimensional Requirements.

NEMA 250 Enclosures for Electrical Equipment (1000 volts maximum).

6) National Fire Protection Association (NFPA).

7) NFPA 70 National Electrical Code.

8) Underwriters Laboratories, Inc. (UL).

UL 467 Grounding and Bonding Equipment.

UL 489 Molded-Case Circuit Breakers and Circuit Breaker Enclosures.

UL 506 Specialty Transformers.

UL 508 Industrial Control Equipment.

1.3 QUALITY ASSURANCE:

A. Listing and Labeling: Provide products that are listed and labeled as defined by NFPA 70, Article 100, by a testing agency acceptable to the Authority Having Jurisdiction and marked for the intended use and for the location and environment in which they are installed.

1) All equipment, circuit breakers, panelboards and appurtenances shall be designed and UL listed for 400-HZ systems applications.

B. Factory Testing:

1) 400-HZ Gate Box Assemblies:

a) The gate box assemblies shall be tested at the factory to verify the following parameters:

i. Transformer Voltage Regulation.
ii. Load Contactor Automatic Opening:

Due to overvoltage.

Due to under voltage.

Due to overload.

iii. Line Drop Compensator(s) Voltage Regulation.

C. Field Testing:

1) Submit field testing as specified in Paragraph 3.2 "System Testing."

D. System Warranty: Provide a warranty of one year from the date of Substantial Completion for all parts and labor for the system and all equipment.

1.4 DELIVERY, STORAGE AND HANDLING

A. Delivery, Storage and Handling shall comply with the requirements listed below in addition to any other requirements found elsewhere in the specifications.

1) Transport using manufacturer provisions and in accordance with manufacturer recommendations.

2) Store in dry, dust-free location and cover completely to exclude contaminants.

3) Provide temporary heat if condensation is likely to occur.

1.5 EXTRA MATERIALS

A. Extra Materials:

1) Spare and extra parts shall be identified for all products, but not provided. Include spare parts information in Operation and Maintenance Manuals.

a) Fuses: Provide 2 of each size and type used.
b) Filters: Provide one spare circuit board for each critical circuit.
c) Bulbs: Provide 2 of each size, type and color used.

1.6 SYSTEM DESCRIPTION

A. The central plant 400-HZ central ground power system is capable of providing all 400-HZ to the system output locations. Source voltage shall be 480Y/277 Volt, 3-phase, 4-wire, 400-HZ, 575 VAC, 3-phase, 4-wire, is distributed from 312 KVA, vertical motor generators (three), via individual branch circuits to each aircraft service connection. The motor generators are capable of unmanned automatic paralleling, automatic master assignment and rotation, and auto-restart. The 400-HZ power is fed from solid-state electronic trip circuit breakers housed in the main distribution switchboard. All distribution wire shall be factory twisted and bundled, 3 or 7-conductor XHHW-2 copper run in non-

ferrous conduits or raceways and shall be installed by the Vendor as indicated on the drawings. The power shall be delivered across the passenger boarding bridge via cable housed in a new over-bridge device. The power shall be delivered to the aircraft from a gate box that is mounted on the loading bridge. The gate box transforms the 575 V, 400-HZ power to 118/204 V, 3-phase, 4 wire, 400-HZ and contains various controls and protective devices. Each output of each gatebox shall contain a line drop compensator to compensate for the inductive line losses in the circuit. An aircraft cable connected in the gate box and plugged into the aircraft completes the circuit.

1.7 SYSTEM PERFORMANCE

A. System Voltage Requirements: The 400-HZ distribution system shall deliver an average steady state voltage in the range between 112.0 and 118.5 VAC using a constant voltage motor generator. All components for each branch circuit, including gate box, line drop compensator (LDC), wire and circuit breaker, shall be rated 180 KV A, as indicated on the plans and schedules. The LDC's will be set to maintain reactive load voltages in the 117-118.5 V range and the wire sized to limit the full load voltage drop within 6.5 volts for a minimum delivery voltage of 112 V. The transient voltages shall be within the range of 102- 130 VAC. The transient recovery for a 90 KVA load change shall be less than 80 milliseconds.

1.8 EQUIPMENT DOCUMENTATION

A. Equipment Submittal: Submit manufacturer's technical product data, including performance and operating criteria, physical dimensions and installation procedures. Product data shall be provided for the following:

1) Modifications to the Distribution Switchboard, including specific information on the circuit breakers.
2) Pushbutton station at PBB.
3) PBB Wire, Cable and Raceway.
4) Gate Box (each type).
5) Aircraft Cable.
6) Cable Hoist/Cable Retrieve.

B. System Shop Drawings: Submit shop drawings detailing the equipment installation, system electrical single-line diagrams, voltage line drop calculations, central room layout, modifications, adjustments and typical bridge equipment arrangement and modifications.

C. Operation and Maintenance Manuals:

1) Operating and Maintenance manuals shall contain, at a minimum:

a) Equipment operating and maintenance information, control diagrams, wiring schematics, physical description, major parts list.
b) List of special tools required, troubleshooting information, spare parts lists and warranty explanation.
c) Catalog information and shop drawings for each major component and for each system layout.
d) Instructions for starting and operating converters and all associated equipment.
e) Routine preventative maintenance and lubrication schedule.
f) Description of operating limits which may result in hazardous or unsafe conditions, or in equipment damage.

D. Design Calculations

1) The system provider is responsible for complete design calculations based on the actual equipment provided in accordance with the identified aircraft mix for each gate. Submit all required structural calculations for mounting of gate equipment to PBB. Submit complete design calculations regarding voltage drop calculations for each gate to include all assumptions, design considerations, design data, equipment selection table. Include in bid all necessary equipment and cable sizes required to meet the performance specifications herein. Provide wire sizes as required to meet specified criteria, at no additional cost to MDAD. 400-HZ distribution wire shall be sized based on LDC settings no greater than 10 percent.

## PART 2 - PRODUCTS

### 2.1 PBB CABLE AND WIRE

A. General Description:

1) Refer to Section 260519

B. PBB Small Power and Control Cable:

1) Multiple conductor control and small power cables used outdoors on the passenger boarding bridges, shall be portable power cable. Cables shall be sized as indicated on the drawings or sized as required by the equipment furnished. Cable shall have green equipment ground conductor with equal size as phase conductors. Cables to be jacketed 600 volts SO type. Cable connectors shall be non-ferrous, steel case liquid tight sized for cable diameter and shall use strain relief gland fitting to prevent tension on conductor terminals. Where cable drops are indicated on the drawings, use non- ferrous wire mesh strain relief cable grips at both ends of cable drops. Conductors shall be stranded copper. Cable shall be suitable for use outdoors, sunlight resistant, moisture resistant and oil resistant.

C. STU Assembly

1) Flexible, 400-HZ cable shall be provided within the passenger boarding bridge (PBB) utility carrier (or STU) where indicated on plans or in schedules. Cable shall be type W, round, portable power cable suitable for outdoor use, sunlight resistant, moisture resistant, and oil resistant. Provide (4) #2/0, stranded conductors with 600/2000 volt, 90 degrees C, EPR insulation. Conductors shall be color coded. Jacket shall be lead cured thermoset or reinforced neoprene. Cable assembly shall be U.L. listed. Provide length required by PBB to span full travel of STU plus 30 feet at each end.

2.2 GATE BOX

A. General Description:

1) The gatebox assembly shall be a stand-alone device to provide transformation of 400-HZ, 575 V AC to 115/200 V AC, 3-phase, 4-wire with grounded neutral power for aircraft use. The gatebox assembly shall be 90 KVA single output or 180 KVA dual output, as indicated by the aircraft mix requested by MDAD. Output power rating shall be continuous at 0.8 power factor lagging. Each component of the gatebox assembly listed below shall be configured with the KVA rating of the assembly unless otherwise noted.

B. Enclosure:

1) The gate box cabinet shall be welded #11-gauge steel with stainless steel door piano hinge. The finish shall be two (2) coats of primer and one coat of polyurethane paint. The color to be as specified by the customer. The top shall be removable to facilitate complete paint coverage. The unit shall be NEMA 3R compliant.

2) The enclosure top cover shall have threaded connections for lifting eyes.

3) Storage receptacle for spare bulbs and fuses shall be located on the interior of the gate box door.

C. Transformer:

1) The gate box shall contain 400-HZ dry type step down isolation transformers with 575V delta connected primary and 118/204 V wye connected secondary. Transformers shall be sized equal to the output rating of the gate box.

2) Insulation shall be class "H" varnish impregnation, two coats.

3) The minimum B.I.L. shall be 10,000 volts.

4) The voltage regulation of the line to neutral, no load to full load shall be 0.6% at unity power factor and 1.5% at 0.8 Jagging power factor.

5) The transformer shall have continuous duty rating equal to rated KVA.

D. Contactor:

1) Provide 600V, 325 Amp, 400-HZ rated load contactors as required. The contactors will be provided with lugs capable of landing two #2/0 wires per phase. The coil shall be 100 VDC.

E. Line Drop Compensator

1) Provide required line drop compensators for gateboxes. The line drop compensator is used to eliminate the reactive voltage losses (line drop) in long runs of 400-HZ power distribution. The line drop compensator shall be rated at its KVA rating, 575 volts, 3-phase, 400-HZ continuous load at 0.8 power factor lagging. The compensator shall be capable of correcting a minimum of 16% inductive impedance at its KVA rating and shall be step adjustable with a minimum of six steps. The line drop compensator shall be UL 508 rated.

2) Transformers:

a) Each LDC shall contain three 90 KV A, 400-HZ dry type, current transformers, one for each phase (A, B, and C). The maximum ampere rating of each transformer shall be according to its KVA rating, which at the 16% setting will give a 53-volt boost per phase, minimum.

b) The insulation shall be class "H" varnish impregnation, two coats.

c) The transformers shall have multiple taps on the secondary windings for adjustment of the reactive compensation for various combinations of cable lengths and sizes to provide voltage boost from 6% to 16% in 2% increments. The secondary taps shall be positioned in an accessible location to allow adjustment without reaching over or around the primary taps in order to reduce the possibility of coming into contact with the 575-volt power. The taps shall be of the quick connect terminal type. A decal shall show the boost connections. The temperature rise of the magnetic components shall show the boost connections. The temperature rise of the magnetic components shall not exceed 80 degrees Celsius over 40 degrees Celsius ambient under rated load conditions. The design of the compensator shall not require the use of fans for cooling.

3) Capacitors:

a) Two capacitors will be connected in parallel across the secondary windings of each transformer to reflect capacitive reactance into the main transmission line and cancel the inductive reactance. Capacitors shall be non-PCB type.
b) Capacitor voltage rating to be such that if one capacitor fails, the second will withstand the increase in voltage and current. The compensator shall handle a 250 percent load transient without interruption of service or system degradation.
c) Provide line drop compensation, as determined from the system provider's voltage drop calculations in order to furnish the correct voltage at the aircraft cable plug. Maximum allowable setting during system start-up of LDC shall be 10 percent. Size conductors based on a maximum 10 percent boost.

F. Controls and Indicators

1) A 600V, 3 pole, manually operated disconnect isolation switch shall be provided on the fixed portion of the enclosure and shall be lockable with internal and external override. The ampere rating of the isolation disconnect switch shall be sized according to the rating of the gatebox.

2) The gate box assembly shall be equipped with individual industry standard PC boards, factory adjusted, to provide over voltage, under voltage and overload protection.

3) E/F feedback circuit shall use relay logic to insure proper aircraft interlock and safety for each output. This circuit shall also be equipped with an MOY to eliminate any 400-HZ induced voltage from the single jacketed aircraft cable.

4) 12-volt cluster LED, minimum 100,000 hours, indicating lights and illuminated pushbuttons shall be located on the exterior of the gate box cabinet. Buttons and lights shall be 30 mm diameter.

Buttons and lights shall be provided as follows:

a) Power Available Light - Power is available in the gate box.
b) Overload Light - An overload fault has occurred.
d) Under Voltage Light - An under voltage fault has occurred.
e) Over Voltage Light - An over voltage fault has occurred.
f) Reset Button - Resets the assembly after a fault has occurred.
g) Test Button Illuminates all lamps.
h) Contactor Closed Light -Lights to indicate that power is being supplied to

the aircraft.

5) All lights, local and remote pushbutton, and controls, shall be 12 VDC with a continuous duty power supply rated from 1.7 to 5 amps, depending on the design conditions. Spare bulbs and fuses of each type provided.

6) Voltmeter: The output voltmeter shall have a single 0 to 300 VAC scale in order to read line-to-line and line-to-neutral voltages. The voltmeter shall be calibrated for 400-HZ and have an accuracy of +2 percent full scale.

7) Voltmeter Selector Switch: Seven (7) position selector switches with "OFF" position shall be provided to monitor line-to-line and line-to-neutral voltages.

8) Ammeter: The Output Ammeter shall have a single 0 to 400-A. RMS scale in order to read output phase currents. The Ammeter shall be calibrated for 400 HZ and shall have an accuracy of +2 percent full scale.

9) Ammeter selector switch: A four (4) position selector switch shall be provided to monitor output phase currents:" A", "B", "C" with an "OFF" position.

10) Frequency meter: Output frequency meter with range of 360 HZ to 400-HZ and accuracy of +5 percent full scale.

11) Elapsed time meter: Shall be non-resettable type with 0 to 99,999 Hr.

G. Gate Box Test Panel:

1) The gate box shall contain a silk screened or equivalent schematic and component legend on a sixteen-point test panel for troubleshooting the following conditions:

a) Output voltage of each of the three phases.
b) Output voltage of the DC power supply.
c) Contactor auxiliary contacts.
d) Contactor auxiliary relay.
e) Under voltage relay contacts.
f) Over voltage relay contacts.
g) Overload relay contacts.
i) Overload relay.
j) Protective Monitor

2) Test switches to facilitate testing and troubleshooting.

3) E/F bypass switch for test purposes when 28 VDC power, is not available.

4) Contactor disable switch to disable the gate box output, but still leave input power to the box enabled.

5) A "Back Feed" receptacle, to allow 400-HZ, 115/200 V external power for purposes of testing normal gate box operation, over voltage and under voltage protection, shall be provided on the face of the test panel.

6) Provide dry alarm contacts for interface with PCA Air Handler Unit Controller for the following:

a) 400-HZ On/Off.
b) 400-HZ Fault

## 2.3 400-HZ AIRCRAFT CABLE

### A. CABLE ASSEMBLIES

1) Multi Conductor Banded

The 400-HZ Cable Assemblies shall consist of A, B, C Phase & N (Neutral) supply wires. Each lead Shall consist of a single conductor. Phase A, B, C, & N shall be approximately 2/0 AWG. Control leads E & F shall be #12 AWG (2) conductors. Provide jumper wire between pins E & F in the plug. The plug shall be Anderson Power Products or approved equal, field attachable, MS25486-3/(R67G36B). Each cable assembly shall be approximately 65 feet and 85 foot in lengths and banded together with stainless steel bands.

| | |
|---|---|
| Lug Terminals for A, B, C, | Phase shall be MS20659-1 20 |
| Lug Terminals for N | Phase shall be MS20659-136 |
| Lug Terminals for E & F | Phase shall be MS20659-106 |

Lug terminals shall be attached to one end of the cable and plug attached to the other end. A ball stop is to be attached to the cable approximately 2-1/2 feet behind plug. Some cablesentire length should be protected with orange scuff cover.

2) Single Jacketed Multi-Conductors

The 400-HZ Cable Assemblies shall consist of A, B, C Phase & N (Neutral) supply wires. Phase A, B, C shall be approximately 1/0 AWG. Phase N (Neutral) shall consist of 3#6 AWG Control leads E & F shall be #12 AWG (2) conductors. Provide jumper wire between pins E & F in the plug. All wire shall be manufactured Anderson Power Products or approved equal, field attachable, R67G76B. Each cable assembly shall be approximately 65 feet and 85 foot in length as required.

| | |
|---|---|
| Lug Terminals for A, B, C, | Phase shall be MS20659-18B |
| Lug Terminals for N | Phase shall be MS20659-143 |
| Lug Terminals for E & F | Phase shall be MS20659-106 |

3) Lug terminals shall be attached to one end of the cable and plug attached to the other end. Plug shall be yellow fluorescent in color.

2.4 400-HZ AIRCRAFT CONNECTOR

A. The Aircraft Connector shall be a molded portable connector consisting of a specially formulated Hypolon® rubber material, as manufactured by Anderson Airmotive Products Co., Inc. Portable Plug Catalog No. R67, or MDAD approved equal, configured to accommodate the characteristics of cables specified for this project. The portable plug shall meet the following additional specifications:

1) Shock-proof, highly abrasion and chemically resistant material

2) Replaceable contacts, silver-plated copper-tellurium alloy

3) Replaceable connector front part

4) Replaceable rubber protectors with wear indicators

5) Short, main contacts for low voltage drop

6) Applicable norms: 2006/42/EC Machinery Directive, VG 95319, ISO 461, MS 25486, DFS 400

7) Push and pull forces meet DIN EN 61984 $\leq$ 445 N

8) Operating temperature range -40°C to +125°C (-40°F to +257°F)

9) Resistant to UV radiation, oil, hydrolysis and microbial attack

10) Nominal voltage: 115/200 V, 400-HZ

11) Current carrying capacity: 260 A/90 KVA

12) Current overload: 600 A/30 min, 1000 A/3 min, 2000 A/3 sec

13) Test voltage: 4 KV at 400-HZ main wires/2 KV at 28 V control wires

14) Protection class: IP 68 for mounted connector

2.5 CABLE HOIST

A. General Description:

1) The Cable Hoist is used to raise the flexible aircraft cable to a stowed position along the side of the bridge out of the path of moving vehicles. It allows the operator to lower the cable to power aircraft at the gate. The hoist shall be designed for mounting on top of or on the side of the bridge. The cable hoist shall be U.L. labeled. Provide two hoists at each gate.

B. Enclosure:

1) The hoist cabinet shall be welded # 10-gauge steel. The finish shall be two coats of primer and one coat of white polyurethane paint. The unit shall be rated NEMA 3R. The hoist shall be constructed with a removable or hinged cover for ease of maintenance and access to major components.

C. Motor:

1) Provide an electric open drip proof gear motor rated at 1/2 HP, 480 VAC, 60 HZ, 3Phase. Provide a PBB-mounted, NEMA 3R, overcurrent/disconnecting means. The gear reducer shall be NEMA rated Class 0. Provide a magnetic disc brake to prevent the wire rope drum from unwinding when the hoist is shut off.

D. Controls:

1) A 600V, 3 pole, 10 amps manually operated disconnect isolation switch shall be provided in the control panel. The panel door shall not be capable of being opened unless the disconnect switch is in the OFF position.

2) Provide a reversing contactor and control circuitry.

3) Provide raise/lower push-button controls for mounting on the bridge drive column.

4) Provide a 24-volt adjustable counter to control the IN and OUT limits of the wire rope.

5) A step down transformer shall be provided for the low voltage circuits.

E. Drum, Fairlead, Cable and Saddles:

1) Provide a single drum with flanges to contain the wire rope.

2) Provide a roller fairlead to guide the cable onto the drum. The fairlead shall be positioned to prevent the cable from rubbing on metal surfaces of the hoist.

3) Provide 3/16" diameter nylon coated stainless steel braided wire rope of sufficient length to raise the aircraft cable level with the underside of the bridge.

## 2.6 PUSHBUTTON STATION

A. Description:

1) A stainless steel, weatherproof enclosure shall be provided at each bridge-mounted gate box for use as a remote control pushbutton station. The pushbuttons shall be non-illuminated recessed type. Indicating light shall be a 12 bolt cluster LED, minimum 1 00,000 hour. Buttons and lights shall be 30 mm diameter. Buttons and lights shall be provided as follows:

a) "ON" pushbutton - Contactor closes, energizing the aircraft cable. Provide two for each gate with 180 KVA.
b) "OFF" pushbutton - Contactor opens, de-energizing the aircraft cable. Provide two for each gate with 180 KVA.
c) "RESET" pushbutton - In the event the protective controls are activated in the gatebox, the contactor cannot be closed until the condition has been corrected and the control circuit reset by depressing the "RESET" button.
d) "Raise" pushbutton - (Used only with cable hoist installation) When depressed, energizes the cable hoist to raise the aircraft cable to its storage position. Provide two for each gate.
e) "Lower" pushbutton - (Used only with cable hoist installation) When depressed, energizes the cable hoist to lower the aircraft cable from its storage position. Provide two for each gate.

i. Location of the pushbutton station shall be as shown on the project drawings and as coordinated with loading bridge manufacturer and with existing conditions.

PART 3 – EXECUTION

3.1 INSTALLATION

A. Existing Conditions: Examine elements and surfaces to receive equipment for compliance with installation tolerances and other conditions affecting performance, including, but not limited to, ambient temperature, cooling air circulation, contaminants and disassembly and maintenance space. Proceed with installation only after unsatisfactory conditions have been corrected.

B. Conduits and Raceways: Provide and install non-ferrous conduits and raceways for all 400-HZ wiring. Conduit shall be as shown on the drawings or sized per NEC when size is indicated. All raceways elements shall be reviewed and acceptable to system designer.

C. Passenger boarding Bridge Equipment Installation: Where 400-HZ equipment is installed on passenger boarding bridges; the work shall be coordinated with the bridge manufacturer. Welding shall be performed in the PBB manufacturer's factory in accordance with the bridge manufacturer's written welding procedure. Surface preparation and painting of areas affected by welding or during equipment installation shall be in accordance with the bridge manufacturer's requirements.

D. Over PBB Devices: The installation of cable in new over-PBB devices shall be coordinated with the PBB manufacturer. Brackets shall be supplied and attached to the PBB prior to factory painting.

3.2 SYSTEM TESTING:

A. General Start-up Requirements:

1) Qualified personnel from the equipment manufacturer shall perform the checkout and testing of the 400-HZ system.

2) The Vendor shall furnish qualified personnel to provide the initial set-up and adjustment of the solid-state electronic trip circuit breakers. Prior to energizing all installed wire, all wiring shall be tested for continuity and faults. The initial settings of the breakers shall be recorded in tabular form for each individual position and be made a part of the final documentation provided with the equipment.

3) The Vendor shall furnish qualified personnel to perform the on-site set-up and testing of the line drop compensators and gate boxes. Each branch circuit shall be tested at full load using the procedures stated below.

4) The following list of test equipment, or equivalent substitute, is required for testing the 400-HZ equipment and system and shall be provided by the supplier. Supplier shall be responsible for providing all other test equipment required to successfully perform all tests.

   a) Certified and calibrated digital AC voltmeter. Model Fluke 87 or 8020.
   b) Certified and calibrated clamp-on AC Ammeter
   c) Combination Resistive and Reactive Load Bank. A total capacity of 90 KVA consisting of 54 KV AR reactive load bank and a 72 KW resistive load bank. For dual output gate boxes 2 sets of load banks shall be employed.

5) On-Site Testing:

   a) Proper circuit breaker fault isolation shall be verified.
   b) Testing of each complete system, after installation, shall be done on-site with the Vendor furnishing their own load banks and all other required test equipment.

C. Testing Requirements:

1) Each individual position and each output shall be checked for no load and full load voltage drop using both a resistive and a reactive load attached to the output of the aircraft cable.

   a) Test each Jumbo position with a 180 KVA load, 90 KVA on each cable at 0.80 power factor. Testing will be at no load, full reactive load, full resistive load and 0.80 power factor load.

D. Test ground fault on the feeder side of each gate box.

E. Check phase rotation with load bank or phase rotation tester, rearrange phase wiring, if required.

F. The overvoltage, under voltage and overload protection provided by the gate box shall be verified.

G. The proper operation of the gate box control buttons shall be verified.

H. The test points located in the gate box test panel shall be used to verify the following parameters:

1) Output voltage of each of the three phases.

2) Output voltage of the DC power supply.

3) Contactor auxiliary contacts.

4) Contactor auxiliary relay.

5) Under-voltage relay contacts.

6) Over-voltage relay contacts.

7) Overload relay contacts.

8) Overload relay.

9) Protective Monitor

3.3 ACCEPTANCE

A. Final System Acceptance:

1) Final acceptance for each of the PBBs will be at the jobsite after all requirements of this Specification have been met. Provide a test report showing compliance with design requirements and calculations at each position as part of the Operations and Maintenance Manuals.

END OF SECTION 263226

# SECTION 238122 – POINT-OF-USE PRE-CONDITIONED AIR SELF-CONTAINED DX UNITS, SERVICE TRANSPORT UNITS (STU'S), AND EQUIPMENT

## PART 1 – GENERAL

### 1.1 RELATED DOCUMENTS

A. General and Supplementary Conditions and Division 01 specifications Sections. Apply to this Section.

### 1.2 GENERAL DESCRIPTION

A. This Section covers new pre-conditioned self-contained air cooled DX PCA units to service aircraft; self-contained air cooled DX units to cool Passenger Boarding Bridges (PBBs) and Fixed walkways. It also covers the installation of Boom-Air hose management system.

### 1.3 SCOPE OF WORK

A. Provide new PCA units to service aircraft; self-contained air cooled DX units to cool PBBs and Fixed walkways herein.

B. Provide new Hose Management System (Boom-Air) unit as specifications herein.

C. The Vendor shall employ a Professional Engineer registered in the State of Florida to prepare calculations and construction documents for aircraft pre-conditioned self-contained DX PCA units and associated equipment. The Delegated Engineer shall have a minimum of 5-years' experience in the design of this type of work.

### 1.4 SUBMITTALS

A. General: Submit the following manufacturer's data and shop drawings before ordering any materials, equipment or commencement of work:

1) Product data for selected model, including specialties, accessories and the following:

a) Unit performance curve with system operating conditions indicated.

b) Motor ratings and electrical characteristics plus motor and fan accessories.

c) Variable Frequency Drives.

d) Material, gages, and finishes.

e) Dampers, including housings, linkages, and operators.

f) Submit air filter manufacturer's technical product data including dimensions, weight, required clearances and access, flow capacity including initial and final pressure drop at rated air flow, efficiency and test method, fire classification, and installation instructions.

g) NEBB test apparatus certification report.

h) Unit air flow control, capacity control and defrost control.

i) Service transport units.

j) Hose Management System Unit (Boom-Air).

k) Flexible hoses.

l) Bridge air ducts.

m) PBB interface with PCA equipment: Installation details, field measurements, support details.

2) Shop drawing from manufacturer detailing equipment assemblies and indicating dimensions, weight, required clearance, components, and location and size of field connections.

3) Wiring diagrams that detail power, signal and control wiring. Differentiate between manufacturer-installed wiring and field installed wiring.

4) Maintenance data for complete new PCA unit with controller.

5) Maintenance data for complete new Boom-Air Hose Management System.

6) Maintenance data for all components.

1.5 COMPLIANCE REQUIREMENTS

A. ANSI/AHRI Compliance: Air filter equipment shall comply with ANSI/AHRI 850.

B. ASHRAE Compliance: Air filters shall comply with ASHRAE Standard 52 - latest edition for method of testing, and for recording and calculating air flow rates.

C. NFPA Compliance: Comply with applicable portions of NFPA 70, NFPA 90 A&B, for components and installation of air conditioning equipment.

D. NEMA Compliance: Motors, enclosures and electrical accessories shall comply with

NEMA standards.

E. ETL Compliance: All components used in the air handler unit shall be ETL or CSA listed or recognized.

F. Comply with the Florida Building Code – latest edition.

G. Comply with MDAD Design Guidelines Manual (DGM).

1.6 QUALITY ASSURANCE

A. It is the intent of this Contract that the aircraft PCA unit, the PBBs and Fixed walkways air-conditioning equipment, be obtained from a single manufacturer. The equipment manufacturer shall have experience in all areas of equipment design, manufacturing, supply and installation, aircraft cooling system design and analysis by in-house engineering and programming, development and installation of complete integrated monitoring and control systems. The Vendor shall have a minimum of three (3) prior installations at other airports of size, climate and complexity similar to Miami International Airport. This experience shall include systems where the Vendor has had turn-key responsibility direct to the Owner for system analysis, design, supply of all major equipment, installation, programming, testing, system start-up and training. All data base generation and other programming efforts shall be accomplished by in-house engineering/programming personnel employed by the Vendor.

B. The Vendor shall submit a record of experience for successfully completed operating systems that provide sub-freezing air to aircraft utilizing central ethylene glycol systems with thermal storage. The experience list shall include a summary of that Vendor's experience, including system location, Owner, major subcontractors and equipment suppliers used, on-line date and contact name and telephone number. The summary shall also name the individual engineers and programmers that the Vendor has employed to be involved in the project, their assignments and responsibilities for the three prior projects. The Vendor shall be responsible to directly supervise the installation of all bridge mounted equipment and controls. Such supervision shall be in the direct employ of the Vendor. This supervision effort shall not be subcontracted to a third party.

C. The Vendor shall coordinate all work to ensure that the resulting installed system functions as specified in all aspects. This coordination shall cover installation of equipment as well as interfaces with piping, power and controls.

D. The temperature control systems shall be warranted to be new and free of defects in material and workmanship under normal service and use for a period of 12-months from the date of Substantial Completion. If, within this period, any equipment proves defective, it shall be repaired or replaced at no cost to MDAD.

E. Equipment and material shall be catalogued products of manufacturers regularly engaged in the productions of temperature control systems. Products shall be manufacturer's latest

standard design and must have been tested and proven in actual use for low temperature systems.

F. It is the intention that certain items of major equipment, PCA units, air conditioning equipment, process instrumentation and controls be standardized throughout all parts of the system. The Vendor shall include in the equipment and material submittals evidence of such coordination between major equipment suppliers, including Trane/Cristopia, BRDG-TNDR Corporation, Honeywell, and Cavotec-Inet US, Inc. Airport Systems.

G. ANSI/AHRI Compliance: Air filter equipment shall comply with ANSI/AHRI 850.

H. ASHRAE Compliance: Air filters shall comply with ASHRAE Standard 52 - latest edition for method of testing, and for recording and calculating air flow rates.

I. NFPA Compliance: Comply with applicable portions of NFPA 70, NFPA 90A & B, for components and installation of air conditioning equipment.

J. NEMA Compliance: Motors, enclosures and electrical accessories shall comply with NEMA Standards.

K. UL (Underwriters Laboratory) Compliance: Air conditioning equipment handler units shall be UL-listed and labeled.

L. Comply with the Florida Building – current edition.

M. Comply with MDAD Design Guidelines Manual (DGM) available on request from MDAD.

N. The Vendor shall be fully responsible to directly supervise the installation of all PBB mounted and control equipment.

1) Coordination shall cover installation of equipment as well as interface of piping, power, and controls, etc. The Vendor shall coordinate the work to ensure the resulting installed system functions as specified in all respects.

2) All work related to attaching support brackets, members, etc. to PBBs shall be done at the loading bridge factory. All of this work, which must be field retrofitted, must be strictly coordinated with and performed under the direct supervision of the bridge manufacturer, who shall provide field supervision for this work.

## 1.7 DELIVERY, STORAGE AND HANDLING

A. Lift and support units with the manufacturer's suggested lifting supporting points. Replace any supports that are damaged or rusted.

B. Provide units that do not require any disassembly and reassembly for movement into the final location following manufacturer's written instruction.

C. Deliver factory-assembled units to the extent allowable by shipping limitation, with protective crating and covering.

D. Store all equipment and material off the floor in a weather protected environment.

## PART 2 – PRODUCT

### 2.1 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following.

1) Aircraft Pre-Conditioned Units:

a) Cavotec/INET US, Inc.

2) Air Filters:

a) American Air Filter Company.
b) Farr Company.
c) Eco Air.

3) PBB and walkway cooling units:

a) Temptrol.
b) Carrier.
c) Trane.

4) Aircraft Adapter Nozzle:

a) Cavotec/INET US, Inc.
b) J&B Aviation Services, Inc.
c) JBT Aerotech.
d) MCM Engineering.
e) US Airmotive GSE.

5) Preconditioned Air Hose Baskets:

a) Cavotec/INET US, Inc.
b) AirTech, Inc.
c) Trilectron Industries, Inc.
d) Aviation Systems, Inc.
e) BFM Transport Dynamics Corporation.
f) J&B Aviation Services, Inc.

2.2 GENERAL DESCRIPTION

A. Provide compact, light-weight, and low-noise, insulated, self-contained, air cooled, direct expansion PCA unit that can be mounted under the PBB such that the operational characteristics of the PBB are unrestricted and the bridge's structural integrity is uncompromised. It is MDAD's intent to have the air handling units hung underneath the bridge to the maximum extent possible. Acceptable location for mounting underneath the bridge include behind or in front of the bogie wheels. An alternate unit location of mounting on the bridge rotunda shall be allowed only where the maximum weight limitations of the PBB tunnels is exceeded.

B. The new self-contained DX PCA unit at the PBBs shall have a minimum of two distinct assemblies:

1) A weatherproof control assembly which contains the low voltage (Class II) logic and control circuits and,

2) The main blower/coil/refrigeration section, consisting of inlet filter(s), blower means of modulating air flow, evaporator coil, condensers, compressors, refrigeration accessories, applicable electrical strip heaters, complete motor starting equipment, outlet plenum and condensate drain pan to provide the required cooled or ventilated air to maintain the aircraft cabin temperature specified.

C. The DX PCA unit shall have the capacity required to sufficiently cool the largest designed aircraft, parked at each gate, as designated in Section 011000 - SUMMARY. Units serving wide-body gates shall also operate properly when serving a narrow-body aircraft at the same gate.

D. The blower shall be centrifugal type and sized for the appropriate volume airflow requirements. The unit size shall be selected so that the fan brake horsepower does not exceed the maximum required over the design operating range of the unit at the total static pressure.

E. Unit external static pressure shall be defined as the gauge pressure measured at the outlet of the air handling unit. The Vendor shall present the gauge pressure this unit can produce at its outlet and at the aircraft connection through 100feet of hose and with an aircraft adapter nozzle in the shop drawing submittal.

F. Horsepower shall be selected based on the equipment that affects the external resistance of the system. The Vendor shall furnish the fan motor and unit size adequate for final total static pressure and maximum brake horsepower requirements.

G. The construction of the unit shall be of a material sufficient to provide adequate structural rigidity for frame and enclosure; of a non-corrosive nature; and provided with thermal insulation for conditions encountered in normal usage. Equipment exterior shall be primed and painted to match the PBB. Equipment interior shall be manufacturer's standard. All

hardware shall be corrosion resistant, suitable for exterior use exposed to all weather conditions.

H. The maximum sound level for the DX PCA unit at maximum cooling shall not exceed 85 dBA at a distance of 14 feet from the unit. Sound power level radiated by the unit outlet and at the unit inlet when the unit is operated at the designated capacity shall be furnished with the shop drawing submittal.

I. Capacity control and defrost control shall be identified and explained in the shop drawing submittal.

J. Return air to the unit shall not be utilized.

K. Locate DX PCA Unit as required for proper access to the following:

1) Blower and VFD.
2) Filters.
3) Coils.
4) Compressors.

L. A condensate pump and drain pan shall be provided for each air handling unit. The condensate pump shall be lightweight, self-priming, and capable of running dry. Minimum pump rating shall be 3 gpm, 40-foot head, 1/3 hp or as required by the specific bridge configuration. Position the drain pan under the coil section. Drain pan shall be stainless steel with capability of complete drainage leaving no standing water in pan. Condensate pump shall be provided with a summer/winter switch or internal float switch actuated assembly

M. All DX PCA units shall be prepared with all necessary rails and mounting assemblies to be hung from the underside of the PBBs.

## 2.3 DX PCA UNIT CONTROL ASSEMBLY

The Controller assembly for the new DX PCA Unit shall be designed for mounting directly onto the PCA Unit or for mounting remotely from the PCA Unit.

H. The DX PCA Unit controller shall contain the following door mounted controls and displays:

1) Lighted ON and OFF push buttons. The ON push button shall be operable in the manual mode only.
2) Summary FAULT indicator (overloads, compressor circuits).
3) "Change Filter" light.

I. The controller shall contain the following operator controls located within the controller cabinet.

1) Auto/Manual Mode Switch.
2) Manual override controls (dials or keypad) to manually vary the outlet air temperature and air flow.
3) Manual secondary hose damper switch to open or close the second hose damper (jumbo gate air handler units only).
4) Connections for remote on/off push-button, aircraft type selector switch, cabin temperature sensor and remote monitoring system.
5) Connection for shutdown and display of smoke alarm indication.
6) Connection for PBB cooling functions and system network cabling.

J. The DX PCA Unit controller shall utilize direct digital control (DDC) using microprocessor technology for all control, regulation, modulation, alarm shut-down, and response to/from remote signals.

K. The controller shall automatically control the DX PCA Unit outlet air temperature in response to the cabin temperature as sensed by the companion cabin temperature sensor.

L. The controller shall automatically sense a failure of the cabin temperature sensor and automatically begin outlet air temperature control based upon sensed inlet ambient temperature. During this backup mode of automatic temperature control, the remote monitoring system shall be supplied with a signal indicating the failure of the cabin temperature sensor.

M. The controller shall, in addition to the above functions, provide for local data display and program updates with a laptop computer connected directly to the controller. In addition, the controller shall provide full networking capabilities and built-in control and monitoring communication means with remote devices including, as a minimum, the following points:

1) Air handler ON and OFF status and SUMMARY ALARM.
2) STOP Switch.
3) Designation of each alarm condition, by type.
4) Air outlet and ambient temperatures.
5) Motor speed as % of full rated speed if VFD.
6) Totalized PCA DX Unit running time.
7) Running time since last air filter change-out.
8) Readout of, and control of, both cabin temperature set point.
9) Readout of actual cabin temperature as measured by cabin temperature probe used by the controller logic.
10) Signal to prohibit starting the PCA DX Unit (enable/disable).
11) Readout of, and control of, mode changeover points and slope versus ambient temperature (backup temperature control in event of cabin temperature sensor failure).
12) Control of auto filter alarm timer set point.
13) Second hose status (open/closed) - Jumbo gates only.

14) Nighttime cabin temperature set-up mode control including on/off control, set-up temperature set point, mode automatic start and stop times and remote override capabilities to adjust start and stop times.
15) 400 Hertz gate box on/off and fault status.
16) PCA DX Unit mode of operation, i.e., aircraft cooling or PBB cooling.
17) Coil freeze up.

N. The PCA DX Unit controller shall contain an internal read-time clock with s battery of minimum 30-day life. The battery shall be capable of being changed without losing any internal history, such as total running time or time since last filter change.

O. The controller shall be capable of stand-alone automatic operation in the event of failure of the data/control network.

P. The controller assembly shall be housed in a NEMA 3R gasketed enclosure and be suitable for direct mounting on the blower/coil unit or remotely mounted.

## 2.4 CABIN TEMPERATURE CONTROL

A. Each gate shall be equipped with controls to automatically maintain the set cabin temperature within ± 2 deg F at the sensing point. This shall be by use of a small temperature probe connected to the system by way of a small cable and jack in the bridge cab.

B. The PCA Cabin Temperature Sensor assembly shall consist of a cord mounted sensor element mounted in a Delrin Plastic housing and a mating wall receptacle design for mounting in the cab of a PBB.

1) The sensor element shall be rated for ambient temperatures listed on ASHRAE Climatic Region Tables most stringent column, be an RTD or solid state element type and be fully compatible with the specified PCA DX Unit controller.
2) The sensor shall be housed in the Delrin plastic housing and provide full sealing of the sensor against all weather conditions. The upper end of the housing shall provide openings sufficient to provide necessary air flow across the sensor element while protecting the element form damage when in use or being stored. The sensor shall be connected to a neoprene retractable cable, 0.2" diameter, with three 2.3 AWG conductors. The cable length shall be approximately four feet retracted and twenty feet extended and be retrained to the sensor housing by a screw-on type waterproof strain relief with O-ring seat.

   The receptacle mating end of the cable shall be terminated with 90 deg angle, waterproof type plug with a screw cap for securing to the wall receptacle. The mating receptacle shall be mounted on a stainless-steel cover plate. A bracket shall be provided in the PBB cab next to the cover plate for easy storage of the sensor assembly when not in use.

2.5 PERFORMANCE SPECIFICATION OF PCA UNITS

A. Specification of PCA DX Units.

1) A wide-body PCA DX Unit shall be capable of delivering a minimum of 244 lb/min of 26 deg F air at the outlet of the unit. The unit shall be capable of 28 inches gage pressure, minimum at the outlet of the unit at the above flow and temperature conditions at summer design inlet conditions.
2) A Jumbo (A380) PCA DX unit shall be capable of delivering a minimum of 440 lb/min of 26 deg F air at the outlet of the unit. The unit shall be capable of 31 inches of gauge pressure, minimum, at the outlet of the unit at the above flow and temperature conditions at summer design inlet conditions.

B. All PCA DX units shall be capable of a 45 minute "pull down" for their respective heat "soaked" aircraft from a cabin temperature of 100 deg F to 80 deg F.

2.6 DX UNIT COMPONENTS

A. Casing: Manufacturer's standard casing construction, having corrosion protection coating, and exterior finish. Where the unit is provided as a utilized enclosure construction, casing shall have removable panels or access doors for inspection and access to internal parts; provide manufacturer's standard internal thermal insulation, knockouts for electrical and exterior condensate drain connection, and lifting provisions. Casing shall be prime coated prior to final assembly. Final color to match the PBB color.

B. Supply Air Blower:

1) The blower shall be forward curved, of the centrifugal type, direct drive fans; permanently lubricated motor bearings (where bearings are not accessible for greasing and sized for the appropriate variable volume airflow requirement.
2) Blower and Shafts: Statically and dynamically balanced and designed for continuous operation at the maximum rated fan speed and motor horsepower. Blower Shaft: Turned, ground and polished steel designed to operate at no more than 70% of the first critical speed at the top of the speed range of the fan's class.
3) Shaft Bearings: Provide bearings having a median life "Rating Life" (AFBMA L50) of 200,000 calculated in accordance with AFBMA 9 for ball bearings or AFBMA 11 for roller bearings.

C. Evaporator and Condenser Coils:

1) Coils shall be seamless copper tube type with aluminum plate fins and removable from the unit. Coils shall have a galvanized steel casing. Coils shall be mounted on the coil casing with same end connections accessible for service. The coils shall be removable from the unit. Coil section shall be completely insulated.
2) The number of tubes and fins spacing shall be submitted on coil selections made. Coils shall be constructed and tested in general accordance with ASHRE 15 - latest

edition and ANSI/AHRI 410.

3) Coils shall be proof tested at 400 psig and leak tested at 250 psig tested with air pressure under water, then cleaned, dehydrated and sealed with a holding charge of nitrogen.

D. Compressors and Related Components: Compressors shall be serviceable, hermetic "scroll type". Each refrigeration circuit shall have thermal expansion valves, filter drivers, sight glasses, fan cycling control for low ambient control to 45 degrees. Low pressure cutout, high pressure cutout compressor motor overload, manual reset, anti-recycling timer, adjustable low-ambient lockout, and compressor over temperature safety module.

E. Airflow Control: Airflow control shall be by variable frequency drive control.

F. Inlet Air Filters: Provide medium efficiency pleated disposable air filters suitable for installation in holding frames; with 2"-inch thick minimum for WB or NB units, 4"-inch thick minimum for jumbo units; constructed of non-woven cotton fabric type. The enclosing frame shall be constructed of rigid, heavy duty, high wet-strength beverage board to the filter pack materials. The filter media internal support shall have welded wire grid. Holding frames shall be fabricated metal construction complete. For WB and NB units, provide filter with rated face velocity of 500 fpm, initial resistance of not greater than 0.30-inch water gauge, final rated resistance of 0.50-inch water gauge and average arrestance of 80%. For jumbo units, provide filters with rated face velocity of 600 fpm. The filter rack and filters shall be sized such that the rate face velocity of the filters shall be sized such that the rated face velocity of the filters is not exceeded at specified DX Unit mass flow and design inlet ambient temperature conditions.

## 2.7 BRIDGE DELIVERY EQUIPMENT

A. Each PBB with the DX Unit at the cab end, shall be provided with a service transport unit (STU). Each STU shall carry services like, 400 Hz cables, condensate drain hoses, power to DX Unit, data/communication control, etc., to the PBB end in a single, low profile package.

B. Moving parts within the slides assembly of the STU shall be minimized. Cables and pulleys are not allowed in the operation of the STU. The STU shall be designed to allow easy access for maintenance and inspection at ramp level.

C. All gates with WB or NB DX Units shall be provided with a single primary air delivery hose. All gates with jumbo air handler units shall be provided with a primary and secondary hose. Each hose end shall be provided with an aircraft PCA connection nozzle, Milo mini-adapter, or equal, approved for use by the MDAD Project Manager/representative. In addition, all PBBs shall be provided with MD-80 extension hoses of suitable length to reach the aircraft PCA connection with a quick connect fitting to mate with the primary hose nozzle. The other end of the extension, hose shall include a sewn "ell/reducer" hose to minimize kinking of the hose when connected to the MD-80 aircraft and terminated with the same type of nozzle as the primary hose.

D. Air flexible hose shall be of the lightweight insulated type, maximum thermal conductance of 1.28 BTU/Hr /Ft /deg F, pressure rated for 50-inches of water maximum. Hose shall be flat when not in use, manufacturer by Flex-fab, Air Tech, Inc., or similar approved quality, 14-inch diameter flat type. Hose is to be supplied in sections of no more than 25-feet in length, connected by a closed nylon zipper device, or Velcro connectors with a 14- to 8-inch diameter reducing adapter on the end section.

E. Boom Air Hose Management System (hose storage and retrieval system) shall be provided for each PBB. Fully integrate the installation of units for A380 service and other aircraft to be serviced at the PBB.

## 2.8 BRIDGE TRANSPORT UNIT

A. The service transport unit (STU) shall meet the mechanical and electrical requirements for an Across the Bridge Service Transport Unit designed for top mounting on a two or three tunnel telescoping ramp drive PBB.

B. The general design and construction of the STU shall be in conformance with sound engineering practices and all equipment and material shall be new.

C. There shall be no cables and pulleys used in the operation of the device. The STU shall be mounted on the side or top of the PBB.

D. The complete STU shall be fully operational under the logical combinations of the following conditions:

1) Blowing winds up to 60 MPH in the operation mode and 186 MPH in the non-operational mode.
2) Ambient temperature range: 32 degF to 120 degF.
3) All components and connections shall be designed in accordance with FBC and ASCE - 7, latest editions.

E. The STU shall be capable of containing, protecting and transporting across the telescoping tunnels of the PBB, DX Unit power cable ,400 HZ power cable AHU condensate drain hose, network cable and control cable.

F. The assembly shall consist of two (for 3 tunnel bridges) identical sliding tubes within a main box, designed to mount at three (3) tunnel passenger loading bridge. The sliding tubes and box will extend and retract in synchronism with the movements of the PBB.

G. When installed on the PBB, the STU shall permit the PBB to fully extend and react (within normal operating limits) without limiting or restricting PBB movement or imposing excessive loads on the PBB structure.

H. The main box and sliding tube shall be constructed of aluminum.

I. The main box shall have a three-piece top cover. The top shall be made of aluminum sheet. The top shall be removable for ease of access to interior components.

J. Each sliding tube shall have sealed ball bearings mounted under the inboard side of the tube to allow for smooth movement.

K. The brackets that support the STU shall be designed to be welded or bolted to the structural members of each PBB tunnel.

L. The STU shall be supplied complete with mounting brackets, support assemblies and hardware to secure to the PBB, either in the field or at the PBB factory. Each bolted joint shall be provided with washers and lock nuts.

M. The exterior surfaces of the STU shall be painted to match the PBB.

N. PCA DX Unit Power Cable:

1) The air handler power cable shall be compatible with the size and configuration of the AHU, design ambient temperature conditions and local codes. Cable to be Type W Round with EP insulation, neoprene jacket rated 600/2000 volt, UL listed and 4 conductor #1/0 AWG max.
2) The cable shall be continuous from a junction box at the Terminal building to a junction box at the aircraft end of the PBB.

O. 400 Hertz Power Cable

1) The 400 Hertz power cable shall be compatible with the size and configuration of the 400 Hertz central system power, design ambient temperature conditions and local codes. Cable to be Type W round with EP insulation, neoprene jacket and rated 600/2000 volt, 4 conductors 2/0 AWG max.
2) The cable shall be continuous from a junction box at the Terminal building to the Aircraft Service Cabinet at the aircraft end of the PBB.

P. Network Cable

1) A cable shall be provided for system monitoring of the Pre-Conditioned Air System and PBB and Fixed Walkway units. The cable shall consist of three (3) twisted shielded pair single jacket daisy chain installed in conduit. Conduit size one- (1") minimum (larger diameter where required). The cable shall be Belden 9773-18/3TSP. Provide Belden 9774 18/4 TSP from j-box to STU. All cables shall be UL recognized.
2) The cable shall be continuous from the network terminal box at the building to a terminal box or DX Unit controller located at the aircraft end of the PBB.

Q. Control Cable

1) A single control cable shall be provided to provide for control of components located external to the DX Unit, including any bridge exhaust fans, smoke detectors, boost pumps and control valves. The cable shall provide the required number and type of conductors to provide of those devices where specified.

2.10 PBB AND FIXED WALKWAY COOLING

A. The Vendor shall furnish PBB cooling and Fixed Walkway cooling at each gate as required. Provide self-contained, air cooled DX units to accomplish PBB and Fixed Walkway cooling.

B. Controls for PBB and Fixed Walkway units shall be located at the entrance to the PBB.

C. Temperature controls shall be protected from damage.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

A. Furnish all necessary support, brackets, guard posts, safety rails, etc. for properly installing all air-handling units. Field verify bridge connection points prior to manufacturer of supports.

B. Install units to provide access space around PCA units for service and maintenance.

C. The DX Units shall be properly aligned, adjusted and lubricated and field tested before final acceptance.

D. Perform water and air system testing and balancing.

E. Apply color coded physical hazard stripe on PCA unit in accordance with manufacturer's suggested practice.

3.2 CONNECTIONS

A. Connect unit to condensate drain piping.

B. Connect unit to electrical power wiring.

C. Connect unit to control system.

D. Coordinate location of outside air louvers with bridge stairs prior to ordering and installing PCA units. On 3-tunnel bridges outside air intake shall be opposite the bridge stairs.

3.3 FIELD QUALITY CONTROL

A. Manufacturer's Field Inspection: Arrange and pay for a factory authorized service representative to perform the following:

1) Inspect the field assembly of components and installation of air handling units including ductwork and electrical connections.
2) Prepare a written report on findings and recommended corrective actions.

3.4 ADJUSTING, CLEANING, AND PROTECTING

A. Check dampers for proper damper operation.

B. Clean unit cabinet interiors to remove foreign material and construction dirt and dust. Vacuum clean fan wheel and cabinet.

C. Provide factory paint touch kits and remove any surface rust and re-finish as required to prevent corrosion and rust.

D. Insulate unit cabinet to prevent condensation.

E. Check and adjust condensate float switch. Check that the hose is not obstructed in anyway.

F. Clean and comb EG/W cooling coil fins.

3.5 COMMISSIONING (Refer to Section 019113)

A. Final checks before start-up: perform the following operations and checks before start-up:

1) Remove shipping, blocking and bracing.
2) Verify that the unit is secure on mountings and supporting devices and that connections for piping, ductwork, and electrical wiring are complete. Verify proper thermal overload protection is installed in motors, starters and disconnects.
3) Perform cleaning and adjusting specified in Section.
4) Lubricate bearings and other moving parts with manufacturer recommended lubricants.
5) Verify manual and automatic volume controls.
6) Disable automatic temperature control operators. Reconnect and verify their proper operation.

B. Starting Procedures for DX Unit:

1) Energize Unit: Verify proper operation of compressors, motor, drive system, blower wheel, condenser fan and controls. Replace faulty components as required.
2) Measure and record electrical value for voltage and amperage for the DX Unit.
3) Check and demonstrate automatic operation of smoke detectors.

4) Check and demonstrate variable frequency drive operation for wide body and narrow body aircrafts.

C. Refer to Division 23, Section 230594 – PCA Test and Balance for procedures for testing, adjusting and balancing PCA cooling systems, PBB and Fixed Walkway cooling systems.

3.6 DEMONSTRATION

A. Demonstration Services: The Vendor shall arrange and pay for a factory-authorized service representative to train MDAD's maintenance personnel on the following:

1) Procedures and schedules related to start-up and shutdown, troubleshooting, servicing, preventative maintenance, and how to obtain replacement parts.
2) Familiarization with contents of Operating and Maintenance Manuals specified in Division 23, Section 230010, PCA General Requirements.

B. The Vendor shall schedule training with at least seven- (7) days advance notice.

3.7 TRAINING

A. During the checkout and test phases, the appropriate MDAD personnel shall be invited to witness and to receive over-the-shoulder operation/adjustment training. Immediately prior to or within one week after Substantial Completion, the Vendor shall conduct a five-day training class for up to 12 MDAD Maintenance Personnel. The class shall consist of 50% classroom and 50% hands-on operation. This class shall be aimed at operating and maintenance personnel for basic operation, preventative maintenance, adjustments, and initial fault response.

B. The Vendor shall arrange and pay for a factory authorized representative to assist in training.

END OF SECTION

# SECTION 263226 - FREQUENCY CONVERTERS – CENTRAL PLANT 400-HZ SYSTEMS

## PART 1 - GENERAL

### 1.1 SCOPE OF WORK

A. This specification describes and defines the performance and documentation required to be provided by the Vendor to furnish, install, and test the completed system, including all required design documents and plans necessary to provide 400-HZ power to Passenger Boarding Bridges (PBB) at Miami International Airport (MIA).

B. This Section applies only where the use of an existing 400-HZ central plant system has been approved for use to provide service to a PBB, as further detailed elsewhere in the specifications.

C. This Section includes furnishing and installing, but is not necessarily limited to, materials, equipment, labor and all other items necessary to deliver a complete and operable 400-HZ power source to new PBBs as directed by MDAD.

D. All codes, standards, and similar publications referenced in this Section shall be understood to be the latest version adopted by the issuing organization.

### 1.2 REFERENCE

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

1) Anti-Friction Bearing Manufacturers Association, Inc. (AFBMA). AFBMA 9 Load Rating and Fatigue Life for Ball Bearings.

2) American National Standards Institute, Inc. (ANSI).
ANSI C2 National Electrical Safety Code.
ANSI C 12.11 2007 Instrument Transformers for Revenue Metering.

3) Federal Communication Commission (FCC).
FCC, PART 18, CFR TITLE 47, Radio Frequency Interference Suppression.

4) International Electrical Testing Association (NETA)
Acceptance testing Specifications for Electrical Power Distribution Equipment and Systems.

5) National Electrical Manufacturers Association (NEMA).

NEMA AB 1 Molded Case Circuit Breakers.

NEMA ICS 1 Industrial Control and Systems: General Requirements.

NEMA ICS 6 Enclosures.

NEMA WD 1 Wiring Devices.

NEMA WD 6 Wiring Devices -Dimensional Requirements.

NEMA 250 Enclosures for Electrical Equipment (1000 volts maximum).

6) National Fire Protection Association (NFPA).

7) NFPA 70 National Electrical Code.

8) Underwriters Laboratories, Inc. (UL).

UL 467 Grounding and Bonding Equipment.

UL 489 Molded-Case Circuit Breakers and Circuit Breaker Enclosures.

UL 506 Specialty Transformers.

UL 508 Industrial Control Equipment.

1.3 QUALITY ASSURANCE:

A. Listing and Labeling: Provide products that are listed and labeled as defined by NFPA 70, Article 100, by a testing agency acceptable to the Authority Having Jurisdiction and marked for the intended use and for the location and environment in which they are installed.

1) All equipment, circuit breakers, panelboards and appurtenances shall be designed and UL listed for 400-HZ systems applications.

B. Factory Testing:

1) 400-HZ Gate Box Assemblies:

a) The gate box assemblies shall be tested at the factory to verify the following parameters:

i. Transformer Voltage Regulation.
ii. Load Contactor Automatic Opening:

Due to overvoltage.

Due to under voltage.

Due to overload.

iii. Line Drop Compensator(s) Voltage Regulation.

C. Field Testing:

1) Submit field testing as specified in Paragraph 3.2 "System Testing."

D. System Warranty: Provide a warranty of one year from the date of Substantial Completion for all parts and labor for the system and all equipment.

1.4 DELIVERY, STORAGE AND HANDLING

A. Delivery, Storage and Handling shall comply with the requirements listed below in addition to any other requirements found elsewhere in the specifications.

1) Transport using manufacturer provisions and in accordance with manufacturer recommendations.

2) Store in dry, dust-free location and cover completely to exclude contaminants.

3) Provide temporary heat if condensation is likely to occur.

1.5 EXTRA MATERIALS

A. Extra Materials:

1) Spare and extra parts shall be identified for all products, but not provided. Include spare parts information in Operation and Maintenance Manuals.

a) Fuses: Provide 2 of each size and type used.
b) Filters: Provide one spare circuit board for each critical circuit.
c) Bulbs: Provide 2 of each size, type and color used.

1.6 SYSTEM DESCRIPTION

A. The central plant 400-HZ central ground power system is capable of providing all 400-HZ to the system output locations. Source voltage shall be 480Y/277 Volt, 3-phase, 4-wire, 400-HZ, 575 VAC, 3-phase, 4-wire, is distributed from 312 KVA, vertical motor generators (three), via individual branch circuits to each aircraft service connection. The motor generators are capable of unmanned automatic paralleling, automatic master assignment and rotation, and auto-restart. The 400-HZ power is fed from solid-state electronic trip circuit breakers housed in the main distribution switchboard. All distribution wire shall be factory twisted and bundled, 3 or 7-conductor XHHW-2 copper run in non-

ferrous conduits or raceways and shall be installed by the Vendor as indicated on the drawings. The power shall be delivered across the passenger boarding bridge via cable housed in a new over-bridge device. The power shall be delivered to the aircraft from a gate box that is mounted on the loading bridge. The gate box transforms the 575 V, 400-HZ power to 118/204 V, 3-phase, 4 wire, 400-HZ and contains various controls and protective devices. Each output of each gatebox shall contain a line drop compensator to compensate for the inductive line losses in the circuit. An aircraft cable connected in the gate box and plugged into the aircraft completes the circuit.

1.7 SYSTEM PERFORMANCE

A. System Voltage Requirements: The 400-HZ distribution system shall deliver an average steady state voltage in the range between 112.0 and 118.5 VAC using a constant voltage motor generator. All components for each branch circuit, including gate box, line drop compensator (LDC), wire and circuit breaker, shall be rated 180 KV A, as indicated on the plans and schedules. The LDC's will be set to maintain reactive load voltages in the 117-118.5 V range and the wire sized to limit the full load voltage drop within 6.5 volts for a minimum delivery voltage of 112 V. The transient voltages shall be within the range of 102- 130 VAC. The transient recovery for a 90 KVA load change shall be less than 80 milliseconds.

1.8 EQUIPMENT DOCUMENTATION

A. Equipment Submittal: Submit manufacturer's technical product data, including performance and operating criteria, physical dimensions and installation procedures. Product data shall be provided for the following:

1) Modifications to the Distribution Switchboard, including specific information on the circuit breakers.
2) Pushbutton station at PBB.
3) PBB Wire, Cable and Raceway.
4) Gate Box (each type).
5) Aircraft Cable.
6) Cable Hoist/Cable Retrieve.

B. System Shop Drawings: Submit shop drawings detailing the equipment installation, system electrical single-line diagrams, voltage line drop calculations, central room layout, modifications, adjustments and typical bridge equipment arrangement and modifications.

C. Operation and Maintenance Manuals:

1) Operating and Maintenance manuals shall contain, at a minimum:

a) Equipment operating and maintenance information, control diagrams, wiring schematics, physical description, major parts list.
b) List of special tools required, troubleshooting information, spare parts lists and warranty explanation.
c) Catalog information and shop drawings for each major component and for each system layout.
d) Instructions for starting and operating converters and all associated equipment.
e) Routine preventative maintenance and lubrication schedule.
f) Description of operating limits which may result in hazardous or unsafe conditions, or in equipment damage.

D. Design Calculations

1) The system provider is responsible for complete design calculations based on the actual equipment provided in accordance with the identified aircraft mix for each gate. Submit all required structural calculations for mounting of gate equipment to PBB. Submit complete design calculations regarding voltage drop calculations for each gate to include all assumptions, design considerations, design data, equipment selection table. Include in bid all necessary equipment and cable sizes required to meet the performance specifications herein. Provide wire sizes as required to meet specified criteria, at no additional cost to MDAD. 400-HZ distribution wire shall be sized based on LDC settings no greater than 10 percent.

## PART 2 - PRODUCTS

### 2.1 PBB CABLE AND WIRE

A. General Description:

1) Refer to Section 260519

B. PBB Small Power and Control Cable:

1) Multiple conductor control and small power cables used outdoors on the passenger boarding bridges, shall be portable power cable. Cables shall be sized as indicated on the drawings or sized as required by the equipment furnished. Cable shall have green equipment ground conductor with equal size as phase conductors. Cables to be jacketed 600 volts SO type. Cable connectors shall be non-ferrous, steel case liquid tight sized for cable diameter and shall use strain relief gland fitting to prevent tension on conductor terminals. Where cable drops are indicated on the drawings, use non- ferrous wire mesh strain relief cable grips at both ends of cable drops. Conductors shall be stranded copper. Cable shall be suitable for use outdoors, sunlight resistant, moisture resistant and oil resistant.

C. STU Assembly

1) Flexible, 400-HZ cable shall be provided within the passenger boarding bridge (PBB) utility carrier (or STU) where indicated on plans or in schedules. Cable shall be type W, round, portable power cable suitable for outdoor use, sunlight resistant, moisture resistant, and oil resistant. Provide (4) #2/0, stranded conductors with 600/2000 volt, 90 degrees C, EPR insulation. Conductors shall be color coded. Jacket shall be lead cured thermoset or reinforced neoprene. Cable assembly shall be U.L. listed. Provide length required by PBB to span full travel of STU plus 30 feet at each end.

2.2 GATE BOX

A. General Description:

1) The gatebox assembly shall be a stand-alone device to provide transformation of 400-HZ, 575 V AC to 115/200 V AC, 3-phase, 4-wire with grounded neutral power for aircraft use. The gatebox assembly shall be 90 KVA single output or 180 KVA dual output, as indicated by the aircraft mix requested by MDAD. Output power rating shall be continuous at 0.8 power factor lagging. Each component of the gatebox assembly listed below shall be configured with the KVA rating of the assembly unless otherwise noted.

B. Enclosure:

1) The gate box cabinet shall be welded #11-gauge steel with stainless steel door piano hinge. The finish shall be two (2) coats of primer and one coat of polyurethane paint. The color to be as specified by the customer. The top shall be removable to facilitate complete paint coverage. The unit shall be NEMA 3R compliant.

2) The enclosure top cover shall have threaded connections for lifting eyes.

3) Storage receptacle for spare bulbs and fuses shall be located on the interior of the gate box door.

C. Transformer:

1) The gate box shall contain 400-HZ dry type step down isolation transformers with 575V delta connected primary and 118/204 V wye connected secondary. Transformers shall be sized equal to the output rating of the gate box.

2) Insulation shall be class "H" varnish impregnation, two coats.

3) The minimum B.I.L. shall be 10,000 volts.

4) The voltage regulation of the line to neutral, no load to full load shall be 0.6% at unity power factor and 1.5% at 0.8 Jagging power factor.

5) The transformer shall have continuous duty rating equal to rated KVA.

D. Contactor:

1) Provide 600V, 325 Amp, 400-HZ rated load contactors as required. The contactors will be provided with lugs capable of landing two #2/0 wires per phase. The coil shall be 100 VDC.

E. Line Drop Compensator

1) Provide required line drop compensators for gateboxes. The line drop compensator is used to eliminate the reactive voltage losses (line drop) in long runs of 400-HZ power distribution. The line drop compensator shall be rated at its KVA rating, 575 volts, 3-phase, 400-HZ continuous load at 0.8 power factor lagging. The compensator shall be capable of correcting a minimum of 16% inductive impedance at its KVA rating and shall be step adjustable with a minimum of six steps. The line drop compensator shall be UL 508 rated.

2) Transformers:

a) Each LDC shall contain three 90 KV A, 400-HZ dry type, current transformers, one for each phase (A, B, and C). The maximum ampere rating of each transformer shall be according to its KVA rating, which at the 16% setting will give a 53-volt boost per phase, minimum.

b) The insulation shall be class "H" varnish impregnation, two coats.

c) The transformers shall have multiple taps on the secondary windings for adjustment of the reactive compensation for various combinations of cable lengths and sizes to provide voltage boost from 6% to 16% in 2% increments. The secondary taps shall be positioned in an accessible location to allow adjustment without reaching over or around the primary taps in order to reduce the possibility of coming into contact with the 575-volt power. The taps shall be of the quick connect terminal type. A decal shall show the boost connections. The temperature rise of the magnetic components shall show the boost connections. The temperature rise of the magnetic components shall not exceed 80 degrees Celsius over 40 degrees Celsius ambient under rated load conditions. The design of the compensator shall not require the use of fans for cooling.

3) Capacitors:

a) Two capacitors will be connected in parallel across the secondary windings of each transformer to reflect capacitive reactance into the main transmission line and cancel the inductive reactance. Capacitors shall be non-PCB type.
b) Capacitor voltage rating to be such that if one capacitor fails, the second will withstand the increase in voltage and current. The compensator shall handle a 250 percent load transient without interruption of service or system degradation.
c) Provide line drop compensation, as determined from the system provider's voltage drop calculations in order to furnish the correct voltage at the aircraft cable plug. Maximum allowable setting during system start-up of LDC shall be 10 percent. Size conductors based on a maximum 10 percent boost.

F. Controls and Indicators

1) A 600V, 3 pole, manually operated disconnect isolation switch shall be provided on the fixed portion of the enclosure and shall be lockable with internal and external override. The ampere rating of the isolation disconnect switch shall be sized according to the rating of the gatebox.

2) The gate box assembly shall be equipped with individual industry standard PC boards, factory adjusted, to provide over voltage, under voltage and overload protection.

3) E/F feedback circuit shall use relay logic to insure proper aircraft interlock and safety for each output. This circuit shall also be equipped with an MOY to eliminate any 400-HZ induced voltage from the single jacketed aircraft cable.

4) 12-volt cluster LED, minimum 100,000 hours, indicating lights and illuminated pushbuttons shall be located on the exterior of the gate box cabinet. Buttons and lights shall be 30 mm diameter.

Buttons and lights shall be provided as follows:

a) Power Available Light - Power is available in the gate box.
b) Overload Light - An overload fault has occurred.
d) Under Voltage Light - An under voltage fault has occurred.
e) Over Voltage Light - An over voltage fault has occurred.
f) Reset Button - Resets the assembly after a fault has occurred.
g) Test Button Illuminates all lamps.
h) Contactor Closed Light -Lights to indicate that power is being supplied to

the aircraft.

5) All lights, local and remote pushbutton, and controls, shall be 12 VDC with a continuous duty power supply rated from 1.7 to 5 amps, depending on the design conditions. Spare bulbs and fuses of each type provided.

6) Voltmeter: The output voltmeter shall have a single 0 to 300 VAC scale in order to read line-to-line and line-to-neutral voltages. The voltmeter shall be calibrated for 400-HZ and have an accuracy of +2 percent full scale.

7) Voltmeter Selector Switch: Seven (7) position selector switches with "OFF" position shall be provided to monitor line-to-line and line-to-neutral voltages.

8) Ammeter: The Output Ammeter shall have a single 0 to 400-A. RMS scale in order to read output phase currents. The Ammeter shall be calibrated for 400 HZ and shall have an accuracy of +2 percent full scale.

9) Ammeter selector switch: A four (4) position selector switch shall be provided to monitor output phase currents:" A", "B", "C" with an "OFF" position.

10) Frequency meter: Output frequency meter with range of 360 HZ to 400-HZ and accuracy of +5 percent full scale.

11) Elapsed time meter: Shall be non-resettable type with 0 to 99,999 Hr.

G. Gate Box Test Panel:

1) The gate box shall contain a silk screened or equivalent schematic and component legend on a sixteen-point test panel for troubleshooting the following conditions:

a) Output voltage of each of the three phases.
b) Output voltage of the DC power supply.
c) Contactor auxiliary contacts.
d) Contactor auxiliary relay.
e) Under voltage relay contacts.
f) Over voltage relay contacts.
g) Overload relay contacts.
i) Overload relay.
j) Protective Monitor

2) Test switches to facilitate testing and troubleshooting.

3) E/F bypass switch for test purposes when 28 VDC power, is not available.

4) Contactor disable switch to disable the gate box output, but still leave input power to the box enabled.

5) A "Back Feed" receptacle, to allow 400-HZ, 115/200 V external power for purposes of testing normal gate box operation, over voltage and under voltage protection, shall be provided on the face of the test panel.

6) Provide dry alarm contacts for interface with PCA Air Handler Unit Controller for the following:

a) 400-HZ On/Off.
b) 400-HZ Fault

2.3 400-HZ AIRCRAFT CABLE

A. CABLE ASSEMBLIES

1) Multi Conductor Banded

The 400-HZ Cable Assemblies shall consist of A, B, C Phase & N (Neutral) supply wires. Each lead Shall consist of a single conductor. Phase A, B, C, & N shall be approximately 2/0 AWG. Control leads E & F shall be #12 AWG (2) conductors. Provide jumper wire between pins E & F in the plug. The plug shall be Anderson Power Products or approved equal, field attachable, MS25486-3/(R67G36B). Each cable assembly shall be approximately 65 feet and 85 foot in lengths and banded together with stainless steel bands.

| | |
|---|---|
| Lug Terminals for A, B, C, | Phase shall be MS20659-1 20 |
| Lug Terminals for N | Phase shall be MS20659-136 |
| Lug Terminals for E & F | Phase shall be MS20659-106 |

Lug terminals shall be attached to one end of the cable and plug attached to the other end. A ball stop is to be attached to the cable approximately 2-1/2 feet behind plug. Some cablesentire length should be protected with orange scuff cover.

2) Single Jacketed Multi-Conductors

The 400-HZ Cable Assemblies shall consist of A, B, C Phase & N (Neutral) supply wires. Phase A, B, C shall be approximately 1/0 AWG. Phase N (Neutral) shall consist of 3#6 AWG Control leads E & F shall be #12 AWG (2) conductors. Provide jumper wire between pins E & F in the plug. All wire shall be manufactured Anderson Power Products or approved equal, field attachable, R67G76B. Each cable assembly shall be approximately 65 feet and 85 foot in length as required.

| | |
|---|---|
| Lug Terminals for A, B, C, | Phase shall be MS20659-18B |
| Lug Terminals for N | Phase shall be MS20659-143 |
| Lug Terminals for E & F | Phase shall be MS20659-106 |

3) Lug terminals shall be attached to one end of the cable and plug attached to the other end. Plug shall be yellow fluorescent in color.

2.4 400-HZ AIRCRAFT CONNECTOR

A. The Aircraft Connector shall be a molded portable connector consisting of a specially formulated Hypolon® rubber material, as manufactured by Anderson Airmotive Products Co., Inc. Portable Plug Catalog No. R67, or MDAD approved equal, configured to accommodate the characteristics of cables specified for this project. The portable plug shall meet the following additional specifications:

1) Shock-proof, highly abrasion and chemically resistant material

2) Replaceable contacts, silver-plated copper-tellurium alloy

3) Replaceable connector front part

4) Replaceable rubber protectors with wear indicators

5) Short, main contacts for low voltage drop

6) Applicable norms: 2006/42/EC Machinery Directive, VG 95319, ISO 461, MS 25486, DFS 400

7) Push and pull forces meet DIN EN 61984 $\leq$ 445 N

8) Operating temperature range -40°C to +125°C (-40°F to +257°F)

9) Resistant to UV radiation, oil, hydrolysis and microbial attack

10) Nominal voltage: 115/200 V, 400-HZ

11) Current carrying capacity: 260 A/90 KVA

12) Current overload: 600 A/30 min, 1000 A/3 min, 2000 A/3 sec

13) Test voltage: 4 KV at 400-HZ main wires/2 KV at 28 V control wires

14) Protection class: IP 68 for mounted connector

2.5 CABLE HOIST

A. General Description:

1) The Cable Hoist is used to raise the flexible aircraft cable to a stowed position along the side of the bridge out of the path of moving vehicles. It allows the operator to lower the cable to power aircraft at the gate. The hoist shall be designed for mounting on top of or on the side of the bridge. The cable hoist shall be U.L. labeled. Provide two hoists at each gate.

B. Enclosure:

1) The hoist cabinet shall be welded # 10-gauge steel. The finish shall be two coats of primer and one coat of white polyurethane paint. The unit shall be rated NEMA 3R. The hoist shall be constructed with a removable or hinged cover for ease of maintenance and access to major components.

C. Motor:

1) Provide an electric open drip proof gear motor rated at 1/2 HP, 480 VAC, 60 HZ, 3Phase. Provide a PBB-mounted, NEMA 3R, overcurrent/disconnecting means. The gear reducer shall be NEMA rated Class 0. Provide a magnetic disc brake to prevent the wire rope drum from unwinding when the hoist is shut off.

D. Controls:

1) A 600V, 3 pole, 10 amps manually operated disconnect isolation switch shall be provided in the control panel. The panel door shall not be capable of being opened unless the disconnect switch is in the OFF position.

2) Provide a reversing contactor and control circuitry.

3) Provide raise/lower push-button controls for mounting on the bridge drive column.

4) Provide a 24-volt adjustable counter to control the IN and OUT limits of the wire rope.

5) A step down transformer shall be provided for the low voltage circuits.

E. Drum, Fairlead, Cable and Saddles:

1) Provide a single drum with flanges to contain the wire rope.

2) Provide a roller fairlead to guide the cable onto the drum. The fairlead shall be positioned to prevent the cable from rubbing on metal surfaces of the hoist.

3) Provide 3/16" diameter nylon coated stainless steel braided wire rope of sufficient length to raise the aircraft cable level with the underside of the bridge.

## 2.6 PUSHBUTTON STATION

A. Description:

1) A stainless steel, weatherproof enclosure shall be provided at each bridge-mounted gate box for use as a remote control pushbutton station. The pushbuttons shall be non-illuminated recessed type. Indicating light shall be a 12 bolt cluster LED, minimum 1 00,000 hour. Buttons and lights shall be 30 mm diameter. Buttons and lights shall be provided as follows:

a) "ON" pushbutton - Contactor closes, energizing the aircraft cable. Provide two for each gate with 180 KVA.
b) "OFF" pushbutton - Contactor opens, de-energizing the aircraft cable. Provide two for each gate with 180 KVA.
c) "RESET" pushbutton - In the event the protective controls are activated in the gatebox, the contactor cannot be closed until the condition has been corrected and the control circuit reset by depressing the "RESET" button.
d) "Raise" pushbutton - (Used only with cable hoist installation) When depressed, energizes the cable hoist to raise the aircraft cable to its storage position. Provide two for each gate.
e) "Lower" pushbutton - (Used only with cable hoist installation) When depressed, energizes the cable hoist to lower the aircraft cable from its storage position. Provide two for each gate.

i. Location of the pushbutton station shall be as shown on the project drawings and as coordinated with loading bridge manufacturer and with existing conditions.

PART 3 – EXECUTION

3.1 INSTALLATION

A. Existing Conditions: Examine elements and surfaces to receive equipment for compliance with installation tolerances and other conditions affecting performance, including, but not limited to, ambient temperature, cooling air circulation, contaminants and disassembly and maintenance space. Proceed with installation only after unsatisfactory conditions have been corrected.

B. Conduits and Raceways: Provide and install non-ferrous conduits and raceways for all 400-HZ wiring. Conduit shall be as shown on the drawings or sized per NEC when size is indicated. All raceways elements shall be reviewed and acceptable to system designer.

C. Passenger boarding Bridge Equipment Installation: Where 400-HZ equipment is installed on passenger boarding bridges; the work shall be coordinated with the bridge manufacturer. Welding shall be performed in the PBB manufacturer's factory in accordance with the bridge manufacturer's written welding procedure. Surface preparation and painting of areas affected by welding or during equipment installation shall be in accordance with the bridge manufacturer's requirements.

D. Over PBB Devices: The installation of cable in new over-PBB devices shall be coordinated with the PBB manufacturer. Brackets shall be supplied and attached to the PBB prior to factory painting.

3.2 SYSTEM TESTING:

A. General Start-up Requirements:

1) Qualified personnel from the equipment manufacturer shall perform the checkout and testing of the 400-HZ system.

2) The Vendor shall furnish qualified personnel to provide the initial set-up and adjustment of the solid-state electronic trip circuit breakers. Prior to energizing all installed wire, all wiring shall be tested for continuity and faults. The initial settings of the breakers shall be recorded in tabular form for each individual position and be made a part of the final documentation provided with the equipment.

3) The Vendor shall furnish qualified personnel to perform the on-site set-up and testing of the line drop compensators and gate boxes. Each branch circuit shall be tested at full load using the procedures stated below.

4) The following list of test equipment, or equivalent substitute, is required for testing the 400-HZ equipment and system and shall be provided by the supplier. Supplier shall be responsible for providing all other test equipment required to successfully perform all tests.

   a) Certified and calibrated digital AC voltmeter. Model Fluke 87 or 8020.
   b) Certified and calibrated clamp-on AC Ammeter
   c) Combination Resistive and Reactive Load Bank. A total capacity of 90 KVA consisting of 54 KV AR reactive load bank and a 72 KW resistive load bank. For dual output gate boxes 2 sets of load banks shall be employed.

5) On-Site Testing:

   a) Proper circuit breaker fault isolation shall be verified.
   b) Testing of each complete system, after installation, shall be done on-site with the Vendor furnishing their own load banks and all other required test equipment.

C. Testing Requirements:

1) Each individual position and each output shall be checked for no load and full load voltage drop using both a resistive and a reactive load attached to the output of the aircraft cable.

   a) Test each Jumbo position with a 180 KVA load, 90 KVA on each cable at 0.80 power factor. Testing will be at no load, full reactive load, full resistive load and 0.80 power factor load.

D. Test ground fault on the feeder side of each gate box.

E. Check phase rotation with load bank or phase rotation tester, rearrange phase wiring, if required.

F. The overvoltage, under voltage and overload protection provided by the gate box shall be verified.

G. The proper operation of the gate box control buttons shall be verified.

H. The test points located in the gate box test panel shall be used to verify the following parameters:

1) Output voltage of each of the three phases.

2) Output voltage of the DC power supply.

3) Contactor auxiliary contacts.

4) Contactor auxiliary relay.

5) Under-voltage relay contacts.

6) Over-voltage relay contacts.

7) Overload relay contacts.

8) Overload relay.

9) Protective Monitor

3.3 ACCEPTANCE

A. Final System Acceptance:

1) Final acceptance for each of the PBBs will be at the jobsite after all requirements of this Specification have been met. Provide a test report showing compliance with design requirements and calculations at each position as part of the Operations and Maintenance Manuals.

END OF SECTION 263226

# SECTION 263543 - STATIC FREQUENCY CONVERTERS – POINT-OF-USE 400 HZ SYSTEMS

## PART 1 - GENERAL

### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the contract, including general and supplementary conditions and specification, apply to this section, as described below.

### 1.2 SUMMARY

A. This Section specifies the design, manufacture, testing, and furnishing 400 Hz Distribution Equipment System to deliver power to parked aircraft at the Miami-International Airport.

B. The converters will be connected to the 400 Hz cables as specified.

C. The Vendor shall provide and install all relevant equipment for a correct connection to get a complete and operable system.

## PART 2 - GROUND POWER UNIT QUALIFICATION

### 2.1 EXPERIENCE

A. The manufacturer shall have a minimum of five- (5) years of experience in designing, producing and supplying Ground Power Unit for aircraft applications with operation in the USA.

B. Demonstrate that the manufacturer has satisfactorily provided 400 Hz system installations of similar scope with a record of successful in-service performance.

C. Demonstrate the manufacturer has installations under multiple ambient conditions in tropical environments such as found in South Florida or cold countries, in dry or humid areas and indoor or outdoor installations.

D. The manufacturer shall manufacture the circuit boards and magnetic components to guarantee the converter integrity.

E. The design, production and supply of GSE equipment within the aviation industry shall be one of the manufacturer's core businesses.

F. The manufacturer must also have equipment references with at least one of the world's leading aircraft manufacturers or airlines.

G. Products that are not manufactured in the US will not be qualified. Proof of US

manufacturing facility shall be presented at time of bid.

H. The product must be UL 1012 certified. Certification of proposed model must be submitted at time of bid.

I. The 400 Hz aircraft plug shall ensure the system integrity and comply with MDAD's universal plug specifications for use throughout Miami International Airport gates.

J. The manufacturer shall have a registered office in the United States to support after sales service.

2.2 APPLICABLE CODES AMD STANDARDS

A. The standards and codes applicable to only a portion of the work specified in this Section are referenced in the relevant parts or clauses. Standards and codes which are generally applicable to the work of this section are listed below:

| | |
|---|---|
| ANSI C 12.11: | Instrument Transformers for Metering Purposes, 15 KV and less. |
| ANSI C 19.1: | Electrical Analog Indicating Instruments. |
| ANSI C 57.13: | Instrument Transformers. |
| ATA SPEC - 101: | Ground equipment technical data. |
| NFPA 70: | National Electrical Code. |
| UL 1012: | Under Writers Laboratories, INC. (UL). |
| BS 2G 219: | General Requirements for Ground Support Equipment. |
| DFS-400: | 400 Hz aircraft ground power. |
| IEEE STD 127: | Aerospace Equipment and Frequency Rating. |
| ISO-6858: | Aircraft Ground Power Supplies. |
| ISO-461: | Connectors for Ground Electrical Supplies. |
| ISO-1540: | Aerospace. Characteristics of Aircraft Electrical Systems. |
| SAE-ARP-5015: | Ground Equipment 400 Hz Ground Power Performance Requirements. |
| MIL-S-19500: | Semiconductor devices. |
| IEC-60146: | Semiconductor Converters. |
| ST-20-1972(R-1978): | Dry type transformer for general application. |
| IEC-60310: | Traction Transformers and Inductors. |

| | |
|---|---|
| EN-50124: | Insulation Coordination. Part 1. Clearances and Creepage Distances for all Electrical and Electronic Systems. |
| EN-61000: | Electromagnetic Compatibility. |
| MIL-STD-461: | Electromagnetic emission and susceptibility requirements for the control of electro-magnetic interference. |
| IEC-60529: | Classification of Degrees of Protection Provided by Enclosures. |
| EN-1915-1: | Aircraft ground support equipment. General requirements. Basic safety requirements. |
| EN-12312-20: | Aircraft ground support equipment. Specific Requirements. Part 20. Ground Power Equipment. |
| BS-EN-61558: | Safety of Power Transformers, Power Supplies, Reactors and Similar Products. |
| EN-62040 1.1: | Uninterruptible power systems (UPS) –Part 1-1: General and safety requirements for UPS used in operator access areas. |
| IEEE STD 500: | Reliability Data. |

2.3 APPLICABLE SUBMITTALS

A. Product Data: For each type of product indicated, including dimensions and data on features, performance, electrical characteristics, ratings, and finishes. Submittals are to include also operating parameters and limitations, ambient conditions, heat dissipation, power requirements, live load, and the like.

B. Product data submittal shall include the following as minimum:

1) Schedule of equipment proposed, with catalog reference number.
2) Name and address of the manufacturer and country of origin of the product.
3) Compliance statement to specification, with necessary supporting documents.
4) Catalog pages of proposed equipment.
5) Basic system architecture.
6) Name and address of the authorized local representative/dealer.
7) Installation details, operation and maintenance of each component.

C. Shop Drawings: Detail assemblies of standard components that are custom assembled for specific application on this Project.

1) Full layout, location of the converters and all related equipment.
2) Dimensioned plan and elevations.
3) Transformers, panels, circuit breakers, cables (as applicable).
4) Instruction manuals.

D. Coordination Drawings: Plans drawn coordinating locations of converters. Show the following:

1) Converters.
2) All related equipment.
3) Coordination with the rotunda's technical rooms.
4) Coordination with PBB Manufacturer.
5) Electrical Wiring Diagram.
6) Control Wiring Diagram.

E. Product Certificates: Signed by manufacturers components certifying that products furnished comply with requirements.

F. Instruction manuals:

1) Provide complete operation and maintenance manuals when the final shop drawings are submitted.
2) Provide additional complete instruction manuals, including any required factory corrections, after the equipment has been factory tested.
3) Each instruction manual shall contain the following:

a) Calibration data curves, wiring diagrams and other pertinent information on every component furnished.
b) Operation procedures, both manual and automatic.
c) Recommended preventive maintenance schedules.
d) Supplied Spare Parts List.
e) Recommended Spare Parts List.

G. Field Quality-Control Test Reports: Indicate and interpret test results for compliance with performance requirements of installed systems. Tests shall be carried out in coordination with 400 Hz cables (and pits if part of the project) for a complete and operable system.

H. As-Built Drawings: At project close-out, submit record drawings in accordance with requirements of the specification, including two- (2) sets of electronic files. Electronic files shall be AutoCAD, CAD data transfer in a single file with no Xrefs and Acrobat pdf file formats. All AutoCAD, CAD data transfer files for each discipline shall contain all reference drawings including final title block with all revisions to reflect as-built conditions.

I. Operation and Maintenance Data: In addition to items specified, include the following:

1) Documented ratings of systems and of each major component.
2) Unit description and specification.
3) Instructions for installation, prestart, starting, and operating procedures.
4) Maintenance and troubleshooting instructions.
5) Routine preventative maintenance and lubricating schedule.

6) Description of operating limits which may result in hazardous or unsafe conditions, or equipment damage
7) List of special tools, maintenance materials and replacement parts, and list of recommended spare parts.
8) Instructions for procedures to check, repair, and test equipment during typical malfunctions.
9) List of spare parts and replacement components recommended to be stored at the site for ready access.
10) Complete record drawings, including as-builts for schematics, wiring diagrams, and plans of the complete equipment.
11) System documentation. Compile approved site inspections and test results.
12) All other information that is necessary for proper installation, service, repair and maintenance of all material, equipment and components furnished under this Section.

## 2.4 PROJECT CONDITIONS

A. Environnemental Conditions:

1) System shall be able to withstand the project environmental conditions without structural or electrical damage or degradation of operating capability.
2) The converters shall be installed outdoor with direct exposure to sunlight. It is the Vendor's responsibility to ensure proper operation of the converters in the installed conditions.

## 2.5 WARRANTY

A. Warranty Terms shall be ten (10) years from the date of Substantial Completion.

B. The Vendor warrants the products to be free of defects of design, material and workmanship under normal use and service for the period as defined above for all aircraft support equipment and systems.

## 2.6 SPARE PARTS AND SPECIAL TOOLS

A. A minimum of the following Spare Parts in the 400 Hz distribution equipment shall be furnished to MDAD for each Passenger Boarding Bridge:

1) Complete set of Control PCB.
2) Fans.
3) Components of Fuse and Input/output Contactor.

B. Furnish one set of all special tools required for the installation, operation, and maintenance of all equipment furnished and installed under this Section.

C. One complete set of diagnostic tools. Hardware toolkit to check the converter parameters shall be provided to MDAD.

D. Furnish a list of recommended spare parts for the 400 Hz distribution equipment and accessories. The list shall contain the prices and availability of the spare parts recommended.

2.7 AVAILABILITY OF SPARE PARTS AND FORWARD COMPATIBILITY

A. The Vendor shall obtain and submit a written undertaking from the manufacturer that spare parts of the system to be installed shall be made available upon request for at least ten (10) years from the date of Substantial Completion.

PART 3 - STANDARD COMMERCIAL PRODUCTS

The proposed products shall be standard commercial products and not engineered specifically for the project.

3.1 SYSTEM DESCRIPTION

A. The 400 Hz Distribution Equipment System is made of 400 Hz solid state frequency converter to operate under a passenger boarding bridge (PBB) or ground mounted. The solid-state frequency converter will deliver power using a 400 Hz aircraft service cable as described in the specification below.

3.2 DESIGN REQUIREMENT

A. The 400 Hz Converter output shall be pulse width modulated, complete unit with components and accessories coordinated so that the unit shall function as specified and shall be capable of continuously running under full load conditions per specification. Unit shall be designed so that under full load conditions all points on printed circuit boards shall not be accessible and will interrupt power once the covers and/or doors are open. The frequency converter enclosure and accessories shall be manufacturer's standard design.

B. The 400 Hz Converter shall be a stand-alone, self-contained unit capable of converting 47 - 63.5 Hz input power to 400 Hz output power for combinations of linear and nonlinear loads in aircraft electrical systems.

C. The 400 Hz Converter shall be of modular design with solid state electronic construction with easily replaceable subassemblies and components wherever possible.

D. The enclosure shall be free standing with provisions for PBB mounting.

E. The enclosure shall have hinged doors or easily removable covers to provide access for maintenance, repair, and replacement of modular components and subassemblies. It shall be weatherproof for outdoor operation.

F. The 400 Hz Converter shall have Built-In-Test-Equipment and alarm functions to continuously monitor, control, and provide diagnostics. The converter shall include a

Google or Apple app to be able to monitor or diagnose a minimum 150 systems.

G. Components of the Converter shall be UL and or CE recognized or listed for their intended application.

H. The converter and inverter sections of the frequency changer shall be modularized solid state IGBT components. The standard construction shall have no moving parts and shall require a minimum service or maintenance.

I. Components shall be cooled by convection, natural draft cooling, use of heat sinks, or by forced draft cooling provided the overall efficiency of the unit is not reduced by use of fans.

J. The power transformers shall be mounted in separate compartments from the solid-state equipment.

K. The electronics shall be completely sealed from the environment.

L. The frequency converter shall be constructed in a way that adjustments and repairs can be easily made by maintenance personnel.

M. All major components and sub-assemblies shall be stenciled or labeled with identification number or letter code on or near the device. The code shall be readily visible when servicing the frequency converter.

N. The enclosure shall be designed to be suitable for the intended environmental conditions in accordance with NEMA Type- 3R or IP54 (IP55 for the electronic compartment).

O. Suitable warning labels or covers shall be provided where internal voltages decay slowly after shutdown.

P. All steel surfaces shall be prepped per ISO 8504 and coated for coastal environments.

Q. All Aluminum surfaces shall be anodized per ASTM B 580 or coated with manufacturer's standard coating.

3.3 SUPPLY INPUT POWER

A. Input Voltage: Nominal voltage is 400 Vac – 480 Vac ± 15%. (320 V to 552 V).

B. Input Phase Connection: No phase dependence.

C. Inrush Current: Shall not exceed 100% of rated full load current and shall be equipped with a fully automatic input soft start circuit. On start-up, the GPU shall withstand inrush current of up to 100% of that input current required when the GPU is operating at rated load output. Manufacturer shall identify as part of submittals the design and circuitry utilized to provide a true input soft start feature. This feature shall be

demonstrated as part of factory acceptance testing.

D. Input Phase Rotation: The GPU shall be input phase rotation independent, allowing the GPU to be connected to the incoming power without regard for phase rotation (not phase sensitive).

E. Input Power Break: The GPU shall be capable of supplying uninterrupted power to the aircraft during a micro break in the input power.

F. Input Circuit Breaker: the GPU shall contain an internally mounted circuit breaker on the input power line to allow the input power to be removed in the case of a fault or for maintenance.

G. Input Power Protection: The frequency converter shall be equipped with the following input power protection:

1) Phase loss protection.
2) Phase sequence protection.
3) Over\Under voltage protection.
4) Thermal overload protection.
5) Overcurrent protection.
6) Short circuit protection.

H. Voltage Operating Range: The frequency converter output voltage shall be capable of being adjusted over a range of +15% from rated voltage.

I. Input Current Harmonics: When connected to a 50/60 Hz power supply Input current harmonics shall not exceed 3% within normal load range. Harmonic traps are not acceptable as they would also be affecting other electrical equipment. Input current harmonics shall be demonstrated as part of the factory acceptance test. Units that do not meet the specified harmonics at time of factory testing shall not be accepted for shipment.

J. Input power shall be confirmed at time of factory acceptance test. Units which require more input current than specified shall not be accepted.

3.4 OUTPUT POWER

A. Output Power Rating: Load capacity of the frequency converters shall be continuous.

B. Output Voltage: The output voltage shall be 115/200 volt, 3-phase, 4 wires, with grounded neutral in accordance with the international aircraft electrical power requirements.

C. Output Phase Rotation: Shall be 3 phase, 4 wire, ABC (clockwise) rotation.

D. Output Frequency: Shall be 400 Hz (0.1% under all load conditions).

E. Voltage Regulation: Voltage regulation from no-load to rated load and from rated load to no-load shall not be more than 0.5% of nominal voltage and shall be maintained with input line voltage variations of ±15%.

F. Voltage Recovery: Transient voltage recovery shall meet or exceed not more than 50m Sec for 100% load change.

G. Voltage Phase Balance: With frequency changer operating at any load within the rated KVA the maximum difference in all line-to-neutral voltages shall not exceed 1% for balanced loads and shall be within 2.5% for 30% unbalanced load.

H. Phase Voltage Displacement: Shall be 120° +1.0° for balanced loads 120°+2.0° for 30% unbalanced.

I. Voltage Trim Adjustment: The output voltage trim adjustment shall be +15% of nominal output span.

J. Crest Factor: Shall be 1.414 +/-3%.

K. Frequency Regulation: Shall be 400 Hz +/- 0.01% and shall not be affected by load.

L. Harmonic Distortion: The maximum total harmonic distortion at 100% linear load at 0.8 pf shall not exceed 2.0% when measured line-to-line or line-to-neutral. Any single harmonic shall be less than 1.5%.

M. Line Drop Compensation: Independent compensation for resistive and reactive cable impedance per phase. Shall be 0 to 15% of voltage span and shall be adjustable.

N. Overload Capacity: After reaching stabilized temperature at full load, the frequency converter shall be capable of carrying the following overloads:

1) 125% over load for 600 sec.
2) 150% over load for 90 sec.
3) 200% over load for 30 sec.
4) 300% over load for 15 sec.
5) 400% over load for 3 sec.
6) 500% over load for 1.5 sec.

Note: MDAD Project Manager/representative to witness and verify test.

O. Efficiency: The efficiency of the frequency converter shall be 94% or better at full load. Efficiency shall be demonstrated as part of factory acceptance testing. Efficiency shall be demonstrated immediately following a full load 24-hour heat run, before the converter is shut down. MDAD or authorized representative to witness and verify test.

P. Over/Under Voltage Protection: An over/under voltage output protection shall be provided to automatically isolate the converter output power from the aircraft when it is exceeding limits of the MIL-STD-704F.

Q. Overload/Short Circuit: The frequency converter shall be isolated from the aircraft load by over-load/short circuit protection specifically rated for 400 Hz operation. The converter shall be equipped with an instantaneous electronic overload alarm circuit designed to operate at not less than 500% of rated capacity.

R. No Break Power Transfer: The frequency converter shall be designed with an energy management system that will provide continuous, trip free operation of aircraft designed for No Break Power Transfer operations during ground servicing at the gate.

## 3.5 CONTROL CIRCUITS

A. Controls: The frequency converter shall be designed to start and stop by means of depressing momentary push buttons, located on the control door. There shall be provisions for remote operation. All controls shall be isolated from each other and withstand output rated voltages without degradation to the system or operation.

B. Output Contactor: The frequency converter output shall be connected to an output contactor of sufficient capacity to handle rated load and overload specified. The output contactor shall be electrically interlocked with input circuitry so that frequency converter will be immediately isolated when converter is being shut down. The operating push-button and associated light indicators shall be mounted on the front door.

C. Line Drop Compensation: The voltage regulation means shall include an electronic line drop compensation circuit for maintaining the voltage regulation at a single point distance from the converter and shall be adjustable at full load to at least 15% of rated output voltage. The frequency converter shall have an independent compensation circuit for resistive and reactive cable impedance per phase compensation.

D. Aircraft Interlock Circuit: The E and F interlock circuit shall instantaneously isolate the converter output in the absence of a 28 VDC signal from the aircraft. The E and F interlock circuit indicator shall be provided to display the status of E and F interlock. E and F indication shall be provided via an LED light inside the control compartment and LCD display. In the event of E and F absence the control system shall record and time stamp when the event was acknowledged, the duration and cleared.

E. Aircraft Bypass Switch: For testing purposes an aircraft bypass switch shall be provided inside the converter to allow the unit to deliver the output power without the 28 VDC (E and F feedback) power from the aircraft. An indicator shall be provided to indicate that the BYPASS circuit has been selected. In the event of Bypass, the control system shall record and time stamp when the event was acknowledged, the duration and cleared.

F. Output Voltage Adjust: A voltage adjusting potentiometer shall be provided to permit adjustment of the converter output voltage per phase and overall three phase. Range of adjustment shall be ±15%.

G. Alarm Indicator Reset: A push-button shall be provided to reset all indicators from cleared alarm signals.

3.6 METERS AND INDICATORS

A. Human Machine-Interface (HMI):

1) The converter shall be equipped with an integrated Human Machine Interface (HMI) and be factory tested with all control sequences and alarms simulated.
2) The integrated controller shall be pre-programmed with project specific data for easy start-up and commissioning.
3) The HMI shall include the following features:

a) Sunlight readable LCD colored touch screen (Minimum size of 6").
b) Capacity of being connected and integrated with the airport BMS.
c) The HMI shall be provisioned for being connected to the gate operator terminal where the airport gate layout can be displayed with the specific gate and ensures the visualization of the gate equipment and status of operation.

B. TCP/IP connection

1) The GPU manufacturer shall provide TCP/IP connection point to enable the access to critical operational status data of the GPU. Such data are required for the remote monitoring of the operation of the GPU through the Building Management System (BMS). These data shall include but not be limited to:

a) GPU 1 ON.
b) GPU 2 ON (if applicable).
c) GPU 1 OFF.
d) Power Available.
e) Summary Fault.
f) E/F signal present.
g) Emergency Stop.
h) Logic Power Supply Voltage.
i) Pilot switch (cable inserted).
j) Enable/Disable Signal bit 0 zero signal.
k) Phase Voltage (V).
l) Line Voltage (V).
m) Phase Current (I).
n) Frequency (Hz)
o) Power Factor (P.F.).
p) Kilowatts.
q) KVA.

C. Elapsed Time Meter: Shall be non-resettable type with 0 to 99,999 hrs.

D. Diagnostic Information: The solid-state frequency converter shall be equipped with a complete diagnostic system including alarm message system. All of the converter's vital function shall be continuously monitored by the diagnostic system. Additionally, the converter shall be capable of diagnosing status of the aircraft cable assembly. All time stamped events shall be downloadable via a USB or Ethernet connection.

3.7 ENVIRONMENTAL

A. The solid-state pulse width modulated frequency converter and the modular coiler shall successfully operate under the following conditions:

1) Ambient Temperature Range: 0°F to 140°F (-40°C to +60°C) – A 3rd party certificate shall be provided.
2) Humidity: 0% to 100% noncondensing.
3) Altitude: 0 to 9850 feet w/o de-rating.
4) Wind: Up to 185 MPH and Exposure C (exposure is identified in the Florida Building Code).
5) Audible Noise Level: Shall be not more than 65 dB at 3 feet and 3.37 inches.

3.8 ENVIRONMENTAL 400 HZ SYSTEM ACCESSORIES

A. Cable Assemblies:

1) Multi Conductor Banded

Cable assemblies shall be in accordance with MIL-C-7974D Specification. The 400 Hz Cable Assemblies shall consist of A, B, C Phase & N (Neutral) supply wires. Each lead shall consist of a single conductor MIL-C5756C cable. Phase A, B, C, & N shall be approximately 2/0 AWB. Control leads E & F shall also be per MIL-C-575C #12 AWG (2) conductors. Provide jumper wire between pins E & F in the plug. Each cable assembly shall be approximately 6 feet and 85 foot in lengths and banded together with stainless steel bands.

| | |
|---|---|
| Lug Terminals for A, B, C | Phase shall be MS20659-120 |
| Lug Terminals for N | Phase shall be MS20659-136 |
| Lug Terminals for E & F | Phase shall be MS20659-106 |

Lug Terminals shall be attached to one end of the cable and plug attached to the other end. A ball stop is to be attached to the cable approximately 2-1/2 feet behind the plug. Entire cable length shall be protected with orange scuff cover.

2) Single Jacketed Multi-Conductors

Cable assemblies shall be in accordance with MIL-C-7974D Specification. The 400 Hz Cable Assemblies shall consist of A, B, C Phase & N (Neutral) supply wires. Phase A, B, C shall be approximately 1/0 AWG. Phase N (Neutral) shall consist of 3 #6 AWG Control Leads E & F shall also be per MIL-C-5756C #12 AWG (2) conductors. Provide jumper wire between pins E & F in the plug. All

wire shall be manufactured by Anderson Power Products or approved equal, field attachable, R67G76B. Each cable assembly shall be approximately 65 feet and 85 foot in length as required.

| | |
|---|---|
| Lug Terminal for A, B, C | Phase shall be MS20659-18B |
| Lug Terminals for N | Phase shall be MS20659-143 |
| Lug Terminals for E & F | Phase shall be MS20659-106 |

3) Lug terminals shall be attached to one end of the cable and plug attached to the other end. Plug shall be yellow fluorescent in color.

B. 400 Hz Aircraft Connector

The Aircraft Connector shall be a molded portable connector consisting of a specially formulated Hypolon® rubber material, as manufactured by Anderson Airmotive Products Co., Inc. Portable Plug Catalog No. R67, or MDAD approved equal, configured to accommodate the characteristics of cables specified for this project. The portable plug shall meet the following additional specifications:

1) Shock-proof, highly abrasion and chemically resistant material.
2) Replaceable contacts, silver-plated copper-tellurium alloy.
3) Replaceable connector front part.
4) Replaceable rubber protectors with wear indicators.
5) Short, main contacts for low voltage drop.
6) Applicable norms: 2006/42/EC Machinery Directive, VG 95319, ISO 461, MIL-C-7974D, MS 25486, DFS 400.
7) Push and pull forces meet DIN EN 61984 $\leq$ 445 N.
8) Operating temperature range -40°C to +125°C (-40°F to +257°F).
9) Resistant to UV radiation, oil, hydrolysis and microbial attack.
10) Nominal voltage: 115/200 V, 400 Hz.
11) Current carrying capacity: 260 A/90 KVA.
12) Current overload: 600 A / 30 min, 1000 A 3 min, 2000 A/3 sec.
13) Test voltage: 4 kV at 400 Hz main wires/2 KV at 28 V control wires.
14) Protection class: IP 68 for mounted connector.
15) Acceptable Manufacturers:

    a) Cavotec-Inet US, Inc.
    b) J&B Aviation.
    c) MCM Engineering.
    d) US Airmotive GSE.

3.9 FACTORY TESTS

A. The manufacturer shall have its own testing facility at the location of the converter manufacturing. This testing facility shall test the converter under +60°C ambient conditions and running the overload tests up to 500%.

B. A factory Test Report shall be furnished for each frequency converter including test

results, instrument used, test procedures, and final conclusions. Each Test Report shall be dated and signed by authorized personnel and shall be neat, readily legible and self-explanatory.

C. Manufacturer shall submit proposed factory acceptance test for review a minimum of 60 days before original unit test is scheduled. Factory testing is not to be done until procedure is approved by MDAD Project Manager/representative. Delay in shipment due to delay in submittal of an acceptable test procedure shall be the responsibility of the Vendor.

D. A converter shall be tested at no load and full load conditions and shall be given a "burn-in" test for at least 24 continuous hours.

E. In addition to load tests the following tests shall be performed:

1) Output Voltage Wave Form.
2) Transient Voltage Recovery Time (For 50% And 100% Load Shocks).
3) Output Voltage Regulation.
4) Efficiency Test At 25%, 50%, 75% And 100% Load.
5) Output Voltage Balance.
6) Output Frequency Regulation.
7) Overload Capabilities.
8) Operation of Safety and Control Devices.
9) LDC Circuit.
10) Input Current Harmonics.

3.10 INSTALLATION

A. General: All equipment, wiring and installation shall be in accordance with current, applicable codes and per current industry standards.

B. Packaged frequency converters: The frequency converters shall be delivered to the site completely assembled and tested.

C. Final Connections: The Vendor shall make final electrical connections from the pre-wired utility connections.

D. Final Field Test: the frequency converter manufacturer, in the presence of MDAD Project Manager/representative, shall operate each unit to verify performance compliance relative to output voltage, control functions and operating controls.

3.11 DESIGN LIFE

A. The converter shall be designed for a useful life of not less than 20 years.

B. MTTR shall be maximum 20 minutes.

3.12 WARRANTY SERVICE AND PARTS

A. Manufacturer shall warrant that its products and work shall meet all applicable specifications, codes and other specific product and work requirements (including those of performance) and shall be free from defects in material and workmanship for a period of one year from the date of Substantial Completion for each PBB. Upon submittal of a warranty claim, Vendor shall repair or replace items necessary to restore the GPU to satisfactory condition. This warranty does not include consumables. The terms and stipulations of the warranty period shall be submitted with the proposal. Warranty shall be valid in the State of Florida.

B. In addition to the proposal for fabrication, delivery and installation of systems, the Proposer shall provide a recommended spare parts list, the cost for each part, the extended cost, the consigned cost, and any terms and conditions applicable to this proposal.

PART 4 – EXECUTION

4.1 DELIVERY, STORAGE, AND HANDLING

A. The electrical equipment shall be contained in a dust and moisture-impervious shrouding and shall be adequately packaged to ensure protection from transit damage and exposure to the weather.

B. Packaging shall be labelled and numbered so that each section or assembly may be identified before being opened. Any items not fully assembled to the unit substation structure shall be packaged and shipped separately.

C. Adequate means shall be provided for lifting by fork lifts and cranes and for moving the equipment on rollers. Lift points shall be marked on each crate. Electrical equipment handling shall be in accordance with the manufacturer's written instructions.

D. Where panels sections must be separated for shipment, all information, materials, and equipment necessary to facilitate reassembly and reconnection of interconnecting bus work and wiring in the field shall be furnished. Shipping lengths of the assembled equipment shall be in accordance with construction site handling limitations.

E. Touch up any damage to finishes to match adjacent surfaces.

4.2 INSTALLATION

A. Converter shall be transported within the construction site, unloaded, and handled, stored, installed, including assembly of all components parts, and wired in accordance with manufacturer's instructions and recommendations and the requirements specified herein.

B. The equipment shall be installed in accordance with the manufacturer's recommendations.

C. Regulations for Electrical Installations, except where in conflict with the aircraft requirements, where the latter shall take precedence.

4.3 FIELD QUALITY CONTROL

A. Manufacturer's Field Service: Engage a factory authorized and trained service representative to inspect field-assembled components and equipment installation and supervise pretesting, testing, and results.

B. Inspection: Verify that equipment and fittings are properly installed connected, and labelled, and that wires are identified.

C. Field tests shall be performed in accordance with the manufacturer's recommendations, applicable standards, as required in this Section and /or as directed by MDAD.

D. Carry out specified tests and submit test sheets as per attached Annex and the requirements for test records as specified here-under.

E. After integrity and component tests have been successfully completed, the equipment shall be subject to operational testing.

F. Test Schedule: Schedule tests after pretesting has been successfully completed and system has been in normal functional operation for at least 14 days. Provide a minimum of 10 days' notice of test schedule.

G. Operational Tests: Perform operational system tests to verify that system complies with Specifications. Include all modes of system operation. Test equipment for proper operation in all functional modes.

4.4 COMPONENTS TESTS:

A. Perform all component checks and tests indicated on the test plan submitted to MDAD Project Manager approval.

B. Perform all inspections, checks, adjustments, and tests recommended by the equipment manufacturers and as directed by the MDAD Project Manager/representative; documentation of the inspections, checks, adjustments, and tests performed shall be submitted to the MDAD Project Manager/representative on the completed test forms.

C. Calibration tests on metering and instrumentation.

D. Operational tests in all control and instrumentation.

4.5 TYPE OF RECORD

A. Maintain complete and accurate records of all tests. These records shall include the following:

1) Equipment or circuit identification, description, and location.
2) Complete nameplate data, including serial number.
3) Readings and measurements taken, including temperature and humidity.
4) Description of test, including data and tester's signature.
5) Description of test equipment used, including serial numbers.
6) Test results (written description).
7) Other observable data applicable to equipment tests.
8) Description of any necessary corrective actions.
9) Certification of satisfactory completion of wiring and installation in accordance with applicable items of this section.

B. Certified test reports as specified in this Section.

1) Remove and replace malfunctioning items and retest as specified above.
2) Record test results for each piece of equipment.
3) Retest: Correct deficiencies identified by tests and observations and retest until specified requirements are met.

4.6 TESTS

A. On completion of the works the entire 400 Hz distribution equipment shall be subject to a full functional test to prove the performance as specified, including the operation of all protective devices.

1) The Vendor shall be responsible for testing and commissioning of the equipment and provision of test equipment, load banks and personnel.
2) All equipment shall be factory tested and test certificates submitted for each item.
3) The Vendor shall inform the MDAD Project Manager/representative when tests are due to take place at place of manufacture so that the MDAD Project Manager/representative may be present to witness all tests.

4.7 MATERIAL AND WORKMANSHIP

A. Unless otherwise specified all materials shall be new.

B. Vendor shall be responsible for defects in equipment and devices furnished by the Vendor. Exposed finishes and other features shall match in all respects. The Vendor alone shall be responsible for all errors of fabrication and for correct fitting of all components that must be erected and joined in the field.

4.8 CLEANING

A. Clean installed using methods and materials recommended in writing by manufacturer.

4.9 PROTECTION

A. Protect 400 Hz distribution equipment and facilities against damage, mechanical or

otherwise and provide maintenance until issuance of the Certificate of Substantial Completion. The 400 Hz distribution equipment shall be kept clean, dry, and protected.

4.10 DEMONSTRATION AND TRAINING

A. The Vendor shall provide start-up of the converter after installation and conduct on-site operation training.

B. Engage a factory-authorized service representative to train MDAD's maintenance personnel.

1) Train MDAD's maintenance personnel on procedures and schedules for servicing and maintaining equipment.
2) Review equipment list and data in maintenance manuals.
3) Conduct a minimum of 4 hours training as specified in instructions to MDAD maintenance representatives.

END OF SECTION

MIAMI INTERNATIONAL AIRPORT

MIAMI-DADE COUNTY

# ADDENDUM NO. 2

**DATE: Monday, November 1, 2021**

**TO: ALL PROSPECTIVE BIDDERS**

**SUBJECT: Solicitation No. MDAD-PBB 15-1020**

**TITLE: 2021 15 PBB's Replacement at Concourses D,E,F and H.**

This Addendum becomes a part of the subject solicitation.

A. The following are changes to the solicitation.

1. Attached is the Revised Invitation to Quote (ITQ) Form that replaces the original ITQ Form submitted to Proposers. **Proposers are required to utilize this Revised ITQ Form when submitting their Proposal**.

B. The following are questions received and corresponding County responses:

1. STU are costumed designed and manufactured, based on passenger boarding bridge models, as well as all inside components needed. The Passenger Boarding Bridges are stated to be quoted as three tunnel, with no specific bridge model references. Is it acceptable for Cavotec to ask the qualified vendor bidding, to provide Cavotec for a three-tunnel bridge model reference, allowing Cavotec to provide them a STU quote for their submission? The STU quote to the bidder, would be subject to adjustments (up or down), based on the awarded bidder's final bridge models at each gate.

Answer: Proposers are required to bid assuming a three-tunnel design of the PBB for all locations. Refer to Part III, "Scope of Work/Technical Specifications", Section 1, Paragraph 1 of the ITQ Form and Section 2.01, "Passenger Boarding Bridge Model Type", of Attachment A " SECTION 14950 - AIRCRAFT PASSENGER BOARDING BRIDGES - APRON DRIVE".

2. Boom-Air hose management unit. Mentions hose reel for bridges with two hose outlets, no mention of hose basket. All gates at MIA also have a hose basket, will that be required at each gate, as well?

Answer: Hose baskets will be required for all locations.

3. Section 14950-Aircraft Passenger Boarding Bridges-Apron Drive. Part 1, Section 1.01 Related Work, makes reference to section 13470 and 16435. We kindly request to provide the listed sections or are we

MIAMI INTERNATIONAL AIRPORT

MIAMI-DADE COUNTY

to refer to PART III SCOPE OF WORK/TECHNICAL SPECIFICATIONS Section D. Equipment and Activities, equipment requirements listed for all technical requirements.

Answer: Refer to Addendum No. 1

**All other information remains the same.**

Miami-Dade County,

Aazam Piprawala
Aviation Purchasing Specialist

c: Clerk of the Board

## Piprawala, Aazam (Aviation)

**From:** Piprawala, Aazam (Aviation)
**Sent:** Monday, November 1, 2021 3:15 PM
**To:** MWESTPHAL@ADELTE.COM; Jay Grantham; CLAY.RATLIFF@TKELEVATOR.COM
**Cc:** Clerk of the Board (COC); Kurt Dobbrunz; Strozier, Eugene (Aviation); Garcia, Neivy (Aviation); Finol, Ana (Aviation); Novela, Sylvia (Aviation)
**Subject:** RE: MDAD ITQ No. MDAD-PBB15-1020 (Addendum No.2)
**Attachments:** Addendum No. 2 (11.1.21).pdf; REVISED ITQ FORM (Addendum No. 2).pdf

**Tracking:**

| Recipient | Read |
|---|---|
| MWESTPHAL@ADELTE.COM | |
| Jay Grantham | |
| CLAY.RATLIFF@TKELEVATOR.COM | |
| Clerk of the Board (COC) | |
| Kurt Dobbrunz | |
| Strozier, Eugene (Aviation) | |
| Garcia, Neivy (Aviation) | |
| Finol, Ana (Aviation) | |
| Novela, Sylvia (Aviation) | Read: 11/1/2021 3:15 PM |

Hello Everyone,
Hope all is well today. Kindly see attached for your perusal

*Thank You!*

**Aazam Piprawala,** Airport Purchasing Specialist
**Miami-Dade Aviation Department**
305-876-0566 Phone
apiprawala@flymia.com
www.iflymia.com
**Connect With Us on:**
Twitter | Facebook | Instagram | YouTube | Linkedin

The award-winning Gateway of the Americas
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Please consider the environment before printing this e-mail.

**From:** Novela, Sylvia (Aviation) <SNovela@FlyMIA.com>
**Sent:** Friday, October 29, 2021 6:09 PM
**To:** MWESTPHAL@ADELTE.COM; Jay Grantham <jay.grantham@aerobridgeworks.net>; CLAY.RATLIFF@TKELEVATOR.COM
**Cc:** Clerk of the Board (COC) <Clerk.Board@miamidade.gov>; Kurt Dobbrunz <kdobbrunz@hntb.com>; Strozier, Eugene (Aviation) <EStrozier@FlyMIA.com>; Garcia, Neivy (Aviation) <NGarcia@FlyMIA.com>; Finol, Ana (Aviation) <AFinol@FlyMIA.com>; Piprawala, Aazam (Aviation) <APiprawala@FlyMIA.com>

# REVISED
# INVITATION TO QUOTE (ITQ)

## PART I. ITQ OVERVIEW AND GENERAL TERMS AND CONDITIONS

### A. Information

| |
|---|
| **ITQ No.**: MDAD- PBB 15-1020 |
| **ITQ Title:** 2021 15 PBBs Replacement at Concourses D, E, F, and H |
| **This ITQ is issued pursuant to Miami-Dade County Pool No. 9427-1/21-1, Passenger Loading Bridges Prequalification Pool: GROUP 1 Prequalified Vendors** |
| **ITQ Due Date: November 22, 2021 @ 2pm** |
| Quotes must be received by the due date and time, in a sealed envelope, identified on its outside as a quote for the above given ITQ number. Deliver or mail sealed quotes to:<br>Miami-Dade Aviation Department<br>Commodities Management Division<br>P.O. Box 025504<br>Miami, Florida 33102-5504<br><br>Walk-in Delivery<br>4331 NW 22 Street,<br>Bldg. 3040<br>Miami, FL 33122<br><br>Attention: **AAZAM PIPRAWALA** |
| **County Department:** Miami-Dade Aviation Department (MDAD) 4200 NW 36th Street – Miami, Florida 33102 |
| **Airport Purchasing Specialist:** AAZAM PIPRAWALA **Phone:** (305)-876-0566 **E-Mail:** apiprawala@flymia.com |
| **Delivery/Service Address:** Miami International Airport (MIA) |
| **Method of Award:** **Commodity Code: 909-26**<br>Award of this contract will be made to the lowest responsive and responsible Bidder:<br>☒ in the aggregate for items 1-31 listed in **PART IV Pricing Form** of this ITQ. If a Bidder fails to submit an offer for all items, its offer may be rejected. |

### B. Instruction to All Bidders

1. Section 1, General Terms and Conditions of Miami-Dade County (County) shall apply to all resultant contracts from this ITQ. This Section is available on demand at the County's Strategic Procurement Division's (SPD) webpage: https://www.miamidade.gov/procurement/library/boilerplate/general-terms-and-conditions-r21-2.pdf
General Terms and Conditions of Section 1 are non-negotiable. The following articles in Section 1, General Terms and Conditions, are not applicable to this ITQ:
   - Section 1.6 Contract Extension
   - Section 1.22 Insurance Requirements
   - Section 1.25 Termination for Convenience
   - Section 1.26 Termination for Default
   - Section 1.27 Breaches and Dispute Resolution

2. **Pre-Bid Conference and Site Visit**

**PRE-BID CONFERENCE/ EXAMINATION OF COUNTY SITES AND COUNTY EQUIPMENT**
**(HIGHLY RECOMMENDED)**

It is recommended that a representative(s) of the Bidder's firm attend this pre-bid conference, as this meeting is exempt from the 'cone of silence', allowing for any questions to be addressed with representatives from Miami-Dade County. This is a public meeting and multiple members of individual community councils may be present. The County is not responsible for any costs incurred by potential Bidder to attend the pre-proposal conference.

# REVISED
# INVITATION TO QUOTE (ITQ)

Bidders are requested to bring a copy of this solicitation document to the conference, as additional copies may not be available. Bidder(s) are advised to carefully examine the requirements and specifications in this solicitation, and to become thoroughly aware regarding all conditions and requirements that may in any manner affect the work to be performed under the contract. No additional allowances will be made because of lack of knowledge of these conditions. It shall be the responsibility of the Bidder(s) to examine the equipment and sites prior to the submittal of their bid. It is highly recommended that Bidder(s) attend the pre-arranged site visit(s) to review the current conditions of the sites. Please see Site visit schedule below.

**PRE-BID CONFERENCE FOLLOWED BY SITE VISIT No.1:**
**9:00 AM – 3:00 PM, Thursday, October 28, 2021**
Meet at the 1st floor lobby area of Building 3030 at Miami International Airport (MIA) 4331 NW 22 ST, Miami FL 33122. Then proceed to site visit.

**SITE VISIT No. 2 (CONTINUATION OF SITE VISIT No.1):**
**9:00 AM – 3:00 PM, Friday, October 29, 2021**
Meet at the 1st floor lobby area of Building 3030 at Miami International Airport (MIA) 4331 NW 22 ST, Miami FL 33122. Then proceed to site visit.

**Attendees are instructed to meet in the 1st floor lobby area of Building 3030 at Miami International Airport (MIA) 4331 NW 22 ST, Miami FL 33122.**

Attendees must submit via email a copy of their driver's license and the last four digits of their Social Security number to apiprawala@flymia.com no later than 2 pm (local time) MONDAY October 25, 2021 to obtain the required security clearance to attend the site visit.

3. All questions must be submitted in writing to the attention of the Airport Purchasing Specialist, via e-mail address indicated above, with a copy sent to Clerk.Board@miamidade.gov, by November 8, 2021. The County Department will issue responses to inquiries and any changes to the ITQ via written addenda issued prior to this ITQ due date and time.

4. ☐ The use of Federal funds is anticipated in the resultant contract. As such, the following Section 1 General Terms and Conditions provisions **shall not apply to this ITQ:**
   - Article 1.11 Local Preference
   - Article 1.2(H) Prompt Payment Terms
   - Article 1.28 Office of the Inspector General (only the **cost** of the random audits, as specified)
   - Article 1.36 County User Access Program (UAP)
   - Article 1.44 Small Business Enterprise (SBE) Measures
   - Article 1.45 Local Certified Veteran's Business Enterprise Preference
   - Article 1.46 Application of Preferences
   - Article 1.49 First Source Hiring Referral Program (FSHRP)

5. Pursuant to Section 2-11.1 (t) of the Code of Miami-Dade County, as amended, a "**Cone of Silence**" is imposed upon issuance of this ITQ after advertisement and terminates at the time a written recommendation is issued.
6. Sealed bid must include the following documentation:
   a. Completed **PART IV Pricing Form**
   b. Completed and signed **PART V Submittal Form**
   c. Completed **Subcontracting Form**

d. Completed **Contractor Due Diligence Affidavit (if award is over $1,000,000)**

e. Certificate(s) of compliance with NFPA 415, latest edition, from a certified testing company located in the continental United States.

f. Affidavits attesting to the Passenger Boarding Bridge's compliance with NFPA 415 (in effect as of the date of bid submittal).

7. **DEFINITIONS**

When used in these Contract Documents (defined below), or in related documents, the following terms, shall have the meanings given below:

- **Addendum**: A modification of the Plans, Specifications or other Contract Documents distributed to prospective Bidders prior to the opening of Bids.

- **Air Operations Area**: The Air Operations Area (AOA) shall mean any area of the airport used or intended to be used for landing, taking off or surface maneuvering of aircraft. An air operation area shall include paved or unpaved areas that are used or intended to be used for the unobstructed movement of aircraft in addition to its associated runway, taxiway or apron.

- **Allowance Account(s)**: Account(s) in which stated dollar amount(s) are included in the Contract for the purpose of funding portions of the Work which are unforeseeable at the time of execution of the Contract, or for construction changes, for adjustments of quantities, for unit price work items or for special work deemed desirable by the Owner to be incorporated into the Contract. Performance of Work, if any, under Allowance Account(s) will be authorized by written Work Order(s) issued by the MDAD Project Manager.

- **Change Order**: A written agreement executed by the Owner, the Contractor and the Contractor's Surety, covering modifications to the Contract, recommended by the MDAD and approved by the consulting engineers.

- **Contract Documents:** Bid Documents, Change Orders, Payment and Performance Bonds, Work Orders, Approved Schedule, all Contractual Forms, Approved Shop Drawings and Approved Working Drawings.

- **Consulting Engineers:** HNTB, Consulting Engineers/Supervising Architects to the Miami-Dade Aviation Department.

- **County**: A political subdivision of the State of Florida, whose governing body is the Board of County Commissioners of Miami-Dade County, Florida.

- **Critical Path**: Longest sequence of activities in a project's schedule which defines the project completion date and which must be completed on time in order for the project to be completed on schedule.

- **Days**: Reference made to Days shall mean consecutive calendar days.

- **Direct Costs**: Direct Costs recoverable by the Contractor as a result of changes in the Work shall be limited to the actual additional costs of labor and materials installed as part of the Work and for the reasonable additional cost of rental for any Special Equipment or Machinery. Labor shall be limited to site labor costs, including Employer's Payroll Burden. Specifically excluded from labor are the costs of general foremen and site office personnel. Materials are limited to permanent materials required by the drawings and specifications and materials approved by the MDAD Project Manager as necessary to install the permanent materials in an efficient and workmanlike manner. Rental for Special Equipment and Machinery, not already mobilized on the airport, shall be an amount equal to the appropriate daily, weekly, or monthly rental rate for such equipment, in accordance with the current issue of Associated Equipment Distributor (AED) "Compilation of Nationally Averaged Rental Rates and Model Specifications for Construction Equipment" (notwithstanding the caveats contained therein that such rental rates are not for use by government agencies) for each and every rental period (in days, weeks, or months as applicable) that the Special Equipment or Machinery is in use on the work plus any required mobilization. Payment for Special Equipment and Machinery already mobilized on the airport shall not exceed the monthly rate stated in the AED divided by one hundred and seventy-six (176) to establish a per hour rate that the

Special Equipment and Machinery is in use on the work, plus any required re-mobilization. For Special Equipment or Machinery not listed in said document the Contractor shall be paid a rental rate corresponding to the average prevailing rental rate for such equipment or machinery in Miami-Dade County, Florida, subject to approval by the MDAD Project Manager. No additional payment shall be made to the Contractor for fuel, lubricants, fair wear and tear, transportation, insurance or depreciation. Any equipment or machinery not designated by the MDAD Project Manager as Special Equipment and Machinery shall be considered Overhead.

- **Equal Brand:** The mention of a particular manufacturer's brand name or style number in the specifications does not imply that this particular product is the only one that will be considered for purchase. This reference is intended solely to designate the style, type or quality of merchandise that will be acceptable. Bidders are to list the make and model number should an alternate be offered. In addition, Bidders are to provide product specification sheets for the alternate product. The "equal" equipment/device specification(s) submitted by the Bidder for approval shall meet or exceed the style, quality, and functionally of those listed in this document. The determination as to whether any alternate product is or is not equal shall be made solely by The County and such determination shall be final and binding upon all Bidders. The County may request additional information, samples, and/or request a demonstration of the equipment in order to make such a determination.

- **Extra Work**: An item of work not provided for in the awarded Contract as previously modified by Change Order or Work Order, but which is found by the MDAD Project Manager to be necessary to complete the work within the intended scope of the Contract.

- **Indirect Costs**: The total daily compensation for approved compensable delays, which consist of all costs associated with: project bond premiums, project insurance premiums, costs of supervision, coordination, superintendents, general foremen, consultants, schedulers, cost controllers, accountants, office administrative personnel, time keepers, clerks, secretaries, watch persons, small tools, equipment or machinery not designated by the MDAD Project Manager as Special Equipment or Machinery, utilities, rent, telephones, facsimile machines, computers, word processors, printers, plotters, computer software, home office expense, all expendable items, job site and general office expenses, profit, extended jobsite general conditions, interest on monies retained by the Owner, escalated costs of materials and labor, decreased productivity, home office expenses or any cost incurred that may be allocated from the headquarters of the Contractor or any of its subcontractors, loss of any anticipated profits, loss of bonding capacity or capability losses, loss of business opportunities, loss of productivity on this or any other project, loss of interest income on funds not paid, costs to prepare a bid, cost to prepare a quote for a Change in the Work, costs to prepare, negotiate or prosecute claims, costs of legal and accounting work, costs spent to achieve compliance with applicable laws and ordinances, loss of projects not bid upon, loss of productivity or inefficiencies in the execution of the Work.

- **Liquidated Damages:** The amount that the Contractor accepts, as stipulated in the Contract Documents, that will be deducted from the Contract Sum for each Day of delay due to a Non-excusable Delay.

- **Miami-Dade Aviation Department (MDAD)**: A department of Miami-Dade County government.

- **Notice To Proceed (NTP)**: The written communication issued by the Owner to the Contractor directing the Contractor to begin Contract Work and establishing the date of commencement of the work.

- **Owner:** Miami-Dade Aviation Department (MDAD)

- **Phase:** A completion date as defined in this ITQ.

- **Performance and Payment Bond:** Bond executed by the Contractor and its Surety, on the attached form, assuring that the Contractor will, in good faith, perform and guarantee the work in full conformity with the terms of the Contract Documents and will promptly pay all persons supplying the Contractor with labor, materials, or supplies, used directly or indirectly by the Contractor in the prosecution of the Work.

- **Schedule:** The final schedule delivered under the Contract including time and deliverable schedule. Refer to Part II, Section 3.

- **Subcontractor**: Any individual, firm, partnership, joint venture or corporation supplying the Contractor with labor,

materials, supplies and equipment used directly or indirectly by the Contractor in the prosecution of the Work.

- **Substantial Completion**: Substantial Completion of the Work shall occur when the MDAD Project Manager certifies that the Work is sufficiently complete, in accordance with the Contract Documents, so that the Owner may use the Work for the use for which it is intended or for such other use which the Owner in its sole discretion may determine to be appropriate under the circumstances, and after receipt of the final certificate of occupancy.

- **Work:** The services required by the Contract Documents, which includes all labor, materials, equipment, and services to be provided by the Contractor to fulfill the Contractor's duties and obligations imposed by the Contract Documents or, if not specifically imposed by the Contract Documents, which can be reasonably assumed as necessary to fulfill the intent of the Contract Documents to provide a complete, fully functional and satisfactory project.

# REVISED
# INVITATION TO QUOTE (ITQ)

## PART II. ADDITIONAL TERMS

1. **Contract Time**
Completion of the Work within the Contract Time is of the essence. The Contract Time for this Work is ***350*** calendar days from the effective date established in the Notice To Proceed.

2. **Small Business Enterprise (SBE)**

SBE Bid preference

3. **Insurance Requirements**

**A.** The contractor shall furnish to the MDAD Purchasing or MDAD Risk Management, Certificate(s) of Insurance which indicate that insurance coverage has been obtained which meets the requirements as outlined below:

1. Worker's Compensation Insurance for all employees of the vendor as required by Florida Statute 440.
2. Commercial General Liability Insurance on a comprehensive basis in an amount not less than **$5,000,000.00** combined single limit per occurrence for bodily injury and property damage. Miami-Dade County must be shown as an additional insured with respect to this coverage.
3. Automobile Liability Insurance covering all owned, non-owned and hired vehicles used in connection with the work, in an amount not less than **$5,000,000.00** combined single limit per occurrence for bodily injury and property damage.

**B**. All required insurance policies shall be issued by companies authorized to do business under the laws of the State of Florida, with the following qualifications:
The company must be rated no less than "A-" as to management, and no less than "Class VII" as to financial strength, by the latest edition of Best's Insurance Guide, published by A.M. Best Company, Oldwick, New Jersey or its equivalent, subject to the approval of the MDAD Risk Management Division OR,
The company must hold a valid Florida Certificate of Authority as shown in the latest "List of All Insurance Companies Authorized or Approved to do Business in Florida", issued by the State of Florida Department of Financial Services

**C.** Certificates of Insurance must meet the following requirements:

1. Certificate must indicate that no modification or change in insurance shall be made without thirty (30) days written advance notice to the certificate holder.
2. Signature of agent must be included.
3. If Automobile Liability Insurance is required above, insurance must be provided for all of the following vehicles:
   a) Owned
   b) Non-owned
   c) Hired
4. If General or Public Liability Insurance is required above, Certificate of Insurance must show Miami-Dade County as an additional insured for that coverage.
5. Certificate Holder must read **EXACTLY** as presented below:

**Miami Dade Aviation Department**
**Attn.: Risk Management Division**
**PO BOX 025504**
**Miami, FL 33102**

**D**. Compliance with the requirements in this Section shall not relieve the successful Bidder of its liability and obligation under this, or under any other, section of the Contract. The successful Bidder shall provide to the County the insurance documents within ten (10) business days after notification of recommendation to award. If the certificate submitted does not include the

coverages outlined in the terms and conditions of this solicitation, the successful Bidder shall have an additional five (5) business days to submit a corrected certificate to the County. Failure of the successful Bidder to provide the required insurance documents in the manner and within the timeframes prescribed within five (5) business days may result in the bidder being deemed non-responsible and the issuance of a new award recommendation.
No work shall be authorized or shall commence under the Contract until the successful Bidder has complied with the foregoing insurance requirements.

**E.** The successful Bidder shall assure that the Certificates of Insurance required in conjunction with this Section remain in full force for the term of the Contract, including any renewal or extension periods that may be exercised by the County. If the Certificate(s) of Insurance is scheduled to expire during the term of the Contract, the successful Bidder shall submit new or renewed Certificate(s) of Insurance to the County a minimum of ten (10) calendar days before such expiration.

**F.** In the event that expired Certificates of Insurance are not replaced or renewed to cover the Contract period, the County may suspend the Contract until the new or renewed certificates are received by the County in the manner prescribed herein. If such suspension exceeds thirty (30) calendar days, the County may, at its sole discretion, terminate the Contract for cause and the successful Bidder shall be responsible for all direct and indirect costs associated with such termination.

**4.Performance/Payment Bond Required**

The vendor to whom a contingent award is made after a quotation process shall duly execute and deliver to the County a Performance and Payment Bond in an amount that represents 100% of the vendor's offer price. The Performance and Payment Bond Form supplied by the County shall be the only acceptable form for these bonds. No other form will be accepted. The completed form shall be delivered to the County within the time frame agreed by the vendor and County Department after formal notice of award. If the vendor fails to deliver the payment and performance bond within this specified time, including granted extensions, the County shall declare the vendor in default of the contractual terms and conditions, and the vendor shall surrender its offer guaranty/bid bond, and the County shall not accept any offer from that vendor for a twelve (12) month period following such default.

The following specifications shall apply to any bond provided:

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

| Bond Amount | Best Rating |
|---|---|
| 500,001 to 1,500,000 | B V |
| 1,500,001 to 2,500,000 | A VI |
| 2,500,001 to 5,000,000 | A VII |
| 5,000,001 to 10,000,000 | A VIII |
| Over 10,000,000 | A IX |

**B.** On contract amounts of $500,000.00 or less, the bond provisions of Section 287.0935, Florida Statutes (2007) shall be in effect and surety companies not otherwise qualifying with this paragraph may optionally qualify by:

1. The surety company is licensed to do business in the State of Florida;
2. The surety company holds a certificate of authority authorizing it to write surety bonds in this state;
3. Providing evidence that the surety has twice the minimum surplus and capital required by the Florida Insurance Code at the time the solicitation is issued;
4. Certifying that the surety is otherwise in compliance with the Florida Insurance Code; and
5. Providing a copy of the currently valid Certificate of Authority issued by the United States Department of the Treasury under SS. 31 USC 9304-9308.

Surety insurers shall be listed in the latest Circular 570 of the U.S. Department of the Treasury entitled "Surety Companies Acceptable on Federal Bonds", published annually. The bond amount shall not exceed the underwriting limitations as shown in this circular.

**C.** For contracts in excess of 500,000 the provisions of Section B will be adhered to plus the company must have been listed for at least three consecutive years or holding a valid Certificate of Authority of at least 1.5 million dollars and on the Treasury List.

**D.** Surety Bonds guaranteed through U.S. Government Small Business Administration or Contractors Training and Development Inc. will also be acceptable.

**E.** In lieu of a bond, an irrevocable letter of credit or a cash bond in the form of a certified cashier's check made out to the Board of County Commissioners will be acceptable. All interest will accrue to Miami-Dade County during the life of this contract and/or as long as the funds are being held by Miami-Dade County.

**F.** The attorney-in-fact or other officer who signs a contract bond for a surety company must file with such bond a certified copy of power of attorney authorizing the officer to do so. The contract bond must be counter signed by the surety's resident Florida agent.

## 5.Special Provisions – Miami-Dade Aviation Department Contracts

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

1. Compliance with Regulations: The contractor (hereinafter includes consultants) will comply with the Title VI List of Pertinent Nondiscrimination Acts And Authorities, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.

2. Non-discrimination: The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Nondiscrimination Acts and Authorities, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR part 21.

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

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

5. Sanctions for Noncompliance: In the event of a contractor's noncompliance with the Nondiscrimination provisions of this contract, the sponsor will impose such contract sanctions as it or the Federal Aviation Administration may determine to be appropriate, including, but not limited to:

   a. Withholding payments to the contractor under the contract until the contractor complies; and/or
   b. Cancelling, terminating, or suspending a contract, in whole or in part.

6. Incorporation of Provisions: The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, Required Contact Provisions Issued on January 29, 2016 Page 19 AIP Grants and Obligated Sponsors Airports (ARP) unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the sponsor or the Federal Aviation Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the sponsor to enter into any litigation to protect the interests of the sponsor. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

7. During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following nondiscrimination statutes and authorities; including but not limited to:

   a. Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin);
   b. 49 CFR part 21 (Non-discrimination In Federally-Assisted Programs of The Department of Transportation—Effectuation of Title VI of The Civil Rights Act of 1964);
   c. The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
   d. Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq.*), as amended, (prohibits discrimination on the basis of disability); and 49 CFR part 27;
   e. The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 *et seq.*), (prohibits discrimination on the basis of age);
   f. Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
   g. The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, subrecipients and contractors, whether such programs or activities are Federally funded or not);
   h. Titles II and III of the Americans with Disabilities Act of 1990, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 – 12189) as implemented by Department of Transportation regulations at 49 CFR parts 37 and 38;
   i. The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123 (prohibits discrimination on the basis of race, color, national origin, and sex);
   j. Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations.;
   k. Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency

(LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);

I. Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

B. All contracts and subcontracts that result from this solicitation incorporate by reference the provisions of 29 CFR part 201, the Federal Fair Labor Standards Act (FLSA), with the same force and effect as if given in full text. The FLSA sets minimum wage, overtime pay, recordkeeping, and child labor standards for full and part time workers.

C. All contracts and subcontracts that result from this solicitation incorporate by reference the requirements of 29 CFR Part 1910 with the same force and effect as if given in full text. Contractor must provide a work environment that is free from recognized hazards that may cause death or serious physical harm to the employee. The Contractor retains full responsibility to monitor its compliance and their subcontractor's compliance with the applicable requirements of the Occupational Safety and Health Act of 1970 (20 CFR Part 1910). Contractor must address any claims or disputes that pertain to a referenced requirement directly with the U.S. Department of Labor – Occupational Safety and Health.

**6. Special Security requirements at Miami-Dade Aviation Department**

A. The Miami-Dade County Aviation Department operates under strict security regulations. These regulations involve the issuance of special identification (ID) badge after performing an FBI fingerprint based criminal history records check (CHRC) and security threat assessment (STA) vetting of individuals who are employed, hired or who are required to frequently (more than 5 times within a 90-day period) enter the restricted areas of the Miami International Airport. These credentials are required for access and are issued by the Miami-Dade Aviation Department at the current cost of $38.00 for fingerprints and $20.00 for the ID badge, per applicant. Renewals are every 2 years or less depending on employment eligibility and or contract expiration date. Fingerprint fee is for initial CHRC, break in access over 30 days, or if the badge expires. Therefore, the awarded vendor(s) under this group shall obtain and pay for ID cards for each of his /her employees and/or agents who will be frequently visiting or performing services at the Miami International Airport restricted areas. For more information concerning Credentialing, registering the company, or additional information you may contact the Miami-Dade Aviation Department ID Section at 30-876-7188 or email miaco@miami-airport.com.

B. The Vendor must follow all security procedures required of workers at MDAD. This will include his will include submitting and successfully passing a Criminal History Record's Check (CHRC) and Security Threat Assessment (STA) for SIDA/SECURE/ STERILE badge issuance. Or successfully passing vetting for pass issuance for all employees, a special driving course for those who operate a vehicle on the aircraft operating area (AOA), additional badges to work within the US Customs service area and may include bonding for a Customs I.D.

For Customs ID, call 305-345-6528 or email miamiairportsecurityoffice@cbp.dhs.gov for information. Vendors are responsible for all costs incurred in obtaining security badges. Security clearance must be obtained prior to start of contract. CBP may require new fingerprints every 2 years or upon badge renewal or break in access.

When performing work at the County's Aviation Department, the awarded vendor(s) shall acquire approval to access the Airside Operations Area (AOA). Vendor(s) shall gain access to the AOA and shall comply with all AOA drivers training requirements and endorsements for each employee assigned to MIA. (Note: Section - Insurance requirements)

C. Vendor(s) and their sub-contractors are required to register their companies separately as only employees who are actively on payroll are authorized to obtain ID badges with the MDAD

Credentialing section. Miami Dade Aviation Department (MIA) are subject to complying with ISO 14001 regulations regarding Environmental responsibility. Vendor(s) will receive training and familiarization about the ISO 14001 protocol from the Miami Dade Aviation Department.

# REVISED
# INVITATION TO QUOTE (ITQ)

## PART III SCOPE OF WORK/TECHNICAL SPECIFICATIONS

1. **PURPOSE**

**Project No. 09**: 2021 15 PBBs Replacement at Concourses D, E, F, and H.

The Owner, Miami Dade Aviation Department (MDAD) is requesting prices for the removal and disposal of fifteen (15) existing Passenger Boarding Bridges (PBB), and for the design, fabrication, transportation, and installation of fifteen (15) new 3 Tunnel PBBs including, at a minimum, brake covers, fixed walkways, baggage chutes, and ground support service equipment at Miami International Airport Gates D10, D12, D15, D17, D19, E5, , H3, H5, H6, H7, H9, H12, H15, H17 and F21 which includes design and installation of new foundations in accordance MDAD Design Guidelines.

All work shall be in accordance with this ITQ, SECTION 14950 - AIRCRAFT PASSENGER BOARDING BRIDGES - APRON DRIVE (Attachment A) and Miami Dade County Contract 9427-1/2-1.

It shall be the Bidder's responsibility to evaluate the site constraints of each gate location, the conditions affecting the removal of the existing PBBs, securing the building at each Gate, power supply and any other physical or material requirement necessary to perform the work. Note that utilities at any gate location which serve other gates and/or tenants shall not be interrupted; any temporary re-routing shall be the Contractor's responsibility. Site Visits will be conducted in conjunction with the Pre-Bid Meeting, affording Bidders the opportunity to inspect all Gates and the existing PBBs.

To minimize disruption, only three Gates may be closed at a time and the new PBB installation shall be completed and PBB returned to 'operational' status before another Gate may be closed, unless otherwise approved or directed by MDAD Project Manager or designee. Gate availability and order of gate closures shall be coordinated with Airside Operations. PBB shipping/delivery shall be scheduled to coincide with the Gate closure; MIA has no facility for on-site storage of PBBs pending installation.

2. **DESCRIPTION OF PHASES AND DELIVERABLES**

**This project will consist, at a minimum, of the following activities for completion:**

A. **Phase 1 (60 DAYS with two activities listed below which are expected to run concurrently):**
   1. PBB Site Survey, Field Analysis and Report: Site survey, field analysis to include at minimum, existing utility verification, foundation suitability verification, soil testing, sub surface investigation, underground utility locations up to and including Ground Penetrating Radar and excavation as necessary and report detailing existing conditions and preliminary designs for any new foundations listed in the bid documents and if necessary, preliminary designs for any needed foundation retrofits and/or existing utility upgrades for each PBB location listed in the documents.
   2. PBB design and shop drawings for all PPBs submitted and approved by MDAD. *Note: It is in the best interest of the Contractor to factor for this Phase approximately 14 calendar days for turnaround by MDAD for any review/approval submitted by the Contractor.*

B. **Phase 2 (90 DAYS):** Manufacturing, foundation design, foundation retrofit, utility upgrade designs and any preliminary work for upgrades that will not greatly impact existing gate operations. Final design for utility enhancements will be performed under a Dedicated Allowance account at the sole discretion of MDAD.

C. **Phase 3 (198 DAYS, 35 DAYS PER GATE-Staggered with 71 days for F 21 including Foundation)**: Delivery, Installation and Commissioning of PBBs, 3 Gate locations at a time; foundation retrofits and any other enhancement work which could not be completed without a major interruption in Airline gate use prior to the Scheduled PBB installation.

***Note:*** *Foundation retrofits may be completed concurrent with the PBB installation, on a pullback basis while*

*the gate is in operation, or with 3-day max closures at an existing PBB location as approved by MDAD Project Manager. Preferably Monday through Wednesday of any given week.*

**D. EQUIPMENT AND ACTIVITIES: The Vendor shall provide and complete the following equipment/items and activities:**

1. Cavotec Inet Service Transport Unit (STU) or approved equals. The STU shall be installed on the roof of the PBBs, all bridge and ancillary equipment power shall be incorporated into the STU.

2. Cavotec Inet PCAir Air Handling Unit (AHU) or approved equals (PAC45 for D12, D15, D17, D19, E5, F21, H3, H5, H6, H7, H9, H15, H17 and PAC90 for H12 and D10) and required hoses/nozzles. AHU to be sized to maintain 75°F cabin temperature with a full passenger and crew loaded for the aircraft noted above. The PCA units must be designed to work with the current central plant glycol systems except F21 which shall utilize Point of Use equipment. Contractor is responsible to survey the existing equipment and its control system during the site visit(s).

3. PBB and walkway Precool air conditioning system shall utilize point-of use precool units, with one, two or more separate AHUs if needed, one for the PBB and fixed walkway, one for the PBB Cab and shall be able to cool and maintain 75-Degree Fahrenheit temperature inside the PBB and walkways within 5 minutes of activation. The precool units should be wired and/or controlled with 2-hour timers.

4. Cavotec INET 400 Hz gate box or approved equals (90KVA for D12, D15, D17, D19, E5, F21, H3, H5, H6, H7, H9, H15, H17) and (180 KVA for D10 and H12) with extended cables and cable hoists. Adequate lengths shall be provided to ensure service of all aircraft identified. The 400Hz units must be designed to work with the current 400Hz plant systems where they are currently in use except F21 which shall utilize Point of Use equipment. Contractor is responsible to survey the existing equipment and its control system during the site visit(s).

5. Boom-Air hose management unit or approved equal for all PBBs, consisting of unit, for 2 unit PBBs for the second unit provide an electro mechanical hose reel system with a start stop station mounted at the wheel bogie control station location which are based on the maximum size aircraft that the system is to supply for each PBB, providing adequate length hoses to service all aircraft.

6. Baggage chutes (Nova Slide or approved equal) attached to the PBB service stairs.

7. Potable water cabinets for all CCF and CCH gates, Semler or approved equals.

8. The PBBs shall be designed and fabricated for the installation of a roof mounted service transport unit (STU) and all necessary components to provide 400 Hz and PCAir services at each Gate. All STU brackets and supports, fan curbs, and equipment support beams for STUs, PCAir units, gate boxes, precool units, cable hoists and or any other ancillary equipment that is required to be mounted to the PBB or walkways shall be detailed on the shop drawings and factory installed.

9. Contractor is responsible to survey the existing equipment and its control system and verify that existing conditions/services/utilities are sufficient for and compatible with the requirements of the new PBBs, including height and location of building portal and all foundations/piers and provide upgrades or replacements where required.

10. Contractor shall utilize Exhibit 2 (PBB Locations) and perform site surveys for all locations for their design.

11. The price for each new PBB shall include the removal and legal disposal of the existing passenger boarding bridges, fixed walkways and any ancillary equipment not requested for salvage by MDAD, in accordance with SECTION 14950 - AIRCRAFT PASSENGER BOARDING BRIDGES - APRON DRIVE (Attachment A).

12. Contractor shall prepare Safety Plans which shall delineate plan for maintenance traffic for work area under this RTQ which shall be submitted for approval by MDAD Airside Operations. Contractor shall comply with all safety regulations. Maintenance Of Traffic (MOT) barricades shall be required at all work sites. Barricades, as shown on the approved Safety Plans, shall not be moved, or removed without the approval of MDAD Airside Operations. All gate closures shall be coordinated with and approved by MDAD Airside Operations. Jersey curb barricades, provided by the Contractor, shall be concrete or water-filled plastic. All work shall be completed, inspected, and approved prior to removing safety measures.

13. A Hot Work Permit is required for any operation that involves open flames or produces heat and/or sparks. This includes, but is not limited to, Brazing, Cutting, Grinding, Flame-Soldering, Pipe Thawing, Torch-Applied Roofing, and Welding (refer to Exhibit 4).

14. All Contractors' site personnel shall comply with MDAD security ID badge ITQ PART IV **#6 Special Security requirements at Miami-Dade Aviation Department** requirements as well as all applicable FAA, TSA/DHS/CBP, and OSHA procedures and requirements.

15. The Contractor shall complete an MDAD Shut-down form (refer to Exhibit 3) and coordinate with Sylvia Montero, MDAD Construction Manager, 305-876-8314, to schedule all shut-downs/closures and re-activations of the various services, utilities, and security/safety measures with Airside Operations, Terminal Operations, Honeywell, Dash Door, Black Box, and others as needed, appropriate to each system. It shall be the Contractor's responsibility to provide sufficient notice to all concerned parties when a shut-down is needed so there will be no Project delay for either closure or re-activation.

16. Interference with Existing Utilities, Controls, FAA Navaids, and NOAA (Weather Bureau) Facilities: Prior to removing any existing PBB, the Contractor shall disconnect and make safe all utilities including, but not limited to, electric, 400 Hz, water, phone, fire and passenger access systems. The Contractor shall protect from damage utilities, foundations, walls or other parts of adjacent, abutting or overhead buildings, railroads, bridges, structures, surface and subsurface structures at or near the site of the Work and shall repair or restore any damage to such facilities, resulting from failure to exercise reasonable care in the performance of the Work. If the Contractor fails or refuses to repair any such damage promptly, as determined by Owner, the Owner may have the necessary work performed and charge the cost thereof to the Contractor. Attention of the Contractor is specifically directed to the need for careful control of all aspects of his work to prevent damage to cables, ducts, water mains, sewers, fire mains, telephone cables, fuel lines, radar cables, and any other underground utilities and structures. Before commencing work in any given area, the Contractor shall carefully review the as-built Plans, survey and search the site for utility locations, and determine possible utility conflicts. All known above and underground utilities, including, but not limited to, electrical, telephone, communications, lighting cables, fuel lines, sewer, drainage and water pipes, and other existing structures, etc., are shown on the as-built Plans, but no guarantee is implied that the information is accurate. It shall be the responsibility of the Contractor to verify the location of all such utilities, structures, etc., using magnetic and electronic detectors and by hand excavation or other appropriate measures before performing any work that could result in damage to such utilities or structures. The Contractor shall, make a thorough search of the particular location for underground utilities, structures, etc., whether or not shown on the drawings, before excavation work is commenced in any particular location. To this end the Contractor shall provide and maintain throughout the term of the Contract, electronic and magnetic detecting devices capable of locating underground utilities, etc. The Contractor shall, after locating primary and critical existing utilities, mark their location with indelible material or other means satisfactory to the MDAD Project Manager and maintain above ground physical identification during the work.

In the event of damage to, or accidental disruption of utilities or other facilities as a result of the Contractor's operations, the Contractor shall take immediate steps to repair or replace all damage and to restore all services. Further, the Contractor shall engage any additional outside services which may be necessary to prosecute repairs on a continuous "around the clock" basis until services are restored. The Contractor shall also provide and operate any supplemental temporary services to maintain uninterrupted use of the facilities. All costs involved in making repairs and restoring disrupted service resulting from the Contractor's work shall be borne by the

Contractor and the Contractor shall be fully responsible for any and all claims resulting from the damage.

The Contractor is hereby informed that there are installed on the Airport, and within the site, FAA NAVAIDS, including without limitations, FAA NAVAIDS such as ASR, IHF, and VHF receivers and transmitters, U.S. Weather Bureau Facilities, and electronic cables and controls relating to such NAVAIDS and facilities. Such NAVAIDS, Weather Bureau, and other facilities and electric cables are vital to the operation of the Airport and must be fully protected during the entire project. Work under this Contract can be accomplished in the vicinity of these facilities and cables only at approved periods of time. Approval is subject to withdrawal at any time because of changes in the weather, emergency conditions, and for any other reason determined by the MDAD Project Manager. Any instructions to the Contractor to clear any given area, at any time, given by the MDAD Project Manager or by any authority designated by the MDAD Project Manager such as the Federal Aviation Administration by any means including radio, shall be immediately executed. Construction work will resume in the cleared area only when such instructions are issued by the MDAD Project Manager.

Power and control cables leading to and from any FAA NAVAIDS, Weather Bureau, or other facilities will be protected from any possible damage from the elements or due to any crossing of these facilities by equipment.

The Contractor is hereby notified that he shall be required to immediately repair, at his own expense, with identical material by skilled workers, any underground cables serving FAA NAVAIDS, Weather Bureau and other existing FAA facilities which are damaged by his workers, equipment or work, and that prior approval of the FAA must be obtained for materials, workers, time of day or night, method of repairs, and for any temporary or permanent repairs the Contractor proposes to make to any FAA NAVAIDS and facilities damaged by the Contractor.

Damaged FAA cables (controls, NAVAIDS and NOAA) shall be repaired in accordance with the requirements of FAA-SO-STD-71 Specifications "Installation and Splicing of Underground Cables". Prior approval of the MDAD Project Manager must be obtained for the materials, workers, time of day or night, and for the method of repairs for any temporary or permanent repairs the Contractor proposes to make to any Airport facilities, cables, or existing utilities damaged by the Contractor. The FAA Airways Facilities Sector Field Office (AFSFO) Manager shall have the discretion of determining who shall perform repairs of damaged cables.

17. Prior to removing any existing PBB the treadle mat within the PBB entry shall be disabled, disconnected, and removed for storage at an Owner-designated location. Flashing at the PBB-building interface shall be removed for legal disposal off-site by the Contractor.

18. The Contractor shall hire a Florida Registered Engineer to provide calculations that verify that the existing foundations and anchor systems are adequate for the new loads imposed by the new PBBs in accordance with the current Florida Building Code. Calculations shall be submitted to the Authorities Having Jurisdiction (AHJ) for permit. Should the existing foundation not be adequate to sustain the new PBB loads, the foundation shall be retrofitted. Where existing foundations are to be reused and/or retrofited, anchor bolt nuts and washers shall not be burned off but shall be replaced on each bolt after removal of the rotunda and/or walkway column. Concrete or water-filled plastic jersey barriers shall be used to protect anchor bolts for re-use with the new replacement PBB.

19. The Contractor is responsible for securing all necessary permits for any of the work performed under this ITQ and that licensed contractors shall perform all work for which a license is required pursuant to 489, Fl. Statute.

20. Remove and deliver to MDAD any part, component, or ancillary equipment designated for salvage by MDAD Project Manager.

21. Existing PBB and all associated components including walkway which are not dedicated for salvage, shall be removed, and legally disposed of offsite by the Contractor.

22. Building doorway openings shall be made safe at all times. After removal of the PBB, the portal exterior shall be covered with plywood and made weather tight until the new PBB is installed. Contractor shall take measures as required to

adequately protect and secure the opening in the event of a hurricane warning and/or hurricane. Hurricane shutters shall have Miami-Dade County product approval. The Contractor shall hire a Florida Registered Engineer to design and provide Construction Documents for the doorway closure in accordance with the current Florida Building Code. Drawings shall be submitted to the AHJ for permit.

23. If required, new foundations and anchor bolts are to be provided for any new rotundas and fixed walkway columns. The Contractor shall verify coordinates and elevations of the tops of foundations, the finish floor elevation at the concourse doorways, and the existing anchor bolt patterns. The Contractor shall hire a Florida Registered Engineer to design and provide Construction Documents for the new foundations in accordance with the current Florida Building Code. Drawings shall be submitted to the AHJ for permit. Geotechnical borings and a report will be required for any new foundations.

> **Geotechnical borings and a report will be required for any new foundations and foundation retrofits.**

24. Shop drawings shall detail proposed rotunda and walkway column lengths, including anchor bolt patterns. All anchor bolts shall have three nuts, 1 leveling, 2 locking including plate washers. Contractor shall provide and place non-metallic, non-shrink grout below all base plates.

25. Where necessary either because it is existing or it is proposed in the Exhibit 2 (PBB Locations) provide a fixed walkway from the building to the rotunda, and support beam/column(s) to replace existing. The walkway shall impose no load on the building. The columns shall utilize the existing foundations and anchor bolts where possible. Walkway support at the rotunda shall be provided by a haunch. The fixed walkway shall match the exterior and interior finishes of the PBB. The fixed walkway shall have fall protection cables on the roof, compatible with the system on the PBB, from the face of the building to the rotunda.

26. Existing power and communications at Concourses where PBBs are to be installed shall be evaluated by the Contractor and the Owner for sufficiency for the replacement PBBs. The Contractor shall be responsible for all modifications necessitated by PBB operation(s) and to meet electric codes. Electrical modifications within the building may require Miami Dade County Building Department permit(s).

27. Automatic door treadle mat at the concourse/PBB interface shall be re-installed and reactivated, and status of the Matrix security system shall be coordinated with the Owner. Building openings shall be made secure at all times.

28. New exterior and interior flashing shall be provided and installed at the building/PBB interface and any walkway/rotunda interface.

29. All worksites shall be swept clean daily and all debris removed by the Contractor. MDAD Airside Operations and PBB Maintenance Divisions personnel will inspect the site and the operation of the PBB prior to returning the Gate to 'operational' status.

3. **SCHEDULE:**

A. The Project shall be completed within 350 calendar days from issuance of Notice to Proceed. Attached is Exhibit 1 (Preliminary Schedule) is the preliminary schedule which will be finalized by Awarded Bidder and MDAD at the time of award and prior to the Notice to Proceed. The final schedule may be subject to change at the sole discretion of MDAD.

B. The Contractor shall submit for approval, within 15 days after award and issuance of the NTP, a Progress Schedule reflecting the work to deliver the items in the Schedule of Prices Bid. The Progress Schedule submitted for approval shall include the shop drawings submittal date and review period and sequence of construction activity for each Gate including manufacturing times, any upgrades and/or foundation work if required. A revised Schedule shall be submitted showing all progress and any revisions to future work for approval with each application for payment.

C. The Contractor shall prosecute the Work in accordance with the approved Schedule or most recently approved revision to the Schedule. In the event that progress along the critical path is delayed, the Contractor shall revise their planning to include additional forces, equipment, shifts or hours as necessary to meet the time or times of completion specified in this Contract at no additional cost to the Owner. In addition, the Contractor shall revise their schedule to reflect these recovery actions and submit it to the Owner for review and approval it being understood that such approval will be as to the format and composition of the schedule and not the Contractor's means and methods. Additional costs resulting therefrom will be borne by the Contractor. Delayed progress is defined as:

1. A delay in the start or finish of any activity on the critical path (critical path is defined as the path with the least amount of float) of the approved Schedule or most recently approved revision to the Schedule; or
2. A delay in the start or finish of any non-critical activity which consumes more than the available float shown on the approved Schedule or most recently approved revision to the Schedule, thereby making the activity critical and late; or
3. A projected completion date shown on a schedule update which is later than the contractual completion date; or
4. Any combination of the above.

D. Failure of the Contractor to comply with the requirements under this section will be grounds for determination that the Contractor is not prosecuting the Work with such diligence as will ensure completion within the Contract Time. Upon such determination, the Owner may terminate the Contractor's right to proceed with the Work, or any separate part thereof, in accordance with the Contract Documents. If in the Contractor's estimation, the cause(s) of delay are beyond the Contractor's control, the Contractor shall adhere to the sections of the Contract Documents related to extensions of time, claims and others as appropriate.

E. The Contractor shall be responsible for scheduling and coordinating the work of all crafts and trades, subcontractors and suppliers, required to perform the Work and to complete the Work within the prescribed time. Any inefficiency or loss of productivity in the labor, materials, or special equipment of the Contractor or its subcontractors of any tier, from any cause, shall be the responsibility of the Contractor. No reimbursement of these or any other costs can be requested by or granted to the Contractor or any of its subcontractors of any tier for inefficiency or loss of productivity in labor, materials, or special equipment. Additional costs may only be paid to the Contractor as a result of additional Work added to the Contract scope of work.

4. **EXTENSIONS OF TIME AND CLASSIFICATION OF TYPES OF DELAYS**

A. Once a delay has been identified and it has been established through a scheduling analysis that a delay affects the Project's end date or contractually mandated milestone date, the delay must be classified to determine responsibility and to compute damages, if any. Before the Contractor can submit a request for time extension, claim or any request for additional compensation involving or related to time, the Contractor must classify the delay(s) in accordance with the following classifications. These delay classifications shall be used by the Owner and the Contractor in resolving any time-related disputes. Delays fall into three basic categories: non-excusable, excusable, and compensable.

1. Non-excusable delays are those delays to the critical path which were foreseeable at the time of contract award or delays caused by the Contractor due to the Contractor's fault or negligence or his/her own inefficiencies or problems, due to his/her inability to coordinate subcontractors and/or other flaws in his/her planning. In these types of delays the Contractor is not entitled to extra time or compensation and the Owner may be allowed to assess Liquidated Damages or actual damages, depending on the contract provisions.
2. Excusable delays are those delays to the critical path beyond the Contractor's control and without the active interference of the Owner, such as extreme weather (force majeure), strikes and delays caused by third parties (i.e. not the Contractor or the Owner). Contractors are granted a time extension but no additional compensation for the extended time of performance for excusable delays.
3. Compensable delays are delays to the critical path caused by active interference or participation of the Owner or Owner's consultant. Examples of compensable delays are failure of the Owner to provide right-of-way, introducing late design changes, late review of shop drawings by the Owner and failure of the Owner to coordinate the work of various prime Contractors. In the case of a compensable delay, the compensation for the extended period of performance may cover the direct cost due as a result of the changes.

4. Concurrent delays involve two or more delays to the critical path occurring at the same time, either of which, had it occurred alone, would have affected the end date of the Project. In that event, the Contractor's sole remedy is a time extension and relief of Liquidated Damages with no compensation for extended cost for the concurrency delay period.
5. The compensability of concurrent delays depends on the types of delays involved. The following shall determine the effects of concurrent delays on time extensions and compensable costs:
    i. EXCUSABLE DELAY CONCURRENT WITH A NON-EXCUSABLE DELAY. For excusable delays concurrent with non-excusable delays, the Contractor is entitled to a time extension only. For example, it rains the day footings are to be excavated (excusable delay) but the excavation equipment was down for repairs (non-excusable delays).
    ii. NON-EXCUSABLE DELAY CONCURRENT WITH A COMPENSABLE DELAY. For non-excusable delays concurrent with compensable delays, the Contractor is entitled to a time extension only. For example, if the Owner introduces a design change for a beam but the Contractor has failed to submit the shop drawings for said beam in a timely manner. This would be an example of a non-excusable delay (late shop drawings) concurrent with a compensable delay (Owner introducing design change).
    iii. EXCUSABLE DELAY CONCURRENT WITH A COMPENSABLE DELAY. For excusable delays concurrent with compensable delays, the Contractor is entitled to a time extension only. For example, the Owner does not provide the necessary right-of-way to begin construction (compensable delay) but the Contractor's forces are on strike (excusable delay).

B. Time Extensions: The Contractor may be granted an extension of time and will not be assessed Liquidated Damages for any portion of the delay in completion of the Work, arising from acts of nature, acts of the public enemy, fires, floods, epidemics, quarantine restrictions, freight embargoes, strikes, labor disputes, or weather more severe than the norm, provided that the aforesaid causes were not foreseeable and did not result from the fault or negligence of the Contractor, and provided further that the Contractor has taken reasonable precautions to prevent further delays owing to such causes, and has given to the MDAD Project Manager immediate verbal notification, with written confirmation within 48 hours, of the cause or causes of delay. Within thirty (30) days after the end of the delay, the Contractor shall furnish MDAD Project Manager with detailed information concerning the circumstances of the delay, the number of days actually delayed, the appropriate Contract Document references, and the measures taken to prevent or minimize the delay. All requests for extension of time shall be submitted in accordance with the Contract Documents. Failure to submit such information will be sufficient cause for denying the delay claims. The Owner will ascertain the facts and the extent of the delay and its findings thereon will be final and conclusive subject to the dispute provisions in the Contract Documents. The extensions of time granted for these reasons shall be considered excusable and shall not be the basis for any additional compensation.
    1. Weather more severe than the norm shall apply only as it affects particular portions of the Work and operations of the Contractor, as determined by the MDAD Project Manager. Weather more severe than the norm is defined as any situation exceeding the mean data as recorded by The National Climatic Data Center, Asheville, North Carolina and published by the National Oceanic and Atmospheric Administration (This data is taken from the table of normals, means, and extremes in the latest version of the "Local Climatological Data, Annual Summary with Comparative Data, Miami, Florida"). For the calculation of delays due to rain, precipitation of 0.01 inches or more a day shall be considered to be a rain day if the rain actually prevented the Contractor from performing work. The effects of weather less severe than the norm may be taken into account in granting time extensions at the Owner's sole discretion.
    2. An extension of time will not be granted for a delay to the critical path caused by a shortage of materials, except Owner-furnished materials, unless the Contractor furnishes to MDAD documentary proof that he has diligently made every effort to obtain such materials from every known source within reasonable reach of the Work. The Contractor shall also submit proof, in the form of a CPM network analysis data, that the inability to obtain such materials when originally planned, did in fact cause a delay in final completion of the Work which could not be compensated for by revising the sequence of his operations. Only the physical shortage of material will be considered under these provisions as a cause for extension of time. No consideration will be given to any claim that material could not be obtained at a reasonable,

practical, or economical cost, unless it is shown to the satisfaction of the MDAD Project Manager that such material could have been obtained only at exorbitant prices, entirely inconsistent with current rates taking into account the quantities involved and the usual practices in obtaining such quantities.

C. Delays Caused the Owner: If the Contractor's performance of the Work along the critical path is delayed by any condition or action directly caused by the Owner, and which was not foreseeable by the Contractor at the time the Contract was entered into, the Contractor shall, provide notification in accordance with the Contract Documents, of any such delay and of the anticipated results thereof. The Contractor shall cooperate with the Owner and use its best efforts to minimize the impact on the schedule of any such delay.

D. Delays Beyond Contractor's Control Not Caused by Consultant and/ or the Owner: If Contractor's performance of the Work along the critical path is delayed by any conditions beyond the control and without the fault or negligence of Contractor and not caused by the Owner, and which was not foreseeable by Contractor at the time this Contract was entered into, Contractor shall, provide immediate verbal notification with written notification in accordance with the Contract Documents, of any such delay and of the anticipated results thereof. Within two (2) calendar days of the termination of any such delay, Contractor shall file a written notice with the MDAD Project Manager specifying the actual duration of the delay. If the Owner determines that the delay was beyond the control and without the fault or negligence of the Contractor and not foreseeable by the Contractor at the time this Contract was entered into, the Owner will determine the duration of the delay and may extend the time of performance of this Contract provided, however, that Contractor shall cooperate with the Owner and use its best efforts to minimize the impact on the schedule of any such delay. These delays shall be considered excusable and the Contractor shall not be entitled to, and hereby expressly waives recovery of, any damages suffered by reason of the delays contemplated by this paragraph and extension of time shall constitute Contractor's sole remedy for such delays.

E. In addition to the delays in the Work specified in this section, delays in the Work directly caused by an act or omission by an owner of an adjoining property will not be considered an Owner-controlled delay. An owner of an adjoining property is a person, firm, corporation, partnership, or other organization who either owns or occupies, or both, structures or parcels or both, immediately adjacent to the Work Site. Extension of time for those delays will be considered excusable and shall be treated as specified in this Section, provided that:
    1. The Contractor has, in accordance with this Section, given to the MDAD Project Manager immediate verbal justification, with written confirmation within forty-eight (48) hours of the delay; and
    2. The Contractor establishes, to the satisfaction of the MDAD Project Manager, that:
        i. The delay was caused directly by an act or omission by the owner of the adjoining property; and
        ii. The Contractor has taken reasonable precautions and has made substantial effort to minimize the delay.

F. A Work Order will be furnished to the Contractor within a reasonable period of time of a request for extension of time, specifying the number of days allowed, if any, and the new dates for completion of the Work or specified portions of the Work. All requests for time extension shall be in accordance with the Contract Documents.

G. For the proper format to be used in submitting requests or claims for time extensions, refer to applicable sections of the Contract Documents.

H. Extensions of time shall be in accordance with Section 9-3 of the Code of Miami-Dade County, as applicable.

5. **FINAL ACCEPTANCE:**

A. When the Contractor believes that all the Work or designated portion thereof required by the contract is completed pursuant to Section 1.10 of Attachment A.

B. If any of the conditions listed in this Section are not met and the Work has not been completed, or the Contractor determines that the final Punch List cannot be completed within sixty (60) days, the Contractor shall continue work, reducing the number of items on the Punch List that were not met. Additional inspections shall be scheduled as necessary until the work is completed. However, costs incurred by the Owner for any inspections beyond a second inspection will be charged back to the Contractor.

C. In the event the Contractor fails to complete the work within the period specified in the Contract for completion, the Contractor shall be liable for Liquidated Damages and the Owner has, as its option, the right to, after ten (10) calendar

days notice to the Contractor, have the work performed by others and backcharge the Contractor for all Direct and Indirect Costs related to performing this work. In the event that the Owner chooses to have the work completed by others, there shall not be any further non-excusable delays charged to the Contractor beyond the ten (10) days following notice to the Contractor. However, the Contractor shall not be relieved of any non-excusable delays incurred through the date of termination. The Punch List and the Contract shall remain open until all the Work is complete and accepted. The current retainage will be used to offset any Liquidated Damages and any backcharges, after which, any surplus retainage will be released to the Contractor. If the retainage is insufficient to cover the Liquidated Damages and any backcharge, the Owner will bill the Contractor for the balance and the Contractor shall promptly remit to the Owner an amount equal to the billing.

D. Final Completion: When the Owner or MDAD Project Manager considers all Work indicated on the Punch List to be complete, the Contractor shall submit written certification that:
    1. Work has been inspected for the compliance with the Contract Documents.
    2. Work has been completed in accordance with the Contract Documents, and that deficiencies listed within the Certificate of Substantial Completion and its attachments have been corrected.
    3. Work is completed and ready for final inspection.

E. Should the Owner and/or MDAD Project Manager inspection find that Work is incomplete, he will promptly notify the Contractor in writing listing all observed deficiencies. The Contractor shall be responsible for all Direct and Indirect Costs to the County resulting from the Contractor's failure to complete the Punch List items within the time allowed for completion.

F. The Contractor shall remedy deficiencies and send a second certification. Another inspection will be made that shall constitute the final inspection. Provided that work has been satisfactorily completed, the MDAD Project Manager will notify the Contractor in writing of Final Acceptance as of the date of this final inspection.

G. Prior to Final Acceptance, the Contractor shall deliver to the MDAD Project Manager complete As-Builts, all approved Shop Drawings, maintenance manuals, pamphlets, charts, parts lists and specified spare parts, operating instructions and other necessary documents required for all installed materials, equipment, or machinery, all applicable warranties and guarantees, and the appropriate Certificate of Occupancy.

H. Upon notification of Final Acceptance to the Contractor, the MDAD Project Manager will request and consider closeout submittals from the Contractor including but not limited to the final Contractor's Affidavit and Release of All Claims.

I. The Contractor, without prejudice to the terms of the Contract, shall be liable to the Owner for latent defects, fraud, or such gross mistakes as may amount to fraud, or as regards the Owner's rights under any warranty or guaranty.

J. Re-Inspection Fees: Should the status of completion of the Work require re-inspection of the Work by the Owner and the MDAD Project Manager due to failure of the Work to comply with the Contractor's representations regarding the completion of the Work, the Owner will deduct from the final payment to the Contractor, fees and costs associated with re-inspection services in addition to scheduled Liquidated Damages.

## 6. USE AND POSSESSION

The Owner shall have the right to beneficially occupy, take possession of or use any completed or partially completed portions of the Work. Such possession or use will not be deemed an acceptance of work not completed in accordance with the Contract. While the Owner is in such possession, the Contractor, notwithstanding the provisions of the Contract Documents, will be relieved of the responsibility for loss or damage to the Work other than that resulting from the Contractor's fault or negligence or breach of warranty. If such prior possession or use by the Owner delays the progress of the Work or causes additional expense to the Contractor, a Contract change in the Contract price or the time of completion will be made and the Contract will be modified in writing accordingly.

## 7. LIQUIDATED DAMAGES

A. The parties to the Contract agree that time, in the completion of the Work, is of the essence. The Owner and the Contractor recognize and agree that the precise amount of actual damages for delay in the performance and completion of the Work is impossible to determine as of the date of execution of the Contract and that proof of the precise amount

will be difficult. Therefore, the Contractor shall be assessed Liquidated Damages on a daily basis for each Day that individual milestones, both interim and cumulative as specified in the Contract Documents, are not timely achieved or that Contract Time is exceeded due to a non-excusable delay. These Liquidated Damages shall be assessed, not as a penalty, but as compensation to the Owner for expenses which are difficult to quantify with any certainty and which were incurred by the Owner due to the delay. Therefore, in accordance with this section (Liquidated Damages) failure to complete the work within the stipulated PBB Installation phases and/or overall completion indicated preliminary schedule, or the project schedule as approved by MDAD: the Contractor and his sureties will be assessed Liquidated Damages as follows:

1. An amount of $332.00 per calendar day will be assessed for every day beyond the approved scheduled installation duration if the PBB at the affected gate location fails to return to service, not as a penalty, but as liquidated damages for each day or fraction thereof of delay until the PBB is complete and in service.
2. An amount of $500.00 per calendar day will be assessed for every day beyond the approved scheduled project completion date, not as a penalty, but as liquidated damages for each day or fraction thereof of delay until the milestone delivery date is met.

B. The amount of Liquidated Damages assessed shall be an amount, as stipulated above, per day for each calendar day that individual milestones as specified in the Contract are not timely achieved or that the Project is delayed due to a non-excusable delay.

C. In the event the Contractor fails to perform any other covenant or condition (other than time-related) of this Contract relating to the Work, the Contractor shall become liable to the Owner for any actual damages which the Owner may sustain as a result of such failure on the part of the Contractor. The Owner reserves the right to retain these amounts from monies due the Contractor.

D. Nothing in this Section shall be construed as limiting the right of the Owner to terminate the Contract and/or to require the Surety to complete said Project and/or to claim damages for the failure of the Contractor to abide by each and every one of the terms of this Contract as set forth and provided for in the Contract Documents.

## 8. CLAIMS AND DISPUTES

A. Notice of Claims

1) The Contractor will not be entitled to additional time or compensation otherwise payable for any act or failure to act by the Owner, the happening of any event or occurrence, or any other cause, unless he shall have given the MDAD Project Manager a written notice of claim therefore as specified in this Section.

2) The Contractor shall provide immediate verbal notification with written confirmation within forty-eight (48) hours of any potential claims and of the anticipated time and/or cost impacts resulting thereof. The written notice of claim shall set forth the reasons for which the Contractor believes additional compensation and/or time will or may be due, the nature of the costs involved and the approximate amount of the potential claim.

3) It is the intention of this Section, that differences between the parties arising under and by virtue of the Contract shall be brought to the attention of the MDAD Project Manager at the earliest possible time in order that such matters may be settled, if possible, or other appropriate action promptly taken.

4) The notice requirements of this Section are in addition to those required in other Sections of these Contract Documents.

5) The Contractor shall segregate all costs associated with each individual claim including but not limited to labor, equipment, material, subcontractor and supplier costs, and all other costs related to the claim. In the event that the Contractor has multiple claims, the Contractor will segregate each claim individually including the respective costs associated with each claim. Failure to segregate claims and their respective costs will be grounds for the Owner's rejection of the claim. No "total cost claims" shall be allowed under this Contract.

6) The Contractor must maintain a cost accounting system as a condition for making a claim against the Owner. The cost accounting system must segregate the costs of the work under the Contract (non-claims-related) from claims-related

and other Contractor costs through the use of a job cost ledger and be otherwise in compliance with general accounting principles.

7) If the Owner decides to pay all or part of a claim for which notice was not timely made, the Owner does not waive the right to enforce the notice requirements in connection with any other claim.

8) Inasmuch as the notice of claim requirements of this Section are intended to enable the MDAD Project Manager to investigate while facts are fresh and to take action to minimize or avoid a claim which might be filed thereafter, the Contractor's failure to make the required notice on time is likely to disadvantage the Owner. Therefore, a claim that does not comply with the notice requirements above shall not be considered unless the Contractor submits with his claim proof showing that the Owner has not been prejudiced by the Contractor's failure to so comply and, in the event the Owner has been prejudiced by the Contractor's failure to submit a timely notice of claim, the Owner will reduce any equitable adjustment claimed by the Contractor to reflect the damage.

B. Claim Submittals

1) Claims or requests for equitable adjustments filed by the Contractor shall be filed in full accordance with this Section no later than 30 calendar days after the act giving rise to the claim and in sufficient detail to enable the Owner to ascertain the basis and amount of said claims. In the case of continuing or on-going claim events, the Contractor shall be allowed to periodically amend his claim to more accurately reflect the impact of said claim, until the end of the claim event. No claims for additional compensation, time extension or for any other relief under the Contract shall be recognized, processed, or treated in any manner unless the same is presented in accordance with this Section. Failure to present and process any claim in accordance with this Section shall be conclusively deemed a waiver, abandonment or relinquishment of any such claim, it being expressly understood and agreed that the timely presentation of claims, in sufficient detail to allow proper investigation and prompt resolution thereof, is essential to the administration of this Contract.

2) The Owner will review and evaluate the Contractor's claims. It will be the responsibility of the Contractor to furnish, when requested by the Architect/Engineer, such further information and details as may be required to determine the facts or contentions involved in his claims. The cost of claims preparation or Work Order negotiations shall not be reimbursable under this Contract.

3) Any work performed by the Contractor prior to Notice-to-Proceed (NTP) shall not be the basis for a claim from the Contractor of any kind.

4) Each claim must be certified by the Contractor as required by the Miami-Dade Code, False Claims Act (see Code Section 21-255, et seq.), and accompanied by all materials required by Miami-Dade County Code Section 21-257. A "certified claim" shall be made under oath by a person duly authorized by the claimant, and shall contain a statement that:

    a. The claim is made in good faith;

    b. The claim's supporting data is accurate and complete to the best of the person's knowledge and belief;

    c. The amount of the claim accurately reflects the amount that the claimant believes is due from the Owner; and

    d. The certifying person is duly authorized by the claimant to certify the claim.

5) In order to substantiate time-related claims (delays, disruptions, impacts, etc.), the Contractor shall, if applicable and as determined by the Owner, submit, in triplicate, the following information:

    a. Copy of Contractor's notice of claim in accordance with this Section. Failure to submit the notice is sufficient grounds to deny the claim.

    b. The approved, as-planned Schedule in accordance with the applicable section of the Contract Documents and computer storage media, if applicable.

c. The as-built Schedule reflecting changes to the approved schedule up to the time of the impact in question and computer storage media if applicable.

d. The basis for the duration of the start and finish dates of each impact activity and the reason for choosing the successor and predecessor events affected in the schedule shall be explained. Also, the basis for the duration of any lead/lags inserted into the schedule and the duration in related activity duration shall be explained.

e. A marked-up as-built Schedule indicating the causes responsible for changes between the as-planned and as-built schedule and establishing the required cause and effect relationships.

f. After indicating specific time related changes on the as-built schedule, the documentation must be segregated into separate packages with each package documenting a specific duration change identified previously. This documentation package shall include Change Orders, Change Notices, Work Orders, written directions, meeting minutes, etc., related to the change in duration.

g. The Contractor assumes all risk for the following items, none of which shall be the subject of any claim and none of which shall be compensated:

(1)home office expenses or any Direct Costs incurred allocated from the headquarters of the Contractor; (2)loss of anticipated profits on this or any other project,

(3)loss of bonding capacity or capability; (4) losses due to other projects not bid upon;

(5)loss of business opportunities;

(6)loss of productivity on this or any other project;

(7)loss of interest income on funds not paid;

(8)costs to prepare, negotiate or prosecute claims and

(9)costs spent to achieve compliance with applicable laws and ordinances (excepting only sales taxes paid shall be reimbursable expense subject to the provisions of the Contract Documents).

h. All non-time-related claim items for additional compensation for Direct Costs shall be properly documented and supported with copies of invoices, time sheets, rental agreements, crew sheets and the like.

i. Cost information shall be submitted in sufficient detail to allow for review. The basis for the budgeted or actual costs shall include man-hours by trade, labor rates, material and equipment costs etc. These costs shall be broken down by pay item and Construction Specification Institute (CSI) Division.

j. The documentation for budgeted cost shall, as a minimum, include:

    i. Copies of all the Contractor's bid documents, bid quotes, faxed quotes, etc.

    ii. Copies of all executed subcontracts.

    iii. Other related budget documents as requested by the MDAD Project Manager.

k. The documentation for actual cost shall, as a minimum, include:

    i. Time Sheets.

    ii. Materials invoices

    iii. Equipment invoices

    iv. Subcontractors' payments

v. Other related documents as required by the Architect/Engineer.

l. The Contractor shall make all his books, employees, work sites and records available to the Owner or its representatives for inspection and audit.

m. No payment shall be made to the Contractor by the Owner for loss of anticipated profit(s) from any deleted work.

6) As indicated above, the MDAD Project Manager shall be allowed full and complete access to all personnel, documents, work sites or other information reasonably necessary to investigate any claim. Within sixty (60) days after a claim has been received, the claim shall either be rejected with an explanation as to why it was rejected or acknowledged. Once the claim is acknowledged, the parties shall attempt to negotiate a satisfactory settlement of the claim, which settlement shall be included in a subsequent Work Order. If the parties fail to reach an agreement on a recognized claim, the Owner shall pay to the Contractor the amount of money it deems reasonable, less any appropriate retention, to compensate the Contractor for the recognized claim.

C. Failure of the Contractor to make a specific reservation of rights regarding any such disputed amounts in the body of the Work Order which contains the payment shall be construed as a waiver, abandonment, or relinquishment of all claims for additional monies resulting from the claims embodied in said Work Order. However, once the Contractor has properly reserved rights to any claim, no further reservations of rights shall be required and the Contractor shall not be required to repeat the reservation in any subsequent work order. Prior reservation of rights may however be modified, by express reference, in subsequent work orders. Notwithstanding the aforementioned, at the time of final payment under the Contract, the Contractor shall specify all claims which have been denied and all claims for which rights have been reserved in accordance with this section. Failure to so specify any particular claim shall be constructed as a waiver, abandonment, or relinquishment of such claim.

D. **Disputes**

1) The following provisions shall govern disputes under this Contract unless the Special Provisions to this Contract contain the requirement for the use of an alternate dispute resolution method. For example, for large projects of great complexity, a Dispute Review Board (DRB) may be employed by the Owner to settle disputes in lieu of the Department Director or OOM designee as specified below. In this case, the DRB alternative shall be specified by the individual department in the Special Provisions and, if utilized, shall supersede this dispute provision.

a. In the event the Contractor and Owner are unable to resolve their differences concerning any determination made by the MDAD Project Manager or Owner on any dispute or claim arising under or relating to the Contract (referred to in this Section as a "Dispute"), either the Contractor or Owner may initiate a dispute in accordance with the procedure set forth in this Section. Exhaustion of these procedures shall be a precondition to any lawsuit permitted hereunder.

b. For contracts with a value of $5 million or less, all Disputes under this Contract shall be decided by the Department Director or his designee. For contracts valued at more than $5 million, Disputes shall be decided by a designee appointed by the Office of the Mayor (OOM). Decisions rendered by the Department Director or OOM designee shall not be binding but shall be admissible in a court of competent jurisdiction.

c. As soon as practicable, the Department Director or OOM designee shall adopt a schedule for the Contractor and Owner to file written submissions stating their respective positions and the bases therefore. The written submissions shall include copies of all documents and sworn statements in affidavit form from all witnesses relied on by each party in support of its position. Within 20 working days of the date on which such written submissions are filed, the Department Director or OOM designee shall afford each party an opportunity to present a maximum of one hour of argument. The Department Director or OOM designee may decide the Dispute on the basis of the affidavits and other written submissions if, in his opinion, there is no issue of material fact and the party is entitled to a favorable resolution pursuant to the terms of this Contract. As part of such decision, the Department Director or OOM designee shall determine the timeliness and sufficiency of each notice of claim and claim at issue as

provided in this Section. The Department Director or OOM designee shall have the authority to rule on questions of law, including disputes over contract interpretation, and to resolve claims, or portions of claims, via summary judgment where there are no disputed issues of material fact. Furthermore, the Department Director or OOM designee is authorized by both parties to strike elements of claims seeking relief or damages not available under the contract (such as, but not limited to, claims for lost profits, off-site overhead, loss of efficiency or productivity claims or claim's preparation costs) by summary disposition.

d. In the event that the Department Director or OOM designee determines that the affidavits or other written submissions present issues of material fact, he shall allow the presentation of evidence in the form of lay or expert testimony directed solely to the issues which he may specifically identify to require factual resolution. The testimonial portion of the process shall not exceed one day in duration per side, including opening statements and closing arguments, if allowed by the Department Director or OOM designee at his reasonable discretion.

e. No formal discovery shall be allowed in connection with any proceeding under this Section. Notwithstanding the foregoing, both parties agree that all of the audit, document inspection, information and documentation requirements set forth elsewhere in this contract shall remain in force and effect throughout the proceeding. The Department Director or OOM designee shall not schedule the hearing until both parties have made all their respective records available for inspection and reproduction and the parties have been afforded reasonable time to analyze the records. The continued failure of a party to comply with the document inspection, examination, or submission requirements set forth in this contract shall constitute a waiver of that party's claims and/or defenses, as applicable. Hearsay evidence shall be admissible but shall not form the sole basis for any finding of fact. Failure of any party to participate on a timely basis, to cooperate in the proceedings, or to furnish evidence in support or defense of a claim shall be a criteria in determining the sufficiency and validity of a claim.

f. The Department Director or OOM designee shall issue a written decision within 15 working days after conclusion of any testimonial proceeding and, if no testimonial proceeding is conducted, within 45 days of the filing of the last written submission. This written decision shall set forth the reasons for the disposition of the claim and a breakdown of any specific issues or subcontractor claims. As indicated previously, the decision of the Department Director or OOM designee is not binding on the parties, but will be admissible in a court of competent jurisdiction.

g. If either party wishes to protest the decision of the Department Director or OOM designee, such party may commence an action in a court of competent jurisdiction, within the periods prescribed by law, it being understood that the review of the court shall be limited to the question of whether or not the Department Director or OOM designee's determination was arbitrary and capricious, unsupported by any competent evidence, or so grossly erroneous to evidence bad faith.

h. Pending final decision of a dispute hereunder, the Contractor shall proceed diligently with the performance of the Contract and in accordance with MDAD's interpretation. Any presentation or request by the Contractor under this Section will be subject to the same requirements for Submittal of Claims in this Section.

9. **TERMINATIONS:**

A. Termination for Convenience

1. The Owner may at its option and discretion terminate the Contract, in whole or, from time to time in part, at any time without any default on the part of the Contractor by issuing a written Notice of Termination to the Contractor and its Surety, specifying the extent to which performance of work under the Contract is terminated and the date upon which such termination becomes effective, at least ten (10) days prior to the effective date of such termination.

2. In the event of Termination for Convenience, the Owner shall pay the Contractor for all labor performed, all materials and equipment furnished by the Contractor and its Subcontractors, materialmen and suppliers and manufacturers of equipment less all partial payments made on account prior to the date of cancellation as determined by the MDAD Project Manager. The Contractor will be paid for:

i. The value of all work completed under the Contract, based upon the approved Schedule of Values and/or Unit Prices,

ii. The value of all materials and equipment delivered to but not incorporated into the work and properly stored on the site,

iii. The value of all bonafide irrevocable orders for materials and equipment not delivered to the construction site as of the date of cancellation. Such materials and equipment must be delivered to the Owner to a site or location designated by the Department prior to release of payment for such materials and equipment.

iv. The values calculated under i., ii. and iii. above shall be as determined by the MDAD Project Manager.

3. In the event of termination under this article, the Contractor shall not be entitled to any anticipated profits for any work not performed due to such termination.

4. In the event of termination under this article, the Owner does not waive or void any credits otherwise due the Owner at the time of termination, including Liquidated Damages, and back charges for defective or deficient work.

5. Upon termination as indicated above, the MDAD Project Manager shall prepare a certificate for Final Payment to the Contractor.

B. Termination for Default of Contractor

1. The Contract may be terminated in whole or, from time to time in part, by the Owner for failure of the Contractor to comply with any requirements of the Contract Documents including but not limited to:

i. Failure to perform the work or failure to provide sufficient workers, equipment or materials to assure completion of work in accordance with the terms of the Contract, and the approved Schedule, or

ii. Failure to provide the Schedule for the Project by the date due, or

iii. Failure to provide adequate shop drawings by the dates indicated in the approved Schedule for the Project, or

iv. Failure to replace the superintendent in the time allotted, if required, or

v. Performing the work unsuitably or neglecting or refusing to remove materials or to perform anew such work as may be rejected as unacceptable and unsuitable, after written directions from the MDAD Project Manager, or

vi. Violating the terms of the Contract or performing work in bad faith, or

vii. Discontinuing the prosecution of the work, or

viii. Failure to resume work which has been discontinued within a reasonable time after notice to do so, or

ix. Abandonment of the Contract, or

x. Becomes insolvent or is declared bankrupt, or commits any act of bankruptcy or insolvency, or failure to maintain a qualifier, or

xi. Allowing any final judgment to stand against him unsatisfied for a period of 10 days, or

xii. Making an assignment for the benefit of creditors, or

xiii. For any other cause whatsoever, fails to carry out the work in an acceptable manner or to comply with any other Contract requirement.

2. Before the Contract is terminated, the Contractor and its Surety will be notified in writing by the MDAD Project Manager of the conditions which make termination of the Contract imminent. The Contract will be terminated by the Owner ten (10) days after said notice has been given to the Contractor and its Surety unless a satisfactory effort acceptable to the Owner has been made by the Contractor or its Surety to correct the conditions. If the Contractor fails to satisfactorily correct the conditions giving rise to the termination, the Owner may declare the Contract breached and send a written Notice of Termination to the Contractor and its Surety.
3. The Owner reserves the right, in lieu of termination as set forth in this article, to withhold any payments of money which may be due or become due to the Contractor until the said default(s) have been remedied. In the event of Termination for Default, the Owner also reserves the right, in cases where the damages calculated by the Owner are expected to exceed the amount the Owner anticipated recovering from the Surety, to withhold amounts for work already performed.
4. In the event the Owner exercises its right to terminate the Contract for default of the Contractor as set forth herein, the Owner shall have the option of finishing the work, through any means available to the Owner, or having the Surety complete the Contract in accordance with its terms and conditions. In case that the Owner decides to have the Surety take over the remaining performance of the Work, the time or delay between Notice of Default and start of work by the Surety is a non-excusable delay. If the Surety fails to act promptly, but no longer than thirty (30) calendar days after the Owner notifies the Surety of the Owner's decision to have the Surety complete the work, or after such takeover fails to prosecute the Work in an expeditious manner, the Owner may exercise any of its other options including completing the Work by whatever means and method it deems advisable. No claims for loss of anticipated profits or for any other reason in connection with the termination of the Contract shall be considered.
5. Payments for the various Bid Items listed in the Bid Form will constitute full compensation for all expenses incurred in consequence of discontinuance of all or any portion of the Work except as provided in this section of the Contract Documents. In no event will compensation be made for anticipatory profits or consequential damages as a result of a discontinuance of all or any portion of the Work.
6. The Contractor shall immediately upon receipt communicate any Notice of Termination for Default issued by the Owner to the affected Subcontractors and suppliers at any tier.
7. If, after Notice of Termination of the Contractor's right to proceed under the provisions of this article, it is determined for any reason that the Contractor was not in default under the provisions of this article, or that the Contractor was entitled to an extension of time under the Contract Documents, the rights and obligations of the parties shall be the same as if the Notice of Termination had been issued pursuant to the section of this article dealing with Termination for Convenience.

C. Termination for National Emergencies

1. The Owner shall terminate the Contract or portion thereof by written notice when the Contractor is prevented from proceeding with the construction Contract as a direct result of an Executive Order of the President of the United States with respect to the prosecution of war or in the interest of national defense.
2. When the Contract, or any portion thereof, is terminated before completion of all items of work in the Contract, payment will be made for the actual number of units or items of work completed at the Contract price or as mutually agreed for items of work partially completed or not started. No claims or loss of anticipated profits or for any other reason in connection with the termination of the Contract shall be considered.

D. Implementation of Termination

1. If the Owner cancels or terminates the Contract or any portion thereof, the Contractor shall stop all work on the date and to the extent specified in the Notice of Termination and shall:
    i. Cancel all orders and Subcontracts, to the extent that they relate to the performance of the work terminated and which may be terminated without costs;

ii. Cancel and settle other orders and Subcontracts, except as may be necessary for completion of such portion of the Work not terminated, where the cost of settlement will be less than costs which would be incurred were such orders and subcontracts to be completed, subject to prior approval of the MDAD Project Manager;

iii. Settle outstanding liabilities and claims arising out of such termination of orders and subcontracts, with the approval or ratification of the Owner, to the extent it may require, which approval or ratification shall be final for the purposes of this Section;

iv. Transfer title and deliver to the Owner, in the manner, at the time, and to the extent, if any, directed by it, in accordance with directions of the Field Representative, all fabricated or un-fabricated parts, all materials, supplies, work in progress, completed work, facilities, equipment, machinery or tools acquired by the Contractor in connection with the performance of the work and for which the Contractor has been or is to be paid;

v. Assign to the Owner in the manner, at the times and to the extent directed by it, all of the right, title, and interest of the Contractor under the orders and subcontracts so terminated, in which case the Owner will have the right, at its discretion, to settle or pay any or all claims arising out of the termination of such orders and subcontracts;

vi. Deliver to the MDAD Project Manager As-Built Documents, complete as of the date of cancellation or termination, plans, Shop Drawings, sketches, permits, certificates, warranties, guarantees, specifications, three (3) complete sets of maintenance manuals, pamphlets, charts, parts lists, spare parts (if any), operating instructions required for all installed or finished equipment or machinery, and all other data accumulated by the Contractor for use in the performance of the work.

vii. Perform all work as may be necessary to preserve the work then in progress and to protect materials, plant and equipment on the site or in transit thereto. The Contractor shall also take such action as may be necessary, or as the MDAD Project Manager may direct, for the protection and preservation of the property related to this Contract which is in the possession of the Contractor and in which the Owner has or may acquire an interest.

viii. Complete performance of each part of the work not terminated by the Notice of Termination;

ix. Use his best efforts to sell, in the manner, at the time, to the extent, and at the price or prices directed or authorized by the Owner, property of the types referred to above; provided, however, that the Contractor (a) shall not be required to extend credit to any purchaser, and (b) may acquire any such property under the conditions prescribed by and at a price or prices approved by the Owner; provided, further, that the proceeds of any such transfer or disposition will be applied in reduction of any payments to be made by the Owner to the Contractor under this Contract or will otherwise be credited to the price or cost of the work covered by this Contract or paid in such other manner as the Owner may direct;

x. Termination of the Contract or a portion thereof shall neither relieve the Contractor of its responsibilities for the completed work nor shall it relieve its Surety of its obligation for and concerning any just claim arising out of the work performed.

xi. In arriving at the amount due the Contractor under this article, there will be deducted, (1) any claim which the Owner may have against the Contractor in connection with this Contract and (2) the agreed price for, or the proceeds of sale of materials, supplies or other items acquired by the Contractor or sold, pursuant to the provisions of this article, and not otherwise recovered by or credited to the Owner.

E. Suspension of Work

1. The Owner reserves the right to temporarily suspend execution of the whole or any part of the Work without compensation to the Contractor.

2. In case the Contractor is actually and necessarily delayed by any act or omission on the part of the Owner, as determined by the Owner in writing, the time for completion of the Work shall be extended by the amount of the time of such delay as determined by the Owner, and an allowance may be made for actual direct costs, if any, which may have been borne by the Contractor. Such requests for additional time and/or compensation must be made in accordance with the applicable sections of the Contract Documents.
3. Only the actual delay necessarily resulting from the causes specified in this Article, shall be grounds for extension of time. In case the Contractor is delayed at any time or for any period by two or more of the causes specified in this Article, the Contractor shall not be entitled to a separate extension for each one of the causes but only one period of extension will be granted for the delay.
4. In case the Contractor is actually and necessarily delayed in the performance of the Work from one or more of the causes specified in this Article, the extension of time to be granted to the Contractor shall be only for such portion of the Work so delayed. The Contractor shall not be entitled by reason of such delay to an extension of time for the completion of the remainder of the Work. If the Contractor shall be so delayed as to a portion of the Work he shall nevertheless proceed continuously and diligently with the prosecution of the remainder of the Work. No demand by the Contractor that the Owner determine and certify any matter of extension of time for the completion of the Work or any part thereof will be of any effect whatsoever unless the demand be made in writing at least 30 days before the completion date of the Work or any part thereof for which Liquidated Damages are established when meeting those dates is claimed to have been delayed by a suspension under this Article. Owner's determination as to any matter of extension of time for completion of the Work or any part thereof shall be binding and conclusive upon the Contractor.
5. Permitting the Contractor to finish the Work or any part thereof after the time fixed for completion or after the date to which the time for completion may have been extended or the making of payments to the Contractor after any such periods shall not operate as a waiver on the part of the Owner of any rights under this contract.
6. The Contractor shall insert in each subcontract a provision that the Subcontractor shall comply immediately with a written order of the Owner to the Contractor to suspend the Work, and that they shall further insert the same provision in each subcontract of any tier.

10. **PAYMENTS:**

A. Payment of Passenger Boarding Bridges, Fixed Walkways, equipment, and materials shall be based on a new Passenger Boarding Bridge accepted pursuant to Section 1.10 of Attachment A.

B. Payment for the quantities measured as described above shall be made at the prices listed in Section III Pricing Form below which prices and payments shall be full compensation for furnishing all labor, materials and incidentals necessary to complete all the work as specified on this solicitation. For the purposes of progress payments, a lump sum amount unit price item may be paid on a percent complete basis at the sole discretion of the MDAD Project Manager.

i. In making such progress payments, a maximum of 5 percent (5%), as may be amended in the Contract Documents, of the estimated amount shall be retained from each progress payment made to the Contractor until completion of all the work under this ITQ.

C. Payments will be made in accordance with following:

**1. PHASE 1:**

a. Approval of Shop Drawings D10 PBB (max amount is: 2% of the sum of bid items no. 2 and 17)
b. Approval of Shop Drawings D12 PBB (max amount is: 2% of the sum of bid items no. 3 and 18)
c. Approval of Shop Drawings D15 PBB (max amount is: 2% of the sum of bid items no. 4 and 19)
d. Approval of Shop Drawings D17 PBB (max amount is: 2% of the sum of bid items no. 5 and 20)

e. Approval of Shop Drawings D19 PBB (max amount is: 2% of the sum of bid items no. 6 and 21)
f. Approval of Shop Drawings E5 PBB (max amount is: 2% of the sum of bid items no. 7 and 22)
g. Approval of Shop Drawings F21 PBB (max amount is: 2% of the sum of bid items no. 8 and 23)
h. Approval of Shop Drawings H3 PBB (max amount is: 2% of the sum of bid items no. 9 and 24)
i. Approval of Shop Drawings H5 PBB (max amount is: 2% of the sum of bid items no. 10 and 25)
j. Approval of Shop Drawings H6 PBB (max amount is: 2% of the sum of bid items no. 11 and 26)
k. Approval of Shop Drawings H7 PBB (max amount is: 2% of the sum of bid items no. 12 and 27)
l. Approval of Shop Drawings H9 PBB (max amount is: 2% of the sum of bid items no. 13 and 28)
m. Approval of Shop Drawings H12 PBB (max amount is: 2% of the sum of bid items no. 14 and 29)
n. Approval of Shop Drawings H15 PBB (max amount is: 2% of the sum of bid items no. 15 and 30)
o. Approval of Shop Drawings H17 PBB (max amount is: 2% of the sum of bid items no. 16 and 31)
p. Foundation Design and Installation F21 (bid item no. 1)

2. **PHASE 3:**

a. Deliver Gate D10 PBB per Lump Sum
b. Deliver Gate D12 PBB per Lump Sum
c. Deliver Gate D15 PBB per Lump Sum
d. Deliver Gate D17 PBB per Lump Sum
e. Deliver Gate D19 PBB per Lump Sum
f. Deliver Gate E5 PBB per Lump Sum
g. Deliver Gate F21 PBB per Lump Sum
h. Deliver Gate H3 PBB per Lump Sum
i. Deliver Gate H5 PBB per Lump Sum
j. Deliver Gate H6 PBB per Lump Sum
k. Deliver Gate H7 PBB per Lump Sum
l. Deliver Gate H9 PBB per Lump Sum
m. Deliver Gate H12 PBB per Lump Sum
n. Deliver Gate H15 PBB per Lump Sum
o. Deliver Gate H17 PBB per Lump Sum
p. Install & Commission Gate D10 PBB per Lump Sum
q. Install & Commission Gate D12 PBB per Lump Sum
r. Install & Commission Gate D15 PBB per Lump Sum
s. Install & Commission Gate D17 PBB per Lump Sum
t. Install & Commission Gate D19 PBB per Lump Sum
u. Install & Commission Gate E5 PBB per Lump Sum
v. Install & Commission Gate F21 PBB per Lump Sum
w. Install & Commission Gate H3 PBB per Lump Sum
x. Install & Commission Gate H5 PBB per Lump Sum
y. Install & Commission Gate H6 PBB per Lump Sum
z. Install & Commission Gate H7 PBB per Lump Sum
aa. Install & Commission Gate H9 PBB per Lump Sum
bb. Install & Commission Gate H12 PBB per Lump Sum
cc. Install & Commission Gate H15 PBB per Lump Sum
dd. Install & Commission Gate H17 PBB per Lump Sum

**D. Allowance Accounts:**

1) Certain portions of work which may be required to be performed by the Contractor under this Contract are either unforeseeable or have not yet been designed, and the value of such work, if any, is included in the Contract as a specific line item(s) entitled "Allowance Account(s)."

a. The Allowance Account 1. (Contingency) can be used to reimburse the Contractor for 1) furnishing all labor, materials, equipment and services necessary for modifications or Extra Work required to complete the Project

because of unforeseeable conditions and; 2) for performing construction changes required to resolve: oversight in design, Owner oversight, unforeseen conditions, revised regulations, technological and product development, operational changes, schedule requirements, program interface, emergencies and delays.

b. Other Allowance Account 2. (Dedicated) may be used to reimburse for unanticipated issues related to foundation retrofit design and installation, utility upgrade designs and any preliminary work for upgrades. This dedicated allowance account shall be used only for the purposes approved pursuant to a written Work Order issued by MDAD.

2) When work is to be performed under the Allowance Account(s), if any, the work shall be incorporated into all respects of this Contract as awarded.

3) The Work Order for the required work will be issued by MDAD upon receipt from the Contractor of a satisfactory proposal for performance of the work, and the acceptance thereof by MDAD. If the Contractor and MDAD are unable to agree upon an amount of compensation or; if the nature of the work is such that a Unit Price or Lump Sum price is not economically practical or if the change work is deemed essential to the Project and actual conditions require work to be swiftly conducted to avoid or minimize delays, the Work Order may be issued to perform the work on a Force Account basis. If an equitable adjustment for the said change work cannot be arrived at, either by mutual agreement or under the dispute provisions of the Contract Documents, the compensation hereunder will be the total compensation for this work.

4) No Work Orders shall be issued against an Allowance Account if such Work Orders in the aggregate exceed the authorized amount of that Allowance Account, provided however that such excess may be authorized by appropriate Change Order.

5) The unexpended amounts under the allowance accounts shall remain with MDAD and the Contractor shall have no claim to the same.

**6) Work Orders/Change Order/Force Account**

A) If the Owner and the Contractor cannot reach agreement on an equitable adjustment to the Contract Price for any work as prescribed above in Section 10.D of this bid document, then Extra Work will be performed on Force Account basis as directed by the MDAD Project Manager and paid for as specified below.

B) The following percentages will be allowed as mark-ups over Direct Costs for all negotiated adjustments to the Contract Amount or for work performed on either a negotiated lump sum basis or a Force Account basis:

1. Extra Work Performed directly by Contractor's Own Forces: The Contractor may add up to a maximum fifteen percent (15%) mark-up on the actual Direct Cost of the Extra Work, subject to review and approval by the MDAD Project Manager, as direct compensation for Overhead. A 10% mark-up will be added to all negotiated credit amounts for deleted work not performed to cover Overhead.

2. Extra Work Performed by a Subcontractor or any Sub-tier Subcontractor: The Subcontractor may add up to a maximum fifteen percent (15%) mark-up on the actual Direct Cost of the Extra Work as direct compensation for Overhead. The Contractor may add a five percent (5%) mark-up on the Subcontractor's actual Direct Cost as Contractor's Overhead. A 10% additional credit will be added to all Subcontractor negotiated credit amounts for deleted work not performed to cover quality control, supervision, coordination, overhead, small tools and incidentals.

C) In the event Extra Work is performed on a Force Account basis, then the Contractor and the Subcontractor(s), as appropriate, shall maintain itemized daily records of costs, quantities, labor and the use of authorized Special Equipment or Machinery. Copies of such records, maintained as follows, shall be furnished to the Architect/Engineer daily for approval, subject to audit.

a. Comparison of Record: The Contractor, including its Subcontractor(s) of any tier performing the work, and the MDAD Project Manager shall compare records of the cost of force account work at the end of each day. Agreement shall be indicated by signature of the Contractor, the Subcontractor performing the work, and the MDAD Project Manager or their duly authorized representatives.

b. Statement: No payment will be made for work performed on a force account basis until the Contractor has furnished the MDAD Project Manager with duplicate itemized statements of the cost of such force account work detailed as follows:

c. Name, classification, date, daily hours, total hours, rate and extension for each laborer, tradesman, and foreman.

d. Designation, dates, daily hours, total hours, rental rate, and extension of each unit of special machinery and equipment.

e. Quantities of materials, prices, and extensions.

D) Transportation of materials: The statements shall be accompanied and supported by a receipted invoice of all materials used and transportation charges. However, if materials used on the force account work are not specifically purchased for such work but are taken from the Contractor's stock, then in lieu of the invoices the Contractor shall furnish an affidavit certifying that such materials were taken from its stock, that the quantity claimed was actually used, and that the price and transportation claimed represent the actual cost to the Contractor.

E) Authorization of Special Equipment and Machinery: No compensation for special equipment or machinery shall be made without written authorization from the MDAD Project Manager. The MDAD Project Manager shall review and evaluate any special equipment or machinery proposed by the Contractor for use on a force account basis. As part of its evaluation, the MDAD Project Manager shall determine whether any of the special equipment or machinery being proposed by the Contractor will be concurrently used on the Project, including approved changes, or on other force account work on the Project. If the MDAD Project Manager determines that such a concurrent use of special equipment or machinery is being proposed by the Contractor, prior to the authorization of such special equipment or machinery, the MDAD Project Manager and thereto Contractor shall establish a straight-line prorated billing mechanism based on the actual percentage of time that the equipment or machinery is required to be used on the force account work(s).

Special equipment or machinery which is approved for use by the MDAD Project Manager shall be reviewed and accounted for on a daily basis as provided in the Comparison of Record and Statement paragraphs of this section of the Contract.

F) Inefficiency in the Prosecution of the Work: If in the Owner's or MDAD Project Manager's opinion, the Contractor or any of its Subcontractors, in performing Force Account Work, is not making efficient use of labor, materials or equipment, or is proceeding in a manner which makes Force Account Work unnecessarily more expensive to the Owner, the Owner or MDAD Project Manager may, in whole or part, direct the Contractor in the deployment of labor, material and equipment. By way of illustration, inefficiency may arise in the following ways, including but not limited to: (1) the timing of the Work, (2) the use of unnecessary labor or equipment, (3) the use of a higher percentage of journeymen than in non-force account Work, (4) the failure to procure materials at lowest price, or (5) using materials of quality higher than necessary.

# REVISED
# INVITATION TO QUOTE (ITQ)

## PART IV. PRICING FORM

A. **The Bidder's prices per this Section, shall be inclusive of all costs associated with providing the services herein, which shall include at minimum the removal and legal disposal of existing fixed walkway and PBBs, manufacturing, delivery and installation of new PBBs, fixed walkway, support columns, foundations (if necessary), repairs to and upgrades to existing systems where required, Preconditioned Air Handling Units, 400 Hz ground power units, Service Transfer Units (STU), Boom-air hose management systems, fixed walkway and PBB pre-cool system, baggage chutes, mechanical, electrical work, and commissioning of the PBBs, and associated equipment.**

1. Mobilization shall consist of the preparatory work and operations for beginning work on the Project; costs of bonds and required insurance; costs of operations necessary to move personnel, badging, equipment, supplies, and incidentals to the site; costs of establishment of temporary offices, shops, safety equipment and first aid supplies; and other costs associated with or required by the Contract Documents and any Federal, State, and/or local laws and regulations. No separate cost will be paid for mobilization. All costs related to mobilization shall be considered incidental to and included in the unit cost prices.
2. The Bidder's prices shall include all engineering, labor, permit(s), materials, tools, and equipment; all other direct and indirect costs necessary to complete the item of Work and to coordinate it with adjacent work; and shall include all overhead and profit.
3. All handling or storage costs incurred by the Contractor shall be considered incidental to the installation of the equipment and as such will not be considered for additional compensation.

| ITEM | QTY | UOM | DESCRIPTION | PRICE |
|---|---|---|---|---|
| 1 | 1 | EA | Foundation Design & Installation F21 PBB per Lump Sum | $ |
| 2 | 1 | EA | Deliver Gate D10 PBB per Lump Sum | $ |
| 3 | 1 | EA | Deliver Gate D12 PBB per Lump Sum | $ |
| 4 | 1 | EA | Deliver Gate D15 PBB per Lump Sum | $ |
| 5 | 1 | EA | Deliver Gate D17 PBB per Lump Sum | $ |
| 6 | 1 | EA | Deliver Gate D19 PBB per Lump Sum | $ |
| 7 | 1 | EA | Deliver Gate E5 PBB per Lump Sum | $ |
| 8 | 1 | EA | Deliver Gate F21 PBB per Lump Sum | $ |
| 9 | 1 | EA | Deliver Gate H3 PBB per Lump Sum | $ |
| 10 | 1 | EA | Deliver Gate H5 PBB per Lump Sum | $ |
| 11 | 1 | EA | Deliver Gate H6 PBB per Lump Sum | $ |
| 12 | 1 | EA | Deliver Gate H7 PBB per Lump Sum | $ |
| 13 | 1 | EA | Deliver Gate H9 PBB per Lump Sum | $ |
| 14 | 1 | EA | Deliver Gate H12 PBB per Lump Sum | $ |
| 15 | 1 | EA | Deliver Gate H15 PBB per Lump Sum | $ |
| 16 | 1 | EA | Deliver Gate H17 PBB per Lump Sum | $ |
| 17 | 1 | EA | Install & Commission Gate D10 PBB per Lump Sum | $ |
| 18 | 1 | EA | Install & Commission Gate D12 PBB per Lump Sum | $ |

# REVISED
# INVITATION TO QUOTE (ITQ)

| | | | | |
|---|---|---|---|---|
| 19 | 1 | EA | Install & Commission Gate D15 PBB per Lump Sum | $ |
| 20 | 1 | EA | Install & Commission Gate D17 PBB per Lump Sum | $ |
| 21 | 1 | EA | Install & Commission Gate D19 PBB per Lump Sum | $ |
| 22 | 1 | EA | Install & Commission Gate E5 PBB per Lump Sum | $ |
| 23 | 1 | EA | Install & Commission Gate F21 PBB per Lump Sum | $ |
| 24 | 1 | EA | Install & Commission Gate H3 PBB per Lump Sum | $ |
| 25 | 1 | EA | Install & Commission Gate H5 PBB per Lump Sum | $ |
| 26 | 1 | EA | Install & Commission Gate H6 PBB per Lump Sum | $ |
| 27 | 1 | EA | Install & Commission Gate H7 PBB per Lump Sum | $ |
| 28 | 1 | EA | Install & Commission Gate H9 PBB per Lump Sum | $ |
| 29 | 1 | EA | Install & Commission Gate H12 PBB per Lump Sum | $ |
| 30 | 1 | EA | Install & Commission Gate H15 PBB per Lump Sum | $ |
| 31 | 1 | EA | Install & Commission Gate H17 PBB per Lump Sum | $ |
| DEDICATED ALLOWANCE ACCOUNT: SITE CONDITIONS (10% OF TOTAL BID FOR ITEMS 1-31) | | | | MDAD WILL FILL IN AT TIME OF AWARD |
| CONTINGENCY ALLOWANCE ACCOUNT (10% OF TOTAL BID FOR ITEMS 1-31) | | | | MDAD WILL FILL IN AT TIME OF AWARD |

# REVISED
# INVITATION TO QUOTE (ITQ)

## PART V. SUBMITTAL FORM

**Bidder's Legal Name (include d/b/a if applicable):**

**Federal Tax Identification Number:**

### A. SMALL BUSINESS ENTERPRISE CONTRACT MEASURES (if applicable):

A Small Business Enterprise (SBE) must be certified by the Small Business Development Division (SBD) for the type of goods and/or services the Bidder provides in accordance with the applicable Commodity Code(s) for this Solicitation. For certification information, contact SBD at (305) 375-3111 or access http://www.miamidade.gov/smallbusiness/certification-programs.asp. The SBE must be certified by this Solicitation's submission deadline, at Contract award, and for the duration of the Contract to remain eligible for the preference. Firms that graduate from the SBE Program during the Contract may remain on the Contract.

☐ Place a check mark here **only** if affirming Bidder is a Miami-Dade County Certified Small Business Enterprise.

**IN ACCORDANCE WITH CFR 200.319 (b), SMALL BUSINESS ENTERPRISE MEASURES SHALL NOT APPLY TO FEDERALLY FUNDED PURCHASES.**

### B. LOCAL PREFERENCE CERTIFICATION:

For the purpose of this certification, and pursuant to Section 2-8.5 of the Code of Miami-Dade County, a "local business" is a business located within the limits of Miami-Dade County that has a valid Local Business Tax Receipt issued by Miami-Dade County at least one year prior to bid submission; has a physical business address located within the limits of Miami-Dade County from which business is performed and which served as the place of employment for at least three full time employees for the continuous period of one year prior to bid submittal (by exception, if the business is a certified Small Business Enterprise, the local business location must have served as the place of employment for one full time employee); and contributes to the economic development of the community in a verifiable and measurable way. This may include, but not be limited to, the retention and expansion of employment opportunities and the support and increase to the County's tax base.

☐ Place a check mark here **only** if affirming the Bidder meets requirements for Local Preference. **Failure to complete this certification at this time may render the vendor ineligible for Local Preference.**

**IN ACCORDANCE WITH CFR 200.319 (b), LOCAL PREFERENCE SHALL NOT APPLY TO FEDERALLY FUNDED PURCHASES.**

### C. LOCAL CERTIFIED VETERAN'S BUSINESS ENTERPRISE CERTIFICATION:

A Local Certified Veteran's Business Enterprise is a firm that is: (a) a local business pursuant to Section 2-8.5 of the Code of Miami-Dade County, and (b) prior to bid submission is certified by the State of Florida Department of Management Services as a veteran business enterprise pursuant to Section 295.187 of the Florida Statues.

☐ Place a check mark here **only** if affirming the Bidder is a Local Certified Veteran's Business Enterprise. **A copy of the certification must be submitted with the bid.**

**IN ACCORDANCE WITH CFR 200.319 (b), LOCAL CERTIFIED VETERAN'S BUSINESS ENTERPRISE PREFERENCE SHALL NOT APPLY TO FEDERALLY FUNDED PURCHASES.**

### D. LOCALLY HEADQUARTERED BUSINESS CERTIFICATION:

For the purpose of this certification, and pursuant to Section 2-8.5 of the Code of Miami-Dade County, a "locally headquartered business" is a Local Business as defined above, which has a "principal place of business" in Miami-Dade County. "Principal place of business" means the nerve center or the center of overall direction, control, and coordination of activities of the Bidder. If the Bidder has only one business location, such business location shall be its principal place of business.

☐ Place a check mark here **only** if affirming the Bidder meets requirements for the Locally Headquartered Preference (LHP). **Failure to affirm this certification at this time may render the vendor ineligible for the LHP.** The address of the Locally Headquartered office is:

# REVISED
# INVITATION TO QUOTE (ITQ)

**IN ACCORDANCE WITH CFR 200.319 (b), LOCALLY HEADQUARTERED BUSINESS PREFERENCE SHALL NOT APPLY TO FEDERALLY FUNDED PURCHASES.**

## E. CONVICTION DISCLOSURE:

Pursuant to Section 2-8.6 of the Code of Miami-Dade County, any individual, corporation, partnership, joint venture or other legal entity having an officer, director, or executive who has been convicted of a felony during the past ten (10) years shall disclose this information at the time of bid submittal.

☐ Place a check mark here **only** if the Bidder has such conviction to disclose to comply with this requirement.

## F. CONFLICT OF INTEREST DISCLOSURE:

Pursuant to Section 2-11.1 (c) and (d) of the Code of Miami-Dade County, please respond to the following questions posed.

1. ARE ANY OWNERS/PRINCIPALS/PERSONS WITH OWNERSHIP INTEREST IN THE COMPANY, A MIAMI-DADE COUNTY ELECTED OFFICIAL, AGENCY BOARD MEMBER OR EMPLOYEE(S)?

☐ **YES** or ☐ **NO**

**If Yes, attach Conflict-of-Interest Opinion provided by Miami-Dade County Commission on Ethics and Public Trust.**

2. ARE ANY IMMEDIATE FAMILY MEMBERS OF THE COMPANY'S OWNERS/PRINCIPALS/PERSONS WITH OWNERSHIP INTEREST IN THE COMPANY, A MIAMI-DADE COUNTY ELECTED OFFICIAL, AGENCY BOARD MEMBER OR EMPLOYEE?

☐ **YES** or ☐ **NO**

**If Yes, attach Conflict-of-Interest Opinion provided by Miami-Dade County Commission on Ethics and Public Trust.**

## G. WAIVER OF CONFIDENTIALITY AND TRADE SECRET TREATMENT OF BID:

The Bidder acknowledges and agrees that the submittal of the Bid is governed by Florida's Government in the Sunshine Laws and Public Records Laws, as set forth in Florida Statutes Section 286.011and Chapter 119. As such, all material submitted as part of, or in support of, the Bid will be available for public inspection after opening of bids and may be considered by the County in public.

**By submitting a bid pursuant to the Solicitation, Bidder agrees that all such materials may be considered public records. The Bidder shall not submit any information in response to the Solicitation which the Bidder considers to be a trade secret, proprietary or confidential.** If the Bid contains a claim that all or a portion of the Bid submitted contains confidential, proprietary or trade secret information, the Bidder, **by signing below**, knowingly and expressly **waives** all claims made that the Bid, or any part thereof no matter how indicated, is confidential, proprietary or a trade secret and authorizes the County to release such information to the public for any reason.

**Acknowledgment of Waiver:**

**Bidder's Authorized Representative's Signature:**

**Date:**

**Representative's Name:**

**Representative's Title:**

## H. BIDDER'S CONTACT INFORMATION

**Bidder's Contact Person:**

**Email Address:**

**Phone Number (include area code):**

# REVISED
# INVITATION TO QUOTE (ITQ)

## I. ACKNOWLEDGEMENT OF BINDING OFFER

**The execution of this form constitutes the consent of the Bidder to be bound by the terms of its Bid and the Solicitation. Failure to sign where indicated below by an authorized representative shall render the Bid non-responsive. The County may, however, in its sole discretion, accept any response that includes an executed document which unequivocally binds the Bidder to the terms of its Bid and the Solicitation.**

**Bidder's Authorized Representative's Signature:**

**Date:**

**Representative's Name:**

**Representative's Title:**

**This ITQ includes the following attachments and exhibits:**

Attachment A - SECTION 14950 - AIRCRAFT PASSENGER BOARDING BRIDGES - APRON DRIVE
Attachment B - Contractor Due Diligence Affidavit (if award is over $1,000,000)
Attachment C – Subcontracting Form

Exhibit 1 – Preliminary Schedule
Exhibit 2 - PBB Locations
Exhibit 3 - Shut-down Request Procedures and forms
Exhibit 4 - Hot Work Permit

## Piprawala, Aazam (Aviation)

**From:** Patricia Cabarcos <patricia.cabarcos@cavotec.com>
**Sent:** Tuesday, October 26, 2021 9:56 AM
**To:** Piprawala, Aazam (Aviation)
**Cc:** Clerk of the Board (COC); Gabriel Figueroa; Feliciano Covarrubias
**Subject:** ITQ No.: MDAD- PBB 15-1020-2021 15 PBBs Replacement at Concourses D, E, F, and H

**Importance:** High

This is an EXTERNAL email. **Exercise Caution**. DO NOT open attachments or click links from unknown senders or unexpected emails. Please use your Report Spam button if this is a suspicious message.

This is an EXTERNAL email. **Exercise Caution**. DO NOT open attachments or click links from unknown senders or unexpected emails. Please use your Report Spam button if this is a suspicious message.

We received a RFQ from one of the Group I Qualified Vendors, invited to quote and we have some questions that need clarification.

PART III SCOPE OF WORK/TECHNICAL SPECIFICATIONS
D. Equipment and Activities.
1. Cavotec Inet Service Transport Unit (STU).
Note STU are costumed design and manufacturer, based on passenger boarding bridge models, as well as all inside components needed. The Passenger Boarding Bridge are stated to be quoted as three tunnel, with no specific bridge model references.
Question: is it acceptable for Cavotec to ask the qualified vendor bidding, to provide Cavotec for a three tunnel bridge model reference, allowing Cavotec to provide them a STU quote for their submission. STU quote to the bidder, would be subject to adjustments (up or down), based on the awarded bidder's final bridge models at each gate.

5. Boom-Air hose management unit. Mentions hose reel for bridges with two hose outlets, no mention of hose basket.
Question: all gates at MIA also have a hose basket, will that be required at each gate, as well?

Section 14950-Aircraft Passenger Boarding Bridges-Apron Drive.
Part 1
Section 1.01 Related Work, Makes reference to section 13470 and 16435.
Question: We kindly request to provide the listed sections, or are we to refer to PART III SCOPE OF WORK/TECHNICAL SPECIFICATIONS Section D. Equipment and Activities, equipment requirements listed for all technical requirements.
Kind regards,

**Patricia Cabarcos**
Sales Manager GSE Americas
Airport Solutions
Airport Division

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USA







Legal disclaimer available here.

MIAMI INTERNATIONAL AIRPORT

MIAMI-DADE COUNTY

# ADDENDUM NO. 3

**DATE: Tuesday, November 9, 2021**

**TO: ALL PROSPECTIVE BIDDERS**

**SUBJECT: Solicitation No. MDAD-PBB 15-1020**

**TITLE: 2021 15 PBB's Replacement at Concourses D,E,F and H.**

This Addendum becomes a part of the subject solicitation.

A. The following are questions received and corresponding County responses:

1. Page 12 in the ITQ provides the following description of the work: "....installation of fifteen (15) new 3 Tunnel PBBs including at a minimum, brake covers, fixed walkways, baggage chutes, and ground support service equipment at Miami International Airport Gates D10, D12, D15, D17, D19, E5, , H3, H5, H6, H7, H9, H12, H15, H17, and F21 *which includes design and installation of new foundations* in accordance MDAD Design Guidelines. However, the line item pricing breakdown on ITQ Pages 33 and 34 only contains one description mentioning a new foundation at Gate F21 under Line Item #1 with a quantity of 1. Please advise if the ITQ and contractor pricing is to include the design and installation of new foundations for all fifteen (15) new PBB's and associated fixed walkway sections or if it only includes one (1) new foundation for Gate F21

Answer: F21 is the only PBB of the 15 to be installed with a new orientation which requires a new foundation the rotunda; the walkway foundation adjacent to the building is to be re-used (Item 1 of Section IV, Price Form). The balance of the PBBs under this ITQ (D10, D12, D15, D17, D19, E5, H3, H5, H6, H7, H9, H12, H15, H17) do not require a new foundation. MDAD desires that the existing foundations be re-used, as is or retrofitted as determined by the site survey, analysis, and report performed by the Contractor. Any additional foundation work for D10, D12, D15, D17, D19, E5, H3, H5, H6, H7, H9, H12, H15, H17 PBBs will be covered under a dedicated allowance account pursuant to Part III, Section 10.D(1)(b) of the revised ITQ.

2. Page 12 in the ITQ provides durations for each phase listed under Item 2 "Description of Phases and Deliverables". Item 2C, Phase 3, states 35 days per gate staggered with 71 days for F21 including foundation. Please confirm the 35-day duration for all gates other than F21 does not include any foundation repairs, enhancements, or new foundation work.

Answer: The intent is to only have the gate location down for 35 days. The foundation enhancements, if required, may be completed on a pullback basis while the existing gate is in

service, prior to the existing PBB being removed, and/or concurrent with the 35 day closure period when the new PBB is being installed. (Refer to the Note in Part III, Section 2.C of the revised ITQ Form).

3. Page 12 in the ITQ provides durations for each phase listed under Item 2 "Description of Phases and Deliverables". Item 2C, Phase 3, states 35 days per gate staggered with 71 days for F21 including foundation. Please confirm these durations are strictly for the installation and manufacturers commissioning of the passenger loading bridge and does not include any additional airline requirements such as gate fit checks, time for the airline to move/resume operations at a gate or any other tasks performed by MDAD or airlines after the completion of the manufacturer/contractor commissioning.

Answer: Fit checks and any other airline/MDAD related tasks associated are to be included in the 35-day period. (*Note: fit checks usually require 1 to 2 days*).

4. Please advise if the contractor or MDAD will be responsible to compile and submit documentation to obtain a FAA 7460 Notice of Proposed Construction.

Answer: The Contractor.

5. Specification section 14950-1.09C requires a qualified manufacturer's technical representative and service personnel to be on call for a response within 8 hours for a period of sixty days after the loading bridge is opened for airline operations. Please advise if this person(s) needs to be a direct employee of the manufacturer and does this include manufacturer's representative(s) for other major equipment being installed on the passenger loading bridge such as PCA units.

Answer: The representative does not have to be a direct employee of the manufacturer, but they must be qualified/certified and/or otherwise licensed by the manufacturer to perform repairs to the systems to which they are assigned without voiding/affecting any warrantees or guarantees.

**All other information remains the same.**

Miami-Dade County,

Aazam Piprawala
Aviation Purchasing Specialist

c: Clerk of the Board

## Piprawala, Aazam (Aviation)

**From:** Piprawala, Aazam (Aviation)
**Sent:** Tuesday, November 9, 2021 1:11 PM
**To:** MWESTPHAL@ADELTE.COM; Jay Grantham; CLAY.RATLIFF@TKELEVATOR.COM
**Cc:** Clerk of the Board (COC); Kurt Dobbrunz; Strozier, Eugene (Aviation); Garcia, Neivy (Aviation); Finol, Ana (Aviation); Novela, Sylvia (Aviation)
**Subject:** MDAD ITQ No. MDAD-PBB15-1020 (Addendum No.3)
**Attachments:** Addendum No. 3.pdf

**Importance:** High

Hello Everyone,
Hope all is well today. Kindly see attached for your perusal

*Thank You!*

**Aazam Piprawala,** Airport Purchasing Specialist
**Miami-Dade Aviation Department**
305-876-0566 Phone
apiprawala@flymia.com
www.iflymia.com
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**From:** Piprawala, Aazam (Aviation)
**Sent:** Monday, November 1, 2021 3:15 PM
**To:** MWESTPHAL@ADELTE.COM; Jay Grantham <jay.grantham@aerobridgeworks.net>; CLAY.RATLIFF@TKELEVATOR.COM
**Cc:** Clerk of the Board (COC) <Clerk.Board@miamidade.gov>; Kurt Dobbrunz <kdobbrunz@hntb.com>; Strozier, Eugene (Aviation) <EStrozier@FlyMIA.com>; Garcia, Neivy (Aviation) <NGarcia@FlyMIA.com>; Finol, Ana (Aviation) <AFinol@FlyMIA.com>; Novela, Sylvia (Aviation) <SNovela@FlyMIA.com>
**Subject:** RE: MDAD ITQ No. MDAD-PBB15-1020 (Addendum No.2)

Hello Everyone,
Hope all is well today. Kindly see attached for your perusal

*Thank You!*

**Aazam Piprawala,** Airport Purchasing Specialist
**Miami-Dade Aviation Department**
305-876-0566 Phone
apiprawala@flymia.com
www.iflymia.com

## Piprawala, Aazam (Aviation)

**From:** Jason Pearson <jason.pearson@aerobridgeworks.net>
**Sent:** Wednesday, November 3, 2021 10:55 AM
**To:** Piprawala, Aazam (Aviation)
**Cc:** Manuel Torres
**Subject:** MDAD ITQ No. MDAD-PBB15-1020 - Questions

**Importance:** High

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Aazam,

Please find the following questions in response to MDAD ITQ No. MDAD-PBB15-1020.

1) Page 12 in the ITQ provides the following description of the work: "....installation of fifteen (15) new 3 Tunnel PBBs including at a minimum, brake covers, fixed walkways, baggage chutes, and ground support service equipment at Miami International Airport Gates D10, D12, D15, D17, D19, E5, , H3, H5, H6, H7, H9, H12, H15, H17, and F21 *which includes design and installation of new foundations* in accordance MDAD Design Guidelines. However, the line item pricing breakdown on ITQ Pages 33 and 34 only contains one description mentioning a new foundation at Gate F21 under Line Item #1 with a quantity of 1. Please advise if the ITQ and contractor pricing is to include the design and installation of new foundations for all fifteen (15) new PBB's and associated fixed walkway sections or if it only includes one (1) new foundation for Gate F21.

2) Page 12 in the ITQ provides durations for each phase listed under Item 2 "Description of Phases and Deliverables". Item 2C, Phase 3, states 35 days per gate staggered with 71 days for F21 including foundation. Please confirm the 35 day duration for all gates other than F21 does not include any foundation repairs, enhancements or new foundation work.

3) Page 12 in the ITQ provides durations for each phase listed under Item 2 "Description of Phases and Deliverables". Item 2C, Phase 3, states 35 days per gate staggered with 71 days for F21 including foundation. Please confirm these durations are strictly for the installation and manufacturers commissioning of the passenger loading bridge and does not include any additional airline requirements such as gate fit checks, time for the airline to move/resume operations at a gate or any other tasks performed by MDAD or airlines after the completion of the manufacturer/contractor commissioning.

4) Please advise if the contractor or MDAD will be responsible to compile and submit documentation to obtain a FAA 7460 Notice of Proposed Construction.

5) Specification section 14950-1.09C requires a qualified manufacturer's technical representative and service personnel to be on call for a response within 8 hours for a period of sixty days after the loading bridge is opened for airline operations. Please advise if this person(s) needs to be a direct employee of the manufacturer and does this include manufacturers representative(s) for other major equipment being installed on the passenger loading bridge such as PCA units.

Thank you,






2019
BEST PLACES
TO WORK
VOTED #1
2nd YEAR IN A ROW

*"...15,000* ***Gates & Counting"***

**Jason Pearson, PE**
AERO BridgeWorks | Vice President

2700 Delk Road SE | Suite 150 | Marietta, GA 30067

**E:** Jason.Pearson@aerobridgeworks.net
**P:** 770.423.4200 x113
**M:** 919.749.0306




***Celebrating Over 20 Years of Excellence***

## Piprawala, Aazam (Aviation)

**From:** Piprawala, Aazam (Aviation)
**Sent:** Tuesday, November 16, 2021 9:28 AM
**To:** Kali Smith
**Cc:** Clerk of the Board (COC)
**Subject:** TWIST QUESTION// MDAD-PBB 15-1020

**Importance:** High

Hi Kali,

You will have to direct your concern to TKE for question below. All questions submitted have been answered via the three (3) addenda issued.

*Thank You!*

**Aazam Piprawala,** Airport Purchasing Specialist
**Miami-Dade Aviation Department**
305-876-0566 Phone
apiprawala@flymia.com
www.iflymia.com
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**From:** Kali Smith <ksmith@twistinc.com>
**Sent:** Tuesday, November 16, 2021 8:26 AM
**To:** Piprawala, Aazam (Aviation) <APiprawala@FlyMIA.com>
**Subject:** MDAD-PBB 15-1020

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Good Morning Aazam,

We have submitted questions through a contractor (TKE) for solicitation MDAD-PBB 15-1020, which were not addressed in Addendum #3. Should we expect another addendum to be released with our bid questions answered?

Appreciate your feedback.

Kind Regards,
Kali

Kali Smith
VP of Business Unit Development
Twist Aero
O: 937-675-9581
C: 937-768-0568
www.TwistAero.com

MIAMI INTERNATIONAL AIRPORT

MIAMI-DADE COUNTY

# ADDENDUM NO. 4

**DATE: Friday, November 19, 2021**

**TO: ALL PROSPECTIVE BIDDERS**

**SUBJECT: Solicitation No. MDAD-PBB 15-1020**

**TITLE: 2021 15 PBB's Replacement at Concourses D,E,F and H.**

This Addendum becomes a part of the subject solicitation.

A. The following are questions received and corresponding County responses:

1. Section D. Equipment and Activities: 2. Cavotec Inet PCAir Air Handling Unit (AHU) or approved equals (PAC45 for D12, D15, D17, D19, E5,F21,H3,H5,H6,H7,H9,H15,H17 and PAC90 for H12 and H10) and required hoses/nozzles. May Twist Aero be considered as an approved equal?

Answer: Submitted Approved Equals will be considered in accordance to paragraph 1.38 of Section 1 "General Terms and Conditions" and Part I.B.7. "Equal Brand Definition".

2. General
   A. Does the Buy American Act apply to this ITQ?
   B. Will this project receive Federal Funding from FAA via the Airport Improvements Program?.

Answer: A. Section 2-8.2.6.1 Buy American Iron and Steel Products Procurement Program is not applicable to this ITQ.
B. Not currently.

3. Attachment A Section 14950 Aircraft Passenger Boarding Bridges – Apron Drive
   A. 1.02.D Description of Work. Can you verify the location of the interface point?
   B. 2.05.2.b Ramp access element. Specifications call for the service door to be 2'-6' wide our standard is 3'-0" will you please accept our standard?
   C. 2.07 E 3 Ceiling. We use painted galvannealed steel sheets for the ceiling panels in lieu of aluminum plank-type ceiling panels. The material is processed at the steel distribution warehouse and is formed in long continuous coils and cut to the width that we require. The material comes pre-painted (coated) in the color that we specify. We request to use our standard.

D. Page 13 5 – Boom-Air. Please verify the quantity of Boom-Air units required per each passenger boarding bridge?

Answer: Attachment A Section 14950 aircraft Passenger Boarding Bridges – Apron Drive

A. The Awarded Contractor's survey must verify these points.
B. Submitted Approved Equals will be considered in accordance to paragraph 1.38 of Section 1 "General Terms and Conditions" and Part I.B.7. "Equal Brand Definition"
C. Submitted Approved Equals will be considered in accordance to paragraph 1.38 of Section 1 "General Terms and Conditions" and Part I.B.7. "Equal Brand Definition"
D. 1 Boom-Air unit per each PBB (15 each) and 1 hose reel for PAC90 units (2 each).

**All other information remains the same.**

Miami-Dade County,

Sylvia Novela for Aazam Piprawala
Aviation Purchasing Specialist

c: Clerk of the Board

## Ramos, Eileen (Aviation)

**From:** Novela, Sylvia (Aviation)
**Sent:** Friday, November 19, 2021 6:41 PM
**To:** Piprawala, Aazam (Aviation); MWESTPHAL@ADELTE.COM; Jay Grantham; CLAY.RATLIFF@TKELEVATOR.COM
**Cc:** Clerk of the Board (COC); Kurt Dobbrunz; Strozier, Eugene (Aviation); Garcia, Neivy (Aviation); Finol, Ana (Aviation); Ramos, Eileen (Aviation)
**Subject:** MDAD ITQ No. MDAD-PBB15-1020 Addendum No. 4
**Attachments:** Addendum No. 4.pdf

**Importance:** High

Please review attachment. Please note that Aazam Piprawala is out of the office today-November 29, 2021. Any correspondence on this procurement, please contact me. The due date/time/location is not changing. I will be present on behalf of Aazam.

Thank you,

*Sylvia Novela*

**Division Director 2, Contracts Administration**
**Miami-Dade Aviation Department**
P.O. Box 025504
Miami, Florida 33102-5504
305-876-7048 Phone
786-769-1580 Cell
snovela@miami-airport.com
www.miami-airport.com

TK Airport Solutions, Inc. | 3201 North Sylvania Avenue Suite 117, Fort Worth, TX 76111]

James Duchan
P +1 817 718-7619
James.duchan@tkelevator.com
11.08.2021

November 8, 2021

Attn: Clerk.Board@miamidade.gov

Reference: ITQ No.: MDAD-PBB 15-1020
2021 15 PBBs Replacement at Concourses D, E, F, and H
Miami, FL

To whom it may Concern,

Please see our RFI's shown below for the above mentioned project.

**GENERAL**

1. Does the Buy American Act apply to this ITQ?
2. Will this project receive Federal funding from the FAA via the Airport Improvement Program?

**Attachment A Section 14950 Aircraft Passenger Boarding Bridges – Apron Drive**

1. **1.02.D Description of Work**

Can you verify the location of the interface point?

2. **2.05.2.b Ramp access element**

Specifications call for the service door to be 2'-6" wide our standard is 3'-0" will you please accept our standard?

3. **2.07 E 3 Ceiling**

We use painted galvannealed steel sheets for the ceiling panels in lieu of aluminium plank-type ceiling panels. The material is processed at the steel distribution warehouse and is formed in long continuous coils and cut to the width that we require. The material comes pre-painted (coated) in the color that we specify. We request to use our standard.

4. **Page 13 5 – Boom-Air**

Please verify the quantity of Boom-Air units required per each passenger boarding bridge?

Kind Regards,

James Duchan
Business Development Manager
TK Airport Solutions
Fort Worth, TX 76111
Tel: (817) 718-7619
James.duchan@tkelevator.com

www.TwistAero.com

TwistAero

5100 Waynesville-
Jamestown Rd.
Jamestown OH, 45335

937.675.9581
937.675.6128

dmcintire@twistinc.com

**Twist Aero Bid RFIs**
**Miami International Airport**
**2021 15 PBBs Replacement at Concourses D, E, F and G.**
**ITQ No: MDAD-PBB 15-1020**
**November 8, 2021**

**"Invitation to Quote Document"**

- **D. Equipment and Activities:**
- **2.** Cavotec Inet PCAir Air Handling Unit (AHU) or approved equals (PAC45 for D12, D15, D17, D19, E5, F21, H3, H5, H6, H7, H9, H15, H17 and PAC90 for H12 and H10) and required hoses/nozzles. *May Twist Aero be considered as an approved equal?*

## Piprawala, Aazam (Aviation)

**From:** Ratliff, Clay <clay.ratliff@tkelevator.com>
**Sent:** Thursday, November 18, 2021 2:55 PM
**To:** Piprawala, Aazam (Aviation)
**Cc:** Duchan, James; Ratliff, Clay
**Subject:** FW: ITQ No. MDAD-PBB 15-1020 2021 15 PBBs Replacement at Concourse D, E, F, and H
**Attachments:** Twist Aero MDAD Bid RFIs.pdf; Miami RFI.pdf

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Aazam,

Please see below. We apologize for any confusion on the submittal of these questions.

Regards,

Wm. Clay Ratliff
Director of Field Operations and Business Development / North America

M: +1 682.328.9165, clay.ratliff@tkelevator.com
TK AIRPORT SOLUTIONS, Inc. | 3201 N. Sylvania Ave. Suite 117 | Fort Worth, TX 76111 | USA

---

**From:** Duchan, James
**Sent:** Monday, November 8, 2021 5:14 PM
**To:** Clerk of the Board (COC) <Clerk.Board@miamidade.gov>
**Cc:** aaron.potter@tkelevator.com; Ratliff, Clay <clay.ratliff@tkelevator.com>
**Subject:** ITQ No. MDAD-PBB 15-1020 2021 15 PBBs Replacement at Concourse D, E, F, and H

To whom it may concern,

Attached please find copy of our RFI's for the above-mentioned project. Thank you,

Regards,

James Duchan
Business Development Manager

M:+1 (817) 718-7619 james.duchan@tkelevator.com
**TK Airport Solutions, Inc**, 3201 N. Sylvania Ave. Suite 117 Fort Worth, TX 76111, USA

## Piprawala, Aazam (Aviation)

**From:** Piprawala, Aazam (Aviation)
**Sent:** Thursday, October 21, 2021 12:43 PM
**To:** MWESTPHAL@ADELTE.COM; Jay Grantham; CLAY.RATLIFF@TKELEVATOR.COM
**Cc:** Clerk of the Board (COC); Kurt Dobbrunz; Strozier, Eugene (Aviation); Garcia, Neivy (Aviation); Finol, Ana (Aviation); Novela, Sylvia (Aviation)
**Subject:** RE: MDAD ITQ No. MDAD-PBB15-1020
**Attachments:** MDAD ITQ No. MDAD-PBB15-1020 (with Attachments and Exhibits).pdf

**Importance:** High

**Tracking:**

| Recipient | Delivery | Read |
|---|---|---|
| MWESTPHAL@ADELTE.COM | | |
| Jay Grantham | | |
| CLAY.RATLIFF@TKELEVATOR.COM | | |
| Clerk of the Board (COC) | | |
| Kurt Dobbrunz | | |
| Strozier, Eugene (Aviation) | Delivered: 10/21/2021 12:43 PM | Read: 10/21/2021 1:11 PM |
| Garcia, Neivy (Aviation) | Delivered: 10/21/2021 12:43 PM | Read: 10/21/2021 12:49 PM |
| Finol, Ana (Aviation) | Delivered: 10/21/2021 12:43 PM | Read: 10/21/2021 1:13 PM |
| Novela, Sylvia (Aviation) | Delivered: 10/21/2021 12:43 PM | Read: 10/21/2021 12:43 PM |

Hello Everyone!
Kindly see attached ITQ for your perusal WITH attachments and Exhibits.

*Thank You!*

**Aazam Piprawala,** Airport Purchasing Specialist
**Miami-Dade Aviation Department**
305-876-0566 Phone
apiprawala@flymia.com
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**From:** Piprawala, Aazam (Aviation)
**Sent:** Thursday, October 21, 2021 11:55 AM
**To:** MWESTPHAL@ADELTE.COM; Jay Grantham <jay.grantham@aerobridgeworks.net>; CLAY.RATLIFF@TKELEVATOR.COM
**Cc:** Clerk of the Board (COC) <Clerk.Board@miamidade.gov>; Kurt Dobbrunz <kdobbrunz@hntb.com>; Strozier, Eugene (Aviation) <EStrozier@FlyMIA.com>; Garcia, Neivy (Aviation) <NGarcia@FlyMIA.com>; Finol, Ana (Aviation)

<AFinol@FlyMIA.com>; Novela, Sylvia (Aviation) <SNovela@FlyMIA.com>
**Subject:** MDAD ITQ No. MDAD-PBB15-1020
**Importance:** High

Hello Everyone!

Hope all is well. Kindly find attached MDAD ITQ No. **MDAD-PBB15-1020** for your perusal.

I will be your point of contact for this ITQ and any questions must be sent to me via e-mail at apiprawala@flymia.com and copy the Clerk of the Board Clerk.Board@miamidade.gov .

*Thank You!*

**Aazam Piprawala,** Airport Purchasing Specialist
**Miami-Dade Aviation Department**
305-876-0566 Phone
apiprawala@flymia.com
www.iflymia.com
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# SECTION 1
# GENERAL TERMS AND CONDITIONS

## 1.1. DEFINITIONS

**Awarded Bidder/Contractor/Prime Contractor** – shall mean the Bidder(s) awarded a Contract as a result of this Solicitation.
**Bid** – shall refer to any offer submitted in response to this Solicitation.
**Bidder** – shall refer to legal entity submitting a Bid in response to this Solicitation.
**BidSync** – shall refer to the electronic bidding system used to solicit and receive Bids for the County.
**Business Management Workforce System (BMWS)** – shall refer to the County's web-based system that firms must utilize to comply with Small Business Enterprise (SBE), Wage and/or Workforce programs and Subcontractor reporting requirements (http://mdcsbd.gob2g.com).
**C.F.R.** – shall mean the Code of Federal Regulations.
**Contract** - shall mean collectively, these terms and conditions, the Solicitation, any addenda and/or properly executed modifications, the awarded Bid, and the resultant County purchase order, work orders (if applicable) and any change order(s), which constitutes the legally enforceable agreement between the County and the Awarded Bidder(s).
**County** – shall refer to Miami-Dade County, Florida.
**FEMA** – shall mean the Federal Emergency Management Agency.
**ISD** – shall refer to the Miami-Dade Internal Services Department.
**NFE** – shall refer to Non-Federal Entity, which means a state, local government, Indian tribe, institution of higher education, hospital, or nonprofit organization that carries out a Federal award as a recipient or sub-recipient. 2 C.F.R.§ 200.69.
**Registered Supplier/Vendor** – shall refer to a legal entity (firm or individual) that has completed, and continues to comply with the requirements of the Miami-Dade County Business Entity Registration Application process via the County's online Supplier/Vendor Portal and has satisfied all requirements to enter into business agreements with the County
**SPD** – shall refer to the Miami-Dade Strategic Procurement Division within ISD.
**Solicitation** – shall mean this documentation, including any and all addenda.
**Subcontractor** – shall mean any person, entity, firm or corporation, other than the employees of the Awarded Bidder/Contractor/Prime Contractor, who furnishes labor and/or materials, in connection with the Work, whether directly or indirectly, on behalf and/or under the direction of the Awarded Bidder/Contractor/Prime Contractor and whether or not in privity of Contract with the Awarded Bidder/Contractor/Prime Contractor.
**Work or Services** - shall mean all matters and things that will be required to be done by the Contractor in accordance with the Scope of Work/Technical Specifications, and the terms and conditions of this Solicitation.

## 1.2. INSTRUCTIONS TO BIDDERS

### A. Bidder Qualification

It is the policy of the County to encourage full and open competition among all available qualified vendors. All vendors regularly engaged in the type of work specified in the d Solicitation are encouraged to submit a Bid. To be eligible for award of a contract (including small purchase orders), Bidder must become a registered Supplier with Miami-Dade County. Only registered Suppliers can be awarded County contracts. Suppliers are required to register with the County's online Supplier/Vendor Portal as described below in Section B "Supplier/Vendor Registration." For additional information about online supplier/vendor registration, please contact the Vendor Outreach & Support Services (VOSS) at (305) 375-5773. **In the event that the vendor's online registration submittal is not approved, the County may in its sole discretion, award to the next lowest responsive, responsible Bidder.**

### B. Supplier/Vendor Registration

Prior to award recommendation, the County requires that recommended Bidder complete the Business Entity Registration Application via the Internal Services Department's Online Supplier/Vendor Registration Portal at: https://supplier.miamidade.gov

To complete the registration, Supplier/vendor must have the following documents: Miami-Dade County Local Tax Receipt (for vendors with a physical location within Miami-Dade County), Certificate of Incorporation (if applicable), and Form W-9 and 147c Letter, as required by the Internal Revenue Service.

1. ***Miami-Dade County Ownership Disclosure Affidavit***
   *(Section 2-8.1 of the Code of Miami-Dade County)*
2. ***Miami-Dade County Employment Disclosure Affidavit***
   *(Section 2-8.1(d)(2) of the Code of Miami-Dade County)*
3. ***Miami-Dade Employment Drug-free Workplace Certification***
   *(Section 2-8.1.2(b) of the of the Code of Miami-Dade County)*
4. ***Miami-Dade Disability and Nondiscrimination Affidavit***
   *(Section 2-8.1.5 of the Code of Miami-Dade County)*
5. ***Miami-Dade County Debarment Disclosure Affidavit***
   *(Section 10-38 of the Code of Miami-Dade County)*
6. ***Miami-Dade County Vendor Obligation to County* Affidavit**
   *(Section 2-8.1 of the Code of Miami-Dade County)*
7. ***Miami-Dade County Code of Business Ethics Affidavit***
   *(Article I, Section 2-8.1(i) of the Code of Miami-Dade County)*
8. ***Miami-Dade County Family Leave Affidavit***
   *(Article V of Chapter 11 of the Code of Miami-Dade County)*
9. ***Miami-Dade County Living Wage Affidavit***
   *(Section 2-8.9 of the Code of Miami-Dade County)*
10. ***Miami-Dade County Domestic Leave and Reporting Affidavit***
    *(Article VIII, Section 11A-60 - 11A-67 of the Code of Miami-Dade County)*
11. ***Miami-Dade County Verification of Employment Eligibility (E-Verify) Affidavit*** *(Section 448.095, Florida Statute)*
12. ***Miami-Dade County Pay Parity Affidavit***
    *(Resolution No. R-1072-17)*
13. ***Miami-Dade County Suspected Workers' Compensation Fraud Affidavit*** *(Resolution No. R-919-18)*
14. ***Subcontracting Practices***
    *(Section 2-8.8 of the Code of Miami-Dade County)*
15. ***Subcontractor/Supplier Listing – Must be submitted via BMWS***
    *(Section 2-8.1 and 10.34 of the Code of Miami-Dade County)*
16. ***Federal Employer Identification Number (FEIN) or Social Security Number***
    *In order to establish a file, the Contractor's FEIN must be provided. If no FEIN exists, the Social Security Number of the owner or individual must be provided. To comply with Section 119.071(5) of the Florida Statutes relating to the collection of an individual's Social Security Number, be aware the County requests the Social Security Number for the following purposes:*

## SECTION 1
## GENERAL TERMS AND CONDITIONS

- *Identification of individual account records*
- *To make payments to individual/Contractor for goods and services provided to Miami-Dade County*
- *Tax reporting purposes*
- *To provide a unique identifier in the Supplier database that may be used for searching and sorting departmental records*

17. ***Office of the Inspector General***
*(Section 2-1076 of the Code of Miami-Dade County)*

18. ***Small Business Enterprises (SBE) - NOT APPLICABLE TO FEDERALLY FUNDED PURCHASES***
*The County endeavors to obtain the participation of all small business enterprises pursuant to Sections 2-8.1.1.1.1, 2-8.1.1.1.2, 10-34, and 2-8.2.2 of the Code of Miami-Dade County and Title 49 of the Code of Federal Regulations. The SBE Program provisions are available at* https://www.miamidade.gov/smallbusiness/business-development-legislation.asp

19. ***Antitrust Laws***
*By acceptance of any contract, the Contractor agrees to comply with all antitrust laws of the United States and the State of Florida.*

### C. Public Entity Crimes
To be eligible for award of a contract, firms wishing to do business with the County must comply with the following:
Pursuant to Section 287.133(2)(a) of the Florida Statutes, a person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a Bid on a contract to provide any goods or services to a public entity, may not submit a Bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit Bids on leases of real property to a public entity, 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 Section 287.017 of the Florida Statutes, for CATEGORY TWO for a period of thirty-six (36) months from the date of being placed on the Convicted Vendor List.

### D. Request for Additional Information
1. Pursuant to Section 2-11.1(t) of the Code of Miami-Dade County, all Solicitations, once advertised and until an award recommendation has been forwarded to the appropriate authority are under the **"Cone of Silence"**. Any communication or inquiries, except for clarification of process or procedure already contained in the solicitation, are to be made in writing to the attention of the Procurement Officer identified on the front page of the solicitation via the BidSync System with a copy sent to the Clerk of the Board, clerkbcc@miamidade.gov.
2. Strategic Procurement Division may issue an addendum in response to any inquiry received, prior to Bid opening, which changes, adds to, or clarifies the terms, provisions or requirements of the Solicitation. The Bidder should not rely on any representation, statement or explanation whether written or verbal, other than those made in this Solicitation document or in any addenda issued.
3. It is the Bidder's responsibility to ensure receipt of all addenda, and any accompanying documentation.

### E. Contents of Solicitation and Bidders' Responsibilities
1. It is the responsibility of the Bidder to become thoroughly familiar with the requirements and terms and conditions of this Solicitation. Pleas of ignorance by the Bidder of conditions that exist or that may exist will not be accepted as a basis for varying the requirements of the County, or the compensation to be paid to the Bidder.
2. In the event a Bidder wishes to contest any part of the General Terms and Conditions, Additional/Special Conditions and/or Technical Specifications contained in the Solicitation, the Bidder must file a notice of objection in writing with the issuing department, at least two workdays *(not less than forty-eight (48) hours)* prior to the Bid opening date and hour specified in the Solicitation. Failure to file a timely notice of objection will constitute a waiver of proceedings.
3. This Solicitation is subject to all legal requirements contained in the applicable County Ordinances, Administrative/Implementing Orders, and Resolutions, as well as all applicable State statutes and Federal regulations. Where conflict exists between this Solicitation and these legal requirements, the authority shall prevail in the following order: Federal, State, and local.
4. It is the responsibility of the Bidder, prior to conducting any lobbying **regarding this** Solicitation to file the appropriate form with the Clerk of the Board **stating that a particular lobbyist is authorized to represent the Bidder.** The Bidder shall also file a form with the Clerk of the Board at the point in time at which a lobbyist is no longer authorized to represent said Bidder. Failure of a Bidder to file the appropriate form required, in relation to each Solicitation, may be considered as evidence that the Bidder is not a responsible contractor.

### F. Change or Withdrawal of Bids
1. Changes to Bid - Prior to the scheduled Bid opening, a Bidder may change its Bid by submitting a new Bid via BidSync. No changes to a Bid will be accepted after the Bid opening.
2. Withdrawal of Bid – A Bid shall be irrevocable unless the Bid is withdrawn as provided herein. A Bid may be withdrawn one hundred-eighty (180) days after the Bid has been opened and prior to award, by submitting a letter to the contact person identified on the front cover of this Solicitation. The withdrawal letter must be on company letterhead and signed by an authorized agent of the Bidder.

### G. Conflicts within the Solicitation
Where there appears to be a conflict between the General Terms and Conditions, Additional/Special Conditions, Technical Specifications, Bid Submittal Section, or any addenda issued, the order of precedence shall (1) last addendum issued, (2) Bid Submittal Section, (3) Technical Specifications, (4) Additional/Special Conditions and, (5) General Terms and Conditions.

### H. Prompt Payment Terms
**IN ACCORDANCE WITH CFR 200.319(b), NO PAYMENT TERMS DISTINCTION SHALL APPLY TO SBE FOR FEDERALLY FUNDED PURCHASES**
It is the policy of Miami-Dade County that payment for all purchases by County agencies and the Public Health Trust shall be made in a timely manner and that interest payments be made on late payments. In accordance with Florida Statutes, Section 218.74. and Section 2-8.1.4 of the Code of Miami-Dade County, the time at which payment shall be due from the County or the Public Health Trust shall be forty-five (45) days from receipt of a proper invoice; for Small Business Enterprises (SBEs), it shall be fourteen (14) calendar days. Billings from Prime Contractors under either services or goods contracts pursuant to Sections 2-8.1.1.1.1 or 2-8.1.1.1.2 of the Code of Miami-Dade County, respectively, that are a SBE contract set-aside, bid preference or contain a subcontractor goal, shall be promptly reviewed and payment made by the County or Trust on those amounts not in dispute, within fourteen (14) calendar days of receipt of a proper invoice. The Prime Contractor shall pay those amounts not in dispute to subcontracting SBEs within two days of receipt of payment from the County. All payments for undisputed amounts due from the County or the Public Health Trust, and not made within the time specified by this section, shall bear interest from thirty (30) days after the due date at the rate of one percent (1%) per month on the unpaid

## SECTION 1
## GENERAL TERMS AND CONDITIONS

balance. Further, proceedings to resolve disputes for payment of obligations shall be concluded by final written decision of the County Mayor, or their designee, not later than sixty (60) days after the date on which the proper invoice was received by the County or the Public Health Trust.

**I. Accounts Receivable Adjustments**

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

### 1.3. PREPARATION OF BIDS

A. Bidders are required to register, free of charge, with BidSync to establish a vendor account to view and respond to solicitations issued by Miami-Dade County.
B. The Solicitation submittal form must be fully completed and provided with Bid. Failure to comply with these requirements may cause the Bid to be rejected.
C. An authorized agent of the Bidder's firm must electronically sign the Solicitation submittal form and submit it electronically. **FAILURE TO SIGN THE SOLICITATION SUBMITTAL FORM SHALL RENDER THE BID NON-RESPONSIVE.**
D. The Bidder may be considered non-responsive if Bid is conditioned to modifications, changes, or revisions to the terms and conditions of this Solicitation.
E. The Bidder may submit alternate Bid(s) for the same Solicitation provided that such offer is allowable under the terms and conditions. The alternate Bid must meet or exceed the minimum requirements and be submitted on a separate Bid submittal marked "Alternate Bid."
F. When there is a discrepancy between the unit prices and any extended prices, the unit prices will prevail.

### 1.4. CANCELLATION OF BID SOLICITATION

Miami-Dade County reserves the right to cancel, in whole or in part, any solicitation when it is in the best interest of the County.

### 1.5. AWARD OF SOLICITATION

A. This Bid may be awarded to the responsible Bidder meeting all requirements as set forth in the Solicitation. The County reserves the right to reject any and all Bids, to waive irregularities or technicalities and to re-advertise for all or any part of this Solicitation, as deemed in its best interest. The County shall be the sole judge of its best interest.
B. When there are multiple line items in a solicitation, the County reserves the right to award on an individual item basis, any combination of items, total low Bid or in whichever manner deemed in the best interest of the County.
C. The County reserves the right to reject any and all Bids if it is determined that prices are excessive, best offers are determined to be unreasonable, or it is otherwise determined to be in the County's best interest to do so.
D. The County reserves the right to negotiate prices with the low bidder, provided that the scope of work/Technical Specifications of this Solicitation remains the same.
E. Award of this Solicitation will only be made to firms that have completed the Miami-Dade County Business Entity Registration Application and that satisfy all necessary legal requirements to do business with Miami-Dade County. Firms domiciled in Miami-Dade County must present a copy of their Miami-Dade County issued Local Business Tax Receipt.
F. Pursuant to Section 2-8.1(g) of the Code of Miami-Dade County, the Bidder's performance as a Prime Contractor or Subcontractor on previous County contracts shall be taken into account in evaluating the Bid received for this Solicitation.
G. To obtain a copy of the Bid tabulation, upon notice of Award Recommendation, Bidder may request bid tabulations or other award information by contacting the contact person outlined within the Solicitation. Information will then be provided electronically.
H. The Solicitation, any addenda and/or properly executed modifications, the purchase order, work order, and any change order(s) shall constitute the resultant Contract.
I. In accordance with Resolution R-1574-88, the Director of the Internal Services Department or authorized designee will decide all Tie Bids.
J. Award of this Bid may be predicated on compliance with, and submittal of **all required documents as stipulated in the Solicitation.**
K. In accord with Resolution No. R-828-19 , the County reserves the right to request from any Bidder the disclosure of any lawsuits which include allegations of discrimination in the last ten years prior to date of solicitation, the disposition of such lawsuits, or statement that there are NO such lawsuits.
L. The County further reserves the right to request and evaluate additional information from any Bidder after the submission deadline as the County deems necessary.

### 1.6. CONTRACT EXTENSION

The County reserves the right to exercise its option to extend a contract for up to one hundred-eighty (180) calendar days beyond the current contract period and will notify the Contractor in writing of the extension.

This Contract may be extended beyond the initial one hundred-eighty (180) day extension period upon mutual agreement between the County and the Awarded Bidder upon approval by the Board of County Commissioners.

### 1.7. WARRANTY

All warranties express and implied, shall be made available to the County for goods and services covered by this Solicitation. All goods furnished shall be fully guaranteed by the Awarded Bidder against factory defects and workmanship. At no expense to the County, the Awarded Bidder shall correct any and all apparent and latent defects that may occur within the manufacturer's standard warranty. The Additional/Special Terms and Conditions of the Solicitation may supersede the manufacturer's standard warranty.

### 1.8. MATERIALS SHALL BE NEW AND WARRANTED AGAINST DEFECTS

All materials, except where recycled content is specifically requested, supplied by the Awarded Bidder under the Contract shall be new, warranted for their merchantability, and fit for the particular purpose herein. In the event any of the materials supplied to the County by the Awarded Bidder are found to be defective or do not conform to specifications: (1) the materials may be returned to the Awarded Bidder at its expense and the Contract terminated or, (2) the County may require the Awarded Bidder to replace the materials at its expense.

### 1.9. QUANTITIES

Quantities or dollars are for Bidder's guidance only: (a) estimates are based on the County's anticipated needs and/or usage during a previous contract period and, (b) the County may use these estimates to determine the low Bidder. Estimated quantities do not contemplate or include possible additional quantities that may be ordered by other government, quasi-governmental or, non-profit entities utilizing this Contract under the Joint Purchase portion of the County User Access Program (UAP) described in Section 1.37 and the resultant Contract, if that section is present in this Solicitation document.

# SECTION 1
# GENERAL TERMS AND CONDITIONS

### 1.10 NON-EXCLUSIVITY
It is the intent of the County to enter Contractors with the Awarded Bidder that will satisfy its needs as described herein. However, the County reserves the right as deemed in its best interest to perform, or cause to be performed, the Work and Services, or any portion thereof, herein described in any manner it sees fit, including but not limited to; award of other contracts, use of any contractor, or perform the Work with its own employees.

### 1.11. LOCAL PREFERENCE IN ACCORDANCE WITH CFR 200.319(B), PARAGRAPH 1.11, LOCAL PREFERENCE SHALL NOT APPLY TO FEDERALLY FUNDED PURCHASES
The evaluation of competitive bids is subject to Section 2-8.5 of the Code of Miami-Dade County, which, except where contrary to Federal and State law, or any other funding source requirements, provides that preference be given to local businesses. A Bidder shall affirm in writing its compliance with the requirements of Section 2-8.5 of the Code of Miami-Dade County at the time of submitting its Bid to be eligible for consideration as a "local business" under this section.

A. A Local Business is defined as:
1. a business that has a valid business tax receipt issued by the County at least one year prior to Bid submission;
2. a business that has physical business address located within the limits of Miami-Dade County from which the Bidder operates or performs business ("Local Business Location"). The Bidder must own or lease the Local Business Location and the address, or another Local Business Location where the owner maintains the appropriate business permits, must have served as the place of employment for at least three full time employees of the Bidder for the continuous period of one year prior to the Bid submission. By exception, if the Bidder is a SBE certified pursuant to the Code, the Local Business Location must have served as the place of employment for at least one full time employee of the Bidder for the continuous period of one year prior to the Bid submission. Post Office Boxes are not verifiable and shall not be used for the purpose of establishing said physical address; and,
3. a business that contributes to the economic development and well-being of the County in a verifiable and measurable way. This may include but not be limited to, the retention and expansion of employment opportunities and the support and increase in the County's tax base.

B. Additionally, a Locally Headquartered Business shall mean a Local Business as defined above, which has a "principal place of business" in Miami-Dade County. "Principal place of business" means *the nerve center or the center of overall direction, control, and coordination of activities of the Bidder.* If the Bidder has only one business location, such business location shall be its principal place of business.

C. If the responsive and responsible Bidder offering the low price ("Low Bidder" and "Low Bid" respectively) is not a Local Business, then any and all responsive and responsible Local Businesses submitting a price within ten percent (10%) of the Low Bid, and any and all responsive and responsible Locally-Headquartered Businesses submitting a price within fifteen percent (15%) of the Low Bid, shall have an opportunity to submit a best and final offer bid equal to, or lower than the Low Bid.

D. If the Low Bidder is a Local Business which is not a Locally Headquartered Business, then any and all responsive and responsible Locally- Headquartered Businesses submitting a price within five percent (5%) of the Low Bid, and the Low Bidder shall have an opportunity to submit a best and final offer equal to or lower than the Low Bid.

### 1.12. CONTINUATION OF WORK
Any Work that commences prior to and extends beyond the expiration date of the current Contract period shall, unless terminated by mutual written agreement between the County and the Awarded Bidder, will continue until completion at the same prices, terms and conditions.

### 1.13 BID PROTEST
A recommendation for Contract award or rejection of award may be protested by a Bidder in accordance with the procedures contained in Sections 2-8.3 and 2-8.4 of the Code of Miami-Dade County, as amended, and as established in Implementing Order No. 3-21.

A. A written intent to protest shall be filed with the Clerk of the Board and emailed to all participants in the competitive process within three County workdays of the filing of the County Mayor's recommendation. This three-day period begins on the County workday after the filing of the County Mayor's or designee's recommendation. Such written intent to protest shall state the grounds on which it is based and shall be accompanied by a filing fee as detailed below.

B. The written intent to protest shall be accompanied by a non-refundable filing fee (the Filing Fee), payable to the Clerk of the Board, in accordance with the schedule provided below:

| Award Amount | Filing Fee |
|---|---|
| $25,000-$250,000 | $ 500 |
| $250,001-$500,000 | $1,000 |
| $500,001-$5 million | $3,000 |
| Over $5 million | $5,000 |

The Filing Fee for a certified Small Business Enterprise (SBE) firm shall be fifty percent (50%) of the listed Filing Fee above, for such contracts set-aside for bidding solely by SBEs. To be entitled to the reduced Filing Fee, the SBE must be certified with the Division of Small Business Development or successor division or department, at the time of filing of the bid protest.

The protester shall then file all pertinent documents and supporting evidence with the Clerk of the Board and mail copies to all participants in the competitive process and to the County Attorney within three County workdays after the filing of a written intent to protest.

C. For award recommendations greater than $250,000 the following shall apply:
The County's recommendation to award or reject will be immediately communicated (via email) to all participants in the competitive process and filed with the Clerk of the Board.

D. For award recommendations from $25,000 to $250,000 the following shall apply:
Participants may view recommendations to award on the SPD website:
https://www.miamidade.gov/DPMww/AwardRecommendations.aspx
or call the contact person as identified on the cover page of the Solicitation.

### 1.14 FEDERAL, STATE AND LOCAL REQUIRMENTS COMPLIANCE
As applicable, the Awarded Bidder shall comply, subject to applicable professional standards, with the provisions of any and all applicable Federal, State and County orders, statutes, ordinances, rules and regulations which may pertain to the goods and/or services specified under the Solicitation, including, but not limited to:

a) Equal Employment Opportunity clause provided under 41 CFR Part 60-1.3 in accordance with Executive Order 11246, Equal Employment Opportunity, as amended by Executive Order 11375, and implementing regulations at 41 C.F.R. Part 60.

b) Miami-Dade County Small Business Enterprises Development

## SECTION 1
## GENERAL TERMS AND CONDITIONS

Participation Provisions.

c) The Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387), as amended.

d) The Davis-Bacon Act (40 U.S.C. 3141-3144 and 3146-3148) as supplemented by the Department of Labor regulations (29 CFR Part 5).

e) The Copeland "Anti-Kickback" Act (40 U.S.C. 3145) as supplemented by the Department of Labor regulations (29 CFR Part 2).

f) Section 2-11.1 of the Code of Miami-Dade County, "Conflict of Interest and Code of Ethics Ordinance."

g) Section 10-38 of the Code of Miami-Dade County, "Debarment of Contractors from County Work."

h) Sections 11A-60 - 11A-67 of the Code of Miami-Dade County, "Domestic Leave."

i) Section 21-255 of the Code of Miami-Dade County, prohibiting the presentation, maintenance, or prosecution of false or fraudulent claims against Miami-Dade County.

j) The Equal Pay Act of 1963, as amended (29 U.S.C. 206(d)).

k) Section 448.07, Florida Statute "Wage Rate Discrimination Based on Sex Prohibited."

l) Chapter 11A of the Code of Miami-Dade County (§ 11A-1 et. seq.) "Discrimination."

m) Chapter 22 of the Code of Miami-Dade County (§ 22-1 et seq.) "Wage Theft."

n) Chapter 8A, Article XIX, of the Code of Miami-Dade County (§ 8A-400 et seq.) "Business Regulations."

o) Any other laws prohibiting wage rate discrimination based on sex.

Pursuant to Miami-Dade County Resolution No. R-1072-17, by entering this Contract, the Awarded Bidder is certifying that the Awarded Bidder is in compliance with, and will continue to comply with, the provisions of items "f" through "k" above.

### 1.15 LICENSES, PERMITS AND FEES
The Awarded Bidder shall hold all licenses and/or certifications, obtain and pay for all permits and/or inspections, and comply with all laws, ordinances, regulations and building code requirements applicable to the Work required herein. Damages, penalties, and/or fines imposed on the County or an Awarded Bidder for failure to obtain and maintain required licenses, certifications, permits and/or inspections, shall be borne by said Awarded Bidder.

### 1.16 SUBCONTRACTING
When subcontracting is allowed and subcontractors will be utilized, the Contractor shall comply with Section 2-8.8 of the Code: (1) Prior to Contract award, the Bidder shall provide a detailed statement of its policies and procedures for awarding subcontracts and (2) As a condition of final payment under a Contract, the Awarded Bidder shall identify Subcontractors used in the Work, the amount of each subcontract, and the amount paid and to be paid to each Subcontractor via the BMWS at http://mdcsbd.gob2g.com.

### 1.17 SUBCONTRACTORS – RACE, GENDER AND ETHNIC MAKEUP OF OWNERS AND EMPLOYEES
Pursuant to Sections 2-8.1 and 10-34 of the Code of Miami-Dade County, for all contracts which involve the expenditure of one hundred thousand dollars ($100,000) or more, the entity contracting with the County must report to the County the race, gender, and ethnic origin of the owners and employees of its first tier Subcontractors and suppliers via the BMWS at http://mdcsbd.gob2g.com. The race, gender, and ethnic information must be submitted via BMWS as soon as reasonably available and, in any event, prior to final payment under the Contract. The Awarded Bidder shall not change or substitute first tier Subcontractors or direct suppliers, or the portions of the Contract Work to be performed or materials to be supplied from those identified except, upon written approval of the County.

### 1.18. ASSIGNMENT
The Awarded Bidder shall not assign, transfer, hypothecate, or otherwise dispose of the Contract, including any rights, title, or interest therein, or its power to execute such Contract to any person, company or corporation without the prior written consent of the County.

### 1.19. DELIVERY
Unless otherwise specified in the Solicitation, prices quoted shall be Freight on Board (F.O.B.) Destination. Freight shall be included in the Bidder's proposed price.

### 1.20. RESPONSIBILITY AS EMPLOYER
All employees of the Awarded Bidder shall be, at all times, employees of the Awarded Bidder under its sole discretion, and not an employee or agent of the County. The Awarded Bidder shall provide competent employees. The County may require the Awarded Bidder to remove any employee it deems careless, incompetent, insubordinate or otherwise objectionable and, whose continued employment on County property is not in the best interest of the County. Each employee of the Awarded Bidder shall have and wear proper identification.

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

### 1.22. INSURANCE REQUIREMENTS
**Unless Otherwise Stated in the Solicitation**

**A.** The Awarded Bidder shall furnish to the Vendor Outreach & Support Services Section, 111 NW 1st Street, Suite 1300, Miami, Florida 33128,

## SECTION 1
## GENERAL TERMS AND CONDITIONS

Certificate(s) of Insurance which indicate that insurance coverage has been obtained which meets the requirements as outlined below:

1. Worker's Compensation Insurance for all employees of the Contractor as required by Florida Statute 440. Failure to maintain such insurance throughout the term of the Contract shall be a cause for debarment under Section 10-38 of the Code of Miami-Dade County.
2. Commercial General Liability Insurance on a comprehensive basis in an amount not less than **$300,000** combined single limit per occurrence for bodily injury and property damage. **Miami-Dade County must be shown as an additional insured with respect to this coverage.**
3. Automobile Liability Insurance covering all owned, non-owned and hired vehicles used in connection with the Work, in an amount not less than **$300,000** combined single limit per occurrence for bodily injury and property damage.

**B.** All required insurance policies shall be issued by companies authorized to do business under the laws of the State of Florida, with the following qualifications:

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

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

**C.** **Certificates of Insurance must meet the following requirements:**

1. Signature of agent must be included.
2. If Automobile Liability Insurance is required above, insurance must be provided for all the following vehicles:
   a) Owned
   b) Non-owned
   c) Hired
3. If General or Public Liability Insurance is required above, Certificate of Insurance must show Miami-Dade County as an additional insured for that coverage.
4. Certificate Holder must read exactly as presented below:

**Miami-Dade County**
**111 N.W. 1st Street, Suite 2340**
**Miami, FL 33128-1974**

**D.** Compliance with the requirements in this section shall not relieve the Awarded Bidder of its liability and obligation under this, or under any other, section of the Contract. The Awarded Bidder shall provide to the County the insurance documents within ten (10) business days after notification of recommendation to award. If the certificate submitted does not include the coverages outlined in the terms and conditions of this Solicitation, the Awarded Bidder shall have an additional five (5) business days to submit a corrected certificate to the County. Failure of the Awarded Bidder to provide the required insurance documents in the manner and within the timeframes prescribed within five (5) business days may result in the Bidder being deemed non-responsible and the issuance of a new award recommendation.

No Work shall be authorized or shall commence under the Contract until the Awarded Bidder has complied with the foregoing insurance requirements.

**E.** The Awarded Bidder shall assure that the Certificates of Insurance required in conjunction with this section remain in full force for the term of the Contract, including any renewal or extension periods that may be exercised by the County. If any Certificate of Insurance is scheduled to expire during the term of the Contract, the Awarded Bidder shall submit new or renewed Certificate(s) of Insurance to the County before such expiration.

**F.** In the event that expired Certificates of Insurance are not replaced or renewed to cover the Contract period, the County may suspend the Contract until the new or renewed certificates are received by the County in the manner prescribed herein. If such suspension exceeds thirty (30) calendar days, the County may, at its sole discretion, terminate the Contract for cause and the Awarded Bidder shall be responsible for all direct and indirect costs associated with such termination.

### 1.23. COLLUSION

In accordance with Section 2-8.1.1 of the Code of Miami-Dade County, where two or more related parties, as defined herein, each submit a Bid for any contract, such Bids shall be presumed to be collusive. The foregoing presumption may be rebutted by the presentation of evidence as to the extent of ownership, control and management of such related parties in preparation and submittal of such Bids. Related parties shall mean the Bidder; the principals, corporate officers, and managers of a Bidder; or the spouse, domestic partner, parents, stepparents, siblings, children or stepchildren of a Bidder or the principals, corporate officers and managers thereof which have a direct or indirect ownership interest in another Bidder for the same contract or in which a parent company or the principals thereof of one Bidder have a direct or indirect ownership interest in another Bidder for the same contract. Bid found to be collusive shall be rejected. Bidders who have been found to have engaged in collusion may be considered non-responsible, and may be suspended or debarred, and any contract resulting from collusive bidding may be terminated for default.

### 1.24. MODIFICATION OF CONTRACT

The Contract may be modified by mutual consent, in writing through the issuance of a modification to the Contract.

### 1.25. TERMINATION FOR CONVENIENCE

The County, at its sole discretion, reserves the right to terminate this Contract for convenience (without cause) upon providing a written notice. Termination for convenience is effective on the termination date stated in the written notice provided by the County. Upon receipt of such notice, the Contractor shall not incur any additional costs under the Contract. The County shall only be liable for reasonable costs incurred by the Contractor prior to notice of termination. The County shall be the sole judge of "reasonable costs."

### 1.26. TERMINATION FOR DEFAULT

The County reserves the right to terminate this Contract, in part or in whole, or place the Contractor on probation, or to avail itself of all other remedies available at law and equity, inclusive injunctive relief and specific performance, in the event the Contractor fails to perform in accordance with the terms and conditions stated herein. Following breach of the Contract by the Contractor, the County shall provide written notice specifying the breach to the Contractor and advising the Contractor that the breach must be cured immediately, or this Agreement may be terminated by the County. The County further reserves the right to suspend or debar the Contractor in accordance with the appropriate County ordinances, resolutions and/or administrative/implementing orders. The Contractor will be notified by letter of the County's intent to terminate if, following the initial notice of breach, the Contractor fails to timely or adequately and, to the satisfaction of the County cure said breach. In the event of termination for default, the County may procure the required goods and/or services from any source and use any method deemed in its best interest. All re-procurement costs shall be borne by the terminated Contractor. The Contractor shall be responsible for all other direct damages incurred by the County arising out of the breach.

In the event of termination for default, the County may procure the required goods and/or services from any source and use any method deemed in its

## SECTION 1
## GENERAL TERMS AND CONDITIONS

best interest. All re-procurement cost shall be borne by the Contractor.

### 1.27. BREACHES AND DISPUTE RESOLUTION

(1) **Disputes and Remedies.** Disputes arising in the performance of this Contract which are not resolved by the Contractor and the County's project manager or contractor manager, shall be referred, in writing, to the authorized representative of the County Mayor for a decision. If there is a disagreement among the parties regarding the decision of the County Mayor's representative, then either party may submit any claim, counterclaim, dispute, and other matters in question between the County and the Contractor arising out of or relating to this Contract or its breach to a court of competent jurisdiction within Miami-Dade County.

(2) **Performance During Dispute.** Unless otherwise directed by the County, Contractor shall continue performance under this Contract while matters in dispute are being resolved.

(3) **Claims for Damages.** Should either party to the Contract suffer injury or damage to person or property because of any act or omission of the party or of any of their employees, agents or others for whose acts they are legally liable, a claim for damages therefore shall be made in writing to such other party within a reasonable time after the first observance of such injury of damage.

### 1.28. FRAUD AND MISREPRESENTATION

Pursuant to Section 2-8.4.1 of the Code of Miami-Dade County, any individual, corporation, or other entity that attempts to meet its contractual obligations with the County through fraud, misrepresentation, or material misstatement, may be debarred. The County, as a further sanction, may terminate or cancel any other contracts with such individual, corporation, or entity. Such individual or entity shall be responsible for all direct or indirect costs associated with termination or cancellation, including attorney's fees.

### 1.29. OFFICE OF THE INSPECTOR GENERAL IN ACCORDANCE WITH CFR 200.319(B), PARAGRAPH 1.29, THE COST OF RANDOM AUDITS SHALL NOT APPLY TO FEDERALLY FUNDED PURCHASES

Miami-Dade County has established the Office of the Inspector General, which is authorized and empowered to review past, present, and proposed County and Public Health Trust programs, contracts, transactions, accounts, records, and programs. The Inspector General (IG) has the power to subpoena witnesses, administer oaths, require the production of records, and monitor existing projects and programs. The Inspector General may, on a random basis, perform audits on all County contracts. The cost of random audits shall be incorporated into the contract price of all contracts and shall be one quarter (1/4) of one (1) percent of the contract price, except as otherwise provided in Section 2-1076 of the Code of Miami-Dade County.

### 1.30. PRE-AWARD INSPECTION

The County may conduct a pre-award inspection of the Bidder's site or hold a pre-award qualification hearing to determine if the Bidder is capable of performing the requirements of this Solicitation.

### 1.31. PROPRIETARY/CONFIDENTIAL INFORMATION

The Bidder acknowledges and agrees that the submittal of the Bid is governed by Florida's Government in the Sunshine Laws and Public Records Laws as set forth in Florida Statutes Section 286.011 and Florida Statutes Chapter 119. As such, all material submitted as part of, or in support of, the Bid will be available for public inspection after opening of bids and may be considered by the County in public.

**By submitting a Bid pursuant to this Solicitation, Bidder agrees that all such materials may be considered to be public records. The Bidder shall not submit any information in response to this Solicitation which the Bidder considers to be a trade secret, proprietary or confidential.**

In the event that the Bid contains a claim that all or a portion of the Bid submitted contains confidential, proprietary or trade secret information, the Bidder, by electronically signing the Solicitation submittal form, knowingly and expressly waives all claims made that the Bid, or any part thereof, no matter how indicated, is confidential, proprietary or a trade secret and authorizes the County to release such information to the public for any reason.

### 1.32. HEALTH INSURANCE PORTABILITY AND ACCOUNTABILITY ACT (HIPAA)

Any person or entity that performs or assists Miami-Dade County with a function or activity involving the use or disclosure of "individually identifiable health information (IIHI) and/or Protected Health Information (PHI") shall comply with the Health Insurance Portability and Accountability Act (HIPAA) of 1996 and the Miami-Dade County Privacy Standards Administrative Order. HIPAA mandates for privacy, security and electronic transfer standards that include but are not limited to:

1. Use of information only for performing services required by the contract or as required by law;
2. Use of appropriate safeguards to prevent non-permitted disclosures;
3. Reporting to Miami-Dade County of any non-permitted use or disclosure;
4. Assurances that any agents and subcontractors agree to the same restrictions and conditions that apply to the Bidder and reasonable assurances that IIHI/PHI will be held confidential;
5. Making Protected Health Information (PHI) available to the customer;
6. Making PHI available to the customer for review and amendment; and incorporating any amendments requested by the customer;
7. Making PHI available to Miami-Dade County for an accounting of disclosures; and
8. Making internal practices, books and records related to PHI available to Miami-Dade County for compliance audits.

PHI shall maintain its protected status regardless of the form and method of transmission (paper records, and/or electronic transfer of data). The Awarded Bidder must give its customers written notice of its privacy information practices including specifically a description of the types of uses and disclosures that would be made with protected health information.

### 1.33. CHARTER COUNTY TRANSIT SYSTEM SALES SURTAX

When proceeds from the Charter County Transit System Sales Surtax levied pursuant to Section 29.121 of the Code of Miami-Dade County are used to pay for all or some part of the cost of this contract, no award for those portions of a purchase order utilizing Charter County Transit System Sales Surtax funds as part of a multi-department contract, nor a contract utilizing Charter County Transit System Surtax funds shall be effective and thereby give rise to a contractual relationship with the County for purchases unless and until both the following have occurred: 1) the County Commission awards the contract, and such award becomes final (either by expiration of 10 days after such award without veto by the Mayor, or by Commission override of a veto); and, 2) either, i) the Citizens' Independent Transportation Trust (CITT) has approved inclusion of the Surtax funding on the contract, or, ii) in response to the CITT's disapproval, the County Commission reaffirms award of the contract by two-thirds (2/3) vote of the Commission's membership and such reaffirmation becomes final. Notwithstanding the aforementioned provisions, award of an allocation for services in support of the CITT's oversight which does not exceed $1000 will not require Commission or CITT approval and may be awarded by the Executive Director of the CITT.

### 1.34. LOBBYIST CONTINGENCY FEES

In accordance with Section 2-11.1(s) of the Code of Miami-Dade County, after May 16, 2003, no person may, in whole or in part, pay, give, or agree to pay or give a contingency fee to another person. No person may, in whole or in part, receive or agree to receive a contingency fee.

## SECTION 1
## GENERAL TERMS AND CONDITIONS

A contingency fee is a fee, bonus, commission or non-monetary benefit as compensation which is dependent on or in any way contingent upon the passage, defeat, or modification of: 1) any ordinance, resolution, action or decision of the County Commission; 2) any action, decision or recommendation of the County Mayor or any County board or committee; or 3) any action, decision or recommendation of any County personnel during the time period of the entire decision-making process regarding such action, decision or recommendation which foreseeably will be heard or reviewed by the County Commission or a County board or committee.

### 1.35. AUDITS – ACCESS TO RECORDS

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

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

### 1.36. INVOICES

The Awarded Bidder shall invoice the County, as specified in this Solicitation. The invoice date shall not exceed thirty (30) calendar days from the delivery of the items or the provision of Services, unless otherwise noted in the Contract. Under no circumstances shall the invoice be submitted to the County in advance of the delivery and acceptance of the items or provision of and acceptance of the Services. Failure to submit invoices in the prescribed manner will delay payment.

All invoices shall contain the following information:

I. Awarded Bidder 's Information:
- Name of the Awarded Bidder as specified on the Contract Award Sheet issued by the County.
- Date of Invoice
- Unique Invoice number
- Awarded Bidder's Federal Identification Number on file with the County and the State of Florida.

II. County Information:
- County Release Purchase Order Number

III. Pricing Information:
- Unit price of the goods and/or services provided
- Extended total price of the goods and/or services provided
- Applicable discounts

IV. Goods or Services Provided:
- Description
- Quantity

V. Delivery Information:
- Delivery terms set forth within the County Release Purchase Order
- Reference (or include a copy of) the corresponding delivery ticket number or packing slip number that was signed by an authorized representative of the County at the time the items were delivered and accepted
- Location and date of delivery of goods and/or services being provided.

### 1.37. COUNTY USER ACCESS PROGRAM (UAP) IN ACCORDANCE WITH CFR 200.319(B), PARAGRAPH 1.37, COUNTY USER ACCESS PROGRAM (UAP), SHALL NOT APPLY TO FEDERALLY FUNDED PURCHASES

**A. User Access Fee**

Pursuant to Section 2-8.10 of the Code of Miami-Dade County, this Contract is subject to a user access fee under the County User Access Program (UAP) in the amount of two percent (2%). All sales resulting from this Contract, or any contract resulting from the Solicitation, and the utilization of the County Contract price and the terms and conditions identified herein, are subject to the two percent (2%) UAP. This fee applies to all Contract usage whether by County Departments or by any other governmental, quasi-governmental or not-for-profit entity.

The Awarded Bidder providing goods or services under this Contract shall invoice the Contract price and shall accept as payment thereof the Contract price less the 2% UAP as full and complete payment for the goods and/or services specified on the invoice. The County shall retain the 2% UAP for use by the County to help defray the cost of the procurement program. Bidder participation in this invoice reduction portion of the UAP is mandatory.

**B. Joint Purchase**

Only those entities that have been approved by the County for participation in the County's Joint Purchase and Entity Revenue Sharing Agreement are eligible to utilize or receive County Contract pricing and terms and conditions. The County will provide to the approved entities a UAP Participant Validation Number. The Awarded Bidder must obtain the participation number from the entity prior to filling any order placed pursuant to this section. Bidder participation in this joint purchase portion of the UAP, however, is voluntary. The Awarded Bidder shall notify the ordering entity, in writing, within three (3) business days of receipt of an order, of a decision to decline the order.

For all ordering entities located outside the geographical boundaries of Miami-Dade County, the Awarded Bidder shall be entitled to ship goods on an "FOB Destination, Prepaid and Charged Back" basis. This allowance shall only be made when expressly authorized by a representative of the ordering entity,and prior to shipping of goods.

The County shall have no liability to the Awarded Bidder for the cost of any purchase made by an ordering entity under the UAP and shall not be deemed to be a party thereto. All orders shall be placed directly by the ordering entity with the Awarded Bidder and shall be paid by the ordering entity less the 2% UAP.

**C. Bidder Compliance**

If an Awarded Bidder fails to comply with the aforementioned provisions, that Contractor may be considered in default by the County.

### 1.38. DEMONSTRATION OF EQUIPMENT MAY BE REQUIRED DURING EVALUATION

After receipt of offers by the County, Bidders may be required to demonstrate specifically offered equipment/product to County personnel, at no additional cost. The purpose of this demonstration is to observe the equipment/product in an operational environment and to verify its capability, suitability, and adaptability in conjunction with the performance requirements stipulated in this Solicitation.

If a demonstration is required, the County will notify the Bidder in writing and I specify the date, time and location of the demonstration. If the Bidder fails to perform the demonstration on the specified date stipulated in the notice, the County may elect to reject that Bidder's offer, or to reschedule the demonstration, whichever action is determined to be in the best interest of the County. The County shall be the sole judge of the acceptability of the

equipment/product in conformance with the specifications and its decision shall be final.
The equipment used for the demonstration shall be the same as the manufacturer's model identified in the Bidder's offer. Accordingly, the equipment used in the demonstration shall create an express warranty that the actual equipment/product to be provided by the Awarded Bidder during the Contract term shall conform to the equipment used in the demonstration. The Awarded Bidder shall provide adequate restitution to the County, in the manner prescribed by the County, if this warranty is violated during the term of the Contract.

**1.39. EQUIPMENT SHALL BE MOST RECENT MODEL AVAILABLE**
The equipment being offered by the Awarded Bidder shall be the most recent model available. Any optional components which are required in accordance with the specifications herein shall be considered standard equipment for the purposes of this Solicitation. Demonstrator models will not be accepted. Omission of any essential detail from the specifications herein does not relieve the Awarded Bidder from furnishing a complete unit. The equipment shall conform to all applicable Federal (including OSHA), State, and local safety requirements. All components (whether primary or ancillary) of the delivered equipment shall be in accordance with current Society of Automotive Engineering (SAE) standards and recommended practices, as applicable. The engineering, materials, and workmanship associated with the Awarded Bidder's performance hereunder shall exhibit a high-level of quality and appearance consistent with or exceeding industry standards.

**1.40. PATENTS AND ROYALTIES**
The Awarded Bidder, without exception, shall indemnify and hold harmless the County and its employees from liability of any nature or kind, including cost and expenses for, or as a result of, any copyrighted, patented, or unpatented invention, process, or article manufactured by the Contractor. The Awarded Bidder has no liability when such claim is solely and exclusively due to the combination, operation, or use of any article supplied hereunder with equipment or data not supplied by Awarded Bidder or is based solely and exclusively upon the County's alteration of the article. The purchaser will provide prompt written notification of a claim of copyright or patent infringement.

Further, if such a claim is made or is pending, the Awarded Bidder may, at its option and expense, procure for the purchaser the right to continue use of, replace, or modify the article to render it non-infringing. (If none of the alternatives are reasonably available, the County agrees to return the article on request to the Awarded Bidder and receive reimbursement, if any, as may be determined by a court of competent jurisdiction). If the Awarded Bidder uses any design, device, or materials covered by letters, patent, or copyright, it is mutually agreed and understood without exception that the Contract prices shall include all royalties or cost arising from the use of such design, device, or materials in any way involved in the Work.

**1.41. TOXIC SUBSTANCES/FEDERAL "RIGHT TO KNOW" REGULATIONS**
The Federal "Right to Know" Regulation implemented by the Occupational Safety and Health Administration (OSHA) requires employers to inform their employees of any toxic substances which they may be exposed to in the workplace, and to provide training in safe handling practices and emergency procedures. It also requires notification to local fire departments of the location and characteristics of all toxic substances regularly present in the workplace. Accordingly, the Awarded Bidder performing under the Contract shall provide two complete sets of Material Safety Data Sheets to each County Department utilizing the awarded products. This information should be provided at the time when the initial delivery is made, on a department-by-department basis.
For additional information on the Federal Right to Know Regulation, contact OSHA at https://www.osha.gov/.

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

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

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

**1.45. SMALL BUSINESS ENTERPRISE (SBE) MEASURES IN ACCORDANCE WITH CFR 200.319(B), PARAGRAPH 1.45, SMALL BUSINESS ENTERPRISE (SBE) MEASURES SHALL NOT APPLY TO FEDERALLY FUNDED PURCHASES**
A Small Business Enterprise (SBE) is a business entity certified by Small Business Development (SBD), a division of the ISD, providing goods or services, which has a valid business tax receipt issued by the County at least one year prior to certification, an actual place of business in Miami-Dade County, not a virtual office, and whose three-year average gross revenues do not exceed the following contracting participation levels:

(i) Micro Tier 1 - $0 to $750,000;
(ii) Micro Tier 2 - $750,000.01 to $2,000,000, or a manufacturer with fifty (50) employees or less (goods only), or a wholesaler with fifteen (15) employees or less (goods only), without regard to gross revenues; or
(iii) Tier 3 - $2,000,000.01 to $5,000,000, or a manufacturer with one hundred (100) employees or less (goods only), or wholesaler with fifty (50) employees or less (goods only), without regard to gross revenues.

An SBE measure applies to this Solicitation as follows and as otherwise stipulated in Sections 2-8.1.1.1.1, 2-8.1.1.1.2, and 10-34 of the Code and Miami-Dade County and Implementing Order 3-41. After award, any changes in SBE participation must be approved by SBD. The BMWS is the web-based system that firms must utilize to comply with SBE, Wage and/or Workforce programs, and Subcontractor reporting requirements (http://mdcsbd.gob2g.com).

**Set-Asides**
Contracts set-aside for SBE participation are governed as follows:
Set-Aside SBE-Micro Tier 1: Only firms certified as SBE-Micro Tier 1 by SBD are eligible for participation.
Set-Aside SBE-Micro Tier 2: Firms certified as SBE-Micro Tier 1 and Tier 2 by SBD are eligible for participation. Additionally, a bid preference of ten percent (10%) shall apply for SBE-Micro Tier 1 firms.
Set-Aside SBE-Tier 3: Firms certified as SBE-Micro Tier 1, SBE-Micro Tier 2 and SBE-Tier 3 by SBD are eligible for participation. Additionally, a bid preference of ten percent (10%) shall apply for SBE-Micro Tier 1 firms and a bid preference of five percent (5%) shall apply for SBE-Micro Tier 2 firms.

## SECTION 1
## GENERAL TERMS AND CONDITIONS

The preference shall be used only to evaluate a bid and shall not affect the contract price.
For Contracts set-aside for SBE participation, Bidders must submit a completed Certificate of Assurance acknowledging the required SBE measure at the time of Bid submission. Where subcontracting is allowed or required on a set-aside contract, Bidders may also be required to submit a Utilization Plan via BMWS.

**Bid Preference**
For awards valued up to one hundred thousand dollars ($100,000) and not set-aside for SBEs, a ten percent (10%) bid preference shall automatically apply for SBE-Micro Tiers 1 and 2 certified firms and a five (5) percent preference shall automatically apply for SBE-Tier 3 certified firms.
For awards valued over one hundred thousand dollars ($100,000) and up to one million dollars ($1,000,000), the preference shall be ten percent (10%) of the Bid price for all SBEs and joint ventures with at least one SBE firm. The preference accorded on awards greater than one million dollars ($1,000,000) shall be five percent (5%) of the Bid price for SBEs and joint ventures with at least one SBE firm.
The preference shall be used only to evaluate a Bid and shall not affect the contract price. Application of preference shall be applied in accordance with the requirements of Paragraph 1.46.

**Subcontractor Goals**
Subcontractor goals may be applied to a Contract based on estimates made prior to solicitation advertisement of the quality, quantity and type of subcontracting opportunities provided by the Contract and the availability of SBEs to perform such Work. Only SBEs certified to provide the type of goods or services are counted towards meeting a goal. For contracts in which a goal is applied, Bidder must submit (1) a completed Certificate of Assurance acknowledging the required SBE measure at the time of Bid submission and (2) a Utilization Plan listing the certified SBEs to fulfill the SBE goals via BMWS, upon notification by SBD or BMWS, within the required time frame. The Contractor will be responsible for reporting payments to subcontractors, and subcontractors must confirm the reported payments, via BMWS, within the specified time frame.

**Certification**
**SBEs must be certified by SBD. For certification information, please contact SBD at 305-375-3111 or online at https://www.miamidade.gov/smallbusiness/enterprise-programs.asp. The enterprises must be certified by bid submission deadline and at contract award, to remain eligible for the preference.**

To search for SBE certified firms or view a firm's certification status, please visit the BMWS website at https://mdcsbd.gob2g.com.

**1.46. LOCAL CERTIFIED VETERAN BUSINESS ENTERPRISE PREFERENCE IN ACCORDANCE WITH CFR 200.319(B), PARAGRAPH 1.46, LOCAL CERTIFIED VETERAN BUSINESS ENTERPRISE PREFERENCE SHALL NOT APPLY TO FEDERALLY FUNDED PURCHASES**
This Solicitation includes a preference for Miami-Dade County Local Certified Veteran Business Enterprises (VBE) in accordance with Section 2-8.5.1 of the Code of Miami-Dade County. "Local Certified Veteran Business Enterprise" is a firm that is (a) a local business pursuant to Section 2-8.5 of the Code of Miami-Dade County and (b) prior to Bid submittal is certified by the State of Florida Department of Management Services as a veteran business enterprise pursuant to Section 295.187 of the Florida Statutes.
A Local Certified Veteran Business Enterprise that submits a bid for a contract shall receive a bid preference of five percent of the bid price. These preferences will only be used for evaluating and awarding the bids and shall not affect the contract price. However, if a Local Certified Veteran Business Enterprise is the lowest Bidder as a result of a Best and Final Offer (also known as a BAFO), then the price submitted as part of the Best and Final Offer shall be the Contract price.
At the time of Bid submission, the Bidder must affirm in writing its compliance with the certification requirements of Section 295.187 of the Florida Statutes and submit this affirmation and a copy of the actual certification along with the Solicitation submittal form.

**1.47. APPLICATION OF PREFERENCE IN ACCORDANCE WITH CFR 200.319(b), PARAGRAPH 1.47, APPLICATION OF PREFERENCES SHALL NOT APPLY TO FEDERALLY FUNDED PURCHASES**
The preferences required by the Code for the Solicitation will be applied in the following manner:
(1) The County will apply first the preferences available to SBEs under Sections 2-8.1.1.1.1(3)(c)(3), 2-8.1.1.1.1(3)(c)(4), and 2-8.1.1.1.2(3)(c)(3) without reference to preferences which may be available to local or locally headquartered businesses under other provisions of the Code.

(2) The County will apply the local and locally headquartered business preferences only after applying the preferences provided in subsection 1 above.

(3) In determining whether a SBE is entitled to the opportunity to submit a best and final bid offer equal to or lower than the low bid under Section 2-8.5 (2)(a)(1), the bid of the SBE shall be reduced by the amount of any preference to which the SBE is entitled under Section 2-8.1.1.1.1(3)(c)(3) and Section 2-8.1.1.1.2(3)(c)(3), which shall be referred to as the SBE evaluation price. The SBE evaluation price shall be used for evaluating the SBE"s opportunity to participate in the best and final bid offer.

(4) The preference to Local Certified Veteran Business Enterprises provided for under Section 2-8.5.1 shall be applied without reference to any bid preference or selection factor available to a SBE.

**1.48. ADDITIONAL/SPECIAL SECURITY REQUIREMENTS AT CERTAIN MIAMI-DADE COUNTY DEPARTMENTS**
Miami-Dade Aviation (MDAD), Water and Sewer (WASD), Transportation and Public Works (DTPW) and Seaport (PortMiami) Departments operate under strict security regulations. These regulations involve the issuance of additional identification (ID) cards.

Awarded Bidders performing services at MDAD must follow all required security procedures. This will include security checks and passes for all employees, a special driving course for those who operate a vehicle on the aircraft operating area (AOA), additional badges to work within the US Customs service area and, may include bonding for a Customs I.D.

For Customs ID, call 305-345-6528 or email miamiairportsecurityoffice@cbp.dhs.gov for information. For MDAD ID, call 305-876-7188 for appointment and to pick-up package. Awarded Bidders are responsible for all costs incurred in obtaining security badges. Security clearance must be obtained prior to start of Contract.

Complete police background checks of individuals who are employed, hired or who are required to enter the restricted areas of the PortMiami and WASD frequently (more than 5 times within a 90-day period). These ID cards are required for access and are issued by the departments at the current cost of $60.00 per applicant per year. Therefore, the Awarded Bidder shall obtain and pay for ID cards for each of their employees and/or agents who will be frequently visiting or performing Services in restricted areas.

For more information concerning PortMiami ID cards, you may contact the PortMiami ID Office at (305) 347-4955.

## SECTION 1
## GENERAL TERMS AND CONDITIONS

For more information concerning WASD ID cards, contact the WASD security at (786) 552-8271.

For the Department of Transportation and Public Works (DTPW), all Awarded Bidders and their employees are required to have at all times a current ID card issued by DTPW while working on DTPW property. For information as to the requirements in obtaining the ID card, contact the Office of Safety and Security by calling 305-375-4240. Additional Security Clearance may be required during the Contract term as may be mandated by County ordinance, local, state, federal laws, or department policy. Awarded Bidders will be charged a minimal fee for the badging requirement.

### 1.49. FIRST SOURCE HIRING REFERRAL PROGRAM ("FSHRP") IN ACCORDANCE WITH CFR 200.319(b), PARAGRAGH 1.49, FSHRP SHALL NOT APPLY TO FEDERALLY FUNDED PURCHASES

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

### 1.50. NONDISCRIMINATION

During the performance of this Contract, Awarded Bidder agrees to not discriminate against any employee or applicant for employment because of race, color, religion, ancestry, national origin, sex, pregnancy, age, disability, marital status, familial status, sexual orientation, gender identity or gender expression, status as victim of domestic violence, dating violence or stalking, or veteran status, and on housing related contracts based on source of income, and will take affirmative action to ensure that employees and applicants are afforded equal employment opportunities without discrimination. Such action shall be taken with reference to, but not limited to: recruitment, employment, termination, rates of pay or other forms of compensation, and selection for training or retraining, including apprenticeship and on the job training.

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

### 1.51. PUBLIC RECORDS AND CONTRACTS FOR SERVICES PERFORMED ON BEHALF OF MIAMI-DADE COUNTY

The Awarded Bidder shall comply with the Public Records Laws of the State of Florida, including but not limited to: (1) keeping and maintaining all public records that ordinarily and necessarily would be required by the County in order to perform the service; (2) providing the public with access to public records on the same terms and conditions that the County would provide the records and at a cost that does not exceed the cost provided in Chapter 119, F.S., or as otherwise provided by law; (3) ensuring that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law; and (4) meeting all requirements for retaining public records and transferring, at no cost, to the County all public records in possession of the Contractor upon termination of the Contract and destroying any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements upon such transfer. In addition, all records stored electronically must be provided to the County in a format that is compatible with the information technology systems of the County. Failure to meet any of these provisions or to comply with Florida's Public Records Laws as applicable shall be a material breach of the Contract and shall be enforced in accordance with the terms of the Contract.

**IF THE AWARDED BIDDER HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES TO THE AWARDED BIDDER'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT (305) 375-5773; ISD-VSS@MIAMIDADE.GOV; 111 NW 1 STREET, SUITE 1300, MIAMI, FLORIDA 33128**

### 1.52. ASPIRATIONAL POLICY REGARDING DIVERSITY

Pursuant to Resolution No. R-1106-15, Miami-Dade County vendors are encouraged to utilize a diverse workforce that is reflective of the racial, gender and ethnic diversity of Miami-Dade County and employ locally based small firms and employees from the communities where work is being performed in their performance of work for the County. This policy shall not be a condition of contracting with the County, nor will it be a factor in the evaluation of solicitations unless permitted by law.

### 1.53. PROHIBITION ON POLYSTYRENE ARTICLES IN MIAMI-DADE COUNTY PARKS

Pursuant to Rule 36 of Chapter 26 of the Code of Miami-Dade County, Parks, Recreation and Open Spaces Department Contractors (Parks Contractors) shall not sell, use, provide food in, or offer the use of Polystyrene articles, also known as Styrofoam, on park property or facilities located within Miami-Dade County Parks. This rule is applicable to a contractor, vendor, lessee, licensee, programming partner, or permittee of the County that uses, works on, provides services at, or undertakes construction of a park property; a special events permittee for an event in a park; or an operator or manager of a park property or a facility within a park. This rule shall not apply to Polystyrene articles that are used for prepackaged food that have been filled and sealed prior to receipt by the Parks Contractor. A violation of this rule shall be deemed a default under the terms of the applicable contract between the County and the Parks Contractor.

### 1.54. VERIFICATION OF EMPLOYMENT ELIGIBILITY (E-VERIFY)

By entering the Contract, the Awarded Bidder becomes obligated to comply with the provisions of Section 448.095, Florida Statute, titled *"Verification of Employment Eligibility."* This includes but is not limited to utilization of the U.S. Department of Homeland Security's E-Verify System to verify the employment eligibility of all newly hired employees by the Awarded Bidder effective,

## SECTION 1
## GENERAL TERMS AND CONDITIONS

January 1, 2021, and requiring all Subcontractors to provide an affidavit attesting that the Subcontractor does not employ, contract with, or subcontract with, an unauthorized alien. Failure to comply may lead to termination of this Awarded Bidder, or if a Subcontractor knowingly violates the statute, the subcontract must be terminated immediately. Any challenge to termination under this provision must be filed in the Circuit Court no later than twenty (20) calendar days after the date of termination. If this Contract is terminated for a violation of the statute by the Awarded Bidder, the Awarded Bidder may not be awarded a public contract for a period of one year after the date of termination, and the Awarded Bidder may be liable for any additional costs incurred by the County resulting from the termination of the Contract. Public and private employers must enroll in the E-Verify System (http://www.uscis.gov/e-verify) and retain the I-9 Forms for inspection.

### 1.55. LABOR, MATERIALS, AND EQUIPMENT

Awarded Bidder shall furnish all labor, materials, and equipment necessary for satisfactory Contract performance. When not specifically identified in the Technical Specifications, such materials and equipment shall be of a suitable type and grade for the purpose of the Work and Contract. All materials, workmanship, and equipment shall be subject to the inspection and approval by the County prior to commencement of the Work, unless otherwise specified in the Solicitation.

### 1.56. ACCIDENT PREVENTION AND BARRICADES

Precautions shall always be exercised for the protection of persons and property. All Awarded Bidders performing Services under the Contract shall conform to all relevant Occupation Safety and Health Administration (OSHA) requirements, State and County regulations, and County department's safety procedures during the course of such effort. Any fines levied by the above-mentioned authorities for failure to comply with these requirements shall be borne solely by the responsible Awarded Bidder. Barricades shall be provided by the Awarded Bidder when Work is performed in areas traversed by persons, or when deemed necessary by the County.

### 1.57. CLEAN-UP

All unusable materials and debris shall be removed from the premises at the end of each workday and disposed of in accordance with all laws and permits pertaining to the safe and proper disposition of the materials and debris. Upon final completion, the Awarded Bidder shall thoroughly clean up all areas where Work has been involved, as mutually agreed with the associated department's project manager.

### 1.58 2026 WORLD CUP

The terms of this agreement are subordinate to the terms of the Airport Agreement submitted by Miami-Dade County to the United States Soccer Federation on February 21, 2018. In carrying out its obligations under this Contract, Contractor shall not take or omit any action which is inconsistent with, or in derogation of, the County's obligations under the Airport Agreement. Where the Contractor's rights or obligations under this Contract are in conflict with the County's obligations under the Airport Agreement, and upon notice by the County to Contractor, the terms of this Contract shall be deemed conformed to the County's obligations under the Airport Agreement. Where such conformance would cause a material change in this Contract, Contractor shall have the right, upon written notice to the County within five days of receipt of notice of such a conflict, to terminate this Contract for convenience; in such termination, the Contractor shall have no cause of action for money damages of any kind, including but not limited to direct damages, unamortized costs or debt, stored or ordered materials, indirect damages, lost profits, loss of opportunity, loss of goodwill, or otherwise. In the event that the Contractor does not elect to terminate this Contract within the time specified herein, this Contract shall be deemed to have been amended via consent of the parties to conform its terms to the requirements of the Airport Agreement, but only to the extent needed to avoid conflict with same.

### 1.59. FAA ADDITIONAL/SPECIALPROVISIONS

**A.** Compliance with Nondiscrimination Requirements
During the performance of this Contract, the Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "Contractor") agrees as follows:

1. Compliance with Regulations: The Contractor (hereinafter includes consultants) will comply with the Title VI List of Pertinent Nondiscrimination Acts and Authorities, as they may be amended from time to time, which are herein incorporated by reference and made a part of this Contract.
2. Non-discrimination: The Contractor, with regard to the Work performed by it during the Contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of Subcontractors, including procurements of materials and leases of equipment. The Contractor will not participate directly or indirectly in the discrimination prohibited by the Nondiscrimination Acts and Authorities, including employment practices when the Contract covers any activity, project, or program set forth in Appendix B of 49 CFR part 21.
3. Solicitations for Subcontracts, Including Procurements of Materials and Equipment: In all Solicitations, either by competitive bidding, or negotiation made by the Contractor for Work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential Subcontractor or supplier will be notified by the Contractor of the Contractor's obligations under this Contract and the Nondiscrimination Acts and Authorities on the grounds of race, color, or national origin.
4. Information and Reports: The Contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the sponsor or the Federal Aviation Administration to be pertinent to ascertain compliance with such Nondiscrimination Acts and Authorities and instructions. Where any information required of a Contractor is in the exclusive possession of another who fails or refuses to furnish the information, the Contractor will so certify to the sponsor or the Federal Aviation Administration, as appropriate, and will set forth what efforts it has made to obtain the information.
5. Sanctions for Noncompliance: In the event of a Contractor's non-compliance with the Nondiscrimination provisions of this Contract, the sponsor will impose such Contract sanctions as it or the Federal Aviation Administration may determine to be appropriate, including, but not limited to:
a. Withholding payments to the Contractor under the Contract until the Contractor complies and/or;
b. Cancelling, terminating, or suspending a Contract, in whole or in part.
6. Incorporation of Provisions: The Contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, Required Contact Provisions Issued on January 29, 2016, Page 19 AIP Grants and Obligated Sponsors Airports (ARP) unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The Contractor will take action with respect to any subcontract or procurement as the sponsor or the Federal Aviation Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the Contractor becomes involved in, or is threatened with litigation by a Subcontractor, or supplier because of such direction, the Contractor may request the sponsor to enter into any litigation to protect the interests of the sponsor. In addition, the Contractor may request the United States to enter into the litigation to protect the interests of the United States.

**B.** All Contracts and subcontracts that result from this Solicitation incorporate by reference the provisions of 29 CFR part 201, the Federal Fair Labor Standards Act (FLSA), with the same force and effect as if given in full text.

## SECTION 1
## GENERAL TERMS AND CONDITIONS

The FLSA sets minimum wage, overtime pay, recordkeeping, and child labor standards for full and part time workers.
The Contractor has full responsibility to monitor compliance to the referenced statute or regulation. The Contractor must address any claims or disputes that arise from this requirement directly with the U.S. Department of Labor – Wage and Hour Division

**C.** All Contracts and subcontracts that result from this Solicitation incorporate by reference the requirements of 29 CFR Part 1910 with the same force and effect as if given in full text.

Contractor must provide a work environment that is free from recognized hazards that may cause death or serious physical harm to the employee. The Contractor retains full responsibility to monitor its compliance and their Subcontractor's compliance with the applicable requirements of the Occupational Safety and Health Act of 1970 (20 CFR Part1910). Contractor must address any claims or disputes that pertain to a referenced requirement directly with the U.S. Department of Labor – Occupational Safety and Health Administration.

**1.60. FORCE MAJEURE**

Shall refer to an act of nature (such as, but not limited to, a hurricane, flood, and/or earthquake), war, terrorism, riot, sovereign conduct, strikes, lockouts, fires, epidemics and/or pandemic, adverse governmental conditions or conduct of third parties.

Neither the County nor the Contractor shall be held liable or responsible to the counterparty nor be deemed to have defaulted under or breached this Contract for failure or delay in performing any obligation under this Contract when such failure or delay is caused by an act of Force Majeure. Within twenty-four (24) hours of the occurrence of an act of Force Majeure, the affected party shall notify the counterparty of the act by sending an e-mail message to the Project Manager of the other party. In addition, the affected party shall provide to the counterparty within seven days of determining the cause of the Force Majeure, a written explanation via e-mail concerning the circumstances that caused the act of Force Majeure and the overall impacts to the Contract. Upon receipt of the written explanation, the parties shall mutually agree to any contractual modifications as necessary to continue the Contract with minimal impact to County operations. The County maintains the right to terminate the Contract for convenience, negotiate with the next low bidder, or obtain the goods and/or services through a separate contract.

**1.61. SUSTAINABLE PROCUREMENT PRACTICES**

The County is committed to responsible stewardship of resources and to demonstrating leadership in sustainable business practices. Based on existing sustainability policy synergies, the County targets sustainable procurement practices that:
1. Reduces greenhouse gases (GHGs);
2. Fosters and integrates supplier diversity;
3. Supports safe and fair labor practices and ethical behavior throughout the supply chain, and
4. Maximizes fiscally responsible "high value, high impact" actions based on the above targeted impact areas and operational contexts.

**1.62. COMPLIANCE WITH FEDERAL PROVISIONS, INCLUDING FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) ASSISTANCE**

All purchases for goods, services, construction or repairs to be provided as a result of any award under this Solicitation, by the Awarded Bidder to Miami-Dade County, and funded, in whole or in part, by Federal assistance in the form of grant, sub-grant, loan or reimbursement either directly to the County as a recipient or as a subrecipient of funding provided from the Federal government to an agency of the State of Florida or to another pass-through agency, the following Federal provisions shall apply pursuant to 2 CFR § 200.326 and 2 CFR Part 200, Appendix II, as applicable.

**A. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILTY AND VOLUNTARY EXCLUTION (Applicability: Contracts exceeding $25,000)**

(1) Contract is a covered transaction for purposes of 2 CFR Part 180 and 2 CFR Part 3000. As such, the Contractor is required to verify that none of the Contractor's principals (defined at 2 CFR § 180.995) or its affiliates (defined at 2 CFR § 180.905) are excluded (defined at 2 CFR § 180.940) or disqualified (defined at 2 CFR § 180.935).

(2) Contractor must comply with 2 CFR Part 180, subpart C and 2 CFR Part 3000, subpart C, and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.

(3) Certification is a material representation of fact relied upon by Miami-Dade County. If it is later determined that the Contractor did not comply with 2 CFR Part 180, subpart C and 2 CFR Part 3000, subpart C, in addition to remedies available to the County, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.

(4) The Bidder agrees to comply with the requirements of 2 CFR Part 180, subpart C and 2 CFR Part 3000, subpart C while this bid is valid and throughout the period of any Contract that may result from this solicitation. The Bidder further agrees to include a provision requiring such compliance in its lower tier covered transactions.

**B. RIGHTS TO INVENTIONS MADE UNDER A CONTRACT OR AGREEMENT (Applicability: Funding agreement)**

If the Federal award meets the definition of "funding agreement" under 37 CFR §401.2 (a) and the recipient or subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that "funding agreement," the recipient or subrecipient must comply with the requirements of 37 CFR Part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," and any implementing regulations issued by FEMA.

**C. BYRD ANTI-LOBBYING CERTIFICATION AND DISCLOSURE STATEMENTS (Applicability: All contracts greater than $100,000)**

Contractors that apply or bid for, or have received an award exceeding $100,000, shall file the attached Certification Regarding Lobbying. Each tier certifies to the tier above that it will not and has not used federally appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier, up to the recipient who in turn will forward the certification(s) to Federal awarding agency.

**D. DAVIS-BACON ACT, AS AMENDED** (40 U.S.C. § 3141-3148) and **COPELAND "ANTI-KICKBACK" ACT** (18 USC § 40 U.S.C. 3145). ***(Applicability: Prime Construction Contracts exceeding $2,000)***

The Davis-Bacon Act and the Copeland Anti-Kickback Act only apply to the Emergency Management Performance Grant Program, Homeland Security Grant Program, Nonprofit Security Grant Program, Tribal Homeland Security Grant Program, Port Security Grant Program, and Transit Security Grant Program. They do not apply to other FEMA grant and cooperative agreement programs, including the Public Assistance Program.

## SECTION 1
## GENERAL TERMS AND CONDITIONS

Accordingly, if applicable to this Contract,

(1) All prime construction contracts exceeding $2,000 awarded by non-Federal entities must include a provision for compliance with the Davis-Bacon Act (40 U.S.C. §§ 3141-3144, and 3146-3148) as supplemented by Department of Labor regulations (29 CFR Part 5, "Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction").

a. In accordance with the statute, and if applicable, the Contractor must pay all laborers and mechanics employed or working upon the site of the work, unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor pursuant to 29 CFR part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) at rates not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractors must be required to pay wages not less than once a week. The County will attach a copy of the current prevailing wage determination issued by the Department of Labor to this form.

b. Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis–Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (a)(1)(iv) of 29 CFR §5.5; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR § 5.5(a)(4).

c. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided,* that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph (a)(1)(ii) of 29 CFR § 5.5) and the Davis–Bacon poster (WH–1321) shall be posted at all times by the Contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(2) The Contractor shall comply with 18 U.S.C. § 874, 40 U.S.C. § 3145, and the requirements of 29 C.F.R. pt. 3 as may be applicable, which are incorporated by reference into this Contract.

(3) The Contractor or Subcontractor shall insert in any subcontracts the clause above and such other clauses as FEMA may by appropriate instructions require, and a clause requiring the Subcontractors to include these clauses in any lower tier subcontracts. The Prime Contractor shall be responsible for the compliance by any Subcontractor or lower tier Subcontractor with all these Contract clauses.

(4) A breach of the Contract clauses above may be grounds for termination of the Contract, and for debarment as a contractor and subcontractor as provided in 29 C.F.R. § 5.12.

**E. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT OF 1962, 40 U.S.C. §§ 3702 AND 3704** ***(Applicability: Contracts exceeding $100,000 involving employment of mechanics, laborers, and construction work)***

*Compliance with Contract Work Hours and Safety Standards Act.*

(1) **Overtime requirements**. No Contractor or Subcontractor contracting for any part of the Contract Work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) **Violation; liability for unpaid wages; liquidated damages.** In the event of any violation of the clause set forth in Paragraph (E)(1) of this section, the Contractor and any Subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such Contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (E)(1) of this section, in the sum of $27 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in Paragraph (E)(1) of this section.

(3) **Withholding for unpaid wages and liquidated damages.** Miami-Dade County shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of Work performed by the Contractor or Subcontractor under any such Contract or any other Federal contract with the same Prime Contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same Prime Contractor, such sums as may be determined to be necessary to satisfy any liabilities of such Contractor or Subcontractor for unpaid wages and liquidated. Damages as provided in the clause set forth in Paragraph (E)(2) of this section.

(4) Contractor or Subcontractor shall insert in any subcontracts the clauses set forth in Paragraphs (E)(1) through (4) of this section and also a clause requiring the Subcontractors to include these clauses in any lower tier subcontracts. The Prime Contractor shall be responsible for compliance by any Subcontractor or lower tier Subcontractor with the clauses set forth in Paragraphs (E)(1) through (4) of this section."

*Further Compliance with the Contract Work Hours and Safety Standards Act.*

(1) Contractor or Subcontractor shall maintain payrolls and basic payroll records during the course of the Work and shall preserve them for a period of three years from the completion of the Contract for all laborers and mechanics, including guards and watchmen, working on the Contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid.

(2) Records to be maintained under this provision shall be made available by the Contractor or Subcontractor for inspection, copying, or transcription by authorized representatives of the Department of Homeland Security, the Federal Emergency Management Agency, and the Department of Labor, and the Contractor or Subcontractor will permit such representatives to interview employees during working hours on the job.

**F. THE CLEAN AIR ACT OF 1955**, as amended, 42 U.S.C. §§7401-7671q and the **FEDERAL WATER POLLUTION CONTROL ACT**, as amended, 33 U.S.C. §§ 1251-1387

***(Applicability: Contracts exceeding $150,000)***

(1) Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42

## SECTION 1
## GENERAL TERMS AND CONDITIONS

U.S.C. § 7401 et seq. and issued pursuant to the Federal Water Pollution Control Act, as amended, 33 USC §1251 et. seq.

(2) Contractor agrees to report each violation to the County and understands and agrees that the County will, in turn, report each violation as required to assure notification to the County, Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.

(3) Contractor agrees to include these requirements in each subcontract exceeding $150,000 financed in whole or in part with Federal assistance provided by FEMA.

*Federal Water Pollution Action:*

Contractor agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. § 1251 et seq.

Contractor agrees to report each violation to Miami-Dade County and understands and agrees that Miami-Dade County will, in turn, report each violation as required to assure notification to the pass-through agency, if applicable, Federal Emergency Management Agency (FEMA), and the appropriate Environmental Protection Agency Regional Office. Contractor agrees to include these requirements in each subcontract exceeding $150,000 financed in whole or in part with federal assistance provided by FEMA.

**G. PROCUREMENT OF RECOVERED MATERIALS**

***(Applicability: Contracts exceeding $10,000)***

In the performance of the Contract, Contractor shall make maximum use of products containing recovered materials that are EPA designated items unless the product cannot be acquired:

(1) Competitively within a timeframe providing for compliance with the contract performance schedule;

(2) Meeting Contract performance requirements; or

(3) At a reasonable price.

Information about this requirement, along with the list of EPA-designated items, is available at EPA's Comprehensive Procurement Guidelines webpage:https://www.epa.gov/smm/frequent-questions-about-comprehensive-procurement-guideline-cpg-program

**H. PROHIBITION ON CONTRACTING FOR COVERED TELECOMMUNICAITONS EQUIPMENT OR SERVICES**

(a) **Definitions.** As used in this clause, the terms backhaul; covered foreign country; covered telecommunications equipment or services; interconnection arrangements; roaming; substantial or essential component; and telecommunications equipment or services have the meaning as defined in FEMA Policy 405-143-1, Prohibitions on Expending FEMA Award Funds for Covered Telecommunications Equipment or Services (Interim), as used in this clause.

(b) **Prohibitions.**

(1) Section 889(b) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019, Pub. L. No. 115-232, and 2 C.F.R. § 200.216 prohibit the head of an executive agency on or after Aug.13, 2020, from obligating or expending grant, cooperative agreement, loan, or loan guarantee funds on certain telecommunications products or from certain entities for national security reasons.

(2) Unless an exception in paragraph (c) of this clause applies, the Contractor and its Subcontractors may not use grant, cooperative agreement, loan, or loan guarantee funds from the Federal Emergency Management Agency to:

(i) Procure or obtain any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology of any system;

(ii) Enter into, extend, or renew a contract to procure or obtain any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology of any system;

(iii) Enter into, extend, or renew contracts with entities that use covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system; or.

(iv) Provide, as part of its performance of this contract, subcontract, or other contractual instrument, any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system.

(c) **Exceptions.**

(1) This clause does not prohibit Contractors from providing:

(i) A Service that connects to the facilities of a third-party, such as backhaul, roaming, or interconnection arrangements; or

(ii) Telecommunications equipment that cannot route or redirect user data traffic or permit visibility into any user data or packets that such equipment transmits or otherwise handles.

(2) By necessary implication and regulation, the prohibitions also do not apply to:

(i) Covered telecommunications equipment or services that:

i. Are not used as a substantial or essential component of any system; and

ii. Are not used as critical technology of any system.

iii. Other telecommunications equipment or services that are not considered covered telecommunications equipment or services.

(d) **Reporting requirement.**

(1) In the event the Contractor identifies covered telecommunications equipment or services used as a substantial or essential component of any system, or as critical technology as part of any system, during Contract performance, or the Contractor is notified of such by a Subcontractor at any tier or by any other source, the contractor shall report the information in paragraph (d)(2) of this clause to the recipient or subrecipient, unless elsewhere in this Contract are established procedures for reporting the information.

(2) The Contractor shall report the following information pursuant to paragraph (d)(1) of this clause:

(i) Within one business day from the date of such identification or notification: The contract number; the order number(s), if applicable; supplier name; supplier unique entity identifier (if known); supplier Commercial and Government Entity (CAGE) code (if known); brand; model number (original equipment manufacturer number, manufacturer part number, or wholesaler number); item description; and any readily available information about mitigation actions undertaken or recommended.

(ii) Within 10 business days of submitting the information in paragraph (d)(2)(i) of this clause: Any further available information about mitigation actions undertaken or recommended. In addition, the Contractor shall describe the efforts it undertook to prevent use or submission of covered telecommunications equipment or services, and any additional efforts that will be incorporated to prevent future use or submission of covered telecommunications equipment or services.

(e) **Subcontracts.**

The Contractor shall insert the substance of this clause, including this paragraph (e), in all subcontracts and other contractual instruments.

**I. DOMESTIC PREFERENCES FOR PROCUREMENTS**

As appropriate, and to the extent consistent with law, the Contractor should, to the greatest extent practicable, provide a preference for the

purchase, acquisition, or use of goods, products, or materials produced in the United States. This includes, but is not limited to iron, aluminum, steel, cement, and other manufactured products.

It is the intent of Miami-Dade County and the Contractor that this Agreement include and incorporate all requirements under all applicable State or Federal law, rules, regulations, or standards as may be needed such that this Agreement is eligible for state or Federal reimbursement. All such laws, rules, regulations, or standards, to the extent not expressly included herein, are deemed incorporated into this Agreement, and Contractor shall comply with same as if same were expressly included herein.

**J. AFFIRMATIVE SOCIOECONOMIC STEPS: CONTRACTING WITH SMALL AND MINORITY BUSINESS, WOMEN'S BUSINESS ENTERPRISES, AND LABOR SURPLUS AREA FIRMS, C.F.R. § 200.321(G)**

Pursuant to C.F.R. 200.321 (g), Miami-Dade County will take all necessary affirmative steps to assure that minority businesses, women's business enterprises, and labor surplus area firms are used when possible. Affirmative steps must include:

1) Placing qualified small and minority businesses and women's business enterprises on solicitation lists;
2) Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;
3) Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;
4) Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises;
5) Using the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce; and,
6) If subcontracts are to be let, the Prime Contractor is required to take all necessary steps identified in 2 C.F.R. § 200.321 (J)(1-5) as listed above to ensure that small and minority businesses, women's business enterprises, and labor surplus area firms are used when possible.

**K. EQUAL EMPLOYMENT OPPORTUNITY**
***(Applicability - Construction Work)***

(1) In connection with the performance of this Contract, the Contractor will not discriminate against any employee or applicant for employment because of race, religion, color, sex, sexual orientation, gender identity or national origin. The Contractor shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, color, sex, age, disability, ancestry, marital status, pregnancy, sexual orientation, veteran's status, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeships. Contractor further agrees to insert a similar provision in all subcontracts, except subcontracts for standard commercial supplies or raw materials. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provide setting forth the provisions of this non-discrimination clause.

(2) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.

(3) The Contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the Contractor's legal duty to furnish information.

(4) The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the Contractor's commitments under this section and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(5) The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(6) The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(7) In the event of the Contractor's noncompliance with the non-discrimination clauses of this Contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(8) The Contractor will include the portion of the sentence immediately preceding paragraph 1 and the provisions of paragraphs 1 through 8 in this clause in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each of Contractor's vendors and subcontractors. The Contractor will take such action with respect to any subcontract or purchase order as the County may direct as a means.

**L. ACCESS TO RECORDS**

In addition to the provisions contained in the Contract, the following access to records requirements apply to this Contract:

1) The Contractor agrees to provide Miami-Dade County, the FEMA Administrator, the Comptroller General of the United States, Inspectors General of the United States, the Florida Auditor General, the Chief Inspector General of the State of Florida, the Florida Division of Emergency Management, or any of their authorized representatives access to any books, documents, papers, and records of the Contractor which are directly pertinent to this Contract for the purposes of making audits, examinations, excerpts, and transcriptions.
2) The Contractor agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.
3) The Contractor agrees to provide the FEMA Administrator or his authorized representatives access to construction or other work sites pertaining to the work being completed under the Contract.

## SECTION 1
## GENERAL TERMS AND CONDITIONS

4) The Contractor agrees to retain its books, documents, papers and records of Contractor pertinent to this Contract for a period of five (5) years from the date of expiration of this Contract; provided, however, that the following are exceptions to this five (5) year requirement:

i. If any litigation, claim or audit is started before the expiration of the five (5) year period and Contractor is notified of same, then the records must be retained until all litigation, claims or audit findings involving the records have been resolved and final action taken;

ii. Where Contractor is notified in writing to extend the retention period, then the record must be retained for the additional times requested by the government; and

iii. Where Contractor transfers all records to the County at the completion of the Contract as set forth in and in accordance with Section W herein, then Contractor is not required to retain records for the five (5) year period as herein required and shall instead comply with the requirements of Section W below.

In compliance with section 1225 of the Disaster Recovery Reform Act of 2018, Miami-Dade County and the Contractor acknowledge and agree that no language in this contract is intended to prohibit audits or internal reviews by the FEMA Administrator or the Comptroller General of the United States.

**M. LICENCE AND DELIVERY OF WORKS SUBJECT TO COPYRIGHT AND DATA RIGHTS**

The Contractor grants to the County, a paid-up, royalty-free, nonexclusive, irrevocable, worldwide license in data first produced in the performance of this Contract to reproduce, publish, or otherwise use including prepared derivative works, distribute copies to the public, and perform publicly and display publicly such data. For data required by the Contract but not first produced in the performance of this Contract, the Contractor will identify such data and grant to the County or, acquire on its behalf a license of the same scope as for data first produced in the performance of this Contract. Data, as used herein, shall include any Work subject to copyright under 17 U.S.C. §102, for example, any written reports or literary works, software and/or source code, music, choreography, pictures or images, graphics, sculptures, videos, motion pictures or other audiovisual works, sound and/or video recordings, and architectural works. Upon or before the completion of this Contract, the Contractor will deliver to the County data first produced in the performance of this Contract in formats acceptable by the County.

**N. PROGRAM FRAUD AND FALSE OF FRAUDULENT STATEMENTS OF RELATED ACTS**

The Contractor acknowledges that 31 U.S.C. Chap. 38 (Administrative Remedies for False Claims and Statements) applies to the Contractor's actions pertaining to the Contract.

**O. DHS SEAL, LOGO, AND FLAGS**

The Contractor shall not use the DHS seal(s), logos, crests, or reproductions of flags or likenesses of DHS agency officials without specific FEMA pre-approval. The Contractor shall include this provision in the any subcontracts.

**P. COMPLIANCE WITH FEDERAL LAW, REGULATIONS, AND EXECUTIVE ORDERS**

This is an acknowledgement that FEMA financial assistance may be used to fund all or a portion of the Contract. The Contractor will comply with all applicable Federal law, regulations, executive orders, FEMA policies, procedures, and directives.

**Q. NO OBLIGATION BY FEDERAL GOVERNMENT**

The Federal government is not a party to this Contract and is not subject to any obligations or liabilities to the non-federal entity, Contractor, or any other party pertaining to any matter resulting from the Contract.

**R. CHANGES**

The Contract may be modified by mutual consent, in writing through the issuance of a modification to the Contract as stipulated in Section 1.24 above. All changes to the method, pricing, or schedule of work must be reasonable and the Contractor shall not present any claim which is not allowable or allocable under any FEMA rule, requirement, or standard. The Contractor shall present all full and complete written justifications, including cost or schedule documentation, supporting any request for a change to the Agreement at the direction of the County, and shall certify any such request for a change pursuant to the County's False Claims Ordinance, 21-255 et seq of the Miami-Dade County Code.

**S. NO OBLIGATION BY FLORIDA DIVISION OF EMERGENCY MANAGEMENT**

The Florida Division of Emergency Management and the State of Florida are not parties to this Contract and are not subject to any obligations or liabilities of the County, Contractor, or any other party pertaining to any matter resulting from the Contract. The Contractor agrees to hold harmless and indemnify the Florida Division of Emergency Management, the State of Florida, the United States of America, FEMA, the County, and their employees and/or contractors from and against all liability and claims of whatever nature by third parties arising from this Contract or the performance of work arising from this Contract.

# INVITATION TO QUOTE (ITQ)

## PART I. ITQ OVERVIEW AND GENERAL TERMS AND CONDITIONS

### A. Information

| |
|---|
| **ITQ No.**: MDAD- PBB 15-1020 |
| **ITQ Title:** 2021 15 PBBs Replacement at Concourses D, E, F, and H |
| **This ITQ is issued pursuant to Miami-Dade County Pool No. 9427-1/21-1, Passenger Loading Bridges Prequalification Pool: GROUP 1 Prequalified Vendors** |
| **ITQ Due Date: November 22, 2021 @ 2pm** |
| Quotes must be received by the due date and time, in a sealed envelope, identified on its outside as a quote for the above given ITQ number. Deliver or mail sealed quotes to:<br>Miami-Dade Aviation Department<br>Commodities Management Division<br>P.O. Box 025504<br>Miami, Florida 33102-5504<br><br>Walk-in Delivery<br>4331 NW 22 Street,<br>Bldg. 3040<br>Miami, FL 33122<br><br>Attention: **AAZAM PIPRAWALA** |
| **County Department:** Miami-Dade Aviation Department (MDAD) 4200 NW 36th Street – Miami, Florida 33102 |
| **Airport Purchasing Specialist:** AAZAM PIPRAWALA **Phone:** (305)-876-0566 **E-Mail:** apiprawala@flymia.com |
| **Delivery/Service Address:** Miami International Airport (MIA) |
| **Method of Award:** **Commodity Code: 909-26**<br>Award of this contract will be made to the lowest responsive and responsible Bidder:<br>☒ in the aggregate for items 1-46 listed in **PART IV Pricing Form** of this ITQ. If a Bidder fails to submit an offer for all items, its offer may be rejected. |

### B. Instruction to All Bidders

1. Section 1, General Terms and Conditions of Miami-Dade County (County) shall apply to all resultant contracts from this ITQ. This Section is available on demand at the County's Strategic Procurement Division's (SPD) webpage: https://www.miamidade.gov/procurement/library/boilerplate/general-terms-and-conditions-r21-2.pdf
General Terms and Conditions of Section 1 are non-negotiable. The following articles in Section 1, General Terms and Conditions, are not applicable to this ITQ:
   - Section 1.6 Contract Extension
   - Section 1.22 Insurance Requirements
   - Section 1.25 Termination for Convenience
   - Section 1.26 Termination for Default
   - Section 1.27 Breaches and Dispute Resolution

2. **Pre-Bid Conference and Site Visit**

**PRE-BID CONFERENCE/ EXAMINATION OF COUNTY SITES AND COUNTY EQUIPMENT**
**(HIGHLY RECOMMENDED)**

It is recommended that a representative(s) of the Bidder's firm attend this pre-bid conference, as this meeting is exempt from the 'cone of silence', allowing for any questions to be addressed with representatives from Miami-Dade County. This is a public meeting and multiple members of individual community councils may be present. The County is not responsible for any costs incurred by potential Bidder to attend the pre-proposal conference.

Procedural ONLY
NO TECH Questions

Bidders are requested to bring a copy of this solicitation document to the conference, as additional copies may not be available. Bidder(s) are advised to carefully examine the requirements and specifications in this solicitation, and to become thoroughly aware regarding all conditions and requirements that may in any manner affect the work to be performed under the contract. No additional allowances will be made because of lack of knowledge of these conditions. It shall be the responsibility of the Bidder(s) to examine the equipment and sites prior to the submittal of their bid. It is highly recommended that Bidder(s) attend the pre-arranged site visit(s) to review the current conditions of the sites. Please see Site visit schedule below.

**PRE-BID CONFERENCE FOLLOWED BY SITE VISIT No.1:**
**9:00 AM – 3:00 PM, Thursday, October 28, 2021**
Meet at the 1st floor lobby area of Building 3030 at Miami International Airport (MIA) 4331 NW 22 ST, Miami FL 33122.
Then proceed to site visit.

**SITE VISIT No. 2 (CONTINUATION OF SITE VISIT No.1):**
**9:00 AM – 3:00 PM, Friday, October 29, 2021**
Meet at the 1st floor lobby area of Building 3030 at Miami International Airport (MIA) 4331 NW 22 ST, Miami FL 33122.
Then proceed to site visit.

**Attendees are instructed to meet in the 1st floor lobby area of Building 3030 at Miami International Airport (MIA) 4331 NW 22 ST, Miami FL 33122.**

**Attendees must submit via email a copy of their driver's license and the last four digits of their Social Security number to apiprawala@flymia.com no later than 2 pm (local time) MONDAY October 25, 2021 to obtain the required security clearance to attend the site visit.**

3. All questions must be submitted in writing to the attention of the Airport Purchasing Specialist, via e-mail address indicated above, with a copy sent to Clerk.Board@miamidade.gov, by November 8, 2021. The County Department will issue responses to inquiries and any changes to the ITQ via written addenda issued prior to this ITQ due date and time.

4. ☐ The use of Federal funds is anticipated in the resultant contract. As such, the following Section 1 General Terms and Conditions provisions **shall not apply to this ITQ:**
   - Article 1.11 Local Preference
   - Article 1.2(H) Prompt Payment Terms
   - Article 1.28 Office of the Inspector General (only the **cost** of the random audits, as specified)
   - Article 1.36 County User Access Program (UAP)
   - Article 1.44 Small Business Enterprise (SBE) Measures
   - Article 1.45 Local Certified Veteran's Business Enterprise Preference
   - Article 1.46 Application of Preferences
   - Article 1.49 First Source Hiring Referral Program (FSHRP)

5. Pursuant to Section 2-11.1 (t) of the Code of Miami-Dade County, as amended, a "**Cone of Silence**" is imposed upon issuance of this ITQ after advertisement and terminates at the time a written recommendation is issued.
6. Sealed bid must include the following documentation:
   a. Completed **PART IV Pricing Form**
   b. Completed and signed **PART V Submittal Form**
   c. Completed **Subcontracting Form**

d. Completed **Contractor Due Diligence Affidavit (if award is over $1,000,000)**

e. Certificate(s) of compliance with NFPA 415, latest edition, from a certified testing company located in the continental United States.

f. Affidavits attesting to the Passenger Boarding Bridge's compliance with NFPA 415 (in effect as of the date of bid submittal).

## 7. DEFINITIONS

When used in these Contract Documents (defined below), or in related documents, the following terms, shall have the meanings given below:

- **Addendum**: A modification of the Plans, Specifications or other Contract Documents distributed to prospective Bidders prior to the opening of Bids.

- **Air Operations Area**: The Air Operations Area (AOA) shall mean any area of the airport used or intended to be used for landing, taking off or surface maneuvering of aircraft. An air operation area shall include paved or unpaved areas that are used or intended to be used for the unobstructed movement of aircraft in addition to its associated runway, taxiway or apron.

- **Allowance Account(s)**: Account(s) in which stated dollar amount(s) are included in the Contract for the purpose of funding portions of the Work which are unforeseeable at the time of execution of the Contract, or for construction changes, for adjustments of quantities, for unit price work items or for special work deemed desirable by the Owner to be incorporated into the Contract. Performance of Work, if any, under Allowance Account(s) will be authorized by written Work Order(s) issued by the MDAD Project Manager.

- **Change Order**: A written agreement executed by the Owner, the Contractor and the Contractor's Surety, covering modifications to the Contract, recommended by the MDAD and approved by the consulting engineers.

- **Contract Documents:** Bid Documents, Change Orders, Payment and Performance Bonds, Work Orders, Approved Schedule, all Contractual Forms, Approved Shop Drawings and Approved Working Drawings.

- **Consulting Engineers:** HNTB, Consulting Engineers/Supervising Architects to the Miami-Dade Aviation Department.

- **County**: A political subdivision of the State of Florida, whose governing body is the Board of County Commissioners of Miami-Dade County, Florida.

- **Critical Path**: Longest sequence of activities in a project's schedule which defines the project completion date and which must be completed on time in order for the project to be completed on schedule.

- **Days**: Reference made to Days shall mean consecutive calendar days.

- **Direct Costs**: Direct Costs recoverable by the Contractor as a result of changes in the Work shall be limited to the actual additional costs of labor and materials installed as part of the Work and for the reasonable additional cost of rental for any Special Equipment or Machinery. Labor shall be limited to site labor costs, including Employer's Payroll Burden. Specifically excluded from labor are the costs of general foremen and site office personnel. Materials are limited to permanent materials required by the drawings and specifications and materials approved by the MDAD Project Manager as necessary to install the permanent materials in an efficient and workmanlike manner. Rental for Special Equipment and Machinery, not already mobilized on the airport, shall be an amount equal to the appropriate daily, weekly, or monthly rental rate for such equipment, in accordance with the current issue of Associated Equipment Distributor (AED) "Compilation of Nationally Averaged Rental Rates and Model Specifications for Construction Equipment" (notwithstanding the caveats contained therein that such rental rates are not for use by government agencies) for each and every rental period (in days, weeks, or months as applicable) that the Special Equipment or Machinery is in use on the work plus any required mobilization. Payment for Special Equipment and Machinery already mobilized on the airport shall not exceed the monthly rate stated in the AED divided by one hundred and seventy-six (176) to establish a per hour rate that the

Special Equipment and Machinery is in use on the work, plus any required re-mobilization. For Special Equipment or Machinery not listed in said document the Contractor shall be paid a rental rate corresponding to the average prevailing rental rate for such equipment or machinery in Miami-Dade County, Florida, subject to approval by the MDAD Project Manager. No additional payment shall be made to the Contractor for fuel, lubricants, fair wear and tear, transportation, insurance or depreciation. Any equipment or machinery not designated by the MDAD Project Manager as Special Equipment and Machinery shall be considered Overhead.

- **Equal Brand:** The mention of a particular manufacturer's brand name or style number in the specifications does not imply that this particular product is the only one that will be considered for purchase. This reference is intended solely to designate the style, type or quality of merchandise that will be acceptable. Bidders are to list the make and model number should an alternate be offered. In addition, Bidders are to provide product specification sheets for the alternate product. The "equal" equipment/device specification(s) submitted by the Bidder for approval shall meet or exceed the style, quality, and functionally of those listed in this document. The determination as to whether any alternate product is or is not equal shall be made solely by The County and such determination shall be final and binding upon all Bidders. The County may request additional information, samples, and/or request a demonstration of the equipment in order to make such a determination.

- **Extra Work**: An item of work not provided for in the awarded Contract as previously modified by Change Order or Work Order, but which is found by the MDAD Project Manager to be necessary to complete the work within the intended scope of the Contract.

- **Indirect Costs**: The total daily compensation for approved compensable delays, which consist of all costs associated with: project bond premiums, project insurance premiums, costs of supervision, coordination, superintendents, general foremen, consultants, schedulers, cost controllers, accountants, office administrative personnel, time keepers, clerks, secretaries, watch persons, small tools, equipment or machinery not designated by the MDAD Project Manager as Special Equipment or Machinery, utilities, rent, telephones, facsimile machines, computers, word processors, printers, plotters, computer software, home office expense, all expendable items, job site and general office expenses, profit, extended jobsite general conditions, interest on monies retained by the Owner, escalated costs of materials and labor, decreased productivity, home office expenses or any cost incurred that may be allocated from the headquarters of the Contractor or any of its subcontractors, loss of any anticipated profits, loss of bonding capacity or capability losses, loss of business opportunities, loss of productivity on this or any other project, loss of interest income on funds not paid, costs to prepare a bid, cost to prepare a quote for a Change in the Work, costs to prepare, negotiate or prosecute claims, costs of legal and accounting work, costs spent to achieve compliance with applicable laws and ordinances, loss of projects not bid upon, loss of productivity or inefficiencies in the execution of the Work.

- **Liquidated Damages:** The amount that the Contractor accepts, as stipulated in the Contract Documents, that will be deducted from the Contract Sum for each Day of delay due to a Non-excusable Delay.

- **Miami-Dade Aviation Department (MDAD)**: A department of Miami-Dade County government.

- **Notice To Proceed (NTP)**: The written communication issued by the Owner to the Contractor directing the Contractor to begin Contract Work and establishing the date of commencement of the work.

- **Owner:** Miami-Dade Aviation Department (MDAD)

- **Phase:** A completion date as defined in this ITQ.

- **Performance and Payment Bond:** Bond executed by the Contractor and its Surety, on the attached form, assuring that the Contractor will, in good faith, perform and guarantee the work in full conformity with the terms of the Contract Documents and will promptly pay all persons supplying the Contractor with labor, materials, or supplies, used directly or indirectly by the Contractor in the prosecution of the Work.

- **Schedule:** The final schedule delivered under the Contract including time and deliverable schedule. Refer to Part II, Section 3.

- **Subcontractor**: Any individual, firm, partnership, joint venture or corporation supplying the Contractor with labor,

materials, supplies and equipment used directly or indirectly by the Contractor in the prosecution of the Work.

- **Substantial Completion**: Substantial Completion of the Work shall occur when the MDAD Project Manager certifies that the Work is sufficiently complete, in accordance with the Contract Documents, so that the Owner may use the Work for the use for which it is intended or for such other use which the Owner in its sole discretion may determine to be appropriate under the circumstances, and after receipt of the final certificate of occupancy.

- **Work:** The services required by the Contract Documents, which includes all labor, materials, equipment, and services to be provided by the Contractor to fulfill the Contractor's duties and obligations imposed by the Contract Documents or, if not specifically imposed by the Contract Documents, which can be reasonably assumed as necessary to fulfill the intent of the Contract Documents to provide a complete, fully functional and satisfactory project.

## PART II. ADDITIONAL TERMS

1. **Contract Time**
Completion of the Work within the Contract Time is of the essence. The Contract Time for this Work is ***350*** calendar days from the effective date established in the Notice To Proceed.

2. **Small Business Enterprise (SBE)**

SBE Bid preference

3. **Insurance Requirements**

**A.** The contractor shall furnish to the MDAD Purchasing or MDAD Risk Management, Certificate(s) of Insurance which indicate that insurance coverage has been obtained which meets the requirements as outlined below:

1. Worker's Compensation Insurance for all employees of the vendor as required by Florida Statute 440.
2. Commercial General Liability Insurance on a comprehensive basis in an amount not less than **$5,000,000.00** combined single limit per occurrence for bodily injury and property damage. Miami-Dade County must be shown as an additional insured with respect to this coverage.
3. Automobile Liability Insurance covering all owned, non-owned and hired vehicles used in connection with the work, in an amount not less than **$5,000,000.00** combined single limit per occurrence for bodily injury and property damage.

**B**. All required insurance policies shall be issued by companies authorized to do business under the laws of the State of Florida, with the following qualifications:
The company must be rated no less than "A-" as to management, and no less than "Class VII" as to financial strength, by the latest edition of Best's Insurance Guide, published by A.M. Best Company, Oldwick, New Jersey or its equivalent, subject to the approval of the MDAD Risk Management Division OR,
The company must hold a valid Florida Certificate of Authority as shown in the latest "List of All Insurance Companies Authorized or Approved to do Business in Florida", issued by the State of Florida Department of Financial Services

**C.** Certificates of Insurance must meet the following requirements:

1. Certificate must indicate that no modification or change in insurance shall be made without thirty (30) days written advance notice to the certificate holder.
2. Signature of agent must be included.
3. If Automobile Liability Insurance is required above, insurance must be provided for all of the following vehicles:
   a) Owned
   b) Non-owned
   c) Hired
4. If General or Public Liability Insurance is required above, Certificate of Insurance must show Miami-Dade County as an additional insured for that coverage.
5. Certificate Holder must read **EXACTLY** as presented below:

**Miami Dade Aviation Department**
**Attn.: Risk Management Division**
**PO BOX 025504**
**Miami, FL 33102**

**D**. Compliance with the requirements in this Section shall not relieve the successful Bidder of its liability and obligation under this, or under any other, section of the Contract. The successful Bidder shall provide to the County the insurance documents within ten (10) business days after notification of recommendation to award. If the certificate submitted does not include the

coverages outlined in the terms and conditions of this solicitation, the successful Bidder shall have an additional five (5) business days to submit a corrected certificate to the County. Failure of the successful Bidder to provide the required insurance documents in the manner and within the timeframes prescribed within five (5) business days may result in the bidder being deemed non-responsible and the issuance of a new award recommendation.
No work shall be authorized or shall commence under the Contract until the successful Bidder has complied with the foregoing insurance requirements.

**E**. The successful Bidder shall assure that the Certificates of Insurance required in conjunction with this Section remain in full force for the term of the Contract, including any renewal or extension periods that may be exercised by the County. If the Certificate(s) of Insurance is scheduled to expire during the term of the Contract, the successful Bidder shall submit new or renewed Certificate(s) of Insurance to the County a minimum of ten (10) calendar days before such expiration.

**F**. In the event that expired Certificates of Insurance are not replaced or renewed to cover the Contract period, the County may suspend the Contract until the new or renewed certificates are received by the County in the manner prescribed herein. If such suspension exceeds thirty (30) calendar days, the County may, at its sole discretion, terminate the Contract for cause and the successful Bidder shall be responsible for all direct and indirect costs associated with such termination.

## 4.Performance/Payment Bond Required

The vendor to whom a contingent award is made after a quotation process shall duly execute and deliver to the County a Performance and Payment Bond in an amount that represents 100% of the vendor's offer price. The Performance and Payment Bond Form supplied by the County shall be the only acceptable form for these bonds. No other form will be accepted. The completed form shall be delivered to the County within the time frame agreed by the vendor and County Department after formal notice of award. If the vendor fails to deliver the payment and performance bond within this specified time, including granted extensions, the County shall declare the vendor in default of the contractual terms and conditions, and the vendor shall surrender its offer guaranty/bid bond, and the County shall not accept any offer from that vendor for a twelve (12) month period following such default.

The following specifications shall apply to any bond provided:

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

| Bond Amount | Best Rating |
|---|---|
| 500,001 to 1,500,000 | B V |
| 1,500,001 to 2,500,000 | A VI |
| 2,500,001 to 5,000,000 | A VII |
| 5,000,001 to 10,000,000 | A VIII |
| Over 10,000,000 | A IX |

**B.** On contract amounts of $500,000.00 or less, the bond provisions of Section 287.0935, Florida Statutes (2007) shall be in effect and surety companies not otherwise qualifying with this paragraph may optionally qualify by:

1. The surety company is licensed to do business in the State of Florida;
2. The surety company holds a certificate of authority authorizing it to write surety bonds in this state;
3. Providing evidence that the surety has twice the minimum surplus and capital required by the Florida Insurance Code at the time the solicitation is issued;
4. Certifying that the surety is otherwise in compliance with the Florida Insurance Code; and
5. Providing a copy of the currently valid Certificate of Authority issued by the United States Department of the Treasury under SS. 31 USC 9304-9308.

Surety insurers shall be listed in the latest Circular 570 of the U.S. Department of the Treasury entitled "Surety Companies Acceptable on Federal Bonds", published annually. The bond amount shall not exceed the underwriting limitations as shown in this circular.

**C**. For contracts in excess of 500,000 the provisions of Section B will be adhered to plus the company must have been listed for at least three consecutive years or holding a valid Certificate of Authority of at least 1.5 million dollars and on the Treasury List.

**D.** Surety Bonds guaranteed through U.S. Government Small Business Administration or Contractors Training and Development Inc. will also be acceptable.

**E**. In lieu of a bond, an irrevocable letter of credit or a cash bond in the form of a certified cashier's check made out to the Board of County Commissioners will be acceptable. All interest will accrue to Miami-Dade County during the life of this contract and/or as long as the funds are being held by Miami-Dade County.

**F.** The attorney-in-fact or other officer who signs a contract bond for a surety company must file with such bond a certified copy of power of attorney authorizing the officer to do so. The contract bond must be counter signed by the surety's resident Florida agent.

## 5.Special Provisions – Miami-Dade Aviation Department Contracts

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

1. Compliance with Regulations: The contractor (hereinafter includes consultants) will comply with the Title VI List of Pertinent Nondiscrimination Acts And Authorities, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.

2. Non-discrimination: The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Nondiscrimination Acts and Authorities, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR part 21.

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

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

5. Sanctions for Noncompliance: In the event of a contractor's noncompliance with the Nondiscrimination provisions of this contract, the sponsor will impose such contract sanctions as it or the Federal Aviation Administration may determine to be appropriate, including, but not limited to:

   a. Withholding payments to the contractor under the contract until the contractor complies; and/or
   b. Cancelling, terminating, or suspending a contract, in whole or in part.

6. Incorporation of Provisions: The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, Required Contact Provisions Issued on January 29, 2016 Page 19 AIP Grants and Obligated Sponsors Airports (ARP) unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the sponsor or the Federal Aviation Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the sponsor to enter into any litigation to protect the interests of the sponsor. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

7. During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following nondiscrimination statutes and authorities; including but not limited to:

   a. Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin);
   b. 49 CFR part 21 (Non-discrimination In Federally-Assisted Programs of The Department of Transportation—Effectuation of Title VI of The Civil Rights Act of 1964);
   c. The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
   d. Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq.*), as amended, (prohibits discrimination on the basis of disability); and 49 CFR part 27;
   e. The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 *et seq.*), (prohibits discrimination on the basis of age);
   f. Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
   g. The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, subrecipients and contractors, whether such programs or activities are Federally funded or not);
   h. Titles II and III of the Americans with Disabilities Act of 1990, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 – 12189) as implemented by Department of Transportation regulations at 49 CFR parts 37 and 38;
   i. The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123 (prohibits discrimination on the basis of race, color, national origin, and sex);
   j. Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations.;
   k. Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency

(LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);

I. Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

B. All contracts and subcontracts that result from this solicitation incorporate by reference the provisions of 29 CFR part 201, the Federal Fair Labor Standards Act (FLSA), with the same force and effect as if given in full text. The FLSA sets minimum wage, overtime pay, recordkeeping, and child labor standards for full and part time workers.

C. All contracts and subcontracts that result from this solicitation incorporate by reference the requirements of 29 CFR Part 1910 with the same force and effect as if given in full text. Contractor must provide a work environment that is free from recognized hazards that may cause death or serious physical harm to the employee. The Contractor retains full responsibility to monitor its compliance and their subcontractor's compliance with the applicable requirements of the Occupational Safety and Health Act of 1970 (20 CFR Part 1910). Contractor must address any claims or disputes that pertain to a referenced requirement directly with the U.S. Department of Labor – Occupational Safety and Health.

**6. Special Security requirements at Miami-Dade Aviation Department**

A. The Miami-Dade County Aviation Department operates under strict security regulations. These regulations involve the issuance of special identification (ID) badge after performing an FBI fingerprint based criminal history records check (CHRC) and security threat assessment (STA) vetting of individuals who are employed, hired or who are required to frequently (more than 5 times within a 90-day period) enter the restricted areas of the Miami International Airport. These credentials are required for access and are issued by the Miami-Dade Aviation Department at the current cost of $38.00 for fingerprints and $20.00 for the ID badge, per applicant. Renewals are every 2 years or less depending on employment eligibility and or contract expiration date. Fingerprint fee is for initial CHRC, break in access over 30 days, or if the badge expires. Therefore, the awarded vendor(s) under this group shall obtain and pay for ID cards for each of his /her employees and/or agents who will be frequently visiting or performing services at the Miami International Airport restricted areas. For more information concerning Credentialing, registering the company, or additional information you may contact the Miami-Dade Aviation Department ID Section at 30-876-7188 or email miaco@miami-airport.com.

B. The Vendor must follow all security procedures required of workers at MDAD. This will include his will include submitting and successfully passing a Criminal History Record's Check (CHRC) and Security Threat Assessment (STA) for SIDA/SECURE/ STERILE badge issuance. Or successfully passing vetting for pass issuance for all employees, a special driving course for those who operate a vehicle on the aircraft operating area (AOA), additional badges to work within the US Customs service area and may include bonding for a Customs I.D.

For Customs ID, call 305-345-6528 or email miamiairportsecurityoffice@cbp.dhs.gov for information. Vendors are responsible for all costs incurred in obtaining security badges. Security clearance must be obtained prior to start of contract. CBP may require new fingerprints every 2 years or upon badge renewal or break in access.

When performing work at the County's Aviation Department, the awarded vendor(s) shall acquire approval to access the Airside Operations Area (AOA). Vendor(s) shall gain access to the AOA and shall comply with all AOA drivers training requirements and endorsements for each employee assigned to MIA. (Note: Section - Insurance requirements)

C. Vendor(s) and their sub-contractors are required to register their companies separately as only employees who are actively on payroll are authorized to obtain ID badges with the MDAD

Credentialing section. Miami Dade Aviation Department (MIA) are subject to complying with ISO 14001 regulations regarding Environmental responsibility. Vendor(s) will receive training and familiarization about the ISO 14001 protocol from the Miami Dade Aviation Department.

## PART III SCOPE OF WORK/TECHNICAL SPECIFICATIONS

1. **PURPOSE**

**Project No. 09**: 2021 15 PBBs Replacement at Concourses D, E, F, and H.

The Owner, Miami Dade Aviation Department (MDAD) is requesting prices for the removal and disposal of fifteen (15) existing Passenger Boarding Bridges (PBB), and for the design, fabrication, transportation, and installation of fifteen (15) new 3 Tunnel PBBs including, at a minimum, brake covers, fixed walkways, baggage chutes, and ground support service equipment at Miami International Airport Gates D10, D12, D15, D17, D19, E5, , H3, H5, H6, H7, H9, H12, H15, H17 and F21 which includes design and installation of new foundations in accordance MDAD Design Guidelines.

All work shall be in accordance with this ITQ, SECTION 14950 - AIRCRAFT PASSENGER BOARDING BRIDGES - APRON DRIVE (Attachment A) and Miami Dade County Contract 9427-1/2-1.

It shall be the Bidder's responsibility to evaluate the site constraints of each gate location, the conditions affecting the removal of the existing PBBs, securing the building at each Gate, power supply and any other physical or material requirement necessary to perform the work. Note that utilities at any gate location which serve other gates and/or tenants shall not be interrupted; any temporary re-routing shall be the Contractor's responsibility. Site Visits will be conducted in conjunction with the Pre-Bid Meeting, affording Bidders the opportunity to inspect all Gates and the existing PBBs.

To minimize disruption, only three Gates may be closed at a time and the new PBB installation shall be completed and PBB returned to 'operational' status before another Gate may be closed, unless otherwise approved or directed by MDAD Project Manager or designee. Gate availability and order of gate closures shall be coordinated with Airside Operations. PBB shipping/delivery shall be scheduled to coincide with the Gate closure; MIA has no facility for on-site storage of PBBs pending installation.

2. **DESCRIPTION OF PHASES AND DELIVERABLES**

**This project will consist, at a minimum, of the following activities for completion:**

A. **Phase 1 (60 DAYS with two activities listed below which are expected to run concurrently):**
   1. PBB Site Survey, Field Analysis and Report: Site survey, field analysis to include at minimum, existing utility verification, foundation suitability verification, soil testing, sub surface investigation, underground utility locations up to and including Ground Penetrating Radar and excavation as necessary and report detailing existing conditions and preliminary designs for any new foundations listed in the bid documents and if necessary, preliminary designs for any needed foundation retrofits and/or existing utility upgrades for each PBB location listed in the documents.
   2. PBB design and shop drawings for all PPBs submitted and approved by MDAD. *Note: It is in the best interest of the Contractor to factor for this Phase approximately 14 calendar days for turnaround by MDAD for any review/approval submitted by the Contractor.*

B. **Phase 2 (90 DAYS):** Manufacturing, foundation design, foundation retrofit, utility upgrade designs and any preliminary work for upgrades that will not greatly impact existing gate operations. Final design for utility enhancements will be performed under a Dedicated Allowance account at the sole discretion of MDAD.

C. **Phase 3 (198 DAYS, 35 DAYS PER GATE-Staggered with 71 days for F 21 including Foundation)**: Delivery, Installation and Commissioning of PBBs, 3 Gate locations at a time; foundation retrofits and any other enhancement work which could not be completed without a major interruption in Airline gate use prior to the Scheduled PBB installation.

***Note:*** *Foundation retrofits may be completed concurrent with the PBB installation, on a pullback basis while*

*the gate is in operation, or with 3-day max closures at an existing PBB location as approved by MDAD Project Manager. Preferably Monday through Wednesday of any given week.*

**D. EQUIPMENT AND ACTIVITIES: The Vendor shall provide and complete the following equipment/items and activities:**

1. Cavotec Inet Service Transport Unit (STU) or approved equals. The STU shall be installed on the roof of the PBBs, all bridge and ancillary equipment power shall be incorporated into the STU.

2. Cavotec Inet PCAir Air Handling Unit (AHU) or approved equals (PAC45 for D12, D15, D17, D19, E5, F21, H3, H5, H6, H7, H9, H15, H17 and PAC90 for H12 and D10) and required hoses/nozzles. AHU to be sized to maintain 75°F cabin temperature with a full passenger and crew loaded for the aircraft noted above. The PCA units must be designed to work with the current central plant glycol systems except F21 which shall utilize Point of Use equipment. Contractor is responsible to survey the existing equipment and its control system during the site visit(s).

3. PBB and walkway Precool air conditioning system shall utilize point-of use precool units, with one, two or more separate AHUs if needed, one for the PBB and fixed walkway, one for the PBB Cab and shall be able to cool and maintain 75-Degree Fahrenheit temperature inside the PBB and walkways within 5 minutes of activation. The precool units should be wired and/or controlled with 2-hour timers.

4. Cavotec INET 400 Hz gate box or approved equals (90KVA for D12, D15, D17, D19, E5, F21, H3, H5, H6, H7, H9, H15, H17) and (180 KVA for D10 and H12) with extended cables and cable hoists. Adequate lengths shall be provided to ensure service of all aircraft identified. The 400Hz units must be designed to work with the current 400Hz plant systems where they are currently in use except F21 which shall utilize Point of Use equipment. Contractor is responsible to survey the existing equipment and its control system during the site visit(s).

5. Boom-Air hose management unit or approved equal for all PBBs, consisting of unit, for 2 unit PBBs for the second unit provide an electro mechanical hose reel system with a start stop station mounted at the wheel bogie control station location which are based on the maximum size aircraft that the system is to supply for each PBB, providing adequate length hoses to service all aircraft.

6. Baggage chutes (Nova Slide or approved equal) attached to the PBB service stairs.

7. Potable water cabinets for all CCF and CCH gates, Semler or approved equals.

8. The PBBs shall be designed and fabricated for the installation of a roof mounted service transport unit (STU) and all necessary components to provide 400 Hz and PCAir services at each Gate. All STU brackets and supports, fan curbs, and equipment support beams for STUs, PCAir units, gate boxes, precool units, cable hoists and or any other ancillary equipment that is required to be mounted to the PBB or walkways shall be detailed on the shop drawings and factory installed.

9. Contractor is responsible to survey the existing equipment and its control system and verify that existing conditions/services/utilities are sufficient for and compatible with the requirements of the new PBBs, including height and location of building portal and all foundations/piers and provide upgrades or replacements where required.

10. Contractor shall utilize Exhibit 2 (PBB Locations) and perform site surveys for all locations for their design.

11. The price for each new PBB shall include the removal and legal disposal of the existing passenger boarding bridges, fixed walkways and any ancillary equipment not requested for salvage by MDAD, in accordance with SECTION 14950 - AIRCRAFT PASSENGER BOARDING BRIDGES - APRON DRIVE (Attachment A).

12. Contractor shall prepare Safety Plans which shall delineate plan for maintenance traffic for work area under this RTQ which shall be submitted for approval by MDAD Airside Operations. Contractor shall comply with all safety regulations. Maintenance Of Traffic (MOT) barricades shall be required at all work sites. Barricades, as shown on the approved Safety Plans, shall not be moved, or removed without the approval of MDAD Airside Operations. All gate closures shall be coordinated with and approved by MDAD Airside Operations. Jersey curb barricades, provided by the Contractor, shall be concrete or water-filled plastic. All work shall be completed, inspected, and approved prior to removing safety measures.

13. A Hot Work Permit is required for any operation that involves open flames or produces heat and/or sparks. This includes, but is not limited to, Brazing, Cutting, Grinding, Flame-Soldering, Pipe Thawing, Torch-Applied Roofing, and Welding (refer to Exhibit 4).

14. All Contractors' site personnel shall comply with MDAD security ID badge ITQ PART IV **#6 Special Security requirements at Miami-Dade Aviation Department** requirements as well as all applicable FAA, TSA/DHS/CBP, and OSHA procedures and requirements.

15. The Contractor shall complete an MDAD Shut-down form (refer to Exhibit 3) and coordinate with Sylvia Montero, MDAD Construction Manager, 305-876-8314, to schedule all shut-downs/closures and re-activations of the various services, utilities, and security/safety measures with Airside Operations, Terminal Operations, Honeywell, Dash Door, Black Box, and others as needed, appropriate to each system. It shall be the Contractor's responsibility to provide sufficient notice to all concerned parties when a shut-down is needed so there will be no Project delay for either closure or re-activation.

16. Interference with Existing Utilities, Controls, FAA Navaids, and NOAA (Weather Bureau) Facilities: Prior to removing any existing PBB, the Contractor shall disconnect and make safe all utilities including, but not limited to, electric, 400 Hz, water, phone, fire and passenger access systems. The Contractor shall protect from damage utilities, foundations, walls or other parts of adjacent, abutting or overhead buildings, railroads, bridges, structures, surface and subsurface structures at or near the site of the Work and shall repair or restore any damage to such facilities, resulting from failure to exercise reasonable care in the performance of the Work. If the Contractor fails or refuses to repair any such damage promptly, as determined by Owner, the Owner may have the necessary work performed and charge the cost thereof to the Contractor. Attention of the Contractor is specifically directed to the need for careful control of all aspects of his work to prevent damage to cables, ducts, water mains, sewers, fire mains, telephone cables, fuel lines, radar cables, and any other underground utilities and structures. Before commencing work in any given area, the Contractor shall carefully review the as-built Plans, survey and search the site for utility locations, and determine possible utility conflicts. All known above and underground utilities, including, but not limited to, electrical, telephone, communications, lighting cables, fuel lines, sewer, drainage and water pipes, and other existing structures, etc., are shown on the as-built Plans, but no guarantee is implied that the information is accurate. It shall be the responsibility of the Contractor to verify the location of all such utilities, structures, etc., using magnetic and electronic detectors and by hand excavation or other appropriate measures before performing any work that could result in damage to such utilities or structures. The Contractor shall, make a thorough search of the particular location for underground utilities, structures, etc., whether or not shown on the drawings, before excavation work is commenced in any particular location. To this end the Contractor shall provide and maintain throughout the term of the Contract, electronic and magnetic detecting devices capable of locating underground utilities, etc. The Contractor shall, after locating primary and critical existing utilities, mark their location with indelible material or other means satisfactory to the MDAD Project Manager and maintain above ground physical identification during the work.

In the event of damage to, or accidental disruption of utilities or other facilities as a result of the Contractor's operations, the Contractor shall take immediate steps to repair or replace all damage and to restore all services. Further, the Contractor shall engage any additional outside services which may be necessary to prosecute repairs on a continuous "around the clock" basis until services are restored. The Contractor shall also provide and operate any supplemental temporary services to maintain uninterrupted use of the facilities. All costs involved in making repairs and restoring disrupted service resulting from the Contractor's work shall be borne by the

Contractor and the Contractor shall be fully responsible for any and all claims resulting from the damage.

The Contractor is hereby informed that there are installed on the Airport, and within the site, FAA NAVAIDS, including without limitations, FAA NAVAIDS such as ASR, IHF, and VHF receivers and transmitters, U.S. Weather Bureau Facilities, and electronic cables and controls relating to such NAVAIDS and facilities. Such NAVAIDS, Weather Bureau, and other facilities and electric cables are vital to the operation of the Airport and must be fully protected during the entire project. Work under this Contract can be accomplished in the vicinity of these facilities and cables only at approved periods of time. Approval is subject to withdrawal at any time because of changes in the weather, emergency conditions, and for any other reason determined by the MDAD Project Manager. Any instructions to the Contractor to clear any given area, at any time, given by the MDAD Project Manager or by any authority designated by the MDAD Project Manager such as the Federal Aviation Administration by any means including radio, shall be immediately executed. Construction work will resume in the cleared area only when such instructions are issued by the MDAD Project Manager.

Power and control cables leading to and from any FAA NAVAIDS, Weather Bureau, or other facilities will be protected from any possible damage from the elements or due to any crossing of these facilities by equipment.

The Contractor is hereby notified that he shall be required to immediately repair, at his own expense, with identical material by skilled workers, any underground cables serving FAA NAVAIDS, Weather Bureau and other existing FAA facilities which are damaged by his workers, equipment or work, and that prior approval of the FAA must be obtained for materials, workers, time of day or night, method of repairs, and for any temporary or permanent repairs the Contractor proposes to make to any FAA NAVAIDS and facilities damaged by the Contractor.

Damaged FAA cables (controls, NAVAIDS and NOAA) shall be repaired in accordance with the requirements of FAA-SO-STD-71 Specifications "Installation and Splicing of Underground Cables". Prior approval of the MDAD Project Manager must be obtained for the materials, workers, time of day or night, and for the method of repairs for any temporary or permanent repairs the Contractor proposes to make to any Airport facilities, cables, or existing utilities damaged by the Contractor. The FAA Airways Facilities Sector Field Office (AFSFO) Manager shall have the discretion of determining who shall perform repairs of damaged cables.

17. Prior to removing any existing PBB the treadle mat within the PBB entry shall be disabled, disconnected, and removed for storage at an Owner-designated location. Flashing at the PBB-building interface shall be removed for legal disposal off-site by the Contractor.

18. The Contractor shall hire a Florida Registered Engineer to provide calculations that verify that the existing foundations and anchor systems are adequate for the new loads imposed by the new PBBs in accordance with the current Florida Building Code. Calculations shall be submitted to the Authorities Having Jurisdiction (AHJ) for permit. Should the existing foundation not be adequate to sustain the new PBB loads, the foundation shall be retrofitted. Where existing foundations are to be reused and/or retrofited, anchor bolt nuts and washers shall not be burned off but shall be replaced on each bolt after removal of the rotunda and/or walkway column. Concrete or water-filled plastic jersey barriers shall be used to protect anchor bolts for re-use with the new replacement PBB.

19. The Contractor is responsible for securing all necessary permits for any of the work performed under this ITQ and that licensed contractors shall perform all work for which a license is required pursuant to 489, Fl. Statute.

20. Remove and deliver to MDAD any part, component, or ancillary equipment designated for salvage by MDAD Project Manager.

21. Existing PBB and all associated components including walkway which are not dedicated for salvage, shall be removed, and legally disposed of offsite by the Contractor.

22. Building doorway openings shall be made safe at all times. After removal of the PBB, the portal exterior shall be covered with plywood and made weather tight until the new PBB is installed. Contractor shall take measures as required to

adequately protect and secure the opening in the event of a hurricane warning and/or hurricane. Hurricane shutters shall have Miami-Dade County product approval. The Contractor shall hire a Florida Registered Engineer to design and provide Construction Documents for the doorway closure in accordance with the current Florida Building Code. Drawings shall be submitted to the AHJ for permit.

23. If required, new foundations and anchor bolts are to be provided for any new rotundas and fixed walkway columns. The Contractor shall verify coordinates and elevations of the tops of foundations, the finish floor elevation at the concourse doorways, and the existing anchor bolt patterns. The Contractor shall hire a Florida Registered Engineer to design and provide Construction Documents for the new foundations in accordance with the current Florida Building Code. Drawings shall be submitted to the AHJ for permit. Geotechnical borings and a report will be required for any new foundations.

> **Geotechnical borings and a report will be required for any new foundations and foundation retrofits.**

24. Shop drawings shall detail proposed rotunda and walkway column lengths, including anchor bolt patterns. All anchor bolts shall have three nuts, 1 leveling, 2 locking including plate washers. Contractor shall provide and place non-metallic, non-shrink grout below all base plates.

25. Where necessary either because it is existing or it is proposed in the Exhibit 2 (PBB Locations) provide a fixed walkway from the building to the rotunda, and support beam/column(s) to replace existing. The walkway shall impose no load on the building. The columns shall utilize the existing foundations and anchor bolts where possible. Walkway support at the rotunda shall be provided by a haunch. The fixed walkway shall match the exterior and interior finishes of the PBB. The fixed walkway shall have fall protection cables on the roof, compatible with the system on the PBB, from the face of the building to the rotunda.

26. Existing power and communications at Concourses where PBBs are to be installed shall be evaluated by the Contractor and the Owner for sufficiency for the replacement PBBs. The Contractor shall be responsible for all modifications necessitated by PBB operation(s) and to meet electric codes. Electrical modifications within the building may require Miami Dade County Building Department permit(s).

27. Automatic door treadle mat at the concourse/PBB interface shall be re-installed and reactivated, and status of the Matrix security system shall be coordinated with the Owner. Building openings shall be made secure at all times.

28. New exterior and interior flashing shall be provided and installed at the building/PBB interface and any walkway/rotunda interface.

29. All worksites shall be swept clean daily and all debris removed by the Contractor. MDAD Airside Operations and PBB Maintenance Divisions personnel will inspect the site and the operation of the PBB prior to returning the Gate to 'operational' status.

3. **SCHEDULE:**

A. The Project shall be completed within 350 calendar days from issuance of Notice to Proceed. Attached is Exhibit 1 (Preliminary Schedule) is the preliminary schedule which will be finalized by Awarded Bidder and MDAD at the time of award and prior to the Notice to Proceed. The final schedule may be subject to change at the sole discretion of MDAD.

B. The Contractor shall submit for approval, within 15 days after award and issuance of the NTP, a Progress Schedule reflecting the work to deliver the items in the Schedule of Prices Bid. The Progress Schedule submitted for approval shall include the shop drawings submittal date and review period and sequence of construction activity for each Gate including manufacturing times, any upgrades and/or foundation work if required. A revised Schedule shall be submitted showing all progress and any revisions to future work for approval with each application for payment.

C. The Contractor shall prosecute the Work in accordance with the approved Schedule or most recently approved revision to the Schedule. In the event that progress along the critical path is delayed, the Contractor shall revise their planning to include additional forces, equipment, shifts or hours as necessary to meet the time or times of completion specified in this Contract at no additional cost to the Owner. In addition, the Contractor shall revise their schedule to reflect these recovery actions and submit it to the Owner for review and approval it being understood that such approval will be as to the format and composition of the schedule and not the Contractor's means and methods. Additional costs resulting therefrom will be borne by the Contractor. Delayed progress is defined as:

1. A delay in the start or finish of any activity on the critical path (critical path is defined as the path with the least amount of float) of the approved Schedule or most recently approved revision to the Schedule; or
2. A delay in the start or finish of any non-critical activity which consumes more than the available float shown on the approved Schedule or most recently approved revision to the Schedule, thereby making the activity critical and late; or
3. A projected completion date shown on a schedule update which is later than the contractual completion date; or
4. Any combination of the above.

D. Failure of the Contractor to comply with the requirements under this section will be grounds for determination that the Contractor is not prosecuting the Work with such diligence as will ensure completion within the Contract Time. Upon such determination, the Owner may terminate the Contractor's right to proceed with the Work, or any separate part thereof, in accordance with the Contract Documents. If in the Contractor's estimation, the cause(s) of delay are beyond the Contractor's control, the Contractor shall adhere to the sections of the Contract Documents related to extensions of time, claims and others as appropriate.

E. The Contractor shall be responsible for scheduling and coordinating the work of all crafts and trades, subcontractors and suppliers, required to perform the Work and to complete the Work within the prescribed time. Any inefficiency or loss of productivity in the labor, materials, or special equipment of the Contractor or its subcontractors of any tier, from any cause, shall be the responsibility of the Contractor. No reimbursement of these or any other costs can be requested by or granted to the Contractor or any of its subcontractors of any tier for inefficiency or loss of productivity in labor, materials, or special equipment. Additional costs may only be paid to the Contractor as a result of additional Work added to the Contract scope of work.

4. **EXTENSIONS OF TIME AND CLASSIFICATION OF TYPES OF DELAYS**

A. Once a delay has been identified and it has been established through a scheduling analysis that a delay affects the Project's end date or contractually mandated milestone date, the delay must be classified to determine responsibility and to compute damages, if any. Before the Contractor can submit a request for time extension, claim or any request for additional compensation involving or related to time, the Contractor must classify the delay(s) in accordance with the following classifications. These delay classifications shall be used by the Owner and the Contractor in resolving any time-related disputes. Delays fall into three basic categories: non-excusable, excusable, and compensable.

1. Non-excusable delays are those delays to the critical path which were foreseeable at the time of contract award or delays caused by the Contractor due to the Contractor's fault or negligence or his/her own inefficiencies or problems, due to his/her inability to coordinate subcontractors and/or other flaws in his/her planning. In these types of delays the Contractor is not entitled to extra time or compensation and the Owner may be allowed to assess Liquidated Damages or actual damages, depending on the contract provisions.
2. Excusable delays are those delays to the critical path beyond the Contractor's control and without the active interference of the Owner, such as extreme weather (force majeure), strikes and delays caused by third parties (i.e. not the Contractor or the Owner). Contractors are granted a time extension but no additional compensation for the extended time of performance for excusable delays.
3. Compensable delays are delays to the critical path caused by active interference or participation of the Owner or Owner's consultant. Examples of compensable delays are failure of the Owner to provide right-of-way, introducing late design changes, late review of shop drawings by the Owner and failure of the Owner to coordinate the work of various prime Contractors. In the case of a compensable delay, the compensation for the extended period of performance may cover the direct cost due as a result of the changes.

4. Concurrent delays involve two or more delays to the critical path occurring at the same time, either of which, had it occurred alone, would have affected the end date of the Project. In that event, the Contractor's sole remedy is a time extension and relief of Liquidated Damages with no compensation for extended cost for the concurrency delay period.
5. The compensability of concurrent delays depends on the types of delays involved. The following shall determine the effects of concurrent delays on time extensions and compensable costs:
    i. EXCUSABLE DELAY CONCURRENT WITH A NON-EXCUSABLE DELAY. For excusable delays concurrent with non-excusable delays, the Contractor is entitled to a time extension only. For example, it rains the day footings are to be excavated (excusable delay) but the excavation equipment was down for repairs (non-excusable delays).
    ii. NON-EXCUSABLE DELAY CONCURRENT WITH A COMPENSABLE DELAY. For non-excusable delays concurrent with compensable delays, the Contractor is entitled to a time extension only. For example, if the Owner introduces a design change for a beam but the Contractor has failed to submit the shop drawings for said beam in a timely manner. This would be an example of a non-excusable delay (late shop drawings) concurrent with a compensable delay (Owner introducing design change).
    iii. EXCUSABLE DELAY CONCURRENT WITH A COMPENSABLE DELAY. For excusable delays concurrent with compensable delays, the Contractor is entitled to a time extension only. For example, the Owner does not provide the necessary right-of-way to begin construction (compensable delay) but the Contractor's forces are on strike (excusable delay).

B. Time Extensions: The Contractor may be granted an extension of time and will not be assessed Liquidated Damages for any portion of the delay in completion of the Work, arising from acts of nature, acts of the public enemy, fires, floods, epidemics, quarantine restrictions, freight embargoes, strikes, labor disputes, or weather more severe than the norm, provided that the aforesaid causes were not foreseeable and did not result from the fault or negligence of the Contractor, and provided further that the Contractor has taken reasonable precautions to prevent further delays owing to such causes, and has given to the MDAD Project Manager immediate verbal notification, with written confirmation within 48 hours, of the cause or causes of delay. Within thirty (30) days after the end of the delay, the Contractor shall furnish MDAD Project Manager with detailed information concerning the circumstances of the delay, the number of days actually delayed, the appropriate Contract Document references, and the measures taken to prevent or minimize the delay. All requests for extension of time shall be submitted in accordance with the Contract Documents. Failure to submit such information will be sufficient cause for denying the delay claims. The Owner will ascertain the facts and the extent of the delay and its findings thereon will be final and conclusive subject to the dispute provisions in the Contract Documents. The extensions of time granted for these reasons shall be considered excusable and shall not be the basis for any additional compensation.
    1. Weather more severe than the norm shall apply only as it affects particular portions of the Work and operations of the Contractor, as determined by the MDAD Project Manager. Weather more severe than the norm is defined as any situation exceeding the mean data as recorded by The National Climatic Data Center, Asheville, North Carolina and published by the National Oceanic and Atmospheric Administration (This data is taken from the table of normals, means, and extremes in the latest version of the "Local Climatological Data, Annual Summary with Comparative Data, Miami, Florida"). For the calculation of delays due to rain, precipitation of 0.01 inches or more a day shall be considered to be a rain day if the rain actually prevented the Contractor from performing work. The effects of weather less severe than the norm may be taken into account in granting time extensions at the Owner's sole discretion.
    2. An extension of time will not be granted for a delay to the critical path caused by a shortage of materials, except Owner-furnished materials, unless the Contractor furnishes to MDAD documentary proof that he has diligently made every effort to obtain such materials from every known source within reasonable reach of the Work. The Contractor shall also submit proof, in the form of a CPM network analysis data, that the inability to obtain such materials when originally planned, did in fact cause a delay in final completion of the Work which could not be compensated for by revising the sequence of his operations. Only the physical shortage of material will be considered under these provisions as a cause for extension of time. No consideration will be given to any claim that material could not be obtained at a reasonable,

practical, or economical cost, unless it is shown to the satisfaction of the MDAD Project Manager that such material could have been obtained only at exorbitant prices, entirely inconsistent with current rates taking into account the quantities involved and the usual practices in obtaining such quantities.

C. Delays Caused the Owner: If the Contractor's performance of the Work along the critical path is delayed by any condition or action directly caused by the Owner, and which was not foreseeable by the Contractor at the time the Contract was entered into, the Contractor shall, provide notification in accordance with the Contract Documents, of any such delay and of the anticipated results thereof. The Contractor shall cooperate with the Owner and use its best efforts to minimize the impact on the schedule of any such delay.

D. Delays Beyond Contractor's Control Not Caused by Consultant and/ or the Owner: If Contractor's performance of the Work along the critical path is delayed by any conditions beyond the control and without the fault or negligence of Contractor and not caused by the Owner, and which was not foreseeable by Contractor at the time this Contract was entered into, Contractor shall, provide immediate verbal notification with written notification in accordance with the Contract Documents, of any such delay and of the anticipated results thereof. Within two (2) calendar days of the termination of any such delay, Contractor shall file a written notice with the MDAD Project Manager specifying the actual duration of the delay. If the Owner determines that the delay was beyond the control and without the fault or negligence of the Contractor and not foreseeable by the Contractor at the time this Contract was entered into, the Owner will determine the duration of the delay and may extend the time of performance of this Contract provided, however, that Contractor shall cooperate with the Owner and use its best efforts to minimize the impact on the schedule of any such delay. These delays shall be considered excusable and the Contractor shall not be entitled to, and hereby expressly waives recovery of, any damages suffered by reason of the delays contemplated by this paragraph and extension of time shall constitute Contractor's sole remedy for such delays.

E. In addition to the delays in the Work specified in this section, delays in the Work directly caused by an act or omission by an owner of an adjoining property will not be considered an Owner-controlled delay. An owner of an adjoining property is a person, firm, corporation, partnership, or other organization who either owns or occupies, or both, structures or parcels or both, immediately adjacent to the Work Site. Extension of time for those delays will be considered excusable and shall be treated as specified in this Section, provided that:
    1. The Contractor has, in accordance with this Section, given to the MDAD Project Manager immediate verbal justification, with written confirmation within forty-eight (48) hours of the delay; and
    2. The Contractor establishes, to the satisfaction of the MDAD Project Manager, that:
        i. The delay was caused directly by an act or omission by the owner of the adjoining property; and
        ii. The Contractor has taken reasonable precautions and has made substantial effort to minimize the delay.

F. A Work Order will be furnished to the Contractor within a reasonable period of time of a request for extension of time, specifying the number of days allowed, if any, and the new dates for completion of the Work or specified portions of the Work. All requests for time extension shall be in accordance with the Contract Documents.

G. For the proper format to be used in submitting requests or claims for time extensions, refer to applicable sections of the Contract Documents.

H. Extensions of time shall be in accordance with Section 9-3 of the Code of Miami-Dade County, as applicable.

5. **FINAL ACCEPTANCE:**

A. When the Contractor believes that all the Work or designated portion thereof required by the contract is completed pursuant to Section 1.10 of Attachment A.

B. If any of the conditions listed in this Section are not met and the Work has not been completed, or the Contractor determines that the final Punch List cannot be completed within sixty (60) days, the Contractor shall continue work, reducing the number of items on the Punch List that were not met. Additional inspections shall be scheduled as necessary until the work is completed. However, costs incurred by the Owner for any inspections beyond a second inspection will be charged back to the Contractor.

C. In the event the Contractor fails to complete the work within the period specified in the Contract for completion, the Contractor shall be liable for Liquidated Damages and the Owner has, as its option, the right to, after ten (10) calendar

days notice to the Contractor, have the work performed by others and backcharge the Contractor for all Direct and Indirect Costs related to performing this work. In the event that the Owner chooses to have the work completed by others, there shall not be any further non-excusable delays charged to the Contractor beyond the ten (10) days following notice to the Contractor. However, the Contractor shall not be relieved of any non-excusable delays incurred through the date of termination. The Punch List and the Contract shall remain open until all the Work is complete and accepted. The current retainage will be used to offset any Liquidated Damages and any backcharges, after which, any surplus retainage will be released to the Contractor. If the retainage is insufficient to cover the Liquidated Damages and any backcharge, the Owner will bill the Contractor for the balance and the Contractor shall promptly remit to the Owner an amount equal to the billing.

D. Final Completion: When the Owner or MDAD Project Manager considers all Work indicated on the Punch List to be complete, the Contractor shall submit written certification that:
    1. Work has been inspected for the compliance with the Contract Documents.
    2. Work has been completed in accordance with the Contract Documents, and that deficiencies listed within the Certificate of Substantial Completion and its attachments have been corrected.
    3. Work is completed and ready for final inspection.

E. Should the Owner and/or MDAD Project Manager inspection find that Work is incomplete, he will promptly notify the Contractor in writing listing all observed deficiencies. The Contractor shall be responsible for all Direct and Indirect Costs to the County resulting from the Contractor's failure to complete the Punch List items within the time allowed for completion.

F. The Contractor shall remedy deficiencies and send a second certification. Another inspection will be made that shall constitute the final inspection. Provided that work has been satisfactorily completed, the MDAD Project Manager will notify the Contractor in writing of Final Acceptance as of the date of this final inspection.

G. Prior to Final Acceptance, the Contractor shall deliver to the MDAD Project Manager complete As-Builts, all approved Shop Drawings, maintenance manuals, pamphlets, charts, parts lists and specified spare parts, operating instructions and other necessary documents required for all installed materials, equipment, or machinery, all applicable warranties and guarantees, and the appropriate Certificate of Occupancy.

H. Upon notification of Final Acceptance to the Contractor, the MDAD Project Manager will request and consider closeout submittals from the Contractor including but not limited to the final Contractor's Affidavit and Release of All Claims.

I. The Contractor, without prejudice to the terms of the Contract, shall be liable to the Owner for latent defects, fraud, or such gross mistakes as may amount to fraud, or as regards the Owner's rights under any warranty or guaranty.

J. Re-Inspection Fees: Should the status of completion of the Work require re-inspection of the Work by the Owner and the MDAD Project Manager due to failure of the Work to comply with the Contractor's representations regarding the completion of the Work, the Owner will deduct from the final payment to the Contractor, fees and costs associated with re-inspection services in addition to scheduled Liquidated Damages.

## 6. USE AND POSSESSION

The Owner shall have the right to beneficially occupy, take possession of or use any completed or partially completed portions of the Work. Such possession or use will not be deemed an acceptance of work not completed in accordance with the Contract. While the Owner is in such possession, the Contractor, notwithstanding the provisions of the Contract Documents, will be relieved of the responsibility for loss or damage to the Work other than that resulting from the Contractor's fault or negligence or breach of warranty. If such prior possession or use by the Owner delays the progress of the Work or causes additional expense to the Contractor, a Contract change in the Contract price or the time of completion will be made and the Contract will be modified in writing accordingly.

## 7. LIQUIDATED DAMAGES

A. The parties to the Contract agree that time, in the completion of the Work, is of the essence. The Owner and the Contractor recognize and agree that the precise amount of actual damages for delay in the performance and completion of the Work is impossible to determine as of the date of execution of the Contract and that proof of the precise amount

will be difficult. Therefore, the Contractor shall be assessed Liquidated Damages on a daily basis for each Day that individual milestones, both interim and cumulative as specified in the Contract Documents, are not timely achieved or that Contract Time is exceeded due to a non-excusable delay. These Liquidated Damages shall be assessed, not as a penalty, but as compensation to the Owner for expenses which are difficult to quantify with any certainty and which were incurred by the Owner due to the delay. Therefore, in accordance with this section (Liquidated Damages) failure to complete the work within the stipulated PBB Installation phases and/or overall completion indicated preliminary schedule, or the project schedule as approved by MDAD: the Contractor and his sureties will be assessed Liquidated Damages as follows:

1. An amount of $332.00 per calendar day will be assessed for every day beyond the approved scheduled installation duration if the PBB at the affected gate location fails to return to service, not as a penalty, but as liquidated damages for each day or fraction thereof of delay until the PBB is complete and in service.
2. An amount of $500.00 per calendar day will be assessed for every day beyond the approved scheduled project completion date, not as a penalty, but as liquidated damages for each day or fraction thereof of delay until the milestone delivery date is met.

B. The amount of Liquidated Damages assessed shall be an amount, as stipulated above, per day for each calendar day that individual milestones as specified in the Contract are not timely achieved or that the Project is delayed due to a non-excusable delay.

C. In the event the Contractor fails to perform any other covenant or condition (other than time-related) of this Contract relating to the Work, the Contractor shall become liable to the Owner for any actual damages which the Owner may sustain as a result of such failure on the part of the Contractor. The Owner reserves the right to retain these amounts from monies due the Contractor.

D. Nothing in this Section shall be construed as limiting the right of the Owner to terminate the Contract and/or to require the Surety to complete said Project and/or to claim damages for the failure of the Contractor to abide by each and every one of the terms of this Contract as set forth and provided for in the Contract Documents.

## 8. CLAIMS AND DISPUTES

A. Notice of Claims

1) The Contractor will not be entitled to additional time or compensation otherwise payable for any act or failure to act by the Owner, the happening of any event or occurrence, or any other cause, unless he shall have given the MDAD Project Manager a written notice of claim therefore as specified in this Section.

2) The Contractor shall provide immediate verbal notification with written confirmation within forty-eight (48) hours of any potential claims and of the anticipated time and/or cost impacts resulting thereof. The written notice of claim shall set forth the reasons for which the Contractor believes additional compensation and/or time will or may be due, the nature of the costs involved and the approximate amount of the potential claim.

3) It is the intention of this Section, that differences between the parties arising under and by virtue of the Contract shall be brought to the attention of the MDAD Project Manager at the earliest possible time in order that such matters may be settled, if possible, or other appropriate action promptly taken.

4) The notice requirements of this Section are in addition to those required in other Sections of these Contract Documents.

5) The Contractor shall segregate all costs associated with each individual claim including but not limited to labor, equipment, material, subcontractor and supplier costs, and all other costs related to the claim. In the event that the Contractor has multiple claims, the Contractor will segregate each claim individually including the respective costs associated with each claim. Failure to segregate claims and their respective costs will be grounds for the Owner's rejection of the claim. No "total cost claims" shall be allowed under this Contract.

6) The Contractor must maintain a cost accounting system as a condition for making a claim against the Owner. The cost accounting system must segregate the costs of the work under the Contract (non-claims-related) from claims-related

and other Contractor costs through the use of a job cost ledger and be otherwise in compliance with general accounting principles.

7) If the Owner decides to pay all or part of a claim for which notice was not timely made, the Owner does not waive the right to enforce the notice requirements in connection with any other claim.

8) Inasmuch as the notice of claim requirements of this Section are intended to enable the MDAD Project Manager to investigate while facts are fresh and to take action to minimize or avoid a claim which might be filed thereafter, the Contractor's failure to make the required notice on time is likely to disadvantage the Owner. Therefore, a claim that does not comply with the notice requirements above shall not be considered unless the Contractor submits with his claim proof showing that the Owner has not been prejudiced by the Contractor's failure to so comply and, in the event the Owner has been prejudiced by the Contractor's failure to submit a timely notice of claim, the Owner will reduce any equitable adjustment claimed by the Contractor to reflect the damage.

B. Claim Submittals

1) Claims or requests for equitable adjustments filed by the Contractor shall be filed in full accordance with this Section no later than 30 calendar days after the act giving rise to the claim and in sufficient detail to enable the Owner to ascertain the basis and amount of said claims. In the case of continuing or on-going claim events, the Contractor shall be allowed to periodically amend his claim to more accurately reflect the impact of said claim, until the end of the claim event. No claims for additional compensation, time extension or for any other relief under the Contract shall be recognized, processed, or treated in any manner unless the same is presented in accordance with this Section. Failure to present and process any claim in accordance with this Section shall be conclusively deemed a waiver, abandonment or relinquishment of any such claim, it being expressly understood and agreed that the timely presentation of claims, in sufficient detail to allow proper investigation and prompt resolution thereof, is essential to the administration of this Contract.

2) The Owner will review and evaluate the Contractor's claims. It will be the responsibility of the Contractor to furnish, when requested by the Architect/Engineer, such further information and details as may be required to determine the facts or contentions involved in his claims. The cost of claims preparation or Work Order negotiations shall not be reimbursable under this Contract.

3) Any work performed by the Contractor prior to Notice-to-Proceed (NTP) shall not be the basis for a claim from the Contractor of any kind.

4) Each claim must be certified by the Contractor as required by the Miami-Dade Code, False Claims Act (see Code Section 21-255, et seq.), and accompanied by all materials required by Miami-Dade County Code Section 21-257. A "certified claim" shall be made under oath by a person duly authorized by the claimant, and shall contain a statement that:

    a. The claim is made in good faith;

    b. The claim's supporting data is accurate and complete to the best of the person's knowledge and belief;

    c. The amount of the claim accurately reflects the amount that the claimant believes is due from the Owner; and

    d. The certifying person is duly authorized by the claimant to certify the claim.

5) In order to substantiate time-related claims (delays, disruptions, impacts, etc.), the Contractor shall, if applicable and as determined by the Owner, submit, in triplicate, the following information:

    a. Copy of Contractor's notice of claim in accordance with this Section. Failure to submit the notice is sufficient grounds to deny the claim.

    b. The approved, as-planned Schedule in accordance with the applicable section of the Contract Documents and computer storage media, if applicable.

c. The as-built Schedule reflecting changes to the approved schedule up to the time of the impact in question and computer storage media if applicable.

d. The basis for the duration of the start and finish dates of each impact activity and the reason for choosing the successor and predecessor events affected in the schedule shall be explained. Also, the basis for the duration of any lead/lags inserted into the schedule and the duration in related activity duration shall be explained.

e. A marked-up as-built Schedule indicating the causes responsible for changes between the as-planned and as-built schedule and establishing the required cause and effect relationships.

f. After indicating specific time related changes on the as-built schedule, the documentation must be segregated into separate packages with each package documenting a specific duration change identified previously. This documentation package shall include Change Orders, Change Notices, Work Orders, written directions, meeting minutes, etc., related to the change in duration.

g. The Contractor assumes all risk for the following items, none of which shall be the subject of any claim and none of which shall be compensated:

(1)home office expenses or any Direct Costs incurred allocated from the headquarters of the Contractor; (2)loss of anticipated profits on this or any other project,

(3)loss of bonding capacity or capability; (4) losses due to other projects not bid upon;

(5)loss of business opportunities;

(6)loss of productivity on this or any other project;

(7)loss of interest income on funds not paid;

(8)costs to prepare, negotiate or prosecute claims and

(9)costs spent to achieve compliance with applicable laws and ordinances (excepting only sales taxes paid shall be reimbursable expense subject to the provisions of the Contract Documents).

h. All non-time-related claim items for additional compensation for Direct Costs shall be properly documented and supported with copies of invoices, time sheets, rental agreements, crew sheets and the like.

i. Cost information shall be submitted in sufficient detail to allow for review. The basis for the budgeted or actual costs shall include man-hours by trade, labor rates, material and equipment costs etc. These costs shall be broken down by pay item and Construction Specification Institute (CSI) Division.

j. The documentation for budgeted cost shall, as a minimum, include:

   i. Copies of all the Contractor's bid documents, bid quotes, faxed quotes, etc.

   ii. Copies of all executed subcontracts.

   iii. Other related budget documents as requested by the MDAD Project Manager.

k. The documentation for actual cost shall, as a minimum, include:

   i. Time Sheets.

   ii. Materials invoices

   iii. Equipment invoices

   iv. Subcontractors' payments

v. Other related documents as required by the Architect/Engineer.

l. The Contractor shall make all his books, employees, work sites and records available to the Owner or its representatives for inspection and audit.

m. No payment shall be made to the Contractor by the Owner for loss of anticipated profit(s) from any deleted work.

6) As indicated above, the MDAD Project Manager shall be allowed full and complete access to all personnel, documents, work sites or other information reasonably necessary to investigate any claim. Within sixty (60) days after a claim has been received, the claim shall either be rejected with an explanation as to why it was rejected or acknowledged. Once the claim is acknowledged, the parties shall attempt to negotiate a satisfactory settlement of the claim, which settlement shall be included in a subsequent Work Order. If the parties fail to reach an agreement on a recognized claim, the Owner shall pay to the Contractor the amount of money it deems reasonable, less any appropriate retention, to compensate the Contractor for the recognized claim.

C. Failure of the Contractor to make a specific reservation of rights regarding any such disputed amounts in the body of the Work Order which contains the payment shall be construed as a waiver, abandonment, or relinquishment of all claims for additional monies resulting from the claims embodied in said Work Order. However, once the Contractor has properly reserved rights to any claim, no further reservations of rights shall be required and the Contractor shall not be required to repeat the reservation in any subsequent work order. Prior reservation of rights may however be modified, by express reference, in subsequent work orders. Notwithstanding the aforementioned, at the time of final payment under the Contract, the Contractor shall specify all claims which have been denied and all claims for which rights have been reserved in accordance with this section. Failure to so specify any particular claim shall be constructed as a waiver, abandonment, or relinquishment of such claim.

D. **Disputes**

1) The following provisions shall govern disputes under this Contract unless the Special Provisions to this Contract contain the requirement for the use of an alternate dispute resolution method. For example, for large projects of great complexity, a Dispute Review Board (DRB) may be employed by the Owner to settle disputes in lieu of the Department Director or OOM designee as specified below. In this case, the DRB alternative shall be specified by the individual department in the Special Provisions and, if utilized, shall supersede this dispute provision.

a. In the event the Contractor and Owner are unable to resolve their differences concerning any determination made by the MDAD Project Manager or Owner on any dispute or claim arising under or relating to the Contract (referred to in this Section as a "Dispute"), either the Contractor or Owner may initiate a dispute in accordance with the procedure set forth in this Section. Exhaustion of these procedures shall be a precondition to any lawsuit permitted hereunder.

b. For contracts with a value of $5 million or less, all Disputes under this Contract shall be decided by the Department Director or his designee. For contracts valued at more than $5 million, Disputes shall be decided by a designee appointed by the Office of the Mayor (OOM). Decisions rendered by the Department Director or OOM designee shall not be binding but shall be admissible in a court of competent jurisdiction.

c. As soon as practicable, the Department Director or OOM designee shall adopt a schedule for the Contractor and Owner to file written submissions stating their respective positions and the bases therefore. The written submissions shall include copies of all documents and sworn statements in affidavit form from all witnesses relied on by each party in support of its position. Within 20 working days of the date on which such written submissions are filed, the Department Director or OOM designee shall afford each party an opportunity to present a maximum of one hour of argument. The Department Director or OOM designee may decide the Dispute on the basis of the affidavits and other written submissions if, in his opinion, there is no issue of material fact and the party is entitled to a favorable resolution pursuant to the terms of this Contract. As part of such decision, the Department Director or OOM designee shall determine the timeliness and sufficiency of each notice of claim and claim at issue as

provided in this Section. The Department Director or OOM designee shall have the authority to rule on questions of law, including disputes over contract interpretation, and to resolve claims, or portions of claims, via summary judgment where there are no disputed issues of material fact. Furthermore, the Department Director or OOM designee is authorized by both parties to strike elements of claims seeking relief or damages not available under the contract (such as, but not limited to, claims for lost profits, off-site overhead, loss of efficiency or productivity claims or claim's preparation costs) by summary disposition.

d. In the event that the Department Director or OOM designee determines that the affidavits or other written submissions present issues of material fact, he shall allow the presentation of evidence in the form of lay or expert testimony directed solely to the issues which he may specifically identify to require factual resolution. The testimonial portion of the process shall not exceed one day in duration per side, including opening statements and closing arguments, if allowed by the Department Director or OOM designee at his reasonable discretion.

e. No formal discovery shall be allowed in connection with any proceeding under this Section. Notwithstanding the foregoing, both parties agree that all of the audit, document inspection, information and documentation requirements set forth elsewhere in this contract shall remain in force and effect throughout the proceeding. The Department Director or OOM designee shall not schedule the hearing until both parties have made all their respective records available for inspection and reproduction and the parties have been afforded reasonable time to analyze the records. The continued failure of a party to comply with the document inspection, examination, or submission requirements set forth in this contract shall constitute a waiver of that party's claims and/or defenses, as applicable. Hearsay evidence shall be admissible but shall not form the sole basis for any finding of fact. Failure of any party to participate on a timely basis, to cooperate in the proceedings, or to furnish evidence in support or defense of a claim shall be a criteria in determining the sufficiency and validity of a claim.

f. The Department Director or OOM designee shall issue a written decision within 15 working days after conclusion of any testimonial proceeding and, if no testimonial proceeding is conducted, within 45 days of the filing of the last written submission. This written decision shall set forth the reasons for the disposition of the claim and a breakdown of any specific issues or subcontractor claims. As indicated previously, the decision of the Department Director or OOM designee is not binding on the parties, but will be admissible in a court of competent jurisdiction.

g. If either party wishes to protest the decision of the Department Director or OOM designee, such party may commence an action in a court of competent jurisdiction, within the periods prescribed by law, it being understood that the review of the court shall be limited to the question of whether or not the Department Director or OOM designee's determination was arbitrary and capricious, unsupported by any competent evidence, or so grossly erroneous to evidence bad faith.

h. Pending final decision of a dispute hereunder, the Contractor shall proceed diligently with the performance of the Contract and in accordance with MDAD's interpretation. Any presentation or request by the Contractor under this Section will be subject to the same requirements for Submittal of Claims in this Section.

9. **TERMINATIONS:**

A. Termination for Convenience

1. The Owner may at its option and discretion terminate the Contract, in whole or, from time to time in part, at any time without any default on the part of the Contractor by issuing a written Notice of Termination to the Contractor and its Surety, specifying the extent to which performance of work under the Contract is terminated and the date upon which such termination becomes effective, at least ten (10) days prior to the effective date of such termination.

2. In the event of Termination for Convenience, the Owner shall pay the Contractor for all labor performed, all materials and equipment furnished by the Contractor and its Subcontractors, materialmen and suppliers and manufacturers of equipment less all partial payments made on account prior to the date of cancellation as determined by the MDAD Project Manager. The Contractor will be paid for:

i. The value of all work completed under the Contract, based upon the approved Schedule of Values and/or Unit Prices,

ii. The value of all materials and equipment delivered to but not incorporated into the work and properly stored on the site,

iii. The value of all bonafide irrevocable orders for materials and equipment not delivered to the construction site as of the date of cancellation. Such materials and equipment must be delivered to the Owner to a site or location designated by the Department prior to release of payment for such materials and equipment.

iv. The values calculated under i., ii. and iii. above shall be as determined by the MDAD Project Manager.

3. In the event of termination under this article, the Contractor shall not be entitled to any anticipated profits for any work not performed due to such termination.

4. In the event of termination under this article, the Owner does not waive or void any credits otherwise due the Owner at the time of termination, including Liquidated Damages, and back charges for defective or deficient work.

5. Upon termination as indicated above, the MDAD Project Manager shall prepare a certificate for Final Payment to the Contractor.

B. Termination for Default of Contractor

1. The Contract may be terminated in whole or, from time to time in part, by the Owner for failure of the Contractor to comply with any requirements of the Contract Documents including but not limited to:

i. Failure to perform the work or failure to provide sufficient workers, equipment or materials to assure completion of work in accordance with the terms of the Contract, and the approved Schedule, or

ii. Failure to provide the Schedule for the Project by the date due, or

iii. Failure to provide adequate shop drawings by the dates indicated in the approved Schedule for the Project, or

iv. Failure to replace the superintendent in the time allotted, if required, or

v. Performing the work unsuitably or neglecting or refusing to remove materials or to perform anew such work as may be rejected as unacceptable and unsuitable, after written directions from the MDAD Project Manager, or

vi. Violating the terms of the Contract or performing work in bad faith, or

vii. Discontinuing the prosecution of the work, or

viii. Failure to resume work which has been discontinued within a reasonable time after notice to do so, or

ix. Abandonment of the Contract, or

x. Becomes insolvent or is declared bankrupt, or commits any act of bankruptcy or insolvency, or failure to maintain a qualifier, or

xi. Allowing any final judgment to stand against him unsatisfied for a period of 10 days, or

xii. Making an assignment for the benefit of creditors, or

xiii. For any other cause whatsoever, fails to carry out the work in an acceptable manner or to comply with any other Contract requirement.

2. Before the Contract is terminated, the Contractor and its Surety will be notified in writing by the MDAD Project Manager of the conditions which make termination of the Contract imminent. The Contract will be terminated by the Owner ten (10) days after said notice has been given to the Contractor and its Surety unless a satisfactory effort acceptable to the Owner has been made by the Contractor or its Surety to correct the conditions. If the Contractor fails to satisfactorily correct the conditions giving rise to the termination, the Owner may declare the Contract breached and send a written Notice of Termination to the Contractor and its Surety.
3. The Owner reserves the right, in lieu of termination as set forth in this article, to withhold any payments of money which may be due or become due to the Contractor until the said default(s) have been remedied. In the event of Termination for Default, the Owner also reserves the right, in cases where the damages calculated by the Owner are expected to exceed the amount the Owner anticipated recovering from the Surety, to withhold amounts for work already performed.
4. In the event the Owner exercises its right to terminate the Contract for default of the Contractor as set forth herein, the Owner shall have the option of finishing the work, through any means available to the Owner, or having the Surety complete the Contract in accordance with its terms and conditions. In case that the Owner decides to have the Surety take over the remaining performance of the Work, the time or delay between Notice of Default and start of work by the Surety is a non-excusable delay. If the Surety fails to act promptly, but no longer than thirty (30) calendar days after the Owner notifies the Surety of the Owner's decision to have the Surety complete the work, or after such takeover fails to prosecute the Work in an expeditious manner, the Owner may exercise any of its other options including completing the Work by whatever means and method it deems advisable. No claims for loss of anticipated profits or for any other reason in connection with the termination of the Contract shall be considered.
5. Payments for the various Bid Items listed in the Bid Form will constitute full compensation for all expenses incurred in consequence of discontinuance of all or any portion of the Work except as provided in this section of the Contract Documents. In no event will compensation be made for anticipatory profits or consequential damages as a result of a discontinuance of all or any portion of the Work.
6. The Contractor shall immediately upon receipt communicate any Notice of Termination for Default issued by the Owner to the affected Subcontractors and suppliers at any tier.
7. If, after Notice of Termination of the Contractor's right to proceed under the provisions of this article, it is determined for any reason that the Contractor was not in default under the provisions of this article, or that the Contractor was entitled to an extension of time under the Contract Documents, the rights and obligations of the parties shall be the same as if the Notice of Termination had been issued pursuant to the section of this article dealing with Termination for Convenience.

C. Termination for National Emergencies

1. The Owner shall terminate the Contract or portion thereof by written notice when the Contractor is prevented from proceeding with the construction Contract as a direct result of an Executive Order of the President of the United States with respect to the prosecution of war or in the interest of national defense.
2. When the Contract, or any portion thereof, is terminated before completion of all items of work in the Contract, payment will be made for the actual number of units or items of work completed at the Contract price or as mutually agreed for items of work partially completed or not started. No claims or loss of anticipated profits or for any other reason in connection with the termination of the Contract shall be considered.

D. Implementation of Termination

1. If the Owner cancels or terminates the Contract or any portion thereof, the Contractor shall stop all work on the date and to the extent specified in the Notice of Termination and shall:
    i. Cancel all orders and Subcontracts, to the extent that they relate to the performance of the work terminated and which may be terminated without costs;

ii. Cancel and settle other orders and Subcontracts, except as may be necessary for completion of such portion of the Work not terminated, where the cost of settlement will be less than costs which would be incurred were such orders and subcontracts to be completed, subject to prior approval of the MDAD Project Manager;

iii. Settle outstanding liabilities and claims arising out of such termination of orders and subcontracts, with the approval or ratification of the Owner, to the extent it may require, which approval or ratification shall be final for the purposes of this Section;

iv. Transfer title and deliver to the Owner, in the manner, at the time, and to the extent, if any, directed by it, in accordance with directions of the Field Representative, all fabricated or un-fabricated parts, all materials, supplies, work in progress, completed work, facilities, equipment, machinery or tools acquired by the Contractor in connection with the performance of the work and for which the Contractor has been or is to be paid;

v. Assign to the Owner in the manner, at the times and to the extent directed by it, all of the right, title, and interest of the Contractor under the orders and subcontracts so terminated, in which case the Owner will have the right, at its discretion, to settle or pay any or all claims arising out of the termination of such orders and subcontracts;

vi. Deliver to the MDAD Project Manager As-Built Documents, complete as of the date of cancellation or termination, plans, Shop Drawings, sketches, permits, certificates, warranties, guarantees, specifications, three (3) complete sets of maintenance manuals, pamphlets, charts, parts lists, spare parts (if any), operating instructions required for all installed or finished equipment or machinery, and all other data accumulated by the Contractor for use in the performance of the work.

vii. Perform all work as may be necessary to preserve the work then in progress and to protect materials, plant and equipment on the site or in transit thereto. The Contractor shall also take such action as may be necessary, or as the MDAD Project Manager may direct, for the protection and preservation of the property related to this Contract which is in the possession of the Contractor and in which the Owner has or may acquire an interest.

viii. Complete performance of each part of the work not terminated by the Notice of Termination;

ix. Use his best efforts to sell, in the manner, at the time, to the extent, and at the price or prices directed or authorized by the Owner, property of the types referred to above; provided, however, that the Contractor (a) shall not be required to extend credit to any purchaser, and (b) may acquire any such property under the conditions prescribed by and at a price or prices approved by the Owner; provided, further, that the proceeds of any such transfer or disposition will be applied in reduction of any payments to be made by the Owner to the Contractor under this Contract or will otherwise be credited to the price or cost of the work covered by this Contract or paid in such other manner as the Owner may direct;

x. Termination of the Contract or a portion thereof shall neither relieve the Contractor of its responsibilities for the completed work nor shall it relieve its Surety of its obligation for and concerning any just claim arising out of the work performed.

xi. In arriving at the amount due the Contractor under this article, there will be deducted, (1) any claim which the Owner may have against the Contractor in connection with this Contract and (2) the agreed price for, or the proceeds of sale of materials, supplies or other items acquired by the Contractor or sold, pursuant to the provisions of this article, and not otherwise recovered by or credited to the Owner.

E. Suspension of Work

1. The Owner reserves the right to temporarily suspend execution of the whole or any part of the Work without compensation to the Contractor.

2. In case the Contractor is actually and necessarily delayed by any act or omission on the part of the Owner, as determined by the Owner in writing, the time for completion of the Work shall be extended by the amount of the time of such delay as determined by the Owner, and an allowance may be made for actual direct costs, if any, which may have been borne by the Contractor. Such requests for additional time and/or compensation must be made in accordance with the applicable sections of the Contract Documents.
3. Only the actual delay necessarily resulting from the causes specified in this Article, shall be grounds for extension of time. In case the Contractor is delayed at any time or for any period by two or more of the causes specified in this Article, the Contractor shall not be entitled to a separate extension for each one of the causes but only one period of extension will be granted for the delay.
4. In case the Contractor is actually and necessarily delayed in the performance of the Work from one or more of the causes specified in this Article, the extension of time to be granted to the Contractor shall be only for such portion of the Work so delayed. The Contractor shall not be entitled by reason of such delay to an extension of time for the completion of the remainder of the Work. If the Contractor shall be so delayed as to a portion of the Work he shall nevertheless proceed continuously and diligently with the prosecution of the remainder of the Work. No demand by the Contractor that the Owner determine and certify any matter of extension of time for the completion of the Work or any part thereof will be of any effect whatsoever unless the demand be made in writing at least 30 days before the completion date of the Work or any part thereof for which Liquidated Damages are established when meeting those dates is claimed to have been delayed by a suspension under this Article. Owner's determination as to any matter of extension of time for completion of the Work or any part thereof shall be binding and conclusive upon the Contractor.
5. Permitting the Contractor to finish the Work or any part thereof after the time fixed for completion or after the date to which the time for completion may have been extended or the making of payments to the Contractor after any such periods shall not operate as a waiver on the part of the Owner of any rights under this contract.
6. The Contractor shall insert in each subcontract a provision that the Subcontractor shall comply immediately with a written order of the Owner to the Contractor to suspend the Work, and that they shall further insert the same provision in each subcontract of any tier.

10. **PAYMENTS:**

A. Payment of Passenger Boarding Bridges, Fixed Walkways, equipment, and materials shall be based on a new Passenger Boarding Bridge accepted pursuant to Section 1.10 of Attachment A.

B. Payment for the quantities measured as described above shall be made at the prices listed in Section III Pricing Form below which prices and payments shall be full compensation for furnishing all labor, materials and incidentals necessary to complete all the work as specified on this solicitation. For the purposes of progress payments, a lump sum amount unit price item may be paid on a percent complete basis at the sole discretion of the MDAD Project Manager.

i. In making such progress payments, a maximum of 5 percent (5%), as may be amended in the Contract Documents, of the estimated amount shall be retained from each progress payment made to the Contractor until completion of all the work under this ITQ.

C. Payments will be made in accordance with following:

**1. PHASE 1:**

a. Site Survey, Field Analysis and Report
b. Approval of Shop Drawings D10 PBB (max 2% of bid items 16 and 31) per Lump Sum
c. Approval of Shop Drawings D12 PBB (max 2% of bid items 17 and 32) per Lump Sum
d. Approval of Shop Drawings D15 PBB (max 2% of bid items 18 and 33) per Lump Sum

e. Approval of Shop Drawings D17 PBB (max 2% of bid items 19 and 34per Lump Sum
f. Approval of Shop Drawings D19 PBB (max 2% of bid items 20 and35) per Lump Sum
g. Approval of Shop Drawings E5 PBB (max 2% of bid items 21 and 36) per Lump Sum
h. Approval of Shop Drawings F21 PBB (max 2% of bid items 22 and 37) per Lump Sum
i. Approval of Shop Drawings H3 PBB (max 2% of bid items 23 and 38) per Lump Sum
j. Approval of Shop Drawings H5 PBB (max 2% of bid items 24 and 39) per Lump Sum
k. Approval of Shop Drawings H6 PBB (max 2% of bid items 25 and 40) per Lump Sum
l. Approval of Shop Drawings H7 PBB (max 2% of bid items 26 and 41) per Lump Sum
m. Approval of Shop Drawings H9 PBB (max 2% of bid items 27 and 42) per Lump Sum
n. Approval of Shop Drawings H12 PBB (max 2% of bid items 28 and 43) per Lump Sum
o. Approval of Shop Drawings H15 PBB (max 2% of bid items 29 and 44) per Lump Sum
p. Approval of Shop Drawings H17 PBB (max 2% of bid items 30 and 45) per Lump Sum
q. Foundation Design and Installation F21 per Lump Sum

2. **PHASE 3:**

a. Deliver Gate D10 PBB per Lump Sum
b. Deliver Gate D12 PBB per Lump Sum
c. Deliver Gate D15 PBB per Lump Sum
d. Deliver Gate D17 PBB per Lump Sum
e. Deliver Gate D19 PBB per Lump Sum
f. Deliver Gate E5 PBB per Lump Sum
g. Deliver Gate F21 PBB per Lump Sum
h. Deliver Gate H3 PBB per Lump Sum
i. Deliver Gate H5 PBB per Lump Sum
j. Deliver Gate H6 PBB per Lump Sum
k. Deliver Gate H7 PBB per Lump Sum
l. Deliver Gate H9 PBB per Lump Sum
m. Deliver Gate H12 PBB per Lump Sum
n. Deliver Gate H15 PBB per Lump Sum
o. Deliver Gate H17 PBB per Lump Sum
p. Install & Commission Gate D10 PBB per Lump Sum
q. Install & Commission Gate D12 PBB per Lump Sum
r. Install & Commission Gate D15 PBB per Lump Sum
s. Install & Commission Gate D17 PBB per Lump Sum
t. Install & Commission Gate D19 PBB per Lump Sum
u. Install & Commission Gate E5 PBB per Lump Sum
v. Install & Commission Gate F21 PBB per Lump Sum
w. Install & Commission Gate H3 PBB per Lump Sum
x. Install & Commission Gate H5 PBB per Lump Sum
y. Install & Commission Gate H6 PBB per Lump Sum
z. Install & Commission Gate H7 PBB per Lump Sum
aa. Install & Commission Gate H9 PBB per Lump Sum
bb. Install & Commission Gate H12 PBB per Lump Sum
cc. Install & Commission Gate H15 PBB per Lump Sum
dd. Install & Commission Gate H17 PBB per Lump Sum

**D. Allowance Accounts:**

1) Certain portions of work which may be required to be performed by the Contractor under this Contract are either unforeseeable or have not yet been designed, and the value of such work, if any, is included in the Contract as a specific line item(s) entitled "Allowance Account(s)."

a. The Allowance Account 1. (Contingency) can be used to reimburse the Contractor for 1) furnishing all labor, materials, equipment and services necessary for modifications or Extra Work required to complete the Project because of unforeseeable conditions and; 2) for performing construction changes required to resolve: oversight in design, Owner oversight, unforeseen conditions, revised regulations, technological and product development, operational changes, schedule requirements, program interface, emergencies and delays.

b. Other Allowance Account 2. (Dedicated) may be used to reimburse for unanticipated issues related to foundation retrofit design and installation, utility upgrade designs and any preliminary work for upgrades. This dedicated allowance account shall be used only for the purposes approved pursuant to a written Work Order issued by MDAD.

2) When work is to be performed under the Allowance Account(s), if any, the work shall be incorporated into all respects of this Contract as awarded.

3) The Work Order for the required work will be issued by MDAD upon receipt from the Contractor of a satisfactory proposal for performance of the work, and the acceptance thereof by MDAD. If the Contractor and MDAD are unable to agree upon an amount of compensation or; if the nature of the work is such that a Unit Price or Lump Sum price is not economically practical or if the change work is deemed essential to the Project and actual conditions require work to be swiftly conducted to avoid or minimize delays, the Work Order may be issued to perform the work on a Force Account basis. If an equitable adjustment for the said change work cannot be arrived at, either by mutual agreement or under the dispute provisions of the Contract Documents, the compensation hereunder will be the total compensation for this work.

4) No Work Orders shall be issued against an Allowance Account if such Work Orders in the aggregate exceed the authorized amount of that Allowance Account, provided however that such excess may be authorized by appropriate Change Order.

5) The unexpended amounts under the allowance accounts shall remain with MDAD and the Contractor shall have no claim to the same.

**6) Work Orders/Change Order/Force Account**

A) If the Owner and the Contractor cannot reach agreement on an equitable adjustment to the Contract Price for any work as prescribed above in Section 10.D of this bid document, then Extra Work will be performed on Force Account basis as directed by the MDAD Project Manager and paid for as specified below.

B) The following percentages will be allowed as mark-ups over Direct Costs for all negotiated adjustments to the Contract Amount or for work performed on either a negotiated lump sum basis or a Force Account basis:

1. Extra Work Performed directly by Contractor's Own Forces: The Contractor may add up to a maximum fifteen percent (15%) mark-up on the actual Direct Cost of the Extra Work, subject to review and approval by the MDAD Project Manager, as direct compensation for Overhead. A 10% mark-up will be added to all negotiated credit amounts for deleted work not performed to cover Overhead.

2. Extra Work Performed by a Subcontractor or any Sub-tier Subcontractor: The Subcontractor may add up to a maximum fifteen percent (15%) mark-up on the actual Direct Cost of the Extra Work as direct compensation for Overhead. The Contractor may add a five percent (5%) mark-up on the Subcontractor's actual Direct Cost as Contractor's Overhead. A 10% additional credit will be added to all Subcontractor negotiated credit amounts for deleted work not performed to cover quality control, supervision, coordination, overhead, small tools and incidentals.

C) In the event Extra Work is performed on a Force Account basis, then the Contractor and the Subcontractor(s), as appropriate, shall maintain itemized daily records of costs, quantities, labor and the use of authorized Special Equipment or Machinery. Copies of such records, maintained as follows, shall be furnished to the Architect/Engineer daily for approval, subject to audit.

a. Comparison of Record: The Contractor, including its Subcontractor(s) of any tier performing the work, and the MDAD Project Manager shall compare records of the cost of force account work at the end of each day. Agreement shall be

indicated by signature of the Contractor, the Subcontractor performing the work, and the MDAD Project Manager or their duly authorized representatives.

b. Statement: No payment will be made for work performed on a force account basis until the Contractor has furnished the MDAD Project Manager with duplicate itemized statements of the cost of such force account work detailed as follows:

c. Name, classification, date, daily hours, total hours, rate and extension for each laborer, tradesman, and foreman.

d. Designation, dates, daily hours, total hours, rental rate, and extension of each unit of special machinery and equipment.

e. Quantities of materials, prices, and extensions.

D) Transportation of materials: The statements shall be accompanied and supported by a receipted invoice of all materials used and transportation charges. However, if materials used on the force account work are not specifically purchased for such work but are taken from the Contractor's stock, then in lieu of the invoices the Contractor shall furnish an affidavit certifying that such materials were taken from its stock, that the quantity claimed was actually used, and that the price and transportation claimed represent the actual cost to the Contractor.

E) Authorization of Special Equipment and Machinery: No compensation for special equipment or machinery shall be made without written authorization from the MDAD Project Manager. The MDAD Project Manager shall review and evaluate any special equipment or machinery proposed by the Contractor for use on a force account basis. As part of its evaluation, the MDAD Project Manager shall determine whether any of the special equipment or machinery being proposed by the Contractor will be concurrently used on the Project, including approved changes, or on other force account work on the Project. If the MDAD Project Manager determines that such a concurrent use of special equipment or machinery is being proposed by the Contractor, prior to the authorization of such special equipment or machinery, the MDAD Project Manager and thereto Contractor shall establish a straight-line prorated billing mechanism based on the actual percentage of time that the equipment or machinery is required to be used on the force account work(s).

Special equipment or machinery which is approved for use by the MDAD Project Manager shall be reviewed and accounted for on a daily basis as provided in the Comparison of Record and Statement paragraphs of this section of the Contract.

F) Inefficiency in the Prosecution of the Work: If in the Owner's or MDAD Project Manager's opinion, the Contractor or any of its Subcontractors, in performing Force Account Work, is not making efficient use of labor, materials or equipment, or is proceeding in a manner which makes Force Account Work unnecessarily more expensive to the Owner, the Owner or MDAD Project Manager may, in whole or part, direct the Contractor in the deployment of labor, material and equipment. By way of illustration, inefficiency may arise in the following ways, including but not limited to: (1) the timing of the Work, (2) the use of unnecessary labor or equipment, (3) the use of a higher percentage of journeymen than in non-force account Work, (4) the failure to procure materials at lowest price, or (5) using materials of quality higher than necessary.

## PART IV. PRICING FORM

A. **The Bidder's prices per this Section, shall be inclusive of all costs associated with providing the services herein, which shall include at minimum the removal and legal disposal of existing fixed walkway and PBBs, manufacturing, delivery and installation of new PBBs, fixed walkway, support columns, foundations if necessary, repairs to and upgrades to existing systems where required, Preconditioned Air Handling Units, 400 Hz ground power units, Service Transfer Units (STU), Boom-air hose management systems, fixed walkway and PBB pre-cool system, baggage chutes, mechanical, electrical work, and commissioning of the PBBs, and associated equipment.**

1. Mobilization shall consist of the preparatory work and operations for beginning work on the Project; costs of bonds and required insurance; costs of operations necessary to move personnel, badging, equipment, supplies, and incidentals to the site; costs of establishment of temporary offices, shops, safety equipment and first aid supplies; and other costs associated with or required by the Contract Documents and any Federal, State, and/or local laws and regulations. No separate cost will be paid for mobilization. All costs related to mobilization shall be considered incidental to and included in the unit cost prices.
2. The Bidder's prices shall include all engineering, labor, permit(s), materials, tools, and equipment; all other direct and indirect costs necessary to complete the item of Work and to coordinate it with adjacent work; and shall include all overhead and profit.
3. All handling or storage costs incurred by the Contractor shall be considered incidental to the installation of the equipment and as such will not be considered for additional compensation.

| ITEM | QTY | UOM | DESCRIPTION | PRICE |
|---|---|---|---|---|
| 1 | 1 | EA | Approval of Shop Drawings D10 PBB (max 2% of bid items 31 and 46) per Lump Sum | $ |
| 2 | 1 | EA | Approval of Shop Drawings D12 PBB (max 2% of bid items 32 and 47) per Lump Sum | $ |
| 3 | 1 | EA | Approval of Shop Drawings D15 PBB (max 2% of bid items 33 and 48) per Lump Sum | $ |
| 4 | 1 | EA | Approval of Shop Drawings D17 PBB (max 2% of bid items 34 and 49) per Lump Sum | $ |
| 5 | 1 | EA | Approval of Shop Drawings D19 PBB (max 2% of bid items 35 and 50) per Lump Sum | $ |
| 6 | 1 | EA | Approval of Shop Drawings E5 PBB (max 2% of bid items 36 and 51) per Lump Sum | $ |
| 7 | 1 | EA | Approval of Shop Drawings F21 PBB (max 2% of bid items 37 and 52) per Lump Sum | $ |
| 8 | 1 | EA | Approval of Shop Drawings H3 PBB (max 2% of bid items 38 and 53) per Lump Sum | $ |
| 9 | 1 | EA | Approval of Shop Drawings H5 PBB (max 2% of bid items 39 and 54) per Lump Sum | $ |
| 10 | 1 | EA | Approval of Shop Drawings H6 PBB (max 2% of bid items 40 and 55) per Lump Sum | $ |

| | | | | |
|---|---|---|---|---|
| 11 | 1 | EA | Approval of Shop Drawings H7 PBB (max 2% of bid items 41 and 56) per Lump Sum | $ |
| 12 | 1 | EA | Approval of Shop Drawings H9 PBB (max 2% of bid items 42 and 57) per Lump Sum | $ |
| 13 | 1 | EA | Approval of Shop Drawings H12 PBB (max 2% of bid items 43 and 58) per Lump Sum | $ |
| 14 | 1 | EA | Approval of Shop Drawings H15 PBB (max 2% of bid items 44 and 59) per Lump Sum | $ |
| 15 | 1 | EA | Approval of Shop Drawings H17 PBB (max 2% of bid items 45 and 60) per Lump Sum | $ |
| 16 | 1 | EA | Foundation Design & Installation F21 PBB per Lump Sum | $ |
| 17 | 1 | EA | Deliver Gate D10 PBB per Lump Sum | $ |
| 18 | 1 | EA | Deliver Gate D12 PBB per Lump Sum | $ |
| 19 | 1 | EA | Deliver Gate D15 PBB per Lump Sum | $ |
| 20 | 1 | EA | Deliver Gate D17 PBB per Lump Sum | $ |
| 21 | 1 | EA | Deliver Gate D19 PBB per Lump Sum | $ |
| 22 | 1 | EA | Deliver Gate E5 PBB per Lump Sum | $ |
| 23 | 1 | EA | Deliver Gate F21 PBB per Lump Sum | $ |
| 24 | 1 | EA | Deliver Gate H3 PBB per Lump Sum | $ |
| 25 | 1 | EA | Deliver Gate H5 PBB per Lump Sum | $ |
| 26 | 1 | EA | Deliver Gate H6 PBB per Lump Sum | $ |
| 27 | 1 | EA | Deliver Gate H7 PBB per Lump Sum | $ |
| 28 | 1 | EA | Deliver Gate H9 PBB per Lump Sum | $ |
| 29 | 1 | EA | Deliver Gate H12 PBB per Lump Sum | $ |
| 30 | 1 | EA | Deliver Gate H15 PBB per Lump Sum | $ |
| 31 | 1 | EA | Deliver Gate H17 PBB per Lump Sum | $ |
| 32 | 1 | EA | Install & Commission Gate D10 PBB per Lump Sum | $ |
| 33 | 1 | EA | Install & Commission Gate D12 PBB per Lump Sum | $ |
| 34 | 1 | EA | Install & Commission Gate D15 PBB per Lump Sum | $ |
| 35 | 1 | EA | Install & Commission Gate D17 PBB per Lump Sum | $ |
| 36 | 1 | EA | Install & Commission Gate D19 PBB per Lump Sum | $ |
| 37 | 1 | EA | Install & Commission Gate E5 PBB per Lump Sum | $ |
| 38 | 1 | EA | Install & Commission Gate F21 PBB per Lump Sum | $ |
| 39 | 1 | EA | Install & Commission Gate H3 PBB per Lump Sum | $ |
| 40 | 1 | EA | Install & Commission Gate H5 PBB per Lump Sum | $ |
| 41 | 1 | EA | Install & Commission Gate H6 PBB per Lump Sum | $ |
| 42 | 1 | EA | Install & Commission Gate H7 PBB per Lump Sum | $ |
| 43 | 1 | EA | Install & Commission Gate H9 PBB per Lump Sum | $ |
| 44 | 1 | EA | Install & Commission Gate H12 PBB per Lump Sum | $ |
| 45 | 1 | EA | Install & Commission Gate H15 PBB per Lump Sum | $ |

| | | | | |
|---|---|---|---|---|
| 46 | 1 | EA | Install & Commission Gate H17 PBB per Lump Sum | $ |
| | | | **BID TOTAL:** | |
| DEDICATED ALLOWANCE ACCOUNT: SITE CONDITIONS (10% OF TOTAL BID FOR ITEMS 1-46) | | | | MDAD WILL FILL IN AT TIME OF AWARD |
| CONTINGENCY ALLOWANCE ACCOUNT (10% OF TOTAL BID FOR ITEMS 1-46) | | | | MDAD WILL FILL IN AT TIME OF AWARD |

## PART V. SUBMITTAL FORM

**Bidder's Legal Name (include d/b/a if applicable):**

**Federal Tax Identification Number:**

### A. SMALL BUSINESS ENTERPRISE CONTRACT MEASURES (if applicable):

A Small Business Enterprise (SBE) must be certified by the Small Business Development Division (SBD) for the type of goods and/or services the Bidder provides in accordance with the applicable Commodity Code(s) for this Solicitation. For certification information, contact SBD at (305) 375-3111 or access http://www.miamidade.gov/smallbusiness/certification-programs.asp. The SBE must be certified by this Solicitation's submission deadline, at Contract award, and for the duration of the Contract to remain eligible for the preference. Firms that graduate from the SBE Program during the Contract may remain on the Contract.

☐ Place a check mark here **only** if affirming Bidder is a Miami-Dade County Certified Small Business Enterprise.

**IN ACCORDANCE WITH CFR 200.319 (b), SMALL BUSINESS ENTERPRISE MEASURES SHALL NOT APPLY TO FEDERALLY FUNDED PURCHASES.**

### B. LOCAL PREFERENCE CERTIFICATION:

For the purpose of this certification, and pursuant to Section 2-8.5 of the Code of Miami-Dade County, a "local business" is a business located within the limits of Miami-Dade County that has a valid Local Business Tax Receipt issued by Miami-Dade County at least one year prior to bid submission; has a physical business address located within the limits of Miami-Dade County from which business is performed and which served as the place of employment for at least three full time employees for the continuous period of one year prior to bid submittal (by exception, if the business is a certified Small Business Enterprise, the local business location must have served as the place of employment for one full time employee); and contributes to the economic development of the community in a verifiable and measurable way. This may include, but not be limited to, the retention and expansion of employment opportunities and the support and increase to the County's tax base.

☐ Place a check mark here **only** if affirming the Bidder meets requirements for Local Preference. **Failure to complete this certification at this time may render the vendor ineligible for Local Preference.**

**IN ACCORDANCE WITH CFR 200.319 (b), LOCAL PREFERENCE SHALL NOT APPLY TO FEDERALLY FUNDED PURCHASES.**

### C. LOCAL CERTIFIED VETERAN'S BUSINESS ENTERPRISE CERTIFICATION:

A Local Certified Veteran's Business Enterprise is a firm that is: (a) a local business pursuant to Section 2-8.5 of the Code of Miami-Dade County, and (b) prior to bid submission is certified by the State of Florida Department of Management Services as a veteran business enterprise pursuant to Section 295.187 of the Florida Statues.

☐ Place a check mark here **only** if affirming the Bidder is a Local Certified Veteran's Business Enterprise. **A copy of the certification must be submitted with the bid.**

**IN ACCORDANCE WITH CFR 200.319 (b), LOCAL CERTIFIED VETERAN'S BUSINESS ENTERPRISE PREFERENCE SHALL NOT APPLY TO FEDERALLY FUNDED PURCHASES.**

### D. CONVICTION DISCLOSURE:

Pursuant to Section 2-8.6 of the Code of Miami-Dade County, any individual, corporation, partnership, joint venture or other legal entity having an officer, director, or executive who has been convicted of a felony during the past ten (10) years shall disclose this information at the time of bid submittal.

☐ Place a check mark here **only** if the Bidder has such conviction to disclose to comply with this requirement.

### E. CONFLICT OF INTEREST DISCLOSURE:

Pursuant to Section 2-11.1 (c) and (d) of the Code of Miami-Dade County, please respond to the following questions posed.

1. ARE ANY OWNERS/PRINCIPALS/PERSONS WITH OWNERSHIP INTEREST IN THE COMPANY, A MIAMI-DADE COUNTY ELECTED OFFICIAL, AGENCY BOARD MEMBER OR EMPLOYEE(S)?

☐ **YES** or ☐ **NO**

**If Yes, attach Conflict-of-Interest Opinion provided by Miami-Dade County Commission on Ethics and Public Trust.**

2. ARE ANY IMMEDIATE FAMILY MEMBERS OF THE COMPANY'S OWNERS/PRINCIPALS/PERSONS WITH OWNERSHIP INTEREST IN THE COMPANY, A MIAMI-DADE COUNTY ELECTED OFFICIAL, AGENCY BOARD MEMBER OR EMPLOYEE?

☐ YES or ☐ NO

**If Yes, attach Conflict-of-Interest Opinion provided by Miami-Dade County Commission on Ethics and Public Trust.**

## F. WAIVER OF CONFIDENTIALITY AND TRADE SECRET TREATMENT OF BID:

The Bidder acknowledges and agrees that the submittal of the Bid is governed by Florida's Government in the Sunshine Laws and Public Records Laws, as set forth in Florida Statutes Section 286.011and Chapter 119. As such, all material submitted as part of, or in support of, the Bid will be available for public inspection after opening of bids and may be considered by the County in public.

**By submitting a bid pursuant to the Solicitation, Bidder agrees that all such materials may be considered public records. The Bidder shall not submit any information in response to the Solicitation which the Bidder considers to be a trade secret, proprietary or confidential.** If the Bid contains a claim that all or a portion of the Bid submitted contains confidential, proprietary or trade secret information, the Bidder, **by signing below**, knowingly and expressly **waives** all claims made that the Bid, or any part thereof no matter how indicated, is confidential, proprietary or a trade secret and authorizes the County to release such information to the public for any reason.

**Acknowledgment of Waiver:**

**Bidder's Authorized Representative's Signature:** **Date:**

**Representative's Name:** **Representative's Title:**

## G. BIDDER'S CONTACT INFORMATION

**Bidder's Contact Person:** **Email Address:**

**Phone Number (include area code):**

## H. ACKNOWLEDGEMENT OF BINDING OFFER

**The execution of this form constitutes the consent of the Bidder to be bound by the terms of its Bid and the Solicitation. Failure to sign where indicated below by an authorized representative shall render the Bid non-responsive. The County may, however, in its sole discretion, accept any response that includes an executed document which unequivocally binds the Bidder to the terms of its Bid and the Solicitation.**

**Bidder's Authorized Representative's Signature:** **Date:**

# INVITATION TO QUOTE (ITQ)

**Representative's Name:**

**Representative's Title:**

**This ITQ includes the following attachments and exhibits:**

Attachment A - SECTION 14950 - AIRCRAFT PASSENGER BOARDING BRIDGES - APRON DRIVE
Attachment B - Contractor Due Diligence Affidavit (if award is over $1,000,000)
Attachment C – Subcontracting Form

Exhibit 1 – Preliminary Schedule
Exhibit 2 - PBB Locations
Exhibit 3 - Shut-down Request Procedures and forms
Exhibit 4 - Hot Work Permit

ATTACHMENT A

# SECTION 14950 - AIRCRAFT PASSENGER BOARDING BRIDGES - APRON DRIVE

## PART 1 GENERAL

### 1.01 RELATED WORK

A. Section 13470 – Pre-Conditioned Air Gate Equipment
B. Section 16435 – 400-Hertz System

### 1.02 DESCRIPTION OF WORK

A. Work furnished by Contractor: Passenger Boarding Bridges complete including all mechanical, electrical, hydraulics, OSHA-compliant fall protection system, etc.

B. Only Passenger Boarding Bridges of a design which has been in an acceptable commercial service in the United States for a period of at least five years and installed within the last 10 years shall be used on this project.

C. Fixed tunnels, complete with supports, for installation at certain Passenger Boarding Bridges as specified. All requirements and criteria herein for Passenger Boarding Bridges shall apply equally to fixed tunnels.

D. Work specified in other Sections and or bid documents: Footings, anchor bolts and nuts, pre-conditioned air, side mounted service transport units (STUs) and 400 Hz equipment, and electrical and telecommunications services to the interface point.

E. For the purpose of this Section, the terms "Contractor", "Manufacturer" and "Manufacturer of the Loading Bridges" are used interchangeably and shall be understood to mean the same entity.

### 1.03 PURPOSE/SCOPE

A. The purpose of these specifications is to describe the design requirements, quality, performance, and maintenance properties of the Passenger Boarding Bridges required at Miami International Airport. Operator training, installation requirements, and acceptance conditions are also requirements of this Specification.

B. Safety to passengers, other personnel, aircraft, and equipment is of prime importance. Nothing in these specifications shall relieve the Contractor of the responsibility for providing a safe product.

C. Safety Requirements:

1. All equipment shall be designed to be fail-safe and all controls which regulate bridge motions (i.e., horizontal travel, vertical travel, and cab rotation) shall be of the dead-man type. Dead-man type shall mean controls which require the operator to apply constant pressure to be engaged. Once the pressure is released, the control is disengaged.

2. All operating mechanisms, i.e., horizontal, and vertical drive, cab rotation, etc., shall be designed so that the drive mechanism is locked when power fails or is shut off.

3. Positive stops shall be provided to prevent dangerous overtravel where any component might become disengaged from its guiding or restraining component. The positive stop shall be in addition to all limit switches provided to restrict overtravel under normal operating conditions, including bogie steering motions. Documents highlighting the actual stops are a shop drawing requirement.

4. The operator's position in the control cab shall be designed to permit the operator to position the loading bridge with the cab weather door closed. Suitable enclosures, guard rails, etc., shall be provided to protect the operator from being pitched out the open end of the cab (when operated with open door) in case of sudden stops or inadvertent movements of the bridge. A handhold shall be attached to the wall on both sides of the cab weather door.

5. The Passenger Boarding Bridges shall comply with all local codes and regulations at point of installation which are in effect at the time of manufacture.

6. All passenger-loading bridges shall meet the requirements of the National Fire Protection Association Standard on Airport Terminal Buildings, Fueling Ramp Drainage, and Loading Walkways, NFPA 415, current edition.

1.04 SPECIFICATIONS BASIS

A. These specifications represent the minimum required performance characteristics of Passenger Boarding Bridges acceptable to the Miami International Airport operational and climatological environment.

B. Applicable Codes and Standards:

The design, fabrication, and construction, including all manufactured components, fittings, and hardware, shall be in U.S. standard units (metric or SI units shall be presented in parentheses following the U.S. standard units), and shall conform to the current issue at the time this project is advertised, of one or more of the following codes and standards as applicable and as referenced herein:

Society of Automotive Engineers (SAE)
American Society for Testing and Materials (ASTM)
American Society of Mechanical Engineers (ASME)
American National Standards Institute (ANSI)
National Electric Code (NEC)
National Electrical Manufacturers Association (NEMA)
National Fire Protection Association STD 415 (NFPA)
Florida Building Code, Miami-Dade County Edition (FBC)
American Institute of Steel Construction (AISC)
Occupational Safety and Health Administration (OSHA)
Americans with Disabilities Act (ADA)
Florida Accessibility Code for Building Construction (FACBC)

Design, fabrication, and construction conforming to other than the above listed U.S. associations and codes will not be permitted.

1.05 SUBMITTALS

The Contractor shall submit at a minimum, six (6) sets of complete and detailed shop drawings, to the Miami Dade Aviation Department (MDAD) Project Manager (PM) for review unless Electronic submittals are approved by MDAD Project Manager. The exterior and interior designs shall be aesthetically pleasing and in keeping with contemporary trends. Where necessary to meet these requirements, and when in conflict with maintainability standards, enclosures shall be utilized to cover unsightly appurtenances. An index prepared in chronological order listing all drawings, sketches, details, and material submitted shall be provided.

All drawings, sketches, details, and materials shall be submitted in English language, in United States standard units, including dimensions, volumes, weights, and forces. The use of the metric or SI units shall be supplemental only, shown in parentheses following the U.S. standard units.

No fabrication and/or assembly of any of the Passenger Boarding Bridge components shall begin until the shop drawings for such components have been reviewed and approved by the MDAD Project Manager. Additional shop drawings shall be submitted as necessary to fully describe the bridge to be delivered and to insure proper interface with the external environment. Shop drawings shall include but not be limited to the following:

A. Interior finishes

1. Interior scheme

2. Transition details

3. Wall finish attachment

4. Light fixture details, layout, and maintained illuminance calculations at floor using the actual interior finishes (use 10% reflectance for the floor surface)

5. Joint details

6. Loading bridge dimensions and general arrangement drawings

7. Tunnel and walkway if required floor finish

8. Cab and Rotunda floor finish

9. Interior walls and ceilings finish

10. Carpet edging details, including lines of demarcation between carpeted and hard surfaced floor, at wall areas, and treatment at doors, thresholds, and treadles at automatic doors to terminal building. (See 1.13A.)

11. Carpet and/or flooring material yardage requirement for each ( Passenger

Boarding Bridge, and fixed walkway if any.)

12. Transition ramp handrails.

B. Exterior configuration

1. General bridge layout including the rotunda, pedestal, foundation and any externally mounted equipment.

2. Exterior sketch

3. Graphics

4. Paint finishes

5. Roof access ladder

6. Flashing (Building to Passenger Boarding Bridge)

7. Flashing (Bridge segments)

8. Cab door seal

9. Insulation

10. Ramp service stairway and handrails

11. Ramp service door and hardware.

12. Opening(s) and curb(s) for exhaust fan(s) (PC Air system).

13. Support brackets for any externally mounted equipment.

C. Cab

1. Operator's cone of visibility (including mirrors and CCTV for viewing drive wheels and apron)

2. Control panel location and functional layout

3. View panels

4. Safety devices

5. Interface with aircraft, i.e., Canopy, Bumpers, and sensors etc.

6. Modifications necessary for appropriate mate with required aircraft types

(including auto-leveling devices).

D. Aesthetics and safety

1. Color and finish, exterior

2. Safety stripes

3. Signage (exterior) - colors, sizes, and legends. MDAD Project Manager

4. Signage and plaques (interior)

5. OSHA-compliant fall protection system on all roofs and at cab/aircraft vestibule.

E. Electrical, Mechanical, and Structural (including bridge operating instructions)

1. Structural drawings including all pertinent calculations which shall be signed and sealed by a Professional Engineer licensed in the State of Florida

2. Electrical power calculations, which shall be signed and sealed by a Professional Engineer licensed in the State of Florida

3. Electrical power and control schematic diagrams

4. Hydraulic schematics

5. Interface requirements for existing foundations and building-supplied utilities (exact location of electrical power and communications J-boxes).

F. Certificates of compliance with NFPA 415 for fire protection by construction.

G. The Contractor shall submit recommended priced spare parts list, submittal date and requirements per 1.12 A.

H. For new foundations the Contractor shall provide a template for each rotunda and support column anchor bolt pattern. Anchor bolts and nuts are detailed on the Plans for all locations.

1.06 MAINTENANCE PROVISIONS

A. Components shall be installed with adequate access and type of fasteners to permit them to be changed by one man. Where the weight of a component requires mechanical assistance, the component or assembly shall be provided with lift eyes, forklift guides, etc.

B. Access panels, where required to gain access to equipment or maintenance areas, shall be suitably sized to permit accomplishment of the tasks required, including tools and equipment.

C. If special tools are required for routine maintenance, they shall be supplied by the Contractor.

D. Modular components: Provide for rapid corrective maintenance of malfunctioning elements through use of standardized modular components, which are readily available in the continental U.S. Allowance must be made for convenient access to components critical to the operation of the Passenger Boarding Bridge.

1.07 WARRANTY

A. The Contractor/manufacturer of the Passenger Boarding Bridges shall warrant that the passenger boarding bridges, and all components and accessories comply with the requirements of the Contract Documents, including approved drawings and these Specifications. The Passenger Boarding Bridge shall perform to the design function for a minimum period of 10 years from the date of final acceptance by the Owner. Failures caused by normal wear and tear, Acts of nature, and modifications by the Owner, which have not been approved by the manufacturer, will be excluded from the coverage in this section.

B. The Contractor/manufacturer of the Passenger Boarding Bridges agrees to repair or replace (parts and labor), at their expense within 24 hours any defect which constitutes a breach of warranty, provided the Contractor is notified of such defect within one year following the date of formal written acceptance of the Passenger Boarding Bridges by the Owner.

C. The Contractor shall warrant that the Passenger Boarding Bridge (s) and all its components are new and manufactured using new U.S. produced materials, and are of good quality, suitable for aircraft use, and are free and clear from liens, encumbrances, and title defects.

1.08 MAINTENANCE

A. Manuals

1. The Contractor shall, not less than 30 days prior to acceptance inspections, supply three (3) copies of a technical manual per each Passenger Boarding Bridge procured under this Contract and one electronic copy (CD) or USB drive if approved by MDAD Project Manager for each type (model) of PLB.

2. The technical manuals shall contain the following information:

a. Description and operation of all systems and components

b. All pertinent wiring diagrams, especially all electrical circuits, including microchips and programs

c. Maintenance instructions including troubleshooting/ diagnostics guidelines

d. Overhaul instructions

e. List of parts and part numbers

f. Illustrated parts list

g. Recommended spare parts list and source.

3. Manuals shall be compact and produced in such a manner that the maintenance personnel can easily refer to any of its pages or schematics when standing on the apron while subjected to jet blast, wind, etc.

B. All hardware items such as, but not limited to, bolts, studs, nuts, washers, and fasteners shall be in United States units.

C. The Contractor shall maintain, for furnishing to the job site within 24 hours, an adequate inventory of all proprietary or vendor fabricated or modified parts, especially the long lead time items for routine maintenance of the unit. All stock shall be maintained, whether or not the unit is in current production, for a minimum of ten years from date of the last unit manufactured.

D. Corrective Maintenance: The Contractor shall be responsible for all corrective maintenance, under the terms of the Warranty - Article 1.07, parts and labor, for one (1) year from date of formal written acceptance of the Passenger Boarding Bridge. Corrective maintenance shall include all maintenance except minor and routine adjustments and lubrication. In the event that the Contractor fails to respond within 24 hours to correct a maintenance occurrence (and expediently perform whatever repairs necessary to restore the loading bridge into service), the MDAD reserves the right to perform (with its own maintenance forces or otherwise) such corrective maintenance work and the Contractor shall reimburse the MDAD whatever expenses incurred by the MDAD in performing such corrective maintenance work.

E. Preventive Maintenance: Prior to formal acceptance and during the on-airport storage and installation, the Contractor shall be responsible for the preventive maintenance and general protection from deterioration of the Passenger Boarding Bridge. After acceptance pursuant to Section 1.10, the MDAD will be responsible for all preventive maintenance, in accordance with Manufacturer's manual.

F. The Contractor shall provide the Maintenance Division and the Design Division of the Miami Dade Aviation Department with Service Bulletins outlining product improvement data resulting from continuing field operation experiences. Service Bulletins are to be sent to the Assistant Director of Maintenance and to the Assistant Director of Facilities, Miami-Dade Aviation Department, P.O. Box 025504, Miami, Florida 33102-5504.

1.09 INSTALLATION REQUIREMENTS

A. The Project bid documents indicate the proposed location of each Passenger Boarding Bridge types, foundation(s) and aircraft positions at each gate. The Contractor shall be responsible to verify all locations (rotunda foundation, aircraft position for the various types of aircraft serviced at each gate, etc.) and advise the MDAD Project Manager of

any conflict or code violation (such as excessive slope, etc.) with the proposed PBBs or foundation locations prior to beginning the fabrication of the Passenger Boarding Bridges.

B. Preparation of construction design drawings: The Contractor shall, as a part of the installation construction, retain a Florida registered Professional Engineer to prepare design drawings and calculations required for the Passenger Boarding Bridge and its structural components, electrical service, and flashing. All such drawings and calculations shall be submitted to the MDAD Project Manager for review prior to fabrication.

C. The Contractor shall provide qualified manufacturer's technical representative and service personnel during the installation of the loading bridges to assure a proper installation. This representative shall also be available to the Owner at no charge on delivery of the first unit and shall be on call for a timely response within 8 hours for a period of sixty days after each loading bridge is officially opened for airline operations. This is to ensure adequate and reliable field service support to correct any and all equipment failures that normally occur during the initial operating period.

D. Temporary hurricane tie-down: During the on-site delivery, storage, and installation process, the Contractor shall be responsible for securing all Passenger Boarding Bridge elements, tools, and equipment against hurricane force winds (Winds of 130 mph with 1.3 gust factor). –(175- MPH ultimate wind speed with pressures calculated per the Florida Building Code)

E. The Passenger Boarding Bridges must be 3-tunnel apron drive models unless specifically approved otherwise by the Owner.

F. Fixed tunnel extensions are required at some of the Passenger Boarding Bridge locations as prescribed in the Bid documents. Refer to Bid Documents for location and approximate size. The Contractor shall, as part of the work under this Contract, design, furnish, and erect the fixed tunnel extensions, including supports, as necessary to complete the installations. The fixed tunnel extensions shall meet all the structural, dimensional, and finish requirements specified for the Passenger Boarding Bridges.

1.10 ACCEPTANCE PROCEDURES

A. Preliminary Inspection:

1. A functional inspection and demonstration of each unit shall be performed at the installation site by a representative of the Contractor in the presence of the MDAD Project Manager.

2. Verification of compliance with the Specification shall be accomplished by inspection, review of data, demonstration, testing (if required), or combination of these.

B. Final Inspection:

1. After full compliance by the Contractor of all outstanding punch list items as

determined from the Preliminary Inspection, the MDAD Project Manager with the Owner's bridge representative shall perform the Final Inspection of the unit. Following such inspection "Fit Checks" will be required ie., (The PBB fit to multiple aircraft will be checked for functional use. This may occur over multiple days requiring the removal of all or portions of the MOT.

2. The Owner reserves the right to employ an independent Testing Laboratory (hereinafter referred to as "Laboratory") to inspect the Passenger Boarding Bridges to verify the manufacturer's compliance with the specified structural, mechanical, electrical, hydraulic, and fireproofing requirements. Deficiencies and/or violations reported by the Laboratory shall be immediately corrected by the Contractor at no cost to the Owner and then re-inspected by the Laboratory. The cost of re-inspection(s) by the Laboratory shall be borne by the Contractor and the Owner will deduct such re-inspection costs from monies due to the Contractor.

3. Full acceptance of the unit shall be made in writing to the Contractor after satisfactory completion of all punch list items as determined by the–MDAD Project Manager.

1.11 TRAINING REQUIREMENTS

A. The Passenger Boarding Bridge and its controls shall be such that it can be easily operated by personnel possessing no special skills and with minimum training. Maintenance requirements shall present no special problems to personnel knowledgeable in their respective fields of hydraulics, electrical power and controls, or general mechanical assembly.

B. Training shall be conducted by the Contractor utilizing prepared texts, slides, actual loading bridges, and other instructional aids as appropriate.

C. The Contractor shall, upon completion of the training program, provide the Miami-Dade Aviation Department with fifty (50) operating instruction brochures and the required quantity and type of maintenance manuals prescribed in Article 1.08.

D. A weatherproof and water-resistant placard outlining the bridge operating instructions shall be displayed in a prominent location in the cab of each bridge so as to be easily visible to the Operator. The Contractor shall have a qualified graphics expert prepare the placard and the displayed instructions. The proposed placard is listed as a shop drawing submittal.

E. The Contractor shall provide and record for the Owner's use, as a minimum, sixteen (16) hours of operator and forty (40) hours of maintenance training, in separate sessions, by a qualified Contractor's representative, for each model or type of loading bridge and accessories purchased under this contract. Training shall be conducted at the installation site and in classrooms as designated and provided by the Miami-Dade Aviation Department. Maintenance training shall include proper demonstration of cut-away models of critical parts, full instruction of proper maintenance and troubleshooting, instructions on proper use of manuals, etc. Operator training shall include proper demonstration as well as actual use of correct bridge operations to avoid damaging the

equipment by improper use of the controls.

F. Training dates shall be mutually agreed upon by the Contractor and Miami-Dade Aviation Department and shall be at dates prior to scheduled commercial service of the Passenger Boarding Bridges.

G. Miami-Dade Aviation Department will assign the individuals and/or companies to be trained.

1.12 SPARE PARTS

A. The Contractor shall furnish, not less than 45 days prior to delivery and installation of a Passenger Boarding Bridge, a list of suggested spare parts, including prices and sources. This is a shop drawing submittal.

B. The MDAD Project Manager will issue a Work Order directing the Contractor to furnish certain spare parts deemed required by MDAD.

1.13 COORDINATION WITH OTHER CONTRACTORS

A. The Contractor shall co-operate and co-ordinate their work with the sub-contractor installing the automatic doors between the terminal building and the Passenger Boarding Bridge and the installation of the automatic door opener (consisting of a floor mat treadle) to automatically activate the doors on both the terminal side and the Passenger Boarding Bridge side of the automatic doors.

B. The Contractor shall co-operate and co-ordinate their work with designated telecommunications contractor providing telephone services at the passenger terminal, for the installation of a theft-proof, vandal-proof telephone unit for the operator's use in the cab.

C. The Contractor shall co-operate and co-ordinate with the manufacturer(s) and the installer(s) of the ground service equipment to be mounted on the PBBs.

D. The Contractor shall co-operate and co-ordinate their work with the use of the premises by other contractors, tenants, and the Owner.

1.14 LENGTHS AND SLOPES

The Bidders shall check and verify proposed bridge types meet slope criteria for aircraft types and positions as shown in the aircraft layout and shall prepare and submit their bids based on their own calculations pursuant to Exhibit 2 (PBB Locations).

Similarly, the Contractor shall verify the proposed bridge types prior to preparing and submitting the shop drawings, which shall show the actual lengths and slopes for all aircraft types at each Passenger Boarding Bridge position. Bridges shall be able to service both the L1 and L2 doors on widebody aircraft while meeting ADA requirements. Any discrepancy shall be brought to the attention of and coordinated with the MDAD Project Manager. Any variation from stated range or

rotation requires Owner's written approval prior to fabrication.

1.15 TYPES

The various passenger-loading bridges to be furnished and installed under this contract are indicated in the Bid Documents listed herein.

PART 2 PRODUCTS

2.01 PASSENGER BOARDING BRIDGE MODEL TYPE

Apron drive units: Apron drive units are those which have "major" degrees of motion - lateral, horizontal, and vertical - of a portion of the loading bridge tunnel and the bridge head/cab about a fixed point. The apron drive units shall be capable of having simultaneous omni-directional (extension, lateral, and horizontal) movements in a fashion similar to a motor vehicle. These invariably include vertical elevation and significant rotation in a horizontal plane and include extension-retraction capability. It is the Contractor's responsibility to submit a bridge that meets functional requirements of the specifications listed herein. The apron drive units shall be designed as "three tunnels" only. Any design requirement, other than the three tunnel, shall be identified by the Awarded Contractor during Phase 1; it will be at MDAD's sole discretion to approve the change and credit(s) to MDAD shall be provided by the Contractor for any cost savings on such approved change for any of the payment milestones affected by such change.

2.02 DESIGN

The existing configuration and operation of the ramp and other appurtenant areas is based on the currently installed Jetway Systems, and Thyssen PBBs. Another manufacturer's system of a similar and equivalent nature will be acceptable when, in the Owner's judgment, differences do not materially impact, or require the County to substantially alter, the configuration or operations of the ramp and appurtenant areas. The burden of proof of equality is on the Proposer.

2.03 PERFORMANCE REQUIREMENTS:

A. General In-service Requirements:

1. The Passenger Boarding Bridge array indicated shall permit aircraft to be taxied in frontward, with all engines running to final parking positions.

2. The Passenger Boarding Bridges shall operate satisfactorily under ambient temperature conditions of plus ten (10) degrees to plus one hundred twenty-five (125) degrees Fahrenheit, including static soak up to forty-eight (48) hours within this range, with or without wind and windblown precipitation up to fifty (50) miles per hour. All components and materials must, individually and collectively, be designed and/or selected for long service life under such climatic conditions.

3. All hydraulic and the electrical systems shall be guarded and protected from damage that might be caused by falling objects or collision with aircraft service equipment and other moving ground vehicles.

4. Electric cabinets, hydraulic cabinets, and pumps shall be so located that they are, at all times, accessible to the maintenance personnel standing at ground level without the use of a ladder, regardless of the vertical position of the bridge.

B. In-service, Shutdown:

1. The Contractor shall provide a manual override to release wheel bogie brakes to permit towing the Passenger Boarding Bridge into or out of position on the apron, in case of power failure. The override system shall be mechanically interlocked to preclude normal operation with the brakes locked out. The wheel bogie shall include tow lugs on the front and rear to permit attachment of a suitable tow bar. The Contractor shall also furnish a tow bar suitable for use with MDAD tugs and tractors.

C. In-service, Maneuvering:

1. The bridge-head/cab shall be equipped with canopies, side curtains, and floor bumpers and shall be capable of docking with aircraft without scratching or damaging the aircraft fuselage when contact is made, with aircraft parked within plus or minus one (1) foot in any direction from the position marked on the apron.

D. In-service, Docked to Aircraft:

1. Contractor must submit, with his Bid, certificate(s) of compliance with NFPA 415, latest edition, from a certified testing company located in the continental United States. The Contractor shall also provide affidavits attesting to the Passenger Boarding Bridge's compliance with NFPA 415 (in effect at the date of bid submittal).

2. The full range of aircraft per Gate location as cited in the attached Exhibit 2 (PBB Locations).

2.04 STRUCTURAL DESIGN AND SUPPORT ELEMENTS

A. General In-service Requirements:

1. The Contractor shall verify the foundations' exact locations, and to advise their Florida registered Professional Engineer of such locations. In addition, the Contractor shall inform the MDAD Project Manager of these locations, noting any discrepancy from locations shown on the Bid Documents.

The Contractor shall verify the anchor bolt pattern, height of the anchor bolts above the top of the foundation, location of the anchor bolts in the bolt pattern, and the rotunda height from terminal door sill to the top of the foundation. Discrepancies shall be reported to the MDAD Project Manager. Each anchor bolt is to be furnished with three nuts. The Contractor shall provide appropriate nuts if any are missing.

2. In addition to the dead loads and strain due to movement, the entire unit shall

support the following loads. These loads may be applied in total or in part, singularly or simultaneously, and the design must allow for the worst conditions.

a. The Contractor shall be responsible for providing a support system of sufficient size and design to resist overturning under the maximum load and nominal wind loads (including jet blasts) of seventeen and one-half (17.5) pounds per square foot during in-service operations. The loading bridge, including all its components, shall be capable of resisting pounds per square foot when shutdown. ultimate wind pressure of sixty (60)

b. The Passenger Boarding Bridge floor shall be designed to accommodate a live load of 40 pounds per square foot over the total floor area.

In the extended position, the live load deflection of floor beams supporting the Passenger Boarding Bridge floor shall not exceed 1/360 of the span length.

c. The Passenger Boarding Bridge shall be structurally capable of supporting an additional 40 pounds per linear foot load along the entire length of the bridge, measured in the fully extended position, for future ground service utility trunks; a 500 pound concentrated load at the rotunda end of the tunnel; 6,500 pounds concentrated load for pre-conditioned air equipment at the cab end of the tunnel; and 1,000 pounds concentrated load for 400 Hz gate box and cable hoist units at the bridge head/cab.

d. Add provisions for exhaust air openings in the bridge walls, duct supports for both the Pre-Cooled Air (PCA) equipment and the bridge exhaust fan.

3. The Passenger Boarding Bridge, including fixed tunnel extension, if any, must be supported entirely by its own structural support elements. No load or structural stress shall be transmitted to the terminal building or the aircraft.

The rotunda shall be supported on a column or pedestal designed to carry the entire unit and reflected loads without imposing any loads on the terminal building.

4. The Passenger Boarding Bridge roof shall be manufactured from steel panels, designed and constructed to resist the accumulation of water in low points and pockets in the structure and shall be provided with diverters, baffles, etc., to prevent the accumulation of rainwater regardless of whether the bridge is in the up or down position. The roof shall, after fabrication and welding is completed, be coated with a three (3) coat paint system meeting the requirements of Article 2.07 A. Water shall be carried in approved suitable drains clear of the structure. Drains shall be sized (1-1/4" minimum inside diameter or an equivalent cross-sectional area of approximately 1.25 square inches) to eliminate blockage; it shall be located in an aesthetically acceptable manner, easily accessible for maintenance purposes, and so designed to prevent water splash on interior finish and carpeted areas.

5. The cab floor shall be aluminum plate, ¼" thick, minimum or approved equal. Live load deflection shall not exceed 1/480. Aluminum floor plates shall be isolated from dissimilar metals; fasteners shall be stainless steel. The floor assembly, fully delineated in shop drawings, shall comply with NFPA 415.

6. The cab slat curtains shall have view panels installed so the operator will have maximum visibility of the aircraft and ramp when positioning bridge to and from an aircraft or stowed position.

7. The design shall incorporate measures to prohibit entry, roosting, and nesting of birds, especially at cab and rotunda roof areas. Such bird guard baffles, screening, or diverters shall not interfere with bridge movements or operation and shall be of durable, non-staining materials. Shop drawings shall identify and delineate these 'bird guards'.

B. In-service, Maneuvering:

1. Passenger Boarding Bridge wheels shall be of sufficient width and surface quality to preclude damage to apron pavement. The Contractor shall ascertain the bearing strength and pavement hardness from the MDAD Project Manager for specific Passenger Boarding Bridge locations. The wheels shall be designed to operate on Portland cement and asphaltic concrete pavement in Miami, Florida climatic conditions.

2. The tires shall solid rubber; tires shall not be foam filled. Tires shall be manufactured of a rubber compound that will not chip or fray at the edges and not be affected or damaged due to contact with oil, lubricating and hydraulic fluids, and/or fuels from aircraft and servicing equipment, including skydrol hydraulic fluid. Each tire shall have a wheel loading, under full dead and live loading, not to exceed 200 p.s.i. The tires shall be deemed suitable for use by Passenger Boarding Bridges.

3. The tire rim, wheel, and hub design shall be such that only the wheel-to-axle-hub bolts/nuts are available for removal while the wheel is mounted on the bogie. This is to preclude accidentally loosening the tire from the rim while still mounted on the wheel bogie assembly. The wheel and tire changing procedures shall be specified in the Maintenance Manual, which shall also include specific information on tire wear limits.

2.05 BRIDGE ASSEMBLY ELEMENTS

A. General In-service Requirements:

1. Fixed ground services equipment: The Contractor shall make provisions for the installation, by others, of pre-conditioned air and 400 Hz systems and associated equipment. Shop drawings, (Electrical, Mechanical, and/or specialty Contractors) of the side-mounted service transport units and ground services equipment, will be provided by the Contractor, detailing the sizes and locations of openings, brackets, and the load(s) associated with each. The Contractor shall

design and furnish additional reinforcing and weldments as required to support the ground services equipment, detailed to coordinate with the work by others, to furnish a unified appearance.

The service transport unit (STU), shall be roof-mounted unless approved in writing by the MDAD Project Manager...

All openings, braces, brackets, and reinforcement details shall be a shop drawing submittal requirement.

2. Ramp access element

a. General: All Passenger Boarding Bridges shall be designed to accommodate circulation of ramp personnel and aircraft crews, between the apron and the aircraft, at all heights and positions of the bridge.

b. Service door: A ramp access service door shall be provided at the aircraft end of the loading bridge with provisions for a standard lock and key mechanism to be provided by MDAD. It shall be of a standard size with nominal dimensions of two (2) feet six (6) inches by six (6) feet eight (8) inches. It shall be equipped with a one-half (1/2) inch wire mesh glass upper window a minimum size of 12" x 18". A thirty (30) inches high stainless steel kickplate shall be provided for the full width of the inside of the door. The door shall open outwards using heavy duty industrial-type hardware (using standard U.S. hinges and finish hardware), and it shall be provided with an automatic heavy-duty door closer installed on inside of the door. A door stop and hook assembly shall be provided on the stair handrail to prevent damage to the passage set and/or door. The door shall be so constructed that the door and all its components can be easily removed and reset or replaced for maintenance purposes.

c. Stairway: A self-adjusting stairway without fixed risers, and having open grate, nonskid treads, shall be provided on the right-hand side of the loading bridge. The stairs shall have equal self-adjusting risers. The steps shall have a nominal width of thirty (30) inches, and the stairway shall be equipped with handrails on both sides. The apron end of the handrails shall be rounded to preclude snagging of passersby. A service stair landing, flush with cab floor, shall be provided, and shall be equipped with handrails and flooring with a suitable non-skid open grate surface. The stairs, treads, risers, landing, and handrails shall meet the requirements of OSHA. The stairway-ramp contact elements (i.e., wheels) shall be of sufficient width and surface quality to preclude damaging the apron pavement. The Contractor shall ascertain the load bearing strength and pavement hardness from the MDAD Project Manager for specific Passenger Boarding Bridge locations. The wheels shall be caster type with solid rubber tires, resistant to ester-based and hydraulic fluids, and shall be designed to operate on asphalt pavement in elevated temperature conditions. Wheels shall swivel 360° and have grease fittings (Zerk).

d. Illumination: A LED equivalent to a 60 Watt incandescent light bulb with a standard Edison screw type base in a vaporproof lighting fixture, with standard fittings, encased in a safety cage shall be provided and installed in such a manner as to optimally illuminate the stairway and landing when actuated by a manual switch located inside the cab service stair door.

3. Flashing: The Contractor shall furnish and install flashing at the point of attachment of the rotunda or fixed tunnel extension to the terminal building. Flashing shall be continuous to provide a weather tight seal around the entire periphery between the bridge and the building and shall meet the requirements of the current NFPA 415. Flashing shall be of a color which coordinates with the color of the abutting Concourse building.

   Flashing between tunnel sections, rotunda, and cab shall provide weather protection for all bridge positions. In addition to preventing water intrusion into the interior of the bridge, positive means shall be provided to prevent access by birds into overlapping tunnel spaces, cab roof pockets, and similar possible bird roosting areas. Interior flashing shall be installed at the jambs and head to cover gaps at the loading bridge/terminal interface, and the loading bridge/fixed tunnel interface, if any.

4. Terminal door thresholds: The Contractor shall install a threshold at the terminal door/loading bridge interface. The threshold shall have an anti-slip surface. Treadle doormats at doors to terminal building shall be furnished and installed by others. Thresholds shall comply with FACBC.

5. Interior lighting: Interior lighting fixtures shall be divided among several different circuits, at least two (2), in such a way that failure of one (1) circuit will not preclude the distribution of light sufficient for the safe use of the Passenger Boarding Bridge. LED fixtures shall be standard type and contain standardized lighting elements that easily replaced without specialty tools as approved by the MDAD Project Manager. Interior lighting shall be actuated by 3-way manual switches located next to the terminal door and the cab service door. Lighting calculations are a shop drawing item.

   a. Tunnel lighting: Twenty (20) to twenty-five (25) average maintained footcandles.

   b. Cab lighting: Twenty (20) footcandles. Control panel area shall have sixty (60) footcandles. It shall be possible for the operator to turn off cab lights at the control console to eliminate glare when positioning the bridge to the aircraft during hours of darkness.

   c. Intensity of illumination will be measured at the floor.

6. Emergency lighting: Not less than one fixture per bridge section shall be connected to the 120-volt AC emergency power supply to be obtained from the terminal. The emergency lighting shall be provided within each Passenger

Boarding Bridge by integrating approximately every third light fixture into the emergency circuit fed from the terminal building emergency source. (See also 2.06 D.1.) This emergency circuit shall be fed separately, from the Concourse, and not be part of the bridge power supply.

7. All lighting fixtures shall be designed for easy access for lamp replacement and for cleaning of fixtures. Lenses shall be positively secured and free of warp and distortion.

8. Maintenance access ladder: Contractor shall provide a maintenance access ladder from the service stairway landing to the cab roof. Safety railings at the roof entry location shall be provided, in addition to roof reinforcement at the roof service area. The access ladder shall conform to the applicable requirements of OSHA and Florida Building Code.

9. Personnel fall protection devices shall be provided on the roof in accordance with OSHA requirements. These devices shall extend from the face of the Concourse building to the cab and include a connection point at the access for the Gate Number Sign. Normal operations of the Passenger Boarding Bridge shall not be hindered by the device or any of its components. The fall protection device shall accommodate a safety lanyard connection.

   A weatherproof sign stating the load capacity of such anti-fall devices shall be mounted on the roof at a location visible from the roof access point.

   OSHA-compliant measures shall also be provided at the cab and aircraft vestibule for both operators and maintenance personnel. These measures shall include, but not be limited to, warning signs and safety harness anchor points near the auto-leveling device and canopy mechanisms.

   Each system component shall be designed for a minimum connected load of 2 men and any cabling and/or fittings associated with the system shall be stainless steel. Shop drawings of all fall-protection devices shall be provided for review by the MDAD Project Manager.

10. Gate Number Signs: Provide each Passenger Boarding Bridge with a three (3) sided internally illuminated gate number sign, mounted at the cab end, suitable for viewing from all directions.

    Signs shall be of waterproof construction of a size suitable to accommodate 24-inch high characters; sign face width shall be not less than 3'-10". Exposed metallic portions shall be painted to match the exterior finish of the Passenger Boarding Bridge. Signs shall be mounted to resist code-mandated hurricane wind loads and shall not interfere with the Passenger Boarding Bridge movements. Internal illumination shall be provided using LED lights. Provide a photocell, located below the cab, for gate sign control. Lights shall be easily accessible for maintenance.

    Sign faces shall be translucent of material highly resistant to ozone attack. Frame

and mounting brackets shall be of corrosion resistant (aluminum or galvanized steel) construction. Hardware shall be stainless steel. Number and characters for each sign shall be as directed by the MDAD Project Manager.

Sign shall be furnished with an integrally mounted disconnect switch for ease of maintenance.

Gate sign shall be connected to the emergency circuit.

Contractor shall verify final "gate number" prior to construction of signage.

B. In-service Shutdown:

1. Cab door: The cab weather door shall be a pair of swing doors that comply with Florida Building Code requirements. providing a clear opening of not less than 3'-8" wide, making it possible to close the side of the cab which normally fits against the aircraft. Hardware for securing the doors both open and closed shall be durable, easily operated, positive in action, and shall not cause scoring or marring of surfaces during operation of the doors. Each leaf shall have a wire glass window, 8"x8", minimum. The doors shall not trap water in either open or closed position.

C. In-service, Docked to Aircraft:

1. The Passenger Boarding Bridges shall extend from an elevated terminal holdroom door to the aircraft-loading door, making it possible for the passengers to walk between the terminal and aircraft.

2. Transition Ramps:

a. Steps shall not be used at any location within the bridge or walkways. Where the difference in elevation is very slight or where moving sections must overlap, short ramps or long chamfered edges shall be used which shall not exceed a twelve (12) percent slope when the loading bridge is level. Means shall be provided to adjust and maintain the ramp lip clearance to preclude carpet wear. Where the design permits the ramp lip to ride the carpet, it shall be sheathed in a smooth Teflon or similar low friction material to minimize wear.

b. Handrails complying with FACBC Section 9.8.5 shall be provided at all transition ramp areas (both sides of the tunnel). Where folding handrails are utilized to accommodate telescoping sections, the design shall be such that the handrail is self-erecting and automatically folded by tunnel action. The handrail, when erected, shall be rigid and promote the confidence of the user and shall be turned at the ends in an approved manner to prevent injury and prevent grabbing coats and purse straps of passengers passing through the tunnel.

3. Insulation: An R9 average value is required to be integrated into metal structures at ceilings and sidewalls at the time of manufacture. In no instance shall

insulation materials be exposed to the weather or applied with glues or tape but shall be covered with appropriate weather resistant finish material. The ceilings shall incorporate acoustical insulation of an inert non-combustible type. Particular attention shall be given in the design to eliminate the possibility of condensation in the insulation that might cause unsightly water stains appearing on the interior finished surfaces and rust at the interface of the insulation and outer shell. The use of asbestos or asbestos products as an insulation material or for any other use will not be permitted.

4. Cab/Aircraft Interface:

a. General: All materials coming into contact with the aircraft shall be of high tear strength, be non-water absorbent, have good elasticity, and be approved as meeting the requirements of the current NFPA 415.

b. Canopy: The cab section of the Passenger Boarding Bridge shall be equipped with an adjustable weather canopy and seal to provide a sheltered transition from cab to aircraft. The canopy and seal, including cab floor, shall be designed to form a weather tight seal with the aircraft skin for all the various aircraft as specified, particularly with respect to windblown rain.

The canopy shall be designed in such a manner that it will be possible to lower the canopy over the aircraft door and have sufficient clearance to open the door. It shall be able to service both L1 and L2 doors on widebody aircraft as specified on the Plans and shall conform to the approximate top fuselage contour at the forward loading door.

A cushion pad(s) shall be provided at the point of contact between the canopy and aircraft fuselage to prevent denting and/or scratching of the aircraft skin or cabin and cockpit windows. This includes damage to rain diverters or troughs, which may be located over the doors. Any canopy supports or stiffening rods in the leading edge of the canopy shall be thoroughly padded to prevent contact with the aircraft. This padding shall be firmly attached in such a manner that it will not slip, turn, twist, or distort from repeated usage. It shall be possible to replace the padding sides and top, and any inserts, in sections without replacing the entire canopy.

The actuating mechanism shall be designed to preclude excessive pressure on the aircraft fuselage. Changes in the position of the aircraft and/or Passenger Boarding Bridge while the canopy is in contact with the fuselage shall not cause excessive loads to be exerted on the fuselage skin. The mechanism shall be rugged and be able to withstand wind gusts and jetblasts. Any chains, cables, or electrical wires, which penetrate the floor or wall structure, shall have adequate clearance, be protected, and securely fastened. The shop drawings shall provide design and testing data proving no damage would occur. Dependence upon the automatic leveling device to prevent such an occurrence is unacceptable.

Cab seal shall be resilient bellows type; tarpaulin types are not acceptable.

The canopy, when in its retracted position, shall be protected by a hood with a smooth exterior surface to shed water or other device to prevent water from laying in the folds of the canopy material when the bridge is not in use.

c. Bumper: An aircraft bumper, the full outside width of the Passenger Boarding Bridge cab opening, shall be provided along the front edge of the floor at the point of contact with the aircraft. Bumper installation and material shall be such that it will not mark and will prevent any damage or abrasion of the aircraft skin when the bridge is in contact with the aircraft. The bumper shall provide bodily support when stepped upon and shall have a Shore A durometer hardness of 70 $\pm$ 5 when measured in accordance with ASTM D2240. The bumper material shall be an E.P.D.M. or other suitable polymer compounded to meet the fireproofing requirements of NFPA 415, current edition.

Passenger Boarding Bridge motion control or limit devices mounted on the bumper shall be located at the extreme outboard ends of the bumper and along its centerline or shall be mounted continuously along the face of the bumper.

There shall not be any metal trim or structural element capable of contacting the aircraft fuselage outside the canopy padding and/or bumper.

5. Performance Criteria:

Passenger Boarding Bridges under this Contract shall be designed to meet the following criteria:

a. Terminal floor height elevation: Contractor to verify the exact elevation at each gate.

b. The apron drive Passenger Boarding Bridges of this contract shall accommodate all aircraft types from the BAE 146 [and Regional Jets] through the Boeing 747 [and Airbus A380].

c. Unless otherwise shown or directed by the MDAD Project Manager and MDAD Technical Support Division, the Passenger Boarding Bridges shall be capable of accommodating the first forward door of all aircraft; in addition, the Passenger Boarding Bridges shall also be capable of accommodating the second door of wide bodies, and other aircraft having second doors.

The Contractor shall verify apron elevations at each bridge location and coordinate these elevations with the bridge operation, layout, and

maximum slope.

The Contractor shall be responsible to check the above requirements to assure that the selected Passenger Boarding Bridges shall meet the requirements of the application within the Contractor's installation guidelines and constraints of the models selected.

d.

| | |
|---|---|
| Minimum usage floor width | 4' - 7" |
| Minimum interior height | 7' - 0" |
| Minimum inter-tunnel ramp width | 4' - 6" measured between the inside faces of handrails |
| Slope of telescoping tunnel | 1:12 maximum measured, for each aircraft type serviced, from the hinge point at the terminal rotunda to the hinge point in the articulating leveling cab. |

e. The cab shall be designed to rotate a total of 125 degrees (90-95° CCW and 30-35° CW) unless otherwise noted. The cab shall rotate at a maximum speed of 19.0 feet per minute in either direction.

f. The rotunda shall be such that it permits the entire unit to rotate 177° ± 3° about its axis.

g. The bogie wheels shall be capable of rotating a maximum of 90° ±3° each side of the longitudinal centerline of the bridge. A warning light shall be installed on the control panel to indicate when the steer limit switch is activated. It shall not be possible for the wheel bogie to rotate beyond its positive stop. Positive stop method is a shop drawing requirement.

h. Bogie wheels shall be dual-drive, both wheels shall have a positive breaking mechanism. Braking system and drives shall be detailed on the shop drawings and be enclosed for weather protection.

i. Provide positive identification for both the front and back sides of the bogie; such identification shall be clearly readable by the operator through the CCTV and the mirrors. The wheels' position shall also be identified by a wheel position indicator on the control panel. Install a protective cover or screen over the indicator.

j. The vertical lift speed as measured at the cab bumper shall be 2.5 fpm to 3.5 fpm.

k. The drive system shall permit the unit to be extended/ retracted and rotated to any point within its operating envelope and shall permit these movements at variable speed between 0 and 90 fpm. The drive mechanism shall be such as to permit the extension/retraction movement

to be accomplished simultaneously with the rotation movement. Maximum speed shall be limited to 85-90 fpm.

l. The horizontal drive system shall include a decelerator device to reduce or eliminate shocks when approaching maximum extension or retraction, or when horizontal travel is stopped or reversed suddenly, for protection of the equipment and Passenger Boarding Bridge operator.

2.06 CONTROL ELEMENTS

A. General In-service Requirements

1. Electrical components

a. General: Electrical equipment, components, and installation shall be manufactured in U.S. standard units and shall conform to the recommendations and requirements of the American Insurance Association (AIA), the National Electrical Manufacturers Association (NEMA), the National Electrical Code (NEC), and the Florida Building Code.

b. The means of accomplishing all motions shall be contained at the operator's control panel.

c. Electrical junctions: All electrical junction points and connections within the loading bridge shall be made directly to terminal strips or plug-type connections. Splices are not permitted. Powerlines shall likewise be hardwired from the Passenger Boarding Bridge directly to terminal building feeder panels. All cables and wiring shall be installed in cable carrying devices approved by the MDAD Project Manager. No standard electrical and/or communication service cabling or conduit will be permitted on the exterior sides of the Passenger Boarding Bridge, visible to the public.

d. The STU shall be roof-mounted or in an alternate location if approved in writing by the MDAD Project Manager.

e. All operating electrical circuitry shall be checked before the unit leaves the manufacturer's plant.

f. Primary power: The main primary power "on" indicator light shall be located on the operator's control panel adjacent to the power on/off control switch.

g. Anti-chafing devices: Whenever electrical cables are required to slide or move, anti-chafing devices shall be provided. Acceptable anti-chafing devices include grommets, flexible sleeves and jackets, and other approved similar protection.

h. Provisions for a restricted telephone service next to the control panel:

The Contractor shall furnish and install a 3/4 inch (min.) diameter galvanized steel conduit, with six (6) pair conductor communications cables from a junction box at the rotunda end to a junction box installed in the cab wall adjacent to the operator's console located approximately 54 inches above the floor. Fixed tunnel sections shall be similarly pre-wired to provide communications cabling between the building and the rotunda.

i. All cables installed under the loading bridge shall be furnished with the minimum length required to achieve the intended function. Dangling cable loops shall not be permitted. Supports and hangers shall be provided for maximum clearance below any cable at the PLB rotunda.

j. The Passenger Boarding Bridge shall be furnished with a 3-phase line voltage monitor, WVW series as manufactured by SSAC Inc. or approved equal. The line voltage monitor shall be furnished with the following features:

1) Low voltage detector
2) Phase loss detector
3) High voltage detector
4) Phase reversal
5) Unbalanced voltages
6) Ten (10) fault memory and status display
7) Switch selectable automatic restart, delayed automatic restart, and manual remote reset
8) Restart delays settable from 0.25 seconds to 60 minutes
9) Isolated 10 amp SPDT relay contacts

Upon detection of a voltage fault, all loading bridge functions except lighting shall be deactivated. System shall be capable of being reset from the control station when the system is in manual reset. Voltage monitor shall be in a secured location inaccessible to the public.

2. Mechanical and hydraulic design and components

a. Only standard components of highest commercial or industrial quality, readily available in the continental United States, manufactured in U.S. standard units and conforming to recommendations and standards established by the Society of Automotive Engineers (SAE) and American Society of Mechanical Engineers (ASME), shall be used.

b. All operating mechanical and hydraulic components must be assembled and checked out before the unit(s) leaves the manufacturer's plant.

c. If any bridge functions are operated hydraulically, the hydraulic system shall be designed to operate over an ambient temperature range of +10° F to +150° F.

d. Hydraulic cylinders shall be designed for simplified seal replacement.

Piston rods shall be chrome plated.

e. Drip pans shall be provided under all hydraulic components to prevent the dripping of hydraulic fluid on the pavement.

3. Certifications

a. The Contractor shall furnish notarized certifications that all electrical, mechanical, and hydraulic designs, components, and installations meet the requirements prescribed under 2.06 A.1. and 2.06 A.2., above.

B. In-service, Maneuvering:

1. Control console

a. General: All Passenger Boarding Bridge operator controls shall be located on the control console in the bridge cab section in such a position as to afford the operator maximum visibility as the bridge is positioned to the aircraft with the cab weather door closed. The operator's control station shall be so located to provide adequate space for the operator and their required movements and sufficient space for maintenance of the electrical control components as required by voltage classification in the National Electrical Code (NEC). In addition, each Passenger Boarding Bridge shall be provided with a closed circuit television system (CCTV), 18 inch circular convex mirrors (to be used as a backup system to the CCTV), and two (2) undercarriage floodlights to enable the operator to have full unobstructed view of the apron and bogie wheels, at any time before setting the bridge into motion and when the bridge is in motion. The CCTV shall include at least one camera, which shall be positioned at such location that the operator can clearly view, on the console mounted monitor, the bogie at all the Passenger Boarding Bridge positions, especially if any ancillary equipment is mounted below the bridge near the bogie.

A wheel position indicator shall also be provided on the control panel to enable the operator to determine the bogie's position at any given time the bridge is idle or in motion.

The control console shall be of such design and installation to be tamper and theft proof.

The CCTV monitoring system shall meet the following:

(1) Video Camera shall be UL listed Color true day/night 1080p resolution infrared bullet camera with built-in infrared LEDs with 30 meter viewing distance in darkness. The camera shall have an automatic varifocal lens that is rated to IP66 standards. The fixed camera shall have automatic zoom/focus lens with AVF (Automatic Varifocal) feature. Power for the camera shall be supplied via a PoE (Power over-Ethernet) Class 3 compliant

network cable connection. The camera shall conform to the ONVIF Profile S specification. Dinion IP Bullet 5000 HD by Bosch or Axis P1435-LE Network Camera by Access Communications meet the minimum specifications for video cameras for loading bridges.

(2) Camera Mount shall be mounted securely to camera enclosure to prevent vibration or movement.

(3) Camera Lens shall be automatic iris control type to match the video camera and have a manual focus control. Lens size shall be selected to provide a clear view of the bogie wheels and stairway plus a minimum of three feet beyond. View shall be maintained throughout the vertical lift range of the Passenger Boarding Bridge.

(4) Camera Enclosure shall be weatherproof, tamper-proof, and mounted securely to the Passenger Boarding Bridge to prevent vibration or movement.

(5) Camera field monitor shall be 7" 4K HDMI 1080P color monitor. Monitor shall be installed in the console in a manner and location to provide viewing by operators of various statures. Monitor shall be installed in a secure manner, but accessible for service. The on/off power switch and other controls on front of monitor shall not be accessible to operators. A gasketed Lexan cover, secured from inside the console, shall protect the monitor from tampering and abuse. Camera field monitor shall be high-contrast ratio daylight viewable DSLR with 3G-SDI, HRMI in and out. Camera field monitor shall be Lilliput model No. 665gl-70np/ho/y Feelworld model No. FW759 meet the minimum specifications for video cameras for loading bridges.

(6) AC Power for the camera and the monitor shall be obtained from a dedicated outlet within the control console. Power to outlet shall only be available when the bridge is in the 'Operate' mode (interlocked).

(7) Video Connectors - High-grade connectors that are specifically manufactured for cable being used.

(8) Raceway - Separate conduits shall be provided for camera power and video cables.

(9) Surge Protection - Passenger Boarding Bridges utilizing solid-state equipment or other system components sensitive to the quality of the power supply shall be provided with a surge protector. One of the following three types must be used:

a) Innovative Technology "Protector"

b) Atlantic Scientific "Transtector"

c) Advanced Protection Technologies "Transient Eliminator"

The surge protector shall be located in the equipment circuit breaker panel or the point of service to the bridge, as necessary. The Contractor shall provide a new ground, if needed for the system.

(10) System Warranty and Service - The Contractor shall warrant all components of this system to be free of defects in materials and workmanship for a minimum period of one year from date of system acceptance by the Owner.

The contractor shall respond to the site prepared to render service to the system within 24 hours of a request for service. Any system malfunction or equipment defect shall be corrected within 24 hours of discovery, without cost to the Owner throughout the warranty period.

Diagrams and Instruction Manuals:

- The Contractor shall provide a simplified block diagram of the system, showing essentials of the installation and functional relationships of components.

- The Contractor shall provide two copies of an instruction book for operation and maintenance of the system, including block, schematics, and wiring diagrams, and sizes and technical descriptions of components.

b. Primary switch: A standard switch on the control panel shall be used to energize and de-energize the other panel controls.

c. Master Control Switch: A master control switch, installed at a location inaccessible to the public, shall be used to lock and unlock the entire Passenger Boarding Bridge's operation. When the master control switch is in the locked position, the entire Passenger Boarding Bridge's movement shall be locked and incapable of movement until the master control switch is unlocked.

d. Alarm System: Make provisions for an audible type alarm system to sound at the gate boarding agent's desk inside the concourse, in case of malfunction of the Passenger Boarding Bridge or of the self-leveler. The Contractor shall provide the alarm unit and all wiring within the bridge, and fixed tunnels, if any, up to the building. Connection to device(s) within the building will be performed by others.

e. Labeling: The control panel shall include all Passenger Boarding Bridge motion controls, canopy controls, emergency stop control, cab and control panel lights, ramp flood lights, and associated indicator lights, meters, and gages, if any. These shall be permanently labeled as to function.

f. Telephone service: Provision for the installation (by others) of theft-proof, vandal-proof telephone service next to the control panel shall be made. Three quarter (3/4) inch conduit shall be connected at the terminal building to junction boxes provided by others.

g. Convenience outlets: Not less than four (4) convenience duplex receptacles wired for 120VAC, 20A shall be installed; one receptacle shall be installed in the cab adjacent to the control panel, one (weatherproof) on the lift column assembly just above the pivot point for use by maintenance personnel and the remainder shall be installed within the tunnel at appropriate intermediate equidistant spaces not more than 50 feet apart (measured when the bridge is in its fully extended position) including the fixed tunnel. Receptacles in the bridge tunnels shall be accessible even when the bridge is fully retracted. Each receptacle shall be on its own 20 amp dedicated branch circuit.

h. A minimum of six spare conductors shall be included in the bridge control circuitry for possible future additions or changes to the control system.

i. All electrical switch and receptacle device plate covers shall be stainless steel and shall match the device configurations and, on exposed wiring, shall exactly fit the outlet box dimensions.

2. Control system

a. Motion control system: Motion controls and means for monitoring the position of the Passenger Boarding Bridge shall be provided and shall be located directly in front of the operator in the cab compartment. The motion control switches shall be of a four quad "dead man" type joystick, which must be manually held "on" during entire period of operation and shall be fully protected at all times against the outside environment and passenger interference. In most cases, visual observation of the ramp area through viewing windows shall be adequate for monitoring the Passenger Boarding Bridge position. For nighttime operation, at least two (2) adjustable floodlights, with safety cages, having an intensity equivalent of of three hundred (300) watts of incandescent lighting each, and located on the exterior base of the bridge-head/cab, shall be provided to illuminate the aircraft and apron; these lights shall be controlled from the control panel. The Contractor shall also provide an amber rotating light and a bell warning system on the exterior base of the bridge-head/cab. These warning systems shall be automatically activated by any movement of the loading bridge, except when in the auto level mode.

b. Canopy control: The canopy shall be operated by switches from the operator's control panel.

c. Emergency stop control: An emergency stop button shall be provided on the control panel to stop all motion of the Passenger Boarding Bridge. The emergency stop button shall activate a local alarm when engaged.

d. Infrared proximity sensors: Each Passenger Boarding Bridge shall be equipped with infrared aircraft proximity sensors to detect when the aircraft fuselage is approximately 2 feet away from the edge of the bumper. At this point, a relay shall be actuated to slow the bridge to a rate of travel of not more than six feet per minute.

e. Hydraulic manual control system for emergency use only: Each Passenger Boarding Bridge which uses a hydraulic system for motion or lift control, shall be equipped with a manual control (of a dead man type) system to permit operation of the bridge at ground level in the event of a complete control system failure. The controls shall be located in a safe area so the operator has a clear unobstructed view of the aircraft bumper interface, and the Passenger Boarding Bridge will not injure him in any way while manually maneuvering the Passenger Boarding Bridge at ground level.

3. Movement prevention interlocks

a. General: The control system logic shall be such as to preclude damage to circuits or mechanical systems because of simultaneous contrary control signals or an otherwise unsafe combination of control signals.

b. Deployed canopy interlock: All Passenger Boarding Bridge motions, except auto-leveling, shall be possible only when the canopy is in a fully retracted position. Provide for a mechanical override (of the dead man type) to permit the retraction (only in case of mechanical emergency or mechanical failure) of the bridge with the canopy not in the fully retracted position.

c. Contrary control signal interlock: All loading bridge motion shall be precluded whenever contrary control signals (e.g., extend and retract) are activated.

4. Actuator systems

a. General: All actuator systems shall be protected from motion overrun near the design limits of motion. All equipment shall be designed to be fail-safe both in terms of the components themselves and in terms of the Passenger Boarding Bridge as a whole.

b. Limit Switches: Electrical limit switches shall be provided on all Passenger Boarding Bridge movement actuator systems, cab bumper,

canopy system, and include fail safe limit switches near the end of horizontal travel and vertical travel. These switches, when contacted, shall de-energize their respective actuator systems. The tunnel rotation limit switch located on the rotunda, when activated, shall only be reset using a keyed switch located inside the control console where it is inaccessible to the operator.

c. Mechanical Stops: Mechanical stops shall be provided on all movement actuator systems except for tunnel rotation, which shall have a dual limit switch. Mechanical stops shall be shown and detailed on shop drawings.

C. In-service, Docked to Aircraft:

1. Auto-leveling: All Passenger Boarding Bridges shall be equipped with an automatic leveling device which permits the bridge to automatically respond to small changes in aircraft door sill height thus maintaining a constant relationship between the floor of the aircraft and the floor of the loading bridge. It shall not exert any stresses on the fuselage skin. The leveling device actuating mechanism or sensor which contacts the aircraft shall be located on the right side of the cab in full view of the operator at all times. If the actuating mechanism or sensor is located in the cab interior or other area normally exposed to passenger traffic, it shall be adequately protected or shrouded to preclude passenger interference. It shall function reliably on all specified aircraft regardless of door location, fuselage contour, and aircraft door sill height.

Since the aircraft and Passenger Boarding Bridge are exposed to various wind conditions and jetblast during the servicing period, the auto-level actuating mechanism and sensor shall be capable of activating within the full range of its horizontal or lateral clearance.

The control circuitry shall include an adjustable solid-state timer which will limit the automatic leveler's continuous response in either direction. The timer shall have a maximum rotation of one revolution and allow a range of adjustment of at least six inches up or down from a neutral position. The circuitry shall include an audible alarm and warning light at the control console, and a bell or horn in the general ramp area, which shall produce a distinctively different sound than any other on the unit, when the timer interrupts the response to the system. When the timer circuit is interrupted, the vertical lift system shall automatically be locked in position and de-energized, a vertical travel brake automatically engaged, a red warning light and audible alarm shall be energized on the control panel, a red warning light and an audible warning horn shall be activated in the ramp area, and an audible alarm shall be energized at the terminal holdroom lift desk area.

2. Articulating Leveling Cab: The cab (aircraft vestibule) shall be provided with a synchronized up and down control to assure a level horizontal attitude at the various extension lengths, vertical heights, and tunnel and cab rotations of the Passenger Boarding Bridge. The Contractor shall submit details of their design for review by the MDAD Project Manager .

3. Aircraft height indicator: An aircraft height indicator to enable the operator to pre-position the cab to the approximate aircraft sill height prior to the arrival shall be prominently displayed on the control console. This indicator can either be digital or have lights which shall indicate the sill height of each aircraft type. The indicator shall be permanently calibrated for each aircraft prior to the initial inspection of the Passenger Boarding Bridges. All electrical connections to the height indicator stops shall be securely fastened and enclosed in a box for waterproofing and to prevent tampering.

4. The lifting mechanism shall hold securely at any elevation within the travel range with or without power supplied and in the event of power failure.

D. Electrical Control Elements:

1. Primary power will be supplied from the terminal building by a three (3) phase four hundred eighty (480) volt, sixty (60) hertz circuit. The normal 120 volt bridge lighting circuit shall be distributed from the Passenger Boarding Bridge main disconnect panel located on the rotunda column or building wall. The required step-down transformer, circuit protection and distribution equipment shall be located in this enclosure.

   The main disconnect panel and its exterior disconnect switch shall be easily identifiable and labeled per FBC, NFPA, and NEC.

   It shall be the responsibility of the Contractor to advise the MDAD Project Manager concerning the primary power requirements.

   In case of a power failure, power to energize the Passenger Boarding Bridge's emergency lighting circuits, as described in 2.05 A.6. herein, shall be provided from the terminal's emergency power supply system.

   The Contractor shall publish an emergency operating procedure and install it in the cab in a prominent location, in a permanent holder; text and location shall be a shop drawing submittal.

   The Contractor shall check and verify the quality of power supplied to the Passenger Boarding Bridge and its suitability for use with solid-state equipment, if utilized, or other systems components sensitive to the quality of the power supply.

   Passenger Boarding Bridges utilizing solid-state equipment or other system components sensitive to the quality of the power supply shall be provided with a surge protector. One of the following three types must be used:

   a) Innovative Technology "Protector".

   b) Atlantic Scientific "Transtector"

   c) Advanced Protection Technologies "Transient Eliminator"

No other type is approved for use at MIA. The surge protector shall be located in the equipment circuit breaker panel or the point of service to the bridge, as necessary. The Contractor shall provide a new ground, if needed for the system.

The PBBs shall be designed to lock out all movement of the Passenger Boarding Bridge until the 400hz electric power cables or air conditioning ducts have been retracted and/or stored. The Contractor shall provide a minimum of three (3) dry contact control points that can be accessed by others to implement this lockout and status indicator lights on the control console panel.

## 2.07 PAINTING METALWORK AND FINISHES

All paint and coatings shall be lead- and chromate- free, and shall meet or exceed all current VOC restrictions.

A. Painting Passenger Boarding Bridge Roofs.

The roofs of the Passenger Boarding Bridges shall receive a three-coat paint system, as follows:

| | |
|---|---|
| Primer: | Organic Zinc-rich Primer |
| Intermediate: | Hi-Build Epoxy Primer |
| Finish: | Roofing Paint |

The various paint coats shall meet the following requirements:

1. Organic Zinc-rich Primer shall meet the requirements of SSPC Paint No. 20, Type II. After all fabrication and welding is completed, the weld beads shall be ground smooth, and the entire exposed surfaces shall be blast cleaned to meet the requirements of SSPC-SP-10, "Near-White Blast Cleaning". The organic zinc rich primer shall be applied to a dry film thickness of not less than three mils and not more than six mils, in accordance with the requirements of SSPC-PS-12.01 and the manufacturer's instructions. The organic zinc rich primer shall be as manufactured by Sherwin-Williams, Tnemec, Valspar or approved equal.

2. Hi-Build Epoxy Primer shall be a chromate-free rust inhibiting primer as manufactured by Sherwin-Williams, Tnemec, Valspar, or approved equal. The Hi-Build Epoxy shall be applied to a dry film thickness of 3.0 - 5.0 mils, in accordance with the manufacturer's instructions.

3. Finish roofing paint shall meet the requirements of Article 2.07.B.

B. Roofing Paint shall be the product of VIP Waterproofing System, Vin-Lox Corporation, Insulating Coatings Corporation, or an approved equal, as follows:

1. Manufacturer: VIP Waterproofing System.

a. Product: VIP Fire Retardant Roofing Material - #3500.

b. Application: Liquid applied system for primary roofing.

c. Rate: Approximately thirty-three (33) square feet per gallon.

2. Manufacturer: Vin-Lox Corp.

a. Product: Vin-Lox Lastomeric Roof Coating.

b. Rate of Application: 20 mil dry film thickness - minimum; fine texture.

3. Application of the roofing paint shall be performed in strict accordance with the manufacturer's written instructions. If applied in more than one coat, then each succeeding coat shall be tinted to contrast with the previous coat.

C. Structure Interior

1. Surface Preparation

Interior surfaces of all structural assemblies shall be prepared per S.S.P.C.-SP-6 (Commercial Blast Cleaning) as a minimum.

2. Primer

Prime with a two-part red oxide, high build epoxy primer equal to Sherwin Williams Products Number E65RY1 (Part A)/E65YY1 (Part B) or approved equal, applied to a dry film thickness of not less than 10 mils but not to exceed 17 mils.

Preparation and application of this coating shall be in accordance with the paint manufacturer's written instructions and the applicable sections of S.S.P.C.-PA-1 (Steel Structures Painting Council Paint Application Guide No. 1 dated November 1, 1982).

Primer paint proposed to be used shall be submitted to the MDAD Project Manager for approval prior to its use.

D. Exterior Surfaces (other than roof)

1. Surface Preparation

The minimum surface preparation for all exterior surfaces shall be Commercial Blast Cleaning per S.S.P.C.-SP-6. The desired blast profile shall be 1.5 - 2.0 mils.

2. Paint System

The paint system used shall be a three-coat polyurethane system consisting of the

following:

a. First Coat - Rust inhibitive epoxy primer applied to achieve a dry film thickness of 2 mils above the blast profile.

b. Second Coat - Catalyzed polyurethane enamel applied to achieve a dry film thickness of 2 mils. Note: This coat shall be tinted to contrast slightly with the finish coat to assist in achieving a full coat on the final application.

c. Third Coat - Catalyzed polyurethane enamel of the final color applied to a dry film thickness of 2 mils.

The cured dry film thickness of the total system shall achieve a minimum of 6 mils.

3. Colors shall be as follows:

a. The entire exposed surface of the bridge, except for the structural support elements, personnel access ladder, mechanical and electrical, etc., located below the Passenger Boarding Bridge's floor, shall be Silver White No. 2530 (Pittsburgh Paint color chart).

b. The color of the surfaces which will not be painted silver white shall be Miami Charcoal, Stormy Sea No. 7752 (Pittsburgh Paint color chart).

c. The demarcation line between colors shall be as determined by the MDAD Project Manager.

Listed below are several Polyurethane Systems; other equivalent systems may be utilized upon approval.

Cook Paint & Varnish Company
Primer - Co. Poxy Primer #920-Y-134/920-C-129
Top Coats - Corothane - LS #975 - Series - 2-part Polyurethane Enamel

Sherwin Williams
Primer - "Tile Clad II" High Build Primer PN B69 N70/B60V70
Top Coats - "Polane" series - 2-part Polyurethane Enamel

Finch Paint & Chemical Co.
Primer - 463-6-5 epoxy primer
Top Coats - 643 series Polyurethane Enamel

E. Interior Surfaces

1. Interior (walls)

All interior walls of the Passenger Boarding Bridge, except the cab and the

rotunda walls, shall have a 7/16-inch laminated finish board (no paint), class A flame spread, as manufactured by Wilson Art, or approved equal by Nevamar or Formica, as follows:

a. 3/8" thick fire-rated marine grade plywood or calcium silicate cementitious board (Cape Calsil) as manufactured by Promat UK Limited, or approved equal, sandwiched between two high-pressure laminates. Laminate adhesive shall be resourcinol Class A or I fire rated. All edges of the panels shall be properly sealed and protected from moisture damage. Plywood panels shall be set in approved neoprene gaskets all around to provide a positive weatherproof installation.

b. The decorative facing shall consist of a high-pressure laminate equal to Wilson Art color product No. 604, approximate thickness 0.036"; color to be selected by the MDAD Project Manager.

c. The backing shall be a non-decorative high pressure laminate equal to Wilson Art color product No. 264, approximate thickness 0.030"; color to be selected by the MDAD Project Manager.

d. The finished product shall carry a UL label and shall meet the flame-spread test as listed in ASTM E-84.

2. Interior (floor)

a. Passenger Boarding Bridge floor, rotunda, and tunnels, shall be of all galvanized metal construction.

b. Loading Bridge floor finish, except in Cab, shall be carpeted or coined rubber as shown in the bid documents. MDAD shall furnish the Contractor with carpet materials for installation by the Contractor (at the job site) in the loading bridge. (See Article 3.01 B.)

c. Cab floor finish: Aluminum or galvanized metal flooring shall have smooth, rounded edges and corners. Fasteners shall be stainless steel, countersunk to provide a flush surface. All burrs shall be removed. Gaps, seams, and edges shall be proportioned and finished to cause no damaged to the rubber floor covering or harm to any person.

Ribbed, non-skid, rubber floor finish shall be provided in the cab vestibule, including the area sustaining traffic from the terminal side of the ramp service door to the cab bumper. Rubber floor finish shall be glued to the aluminum or galvanized metal flooring with a non-reactive adhesive.

3. Ceiling

All ceiling areas shall have linear metal systems, Alcan Planar, Hunter Douglas round edge, or approved equal. Color, equal to Alcan #065 Brushed Silver, shall

be submitted to the MDAD Project Manager for approval.

Ceiling layout shall incorporate lighting fixtures to produce a regular pattern, which will maintain required lighting levels.

Reflected ceiling plans are a shop drawing submittal.

4. Architectural Metal and Trim Items

Anodized aluminum and other galvanized, aluminum, or stainless-steel trim items shall have a satin finish.

PART 3 EXECUTION

3.01 INSTALLATION

A. Structural Support Elements:

1. It will be the Contractor's responsibility to verify the design dimensions from the top of the foundation(s) to the floor of the terminal building door sill at each gate location.

2. All anchor bolts shall be properly protected from bending and damage during and after construction. The Contractor shall furnish anchor and leveling nuts, as required, to complete the installation per standard 8-bolt #7 foundation pattern. Nuts shall meet the requirements of ASTMA 449 and shall be galvanized. After installation, tack weld the anchor nuts to the base. All zinc coating removed or damaged by welding or by any other reason shall be cleaned and repaired in accordance with ASTM A 780, using zinc-based alloys meeting the requirements of Annex A1, or sprayed zinc meeting the requirements of Annex A3.

3. An approved non-shrinking grout shall be used underneath the column baseplate and leveling-plate. Grout shall be a no-iron mix to avoid unsightly rust marks.

B. Flooring Specifications:

**Coin Rubber Flooring:**

| | |
|---|---|
| Color | Per Shop Drawing Submittal |
| Texture | Round Stud |
| Thickness | 0.1" (2.5 mm) |
| Tile Size | 39 3/8" x 39 3/8" (100 cm x 100 cm) |
| Dimensional Stability | 0,3% (UNI EN 434) |
| Tear Strength | 40N/nm (ISO 34-1, Method B, Procedure A) |
| Flexibility | (mandrel diameter 20 mm) No Fissuring |
| Hardness Shore A (ISO 7619) | 90 |
| Residual Indention (After Static Loading) | 0.08 mm (UNI EN 443) |
| Abrasion Resistance | 130 mm3 (ISO 4649) |
| Color Fastness to Artificial Light In Conformity | (EN 2105-B02) |
| Fire Behavior | Class 1 (UNI 8457, 9174); Class B1 (DIN 4102) |
| Anti-slip Characteristics | R9 (DIN 51130) |
| Improvement in footfall sound absorption | 8 (DIN 52210,ISO 140/VIII) |
| Heat Transfer Resistance | 0,0093 (DIN 52612-2) |
| Thermal Conductivity | 0,27 (DIN 52612-1) |

**Ribbed Rubber Flooring:**

| | |
|---|---|
| Color | Black |
| Sizes | 1/8" x 36" |
| Roll Lengths | Approximately 35 Yards |
| Weight | Approximately 7 lbs. /sq. yd. |

Conforms to OSHA Regulations REF 29 CFR 1910.137 & 29 CFR 1910.309 (b)

**Meet flammability test requirements of Motor Vehicle Safety** Standard No. 302 (49 CFR 571.302).

C. Flooring Installation

1. The Contractor shall verify with the MDAD Project Manager prior to beginning installation, all edging techniques, lines of demarcation between Coined flooring, Cab rubber flooring and wall areas, and treatment at doors and thresholds.

2. The Contractor shall install the flooring by direct glue down method.

3. Adhesive and primer shall be compatible.

4. The Contractor shall install edge strips where flooring abuts other flooring including door openings where thresholds are not indicated. Secure edge strips with countersunk flat head stainless steel screws at 12 inches o.c. maximum.

5. Finished appearance shall be smooth, level, free from misalignment, neatly cut and closely fitted at projections and openings, with joints as close and inconspicuous as possible.

7. The Contractor shall vacuum clean flooring after installation and cover with non-staining, protective materials.

8. Excess pieces of usable flooring material, the least dimension of which is six inches, shall be left with the MDAD for use in future repairs.

9. After the flooring installation is complete, the Contractor shall clean all drains, gutters, and rain diverters to remove any excess material, construction debris and flooring cutouts, etc., to provide an unobstructed free flowing drainage system.

10. The Contractor shall provide to the MDAD Project Manager the required flooring shop drawings for each bridge/gate.

END OF SECTION

ATTACHMENT B

*Miami-Dade County*
Contractor Due Diligence Affidavit

Per Miami-Dade County Board of County Commissioners (Board) Resolution No. R-63-14, County Vendors and Contractors shall disclose the following as a condition of award for any contract that exceeds one million dollars ($1,000,000) or that otherwise must be presented to the Board for approval:

(1) Provide a list of all lawsuits in the five (5) years prior to bid or proposal submittal that have been filed against the firm, its directors, partners, principals and/or board members based on a breach of contract by the firm; include the case name, number and disposition;

(2) Provide a list of any instances in the five (5) years prior to bid or proposal submittal where the firm has defaulted; include a brief description of the circumstances;

(3) Provide a list of any instances in the five (5) years prior to bid or proposal submittal where the firm has been debarred or received a formal notice of non-compliance or non-performance, such as a notice to cure or a suspension from participating or bidding for contracts, whether related to Miami-Dade County or not.

All of the above information shall be attached to the executed affidavit and submitted to the Procurement Contracting Officer (PCO) Coordinator overseeing this solicitation. The Vendor/Contractor attests to providing all of the above information, if applicable, to the PCO.

**Contract No.:** _____ **Federal Employer Identification Number (FEIN):** _____

**Contract Title:** _____

_____ Printed Name of Affiant

_____ Printed Title of Affiant

_____ Signature of Affiant

_____ Name of Firm

_____ Date

_____ Address of Firm

_____ State

_____ Zip Code

***Notary Public Information***

Notary Public – State Of: _____ County Of: _____

***Subscribed and sworn to*** (or affirmed) before me this _____ day of _____, 20 _____

By _____ He or she is personally known to me ☐ Or has produced identification ☐

Type of Identification produced: _____

_____ Signature of Notary Public

_____ Serial Number

_____ Print or Stamp of Notary Public

_____ Expiration Date

_____ Notary Public Seal

ATTACHMENT C

# SUBCONTRACTING FORM

**Solicitation Number** _____

**Vendor Name** _____ **FEIN #** _____

**Complete "A" or "B":**

**A.** ☐ **No subcontractors or direct suppliers will be utilized pursuant to this solicitation.**

**B.** ☐ **The below listed subcontractors and/or suppliers will be utilized pursuant to this solicitation:**

| Business Name and Address of First Tier Subcontractor/ Subconsultant | Name of Principal Owner | Scope of Work to be Performed by Subcontractor /Subconsultant | Subcontractor / Subconsultant License (if applicable) |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |

| Business Name and Address of First Tier Direct Supplier | Name of Principal Owner | Supplies, Materials, and/or Services to be Provided by Supplier |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

**And**

| Below and/or attached is a detailed statement of the firm's policies and procedures for awarding subcontractors: |
|---|
| |
| |
| |
| |

(Duplicate this form if additional space is needed to provide the required information)

When Subcontracting is allowed and subcontractors will be utilized, the Contractor shall comply with Section 2-8.8 of the Code – Fair Subcontracting Practices: (1) Prior to contract award, the Bidder shall provide a detailed statement of its policies and procedures for awarding subcontracts and (2) As a condition of final payment under a contract, the Contractor shall identify subcontractors used in the work, the amount of each subcontract, and the amount paid and to be paid to each subcontractor via the BMWS at http://mdcsbd.gob2g.com.

Pursuant to Section 2-8.1(f) of the Code – Listing of subcontractors required on certain contracts, for all contracts which involve the expenditure of one hundred thousand dollars ($100,000) or more, the entity contracting with the County must report to the County the race, gender, and ethnic origin of the owners and employees of its first tier subcontractors and suppliers via the BMWS at http://mdcsbd.gob2g.com. The race, gender, and ethnic information must be submitted via BMWS as soon as reasonably available and, in any event, prior to final payment under the Contract. The Contractor shall not change or substitute first tier subcontractors or direct suppliers or the portions of the Contract work to be performed or materials to be supplied from those identified except upon written approval of the County.

*I certify that the information contained in this form is to the best of my knowledge true and accurate.*

| _____ | _____ | _____ | _____ |
|---|---|---|---|
| **Signature of Vendor's Representative** | **Print Name** | **Print Title** | **Date** |

EXHIBIT 1 - PRELIMINARY SCHEDULE

| | DAYS | | 1/1/22<br>1 | 3/1/22<br>60 | 3/2/22<br>61 | 5/31/22<br>151 | 6/1/22<br>152 | 7/6/22<br>187 | 7/7/22<br>188 | 8/10/22<br>222 | 8/11/22<br>223 | 9/16/22<br>259 | 9/17/22<br>260 | 10/22/22<br>295 | 10/23/22<br>296 | 11/27/22<br>331 | 11/28/22<br>332 | 12/16/22<br>350 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 001-060 | PHASE 1: 60 DAYS PBB shop drawings, Foundation review and preliminary design for any Foundation enhancements that may be required. | | | | | | | | | | | | | | | | |
| | 091-151 | PHASE 2: 90 DAYS PBB Manufacturing and final approved foundation enhancement design, 90 days. | | | | | | | | | | | | | | | | |
| 1 | 152-187 | 35D: H03 Found/Del/Ins | | | | | 35D: H03 Found/Del/Ins | | | | | | | | | | | |
| 2 | 188-223 | 35D: H05 Found/Del/Ins | | | | | | 35D: H05 Found/Del/Ins | | | | | | | | | | |
| 3 | 223-259 | 35D: H07 Found/Del/Ins | | | | | | | | | 35D: H07 Found/Del/Ins | | | | | | | |
| 4 | 260-295 | 35D: H09 Found/Del/Ins | | | | | | | | | | | 35D: H09 Found/Del/Ins | | | | | |
| 5 | 296-331 | 35D: H17 Found/Del/Ins | | | | | | | | | | | | | 35D: H17 Found/Del/Ins | | | |
| 6 | 152-187 | 35D: H12 Found/Del/Ins | | | | | 35D: H12 Found/Del/Ins | | | | | | | | | | | |
| 7 | 188-223 | 35D: H15 Found/Del/Ins | | | | | | 35D: H15 Found/Del/Ins | | | | | | | | | | |
| 8 | 223-259 | 35D: H06 Found/Del/Ins | | | | | | | | | 35D: H06 Found/Del/Ins | | | | | | | |
| 9 | 260-295 | 35D: E05 Found/Del/Ins | | | | | | | | | | | 35D: E05 Found/Del/Ins | | | | | |
| 10 | 260-331 | 71D: F21 NEW Found/Del/Ins | | | | | | | | | | | 71D: F21 NEW Found/Del/Ins | | | | | |
| 11 | 152-187 | 35D: D10 Found/Del/Ins | | | | | 35D: D10 Found/Del/Ins | | | | | | | | | | | |
| 12 | 188-223 | 35D: D12 Found/Del/Ins | | | | | | 35D: D12 Found/Del/Ins | | | | | | | | | | |
| 13 | 223-259 | 35D: D15 Found/Del/Ins | | | | | | | | | 35D: D15 Found/Del/Ins | | | | | | | |
| 14 | 260-295 | 35D: D17 Found/Del/Ins | | | | | | | | | | | 35D: D17 Found/Del/Ins | | | | | |
| 15 | 296-331 | 35D: D19 Found/Del/Ins | | | | | | | | | | | | | 35D: D19 Found/Del/Ins | | | |
| | 332-350 | 18D: Closeout | | | | | | | | | | | | | | | 18D: Closeout | |

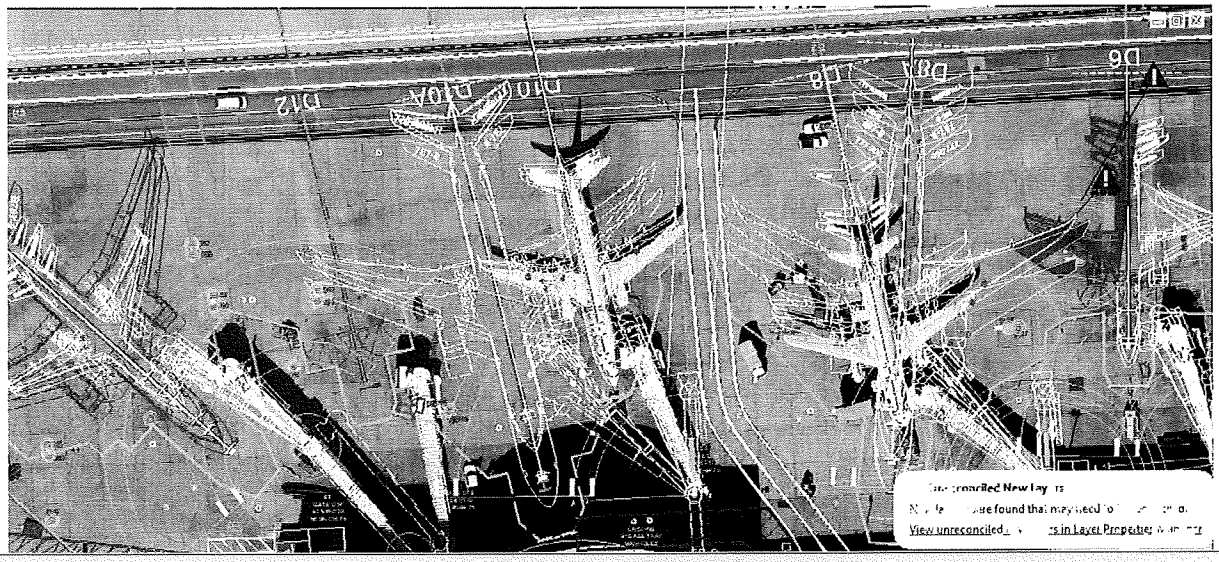
# Exhibit 2 - PBB Locations

D 10
D 12
D 15
D 17
D 19
E 5
F 21
H 3
H 5
H 6
H 7
H 9
H 12, H 15, H 17

Note: Please note that there are some aircraft listed that have a red cell in the reports, these are requested but not required for the aircraft mix designs.

# D10 D10A prop

Last edited on Thursday, September 9, 2021




| Stand definition and settings | | |
|---|---|---|
| **Item** | **Value as per item description** | **Comments** |

| General | | |
|---|---|---|
| Coordinates | X=895355.19ft Y=533205.69ft Angle=92.8deg | Drawing coordinates |
| Apron slope | Direction=0.4deg Grade=D1.0% | |

| Bridge1 | | |
|---|---|---|
| Manufacturer: | ThyssenKrupp (USA) | |
| Model: | TB Metal | Slide not attached |
| Tunnel variant: | TB 45.0/21.0-3 | |
| Closure floor: | Adjustable | |
| Operational limits | Min= 58.40ft Max= 137.14ft | |
| Working limits | Min=69.88ft Max= 148.62ft | |
| Drive column limits | Min= 7.22ft Max= 17.22ft | |
| Rotunda location | X=0.00ft Y= 0.00ft Angle= L0.0deg | Local stand coordinates |
| Rotunda elevation | Z=13.00ft / above apron= 13.00ft | Local stand coordinates |
| Park position | X=69.86ft Y= -0.00ft | Local stand coordinates |

| | | |
|---|---|---|
| Rotunda limits | Left=87.5deg Right= 87.5deg | |
| Maximum allowable slope | 8.3% | |
| Dock to | Door front , 0.50ft below door sill | |

| **D10A** | | |
|---|---|---|
| Origin | X=7.47ft Y= 86.03ft Angle= 190.9deg | Local stand coordinates |
| Limits | Nose=27.90ft Tail= 236.08ft | Measured from origin |
| Misparking | Distance=1.00ft Left/Right, 1.00ft Forward/Backward<br>Angle= 2.0deg | |
| Minimum stop line distance | 3.00ft | |

| **D10** | | |
|---|---|---|
| Origin | X=78.42ft Y= 47.49ft Angle= 190.1deg | Local stand coordinates |
| Limits | Nose=20.00ft Tail= 200.00ft | Measured from origin |
| Misparking | Distance=1.00ft Left/Right, 1.00ft Forward/Backward<br>Angle= 2.0deg | |
| Minimum stop line distance | 3.00ft | |

| **Fuel pits** | | |
|---|---|---|
| FP1 | X=122.56ft Y=71.81ft | Local stand coordinates |
| FP2 | X=128.19ft Y=71.93ft | Local stand coordinates |

| | | |
|---|---|---|
| Operational radius | 30.00ft | |
| Safety radius | 3.00ft | |

| **Docking results** |
|---|

**D10A :**
**Stop line creation: User-defined**
**Airplane positioning: User-defined**

| Stop lines | | |
|---|---|---|
| **Label** | **Distance** | **Aircraft** |
| X | 35.91ft | 787-8 |
| Y | 32.91ft | 777-200LR, 787-9 |
| Z | 0.00ft | 777-300ER |

| Docking results – Bridge | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Airplane (stop line)** | **Bridge** | **Door [min/max]** | **Slope [empty/full]** | **Operational length** | **Drive column [min/max]** | **Rotunda angle** | **Closure angle** |
| 777-200LR (Y) | Bridge1 | L2 [15.91ft/16.77ft] | U2.7%/U2.0% | 118.21ft | 14.69ft/15.34ft | L42.3deg | L58.6deg |
| 777-300ER (Z) | Bridge1 | L2 [16.14ft/17.06ft] | U4.1%/U3.1% | 91.73ft | 14.58ft/15.21ft | L53.1deg | L47.8deg |
| 787-8 (X) | Bridge1 | L2 [14.40ft/15.42ft] | U1.6%/U0.8% | 117.63ft | 13.54ft/14.31ft | L43.0deg | L57.9deg |
| 787-9 (Y) | Bridge1 | L2 [14.50ft/15.75ft] | U1.8%/U0.8% | 123.60ft | 13.64ft/14.60ft | L41.2deg | L59.7deg |

| Docking results – Fixed installations | |
|---|---|
| **Airplane (stop line)** | **Fuel pit(s) distance** |
| 777-200LR(Y) | (FP1) 5.57 ft<br>(FP2) 2.43 ft |
| 777-300ER(Z) | (FP1) 10.67 ft<br>(FP2) 15.47 ft |
| 787-8(X) | (FP1) 13.99 ft<br>(FP2) 11.20 ft |
| 787-9(Y) | (FP1) 18.70 ft<br>(FP2) 14.13 ft |

**D10 :**
**Stop line creation: User-defined**
**Airplane positioning: User-defined**

| Stop lines | | |
|---|---|---|
| **Label** | **Distance** | **Aircraft** |
| A | 0.00ft | 737 MAX 8 |
| B | 3.61ft | 737-800W |
| C | 16.89ft | A320 NEO [LEAP-1A] |
| D | 21.74ft | A319 NEO [LEAP-1A] |

| Docking results – Bridge | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Airplane (stop line)** | **Bridge** | **Door [min/max]** | **Slope [empty/full]** | **Operational length** | **Drive column [min/max]** | **Rotunda angle** | **Closure angle** |
| 737 MAX 8 (A) | Bridge1 | L1 [9.09ft/10.07ft] | D3.9%/D5.1% | 87.28ft | 9.73ft/10.41ft | L20.9deg | L71.2deg |
| 737-800W (B) | Bridge1 | L1 [8.50ft/8.99ft] | D5.0%/D5.6% | 90.88ft | 9.27ft/9.62ft | L20.4deg | L71.6deg |
| A320 NEO [LEAP-1A] (C) | Bridge1 | L1 [11.09ft/11.42ft] | D2.2%/D2.5% | 101.40ft | 11.03ft/11.27ft | L18.8deg | L77.3deg |
| A319 NEO [LEAP-1A] (D) | Bridge1 | L1 [11.09ft/11.38ft] | D2.2%/D2.5% | 106.41ft | 11.00ft/11.23ft | L18.4deg | L78.7deg |

| Docking results – Fixed installations | |
|---|---|
| **Airplane (stop line)** | **Fuel pit(s) distance** |
| 737 MAX 8(A) | 7.70 ft |
| 737-800W(B) | 10.62 ft |
| A320 NEO [LEAP-1A](C) | 19.06 ft |
| A319 NEO [LEAP-1A](D) | 18.85 ft |

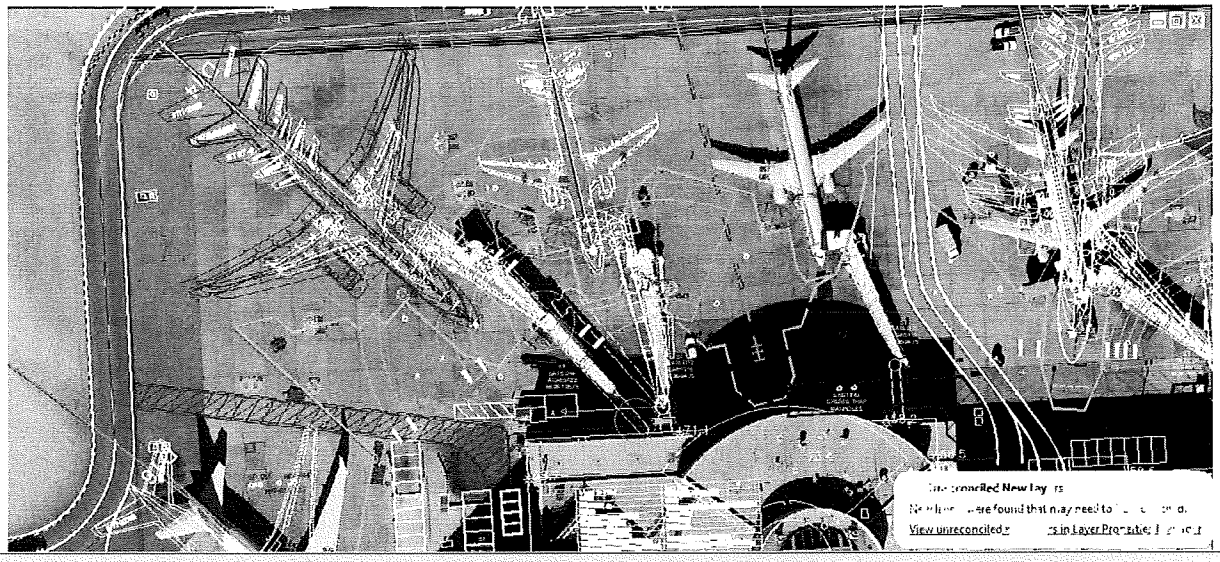
**Legend:**

| Short label | Full label |
|---|---|

| | |
|---|---|
| A | A |
| B | B |
| C | C |
| D | D |

# D12 Prop

Last edited on Thursday, September 23, 2021



| Stand definition and settings | | |
|---|---|---|
| **Item** | **Value as per item description** | **Comments** |

| General | | |
|---|---|---|
| Coordinates | X=895207.76ft Y=533179.58ft Angle=92.5deg | Drawing coordinates |
| Apron slope | Direction=0.0deg Grade=U0.0% | |

| Bridge1 | | |
|---|---|---|
| Manufacturer: | ThyssenKrupp (USA) | |
| Model: | TB Metal | Slide not attached |
| Tunnel variant: | TB 43.0/20.5-3 | |
| Closure floor: | Adjustable | |
| Operational limits | Min= 56.76ft Max= 130.58ft | |
| Working limits | Min=68.24ft Max= 142.06ft | |
| Drive column limits | Min= 7.22ft Max= 17.22ft | |
| Rotunda location | X=0.00ft Y= 0.00ft Angle= L0.0deg | Local stand coordinates |
| Rotunda elevation | Z=13.00ft / above apron= 13.00ft | Local stand coordinates |
| Park position | X=67.90ft Y= -0.00ft | Local stand coordinates |

| | | |
|---|---|---|
| Rotunda limits | Left=47.4deg Right= 21.6deg | |
| Maximum allowable slope | 8.3% | |
| Dock to | Door front , 0.33ft below door sill | |

| **D12** | | |
|---|---|---|
| Origin | X=90.79ft Y= 38.43ft Angle= 190.4deg | Local stand coordinates |
| Limits | Nose=25.93ft Tail= 160.00ft | Measured from origin |
| Misparking | Distance=1.00ft Left/Right, 1.00ft Forward/Backward<br>Angle= 2.0deg | |
| Minimum stop line distance | 3.00ft | |

| **Fuel pits** | | |
|---|---|---|
| FP1 | X=146.56ft Y=64.51ft | Local stand coordinates |

| | | |
|---|---|---|
| Operational radius | 50.00ft | |
| Safety radius | 3.00ft | |

**Docking results**

**D12 :**
**Stop line creation: User-defined**
**Airplane positioning: User-defined**

| **Stop lines** | | |
|---|---|---|
| **Label** | **Distance** | **Aircraft** |
| A | 0.00ft | 737 MAX 8, 737-800W, A321 NEO [LEAP-1A] |
| B | 12.60ft | A320-200S [CFM56] |
| C | 18.59ft | A319-100S [CFM56] |

**Docking results – Bridge**

| Airplane (stop line) | Bridge | Door [min/max] | Slope [empty/full] | Operational length | Drive column [min/max] | Rotunda angle | Closure angle |
|---|---|---|---|---|---|---|---|
| A321 NEO [LEAP-1A] (A) | Bridge1 | L1 [11.12ft/11.48ft] | D1.0%/D1.3% | 105.30ft | 11.11ft/11.38ft | L12.4deg | L85.0deg |
| 737 MAX 8 (A) | Bridge1 | L1 [9.09ft/10.07ft] | D2.3%/D3.2% | 107.58ft | 9.56ft/10.31ft | L12.9deg | L79.5deg |
| 737-800W (A) | Bridge1 | L1 [8.50ft/8.99ft] | D3.3%/D3.8% | 107.61ft | 9.11ft/9.49ft | L12.9deg | L79.5deg |
| A319-100S [CFM56] (C) | Bridge1 | L1 [11.09ft/11.38ft] | D0.9%/D1.2% | 123.91ft | 11.03ft/11.27ft | L12.1deg | L85.2deg |
| A320-200S [CFM56] (B) | Bridge1 | L1 [11.12ft/11.35ft] | D1.0%/D1.2% | 117.73ft | 11.07ft/11.25ft | L12.3deg | L84.1deg |

**Docking results – Fixed installations**

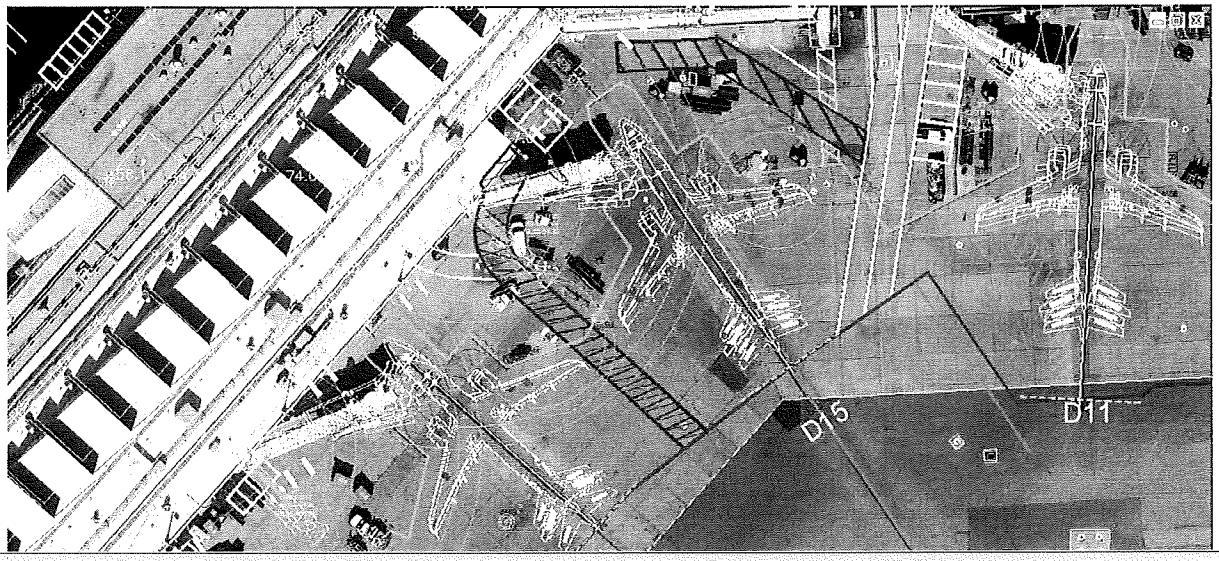
| Airplane (stop line) | Fuel pit(s) distance |
|---|---|
| A321 NEO [LEAP-1A](A) | 17.92 ft |
| 737 MAX 8(A) | 8.13 ft |
| 737-800W(A) | 9.76 ft |
| A319-100S [CFM56](C) | 17.86 ft |
| A320-200S [CFM56](B) | 17.70 ft |

**Legend:**

| Short label | Full label |
|---|---|
| A | A |
| B | B |
| C | C |

# D15 r

Last edited on Friday, September 17, 2021




| Stand definition and settings | | |
|---|---|---|
| **Item** | **Value as per item description** | **Comments** |

| General | | |
|---|---|---|
| Coordinates | X=895215.83ft Y=532886.98ft Angle=-40.9deg | Drawing coordinates |
| Apron slope | Direction=0.0deg Grade=U0.0% | |

| Bridge1 | | |
|---|---|---|
| Manufacturer: | ThyssenKrupp (USA) | |
| Model: | TB Metal | Slide not attached |
| Tunnel variant: | TB 39.0/19.0-3 | |
| Closure floor: | Adjustable | |
| Operational limits | Min= 51.84ft Max= 117.45ft | |
| Working limits | Min=63.32ft Max= 128.93ft | |
| Drive column limits | Min= 6.56ft Max= 16.57ft | |
| Rotunda location | X=0.00ft Y= 0.00ft Angle= L0.0deg | Local stand coordinates |
| Rotunda elevation | Z=13.00ft / above apron= 13.00ft | Local stand coordinates |
| Park position | X=63.32ft Y= -0.00ft | Local stand coordinates |

| | | |
|---|---|---|
| Rotunda limits | Left=87.5deg Right= 87.5deg | |
| Maximum allowable slope | 8.3% | |
| Dock to | Door front , 0.33ft below door sill | |

| **D15** | | |
|---|---|---|
| Origin | X=46.75ft Y= 83.28ft Angle= 165.2deg | Local stand coordinates |
| Limits | Nose=27.32ft Tail= 144.17ft | Measured from origin |
| Misparking | Distance=1.00ft Left/Right, 1.00ft Forward/Backward<br>Angle= 2.0deg | |
| Minimum stop line distance | 3.00ft | |

| **Fuel pits** | | |
|---|---|---|
| FP1 | X=103.65ft Y=115.89ft | Local stand coordinates |
| FP2 | X=107.79ft Y=110.66ft | Local stand coordinates |
| FP3 | X=120.70ft Y=111.17ft | Local stand coordinates |

| | | |
|---|---|---|
| Operational radius | 30.00ft | |
| Safety radius | 3.00ft | |

**Docking results**

**D15 :**
**Stop line creation: User-defined**
**Airplane positioning: User-defined**

**Stop lines**

| Label | Distance | Aircraft |
|---|---|---|
| B | 4.70ft | 737 MAX 8, 737-800W, A321 NEO [LEAP-1A] |
| C | 22.33ft | A319 NEO [LEAP-1A], A320 NEO [LEAP-1A] |

**Docking results – Bridge**

| Airplane (stop line) | Bridge | Door [min/max] | Slope [empty/full] | Operational length | Drive column [min/max] | Rotunda angle | Closure angle |
|---|---|---|---|---|---|---|---|
| A321 NEO [LEAP-1A] (B) | Bridge1 | L1 [11.12ft/11.48ft] | D1.2%/D1.6% | 79.33ft | 11.29ft/11.52ft | L55.6deg | L16.6deg |
| 737 MAX 8 (B) | Bridge1 | L1 [9.09ft/10.07ft] | D2.8%/D3.9% | 81.11ft | 10.00ft/10.62ft | L54.4deg | L12.8deg |
| 737-800W (B) | Bridge1 | L1 [8.50ft/8.99ft] | D4.0%/D4.6% | 81.16ft | 9.62ft/9.93ft | L54.4deg | L12.8deg |
| A319 NEO [LEAP-1A] (C) | Bridge1 | L1 [11.09ft/11.38ft] | D1.2%/D1.5% | 86.98ft | 11.22ft/11.42ft | L44.6deg | L27.6deg |
| A320 NEO [LEAP-1A] (C) | Bridge1 | L1 [11.09ft/11.42ft] | D1.1%/D1.5% | 86.81ft | 11.22ft/11.44ft | L44.7deg | L26.5deg |

**Docking results – Fixed installations**

| Airplane (stop line) | Fuel pit(s) distance |
|---|---|
| A321 NEO [LEAP-1A](B) | (FP1) 18.90 ft<br>(FP2) 12.39 ft<br>(FP3) 14.32 ft |
| 737 MAX 8(B) | (FP1) 23.61 ft<br>(FP2) 18.51 ft<br>(FP3) 24.37 ft |
| 737-800W(B) | (FP1) 22.06 ft<br>(FP2) 16.88 ft<br>(FP3) 22.89 ft |
| A319 NEO [LEAP-1A](C) | (FP1) 17.85 ft<br>(FP2) 11.47 ft<br>(FP3) 14.92 ft |
| A320 NEO [LEAP-1A](C) | (FP1) 21.57 ft<br>(FP2) 14.92 ft<br>(FP3) 13.56 ft |

**Legend:**

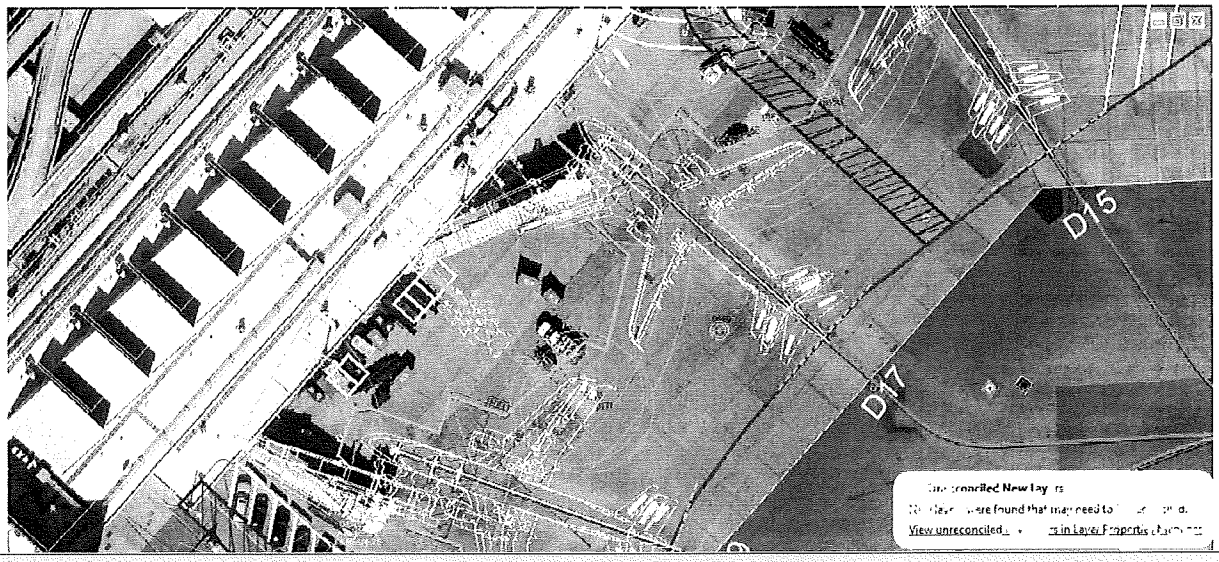
| Short label | Full label |
|---|---|
| B | B |
| C | C |

Date: Friday, September 17, 2021
Drawing: 090821 Terminal.dwg
Created by: AviPLAN Airside Pro 3.0.2.78

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# D17 r

Last edited on Friday, September 17, 2021




| Stand definition and settings | | |
|---|---|---|
| **Item** | **Value as per item description** | **Comments** |

| General | | |
|---|---|---|
| Coordinates | X=895096.93ft Y=532756.69ft Angle=-42.6deg | Drawing coordinates |
| Apron slope | Direction=1.3deg Grade=D1.0% | |

| Bridge1 | | |
|---|---|---|
| Manufacturer: | ThyssenKrupp (USA) | |
| Model: | TB Metal | Slide not attached |
| Tunnel variant: | TB 39.0/19.0-3 | |
| Closure floor: | Adjustable | |
| Operational limits | Min= 51.84ft Max= 117.45ft | |
| Working limits | Min=63.32ft Max= 128.93ft | |
| Drive column limits | Min= 6.56ft Max= 16.57ft | |
| Rotunda location | X=0.00ft Y= 0.00ft Angle= L358.4deg | Local stand coordinates |
| Rotunda elevation | Z=13.10ft / above apron= 13.10ft | Local stand coordinates |
| Park position | X=63.28ft Y= -1.77ft | Local stand coordinates |

| | | |
|---|---|---|
| Rotunda limits | Left=87.5deg Right= 28.3deg | |
| Maximum allowable slope | 8.3% | |
| Dock to | Door front , 0.50ft below door sill | |

| **D17** | | |
|---|---|---|
| Origin | X=35.10ft Y= 96.86ft Angle= 181.0deg | Local stand coordinates |
| Limits | Nose=24.54ft Tail= 131.00ft | Measured from origin |
| Misparking | Distance=1.00ft Left/Right, 1.00ft Forward/Backward<br>Angle= 2.0deg | |
| Minimum stop line distance | 3.00ft | |

| **Fuel pits** | | |
|---|---|---|
| FP1 | X=83.92ft Y=150.49ft | Local stand coordinates |
| FP2 | X=77.84ft Y=150.20ft | Local stand coordinates |

| | | |
|---|---|---|
| Operational radius | 35.00ft | |
| Safety radius | 3.00ft | |

**Docking results**

**D17 :**
**Stop line creation: User-defined**
**Airplane positioning: User-defined**

**Stop lines**

| Label | Distance | Aircraft |
|---|---|---|
| A | 0.00ft | 737 MAX 8, 737-800W, A321 NEO [LEAP-1A] |
| B | 12.38ft | A320 NEO [LEAP-1A] |
| C | 17.65ft | A319 NEO [LEAP-1A] |

**Docking results – Bridge**

| Airplane (stop line) | Bridge | Door [min/max] | Slope [empty/full] | Operational length | Drive column | Rotunda angle | Closure angle | Conflict analysis |
|---|---|---|---|---|---|---|---|---|
| 737 MAX 8 (A) | Bridge1 | L1 [9.09ft/10.07 ft] | D3.3%/D4.3 % | 87.82ft | 9.86ft/10.50f t | L67.7deg | L16.9deg | 21.27ft (E) |
| 737-800W (A) | Bridge1 | L1 [8.50ft/8.99ft ] | D4.4%/D5.0 % | 87.85ft | 9.47ft/9.79ft | L67.7deg | L16.9deg | 22.46ft (E) |
| A321 NEO [LEAP-1A] (A) | Bridge1 | L1 [11.12ft/11.4 8ft] | D1.8%/D2.2 % | 85.87ft | 11.21ft/11.4 5ft | L68.7deg | L20.9deg | 28.02ft (E) |
| A320 NEO [LEAP-1A] (B) | Bridge1 | L1 [11.09ft/11.4 2ft] | D1.9%/D2.2 % | 91.54ft | 11.16ft/11.3 8ft | L61.7deg | L26.9deg | 14.65ft (E) |
| A319 NEO [LEAP-1A] (C) | Bridge1 | L1 [11.09ft/11.3 8ft] | D1.9%/D2.2 % | 94.53ft | 11.14ft/11.3 5ft | L58.9deg | L30.7deg | 9.46ft (E) |

**Docking results – Fixed installations**

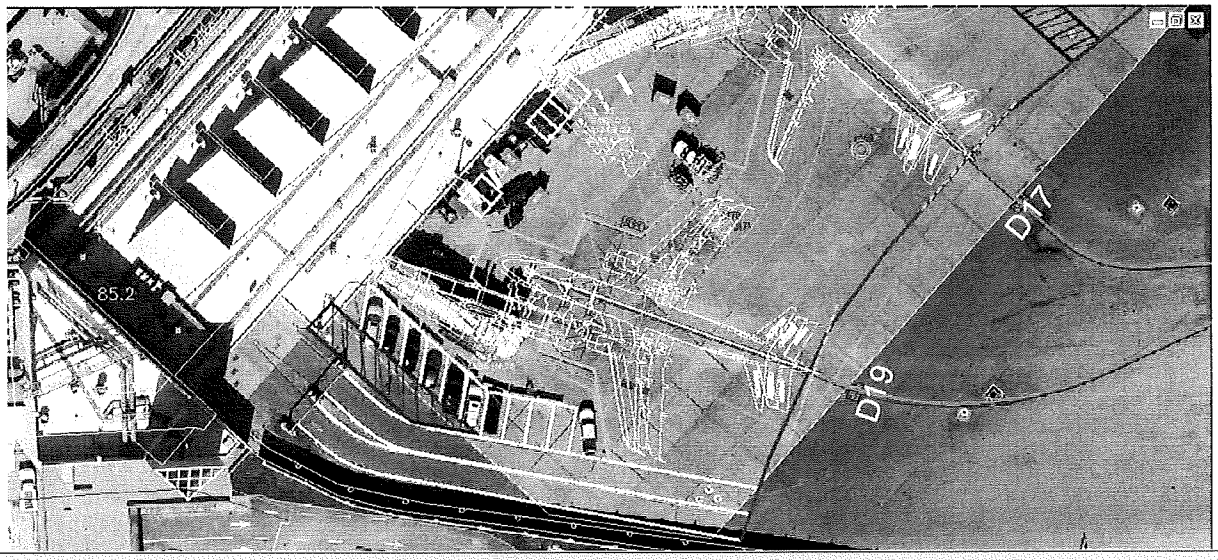
| Airplane (stop line) | Fuel pit(s) distance |
|---|---|
| 737 MAX 8(A) | 29.51 ft |
| 737-800W(A) | 27.91 ft |
| A321 NEO [LEAP-1A](A) | 23.23 ft |
| A320 NEO [LEAP-1A](B) | 22.50 ft |
| A319 NEO [LEAP-1A](C) | 22.51 ft |

**Legend:**

| Short label | Full label |
|---|---|
| A | A |
| B | B |
| C | C |

# D19 r

Last edited on Thursday, September 16, 2021




| Stand definition and settings | | |
|---|---|---|
| **Item** | **Value as per item description** | **Comments** |

| General | | |
|---|---|---|
| Coordinates | X=895021.68ft Y=532673.39ft Angle=-30.5deg | Drawing coordinates |
| Apron slope | Direction=0.0deg Grade=U0.0% | |

| Bridge1 | | |
|---|---|---|
| Manufacturer: | ThyssenKrupp (USA) | |
| Model: | TB Metal | Slide not attached |
| Tunnel variant: | TB 41.0/19.5-3 | |
| Closure floor: | Adjustable | |
| Operational limits | Min= 53.48ft Max= 124.02ft | |
| Working limits | Min=64.96ft Max= 135.50ft | |
| Drive column limits | Min= 6.56ft Max= 16.57ft | |
| Rotunda location | X=0.00ft Y= 0.00ft Angle= L0.0deg | Local stand coordinates |
| Rotunda elevation | Z=13.10ft / above apron= 13.10ft | Local stand coordinates |
| Park position | X=64.96ft Y= -0.00ft | Local stand coordinates |

| | | |
|---|---|---|
| Rotunda limits | Left=66.5deg Right= 16.9deg | |
| Maximum allowable slope | 8.3% | |
| Dock to | Door front , 0.33ft below door sill | |

| **D19** | | |
|---|---|---|
| Origin | X=65.42ft Y= 31.31ft Angle= 191.2deg | Local stand coordinates |
| Limits | Nose=24.57ft Tail= 132.00ft | Measured from origin |
| Misparking | Distance=1.00ft Left/Right, 1.00ft Forward/Backward<br>Angle= 2.0deg | |
| Minimum stop line distance | 3.00ft | |

**Docking results**

**D19 :**
**Stop line creation: User-defined**
**Airplane positioning: User-defined**

**Stop lines**

| Label | Distance | Aircraft |
|---|---|---|
| A | 0.00ft | 737 MAX 8, 737-800W, A321 NEO [LEAP-1A] |
| B | 17.41ft | A320-200 [CFM56] |
| C | 29.41ft | A319 NEO [LEAP-1A] |

**Docking results – Bridge**

| Airplane (stop line) | Bridge | Door [min/max] | Slope [empty/full] | Operational length | Drive column [min/max] | Rotunda angle | Closure angle |
|---|---|---|---|---|---|---|---|
| A321 NEO [LEAP-1A] (A) | Bridge1 | L1 [11.12ft/11.48f | D1.7%/D2.3% | 68.18ft | 11.30ft/11.54ft | L11.4deg | L86.7deg |

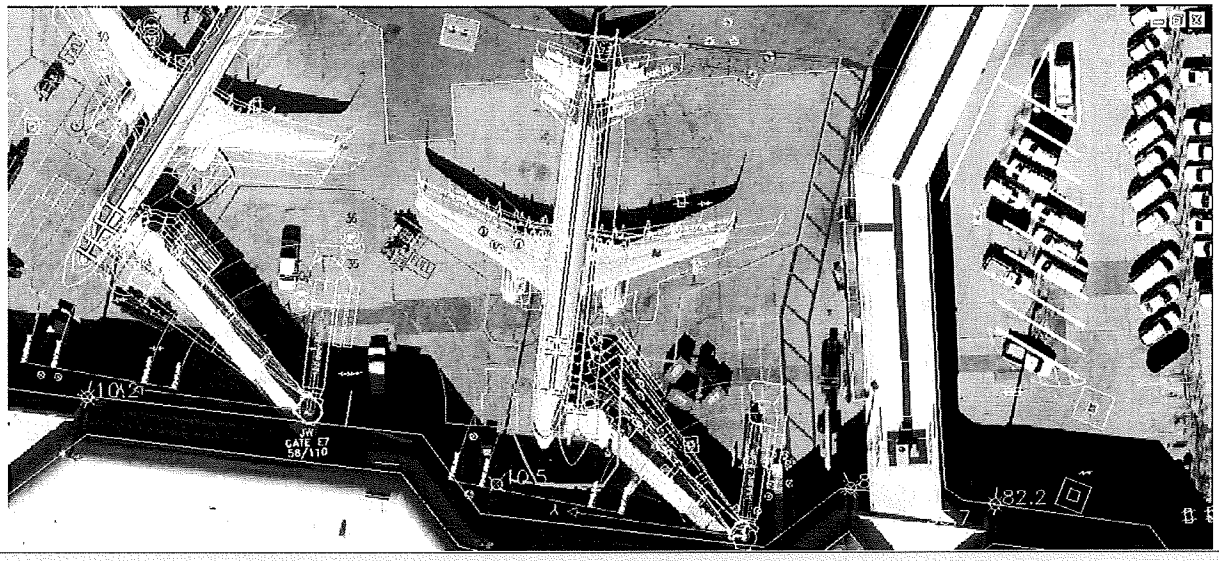
| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | t] | | | | | |
| 737 MAX 8 (A) | Bridge1 | L1 [9.09ft/10.07ft] | D3.7%/D5.2% | 70.43ft | 9.99ft/10.62ft | L12.2deg | L80.9deg |
| 737-800W (A) | Bridge1 | L1 [8.50ft/8.99ft] | D5.3%/D6.1% | 70.49ft | 9.61ft/9.93ft | L12.2deg | L80.9deg |
| A320-200 [CFM56] (B) | Bridge1 | L1 [11.12ft/11.42ft] | D1.4%/D1.8% | 86.19ft | 11.18ft/11.40ft | L11.2deg | L89.9deg |
| A319 NEO [LEAP-1A] (C) | Bridge1 | L1 [11.09ft/11.38ft] | D1.3%/D1.6% | 97.63ft | 11.11ft/11.34ft | L11.4deg | L86.7deg |

**Legend:**

| Short label | Full label |
|---|---|
| A | A |
| B | B |
| C | C |

# E5 prop r

Last edited on Tuesday, September 21, 2021




| Stand definition and settings | | |
|---|---|---|
| **Item** | **Value as per item description** | **Comments** |

| General | | |
|---|---|---|
| Coordinates | X=892904.33ft Y=531893.17ft Angle=81.5deg | Drawing coordinates |
| Apron slope | Direction=3.4deg Grade=D1.0% | |

| Bridge1 | | |
|---|---|---|
| Manufacturer: | ThyssenKrupp (USA) | |
| Model: | TB Metal | Slide not attached |
| Tunnel variant: | TB 33.0/17.0-3 | |
| Closure floor: | Adjustable | |
| Operational limits | Min= 45.28ft Max= 97.77ft | |
| Working limits | Min=56.76ft Max= 109.25ft | |
| Drive column limits | Min= 6.56ft Max= 16.57ft | |
| Rotunda location | X=0.00ft Y= 0.00ft Angle= L0.0deg | Local stand coordinates |
| Rotunda elevation | Z=12.25ft / above apron= 12.25ft | Local stand coordinates |
| Park position | X=56.74ft Y= -0.00ft | Local stand coordinates |

| | | |
|---|---|---|
| Rotunda limits | Left=87.5deg Right= 11.0deg | |
| Maximum allowable slope | 8.3% | |
| Dock to | Door front , 0.33ft below door sill | |

| **E5 737** | | |
|---|---|---|
| Origin | X=41.85ft Y= 78.01ft Angle= 181.3deg | Local stand coordinates |
| Limits | Nose=33.60ft Tail= 130.87ft | Measured from origin |
| Misparking | Distance=1.00ft Left/Right, 1.00ft Forward/Backward<br>Angle= 2.0deg | |
| Minimum stop line distance | 3.00ft | |

| **E5 757** | | |
|---|---|---|
| Origin | X=36.11ft Y= 67.49ft Angle= 182.3deg | Local stand coordinates |
| Limits | Nose=27.32ft Tail= 137.27ft | Measured from origin |
| Misparking | Distance=1.00ft Left/Right, 1.00ft Forward/Backward<br>Angle= 2.0deg | |
| Minimum stop line distance | 3.00ft | |

**Docking results**

**E5 737 :**
**Stop line creation: User-defined**
**Airplane positioning: User-defined**

| **Stop lines** | | |
|---|---|---|
| **Label** | **Distance** | **Aircraft** |

| | | |
|---|---|---|
| A | 0.00ft | 737-800W, A321 NEO [LEAP-1A] |
| B | 14.48ft | A320 NEO [LEAP-1A] |
| C | 19.13ft | A319 NEO [LEAP-1A], E175 EWT |

**Docking results – Bridge**

| Airplane (stop line) | Bridge | Door [min/max] | Slope [empty/full] | Operational length | Drive column [min/max] | Rotunda angle | Closure angle |
|---|---|---|---|---|---|---|---|
| 737-800W (A) | Bridge1 | L1 [8.50ft/8.99ft] | D4.0%/D4.7% | 74.64ft | 9.32ft/9.64ft | L55.4deg | L27.8deg |
| E175 EWT (C) | Bridge1 | L1 [8.33ft/8.66ft] | D4.1%/D4.4% | 88.82ft | 8.99ft/9.23ft | L44.5deg | L46.7deg |
| A319 NEO [LEAP-1A] (C) | Bridge1 | L1 [11.09ft/11.38ft] | D1.1%/D1.5% | 84.95ft | 10.99ft/11.20ft | L45.7deg | L42.6deg |
| A321 NEO [LEAP-1A] (A) | Bridge1 | L1 [11.12ft/11.48ft] | D0.9%/D1.4% | 72.41ft | 11.04ft/11.28ft | L56.3deg | L31.9deg |
| A320 NEO [LEAP-1A] (B) | Bridge1 | L1 [11.09ft/11.42ft] | D1.1%/D1.4% | 81.50ft | 11.00ft/11.23ft | L48.0deg | L39.2deg |

**Legend:**

| Short label | Full label |
|---|---|
| A | A |
| B | B |
| C | C |

**E5 757 :**
**Stop line creation: User-defined**
**Airplane positioning: User-defined**

**Stop lines**

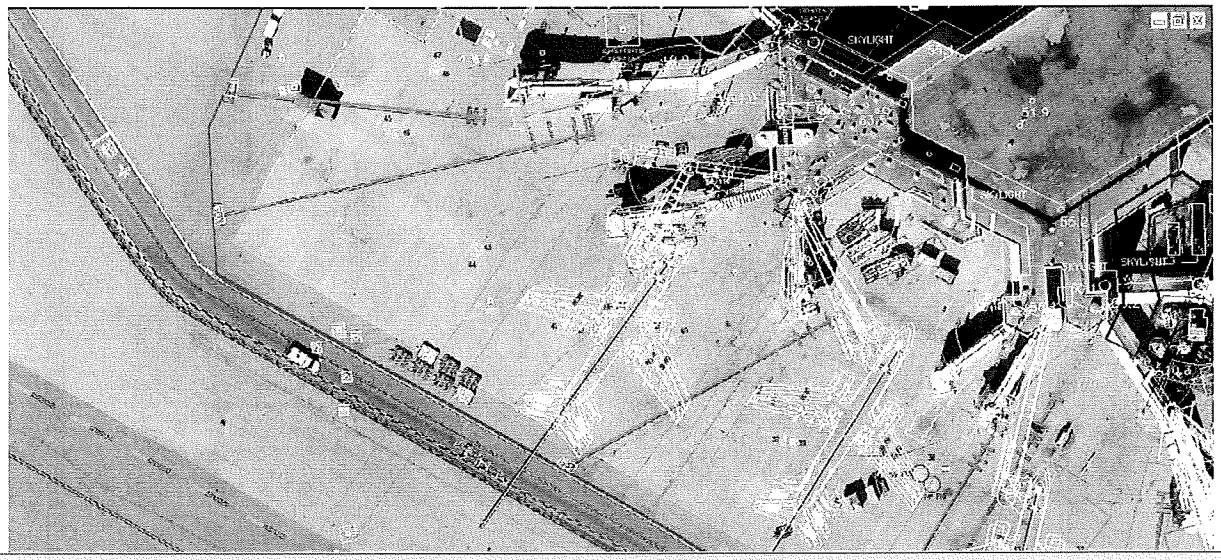
| Label | Distance | Aircraft |
|---|---|---|
| Z | 0.00ft | 757-200W |

**Docking results – Bridge**

| Airplane (stop line) | Bridge | Door [min/max] | Slope [empty/full] | Operational length | Drive column [min/max] | Rotunda angle | Closure angle |
|---|---|---|---|---|---|---|---|
| 757-200W (Z) | Bridge1 | L1 [12.43ft/13.16ft] | U1.7%/U0.5% | 59.44ft | 11.84ft/12.26ft | L57.3deg | L31.9deg |

# F21 Prop r

Last edited on Monday, September 20, 2021



| Stand definition and settings | | |
|---|---|---|
| **Item** | **Value as per item description** | **Comments** |

| General | | |
|---|---|---|
| Coordinates | X=892306.58ft Y=530764.49ft Angle=-188.0deg | Drawing coordinates |
| Apron slope | Direction=43.4deg Grade=D1.0% | |

| Bridge1 | | |
|---|---|---|
| Manufacturer: | ThyssenKrupp (USA) | |
| Model: | TB Metal | Slide not attached |
| Tunnel variant: | TB 25.0/14.5-3 | |
| Closure floor: | Adjustable | |
| Operational limits | Min= 37.07ft Max= 71.52ft | |
| Working limits | Min=48.55ft Max= 83.00ft | |
| Drive column limits | Min= 6.56ft Max= 16.57ft | |
| Rotunda location | X=0.00ft Y= 0.00ft Angle= R0.0deg | Local stand coordinates |
| Rotunda elevation | Z=11.00ft / above apron= 11.00ft | Local stand coordinates |
| Park position | X=48.54ft Y= -0.00ft | Local stand coordinates |

| | | |
|---|---|---|
| Rotunda limits | Left=87.5deg Right= 87.5deg | |
| Maximum allowable slope | 8.3% | |
| Dock to | Door front , 0.50ft below door sill | |

| **F21** | | |
|---|---|---|
| Origin | X=-0.61ft Y= 49.89ft Angle= 242.0deg | Local stand coordinates |
| Limits | Nose=32.24ft Tail= 200.00ft | Measured from origin |
| Misparking | Distance=1.00ft Left/Right, 1.00ft Forward/Backward<br>Angle= 2.0deg | |
| Minimum stop line distance | 2.00ft | |

| **Fuel pits** | | |
|---|---|---|
| FP1 | X=-3.49ft Y=98.34ft | Local stand coordinates |
| FP2 | X=0.44ft Y=96.49ft | Local stand coordinates |

| | | |
|---|---|---|
| Operational radius | 30.00ft | |
| Safety radius | 3.00ft | |

**Docking results**

**F21 :**
**Stop line creation: User-defined**
**Airplane positioning: User-defined**

**Stop lines**

| Label | Distance | Aircraft |
|---|---|---|
| A | 0.00ft | A321 NEO [LEAP-1A] |
| B | 6.74ft | 737 MAX 8, 737 MAX 9 |
| C | 17.79ft | 737 MAX 7, A319 NEO [LEAP-1A], A320 NEO [LEAP-1A] |

**Docking results – Bridge**

| Airplane (stop line) | Bridge | Door [min/max] | Slope [empty/full] | Operational length | Drive column | Rotunda angle | Closure angle | Conflict analysis |
|---|---|---|---|---|---|---|---|---|
| A319 NEO [LEAP-1A] (C) | Bridge1 | L1 [11.09ft/11.38ft] | U0.3%/D0.2% | 63.45ft | 10.54ft/10.76ft | L67.7deg | L81.2deg | 11.66ft (E) |
| 737 MAX 7 (C) | Bridge1 | L1 [9.09ft/10.07ft] | D1.8%/D3.4% | 65.71ft | 9.00ft/9.75ft | L68.3deg | L75.6deg | 15.31ft (E) |
| 737 MAX 8 (B) | Bridge1 | L1 [9.09ft/10.07ft] | D2.0%/D3.8% | 54.79ft | 9.08ft/9.78ft | L69.6deg | L74.3deg | 22.52ft (E) |
| 737 MAX 9 (B) | Bridge1 | L1 [9.15ft/10.07ft] | D2.0%/D3.7% | 54.98ft | 9.12ft/9.78ft | L69.5deg | L75.4deg | 27.58ft (E) |
| A321 NEO [LEAP-1A] (A) | Bridge1 | L1 [11.12ft/11.48ft] | U1.1%/U0.2% | 45.73ft | 10.51ft/10.76ft | L69.8deg | L79.1deg | 30.41ft (E) |
| A320 NEO [LEAP-1A] (C) | Bridge1 | L1 [11.09ft/11.42ft] | U0.4%/D0.2% | 63.24ft | 10.54ft/10.79ft | L67.7deg | L80.3deg | 16.78ft (E) |

**Docking results – Fixed installations**

| Airplane (stop line) | Fuel pit(s) distance |
|---|---|
| A319 NEO [LEAP-1A](C) | 17.26 ft |
| 737 MAX 7(C) | 22.34 ft |
| 737 MAX 8(B) | 18.59 ft |
| 737 MAX 9(B) | 23.83 ft |
| A321 NEO [LEAP-1A](A) | 18.58 ft |
| A320 NEO [LEAP-1A](C) | 22.16 ft |

**Legend:**

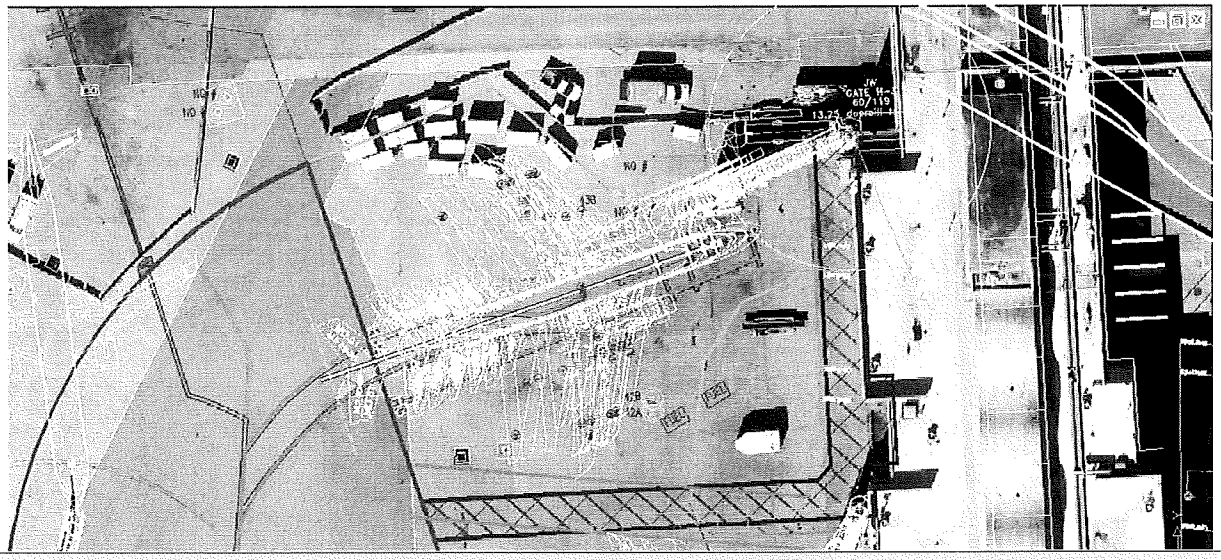
| Short label | Full label |
|---|---|
| A | A |
| B | B |
| C | C |

Date: Monday, September 20, 2021
Drawing: 090821 Terminal.dwg
Created by: AviPLAN Airside Pro 3.0.2.78

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# H3 prop r

Last edited on Tuesday, September 21, 2021



| Stand definition and settings | | |
|---|---|---|
| **Item** | **Value as per item description** | **Comments** |

| General | | |
|---|---|---|
| Coordinates | X=894091.93ft Y=531031.97ft Angle=-157.0deg | Drawing coordinates |
| Apron slope | Direction=3.5deg Grade=D1.0% | |

| Bridge1 | | |
|---|---|---|
| Manufacturer: | ThyssenKrupp (USA) | |
| Model: | TB Metal | Slide not attached |
| Tunnel variant: | TB 31.0/16.5-3 | |
| Closure floor: | Adjustable | |
| Operational limits | Min= 43.64ft Max= 91.21ft | |
| Working limits | Min=55.11ft Max= 102.69ft | |
| Drive column limits | Min= 6.56ft Max= 16.57ft | |
| Rotunda location | X=0.00ft Y= 0.00ft Angle= L339.9deg | Local stand coordinates |
| Rotunda elevation | Z=13.25ft / above apron= 13.25ft | Local stand coordinates |
| Park position | X=51.75ft Y= -18.92ft | Local stand coordinates |

| | | |
|---|---|---|
| Rotunda limits | Left=87.5deg Right= 9.0deg | |
| Maximum allowable slope | 8.3% | |
| Dock to | Door front , 0.50ft below door sill | |

| **H3** | | |
|---|---|---|
| Origin | X=63.14ft Y= 20.51ft Angle= 175.8deg | Local stand coordinates |
| Limits | Nose=47.68ft Tail= 158.89ft | Measured from origin |
| Misparking | Distance=1.00ft Left/Right, 1.00ft Forward/Backward<br>Angle= 2.0deg | |
| Minimum stop line distance | 3.00ft | |

**Docking results**

**H3 :**
**Stop line creation: User-defined**
**Airplane positioning: User-defined**

**Stop lines**

| Label | Distance | Aircraft |
|---|---|---|
| A | 0.00ft | 737 MAX 10, 737 MAX 8, 737 MAX 9, 737-400, 737-800W, 737-900W, 757-200W, E195 STD |
| B | 4.35ft | 737 MAX 7, 737-300W, 737-500W, 737-700 SSW, A220-100, A220-300 |
| C | 10.46ft | 717-200, MD 81, MD 87, MD 90-30 |
| D | 23.37ft | E170 STD, E175 EWT |

**Docking results – Bridge**

| Airplane (stop line) | Bridge | Door [min/max] | Slope [empty/full] | Operational length | Drive column [min/max] | Rotunda angle | Closure angle |
|---|---|---|---|---|---|---|---|

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 757-200W (A) | Bridge1 | L1 [12.43ft/13.16ft] | D0.6%/D1.9% | 59.32ft | 12.10ft/12.59ft | L23.4deg | L79.4deg |
| MD 81 (C) | Bridge1 | L1 [7.22ft/7.87ft] | D7.7%/D8.5% | 79.36ft | 8.11ft/8.60ft | L22.2deg | L79.7deg |
| MD 90-30 (C) | Bridge1 | L1 [7.22ft/7.87ft] | D7.6%/D8.5% | 79.46ft | 8.11ft/8.60ft | L22.2deg | L79.7deg |
| MD 87 (C) | Bridge1 | L1 [7.22ft/7.87ft] | D7.7%/D8.5% | 79.63ft | 8.09ft/8.59ft | L22.1deg | L80.7deg |
| 717-200 (C) | Bridge1 | L1 [7.22ft/7.87ft] | D7.7%/D8.5% | 79.41ft | 8.11ft/8.60ft | L22.2deg | L79.7deg |
| 737 MAX 10 (A) | Bridge1 | L1 [9.09ft/10.07ft] | D5.6%/D7.2% | 64.32ft | 9.80ft/10.47ft | L23.4deg | L74.5deg |
| 737 MAX 7 (B) | Bridge1 | L1 [9.09ft/10.07ft] | D5.3%/D6.8% | 68.66ft | 9.71ft/10.41ft | L22.9deg | L74.9deg |
| 737 MAX 8 (A) | Bridge1 | L1 [9.09ft/10.07ft] | D5.6%/D7.2% | 64.32ft | 9.80ft/10.47ft | L23.4deg | L74.5deg |
| 737 MAX 9 (A) | Bridge1 | L1 [9.15ft/10.07ft] | D5.6%/D7.1% | 64.51ft | 9.83ft/10.46ft | L23.3deg | L75.5deg |
| 737-300W (B) | Bridge1 | L1 [8.60ft/9.09ft] | D6.8%/D7.5% | 68.81ft | 9.37ft/9.72ft | L22.9deg | L73.9deg |
| 737-400 (A) | Bridge1 | L1 [8.60ft/9.09ft] | D7.1%/D7.9% | 64.49ft | 9.47ft/9.80ft | L23.4deg | L73.4deg |
| 737-500W (B) | Bridge1 | L1 [8.60ft/9.09ft] | D6.8%/D7.5% | 68.81ft | 9.37ft/9.72ft | L22.9deg | L73.9deg |
| 737-700 SSW (B) | Bridge1 | L1 [8.50ft/8.99ft] | D6.9%/D7.7% | 68.76ft | 9.30ft/9.64ft | L22.9deg | L74.9deg |
| 737-800W (A) | Bridge1 | L1 [8.50ft/8.99ft] | D7.3%/D8.1% | 64.40ft | 9.39ft/9.73ft | L23.4deg | L74.5deg |
| 737-900W (A) | Bridge1 | L1 [8.50ft/8.99ft] | D7.3%/D8.1% | 64.60ft | 9.38ft/9.72ft | L23.3deg | L75.5deg |
| A220-100 (B) | Bridge1 | L1 [9.84ft/10.17ft] | D5.0%/D5.5% | 72.66ft | 10.15ft/10.39ft | L22.3deg | L81.5deg |
| A220-300 (B) | Bridge1 | L1 [9.84ft/10.17ft] | D5.0%/D5.5% | 72.79ft | 10.14ft/10.38ft | L22.6deg | L83.3deg |
| E195 STD (A) | Bridge1 | L1 [8.50ft/8.79ft] | D7.6%/D8.1% | 66.36ft | 9.28ft/9.49ft | L23.8deg | L82.1deg |
| E175 EWT (D) | Bridge1 | L1 [8.33ft/8.66ft] | D6.0%/D6.4% | 89.47ft | 8.78ft/9.04ft | L21.5deg | L84.3deg |
| E170 STD (D) | Bridge1 | L1 [8.33ft/8.63ft] | D6.0%/D6.4% | 89.50ft | 8.78ft/9.01ft | L21.7deg | L84.1deg |

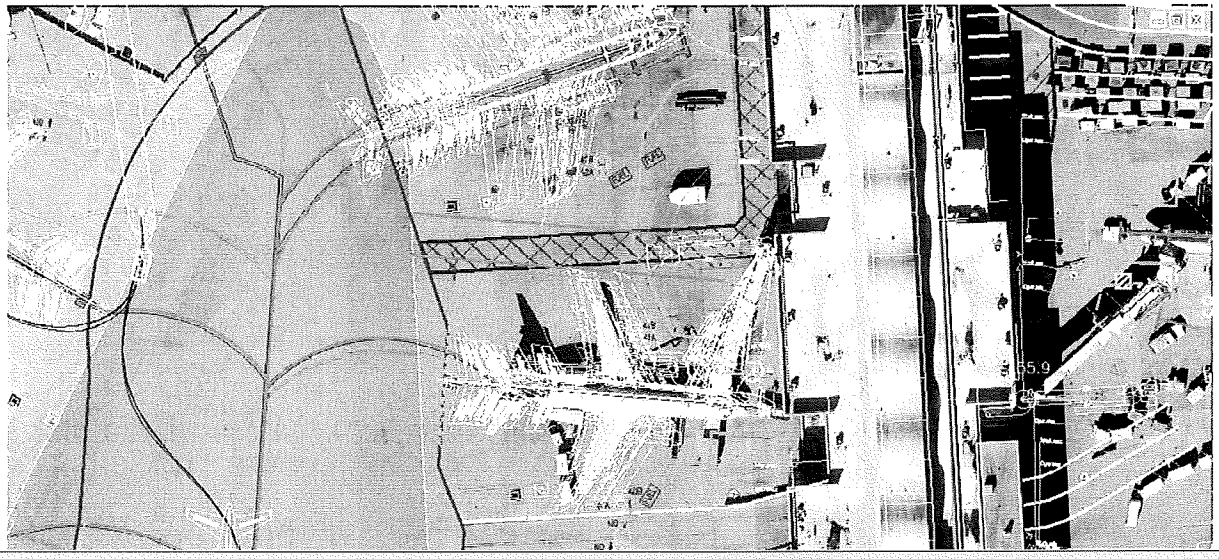
**Legend:**

| Short label | Full label |
|---|---|

| | |
|---|---|
| A | A |
| B | B |
| C | C |
| D | D |

# H5 prop

Last edited on Tuesday, September 21, 2021



| Stand definition and settings | | |
|---|---|---|
| **Item** | **Value as per item description** | **Comments** |

| General | | |
|---|---|---|
| Coordinates | X=894095.64ft Y=530887.68ft Angle=-175.0deg | Drawing coordinates |
| Apron slope | Direction=0.0deg Grade=D1.0% | |

| Bridge1 | | |
|---|---|---|
| Manufacturer: | ThyssenKrupp (USA) | |
| Model: | TB Metal | Slide not attached |
| Tunnel variant: | TB 35.0/17.5-3 | |
| Closure floor: | Adjustable | |
| Operational limits | Min= 46.92ft Max= 104.33ft | |
| Working limits | Min=58.40ft Max= 115.81ft | |
| Drive column limits | Min= 6.56ft Max= 16.57ft | |
| Rotunda location | X=0.00ft Y= 0.00ft Angle= L0.0deg | Local stand coordinates |
| Rotunda elevation | Z=13.33ft / above apron= 13.33ft | Local stand coordinates |
| Park position | X=58.38ft Y= -0.00ft | Local stand coordinates |

| | | |
|---|---|---|
| Rotunda limits | Left=87.5deg Right= 87.5deg | |
| Maximum allowable slope | 8.3% | |
| Dock to | Door front , 0.33ft below door sill | |

| **H5** | | |
|---|---|---|
| Origin | X=10.47ft Y= 76.28ft Angle= 170.4deg | Local stand coordinates |
| Limits | Nose=16.00ft Tail= 153.52ft | Measured from origin |
| Misparking | Distance=1.00ft Left/Right, 1.00ft Forward/Backward<br>Angle= 2.0deg | |
| Minimum stop line distance | 3.00ft | |

**Docking results**

**H5 :**
**Stop line creation: User-defined**
**Airplane positioning: User-defined**

**Stop lines**

| Label | Distance | Aircraft |
|---|---|---|
| A | 0.00ft | MD 87, MD 88, MD 90-30ER |
| B | 14.58ft | 717-200 |
| C | 23.77ft | 737 MAX 9, 737-500W, A318-S, A321 NEO [PW1100G], CRJ-200, CRJ-900 ER, CS100 ER, CS300 ER, E170 STD, E195 LR, ERJ 135 LR, SSJ 100-95 |

**Docking results – Bridge**

| Airplane (stop line) | Bridge | Door [min/max] | Slope [empty/full] | Operational length | Drive column [min/max] | Rotunda angle | Closure angle |
|---|---|---|---|---|---|---|---|
| MD 87 (A) | Bridge1 | L1 [7.22ft/7.87ft] | D7.6%/D8.6% | 60.82ft | 9.40ft/9.76ft | L78.1deg | R0.7deg |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MD 88 (A) | Bridge1 | L1 [7.22ft/7.87ft] | D7.6%/D8.5% | 60.85ft | 9.40ft/9.76ft | L78.3deg | R2.0deg |
| MD 90-30ER (A) | Bridge1 | L1 [7.22ft/7.87ft] | D7.6%/D8.5% | 60.85ft | 9.40ft/9.76ft | L78.3deg | R1.9deg |
| 717-200 (B) | Bridge1 | L1 [7.22ft/7.87ft] | D7.5%/D8.5% | 63.09ft | 9.33ft/9.70ft | L64.9deg | L11.4deg |
| A318-S (C) | Bridge1 | L1 [11.06ft/11.32ft] | D2.6%/D3.0% | 62.44ft | 11.51ft/11.66ft | L62.4deg | L14.9deg |
| A321 NEO [PW1100G] (C) | Bridge1 | L1 [11.12ft/11.48ft] | D2.4%/D2.9% | 62.33ft | 11.54ft/11.75ft | L62.3deg | L15.0deg |
| 737 MAX 9 (C) | Bridge1 | L1 [9.15ft/10.07ft] | D4.4%/D5.7% | 64.11ft | 10.40ft/10.92ft | L60.6deg | L12.7deg |
| 737-500W (C) | Bridge1 | L1 [8.60ft/9.09ft] | D5.8%/D6.5% | 64.23ft | 10.08ft/10.36ft | L60.7deg | L10.6deg |
| CRJ-200 (C) | Bridge1 | L1 [4.99ft/5.68ft] | D10.3%/D11.3% | 68.01ft | 7.80ft/8.22ft | L55.4deg | L24.9deg |
| CRJ-900 ER (C) | Bridge1 | L1 [5.41ft/5.68ft] | D10.3%/D10.5% | 68.33ft | 8.05ft/8.21ft | L55.4deg | L24.9deg |
| E170 STD (C) | Bridge1 | L1 [8.33ft/8.63ft] | D6.4%/D6.8% | 65.46ft | 9.88ft/10.06ft | L59.5deg | L20.8deg |
| E195 LR (C) | Bridge1 | L1 [8.50ft/8.79ft] | D6.1%/D6.6% | 65.47ft | 9.98ft/10.15ft | L59.4deg | L20.9deg |
| ERJ 135 LR (C) | Bridge1 | L1 [4.89ft/5.14ft] | D10.6%/D11.1% | 69.78ft | 7.67ft/7.82ft | L55.7deg | L24.6deg |
| CS100 ER (C) | Bridge1 | L1 [9.84ft/10.17ft] | D4.2%/D4.7% | 65.32ft | 10.77ft/10.96ft | L57.3deg | L21.0deg |
| CS300 ER (C) | Bridge1 | L1 [9.84ft/10.17ft] | D4.2%/D4.7% | 65.70ft | 10.76ft/10.95ft | L57.4deg | L22.9deg |
| SSJ 100-95 (C) | Bridge1 | L1 [9.25ft/9.25ft] | D5.5%/D5.5% | 65.56ft | 10.42ft/10.42ft | L57.5deg | L21.8deg |

**Legend:**

| Short label | Full label |
|---|---|
| A | A |
| B | B |
| C | C |

# H6 prop r

Last edited on Wednesday, September 22, 2021



| Stand definition and settings | | |
|---|---|---|
| **Item** | **Value as per item description** | **Comments** |

| General | | |
|---|---|---|
| Coordinates | X=894226.15ft Y=530678.58ft Angle=3.2deg | Drawing coordinates |
| Apron slope | Direction=0.4deg Grade=D1.0% | |

| Bridge1 | | |
|---|---|---|
| Manufacturer: | ThyssenKrupp (USA) | |
| Model: | TB Metal | Slide not attached |
| Tunnel variant: | TB 41.0/19.5-3 | |
| Closure floor: | Adjustable | |
| Operational limits | Min= 53.48ft Max= 124.02ft | |
| Working limits | Min=64.96ft Max= 135.50ft | |
| Drive column limits | Min= 6.56ft Max= 16.57ft | |
| Rotunda location | X=0.00ft Y= 0.00ft Angle= L0.0deg | Local stand coordinates |
| Rotunda elevation | Z=13.50ft / above apron= 13.50ft | Local stand coordinates |
| Park position | X=64.94ft Y= -0.00ft | Local stand coordinates |

| | | |
|---|---|---|
| Rotunda limits | Left=87.5deg Right= 87.5deg | |
| Maximum allowable slope | 8.3% | |
| Dock to | Door front , 0.50ft below door sill | |

| **H6 prop** | | |
|---|---|---|
| Origin | X=59.89ft Y= 39.62ft Angle= 179.6deg | Local stand coordinates |
| Limits | Nose=20.00ft Tail= 200.00ft | Measured from origin |
| Misparking | Distance=1.00ft Left/Right, 1.00ft Forward/Backward<br>Angle= 2.0deg | |
| Minimum stop line distance | 3.00ft | |

**Docking results**

**H6 prop :**
**Stop line creation: User-defined**
**Airplane positioning: User-defined**

**Stop lines**

| Label | Distance | Aircraft |
|---|---|---|
| A | 0.00ft | 737 MAX 10, 737 MAX 8, 737 MAX 9, 737-400, 737-800W, 737-900W, A220-100, A220-300, A321 NEO [LEAP-1A], CS300 |
| B | 7.67ft | 737 MAX 7, 737-300W, 737-700W, CS100 |
| C | 15.72ft | 717-200, 737-500W, 737-600, A318-100, A319 NEO [LEAP-1A], A320 NEO [LEAP-1A], E170 STD, E175 EWT, E195-E2, MD 81, MD 87 |

**Docking results – Bridge**

| Airplane (stop line) | Bridge | Door [min/max] | Slope [empty/full] | Operational length | Drive column [min/max] | Rotunda angle | Closure angle |
|---|---|---|---|---|---|---|---|
| A321 NEO | Bridge1 | L1 | D3.6%/D4.2% | 61.78ft | 11.54ft/11.74ft | L20.7deg | L65.8deg |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| [LEAP-1A] (A) | | [11.12ft/11.48ft] | | | | | |
| 717-200 (C) | Bridge1 | L1 [7.22ft/7.87ft] | D7.4%/D8.2% | 83.65ft | 8.62ft/9.07ft | L16.0deg | L69.5deg |
| 737 MAX 8 (A) | Bridge1 | L1 [9.09ft/10.07ft] | D5.7%/D7.2% | 64.28ft | 10.35ft/10.92ft | L20.9deg | L60.6deg |
| 737 MAX 9 (A) | Bridge1 | L1 [9.15ft/10.07ft] | D5.7%/D7.1% | 64.44ft | 10.38ft/10.91ft | L20.8deg | L61.8deg |
| 737 MAX 10 (A) | Bridge1 | L1 [9.09ft/10.07ft] | D5.7%/D7.2% | 64.28ft | 10.35ft/10.92ft | L20.9deg | L60.6deg |
| 737-400 (A) | Bridge1 | L1 [8.60ft/9.09ft] | D7.2%/D7.9% | 64.45ft | 10.08ft/10.36ft | L20.9deg | L59.6deg |
| 737-800W (A) | Bridge1 | L1 [8.50ft/8.99ft] | D7.4%/D8.1% | 64.36ft | 10.02ft/10.30ft | L20.9deg | L60.6deg |
| 737-900W (A) | Bridge1 | L1 [8.50ft/8.99ft] | D7.4%/D8.1% | 64.54ft | 10.00ft/10.29ft | L20.8deg | L61.7deg |
| MD 81 (C) | Bridge1 | L1 [7.22ft/7.87ft] | D7.4%/D8.2% | 83.61ft | 8.62ft/9.07ft | L16.1deg | L69.5deg |
| MD 87 (C) | Bridge1 | L1 [7.22ft/7.87ft] | D7.4%/D8.2% | 83.86ft | 8.60ft/9.05ft | L16.0deg | L70.6deg |
| A220-100 (A) | Bridge1 | L1 [9.84ft/10.17ft] | D5.4%/D5.9% | 68.00ft | 10.67ft/10.87ft | L19.5deg | L68.1deg |
| A220-300 (A) | Bridge1 | L1 [9.84ft/10.17ft] | D5.4%/D5.9% | 68.21ft | 10.66ft/10.86ft | L19.7deg | L69.8deg |
| A318-100 (C) | Bridge1 | L1 [11.06ft/11.32ft] | D3.4%/D3.7% | 76.57ft | 11.31ft/11.48ft | L16.6deg | L68.9deg |
| A319 NEO [LEAP-1A] (C) | Bridge1 | L1 [11.09ft/11.38ft] | D3.3%/D3.7% | 76.72ft | 11.33ft/11.52ft | L16.6deg | L70.0deg |
| A320 NEO [LEAP-1A] (C) | Bridge1 | L1 [11.09ft/11.42ft] | D3.3%/D3.7% | 76.50ft | 11.33ft/11.55ft | L16.6deg | L69.0deg |
| 737 MAX 7 (B) | Bridge1 | L1 [9.09ft/10.07ft] | D5.3%/D6.6% | 71.44ft | 10.17ft/10.78ft | L18.7deg | L62.9deg |
| 737-300W (B) | Bridge1 | L1 [8.60ft/9.09ft] | D6.6%/D7.3% | 71.62ft | 9.87ft/10.17ft | L18.7deg | L61.9deg |
| 737-500W (C) | Bridge1 | L1 [8.60ft/9.09ft] | D6.1%/D6.7% | 79.26ft | 9.68ft/10.01ft | L16.8deg | L63.8deg |
| 737-600 (C) | Bridge1 | L1 [8.50ft/8.99ft] | D6.2%/D6.9% | 79.18ft | 9.61ft/9.94ft | L16.8deg | L64.8deg |
| 737-700W (B) | Bridge1 | L1 [8.50ft/8.99ft] | D6.8%/D7.4% | 71.55ft | 9.80ft/10.10ft | L18.7deg | L62.9deg |
| CS100 (B) | Bridge1 | L1 [9.84ft/10.17ft] | D5.0%/D5.4% | 75.25ft | 10.53ft/10.74ft | L17.5deg | L70.1deg |
| CS300 (A) | Bridge1 | L1 [9.84ft/10.17ft] | D5.4%/D5.9% | 68.21ft | 10.66ft/10.86ft | L19.7deg | L69.8deg |
| E170 STD (C) | Bridge1 | L1 [8.33ft/8.63ft] | D6.7%/D7.0% | 81.15ft | 9.40ft/9.61ft | L16.9deg | L72.7deg |

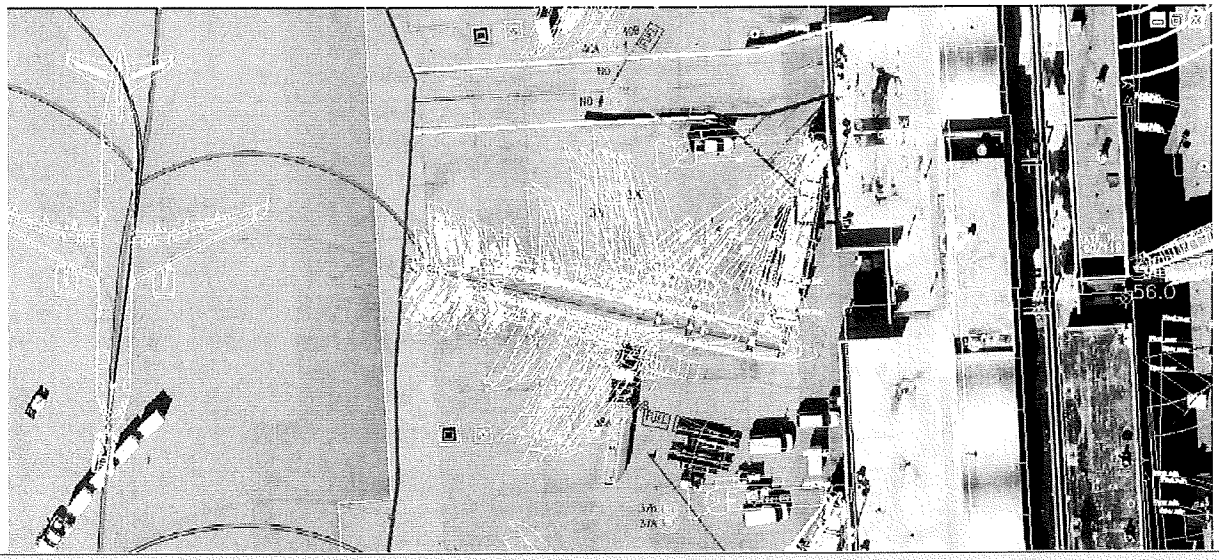
| | | | | | | | |
|---|---|---|---|---|---|---|---|
| E175 EWT (C) | Bridge1 | L1 [8.33ft/8.66ft] | D6.6%/D7.0% | 81.05ft | 9.40ft/9.63ft | L16.7deg | L72.9deg |
| E195-E2 (C) | Bridge1 | L1 [8.50ft/8.79ft] | D6.6%/D6.9% | 79.80ft | 9.54ft/9.74ft | L17.2deg | L72.4deg |

**Legend:**

| Short label | Full label |
|---|---|
| A | A |
| B | B |
| C | C |

# H7 prop r

Last edited on Thursday, September 23, 2021




| Stand definition and settings | | |
|---|---|---|
| **Item** | **Value as per item description** | **Comments** |

| General | | |
|---|---|---|
| Coordinates | X=894104.56ft Y=530726.43ft Angle=-175.7deg | Drawing coordinates |
| Apron slope | Direction=0.0deg Grade=D1.0% | |

| Bridge1 | | |
|---|---|---|
| Manufacturer: | ThyssenKrupp (USA) | |
| Model: | TB Metal | Slide not attached |
| Tunnel variant: | TB 39.0/19.0-3 | |
| Closure floor: | Adjustable | |
| Operational limits | Min= 51.84ft Max= 117.45ft | |
| Working limits | Min=63.32ft Max= 128.93ft | |
| Drive column limits | Min= 6.56ft Max= 16.57ft | |
| Rotunda location | X=0.00ft Y= 0.00ft Angle= L0.0deg | Local stand coordinates |
| Rotunda elevation | Z=13.42ft / above apron= 13.42ft | Local stand coordinates |
| Park position | X=63.30ft Y= -0.00ft | Local stand coordinates |

| | | |
|---|---|---|
| Rotunda limits | Left=87.5deg Right= 23.8deg | |
| Maximum allowable slope | 8.3% | |
| Dock to | Door front , 0.33ft below door sill | |

| **H7** | | |
|---|---|---|
| Origin | X=20.28ft Y= 77.04ft Angle= 163.0deg | Local stand coordinates |
| Limits | Nose=16.00ft Tail= 160.00ft | Measured from origin |
| Misparking | Distance=1.00ft Left/Right, 1.00ft Forward/Backward<br>Angle= 2.0deg | |
| Minimum stop line distance | 3.00ft | |

**Docking results**

**H7 :**
**Stop line creation: User-defined**
**Airplane positioning: User-defined**

**Stop lines**

| Label | Distance | Aircraft |
|---|---|---|
| A | 0.00ft | 717-200, 737 MAX 10, MD 87, MD 88, MD 90-30ER |
| B | 12.36ft | 737 MAX 7, 737 MAX 9, 737-500W, 757-200W, A321 NEO [PW1100G] |
| C | 31.44ft | A318-S, CS100 ER, CS300 ER, E170 STD, E195 LR |
| D | 36.89ft | CRJ-900 ER |
| E | 49.50ft | CRJ-200, CRJ-700, ERJ 145 EP/ER/EU, Legacy 600 |

**Docking results – Bridge**

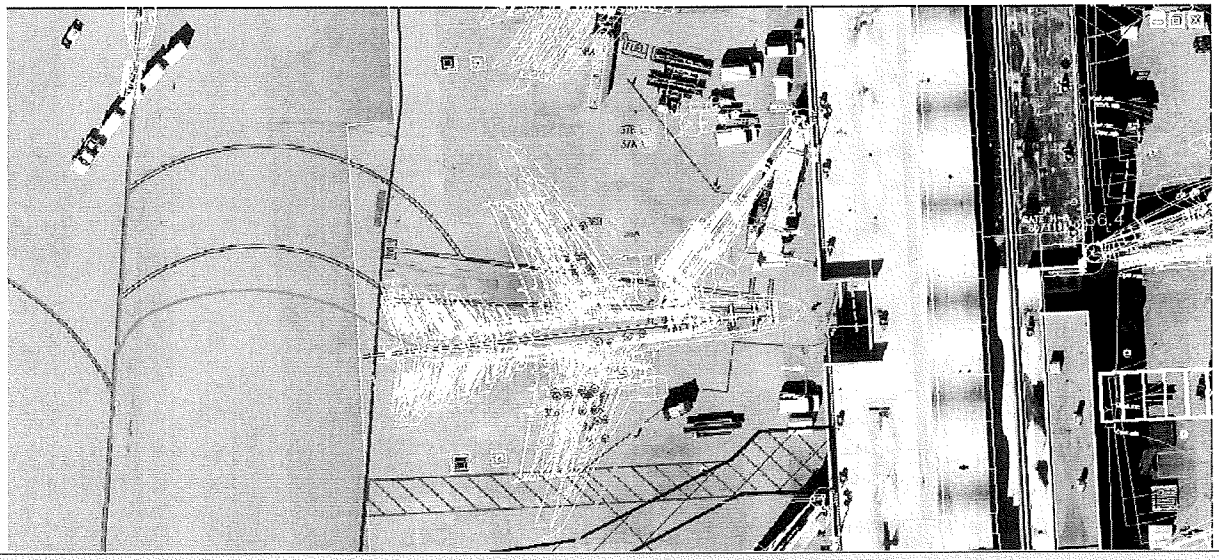
| Airplane (stop line) | Bridge | Door [min/max] | Slope [empty/full] | Operational length | Drive column [min/max] | Rotunda angle | Closure angle |
|---|---|---|---|---|---|---|---|
| 717-200 (A) | Bridge1 | L1 [7.22ft/7.87ft] | D7.5%/D8.5% | 63.48ft | 9.52ft/9.88ft | L71.6deg | R2.7deg |
| MD 87 (A) | Bridge1 | L1 [7.22ft/7.87ft] | D7.5%/D8.5% | 63.44ft | 9.53ft/9.88ft | L71.4deg | R1.5deg |
| MD 88 (A) | Bridge1 | L1 [7.22ft/7.87ft] | D7.5%/D8.5% | 63.48ft | 9.52ft/9.88ft | L71.7deg | R2.7deg |
| MD 90-30ER (A) | Bridge1 | L1 [7.22ft/7.87ft] | D7.5%/D8.5% | 63.48ft | 9.52ft/9.88ft | L71.6deg | R2.6deg |
| A318-S (C) | Bridge1 | L1 [11.06ft/11.32ft] | D2.8%/D3.2% | 67.35ft | 11.55ft/11.70ft | L50.0deg | L19.9deg |
| A321 NEO [PW1100G] (B) | Bridge1 | L1 [11.12ft/11.48ft] | D2.5%/D3.0% | 62.32ft | 11.63ft/11.83ft | L66.4deg | L3.5deg |
| 737 MAX 7 (B) | Bridge1 | L1 [9.09ft/10.07ft] | D4.5%/D5.9% | 63.72ft | 10.52ft/11.05ft | L64.6deg | L0.3deg |
| 737 MAX 9 (B) | Bridge1 | L1 [9.15ft/10.07ft] | D4.5%/D5.8% | 63.70ft | 10.56ft/11.05ft | L64.4deg | L1.5deg |
| 737-500W (B) | Bridge1 | L1 [8.60ft/9.09ft] | D5.9%/D6.6% | 63.85ft | 10.25ft/10.52ft | L64.5deg | R0.5deg |
| 757-200W (B) | Bridge1 | L1 [12.43ft/13.16ft] | U0.0%/D1.1% | 62.49ft | 12.33ft/12.71ft | L68.8deg | L1.1deg |
| E170 STD (C) | Bridge1 | L1 [8.33ft/8.63ft] | D6.3%/D6.7% | 70.63ft | 9.91ft/10.09ft | L47.6deg | L25.3deg |
| E195 LR (C) | Bridge1 | L1 [8.50ft/8.79ft] | D6.1%/D6.5% | 70.64ft | 10.01ft/10.18ft | L47.5deg | L25.4deg |
| CRJ-900 ER (D) | Bridge1 | L1 [5.41ft/5.68ft] | D9.7%/D10.0% | 76.61ft | 7.94ft/8.11ft | L40.4deg | L32.5deg |
| CRJ-200 (E) | Bridge1 | L1 [4.99ft/5.68ft] | D9.1%/D9.9% | 83.77ft | 7.38ft/7.84ft | L33.0deg | L39.9deg |
| CRJ-700 (E) | Bridge1 | L1 [5.51ft/5.68ft] | D9.1%/D9.3% | 83.73ft | 7.73ft/7.84ft | L33.3deg | L39.5deg |
| Legacy 600 (E) | Bridge1 | R0 [0.00ft/0.00ft] | D9.6%/D9.7% | 78.62ft | 7.92ft/8.03ft | L38.1deg | L34.7deg |
| ERJ 145 EP/ER/EU (E) | Bridge1 | L1 [4.86ft/5.24ft] | D9.5%/D9.9% | 85.07ft | 7.26ft/7.52ft | L33.3deg | L39.5deg |
| CS100 ER (C) | Bridge1 | L1 [9.84ft/10.17ft] | D4.3%/D4.7% | 70.68ft | 10.80ft/10.99ft | L45.6deg | L25.3deg |
| CS300 ER (C) | Bridge1 | L1 [9.84ft/10.17ft] | D4.3%/D4.7% | 71.05ft | 10.79ft/10.98ft | L45.6deg | L27.3deg |
| 737 MAX 10 (A) | Bridge1 | L1 [9.09ft/10.07ft] | D4.4%/D5.8% | 63.11ft | 10.52ft/11.04ft | L75.7deg | R10.7deg |

**Legend:**

| Short label | Full label |
|---|---|
| A | A |
| B | B |
| C | C |
| D | D |
| E | E |

# H9 prop r

Last edited on Tuesday, September 21, 2021



| Stand definition and settings | | |
|---|---|---|
| **Item** | **Value as per item description** | **Comments** |

| General | | |
|---|---|---|
| Coordinates | X=894111.81ft Y=530592.00ft Angle=-177.1deg | Drawing coordinates |
| Apron slope | Direction=0.0deg Grade=U0.0% | |

| Bridge1 | | |
|---|---|---|
| Manufacturer: | ThyssenKrupp (USA) | |
| Model: | TB Metal | Slide not attached |
| Tunnel variant: | TB 35.0/17.5-3 | |
| Closure floor: | Adjustable | |
| Operational limits | Min= 46.92ft Max= 104.33ft | |
| Working limits | Min=58.40ft Max= 115.81ft | |
| Drive column limits | Min= 6.56ft Max= 16.57ft | |
| Rotunda location | X=0.00ft Y= 0.00ft Angle= L0.0deg | Local stand coordinates |
| Rotunda elevation | Z=13.42ft / above apron= 13.42ft | Local stand coordinates |
| Park position | X=58.40ft Y= -0.00ft | Local stand coordinates |

| | | |
|---|---|---|
| Rotunda limits | Left=87.5deg Right= 23.6deg | |
| Maximum allowable slope | 8.3% | |
| Dock to | Door front , 0.50ft below door sill | |

| **H9 Delta** | | |
|---|---|---|
| Origin | X=17.33ft Y= 81.00ft Angle= 183.0deg | Local stand coordinates |
| Limits | Nose=34.38ft Tail= 171.21ft | Measured from origin |
| Misparking | Distance=1.00ft Left/Right, 1.00ft Forward/Backward<br>Angle= 2.0deg | |
| Minimum stop line distance | 3.00ft | |

**Docking results**

**H9 Delta :**
**Stop line creation: User-defined**
**Airplane positioning: User-defined**

**Stop lines**

| Label | Distance | Aircraft |
|---|---|---|
| A | 0.00ft | 767-300ERW |
| B | 6.40ft | 757-300W |
| C | 16.10ft | 757-200W, 767-200 |
| D | 30.19ft | CRJ-100, CRJ-200, CRJ-700, CRJ-900, ERJ 135 ER, ERJ 145 XR |
| E | 33.74ft | A220-100, A220-300, A321 NEO [LEAP-1A], CS100, CS300, E170 STD, E175 EWT, E195 STD |
| F | 39.33ft | 737 MAX 7, 737 MAX 8, 737 MAX 9, 737-300W, 737-400, 737-700 SSW, 737-800W, 737-900W |
| G | 42.33ft | A318-S, A319 NEO [LEAP-1A], A320 NEO [LEAP-1A] |

**Docking results – Bridge**

| Airplane (stop line) | Bridge | Door [min/max] | Slope [empty/full] | Operational length | Drive column [min/max] | Rotunda angle | Closure angle |
|---|---|---|---|---|---|---|---|
| 767-300ERW (A) | Bridge1 | L2 [13.65ft/14.67ft] | U1.8%/U0.7% | 83.88ft | 12.97ft/13.68ft | L48.9deg | L44.0deg |
| 767-200 (C) | Bridge1 | L1 [13.42ft/14.63ft] | U2.0%/U0.4% | 72.88ft | 12.79ft/13.56ft | L60.2deg | L26.8deg |
| 757-200W (C) | Bridge1 | L2 [12.60ft/13.16ft] | U0.1%/D0.5% | 89.43ft | 12.23ft/12.63ft | L47.4deg | L45.6deg |
| A220-100 (E) | Bridge1 | L1 [9.84ft/10.17ft] | D3.2%/D3.5% | 87.46ft | 10.30ft/10.53ft | L49.2deg | L41.8deg |
| A220-300 (E) | Bridge1 | L1 [9.84ft/10.17ft] | D3.2%/D3.5% | 87.79ft | 10.29ft/10.52ft | L49.3deg | L43.7deg |
| A321 NEO [LEAP-1A] (E) | Bridge1 | L1 [11.12ft/11.48ft] | D1.8%/D2.2% | 82.60ft | 11.24ft/11.49ft | L51.9deg | L38.0deg |
| CRJ-100 (D) | Bridge1 | L1 [4.99ft/5.68ft] | D8.1%/D8.8% | 88.29ft | 6.88ft/7.36ft | L50.0deg | L43.0deg |
| CRJ-200 (D) | Bridge1 | L1 [4.99ft/5.68ft] | D8.1%/D8.8% | 88.29ft | 6.88ft/7.36ft | L50.0deg | L43.0deg |
| CRJ-700 (D) | Bridge1 | L1 [5.51ft/5.68ft] | D8.1%/D8.3% | 88.18ft | 7.25ft/7.37ft | L50.3deg | L42.6deg |
| CRJ-900 (D) | Bridge1 | L1 [5.41ft/5.68ft] | D8.1%/D8.3% | 88.54ft | 7.17ft/7.36ft | L50.1deg | L42.9deg |
| CS100 (E) | Bridge1 | L1 [9.84ft/10.17ft] | D3.2%/D3.5% | 87.46ft | 10.30ft/10.53ft | L49.2deg | L41.8deg |
| CS300 (E) | Bridge1 | L1 [9.84ft/10.17ft] | D3.2%/D3.5% | 87.79ft | 10.29ft/10.52ft | L49.3deg | L43.7deg |
| E170 STD (E) | Bridge1 | L1 [8.33ft/8.63ft] | D4.9%/D5.3% | 86.69ft | 9.26ft/9.46ft | L50.7deg | L42.2deg |
| E175 EWT (E) | Bridge1 | L1 [8.33ft/8.66ft] | D4.9%/D5.3% | 86.45ft | 9.26ft/9.49ft | L50.6deg | L42.4deg |
| E195 STD (E) | Bridge1 | L1 [8.50ft/8.79ft] | D4.7%/D5.1% | 86.71ft | 9.37ft/9.58ft | L50.7deg | L42.3deg |
| ERJ 135 ER (D) | Bridge1 | L1 [4.89ft/5.14ft] | D8.5%/D8.8% | 89.82ft | 6.77ft/6.95ft | L50.5deg | L42.4deg |
| ERJ 145 XR (D) | Bridge1 | L1 [4.79ft/5.18ft] | D8.5%/D8.9% | 89.51ft | 6.71ft/6.99ft | L50.3deg | L42.6deg |
| A318-S (G) | Bridge1 | L1 [11.06ft/11.32ft] | D1.9%/D2.2% | 88.56ft | 11.15ft/11.33ft | L47.8deg | L42.2deg |
| A319 NEO [LEAP-1A] (G) | Bridge1 | L1 [11.09ft/11.38ft] | D1.8%/D2.1% | 88.58ft | 11.17ft/11.38ft | L47.8deg | L42.2deg |

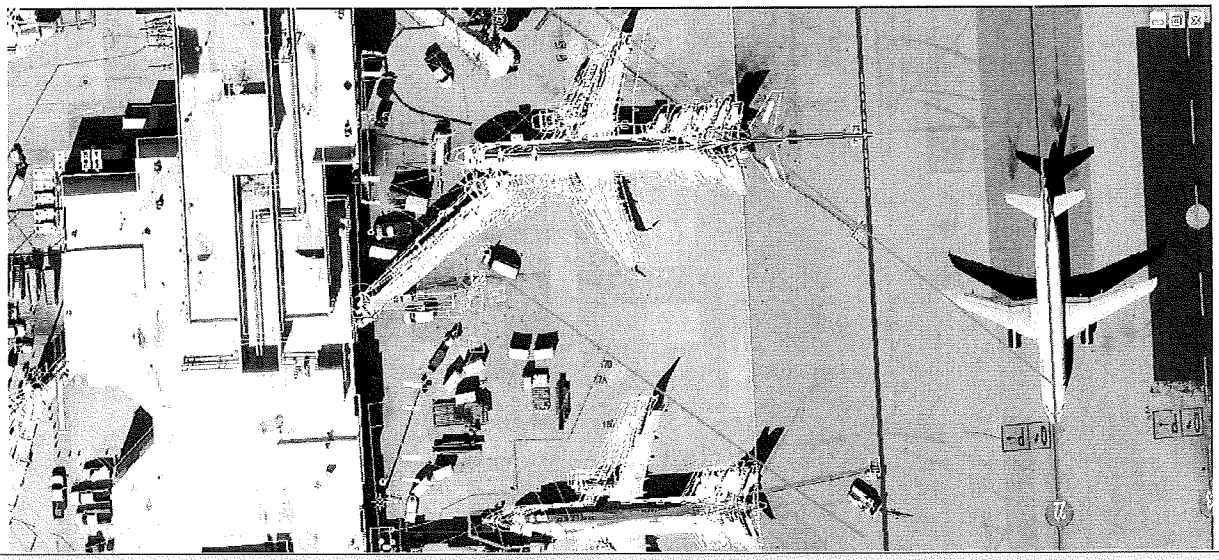
| | | | | | | | |
|---|---|---|---|---|---|---|---|
| A320 NEO [LEAP-1A] (G) | Bridge1 | L1 [11.09ft/11.42ft] | D1.8%/D2.1% | 88.39ft | 11.17ft/11.40ft | L47.8deg | L41.1deg |
| 737 MAX 7 (F) | Bridge1 | L1 [9.09ft/10.07ft] | D3.2%/D4.3% | 88.71ft | 9.78ft/10.47ft | L48.6deg | L36.4deg |
| 737 MAX 8 (F) | Bridge1 | L1 [9.09ft/10.07ft] | D3.2%/D4.3% | 88.73ft | 9.78ft/10.47ft | L48.6deg | L36.4deg |
| 737 MAX 9 (F) | Bridge1 | L1 [9.15ft/10.07ft] | D3.2%/D4.2% | 88.83ft | 9.82ft/10.46ft | L48.5deg | L37.5deg |
| 737-300W (F) | Bridge1 | L1 [8.60ft/9.09ft] | D4.3%/D4.8% | 88.84ft | 9.44ft/9.78ft | L48.6deg | L35.4deg |
| 737-400 (F) | Bridge1 | L1 [8.60ft/9.09ft] | D4.3%/D4.8% | 88.85ft | 9.44ft/9.78ft | L48.6deg | L35.4deg |
| 737-700 SSW (F) | Bridge1 | L1 [8.50ft/8.99ft] | D4.4%/D4.9% | 88.77ft | 9.37ft/9.71ft | L48.6deg | L36.4deg |
| 737-800W (F) | Bridge1 | L1 [8.50ft/8.99ft] | D4.4%/D4.9% | 88.76ft | 9.37ft/9.71ft | L48.6deg | L36.4deg |
| 737-900W (F) | Bridge1 | L1 [8.50ft/8.99ft] | D4.4%/D4.9% | 88.88ft | 9.36ft/9.71ft | L48.5deg | L37.5deg |
| 757-300W (B) | Bridge1 | L2 [12.60ft/13.16ft] | U0.1%/D0.5% | 82.76ft | 12.25ft/12.63ft | L52.1deg | L40.8deg |

**Legend:**

| Short label | Full label |
|---|---|
| A | A |
| B | B |
| C | C |
| D | D |
| E | E |
| F | F |
| G | G |

# H12 Prop r

Last edited on Tuesday, September 21, 2021



| Stand definition and settings | | |
|---|---|---|
| **Item** | **Value as per item description** | **Comments** |

| General | | |
|---|---|---|
| Coordinates | X=894243.80ft Y=530213.22ft Angle=2.1deg | Drawing coordinates |
| Apron slope | Direction=-0.3deg Grade=D1.0% | |

| Bridge1 | | |
|---|---|---|
| Manufacturer: | ThyssenKrupp (USA) | |
| Model: | TB Metal | Slide not attached |
| Tunnel variant: | TB 39.0/19.0-3 | |
| Closure floor: | Adjustable | |
| Operational limits | Min= 51.84ft Max= 117.45ft | |
| Working limits | Min=63.32ft Max= 128.93ft | |
| Drive column limits | Min= 6.56ft Max= 16.57ft | |
| Rotunda location | X=0.00ft Y= 0.00ft Angle= L0.0deg | Local stand coordinates |
| Rotunda elevation | Z=13.50ft / above apron= 13.50ft | Local stand coordinates |
| Park position | X=63.30ft Y= -0.00ft | Local stand coordinates |

| | | |
|---|---|---|
| Rotunda limits | Left=87.5deg Right= 87.5deg | |
| Maximum allowable slope | 8.3% | |
| Dock to | Door front , 0.50ft below door sill | |

| **H12 Prop** | | |
|---|---|---|
| Origin | X=60.36ft Y= 73.69ft Angle= 180.8deg | Local stand coordinates |
| Limits | Nose=21.83ft Tail= 204.01ft | Measured from origin |
| Misparking | Distance=1.00ft Left/Right, 1.00ft Forward/Backward<br>Angle= 2.0deg | |
| Minimum stop line distance | 2.00ft | |

**Docking results**

**H12 Prop :**
**Stop line creation: User-defined**
**Airplane positioning: User-defined**

**Stop lines**

| Label | Distance | Aircraft |
|---|---|---|
| A | 0.00ft | 717-200, MD 81, MD 87 |
| C | 5.50ft | 737 MAX 10, 737 MAX 9, 757-200W, 757-300W |
| D | 15.50ft | 737 MAX 7, 737-300W, 737-500W, A220-100, A220-300, A321 NEO [LEAP-1A], CS100, CS300, E175 STD, E195 STD |
| E | 32.96ft | A318-100, A319 NEO [LEAP-1A], E170 STD |

**Docking results – Bridge**

| Airplane (stop line) | Bridge | Door [min/max] | Slope [empty/full] | Operational length | Drive column [min/max] | Rotunda angle | Closure angle |
|---|---|---|---|---|---|---|---|

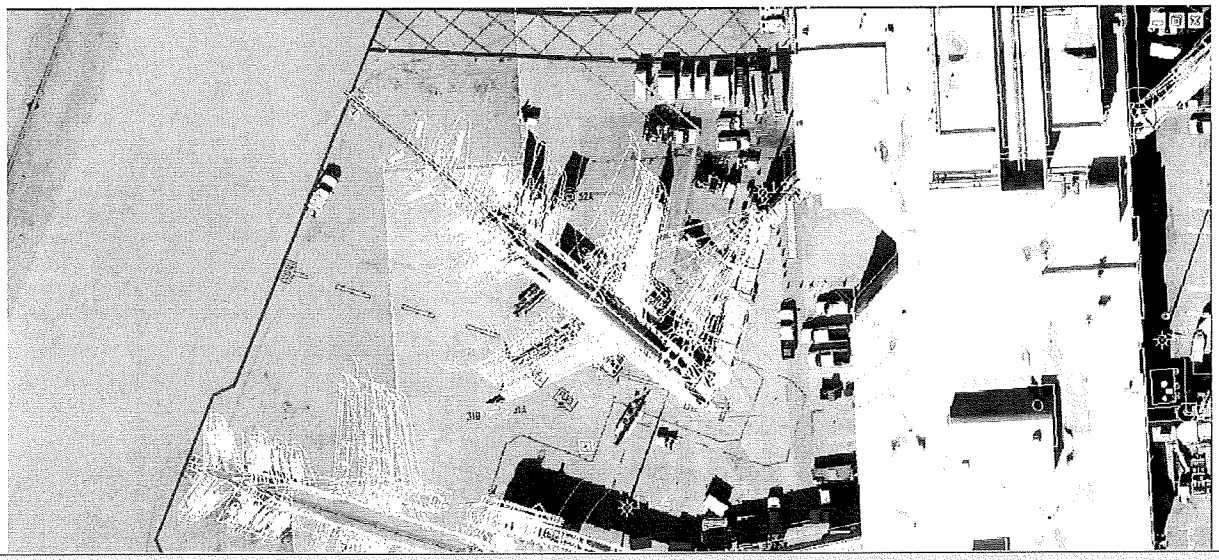
| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MD 81 (A) | Bridge1 | L1 [7.22ft/7.87ft] | D6.6%/D7.3% | 87.08ft | 8.67ft/9.12ft | L41.3deg | L45.4deg |
| MD 87 (A) | Bridge1 | L1 [7.22ft/7.87ft] | D6.6%/D7.3% | 87.26ft | 8.66ft/9.11ft | L41.2deg | L46.5deg |
| 717-200 (A) | Bridge1 | L1 [7.22ft/7.87ft] | D6.6%/D7.3% | 87.12ft | 8.67ft/9.11ft | L41.3deg | L45.4deg |
| 737 MAX 7 (D) | Bridge1 | L1 [9.09ft/10.07ft] | D3.9%/D4.9% | 95.41ft | 9.82ft/10.52ft | L36.9deg | L45.8deg |
| 737 MAX 9 (C) | Bridge1 | L1 [9.15ft/10.07ft] | D4.1%/D5.1% | 87.69ft | 9.98ft/10.60ft | L40.6deg | L43.1deg |
| 737 MAX 10 (C) | Bridge1 | L1 [9.09ft/10.07ft] | D4.1%/D5.2% | 87.57ft | 9.94ft/10.61ft | L40.8deg | L42.0deg |
| 737-300W (D) | Bridge1 | L1 [8.60ft/9.09ft] | D4.9%/D5.4% | 95.56ft | 9.48ft/9.82ft | L36.9deg | L44.8deg |
| 737-500W (D) | Bridge1 | L1 [8.60ft/9.09ft] | D4.9%/D5.4% | 95.56ft | 9.48ft/9.82ft | L36.9deg | L44.8deg |
| 757-200W (C) | Bridge1 | L1 [12.43ft/13.16ft] | D0.7%/D1.5% | 83.38ft | 12.22ft/12.70ft | L42.6deg | L45.1deg |
| 757-300W (C) | Bridge1 | L1 [12.43ft/13.16ft] | D0.7%/D1.5% | 83.36ft | 12.22ft/12.70ft | L42.6deg | L45.1deg |
| A318-100 (E) | Bridge1 | L1 [11.06ft/11.32ft] | D2.5%/D2.8% | 107.48ft | 11.13ft/11.32ft | L31.7deg | L55.0deg |
| A319 NEO [LEAP-1A] (E) | Bridge1 | L1 [11.09ft/11.38ft] | D2.5%/D2.7% | 107.61ft | 11.15ft/11.37ft | L31.7deg | L56.1deg |
| A321 NEO [LEAP-1A] (D) | Bridge1 | L1 [11.12ft/11.48ft] | D2.5%/D2.9% | 92.97ft | 11.27ft/11.52ft | L37.1deg | L50.6deg |
| E170 STD (E) | Bridge1 | L1 [8.33ft/8.63ft] | D4.9%/D5.1% | 111.97ft | 9.02ft/9.24ft | L31.3deg | L59.4deg |
| E175 STD (D) | Bridge1 | L1 [8.33ft/8.66ft] | D5.3%/D5.7% | 97.17ft | 9.22ft/9.46ft | L36.4deg | L54.3deg |
| E195 STD (D) | Bridge1 | L1 [8.50ft/8.79ft] | D5.2%/D5.5% | 97.39ft | 9.34ft/9.55ft | L36.6deg | L54.1deg |
| A220-100 (D) | Bridge1 | L1 [9.84ft/10.17ft] | D3.8%/D4.1% | 98.58ft | 10.30ft/10.54ft | L35.4deg | L53.4deg |
| A220-300 (D) | Bridge1 | L1 [9.84ft/10.17ft] | D3.8%/D4.1% | 98.86ft | 10.29ft/10.53ft | L35.5deg | L55.2deg |
| CS300 (D) | Bridge1 | L1 [9.84ft/10.17ft] | D3.8%/D4.1% | 98.86ft | 10.29ft/10.53ft | L35.5deg | L55.2deg |
| CS100 (D) | Bridge1 | L1 [9.84ft/10.17ft] | D3.8%/D4.1% | 98.58ft | 10.30ft/10.54ft | L35.4deg | L53.4deg |

**Legend:**

| Short label | Full label |
|---|---|
| A | A |
| C | C |
| D | D |
| E | E |

# H15 prop r

Last edited on Tuesday, September 21, 2021



| Stand definition and settings | | |
|---|---|---|
| **Item** | **Value as per item description** | **Comments** |

| General | | |
|---|---|---|
| Coordinates | X=894076.12ft Y=530168.83ft Angle=-135.1deg | Drawing coordinates |
| Apron slope | Direction=-42.9deg Grade=D1.0% | |

| Bridge1 | | |
|---|---|---|
| Manufacturer: | ThyssenKrupp (USA) | |
| Model: | TB Metal | Slide not attached |
| Tunnel variant: | TB 29.0/15.5-3 | |
| Closure floor: | Adjustable | |
| Operational limits | Min= 40.35ft Max= 84.65ft | |
| Working limits | Min=51.83ft Max= 96.13ft | |
| Drive column limits | Min= 6.56ft Max= 16.57ft | |
| Rotunda location | X=0.00ft Y= 0.00ft Angle= L0.0deg | Local stand coordinates |
| Rotunda elevation | Z=11.00ft / above apron= 11.00ft | Local stand coordinates |
| Park position | X=51.82ft Y= -0.00ft | Local stand coordinates |

| | | |
|---|---|---|
| Rotunda limits | Left=87.5deg Right= 87.5deg | |
| Maximum allowable slope | 8.3% | |
| Dock to | Door front , 0.50ft below door sill | |

| **H15** | | |
|---|---|---|
| Origin | X=74.11ft Y= 31.56ft Angle= 95.6deg | Local stand coordinates |
| Limits | Nose=27.36ft Tail= 200.00ft | Measured from origin |
| Misparking | Distance=1.00ft Left/Right, 1.00ft Forward/Backward<br>Angle= 2.0deg | |
| Minimum stop line distance | 3.00ft | |

**Docking results**

**H15 :**
**Stop line creation: User-defined**
**Airplane positioning: User-defined**

**Stop lines**

| Label | Distance | Aircraft |
|---|---|---|
| A | 0.00ft | 757-300, 757-300W |
| B | 6.57ft | 737 MAX 8, 737 MAX 9, 737-800W, 737-900W, A321 NEO [LEAP-1A] |
| C | 12.80ft | 737 MAX 7, 737-300W, 737-400, 737-500W, 737-600, 737-700W, A220-100, A220-300, CS100, CS300 |
| D | 17.80ft | A318-100, A319 NEO [LEAP-1A], A320 NEO [LEAP-1A], E170 STD, E195 STD |
| E | 60.12ft | CRJ-100, CRJ-200, CRJ-700, CRJ-900, ERJ 145 EP/ER/EU, Legacy 600 |

**Docking results – Bridge**

| Airplane (stop line) | Bridge | Door [min/max] | Slope [empty/full] | Operational length | Drive column [min/max] | Rotunda angle | Closure angle |
|---|---|---|---|---|---|---|---|
| 757-300 (A) | Bridge1 | L1 [12.43ft/13.16ft] | U3.1%/U2.1% | 66.24ft | 11.30ft/11.78ft | L31.5deg | R28.9deg |
| 757-300W (A) | Bridge1 | L1 [12.43ft/13.16ft] | U3.1%/U2.1% | 66.24ft | 11.30ft/11.78ft | L31.5deg | R28.9deg |
| A321 NEO [LEAP-1A] (B) | Bridge1 | L1 [11.12ft/11.48ft] | U0.8%/U0.2% | 62.31ft | 10.43ft/10.66ft | L24.0deg | R21.4deg |
| 737 MAX 8 (B) | Bridge1 | L1 [9.09ft/10.07ft] | D1.4%/D2.8% | 62.72ft | 9.13ft/9.76ft | L21.8deg | R24.2deg |
| 737 MAX 9 (B) | Bridge1 | L1 [9.15ft/10.07ft] | D1.4%/D2.7% | 62.61ft | 9.18ft/9.76ft | L21.6deg | R23.0deg |
| 737-800W (B) | Bridge1 | L1 [8.50ft/8.99ft] | D2.9%/D3.7% | 62.75ft | 8.75ft/9.07ft | L21.8deg | R24.2deg |
| 737-900W (B) | Bridge1 | L1 [8.50ft/8.99ft] | D2.9%/D3.7% | 62.67ft | 8.76ft/9.07ft | L21.6deg | R23.0deg |
| A220-100 (C) | Bridge1 | L1 [9.84ft/10.17ft] | D1.3%/D1.8% | 60.35ft | 9.65ft/9.85ft | L12.4deg | R8.8deg |
| A220-300 (C) | Bridge1 | L1 [9.84ft/10.17ft] | D1.3%/D1.8% | 60.71ft | 9.65ft/9.86ft | L12.3deg | R6.7deg |
| 737 MAX 7 (C) | Bridge1 | L1 [9.09ft/10.07ft] | D1.5%/D2.9% | 61.25ft | 9.16ft/9.78ft | L16.2deg | R18.6deg |
| 737-300W (C) | Bridge1 | L1 [8.60ft/9.09ft] | D2.9%/D3.6% | 61.32ft | 8.85ft/9.16ft | L16.1deg | R19.5deg |
| 737-500W (C) | Bridge1 | L1 [8.60ft/9.09ft] | D2.9%/D3.6% | 61.32ft | 8.85ft/9.16ft | L16.1deg | R19.5deg |
| 737-400 (C) | Bridge1 | L1 [8.60ft/9.09ft] | D2.9%/D3.6% | 61.31ft | 8.85ft/9.16ft | L16.1deg | R19.5deg |
| 737-600 (C) | Bridge1 | L1 [8.50ft/8.99ft] | D3.1%/D3.8% | 61.28ft | 8.79ft/9.10ft | L16.2deg | R18.6deg |
| 737-700W (C) | Bridge1 | L1 [8.50ft/8.99ft] | D3.1%/D3.8% | 61.28ft | 8.79ft/9.10ft | L16.2deg | R18.6deg |
| CS100 (C) | Bridge1 | L1 [9.84ft/10.17ft] | D1.3%/D1.8% | 60.35ft | 9.65ft/9.85ft | L12.4deg | R8.8deg |
| CS300 (C) | Bridge1 | L1 [9.84ft/10.17ft] | D1.3%/D1.8% | 60.71ft | 9.65ft/9.86ft | L12.3deg | R6.7deg |
| A318-100 (D) | Bridge1 | L1 [11.06ft/11.32ft] | U0.4%/U0.0% | 59.88ft | 10.40ft/10.56ft | L13.8deg | R12.2deg |
| A319 NEO [LEAP-1A] (D) | Bridge1 | L1 [11.09ft/11.38ft] | U0.5%/U0.1% | 59.83ft | 10.42ft/10.60ft | L13.7deg | R11.0deg |
| A320 NEO [LEAP-1A] (D) | Bridge1 | L1 [11.09ft/11.42ft] | U0.5%/U0.1% | 59.77ft | 10.42ft/10.62ft | L13.9deg | R12.2deg |
| E170 STD (D) | Bridge1 | L1 | D3.6%/D4.1% | 61.11ft | 8.72ft/8.90ft | L9.8deg | R4.1deg |

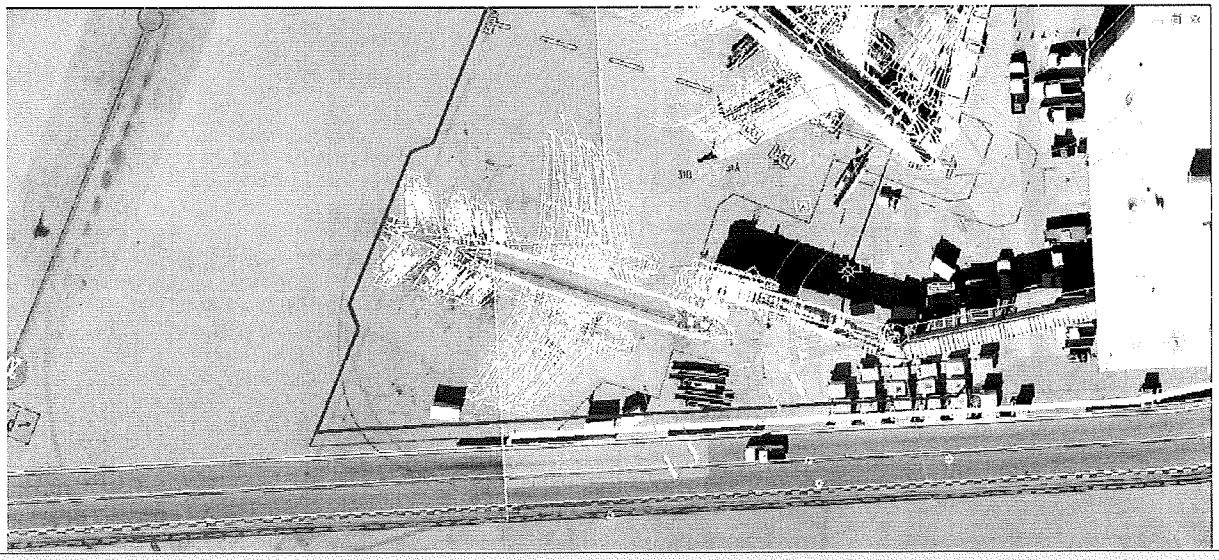
| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | [8.33ft/8.63ft] | | | | | |
| E195 STD (D) | Bridge1 | L1 [8.50ft/8.79ft] | D3.4%/D3.8% | 61.10ft | 8.82ft/9.00ft | L9.7deg | R4.1deg |
| CRJ-100 (E) | Bridge1 | L1 [4.99ft/5.68ft] | D7.3%/D8.2% | 75.15ft | 6.19ft/6.68ft | R29.6deg | L35.2deg |
| CRJ-200 (E) | Bridge1 | L1 [4.99ft/5.68ft] | D7.3%/D8.2% | 75.15ft | 6.19ft/6.68ft | R29.6deg | L35.2deg |
| CRJ-700 (E) | Bridge1 | L1 [5.51ft/5.68ft] | D7.3%/D7.5% | 75.11ft | 6.57ft/6.68ft | R29.2deg | L34.8deg |
| CRJ-900 (E) | Bridge1 | L1 [5.41ft/5.68ft] | D7.3%/D7.6% | 75.41ft | 6.49ft/6.67ft | R29.5deg | L35.1deg |
| Legacy 600 (E) | Bridge1 | R0 [0.00ft/0.00ft] | D7.8%/D8.1% | 67.51ft | 6.72ft/6.89ft | R18.3deg | L23.9deg |
| ERJ 145 EP/ER/EU (E) | Bridge1 | L1 [4.86ft/5.24ft] | D7.7%/D8.2% | 76.42ft | 6.08ft/6.35ft | R29.3deg | L34.9deg |

**Legend:**

| Short label | Full label |
|---|---|
| A | A |
| B | B |
| C | C |
| D | D |
| E | E |

# H17 prop r

Last edited on Tuesday, September 21, 2021



| Stand definition and settings | | |
|---|---|---|
| **Item** | **Value as per item description** | **Comments** |

| General | | |
|---|---|---|
| Coordinates | X=894035.56ft Y=530011.04ft Angle=-168.4deg | Drawing coordinates |
| Apron slope | Direction=0.0deg Grade=U0.0% | |

| Bridge1 | | |
|---|---|---|
| Manufacturer: | ThyssenKrupp (USA) | |
| Model: | TB Metal | Slide not attached |
| Tunnel variant: | TB 33.0/17.0-3 | |
| Closure floor: | Adjustable | |
| Operational limits | Min= 45.28ft Max= 97.77ft | |
| Working limits | Min=56.76ft Max= 109.25ft | |
| Drive column limits | Min= 6.56ft Max= 16.57ft | |
| Rotunda location | X=0.00ft Y= 0.00ft Angle= L0.0deg | Local stand coordinates |
| Rotunda elevation | Z=13.00ft / above apron= 13.00ft | Local stand coordinates |
| Park position | X=56.75ft Y= -0.00ft | Local stand coordinates |

| | | |
|---|---|---|
| Rotunda limits | Left=20.8deg Right= 87.5deg | |
| Maximum allowable slope | 8.3% | |
| Dock to | Door front , 0.33ft below door sill | |

| **H17** | | |
|---|---|---|
| Origin | X=75.42ft Y= -18.91ft Angle= 151.1deg | Local stand coordinates |
| Limits | Nose=20.96ft Tail= 160.00ft | Measured from origin |
| Misparking | Distance=1.00ft Left/Right, 1.00ft Forward/Backward<br>Angle= 2.0deg | |
| Minimum stop line distance | 3.00ft | |

**Docking results**

**H17 :**
**Stop line creation: User-defined**
**Airplane positioning: User-defined**

**Stop lines**

| Label | Distance | Aircraft |
|---|---|---|
| A | 0.00ft | MD 90-30 |
| B | 4.00ft | 717-200, 737 MAX 8, 737-800W, MD 87, MD 88 |
| C | 9.68ft | 737-300W, 757-200W, A320 NEO [LEAP-1A], A321 NEO [LEAP-1A], CS100, CS300 |
| D | 15.34ft | 737 MAX 7, 737 MAX 9, 737-400, 737-500W, 737-600, 737-700W, 737-900W |

**Docking results – Bridge**

| Airplane (stop line) | Bridge | Door [min/max] | Slope [empty/full] | Operational length | Drive column [min/max] | Rotunda angle | Closure angle |
|---|---|---|---|---|---|---|---|

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MD 90-30 (A) | Bridge1 | L1 [7.22ft/7.87ft] | D6.0%/D6.9% | 80.15ft | 8.18ft/8.68ft | R26.4deg | L83.5deg |
| 717-200 (B) | Bridge1 | L1 [7.22ft/7.87ft] | D5.7%/D6.6% | 84.09ft | 8.12ft/8.62ft | R26.5deg | L83.6deg |
| 737 MAX 8 (B) | Bridge1 | L1 [9.09ft/10.07ft] | D3.1%/D4.4% | 79.46ft | 9.62ft/10.35ft | R26.5deg | L79.7deg |
| 737-800W (B) | Bridge1 | L1 [8.50ft/8.99ft] | D4.6%/D5.2% | 79.49ft | 9.18ft/9.55ft | R26.5deg | L79.7deg |
| MD 88 (B) | Bridge1 | L1 [7.22ft/7.87ft] | D5.7%/D6.6% | 84.04ft | 8.12ft/8.62ft | R26.5deg | L83.6deg |
| MD 87 (B) | Bridge1 | L1 [7.22ft/7.87ft] | D5.7%/D6.6% | 84.32ft | 8.10ft/8.61ft | R26.5deg | L84.7deg |
| CS100 (C) | Bridge1 | L1 [9.84ft/10.17ft] | D2.7%/D3.1% | 89.17ft | 10.07ft/10.33ft | R26.9deg | L86.1deg |
| CS300 (C) | Bridge1 | L1 [9.84ft/10.17ft] | D2.7%/D3.1% | 89.27ft | 10.07ft/10.32ft | R26.7deg | L87.9deg |
| A320 NEO [LEAP-1A] (C) | Bridge1 | L1 [11.09ft/11.42ft] | D1.4%/D1.8% | 82.67ft | 11.08ft/11.33ft | R27.3deg | L84.5deg |
| A321 NEO [LEAP-1A] (C) | Bridge1 | L1 [11.12ft/11.48ft] | D1.3%/D1.7% | 82.83ft | 11.10ft/11.38ft | R27.4deg | L85.5deg |
| 737-300W (C) | Bridge1 | L1 [8.60ft/9.09ft] | D4.1%/D4.7% | 85.23ft | 9.19ft/9.57ft | R26.6deg | L78.8deg |
| 757-200W (C) | Bridge1 | L1 [12.43ft/13.16ft] | U0.9%/D0.1% | 80.18ft | 12.11ft/12.66ft | R27.0deg | L85.1deg |
| 737 MAX 7 (D) | Bridge1 | L1 [9.09ft/10.07ft] | D2.7%/D3.9% | 90.74ft | 9.51ft/10.27ft | R26.8deg | L80.0deg |
| 737 MAX 9 (D) | Bridge1 | L1 [9.15ft/10.07ft] | D2.8%/D3.8% | 90.97ft | 9.55ft/10.27ft | R26.8deg | L81.0deg |
| 737-400 (D) | Bridge1 | L1 [8.60ft/9.09ft] | D3.9%/D4.4% | 90.89ft | 9.13ft/9.51ft | R26.8deg | L78.9deg |
| 737-500W (D) | Bridge1 | L1 [8.60ft/9.09ft] | D3.9%/D4.4% | 90.87ft | 9.13ft/9.51ft | R26.8deg | L78.9deg |
| 737-600 (D) | Bridge1 | L1 [8.50ft/8.99ft] | D4.0%/D4.5% | 90.81ft | 9.05ft/9.43ft | R26.8deg | L80.0deg |
| 737-700W (D) | Bridge1 | L1 [8.50ft/8.99ft] | D4.0%/D4.5% | 90.82ft | 9.05ft/9.43ft | R26.8deg | L80.0deg |
| 737-900W (D) | Bridge1 | L1 [8.50ft/8.99ft] | D4.0%/D4.5% | 91.01ft | 9.04ft/9.42ft | R26.8deg | L81.0deg |

**Legend:**

| Short label | Full label |
|---|---|

| | |
|---|---|
| A | A |
| B | B |
| C | C |
| D | D |

EXHIBIT 3

# MDAD SHUT-DOWN REQUESTS PROCEDURE

## Requestor/Contactor Requirements:

1. The Project Manager/Contractor of a particular project shall contact the MDAD shop supervisor and/or lead worker of each discipline for a kick-off meeting regarding shutting down any equipment and/or system that may impact the airport.
2. Once the affected areas have been identified with the assistance of MDAD staff, the Project Manager/Contractor shall complete the shut-down request package (MDAD Shut-Down Request Form and MDAD Shut-Down Coordination Concurrence Form) correctly with all pertinent information.
3. All Contractors/Requestors shall follow the shut-down procedures for the appropriate project types, areas and systems that will be affected.

## Requirements for filling out the shut-down forms and procedures:

1. Complete the Shut-Down Package properly by making sure to attach all necessary documents showing the affected areas, systems, devices, permits, certification of licenses from Contractor and environmental plans (if required), etc.

## Requirements for each discipline to be attached with the Shut-Down Request Package:

1. **Electrical/Mechanical** - site plans or as-builts showing affected areas, scope of work, etc.
2. **Water/Sewer- (water)** - site plans or as-builts showing affected areas, scope of work; **(sewer)** - site plans or as-builts showing affected area, scope of work, environmental action plan (if required).
3. **Fire Sprinkler & Alarm** - site plans or as-builts showing affected areas, scope of work, copies of permits, copies of licenses, copies of Honeywell plans. (Copies of Honeywell Shutdown Notice).
4. **Security & Life Safety** - site plans or as-builts showing affected areas, scope of work, copies of permits, licenses and copies of Honeywell Security Plan, Matrix, BlackBox and Honeywell concurrence letters of walk thru involvement.
5. **For shut-downs affecting life safety-related systems** in the MIA Terminal Complex, all plans shall indicate and label the affected "nested" zones of the fire alarm, paging, fire suppression and/or smoke management systems and components, etc., as required by the MIA Terminal Complex Life Safety Master Plan (LSMP), an approved extension of the Building Code.

## To ensure that all shut-downs are approved in a timely manner:

1. Deliver the completed SHUT-DOWN REQUEST PACKAGE fully executed to the MDAD Shut-down Coordinator, where it shall be stamped "Received." Incomplete paperwork will not be processed and the requestor shall be contacted.
2. The MDAD Shut-down Coordinator shall review the request and contact the project manager/contractor in the event of any clarification is needed.
3. Via an e-mail, the MDAD Shut-Down Coordinator will confirm notifying all parties involved and/or affected by the shut-down. Unless an emergency arises, all shut-downs shall be scheduled no sooner than 14 calendar days after completed paperwork is submitted by the Contractor/Requestor to the MDAD Shut- Down Coordinator, so that there is sufficient time to coordinate with all of the requisite MDAD parties affected before scheduling any requested shutdown.
4. When the Requestor/Contractor has received approval of a scheduled shut-down of any life-safety-related systems or components, he/she shall arrange for and pay for any fire watches that may be required by the Authority Having Jurisdiction (AHJ).

# MDAD SHUT-DOWN COORDINATION CONCURRENCE FORM

Project Name: _____

Today's Date: _____ Shut-Down Date Requested: _____

Reason for Shut-Down: _____

| JURISDICTION AGENCY | REPRESENTATIVE | APPROVED | DATE | COMMENTS |
|---|---|---|---|---|
| Honeywell (305) 876-8134 | Gonzalo H. Pessolano | ☐Yes ☐No ☐ N/A | | |
| Dash Door (305) 477-1164 | Eneldo Pereira | ☐Yes ☐No ☐ N/A | | |
| Matrix (305) 869-3692 | Bernardo Prado | ☐Yes ☐No ☐ N/A | | |
| BlackBox (305) 869-5511 | Floyd Lindo | ☐Yes ☐No ☐ N/A | | |
| CCTV/Bldg. Controls (305) 869-3120 | Victor Adriazola | ☐Yes ☐No ☐ N/A | | |
| MDAD Fire Techs (305) 869-4170 | Denes Csajkas | ☐Yes ☐No ☐ N/A | | |

Note 01: *Shut-Downs affecting life safety-related systems or components requiring more than four (4) hours of shut-down shall be reviewed and approved by Aviation Life Safety Bureau (ALSB) before approval and issuance of Shut-Down e-mail notification.*
**(No Exceptions)**

| | | | | |
|---|---|---|---|---|
| FIRE/ALSB (305) 876-7904 | MDFR-ALSB | ☐Yes ☐No ☐ N/A | | |

Note 02: *Shut-Downs affecting gates shall be reviewed and approved by MDAD Airside Operations before approval and issuance of Shut-Down e-mail notification.*
**(No Exceptions)**

| | | | | |
|---|---|---|---|---|
| Airside Operations (305) 876-7838 | Dino Leonardi | ☐Yes ☐No ☐ N/A | | |

Note 03: *Shut-Downs affecting security AOA gates shall be reviewed and approved by MDAD Security before approval and issuance of Shut-Down e-mail notification.*
**(No Exceptions)**

| | | | | |
|---|---|---|---|---|
| MDAD Security (305) 876-7016 or (305) 869-1613 | Susan Feeney/Christian Fernandez | ☐Yes ☐No ☐ N/A | | |

# MDAD SHUT-DOWN REQUEST FORM

Project Name: _____ Project No.: _____

Project Manager: _____ Today's Date: _____

Project Manager Phone #: _____ Requested Date: _____

Project Manager E-mail: _____

***Note:*** *Return executed forms (Shut-Down Request and Shut-Down Coordination Concurrence) and all supporting documents including Plans, sketches, copy of permit, etc. (if applicable) to MDAD Shutdown Coordinator at MIA Building 3030, 2nd Floor, B-Wing. Submit not less than 14 calendar days before requested shut-down date.*

| | |
|---|---|
| * Location of Work/Floor: | |
| * Project Contact Person/Phone #/e-mail: | |
| A/E Name: | |
| A/E Project Manager/Phone #/e-mail: | |
| Engineering Consultant/Phone: | |
| * Prime Contractor Name: | |
| * Prime Contractor PM/Phone #/e-mail: | |
| Subcontractor Name: | |
| Subcontractor PM/Phone #/e-mail: | |
| * Systems to be shut-down: | |
| * Reason for shut-down: | |
| * List areas affected by shut-down: | |
| * Other systems affected by shut-down: | |
| Additional e-mails to be notified: | |

| | | | | | |
|---|---|---|---|---|---|
| Permit Required: ☐ Yes ☐ No | If yes, Permit #: | | Police Presence Required: ☐ Yes ☐ No | | |
| Shut-down Start Date: | | Completion Date: | | Hours Per Day: | |
| Daily Start Time (Fire Techs Open F.A. Panels): | | ☐ AM ☐ PM | Daily Stop Time (Fire Techs Close F.A. Panels): | | ☐ AM ☐ PM |

| | | | |
|---|---|---|---|
| | | | |
| MDAD Project Manager Concurrence Signature | Date | Requestor/Contractor Signature | Date |

* Information must be provided. If any field is not applicable please enter "N/A" on it.

*By signing this form, the Requestor/Contractor acknowledges that he/she has read all the Shut-Down procedures and if any exceptions exist they have been noted on this form. Attach additional sheets if required to document any exceptions.*

SHUTDOWN EMAIL CONTACTS

**HONEYWELL-** Gonzalo H. Pessolano (Honeywell) <gonzalo.pessolano@honeywell.com>;

**DASH DOOR-** ENELDO PEREIRA- epereira@dashdoor.com

**MATRIX-** BERNARD PRADO -bprado@miami-airport.com

**BLACKBOX-**FLOYD LINDO- floyd.lindo@blackbox.com

**CCTV/BLDG.CONTROLS** - Victor Adriazola (Aviation) (VAdriazola@miami-airport.com)

**MDAD FIRE TECHS-** Denes Csajkas (Aviation) (DCsajkas@miami-airport.com) & jcpereira@miami-airport.com

**FIRE/ALSB-**mdfr-alsb@miamidade.gov)

**AIRSIDE OPERATIONS-** Dino Leonardi (Aviation) (DLeonardi@miami-airport.com);

**MDAD SECURITY-** Susan Feeney (Aviation) (SFEENEY@miami-airport.com);

# EXHIBIT 4

MIAMI-DADE AVIATION DEPARTMENT Attachment D

**CONTROL No.**_____

## HOT WORK PERMIT

A Hot Work Permit is required for any operation that involves open flames or produces heat and/or sparks.
This includes, but is not limited to, Brazing, Cutting, Grinding, Flame-Soldering, Pipe Thawing, Torch-Applied Roofing, and Welding.

PROJECT NAME: _____ PROJECT No: _____

MDAD WORK ORDER No: _____ CONTRACTOR JOB No: _____ DATE WORK TO BE DONE: _____

PERFORMING CONTRACTOR: _____ ☐ GC ☐ SUB PHONE No: _____

WORK TO BE DONE BY: EMPLOYEE: _____ SUPERVISOR: _____ FIRE WATCH: _____

HOT WORK is to be performed at one location per permit.

FACILITY, BUILDING, and FLOOR _____

NATURE OF JOB: _____

SPECIAL PRECAUTIONS: _____

### REQUIRED PRECAUTIONS CHECKLIST

**General Contractor or designee to verify that each precaution has been taken or to indicate that it is Not Applicable (NA).**

- ☐ Available sprinklers, hose streams, and extinguishers are in service/operable.
- ☐ Hot Work equipment is in good repair.
- ☐ Entrances to work area have been posted with NO SMOKING signs.
- ☐ No welding or open flames within 100 feet of aircraft or a flammable spill.
- ☐ Work area enclosed to contain sparks and prevent vision flash burn.
- ☐ Ventilation is adequate to remove smoke/vapor from work area.

**Requirements within fifty feet (fifteen meters) of work:**

- ☐ Flammable liquids, dust, lint, and oily deposits have been removed.
- ☐ Explosive atmosphere in area has been eliminated.
- ☐ Floors have been cleaned of debris.
- ☐ Combustible floors have been wet down, covered with damp sand, or covered with fire-resistive sheets.
- ☐ Other combustibles have been removed, where possible, or protected with fire-resistive tarpaulins or metal shields.
- ☐ All wall and floor openings have been covered.
- ☐ Fire-resistive tarpaulins have been spread beneath work to collect sparks.

**For work on walls or ceilings:**

- ☐ Construction is noncombustible and without combustible covering or insulation.
- ☐ Combustible materials or items on other side of walls have been moved away.
- ☐ When welding, cutting, or heating is performed on walls, floors, or ceiling, since direct penetration of sparks or heat transfer may introduce a fire hazard to an adjacent area, the same precautions shall be taken on the opposite side as are taken on the side on which the work is being performed.

**For work on enclosed equipment (tanks, ducts, etc.):**

- ☐ Enclosed equipment has been cleaned of all combustibles.
- ☐ Containers have been purged of flammable liquids/vapors.

**Fire Watch / Hot Work area monitoring:**

- ☐ Fire Watch will be provided during and for thirty minutes after work, including any coffee or meal breaks.
- ☐ Fire Watch is supplied with suitable extinguishers/a charged small hose.
- ☐ Fire Watch is trained in use of this equipment and in sounding alarm.

I VERIFY that the above named location has been examined, that the precautions checked on the Required Precautions Checklist have been taken to prevent fire, and I request authorization to perform this work.

SIGNED _____

Printed Name _____ Date _____

General Contractor Firm _____ Phone Number _____

**AUTHORIZATION:**

SIGNED _____

Printed Name _____ Date _____

A/E Consultant/CIS Firm Name _____ Phone Number _____

**WORK PERFORMED:**

**START:** _____ **END:** _____

**PERMIT EXPIRES (Good for one day only):**

**DATE:** _____ **TIME:** _____

**FINAL CHECK:**

The work area and all adjacent areas to which sparks and heat might be spread were inspected during the fire watch period and for at least thirty minutes after the work was completed and no fie conditions were found.

SIGNED _____

Fire Watch _____ Date _____

Printed Name: _____

**NOTIFICATION:**

- **Post a copy of approved Permit at the Hot Work site.**
- **Fax a copy of approved permit to:**
  1. **Airside Ops (General Aviation Center) at (305) 869-5858.**
  2. **Risk Management at (305) 876-7162.**
  3. **Life Safety Bureau at (305) 869-1589.**
  4. **Maintenance at (305) 869-1633.**
     **On weekends and after hours use (305) 876-0193.**
- **A/E Field Rep to log and file copy signed by Fire Watch.**

**IN CASE OF FIRE - - - CALL (305) 876-7070**