## ADDENDUM NO. 37 TO THE AGREEMENT DATED SEPTEMBER 15, 2015 BETWEEN GREATER ORLANDO AVIATION AUTHORITY AND BURNS ENGINEERING, INC.

Project: Review of Future Capacity of EV Charging Infrastructure Construction Phase Services for BP-S196 Terminal C Phase 1 Expansion (P1X) – Airfield Civil, Apron and Taxiway Paving, Orlando International Airport

**THIS ADDENDUM** is effective this 1<sup>st</sup> day of October, 2024, by and between the **GREATER ORLANDO AVIATION AUTHORITY** ("Aviation Authority"), and **BURNS ENGINEERING, INC.** ("Consultant').

## WITNESSETH:

WHEREAS, by Agreement dated September 15, 2015, Aviation Authority and Consultant entered into an agreement for Consultant to provide Technology and Multi-Media System Specialty Engineer for the South Terminal C, Phase 1 Consulting Services; and

**WHEREAS**, under the Agreement, Consultant agreed to perform such additional services for the Aviation Authority as are contained in any additional scope of work established by the Aviation Authority in any addendum to the Agreement and accepted in writing by the Consultant; and

**WHEREAS**, the Aviation Authority and the Consultant desire to enter into this Addendum to the Agreement to provide for additional services to be rendered by the Consultant under the terms of said Agreement.

**NOW, THEREFORE**, in consideration of the premises and the mutual covenants herein contained, the Aviation Authority and the Consultant do hereby agree as follows:

1. Consultant shall perform additional services in accordance with the terms of the Agreement and the attached Exhibit "A." Consultant shall be paid for such additional services according to the payment terms set forth in the Agreement.

2. Consultant shall be compensated for such additional services in the **NOT TO EXCEED amount of SIXTY-FOUR THOUSAND SEVEN HUNDRED TWELVE AND NO/100 DOLLARS (\$64,712.00)**, broken down as follows:

Professional Fees:	NTE:	\$64,712.00
Professional Fees:	LS:	\$0.00
Reimbursable Expenses:	NTE:	<u>\$0.00</u>

Total:

\$64,712.00

3. A. Consultant hereby certifies that it is not on the Scrutinized Companies that Boycott Israel List and is not engaged in a boycott of Israel, as defined in Florida Statutes § 287.135, as amended;

## AND

B. (applicable to agreements that may be \$1,000,000 or more) - Consultant hereby certifies that it is: (1) not on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List as defined in Florida Statutes § 287.135; and (2) not engaged in business operations in Cuba or Syria, as defined in Florida Statutes § 287.135, as amended.

4. Authority may terminate the Agreement for cause and without the opportunity to cure if the Consultant is found to have submitted a false certification or has been placed on the Scrutinized Companies that Boycott Israel List or is engaged in a boycott of Israel.

In the event the Agreement is for One Million Dollars (\$1,000,000.00) or more, Authority may terminate this Agreement for cause and without the opportunity to cure if the Consultant is found to have submitted a false certification or has been placed on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List or is engaged in business operations in Cuba or Syria.

5. Except as expressly modified in this Addendum, the Agreement dated September 15, 2015 and all prior addenda will remain in full force and effect.

**IN WITNESS WHEREOF**, the parties hereto by their duly authorized representatives, have executed this Addendum this day of <u>Oct 7, 2024</u>.

	GREA		NDU AVIATION AUTHURIT
	By:		Magan AMagan
Approved as to Form and Legality (for the benefit of GOAA only) this day of <u>Oct 7, 2024</u> <i>Claramargaret Groover</i> By: box sign 4ZR2R2V8-463JZK2Y Becker & Poliakoff, Legal Counsel Greater Orlando Aviation Authority	By:	S ENGINEE Brid	esident, Capital Programs ERING, INC.
	Ву:	Signature ( Brian F Printed Na Sr Vice Title	AQ8ZK6JX-463JZK2Y Duly Authorized Rep.) Phillips me e President

## **GREATER ORLANDO AVIATION AUTHORITY**

Published By: Drew Erickson Reviewed By:



#### MEMORANDUM

- TO: Members of the Construction Committee
- FROM: Scott Shedek, Vice President of Construction
- DATE: October 1, 2024

#### **ITEM DESCRIPTION**

Request for Approval of Addendum to the Technology and Multi-Media Systems Specialty Engineer for South Terminal C, Phase 1, Agreement with Burns Engineering, Inc. for review of future capacity of EV Charging Infrastructure Construction Phase Services for BP-S00196, Terminal C, Phase 1 Expansion (P1X) – Airfield Civil, Apron and Taxiway Paving, and Ground Support Equipment Facility at Orlando International Airport

#### BACKGROUND

On August 19, 2015, the Aviation Authority approved an agreement for W-S00113 with Burns Engineering, Inc. for Technology and Multi-Media Systems Specialty Engineer for the South Terminal C, Phase I Services to the Aviation Authority at the Orlando International Airport, Orlando Executive Airport and other Facilities.

#### ISSUES

Consultant's proposal, dated September 23, 2024, is to provide an assessment of how to provide sufficient conduit pathway underneath this surface to accommodate future eGSE charging operations and to generate a basis of design for the conduit sizing and layout at the current GSE facility.

If approved, services will be effective the date of Construction Committee approval.

#### **SMALL BUSINESS**

The MWBE/LDB participation has been reviewed by the Office of Small Business Development. Their findings and recommendation are attached.

#### **ALTERNATIVES**

None.

#### **FISCAL IMPACT**

Funding is from Capital Expenditure funded from W-S00113 Technology and Multi-Media Systems Specialty Engineer. Funding source verified by <u>Melvin Martinez</u> of Construction Finance on <u>09/25/24</u> as correct and available.

EXHIBIT A

CC ITEM IV-C 10/01/2024

#### **RECOMMENDED ACTION**

It is respectfully requested that the Construction Committee approve an Addendum to the Technology and Multi-Media Systems Specialty Engineer for South Terminal C, Phase 1, Agreement with Burns Engineering, Inc. for the services contained herein and the amount as shown below:

Not to Exceed Fees	\$64,712.00
Lump Sum Fees	\$0.00
Not to Exceed Expenses	\$0.00
TOTAL	\$64,712.00
AAC – Compliance Review Date	SJ 09/23/24
AAC - Funding Eligibility Review Date	09/24/24

SUBJECT TO CFOC

#### MEMORANDUM

- TO: Members of the Construction Committee
- FROM: Edelis Molina, Manager Small Business Programs
- DATE: October 01, 2024

#### **ITEM DESCRIPTION**

Request for Approval of an Addendum to the Technology and Multi-Media Systems Specialty Engineers for South Terminal C, Phase 1, Agreement with Burns Engineering, Inc. for review of future capacity of EV Charging Infraestructure Construction Phase Services for BP-S00196, Terminal C, Phase 1 Expansion (P1X) - Airfield Civil, Apron and Taxiway Paving, and Ground Support Equipment Facility at Orlando International Airport

#### SMALL BUSINESS

We have reviewed the qualifications of the subject contract's MWBE/LDB/VBE specifications and determined that Burns Engineering, Inc. does not propose small business participation on this addendum due to limited and specialized scope of the services to be provided.



September 23, 2024

Max Marble, PE, CM, LEED AP Senior Vice President, Capitol Programs Greater Orlando Aviation Authority

## Re: Professional Fee Proposal for:

Technology and Multi-Media Specialty Systems Engineer for the South Terminal C, Phase 1 (WS-113), Orlando International Airport:

• EV Charging Infrastructure Assessment

Dear Max,

The GSE facility construction contract in the South began in March of 2024. In mid-June of 2024, Authority Construction requested information regarding the electrical design of the GSE and if there was capacity for potential EV charging of electronic GSE (eGSE). Our understanding is that this question was initially raised by the Authority Planning and Development.

The PMO recently requested Burns Engineering to provide a fee proposal to assess the feasibility of adding infrastructure for future eGSE charging at or near the GSE facility. The following addresses that request and provides background information on eGSE operations in general, what considerations need to be discussed, and the parameters that will need to be identified to effectively prescribe infrastructure for future use.

The fee proposal is based on Level 1 Scope of Work based on direction from the PMO. Levels 2 and 3 could be implemented subsequent to this initial effort should the Authority desire to proceed with the project.

## Summary

Electrification of ground support equipment requires EV charging infrastructure. The layout and configuration of the charging infrastructure requires an understanding of not only the site, but also the ground support equipment fleet mix, the refueling demand, the number and type of charging stations, turnover time (how long it should take to complete a charge), as well as energy (utility) capacity, sourcing methods, and generation.

Our current understanding of Authority Planning and Development's goal is to accommodate for growing demand of eGSE by providing conduit pathway infrastructure now for future eGSE charging needs. Typically, an airline tenant will install the charging equipment and they would develop a package that describes the equipment, installation, location, and specs on charging stations, breaker sizes, frequency of charging, etc. The Authority would review the tenant's design package and provide feedback on where to connect to, what panels to source from, and what metering to install to track the energy usage for compensation charged per kWh, billed through Authority Finance.





This infrastructure would usually be installed in the ramp area; however, likely due to common use, Authority Operations has indicated that the preference is to do the bulk of the charging at GSE facility lots. Please refer to the site map shown below.



FIG. 1 SITE MAP

The yellow area represents an example of a paved parking surface for GSE. The current request would involve assessing how to provide sufficient conduit pathway underneath this surface to accommodate future eGSE charging operations. It is anticipated that the initial layout shown in figure 1 may be revised as more information regarding demand and use by each airline is gathered.

## Scope of Work and Project Approach

For this request, we have broken the scope of work up into three distinct levels of service. We have done this to accommodate the Authority with respect to timing and budget, to provide options for moving forward with this first step towards electrification. The three distinct levels of service are

- Level 1 Basic Assessment
- Level 2 Full Assessment (Follow-up Project)
- Level 3 Complete Design (Follow-up Project)

Each level is described in more detail below.



#### Level 1 - Basic Assessment

This level of service is the minimal amount needed to identify the probable requirements for conduit infrastructure to service future airline tenant eGSE charging needs. It was formulated with budget and schedule as a top priority. Burns will use commercially available charging system data, along with our knowledge of eGSE operations from other similar airports, to generate a basis of design for the conduit sizing and layout at the current GSE facility. This approach will not collect all the relevant local stakeholder data that a full eGSE assessment would normally consider. Therefore, there is some risk in this approach relevant to the resulting layout and assumptions that will have to be made in order to complete the task at this level.

## Level 2 - Full Assessment (Follow-up Project)

The full assessment does account for the time and budget for Burns to meet with all local relevant stakeholders. This process takes more time but is necessary to accurately plan and predict what future eGSE operations will require. This approach is an iterative process where Burns collects information and requirements from Authority Planning and Development, Operations, Airline Tenants, and Orlando Utilities Commission (OUC). This collected information is then presented to Authority Capitol, Engineering and Construction for review, and a plan is drafted that takes all variables into consideration necessary for this endeavor. This includes but is not limited to current GSE operational characteristics, refueling demand, future Airline Tenant eGSE forecasts and requirements, modeling of future demand, and Airline Tenant charging space delineations within the GSE parking surface.

## Level 3 – Complete Design (Follow-up Project)

This level of service includes all of the above items and produces a design ready for construction, including a complete drawing package, specifications, and all coordination required to facilitate the implementation of the infrastructure required for future eGSE operations.

Please refer to the Level of Service Matrix on the next page for a comprehensive list of items included at each level.

# **Burns**

Existing Conditions and Document Review	Level 1	Level 2	Level 3
Identify Utility Connection Point	$\checkmark$	$\checkmark$	$\checkmark$
Locate Utility Transformer	$\checkmark$	$\checkmark$	$\checkmark$
Identify service size <sup>1</sup>	$\checkmark$	$\checkmark$	$\checkmark$
Identify commercially available charging stations	$\checkmark$	$\checkmark$	$\checkmark$
Estimate demand based on commercially available eGSE equipment	$\checkmark$		
Capture Existing Utility Capacity and Demand		$\checkmark$	$\checkmark$
Determine Existing GSE Vehicle Fleet Mix, Refueling Rates, Operational Characteristics		$\checkmark$	$\checkmark$
Determine Potential Future eGSE vehicle Fleet Mix and Charger Types		$\checkmark$	$\checkmark$
Develop Demand Estimate for Charging Infrastructure based on potential eGSE Fleet Mix		$\checkmark$	$\checkmark$
Stakeholder Process	Level 1	Level 2	Level 3
Meet with Authority Capitol Programs to review charging station basis of designs <sup>2</sup>	$\checkmark$	$\checkmark$	$\checkmark$
Meet with Authority Planning and Development to review system layout, discuss delineation of airline tenant charging space, energy use compensation		√	$\checkmark$
Meet with Authority Operations to review operational characteristics, refueling/recharging demand, charging time requirements		$\checkmark$	$\checkmark$
Meet with Airlines operating at MCO to gather existing fleet mix, and obtain potential eGSE fleet mix		√	$\checkmark$
Meet with Orlando Utilities Commission (OUC) to obtain existing demand characteristics and specify new transformer and service size.		√	$\checkmark$
Electrification Analysis and Recommendations Report	Level 1	Level 2	Level 3
Schematic level line diagram of potential feeder, distribution and branch circuits serving future charging station loads and conduit sizing.	√	√	$\checkmark$
Charging System Matrix containing commercially available charging system types and their specifications	√		
Charging System Matrix based on Airline Tenant potential eGSE forecasts		$\checkmark$	$\checkmark$
Impacts of future Charging Facilities to Utility		$\checkmark$	$\checkmark$
Onsite Generation Options		$\checkmark$	$\checkmark$
Potential eGSE fleet characteristics including performance, range, size demand and operational characteristics		$\checkmark$	$\checkmark$
Deliverables	Level 1	Level 2	Level 3
Initial Findings Report	$\checkmark$	$\checkmark$	$\checkmark$
Stakeholder Engagement Results		$\checkmark$	$\checkmark$
Analysis and Recommendations Draft Report	$\checkmark$	$\checkmark$	$\checkmark$
Final Analysis and Recommendations Report	$\checkmark$	$\checkmark$	$\checkmark$
30% Level Schematic Design		$\checkmark$	$\checkmark$

# **Burns**

Overall Site Plan	$\checkmark$	$\checkmark$
Charging System Electrical Line Diagram	$\checkmark$	$\checkmark$
60% Level Design Progression		$\checkmark$
Cover Sheet		$\checkmark$
Area Plans		$\checkmark$
System Riser		$\checkmark$
Utility Duct Bank Alignments		$\checkmark$
Specification Outline		$\checkmark$
95% Level Complete Design Ready for Permit Process		$\checkmark$
Refined Drawing Package including all of the above		$\checkmark$
Details		$\checkmark$
Full Specifications		$\checkmark$
100% Design Issued for Construction Documents		$\checkmark$
Notes:		
<sup>1</sup> Service size to be calculated with information gathered based on the level of service.		
<sup>2</sup> For level 1 service, Burns will rely on Authority Capitol, Engineering and Construction, to verify assumptions related to charging equipment, operational characteristics, Airline Tenant Charging Space delineations, etc.		

The Burns Engineering Level 1 assessment will produce a report that captures the requirements required to provide eGSE charging infrastructure that meets the future needs of the Authority and its tenants. This report will bring the design of the infrastructure to a schematic level, prescribing the required service size, making recommendations on conduit sizing, grouping, routing and end points. This will either be based on the commercially available charging systems in a configuration agreed on by the Authority (Level 1 Service).

## Assumptions and Clarifications

GSE facility only: Authority representatives from the Capital Programs will be available for meetings and follow-up questions when required.

## Exclusions

Arc Flash and Short Circuit Current Rating study not included. This is because our understanding of the current request is to include conduit infrastructure only. If that understanding changes, we can revisit this scope of work and level of service to include that pricing.



#### **Professional Fees**

After review of the above scope and levels of service, Jacobs – South Terminal C PMO, requested a fee proposal for the Level 1 service. The fee for the engineering services associated with the scope of work as defined above is hourly not-to-exceed and included in the attached C-Tables and as defined below:

Total Level 1 Fee: \$64,712.00

## Schedule

The following schedule is a rough estimate for the Level 1 scope of service, on a days-elapsed from NTP basis.

Level 1: 60 days

We hope this proposal meets with your approval, and I am available to discuss with you or your staff any aspect of the information contained herein. Burns is committed to serving GOAA with our fullest capabilities. Please do not hesitate to contact me at 314-835-7149 if you need anything further.

Regards, Burns Engineering, Inc.

Day S Spr

Gregory Spence, PE Project Manager, Aviation 2016-093

# EXHIBIT A - CONSULTANT'S COMPENSATION PROPOSAL TABLE C-1 SUMMARY OF TOTAL CONTRACT VALUE EV Charging Infrastructure Assessment

Phase of Project:	Preliminary Design	SUBTOTAL	TOTAL CONTRACT
1.0 Hourly NTE Fee:	\$64,712.00	\$64,712.00	\$64,712.00
4.0 TOTAL CONTRACT VALUE:	\$64,712.00	\$64,712.00	\$64,712.00

Total Hourly NTE Labor Hours:	406.00	406.00	406.00
TOTAL LABOR HOURS:	406.00	406.00	406.00
Average Hourly Rate:	\$159.39	\$159.39	\$159.39

## EXHIBIT A - CONSULTANT'S COMPENSATION PROPOSAL TABLE C-4 SUMMARY OF HOURLY NTE FEES

Phase of Project:	Prelim	inary Design			
	labor hours Total Fee I		labor hours	Cost	Avg. Rate
Burns Engineering, Inc.					
Hourly NTE Fee Subtotal	406	\$64,712	406	\$64,712.00	\$159
Total Hourly NTE Amount:	406	\$64,712	406	\$64,712.00	\$159

#### EXHIBIT A - CONSULTANT'S COMPENSATION PROPOSAL TABLE C-5 BREAKDOWN OF HOURLY NOT TO EXCEED FEES

Position:		Sr. F Ma	Project nager	Sr. E	ngineer	Sr. E	Engineer	F Engine	Project eer/Designer	Engineer		TOTAL		
Rate (\$/Hour):	Building	\$2	32.00	\$1	72.00	\$1	172.00	\$	140.00	\$11	6.00	labar		Avg. Hourly
Burns Engineering, Inc.		hours	Cost	hours	Cost	hours	Cost	hours	Cost	hours	Cost	hours	Cost	Rate
Preliminary Design														
Identify Utility Connection Point	GSE	0	\$0	4	\$688	0	\$0	0	\$0	4	\$464	8	\$1,152	\$144
Locate Utility Transformer	GSE	0	\$0	4	\$688	0	\$0	0	\$0	4	\$464	8	\$1,152	\$144
Identify Service Size	GSE	0	\$0	8	\$1,376	4	\$688	0	\$0	4	\$464	16	\$2,528	\$158
Identify Commercially Available Charging Stations	GSE	0	\$0	4	\$688	8	\$1,376	24	\$3,360	0	\$0	36	\$5,424	\$151
Estimate Demand Based on Commercially Available eGSE Equipment	GSE	4	\$928	20	\$3,440	12	\$2,064	0	\$0	0	\$0	36	\$6,432	\$179
Meet with Authority Capital Programs to Review Charging Station BoD	GSE	4	\$928	12	\$2,064	12	\$2,064	12	\$1,680	0	\$0	40	\$6,736	\$168
Schematic Level Line Diagram of Potential Feeder, Distribution, and Circuits	GSE	8	\$1,856	24	\$4,128	24	\$4,128	32	\$4,480	16	\$1,856	104	\$16,448	\$158
Charging Station Matrix - Commercially Available Charging Systems Types	GSE	0	\$0	4	\$688	8	\$1,376	16	\$2,240	0	\$0	28	\$4,304	\$154
Initial Findings Report	GSE	4	\$928	12	\$2,064	16	\$2,752	24	\$3,360	8	\$928	64	\$10,032	\$157
Analysis and Recommendations Draft Report	GSE	0	\$0	12	\$2,064	8	\$1,376	8	\$1,120	4	\$464	32	\$5,024	\$157
Final Analysis and Recommendations Report	GSE	4	\$928	6	\$1,032	8	\$1,376	12	\$1,680	4	\$464	34	\$5,480	\$161
Sub-Total Preliminary Design	n	24	\$5,568	110	\$18,920	100	\$17,200	128	\$17,920	44	\$5,104	406	\$64,712	\$159
Schematic Design (30%)														
Sub-Total Schematic Design (30%	-)	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	
Design Development (60%)														
Sub-Total Design Development (60%	)	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	
Construction Documents (95% / 100%)														
Bidding and Award														
Sub-Total Bidding and Award	d	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	
Construction Administration														
Sub-Total Construction Administration	n	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	
Closeout														
Sub-Total Closeou	t	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	
TOTAL HOURLY NTE FEE:		24	\$5,568	110	\$18,920	100	\$17,200	128	\$17,920	44	\$5,104	406	\$64,712	\$159

# EXHIBIT A - CONSULTANT'S COMPENSATION PROPOSAL TABLE C-7a, C-7b and C-7c PARTICIPATION SCHEDULES

## TABLE C-7a DBE PARTICIPATION SCHEDULE

NAME OF SUBCONSULTANT	ADDRESS	PROPOSED SCOPE OF SERVICES	FEE	PROPOSED
				PARTICIPATION
				0
				0
TOTAL PROPOSED PARTICIPATION			\$0.00	0

## **TABLE C-7b MWBE PARTICIPATION SCHEDULE**

NAME OF SUBCONSULTANT	ADDRESS	MWBE	PROPOSED SCOPE OF SERVICES	FEE	PROPOSED
		CLASSIFICATION			PARTICIPATION
TOTAL PROPOSED PARTICIPATION				\$0.00	0%

## TABLE C-7c LDB PARTICIPATION SCHEDULE

NAME OF FIRM	ADDRESS	PROPOSED SCOPE OF SERVICES	FEE	PROPOSED
				PARTICIPATION
TOTAL PROPOSED PARTICIPATION			\$0.00	0%

# EXHIBIT A - CONSULTANT'S COMPENSATION PROPOSAL TABLE C-9 CONTRACT HOURLY RATES

All amounts invoiced by the Consultant as Reimbursable Fees shall be calculated on the basis of the actual number of hours of services rendered under this Agreement by each of the positions defined and by the new positions as identified below, multiplied by the corresponding Contract Hourly Rate, up to the Not to Exceed limit defined by the Agreement. Include information on positions held by both the design consultant and each subconsultant.

FIRM	POSITION	CONTRACT HOURLY RATE
Burns Engineering, Inc.	Sr. Project Manager	\$232.00
Burns Engineering, Inc.	Sr. Engineer	\$172.00
Burns Engineering, Inc.	Project Engineer/Designer	\$140.00
Burns Engineering, Inc.	Engineer	\$116.00

#### TRUTH IN NEGOTIATION CERTIFICATION

The Consultant hereby certifies, covenants, and warrants that wage rates and other factual unit costs supporting the compensation for this project's agreement are accurate, complete, and current at the time of contracting.

The Consultant further agrees that the original agreement price and any additions thereto shall be adjusted to exclude any significant sums by which the Greater Orlando Aviation Authority determines the agreement price was increased due to inaccurate, incomplete, or noncurrent wage rates and other factual unit costs. All such agreement adjustments shall be made within one (1) year following the end of the contract. For purposes of this certificate, the end of the agreement shall be deemed to be the date of final billing or acceptance of the work by the Greater Orlando Aviation Authority, whichever is later.

Consultant: Burns Engineering, Inc.

By: *By* 5 Spr Print Name: Gregory S. Spence Date: August 21, 2024