SUPPLEMENTAL AGREEMENT NO. 5

TO CONTRACT FOR PROFESSIONAL SERVICES DATED FEBRUARY 4, 2020 BETWEEN THE CITY OF FOLEY AND VOLKERT, INC.

•	THIS SUP	PLEME	ENTAL	AGRE	EMENT,	made and	entered	d into thi	s the	21st	day
of Mar	ch		, 20)2 <u>2</u> ,	by and be	etween the	City of F	Foley, Ala	abam	a, 407 l	East
Laurel	Avenue, F	oley, Al	abama	36535	5 (hereina	after called	the OW	/NER), a	and V	olkert,	Inc.,
1110 N	Montlimar	Drive,	Suite	1050,	Mobile,	Alabama	36609	(herein	after	called	the
CONS	ULTANT);							•			

WITNESSETH, THAT:

WHEREAS, the Owner and the Consultant entered into an Agreement on the 4th day of February, 2020 (Original Contract) whereby the Consultant is to provide all necessary professional services associated with improvements to the Foley Municipal Airport, Foley, Alabama all as more specifically set forth in said Agreement, and

WHEREAS, the Owner now desires to proceed with professional services to accomplish the following Airport improvement project:

Master Plan / ALP Update

WHEREAS, the Consultant is agreeable to completing the required work for fees that are acceptable to the Owner and in accordance with the latest requirements of the FAA and State of Alabama for State funding of projects, and

NOW THEREFORE, it is hereby agreed between the parties hereto that the Original Contract be supplemented as follows:

SECTION I. BASIC SERVICES

The Engineer shall furnish and perform basic services as appropriate and as described in the General Provisions in the Original Contract and made a part hereof for the following described project:

This project will provide for updating the Airport Master Plan / Airport Layout Plan (ALP) for Foley Municipal Airport as described by FAA and in accordance with AC 150/5070-6B. The last Master Plan / ALP update was completed in January 2013. The proposed update will incorporate recent modifications to the airfield and update the forecast and growth needs for the next planning cycle.

The scope of basic services will include a design phase.

SECTION II. SPECIAL SERVICES

The scope of special services will include a ground control survey and an aerial survey. AGIS survey or submission of survey data into the FAA AGIS online database is not included in this contract.

Ground Control Survey:

Provide a ground control survey by a subconsultant at the rates established in the attached Attachment "A", and hourly rates for Engineer's services as specified below in Section III, Method of Payment.

Aerial Survey:

Provide an aerial survey by a subconsultant at the rates established in the attached Attachment "A", and hourly rates for Engineer's services as specified below in Section III, Method of Payment.

SECTION III. METHOD OF PAYMENT

The Consultant agrees to provide all services included in Section I, Basic Services, of this Supplemental Agreement at the lump sum amount of <u>Thirty Nine Thousand Three Hundred Fifty Six Dollars and Eighty Three Cents</u> (\$39,356.83) as summarized in Attachment "A".

For all work associated with Special Services included in Section II, the Engineer will be compensated a fee consisting of direct salary as defined herein, plus Current ALDOT audited rate for overhead, plus profit at ten percent (10%), plus out-of-pocket expenses, at the not to exceed amount of <u>Forty Thousand Fifty Nine Dollars and Sixty Cents</u> (\$40,059.60) as summarized in Attachment "A".

Direct salary is actual salary paid to each employee.

In addition to compensation computed above, reimbursement of actual cost shall be made for travel, subsistence, telephone, printing costs and other general out-of-pocket expenses required specifically for the contract.

The Owner will pay the Engineer for special services performed by subconsultants at the actual invoice amount. Consultant's time for assisting and coordinating the subconsultants' services will be billed as special services. All work encompassed herein shall be accomplished in accordance with the requirements of the aforesaid Original Contract, and all requirements of said Agreement except as specifically modified by this Supplemental Agreement, shall remain in full force and effect.

IN WITNESS WHEREOF, the parties hereto have executed this Supplemental Agreement on the day and year first above written.

CITY OF FOLEY

Attest: __ Name: Title:		 Name: Title:	Ralph G. Hellmich Mayor, City of Foley	
iiue.		_	·	
		Federal Emp	loyer ID # (Corporation): 63-6001263	
		Social Secur	ity # (Individual):	
		VOLKE	RT, INC.	
Attest:	Soular Strinfeller		D-7A_	
Name:	√ordan Stringfellow, P.E.	Name:	Drew Davis, P.E.	
Title:	Project Manager	Title:	Vice President	

ATTACHMENT A

ENGINEERING FEE PROPOSAL

FOR

MASTER PLAN / ALP UPDATE

FOR



ΑT

FOLEY MUNICIPAL AIRPORT FOLEY, ALABAMA

PREPARED BY:



1110 Montlimar Drive, Suite 1050 Mobile, Alabama 36609

Volkert Project No: 1059405

Submission Date: March 13, 2022

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DESCRIPTION	SHEET NUMBER
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Sub-Consultant Proposals	TTACHMENT B

PROJECT DESCRIPTION: Master Plan / ALP Update

PROJECT INTRODUCTION & SCOPE

This project will provide for updating the Airport Master Plan / Airport Layout Plan (ALP) for Foley Municipal Airport as described by FAA and in accordance with AC 150/5070-6B. The last Master Plan / ALP update was completed in January 2013. The proposed update will incorporate recent modifications to the airfield and update the forecast and growth needs for the next planning cycle.

The engineering services will include production of plans and technical specifications to be used for bid procurement and construction. Bid procurement and engineering construction services for this project will be included under a separate task order when funding is obtained.

BASIC SERVICES (Lump Sum)

Basic Services will include a Design Phase. An itemized list of services is anticipated:

- Design Phase
 - o ALP Development
 - Scope Development & Airport Planning
 - o Master Plan / ALP Update
 - Review of Surface Obstructions
 - Review Existing & Forecasted Traffic Counts
 - Determine Existing & Ultimate Critical Aircraft and Runway Classifications

- Develop Narrative Report
- Generate ALP Title Sheet
- Generate Airport Data Sheet
- Generate ALP Drawing
- Generate Airport Airspace Drawing
- Generate Inner Approach Surface Drawings
- Generate Runway Plan & Profile Drawing
- Generate Runway Departure Surface Drawing
- Generate Terminal Area Drawing
- Generate Airport Property Map / Exhibit A Drawing
- Submittal Reviews and Coordination
 - Review Meeting with Sponsor
 - Coordination with FAA & ALDOT for Review
 - Prepare Submittals (Review & Final)
- Quality Assurance / Quality Control

SPECIAL SERVICES (Cost Plus with Not to Exceed)

Special Services will include a Ground Control Survey and an Aerial Survey. An itemized list of services is anticipated:

- Ground Control Survey (provided by Bumpers Land Surveying, LLC)
 - o Perform Ground Control Survey in accordance with attached subconsultant proposal.

- Set required control points for Aerial Survey.
- o Collect required pictures of each control point.
- o Ground Control Survey shall be performed prior to Aerial Survey.
- Aerial Survey (provided by Quantum Spatial, Inc.)
 - o Perform Aerial Survey in accordance with attached subconsultant proposal.
 - o Identify and map obstructions to Airspace Surfaces (Approach, TSS, Part 77).
 - o Provide 2-foot contours.
 - o Provide 6-inch digital orthophotos.

SUMMARY OF ENGINEERING FEE PROPOSAL	
BASIC / PROFRESSIONAL SERVICES	
SERVICE DESCRIPTION	TOTAL COST
TOTAL DESIGN PHASE	\$39,356.83
TOTAL BASIC SERVICES COST	\$39,356.83
SPECIAL SERVICES	
SPECIAL SERVICES SERVICE DESCRIPTION	TOTAL COST
SERVICE DESCRIPTION	TOTAL COST \$4,053.00 \$36,006.60
SERVICE DESCRIPTION TOTAL GROUND CONTROL SURVEY COST	\$4,053.00 \$36,006.60
SERVICE DESCRIPTION TOTAL GROUND CONTROL SURVEY COST TOTAL AERIAL SURVEY COST	\$4,053.00

Task No.	MAN-HOUR DESIGN ESTIMATE					
1	DESIGN PHASE	Project Manager	Staff 2 Prof	Staff 1 Prof	Tech	Admin
1.A	ALP Development					
1.A1	Scope Development & Airport Planning	4	8			
1.B	Masterplan / ALP Update					
1.B1	Review of Surface Obstructions	1	2	4		
1.B2	Review Existing & Forecasted Traffic Counts	2	4			
1.B3	Determine Existing & Ultimate Critical Aircraft and Ruwnay Classifications	1	4			
1.B4	Narrative Report	2	8	16		8
1.B5	Generate ALP Drawing Title Sheet			2	4	
1.B6	Generate ALP Data Sheet	1	2	4	8	
1.B7	Generate ALP Drawing					
1.B8	Update Background Topography		2	4	8	
1.B9	Update Existing Airport Information	1	2	4	4	
1.B10	Update Ultimate Airport Improvements	1	2	4	4	
1.B11	Update Ultimate Property Lines	1	2	4	4	
1.B12	Generate Airport Airspace Drawing	1	4	8	8	
1.B13	Generate Inner Approach Surface Drawings	1	4	8	8	
1.B14	Generate Runway Plan & Profile Drawing	1	2	4	8	
1.B15	Generate Runway Departure Surface Drawing	1	2	8	8	
1.B16	Generate Terminal Area Drawing	1	2	4	8	
1.B17	Generate Land Use Drawing	1	1	4	4	
1.B18	Generate Airport Property Map / Exhbibit A Drawing	1	4	8	8	
1.C	Submittal Reviews and Coordination					
1.C1	Review Meeting with Sponsor	4	4			
1.C2	Coordination with FAA & ALDOT for Review		4	4		
1.C3	Prepare Submittals (Review & Final)		2	4		8
1.D	QA/QC					
1.D1	QA/QC Contract Documents	1	2	4		4
1.D2	Internal Reviews	4	8			
	TOTAL DESIGN MAN-HOURS	30	75	98	84	20

Task No.	PROPOSED DESIGN FEE						
	DESIGN PHASE	Man-hour	Ra	ate	COST		
Labor Costs							
	Project Manager	30	\$76	6.37	\$2,291.10		
	Staff 2 Professional	75	\$54	l.81	\$4,110.75		
	Staff 1 Professional	98	\$34	1.15	\$3,346.70		
	Technician	84	\$38	3.74	\$3,254.16		
	Administrative Assistant	20	\$28	3.45	\$569.00		
		TO	TAL DIREC	CT LABOR	\$13,571.71		
	Combined Overhead 150.77%				\$20,462.07		
		TOTAL L	ABOR + O	VERHEAD	\$34,033.78		
	Operating Margin		15%		\$5,105.07		
	FCCM (Direct Labor Only)			13%	\$42.48		
		SUBTO	SUBTOTAL LABOR COSTS				
	Out of Pocket Costs						
	Travel Expenses (Mobile office to Foley Airport)	Trips	Miles	Rate	Cost		
	(50 Miles 1-way)	3	100	\$0.585	\$175.50		
		TOTA	AL OUT O	POCKET	\$175.50		
		TOTAL DESIG	N PHASE		\$39,356.83		

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Task No.	SUBCONSULTANT (BUMPERS LAND SURVEYING, LLC.) GROUND CONTROL SURVEY					
2	GROUND CONTROL SURVEY - BUMPERS LAND SURVEYING, LLC.	COST				
2.1	Ground Control Survey	\$3,860.00				
	SUBTOTAL SUBCONSULTANT COST	\$3,860.00				
	Volkert, Inc. (Management Fee, 5% of Total Subconsultant Fee)	\$193.00				
	TOTAL GROUND CONTROL SURVEY COST	\$4,053.00				

Task No.	SUBCONSULTANT (QUANTUM SPATIAL, INC.) AERIAL SURVEY					
3	AERIAL SURVEY - QUANTUM SPATIAL, INC.	COST				
3.1	Aerial Survey	\$34,292.00				
	SUBTOTAL SUBCONSULTANT COST	\$34,292.00				
	Volkert, Inc. (Management Fee, 5% of Total Subconsultant Fee)	\$1,714.60				
	TOTAL AERIAL SURVEY COST	\$36,006.60				

ATTACHMENT B

SUB-CONSULTANT PROPOSALS

FOR

MASTER PLAN / ALP UPDATE

FOR



AT

FOLEY MUNICIPAL AIRPORT FOLEY, ALABAMA

Volkert Project No: 1059405

Submission Date: March 13, 2022



Bumpers Land Surveying, LLC 1829 College Ave. #350 104 Norton Ave. #171 Jackson, AL 36545 Saraland, AL 36571 Office 251.237.1440

wesley@bumperssurveying.com www.bumperssurveying.com

November 30, 2021

Mrs. Jordan Stringfellow Volkert, Inc. 1110 Montlimar Dr., Suite 1050 Mobile, AL 36609

Subject: Foley Airport Master Plan Update Control Survey

Mrs. Stringfellow,

Bumpers Land Surveying, LLC is pleased to submit this proposal to perform a Ground Control Survey for the Foley Airport Master Plan Update located in Foley, Alabama.

<u>Scope of Services</u>: Collect 20-30 control/picture points at the locations specified by Quantum Spatial or other Volkert photography consultant. Each point will be collected at a minimum of 60 epochs for three occupations utilizing the ALDOT CORS Network. Four pictures will be collected at each point location. Coordinates and elevations will be provided in CSV format along with a certified letter.

Lump sum: \$3,860

Should you have any questions or comments regarding the information contained in this proposal, please feel free to contact me.

Sincerely,

Wesley G. Bumpers, PLS, PSM

President and Founder



December 17, 2021

Mr. Jordan Stringfellow, P.E. Volkert, Inc. 1110 Montlimar Dr., Suite 1050 Mobile, Alabama 36609

Project: 040303 | Aeronautical Obstruction Survey – Foley Municipal Airport (5R4) ALP Update

Dear Mr. Stringfellow,

This summary of work describes our understanding of the scope of work and services required for the airport data collection supporting an airport property mapping project for the Foley Municipal Airport (5R4) located in Foley, AL. Please note: The format will NOT be collected to FAA ADIP standards, nor will it be uploaded to FAA ADIP.

Summary of Work

For this project, we will acquire new vertical stereo digital imagery at a physical image scale of 1"=2,500' of the obstruction surface areas and 1"= 1,250' of the airport property. The aerial imagery will cover all of the surfaces using a UltraCam Falcon Prime (UCFp), or comparable, during leaf-on conditions.

From the 1"=2,500' imagery, we will produce the following:

Identification and mapping of obstruction obstacles for the Part 77 NPIR (A) surfaces

From the 1"= 1,250' imagery, we will produce the following:

- 100 scale mapping with 2' contours of the existing airport property and surrounding area (142 acres)
- Color digital orthophotos with a 0.5' pixel resolution

Quality Standards

The project has been designed to conform to the National Map Accuracy Standards for 1"=100' scale planimetric feature collection, two foot contours and six inch orthophoto production.

Project Area

The project area encompasses all of Foley Municipal Airport (5R4) as shown in attached exhibits.

Control Surveying

The aerial photography will be completed with ABGPS control which will be used for the base control for the geo-referencing of the aerial imagery. Quantum Spatial will process the ABGPS data using COR stations and reference it to the project control datums:

Horizontal: North American Datum of 1983/2011 (NAD 83(2011)), in the AL State Plane Coordinate System, West Zone in US survey feet.

Vertical: North American Vertical Datum of 1988 (NAVD 88)

Volkert will obtain all necessary ground control photo identifiable control check points required to validate the ABGPS control. Our staff will provide information on the specific locations required to support the ABGPS control.



Photogrammetric Mapping

We will collect the features normally shown on 1"=100' scale mapping within the mapping limits identified in the attached exhibit. We will build a digital terrain model (DTM) by collecting masspoints and breaklines. These DTM elements will be used to construct a triangulated irregular network (TIN) surface from which 2' contours will be interpolated. Contours will be dashed in areas where the ground is obscured by trees, dense brush, deep shadows or other obstructing features. Dashed contours indicate a lower level of accuracy. Additional field surveys should be performed in areas of dashed contours prior to design. All contours will be continuous polylines. The final data will be delivered in AutoCAD format.

Production Schedule

We will work with you to finalize a mutually agreeable schedule for the project. We will make a reasonable effort to maintain the agreed-upon schedule. However, should the project be interrupted by technical problems beyond our control, including control rescheduling may become necessary.

Deliverables

QSI will deliver the following items to Volkert:

- Planimetric data and two foot contours in Civil 3D format
- Color digital orthophotos with a 0.5' pixel resolution in GeoTIFF (mapping limits)
- 2 color enlargements (30"x40") covering the airport and surrounding area (mounted/laminated/framed)
- Obstruction survey data
 - EX Runway 18/36 Part 77 NPIR (A)
 - ULT Runway 18/36 Part 77 NPIR (A)

All digital files will be delivered on external hard drive or CD/DVD.

Cost and Payment Terms

Compensation for the above services will be provided as a lump sum cost of U.S. \$34,292.00.

Client Responsibilities

The successful and timely completion of this project is dependent upon a number of elements and work tasks, some of which involve participation by Volkert. You will be responsible for designating a representative for the project who will have the authority to transmit instructions, receive information, and make timely decisions with respect to the services provided by Quantum Spatial.



Quantum Spatial Representative

Jill Mahoney, Project Manager and Marlin Zook, Technical Manager, will represent us during the performance of the services to be provided under this agreement. Each has the authority to transmit and receive instructions and make decisions with respect to the services. Each is authorized to commit the necessary resources towards completing the services described herein.

We look forward to working with you and your staff to complete this project in a timely and cost effective manner. Should you have any questions, please call me at 803-351-3136 or email me at the address shown below.

Sincerely,

Quantum Spatial, Inc.

David Grigg

Aviation Program Director dgrigg@quantumspatial.com























