Airport Name: Columbia Regional Airport

Project No.: 3-29-0022-049-2020

County: Boone

AVIATION PROJECT CONSULTANT SUPPLEMENTAL AGREEMENT NO. 1 CONSTRUCTION SERVICES

THIS SUPPLEMENTAL AGREEMENT NO. 1 for Construction Services is entered into by the City of Columbia, Missouri (hereinafter, "Sponsor") and BURNS & MCDONNELL ENGINEERING COMPANY, INC. (hereinafter, "Consultant").

WITNESSETH:

WHEREAS, the Sponsor and the Consultant entered into an Agreement on 1/9/2019, to accomplish a project at the Columbia Regional Airport related to the design of the Extension of Runway 2-20 for nine hundred feet to the North, (hereinafter, "Original Agreement"); and

WHEREAS, the Sponsor and the Consultant now desire to enter into Supplemental Agreement No. 1 to otherwise complete, extend or continue the Original Agreement as provided herein.

NOW, THEREFORE, in consideration of the mutual promises, covenants, and representations contained herein the parties agree as follows:

(1) SCOPE OF SERVICES:

(A) The Services to be provided by the Consultant under Supplemental Agreement No. 1 are additional services which are beyond the scope of services provided in the Original Agreement. These additional professional services are generally described and defined in Section (16)(State) or (17)(Federal) of the Original Agreement and Exhibit II - SA1, which is attached hereto and incorporated herein by reference.

(2) FEES AND PAYMENTS:

- (A) The Consultant shall be reimbursed in accordance with Section (8)(State) or (9)(Federal) of the Original Agreement.
- (B) The costs of Supplemental Agreement No. 1 shall be in addition to the cost of the Original Agreement.
- (C) The lump sum fee and maximum amount payable included in Section (8)(State) or (9)(Federal) of the Original Agreement are hereby modified to be cost plus fixed fee not to exceed as follows:

	ORIGINAL AMOUNT	SUPPLEMENTAL AGREEMENT NO. 1	TOTAL		
Fixed Fee	\$44,309.01	\$65,352.23	\$109,661.24		
Lump Sum	\$632,293.00	N/A	\$632,293.00		

Max. Fee Payable	\$632,293.00	\$959,886.00	\$1,592,179.00
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- (D) Estimated costs for the services in Supplemental Agreement No. 1 are defined in Exhibit IV SA1 and Exhibit V SA1, which are attached hereto and incorporated herein by reference.
- (3) PERIOD OF SERVICE: Exhibit VI, Performance Schedule, of the Original Agreement is hereby revised to include time for the performance of these additional services. The total time to be added to Exhibit VI for completion of these additional services shall be three hundred and ninety (390) calendar days. The projected completion date shown on Exhibit VI is now revised to 390 calendar days after the Sponsor issues a Notice to Proceed to the selected Construction Contractor, which includes time for performance of all remaining services in the Original Agreement and the services in Supplemental Agreement No. 1 and submittal of all deliverables.

(4) <u>DISADVANTAGED BUSINESS ENTERPRISE (DBE) REQUIREMENTS:</u>

- (A) <u>DBE Goal</u>: The following DBE goal has been established for this Supplemental Agreement No. 1. The dollar value of services and related equipment, supplies, and materials used in furtherance thereof which is credited toward this goal will be based on the amount actually paid to DBE firms. The goal for the percentage of services to be awarded to DBE firms is 3.60% of the total Supplemental Agreement No. 1 dollar value.
- (B) <u>DBE Participation Obtained by Consultant</u>: The Consultant has obtained DBE participation, and agrees to use DBE firms to complete 3.60% of the total services to be performed under this Supplemental Agreement No. 1 by dollar value. The DBE firms which the Consultant shall use, and the type and dollar value of the services each DBE will perform, is as follows:

DBE FIRM NAME, STREET AND COMPLETE MAILING ADDDRESS	TYPE OF DBE SERVICE	TOTAL \$ VALUE OF THE DBE SUBCONTRACT	CONTRACT \$ AMOUNT TO APPLY TO TOTAL DBE GOAL	% OF SUBCONTRACT \$ VALUE APPLICABLE TO TOTAL GOAL
RDM International, Inc.	Pavement Consulting	\$34,484.00	\$34,484.00	3.60%

2

(5) <u>SUBCONSULTANTS</u>:

(A) The Consultant agrees that except for those firms and for those services listed below, there shall be no transfer of engineering services performed under this Supplemental

Rev. 02/01/10

Agreement No. 1 without the written consent of the Sponsor. Subletting, assignment, or transfer of the services or any part thereof to any other corporation, partnership, or individual is expressly prohibited. Any violation of this clause will be deemed cause for termination of this Supplemental Agreement No. 1.

Exceptions (Subconsultant Information):

FIRM NAME	COMPLETE ADDRESS	NATURE OF SERVICES				
Engineering, Surveys and Services, LLC	1113 Fay street Columbia, Missouri 65201	Geotechnical				
RDM International, Inc.	14310 Sullyfield Circle, Suite 600 Chantilly, VA 20151	Pavement Consulting				

(6) <u>ORIGINAL AGREEMENT</u>: Except as otherwise modified, amended, or supplemented by this Supplemental Agreement No. 1, the Original Agreement between the parties shall remain in full force and effect and the terms of the Original Agreement shall extend and apply to this Supplemental Agreement No. 1.

IN WITNESS WHEREOF, the parties have entered into this Supplemental Agreement No. 1 on the date last written below.

4	h	
Executed by the Consultant this 10	day of <u>September</u> _,2020.	
Executed by the Sponsor this	day of, 2020.	
CONSULTANT Burns & McDonnell Engineering Company Inc. By David G. Yeamans Presiden:, A & F	SPONSOR City of Columbia, Missouri By John Glascock City Manager	- Aglid
By 2-10-2020 David G. Hadel Manager, Aviation Services	ATTEST: By Sheela Amin City Clerk	
	Approved as to Form:	
	By	

Nancy Thompson (N)

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I, hereby certify that this Agreement is within the purpose of the appropriation to which it is to be charged, Account Number 55416288-604990, AP125, and that there is an unencumbered balance to the credit of such appropriation sufficient to pay therefor.

By:				
Matth	ew Lue.	Director of	Finance	

EXHIBIT II - SA1 SCOPE OF SERVICES

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EXHIBIT "A" JANUARY 21, 2020

SCOPE OF BASIC SERVICES

FOR PROFESSIONAL ENGINEERING SERVICES FOR

CONSTRUCTION PHASE SERVICES FOR THE EXTEND RUNWAY 2-20 & TAXIWAY A 900' TO THE NORTH AT COLUMBIA REGIONAL AIRPORT AIP NO. 3-29-0022-48

A. PROJECT NAME AND DESCRIPTION OF IMPROVEMENTS:

- 1. <u>Project Name</u>: Construction Services for the Extension of Runway 2-20 and Taxiway A 900' to the north including the associated FAA NAVIDS at the Columbia Regional Airport (COU).
- 2. **Description of Improvements**: The proposed improvements are shown on EXHIBIT No. 1. The Engineer will perform construction observation services for the Runway 2-20 and Taxiway A Extension and associated improvements including NAVAIDS.

B. DESCRIPTION OF SERVICES TO BE PERFORMED:

Consultant has developed the following Scope of Services to perform engineering services for the aforementioned project. The Scope of Services is defined as follows:

1. Construction Phase Services Assumptions:

The following assumptions have been established for construction phase services:

a. The project duration anticipated to start in March/April 2021, as identified in the Project Manual and Drawings (Contract Documents) indicating the project is to be completed within 240 calendar days from the Contractor's Notice to Proceed.

2. Construction Administration Services – Office Staff:

- a. Develop a Construction Observation Program, (COP). This document will outline the general responsibilities of the Sponsor, the Federal Aviation Administration (FAA), Consultant and Construction Contractor. The document will be developed in accordance to FAA's Section 1030 Construction Observation Program. As a minimum, the COP will include the following items:
 - 1. Name of the person representing the Sponsor who has overall responsibility of contract administration for the project and the authority to take necessary actions to comply with the contract.
 - 2. Names of testing laboratories and a certificate of accreditation, indicating proficiency in specific test standards.

- 3. Names of other engineering firms with quality assurance responsibilities for the project including a description of the services to be provided by each firm.
- 4. Listing of qualifications for the Consultant's management team including; Project Manager, site observers, laboratory personnel, and testing personnel.
- 5. Listing of all tests required by the contract specifications, including the type and frequency of tests to be taken, the method of sampling, the applicable test standard, and the acceptance criteria or tolerances permitted for each type of test.
- 6. Procedures for confirming that:
 - (a) Tests are taken in accordance with the approved construction observation program.
 - (b) Tests are documented properly.
 - (c) Corrective actions/retesting are taken for failed tests.
 - (d) Mix designs meet project specifications and Consultant's approval is properly documented.
 - (e) Quality and quantity of materials meet project requirements.
- b. Attend and chair one (1) preconstruction meeting with the Contractor, Sponsor and the FAA to determine detailed project requirements, budget, schedule, phasing and other pertinent matters. This meeting will be attended by the Consultant's Project Manager, and Construction Services Team. The preconstruction conference will comply with FAA Central Region, AIP Sponsor Guide, Section 1040. Meeting minutes will be prepared by the Consultant and distributed to the contact for each attending company.
- c. Provide coordination with the Sponsor to issue a Notice to Proceed to comply with the FAA Central Region, AIP Sponsor Guide, Section 1050. A copy of the Notice to Proceed and contractor final schedule will be forwarded to the FAA.
- d. Perform shop drawing reviews, material certifications and "Buy American" verifications as received from the Contractor. The Consultant estimates 25 original shop drawings will be reviewed. It is assumed 25% of the initial submittals will need to be resubmitted by the contractor and re-reviewed by the Consultant. It is assumed 4-hours per review (includes administrative processing). As a result, 31 shop drawings are estimated for a total of 124 hours.
- e. Prepare and provide four copies of the Construction Plans and Project Manual for use by the Contractor during construction.
- f. Respond to field issues throughout the duration of the project (240 calendar days approximately 34 weeks). It is assumed this effort will require 10 hours per week for 34 weeks equating to 340 hours.

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- g. Coordinate and review monthly pay estimates and weekly progress reports (field diaries, weather reports, labor reports and equipment reports) as received from the Resident Representative.
- h. Coordinate and prepare change orders and supplemental agreements for the duration of the project. This effort assumes 3 of these efforts at 8 hours per effort for a total of 24 hours. These documents will comply with FAA Central Region, AIP Sponsor Guide, Section 1080.
- i. Coordinate and review weekly test reports.
- j. Project Management: Consultant will provide project management for all phases of construction services throughout the duration of the project. This effort is assumed to require 5 hours per week for a project duration of 34 weeks for a not to exceed total of 170 hours.
- k. Attend weekly progress meetings via telecon including Project Manager, Senior Civil Engineer and Staff Electrical Engineer.
- 1. Procure material testing contract and scope of work.

3. Construction Phase Services – (240 calendar days):

- a. Provide a Senior Resident Representative, (SRR) on site for 210 working days for 10 hours per day for 240 days not to exceed a duration of 2,100 hours. The SSR will be responsible for the following reporting:
 - i. Weekly Reports on FAA Form 5370-1: Tests reports including types of tests taken, applicable standards, location of tests, tests results (highlighting those tests which fail specification requirements), provisions for failed tests, and specification requirements shall be recorded and filed in a timely and orderly manner and shall be made available for review by the Sponsor and the FAA. A photo log showing the progress of the project will also be included. The weekly Reports will be submitted on a weekly basis to the Sponsor and the FAA.
 - ii. Final Report: At the conclusion of the project, the Consultant shall submit a final test and quality control report documenting the results of all tests performed. Those tests that failed or did not meet the applicable test standard shall be highlighted and corrective action/retesting noted. The reports shall include the pay reductions applied and justification of accepting any out-of-tolerance materials.
- b. Provide a part-time Assistant Resident Representative on site for 24 working days for 10 hours per day or for a not to exceed duration of 240 hours.
- c. Perform periodic site visits from the design team members for the following activities:

- (1) Trip No. 1: Observe Mobilization. This trip will be taken for the purposes of observing the contractors start-up activities and general coordination with the Sponsor and contractor. The duration of this trip will be 8 hours. An additional 4 hours will be utilized for pre-trip preparation and post-trip documentation. The total hours allocated for this effort will not exceed 12.
- (2) Trip No. 2: Observe demolition operations and attend weekly project meeting. The duration of this trip will be 8 hours. An additional 4 hours will be utilized for pre-trip preparation and post-trip documentation. The total hours allocated for this effort will not exceed 12.
- (3) Trip No. 3: Observe the initial placement of P-158 operations. The duration of this trip will be 8 hours. An additional 4 hours will be utilized for pre-trip preparation and post-trip documentation. The total hours allocated for this effort will not exceed 12.
- (4) Trip No. 4: Observe the initial placement of P-209 operations. The duration of this trip will be 8 hours. An additional 4 hours will be utilized for pre-trip preparation and post-trip documentation. The total hours allocated for this effort will not exceed 12.
- (5) Trip No. 5: Observe the initial placement of P-307 operations. The duration of this trip will be 8 hours. An additional 4 hours will be utilized for pre-trip preparation and post-trip documentation. The total hours allocated for this effort will not exceed 12.
- (6) Trip No. 6: Observe the initial placement of choke stone layer. The duration of this trip will be 8 hours. An additional 4 hours will be utilized for pre-trip preparation and post-trip documentation. The total hours allocated for this effort will not exceed 12.
- (7) Trip No. 7: Concrete Placement. This trip will be used to observe and assist the Resident Representative on the first day of concrete placement. This trip will be conducted by the Project Manager and a Staff Civil Engineer. The duration of this trip will be 8 hours. An additional 4 hours will be utilized for pre-trip preparation and post-trip documentation. The total hours allocated for this effort will not exceed 24.
- (8) Trip No. 8: General Site Visit. This trip will be taken for the purposes of attending the regularly scheduled weekly meeting and to observe the activities and progress of the project. Duration of this trip will be 8 hours. An additional 4 hours will be utilized for pre-trip preparation and post-trip documentation. The total hours allocated for this effort will not exceed 12.

- (9) Trip No. 9: Airfield Lighting Installation. This trip will be used to observe the installation of the airfield lighting system. The duration of this trip will be 8 hours. An additional 4 hours will be utilized for pretrip preparation and post-trip documentation. The total hours allocated for this effort will not exceed 12.
- (10) Trip No. 10: Observe the pavement marking installations. The duration of this trip will be 8 hours. An additional 4 hours will be utilized for pretrip preparation and post-trip documentation. The total hours allocated for this effort will not exceed 12.
- (11) Trip No. 11: Pre-Final Punch List. The Consultant will prepare the prefinal project punch list. This trip will be performed by the team's project manager, project civil engineer and project electrical engineer. The duration of this trip will be 8 hours per each team member. An additional 4 hours will be utilized for pre-trip preparation and post-trip documentation. The total hours allocated for this effort will not exceed 36.
- 4. <u>Construction Closeout</u>: This includes activities for providing a final project walk through, project closeout documentation and creating a record set of drawings conforming to construction records drawings. The specific elements of work include:
 - a. Final Project Punch List and Walk Through: The Consultant will prepare the Final project punch list. A final walk through will be performed by the Sponsor, the FAA (if available) and members of the Consultant's Team.
 - b. Engineering Record Drawings: The Consultant will prepare the Conforming to Construction Record drawings of the project. These drawings will be developed from documentation created by the Contractor and Consultant throughout the duration of the project. An electronic (pdf) set of drawings will be provided to the Sponsor and the FAA for their records.
 - c. Final Construction Report: The Consultant will prepare and submit to the Sponsor and the FAA a final construction report in accordance with the FAA Central Region, Airport Sponsor Guide, Section 1610, Development Project Closeout. DBE Compliance Report Coordination: Assistance to City staff as required to provide project documentation for DBE Compliance during project closeout. These documents will be provided to the FAA within 90 calendar days after project final acceptance.
 - d. Prepare and submit an as built Airport Layout Drawing.
 - e. Prepare and submit an updated signage and pavement marking plan. A copy will also be forwarded to the FAA 139 Inspector.

- f. Prepare and submit a dimensional drawing of all the new facilities resulting from the Runway 2-20 Extension project for the purposes of updating the Airport Diagram.
- g. Coordination with Technical Operations & Airports Division for NAVAIDs final project document submittal.
- 5. <u>Subconsultant Material Testing:</u> The Consultant will provide, through the services of a certified and accredited material testing laboratory, all quality assurance testing in accordance with the Contract Documents.
- 6. <u>Subconsultant Construction Observation Services (DBE):</u> The DBE subconsultant will provide construction observation support during concrete paving operations.

C. ESTIMATED TIME OF COMPLETION:

1. The time to complete the Scope of Services for items identified in Section B of this Scope of Work is estimated at Three Hundred Ninety (390) calendar days from the Construction Contractor's Notice to Proceed.

END OF SOW

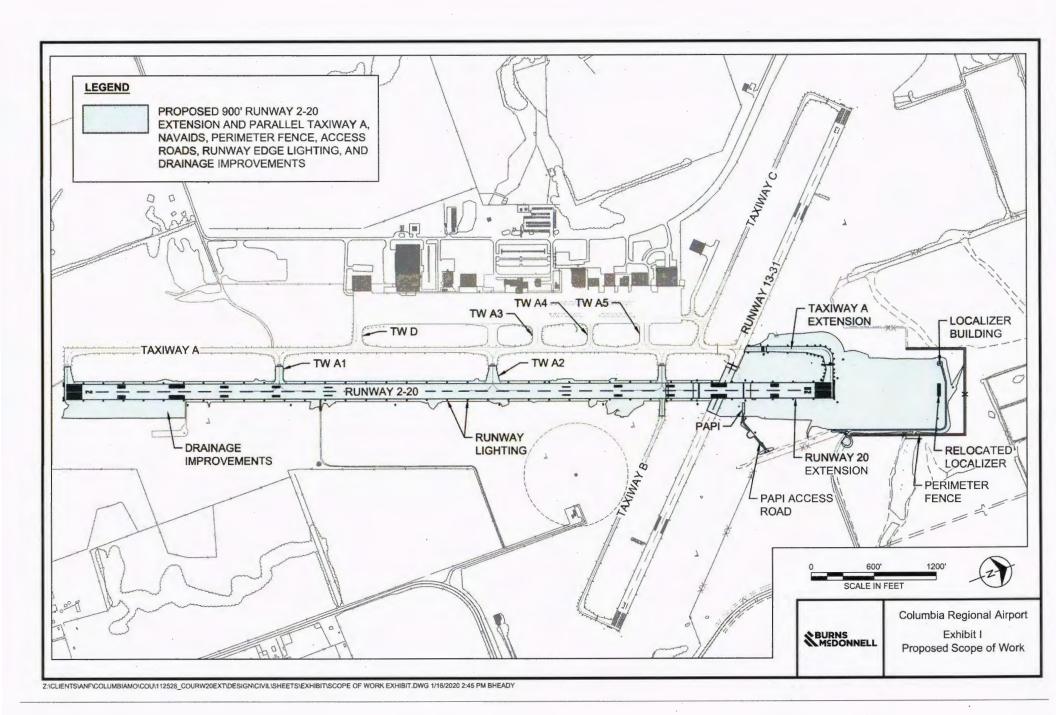


EXHIBIT IV - SA1

DERIVATION OF CONSULTANT PROJECT COSTS (CONSTRUCTION)

SUPPLEMENTAL AGREEMENT NO. 1 - EXHIBIT IV - SA1

DERIVATION OF CONSULTANT PROJECT COSTS SUMMARY OF COSTS

EXTEND RUNWAY 2-20 & TAXIWAY A 900' TO THE NORTH

C-Services for Extend Runway 2-20 & Taxiway A 900' to the North including NAVAIDS

Columbia Regional Airport BASIC & SPECIAL SERVICES August 10, 2020

1	DIRECT SALARY COSTS							
	TITLE	HOURS	R/	ATE/HR			COST (\$)	
						Office	Field	Contract
	Principal	24.00	\$	70.00		\$ 1,680.00	\$ -	\$ -
	Project Manager	262.00	\$	56.00		\$ 14,672.00	\$ -	\$ -
	Sr. Civil Engineer	599.00	\$	45.00		\$ 26,955.00	\$ -	\$ -
	Staff Civil Engineer	361.00	\$	39.00		\$ 14,079.00	\$ -	\$ -
	Sr. Electrical Engineer	119.00	\$	54.00		\$ 6,426.00	\$ -	\$ -
	Staff Electrical Engineer	136.00	\$	44.50		\$ 6,052.00	\$ -	\$ -
	Sr. Planner	24.00	\$	38.00		\$ 912.00	\$ -	\$ -
	Geotech Engineer	16.00	\$	57.00		\$ 912.00	\$ -	\$ -
	Resident Observer	2,112.00	\$	59.50		\$ 125,664.00	\$ -	\$ -
	Sr. Architect	0.00	\$	49.00		\$ -	\$ -	\$ -
	Sr. Tech	24.00	\$	35.00		\$ 840.00	\$ -	\$ -
	Staff Tech.	70.00	\$	30.00		\$ 2,100.00	-	\$ -
	Clerical	167.00	\$	21.00		\$ 3,507.00	\$ -	\$ -
	Total Hours	3,914.00						
	Total Direct Salary Costs					\$ 203,799.00	\$ -	\$ -
		No.						
2	LABOR & GENERAL ADMINISTRATIV	<u>E OVERHEAD</u>						
		· ·						
a.	Percentage of Direct Salary Cost: (O				220.67%	\$ 449,723.25		
b.	Percentage of Direct Salary Cost: (Fi				220.67%	•	\$ -	
с.	Percentage of Direct Salary Cost: (Co	ontract Employee Rate)			0.00%			\$ -
2	CLIRTOTAL							
3	SUBTOTAL							
	Summary of Items No. 1 and No. 2	(a,b,c):				\$ 653,522.25	\$ -	\$ -
4	PROFIT/FIXED FEE:							
7	THO THE TEE						,	
	Percentage:				10.00%	\$ 65,352.23	\$ -	\$ -
5	SUBTOTAL							

718,874.48 \$

Summary of Items No. 1, No. 2 & No. 4:

SUPPLEMENTAL AGREEMENT NO. 1 - EXHIBIT IV - SA1

DERIVATION OF CONSULTANT PROJECT COSTS SUMMARY OF COSTS

EXTEND RUNWAY 2-20 & TAXIWAY A 900' TO THE NORTH

C-Services for Extend Runway 2-20 & Taxiway A 900' to the North including NAVAIDS

Columbia Regional Airport BASIC & SPECIAL SERVICES August 10, 2020

6 OUT OF POCKET EXPENSES

	TOTA	\$			 959,886.00				
	Subtotal					\$	780,402.00	\$ -	\$ 179,484.00
3	MAXIMUM TOTAL FEE	•							
	Subtotal (Not to Exceed)					\$	-	\$ •	\$ 179,484.00
Co	onstruction Observation Services: RI	MC				\$	- '	\$ -	\$ 34,484.00
	Material Testing: ESS					\$	-	\$ -	\$ 145,000.00
7	SUBCONSULTANTS								
	Summary of Out of Pocket Expense	es:				\$	61,527.52	\$ -	\$ •
	Subtotal					\$	61,527.52	\$	\$ -
	Printing, Shipping & Misc.					\$	4,891.45		
	Airline	0.00	Hour	\$	0.00	\$	-		
	Rental Vehicle	0.00	Days	\$	65.00	\$	-		
	Lodging: Per Diem (incl. taxes)	264.00	Per Day	\$	104.13	\$	27,490.32		
	Food: Per Diem	285.00	Per Day	\$	51.00	. \$	14,535.00		
	Travel: Mileage	25,410.00	Miles	\$	0.575	\$	14,610.75		
	OFFICE	No. of Units	Units	Co	st/Unit				

SUPPLEMENTAL AGREEMENT NO. 1 - EXHIBIT IV - SA1

Engineering Surveys & Services

Consulting Engineers, Land Surveyors, and Geoprofessionals Analytical and Materials Laboratories

1113 Fay Street Columbia, Missouri 65201

Telephone: 573-449-2646

ess@ess-inc.com www.ess-inc.com

February 25, 2020

Mr. Ryan Lorton Burns & McDonnell 9400 Ward Parkway Kansas City, MO 64114

RE: Construction Material Testing Columbia Regional Airport Runway 2-20 Extension Columbia, Missouri

Dear Mr. Lorton:

Thank you for the opportunity to summit this proposal for professional services on the above referenced project. We propose the following services:

- Compaction/Soils Testing
 - Subgrade and proof-roll inspections
 - Material compaction testing
- Portland cement concrete pavement testing (P-501)
 - Flexural strength, slump, air content determination
 - Approximately 34,000 square yards of concrete
 - o Assumed 12 test lots
- Structural concrete testing (P-601)
 - Compressive strength, slump, air content determination
 - Testing performed for lighting, signage, duct bank(s), and localizer base
- Miscellaneous engineering observations/consulting
 - Material depth/thickness testing
 - Pavement straight edge testing
 - Lot/Sublot determination

All fees are applicable for the project duration. We propose to provide these services on a time expended and unit price basis for an estimated cost of \$145,000. There is a charge of \$0.58 per mile assessed for each trip. All time is charged on a "portal to portal" basis from our Columbia office. All tests will be performed by Engineering Surveys & Services personnel using equipment and instruments owned by this firm.

Our experience on similar projects has shown that the final cost for construction materials testing is affected by at least three variables which we as an independent laboratory cannot control. They include 1) the ability of the contractor/subcontractor to comply with the project specifications in a timely manner, 2) the level of effort for quality assurance testing the construction project manager deems necessary for the site-specific job and 3) the project schedule versus weather conditions. Therefore, our proposed not to exceed cost for quality

Ryan Lorton February 25, 2020 Page 2

assurance testing is based on the project plans and specifications as well as historical costs for similar sized projects. We reserve the right to revise this proposal should the above proposed scope of services be affected by any of the variables listed.

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Engineering Surveys and Services Columbia Regional Airport - Runway 2-20 Extension

Material Testing and Observation

Estimate of Cost

January 16, 2020

MATERIAL	S TESTING FEE	Hours	(Salary Only)	Cost
	Geotechnical Engineer	250	\$ 43.85	\$ 10,962.50
	Project Engineer	240	\$ 22.30	\$ 5,352.00
	Engineering Technician	1000	\$ 20.40	\$ 20,400.00
	Administrative	60	\$ 22.50	\$ 1,350.00
	SUBTOTAL	1550	_	\$ 38,064.50
	Payroll Overhead (Est. at	38.53	_% X SUBTOTAL)	\$ 14,666.25
General	and Admin. Overhead (Est. at	123.23	\$ 46,906.88	
		T	OTAL LABOR & OVERHEAD	\$ 99,637.64
				,
Fixed Fee	15	% X TOTAL	LABOR & OVERHEAD)	\$ 14,945.65
	1	TOTAL LABO	R, OVERHEAD & FIXED FEE	\$ 114,583.28
0.1 7.				
Other Direct	Costs Vehicle Mileage			\$ 3,360.00
	Nuclear Density Meter			\$ 10,400.00
	Concrete Testing			\$ 9,070.00
	Laboratory Soils Tests			\$ 3,220.00
	Mobile Lab			\$ 4,500.00
			SUBTOTAL DIRECT COSTS	\$ 30,550.00
			TOTAL	\$ 145,133.28



RDM International, Inc.

Engineering Technology Research

January 10, 2020

RDM Proposed Scope and Fee

Columbia Regional Airport (COU) Proposed Runway 20 Extension CM Support Services

Introduction

Burns & McDonnell (B&M) has requested RDM International, Inc. (RDM) to provide a scope and fee for assisting with construction support services for the Runway 20 extension. As a part of these services, B&M would need to provide RDM with a set of conformed plans and specifications for the project.

RDM is pleased to provide the following scope and fee for support with this task.

Scope of Work

Task 1 Review of submittals

- A. The term "Submittals" shall have the same meaning as defined in the Construction Contract Documents.
- B. RDM shall typically process submittals and return to within seven (7) calendar days of receipt unless otherwise indicated by the requirements of the Contract Documents or requested by B&M due to specific project conditions. All transmittals of submittals shall be electronic.
- C. RDM shall review the submittals for general conformance with the requirements of the Contract Documents. RDM anticipates the review of the paving submittals (P-501 and related materials or others requested by B&M).
- D. Submittals shall not be used as a vehicle for modifying the Contract Documents or other requirements of the Contract.
- E. For projects that include subconsultants of several disciplines, B&M shall establish a submittal responsibility matrix that defines primary and secondary responsibility for review of submittals by the B&M team including Design/Engineering, Safety, Quality Assurance and Construction.

Task 2 Site Visits and On-Site Observations

- A. RDM shall make two (2) scheduled site visits at 6 days each as defined by the Resident Engineer to review the production and placement of the P-501 work, and to evaluate the work for general conformance with the requirements of the Contract Documents.
- B. When requested, RDM shall submit field reports within five (5) working days to B&M

- documenting observations made during each site visit.
- D. RDM shall observe and comply with established safety and security procedures for personnel working on airport property.

Task 3 Attendance at and Assistance with Pre-Paving Meeting

- A. RDM will attend and assist with preparing the Pre-Paving meeting for the project via conference call.
 - 1. Anticipated meetings shall include: P-501 Mix Design and P-501 Placement
- B. Meeting minutes will be prepared by B&M.

Task 4 Consultation & Management

RDM shall provide consultation in response to requests from B&M for the services listed below and any other reasonable services which B&M and/or Owner deem necessary for the completion of the project:

- A. Clarification of the Contract Documents including evaluation of requests for information (RFIs) or correspondence submitted by the Contractor. All transmittals of RFI's shall be by electronic transmittals.
- B. Consultation and recommendations in response to contractor-generated value engineering proposals.
- C. Consultation services for preparation of Owner requested changes to construction contract drawings and other services, as requested by the Contracting Officer or his/her designated representatives shall be particularly described and authorized by a written Technical Support Request (TSR). Each request shall contain a description of the services to be performed. Examples of these services requiring a TSR are: owner requested changes and services including: changed field conditions; material substitutions; value engineering proposals by the contractor; review of mock-ups; witnessing of specific tests; and construction close out and turnover assistance. Significant design changes (program scope changes) are not part of services during construction and will be managed by the B&M for Design Services by a separate contract modification.
- D. RDM shall review QA / QC test results for compliance with the specifications and offer any recommendations, as required.
- E. All responses to B&M shall include the RDM opinion as to whether cost and/or schedule impacts could occur.

CM Support Services COU Runway 20 Extension Page 3 of 3

Statement of Assumptions/Listing of Limitations

This proposal is submitted based on the following assumptions and requirement for which the following terms and conditions form an integral part of a subsequent agreement for the services.

- The presence or duties of RDM's personnel at a construction site, whether as onsite representatives or otherwise, do not make RDM or RDM's personnel in any way responsible for those duties that belong to the B&M and/or the Contractor or other entities, and do not relieve the construction contractors or any other entity of their obligations, duties, and responsibilities, including, but not limited to, all construction methods, means, techniques, sequences, and procedures necessary for coordinating and completing all portions of the construction work in accordance with the construction Contract Documents and any health or safety precautions required by such construction work.
- RDM and RDM's personnel have no authority to exercise any control over any Contractor or
 other entity or their employees in connection with their work or any health or safety
 precautions and have no duty for inspecting, noting, observing, correcting, or reporting on
 health or safety deficiencies of the construction contractor(s) or other entity or any other persons
 at the site except RDM's own personnel.
- The presence of RDM's personnel at a construction site is for the purpose of providing B&M a greater degree of confidence that the completed construction work will conform generally to the construction documents and that the integrity of the design concept as reflected in the construction documents has been implemented and preserved by the Contractor. RDM neither guarantees the performance of the Contractor nor assumes responsibility for Contractor's failure to perform work in accordance with the construction documents.
- If the RDM suspects the contractor is having material conformance problems at any time during construction, RDM will notify B&M. Additional QA testing may be necessary as a result of the Contractor's non-conformance. However, the type and frequency cannot be quantified at this time.

Detailed Cost Breakdown

RDM INTERNATIONAL'S MANHOUR & FEE ESTIMATE

Construction Support Services Runway 20 Extension Columbia Regional Airport (COU)

TASK	Project Manager	Const Manager	Project Engineer		NDT/CAD Technician	QC Manager	Admin	Testing Equip	Misc ODC	Task Total	Remarks
Task 1 - Review Construction Submittals a. P-501	8	4								\$2,737	
Task 2 - Site Visits & On-Site Observations	4	120							\$ 3,994.00	\$26,672	2 Trips for 6 Days Each - 10 hours per day
Task 3 - Attendance At & Assistance with Prepaving Meeting	4	4								\$1,730	Conference Calls
Task 4 - Consultation & Management a. Questions, RFI's, QA/QC Test Data, etc.	2 4	4 4		2						\$1,615 \$1,730	
SUBTOTALS	22	136	0	2	0	0	0	0	\$ 3,994.00	\$34,484	
SALARY RATE	\$83.85	\$60.11	\$34.83	\$64.76	\$34.57	\$47.74	\$24.61	\$2,100			
TOTAL PER CATEGORY	\$5,541	\$24,559	\$0	\$389	\$0	\$0	\$0	\$0	\$3,994	\$34,484	
TOTAL ESTIMATE FEE	\$34,484										

Travel Assumptions: Houst to COU

	Employee	From	То	Number of Trips	Number of days	Air Fare /each	Car Rental /day	Lodging /day	M&IE/day	Airport Parking/Day	Mileage @ \$0.535	Total	
Task 2	CM Manager	Dulles VA	cou	2	6	\$ 500.00	\$ 55.00	\$ 135.00	\$ 60.00	\$ 22.00		\$	3,994.00
									Total for Tra	evel Details		\$	3.994.00

EXHIBIT V - SA1

ENGINEERING CONSTRUCTION SERVICES-COST BREAKDOWN

SUPPLEMENTAL AGREEMENT NO. 1 - EXHIBIT V - SA1

DERIVATION OF CONSULTANT PROJECT COSTS

SUMMARY OF COSTS

EXTEND RUNWAY 2-20 & TAXIWAY A 900' TO THE NORTH

C-Services for Extend Runway 2-20 & Taxiway A 900' to the North including NAVAIDS

Columbia Regional Airport

BASIC & SPECIAL SERVICES

August 10, 2020

Gross Hourly Rates	Driveriani													
Gross Hourly Rates	Principal	Project Manager	Sr. Civil Engineer	Staff Civil Engineer	Sr. Electrical Engineer	Staff Electrical Engineer	Sr. Planner	Geotech Engineer	Resident Observer	Sr. Architect	Sr. Tech	Staff Tech.	Quality Control Reviewer	Other Cost:
	\$ 246.	2 \$ 197.53	\$ 158.73	\$ 137.57	\$ 190.48	\$ 156.97	\$ 134.04	\$ 201.06	\$ 209.88	\$ 172.84	\$ 123.46	\$ 105.82	\$ 225.75	
BASIC SERVICES	1													
Construction Administration 1 (Office)	24	.0 198.0	454.0	51.0	78.0	100.0	0.0	16.0	8.0	0.0	0.0	0.0	0.0	Sum: (1, 2 4, & 5)
Total = \$ 173,452.14	\$ 5,925.	8 \$ 39,111.48	\$ 72,064.17	\$ 7,015.94	\$ 14,857.28	\$ 15,696.80	\$ -	\$ 3,216.96	\$ 1,679.03	\$ -	\$ -	\$ -	\$ -	\$ 4,032
Construction Phase 2 Services (Field)	!	.0 36.0	108.0	240.0	12.0	12.0	0.0	0.0	2,100.0	0.0	0.0	0.0	0.0	Sum: (1, 2 4, & 5)
Total = \$ 560,065.93	\$ -	\$ 7,111.18	\$ 17,143.02	\$ 33,016.18	\$ 2,285.74	\$ 1,883.62	\$ -	\$ -	\$ 440,744.88	\$ -	\$ -	\$ -	\$ -	\$ 56,399
3 Construction Closeou	ıt (.0 28.0	37.0	70.0	29.0	24.0	24.0	0.0	4.0	0.0	24.0	70.0	0.0	Sum: (1, 2, 4, & 5)
Total = \$ 46,883.93	\$ -	\$ 5,530.92	\$ 5,873.07	\$ 9,629.72	\$ 5,523.86	\$ 3,767.23	\$ 3,216.96	\$ -	\$ 839.51	\$ -	\$ 2,962.99	\$ 7,407.48	\$ -	\$ 1,095
SPECIAL SERVICES				f	[·····	,							
Material Testing: ES	۱ (۱	nl nr	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1		.0 0.0	0.0	0.0 \$ -	0.0 \$ -	0.0 \$ -	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4, & 5)
1	\$ -		\$ -					!				1		4, & 5) \$ 145,000
1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	4, & 5) \$ 145,000 Sum: (1, 2, 4, & 5)
Total = 1 \$ 145,000.00 Construction Observation Services 2 RDM	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 145,000. Sum: (1, 2, 4, & 5)

SUPPLEMENTAL AGREEMENT NO. 1 - EXHIBIT V - SA1

EXHIBIT VI – SA1 PERFORMANCE SCHEDULE

EXHIBIT VI - SA1

PERFORMANCE SCHEDULE

ORIGINAL AND SUPPLEMENTAL AGREEMENT 1

Consultant agrees to proceed with services immediately upon receipt of written Notice to Proceed (NTP) by the Sponsor and to employ such personnel as required to complete the scope of services in accordance with the following time schedule:

1. Table A identifies the planned schedule to complete the Scope of Services for items identified in B.1-B.3 of the Original Agreement.

TABLE A ORIGINAL AGREEMENT

ONOMAL A	
Item	Estimated Duration
Basic Services: B.1: Preliminary Design Phase	150 Days from the Notice to Proceed
Basic Services: B.2: Design Phase	120 Days from the FAA acceptance of Preliminary design report
Basic Services: Total Time to Complete B.1 and B.2 270 Days from the Notice to Proceed	270 Days from the Notice to Proceed
Basic Services: B.3: Bidding & Construction Award Phase	As Required
Special Services: Field Design Survey Special Services: Geotechnical	60 Days after receipt of NTP 60 Days after receipt of NTP
Construction Services Not included in this Scope of Work	N/A

2. Table B identifies the planned schedule to complete the Scope of Services for items identified in B.1-B.6 of Supplemental Agreement 1.

TABLE B SUPPLEMENTAL AGREEMENT 1

	Item	Estimated Duration
С	construction Services:	
	Exhibit II – SA1:	390 Days from the Sponsor's issuance of a Notice to
Exh	ibit A, January 21, 2020	Proceed to the selected Construction Contractor
	Items B.1-6	