



City Hall, 215 Sycamore St.
Muscatine, IA 52761-3840
(563) 262-4141
Fax (563) 262-4142

COMMUNITY DEVELOPMENT

Planning,
Zoning,
Building Safety,
Construction Inspection Services,
Public Health,
Housing Inspections,
Code Enforcement

MEMORANDUM

To: Mayor and City Council Members
Cc: Gregg Mandsager, City Administrator
From: Andrew Fangman, City Planner
Date: December 15, 2011
Re: Agreement for Engineering Services Related to Airfield Pavement Maintenance

INTRODUCTION: The City of Muscatine continues to utilize Anderson-Bogert Engineers & Surveyors, Inc., for design and consulting services for projects at the Muscatine Municipal Airport. The Federal Aviation Administration has identified airfield maintenance as the project for being considered for funding in fiscal year 2012 under the Airport Improvement Program.

BACKGROUND: The City Council Airport Advisory Commission and the City Council have included this project in the 5-year CIP for the airport. Anderson-Bogert Engineers & Surveyors, Inc. will provide the required professional services to specify repairs to defects identified in the existing airfield pavements. The pavement defects are anticipated to include joint seal damage, corner spalling, linear cracking, corner breaks, durability cracking, scaling, failed patching, shrinkage cracking, and faulting. Repairs are anticipated to include joint cleaning and sealing, crack routing and sealing, PCC partial depth patching, and PCC full depth patching. Additional information regarding the scope of engineering services expected under this Agreement may be referred to Exhibit A attached hereto.

RECOMMENDATION/RATIONALE: The attached professional services agreement has been reviewed and approved by staff. The cost for the project is provided through 85% state, 15% local cost share and is part of the approved 5-year CIP for the airport. It is recommended that the City Council approve the Agreement for Engineering Services Related to Airfield Pavement Maintenance – with Anderson Bogert Engineers and Surveyors as attached hereto.

BACKUP INFORMATION:

1. Agreement for Professional Services

EXHIBIT A
TASK ORDER
MASTER AGREEMENT FOR ENGINEERING SERVICES
MUSCATINE MUNICIPAL AIRPORT
FFY 2012 through FFY 2016

This Task Order pertains to an AGREEMENT by and between the City of Muscatine (SPONSOR) and Anderson-Bogert Engineers & Surveyors, Inc. (CONSULTANT) dated December 15, 2011. CONSULTANT shall perform Services on the PROJECT described below as provided herein and provided in the original referenced AGREEMENT. This Task Order shall not be binding until it has been properly executed by both parties. Upon execution, this Task Order shall supplement the AGREEMENT as it pertains to the Project described below.

TASK ORDER NUMBER: 1

PROJECT NAME: AIRFIELD PAVEMENT MAINTENANCE

ARTICLE I. SCOPE

NARRATIVE - The CONSULTANT shall provide the required professional services to specify repairs to defects identified in the existing airfield pavements. The pavement defects are anticipated to include joint seal damage, corner spalling, linear cracking, corner breaks, durability cracking, scaling, failed patching, shrinkage cracking, and faulting. Repairs are anticipated to include joint cleaning and sealing, crack routing and sealing, PCC partial depth patching, and PCC full depth patching.

The CONSULTANT shall provide the required professional services to:

- Locate, measure, and identify defects in the airfield pavements.
- Prepare bid documents for specifying repairs to the pavements.
- Observe construction and administer the construction contract for repairing the pavements.

These tasks are described in more detail below.

A. DESIGN PHASE

Preliminary

1. Conferences with the SPONSOR and FAA, inspection of the airfield pavements, discussion of scheduling, and development of a concept to establish project goals/scope.
2. Review recommendations from December 2010 IDOT Pavement Management Report.

3. Inspect, photograph, and document pavement defects and location of defects.
4. Prepare engineer's report to include design methodology and recommendations, preliminary plan quantities, engineer's cost opinion, project budget, and a construction phasing/staging plan to minimize interference with airport operations. The CONSULTANT shall advise the SPONSOR as to options available for reducing construction costs to stay within the budget, if it appears likely that bid prices will exceed the budget.
5. Prepare preliminary plans for review and approval by the SPONSOR.

Final

1. Incorporate/respond to preliminary design comments and prepare construction plans for airfield pavement maintenance for bidding as listed below.
 - Title sheet
 - Project location plan and tabulation of quantities
 - Safety and staging plan
 - Repair plan
 - Repair details
2. Develop the safety plan in accordance with AC 150/5370-2, Operational Safety on Airports during Construction.
3. Prepare project manual for the project including contract documents and specifications. Develop technical specifications using Advisory Circular 150/5370-10, Standards for Specifying Construction of Airports.
4. Design all improvements in accordance with FAA standards and guidelines.
5. Calculate final plan quantities; prepare final engineer's opinion of probable construction cost and compare to project budget.
6. Submit 95% plans and specifications for review and approval by the SPONSOR and by the FAA. Incorporate resulting final design review comments into the bid documents.
7. In-depth conferences with the SPONSOR and FAA for planning and coordination.

B. CONSTRUCTION PHASE

Bidding

1. Issue copies of plans, specifications, and contract documents to bidders, contractors, FAA, SPONSOR, and other interested state and federal agencies.
2. Assist in publicizing the proposed construction to secure competitive bids.
3. Field questions from contractors and suppliers.
4. Prepare and issue addenda, if required.
5. Assist the City with review of and tabulation of the bids and make recommendation for award of contract.
6. Provide FAA notification of the staging areas and haul routes by entering OEAAA cases for the four corners of each staging area and at least three points of the haul route into the FAA website. Coordinate with the contractor on the height of the most demanding piece of equipment that will be used on a regular basis.

Construction Services

1. Conduct the pre-construction conference.
2. Provide consultation and advice to the CLIENT during construction.
3. Assist the contractor with coordination of the construction work schedule with the Airport Manager to ensure the minimum interruption of Airport operations during the construction period.
4. Provide on-site construction review and observation. General observation of the construction work shall include consulting and advisory services and necessary activities associated with changed field conditions. Construction review shall include professional observations of the project when construction is in progress, to help assure substantial compliance with the plans, specifications, and contract documents. Services shall include assuring that all required field and laboratory inspections and tests are accomplished.
5. Provide review of all contractor submittals and shop drawings during construction.
6. If required, prepare change orders, supplemental agreements, and the accompanying FAA required independent cost analyses.

7. Review and approve partial and final estimates of work completed, as prepared and submitted by the Contractor.
8. Review Contractor payroll reports and compare to wage rate interview reports prepared by the SPONSOR.
9. Prepare and distribute working day reports.
10. Provide coordination with Nav/Com Sector Field Office, FAA, Cedar Rapids on runway closures.
11. Accompany SPONSOR and Contractor on final inspection.

C. SPECIAL SERVICES

Additional Services To Be Provided By The CONSULTANT Shall Include:

1. Assist the SPONSOR with the preparation and administration of a DBE Program, if required.
2. Assist in filing of the FAA Grant Application.
3. Prepare all required FAA SPONSOR certification forms.
4. Provide information and prepare "Record Drawings" based upon our best recorded knowledge of the completed construction for the SPONSOR and FAA files.
5. Prepare required FAA report for closeout of project.

D. ADDITIONAL ENGINEERING SERVICES

Should additional engineering services be required due to the scope of the project being changed, an amendment to this contract will be developed with the accompanying costs.

ARTICLE II. COMPENSATION

The SPONSOR agrees to compensate the CONSULTANT for performing engineering services on a **FIXED LUMP SUM BASIS** as described below:

1.	Design Phase	
	a. Preliminary\$6,479
	b. Final\$3,735
2.	Construction Phase – Bidding Assistance\$2,222
3.	Special Services\$2,149
	SUBTOTAL\$14,585

And the SPONSOR agrees to compensate the CONSULTANT for performing Construction Services on a **COST-PLUS-FIXED FEE NOT TO EXCEED BASIS** as described below:

Construction Services\$12,442
TOTAL PROJECT COMPENSATION\$27,027

Per the following Cost Summary and Work Plan.

Cost Summary

1	Direct Salary Costs			
	<u>Title</u>	<u>Hours</u>	<u>Rate/Hour</u>	<u>Cost</u>
	Project Manager/Engineer	124	\$40.50	\$5,022.00
	Staff Engineer	'37	\$26.44	\$978.28
	Surveyor	8	\$31.00	\$248.00
	CAD technician	27	\$28.60	\$772.20
	Word Processing/Acct	17	\$22.90	\$389.30
	Construction Observer	137	\$26.44	\$3,622.28
	<i>Total Direct Salary Costs</i>			<i>\$11,032.06</i>
2	Labor & General Administrative Overhead			
	Percentage of Direct Salary Costs 105%			\$11,583.66
3	Subtotal Items 1 & 2			\$22,615.72
4	Fixed Fee @ 15%			\$3,392.36
5	Direct Non-Salary Expense			
	Transportation			\$986.00
	Postage			\$32.92
	<i>Total Direct Non-Salary Costs</i>			<i>\$1,018.92</i>
6	Grand Total (3+4+5)			\$27,027.00

Work Plan

Task	Design Engineer	Staff Engineer	Surveyor	CAD Technician	Clerical	Const. Observer
	Hours	Hours	Hours	Hours	Hours	Hours
Design Phase						
Preliminary	46	10		16	3	
Final	26	0	5	11	3	
Construction Phase						
Bidding	15		3		11	
Construction Services	22	16				137
Special Services	15	11				0
Totals	124	37	8	27	17	137

ARTICLE III. SCHEDULE

Date	Task/Activity Complete
1/24/12	research/data gathering
2/7/12	preliminary plans
3/7/12	95% plans & specifications
3/15/12	council pass resolution to set a public hearing date for 4/5/2012 for considering the plans and specifications and for establishing a bid date
3/29/12	final plans complete
4/5/12	Public hearing on plans and specs/council establish bid date
4/6/12	Notice to bidders published
4/24/12	Open bids
5/3/12	Council approve low bidder (conditional to FAA concurrence)/execute grant offer
6/7/12	Council approve contract and bonds from contractor (conditional to FAA concurrence)

IN WITNESS WHEREOF, the SPONSOR and the CONSULTANT have executed this Task Order as of the date first written.

FOR THE CONSULTANT

FOR THE SPONSOR
CITY OF MUSCATINE

BY: _____

BY: _____

ATTEST: _____

ATTEST: _____