



**COCHISE COUNTY FACILITIES MANAGEMENT**  
**DEPARTMENT**

1415 Melody Lane, Building C, Bisbee, AZ 85603  
Phone: (520) 432-9734 Fax: (520) 432-9758  
Website: [www.cochise.az.gov](http://www.cochise.az.gov)

**Project Description: Design and Engineering Services for  
Reconstruction of Taxiways A1 & A2**

**BISBEE-DOUGLAS INTERNATIONAL AIRPORT**

**Administering Agency: Cochise County Facilities Management**

**Agreement No. 11-31-FAC-04/AIP # 3-04-0013-07-2012**

**AMENDMENT NO. 2**

THIS AGREEMENT, originally entered into on September 7, 2011, by and between the **County of Cochise** (County) and **Armstrong Consultants**, (Consultant), is amended as follows:

1. **WORK PROGRAM** – See Amendment 1 to Professional Services Agreement #11-31-FAC-04 dated 9/7/2011 for the Phases 1, 2 & 3 work program for Projects #1 & #2, Reconstruct Connecting Taxiway A2 and Replace Taxiway Edge Lighting System. A portion of Project #1, Rehabilitate Taxiway A1, has been removed from the project bid package and will not be bid or constructed.
2. **FEES** - The fees will be as noted below. (All lump sums)

Projects #1 & #2 – Reconstruct Connecting Taxiway A2 and Replace Taxiway Edge Lighting System

Bidding: \$7,799.18  
Phase 4: \$85,181.99

Ref: Scope of Work and detailed Engineering Fee Breakout incorporated herein as Exhibit A.

The total amount of this contract amendment is an increase of \$92,981.17. The new contract amount shall be \$234,481.17.

With the exception of the above, all other provisions of this agreement shall remain in full force and effect.

This Amendment is entered into this \_\_\_\_\_ day of \_\_\_\_\_ 2012.

**CONTRACTOR:**

**APPROVED BY:**  
COCHISE COUNTY BOARD OF  
SUPERVISORS

\_\_\_\_\_  
Dennis A. Corsi  
President  
\_\_\_\_\_

\_\_\_\_\_  
Richard R. Searle, Chairman  
Board of Supervisors  
\_\_\_\_\_

**ATTEST:**

**APPROVED AS TO FORM:**

\_\_\_\_\_  
Katie Howard  
Clerk of the Board  
\_\_\_\_\_

\_\_\_\_\_  
David C. Fifer  
Civil Denuty County Attorney  
\_\_\_\_\_

**Exhibit A**  
**Agreement No. 11-31-FAC-04**  
**Amendment No. 2**

**Scope of Work**

**Projects #1 & #2 – Reconstruct Connecting Taxiway A2 and Replace Taxiway Edge Lighting System**

Estimated Construction Costs are: \$600,000

Anticipated Contract Construction period: 60 Calendar Days

**BIDDING SERVICES**

The Engineer shall provide the following Prebid and Bidding services. These services will

include assisting the Owner with the advertisement for bids, notification of local airport users of

the construction schedule and general completion of the final construction contract documents

for the project. The following outline describes in greater detail the tasks and products:

1. Attend scoping meeting either in person or via telephone.
2. Prepare project scope of work and fee estimate worksheets.
3. Assist the Owner with advertising and interpretation of project requirements.
4. Provide technical assistance and recommendations to the Owner during the bidding process.
5. Assist with pre-bid conference. Issue addenda, prepare an abstract of bids, and make recommendations for award.
6. Assist in award notification to successful bidder and notify and return bid bonds to the unsuccessful bidders.

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**PHASE 4 - CONSTRUCTION SERVICES**

During the construction phase of the project, the Engineer shall provide the following services.

The Engineer will assist the Owner to monitor and document progress for quality and cost

control. Review contractor payment requests, quality control and acceptance testing, continually inform the Owner of project progress and problems, complete the test summary,

conduct the final project inspection and complete the final project report. Activities include:

1. Review bonds, insurance certificates, construction schedules, etc.
2. Conduct pre-construction conference, prepare and distribute meeting minutes.
3. Review submittals and shop drawings during construction, prepare approval/rejection letters for the materials. Maintain a list of material submittal and approval/rejection dates.
4. Provide technical assistance to the Owner during construction. Prepare the Construction Management Plan including a copy of the Contractor's Quality Control Plan and Construction Schedule.

5. Provide a fulltime resident inspector to monitor and document construction progress, maintain daily diary, confirm conformance with schedules, plans and specifications, measure and document construction pay quantities and resolve quantity disputes with Contractor, attend and participate in weekly safety/progress meetings with the Contractor, review survey data and test results, document significant conversations or situations, document input or visits by local authorities, etc. The Project Manager will be onsite approximately every two weeks and will attend the prepaving conference.

6. Partner with a quality assurance (QA) testing firm to provide project acceptance testing

as specified in the project construction contract and specifications as published July, 2012. Acceptance testing will generally consist of the final tests necessary for each construction item to count that item for project acceptance. Construction contractor will be responsible for all project quality control (QC) testing and any other test not specifically referenced as "acceptance." Further, as described in the project specifications, repeated failing QA tests will become the contractor's responsibility for payment since failing tests will not result in item acceptance.

7. Prepare change orders and supplemental agreements, if required.

8. Prepare and submit weekly inspection reports to the Owner, ADOT/MPD – Aeronautics Group, and FAA.

9. Prepare and confirm Requests for Reimbursement (RFRs) for the Owner, including the

backup data to consist of copies of invoices documenting the requested funds.

10. Conduct and document periodic wage rate interviews and review certified payrolls.

11. Prepare and submit the project quality acceptance test summary for the 2012 project.

This document will be submitted to the FAA and ADOT/MPD – Aeronautics Group.

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12. Conduct a final project inspection with the Owner, the FAA, ADOT/MPD – Aeronautics

Group and the Contractor.

13. Prepare record drawings and a final project report for the 2012 project. The final report

will follow the current FAA AIP Final Report guidance. The FAA, ADOT/MPD – Aeronautics Group, and Owner will each receive one copy of the final report and record drawings in half size (11"x17"). The Owner will receive hard copies of the documents as well as an electronic copy. The FAA and ADOT/MPD – Aeronautics Group will receive an electronic copy unless otherwise requested.

### Detailed Engineering Fee Breakout

**AIRPORT:** Bisbee Douglas International Airport      **ACI PROJECT NUMBER:** 3-04-0013-007-2012  
**LOCATION:** Douglas, Arizona      **DATE:** 9/14/12  
**ADOT GRANT NO.:** Pending      **REV. NO:** NA  
**PROJECT DESCRIPTION:** Reconstruct Connecting Taxiway A2 and Replace Taxiway Edge Lighting System

Note: This spreadsheet is provided to show how the lump sum totals for each phase have been established. The monthly billing will be a simple percentage of each phases total lump sum amount.

	Proposed Fee	Independent Fee Analysis	Negotiated Fee
<b>PHASES 1-3 - DESIGN SERVICES</b>			
3.0 BIDDING	\$7,799.18		
<b>ARMSTRONG PART A - BASIC SERVICES</b>	<b>\$7,799.18</b>	<b>\$0.00</b>	<b>\$0.00</b>
<b>PHASE 4 CONSTRUCTION SERVICES</b>			
4.0 CONSTRUCTION SERVICES PHASE	<b>\$75,406.99</b>		
<b>PHASE 4 - DIRECT SUBCONSULTANTS</b>			
QA Testing Services - Construction	\$8,500.00		
<b>TOTAL SUBCONSULTANTS</b>	<b>\$8,500.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
ACI 15% Overhead on Subconsultants	\$1,275.00	\$0.00	\$0.00
<b>TOTAL PHASE 4 - CONSTRUCTION SERVICES</b>	<b>\$85,181.99</b>	<b>\$0.00</b>	<b>\$0.00</b>

Item No.	Principal Engineer	Project Manager	Project Engineer/Planner	Staff Engineer	Draftsman	Clerical	Total Hours	Cost Summary
<b>3.0 BIDDING</b>	<b>\$220.00</b>	<b>\$180.00</b>	<b>\$155.00</b>	<b>\$130.00</b>	<b>\$100.00</b>	<b>\$65.00</b>		
3.2 Prepare Project Scope of Work and Fee Estimate:	3	6	1	0	0	2	12	\$2,025.00
3.3 Assist Owner with Advertising	0	2	1	2	0	0	5	\$775.00
3.4 Technical Assistance During Bidding Process	0	4	2	3	2	0	11	\$1,620.00
3.5 Conduct Pre-Bid Meeting	0	6	2	0	0	0	8	\$1,390.00
3.5 Addenda, Bid Abstract, Award Recommendation	1	2	1	2	0	2	8	\$1,125.00
<b>Estimated Total Man-hours</b>	<b>4</b>	<b>20</b>	<b>7</b>	<b>7</b>	<b>2</b>	<b>4</b>	<b>44</b>	
<b>Summary Costs</b>	<b>\$880.00</b>	<b>\$3,600.00</b>	<b>\$1,085.00</b>	<b>\$910.00</b>	<b>\$200.00</b>	<b>\$260.00</b>		<b>\$6,935.00</b>
<b>3.90 Reimbursables</b>								
3.92 Miscellaneous (Printing, Copying & Mailing)		\$50					\$50.00	\$50.00
3.93 Auto Rental						0 Days	\$70.00	\$0.00
3.94 Mileage		22				22 Mi	\$0.445	\$9.79
3.95 Pilot Time		6				6	\$75.00	\$450.00
3.96 C 182 Aircraft Miles		322				322	\$0.995	\$320.39
3.97 P 210 Aircraft Miles						0	\$0.995	\$0.00
3.98 Lodging and Per Diem		1				1 Days	Per ADOT	\$34.00

**Total Final Design Phase: \$7,799.18**

Checks

### Detailed Engineering Fee Breakout

AIRPORT: Bisbee Douglas International Airport  
 LOCATION: Douglas, Arizona  
 ADOT GRANT NO.: Pending

ACI PROJECT NUMBER: 3-04-0013-007-2012  
 DATE: 9/14/12  
 REV. NO: NA

#### PHASE 4 - CONSTRUCTION SERVICES

Item No.	CONSTRUCTION SERVICES PHASE (based on 60 Calendar Days)	Principal Engineer	Project Manager	Project Engineer/ Planner	Resident Engineer	Draftsman	Clerical	Total Hours	Cost Summary
4.1	Review Bonds, Certs, Construction Schedule	0	2	4	0	0	0	6	\$980.00
4.2	Conduct Pre-Construction Conference	0	6	1	0	0	0	7	\$1,235.00
4.3	Review Submittals, Shop Drawings and RFI	0	2	8	0	0	0	10	\$1,600.00
4.4	Provide Technical Assistance During Construction	0	12	2	0	0	0	14	\$2,470.00
4.5	Provide Full-Time Inspector	0	0	0	396	0	0	396	\$39,600.00
4.7	Prepare Change Orders, Supplemental Agreeeme	1	3	8	0	5	0	17	\$2,500.00
4.8	Weekly Reports	0	2	8	13	0	0	23	\$2,900.00
4.9	Confirm Payment Requests	0	4	16	0	0	0	20	\$3,200.00
4.10	Review Cert. Payroll and Conduct Interviews	0	1	5	0	0	0	6	\$955.00
4.11	Project Test Summary Document	0	3	8	10	0	0	21	\$2,780.00
4.12	Conduct Final Inspection	0	6	6	0	0	0	12	\$2,010.00
4.13	Prepare Record Drawings	0	2	4	2	6	0	14	\$1,780.00
4.13	Prepare Final Engineers Report	1	3	10	6	0	0	20	\$2,910.00
<b>Estimated Total Man-hours</b>		<b>2</b>	<b>46</b>	<b>80</b>	<b>427</b>	<b>11</b>	<b>0</b>	<b>566</b>	
<b>Summary Costs</b>		<b>\$440.00</b>	<b>\$8,280.00</b>	<b>\$12,400.00</b>	<b>\$42,700.00</b>	<b>\$1,100.00</b>	<b>\$0.00</b>		<b>\$64,920.00</b>
4.90	<b>Fixed Fee/Reimbursables</b>								
4.92	Miscellaneous						50	\$50.00	\$50.00
4.93	Auto Rental						0 Days	\$70.00	\$0.00
4.94	Mileage		88		2566		2654 Mi	\$0.445	\$1,181.03
4.95	Pilot Time		24		12		36	\$75.00	\$2,700.00
4.96	C 182 Aircraft Miles		1288		2520		3808	\$0.995	\$3,788.96
4.97	P 210 Aircraft Miles						0	\$0.995	\$0.00
4.98	Lodging and Per Diem				60		60 Days	Per ADOT	\$2,767.00
<b>Total Construction Phase Services</b>								<b>Total Construction Phase Services:</b>	<b>\$75,406.99</b>

Checks