

DEFINITIONS

Architect Services, Engineer Services, Land Surveying Services, Assayer Services, Geologist Services and Landscape Architect Services: Those professional services within the scope of the practice of those services as provided in ARS § 32-101.

Branch Office: A geographically distinct place of business or subsidiary office of a firm that has a key role on the team.

Discipline: Primary technical capabilities of key personnel, as evidenced by academic degree, professional registration, certification, and/or extensive experience.

Firm: Defined in ARS § 32-101(B.19.).

Key Personnel: Individuals who will have major contract responsibilities and/or provide unusual or unique expertise.

SPECIFIC INSTRUCTIONS:

1. Complete this form for each branch office seeking work under this RFQ.
 - a. – e. **Firm (or Branch Office) Name and Address.** Self-explanatory.
 - f. **Year Established.** Enter the year the firm (or branch office, if appropriate) was established under the current name.
 - g. **Ownership.**
 - (g1). *Type.* Enter the type of ownership or legal structure of the firm (sole proprietor, partnership, corporation, joint venture, etc.).
 - (g2). *Small Business Status.* A firm is a small business if the firm has less than 100 employees **or** has gross revenues of \$4 million or less.
 - h.-j. **Point of Contact.** Provide this information for a representative of the firm that the Customer can contact for additional information. The representative must be empowered to speak on contractual and policy matters.
 - k. **Name of Firm.** Enter the name of the firm.
2. **Employees by Discipline.**
 - a. Select disciplines from the List of Disciplines (Function Code) listed on Page 3 of 4 Instructions. For employees that do not qualify for any of the disciplines, select Other. *Note: The intended searchable database indicated in the RFQ will be populated from the Qualifications Form I Excel attachment only.*
 - b. Each person can be counted only twice; once for his/her primary function and once for his/her secondary function. Primary and secondary functions should be indicated by including a "P" or an "S" in column b after the Description Title is given.
 - c-d. If the form is completed for a firm (including all branch offices), enter the number of employees by disciplines in column c. If the form is completed for a branch office, enter the number of employees by discipline in column d and for the firm in column c.
3. **Profile of Firm's Experience and Annual Average Revenue for Last Year.**
 - a. Enter the approximate number of projects the firm (or branch) has done attributable by Profile Code listed on Page 3 of 4 Instructions over the last year.
 - b. Enter the appropriate Profile Codes from Instructions Pages 3 of 4 that represent the type of work the firm (or branch) has done over the last year.
 - c. Using the Revenue Index Number on Page 3 of 6 Form, indicate the approximate revenue the firm has

earned over the last year per Profile Code entered into the table.

4. **Resumes of Key Personnel Proposed for This Contract.** Complete this section for each key person who will participate in this contract.
 - a. Self-explanatory.
 - b. Self-explanatory
 - c. Total years of relevant experience (block c1), and years of relevant experience with current firm, but not necessarily the same branch office (block c2).
 - d. Name, City and State of the firm where the person currently works, which must correspond with one of the firms (or branch office or a firm, if appropriate) listed in Section 1.
 - e. Provide information on the highest relevant academic degree(s) received. Indicate the area(s) of specialization for each degree.
 - f. Provide information on current relevant professional registration(s) and in which State(s) they are current.
 - g. Provide information on any other professional qualifications relating to this contract, such as education, professional registration, publications, organizational memberships, certifications, training, awards, and foreign language capabilities.
 - h. Provide information on no more than five (5) projects in the last year which the person had a significant role that demonstrates the person's capability relevant to her/his proposed role in this contract. These projects do not necessarily have to be any of the projects presented in Section 5 for the project team if the person was not involved in any of those those projects or the person worked on other projects that were more relevant than the team projects in Section 5. Use the check box provided to indicate if the project was performed with any office of the current firm. If any of the professional services or construction projects are not complete, leave Year Completed blank and indicate the status in Brief Description and Specific Role.

5. **Example Projects Which Best Illustrate Firms Qualification for this contract.** Select project where multiple team members worked together, if possible, that demonstrate the team's capability to perform work similar to that required for this contract. Complete one Section 5 for each project. List no more than five (5) projects.
 - a. Title and Locations of project or contract. For an indefinite delivery contract, the location is the geographic scope of the contract.
 - b. Enter the year completed of the professional services (such as planning, engineering study, or design), and/or the year completed if construction. If any of the professional services or the construction projects are not complete, leave Year Completed blank and indicate the status in Brief Description of Project and Relevance to This Contract (block f).
 - c. Project Owner or user, such as a government agency or installation, an institution, a corporation or private individual.
 - d. Provide the original budget or not to exceed dollar amount for the project.
 - e. Provide the Total Cost of the Project. If any of the professional services or construction projects is not complete, indicate the percentage complete and whether this project will be on budget, over or under budget.
 - f. Brief Description: Indicate scope, size, and length of project, principle elements and special features of the project. Discuss the relevance of the example project to this contract.

6. **Additional Information.** Use this section to provide additional information you feel may be necessary to describe your firm's qualifications for this contract.

7. **Annual Average Professional Services Revenues of Firm for Last 3 Years.** Complete this block for the firm or branch office for which this form is completed. In column a, enter an approximate percentage of total work attributable to State, Federal or Municipal Work. In column b, enter an approximate percentage of total work attributable to Non-Government work. Percentages should take into consideration work completed over the last 3 years.

8. **Authorized Representative.** An authorized representative of the firm or branch office must sign and date the completed form. Signing attests that the information provided is current and factual. Provide the name and title of the authorized representative who signed the form.

**RFQ# ADSP014-00003465, Annual Request for Qualifications and Experience
REVISED - Attachment I – General Qualifications**

List of Disciplines (Function Codes) for Question 7

Aeronautical Engineer	Environmental Engineer	Mining Engineer
Agricultural Engineer	Environmental Scientist	Nuclear Engineer
Archeologist	Fire Protection Engineer	Petroleum Engineer
Architect	Geodetic Surveyor	Photogrammetrist
Architectural Engineering	Geographic Information System Specialist	Project Manager
Biologist	Geological Engineer	Sanitary Engineer
CADD Technician	Geologist	Soils Engineer
Chemical Engineer	Hydrographic Surveyor	Structural Engineer
Civil Engineer	Hydraulic Engineer	Technician/Analyst
Construction Manager	Hydrologist	Transportation Engineer
Construction Inspector	Industrial Engineer	Water Resources Engineer
Control Systems Engineer	Landscape Architect	
Cost Engineer/Estimator	Mechanical Engineer	
Ecologist	Metallurgical Engineer	
Electrical Engineer		

List of Experience Categories (Profile Codes for Question 8)

Acoustics, Noise Abatement	Dredging Studies and Design
Aerial Photography; Airborne Data and Imagery Collection and Analysis	Design & Planning Structured Parking Facilities
Activity Centers	Detention Security Systems
Air Pollution Control	Disability / Special Needs
Airports; Navaids; Airport Lighting; Aircraft Fueling	Ecological and Archeological Investigations
Airports; Terminals and Hangars; Freight Handling	Educational Facilities; Classrooms
Agricultural Development; Grain Storage; Farm Mechanization	Electrical Studies and Design
Animal Facilities	Electronics
Anti-Terrorism/Force Protection	Elevators; Escalators; People-Movers
Area Master Planning	Energy / Water Auditing Savings
Auditoriums and Theaters	Energy Conservation; New Energy Sources
Automation; Controls; Instrumentation	Environmental Impact Studies, Assessments or Statements
Barracks; Dormitories	Fallout Shelters; Blast-Resistant Design
Bridge Design: Bridges	Fire Protection
Cartography	Fisheries; Fish Ladders
Cemeteries (<i>Planning and Relocation</i>)	Forensic Engineering
Chemical Processing and Storage	Garages; Vehicles Maintenance Facilities; Parking
Child Care/Development Facilities	Gas Systems (<i>Propane; Natural, Etc.</i>)
Codes; Standards; Ordinances	Geodetic Surveying: Ground and Airborne
Cold Storage; Refrigeration and Fast Freeze	Heating; Ventilating; Air Conditioning
Commercial Building (<i>Low Rise</i>); Shopping Centers	Highways; Streets; Airfield Paving; Parking Lots
Community Facilities	Historical Preservation
Communications Systems; TV; Microwave	Hospital and Medical Facilities
Computer Facilities	Hotels; Motels
Conservation and Resource Management	<i>Housing (Residential, Multi-Family; Apartments; Condominiums)</i>
Construction Management	Hotels; Motels
Construction Surveying	Hydraulics and Pneumatics
Corrosion Control; Cathodic Protection Electrolysis	Hydrographic Surveying
Cost Estimating; Cost Engineering and Analysis; Parametric Costing; Forecasting	Industrial Buildings; Manufacturing Plants
Cryogenic Facilities	Industrial Processes; Quality Control
Construction Materials Testing	Industrial Waste Treatment
Dams (<i>Concrete; Arch</i>)	Intelligent Transportation Systems
Dams (<i>Earth; Rock</i>); Dikes; Levees	Infrastructure
Desalinization (<i>Process and Facilities</i>)	Irrigation; Drainage
Design-Build - Preparation of Requests for Proposals	Judicial and Courtroom Facilities
Digital Elevation and Terrain Model Development	Laboratories; Medical Research Facilities
Digital Orthophotography	Land Surveying
Dining Halls; Clubs; Restaurants	Landscape Architecture
	Libraries; Museums; Galleries

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REVISED - Attachment I – General Qualifications**

Lighting (*Interior; Display; Theater, Etc.*)
Lighting (*Exteriors; Streets; Memorials; Athletic Fields, Etc.*)
Labs - General
Labs – Research – Dry
Labs – Research – Wet
LEED Accredited A/E
LEED Independent 3rd Party Building Commissioning
Mapping Location/Addressing Systems
Materials Handling Systems; Conveyors; Sorters
Metallurgy
Materials Testing
Measurement / Verification / Conservation Water Consumption Savings
Mining and Mineralogy
Medical Related
Modular Systems Design; Fabricated Structures or Components
Mold Investigation
Museums
Nuclear Facilities; Nuclear Shielding
Office Buildings; Industrial Parks
Outdoor Recreation
Petroleum and Fuel (*Storage and Distribution*)
Photogrammetry
Pipelines (*Cross-Country - Liquid and Gas*)
Phase I Environmental
Prisons & Correctional Facilities
Plumbing and Piping Design
Prisons and Correctional Facilities
Product, Machine Equipment Design Pneumatic Structures, Air-Support Buildings Power Generation, Transmission, Distribution Public Safety Facilities
Radar; Sonar; Radio and Radar Telescopes
Radio Frequency Systems and Shielding's
Railroad; Rapid Transit
Recreation Facilities (*Parks, Marinas, Etc.*)
Refrigeration Plants/Systems
Rehabilitation (*Buildings; Structures; Facilities*)
Research Facilities
Resources Recovery; Recycling
Roof Infrared Imaging to Identify Water Leaks

Roofing
Safety Engineering; Accident Studies; OSHA Studies
Security Systems; Intruder and Smoke Detection
Seismic Designs and Studies
Sewage Collection, Treatment and Disposal
Soils and Geologic Studies; Foundations
Solar Energy Utilization
Solid Wastes; Incineration; Landfill
Special Environments; Clean Rooms, Etc.
Structural Design; Special Structures
Surveying; Platting; Mapping; Flood Plain Studies
Sustainable Design
Swimming Pools
Storm Water Handling and Facilities
Specifications Writing
Toxicology
Testing and Inspection Services
Traffic and Transportation Engineering
Topographic Surveying and Mapping
Towers (*Self-Supporting and Guyed Systems*)
Tunnels and Subways
Traffic Studies
Transportation
Urban renewals; Community Development
Utilities (*Gas and Steam*)
Value Analysis; Life-Cycle Costing
Warehouse and Depots
Water Resources; Hydrology; Ground Water
Water Supply; Treatment and Distribution
Wind Tunnels; Research/Testing Facilities Design
Waste Water Treatment Facility
Water Well Rehabilitation; Water Well Work
Zoning; Land Use Studies

**RFQ# ADSPO14-00003465, Annual Request for Qualifications and Experience
REVISED - Attachment I – General Qualifications**

(If a firm has branch offices, complete for each specific branch office seeking work.)

1. REVISED ADSPO13-00003465: Annual Request for Qualifications

a.	FIRM (OR BRANCH OFFICE) NAME:	Cooper Aerial Surveys Co.
b.	FIRM (OR BRANCH OFFICE) STREET:	11402 N. Cave Creek Rd
c.	FIRM (OR BRANCH OFFICE) CITY:	Phoenix
d.	FIRM (OR BRANCH OFFICE) STATE:	AZ
e.	FIRM (OR BRANCH OFFICE) ZIP CODE:	85020
f.	YEAR ESTABLISHED:1966	
(g1).	OWNERSHIP - TYPE:	Corporation
(g2)	OWNERSHIP - SMALL BUSINESS STATUS:	Small Business
h.	POINT OF CONTACT NAME AND TITLE:	Philip Gershkovich
i.	POINT OF CONTACT TELEPHONE NUMBER:	602-678-5111
j.	POINT OF CONTACT E-MAIL ADDRESS:	phil@cooperaerial.com
k.	NAME OF FIRM <i>(If block 1a is a branch office):</i>	

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2. EMPLOYEES BY DISCIPLINE

a. Discipline Title	b. Function: Primary (P) or Secondary (S)	c. No. of Employees - Firm	d. No. of Employees - Branch
Photogrammetry	P	14	
Land Surveying	S		
Total		14	

3. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST YEAR

a. Approximate No. of Projects	b. Experience	c. Revenue Index Number (see below)
360	Aerial Photography, Photogrammetry, Land Surveying, Ortho-Rectification	6

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REVISED - Attachment I – General Qualifications**

4. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT (Complete one Section 4 for each key person.)

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT <i>(Complete one Section E for each key person.)</i>						
12. NAME Philip Gershkovich	13. ROLE IN THIS CONTRACT Project Manager	14. YEARS EXPERIENCE <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;">a. TOTAL</td> <td style="width:50%;">b. WITH CURRENT FIRM</td> </tr> <tr> <td align="center">8</td> <td align="center">8</td> </tr> </table>	a. TOTAL	b. WITH CURRENT FIRM	8	8
a. TOTAL	b. WITH CURRENT FIRM					
8	8					
15. FIRM NAME AND LOCATION <i>(City and State)</i> Cooper Aerial Surveys Co., Philadelphia, PA						
16. EDUCATION (DEGREE AND SPECIALIZATION) B.S. / Geography M.A.S. / Geographical Information Systems		17. CURRENT PROFESSIONAL REGISTRATION <i>(STATE AND DISCIPLINE)</i> Certified Photogrammetrist ASPRS National				
18. OTHER PROFESSIONAL QUALIFICATIONS <i>(Publications, Organizations, Training, Awards, etc.)</i> <ul style="list-style-type: none"> • Member: PSLS, APLS, NJPLS 						

H. RELEVANT PROJECTS

	(1) TITLE AND LOCATION <i>(City and State)</i>	(1) YEAR COMPLETED	
a.	RT 440 – NJ Turnpike to Rt 1-9 Jersey City, NJ	PROFESSIONAL SERVICES 2009	CONSTRUCTION (If Applicable)
	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Cooper Aerial Surveys Co. provided Jacobs Engineering with mapping and imagery services covering a very urban area of RT 440 N stretching from the New Jersey Turnpike to RT 1-9 just 4 miles west of New York City. The project consisted of 1:3000 photography 1"=30' mapping with 1' contours. Mr. Gershkovich served as project manager and hired Control Point Associates/Bohler Engineering for ground control on this project, providing weekly updates, and assuring timely delivery. <i>Total Project Cost: \$25,900.00</i>		
b.	AZDOT Master Consultant Services Phoenix, Arizona	PROFESSIONAL SERVICES 2005-Present	CONSTRUCTION (If Applicable)
	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Over the last Eight years, Cooper Aerial Surveys Co. provided the ADOT with design 1' contour mapping for over 200 linear miles in Maricopa County. The mapping was furnished through three Master Consultants, AECOM, Parsons Brinckerhoff, and HDR. The projects consist of 1:3600 stereo photography used to generate 1"=40' mapping. Project locations include the I-17 corridor, US 60 Grand Ave, I-10, SR 101L, SR 202 Red Mountain, Lake Pleasant Road. Mr. Gershkovich managed many of these projects himself including the project listed above to insure on-time deliverables and constant communication with the clients. <i>Total Project Cost: \$1,428,893.00</i>		
c.	Rhode Island Resource Recovery Corporation Landfill Providence, Rhode Island	PROFESSIONAL SERVICES 2012	CONSTRUCTION (If Applicable)
	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Cooper Aerial provided digital mapping services and color ortho-rectified imagery for the Rhode Island Resource Recovery Corporation Landfill located east of Providence Rhode Island. Cooper Aerial Surveys contracted with Control Point Associates out of Warren NJ to place roughly 26 ground control points on and around the landfill in order to create and establish a control network for photogrammetric mapping. 1:6000 Color stereo photography of the proposed site was flown and furnished to RIRRC as well as a color center shot at 1:24000 which encompassed the whole site. As a preliminary deliverable, scanning services, three sets of contact prints, and 9 color enlargements of the center shot were provided before compilation began. The imagery was then used to generate 1"=100' scale mapping with a 2' contour interval. The mapping was done as a DTM and delivered in		

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AutoCAD format on DVD

Total Project Cost: \$31,255.00

d.	(1) TITLE AND LOCATION <i>(City and State)</i>	(1) YEAR COMPLETED	
	Riegelsville Bridge Riegelsville, PA	PROFESSIONAL SERVICES 2009	CONSTRUCTION (If Applicable)

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

Check if project performed with current firm

Pinto Engineering contracted Cooper Aerial Surveys to provide low level aerial photography and mapping services with the use of a Bell 206 helicopter less than 250 feet above the bridge deck. The main purpose of the project was to map the tops of the suspension cables with a very high degree of accuracy. The contours were successfully compiled at an interval of 0.2', and the horizontal and vertical point accuracy specifications are above and beyond project requirements. Cooper Aerial Surveys was able to successfully read vertical positions with an accuracy of roughly .05'. The project was featured in the Fall 2009 PSLs magazine.

Total Project Cost: \$9,4550.00

e.	(1) TITLE AND LOCATION <i>(City and State)</i>	(1) YEAR COMPLETED	
	Republic Services Nationwide Contract	PROFESSIONAL SERVICES 2011 to Present	CONSTRUCTION (If Applicable)

(3) BRIEF DESCRIPTION *(Brief scope, size, cost, etc.)* AND SPECIFIC ROLE

Check if project performed with current firm

Cooper Aerial Surveys was hired by Republic Landfill to provide mapping for each of their 218 Landfills throughout the United States. Each Landfill was flown for 2 ft mapping and Planimetric Compilation. As project manager, Mr. Gershovich was responsible for coordinating with each project manager and internal staff to insure each landfill was completed within 1 month from flight.

Total Project Cost: \$600,000.00

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E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person.)

12. NAME Benjamin M. Saunders	13. ROLE IN THIS CONTRACT Stereo Compilation/Aero Triangulation Manager	14. YEARS EXPERIENCE	
		a. TOTAL 27	b. WITH CURRENT FIRM 22
15. FIRM NAME AND LOCATION (City and State) Cooper Aerial Surveys Co., Tucson, AZ			
16. EDUCATION (DEGREE AND SPECIALIZATION) VA, O.J.T. for Photogrammetry		17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)	
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)			

19. RELEVANT PROJECTS

a.	(1) TITLE AND LOCATION (City and State)	(1) YEAR COMPLETED	
		AZDOT Master Consultant Services Phoenix, Arizona	PROFESSIONAL SERVICES 2005-2009
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Over the last five years, Cooper Aerial Surveys Co. provided the ADOT with design 1' contour mapping for over 200 linear miles in Maricopa County. The mapping was furnished through three Master Consultants, AECOM, Parsons Brinckerhoff, and HDR. The projects consist of 1:3600 stereo photography used to generate 1"=40' mapping. Project locations include the I-17 corridor, US 60 Grand Ave, I-10, SR 101L, SR 202 Red Mountain, Lake Pleasant Road. Mr. Saunders managed the production tasks such as compilation and QA/QC for each of these projects covering 200 miles of roadway. Mr. Saunders also provided full support to the project manager in ensuring on-time completion of the project. <i>Total Project Cost: \$1,428,893.00</i>		<input checked="" type="checkbox"/> Check if project performed with current firm
b.	(1) TITLE AND LOCATION (City and State)	(1) YEAR COMPLETED	
	RT 440 – NJ Turnpike to Rt 1-9 Jersey City, NJ	PROFESSIONAL SERVICES 2009	
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Cooper Aerial Surveys Co. provided Jacobs Engineering with mapping and imagery services covering a very urban area of RT 440 N stretching from the New Jersey Turnpike to RT 1-9 just 4 miles west of New York City. Cooper Aerial contracted with Keystone Aerial Surveys to fly the project and provide photography for mapping. The project consisted of 1:3000 photography 1"=30' mapping with 1' contours. Mr. Saunders served as production manager to make sure all the compilation and imagery processing stays on schedule. Mr. Saunders also kept constant communication with the project manager. <i>Total Project Cost: \$25,900.00</i>		<input checked="" type="checkbox"/> Check if project performed with current firm
c.	(1) TITLE AND LOCATION (City and State)	(1) YEAR COMPLETED	
	Red Gap Ranch Flagstaff, AZ	PROFESSIONAL SERVICES 2008	
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Cooper Aerial Surveys Co. provided Jacobs Engineering with 5' contour mapping for over approximately 36 miles of pipeline in Flagstaff Arizona. The projects consist of 1:20000 stereo photography used to generate 1"=200' mapping. Ortho-rectified imagery was captured at 1:20000 to efficiently save costs while providing a quality image product. Mr. Saunders served as production manager to make sure all the compilation and imagery processing stays on schedule. Mr. Saunders also kept constant communication with the project manager.		<input checked="" type="checkbox"/> Check if project performed with current firm

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Total Project Cost: \$40,000.00

d.	(1) TITLE AND LOCATION (City and State)	(1) YEAR COMPLETED	
	Buckskin Parker, AZ	PROFESSIONAL SERVICES	

2006

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE

Check if project performed with current firm

Stanley Consultants contracted Cooper Aerial Surveys Co. to provide the Buckskin Sanitary District with photogrammetry services for a 5,000 acre area. These services were tailored for Buckskin's Wastewater Master plan project. Cooper Aerial Surveys Co. worked closely with Stanley Consultants surveying department to insure the proficient placement for the 61 aerial targets. To provide a cost efficient product, a 1:12000 color flight was flown for the ortho-rectified photography. Cooper Aerial Surveys Co. designed a custom tile definition file and image file index for the imagery to minimize the size of the ortho-photo tiles. The mapping was also delivered in minimized file sizes to provide a manageable product. Ms. Saunders served as production manager for this project, managing over 700 hours of compilation.

Total Project Cost: \$48,000.00

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E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME Steve B. Costin	13. ROLE IN THIS CONTRACT Digital Orthoimagery Manager	14. YEARS EXPERIENCE	
		a. TOTAL 13	b. WITH CURRENT FIRM 10
15. FIRM NAME AND LOCATION <i>(City and State)</i> Cooper Aerial Surveys Co., Phoenix, AZ			
16. EDUCATION (DEGREE AND SPECIALIZATION) 2 years New Mexico State University (General Studies)		17. CURRENT PROFESSIONAL REGISTRATION <i>(STATE AND DISCIPLINE)</i>	
18. OTHER PROFESSIONAL QUALIFICATIONS <i>(Publications, Organizations, Training, Awards, etc.)</i>			

Socet Set advanced user training certification, Orima advanced user training certification, Introduction to ArcGIS certified, GPro advanced user training for ADS40 processing, PosPac advanced user training for IMU post-processing, onsite user training for Condor node processing

19. RELEVANT PROJECTS

	(1) TITLE AND LOCATION <i>(City and State)</i>	(1) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (If Applicable)
a.	AZDOT Master Consultant Services Phoenix, Arizona	2005-2009	
	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE Over the last five years, Cooper Aerial Surveys Co. provided the ADOT with design 1' contour mapping for over 200 linear miles in Maricopa County. The mapping was furnished through three Master Consultants, AECOM, Parsons Brinckerhoff, and HDR. The projects consist of 1:3600 stereo photography used to generate 1"=40' mapping. Project locations include the I-17 corridor, US 60 Grand Ave, I-10, SR 101L, SR 202 Red Mountain, Lake Pleasant Road. Mr. Costin managed the imagery department and provided QA/QC throughout the entire project. Mr. Costin also kept continuing dialogue with the project manager to ensure on-time delivery. <i>Total Project Cost: \$1,428,893.00</i>		<input checked="" type="checkbox"/> Check if project performed with current firm
b.	RT 440 – NJ Turnpike to Rt 1-9 Jersey City, NJ	2009	
	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE Cooper Aerial Surveys Co. provided Jacobs Engineering with mapping and imagery services covering a very urban area of RT 440 N stretching from the New Jersey Turnpike to RT 1-9 just 4 miles west of New York City. The project consisted of 1:3000 photography 1"=30' mapping with 1' contours. Mr. Costin managed the imagery department and provided QA/QC throughout the entire project. Mr. Costin also kept continuing dialogue with the project manager to ensure on-time delivery. <i>Total Project Cost: \$25,900.00</i>		<input checked="" type="checkbox"/> Check if project performed with current firm
c.	Camp Dresser Mckee El Paso, Texas	2008	
	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE Cooper Aerial Surveys Co. provided the Camp Dresser Mckee (CDM) with design 1' contour mapping for over 700 Acres in El Paso. The projects consist of 1:3600 stereo photography used to generate 1"=40' mapping. Project location was along I10 between Paisano Dr and Mesa St. Ortho-rectified imagery was captured at 1:9600 to efficiently save costs while providing a		<input checked="" type="checkbox"/> Check if project performed with current firm

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quality image product. Mr. Costin managed the imagery department and provided QA/QC throughout the entire project. Mr. Costin also kept continuing dialogue with the project manager to ensure on-time delivery.

Total Project Cost: \$38,000.00

 <p align="center">F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT</p> <p align="center"><i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)</i></p>		20. EXAMPLE PROJECT KEY NUMBER	
21. TITLE AND LOCATION <i>(City and State)</i>		22. YEAR COMPLETED	
Republic Services Inc. - Nationwide Landfill Mapping		PROFESSIONAL SERVICES	CONSTRUCTION (if Applicable)
		2011-2013	
23. PROJECT OWNER'S INFORMATION			
a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER	
Republic Services Inc.	Wade Ross	(480) 627-2276	

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24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (Include scope, size, and cost)

**Republic Services, Inc.
Project Scope**

- ✓ 5 cm and 8cm GSD 4-band Stereo photography with DMCI
- ✓ 1:3600 & 1:7200 Stereo photography
- ✓ 2' contours generated
- ✓ 1' contours generated
- ✓ Ortho-rectified photography
- ✓ .24' ground pixel resolution
- ✓ Airborne GPS
- ✓ Over 100 Landfills throughout the US
- ✓ Project Cost: \$400,000+



Republic Services, Inc. contracted Cooper Aerial to map their Southwest and East Coast Region landfills in 2012.

Cooper contracted the flying services of Midwest Aerial to fly all of Republic's landfills using both the DMC II 4-band digital sensor and RC-30 film Camera. Imagery was acquired with both 1:3600 and 1:7200 with the RC 30 camera with color stereo photography or 5cm 4-band imagery with the DMC II of over 100 landfills. Mapping at 1" = 40' and 1"=100' with 1foot and 2 foot contours was provided with full planimetrics. Cooper also provided color ortho rectified photography at a .25 pixel resolution of each site.

Cooper was awarded an on-going contract to provide mapping services for all the landfills totaling near 150 sites for the next 5 years.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

a.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE

	F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT <i>(Present as many projects as requested by the agency, or 10 projects, If not specified. Complete one Section F for each project.)</i>	20. EXAMPLE PROJECT KEY NUMBER

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER Mohave County Flood Control District	b. POINT OF CONTACT NAME Shannon Summers	c. POINT OF CONTACT TELEPHONE NUMBER (928) 757-091
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**RFQ# ADSP014-00003465, Annual Request for Qualifications and Experience
REVISED - Attachment I – General Qualifications**

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (Include scope, size,

and cost)

Project Scope

Project Classification: Flood Control

- ✓ 1:7200 Stereo Photography
- ✓ Airborne GPS
- ✓ 2' Contours Generated
- ✓ 210 Square Miles
- ✓ 1:14400 Stereo Photography
- ✓ Color Ortho-rectified photography
- ✓ 6 inch ground pixel resolution
- ✓ Project Cost to Date: \$491,992.00



Mohave County Flood Control District, MCFCD, possesses numerous mapping databases dating back to the 1970's. Several of these databases were on conflicting datums. FEMA attempted to re-project and match these databases without much resolve. The goal of the Golden Valley Mapping & Imagery project is to obtain one consistent mapping product to study floodplain and drainage analysis. This data will also be used to revise the digital flood insurance rate map, DFIM.

Cooper Aerial Surveys Co. will provide photogrammetry and surveying services for a 210 square mile area. Working closely with Shephard Wesnitzer, Inc., Cooper Aerial Surveys Co. provided surveying services, Airborne GPS set-up and post-processed data. The Mohave County Height Modernization benchmarks were utilized along with 10 horizontal and vertical control monuments were permanently set using rebar and brass caps. These are all tied to Arizona State Plane Coordinate System International Survey Feet project, Western Zone, Geometric reference system NAD 83. Cooper Aerial and Shephard-Wesnitzer set and controlled 146 aerial panels to support Airborne GPS photogrammetry.

Cooper Aerial acquired 1:7200 Black and White stereo photography using a Leica RC-30 aerial camera that was interfaced with two GPS receivers. Airborne GPS was collected at a 0.10 epoc and post-processed to meet NSSDA and FEMA standards for 1"=200' with 2' ci floodplain mapping. The 1:7200 mapping area was separated into two blocks to economize flight services and insure accuracy. Using the aerial panel data and the Airborne GPS data, Cooper Aerial will perform a digital analytical aerotriangulation math model.

The color ortho photography was acquired at 1:14400 also using Airborne GPS. The photography from the higher stereo flight produces a quality ortho product at 6" ground pixel resolution while providing a cost savings to the client.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

a.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE

 F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)</i>		20. EXAMPLE PROJECT KEY NUMBER
21. TITLE AND LOCATION (City and State) RT 440 – NJ Turnpike to Rt 1-9	22. YEAR COMPLETED PROFESSIONAL SERVICES 2009	CONSTRUCTION (if Applicable)

23. PROJECT OWNER'S INFORMATION

**RFQ# ADSP014-00003465, Annual Request for Qualifications and Experience
REVISED - Attachment I – General Qualifications**

a. PROJECT OWNER	b. POINT OF CONTACT NAME Scott Parker, PE	c. POINT OF CONTACT TELEPHONE NUMBER (973) 267-8830 x1326
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**Project Classification: Transportation
Project Scope**

- ✓ 1:3000 Stereo photography
- ✓ 1' contours generated
- ✓ Ortho-rectified photography
- ✓ .08' ground pixel resolution
- ✓ 5 linear miles
- ✓ Project Cost to this date: \$25,900.00



Project Description

During the summer of 2009, Cooper Aerial Surveys Co. was contracted by Jacobs Engineering to provide design 1' contour mapping and full planimetrics of a 5 linear miles stretch of RT440 in Jersey City, NJ. Cooper Aerial hired **Control Point Associates\Bohler Engineering** of Warren NJ to set ground control and provide coordinates so that the mapping could be provided in NJ State Plane NAD83 coordinates with a vertical coordinate system of NAVD88.

The projects consist of 1:3000 stereo photography used to generate 1"=30' mapping. The mapping was furnished through Malick and Scherer who field verified all the contour and Planimetric mapping and provided the final deliverable to Jacobs Engineering.

The project was located in Jersey City NJ and went from the NJ turnpike to RT 1/9 which is about a 5 mile stretch of a very urban area. The imagery was rectified from the 1:3000 flight providing a quality image product with a pixel resolution of approximately .08 feet. Cooper Aerial mapped a large swath of roadway providing full planimetric and contour mapping of all the features.



25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

a.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE
	Control Point Associates/Bohler Engineering	Warren, NJ	Survey/ Ground Support

 F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT <i>(Present as many projects as requested by the agency, or 10 projects, If not specified. Complete one Section F for each project.)</i>	20. EXAMPLE PROJECT KEY NUMBER	
	21. TITLE AND LOCATION (City and State)	22. YEAR COMPLETED
Master Consultant Services Phoenix, Arizona	PROFESSIONAL SERVICES 2005-2009	CONSTRUCTION (if Applicable)

23. PROJECT OWNER'S INFORMATION

**RFQ# ADSP014-00003465, Annual Request for Qualifications and Experience
REVISED - Attachment I – General Qualifications**

a. PROJECT OWNER Arizona Department of Transportation, Master Consultants: AECOM, HDR, and Parsons Brinckerhoff	b. POINT OF CONTACT NAME Steve Beasley, ADOT Steve Wilcox, AECOM Bill Cowdrey, HDR	c. POINT OF CONTACT TELEPHONE NUMBER (602) 712-7645 (602) 337-2777 (602) 522-7700
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24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

Project Classification: Transportation

Project Scope

- ✓ 1:3600 Stereo photography
- ✓ 1' contours generated
- ✓ 1:9600 Stereo photography for imagery
- ✓ Ortho-rectified photography
- ✓ .40' ground pixel resolution
- ✓ Over 200 linear miles
- ✓ Project Cost to this date: \$1,428,893.00



Project Description

Over the last four years, Cooper Aerial Surveys Co. provided the ADOT with design 1' contour mapping for over 200 linear miles in Maricopa County. The mapping was furnished through three Master Consultants, AECOM, Parsons Brinckerhoff, and HDR.

The projects consist of 1:3600 stereo photography used to generate 1"=40' mapping. Project locations include the I-17 corridor, US 60 Grand Ave, I-10, SR 101L, SR 202 Red Mountain, Lake Pleasant Road. Most imagery flights were captured at 1:9600 to efficiently save costs while providing a quality image product. The mapping will be used of EIS and EA for future design and construction projects. The mapping will also allow the Master Consultants and ADOT to perform different project alternatives and chose the best new project design.

Cooper Aerial strives to meet all deadlines, working closely with all Master Consultants to deliver the quality product they expect in the timely manner they require. When a project schedule is more aggressive than the production capacity, the Master Consultant will delineate priority limits enabling the project to be delivered in phases. Cooper Aerial prides itself on its quality service to these consultants and looks forward to maintaining their ongoing professional relationships.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

a.	(1) FIRM NAME	(2) FIRM LOCATION <i>(City and State)</i>	(3) ROLE

6. ADDITIONAL INFORMATION

a. PROVIDE ANY ADDITIONAL INFORMATION YOU FEEL MAY BE NECESSARY TO DESCRIBE YOUR FIRMS QUALIFICATIONS. (ATTACH ADDITIONAL SHEETS AS NEEDED.)

7. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS

a. Percentage of Total Work Attributable to State, Federal and Municipal Government Work:	
b. Percentage of Total Work Attributable to Non-Government Work:	

8. AUTHORIZED REPRESENTATIVE. The foregoing is a statement of facts.

Signature: _____

Date: _____

Name: _____

Title: _____