

**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:	Engineering and Environmental Consultants, Inc.
b.	FIRM (OR BRANCH OFFICE) STREET:	7740 N 16 th Street, Suite 135
c.	FIRM (OR BRANCH OFFICE) CITY:	Phoenix
d.	FIRM (OR BRANCH OFFICE) STATE:	Arizona
e.	FIRM (OR BRANCH OFFICE) ZIP CODE:	85020
f.	YEAR ESTABLISHED:	1997 (Purchased Phoenix Firm)
(g1).	OWNERSHIP - TYPE:	Corporation
(g2).	OWNERSHIP - SMALL BUSINESS STATUS:	Arizona Small Business (< 100 Employees)
h.	POINT OF CONTACT NAME AND TITLE:	James Lemon, PE (VP/Phoenix Branch Mgr)
i.	POINT OF CONTACT TELEPHONE NUMBER:	602-248-7702 (ext 7318)
j.	POINT OF CONTACT E-MAIL ADDRESS:	jlemon@eecphx.com
k.	NAME OF FIRM <i>(If block 1a is a branch office):</i>	Engineering and Environmental Consultants, Inc.

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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
Biologist	P	1	1
CADD Technician	P	6	1
Civil Engineer	P (S)	5 (8)	2(2)
Construction Inspector	(S)	(2)	(1)
Environmental Engineer	P	1	1
Environmental Scientist	P(S)	4(3)	1 (3)
Geodetic Surveyor	P(S)	4(1)	-
Geologist	P	1	1
Hydraulic Engineer	(S)	(1)	-
Hydrologist	P	1	-
Project manager	P(S)	5(4)	3(1)
Sanitary Engineer	P	1	-
Transportation Engineer	P(S)	3(1)	0(1)
Other	P	7	1
Total	P(S)	39(20)	11(8)

**RFQ# ADSP014-00003465, Annual Request for Qualifications and Experience
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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)
31	Community Facilities	4
0	Construction Management	1
12	Highways: Streets; Airfield Paving; Parking Lots	5
1	Irrigation; Drainage	3
18	Land Surveying	4
20	Phase I Environmental	1
1	Recreational Facilities (Parks, Marinas Etc.)	1
2	Sewage Collection, Treatment and Disposal	2
4	Storm Water Handling and Facilities	4
26	Topographic Surveying and Mapping	3
7	Water resources; Hydrology; Ground Water	2
6	Water Supply; Treatment and Distribution	3
1	Waste Water Treatment Facility	1
2	Water Well Rehabilitation; Water Well Work	2
32	Landfill	4

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

- | | |
|---|---|
| 1. Less than \$100,000 | 6. \$2 million to less than \$5 million |
| 2. \$100,000 to less than \$250,000 | 7. \$5 million to less than \$10 million |
| 3. \$250,000 to less than \$500,000 | 8. \$10 million to less than \$25 million |
| 4. \$500,000 to less than \$1 million | 9. \$25 million to less than \$50 million |
| 5. \$1 million to less than \$2 million | 10. \$50 million or greater |

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

a. NAME: James Lemon, P.E., R.L.S.	b. ROLE IN THIS CONTRACT: Project Principal	c. YEARS EXPERIENCE	
		1. TOTAL 38	2. WITH CURRENT FIRM 1 YR
d. FIRM NAME AND LOCATION (City and State): Engineering and Environmental Consultants, Inc. 7740 North 16 th Street, Suite 135, Phoenix, AZ 85020			
e. EDUCATION (DEGREE AND SPECIALIZATION) B.S.E./Civil Engineering/1976		f. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Arizona/Professional Engineer Civil/#12890/1980 Arizona Professional Land Surveyor/#15884/1983	
g. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) American Public Works Association, American Society of Civil Engineers, Valley Partnership			

H. RELEVANT PROJECTS

1)	(1) TITLE AND LOCATION (City and State) : Little Sunshine Playhouse/Gilbert, AZ	(2) Year Completed	
		Professional Services: 2014	Construction (if applicable): 2014
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Principal, including design oversight, project direction, staff allocation, town and client meetings. Civil engineering services for a 8,500 S.F. Pre-School on a 1.6 acre site within an existing retail project. Services included site planning, grading, ADA compliance design, site drainage analysis, water plans, sewer plans and integration of new construction into existing site infrastructure .		
2)	(1) TITLE AND LOCATION (City and State) Artisan House/Phoenix, AZ	(2) Year Completed	
		Professional Services: 2014	Construction (if applicable): 2014
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Principal, including design oversight, project direction, staff allocation, city and client meetings. Civil Engineering services for development of a 4 story 9 unit apartment on a downtown infill location. Services include planning assistance, grading plans, drainage analysis, water and sewer plans.		
3)	(1) TITLE AND LOCATION (City and State) Higley Pavilion Retail Pads/Gilbert, AZ	(2) Year Completed	
		Professional Services: 2014	Construction (if applicable): 2014
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Principal, including design oversight, project direction, staff allocation, city and client meetings. Civil Engineering services consisting of grading, water and sewer plans and ADA compliance for two separate retail pads totaling 12,000 S.F. on 2.8 acres within an existing retail center.		
4)	(1) TITLE AND LOCATION (City and State) Arrowhead Ranch Phase III Drainage Analysis/Glendale, AZ	(2) Year Completed	
		Professional Services: 2013	Construction (if applicable): N/A
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Manager. Worked with City and Homeowner's Association to analyze ongoing flooding problems in an existing subdivision. Services included hydrologic and hydraulic analysis of onsite and upstream conditions and providing of a solution.		
5)	(1) TITLE AND LOCATION (City and State) Gilbert Christian High School Basement Flooding Analysis/Gilbert, AZ	(2) Year Completed:	
		Professional Services: 2013	Construction (if applicable): 2013
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Manager including design oversight and client communication of best design solutions. Services involved analysis and design recommendations for resolution of basement flooding for an existing high school. Solution involved revisions to existing onsite storm drainage conveyance and improvements to building perimeter surfacing. Role: Project Manager including design oversight and client communication of best design solutions.		

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

a. NAME: J. Chuck Hollingsworth, PE, RLS	b. ROLE IN THIS CONTRACT: Project Manager	c. YEARS EXPERIENCE	
		1. TOTAL 35	2. WITH CURRENT FIRM 26
d. FIRM NAME AND LOCATION (City and State): Engineering and Environmental Consultants, Inc. 4625 E Fort Lowell Road, Tucson, AZ 85712			
e. EDUCATION (DEGREE AND SPECIALIZATION) M.S./Environmental Engineering/1979 B.S./Environmental Engineering/1973		f. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Arizona/Sanitary Engineer/#13695/1981 Arizona/Professional Engineer (Civil)/#19229/1986 Arizona/Professional Land Surveyor/#16838/1984	
g. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) American Consulting Engineers Council, President – Arizona Arizona Water Association			

H. RELEVANT PROJECTS

1)	(1) TITLE AND LOCATION (City and State) : Metropolitan Water District On-Call Design Services/Tucson, AZ	(2) Year Completed	
		Professional Services: Ongoing	Construction (if applicable): NA
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Principal providing on-call engineering services including water system design, transmission main design, municipal well system design, booster pump design, storage tank/reservoir design, route studies, roadway designs, grading plans, drainage design and studies, bank protection design, sediment transport, river stability analysis, hydraulic and hydrologic analysis, native plant inventories and preservation plans, and construction inspection.	<input checked="" type="checkbox"/> Check if project performed with current firm	
2)	(1) TITLE AND LOCATION (City and State) Town of Oro Valley On-Call Water Utility Engineering Services/Oro Valley, AZ	(2) Year Completed	
		Professional Services: Ongoing	Construction (if applicable): NA
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Principal for on-call civil design tasks for the Oro Valley Water Utility including Tucson Water/CAP Interconnection Site Engineering and Design; Campo Bello Water Line Replacement; and PRV Modifications to Big Horn Butte Drive, Linda Vista and La Canada.	<input checked="" type="checkbox"/> Check if project performed with current firm	
3)	(1) TITLE AND LOCATION (City and State) Avra Valley Augmentation Transmission Main/Tucson, AZ	(2) Year Completed	
		Professional Services: Ongoing	Construction (if applicable): NA
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Principal as a sub to Dibble Engineering's team. EEC was selected to provide professional engineering services for route investigation and analysis needed for the reliability redundant augmentation transmission mains. Route investigation will include pipe material type, pipe sizing, easement/right-of-way acquisitions, utility conflicts, traffic disturbance, pipe corrosion, environmental and archaeological, geotechnical, floodplain, and Clean Water considerations.	<input checked="" type="checkbox"/> Check if project performed with current firm	
4)	(1) TITLE AND LOCATION (City and State) Design of Potable and Reclaimed Water Transmission Mains/Chandler, AZ	(2) Year Completed	
		Professional Services: 2007	Construction (if applicable): NA
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Principal for services including reclaimed water distribution to housing developments, the design of an important interconnect from the Chandler Airport Water Facility to the rest of the Chandler reclaimed water system, and increased flow and pressure for local users.	<input checked="" type="checkbox"/> Check if project performed with current firm	
5)	(1) TITLE AND LOCATION (City and State) Annual Permitting, Study and Design/Chandler, AZ	(2) Year Completed:	
		Professional Services: 2012	Construction (if applicable): NA
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Principal for services including well sites, booster stations, lift stations, treatment facilities, pressure reducing stations, and other equipment integral to the successful operation of the City's distribution system.	<input type="checkbox"/> Check if project performed with current firm	

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

NAME: Craig Allison, PE, RLS		b. ROLE IN THIS CONTRACT: Transportation Engineer/Project Manager		c. YEARS EXPERIENCE	
		1. TOTAL 36	2. WITH CURRENT FIRM 17		
d. FIRM NAME AND LOCATION (City and State): Engineering and Environmental Consultants, Inc. 4625 E Fort Lowell Road, Tucson, AZ 85712					
e. EDUCATION (DEGREE AND SPECIALIZATION) BS-Civil Engineering, Univ. of AZ, 1978 MA-Business Administration, Univ. of AZ, 1985			f. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Civil Engineering Arizona 13900 Land Surveying Arizona 16486		
g. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)					

H. RELEVANT PROJECTS

1)	(1) TITLE AND LOCATION (City and State) : Sahuarita Road Phase II, La Villita to Country Club Road/Town of Sahuarita, AZ	(2) Year Completed	
		Professional Services: 2014	Construction (if applicable) N/A
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Manager. Design of 5 miles of 4-lane divided arterial road reconstruction including a new Santa Cruz River bridge, two at-grade railroad crossings, a signalized intersection, raised landscaped medians, curb, gutter, and sidewalk. Construction is through the CM at Risk delivery mechanism with an approximate total cost of \$42 million.		
2)	(1) TITLE AND LOCATION (City and State) Davis Road, Central Highway to US 191/Cochise County, AZ	(2) Year Completed	
		Professional Services: 2014	Professional Services: 2014
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Manager. Design of 2 miles of 2-lane rural road reconstruction including environmental clearance in compliance with NEPA requirements. Construction will be administered by ADOT for this federally-funded project with an approximate total cost of \$6.5 million.		
3)	(1) TITLE AND LOCATION (City and State) US 83, North of Parker Canyon Lake to Canelo/Santa Cruz County, AZ	(2) Year Completed	
		Professional Services: 2013	Professional Services:
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Manager. Design of 2 miles of 2-lane rural road reconstruction including environmental clearance in compliance with NEPA requirements. Construction will be administered by ADOT for this road rehabilitation project with an approximate total cost of \$1.2 million.		
4)	(1) TITLE AND LOCATION (City and State) I-10 Mainline Widening, Jct. I-8 to SR 87/Pinal County, AZ	(2) Year Completed	
		Professional Services: 2013	Construction (if applicable) N/A
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Manager. Design of 11 miles of 6-lane interstate freeway widening including two Santa Rosa Canal bridges, 45 culvert extensions, 11 ramp conversions from taper to parallel type geometry, work zone traffic control, signing, marking, erosion control, and as-built plans. Construction was administered by ADOT with a total cost of \$31 million.		
5)	(1) TITLE AND LOCATION (City and State) Battaglia Road Westbound Left Turn Lane/Pinal County, AZ	(2) Year Completed	
		Professional Services: 2013	Construction (if applicable) N/A
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE PP Design of 0.5 miles of 2-lane rural roadway to provide new left turn access and correct a congestion and safety issue, including grading and pavement widening, signing, marking, and guard rail to avoid utility conflicts. Construction will be administered by Pinal County with an approximate total cost of \$250,000.		

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

a. NAME: Carrie Côté, P.E.	b. ROLE IN THIS CONTRACT: Civil Engineer	c. YEARS EXPERIENCE	
		1. TOTAL 18	2. WITH CURRENT FIRM + 7 YRs
d. FIRM NAME AND LOCATION (City and State): Engineering and Environmental Consultants, Inc. 7740 North 16 th Street, Suite 135, Phoenix, AZ 85020			
e. EDUCATION (DEGREE AND SPECIALIZATION) Bachelor of Science Civil Engineering – Cooperative Program		f. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Professional Engineer (Civil) Arizona (#28832)	
g. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Arizona Water Association – Awards Committee Member American Public Works Association – Government Affairs Committee Member Mine Safety & Health Administration – Above Ground Certification			

H. RELEVANT PROJECTS

1)	(1) TITLE AND LOCATION (City and State) : ASARCO – Ray Seepage Collection System/Kearny, Arizona	(2) Year Completed	
		Professional Services: 2013	Construction (if applicable): 2013
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Manager and Construction Administration for installation of approximately 1700 LF seepage collection system. Project included preparing design plans to meet Best Available Demonstrated Control Technology and prepare permit documents for permit submittal to Arizona Department of Environmental Quality. Task also included Construction Administration, Site Inspections and materials QA/QC during the Construction Phase. (Engineering/Permitting/CA: \$146,500; Construction: \$550,000)	<input checked="" type="checkbox"/> Check if project performed with current firm	
2)	(1) TITLE AND LOCATION (City and State) Buckskin Sanitary District – New North WWTP Pre-Design/Parker, AZ	(2) Year Completed	
		Professional Services: 2013	Construction (if applicable) N/A
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Manager for the New North WWTP Pre-Design Phase. Assisting the District in locating a new 0.4 MGD wastewater treatment plant in the north section of the service area. EEC reviewed the site suitability for engineering and permitting limitations and provided preliminary facilities layout, review of environmental permitting requirements, flood zone location, well data and groundwater information, provided preliminary project design/permitting/construction schedule, and evaluated effluent disposal alternatives and associated cost and permit requirements. (Engineering: \$53,500)	<input checked="" type="checkbox"/> Check if project performed with current firm	
3)	(1) TITLE AND LOCATION (City and State) City of Phoenix – Downtown Storm Drain Improvements/Phoenix, AZ	(2) Year Completed	
		Professional Services: 2013	Construction (if applicable) Current
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Manager for design of approx. 15,500 LF of storm drain piping for downtown Phoenix. New storm drain segments were designed to alleviate the flooding and ponding issues City was experiencing and to meet the 10-year storm event. Additional tasks included extensive utility locating and research and coordinating with utility companies due to utility conflicts. The project also included paving improvements to approximately 1 mile of Jefferson Street, dry-well removal and sampling and closure. (Engineering: \$1.8M)	<input checked="" type="checkbox"/> Check if project performed with current firm	
4)	(1) TITLE AND LOCATION (City and State) Reclaimed Transmission main (In-Fill)/Chandler, AZ	(2) Year Completed	
		Professional Services: 2012	Construction (if applicable): 2012
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Manager and Construction Administration preparing design plans to extend and loop the reclaimed water system to provide for better service flow and pressures. The design included utility research and coordination with utility companies and working with the City operational staff to develop alignment, connection points and valves. Provided construction administration. (Engineering: \$123,900)	<input checked="" type="checkbox"/> Check if project performed with current firm	
5)	(1) TITLE AND LOCATION (City and State) Ocotillo Water Reclamation Facility – Maintenance and Operational Improvements Phase 1 and Phase 2/Chandler, AZ	(2) Year Completed:	
		Professional Services: 2011	Construction (if applicable): 2012
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Manager and Construction Administration for Upgrade of Facilities at the OWRF including replacement of grit classifiers, replacement of influent pump and VFD, aeration header replacement and rerouting, clarifier tank rehabilitation, steel shade structure, chlorine contact tank rehabilitation, site grading and repaving, administration building upgrades, HVAC upgrades, and signage upgrades. Included Construction Administration and Assistance for Phase 1 construction.	<input checked="" type="checkbox"/> Check if project performed with current firm	

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

a. NAME: Ray P. Montoya, PE	b. ROLE IN THIS CONTRACT: Water/Wastewater: Project Manager	c. YEARS EXPERIENCE	
		1. TOTAL 15	2. WITH CURRENT FIRM 1
d. FIRM NAME AND LOCATION (City and State): Engineering and Environmental Consultants, Inc. 4625 E Fort Lowell Road, Tucson, AZ 85712			
e. EDUCATION (DEGREE AND SPECIALIZATION) B.S./Civil Engineering/New Mexico State University/1998		f. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Arizona/Professional Engineer (Civil)/#38413/2002	
g. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Society of American Military Engineers Construction Management Association of America American Society of Civil Engineers, Member Arizona Water Association, Member			

H. RELEVANT PROJECTS

1)	(1) TITLE AND LOCATION (City and State) : Metropolitan Domestic Water Improvement District On-Call Transmission Main Design Services/Tucson, AZ	(2) Year Completed	
		Professional Services: Current	Construction (if applicable): NA
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Manager providing on-call engineering services including water system design, transmission main design, municipal well system design, booster pump design, storage tank/reservoir design, and route studies. Projects included Freer Road/Camino del Sur Waterline Interconnection Upgrades and Improvements; Diablo Village Water Plant Foundation Design and Electrical Inspection; and Magee Trail New Domestic Water Well Layout and Design.		
2)	(1) TITLE AND LOCATION (City and State) Oro Valley Water Utility On-Call/Oro Valley, AZ	(2) Year Completed	
		Professional Services: Current	Construction (if applicable): NA
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Manager for on-call civil design services for the Town of Oro Valley. Projects included engineering design for the Tucson Water/CAP Interconnection Site; the Campo Bello 8-inch and 12-inch water line replacement; and PRV modifications for Big Horn Butte Drive, Linda Vista and La Canada Boulevard.		
3)	(1) TITLE AND LOCATION (City and State) Avra Valley Wastewater Treatment Facility/Pima County, AZ	(2) Year Completed	
		Professional Services: 2009	Construction (if applicable): NA
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input type="checkbox"/> Check if project performed with current firm Project Civil Engineer responsible for portions of the upgrade and expansion to the Avra Valley Wastewater Treatment BNROD Facility. The existing facility was designed for a 1.2 MGD dry weather flow and consists of an influent pump station and self-cleaning bar screen; a reinforced concrete equalization basin; an emergency influent storage basin; a biological nutrient removal oxidation ditch; and two clarifiers.		
4)	(1) TITLE AND LOCATION (City and State) Corona de Tucson Wastewater Treatment Plant/Tucson, AZ	(2) Year Completed	
		Professional Services: 2007	Construction (if applicable): NA
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input type="checkbox"/> Check if project performed with current firm Project Civil Engineer for completion of an initial Facility Plan and Basin Study for this increasingly rapidly growing outlying treatment area, resulting in the design and upgrade of the existing wastewater treatment facility. Improvements included the addition of circular concrete clarifiers, sludge handling facilities, operation and laboratory facilities, and associated control and electrical upgrades.		
5)	(1) TITLE AND LOCATION (City and State) City of Phoenix 91st Avenue Digester Rehabilitation/Phoenix, AZ	(2) Year Completed:	
		Professional Services: 2007	Construction (if applicable): NA
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input type="checkbox"/> Check if project performed with current firm Project Civil Engineer for design and construction of new fixed steel digester domes at the 91 st Avenue Wastewater Treatment Plant. The project included initial structural evaluations of existing concrete walls and surfaces, digester gas management improvements, heating and mixing efficiency improvements, and exterior safety upgrades.		

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

a. NAME: Gary Miller, Jr.	b. ROLE IN THIS CONTRACT: Project Manager/Sr. Engineering Designer	c. YEARS EXPERIENCE	
		1. TOTAL 27	2. WITH CURRENT FIRM 15
d. FIRM NAME AND LOCATION (City and State): Engineering and Environmental Consultants, Inc. 7740 North 16 th Street, Suite 135, Phoenix, AZ 85020			
e. EDUCATION (DEGREE AND SPECIALIZATION) A.A., Architectural Drafting and Design, Phoenix Institute of Technology, 1985		f. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Certificate, CAD for the Professional, The CAD Institute, 1987 Certificate, Microsoft Certified Systems, GSE Erudite, 1997 Certificate, Project Management Leadership, PSMJ Resources Inc., 2006	
g. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Arizona Association of Economic Development Valley Partnership			

H. RELEVANT PROJECTS

1)	(1) TITLE AND LOCATION (City and State) : Maricopa County Sherriff's Office Headquarters/Phoenix, AZ	(2) Year Completed	
		Professional Services: 2012	Construction (if applicable): 2013
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Maricopa County Sherriff's Office Headquarters - Project Manager. This project includes a new multi-story building totaling approximately 165,000 gross square feet with 50-100 sub-surface parking stalls, on-site and off-site improvements, sidewalks, half street paving for the adjacent streets, establishing building floor elevation, storm water retention, on- and off-site, utility plans, a water and sewer report, and storm water pollution map. Services included site analyses for 10 different properties. The site analysis report included utility infrastructure for wet and visible dry utilities, drainage, existing right-of-way, existing parking, existing structures and site access followed by a summary of the constructability pros and cons.		
2)	(1) TITLE AND LOCATION (City and State) ASU Downtown Student Recreation Center/Phoenix, AZ	(2) Year Completed	
		Professional Services: 2012	Construction (if applicable) 2013
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Manager. Responsibilities includes topographic survey, ALTA/ACSM land title survey, final subdivision plat services and civil/site design documents. This recreation center includes a multi-story building totaling approximately 57,000 gross square feet and includes driveways, utility data coordination, on- and off-site improvements, sidewalks, minor street paving, grading and drainage, water, sewer and fire line design. The site includes development of approximately 0.46-acres fronting First Avenue north of Van Buren Street in downtown Phoenix.		
3)	(1) TITLE AND LOCATION (City and State) Little Sunshine Playhouse/Gilbert, AZ	(2) Year Completed	
		Professional Services: 2013	Construction (if applicable) 2014 Ongoing
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Manager. Responsible for improvement plan production of the project. Project consisted of a completing onsite water, sewer, fire and grading and drainage plans for the 1.6 acre facility in Gilbert AZ.		
4)	(1) TITLE AND LOCATION (City and State) Tohono O'odham Nation Fire Station/Tohono O'odham Nation, AZ	(2) Year Completed	
		Professional Services: 2013	Construction (if applicable): 2014 Ongoing
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Manager. Provided engineering services for the new Fire Station located on the Tohono O'Odham Nation. Services included survey, grading and drainage plans, septic design, utility plans and horizontal control.		
5)	(1) TITLE AND LOCATION (City and State) NRG Chilled Waterlines/Phoenix, AZ	(2) Year Completed:	
		Professional Services: 2013	Construction (if applicable): 2013
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Manager. Provided surveying and engineering design services for two 24 inch chilled water lines from 4th Avenue to 6th Avenue in Downtown Phoenix. Critical communication with various utility companies was key in the design of this project. The dual run parallel to each other and had to vertically fit between the congested utility infrastructures in the downtown area. The new lines were specifically located to avoid other utilities and City infrastructure.		

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

a. NAME: Sherry Martin, PE	b. ROLE IN THIS CONTRACT: Transportation Engineer	c. YEARS EXPERIENCE	
		1. TOTAL 22	2. WITH CURRENT FIRM 15
d. FIRM NAME AND LOCATION (City and State): Engineering and Environmental Consultants, Inc. 4625 E Fort Lowell Road, Tucson, AZ 85712			
e. EDUCATION (DEGREE AND SPECIALIZATION) B.A., Microbiology, University of Hawaii, 1987 B.S., Civil Engineering, University of Hawaii, 1990		f. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Professional Engineer (Civil), Arizona, 2002, #37865	
g. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Arizona Society of Civil Engineers			

H. RELEVANT PROJECTS

1)	(1) TITLE AND LOCATION (City and State) : Campbell Avenue, Grant to Fort Lowell Improvements - City of Tucson/Tucson, AZ	(2) Year Completed	
		Professional Services: 2013	Construction (if applicable): N/A
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE (ie: Project Manager) <input checked="" type="checkbox"/> Check if project performed with current firm Project Manager. Provided improvements design including sidewalks, landscaping, and bus pullouts along Campbell Avenue from Grant Road to Fort Lowell Road.		
2)	(1) TITLE AND LOCATION (City and State) I-19/Sahuarita Road Traffic Interchange/Town of Sahuarita	(2) Year Completed	
		Professional Services: 2012	Construction (if applicable): N/A
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE (ie: Project Manager) <input checked="" type="checkbox"/> Check if project performed with current firm Project Engineer. Providing civil engineering services for the Design Concept Report (DCR) and Environmental Assessment for the reconstruction of the I-19 traffic interchange at Sahuarita Road.		
3)	(1) TITLE AND LOCATION (City and State) Multiple Bus Pullout Lanes RTA	(2) Year Completed	
		Professional Services: 2013	Construction (if applicable): 2013
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE (ie: Project Manager) <input checked="" type="checkbox"/> Check if project performed with current firm Project Manager. Provided professional engineering services for the design of multiple bus pullout lanes located at Oracle and Glenn, Oracle and Prince, Campbell and Prince, Campbell and Adams, and Alvernon and Fort Lowell in Tucson.		
4)	(1) TITLE AND LOCATION (City and State) I-10 Interim Widening, I-8 to SR 87 ADOT	(2) Year Completed	
		Professional Services: 2011	Construction (if applicable): 2012
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE (ie: Project Manager) <input checked="" type="checkbox"/> Check if project performed with current firm YES Project Engineer. Provided design services to widen I-10 from four to six lanes (3 eastbound, 3 westbound) between the I-8 interchange and the La Palma Road bridge. The project includes reconfiguring the ramps at Sunshine Boulevard, Toltec Road and Sunland Gin Road to increase safety and capacity, and widening the bridge over the Santa Rosa Canal.		
5)	(1) TITLE AND LOCATION (City and State) ARRA On-Call Civil Engineering Services - City of Tucson/Tucson, AZ	(2) Year Completed:	
		Professional Services: 2012	Construction (if applicable): N/A
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE (ie: Project Manager) <input checked="" type="checkbox"/> Check if project performed with current firm YES Project Manager. Provided civil engineering, surveying and related services on an as-needed basis. Task orders have included plan review, water modifications, Transportation Enhancement projects, Safe Routes to School projects, signing, pavement markings, driveways, drainage, safety, feasibility evaluation, planning studies (Project Assessment), and public involvement.		

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

a. NAME: Ryan R. Stucki, PE	b. ROLE IN THIS CONTRACT: Project Manager	c. YEARS EXPERIENCE	
		1. TOTAL 13	2. WITH CURRENT FIRM 5
d. FIRM NAME AND LOCATION (City and State): Engineering and Environmental Consultants, Inc. 4625 E Fort Lowell Road, Tucson, AZ 85712			
e. EDUCATION (DEGREE AND SPECIALIZATION) B.S./Civil Engineering/University of Arizona/1998		f. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Arizona/Professional Engineer (Civil)/#35926/2003	
g. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) LEED Accredited Professional Southern Arizona Homebuilders Association, Member American Society of Civil Engineers, Member U.S. Green Building Council, Member			

H. RELEVANT PROJECTS

1)	(1) TITLE AND LOCATION (City and State) : Indian Health Services IDIQ Contract/Various Locations	(2) Year Completed	
		Professional Services: 2012	Construction (if applicable): N/A
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Civil Engineer on this IDIQ Contract for various locations throughout Arizona. Projects included site planning, building renovations, additions, improvements, studies and new construction.		
2)	(1) TITLE AND LOCATION (City and State) Green Valley Performing Arts and Learning Center/Pima County, AZ	(2) Year Completed	
		Professional Services: 2010	Construction (if applicable): N/A
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input type="checkbox"/> Check if project performed with current firm Project Civil Engineer for design and preparation of platting and full construction documents for this small commercial/institutional development. Design elements included providing unique solutions to transitioning private sewer and water to accommodate the building.		
3)	(1) TITLE AND LOCATION (City and State) Reid Park Zoo Entrance and Adaptive Recreation Center/Tucson, AZ	(2) Year Completed	
		Professional Services: 2009	Construction (if applicable): N/A
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input type="checkbox"/> Check if project performed with current firm Project Civil Engineer for design and preparation of full construction documents for the entry of the zoo, public swimming area, sewer layout, and water layout. Also assisted in the construction detailing of various drainage control structures.		
4)	(1) TITLE AND LOCATION (City and State) Amphitheater Middle School/Tucson, AZ	(2) Year Completed	
		Professional Services: 2012	Construction (if applicable): N/A
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Civil Engineer for site civil design services related to the addition of a new classroom to the Amphi Middle School campus, as well as new rest rooms and courtyard improvements.		
5)	(1) TITLE AND LOCATION (City and State) Amphitheater High School/Tucson, AZ	(2) Year Completed:	
		Professional Services: 2012	Construction (if applicable): N/A
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input type="checkbox"/> Check if project performed with current firm Project Civil Engineer for civil site design services as part of the design team for improvements related to the addition and renovation of buildings to the Amphi High School campus. Traffic/circulation improvements were also included in the project scope.		

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

NAME: Lisa Spahr	b. ROLE IN THIS CONTRACT: Sr. Environmental Scientist/Project Manager	c. YEARS EXPERIENCE	
		1. TOTAL 28	2. WITH CURRENT FIRM 12
d. FIRM NAME AND LOCATION (City and State): Engineering and Environmental Consultants, Inc. 7740 North 16 th Street, Suite 135, Phoenix, AZ 85020			
e. EDUCATION (DEGREE AND SPECIALIZATION) M.A., Hydrology, Indiana University, 1986 M.S., Water Resource Management, Indiana University, 1986 B.A., Environmental Politics, Oberlin College, 1983		f. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Registered Geologist, Maine, #GE 312	
g. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) OSHA 40-hour HAZWOPER Refresher OSHA 8-hour Supervisory Fundamentals of Radiation Protection Certified Outdoor Emergency Medical Technician CPR for the Professional Rescuer, American Red Cross			

H. RELEVANT PROJECTS

1)	(1) TITLE AND LOCATION (City and State) : AZPDES Phase 1 Municipal Separate Storm Sewer System Permit Compliance City of Scottsdale/Scottsdale, AZ	(2) Year Completed	
		Professional Services: Annual since 2008	Construction (if applicable): N/A
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Manager for this on-call contract to provide annual and as-needed stormwater compliance activities under the City's individual AZPDES Municipal Separate Storm Sewer (MS4) since 2008. Annual tasks include wet weather monitoring and annual reporting. On-call services included emergency response oversight, sampling, and follow-up; permit negotiation with ADEQ; stormwater code revision; and advisory support to the City airport. Made compliance improvement recommendations in the areas of inspection, reporting, and SWPPP development. Outreach to the Airport's stormwater compliance personnel helped fine tune the Airport's tenant inspection and training programs. Represented the City during the MS4 coalition negotiations with ADEQ in 2007 and 2008 and submitted suggested permit language to ADEQ for the City's new MS4 AZPDES permit. Helped revise several components of the City's Storm Water Management Plan (SWMP), including development of a system for generating and updating an industrial facility inventory. Prepared and implemented protocols, procedures, and training for industrial facility inventory. Prepared protocols, procedures, and training for industrial inspections, construction inspections, dry weather monitoring, illicit discharge detection and elimination, and municipal industrial MSGP compliance. Additional tasks included assistance with public outreach through participation in Stormwater Outreach for Regional Municipalities (STORM), review and revision of existing City Code for changes in stormwater enforcement, development of industrial and construction stormwater inspection programs, and preparation of an Enforcement Response Plan. Also assisted the City respond to the findings of two EPA audits of the stormwater program. EEC is currently working under a second 5-year on-call contract with the City. Previous \$675,637, Current \$79,386.		
2)	(1) TITLE AND LOCATION (City and State) City of Phoenix Aviation Department Storm Water Management Planning (City of Phoenix Aviation Department)	(2) Year Completed	
		Professional Services: Annual since 2008	Construction (if applicable) N/A
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Working with a prime contractor, Ms. Spahr is the deputy project manager for this stormwater planning and compliance project at the Sky Harbor, Goodyear, and Deer Valley Airports under the AZPDES Multi Sector General Permit (MS4). Responsibilities included assisting with the development and delivery of the annual stormwater pollution prevention training, annual inspections, annual Comprehensive Site Compliance Evaluation Reports, managing four teams of facility inspectors, and revision to the airports' SWPPPs. The SWPPP was revised to make the Best Management Practices (BMP) more user-friendly for the airports' tenants while ensuring compliance with the Multi-Sector General Permit. Helped the airport to transition when the new AZPDES MSGP permit was issued in 2010. Working with the Aviation Department, new notices of intent (NOIs) were filed for the City and the airport. Helped develop and present a "train the trainer" type curriculum. Each attendee was required to take a copy of the training back and present it to their employees. Oversees quarterly routine and annual inspections for tenants and City-owned facilities at all three City airports. Data are entered into an Access database that tracks inspection findings (including photographs), tenant responses, NOIs, and notices of termination. EEC is currently working under a second 5-year contract with the City for this work. Previous \$477,626, Current \$129,782.		
3)	(1) TITLE AND LOCATION (City and State) Aquifer Protection Program Permit Amendment (Gila River Power Station)/Gila Bend, AZ	(2) Year Completed	
		Professional Services: 2013	Construction (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Manager. Prepare an Aquifer Protection Program permit amendment application to allow new management practices for three previously evaporation ponds. The Gila Bend Power Station was seeking to increase the average discharge rate and to allow water withdrawals from the evaporation pond receiving cooling tower blowdown water. Attended a pre-application meeting with the applicant and ADEQ, prepared the permit amendment, responded to ADEQ requests for additional information, and reviewed the draft permit on behalf of the applicant. Oversaw modeling efforts designed to show that the plant could meet with permit requirements at the higher average discharge rate with the addition of enhanced aeration units. Cost \$21,692.		
4)	(1) TITLE AND LOCATION (City and State)	(2) Year Completed	

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Closure Cost Review, BHP Billiton Pinto Valley Mine (ADEQ)/Superior, AZ			
		Professional Services: 2013	Construction (if applicable):
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Manager for this project to conduct third party review of BHP Billiton Pinto Valley Mine's closure and post-closure costs submitted in response to a compliance schedule item in the mine's current Aquifer Protection Program (APP) permit under a very aggressive three week schedule. Managed this project to review the closure and post-closure plans to determine if proposed strategies were consistent with ADEQ requirements and if any APP-required closure items were omitted and review three sets of closure and post closure costs to determine whether the evaluate the unit rate and quantity estimates. EEC provided preliminary results in two weeks and final written memoranda in three weeks. Attended a meeting with the ADEQ and the applicant to review the findings. Cost \$25,643.		<input checked="" type="checkbox"/> Check if project performed with current firm	
(1) TITLE AND LOCATION (City and State) Multi-Sector General Permit Support (Scorpion Bay Marina and Yacht Club)/Morristown, AZ		(2) Year Completed:	
		Professional Services: 2013	Construction (if applicable): N/A
5)	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Manager for this project to bring the marina into compliance the Arizona Pollutant Discharge Elimination System Multi-Sector General Permit. Developed a Storm Water Pollution Prevention Plan meeting the general permit requirements and sector-specific requirements under Sector Q – Water Transportation Facilities. Because the marina discharged to Lake Pleasant which is impaired for mercury in fish tissue and was covered under Sector Q, it is required to conduct benchmark sampling. EEC prepared a Sampling Plan and provided passive stormwater samplers and training to marina personnel for the required sampling. \$6,757.		<input checked="" type="checkbox"/> Check if project performed with current firm

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

a. NAME: John Burton	b. ROLE IN THIS CONTRACT: Environmental Scientist/Project Manager	c. YEARS EXPERIENCE	
		1. TOTAL 16	2. WITH CURRENT FIRM 12
d. FIRM NAME AND LOCATION (City and State): Engineering and Environmental Consultants, Inc. 7740 North 16 th Street, Suite 135, Phoenix, AZ 85020			
e. EDUCATION (DEGREE AND SPECIALIZATION) B.S., Environmental Science, Slippery Rock University of Pennsylvania, 1996		f. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)	
g. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) OSHA 40 hour, OSHA 8-hour, EPA Asbestos Inspector, Confined Space Entry			

H. RELEVANT PROJECTS

1)	(1) TITLE AND LOCATION (City and State) : APP, Stormwater, and Spill Prevention Support - Maricopa County Client/Phoenix, AZ	(2) Year Completed	
		Professional Services: 2013	Construction (if applicable):
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Manager for oversight of permitting and plan updates for 16 Maricopa County facilities. Conducted site visits, coordinated the update of SWPPPs and SPCC Plans, and APP general permits. The various sites for review have included maintenance yards, parks, sheriff ranges, court building, juvenile and jail facilities. Also performed inspection and review of new facilities for compliance with spill prevention requirements and provided recommendations to the County for compliance.		
2)	(1) TITLE AND LOCATION (City and State) Drywell Abandonment - Former Phoenix University Parking Garage (ADOT)	(2) Year Completed	
		Professional Services: 2013	Construction (if applicable):
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Manager. Conducted abandonment of four (4) drywells associated with the former Phoenix University Parking Garage on behalf of ADOT. Activities included transfer of ownership to ADOT, sampling the drywell sediment, comparison of data to Arizona Soil Remediation Levels, removal of drywell chambers by a subconsultant, and development of a final report with recommendations. This project was completed in advance of the planned widening of Interstate 10 within the east valley area of Phoenix.		
3)	(1) TITLE AND LOCATION (City and State) City of Phoenix –Stormwater Permitting Support/IDDE/Phoenix, AZ	(2) Year Completed	
		Professional Services: 2013	Construction (if applicable):
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Manager. Oversaw an illicit discharge detection and elimination (IDDE) investigation for three dry weather flows within the downtown Phoenix area. Activities included review of stormdrain maps and field investigation of several dry weather flows. The investigation identified one flow resulting from a well within the basement of a building used for chill water and discharging its excess water into the City's stormdrain. A second flow was identified coming from adjacent buildings and excess SRP water. A third flow consisted of excess water and a trash compactor discharge into the City's stormdrain. Oversaw investigation of interconnects to ADOT's tunnel system within the downtown area. This investigation resulted in over 20 interconnects identified and several dry weather flows. Information was provided to the City to contact facility representatives and at least two sources of pollutants/flows eliminated.		
4)	(1) TITLE AND LOCATION (City and State) Stormwater Compliance/Assistance (ADOT - Statewide)	(2) Year Completed	
		Professional Services: 2013	Construction (if applicable):
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Manager. EEC has assisted ADOT with its NPDES/AZPDES Phase I and II MS4 permitting since 1999 under an on-call contract. This assistance includes permitting, updating of the SWMP, developing SWPPPs for construction and industrial sites, stormwater outfall mapping, conducting stormwater awareness courses, community outreach and public participation, performing stormwater sampling, illicit detection & connection program and development of the annual report.		
5)	(1) TITLE AND LOCATION (City and State) Ken and Mel's Soil and Groundwater Remediation, Lake Havasu, AZ – ADEQ	(2) Year Completed:	
		Professional Services: 2013	Construction (if applicable):
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Manager. Over saw the installation of six air sparge wells, six soil vapor extraction wells, and removal of free product on groundwater. This project included the installation of a 250 cfm natural gas thermal oxidizer and a 10 HP positive displacement air sparge blower. The thermal oxidizer was later replaced with a 250 cfm electric catalytic oxidizer in response to declining vapor concentrations. Remediation activities resulted in the elimination of free product thickness, a 96% reduction in soil vapor concentration, and have removed over 70,000 pounds of total petroleum hydrocarbons in two years of operation. Air sparging has significantly improved dissolved oxygen in groundwater for the support of aerobic degradation.		

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

a. NAME: Kirk Creswick, R.G.	b. ROLE IN THIS CONTRACT: Geologist/Sr. Environmental Scientist	c. YEARS EXPERIENCE	
		1. TOTAL 23	2. WITH CURRENT FIRM 11
d. FIRM NAME AND LOCATION (City and State): Engineering and Environmental Consultants, Inc. 7740 North 16th Street, Suite 135, Phoenix, AZ 85020			
e. EDUCATION (DEGREE AND SPECIALIZATION) M.S. Hydrogeology, B.A. Geology		f. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Arizona Registered Geologist	
g. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Arizona Hydrological Society, GIS, HAZWOPER, MSHA, Radiological Worker II, ASTM RBCA, ASTM Remediation by Natural Attenuation			

H. RELEVANT PROJECTS

1)	(1) TITLE AND LOCATION (City and State) : ASARCO – Elder Gulch APP Support/Kearny, Arizona	(2) Year Completed	
		Professional Services: 2013	Construction (if applicable): 2013
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Senior Registered Geologist/Hydrogeologist for study of seeps from tailings pile at the facility. Study used high resolution resistivity surveys, monitoring well installation and sampling; geochemical assessment and modeling; water table mapping; GIS spatial analysis, and aquifer testing to identify the source of impact to seep water and groundwater. This study resulted in the design and installation of an interceptor trench to collect impacted seep water and route it to a reclamation facility. (Study \$49,000; Construction \$550,000)	<input checked="" type="checkbox"/> Check if project performed with current firm	
2)	(1) TITLE AND LOCATION (City and State) Laughlin-Bullhead International Airport LUST Site Remediation/Bullhead City, AZ	(2) Year Completed	
		Professional Services: Ongoing	Construction (if applicable) Ongoing
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Project Manager/Senior Environmental Scientist for characterization and remediation of nine leaking underground storage tank (LUST) releases (aviation and automotive fuels) at the airport. Installed 17 monitoring wells, five vapor extraction wells, five air sparge wells and a catalytic oxidizer. Performed operations and maintenance of the remediation system with groundwater monitoring. Vapor extraction achieved asymptotic concentrations in 14 months. Seven of nine releases have been successfully closed in less than four years. (Original remediation budget \$723,000. Current billings ~\$3,000/qtr).	<input checked="" type="checkbox"/> Check if project performed with current firm	
3)	(1) TITLE AND LOCATION (City and State) AEPSCO Apache Generating Station APP Support/Cochise, AZ	(2) Year Completed	
		Professional Services: 2013	Construction (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Senior Registered Geologist/Hydrogeologist for the preparation of a hydrogeological study in support of Aquifer Protection Permit (APP) amendment. Involved geochemical analysis and modeling to investigate the causes of compliance well exceedances at the facility. Changes in APP and NPDES discharge practices resulted in encroachment of groundwater from the adjacent Wilcox Playa, causing exceedances. (\$76,400)	<input checked="" type="checkbox"/> Check if project performed with current firm	
4)	(1) TITLE AND LOCATION (City and State) ADEQ State Lead Consultant/Statewide AZ	(2) Year Completed	
		Professional Services: 5 Ongoing	Construction (if applicable):
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Senior Environmental Scientist for five ongoing projects where EEC is contracted with ADEQ to provide site characterization and remediation services for LUST sites. Remediation systems were installed at three of the five sites. Other activities involve soil sampling, well installation, groundwater sampling, aquifer testing, etc. (\$501,000 current budgets)	<input checked="" type="checkbox"/> Check if project performed with current firm	
5)	(1) TITLE AND LOCATION (City and State) ADEQ Munitions Response On-call – Sentinel Plain (Barry Goldwater Range–East)/Sentinel, AZ	(2) Year Completed:	
		Professional Services: Ongoing	Construction (if applicable):
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Senior Environmental Scientist for technical support to ADEQ on projects involving military munitions. Advises ADEQ on appropriate methods for characterization of contamination by munitions constituents, statistical analysis for risk assessment, and geophysical methods for detection and clearance of unexploded ordnance and munitions of environmental concern. Also providing technical support to ADEQ for 13 Installation Restoration Program (IRP) sites at Luke AFB facilities under this project. (\$33,000)	<input checked="" type="checkbox"/> Check if project performed with current firm	

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

a. NAME: Rebecca Sydnor, P.E., LEED AP	b. ROLE IN THIS CONTRACT: Environmental Engineer/Civil Engineer	c. YEARS EXPERIENCE	
		1. TOTAL 9	2. WITH CURRENT FIRM 7
d. FIRM NAME AND LOCATION (City and State): Engineering and Environmental Consultants, Inc. 7740 North 16 th Street, Suite 135, Phoenix, AZ 85020			
e. EDUCATION (DEGREE AND SPECIALIZATION) B.S., Environmental Engineering, Arizona State University, December, 2007		f. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Registered Professional Engineer (Civil), Arizona, #54662, 2013 LEED Accredited Professional	
g. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) MSHA, 2013 OSHA 8-Hour HAZWOPER Refresher Confined Space Training, 2012 Pumping Systems Design, Arizona Society of Civil Engineers (ASCE), Continuing Education, 2008 Comprehensive NEPA 2-Day Hazardous Materials Training Program Tankerman Person-in-Charge of Dangerous Liquid, Oil and Chemical Cargoes Arizona Society of Civil Engineers (ASCE)			

H. RELEVANT PROJECTS

1)	(1) TITLE AND LOCATION (City and State) : AZPDES MSGP Stormwater Management Planning (CDM c/o City of Phoenix Aviation Department)	(2) Year Completed	
		Professional Services: In progress	Construction (if applicable): N/A
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Responsibilities included assisting in development of the training curriculum for annual Stormwater Pollution Prevention training, conducting quarterly inspections, and revising and updating the Stormwater Pollution Prevention Plan for each of the three city airports. Assisted the airport to transition when the new AZPDES MSGP permit was issued in 2010. Working with the Aviation Department, new notices of intent (NOIs) were filed for the City and the airport. Helped develop and present a "train the trainer" type curriculum. Each attendee was required to take a copy of the training back and present it to their employees. Assists in managing quarterly routine and annual inspections for tenants and City-owned facilities at all three City airports. Data are entered into an Access database that tracks inspection findings (including photographs), tenant responses, NOIs, and notices of termination.		
2)	(1) TITLE AND LOCATION (City and State) Environmental Clearance for Roadway and Drainage Improvement Project/ City of San Luis	(2) Year Completed	
		Professional Services: In progress	Construction (if applicable) Future
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Environmental Specialist for the environmental clearance and public involvement portion of an ADOT Local Governments project for roadway and drainage improvements in the City of San Luis. The project plans include improvements along a 4-mile section of Juan Sanchez Boulevard from State Highway 95 to the transition to State Route 195 to improve capacity, public safety, and operational characteristics. The environmental clearance is being obtained through a Group II Programmatic Categorical Exclusion (CE) including a CE Checklist and Group II Clearance Memorandum. EEC prepared a Public Involvement Plan for the project and is responsible to public involvement through construction. Public outreach includes effective communication with the largely Spanish-speaking residents of the project area. EEC is currently exploring the possibilities of outreach through schools and churches.		
3)	(1) TITLE AND LOCATION (City and State) Multi-Sector General Permit Support/Tempe, AZ	(2) Year Completed	
		Professional Services: 2013	Construction (if applicable) N/A
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Assistant project manager for this project to bring the East Valley Bus Operations and Maintenance (EVBOM) Facility into compliance the Arizona Pollutant Discharge Elimination System Multi-Sector General Permit. Revised the Stormwater Pollution Prevention Plan to meet the general requirements and sector-specific requirements under Sector P – Land Transportation and Warehousing. After the EVBOM Facility made structural modifications, updated the SWPPP and Spill Prevention Control and Countermeasures (SPCC) Plan and developed a combined inspection form to streamline the inspection documentation process. Prepared and delivered training to meet the requirements of both the SWPPP and SPCC programs.		
4)	(1) TITLE AND LOCATION (City and State) Auto-Sampler Maintenance/Mesa, AZ	(2) Year Completed	
		Professional Services: 2013	Construction (if applicable): N/A

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	<p>(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE</p> <p>Technical Lead for confined space entry. EEC conducted seasonal maintenance at the City's five automatic stormwater sampler locations in preparation for the winter sampling season. Two of the locations were located in manholes that qualified as confined spaces. Conducted air monitoring and determined that the spaces were non-permit required. Despite being non-permit required, EEC treats all confined spaces with the same level of safety as if they were permit-required. Developed confined space entry plans, performed continuous air monitoring throughout the entry, and supervised the entry of EEC personnel to perform maintenance.</p>	<input checked="" type="checkbox"/> Check if project performed with current firm		
	<p>(1) TITLE AND LOCATION <i>(City and State)</i></p> <p>APP Amendment and Engineering Support (Asarco, LLC)/Near Kearney, AZ</p>	<p>(2) Year Completed:</p> <table border="1"> <tr> <td data-bbox="967 352 1252 401">Professional Services: In progress</td> <td data-bbox="1252 352 1559 401">Construction <i>(if applicable)</i>: Multiple phases</td> </tr> </table>	Professional Services: In progress	Construction <i>(if applicable)</i> : Multiple phases
Professional Services: In progress	Construction <i>(if applicable)</i> : Multiple phases			
5)	<p>(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE</p> <p>Assistant project manager for multiple APP amendment applications for mining operations near Kearny, Arizona. This project consisted of submitting two significant amendment applications, developing an APP Field Guide, and responding to ADEQ request for additional information. The Field Guide summarized permit requirements for all facilities covered by the APP and provided maps and images of each facility. Changes also included adding, modifying, and closing impoundments and consolidating two Individual APPs into an Area-Wide APP. In support of the APP Amendment applications, EEC provided engineering review of design plans and assuring BADCT requirements are implemented, prepared closure and post closure plans and cost analysis, prepared recommended monitoring plan, contingency plan, and compliance schedule. Additional services included the geophysical investigation surrounding a Tailings Storage Facility and subsequent design and construction management services for a new Seepage Collection System. Engineering work in support of the amendment applications included hydrology and hydraulics analysis, grading and drainage plans, impoundment design plans, drainage reports, surveying, piezometer installation, and construction management. Ms. Sydnor provided regulatory assistance by drafting permit applications, creating the Field Guide, overseeing well installation, attending meetings with ADEQ and Asarco, and coordinating between ADEQ, Asarco, and various contractors.</p> <p>Assisitant project manager for APP permitting of a new tailings storage facility. This Application effort was conducted concurrently with Asarco's EIS application and required extensive coordination with multiple entities.</p>	<input checked="" type="checkbox"/> Check if project performed with current firm		

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

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

a. NAME: Sean Doctor, EIT	b. ROLE IN THIS CONTRACT: Civil Engineer/Transportation Engineer	c. YEARS EXPERIENCE	
		1. TOTAL 9	2. WITH CURRENT FIRM 6
d. FIRM NAME AND LOCATION (City and State): Engineering and Environmental Consultants, Inc. 7740 North 16 th Street, Suite 135, Phoenix, AZ 85020			
e. EDUCATION (DEGREE AND SPECIALIZATION)		f. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)	
g. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)			

H. RELEVANT PROJECTS

1)	(1) TITLE AND LOCATION (City and State) : Downtown Storm Drain Improvements/Phoenix, AZ	(2) Year Completed	
		Professional Services: 2013	Construction (if applicable): 2013
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Assisted and Performed Engineering Design for 15,500 feet of Storm Drain and 1-mile of roadway in Downtown Phoenix area; Tasks included base map preparation, survey coordination, utility coordination, computer-aided drafting, cost estimation, final plans and documents preparation.		
2)	(1) TITLE AND LOCATION (City and State) Rancho Bella Vista Flood Plain Mitigation/Pinal County, AZ	(2) Year Completed	
		Professional Services: 2013	Construction (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Assisted and performed engineering design to mitigate flooding of the Rancho Bella Vista Subdivision in Pinal County, AZ, south of Queen Creek, AZ. Design alternatives and subsequent cost estimation was performed. Tasks included base map preparation, survey coordination, computer-aided drafting and cost estimation.		
3)	(1) TITLE AND LOCATION (City and State) ASARCO Ray Mine – Elder Gulch Tailing Dam/Kearny, AZ	(2) Year Completed	
		Professional Services: 2013	Construction (if applicable) 2013
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Assisted in the engineering design for a relocated 1700 ft. seepage channel at the ASARCO Ray Mine site. Tasks included engineering design and computer-aided drafting.		
4)	(1) TITLE AND LOCATION (City and State) Battaglia Left Turn Lane – Pinal County/Arizona City, AZ	(2) Year Completed	
		Professional Services: 2013	Construction (if applicable) 2013
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Assisted and performed roadway design for pavement widening and left turn lane from Battaglia Road to the United States Post Office west of Del Rio Road in Arizona City, AZ. Duties included preliminary site layout, base map preparation, computer-aided drafting and roadway design.		
5)	(1) TITLE AND LOCATION (City and State) Contractor Utilization Program – Arizona Dept. of Environmental Quality BHP Copper Pinto Valley Mine	(2) Year Completed:	
		Professional Services: 2013	Construction (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Assisted in a cost review for a mining operation closure on the behalf of ADEQ. Duties included unit cost verification and cost estimation for an \$80+ Million proposed operation closure.		

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

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

NAME: Patricia Gajda		b. ROLE IN THIS CONTRACT: Survey Manager		c. YEARS EXPERIENCE	
		1. TOTAL 11	2. WITH CURRENT FIRM >1 YR		
d. FIRM NAME AND LOCATION (City and State): Engineering and Environmental Consultants, Inc. 4625 E Fort Lowell Road, Tucson, AZ 85712					
e. EDUCATION (DEGREE AND SPECIALIZATION) B.S., Surveying Engineering			f. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Registered Land Surveyor, AZ, #46278		
g. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)					

H. RELEVANT PROJECTS

1)	(1) TITLE AND LOCATION (City and State) : Miscellaneous Right of Way Services (Southwest Gas Corporation)	(2) Year Completed	
		Professional Services: 2013	Construction (if applicable):
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input type="checkbox"/> Check if project performed with current firm Contract Right-of-Way Agent - Provided right-of-way services for approximately 6 miles of a pipeline relocation and reinforcement project along SR77 (Oracle Road). Services included, research, preparation of easement documents, preparation of Arizona State Land Department (ASLD) applications for new right-of-way, negotiation and acquisition of easements, prior rights determination. Also, reviewed survey work performed by a third party.		
2)	(1) TITLE AND LOCATION (City and State) Miscellaneous Right of Way Services (Southwest Gas Corporation)	(2) Year Completed	
		Professional Services: 2013	Construction (if applicable):
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input type="checkbox"/> Check if project performed with current firm Contract Right-of-Way Agent - Provided right-of-way services for approximately 7 miles of a pipeline relocation and reinforcement project along SR86 (Ajo Highway). Services included, research, preparation of easement documents, preparation of Bureau of Land Management (BLM) applications and Arizona State Land Department (ASLD) applications for new right-of-way, negotiation and acquisition of easements, prior rights determination. Also, reviewed survey work performed by a third party.		
3)	(1) TITLE AND LOCATION (City and State) Summerlin Master Planned Community (The Howard Hughes Corporation)	(2) Year Completed	
		Professional Services: 2008	Construction (if applicable):
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input type="checkbox"/> Check if project performed with current firm Survey Manager - Provided boundary surveys, ALTA/ACSM land surveys, construction staking, topographic surveys, design/location surveys, Records of Surveys, Parcel Maps, Final Plats, legal descriptions for easement and rights-of-way takes for this 23,000-acre master planned community.		
4)	(1) TITLE AND LOCATION (City and State) Badlands Golf Course ALTA (EHB Companies)	(2) Year Completed	
		Professional Services: 2013	Construction (if applicable):
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input type="checkbox"/> Check if project performed with current firm Survey Manager - Provided ALTA/ACSM Land Title Survey for the Badlands Golf Course located in Las Vegas, Nevada consisting of approximately 188 acres. Survey services included setting photo control, verifying aerial mapping data.		
5)	(1) TITLE AND LOCATION (City and State) Summerlin Village 15A Condominiums (Flamingo/TC, LLC)	(2) Year Completed:	
		Professional Services: 2006	Construction (if applicable):
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input type="checkbox"/> Check if project performed with current firm Survey Manager - Summerlin Village 15A Condominiums is a condominium development on ±31 acres located in Summerlin. The project consisted of mapping 23 buildings with 420 units and includes primary and secondary recreation areas. Provided mapping, mass grading, staking and roadway design.		

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REVISED - Attachment I – General Qualifications**

5. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT		
<i>(Present no more than five (5) projects. Complete one Section 5 for each project.)</i>		
a. TITLE AND LOCATION <i>(City and State)</i>	b. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION <i>(If applicable)</i>
Sahuarita Road, La Villita to Eastern Town Limits Town of Sahuarita, Arizona	Current	\$32M (Estimate)
23. PROJECT OWNER'S INFORMATION		
c. PROJECT OWNER	d. DOLLAR AMOUNT OF PROJECT	e. TOTAL COST OF PROJECT
Town of Sahuarita Public Works	Engineering Design Fee \$4.5M	NA
f. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (include scope, size, and length of project)		

This is a \$32 million Regional Transportation Authority(RTA) funded project consisting of the 4-lane, urbanized 5-mile widening of the existing 2-lane strip paved roadway for the Town of Sahuarita to Pima County's Roadway Design Manual standards. This project requires the collaborating efforts of design surveys, roadway and drainage design, environmental studies, landscape and bridge design, geotechnical studies, utility coordination, and right of way services. This collaboration continues with the CM at Risk contractor completing the first phase of work while designs are being completed on the final phases. Benefits of this collaboration arose concerning the overbank flooding of the Santa Cruz River. All-weather access design resulted in an elevated roadway embankment with extensive cross culvert and training levee components necessary to control this flow. We were asked to assess lowering the road to maintain the status quo for flooding and avoiding the expense now of potential throwaway improvements. Our investigation determined that the new roadway could be lowered without worsening the flooding conditions. Community leaders publically acknowledged that roadway overtopping would still occur infrequently as it had done twice in the last 30 years. Tabulation of quantities saved included items for borrow, box culverts, levee armoring and right of way.

Our roadway designers worked with our river mechanics and local drainage designers to allow modeling of the proposed condition to confirm the status quo could be preserved. Agency technical staff communicated with community leaders and consensus was derived at both the technical and political levels. Similarly, the original design concept included a grade-separated crossing of the Union Pacific Nogales mainline and siding. Through soil borings, data collection and alternative analyses the design team determined the existing soils did not have capacity to support the additional overburden without significant investments in soils mitigation. In this instance our roadway designers, geotechnical scientists and structural designers worked collaboratively with agency technical staff to model and tabulate quantities for alternate designs. This enabled community leaders to reach a consensus and resulted in project that is a greater community benefit.

Project Scope: Provide comprehensive engineering roadway design services of a 4-lane, 5-mile widening of an existing roadway

Project Size and Length: 5-miles of a 4-lane roadway.

Principal Elements: This project encompassed a comprehensive team of disciplines either provided by EEC or our sub-consultants and included environmental analysis, geotechnical analyses, hydraulic and hydrologic modelling, coordination with railroad, right of way services, landscape design, bridge design, roadway design, surveying, public relations, and quantity and cost analysis.

Special Features: Project included collaboration with a Construction at Risk contractor to develop Value Engineering Solutions early on in the project.

Relevance: This project is relevant to this contract because it shows EEC's thorough and extensive technical ability to provide many different engineering design services, related to roadway, paving and drainage. Additionally, providing excellent customer service and coordination abilities with municipal agencies and utility companies for a successful project.

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5. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT		
<i>(Present no more than five (5) projects. Complete one Section 5 for each project.)</i>		
a. TITLE AND LOCATION <i>(City and State)</i>	b. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION <i>(If applicable)</i>
Town of Oro Valley – On Call (Water/Wastewater Contracts) Oro Valley, Arizona	On-Going (Since2009)	N/A
23. PROJECT OWNER'S INFORMATION		
c. PROJECT OWNER	d. DOLLAR AMOUNT OF PROJECT	e. TOTAL COST OF PROJECT
Town of Oro Valley	\$400,000	On-Call not to exceed \$400,000
f. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (include scope, size, and length of project)		

EEC has been providing on-call civil design services to the Town of Oro Valley on this contract since 2009. Relevant tasks have included:

- **Waterline interconnect pipeline and appurtenances:** Provided professional engineering and design services for the addition of a new Tucson Water/CAP interconnection site to include new pipeline and metering, electrical upgrades and monitoring equipment, and site facility improvements to include site wall and enclosure gate additions. EEC provided alignment analysis, base sheet preparation and detailed design plans and documents.
Water Line Replacement (of varying diameters) – As part of the on-call design services, EEC also provided design analysis for recommendation of water distribution system replacement and interconnection. Provided the design of approximately 18,000 L.F. of new 8" water mains, replacing a 4" AC distribution system plus interconnecting four additional cul-de-sacs to Oro Valley Water Utility system, currently being served by Tucson and Metro Water. The project crosses existing residential neighborhoods streets, public streets, washes, and it will have to directional bore under newly road improvements. Connections will loop an existing 6" system; the new system will also provide a new 8" pressure reducing station
- **PRV Modifications** – EEC also provided design analysis and detailed design for the Pressure Reducing Valve modifications for Big Horn Butte Drive and Linda Vista and La Canada location. Services included survey and mechanical details to prepare a construction plan set.
- **Reclaimed Waterline** – Additional on-call tasks included providing engineering and design services for the addition of a new 12-inch reclaimed waterline along Naranja Drive and along Guava Drive to a proposed field site. EEC prepared a preliminary alignment analysis and conducted utility research and developed base sheets for final design drawings. This task also included design of new 6-inch potable waterline from Naranja Drive along Guava Drive to the new field site.

Project Scope: This scope includes assessment of existing water and reclaimed water infrastructure network system and assist client in developing the most feasible and economical alignment and final design. This on call contract encompasses tasks from pre-design analysis, surveying, alignment study, utility research, detailed design plans and specifications, and post design assistance. The on-call amount is capped at \$400,000 under this on-call.

Project Size and Length: Project size varies in scope from 4" to 12" pipelines from a few 100ft to 1000's ft of pipeline.

Principal Elements: Full Engineering services from Planning, Surveying, Design through Construction.

Special Features: Assessment of water and reclaimed water network system and developing solutions to provide better service capacity and pressure to customers.

Relevance: This project is relevant to this contract because it shows EEC's technical ability through a wide range of services and customer service orientation to be able to maintain an on-call for many years. EEC is a "go to" firm for the Town and they are confident we will deliver a quality product that is on time and within budget.

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5. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT		
<i>(Present no more than five (5) projects. Complete one Section 5 for each project.)</i>		
a. TITLE AND LOCATION <i>(City and State)</i>	b. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION <i>(If applicable)</i>
Maricopa County Sheriff's Office (MCSO) Headquarters	2012	2013
23. PROJECT OWNER'S INFORMATION		
c. PROJECT OWNER	d. DOLLAR AMOUNT OF PROJECT	e. TOTAL COST OF PROJECT
Maricopa County	Engineering Design Fee \$107,200	NA

f. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (include scope, size, and length of project)

EEC was initially hired to evaluate and assess 10 different project locations for the new facility. A final deliverable of a report was delivered to the client that addressed the cost implication and feasibility of pros and cons of each site. The client then chose the site they felt was the most appropriate and cost effective to build the new facility. The final site location was selected in the downtown area of Phoenix.

Engineering design services included support for the new 165,000 square foot building. These services consisted of on-site and off-site improvements, hardscape, half street paving for the adjacent streets, establishing building floor elevation, storm water retention, on- and off-site, utility plans, a water and sewer report, and storm water pollution map. As part of the project, the City of Phoenix required an existing offsite waterline be upsize along the property frontage. EEC prepared water mainline plans for submission and approval to the City for upsizing a 6" waterline to an 8" for approximately 400 linear feet in Madison Street. The City also elected to include off-site storm drain in this project since it was adjacent to the property. Under a separate contract with the City, EEC completed approximately 850 linear feet of large diameter storm drain plans as part of the City storm water infrastructure. These plans were incorporated into and constructed with the County project.

NRG Energy of Phoenix was able to enter into an agreement with Maricopa County to provide chilled water services to this facility instead of building a central plant on-site. Under a separate contract with NRG, EEC completed engineering design plans for dual 24" diameter chilled water lines to the County Facility. The project limits were from the intersection of 4th Avenue to just west of 5th Avenue where they entered the new building, approximately 500 linear feet within Madison Street.

EEC also provided post design services for the County project and as-built documents for the NRG chilled water lines and City of Phoenix water mainline.

Project Scope: Provide on-site and off-site engineering services for the new MCSO Headquarters. Services include paving, grading, drainage, storm drain, water line, sewer line and fire line.

Project Size and Length: On-site project consists of approximately 2.9 acres and off-site consists of approximately 1,250 linear feet of roadway and infrastructure improvements.

Principal Elements: Site evaluation and recommendation from 10 different locations, utility coordination in the downtown area and design elements for a high level security site and building.

Special Features: Project includes a secure sub-surface basement with on-site elements and security features to protect the facility.

Relevance: This project is relevant to this contract because it shows EEC's technical ability to provide many different engineering design services. Additionally, providing excellent customer service and coordination abilities with municipal agencies and utility companies for a successful project.

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5. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT <i>(Present no more than five (5) projects. Complete one Section 5 for each project.)</i>		
a. TITLE AND LOCATION <i>(City and State)</i> ARSARCO Ray Mine: Seepage Collection System Kearny, Arizona	b. YEAR COMPLETED	
	PROFESSIONAL SERVICES On-Going	CONSTRUCTION <i>(If applicable)</i> 2013
23. PROJECT OWNER'S INFORMATION		
c. PROJECT OWNER Asarco – Ray Mine	d. DOLLAR AMOUNT OF PROJECT Engineering, Permitting and Construction Assistance: \$146,500	e. TOTAL COST OF PROJECT 97% Complete – will be completed on budget
f. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (include scope, size, and length of project)		

This project was a permitting, engineering design and construction assistance project. EEC assisted Asarco Ray in consolidating two Aquifer Protection Permits into one. The project began in November 2012 as a permitting task which included working with the Client in preparing all required technical and administrative documents for inclusion with the permit application submittal.

As part of the required documents, EEC was tasked with developing an engineered solution to eliminate or bring into compliance several unpermitted impoundments and design a collection system to separate tailings seepage from the storm water collection system. EEC conducted field work and reviewed data including water quality sampling, geophysical analysis, water level data, historical and current topography and drainage characteristics. Using the results of the data, a new seepage collections system was sited and designed. This new collection system consisted of a semi-lined buried trench with a combination of perforated and solid pipe collecting subsurface seepage from the tailings facility. The partially lined trench was designed for limiting storm water from entering the seepage collection system, while maximizing collection of seepage flow. Two non-permitted impoundments were eliminated from the system by construction a headwall and pipe inlet and discharge system at seep locations.

EEC prepared engineering design documents for the seepage collection system and assisted the Client in reviewing contractor bids and procuring a qualified contractor. EEC provided Construction Assistance during the construction phase and reviewed shop drawings, responded to contractor requests for information, attended weekly project meetings, and provided weekly inspection support and coordination of QA/QC materials testing sub consultants.

Project Scope: \$146,500 (permitting, design, construction administration, and final as-built documentation fee)

Project Size and Length: \$550,000 (estimated final construction cost). Approximately 1700 LF of 15-inch and 16-inch pipe with rock trenching and drainage grading, grading, pipe relocation and headwalls.

Principal Elements: Trenching (including rock trenching) within existing drainage channel, perforated and solid pipe system, trench liner system, drainage analysis, site grading, headwall and inlet/outlet collection system, hydraulic analysis

Special Features: Semi-Lined trench and collection system, use of geocomposite/HDPE liner system, dewatering system during construction, use of acid resistant concrete for headwalls.

Relevance: This project is relevant to this contract in that it demonstrates EEC's regulatory knowledge and ability to assist clients in local, county and state permitting and environmental requirements. This project also highlights EEC's engineering design ability and our emphasis in developing solid and unique solutions to Client issues. As an added benefit, EEC also can provide assistance during construction, as shown in this project. Because of our knowledge of project design, we are able to translate that knowledge into the field and provide added insight during construction.

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5. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT				
<i>(Present no more than five (5) projects. Complete one Section 5 for each project.)</i>				
a. TITLE AND LOCATION <i>(City and State)</i> Environmental Services Contract City of Phoenix	b. YEAR COMPLETED <table border="1" style="width: 100%;"> <tr> <td style="width: 50%;">PROFESSIONAL SERVICES On-Going</td> <td style="width: 50%;">CONSTRUCTION <i>(If applicable)</i> N/A</td> </tr> </table>		PROFESSIONAL SERVICES On-Going	CONSTRUCTION <i>(If applicable)</i> N/A
PROFESSIONAL SERVICES On-Going	CONSTRUCTION <i>(If applicable)</i> N/A			
23. PROJECT OWNER'S INFORMATION				
c. PROJECT OWNER City of Phoenix	d. DOLLAR AMOUNT OF PROJECT \$101,500.00 (as of November 2013)	e. TOTAL COST OF PROJECT On-Call not to exceed \$500,000		

f. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (include scope, size, and length of project)

EEC has provided the City of Phoenix with Phase I, II, and III Environmental Site Assessment (ESA) on-call services since 2003 (multiple renewed contracts). ESA Activities under this on-call have been completed on behalf of the Light Rail Transit System, Community Noise Reduction Program, Neighborhood Services, Parks and Recreation Department, and Street Department. EEC has completed 29 ESAs under the current contract (since July 2012) and has completed nearly 300 since our first on-call was awarded in 2003. Properties assessed under this on-call have included residential, commercial, light industrial, and right-of-way. Phase I ESA activities are conducted in accordance with ASTM 1527-05 and general requirements as required by the City of Phoenix.

Phase II ESAs have been conducted for approximately 18 properties and have included investigation and assessment of hazardous and petroleum products. Such assessments have included investigation of underground storage tanks (USTs), determination if a leaking UST has impacted a right-of-way, petroleum spills and releases from automotive related activities, and assessment of aboveground storage tank (AST) releases. EEC employed a variety of investigation techniques during completion of the Phase II investigations to include hand auger, hollow stem auger, direct-push, and ground penetrating radar. These investigations have resulted in one Phase III ESA being conducted by EEC. The Phase III included the excavation and removal of petroleum contaminated soil as a result of a property owner dumping a 55-gallon drum of used oil.

Project Scope: This scope includes assessment of real property for hazardous and petroleum products under the ASTM 1527-05 standard. The dollar amount of work completed to date under the current on-call is \$101,500. The on-call amount is capped at \$500,000 under this on-call (current on-call expires June 30, 2014).

Project Size and Length: Project size varies from a few square feet for a right-of-way to a few acres for larger property acquisitions.

Principal Elements: Determination if a Recognized Environmental Condition exists for a property the City is considering acquiring. Includes investigation and assessment of hazardous and petroleum products.

Special Features: Assessment of a wide variety of properties. Also includes working closely with City personnel to meet budget and timeframe constraints.

Relevance: This project is relevant to this contract because it shows EEC's technical ability and customer service orientation to be able to maintain an on-call for 10 years and win multiple awards. EEC is a "go to" firm for the City of Phoenix and they are confident we will deliver a quality product that is on time and within budget.

6. ADDITIONAL INFORMATION

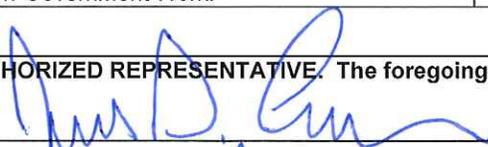
a. PROVIDE ANY ADDITIONAL INFORMATION YOU FEEL MAY BE NECESSARY TO DESCRIBE YOUR FIRMS QUALIFICATIONS. (ATTACH ADDITIONAL SHEETS AS NEEDED.)

Please See Attached SOQ

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:	65 %
b. Percentage of Total Work Attributable to Non-Government Work:	35%

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

Signature: 

Date: 12/12/13

Name: James D. Lemoine

Title: Vice President

6. Additional Information

FIRM DESCRIPTION

EEC is a local Arizona only corporation with over 26 years of experience providing superior transportation, water and wastewater, hydrology/hydraulics, hydrogeological engineering, environmental consulting, construction assistance and surveying services throughout the State. As an Arizona-based company, EEC employs a staff of 11 and 28 in Maricopa and Pima counties respectively. Our success depends on keeping our local clients satisfied and being diverse enough to put the right resources on every project with local Arizona staff.

EEC will lead our team with our company maxim of the three “Cs”: Communication, Commitment and Customer focus. We are committed to providing total satisfaction, clear and honest communication and dedicating the right personnel to meet the needs of our clients. This practical experience facilitates well thought-out elements, details, and quality construction documents.

Available EEC Personnel

Registered Professional Engineers	12*
Engineers-in-Training	1*
Certified Floodplain Managers	1*
Registered Land Surveyors	8*
Land Surveyor in Training	1
Registered Geologist	1
NICET Certified	2*
Hydrologist	1
Designers	8
Environmental Scientist	4
Environmental Technician	4
LEED Accredited	2
Administrative	7

* indicates multiple registrations

RELEVANT EXPERIENCE

A good percentage of EEC’s workload comes from on-call type contracts we have with various agencies. Below is a list of recent select experience in each discipline we are qualified to work in.

WASTEWATER SYSTEMS

AS-NEEDED MISCELLANEOUS ENGINEERING SERVICES

PROJECT OWNER/REFERENCE: TOWN OF SAHUARITA / FARHAD MOGHIMI (520) 792-1093 (NO LONGER WITH TOWN OF SAHUARITA)

EEC has provided as-needed civil engineering services to the Town of Sahuarita and has also provided third-party development review services on an as-needed basis. Work included plan review of 10 units at Madera Highlands Villages. Other tasks have included:

- Groundwater Sampling and Monitoring
- Quail Creek II Plan Review
- Monitoring Well Installation
- Sahuarita High School Access Bypass
- CMOM Plan Documents
- WWTP Operations
- Duval Mine Road
- Sahuarita Road Bike Lanes

ON-CALL ENGINEERING SERVICES

PROJECT OWNER/REFERENCE: CITY OF BENSON / BRAD HAMILTON (520) 586-2245

For over two years, EEC provided the City of Benson with as needed services which included development of a Sewer Collection System Model that will enable the city to prepare capacity assurance letters for developers and ADEQ; perform “what if” flow scenarios; track collection system maintenance records and conditional assessments; and track system inventory, video, and photographic inspection data. EEC also provided reviews of site and subdivision developments, such as Sunset Trails Subdivision, Benson 35 RV Park and the Solar Park Industrial Development.

6. Additional Information

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BROWN ROAD SEWER AND ITS IMPROVEMENTS

PROJECT OWNER/REFERENCE: CITY OF MESA / DAN WOMACK (480) 644-2650

Designed approximately 1-mile of 18-inch public sewer main with two concrete diversion structures. Project included site surveying, utility research, preparing design plans and special provisions for pavement overlay, sidewalk ramp replacements to meet ADA compliance, ITS modifications and waterline abandonment.

BONDURANT LIFT STATION & WASTEWATER SYSTEMS DESIGN

PROJECT OWNER/REFERENCE: BONDURANT SCHOOL OF HIGH PERFORMANCE DRIVING / N/A

EEC designed a sewage lift station and associated piping and appurtenances to tie into the existing Gila River Indian Community (GRIC) sewer system. Project included coordination with GRIC Department of Environmental Quality and Public Works department and abandonment of existing septic system to meet EPA requirements.

TALAVERA SANITARY LIFT STATION AND FORCE MAIN

PROJECT OWNER/REFERENCE: THE ESTES COMPANY / CHRISTOPHER VOLPE (520) 571-1961

EEC prepared engineering documents for the construction of a new private sewage lift station and force main in accordance with ADEQ and Pima County Wastewater Management Department's design standards. The sewer lift station design included provisions for aeration of the wet well, chemical addition for sulfide inhibition, and air scrubbers for odor abatement. Additionally, the design included provisions for duplex pump operation and a diesel powered emergency generator for back up power, as well as permit applications from ADEQ.

OWRF MAINTENANCE & OPERATIONAL IMPROVEMENTS

PROJECT OWNER/REFERENCE: CITY OF CHANDLER / BOB FORTIER (480) 782-3343

EEC provided professional engineering services for upgrades and modifications to existing facilities at the Ocotillo Water Reclamation Facility including grit classifiers and influent pump and VFD pump drive replacement, aeration header pipe rerouting and replacement, chlorine contact tank repairs, new shade structure over chlorine contact tank, clarifier rehabilitation, administration building improvements, HVAC improvements, electrical lighting improvements, and detailed plans for plant pipe painting and plant signage. Project tasks include pre-design planning, detailed design documents and specifications and post design services. EEC provided Construction Administration Services during construction phase including reviewing shop drawings, responding to contractor requests for information, reviewing contract change orders, attending weekly project meetings, reviewing contractor pay requests, weekly inspections, and preparation of as-built and project close out documents.

LOST DUTCHMAN STATE PARK LIFT STATION & WASTEWATER TREATMENT PLANT

PROJECT OWNER/REFERENCE: ARIZONA STATE PARKS / PAUL GOVINO (602) 542-4174

EEC provided design and construction administration for a new 10,000 gallon per day extended aeration wastewater treatment plant, new effluent disposal leach bed, lift station, and force main at the Lost Dutchman State Park in Apache Junction. EEC was able to advocate on the Park's behalf to be exempt from ADEQ's permitting process in its entirety by obtaining the State's approval to construct the new facilities under a standard maintenance clause of their regulations. This action saved the Park money and nearly a year's time and possibly the loss of funding for Arizona State Parks.

SLIDE ROCK STATE PARK WASTEWATER TREATMENT PLANT

PROJECT OWNER/REFERENCE: ARIZONA STATE PARKS / PAUL GOVINO (602) 542-4174

As part of a **design-build team**, EEC provided design services for a new wastewater treatment plant at the environmentally sensitive Slide Rock State Park in Sedona. The project included a new Membrane Bio-Reactor (MBR) treatment plant to serve the present and future needs of the park; new effluent reuse system including an effluent storage pond and irrigation system; two new restroom buildings to facilitate 2,500 park visitors per day; one new pre-engineered maintenance building to facilitate maintenance and storage needs; and water, sewer, and electrical utility lines

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with all the necessary appurtenances. EEC also prepared an individual Aquifer Protection Permit (APP) and Reuse Permit for the treatment facility.

MT. LEMMON WASTEWATER MANAGEMENT PLAN AND WATERSHED STUDY

PROJECT OWNER/REFERENCE: PIMA COUNTY WMD / CHARLES MATTHEWSON (520) 740-6500

EEC conducted a wastewater management study of the Mt. Lemmon watersheds to develop a long-range plan for the service area. The final deliverable is a comprehensive Service Area Watershed Study and Wastewater Management Plan identifying conditions and circumstances existing in and around the Mt. Lemmon community.

AJO IMPROVEMENT COMPANY SANITARY SURVEY

PROJECT OWNER/REFERENCE: FREEPORT MCMORAN / JACK PETERSEN (520) 387-2002

EEC performed a Class I sanitary survey for Ajo Improvement Company using pre-prepared check lists and EPA guidance documents. The following elements of a Class I sanitary survey of a small water system include: Operator compliance with regulations, source protection, physical components and condition; treatment, finished water storage, distribution, pumps /pump facility and controls, monitoring, reporting and data verification, water system management and operations.

BENSON SEWER COLLECTION SYSTEM MODEL

PROJECT OWNER/REFERENCE: CITY OF BENSON / BRAD HAMILTON (520) 586-2245

EEC is working on a multi-year sewer collection system modeling project with the City of Benson. EEC prepared a computer model of the Benson sewer collection system using the PCSWMM modeling software. This modeling software will be used by the City to prepare capacity assurance letters for developers and ADEQ. EEC performed "what if" flow scenarios, tracked collection system maintenance records and conditional assessments, tracked system inventory data, and tracked video and photographic inspection data. EEC recommended and purchased modeling software for the City, performed modeling software training, entered the existing system data into the sewer model, and identified survey needs for future modeling tasks.

GRAY WATER STUDY

PROJECT OWNER/REFERENCE: PIMA COUNTY WMD / BILL RICHARDSON (520) 617-8253

EEC prepared a gray water study for Pima County, which included calculating flow rates, pipeline capacity, and performing research related to other municipalities' programs. The study also identified means to implement a low flow water fixture program and a gray water program for new housing in a manner that will minimize negative impacts on the Pima County wastewater conveyance system.

WATER DISTRIBUTION SYSTEM

ON-CALL PROFESSIONAL ENGINEERING SERVICES

PROJECT OWNER/REFERENCE: METROPOLITAN WATER IMPROVEMENT DISTRICT / JAMES LEWIS, PE (520) 575-8100

EEC provided on-call engineering services including: water system design, transmission main design, municipal well system design, booster pump design, storage tank/reservoir design, route studies, roadway design, grading plans, drainage design and studies, bank protection design, sediment transport, river stability analysis, hydraulic and hydrologic analysis, native plant inventories and preservation plans, landscape design, and construction inspection. Relevant Projects included:

- Freer Road/Camino del Sur Waterline Interconnection Upgrades and Improvements
- Metro Water Three Waterline Connections
- Hub Well 1A Site Improvements
- Diablo Village Water Plant Foundation Design and Electrical Inspection
- Lulu Walker School Waterline Relocations

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- Metro Water District Office Site Access and Layout
- Orange Grove Road Transmission Main Relocation
- Riverside Well Site Design
- Shannon Road Transmission Main Wash Crossing Analysis, Native Plant Inventory, Biological and Cultural Evaluations
- Magee Trail New Domestic Water Well Site Layout and Design

ON-CALL PROFESSIONAL ENGINEERING SERVICES

PROJECT OWNER/REFERENCE: TOWN OF ORO VALLEY ON-CALL / DAVID RUIZ (520)–229–5023

EEC provided on-call civil design services for Town of Oro Valley including pre-planning, survey, alignment study, utility research and coordination, base sheet preparation, detailed design drawings and specifications. Relevant tasks included:

- Tucson Water/CAP Interconnection Site, Engineering and Design
- Campo Bello 8-inch and 12-inch Water Line Replacement (15,000 linear feet)
- PRV Modifications: Big Horn Butte Drive, Linda Vista and La Canada

KITT PEAK NATIONAL OBSERVATORY WATER SYSTEM RENOVATION

PROJECT OWNER/REFERENCE: AURA, INC. / JOHN DUNLAP (520) 318–8284

EEC provided engineering documents for the rehabilitation and improvement of the water system at Kitt Peak National Observatory. The design included rehabilitation of sand and GAC filters, VFD pumping system, chemical disinfection system, upgrade of existing distribution piping and storage tanks. Project was funded by ARRA. EEC provided post design assistance including bid reviews, contractor evaluation, shop drawing review and response to contractor requests for information.

HIGHLANDS RANCH MAINLINE REPLACEMENT, ORO VALLEY, AZ

PROJECT OWNER/REFERENCE: TOWN OF ORO VALLEY WATER UTILITY / DAVID RUIZ (520) 229–5023

EEC designed the mainline replacement for the Highlands Ranch Subdivision, which included 8-inch and 6-inch diameter waterlines totaling approximately 16,600 lineal feet. Individual private plumbing connections within the subdivision were also relocated as a part of this project. This project enabled new waterlines to replace the old and undersized waterlines, and provided the existing subdivision with improved water pressure, reliability, and fire protection. EEC recently completed construction services.

PHOENIX FEDERAL CORRECTIONS WATER TREATMENT FACILITY

PROJECT OWNER/REFERENCE: US PENITENTIARY/CANDELARIA CORPORATION / STEVE LLOYD (623) 463–8471

EEC designed and provided post design assistance of a 600 gpm arsenic treatment system, replacement of sanitary lift station pumps, appurtenances and controls for the United States Bureau of Prisons at the Phoenix Federal Correctional Institution. EEC worked directly with the contractor during design and was the liaison with Arizona Department of Environmental Quality during agency project review and approval.

OCOTILLO ROAD WATERLINE REPLACEMENT

PROJECT OWNER/REFERENCE: TOWN OF GILBERT / JASON KERBY (480) 497–4943

EEC designed approximately 1300 feet of 12-inch C-900 water main and associated fire hydrants just east of Lindsey Road on Ocotillo Road. This section of waterline had been previously removed during the construction of an adjacent sewer and needed to be reconstructed. In addition to design services, EEC provided assistance with bidding and submittal reviews.

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AIRPORT WATER PRODUCTION FACILITY

PROJECT OWNER/REFERENCE: CITY OF CHANDLER / JOHN KNUDSON (480) 782-2400

EEC provided professional engineering services that included a complete rehabilitation of a 2.0 million gallon reservoir, new 20-inch reservoir fill line connection, reconnection of on-site well for the reservoirs fill line, and upgrade of 3 high service booster pumps from 750 gpm to 1050 gpm. EEC is currently providing construction administration services, which includes shop drawing review, RFI response, construction inspection/observations and application to Maricopa County Environmental Services Department for the Approval of Construction permit.

DEER VALLEY ROAD PIPELINE

PROJECT OWNER/REFERENCE: CITY OF PHOENIX / MELODY MOSS (602) 262-4055

EEC prepared construction documents for a 42- and 12-inch water main as part of the overall roadway extension.

QUEEN CREEK ROAD PIPELINE

PROJECT OWNER/REFERENCE: CITY OF CHANDLER / JOHN KNUDSON (480) 782-2400

EEC prepared design plans for 10,600 linear feet of 36- and 24-inch pipeline. Challenges along this alignment included crossing a railroad and former state highway.

CHANDLER BOULEVARD/DOBSON ROAD

PROJECT OWNER/REFERENCE: CITY OF CHANDLER / PAUL YOUNG (480) 782-3429

EEC completed final construction documents to improve this intersection to a high capacity corridor. EEC designed approximately 2,300 lineal feet of 12-inch diameter ductile iron water main to replace an existing asbestos cement pipe. Project included sewer manhole rehabilitation, major drainage improvements, bike lanes, bus bays and utility relocations/coordination.

LINDSAY ROAD PIPELINE

PROJECT OWNER/REFERENCE: CITY OF CHANDLER / JOHN KNUDSON (480) 782-2400

EEC prepared construction documents for 8,000 linear feet of 24-inch diameter pipeline along Lindsay Road from Appleby to Chandler Heights Roads. The project resulted in distribution of reclaimed water to numerous housing developments and the future Chandler Heights Recharge Facility and Wetlands. EEC performed services during bidding/ construction and prepared as-built plans.

AJO DETENTION BASIN RE-DESIGN AND PIPING MODIFICATIONS

PROJECT OWNER/REFERENCE: PIMA COUNTY / LARRY ROBISON (520) 243-1800

EEC prepared survey data, developed construction plans, specifications, estimates, calculations, and technical reports for pipe and pump modifications, multi-use pathway designs, and erosion evaluation and remediation at discharge pads. The new piping, pump and valve system will provide the park with a controlled mechanism to circulate storm water between the three existing ponds. The project includes the construction of approximately 1,690 linear feet of 8-, 10-, and 12-foot wide multi-use pathway (MUP); culvert drainage crossings with inlet and outlet headwalls; approximately 1,900 linear feet of 12-inch HDPE; 1,100 linear feet of 8-inch HDPE; 670 linear feet of 12-inch DIP; modifications of existing HDPE and DIP pipeline and valve system near the basin outlet; and a pump station with two pumps. The work shall include furnishing and installing all pipe and pump, concrete structures, valves, associated pipe bedding, backfill, site preparation, grading and restoration, excavation and backfill, riprap, and asphalted pavement. The work also includes removal of handrail, asphalt pavement, and miscellaneous concrete structures.

ENCANTO PARK PUMP STATION

PROJECT OWNER/REFERENCE: CITY OF PHOENIX / NO LONGER WITH THE CITY

EEC designed and sited a new 300 hp pump station including intake line, wet-well, and enclosure for an existing City of Phoenix municipal golf course, as part of an on-call contract with the City.

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LAKE JUNIPER WATER SYSTEM UPGRADES

PROJECT OWNER/REFERENCE: MOHAVE COUNTY / MONTE WILSON (928) 757-0910

EEC prepared construction documents for a new water storage tank and booster pumping facilities needed to supply drinking water to remote portion of Mohave County, Arizona. The design activities included: preparing improvement plans and the accompanying design report; estimating the probable construction costs; arranging for the services of subconsultants including geotechnical, structural and electrical design related to the tanks, pumps and controls; and performing a drainage study to protect the structures from inundation due to flooding. EEC also assisted Mohave County with ADEQ permitting.

TRANSPORTATION ENGINEERING

ON-CALL STATEWIDE AND LOCAL GOVERNMENTS PROJECT DESIGN

PROJECT OWNER/REFERENCE: ARIZONA DEPT. OF TRANSPORTATION / ROB KNIGHTEN (602) 712-7615

EEC will provide professional engineering services for design for On-Call Statewide and/or Local Government Projects. EEC will perform all pre-construction activities, which includes development of project scoping documents, preparation of designs and construction plans, technical specifications, quantity computations and related construction.

ON-CALL MISCELLANEOUS ENGINEERING DESIGN SERVICES

PROJECT OWNER/REFERENCE: CITY OF TUCSON DOT / ANDY MCGOVERN (520) 791-4371

EEC has provided civil engineering, surveying and related services. Tasks and improvements include culture surveys, pavement reconstruction and widening, sidewalks, curbs, driveways, drainage, traffic signals, hardscape/landscape, bus pull-outs, deceleration lanes, left turn lanes, culverts, bike lanes, shared-use paths, driveways, intersection improvements, project assessments, street lighting, and pavement markings.

AS-NEEDED MISCELLANEOUS ENGINEERING SERVICES

PROJECT OWNER/REFERENCE: TOWN OF SAHUARITA / MONICA MOXLEY-WILSON (520) 399-3339

EEC has provided as-needed civil engineering services to the Town of Sahuarita and has also provided third-party development review services on an as-needed basis. Work included plan review of 10 units at Madera Highlands Villages. Other tasks have included:

- Groundwater Sampling and Monitoring
- Quail Creek II Plan Review
- Monitoring Well Installation
- Sahuarita High School Access Bypass
- CMOM Plan Documents
- WWTP Operations
- Duval Mine Road
- Sahuarita Road Bike Lanes

ON-CALL BACK TO BASICS CIVIL DESIGN SERVICES

PROJECT OWNER/REFERENCE: CITY OF TUCSON DOT / ANDY MCGOVERN (520) 791-4371

EEC provided engineering, surveying and related services on an as-needed basis for 6 diverse neighborhoods. Improvements and tasks assigned include roadway and drainage design, right-of-way survey, culture survey, sidewalks, street lighting, traffic calming, pedestrian/ bicycle facilities and hardscape/landscape.

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ON-CALL ENGINEERING SERVICES

PROJECT OWNER/REFERENCE: CITY OF BENSON / BRAD HAMILTON (520) 586-2245

For over two years, EEC has been providing the City of Benson with as needed services which have included development of a Sewer Collection System Model, as well as review of site and subdivision developments, such as Sunset Trails Subdivision, Benson 35 RV Park and the Solar Park Industrial Development.

ON-CALL DISTRICT MINOR SERVICES

PROJECT OWNER/REFERENCE: ARIZONA DEPT. OF TRANSPORTATION / ROBIN RAINE (520) 388-4264

EEC provided on-call district minor civil engineering services to ADOT Safford District for small projects including scoping studies, design surveys, traffic studies, construction documents for intersection improvements and climbing lanes, guard rail safety improvements, right of way acquisition documents, storm water pollution prevention plans, minor drainage improvements, local government and utility coordination, and similar project assignments.

SILVERBELL ROAD, INA ROAD TO CORTARO ROAD

PROJECT OWNER/REFERENCE: TOWN OF MARANA / SCOTT LESKA (520) 382-2600

EEC provided planning, design and post-design services for the widening of one-mile of Silverbell Road to include intersection realignment at Ina Road, four traffic lanes with a center two-way left-turn lane, multi-use lanes, outside curb and gutter, bicycle facilities, drainage facilities and sidewalks. Included extensive drainage analysis, utility relocation, environmental studies, traffic signal design, and geotechnical analysis.

SR 287/ELEVEN MILE CORNER ROAD INTERSECTION IMPROVEMENT

PROJECT OWNER/REFERENCE: ARIZONA DEPT. OF TRANSPORTATION / DANNY GRANILLO (520) 388-4203

EEC prepared a project assessment, traffic study, and final construction documents. Project elements included turn lane widening in each quadrant, traffic signing and marking, right of way acquisition, environmental documentation, utility relocation coordination, and geotechnical study with pavement design.

SR 79/CACTUS FOREST ROAD INTERSECTION IMPROVEMENT

PROJECT OWNER/REFERENCE: ARIZONA DEPT. OF TRANSPORTATION / DANNY GRANILLO (520) 388-4203

EEC provided a project assessment, traffic study, and final construction documents. Project elements include box culvert extensions and shoulder ditch reconstruction, turn lane widening in each quadrant, traffic signing and marking, right of way acquisition, environmental documentation, utility relocation coordination, and geotechnical study with pavement design.

I-10 INTERIM WIDENING, I-8 TO SR 87

PROJECT OWNER/REFERENCE: ARIZONA DEPT. OF TRANSPORTATION / STEVE WILSON (520) 388-4200

EEC provided design services to widen I-10 from four to six lanes (3 eastbound, 3 westbound) between the I-8 interchange and the La Palma Road bridge. The project includes reconfiguring the ramps at Sunshine Boulevard, Toltec Road and Sunland Gin Road to increase safety and capacity, and widening the bridge over the Santa Rosa Canal.

VALENCIA ROAD, CAMINO DE LA TIERRA TO THE CAP AQUEDUCT

PROJECT OWNER/REFERENCE: PIMA COUNTY DOT / DEAN PAPAJOHN (520) 740-6471

EEC performed planning and design services for improvements to 3 miles of Valencia Road including widening from two lanes to four travel lanes with a raised median or continuous left-turn lane, a multi-use lanes, sidewalks, and landscaped medians and shoulder. Included aerial mapping, culture & R/W surveys, environmental studies, geotechnical analysis, traffic analysis, DCR, drainage report, traffic signals, retaining walls, storm sewers and box culverts, noise abatement, public art, and public involvement.

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AS-NEEDED CIVIL ENGINEERING SERVICES

PROJECT OWNER/REFERENCE: PIMA COUNTY DOT / DAMON BALLESTEROS (520) 740-6477

EEC provided civil engineering, drainage, survey and related services. Tasks included plan review, R/W and culture survey, aerial mapping, water supply for airport fire protection, pedestrian/bicycle facilities, pavement reconstruction and widening, signing, pavement markings, driveways, drainage, safety, feasibility evaluation, planning studies (location report and DCR), potholing for utilities, biological surveys and reports, and public involvement.

25TH STREET SIDEWALK IMPROVEMENTS

PROJECT OWNER/REFERENCE: CITY OF PHOENIX / BELINDA CUMMINGS (602) 534-7067

EEC provided design services to construct sidewalks in areas that did not have existing sidewalks present and where necessary, replaced sidewalks to install Americans with Disability Act (ADA) ramps. The project was located at the west side of 25th Street from Monterosa Street to Glenrosa Avenue.

EEC provided field surveys and preparation of detailed construction plans, cost estimates, and special provisions for sidewalk and ADA improvements. The sidewalks constructed were five feet where possible (four foot minimum). Some driveways were modified or rebuilt to conform to ADA standards.

51ST AVENUE STORM DRAIN AND ROADWAY WIDENING

PROJECT OWNER/REFERENCE: CITY OF PHOENIX / DAVE PETERSON (602) 262-7224

EEC provided paving and drainage improvements to 51st Avenue for a one and a quarter mile section from south of Dobbins Road to the Laveen Area Conveyance Channel (LACC), which crosses 51st Avenue north of Baseline Road. In coordination with private developers, this project improved the existing two-lane to a four-lane roadway with a raised median. This project also included a new storm drain system that collects off-site runoff from the South Mountains in addition to the on-site street runoff. At Baseline Road, the new storm drain ties into an existing Flood Control District of Maricopa County (FCDMC) project via a new unique junction structure. The FCDMC's twin 66-inch pipes ultimately discharges into the LACC. Design also included utility relocations, sidewalks, bus bays and a multi-use trail.

ARIZONA AVENUE AND PLAINVIEW ROADWAY

PROJECT OWNER/REFERENCE: CITY OF MARICOPA / KELLI KURTZ (520) 316-6951

EEC provided survey and engineering design services for the city of Maricopa, in conjunction with a Community Development Block Grant (CDBG) for the design of Plainview Street (PM-10 compliance). This federally funded project required documentation necessary for compliance with all Federal Labor Standards. The project included paving, curb and gutter, scuppers, roadside ditches and a retention facility. Design was approximately 825 linear feet long from Maricopa Casa Grande Highway to W. Maricopa Avenue and incorporated a local street section with a minimum 5 year design life.

DEER VALLEY ROAD, CAVE CREEK TO BLACK MOUNTAIN PKWY.

PROJECT OWNER/REFERENCE: CITY OF PHOENIX / BELINDA CUMMINGS (602) 495-2050

As a prime consultant, EEC provided design services to extend Deer Valley Road in several phases. The first phase designed Deer Valley Road from Cave Creek Road to Reach 11. The second phase designed the entry to the Reach 11 Recreational Complex and included two lanes with a roundabout. The third phase provided design from Reach 11 east to Black Mountain Parkway. This phase was designed as a four lane divided roadway on native desert to be constructed by the developer. This project also included the extension of a 42- and 12-inch water main from Cave Creek Road to approximately 1,000 feet east. Additional services included environmental permitting and a plant inventory and relocation plan.

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DOBSON ROAD/CHANDLER BLVD. INTERSECTION AND DRAINAGE IMPROVEMENTS

PROJECT OWNER/REFERENCE: CITY OF CHANDLER / PAUL YOUNG (480) 782-3429

This federally funded project included both a DCR and final construction documents to ADOT and City standards. This intersection is a high capacity corridor; improvements included a right-turn lane, dual left-turn lanes, bus bays and bike lanes. The project also included major drainage improvements, water main replacement, sewer manhole rehabilitation, landscaping, right-of-way acquisition and legal descriptions and extensive utility relocation/coordination. Lessons learned from this project will enable EEC to take a proactive approach on all matters related to utility coordination and right-of-way acquisition. The project was extended and the budget increased due to the relocation of the storm water retention basins. EEC will be providing post design services on this project.

NORTH VALLEY PARKWAY BRIDGE OVER THE CENTRAL ARIZONA PROJECT (CAP)

PROJECT OWNER/REFERENCE: CITY OF PHOENIX / BELINDA CUMMINGS (602) 534-7067

The primary purpose of this project was to design a bridge crossing over the CAP canal and the roadway extension of North Valley Parkway (19th Avenue) from south of Jomax Road to Quail Trail Drive. This includes a grade-separated crossing between the bridge and CAP operation and maintenance roadways. Paving and drainage improvements along North Valley Parkway (19th Avenue) extend from the bridge south to Jomax Road, and north of the CAP. This project will link to developer improvements at Quail Track Road. The total length of project is approximately 0.5 miles and includes storm drain and retaining wall design.

North Valley Parkway is designated as a major arterial. This project's improvements will construct an interim roadway section tapering over the initial 1,700 feet of the project to meet the full width. The ultimate section consists of six lanes, three in each northbound and southbound direction, with a 24-foot wide raised median and sidewalks extending through the proposed bridge limits to the end of the project. The alignment is centered in a 140-foot wide right-of-way.

DRAINAGE / FLOOD CONTROL PROJECTS

JUSTIN DRIVE DRAINAGE IMPROVEMENTS

PROJECT OWNER/REFERENCE: CITY OF MARICOPA / KELLY KURTZ (520) 316-6951

EEC designed a new roadway and drainage system funded through a Community Development Block Grant (CDBG). EEC provided assistance in the preparation, investigation, and documentation necessary for compliance with all Federal Labor Standards, and other requirements of the Arizona Department of Housing (ADOH) and the CDBG program. In addition, EEC addressed current flooding issues along Justin Drive by designing improvements to handle the 100-year, 2-hour storm. The project lies within Zone AO of the floodplain. EEC provided a drainage study to include potential drainage areas impacting the project and considered recommendations of the Regional Transportation Plan Update (May 2008) so that the solution for Justin Drive provide a means to integrate both short and long term objectives for this area.

DOWNTOWN STORM DRAINAGE IMPROVEMENTS

PROJECT OWNER/REFERENCE: CITY OF PHOENIX / BELINDA CUMMINGS (602) 495-2050

EEC prepared detailed hydrologic reports, storm drain plans, street overlay plans, sidewalk ramp improvement plans and final construction documents for 10-year storm drain improvements for an area in downtown Phoenix business district bounded by Van Buren Street, the Union Pacific Railroad, 19th Avenue and 3rd Avenue. The project included 27 separate storm drains segments covering approximately 15,500 feet of storm drain piping plus associated connector pipes and approximately 130 storm drain inlets. EEC also prepared paving plans for Jefferson Street Project is based upon the Metro Phoenix ADMP prepared by EEC.

DOWNTOWN STORM DRAIN CANDIDATE ASSESSMENT REPORT

PROJECT OWNER/REFERENCE: CITY OF CHANDLER / BILL FAY (480) 782-3343

EEC prepared a Candidate Assessment Report (CAR) for four drainage improvement projects the City was pursuing funding for from the Flood Control District of Maricopa County. EEC coordinated with both the City of Chandler and

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FCDMC to collect and analyze existing data (flooding complaints, drainage studies, flood studies, etc.); determine the approximate peak discharges utilizing existing hydrologic studies; determine approximate limits of the existing flooding; perform field investigations as required; inventory existing flooding problems and existing drainage infrastructures; develop conceptual ideas for solving the existing flooding problems; prepare concept level cost estimates; and document the CAR in a final report.

WICKENBURG DOWNTOWN FLOODING HAZARD MITIGATION

PROJECT OWNER/REFERENCE: FCDMC / SCOTT VOGEL (602) 506-4771

EEC designed improvements to Sols Wash which included levee and floodwall channelization to convey the 100-year flow; capturing, conveying, and storing local runoff in a new 25 acre-foot on-line detention facility that bleeds off into Sols Wash; modifications to the Tegner Street bridge; a new mid-stream concrete drop structure; relocating utilities and moving the town of Wickenburg's well site; and preparing a Conditional Letter of Map Revision (CLOMR) to effectively remove the 100-year floodplain for submittal to the Federal Emergency Management Agency (FEMA).

WATERMAN WASH FLOODPLAIN DELINEATION STUDY & LOMRS

PROJECT OWNER/REFERENCE: FCDMC / RICHARD HARRIS (602) 506-4528

EEC completed field work and hydrologic modeling for the entire 420-square-mile watershed located just southeast of the Palo Verde watershed. This project included more than 165 stream miles of approximate Zone A floodplain delineations for Waterman Wash and 43 of its tributaries. This project included additional HEC-1 hydrologic modeling to account for the "with and without" effect of the UPRR which bisects Rainbow Valley.

PALM VALLEY CHANNELIZATION

PROJECT OWNER/REFERENCE: SUNCOR DEVELOPMENT / PROJECT MANAGER NO LONGER WITH SUNCOR

As the sub-consultant, EEC prepared a hydraulic report to document the off-site drainage structures associated with the subdivision construction of Dysart Ranch Phase IVB (North side of the RID Canal and west side of Dysart Road); conducted retention investigation for Palm Valley's Master Drainage Plan and investigated the storm water outfall/flow path for Palm Valley South Western Watershed west of Bullard Wash; investigated storm water outfall and revised flow path for Palm Valley South Western Watershed, west of Bullard Wash; prepared the drainage report for Palm Valley Phase V; prepared a LOMR for the new channel through Palm Valley Phase 2 and Bullard Wash FEMA floodplain and prepared Channel Construction plans for Indian School Road, Bullard Wash, and Camelback Road.

COMMUNITY AND RECREATIONAL FACILITIES

ASU DOWNTOWN STUDENT RECREATION CENTER

PROJECT OWNER/REFERENCE: ASU / JAN LORANT (602) 667-9090 – PROJECT ARCHITECT

EEC prepared site civil infrastructure design documents for the ASU Downtown Student Recreation Center in the downtown area of the City of Phoenix. Project included topographic survey, ALTA/ACSM land title survey, final subdivision plat services and civil/site design documents. This recreation center includes a multi-story building totaling approximately 57,000 gross square feet and includes driveways, utility data coordination, on- and off-site improvements, sidewalks, minor street paving, grading and drainage, water, sewer and fire line design. The site includes development of approximately 0.46-acres fronting First Avenue north of Van Buren Street in downtown Phoenix.

911 DISPATCH AND ADMINISTRATION BUILDING (MARICOPA COUNTY SHERIFF'S OFFICE)

PROJECT OWNER/REFERENCE: MARICOPA COUNTY / KELLY ROY 602-332-5423

This project includes a new multi-story building totaling approximately 100,000 gross square feet with driveways, 50-100 parking stalls, on-site and off-site improvements, sidewalks and minor street paving. Services included site analyses for 10 different properties. The site analysis report included utility infrastructure for wet and visible dry utilities, drainage, existing right-of-way, existing parking, existing structures and site access followed by a summary of the constructability pros and cons for each site. Civil engineering includes for on-site and off-site infrastructure

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improvements that include grading and drainage, water, sewer and fire line design. EEC also provided post design services.

SCOTTSDALE NORTH CORPORATION YARD (CITY OF SCOTTSDALE/GLA)

PROJECT OWNER/REFERENCE: CITY OF SCOTTSDALE / JAN LORANT (602) 667-9090 – PROJECT ARCHITECT

Civil/site engineering services were provided for the 16,300 square foot expansion of the North Corporation Yard, which included a new 2,500 square foot truck wash. Challenges of the site consisted of maintaining large vehicle circulation during construction, adapting new utilities to existing and site paving and grading design that matched into the surrounding pavement. EEC prepared construction documents for site demolition of the existing fuel islands, truck wash, steam wash wand area and swimming pool to allow for the new design of a parking/storage lot. Parking layout, grading, drainage, water and sewer design, property and utility data coordination, boundary and topographic survey, fire line plans were also included as part of the construction documents.

PEORIA COMMUNITY CENTER (CITY OF PEORIA)

PROJECT OWNER/REFERENCE: CITY OF PEORIA / EDWARD STRIFFLER (623) 773-7721

The City of Phoenix's Water Services Department developed this 2.4 acre site into their new maintenance facility. New features at this facility included a new 5,000 square foot building, knock down area for street sweepers, storage bins, truck wash area and secure vehicle storage areas. EEC prepared a boundary and topographic survey, on- and off-site paving, grading and drainage plans, ADA compliance, water, sewer and fire line plans and a Storm Water Pollution Prevention Plan (SWPPP). Maximizing usable space was critical to this project due to its size. Underground storage tanks and pervious concrete were utilized to eliminate above grade retention areas. Capturing storm runoff below the surface allowed traffic circulation for fleet vehicles to move easily throughout the site and provide more employee/public parking spaces in the front of the building was critical in the design process.

YUMA WEST WETLANDS PARK (CITY OF YUMA)

PROJECT OWNER/REFERENCE: CITY OF YUMA / KEVIN EATHERLY (928) 373-5195

Provided engineering design services for the Colorado River front park. Design services included landscaping and engineering for full utility infrastructure, grading and drainage, entry and perimeter roads, lake design, a restroom building, play fields, ramadas, parking lots and a boat ramp in the Colorado River.

HYDROGEOLOGICAL ENGINEERING

WELL INSTALLATION MONITORING

PROJECT OWNER/REFERENCE: TOWN OF SAHUARITA / MONICA MOXLEY (520) 399-3339

EEC installed, developed, and surveyed three points of compliance groundwater monitoring wells at the town's wastewater treatment facility and conducted one year's worth of monthly sampling and reporting. The project included the development of a health and safety plan, as well as training for town staff.

HYDROLOGY MODELING & GROUNDWATER ASSESSMENT

PROJECT OWNER/REFERENCE: USAG FORT HUACHUCA / TOM RUNYON (520) 533-2692

EEC analyzed hydrologic impacts of potential groundwater recharge and pumping actions taken by Fort Huachuca on critical habitat within the San Pedro Riparian National Conservation Area (SPRNCA), and identified various strategies for mitigating impacts.

VALLEY VERDE WATER COMPANY

PROJECT OWNER/REFERENCE: VALLEY VERDE WATER COMPANY / BONNIE O'CONNOR (520) 623-5172

EEC addressed groundwater remediation for potable use. The Valle Verde Water Company has high VOC and arsenic concentrations in separate wells that require treatment to meet Safe Drinking Water Standards.

6. Additional Information

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

PARKER WELL ABANDONMENT

PROJECT OWNER/REFERENCE: ADEQ / DEBI GOODWIN (602) 771-4453

EEC and its sub-consultant abandoned three shallow groundwater monitoring wells at Lil' Mike's Service Station located in Parker, Arizona. The well vaults for each well were removed, the wells abandoned to depth with a neat cement grout, and appropriate abandonment documentation was submitted to the Arizona Department of Water Resources (ADWR).

ENVIRONMENTAL

EXPEDITED PERMITTING CONTRACT

PROJECT OWNER/REFERENCE: ADEQ, INGRID CLARK (602) 771-4385

EEC is providing accelerated permit assistance to ADEQ. Acting as agent for ADEQ, EEC conducts the administrative and technical reviews of APP and Arizona Pollutant Discharge Elimination System (AZPDES) permit applications, coordinates interim submittals with the applicant, drafts the permits, conducts the public reviews, addresses the public comments, and coordinates permit finalization. To date, EEC has successfully completed the AZPDES permit renewals for the Luke Air Force Base WWTP and San Tan Generating Station. EEC has also completed APPs and amendments for BHP Billiton's Pinto Valley Mine, Resolution Copper Mining Company, Palo Verde Nuclear Generating Station, Arizona Natural Gas Storage and Solana.

PHOENIX ON-CALL PHASE I & II ESAS

PROJECT OWNER/REFERENCE: CITY OF PHOENIX/PHYLLIS RETTKE (602) 594-0091

EEC completed a Phase I and II ESA on behalf of the City of Phoenix for the Durango Conveyance Channel located in the southwest portion of Phoenix. The site was previously part of an industrial facility that had a leak from a diesel aboveground storage tank. The Phase I ESA included compiling data from two previously completed Phase II ESAs and identifying the data gap. EEC determined a data gap existed for soil sampling data from 15 feet to 45 feet below grade surface and was authorized to proceed with a Phase II ESA. EEC completed the Phase II ESA and determined that no remaining soil contaminants exceeded its applicable Arizona Soil Remediation Level. The City was able to take over maintenance of the property without additional investigation.

EXPANDED ENVIRONMENTAL SITE ASSESSMENT PHASE I

PROJECT OWNER/REFERENCE: PIMA COUNTY/ DAVID AMASH, P.E. (520) 724-7382

EEC completed an Expanded Phase I ESA on behalf of Pima County for a portion of the planned Canada del Oro Pathway from La Cholla Boulevard to La Canada Drive. The assessment included review of five non-contiguous parcels totaling 70 acres. The Phase I ESA was completed in accordance with ASTM 1527-05 and included eight non-ASTM (expanded) items as per the County's request. These additional items included review of asbestos, lead-based paint, riparian area, historical resources, health/safety concerns, groundwater wells, ecological resources and high voltage power lines. The Expanded Phase I ESA identified no recognized environmental conditions as per the ASTM standard, but did identify riparian area, ecological issues, and possible historical resource issues for the property.

ENVIRONMENTAL SITE ASSESSMENT PHASE I

PROJECT OWNER/REFERENCE: STIMCO / GANNON THIEL (480) 898-8132

EEC completed a Phase I ESA of the former Ruan Transportation facility on behalf of STIMCO Precast Products prior to property acquisition. The site consisted of a former Ruan Transportation facility that was used for commercial and industrial purposes since 1967. Two 10,000-gallon diesel underground storage tanks (USTs) had been removed in 1992 and a leaking UST (LUST) identified and eventually closed. The site also had an existing 10,000-gallon aboveground diesel tank and an oil-water separator. EEC identified the former LUST as a historical recognized environmental condition, but required no further action. This allowed STIMCO to proceed with full acquisition of the property.

6. Additional Information

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

PHOENIX AZPDES MS4 COMPLIANCE SUPPORT

PROJECT OWNER/REFERENCE: CITY OF PHOENIX, LINDA PALUMBO (602) 495-0975

EEC has conducted several MS4 stormwater projects for Phoenix. After Phoenix received their new Phase I MS4 permit from ADEQ, EEC helped the Phoenix determine the resources and associated costs to achieve and maintain compliance with their new Phase I MS4 AZPDES permit. EEC reviewed the new permit for new requirements, identified new and/or modified requirements, and estimated the level of effort (manhours, materials/expenses and capital purchases) associated with each activity.

EEC also conducted employee stormwater training including level I and II awareness training, dry weather screening training and stormwater inspection training.

EEC is currently assisting with Phoenix's IDDE program using the City's GIS database to track potential sources dry weather discharges.

FLORENCE MILITARY RESERVATION NEPA EA

PROJECT OWNER/REFERENCE: ARIZONA DEPT. OF EMERGENCY AND MILITARY AFFAIRS / DAVID LARSEN (602) 267- 2992

EEC is preparing an EA on the potential environmental impacts of the Arizona Army National Guard's (AZARNG) Range Development Plan for the Florence Military Reservation (FMR). Major changes to the range include the addition of helicopter training, convoy defense exercises, Forward Operating Base defense, and infrastructure improvements at several existing ranges.

CRAYCROFT ROAD, RIVER ROAD TO SUNRISE DRIVE ENVIRONMENTAL ASSESSMENT MITIGATION REPORT (EAMR)

PROJECT OWNER/REFERENCE: PIMA COUNTY DOT / SAL CACCAVALE (520) 740-6364

EEC evaluated potential impacts to biological, social, cultural, and air and water quality resources caused by the road widening project. EEC's biological evaluation determined the project would likely affect, but not adversely affect, two federally listed species; the cactus ferruginous pygmy owl and the lesser long nosed bat. The final EAMR included noise impacts to adjacent buildings and native tree replanting to restore impacted owl habitat. Culverts used to go under the road were made large enough to accommodate people on horseback and wildlife. EEC scientists made numerous appearances at public meetings for the Citizen Advisory Committee presenting potential impacts as well as the planned mitigation measures. This study was the first EAMR in Pima County to follow the new "Environmentally Sensitive Roadway Design Guidelines."

NEPA EA FOR IMPACTS OF PREDATOR UNMANNED AERIAL VEHICLE (UAV), CALIFORNIA

PROJECT OWNER/REFERENCE: CALIFORNIA AIR NATIONAL GUARD (ANG) / JOHN REED (928) 776-9307

EEC prepared an EA of the potential impacts of UAV training at March Air Reserve Base, Southern California Logistics Airport and former El Mirage Air Force Base. The alternatives included several combinations of classroom and UAV lift off and recovery training at the different locations. The project was cancelled by the ANG contracting authority due to internal ANG problems focusing proposed activities into clear alternatives.

SURVEY

US 80, BISBEE SIDEWALKS

PROJECT OWNER/REFERENCE: ARIZONA DEPT. OF TRANSPORTATION / ROBIN RAINE (520) 388-4264

EEC completed surveying and prepared construction plans for a new sidewalk from the Queen Mine parking lot to the Lavender Pit Overlook along the south side of US 80.

6. Additional Information

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I-19/SAHUARITA ROAD TRAFFIC INTERCHANGE

PROJECT OWNER: TOWN OF SAHUARITA

EEC provided ground control including static and OPUS sessions and did detailed design surveys for traffic engineering and civil design.

US 70, PIMA TO THATCHER SLOPE FLATTENING

PROJECT OWNER/REFERENCE: ARIZONA DEPT. OF TRANSPORTATION / ROBIN RAINE (520) 388-4264

EEC performed design surveys for irrigation, drainage and earthwork for the slope flattening of US 70 between the towns of Pima and Thatcher in ADOT's Safford District.

ON-CALL SURVEYING SERVICES

PROJECT OWNER: CITY OF SIERRA VISTA

EEC provided land surveying services to support the design and construction of various City capital improvement projects, and to complete other miscellaneous survey services, including level circuit and evaluation surveys, development of legal descriptions, and property research for the City of Sierra Vista. Projects included surveys for the AV Anderson Park Improvements, Savanna Springs Multi-Use Path, Domingo Paiz Ballfields, and Soldiers Creek Recharge/Detention Basin.

AS-NEEDED SURVEYING SERVICES

PROJECT OWNER/REFERENCE: PIMA COUNTY DOT / DR. EVAN CANFIELD (520) 243-1800

EEC provided surveying services on an as-needed basis for projects in Pima County. The projects ranged from staking bank protection for 7.2 miles of the Santa Cruz River, to topographic and boundary surveying for a portion of River Road. In addition, his crew provided construction staking for a portion of the new Sabino Canyon Road/Kolb Road intersection.

MISCELLANEOUS SURVEYING SERVICES

PROJECT OWNER/REFERENCE: TUCSON ELECTRIC POWER / CYNTHIA GARCIA (520) 918-8246

EEC is providing surveying and legal descriptions services for Qwest Communications facilities under the supervision of TEP. These surveys are prepared for both new utility easements and staking easements in the field so crews know where to place equipment. In addition, EEC provided aerial mapping and orthophotos for a new transmission line.

MISCELLANEOUS SURVEYING SERVICES

PROJECT OWNER: TOWN OF ORO VALLEY

EEC provided surveying services including design surveys, annexation maps and legal descriptions. The scope of work (annexation areas) was determined by meeting with the Town of Marana after which ownership in the proposed annexation area was researched using the Pima County GIS site. After determining that entire parcels were included in the annexation area, a legal description and record of survey were prepared and given to the Town for recording.

KEY PERSONNEL / QUALIFICATIONS

STAFF MATRIX

Below is a staff matrix demonstrating EEC's multidisciplinary experience levels. EEC maintains a responsive structure with experienced senior professionals and project managers, supported by engineering and environmental professionals from offices in Phoenix and Tucson, Arizona. We have earned our excellent statewide reputation by providing high quality services while adhering to project schedules and budgets. We are proud of our high volume of repeat clients and our track record for innovative, cost-effective solutions.

The majority of EEC's workload comes from on-call as-needed contracts we have had or currently have with various agencies, including the cities of Phoenix, Mesa, Chandler, Scottsdale, Maricopa, Glendale, Tucson, Flagstaff, and

6. Additional Information

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Williams; Pinal County; FCDMC; Maricopa County Risk Management; Pima County; USACE at Fort Huachuca; ADOA, ADEQ; and several private sector clients. The staff matrix on the following page identifies the categories and depth of experience of our team.

CERTIFICATES, LICENSES & MEMBERSHIPS

EEC is registered with the Arizona Board of Technical Registration, #10256. Our Federal Tax ID number is 860579251. Under EEC's company President, EEC is also has an "A General" Contractor's License with the Arizona Register of Contractors (#ROC110817, John "Chuck" Hollingsworth).

KEY PERSONNEL

Brief resumes for Key Task Leaders are provided in the following section. Full resumes can be furnished upon request

WATER / WASTEWATER

RAY P. MONTOYA, PE, PROJECT MANAGER

PROFESSIONAL CIVIL ENGINEER/AZ #38413/2002

BS/CIVIL ENGINEERING/1998

Mr. Montoya has 15 years of experience in the water and wastewater industry. He has prepared water and sanitary sewer improvement plans, water and sewer hydraulic computer models, master water and sewer studies and water reuse system plans. His experience includes a wide range of projects in the water and wastewater industry including pipelines, pump stations, pressure reducing stations, and the completion of various preliminary and detailed design reports. He has experience in sewer design utilizing alternative construction methods, including pipe bursting, slip lining of existing sewer, micro-tunneling and directional drilling. Mr. Montoya has a vast amount of experience in project management, planning design, and construction services for various water and wastewater projects. His construction experience includes on-site construction phase services, construction management, observation and inspection services, associated testing, and assistance during facility start-up.

While stationed in Iraq and Afghanistan with the U.S. Marine Corps, Mr. Montoya performed duties as MEF Civil Engineering Officer and Project Team Leader. His primary responsibilities were to provide design and management of over 150 separate construction projects in support of the Marine Corps mission. Projects included design and construction of sanitary improvement for new bases; construction of water wells; repair and/or construction of essential bridges and roadways; power generation sizing and installations and renovation or reconstruction of existing Iraqi and Coalition government buildings. Relevant Arizona project experience includes:

- Metropolitan Domestic Water Improvement District On-Call Transmission Main Design Services
- Oro Valley Water Utility On-Call
- Avra Valley Wastewater Treatment Facility
- Corona de Tucson Wastewater Treatment Plant
- City of Phoenix 91st Avenue Digester Rehabilitation

MR. HOLLINGSWORTH IS PRESIDENT AND CEO OF EEC AND J. CHUCK HOLLINGSWORTH, PE, RLS
PROJECT PRINCIPAL AND PROJECT MANAGER

PROFESSIONAL CIVIL ENGINEER/AZ #19229/1979

PROFESSIONAL SANITARY ENGINEER/AZ #13695/1991

PROFESSIONAL LAND SURVEYOR/AZ #16838/1994

MS/ENVIRONMENTAL ENGINEERING/1979

BS/CIVIL ENGINEERING/1973

Mr. Hollingsworth is President and CEO of EEC and has over 30 years of experience in civil, sanitary, and environmental engineering, including 26 years with EEC. He will provide our utmost corporate commitment to excellence on this contract. He specializes in the planning and design of water and wastewater systems. His experience in water resources includes design of wells, pumping plants, storage tanks, and distribution systems. His broad based experience in water and wastewater utility system planning and engineering allows him to effectively provide total solutions to sanitary and civil engineering problems, while meeting or exceeding all environmental and regulatory constraints. Relevant Arizona project experience includes:

- Metro Water Well Design (3 sites)
- Town of Oro Valley Campo Bello Water Main Improvements
- Water System Needs Study at Davis-Monthan Air Force Base

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- Roger Road Reclaimed Water Treatment Plant Upgrade
- Roger Road North Biotower Distribution Arms Replacement
- Avra Valley Potable Water Well Modifications
- Tucson Water Reclaimed Chlorination System
- Redhawk Reservoir and Booster Station Design
- Marana Water Master Plan
- Kitt Peak Water System Evaluation
- Chandler Infill Reclaimed Water Distribution Mains

CARRIE CÔTÉ, PE, PROJECT MANAGER

PROFESSIONAL CIVIL ENGINEER/AZ #28831 /1995

BS/CIVIL ENGINEERING/1987

Ms. Cote has over 18 years of experience in civil engineering with municipal and private projects, including over 7 years with EEC. Specific experience includes water and sewer evaluation studies, drainage analysis and designs, wells designs, potable pump station designs, and storage tank designs; wastewater and effluent pump stations, water and sewer lines of varying diameters, computer modeling, permitting, cost estimating and quantity analysis, design review, and bid assistance. In addition, she has prepared numerous Aquifer Protection Permits, NPDES permits, and Army Corps of Engineers 401 and 404 permits. Ms. Cote has additional wastewater experience in treatment facility upgrades including influent pumping stations, expansion of aeration tanks and clarifiers, chlorination facility and UV disinfection tanks, effluent pump stations and effluent transmission lines, new odor control scrubbing units, and new effluent storage lagoons.

She has managed teams of in-house technical and administrative staff and outside sub-consultants of various disciplines. Her responsibilities as a project engineer encompassed procurement of projects, preparing team presentations to clients, ongoing client liaison, and managing projects within proposed budget and time specifications. Relevant Arizona experience includes:

- Lost Dutchman State Park Wastewater Treatment Plant and Sewage Lift Station
- Airport Water Production Facility Modifications Design for City of Chandler
- Pima County Wastewater Gray Water Study
- Lake Juniper Water System in Mohave County
- Slide Rock State Park Wastewater Treatment Plant, Restroom Building and Maintenance Buildings
- Palo Verde Nuclear Generating Station Evap Pond 2

TRANSPORTATION

R. CRAIG ALLISON, PE, RLS

PROJECT PRINCIPAL AND PROJECT MANAGER

PROFESSIONAL CIVIL ENGINEER/AZ #13900/1981

PROFESSIONAL LAND SURVEYOR/AZ #13900/1981

MBA/BUSINESS ADMINISTRATION/1985

BS/CIVIL ENGINEERING/1978

Mr. Allison is Vice President of EEC and has over 35 years of experience in civil engineering, including 17 years with EEC. His experience in Arizona includes over 40 highway projects, and a total aggregate length in excess of 80 miles. He has substantial experience in hydrologic/hydraulic analysis and design including the use of HEC-1 and HEC-2; COE Hydraulic Engineering Circulars and the SCS TR-20 programs; traffic capacity analysis using the Highway Capacity Manual; foundation studies based on FHWA documents and roadway design using current AASHTO and ADOT criteria. He has substantial experience in flood routing, floodplain mapping, and drainage improvement design including detention basins, channel bank stabilization, and storm drain projects. He is especially knowledgeable in

5.1.3 Company Statement of Qualifications

hydrologic and hydraulic analysis and design including the use of COE Hydraulic Design Guides and the HEC-1 and HEC-RAS programs. Relevant Arizona project experience includes:

- On-Call Miscellaneous Engineering Design Services
- ADOT's On-Call District Minor Services
- Sahuarita Road, La Villita Road to Eastern Town Limits
- I-19/Sahuarita Road Interchange
- Houghton Road at Old Vail Road/Mary Ann Cleveland Way
- Craycroft Road, Sunrise Drive to River Road
- Silverbell Road, Cortaro Road to Ina Road
- Valencia Road, Mark to Camino de la Tierra
- I-10 Mainline Widening, Marana to Cortaro Road and Pinal Air Park to Tangerine Road

SHERRY MARTIN, PE, PROJECT MANAGER

PROFESSIONAL CIVIL ENGINEER/AZ #37865/2002

BS/CIVIL ENGINEERING/1990

BS/MICROBIOLOGY/1987

Ms. Martin has over 17 years of experience in civil design for public works projects, including over 12 years with EEC. She currently oversees an on-call design contract with the City of Tucson. She also performs project management duties for on-call contracts with other municipalities. In addition, Ms. Martin has worked on several transportation, water, wastewater and drainage projects. She is proficient in the use of MicroStation production methods, and is knowledgeable in local engineering standards and AASHTO highway design guidelines. Relevant Arizona project experience includes:

- City of Tucson's On-Call Miscellaneous Engineering Design Services
- ADOT's On-Call District Minor Services
- Sahuarita Road, La Villita Road to Eastern Town Limits
- I-19/Sahuarita Road Interchange DCR
- Houghton Road at Old Vail Road/Mary Ann Cleveland Way
- Craycroft Road, Sunrise Drive to River Road
- Silverbell Road, Cortaro Road to Ina Road
- Valencia Road, Mark to Camino de la Tierra
- I-10 Mainline Widening, Marana to Cortaro Road and Pinal Air Park to Tangerine Road

DRAINAGE / FLOOD CONTROL PROJECTS

JACOB A. LOMELI, PE, PROJECT ENGINEER

PROFESSIONAL CIVIL ENGINEER/AZ #49862/2009

BS/CIVIL ENGINEERING/2005

Mr. Lomeli has worked for the United States Geological Survey for five years in the field of environmental science and hydrology. He has four years experience as an engineering designer following his graduation with a B.S. in Civil Engineering and Minor in Hydrology. He has worked on drainage studies for public and private projects, drainage design and specifications for state highway projects, storm drain design, utility conflict analysis and design. He has experience in retention/detention basin analysis, and in hydrologic/hydraulic analysis and design including the use of Hydraulic Design Guides, HEC-HMS and HEC-RAS, and StormCAD programs. In addition, he has performed hydrological and hydraulic studies and assisted in the preparation of reports for major roadway design projects. Relevant Arizona project experience includes:

- Ajo Detention Basin Re-Design and Piping Modifications

5.1.3 Company Statement of Qualifications

- US 191, Milepost 87.4 to Milepost 91.6 Drainage Improvements
- Silverbell Road, Ina Road To Cortaro Road
- SR 90, Cochise Crossroads Center to Giulio Cesare
- Crossroads Commerce Center

COMMUNITY AND RECREATIONAL FACILITIES

JAMES D. LEMON, PE, RLS, PROJECT PRINCIPAL

PROFESSIONAL CIVIL ENGINEER/AZ #12890/1980

REGISTERED LAND SURVEYOR/AZ #15884/1983

PROFESSIONAL CIVIL ENGINEER/ CA #C40200/1986 PROFESSIONAL CIVIL ENGINEER/CO #19363/1982

PROFESSIONAL CIVIL ENGINEER/NV#5985/1982

BS/CIVIL ENGINEERING/1976

Mr. Lemon is an experienced civil engineering and survey professional with over 37 years of a diverse background in corporate management and civil engineering project overview. As Branch Manager he oversees all operations and administrative functions of the Phoenix Office of EEC. Mr. Lemon's experience includes master planned communities, residential subdivisions, commercial, industrial, multi-family, and public sector projects. Mr. Lemon's technical and professional strengths include communication and liaising effectively with colleagues, architects, subcontractors, consultants, co-workers and clients. He is able to undertake technical and feasibility studies and site investigations while evaluating and resolving project liability issues. He has led project teams, including professionals from numerous firms and agencies and has attended public meetings to present projects.

GARY MILLER, PROJECT MANGER/DESIGNER

A.A. ARCHITECTURAL DRAFTING AND DESIGN/1985

Mr. Miller has over 27 years of experience in the civil engineering industry specializing in site civil design for community and recreational facilities, encompassing all phases of project management, survey, site development, GIS, and computer aided design for both the public and private sectors. His experience includes surveying, right-of-way, GIS conversion, floodplain studies, grading plans, water and sewer plans, and full civil/site construction drawings and cost estimates for educational facilities, public works facilities and infrastructure, private developments, commercial and residential sites. Survey experience includes ALTA surveys, boundary surveys, site surveys, and final plats. He has also coordinated right-of-way plans, utilities and subconsultant services. Mr. Miller is capable of preparing design plans that are compatible with BIM modeling.

GEOLOGICAL / ENVIRONMENTAL

LISA SPAHR, NEPA PROJECT MANAGER

REGISTERED GEOLOGIST/MAINE # GE 312

MA/HYDROLOGY/1986

MS/WATER RESOURCE MANAGEMENT/1986

BA/ENVIRONMENTAL POLITICS/1983

Ms. Spahr is a hydrogeologist with more than 25+ years of environmental consulting experience, specializing in soil and groundwater investigations, hydrogeology, permitting and planning. She has conducted remedial investigations for private and government clients at landfills, tannery waste sites, a thermometer factory, electronics manufacturers, and pharmaceutical plants, and has worked at Superfund sites and maquiladoras. Ms. Spahr has extensive planning experience with National Pollution Discharge Elimination System (NPDES), Storm Water Pollution Prevention Plans (SWPPPs), Integrated Contingency Plans, and Environmental Management Plans. Ms. Spahr's areas of technical expertise are soil and groundwater, environmental management, and regulatory compliance. She has worked for a wide

5.1.3 Company Statement of Qualifications

variety of clients including federal, state, and local governments; the International Boundary and Water Commission; domestic and international private companies; and several airports. Relevant Arizona experience includes:

- NEPA Environmental Assessment, Arizona Department of Emergency and Military Affairs, Florence Military Reservation
- Craycroft Road, River Road to Sunrise Drive
- Bullhead City 404 Delineation
- I-19/Sahuarita Road Interchange Environmental Services
- Valencia Road, Mark Road to Camino de la Tierra

JOHN BURTON – PHASE I PROJECT MANAGER

BS ENVIRONMENTAL SCIENCE / 1996

John manages many of our Environmental On-Call Services and has more than 16 years of experience in performing due diligence, environmental site assessments and stormwater compliance. He has been an environmental scientist and project manager on contracts for the cities of Phoenix, Glendale, Avondale, Scottsdale and Tucson; Arizona Department of Environmental Quality, Arizona Department of Transportation, Pima County and the US Army Garrison at Fort Huachuca. He has completed many Phase I, II, and III site assessments to include those under the Brownfields Program. His stormwater experience for MS4s includes developing Phase I permit renewals and Phase II permit applications. He has also prepared annual reports for MS4s, prepared construction and industrial SWPPPs, conducted stormwater sampling, performed comprehensive site compliance evaluations, conducted annual stormwater training, screened illicit discharges, and investigated spills. He is also a former hydrologist and compliance officer for the ADEQ and has extensive knowledge of state and federal statutes and regulations.

KIRK CRESWICK

REGISTERED GEOLOGIST / AZ #32700

MS / HYDROGEOLOGY / 1996

BA / GEOLOGY / 1987

Mr. Creswick has 23 years of experience in the areas of hydrogeology, geology, and remediation. Mr. Creswick has used his technical and regulatory expertise to assist clients with permitting and compliance under APP and NPDES/AZPDES programs. Additionally, he has provided environmental services, management and technical assistance under RCRA, CERCLA, IRP, WQARF, LUST, and the Voluntary Remediation Program. With 18 years of private practice as well as over four years with the Arizona Department of Environmental Quality, Mr. Creswick has a broad base of environmental experience and knowledge on which to draw when assessing environmental issues both from a technical and regulatory point of view. In addition, Mr. Creswick has completed investigation and remediation of contaminated sites under a wide variety of environmental conditions and contaminants using both conventional and innovative technologies, as appropriate for the site conditions. Relevant Arizona experience includes:

- ASARCO – Elder Gulch APP Support/Kearny, Arizona
- Laughlin-Bullhead International Airport LUST Site Remediation/Bullhead City, AZ
- AEPSCO Apache Generating Station APP Support/Cochise, AZ
- ADEQ Munitions Response On-call – Sentinel Plain (Barry Goldwater Range–East)/Sentinel, AZ

SURVEY

JAMES L. DEAN, RLS, SURVEY MANAGER

PROFESSIONAL LAND SURVEYOR / AZ #14145 / 1981

Mr. Dean will be the Survey Manager for this contract responsible for supervising field crews, preparing right of way documents, and coordinating aerial mapping. Jim has over 30 years of experience, including 15 years with EEC. He has been surveying in Pima County since 1980 and has had extensive experience in boundary and ALTA surveys, aerial

5.1.3 Company Statement of Qualifications

mapping controls, geodetic and topographic mapping surveys, construction staking, and supervision of field survey crews. Relevant Arizona experience includes:

- Tucson Water On-Call Civil, Survey, and Drafting
- Sierra Vista On-Call Surveying Services
- Pima County Wastewater As-Needed Civil Engineering Services
- Pima County As-Needed Surveying Services
- Avra Valley Wastewater Treatment Plant Survey Services
- Vail I-Zone 600,000 Gallon Reservoir

PATRICIA GAJDA, SURVEYOR

REGISTERED LAND SURVEYOR / AZ #46278

Ms Gajda will be assisting the Survey Manager for this contract responsible for on-site field crews, preparing right of way documents, and coordinating aerial mapping. Patricia has over 11 years of experience, and has recently joined the EEC team. She brings her vast survey experience with projects encompassing boundary surveys, ALTA/ACSM land surveys, construction staking, topographic surveys, design and location surveys, right –of-way application documents and legal descriptions.