



Offer and Acceptance

State of Arizona
State Procurement Office
100 N. 15th Ave. Suite 201
Phoenix, AZ 85007

SOLICITATION NO.: ADSP016-00005912 Request
for Qualifications: 2016 Annual Professional
Services List

PAGE
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Offeror: **Delta Systems Engineering, Inc.**

OF
1

OFFER

TO THE STATE OF ARIZONA:

The Undersigned hereby offers and agrees to furnish the material, service or construction in compliance with all terms, conditions, specifications and amendments in the Solicitation and any written exceptions in the offer. Signature also certifies Small Business status.

Delta Systems Engineering, Inc.

Company Name

3550 N. Central Ave., Ste. 915

Address

Phoenix

AZ

85012

City

State

Zip

marketing@deltaseinc.com

Contact Email Address

Signature of Person Authorized to Sign Offer

Brian D. Downing, P.E.

Printed Name

President

Title

Phone: **(602) 266-4658**

Fax: **(602) 266-4953**

By signature in the Offer section above, the Offeror certifies:

1. The submission of the Offer did not involve collusion or other anticompetitive practices.
2. The Offeror shall not discriminate against any employee or applicant for employment in violation of Federal Executive Order 11246, State Executive Order 2009-9 or A.R.S. §§ 41-1461 through 1465.
3. The Offeror has not given, offered to give, nor intends to give at any time hereafter any economic opportunity, future employment, gift, loan, gratuity, special discount, trip, favor, or service to a public servant in connection with the submitted offer. Failure to provide a valid signature affirming the stipulations required by this clause shall result in rejection of the offer. Signing the offer with a false statement shall void the offer, any resulting contract and may be subject to legal remedies provided by law.
4. The Offeror certifies that the above referenced organization IS/ IS NOT a small business with less than 100 employees or has gross revenues of \$4 million or less.

ACCEPTANCE OF OFFER

The Offer is hereby accepted.

The Contractor is now bound to sell the materials or services listed by the attached contract and based upon the solicitation, including all terms, conditions, specifications, amendments, etc., and the Contractor's Offer as accepted by the State.

This Contract shall henceforth be referred to as Contract No. ADSP016-00005912

The effective date of the Contract is March 1, 2016

The Contractor is cautioned not to commence any billable work or to provide any material or service under this contract until Contractor receives purchase order, contract release document or written notice to proceed.

State of Arizona
Awarded this 29 day of February 2016

Procurement Officer



ATTACHMENT I – General Qualifications

**ANNUAL REQUEST FOR QUALIFICATIONS AND EXPERIENCE NO:
ADSP016-00005912**

**STATE PROCUREMENT OFFICE
Department of Administration
100 North 15th Avenue, Suite 201
Phoenix, Arizona 85007**

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

1. Annual Request for Qualifications

a. FIRM (OR BRANCH OFFICE) NAME:	Delta Systems Engineering, Inc. (DeltaSE)
b. FIRM (OR BRANCH OFFICE) STREET:	3550 N. Central Ave., Ste. 915
c. FIRM (OR BRANCH OFFICE) CITY:	Phoenix
d. FIRM (OR BRANCH OFFICE) STATE:	AZ
e. FIRM (OR BRANCH OFFICE) ZIP CODE:	85012
f. YEAR ESTABLISHED:	1997

(g1). OWNERSHIP - TYPE:	S-Corp
(g2). OWNERSHIP - SMALL BUSINESS STATUS:	SBE
h. POINT OF CONTACT NAME AND TITLE:	Heber Torres, PE Engineering Senior Project Manager
i. POINT OF CONTACT TELEPHONE NUMBER:	602-266-4658 x122
j. POINT OF CONTACT E-MAIL ADDRESS:	htorres@deltaseinc.com
k. NAME OF FIRM <i>(If block 1a is a branch office):</i>	Delta Systems Engineering, Inc. (DeltaSE)



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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
Electrical Engineer	P	4	4
Control Systems Engineer	P	9	2
Project Manager	P	8	5
<u>TOTAL</u>		17	11



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4. Resumes of Key Personnel Proposed for this Contract *(Complete one Section #4 for each key person.)*

a. NAME Heber Torres, PE	b. ROLE IN THIS CONTRACT Senior Project Manager	c. YEARS EXPERIENCE	
		1. TOTAL 13	2. WITH CURRENT FIRM 9
d. LOCATION <i>(City and State)</i> Phoenix, AZ			
e. EDUCATION <i>(DEGREE AND SPECIALIZATION)</i> B.S. – Electrical Engineering		f. PROFESSIONAL TRAINING - REGISTRATIONS Professional Engineer, Arizona, Electrical Engineering; ADEQ Grade II Water Dist. Operator; ETAP Power Systems (Certified)	
g. OTHER PROFESSIONAL QUALIFICATIONS <i>(Organizations, Awards, etc.)</i> Heber has extensive project experience specifying equipment and instrumentation, modeling radio systems, providing radio survey/master plan studies, preparing design plans, creating panel schedules, and performing calculations.			

H. RELEVANT PROJECTS

	(1) TITLE AND LOCATION <i>(City and State)</i>	(2) YEAR COMPLETED	
		Professional Services	Construction (if applicable)
1.	Bullhead City, City Wide SCADA Bullhead City, Arizona	Ongoing	N/A
	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE This project involved connecting to the existing wastewater collection and treatment systems with remote monitoring, control and communication. Information is gathered from 16 collection stations and 2 treatment plants and utilized to create a new SCADA system requiring no down time of the current service. A seamless transition from the current system to a fully controlled and remotely monitored SCADA system will unify the treatment plants and lift stations. \$1,179,000; Role: Senior Designer	<input checked="" type="checkbox"/>	Check if project performed with current firm
2.	Town of Buckeye Master SCADA Plan Buckeye, Arizona	2010	N/A
	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE Master SCADA Plan comprised of a Radio Path Survey of 31 existing water/wastewater sites, a Coverage Study for proposed areas of expansion, a recommended system, and an appendix containing performance specifications and standards for guiding the development of future facilities and their integration with the existing SCADA system. \$115,000; Role: Engineer	<input checked="" type="checkbox"/>	Check if project performed with current firm
3.	City of Scottsdale, Arc Flash Hazard Analysis Scottsdale, Arizona	Ongoing	N/A
	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE DeltaSE is currently providing professional engineering services to the City, developing an electrical safety program based on the National Fire Protection Association (NFPA) 70E standard for electrical safety in the workplace. DeltaSE team is responsible for supplementing the City's existing electrical safety policies and providing additional safety measures for the City and its employees. Scope includes a full electrical arc flash analysis and associated labeling for City facilities, assessment and inventory of existing electrical equipment, on-site inspection of four (4) City facilities and updating existing safety policies and developing an electrical safety program for the City to implement. Role: Project Manager	<input checked="" type="checkbox"/>	Check if project performed with current firm
4.	City of Avondale, Water Resources Master SCADA Five Year Plan Avondale, Arizona	2009	N/A
	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE DeltaSE was a master plan design consultant for a preliminary design study and report for the Water SCADA Five Year Master Plan to accomplish full monitoring and controls of the City's water system. The preliminary design study and report included recommendations on how best to utilize the Master SCADA system; define the requirements to achieve SCADA optimization; provide budgetary cost estimates for implementation; and a recommended implementation schedule. \$145,000; Role: Senior Design Engineer	<input checked="" type="checkbox"/>	Check if project performed with current firm
5.	State of Arizona, SCADA and System Integration Various Locations, Arizona	Ongoing	N/A
	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE DeltaSE was selected in 1999 as Arizona-American Water's (AAW) SCADA system integrator. We have provided nearly \$3 Million worth of programming, engineering, and material procurement services on over 100 projects for AAW in Arizona. \$2,900K; Role: Project Manager	<input checked="" type="checkbox"/>	Check if project performed with current firm



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a. NAME	b. ROLE IN THIS CONTRACT	c. YEARS EXPERIENCE	
Robert (Scott) Frink, PE	Quality Assurance/Control	1. TOTAL 25	2. WITH CURRENT FIRM 1
d. LOCATION (<i>City and State</i>) Las Vegas, NV			
e. EDUCATION (<i>DEGREE AND SPECIALIZATION</i>) B.S. – Electrical Engineering Masters – Business Administration		f. PROFESSIONAL TRAINING - REGISTRATIONS Professional Engineer, Kansas, Oklahoma, Nevada (Pending), Electrical Engineering; Basic Electricity & Electronics, Electronics Technician Class A School; Leadership & Management Education Training	
g. OTHER PROFESSIONAL QUALIFICATIONS (<i>Organizations, Awards, etc.</i>) Scott is a member of the IEEE (Institute of Electrical & Electronics Engineers). He is also served in the US Navy for seven years.			

H. RELEVANT PROJECTS

	(1) TITLE AND LOCATION (<i>City and State</i>)	(2) YEAR COMPLETED	
		Professional Services	Construction (if applicable)
1.	Bullhead City, City Wide SCADA Bullhead City, Arizona	Ongoing	N/A
	(3) BRIEF DESCRIPTION (<i>Brief scope, size, cost, etc.</i>) AND SPECIFIC ROLE This project involved connecting to the existing wastewater collection and treatment systems with remote monitoring, control and communication. Information is gathered from 16 collection stations and 2 treatment plants and utilized to create a new SCADA system requiring no down time of the current service. A seamless transition from the current system to a fully controlled and remotely monitored SCADA system will unify the treatment plants and lift stations. \$1,179,000; Role: Project Manager	<input checked="" type="checkbox"/>	Check if project performed with current firm
2.	Clark County Water Reclamation District, SCADA System Transition Las Vegas, Nevada	Ongoing	N/A
	(3) BRIEF DESCRIPTION (<i>Brief scope, size, cost, etc.</i>) AND SPECIFIC ROLE DeltaSE served as a prime design-build consultant and as a sole-sourced engineering sub-consultant on CCWRDs SCADA system replacement and expansion projects. This included 119 Allen Bradley PLC's with approximately 27,000 I/Os. \$9,500,000 (to date); Role: Project Manager	<input checked="" type="checkbox"/>	Check if project performed with current firm
3.	City of Henderson, Utility Services Henderson, Nevada	2011	N/A
	(3) BRIEF DESCRIPTION (<i>Brief scope, size, cost, etc.</i>) AND SPECIFIC ROLE DeltaSE has provided E/I&C design construction and startup services for various projects which included: Pump Stations and Lift Stations; Power monitoring, short circuit and coordination studies; Arc Flash Analysis, Site electrical evaluations and reports; and PRV's, Radio path analysis. Role: Project Manager	<input checked="" type="checkbox"/>	Check if project performed with current firm
4.	Utilities Inc. of Central NV, Ongoing Consulting Services Pahrump, Nevada	Ongoing	Ongoing
	(3) BRIEF DESCRIPTION (<i>Brief scope, size, cost, etc.</i>) AND SPECIFIC ROLE DeltaSE has provided a number of SCADA consulting services for Utilities Inc. of Central Nevada's Water SCADA system since 2011. Among the services provided to several locations include the following tasks: PLC/RTU/HMI programming, installation/calibration, troubleshooting, modification to existing system, configuration, and construction and support services. In addition, DeltaSE has performed onsite evaluation services for their existing system and provided recommendation for future changes/upgrades to enhance the clients SCADA system. \$148,000 (to date); Role: Project Manager	<input checked="" type="checkbox"/>	Check if project performed with current firm
5.	State of Arizona, SCADA and System Integration Various Locations, Arizona	Ongoing	N/A
	(3) BRIEF DESCRIPTION (<i>Brief scope, size, cost, etc.</i>) AND SPECIFIC ROLE DeltaSE was selected in 1999 as Arizona-American Water's (AAW) SCADA system integrator. We have provided nearly \$3 Million worth of programming, engineering, and material procurement services on over 100 projects for AAW in Arizona. \$2,900K; Role: Project Manager	<input checked="" type="checkbox"/>	Check if project performed with current firm



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a. NAME Craig Gorman	b. ROLE IN THIS CONTRACT Technical Specialist	c. YEARS EXPERIENCE	
		1. TOTAL 39	2. WITH CURRENT FIRM 15

d. LOCATION (*City and State*)
Phoenix, AZ

e. EDUCATION (<i>DEGREE AND SPECIALIZATION</i>) N/A	f. PROFESSIONAL TRAINING - REGISTRATIONS C Programming; Visual Basic; AutoLisp; National Electrical Code; Maximizing AutoCAD; Facility Protection; Lightning Protection; Grounding/Bonding; Surge Protection
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g. OTHER PROFESSIONAL QUALIFICATIONS (*Organizations, Awards, etc.*)
With in-depth experience in Master Planning, Craig will work closely with the Project Manager on a wide range of design and implementation issues to provide efficient technical and advisory support.

H. RELEVANT PROJECTS

	(1) TITLE AND LOCATION (<i>City and State</i>)	(2) YEAR COMPLETED	
		Professional Services	Construction (if applicable)
1.	Bullhead City, City Wide SCADA Bullhead City, Arizona	Ongoing	N/A
	(3) BRIEF DESCRIPTION (<i>Brief scope, size, cost, etc.</i>) AND SPECIFIC ROLE This project involved connecting to the existing wastewater collection and treatment systems with remote monitoring, control and communication. Information is gathered from 16 collection stations and 2 treatment plants and utilized to create a new SCADA system requiring no down time of the current service. A seamless transition from the current system to a fully controlled and remotely monitored SCADA system will unify the treatment plants and lift stations. \$1,179,000; Role: QA/QC	<input checked="" type="checkbox"/>	Check if project performed with current firm
2.	Casa Grande/Coolidge Water System SCADA Design-Build Casa Grande, Arizona	Ongoing	Ongoing
	(3) BRIEF DESCRIPTION (<i>Brief scope, size, cost, etc.</i>) AND SPECIFIC ROLE DeltaSE completed a wide variety of projects and on-call support services since 1998. Including design and development of a SCADA system. These sites are distributed between two cities and interconnected by MDS iNET-II Ethernet radio network with a repeater site that allows communication over 14 miles. DeltaSE designed and prepared control descriptions after extensive discussions with AWC operators and engineers; programmed and installed 16 Modicon PLCs, 17 OITs, and 14 Power Quality Meters; and designed and programmed the SCADA/HMI system using Wonderware's ArchestrA, InTouch, Historian, and SCADAAlarm. Role: Engineer & QA/QC	<input checked="" type="checkbox"/>	Check if project performed with current firm
3.	Town of Buckeye, SCADA Master Plan Buckeye, Arizona	2010	N/A
	(3) BRIEF DESCRIPTION (<i>Brief scope, size, cost, etc.</i>) AND SPECIFIC ROLE DeltaSE has provided E/I&C design construction and startup services for various projects which included: Pump Stations and Lift Stations; Power monitoring, short circuit and coordination studies; Arc Flash Analysis, Site electrical evaluations and reports; and PRV's, Radio path analysis. Role: Project Manager	<input checked="" type="checkbox"/>	Check if project performed with current firm
4.	Port of Long Beach, SCADA Design/Build Long Beach, California	Ongoing	N/A
	(3) BRIEF DESCRIPTION (<i>Brief scope, size, cost, etc.</i>) AND SPECIFIC ROLE DeltaSE team developed a pilot SCADA System for 6 representative pump stations and provided complete monitor and control from a Master SCADA System. Prior to start of the design, a Preliminary Design Report (PDR) was developed including many components of a SCADA Master Plan. The final design included plan drawings locating all instruments and equipment, connection diagrams, conduit layout, PLC/HMI programming, and site security. \$598,000 (to date); Role: Project Manager	<input checked="" type="checkbox"/>	Check if project performed with current firm
5.	City of Peoria, SCADA Network Upgrade Peoria, Arizona	2009	N/A
	(3) BRIEF DESCRIPTION (<i>Brief scope, size, cost, etc.</i>) AND SPECIFIC ROLE Water and wastewater SCADA services to Peoria since 1999. This included design, programming, and other support services for their radio telemetry system. DeltaSE also developed a plan to upgrade Peoria's SCADA radio network. Phase I included a detailed inventory of 62 water and wastewater sites and development of Transition Plans to upgrade from serial to MDS iNet II Ethernet radios, and re-configuration of the network paths to the new Cluster configuration. \$1,102,638; Role: Project Manager	<input checked="" type="checkbox"/>	Check if project performed with current firm



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a. NAME Arun Ramamoorthy, PhD	b. ROLE IN THIS CONTRACT Senior Integrator	c. YEARS EXPERIENCE	
		1. TOTAL 9	2. WITH CURRENT FIRM 7
d. LOCATION (<i>City and State</i>) Phoenix, AZ			
e. EDUCATION (<i>DEGREE AND SPECIALIZATION</i>) Doctor of Electrical Engineering, ASU, Tempe, Arizona M.S. Electrical Engineering, ASU, Tempe, Arizona		f. PROFESSIONAL TRAINING - REGISTRATIONS Wonderware InTouch Certified, Wonderware Application Server Certified, Wonderware Historian Certified	
g. OTHER PROFESSIONAL QUALIFICATIONS (<i>Organizations, Awards, etc.</i>) Arun's expertise covers Modicon PLC systems, ladder logic programming, and experience in design and development of SCADA systems based on Wonderware and iFix platforms. His expertise also encompasses programming operator interface terminals (OIT - Magelis/Magellan/PanelMate) and configuring ethernet and serial radios.			

H. RELEVANT PROJECTS

1.	(1) TITLE AND LOCATION (<i>City and State</i>) Casa Grande/Coolidge Water System SCADA Design-Build Casa Grande, Arizona	(2) YEAR COMPLETED	
		Professional Services Ongoing	Construction (if applicable) Ongoing
	(3) BRIEF DESCRIPTION (<i>Brief scope, size, cost, etc.</i>) AND SPECIFIC ROLE DeltaSE completed a wide variety of projects and on-call support services since 1998. Including design and development of a SCADA system. These sites are distributed between two cities and interconnected by MDS iNET-II Ethernet radio network with a repeater site that allows communication over 14 miles. DeltaSE designed and prepared control descriptions after extensive discussions with AWC operators and engineers; programmed and installed 16 Modicon PLCs, 17 OITs, and 14 Power Quality Meters; and designed and programmed the SCADA/HMI system using Wonderware's ArchestrA, InTouch, Historian, and SCADAalarm. Role: Project Manager	<input checked="" type="checkbox"/>	Check if project performed with current firm
2.	(1) TITLE AND LOCATION (<i>City and State</i>) State of Arizona, SCADA and System Integration Various Locations, Arizona	(2) YEAR COMPLETED	
		Professional Services Ongoing	Construction (if applicable) N/A
	(3) BRIEF DESCRIPTION (<i>Brief scope, size, cost, etc.</i>) AND SPECIFIC ROLE DeltaSE was selected in 1999 as Arizona-American Water's (AAW) SCADA system integrator. We have provided nearly \$3 Million worth of programming, engineering, and material procurement services on over 100 projects for AAW in Arizona. \$2,900K; Role: Lead Integrator	<input checked="" type="checkbox"/>	Check if project performed with current firm
3.	(1) TITLE AND LOCATION (<i>City and State</i>) City of Bullhead City, City-Wide SCADA Upgrade Bullhead City, Arizona	(2) YEAR COMPLETED	
		Professional Services Ongoing	Construction (if applicable) N/A
	(3) BRIEF DESCRIPTION (<i>Brief scope, size, cost, etc.</i>) AND SPECIFIC ROLE This project involved connecting to the existing wastewater collection and treatment systems with remote monitoring, control and communication. Information is gathered from 16 collection stations and 2 treatment plants and utilized to create a new SCADA system requiring no down time of the current service. A seamless transition from the current system to a fully controlled and remotely monitored SCADA system will unify the treatment plants and lift stations. \$1,179,000; Role: Lead Integrator	<input checked="" type="checkbox"/>	Check if project performed with current firm
4.	(1) TITLE AND LOCATION (<i>City and State</i>) City of Peoria, SCADA Network Upgrade Peoria, Arizona	(2) YEAR COMPLETED	
		Professional Services 2009	Construction (if applicable) N/A
	(3) BRIEF DESCRIPTION (<i>Brief scope, size, cost, etc.</i>) AND SPECIFIC ROLE Water and wastewater SCADA services to Peoria since 1999. This included design, programming, and other support services for their radio telemetry system. DeltaSE also developed a plan to upgrade Peoria's SCADA radio network. Phase I included a detailed inventory of 62 water and wastewater sites and development of Transition Plans to upgrade from serial to MDS iNet II Ethernet radios, and re-configuration of the network paths to the new Cluster configuration. \$1,102,638; Role: Lead Integrator	<input checked="" type="checkbox"/>	Check if project performed with current firm
5.	(1) TITLE AND LOCATION (<i>City and State</i>) Utilities Inc. of Central NV, Ongoing Consulting Services Pahrump, Nevada	(2) YEAR COMPLETED	
		Professional Services Ongoing	Construction (if applicable) Ongoing
	(3) BRIEF DESCRIPTION (<i>Brief scope, size, cost, etc.</i>) AND SPECIFIC ROLE DeltaSE has provided a number of SCADA consulting services for Utilities Inc. of Central Nevada's Water SCADA system since 2011. Among the services provided to several locations include the following tasks: PLC/RTU/HMI programming, installation/calibration, troubleshooting, modification to existing system, configuration, and construction and support services. In addition, DeltaSE has performed onsite evaluation services for the existing system and provided recommendation for future changes/upgrades for SCADA system. \$148,000 (to date); Role: Integration Support	<input checked="" type="checkbox"/>	Check if project performed with current firm



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a. NAME Bruce Mayhook	b. ROLE IN THIS CONTRACT Construction Specialist	c. YEARS EXPERIENCE	
		1. TOTAL 29	2. WITH CURRENT FIRM 9
d. LOCATION (<i>City and State</i>) Phoenix, AZ			
e. EDUCATION (<i>DEGREE AND SPECIALIZATION</i>) Associate in Occupational Studies/Electrical Maintenance/Construction Inspection & Controls		f. PROFESSIONAL TRAINING - REGISTRATIONS Journeyman Electrician, I.B.E.W; UL508A Trained;	
g. OTHER PROFESSIONAL QUALIFICATIONS (<i>Organizations, Awards, etc.</i>) Bruce has broad experience with industrial building management systems including HVAC, lighting, security, and fire. He also has extensive experience with PLC-based control systems and designing, fabricating and installing UL508A-listed control panels.			

H. RELEVANT PROJECTS

1.	(1) TITLE AND LOCATION (<i>City and State</i>) Clark County Water Reclamation District, SCADA System Transition Las Vegas, NV	(2) YEAR COMPLETED	
		Professional Services Ongoing	Construction (if applicable) Ongoing
	(3) BRIEF DESCRIPTION (<i>Brief scope, size, cost, etc.</i>) AND SPECIFIC ROLE DeltaSE served as a prime design-build consultant and as a sole-sourced engineering sub-consultant on CCWRDs SCADA system replacement and expansion projects. This included 119 Allen Bradley PLC's with approximately 27,000 I/Os. \$9,500,000 (to date); Role: Construction Support	<input checked="" type="checkbox"/>	Check if project performed with current firm
2.	(1) TITLE AND LOCATION (<i>City and State</i>) City of Bullhead City, City-Wide SCADA Upgrade Bullhead City, Arizona	(2) YEAR COMPLETED	
		Professional Services Ongoing	Construction (if applicable) Ongoing
	(3) BRIEF DESCRIPTION (<i>Brief scope, size, cost, etc.</i>) AND SPECIFIC ROLE Connected the existing wastewater collection and treatment systems with remote monitoring, control and communication. Information is gathered from 16 collection stations and 2 treatment plants and utilized to create a new SCADA system requiring no down time of the current service. A seamless transition from the current system to a fully controlled and remotely monitored SCADA system will unify the treatment plants and lift stations. \$1,179,000; Role: Construction Support	<input checked="" type="checkbox"/>	Check if project performed with current firm
3.	(1) TITLE AND LOCATION (<i>City and State</i>) City of Scottsdale, Arc Flash Hazard Analysis Scottsdale, Arizona	(2) YEAR COMPLETED	
		Professional Services Ongoing	Construction (if applicable) Ongoing
	(3) BRIEF DESCRIPTION (<i>Brief scope, size, cost, etc.</i>) AND SPECIFIC ROLE DeltaSE is currently providing professional engineering services to the City, developing an electrical safety program based on the National Fire Protection Association (NFPA) 70E standard for electrical safety in the workplace. DeltaSE team is responsible for supplementing the City's existing electrical safety policies and providing additional safety measures for the City and its employees. Scope includes a full electrical arc flash analysis and associated labeling for City facilities, assessment and inventory of existing electrical equipment, on-site inspection of four (4) City facilities and updating existing safety policies and developing an electrical safety program for the City to implement. Role: Field Data Technician	<input checked="" type="checkbox"/>	Check if project performed with current firm
4.	(1) TITLE AND LOCATION (<i>City and State</i>) Utilities Inc. of Central NV, Ongoing Consulting Services Pahrump, Nevada	(2) YEAR COMPLETED	
		Professional Services Ongoing	Construction (if applicable) Ongoing
	(3) BRIEF DESCRIPTION (<i>Brief scope, size, cost, etc.</i>) AND SPECIFIC ROLE DeltaSE has provided a number of SCADA consulting services for Utilities Inc. of Central Nevada's Water SCADA system since 2011. Among the services provided to several locations include the following tasks: PLC/RTU/HMI programming, installation/calibration, troubleshooting, modification to existing system, configuration, and construction and support services. In addition, DeltaSE has performed onsite evaluation services for the existing system and provided recommendation for future changes/upgrades for SCADA system. \$148,000 (to date); Role: Construction Support	<input checked="" type="checkbox"/>	Check if project performed with current firm
5.	(1) TITLE AND LOCATION (<i>City and State</i>) City of Peoria, SCADA Network Upgrade Peoria, Arizona	(2) YEAR COMPLETED	
		Professional Services 2009	Construction (if applicable) N/A
	(3) BRIEF DESCRIPTION (<i>Brief scope, size, cost, etc.</i>) AND SPECIFIC ROLE Water and wastewater SCADA services to Peoria since 1999. This included design, programming, and other support services for their radio telemetry system. DeltaSE also developed a plan to upgrade Peoria's SCADA radio network. Phase I included a detailed inventory of 62 water and wastewater sites and development of Transition Plans to upgrade from serial to MDS iNet II Ethernet radios, and re-configuration of the network paths to the new Cluster configuration. \$1,102,638; Role: Construction Support	<input checked="" type="checkbox"/>	Check if project performed with current firm



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5. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT

(Present no more than five (5) projects. Complete one Section 5 for each project.)

a. TITLE AND LOCATION <i>(City and State)</i> City of Bullhead City, City Wide SCADA Bullhead City, Arizona	b. YEAR COMPLETED	
	PROFESSIONAL SERVICES Ongoing	CONSTRUCTION <i>(If applicable)</i> Ongoing

23. PROJECT OWNER'S INFORMATION

c. PROJECT OWNER City of Bullhead City	d. ORIGINAL BUDGET/NTE AMOUNT OF PROJECT N/A (On-Call)	e. TOTAL COST OF PROJECT \$1,179,000 (to date)
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f. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (include scope, size, and length of project)

Scope & Size:

The Bullhead City-Master Planning, Evaluation and Implementation of Citywide SCADA system is a Design-Build project designed to connect the existing wastewater collection and treatment systems with remote monitoring, control and communication. Information will be gathered from 16 collection stations and 2 treatment plants that will be utilized to create a new SCADA system that will not require any down time of the current service. A seamless transition from the current system to a fully controlled and remotely monitored SCADA system will unify the treatment plants and lift stations. Multiple communication methods will be reviewed for existing and future needs. The City will work with the project team to select the method that will provide the best value, security and reliability. The project design will set a standard that can be used for future expansion and reduce maintenance costs.

Length of Project:

3 years to date



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5. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT

(Present no more than five (5) projects. Complete one Section 5 for each project.)

b. TITLE AND LOCATION <i>(City and State)</i> City of Scottsdale, Arc Flash Hazard Analysis Scottsdale, Arizona	b. YEAR COMPLETED	
	PROFESSIONAL SERVICES Ongoing	CONSTRUCTION <i>(If applicable)</i> Ongoing

23. PROJECT OWNER'S INFORMATION

c. PROJECT OWNER City of Scottsdale	d. ORIGINAL BUDGET/NTE AMOUNT OF PROJECT Ongoing	e. TOTAL COST OF PROJECT \$252,790 (to date)
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f. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (include scope, size, and length of project)

Scope & Size:

DeltaSE is currently providing professional engineering services to the City, developing an electrical safety program based on the National Fire Protection Association (NFPA) 70E standard for electrical safety in the workplace. DeltaSE team is responsible for supplementing the City's existing electrical safety policies and providing additional safety measures for the City and its employees. Scope includes a full electrical arc flash analysis and associated labeling for City facilities, assessment and inventory of existing electrical equipment, on-site inspection of four (4) City facilities and updating existing safety policies and developing an electrical safety program for the City to implement.

Length of Project:

18 months to date



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5. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT

(Present no more than five (5) projects. Complete one Section 5 for each project.)

c. TITLE AND LOCATION <i>(City and State)</i> Town of Buckeye, SCADA Master Plan Buckeye, Arizona	b. YEAR COMPLETED	
	PROFESSIONAL SERVICES 2010	CONSTRUCTION <i>(If applicable)</i> N/A

23. PROJECT OWNER'S INFORMATION

c. PROJECT OWNER Town of Buckeye	d. ORIGINAL BUDGET/NTE AMOUNT OF PROJECT N/A	e. TOTAL COST OF PROJECT \$52,139
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f. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (include scope, size, and length of project)

Scope & Size:

This Master SCADA Plan was comprised of a Radio Path Survey of 31 existing water/wastewater sites, a Coverage Study for proposed areas of expansion, a recommended system, and an appendix containing performance specifications and standards for guiding the development of future facilities and their integration with the existing SCADA system. The performance specifications for guiding future SCADA System development included a general SCADA expansion specification setting developer, engineer, and contractor requirements, a PLC hardware & programming specification, and an HMI software & programming specification.

Length of Project:

3 years (approximately)



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5. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT

(Present no more than five (5) projects. Complete one Section 5 for each project.)

d. TITLE AND LOCATION <i>(City and State)</i> Casa Grande/Coolidge Water System SCADA Design-Build Casa Grande, Arizona	b. YEAR COMPLETED	
	PROFESSIONAL SERVICES Ongoing	CONSTRUCTION <i>(If applicable)</i> Ongoing

23. PROJECT OWNER'S INFORMATION

c. PROJECT OWNER Arizona Water Company	d. ORIGINAL BUDGET/NTE AMOUNT OF PROJECT N/A	e. TOTAL COST OF PROJECT \$169,774 (to date)
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f. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (include scope, size, and length of project)

Scope & Size:

DeltaSE completed a wide variety of projects and on-call support services since 1998. One relevant project includes design and development of a SCADA system. The project automated 4 booster sites (10 VFD pumps) and connected 12 remote well sites to the SCADA system. These sites are distributed between two cities and interconnected by MDS iNET-II Ethernet radio network with a repeater site that allows communication over 14 miles. The entire network consists of four separate networks interacting with each other to minimize process disruption in case of a failure. The system consisted of two Arsenic Treatment plants and one Nitrate Removal plant, two elevated tanks and two ground storage tanks. DeltaSE designed and prepared control descriptions after extensive discussions with AWC operators and engineers; programmed and installed 16 Modicon PLCs, 17 OITs, and 14 Power Quality Meters; and designed and programmed the SCADA/HMI system using Wonderware's ArcestrA, InTouch, Historian, and SCADAAlarm. Currently SCADAAlarm is being migrated to WIN-911.

Length of Project:

17 years (to date)



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5. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT

(Present no more than five (5) projects. Complete one Section 5 for each project.)

e. TITLE AND LOCATION <i>(City and State)</i> Clark County Water Reclamation District, SCADA System Transition Las Vegas, Nevada	b. YEAR COMPLETED	
	PROFESSIONAL SERVICES Ongoing	CONSTRUCTION <i>(If applicable)</i> Ongoing

23. PROJECT OWNER'S INFORMATION

c. PROJECT OWNER Clark County Water Reclamation District	d. ORIGINAL BUDGET/NTE AMOUNT OF PROJECT N/A	e. TOTAL COST OF PROJECT \$9,500,000 (to date)
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f. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (include scope, size, and length of project)

Scope & Size:

DeltaSE served as a prime design-build consultant on over half total budget, and as a sole-sourced engineering sub-consultant the rest of CCWRDs SCADA system replacement and expansion projects. Most of the work involved replacing Square D IOnyx DCS hardware and CRISP Automation software with Allen Bradley PLC5, ControlLogix, and MicroLogix 1500 hardware, and Wonderware System Platform SCADA HMI software. The system included 119 Allen Bradley PLC's with approximately 27,000 Inputs & Outputs (I/O). Responsible for providing initial communications master planning services.

The transition included Radio path studies, preliminary and final design documents, construction plans, Allen Bradley RTUs and PLCs, computer and network hardware and software, SCADA system and PLC software programs. In our capacity as CCWRD's system integration engineer, we managed all SCADA replacement construction contracts and procured all new servers and software, as well performed all control system design and programming to replace the legacy CRISP Automation source code logic that ran on DEC MicroVAX servers and workstations. Most of the plant-wide control system logic written for the Allen Bradley PLCs was developed in interviews with plant operations staff, and very little of the CRISP logic was reviewed or reused, which was the most efficient method of upgrading the plant control systems. So far, seven treatment plants and 25 remote telemetry sites have been upgraded and converted to the new SCADA technology.

Length of Project:

9 years (to date)



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6. ADDITIONAL INFORMATION

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

Delta Systems Engineering, Inc. (DeltaSE) is an electrical engineering and systems integration firm in Arizona, Nevada, and California. We specialize in industrial facility electrical design and integration, with a major focus on the water/wastewater industries. Our core competencies include extensive experience in Electrical Instrumentation and Control (EI&C) systems design, SCADA master planning, construction management, and programming. We have completed over 2,000 projects throughout the southwest which have included a wide range of projects such as a pump station with a low bandwidth radio link, a master SCADA system, and a 150 MGD facility with outlying remote telemetry sites.

DeltaSE has successfully master planned, designed, built, commissioned, and continues to support a large number of SCADA systems we've upgraded over the last 14 years. In fact, we continue to support clients like the Arizona Water in Casa Grande, Arizona, Clark County Water Reclamation District in Nevada, and San Diego County Water Authority in California. These are just a few of the clients that have selected us to support their SCADA systems. These clients have created long-term plans with our assistance to upgrade from obsolete legacy systems, and continue to enhance the capabilities of the new SCADA systems we have built for them. Many of the SCADA systems we have successfully upgraded were well over 10 years old, and required phased replacement approaches.

DeltaSE's services include:

ENGINEERING SERVICES:

- Power distribution system design
- Control panel fabrication design
- Power system analysis
- Emergency and standby power systems design
- Report preparation and cost estimating
- Control system network design
- SCADA system master planning, design, and configuration
- Wireless network studies and design
- Arc flash, short circuit, load floor, coordination studies
- Energy use assessment and management
- Lighting system design
- Personal protective equipment and hazard labeling

CONSTRUCTION SERVICES:

- Bid assistance
- Construction management
- On-site observations
- Shop drawing review
- Record drawing and operation and maintenance manual preparation
- Material procurement and equipment purchasing management
- UL508A control panel design and fabrication
- Instrumentation services; process control loop drawings, calibration reports, and loop testing

INTEGRATION AND SUPPORT SERVICES:

- Programmable Logic Controller (PLC) programming
- Operator Interface Terminal (OIT) programming
- Human-machine Interface (HMI) software configuration
- System field start-up and commissioning
- Troubleshooting electrical control systems
- On-call SCADA support services
- O&M Staff training
- Customized preventative maintenance and annual support service plans
- Network and communication integration



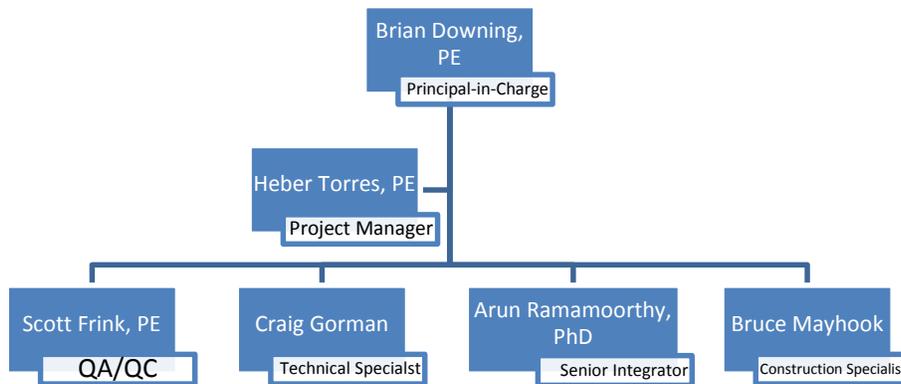
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We maintain a local Phoenix office, allowing for quick response and mobilization by our team for any project needs. We have a strong and supportive project team that has worked together on multiple projects for our clients. DeltaSE’s most valuable asset is our talented team; we coordinate, plan and maintain open communication among our project team members throughout all of our projects to deliver high quality products and services to our clients.

You will find that our team has the skill, knowledge, and experience in electrical engineering, system integration and construction services to support all of the State’s project needs. Our team consists of licensed engineers and experienced professional tradesmen who maintain their training to provide best practices towards overall success of any project.

Our Project Manager, Heber Torres, PE, has an in-depth knowledge in the electrical engineering industry. His strong knowledge and experience, will lead our team smoothly in providing the State with comprehensive professional engineering support. Below is an organization chart depicting our key personnel:



Additional resources are available as needed

UL 508A-Listed Panel Shop

Our local Las Vegas office is registered to provide panels and subpanels that are UL 508A listed. This value-added service allows us to provide control panels with our traditional wrap around services of engineering, programming and field startup services to give our clients a more cost effective low risk solution for their instrument, electrical and controls projects. Additional services are complete panel design, loop drawings, instrument specification, purchasing and calibration, panel acceptance testing and field installation and modification services.

Arc Flash Hazard Analysis Services

DeltaSE understands what is required for arc flash analysis, coordination studies, safety training and electrical system design. We work with clients to provide the safety information required to protect their workers and facilities. Safety is an important factor to DeltaSE. All electrical work practices must comply with the Occupational Safety and Health Administration (OSHA), National Fire Protection Association (NFPA), National Electrical Code, National Electrical Safety Code, and State adopted electrical codes. Only qualified personnel may work on electrical circuits and equipment. Our team will conduct a jobsite daily briefing to insure proper safety measures are conducted.

DeltaSE stays on the leading edge of technology and has formed many strategic partnerships with software providers giving our staff a diverse knowledge. DeltaSE is a Wonderware Endorsed System Integrator which is the highest level of certification available from Wonderware. The team has successfully integrated various systems with Wonderware’s Archestra as the human machine interface (HMI). Other strategic partnerships include: ETAP and Automation Direct (System Integrators); Inductive Automation, Rockwell Automation; Distrix, Mtelligence; and Schneider Electric (Modicon).

DeltaSE understands not only that quality results are expected, but that they must be delivered on or ahead of schedule and on or under-budget.



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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:	95%
b. Percentage of Total Work Attributable to Non-Government Work:	5%

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

Signature: Brian Downing

Date: 12/21/15

Name: Brian D. Downing, PE

Title: President