CALL TO ORDER

PLEDGE OF ALLEGIANCE

PUBLIC COMMENTS

Items Not on the Agenda: Members of the public are invited to address the Board regarding items which are not on the agenda. Each speaker is limited to three minutes. The Board will set aside 30 minutes for public comments.

Items on the Agenda: Members of the public may comment on agenda items before action is taken, or after the Board has discussed the item. Each speaker is limited to three minutes. The Board will set aside 60 minutes for public comments.

ITEMS TO BE ADDED, REMOVED, OR REORDERED ON THE AGENDA
At the discretion of the Board, all items appearing on this agenda, whether or not expressly listed as an Action Item, may be deliberated and may be subject to action by the Board.

CONSENT CALENDAR ITEMS:
Approve all matters under the Consent Calendar by one motion unless a Board member, staff, or a member of the public requests a separate action.

1. Approve minutes of regular Board meeting of September 13, 2018.
2. Approve minutes of special Board meeting of September 18, 2018.
3. Approve minutes of special Board meeting of September 20, 2018.
4. Award a contract to Jett Construction Management, LLC in the amount of $134,582 and a 10% contingency for a not-to-exceed amount of $148,040 to provide Construction Management Services for the Administration Building and HVAC Improvements Project, and authorize execution of the contract.
5. Award a contract to TJC and Associates, Inc. in the amount of $70,050 and a contingency of $15,000 for a not-to-exceed amount of $85,050 to provide a Programmable Logic Controllers and Supervisory Computer System Assessment, and authorize execution of the contract.
6. Approve a proclamation honoring the life and memory of Wayne A. Clark.
7. Approve support of Santa Margarita Water District Vice President Saundra Jacobs and El Toro Water District Director Mark Monin as President and First Vice President, respectively, for the Independent Special Districts of Orange County Executive Committee election and authorize President Jim Atkinson to be the District's voting delegate.
8. Approve attendance considerations (additions, changes, deletions).
9. Board Schedule:
   - Conferences, Seminars, and Meetings
   - Board Calendar
   - Upcoming Community Outreach Events
ACTION ITEMS:

10. REIMBURSEMENT PAYMENT PROCESS:

Recommendation: Approve that Director and employee reimbursement payments be processed through bi-weekly payroll and discontinue the issuing of paper checks for Director and employee reimbursements payments.

11. NEW PHONE SYSTEM:

Recommendation: Award a three-year contract with Vonage for $246,255 and a 10% contingency with two one-year renewal options to provide a Voice Unified Communications/Contact Center Cloud System.

PRESENTATION AND DISCUSSION ITEMS:

12. STATE ADVOCACY UPDATE:

Recommendation: Receive the presentation.

13. FISCAL YEAR 2018 ENVIRONMENTAL, HEALTH AND SAFETY PROGRAM AUDIT:

Recommendation: Receive the presentation.

REPORTS:

14. REPORT OF THE GENERAL MANAGER:

- September Key Indicators Report
- Other (no enclosure)

15. DIRECTORS' REPORTS AND COMMENTS:

INFORMATION ITEMS:

16. DIRECTORS' REPORTS (AB 1234) PER CA GOVERNMENT CODE SECTION 53232.3 (D)

17. OTHER (NO ENCLOSURE)

In compliance with California law and the Americans with Disabilities Act, if you need disability-related modifications or accommodations, including auxiliary aids or services in order to participate in the meeting, or if you need the agenda provided in an alternative format, please contact the District Secretary at (949) 631-1206. Notification 48 hours prior to the meeting will enable Mesa Water District (Mesa Water) to make reasonable arrangements to accommodate your requests.

Members of the public desiring to make verbal comments utilizing a translator to present their comments into English shall be provided reasonable time accommodations that are consistent with California law.

Agenda materials that are public records, which have been distributed to a majority of the Mesa Water Board of Directors (Board), will be available for public inspection at the District Boardroom, 1965 Placentia Avenue, Costa Mesa, CA and on Mesa Water’s website at www.MesaWater.org. If materials are distributed to the Board less than 72 hours prior or during the meeting, the materials will be available at the time of the meeting.

ADJOURN TO A REGULAR BOARD MEETING SCHEDULED FOR TUESDAY, NOVEMBER 8, 2018 AT 6:00 P.M.
CALL TO ORDER
The meeting of the Board of Directors was called to order on September 13, 2018 at 6:00 p.m. by President Atkinson at the District Office Boardroom, located at 1965 Placentia Avenue, Costa Mesa, California.

PLEDGE OF ALLEGIANCE
Vice President Bockmiller led the Pledge of Allegiance.

Directors Present
Jim Atkinson, President
Fred R. Bockmiller, P.E., Vice President
Marice H. DePasquale, Director
Shawn Dewane, Director
James R. Fisler, Director

Directors Absent
None

Staff Present
Paul E. Shoenberger, P.E., General Manager
Denise Garcia, Administrative Services Manager/District Secretary
Marwan Khalifa, CPA, MBA, Chief Financial Officer/District Treasurer
Stacie Sheek, Customer Services Manager
Stacy Taylor, External Affairs Manager
Syndie Ly, Human Resources Manager
Sara J. Fahy, Public Affairs Manager
Tracy Manning, Water Operations Manager
Rob Anslow, Partner, Atkinson, Andelson, Loya, Ruud & Romo

Others Present
Michael R. Markus, General Manager, Orange County Water District

PUBLIC COMMENTS
President Atkinson asked for public comments on items not on the agenda.

There were no comments and President Atkinson proceeded with the meeting.

ITEMS TO BE ADDED, REMOVED, OR REORDERED ON THE AGENDA
General Manager Shoenberger reported there were no items to be added, removed, or reordered on the agenda.
CONSENT CALENDAR ITEMS:

Vice President Bockmiller pulled Item 5 for discussion. There were no objections.

1. Approve minutes of regular Board meeting of August 9, 2018.
2. Approve minutes of special Board meeting of August 16, 2018.
3. Approve minutes of special Board meeting of August 21, 2018.
4. Approve minutes of special Board meeting of August 27, 2018.
5. Approve a proclamation honoring the career of John Cernek for his dedicated and committed service to Mesa Water District.
6. Approve attendance considerations (additions, changes, deletions).
7. Board Schedule:
   • Conferences, Seminars, and Meetings
   • Board Calendar
   • Upcoming Community Outreach Events

President Atkinson asked for comments from the public. There were no comments.

MOTION

Motion by Director Dewane, second by Director Fisler, to approve Items 1 – 4 and 6 – 7 of the Consent Calendar. Motion passed 5-0.

Vice President Bockmiller offered that John Cernek has worked at Mesa Water District for over 39 years, making Mr. Cernek the longest serving employee in District history.

Vice President Bockmiller read the proclamation into the record:

Whereas, John Cernek began his career at Mesa Water District on April 23, 1979 as a Meter Reader and worked his way up through the organization holding job titles including Water Quality Representative I & II and Field Customer Service Representative I & II; and

Whereas, as a Water Quality Representative, John performed various tasks and water quality duties such as responding to customers’ water quality concerns and ensuring that the water served to the public was safe; and

Whereas, as a Field Customer Service Representative, John performed a variety of field customer service duties such as responding to customer concerns and requests regarding water consumption, leaks, service connections/disconnections, and water conservation; and

Whereas, John’s achievements include receiving the District’s Distinctive Service Award in the 3rd Quarter of 1989-90 and Excellent Service Recognition Award in 2010, and being nominated for the Silver Lining Award in 2006, 2011, and 2015; and

Whereas, he also obtained the State Water Resources Control Board Drinking Water Operator Grade 3 Water Distribution and Grade 2 Water Treatment certificates, completed the ACWA/JPIA Professional Development Program (Operations Specialty) and served as a Safety Ambassador for many years; and
Whereas, John is the longest serving Mesa Water employee with nearly 40 years of service to the District.

NOW THEREFORE, BE IT RESOLVED that the Board of Directors of Mesa Water District hereby recognizes and honors you for your dedicated and committed service to the District and wishes you the best as you begin your retirement.

President Atkinson asked for comments from the public. There were no comments.

MOTION

Motion by Vice President Bockmiller, second by Director Dewane, to approve Item 5 of the Consent Calendar. Motion passed 5-0.

President Atkinson reordered the agenda to take Item 9 before Item 8. There were no objections.

Item 9 – ORANGE COUNTY WATER DISTRICT BRIEFING:

General Manager Shoenberger introduced Orange County Water District General Manager Mike Markus who proceeded with a presentation that highlighted the following:

- Groundwater Basin Conditions
- Ground Water Replenishment System (GWRS) Operations
- GWRS Final Expansion
- Ocean Desalination Update

Mr. Markus responded to questions from the Board and they thanked him for the presentation.

RECESS

President Atkinson declared a recess at 7:00 p.m.

The Board meeting reconvened at 7:06 p.m.

ACTION ITEMS:

8. RESOLUTION NO. 1515 – RECORDS RETENTION POLICY:

President Atkinson asked for comments from the public. There were no comments.

MOTION

Motion by Vice President Bockmiller, second by Director DePasquale, to adopt Resolution No. 1515 - Amending the Records Retention Policy Superseding Resolution No. 1425. Motion passed 5-0, by the following roll call vote:

AYES: DIRECTORS DePasquale, Dewane, Fisler, Bockmiller, Atkinson
NOES: DIRECTORS None
ABSENT: DIRECTORS None
ABSTAIN: DIRECTORS None
PRESENTATION AND DISCUSSION ITEMS:

9. ORANGE COUNTY WATER DISTRICT BRIEFING:

   Item was taken earlier in the agenda.

10. INDEPENDENT SPECIAL DISTRICTS OF ORANGE COUNTY EXECUTIVE COMMITTEE ELECTION:

   GM Shoenberger provided an overview of the topic.

   Discussion ensued amongst the Board.

   The Board directed staff to review the Independent Special Districts of Orange County’s (ISDOC) bylaws regarding the section on their Executive Committee candidacy eligibility.

REPORTS:

11. REPORT OF THE GENERAL MANAGER:

   • August Key Indicators Report
   • Other (no enclosure)

12. DIRECTORS’ REPORTS AND COMMENTS:

INFORMATION ITEMS:

13. DIRECTORS’ REPORTS (AB 1234) PER CA GOVERNMENT CODE SECTION 53232.3 (D)

14. OTHER (NO ENCLOSURE)

CLOSED SESSION:

President Atkinson announced the Board was going into Closed Session at 7:39 p.m.

15. CONFERENCE WITH LABOR NEGOTIATOR PURSUANT TO GOVERNMENT CODE 54957.6:

   District Negotiator: General Manager and Human Resources Manager
   Employee Organization: Mesa Water District Employee Association Represented Employees
   Number of Matters: 2

   The Board returned to Open Session at 8:16 p.m.

District Secretary Garcia reported that the Board conducted one Closed Session with the General Manager, District Secretary and Human Resources Manager pursuant to California Government Code Section 54957.6. The Board received information on two matters. Action will be taken under Item 16 regarding the first matter. There was no further announcement regarding the second matter.
ACTION ITEMS (CONT.):

16. TERMS AND CONDITIONS OF BENEFITS FOR DISTRICT EMPLOYEES:

President Atkinson asked for comments from the public. There were no comments.

MOTION

Motion by Vice President Bockmiller, second by Director Dewane, to approve the terms and conditions of benefits for District employees for the period of January 1, 2019 through December 31, 2022 and authorize the General Manager to execute the agreement. Motion passed 5-0.

President Atkinson adjourned the meeting at 8:20 p.m. to an adjourned Regular Board Meeting scheduled for Tuesday, October 9, 2018 at 9:00 a.m.

Approved:

_____________________________________________________
Jim Atkinson, President

_____________________________________________________
Denise Garcia, District Secretary

Sharon D. Brimer, Recording Secretary
MINUTES OF THE BOARD OF DIRECTORS
MESA WATER DISTRICT
Tuesday, September 18, 2018
1965 Placentia Avenue, Costa Mesa, CA 92627
3:30 p.m. Special Board Meeting

ENGINEERING AND OPERATIONS COMMITTEE MEETING

CALL TO ORDER
The meeting of the Board of Directors was called to order on September 18, 2018 at 3:30 p.m. by Chairman Fisler at the District Office Boardroom, located at 1965 Placentia Avenue, Costa Mesa, California.

PLEDGE OF ALLEGIANCE
President Atkinson led the Pledge of Allegiance.

Directors Present
Jim Atkinson, President
Fred R. Bockmiller, P.E., Vice President
Marice H. DePasquale, Director
James R. Fisler, Director, Chair

Directors Absent
Shawn Dewane, Director

Staff Present
Paul E. Shoenberger, P.E., General Manager
Phil Lauri, P.E., Assistant General Manager
Denise Garcia, Administrative Services Manager/District Secretary
Tracy Manning, Water Operations Manager
Sara J. Fahy, Public Affairs Manager
Karyn Igar, Senior Civil Engineer

Others Present
None

PUBLIC COMMENTS
There was no public present.

CONSENT CALENDAR ITEMS:
1. Developer Project Status Report
2. Mesa Water and Other Agency Projects Status Report
3. Water Quality Call Report
4. Committee Policy & Resolution Review
5. Water Operations Status Report
MOTION

Motion by Director DePasquale, second by President Atkinson, to approve Items 1-5 of the Consent Calendar. Motion passed 4-0-1, with Director Dewane absent.

ACTION ITEMS:

6. Administration Building and HVAC Improvements Project

MOTION

Motion by President Atkinson, second by Vice President Bockmiller, to add to the next regular Board meeting Consent Calendar award of a contract to Jett Construction Management, LLC in the amount of $134,582 and a 10% contingency for a not-to-exceed amount of $148,040 to provide Construction Management Services for the Administration Building and HVAC Improvements Project, and authorization to execute the contract. Motion passed 4-0-1, with Director Dewane absent.

7. Programmable Logic Controllers and Supervisory Computer System Assessment

MOTION

Motion by Vice President Bockmiller, second by President Atkinson, to add to the next regular Board meeting Consent Calendar award of a contract to TJC and Associates, Inc. in the amount of $70,050 and a contingency of $15,000 for a not-to-exceed amount of $85,050 to provide a Programmable Logic Controllers and Supervisory Computer System Assessment, and authorization to execute the contract. Motion passed 4-0-1, with Director Dewane absent.

PRESENTATION AND DISCUSSION ITEMS:

8. Water System Operations Update

Assistant General Manager Lauri introduced Water Operations Manager Manning who proceeded with a presentation that highlighted the following:

- Service Area Map – Grade D5 Water System
- Supply Portfolio
- Water System Hydraulics
- Water Pressure Ranges
- Water Pressure Regulations
- Pressure Regulators
- Plumbing Material Strength
- Customer Service
- Customer Guidance
- Questions and Discussion
- Well Automation Operational Benefits
- Operational Scenario – Res 1 Lead
- Reservoir Operations
Ms. Manning answered questions from the Board and they thanked her for the presentation.

REPORTS:

10. Directors' Reports and Comments

INFORMATION ITEMS:

11. Well Automation and Rehabilitation Project Update

The Board meeting was adjourned at 4:55 p.m.

Approved:

______________________________
Jim Atkinson, President

______________________________
Denise Garcia, District Secretary
FINANCE COMMITTEE MEETING

CALL TO ORDER
The meeting of the Board of Directors was called to order on September 20, 2018 at 3:32 p.m. by Chairman Bockmiller at the District Office Boardroom, located at 1965 Placentia Avenue, Costa Mesa, California.

PLEDGE OF ALLEGIANCE
Director Fisler led the Pledge of Allegiance.

Directors Present
Jim Atkinson, President
Fred R. Bockmiller, P.E., Vice President, Chair
Shawn Dewane, Director
James R. Fisler, Director

Directors Absent
Marice H. DePasquale, Director

Staff Present
Paul E. Shoenberger, P.E., General Manager
Wendy Duncan, Records Management Specialist/Assistant District Secretary
Marwan Khalifa, CPA, MBA, Chief Financial Officer

Others Present
None

PUBLIC COMMENTS
There was no public present.

CONSENT CALENDAR ITEMS:
Director Fisler pulled Item 1 for discussion. There were no objections.

1. Accounts Paid Listing
2. Monthly Financial Reports
3. Major Staff Projects
4. Committee Policy & Resolution Review

MOTION
Motion by Director Dewane, second by President Atkinson, to approve Items 2-4 of the Consent Calendar. Motion passed 4-0-1, with Director DePasquale absent.
Director Fisler requested clarification on a line item of the Accounts Paid Listing to which staff responded.

MOTION

Motion by Director Dewane, second by Director Fisler, to approve Item 1 of the Consent Calendar. Motion passed 4-0-1, with Director DePasquale absent.

ACTION ITEMS:

5. Reimbursement Payment Process

Motion by Director Dewane, second by Director Fisler, to approve that Director and employee reimbursement payments be processed through bi-weekly payroll and to discontinue the issuing of paper checks for Director and employee reimbursement payments.

Discussion ensued amongst the Board.

SUBSTITUTE MOTION

Motion by President Atkinson, second by Vice President Bockmiller, to direct staff to agendize the item, "Reimbursement Payment Process", at a future Board meeting. Motion passed 4-0-1, with Director DePasquale absent.

PRESENTATION AND DISCUSSION ITEMS:

None.

REPORTS:

7. Directors’ Reports and Comments

INFORMATION ITEMS:

8. Claim of Ronald & Diane Owens
9. Claim of Birgitta Schaefer
10. Claim of Paula Klug
The Board meeting was adjourned at 3:53 p.m.

Approved:

______________________________
Jim Atkinson, President

______________________________
Denise Garcia, District Secretary
MEMORANDUM

TO: Board of Directors
FROM: Phil Lauri, P.E., Assistant General Manager
DATE: October 11, 2018
SUBJECT: Administration Building and HVAC Improvements Project

RECOMMENDATION

Award a contract to Jett Construction Management, LLC in the amount of $134,582 and a 10% contingency for a not-to-exceed amount of $148,040 to provide Construction Management Services for the Administration Building and HVAC Improvements Project, and authorize execution of the contract.

The Engineering and Operations Committee reviewed this item at its September 18, 2018 meeting and recommends Board approval.

STRATEGIC PLAN

Goal #2: Practice perpetual infrastructure renewal and improvement.

PRIOR BOARD ACTION/DISCUSSION

On November 24, 2015 a contract was signed with Goss Engineering, Inc. to perform a heating, ventilation, and air conditioning (HVAC) system building analysis.

At its August 11, 2016 meeting, the Board of Directors (Board) awarded a contract to Goss Engineering, Inc. for $72,620 and a 10% contingency for a not-to-exceed amount of $79,882 to perform design of a new HVAC system for the Administration and Operations Buildings.

At its June 20, 2017 meeting, the Engineering and Operations (E&O) Committee received an information item that a Request for Proposals was being solicited.

At its September 14, 2017 meeting, the Board approved a contract amendment to Goss Engineering, Inc. in the amount of $52,467 to provide design and documentation for a new roof and skylight on the Administration and Operations Buildings as part of the HVAC Systems Design Project, and authorized execution of the contract amendment.

At its December 19, 2017 meeting, the E&O Committee received an information item that Goss Engineering, Inc. had completed the design drawings, specifications, and contract documents and was soliciting bids for construction.

BACKGROUND

Mesa Water District’s (Mesa Water®) current HVAC system has provided 24 years of service. The HVAC system is a roof top mounted fan-coil type system consisting of seven units placed atop the Operations and Administration Buildings. The system has been periodically maintained throughout the years and various repairs made to accommodate changing office configurations. With an increasing frequency in repairs, a need for more systematic control to address varying thermal conditions within the office environment, changing code compliance requirements, and the
age of the current system, Mesa Water engaged Goss Engineering, Inc. (GEI) in July 2015 to perform an assessment of Mesa Water’s HVAC system.

The assessment recommended that Mesa Water replace the rooftop units with a new variable refrigerant flow (VRF) system. VRF systems provide more flexibility with improved zoning ability with the installation of individual cooling units in each occupant’s space. VRF systems consist of interior fan-coil units that can be ducted, ceiling mounted or wall-mounted and rooftop condensing units. The most appropriate fan-coil solution would include a ceiling-mounted approach. Ceiling-mounted units are preferred as they simplify condensate pipe installation and provide a cleaner appearance once installed. Installing a fan-coil unit in each space would allow individual occupant control of temperature in each office or workspace.

GEI has completed the design drawings, specifications, and contract documents and are currently soliciting bids for construction. Bid solicitation results will be brought to a future Engineering and Operations Committee meeting. Copies of the design drawings and specifications are available upon request.

DISCUSSION

The construction process will require the assistance of a qualified construction management consultant with expertise in HVAC systems, roofing replacement, and associated installation requirements. The construction management team will also provide qualified inspection services to ensure all work is compliant with the design documents and building code regulations.

Selection Process

Mesa Water solicited proposals from nine firms to provide the required scope of work. The firms included MWH Global (Stantec), Butler Engineering, TELACU Construction Management, Kitchell CEM, NV5, Inc. (NV5, formerly Civil Source), Cumming, Inc., IEM Construction Management (IEM), Michael Baker International, and Jett Construction Management, LLC (JCM). Three proposals were received on August 28, 2018. The proposing firms included NV5, IEM, and JCM. Proposals were reviewed and evaluated by a selection panel comprised of Mesa Water and Orange County Water District staff. Each proposal was ranked based on qualifications, experience, project understanding, and scope of work approach. All three firms are qualified to perform the work effort and were invited to participate in the interview process on September 4, 2018. While each firm provided a unique and solid approach to the required scope of work, the selection panel determined that JCM’s approach would be most comprehensive given their proposed project staff and HVAC and roof construction experience. While JCM’s overall proposed project cost is slightly higher than NV5 (~7.5%), JCM provides specific experience similar to the Mesa Water project and it is believed that JCM’s experience in managing this type of project will save Mesa Water future costs through reduced change order mitigation. JCM specializes in providing construction management and consulting services for building projects. JCM’s project experience ranges from large office projects, high-rise/mixed-use projects, public works, healthcare, retail, hospitality, renovations, data centers, industrial, infrastructure, and tenant improvements. JCM has worked on multiple projects that include public agencies, water districts, state and county governments, non-profit organizations, and private companies. JCM’s proposal is included as Attachment A. The proposals from NV5 and IEM are available upon request.
The results of each firm’s proposal are as follows:

<table>
<thead>
<tr>
<th>Rank</th>
<th>Proposer</th>
<th>Submitted Cost</th>
<th>Total Hours</th>
<th>Average Hourly Rate ($/Hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>JCM</td>
<td>$134,582</td>
<td>829</td>
<td>$162.34</td>
</tr>
<tr>
<td>2</td>
<td>NV5</td>
<td>$125,089</td>
<td>829</td>
<td>$150.89</td>
</tr>
<tr>
<td>3</td>
<td>IEM</td>
<td>$177,011</td>
<td>1,005</td>
<td>$176.13</td>
</tr>
</tbody>
</table>

The proposing firms were requested to submit proposals using 829 hours as a budgetary requirement for both the construction management and inspection services portion of work. IEM submitted 1,005 hours without explanation of why additional hours beyond the budget were required. Staff recommends that the Board consider awarding a contract to JCM for $134,582 and a 10% contingency for a not-to-exceed amount of $148,040 to provide Construction Management Services for the Administration Building and HVAC Improvements Project.

FINANCIAL IMPACT

In Fiscal Year 2019, $1,808,000 is budgeted for the Administration Building and HVAC Improvements Project; no funds have been spent to date.

ATTACHMENTS

Attachment A: Jett Construction Management, LLC Proposal
### Mesa Water District

Administration Building Improvements
And HVAC Replacement Project

Construction Management Services

August 28, 2018

<table>
<thead>
<tr>
<th>Name of Business:</th>
<th>Jett Construction Management, LLC (JCM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business/Company Address:</td>
<td>29 Salinger Court, Trabuco Canyon CA 92679</td>
</tr>
<tr>
<td>Telephone Number(s):</td>
<td>(949) 283-0007</td>
</tr>
<tr>
<td>E-mail Address:</td>
<td><a href="mailto:JettM@JettCM.com">JettM@JettCM.com</a></td>
</tr>
<tr>
<td>Website Address:</td>
<td><a href="http://www.jettcm.com">www.jettcm.com</a></td>
</tr>
<tr>
<td>Federal Tax ID Number:</td>
<td>83-1569830</td>
</tr>
<tr>
<td>Type of Business:</td>
<td>Limited Liability Corporation</td>
</tr>
<tr>
<td>Number of Years in Business:</td>
<td>Jett Construction Management LLC is a recently formed company with 35 years of industry experience. Jett McCormick has worked in the Southern California construction and real estate development market for over 35 years.</td>
</tr>
<tr>
<td>Authorized Representative:</td>
<td>Jett McCormick, President</td>
</tr>
<tr>
<td>Certificate of Insurance</td>
<td>Attached based on currently available endorsements</td>
</tr>
</tbody>
</table>
Mesa Water District
Administration Building Improvements

This proposal provides a comprehensive response to Mesa Water's Request for Proposal for the Administration Building Improvements and HVAC Replacement Project. Jett Construction Management, LLC (JCM) has an excellent understanding of the project scope and requirements. Our team is prepared to provide Mesa Water the required services to ensure the successful implement and completion of the project as outlined in this proposal.

SECTION 1 - FIRM QUALIFICATIONS AND EXPERIENCE

INTRODUCTION TO THE FIRM

After many years working with top-tier construction and real estate development companies in Southern California, Jett McCormick established Jett Construction Management, LLC (JCM) to provide best of class construction management services to his clients. Mr. McCormick has over 35 years of experience with an excellent reputation. This experience includes more than twenty years with general contractors Turner Construction and Rudolph & Sletten. Mr. McCormick's has more than a decade with top Landlord and developer including the Irvine Company as the heading the Office Properties - Campus Office and Industrial Tenant Improvements Group before moving to the Development Group. Most recently, Jett McCormick was with LBA Realty as the Vice President overseeing the design and construction for their 45M SF industrial and office portfolio.

JCM believes in the principle that it is about the client and the client's needs. We want to understand the client's needs and ensure that they are met or exceeded.

STRENGTH AND STABILITY OF FIRM

JCM's founder, Jett McCormick has a solid reputation and has worked in the Southern California construction and real estate development industry for over 35 years. JCM can partner with other firms as needed to provide required services for any project.

JCM is partnering with Reliant Testing Engineers to provide inspection services and commissioning for this project. Reliant was founded in 2004 by Denise DeGroff and Dr. Sanjay Govil, RCE, GE. Reliant Testing Engineers, Inc. provides professional inspection and engineering services in the areas of construction materials and geotechnical engineering, inspection services, forensics commissioning, and all related testing in their full-service laboratory located within minutes of the project site. Reliant provides services with the highest degree of professional excellence and proficiency. They hold certifications from CCRL, ASHTO, AMRL, Cal Trans, City of LA, Newport, Long Beach and San Diego. Their resources of 80 inspectors and licensed engineers and laboratory technicians are well versed in quality assurance and quality control for municipalities. Their teams' certifications, experience, and knowledge in applicable state and county building code requirements combined with their management plans that are custom tailored to each client's needs are all factors contributing to their ability to meet the requirements of this project.
OVERVIEW OF THE FIRM'S CAPABILITIES IN PROJECT SCOPE

JCM specializes in providing construction management and consulting services for building projects. These services include the expertise to manage, support, and coordinate all aspects of your project. JCM's capabilities include, but are not limited to:

- Ground up Construction
- Major Renovations
- Tenant Improvements
- Contract Management
- Estimating/Budgeting
- Preconstruction
- Value Engineering and Lifecycle Analysis
- Entitlements
- Feasibility Studies
- Agency Review and Permitting
- Constructability Reviews
- Scheduling
- Due Diligence
- Cost Management
- Construction Accounting
- Change Order Resolution
- Sustainable Construction
- Claims Evaluation and Resolution
- Commissioning

Project Types include:

- Commercial Office
- Tenant Improvements
- Major Renovations
- Healthcare/Medical Office
- Retail
- Mixed Use
- Data Centers
- Laboratories
- Infrastructure
- Campus Office
- Land Acquisitions
- Central Plants

JCM will apply this experience to provide best-in-class management services to its clients of all sizes, complexities, and needs. Project experiences range from large office projects, high-rise, mixed-use projects, public works, healthcare, retail, hospitality, renovations, data centers, industrial, infrastructure, and tenant improvements. Specialties: Real estate development and construction, commercial and corporate real estate, pre-construction, sustainable projects, project controls, complicated projects, and more.

PROVIDE A DESCRIPTION OF THREE PROJECTS SIMILAR

JCM has worked on multiple projects that include public agencies, water districts, state and county governments, non-profit organizations, and private companies. The three projects listed below are a sampling of our teams the experience that applies to this project.
Mesa Water District
Administration Building Improvements

4400 Ruffin Road Building Renovation-LBA Realty
Renovation and reconstruction of an office/industrial building. The project included demolition of approximately 200,000 SF of the building replaced by a new 106,000 industrial warehouse. The remaining 130,000 SF of the building was renovated and prepared for new office space. The project included site work, new electrical services, renovations to the mechanical system, new roof, seismic upgrades, new lobbies, elevator, and restroom. Ruffin Road was a multi-phase project with tight budget constraints. The project was completed on time and within budget. Contact: John Garrigan-Principal LBA Realty email: jgarrigan@lbarealty.com

Gonda (Goldschmied) Neuroscience and Genetics Research Center, UCLA - Construction Management services for the construction of a new eight-story laboratory building for UCLA. It was a public project utilizing multiple contractors. As a laboratory building with 40 laboratories, vivariums, and conference areas, the HVAC requirements were significant and complicated. This project was completed on time and within budget. There are no current employees at UCLA that were involved in the project.

Ground Water Replenishment System, Orange County CA - The Groundwater Replenishment (GWR) System is a jointly funded project of the Orange County Water District (OCWD) and Orange County Sanitation District (OCSD) with OCWD as the lead or constructing agency. The GWR System is a water supply project designed to ultimately reuse approximately 140,000 acre-feet per year of advanced treated wastewater (recycled water). The GWR System will supplement existing water supplies by providing a new, reliable, high-quality source of water to recharge the Orange County Groundwater Basin (the Basin) and protect the Basin from further degradation due to seawater intrusion. It will also postpone the need for OCSD to construct a new ocean outfall by treating excess storm flows. The Ground Water Replenishment Project is a public works project. Contact: Mr. Jamine Burrola - MWH America, Inc

OTHER PROJECTS:

<table>
<thead>
<tr>
<th>Project</th>
<th>Client</th>
<th>Project Type</th>
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<tbody>
<tr>
<td>Pavilion 4-TI UCI Medical Campus</td>
<td>UCI Medical</td>
<td>Public Agency</td>
</tr>
<tr>
<td>Tenant Improvement and Clean room</td>
<td>Medtronics</td>
<td>Private Company</td>
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<tr>
<td>Tenant Improvements/Seismic Upgrades</td>
<td>K-1 Speed-Irvine</td>
<td>Private Company</td>
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<tr>
<td>Occupied T.I.-19 Technology Dr.</td>
<td>Stantec</td>
<td>Private Company</td>
</tr>
<tr>
<td>Pretend City-Children's Museum, Irvine</td>
<td>Pretend City</td>
<td>Non-Profit</td>
</tr>
<tr>
<td>Well 115 Replacement Project</td>
<td>IRWD</td>
<td>Public Agency</td>
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<tr>
<td>LAC+USC Replacement Hospital</td>
<td>County of Los Angeles</td>
<td>Government</td>
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<tr>
<td>Westwood Replacement Hospital</td>
<td>UCLA</td>
<td>Government</td>
</tr>
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</table>
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Why Jett Construction Management (JCM)

- First, it is about communication. JCM will ensure that lines of communication are kept open between all team members. It will be documented and maintained for future reference. Open discussions are essential for the project to run smoothly and quick issue resolution. No surprises.

- JCM has experience with all facets of the project: design components, type of construction, project delivery system, phased work and managing occupied remodels. Experience also includes work for multiple public agencies including the State of California, Los Angeles County, the UC system, LAX, and Irvine Water District.

- JCM has primarily focused on tenant improvement projects over the past 15 years. This experience included extensive work in similar buildings to this project when occupied. JCM has familiarity with about any issue that could arise during construction and can apply this experience to the problem. This experience will allow us to quickly assess problems and, working with the contractor, design team, and Mesa Water, come up with solutions. This process will minimize any potential delays or potential extra cost.

- The construction industry is a relationship-based business. JCM has extensive experience with the Orange County construction market working with numerous general contractors, subcontractors, architects, engineers, and other agencies. This experience will be invaluable to ensure the project will attract qualified contractors and subcontractor to bid on the project. The long relationships with many of these contractors will also be beneficial to assist with the resolution of any field issues and potential change orders that might arise.

- JCM, being a local business, will ensure that the Mesa Water Administration Building Improvements and HVAC Replacement Project is its top priority. JCM is only successful if this project is successful.

- JCM is partnering with Reliant Testing who has the specific inspection and testing expertise for this type of project. Reliant provides inspection services such as Inspector of Record for OSHPD Project as well as other public agencies where they function at the Owner's inspection representative in the field. Reliant has provided services on various Federal, state, county, higher education, and other agency projects where the entity provided plan check and inspection services.

- Mr. McCormick had worked with Reliant Testing on various projects when he was at the Irvine Company.
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SECTION 2 - STAFF EXPERIENCE

The organization chart below for the project team indicates the hierarchy and reporting structure for the project. The inspectors will report to Jett McCormick as the Construction Manager. Jett will coordinate with Denise Degroff with Reliant for other inspect services that might be required.

![Organization Chart]

Resumes of each team member are attached in Appendix A and include details of their experience, background, and abilities. Listed below are the specific reasons why each team member is individually qualified for this project and the role they will fill.

**Jett McCormick - Construction Manager** - Mr. McCormick has extensive experience in tenant improvement work, mechanical systems, occupied remodel projects and roofing projects. Mr. McCormick has worked with many public agencies.

**Denise Degroff - Reliant Testing Engineers Project Manager** - Ms. Degroff will assist in coordinating the inspection effort for Reliant Testing Engineers. As President for Reliant, she will ensure the quality of service and support as needed. In this role, Ms. Degroff will not be billable to the project, but as an expert in the field, she can provide additional services if required.

**Jack Lucas - Reliant Testing Lead Inspector** – Mr. Lucas, as a Department of State Architect (DSA) – Class I Project Inspector, will be the lead inspector for the project and can provide inspections for all disciplines. Mr. Lucas has 30 years of experience in the construction industry with 15 years as an inspector. He has completed many renovation projects. He has strengths include submittal verification, pre-installation evaluations, inspection documentation, and quality assurance. Mr. Lucas will be responsible for the coordination of specialty inspectors as required to meet ICC requirements.

**Megan Drewen - Reliant Testing Special Inspector** – Ms. Drewen’s experience range from SHPD, DSA, commercial and municipal projects. She has certification for AWS, ICC, ACI and California Building Inspector. Ms. Drewen has over 5 years in the construction industry.
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Nathan Haley - Reliant Testing Special Inspector – Mr. Haley, has certification for AWS, ICC, ACI and California Building Inspector. He will assist Mr. Lucas with inspection as required. Mr. Haley has over 16 years in the construction industry.

**Current workload**

<table>
<thead>
<tr>
<th>Team Member</th>
<th>Role</th>
<th>Hours/Wk</th>
<th>Start</th>
<th>Finish</th>
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<tbody>
<tr>
<td>Jett McCormick</td>
<td>Construction Manager (0.4 FTE)</td>
<td>16</td>
<td>09/18</td>
<td>05/19</td>
</tr>
<tr>
<td>Other Commitments</td>
<td>Project hours</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No other current commitments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jack Lucas</td>
<td>DSA Class 1 Project Inspector (.33 FTE)</td>
<td>13.2</td>
<td>10/18</td>
<td>04/19</td>
</tr>
<tr>
<td></td>
<td>No other current commitments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Megan Drewen</td>
<td>ICC &amp; CWI multi carded Inspectors</td>
<td>Included above</td>
<td>10/18</td>
<td>04/19</td>
</tr>
<tr>
<td>Nathan Haley</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>On-call services as needed</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SECTION 3-SCOPE OF WORK UNDERSTANDING AND SCHEDULE

Describe the key challenges associated with the project and the firm's approach to overcoming these challenges.

The drawings were not available for review in response to this proposal but, several issues typically come up with this type of project. Below are some of the significant areas of concern to consider.

- **Occupied Remodel**-Most of the staff in the building may or may not be aware this project will impact them. A phasing plan needs to be developed to identify what areas will be worked in to ensure the minimum disruption to the staff and ongoing operations. The phasing plan would outline how the work will proceed, and the duration of each phase. Temporary workspaces will need to be established to accommodate affected staff members of each stage. If Mesa Water requires computers or phones for the interim space, how will this be done and who will do it? Once the draft plan is complete, it will need to be reviewed with all affected staff consideration to ensure individual requirements and other issues. Once all additional input is incorporated, the final plan will need to be included into the contractor's bid documents and issued out to the Mesa Water staff. Once the project starts; continual updates will need to be sent to Mesa Water staff, so they are aware of affected areas, if they will be temporarily relocated and will have adequate notice of when this will occur. Updates should be in the weekly staff update.

- **Phased Construction**-Construction documents are typically developed assuming the work will proceed in a logical order. However, with an occupied building the project will need to be done in phases which can result in work scheduled for an early phase requiring work planned for a later time. Phasing might require temporary piping or out of sequence work. The review will also make sure the contractor does not have to go back into an area just completed.

- **Unknown Conditions**-When construction documents are being prepared field investigations of concealed areas may not always be performed. These investigations may require looking in those areas compared to the plans to make sure there is nothing that would impact the work to be completed as planned. For this project using a ladder and flashlight and looking above the ceiling would be advisable. This investigation could avoid potential delays and extra cost once the contractor is on board.

- **Phased Roofing**-It is our understanding roofing and equipment replacement are concurrent. This phasing will require temporary measures to be considered and incorporated into the bid documents to ensure that a watertight roofing system is in place at the end of each day. This condition will also need to be reviewed with the roofing manufacturer to ensure they will warranty the system with this installation method.

- **Documenting scope not currently on the plans**-Since the work will be performed in an occupied building and phases, not all the requirements of the project may be included in the plans. Examples of this would be temporary protection, cleanup requirements, temporary construction, requirements for maintaining the roof system and touch up or minor repair work.

- **Existing conditions**-Not knowing the age of the conditions throughout the building a review of each area of work to determine if additional work will be required. Can the ceiling tiles be matched? Will touch up paint be required? Can the color be matched or does the area need to be repainted? Is there equipment or furniture that will need to be moved to accommodate
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the construction? Is there other work that may be impacted such as relocating fire sprinkler heads? Many of these requirements can be documented in writing and would not require additional drawings.

- **Documenting the project requirements in the Bid Documents** - As identified above, there may be several items the bidding contractors need to know up front. It is essential to determine that these items are conveyed in the bid documents for the bidders to consider and incorporate into their bid upfront. If requirements are not precise, missing or in an obscure location in the request for bid, Mesa Water may not get complete bids at bid time. Having full and clearly defined documents at bid time will avoid disagreements, delays and change orders during construction.

- **Cutting-edge technology** - The Variable Refrigerant Flow (VRF) HVAC system is a newer technology. Not all contractors may have the needed experience to install it particularly in a working, phased condition. JCM will reach out to the market to identify contractors and subcontractors who have the proper experience with VRF systems to bid on the project. JCM will ensure these contractors are interested in the project and will keep them up to date regarding the project status, so they are prepared to bid the project when the documents come out. The bid documents need to be clear as to ensure bidders have the required experience and JCM will ensure that qualified contractors are bidding. If for some reason a bidding contractor does not have the correct expertise, Mesa Water can find the contractor non-responsive and disqualify them.

**Describe your firm's approach to the work and how it will benefit Mesa Water®.**

*Begin with the end in sight.* Ultimately, it is about completing the project successfully. This process starts by identifying the goals at the beginning that will make the project successful. Once defined, develop a plan to achieve these goals. We think this will include some of the following:

- One time project completion.
- The final cost is within the budget.
- The improvements meet or exceed MWD's expectations.
- As an occupied remodel, minimize disruptions to the District staff and clients.
- No surprises - ensure Mesa Water kept informed.
- Address any unknown field conditions that may arise quickly and resolve it.
- No accidents, everyone goes home healthy at the end of the day.

Reviewing and identifying Mesa Water's goals would be an initial priority of JCM. A Success Plan will be developed to determine what steps will be taken to achieve the goals. Many of them may have overlapping action items. We will identify the most efficient way to accomplish each task. This Plan will include elements to incorporate in the bid documents for the general contractor, processing of submittals and RFI's, procedures on how to manage potential change orders, the MWD communication plan, and more.

An example of what can be done to achieve these goals is to develop a weekly project update. This update would be distributed to MWD staff keeping them informed of the project status and upcoming work. The report would be a one-page document including the accomplishments from
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the past week and the plan for the next week. If critical activities are coming up like staff relocations, highlight them more than a week out. The update would include the status picture(s) or logistics plan. If there are pertinent facts or issues the staff should be aware of, add them. This simple update would keep all informed and engaged in the project. JCM has successfully used this type of update on several projects.

A successful outcome starts with having a clear Success Plan for completion at the beginning of the project outlining what will make this a successful project for Mesa Water.

The Processes to Provide Quality Deliverables

The first step is to understand what Mesa Water wants to receive. Then determine who will provide the deliverable. The contractor would provide many of the standard items like a schedule update, change order logs, submittal and RFI logs. The frequency and detail of these reports would be determined, and incorporate these requirements into the bid documents. JCM will ensure that reports, schedules or logs provided by the contractor are complete and accurate. The contractor will be required to update information that may be incomplete or not accurate.

There are a few deliverables that should come from the construction manager which are typically an evaluation of information from the contractor. Weekly updates from the contractor for the logs, issues, and other information will be reviewed and evaluated with a summary update to MWD.

Monthly status reports should never include surprises. It should be a summary of the information provided in the last month with a projection of the upcoming work. The monthly report would consist of a status update of the Success Plan, issues to be resolved, schedule updates, budget report, cash flow, and other required information. A summary analysis of each is needed to state the status explicitly so, and the reader should not have to interrupt the information included. The monthly report would contain detailed information and would have an executive summary to provide a quick update of the project status. Typically, the executive summary will include all needed information. However, if the additional detailed information is necessary, it would be covered as well.

The typical monthly status reports should start with, “The project is proceeding on schedule, within budget, with no significant issues.” If there are issues requiring resolution, a solution or plan to resolve will also be provided.

Understanding the Scope of Work

Below is JCM’s understanding of the project purpose and scope of work requested for the project. Appendix C to the contract outlines in detail the requirements of the project. Below is a summary of JCM’s understanding of the scope of work.

Project Purpose: The project is being undertaken to replace an aging HVAC system with a new Variable Refrigerant Flow (VRF) system in both the Administration and Operations buildings. The Project will include replacing the roof with a new roof and replacing the large skylight in the administration building.
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The Scope of Work:

Program Management

- Provide program management that includes conducting regular meetings and providing updates to Mesa Water District as to the status of the project. The CM will ensure open lines of communication with MWD, contractor, and design team. The CM will work under the direction of the MWD project manager and become familiar with the District policies and processes to ensure compliance with the District’s requirements.

- Develop a Success Plan to incorporate Mesa Water’s goals and plan on how to achieve these goals.

- Facilitate and conduct Owner, Architect, Contractor meeting includes the initial kick-off meeting and ongoing weekly progress meetings. The CM will be responsible for the development of the meeting agenda, updates of logs, schedules, and other required information. Ensure the meetings are documented by meeting minutes and promptly distributed.

- Maintain an overall project control process. Track ongoing project costs, change orders and contracts. Review and process applications for payment including all information required by the contract. Follow for, and review, the contractor’s certified payroll records.

- Prepare and issue monthly reports documenting the project status and any outstanding issues. Provide other documents and information that may be requested by Mesa Water.

- Assist with presentations and presentation information for Board presentation. Assist with presentation material required for staff distribution.

- Develop a Construction Management plan that will include the project organization structure and duties, safety, risk management plan, inspection requirements and process. The Plan will address the document management process and retention, and the closeout process and strategy to complete the closeout quickly.

- The construction manager will perform the scope of work as outlined and other job-specific functions to oversee the construction activities. The work will be conducted on an hourly basis as described.

Construction Administration

- The construction manager will be responsible for the daily management of the project and support the Mesa Water staff.

- CM will be responsible for reviewing, processing, and tracking RFIs and submittals and track for a timely response from the design team.

- Obtain and monitor the contractor’s Quality Assurance program.

- Review and provide recommendations on substitution request considering cost, schedule, and value.

- Review and monitor contractor’s resource projections. Advise Mesa Water if the contractor is not providing proper resources and the proposed corrective action.

- Ensure the contractor has a CAL-OSHA compliant safety program and they are enforcing the program requirements and provide notification of safety issues. CM is to furnish its own PPE.
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- Ensure the contractor has an Emergency Response Plan that is CAL-OSHA compliant.
- Conduct regular site security and walks. Ensure the site is safe, notify the contractor if issues are noted, follow up for corrections.
- If environmental issues are present, ensure all required permits are issued and work completed.
- Provide comprehensive cost and schedule controls for the project. This review will include evaluating the contractor’s baseline schedule and updates and provide schedule analysis. Maintain a cost control system to track the overall project cost and cash flow.
- Issue monthly reports to provide a comprehensive overall status and corrective actions if issues exist.
- Review and recommend approval of contractor’s invoices. Verify it complies with the requirement of the contract.
- Review and recommend action for contractor change order requests including both cost and schedule impacts.
- Monitor the potential of contractor delays or claims. Provide analysis and recommendations on how to minimize any impacts or its validity to Mesa Water. If a claim is submitted, coordinate relevant documentation and analysis. Provide prompt responses and recommendation for acceptance or action.
- Monitor any work performed on a time and material basis.
- Review contractors change order requests and perform an independent estimate of the work, schedule impact, validity of the change, and recommendation for further action.
- The construction manager will be responsible for the written documents, correspondence and maintaining a document management system. These documents will include RFIs, RFCs RFPs, submittals and other correspondence. Receive and provide to Mesa Water project notices. Organize documents in a format approved by Mesa Water.
- Maintain and ensure the contractor is maintaining as-built documentation. Approval of contractor's payment application would be contingent upon the proper documentation of the as-built documents.
- Maintain hard copy records as required, turn over to Mesa Water at project completion.
- Follow for, review, and turn over to Mesa Water O&M manuals, spare parts, attic stock, and other close-out documents.

**Inspection**

- An ICC certified inspector will provide inspection services.

**Equipment and System Testing, Start-Up, and Training**

- Work with the contractor and Mesa Water to provide startup and commissioning plans. Coordinate with the contractor for scheduling the work and documentation of the process. Follow up for any corrective actions.
- Coordinate with the contractor to develop and provide training as required for Mesa Water staff.
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Construction Contract Close Out

- At the onset of the project, request from the contractor a log of all the closeout submittals to be provided. Review with Mesa Water and design team for acceptance. This log shall include warranties, as-buils, attic stock, tools, and training.

- Coordinate a final punch walk within seven days after substantial completion. Verify if the work meets the requirements. If so, develop and issue a final punch list.

- Conduct a final review of as-built documents. Submit to the design team for review within 14 days of Substantial Completion. Follow up with the contractor for any corrections. Transmit the final as-buils to Mesa Water.

- Within seven days after substantial completion, request a final submittal of any outstanding change orders and a final payment application. Resolve as required.

- Finalize the project. Provide a final report document for the project, turnover all documents both digital and hardcopy, including all contractor close-out documents, and demobilize within 14 days after completion.

The typical monthly status reports should start with, “The project is proceeding on schedule, within budget, and no significant issues.” If there are issues requiring resolution, a solution or plan to resolve will also be provided.

Schedule Management

It is critical to the success of a project to monitor and track the project schedule continually. The design team develops plans and specifications to describe for the owner and contractor what the project looks like and how it will function, but they do not tell you how to build the project. As crucial as these documents are, the project schedule is just as important. It will be critical to have a well thought out schedule for the Administration Building Improvements and HVAC Replacement Project. It will require the contractor to work in an occupied building requiring phasing, limited access, and understanding that other activities like relocating employees will affect their work. There is significant time and effort put into developing the design documents. A similar effort is required to create the project schedule. The following steps should be taken to ensure the project schedule is appropriately prepared, tracked, and updated.

1. The Request for Bid issued to the contractor should include all of Mesa Water’s constraints and requirements for the project. The plans and specification include information on the physical work, but generally do not include other conditions such as logistic information, phasing requirements, and on-going operational limitation. Each of these issues will have time and money impacts on the contractor bid. The contractor will evaluate these requirements as they are pricing the project and they must be required to incorporate them into as they are developing their schedule.

2. The requirements of how to develop the schedule must be in the bid documents including types of activities, length, conditions for logic ties, cost loaded, the frequency of updates, changes in the work, report format, and other requirements.

3. After the award of the contract, with items 1 and 2 included in the bid documents, a kick off meeting would be held with the contractor to review the requirements and how they are going to put the schedule together.
4. Review the proposed schedule for conformance to the requirements and that it includes all the work. Activity lengths are not too aggressive, the logic makes sense, there are no unnecessary ties, and owner activities that could affect the work are in the schedule. Include Activities for long lead items and critical submittals. The critical path and subcritical paths should be reviewed in detail as this is where delays will arise. If it is not acceptable or needs correction, return it to the contractor for further action. If accepted, this should be in writing as well. The contractor needs to provide a live, digital file of the approved baseline schedule for its records.

5. Review the schedule on a weekly basis to ensure compliance and what work is coming up in the next few weeks. If there are potential schedule issues that arise, discuss and resolve them as quickly as possible. Agree to any needed changes before they are made.

6. Approval of the contractor’s payment application should be contingent with the monthly schedule submittal. Compare the schedule to the baseline schedule, verify actual starts and finish dates, and remaining durations. It needs to be reviewed with the contractor and the Mesa Water’s PM to understand any variances, status, and any potential risks. Compare the schedule and the payment application completion percentages. A live digital file should be submitted to Mesa Water once it is accepted.

7. If changes arise, the contractor must notify the owner of any potential impacts to the schedule. This notice should be discussed as a group to determine if there are workarounds to avoid or minimize any effects. The CM should advise Mesa Water of any direction or response to the contractor. This communication should be in writing. When the change order request is submitted, the contractor should provide a schedule fragment of affected activities with a written explanation of the impact.

8. Written notices are important. The contractor is required to notify Mesa Water of any potential delays. It is also essential that Mesa Water and the CM provide written notice to the contractor if they are not following the schedule, they are causing delays, or they take other actions or inactions that could affect the project. By actively monitoring and managing all activities, impacts will be kept to a minimum and avoid potentially more significant problems later.

9. Take pictures. Weekly photos provide visual documentation of that project’s status. They can be used to document damage, status, and safety issues. They can provide documentation to review change orders and delays that may come up later.

10. Keep track of submittals. The submittal schedule is a subset of the project schedule. Materials and equipment cannot be released until their submittals are approved. A list of all submittals should be provided immediately after the contract award, so all can agree on the submittal list. The submittal log needs to be tied to the schedule when items are due in the field. Monitor submittals to make sure they are submitted on time or early. For critical or complicated submittals, allow time for resubmissions. Notify contractor if submittal items are late. Monitor the design team to ensure they are reviewing submittals in a timely matter.

11. Create the close-out plan. Make sure the activities required to close out the project in the field are in the schedule including final inspections, punch list and punch list completion, training, and demobilization.

actively managing the schedule, starting with the bid documents through completion, will avoid claims, delays, surprises and will minimize change orders.
Conclusion:

Jett Construction Management (JCM) and Reliant Testing are excited about this opportunity. We look forward to discussing our services with Mesa Water. We have a comprehensive understanding of the project requirements and are the best-qualified team for the project. Our team has extensive experience and looks forward to discussing other creative solutions for the successful completion of the Administration Building Improvements and HVAC Replacement Project.
APPENDIX A
RESUMES OF KEY STAFF

Include resumes of key staff, including subconsultants staff. Limit each resume to two pages. Resumes are not included in overall page count.
Jett McCormick, LEED AP

Jett McCormick founded of Jett Construction Management (JCM) to provide best in class project management and construction management services for its clients putting them first. Mr. McCormick has over 35 years of experience on the Southern California real estate development and construction market.

Skills and Qualifications

- Proven track record of completing projects on time, within budget, and without issue.
- Management of all size projects and complexity ranging from tenant improvements to large multi-phased developments, ground up, and renovations, brownfield, and urban environments.
- Preconstruction experience includes master planning, entitlements, code analysis, due diligence evaluations, design management, estimating, financial analysis and tracking, project scheduling, and issues resolution.
- Experience with multiple project control systems including development and implementation. Successfully managed electronic document imaging and control systems, web-based and multi-organizational systems, job costing, accounting, scheduling, estimating and issues tracking systems.
- Management of large project teams

Accomplishments

- Management projects totaling over $2.0B of multiple types, sizes, and delivery methods.
- Excellent record of managing tight schedules to deliver projects on time and within budget. All projects have met or exceeded financial expectation with most resulting in repeat business.
- Completed largest privately funded LEED-Gold project in the US when constructed.
- Completed other LEED projects for Existing Buildings and Commercial Interior.
- Develop policies and procedures to create more efficient and cost-efficient systems.
- Developed paperless document management and control systems on multiple projects.
- Managed the first construction project to achieve Cal OSHA Voluntary Protection Program Star Status.
- Claims management on multiple projects to manage and resolve contractor claims.

Notable Project Experience

Tenant Improvement Projects

- Blizzard Entertainment Corporate Campus Tenant Improvements (235,000 SF) & site work-Irvine, CA
- Microtherapeutics Headquarter & Manufacturing Cleanroom (96,000 SF) (Medtronic)-Irvine, CA
- Eaton Aerospace Headquarter, R&D and Manufacturing Facility (140,000 SF)-Irvine, CA
- K1 Speed Racing build-out and building seismic improvements-Irvine, CA
- Pretend City-Children’s Museum, Irvine CA
- Broadcom Headquarter Projects Various, Irvine CA
- Printronix Corporate Headquarters and Distribution Facility (85,000 SF)-Irvine CA
- Staco Systems Headquarters, R&D and warehouse Facility, Irvine CA
- Lending Tree, Irvine Various Projects, Irvine CA
- Anchen (Par) Pharmaceutical Headquarter, R&D and Manufacturing Facility, Irvine CA
- Toyota South Campus Tenant Improvements (600,000SF), Torrance CA
- Glendale Adventist Physicians Terrace Office Buildout (70,000 SF)-Glendale CA
- Universal Studios-Mail and Security Facility-Los Angeles, CA
• Numerous ADA and Capital Improvement projects
• Numerous Spec and Market Ready Suites

Major Renovation Projects
• One Culver-Major Exterior and Interior Renovations of an 8-store office building, Culver City CA
• 4400 Ruffin Road-Partial Demolition, Renovation & Industrial building addition, San Diego
• Pacific Financial Plaza Campus Redevelopment. Newport Beach Calif.
• Lakeview Technology Park Redevelopment, Irvine CA
• Bake Technology Park Redevelopment, Irvine CA
• Pacific Arts Plaza Campus Redevelopment. Costa Mesa Calif.
• Exodus Communications – LA3 Data Center (106,000 SF), El Segundo,
• LAC+USC Medical Center Campus Northridge Earthquake Recovery

Ground Up Construction
• Kaiser Diamond Bar Medical Office Building (35,000 SF), Diamond Bar, Calif.
• Mission Hospital – Education & Conference Center, Mission Viejo, California
• Toyota Motor Sales, South Campus (627K SF and 38 Acres), Torrance, California
• UCLA Gonda Neuroscience Research Center, Los Angeles, California
• San Diego Convention Center-Phase II, San Diego, California
• Harlan Road South Industrial Development (517,000 SF), Layton CA
• Schulte Industrial Development (490,000 SF), Tracey CA
• Glendale Adventist Physician Medical Office Building and Garage, Glendale, California
• San Bernardino Community Hospital Acute Care Addition, San Bernardino, California
• Los Angeles International Airport Terminal 2, Los Angeles, California
• American Honda Corporate Headquarters-Phase I, Torrance, California

Additional Projects:
• UCLA Westwood Replacement Hospital, Los Angeles, California
• LAC+USC Medical Center, Los Angeles, California
• LAC+USC Central Support Facility, Los Angeles, California
• Disneyland-Grand Californian Hotel, Anaheim, California
• Library Square Tower (US Bank Building, Los Angeles, California
• The Gas Company Tower, Los Angeles, California
• Universal Studios-Central Security and Mail Facility, Los Angeles, California
• Westwood Gateway Towers II and III, Santa Monica, California

Education/Certifications

University of Southern California-BSCE (Building Science-Civil Engineer & Architecture)
USGBC-LEED AP 2006

Affiliations
• Commissioner 5th District - Orange County Planning Commission 2014- 2018
• Board of Directors Ladera Ranch Civic Council (Founding Member) 2008-2017
• Board of Directors U.S. Green Building Council Orange County Chapter 2007-2011
PROFESSIONAL EXPERIENCE
Ms. DeGroff-Coffey has more than 35 years' experience in both the private and public sectors of the construction industry. She has worked in project management, field supervision and senior corporate management. Ms. DeGroff-Coffey is well versed in providing support and review of project correspondence and field reports for compliance with project plans, specifications, the California Building Code (Title 24), and the Uniform Building Code.
Ms. DeGroff-Coffey has both a strong practical background in this very technical field, as well as a sharp focus on client relationship management. This unique blend of skills has resulted in Reliant's very loyal client base. In addition to overall operational responsibilities of the firm, she leads the company's growth initiative.

CORPORATE CULTURE
Ms. DeGroff-Coffey also leads Reliant's focus on giving back to the community. Reliant's involvement reaches from pro bono services for fire training facilities, Habitat for Humanity, HomeAid OC, The Blue Heart International to end human trafficking, Fairway to the future – Sutter Hospital, CASA, Freedom Writers and The Military Children’s Charity.

Relationships Built to Last

- The Irvine Company
- Disneyland Resort
- Sares-Regis Group
- Prologis
- Fullmer Companies
- Nordstrom
- Providence Holy Cross
- Tenet Healthcare
- Northgate Markets
- Bristol Farms
- Jones Lang LaSalle
- Pacific Industrial
- Duke Realty
- CW Driver / Driver SPG
- Associated Ready Mix
- Procast Precast Concrete
- Shea Development
- HCR Manor Care
- KPRS
- Newcastle Partners
- Howard CDM
- The Beverly Center
- RM Dalton
- Smith & Severson
- Alston
- Cannon Building Services

REGISTRATION
- ACI Field Technician
- Radiation Safety Officer
- Nuclear Density and Moisture Operator

PROFESSIONAL AFFILIATIONS
- Member, American Concrete Institute
- Member, California Council of Testing & Inspection Agencies
- Member, Sales Marketing Professional Services (past board member)
- Member, NAIOP

WORK HISTORY
- Reliant Testing Engineers, Inc., President 2004 – Present
- QAI, Inc., President 2001 – 2004
- Twining Laboratories, Inc. Executive VP 2000 – 2004
- Bernards Brothers, Construction Manager 1999 – 2000
- Master Development Corp, Project Manager 1996 – 1999
- Arciero Brothers, Inc., Project Engineer 1983 - 1993

♦ Special Inspection ♦ Geotechnical ♦ Materials Testing ♦ GPR/X-Ray ♦ FF/FL ♦
JACK LUCAS

QUALIFICATION HIGHLIGHTS

- Inspector of Record with experience in capital improvement projects of varied project delivery methods including traditional GC, CM-GC, CM-MultiPrime, and Design-Build.
- Administration of the California Building Code (CBC), referenced standards, and project specifications.
- Emphasis on pre-installation evaluation and specification verification with a goal of overall quality assurance.
- Encourages teamwork, partnering, and open communication between all parties to facilitate early identification and resolution of constructability or code issues.
- A willingness to participate in problem solving to keep the project moving forward.
- Coordination of material testing and specialty inspectors that assures high quality and high value inspection to the owner.

INSPECTION EXPERIENCE

Newport Mesa Unified School District (2013 to 2018)
Costa Mesa, California

As DSA Project Inspector, projects include:

- Wilson Elementary School HVAC Modernization & Administration Upgrades
  - New HVAC systems added to classrooms and administration building, a remodel to the administration building, and ADA site upgrades.
- Costa Mesa High School Enclave Buildings
  - CM-GC delivery. 17,000 ft², 2-story structural steel STEM emphasis classroom buildings for 7th & 8th grade students constructed from July 2013 to July 2014.
- Adams Elementary School HVAC Modernization & Administration Building Upgrades
  - New HVAC systems added to classrooms and administrations buildings, a remodel to the administration building, and ADA site upgrades.
- Woodland, Mariners, Back Bay, Kaiser Elementary Schools Photovoltaic (PV) System
  - Underground, structural, and electrical inspection for parking & lunch PV Structures for four schools.
Coast Community College District  
Costa Mesa, California  

As DSA Project Inspector, projects include:

- OCC Consumer, Health Science and Biology Labs
  - CM/Prime delivery. Three buildings, 83,000sf2, structural steel and concrete shear wall, Type II construction. An Allied Health building with an EMT training facility and instructional radiology and respiratory hospital suites that include a working medical gas system, respirator stations, x-ray facility, and sleep lab. A five chair state of the art dental suite and dental laboratory. The Biology building has laboratory suites with adjacent prep rooms, fume safety hoods, a Bio-Safety hood, walk-in refrigeration, autoclaves, a Prosecution Lab, Plastination Lab, and a Phoenix Air Control System in all laboratory rooms. Construction Budget: $35,000,000

- OCC Sailing & Rowing Center Remodel
  - CM/GC delivery. Two Story CMU and Wood Frame Type V Building. Demolition & reconstruction of Sailing & Rowing Facilities required injection soil stabilization for liquefaction mitigation, unanticipated shoring adjacent structures and City property, and extensive shoring of existing structures. Construction Budget: $3,200,000

- OCC Learning Resource Center
  - CM/Prime delivery. An 89,000sf2 two story, structural steel moment connection and braced steel frame, Type II construction, B occupancy. A campus gathering place that includes the Campus Library, computer labs, group study rooms, and large open individual study room with spaces for more than 1000 occupants. The entire building is Cyber connected for both hardwire and wireless service. Construction Budget: $25,000,000

- OCC Art’s Pavilion & Café
  - CM/GC delivery. An 8,500sf2, CMU and Structural Steel, Type II construction, A-3 occupancy. A stand-alone gallery adjacent to the OCC Art Center. A multi-level security system and a pre-action fire suppression system fill special needs of high security and a high level of property protection. An onsite Café is built out with a tenant improvement for Starbucks Coffee Company. Construction Budget: $2,500,000

- Coastline Westminster Learning Center
  - A 42,000sf2 multipurpose community college classroom & office center. Two story, structural custom CMU / structural steel frame, Type V-N construction, B occupancy. Three buildings with instructional rooms, art and science labs, a courtyard plaza with a water feature, and a connecting walkway bridge between buildings. Project Budget: $11,000,000

EDUCATION
Associate in Arts Degree - Orange Coast College - Costa Mesa, CA
Civil Technology Certificate
Construction Technology Certificate | Coastline College – Fountain Valley, CA
Surveying and Mapping Certificate

● Special Inspection  ● Geotechnical  ● Materials Testing  ● GPR/X-Ray  ● FF/FL
PROFESSIONAL EXPERIENCE

Ms. Megan Drewen, joined the Reliant Team in 2016. Her project experience ranges from OSHPD, DSA, commercial, retail, and municipal.

She possesses excellent plan reading skills, extensive knowledge of current building codes including California Building Code, and computer literacy. Megan Drewen uses Reliant's iPad reporting system, enabling her to deliver daily reports from the field as well as keep running tabs on current work being performed.

In addition to field inspections, Ms. Megan Drewen has been instrumental in growing Reliant's Southern California presence. She has always been an exemplary inspector on any project he has been a part of.

RECENT REPRESENTATIVE PROJECTS

**Providence Holy Cross – Mission Hills**
- Provided special inspection for trash compactor renovation and lab renovation
- Reinforced concrete and CWI welding inspection.

**Providence Saint Josephs**
- Fire panel installation.
- Reinforced concrete special inspection.

**Valley Presbyterian Hospital**
- Pharmacy renovation, roof replacement, and ED renovation.
- Reinforced concrete, CWI welding, fireproofing inspection.

**Hollenbeck Palms Skilled Nursing Facility**
- Duct support replacement, dining room extension.
- Reinforced concrete, CWI welding inspection.

**New Vista Post-Acute Care Center**
- Parking bollard replacement.
- Reinforced concrete inspection.

**Century City Hospital**
- Perimeter wall renovation, Mechanical room renovation.
- Fireproofing, reinforced concrete inspection.

**Fountain Valley Hospital**
- Parking Lot, Reinforced concrete inspection.

**Sherman Oaks Hospital**
- ER Renovation, Nurse call replacement, CA commercial building inspection

EDUCATION
- California State University-Long Beach

CERTIFICATIONS
- AWS Certified Welding
- ICC Reinforced Concrete
- ICC Structural Masonry
- ICC Welding and Bolting
- ICC Spray Applied Fireproofing
- ACI Grade 1 Field Technician
- Fyfe Fiber Wrap Certification of Completion
- CA commercial Building Inspector
PROFESSIONAL EXPERIENCE

Mr. Nathan Haley brings over 16 years of experience from the construction industry. He has served as an inspector on numerous large-scale projects.

He has been working as a special inspector on concrete, pre-stressed concrete, masonry, structural steel/welding, Fiber reinforced construction for commercial, and residential projects.

Mr. Haley has excellent communication, plan reading skills as well as extensive knowledge of up to date building codes.

RECENT REPRESENTATIVE PROJECTS

Newport Mesa USD, Costa Mesa High School – Costa Mesa
- FRP repair of gymnasium beams.

Fountain Valley Regional Medical Center Utility and Generator Upgrade
- Provided epoxy dowel inspections.

Pacific Arts Plaza Parking Structure
- 110k square foot, 350 car, 3 level parking structure in Costa Mesa with post tensioned decks, caissons, and masonry accents.

Disneyland Resort
- Performed concrete, welding and masonry inspection for various locations in and around the resort. Most notably the Matterhorn track replacement and rehab, Rivers of America track installation and 400 block restoration.

Whole Foods Site Improvement-Fashion Island
- Performed concrete, epoxy, masonry, welding and FRP installation inspections throughout Fashion Island Newport Beach.

630 Newport Center Drive Expansion
- Performed continuous concrete, post tension concrete, masonry, and fiber reinforcing installation for the expansion of a 3-level parking structure near Fashion Island Newport Beach.

Hill Resort Villas, Hotel, Recreation Center, Newport Coast, Ca
- 1.5 Years as Inspector of Record overseeing all concrete placement, PT slabs, CMU buildings, pool shotcrete and related site work.

CERTIFICATIONS
- AWS Certified Welding
- ICC Reinforced Concrete
- ICC Structural Masonry
- ICC Structural Steel Welding and Bolting
- ICC Pre-Stressed Concrete
- ICC Spray Applied Fireproofing
- ACI Grade 1 Field Technician
- TYFO Manufacturers
- CA commercial Building Inspector

CITY LICENSE
- City of Irvine
- City of Newport Beach
- City of Orange
- City of San Clemente
- City of Tustin
- City of Dana Point
Appendix B: Professional Services Agreement Acceptance Form

Firm Name: Jett Construction Management

Address: 29 Salinger Court

City Coto de Caza State CA Zip Code 92679

Telephone: 949-283-0007 Fax:

I have reviewed the RFP and Professional Services Agreement in their entirety. Our firm will execute the Professional Services Agreement with no exceptions.

Name of Authorized Representative: Jett McCormick

Signature of Authorized Representative:

Date: August 28, 2018
MEMORANDUM

TO: Board of Directors
FROM: Phil Lauri, P.E., Assistant General Manager
DATE: October 11, 2018
SUBJECT: Programmable Logic Controllers and Supervisory Computer System Assessment

RECOMMENDATION

Award a contract to TJC and Associates, Inc. in the amount of $70,050 and a contingency of $15,000 for a not-to-exceed amount of $85,050 to provide a Programmable Logic Controllers and Supervisory Computer System Assessment, and authorize execution of the contract.

The Engineering and Operations Committee reviewed this item at its September 18, 2018 meeting and recommends Board approval.

STRATEGIC PLAN

Goal #1: Provide a safe, abundant, and reliable water supply.
Goal #2: Practice perpetual infrastructure renewal and improvement.

PRIOR BOARD ACTION/DISCUSSION

At its August 21, 2018 meeting, the Engineering and Operations (E&O) Committee received an information item that a Request for Proposals for a Programmable Logic Controllers and Supervisory Computer System Assessment was being solicited.

BACKGROUND

Mesa Water District’s (Mesa Water®) supervisory computer system was installed in 2012/2013. The supervisory computer system consists of 37 sites at the Mesa Water Reliability Facility (MWRF), wells, reservoirs, import stations, and pressure stations that send operational and control data via radio to three data concentrator sites located at Mesa Water’s main headquarters building, the MWRF, and Reservoir 2. The three data concentrators are the backbone of the system and are connected by three radio antennae. The supervisory computer system includes several servers for control programming, software application functionality, data historian’s management (located in the Emergency Operations Center as well as at the MWRF), three radio antennae, and numerous programmable logic controllers (PLCs) and Remote Terminal Units (RTUs). Like all computer equipment, the electronic components have a finite life expectancy and require on-going assessment and replacement as end-of-life is reached.

Mesa Water received a notice from Schneider Electric that its Modicon Quantum PLCs and Input/Output (I/O) modules will no longer be supported nor available for purchase from Schneider Electric. The MWRF has three PLCs installed around the year 2000 for the original Colored Water Treatment Facility that used this now obsolete Modicon Quantum hardware. In order to maintain the overall viability of the supervisory computer system as its components reach end-of-life, a complete assessment of the supervisory computer system is needed.
Discussion

A Request for Proposal (RFP) for a PLC and Supervisory Computer System Assessment to systematically plan for end of life of the Mesa Water supervisory computer system components was developed to initiate a replacement plan and schedule for those systems. The RFP was developed by staff with input from Mesa Water’s SCADA Integrator. Key tasks include:

1) Inventory Mesa Water’s supervisory computer system main components (i.e., PLCs, Central Processing Units (CPUs), RTUs, data concentrators, etc.);

2) Identify critical hardware components and supporting software; and

3) Develop an end-of-life replacement plan for all hardware and software.

Industry-leaders in the supervisory computer system arena to receive the RFP were identified by reaching out through the American Water Works Association and International Society of Automation. The RFP was sent to the following seven consultants: Aspect Engineering Group (Aspect), Brady, Brown and Caldwell, Carollo, HDR, TJC & Associates, Inc. (TJC), and Westin. Four proposals were received. The cost proposals are shown in the table below:

<table>
<thead>
<tr>
<th>Proposer</th>
<th>Submitted Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>TJC</td>
<td>$48,230</td>
</tr>
<tr>
<td>Westin</td>
<td>$48,424</td>
</tr>
<tr>
<td>Brady</td>
<td>$46,988</td>
</tr>
<tr>
<td>Aspect</td>
<td>$52,670</td>
</tr>
</tbody>
</table>

Two finalists, TJC and Westin, were interviewed based on their proposals. Both finalists are industry leaders with strong references and California-based staff. TJC’s approach, experience, and project organization is more in alignment with Mesa Water’s scope of work requirements than Westin’s project delivery approach. TJC’s organization focused on a seasoned Project Manager with strong technical and client satisfaction skills who would be directing technical mid-level staff and reviewing deliverables. Westin’s organization had a non-technical Project Manager and put Mesa Water in charge of managing the individual technical team members. TJC’s organization was preferred as it provides a smoother path to a successful outcome. TJC also had a slightly lower cost than Westin, and is recommended as the best value selection. TJC’s proposal in response to the RFP is provided as Attachment A.

After the proposals were evaluated, it was noted and recommended by the Consultant that a complete network architecture diagram to describe the Supervisory Computer System had never been developed and would be helpful for future system management. In addition, the key components of the Supervisory Computer System, including the radio communications system and the supervisory control computer hardware were recommended to be assessed to ensure a complete end of life plan that includes these key components and to ensure all equipment remains compatible during the phased equipment replacements. Evaluation of these components was added to the scope of work; TJC’s revised cost proposal is $70,050. TJC’s revised scope of work
and fee schedule is provided as Attachment B. Staff recommends that the Board consider
awarding a contract to TJC for $70,050 and a contingency of $15,000 for a not-to-exceed amount
of $85,050.

FINANCIAL IMPACT

In Fiscal Year 2019, $100,000 is budgeted for the Mesa Water Reliability Facility PLC
Replacement Study; no funds have been spent to date.

ATTACHMENTS

Attachment A: TJC and Associates, Inc. Proposal
Attachment B: TJC and Associates, Inc. Revised Scope and Fee, Redline
Proposal for
PLC Assessment

July 11, 2018

TJC and Associates, Inc.
2890 North Main St., Suite 303
Walnut Creek, CA 94597
(925) 357-2676
www.tjcaa.com
July 11, 2018

Karyn Igar, P.E.
Senior Civil Engineer
Mesa Water District
1965 Placentia Avenue
Costa Mesa, CA 92627

Subject: Proposal for PLC Assessment

Dear Ms. Igar:

On behalf of TJC and Associates, Inc. (TJCAA), we wish to thank you for the opportunity to submit our proposal for the District’s PLC Assessment Project. TJCAA is excited about our involvement in this effort, as it is particularly well suited to our firm’s capabilities. We believe that our team’s qualifications will provide the following benefits to the District:

Applicable Experience: Our experience in both design and programming makes us uniquely qualified to assess existing control systems and make recommendations for replacement that will meet the District’s needs over the long-term. Having performed dozens of PLC upgrade projects we have learned valuable lessons that provide our clients with the knowledge necessary to make intelligent decisions in selecting equipment and adopting standards.

Technical Expertise: As Project Manager, I bring over 30 years of system integration experience. I am supported by our staff of qualified engineers and technicians including our Project Engineer, Lee Meyer, P.E., and Helen Tran, our Senior Control Systems Technician. We bring a wealth of experience on design and programming projects and have provided similar work for several other clients throughout California. This technical breadth benefits the District because we consider design elements from electrical wiring through SCADA configuration and startup.

Client Focused: Having supported a wide variety of water industry clients over the past decades we have become well adept at developing solutions that are specifically designed and tailored to meet our client’s needs. Our designs and software are always developed based on feedback from client stakeholders and maintaining defined client standards.

Again, thank you for the opportunity to submit this proposal. Should you have any questions regarding this proposal please do not hesitate to call or email me (michael@tjcaa.com) or Paul Giorsetto (paul@tjcaa.com). We can be reached in our Walnut Creek office at (925) 357-2676.

Sincerely,

Michael J. Erwin, P.E.
Principal, Project Manager
TJC and Associates, Inc.
Section 1: Firm Overview

1.1 FIRM BACKGROUND

TJCAA is a small business enterprise, providing engineering services to both end users and other engineering firms. TJCAA supports clients throughout California and the western United States. Founded by Terence Cavanagh, S.E. and Gianna Zappettini as a structural engineering firm in 1998, TJCAA expanded in 2006 to offer multidiscipline design solutions in Structural Engineering, Electrical Engineering, and Instrumentation and Control (I&C).

TJCAA’s head designers, Terry Cavanagh and Paul Giorsetto, each provide over 30 years of experience, respectively, in delivering creative solutions for special districts, municipalities, and commercial/industrial clients. The TJCAA team provides expertise in design of structural, I&C, and electrical infrastructure for water and wastewater treatment plants, pump stations, and support facilities.

In 2012, Mike Erwin joined the TJCAA group. Mike brought to bear his 30-plus years of experience as a designer and system integrator working on control systems in the water and wastewater industry. Mike has been the point person for expanding TJCAA services to include Control System Programming (CSP) to our suite of services. Our CSP group, with its growing staff of system programmers, brings a combination of PLC and SCADA programming skills coupled with design and field experience to implement practical and effective CSP solutions.

1.2 CONTROL SYSTEMS PROGRAMMING GROUP

TJCAA’s Control Systems Programming group is comprised of engineers and programmers with real-world knowledge and a deep understanding of process control for the water industry. From configuring SCADA servers to calibrating instruments our CSP group offers a unique blend of qualifications and hands-on experience to meet our client’s most challenging needs.

TJCAA has designed, programmed, and implemented scores of PLC, RTU, and I/O upgrade projects. These experiences have enabled us to develop a set of best practices, design tools, and programming methods that ensure successful projects.
Section 2: Firm Qualifications

2.1 PROJECT DESCRIPTIONS AND REFERENCES

We take pride in the relationships we have established with our clients, and in the many successful projects we have performed over the years. Below are three references for relevant projects we have completed during the last five years. We encourage you to discuss our firm’s excellent service with our clients.

<table>
<thead>
<tr>
<th>Client Reference</th>
<th>Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alameda County Water District</td>
<td>Treatment Plant 2 PLC Upgrade Project – Phases 1, 2 and 3</td>
</tr>
<tr>
<td>Team Members Involved:</td>
<td>Michael Erwin, P.E.</td>
</tr>
<tr>
<td></td>
<td>Lee Meyer, P.E.</td>
</tr>
<tr>
<td></td>
<td>Jacqueline Arama, P.E.</td>
</tr>
<tr>
<td>Project Year:</td>
<td>June 2015 – April 2018</td>
</tr>
<tr>
<td>Contract Value:</td>
<td>$760,000</td>
</tr>
<tr>
<td>Benjamin Egger, P.E.</td>
<td>Project Engineer</td>
</tr>
<tr>
<td>(510) 668-4482</td>
<td><a href="mailto:Benjamin.Egger@acwd.com">Benjamin.Egger@acwd.com</a></td>
</tr>
</tbody>
</table>

Treatment Plant 2 was originally commissioned in 1994 to provide up to 24 MGD of drinking water to the cities of southern Alameda County. The plant control system was comprised of three Modicon 984-785 Hot-Standby PLC systems, two stand-alone Modicon 984-785 PLC systems, and 41 remote I/O panels.

In 2015, TJCAA was hired to provide both engineering services to upgrade the PLCs, I/O panels, and rewrite the PLC programs. The project was completed over three phases in three years. The first phase included upgrading the Plant and Dewatering PLC systems to Unity processors and rewriting the PLC programs. Phase 2 work included upgrading the Chemical and Ozone PLC systems to Unity processors, upgrading the associated I/O panels to X80 series I/O, and rewriting the PLC programs. In Phase 3 the remote I/O panels associated with the Plant and Dewatering PLC systems were upgraded to X80 series I/O, and the Turnout PLC was upgraded to a Unity processor with a new PLC program.

In each of the three phases of the project, design work was performed between June and September, panel fabrication and programming was performed between October and January, factory testing was performed in February, and installation and commissioning was performed during pre-planned plant shutdowns during the month of March. TJCAA worked closely with the Districts engineering and operations staffs to maintain the project schedule and complete the work required to bring the plant back online, on time and under budget.

<table>
<thead>
<tr>
<th>City of Benicia</th>
<th>Water Treatment Plant PLC Upgrade Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team Members Involved:</td>
<td>Michael Erwin, P.E.</td>
</tr>
<tr>
<td></td>
<td>Jacqueline Arama, P.E.</td>
</tr>
<tr>
<td></td>
<td>Maria Aguirre</td>
</tr>
<tr>
<td>Project Year:</td>
<td>January 2014 – June 2015</td>
</tr>
<tr>
<td>Contract Value:</td>
<td>$87,250</td>
</tr>
<tr>
<td>Leo Larkin</td>
<td>Plant Superintendent</td>
</tr>
<tr>
<td>(707) 746-4293</td>
<td><a href="mailto:Llarkin@ci.benicia.ca.us">Llarkin@ci.benicia.ca.us</a></td>
</tr>
</tbody>
</table>

In 2014, TJCAA was awarded the contract to upgrade the existing WTP 90-70 PLC to the PACSystems RX3i and to provide a fully updated and documented PLC program for control of the water treatment plant. The design included disconnecting all field wiring and removal of the entire MCP mounting panel, installation of a new mounting panel with all new components, and re-termination of the existing field wiring on the new terminal blocks. TJCAA provided project management for the City for the design and installation of the replacement PLC panel, programming of the new PLC system, and functional acceptance testing of the new program to bring the plant back into fully automatic operation.

The programming portion of the work included some unique challenges. Since most of the existing 90-70 program was not documented, the iFix database export file from the plant’s existing SCADA software was used to document the PLC tags, then the existing ladder logic was used to determine how the existing PLC controlled each plant process. Once we determined how the process was controlled, the PLC program was rewritten and fully documented. Using the latest programming features and techniques, we were able to reduce the size of the program by about 20%. New user defined function blocks were developed for scaling analog I/O to real numbers (in engineering units), totaling flows, controlling equipment cycle timers, tracking equipment runtimes, and filtering noisy analog input signals.

A 24-hour plant shutdown was scheduled for installation of the new PLC panel and to begin testing of the new PLC program. The plant was back online with most systems under automatic control within 48 hours of the start of the plant shutdown.
<table>
<thead>
<tr>
<th>Client Reference</th>
<th>Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Malibu</td>
<td>TJCAA teamed up with RMC Water and Environment in 2013 on the design of a new wastewater plant to serve the Civic Center area of the City of Malibu. TJCAA’s scope of work included the Electrical and Instrumentation &amp; Control portions of the treatment plant, two lift stations, and three injection wells. The design included three in-plant PLCs, three packaged system PLCs for membrane bioreactors, UV treatment and solids treatment, and PLCs at each of the lift stations and injection wells. TJCAA was awarded the PLC and SCADA programming for the project, while the plant was under construction, in April of 2016. TJCAA’s scope of work included programming for eight Rockwell CompactLogix PLCs, SCADA configuration and programming for the entire collection and treatment system using Ignition software by Inductive Automation, and startup and commissioning of the control system. Programming included PLC to PLC communications over an area wide fiber optic network, development of User Defined Variables and Add-On Instructions for control of the pump stations, dissolved oxygen system, chemical injection systems, odor control systems, and process alarm handling for unmanned operation.</td>
</tr>
<tr>
<td>Civic Center Wastewater Treatment Plant</td>
<td>Rob DuBoux, Esq., P.E. Assistant Public Works Director City Engineer (310) 456-2489 x 339 <a href="mailto:RDuboux@malibucity.org">RDuboux@malibucity.org</a></td>
</tr>
<tr>
<td>Team Members Involved: Michael Erwin, P.E. Lee Meyer, P.E. Helen Tran</td>
<td>Project Year: January 2013 – July 2018</td>
</tr>
<tr>
<td></td>
<td>Contract Value: $370,000</td>
</tr>
</tbody>
</table>

**City of Benicia**  
**Water Treatment Plant PLC Upgrade Project**

---

**Before**

**After**
Section 3: Project Team

TJCA has assembled a team of design professionals with proven ability providing services similar to those described for the Project. TJCA is committed to allocating these resources throughout the life of the Project. The following organization chart presents our proposed Project team and relationships.

Resumes for the Project team members are included in Appendix B. The team members shown below are all available to be assigned to this project through all phases of assessment, design, and construction, as needed. Refer also to Section 1 for experience of the management team and technical expertise.

3.1 KEY STAFF

Michael J. Erwin, P.E. – Project Manager

Mr. Erwin has been building valuable experience since 1986 in the design, implementation, and management of electrical power, control, automation, and instrumentation systems. He performs control system and electrical design engineering for water and wastewater treatment, collection, and distribution systems, focusing on instrumentation and control system design and control system programming (CSP). Mr. Erwin has hands-on familiarity with a variety of PLC and SCADA platforms. He gained his extensive experience not only as a consultant, but also as chief engineer and project manager for a systems integrator. With this background, he provides a viewpoint that emphasizes constructability and systems featuring maximum operator usability and efficiency.
Lee G. Meyer, P.E. – Project Engineer

Mr. Meyer is an electrical engineer with experience in electrical power and control systems engineering for the water and wastewater industry. He has performed the full scope of low-voltage (under 600 V) design including control panels, motor control centers, utility metering, transformers, switchboards, load centers, variable frequency drives, PLCs, and SCADA. His design experience also includes Ethernet and fiber-optic networking, radio telemetry, and relay logic. Mr. Meyer is familiar with NEC, NFPA, ISA, UL508A and UL698A standards and has provided engineering support for drafting and production teams. He has provided construction management services, including preparing and reviewing engineering drawings, submittals, engineering change orders, and requests for information.

Helen Tran – Senior Controls Technician

Ms. Tran an automation engineer with nearly 15 years’ experience in I&C and system integration. She has performed a variety of electrical and I&C designs for process equipment and utility systems. With a background in the electric power, biotechnology, and water treatment industries, Ms. Tran applies practical knowledge in design, documentation, programming, and configuration of control system hardware and software components. She is adept at interpreting client processes and operations, planning/design/implementation of automation, and providing support for system integration projects under a variety of automation hardware and software platforms.

Paul J. Giorsetto, P.E. – Principal-in-Charge, QA & QC

Mr. Giorsetto has over 35 years of design experience in the areas of control systems, telemetry, and industrial electrical applications. For the last 25 years, he has been responsible for multidiscipline groups on a variety of projects, maintaining project schedules, tracking earned value to budgets, and overseeing the quality of the design work products. His technical capabilities and experience include electrical system instrumentation and in-plant and remote telemetry SCADA systems. Mr. Giorsetto has been the electrical and/or instrumentation and controls (I&C) discipline lead on numerous large water design projects.
Section 4: Approach to Work

4.1 PROJECT APPROACH

TJCAA engineers will work with the District stakeholders to provide a PLC Assessment that will meet the District’s goals and provide a clear path forward to operate and maintain a highly reliable and well-functioning control system. Our recommendations will consider technical alternatives, the District’s history with the current systems, prevalent trends in the water industry, system reliability, serviceability, available technical support, local product support, and budget constraints.

The District has identified five Tasks associated with this assessment, and each task has an associated deliverable. The tasks and deliverables are detailed below.

**Task 1: Narrative of the State of the PLC Industry**

The deliverable for Task 1 will be a Technical Memorandum that describes the hardware, industrial networks, control system architectures, software, and current methods that are currently used for the water treatment and distribution industry. The memo will include a comparison of leading manufacturers, methods for technical support, product availability, partnerships with local system integrators, product life expectancies, and various product levels that are available.

TJCAA engineers meet regularly with PLC and SCADA manufacturers’ representatives, continually update our design standards and specifications to reflect current products and methods and, attend industry trade group meetings in order to keep tabs on current trends and technologies. In this era of disposable electronics, product obsolescence is a fact of life, especially in an industry that is relatively slow to deploy new technologies. Although control system hardware components will become obsolete, by employing intelligent design methods and modern programming techniques we can ensure that future replacement of obsolete hardware can be done with minimal disruption to the treatment process, and minimal cost to the District.

As part of Task 1, in addition to the Technical Memorandum, TJCAA will facilitate a Workshop with District stakeholders to discuss the current state of the industry and present control system alternatives that will benefit the District. The Workshop will also give us an opportunity to discuss project goals and review the current installed system.

**Task 2: PLC and RTU Inventory**

Once we receive record drawings from the District, TJCAA will review the drawings and fully document the currently installed system. An Excel spreadsheet will be used to document the attributes of each PLC and RTU system, including:

- PLC type and manufacturer
- Model number
- Hardware version
- Firmware version
- Programming software and current version used
- Year installed
- Life cycle status and remaining service life
- Rack type/setup
- Digital I/O card type and quantity
- Analog I/O card type and quantity
- I/O card capacity/extensibility
• Power supply model number and age
• Operating deficiencies
• Network interfaces

Once the PLC and RTU systems have been documented, TJCAA will provide a report for each facility that summarizes findings and identifies critical deficiencies. TJCAA will then host a screen sharing conference call to discuss the results of our findings with the District.

**Task 3: Software and Programming Inventory**

Under Task 3, TJCAA will document the programming software and languages that are currently used by Mesa Water District for PLCs, RTUs, and the SCADA system. The Excel spreadsheet created under Task 2 will be used to document the current installed software, including:

- The software manufacturer
- Software part number
- Software version
- The current licenses owned by the District
- Current availability and support level for the software
- Annual cost of maintaining licenses

TJCAA engineers will also perform a review of each of the PLC and RTU programs and document program organization, structure, languages used, consistency, tagging and annotation, data organization, efficiency, and control functions.

Once the programs have been documented, TJCAA will provide a summary report for each software package that identifies current use, software life cycle status, and recommended consolidation and upgrades.

**Task 4: Replacement Planning and Recommendations**

Once our hardware and software assessments are completed, TJCAA will prepare a Replacement Planning and Recommendations report. The report will organize sites based on the urgency of the recommended replacement; Immediate, Near-Term, and Long-Term. Our site by site recommendations will include the following.

- Expected life of the existing equipment.
- Scope of the replacement – PLC components, network components, power distribution and DC supplies, complete mounting panel assembly, or entire control panel.
- Down time required for recommended replacement scope.
- Replacement PLC manufacturer and series.
- Programming upgrade – conversion or rewrite.
- SCADA interface considerations.
- Estimated cost of the replacement.
- Replacement schedule, including drawing development, procurement, fabrication, programming, installation, and testing.
- Improvements to panel reliability and safety.

The report will also include a list of common control functions that can be implemented using standard user-defined function blocks on each of the Districts platforms.
Once the District has had an opportunity to review the replacement planning and recommendations, TJCAA will host a screen sharing conference call to discuss our findings and recommendations with the District.

**Task 5: Summary Report**

The deliverables from Tasks 1 through 4 will be combined with feedback from the District’s stakeholders and summarized in a Summary Report. The Summary Report will include a recommended schedule, budgets and phasing for replacement projects, a list of District wide recommendations, site by site replacement recommendations, the District’s tagging and naming standards, future hardware and software maintenance strategies, and a list of next steps.

4.2 **KEY CHALLENGES**

Based on our extensive experience in this area, we have identified three key challenges to the project that will need to be considered and addressed in developing a PLC replacement plan and recommendations for the District.

- A viable implementation and transition plan.
- Upgrading to modern programming techniques while maintaining the interface with the existing SCADA software.
- Developing design criteria to minimize the number of differing hardware and software platforms that must be maintained by the District.

**Implementation and Transition Plan**

Even when the replacement PLC equipment has been selected, there are many aspects that must be considered in developing a plan for installing that equipment. Some questions to consider are:

- Should only PLC components be upgraded, or does it make sense to replace the entire mounting panel assembly?
- What are the operational constraints that will limit down time for the processes being upgraded?
- How much of the preparation work can be completed before shutting down the system to perform an upgrade?
- How should processes be prioritized when testing and commissioning an upgraded control system?
- What network and program changes are necessary to maintain PLC to PLC communications and communications with SCADA systems when PLC systems are upgraded.
- Should programs be converted from older PLC programming software, or should the program be rewritten?

TJCAA will tailor an implementation and transition plan specifically to meet Mesa Water District’s technical needs, budget limitations, and operational constraints. Below is a summary plan for a 48-hour transition strategy developed and successfully implemented for the Benicia Water Treatment Plant PLC Upgrade Project.
### Interface to the Existing SCADA System

With the advent of reliable industrial high-speed networks and efficient new communication protocols, programming methods and data structures used to transmit information between PLCs and SCADA systems have evolved significantly over the past ten years. Where we once used arrays and register tables of similar data types (e.g. integers, Boolean, etc.) to transmit information between industrial equipment, today's technologies allow us to package information in user-defined data types (UDTs) that are based on process equipment and/or specific control functions. For example, in Figure 1 below, a single UDT variable called Pump2112 contains all of the information for Booster Pump 2. In older systems, the same amount of information would have required 17 variables, separated into three different types of data tables.

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*Figure 1 - A single variable "Pump2112" includes all of the data available for Booster Pump 2*
The use of modern programming techniques is crucial to developing a reliable control system that can be maintained for the next decades. Unfortunately, in most cases the SCADA software and the PLC systems are not upgraded at the same time or under the same project. Without significant and expensive updates to the way the SCADA software is configured, the existing SCADA system will not be able to take advantage of the newer data structures. In order to maintain the operation of the existing SCADA software, the upgraded PLC systems must provide information using the data arrays and register tables that were common when the system was originally installed.

TJCAA has used several different solutions on several different PLC platforms to overcome this problem. Determining the best approach for Mesa Water District will depend on the age of the existing SCADA software, capabilities of the existing SCADA software, plans for upgrading the SCADA software in the near future, and budget constraints. TJCAA has implemented and/or specified these techniques for several clients including Santa Clara Valley Water District, City of Malibu, and Union Sanitary District.

**Common Design Criteria**

Even those agencies that have successfully standardized on a single PLC manufacturer have great difficulty maintaining all facilities on a common hardware and software platform. Over time facilities are upgraded at different rates, hardware becomes obsolete, different firmware versions are installed at different locations, and updated systems get programmed with newer software versions.

While these issues can’t be entirely avoided, their impacts can be mitigated by using a proactive upgrading strategy to manage hardware, firmware, and software versions at all District facilities. TJCAA has successfully implemented strategies for several of our clients to maintain common programming versions, schedule firmware upgrades, schedule hardware upgrades, maintain a control system inventory system, and manage PLC program version control.

In addition, developing an approach for implementing system wide standardization and use of programming modules can also be beneficial in managing transition and technical advances. For example, standards based on programming templates or subroutines can simplify upgrades of programming code across the system. Our team has implemented standardized programming modules and assisted our clients with developing standards at the Alameda County Water District, City of Malibu, City of Palo Alto, City of Benicia, Contra Costa Water District, East Bay Dischargers Authority, Union Sanitary District, Stockton East Water District, and Bella Vista Water District.

Custom programming modules are especially useful in applications that are repeated throughout the control system. They help the user to maintain consistency and ensure that identical programming methods are used by all programmers and technicians that maintain and modify the system.

In the Figure 2 below, TJCAA developed a custom analog input scaling function that results in an implied decimal integer value for interface to an existing older SCADA system, and a REAL value in engineering units for use in the PLC program, and to interface to the client’s planned upgraded SCADA system.
TJCAA has also developed custom programming modules for alarming, pump alternation, flow totalizers, elapsed runtime meter/starts counter, analog signal filtering, on/off cycle time control, modulating valve positioning control, and complex calculations. Figure 3 below shows the use of a chemical dosage calculation module that was developed for a water treatment plant with 16 separate chemical injection areas.

4.3 ASSUMPTIONS AND CLARIFICATIONS

TJCAA has included the following assumptions and clarifications in preparing this proposal.

1) The project scope will be completed in 2018 and the project schedule proposed in the RFP will be maintained.
2) TJCAA will facilitate one workshop at Mesa Water District facilities during Task 1. Site visits will be scheduled for the same day as the workshop to allow TJCAA to review a sample of the current installations and review the existing network and SCADA system. All other meetings will be held via conference calls with screen sharing.
3) TJCAA will setup a Dropbox folder for the project to allow file sharing between TJCAA and the District’s project staff.
4) Work will be performed primarily at TJCAA’s Walnut Creek office.
5) Project deliverables will be transmitted to the District in Adobe pdf format, native electronic format (MS Word and Excel), and hard copies as detailed in the RFP.
6) The District will provide TJCAA with as-built drawings of all PLC and RTU panels in Adobe pdf format, PLC and RTU panel programs in native electronic format, and requested electronic files from the District’s existing SCADA system.
7) TJCAA is a Schneider Electric Alliance Partner, Rockwell Automation Partner, GE Intelligent Platforms Solution Provider, and Inductive Automation Core Certified Integrator. These programs provide TJCAA software licenses. For other manufacturers, TJCAA may request the use of District software licenses to review electronic versions of the PLC and RTU programs.
Section 5: Fee Proposal

Our Fee Proposal is detailed on the next sheet. The estimate includes labor rates, labor classifications, direct costs, and estimated level of effort for each task.
# Mesa Water District
## PLC Assessment Project

### Personnel Name and Grade

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Total Direct Costs: $48,230
Appendix A
Resumes
Michael J. Erwin, P.E.
Principal

Experience

Michael Erwin, who heads up TJCAA’s Control Systems Programming group, has been building valuable experience since 1986 in the design, implementation, and management of electrical power, control, automation, and instrumentation systems. He performs electrical design engineering for water and wastewater treatment facilities, collection and distribution systems, and industrial facilities, focusing on instrumentation and control system design and programming. His specific experience includes development of power calculations, protective device coordination, equipment specification, instrument selection, and control panel fabrication design; design of SCADA systems for in-plant and telemetry-based systems; and programmable logic controller (PLC) programming.

Mr. Erwin has hands-on familiarity with a wide variety of PLC and SCADA hardware and software platforms, including Rockwell Automation, Schneider Electric, and GE Intelligent Platforms. He gained his extensive experience not only as a consultant, but also as chief engineer and project manager for a Northern California systems integrator. With this understanding of the water/wastewater, control system, and construction industries, he emphasizes constructability and focuses on systems that feature maximum operator usability and efficiency. His experience includes the following:

- **Treatment Plant 2 PLC Upgrade Project; Alameda County Water District; Project Manager/Lead Programmer.** Treatment Plant 2 was built in 1993 and included four Modicon 984-785 PLC systems, three of which were hot-standby PLCs. Michael Erwin was one of the PLC programmers on the original 1994 project. The PLC upgrade project involved converting the original Modicon 984 PLC programs to the latest version of Schneider Electric’s Unity software and testing and commissioning new Quantum Unity PLC systems to replace the existing PLCs. The programming work included development of new ACWD-defined function blocks, conversion of the LL984 ladder for plant control functions, and thoroughly bench-testing all aspects of the new program before installation and testing in the field.

- **Oro Loma Effluent Pump Station Control System Upgrade Project; East Bay Dischargers Authority, San Lorenzo, CA; Project Manager/Programmer.** The Oro Loma Effluent Pump Station collects treated wastewater from Hayward, San Leandro, San Lorenzo, Castro Valley, and Union City and pumps the treated water through a dechlorination station and into San Francisco Bay. The pump station consists of two 350-hp electric pumps on variable frequency drives (VFDs) and two 1,200-hp diesel driven pumps, and has a pumping capacity of over 200 mgd. The first phase of the project involved development of a control system design package to replace three existing Automation Direct PLCs and two Woodward engine controllers with two Quantum Unity PLCs that provided parallel control to two pumps each. In the second phase of the project TJCAA developed the new Unity PLC control programs and
configured the plant’s existing Wonderware system to monitor the control of the pump station.

- **Water Treatment Plant (WTP) PLC Upgrade Project; City of Benicia, CA; Project Manager/Programmer.** The Main PLC at the City’s WTP had become obsolete and difficult to maintain. In addition, multiple undocumented changes had been made over the past 15 years while the City’s maintenance staff was keeping the system operating reliably. The project included field verifying and “as-building” the existing PLC control panel, developing a bid set of documents for replacement of the PLC control panel, and programming the new GE RX3i PLC to improve performance of some treatment processes and a fully documented PLC control program. Because the plant was in operation, the installation team had only 24 hours to remove the existing PLC panel, install the new panel, and bring the plant’s primary processes back into operation. Not only was the installation completed on time, the plant was back in full automated operation within 32 hours of the initial plant shutdown.

- **Rinconada WTP Reliability Improvement Project; Santa Clara Valley Water District; Los Gatos, CA; Lead I&C Engineer.** Oversaw the electrical engineering and control systems design work for the $180 million WTP modernization. This project incorporates capacity increases to raise plant output to 100 mgd and incorporates new ozone treatment trains, multiple new and retrofitted chemical systems, filters, and floc-sed basins. The design was developed to maintain the plant in operation throughout the estimated 5-year construction period. Design included new 12-kV distribution, arc flash protection strategies, a new 3-MW diesel standby generator, and new distributed motor control centers with smart motor starters and VFD equipment. I&C design incorporated a new distributed PLC architecture coordinated with construction phasing and new processes. Final design included over 400 electrical, instrumentation, and controls design drawings.

- **Civic Center Wastewater Treatment Plant (WWTP); City of Malibu, CA; I&C and Electrical Discipline Lead; Control Systems Programming Lead.** Lead I&C, electrical engineer, and programmer for new greenfield WWTP and collection system pump stations for City of Malibu. This project included new SCE service, secondary selective 480-V distribution for reliability, standby generation, and local motor controls. The I&C design incorporated distributed controls based on PLCs and integration of control platforms provided by process package suppliers. Developed and commissioned seven Rockwell Studio 5000 PLC programs, managed development of the Ignition SCADA software application, and coordinated system integration of three packaged PLC systems.

**Publications and Presentations**


Lee G. Meyer, P.E.
Electrical Engineer

Experience
Lee Meyer is an electrical engineer with experience in electrical power and control systems engineering for the water and wastewater industry. He has performed the full scope of low-voltage (under 600 V) design including control panels, motor control centers (MCCs), utility metering, transformers, switchboards, load centers, variable frequency drives, programmable logic controllers (PLCs), and SCADA. His design experience also includes Ethernet and fiber-optic networking, radio telemetry, and relay logic.

Mr. Meyer is familiar with NEC, NFPA, ISA, UL508A, and UL698A standards and has provided engineering support for drafting and production teams. He has provided construction management services, including preparing and reviewing engineering drawings, submittals, engineering change orders, and requests for information.

His specific experience includes the following:

- **Treatment Plant 2 PLC Upgrade Project; Alameda County Water District; Fremont, CA; Control Systems Programmer.** Developed programming for an upgrade of the 21-mgd Water Treatment Plant (WTP) 2 PLC from an obsolete 984-series ProWorx PLC system to a modern Quantum Unity PLC system. Performed programming and bench-testing the new system, which involved I/O testing, SCADA testing, and function testing. This project also included field-verification and maintenance of PLC-related as-built documentation including PLC wiring diagrams, system design narratives, and coordination spreadsheet.

- **Rinconada WTP Reliability Improvement Project; Santa Clara Valley Water District; Los Gatos, CA; Electrical Designer.** Performed electrical engineering and control systems design as part of a $135-million WTP modernization. Performed a change order design for converting all PLCs and instrumentation from 120 V AC to 24 V DC. This project involves demolition and phased expansion of an 80-mgd plant while maintaining plant operations.

- **WTP A and B Electrical Improvements; City of Antioch WTP; Antioch, CA; Electrical Engineer.** The City’s two WTPs provide roughly 6.4 billion gallons of treated water annually. This project included a comprehensive electrical inventory documenting condition, settings, and circuiting details. Mr. Meyer performed site reconnaissance, modifications to the SKM electrical model, arc flash calculations, and arc flash label installation. Mr. Meyer also was the staff engineer on the system design upgrades, including replacement of the WTP A 480-V switchboard, main automatic transfer switch, and MCCs.

- **SCADA System Integrator Projects FY 2014–2016 (extended to 2018); Contra Costa Water District, Concord, CA; Programmer.** TJCAA was selected by Contra Costa Water District for performing all system integration tasks for District projects during the fiscal year. Mr. Meyer has performed a variety of tasks including technical and commercial comparisons of HMI platforms to assist the
District in selection of new software, field reconnaissance of remote telemetry units to accommodate system upgrades, and review and modifications of PLC and OIT applications. He provided assistance with development of panel I/O requirements, system PLC programming (Modicon Unity), human-machine interface graphic preparation (Magellis, Telvent and WonderWare), coordination with construction contractors, and development of as-built documentation.

- **Pump Station Facilities Repair; Delta Diablo; Antioch, CA; Electrical Engineer.** Project design engineer to provide instrumentation, controls, and electrical condition assessments for five pump stations in the Delta Diablo wastewater collection system: Pittsburg, Antioch, Bridgehead, and Shore Acres Pump Stations and the Broadway Diversion Facility. The purpose of this project is to increase reliability and extend the useful lives of these important facilities, while also facilitating operations within the system. Mr. Meyer performed site inspections to determine the condition and integrity of the electrical and I&C infrastructure including equalization storage basins, wetwells, pumps, electrical distribution, motor controls, and SCADA components and provided recommendations as well as final designs for electrical repairs.

- **SCADA System Master Plan and Standards Development; Union Sanitary District (USD); Fremont, CA; Control System Engineer.** Assisted in the technical development of the SCADA Master Planning document, providing a 10-year roadmap for USD SCADA system improvements. Mr. Meyer prepared sample graphics under the iFIX application for demonstrating concepts and features of Situational Awareness, High Performance human-machine interface graphics adopted by USD for use on future projects.

His previous experience at MCC Control Systems includes the following:

- **Wastewater Treatment Plant (WWTP) Expansion & Upgrade Project; City of Redding, CA; Electrical Designer.** Performed electrical power and controls design of multiple MCCs, transformers, load centers, PLC control panels, and local control panels for a WWTP capacity expansion. Developed loop diagrams per ISA S5.4 standards and developed interconnection diagrams. Supported production and CAD drafting teams during fabrication.

- **Thermal Energy Storage PLC Upgrade Project; University of California - Davis; Davis, CA; Electrical Designer.** Facilitated thermal energy storage control system upgrade from Siemens Apogee I/O banks to Allen-Bradley ControlLogix system. Performed field investigation to document existing system, developed interconnection check and diagrams, created I/O list and PLC rack design.

**Certifications**

- **Inductive Automation – Ignition V7.9 – Core Certified**
Helen Tran  
Senior Controls Technician

Experience

Helen Tran is an automation engineer with nearly 15 years’ experience in instrumentation and controls (I&C) and system integration. She has performed a variety of electrical and I&C designs for process equipment and utility systems. With a background in the electric power, biotechnology, and water treatment industries, Ms. Tran applies practical knowledge in design, documentation, programming, and configuration of control system hardware and software components. She is adept at interpreting client processes and operations, automation planning/design/implementation, and providing support for system integration projects under a variety of automation hardware and software platforms.

Her skillset includes operating principles of turbomachinery control systems and plant process controls. In addition, her experience includes pharmaceutical and biotech operations, and she has a thorough working knowledge of pharma design, construction, commissioning and qualification, and operations and experience within the current good manufacturing practices (cGMP) regulations.

Ms. Tran’s experience includes the following:

- **Wastewater Treatment Plant (WWTP); City of Malibu, CA; Senior Controls Technician.** Design and system integration/programming including operator interface terminal (OIT) graphics development for the City of Malibu's new greenfield WWTP and collection system. Ms. Tran’s efforts included new OIT graphics using PanelView hardware and software, configured to match the main plant look and feel of the graphics developed under the main plant Ignition software. This project I&C design incorporates distributed controls based on Rockwell Automation PLCs and integration of control platforms provided by process package suppliers. Remote sites featured standalone PLC controls for lift stations and injection wells. The remote sites are all interconnected to the WWTP via a new fiber-optic cable system installed in parallel with new collection system pipelines.

- **Secondary Compliance Facilities, Phase 1; Honouliuli WWTP, City and County of Honolulu, HI; Senior Controls Technician.** Design and engineering support for new control system facilities provided as part of a major expansion to the existing WWTP in Honolulu. Process expansion included full secondary treatment facilities including clarifiers, aeration basins, and support infrastructure. Control system design expanded the existing fiber-optic network to accommodate the new process areas, new redundant PLC and remote I/O installations, and network-based SCADA to extract data directly from smart motor controllers, electrical distribution systems, analyzers, and valves.
**Control System Expansion Project; White Slough WWTP, City of Lodi, CA; Senior Controls Technician.** Design and engineering support for new control system facilities for the White Slough WWTP for the City of Lodi. Work included facility reconnaissance and inventory, development of conceptual level design, establishing new control system design criteria and standards, and preparation of new control system phased installation prepared to match the City's existing annual budget allocations. The approach applied new Rockwell Automation-based hot standby ControlLogix processors allocated along geographic areas of the plant. Remote I/O drops were also incorporated to reuse existing wiring associated with the plant's obsolete SLCs and PLC 5 hardware.

**Lead Automation Engineer III**

Banks Integration Group, Vacaville, CA

- Provided systems integration services for a Tangential Flow Filtration Skid Upgrade at a local biotechnology company from PLC 5 to ControlLogix. Responsibilities included Allen-Bradley PLC (ControlLogix) programming, human-machine interface design, electrical design, test form generation, documentation, FAT execution, start-up, and SAT execution effort on site.

- Provided engineering for a system migration upgrade from five standalone systems into a single GE iFIX SCADA system with terminal services in a virtual environment for a cGMP environment. Responsibilities included building the SCADA Server/Remote Desktop Server build, SDS/SSM/FS documentation development, factory acceptance testing, and site acceptance testing.

- Coordinated with vendors/contractors to eliminate potential conflicts and assure vendors' compliance with design requirements.

- Evaluated projects and prepared feasibility analyses.

- Analyzed legacy systems (controls and electrical) and created upgrade approaches along with contractor electrical scopes of work for bid and proposals.

- Designed control panels, developed instrumentation specifications, and performed electrical design.

**Proficiencies**


**Communication:** Fluent in written and spoken Vietnamese.
Paul Giorsetto, P.E., LEED AP
Vice President

Experience

Paul Giorsetto, a licensed engineer since 1984, has extensive design experience in the areas of electrical power distribution, electrical industrial applications, control systems, and instrumentation. His specific experience includes electrical system modeling and planning; medium and low-voltage electrical distribution designs of water, wastewater and industrial waste treatment facilities; plant instrumentation; and SCADA systems for in-plant and telemetry-based systems. He also has significant experience in construction services, as a resident engineer and inspector, and during facility startup.

Mr. Giorsetto has been the electrical and/or discipline lead on numerous large water and wastewater design projects, and has been a project manager on stand-alone control system and electrical design projects having construction costs in excess of $3 million. He has acted as project manager on several stand-alone electrical and instrumentation and controls (I&C) design-build projects.

- **Rinconada Water Treatment Plant (WTP) Reliability Improvement Project; Santa Clara Valley Water District; Los Gatos, CA; I&C and Electrical Discipline Lead.** Oversaw the electrical engineering and control systems design work for the $180 million water treatment plant modernization. This project incorporates capacity increases to raise plant output to 100 mgd and incorporates new ozone treatment trains, multiple new and retrofitted chemical systems, filters, and floc-sed basins. The design was developed to maintain the plant in operation throughout the estimated 5-year construction period. Design included new 12-kV distribution, arc flash protection strategies, a new 3-MW diesel standby generator, and new distributed motor control centers with smart motor starters and variable frequency drive (VFD) equipment. I&C design incorporated a new distributed programmable logic controller (PLC) architecture coordinated with construction phasing and new processes. Final design included over 400 electrical, instrumentation, and controls design drawings.

- **SCADA System Master Plan and Standards Development; Union Sanitary District (USD); Fremont, CA; Control System Engineer.** Assisted in the technical development of the SCADA Master Planning document providing a road map for USD SCADA system improvements over the next 10 years. The Master Planning process included reconnaissance, interviews with staff, development of potential projects (including costs), review and selection of projects, and projection of annual budget impacts. TJCAA also lead the effort to develop several technical standard documents for the USD engineering and project managers under the same project scope. Standards were developed addressing PLC programming, SCADA/human-machine interface software, field instrumentation, control panels, and I&C design methods.

- **SCADA Telemetry Upgrade Project; Contra Costa Water District, Concord, CA Project Manager.** Prepared comprehensive predesign analyses and report for development of alternatives for remote site radio and PLC equipment, new multiple address system radios, new
point-to-point and high bandwidth backbone communication links, and secure MPLS strategy as a standby strategy for routing telemetry SCADA data to CCWD servers. This project also included development of RFQ and RFP documents for execution of a design/build procurement strategy by CCWD for both the telemetry equipment and new server equipment being installed at the Randall-Bold WTP.

- **1630 Pump Station Project; Cucamonga Valley Water District, Rancho Cucamonga, CA; TJCAA Project Manager.** New pump station executed as a joint effort between CVWD and the Inland Empire Utilities District. Project management tasks included prime consultant responsibilities for all support disciplines: structural architectural, building mechanical, electrical, and I&C. The new pump station included a new building structure, building mechanical systems, new electrical (SCE) service, and control system coordination for secure extra-agency data exchange. Project requirements included a pre-purchase process to expedite procurement and ensure commonality of provided equipment.

- **Skinner WTP; Metropolitan Water District, Riverside CA; Electrical and I&C Task Leader.** Designed renovation of existing medium-voltage distribution, including a new 33-kV SCE service, new 4.16-kV main switchgear, addition of a 1.75-MW standby generator, and campus style unit substations as part of the $180 million plant upgrade. The design incorporated strict criteria for power supply switchover to the new SCE service and system controls for the standby generator addition with multiple main-tie-main circuit breakers. The project also included a fiber optic network, electrical power modeling, and electrical distribution and lighting design. I&C design included development of piping and instrumentation diagrams (P&IDs) for the facility including MWD-furnished ozone system equipment, 144-inch raw water metering, control narrative development, integration into the existing MWD control system, development of software interface protocols, and detailed I&C design for the plant improvements.

- **Groundwater Replenishment System; Orange County Water District, Fountain Valley, CA; Electrical and I&C Task Leader.** Designed electrical and I&C components. I&C design elements included application of P&IDs, design of bus-based I&C system using Foundation Fieldbus and DeviceNet, and a distributed control system preselection effort resulting in selection of an Emerson DeltaV process control system platform. Electrical aspects of the project included integrating the bus-based control system, a new 66-kV substation, 12-kV in-plant distribution, and large-scale application of VFDs, with over 30 units ranging in size from 500 to 2,500 hp using active front-end technologies.

### Publications and Presentations


"Wireless Applications in the Water and Wastewater Industries,“ presented at the American Water Works Association, Fall 2007 Conference,


Section 4: Approach to Work

4.1 PROJECT APPROACH

TJCAA engineers will work with the District stakeholders to provide a PLC and Supervisory Control System Assessment that will meet the District’s goals and provide a clear path forward to operate and maintain a highly reliable and well-functioning control system. Our recommendations will consider technical alternatives, the District’s history with the current systems, prevalent trends in the water industry, system reliability, serviceability, available technical support, local product support, and budget constraints.

The District has identified five-seven Tasks associated with this assessment, and each task has an associated deliverable. The tasks and deliverables are detailed below.

**Task 1: Narrative of the State of the PLC Industry**

The deliverable for Task 1 will be a Technical Memorandum that describes the hardware, industrial networks, control system architectures, software, and current methods that are currently used for the water treatment and distribution industry. The memo will include a comparison of leading manufacturers, methods for technical support, product availability, partnerships with local system integrators, product life expectancies, and various product levels that are available.

TJCAA engineers meet regularly with PLC and SCADA manufacturers’ representatives, continually update our design standards and specifications to reflect current products and methods and, attend industry trade group meetings in order to keep tabs on current trends and technologies. In this era of disposable electronics, product obsolescence is a fact of life, especially in an industry that is relatively slow to deploy new technologies. Although control system hardware components will become obsolete, by employing intelligent design methods and modern programming techniques we can ensure that future replacement of obsolete hardware can be done with minimal disruption to the treatment process, and minimal cost to the District.

As part of Task 1, in addition to the Technical Memorandum, TJCAA will facilitate a Workshop with District stakeholders to discuss the current state of the industry and present control system alternatives that will benefit the District. The Workshop will also give us an opportunity to discuss project goals and review the current installed system.

**Task 2: PLC and RTU Inventory**

Once we receive record drawings from the District, TJCAA will review the drawings and fully document the currently installed system. An Excel spreadsheet will be used to document the attributes of each PLC and RTU system, including:

- PLC type and manufacturer
- Model number
- Hardware version
- Firmware version
- Programming software and current version used
- Year installed
- Life cycle status and remaining service life
- Rack type/setup
- Digital I/O card type and quantity
- Analog I/O card type and quantity
• I/O card capacity/extensibility
• Power supply model number and age
• Operating deficiencies
• Network interfaces

Once the PLC and RTU systems have been documented, TJCAA will provide a report for each facility that summarizes findings and identifies critical deficiencies. TJCAA will then host a screen sharing conference call to discuss the results of our findings with the District.

**Task 3: Software and Programming Inventory**

Under Task 3, TJCAA will document the programming software and languages that are currently used by Mesa Water District for PLCs, RTUs, and the SCADA–Supervisory Control system. The An Excel spreadsheet created under Task 2 will be used to document the current installed software, including:

- The software manufacturer
- Software part number
- Software version
- The current licenses owned by the District
- Current availability and support level for the software
- Annual cost of maintaining licenses

TJCAA engineers will also perform a review of each of the PLC and RTU programs and document program organization, structure, languages used, consistency, tagging and annotation, data organization, efficiency, and control functions.

Once the programs have been documented, TJCAA will provide a summary report for each software package that identifies current use, software life cycle status, and recommended consolidation and upgrades.

**Task 4: Supervisory Control Computer Hardware Inventory**

Under Task 4, TJCAA will document the servers, workstations, and ancillary hardware installed for the District’s SCADA system. An Excel spreadsheet will be used to document the current hardware and software, including:

- Equipment location
- Equipment function
- Equipment name and network address
- Manufacturer and model number
- Year manufactured
- The computer’s base operating system and version
- The current virtual machines installed and associated operating systems and functions
- Current level of manufacturer’s support for the product line

**Task 5: Radio Telemetry System and Network Hardware Inventory**

Under Task 5, TJCAA will document the radios, antennas, and network switches that are installed as part of the District’s telemetry system. An Excel spreadsheet will be used to document the current hardware, including:
**Mesa Water District**

**Proposal for PLC and Supervisory Control System Assessment**

- Installed location
- Radio type
- Radio function
- Broadcast frequencies
- FCC License type
- Manufacturer and model number
- Year manufactured
- Network connections and routing
- Antenna type
- Antenna mounting
- Associated network switch
- Current level of manufacturer’s support for the product line

TJCAA will develop network architecture drawings that detail the equipment installed at each facility and both wired and wireless network interconnections. Separate drawings will be developed for the 5 GHz network backbone, 900 MHz spread spectrum radio telemetry network, and 450 MHz licensed radio telemetry network.

**Task 46: Replacement Planning and Recommendations**

Once our hardware and software assessments are completed, TJCAA will prepare a Replacement Planning and Recommendations report. The report will organize sites based on the urgency of the recommended replacement; Immediate, Near-Term, and Long-Term. Our site by site recommendations will include the following.

- Expected life of the existing equipment and software.
- Recommended software upgrade schedule and software maintenance
- Scope of the replacement – Computer hardware, software, PLC components, radios, network components, power distribution and DC supplies, complete mounting panel assembly, or entire control panel.
- Down time required for recommended replacement scope.
- Replacement PLC-equipment manufacturer and series.
- Programming upgrade – conversion, upgrade, or rewrite.
- SCADA interface considerations.
- Estimated cost of the replacement.
- Replacement schedule, including drawing development, procurement, fabrication, programming, installation, and testing.
- Improvements to panel reliability and safety.

The report will also include a list of common control functions that can be implemented using standard user-defined function blocks on each of the Districts platforms.

Once the District has had an opportunity to review the replacement planning and recommendations, TJCAA will host a screen sharing conference call to discuss our findings and recommendations with the District.

**Task 57: Summary Report**

The deliverables from Tasks 1 through 4-6 will be combined with feedback from the District’s stakeholders and summarized in a Summary Report. The Summary Report will include a
recommended schedule, budgets and phasing for replacement projects, a list of District wide recommendations, site by site replacement recommendations, the District’s tagging and naming standards, future hardware and software maintenance strategies, and a list of next steps.

4.2  KEY CHALLENGES

Based on our extensive experience in this area, we have identified three key challenges to the project that will need to be considered and addressed in developing a PLC replacement plan and recommendations for the District.

- A viable implementation and transition plan.
- Upgrading to modern programming techniques while maintaining the interface with the existing SCADA software.
- Developing design criteria to minimize the number of differing hardware and software platforms that must be maintained by the District.

Implementation and Transition Plan

Even when the replacement PLC equipment has been selected, there are many aspects that must be considered in developing a plan for installing that equipment. Some questions to consider are:

- Should only PLC components be upgraded, or does it make sense to replace the entire mounting panel assembly?
- What are the operational constraints that will limit down time for the processes being upgraded?
- How much of the preparation work can be completed before shutting down the system to perform an upgrade?
- How should processes be prioritized when testing and commissioning an upgraded control system?
- What network and program changes are necessary to maintain PLC to PLC communications and communications with SCADA systems when PLC systems are upgraded.
- Should programs be converted from older PLC programming software, or should the program be rewritten?

TJCAA will tailor an implementation and transition plan specifically to meet Mesa Water District’s technical needs, budget limitations, and operational constraints. Below is a summary plan for a 48-hour transition strategy developed and successfully implemented for the Benicia Water Treatment Plant PLC Upgrade Project.
Interface to the Existing SCADA System

With the advent of reliable industrial high-speed networks and efficient new communication protocols, programming methods and data structures used to transmit information between PLCs and SCADA systems have evolved significantly over the past ten years. Where we once used arrays and register tables of similar data types (e.g. integers, Boolean, etc.) to transmit information between industrial equipment, today’s technologies allow us to package information in user-defined data types (UDTs) that are based on process equipment and/or specific control functions. For example, in Figure 1 below, a single UDT variable called Pump2112 contains all of the information for Booster Pump 2. In older systems, the same amount of information would have required 17 variables, separated into three different types of data tables.
The use of modern programming techniques is crucial to developing a reliable control system that can be maintained for the next decades. Unfortunately, in most cases the SCADA software and the PLC systems are not upgraded at the same time or under the same project. Without significant and expensive updates to the way the SCADA software is configured, the existing SCADA system will not be able to take advantage of the newer data structures. In order to maintain the operation of the existing SCADA software, the upgraded PLC systems must provide information using the data arrays and register tables that were common when the system was originally installed.

TJCAA has used several different solutions on several different PLC platforms to overcome this problem. Determining the best approach for Mesa Water District will depend on the age of the existing SCADA software, capabilities of the existing SCADA software, plans for upgrading the SCADA software in the near future, and budget constraints. TJCAA has implemented and/or specified these techniques for several clients including Santa Clara Valley Water District, City of Malibu, and Union Sanitary District.

**Common Design Criteria**

Even those agencies that have successfully standardized on a single PLC manufacturer have great difficulty maintaining all facilities on a common hardware and software platform. Over time facilities are upgraded at different rates, hardware becomes obsolete, different firmware versions are installed at different locations, and updated systems get programmed with newer software versions.

While these issues can’t be entirely avoided, their impacts can be mitigated by using a proactive upgrading strategy to manage hardware, firmware, and software versions at all District facilities. TJCAA has successfully implemented strategies for several of our clients to maintain common programming versions, schedule firmware upgrades, schedule hardware upgrades, maintain a control system inventory system, and manage PLC program version control.

In addition, developing an approach for implementing system wide standardization and use of programming modules can also be beneficial in managing transition and technical advances. For example, standards based on programming templates or subroutines can simplify upgrades of programming code across the system. Our team has implemented standardized programming modules and assisted our clients with developing standards at the Alameda County Water District, City of Malibu, City of Palo Alto, City of Benicia, Contra Costa...
Water District, East Bay Dischargers Authority, Union Sanitary District, Stockton East Water District, and Bella Vista Water District.

Custom programming modules are especially useful in applications that are repeated throughout the control system. They help the user to maintain consistency and ensure that identical programming methods are used by all programmers and technicians that maintain and modify the system.

In the Figure 2 below, TJCAA developed a custom analog input scaling function that results in an implied decimal integer value for interface to an existing older SCADA system, and a REAL value in engineering units for use in the PLC program, and to interface to the client’s planned upgraded SCADA system.

TJCAA has also developed custom programming modules for alarming, pump alternation, flow totalizers, elapsed runtime meter/stops counter, analog signal filtering, on/off cycle time control, modulating valve positioning control, and complex calculations. Figure 3 below shows the use of a chemical dosage calculation module that was developed for a water treatment plant with 16 separate chemical injection areas.
4.3 ASSUMPTIONS AND CLARIFICATIONS

TJCAA has included the following assumptions and clarifications in preparing this proposal.

1) The project scope will be completed in 2018 and the project schedule proposed in the RFP will be maintained.

2) TJCAA will facilitate one workshop at Mesa Water District facilities during Task 1. Site visits will be scheduled for the same day as the workshop to allow TJCAA to review a sample of the current installations and review the existing network and SCADA system. All other meetings will be held via conference calls with screen sharing.

3) TJCAA will setup a Dropbox folder for the project to allow file sharing between TJCAA and the District’s project staff.

4) Work will be performed primarily at TJCAA’s Walnut Creek office.

5) Project deliverables will be transmitted to the District in Adobe pdf format, native electronic format (MS Word and Excel), and hard copies as detailed in the RFP.

6) The District will provide TJCAA with as-built drawings of all PLC and RTU panels in Adobe pdf format, PLC and RTU panel programs in native electronic format, and requested electronic files from the District’s existing SCADA system.

7) TJCAA is a Schneider Electric Alliance Partner, Rockwell Automation Partner, GE Intelligent Platforms Solution Provider, and Inductive Automation Core Certified Integrator. These programs provide TJCAA software licenses. For other manufacturers, TJCAA may request the use of District software licenses to review electronic versions of the PLC and RTU programs.
## Mesa Water District
### PLC Assessment Project

<table>
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<tr>
<th>Personnel Name and Grade</th>
<th>Paul Giorsetto</th>
<th>Michael Erwin</th>
<th>Lee Meyer</th>
<th>Helen Tran</th>
<th>AutoCAD</th>
<th>Admin</th>
<th>Other Direct Costs</th>
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| Task Description                                | Task Description                                | Task Description                                | Task Description                                | Task Description                                | Task Description                                | Task Description                                | Task Description                                | Task Description                                | Task Description                                | Task Description                                | Task Description                                | Task Description                                | Task Description                                |
|------------------------------------------------|------------------------------------------------|------------------------------------------------|------------------------------------------------|------------------------------------------------|------------------------------------------------|------------------------------------------------|------------------------------------------------|------------------------------------------------|------------------------------------------------|------------------------------------------------|------------------------------------------------|------------------------------------------------|------------------------------------------------|------------------------------------------------|
| 1 Narrative of the State of the PLC Industry   | 2 PLC and RTU Inventory                         | 3 Software and Programming Inventory            | 4 Computer Hardware Inventory                    | 5 Radio Telemetry System and Network Hardware Inventory | 6 Replacement Planning and Recommendations       | 7 Summary Report                                | Subtotals                                      | Subtotals                                      | Subtotals                                      | Subtotals                                      | Subtotals                                      | Subtotals                                      | Subtotals                                      | Subtotals                                      |
|                                                | $520 $3,440 $1,270 $1,540 $0 $200 $600         | $520 $980 $2,540 $3,070 $0 $0 $120             | $520 $980 $2,540 $3,070 $0 $200 $120            | $520 $980 $1,270 $1,540 $0 $200 $120            | $1,040 $4,920 $5,090 $6,140 $1,090 $200 $120 | $1,040 $4,920 $3,820 $4,610 $270 $200 $120 | $70,050                                        | $7,570                                        | $7,230                                        | $7,430                                        | $4,630                                        | $18,600                                       | $14,980                                       | $70,050                                        |
MEMORANDUM

TO: Board of Directors
FROM: Denise Garcia, Administrative Services Manager
DATE: October 11, 2018
SUBJECT: Proclamation in Memoriam of Wayne A. Clark

RECOMMENDATION

Approve a proclamation honoring the life and memory of Wayne A. Clark.

The Executive Committee reviewed this item at its October 2, 2018 meeting and recommends Board approval.

STRATEGIC PLAN

Goal #7: Actively participate in regional water issues.

DISCUSSION

Wayne A. Clark was an active leader in the water industry for 37 years, first serving as a member of the Irvine Ranch Water District Board of Directors from 1977 until 1981.

In 1979, Mr. Clark was elected to the Municipal Water District of Orange County (MWDOC) Board of Directors, where he served the constituents of Newport Beach, portions of Irvine, Lake Forest and Laguna Woods until 2014.

As a Director for MWDOC and in partnership with the Orange County Water District, he formed the National Water Resources Institute to develop new sources of water through cooperative research and technology while protecting the environment.

Mr. Clark was involved with the Association of California Water Agencies and served as an Elected Alternate to the National Water Resources Association Board of Directors. He was also the Founder and former Executive Director of the Urban Water Institute, a non-profit corporation devoted to providing information on the economics and management of water resources.

Mr. Clark has left behind a legacy that will continue to benefit the water industry and Southern California for years to come.

FINANCIAL IMPACT

None.

ATTACHMENTS

Attachment A: Draft Proclamation
In Memoriam of Wayne A. Clark

Whereas, Wayne A. Clark was an active leader in the water industry for 37 years; and

Whereas, he first served as a member of the Irvine Ranch Water District Board of Directors from 1977 until 1981; and

Whereas, in 1979, Mr. Clark was elected to the Municipal Water District of Orange County (MWDOC) Board of Directors, where he served the constituents of Newport Beach, portions of Irvine, Lake Forest and Laguna Woods until 2014; and

Whereas, Mr. Clark, as a Director for MWDOC and in a partnership with the Orange County Water District, formed the National Water Resources Institute to develop new sources of water through cooperative research and technology while protecting the environment; and

Whereas, Mr. Clark was involved with the Association of California Water Agencies and served as an Elected Alternate to the National Water Resources Association Board of Directors; and

Whereas, Mr. Clark was the Founder and former Executive Director of the Urban Water Institute, a non-profit corporation devoted to providing information on the economics and management of water resources; and

Whereas, Mr. Clark has left behind a legacy that will continue to benefit the water industry and Southern California for years to come.

NOW THEREFORE, BE IT RESOLVED that the Board of Directors of Mesa Water District, with deep respect and gratitude, honor the life and memory of Wayne A. Clark.

__________________________
Jim Atkinson, President

__________________________
Fred R. Bockmiller, P.E., Vice President

__________________________
Shawn Dewane, Director

__________________________
October 11, 2018

__________________________
Marice H. DePasquale, Director

__________________________
James R. Fisler, Director
MEMORANDUM

TO: Board of Directors
FROM: Paul E. Shoenberger, P.E., General Manager
DATE: October 11, 2018
SUBJECT: Independent Special Districts of Orange County Executive Committee Election

RECOMMENDATION

Approve support of Santa Margarita Water District Vice President Saundra Jacobs and El Toro Water District Director Mark Monin as President and First Vice President, respectively, for the Independent Special Districts of Orange County Executive Committee election and authorize President Jim Atkinson to be the District’s voting delegate.

The Executive Committee reviewed this item at its October 2, 2018 meeting and recommends Board approval.

STRATEGIC PLAN

Goal #1: Provide a safe, abundant, and reliable water supply.
Goal #2: Practice perpetual infrastructure renewal and improvement.
Goal #3: Be financially responsible and transparent.
Goal #4: Increase public awareness about Mesa Water® and about water.
Goal #5: Attract and retain skilled employees.
Goal #6: Provide outstanding customer service.
Goal #7: Actively participate in regional water issues.

PRIOR BOARD ACTION/DISCUSSION

At its September 13, 2018 meeting, the Board of Directors (Board) received a discussion item in order to discuss the possible nomination of a candidate from Mesa Water District (Mesa Water®) for the Independent Special Districts of Orange County Executive Committee; no candidate was put forth.

At its October 2, 2018, the Executive Committee received a discussion item to provide guidance on the slate of candidates. The Executive Committee recommended Board approval to support Santa Margarita Water District Vice President Saundra Jacobs and El Toro Water District Director Mark Monin as President and First Vice President, respectively. In addition, the Executive Committee recommended Board approval to authorize President Jim Atkinson to be the District’s voting delegate.

DISCUSSION

The Independent Special Districts of Orange County (ISDOC) will elect the members of their Executive Committee by mail ballot during the month of October; new officers will be announced at ISDOC’s quarterly meeting on October 25, 2018. The elected Executive Committee members will serve a two-year term that begins January 1, 2019 and ends December 31, 2020. Meetings of ISDOC’s Executive Committee occur on the first Tuesday of every month at 7:30 a.m. at the offices of the Municipal Water District of Orange County (MWDOC) in Fountain Valley, CA.
In order to have been considered, a candidate must be an elected or appointed official of a regular member district and be endorsed by his/her district in the form of a Board resolution. The nomination period for Executive Committee officer positions closed on September 18, 2018. All candidates nominated by their respective Boards were placed on the ballot for the full membership to vote.

Each regular member District in good standing shall be entitled to one vote per position. In accordance with current bylaws, the votes must be cast (signed) by the District’s presiding officer or an alternate selected by the District’s Board. The ballots were sent out – via U.S mail and email - on September 21, 2018 with a deadline to be returned no later than 5 p.m. on October 23, 2018.

The responsibilities of each Executive Committee position are as follows:

**President** – The President is the chief executive officer of ISDOC. He or she presides at all meetings of the Board of Directors and the Executive Committee, appoints all committees, and represents ISDOC as its official spokesperson.

**First Vice President** – The First Vice President chairs the Program Committee. Duties include planning the Quarterly Luncheon program, inviting and coordinating with the invited speaker, and in the absence of the President, shall perform all duties of the President.

**Second Vice President** – The Second Vice President chairs the Membership Committee. Duties include maintaining a list of current regular and associate members, follow up with any outstanding membership dues as needed, and in the absence of the President and First Vice President, shall perform all duties of the President.

**Third Vice President** – The Third Vice President chairs the Legislative Committee. Duties include providing a legislative update, making legislative position recommendations to the Executive Committee, and in the absence of the President, First Vice President, and Second Vice President, shall perform all duties of the President.

**Secretary** – The Secretary is responsible for all correspondence and the dissemination of information to members. Duties include preparing and distributing agendas and minutes for the Executive Committee meetings, and editing and publishing the quarterly newsletter. All official correspondence to the members will be approved in advance by the President or President’s designee.

**Treasurer** – The Treasurer maintains the complete financial records and bank accounts in the name of the Organization, and pays all bills duly approved by the, Executive Committee, with a report to be presented to the membership at the Organization’s next membership meeting.

The current Executive Committee members are as follows:

**President** – James Fisler, Mesa Water District  
**1st Vice President** – Saundra Jacobs, Santa Margarita Water District  
**2nd Vice President** – Mark Monin, El Toro Water District  
**3rd Vice President** – Mary Aileen Matheis, Irvine Ranch Water District  
**Secretary** – Doug Davert, East Orange County Water District
The ISDOC bylaws indicate that, “at the end of the nomination period if only one candidate is nominated for a vacant seat, that candidate shall be deemed selected”. This is the case for the Second Vice President, Third Vice President and Treasurer positions; therefore, they are not on the ballot. Arlene Schafer from Costa Mesa Sanitary District, Mary Aileen Matheis from Irvine Ranch Water District and Joan Finnegan from Municipal Water District of Orange County, respectfully, have been selected to these seats. As there were no nominations for the Secretary position, the ISDOC Executive Committee will either fill the vacancy by appointment or call for a special election within the first sixty days of 2019.

Following are the list of ballot candidates and the respective seats they are pursuing:

**President**
- Saundra Jacobs, Santa Margarita Water District
- Michael Posey, Orange County Mosquito & Vector Control District

**First Vice President**
- Lucille Kring, Orange County Mosquito & Vector Control District
- Mark Monin, El Toro Water District

**FINANCIAL IMPACT**

None; the annual membership dues to ISDOC are estimated at $50.

**ATTACHMENTS**

Attachment A: ISDOC Election Correspondence
Attachment B: Candidate Correspondence
September 21, 2018

RE: Election of Independent Special Districts of Orange County (ISDOC) Officers

Dear Member Districts,

The nomination period for Executive Committee officer positions closed on September 18th, 2018. At this time, ISDOC is conducting a vote of Regular Special District Members for the election of officers. This letter serves as official notice of the election.

The names of nominated candidates are printed on the ballot. Please vote for one candidate per seat.

The Executive Committee meets at 7:30 am on the first Tuesday of the month. Meetings are open to the public. Duties of Executive Committee members are contained in the ISDOC bylaws, which may be found at the ISDOC website - http://www.mwdoc.com/ISDOC.

Each Regular Member District in good standing shall be entitled to one vote. In accordance with current bylaws, the vote must be cast (signed) by the district’s presiding officer or an alternate selected by the district board.

You may submit your ballot via mail or email to Heather Baez: P.O. Box 20895, Fountain Valley, CA 92728 (mail) or hbaez@mwdoc.com (email). Ballots must be received by 5:00 p.m. on Tuesday, October 23, 2018 in order to be counted. Even if positions are uncontested, it is important to submit a ballot since a quorum of voting members is required for the election of officers.

The names of officers elected will be announced at the October 25th quarterly meeting.

If you have any questions or wish to discuss the election process further, please contact Heather Baez (MWDOC) at hbaez@mwdoc.com or (714) 593-5012.

Sincerely,

[Signature]

James R. Fisler, President
Independent Special Districts of Orange County

Enclosed: Ballot for ISDOC Election of Officers Candidates’ Statements
INDEPENDENT SPECIAL DISTRICTS OF ORANGE COUNTY
ELECTION OF OFFICERS

The ISDOC Executive Committee consists of the President, First Vice President, Second Vice President, Third Vice President, Secretary, Treasurer and Immediate Past President. Officers are elected in October of even numbered years for two year terms. Please vote for one candidate per seat.

The ISDOC bylaws indicate, "At the end of the nominating period if only one candidate is nominated for a vacant seat, that candidate shall be deemed selected." This is the case for the Second Vice President, Third Vice President and Treasurer positions, therefore they are not on the ballot. Arlene Schafer from Costa Mesa Sanitary District, Mary Aileen Mathies from Irvine Ranch Water District and Joan Finnegan from Municipal Water District of Orange County, respectively, have been selected to these seats. As there were no nominations for the Secretary position, the ISDOC Executive Committee will either fill the vacancy by appointment or call for a special election within the first sixty days of 2019.

**Cast your Vote:** Please cast your vote for the remaining seats by placing an “X” on the line next to the individual for which you wish to vote in each position. If you are writing in a candidate, please include their district affiliation and position. **THE SIGNATURE PAGE IS ON THE REVERSE SIDE OF THE BALLOT. IT MUST BE SIGNED BY YOUR VOTING REPRESENTATIVE IN ORDER TO BE COUNTED.**

**President**

_________ Saundra Jacobs, Vice President
Santa Margarita Water District

_________ Michael Posey, Trustee
Orange County Mosquito & Vector Control District

**First Vice President (Programs)**

_________ Lucille Kring, President
Orange County Mosquito & Vector Control District

_________ Mark Monin, Director
El Toro Water District

________________________________________________________________________________________

**DISTRICT NAME**

________________________________________________________________________________________

**SIGNATURE OF VOTING REPRESENTATIVE**

**Ballots must be received no later than 5 p.m. October 23, 2018.**
You may return your ballot by mail or email to:

Heather Baez
P.O. Box 20895
Fountain Valley, CA 92728
**Attention: ISDOC Executive Committee Election**
OR Email: hbaez@mwdoc.com
August 22, 2018

Board of Directors
Mesa Water District
1965 Placentia Avenue
Costa Mesa, CA 92627

Re: Santa Margarita Water District Resolution in Support of Director Saundra F. Jacobs Nomination for President of the Independent Special Districts of Orange County

Dear President and Members of the Board:

I am delighted to announce my candidacy for President of the Independent Special Districts of Orange County ("ISDOC"). I am writing today to ask for your districts’ support.

I have a deep and abiding commitment to the twenty-six Special Districts that competently and ably provide critical public services in our county. It has been my privilege to serve in ISDOC leadership during my 12 consecutive years on the ISDOC Board. I am currently the First Vice President and serve on the Executive Committee.

My passion for public service and the work of special districts comes from my 22 years on the Santa Margarita Water District ("SMWD") Board of Directors. While I have extensive experience in the water sector I also have a keen interest and awareness of the needs and requirements for success of all special districts—from library and vector control to water, sewer, and other community services. I hope that I have adequately demonstrated my willingness to provide leadership in organization, advocacy, and communication to benefit and nurture special districts of every stripe.

ISDOC is an important association of agencies providing important services associated with LAFCO and CSDA. We need the continued leadership of all individuals who have a demonstrated commitment to serving the public, a strong sense of responsibility for the protection of the value that special districts provide, and a vision to plan for the future of the organization here in Orange County. It would be my honor to serve you and our organization as President and I humbly ask for your vote and support. If you or your colleagues have questions about my candidacy I hope you will contact me at 949/702-1145 or at saundraj@smwd.com.

Sincerely,

Saundra F. Jacobs
SMWD Board Member
First VP, ISDOC
Date: September 17, 2018

Independent Special Districts of Orange County
18700 Ward St.
Fountain Valley, CA 92708

Dear Selection Committee

I am writing to you today to express my keen interest in serving as President of ISDOC. I was nominated to apply and voted unanimously by my peers at Orange County Mosquito and Vector Control where I serve on the Board of Trustees as well serve as the Chair for the Budget and Finance Committee.

Until year-end, I also serve as Mayor for the City of Huntington Beach voted in unanimously by my City Council colleagues in December 2017 for a one-year term. First elected to the City Council in 2014 I am finishing my first term and running for re-election for a second term. Prior to my election to City Council, I served as a Planning Commissioner.

Other County-wide service includes Commissioner for Orange County Parks, I was nominated to serve by Orange County Supervisor, Michelle Steel with my nomination confirmed unanimously by the entire Board. I also serve as Chair of the West Orange County Water District and an alternate on Sanitation District.

Committees served at the City of Huntington Beach include Chair of Economic Development Committee, Chair of Intergovernmental Relations, Personnel Committee, Special events and many others.

Non-Governmental service with the Association of California Cities include, Co-Chair of the Jobs and Economic Development Committee and member of the Legislative Affairs Committee. I also serve on the Governmental Affairs Committee for the Huntington Beach Chamber of Commerce.

Lastly, I am on the Board of SCAG, OCCOG and serve as the alternate voting member of the RHNA Committee for SCAG.

I respectfully ask that nomination be considered: I have the demonstrated leadership, organizational and relationship building skills to well serve ISDOC and its members.

Sincerely,

Michael Posey
September 27, 2018

Mesa Water District
Attention: Jim Atkinson
1965 Placentia Ave.
Costa Mesa, CA 92627

Re: Mark Monin for ISDOC Executive Committee 1st Vice President

Dear Board Members,

I would be honored to serve as 1st Vice President for the Independent Special Districts of Orange County Chairing the Program Committee and would love to speak with your District. Duties include planning the Quarterly Luncheon Program, inviting and coordinating with the invited speakers and in the absence of the President perform all duties of the President.

I currently serve on the ISDOC Executive Committee as the 2nd Vice President chairing the Membership Committee. Duties include maintaining a list of current and regular and associate members, follow up with any outstanding membership dues as needed and in the absence of the President and the 1st Vice President perform all duties of the President.

I am a Director and Treasurer on the El Toro Water District Board and Vice Chairman / Commissioner of the Orange County Airport Land Use Commission. I was also a PCF Fire Fighter with the Orange County Fire Authority. I have proven to be a fiscally responsible individual with a “think out of the box mentality” and I look forward to working with the other ISDOC Board members to achieve greatness. I love Orange County and want to work hard here and in Sacramento to help Special Districts progress into the future. With the exception of one meeting, I have attended every ISDOC Executive Committee meeting in the last 4 years and I know the issues that have affected ISDOC in the past and what is important to propel this fine organization in the future. My qualifications for this position include:

>EXPERIENCED LEADER >COMMITTED TO SPECIAL DISTRICTS >FISCALLY RESPONSIBLE >DEDICATED

As you know ISDOC is a membership association that was formed more than 30 years ago to serve the needs of Orange County’s independent special districts. I want to continue to build on that fine tradition, work hard with others to achieve a higher degree of member satisfaction and make ISDOC even stronger. I feel I can collaborate with the Executive Committee and the membership to provide valuable information and presentations on issues that affect Special Districts which can help you with important discussions in the future.

Please see the accompanying resume outlining my experience and education. I would love to hear your thoughts on how we can make ISDOC even better and please contact me with your input, ideas or questions on my experience or platform. I can be reached at (949) 939-6612 or markmonin@msn.com.

Sincerely,

Mark Monin, Director/Treasurer
Mark L. Monin
3371 Punta Alta Unit 3E
Laguna Woods, CA 92637
(949) 939-6612
markmonin@msn.com

Mark Monin serves as a Director with the El Toro Water District and Vice Chairman of the Orange County Airport Land Use Commission. He is also has over 35 years in the securities industry, most recently with Raymond James, specializing in executive services, 401k, endowments, foundations, high level financial planning and asset management. Mark is also a former PCF Fire Fighter with Orange County Fire Authority and has pilot FAA Licenses private, commercial, instrument and multi engine. Mark also has over 28 years of real estate experience mostly in Orange County California.

Professional Experience

Boards/Committees/Community Involvement

- El Toro Water District, Board of Directors 2015 – Present
- Vice Chairman of the Orange County Airport Land Use Commission 2015 – Present
- South Orange County Watershed Management Area Executive Committee
- Independent Special Districts of Orange County (ISDOC)
- South Orange County Agencies
- Water Advisory Committee of Orange County (WACO)
- Orange County Water Association (OCWA)
- City of Laguna Woods Public Safety Committee Chairman 2012-2015 Past Chairman
- City of Laguna Woods Landscape Committee, Past Member
- Newport Beach Chamber of Commerce, Past Member
- Irvine Chamber of Commerce, Past Member

Financial Investment/Securities Industry (35 Years)

- Raymond James Financial Services, Newport Beach 2009-current
- Oppenheimer & Co., Newport Beach, California 2005-2009
- Morgan Stanley, Sales Manager / Financial Advisor, Los Angeles / Orange County 1998 - 2005
- Prudential Securities, Assistant Manager, Anaheim 1991 – 1994

Aviation Experience / Aviation Organizations

- Pilot Data & FAA Licenses
  - Private
  - Commercial
  - Instrument
  - Multi Engine
- Vice Chairman of the Orange County Airport Commission (Land Use) 2015-present
- Adjunct Professor at California Baptist University, Riverside, CA 2015- Present
  - Teaches Aviation Law and Aviation Finance
- Civil Air Patrol (Auxiliary United States Air Force) from 1992-1996
  - Aerial and ground search & rescue,
- Civil Air Patrol Aerial Disaster inspection, Orange County, CA
  - DEA and Customs assistance in aerial surveillance, air transport from 1992-1996
- Flying Samaritans/ Liga
  - Free medical clinics; fly physicians/medical professionals to Mexico 1995-present
- Angel Flight Pilot
  - Provides transportation to medical treatment for those who cannot afford/tolerate public transportation, 1998-present
- Southern California Pilots Association
To provide a collective voice for General Aviation at our So CA Airports.
- Develop a positive working relationship with the airport administration.
- Foster camaraderie amongst So CA Pilots with aviation related
- Enhance safety and education in the So CA Pilot community.
- Orange County Pilots Association (OCPA)
  - OCPA is an association of aviation enthusiasts with the purpose of promoting aviation at the Orange County Airport
- Experimental Aviation Association (EAA)
  - Experimental Aircraft Association based in Oshkosh, Wisconsin, encourages and supports recreational aviation.

**Real Estate Experience (28 Years)**

- California Department of Real Estate, 1988 – Present (28 Years)
- Real Estate Consultant
- California Department of Real Estate Continuing Education

**Firefighter Experience**

- Orange County Fire Authority
  - PCF/ Firefighter/Engineer/ search & rescue/ medical training (first responder) 1988-1995
- Twin District Fire Department, Lancaster, NY
  - Firefighter/ Engineer/ search & rescue/ medical training (first responder) 2005-2006
- Lancaster Fire Department, Lancaster, NY
  - Firefighter/ Engineer/ search & rescue/ medical training (first responder) 1982-1984
- Egypt Fire Department, Rochester/Perrington, NY
  - Firefighter/ Engineer/ search & rescue/ medical training (first responder) 1985-1987

**Education/Licensure**

- Pepperdine University, Malibu California, Masters in Business Administration, 2002
- The Wharton School, University Of Pennsylvania, Senior Financial Advisor
- The Wharton School, University Of Pennsylvania, Management Training Program
- Institute of Investment Management Consulting, Investment Management Consultant
- The Institute of Business & Finance: Certified Annuity & Fund Specialist
- Board Certified in Asset Allocation
- Canisius College, Buffalo New York, BS/Finance, 1981
- University of Buffalo, Aeronautical Engineering, 1978
- Federal Aviation Administration, Multi Engine, 2000
- New York Stock Exchange, Series 8, Branch Manager, 1990
- National Association of Securities Dealers, Series 65, Financial Planning, since 1989
- California Department of Real Estate, since 1988
- National Association of Securities Dealers, Series 3, Futures, since 1988
- National Association of Securities Dealers, Series, Options Principal, since 1983
- National Association of Securities Dealers, Series 24, Principal Supervisor, since 1983
- National Association of Securities Dealers, Series 63, State Licensing, since 1981
- Securities Licensed in California, Colorado, Connecticut, Delaware, Georgia, Iowa, Illinois, Indiana, Louisiana, Maryland, New Jersey, New York, Ohio, Pennsylvania
- Federal Aviation Administration, Commercial, 1979
- Federal Aviation Administration, Instrument, 1978
- Federal Aviation Administration, Private, 1977
September 17, 2018

My name is Lucille Kring, council woman in Anaheim for 14 years.

I am running for 1st Vice President of ISDOC. This organization is needed to serve the community of Orange County. It does a great job and needs to be protected.

I have served on the Orange County Sanitation District board for over 4 years.

I served on the Transportation Corridor Agencies board for over 8 years.

I am currently the president of the Orange County Mosquito and Vector Control board and have served for over 11 years, twice as President.

I believe my background on these boards and council has prepared me to be a part of ISDOC.

Thank you for your consideration,

Lucille Kring
MEMORANDUM

TO: Board of Directors
FROM: Paul E. Shoenberger, P.E., General Manager
DATE: October 11, 2018
SUBJECT: Attendance at Conferences, Seminars, Meetings, and Events

RECOMMENDATION

In accordance with Ordinance No. 28, adopted April 13, 2017, authorize attendance at conferences, seminars, meetings, and events.

STRATEGIC PLAN

Goal #1: Provide a safe, abundant, and reliable water supply.
Goal #2: Practice perpetual infrastructure renewal and improvement.
Goal #3: Be financially responsible and transparent.
Goal #4: Increase public awareness about Mesa Water® and about water.
Goal #5: Attract and retain skilled employees.
Goal #6: Provide outstanding customer service.
Goal #7: Actively participate in regional water issues.

PRIOR BOARD ACTION

At its June 14, 2018 meeting, the Board of Directors (Board) approved Fiscal Year 2019 attendance at Conferences, Seminars, Meetings, and Events.

DISCUSSION

During the discussion of this item, if any, the Board may choose to delete any item from the list and/or may choose to add additional conferences, seminars, meetings, or events for approval, subject to available budget or additional appropriation.

FINANCIAL IMPACT

None.

ATTACHMENTS

None.
2018 CONFERENCES, SEMINARS, AND MEETINGS:

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<tr>
<th>Date</th>
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<tr>
<td>October 11, 2018</td>
<td>MWDOC Water Policy Forum</td>
<td>Costa Mesa, CA</td>
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<tr>
<td>October 22 - October 25, 2018</td>
<td>CA-NV Annual Fall Conference</td>
<td>Rancho Mirage, CA</td>
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<tr>
<td>October 26, 2018</td>
<td>MCWRA Water Symposium</td>
<td>Auburn, CA</td>
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<tr>
<td>November 26 - November 30, 2018</td>
<td>ACWA/JPIA Fall Conference</td>
<td>San Diego, CA</td>
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<tr>
<td>December 6, 2018</td>
<td>MWDOC Elected Officials Forum</td>
<td>Fountain Valley, CA</td>
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<tr>
<td>December 12 - December 14, 2018</td>
<td>Colorado River Water Users Association Conference</td>
<td>Las Vegas, NV</td>
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2019 CONFERENCES, SEMINARS, AND MEETINGS:

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<th>Date</th>
<th>Event</th>
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<tr>
<td>February 6 - 8, 2019</td>
<td>CalDesal Annual Conference</td>
<td>Palm Springs, CA</td>
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<td>February 25 - 28, 2019</td>
<td>AWWA/AMTA Membrane Technology Conference</td>
<td>New Orleans, LA</td>
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<td>February 27 - March 1, 2019</td>
<td>Urban Water Institute Spring Conference</td>
<td>Palm Springs, CA</td>
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<td>March 17 - 19, 2019</td>
<td>WaterReUse Conference</td>
<td>Garden Grove, CA</td>
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<td>March 27 - 28, 2019</td>
<td>WaterNow Alliance 4th Annual Summit</td>
<td>Austin, TX</td>
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<td>May 7 - 10, 2019</td>
<td>ACWA/JPIA Spring Conference</td>
<td>Monterey, CA</td>
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<td>Sep 30</td>
<td>10:00am MWDOC Planning &amp; Operations Committee Meeting (MWDOC Conference Room 101).</td>
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<td>Oct 1</td>
<td>10:00am Newport-Mesa State of the Schools Event (Corona Del Mar)</td>
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Kathy Pham

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<td>Dec 2</td>
<td>11:00am EVC Artisans Marketplace</td>
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<td>Dec 3</td>
<td>8:30am MWDOC Planning &amp; Operations Committee Meeting (MWDOC Conference Room 101)</td>
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<td>7:30am MWDOC Executive Committee Meeting (MWDOC Conference Room 101)</td>
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<td>3:30pm Executive Committee Meeting (MK500)</td>
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Kathy Pham

10/3/2018 12:47 PM
## UP COMING COMMUNITY OUTREACH EVENTS

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<tr>
<th>Event:</th>
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| **ARTVenture**                   | **Friday, October 5, 2018 5:00 to 9:00 p.m.**     | **Segerstrom Center for the Arts (SCFTA) – Renee and Henry Segerstrom Concert Hall**  
| Costa Mesa’s Premier Art Event   | **Saturday, Oct. 6, 2018 10 a.m. to 3 p.m.**      | 600 Town Center Drive  
|                                 |                                                  | Costa Mesa, CA 92626                                                     |
| **Vanguard University**          | **Friday, October 5, 2018 3:00 p.m.**             | **Vanguard University**                                                  |
| **Groundbreaking Ceremony**      |                                                  | 55 Fair Drive                                                           |
|                                 |                                                  | Costa Mesa, CA 92626                                                   |
| **Werner Escher**                | **Monday, October 8, 2018 9:00 a.m. to 4:00 p.m.**| **Santa Ana Country Club**                                             |
| **Community Golf Classic**       |                                                  | 20382 Newport Boulevard                                                 |
|                                 |                                                  | Costa Mesa, CA 92707                                                   |
| **Fall in Love with the Westside** | **Saturday, October 21, 2018 9:00 a.m. to 2:00 p.m.** | **Estancia High School**                                               |
| **Local Artisans Market**        |                                                  | 2323 Placentia Avenue                                                  |
|                                 |                                                  | Costa Mesa, CA 92627                                                   |
MEMORANDUM

TO: Board of Directors
FROM: Marwan Khalifa, CPA, MBA, Chief Financial Officer
DATE: October 11, 2018
SUBJECT: Reimbursement Payment Process

RECOMMENDATION

Approve that Director and employee reimbursement payments be processed through payroll bi-weekly and discontinue the issuing of paper checks for Director and employee reimbursement payments.

STRATEGIC PLAN

Goal #3: Be financially responsible and transparent.
Goal #6: Provide outstanding customer service.

PRIOR BOARD ACTION/DISCUSSION

At its September 20, 2018 meeting, the Finance Committee received an action item on this topic. After much discussion, the Board directed staff to agendize the item at a future Board meeting.

DISCUSSION

Currently, reimbursement payments for Directors and employees are processed through the Finance Department resulting in the issuing of a paper check. Staff was recently directed to research options for automatic deposit of reimbursement payments in order to eliminate the inefficient process of issuing paper checks. The current process requires approximately 60 minutes of staff time per reimbursement (at a cost of approximately $60). The process involves a reconciliation of receipts, verification of the totals, processing of payment through Great Plains and follow up to ensure delivery of the paper check. Two possible options are as follows:

1) Accounts Payable Option – Processing Reimbursement Payments Through Accounts Payable

Automatic Clearing House (ACH) deposits would require additional setup work with Union Bank to establish the ACH program and to set up each Director and employee with their own ACH Deposit. This option would result in the bank account information of Directors and employees being stored in a second location in addition to the payroll system. This would require setting up a new process for ensuring the security of Director and employee information. The ACH process would reduce required staff time in the current process down from 60 minutes to 30 minutes. This time savings would come from reduced follow up and distribution of checks. There are approximately ten reimbursements issued per month which would result in a monthly time savings of approximately five hours to staff time. Accounts payable checks are issued weekly and therefore would allow for reimbursement checks to be issued weekly, if needed.

2) Payroll Option – Processing Reimbursement Payments Through Payroll

Processing reimbursement payments through payroll would result in one additional line item on paystubs when a reimbursement is processed. Staff would be able to set up a payroll code for
reimbursement that is non-taxable for all taxes. However, all Director and employee information related to bank accounts and social security numbers would not need to be reentered or maintained in a second system since this information is already secure in the Sentric payroll system. Similar to the ACH process, the payroll option would reduce required staff time in the current process down from 60 minutes to 30 minutes. This time savings would come from reduced follow up and distribution of checks. There are approximately ten reimbursements issued per month which would result in a monthly time savings of approximately five hours of staff time. Payroll is processed bi-weekly and therefore would allow for reimbursements to be processed every other week, if needed.

Staff recommends Option 2 – Processing Reimbursement Payments through Payroll. Staff’s research found that this process would yield the most efficiencies for the District, while also adhering to the organization’s best practices for the ever changing demands on security.

FINANCIAL IMPACT

None.

ATTACHMENTS:

None.
MEMORANDUM

TO: Board of Directors
FROM: Denise Garcia, Administrative Services Manager
DATE: October 11, 2018
SUBJECT: New Phone System

RECOMMENDATION

Award a three year contract with Vonage for $246,255 and a 10% contingency with two one-year renewal options to provide a Voice Unified Communications/Contact Center Cloud System.

STRATEGIC PLAN

Goal #3: Be financially responsible and transparent.
Goal #5: Attract and retain skilled employees.
Goal #6: Provide outstanding customer service.

PRIOR BOARD ACTION/DISCUSSION

At its February 8, 2018 meeting, the Board of Directors (Board) approved retaining the services of Stein Technology Consulting Group (STCG) for an amount not-to-exceed $27,000 for the Procurement and Implementation Management of a new telephone system.

BACKGROUND

Mesa Water District's (Mesa Water®) current phone system is a cloud-based IP Telephony system from Fuze (previously known as Thinking Phones). Fuze was procured and implemented 2014-2015 and provides telephone services for all District staff including voice, conferencing, mobility, and unified communications. Carousel Industries is the integration partner that the District originally contracted with for Fuze’s services.

In 2016, the Board awarded a contract to Moran Consulting, Inc. to develop and provide Elite Customer Service training. Moran evaluated the District's current level of customer service and established a baseline that was used to identify enhancements to create a new customer service culture and improve customer satisfaction.

At its April 13, 2017 meeting, the Board approved the Elite Customer Service next steps which included the implementation of recommended telephone system enhancements. At this time, the District implemented the Fuze Automatic Call Distribution (ACD) for customer service. The ACD replaced the previously used “hunt groups” and provided the following functionality:

- Allows calls to be queued (when there are more active callers than available customer service representatives)
- Provides reports with a variety of metrics such as wait time, abandon rate, etc.
- Provides automatic call recording
- Provides the ability to offer surveys to callers
- Provides a call back option for callers that don't want to wait in queue
- Provides the ability for calls to be audited for consistency and compliance
Staff believes that the implementation of the Fuze ACD did not go smoothly. Several problems were encountered over the course of six months. Some of the issues encountered were identified as limitations of the Fuze software, primarily issues with the recording and reporting of phone calls. Staff engaged with STCG to assist with identifying solutions to these issues. Three solution based approaches were identified:

1. Work with Fuze to resolve existing issues
2. Procure a new ACD system
3. Procure a new telephone system

After evaluating the three approaches to resolving the existing Contact Center issues, staff recommended to the Board in February of 2018 to replace the telephone system and proceeded with the Request for Proposal process.

DISCUSSION

On July 23, 2018, Mesa Water solicited proposals from eight vendors for a Voice/Unified Communications/Contact Center Cloud System. Proposals were received from the following six vendors: Blue Violet, Carousel, DTC, Vonage, Vox, and 8x8 (proposals are available upon request). The proposals were reviewed and evaluated by a selection panel comprised of staff, Dave Stein of STC and Kimera Hobbs from Moran Consulting. Three proposals clearly exceeded the mandatory specifications of the RFP and they were invited to participate in the interview process the week of August 20, 2018. All three vendors were found to be well qualified and each presented a solution for the scope of work. The selection panel determined that Vonage's solution best synchronized with Mesa Water's required scope of work. Vonage's solution best meets the District's requirements to provide an ACD system for our customer services—specific functions and a core voice system for our internal and external customers. The results of the proposals are as follows:

<table>
<thead>
<tr>
<th>Rank</th>
<th>Proposer</th>
<th>Submitted Initial Cost</th>
<th>Monthly Recurring Costs</th>
<th>Total 3-year Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Vonage</td>
<td>$9,699.00</td>
<td>$6,571.00</td>
<td>$246,255.00</td>
</tr>
<tr>
<td>2</td>
<td>Carousel</td>
<td>$97,268.00</td>
<td>$5,315.00</td>
<td>$288,596.25</td>
</tr>
<tr>
<td>3</td>
<td>Vox</td>
<td>$81,808.00</td>
<td>$5,965.00</td>
<td>$296,535.75</td>
</tr>
</tbody>
</table>

The cost disparity between Vonage and the other vendors is due to the fact that Vonage bundles the costs of the echo surveys and includes most of the professional services for the implementation at no charge whereas the others have more extensive fees.

Staff recommends that the Board approve a three year contract with Vonage for $246,255 and a 10% contingency with two one-year renewal options.
FINANCIAL IMPACT

In Fiscal Year 2019, $125,000 is budgeted for a new phone system; no funds have been spent to date.

ATTACHMENTS:

Attachment A: Request for Proposal
Professional Services Request for Proposal

Voice/Unified Communications/ Contact Center Cloud

July 23, 2018
I. BACKGROUND & PURPOSE

Mesa Water District (Mesa Water) provides water service to more than 110,000 customers in an 18-square-mile area. The service area includes the City of Costa Mesa, parts of Newport Beach, and some unincorporated sections of Orange County, including the John Wayne Airport. The Mesa Water District headquarters is located at 1965 Placentia Avenue in Costa Mesa. Two buildings house the majority of non-field staff. Two remote locations have telephones and are not staffed on a full-time basis.

Today, Mesa Water District utilizes a Cloud-based Fuze for voice, UC and Contact Center. The system has limited Contact Center functionality and reporting capability. Although the system had served Mesa Water’s needs in the past, it is no longer suitable to support the growing needs of the District.

It has been determined that a new ‘Cloud-based’ system will be required to meet the future needs of the District. The new system must be able to meet Mesa Water’s changing needs by cost-effectively adding functionality in a modular fashion as it’s required by the business units. Premise based proposals will not be considered.

It should be noted that Mesa Water has limited in-house IT resources. Proposed solutions that are intuitive, allow for end-user self-service (i.e. password resets) and are easy to administer for basic Add, Move and Changes as well as Contact Center report generation will be welcome.
II. GENERAL INFORMATION

The purpose of the Request for Proposal (RFP) is to help Mesa Water answer the following critical questions:

- What ‘Cloud-based’ telecommunication vendor (integrator and solutions manufacturer) can provide a standardized technology solution that is easy to procure, support and manage?
- What telecommunication solution can deliver the functionality and features today and in the future with the lowest total cost of ownership?
- What telecommunications vendor can be a long term strategic partner in providing technology to Mesa Water?

The RFP is intended to solicit the most cost-effective technology solution available with the features, support and services that align with Mesa Water’s requirements. The successful voice/UC/Contact Center Vendor:

- Must have at least one expert network engineer assigned to this project to assist with interfacing to an existing LAN and 802.11 wireless networks. Review and modification of existing configurations as well as testing is part of the project. The proposed solution must work with the existing network components and the scope in this RFP is to ensure functionality with the proposed voice/UC solution;
- Must be able to demonstrate highly reliable ‘Cloud-based’ Contact Center, Voice and Unified Communications services similar to those requested by Mesa Water®; and
- Must be prepared to commit to a response time Service Level Agreement (SLA) backed by liquidated damages penalty.

In order to be considered, a proposal must include all capabilities and functionality specified in this RFP as required, including but not limited to LAN and 802.11 wireless integration, call processing, Contact Center, presence and messaging integration, IP and analog endpoints, Automated Attendant, and system/network management. In addition, the successful vendor will be required to provide integration support for the existing Microsoft Exchange 2016 system. A proposed solution lacking critical functionality may be determined to be non-compliant and/or non-responsive causing the entire proposal to be disqualified.

This RFP contains instructions governing the proposals to be submitted and the material to be included therein; a description of the project and specific services to be provided; general evaluation criteria; and other pertinent information. The submission of this proposal shall be considered evidence that the proposal has and is in acceptance with this RFP.

Any modifications or changes made in this RFP will be made in writing in the form of an addendum issued by Mesa Water. All proposers will receive written notice of any changes or modifications, which may be made by Mesa Water. Oral communications
from Mesa Water personnel or others concerning this RFP shall not be binding on Mesa Water and shall not in any way be considered as a commitment by Mesa Water.

Submit one electronic copy to the address listed below no later than **3:00 p.m., on August 13, 2018**. After this date and time proposals will not be accepted or considered. Upon receipt of your proposal, you will receive an e-mail acknowledging receipt. If you do not receive an e-mail acknowledging your submittal, please contact Denise Garcia at 949.631.1205.

Proposals are to be simultaneously submitted via email to:

Denise Garcia  
deniseg@mesawater.org

David Stein  
dave@steintechconsult.com

All materials submitted in accordance with this RFP become the property of Mesa Water and will not be returned. The material will become public record subject to the disclosure provisions of the Public Records Act (Government Code Section 6250 et seq.).

The following proposal timeframe is listed below:

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Release of RFP</td>
<td>July 23, 2018</td>
</tr>
<tr>
<td>Pre-Proposal Meeting - Conference Call (Mandatory) limited to 3 people per proposal</td>
<td>July 31, 2018, 3:00 p.m.</td>
</tr>
<tr>
<td>Deadline for Project Inquiries</td>
<td>August 6, 2018</td>
</tr>
<tr>
<td>Deadline for Proposals</td>
<td>August 13, 2018 3 p.m.</td>
</tr>
<tr>
<td>Short List &amp; Demo/Interviews</td>
<td>Week of August 20</td>
</tr>
<tr>
<td>Tentative Date for Award</td>
<td>September 9, 2018</td>
</tr>
<tr>
<td>Order Confirmation</td>
<td>NTP + 15 days</td>
</tr>
<tr>
<td>Configuration and Installation</td>
<td>NTP + 45 days</td>
</tr>
<tr>
<td>Integration Complete – In production</td>
<td>NTP + 70 days</td>
</tr>
<tr>
<td>Final Acceptance</td>
<td>NTP + 90 days</td>
</tr>
</tbody>
</table>

**A. Pre-Proposal Meeting – Conference Call**

A mandatory pre-proposal meeting shall take place on **July 31, 2018 3:00 p.m. Pacific Time** at the Mesa Water District headquarters located at 1965 Placentia Avenue, Costa Mesa CA 92627 or via conference call conducted by Mesa Water’s Project Manager. The purpose of the meeting is to discuss the project, review the request for proposal, and answer any questions from potential proposers.

Conference Call Number: 949.207.5455  
Conference Call Bridge Code: 994290
B. Project Inquiries

Any explanation desired by a proposer regarding the meaning or interpretation of the RFP or general inquiries must be requested in writing, via email simultaneously to Denise Garcia deniseg@mesawater.org and David Stein dave@steintechconsult.com.

The deadline for inquiries is August 6, 2018 at 5 p.m.

C. Contract

Prior to the commencement of services, the selected Voice/Unified Communications/Contact Center Vendor awarded the contract will be required to execute a Professional Services Contract (Appendix A) between itself and Mesa Water. The contract shall incorporate the scope of work defined herein and all RFP terms and conditions. Portions of the vendor’s proposal may be considered for inclusion into the scope of work at Mesa Water’s discretion.

Vendor shall review the Sample Professional Services Contract and list any exceptions for the consideration of Mesa Water®. If your firm has no exceptions, please indicate by documenting on the Professional Services Contract Form (Appendix B) “No Exceptions”.

Mesa Water® will consider the proposed exceptions and negotiate the contract language in good faith with the number one ranked firm. If an agreement with the contract language cannot be reached with the number one ranked firm, Mesa Water® will proceed to begin negotiations with the second ranked firm, and so on until an agreement can be reached that is in the best interest of Mesa Water®.

Please indicate that the Sample Professional Services Agreement has been reviewed and list any exceptions to the contract language. If your firm has no exceptions, please indicate by documenting on the Professional Services Agreement Form “No Exceptions”. Please sign and date the Professional Services Contract Exceptions Form (Appendix B).

If the vendor has an exception, they shall include a sample Contract as part of their RFP response.

D. Use of Subcontractors

The proposer may utilize subcontractors in an effort to perform all tasks listed in the Section III Scope of Work. The proposer must indicate which tasks are performed by the subcontractor on the Fee Schedule (Appendix D) and submit the resumes of the proposed subcontracting staff assigned to this project as described in Section IV.2 - Contents of Proposal; Statement of Experience.
E. Call Flows

Diagrams of Mesa Water District’s existing Call Flows are included in Appendix E. It is expected that this will be used as a starting point and will greatly reduce the amount of time needed for vendor discovery.

End of Section
III. SCOPE OF WORK

A. REQUIREMENTS

1. Business Requirements

These requirements are those that support Mesa Water’s business operations. As such, any solution must fully meet these requirements for consideration:

- Standardize voice communication systems, contact center, other applications, and user interfaces on a single technology platform
- Provide a State of the Art Contact Center solution to support current and future requirements
- Provide simple and intuitive communications capabilities for all staff
- Improve communication capabilities for mobile staff regardless of their work location.
- Offer an extensible communications infrastructure to simplify and support growth.
- Deliver financial benefits through operational cost reductions where appropriate
- Improve system management and IT support capabilities to improve customer service for both internal and external stakeholders.

2. Functional Requirements

These requirements are specific to the voice/UC/Contact Center system’s functionality but in their totality meet the business requirements described above:

- Provide a high degree of transparent operation across all facilities for user’s station, attendant, and system features.
- Provide Contact Center reporting that is easily customized by non-IT Contact Center staff.
- Enhanced reliability and resilience (no single point of failure) such as geographically diverse and redundant trunking, hosting cloud services data centers and automatic network failover to ensure maximum uptime.
- Create a uniform dial plan and integrated voice systems to simplify internal communications.
- Provide ‘bundled’ minutes for local and long distance (United States) for outbound calls.
- Provide centralized system management capabilities for all stations and voice system operations enterprise-wide.
- Improve and streamline call processing and self-service capabilities.
• Support ‘corridor warriors’ with Dual-mode wireless voice/UC services using Smart phones and tablets

• Outbound Dialer system capable of campaigns such as overdue payment reminders, service outages, etc.

• Reuse and integration of existing Microsoft Exchange 2016.

3. General Requirements

This section provides Proposers a brief overview of the nature and magnitude of the project. Statements in this section are intended to ensure that proposals encompass all necessary aspects of the project. This Mesa Water specific information is the basis for Proposer’s system configurations, responses, and pricing. As an integral part of this project, the Proposer’s response shall:

• Provide a "turn-key" system installation of the specific systems detailed in this RFP for Contact Center, Voice, Unified Communications and integration/testing with existing wired and wireless network infrastructure. Proposer responsibilities for the entire project shall include, but not limited to: design, engineering, ordering, delivery, asset management, project management, voice and network carrier services coordination (including number porting), installation, testing, software databases development, training, placement of phones, cutover, helpdesk, documentation, and warrantee of all systems. In addition, the proposed solution MUST include all cross-connect hardware, patch cables, power strips, for the proposed solution. Vendor must also include all required integrations and support of existing ‘re-use’ systems including HP LAN, HP/Aruba 802.11 network and Microsoft Exchange 2016.

• Subsequent to system cutover, line/circuit additions, and/or changes, the selected Proposer shall test all station lines (including conference rooms, and public stations), PSTN circuits, 911 applications, automatic failover functionality to ensure their proper installation, performance and connection to new equipment/system(s);

• Perform all discovery work including station reviews and call flows.

• Provide all required Contact Center Reports required by Mesa Water as described in this RFP.

• Perform all project management functions necessary to ensure accurate provisioning, design and implementation. This includes all points of integration activities with existing Mesa Water systems including but not limited to automatic Presence updates between proposed UC system and Mesa Water Outlook and Calendar.

• Perform all tasks necessary to develop, install, and conduct test/acceptance activities for all systems and user databases of the proposed systems.

• Develop and conduct on-site station user, ambassador (super-user), and admin training programs specifically designed for all system(s) and
applications being installed. The extent, nature and scheduling of such training shall be agreed upon by the selected Proposer and Mesa Water.

B. RFP DEFINITION OF TERMS

Throughout this document, various terms and abbreviations are identified with associated contractual responsibilities and/or definitions. The parties are referenced by the following terms:

<table>
<thead>
<tr>
<th>TERM</th>
<th>DEFINITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Furnish” or “Provide”</td>
<td>Supply, install and connect up complete and ready for safe and regular operation of particular work referred to unless specified otherwise noted.</td>
</tr>
<tr>
<td>“Install”</td>
<td>To erect, mount and connect complete with related accessories.</td>
</tr>
<tr>
<td>“LAN”</td>
<td>Local Area Network</td>
</tr>
<tr>
<td>“Mesa Water Representative”</td>
<td>STCG Consulting is the design/procurement/oversight consultant for Mesa Water</td>
</tr>
<tr>
<td>“Mesa Water”</td>
<td>Mesa Water District</td>
</tr>
<tr>
<td>“Proposer”</td>
<td>Vendor responding to the RFP</td>
</tr>
<tr>
<td>“RFC”</td>
<td>Request for Clarification</td>
</tr>
<tr>
<td>“RFP”</td>
<td>Request for Proposal</td>
</tr>
<tr>
<td>“Supply”</td>
<td>To purchase, procure, acquire and deliver complete with related accessories.</td>
</tr>
<tr>
<td>“TUI”</td>
<td>Telephony User Interface</td>
</tr>
<tr>
<td>“Vendor”</td>
<td>Vendor to whom the contract is awarded and who will be the prime Vendor responsible for completion of the work described herein.</td>
</tr>
<tr>
<td>“Work”</td>
<td>Labor, materials, equipment, apparatus, controls, accessories and other items required for proper and complete installation</td>
</tr>
</tbody>
</table>
C. CURRENT COMMUNICATIONS NETWORK OVERVIEW

1. Data Network

Mesa Water District has previously installed Cisco switches to support network needs and the new cloud-based voice/UC system. They have been configured for, Voice Support (QoS), VLAN, Sub-netting, Routing Protocols, Reliability/Failover (L2/L3) and Security Settings.

The switches for voice are:

- Cisco 3850 POE

Mesa Water District has previously implemented an HP/Aruba a/b/g/n 802.11 network to support data applications as well as the cloud-based voice/UC system such as voice over Wi-Fi. This consists of a controller-less system based largely on AP-105’s. The system has been designed to support eight (8) simultaneous voice calls per AP. They are configured for Voice Support (QoS) with appropriate VLAN, Sub-netting, Routing Protocols, Reliability/Failover (L2/L3), Security Settings and authentication settings.

Support of this LAN is the responsibility of Mesa Water District.

2. Voice Communication Network

Mesa Water currently supports approximately 80 stations throughout the organization. The current Voice/UC infrastructure consists of Fuze Voice, Contact Center and UC; other existing communication systems such as Exchange; will integrate to the new voice systems that are being proposed as part of this RFP.

Mesa Water has one T1 and DID’s provided by Fuze connecting the campus to the Fuze cloud. The District has router configurations in place to allow failover to commodity internet in the event of a T1 failure. It is expected that this same approach will be used for trunking the new solution.

New T1 trunking will be procured and provided by the vendor as part of this RFP. The existing DID’s (~80) will be ported as part of this project.
D. GENERAL VOICE REQUIREMENTS

1. High Level Requirements Include:

- Auto Attendant for: (RE-USEEXISTING FOR THE MOST PART)
  - Directions
  - Hours of Operation
  - After Hours
- Directory accessible by all users
- Unified Messaging + Voicemail – Ability to have voicemails accessed through email in addition to being accessed through a phone interface (Integration at Exchange level preferred over Outlook integration)
- Call Logs (i.e. easy to see missed calls – similar to cell phone)
- Single Number Reach for ‘corridor warriors’ and managers – Ability to have cell phone seamlessly act as a system extension) ring when desk number is called:
- Caller ID
- Shared Line Appearances – maintain current administrative assistant to manager phone relationship
- Ability to use buttons/Busy Lamp Field (BLF) or Presence to determine if users are occupied on calls or available
- Supervised transfers
- Call Park/Pickup, including Contact Center calls
- Contact Center Management reports with queue statistics such as wait times and abandons
- Time of Day (TOD) routing
- Ergonomic phones with the right # of buttons
- Training
  - End Users
  - Power Users/Ambassadors
  - Overall Admin (2) + Contact Center (3)
E. VOICE TECHNICAL SPECIFICATIONS

1. Conceptual Solution

The conceptual solution design is based on a highly reliable architecture where there will be no single point of failure from the Cloud-based service provider. At a minimum this includes a minimum of two hosting data centers, each equipped with all of the components and capacity to provide fault tolerant call control, gateway functions, security (i.e. SBC and/or firewall) and applications such as Contact Center, voicemail/UM and Unified Communications. Trunking/call paths should be proposed so that no single link failure will cause service disruption. The existing Mesa Water District approach of using T1 as a primary and commodity internet as backup will be used.

The proposed communications system shall be:

- Capable of supporting a minimum call volume of 1,000 calls in the busy hour for Mesa Water District (not other hosted clients of service provider).

- Designed to provide five 9’s (99.999%) system reliability as defined by ITU/Telcordia standards. (Note: if your proposed solution is unable to meet five 9’s, please be specific in describing what level of reliability your proposed solution is designed to meet)

- Designed to eliminate single points of failure by providing geographically diverse, stateful redundant call controllers.

- Capable of interoperating with Active Directory, LDAP and other open directory standard with the ability to automatically import the system phone directory on a real-time or daily batch basis.

- Extensible to interface with 3rd party systems using common standards and protocols.

- User-friendly and easy-to-use GUI (preferably web-based with support for standard Internet browsers) and Telephony TUI to allow end-user “self-service” control of call forwarding, other end-user features such as speed dial configurations, and other personalization.
2. Cloud-Based Telephony System

The Proposer shall provide all hardware and software required for a complete turnkey Contact Center/Telephony/UC solution. The Proposer shall state any items not included and that will be required by Mesa Water to install a fully functional system.

<table>
<thead>
<tr>
<th>Item #</th>
<th>Description</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Manufacturer/Developer</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Product Names and Designations</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Architecture and Operating System</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Software Versions</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Date when the proposed software release version was made generally available</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Date when the next software release version will be made generally available</td>
<td></td>
</tr>
</tbody>
</table>

3. Cloud-Based Telephony System - Reliability and Availability

Mesa Water is aware that the terms “reliability” and availability” are often used interchangeably in the telecom and IT world. For Mesa Water, reliability refers to the measure of system “up-time” (defined as the percentage of time a system is functioning in accordance with published operational specifications). The Mesa Water metric for voice system reliability will be 99.999%. In this Document, availability will refer to the measure of accessibility to system services when required by users (defined as the percentage of time a user is able to access requested voice services from a system on his/her initial attempt).

The overall enterprise-wide metric for voice system availability will be 99.999%. This means that less than .01% of system requests for services will be blocked on their initial attempt. While both are critical issues to Mesa Water, particular importance will be placed on availability because the system provides no value to the organization if the system (or a segment of the system) is “up” (e.g., processors and/or servers functioning), but a system fault (whether hardware or software in nature) has caused the system or a primary application to become unavailable to users.

The vendor must propose trunking between the proposed Cloud solution and Mesa Water’s premises. This shall include:
- T1/MPLS
- Backup commodity internet

It is not expected that SD-WAN will be needed.
4. **System Reliability / Availability**

<table>
<thead>
<tr>
<th>Item #</th>
<th>Description</th>
<th>Proposer's Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>What is the verified reliability for the proposed system?</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Describe how your redundancy design eliminates single points of failure for Mesa Water</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Provide a list of single points of failure within the proposed redundant architecture. This includes systems, sites and trunking to the Mesa Water location</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>In the event of a site failure, discuss how the backup site will control the system and applications processing. What happens to calls in progress? To calls being set up?</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>In the event the network between the primary cloud-based call control server and the Mesa Water site goes down, how is service within the maintained? What happens to calls in progress? To calls being set up?</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>What functions and features (if any) are lost in backup or survivable mode?</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>How does the system support power fail bypass trunks?</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Is redundancy offered as a standard system feature or is it optional?</td>
<td></td>
</tr>
</tbody>
</table>

5. **Station Requirements**

For purposes of the RFP, Mesa Water has defined the following table to identify the station end-point requirements. The Proposer shall specify which model of phone they are proposing for the different model types identified in the table below. At a minimum, it should be comparable or superior in capabilities to the Polycom VVX 600

<table>
<thead>
<tr>
<th>Description</th>
<th>Standard IP Phone (managers, staff, admin)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity</td>
<td>80</td>
</tr>
<tr>
<td>Fixed keys:</td>
<td>6</td>
</tr>
<tr>
<td>Expansion keys (sidecar)</td>
<td>2</td>
</tr>
<tr>
<td>Hold</td>
<td>Y</td>
</tr>
</tbody>
</table>
### Description | Standard IP Phone (managers, staff, admin)
--- | ---
Release | Y
Transfer | Y
Hands-free/Mute | Y
Volume control | Y
Programmable keys/ Line Appearances | 6
Soft Keys | Y
Display | Large color/Touch
Advanced Display (XML) | Y
Caller ID | Y
Caller Name | Y
2-way Full-Duplex Speakerphone | Y
Intercom | Y
Integrated Headset connectivity (DECT/Bluetooth) | Y
Ability to have sidecar | Y
Speed | 10/100/1000Mb

**IMPORTANT**: The station end-point types reflected above (and in the pricing sheets) shall provide, at a minimum, the following functionality:

- **Standard IP Phone**: 6 - 8-line phone with a high-resolution color touch graphical LCD display. Hands-free with full-duplex 2-way speakerphone. Capability of adding Line/Feature button expansion module (8 – 24 feature/line appearance buttons) as well as DECT or Bluetooth headset

- **Mobile Client**
  To optimize the advantages of deploying the mobile cellular extension option Mesa Water also requires that the proposed communications system solution support an advanced mobile client for iOS and Android devices. The mobile client should include a user-friendly GUI to facilitate and enhance mobile handset telephony service features and functions. At minimum the mobile client GUI should be capable of Single Number Reach, User Programmable Ringing Sequence, Call Records, and Single Voicemail Box. It should be as similar to the native manufacturer Smart phone interface as possible.
It should also be capable of fixed and programmable feature keys; contact directories; call logs; incoming call identification information; internal call diversion information; active call information. Additional basic features must also be supported such as:

- The mobile handset must be able to receive incoming calls directed to the station user's primary system directory number, and calling party information should be displayed at the mobile handset;
- Calls placed from the mobile handset must appear to look like calls from the station user’s primary desktop voice terminal, including calling party name/ID display;
- The mobile handset must be able to place calls through the cloud to external stations users;
- Voice system subscribers must be able to program incoming calls to ring simultaneously or sequentially at the desktop instrument and mobile handset as required;
- Basic telephony features that should be supported in mobile extension mode, including Hold, Transfer, Conference, Park and Forward to voice mail system on busy/no-answer;
- Call detail records must be collected and stored for all mobile extension calls.

**Vendor Response Requirement:**

Confirm that your proposed communications system solution supports an advanced mobile client option and that it satisfies the capabilities listed above (specify capabilities not satisfied).

- Provide a brief description of the mobile client’s general capabilities and features/functions;
- Include a list the cellular handset models (and/or tablets) and operating systems capable of supporting your mobile client option;
- Provide as an attachment one graphical illustration (PPT format, only) slide that are representative of the GUI screen display.

**WIFI Phones**

The vendor must provide six (6) Wi-Fi phones optimized for the existing 802.11n environment as well as being able to take advantage of a new 802.11ac wave 2 network.

The Vendor shall state battery life and talk time.

The Vendor shall describe what functionality, if any, the Wi-Fi phones lack as compared to the standard IP phone and mobile client on Smartphone.
The Proposer shall specify any area where the proposed solution deviates from the station requirements outlined above. In addition, the Proposer shall provide specification sheets for each type of proposed station type and define what model they deem each type.

Note: Mesa Water plans to reuse Four existing Polycom Soundstation 6000 Conference Phones

6. Key Voice Features

a) Station User Features

It is required that the proposed communications system supports the following list of station user features:

<table>
<thead>
<tr>
<th>Item #</th>
<th>Feature Description</th>
<th>Fully Meets Requirement (Y/N)</th>
<th>Clarification/Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.6.1.1</td>
<td>Automatic callback</td>
<td></td>
<td>Receive call back from a dialed busy internal extension</td>
</tr>
<tr>
<td>4.6.1.2</td>
<td>Button View/Display</td>
<td></td>
<td>Allows the end-user to identify programmed buttons on the phone.</td>
</tr>
<tr>
<td>4.6.1.3</td>
<td>Bridged Call appearance</td>
<td></td>
<td>Ability of a call appearance of another extension to be linked or “bridged” to any extension.</td>
</tr>
<tr>
<td>4.6.1.4</td>
<td>Call forwarding (including across systems)- All calls, Busy, No Answer, Off-Premise</td>
<td></td>
<td>Call forwarding</td>
</tr>
<tr>
<td>4.6.1.5</td>
<td>Call Hold</td>
<td></td>
<td>Hold</td>
</tr>
<tr>
<td>4.6.1.6</td>
<td>Call Park</td>
<td></td>
<td>Ability to place a call on hold so that it may be answered from any extension</td>
</tr>
<tr>
<td>4.6.1.7</td>
<td>Call Park Pickup</td>
<td></td>
<td>Ability to pick up a call that has been parked from any extension.</td>
</tr>
<tr>
<td>4.6.1.8</td>
<td>Call Timer</td>
<td></td>
<td>Call duration is timed.</td>
</tr>
<tr>
<td>4.6.1.9</td>
<td>Unsupervised and Supervised Call Transfer</td>
<td></td>
<td>Transfer</td>
</tr>
<tr>
<td>4.6.1.10</td>
<td>Called Party Name Display Log of Received Calls, Missed Calls, Placed Calls?</td>
<td></td>
<td>Call log, similar to a cell phones call log, user can scroll though received, missed or dialed calls and select an entry to redial.</td>
</tr>
<tr>
<td></td>
<td>Can the end-user dial direct from the Log Display?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.6.1.11</td>
<td>Conference calling</td>
<td></td>
<td># of internal and external parties on one call</td>
</tr>
<tr>
<td></td>
<td>Selective disconnection of parties on a conference</td>
<td></td>
<td>Ability to drop any caller</td>
</tr>
<tr>
<td></td>
<td>Display of participants on a conference call</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item #</td>
<td>Feature Description</td>
<td>Fully Meets Requirement (Y/N)</td>
<td>Clarification/Comment</td>
</tr>
<tr>
<td>---------</td>
<td>---------------------------------------------------------</td>
<td>------------------------------</td>
<td>--------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>4.6.1.12</td>
<td>Dial by Name Directory</td>
<td></td>
<td>Directory lookup and call a number that was “looked up”; the directory shall automatically update by the system in real time without requiring a phone reboot</td>
</tr>
<tr>
<td>4.6.1.13</td>
<td>Direct Station Selection with BLF (Busy Lamp Field)</td>
<td></td>
<td>Another user’s extension can be programmed on an admin phone so that the line appearance will be lit when active and at the same time the line appearance will act as a speed dial to that extension</td>
</tr>
<tr>
<td>4.6.1.14</td>
<td>Display of Date and Time on display phones</td>
<td></td>
<td>Display of Date and Time on display phones</td>
</tr>
<tr>
<td>4.6.1.15</td>
<td>Distinctive Ringing</td>
<td></td>
<td>Ability to set different types of rings on a per phone basis, so not all phones have the same ring</td>
</tr>
<tr>
<td>4.6.1.16</td>
<td>Do Not Disturb</td>
<td>Y</td>
<td>Do Not Disturb</td>
</tr>
<tr>
<td>4.6.1.17</td>
<td>Drop call</td>
<td></td>
<td>Drops the last caller in a conference call</td>
</tr>
<tr>
<td>4.6.1.18</td>
<td>Hands Free Dialing</td>
<td></td>
<td>Handset does not have to be off hook to dial</td>
</tr>
<tr>
<td>4.6.1.19</td>
<td>Group Paging by Phone</td>
<td></td>
<td>Group Paging by Phone to groups of phones or page to external overhead paging system</td>
</tr>
<tr>
<td>4.6.1.20</td>
<td>Intercom Dial (individual and Groups)</td>
<td></td>
<td>Call announce via the speaker</td>
</tr>
<tr>
<td>4.6.1.21</td>
<td>Message Waiting Indicator</td>
<td></td>
<td>Light indicator for voice mail messages</td>
</tr>
<tr>
<td>4.6.1.22</td>
<td>Multiple Line Appearances</td>
<td></td>
<td>Extension has more than one appearance for the ability to take multiple calls</td>
</tr>
<tr>
<td>4.6.1.23</td>
<td>Music on Hold – Enable/Disable</td>
<td></td>
<td>Ability to disable the music on hold for callers placed on hold</td>
</tr>
<tr>
<td>4.6.1.24</td>
<td>Mute</td>
<td></td>
<td>Mute</td>
</tr>
<tr>
<td>4.6.1.25</td>
<td>Redial / Last number redial</td>
<td>Y</td>
<td>Redial</td>
</tr>
<tr>
<td>4.6.1.26</td>
<td>Speaker/Off-Hook button</td>
<td></td>
<td>Fixed button for speaker phone</td>
</tr>
<tr>
<td>4.6.1.27</td>
<td>Speed dialing:</td>
<td></td>
<td>Programmed fixed or soft speed dial buttons # Limit of speed dials per station</td>
</tr>
<tr>
<td></td>
<td>Speed numbers per station</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Configurable by user from the GUI/web interface</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Configurable by user from the phone itself?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.6.1.28</td>
<td>Systems wide maximum amount of speed numbers</td>
<td></td>
<td># Limit of speed dials per system</td>
</tr>
<tr>
<td>4.6.1.29</td>
<td>Voicemail Auto Dial</td>
<td></td>
<td>Fixed button for calling into voicemail</td>
</tr>
<tr>
<td>4.6.1.30</td>
<td>Volume Adjust</td>
<td></td>
<td>Volume Adjust – Ringer, Handset and Speaker</td>
</tr>
</tbody>
</table>
b) Conference Calling Telephone system should preferably support a minimum of six (6) participants for any Ad-Hoc style conference.

- The initiator of the conference call (Assistant) must have the capability to fully control the call with the ability to add and drop parties as well as view (on the telephone) the parties that have been added and dropped.

- The conference feature must be accessed the same way regardless of whether an executive is in the office or off-site. For example, if an executive and Assistant are on the telephone, and the conference feature is accessed by pressing the conference button, dialing the number and pressing the conference button to connect all parties, the steps should be the same regardless of whether an executive is on site or off site.
<table>
<thead>
<tr>
<th>Item #</th>
<th>Description</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.6.2.4</td>
<td>Does the system allow the conference call initiator to view on the telephone set the internal and external parties that have been added and dropped?</td>
<td></td>
</tr>
<tr>
<td>4.6.2.5</td>
<td>Describe how an Assistant sets up a conference call when the Executive is in the office.</td>
<td></td>
</tr>
<tr>
<td>4.6.2.6</td>
<td>Describe how an Assistant sets up a conference call when the Executive calls in from out of the office.</td>
<td></td>
</tr>
</tbody>
</table>

c) Merging/Joining Calls: The Assistants must have the ability to create a conference call by joining two separate lines.
- Example: Off-site Executive 1 wants to talk to off-site Executive 2
- Off-site Executive 1 calls (on-site) Assistant 1; Assistant 1 calls (on-site) Assistant 2; Assistant 2 calls off-site Executive 2 and all calls are merged, or joined together. The system must be capable of joining/conferencing all parties (outside Executive 1, inside Assistant 1, inside Assistant 2 and outside Executive 2).

<table>
<thead>
<tr>
<th>Description</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe the steps that are required to merge a call to a shared line.</td>
<td></td>
</tr>
<tr>
<td>Describe the steps that are required to join separate lines to create a conference call using the following example: off-site executive 1 calls (on-site) Assistant 1; Assistant 1 calls (on-site) Assistant 2; Assistant 2 calls off-site executive 2.</td>
<td></td>
</tr>
</tbody>
</table>

---

**Vendor Response Requirement:**

Confirm that the proposed solution supports each of the above listed station user features.

Identify any and all features that are not included as part of the standard call processing software generic package. Also identify any optional...
hardware requirements, to satisfy a specific listed feature, if it is or is not included as part of the standard generic software package.

**Meet-me Conferencing**

Mesa Water requires that Each of their eleven (11) departments have their own conference number to support ‘Meet Me’ dial-in conferences. These conferences must be able to support a total of 50 participants.

7. System Features

It is required that the proposed communications system support the following list of system features.

<table>
<thead>
<tr>
<th>Description</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCOUNT CODES</td>
<td></td>
</tr>
<tr>
<td>AUTHORIZATION CODES</td>
<td></td>
</tr>
<tr>
<td>AUTOMATED ATTENDANT</td>
<td></td>
</tr>
<tr>
<td>AUTOMATIC CALL DISTRIBUTION</td>
<td></td>
</tr>
<tr>
<td>AUTOMATIC ALTERNATE ROUTING</td>
<td></td>
</tr>
<tr>
<td>AUTOMATIC NUMBER ID</td>
<td></td>
</tr>
<tr>
<td>AUTOMATIC ROUTE SELECTION - BASIC</td>
<td></td>
</tr>
<tr>
<td>CALL-BY-CALL SERVICE SELECTION</td>
<td></td>
</tr>
<tr>
<td>CALL DETAIL RECORDING</td>
<td></td>
</tr>
<tr>
<td>CALL LOG</td>
<td></td>
</tr>
<tr>
<td>CENTRALIZED ATTENDANT SERVICE</td>
<td></td>
</tr>
<tr>
<td>CLASSES OF RESTRICTION (SPECIFY #)</td>
<td></td>
</tr>
<tr>
<td>CLASSES OF SERVICE (SPECIFY #)</td>
<td></td>
</tr>
<tr>
<td>DIAL PLAN</td>
<td></td>
</tr>
<tr>
<td>DIALED NUMBER ID SERVICE</td>
<td></td>
</tr>
<tr>
<td>DIRECT DEPARTMENT CALLING</td>
<td></td>
</tr>
<tr>
<td>DIRECT INWARD DIALING</td>
<td></td>
</tr>
<tr>
<td>DID CALL WAITING</td>
<td></td>
</tr>
<tr>
<td>DIRECT OUTWARD DIALING</td>
<td></td>
</tr>
<tr>
<td>E-911 SERVICE SUPPORT</td>
<td></td>
</tr>
<tr>
<td>FACILITY RESTRICTION LEVELS</td>
<td></td>
</tr>
<tr>
<td>FORCED ENTRY ACCOUNT CODES</td>
<td></td>
</tr>
<tr>
<td>HOTELING (IPERSONAL ROAMING)</td>
<td></td>
</tr>
<tr>
<td>HOUSE PHONE</td>
<td></td>
</tr>
<tr>
<td>HUNTING</td>
<td></td>
</tr>
<tr>
<td>INTEGRATED SYSTEM DIRECTORY THAT IS AUTOMATICALLY UPDATED AND AVAILABLE IN REAL-TIME ON EACH PHONE AFTER A MAC IS COMPLETED</td>
<td></td>
</tr>
<tr>
<td>LEAST COST ROUTING</td>
<td></td>
</tr>
<tr>
<td>MULTIPLE LISTED DIRECTORY NUMBERS</td>
<td></td>
</tr>
<tr>
<td>MUSIC ON HOLD</td>
<td></td>
</tr>
<tr>
<td>NIGHT SERVICE</td>
<td></td>
</tr>
<tr>
<td>OFF-HOOK ALARM</td>
<td></td>
</tr>
</tbody>
</table>
a) The vendor must be able to guaranty that outbound calls from any Mesa Water phone display the correct Caller-ID for Mesa Water. Mesa Water has experienced problems with the current Fuze system. Vendor shall state how they achieve this.

b) The vendor shall state the number of local and long-distance minutes bundled with the proposed solution

**Vendor Response Requirement:**

Confirm that the proposed solution supports each of the above listed system features. Identify any and all features that are **not** included as part of the standard call processing software generic package.

8. Contact Center

Current Mesa Water Contact Center is Voice Only. At maximum capacity, there may be as many as five (5) agents taking calls and three (3) supervisors, though typical staffing is much lower. Neither Skills based routing or CRM is currently in use by Mesa Water today

a) Key functionality that must be included:

- Vendor shall describe process for agents logging in and logging out. Describe if this is accomplished through the agent client or the phone.
- Vendor shall describe how agents are ‘automatically’ logged out after hours. Existing system reports are incorrect as a result of agents remaining logged in.
- Vendor shall indicate if there is a manual override for logging agents out.
- Queueing and playing of messages to those in queue
- Vendor shall describe how ‘Wrap up Codes’ are used
- Ability to ring ALL agent phones simultaneously as well as round robin, least busy, etc.
- Auto call back option for callers without losing place in queue
  - Request Time
  - Next Available Time
- Customer Survey after call
  - Brief two to five question ‘opt in’ survey (user prompted to opt in at end of call)
  - Automatic Reporting for survey results.
- Call Recording
  - Automatically announce and record all Contact Center Calls for external calls as well as internally transferred calls
  - Automatically Stop Recording on transfer out of contact center
  - Minimum of 6-month retention of recordings
- Ability for Supervisor to ‘Listen in’ on calls
- Support for Supervisor ‘Whisper mode’
- Ability for Supervisor to ‘Barge in’ on calls
- Support for Automated Outbound IVR campaigns (i.e. service issues) where dialer can be loaded from a CSV or Excel file. Examples include:
  - Disconnection notices ~30 per day
  - Service Outage (GIS/Customer billing integration) may have ~10,000 numbers in campaign
- Initial Licenses:
  - 5 agents
  - 3 Supervisors
- Reporting including:
  - Standard Reports:
    o Call Abandonment Rate
    o Average Call Handle Time by Agent
  - Service Level Agreement/Speed to Answer (percentage of calls answered within 10 seconds)
  - Average Ring Time by Agent
  - Available Time per Agent
  - First Call Resolution (manual way for agents to track customers whose needs were met on the first call)
  - Detail of Customer Satisfaction Surveys (score by question)
  - Cradle to Grave’ takes into account all transfers for Call Time:
    o Within Contact Center
    o To other Mesa Water Departments
  - Ability for Mesa Water to access ‘raw data’
  - Easy to use Report Writer
Vendor shall provide copies of ‘canned’ reports that satisfy the requirements in this section. Vendor shall clearly state what reports must be custom produced and include the cost for providing these reports.

b) Future Requirements

- Voice only initially with ability to handle future modalities such as chat, email, text, social.
  - Ability to utilize natural voice recognition (i.e. similar to Alexa/Siri) for callers
  - Potential for screen pop (CRM integration)


Voice Messaging is an integral part of Mesa Water’s existing centralized communications infrastructure. Mesa Water plans to integrate the vendor provider voicemail with its existing Microsoft Exchange 2016 infrastructure. Voice messages to be stored in cloud and allow for minimum 60-day retention.
Vendor Response Requirement:

Briefly describe the proposed unified messaging solution, and provide details about the voice mail system architecture and its interconnection to the voice communications system and Microsoft Exchange 2016. Verify that the system being proposed can comply with each of the proceeding requirements. Vendor shall state their support for Office 365 and describe any differences in Unified Messaging as compared to the Exchange 2016 environment.

a) Support for Open Standards

Vendor Response Requirement:

- Describe voice messaging system’s support for open standards.
- List the clients that can be used with your proposed solution.
- For proprietary clients, detail minimum hardware and software requirements.

b) Security Features

Vendor Response Requirement:

Describe all security features available with the voice messaging system to prevent abuse and unauthorized access.

c) Voice Mail Features

- Forwarding

  The system must provide access for forwarded calls from:
  - Customer telephone system
  - Direct central office (Business or Centrex lines)
  - 800 Service lines

Vendor Response Requirement:

Confirm support for each forwarding requirement.

- Disconnect Detection

  The system should detect that a caller has hung up and immediately disconnect and restore the line to service.

Vendor Response Requirement:
Confirm support for this operation.

- Station Dialing

  In addition to the menu/route, callers may access an individual station either through the input of the extension number or the input of the called party's last name.

**Vendor Response Requirement:**

Confirm support for this operation.

- DTMF Signaling

  The system will be capable of receiving and generating standard DTMF tone signaling.

**Vendor Response Requirement:**

Confirm support for this feature.

- Greeting

  Voice mail calls will be answered on the first ring and be time-and-date stamped.

**Vendor Response Requirement:**

Confirm support for this feature.

- Escape

  A caller reaching the voice mail system will have the ability to re-route to an extension by dialing up to five digits or the operator by dialing "0" before or after leaving a message. It will not be possible for a caller reconnected to the telephone system to be connected to the public network.
Vendor Response Requirement:

Confirm support for this feature.

- Trunk Access

  It will be impossible for a caller passing through the attendant to reach an outside line.

Vendor Response Requirement:

Confirm support for this feature.

- Distribution Lists

  The system will contain a minimum of 100 distribution lists of at least 25 names each plus "all broadcast."

Vendor Response Requirement:

Confirm support for this feature.

- Message Forwarding

  Messages may be forwarded to single or multiple destinations with or without introductory comments.

Vendor Response Requirement:

Confirm support for this feature.

- Audit Trail

  It will be possible for a user to designate a necessary written record of message destination, input time and receipt. This audit trail will be printed on the administrative console together with daily reports.

Vendor Response Requirement:

Confirm support for this feature.

- Message Indication

  The receipt of a message in a mailbox will cause a message-waiting lamp on the phone to indicate a message-waiting condition. In addition, a new message indicator should appear via Exchange email
**Vendor Response Requirement:**

Confirm support for this feature.

- **Identification Code**

  Users accessing the system will input a discrete six-digit identification code which will be positively validated prior to access to their mailbox. Identification codes may be changed by mailbox owner.

**Vendor Response Requirement:**

Confirm support for this feature.

- **Message Recovery**

  The mailbox owner accessing the mailbox will be automatically told how many new messages have been received since last access and how many saved messages exist. Upon accessing the messages, the subscriber will have the choice of deleting, skipping or saving a message. Saved messages may only be deleted by the subscriber or by the system administrator.

**Vendor Response Requirement:**

Confirm support for this feature.

- **Message Reply**

  A mailbox owner may respond to a message input by another system mailbox owner by simply depressing a single key.

**Vendor Response Requirement:**

Confirm support for this feature.

- **Message Review**

  It will be possible for a user to review and edit either an announcement or input a message.

**Vendor Response Requirement:**

Confirm support for this feature.

- **User Controls**
A user accessing their mailbox must be capable of the following control functions:

- Playback messages
- Skip to next message
- Cancel review
- Replay last message
- Replay faster or slower
- Pause
- Append information
- Forward message (to mailbox or list)
- Create new answer announcement
- Increase play-back volume

**Vendor Response Requirement:**

Confirm support for these features. Indicate if any function is not supported.

**E. UNIFIED MESSAGING APPLICATION**

Mesa Water requires that the proposed voice messaging system integrate/interoperate with its premise based 2016 Microsoft Exchange messaging solution to provide unified messaging access from any system terminal/client.

**Vendor Response Requirement:**

Confirm that the proposed voice messaging system supports this requirement. Briefly describe how the proposed voice messaging system can be integrated with Mesa Water’s existing email messaging system, based on an Exchange 2016 system. The vendor must also indicate its ability to support Office 365 integration should the Mesa Water District upgrade.

The solution must, at minimum, satisfy the following processes:

- Station users must be able to view and access all message headers (voice, text, fax) from their PC display monitor.
- Voice messages accessed from the PC should be in WAVE format.
- Email text messages must be accessible from a telephone using text-to-speech conversion.
F. UNIFIED COMMUNICATIONS (UC)

Mesa Water plans to utilize the following components of a UC solution from the vendor:

- Presence management & control
- Instant Messaging
- Fixed Mobile Convergence (FMC) – Single Number Each (SNR)
- Click to Call

1. Describe how your system automatically integrates presence between Outlook/Exchange Calendar and your UC system.

2. Describe how presence is integrated (i.e. will users being on the phone show that status within Outlook and IM client?)

3. Describe if your proposed solution can provide integrated Presence and IM in the core solution. The cost shall be included in the pricing workbook Recurring Cost tab ((Unified Communications (IM/Presence/80 users))

4. Mesa Water does NOT want the Instant Messages to be stored/retained in any way. As this mode of communication is informal, The IM’s should not be electronically discoverable. This should be a system setting rather than an individual user setting.

5. Describe how a user can ‘Click to Call’ on:
   - An Outlook contact
   - embedded phone number in an email

   In each instance, it is expected that the phone will be used for the voice path.

G. PAGING

Mesa Water would like to utilize paging through the phone speakers.

Specifically, the Proposer should describe how its solution would provide for such desirable features as the ability to:

- send audio messages to any station sets without requiring the user to pick up the handset
- address end points in groups; and ability to assign endpoints to multiple groups
- selectively adjust volume control for all endpoints
• define group members by class of service, type or location. Examples might be: departments, all end points in Bldg X, all station sets assigned to a specific admin.

Limit use of paging via Class of Service to a limited number of staff such as admins, customer service

Please describe the amount of bandwidth required for paging. If necessary, can the paging bandwidth be forced over the commodity internet connection?

For purposes of the RFP, Proposer shall assume 1 phone paging zone (all Phones). The Proposer shall provide optional pricing information in Appendix D for all hardware, software, licensing and professional service costs necessary to implement the proposed phone speaker paging solution.

H. SERVICES AND SUPPORT REQUIREMENTS

The objective for consistent and simplified support means having one Vendor provide all support and services under a single contract. Mesa Water will consider separate contracts for one time purchasing, monthly carrier services, and other recurring costs. The preference is to still have one point of contact, and consistent service offerings and Service Level Agreements (SLAs). Proposers shall respond to this section keeping in mind Mesa Water’s strategic philosophy to deliver technology, support, service, training, and end-user experience in a cost effective, standardized, consistent, and reliable fashion.

1. Design

The Proposer shall describe their ability and commitment to provide Mesa Water with required design support assistance prior to order placement(s) and implementation. This design effort may take the form of technical reviews and workshops, preparation of network diagrams, standards reviews, and lab tests. The Proposer must provide professional service costs for these services in the total system pricing section. All fees and costs for the professional services and materials necessary to provide the required design support MUST be included in the total system pricing.

2. Implementation Plan and Schedule

A one-phase cutover is expected. The vendor is required to propose a detailed implementation schedule for the new voice/UC cloud services, phone placement, training, carrier coordination as part of the RFP response.
3. Carrier Coordination

Mesa Water requires the Proposer’s implementation team to provide voice carrier services coordination for this project. The Proposer must state the role and responsibilities their implementation team will provide to coordinate and test new (or the relocation and re-termination of existing voice services) at Mesa Water. This is expected to include new circuits (i.e. PRI, MPLS, Broadband, etc.) and DID’s as well as migration of existing DID’s. The Proposer MUST state any restrictions or limitations they have in the delivery of this service. Provide estimated professional service costs for these services in the total system pricing section. For the Mesa Water installation, all costs associated with carrier services coordination MUST be included in the total system pricing.

4. Subcontractors

The Proposer must indicate the location, role (e.g., new installation, maintenance, and post-cutover support), responsibilities, and qualifications of each subcontractor where subcontractors will perform work. The Proposer must state their previous experience with each sub-contractor and how the Proposer will manage the subcontractors to ensure the highest level of support is provided to Mesa Water using the Proposer’s services and support team.

5. Database Design and Input

Mesa Water requires the Proposer to provide “turn-key” system database design and input for all installations. The Proposer must state the role and responsibilities they will provide globally including the information gathering process (e.g., station reviews, automated attendant menus, call flow designs), data input, and database loading. Special review and design consideration should be given to:

- Contact Center and Customer Service
- Hunt groups and call coverage
- Executive/Executive assistant phones and call coverage
- Single Number Reach
- Auto attendant
- Presence/IM

The Proposer shall also describe the role the Mesa Water IT staff and end-users will need to provide to support this task. The description should identify the responsible parties for database input and the verification process used to ensure the proper features are activated, and all database fields properly selected. Proposer shall include all estimated professional service costs for these services in the total system pricing section. All costs associated with the data base design and input for all proposed systems MUST be included in the total system pricing.
6. Installation

The Proposer shall provide an installation plan for the installation of the proposed system. The Proposer shall state how your implementation team will serve as the single point of contact for Mesa Water to make the installation process consistent, and simplified. All project management and professional services costs for the installation of all proposed systems at all sites MUST be included in the total system pricing.

7. First Two Day’s In Service / Help Desk Support

The Proposer MUST provide a description of your approach and plan for supporting Mesa Water on the first two days in service. The plan should also describe post-implementation support for the first two days in service. The Proposer shall describe the methodology their implementation team will use for closing out punch list items. The Proposer shall include all professional services costs for these services in the total system pricing section.

For the cutover, it is expected the Proposer will augment Mesa Water’s Help Desk support staff by providing two technical support people on-site for extended business hours (up to 10 hours, 7AM-5PM) for the first two days of the post-implementation period. The second day of coverage will be optional at Mesa Water’s discretion based on the results of the first day after cutover.

8. Warranty Maintenance

It is not expected that any equipment proposed by the vendor will require a warranty. The vendor shall clarify in their response if anything proposed requires a warranty or maintenance contract.

9. Post-Warranty Support

Mesa Water understands that Proposers typically offer different levels of post-warranty support at different costs. Proposer pricing shall assume that IP and analog end-points are EXCLUDED from system post-warranty maintenance options. Proposer shall provide optional maintenance pricing for phones. Mesa Water is specifically interested in the Post-Warranty Support options described below. Please provide line item post-warranty support costs.

- State how Move, Add, and Change (MAC) work is covered during the implementation. Is this included with the professional services costs proposed or in addition?
- State the telephone number that Mesa Water would call for product support. Is there one number for all products or a separate number or contact for each product? Is there a separate number or contact based on country or region?
• What Service Level Agreement commitment is the Proposer able to make for “live” answer support? What is the average speed of answer for “live” support for the past year?

• The Proposer shall state the number of certified technicians that can meet the response time requirements.

• The proposer shall state how long (i.e. 5 years from purchase) the proposed phones will be supported for maintenance, repair and refurbishment.

10. Technology Training Plan

Training is a critical component for the successful implementation of any new technology. The Proposer MUST state the general training plan and approach your company will use to train the full range of Mesa Water’s end users, system administrators, ambassadors and staff. A total of approximately 75 people will need to be trained. The Proposer must provide their own training staff on-site at Mesa Water’s campus no earlier than one week before system cutover.

All costs for on-site end-user, operator, and system administrator training using “live” systems MUST be included in the total system pricing.

a) Training for End-Users, Contact Center, Administrators and Ambassadors (Super Users)

The Proposer shall describe how their organization proposes to deliver on-site training with “live” telephones and messaging systems to educate Mesa Water’s diverse staff on the proper use of the proposed system features, phones, and messaging. The Proposer shall also provide the estimated time per training session required for each end-user group (e.g., executive and executive support staff, operators, etc.). Mesa Water assumes training classes will be limited to 10-12 users per session.

The Proposer shall provide information on additional end-user training “tools” such as web-based tutorials, and web-based user guides that may be available to Mesa Water for pre-cutover and post-cutover end-user training. Costs for all training materials offered shall be described herein.

The Proposer shall also provide the training and costs for “super user” training. This training is intended to develop key Mesa Water administrative staff that can provide post-cutover and ongoing support for end-users (e.g., how to use system, phone, and messaging features). The Proposer shall assume six (6) ambassadors (super users) as well as two System Admins will be trained for this project.
b) Training Room Setup

The Proposer shall be responsible for all hardware, software, miscellaneous materials, labor, and cable infrastructure necessary to setup the user training room at Mesa Water as required to meet the training requirements for this project. The training room must provide “live” system functionality for all end-user phones, messaging, operators, and call center agents training sessions. All costs for training room setup MUST be included in the total system pricing.

I. ACCOUNT TEAM AND SERVICE LEVELS

1. Service Responsibility Demarcation

Describe the managed services responsible demarcation points for all service elements of the proposed solution with Mesa Water’s network – specifically, in terms of the Respondent’s (or a third-party subcontractor) access and transport network connecting Mesa Water locations with the cloud-based (hosted; dedicated servers and other equipment and systems) used to provide the services of the proposed solution. Describe what the Respondent understands from this RFP to be the demarcation (service limits) of its proposed managed service responsibility. Also describe what the Respondent understands will be within the Mesa Water’s management responsibility for the proposed solution.

2. Service Continuity

Describe the mandatory and optional backup services for service continuity for the proposed solution, including any design requirements for Respondent or third-party redundant circuits, etc.

a) Does the Respondent agree to waive all usage-based fees for the proposed backup plan for the proposed solution to compensate for availability below the SLA threshold metric (standard or negotiated) for the proposed solution? Does the proposed solution include backup redundancy at no cost (or lower cost) than primary connections?

b) Describe the Disaster Recovery Plan for the hosted UC solution included in the proposed hosted UC. Provide a service description for managed disaster recovery.

c) Describe the services restoration plan (specifically created or customized for Mesa Water) that is included in the proposed solution?
d) Does the Respondent agree that the restoration plan for the proposed hosted service solution will include automatic alternate routing and service centers? Will the Respondent include a planned capacity design for the proposed solution which it may immediately use to reassign and re-establish Mesa Water’s service as quickly as possible (and within the SLA restoration time window)?

3. Service Desk

Mesa Water requires 24/7 help desk support to be included in the proposed solution at no additional cost to Mesa Water. Mesa Water IT will be responsible for providing basic Level 1 (end user) help desk support for all of the proposed solution categories – UC applications, telephony, and email/messaging.

a) Will the Respondent offer Level 2 to Level 3 service desk support between Mesa Water and the Respondent’s support structure? Describe the standard process for Mesa Water to engage support at all levels (help desk to help desk, engineering to engineering).

b) Does the Respondent agree to provide Mesa Water service response coverage 24 hours a day, 7 days a week as part of the proposed solution at no additional cost to Mesa Water? Identify any limitations in coverage hours.

c) Mesa Water requires the Respondent to guarantee to operate its Level 2 help desk for the proposed solution according to the following availability, and response time windows. (Explain any exceptions.)

- Maximum unavailability per 30-day period (rolling period): five (5) minutes.
- Maximum time to respond (i.e., wait for an available operator) for a single call: five (5) minutes.
- Mean time to respond: fifteen (15) minutes after initial call is logged.
- Maximum time to examine a single request (i.e., process the request): thirty (30) minutes.
- Mean time to examine requests: thirty (30) minutes.

e) Mesa Water requires that the Respondent’s help desk be responsible for opening trouble tickets, informing and providing Mesa Water with periodic and Web-accessible updates of open cases, processes, etc. Mesa Water also desires the ability to open a trouble ticket and track its progress a via a secure customer Web portal. Does the proposed solution include Web ticketing and tracking as standard and at no additional cost to Mesa Water? Does the proposed solution include an established time to repair priority services or systems based on mutually agreed Severity Codes?

f) Will the Respondent provide problem management with a single point of contact, 24 hours a day, 7 days a week? Describe the problem escalation procedures for the proposed solution. Also explain:
• Does the Respondent agree to escalate a trouble ticket at Mesa Water’s request?
• Does the Respondent agree that Mesa Water’s nominated Service Delivery Manager will act as the single point of contact for the escalation process?
• Does the Respondent agree that any issues not resolved in a timely fashion and to Mesa Water’s complete satisfaction will be promptly escalated to a senior member of the Respondent’s management at the phone or email request of Mesa Water?
• Describe the standard or proposed SLA for each of the managed service elements of the proposed solution that are provided at no additional cost to Mesa Water.
• Committed delivery date - This is defined as the date at which the proposed solution will be delivered (production cutover date) to a Mesa Water site as agreed between Mesa Water and the Respondent. Describe how the Respondent will handle and compensate Mesa Water for a missed committed delivery date when an action or inaction of Mesa Water is not the cause for the delay?

  g) Mesa Water requires average availability of the proposed solution of 99.9% for hosted UC applications and 99.999% for telephony. What is the maximum amount of time of unavailability for each service element of the proposed solution that is offered as a standard SLA?

• Describe the normal maintenance window for all managed service elements of the proposed solution. Indicate the maximum scheduled downtime/outage per month for maintenance and upgrade activities.
• What are the SLA metrics for desktop/station-to-application performance related to the proposed solution for:
  – Latency (maximum user desktop to server)?
  – Jitter (maximum user desktop/server for telephony and video)?
  – Packet loss (maximum user desktop/server)?
• Describe the calculation of repair time. Does the clock start running from the time the outage occurs based on the service logs and regardless of when the trouble ticket is opened by either the Respondent or Mesa Water? Mesa Water requires that the maximum time to fully restore service following a hosted UC application or email service failure is four (4) hours following an outage. Does the Respondent agree to this SLA at no additional cost to Mesa Water? (Identify any caveats or exclusions.)
• Identify the parameters of financial compensation that will be paid out or credited to Mesa Water if the Respondent or its third-party partners do not achieve the proposed time table in a critical task execution for the proposed solution:
• Service Downtime: What credits will be given for downtime generated by activities initiated by the Respondent and/or by its third-party partners?
• Help Desk Availability and Responsiveness: What credits will be given if 24/7 Level 2 help desk response time or examination time exceeds the guaranteed minimum service level?
• Automatic credits: Describe how SLA penalty credits will be handled. How quickly will the credit appear on the service invoice?
• Penalty Credit Caps: What is the maximum financial penalty payout or credit for missing an SLA guarantee target for the proposed solution?
• Does the Respondent support a customized (negotiated) SLA to meet Mesa Water’s specific business requirements?
• Describe any prerequisites that apply for the SLA elements of the proposed solution.
• Does the Respondent agree that either party has the right to seek modification of the SLA for the proposed solution in the event of a change in Mesa Water’s technical and business conditions?
• Describe the standard performance reporting services provided in conjunction with each element of the SLA in the proposed solution at no additional cost to Mesa Water. Provide a sample of a standard service performance report for the proposed solution attached as an Appendix to the RFP response proposal.
• Will an SLA performance report be posted regularly (monthly) on a secure website for Mesa Water’s remote access via a secure Web portal?
• Will the report include fault reports showing, for each fault, the Mesa Water location and service element affected along with the length and cause of the fault/outage compared to the SLA?
• Will Mesa Water receive a monthly report, accessible online, listing the SLAs attained and/or not attained for the preceding 30-day (calendar month) period?
• Will the Respondent also provide Mesa Water with quarterly reports that include a comparison of SLA actual performance data versus commitments?
• Will Mesa be allowed to run ad-hoc reports showing the SLA performance for all metrics?

4. Performance Monitoring, Troubleshooting, and Reporting

Describe the standard services for performance monitoring, reporting and troubleshooting for the proposed solution that are bundled in/included at no additional cost to Mesa Water.

a) Describe the standard services for performance monitoring that are included in the proposed solution at no additional cost to Mesa Water. Does the proposed solution include continuous monitoring and performance improvements to meet Mesa Water’s changing service needs?
b) Does the Respondent agree to provide root cause analysis of major faults, and forward them to Mesa Water upon Mesa Water IT’s email or phone request?
c) Will Mesa Water be allowed to reduce its contractual obligations at any time as a result of chronic support or poor user experience that cannot be resolved within thirty (30) or a written complaint by Mesa Water - by an amount that is equal to the volume of the discontinued managed services? Does the Respondent agree that chronic issues will be jointly defined by the Respondent and Mesa Water?

d) What are the Respondent’s problem notification commitments for the proposed solution?

- Describe the standard services for troubleshooting included in the proposed solution at no additional cost to Mesa Water. Does the Respondent agree to troubleshoot issues until full resolution?
- State what types of performance reports for the proposed solution are bundled in/ included at no additional cost to Mesa Water.
- Is the proposed solution’s reporting tool Web-based or does it use a client server architecture?

e) Describe the components of the reporting platform in the proposed solution (e.g., servers, database software, versions, etc.).

f) Is the reporting database built using a standards-based architecture that would allow Mesa Water IT administrators to query the database directly?

g) Describe the standard and custom report formats for which the proposed solution's reporting system exports its data.

h) Is electronic reporting down to the site level provided as standard which is accessible via a secure customer Web portal at no additional cost to Mesa Water? Describe the standard included report options for the proposed solution to measure application performance quality and system performance.

i) For how long is the lowest level of reporting data retained for the proposed solution?

5. Service Authorization and Billing

a) Does the Respondent agree to only bill Mesa Water for services that have been approved by a Mesa Water nominated approver? (Note: The list of approvers will be provided to the successful Respondent whose solution is accepted by Mesa Water.)

b) Mesa Water does not expect to pay for invoicing services. Does the proposed solution include any costs that might be incurred to perform this function? If yes, provide an explanation.

c) Mesa Water does not expect to pay for reporting services. Describe the proposed solution’s standard reporting services that are bundled in/included at no additional cost to Mesa Water.
6. **Account Management**

Describe how Account Management will be handled for the proposed solution. What is the planned account team structure? Describe the pre-sale and post-sale structure of the account management team that will be assigned to Mesa Water for each managed service element and during the different stages of the proposed solution’s life cycle.

a) Describe how regular service performance reviews will be provided.

b) Does the Respondent agree to review the following items with Mesa Water on a monthly basis?

c) Overall performance against SLAs.

d) Major incidents affecting hosted applications availability.

e) New projects.

f) Major change notices.

g) State how the Respondent will comply with Mesa Water’s requirement of a semi-annual customer satisfaction review meeting to discuss and review:

h) The results of Mesa Water customer satisfaction surveys related to the proposed solution.

i) Recent and planned managed service enhancements, new products, etc. in order to identify opportunities for business benefit to Mesa Water.

j) State how the Respondent will comply with Mesa Water’s requirement of an annual review meeting to discuss:
   - Budget, targets and continuous improvement initiatives.
   - Balanced scorecard reconciliation.
   - Medium term Mesa Water business plans/changes.
   - SLA metrics.
   - Price benchmarking.

7. **Roadmap**

Respondent should describe the roadmap for its solution which may include additional features, capabilities, architectures, etc. for the next twelve months that may be of interest to Mesa Water. The response to this section will be considered confidential.
IV. CONTENTS OF PROPOSAL

The proposal must be divided into five (5) sections with references to parts of this RFP done on a section number basis. The five (5) sections shall be clearly identified matching the sections 1 through 5 as listed below.

A. Firm Information

These items must be fully completed:

- Name of Business
- Business Address
- Business Telephone Number(s)
- Business Facsimile Number
- Federal Tax ID Number
- Type of Business (Sole Proprietorship; Partnership; Corporation; or Other (Explain)
- Number of Years in Business
- Name, title, telephone number, email and, if different, business address of person(s) authorized to represent business entity
- Name, title, telephone number, email and, if different, business address of person(s) authorized to sign contracts for the business entity
- Certificate of Insurance showing a minimum of $1 M in Professional Liability

B. Statement of Experience

This section should establish the firm’s ability to perform the required work to the expectations of Mesa Water. Narrative should include the vendor firm’s background, including main business focus, length of time in business, number of employees, location that will primarily support the project. Any subcontractors utilized on this project must be identified in this section. Areas to focus on include:

- Similar work experience
- Strength and stability of firm
- Current work load as it relates to the ability to perform this work in a timely manner
- A statement that the prospective firm has a demonstrated track record to perform the required services.
- Provide reasoning why the prospective firm would be the best choice for providing services as described in the RFP for Mesa Water.
- Provide resumes for staff members that vendor expects to lead each task, and a statement that the staff members proposed are available during the schedule proposed for the task. Include the resumes of any subcontractors that will work on the project.
• Summary of hourly rate by labor class for assigned project team. This should be provided in a table format.

C. References

Provide at least three references from public agencies, water districts, or from private companies for which similar work has been done. Mesa Water District is most interested in references of similar size and scope. Include the name of the organization, address, contact name, email, telephone number and a description of work performed for the reference. Local references are proffered.

D. Scope of Work Understanding & Schedule

The firm should clearly state its understanding of the project objectives, scope of work and anticipated deliverables. There scope of work is developed to provide a highly functional telephony system meeting the described criteria including implementation and system training. The following areas must be addressed:

• A proposed schedule for completion of the project. The schedule should be outlined in a bar chart format and include the entire project. Deliverables should be included and noted in the schedule.

• Outline processes or steps that the vendor will take to ensure quality deliverables. The process shall include a monthly work status summary report where the project status and schedule adherence shall be reported and challenges identified.

• Indicate why the firm is qualified to help Mesa Water in this endeavor and a description of why Mesa Water should choose this firm.

• An outlined approach regarding account management and service levels as described in Section 10 of the scope of work.

E. RFP Acceptance Form (Appendix C)

End of Section
V. EVALUATION CRITERIA AND SELECTION PROCESS

A Selection Team established by the Project Manager will review, evaluate, and score the proposals. The scoring system will be based on a scale of 1 to 5 with 5 being the most favorable score. The Evaluation Team shall evaluate the proposals based upon the following weighted criteria:

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm and Staff Qualifications &amp; Experience</td>
<td>30%</td>
</tr>
<tr>
<td>Company/Staff Availability</td>
<td>10%</td>
</tr>
<tr>
<td>Scope of Work/Project Schedule</td>
<td>45%</td>
</tr>
<tr>
<td>Proposal Quality</td>
<td>5%</td>
</tr>
<tr>
<td>Administrative/Contract Compliance</td>
<td>10%</td>
</tr>
</tbody>
</table>

The Selection Team may select the proposal that clearly exceeds the others in all mandatory specifications of the RFP or they may select finalist proposals that meet specifications and whose score on evaluation factors is sufficiently high to merit further consideration by the Selection Team.

The Selection Team will conduct interviews with the most qualified and responsive firms. Vendor interviews are tentatively scheduled for completion during the week of August 20. The vendor firms asked to participate in the interview process may be required to submit other information or clarification on submitted proposals.

Mesa Water reserves the right to reject any and all proposals for any reason. Mesa Water may not proceed, for any reason, with the selection process of a proposer if Mesa Water deems it is in the best interest of the organization. Mesa Water shall not be responsible to any of the submitters for the cost to prepare their proposal in response to this RFP.

Proposals must include the entire scope of work as outlined in this RFP.
A. Proposal Evaluation Criteria

1. Review

a) All proposals will be initially evaluated to determine if they meet the mandatory requirements.

b) The proposal must be complete, in the required format and be in compliance with all the conditions of this RFP.

c) Prospective vendor firms must provide three (3) references from other agencies that they have provided the same or similar services as being requested in this RFP.

2. Process

a) Proposals shall be reviewed using the process that evaluates five (5) key categories. A weighted ranking has been assigned for each of the categories.

b) Firm and Staff Qualifications & Experience 30% - Experience of proposing firm and proposed staff; capabilities of staff to perform tasks as described in the scope of work; any subcontractors and their staff capabilities of performing tasks as assigned by vendor firm; staff experience with performing similar work.

c) Company/Staff Availability 10% - Availability of sufficiently qualified and experienced staff to perform tasks as described in the scope of work; adequate organizational structure and financial stability; adequate resources to provide the level of support described in the scope of work.

d) Scope of Work/Project Schedule 45% - vendor’s understanding of the project objectives, scope of work; clear expression of deliverable requirements for each of the outlined tasks; clear process outlined for quality review; schedule developed with reasonable timeframes that include the entire project.

e) Proposal Quality 5% - vendor’s adherence to the format of the proposal as outlined in Section IV Contents of Proposal; well written and responses that are clear and understandable; logical, organized, and well thought out concepts.

f) Administrative/Contract Compliance – 10% - vendor’s contract terms and conditions as are favorable to Mesa Water.

End of Section
APPENDIX A

Mesa Water's professional services contract
PROFESSIONAL SERVICES CONTRACT

THIS CONTRACT (Contract) is entered into on March 20, 2017 by and between Mesa Water District, hereinafter called “Mesa Water”, and Professional Services Contract, hereinafter called “Consultant.”

WHEREAS, Mesa Water desires certain services hereinafter described and Consultant is capable of providing and desires to provide such service.

NOW, THEREFORE, Mesa Water and Consultant, for the consideration and upon the terms and conditions hereinafter specified, agree as follows:

SECTION I

SCOPE OF SERVICES

1.1 The services to be performed under this Contract are as described in Appendix One hereunto attached and by this reference made a part hereof. In the event that a conflict or contradiction is discovered between the proposal language and Mesa Water’s standard contract terms, Mesa Water’s standard contract terms shall prevail. Such service shall be performed by individuals as employees of the Consultant, as an independent consultant, and not by or as employees of Mesa Water.

SECTION II

DUTIES OF CONSULTANT

2.1 Standards. All work performed by Consultant or under its direction shall be sufficient to meet the purposes specified therefor and shall be rendered in accordance with the accepted practices and to the standards of Consultant’s profession.

All service hereunder shall be performed by employees or agents of Consultant who are experienced and skilled in their business and in accordance with the standards of work in their respective professions. Consultant’s findings, recommendations and professional advice shall be based on practices and procedures customary in its profession. Consultant shall provide additional services needed to correct any deficiency in its work at no additional costs or expense to Mesa Water.

2.2 Additional Work. Consultant shall not undertake any work beyond the scope of this Contract unless such additional work is approved in advance and in writing by Mesa Water. The cost of such additional work shall be reimbursed to Consultant by Mesa Water on the same basis as provided in Section IV.

2.3 Security and Safety. If, in the prosecution of the work, it is necessary to conduct field operations, security and safety of the job site will be the responsibility of Consultant, excluding, nevertheless, the security and safety of any facility of Mesa Water within the job site, but not under the control of Consultant.
In providing its services hereunder, Consultant shall not be responsible for identification, handling, containment, abatement, or in any other respect, for any asbestos or hazardous material if such is present in connection with the project. In the event that Mesa Water becomes aware of the presence of asbestos or hazardous material at the job site, Mesa Water shall be responsible for complying with all applicable federal and state rules and regulations and shall immediately notify Consultant, which shall then be entitled to cease any of its services that may be affected by such presence, without any liability to Consultant arising therefrom.

2.4 **Consultations.** Consultant shall meet with Mesa Water personnel, or third parties as necessary, on all matters connected with carrying out of Consultant’s services described in Appendix One. Such meetings shall be held at the request of either party hereto. Review and Mesa Water approval of completed work shall be obtained monthly, or at such intervals as may be mutually agreed upon, during the course of this work.

2.5 **Data.** Consultant agrees that all data and information, including without limitation specifications, designs, drawings, reports, and blueprints, generated in the performance of this Contract and data and information that are specified to be delivered or which are, in fact, delivered pursuant to this Contract shall be and remain the sole property of Mesa Water. Consultant understands and agrees that all rights under copyright and patent laws under this Contract to drawings, records, data or other work product belong to Mesa Water, unless otherwise stated. Consultant hereby assigns any and all rights under copyright and patent law to Mesa Water and agrees to assist Mesa Water in perfecting the same. Consultant shall deliver all records, drawings, data, information and work product resulting from this Contract to Mesa Water upon Mesa Water’s request and in any event upon the completion of all work hereunder or the termination or expiration hereof, whichever shall first occur, and shall be fully responsible for the care and protection thereof until such delivery. Except as otherwise provided in this Contract, said documents shall be delivered to Mesa Water without additional cost to Mesa Water.

2.6 **Subcontracting.** Performance of this Contract may not be subcontracted in whole or in part without the prior written consent of Mesa Water. Any subcontractors under this Contract with an estimated cost greater than $1,000 shall not be awarded without Mesa Water’s prior written approval. Lists of proposed subcontractors and proposed subcontractors shall be submitted to Mesa Water.

**SECTION III**

**DUTIES OF MESA WATER**

3.1 **Provision of Information.** Mesa Water shall make available to Consultant all data and information in the possession of Mesa Water which Mesa Water deems necessary to the preparation of the work, and Mesa Water shall actively aid and assist Consultant in obtaining such information from other agencies and individuals. Except as specifically provided in the scope of services, Consultant shall be entitled to rely upon the accuracy of data and information provided by Mesa Water or others without independent review or evaluation.
3.2 **Review of Progress of Work.** Mesa Water Management may authorize a staff person as a representative to confer with Consultant relative to Consultant’s services hereunder. The work in progress hereunder shall be reviewed from time to time by Mesa Water at the discretion of Mesa Water or upon the request of Consultant. If the work is satisfactory, it will be approved. If the work is not satisfactory, Mesa Water will inform Consultant of the changes or revisions necessary to secure approval.

**SECTION IV**

**FEES AND PAYMENTS**

4.1 **Payment Schedule.** Payment for the services hereinabove described shall be made upon a schedule and within the limit or limits shown upon Appendix Two hereunto attached and made a part hereof, and such payment shall be considered as full compensation for all personnel, materials, supplies, and equipment used in carrying out the work. In the event that a conflict or contradiction is discovered between the proposal language and Mesa Water’s standard contract terms, Mesa Water’s standard contract terms shall prevail.

4.2 **Statements.** Unless otherwise specified in said Appendix Two, Consultant’s fees shall be payable on monthly statements; such statements shall give a detail of time worked by each class of employee, services (or tasks) performed, and the itemized expenses incurred and accompanied by receipts for which billing is made and shall contain the following affidavit signed by a principal of the firm of Consultant:

“I hereby certify as principal of the firm of ____________________________ that the charge of $ ______________ as summarized above and shown in detail on the attachments is fair and reasonable, is in accordance with the terms of the Contract dated ______________________, 20___, and has not been previously paid.”

Compensation is clearly outlined in Appendix Two. This information includes rates by individual/title grouping, the not-to-exceed amount of the Contract, whether the payments will be periodic or paid in a lump sum, and a list of expenses for which the Consultant(s) will, or will not, be reimbursed.

**SECTION V**

**CHANGES IN WORK**

5.1 **Extra/Changed Work.** Mesa Water may order major changes in scope or character of the work, either decreasing or increasing the amount of Consultant’s services. Increased compensation for major changes shall be determined in accordance with Appendix Two hereof, or as otherwise agreed to, in writing, between the parties.
5.2 **Change of Schedule.** In the event that major changes are ordered, the schedule for completion as stated in Appendix Three hereto will be adjusted by negotiation between Consultant and Mesa Water.

5.3 **Change Authorization.** No representative of Mesa Water, other than the General Manager, is authorized to obligate Mesa Water to pay the cost or value of services beyond the scope thereof as herein described.

SECTION VI

**TIME OF BEGINNING AND SCHEDULE FOR COMPLETION**

6.1 **Commencement of Work.** Consultant shall begin work upon receipt by it of written Notice to Proceed from Mesa Water Management which said notice shall not be issued until after this Contract has been approved and authorized by Mesa Water.

6.2 **Completion Schedule.** The schedule for completion of the work shall be as shown upon Appendix Three hereunto attached and made a part hereof. Consultant shall complete the work set forth in Appendix One in accordance with the schedule for completion shown in Appendix Three.

6.3 **Suspension of Services.** Mesa Water may, at any time and without cause, suspend all or a portion of the services of Consultant for a period of not more than ninety (90) days by notice in writing to Consultant. Consultant shall resume the service on receipt from Mesa Water of a notice of resumption of services. Any change to the contract, price or time of completion sought by Consultant as a result of suspension hereunder, shall be processed as a change order under the provisions of Section V hereof.

SECTION VII

**DELAYS AND EXTENSIONS**

7.1 **Delays.** In the event Consultant is delayed in performance of its services by circumstances beyond its control, it will be granted a reasonable adjustment in the Schedule for Completion as described in Appendix Three. All claims for adjustments in the Schedule for Completion must be submitted to Mesa Water by Consultant within thirty (30) calendar days of the time of occurrence of circumstances necessitating the adjustment.

SECTION VIII

**TERMINATION**

8.1 **Termination by Owner.** Mesa Water may terminate this Contract at any time by giving Consultant written notice thereof. Upon termination, Consultant will be paid for that portion of the work completed prior to termination.
8.2 **Termination by Consultant.** Consultant may terminate this Contract upon written notice to Mesa Water should Mesa Water fail to fulfill duties as set forth in Section III.

8.3 **Effect Upon Records.** Upon termination, Consultant shall turn over to Mesa Water all of the documents, records, papers and other work product related to this Contract, which shall, at the option of Mesa Water, become Mesa Water property. Mesa Water shall not be liable for any costs other than as specified in this Contract.

8.4 **Examination of Records.** Mesa Water shall, until the expiration of three (3) years after final payment under this Contract, have access to and the right to examine any directly pertinent books, documents, papers and records of Consultant involving transactions related to this Contract.

8.5 **Change in Consultant’s Status.** The financial capability and status of Consultant were substantial inducements for Mesa Water to enter into this Contract. Therefore, Consultant shall, and hereby specifically acknowledges its duty to do so, notify Mesa Water of any significant financial change, or significant change in status of Consultant within seven (7) days of significant financial change or significant change in status. “Significant financial change” or “significant change in status” shall mean the following:

- Any action(s) by which Consultant shall consolidate with, merge, or convert the Consultant into another (partnership or corporation),
- Any filing of bankruptcy by the Consultant (or any of its partners),
- Loss of Consultant’s professional qualifications, and
- The fact that Consultant is no longer in compliance with federal or state equal opportunity laws.

**SECTION IX**

**ATTORNEYS’ FEES**

9.1 If either party brings an action or proceeding against the other party by reason of default of any term or condition of this Contract, or otherwise arising out of this Contract, the prevailing party in such action or proceeding shall be entitled to recover, as an element of its cost of suit, and not as damages, reasonable attorneys’ fees, which shall be payable whether or not such action is prosecuted to judgment. The “prevailing party” as the term is used herein, shall be the party who is entitled to recover costs of suit, whether or not such suit proceeds to final judgment, and shall include, without limitation, a party who dismisses an action for recovery hereunder in exchange for payment of the sums allegedly due, performance of covenants allegedly breached, or considerations substantially equal to the relief sought in such action.

**SECTION X**

**INDEMNIFICATION/HOLD HARMLESS**

10.1 Consultant shall be solely responsible for any injury or damage to any person or property howsoever occasioned by or arising out of Consultant’s willful misconduct or negligent
performance of the work hereunder. Consultant shall assume the defense and indemnify and hold harmless Mesa, its officers, directors, agents and employees, from every claim, expense, liability, or payment for any such injury or damage.

SECTION XI

INSURANCE

11.1 Insurance requirements shall be as set forth in Appendix Four hereto attached.

SECTION XII

MISCELLANEOUS PROVISIONS

12.1 **Gratuities.** Consultant warrants that neither it nor any of its employees, agents, or representatives has offered or given any gratuities to Mesa Water's employees, agents, or representatives with a view toward securing this Contract or securing favorable treatment with respect thereto.

12.2 **Interpretation.** The parties hereto acknowledge and agree that each has been given the opportunity to independently review this Contract with legal counsel, and/or has the requisite experience and sophistication to understand, interpret, and agree to the particular language of the provisions of this Contract.

12.3 **Project Manager.** Mesa Water Management reserves the right to approve the project manager assigned by Consultant to said work.

12.4 **Limitation on Assignment.** This Contract shall not be assigned without first obtaining the express written consent of Mesa Water.

12.5 **Status of Consultant.** Consultant is employed to render a professional service only and any payments made to Consultant are compensation solely for such services as Consultant may render. Consultant shall at all times retain the status of an independent consultant with Mesa Water. Nothing within this Contract shall be construed so as to make Consultant, or any of its agents or employees, the employee(s), partner(s), or joint venturer(s) of or with Mesa Water.

12.6 **Licensing.** Consultant warrants that they have complied, and shall comply, with any and all applicable state licensing requirements.

12.7 **Entire Contract.** This Contract supersedes any and all other Contracts, either oral or in writing, between the parties hereto with respect to the subject matter hereof, and no other Contract, statement, or promise related to the subject matter of this Contract which is not contained in this Contract shall be valid or binding.

12.8 **Ownership of Work.** All work performed pursuant hereto shall, upon completion, become the property of Mesa Water. In the event the work is not completed, the completed portions thereof shall become the property of Mesa Water.

Page 6 of 14

Professional Services Contract, March 20, 2017
12.9 **Waiver.** Either party to this Contract may specifically and expressly waive, in writing, compliance by the other party hereto with any term, condition or requirements set forth in this Contract. Either party to this Contract may specifically and expressly waive, in writing, any breach of any term, condition, or requirement of this Contract by the other party hereto. However, in the event that either party makes or gives such a waiver, such action shall not constitute a further or continuing waiver of any preceding or succeeding breach, or requirement of compliance with, the same or any other provision or contractual requirement, unless a specific statement to the contrary is contained within such waiver. The waiving party may, at any time thereafter, require further compliance by the other party hereto with the requirements or provisions of this Contract that have been so waived. The consent of one party to any act by the other party for which such written consent was required shall not be deemed to imply consent or waiver of the necessity of obtaining such written consent for the same or similar acts in the future. No waiver or consent shall be implied from the silence or from the failure of any party to an act, except as otherwise specified in this Contract.

12.10 **Job Costing.** Any opinion of the Construction Cost prepared by Consultant represents its judgment as a design professional and is supplied for the general guidance of Mesa Water. Since Consultant has no control over the cost of labor and material, or over competitive bidding or market conditions, Consultant does not guarantee the accuracy of such opinions as compared to consultant bids or actual cost to Mesa Water.

12.11 **Notices.** Any notice, request, demand, consent or approval, or other communication required or permitted hereunder by law, shall be validly given and made only if in writing and delivered in person to an officer or duly authorized representative of the party, or deposited in the United States mail, first class postage prepaid, and addressed to the party for whom intended as follows:

To Mesa Water:     Mesa Water District  
Attention: General Manager  
1965 Placentia  
Costa Mesa, CA 92627

To Consultant:     Professional Services Contract  
Attention: Click here to enter name.  
Click here to enter address.  
Click here to enter City/State/Zip.

12.12 **Jurisdiction.** The parties hereby understand and agree that this Contract, and the attachments hereto, have been negotiated and executed in the State of California and shall be governed by, and construed under, the laws of the State of California. The parties hereto do expressly agree that in the event of a dispute concerning the terms hereof, venue for any legal action shall be with the appropriate court of the County of Orange, State of California.

12.13 **Amendments.** No addition to, or modification of, any provision contained in this Contract shall be effective unless fully set forth in writing signed by the authorized representative of both of the parties hereto.

12.14 **Signatories.** The signatories hereto do warrant that they are appropriately authorized to execute this Contract on behalf of the party for which they signed.
IN WITNESS WHEREOF, the parties have executed this Contract the day first hereinabove written.

CONSULTANT

By: _____________________________________
   Principal

Print Name: ________________________________

MESA WATER

By: Paul E. Shoenberger, P.E., General Manager

Board Approved: Click here to enter the Board Approved date.
APPENDIX ONE

SCOPE OF SERVICES

In the event that a conflict or contradiction is discovered between the proposal language and Mesa Water’s standard contract terms, Mesa Water’s standard contract terms shall prevail.

The description of services should very clearly define the exact nature of the service, or services, to be provided by the consultant and/or an end product (where the Contract provides for an end product rather than a specific list of services). It is very important to include as much specificity as possible relative to the services to be provided so that in the event of a dispute or a disagreement over the nature of the services to be provided, a specific listing or description can be referred to.
APPENDIX TWO

FEE SCHEDULE

In the event that a conflict or contradiction is discovered between the proposal language and Mesa Water’s standard contract terms, Mesa Water’s standard contract terms shall prevail. Mesa Water’s payment terms are Net 30.

Clearly spell out the amount and type of compensation to be paid to the consultant. This should include rates by individual/title grouping, the not-to-exceed amount of the contract, whether the payments will be periodic or paid in a lump sum, hourly rates if applicable, retentions, if any, and a list of expenses for which the consultant will, or will not, be reimbursed.
APPENDIX THREE

SCHEDULE FOR COMPLETION

Clearly list the timeline for progress upon the work and for completion of the project(s) that are expected. If the Professional Services Contract is open-ended (i.e., for provision of services from time-to-time without a finite final completion date), then Appendix Three should specify a term at which it will conclude or at which the parties could decide to renew the contract. Under Section VIII, the Contract may be terminated at the election of either party. If some other form of termination provision is desired, this should be included in Section VIII of the Contract.
APPENDIX FOUR

INSURANCE REQUIREMENTS

The following coverages (below) will be provided by Consultant and maintained on behalf of Mesa Water, its directors, officers, employees, and authorized volunteers in accordance with the requirements set forth herein.

Commercial General Liability Insurance. Primary coverage shall be provided on Insurance Services Office CGL form No. CG 00 01 11 85 or 88. Policy limits shall be no less than one million dollars per occurrence for all coverages and two million dollars general aggregate applicable exclusively to this project. There shall be no cross liability exclusion. Coverage shall apply on a primary non-contributing basis in relation to any other insurance or self-insurance (primary or excess) available to Mesa Water, its directors, officers, employees, and authorized volunteers. General liability insurance will not be limited to coverage for the vicarious liability or the supervisory role of the additional insureds. Coverage for the additional insureds shall apply to the fullest extent permitted by law excepting only the active negligence of Mesa Water as established by agreement between the parties or by the findings of a court of competent jurisdiction. Mesa Water, its directors, officers, employees, and authorized volunteers shall be added as insureds using Insurance Services Office additional insured endorsement form CG 20 10 11 85.

Business Auto Coverage. Primary coverage shall be written on Insurance Services Office Business Auto Coverage form CA 00 01 06 92 including owned, non-owned, and hired autos. Limits shall be no less than one million dollars per accident. This policy shall be scheduled as underlying insurance to any umbrella policy as applicable. If Consultant owns no autos, a non-owned auto endorsement to the General Liability policy described above is acceptable.

Workers’ Compensation/Employer’s Liability shall be written on a policy form providing workers’ compensation statutory benefits as required by law. Employer’s liability limits shall be no less than one million dollars per accident or disease. Unless otherwise agreed, this policy shall be endorsed to waive any right of subrogation as respects Mesa Water, its directors, officers, employees, and authorized volunteers. By the signatures hereunder, each party certifies that it is aware of the provision of Section 3700 of the California Labor Code which requires every employer (and their consultants and subcontractors) to be insured against liability for workers’ compensation or to undertake self insurance in accordance with the provisions of that code, and it will comply with such provisions before commencing the performance of the work of this Contract.

Professional Liability or Errors and Omissions Insurance. Coverage as appropriate shall be written on a policy form coverage specifically designed to protect against acts, errors, or omissions of the consultant and “Covered Professional Services” as designated in the policy must specifically include work performed under this Contract. Any policy exclusions affecting work performed under this Contract (such as lead, asbestos, testing, soil work, laboratory analysis, etc.) must be deleted. The policy limit shall be no less than one million dollars per claim and in the aggregate. The limit must be separate from other project limits and applicable to this project only. The policy must “pay on behalf of” the insured and must include a provision establishing the insurer’s duty to defend. Coverage shall apply on a primary non-contributing basis in relation to any other insurance or self-insurance (primary or excess) available to Mesa Water, its directors, officers, employees, and authorized volunteers. If the work contemplated by this Contract includes any asbestos removal, identification or other treatment, any failure to detect asbestos exclusion must be deleted. Exclusions for any claims arising out of suspected
deficiency, or the malfunction of any products, process technique, system, or piece of equipment sold, procured, or otherwise furnished, is to be deleted.

**General conditions pertaining to provision of insurance coverage.** Consultant and Mesa Water agree to the following provisions regarding insurance provided:

1. Consultant agrees to provide insurance in accordance with the requirements set forth here. If Consultant uses existing coverage to comply with these requirements and that coverage does not meet the requirements set forth herein, Consultant agrees to amend, supplement, or endorse the existing coverage to do so. In the event any policy of insurance required under this Contract does not comply with these requirements or is canceled and not replaced, Mesa Water has the right, but not the duty, to obtain the insurance it deems necessary and Consultant will promptly reimburse any premium paid by Mesa Water.

2. All insurance coverage and limits provided by Consultant and available or applicable to this Contract are intended to apply to the full extent of the policies. Nothing contained in this Contract or any other contract relating to Mesa Water or its operations limits the application of such insurance coverage.

3. Unless otherwise approved by Mesa Water, insurance provided pursuant to these requirements shall be written by insurers authorized to do business in the State of California and with a minimum “Best’s” Insurance Guide rating of A-:VII. Self-insurance will not be considered to comply with these insurance specifications.

4. Any “self-insured retention” must be declared and approved by Mesa Water. Mesa Water reserves the right to require the self-insured retention to be eliminated or replaced by a deductible. Self-funding, policy fronting, or other mechanisms to avoid risk transfer are not acceptable. If Consultant has such a program, Consultant must fully disclose such program to Mesa Water before any notice to proceed is issued.

5. Consultant agrees to provide evidence of the insurance required herein, satisfactory to Mesa Water, consisting of: a) certificate(s) of insurance evidencing all of the coverages required and, b) an additional insured endorsement to Consultant’s general liability policy using Insurance Services Office form CG 20 10 11 85. Consultant agrees, upon request by Mesa Water, to provide complete, certified copies of any policies required by this section, within ten days of such request. Any actual or alleged failure on the part of Mesa Water or any other additional insured under these requirements to obtain proof of insurance required under this Contract in no way waives any right or remedy of Mesa Water or any additional insured, in this or any other regard.

6. Certificate(s) are to reflect that the insurer will provide thirty (30) days notice to Mesa Water of any cancellation of coverage. Consultant agrees to require its insurer to modify such certificate(s) to delete any exculpatory wording stating that failure of the insurer to mail written notice of cancellation imposes no obligation or that any party will “endeavor (as opposed to being required) to comply with the requirements of the certificate(s).”

7. Consultant shall provide proof that policies of insurance required herein expiring during the term of this Contract have been renewed or replaced with other policies providing at least the same coverage. Proof that such coverage has been ordered shall be submitted prior to expiration. A
coverage binder or letter from Consultant’s insurance agent to this effect is acceptable. A certificate of insurance and/or additional insured endorsement as required in these specifications applicable to the renewing or new coverage must be provided to Mesa Water within five (5) days of the expiration of the coverages.

8. Consultant agrees to require all subcontractors or other parties hired for this project to provide the same insurance as required of Consultant unless otherwise agreed to by Mesa Water. The subcontractor’s general liability insurance shall add as additional insureds all parties to this Contract using Insurance Services Office form CG 20 10 11 85. Consultant agrees to obtain certificates evidencing such coverage and make reasonable efforts to ensure that such coverage is provided as required here.
APPENDIX B

RFP Exception Form

Firm Name: ____________________________________________________

Address: ________________________________________________________

City ___________________ State _______ Zip Code ______________

Telephone: ____________________ Fax: __________________________

Email: _______________________

I have reviewed the Professional Services Agreement in its entirety. Our firm has either provided a list of exceptions or has indicated “No Exceptions” regarding the Professional Services Agreement.

Name of Authorized Representative: _________________________________

Signature of Authorized Representative: _____________________________

Date: _________________________
APPENDIX C

RFP Acceptance Form

Firm Name: __________________________________________________

Address: _____________________________________________________

City _____________________ State _______ Zip Code ______________

Telephone: ________________________ Fax: ____________________

Email: __________________________

I have reviewed the RFP in its entirety.

Name of Authorized Representative: _________________________________________

Signature of Authorized Representative: _________________________________________

Date: _____________________________
APPENDIX D

Fee Schedule

Excel workbook attached

Vendor shall explain what items are one-time upfront costs and what items are monthly recurring costs. The Excel workbook has separate sheets for one-time and recurring costs. In the case where items may be procured in either fashion (i.e. phones can be purchased up front or paid for via a monthly charge), BOTH spreadsheets must be filled out. Mesa Water District will decide on the specific procurement approach for these items after analyzing the proposals.

Base all recurring costs on a THREE YEAR TERM.

Vendor shall submit their standard Bill of Materials (BOM)/Order in addition to the completed workbooks.
### One Time Cost/Pricing

<table>
<thead>
<tr>
<th>Item</th>
<th>List Price</th>
<th>% Discount</th>
<th>Mesa Water Net Price</th>
<th>QTY</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Circuits/Access installation</td>
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<td>Custom Contact Center Reports (If needed)</td>
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<td>Applicable Taxes</td>
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### Optional

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<th>% Discount</th>
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## APPENDIX D - FEE SCHEDULE

**MESA WATER DISTRICT**

**CLOUD CONTACT CENTER, IP TELEPHONY UC SYSTEM RFP**

**MONTHLY RECURRING COST/PRICING**

**Three Year Term Pricing**

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<tr>
<th>Item</th>
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<th>% Discount</th>
<th>Mesa Water Net Price</th>
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<tr>
<td>Circuits/Access</td>
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<td>T1 MPLS</td>
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<tr>
<td>Unified Communications (IM/Presence/80 users)</td>
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<td>80</td>
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<td>Assumes this does not apply to analog phones or conference phones STATE IF PHONES HAVE TO BE PURCHASED OR CAN BE LEASED</td>
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<td>Standard IP Phones</td>
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<td>Conference Phone User License</td>
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<td>Contact Center Agent License</td>
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<td>Contact Center Supervisor License</td>
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<td>3</td>
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<td>IP Soft Phone</td>
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**TOTAL COSTS:**

**Optional**

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<th>EC Price</th>
<th>QTY</th>
<th>Notes</th>
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Respondent: ________________________________
## APPENDIX D - FEE SCHEDULE

### MESA WATER DISTRICT
CLOUD CONTACT CENTER, TELEPHONY/UC COMMUNICATION SYSTEM RFP
UNIT PRICING SUMMARY

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<tr>
<th>Item</th>
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<td>Expansion Module (Sidecar)</td>
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<tr>
<td>Headsets per unit</td>
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<td>Specify manufacturer and model here</td>
</tr>
<tr>
<td>Standard IP Phone</td>
<td></td>
<td></td>
<td></td>
<td>Specify manufacturer and model here</td>
</tr>
<tr>
<td>Analog Phone</td>
<td></td>
<td></td>
<td></td>
<td>Specify manufacturer and model here</td>
</tr>
<tr>
<td>Conference room phone</td>
<td></td>
<td></td>
<td></td>
<td>Specify manufacturer and model here</td>
</tr>
<tr>
<td>Contact Center Agent License</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contact Center Supervisor License</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Analog User License</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IP User License</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Conference Phone User License</td>
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</tr>
<tr>
<td>Vendor provided End-User Training</td>
<td></td>
<td></td>
<td></td>
<td>Additional training classes, based on group of 10 users</td>
</tr>
<tr>
<td>DECT or Bluetooth headsets</td>
<td></td>
<td></td>
<td></td>
<td>State Make and model</td>
</tr>
</tbody>
</table>
APPENDIX E

Existing Call Flows
Auto Attendant Call Flow Structure

Main Line
949 631-1200

Auto Attendant
1. Board of Directors 1205
2. Engineering 1291
3. Financial Services 1022
4. Human Resources 1020
5. Public and Government Affairs 1201
6. Water Operations 1000
7. Office of the General Manager 1206
8. Water Quality 1031
9. Costa Mesa Communications 714 754-5251

Administrative Services
949 631-1205

1. Board of Directors Req.
2. Records Req.
3. All Other Req.

Engineering
949 631-1291

1. Plan Check
2. Backflow or Cross Connection
3. All Other Req.

Financial Services
949 574-1022

1. Accounts Payable
2. Accounts Receivable
3. Purchasing
4. All Other Req.

Human Resources
949 574-1020

1. Employment Information
2. Employment Verification
3. All Other Req.

Public and Government Affairs
949 631-1201

1. Media Inquiries
2. Events
3. Legislative Affairs
4. All Other Req.

Water Operations
949 574-1000

1. Leak Reporting
2. Water Quality
3. Backflow or Cross Connection
4. Inspections

Customer Service
949 631-1200

1. Start or End Service
2. Bill Inquires
3. All Other Req.

Office of the General Manager
949 631-1206

1. Reach the General Manager
2. All Other Req.

Water Quality
949 574-1031

1. Water Quality
2. Return to available district staff

Costa Mesa Communications
714 754-5251

5. All Other Req.

June 16, 2014
Mesa Water Preferred
Call Flow structure

Main line extension
949-631-1200

Live answer

Ring Customer service department agents
On secondary main line appearance
X Sec

If no answer after X seconds customers will be directed to
an automated recording

Thank you for calling Mesa Water, if you know the direct
extension of the party you wish to reach please dial it now

If you would like to locate someone within our dial by name
directory please press pound

For Customer Service and general assistance please press 0
at any time

For the Board of Directors please press 1
For Engineering please press 2
For Financial Services please press 3
For Human Resources please press 4
For Public and Government Affairs please press 5
For Water Operations please press 6
For the Office of the General Manager press 7

For all general inquiries and assistance please press 0

Ringing on a dedicated line will allow the reps to instantly notice a
customer call

Multiple calls can be managed on this line to allow for no call loss

Options are examples of possible departments

Having an Auto Attendant limits the amount of calls reporting back to
customer service and allows them to manage calls more efficiently and not
have to worry about call loss

This also cuts down the amount of time a caller is waiting for an answer
or person

1) Administrative Services
2) Engineering
3) Financial Services
4) Human Resources
5) Public and Government Affairs
6) Water Operations
0) Customer Service
7) Office of General Manager
<table>
<thead>
<tr>
<th>Administrative Services</th>
<th>Engineering</th>
<th>Finance</th>
<th>Human Resources</th>
<th>Public and Government Affairs</th>
<th>Water Operations</th>
<th>Customer Services</th>
<th>Office of General Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>949 631-1205</td>
<td>949 631-1291</td>
<td>949 574-1022</td>
<td>949 574-1020</td>
<td>949 574-1000</td>
<td>949 631-1200</td>
<td>949 631-1206</td>
<td></td>
</tr>
</tbody>
</table>

**Mesa Water Secondary Call Flow structure**

**Auto Attendant**
If no answer after X seconds customers will be directed to an automated recording

Thank you for calling Mesa Water, if you know the direct extension of the party you wish to reach please dial it now

If you would like to locate someone within our dial by name directory please press pound

For Board Related Requests please press 1
For Records Request please press 2
For all other related request please press 3

**Live answer**

**Auto Attendant**
If no answer after X seconds customers will be directed to an automated recording

Thank you for calling Mesa Water, if you know the direct extension of the party you wish to reach please dial it now

If you would like to locate someone within our dial by name directory please press pound

For Plan Check please press 1
For Development Fee information press 2
For all other related request please press 3

**Live answer**

**Auto Attendant**
If no answer after X seconds customers will be directed to an automated recording

Thank you for calling Mesa Water, if you know the direct extension of the party you wish to reach please dial it now

If you would like to locate someone within our dial by name directory please press pound

For Accounts Payable please press 1
For Accounts Receivable please press 2
For all other related request please press 3

**Live answer**

**Auto Attendant**
If no answer after X seconds customers will be directed to an automated recording

Thank you for calling Mesa Water, if you know the direct extension of the party you wish to reach please dial it now

If you would like to locate someone within our dial by name directory please press pound

For Employment information please press 1
For employment verification please press 2
For all other related request please press 3

**Live answer**

**Auto Attendant**
If no answer after X seconds customers will be directed to an automated recording

Thank you for calling Mesa Water, if you know the direct extension of the party you wish to reach please dial it now

If you would like to locate someone within our dial by name directory please press pound

For Media inquires please press 1
For Event press 2
For all other related request please press 3

**Live answer**

**Auto Attendant**
If no answer after X seconds customers will be directed to an automated recording

Thank you for calling Mesa Water, if you know the direct extension of the party you wish to reach please dial it now

If you would like to locate someone within our dial by name directory please press pound

For Water Quality please press 1
For Leak reporting please press 2
For all other related request please press 3

**Live answer**

**Auto Attendant**
If no answer after X seconds customers will be directed to an automated recording

Thank you for calling Mesa Water, if you know the direct extension of the party you wish to reach please dial it now

If you would like to locate someone within our dial by name directory please press pound

For to reach the General Manager please press 1
For all other related request please press 2

**Live answer**

**Auto Attendant**
If no answer after X seconds customers will be directed to an automated recording

Thank you for calling Mesa Water, if you know the direct extension of the party you wish to reach please dial it now

If you would like to locate someone within our dial by name directory please press pound

For Plan Check please press 1
For Development Fee information press 2
For all other related request please press 3

**Live answer**

**Auto Attendant**
If no answer after X seconds customers will be directed to an automated recording

Thank you for calling Mesa Water, if you know the direct extension of the party you wish to reach please dial it now

If you would like to locate someone within our dial by name directory please press pound

For Accounts Payable please press 1
For Accounts Receivable please press 2
For all other related request please press 3

**Live answer**

**Auto Attendant**
If no answer after X seconds customers will be directed to an automated recording

Thank you for calling Mesa Water, if you know the direct extension of the party you wish to reach please dial it now

If you would like to locate someone within our dial by name directory please press pound

For Employment information please press 1
For employment verification please press 2
For all other related request please press 3
APPENDIX F

Existing Phone Survey

Please tell us the reason for your call today:

1. Pay My Bill
2. Get information on Account or Services
3. Other

Did you receive a warm, friendly greeting from the employee on your call?

1. Yes
2. No

Did the employee listen carefully and understand the reason for your call today?

1. Yes
2. No

Please rate your satisfaction with the service provided by the Mesa Water employee:

1. Very Satisfied
2. Somewhat Satisfied
3. Somewhat Dissatisfied
4. Dissatisfied

We value your thoughts and appreciate you taking the time to provide Mesa Water® with your feedback.
Appendix G

Existing Customer Service Dashboard
### Customer Service Dashboard

<table>
<thead>
<tr>
<th>Key Performance Indicator</th>
<th>Q1 Score</th>
<th>Q2 Score</th>
<th>Q3 Score</th>
<th>Q4 Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Jan</td>
<td>Feb</td>
<td>Mar</td>
<td>Apr</td>
</tr>
<tr>
<td><strong>Overall Customer Satisfaction</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phone: Very Satisfied / Satisfied</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walk-in: Very Satisfied / Satisfied</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Comments:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>First Call Resolution</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of customers whose needs were met on the first call.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Comments:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Call Quality: Call Center Evaluations</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaluation Form Total Score</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS Manager Score: # of Call Center Evals completed / # of Call Center Evals possible</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Comments:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Service Level Agreement (Speed to Answer)</strong></td>
<td></td>
<td></td>
<td></td>
<td>68.7%</td>
</tr>
<tr>
<td>Percentage of calls answered within 10 seconds.</td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Comments:</strong></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Call Abandonment Rate</strong></td>
<td></td>
<td></td>
<td></td>
<td>10.0%</td>
</tr>
<tr>
<td>Percentage of customers that hang up before an agent answers.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Comments:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Average Call Handle Time by Agent</strong></td>
<td></td>
<td></td>
<td></td>
<td>8.80</td>
</tr>
<tr>
<td>Average Length of Call for Agents</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Comments:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Detail of Customer Satisfaction Surveys (score by question)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phone: Did you receive a warm &amp; friendly greeting?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phone: Did the employee listen carefully…?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Comments:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Average Ring Time by Agent (seconds)</strong></td>
<td></td>
<td></td>
<td></td>
<td>8.80</td>
</tr>
<tr>
<td>Average Ring Time for Agents</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Comments:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
MEMORANDUM

TO: Board of Directors  
FROM: Stacy Taylor, External Affairs Manager  
DATE: October 11, 2018  
SUBJECT: State Advocacy Update

RECOMMENDATION

Receive the presentation.

STRATEGIC PLAN

Goal #1: Provide a safe, abundant, and reliable water supply.
Goal #2: Practice perpetual infrastructure renewal and improvement.
Goal #3: Be financially responsible and transparent.
Goal #4: Increase public awareness about Mesa Water® and about water.
Goal #5: Attract and retain skilled employees.
Goal #6: Provide outstanding customer service.
Goal #7: Actively participate in regional water issues.

PRIOR BOARD ACTION/DISCUSSION

At its October 9, 2018 workshop, the Board of Directors (Board) will review the District’s proposed 2019 Legislative Platforms. Advocacy for Mesa Water’s platforms will continue to require significant work in Sacramento on multiple matters during Calendar Year 2019.

DISCUSSION

California Advocates has effectively advocated for Mesa Water District (Mesa Water®) on several high-priority issues through active legislative monitoring and engagement with: the State legislature and its leadership, committees, consultants and staff; Governor’s administration, Department of Water Resources, and State Water Resources Control Board; Association of California Water Agencies; CalDesal; California Municipal Utilities Association; Delta Stewardship Council; California Special Districts Association; WateReuse; and others.

Mesa Water’s lobbyists from California Advocates -- Dennis Albiani and Erinn Ryberg -- will provide a verbal report to the Board regarding State advocacy activities for Mesa Water and anticipated State legislative/regulatory activities in Calendar Year 2019.

FINANCIAL IMPACT

In Fiscal Year 2019, $89,000 is budgeted; $21,000 has been spent to date.

ATTACHMENTS

None.
MEMORANDUM

TO: Board of Directors
FROM: Paul E. Shoenberger, P.E., General Manager
DATE: October 11, 2018
SUBJECT: Fiscal Year 2018 Environmental, Health and Safety Program Audit

RECOMMENDATION

Receive the presentation.

STRATEGIC PLAN

Goal #1: Provide a safe, abundant, and reliable water supply.
Goal #3: Be financially responsible and transparent.

PRIOR BOARD DISCUSSION

None.

DISCUSSION

In 2012, Mesa Water District (Mesa Water®) contracted with Environmental & Occupational Risk Management, Inc. (EORM), now BSI Group (BSI), to review Mesa Water’s existing Environmental, Health and Safety Program (EHS Program) and to provide a gap analysis report. Based on that report, a scope of work was developed to enhance Mesa Water’s EHS policies and programs. BSI then provided EHS services to ensure the implementation of program improvements, assist in establishing an annual audit process, and provide EHS program support.

In March 2018, Mesa Water released a request for proposal and engaged in a competitive selection process for two EHS service components. The first component was for EHS Support Services. This service is providing the day-to-day support for Mesa Water’s EHS Program. The second component was to conduct the Annual EHS Program Audit. This service ensures Mesa Water’s EHS Program remains strong through an independent performance review.

The objective of issuing a proposal with two different components was to separate the support service from the audit service and select different firms to fulfill each role. BSI was selected to provide EHS Support Services and Citadel Environmental Services, Inc. was selected to conduct the Annual EHS Audit. The contract terms for both services is five years.

EHS Program Audits were completed in 2014, 2015, 2016, and 2017 to measure the strength and progress of Mesa Water’s EHS Program. The intent is to establish a continuous improvement process and to perform an annual review to allow for long-term monitoring of success and identification of challenges related to Mesa Water’s EHS Program. Mesa Water’s overall EHS Program score for Fiscal Year 2018 is 91% - down one percentage point from last year and up fifty-two percentage points from the 2012 baseline.

Mesa Water’s EHS Program was audited in August of 2018 and consisted of documentation review, interviews with employees, and field observations.
FINANCIAL IMPACT

In Fiscal Year 2019, $15,920 is budgeted for the EHS Program Audit; $3,776 has been spent to date.

ATTACHMENTS

ATTACHMENT A: Fiscal Year 2018 Environmental, Health and Safety Scorecard
ATTACHMENT B: Safety Program Progress Chart, “The Road to Excellence”
<table>
<thead>
<tr>
<th>Key Element</th>
<th>2012</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Injury and Illness Prevention Program</td>
<td>50%</td>
<td>83%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>82%</td>
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<tr>
<td>Confined Space Program</td>
<td>50%</td>
<td>83%</td>
<td>83%</td>
<td>83%</td>
<td>100%</td>
<td>100%</td>
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<tr>
<td>Hazard Communication Program</td>
<td>0%</td>
<td>83%</td>
<td>100%</td>
<td>83%</td>
<td>83%</td>
<td>100%</td>
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<tr>
<td>Emergency Action Plan</td>
<td>25%</td>
<td>92%</td>
<td>92%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
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<tr>
<td>Control of Hazardous Energy Procedure</td>
<td>0%</td>
<td>67%</td>
<td>75%</td>
<td>83%</td>
<td>100%</td>
<td>100%</td>
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<tr>
<td>Arc Flash and Electrical Safety Program</td>
<td>0%</td>
<td>67%</td>
<td>100%</td>
<td>83%</td>
<td>83%</td>
<td>75%</td>
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<tr>
<td>Accident Investigation</td>
<td>58%</td>
<td>83%</td>
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<td>100%</td>
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<td>100%</td>
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<tr>
<td>Hazardous Waste and DOT Program</td>
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<td>75%</td>
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<td>Heat Illness Prevention Program</td>
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<tr>
<td>Fall Protection Program</td>
<td>0%</td>
<td>8%</td>
<td>42%</td>
<td>83%</td>
<td>100%</td>
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<td>Fire Prevention Plan</td>
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<tr>
<td>Forklift Operations</td>
<td>83%</td>
<td>83%</td>
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<td>83%</td>
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<tr>
<td>Overhead Crane Operations</td>
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<td>100%</td>
<td>100%</td>
<td>83%</td>
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<tr>
<td>Slings and Hoisting Equipment</td>
<td>58%</td>
<td>67%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>83%</td>
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<tr>
<td>Bloodborne Pathogens Procedure</td>
<td>0%</td>
<td>100%</td>
<td>75%</td>
<td>100%</td>
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<td>100%</td>
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<tr>
<td>Alcohol and Controlled Substances Program</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Key Element</td>
<td>Score</td>
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<td></td>
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<td>------------------------------------------------</td>
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<tr>
<td></td>
<td>2012</td>
<td>2014</td>
<td>2015</td>
<td>2016</td>
<td>2017</td>
<td>2018</td>
</tr>
<tr>
<td>Asbestos Containing Materials Program</td>
<td>75%</td>
<td>83%</td>
<td>83%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Excavation and Trench Safety Program</td>
<td>50%</td>
<td>67%</td>
<td>100%</td>
<td>92%</td>
<td>58%</td>
<td>83%</td>
</tr>
<tr>
<td>Personal Protective Equipment Program</td>
<td>42%</td>
<td>83%</td>
<td>75%</td>
<td>83%</td>
<td>100%</td>
<td>83%</td>
</tr>
<tr>
<td>Physical Inspections of Facilities and Grounds Program</td>
<td>75%</td>
<td>83%</td>
<td>83%</td>
<td>100%</td>
<td>100%</td>
<td>83%</td>
</tr>
<tr>
<td>Respiratory Protection Program</td>
<td>50%</td>
<td>100%</td>
<td>100%</td>
<td>83%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Hearing Conservation Program</td>
<td>50%</td>
<td>83%</td>
<td>92%</td>
<td>83%</td>
<td>100%</td>
<td>83%</td>
</tr>
<tr>
<td>HMBP</td>
<td>42%</td>
<td>83%</td>
<td>100%</td>
<td>83%</td>
<td>100%</td>
<td>100%</td>
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<tr>
<td>SPCC</td>
<td>0%</td>
<td>50%</td>
<td>67%</td>
<td>83%</td>
<td>100%</td>
<td>100%</td>
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<tr>
<td>Overall Score</td>
<td>39%</td>
<td>77%</td>
<td>87%</td>
<td>89%</td>
<td>92%</td>
<td>91%</td>
</tr>
</tbody>
</table>

Scoring:
0 – Not Present
1 – Present but needs major revisions – does not meet the regulatory requirements
2 – Present but needs minor changes or improvements
3 – Excellent, requires routine work to support

Note: Scoring is weighted, written program and training each account for 25% of the overall score, execution of procedures in routine operations are worth 50% of the overall score.
THE ROAD TO EXCELLENCE

Present but needs major changes or improvement – does not meet the regulatory requirements

Excellent, requires routine work to support

2018
91%

2017
92%

2016
89%

2015
87%

2014
77%

2012
39%

2012
Present but needs minor changes or improvements

REPORTS:

14. REPORT OF THE GENERAL MANAGER:
   • September Key Indicators Report
   • Other (no enclosure)
Goal #1: Provide a safe, abundant, and reliable water supply

FY 2018 Potable Production (Acre Feet)

<table>
<thead>
<tr>
<th>Water Supply Source</th>
<th>FY 2019 YTD Actual (AF)</th>
<th>FY 2019 YTD Budget (AF)</th>
<th>FY 2019 Annual Budget (AF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear Water</td>
<td>2,636</td>
<td>2,161</td>
<td>12,241</td>
</tr>
<tr>
<td>Amber Water (MWRF)</td>
<td>2,183</td>
<td>2,200</td>
<td>4,419</td>
</tr>
<tr>
<td>Imported</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Basin Management Water</td>
<td>236</td>
<td>400</td>
<td>1,000</td>
</tr>
<tr>
<td>Total Production</td>
<td>5,055</td>
<td>4,961</td>
<td>17,660</td>
</tr>
</tbody>
</table>

YTD actual water production (AF) through September 30, 2018
**Goal #1: Provide a safe, abundant, and reliable water supply**

FY18 System Water Quality – This data reflects samples taken in August

<table>
<thead>
<tr>
<th>Distribution System:</th>
<th>Average</th>
<th>Range</th>
<th>MCL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorine Residual (mg/L) <em>Compliance</em></td>
<td>1.92</td>
<td>0.71 – 2.71</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Current RAA = 1.89</td>
<td>RAA</td>
</tr>
<tr>
<td>Coliform Positive % <em>Compliance</em></td>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Temperature (° F)</td>
<td>81.5</td>
<td>73 – 88</td>
<td>None</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reservoir I &amp; II:</th>
<th>Average</th>
<th>Range</th>
<th>MCL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorine Residual (mg/L)</td>
<td>1.38</td>
<td>0.60 – 2.09</td>
<td>None</td>
</tr>
<tr>
<td>Monochloramine (mg/L)</td>
<td>1.22</td>
<td>0.52 – 1.89</td>
<td>None</td>
</tr>
<tr>
<td>Ammonia (mg/L)</td>
<td>0.30</td>
<td>0.13 - 0.46</td>
<td>None</td>
</tr>
<tr>
<td>Temperature (° F)</td>
<td>78.3</td>
<td>75-83</td>
<td>None</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wells (Treated):</th>
<th>Average</th>
<th>Range</th>
<th>MCL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorine Residual (mg/L)</td>
<td>2.38</td>
<td>2.12 - 2.87</td>
<td>None</td>
</tr>
<tr>
<td>Monochloramine (mg/L)</td>
<td>2.10</td>
<td>1.79 – 2.57</td>
<td>None</td>
</tr>
<tr>
<td>Ammonia (mg/L)</td>
<td>0.52</td>
<td>0.36 - 0.79</td>
<td>None</td>
</tr>
<tr>
<td>Temperature (° F)</td>
<td>78.3</td>
<td>72 - 84</td>
<td>None</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MWRF:</th>
<th>Average</th>
<th>Range</th>
<th>MCL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorine Residual (mg/L)</td>
<td>2.57</td>
<td>2.30 – 3.01</td>
<td>None</td>
</tr>
<tr>
<td>Monochloramine (mg/L)</td>
<td>2.40</td>
<td>2.13 – 2.74</td>
<td>None</td>
</tr>
<tr>
<td>Ammonia (mg/L)</td>
<td>0.56</td>
<td>0.42 – 0.67</td>
<td>None</td>
</tr>
<tr>
<td>Temperature (° F)</td>
<td>84.3</td>
<td>83 – 87</td>
<td>None</td>
</tr>
<tr>
<td>Color (CU) <em>Compliance</em></td>
<td>ND</td>
<td>ND</td>
<td>15</td>
</tr>
<tr>
<td>Odor (TON) <em>Compliance</em></td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

**Water Quality Calls/Investigations:**

| Total Calls       | 6 |
| Total Investigations (from calls) | 1 |
Goal #2: Practice perpetual infrastructure renewal and improvement

Revenues of Potable Water
(in thousands)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Jul</td>
<td>$2,500</td>
<td>$2,500</td>
<td>$2,500</td>
<td>$2,500</td>
</tr>
<tr>
<td>Aug</td>
<td>$3,000</td>
<td>$3,000</td>
<td>$3,000</td>
<td>$3,000</td>
</tr>
<tr>
<td>Sep</td>
<td>$2,500</td>
<td>$2,500</td>
<td>$2,500</td>
<td>$2,500</td>
</tr>
<tr>
<td>Oct</td>
<td>$2,000</td>
<td>$2,000</td>
<td>$2,000</td>
<td>$2,000</td>
</tr>
<tr>
<td>Nov</td>
<td>$1,500</td>
<td>$1,500</td>
<td>$1,500</td>
<td>$1,500</td>
</tr>
<tr>
<td>Dec</td>
<td>$1,000</td>
<td>$1,000</td>
<td>$1,000</td>
<td>$1,000</td>
</tr>
<tr>
<td>Jan</td>
<td>$500</td>
<td>$500</td>
<td>$500</td>
<td>$500</td>
</tr>
<tr>
<td>Feb</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Mar</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Apr</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>May</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Jun</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Actual</th>
<th>Budget</th>
<th>Difference</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total YTD</td>
<td>$8,021,649</td>
<td>$7,899,520</td>
<td>$122,129</td>
<td>1.55%</td>
</tr>
</tbody>
</table>
Goal #3: Be financially responsible and transparent
**Goal #4: Increase public awareness about Mesa Water® and about water**

<table>
<thead>
<tr>
<th>Web Site Information</th>
<th>August 2018</th>
<th>September 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visits to the web site</td>
<td>5995</td>
<td>6841</td>
</tr>
<tr>
<td>Unique visitors (First time to the site)</td>
<td>3508</td>
<td>4204</td>
</tr>
<tr>
<td>Average per day</td>
<td>193</td>
<td>228</td>
</tr>
<tr>
<td>Average visit length</td>
<td>1 minute, 24 seconds</td>
<td>1 minute, 30 seconds</td>
</tr>
<tr>
<td>Page visited most</td>
<td>Home</td>
<td>Home</td>
</tr>
<tr>
<td>Second most visited page</td>
<td>Online Bill Pay</td>
<td>Online Bill Pay</td>
</tr>
<tr>
<td>Third most visited page</td>
<td>Human Resources</td>
<td>Human Resources</td>
</tr>
<tr>
<td>Fourth most visited page</td>
<td>Contact</td>
<td>Departments</td>
</tr>
<tr>
<td>Fifth most visited page</td>
<td>Departments</td>
<td>Contact</td>
</tr>
<tr>
<td>Most downloaded file</td>
<td>2018 Water Quality Report</td>
<td>2018 Water Quality Report</td>
</tr>
<tr>
<td>Second most downloaded file</td>
<td>Standard Specifications and Standard Drawings for the Construction of Water Facilities</td>
<td>Board Agenda</td>
</tr>
<tr>
<td>Most active day of the week</td>
<td>Thursday</td>
<td>Tuesday</td>
</tr>
<tr>
<td>Least active day of the week</td>
<td>Saturday</td>
<td>Saturday</td>
</tr>
</tbody>
</table>

**Total visits since June 1, 2002** 1,282,465

**Water Vending Machine Information**

<table>
<thead>
<tr>
<th>Vending Machine Location</th>
<th>Vend Measurement</th>
<th>September 2018 Vends</th>
<th>Totals Vends</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mesa Water Office</td>
<td>1 gal</td>
<td>4,070</td>
<td>314,147</td>
</tr>
</tbody>
</table>
## Monthly Key Indicators Report
For the Month of September 2018

### Goal #5: Attract and retain skilled employees

<table>
<thead>
<tr>
<th>DEPARTMENT:</th>
<th>FY 2018</th>
<th>COMMENTS:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OFFICE OF THE GENERAL MANAGER:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Manager</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Business Administrator</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>2.00</td>
<td></td>
</tr>
<tr>
<td><strong>ADMINISTRATIVE SERVICES:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administrative Services</td>
<td>5.00</td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>5.00</td>
<td></td>
</tr>
<tr>
<td><strong>CUSTOMER SERVICES:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conservation</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Customer Service</td>
<td>8.00</td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>9.00</td>
<td></td>
</tr>
<tr>
<td><strong>ENGINEERING:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineering</td>
<td>5.00</td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>5.00</td>
<td></td>
</tr>
<tr>
<td><strong>EXTERNAL AFFAIRS:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legislative &amp; Governmental Affairs</td>
<td>1.50</td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>1.50</td>
<td></td>
</tr>
<tr>
<td><strong>FINANCIAL SERVICES:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial Reporting/ Purchasing</td>
<td>5.00</td>
<td></td>
</tr>
<tr>
<td>Accounting</td>
<td>2.00</td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>7.00</td>
<td></td>
</tr>
<tr>
<td><strong>HUMAN RESOURCES:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human Resources</td>
<td>3.00</td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>3.00</td>
<td></td>
</tr>
<tr>
<td><strong>PUBLIC AFFAIRS:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outreach, Education &amp; Communications</td>
<td>2.50</td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>2.50</td>
<td></td>
</tr>
<tr>
<td><strong>WATER OPERATIONS:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervision/Support</td>
<td>6.00</td>
<td></td>
</tr>
<tr>
<td>Distribution</td>
<td>10.00</td>
<td></td>
</tr>
<tr>
<td>Production</td>
<td>3.00</td>
<td></td>
</tr>
<tr>
<td>Water Quality</td>
<td>2.00</td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>21.00</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL BUDGETED POSITIONS:</strong></td>
<td>56.00</td>
<td></td>
</tr>
</tbody>
</table>

**Meter reader** - vacant/using temporary assistance

**Associate Engineer II** - vacant/under review

**Department Assistant (shared)** - vacant/using temporary assistance/recruitment in process

**Buyer** - vacant/using temporary assistance

**Senior Accounting Technician** - vacant

**Sr. Human Resources Analyst** - vacant/using temporary assistance/recruitment in process

**Public Affairs Coordinator** - vacant/recruitment in process

**Facilities Maintenance Worker** - vacant/recruitment in process
**Goal #6: Provide outstanding customer service**

### Customer Calls

<table>
<thead>
<tr>
<th>Call Type</th>
<th>FY19 YTD</th>
<th>Sept 2018</th>
<th>YTD Weekly Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Billing Question</td>
<td>605</td>
<td>186</td>
<td>47</td>
</tr>
<tr>
<td>Service Requests</td>
<td>579</td>
<td>185</td>
<td>45</td>
</tr>
<tr>
<td>High Bill</td>
<td>542</td>
<td>232</td>
<td>42</td>
</tr>
<tr>
<td>Payments</td>
<td>727</td>
<td>240</td>
<td>56</td>
</tr>
<tr>
<td>Late Fee</td>
<td>423</td>
<td>122</td>
<td>33</td>
</tr>
<tr>
<td>Account Maintenance</td>
<td>157</td>
<td>41</td>
<td>12</td>
</tr>
<tr>
<td>On-Line Bill Pay</td>
<td>411</td>
<td>136</td>
<td>32</td>
</tr>
<tr>
<td>Water Pressure</td>
<td>14</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>No Water</td>
<td>114</td>
<td>35</td>
<td>9</td>
</tr>
<tr>
<td>Conservation</td>
<td>99</td>
<td>31</td>
<td>8</td>
</tr>
<tr>
<td>Water Waste</td>
<td>39</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>Other (District info. other utility info. etc.)</td>
<td>830</td>
<td>121</td>
<td>64</td>
</tr>
<tr>
<td>Rate Increase</td>
<td>2</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Fluoridation</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTAL CUSTOMER CALLS</strong></td>
<td>4542</td>
<td>1341</td>
<td>349</td>
</tr>
<tr>
<td><strong>AVERAGE ANSWER TIME (Seconds)</strong></td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

### Online Bill Pay Customers

<table>
<thead>
<tr>
<th>Current Customers Enrolled</th>
<th>FY 2019 YTD</th>
<th>Sept 2018</th>
<th>YTD Weekly Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>13142</td>
<td>527</td>
<td>151</td>
<td>41</td>
</tr>
</tbody>
</table>
REPORTS:

15. DIRECTORS' REPORTS AND COMMENTS:
DIRECTORS' REPORTS (AB 1234) PER CA GOVERNMENT CODE SECTION 53232.3 (d)

In accordance with CA Government Code 53232.3 (d), the following report identifies the meetings for which Mesa Water Directors received expense reimbursement.

<table>
<thead>
<tr>
<th>Name</th>
<th>Meetings Attended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jim Atkinson</td>
<td></td>
</tr>
<tr>
<td>Reimbursement Date:</td>
<td>Description, Date</td>
</tr>
<tr>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Fred R. Bockmiller, P.E.</td>
<td></td>
</tr>
<tr>
<td>Reimbursement Date:</td>
<td>Description, Date</td>
</tr>
<tr>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Marice H. DePasquale</td>
<td></td>
</tr>
<tr>
<td>Reimbursement Date:</td>
<td>Description, Date</td>
</tr>
<tr>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Shawn Dewane</td>
<td></td>
</tr>
<tr>
<td>Reimbursement Date:</td>
<td>Description, Date</td>
</tr>
<tr>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>James R. Fisler</td>
<td></td>
</tr>
<tr>
<td>Reimbursement Date:</td>
<td>Description, Date</td>
</tr>
<tr>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>
There are no support materials for this item.