MADDAUS WATER MANAGEMENT INC.

105 Zephyr Place, Danville, CA 94526 (925) 831-0194



July 30, 2015

Stevie Kister Monterey Peninsula Water Management District Conservation Representative 5 Harris Ct Building G Monterey CA 93940

Subject: Proposal for Maddaus Water Management (MWM) Conducting Commercial Water Efficiency Training

Dear Ms. Kister and Mr. Dimaggio:

Maddaus Water Management is pleased to present this proposal to provide engineering services for conducting water efficiency training for customers in the Monterey, California region. This letter proposal presents information about Maddaus Water Management, a project scope, schedule and estimated fee.

LIST OF PROJECT TASKS

It is assumed that the following scope of work outlined in Tasks 1 through 3 would be completed by October, 31 2015.

Task 1. Review Facility Data & Coordination before Site Visit

MWM will spend up to 11 hours on Task 1 reviewing data provided by MPWMD//California American Water.

- MPWMD//California American Water will collect some of the data needed by the project. This will include historical water meter data from the main meter and any submeters, a description of buildings and their purpose, building occupancy data.
- Data to be collected by MPWMD//California American Water for each training facility will include such items as:
 - (1) Square footage of facility
 - (2) Purpose of the building, as it relates to water use level
 - (3) Occupant (employee and student) load
 - (4) Special water uses such as cooling, number of rooms or number of beds on building meter, any landscape use
 - (5) Age of facility
 - (6) Recent remodeling, especially related to end uses of water (restrooms, kitchens)

Task 2. Conduct Training

Provide one day of hands-on training of instruction at MPWMD//California American Water provided sites located in Monterey. It is assumed half of the instruction time will be dedicated to classroom training and half dedicated to water audit instruction in the field.

- > Training would focus on hotel / restaurant indoor water use (except restrooms)
 - 1 hour high level overview for management level attendees
 - 3 hour overview of kitchens
 - 4 hour afternoon on pools, linen programs, cooling towers, etc.

Task 3. Create Handout Worksheets, Phone Meetings, Project Management

Create worksheets on common hotel equipment up to allowable budget. The worksheets should have the following items to allow customers to know how they change to a higher efficient appliance.

- o Type of appliance they have now and its efficiency rating
- Where to find a more efficient appliance
- Potential Water Savings
- Potential Dollar Savings
- o Payback period

Assumptions:

- MPWMD//California American Water will provide all site and attendee coordination and logistics associated with the training, including site support, outreach, attendee sign-up, sign-in, food for attendees, copies training materials/handouts, compilation of attendee feedback forms, etc.
- MPWMD//California American Water has stated that this will be in-person training and not a webinar format. The existing material is modular such that it could be a webinar series at a future date.
- MWM will provide training material content in the form of MS PowerPoint slides (existing materials) and electronic course CD with additional reference materials arranged by technology type. Our existing material will need to be selectively pared down to one day format with the most relevant information for the attendees.
- MPWMD//California American Water will provide three audit kits for in-class use and a list of what simple items attendees can bring with them (stop watch timers, pens, note paper, laptop computers, measuring containers, etc.)
- Given Michelle Maddaus is located in the Bay Area, prep time will be done electronically over the phone or via Go To Meetings and may include a review of existing materials and QA/QC of final training handout materials.
- MWM will travel the day prior to the training and be available for training from 8 a.m. to 5 p.m. Travel arrangements and costs for travel are not included in this proposal other than mileage. It is assumed the hotel cost would be covered by the sponsoring hotel or to be paid by MPWMD//California American Water at an additional cost to this proposal.

Description of presentation materials for classroom portion of training

Based on previous trainings (described below), MWM has materials that are readily available and current. We will provide power point presentations on the following 5 topic areas (individual modules) that may be used for this training focused on indoor commercial water use:

- 1. Introduction (16 slides)
- 2. Toilets, Urinals, Showers, Faucets (13 slides) may be used in limited overview
- 3. Cooling Towers / Thermodynamics (23 slides) the cooling tower section can be eliminated or reduced as desired
- 4. Pools / Wash Down (6 slides)
- 5. Kitchens (21 slides)

We recommend a mixture of classroom instruction and field visits, though this can be adjusted. We feel our suggested format provides a comprehensive overview of the most common and key CII water uses. However, the set-up is flexible and topics can be added or removed if desired after the review of materials by MPWMD//California American Water staff. The aforementioned 5 topics focused on indoor use are too comprehensive for a 1-day training, but will easily be reduced to the appropriate desired training length with consensus by MWM and MPWMD//California American Water staff.

Description of water audit materials for field portion of class

We will demonstrate both electronic and paper data collection techniques. We will provide examples of electronic software data collection in the field, as well as provide paper forms for use.

The field survey time will support the classroom instruction and may include tours of kitchens, restrooms, landscape, cooling towers.

During our field training we will utilize the facilities we are granted access. We are very comfortable on a commercial setting completed over 200 water audits over the past two decades.

MWM has conducted seven (8) hands field and Power Point based CII audit trainings in the past 3 years (2012-2015).

- City of Santa Barbara (7 day field training marina, laundry facility, hotels, retirement community)
- Army Corps of Engineers (4 day field training army base) 10 attendees William Maddaus and Michelle Maddaus instructors



• Honolulu Board of Water Supply (24 attendees representing all the Hawaiian Islands). (2 day field training) (large hotel) – William Maddaus, Lisa Maddaus and Michelle Maddaus instructors.



- Abbotsford, Canada (3 day field training poultry processing / agriculture)
- Cambria Services District (2 day field training restaurant, hotels)
- San Luis Obispo County (2 day field training grocery stores, golf course, hotel resort)
- Stanford University (6 days in the field over 3 trips turf and landscape areas)
- State of Illinois Community Colleges (hosted by Lewis and Clark Community College) (2 day field training, cooling tower, laboratory, pool, kitchens, restrooms)

References for these training are available upon request.

Schedule & Proposed Time and Cost Estimate

William Maddaus, Michelle Maddaus, Lisa Maddaus and Chris Matyas are all fully trained and capable of leading the CII Training instruction. For this project, it is intended the Michelle Maddaus will be the trainer as she is an experienced with restaurants and hotels. However as a backup, with four trained professionals, two trainers are guaranteed to be available during the potential training dates requested in October 2015.

MWM is willing to start the training preparation upon the successful execution of an agreement, and will continue through October 31, 2015, or until funds have been depleted. Due to previous training experience and existing materials MWM guarantees the instruction materials and instructors will be ready to conduct the training in the requested time window of the last three weeks in October 2015. MWM has four fully trained instructions and can complete the project in the requested time period.

The cost for the project is based on a number of items – number of class attendees, number of instructors required, complexity of training requested and prep work required (i.e. do you want to cover cooling towers etc.), location of the hotel, and amount of requested changes to training materials, amount of coordination logistics required between MPWMD/California American Water and MWM instructors.

As this is a hands-on technical training, we have found the following instructor-student ratios seem to work well: Up to 12-15 attendees per day warrant 1 instructor, 15-30 per day are best served by 2 instructors. We would not count MPWMD//California American Water staff as attendees in the number of attendees count. The projected range in cost is \$8,000, which can be further discussed and settled upon after the selection of site, preferred option of training, number of attendees, and reflect the needs and yields high quality training. The minimum fee of \$8,000 includes a short kick-off meeting, 1 day on site, and minimum of 1 day of preparations of slides, materials and site review. Due to our previous experience, we are confident we can provide a very cost efficient and high quality training for MPWMD//California American Water. At this time it is assumed there will be 30 attendees which is well suited to 2 instructors.

Task	Title – OPTION #1	Michelle Maddaus \$185/hr.	Tess Kretschmann \$125/hr.	Total Budget
	Project Role	Trainer #1	Trainer #2	
1	Project Kick-off and Training Prep	10	1	\$2,025
2	Conduct Training – 1 day trainings	8	8	\$2,520
3	Create Worksheets for participants, Meetings, Project			
	Management	12	8	\$3,280
	ODCs - Mileage			\$125
	Total Hours and Labor Cost	30	17	\$7,945

Summary of Key Staff and 2015 Rate Schedule

The following table presents specific individual qualifications for all MWM personnel. Michelle Maddaus will be serving as Project Manager. Resumes for personnel are available upon request.

Person	Position	Service/Discipline	Years Exp.	Education / Degree	License	Hourly Rate
William Maddaus	Principal	Technical Director/Reviewer	50	M.S. Engineering	P.E.	\$280
Lisa Maddaus	Senior Engineer	Project Manager	20	M.S. Engineering	P.E.	\$185
Michelle Maddaus	Senior Engineer	Technical Advisor	16	M.B.A., B.S. Engineering	P.E.	\$180
Christopher Matyas	Software Engineer	Software for Water Efficiency	16	B.S. Engineering	E.I.T.	\$175
Tess Kretschmann	Staff Engineer	Technical Analyst, Modeler	9	B.S. Engineering	E.I.T.	\$125
Andrea Pacheco	Document Review	Word Processing	9	B.S. Sociology		\$85

We look forward to having the opportunity to work with MPWMD//California American Water. If you have any questions or would like additional information, please contact Michelle at (925) 831-0194 or <u>michelle@maddauswater.com</u>.

Sincerely,

Michelle Maddaus

Michelle Maddaus P.E. and M.B.A. President

FIRM OVERVIEW AND QUALIFICATIONS

Maddaus Water Management is a woman-owned business incorporated in January 2013 that was originally founded by William O. Maddaus in 1995. The firm has five employees and has completed over 325 projects in 20 years. The firm operates from its offices in Danville, California and Folsom, California.

MWM gives clients the personal attention expected of a small business. As registered engineers, MWM has always taken a technically rigorous approach to water management planning using proven engineering estimates of water savings and cost effectiveness analysis, including detailed financial

analysis of utility costs and benefits. The company is widely recognized for our expertise and capabilities in water resources management, drought, water auditing, and water conservation planning evaluations.

MWM started supporting Best Management Practice design during the original negotiations of the Memorandum of Understanding for Urban Water Conservation in California back in 1990. MWM has since helped more than more than a 150 California utilities prepare and implement water conservation plans. MWM covers a broad range of services needed for BMP planning and implementation and qualifies in all areas of technical expertise on the CUWCC Qualified Consultants Roster.

Bill and Lisa Maddaus were original authors of the first edition of the American Water Works Association, Manual of Practice of M52, Water Conservation Programs – A Planning Manual (AWWA, 2006). The Manual is peer-reviewed and accepted by AWWA and currently being updated by Maddaus Water Management and reviewed and commented on by AWWA members. In November 2013, Maddaus Water Management also completed a new publication for the International Water Association, Preparing Urban Water Use Efficiency Plans – A Best Practices Guide (IWA, 2013).