AGENDA IRVINE RANCH WATER DISTRICT ENGINEERING AND OPERATIONS COMMITTEE MEETING TUESDAY, JUNE 17, 2025

This meeting will be held in-person at the District's headquarters located at 15600 Sand Canyon Avenue, Irvine, California. The meeting will also be broadcasted via Webex for those wanting to observe the meeting virtually.

To observe this meeting virtually, please join online using the link and information below:

Via Web: https://irwd.webex.com/irwd/j.php?MTID=m2b76d44c0c2a14a171b3103619028038

Meeting Number (Access Code): 2489 679 9047

Meeting password: XBcdKM2tm77

PLEASE NOTE: Webex observers of the meeting will be placed into the Webex lobby when the Board enters closed session. Participants who remain in the "lobby" will automatically be returned to the open session of the Board once the closed session has concluded. Observers joining the meeting while the Board is in closed session will receive a notice that the meeting has been locked. They will be able to observe the meeting once the closed session has concluded.

CALL TO ORDER	1:30 p.m.			
<u>ATTENDANCE</u>	Committee Chair: Committee Member	niel Ferons _ n Withers _		
ALSO PRESENT	Paul Cook Neveen Adly Jim Colston Eric Akiyoshi Harry Cho Belisario Rios Cameron Smith	Kevin Burton Paul Weghorst Jason Manning Malcolm Corez Alex Murphy Joe Lam	Wendy Chambers Steve Choi Jose Zepeda Jacob Moeder Scott Giatpaiboon Lance Kaneshiro	

PUBLIC COMMENT NOTICE

If you wish to address the Committee on any item, please submit a request to speak via the "chat" feature available when joining the meeting virtually. Remarks are limited to three minutes per speaker on each subject. Public comments are limited to three minutes per speaker on each subject. You may also submit a public comment in advance of the meeting by emailing comments@irwd.com before 8:00 a.m. on Tuesday, June 17, 2025.

COMMUNICATIONS

- 1. Notes: Burton
- 2. Public Comments
- 3. Determine the need to discuss and/or take action on item(s) introduced that came to the attention of the District subsequent to the agenda being posted and determine which items may be approved without discussion.

INFORMATION

4. IRWD RESEARCH BUSINESS PLAN UPDATE – COLSTON / BURTON

Recommendation: Receive and file.

ACTION

5. <u>CONSULTANT SELECTION FOR ADVANCED METERING</u>
<u>INFRASTRUCTURE PLANNING AND IMPLEMENTATION – MCNULTY /</u>
MATUSKA / NYE / WEGHORST

Recommendation: That the Board authorize the General Manager to increase Capital Budget Projects 12514 and 12515 each by \$170,000 for a total of \$340,000; and to execute a Professional Services Agreement with Arcadis U.S., Inc. in the amount of \$432,930 for the development of a detailed Advanced Metering Infrastructure Implementation Plan and providing procurement assistance.

OTHER BUSINESS

- 6. Directors' Comments
- 7. Adjournment

Availability of agenda materials: Agenda exhibits and other writings that are disclosable public records distributed to all or a majority of the members of the above-named Committee in connection with a matter subject to discussion or consideration at an open meeting of the Committee are available for public inspection in the District's office, 15600 Sand Canyon Avenue, Irvine, California ("District Office"). If such writings are distributed to members of the Committee less than 72 hours prior to the meeting, they will be available from the District Secretary of the District Office at the same time as they are distributed to Committee Members, except that if such writings are distributed one hour prior to, or during, the meeting, they will be available electronically via the Webex meeting noted. Upon request, the District will provide for written agenda materials in appropriate alternative formats, and reasonable disability-related modification or accommodation to enable individuals with disabilities to participate in and provide comments at public meetings. Please submit a request, including your name, phone number and/or email address, and a description of the modification, accommodation, or alternative format requested at least two days before the meeting. Requests should be emailed to comments@irwd.com. Requests made by mail must be received at least two days before the meeting. Requests will be granted whenever possible and resolved in favor of accessibility.

June 17, 2025

Prepared by: J. Colston Submitted by: K. Burton

Approved by: Paul A. Cook

ENGINEERING AND OPERATIONS COMMITTEE

IRWD RESEARCH BUSINESS PLAN UPDATE

SUMMARY:

Staff will provide an update on the research projects in which IRWD is currently involved.

BACKGROUND:

Periodically, IRWD receives requests to participate in various research projects pertaining to emerging technologies through either direct funding or dedication of in-kind staff resources. Guidelines were developed to assist staff with its evaluation and response to those requests. These guidelines were incorporated into the IRWD Research Business Plan, which also provides a tracking mechanism for the various requests and ongoing research projects and programs in which IRWD participates. The Research Business Plan ensures that IRWD's research resources are being prioritized and utilized effectively.

One of the components of the Research Business Plan is for staff to provide a status update on the research projects to the Engineering and Operations Committee on a quarterly basis. IRWD actively participates in the Technology Approval Group (TAG) sponsored by Isle Utilities. The TAG hosts numerous developing technology providers in order to match interested agencies with their technologies. The following summarizes the changes since the previous quarterly report:

- <u>Biosolids Pellets Land Application Crop Study</u> The first manuscript from the research has been published, and additional research is ongoing. More results are not expected until at least the summer of 2025.
- Request for Participation: UCI Microplastics Method Development Study UCI professor Diego Rosso has requested that IRWD participate in an advisory capacity for a Water Research Foundation (WRF) research project regarding the development of methods for the characterization and sampling of microplastics (WRF #5287). IRWD Water Quality Laboratory Manager Scott Giatpaiboon will serve as a member of the advisory panel with other experts from wastewater utilities including Los Angeles County Sanitation District, Central Contra Costa Sanitation District, South Orange County Water Authority and Clean Water Services. This item was rejected for funding by EPA and will not be moving forward.
- <u>UCI CDC Sponsored PFAS Epidemiological Study</u> UCI is conducting a Centers for Disease Control (CDC) sponsored study of health impacts from the public drinking potable water tainted with Per- and Poly-fluoroalkyl substances (PFAS). Researchers have added a PFAS Child Immune Study to this research. The data collection portion of the research has been completed. The data has been reviewed, and numerous scholarly manuscripts are under production. Certain correlations and reverse correlations with health outcomes are associated with serum PFAS levels.

Engineering and Operations Committee: IRWD Research Business Plan Update June 17, 2025
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• Request for Participation: The State Water Resources Control Board Division of Drinking Water (DDW) Multi-Laboratory Validation (MLV) Study – The DDW has requested IRWD's participation in a MLV Study for the validation of new analytical methods for the analysis of two emerging contaminants in drinking water: Benzotriazole and Trifluoroacetate (TFA). The MLV study will involve the Laboratory's technical expertise in LC-MS/MS instrumentation and analysis of analytes at trace levels. Benzotriazole is a versatile compound widely used as a corrosion inhibitor, anti-fogging agent and analytical reagent. TFA is a phytotoxic PFAS compound and is linked to reproductive toxicity and as suspected of damaging fertility. Staff completed this project with the submittal of all records associated with the MLV study, the final data package, and the proficiency testing (PT) results in early April 2025. **This research is complete.**

A summary of the current research projects is provided as Exhibit "A".

FISCAL IMPACTS:

Not applicable.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

RECOMMENDATION:

Receive and file.

LIST OF EXHIBITS:

Exhibit "A" – Research Projects Summary

Exhibit "A"

Research Projects Summary Table

No.	Project Title	Project Description	IRWD Contact	Organizations Involved	Type of Research	IRWD Participation Resource	Start Date	Projected Completion Date
1	Application Crop Study	The primary goal is to determine if ~40-50 of the roughly 400 unregulated organic contaminants listed in the 'EPA contaminants in biosolids database' can be found in, or remain in, the edible portions of food and feed crops following land application at standard agronomic rates based on the nitrogen needs of the test crop.	Zepeda			Provide Class A biosoilds pellets (approximately 1-2 tons of material)	Apr-22	Aug-25
		UCI is conducting a Centers for Disease Control (CDC) sponsored study of health impacts from the public drinking potable water. Due to localized PFAS contamination in some Orange County drinking water sources, the CDC is sponsoring research to determine potential public health effects. IRWD's Irvine service area is seen as an ideal control population due to the lack of PFAS in IRWD's served potable water.		CDC	1,000 adults and 300 children for	Assistance in determining historic sources of drinking water in IRWD's service area.	Jan-23	Aug-25

Updated: 6/11/2025

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June 17, 2025

Prepared by: A. McNulty / R. Matuska Submitted by: F. Nye / P. Weghorst Approved by: Paul A. Cook

ENGINEERING AND OPERATIONS COMMITTEE

CONSULTANT SELECTION FOR ADVANCED METERING INFRASTRUCTURE PLANNING AND IMPLEMENTION

SUMMARY:

Last summer, staff reviewed with the Board of Directors the findings of an Advanced Metering Infrastructure (AMI) and Meter Replacement Feasibility Study along with next steps for developing a detailed AMI Implementation Plan. In March 2025, staff issued a Request for Proposal (RFP) seeking a qualified consulting firm to prepare the plan and assist with subsequent work. Seven proposals were received and evaluated by staff. Staff recommends that the Board authorize the General Manager to execute a Professional Services Agreement with Arcadis U.S., Inc. in the amount of \$432,930 for AMI related consulting services and approve increases to Projects 12514 and 12515 in the amount of \$170,000 each in the Fiscal Year (FY) 2025-26 Capital Budget.

BACKGROUND:

In August, 2024 staff presented to the Board the results of an evaluation of alternative customer water meter reading strategies as well as the results of an AMI and Meter Replacement Feasibility Study. The work included an assessment of the benefits and costs of bringing meter reading services in house compared with various meter replacement alternatives with and without AMI. The results showed that implementation of AMI with a meter replacement program using static meters could achieve all IRWD's meter reading objectives and enable IRWD to potentially realize \$46.6 million in avoided costs over a 15-year period. The Board approved budget increases to proceed with developing a detailed AMI Implementation Plan. Subsequently, an interdepartmental AMI Steering Committee of staff was formed to conduct a competitive procurement process to proceed with developing the AMI Implementation Plan and to assist with subsequent work.

Consultant Selection Process:

In March 2025, staff issued an RFP for AMI related consulting services. The RFP included the following three phases of work:

<u>Phase 1:</u> Preparing a detailed AMI Implementation Plan focused on a proposed AMI solution.

<u>Phase 2:</u> Providing AMI procurement services including developing an RFP to be submitted to AMI vendors and assisting with contract negotiations with a selected AMI provider.

<u>Phase 3:</u> Providing Project Management services for the implementation of the selected AMI solution for metering water provided to IRWD's customers.

Engineering and Operations Committee: Consultant Selection for Advanced Metering Infrastructure Planning and Implementation

June 17, 2025

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Consultants were required to submit proposals for all three phases of work with the understanding that proceeding with each phase is contingent upon the successful completion of the previous phase. A total of seven proposals were received.

Staff evaluated the seven consultant proposals, conducted interviews with the top three firms, and verified references. While the top firms showed a good understanding of the scope of work, Arcadis demonstrated that its team has a superior ability to meet IRWD's objectives. Arcadis's proposal demonstrated significant understanding of IRWD, a thorough and adaptable approach, a local presence, and the ability to complete the work in a timely manner. Staff's Consultant Evaluation Matrix and Arcadis's proposal are provided as Exhibit "A" and "B", respectively. Based on conclusions drawn from this selection process, staff recommends the selection of Arcadis to provide the requested consulting services.

At the meeting, staff will present an overview of the consultant selection process as well as the AMI project scope of work and schedule. Staff's presentation is provided as Exhibit "C".

FISCAL IMPACTS:

Projects 12514 and 12515 are included in the FY 2025-26 Capital Budget. The following Capital Budget increases are needed to provide funding for completion of the Phase 1 and Phase 2 work, including consultant and staff time, as well as accounting for contingencies. Work on Phase 3 would be subject to further budget approval by the Board of Directors.

Project	Current	Addition	
No.	Budget	<reduction></reduction>	Total Budget
12514	\$270,000	\$170,000	\$440,000
12515	\$270,000	\$170,000	\$440,000

ENVIRONMENTAL COMPLIANCE:

Not applicable.

RECOMMENDATION:

That the Board authorize the General Manager to increase Capital Budget Projects 12514 and 12515 each by \$170,000 for a total of \$340,000; and to execute a Professional Services Agreement with Arcadis U.S., Inc. in the amount of \$432,930 for the development of a detailed Advanced Metering Infrastructure Implementation Plan and providing procurement assistance.

LIST OF EXHIBITS:

Exhibit "A" – Consultant Evaluation Matrix

Exhibit "B" – Arcadis Proposal

Exhibit "C" - Draft Presentation on AMI Consulting and Project Management Services

AMI Consulting and Project Management Services

Rank 1- 7 with '1' being the best

						iii Consulting	uu						Rank 1	- / with :	1. peiu8	the best
Item	n Description		Utilitie	es One		GHD	Diamete	r Services	Utility Solut	tions Partners	Arc	cadis	E-S	ource	Wes	t Monroe
Α	TECHNICAL APPROACH	50%														
1	Adherence to RFP Requirements	10%		7		4		1		6		2		3		5
2	Understanding of required services and project details	25%		7		5		1		6		2		3		4
3	Approach and Methodology	45%		7 4				3		6		1		2		5
4	Schedule	20%		7		4		2		5		1		3		6
	Weighted Score (Technical Approach)		7.	.00		4.25	2	2.10	5	5.80	1	.35	2	2.55		4.95
В	QUALIFICATIONS AND EXPERIENCE	50%														
				7		4		3		6		1		2		5
1	Project Manager(s)	35%		renker (10yrs)	Richard Rel	yea (22 yrs, 13 AMI)		pman (20 yrs)		ney (20 yrs)		velle (21 yrs)		rch (12 yrs)	Justin	Licke (10 yrs)
							-	rty (25 yrs)				iams (17 yrs)	+			
				7		4		3		6		1	2		5	
			No names or e	experience given	Freddie Guer	ra (30+ AMI Projects)	Dan Don	ovan (15 yrs)	Geetha Ga	ineson (24 yrs)	Joanna Bri	unner (10 yrs)	Rajaramesh	Gandla (15 yrs)	Tricia A	nklan (13 yrs)
					Kenne	th Molli (40yrs)	Dave Ha	nes (34 yrs)	Colin Har	rison (25 yrs)	Michael Ro	otunno (27 yrs)	Athens Si	laban (12 yrs)	Shivank Srivastava	
						ith (30 yrs, 150 AMI			1							
						ployments)	Jake Ma	ther (12 yrs)	Jackie Lem	merhirt (35 yrs)	James Cooper (20 yrs)		Mark Johnson (45 yrs)		Mark Johnson (45 yrs) Liz Alexander (5 yrs)	
2	Technical Leads/Advisors	25%			Amy Cz	ajkowski (30yrs)	Jamie Wa	agler (11 yrs)	Scott Sn	nith (17 yrs)	Steve Da	avis (54 yrs)	Steve Catanach (35 yrs)		Sean Teska	
					Edgar Jo	ohnson (40+ yrs)	Jan Ge	yer (19 yrs)	Sandip B	Basu (20 yrs)	Melissa [Darr (11 yrs)	Rachael Robinson (3 yrs)		Jonathan Shaw (20 yrs)	
											Brian Wone	ershall (25 yrs)	Elijah Lujan (7 yrs)		+	
3	Project Team Experience (sub and prime)	25%		7		4		3		5	Michelle Maddaus (25 yrs)) Rick Hitzemann (30 yrs)		6	
4	Firm's Relevant Experience (sub and prime)	15%		7	4		3		6		2		1		5	
	Weighted Score (Experience)	1070		7		4		3		5.75		.15		.85	5.25	
		1	1	.00		4.13		2.55		5.78			2.20		5.10	
	COMBINED WEIGHTED SCORE		-			4.13					1.25					
	Ranking of Consultants		•	7		4		3		6	1		1 2		5	
С	SCOPE OF WORK															
TASK			TASK HOURS	TASK COST	TASK HOURS	TASK COST	TASK HOURS	TASK COST	TASK HOURS	TASK COST	TASK HOURS	TASK COST	TASK HOURS	TASK COST	TASK HOURS	TASK COST
1	Phase 1: Implementation Plan		290	\$ 29,000.00	253	\$ 107,671.00	394	\$ 82,010.00	752	\$ 123,360.00	965	\$ 236,309.00	302	\$ 97,660	783	\$ 251,534.80
2	Phase 2: RFP Procurement		280	\$ 28,000.00	274	\$ 160,009.00	948	\$ 359,575.00	3,064	\$ 456,480.00	900	\$ 196,621.00	598	\$ 189,520	1,094	\$ 404,450.17
3	Phase 3: Project Management		540	\$ 54,000.00	1,126	\$ 322,628.00	7,074	\$ 1,115,385.00	13,144	\$ 2,172,000.00	3,335	\$ 1,097,244.00	3,278	\$ 991,260	4,336	\$ 1,388,195.89
	TOTAL ENGINEERING SERVICES, FEES		1,110	\$ 111,000	1,653	\$ 590,308	8,416	\$ 1,556,970	16,960	\$ 2,751,840	5,200	\$ 1,530,174	4,178	\$ 1,278,440	6,213	\$ 2,044,181
		Avg \$/hr		\$ 100.00		357.11		185.00)	162.25		294.26		305.99		329.02
D	OTHER		<u> </u>		1			I			<u> </u>		<u> </u>			
	Conflict of Interest		1	No		No		No		No		No		No		No
	Joint Venture			No		No		No		No	Yes			No	No	
	Scope of Work Exclusions			No		No		No		No	No			No	No	
	Exceptions taken to IRWD Professional Services Agreement		1	No		Yes		No	No					No	Yes	
	Insurance (Professional & General Liability)		Y	'es		Yes	,	Yes	,	Yes	,	Yes	,	Yes		Yes
			1										<u> </u>			

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Proposal



Irvine Ranch Water District

AMI Consulting and Project Management Services





Arcadis U.S., Inc. 18401 Von Karman Ave., Suite 300 Irvine, CA 92612 Tel: 714.730.9052 www.arcadis.com

Irvine Ranch Water District

Amy McNulty, Water Efficiency Manager
15600 Sand Canyon Avenue
Irvine, CA 92618
949.453.5634
Email: amiproject@irwd.com

May 5, 2025

Re: Proposal for AMI Consulting and Project Management Services

Dear Ms. McNulty:

On behalf of Arcadis, I am delighted to submit our proposal to support Irvine Ranch Water District (IRWD) in advancing its Advanced Metering Infrastructure (AMI) initiative. Building on the successful AMI and Meter Replacement Feasibility Study (Feasibility Study) completed in July 2024 with IRWD, our team is excited to leverage its deep expertise and proven methodologies to ensure the success of this transformative program.

With a clear understanding of your goals and expectations, we have crafted our value propositions that highlight how our approach will deliver meaningful impact and drive success for this transformational initiative. We are the right firm for IRWD for the following reasons:

Prior Experience and Proven Success. Our prior experience working closely with IRWD during the Feasibility Study gives us unique insight into your operational goals, business processes, potential topography challenges for AMI networks, and system requirements. This foundational knowledge allows us to deliver a highly tailored implementation plan that addresses IRWD's unique needs, from selecting the right technologies to ensuring seamless integration with existing systems. We will deliver these services with the same team as before, including our two subcontractors: Maddaus Water Management, Inc. and Metering Technology Consultants, Inc.

Sound Approach to AMI Procurement. We recognize that AMI procurement requires a thoughtful, client-specific approach. Our strategy incorporates methods to normalize and compare varying technologies to ensure that IRWD selects the solution that best aligns with your priorities. Leveraging a structured Request for Proposal (RFP) process, we will provide clarity and guidance in evaluating options, that allows for IRWD to achieve the best value and performance outcomes. We have the experience to support the District with developing a strong contract which will streamline the effort while managing the risks.

Implementation Management and Local Resources. To ensure IRWD receives hands-on support throughout the deployment, our team includes a dedicated Project Manager and Deployment Lead located near IRWD. This local presence provides direct access to expertise and timely responsiveness to project needs.

We would welcome the opportunity to discuss our approach further and demonstrate how our continued partnership can help IRWD achieve its vision for AMI. Should you have any questions about our response or require additional information from us, please do not hesitate to contact me. Thank you for your time in considering our proposal.

Sincerely, Arcadis U.S., Inc.

Kristy Lavelle Project Director

☑ Kristine.Lavelle@arcadis.com |
☐ 314.494.1275



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SECTION 8.

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SECTION 9.

Contract

APPENDIX.

Resumes

This proposal and its contents shall not be duplicated, used or disclosed in whole or in part for any purpose other than to evaluate the proposal. This proposal is not intended to be binding or form the terms of a contract. The scope and price of this proposal will be superseded by the contract. If this proposal is accepted and a contract is awarded to Arcadis as a result of or in connection with the submission of this proposal, Arcadis and/or the client shall have the right to make appropriate revisions of its terms, including scope and price, for purposes of the contract. Further, client shall have the right to duplicate, use or disclose the data contained in this proposal only to the extent provided in the resulting contract.



Section 1. Scope

Project Understanding

Irvine Ranch Water District (IRWD) has initiated a strategic effort to take the next steps in their Advanced Metering Infrastructure (AMI) journey following the foundational work completed by IRWD and the Arcadis team together in 2024, which established the feasibility and benefits of adopting AMI technology alongside the replacement of mechanical meters with static meters. The previous study demonstrated the viability of this approach, highlighting its cost-effectiveness and the potential for improved operational efficiency, enhanced meter reading accuracy, and the ability to leverage AMI functionalities for broader utility benefits. Building on these positive findings, IRWD is now seeking to move forward with the next critical phases of the AMI initiative.

Arcadis is prepared to provide IRWD with the strategic guidance, technical expertise, and project management support necessary to achieve the successful deployment of AMI technology through our Project Approach detailed below.

Building on our prior project knowledge, established relationships with the IRWD team, and extensive expertise in AMI systems, we are exceptionally equipped to deliver a comprehensive implementation plan, risk-averse procurement, and successful system deployment—while ensuring impartiality and unbiased support throughout every stage of the procurement process.

Project Approach

Our approach has been customized to IRWD based on our matured methodology for meter replacement and AMI projects. Coupled with the Arcadis team's experience with similar projects, we will bring to IRWD our proven best practices and tools to streamline the development of a detailed implementation plan, procurement of equipment and installation services, and a well-managed, risk mitigated AMI and meter implementation. Our proposed approach achieves all the scope of work items requested by IRWD in the request for proposal (RFP) as well as bringing forward important lessons learned to support you with a successful delivery of this strategic initiative.

Task Plan Summary

Based on our understanding of the Scope of Work described in the RFP, and our proposed project approach, Arcadis has prepared a Task Plan Summary outlining key elements of this project, including, task objectives, keys to success, project approach, digital tools, task meetings, and task deliverables (Table 1-1). The Task Plan will be reviewed with IRWD at the kick-off meeting and refined to ensure compliance with the established project execution strategy and project goals.

Table 1-1. Task Plan Summary

PHASE	TASK	TASK OBJECTIVES	KEY TO SUCCESS	ARCADIS APPROACH	PROVEN TOOLS	TASK MEETINGS	TASK DELIVERABLES
Phase 1: Detailed Implementation Plan	TASK 1.1 Review of Existing Information	To review all relevant existing information related to IRWD's AMI program following our previous Feasibility Study in preparation for a formal Project Kickoff and draft the business and technical requirements leading into Phase 2, Procurement.	Swift ramp-up based on our past AMI project work with IRWD.	Our team will meet with IRWD staff to learn of recent activity since the Feasibility Study, and develop a draft of the business and technical requirements.	 MS Teams for Virtual Meetings. MS Excel for RFI Tracking. MS SharePoint for Efficient File Sharing. 	☐ Project & Phase Kick-off Meeting.	 Request for Data/ Information. Kick-off Meeting Agenda and Minutes. Draft of business and technical requirements.
	TASK 1.2 Develop Detailed AMI Implementation Plan	To develop the key components of the Detailed AMI Implementation Plan including: Funding, Procurement, Data Management, Change Management, Deployment, Customer Outreach, and Project Schedule.	☐ Engagement from the key IRWD teams and efficient coordination.	☐ A collaborative approach with a series of workshops and meetings focused on the seven key areas that comprise the Detailed AMI Implementation Plan.	 MS Teams for Virtual Meetings. MS Excel for Tracking Requirements and Schedules. MS Visio for Process Flow Diagrams. 	 Funding Planning Meetings (Up to 2). Procurement Planning Meetings (Up to 2). Data Management Planning Workshop. Change Sentiment Interviews (Up to 15). Change Management Planning Workshop. Deployment Planning Meeting. Customer Outreach Planning Workshop. Project Schedule Planning Meeting. 	 Meeting/Workshop Agendas and Minutes. Detailed AMI Implementation Plan.
	TASK 1.3 Phase 1 Project Management	product and deliverables, project including project team, sponsors, subject matter		 Highly experienced AMI team to provide Technical Leadership. Local Project Controls expert to maintain action items, schedule, and upcoming deliverables. 	 MS Teams for Virtual Meetings MS Excel for Tracking Action Items MS SharePoint for Efficient File Sharing. 	☐ Bi-Weekly Project Status Meetings (Up to 6).	 Phase 1 Project Schedule. Bi-Weekly Meeting Agendas and Minutes for Status Meetings. Monthly Invoices.

PHASE	TASK	TASK OBJECTIVES	KEY TO SUCCESS	ARCADIS APPROACH	PROVEN TOOLS	TASK MEETINGS	TASK DELIVERABLES
	TASK 2.1 Develop AMI Requests for Proposals	To develop an AMI Request for Proposals solicitation package that outlines IRWD's future AMI System's technical and functional requirements and complies with its procurement rules and regulations.	☐ Engagement from the key IRWD teams to clearly define the requirements of IRWD's AMI System and scope of implementation.	 An unbiased approach to designing requirements and scope. A series of workshops focused on identifying core technical and functional requirements. 	 MS Teams for Virtual Meetings. MS OneNote and Word for Workshop Notes. MS SharePoint for Efficient File Sharing. 	 Technical and Functional Requirements Workshops (Up to 9). AMI RFP Feedback Session Meetings (Up to 3). 	 Workshop Notes and Meeting Minutes. Draft and Final AMI Request for Proposals Package.
Phase 2: Procurement	TASK 2.2 RFP Administration and Evaluation Support	To assist IRWD with the bid solicitiation and procurement process including a pre-bid meeting, assistance in responding to questions, developing a scoring rubric, prposal reviews and evaluations, and cost comparisons to facilitate the selection of the most well suited solution.	☐ Engagement from the IRWD evaluation team and timely communication.	Our teams will support IRWD throughout the entire bid solicitation and evaluation process, facilitating the review and cost comparisons from each proposal received.	☐ MS Excel for Scoring Rubric, Bid Evaluation, and Cost Comparison Analysis.	 Pre-Bid Meeting. RFI and Clarification Check-In Meeting (Up to 2). Bid Evaluation and Scoring Meeting (Up to 2). 	 Pre-Bid Meeting Agenda, Attendance Log, and Meeting Minutes. Addenda and Question Responses As Needed. Bid Evaluation Scores and Cost Comparison Analysis.
	TASK 2.3 Contract Negotiations	To serve as IRWD's Technical Advisor In the review and negotiation of the final contract to be signed with the selected vendor.	☐ Engagement from the key IRWD teams including legal and timely communication.	Providing IRWD with highly experienced SMEs with a history of large scale AMI contracts across the nation to mitigate potential risks and enable a contract in favor of IRWD.	MS Excel and Word to Track Notes.MS SharePoint for Efficient File Sharing.	☐ Contract Review Meetings (Up to 4).☐ IRWD Board Approval Meeting.	Meeting Agendas and Minutes.Contract with Comments and Recommendations.
	TASK 2.4 Phase 2 Project Management	To provide proper scheduling, project control, review of work product and deliverables, project quality, invoice preparation, all in coordination with IRWD.	☐ Identify and establish the key IRWD personnel including evaluation team, sponsors, subject matter experts, and stakeholders. ☐ Timely communication.	 Highly experienced AMI team to provide Technical Leadership. Local Project Controls expert to maintain action items, schedule, and upcoming deliverables. 	 MS Teams for Virtual Meetings. MS Excel for Tracking Action Items. MS SharePoint for Efficient File Sharing. 	Phase Launch Meeting.Monthly Project Status Meetings (Up to 9).	 Project Schedule. Meeting Agendas and Minutes for Monthly Progress Meetings. Monthly Progress Reports. Monthly Invoices.
Diaman.	TASK 3.1 Systems Integrations Support and Testing	To advise and coordinate the integration of the selected vendor's solution, provide technical support, and facilitate testing of the provided solution to ensure compliance with the approved Contract.	 Engagement from the key IRWD teams including test resources and timely communication. Effective management and oversight of awarded vendor and testing activities. 	Our teams will manage and support the Functional Testing of the provided solution to ensure compliance with the stated requirements and customize elements as necessary to suit IRWD's needs. The team will then move onto Integrated System Testing which will validate the solution's integration with the rest of IRWD's connected systems and processes.	 MS Teams for Virtual Meetings. MS Excel and Word to Track Notes, Test Scenarios and Defect Management. MS SharePoint for Efficient File Sharing. 	 □ Phase Launch Meeting. □ Functional Testing (Up to 2 weeks). □ Integrated System Testing (Up to 4 weeks). 	□ Test Scenarios.□ Defect Management Log.□ Meeting Agendas and Minutes.
Phase 3: AMI Implementation Project Management and Support Services	TASK 3.2 Data Management	To assist IRWD with the establishment and integration of an AMI Data Management Strategy plan that incorporates the new data and identify key use cases to be futher refined.	☐ Engagement from the key IRWD teams and timely communication.	☐ Building upon IRWD's existing data strategy, our teams will share our experiences from other large utilities that have successfully incorporated AMI data with other utility data to maximize the potential for data driven business intelligence.	 MS Teams for Virtual Meetings. MS Excel and Word to Track Notes. MS SharePoint for Efficient File Sharing. 	□ Data Management Use Case Workshop.	Meeting Agendas and Minutes.Up to Three Documented Use Cases.
	TASK 3.3 Oversee Change Management Plan	To review IRWD's business processes and develop the anticipated changes and/or additional processes as part of the new AMI System and its associated components. To strengthen adoption of the AMI system and achieve it's full benefits.	☐ Engagement from the key IRWD teams and timely communication.	Utilizing our Change Management Framework and the Change Management Plan developed in Phase 1, our team will guide IRWD through the various changes that will impact existing and/or new business processes.	 MS Teams for Virtual Meetings. MS Excel and Word to Track Notes. MS Visio for Process Flow Diagrams. MS SharePoint for Efficient File Sharing. 	Change Management KPI Workshop.Business Process Future State Workshops (Up to 10).	 Workshop Agendas and Minutes. Future State Business Process Flow Diagrams. Updated Change Management Plan.

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PHASE	TASK	TASK OBJECTIVES	KEY TO SUCCESS	ARCADIS APPROACH	PROVEN TOOLS	TASK MEETINGS	TASK DELIVERABLES
	TASK 3.4 Performance Analysis and Validation Testing	To support the implementation of an AMI Endpoint Installation Management System that will be used to schedule and control the field installation of meters and AMI. To implement and manage an AMI Endpoint Acceptance Tool used for validation that all endpoints are functioning in accordance with the contract specifications, and to determine earned value for progress payments.	 □ Engagement from the key IRWD teams, Vendors, Installation Contractor, Field Crews, and timely communication. □ Access to the AMI system. 	☐ Coordinating with the AMI Vendor's AMI Endpoint Installation Management System and Arcadis' Endpoint Acceptance Tool, our teams will provide IRWD with an efficient review of the installation progress and Endpoint Verification and Acceptance Testing which will serve as the basis of determining progress payments.	 MS Teams for Virtual Meetings. MS Excel and Word to Track Notes and Progress Payments. Arcadis' Endpoint Acceptance Tool. MS SharePoint for Efficient File Sharing. 	☐ EAT Integration Meetings.	 Meeting Agenda and Minutes. Endpoint Acceptance Tool Progress Reports. Prepared Progress Payment Quantities.
Phase 3: AMI Implementation Project Management and Support Services	TASK 3.5 Phase 3 Owner's Agent Project Management	To provide owner's agent project management, monitoring the vendor and installation contractor, maintainting Description: Engagement from the key IRWD teams, including Project Manager. Arcadis local Project Manager.		 Local highly experienced Project Manager to monitor deployment, maintain action items, schedule, and upcoming deliverables. Highly experienced AMI team available to support IRWD through the entire project. 	 MS Teams for Virtual Meetings MS Excel for Tracking Action Items MS SharePoint for Efficient File Sharing. MS Project or equivalent for project schedule. 	□ Phase Launch Meeting.□ Weekly Status Meetings.□ Monthly Progress Meetings.	 □ Implementation Project Schedule. □ Meeting Agendas and Minutes for Monthly Progress Meetings. □ Monthly Progress Reports. □ Monthly Invoices.
	TASK 3.6 Field Inspections (Optional)	To perform Field Inspections as Quality Control, as it is significantly easier to rectify any installation issues discovered as they occur as well as providing a review of the mass volume of data being acquired during the installation phase that may otherwise be difficult to correct.	 Timely communication. Experienced field personnel. Routine data quality control checks. 	☐ If selected, to provide IRWD's efforts to perform routine field inspections during the meter installation phase to ensure work is being performed in accordance with the Contract and the ability to handle issues as they arise.	 MS Teams for Virtual Meetings. MS Excel and Word to Track Notes and Conflict/ Resolution Logs. MS Sharepoint for Efficient File Sharing. 	☐ Bi-Weekly Quality Control Status Reports.	 Quality Control Status Reports. Field Inspection Logs. Conflict/Resolution Logs.

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Phase 1: Detailed Implementation Plan

TASK 1.1: Review of Existing Information

Arcadis will begin the project by refreshing the team on the existing information. We will be efficient with this review given our past experience working with IRWD on the AMI and Meter Replacement Feasibility Study (Feasibility Study). Our review will focus on developments and project planning that have occurred since we delivered our prior work report in July 2024.

We will facilitate a kickoff meeting with IRWD staff, including the project sponsors, key members of the project team, subject matter experts, and other stakeholders as appropriate. As part of the kickoff meeting agenda, we will invite the IRWD team to outline the key developments and decisions which have been made related to this project following the Feasibility Study.

Arcadis will begin development of the business and technical requirements, giving consideration to the following as requested by IRWD:

AMI Implementation Phasing and Scheduling

Arcadis will focus the design of the project phasing and schedule so as to get the most out of the grants available, with consideration to implement the project as quickly as possible without introducing unnecessary risk.

Integration Compatibility with Existing and Future System

Arcadis understands a new Customer Information System implementation is underway. It will be important to understand the details of this new system and the intended functionality. In addition, we will take a deeper look at other existing systems, planned upgrades, and future systems that will be critical to integrate into the overall AMI system architecture.

Hardware, Software, and Network Specifications

Many variations of available AMI and meter hardware, software, and network types were discussed and evaluated as part of the Feasibility Study. Arcadis will meet with IRWD's steering committee / key stakeholders to learn if any of these types are more favorable to IRWD's AMI and metering needs, or if any have been ruled out altogether.

Performance and Warranty Requirements

As discussed during the Feasibility Study, contractual performance of the system and clarity of warranty terms are very important to the long-term viability of the AMI system. Arcadis will work with IRWD to discuss and define the details of these requirements, bringing along lessons learned from past and current AMI project experiences.

Long-Term Operation and Maintenance Costs

Consideration for ongoing operation and maintenance of the AMI system is often not considered during the early stages of the project. It is refreshing to see that IRWD recognizes the importance of this piece while defining requirements. Arcadis will work with IRWD to unearth the availability and skillset of staff and equipment to support the long-term operation and maintenance, which will inform the system requirements in this area.

AMI and Static Meter Feasibility Study

The results of the Feasibility Study will be used to help define business and technical requirements and help to identify areas where further discussion is needed to hone in on IRWD's specifications where not defined.

TASK 1.2: Develop Detailed AMI Implementation Plan

Arcadis will develop a detailed implementation plan which will be comprised of several important sub-plans as outlined below.

Funding Plan. IRWD has identified that funding through state and federal grants is an important funding option for their AMI initiative. We have included on our team, Michelle Maddaus, who will lead the funding plans to help IRWD with identifying relevant grant sources and provide expertise and input on the grant applications drafted. Arcadis has helped many clients with aligning project priorities with grant sources as well as drafting grant applications and managing grant

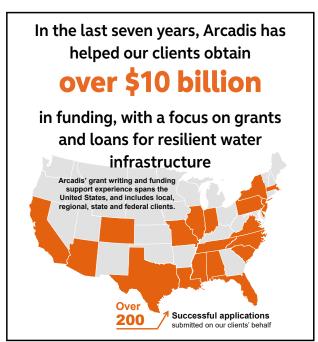
Michelle is an industry expert in water conservation, AMI solutions, and state legislation, with deep knowledge of IRWD's staff and service area. Having led a previous IRWD project in 2018 and

the 2022 national AWWA study on AMI customer portals, she brings unparalleled expertise and proven leadership to drive innovative and sustainable outcomes for the client.

funds after award. Our team is experienced to support IRWD with any of their grant pursuit activities. For this project, Arcadis will deliver the following funding services:

- Identify sources IRWD can employ to support the funding of the AMI project. We monitor the grant source landscape with a focus in water and will provide a summarized list of grant sources that are relevant to the AMI project. The summary will include:
 - Grant agency.
 - Grant description.
 - Objective/focus.
 - Funding levels.
 - Eligibility requirements.
 - Cost share requirements.
 - Other important notes and due dates.

Additionally, Arcadis will provide the key steps to obtain funding and a timeline for preparing for the funding lifecycle such that IRWD has adequate time to gather details for the application and develop narratives prior to the due date.



We will provide application review and feedback of drafted applications, narratives, and supporting details. Our grant award success for our clients has been outstanding. Our grant experts will review the applications prepared and provide constructive feedback on areas to strengthen within the application.

Our team will conduct a feedback session so we can support the team with knowledge transfer about grant applications.

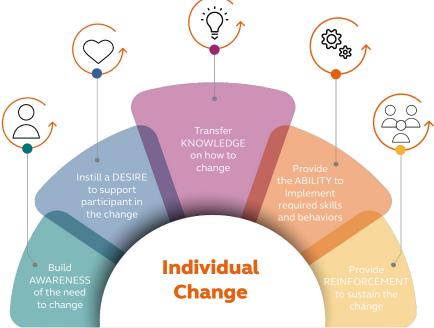
Procurement Plan. Using the findings of the AMI and Static Meter Feasibility Study (Feasibility Study) as a starting point, Arcadis will work with the IRWD team to develop a procurement plan for the meters, AMI system, customer portal (if the intention is to procure a replacement), and installation services. We will conduct a series of up to three meetings with the project steering committee / key stakeholders, including IRWD's procurement department representatives, to review the findings of the Feasibility Study and IRWD's procurement processes. We will then define and evaluate the viable procurement approach for the project. Approaches may include sole-source acquisition, a turnkey project, or separate meter, AMI, customer portal (if applicable), and installation procurement packages. We will also prepare a market summary that will identify the AMI vendors that Arcadis believes would be viable alternatives for IRWD based on our knowledge of your

Data Management Plan. The data management plan will outline the framework for handling, storing, and utilizing the AMI data. The plan will establish protocols for data collection, validation, integration, and security to maintain accuracy, reliability, and compliance with industry standards and regulatory requirements. It will address data governance, ownership, and access control, while defining procedures for managing large volumes of meter data. Additionally, the data management plan will detail strategies for leveraging data

needs and requirements.

insights to support decision-making, improve customer service, and optimize utility operations. The scope will include considerations for data retention, scalability, and integration with IRWD's existing systems to support long-term sustainability and adaptability of the AMI system. The data management plan will be outlined during Phase 1 and will continue to be developed and refined throughout the following phases of the project.

Change Management Plan. The change management plan for the AMI project will focus on guiding IRWD through the organizational, operational, and cultural shifts associated with implementing Advanced Metering Infrastructure. The plan will outline strategies to allow stakeholder engagement, employee readiness, and smooth adoption of new systems and processes. In fact, Arcadis will conduct a Change Readiness Assessment early in Phase 1 to evaluate IRWD's current capacity for change, identify potential barriers, and gauge the preparedness of staff and stakeholders for the transition. The results of this assessment will inform the change management plan so as to maximize adoption. The plan will address communication plans, training programs, and support mechanisms to equip staff with the knowledge and tools needed to effectively operate and maintain the AMI system. By fostering transparency, collaboration, and proactive planning, the change management plan will support a seamless transition to AMI technology while maximizing its benefits for IRWD and its customers. This plan will be outlined during Phase 1 and will continue to be developed and refined throughout the following phases of the project.



Customer Outreach Plan. A customer outreach plan serves as a strategic framework to engage, inform, and educate IRWD customers about the AMI project and its benefits. The plan will outline methods for proactive communication, including public awareness campaigns, community meetings, digital outreach, and printed materials, to ensure customers understand how AMI will improve service accuracy, transparency, and efficiency. It will include tailored messaging to address customer concerns, such as data privacy, billing changes, and installation processes, while providing clear timelines and updates throughout the project. By fostering trust and transparency, the customer outreach plan will aim to build public support and ensure a smooth transition to the new AMI system.



Deployment Plan. Deployment planning is a critical step in the Arcadis approach which results in the development of a deployment plan. Often in meter deployment programs, the installation contractor details what is expected but the details on how this will be executed is not at a sufficient level of detail. This plan will provide clarity on processes and procedures. establishes expectations for contractor onboarding, hiring/staffing requirements, installer training expectations, inventory management, customer communications, return to utility processes, project status reporting, and much more. The benefits include established communications (internally and externally), improved field installation quality, and enhanced quality of data capture for the completed work. This deployment plan will be outlined during Phase 1 and further developed and refined in Phase 3.

Project Schedule Plan. The project schedule plan is the integrated roadmap for how the program will be executed. The schedule will detail the timeline for funding, board approval, procurement, contracting, initial deployment, and full deployment. The awarded vendor and installation contractor will develop their

own installation plan and schedule to complete the assigned meter and AMI installations, but the intention would be for their detailed schedule to fit within our planned deployment schedule. The project schedule plan with establish activities for monitoring and controlling the schedule, including the process for regularly updating the schedule based on the actual development of the project activities. This includes identifying, analyzing, documenting, prioritizing, approving or rejecting, and publishing all schedule related changes. The planning and scheduling philosophies for this project will include the following:

- Schedule based on a scope of work.
- Well-defined work breakdown schedule.
- Predecessor dependencies and critical path management.
- Baseline project schedule provides a time-phased plan based on the logical sequence of work, incorporating the total scope of the project.

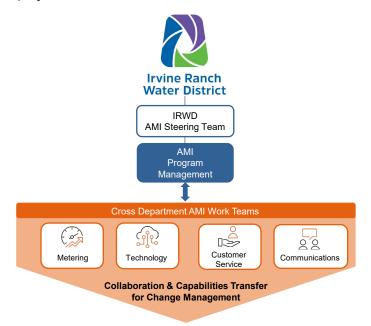
This Project Schedule Plan will be outlined during Phase 1 and further developed and refined in Phase 3.

TASK 1.3: Phase 1 Project Management

Our work will begin with establishing the project management processes so that Arcadis and IRWD's project team understands the tasks and activities required to achieve the project objectives. The overall project delivery responsibilities will be led by our Project Director, **Kristy Lavelle** and Project Manager, **Tony Williams**. We will collaborate closely with IRWD's project manager to prepare for the launch of the project and develop a detailed schedule aligned with IRWD's project goals. We will provide leadership and guidance at all levels throughout the project duration to ensure deliverables and goals are met for a successful project while oversight on project issues are managed.

We have learned through our experience that one of the most important first steps in organizing an AMI project in a large organization such as IRWD is to identify the participating departments and to deploy a formalized project organizational structure based on a Steering Team and multiple work teams. The AMI Steering Team is a cross-departmental leadership team, including IRWD's Project Manager and senior representation from the impacted departments. Critical functions of the steering team include providing executive oversight with an organization-wide perspective, engaging additional stakeholders as necessary, establishing and reinforcing the AMI project objectives, monitoring progress, and

assigning resources. AMI Work Teams are crossdepartmental teams with management and technical staff from the key impacted departments who will work alongside the Arcadis subject matter experts to execute the project work activities. The work teams will start their efforts through participation in the workshops and meetings in which they will define their unique business needs and desired enhancements and therefore determine the AMI technical requirements. After being formed during the project initiation activities, the AMI Work Team members will continue to provide overall project sustainability through active participation in all project work activities. Arcadis will work with IRWD's project manager to define the work teams and team membership as part of the project initiation.



We will facilitate a kickoff meeting as mentioned in Task 1.1. During this kickoff meeting, we will review Arcadis' project tasks and schedule, as well as the overall project objectives. The kickoff meeting will help orient all participants on the project approach, gather their expectations and identify the areas of input that will be required for project success.

Our project management services will include ongoing coordination, framed within the project management, monitoring, and control activities for the duration of the project. The following activities will be performed on an ongoing basis and adjusted as required based on the project phase.

Arcadis' **Phase 1** project management activities will be as follows:

 Project communications. Conduct bi-weekly project status meetings with the IRWD project manager and other stakeholders as needed. An agenda will be provided in advance of each meeting. Meetings will include regular project status updates that will summarize work performed, upcoming work, schedule, risks, action items, and budget performance.

- Schedule management. Develop, monitor, and maintain an integrated project schedule using MS Project or an equivalent schedule management package.
- Scope and budget management. Manage overall project scope and budget and identify to IRWD when a task is outside of scope.
- Project documentation repository. Publish and maintain all project documentation. This includes producing meeting notes, managing action items, documenting key decisions, tracking of issues, and management of other project-related documentation and deliverables.

>>> Phase 1

Deliverables:

- Request for Information
- Kick-off Meeting Agenda and Minutes
- Business and Technical Requirements Draft
- Implementation Plan Meetings/Workshops Agenda and Minutes
- 1 Draft of each Implementation Sub-Plan
- Detailed AMI Implementation Plan
- Project Schedule
- Bi-Weekly Project Status Meeting Agenda and Minutes
- Monthly Invoices

Assumptions:

- Kick-off Meeting will be up to ninety (90) minutes
- Up to 2 Funding Planning meetings, 1 hour each
- Up to 2 Procurement Planning meetings, 1 hour each
- Grant applications to be developed by IRWD and reviewed by the Arcadis team
- 1 Data Management workshop up to 2 hours
- 1 Change Management Readiness Assessment
- Up to 15 Sentiment Interviews, 30 minutes each
- 1 Change Management workshop, 2 hours
- 1 Deployment Planning meeting, 1 hour
- 1 Customer Outreach workshop, 2 hours
- 1 Project Schedule Planning meeting, 1 hour
- Up to 6 Bi-Weekly Project Status Meetings, 1 hour each

Phase 2: Procurement

During the procurement phase of this project, Arcadis will provide the technical expertise and the consulting support to conduct the Procurement Plan defined in Phase 1 for IRWD's AMI solution that includes equipment, AMI software, customer portal software (if applicable), professional services, and installation services.

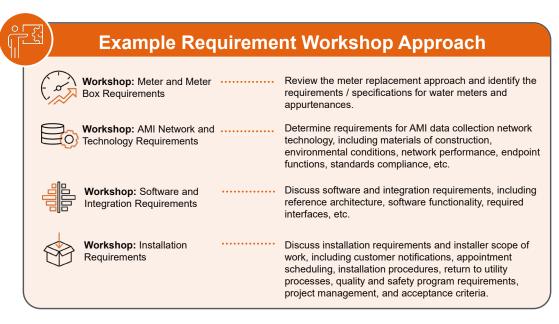
Arcadis will support IRWD throughout the solicitation development process as an owner's agent and will help with activities such as RFP development, issuance of addenda, proposal evaluation, award recommendations, and contract negotiations. The result of these efforts will be a signed contract for the AMI system that most closely matches the needs and requirements of IRWD. We will work with IRWD to develop the AMI solicitation and to complete the procurement of the AMI, following the guidelines defined by IRWD's procurement department for the required contract vehicles, resulting in the best value selection of the AMI. We will leverage our AMI experience, in combination with our extensive procurement experience, and support from IRWD's procurement team to document a procurement and proposal evaluation process that will result in the selection of the best fit solution.

TASK 2.1: Develop AMI RFPs

Arcadis will use the outcomes from the Feasibility Study to develop the RFP package. Our team will work closely with IRWD's procurement department so that we are compliant with IRWD's purchasing rules and regulations.

Based on the procurement approach selected, Arcadis will define the process and protocols to develop procurement documents. We will identify internal approval processes, general conditions, and special provisions. As part of the procurement planning, we will work with the project steering team to determine the selection criteria that will be used, as well as details about the overall construction of the contract documents.

The purpose of this task is to define the functional and technical requirements, and scope of work for the AMI and meter replacement project. Our team will identify requirements taking into consideration current and future needs, business process improvement opportunities, industry trends, and the financial and people aspects of the proposed solution. Arcadis will conduct a series of requirements definition workshops.



We will shape the workshops using inputs from prior work and also leverage our library of requirements that we have used on past successful projects. We typically begin each workshop covering the "big picture" items, then the scope of work, and then dive deeper into the detailed requirements.

- Instructions to Proposers.
- Procurement Schedule.
- Data Release Requirements.
- Evaluation Criteria.
- Proposal Format Requirements.
- Background and Scope of Work.

- Series of attachments that provides the technical requirements for data collection system, meter interface units, meters and meter box covers, AMI software, customer portal, security, field programming equipment, project implementation services, installation services and support services.
- Pricing Proposal Template.

The RFP package will include but not be limited to the following sections:

Arcadis will prepare a draft RFP package and begin releasing the RFP document in sections. Feedback sessions will be planned throughout the document preparation process. A final review with the IRWD's procurement team and project team will be held for final edits.

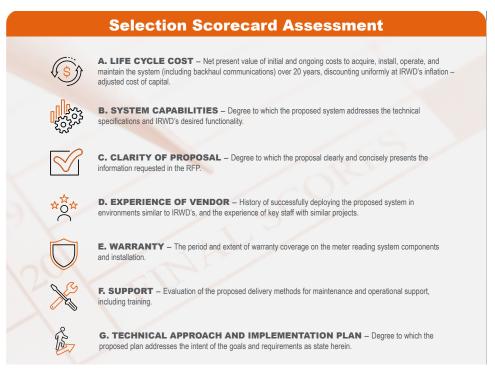
Selection and Procurement RFP Package Proposal Contract Strategy **Development** Evaluation **Negotiations**

TASK 2.2: RFP Administration and Evaluation Support

Arcadis will assist IRWD in managing the procurement process with the prospective vendors, including conducting a pre-proposal meeting and managing the development and distribution of any required RFP addenda.

With the AMI solicitation ready for release to the public, Arcadis will prepare a presentation and facilitate a pre-bid meeting to interested parties. The presentation will provide participants with a high-level overview of the procurement process, schedule and evaluation criteria. Information about the project and proposal submission expectations will also be shared. Arcadis will provide support to the Procurement department to respond to any RFP questions that will be packaged into addenda.

Arcadis will assist IRWD in developing a balanced scorecard that enables the selection team to rate the candidate AMI vendors objectively based on the set of criteria that were established as part of the procurement planning process. Proposal evaluation with the evaluation team begins with a session to train the evaluation team on the approach, guidelines, tools and timeline for the review and evaluation of submissions. The training will cover in detail the scoring guidelines to make certain each evaluation team member is assessing each proposal in a fair and consistent manner. Arcadis will assist IRWD in preparing and distributing the proposal scoring worksheet to the evaluation team along with evaluation instructions.



Our technical experts will review all vendor proposals to determine compliance with procurement requirements and minimum qualifications. Arcadis will facilitate a thorough review and assessment of technical responses with IRWD's evaluation team members. During these sessions, our technical experts will provide clarity and explanation to support the team's understanding of the responses to fairly assess the technical proposals.

Additionally, our team will prepare a cost comparison analysis from all proposers and prepare a cost comparison deliverable for the IRWD team. Developing a cost comparison model starts with the RFP Package Pricing Forms. The RFP will include pricing forms, which will guide the proposer to provide the right level of pricing detail. The cost analysis will use capital costs, annual recurring costs, and the project deployment timeline to develop a life-cycle cost analysis. Arcadis uses a net present value (NPV) approach for the life-cycle cost analysis using the IRWD's solution life (typically 15 or 20 years).

With this initial technical and pricing assessment complete, the IRWD evaluation team will be ready to identify a shortlist to invite for interviews and demonstrations. Arcadis will prepare for and facilitate interviews with vendors to include an implementation approach, qualifications, and vendor specific questioning. Interview evaluation guidelines will be developed and provided to the evaluation team members.

At the completion of the interviews and demonstrations, Arcadis will facilitate a selection meeting with IRWD's evaluation team. After the IRWD's evaluation team has selected their preferred AMI solution, Arcadis will prepare a procurement evaluation summary and evaluation results to support any internal communications and approvals required to proceed to the contract development phase of the procurement.

TASK 2.3: Contract Negotiations

Once the vendor selection is final, we begin to move the requirements from the proposal request document into the contract to confirm IRWD's desired responsibilities, timeline and outcomes are crystal clear to all parties. The contract must include an agreement that all system elements will be met to achieve project success and precisely how success will be measured.

Arcadis provides experienced practitioners who have negotiated multiple AMI and installation contracts in the past. This experience will result in a contract that is favorable to IRWD and covers all project elements. We will facilitate the work plan development between the selected vendor and project team to include identified resources, timelines, responsibilities, professional services, high level project plan, detailed Statement of Work, and change management procedures, both in-house and with the selected vendor(s).

We recommend contracts at a minimum will include the following sections:

- Main Agreement:
 - Assignment of agreement to subsidiary or subcontractor.
 - Contract termination procedures.
 - Confidentiality clause.
 - Warranties and remedies (time to resolve defects, location of warranty service, compatibility with operating systems, hardware, and other system components).
 - Dispute resolution processes.

- Network performance warranty.
- Excessive failure warranties which are very important given the wet environment the equipment will be exposed.
- Service levels to meet (response times, meter read and transmission rates, etc.).
- Technical support support and maintenance (hours of support, enhancements incorporated into future base releases, and documentation).
- Statement of Work (Scope):
 - Project management and project implementation schedule.
 - Integration services.
 - Network design and network installation scope.
 - Specifications/deliverables.
 - Training.
 - Testing scope integration testing, user acceptance testing and system acceptance.
 - Definition of payment schedule and milestones.

Once the contract is signed and agreed upon, Arcadis will provide support to the procurement department and the IRWD's project team to prepare the required documentation to obtain IRWD Council approval. The IRWD Procurement team will notify all vendors of the selection and Arcadis and IRWD's Project Manager will proceed with onboarding the AMI vendor and implementation team.

TASK 2.4: Phase 2 Project Management

Arcadis' project management activities for Phase 2 will begin with a Phase Kickoff Meeting to review the scope and objectives of the Procurement Phase and introduce key members of the project team from both the Arcadis team and the IRWD team.

Arcadis' **Phase 2** project management activities will be as follows:

- Project communications. Conduct bi-weekly project status meetings with the IRWD project manager and other stakeholders as needed. An agenda will be provided in advance of each meeting. Meetings will include regular project status updates that will summarize work performed, upcoming work, schedule, risks, action items, and budget performance.
- Schedule management. Develop, monitor, and maintain an integrated project schedule using MS

Project or an equivalent schedule management package.

- Scope and budget management. Manage overall project scope and budget and identify to IRWD when a task is outside of scope.
- Project documentation repository. Publish and maintain all project documentation. This includes producing meeting notes, managing action items, documenting key decisions, tracking of issues, and management of other project-related documentation and deliverables.

>>> Phase 2

Deliverables:

- Phase Launch Meeting Agenda and Minutes
- Draft RFP Package, up to 2 versions
- Final RFP Package
- Pre-Bid Meeting Agenda, Attendance Log, Meeting Minutes
- RFP Addenda
- Responses to RFP Vendor Questions
- Evaluation Rubric
- Cost Comparison Analysis
- AMI Evaluation and Selection Summary
- Contract with Comments and Recommendations
- Monthly Project Status Meeting Agenda and Minutes

Assumptions:

- 1 Phase Launch Meeting, 1 hour
- Up to 9 technical requirement meetings, up to ninety (90) minutes each
- Up to 3 RFP feedback session meetings, 1 hour each
- 1 Pre-Bid Meeting, 1 hour
- Up to 3 RFP Addendums
- Up to 15 RFP Vendor Questions
- Up to 5 Proposals
- Up to 4 Contract Review Meetings, 60 minutes each
- Up to 9 Monthly Project Status Meetings, 1 hour each
- Includes 1 Procurement, assume IRWD moves forward with a turnkey procurement for all equipment and services

Phase 3: AMI Implementation Project Management and Support Services

Now that procurement is complete and the contract is in place, we can begin the exciting phase of implementation. During this phase of the project, Arcadis will serve as the Project Management Office (PMO), overseeing all aspects of the project including the AMI vendor, the installation contractor, key IRWD staff responsible for implementation activities, and other relevant parties. We will begin by focusing on the initial and critical implementation activities involving systems integrations.

TASK 3.1: Systems Integrations Support and Testing

Arcadis will provide coordination and advisement on systems integrations for the AMI project, which includes providing technical expertise and strategic guidance to ensure seamless integration of the AMI system with IRWD's existing technologies and operational platforms. This includes coordinating the integration of AMI with customer information systems (CIS), billing platforms, geographic information systems (GIS), and data analytics tools, while addressing interoperability and compatibility requirements. The work will involve identifying key integration points, developing detailed integration plans, and advising on system architecture to optimize data flow and functionality. Additionally, the scope will include coordinating and monitoring testing, troubleshooting, and validation processes to ensure all systems operate cohesively. This effort will ensure IRWD achieves maximum benefits from AMI technology with minimal disruption to existing operations.

Arcadis will focus testing on two major areas:

• Functional Testing. Functional testing ensures that the delivered AMI control and monitoring software is tested and aligned with IRWD business requirements. Modifications, enhancements and reports are tested during this phase. Functional testing will be performed by IRWD staff with assistance from Arcadis. The baseline test scenarios relate to initial configuration, "how-to" scenarios related to how future business processes are executed, and test scenarios specific to modifications.

• Integrated System Testing. Integrated system testing verifies that application components are working as a complete solution rather than merely in isolation. This includes testing system interfaces and end-to-end processes, such as meter installation, meter reading and billing operations. System testing is performed by IRWD staff with assistance from Arcadis.

Arcadis will manage testing activities for the AMI project and will work with IRWD to provide software testing support for the project. Based on the detailed test plans for each system, the Arcadis project management team will support IRWD by:

- Developing test scenarios.
- Review the preparations of testing environments and data, in conjunction with the system administrators and the AMI vendor.
- Support IRWD staff in the execution of the test cases.
- Identify, log, analyze, and assign responsibility for correcting defects.
- Manage defect resolution.
- Report on defects and testing status.

TASK 3.2: Data Management

Arcadis has assisted several large, complex utilities with developing an in-house Data Management Strategy plan. This typically involves establishing the technical foundation, data architecture, and governance requirements to serve as an enterprise-wide data analysis tool. Although these types of Data Management Strategy solutions will evolve over time and through additional use cases, the following elements serve as the core of any data management plan:

- Documenting and mapping all relevant data systems and their sources.
- Establishing data access and user permissions, defined data stewardship roles and responsibilities, and end-usage requirements to mitigate overlap or conflicts between various data sources and maintain accountability.
- Identifying the business needs and reporting requirements by means of workshops to help key departments and personnel identify desired reporting tools, dashboards, and other potential use cases.
- Designing the solution architecture and, if applicable, a centralized, extensible data repository that can handle multiple data sources from both internal and external sources while protecting the utility's network.

As part of this task, Arcadis will support IRWD in advancing its Data Management Plan, originally established during Phase 1, by identifying and prioritizing key use cases. Arcadis will collaborate closely with IRWD to identify and define the top three use cases, ensuring they are detailed and actionable to maximize the benefits of the AMI system.

TASK 3.3: Oversee Change Management Plan

Change management and understanding how the AMI solution will impact IRWD's business processes are key to the success of the project. Data and experience show that effective change management drives greater benefit realization and achievement of project goals and objectives.

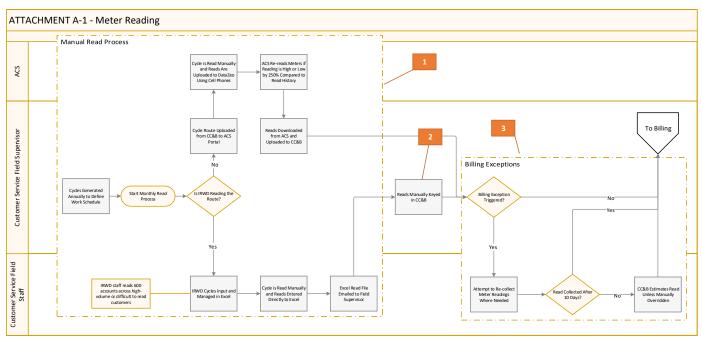
Arcadis will draw on its Change Management Framework (CMF) and use standardized tools and templates to further develop the Change Management Plan, initially established in Phase 1, which will lead IRWD's team through the lifecycle of the AMI project implementation.

With the AMI vendor onboard, our Change Management Lead, Joanna Brunner, will facilitate business process workshops to support review, refinement, and continued development of the future business processes in several key areas. These areas include billing (meter-to-cash), customer service, field operations, meter inventory, and meter management. Some will be new processes like proactive notifications of abnormal consumption and alert management (tampers, leaks) and others are changes to existing process and/or standard operating procedures such as new meter installations and high bill investigations.



Joanna brings unparalleled expertise in strategy and transformation to IRWD's Advanced Metering Infrastructure initiative. Her ability to develop sustainable strategies, foster agile

organizations, and engage stakeholders ensures impactful results. Leveraging certifications in Prosci® Change Management, IDEO Design Thinking, and Lean Six Sigma, she drives innovation and operational excellence to meet IRWD's current and future water sector challenges.



Future State with AMI:

- ial Read Process is eliminated. There is no longer a need to annually generate cycles because there is no work schedule. Meter reads will be collected on the AMI Network.
- Reads are now automatically uploaded to CC&B from the AMI Headens
- 3 A desktop analysis of historical data can be performed before rolling a truck in the case of a billing exception. An on demand reading may be possible. Exceptions will be much more rare with interval read data.

Arcadis will provide the following services:

- · Review and refine as needed the KPIs to track and monitor success of the AMI Project.
- · Review, refine, or develop business future state process maps for the processes impacted or created by AMI.
- Recommend required skills or additional resources (either new responsibilities for existing resources or additional resources) to support the new AMI processes.
- Training-related activities:
 - Review the training plan and materials provided by the selected AMI vendor.
 - Work with the IRWD Project Manager to coordinate the key resources for training.
 - Oversee and coordinate the execution of the training plan prepared by the AMI Vendor.

TASK 3.4: Performance Analysis and Validation Testing

Arcadis will provide endpoint installation monitoring throughout the duration of the deployment activities. The full deployment of the AMI system will involve close monitoring and coordination between the AMI vendor and IRWD. Arcadis will perform the following activities during the installation, which will be integrated with the overall program monitoring and control and governance processes.

AMI Endpoint Installation Management System

Arcadis will work with the AMI vendor and deployment teams to implement a formal endpoint installation management system, which will be used to schedule and control field work associated with the installation program. The reporting from the installation management system will be a primary input to the earned value management, schedule management, and overall project monitoring and control activities.

AMI Endpoint Installation Testing and System Testing

Arcadis will manage installation quality assurance for the project as defined in the quality management plan and installation vendor contract. We will provision an endpoint acceptance testing process using the proprietary Arcadis Endpoint Acceptance Tool (EAT).

The EAT is a cloud-hosted toolset that uses AMI system data to confirm that installed AMI endpoints are functioning as expected and that the AMI system is able to meet the overall read-performance and redundancy measures called for in the system specifications.

Once the endpoints are installed, our quality control team verifies the data coming into the AMI system using system reports, the headend software, and the EAT. This data can support decision-making regarding which specific installations should be investigated physically in the field.



Progress Payments and Earned Value Management

Progress payments for the AMI vendor and installation contractors are typically made based on completed, verified and accepted endpoints and system component installations. The acceptance criteria for the various system components and services will be defined as part of the contract documents. The monitoring of acceptance for purposes of progress payments will be tightly integrated with quality assurance and inspection processes. The progress payments will be reported and reviewed during the monthly progress meetings included in Task 3.5.

TASK 3.5: Phase 3 Owner's Agent Project Management

Arcadis' owner's agent project management activities for Phase 3 will begin with a Phase Kickoff Meeting to review the scope and objectives of the AMI Implementation Project Management and Support Services Phase and introduce key members of the project team from the Arcadis team, Vendor team, and IRWD team.

Arcadis' **Phase 3** owner's agent project management activities will be as follows:

- Project communications. Conduct weekly project status meetings with the IRWD project manager, Vendor project manager, and other stakeholders as needed. An agenda will be provided in advance of each meeting. Meetings will include regular project status updates that will summarize work performed, upcoming work, schedule, risks, action items, implementation or deployment issues, and budget performance.
- Schedule management. Develop, monitor, and maintain an integrated project schedule using MS Project or an equivalent schedule management package.
- Scope and budget management. Manage overall project scope and budget and identify to IRWD when a task is outside of scope.
- Project documentation repository. Publish and maintain all project documentation. This includes producing meeting notes, managing action items, documenting key decisions, tracking of issues, and management of other project-related documentation and deliverables.

TASK 3.6: Field Inspections (Optional)

Arcadis recommends field inspections are performed. Regardless of whether inspections are performed by IRWD staff, or supplemented with other resources, it is an important part of the Quality Control process. If IRWD elects this optional task, Arcadis will provide installation inspection and quality reviews of the field installation work of the vendor. The Arcadis installation inspectors will supplement IRWD meter management staff to perform the field inspection work. Arcadis will review a sampling of vendor meter and endpoint installations to verify conformance with installation procedures and specifications. When problem site conditions are found, we review site conditions and provide a recommendation to IRWD on an appropriate course of action. We will also review extra work claims submitted by vendor and provide a recommendation to IRWD on appropriate claim dispositions per agreed-upon contract terms, policies, and procedures. Pricing for this optional task has not been included in our proposed fee. Pricing for this optional task has not been included in our proposed fee due to the dependencies on the selected solutions and actual deployment schedules that are developed upon the selection of a vendor. Pricing for this task can be developed during Phase 2 of this project upon request.

>>> Phase 3

Deliverables:

- Phase Launch Meeting Agenda and Minutes
- Functional Test Scenarios
- Integrated System Test Scenarios
- Defect Management Log
- Test Planning Meetings Agenda and Minutes
- Data Management Use Case Workshop Agenda and Minutes
- Documented Use Cases (3)
- Change Management KPI Workshop Agenda and Minutes
- Business Process Future State Workshop Agenda and Minutes
- Updated Change Management Plan
- Implementation Project schedule
- Monthly Progress Meetings Agenda and Minutes
- Monthly Progress Reports
- Monthly Invoices
- Bi-Weekly Quality Control Status Reports (Optional Task 3.5)

Assumptions:

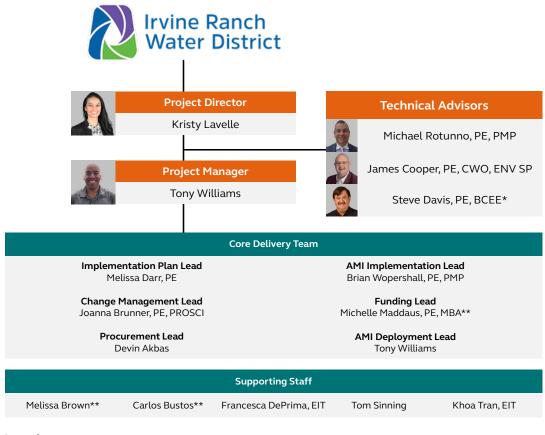
- 1 Phase Launch Meeting, 1 hour
- Up to 8 Interfaces
- Functional Testing duration will be 2 weeks
- Integrated Systems Testing duration will be 4 weeks
- 1 Data Management Use Case Workshop, up to 2 hours
- Up to 3 Documented Use Cases
- 1 Change Management KPI Workshop, 1 hour
- Up to 10 Business Process Future State Workshops and Future State Process Diagrams
- Up to 2 EAT integration meetings, 1 hour each
- Progress reports will be run on a monthly basis for the duration of the deployment, up to
- Phase 3 is assumed to begin April 2026 and finish December 2030
- Up to 58 Monthly Progress Meetings



Section 2. Team

Project Team

The Arcadis team will be led by **Kristy Lavelle** and **Tony Williams**, both who serve as two of Arcadis' AMI Experts in our Intelligent Water and Advisory Services practice area. Our core delivery team consists of AMI experts and management consultants from our Business Advisory Services team supplemented with a leading state and national expert in AMI driven conservation benefits. Arcadis has a successful history working with our subconsultants and our teams have engaged together on several recent or currently active projects for Irvine Ranch Water District (IRWD) and the City of Santa Monica (CA). An introduction to our key personnel is provided below and on the following page.



Legend

Key Personnel Summaries



Kristy Lavelle | Project Director

Ms. Lavelle led IRWD's Feasibility Study working closely with IRWD's team which provides the foundation for this project. She is a seasoned professional with over 21 years of experience specializing in water efficiency, metering, and Advanced Metering Infrastructure (AMI). Her career includes executive leadership roles and extensive experience supporting more than 100 water utilities through various stages of their projects. Known for her detail-oriented approach and ability to overcome challenges, She has a proven track record of achieving project success. Her expertise spans a wide range of areas, including meter services, water loss and efficiency programs, AMI, business and strategic planning, customer experience, technology implementation, influential leadership, business process improvement, field investigation, and problem resolution. As part of Arcadis, Ms. Lavelle leads projects for utilities across the country and serves as a national expert within the business advisory practice.

^{*} Metering Technology Consultants, Inc.

^{**} Maddaus Water Management, Inc.

Key Personnel Summaries



Tony Williams | Project Manager; AMI Deployment Lead

Mr. Williams has over 17 years of experience providing consulting services in the AMI and SmartGrid marketplace, specializing in program and project management, software integration, meter grid device deployment, subcontractor management, product procurement, business consulting, and implementation oversight. He has worked extensively on AMI deployments for water, gas, and electric utilities, ensuring secure and reliable data integration across multiple systems. Throughout his career, Mr. Williams has developed expertise in areas such as refining professional services strategies, coordinating multi-vendor system integrations to maintain data integrity, leveraging utility contacts and vendors for resource augmentation, and serving as a subject matter expert for AMS/AMI/AMR systems and large-scale deployments. His work also includes evaluating solutions, providing procurement recommendations, managing client relationships, driving contract negotiations, and generating new business through solution-focused proposals tailored to client needs.



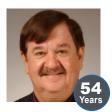
Michael Rotunno, PE, PMP | Technical Advisor

With Arcadis, Mr. Rotunno is responsible for leading large and complex information technology projects for water utilities nationally and serves as the Discipline Leader for the North America Technology and Information practice. He has been involved in AMI and meter-to-cash programs for the past 15 years, having filled leadership roles in AMI programs ranging from 5,000 to over 1.5 million endpoints. Prior to joining Arcadis, Mr. Rotunno served as the Assistant Commission of IT for the City of Cleveland, Division of Water (CWD), one of the largest water utilities in the United States, where he had overall responsibility for IT strategy and operations.



James Cooper, PE, ENV SP, CPM, CWO | Technical Advisor

Mr. Cooper is a Certified Project Manager, Licensed Professional Engineer, and Envision Sustainability Professional with expertise in engineering, management, and water operations. He is a trustee for the American Water Works Association (AWWA), Chair of the Engineering and Construction Division, and lead author of AWWA Manual of Practice 32. A recipient of the AWWA Vernon Lucy Award, he is recognized for delivering innovative, sustainable solutions and advancing utility innovation.



Steve Davis, PE, BCEE | Technical Advisor

Mr. Davis has over 54 years of expertise in potable water systems, specializing in evaluation, planning, design, and AMR/AMI implementation. He has led key projects, including authoring procurement documents and studies for utilities such as Mesa, AZ; Ft. Worth, TX; Miami-Dade, FL; and Tucson, AZ. His work also includes water meter specifications for Guam, Puerto Rico, and Sacramento, CA. A registered engineer in Texas, Mr. Davis has managed multiple Malcolm Pirnie offices and spent 10 years with the City of Tucson Water Utility. He is a recognized leader in AWWA, currently chairing the Apparent Losses Subcommittee.



Melissa Darr, PE | Implementation Plan Lead

Ms. Darr is a Civil and Environmental Engineering professional with a passion for sustainability and a proven track record in the utilities sector. Her expertise includes water engineering, program management, and corporate communications, with experience managing multimillion-dollar asset management programs, smart meter deployments, and carbon footprint analyses. She has led sustainability initiatives, including education programs and peer engagement networks, driving innovation and positive impact.



Joanna Brunner, PE, PROSCI | Change Management Lead

Ms. Brunner is the Strategy & Transformation Practice Lead for Arcadis North America's water sector. She specializes in developing sustainable strategies and leading transformations for water and wastewater utilities, helping them adapt to current and future challenges through agile organizations and staff engagement. Certified in Prosci® Change Management, Ideo Design Thinking, and Lean Six Sigma Green Belt, she brings expertise in strategic planning, workforce development, innovation management, and change leadership. Her project experience includes working with organizations like City of Phoenix, WSSC Water, Louisville Water, and City of Evansville on digital, operational, and asset management transformations.

Key Personnel Summaries



Devin Akbas | Procurement Lead

Mr. Akbas is a passionate young professional with consulting experience on a variety of business advisory projects. His four years with Arcadis have focused on helping clients optimize business practices by leveraging technology, with experiences including billing system implementation, AMI implementation, software requirements gathering, business intelligence, data visualization and analysis, process modeling, and business case development. Recently, he has been conducting AMI industry research for the Water Research Foundation. Mr. Akbas' adaptability and ambition make him an asset on any project team.



Brian Wopershall, PE, PMP | AMI Implementation Lead

Mr. Wopershall is an expert in utility technology and asset management with 25 years of experience delivering solutions for water, wastewater, and electric utilities. His expertise includes Work Order Management, GIS, AMI, and hydraulic modeling, as well as leading large-scale IT transformations for utilities serving over 400,000 customers. He specializes in data integration strategies, asset management, condition assessments, and applying PMI project management principles to ensure successful project delivery and improved business processes.

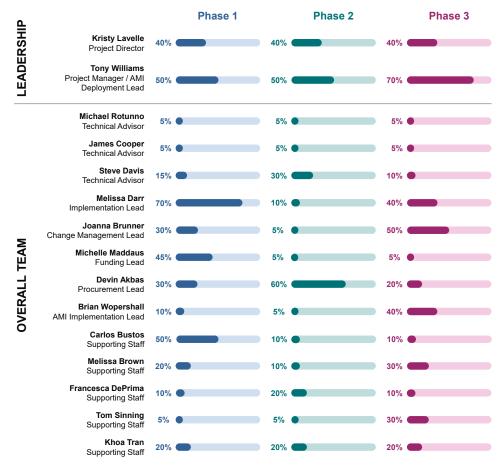


Michelle Maddaus, PE, MBA | Funding Lead

Ms. Maddaus is a registered Civil Engineer in California with 24 years of experience, a wide variety of which is in the water resources field. She is comfortable designing both indoor and outdoor conservation programs with current technology. She has conducted over 300 CII audits and has directly witnessed equipment and program needs of the water customers, including the survey for facilities in California, Washington, Illinois, Arizona and Hawaii. Her water audit experience includes facilities in Arizona Grant Hotel, Biltmore Hotel in Arizona, University of California Santa Cruz, Stanford Linear Accelerator, and Stanford University Campus. Ms. Maddaus is also an excellent trainer who has done in-person trainings for over 200 people on the DSS Model and for over 600 people regarding how to conduct a CII water efficiency survey.

Team Commitment and Resource Availability

Our team is dedicated to IRWD, with key members fully aligned on their roles and responsibilities. The graphic shows their availability based on workload. We are committed to providing the resources needed to complete the project on time with exceptional responsiveness, assigning each person to roles as required.





Section 3. References

AMI Program Management and Advisory Services

Our proposed team is drawn from a dedicated business advisory practice with extensive water industry knowledge and insights. Our service leaders have assisted numerous water clients to implement best-in-class management consulting programs. We bring a business mindset to the water industry, which will result in a practical and implementable program that achieves critical buy-in from all parts of your organization to guarantee long-term results and sustainability. The business advisory practice was established intentionally considering the key challenges that utilities and municipals face each year. The knowledge and expertise from our management consultants from these five service offerings described below will provide the Fairfax Water with program management services and the technical experience required to achieve the established goals.

AMI/Smart Utilities

We take the pressure off municipalities and utilities by helping them streamline their meter-to-cash processes, implement a network of metering technology, and manage an aging workforce while delivering safe and reliable utility services. Customer demands, metering technology advancements, intelligent utility technologies, and sensors have utilities focused on improving their metering capabilities. Utilities face increasing pressures of aging infrastructure, customer expectations and an aging workforce while struggling with competing demands for operational and capital funds. Government and private entities providing utility services across the nation face meeting the needs of their residents and visitors as they continue to grow in population. Ability to be resilient, efficient, and innovative are three key drivers to becoming a smart utility.

Digital Consulting

Arcadis' digital advisory discipline helps organizations in asset intensive industries to improve their performance through the application of information technology, effective business processes, and proper organizational design. Our proposed team includes national AMI leads to maximize the use of data to support a more intelligent water network. An AMI initiative is a kickstart to a digital transformation. Digital advisory drives business transformation, making fundamental changes in how business is conducted to succeed in the ever-changing operating environment.

Strategy, Innovation and Business Transformation The strategy, innovation, and business

transformation team is focused on

empowering water, wastewater and stormwater utilities to meet current and future water sector challenges by leading more agile and creative organizations. We do this by supporting meaningful strategic planning that turns great aspirations into sustainable outcomes, co-creating innovation programs that engage their workforce and partners to generate solutions for current and emerging issues, and transform utilities to optimize performance and emerge fit for the future.

Grant and Financial Advisory (GFA) Services The challenge utilities face today is the same it

has always been, how to do more with less. Except, today, there is a lot more to do with a lot less to get it done. The GFA services team works with utilities to maintain or improve current financial positions, provide financing for capital projects, mitigate the need for frequent rate fluctuations, and provide transparency and proof of doing more with less while successfully making the case for critical investment. Additionally, we have supported many water utilities and municipals across the nation to secure grant funding to support these important initiatives. All these capabilities are under one firm and can support IRWD's future efforts.

Asset Management

Arcadis is a nationally recognized firm with the credentials and resources to continue to advance our client's asset management program. Our asset management professionals guide utilities in the management of their water and wastewater assets across the nation to produce Environmental Protection Agency (EPA)/Water Environment Research Foundation compliant asset management programs. We have a proven track record of developing asset management plans that have been endorsed by EPA and other state agencies as "best-in-class." We support national clients with multiple facilities by organizing our staff with centralized technical leadership serving as subject matter experts, coupled with qualified local staff to assist on-site with the day-to-day activities of asset management at our client's facilities.

AMI Project Experience

Arcadis has worked for water utilities across the U.S. on more than 25 AMI projects — nearly all of which we have assisted with a vast array of AMI services. Our AMI Experts have nearly 50 years of collective experience in AMI initiatives. Arcadis offers a full range of services from design and planning to implementation and deployment of an AMI solution, advancing broader intelligent water initiatives for our clients. Our staff possesses deep technical and managerial experience in areas such as metering, customer service, engineering, information technology, and business consulting. We use this knowledge to help clients successfully implement complex intelligent water projects. We have a proven approach with a highly experienced team of professionals that will secure the success of AMI for IRWD.



Arcadis is working with client across the U.S. on AMI projects covering the entire project life-cycle.

AN

AMI and Meter Replacement Feasibility Study

Irvine, CA



Arcadis conducted a comprehensive feasibility study to assess the potential implementation of AMI and the replacement of existing water meters with static water meters. The study aimed to provide the client with actionable insights, a strategic roadmap, and a cost-effective approach to modernizing their metering infrastructure while ensuring alignment with organizational objectives and technical standards.

IRWD, located in Southern CA, has about 130,000 service connections.

Key Project Components

 Feasibility Study. Arcadis evaluated the technical, financial, and operational feasibility of transitioning to AMI and replacing existing meters with static water meters. This included assessing key challenges, risks, and opportunities associated with the implementation process

• Cost-Benefit Analysis.

Arcadis developed a detailed cost-benefit analysis to determine the economic viability of AMI deployment and static meter replacement. This involved quantifying potential savings, operational efficiencies, and long-term value for the client.

Organization Impact
 Assessment. Arcadis conducted
 an assessment of how AMI
 and meter replacement would
 impact the client's organizational
 structure, processes,
 and workforce.

• AMI Roadmap Development.

Arcadis developed a strategic AMI roadmap featuring a phased implementation approach designed to maximize opportunities for securing grant funding that was researched and evaluated.

· Static Meter Research.

Arcadis conducted an in-depth analysis of static water meter

Client

Irvine Ranch Water District (IRWD)

Client Contact

Amy McNulty Water Efficiency Manager 949.453.5634 mcnulty@irwd.com

Completion Date

2023 - 2024

Key Personnel

Kristy Lavelle Devin Akbas Francesca DePrima, EIT Michelle Maddaus, PE, MBA Steve Davis, PE, BCEE

technologies and compared their technical specifications to IRWD's specifications to identify any incompatibilities and deviations from standards.

• Static Meter Peer Survey.

Arcadis performed a peer survey to gather insights on the adoption and performance of static water meters across comparable utilities for IRWD.

2 Smart Metering Program Mesa, AZ



The AMI Project was undertaken by the City of Mesa to install 'smart' meters across its three utility service offerings. A unique municipal utility that provides utility services for about half a million residents. The City has all three utility services water, gas, and electric serving customers both in the City limits and surrounding areas. In total, about 240,000 service connections (Water 150,000, Gas, 70,000, Electric 17,000).

Our Role

Owner's Representative. Arcadis provided program and project management leadership and AMI technical expertise for the planning, procurement, implementation and deployment of the City's AMI solution.

Services Delivered: Arcadis's approach to AMI program

management has been constructed based on the unique and specific requirements of these important customer-facing projects. During Phase 1 Arcadis provide owner's representative services for the AMI Planning, Procurement, Contract Negotiations, Implementation of the AMI solution and integrations, installation contractor management, initial deployment and customer communications services.

With the project now in full deployment, Arcadis is providing the follow services:

- Project Management & Project Controls including project budget tracking (Forecast vs. Actuals)
- Meter Deployment Oversight

 Responsible for installation oversight for the meter and transmitter deployment.
 - Deployment Plan to standardize the installation operations.
 - Installation Schedule and Route Release Review
- Independent warehouse audit to ensure meters are accounted

Client

City of Mesa, AZ

Client Contact

Sam McKenna Senior Project Manager 480.644.2245 sam.mckenna@mesaaz.gov

Completion Date

Phase 1 - 2019-2023 Phase 2 - 2023-Ongoing

Key Personnel

Tony Williams Brian Wopershall, PE, PMP Melissa Darr, PE Steve Davis, PE, BCEE

for and equipment supplies are adequate to complete the deployment

- Installation issue tracking and issue resolution
- Review of field audits from the installer and the City's inspectors.
- Endpoint acceptance including installer and AMI Vendor invoicing review and approval
- Customer Claims Review and tracking
- Customer communications coordination with the City's PIO.

3 AMI Needs Assessment, Procurement, and Implementation

Glendale, AZ



Arcadis is providing owner's agent consulting services and technical expertise to support the City of Glendale, AZ with AMI and meter replacement needs assessment and business case, procurement, and Implementation project management.

Key Challenges

The key objectives of this project are to address the City's metering accuracy, customer service improvements, lost revenue, non-revenue water loss and operational efficiency.

Our Approach

Arcadis initiated the project by performing a Needs Assessment and developing the project business case. We conducted a series of interviews and workshops with key City staff from the Customer Service, Billing, IT, Metering, and Conservation groups to identify the City's needs from the AMI. We then conducted a thorough business case evaluation that identified a series of project alternatives and documented the costs and benefits

for each. The needs assessment also evaluated a number of different contracting alternatives, including the use of performance-based contracting, and identified potential grant funding opportunities that Arcadis then helped the City to pursue.

Using the findings of the Needs Assessment, Arcadis worked with the City team to develop an implementation roadmap and procurement plan for the AMI. We conducted a series of meetings with the project stakeholders, including the City's procurement department representatives, to review the findings of the Needs Assessment and the City's procurement processes. We then conducted a series of requirements definition workshops covering the relevant areas for the AMI. Using the results of these requirements workshop, Arcadis developed a Request for Proposals (RFP) for a turn-key AMI project.

Arcadis then facilitated the procurement of the AMI system. We worked closely with the City to manage the solicitation process in conjunction with City staff. We performed a detailed technical evaluation of the proposals that were received including the development of lifecycle cost

Client

City of Glendale, AZ

Client Contact

John Henny Deputy Water Services Director 623.930.4106 jhenny@glendaleaz.com

Completion Date

2022 - Ongoing

Key Personnel

Kristy Lavelle Michael Rotunno, PE, PMP Devin Akbas

evaluation. We then facilitated an series of in-person vendor interviews including system software demonstrations. At the completion of the evaluation process, Arcadis facilitated the final system selection and performed confirmation activities consisting of vendor reference checks.

Arcadis is currently facilitating the development of the project contract documents and preparing to transition the project into the installation phase. During the installation of the AMI, Arcadis will be providing project management and quality assurance services on behalf of the City.

Arcadis has also provided grant support services for the project. We have worked closely with the City's grants team to submit proposals for the Bureau of Reclamation WaterSMART grant and the state of Arizona Water Infrastructure Finance Authority Water Conservation Grant.

The Client Outcome

The City is currently finalizing the contract documents and anticipates proceeding with the AMI installation in the 3rd quarter of 2025.

Advanced Metering Project Santa Monica, CA



Arcadis provided technical advisory services and Advanced Metering expertise to support the City of Santa Monica, CA with AMI Contracting and Deployment.

City of Santa Monica, CA, has about 18,500 service connections. The City had been manually reading their meters through a meter reading contractor. The decision was made to move to a cellular AMI solution.

Key Challenges: The key objectives of this project are to complete an AMI deployment with a mix of full

meter replacements and meter retrofits. The City also chose to complete a pre-installation survey to confirm material needs as well as identify the pipe material for service line inventory. The City's goals are to improve meter reading efficiency, move to monthly billing, engage customers, and minimize water loss.

Project Approach: The technical advisory scope was designed to provide expert advisory services in the following areas:

- Turn-key master contract and Scope of Work (SOW) negotiations
- Program and project management
- Public outreach and communication

Clien

City of Santa Monica, CA

Client Contact

Ralph Valencia Water/Wastewater Administrator 310.458.8531 Ralph.Valencia@santamonica.gov

Completion Date

2022 - 2025

Key Personnel

Kristy Lavelle

- Software integrations
- Change management
- · Deployment management
- System acceptance planning
- General AMI technical advisory



Section 4. Schedule

Schedule management is built into our overall project management approach, and is a primary activity that we will perform throughout the life of the project. We have developed the following preliminary project schedule. It is an aggressive schedule, but one which Arcadis is prepared to execute. We will discuss and refine the schedule as part of the project initiation activities. We have designed our scope and schedule for Phase 1 to meet the dates outlined in the RFP. In looking at the later part of the schedule, Arcadis believes there is opportunity to condense the deployment timeline, dependent upon funding and other factors which can be highlighted during Phase 1 as we build out the Detailed Implementation Plan. We will then maintain the integrated project schedule for the life of the project, which will show the work breakdown, critical path, deliverables, and other key schedule indicators for all work team involved in the project. For context, we have included a summary of the typical activities performed by the AMI vendor.

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	lasks	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3 (Q4	Q1	Q2	Q3	Q4	Q1	Q2 (Q3 Q4
	Phase 1: Detailed Implementation Plan																					
dis	Task 1.1: Review of Existing Information																					
Arcadis	Task 1.2: Develop Detailed AMI Implementation Plan																					
Ar	Task 1.3 Phase 1 Project Management																					
	Phase 2: Procurement																					
10	Task 2.1: Develop AMI Request for Proposals																					
adis	Task 2.2: RFP Administration and Evaluation Support																					
Arcadis	Task 2.3: Contract Negotiations																					
	Task 2.4: Phase 2 Project Management																					
	Phase 3: AMI Implementation Project Management and Support Servic	es																				
	Task 3.1 Systems Integrations Support and Testing																					
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Arcadis	Task 3.3: Oversee Change Management Plan																					
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	Task 3.5: Phase 3 Owner's Agent Project Management																					
r	Project Initiation and Deployment Planning																					
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AMI Ve	Full Deployment																					
4	Project Close Out																					





Section 5. Budget

By leveraging our knowledge gained during the Feasibility Study and the requirements in the RFP, we have developed this proposal to provide a competitive, transparent, and fair representation of the effort required to achieve your goals. The proposed fee includes all anticipated resources, expertise, and support necessary to ensure a successful delivery of the project execution while maintaining the high standards of quality and service that Arcadis is known for.

Project Fee Summary

			Billable Labor Rate		
Phase		Task	(\$/Hr)	Hours	Fee
Phase 1:	1.1	Review of Existing Information	Task Total:	110	\$25,330
Detailed	1.2	Develop Detailed AMI Implementation Plan	Task Total:	755	\$187,759
Implementation	1.3	Phase 1 Project Management	Task Total:	100	\$23,220
Plan			Phase 1 Totals	965	\$236,309
	2.1	Develop AMI Request for Proposals	Task Total:	380	\$76,138
	2.2	RFP Administration and Evaluation Support	Task Total:	270	\$60,624
Phase 2:	2.3	Contract Negotiations	Task Total:	150	\$37,949
Procurement	2.4	Phase 2 Project Management	Task Total:	100	\$21,910
			Phase 2 Totals	900	\$196,621
Phase 3: AMI	3.1	Systems Integration Support and Testing	Task Total:	450	\$112,348
Implementation	3.2	Data Management	Task Total:	250	\$63,720
Project	3.3	Oversee Change Management Plan	Task Total:	385	\$92,738
Management	3.4	Performance Analysis and Validation Testing	Task Total:	1,180	\$535,048
and Support	3.5	Phase 3 Owner's Agent Project Management	Task Total:	1,070	\$293,390
Services			Phase 3 Totals	3,335	\$1,097,244
			Project Totals:	5,200	\$1,530,174

Pricing Assumptions:

- Our proposed fee is presented as not-to-exceed. Work will be invoiced based on the hours expended and the billable labor rates included in the Project Team Roles and Billing Labor Rates Table. Billable labor rates will be fixed through 2025, then escalated annually on January 1 of each year based on the U.S. Department of Labor, Consumer Price Index, All Items, Unadjusted, Urban Areas ("CPI-U"), starting on January 1, 2026.
- It is assumed that unspent labor dollars can be moved between phases and tasks.
- Allowable project expenses, including travel and other allowable direct costs, will be invoiced as incurred with proper supporting documentation and no markup.



- IRWD will provide Arcadis with information, documentation, and access to software as required in a timely manner to perform the agreed upon project work activities.
- Project work will be conducted both on-site at IRWD's office and remotely.
- Our proposed fee for the Funding Plan under Task 1.2 is designed to help identify funding opportunities, review funding applications, and support IRWD's staff only. It is assumed that IRWD will be responsible for the preparation and execution of any funding applications.
- It is assumed that there will be a single, turnkey procurement Request for Proposals for all services and equipment.
- The proprietary Arcadis Endpoint Acceptance Tool (EAT) used in Task 3.4 is a cloud-based data analytics software that runs on a Microsoft Azure computing environment. Usage fees for the EAT are included at \$5,000 per month commencing upon the start-up of the tool and is assumed to cover 50 months during the deployment phase.
- Project durations, broken down by Phase, are assumed to be in line with the Schedule included under Section 4. Any delays or changes to the schedule may affect the budgeted hours required to complete the work, and as a result, could necessitate a change to address the associated impacts on scope, resources, and costs.
- Schedule does not account for vendor product shipping delays.



Detailed Project Fee Breakdown

Phase			Task	Billable Labor Rate (\$/Hr)	Hours	Fee
	1.1	Review of Existing Information		Task Total:	110	\$25,330
		Kristy Lavelle	Project Director	\$280	17	\$4,760
		Tony Williams	Project Manager	\$265	21	\$5,565
		Melissa Darr	Senior Management Consultant	\$230	21	\$4,830
		Devin Akbas	Management Consultant	\$160	26	\$4,160
		Joanna Brunner	Senior Management Consultant	\$230	3	\$690
		Brian Wopershall	Senior Management Consultant	\$265	3	\$795
		Francesca DePrima	Project Engineer	\$180	5	\$900
		Khoa Tran	Project Engineer	\$180	2	\$360
		Michael Rotunno	Technical Advisor	\$320	2	\$640
		Jim Cooper	Technical Advisor	\$335	2	\$670
		Steve Davis	Technical Advisor - Subconsultant	\$225	2	\$450
		Michelle Maddaus	Expert Consultant - Subconsultant	\$355	2	\$710
		Carlos Bustos	Senior Consultant - Subconsultant	\$240	2	\$480
Phase 1: Detailed		Melissa Brown	Consultant - Subconsultant	\$160	2	\$320
Implementation Plan	1.2	Develop Detailed AMI Implemen	ntation Plan	Task Total:	755	\$187,759
		Kristy Lavelle	Project Director	\$280	32	\$8,960
		Tony Williams	Project Manager	\$265	100	\$26,500
		Melissa Darr	Senior Management Consultant	\$230	140	\$32,200
		Devin Akbas	Management Consultant	\$160	150	\$24,000
		Joanna Brunner	Senior Management Consultant	\$230	30	\$6,900
		Brian Wopershall	Senior Management Consultant	\$265	8	\$2,120
		Francesca DePrima	Project Engineer	\$180	20	\$3,600
		Khoa Tran	Project Engineer	\$180	28	\$5,040
		Jim Cooper	Technical Advisor	\$335	2	\$670
		Steve Davis	Technical Advisor - Subconsultant	\$225	20	\$4,500
		Michelle Maddaus	Expert Consultant - Subconsultant	\$355	85	\$30,175
		Carlos Bustos	Senior Consultant - Subconsultant	\$240	100	\$24,000
		Melissa Brown	Consultant - Subconsultant	\$160	40	\$6,400
			Other Direct Costs	-	-	\$12,694



Phase			Task	Billable Labor Rate (\$/Hr)	Hours	Fee
	1.3	Phase 1 Project Management		Task Total:	100	\$23,220
		Kristy Lavelle	Project Director	\$280	16	\$4,480
Phase 1: Detailed		Tony Williams	Project Manager	\$265	40	\$10,600
Implementation		Melissa Darr	Senior Management Consultant	\$230	8	\$1,840
Plan		Khoa Tran	Project Engineer	\$180	30	\$5,400
		Annette Hollenbeck	Project Administrator	\$150	6	\$900
				Phase 1 Totals	965	\$236,309
	2.1	Develop AMI Request for Propos	sals	Task Total:	380	\$76,138
		Kristy Lavelle	Project Director	\$280	28	\$7,840
		Tony Williams	Project Manager	\$265	32	\$8,480
		Devin Akbas	Management Consultant	\$160	176	\$28,160
		Francesca DePrima	Project Engineer	\$180	50	\$9,000
		Khoa Tran	Project Engineer	\$180	56	\$10,080
		Michael Rotunno	Technical Advisor	\$320	8	\$2,560
		Steve Davis	Technical Advisor - Subconsultant	\$225	30	\$6,750
			Other Direct Costs	-	-	\$3,268
	2.2	RFP Administration and Evaluati	on Support	Task Total:	270	\$60,624
		Kristy Lavelle	Project Director	\$280	25	\$7,000
		Tony Williams	Project Manager	\$265	65	\$17,225
Phase 2: Procurement		Devin Akbas	Management Consultant	\$160	135	\$21,600
Floculement		Khoa Tran	Project Engineer	\$180	35	\$6,300
		Steve Davis	Technical Advisor - Subconsultant	\$225	10	\$2,250
			Other Direct Costs	-	-	\$6,249
	2.3	Contract Negotiations		Task Total:	150	\$37,949
		Kristy Lavelle	Project Director	\$280	70	\$19,600
		Tony Williams	Project Manager	\$265	30	\$7,950
		Devin Akbas	Management Consultant	\$160	45	\$7,200
		Michael Rotunno	Technical Advisor	\$320	5	\$1,600
			Other Direct Costs	-	-	\$1,599
	2.4	Phase 2 Project Management		Task Total:	100	\$21,910
		Kristy Lavelle	Project Director	\$280	10	\$2,800
		Tony Williams	Project Manager	\$265	34	\$9,010



Phase			Task	Billable Labor Rate (\$/Hr)	Hours	Fee
		Devin Akbas	Management Consultant	\$160	18	\$2,880
51 6		Khoa Tran	Project Engineer	\$180	28	\$5,040
Phase 2: Procurement		Michael Rotunno	Technical Advisor	\$320	4	\$1,280
riocarcinent		Annette Hollenbeck	Project Administrator	\$150	6	\$900
				Phase 2 Totals	900	\$196,621
	3.1	Systems Integration Support an	d Testing	Task Total:	450	\$112,348
		Kristy Lavelle	Project Director	\$280	60	\$16,800
		Tony Williams	Project Manager	\$265	70	\$18,550
		Brian Wopershall	Senior Management Consultant	\$265	180	\$47,700
		Tom Sinning	Senior Management Consultant	\$265	20	\$5,300
		Khoa Tran	Project Engineer	\$180	80	\$14,400
		Melissa Brown	Consultant - Subconsultant	\$160	40	\$6,400
			Other Direct Costs	-	-	\$3,198
	3.2	Data Management		Task Total:	250	\$63,720
		Kristy Lavelle	Project Director	\$280	40	\$11,200
		Tony Williams	Project Manager	\$265	20	\$5,300
Phase 3:		Melissa Darr	Senior Management Consultant	\$230	120	\$27,600
AMI		Brian Wopershall	Senior Management Consultant	\$265	10	\$2,650
Implementation Project		Tom Sinning	Senior Management Consultant	\$265	40	\$10,600
Management and		Melissa Brown	Consultant - Subconsultant	\$160	20	\$3,200
Support Services			Other Direct Costs	-	-	\$3,170
	3.3	Oversee Change Management P	lan	Task Total:	385	\$92,738
		Kristy Lavelle	Project Director	\$280	30	\$8,400
		Tony Williams	Project Manager	\$265	50	\$13,250
		Melissa Darr	Senior Management Consultant	\$230	45	\$10,350
		Joanna Brunner	Senior Management Consultant	\$230	150	\$34,500
		Francesca DePrima	Project Engineer	\$180	110	\$19,800
			-	-	\$6,438	
	3.4	Performance Analysis and Valid	ation Testing	Task Total:	1,180	\$535,048
		Kristy Lavelle	Project Director	\$280	160	\$44,800
		Tony Williams	Project Manager	\$265	160	\$42,400
		Melissa Darr	Senior Management Consultant	\$230	420	\$96,600



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Phase			Task	Billable Labor Rate (\$/Hr)	Hours	Fee
		Tom Sinning	Senior Management Consultant	\$265	240	\$63,600
		Khoa Tran	Project Engineer	\$180	200	\$36,000
		Other Direct Costs		-	-	\$251,648
	3.5	Phase 3 Owner's Agent Project N	Task Total:	1,070	\$293,390	
		Kristy Lavelle	Project Director	\$280	160	\$44,800
Phase 3:		Tony Williams	Project Manager	\$265	420	\$111,300
AMI		Devin Akbas	Management Consultant	\$160	4	\$640
Implementation		Joanna Brunner	Senior Management Consultant	\$230	8	\$1,840
Project		Brian Wopershall	Senior Management Consultant	\$265	4	\$1,060
Management and		Francesca DePrima	Project Engineer	\$180	4	\$720
Support Services		Tom Sinning	Senior Management Consultant	\$265	12	\$3,180
		Khoa Tran	Project Engineer	\$180	390	\$70,200
		Michael Rotunno	Technical Advisor	\$320	8	\$2,560
		Annette Hollenbeck	Project Administrator	\$150	60	\$9,000
		Other Direct Costs		-	-	\$48,090
				Phase 3 Totals	3,335	\$1,097,244
			·	Project Totals:	5,200	\$1,530,174

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Subcontractor: Metering Technology Consultants – Fee Summary

Phase		Task		Billable Labor Rate (\$/Hr)	Hours	Fee
	1.1	Review of Existing Information		Task Total:	2	\$450
Phase 1: Detailed		Steve Davis	Technical Advisor - Subconsultant	\$225	2	\$450
Implementation	1.2	Develop Detailed AMI Implementation Plan		Task Total:	20	\$4,500
Plan		Steve Davis	Technical Advisor - Subconsultant	\$225	20	\$4,500
				Phase 1 Totals	22	\$4,950
	2.1	Develop AMI Request for Proposals	Task Total:	30	\$6,750	
		Steve Davis	Technical Advisor - Subconsultant	\$225	30	\$6,750
Phase 2:	2.2	RFP Administration and Evaluation Support		Task Total:	10	\$2,250
Procurement		Steve Davis	Technical Advisor - Subconsultant	\$225	10	\$2,250
				Phase 2 Totals	40	\$9,000
				Project Totals:	62	\$18,450

This Subcontractor Fee breakdown is provided to show the Subcontractor's portion of the Detailed Fee Breakdown as a standalone summary only.



Subcontractor: Maddaus Water Management – Fee Summary

Phase			Task	Billable Labor Rate (\$/Hr)	Hours	Fee
	1.1	Review of Existing Information	Task Total:	6	\$1,510	
		Michelle Maddaus	Expert Consultant - Subconsultant	\$355	2	\$710
		Carlos Bustos	Senior Consultant - Subconsultant	\$240	2	\$480
Phase 1: Detailed		Melissa Brown	Consultant - Subconsultant	\$160	2	\$320
Implementation	1.2	Develop Detailed AMI Impleme	Task Total:	225	\$60,575	
Plan		Michelle Maddaus	Expert Consultant - Subconsultant	\$355	85	\$30,175
		Carlos Bustos	Senior Consultant - Subconsultant	\$240	100	\$24,000
		Melissa Brown	Consultant - Subconsultant	\$160	40	\$6,400
				Phase 1 Totals	231	\$62,085
Phase 3: AMI	3.1	Systems Integration Support an	d Testing	Task Total:	40	\$6,400
Implementation		Melissa Brown	Consultant - Subconsultant	\$160	40	\$6,400
Project	3.2	Data Management		Task Total:	20	\$3,200
Management and		Melissa Brown	Consultant - Subconsultant	\$160	20	\$3,200
Support Services				Phase 3 Totals	60	\$9,600
				Project Totals:	291	\$71,685

This Subcontractor Fee breakdown is provided to show the Subcontractor's portion of the Detailed Fee Breakdown as a standalone summary only.



Project Team Roles and 2025 Billing Labor Rates

Team Member	Role	Bill Rate* (\$/Hr)
Kristy Lavelle	Project Director	\$280
Tony Williams	Project Manager	\$265
Michael Rotunno	Technical Advisor	\$320
Jim Cooper	Technical Advisor	\$335
Brian Wopershall	Senior Management Consultant	\$265
Tom Sinning	Senior Management Consultant	\$265
Melissa Darr	Senior Management Consultant	\$230
Joanna Brunner	Senior Management Consultant	\$230
Francesca DePrima	Project Engineer	\$180
Khoa Tran	Project Engineer	\$180
Devin Akbas	Management Consultant	\$160
Annette Hollenbeck	Project Administrator	\$150
Steve Davis	Technical Advisor - Subconsultant	\$225
Michelle Maddaus	Expert Consultant - Subconsultant	\$355
Carlos Bustos	Senior Consultant - Subconsultant	\$240
Melissa Brown	Consultant - Subconsultant	\$160



Section 6. Joint Venture

Arcadis is pleased to announce the continued collaboration with two subconsultants, Maddaus Water Management and Metering Technology Consultants, both of whom contributed to the success of IRWD's AMI and Metering Replacement Feasibility Study.

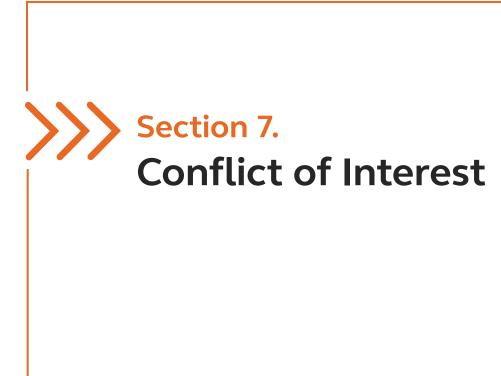


Maddaus Water Management will lead the funding component of the project, leveraging their expertise to ensure effective support in this area. They will play an active role in Phase 1 and Phase 3.

Consultants

Metering Technology Metering Technology Consultants will continue to provide their specialized metering expertise, serving as technical advisors and quality control reviewers for meter technical specifications. They will play an active role in Phase 2.

Together, these partnerships will help drive the project forward with industry-leading knowledge and precision.



Section 7. Conflict of Interest

Arcadis is a large, multi-disciplined international firm providing services to municipal, state, federal, and private sector clients. Arcadis is fully dedicated to the proper fulfilment of our jobs and avoids any conflict of our personal or business activities and financial interests with such commitment. As such, Arcadis has a company-wide conflict of interest review process. To the best of our knowledge, no potential conflict of interest exists or is anticipated for Arcadis or our proposed team members in the execution of this project. Arcadis will be transparent to clients about any potential conflicts of interest that could emerge during the performance of its services.

Arcadis stays constantly abreast of developments in the AMI marketplace but remains independent of AMI vendors so that we can advise our clients in an unbiased manner.





CERTIFICATE OF LIABILITY INSURANCE

DATE(MM/DD/YYYY) 09/23/2024

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

this certificate does not comer rights to the certificate holder in fied of such endorse	ineni(s).			
PRODUCER	CONTACT NAME:			
Aon Risk Services South, Inc. Franklin TN Office	PHONE (A/C. No. Ext):	NE . No. Ext): (866) 283-7122 FAX (A/C. No.): 800-363-01		
501 Corporate Centre Drive Suite 300	E-MAIL ADDRESS:			
Franklin TN 37067 USA		INSURER(S) AFFORDING COVI	NAIC#	
INSURED	INSURER A:	Twin City Fire Insuran	ice Company	29459
Arcadis U.S., Inc. 630 Plaza Drive	INSURER B:	Hartford Fire Insurance Co.		19682
Suite 200	INSURER C:	Hartford Casualty Insu	rance Co	29424
Highlands Ranch CO 80129 USA	INSURER D:	Endurance American Ins	urance Company	10641
	INSURER E:	Hartford Accident & In	demnity Company	22357
	INSURER F:			

COVERAGES CERTIFICATE NUMBER: 570108353250 REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS,

					Limits shown are as requeste
INSR LTR	TYPE OF INSURANCE	ADDL SI INSD V	UBR WD POLICY NUMBER	POLICY EFF POLICY EXP (MM/DD/YYYY)	
Α	X COMMERCIAL GENERAL LIABILITY		20ECS0L5318	10/01/2024 10/01/2025	EACH OCCURRENCE \$1,000,00
	CLAIMS-MADE X OCCUR		SIR applies per policy te	rms & conditions	DAMAGE TO RENTED PREMISES (Ea occurrence) \$1,000,00
	X Contractual Liability				MED EXP (Any one person) \$10,00
					PERSONAL & ADV INJURY \$1,000,00
	GEN'L AGGREGATE LIMIT APPLIES PER:				GENERAL AGGREGATE \$2,000,00
	POLICY X PRO- JECT X LOC				PRODUCTS - COMP/OP AGG \$2,000,00
В	OTHER: AUTOMOBILE LIABILITY		20 UEN OL5319	10/01/2024 10/01/2025	COMBINED SINGLE LIMIT (Ea accident) \$1,000,00
	X ANY AUTO				BODILY INJURY (Per person)
	OWNED SCHEDULED				BODILY INJURY (Per accident)
	AUTOS ONLY HIRED AUTOS ONLY NON-OWNED AUTOS ONLY				PROPERTY DAMAGE (Per accident)
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	EXCESS LIAB CLAIMS-MADE		Umbrella		AGGREGATE \$1,000,00
	DED X RETENTION \$10,000				
Е	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY		20wnoL5323	10/01/2024 10/01/2025	X PER STATUTE OTH-
A	ANY PROPRIETOR / PARTNER / EXECUTIVE OFFICER/MEMBER	N/A	AOS 20WBROL5321	10/01/2024 10/01/2025	E.L. EACH ACCIDENT \$1,000,00
	(Mandatory in NH)	"' ~	MA, WI	20, 02, 202 . 20, 02, 2023	E.L. DISEASE-EA EMPLOYEE \$1,000,00
	If yes, describe under DESCRIPTION OF OPERATIONS below				E.L. DISEASE-POLICY LIMIT \$1,000,00
				1	

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Evidence of Insurance.

CERTIFICATE HOLDER	CANCELLATION
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SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

Arcadis U.S., Inc.
630 Plaza Drive, Suite 200
Highlands Ranch CA 80129 USA

Aon Prish Services South Inc.

ACORD

CERTIFICATE OF LIABILITY INSURANCE

DATE(MM/DD/YYYY)

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this

certificate does not comer right	S to the certificate morder in new or such t	indoi semen	1(3).											
PRODUCER		CONTACT NAME:												
Aon Risk Services South, Inc. Franklin TN Office 501 Corporate Centre Drive Suite 300	•	PHONE (A/C. No. Ext):	HONE A/C. No. Ext): (866) 283-7122 FAX (A/C. No.): (800) 363											
		E-MAIL ADDRESS:												
Franklin TN 37067 USA			VERAGE	NAIC#										
INSURED	· · - · · · · · · · · · · · · · · ·	INSURER A:	36940											
Arcadis U.S., Inc.		INSURER B:												
630 Plaza Drive Suite 200 Highlands Ranch CO 80129 USA		INSURER C:												
		INSURER D:												
		INSURER E:												
		INSURER F:												
COVERAGES	CERTIFICATE NUMBER: 5701057669	19	F	REVISION	NUMBER:									
TUIC IS TO CERTIEV THAT THE DO	NI ICIES OF INSTIDANCE LISTED BELOW HAY	IE DEEN ICC	HED TO THE INCHE	DED NAME	D APOVE FOR THE DO	VICY BEDIOD								

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICIF FERIOR INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

Limits shown are as requeste I imite shown are as requested

INSR LTR	TYPE OF INSURANCE	ADDL	SUBR	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP	LIMITS
	COMMERCIAL GENERAL LIABILITY						EACH OCCURRENCE
	CLAIMS-MADE OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)
	_						MED EXP (Any one person)
			1				PERSONAL & ADV INJURY
ll	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE
	POLICY PRO- LOC		1				PRODUCTS - COMP/OP AGG
	OTHER:						
	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)
	ANYAUTO						BODILY INJURY (Per person)
	OWNED SCHEDULED						BODILY INJURY (Per accident)
	AUTOS ONLY HIRED AUTOS ONLY AUTOS ONLY AUTOS NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident)
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li	EXCESS LIAB CLAIMS-MADE		l				AGGREGATE
	DED RETENTION						
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY						PER STATUTE OTH-
	ANY PROPRIETOR / PARTNER / EXECUTIVE	N/A					E.L. EACH ACCIDENT
	OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	N/A					E.L. DISEASE-EA EMPLOYEE
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE-POLICY LIMIT
A	Contractors Pollution Liability			USO0101061E024A Professional & Pollution SIR applies per policy ter			Each Claim \$2,000,000 Annual Aggregate \$2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required) Evidence of Insurance. For Professional Liability coverage, the Aggregate Limit is the total insurance available for claims presented within the policy period for all operations of the insured. The Limit will be reduced by payments of indemnity and expense.

CERTIFICATE HOLDER	CANCELLATION
	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
Arcadis U.S., Inc.	AUTHORIZED REPRESENTATIVE
630 Plaza Drive, Suite 200 Highlands Ranch CO 80129 USA	Aon Prish Services South Inc.

CANCELL ATION

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OFFICIANT HOLDES

AGENCY CUSTOMER ID: 570000005571

LOC#:



ADDITIONAL REMARKS SCHEDULE

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AGENDA

- Background
- AMI Steering Committee
- Consultant Selection
- Project Scope and Schedule
- Recommendation





BACKGROUND

- AMI Feasibility and Static Meter Study reviewed with Board in 2024
- Conclusions: Implementing AMI with static meters will:
 - Increase service level to IRWD Customers; ensure meter performance and meter reading reliability.
 - \$46.6 million in avoided costs.
- Next Steps: Issue Request for Proposal (RFP) for consultant services:
 - Phase 1: Develop a Detailed Implementation Plan
 - Phase 2: Procurement Guidance
 - Phase 3: AMI Deployment Project





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IRWD AMI STEERING COMMITTEE

Interdepartmental Team to oversee project:

- 1. Draft RFP for consultant services
- 2. Coordinate with consultants
- 3. Assess IRWD readiness for AMI
- 4. Evaluate proposals from consultants and AMI vendors
- Prepare status reports to Senior Management
- 6. Prepare recommendations to IRWD Board







REQUEST FOR PROPOSALS

Phase 1: Detailed Implementation Plan

Focus on the desired AMI solution and general implementation approach

Plan

Phase 2: Procurement Strategy

• Provide guidance throughout the AMI procurement phase



Phase 3: Implementation Project Management

- Pending selection of AMI solution
 - Project Management for implementing AMI
- · Contingent upon separate Board approval



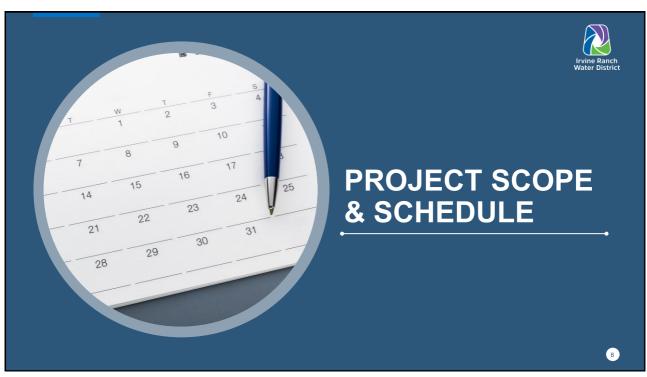


ARCADIS

- ✓ Dedicated and experienced team:
 - Specialists in AMI funding strategies and meter performance
- √ Thorough and adaptable approach
- ✓ Understanding of IRWD and objectives
- √ Local presence
- ✓ Ability to meet schedule
- ✓ Appropriate cost







PHASE 1: DETAILED IMPLEMENTATION PLAN

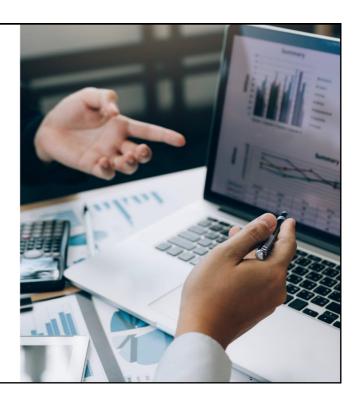
Purpose:

Prepare for the AMI Procurement and Implementation.

Tasks:

- 1. Review Existing Information
- 2. Develop Detailed Implementation Plan:
 - a. Funding
 - b. Procurement Strategy
 - c. Data Management
 - d. Change Management
 - e. Deployment
 - f. Customer Outreach Plan
 - g. Project Schedule





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PHASE 2: AMI PROCUREMENT

Purpose:

Guide IRWD through the AMI procurement process.

Tasks:

- 1. Develop AMI Request for Proposal.
- 2. RFP administration and evaluation support.
- 3. Contract negotiations.





PHASE 3: AMI PROJECT MANAGEMENT AND SUPPORT

Purpose:

Provide project management and oversight for the AMI implementation to ensure adherence to project scope, budget, and schedule.

Tasks:

Staff will return to the Board for approval of the selected AMI solution and a Phase 3
Scope of Work and Budget.





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PROJECT SCHEDULE

		202	25	2	026			20	27			2028		2029				2030		
	Tasks	Q3	Q4 (Q1 Q2	Q3	Q4	Q1	Q2	Q3	Q4 (Q1 C	2 Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2 (Q3 Q4
	Phase 1: Detailed Implementation Plan																			
<u>.s.</u>	Task 1.1: Review of Existing Information					Π														
Arcadis	Task 1.2: Develop Detailed AMI Implementation Plan					Π												П		
¥	Task 1.3 Phase 1 Project Management																			
	Phase 2: Procurement																			
10	Task 2.1: Develop AMI Request for Proposals																			
ij	Task 2.2: RFP Administration and Evaluation Support					Π												П		
Arcadis	Task 2.3: Contract Negotiations																			
1	Task 2.4: Phase 2 Project Management																			
	Phase 3: AMI Implementation Project Management and Support Service	es																		
	Task 3.1 Systems Integrations Support and Testing																	П		
<u>.v.</u>	Task 3.2: Data Management																	П		
Arcadis	Task 3.3: Oversee Change Management Plan																	П		
¥	Task 3.4: Performance Analysis and Validation Testing																			
	Task 3.5: Phase 3 Owner's Agent Project Management																			
<u> </u>	Project Initiation and Deployment Planning																			
endor	Software Integration																			
\ e	Initial Deployment																			
Σ	Full Deployment																			
⋖	Project Close Out																			





RECOMMENDATION

- That the Board authorize the General Manager to execute a Professional Services Agreement with Arcadis in the amount of \$432,930 for the development of a detailed AMI Implementation Plan and providing AMI procurement services; and
- Approve an increase to the budget for Projects 12514 and 12515 by \$170,000 each for a total amount of \$340,000.





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