# Agenda

# Sacramento Suburban Water District Special Board Meeting

3701 Marconi Avenue, Suite 100 Sacramento, California 95821

Tuesday, November 25, 2014 6:00 p.m.

Where appropriate or deemed necessary, the Board may take action on any item listed on the agenda, including items listed as information items. Public documents relating to any open session item listed on this agenda that are distributed to all or a majority of the members of the Board of Directors less than 72 hours before the meeting are available for public inspection in the customer service area of the District's Administrative Office at the address listed above.

The public may address the Board concerning an agenda item either before or during the Board's consideration of that agenda item. Persons who wish to comment on either agenda or non-agenda items should fill out a Comment Card and give it to the General Manager. The President will call for comments at the appropriate time. Comments will be subject to reasonable time limits (3 minutes).

In compliance with the Americans with Disabilities Act, if you have a disability, and you need a disability-related modification or accommodation to participate in this meeting, then please contact Sacramento Suburban Water District Human Resources at 679.3972. Requests must be made as early as possible, and at least one full business day before the start of the meeting.

#### Call to Order

#### Roll Call

#### Announcements

#### **Public Comment**

This is the opportunity for the public to comment on non-agenda items within the Board's jurisdiction. Comments are limited to 3 minutes.

#### Item for Discussion and Action

1. Antelope Pump Back Project – Revised Memorandum of Understanding (MOU) with San Juan Water District and Award of Construction Contract Consider approving a revised MOU with San Juan Water District and awarding a contract for construction of new pumping facilities.

SSWD Special Board Meeting Agenda November 25, 2014 Page 2 of 2

#### Director's Comments/Staff Statements and Requests

The Board and District staff may ask questions for clarification, and make brief announcements and comments, and Board members may request staff to report back on a matter, or direct staff to place a matter on a subsequent agenda.

Closed Session (Closed Session Items are not opened to the public) None.

Adjournment

#### **Upcoming Meetings**

Monday, December 15, 2014 at 6:30 p.m., Regular Board Meeting

Tuesday, December 16, 2014 at 6:30 p.m., Sacramento Suburban Water District and San Juan Water District Joint Board Meeting

I certify that the foregoing agenda for the November 25, 2014 meeting of the Sacramento Suburban Water District Board of Directors was posted by November 20, 2014 in a publicly-accessible location at the Sacramento Suburban Water District office, 3701 Marconi Avenue, Suite 100, Sacramento, California, and was freely available to the public.

Robert S. Roscoe General Manager/Secretary Sacramento Suburban Water District



# Agenda Item: 1

Date: November 20, 2014

**Subject:** Antelope Pump Back Project – Revised Memorandum of Understanding with

San Juan Water District and Award of Construction Contract

Staff Contact: John E. Valdes, Engineering Manager

#### **Recommended Board Action:**

It is recommended that the Board of Directors: a) Approve a revised Memorandum of Understanding (MOU) between San Juan Water District (SJWD) and Sacramento Suburban Water District for the Antelope Pump Back Project and authorize the General Manager to execute the MOU, attached as Exhibit 3, on behalf of the District; and b) Subject to approval of Item a., Award contract for construction of the pump station to W.M. Lyles Co. in the amount of \$3,364,000.

#### **Discussion:**

This item was presented for Board consideration at the November 17, 2014 Regular Board Meeting. A motion to adopt the staff recommendation failed on a 2-2 vote with Directors Thomas and Schild opposed and Director Gayle absent. Staff was directed to schedule a special meeting to attempt to resolve the issue. The remainder of the staff report is the same as what was presented previously.

Design of the Antelope Pump Back Pump Station ("Pump Back") project was completed in September 2014 by the District's engineer, Domenichelli & Associates (D&A). As designed, the Pump Back project consists of the construction of a 50' x 35' (1,750 square foot) metal insulated building, two 5,000 gallons per minute (gpm) high head vertical turbine pumps, one 2,000 gpm low head pump, new transformer and electrical service, switchboard, MCC and site electrical, new standby generator, flow meters, offsite electrical work and all other work required to complete the work as shown on the plans and specified in the contract documents. The engineer's estimate of probable construction cost is \$2,515,000.

On October 9, 2014, an Invitation to Bid (ITB) for the construction of the Pump Back project was published in the Sacramento Bee. The ITB was also distributed to three plan centers. A mandatory pre-bid meeting was held on October 16th. A total of 12 general contractors attended the mandatory pre-bid meeting. These are the only general contractors that were allowed to bid on the project.

Antelope Pump Back Project – Revised Memorandum of Understanding with San Juan Water District and Award of Construction Contract November 20, 2014
Page 2 of 3

The bid opening was held at 3:00 pm on Thursday, November 6, 2014. Bids were received from nine general contractors. A tabulation of bids received is attached as Exhibit 1. As indicated, the lowest, responsive, responsible bidder was W.M. Lyles Co. at \$3,364,000. This low bid amount is approximately 33.8 percent above the engineer's estimate. The second low bid (as submitted by Aztec Consultants) was only 2.8 percent above the low bid.

D&A has reviewed the submitted bids and analyzed why the low bid was so much higher than the engineer's estimate. Their analysis and conclusions are provided in the attached memorandum dated November 10, 2014 (see Exhibit 2).

In their memorandum, D&A has also recommended bid award to W.M. Lyles Co. They also mention the possibility that potential cost savings could be realized by "value engineering" the project with W.M. Lyles Co. after the contract is awarded. This same approach was performed by the District in 2006 on the Enterprise/Northrop Reservoir and Booster Pump Station project and cost savings over \$100,000 were realized through value engineering. Staff concurs with D&A's recommendation to both award the contract to W.M. Lyles Co. and to proceed with value engineering with the contractor.

At the June 2014 Board Meeting, the Board adopted a MOU with SJWD that documented the understanding of each District regarding the planning, design, engineering, construction, and construction administration for the proposed construction of a pump-back booster pump station. This same MOU was also approved by the SJWD Board of Directors. Paragraph 5.a. of the MOU outlined the cost sharing details for the project. The total cost for planning, design, construction, and construction administration for the Project was estimated to be approximately \$2,900,000 based on a March 14, 2014 pre-design level cost estimate (as prepared by D&A). The MOU indicated that the agencies had agreed that SJWD will pay approximately 79 percent of the costs of the Project work and SSWD will pay approximately 21 percent of the Project costs based on the cost estimate breakdown. It was also stated in this same paragraph that "The Agencies agree that the final Project costs may vary by 10 percent and the final cost allocations may vary by 5 percent from the March 14, 2014 estimate without the need to renegotiate this MOU."

As a result of the bids received on this project, the "final Project costs" will exceed the estimate in the MOU by greater than 10 percent. Therefore, it is necessary to renegotiate the MOU with updated costs. The current estimated total cost of the project is \$3.9 million. A revised MOU is attached as Exhibit 3. This revised MOU has already been approved by SJWD's Board of Directors. Note that after an analysis of the low bid from W.M. Lyles Co.; the cost sharing percentages will remain exactly the same, with 79 percent of the project costs to be paid by SJWD and 21 percent to be paid by SSWD. Proposed changes in the MOU are shown in Exhibit 4, a version tracking changes.

A formal agreement for the ownership, operation, maintenance, and capital replacement of the project must still be finalized and approved by both Boards. A draft agreement has been

Antelope Pump Back Project – Revised Memorandum of Understanding with San Juan Water District and Award of Construction Contract November 20, 2014
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prepared that is currently under review by staff from both agencies. The Boards of both Districts have approved "principles of agreement" for the final O&M agreement.

#### **Fiscal Impact:**

The current estimated total cost of the project is \$3.9 million. This cost would be shared by SSWD (21%) and SJWD (79%). Approximately \$982,000 in grant funds are available to offset this cost.

#### **Strategic Plan Alignment:**

Facilities and Operations – 2.B. Monitor and improve the District's efficiencies in operating and maintaining system infrastructure.

Facilities and Operations – 2.C. Develop cost-effective strategies utilizing appropriate technology and other available resources to achieve optimization in delivery of water and enhance service.

This project is in agreement with these goals because this project will provide for conjunctive use opportunities and groundwater substitution transfers. This project will also allow SSWD operators more operational flexibility by moving water into the Arvin Area to improve water service and reliability.

Antelope Pumpback Pump Station Project - Bid Tabulation

11/11/2014

No.	ITEM	\ \ \	/. M. Lyles	Az Consu	tec		yers and Sons astruction	Sı	/blon Reid	Co	nco West	l	Auburn		stern 'ater		Manito struction, Inc.		Preston Pipelines		Engineers Estimate	Estir	ngineers mate + 10% intingency
1	Mobilization, Administration, Permits, Asbuilt Drawings	\$	100,000			\$		\$	165,000	\$	73,000	\$			266,000	\$	255,300		185,000	\$	100,000	\$	110,000
2	Traffic Control	\$	15,000	\$	3,500	\$	15,000	\$	14,000	\$	25,000	\$	13,000	\$	8,000	\$	17,000	\$	29,000	\$	5,000	\$	5,500
3	Erosion and Sediment Control Compliance	\$	5,000	\$	3,500	\$	20,000	\$	7,000	\$	15,000	\$	33,000	\$	3,000	\$	7,200	\$	17,000	\$	10,000	\$	11,000
4	Demolition	\$	24,000	\$	15,500	\$	20,000	\$	20,000	\$	40,000	\$	20,000	\$	29,000	\$	10,000	\$	30,000	\$	10,000	\$	11,000
5	Site grading and Paving	\$	70,000	\$	95,200	\$	105,000	\$	100,000	\$	75,000	\$	61,000	\$	82,000	\$	87,000	\$	140,000	\$	40,000	\$	44,000
6	350 HP (5,000 gpm) Pumpback Pumps	\$	215,000	\$ 2	53,200	\$	290,000	\$	260,000	\$	260,000	\$	294,000	\$	264,000	\$	268,700	\$	314,000	\$	180,000	\$	198,000
7	70 HP (2,000 gpm) Pump Around Pump	\$	85,000	\$	75,000	\$	90,000	\$	85,000	\$	80,000	\$	71,000	\$	85,000	\$	108,200	\$	103,000	\$	55,000	\$	60,500
8	48-inch Flow Meter, Vault & Piping	\$	200,000	\$ 2	16,300	\$	300,000	\$	240,000	\$	334,000	\$	276,000	\$	251,000	\$	259,800	\$	500,000	\$	144,000	\$	158,400
9	36-inch intake manifold piping, fittings and valves	\$	170,000	\$ 1	.51,000	\$	165,000	\$	175,000	\$	235,000	\$	194,000	\$	172,000	\$	245,000	\$	263,000	\$	201,500	\$	221,650
10	36-inch discharge manifold (for 4-pumps) piping, fittings and valves	\$	195,000	\$ 2	03,400	\$	175,000	\$	200,000	\$	235,000	\$	185,000	\$	183,000	\$	222,600	\$	256,000	\$	190,000	\$	209,000
11	Future Roseville Intertie piping and valve vault	\$	55,000	\$	34,000	\$	40,000	\$	50,000	\$	35,000	\$	64,000	\$	64,000	\$	59,900	\$	46,000	\$	20,000	\$	22,000
12	Chlorine Residual and pH Monitoring and Sample Water Holding Tank	\$	85,000	\$	92,500	\$	80,000	\$	75,000	\$	75,000	\$	90,000	\$	94,000	\$	84,800	\$	100,000	\$	27,000	\$	29,700
13	Miscellaneous piping & Valves	\$	45,000	\$	16,400	\$	40,000	\$	20,000	\$	25,000	\$	62,000	\$	35,000	\$	84,600	\$	100,000	\$	34,000	\$	37,400
14	Metal Insulated Building	\$	460,000	\$ 2	63,000	\$	315,000	\$	320,000	\$	275,000	\$	270,000	\$	533,000	\$	322,100	\$	382,000	\$	226,050	\$	248,655
15	Site Electrical, switchboard and MCC	\$	1,031,000	\$ 1,3	310,000	\$	1,175,000	\$	1,255,000	\$	1,270,000	\$	1,200,000	\$ 1,	041,000	\$	1,232,600	\$	1,497,000	\$	601,200	\$	661,320
16	Transformer and Electrical service	\$	115,000	\$ 1	165,000	\$	80,000	\$	180,000	\$	110,000	\$	121,000	\$	120,000	\$	135,500	\$	165,000	\$	135,000	\$	148,500
17	SCADA Improvements	\$	60,000	\$	61,500	\$	60,000	\$	55,000	\$	55,000	\$	55,000	\$	64,000	\$	55,300	\$	69,000	\$	70,000	\$	77,000
18	Standby Generator	\$	285,000	\$ 2	289,000	\$	240,000	\$	250,000	\$	225,000	\$	242,000	\$	277,000	\$	268,500	\$	285,000	\$	190,000	\$	209,000
19	Verner Pressure Reducing Station Improvements	Ś	140,000	Š 1	135,000	s	130,000	s	150,000	\$	225,000	s	172,000	\$	154,000	Š	164.800	s	161.000	Ś	48,000	Ś	52,800
20	C-Bar-C Station Improvements	\$	9,000	<del></del>	24,000	_	9,000	<del>-</del>	7,000	\$	22,000	\$	8,000	_	9,000	\$	11,100	\$	25,000	Ė	Included in	<del></del>	
		\$	3,364,000	\$ 3,4	159,000	\$	3,499,000	\$	3,628,000	\$	3,689,000	\$	3,699,300	\$ 3,	734,000	\$	3,900,000	\$	4,667,000	\$	2,286,750	\$	2,515,000



# DOMENICHELLI AND ASSOCIATES, INC.

#### CIVIL ENGINEERING

#### MEMORANDUM

November 10, 2014

TO: John Valdes, SSWD FROM: Joe Domenichelli

#### SUBJECT: EVALUATION OF BID PARTICIPATION AND BID RESULTS

This memorandum summarizes the bids obtained for the Antelope Pumpback Pump Station Project. The bid results, a comparison of bid costs, and our conclusions and recommendations are presented below.

As you are aware, the bids for the Antelope Pump Station Project were received by the District and opened on November 5, 2014 at 3:00 P.M., local time. The bids were read aloud and checked to verify signatures, licensing, inclusion of the Bid Bond and acknowledgement of all Addendums. A summary of the bids, in order from lowest to highest, is provided in the table below. A breakdown of the bid unit costs was forwarded to the District under separate cover.

#### **Bid Process and Results:**

Domenichelli & Associates (D&A) furnished Bid Documents to SSWD which advertised the project as required by Public Contract Code. A significant number of general contractors, subcontractors, suppliers and sub-tier vendors expressed interest in the project. Based upon the interest, a significant level of competition was anticipated.

General Contractors were required to attend the mandatory pre-bid meeting and site tour on October 16, 2014. Bids from the following General Contractors were received and opened on November 5, 2014:

W. M. Lyles	\$	3,364,000
Aztec Consultants	\$	3,459,000
Myers and Sons Construction	\$	3,499,000
Syblon Reid	\$	3,628,000
Conco West	\$	3,689,000
Auburn Constructors	\$	3,699,300
Western Water	\$	3,734,000
Manito Construction, Inc.	\$	3,900,000
Preston Pipelines	\$	4,667,000
Engineer's Estimate	\$2.2	to 2.5 million



# DOMENICHELLI AND ASSOCIATES, INC.

#### CIVIL ENGINEERING

A total of 9 bids were received which is considered a good number of bids to be able to compare pricing between contractors.

#### **Comparison of Bids:**

A review of the bids received indicates most of the bids were in the \$3.4 to \$3.7 million range. The low bid was \$3,364,000. The lowest three bids were within 4% of each other. This would suggest the bids received are a reasonable representation of the actual cost of the project.

#### **Comparison of Bid to Engineers Estimate:**

The bid amounts were significantly higher that the Engineer's Estimate of \$2.3 to \$2.5 million. A cost breakdown table that compares the bids received to the Engineer's Estimate is attached. As indicated on the table, the low bid exceeds the Engineer's Estimate by approximately \$860,000.

Several items are significantly different in cost between the estimated cost and bid cost.

- In general, costs as a whole were higher than expected. This could be accounted for in the tight construction schedule required, as well as recent rises in material costs. In addition, the economy is continuing to improve and contractors are beginning to bid higher on work as they are busier.
- Steel Building: The Engineer's Estimate of \$226,000 for the steel building was based upon the recently constructed Antelope PRV Station Security Building along with several other projects D&A was involved in. The bid of \$460,000 from W. M. Lyles was the second highest of the bids received. The average bid was \$336,000. The reason for this difference may be due to the added complexity of the foundation work around the underground pump cans.
- Another contributing factor for the difference between the Engineer's Estimate and the actual bid result is due to some design changes made after the time when the estimate was generated. Added electrical costs included additional SMUD requirements for the new service such as added junction boxes and conduit runs within the landscaped corridor, electrical requirements added at the Verner PRS for a new meter and electrical controls for addition of the chlorine & pH monitoring system. In addition, a safety cover was added to the above monitoring system with along with a larger holding tank to collect waste flow and drainage.

#### **Conclusions and Recommendations:**



# DOMENICHELLI AND ASSOCIATES, INC.

#### CIVIL ENGINEERING

- 1. The bid results obtained suggest there was sufficient competition to promote fair pricing.
- 2. The lowest three bid results obtained were within 4% of each other. As stated above, this indicates the bids are reliable.
- 3. Possible cost savings may be realized by meeting with the low bid contractor and "Value Engineering" the project. The contractor may have ideas on how to cut cost in some areas. As long as the quality of materials and construction are not compromised, these ideas should be considered.

From the reading of the bids, the apparent low bidder is W. M. Lyles Co. of West Sacramento, California, with a total amount of \$3,364,000. A detailed review of the bid submitted by W. M. Lyles Co. indicated that the bid was totaled correctly and all of the required forms and signatures were submitted.

W. M. Lyles Co. has worked for SSWD on previous projects and the District was satisfied with their performance. It is our opinion that the proposed work is well within their expertise and capabilities. It is therefore our opinion that the lowest responsible bidder is W. M. Lyles Co. and we recommend award of the project in the amount of \$3,364,000.00 (Three Million, Three hundred Sixty Four Thousand Dollars and Zero Cents).

Please let us know if you have any questions or require additional information. We look forward to working with the District during construction to ensure a successful project.

Sincerely,

Joseph Domenichelli, PE, President,

Domenichelli & Associates, Inc.

#### Antelope Pumpback Pump Station Project - Bid Tabulation

#### 11/11/2014

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No.	ITEM		/. M. Lyles	1	ztec sultants		yers and Sons	,	yblon Reid		onco West		Auburn		estern fater		Manito nstruction, Inc.		Preston Pipelines	Engin Estin		Estir	ngineers nate + 10% ntingency
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1	Mobilization, Administration, Permits, Asbuilt Drawings	\$	100,000	\$	52,000	\$	150,000	\$	165,000	\$	73,000	\$	268,300	\$	266,000	\$	255,300	\$	185,000	\$ 1	.00,000	\$	110,000
2	Traffic Control	\$	15,000	\$	3,500	\$	15,000	\$	14,000	\$	25,000	\$	13,000	\$	8,000	\$	17,000	\$	29,000	\$	5,000	\$	5,500
3	Erosion and Sediment Control Compliance	\$	5,000	\$	3,500	\$	20,000	\$	7,000	\$	15,000	\$	33,000	\$	3,000	\$	7,200	\$	17,000	\$	10,000	\$	11,000
4	Demolition	\$	24,000	\$	15,500	\$	20,000	\$	20,000	\$	40,000	\$	20,000	\$	29,000	\$	10,000	\$	30,000	\$	10,000	\$	11,000
5	Site grading and Paving	\$	70,000	\$	95,200	\$	105,000	\$	100,000	\$	75,000	\$	61,000	\$	82,000	\$	87,000	\$	140,000	\$	40,000	\$	44,000
6	350 HP (5,000 gpm) Pumpback Pumps	\$	215,000	\$	253,200	\$	290,000	\$	260,000	\$	260,000	\$	294,000	\$	264,000	\$	268,700	\$	314,000	\$ 1	80,000	\$	198,000
7	70 HP (2,000 gpm) Pump Around Pump	\$	85,000	\$	75,000	\$	90,000	\$	85,000	\$	80,000	\$	71,000	\$	85,000	\$	108,200	\$	103,000	\$	55,000	\$	60,500
8	48-inch Flow Meter, Vault & Piping	\$	200,000	\$	216,300	\$	300,000	\$	240,000	\$	334,000	\$	276,000	\$	251,000	\$	259,800	\$	500,000	\$ 1	44,000	\$	158,400
9	36-inch intake manifold piping, fittings and valves	\$	170,000	\$	151,000	\$	165,000	\$	175,000	\$	235,000	\$	194,000	\$	172,000	\$	245,000	\$	263,000	\$ 2	01,500	\$	221,650
10	36-inch discharge manifold (for 4-pumps) piping, fittings and valves	\$	195,000	\$	203,400	\$	175,000	\$	200,000	\$	235,000	\$	185,000	\$	183,000	\$	222,600	\$	256,000	\$ 1	190,000	\$	209,000
11	Future Roseville Intertie piping and valve vault	\$	55,000	\$	34,000	\$	40,000	\$	50,000	\$	35,000	\$	64,000	\$	64,000	\$	59,900	\$	46,000	\$	20,000	\$	22,000
12	Chlorine Residual and pH Monitoring and Sample Water Holding Tank	\$	85,000	\$	92,500	\$	80,000	\$	75,000	\$	75,000	\$	90,000	\$	94,000	\$	84,800	\$	100,000	\$	27,000	\$	29,700
13	Miscellaneous piping & Valves	\$	45,000	\$	16,400	\$	40,000	\$	20,000	\$	25,000	\$	62,000	\$	35,000	\$	84,600	\$	100,000		34,000		37,400
14	Metal Insulated Building	\$	460,000	\$	263,000	\$	315,000	\$	320,000	\$	275,000	\$	270,000	\$	533,000	\$	322,100	\$	382,000	\$ 2	26,050	Ś	248,655
15	Site Electrical, switchboard and MCC	\$	1,031,000	\$ 1,	,310,000	\$	1,175,000	\$	1,255,000	\$	1,270,000	\$	1,200,000	\$ 1,	041,000	\$	1,232,600	\$	1,497,000		01,200		661,320
16	Transformer and Electrical service	\$	115,000	\$	165,000	\$	80,000	\$	180,000	\$	110,000	\$	121,000	\$	120,000	\$	135,500	\$	165,000	\$ 1	35,000	\$	148,500
17	SCADA Improvements	\$	60,000	\$	61,500	\$	60,000	\$	55,000	\$	55,000	\$	55,000	\$	64,000	\$	55,300	\$	69,000	\$	70,000		77,000
18	Standby Generator	\$	285,000	\$	289,000	\$	240,000	\$	250,000	\$	225,000	\$	242,000	\$	277,000	\$	268,500	\$	285,000	\$ 1	90,000	_	209,000
19	Verner Pressure Reducing Station Improvements	\$	140,000	\$	135,000	\$	130,000	\$	150,000	\$	225,000	\$	172,000	\$	154,000	\$	164,800	\$	161,000		48,000		52,800
20	C-Bar-C Station Improvements	\$	9,000	+	24,000		9,000	_	7,000	_	22,000	_	8,000		9,000	\$	11,100	_	25,000		cluded in	_	
		\$	3,364,000	\$ 3,	,459,000	\$	3,499,000	\$	3,628,000	\$	3,689,000	\$	3,699,300	\$ 3,	734,000	\$	3,900,000	\$	i		86,750		2,515,000

# REVISED MEMORANDUM OF UNDERSTANDING REGARDING THE SAN JUAN WATER DISTRICT AND SACRAMENTO SUBURBAN WATER DISTRICT ANTELOPE PUMP-BACK BOOSTER PUMP STATION PROJECT

This Memorandum of Understanding ("MOU") regarding the planning, design and engineering for a joint pump-back station is made effective on November 17, 2014, by and between the San Juan Water District ("SJWD") and Sacramento Suburban Water District ("SSWD"), both California public agencies with the authority to carry out the project described herein. SJWD and SSWD are collectively referred to herein as the "Agencies" and individually as an "Agency."

## **RECITALS**

- A. The purpose of this MOU is to document the understanding of the Agencies regarding the planning, design, engineering, construction, and construction administration for the proposed construction of a pump-back station, which the Agencies would jointly own, operate and maintain and which would be called the Antelope Pump-Back Booster Pump Station (the "Project"). This MOU is intended to govern the allocation of responsibilities and costs for the joint design, engineering, planning and construction phase work undertaken by SJWD and SSWD while they develop a formal agreement for the ownership, operation, maintenance, and capital replacement of the Project.
- B. The Project is intended to provide groundwater supplies to SJWD during dry years, planned outages of United States Bureau of Reclamation ("USBR") or SJWD's Water Treatment Plant facilities, or emergencies when SJWD's surface water supplies are reduced. SJWD relies on surface water diverted from Folsom Reservoir as its main supply source, but that source is inadequate for supplying the desired minimum levels of service to SJWD if deliveries from Folsom Reservoir are compromised by USBR operations, drought or system failure. A new pump-back facility would supplement SJWD's water supplies during times of limited surface water availability from Folsom Reservoir. In addition, SSWD will benefit from the Project by installing facilities to pump water from the northern-most portion of SSWD's North Service Area (NSA) where the Project will be located to the southern portion of the NSA to improve the water supply reliability within that zone.
- C. The Project will be located at SSWD's Antelope Pressure Reducing Station Site on Antelope North Road within the SSWD service area. The Project will enable the Agencies to pump groundwater supplies to areas where those supplies are needed. Operational SCADA controls and flow meters will be installed to facilitate this new pumping system.

- D. SSWD has contracted with Domenichelli & Associates to conduct planning and engineering studies and to design the Project. SJWD and SSWD staffs are cooperating on the design of the Project and providing necessary information and data related to that design to Domenichelli & Associates.
- E. The initial engineering studies for the Project indicate that SSWD currently has sufficient groundwater supplies to deliver approximately 10,000 gallons per minute ("gpm"), or 14.4 million gallons per day ("MGD") to the Project. Although it is the intent to maintain or increase available groundwater supplies for the project, the Agencies understand that the available groundwater supply may change in the future based on increased or decreased SSWD customer demands, changes in groundwater quality or regulations, decommissioning of existing wells, addition of new wells, success of conservation programs, or other unforeseen circumstances. Ownership in the Project facilities by SJWD does not imply or provide ownership in the existing SSWD groundwater supply or other facilities necessary to utilize the Project.
- F. As design, engineering, and construction work progresses, SJWD and SSWD will negotiate and prepare an Agreement for Ownership, Utilization, Operation and Maintenance of the Project (the "Agreement"). The Agencies intend that the Project will be jointly owned according to the final allocation of its construction cost; however, the Agreement will determine the Agencies' respective ownership of the Project and allocate capacity and costs for operation, maintenance, capital replacements and repairs of the Project.
- G. Groundwater supplies pumped by the Project will be delivered through existing, and potentially new, transmission and distribution system facilities. Any agreements necessary for the utilization, operation, maintenance, capital replacements and repairs of those transmission and distribution facilities will be separate from, and are not covered by this MOU and future Agreements for the Project.
- H. SSWD has been paying the costs for and directing Domenichelli & Associates' work required to complete preliminary investigations, initial planning, design, and engineering work for the Project. The Agencies have agreed that SSWD will continue to manage and direct the Project planning and design work. SJWD will actively participate in the planning process, design reviews, and other project activities to ensure that the project meets both agencies' needs.
- I. The Agencies agree that there is a need to construct the Project and desire to avoid delay in its planning, design, engineering, and construction. This MOU is intended to facilitate that work by providing a written understanding between the Agencies on the scope of the Project and a basis for cost sharing prior to finalizing and executing the Agreement.

#### **UNDERSTANDING**

- 1. <u>Incorporation of Recitals</u>. The Agencies agree that foregoing recitals are true and that they are incorporated herein by reference.
- 2. <u>Lead Agency</u>. SSWD will continue to act as lead Agency for the planning, design and engineering phases of the Project and will provide primary direction to Domenichelli & Associates and/or other Consultants contracted to work on the Project. SJWD and SSWD will cooperate to ensure that the Project is designed to meet both Agencies' requirements and will share all information and data required to enable Consultants to perform all tasks necessary to plan, design and engineer the Project. SSWD will also act as lead during the bidding and construction phase of the Project and will provide primary direction for construction management and inspection. SJWD will participate and assist during the bidding and construction phase to ensure the constructed facilities meet both Agencies' requirements.
- 3. <u>Scope of MOU</u>. The Agencies agree this MOU covers Project work completed before the date of this MOU through the expiration or termination of this MOU, as provided in Section 9 below.
- 4. <u>Project Scope</u>. The Agencies intend that the Project be designed with the following benefits provided to SJWD and SSWD:
  - a. SJWD:
  - Provide pumping capacity of 10,000 gpm, with space reserved within the Project footprint to install an additional 5,000 gpm pump and controls.
  - Provide improved water supply reliability during drought or Folsom Reservoir low level conditions and/or extended emergency or planned outages of USBR or SJWD's Water Treatment Plant facilities.
  - Provide a minimum supplemental water supply of 11 MGD to satisfy at least minimum levels of service demand in the portions of SJWD's service area that do not have access to water supplies other than Folsom Reservoir.
  - Allow for improved system operations during dry year, planned outages, and emergency conditions to maximize well production in the existing wholesale service area.
  - Increase opportunities for SJWD to participate in conjunctive use projects.
  - Increase SJWD's opportunities to execute water transfers by providing access to a more diverse water supply portfolio.

#### b. SSWD:

- Install a low-head 2,000 gpm to pump water from the northern-most portion of the NSA to the southern portion of the NSA to improve the water supply reliability within the southern zone.
- Install SCADA controls and flow meters to facilitate the new pumping system, which will permit SSWD staff to increase the NSA's operational flexibility.
- Increase SSWD's opportunities to execute water transfers by providing access to a more diverse water supply portfolio.
- Increase the sustainability of the groundwater basin through increased in-lieu water banking opportunities.
- Maximize SSWD's capital investment in the CTP by increasing pumping options.

### 5. <u>Cost Sharing</u>.

- a. The total costs for planning, design, construction, and construction administration for the Project is estimated to be approximately \$3,900,000 based on a November 11, 2014 cost estimate prepared by Domenichelli & Associates. SJWD's and SSWD's respective obligations to pay the estimated total cost of the Project will be reduced by the net amount of grant funding received as provided in Section 7 of this MOU. The Agencies have agreed that SJWD will pay approximately 79 percent of the costs of the Project work and SSWD will pay approximately 21 percent of the Project costs based on Domenichelli & Associates' cost estimate breakdown. The Project cost estimate and cost allocations will be updated from time to time as the Project work progresses and finalized when construction is completed. The Agencies agree that the final Project costs may vary by 10 percent and the final cost allocations may vary by 5 percent from the November 11, 2014 estimate without the need to renegotiate this MOU.
- b. SSWD has already incurred costs for the planning and pre-design of the Project, for which SSWD will invoice SJWD using the above cost allocation.
- c. The foregoing cost allocation also will apply to costs incurred for legal work, work performed by other consultants, permits, and/or other direct costs related to this MOU.
- d. The Agencies agree that each agency will be responsible for its own staff time and expenses to administer the Project work.
- 6. <u>Invoices and Payments</u>. SSWD will provide itemized invoices to SJWD monthly. SJWD will pay all invoices received from SSWD for Project work within 30 days of receipt.
- 7. <u>Grant Funding</u>. SSWD has secured two grants that it may be permitted to apply to the costs of the Project. One grant is in the amount of \$264,000 with an expiration date of June 1,

2016 and was awarded by the California Department of Water Resources under a Proposition 84 Implementation Grant. The second grant was awarded by USBR in the amount of \$300,000 for SSWD to construct an in-conduit hydroelectric generation facility and pump-back project. Because of timing and SSWD's decision not to construct the in-conduit hydro facility, USBR may reduce the amount of this grant. The Agencies are also pursuing other grant opportunities. The Agencies have agreed that the total amount of all available grant funds will be applied without allocation to the total cost of the Project and that only the remaining unfunded costs of the Project will be allocated in accordance with Section 5 of this MOU.

- 8. <u>Participation by Others</u>. The Agencies acknowledge that SSWD has agreed to design the Project to include a connection that may be used in the future by others, potentially including the City of Roseville. SSWD will pay the costs of planning, designing and constructing this connection from its share of Project costs and will negotiate separately with the City of Roseville or others for any cost-sharing or reimbursement for this connection.
- 9. <u>Term of MOU</u>. This MOU will be effective as of the effective date stated above and will remain in effect until the execution of an Agreement for Ownership, Utilization, Operation and Maintenance of the Project. This MOU also may be terminated by either SJWD or SSWD upon 30 days' written notice to the other Agency.
- 10. <u>Amendment</u>. The terms of this MOU may be modified or amended only by written amendment approved and executed by both Agencies.
- 11. <u>Cooperation</u>. SJWD and SSWD will reasonably cooperate with each other, including the execution of all necessary documents and providing of all information and data required to carry out the purpose and intent of this MOU.
- 12. <u>Counterparts</u>. This MOU may be executed in two or more counterparts, each of which will be deemed an original, but all of which together will constitute one and the same instrument.

SAN JUAN WATER DISTRICT:	SACRAMENTO SUBURBAN WATER DISTRICT:
By:	By:
Shauna Lorance General Manager	Robert S. Roscoe General Manager

# REVISED MEMORANDUM OF UNDERSTANDING REGARDING THE SAN JUAN WATER DISTRICT AND SACRAMENTO SUBURBAN WATER DISTRICT ANTELOPE PUMP-BACK BOOSTER PUMP STATION PROJECT

This Memorandum of Understanding ("MOU") regarding the planning, design and engineering for a joint pump-back station is made effective on November 17, 2014June 16, 2014, by and between the San Juan Water District ("SJWD") and Sacramento Suburban Water District ("SSWD"), both California public agencies with the authority to carry out the project described herein. SJWD and SSWD are collectively referred to herein as the "Agencies" and individually as an "Agency."

#### **RECITALS**

- A. The purpose of this MOU is to document the understanding of the Agencies regarding the planning, design, engineering, construction, and construction administration for the proposed construction of a pump-back station, which the Agencies would jointly own, operate and maintain and which would be called the Antelope Pump-Back Booster Pump Station (the "Project"). This MOU is intended to govern the allocation of responsibilities and costs for the joint design, engineering, planning and construction phase work undertaken by SJWD and SSWD while they develop a formal agreement for the ownership, operation, maintenance, and capital replacement of the Project.
- B. The Project is intended to provide groundwater supplies to SJWD during dry years, planned outages of United States Bureau of Reclamation ("USBR") or SJWD's Water Treatment Plant facilities, or emergencies when SJWD's surface water supplies are reduced. SJWD relies on surface water diverted from Folsom Reservoir as its main supply source, but that source is inadequate for supplying the desired minimum levels of service to SJWD if deliveries from Folsom Reservoir are compromised by USBR operations, drought or system failure. A new pump-back facility would supplement SJWD's water supplies during times of limited surface water availability from Folsom Reservoir. In addition, SSWD will benefit from the Project by installing facilities to pump water from the northern-most portion of SSWD's North Service Area (NSA) where the Project will be located to the southern portion of the NSA to improve the water supply reliability within that zone.
- C. The Project will be located at SSWD's Antelope Pressure Reducing Station Site on Antelope North Road within the SSWD service area. The Project will enable the Agencies to pump groundwater supplies to areas where those supplies are needed. Operational SCADA controls and flow meters will be installed to facilitate this new pumping system.

- D. SSWD has contracted with Domenichelli & Associates to conduct planning and engineering studies and to design the Project. SJWD and SSWD staffs are cooperating on the design of the Project and providing necessary information and data related to that design to Domenichelli & Associates.
- E. The initial engineering studies for the Project indicate that SSWD currently has sufficient groundwater supplies to deliver approximately 10,000 gallons per minute ("gpm"), or 14.4 million gallons per day ("MGD") to the Project. Although it is the intent to maintain or increase available groundwater supplies for the project, the Agencies understand that the available groundwater supply may change in the future based on increased or decreased SSWD customer demands, changes in groundwater quality or regulations, decommissioning of existing wells, addition of new wells, success of conservation programs, or other unforeseen circumstances. Ownership in the Project facilities by SJWD does not imply or provide ownership in the existing SSWD groundwater supply or other facilities necessary to utilize the Project.
- F. As design, engineering, and construction work progresses, SJWD and SSWD will negotiate and prepare an Agreement for Ownership, Utilization, Operation and Maintenance of the Project (the "Agreement"). The Agencies intend that the Project will be jointly owned according to the final allocation of its construction cost; however, the Agreement will determine the Agencies' respective ownership of the Project and allocate capacity and costs for operation, maintenance, capital replacements and repairs of the Project.
- G. Groundwater supplies pumped by the Project will be delivered through existing, and potentially new, transmission and distribution system facilities. Any agreements necessary for the utilization, operation, maintenance, capital replacements and repairs of those transmission and distribution facilities will be separate from, and are not covered by this MOU and future Agreements for the Project.
- H. SSWD has been paying the costs for and directing Domenichelli & Associates' work required to complete preliminary investigations, initial planning, design, and engineering work for the Project. The Agencies have agreed that SSWD will continue to manage and direct the Project planning and design work. SJWD will actively participate in the planning process, design reviews, and other project activities to ensure that the project meets both agencies' needs.
- I. The Agencies agree that there is a need to construct the Project and desire to avoid delay in its planning, design, engineering, and construction. This MOU is intended to facilitate that work by providing a written understanding between the Agencies on the scope of the Project and a basis for cost sharing prior to finalizing and executing the Agreement.

#### UNDERSTANDING

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- Increase SSWD's opportunities to execute water transfers by providing access to a more diverse water supply portfolio.
- Increase the sustainability of the groundwater basin through increased in-lieu water banking opportunities.
- Maximize SSWD's capital investment in the CTP by increasing pumping options.

### 5. <u>Cost Sharing</u>.

- a. The total costs for planning, design, construction, and construction administration for the Project is estimated to be approximately \$32,900,000 based on a November 11 March 14, 2014 cost estimate prepared by Domenichelli & Associates. SJWD's and SSWD's respective obligations to pay the estimated total cost of the Project will be reduced by the net amount of grant funding received as provided in Section 7 of this MOU. The Agencies have agreed that SJWD will pay approximately 79 percent of the costs of the Project work and SSWD will pay approximately 21 percent of the Project costs based on Domenichelli & Associates' cost estimate breakdown. The Project cost estimate and cost allocations will be updated from time to time as the Project work progresses and finalized when construction is completed are received. The Agencies agree that the final Project costs may vary by 10 percent and the final cost allocations may vary by 5 percent from the November 11, 2014 March 14, 2014 estimate without the need to renegotiate this MOU.
- b. SSWD has already incurred costs for the planning and pre-design of the Project, for which SSWD will invoice SJWD using the above cost allocation.
- c. The foregoing cost allocation also will apply to costs incurred for legal work, work performed by other consultants, permits, and/or other direct costs related to this MOU.
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SAN JUAN WATER DISTRICT:	SACRAMENTO SUBURBAN WATER DISTRICT:
By:	Ву:
Shauna Lorance General Manager	Robert S. Roscoe General Manager