

**ENGINEER'S OPINION OF PROBABLE COSTS**

Client/Owner: **County of Yolo / City of Davis**

Project: **North Davis Meadows Water System Consolidation**

Percent Complete: **Final PS&E - Reduced Fire Flows using existing system**

Prepared By: **AJU**

Review By:

Date: **6-Dec-2018**



ITEM	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL	SRF Eligible
1	Mobilization	1	LS	\$ 140,000	\$ 140,000	Yes
2	Sheeting, Shoring and Bracing	1	LS	\$ 66,000	\$ 66,000	Yes
3	Traffic Control	1	LS	\$ 60,000	\$ 60,000	Yes
4	Storm Water Pollution Prevention	1	LS	\$ 15,000	\$ 15,000	Yes
5	Construction Surveying and Staking	1	LS	\$ 40,000	\$ 40,000	Yes
6	Landscape and Site Restoration	1	LS	\$ 86,000	\$ 86,000	Yes
7	Obtain City of Davis Encroachment Permit for Metered Connection	102	EA	\$ 1,100	\$ 112,200	Yes
8	14-inch Diameter Water Main in County Road 99D R/W	5393	LF	\$ 265	\$ 1,429,145	Yes
9	14-inch Diameter Water Main in golf course property	1353	LF	\$ 215	\$ 290,895	Yes
10	14-inch Diameter Water Main in residential road/path	181	LF	\$ 240	\$ 43,440	Yes
11	12-inch Diameter Water Main in golf course and county property	1848	LF	\$ 165	\$ 304,920	Yes
12	12-inch Diameter water pipe in residential road/path	293	LF	\$ 190	\$ 55,670	Yes
13	8-inch Diameter water pipe in residential road/path	1451	LF	\$ 160	\$ 232,160	Yes
14	14-inch Diameter Restrained Joint DIP Water Main in 27-inch Bore-and-Jack Casing in County Road 99D ('CR99D' 301+53 TO 302+15) (62 LF)	1	LS	\$ 130,000	\$ 130,000	Yes
15	6-inch Diameter Bypass Pipe Installation with One (1) 6-inch Gate Valve complete with tees, taps and fittings	4	EA	\$ 8,000	\$ 32,000	Yes
16	Fire Hydrant assembly (not including gate valve) and lateral with hot tap connection	2	EA	\$ 10,000	\$ 20,000	Yes
17	Remove Existing Fire Hydrant assembly and cap lateral	2	EA	\$ 2,000	\$ 4,000	Yes
18	14-inch Butterfly Valve and Box	3	EA	\$ 7,900	\$ 23,700	Yes
19	12-inch Gate Valve and Box	3	EA	\$ 5,500	\$ 16,500	Yes
20	8-inch Gate Valve and Box	9	EA	\$ 3,200	\$ 28,800	Yes
21	6-inch Gate Valve and Box	5	EA	\$ 3,000	\$ 15,000	Yes
22	4-inch Low-point Blow-Off Valve Assembly with Box	1	EA	\$ 16,000	\$ 16,000	Yes
23	1-inch Combination Air Valve Assembly with Cover and bollards	3	EA	\$ 9,000	\$ 27,000	Yes
24	1.5-inch Service from Main Through Meter Valve	5	EA	\$ 4,600	\$ 23,000	Yes
25	2-inch Service from Main Through Meter Valve	5	EA	\$ 5,100	\$ 25,500	Yes
26	2-inch Irrigation Service From Main Through Meter Valve	3	EA	\$ 5,100	\$ 15,300	Yes
27	2-inch Meter with Anode, Valve, Box and Lid (Irrigation)	3	EA	\$ 3,000	\$ 9,000	Yes
28	1.5-inch Meter with Anode, Valve, Box and Lid (Irrigation)	5	EA	\$ 3,000	\$ 15,000	Yes
29	1-inch Meter with Anode, Valves, Box and Lid (Case 1) on Existing service	55	EA	\$ 3,100	\$ 170,500	Yes
30	1-inch Meter with Anode, Valve, Box and Lid (Case 2) on Existing service	39	EA	\$ 2,900	\$ 113,100	Yes
31	Locate and expose existing service valve	18	EA	\$ 600	\$ 10,800	Yes
32	2-inch backflow preventer assembly	1	EA	\$ 3,300	\$ 3,300	Yes
33	1-inch Water Service and Sampling Station	1	EA	\$ 6,000	\$ 6,000	Yes
34	Install 1-inch Service and Stub for Pressure Transducer/Sensor	1	EA	\$ 4,000	\$ 4,000	Yes
35	Transmission Main Tie-In County Road 99D	1	LS	\$ 10,000	\$ 10,000	Yes
36	Transmission Main Tie-Ins to Existing Mains in Fairway Drive and at STA 'GCSA' 104+69	1	LS	\$ 12,000	\$ 12,000	Yes
37	Water Main Tie-Ins for Upsize to 8-inch mains	1	LS	\$ 24,000	\$ 24,000	Yes
38	Disconnect and Cap Pipes from Existing Wells	1	LS	\$ 7,500	\$ 7,500	Yes

SUBTOTAL \$ 3,637,430

SRF ELIGIBLE SUBTOTAL \$ 3,637,430

PREMIUM FOR CONTRACTOR'S MARKET 0% \$ -

CONTINGENCY 10% \$ 363,743

SRF ELIGIBLE CONTINGENCY \$ 363,743

TOTAL (rounded) \$ 4,001,000

SRF ELIGIBLE TOTAL (rounded) \$ 4,001,000

NON-ELIGIBLE TOTAL (rounded) \$ -

**NOTES:**

Premium for Contractor's Market set to zero due to recent lull in underground pipeline construction sector with the assumption that the County can advertise project for bids this Winter.

**Required Equipment Installations by City of Davis**

Aclara System Data Collector Unit Antenna for Automated Meter Reading System to be supplied, installed and activated by City of Davis  
 Pressure sensor with SCADA/telemetry equipment to be supplied, installed and activated by City of Davis

SUBTOTAL (rounded) \$ 12,000

SUBTOTAL (rounded) \$ 20,000

SRF ELIGIBLE TOTAL (rounded) \$ 32,000

NON-ELIGIBLE TOTAL (rounded) \$ -

**Well Site Decommissioning**

See Next Page for Details

TOTAL (rounded) \$ 275,000

SRF ELIGIBLE TOTAL (rounded) \$ 275,000

NON-ELIGIBLE TOTAL (rounded) \$ -

**Pipe System Plus Well Site Decommissioning**

TOTAL (rounded) \$ 4,308,000

SRF ELIGIBLE TOTAL (rounded) \$ 4,308,000

NON-ELIGIBLE TOTAL (rounded) \$ -

**ENGINEER'S OPINION OF PROBABLE COSTS**

Client/Owner: **County of Yolo / City of Davis**

Project: **North Davis Meadows Water System Consolidation -  
Well Site Decommissioning**

Percent Complete: **Conceptual**

Prepared By: **AJU**

Review By:

Date: **7-Nov-2018**



ITEM	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL	SRF Eligible
<b>NDM1 Well DESTRUCTION, Tank Removal &amp; Site Demo</b>						
1	Mobilization	1	LS	\$ 7,000	\$ 7,000	Yes
2	Destroy NDM1 Well	1	LS	\$ 70,000	\$ 70,000	Yes
3	Remove Tank and Chlorination System	1	LS	\$ 50,000	\$ 50,000	Yes
4	Demo Site piping & booster pumps	1	LS	\$ 15,000	\$ 15,000	Yes
5	Demo Site pads, pavement and fencing	1	LS	\$ 10,000	\$ 10,000	No?
					\$ -	
SUBTOTAL					\$ 152,000	
<b>NDM2 Well Capping &amp; Site Demo</b>						
1	Mobilization	1	LS	\$ 4,000	\$ 4,000	Yes
2	Destroy NDM2 Well	1	LS	\$ 70,000	\$ 70,000	Yes
4	Demo Site piping	1	LS	\$ 6,000	\$ 6,000	Yes
5	Demo Site pads and modify pavement and fencing	1	LS	\$ 7,000	\$ 7,000	Yes
					\$ -	
SUBTOTAL					\$ 87,000	

TOTAL	\$ 239,000
SRF ELIGIBLE SUBTOTAL	\$ 239,000
PREMIUM FOR CONTRACTOR'S MARKET	0% \$ -
CONTINGENCY	15% \$ 35,850
SRF ELIGIBLE CONTINGENCY	\$ 36,000
TOTAL (rounded)	\$ 275,000
<b>SRF ELIGIBLE TOTAL (rounded)</b>	<b>\$ 275,000</b>
<b>NON-ELIGIBLE TOTAL (rounded)</b>	<b>\$ -</b>

**NOTES:**

The NDM2 site is assumed to be left as some form of enclosure with equipment for irrigation controls and the added pressure monitoring and SCADA equipment. Based on Joshua Reuhlig response to Nellie of Ponticello, site demolition and basic reconfiguration is assumed to be SRF eligible.