		Agenda Item No	**C-2**
DATE SUBMITTED	08//19//2016	CITY COUNCIL ACTION	(X)
		PUBLIC HEARING REQUIRED	( )
SUBMITTED BY	Public Serv.Dir	RESOLUTION	( )
		ORDINANCE 1ST READING	( )
DATE ACTION REQUIRED	08/24/2016	ORDINANCE 2ND READING	( )

IMPERIAL CITY COUNCIL
AGENDA ITEM

SUBJECT: **DISCUSSION/ACTION PURCHASE OF SPECIAL EQUIPMENT – WATER TREATMENT PLANT TO REPLACE RAW WATER FLOW METER.**

1. APPROVAL TO PURCHASE RAW WATER FLOW METER FROM CONTROL SYSTEM IN THE AMOUNT OF $16,192.60

DEPARTMENT INVOLVED: Water Treatment

BACKGROUND/SUMMARY: The water treatment plant raw water meter has stopped working. It had been checked by the electronic technician and is not repairable due to age and damage. Staff has contacted Control Systems about the replacement of the meter. There are two options proposed by Control Systems, which is attached for review. Staff agrees with Control System in recommending Plan B. This meter is the same as the current effluent meter at the plant and will match with all existing equipment and the SCADA system.

FISCAL IMPACT: $16,192.60

STAFF RECOMMENDATION: Council approves purchase of new meter in the amount of $16,192.60

MANAGER'S RECOMMENDATION: MANAGER'S INITIAL JG

MOTION:

SECONDED:	APPROVED	( )	REJECTED	( )
AYES:	DISAPPROVED	( )	DEFERRED	( )
NAYES:				
ABSENT:	REFERRED TO:			

CONTROL SYSTEMS ENGINEERING, INC.
License 558496

P O Box 128, Murrieta, CA 92564
VOICE 951.696.3689 FAX (888)398-2734
www.ControlSystemsEng.com

August 17, 2016

Mr. Fernando Viesca
County of Imperial Water Plant
201 South B Street
Imperial, CA 92251

RE: Raw Water Flowmeter Proposal

Dear Fernando:

To address the issue with the raw water flowmeter, I wanted to provide you with two options and two cost proposals. Please see the following.

Plan A – The first option is to replace the propeller meter with a second insertion mag meter and add a hot tap valve. To supplement the insertion mag meter with a second mag meter would require verification the insertion meter can be placed in top of the pipe. After installation, both insertion mag meters should be protected with a sunshade.

Plan A Cost Proposal: $7,981.82

Plan B – The second option is to install a new Sparling inline mag meter. This would require replacing the spool piece and victaulic to flange pipe section to do the installation. It is my opinion that this option will be the most accurate measurement of flow and require the least amount of maintenance.

Plan B Cost Proposal: $16,192.69

Please let me know how you would like to proceed. If you have any questions or need additional information, please feel free to contact me at 951-551-6347.

Sincerely,

Eric A. Blom
President

Control Systems Engineering, Inc.
P O Box 128, Murrieta, CA 92564
Phone 951.696.3689 Fax 888.398.2734

COST ESTIMATE SUMMARY

Cost Estimate #: **A2016-08**

To: County of Imperial Water Plant
201 South B Street
Imperial, CA 92251

CSEI Job Number: T&M
8/17/2016

Attention: Fernando Viesca

Date Revised:

DESCRIPTION:
Supplement insertion meter with second insertion mag meter

Totals Transfered from Estimate of Direct Costs					TOTALS
(1) Total BURDENED Labor Costs	(2) Total Material Costs	(3) Total Equip Costs			
2,561.32	3,100.08		Subtotal 1, 2 and 3	(5)	$5,661.40
Workman's Comp...		23%			
FICA Combined Med & Soc...		10%			
Calif State Training...		1%			
Calif State and Fed UI...		6%			
Total Labor Burden		40%	of (1)	(6)	$1,024.53
**Riverside County Sales Tax		8.00%	of (2)	(7)	$248.01
Material Shipping & Handling Costs				(8)	$45.00
			Subtotal (5) thru (8)	(9)	$6,978.93
Contractor Labor Markup			15%		$537.88
Contractor Material Markup			15%		$465.01
TOTAL PROPOSED COST OF CHANGE ORDER					**$7,981.82**

REMARKS:
PREVAILING LABOR RATES FOR IMPERIAL COUNTY
JOURNEYMAN ELECTRICIANs

Eric Blom, Project Manager
8/17/2016

CONTF SYSTEMS ENGINEERING INC

Job: **0**

Supplement insertion meter with second insertion mag meter

0

Cost Estimate #: **A2016-08**

Contractor's Estimate of Costs

No.	Item of Work	No. of Units	Unit	Labor M.H. Per Unit	Labor M.H. Total	Labor Cost/ M.H.	Labor Total Cost	Material Unit Cost	Material Total Cost	Equipment Unit Cost	Equipment Total Cost
1	Insertion Mag Meter, Seametrics EX250	1.00	EA	0.000	0.00	0.00	$0.00	$1,864.00	$1,864.00	$0.00	$0.00
2	Indicator, Seametrics FT440W	1.00	EA	0.000	0.00	0.00	$0.00	$500.00	$500.00	$0.00	$0.00
3	Labor, Journeyman Electrician	1.00	LUMP	8.000	8.00	57.69	$461.52	$0.00	$0.00	$0.00	$0.00
4	Labor, Laborer	1.00	LUMP	10.000	10.00	50.48	$504.80	$0.00	$0.00	$0.00	$0.00
5	Sunshades	2.00	EA	0.000	0.00	0.00	$0.00	$300.00	$600.00	$0.00	$0.00
6	Travel Time	1.00	LUMP	5.000	5.00	55.00	$275.00	$0.00	$0.00	$0.00	$0.00
7	Mileage	252.00	MILES	0.000	0.00	0.00	$0.00	$0.54	$136.08	$0.00	$0.00
8	Engineering, Evaluation, Measursements	1.00	LUMP	8.000	8.00	165.00	$1,320.00	$0.00	$0.00	$0.00	$0.00
9			EA	0.000	0.00	0.00	$0.00	$0.00	$0.00	$0.00	$0.00
10			EA	0.000	0.00	0.00	$0.00	$0.00	$0.00	$0.00	$0.00
11			EA	0.000	0.00	0.00	$0.00	$0.00	$0.00	$0.00	$0.00
12			EA	0.000	0.00	0.00	$0.00	$0.00	$0.00	$0.00	$0.00
13			EA	0.000	0.00	0.00	$0.00	$0.00	$0.00	$0.00	$0.00
14			EA	0.000	0.00	0.00	$0.00	$0.00	$0.00	$0.00	$0.00
15			EA	0.000	0.00	0.00	$0.00	$0.00	$0.00	$0.00	$0.00
16			EA	0.000	0.00	0.00	$0.00	$0.00	$0.00	$0.00	$0.00
17			EA	0.000	0.00	0.00	$0.00	$0.00	$0.00	$0.00	$0.00
18			EA	0.000	0.00	0.00	$0.00	$0.00	$0.00	$0.00	$0.00
19			EA	0.000	0.00	0.00	$0.00	$0.00	$0.00	$0.00	$0.00
20			EA	0.000	0.00	0.00	$0.00	$0.00	$0.00	$0.00	$0.00
21			EA	0.000	0.00	0.00	$0.00	$0.00	$0.00	$0.00	$0.00
22			EA	0.000	0.00	0.00	$0.00	$0.00	$0.00	$0.00	$0.00
23			EA	0.000	0.00	0.00	$0.00	$0.00	$0.00	$0.00	$0.00
24			EA	0.000	0.00	0.00	$0.00	$0.00	$0.00	$0.00	$0.00
25			EA	0.000	0.00	0.00	$0.00	$0.00	$0.00	$0.00	$0.00
26			EA	0.000	0.00	0.00	$0.00	$0.00	$0.00	$0.00	$0.00
	ITEM TOTALS				31		$2,561.32		$3,100.08		$0.00

Control Systems Engineering, Inc.
P O Box 128, Murrieta, CA 92564
Phone 951.696.3689 Fax 888.398.2734

COST ESTIMATE SUMMARY

Cost Estimate #: **B2016-08**

To: County of Imperial Water Plant
201 South B Street
Imperial, CA 92251

CSEI Job Number: T&M
8/17/2016

Attention: Fernando Viesca

Date Revised:

DESCRIPTION:
Replace raw water flow meter with Sparling Magnetic Flow Meter

Totals Transfered from Estimate of Direct Costs					TOTALS
(1) Total BURDENED Labor Costs	(2) Total Material Costs	(3) Total Equip Costs			
2,561.32	9,775.58		Subtotal 1, 2 and 3	(5)	$12,336.90
Workman's Comp...		23%			
FICA Combined Med & Soc...		10%			
Calif State Training...		1%			
Calif State and Fed UI...		6%			
Total Labor Burden		40%	of (1)	(6)	$1,024.53
**Riverside County Sales Tax		8.00%	of (2)	(7)	$782.05
Material Shipping & Handling Costs				(8)	$45.00
			Subtotal (5) thru (8)	(9)	$14,188.47
Contractor Labor Markup			**15%**		$537.88
Contractor Material Markup			**15%**		$1,466.34
TOTAL PROPOSED COST OF CHANGE ORDER					**$16,192.69**

REMARKS:
PREVAILING LABOR RATES FOR IMPERIAL COUNTY
JOURNEYMAN ELECTRICIANs

Eric Blom, Project Manager
8/17/2016

CONTF SYSTEMS ENGINEERING INC

Job: 0

Cost Estimate #: B2016-08

Replace raw water flow meter with Sparling Magnetic Flow Meter

0

Contractor's Estimate of Costs

No.	Item of Work	No. of Units	Unit	Labor M.H. Per Unit	Labor M.H. Total	Labor Cost/ M.H.	Labor Total Cost	Material Unit Cost	Material Total Cost	Equipment Unit Cost	Equipment Total Cost
1	Sparling Mag Flow Meter, Quote #Q1608-019	1.00	EA	0.000	0.00	0.00	$0.00	$6,604.50	$6,604.50	$0.00	$0.00
2	Spool and Gaskets	1.00	EA	0.000	0.00	0.00	$0.00	$3,000.00	$3,000.00	$0.00	$0.00
3	Labor, Journeyman Electrician	1.00	LUMP	8.000	8.00	57.69	$461.52	$0.00	$0.00	$0.00	$0.00
4	Labor, Laborer	1.00	LUMP	10.000	10.00	50.48	$504.80	$0.00	$0.00	$0.00	$0.00
5	Paint	1.00	EA	0.000	0.00	0.00	$0.00	$35.00	$35.00	$0.00	$0.00
6	Travel Time	1.00	LUMP	5.000	5.00	55.00	$275.00	$0.00	$0.00	$0.00	$0.00
7	Mileage	252.00	MILES	0.000	0.00	0.00	$0.00	$0.54	$136.08	$0.00	$0.00
8	Engineering Evaluation, Measurements	1.00	LUMP	8.000	8.00	165.00	$1,320.00	$0.00	$0.00	$0.00	$0.00
9			EA	0.000	0.00	0.00	$0.00	$0.00	$0.00	$0.00	$0.00
10			EA	0.000	0.00	0.00	$0.00	$0.00	$0.00	$0.00	$0.00
11			EA	0.000	0.00	0.00	$0.00	$0.00	$0.00	$0.00	$0.00
12			EA	0.000	0.00	0.00	$0.00	$0.00	$0.00	$0.00	$0.00
13			EA	0.000	0.00	0.00	$0.00	$0.00	$0.00	$0.00	$0.00
14			EA	0.000	0.00	0.00	$0.00	$0.00	$0.00	$0.00	$0.00
15			EA	0.000	0.00	0.00	$0.00	$0.00	$0.00	$0.00	$0.00
16			EA	0.000	0.00	0.00	$0.00	$0.00	$0.00	$0.00	$0.00
17			EA	0.000	0.00	0.00	$0.00	$0.00	$0.00	$0.00	$0.00
18			EA	0.000	0.00	0.00	$0.00	$0.00	$0.00	$0.00	$0.00
19			EA	0.000	0.00	0.00	$0.00	$0.00	$0.00	$0.00	$0.00
20			EA	0.000	0.00	0.00	$0.00	$0.00	$0.00	$0.00	$0.00
21			EA	0.000	0.00	0.00	$0.00	$0.00	$0.00	$0.00	$0.00
22			EA	0.000	0.00	0.00	$0.00	$0.00	$0.00	$0.00	$0.00
23			EA	0.000	0.00	0.00	$0.00	$0.00	$0.00	$0.00	$0.00
24			EA	0.000	0.00	0.00	$0.00	$0.00	$0.00	$0.00	$0.00
25			EA	0.000	0.00	0.00	$0.00	$0.00	$0.00	$0.00	$0.00
26			EA	0.000	0.00	0.00	$0.00	$0.00	$0.00	$0.00	$0.00
	ITEM TOTALS				31		$2,561.32		$9,775.58		$0.00

PATTEN SYSTEMS, INC.

15598 Producer Lane
Huntington Beach, CA 92649
Tel: (714)-799-5656 Fax: (714)-799-5353

August 12, 2016

Control Systems Engineering
Attn: Eric Blom
P.O. Box 128
Murrieta, CA 92564

Ph: 951-551-6347

eric@controlsystemseng.com

Quote #Q1608-019
Ref : City of Imperial 13.06-05R1

As a Representative for **Sparling Instruments,** we are pleased to offer our quotation for the following:

Reference Information
Max Pressure: (please advise)
Max Temperature: (please advise)
Flow Media: (please advise)
Flow Range: 0-_____ GPM (please advise)

Item 1
Qty 1

Sparling Magnetic Flow Meter, Tigermag Series
FM656
20 = 20" Size
5 = Polyurethane Liner, NSF Approved
1 = 316SS Electrodes
A = Flanged 150# ANSI B16.5
3= Remote Mount NEMA 4X/ 7 Enclosure with accidental submergence proof sensor and cable for remote transmitter (See item 1A below)
1= 24 VDC Power
HART = HART Protocol Included
Part No. FM656-205-1A3-1-HART
Unit Price $6,228.00 **Total Price: $6,228.00**

NOTE: If NSF approved polyurethane liner is required, change p/n to: FM656-20A-1A3-1-HART

Item 1A
Qty *

Sparling **50** ft. of Cable **Part #CS656050** (add $4.50/ ft. over **50**ft.)
Unit Price: $94.50 **Total Price: $94.50**

Item 1B
Qty 1 set

Sparling Grounding Rings **Part #AC615-20-1**
AC615 = Grounding Rings
20 = 20" Size
1 = 304SS Material
Unit Price $282.00 **Total Price: $282.00**

Notes/ Exceptions:

1) Sparling is not responsible for field installation. Installation is to be handled by the on site contractor. All meters are flow tested and calibrated at a NIST certified flow lab prior to shipping. No in-field volumetric calibration/ testing is required or available unless proper piping is constructed for volumetric flow test. A manufacturer's representative can be present at the final start-up to verify installation and instruct district personnel on operation of the meter.

2) If a Sparling Service person is required, service rates are $130.00/ hour Portal to Portal (Mon-Fri, 8:00AM to 5:00PM) plus mileage and expenses. Rates increase for off hours and weekends.

3) Accuracy: 0.5% of Flow Rate, Repeatability: ± 0.1% full scale

Prices listed do not include any applicable taxes, set-up, training or freight charges.

PLEASE ISSUE ORDER TO:

Sparling Instruments
c/o Patten Systems, Inc.
15598 Producer Lane
Huntington Beach, CA 92649

Materials purchased will be shipped and invoiced directly by Sparling Instruments. Shipment can be made in approximately **2-4** weeks from receipt of order. Terms of payment are Net 30 days from invoice date, **F.O.B. El Monte, CA.** Prices quoted are firm for 60 days from this date.

We thank you for this opportunity to offer our quotation and we look forward to working with you. If we can be of any further service or assistance, please contact us.

Regards,

John Raia