

CITY of NOVI CITY COUNCIL

Agenda Item G October 8, 2007

SUBJECT Approval to purchase five sanitary sewer flow meters associated with the Capacity Management Operations and Maintenance (CMOM) Phase III tasks from HESCO, the lowest responsive bidder, in the amount of \$22,050.80.

SUBMITTING DEPARTMENT: Engineering/Water & Sewer /24

CITY MANAGER APPROVAL: PWA for COP

EXPENDITURE REQUIRED	\$22,050.80
AMOUNT BUDGETED	\$392,778 (\$96,100 awarded to OHM; pilot area manholes and cleaning and televising remains to be awarded)
LINE ITEM NUMBER	592-592.00-936.500

BACKGROUND INFORMATION:

The purchase of new sanitary sewer flow meters was identified as one of the critical path items for the recently awarded Capacity, Management, Operations and Maintenance (CMOM) Phase III tasks. The existing flow meters are approximately six years old and have reached the end of their serviceable life. Additionally, the existing meters utilize radar to detect the velocity of the flow which requires smooth (laminar) flow. This technology limits the locations in which the meter can be installed to those that are straight runs of sanitary sewer. The new meters would utilize Doppler technology to detect the velocity in any flow condition (laminar or turbulent) which allows the Water and Sewer Department more flexibility for installation.

Orchard Hiltz & McCliment (OHM), the consultant for the CMOM Phase III tasks, requested quotations from vendors for three brands of sanitary sewer meters that meet the requirements of the Water and Sewer Department. OHM then evaluated the quotations for responsiveness, familiarity with equipment, ability to meet the City's needs and price (see attached Equipment Procurement Ranking sheet). The total score and cost estimate for each brand are as shown below:

Vendor	Meter Manufacturer	Total Evaluation Score	Equipment Quote
HESCO	ISCO	39	\$22,050.80
Midwest Municipal Instrumentation	Sigma	27	\$21,710.00
Midwest Municipal Instrumentation	Marsh-McBirney	26	\$24,245.00

While the lowest quotation was from Midwest Municipal Instrumentation for a Sigma meter, the Sigma meters would not meet all of the City's needs for the reasons stated in the attached ranking The Engineering Department and Water and Sewer Department agree with the recommendation from OHM to purchase the ISCO sanitary sewer meters from HESCO.

RECOMMENDED ACTION: Approval to purchase five sanitary sewer flow meters associated with the Capacity Management Operations and Maintenance (CMOM) Phase III tasks from HESCO, the lowest responsive bidder, for the amount of \$22,050.80.

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Mayor Landry	 			1
Mayor Pro Tem Capello				1
Council Member Gatt				
Council Member Margolis	 			1

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Council Member Mutch	
Council Member Nagy	
Council Member Paul	

September 27, 2007



Brian T. Coburn, P.E. City of Novi Engineering Department 45175 West Ten Mile Road Novi, MI 48375

Regarding: City of Novi Flow Monitoring Equipment Purchase Recommendation

Dear Mr. Coburn:

We have received and reviewed flow monitoring equipment quotes for the Novi CMOM Phase III project. Quotes were received from Hesco (regarding Isco flow meters) and Midwest Municipal Instrumentation (regarding Sigma and Marsh-McBirney flow meters). The Sigma quote was the least expensive at \$21,710. The Isco quote was \$22,050.80. The Marsh-McBirney quote came in at \$24,245. Please see attached quotes and correspondence for reference.

We ranked all flow metering bids with respect to responsiveness to quote, familiarity with equipment, ability to meet our needs and price. Each item was given a score ranging between 1 and 10, with 10 being the highest and the total score being the basis of recommendation (see attached City of Novi Equipment Procurement Ranking). Based on Isco meters ease of use, their software capabilities, Hesco's products ability to meet our needs, and price near the least expensive, OHM recommends the City of Novi purchase Isco flow meters and equipment from Hesco at a cost of \$22,050.80.

If you have any questions or concerns please feel free to contact me.

Very truly yours,

Orchard, Hiltz & McCliment, Inc.

Daniel A. Schmoekel, E.I.T.

P:\0126 0165\0163073000 CMOM PH III\EWRG\METERING HELP\CORRESPONDENCE\LETTER OF RECOMMENDATION.DOC

CC: Rob Hayes, P.E., City of Novi

Carrie Ricker, P.E., OHM

Robert Czachorski, P.E., OHM

CMOM Phase III

City of Novi Equipment Procurement Ranking

Item	Description	Range	Score Comments
Responsiveness	How quick was the quote returned? If returned before deadline and addressed every item = 10, if quote is not returned = 0	0 - 10	Quote was received before the date requested and addressed all items.
Familiarity with Equipment	10 = very familiary, 0 = not familiar	0 - 10	10 We are very familiar with Isco meters.
Ablility to meet our needs	Software capabilities to archive data and store in database, ease of rain gauge data collection, ease of battery replacement and desiccant replacement	0 - 10	Isco meters, software and products are able to meet our needs. Software capabilities will save labor time due to database features and ability to archive data for transferring between field laptop and system computers. Meter properties allow flexibility in selecting metering locations. Battery replacement and checking the desiccant in meters are both easy and less time consuming (than Sigma and Marsh-McBirney).
Price .	Lowest price = 10. Within % of lowest, score; 05% = 9 10% = 8 20% = 6 30% = 4 40% = 2 50% = 0	0 - 10	9 Isco's quote total is \$22,050.80. This quote is 1.5% higher than the lowest quote.

Item	Description	Range	Score	Comments
Responsiveness	How quick was the quote returned? If returned before deadline and addressed every item = 10, if quote is not returned = 0	0 - 10	7	Quote was received on or before the date requested. However, the quote was slightly confusing and did not include all info that was requested.
Familiarity with Equipment	10 = very familiary, 0 = not familiar	0 - 10	8	Our field staff are not familiar with Sigma equipment nor it's software.
Ablility to meet our needs	Software capabilities to archive data and store in database, ease of rain gauge data collection, ease of battery replacement and desiccant replacement	0 - 10		Sigma meters, software and products would not be able to meet all of our needs. In terms of collecting meter data, Sigma can meet those needs, however there are several areas where the Sigma product falls short. 1) Software - data review and archiving are ineffective and inefficient (or non-existant) 2) Battery Dessicant - not conduscive for checking in the field. 3) Rain Gauge Data Collection - data retrieval is inefficient; access to the gauge and removal of the funnel along with "Rain Logger" box to align next to "Rain Reader" box to collect the data.
Price	Lowest price = 10. Within % of lowest, score; 05% = 9 10% = 8 20% = 6 30% = 4 40% = 2 50% = 0	0 - 10	10	Sigma quote total = \$21,710.

ltem.	Description	Range	Score	Comments
Responsiveness	How quick was the quote returned? If returned before deadline and addressed every item = 10, if quote is not returned = 0	0 - 10	7	Quote was received on or before date as requested. The quote was slightly confusing and did not include all info that was requested.
Familiarity with Equipment	10 = very familiary, 0 = not familiar	0 - 10	10	The City field staff are familiar with Marsh-McBirney equipment and it's software.
Ablility to meet our needs	Software capabilities to archive data and store in database, case of rain gauge data collection, ease of battery replacement and desiceant replacement	0 - 10	1	Marsh-McBirney meters utilize a technology that limits site locations that can be utilized. This would be a significant constraint for the CMOM program.
Price	Lowest price = 10. Within % of lowest, score; 05% = 9 10% = 8 20% = 6 30% = 4 40% = 2 50% = 0	0 - 10	8	Marsh-McBirney quote total = \$24,245. This quote is 12 percent higher than the lowest quote.



28838 Van Dyke • Warren, MI 48093

Phone: 586-978-7200 • Fax: 586-978-2200

www.hesco-mi.com

Monday, September 24, 2007

To:

Orchard, Hiltz & McCliment, Inc.

Daniel Schmoekel

Orchard, Hiltz & McCliment, Inc.

34000 Plymouth Rd Livonia, MI 48150 United States

Phone:

734-522-6711

Fax:

734-522-6427

E-mail:

dan.schmoekel@ohm-advisors.com

Dear Dan -

Attached please find our quote for the flow metering equipment for your Novi project, revised per our phone conversation today.

RFQ #: Verbal

Quotation #: 0338557896GTH-A

Please refer to this number when ordering

I had to add a line item for Freight, which I forgot to include in the original quote.

I thank you for the opportunity to be of assistance and look forward to working with you in the near future. In the meantime, if you have any questions or require any additional information, please do not hesitate to contact me.

Best regards,

Glenn Hummel

Glenn T. Hummel, P.E. HESCO 38828 Van Dyke Avenue Warren, MI 48093 (586) 978-7200 x23 (586) 978-2200 FAX

PRICE QUOTE

Item	Description	Qty	Unit Price	Subtotal
1.00	Teledyne Isco	5	\$2,916.00	\$14,580.00
	68-2050-002 (68-2050-002)			
	2150 Flow Meter			
	2150 Flow Module with 2191 Battery Module. Includes Area Velocity Sensor with 10 ft. (3 m) level measurement range and 33 ft. (10 m) cable, 2 battery holders, and carrying handle with suspension strap. Also includes instruction manual and coupon for free Isco Open Channel Flow Measurement Handbook. Requires Flowlink software and computer connect cable (sold separately).			
2.00	Teledyne Isco	5	\$52.00	\$260.00
	68-3200-008 (68-3200-008)			
	8-inch Spring Ring			
	Spring Ring for 8 inch diameter pipe			
3.00	Teledyne Isco	3	\$316.00	\$948.00
	68-3000-042 (68-3000-042)			
	Scissor Ring 16 to 23-inch			
	Scissors Ring for 16 inch to 23 inch diameter pipes. Includes base section, scissors mechanism, and one pair of 7.5 inch extensions.			
4.00	Teledyne Isco	2	\$396.00	\$792.00
	68-3000-043 (68-3000-043)			
	Scissor Ring 16 to 36-inch			
	Scissors Ring for 16 inch to 36 inch diameter pipes. Includes base section, scissors mechanism, one pair of 7.5 inch extensions, and one pair of 20 inch extensions.			
5.00	Teledyne Isco	2	\$420.00	\$840.00
	68-3000-044 (68-3000-044)			
	Scissor Ring 39 to 43-inch			
	Scissors Ring for 39 inch to 43 inch diameter pipes. Includes base section, scissors mechanism, one pair of 7.5 inch extensions, and one pair of 30 inch extensions.			
6.00	Teledyne Isco	1	\$1,500.80	\$1,500.80

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	68-2540-200 (68-2540-200)			
	Software: Flowlink 5			
	Flowlink 5 Software, two user licenses. For retrieving flow, rainfall, parameter and sample data from Isco 2100 Series Modules and 2101 Field Wizard, 4100 Series Flow Loggers, 4200 Series Flow Meters, 6700 Series Samplers, 676 Logging Rain Gauge System, and 581 Rapid Transfer Device. Stores data in a Microsoft Access database and generates a variety of graphs and tables from stored data. Data can also be exported in ASCII format for analysis by programs such as Microsoft Excel, HTML format for viewing in a web browser, and PDF format for viewing in Adobe Reader. Operates on Windows 98, ME, NT, 2000, or XP. Supplied on CD-ROM. Software supports multiple languages, one of which is selected during installation.			
7.00	Teledyne Isco	1	\$1,220.00	\$1,220.00
	68-3280-002 (68-3280-002)			
	Logging Rain Gage System			
	Rain Logging System, 0.01 inch. Includes 674 tipping bucket rain gauge, 4120 Flow Logger to record rain events, and 50 ft. of connect cable.			
8.00	Teledyne Isco	1	\$160.00	\$160.00
	60-2004-508 (60-2004-508)			
	Communication Cable (Rain Gage)			
	USB Communication Cable, 10 ft. (3 m). Connects 4200 Series Flow Meters and 6700 Series samplers to PC with USB connector.			
9.00	Teledyne Isco	1	\$160.00	\$160.00
	60-2004-507 (60-2004-507)			
	Communication Cable (2100 Series)			
	USB Communication Cable, 10 ft. (3 m). Connects 2100 Series Module top connector to PC with USB connector.			
10.00	Teledyne Isco	3	\$160.00	\$480.00
	60-5314-326 (60-5314-326)			
	Sensor Extension Cable (2100 Series)			
	SPA 1326. 2150 Sensor Extension Cable, built to length, per ft. Maximum length is 75 ft. Specify length when ordering. Extends the distance between the 2150 and the sensor.			
11.00	HESCO	1	\$1,000.00	\$1,000.00

	Standard ground freight rate for Total Order Value \$12,500 - \$24,999			
12.00	Teledyne Isco Freight 4 (Standard ground freight rate for Total Order Value \$250.00 - \$99)	1	\$110.00	\$110.00
	FIELD SERVICE (Start-up & Training - Flow Paced Sampling Flow Meter System) Start-up & Training - 2100 Flow Meter System & Logging Rain Gage Perform one day (8 hours) of in-field training for Flow Meter Field Crews on flow meter and rain gage start-up, operation & maintenance.			

Terms & Conditions						
Proposed Shipping Date To Be Advised Payment Terms Net 30						
Shipping Method Best Way Shipping Terms Prepaid and Added to Invoi						
F.O.B. Factory This Quotation is valid until 2007-10-24.						

If favored with an Order, please issue the Purchase Order to:

Teledyne Isco, Inc. c/o HESCO 4700 Superior Street Lincoln, NE 68504





QUOTATION

Reference: Novi Customer: OHM

Engineer: OHM Bid date:

Date: 09/25/07

Attention: Mr. Daniel Schmoekel

We are pleased to offer our proposal for furnishing and delivering Hach equipment for the above referenced project. Equipment is specifically listed in the attached "Proposed Equipment List." Items required, but not listed, are to be furnished by others.

PROPOSED EQUIPMENT LIST

Freight Pre-Pay & Add estimated freight \$100.00

Does not include taxes

Quantity	Model	Unit Cost
5	3000-1 Flo-Tote 3 flow sensor Electromagnetic velocity Sensor and pressure sensor For level measurement Comes in longer lengths 30 feet of cable provided Accuracy +/- 2% of rate for velocity +/- 5% or better for flow	\$850.00
	Adder for 50 feet of cable Per unit	\$90.00
5	1003-11 Portable Flo-Logger For use with either Flo-Dar or Flo-Tote 3 sensor Battery Operated Waterproof Enclosure Serial Port for Logger Setup and Data Retrieval	\$2,400.00

Prepared by: Curtis Brzyski

4387 Bonnymede Court Jackson, MI 49201

Per ABB Terms & Conditions

E-mail: cbrzyskimmi@msn.com Validity of Proposal: 90 Days FOB: Factory / Delivered

Payment Terms: 100% Net 30 Days from shipment Taxes: Excluded and are the responsibility of the Buyer

Telephone: 517-764-4736

Fax: 517-764-4739

Pager: 517 534 0482

Installation and all on-site services: Not Included

Midwest Municipal Instrumentation Inc. Proposal Page 2 of 3

1	T200-120 software All cables CD's and documentation	\$800.00
5	Includes option #800008106 Mounting Hardware and Band extensions Used to mount sensor in 6 to 9 Inch pipe	\$140.00
2	Includes option #800008101 Mounting Hardware and Scissor Band extensions Used to mount sensor in 16 to 19 Inch pipe	\$475.00
2	Includes option #800008101 Mounting Hardware and Scissor Band extensions Used to mount sensor in 19 to 31 Inch pipe	\$525.00
2	Includes option #800008102 Mounting Hardware and Band extensions Used to mount sensor in 34 to 43 Inch pipe	\$850.00
X	Installation supervision by Martin Controls Per day required	\$1,000.00

RAIN GAGE EQUIPMENT

Rain Gage P#2459

1

	With tipping Bucket, bubble level, level adjust an Base mounting kit	d
1	Rain Logger with battery	\$350.00
1	Rain Reader 115 VAC	\$375.00

Midwest Municipal Instrumentation Incorporated

4387 Bonnymede Court Jackson, MI 49201 Telephone: 517-764-4736 Telefax: 517-764-4739 4282 Jasper Road Jamestown, OH 45335 Telephone: 937-675-3586 Telefax: 937-675-3587

\$700.00

Midwest Municipal Instrumentation Inc. Proposal Page 3 of 3

Curtis Brzyski MMI INC. 517 764 4736

Terms and Conditions

Shipping From: Ames, Iowa, USA

Prices Firm for orders received within 60 days of quote date Shipment within 30 days after the receipt of firm order Payment Terms: Net 30 Days from invoice date

Freight Charges: Pre-Pay and add simplified freight. Please note freight charges have not been included within pricing.

Payment terms are subject to credit review, refer to conditions. Sales/use taxes are not included in quotation. Taxes will be added to invoice unless valid resale exemption certificate is provided. Freight charge schedule attached. Send confirming purchase order for orders \$5,000 or more to address or fax number above.

Note: Hach takes exception to any additional requirements outside of the instrumentation in the specifications and offers and supports the above listed items only. Hach is not responsible for any other requirements within the bid documentation.

One operations maintenance manual is shipped with each of the above instruments. There is a charge for any additional manuals ordered. Only standard OEM manuals and Hach standard submittal packages are available. Custom date, drawings and manuals are not available.

Prices quoted are valid only for orders billing & shipping within the USA, not for ultimate export.

Most items are available within 30 days after receipt of purchase order. Items in stock will ship within 48 hours.

Start-Up services by a company representative are available at an additional charge. Instruments must be plumbed and wired prior to startup.

HACH INC.
GENERAL TERMS AND CONDITIONS OF SALE

Midwest Municipal Instrumentation Incorporated

4387 Bonnymede Court Jackson, MI 49201 Telephone: 517-764-4736 Telefax: 517-764-4739 4282 Jasper Road Jamestown, OH 45335 Telephone: 937-675-3586 Telefax: 937-675-3587





QUOTATION

Reference: Novi Engineer: OHM

Bid date:

Date: 09/25/07

Attention: Mr. Daniel Schmoekel

We are pleased to offer our proposal for furnishing and delivering Hach equipment for the above referenced project. Equipment is specifically listed in the attached "Proposed Equipment List." Items required, but not listed, are to be furnished by others.

PROPOSED EQUIPMENT LIST

Freight Pre-Pay & Add Estimated Freight \$100.00

Does not include taxes

Customer: OHM

Quantity	Model	Unit Cost
5 5	910 AV FLOW METER 4900910 NON OIL-FILLED, SIGMA SUBMERGED A/V SENSOR 77065-030 W/30 FT OF CABLE	
5	BATTERY, DD CELL, 4 PACK 4150-26 DC POWER	
2	INSIGHT FOR WINDOWS & SIGMA FLASH 5254 Included Additional copies if required free of charge	
	TOTAL COST EACH UNIT	\$2,795.00
1	Communication Cable P#1727	\$50.00
1	Cost adder for 50 feet of cable	\$105.00
X	On Site Technical support Per day required	\$1,000.00
Mounting Options		
5	Spring Ring for 8 Inch diameter pipe 1362	\$125.00
2 2	Spring Ring for 16 Inch Diameter pipe 1365 Scissor Band for 18 to 20 Inch Pipe 9706200	\$175.00 \$375.00
2	Scissor Band for 21 to 23 Inch Pipe 970300	\$425.00
2 2	Scissor Band for 24 to 26 Inch Pipe 970400	\$435.00
1	Scissor Band for 30 to 36 Inch Pipe 9706600	\$450.00
2	Scissor Band for 37 to 42 Inch Pipe	\$475.00

Telephone: 517-764-4736

Fax: 517-764-4739

Pager: 517 534 0482

Prepared by:

Curtis Brzyski

4387 Bonnymede Court

Jackson, MI 49201

Per ABB Terms & Conditions

E-mail: cbrzyskimmi@msn.com

Validity of Proposal: 90 Days FOB: Factory / Delivered Payment Terms: 100% Net 30 Days from shipment Taxes: Excluded and are the responsibility of the Buyer

Installation and all on-site services: Not Included

RAIN GAGE EQUIPMENT

1	Rain Gage P#2459 With tipping Bucket , bubble level , level adjust and Base mounting kit	\$700.00
1	Rain Logger with battery	\$350.00
1	Rain Reader 115 VAC	\$375.00

Curtis Brzyski MMI INC. 517 764 4736

Terms and Conditions

Shipping From: Ames, Iowa, USA

Prices Firm for orders received within 60 days of quote date Shipment within 30 days after the receipt of firm order Payment Terms: Net 30 Days from invoice date

Freight Charges: Pre-Pay and add simplified freight. Please note freight charges have not been included within pricing.

Payment terms are subject to credit review, refer to conditions. Sales/use taxes are not included in quotation. Taxes will be added to invoice unless valid resale exemption certificate is provided. Freight charge schedule attached. Send confirming purchase order for orders \$5,000 or more to address or fax number above.

Note: Hach takes exception to any additional requirements outside of the instrumentation in the specifications and offers and supports the above listed items only. Hach is not responsible for any other requirements within the bid documentation.

One operations maintenance manual is shipped with each of the above instruments. There is a charge for any additional manuals ordered. Only standard OEM manuals and Hach standard submittal packages are available. Custom date, drawings and manuals are not available.

Prices quoted are valid only for orders billing & shipping within the USA, not for ultimate export.

Most items are available within 30 days after receipt of purchase order. Items in stock will ship within 48 hours.

Start-Up services by a company representative are available at an additional charge. Instruments must be plumbed and wired prior to startup.

Midwest Municipal Instrumentation Incorporated

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