### **Exhibit A**

### Solicitation IND2122200B1

**Water Meters and Repair Parts** 

**Bid Designation: Public** 



**Broward County Board of County Commissioners** 

## Bid IND2122200B1 Water Meters and Repair Parts

Bid Number IND2122200B1

Bid Title Water Meters and Repair Parts

Question &

Answer End Date Jan 29, 2021 5:00:00 PM EST

Bid Contact Amy Almanzar

**Purchasing** 

aalmanzar@broward.org

Contract Duration 1 year

Contract Renewal 2 annual renewals

Prices Good for 120 days

**Bid Comments** 

This project is for the purchase of Water Meters and Repair Parts for Water & Wastewater Services in accordance with the Specifications and Requirements.

### **Goal Participation:**

This solicitation is open to the general marketplace.

Local Preference: The Broward County Board of Commissioners may amend the local preference ordinance to address vendors that are subsidiaries of nonlocal entities. The local preference requirements for this solicitation will be based upon the local preference ordinance in effect at the time the solicitation is awarded. If as a result of an amendment to the ordinance additional information is required from the Vendors, the Vendors will be allowed appropriate time to submit such information.

Request for Approved Equals: Vendors may submit for Broward County's consideration, a request to approve an equal product for a product/specification of this solicitation. The Request for Approved Equals form must be submitted (by email) no later than 5:00 PM EST on January 29, 2021.

Questions and Answers: The County provides a specified time for Vendors to ask questions and seek clarification regarding the requirements of the solicitation. All questions or clarification inquiries must be submitted through BidSync by the date and time referenced in the solicitation document (including any addenda). The County will respond to all questions via Bid Sync.

Vendor MUST submit its solicitation response electronically and MUST confirm its submittal in order for the County to receive a valid response through BidSync. Refer to the Purchasing Division website or contact BidSync for submittal instructions. It is the Vendor's sole responsibility to assure its response is submitted and received through BidSync by the date and time specified in the solicitation. The County will not consider solicitation responses received by other means. Vendors are encouraged to submit their responses in advance of the due date and time specified in the solicitation document. In the event that the Vendor is having difficulty submitting the solicitation document through BidSync, immediately notify the Purchasing Agent and then contact BidSync for technical assistance.

This is a group bid. A bidder must bid on all items within the group to be considered for award of that group. Bidder to indicate "no charge" for those items that are included at no additional charge. Added on Feb 2, 2021:

Responses to received Request for Approved Equals (RFAE) have been attached.

### Addendum # 1

**New Documents** 

RFAE 1 - IBT AMI Final.pdf

RFAE 2 - Ferguson Enterprises Final.pdf

### Item Response Form

B	INDESCRIPTION OF SECURITION OF	
Item	IND2122200B101-01 - Group 1: Meter, 5/8 Inch lead free brass positive displacement	
Lot Description	Group 1	
Quantity	2200 each	
Unit Price		
Manufacturer Offered		
Model Name		
Part Number		
Delivery (Calendar Days)		
Warranty Main Case (Years)		
Delivery Location	Broward County Board of County Commissioners	
EV0055 WATER AND WASTEWATER SERVICES WAREHOUSE (954) 831-0813 2555 W COPANS ROAD POMPANO BEACH FL 33069 Qty 2200		
<b>Description</b> Meter, 5/8 inch lead fre	ee brass, positive displacement meeting NSF-61 certification, Zenner PDD02 or Approved Equal, as per Specifications.	
Item	IND2122200B101-02 - Group 1: Meter, 3/4 Inch lead free brass positive displacement	
Lot Description	Group 1	
Quantity	10 each	
Unit Price		
Manufacturer Offered		
Model Name		
Part Number		
Delivery (Calendar Days)		
Warranty Main Case (Years)		
Delivery Location	Broward County Board of County	
	Commissioners	
	EV0055 WATER AND WASTEWATER SERVICES	

WAREHOUSE (954) 831-0813 2555 W COPANS ROAD POMPANO BEACH FL 33069 **Qty** 10

### Description

Item

Meter, 3/4 inch lead free brass, positive displacement meeting NSF-61 certification, Zenner PDD04 or Approved Equal, as per Specifications.

IND2122200B1--01-03 - Group 1: Meter, 1 Inch lead free brass positive displacement

Lot Description	Group 1
Quantity	150 each
Unit Price	
Manufacturer Offered	
Model Name	
Part Number	
Delivery (Calendar Days)	
Warranty Main Case (Years)	
Delivery Location	Broward County Board of County Commissioners
	EV0055 WATER AND WASTEWATER SERVICES WAREHOUSE (954) 831-0813 2555 W COPANS ROAD POMPANO BEACH FL 33069 Qty 150
<b>Description</b> Meter, 1 inch lead free	brass, positive displacement meeting NSF-61 certification, Zenner PDD007 or Approved Equal, as per Specifications.
Item	IND2122200B101-04 - Group 1: Meter, 1 1/2 Inch lead free brass flanged ends positive displacement with test p
Lot Description	Group 1
Quantity	15 each
Unit Price	
Manufacturer Offered	
Model Name	
Part Number	
Delivery (Calendar Days)	
Warranty Main Case (Years)	
Delivery Location	Broward County Board of County Commissioners
	EV0055 WATER AND WASTEWATER SERVICES WAREHOUSE (954) 831-0813

2555 W COPANS ROAD POMPANO BEACH FL 33069

**Qty** 15

### Description

Meter, 1 1/2 inch lead free brass, flanged ends positive displacement with test port, meeting NSF-61 certification, Zenner PDD09 or Approved Equal, as per Specifications.

ltem	IND2122200B101-05 - Group 1: Meter, 2 Inch lead free brass flanged ends positive displacement with to			
Lot Description	Group 1			
Quantity	15 each			
Unit Price				
Manufacturer Offered				
Model Name				
Part Number				
Delivery (Calendar Days)				
Warranty Main Case (Years)				
Delivery Location	Broward County Board of County Commissioners			
	EV0055 WATER AND WASTEWATER SERVICES WAREHOUSE (954) 831-0813 2555 W COPANS ROAD POMPANO BEACH FL 33069 Qty 15			
<b>Description</b> Meter, 2 inch lead free Equal, as per Specifica	brass, flanged ends positive displacement with test port, meeting NSF-61 certification, Zenner PDD12 or Approved			
Item	IND2122200B101-06 - Group 1: Meter, 5/8 Inch lead free brass multi-jet			
Lot Description	Group 1			
Quantity	1 each			

Lot Description

Quantity

1 each

Unit Price

Manufacturer
Offered

Model Name

Part Number

Delivery (Calendar Days)

Warranty Main Case
(Years)

Delivery Location

Broward County Board of County
Commissioners

EV0055

WATER AND WASTEWATER SERVICES

WAREHOUSE (954) 831-0813 2555 W COPANS ROAD POMPANO BEACH FL 33069

Qty 1

### Description

Item

Meter, 5/8 inch lead free brass multi-jet meeting NSF-61 certification, Zenner PMN02 or Approved Equal, as per Specifications

IND2122200B1--01-07 - Group 1: Meter, 1 Inch lead free brass multi-jet

Lot Description	Group 1
Quantity	1 each
Unit Price	
Manufacturer Offered	
Model Name	
Part Number	
Delivery (Calendar Days)	
Warranty Main Case (Years)	
Delivery Location	Broward County Board of County
	Commissioners
	<u>EV0055</u>
	WATER AND WASTEWATER SERVICES
	WAREHOUSE (954) 831-0813 2555 W COPANS ROAD
	POMPANO BEACH FL 33069
	<b>Qty</b> 1
<b>Description</b> Meter, 1 inch lead free	brass multi-jet meeting NSF-61 certification, Zenner PMN07 or Approved Equal, as per Specifications.
Item	IND2122200B1-01-08 - Group 1: Meter, 1 1/2 Inch lead free brass flanged ends multi-jet with a test port
Item Lot Description	IND2122200B101-08 - Group 1: Meter, 1 1/2 Inch lead free brass flanged ends multi-jet with a test port Group 1
Lot Description	Group 1
Lot Description Quantity	Group 1
Lot Description Quantity Unit Price Manufacturer	Group 1
Lot Description Quantity Unit Price Manufacturer Offered	Group 1
Lot Description Quantity Unit Price Manufacturer Offered Model Name	Group 1
Lot Description Quantity Unit Price Manufacturer Offered Model Name Part Number Delivery (Calendar	Group 1
Lot Description Quantity Unit Price Manufacturer Offered Model Name Part Number Delivery (Calendar Days) Warranty Main Case	Group 1 100 each  Broward County Board of County
Lot Description Quantity Unit Price Manufacturer Offered Model Name Part Number Delivery (Calendar Days) Warranty Main Case (Years)	Group 1 100 each  Broward County Board of County Commissioners
Lot Description Quantity Unit Price Manufacturer Offered Model Name Part Number Delivery (Calendar Days) Warranty Main Case (Years)	Group 1 100 each  Broward County Board of County Commissioners EV0055
Lot Description Quantity Unit Price Manufacturer Offered Model Name Part Number Delivery (Calendar Days) Warranty Main Case (Years)	Group 1 100 each  Broward County Board of County Commissioners

POMPANO BEACH FL 33069

**Qty** 100

Des		

Meter, 1 1/2 inch lead free brass flanged ends multi-jet with a test port meeting NSF-61 certification, Zenner PMN09 or Approved Equal, as per Specifications.

Item	IND2122200B101-09 - Group 1: Meter, 2 Inch lead free brass flanged ends multi-jet with a test port
Lot Description	Group 1
Quantity	100 each
Unit Price	
Manufacturer Offered	
Model Name	
Part Number	
Delivery (Calendar Days)	
Warranty Main Case (Years)	
Delivery Location	Broward County Board of County Commissioners
<b>Description</b> Meter, 2 inch lead free Specifications.	WATER AND WASTEWATER SERVICES WAREHOUSE (954) 831-0813 2555 W COPANS ROAD POMPANO BEACH FL 33069 Qty 100  brass flanged ends multi-jet with a test port meeting NSF-61 certification, Zenner PMN12 or Approved Equal, as per
ltem	IND2122200B101-10 - Group 1: Meter, 3 Inch lead free brass hydrant meter with hydrant couplings turbine
Lot Description	Group 1
Quantity	15 each
Unit Price	
Manufacturer Offered	
Model Name	
Part Number	
Delivery (Calendar Days)	
Warranty Main Case (Years)	
Delivery Location	Broward County Board of County Commissioners  EV0055 WATER AND WASTEWATER SERVICES WAREHOUSE (954) 831-0813

2555 W COPANS ROAD POMPANO BEACH FL 33069

**Qty** 15

### Description

**Delivery Location** 

Meter, 3 inch lead free brass hydrant meter with hydrant coupling turbine. Must come with a built in testable (e.g., differential gauge) backflow device, with a permanent, affixed adjustable stand to support weight and it must come with an anti-locking collar that can be secured to the fire hydrant meter simultaneously, Zenner PHD305-RP or Approved Equal, as per Specifications.

Itama	IND3433300B4 04 44 Cyayar 4 Matay 2 lash load from hyper turking with halt an atyring and took your			
Item	IND2122200B1–01-11 - Group 1: Meter, 3 Inch lead free brass turbine with bolt-on strainer and test port			
Lot Description	Group 1 1 each			
Quantity	i eacii			
Unit Price				
Manufacturer Offered				
Model Name				
Part Number				
Delivery (Calendar Days)				
Warranty Main Case (Years)				
Delivery Location	Broward County Board of County Commissioners			
<b>Description</b> Meter, 3 inch lead free per Specifications.	WAREHOUSE (954) 831-0813 2555 W COPANS ROAD POMPANO BEACH FL 33069 <b>Qty</b> 1  brass turbine with bold-on strainer and test port, meeting NSF-61 certification, Zenner PMTB03 or Approved Equal, as			
Item	IND2122200B101-12 - Group 1: Meter, 4 Inch lead free brass turbine with bolt-on strainer and test port			
Lot Description	Group 1			
Quantity	1 each			
Unit Price				
Manufacturer Offered				
Model Name				
Part Number				
Delivery (Calendar Days)				
Warranty Main Case (Years)				

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**Broward County Board of County** 

WATER AND WASTEWATER SERVICES

**Commissioners** EV0055

WAREHOUSE (954) 831-0813 2555 W COPANS ROAD POMPANO BEACH FL 33069

Qty 1

### Description

Item

Meter, 4 inch lead free brass turbine with bold-on strainer and test port, meeting NSF-61 certification, Zenner PMTB04 or Approved Equal, as per Specifications.

IND2122200B1--01-13 - Group 1: Meter, 6 Inch lead free brass turbine with bolt -on strainer and test port

Lot Description	Group 1
Quantity	1 each
Unit Price	
Manufacturer Offered	
Model Name	
Part Number	
Delivery (Calendar Days)	
Warranty Main Case (Years)	
Delivery Location	Broward County Board of County Commissioners
	EV0055 WATER AND WASTEWATER SERVICES WAREHOUSE (954) 831-0813 2555 W COPANS ROAD POMPANO BEACH FL 33069 Qty 1
<b>Description</b> Meter, 6 inch lead free per Specifications.	brass turbine with bold-on strainer and test port, meeting NSF-61 certification, Zenner PMTB06 or Approved Equal, as
ltem	IND2122200B101-14 - Group 1: Meter, 8 Inch lead free brass turbine with bolt-on strainer and test port
Lot Description	Group 1
Quantity	1 each
Unit Price	
Manufacturer Offered	
Model Name	
Part Number	
Delivery (Calendar Days)	
Warranty Main Case (Years)	
Delivery Location	Broward County Board of County Commissioners
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WATER AND WASTEWATER SERVICES

WAREHOUSE (954) 831-0813 2555 W COPANS ROAD POMPANO BEACH FL 33069

Qty 1

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WATER AND WASTEWATER SERVICES

### Description

Meter, 8 inch lead free brass turbine with bold-on strainer and test port, meeting NSF-61 certification, Zenner PMTB08 or Approved Equal, as per Specifications.

Item	IND2122200B101-15 - Group 1: Meter, 10 Inch lead free brass turbine with bolt-on strainer and test port
Lot Description	Group 1
Quantity	1 each
Unit Price	
Manufacturer Offered	
Model Name	
Part Number	
Delivery (Calendar Days)	
Warranty Main Case (Years)	
Delivery Location	Broward County Board of County Commissioners
<b>Description</b> Meter, 10 inch lead free per Specifications.	WATER AND WASTEWATER SERVICES WAREHOUSE (954) 831-0813 2555 W COPANS ROAD POMPANO BEACH FL 33069 Qty 1  e brass turbine with bold-on strainer and test port, meeting NSF-61 certification, Zenner PMTB10 or Approved Equal, as
ltem	IND2122200B101-16 - Group 1: Meter Reclaimed, 5/8 Inch lead free brass multi-jet
Lot Description	Group 1
Quantity	10 each
Unit Price	
Manufacturer Offered	
Model Name	
Part Number	
Delivery (Calendar Days)	
Warranty Main Case (Years)	
Delivery Location	Broward County Board of County Commissioners

WAREHOUSE (954) 831-0813 2555 W COPANS ROAD POMPANO BEACH FL 33069 **Qty** 10

### Description

Meter, Reclaimed, 5/8 inch lead free brass multi-jet meeting NSF-61 certification, Zenner PMNR02 or Approved Equal, as per Specifications

Item	IND2122200B101-17 - Group 1: Meter Reclaimed, 3/4 Inch lead free brass multi-jet			
Lot Description	Group 1			
Quantity	1 each			
Unit Price				
Manufacturer Offered				
Model Name				
Part Number				
Delivery (Calendar Days)				
Warranty Main Case (Years)				
Delivery Location	Broward County Board of County Commissioners			
	EV0055			
	WATER AND WASTEWATER SERVICES			
	WAREHOUSE (954) 831-0813			
	2555 W COPANS ROAD			
	POMPANO BEACH FL 33069			
	<b>Qty</b> 1			
Description				
Meter, Reclaimed, 3/4	inch lead free brass multi-jet meeting NSF-61 certification, Zenner PMNR04 or Approved Equal, as per Specifications			
Item	IND2122200B101-18 - Group 1: Meter Reclaimed, 1 Inch lead free brass multi-jet meter			
Lot Description	Group 1			
Quantity	2 each			
Unit Price				
Manufacturer Offered				
Model Name				
Part Number				
Delivery (Calendar Days)				
Warranty Main Case (Years)				
Delivery Location	Broward County Board of County Commissioners			
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	WATER AND WASTEWATER SERVICES			
	WAREHOUSE (954) 831-0813			
	2555 W COPANS ROAD			

POMPANO BEACH FL 33069

Qty 2

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Meter, Reclaimed, 1 inch lead free brass, multi-jet meeting NSF-61 certification, Zenner PMNR07 or Approved Equal, as per Specifications

Item	IND2122200B101-19 - Group 1: Meter Reclaimed, 1 1/2 Inch lead free brass flanged ends multi-jet with test por	
Lot Description	Group 1	
Quantity	1 each	
Unit Price		
Manufacturer Offered		
Model Name		
Part Number		
Delivery (Calendar Days)		
Warranty Main Case (Years)		
Delivery Location	Broward County Board of County Commissioners	
	EV0055 WATER AND WASTEWATER SERVICES WAREHOUSE (954) 831-0813 2555 W COPANS ROAD POMPANO BEACH FL 33069 Qty 1	
Description Meter, Reclaimed, 1 1/	'2 inch lead free brass, multi-jet meeting NSF-61 certification, Zenner PMNR09 or Approved Equal, as per Specifications  IND2122200B101-20 - Group 1: Meter Reclaimed, 2 Inch lead free brass flanged ends multi-jet with test port	
Lot Description	Group 1	
Quantity	1 each	
Unit Price		
Manufacturer Offered		
Model Name		
Part Number		
Delivery (Calendar Days)		
Warranty Main Case (Years)		
Delivery Location	Broward County Board of County Commissioners  EV0055 WATER AND WASTEWATER SERVICES WAREHOUSE (954) 831-0813	

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POMPANO BEACH FL 33069

Qty 1

Commissioners

WATER AND WASTEWATER SERVICES

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### Description

Meter, Reclaimed, 2 inch lead free brass, flanged ends multi-jet with a test port meeting NSF-61 certification, Zenner PMNR12 or Approved Equal, as per Specifications

Item	IND2122200B101-21 - Group 1: Meter Reclaimed, 3 Inch lead free brass turbine with bolt-on strainer and test p		
Lot Description	Group 1		
Quantity	1 each		
Unit Price			
Manufacturer Offered			
Model Name			
Part Number			
Delivery (Calendar Days)			
Warranty Main Case (Years)			
Delivery Location	Broward County Board of County Commissioners		
	WATER AND WASTEWATER SERVICES WAREHOUSE (954) 831-0813 2555 W COPANS ROAD POMPANO BEACH FL 33069 Qty 1		
<b>Description</b> Meter, Reclaimed, 3 in Equal, as per Specification	ich lead free brass turbine with bolt-on strainer and test port meeting NSF-61 certification, Zenner PMTBR03 or Approved		
Item	IND2122200B101-22 - Group 1: Meter Reclaimed, 4 Inch lead free brass turbine with bolt-on strainer & test por		
Lot Description	Group 1		
Quantity	1 each		
Unit Price			
Manufacturer Offered			
Model Name			
Part Number			
Delivery (Calendar Days)			
Warranty Main Case (Years)			
Delivery Location	Broward County Board of County		

WAREHOUSE (954) 831-0813 2555 W COPANS ROAD POMPANO BEACH FL 33069

Qty 1

### Description

**Delivery Location** 

Meter, Reclaimed, 4 inch lead free brass turbine with bolt-on strainer and test port meeting NSF-61 certification, Zenner PMTBR04 or Approved Equal, as per Specifications

Item	IND2122200B101-23 - Group 1: Meter Reclaimed, 6 Inch lead free brass turbine with bolt-on strainer & test por
Lot Description	Group 1
Quantity	1 each
Unit Price	
Manufacturer Offered	
Model Name	
Part Number	
Delivery (Calendar Days)	
Warranty Main Case (Years)	
Delivery Location	Broward County Board of County Commissioners
<b>Description</b> Meter, Reclaimed, 6 in Equal, as per Specifica	WATER AND WASTEWATER SERVICES WAREHOUSE (954) 831-0813 2555 W COPANS ROAD POMPANO BEACH FL 33069 Qty 1  ch lead free brass turbine with bolt-on strainer and test port meeting NSF-61 certification, Zenner PMTBR06 or Approved attions
ltem	IND2122200B101-24 - Group 1: Meter Reclaimed, 8 Inch lead free brass turbine with bolt-on strainer & test por
Lot Description	Group 1
Quantity	1 each
Unit Price	
Manufacturer Offered	
Model Name	
Part Number	
Delivery (Calendar Days)	
Warranty Main Case (Years)	

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**Broward County Board of County** 

**Commissioners** 

WATER AND WASTEWATER SERVICES WAREHOUSE (954) 831-0813 2555 W COPANS ROAD POMPANO BEACH FL 33069

Qty 1

### **Description**

Meter, Reclaimed, 8 inch lead free brass turbine with bolt-on strainer and test port meeting NSF-61 certification, Zenner PMTBR08 or Approved Equal, as per Specifications

Item	IND2122200B1–01-25 - Group 1: Meter Fire Service, 10 Inch X 2 Inch lead free brass with test port				
Lot Description	Group 1				
Quantity	1 each				
Unit Price					
Manufacturer Offered Model Name					
Part Number					
Delivery (Calendar Days) Warranty Main Case (Years)					
	e				
Delivery Location	Broward County Board of County Commissioners				
	EV0055 WATER AND WASTEWATER SERVICES WAREHOUSE (954) 831-0813 2555 W COPANS ROAD POMPANO BEACH FL 33069 Qty 1				
	) inch X 2 inch lead free brass with test port (10 inch shall be a turbine and the 2 inch shall be a multi-jet) meeting NSF-61 FS010X4 or Approved Equal, as per Specifications				
Item	IND2122200B101-26 - Group 1: Meter Fire Service, 8 Inch X 2 Inch lead free brass with test port				
Lot Description	Group 1				
Quantity	1 each				

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WATER AND WASTEWATER SERVICES WAREHOUSE (954) 831-0813 2555 W COPANS ROAD POMPANO BEACH FL 33069

Qty 1

### **Description**

Meter, Fire Service, 8 inch X 2 inch lead free brass with test port (8 inch shall be a turbine and the 2 inch shall be a multi-jet) meeting NSF-61 certification, Zenner PF508X4 or Approved Equal, as per Specifications

Item	IND2122200B101-27 - Group 1: Meter Fire Service, 6 Inch X 2 Inch lead free brass with test port	
Lot Description	Group 1	
Quantity	1 each	
Unit Price		
Manufacturer Offered		
Model Name		
Part Number		
Delivery (Calendar Days)		
Warranty Main Case (Years)		
Delivery Location	Broward County Board of County Commissioners	
	EV0055 WATER AND WASTEWATER SERVICES WAREHOUSE (954) 831-0813 2555 W COPANS ROAD POMPANO BEACH FL 33069 Qty 1	
	nch X 2 inch lead free brass with test port (6 inch shall be a turbine and the 2 inch shall be a multi-jet) meeting NSF-61 //C06 or Approved Equal, as per Specifications	
Item	IND2122200B101-28 - Group 1: Meter Fire Service, 4 Inch X 1 1/2 Inch lead free brass with test port	
Lot Description	Group 1	
Quantity	1 each	
Unit Price		
Manufacturer Offered		
Model Name		
Part Number		
Delivery (Calendar Days)		
Warranty Main Case (Years)		
Delivery Location	Broward County Board of County Commissioners	

WATER AND WASTEWATER SERVICES WAREHOUSE (954) 831-0813 2555 W COPANS ROAD POMPANO BEACH FL 33069

Qty 1

### **Description**

Meter, Fire Service, 4 inch X 1 1/2 inch lead free brass with test port (4 inch shall be a turbine and the 1 1/2 inch shall be a multi-jet) meeting NSF-61 certification, Zenner PFS04X2 or Approved Equal, as per Specifications

Item	IND2122200B1–01-29 - Group 1: Meter Fire Service, 3 Inch X 1 Inch lead free brass with test port	
Lot Description	Group 1	
Quantity	1 each	
Unit Price		
Manufacturer Offered		
Model Name		
Part Number		
Delivery (Calendar Days)		
Warranty Main Case (Years)		
Delivery Location	Broward County Board of County Commissioners	
	EV0055 WATER AND WASTEWATER SERVICES WAREHOUSE (954) 831-0813 2555 W COPANS ROAD POMPANO BEACH FL 33069 Qty 1	
<b>Description</b> Meter, Fire Service, 3 in certification, Zenner PN	nch X 1 inch lead free brass with test port (3 inch shall be a turbine and the 1 inch shall be a multi-jet) meeting NSF-61 IC3 or Approved Equal, as per Specifications	
Item	IND2122200B101-30 - Group 1: Meter Residential Fire Service, 2 Inch lead free brass multi-jet	
Lot Description	Group 1	
Quantity	1 each	
Unit Price		
Manufacturer Offered		
Model Name		
Part Number		
Delivery (Calendar Days)		
Warranty Main Case (Years)		
Delivery Location	Broward County Board of County Commissioners	

WATER AND WASTEWATER SERVICES WAREHOUSE (954) 831-0813 2555 W COPANS ROAD POMPANO BEACH FL 33069

Qty 1

### Description

Meter, Residential Fire Service, 2 inch lead free brass multi-jet with a red register lid meeting NSF-61 certification, Zenner PMN12 or Approved Equal, as per Specifications

ltem	IND2122200B1–01-31 - Group 1: Meter Residential Fire Service, 1 1/2 Inch lead free brass multi-jet		
Lot Description	Group 1		
Quantity	1 each		
Unit Price			
Manufacturer Offered			
Model Name			
Part Number			
Delivery (Calendar Days)			
Warranty Main Case (Years)			
Delivery Location	Broward County Board of County Commissioners		
<b>Description</b> Meter, Residential Fire Approved Equal, as pe	WAREHOUSE (954) 831-0813 2555 W COPANS ROAD POMPANO BEACH FL 33069 <b>Qty</b> 1  Service, 1 1/2 inch lead free brass multi-jet with a red register lid meeting NSF-61 certification, Zenner PMF09 or Specifications		
ltem	IND2122200B101-32 - Group 1: Meter Residential Fire Service, 1 Inch lead free brass multi-jet		
Lot Description	Group 1		
Quantity	1 each		
Unit Price			
Offered			
Offered Model Name			
Offered Model Name Part Number Delivery (Calendar			
Manufacturer Offered Model Name Part Number Delivery (Calendar Days) Warranty Main Case (Years)			

WATER AND WASTEWATER SERVICES WAREHOUSE (954) 831-0813 2555 W COPANS ROAD POMPANO BEACH FL 33069

Qty 1

### **Description**

Meter, Residential Fire Service, 1 inch lead free brass multi-jet with a red register lid meeting NSF-61 certification, Zenner PMF07 or Approved Equal, as per Specifications

ltem	IND2122200B101-33 - Group 1: Meter residential Fire Service, 5/8 Inch lead free brass positive displacement	
Lot Description	Group 1	
Quantity	1 each	
Unit Price		
Manufacturer Offered		
Model Name		
Part Number		
Delivery (Calendar Days)		
Warranty Main Case (Years)		
Delivery Location	Broward County Board of County Commissioners	
	EV0055 WATER AND WASTEWATER SERVICES WAREHOUSE (954) 831-0813 2555 W COPANS ROAD POMPANO BEACH FL 33069 Qty 1	

Equal, as per Specifications

Item IND2122200B1--01-34 - Group 1: Discount off of list price - \$5,000 Lot Description **Group 1** 1 contract Quantity Percentage Delivery (Calendar Days) Warranty (Years) **Delivery Location Broward County Board of County Commissioners** EV0055

WATER AND WASTEWATER SERVICES WAREHOUSE (954) 831-0813

2555 W COPANS ROAD

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### POMPANO BEACH FL 33069

**Qty** 1

**Description**Discount off of list price for any additional parts not listed in the line items as per Specifications. Estimated annual value is \$5,000.

### 1. Scope:

This project is for an open-end contract for the purchase of new, not used or refurbished, water meters and water meter repair parts for Water and Wastewater Services. These meters are used to accurately measure the consumption of water by commercial and residential customers for billing purposes and are critical to the County's operation. No installation is required for this solicitation.

The specifications may reference pre-approved manufacturer's product models which meet the described minimum requirements. However, products installed in Water and Wastewater Service systems are not limited to those identified as pre-approved. The pre-approved list is <u>not</u> an exclusive collection of authorized products. Equivalent manufacturers are encouraged to submit their products' technical information for review and approval. Upon conclusion of the review, the products may become listed as pre-approved. (See Attachment "A" – Water Meter Products)

Bidders offering alternate manufacturer's water meters that meet the minimum requirements must submit technical information for consideration. This information should be submitted with the bid response, however, must be submitted within three (3) business days when requested by the County. Products listed as pre-approved do not require the submittal of technical information for approval.

#### 2. Definition:

ANSI - American National Standard Institute
AWWA - American Water Works Association

F - Fahrenheit

MSRP - Manufacturer Suggested Retail Price
 NSF - National Sanitation Foundation
 WWS - Water and Wastewater Services

### 3. General Requirements:

- 3.1. This contract is intended for the purchase of water meters and repair parts for maintenance, repair and operations only, and is not intended for large construction or major renovation projects.
- 3.2. Only new water meters and repair parts will be considered, no used or refurbished meters and parts will be allowed.
- 3.3. Awarded bidder shall provide technical assistance and troubleshooting of all model water meters at no additional charge to the County.

### 4. Bidder Qualification Requirements:

- 4.1. Bidders shall be fully capable dealers, distributors, or manufacturers who are regularly engaged in the sale of water meters as specified in this solicitation.
- 4.2. Only manufacturer authorized dealers/sellers will be eligible to provide products on behalf of the manufacturer through this solicitation. The County may request, and the bidder shall provide, supporting information and/or documentation attesting to this requirement. By submitting a response, bidder certifies that it satisfies this, and all criteria specified in the solicitation documents. Failure to be an authorized dealer/seller of the manufacturer at the time of bid opening will result in your bid being deemed non-responsive. Failure to supply this supporting information and/or documentation within

- three (3) business days of request by the County may result in your bid being deemed non-responsive.
- 4.3. County will be the sole judge in determining Bidder is adequately meeting this requirement.

### 5. Specifications:

### 5.1. Materials:

- 5.1.1. Main cases shall be composed of NSF 61, lead free, brass material and be certified under NSF standard 61 and shall have NSF 61 molded on the body in raised lettering and non-corrosive metal, male threaded end connections. Meters greater than one (1) inch in size shall all come with flanged ends.
- 5.1.2. All materials used in the construction of the main cases shall have sufficient dimensional stability to retain operating clearances at working temperatures up to 105 degrees F.
- 5.1.3. The bidder shall provide a manufacturer's warranty for the main case for a minimum period of 15 years or for 1.5 million gallons of water consumption (whichever comes first) for sizes 5/8-inch to 1-inch. For meters sizes 1 1/2-inch and 2-inch, a warranty of 15 years or 15 million gallons of water consumption (whichever comes first) from the date of final acceptance by the County. For meter sizes greater than 2-inch, a warranty of 15 years or 50 million gallons of water consumption (whichever comes first) from the date of final acceptance by the County.
- 5.1.4. The meter serial number shall be permanently engraved on the main case of the meter on a flat serial number pad parallel to the face of the register and on the bronze/brass body of the meter so that it is easily visible within the meter pit and will not wear down after installation.
- 5.1.5. The meter serial number shall begin with the last two digits of the year they were ordered and proceed with the next two digits indicating the size. For example: meter ordered in 2020 with a size of 5/8-inch shall have a serial number beginning with 2058XXXX. 3/4-inch meter would be 2075XXXX; 1-inch meter would be 2001XXXX, and 1 1/2-inch would be 2015XXXX, 2-inch meter would be 2002XXXX thereon after up to sizes of 10-inch and greater.
  - 5.1.5.1. For fire services meters, the serial number must begin with the letter "F" before the actual serial number. For example: a fire service 5/8-inch meter would read, F2058XXXX.
  - 5.1.5.2. For reclaimed meters, the serial number must begin with the letter "R" before the actual serial number. For example: a reclaimed 5/8-inch meter would read, R2058XXXX.
- 5.1.6. Meters shall be of split case bottom entry design for 5/8-inch through 2-inches.
- 5.1.7. Meter body shall be designed with a minimum four bolt connection to the bottom plate so that any expansion due to pressure will not allow the bottom plate to loosen.
- 5.1.8. All 5/8-inch meters shall have a lay length of 7 1/2-inches long. All 1-inch meters shall have a lay length of 10 3/4-inches long and not exceed those lay lengths unless approved by the WWS Project Manager in writing.

### 5.2. Head Loss:

5.2.1. Meters shall not exceed the pressure loss standards set forth in the AWWA.

### 5.3. Measuring Chamber:

- 5.3.1. Measuring chamber shall be AWWA compliant.
- 5.3.2. Chamber shall be of the nutating disc or oscillating piston style for all positive displacement meters.
- 5.3.3. If applicable, the chamber magnet shall be a minimum four-pole magnet.
- 5.3.4. If applicable, the measuring chamber shall be locked into place with a chamber retainer.

### 5.4. Accuracy:

- 5.4.1. Meters shall be 100 percent factory tested for accuracy and have the factory test results provided with the shipment **AND** Vendor is to provide an Microsoft Excel Sheet (version 2010 or higher) to the County Project Manager via email to <a href="www.baseone@broward.org">wws.baseone@broward.org</a> with all of the meter testing results performed by the manufacturer on each meter before it is shipped to the County. The Excel sheet must contain the meter serial number, date of test, Gallons Per Minute, number of tests and all flow rates tested, along with the before and after meter reading.
- 5.4.2. Meters shall be pressure tested in accordance with AWWA standards to ensure against leakage.

### 5.5. Strainers:

- 5.5.1. All meters shall have non-corrosive strainer screens installed in the meter for sizes 5/8-inch through 2-inches.
- 5.5.2. All meter sizes greater than 2-inches shall have bolt on strainers.
- 5.5.3. Strainers shall be rigid, fit easily, be easy to remove, and shall have an effective straining area at least twice that of the inlet opening.

### 5.6. Register Assembly:

- 5.6.1. The register shall be magnetic driven with internal gearing and mechanically driven six-wheel odometer for sizes 5/8-inch through 1-inch, shall read in US gallons and shall be permanently sealed by the manufacturer.
- 5.6.2. Sizes 1 1/2-inch through 3-inches shall have seven mechanically driven wheels on the odometer. Sizes 4-inches through 10-inches shall have eight mechanically driven wheels on the odometer.
- 5.6.3. The register shall provide for visual registration at the meter.
- 5.6.4. The moving odometer number wheels shall be of contracting colors with all digits 1,000 gallons and higher being white wheels with black lettering.
- 5.6.5. The numerals on the number wheels of the register shall not be less than 1/4-inch height and should be legible at a minimum 45-degree angle.
- 5.6.6. Registers shall incorporate a center sweep test hand and a low flow indicator.
- 5.6.7. The register shall be secured to the meter main case by a tamper resistant mechanism or casing protecting against unauthorized removal of the register. The tamper resistant mechanism shall be lead seal and/or a unique screw that requires a special tool to remove the register.
- 5.6.8. Direct reading registers shall be housed within a domed register glass to prevent buildup utilizing an engineered, heat treated glass to prevent scratching. Flat glass or beveled register glass will not be accepted.
- 5.6.9. A register and/or meter ID number shall be clearly imprinted (See Section 5.1 Materials for more details) on the top of the register for field identification and must be capable of being removed while the meter is in service without the need to remove or access the measuring chamber.

5.6.10. All meters shall read in US gallons.

### 5.7. Reclaimed Meters:

- 5.7.1. Special markings: Shall have a colored lid, (pantone purple 522C), shroud, register (pantone purple), and a lead-free brass main case that meets NSF 61.
- 5.7.2. The word "RECLAIMED" is cast or engraved in the meter body and printed on the register dial face and lid.
- 5.7.3. All reclaimed meters sizes 5/8-inch through 2-inches must be multi-jet meters.
- 5.7.4. The non-potable water symbol is displayed on register lid.
- 5.7.5. The chamber assembly has designation for non-potable water only.
- 5.7.6. Register type shall meet the same types of registration and reading system as the potable water meter line.

### 5.8. Fire Service Meters:

- 5.8.1. Special markings: shall have a colored lid, (red), shroud, register, and a lead-free brass main case that meets NSF 61.
- 5.8.2. Register type shall meet the same types of registration and reading systems as the potable water meter line.

### 6. Fixed Percentage Discount Off Catalogs/Price Lists:

- 6.1. Bidder shall indicate in all spaces provided on the Item Response Form, their single fixed discount from the most current manufacturer's price list. That percentage discount will be used for the term of the contract.
- 6.2. The Bidder should provide a copy of the most current Manufacturer's Published Price List as part of the solicitation package, in a spreadsheet format or, as an alternative, provide an internet web link. If a CD or internet web link is not available, a printed copy of Price List shall be submitted within five (5) business days at the request of the County. The Price List must clearly indicate:
  - 6.2.1. The Catalog or Published Price List Number
  - 6.2.2. The Effective Date
  - 6.2.3. The Column Pricing Quote
  - 6.2.4. Internet Web Link:
- 6.3. If a catalog is updated by the Manufacturer, the current copy of that price list/catalog should be sent to the County, unless the published price listing is available on-line and can be easily found and identified by County personnel.
- 6.4. If Manufacturer's Published Price List is not available, one of the following shall be provided:
  - 6.4.1. Manufacturer suggested retail price (MSRP).
  - 6.4.2. Letter from the Manufacturer with description and their list price.
- 6.5. Percentage mark-ups are not accepted.

#### 7. Warranty:

- 7.1. Manufacturer warranty period for new meters will be in accordance with Section 5.1.3.
- 7.2. At a minimum one (1) year standard manufacturer warranty for repair parts.
- 7.3. A copy of the manufacturer's standard warranty will be in the County's name and provided at time of delivery.
- 7.4. Warranty shall begin on date of shipment received by WWS.

### 8. Invoices/Payments:

- 8.1. Invoices shall include the County Purchase Order number, brand name, make/model, description, unit price, quantity, and extended price.
- 8.2. Payment will be processed after commodities/services have been received, accepted and properly invoiced.
- 8.3. In order to ensure prompt payment, all invoices and backup documentation must be emailed to <a href="mailto:AccountsPayable@Broward.org">AccountsPayable@Broward.org</a> and a copy to the technical contact listed on the purchase order.
- 8.4. Payment for all goods and services, requested by a purchase order, shall be made in a timely manner and in accordance with Local Government Prompt Payment Act, Section 218.70, Florida Statutes, and the Prompt Payment Policy, Section No. 1-51.6, Broward County Code of Ordinances.

### 9. Delivery:

- 9.1. All prices must be bid FOB destination, freight included in the price. No additional charges will be allowed.
- 9.2. All items must be delivered on pallet(s).
  - 9.2.1. All pallets must be clearly marked indicating size of item and quantity.
  - 9.2.2. Pallets must be shrink-wrapped.
  - 9.2.3. Shipment/pallets not securely palletized will not be received.
  - 9.2.4. Shipments/pallets are not to exceed a maximum of 3,500 pounds or they will not be received.
  - 9.2.5. Mixed shipments/pallets will not be received.
  - 9.2.6. Shipments/pallets are not to be higher than five (5) feet from the bottom of the pallet to the top of the product.
- 9.3. Delivery is desired within 30 calendar days after receipt of purchase order.
- 9.4. In the event products cannot be delivered within 30 calendar days, the Vendor shall notify the County with the reason for the delay and provide the revised delivery date. The County reserves the right to terminate the purchase order or procure the item elsewhere, in the event the delay in delivery is deemed unacceptable. The County contact name, phone number and email address will be provided on each purchase order.
- 9.5. Vendor shall provide proof of availability upon the County's request.
- 9.6. Delivery to be performed during normal business hours, Monday thru Friday, 8:00 a.m. to 3:00 p.m., except County holidays.
- 9.7. Delivery must be made to:

Broward County Water and Wastewater Services ATTN: Warehouse 2555 West Copans Road Pompano Beach, FL 33069

### 10. Notice of Non-Compliance (Vendor Complaints):

Formal Vendor Complaints made by users copying the Purchasing Division are to be corrected within the deadline specified in the formal complaint. Written response to the Purchasing Division and the Using Division is required. Failure to properly resolve complaints in a timely manner may result in the cancellation of this contract.



### PRODUCT SPECIFICATIONS

### **COMPOUND FIRELINE WATER METERS**

### **Minimum Requirements:**

- Shall meet or exceed ANSI/NSF 61, latest revision.
- Shall meet or exceed the requirements of AWWA C703, latest revision.
- Shall be UL listed or FM approved.
- Flanges shall meet ANSI 16.1 (latest revision) Class
- Main case material shall be bronze, cast iron, or ductile iron.
- Bypass meter casing material shall be bronze\*.
- The high-capacity and by-pass meter registers shall have a magnetic drive.
- The register shall be permanently sealed, tamper resistant, and have a standard gear ratio for interchangeability.
- Operating pressure shall be 150 psi, minimum.
- Transition between the low-flow and main-line meter shall be controlled by an internal, automatic device.\*

\*Not required for Sensus Omni F2 as it does not have an external bypass meter.

#### Note:

• Compound fire line water meters are intended for use where an extremely wide flow range is required and where measurement of both domestic and fire service water usage is desired.





### PRE-APPROVED MANUFACTURERS:

SENSUS (Omni F2) HERSEY METERS (Model FM3)

Date: June 8, 2017 Date Last Issued: January 23, 2013 Date First Issued: June 23, 2010

Standard Detail:

Sheet Number

6.1



# PRODUCT SPECIFICATIONS WATER METERS (3", 4", 6", 8")

### Minimum Requirements:

- Shall meet or exceed ANSI/NSF 61, latest revision.
- Shall meet or exceed AWWA C701, latest revision.
- Meters shall be the Class II turbine type meter assembly.
- Main case material shall be bronze or epoxy coated ductile iron.
- Strainer body material shall be bronze or epoxy coated ductile iron or cast iron.
- Strainer and fastener material shall be stainless steel (Type 304 minimum).
- Registers shall be permanently sealed, tamper resistant, with a straight reading odometer type display.
- Meters shall have a direct magnetic drive.
- Shall be designed so maximum continuous flow rates may be exceeded up to a minimum of 25% for intermittent periods.
- Flanges shall meet to ANSI B16.1 (latest revision), Class 125 or Class 150.
- Working pressure shall be 175 psi, minimum.

### Note:

- A strainer is required upstream of the meter.
- The strainer screen area shall have a minimum net open area of at least 2 times the pipe opening.





### **PRE-APPROVED MANUFACTURERS:**

- HERSEY-METERS (HORIZON)
- SENSUS (Omni T2)
- ZENNER PMCB03
- ZENNER PMCB04

Date: June 8, 2017 Date Last Issued: January 23, 2013 Date First Issued: June 23, 2010 Standard Detail:

Sheet Number

6.2



### **PRODUCT SPECIFICATIONS FIRE PROTECTION BY-PASS** METERS (1")

### **Minimum Requirements:**

• Shall meet or exceed the Minimum Requirements for Service Meter (5/8", 1", 1 1/2", 2"), Product Specification Sheet 6.4.



### **PRE-APPROVED MANUFACTURERS:**

- BADGER (Model 25 [5/8"]; Model 70 [1"]; Model 120 [1-1/2"] and Model 170 [2"]).
- NEPTUNE ( Model T-10 [all sizes])

Date: June 8, 2017 Date Last Issued: June 23, 2010 Date First Issued: June 23, 2010 Standard Detail: 226, 235, 237

Sheet Number

6.3



### PRODUCT SPECIFICATIONS

SERVICE METERS (5/8", 1", 1-1/2", 2")

### **Minimum Requirements:**

- Main case material for 5/8" to 2" meters shall be ANSI/NSF 61 (latest edition) approved and shall be certified lead free
- Main case shall have ANSI/NSF 61 (latest edition) molded on the body in raised lettering.
- Main case shall have non-corrosive metal, male threaded end connections for 5/8" and 1" meters and flanged end connections for 1-1/2" and 2" meters.
- The manufacturer shall warranty bronze or brass main cases for a period of fifteen years from the date of final acceptance by the County.
- All materials used in the construction of the main case shall have sufficient dimensional stability to retain operating clearances at working temperatures up to 105 degrees F.
- The meter serial number shall be engraved onto the main case of the meter on a flat serial number pad parallel to the face of the register so that it is easily visible within the meter box and will not wear down after installation.
- The meter serial number shall begin with the last two digits of the year of manufacture. For example, meter manufactured in 2010 shall have a serial number beginning with 10XXXXX.
- The meter size, model number, manufacturer, and direction of flow shall be molded in raised lettering on the main case.
- Meters shall be of split case bottom entry design for sizes 5/8" and 1".
- Meter bodies shall incorporate non-corrosive metal end connections with male threads of the proper size for easy installation and compatibility with existing metal meter couplings. Plastic threads or end connections will not be accepted. Non-corrosive metal end connections shall be permanently bonded to the meter.
- Meter bodies shall be designed with a minimum 4-bolt threaded connection to the bottom plate so that any expansion due to pressure will not allow the bottom plate to loosen. Female threaded meter body connections to the bottom plate will not be accepted.
- The measuring chamber shall be AWWA compliant to current
- The chamber shall be of the nutating disc or oscillating piston style.
- The chamber magnet shall be a minimum 4-pole magnet an the measuring chamber shall be locked into place with a chamber retainer, as applicable.
- Meters shall meet or exceed AWWA C700 (latest revision) requirements for pressure loss and accuracy. Accuracy requirements shall be met for a period of 5 years from the date of installation.
- Meters shall be 100% factory tested for accuracy and results shall be provided upon request.



### PRE-APPROVED MANUFACTURERS:

See Next Page

Date: See Next Page Date Last Issued: See Next Page Date First Issued: See Next Page Standard Detail: See Next Page

Sheet Number

6.4



### PRODUCT SPECIFICATIONS

SERVICE METERS (5/8", 1", 1-1/2", 2")

### Minimum Requirements (Cont'd):

- · All meters requiring strainers shall be provided with noncorrosive strainer screens installed in the meter.
- Strainers shall be rigid, fit snugly, be easy to remove, and shall have an effective straining area at least twice that of the inlet opening.
- The register shall be magnetically driven with internal gearing and mechanically driven 6-wheel odometer, read in US gallons, and be permanently sealed by the manufacturer.
- The register shall provide for visual registration at the meter.
- The moving odometer wheels shall be of contrasting colors. All digits 1000 gallons and higher must be white wheels with black lettering.
- The numerals on the number wheels of the register shall not be less than 1/4 in height and should be legible at a 45 degree angle.
- Registers shall incorporate a center sweep test hand and a low flow indicator.
- The register shall be secured to the meter main case by a tamper resistant mechanism or casing protection against unauthorized removal of the register and be interchangeable with meters of the same size.
- Direct reading registers shall be housed within an engineered, heat treated glass to prevent scratching.
- Register box shall be made of bronze, brass or an engineered plastic and have a box lid with stainless steel (Type 304 minimum) hinge pins.
- A register and/or meter ID number shall be clearly imprinted on the top of the register and must be capable of being removed while the meter is in service without the need to remove or access the measuring chamber.



### PRE-APPROVED MANUFACTURERS:

- BADGER (Model 25 [5/8"]; Model 70 [1"]; Model 120 [1-1/2"] and Model 170 [2"]).
- NEPTUNE (Model T-10 [all sizes])

Date: June 8, 2017 Date Last Issued: January 23, 2013 Date First Issued: June 23, 2010 Standard Detail: 224, 226, 227, 228

Sheet Number

6.4 (Cont'd)

### REQUESTS FOR APPROVED EQUALS FORM

Potential Vendors may submit for the County's consideration for a determination of approved equal status. Requests for Approved Equals must be submitted on the below form and delivered by email to the Purchasing Agent, no later than date and time listed in **Special Instructions to Vendors.** The County's response to Requests for Approved Equals will be issued by addendum. Do not submit this form through BidSync.

Vendor shall submit with this form any relevant product literature in order to demonstrate that the product meets all the solicitation requirements. County is not obligated to review incomplete requests.

Vendor to complete the following:				
Vendor Name:				
Contact Name/Title:				
E-mail:	Phone:			
olicitation No.: Solicitation Title:				
Request No.: Ref. Page No.: _	Ref. Specification No.:			
Specification Requirement from solicitation:				
Request for Approved Equal:				
Manufacturer Offered:				
Model No./Product:				
Description of product offered for approved eq	ual:			
Product Literature is attached to this form?	Yes No			
For Broward	County Use Only			
Broward County Response: Approved	Not Approved			
Reasons:				

### SPECIAL INSTRUCTIONS TO VENDORS (IN ADDITION TO GENERAL CONDITIONS)

### **Water Meters and Repair Parts**

### A. Scope:

Vendors are invited to respond for an open-end contract to furnish Water Meters and Repair Parts for Water & Wastewater Services and various other Broward County agencies that may have need of these services and products.

The initial contract period shall start on date of award, or upon expiration of the current contract (currently September 24, 2021), whichever is later and shall terminate one year from that date. The Director of Purchasing may renew this contract for two, one year periods subject to vendor acceptance, satisfactory performance and determination that renewal will be in the best interest of the County. Notification of Intent to Renew will be sent in advance of expiration date of this contract. The Vendor will complete delivery and the County will receive delivery on any orders mailed to the Vendor prior to the date of expiration.

All discounts, prices, terms and conditions shall remain fixed for the initial period of the contract. In addition, all prices, terms and conditions shall remain fixed for the renewal period of the contract. There will be no allowable price escalations for fuel costs throughout any contract period(s), unless otherwise specified in this document.

No guarantee is expressed or implied as to the total quantity of commodities/services to be purchased under any open end contract. Estimated quantities will be used for bid comparison purposes only. The Board of County Commissioners reserves the right to: issue purchase orders as and when required, or, issue a blanket purchase order for individual agencies and release partial quantities or, issue instructions for use of direct purchase orders by various County agencies, make random, open market purchases for any or all of the item(s) on any open end contract or, any combination of the preceding. No delivery shall become due or be acceptable without a written order by the County, unless otherwise provided for in the contract. Such order will contain the quantity, time of delivery and other pertinent data. However, on items urgently required, the seller may be given telephone notice, to be confirmed by an order in writing.

### B. Specifications and Requirements:

Specifications and Requirements, are included hereto and made a part hereof. Whenever the Technical Specifications address a third party (i.e. manufacturer, applicator, subcontractor, etc.) it is to be construed as the Vendor through the third party.

The product offered by the Vendor must on an overall basis be equal or greater in quality or performance than the Specifications and Requirements. Broward County reserves the right to be the sole judge of what is equal and acceptable. Submittals which do not comply with Specifications and Requirements are subject to rejection.

Vendor should submit with the bid photographs, drawings, current manufacturer's catalogues, or product literature on items offered. However, this information must be submitted within three calendar days when requested by Broward County Purchasing Division. Literature should be clearly marked as to each item number. Failure on the part of the vendor to submit the requested literature and/or catalogues may result in their bid being declared non-responsive.

### C. Requests for Approved Equals:

Potential Vendor may submit for the County's consideration, prior to due date of solicitations, for a determination of approved equal status. **Requests for Approved Equals** must be submitted on the form and delivered by email to the Purchasing Agent, no later than 5:00 p.m. EST on the

date specified in the Bid Comments. Late requests will not be considered. The County's response to Requests for Approved Equals will be issued by addendum.

- D. Office of Economic and Small Business Requirements: Not applicable to this solicitation.
- E. Federal Transit Administration Requirements: Not applicable to this solicitation.

### F. Vendor Responsibilities:

The Vendor will be responsible for the provision, installation (if applicable, per Specifications and Requirements) and performance of all equipment, materials, services, etc. offered in his or her submittal. The Vendor is in no way relieved of the responsibility for the performance of all equipment furnished, or of assuring the timely delivery of materials, equipment, etc. even though it is not of his or her own manufacture.

Vendor shall perform the Work with its own organization, amounting to not less than 100 percent of the Contract Price.

## GENERAL CONDITIONS Quotation Requests and Invitations for Bids

These General Conditions apply to every Quotation Requests ("RFQs") and Invitations for Bid ("IFBs") (each a "solicitation") issued by Broward County (the "County") unless the County deletes, supersedes, or modifies any of these General Conditions for a particular solicitation by indicating such change in the Special Instructions to Vendors. The submission by any vendor ("Vendor") of a response to the solicitation ("response") constitutes Vendor's offer to contract to the County and includes as a material part of that offer Vendor's agreement that these General Conditions, along with all other provisions included in the solicitation and the pricing stated in Vendor's response, will constitute the contract between the Vendor awarded the solicitation ("Contractor") and the County, and shall prevail over any conflicting provision in any quotation, standard form contract, or other document of the Contractor, regardless of any language in such document(s) to the contrary. Any modification to these General Conditions or the language of the solicitation by Vendor is prohibited, unenforceable, and may render Vendor's response nonresponsive.

#### A. GENERAL PROVISIONS

### 1. Effect of Vendor's Signature on Vendor's Response:

By Vendor including its digital or electronic signature on its response to this solicitation:

- (a) Vendor represents and certifies that the representations in Section A.2 of these General Conditions are true and accurate;
- (b) Vendor acknowledges, accepts, and agrees that this solicitation is governed by the Terms and Conditions of the Solicitation stated herein; and
- (c) VENDOR ACKNOWLEDGES, ACCEPTS, AND AGREES THAT, IF AWARDED THE SOLICITATION BY THE COUNTY'S ACCEPTANCE OF VENDOR'S OFFER AS SET FORTH IN ITS RESPONSE TO THE SOLICITATION, VENDOR IS LEGALLY BOUND TO THESE GENERAL CONDITIONS, SPECIAL INSTRUCTIONS, AND THE SPECIFICATIONS OF THIS SOLICITATION, INCLUDING WITHOUT LIMITATION THE TERMS AND CONDITIONS OF CONTRACT STATED HEREIN.

### 2. Vendor Representations and Certifications

Vendor represents and certifies the following:

- (a) The individual submitting this form is authorized to sign the response on Vendor's behalf and has actual legal authority to bind Vendor to the solicitation's terms. Vendor acknowledges and agrees that electronic signatures or digital signatures shall have the same legal effect as a handwritten signature.
- (b) Vendor's response is made without prior understanding, agreement, or connection with any other vendor submitting a response to the solicitation regarding either vendor's response, and is in all respects fair and without collusion or fraud.
- (c) Vendor is neither delinquent in payment of any taxes, fees, fines, contractual debts, judgments, or any other debts due and owed to the County, nor in default of any contractual or regulatory obligation to the County.
- (d) No owner, principal, officer, director, or member of Vendor is or was an owner, principal, officer, director, or member in any other firm that was suspended or debarred from doing business with Broward County within the last three (3) years, unless otherwise noted in Vendor's response.
- (e) All statements, oral, written or otherwise, in Vendor's response are accurate, true, and correct. Vendor acknowledges that inaccurate, untruthful, or incorrect statements made in its response may be used by the County as a basis for rejection; rescission of contract award; or termination of the contract; and may also serve as the basis for suspension and/or debarment of Vendor pursuant the Broward County Procurement Code.

(f) Vendor represents and warrants that it possesses the knowledge, skill, experience, and financial capability required to provide and perform all goods and services required under the solicitation and that each person and entity that will provide goods or services is duly qualified to perform such services by all appropriate governmental authorities, where required, and is sufficiently experienced and skilled in the area(s) for which such person or entity will render such goods or services.

### B. TERMS AND CONDITIONS OF THE SOLICITATION

### 1. Responses.

Vendors' responses must be submitted electronically through the County's designated electronic bidding system ("EBS"). It is Vendor's sole responsibility to assure its response is submitted and received through the EBS by the date and time specified in the solicitation. The County will not consider responses received by other means or after the time that solicitations are due. All timeframe references are in Eastern Time. The official time for electronic submittals is the EBS's servers, as synchronized with the atomic clock. Any response that seeks to modify or take exception to the official time shall be deemed nonresponsive.

The County is a public agency subject to Chapter 119, Florida Statutes. Unless otherwise expressly approved in advance in writing by the Purchasing Division, any material submitted in the Vendor's response will become a public document available for public inspection and copying pursuant to Section 119.071, Florida Statutes, and any claim of confidentiality or trade secret is waived with respect to any and all information included in the Vendor's response.

### 2. Withdrawal.

Vendors may not withdraw their responses after the deadline for responses to the solicitation and before the expiration of 120 days after the date of opening responses to the solicitation. Any response that seeks to modify or take exception to the 120-day requirement shall be deemed nonresponsive.

### 3. Bid Opening (Invitation for Bids only).

All responses to Invitations for Bids shall be publicly opened in the public domain or as otherwise designated in the solicitation. The Purchasing Division will decrypt responses received in the EBS immediately following the deadline for bid responses.

### 4. Cancellation of Bids:

The County may cancel a solicitation before or after bid opening in its sole discretion, for any reason or no reason.

### 5. Addenda:

The County reserves the right to amend this solicitation prior to the deadline for Vendor responses by issuing written addenda to the solicitation. If, upon review, a Vendor finds a nonclerical error in an addendum, that Vendor must contact the Purchasing Division immediately, prior to opening date, to allow the County to review the alleged error and to issue any clarification, if the County determines that a clarification is necessary. Responding vendors shall be responsible for obtaining and reviewing each addendum prior to the deadline for submission of responses to the solicitation. The terms of all addenda are included in the Terms and Conditions of the Solicitation.

### 6. Prices, Terms, and Payments:

All solicitation responses must include firm prices, which must include all handling, set up, shipping, and inside delivery charges to the destination specified in the solicitation, unless otherwise indicated in the solicitation.

- (a) **Certification of Prices:** In submitting its response to this solicitation, Vendor certifies that the prices it is proposing are not higher than the prices at which Vendor sells the same goods and/or services in approximately similar quantities, under similar terms and conditions, to any other purchaser.
- (b) **F.O.B. Destination:** Unless otherwise specified, prices shall be provided as F.O.B. Destination, with freight, fuel, and all other costs included.
- (c) **Ties:** When two or more responding Vendors offer the same pricing, the Purchasing Division will break the tied responses in accordance with the applicable provisions of the Broward County Procurement Code (the "Procurement Code").
- (d) **Taxes:** The County is exempt from federal and Florida taxes on direct purchases of tangible property. The County's tax exemption number will appear on the County's purchase order. Vendor must pay all applicable sales, consumer, land use, or other similar taxes required by law.
- (e) **Discounts:** Vendors may offer a cash discount for prompt payment, but such discounts will not be considered in determining the lowest net cost for evaluation purposes unless otherwise stated in the solicitation. In order to be considered for evaluation purposes, Vendors must reflect any applicable discounts in the unit prices submitted in their responses.
- (f) **Mistakes:** Vendors are cautioned to examine all specifications, drawings, delivery instructions, unit prices, extensions, and all other special conditions pertaining to this solicitation. Failure to examine all pertinent documents shall not entitle vendors to relief from any provision or any requirement of this solicitation. Mathematical errors are deemed clerical errors and are subject to correction by the County. If there is a mistake in the extension price (i.e., unit price multiplied by quantity), the unit price shall govern.
- (g) **Ordering:** The County reserves the right to purchase the goods/services specified in the solicitation through contracts established by governmental agencies, consortiums, or other approved cooperatives, or through separate procurement actions conducted by the County. In addition, if the County requires delivery within a shorter period than the delivery time specified in the solicitation, and if the Contractor is unable to deliver by that time, the County may obtain such delivery from other sources without penalty or prejudice to the County. This solicitation is not for a requirements contract, and the County is not required to fulfill all of its needs for the goods/services at issue exclusively from the Contractor.

### 7. Awards:

If a specific basis of award is not established in the Special Instructions to Vendors, the award shall be to the lowest, responsive, and responsible Vendor. The County reserves the right to make separate award(s) to one or more Vendors for individual goods/services, groups of goods/services, or all or none or any combination thereof. When a group of goods/services is specified in the solicitation, Vendor must include prices for all items within the group in its response.

A Vendor desiring to offer "No Charge" on an item in a group of goods/services must so indicate by placing a \$0.00 in the offer field for that item, and enter "No Charge" in the "Notes for Buyer" section in the EBS. If a Vendor does not comply with these requirements, its response with respect to that group of goods/services will be deemed incomplete and may be rejected. However, if Vendors do not offer all items within a group, the County may issue an award on one or more items on an item-by-item basis. When a group is indicated for variable quantities and the group shows evidence of unbalanced prices, such solicitation response may be rejected. The Director of Purchasing, or the Broward County Board of County Commissioners, whichever is applicable, reserves the right to waive technicalities and irregularities and to reject any or all responses.

### 8. Qualifications of Vendors:

The County will only award a contract to a Vendor that is normally engaged in providing the types of commodities, services, or construction specified herein. Responding Vendors must have adequate

organization, facilities, equipment, and personnel to ensure prompt and efficient service to the County. The County reserves the right to inspect Vendor's facilities, equipment, personnel, and organization, or to take any other action necessary to determine Vendor's ability to perform in accordance with the solicitation's specifications, terms, and conditions. The County will determine whether the evidence of ability to perform is satisfactory, and reserves the right to reject responses and/or find any responding vendor nonresponsible where evidence or evaluation is determined to indicate insufficient capacity or ability to perform. The County may also consider a responding Vendor's history of any and all types of citations, orders, judgments, and/or violations, including those relating to suspensions, debarments, or environmental regulations, in determining responsibility. Responding Vendors must submit with their response a complete history of all citations and/or violations notices and dispositions thereof. Failure of the successful Vendor to submit such information may be grounds for rejection of Vendor's response or termination of Vendor's contract. Vendor shall notify the County immediately of notice of any citations, orders, judgments, or violations not included in Vendor's response that occur at any time period prior to expiration of the contract.

# 9. Affiliated Companies Entities of the Principal(s):

To ensure Vendor has the capability to fully perform the contract requirements, as well as the integrity and reliability that will ensure good faith performance, each Vendor must disclose in its response the names and addresses of entities with whom the principal(s) of Vendor have been affiliated at any time in the five (5) years preceding the date the solicitation was posted. Affiliated entities of the principal(s) are those entities related to Vendor by the sharing of stock or other means of control, including but not limited to a subsidiary, parent, or sibling entity.

# 10. Resolution of Protested Solicitations and Proposed Awards:

In accordance with Sections 21.118 and 21.120 of the Broward County Procurement Code, if a Vendor intends to protest a solicitation or proposed award of a contract the following shall apply:

- (a) Any protest concerning the solicitation's specifications or requirements (or any addendum thereto) received by the County within seven (7) business days from the posting of the solicitation or addendum on the Purchasing Division's website. The protest must be made in writing to the Director of Purchasing, and must specify the grounds for protest.
- (b) Any protest concerning a solicitation or a proposed award above the authority of the Director of Purchasing, as provided in the Procurement Code must be received by the County within five (5) business days after the posting of the recommendation for award on the Purchasing Division's website. The protest must be made in writing to the Director of Purchasing, and must specify the grounds for protest.
- (c) Any protest concerning a solicitation or a proposed award within the authority of the Director of Purchasing, as provided in the Procurement Code, must be received by the County within three (3) business days after the posting of the recommendation of award on the Purchasing Division's website may protest to the Director of Purchasing. The protest must be made in writing to the Director of Purchasing, and must specify the grounds for protest.
- (d) For purposes of this section, a business day is defined as Monday through Friday between 8:30 a.m. and 5:00 p.m. Failure to timely file a protest within the timeframes specified shall constitute a waiver of the right to protest.
- (e) As a condition of initiating any protest, the protestor shall present the Director of Purchasing with a nonrefundable filing fee. The filing fee shall be calculated based on the estimated contract amount. For purposes of the protest, the estimated contract amount shall be the contract amount submitted by the protestor. If no contract amount was submitted, the estimated contract amount shall be the County's estimated contract price for the project. The County will accept money order, certified check, or cashier's check, payable to Broward County Board of County Commissioners. The filing fees are as follows:

Estimated Contract Amount	Filing Fee
Mandatory Bid Amount - \$250,000	\$500
\$250,001 - \$500,000	\$1,000

# Broward County Board of County Commissioners

\$500,001 - \$5 million	\$3,000
Over \$5 million	\$5,000

## 11. Public Entity Crimes & Public Business Discrimination:

Vendor represents that the submission of its response to this solicitation does not violate the Public Entity Crimes Act, Section 287.133, Florida. Vendor represents that it has not been placed on the "discriminatory vendor list" as provided in Section 287.134, Florida Statutes, and that it is not a "scrutinized company" pursuant to Section 215.473, Florida Statutes. Vendor represents and certifies that it is not ineligible to contract with the County on any of the grounds stated in Section 287.135, Florida Statutes. Violation of this section shall result in cancellation of Vendor's contract, and may result in suspension and/or debarment.

# 12. State of Florida Division of Corporations Requirements:

Vendor must comply with all state and local business licensing requirements. All corporations, partnerships, and other business entities must have the authority to transact business in the State of Florida and must be in good standing with the Florida Secretary of State before responding to this solicitation. For further information, contact the Florida Department of State, Division of Corporations. A Vendor that does not comply with the provisions of this section may be deemed nonresponsive to the solicitation.

## 13. Cone of Silence Ordinance (Invitations for Bids):

The Cone of Silence Ordinance, Section 1-266, Broward County Code of Ordinances, provides that for certain time periods, Vendors and their representatives may not communicate regarding the solicitation with any County Commissioner or their staff, the County Administrator, Deputy County Administrator, Assistant County Administrator, Assistants to the County Administrator, their respective support staff, or any staff person that will evaluate solicitation responses or recommend selection in this solicitation process. However, Vendors may communicate with a representative of the Office of Economic and Small Business Development ("OESBD") (telephone (954) 357-6400) at any time regarding a solicitation or regarding participation of Small Business Enterprises or County Business Enterprises in a solicitation. The Cone of Silence also permits communication with certain other County employees (for more information, refer to Section 1-266, Broward County Code of Ordinances).

- (a) The Cone of Silence shall be in effect for any County Commissioner or the Commissioner's staff, commencing at the time of the opening of responses to the solicitation;
- (b) The Cone of Silence shall be in effect for the County Administrator, Deputy County Administrator, Assistant County Administrator, Assistants to the County Administrator, their respective support staff, and any person that will evaluate solicitation responses or recommend selection in this solicitation process commencing at the time of advertisement for the solicitation.
- (c) The Cone of Silence terminates when the County Commission or other awarding authority takes action that concludes the solicitation.
- (d) Any violations of the Code of Silence Ordinance by any representative of Vendor, including owner, employee, consultant, lobbyist, or actual or potential subcontractor or subconsultant, may be reported to the County's Office of Professional Standards. If the Office of Professional Standards determines that a violation has occurred, a fine shall be imposed against Vendor as provided in the Broward County Code of Ordinances. Additionally, a determination of violation shall render any award to a Vendor who is found to have violated the Cone of Silence Ordinance voidable, at the sole discretion of the Broward County Board of County Commissioners.

# 14. Contingency Fees:

By submission of this solicitation response, Vendor certifies it has not paid and will not pay any contingency fees (sometimes known as a finder's fee) to any person or organization, other than a bona fide employee working solely for Vendor, to secure a contract made pursuant to this solicitation. Violation of this policy may result in termination of any resultant contract and/or possible suspension and/or debarment of Vendor.

## 15. Local Business Tax Receipt Requirements:

All Vendors maintaining a business address within Broward County must have a current Broward County Local Business Tax Receipt issued by the Broward County Records, Taxes and Treasury Division prior to recommendation for award. Vendors that do not have such a license may be deemed nonresponsive to this solicitation. For further information on obtaining or renewing a Local Business Tax Receipt, contact the Records, Taxes and Treasury Division at (954) 357-6200.

## 16. Dun & Bradstreet Report Requirement:

The County may review any Vendor's Dun & Bradstreet rating and payment performance to assist in determining a Vendor's responsibility regarding this solicitation.

# 17. Samples:

Samples or drawings, when required, shall be provided to the County free of charge. If not mutilated or destroyed in the examination, Vendor will be notified to remove same at their expense. If samples are not removed within thirty (30) calendar days after written notice to Vendor, they shall be considered as abandoned, and the County shall have the right to dispose of them as its own property.

# 18. "Or Equal" Clause:

Whenever a material, article or piece of equipment is identified in the solicitation by reference to a manufacturer or vendor name, trade name, catalog number, or otherwise, any such reference is intended merely to establish a standard; and, unless such identification is followed by the words "no substitution is permitted," any material, article, or piece of equipment of any other manufacturer or vendors that will perform or serve the requirements of the solicitation will be considered equally acceptable, provided that the material, article, or piece of equipment so proposed is, in the sole opinion of the County, equal in substance, quality, and function to the material, article, or piece of equipment specified in the solicitation.

## 19. Procurement Code:

The Broward County Procurement Code is applicable to this solicitation, and can be obtained from the Purchasing Division's website at: www.broward.org/purchasing.

## 20. Legal Requirements:

Applicable provisions of all federal, state, and local laws, ordinances, rules, and regulations, including the Broward County Procurement Code, shall govern development, submittal, and evaluation of responses to this solicitation, and shall govern any and all claims and disputes that may arise between Vendors and the County, and its officers, employees, and/or authorized representatives. Lack of knowledge by any Vendor of any applicable law, rule, or regulation shall not constitute a recognizable defense against the legal effect thereof.

# C. TERMS AND CONDITIONS OF CONTRACT

## 1. Contract Period:

The contract period shall start and terminate as indicated in the solicitation's Special Instructions to Vendors. If no contract period is stated in the Special Instructions to Vendors: the contract period shall start upon the date of award and end three (3) years later, unless extended by the Director of Purchasing; and the Director of Purchasing may extend the contract period for up to two (2) additional one (1) year terms upon written notice to Contractor at least thirty (30) days prior to the expiration of the then-current term. The contract shall not exceed a total of five (5) years, unless extended pursuant to action by the Broward County Board of County Commissioners. The continuation of this contract beyond the end of any County

fiscal year is subject to both the appropriation and the availability of funds in accordance with Chapter 129, Florida Statutes.

The Director of Purchasing may, in her/his sole and absolute discretion, renew the contract based on Contractor's satisfactory performance and the Director of Purchasing's determination that renewal is in the best interest of the County. In such cases, the County will provide Contractor with a Notification of Intent to Renew in advance of the contract expiration date. All prices, terms, and conditions of the contract shall remain firm for any renewal period unless subject to price adjustment specified as a "special condition" in the solicitation. If the Director of Purchasing does not renew the contract, Contractor nonetheless shall, if directed in writing by the Director of Purchasing, continue contract performance for a period not exceeding ninety (90) days beyond the contract expiration date. Contractor shall be compensated for such extended performance at the rate in effect when the Director of Purchasing directs Contractor to continue performance beyond the contract expiration date.

# 2. Orders and Quantities:

Unless the solicitation states a fixed quantity to be purchased, no guarantee is expressed or implied as to the total quantity of goods/services to be purchased under any open-end contract. Solicitations for open-end contracts may state estimated quantities, but such estimated quantities are not a representation of the amount to be purchased. The County reserves the right to issue purchase orders on this solicitation as and when required; or issue a blanket purchase order for individual agencies and release partial quantities; or issue instructions for use of direct purchase orders by various County agencies; or do any combination of the foregoing. No delivery shall become due or be acceptable without a written purchase order and shipping instruction by the County, unless otherwise expressly provided in the solicitation. Such order will contain the quantity, time of delivery, and other pertinent data. However, for items required immediately, the County may place an order electronically (which may include by email), with subsequent confirmation by a written purchase order.

For solicitations stating fixed quantities, purchase order(s) for the quantities stated in the solicitation will be issued to the Contractor after notification of award and receipt of all required documents. The County may order additional quantities of up to an additional twenty percent (20%) of the originally specified quantities at any time prior to the expiration of one (1) year after the date of award; if so ordered by the County, Contractor must furnish such additional quantities at the same prices, terms, and conditions as stated in the solicitation.

# 3. Invoice and Payment:

Contractor may submit invoices for payment no more often than on a monthly basis, but only after the goods or services for which the invoices are submitted have been delivered or completed. If Contractor utilizes a subcontractor for any goods or services relating to the contract, Contractor must submit a Certification of Payments to Subcontractors and Suppliers with each invoice in the form provided by the County. Contractor must pay subcontractors and suppliers within fifteen (15) days following receipt of payment from the County for such subcontracted work or supplies. The certification shall be accompanied by a copy of the notification sent to each unpaid subcontractor listed on the form, if any, explaining the good cause why payment has not been made to that subcontractor.

The County shall pay for all goods and services received and accepted by the County in accordance with the Local Government Prompt Payment Act, Section 218.70, Florida Statutes, and the Prompt Payment Policy, Section No. 1-51.6, of the Broward County Code of Ordinances. All applications for payment shall be submitted to the address indicated in the purchase order. The County will pay Contractor after receipt, acceptance, and proper invoice is received. Invoices must bear the purchase order number. The County will

only accept and pay for deliveries made by Contractor within the contract period, including any extensions or continued performance as directed by the Director of Purchasing.

## 4. Termination:

- (a) **Availability of Funds:** In the event funds for this contract are not made available or otherwise allocated by the Broward County Board of County Commissioners, the County may terminate this contract upon thirty (30) days prior written notice to Contractor without penalty or liability for such termination. The Broward County Board of County Commissioners shall be the final authority as to availability of funds and how such available funds are to be allotted and expended.
- (b) **Nonperformance:** The County may terminate the contract for cause if Contractor is in in breach and does not correct the breach within ten (10) days after written notice from the County Contract Administrator identifying the breach. Cause for termination shall include, but not be limited to, failure to suitably perform the work; failure to suitably deliver goods in accordance with the specifications and instructions in this solicitation; failure to continuously perform the work in a manner calculated to meet or accomplish the objectives of the County as set forth in this solicitation; or multiple breaches of the provisions of this contract notwithstanding whether any breach was previously waived or cured. The County's election not to enforce any particular breach(es) shall not constitute a waiver its right to enforce such breach(es).
- (c) For Convenience: The County may terminate the contract for convenience upon no less than thirty (30) days written notice. In the event the contract is terminated for convenience, Contractor shall be paid for any goods properly delivered and services properly performed to the date the contract is terminated. However, upon being notified of the County's election to terminate, Contractor shall cease any deliveries, shipment or carriage of goods, and refrain from performing further services or incurring additional expenses under the terms of the contract, unless directed otherwise in writing by the County. In no event will payment be made for lost or future profits or damages for Contractor's reliance on continued performance of the contract beyond the date of termination for convenience. Contractor acknowledges and agrees that it has received good, valuable, and sufficient consideration from the County for the County's right to terminate this contract for convenience, the receipt and adequacy of which are hereby acknowledged.

## 5. Conditions and Packaging:

Unless otherwise stated in the solicitation, or specifically ordered from an accepted price list, deliveries must consist only of new and unused goods and must be the current standard production model available at the time of Contractor's response. The goods must be suitably packaged for shipment by common carrier. Each container, or multiple units or items otherwise packaged, must bear a label or otherwise legible marking stating the name of Contractor (or the manufacturer or supplier), the purchase order number, and any other information required by the solicitation's specifications.

# 6. Safety Standards:

Unless otherwise specified in the solicitation, all manufactured items and fabricated assemblies shall comply with applicable requirements of the Occupational Safety and Health Act ("OSHA") and all standards thereunder. All sources of energy associated with machinery/equipment purchased shall be capable of being "locked-out" in accordance with OSHA 29 CFR § 1910.147, Hazardous Energy Control. Pursuant to OSHA 29 CFR § 1910.1200, Hazard Communication Standard, and Chapter 442, Florida Statutes, Occupational Safety and Health, any chemical substance provided or delivered pursuant to this solicitation to the County must be compliant with the Global Harmonized System ("GHS") for Hazard Communication accompanied by a Safety Data Sheet ("SDS") consisting of 16 sections, which SDS must be submitted to the Broward County Risk Management Division, 115 South Andrews Avenue, Room 218, Fort Lauderdale, FL 33301-1803.

# 7. Rejection of Nonconforming Items:

The County may withhold acceptance of, or reject any items that the County determines do not meet the specification requirements of the solicitation. Upon written notice in accordance with Section 12 below, Contractor must remove the rejected items at its own expense within five (5) calendar days after the County's notice of rejection and then replace them at its own expense with items that meet the specification requirements of the solicitation. Any items not removed by Contractor within thirty (30) days after the County's notice of rejection shall be considered abandoned, and the County may dispose of them in any manner it sees fit. The County shall not be required to give written notice of rejection with respect to foodstuffs or medication. With respect to foodstuffs and medication, the County may provide verbal notification of rejection, in response to which Contractor must immediately remove and replace the rejected goods at its sole expense. Contractor's failure to provide conforming items, failure to meet the timeframes for removal and replacement specified in this Section 7 may result in Contractor being found in breach of contract.

## 8. Inspection, Acceptance and Title:

Inspection and acceptance will be at the delivery destination specified in the solicitation, unless otherwise stated in the purchase order. Title and risk of loss or damage to all items shall be the responsibility of Contractor until such items are accepted by the County.

## 9. Governmental Restrictions:

In the event any applicable law or regulation requires substitution of the goods or services required by the solicitation (or alteration of the material quality, workmanship, or performance of such goods or services) prior to delivery of same, Contractor must immediately notify the County in writing of the specific law or regulation requiring such substitution or alteration. The County reserves the right to accept any such substitution or alteration, including any price adjustments occasioned thereby, or to terminate the contract without liability and at no further expense to the County.

# 10. Insurance:

Contractor shall, at its sole expense, maintain the minimum insurance coverages required in the solicitation in accordance with the terms and conditions of this article. Contractor shall maintain insurance coverage against claims relating to any act or omission by Contractor, its agents, representatives, employees, or subcontractors in connection with this contract. Contractor shall ensure that "Broward County" is listed and endorsed as an additional insured on all required policies. Contractor shall ensure that all required insurance coverages remain in full force and effect for the duration of this contract and until all performance required by Contractor has been completed. Contractor shall ensure that all required insurance policies are issued by insurers: (1) assigned an A. M. Best rating of at least "A-" with a Financial Size Category of at least Class VII; (2) authorized to transact insurance in the State of Florida; or (3) a qualified eligible surplus lines insurer pursuant to Section 626.917 or 626.918, Florida Statutes, with approval by the County's Risk Management Division. Contractor shall be solely responsible for and shall pay any deductible or self-insured retention applicable to any claim against the County. Unless prohibited by the applicable policy, Contractor waives any right to subrogation that any of Contractor's insurer may acquire against the County, and agrees to obtain same in an endorsement of Contractor's insurance policies.

## 11. Indemnification:

(a) Contracts other than construction contracts (as defined in Section 726.06, Florida Statutes): Contractor shall indemnify, hold harmless, and defend the County and all of the County's current, past, and future officers, agents, servants, and employees (collectively, "Indemnified Party") from and against any and all causes of action, demands, claims, losses, liabilities, and expenditures of any kind, including attorneys' fees, court costs, and expenses, including through the conclusion of any appellate proceedings, raised or

asserted by any person or entity not a party to this contract, and caused or alleged to be caused, in whole or in part, by any intentional, reckless, or negligent act or omission of Contractor, its officers, employees, agents, or servants, arising from, relating to, or in connection with this solicitation (collectively, a "Claim"). If any Claim is brought against an Indemnified Party, Contractor shall, upon written notice from the County, defend each Indemnified Party against each such Claim by counsel satisfactory to the County or, at the County's option, pay for an attorney selected by the County Attorney to defend the Indemnified Party. The obligations of this section shall survive the expiration or earlier termination of this solicitation and the contract term. If considered necessary by the Contract Administrator and the County Attorney, any sums due Contractor under this contract may be retained by the County until all Claims subject to this indemnification obligation have been settled or otherwise resolved. Any amount withheld shall not be subject to payment of interest by the County.

b) Construction contracts (as defined in Section 726.06, Florida Statutes): Contractor shall indemnify and hold harmless the County and its current, past, and future officers and employees from liabilities, damages, losses, and costs, including, but not limited to, reasonable attorneys' fees, to the extent caused by the negligence, recklessness or intentionally wrongful conduct of Contractor or other persons employed or utilized by Contractor in the performance of this contract. The provisions of this section shall survive the expiration or earlier termination of this contract. To the extent considered necessary by the Contract Administrator and the County Attorney, any sums due Contractor under this contract may be retained by the County until all of the County's claims subject to this indemnification obligation have been settled or otherwise resolved, and any amount withheld shall not be subject to payment of interest by the County.

# 12. Notice:

Notice to the County or Contractor must be sent via U.S. first-class mail, hand delivery, or commercial overnight delivery, each with a contemporaneous copy via email, to the addresses listed below (for the County) or stated in the solicitation (for Contractor), and shall be effective upon mailing or hand delivery (provided the contemporaneous email is also sent). The addresses for notice shall remain as set forth in this section unless and until changed by providing notice of such change in accordance with the provisions of this section.

For the County:
Broward County
Director, Broward County Purchasing Division
115 S. Andrews Avenue, Room 212
Fort Lauderdale, FL 33301-1801

Contractor must identify in its response a designated person and address to whom notice shall be sent when required by the contract.

# 13. Jurisdiction, Venue, Waiver of Jury Trial:

This contract shall be interpreted and construed in accordance with and governed by the laws of the State of Florida. The exclusive venue for any lawsuit arising from, related to, or in connection with this solicitation or contract shall be in the state courts of the Seventeenth Judicial Circuit in and for Broward County, Florida. If any claim arising from, related to, or in connection with this solicitation or contract must be litigated in federal court, the exclusive venue for any such lawsuit shall be in the United States District Court or United States Bankruptcy Court for the Southern District of Florida. BY ENTERING INTO THIS CONTRACT, EACH OF CONTRACTOR AND THE COUNTY HEREBY EXPRESSLY WAIVE ANY RIGHTS IT MAY HAVE TO A TRIAL BY JURY OF ANY CIVIL LITIGATION RELATED TO THIS CONTRACT. IF A PARTY FAILS TO WITHDRAW A REQUEST FOR A JURY TRIAL IN A LAWSUIT ARISING OUT OF THIS CONTRACT OR SOLICITATION AFTER WRITTEN NOTICE BY THE OTHER PARTY OF VIOLATION OF THIS SECTION, THE PARTY

MAKING THE REQUEST FOR JURY TRIAL SHALL BE LIABLE FOR THE REASONABLE ATTORNEYS' FEES AND COSTS OF THE OTHER PARTY IN CONTESTING THE REQUEST FOR JURY TRIAL, AND SUCH AMOUNTS SHALL BE AWARDED BY THE COURT IN ADJUDICATING THE MOTION.

# 14. Patents and Royalties:

Contractor, without exception, shall indemnify, hold harmless, and defend the County, and all of the County's current, past, and future officers, agents, servants, and employees, from liability of any nature or kind, including but not limited to attorneys' fees, costs, and expenses, for or on account of any of any claims by third parties arising out of any copyrighted, trademarked, invention (patented or unpatented), process, or article that is manufactured, used, or otherwise required or occasioned by performance of the contract by Contractor or by the County. Contractor is solely responsible for any and all royalties, fees, or costs resulting or arising from use of any design, device, or materials covered by letters, patent, or copyright. The County shall not be liable or pay any royalties, fees, or costs in connection with this contract or the goods or services provided pursuant to this contract. This provision shall survive the expiration or earlier termination of the contract.

## 15. Assignment; Subcontractors:

Except for subcontracting approved by the County in advance, neither this contract nor any right or interest in it may be assigned, transferred, subcontracted, or encumbered by Contractor without the prior written consent of the County. Any assignment, transfer, encumbrance, or subcontract in violation of this section shall be void and ineffective, constitute a breach of this contract, and permit the County to immediately terminate the contract, in addition to any other remedies available to the County at law or in equity.

# 16. Equal Employment Opportunity:

Contractor shall not discriminate against any employee or applicant for employment based on race, religion, age, color, sex, gender, national origin, sexual orientation (including as provided in Broward County Code, Chapter 16½), marital status, political affiliation, disability, or physical or mental disability. Contractor shall also take affirmative action to ensure that employees are treated during their employment, without regard to their race, religion, age, color, sex, gender, national origin, sexual orientation, marital status, political affiliation, disability, or physical or mental disability. Such actions shall include, but not be limited to the following: employment, promotion, demotion, transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, as well as selection of training, including apprenticeship. Contractor agrees to post notices setting forth the provisions of this nondiscrimination clause in conspicuous places available to employees and applicants for employment.

Contractor must include the foregoing or similar language in its contracts with any subcontractors or subconsultants that may perform work required by this solicitation, except that any project assisted by U.S. Department of Transportation funds shall comply with the nondiscrimination requirements in Title 49 C.F.R. Parts 23 and 26, as applicable. Contractor must ensure subcontractors and subconsultants, if any, are aware and comply with the requirements of this nondiscrimination clause. Failure to comply with above requirements is a material breach of the contract, and may result in contract termination or such other remedy as the County deems appropriate, all of such remedies being cumulative.

# 17. County Business Enterprise (CBE):

Contractor will meet the required CBE goal (if any) stated in the solicitation by utilizing the CBE firms listed in Contractor's response for the required percentage of total services (the "Commitment"). Contractor shall enter into formal contracts with the CBE firms listed in the response and, upon request, provide copies of those contracts to the OESBD. Each CBE firm must be certified by OESBD, and any replacement of a CBE firm must be approved by OEBSD. The parties stipulate that if Contractor fails to meet the Commitment, the damages to the County arising from such failure are not readily ascertainable at the time of contracting. If Contractor fails to meet the Commitment and the County determines, in the sole discretion

of the OESBD Program Director, that Contractor failed to make Good Faith Efforts (as defined in Section 1-81, Broward County Code of Ordinances) to meet the Commitment, Contractor shall pay the County liquidated damages in an amount equal to fifty percent (50%) of the actual dollar amount by which Contractor failed to achieve the Commitment, up to a maximum amount of ten percent (10%) of the total contract amount excluding costs and reimbursable expenses. As elected by County, such liquidated damages amount shall be either credited against any amounts due from County, or must be paid to County within thirty (30) days after written demand. Contractor shall provide written monthly reports to the Contract Administrator attesting to Contractor's compliance with the Commitment, and must allow the County to engage in onsite reviews to monitor Contractor's progress in complying with the obligations of this section.

# 18. Domestic Partnership Requirement:

Unless this contract is exempt from the provisions of the Broward County Domestic Partnership Act, Section 16½-157, Broward County Code of Ordinances, Contractor certifies and represents that it will comply with the provisions of Section 16½-157 for the duration of this contract.

## 19. Drug-Free Workplace.

To the extent required under Section 21.31(a)(2), Broward County Administrative Code, or Section 287.087, Florida Statutes, Contractor certifies that it has a drug-free workplace program that it will maintain such drug-free workplace program for the duration of this contract.

## 20. Modifications:

All changes to purchase orders shall be by issuance of a change order by the County. Any modification or change to this contract must be by written amendment signed by Contractor and the County.

# 21. Purchase by Other Governmental Agencies:

Contractor understands and agrees that any other governmental unit may enter into a contract with Contractor on the same terms and conditions as Contractor's contract with the County. However, any such governmental unit must establish its own contract with Contractor, place its own orders, issue its own purchase orders, be separately invoiced by Contractor, make its own payments, and issue its own exemption certificates as required by Contractor. Contractor understands and agrees that the County is not and will not be a legally bound party to any contractual agreement made between any other governmental unit and Contractor as a result of this solicitation, and that no other governmental unit is an implied or intended third-party beneficiary of this contract between the County and Contractor.

#### 22. Public Records:

Pursuant to Chapter 119, Florida Statutes, Contractor and all subcontractors and subconsultants retained by Contractor for performance of this contract, shall comply with Florida's Public Records Law, including as follows:

- (a) Keep and maintain public records required by the County to perform the services;
- (b) Upon request from the County, provide the County with a copy of the requested records or allow the records to be inspected or copied within a reasonable time and at a cost that does not exceed that provided in Chapter 119, Florida Statutes, or as otherwise provided by law;
- (c) Ensure that public records that are exempt or confidential and exempt from public record requirements are not disclosed except as authorized by law for the duration of this contract and following completion or termination of this contract if the records are not transferred to the County; and
- (d) Upon completion or termination of this contract, transfer to the County, at no cost, all public records in possession of Contractor or keep and maintain public records required by the County to perform the services. If Contractor transfers the records to the County, Contractor shall destroy any duplicate public records that are exempt or confidential and exempt. If Contractor keeps and maintains the public records, Contractor shall meet all applicable requirements for retaining public records. All records stored

electronically must be provided to the County upon request in a format that is compatible with the information technology systems of the County.

A request for public records regarding this contract must be made directly to the County, who will be responsible for responding to any such public records requests. Contractor must provide any requested records to the County to enable the County to respond to the public records request.

IF CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT (954) 357-6006, PURCHASINGINFORMATION@BROWARD.ORG, 115 S. ANDREWS AVE., SUITE 212, FORT LAUDERDALE, FLORIDA 33301.

Any material submitted to the County that Contractor contends constitutes or contains trade secrets or is otherwise exempt from production under Florida public records laws (including Chapter 119, Florida Statutes) ("Trade Secret Materials") must be separately submitted and conspicuously labeled "EXEMPT FROM PUBLIC RECORD PRODUCTION – TRADE SECRET." In addition, Contractor must, simultaneous with the submission of any Trade Secret Materials, provide a sworn affidavit from a person with personal knowledge attesting that the Trade Secret Materials constitute trade secrets under Section 812.081, Florida Statutes, and stating the factual basis for same. If a third party submits a request to the County for records designated by Contractor as Trade Secret Materials, the County shall refrain from disclosing the Trade Secret Materials, unless otherwise ordered by a court of competent jurisdiction or authorized in writing by Contractor. Contractor must indemnify and defend the County and its employees and agents from any and all claims, causes of action, losses, fines, penalties, damages, judgments and liabilities of any kind, including attorneys' fees, litigation expenses, and court costs, relating to the nondisclosure of any Trade Secret Materials in response to a records request by a third party.

# 23. Audit Right and Retention Records:

The County shall have the right to audit the books, records, and accounts of Contractor and its subcontractors that are related to this contract. Contractor and its subcontractors shall keep such books, records, and accounts as may be necessary in order to record complete and correct entries related to this contract and performance under this contract. All such books, records, and accounts shall be kept in written form, or in a form capable of conversion into written form within a reasonable time, and upon request to do so, Contractor or its subcontractor shall make same available in written form at no cost to the County. Contractor shall ensure that the requirements of this section are included in all agreements with its subcontractor(s).

Contractor shall preserve and make available, at reasonable times within Broward County, Florida, for examination and audit, all financial records, supporting documents, statistical records, and any other documents pertinent to this contract for at least three (3) years after expiration or termination of this contract or until resolution of any audit findings, whichever is longer. Any audit or inspection pursuant to this section may be performed by any County representative (including any outside representative engaged by the County). Contractor hereby grants the County the right to conduct such audit or review at Contractor's place of business, if deemed appropriate by the County, with seventy-two (72) hours' advance notice.

Any incomplete or incorrect entry in such books, records, and accounts shall be a basis for the County's disallowance and recovery of any payment made by the County based upon such entry. If an audit or inspection in accordance with this section discloses overpricing or overcharges to the County of any nature by Contractor in excess of five percent (5%) of the total contract billings reviewed by the County, County shall reimburse County for the reasonable actual cost of the County's audit. In addition, at the County's

option, Contractor shall remit the amount of overcharges to County or County shall deduct such overcharges from future payments made by County to Contractor. Any remittances due by Contractor as a result of such audit or inspection shall be made within thirty (30) days after presentation of the County's findings to Contractor.

# 24. Ownership of Documents:

All finished or unfinished documents, studies, surveys, drawings, maps, models, photographs, specifications, and reports prepared or provided by Contractor in connection with this contract shall become the property of the County upon the expiration or termination of the contract, whether the project for which they are made is completed or not. Contractor must deliver all such materials to the Contract Administrator prior to contract expiration or within fifteen (15) days after Contractor's receipt of a written notice of termination. If applicable, the County may withhold any payments then due to Contractor until Contractor complies with the provisions of this section.

# 25. Special Notice:

In accordance with OSHA Regulation 29 CFR § 1926.1101(k)(2), Contractor is hereby notified of the presence of asbestos containing material and/or presumed asbestos containing material at some Broward County locations.

## 26. Code Requirements:

Contractor and his or her subcontractors on this project must be familiar and comply with all applicable federal, state, county, municipal, and local laws, rule, regulations, and codes applicable to performance of the contract awarded with respect to this solicitation. Contractor must ask for and receive any required inspections relevant to its performance of the contract.

## 27. Contractor Responsibilities:

Unless otherwise stated in the solicitation, Contractor will be responsible for the provision, installation, and performance of all equipment, materials, goods, and services offered in its response, even if such materials or equipment is not of their own manufacture or such services are not being performed by Contractor's own employees. Time is of the essence in performing the duties, obligations, and responsibilities required by Contractor under this contract.

## 28. Warranties and Guarantees:

Contractor shall obtain all applicable manufacturers' warranties and guarantees of the equipment and materials required by this solicitation and resulting orders under this solicitation for the benefit of, and in the name of, Broward County. Contractor shall deliver documentation of such warranties and guarantees to the point of delivery specified in the solicitation.

# 29. Contractor Evaluation:

The Contract Administrator will document Contractor's performance by completing a Performance Evaluation Form. blank Performance Evaluation Form may be viewed at: broward.org/Purchasing/documents/vendorperformanceevaluationrequirements.pdf. An performance evaluation of Contractor may be conducted by the Contract Administrator at any time before completion of the Project. The Contract Administrator shall conduct a final performance evaluation when the Request for Final Payment to Contractor is forwarded for approval. In either situation, the completed evaluation(s) shall be forwarded to the Director of Purchasing, who shall provide a copy to Contractor upon request. Said evaluation(s) may be used by the County as a factor in considering the responsibility of Contractor for future solicitations.

# 30. Independent Contractor.

Contractor is an independent contractor of the County, and nothing in this contract shall constitute or create a partnership, joint venture, or any other relationship between the Parties. In providing Services, neither Contractor nor its agents shall act as officers, employees, or agents of the County. Contractor shall not have the right to bind the County to any obligation not expressly undertaken by the County under this contract.

# 31. Regulatory Capacity.

Notwithstanding the fact that the County is a political subdivision with certain regulatory authority, the County's performance under this contract is as a Party to this contract and not in its regulatory capacity. If the County exercises its regulatory authority, the exercise of such authority and the enforcement of any rules, regulation, laws, and ordinances shall be made pursuant to its pursuant to the County's regulatory authority as a governmental body separate and apart from this contract, and shall not be attributable in any manner to the County as a party to this contract.

# 32. Sovereign Immunity.

Except to the extent required by law, nothing herein is intended to serve as a waiver of sovereign immunity by the County nor shall anything included herein be construed as consent by the County to be sued by third parties in any matter arising out of this contract. The County is a political subdivision as defined in Section 768.28, Florida Statutes, and shall be responsible for the negligent or wrongful acts or omissions of its employees pursuant to Section 768.28, Florida Statutes.

# 33. Third-Party Beneficiaries.

Neither Contractor nor the County intends to directly or substantially benefit a third party by entering into this contract. Therefore, the Parties acknowledge that there are no third-party beneficiaries to this contract and that no third party shall be entitled to assert a right or claim against either of them based upon this contract.

# 34. Compliance with Laws.

Contractor and the goods and services provided by Contractor pursuant to this contract must comply with all applicable federal, state, and local laws, codes, ordinances, rules, and regulations including, without limitation, American with Disabilities Act, 42 U.S.C. § 12101, Section 504 of the Rehabilitation Act of 1973, and any related federal, state, or local laws, rules, and regulations.

# 35. Severability.

If any part of this contract is found to be unenforceable by any court of competent jurisdiction, that part shall be deemed severed from this contract and the balance of this contract shall remain in full force and effect.

Rev. 10/2020 #529892v2

#### **VENDOR QUESTIONNAIRE**

Quotations and Invitations for Bids

The completed Vendor Questionnaire should be submitted with the solicitation response. If not submitted with solicitation response, it must be submitted within three business days of County's request. Failure to timely submit may affect may result in Vendor being deemed non-responsive.

If a response requires additional information, the Vendor should upload a written detailed response; each response should be numbered to match the question number. The completed questionnaire and attached responses will become part of the procurement record. It is imperative that the person completing the form be knowledgeable about the proposing Vendor's business and operations.

1.	Legal business name:
2.	Doing Business As/Fictitious Name (if applicable):
3.	Federal Employer I.D. no. (FEIN):
4.	Dun and Bradstreet No.:
5.	Website address (if applicable):
6.	Principal place of business address:
7.	Office location responsible for this project:
8.	Telephone no.: Fax no.:
9.	Type of business (check appropriate box):
	Corporation (specify the state of incorporation):
	Sole Prioprietor Limited Liability Company (LLC) Limited Partnership General Partnership (State and County filled in)
10	Other – Specify AUTHORIZED CONTACT(S) FOR YOUR FIRM:
10.	Name:
	Title:
	E-mail:
	Telephone No.:
	Name:
	Title:
	E-mail:
	Telephone No.:
	Generic e-mail for purchase orders:
44	(Broward County auto distributes purchase orders from its financial system. To ensure a firm receives a purchase order, it is suggested a company accessible e-mail address is used.)
11.	List name and title of each principal, owner, officer, and major shareholder:  a)
	b)
	c)
	d)

12. Affiliated Entities of the Principal(s): List the names and addresses of "affiliated entities" of the Vendor's principal(s) over the last five (5) years (from the solicitation opening deadline) that have acted as a prime Vendor with the County. Affiliated entities of the principal(s) are those entities related to the vendor by the sharing of stock or other means of control, including but not limited to a subsidiary, parent or sibling entity.

# Broward County Board of County Commissioners

	a)
	b)
	c)
	d)
13.	Has your firm, its principals, officers or predecessor organization(s) been debarred or suspended by any
	government entity within the last three years? If yes, specify details in an attached written response.   Yes  No
14.	Has your firm, its principals, officers or predecessor organization(s) ever been debarred or suspended by any
	government entity? If yes, specify details in an attached written response the reinstatement date, if granted. Yes No
15.	Specify the type of services or commodities your firm offers:
16.	How many years has your firm been in business while providing the services and/or products offered within this
	solicitation?
17.	Is your firm's business regularly engaged in and routinely selling the product(s) or services offered within this
	solicitation? Yes No
18.	Does your firm affirm that it is currently authorized by the manufacturer as a dealer/seller of the product(s) offered herein, and warranty offered is the manufacturer's warranty with Broward County recorded as the original
	purchase? Yes No N/A (if service)
19.	Has your firm ever failed to complete any services and/or delivery of products during the last three (3) years? If
20.	yes, specify details in an attached written response. Yes No Is your firm or any of its principals or officers currently principals or officers of another organization? If yes,
21.	specify details in an attached written response.  No Have any voluntary or involuntary bankruptcy petitions been filed by or against your firm, its parent or subsidiaries
	or predecessor organizations during the last three years? If yes, specify details in an attached written response.   Yes No
22.	Has your firm's surety ever intervened to assist in the completion of a contract or have Performance and/or Payment Bond claims been made to your firm or its predecessor's sureties during the last three years? If yes,
	specify details in an attached written response, including contact information for owner and surety company.
	Yes No
23.	If requested, will your firm extend the same price, terms and conditions to other governmental entities during the
24.	period covered by this contract?
	bid price? Procurement Contract must be approved and designated for procurement card (p-card) by Director of
25.	Purchasing for use prior to ordering.   Yes No Living Wage solicitations only: In determining what, if any, fiscal impact(s) are a result of the Ordinance for this
	solicitation, provide the following for informational purposes only. Response is not considered in determining the award of the contract.
	Living Wage had an effect on the pricing Yes  No
	If yes, Living Wage increased the pricing by % or decreased the pricing by
	%.
26.	Non-Collusion Certification: Vendor shall disclose, to their best knowledge, any Broward County officer or employee, or any relative of any such officer or employee as defined in Section 112.3135 (1)(c), the Florida Statues who is an officer or director of, or has a material interest in, the Vendor's business, who is in a position to influence this procurement. Any Broward County officer or employee who has any input into the writing of specifications or requirements, solicitation of offers, decision to award, evaluation of offers, or any other activity pertinent to this procurement is presumed, for purposes hereof, to be in a position to influence this procurement. Failure of a Vendor to disclose any relationship described herein shall be reason for debarment in accordance with the provisions of the Broward County Procurement Code.
	Select One:  Nonder certifies that this effer is made independently and free from collusion; or
	Vendor certifies that this offer is made independently and free from collusion; or
	■ Vendor is disclosing names of officers or employees who have a material interest in this procurement and is in a position to influence this procurement. Vendor must include a list of name(s), and relationship(s) with its submittal.

☐ I have not participated in the preparation or drafting of any language, scope, or specification that would
provide my firm or any affiliate an unfair advantage of securing this solicitation that has been let on behalf of Broward County Board of County Commissioners.
I have provided information regarding the specifications and/or products listed in this solicitation that has been let on behalf of Broward County Board of County Commissioners. If this box is checked, provide the following:
Name of Person the information was provided:
Title:
Date information provided:
For what purpose was the information provided?
Question 28 – 31 are only applicable to <b>service contracts</b> or a <b>construction contracts</b> (repair, maintain or furnish and install) solicitations:  28. What similar on-going contracts is your firm currently working on? If additional space is required, provide on separate sheet.
29. Has your firm completely inspected the project site(s) prior to submitting response?   Yes  No
30. Will your firm need to rent or purchase any equipment for this contract? If yes, please specify details in an
attached written response.  Yes No 31. What equipment does your firm own that is available for this contract?
32. Provide at least three (3) individuals, corporations, agencies, or institutions for which your firm has completed work of a similar nature or in which your firm sold similar commodities in the past three (3) years. Contact persons shall have firsthand knowledge of the referenced project/contract. Only provide references for non-Broward County Board of County Commissioners contracts. For Broward County contracts, the County will review performance evaluations in its database for vendors with previous or current contracts with the County. The County considers references and performance evaluations in the evaluation of Vendor's past performance. It any of the following references are inaccessible or not relevant, additional references may be requested by the County.
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# Broward County Board of County Commissioners

Contract/Project Dates (Month and Year):
Contract Amount:
Reference 3:
Scope of Work:
Contract/Project Title:
Agency:
Contact Name/Title:
Contact Telephone:
Email:
Contract/Project Dates (Month and Year):
Contract Amount:

# 1. Litigation History

- A. All Vendors are required to disclose to the County all "material" cases filed, pending, or resolved during the last three (3) years prior to the solicitation response due date, whether such cases were brought by or against the Vendor, any parent or subsidiary of the Vendor, or any predecessor organization. Additionally, all Vendors are required to disclose to the County all "material" cases filed, pending, or resolved against any principal of Vendor, regardless of whether the principal was associated with Vendor at the time of the "material" cases against the principal, during the last three (3) years prior to the solicitation response. A case is considered to be "material" if it relates, in whole or in part, to any of the following:
  - i. A similar type of work that the vendor is seeking to perform for the County under the current solicitation;
  - ii. An allegation of fraud, negligence, error or omissions, or malpractice against the vendor or any of its principals or agents who would be performing work under the current solicitation;
  - iii. A vendor's default, termination, suspension, failure to perform, or improper performance in connection with any contract;
  - iv. The financial condition of the vendor, including any bankruptcy petition (voluntary and involuntary) or receivership; or
  - v. A criminal proceeding or hearing concerning business-related offenses in which the vendor or its principals (including officers) were/are defendants.
- B. For each material case, the Vendor is required to provide all information identified in the **Litigation History Form**. Additionally, the Vendor shall provide a copy of any judgment or settlement of any material case during the last three (3) years prior to the solicitation response. Redactions of any confidential portions of the settlement agreement are only permitted upon a certification by Vendor that all redactions are required under the express terms of a pre-existing confidentiality agreement or provision.
- C. The County will consider a Vendor's litigation history information in its review and determination of responsibility.
- D. If the Vendor is a joint venture, the information provided should encompass the joint venture and each of the entities forming the joint venture.
- E. A vendor is required to disclose to the County any and all cases(s) that exist between the County and any of the Vendor's subcontractors/subconsultants proposed to work on this project during the last five (5) years prior to the solicitation response.
- F. Failure to disclose any material case, including all requested information in connection with each such case, as well as failure to disclose the Vendor's subcontractors/subconsultants litigation history against the County, may result in the Vendor being deemed non-responsive.

## LITIGATION HISTORY FORM

The completed form(s) should be returned with the Vendor's submittal. If not provided with submittal, the Vendor must submit within three business days of County's request. Vendor may be deemed non-responsive for failure to fully comply within stated timeframes.

☐ There are no material cases for this Vendor; or

☐ Material Case(s)	are disclosed below:
Is this for a: (check type)	If Yes, Name of Parent/Subsidiary/Predecessor:
Parent, Subsidiary, or	
Predecessor Firm?	or No
Party	Vendor is Plaintiff Vendor is Defendant
Case Number, Name,	
and Date Filed	
Name of Court or other tribunal	
Type of Case	Bankruptcy Civil Criminal Administrative/Regulatory
Claim or Cause of Action and Brief description of each	
Count	
Brief description of the Subject Matter and Project Involved	
Disposition of Case	Pending Settled Dismissed
(Attach copy of any applicable Judgment, Settlement	Judgment Vendor's Favor Judgment Against Vendor
Agreement and Satisfaction of Judgment.)	If Judgment Against, is Judgment Satisfied? Yes No
Opposing Counsel	
	Name:
	Email:

outly commissioner			
	Telephone Number:		
		_	
_			
Vendor Name:			

# Procurement Preferences for Broward County Small Business Enterprises and County Business Enterprises

This form should be returned with the Vendor's submittal and will be used for informational purposes.

In accordance with Broward County Ordinance, Section 1.81, non-reserved solicitations (for SBE's or CBE's) and solicitations without any assigned CBE goals, a responding Broward County certified SBE or CBE may be eligible for a procurement preference, in accordance with below:

# For Invitations to Bid and Quotation Requests:

If a responsive, responsible bid is received from a certified CBE or SBE that is within ten percent (10%) of the lowest responsive, responsible bid received from a non-certified (SBE or CBE) firm, the SBE or CBE (as applicable) shall be offered the opportunity to match the lowest responsive, responsible bid. If the SBE or CBE firm (as applicable) is responsive and responsible, and matches the lowest responsive, responsible bid, the CBE or SBE firm shall be recommended for award.

# For Request for Proposals:

If upon the completion of final rankings by the Evaluation Committee, a non-certified proposer is the highest-ranked proposer, and a responsive, responsible SBE or CBE proposer receives a score that is within five percent (5%) of the score obtained by the non-certified proposer, the highest-ranked responsive, responsible SBE or CBE proposer shall be considered the highest-ranked proposer and shall have the opportunity to proceed to negotiations with the County for award of the contract.

Vendor should indicate below if the firm is a currently certified Broward County SBE and/or CBE firm. If the firm does not indicate it is an SBE or CBE, preference may not be applied based on information received but certification will be verified in the Broward County OESBD <u>Certified Firm Directory</u>. Vendor must be certified at time of solicitation opening (due date).

This form does not substitute for certification or application for certification.

	Firm is a Broward County certified County Business Enterprise (CBE)	
Vendo	r Name	

For questions regarding the Broward County SBE and CBE certifications, please contact Office of Economic and Small Business Development at 954-357-6400.

## LOCATION CERTIFICATION FORM

Refer to applicable sections for submittal instructions. Failure to submit required forms or information by stated timeframes will deem vendor ineligible for local preference or location tiebreaker.

Broward County Code of Ordinances, Section 1-74, et seq., provides certain preferences to Local Businesses, Locally Based Businesses, and Locally Based Subsidiaries, and the Broward County Procurement Code provides location as the first tiebreaker criteria. Refer to the ordinance for additional information regarding eligibility for local preference.

## For Invitation for Bids:

To be eligible for the Local Preference best and final offer ("BAFO") and location tiebreaker, the Vendor must submit this fully completed form and a copy of its Broward County local business tax receipt at the same time it submits its bid. Vendors who fail to comply with this submittal deadline will not be eligible for either the BAFO or the location tiebreaker.

For Request for Proposals (RFPs), Request for Letters of Interest (RLIs), or Request for Qualifications (RFQs):

For Local Preference eligibility, the Vendor **should** submit this fully **completed form** and **all Required Supporting Documentation** (as indicated below) at the time Vendor submits its response to the procurement solicitation. If not provided with submittal, the Vendor **must** submit within three business days after County's written request. Failure to submit required forms or information by stated timeframes will deem the Vendor ineligible for local preference.

To be eligible for the location tiebreaker, the Vendor must submit this fully completed form and a copy of its Broward County local business tax receipt at the same time it submits its response. Vendors who fail to comply with this submittal deadline will not be eligible for the location tiebreaker.

The undersigned Vendor hereby certifies that (check the box for only one option below):

- Option 1: The Vendor is a Local Business, but does not qualify as a Locally Based Business or a Locally Based Subsidiary, as each term is defined by Section 1-74, Broward County Code of Ordinances. The Vendor further certifies that:
  - A. It has continuously maintained, for at least the one (1) year period immediately preceding the bid posting date (i.e., the date on which the solicitation was advertised),
    - i. a physical business address located within the limits of Broward County, listed on the Vendor's valid business tax receipt issued by Broward County (unless exempt from business tax receipt requirements),
    - ii. in an area zoned for the conduct of such business.
    - iii. that the Vendor owns or has the legal right to use, and
    - iv. from which the Vendor operates and performs on a day-to-day basis business that is a substantial component of the goods or services being offered to Broward County in connection with the applicable competitive solicitation (as so defined, the "Local Business Location").

	County Commissioners	IU INDZ 1222
	If Option 1 selected, indicate Local Business Location:	
term	otion 2: The Vendor is both a Local Business and a Locally Based Business of its defined by Section 1-74, Broward County Code of Ordinances. The Vendor tifies that:	
A.	The Vendor has continuously maintained, for at least the one (1) year immediately preceding the bid posting date (i.e., the date on which the solicitat advertised),	
	<ul> <li>i. a physical business address located within the limits of Broward County, I the Vendor's valid business tax receipt issued by Broward County (unless from business tax receipt requirements),</li> </ul>	
	ii. in an area zoned for the conduct of such business,	
	iii. that the Vendor owns or has the legal right to use, and	
	iv. from which the Vendor operates and performs on a day-to-day basis busing is a substantial component of the goods or services being offered to E County in connection with the applicable competitive solicitation as so the "Local Business Location");	3roward
B.	. The Local Business Location is the primary business address of the majority Vendor's employees as of the bid posting date, and/or the majority of the work un	nder the
	solicitation, if awarded to the Vendor, will be performed by employees of the whose primary business address is the Local Business Location;	Vendor
C.	. The Vendor's management directs, controls, and coordinates all or substantial	•
	the day-to-day activities of the entity (such as marketing, finance, accounting, resources, payroll, and operations) from the Local Business Location;	numan
D.	. The Vendor has not claimed any other location as its principal place of busines	s within
	the one (1) year period immediately preceding the bid posting date; and	

E. Less than fifty percent (50%) of the total equity interests in the business are owned, directly or indirectly, by one or more entities with a principal place of business located outside of Broward County. The Vendor certifies that the total equity interests in the Vendor owned, directly or indirectly, by one or more entities with a principal place of business located outside of Broward County is

If Option 2 selected, indicate	Local Business	Location

Option 3: The Vendor is both a Local Business and a Locally Based Subsidiary as each term is defined by Section 1-74, Broward County Code of Ordinances. The Vendor further certifies that:

A. The Vendor has continuously maintained:

for at least the one (1) year period immediately preceding the bid posting date (i.e., the date on which the solicitation was advertised),

- a physical business address located within the limits of Broward County, listed on the Vendor's valid business tax receipt issued by Broward County (unless exempt from business tax receipt requirements),
- iii. in an area zoned for the conduct of such business,
- that the Vendor owns or has the legal right to use, and İ۷.
- from which the Vendor operates and performs on a day-to-day basis business that is a substantial component of the goods or services being offered to Broward County in connection with the applicable competitive solicitation (as so defined, the "Local Business Location");
- B. The Local Business Location is the primary business address of the majority of the Vendor's employees as of the bid posting date, and/or the majority of the work under the solicitation, if awarded to the Vendor, will be performed by employees of the Vendor whose primary business address is the Local Business Location;
- The Vendor's management directs, controls, and coordinates all or substantially all of the day-to-day activities of the entity (such as marketing, finance, accounting, human resources, payroll, and operations) from the Local Business Location;
- The Vendor has not claimed any other location as its principal place of business within D. the one (1) year period immediately preceding the bid posting date; and
- At least fifty percent (50%) of the total equity interests in the business are owned, directly or indirectly, by one or more entities with a principal place of business located outside of Broward County. The Vendor certifies that the total equity interests in the Vendor owned, directly or indirectly, by one or more entities with a principal place of business located outside of Broward County is

If Option 3 selected, indicate **Local Business Location**: **Option 4:** The Vendor is a **joint venture** composed of one or more Local Businesses, Locally Based Businesses, or Locally Based Subsidiaries, as each term is defined by Section 1-74, Broward County Code of Ordinances. Fill in blanks with percentage equity interest or list "N/A" if section does not apply. The Vendor further certifies that: The proportion of equity interests in the joint venture owned by **Local Business(es)** Α. (each Local Business must comply with all of the requirements stated in Option 1) is % of the total equity interests in the joint venture; and/or B. The proportion of equity interests in the joint venture owned by Locally Based Business(es) (each Locally Based Business must comply with all of the requirements stated in Option 2) is % of the total equity interests in the joint venture; and/or C. The proportion of equity interests in the joint venture owned by Locally Based Subsidiary(ies) (each Locally Based Subsidiary must comply with all of the requirements stated in Option 3) is % of the total equity interests in the joint venture. If Option 4 selected, indicate the Local Business Location(s) (es) on separate sheet.

Option 5: Vendor is not a Local Business, a Locally Based Business, or a Locally Based Subsidiary, as each term is defined by Section 1-74, Broward County Code of Ordinances.

# **Required Supporting Documentation** (in addition to this form):

# Option 1 or 2 (Local Business or Locally Based Business):

1. Broward County local business tax receipt.

# Option 3 (Locally Based Subsidiary)

- 1. Broward County local business tax receipt.
- 2. Documentation identifying the Vendor's vertical corporate organization and names of parent entities if the Vendor is a Locally Based Subsidiary.

Option 4 (**joint venture** composed of one or more Local Business(es), Locally Based Business(es), or Locally Based Subsidiary(ies):

- 1. Broward County local business tax receipt(s) for each Local Business(es), Locally Based Business(es), and/or Locally Based Subsidiary(ies).
- 2. Executed joint venture agreement, if the Vendor is a joint venture.
- If joint venture is comprised of one or more Locally Based Subsidiary(ies), submit documentation identifying the vertical corporate organization and parent entities name(s) of each Locally Based Subsidiary.

If requested by County (any option):

- 1. Written proof of the Vendor's ownership or right to use the real property at the Local Business Location.
- 2. Additional documentation relating to the parent entities of the Vendor.
- 3. Additional documentation demonstrating the applicable percentage of equity interests in the joint venture, if not shown in the joint venture agreement.
- 4. Any other documentation requested by County regarding the location from which the activities of the Vendor are directed, controlled, and coordinated.

By submitting this form, the Vendor certifies that if awarded a contract, it is the intent of the Vendor to remain at the Local Business Location address listed below (or another qualifying Local Business Location within Broward County) for the duration of the contract term, including any renewals or extensions. (If nonlocal Vendor, leave Local Business Location blank.)

Indicate Local Business Location:		
	//	

# **True and Correct Attestations:**

Any misleading, inaccurate, or false information or documentation submitted by any party affiliated with this procurement may lead to suspension and/or debarment from doing business with Broward County as authorized by the Broward County Procurement Code. The Vendor understands that, if after contract award, the County learns that any of the information provided by the Vendor on this form was false, and the County determines, upon investigation, that the Vendor's provision of such false information was willful or intentional, the County may exercise any contractual right to terminate the contract. The provision of false or fraudulent information or documentation by a Vendor may subject the Vendor to civil and criminal penalties.

AUTHORIZED SIGNATURE/NAME:	

TITLE:	,
VENDOR NAME:	
DATE:	

## DOMESTIC PARTNERSHIP REQUIREMENTS CERTIFICATION FORM

The completed and signed form should be returned with the Vendor's submittal. If not provided with submittal, the Vendor must submit within three business days of County's request. Vendor may be deemed non-responsive for failure to fully comply within stated timeframes.

The Domestic Partnership Act, Section 16 1/2 -157, Broward County Code of Ordinances, as amended, requires all Vendors contracting with the County, in an amount over \$100,000 provide benefits to Domestic Partners of its employees, on the same basis as it provides benefits to employees spouses, with certain exceptions as provided by the Ordinance.

For all submittals over \$100,000.00, the Vendor, by virtue of the signature below, certifies that it is aware of the requirements of

	ard County's Domestic Partnership Act, Section 16-½ llowing: <b>(check only one below)</b> .	-157	7, Broward County Code of Ordinances,	, as amended; and certific
<b>1</b> .	The Vendor currently complies with the requiremen Domestic Partners of its employees on the same ba			
2.	The Vendor will comply with the requirements of the provide benefits to Domestic Partners of its employed			
3.	The Vendor will not comply with the requirements of t	he C	ounty's Domestic Partnership Act at time	e of award.
<b>4</b> .	The Vendor does not need to comply with the requbecause the following exception(s) applies: (check of			rship Act at time of awa
	☐ The Vendor employs less than five (5) employee	es.		
	☐ The Vendor is a governmental entity, not-for-pro	fit co	rporation, or charitable organization.	
	☐ The Vendor is a religious organization, associati	on, s	society, or non-profit charitable or educat	tional institution.
	☐ The Vendor does not provide benefits to employ	ees'	spouses.	
	The Vendor provides an employee the cash stating the efforts taken to provide such benefits			n compliance with the A
	The Vendor cannot comply with the provisions or regulations of federal or state law or would contract with the United States or State of Flor regulation and attach explanation of its applicable	viol orida.	ate or be inconsistent with the terms of Indicate the law, statute or regulation	or conditions of a grant
A 1 1 T	HODIZED CIONATURE (NAME		TT F	DATE
AUII	HORIZED SIGNATURE/ NAME	- 1	TITI F	DATE

#### DRUG-FREE WORKPLACE REQUIREMENT CERTIFICATION FORM

The completed and signed form should be returned with the Vendor's submittal. If not provided with submittal, the Vendor must submit within three business days of County's request. Vendor may be deemed non-responsive for failure to fully comply within stated timeframes.

Section 21.31.a. of the Broward County Procurement Code requires awards of all competitive solicitations requiring Board Award be made only to firms certifying the establishment of a drug free workplace.

The undersigned vendor hereby certifies that it will provide a drug-free workplace program by:

- (1) Publishing a statement notifying its employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the offeror's workplace, and specifying the actions that will be taken against employees for violations of such prohibition;
- (2) Establishing a continuing drug-free awareness program to inform its employees about:
  - i. The dangers of drug abuse in the workplace;
  - ii. The offeror's policy of maintaining a drug-free workplace;
  - iii. Any available drug counseling, rehabilitation, and employee assistance programs; and
  - iv. The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;
- (3) Giving all employees engaged in performance of the contract a copy of the statement required by subparagraph (1);
- (4) Notifying all employees, in writing, of the statement required by subparagraph (1), that as a condition of employment on a covered contract, the employee shall:
  - i. Abide by the terms of the statement; and
  - ii. Notify the employer in writing of the employee's conviction of, or plea of guilty or nolo contendere to, any violation of Chapter 893 or of any controlled substance law of the United States or of any state, for a violation occurring in the workplace NO later than five days after such conviction.
- (5) Notifying Broward County government in writing within 10 calendar days after receiving notice under subdivision (4) (ii) above, from an employee or otherwise receiving actual notice of such conviction. The notice shall include the position title of the employee;
- (6) Within 30 calendar days after receiving notice under subparagraph (4) of a conviction, taking one of the following actions with respect to an employee who is convicted of a drug abuse violation occurring in the workplace:
  - i. Taking appropriate personnel action against such employee, up to and including termination; or
  - ii. Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a federal, state, or local health, law enforcement, or other appropriate agency; and
- (7) Making a good faith effort to maintain a drug-free workplace program through implementation of subparagraphs (1) through (6).

•		
AUTHORIZED SIGNATURE/ NAME	TITLE	DATE



Finance and Administrative Services Department

#### **PURCHASING DIVISION**

115 S. Andrews Avenue, Room 212 • Fort Lauderdale, Florida 33301 • 954-357-6066 • FAX 954-357-8535

#### Summary of Vendor Rights Regarding Broward County Competitive Solicitations

The purpose of this document is to provide vendors with a summary of their rights to object to or protest a proposed award or recommended ranking of vendors in connection with Broward County competitive solicitations. These rights are fully set forth in the Broward County Procurement Code, which is available here: https://www.broward.org/purchasing.

# 1. Right to Object

The right to object is available for solicitations conducted through Requests for Proposals ("RFPs") or Requests for Letters of Interest ("RLIs"). In such solicitations, vendors may object in writing to a proposed recommendation of ranking made by a Selection or Evaluation Committee. Objections must be filed within three (3) business days after the proposed recommendation is posted on the Purchasing Division's website. The contents of an objection must comply with the requirements set forth in Section 21.84 of the Procurement Code. Failure to timely and fully meet any requirement will result in a loss of the right to object.

# 2. Right to Protest

The right to protest is available for RFPs and RLIs and in solicitations conducted through Invitations to Bid ("ITBs"). In RFPs and RLIs, vendors may protest a final recommendation of ranking made by a Selection or Evaluation Committee. In ITBs, vendors may protest a final recommendation for award made by the Broward County Purchasing Division.

In all cases, protests must be filed in writing within three (3) or five (5) business days after a recommended ranking or recommendation for award is posted on Purchasing Division's website. The timeframe for filing (*i.e.*, 3 or 5 business days) depends on the monetary value of the procurement. Additional requirements for a protest are set forth in Section 21.118 of the Procurement Code. Failure to timely and fully meet any requirement will result in a loss of protest rights.

Vendors may appeal the denial of a protest. Appeals may require payment of an appeal bond. Additional requirements for an appeal are set forth in Section 21.120 of the Procurement Code. Failure to timely and fully meet any requirement will result in a loss of appeal rights.

## 3. Cone of Silence; Right to Contact OESBD

Please be aware that a Cone of Silence remains in effect for competitive solicitations until a solicitation is completed or a contract is awarded. During that time period, vendors may not contact certain County officials and employees regarding a solicitation. Substantial penalties may result from even an unintentional violation. For further information, please contact the Purchasing Division at 954-357-6066 or refer to the Cone of Silence Ordinance which is available here: https://www.broward.org/Purchasing/Documents/ConeOfSilence.pdf.

However, vendors may communicate with a representative of the Office of Economic and Small Business Development ("OESBD") at any time regarding a solicitation or regarding participation of Small Business Enterprises or County Business Enterprises in a solicitation. OESBD may be contacted at (954) 357-6400. The Cone of Silence also permits communication with certain other County employees (please see the Cone of Silence Ordinance at the above link for further details).

Broward County Board of County Commissioners

Mark D. Bogen • Lamar P. Fisher • Beam Furr • Steve Geller • Dale V.C. Holness • Nan H. Rich • Tim Ryan • Barbara Sharief • Michael Udine www.broward.org

# **Insurance Requirements: (Refer to the Insurance Requirement Form)**

- A. The insurance requirement designated in the **Insurance Requirement Form** indicates the minimum coverage required for the scope of work, as determined by the Risk Management Division. Vendor shall provide verification of compliance such as a Certificate of Insurance, or a letter of verification from the Vendor's insurance agent/broker, which states the ability of the Vendor to meet the requirements upon award. The verification must be submitted within three business days of County's request. Vendor may be deemed non-responsive for failure to fully comply within stated timeframes. Final award shall be subject to receipt and acceptance by the County of proof of meeting all insurance requirements of the bid.
- B. Without limiting any of the other obligations or liabilities of Vendor, Vendor shall provide, pay for, and maintain on a primary basis in force until all of its work to be performed under this Contract has been completed and accepted by County (or for such duration specified), at least the minimum insurance coverage and limits set forth in the Insurance Requirement Form under the following conditions listed below. If a limit or policy is not indicated on Insurance Requirement certificate by a checked box, it is not required as a condition of this contract.
  - 1. Commercial General Liability with minimum limits per occurrence, combined single limit for bodily injury and property damage, and when indicated a minimum limit per aggregate. County is to be expressly included as an Additional Insured in the name of Broward County arising out of operations performed for the County, by or on behalf of Vendor, or acts or omissions of Vendor in connection with general supervision of such operation. If Vendor uses a subcontractor, then Vendor shall require that subcontractor names County as an Additional Insured.
  - 2. Business Automobile Liability with minimum limits per occurrence, combined single limit for bodily injury and property damage. Scheduled autos shall be listed on Vendor's certificate of insurance. County is to be named as an additional insured in the name of Broward County.

Note: Insurance requirements for Automobile Liability are not applicable where delivery will be made by a third party carrier. All vendors that will be making deliveries in their own vehicles are required to provide proof of insurance for Automobile Liability and other pertinent coverages as indicated on the Insurance Requirement certificate, prior to award. If deliveries are being made by a third party carrier, other pertinent coverages listed on the Insurance Requirement certificate are still required.

Vendor should indicate how product is being delivered:

Vendor Name:

Company Vehicle:

Yes or No

If Common Carrier (indicate carrier):

Other:

- 3. Workers' Compensation insurance to apply for all employees in compliance with Chapter 440, the "Workers' Compensation Law" of the State of Florida and all applicable federal laws. The policy must include Employers' Liability with minimum limits each accident. If any operations are to be undertaken on or about navigable waters, coverage must be included for the U.S. Longshoremen & Harbor Workers Act and Jones Act.
- 4. Excess Liability/Umbrella Insurance may be used to satisfy the minimum liability limits required; however, the annual aggregate limit shall not be less than the highest "each occurrence" limit for

the underlying liability policy. Vendor shall endorse County as an Additional Insured unless the policy provides coverage on a pure/true "Follow-form" basis.

- 5. Builder's Risk or equivalent coverage (such as Property Insurance or Installation Floater) is required as a condition precedent to the issuance of the Second Notice to Proceed for projects involving but not limited to: changes to a building's structural elements, work compromising the exterior of the building for any extended period of time, installation of a large single component, or remodeling where the cost of remodeling is 20% or more the value of the property. Coverage shall be, "All Risks" Completed Value form with a deductible not to exceed Ten Thousand Dollars (\$10,000.00) each claim for all perils except for wind and flood.
- 6. For the peril of wind, the Vendor shall maintain a deductible that is commercially feasible which does not exceed five percent (5%) of the value of the Contract price. Such Policy shall reflect Broward County as an additional loss payee.
- 7. For the peril of flood, coverage must be afforded for the lesser of the total insurable value of such buildings or structures, and the maximum amount of flood insurance coverage available under the National Flood Program. Vendor shall maintain a deductible that is commercially feasible and does not exceed five percent (5%) of the value of the Contract price. Such Policy shall reflect Broward County as an additional loss payee.
- 8. The County reserves the right to provide Property Insurance covering the Project, materials, equipment and supplies intended for specific installation in the Project while such materials, equipment and supplies are located at the Project site, in transit, or while temporarily located away from the Project site. This coverage will not cover any of the Vendor's or subcontractors' tools, equipment, machinery or provide any business interruption or time element coverage to the Vendor(s).
- 9. If the County decides to purchase Property Insurance or provide for coverage under its existing insurance policy for this Project, then the insurance required to be carried by the Vendor may be modified to account for the insurance being provided by the County. Such modification may also include execution of Waiver of Subrogation documentation.
- 10. In the event that a claim occurs for this Project and is made upon the County's insurance policy, for other than a windstorm, Vendor will pay at least Ten Thousand Dollars (\$10,000.00) of the deductible amount for such claim.
- 11. Waiver of Occupancy Clause or Warranty: Policy must be specifically endorsed to eliminate any "Occupancy Clause" or similar warranty or representation that the building(s), addition(s) or structure(s) in the course of construction shall not be occupied without specific endorsement of the policy. The Policy must be endorsed to provide that the Builder's Risk coverage will continue to apply until final acceptance by County.
- 12. Pollution Liability or Environmental Impairment Liability: including clean-up costs, with minimum limits per claim, subject to a maximum deductible per claim. Such policy shall remain in force for the minimum length of time indicated, include an annual policy aggregate and name Broward County as an Additional Insured. Vendor shall be responsible for all deductibles in the event of a claim.
- 13. Professional Liability Insurance with minimum limits for each claim, subject to a maximum deductible per claim. Such policy shall remain in force for the minimum length of time indicated. Vendor shall notify County in writing within thirty (30) days of any claim filed or made against its Professional Liability Insurance policy. Vendor shall be responsible for all deductibles in the event of a claim. The deductible shall be indicated on the Vendor's Certificate of Insurance.
- C. Coverage must be afforded on a form no more restrictive than the latest edition of the respective policy form as filed by the Insurance Services Office. If the initial insurance expires prior to the completion and acceptance of the Work, renewal certificates shall be furnished upon expiration. County reserves the right to obtain a certified copy of any insurance policy required by this Section within fifteen (15) calendar days of a written request by County.

- D. Notice of Cancellation and/or Restriction: the policy(ies) must be endorsed to provide Broward County with at least thirty (30) days' notice of cancellation and/or restriction.
- E. The official title of the Certificate Holder is Broward County. This official title shall be used in all insurance documentation.
  - F. Broward County's Risk Management Division reserves the right, but not the obligation, to review and revise any insurance requirements at the time of contract renewal and/or any amendments, not limited to deductibles, limits, coverages and endorsements based on insurance market conditions affecting the availability or affordability of coverage; or changes in the scope of work/specifications affecting the applicability of coverage.

# Broward County Board of INSURANCE BENJAMENTS

# NO PROOF OF INSURANCE IS REQUIRED IF DELIVERY WILL BE BY COMMON CARRIER

 $\begin{array}{c} \textbf{Project:} \ \underline{\textbf{Purchase and Delivery of Water Meters and Repair Parts}} \\ \textbf{Agency:} \ \underline{\textbf{Water and Wastewater Services}} \end{array}$ 

TYPE OF INSURANCE	ADDL INSD	SUBR WVD	MINIMUM LIABILITY LIMITS			
		<u> </u>		Each Occurrence	Aggregate	
GENERAL LIABILITY - Broad form		Ø	Bodily Injury			
☑ Commercial General Liability ☑ Premises–Operations			Property Damage			
<ul> <li>□ XCU Explosion/Collapse/Underground</li> <li>☑ Products/Completed Operations Hazard</li> <li>☑ Contractual Insurance</li> </ul>			Combined Bodily Injury and Property Damage	\$500,000	\$500,000	
<ul><li>☑ Broad Form Property Damage</li><li>☑ Independent Contractors</li><li>☑ Personal Injury</li></ul>			Personal Injury			
Per Occurrence or Claims-Made:			Products & Completed Operations			
☑ Per Occurrence □ Claims-Made  Gen'l Aggregate Limit Applies per: □ Project □ Policy □ Loc. □ Other						
AUTO LIABILITY ☑ Comprehensive Form			Bodily Injury (each person)			
☑ Owned ☑ Hired			Bodily Injury (each accident)			
☑ Non-owned			Property Damage			
☑ Any Auto, If applicable  Note: May be waived if no driving will be done in performance of services/project.			Combined Bodily Injury and Property Damage	\$500,000		
□ EXCESS LIABILITY / UMBRELLA Per Occurrence or Claims-Made: □ Per Occurrence □ Claims-Made Note: May be used to supplement minimum liability coverage requirements.	Ø	Ø				
☑ WORKER'S COMPENSATION	N/A	Ø	Each Accident	STATUTORY LIMITS		
Note: U.S. Longshoremen & Harbor Workers' Act & Jones Act is required for any activities on or about navigable water.				STATUTORT ENHIS		
☑ EMPLOYER'S LIABILITY			Each Accident	\$100,000		
□ POLLUTION / ENVIRONMENTAL LIABILITY	Ø	Ø	Each Claim: *Maximum Deductible:	\$10,000		
☐ PROFESSIONAL LIABILITY (ERRORS & OMISSIONS)	N/A	Ø	Each Claim:			
All engineering, surveying and design professionals.			*Maximum Deductible:	\$100,000		
☐ Installation floater is required if Builder's Risk or Property are not carried.  Note: Coverage must be "All Risk". Completed Value.			*Maximum Deductible (Wind and/or Flood):	Not to exceed 5% of completed value	Completed Value	
Note: Coverage must be "All Risk", Completed Value.			*Maximum Deductible:	\$10,000		
Description of Operations: "Broward County" shall be I County shall be provided 30 days written notice of can and shall not require contribution from the County, self-must be declared to and approved by County and may reotherwise specified in the agreement	cellation, 1 insurance	0 days' or other	notice of cancellation for non-payment. Cowise. Any self-insured retention (SIR) high	ontractors insurance shall provide pr her than the amount permitted in thi	imary coverage s Agreement	

CERTIFICATE HOLDER:	
Broward County 115 South Andrews Avenue Fort Lauderdale, Florida 33301	
	Risk Management Division

# REQUESTS FOR APPROVED EQUALS FORM

Potential Vendors may submit for the County's consideration for a determination of approved equal status. Requests for Approved Equals must be submitted on the below form and delivered by email to the Purchasing Agent, no later than date and time listed in **Special Instructions to Vendors.** The County's response to Requests for Approved Equals will be issued by addendum. Do not submit this form through BidSync.

Vendor shall submit with this form any relevant product literature in order to demonstrate that the product meets all the solicitation requirements. County is not obligated to review incomplete requests.

Vendor to complete the following:
Vendor Name: IBT AMI Solutions, LLC
Contact Name/Title: Joseph Testa/AMI Division Director
E-mail: joseph.testa@ibtgroup.com Phone: 810 580 0079
Solicitation No.: IND2122200B1 Solicitation Title: Water Meters and Repair Parts
Request No.: Ref. Page No.: Ref. Specification No.:
Specification Requirement from solicitation: Water Meters of Various Sizes
Request for Approved Equal:  Manufacturer Offered: Diehl Metering
Model No./Product: Hydrus Ultrasonic Water Meters 5/8" to 2"
Description of product offered for approved equal:
Lead-free brass bodied, ultrasonic measure, water meters that meet and exceed
AWWA standards compliant, AMI/AMR ready, 20 year life
Product Literature is attached to this form?  Yes  No
For Broward County Use Only
Broward County Response: Approved Not Approved
Reasons: Ultrasonic meters are not acceptable. Per Specifications and Requirements, 5.6.1., "The register shall be magnetic driven"

2/25/20219:50 AM p. 69

# **HYDRUS**

# **ULTRASONIC WATER METER**





## **APPLICATION**

Cold water lead-free brass meter, 5/8", 3/4" and 1", NSF/ANSI Standard 61 Annex F/G certified, for all residential, commercial and industrial

#### **FEATURES**

- ▶ Lead-free brass meter
- ▶ Static meter with Solid State Technology
- Non moving part (static) meter
- ▶ Over 40 days of hourly data storage
- ▶ Accuracy is maintained over the life of the meter
- ▶ Extended minimum low flow rate in comparison to mechanical meters
- ▶ Available with industry standard connector
- ▶ Rate of flow and reverse flow indication
- ▶ Internal data logging for consumption values
- ▶ Leak detection
- ▶ No measurement of air
- Alarms on display and via remote reading
- ▶ Up to 20 years battery lifetime





# **GENERAL FEATURES**

- Lead-free copper alloy "CUPHIN®"
- Industry standard Encoder interface compatible with all AMR/AMI systems
- Approved AMR/AMI systems (Itron, Aclara, Metron Farnier)
- Mounting in any installation position
- Designed for meter pit installation (IP 68)
- Meets or exceeds applicable C700 AWWA/ANSI Standards
- Complies with NSF/ANSI Standards 61, Annex F/G as well as FCC part 15 B

#### **GENERAL TECHNICAL DATA**

		HYDRUS
Potable water temperature range	°F	34 122
Ambient operating temperature	°F	34 158
Ambient storage temperature	°F	-4 +140(> 90° F max. for one hour)
Maximum pressure	psi	300
Power supply		3.6 VDC lithium battery
Battery lifetime		Up to 20 years
Interfaces		Industry standard Encoder protocol, ASCII output for compatibility with all AMR/AMI systems, Diehl Extendend protocol is available
Data storage		Alarms and consumption values (42 days memory configurable value hourly / daily)
Protection class		IP 68
Operating performance		In the temperature range of 45 to 85° F, meter consumption measurement is accurate to $\pm 1.5\%$ over the normal flow range (reference: approved Diehl Metering test bench, ISO9001 certified)

# **TECHNICAL DATA DISPLAY**

	HYDRUS
Display indication	LCD, 8-digit
Units	Flow and volume (GPM, gal, Ft³)
Values displayed	Volume - flow - reverse flow - water temperature - display test - error and alarm status - battery lifetime

## **APPROVAL**

	HYDRUS
NSF	Complies with NSF/ANSI Standard 61, Annex F/G
AWWA	Meets or exceeds applicable sections of the AWWA/ANSI C700 Standards
FCC	Complies with FCC part 15 B

## MATERIAL

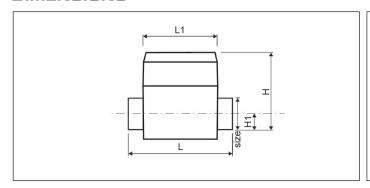
	HYDRUS
Measuring pipe	Lead-free copper alloy "CUPHIN®"
Register housing	Engineered Polymer
Transducers	Composite
Reflectors	Stainless steel

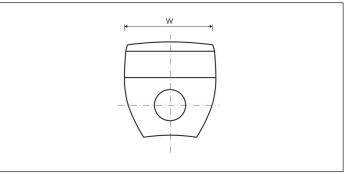


# **TECHNICAL DATA**

Size			5/8"	³/4" S	³/4" L	1"
Lay length	L	Inch	71/2	71/2	9.0	10¾
Operating flow range		GPM	0.1 - 20	0.1 - 30	0.1 - 30	0.4 - 55
Low flow range		GPM	0.05 - 0.1	0.05 - 0.1	0.05 - 0.1	0.25 - 0.4
Start flow @90%		GPM	0.0176	0.0176	0.0176	0.044
Max. flow		GPM	25	30	30	69
Operating range accuracy		%	± 1.5	± 1.5	± 1.5	± 1.5
Low flow range accuracy		%	-5 / +1.5	-5 / +1.5	-5 / +1.5	-5 / +1.5
Pressure loss			2.0 psi at 15 GPM	2.0 psi at 15 GPM	2.0 psi at 15 GPM	1.5 psi at 25 GPM
Operating performance			In the temperature range of 45 to 85° F, meter consumption measurement is accurate to $\pm 1.5\%$ over the normal flow range (reference: approved Diehl Metering test bench, ISO9001 certified)			

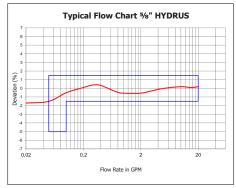
# **DIMENSIONS**

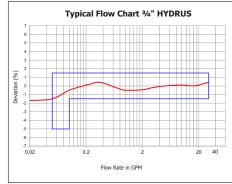


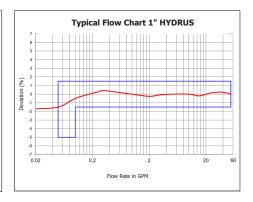


Size			5/8"	³⁄4" S	³⁄4" L	1"
Lay length	L	Inch	71/2	71/2	9.0	10¾
Register length	L1	Inch	3.5	3.5	3.5	3.5
Register width	W	Inch	3.7	3.7	3.7	3.7
Overall height	Н	Inch	4.0	4.0	4.0	4.2
Height to center of pipe	H1	Inch	1.3	1.3	1.3	1.4
Nominal thread size			1" - 11½ NPSM	1" - 11½ NPSM	1"- 11½ NPSM	11/4" - 111/2 NPSM
Net weight		Ib	2.8	2.8	3.1	3.5

# **TYPICAL FLOW CHARTS**







## HYDRUS 11/2" & 2"

**ULTRASONIC WATER METER** 





### **APPLICATION**

Cold water stainless steel 1½" and 2", NSF/ANSI Standard 61 Annex F/G certified, for all residential, commercial and industrial applications

### **FEATURES**

- Static meter with Solid State Technology
- Non moving part (static) meter
- Over 40 days of hourly data storage
- Accuracy is maintained over the life of the meter
- Extended minimum low flow rate in comparison to mechanical meters
- Available with industry standard connector
- Rate of flow and reverse flow indication
- Leak detection
- No measurement of air
- Alarms on display and via remote reading
- ▶ Up to 20 years battery lifetime

Smart in solutions

## HYDRUS 11/2" & 2"

### **ULTRASONIC WATER METER**

### **GENERAL FEATURES**

- Stainless steel
- Industry standard Encoder interface compatible with all AMR/AMI systems
- Approved AMR/AMI systems (Itron, Aclara, Metron Farnier)
- Mounting in any installation position
- Designed for meter pit installation (IP 68)
- Meets or exceeds applicable C700 AWWA/ANSI Standards
- Complies with NSF/ANSI Standards 61, Annex F/G as well as FCC part 15 B

### **GENERAL TECHNICAL DATA**

		HYDRUS 11/2" & 2"
Potable water temperature range	°F	34 122
Ambient operating temperature	°F	34 158
Ambient storage temperature	°F	-4 +140(> 90° F max. for one hour)
Maximum pressure	psi	300
Power supply		3.6 VDC lithium battery
Battery lifetime		Up to 20 years
Interfaces		Industry standard Encoder protocol, ASCII output for compatibility with all AMR/AMI systems, Diehl Extendend protocol is available
Data storage		Alarms and consumption values (42 days memory configurable value hourly / daily)
Protection class		IP 68
Operating performance		In the temperature range of 45 to 85° F, meter consumption measurement is accurate to $\pm 1.5\%$ over the normal flow range (reference: approved Diehl Metering test bench, ISO9001 certified)

### **TECHNICAL DATA DISPLAY**

	HYDRUS 11/2" & 2"
Display indication	LCD, 8-digit
Units	Flow and volume (GPM, gal, Ft³)
Values displayed	Volume - flow - reverse flow - water temperature - display test - error and alarm status - battery lifetime

### **APPROVAL**

	HYDRUS 11/2" & 2"
NSF	Complies with NSF/ANSI Standard 61, Annex F/G
AWWA	Meets or exceeds applicable sections of the AWWA/ANSI C700 Standards
FCC	Complies with FCC part 15 B

### **MATERIAL**

	HYDRUS 11/2" & 2"	
Measuring pipe	Stainless steel	
Register housing	Engineered Polymer	
Transducers	Composite	
Reflectors	Stainless steel	

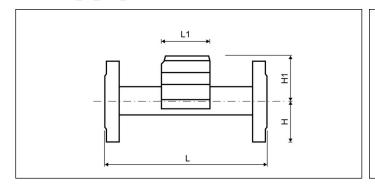
## HYDRUS 11/2" & 2"

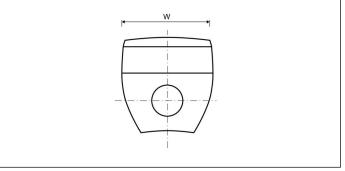
ULTRASONIC WATER METER

### **TECHNICAL DATA**

Size		11/2"	2" S	2" L
Lay length	L Inch	13"	10"	17 <b>"</b>
Operating flow range	GPM	0.8 - 100	0.8 - 160	0.8 - 160
Low flow range	GPM	0.5 - 0.8	0.55 - 0.8	0.55 - 0.8
Operating range accuracy	%	±1.5	±1.5	±1.5
Low flow range accuracy	%	-5 / +1.5	-5 / +1.5	-5 / +1.5
Pressure loss		3.5 psi at 70 GPM	3.6 psi at 110 GPM	3.6 psi at 110 GPM

### DIMENSIONS

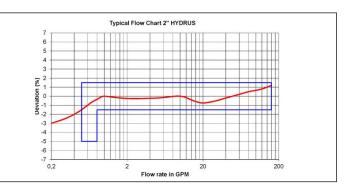




Size			11/2"	2" S	2" L
Lay length	L	Inch	13"	10 <b>"</b>	17 <b>"</b>
Register length	L1	Inch	31/2"	31/2"	31/2"
Register width	W	Inch	3¾"	3¾"	3¾"
Height to center of pipe	Н	Inch	2"	2.5"	2.5"
Height to center of pipe	H1	Inch	3.3"	3.3"	3.3"
Net weight		Ib	14.1	16.1	19.2

### **TYPICAL FLOW CHARTS**









### **Limited Extended Warranty**

### **Applicability**

This Limited Extended Warranty (this "Limited Warranty") is applicable to all Diehl Metering HYDRUS Ultrasonic water meters, sizes 5/8", 3/4" x 9" and 1", including HYDRUS System Components (Electronics, Battery, Transducers and Register) which are marked on the delivery note or the order confirmation as "Extended Warranty" (hereinafter referred to as a "Product").

### Warranty, Material and Workmanship

Diehl Metering GmbH ("Diehl Metering") warrants, for a period of twenty (20) years from the date of delivery of the Products (the "Warranty Period"), that (a) at the date of delivery, Products comply with the applicable specifications and be free from defects in material and workmanship, and (b) Product housings are free from lead. Claims under this Limited Warranty are subject to the restrictions and conditions set forth herein and must be made in accordance with the procedures set forth under "Claim Handling" below.

### Remedy

If Diehl Metering establishes that the Product has a defect that is covered by this Warranty, based on a claim submitted by a customer in compliance with the provisions set forth under "Claim Handling" below ("Covered Claim"), Diehl Metering will remedy such defect as set forth below:

- If the Covered Claim is received by Diehl Metering within the first 5 years of the Warranty Period, Diehl Metering will at its sole discretion repair or replace such Product free of charge and cover the reasonable costs for removal of the defective Product and installation of the repaired or replaced Product.
- If the Covered Claim is received by Diehl Metering after the 5<sup>th</sup> anniversary of the beginning of the Warranty Period and on or prior to the 10<sup>th</sup> anniversary thereof, Diehl Metering will, at its sole discretion, repair or replace such Product free of charge, and the customer shall bear the entire costs of the removal of the defective Product and installation of the repaired or replaced Product.
- If the Covered Claim is received by Diehl Metering after the 10<sup>th</sup> anniversary of the beginning of the Warranty Period and on or prior to the 14<sup>th</sup> anniversary thereof, Diehl Metering will sell to the customer a replacement Product at a discount of 60% of the then valid list price of such replacement Product.
- If the Covered Claim is received by Diehl Metering after the 14<sup>th</sup> of the beginning of the Warranty Period and on or prior to the 17<sup>th</sup> anniversary thereof Diehl Metering will sell to the customer a replacement Product at a discount of 40% of the then valid list price of such replacement Product.
- If the Covered Claim is received by Diehl Metering after the 17<sup>th</sup> anniversary of the beginning of the Warranty Period and on or prior to the 20<sup>th</sup> anniversary thereof, Diehl Metering will sell to the customer a replacement Product at a discount of 20% of the then valid list price.

If Diehl Metering elects to replace any defective Product, it may replace such Product with the same Product or a successor Product that may be new or refurbished. If Diehl Metering elects to repair any defective Product, it is free to determine the manner in which such repair is performed and may use new or reconditioned parts. Repaired or replaced Products remain covered under this Warranty until the later of the expiration of the original Warranty Period or 90 days from the date of the return shipment of the repaired or replaced Product to the customer.

### **Meter Accuracy**

The Products will meet or exceed meter accuracy of +/-1.5% between the "minimum flow rate" to "maximum flow rate" for twenty (20) years from date of shipment:

```
5/8"
0.1 - 20 gpm
3/4" S (5/8" x 3/4") and 3/4" x 9"
0.1 - 30 gpm
1"
0.4 - 55 gpm
```

### **Claim Handling**

To exercise its rights under this Warranty, the customer must notify Diehl Metering in writing at *info-dmde@diehl.com* and provide the name of the Product, the serial number, the specific defect, other relevant details, and customer's contact information. The customer may include test results, as long as such test results adhere to the standards set forth under "Testing" below. In case the customer does not include test results, the submission of a claim by the customer shall be deemed as the customer's consent to the performance of such tests by Diehl Metering, as Diehl Metering deems necessary or advisable, at the sole expense of the customer. Any claim submitted by customer under this Warranty shall include a copy of the applicable proof of purchase and delivery note.

At Diehl Metering's sole discretion, the defective Product shall be shipped by the customer prepaid F.O.B. to the nearest Diehl Metering factory or distribution center, as communicated by Diehl Metering from time to time (Incoterms 2010). Any return delivery has to be agreed and coordinated with Diehl Metering beforehand.

If requested by Diehl Metering, the customer shall furnish proof that the Products were installed by customer or an authorized installer in full compliance with the Product specifications, the installation manual, or any other written instructions by Diehl Metering, and provide Diehl Metering with any other information reasonably required by Diehl Metering.

### **Testing**

Test results must be obtained according to AWWA standards and the HYDRUS Testing Instruction, which can be obtained from Diehl Metering.

#### **General Provisions**

This Warranty is not transferable and shall only apply to the original customer who bought the respective Products from Diehl Metering or the original customer of an authorized Diehl Metering reseller.

### **Warranty Limitations**

This Warranty shall not apply

- to Products repaired, replaced modified, altered or tampered with by the customer or any other third party without the prior written approval from Diehl Metering,
- if the Products have not been installed in compliance with the Product's installation manual provided or Diehl Metering's written instructions,
- if the Products have not been operated, used, stored, or maintained in accordance with the Product specifications, technical literature or any other written instructions provided by Diehl Metering with respect to the Products,
- to Products connected to, or integrated or combined with, another product without the prior written approval of Diehl Metering or used with substances other than potable water, or with water containing dirt, debris, deposits or other impurities,
- to Products that have been subjected to improper periodic testing or exposed to conditions other than those detailed in the Product specifications or any other written instructions with respect to the Product,
- if the defect is caused by damage or destruction resulting from the action or inaction of any person other than Diehl Metering, vandalism, accidents, chemical contamination or physical impact, exposure to inappropriate environments by acts of nature or other events beyond Diehl Metering's control.

Descriptions of the Products and information regarding the Products, regardless of form or origin, shall not IMPLY any warranties. EXCEPT FOR THE WARRANTIES EXPLICITLY SET FORTH HEREIN, DIEHL METEREING MAKES NO OTHER WARRANTIES WHATSOEVER, AND ANY AND ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT, ARE HEREBY EXPRESSLY DISCLAIMED.

This Warranty is the only warranty provided by Diehl Metering with respect to the Products. No representative, dealer or any other person is authorized to make any additional or different warranty, representation, condition or promise on behalf of Diehl Metering with respect to the Products. No terms or conditions other than those stated herein or provided by applicable law, and no oral or written agreement, understanding, promise, or commitment, may in any way modify this warranty without Diehl Metering's express prior written consent, and no such modification may be relied upon by any party or under any circumstances other than the party for which, and the circumstances under which, such modification is granted.

If the Products are consumer Products, federal law does not allow an exclusion of implied warranties. To the extent certain customers are entitled to implied warranties under federal law, to the extent permitted by applicable law, they are limited to the duration of this Warranty. Some states do not allow limitations or exclusions on implied warranties or on the duration of an implied warranty or on the limitation or exclusion of incidental or consequential damages, so the above limitation(s) or exclusion(s) may not apply to certain customers. This Warranty gives such customers specific legal rights. Certain customers may have other rights which may vary from state to state.

### **Liability Limitations**

THE REMEDIES SET FORTH HEREIN SHALL BE THE CUSTOMER'S SOLE AND EXCLUSIVE REMEDY AND DIEHL METERING'S ENTIRE LIABILITY FOR ANY BREACH OF THIS WARRANTY.

THE LIABILITY OF DIEHL METERING FOR ANY CLAIMS, OBLIGATIONS AND WARRANTIES OUT OF OR IN CONNECTION WITH THE PRODUCTS SHALL BE LIMITED TO THE TOTAL AMOUNT PAID BY THE CUSTOMER FOR THE PRODUCT GIVING RISE TO THE RESPECTIVE CLAIM.

IN NO EVENT SHALL DIEHL METERING BE LIABLE EITHER IN TORT OR IN CONTRACT FOR ANY INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION LOST PROFITS, LOST REVENUE, LOSS OF USE, DIMINUTION IN VALUE, ARISING OUT OF OR RELATING TO ANY BREACH OF THIS WARRANTY, WHETHER OR NOT THE POSSIBILITY OF SUCH DAMAGES HAS BEEN DISCLOSED IN ADVANCE BY THE CUSTOMER OR COULD HAVE BEEN REASONABLY FORESEEN BY DIEHL METERING, REGARDLESS OF THE LEGAL OR EQUITABLE THEORY (CONTRACT, TORT OR OTHERWISE) UPON WHICH THE CLAIM IS BASED, AND NOTWITHSTANDING THE FAILURE OF ANY AGREED OR OTHER REMEDY OF ITS ESSENTIAL PURPOSE.

### **Unjustified Claims**

In case of claims that are not covered by this Warranty, as determined by Diehl Metering, all costs for testing, repair, replacement and shipping incurred by Diehl Metering shall be reimbursed by the customer to Diehl Metering within a reasonable time after the customer has been notified by Diehl Metering.

### **Applicable Law**

This Warranty shall solely be subject to the laws of the state of New York (United States) excluding any conflicts of laws provisions. In the event of a conflict with the general terms and conditions of either party, the delivery note or order confirmation, this Warranty shall prevail. All disputes arising out of or in connection with this Warranty shall be finally settled under the Rules of Arbitration of the International Chamber of Commerce (the "Rules") by three arbitrators appointed in accordance with the Rules. The place of arbitration shall be New York City, New York. The arbitration shall be held in the English language.

#### Severability

If any provision contained in this Warranty is held by final judgment of a court of competent jurisdiction to be invalid, illegal or unenforceable, such invalid, illegal or unenforceable provision shall be severed from the remainder of this Warranty, and the remainder of this Warranty shall be enforced. In addition, the invalid, illegal or unenforceable provision shall be deemed to be automatically modified, and, as so modified, to be included in this Warranty, such modification being made to the minimum extent necessary to render such provision valid, legal and enforceable.

### REQUESTS FOR APPROVED EQUALS FORM

Potential Vendors may submit for the County's consideration for a determination of approved equal status. Requests for Approved Equals must be submitted on the below form and delivered by email to the Purchasing Agent, no later than date and time listed in **Special Instructions to Vendors.** The County's response to Requests for Approved Equals will be issued by addendum. Do not submit this form through BidSync.

Vendor shall submit with this form any relevant product literature in order to demonstrate that the product meets all the solicitation requirements. County is not obligated to review incomplete requests.

Vendor to complete the following:
Ferguson Enterprises LLC Vendor Name:
Contact Name/Title: Drew Petonick/Sales
E-mail: drew.petonick@ferguson.com Phone: 561-718-1037
Solicitation No.: ND2122200B1 Solicitation Title: water meters and repair parts
Request No.: Ref. Page No.: Ref. Specification No.:
Specification Requirement from solicitation: attachment A from bid package
Request for Approved Equal:  Mueller and Watts  Manufacturer Offered:
Model No./Product: see attached email
Description of product offered for approved equal:
please see attached email
Product Literature is attached to this form?  Yes  No
For Broward County Use Only
Broward County Response:  Approved  Not Approved
Reasons: Broward County WWS approves the request for approved equals as long as the vendor does not
supply any LCD register screens, meters w/batteries, and no composite meter bases.



## Magnetic Drive Positive Displacement Disc Meters Sizes 1 1/2" & 2"

### **FEATURES**

**Applications:** Measurement of cold water for residential, commercial and industrial applications where water volumes are low, and low flow sensitivity is important.

**Conformance to Standards:** Mueller Series 500 D Water Meters comply with ANSI / AWWA Standard C700. Meters which are manufactured with the Nylon coated ductile iron maincase option meet the requirements of NSF Standard 61, Annex 372. The meters provide a no lead solution. Each meter is tested to ensure compliance.

**Construction:** Mueller Series 500 D Water Meters consist of three basic parts: maincase; measuring chamber; and permanently sealed register. The maincase and topcase are made of Nylon coated ductile iron. The measuring chamber, nutating disc and strainer are made of thermoplastic, which is dimensionally stable and will not corrode. A test port in the body permits in-line testing. Register box and lid are available in plastic or bronze.

The meter is designed so that the register, measuring chamber and strainer can be replaced without removing the meter from the line.

**Register:** The permanently sealed register has a unique seal and heat-treated glass to eliminate dirt, moisture infiltration and lens fogging. An integral tamper-proof locking feature is provided to resist tampering with the register. The totalizing register has a straight-reading odometer type display, a 360° test circle with center sweep hand and a low flow (leak) detector. Standard gearing is used, making registers interchangeable by size.

All Mueller Meter Models have electronic meter reading systems available for increased reading efficiency (see Meter Reading Systems.)

**Operation:** Water flows through the meter's strainer where any debris that could adversely affect meter accuracy or free operation is screened out. As the water enters, it fills a known volume of the measuring chamber on one or the other side of a movable disc that separates the chamber into two sections. As water enters it moves the disc (nutates), forcing a known volume of water out of the meter from the opposite side of the disc. The process repeats as the sections refill and empty in turn. The nutating action of the disc is coupled magnetically to the register to indicate the volume of water that passes through the meter. The large measuring chamber requires fewer nutations of the disc for each gallon measured, which helps to limit wear, reduce pressure loss and extend the life of the meter.

**Maintenance:** The Mueller Series 500 D Water Meters are designed and manufactured to provide long service life with virtually no maintenance required.

**Connections:** Available with integral two-bolt oval flanges.



### MATERIALS AND SPECIFICATIONS

<b>Model Number</b>	562 D and 572 D	
Sizes	1 ½" and 2"	
Standards	Manufactured and tested to meet or exceed all applicable parts of ANSI / AWWA C700 Standard.  Nylon coated ductile iron options meet requirements of NSF Standard 61, Annex G.	
Operating Flow Range	Cold water measurement with flow in only one direction	
Accuracy	See chart on following page	
<b>Pressure Loss</b>	See chart on following page	
Maximum Working Pressure	See chart on following page	
Temperature Range	150 psi	
Measuring Element	33°F to 100°F water temperature	
Disc Nutations (Per Gallon)	Nutating disc	
Register Type	562 D: 6.47, 572 D: 3.92	
Meter Connections	Straight reading, permanently sealed, magnetic drive with low flow indicator. Remote reading units optional.	
Materials	Maincase – Nylon coated ductile iron; Measuring Chamber – Thermoplastic; Magnets – ceramic; Strainer – Thermoplastic; Casing bolts – stainless steel ANSI B18; Register box and lid – thermoplastic.	
Options	Meter case – Nylon coated ductile iron Registe box and lid – bronze UNSC85700; AMR / AMI Reading Systems.	

# Magnetic Drive Positive Displacement Disc Meters Sizes 1 ½" & 2"

### **METER REGISTRATION**

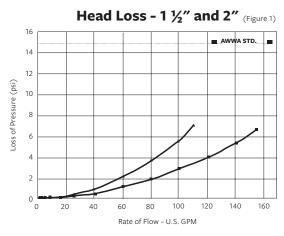
METER SIZE	INITIAL DIAL*	CAPACITY	INITIAL DIAL*	CAPACITY
1 ½″	100 Gallons	100 Million	10 Cubic Feet	10 Million
2″	100 Gallons	100 Million	10 Cubic Feet	10 Million

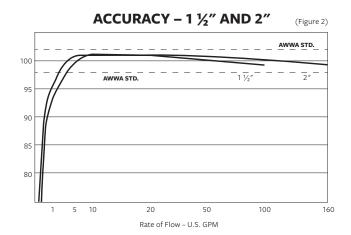
<sup>\*</sup>Registration equal to one full revolution of the sweep hand.

### FLOW CHARACTERISTICS

METER SIZE	TYPICAL LOW FLOW (95% MINIMUM)	TYPICAL OPERATING RANGE (100% ± 1.5%)	MAXIMUM CONTINUOUS OPERATION	
1 ½″	1 ½ GPM	5 to 100 GPM	50	
2"	2 GPM	8 to 160 GPM	80	

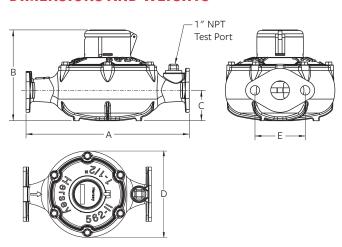
### **PERFORMANCE**





**Note:** Performance curves are typical only and NOT a guarantee of performance.

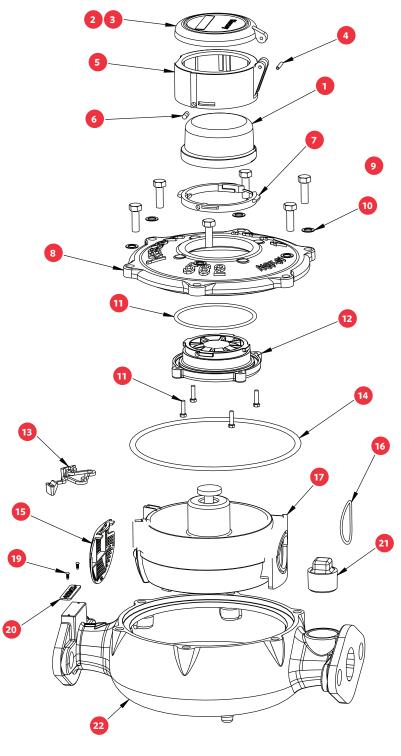
### **DIMENSIONS AND WEIGHTS**



METER SIZE	1 1/2"	2"
ENDS	FLAN	GED
MODEL	562 D	572 D
	DIMENSION	
Α	13″	17″
В		
Visual Registration	7.250″	8.125″
SSR Registration	7″	7″
ME-Registration	7.750″	7.750″
С	2.437″	3.00″
D	8.750″	10.437″
E	4.00″	4.50″
Net weight	18	28

**Note:** Meter couplings are optional and must be ordered separately. Weights are in pounds and are approximate.

# Magnetic Drive Positive Displacement Disc Meters Sizes 1 ½" & 2"



# Magnetic Drive Positive Displacement Disc Meters Sizes 1 ½" & 2" Parts

REF NO.	DESCRIPTION	MATERIAL	562 1 ½" MODEL	572 2" MODEL
	Visual Desister	US Gallons Glass / Brass	D357715	D358115
	Visual Register	CF Glass / Brass	D357725	D358125
1	Tourslate a Danistan	US Gallons Plastic / Brass	D35791xxx	D35831xxx
	Translator Register	CF Plastic / Brass	D35792xxx	D35832xxx
	Spec	cify Electronic Reading Value 4, 5	, or 6 Wheel	
	Complete Register Housing Assembly Includes	Plastic	B7856	B7856
2	parts 3-7	Bronze	B7857	B7857
3	Pagistar Cayar	Plastic	C5768	C5768
3	Register Cover	Bronze	C5774	C5774
4	Spirol Pin	Plastic cover: SST	AS41122	AS41122
4	эрноген	Bronze Cover: SST	AS41123	AS41123
5	Register Housing Base	Plastic	C5769	C5769
5	Register Housing base	Bronze	C5772	C5772
6	Pagistar Locking Din	Blue Colored Plastic	A12658	A12658
	Register Locking Pin	Brass Colored Plastic	A126581	A126581
7	Register Housing Insert	Plastic	C5770	C5770
8	Top Case	Nylon Coated Ductile Iron	D3642C	D3646C
9	Case Bolts	SST	90026 (qty 6)	90010 (qty 8)
10	Washers	SST	90018 (Qty 6)	90018 (Qty 8)
11	Register Hub O-Ring	Rubber	98313	98313
12	Register Hub	Plastic	C6631	C6631
13	Socket Head Cap Screws	SST	98157 (Qty 4)	98157 (Qty 4)
14	O-Ring Case Seal	Rubber	98314	98315
15	Chamber Retainer	Plastic	C5466	C5466
16	O-Ring Chamber Seal	Rubber	A130204	A130205
17	Complete Chamber Assembly Includes parts 14, 15, 16		D3575	D3576
18	Strainer	Plastic	C6576	C6577
19	Type U Drive Screw	Plated	98158 (Qty 2)	98158 (Qty 2)
20	Serial Number ID Plate		A13070	A13070
21	Test Plug	SST	59013	59013
22	Bottom Case	Nylon Coated Ductile Iron	D3644C	D3648C

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420 Bronze PD Meter - Sizes  $\frac{5}{8}$ " x  $\frac{1}{2}$ " and  $\frac{5}{8}$ " x  $\frac{3}{4}$ "

### **FEATURES**

**Applications:** The Mueller® 420 bronze is a nutating disc style, positive displacement meter designed for residential and small commercial applications where water volumes are low and low flow sensitivity is important.

**Conformance to Standards:** All Mueller 420 bronze meters meet or exceed the latest revision of the AWWA C-700 Standard for positive displacement meters. Every 420 bronze no lead meter is compliant with the latest initiatives of NSF, ANSI and EPA standards.

Construction: Mueller 420 water meters consist of three basic parts: maincase; measuring chamber; and permanently sealed register. The maincase is made of bronze for long life. Direction of flow arrows and model are cast into each maincase for ease of identification. The bottom cover is epoxy-coated cast iron with a molded plastic liner separating it from the waterway. Optional bronze and polymer bottom covers are available. The measuring chambers are designed for reduced wear during operation. The measuring chamber, integral strainer, nutating disc and thrust roller are thermoplastic, which is dimensionally stable and will not corrode. The register housing and lid are available in your choice of plastic or bronze for standard visual read registers. The meter is designed so that the register can be replaced easily without removing the meter from the service line.

**Register:** The permanently sealed visual read register has a unique triple "L" seal and heat treated, glass lens to eliminate dirt, moisture infiltration and fogging. An integral tamper-proof locking feature is provided to resist tampering with the register. The totalizing register has a straight-reading odometer type display, a 360° test circle with center sweep hand and a low flow (leak) detector. Standard gearing is used, making registers interchangeable by size. The 420 bronze meter is available with all AMR and AMI options for increased reading efficiency.

**Operation:** Water flows through the meter's strainer where debris is screened out. The incoming water fills a known volume of the measuring chamber on one or the other side of a movable disc that separates the chamber into two sections. As water enters, it moves the disc (nutates), forcing a known volume of water out of the meter from the opposite side of the disc. The process repeats as the sections refill and empty in turn. The nutating action of the disc is coupled magnetically to the register to indicate the volume of water that passes through the meter.

**Maintenance:** The Mueller 420 positive displacement meter is designed and manufactured to provide long service life with virtually no maintenance required. Repair components available include complete chamber assemblies and bottom plate gaskets. All components can be accessed without removing the meter body from the service line for simplified maintenance.

Connections: Supplied with external straight pipe threads (NPSM) per ANSI R1 20.1



 $\frac{5}{8}$ " X  $\frac{1}{2}$ " 420 BRONZE PD METER

### MATERIALS AND SPECIFICATIONS

Model	420 Bronze Meter
Sizes	5/8" x 1/2", 5/8" x 3/4"
Standards	AWWA C-700, Most current NSF-61, ANSI, & EPA Initiatives
Service	Measurement of flow in forward direction only
Installation	Horizontal or Vertical
<b>Operating Flow Range</b>	See charts on the following pages
Accuracy	See charts on the following pages
Maximum Working Pressure	150 psi
Temperature Range	33° F to 100° F water temperature
<b>Measuring Element</b>	Nutating Disc PD Chamber
Register Type	Straight reading, permanently sealed, magnetic drive with low flow indicator and remote reading capability
Meter Connections	External straight pipe threads (NPSM)
Materials	Meter case – Bronze Bolts – Stainless Steel Measuring Element Chamber and Disc - Thermoplastic Disc Pin - SST Strainer - Thermoplastic
Options	AMR/AMI Reading Systems

420 Bronze PD Meter - Sizes  $\frac{5}{8}$ " x  $\frac{1}{2}$ " and  $\frac{5}{8}$ " x  $\frac{3}{4}$ "

### **METER REGISTRATION**

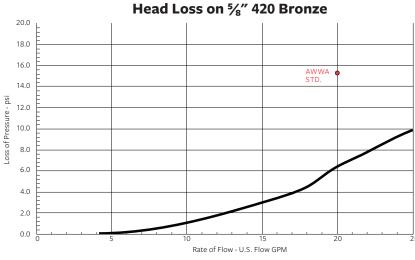
METER SIZE	INITIAL DIAL*	CAPACITY	INITIAL DIAL*	CAPACITY
5/8″	10 Gallons	10 Million	1 Cubic Feet	1 Million

<sup>\*</sup>Registration equal to one full revolution of the sweep hand.

### **FLOW CHARACTERISTICS**

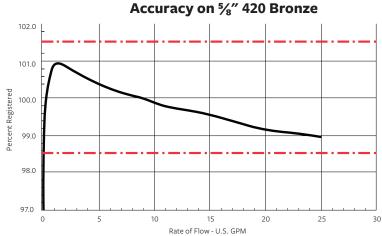
METER SIZE	TYPICAL LOW FLOW (95% MINIMUM)	TYPICAL OPERATING RANGE (100% ± 1.5%)	MAXIMUM CONTINUOUS OPERATION
5/8"	1/ <sub>8</sub> GPM	½ to 20 GPM	15 GPM

# PERFORMANCE HEAD LOSS



NOTE: Performance curves are typical only and NOT a guarantee of performance.

### **ACCURACY**

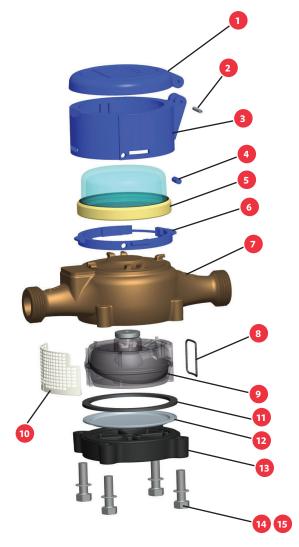


NOTE: Performance curves are typical only and NOT a guarantee of performance.

420 Bronze PD Meter - Sizes  $\frac{5}{8}$ " x  $\frac{1}{2}$ " and  $\frac{5}{8}$ " x  $\frac{3}{4}$ "

## **MODEL 420 BRONZE METER ASSEMBLY COMPONENTS**

ITEM	PART#	DESCRIPTION	QTY
1	C5768	Plastic Register Cover	1
'	C5774	Bronze Register Cover	'
2	C5769	Plastic Register Housing Base	1
2	C5772	Bronze Register Housing Base	'
3	AS41122	Plastic Lid Spirol Pin	1
5	AS41123	Bronze Lid Spirol Pin	'
4	AS12658	Blue Color Register Locking Pin	1
4	AS126581	Bronze Color Register Locking Pin	'
	D36981	Model 420 Visual Register SG	
5	D36982	Model 420 Visual Register CF	1
	D36983	Model 420 Visual Register CM	
6	C5770	Register Housing Insert	1
-	D3680SI	5⁄8″ x 3⁄4″ Model 420 Main Case	1
7	D3681-1SI	5⁄8″ x 1⁄2″ Model 420 Main Case	1
8	A13120	Model 420 Chamber O-Ring	1
9	D3635PO	Model 420 Chamber Assembly	1
10	C6681	Model 420 Bronze Strainer Retainer	1
11	B8664	Model 420 Bronze Gasket	1
12	B8665	Model 420 Liner (Iron / Brz Only)	1
	B8663	Model 420 Iron Bottom Plate	
13	B8662	Model 420 Bronze Bottom Plate	1
	C6682	Model 420 Polymer Bottom Plate	
14	90026	<sup>5</sup> ∕ <sub>16</sub> - 18 x <sup>7</sup> ⁄ <sub>8</sub> ″ Hex Bolt SS (Iron / Brz Btm)	
14	90010	$\frac{5}{16}$ - 18 x 1 $\frac{1}{8}$ " Hex Bolt SS (Plastic Btm)	4
15	90018	⁵⁄₁6 Flat Washer SS (Polymer Btm)	4

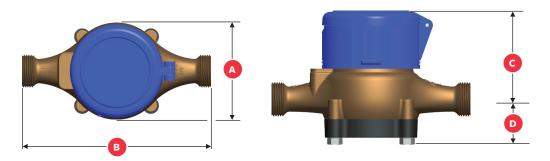


## **DIMENSIONS, WEIGHTS AND PARTS**

METER SIZE		5/8"		
MODEL	420 BRONZE Standard register	420 BRONZE SSR REGISTER	420 BRONZE ME-8 REGISTER	
		DIMENSION		
Α	3.8125″	3.8125″	3.8125"	
В	7.5″	7.5″	7.5″	
С	3.3125	3″	3.5″	
D	1.375″	1.375″	1.375″	
Weight	3.7	3.7	3.7	
Weights are in po	ounds are approximate.			

### **420 BRONZE METER**

Inlet and outlet 1/2" or 3/4"



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435 Bronze PD Meter - Sizes 3/4" Short, 3/4" x 3/4" Standard, 3/4" x 1"

### **FEATURES**

**Applications:** The Mueller® 435 bronze is a nutating disc style, positive displacement meter designed for residential and small commercial applications where water volumes are low and low flow sensitivity is important.

**Conformance to Standards:** All Mueller 435 bronze meters meet or exceed the latest revision of the AWWA C-700 Standard for positive displacement meters. Every 435 bronze no lead meter is compliant with the latest initiatives of NSF, ANSI and EPA standards.

**Construction:** Mueller 435 water meters consist of three basic parts: maincase; measuring chamber; and permanently sealed register. The maincase is made of bronze for long life. Direction of flow arrows and model are cast into each maincase for ease of identification. The bottom cover is epoxy-coated cast iron with a molded plastic liner separating it from the waterway. Optional bronze bottom covers are available. The measuring chambers are designed for reduced wear during operation. The measuring chamber, integral strainer, nutating disc and thrust roller are thermoplastic, which is dimensionally stable and will not corrode. The meter is designed so that the register can be replaced easily without removing the meter from the service line.

**Register:** The permanently sealed solid state encoder register has a heat treated, glass lens and thermoplastic housing to eliminate dirt, moisture infiltration and fogging. An integral tamper-proof locking feature is provided to resist tampering with the register. The totalizing register has a 10 digit LCD reading display, up to 9 digit electronic output, specifiable visual back flow detection, battery life icon, and a low flow and leak detector. Visual tamper codes are displayed intermittently with the reading data in the event of register removal or magnetic tampering. The 435 bronze meter is compatible with all AMR and AMI options for increased reading efficiency.

**Operation:** Water flows through the meter's strainer where debris is screened out. The incoming water fills a known volume of the measuring chamber on one or the other side of a movable disc that separates the chamber into two sections. As water enters, it moves the disc (nutates), forcing a known volume of water out of the meter from the opposite side of the disc. The process repeats as the sections refill and empty in turn. The nutating action of the disc is sensed by the register to accurately indicate the volume of water that passes through the meter.

**Maintenance:** The Mueller 435 positive displacement meter is designed and manufactured to provide long service life with virtually no maintenance required. Repair components available include complete chamber assemblies and bottom plate gaskets. All components can be accessed without removing the meter body from the service line for simplified maintenance.

Connections: Supplied with external straight pipe threads (NPSM) per ANSI B1.20.1



34" SHORT BRONZE 435 PD BRONZE BODIED METER
WITH SSR REGISTER

### **MATERIALS AND SPECIFICATIONS**

Model	435 Composite Meter	
Sizes	3/4" Short, 3/4" x 3/4" Standard, 3/4" x 1"	
Standards	AWWA C-710, Most Current NSF-61, ANSI, & EPA Initiatives	
Service	Measurement of flow in forward direction only	
Installation	Horizontal or Vertical	
Operating Flow Range	See charts on the following pages	
Accuracy	See charts on the following pages	
Maximum Working Pressure	150 psi	
Temperature Range	33° F to 100° F water temperature	
Measuring Element	Nutating Disc PD Chamber	
Register Type	Solid State Register (SSR)  ME-8 Register  5' flying lead wire, 5' Nicor connector,  5' Itron connector	
Meter Connections	External straight pipe threads (NPSM)	
Materials	Meter case – Bronze Bolts – Stainless Steel Measuring Element Chamber and Disc - Thermoplastic Disc Pin - SST Strainer - Thermoplastic	
Options	AMR/AMI Reading Systems	

435 Bronze PD Meter - Sizes  $\frac{3}{4}$ " Short,  $\frac{3}{4}$ " x  $\frac{3}{4}$ " Standard,  $\frac{3}{4}$ " x 1"

### **METER REGISTRATION**

METER SIZE	METER SIZE REGISTRATION		REGISTRATION	
3/4"	Gallons	Cubic Feet	Cubic Meters	

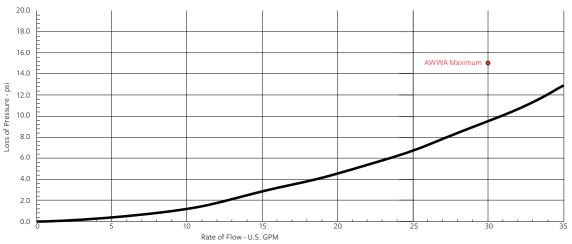
 $<sup>^*\!</sup>$  All registration values are factory programmable and must be specified prior to ordering.

### **FLOW CHARACTERISTICS**

METER SIZE	TYPICAL LOW FLOW (95% MINIMUM)	TYPICAL OPERATING RANGE (100% ± 1.5%)	MAXIMUM CONTINUOUS OPERATION
3/4"	1/ <sub>4</sub> GPM	³⁄₄ to 30 GPM	25 GPM

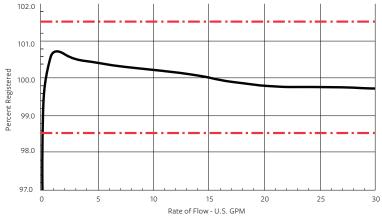
### **PERFORMANCE**

### **HEAD LOSS**



NOTE: Performance curves are typical only and NOT a guarantee of performance.

### **ACCURACY**



NOTE: Performance curves are typical only and NOT a guarantee of performance

435 Bronze PD Meter - Sizes  $\frac{3}{4}$ " Short,  $\frac{3}{4}$ " x  $\frac{3}{4}$ " Standard,  $\frac{3}{4}$ " x 1"

### **MODEL 435 BRONZE METER ASSEMBLY COMPONENTS**

ITEM	PART#	DESCRIPTION	QTY
1	C6939	SSR Cover	1
2	CALL CS	SSR Register Assembly	1
3	B8703	SSR Housing Retainer	1
	D3707	³⁄₄" x ³⁄₄" x 7.5" Model 435 Main Case	
3B	B8735	SSR Ring Wedge	1
4	D3723-1	<sup>3</sup> / <sub>4</sub> " x <sup>3</sup> / <sub>4</sub> " x 9" Model 435 Main Case	1
4	D3723-2	³¼″ x 1″ x 9″ Model 435 Main Case	
5	D3705	Model 435 Chamber Assembly	1
6	A13128	Model 435 Chamber O-Ring	1
7	C6933	Model 435 Strainer Retainer	1
8	B8698	Model 435 Bronze Gasket	1
9	B8699	Model 435 Liner (Iron / Brz Bottom Only)	1
10	B8714	Model 435 Iron Bottom Plate	1
10	B8715	Model 435 Bronze Bottom Plate	1
11	90026	5/ <sub>16</sub> - 18 x 7/ <sub>8</sub> Hex Bolt SS (Iron / Brz Btm)	4

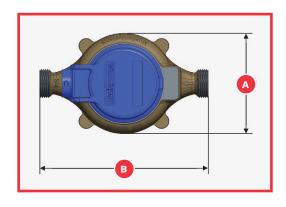


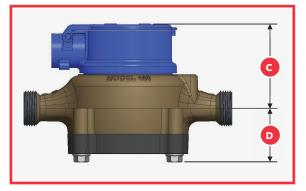
## **DIMENSIONS, WEIGHTS AND PARTS**

METER SIZE	3/4" SHORT 7.5"	3/4" STANDARD 9"	³/ <sub>4</sub> ″ X 1″ X 9″	
MODEL	435 BRONZE SSR REGISTER	435 BRONZE SSR REGISTER	435 BRONZE SSR REGISTER	
	DIME	NSION		
Α	4.475″	4.475″	4.475″	
В	7.5″	9″	9″	
С				
Visual Register	3.25″	3.25″	3.25″	
SSR Register	3.035″	3.035″	3.035″	
ME-8 Register	3.5″	3.5″	3.5″	
D	1.925″	1.925″	1.925″	
Weight	4.6	4.7	4.8	

Weights are in pounds are approximate.

### **435 BRONZE METER**





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F 14210 6/20



# Magnetic Drive Positive Displacement Disc Meters Size 1"

### **FEATURES**

**Applications:** Measurement of cold water for residential and small commercial applications where water volumes are low, and low flow sensitivity is important.

**Conformance to Standards:** Mueller 452 water meter complies with latest version of ANSI/AWWA Standard C700, NSF-61 372 and the Safe Water Drinking Act. Each meter is tested to ensure compliance.

Construction: Mueller 452 water meter consists of three basic parts: main case; measuring chamber; and permanently sealed register. The main case is made of bronze for long life. Direction of flow arrows and model are cast into each main case. The bottom cover is epoxy-coated cast iron with a molded plastic liner separating it from the waterway. Optional bronze bottom covers are available. The measuring chambers are large for reduced wear during operation. The measuring chamber, integral strainer, nutating disc are thermoplastic, which is dimensionally stable and will not corrode. The stainless steel thrust roller moves smoothly along a stainless steel wear plate to reduce friction and maintain accuracy. The register box and lid are available in plastic or bronze. The meter is designed so that the register can be replaced without removing the meter from the line.

**Register:** The permanently sealed register has a unique seal and heat-treated glass to eliminate dirt, moisture infiltration and lens fogging. An integral tamper-proof locking feature is provided to resist tampering with the register. The totalizing register has a straight-reading odometer type display, a 360° test circle with center sweep hand and a low flow (leak) detector or the option of a solid state LCD display. Standard gearing is used, making registers interchangeable by size. All Mueller meter Models have electronic meter reading systems available for increased reading efficiency (see Meter Reading Systems.)

**Operation:** Water flows through the meter's strainer where debris is screened out. The incoming water fills a known volume of the measuring chamber on one or the other side of a movable disc that separates the chamber into two sections. As water enters, it moves the disc (nutates), forcing a known volume of water out of the meter from the opposite side of the disc. The process repeats as the sections refill and empty in turn. The nutating action of the disc is coupled magnetically to the register to indicate the volume of water that passes through the meter. The large capacity measuring chamber requires fewer nutations of the disc for each gallon measured, which helps to limit wear, extend the life of the meter, and reduce pressure loss.

**Maintenance:** The Mueller 452 water meter is designed and manufactured to provide long service life with virtually no maintenance required.

**Connections:** Supplied with external straight pipe threads (NPSM) per ANSI B1.20.1.



452 WITH SSR REGISTER

### **MATERIALS AND SPECIFICATIONS**

Model	452	
Sizes	1″ x 1″	
Standards	Manufactured and tested to meet or exceed all applicable parts of ANSI/AWWA C700 Standard NSF-61 372 and the Safe Water Drinking Act	
Service	Cold water measurement with flow in only one direction	
Operating Flow Range	See chart on the following page	
Accuracy	See chart on the following page	
Pressure Loss	See chart on the following page	
Maximum Working Pressure	150 PSI	
Temperature Range	33° F to 100° F water temperature	
Measuring Element	Nutating Disc	
Register Type	Straight reading, permanently sealed, magnetic drive with low flow indicator. Remote reading units optional.	
Meter Connections	1" external (NPSM) straight pipe threads per ANSI B1.20.1	
Materials	Meter case – No Lead Bronze; Bottom cover – cast iron ASTM A126 CL. B; Chamber top/bottom – thermoplastic; Nutating disc – thermoplastic; Disc pin – stainless steel; Thrust roller – stainless steel; Wear plate – stainless steel; Coupling – Ceramic magnet; Strainer – thermoplastic; Coupling shaft – stainless steel ANSI B18; Top cover bolts – stainless steel ANSI B18; Bottom cover bolts – stainless steel ANSI B18; Register box and lid – thermoplastic.	
Options	Bottom cover – bronze UNSC84400 ; Register box and lid – bronze UNSC85700; AMR/AMI Reading Systems	

# Magnetic Drive Positive Displacement Disc Meters Size 1"

### **METER REGISTRATION**

METER SIZE	INITIAL DIAL*	CAPACITY	INITIAL DIAL*	CAPACITY
1″	10 Gallons	10 Million	1 Cubic Feet	1 Million

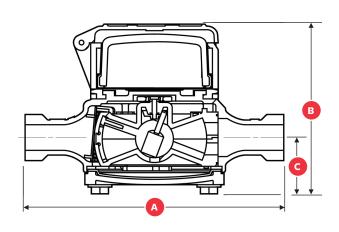
<sup>\*</sup>Registration equal to one full revolution of the sweep hand.

### **FLOW CHARACTERISTICS**

METER SIZE	TYPICAL LOW FLOW (95% MINIMUM)	TYPICAL OPERATING RANGE (100% ± 1.5%)	MAXIMUM CONTINUOUS OPERATION	
	1″	¾ GPM	2 to 20 GPM	35 GPM

Note: Performance curves are typical only and NOT a guarantee of performance.

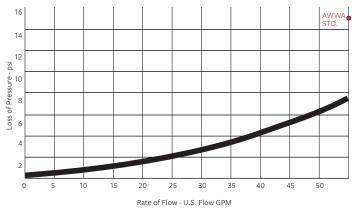
### **DIMENSIONS AND WEIGHTS**



METER CITE	1"		
METER SIZE	ENDS EXTERNAL (NPSM) STRAIGHT PIPE THREADS		
MODEL	452		
	DIMENSIONS		
А	10 ³⁄₄″		
B Visual Reg	5 ½″		
B SSR Reg	5 1⁄4″		
B ME-8 Reg	5 3/4″		
С	2 1/8″		
Width	7.22″		
Inlet & Outlet	1″		
Net Weight	11		

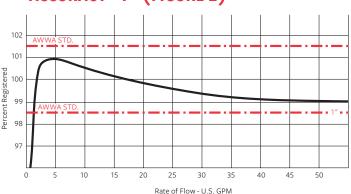
# PERFORMANCE

## **HEAD LOSS - 1" (FIGURE 1)**



NOTE: Performance curves are typical only and NOT a guarantee of performance.

## ACCURACY - 1" (FIGURE 2)



# Magnetic Drive Positive Displacement Disc Meters Size 1" Parts

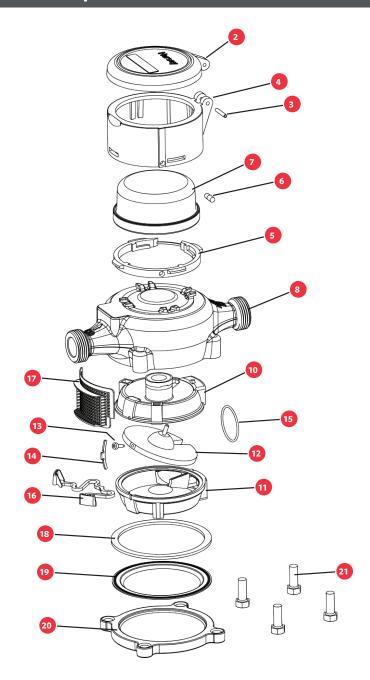
REF NO.	DESCRIPTION	MATERIAL	1" MODEL 452
1	Complete Register Housing Assembly	Plastic	B7856
•	Includes the following:	Bronze	B7857
2	Register Cover	Plastic	C5768
3	Spirol Pin	Plastic	AS41122
3	Spirol Pin	Bronze	AS41123
4	Register Housing Base	Plastic	C5769
5	Register Housing Insert	Plastic	C5770
6	Register Locking Pin	Blue Color Plastic	A12658
0	Register Locking Pin	Brass Color Plastic	A126581
	Visual Register USG	Glass/Brass	D32565
7	Visual Register CF	Glass/Brass	D32566
,	Encoder Register USG*	Plastic/Brass	Call CS
	Encoder Register CF*	Plastic/Brass	Call CS
8	1" Main Case 2006 and after	No Lead Bronze	D3589SI
9	Complete Chamer Assembly Includes following parts 10-16	Plastic	C5692PO
10	Top Chamber Assembly	Plastic**	-
11	Bottom Chamber Assembly	Plastic**	-
12	Disc Assembly	Plastic/SST**	-
13	Thrust Roller	SST	
14	Wear Plate	SST	
15	Outlet Seal	Rubber	A130203
16	Chamber Retainer	Plastic	C5466
17	Strainer	Plastic	51026P045
18	Gasket	Rubber	C5489
19	Liner	Plastic	C5506
20	Bottom Cover 2006 and after	Cast Iron	B8623
20	Bottom Cover 2006 and after	Bronze	B8624
21	Case Bolt 2006 and after	SST	90010 (6)

<sup>\*</sup>Call Mueller Customer Service for appropriate Translator Register and AMR Device part number.

\*\*Available only as part of item 9 – Complete Chamber Assembly.

NOTE: If more than one part is required per assembly, quantity is noted after part number (in parenthesis). The different top and bottom case requirements for the various flange configurations. Bolt quantities and sizes vary.

# Magnetic Drive Positive Displacement Disc Meters Model 452



### For more information about Mueller or to view our full line of water products, please visit muellersystems.com or call Mueller customer service at 1.800.423.1323.

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MUELLER

F 14211 11/20

Job Name	Contractor
Job Location	Approval
Engineer	Contractor's P.O. No.
Approval	Representative

## Series 6000HMB

### **Double Check Valve Assemblies**

Sizes: 21/2" - 7NST x 3"

Series 6000HMB Portable Hydrant Backflow Preventers are designed to protect drinking water supplies from dangerous cross-connections in accordance with national plumbing codes and water authority requirements for non-potable service applications such as irrigation, fireline, or industrial processing. For use in protection of water from a fire hydrant or other nonpermanent installation where flow is in one direction only and the possibility of a cross-connection exists. This model can be used where approved by the local authority having jurisdiction on health hazard cross-connections. Ideal for use with client's existing hydrant meter hookup.



6000HMB

### **Features**

- Designed to retrofit backflow protection onto fire hydrants used for temporary water service.
- Outlet gate valve can be opened/closed slowly to prevent surges.
- Heavy duty relief valve cover prevents vandalism and protects the valve from damage when the 994HMB is transported to another fire hydrant location.
- In-line flow restrictor protects the meter measuring element and the backflow preventer components from damage due to excessive flow.
- Stainless steel kicker bar supplied with each valve for support
- Meets AWWA C701 meter requirements.
- Standardly supplied with 2½"-7 NST fire hose swivel coupling on inlet.
- Only weighs 66 lbs. total.
- Backflow preventer manufactured from 300 Series stainless steel for corrosion resistance.
- Includes the strongest double walled stainless steel inlet strainer available.
- Accurately measure flow and protects the water supply from possible contamination.

### Materials

Trim:

Housing: Heat treated aluminum alloy/

stainless-steel

Nose Cone and

Straightening Vanes: Thermoplastic Rotor: Thermoplastic

Rotor: Thermoplastic

Rotor Radial Bearings: Lubricated Thermoplastic

Rotor Thrust Bearings: Sapphire Jewels

Rotor Bearing Pivots: Passivated 316 Stainless Steel
Calibration Mechanism: Stainless Steel and Thermoplastic
Flow Restriction Orifice: Heat Treated Aluminum Alloy

Magnet: Ce

Ceramic

Register Cover: Bronze

Stainless Steel

Inlet Screen: Stainless Steel with Elastomer

### NOTICE

The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.

Ames Fire & Waterworks product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Ames Fire & Waterworks Technical Service. Ames Fire & Waterworks reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Ames Fire & Waterworks products previously or subsequently sold.



A WATTS Brand

### **Specifications**

Typical Operating Range (100%±1.5%)

5 - 660 GPM (1.1 to 150 m3/h)

Maximum

450 GPM (102 m3/h)

Continuous Flow Maximum

660 GPM (150 m3/h)

Intermittent Flow

Typical Low Flow (Min. 95%)

4 GPM (0.9 m3/h)

Pressure Loss at Maximum

37 psi @ 450 GPM (2.55 bar @ 102 m3/h)

(standard couplings with orifice

and screen)

Continuous Operation

Note: 23 psi @ 350 GPM

Maximum Operating Pressure

150 psi (10 bar)

Standard

 $2^{1/2}$ " – 7" NST threads

Hose Coupling (78P - 3.4mm)

(National standard fire hose coupling

thread)

Register

Straight reading, permanently sealed

magnetic drive standard.

Registration

100,000,000 Gallons

100 gallons/sweep hand revolution.

10,000,000 Cubic Feet

10 cubic ft./sweep hand revolution.

1,000,000 m3

1 m3/sweep hand revolution.

Flow Restriction (Orifice)

Limits flow through the meter

to 660 GPM at 85 psi system pressure

with standard couplings. (150 m3/h at 5.9 bar)

### Typical Installation — Hydrant Meter Backflow



### A WARNING

It is illegal to use this product in any plumbing system providing water for human consumption, such as drinking or dishwashing, in the United States. Before installing standard material product, consult your local water authority, building and plumbing codes.



### **Approvals**

Model 6000HMB Hydrant Meter Backflow Preventer meets the design requirements of most national standards. Due to the portability of the unit, there are no national approvals available. Contact the factory for specific approvals on the reduced pressure backflow preventer.

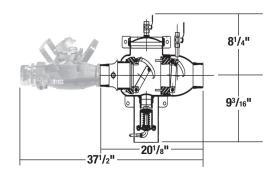
### Dimensions - Weight

Overall lay length: 371/2"

Weight: 66 lbs.

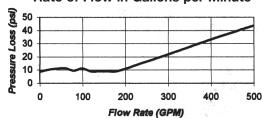
Height from top of open gate valve to bottom of relief valve 19"

Width: 10"

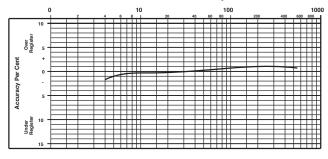


MODEL	WE	IGHT	
	lbs.	kg	
6000HMB-GPM	66	30	
6000HMB-CFM	66	30	

# Pressure Loss Chart Rate of Flow in Gallons per Minute



# Accuracy Chart Rate of Flow in Gallons per Minute



### NOTICE

Inquire with governing authorities for local installation requirements

A **WATTS** Brand

USA: Backflow Tel: (978) 689-6066 • Fax: (978) 975-8350 • AmesFireWater.com
USA: Control Valves Tel: (713) 943-0688 • Fax: (713) 944-9445 • AmesFireWater.com

Canada: Tel: (905) 332-4090 • Fax: (905) 332-7068 • AmesFireWater.ca
Latin America: Tel: (52) 81-1001-8600 • AmesFireWater.com

# **Mueller** SYSTEMS

# Fire Service Meter with Bypass Sizes 3", 4", 6", 8", 10"

### **Features**

**APPLICATIONS:** The Hersey® Meters FM³ fire service meter is designed for combined fire service and domestic water where a single supply line supports both fire and domestic or process needs. The meter may be utilized in automatic sprinkler systems and fire service, as a master meter for an entire water system, as a master meter for zoned systems, and for domestic or processed water where accuracy across a broad range of flows is critical. The FM³ meter eliminates the need for secondary service lines, saving time and reducing installation expenses and is compliant for all UL®, FM®, NSF®-61 fire service meter applications.

CONSTRUCTION: Every Hersey FM³ meter is manufactured with epoxy coated ductile iron construction which eliminates additional gaskets and fasteners, reducing ongoing maintenance costs. The unique, Hersey strainer design protects the horizontal turbine meter measuring element in a unibody construction that reduces meter vault and installation costs due to its compact size and reduced weight while providing four times the inlet pipe diameter of strainer surface area. The unitized horizontal turbine measuring element is easily accessed through the top case of the meter and o-ring seals simplify field service. A Hersey EDCIV<sup>TM</sup> detector check provides proven backflow protection with a spring loaded clapper assembly that is mounted to the top case of the check valve for ease of service. Bypasses consist of an appropriately sized positive displacement or residential fire line meter for low flow accuracy. Dual ball valves permit isolation of the meter and a swing check prevents backflow through the bypass. Stainless steel and bronze fasteners are used throughout the meter where required.

**REGISTER:** Separate mainline and bypass registers provide visibility of performance and field testing opportunity. The permanently sealed registers use proven magnetic drive design and the exclusive Hersey triple seal provides clarity and error free meter reading. Internal gears are self lubricating, molded plastic for minimal friction and a long service life. Standard visual read and electronic Translator® registers offer odometer wheels with a totalizing display, 360° degree test circle with center sweep hand and a low flow indicator. All Hersey FM³ models are available with electronic meter reading system components to meet any utility AMR/AMI requirement and all registers are protected by the unique Hersey locking pin which requires no special removal tools for field service.

**OPERATION:** During normal low flow operation, all water flows through the sensitive bypass meter for accurate registration. As flow and pressure loss through the bypass increases, the mainline clapper assembly automatically opens, permitting water to flow through the horizontal turbine measuring element and the bypass meter for accurate combined registration of all flows. The element employs Hersey's unique Retro-Thrust® feature to divide wear across multiple points, increasing accuracy, reducing friction and extending the life of the measuring element. Integral flow straightening vanes on the inlet and outlet sides of the measuring element contribute to the long term accuracy of the meter. As flow and pressure loss through the bypass meter decrease, the clapper assembly once again closes, redirecting all water through the bypass. Higher demand instances include master meter supply applications and fire suppression requirements.

**INSTALLATION:** Hersey FM<sup>3</sup> meters are designed for horizontal installation with a minimum of five times the inlet pipe diameter of straight pipe prior to the meter and a minimum of three times the pipe diameter after the meter.

**MAINTENANCE:** All service components for the FM³ are unitized for easy replacement. Access to components is accomplished through the top side of the meter for full in-line service. Drop In Measuring Elements (DIMES) are available in pre-tested configurations which include a new measuring element, top case, register and o-ring for utilities that require quick field replacement. A calibration vane permits field adjustments to ensure accurate registration and extend the service life of the measuring element. The calibration vane is protected by the register and the locking pin for added security. For additional information regarding Hersey's unitized replacement options, please contact the Mueller Systems Sales and Technical Support Group at 800-323-8584.



4" x 1" FM3 with Residential Fire Meter

## Materials and Specifications

MODEL	FM <sup>3</sup> Fire Service Meter
SIZES	3" with 3/4" RFM bypass meter 4" with 1" RFM bypass meter 6" with 2" PD bypass meter 8" with 2" PD bypass meter 10" with 2" PD bypass meter
STANDARDS exceed	Manufactured and tested to meet or all applicable parts of AWWA C703, NSF®-61 compliant
INSTALLATION (sam	Horizontal only with 5X pipe diameter of straight pipe e size as meter) on inlet and 3X on outlet side of meter
OPERATING FLOW RANGE	See Chart on the following page
ACCURACY	See Chart on the following page
PRESSURE LOSS	See Chart on the following page
MAXIMUM WORKING PRE	SSURE 175 PSI
WATER TEMPERATURE RA	ANGE 33°F to 100°F
· · · · · · · · · · · · · · · · · · ·	Mainline: Horizontal Turbine Element on all sizes ertical Turbine Residential Fire Meter on 3" and 4" sizes th Pressure Nutating Disc Meter on 6", 8" and 10" sizes
METER CONNECTIONS	ANSI class 125 standard end flanges
OPTIONS	All AMR/AMI Reading Systems



Fire Service Meter with Bypass Sizes 3", 4", 6", 8", 10"

# **Meter Registration**

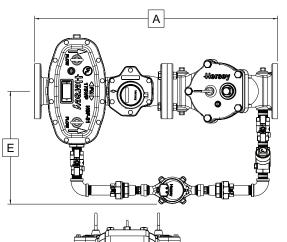
Meter Size			Capacity Initial Dial*	
3"	100 Gallons	100 Million	10 Cubic Feet	10 Million
4"	100 Gallons	100 Million	10 Cubic Feet	10 Million
6"	1000 Gallons	1 Billion	100 Cubic Feet	100 Million
8"	1000 Gallons	1 Billion	100 Cubic Feet	100 Million
10"	1000 Gallons	1 Billion	100 Cubic Feet	100 Million

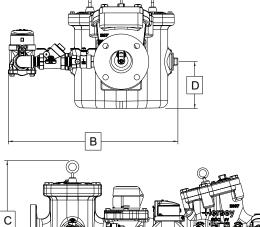
<sup>\*</sup>Registration equal to one full revolution of the sweep hand.

# Flow Characteristics

Meter Size	Typical Low Flow (95% Min)	Typical Operating Range (100% ± 1.5%)	Maximum Continuous Operation	Maximum Intermittent Flow
3"	1/2 GPM	6 to 600 GPM	600 GPM	750 GPM
4" 3/4 GPM		8 to 1000 GPM	1000 GPM	1250 GPM
6"	2 GPM	15 to 2000 GPM	2000 GPM	2600 GPM
8" 2 GPM		30 to 3500 GPM	3500 GPM	4400 GPM
10"	2 GPM	40 to 5500 GPM	5500 GPM	7000 GPM

## **Dimensions and Weights**





Meter Size	3x3/4	4x1	6x2	8x2	10x2			
Dimension	Dimension							
Α	33"	35"	45"	53"	68"			
В	23-5/8"	23-5/8"	33-11/32"	33"	39-17/32"			
C	16"	19"	24-1/4"	25-15/16"	31-7/16"			
D	6-3/8"	9-3/8"	11-1/2"	11-9/16"	14"			
E	15-5/8"	15-5/8"	22-11/32"	19-7/8"	22-29/32"			
Weight	220	250	590	890	1550			

NOTE: Weights are in pounds and are approximate.

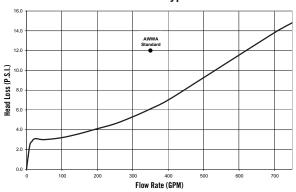
# $\mathsf{FM}^3$



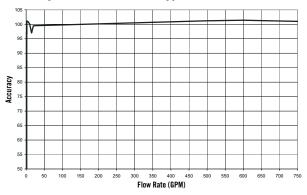
Fire Service Meter with Bypass Sizes 3", 4", 6", 8", 10"

## **Performance**

### Head Loss - 3" with 3/4" RFM Bypass

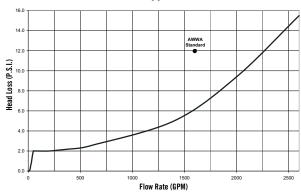


### Accuracy - 3" with 3/4" RFM Bypass



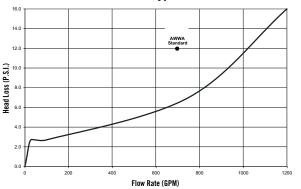
NOTE: Performance curves are typical only and NOT a guarantee of performance.

### Head Loss - 6" with 2" PD Bypass

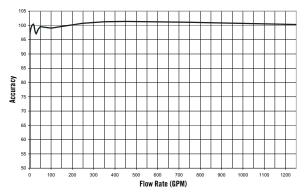


## **Performance**

### Head Loss – 4" with 1" RFM Bypass

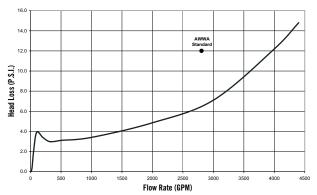


### Accuracy - 4" with 1" RFM Bypass



NOTE: Performance curves are typical only and NOT a guarantee of performance.

### Head Loss - 8" with 2" PD Bypass

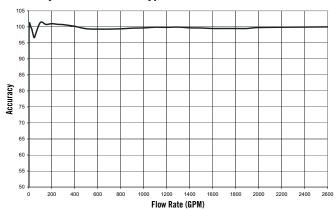


**Mueller** SYSTEMS

Fire Service Meter with Bypass Sizes 3", 4", 6", 8", 10"

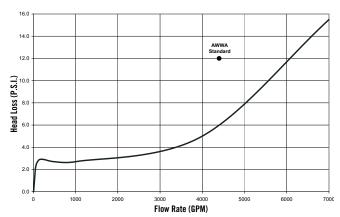
### **Performance**

### Accuracy - 6" with 2" PD Bypass



NOTE: Performance curves are typical only and NOT a guarantee of performance.

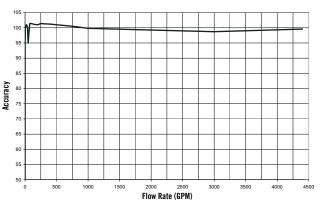
### Head Loss - 10 with 2" PD Bypass Meter



NOTE: Performance curves are typical only and NOT a guarantee of performance.

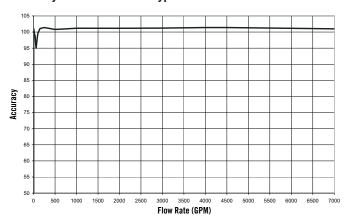
## **Performance**

### Accuracy - 8" with 2" PD Bypass



NOTE: Performance curves are typical only and NOT a guarantee of performance.

### Accuracy - 10" with 2" PD Bypass Meter



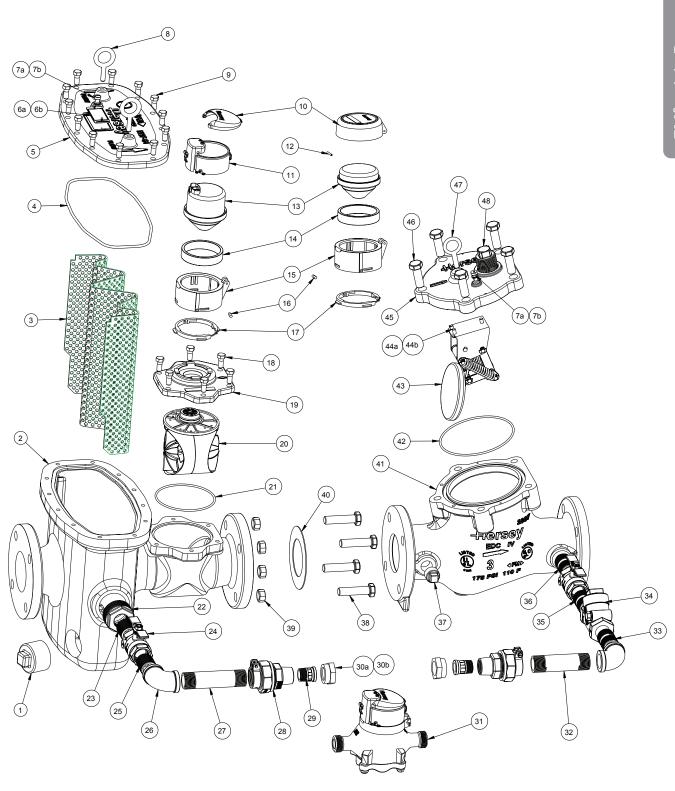
NOTE: Performance curves are typical only and NOT a guarantee of performance.

 $\mathsf{FM}^3$ 



Fire Service Meter with Bypass Sizes 3", 4", 6", 8", 10"

## FM3 WITH BYPASS EXPLODED ASSEMBLY (See parts listing, next page)





Fire Service Meter with Bypass Sizes 3", 4", 6", 8", 10"

### 3" - 10" FM3 WITH BYPASS PARTS LIST (See exploded assembly diagram for reference)

#	DESCRIPTION	3" x 3/4" with RFM	4" x 1" with RFM	6" x 2" with HP PD	8" x 2" with HP PD	10" x 2" with HP PD
1	TEST PORT PLUG	59010PLA (3)				
2	FM3 BODY	D3624	D3603	D3608	D3614	D3618
3	STRAINER SCREEN	B8634	C6628	C6615	C6614	C6616
4	STRAINER COVER O-RING	A13077	A13077	A13078	A13079	A13080
5	STRAINER COVER	C6620	C6620	D3616	D3610	D3620
6a	NAME TAG	A13054	A13054	A13054	A13054	A13054
6b	DRIVE SCREW	7199070109	7199070109	7199070109	7199070109 (2)	7199070109 (2)
7a	VENT SCREW	59003	59003	59003	59003	59003
7b	VENT SCREW WASHER	59073	59073	59073	59073	59073
8	EYE BOLT	AS7733 (2)	AS7733 (2)	AS7731 (2)	AS7732 (2)	AS7732 (2)
9	STRAINER COVER BOLT	90065 (12)	90065 (12)	90180 (20)	90243 (20)	90264 (24)
10	TRANSLATOR LID	B8638	B8638	B8638	B8638	B8638
10	VISUAL READ LID	50381	50381	50381	50381	50381
11	WIRE EXIT HOUSING	C6624	C6624	C6624	C6624	C6624
12	LID HINGE PIN	AS41122	AS41122	AS41122	AS41122	AS41122
13	TRANSLATOR REGISTER	D3655XXXX	D3656XXXX	D3657XXXX	D3658XXXX	D3659XXXX
	VISUAL READ REGISTER	D3663X	D3663X	D3663X	D3663X	D3663X
14	REGISTER SPACER	50382	50382	50382	50382	50382
15	TRANSLATOR HOUSING BASE VISUAL READ HOUSING BASE	C6637 50380	C6637 50380	C6637 50380	C6637 50380	C6637 50380
16	LOCKING PIN	A12658	A12658	A12658	A12658	A12658
17	REGISTER HOUSING INSERT	C5770	C5770	C5770	C5770	C5770
18	ELEMENT COVER BOLT	90065 (6)	90065 (6)	90264 (8)	90264 (8)	90264 (8)
19	ELEMENT COVER	C6618	C6618	C6612	C6612	C6630
20	MEASURING ELEMENT	C6598	C6598	54700	54700	54700
21	ELEMENT COVER O-RING	54602	54602	B8657	B8657	B8636
22	REDUCING BUSHING	96049NSF	96049NSF	N/A	N/A	N/A
23	NIPPLE	96062	96063	9605J	9605J	9605J
24	LOCKING BALL VALVE	96551 (2)	96551 (2)	96553 (2)	96553 (2)	96553 (2)
25	NIPPLE	9605G	9605G	9605J	9605J	96053 (2) 9607G
26	90° ELBOW	96037SS (2)	96037SS (2)	96039 (2)	96039 (2)	96039 (2)
27	CUT NIPPLE	96062	96063	96173	96039 (2)	96072
28	PACK JOINT					96012 (2)
29	CONNECTION TAILPIECE	96010 (2)	96011 (2)	96012 (2) N/A	96012 (2)	96012 (2) N/A
$\perp$		96033 (2)	95062 (2)	N/A N/A	N/A	
30a	CONNECTION NUT	95033 (2)	95058 (2)		N/A	N/A
30b	CONNECTION WASHER	95038 (2)	95057 (2)	N/A	N/A	N/A
31	BYPASS METER	SEE RFM SHEET	SEE RFM SHEET	SEE HP PD SHEET	SEE HP PD SHEET	SEE HP PD SHEET
32	CUT NIPPLE	96062	96063	96173	96174	96072
33	NIPPLE	9605G	9605G	9605J	9605J	9609H
34	SWING CHECK VALVE	96092	96092	96094	96094	96094
35	NIPPLE	9606F	9606F	9605J	9605J	9608C
36	NIPPLE	9614A	9614A	96138	9619B	9617C
37	TEST PORT PLUG	59013 (3)	59013 (3)	59010PLA (3)	59010PLA (3)	59010PLA (3)
38	FLANGE CONNECTION BOLT	90256 (4)	90256 (8)	90308 (8)	90311 (8)	90365 (12)
39	FLANGE CONNECTION NUT	AS7633 (4)	AS7633 (8)	90335 (8)	90339 (8)	90356 (12)
40	FLANGE CONNECTION GASKET	923701011NSF	923701014NSF	923701015NSF	923701016NSF	923701017NSF
41	F x F EDCIV BODY	E20841	E200531	E20154	E20094	E20214
42	EDCIV COVER O-RING	AS7612	AS7612	AS7613	AS7614	AS7615
43	CLAPPER ASSEMBLY	E20843	E20843	E20153	E20093	E20213
44a	CLAPPER BRACKET BOLT	AS7621 (3)	AS7621 (3)	AS7622 (3)	AS7623 (3)	AS7623 (3)
44b	CLAPPER BRACKET LOCK WASHER	AS7651 (3)	AS7651 (3)	AS7653 (3)	AS7654 (3)	AS7654 (3)
45	EDCIV COVER	D3626	D3626	D3628	D3630	D3632
46	EDCIV COVER BOLT	90241 (5)	90241 (5)	90264 (8)	AS48227SS (8)	AS48229SS (8)
47	EYE BOLT	AS7733	AS7733	AS7731	AS7731 (2)	AS7731 (2)
48	TEST PORT PLUG	59027NSF	59027NSF	59009NSF	59009NSF	59009NSF
49	D.I.M.E. Includes #'s (10-17) & (19-21)	CALL M.S. CUSTOMER CARE				

# Model MVR

# **Mueller** SYSTEMS

## Magnetic Drive Vertical Turbine Meters Sizes 3/4"x1/2", 3/4", 3/4"x1", 1", 1-1/2", 2", 3", 4" and 6"

### **Features**

APPLICATIONS: Measurement of water for residential, commercial, industrial and residential fire applications, where sensitivity to low flow is also important. Hersey® MVR meters are among the most sensitive vertical turbine meters available and may be used in place of compound meters in some applications. The compact design and integral strainer (separate external strainer is not needed) of Model MVR meters facilitate installation in tight spaces. They are ideal where flexibility is needed to meet wider flow ranges, where water temperatures are elevated between 80°F and 130°F. or where sand particles or other small debris may be encountered. May be installed vertically or horizontally for greater installation flexibility.

**CONFORMANCE TO STANDARDS:** Hersey Model MVR Water Meters comply with ANSI/AWWA Standard C701 Class I. Each meter is tested to ensure compliance. EnviroBrass® II options conform to the NSF 61 Standard.

CONSTRUCTION: Hersey Model MVR Water Meters consist of three basic parts: maincase; rotor assembly; and a permanently sealed register. Maincases are made of bronze for long life. Rotor assemblies are thermoplastic, which is dimensionally stable and will not corrode. Retro Thrust rotor design extends the life of the meter by dividing wear between two points: during low flow the tungsten carbide thrust bearing floats against a sapphire bearing surface; during high flow the stainless steel shaft gently contacts a second sapphire bearing. During medium flow, the rotor floats between the thrust bearings without contact. Optional test ports are available on all sizes 1-1/2" and larger. The measuring chamber is protected by an internal strainer. No external strainer is required.

**REGISTER:** Permanently sealed register has a unique seal and heat-treated glass to eliminate dirt, moisture infiltration and lens fogging. The totalizing register has a straight-reading odometer type display, a 360° test circle with center sweep hand and a low flow (leak) detector.

All Hersey Meter models have electronic meter reading systems available for increased reading efficiency (see Meter Reading Systems.)

**OPERATION:** Water flows through the integral strainer and into the vertical turbine assembly. There the direction of the water flow is directed by the hub into the rotor at the precise angle necessary for accurate measurement over the full range of flow rates. No straight pipe requirements apply before or after the meter. The turbine turns freely and rotates in direct proportion to the volume of water passing through the meter. The Model MVR turbine operates more quietly than conventional disc or piston meters.

MAINTENANCE: The Hersey Model MVR Water Meters are designed and manufactured to provide long service life. The register on all sizes, and meter interior and strainer on sizes 3" and larger, can be replaced without removing the meter from the line. Modular design and economical internal parts allow for inexpensive, speedy rebuilds. Optional built-in test ports make field testing easy and convenient.

**CONNECTIONS:** Available with external (N.P.S.M.) straight pipe threads (ANSI B1.20.1) on 3/4" and 1" sizes; integral two-bolt oval flanges or internal (NPT) pipe threads (ANSI B1.20.1) on 1-1/2" and 2" sizes. ANSI class 150 flanges on 3" through 6" sizes (class 125 cast iron or class 150 bronze companion flanges available on request).





MVR 30

MVR 30 with adapter



MVR 350

## Materials and Specifications

MODEL NUMBER MVR 30, MVR 30A, MVR 30B, MVR 50, MVR 100, MVR 160, MVR 350, MVR 650, and MVR 1300.

SIZES 3/4"x1/2", 3/4", 3/4"x1", 1", 1-1/2", 2", 3", 4" and 6"

STANDARDS Manufactured and tested to meet or exceed all applicable parts of ANSI/AWWA C701 Class I Standard.

**SERVICE** Cold water measurement with flow in only one direction.

OPERATING FLOW RANGE See Chart on following page

**ACCURACY** See Chart on following page

PRESSURE LOSS See Chart on following page

MAXIMUM WORKING PRESSURE 150 PSI

TEMPERATURE RANGE 33°F to 130°F water temperature Hot water up to 180° available upon request.

MEASURING ELEMENT

REGISTER TYPE Straight reading, permanently sealed, magnetic drive with low flow indicator.

Remote reading units optional.

AMR Reading Systems.

METER CONNECTIONS

1/2", 3/4" and 1" external (NPSM) straight pipe threads, 1-1/2 size and 2" size available with either two bolt flanged ends or internal thread (NPT) ends same nominal size as size of meter, 3" thru 6" ANSI class 150 flanges.

Maincase - bronze UNSC84400: **MATERIALS** 3/4"- 1-1/2" Bottom cover - cast iron ASTM A126 CL. B enamel painted: 2" Bottom cover – bronze UNSC84400; Rotor assembly – thermoplastic; Strainer –

thermoplastic std. in 3/4" thru 1-1/2";

or stainless steel (2" -6"); Casing bolts - stainless steel ANSI B18.

**OPTIONS** Meter case — EnviroBrass® II UNSC89520. Stainless steel ring strainer is available on 3/4", 1" and 1-1/2" meters.



# **Model MVR**

Magnetic Drive Vertical Turbine Meters Sizes 3/4"x1/2", 3/4", 3/4"x1", 1", 1-1/2", 2", 3", 4" and 6"

## **Meter Registration**

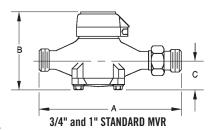
Meter	Initial Dial*	Capacity	Initial Dial *	Capacity
Size				
3/4"	10 Gallons	10 Million	1 Cubic Foot	1 Million
1"	10 Gallons	10 Million	1 Cubic Foot	1 Million
1-1/2"	100 Gallons	100 Million	10 Cubic Feet	10 Million
2"	100 Gallons	100 Million	10 Cubic Feet	10 Million
3"	100 Gallons	100 Million	10 Cubic Feet	10 Million
4"	100 Gallons	100 Million	10 Cubic Feet	10 Million
6"	1000 Gal	1 Billion	100 Cubic Ft	100 Mill.

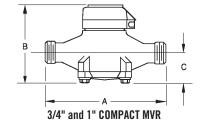
<sup>\*</sup> Registration equal to one full revolution of the sweep hand.

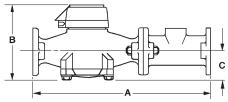
## **Flow Characteristics**

Meter	Typical Low	Typical	Maximum	Maximum	
Size Flow		Operating Range	Continuous	Intermittent	
	(95% Min.)	(100% ± 2%)	Operation	Flow	
3/4"	1/2 GPM	1 to 30 GPM	25 GPM	35 GPM	
1"	3/4 GPM	1-1/2 to 50 GPM	35 GPM	55 GPM	
1-1/2" 1-1/2 GPM 2		2 to 100 GPM	70 GPM	110 GPM	
2"	2 GPM	3 to 160 GPM	115 GPM	175 GPM	
3"	2-1/2 GPM	4 to 350 GPM	240 GPM	390 GPM	
4"	3-1/2 GPM	5 to 650 GPM	450 GPM	715 GPM	
6"	5 GPM	15 to 1300 GPM	910 GPM	1430 GPM	

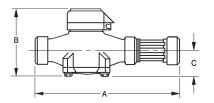
## **Dimensions and Weights**



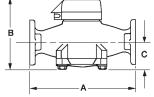




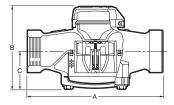
1-1/2" and 2" STANDARD MVR with 2 bolt flange ends\*\* and spool piece



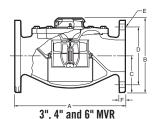
1-1/2" and 2" STANDARD MVR with Internal NPT ends



1-1/2" and 2" COMPACT MVR with integral 2 bolt flange ends\*\*



1-1/2" and 2" COMPACT MVR with Internal NPT ends



Meter Size 3/4"x1/2" 3/4" 3/4"x1" 1-1/2" 2" 1-1/2" 6" Ends Threaded (screwed) Flanged MVR350 Model MVR30 MVR30A MVR30B MVR50 MVR100 MVR160 MVR100 MVR160 MVR650 MVR1300 Dimensions 10-3/4" 12-5/8" 15-1/4" 13" 17" 12" 14" 18" 7-1/2" 7-1/2" 10-1/2" AA<sup>3</sup> 7-1/2" 10" 5-3/4" 6-1/4" 5" 5-1/2" 5-3/4" 6-1/4" 8-7/16" 9-3/8" 12-9/16" В 5" 5" 1-13/16" 1-13/16" 1-13/16" 2-3/8" 2-3/8" 3" 2-3/8" 3" 3-7/8" 4-5/8' N/A N/A N/A N/A N/A N/A 4-1/2" 6" 7-1/2" 9-1/2" D N/A N/A N/A N/A N/A N/A 5/8" 5/8" 3/4" 3/4" 7/8" N/A N/A N/A N/A N/A 11/16 15/16" 5/8" 11/16" 13/16" N/A 3-3/4" 3-3/4" 5-3/8" Max.width 3-3/4" 4-1/4" 4-3/8" 5-3/8" 5-15/16" 7-7/8" 9-3/4" 12-7/8" 6 (5\*) 6 (5\*) 6 (5\*) 8 (7\*) 11 (9\*) 15 (14 \*) 12 (9\*) 20 (14\*) 38 140 Net weight 68

<sup>\*</sup>Compact length

<sup>\*\*1-1/2&</sup>quot; and 2" Flanged meters have 2 bolt oval flange pattern.

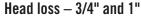
NOTE: Meter couplings are optional and must be ordered separately. Weights are in pounds and are approximate.

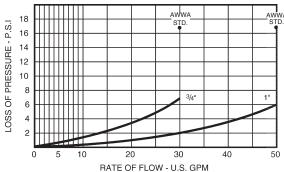
# Model MVR



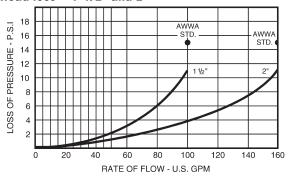
Magnetic Drive Vertical Turbine Meters Sizes 3/4"x1/2", 3/4", 3/4"x1", 1", 1-1/2", 2", 3", 4" and 6"

## **Performance**

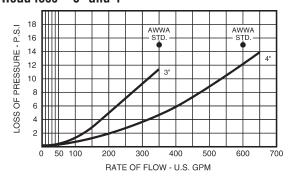




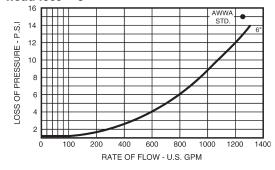
### Head loss -1-1/2" and 2"



### Head loss -3" and 4"



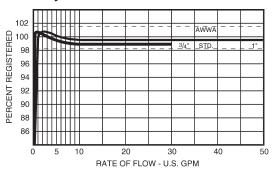
### Head loss - 6"



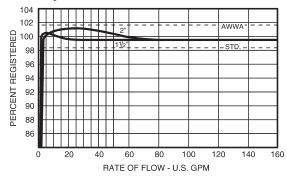
<sup>\*</sup>Performance curves are typical only and not a guarantee of performance.

## **Performance**

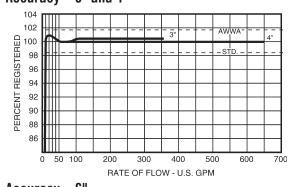
### Accuracy -3/4" and 1"



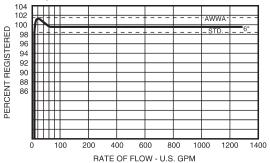
### Accuracy - 1-1/2" and 2"



### Accuracy -3" and 4"



### Accuracy – 6"



# Models MVR-30, MVR 50, MVR 100 and MVR 160

Ref. No.	Description	Model MVR-30	Model MVR-50	Model MVR-100	Model MVR-160
1	Lid (Plastic)	50377	50377	50377	50377
	Lid (Bronze)	50390	50390	50390	50390
2	Black Clamp Band for Visual Register	50379	50379	50379	50379
	Blue Clamp Band for Translator Register	B8602	B8602	B8602	B8602
3	SST Tri-Wing Screw	98344	98344	98344	98344
4	Lid Nut	19999	19999	19999	19999
5	Sealed Registers (Specify unit of measurement)	See pages 4.9-4.11			
6	MVR 30 Top Case (7-1/2" length): 1/2" M.I.P. Ends 3/4" M.I.P. Ends 1" M.I.P. Ends	50452 50466 (A) 50476 (B)	-	-	-
6	MVR 50 Top Case (9" length): 1" M.I.P. Ends 1-1/4" M.I.P. Ends	-	50566 (C) 50576 (D)	-	-
6	MVR 100 Top Case (9" length): 1-1/2" F.I.P. Ends 1-1/2" Bronze 2-Bolt Flange Assembly	-	-	50776 (E) 50784 (F)	-
6	MVR 160 Top Case (10-1/2" length): 2" F.I.P. Ends 2" Bronze 2-Bolt Flange Assembly (10" length)	-	-	-	50866 (G) 50884 (H)
7	Rotor	50471	50571	50771	50871
8	Inlet Hub	50468	50568	50768	50867
9	Lower Bushing	50374 (2)	50574 (2)	50574 (2)	-
10	Interior Screw	98394 (4)	98394 (4)	98394 (4)	98394 (4)
11	Strainer (Plastic)	50469	50569	50769	-
12	Strainer (Metal Ring)**	50480	50580	50780	50880
13	Liner	50365	50565	50765	50865
14	Bottom (Bronze)	50363	50563	50763	50863
	Bottom (Cast Iron)	50364	50564	50764	-
15	Case Washer	AS7792 (4)	AS7792 (4)	98378 (4)	98378 (4)
16	Case Bolt	90026 (4)	90026 (4)	90073 (4)	90073 (4)
	Inlet Hub Assembly	-	-	-	50862
	Bushing Spacer	-	-	-	53114
	Bushing	-	-	-	54915 (2)
	Inlet Plug Assembly	50493	50493	50493	53105
	Sapphire Thrust Bearing (Case)	98371	98371	98371	98371
	Complete Interior	50477	50577	50777	50872
	Bearing Adhesive *	-	-	-	-
	Adapters: 3/4" Adapter 3/4" Adapter Washer 1" Adapter 1" Adapter Washer	95046 95014 95011 95064	- 95063 95064 95086	- - - -	- - - -
	1-1/4" Adapter 1-1/4" Adapter Washer 1-1/2" Female Adapter 2" Female Adapter	- - -	95007 - -	- 95095 -	- - 95195

A: Order 3/4" Adapter 95046 and Adapter Washer 95014 to replace standard 3/4" disc meter, 9" long.

B: Order 1" Adapter 95011 and Adapter Washer 95064 with Top Case 50476 to replace 3/4" disc meter, 9" long, installed with 1" pipe connections.

C: Order 1" Adapter 95063 and Adapter Washer 95064 with Top Case 50566 to replace standard 1" disc meter, 10-3/4" long.

D: Order 1-1/4" Adapter 95086 and Adapter Washer 95007 with Top Case 50576 to replace 1" disc meter, 10-3/4" long, installed with 1-1/4" pipe connection.

E: Order 1-1/2" Adapter 95095 with Top Case 50776 to replace 1-1/2" female end meter installed with union connections. Assemble to length of 12-5/8".

F: Order 1-1/2" Bronze Spool Piece 50783 and gasket 95102 with Top Case 50784 to replace standard 1-1/2" disc meter, 13" long.

G: Order 2" Adapter 95195 with Top Case 50866 to replace standard 2" Female End disc meter, 15-1/4" long. H: Order (2) Bronze Spool piece 50883 and gasket 95122 with Top Case 50884 for 17" length 2-90229 Bolt 2-90260 Nut.

Purchase locally. Use a cyanoacrylic adhesive, such as Loctite Super Bonder #30-13, Eastman #916, Permabond or Aron Alpha.

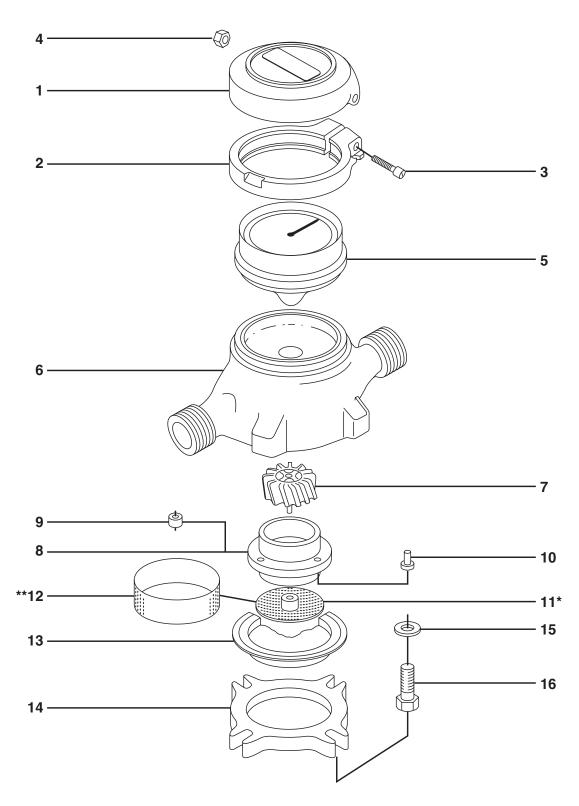
<sup>\*\*</sup>Standard on MVR 160. Optional on MVR 30, 50 100 in place of standard plastic disc strainer.

NOTE: If more than one part is required, quantity is noted after part number (in parenthesis).

# Model MVR

**Mueller** SYSTEMS

### Models MVR-30, MVR 50, MVR 100 and MVR 160

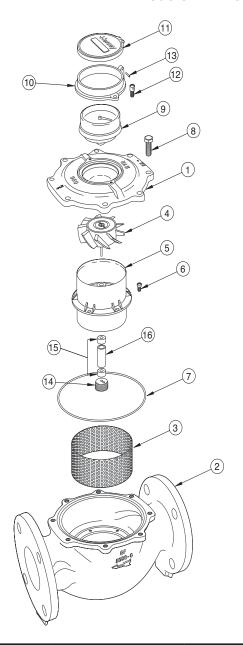


<sup>\*</sup>Disc Strainer - standard on MVR 30, 50, 100.

<sup>\*\*</sup>Ring Strainer – optional (in place of) disc strainer on MVR 30, 50 100. Standard on MVR 160.



# Models MVR-350, MVR 650 and MVR 1300



Ref. No.	Description	Model MVR-350	Model MVR-650	Model MVR-1300
1	Top Case/Thrust Bearing	50981	51181	51381
2	Bottom Case	50982	51182	51382
3	Ring Strainer	50985	51185	51383
4	Rotor Assembly	50984	51184	51384
5	Inlet Hub Assembly	50987	51187	51387
6	Inlet Hub Screws	98395 (6)	98395 (6)	98409 (12)
7	Top Case O-Ring	98361	98362	98408
8	Top Cast Screw	90073 (8)	90073 (10)	90180 (14)
9	Register	See page following pages	See page following pages	See page following pages
10	Register Box (Bronze)	50998	50998	50998
11	Lid (Bronze)	19201	19201	19201
12	Register Box Screw	51005P007 (2)	51005P007 (2)	51005P007 (2)
13	Lid Pin	AS41122	AS41122	AS41122
14	Inlet Plug/Thrust Bearing	50992	50992	-
15	Rotor Bushing	54915 (2)	56915 (2)	51392 (2)
16	Bushing Spacer	54914	51186	51391

NOTE: In order to retrofit translator registers on all 3"-6" MVR meters manufactured prior to 2003 a new top case (1) and top case o-ring (7) is required.

# Model MVR Registers



		Cı	ubic Feet	U.S. Gallons		
MVR Model	Register Part Numbers	Internal Ratio	Relation to other Registers	Register Part Numbers	Internal Ratio	Relation to other Registers
MVR-30	B79821	551.99	-4% (in relation to B79825)	B79813	738.92	-4% (in relation to B79817)
MVR-30	B79822	546.34	-3% (in relation to B79825)	B79814	731.88	-3% (in relation to B79817)
MVR-30	B79823	540.85	-2% (in relation to B79825)	B79815	723.79	-2% (in relation to B79817)
MVR-30	B79824	536.22	-1% (in relation to B79825)	B79816	715.86	-1% (in relation to B79817)
MVR-30	B79825	530.07	-	B79817	709.01	-
MVR-30	B79826	523.96	+1% (in relation to B79825)	B79818	702.61	+1% (in relation to B79817)
MVR-30	B79827	519.6	+2% (in relation to B79825)	B79819	694.85	+2% (in relation to B79817)
MVR-30	B79828	514.2	+3% (in relation to B79825)	B79820	688.55	+3% (in relation to B79817)
MVR-50	B79861	269.44	-4% (in relation to B79865)	B79851	360.58	-3% (in relation to B79854)
MVR-50	B79862	266.44	-3% (in relation to B79865)	B79852	356.41	-2% (in relation to B79854)
MVR-50	B79863	264.51	-2% (in relation to B79865)	B79853	353.17	-1% (in relation to B79854)
MVR-50	B79864	262.07	-1% (in relation to B79865)	B79854	349.42	-
MVR-50	B79865	258.83	-	B79855	345.93	+1% (in relation to B79854)
MVR-50	B79866	256.52	+1% (in relation to B79865)	B79856	342.53	+2% (in relation to B79854)
MVR-50	B79867	254	+2% (in relation to B79865)	B79857	339.04	+3% (in relation to B79854)
MVR-100	B79901	1973.95	-3% (in relation to B79904)	B79891	2664.16	-3% (in relation to B79894)
MVR-100	B79902	1951.68	-2% (in relation to B79904)	B79892	2646.98	-2% (in relation to B79894)
MVR-100	B79903	1935.27	-1% (in relation to B79904)	B79893	2605.61	-1% (in relation to B79894)
MVR-100	B79904	1912.65	- 10/ //	B79894	2586.61	- 10/ //
MVR-100	B79905	1901.98	+1% (in relation to B79904)	B79895	2554.55	+1% (in relation to B79894)
MVR-100	B79906	1882.77	+2% (in relation to B79904)	B79896	2526.66	+2% (in relation to B79894)
MVR-100	B79907	1862.97	+3% (in relation to B79904)	B79897	2505.78	+3% (in relation to B79894)
MVR-160	B79941	604.34	-3% (in relation to B79944)	B79931	808.31	-3% (in relation to B79934)
MVR-160	B79942	598.37	-2% (in relation to B79944)	B79932	800.5	-2% (in relation to B79934)
MVR-160	B79943	592.81	-1% (in relation to B79944)	B79933	792.41	-1% (in relation to B79934)
MVR-160	B79944	587.03	-	B79934	784.64	-
MVR-160	B79945	580.58	+1% (in relation to B79944)	B79935	775.87	+1% (in relation to B79934)
MVR-160	B79946	575.56	+2% (in relation to B79944)	B79936	768.47	+2% (in relation to B79934)
MVR-350	B79981	294.32	-2% (in relation to B79983)	B79971	394.09	-2% (in relation to B79973)
MVR-350	B79982	291.49	-1% (in relation to B79983)	B79972	389.61	-1% (in relation to B79973)
MVR-350	B79983	288.55	-	B79973	385.91	-
MVR-350	B79984	285.72	+1% (in relation to B79983)	B79974	382.06	+1% (in relation to B79973)
MVR-350	B79985	283.03	+2% (in relation to B79983)	B79975	378.6	+2% (in relation to B79973)
MVR-350	B79986	280.7	+3% (in relation to B79983)	B79976	374.11	+3% (in relation to B79973)
MVR-650	B80021	182.28	-3% (in relation to B80024)	B80013	239.51	-1% (in relation to B80014)
MVR-650	B80022	180.35	-2% (in relation to B80024)	B80014	236.41	-
MVR-650	B80023	178.86	-1% (in relation to B80024)	B80015	234.58	+1% (in relation to B80014)
MVR-650	B80024	176.9	-	B80016	232.95	+2% (in relation to B80014)
MVR-650	B80025	175.04	+1% (in relation to B80024)	B80017	230.62	+3% (in relation to B80014)
MVR-650	B80026	173.77	+2% (in relation to B80024)	B80018	228.21	+4% (in relation to B80014)
MVR-650	B80027	171.53	+3% (in relation to B80024)	-	-	-
MVR-650	B80028	170.34	+4% (in relation to B80024)	-	-	-
MVR-1300	B80067	413.35	-1% (in relation to B80068)	B80056	551.99	1% (in relation to B80057)
MVR-1300	B80068	409.41	-	B80057	546.34	-
MVR-1300	B80069	405.25	+1% (in relation to B80068)	B80058	540.85	1% (in relation to B80057)



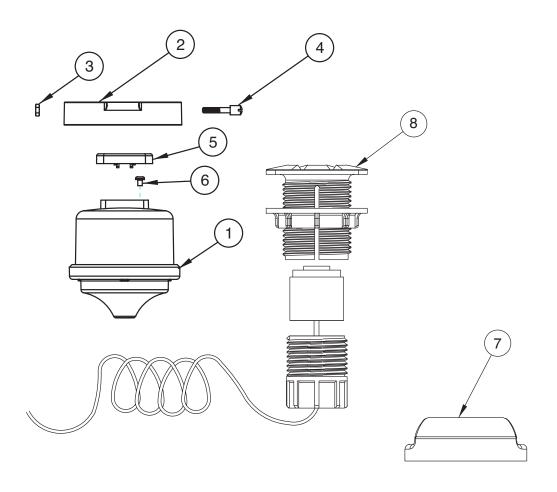
# Model MVR Visual Registers Options

	Cubic Feet	US Gallons
MVR Model	Standard Register	Standard Register
MVR-30	B79821	B79813
MVR-30	B79822	B79814
MVR-30	B79823	B79815
MVR-30	B79824	B79816
MVR-30	B79825	B79817
MVR-30	B79826	B79818
MVR-30	B79827	B79819
MVR-30	B79828	B79820
MVR-50	B79861	B79851
MVR-50	B79862	B79852
MVR-50	B79863	B79853
MVR-50	B79864	B79854
MVR-50	B79865	B79855
MVR-50	B79866	B79856
MVR-50	B79867	B79857
MVR-100	B79901	B79891
MVR-100	B79902	B79892
MVR-100	B79903	B79893
MVR-100	B79904	B79894
MVR-100	B79905	B79895
MVR-100	B79906	B79896
MVR-100	B79907	B79897
MVR-160	B79941	B79931
MVR-160	B79942	B79932
MVR-160	B79943	B79933
MVR-160	B79944	B79934
MVR-160	B79945	B79935
MVR-160	B79946	B79936
MVR-350	B79981	B79971
MVR-350	B79982	B79972
MVR-350	B79983	B79973
MVR-350	B79984	B79974
MVR-350	B79985	B79975
MVR-350	B79986	B79976
MVR-650	B80021	B80013
MVR-650	B80022	B80014
MVR-650	B80023	B80015
MVR-650	B80024	B80016
MVR-650	B80025	B80017
MVR-650	B80026	B80018
MVR-650	B80027	B80019
MVR-650	B80028	B80020
MVR-1300	B80067	B80053
MVR-1300	B80068	B80054
MVR-1300	B80069	B80055

# **Model MVR**

# **Mueller** SYSTEMS

Translator Register Options for MVR 30 to 160

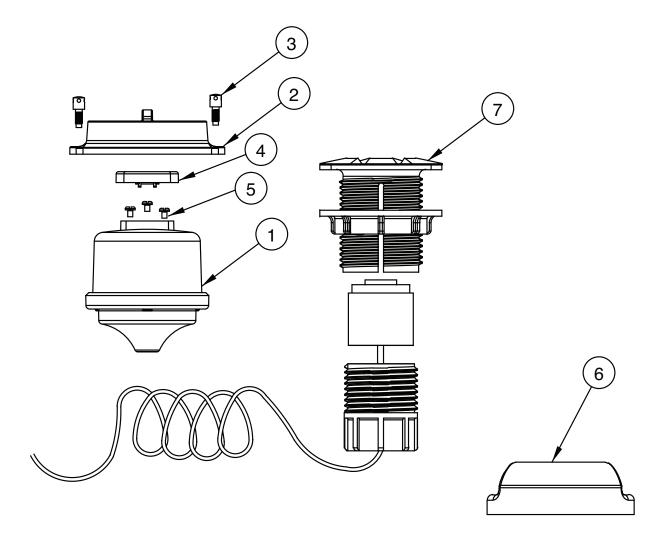


Ref	Description	MVR-30	MVR-50	MVR-100	MVR-160
1	Translator Register* Gallons Cubic Feet Specify Electronic Reading Value 4, 5, or 6 Wheel	D35231xxx D35232xxx	D35241xxx D35242xxx	D35251xxx D35252xxx	D35261xxx D35262xxx
2	Clamp Band (Plastic) Translator Only	B8602	B8602	B8602	B8602
3	Clamp Band Seal Nut	19999	19999	19999	19999
4	SST Tri-Wing Screw	98344	98344	98344	98344
5	Lens Terminal Cover	B8447	B8447	B8447	B8447
6	Terminal Lug Screw	98197 (3)	98197 (3)	98197 (3)	98197 (3)
7	Wall Pad	T1234	T1234	T1234	T1234
8	Pit Pad	T1240	T1240	T1240	T1240
9	TrueRead (not shown)	C6551G	C6551G	C6551G	C6551G
10	1,000' Spool of Wire (not shown)	AS755	AS755	AS755	AS755

<sup>\*</sup>Call Mueller Systems Customer Service for appropriate Translator Register and AMR device part number.



# Translator Register Options for MVR 350 to 1300



Ref	Description	MVR-350	MVR-650	MVR-1300
1	Translator Register Gallons* Cubic Feet*	D35271xxx D35272xxx	D35281xxx D35282xxx	D35291xxx D35292xxx
2	Register Box (Bronze) Translator Only	C6525	C6525	C6525
3	Register Box Screw	51005P007 (2)	51005P007 (2)	51005P007 (2)
4	Lens Terminal Cover	B8447	B8447	B8447
5	Terminal Lug Screw	98197 (3)	98197 (3)	98197 (3)
6	Wall Pad	T1234	T1234	T1234
7	Pit Pad	T1240	T1240	T1240
8	TrueRead (not shown)	C6551G	C6551G	C6551G
9	1,000' Spool of Wire (not shown)	AS755	AS755	AS755

<sup>\*</sup>Call Mueller Systems Customer Service for appropriate Translator Register and AMR device part number.

Residential Fire Meter Sizes 3/4", 1", 1-1/2" and 2"

### **Mueller** SYSTEMS

#### **Features**

APPLICATIONS: The Hersey Residential Fire Meter (RFM) is specifically designed for use in residential fire protection systems or combination systems that supply domestic plumbing needs and residential sprinkler fire protection service when installed as specified in NFPA 13D or NFPA 13R; (Standards for the installation of sprinkler systems in one and two family dwellings, manufactured homes and residential occupancies up to and including four stories in height). The RFM utilizes Hersey's unique vertical turbine measuring element to measure flow rates comparable to traditional positive displacement meters, yet provides a measuring element that allows suspended particulate matter to pass through the element unobstructed when emergency flow requirements for water are demanded. No other meter provides more flexibility and dependability for measuring water accurately in residential fire suppression and domestic use applications.

**CONFORMANCE TO STANDARDS:** Each Hersey Residential Fire Service Meter is tested to assure compliance with ANSI/AWWA Standard C701, Class 1. Each male and female threaded RFM has UL Approval. EnviroBrass II® options conform to the NSF 61 Standard.

**CONSTRUCTION:** Hersey Residential Fire Water Meters consist of three basic parts: maincase, rotor assembly, and a permanently sealed register. Maincases and bottom plates are made of bronze for long service life. Rotor assemblies are thermoplastic, which is dimensionally stable and will not corrode. Retro Thrust® rotor design extends the life of the meter by dividing wear between two points: during low flow the tungsten carbide thrust bearing floats against a sapphire bearing surface; during high flow the stainless steel shaft gently contacts a second sapphire bearing and during medium flow, the rotor floats between the thrust bearings without contact. The measuring chamber is protected by an internal strainer with four times the effective straining area of the inlet pipe diameter. No external strainer is required. Fire service connections are easily recognized by the bright red register collar and lid on all visual read meters. Electronic meters are distinguished by the red collar and lense terminal cover on top of the Translator® register. Optional test ports are available on all 1-1/2" and 2" meters.

**REGISTER:** The permanently sealed register has a unique L seal and heat treated glass to eliminate dirt, moisture infiltration and lens fogging. The totalizing register has a straight-reading odometer type display, a 360° test circle with center sweep hand and a low flow (leak) detector.

All Hersey Meter models have electronic meter reading systems available for increased reading efficiency (see Meter Reading Systems).

**OPERATION:** Water flows through the integral strainer and into the vertical turbine assembly. There, the direction of the water flow is directed by the hub into the rotor at the precise angle necessary for accurate measurement over the full range of flow rates. No straight pipe requirements apply before or after the meter. The turbine turns freely and rotates in direct proportion to the volume of water passing through the meter. The Hersey turbine operates more quietly than conventional disc or piston meters.

**MAINTENANCE:** All Hersey Residential Fire Meters are designed and manufactured to provide long service life. The register on all sizes can be replaced without removing the meter from the line. Modular design and economical internal parts allow for inexpensive, speedy rebuilds.

**CONNECTIONS:** Available with external (N.P.S.M.) straight pipe threads (ANSI B1.20.1) on 3/4" and 1" sizes; internal (NPT) pipe threads (ANSI B1.20.1) on 1-1/2" and 2" sizes.



2" RFM 160

### Materials and Specifications

MODEL Residential Fire Meter (RFM) 3/4", 1", 1-1/2" and 2" SIZES **STANDARDS** Manufactured and tested to meet or exceed all applicable parts of ANSI/AWWA C701, Class 1 Standard All Male and Female Threaded RFMS have UL Fire Service Approval **SERVICE** Cold water measurement with flow in only one direction OPERATING FLOW RANGE See Charts **ACCURACY** See Charts MAXIMUM WORKING PRESSURE 175 PSI Meets Hydrostatic Pressure Testing to 875 PSI. TEMPERATURE RANGE 33°F TO 130°F MEASURING ELEMENT **STRAINER** 4 times the inlet pipe diameter of straining surface area with .080 perforations. REGISTER TYPE Straight reading, permanently sealed, magnetic drive with low flow indicator. Remote reading units optional. METER CONNECTIONS 3/4" and 1" external (NPSM) straight pipe threads, 1-1/2" size and 2" size available with internal thread (NPT) ends same nominal size as size of meter MATERIALS Maincase - bronze UNSC84400; Rotor assembly – thermoplastic: Strainer – stainless steel: Casing bolts – stainless steel ANSI B18. **OPTIONS** Meter case - EnviroBrassII® UNSC89520, Translator registers and AMR Systems



Residential Fire Meter Sizes 3/4", 1", 1-1/2" and 2"

### **Meter Registration**

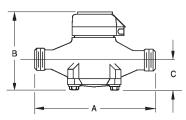
Meter Size	Initial Dial *	Capacity	Initial Dial *	Capacity
3/4"	10 Gallons	10 Million	1 Cubic Foot	1 Million
1"	10 Gallons	10 Million	1 Cubic Feet	1 Million
1-1/2"	100 Gallons	100 Million	10 Cubic Feet	10 Million
2"	100 Gallons	100 Million	10 Cubic Feet	10 Million

<sup>\*</sup>Registration equal to one full revolution of the sweep hand.

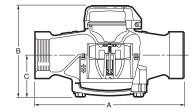
### **Flow Characteristics**

Meter Size	Typical Low Flow (95% Minimum)	Typical Operating Range (100% ± 2%)	Maximum Continuous Operation	Maximum Intermittent Flow
3/4"	1/2 GPM	1 to 30 GPM	25 GPM	35 GPM
1"	3/4 GPM	1-1/2 to 50 GPM	35 GPM	55 GPM
1-1/2"	1-1/2 GPM	2 to 100 GPM	70 GPM	110 GPM
2"	2 GPM	3 to 160 GPM	115 GPM	175 GPM

### **Dimensions and Weights**



3/4" and 1" COMPACT RFM



1-1/2" and 2" COMPACT RFM with Internal NPT ends

Meter Size	3/4"	1"	1-1/2"	2"
Ends		Threaded (	screwed)	
Model	RFM30	RFM50	RFM100	RFM160
Dimensions				
Α	7-1/2"	9"	9"	10-1/2"
В	5"	5-1/2"	5-3/4"	6-1/4"
C	1-13/16"	2-3/8"	2-3/8"	3"
Max.width	3-3/4"	4-1/4"	4-3/8"	5-3/8"
Net weight	5*	7*	9*	14*

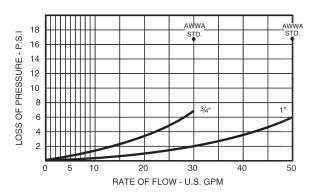
 $<sup>\</sup>ensuremath{^{\star}}$  Weights are in pounds and are approximate.

Mueller SYSTEMS

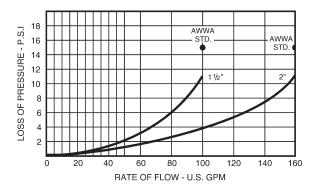
Residential Fire Meter Sizes 3/4", 1", 1-1/2" and 2"

### **Performance**

#### Head loss -3/4" and 1"



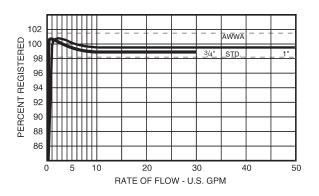
#### Head loss -1-1/2" and 2"



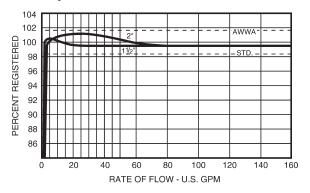
<sup>\*</sup>Performance curves are typical only and not a guarantee of performance.

### **Performance**

#### Accuracy -3/4" and 1"

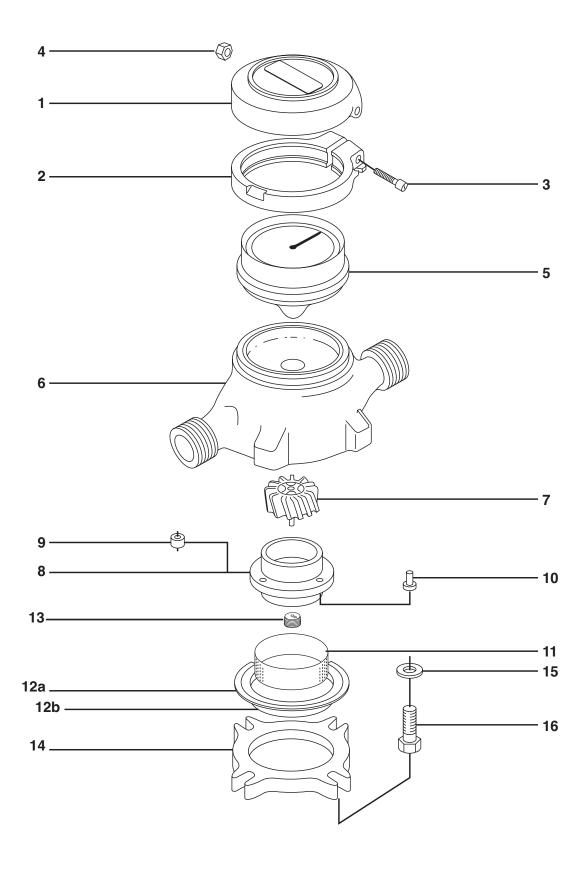


#### Accuracy - 1-1/2" and 2"





Models RFM-30, RFM 50, RFM 100 and RFM 160



## **Mueller** SYSTEMS

### Models RFM-30, RFM 50, RFM 100 and RFM 160

Ref. No.	Description	Model RFM-30	Model RFM-50	Model RFM-100	Model RFM-160
1	Lid (Plastic) Red	50377FS	50377FS	50377FS	50377FS
2	Red Clamp Band for Visual Register Red Clamp Band for Translator Register	50379FS B8602FS	50379FS B8602FS	50379FS B8602FS	50379FS B8602FS
3	Lid Seal Screw	19945	19945	19945	19945
4	Lid Nut	19999	19999	19999	19999
5	Sealed Registers (Specify unit of measurement)		See p	pages 7.7-7.8	•
6	RFM 30 Top Case (7-1/2" length): 3/4" M.I.P. Ends	50466 (A)	-	-	-
6	RFM 50 Top Case (9" length): 1" M.I.P. Ends	-	50566FS (B)	-	-
6	RFM 100 Top Case (9" length): 1-1/2" F.I.P. Ends	-	-	50776FS (C)	-
6	RFM 160 Top Case (10-1/2" length): 2" F.I.P. Ends	-	-	-	50866FS (D)
7	Rotor	50471	50571	50771	50871
8	Inlet Hub	50467	50567	50767	50867
9	Lower Bushing	50374 (2)	50574 (2)	50574 (2)	-
10	Interior Screw	98394 (4)	98394 (4)	98394 (4)	98394 (4)
11	Strainer (Metal Ring)	50480	50580	50780	50880
12a	Rubber Gasket	-	B7647	50786	C5488
12b	Liner	50365	B7646	50766	C5491
13	Inlet Plug Assembly	50493	50493	50493	53105
14	Bottom (Bronze) only	C6592	C6593	C6594	D3594
15	Case Washer	AS7792 (4)	AS7792 (4)	98378 (4)	98378 (4)
16	Case Bolt	90010 (4)	90010 (4)	90073 (4)	90073 (4)
	Bushing Spacer	-	-	-	53114
	Bushing	-	-	-	54915 (2)
	Sapphire Thrust Bearing (Case)	98371	98371	98371	98371
	Complete Interior	50477FS	50577FS	50777FS	50872FS
	Bearing Adhesive*	-	-	-	-
	Adapters**: 3/4" Adapter 3/4" Adapter Washer 1" Adapter 1" Adapter Washer 1-1/2" Female Adapter	95046 95014 -	- - 95063 95064	- - - - - 95095	-
	2" Female Adapter	-	-	-	95195

A: Order 3/4" Adapter 95046 and Adapter Washer 95038 to replace standard 3/4" disc meter, 9" long.

NOTE: If more than one part is required, quantity is noted after part number (in parenthesis).

B: Order 1" Adapter 95063 and Adapter Washer 95064 with Top Case 50566 to replace standard 1" disc meter, 10-3/4" long.

C: Order 1-1/2" Adapter 95095 with Top Case 50776 to replace 1-1/2" female end meter installed with union connections. Assemble to length of 12-5/8".

D: Order 2" Adapter 95195 with Top Case 50866 to replace standard 2" Female End disc meter, 15-1/4" long.

<sup>\*</sup>Purchase locally. Use a cyanoacrylic adhesive, such as Loctite Super Bonder #30-13, Eastman #916, Permabond or Aron Alpha.

<sup>\*\*</sup>Must be ordered separately. Not an integral meter component.

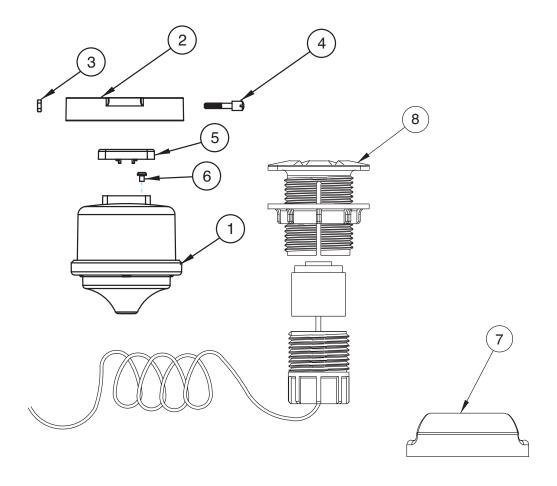
Mueller SYSTEMS

# Model RFM Visual Register Options

		Cubic F	eet			U.S. Gallons
RFM Model	Register Part Numbers	Internal Ratio	Relation to other Registers	Register Part Numbers	Internal Ratio	Relation to other Registers
RFM-30	B79821FS	551.99	-4% (in relation to B79825)	B79813FS	738.92	-4% (in relation to B79817)
RFM-30	B79822FS	546.34	-3% (in relation to B79825)	B79814FS	731.88	-3% (in relation to B79817)
RFM-30	B79823FS	540.85	-2% (in relation to B79825)	B79815FS	723.79	-2% (in relation to B79817)
RFM-30	B79824FS	536.22	-1% (in relation to B79825)	B79816FS	715.86	-1% (in relation to B79817)
RFM-30	B79825FS	530.07	-	B79817FS	709.01	-
RFM-30	B79826FS	523.96	+1% (in relation to B79825)	B79818FS	702.61	+1% (in relation to B79817)
RFM-30	B79827FS	519.6	+2% (in relation to B79825)	B79819FS	694.85	+2% (in relation to B79817)
RFM-30	B79828FS	514.2	+3% (in relation to B79825)	B79820FS	688.55	+3% (in relation to B79817)
RFM-50	B79861FS	269.44	-4% (in relation to B79865)	B79851FS	360.58	-3% (in relation to B79854)
RFM-50	B79862FS	266.44	-3% (in relation to B79865)	B79852FS	356.41	-2% (in relation to B79854)
RFM-50	B79863FS	264.51	-2% (in relation to B79865)	B79853FS	353.17	-1% (in relation to B79854)
RFM-50	B79864FS	262.07	-1% (in relation to B79865)	B79854FS	349.42	-
RFM-50	B79865FS	258.83	-	B79855FS	345.93	+1% (in relation to B79854)
RFM-50	B79866FS	256.52	+1% (in relation to B79865)	B79856FS	342.53	+2% (in relation to B79854)
RFM-50	B79867FS	254	+2% (in relation to B79865)	B79857FS	339.04	+3% (in relation to B79854)
RFM-100	B79901FS	1973.95	-3% (in relation to B79904)	B79891FS	2664.16	-3% (in relation to B79894)
RFM-100	B79902FS	1951.68	-2% (in relation to B79904)	B79892FS	2646.98	-2% (in relation to B79894)
RFM-100	B79903FS	1935.27	-1% (in relation to B79904)	B79893FS	2605.61	-1% (in relation to B79894)
RFM-100	B79904FS	1912.65	-	B79894FS	2586.61	-
RFM-100	B79905FS	1901.98	+1% (in relation to B79904)	B79895FS	2554.55	+1% (in relation to B79894)
RFM-100	B79906FS	1882.77	+2% (in relation to B79904)	B79896FS	2526.66	+2% (in relation to B79894)
RFM-100	B79907FS	1862.97	+3% (in relation to B79904)	B79897FS	2505.78	+3% (in relation to B79894)
RFM-160	B79941FS	604.34	-3% (in relation to B79944)	B79931FS	808.31	-3% (in relation to B79934)
RFM-160	B79942FS	598.37	-2% (in relation to B79944)	B79932FS	800.5	-2% (in relation to B79934)
RFM-160	B79943FS	592.81	-1% (in relation to B79944)	B79933FS	792.41	-1% (in relation to B79934)
RFM-160	B79944FS	587.03	-	B79934FS	784.64	-
RFM-160	B79945FS	580.58	+1% (in relation to B79944)	B79935FS	775.87	+1% (in relation to B79934)
RFM-160	B79946FS	575.56	+2% (in relation to B79944)	B79936FS	768.47	+2% (in relation to B79934)

# **Mueller** SYSTEMS

### Translator Register Options for RFM 30 to 160



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1	Translator Register* Gallons Cubic Feet Specify Electronic Reading Value 4, 5, or 6 Wheel	D35231xxx D35232xxx	D35241xxx D35242xxx	D35251xxx D35252xxx	D35261xxx D35262xxx
2	Red Clamp Band (Plastic) Translator Only	B8602FS	B8602FS	B8602FS	B8602FS
3	Clamp Band Seal Nut	19999	19999	19999	19999
4	Clamp Band Seal Screw	19945	19945	19945	19945
5	Lens Terminal Cover Red	B8447FS	B8447FS	B8447FS	B8447FS
6	Terminal Lug Screw	98197 (3)	98197 (3)	98197 (3)	98197 (3)
7	Wall Pad	T1234	T1234	T1234	T1234
8	Pit Pad	T1240	T1240	T1240	T1240
9	TrueRead (not shown)	C6551G	C6551G	C6551G	C6551G
10	1,000' Spool of Wire (not shown)	AS755	AS755	AS755	AS755

<sup>\*</sup>Call Mueller Systems Customer Service for appropriate Translator Register and AMR device part number.



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#### Question and Answers for Bid #IND2122200B1 - Water Meters and Repair Parts

#### **Overall Bid Questions**

#### **Question 1**

I believe the bid documents stated in, but wanted to double check two questions I had:

Does the end user have to bid on all items? Is the goal for this to be awarded to a small business as in the past?

Thank you! (Submitted: Jan 29, 2021 10:00:32 AM EST)

#### Answer

- Per the bid comments, "This is a group bid. A bidder must bid on all items within the group to be considered for award of that group."

Per the bid comments, "This solicitation is open to the general marketplace." However, refer to the attachment titled "Procurement Preferences for Broward County Small Business Enterprises and County Business Enterprises." (Answered: Feb 2, 2021 9:08:39 AM EST)

Question Deadline: Jan 29, 2021 5:00:00 PM EST

## AFFIDAVIT of ASSIGNMENT OF CONTRACT(S)

Gregory A. Velz, Assistant ( of Fortiline Inc., DBA Fortiline Waterworks
(Name and Title) (Name of Company Transferring Contract Responsibility)
certify that all rights and responsibilities of Contract/P.C. No
for Water Meters and Repair Parts have been delegated and assigned
by assignment to Consolidated Pipe & Supply Company, Inc.
(assignment, merger, acquisition, consolidation) (Name of Company Assuming Contractual Responsibility)
in accordance with all terms, conditions, promises, covenants, and payments set forth therein.
Assignor/Contractor hereby releases, discharges and covenants not to sue Broward County from any actions
or claims arising or occurring by virtue of this contract.
ASSIGNOR/CONTRACTOR
Fortiline Inc., DBA Fortiline Waterworks
(Company Name) 7025 Northwinds Dr. NW
(Street Address)
Concord, NC 28027-3334 (City, State, Zip Code)
Federal I.D. No. 57-0819190
By Assour
(Signature)
Gregory A. Velz, Assistant Corporate Secr
(Type Name and Title of Authorized Officer)
This 24th day of lugust, 20 22.
STATE OF FLORIDA )
COUNTY OF BROWARD VOIUSIA ) SS.
The foregoing instrument was acknowledged before me this 24th day of AVQUST By GREGORY A-VELT
who is personally known to me or who has produced Dersonally known to me or who has produced
as identification and who did did not take an oath.
NOTARY PUBLIC:
Signature: Deweller Deweller
Print Name: DeNise Kemp  State of Florida At Large  My Commission Expires: 7/26/26  My Commission Expires: 7/26/26
State of Florida At Large
My Commission Expires: 7/26/26
(SEAL)
Affidavit for Assignments

jwilf@broward.org

Contract ID # IND2122200B2\_2

**Document Description**Water Meters and Repair Parts

**Start Date** 10/1/2022

**End Date** 9/24/2024

**Not To Exceed** \$721,207.80

**Amount Ordered** \$149,395.00

Vend#-AddrID-ContactID 0000013412 Legal Name CONSOLIDATED PIPE & SUPPLY COMPANY, INC. Vendor Contact Email alex.ashton@cpspipe.com

Item #	Category	Description	Total Line Qty Released	UOM	Maximum Line Amount	Unit Price	Total Line Released Amount	Amount Paid
IND2122200B2_2_001	7206700	Meter, 5/8 Inch Lead Free Brass Positive Displacement, MFR: Zenner, MDL: ZPD, P/N PPD02	2,000.00	EA	\$0.00	\$39.95	\$79,900.00	\$79,900.00
IND2122200B2_2_002	7206700	Meter, 3/4 Inch Lead Free Brass Positive Displacement, MFR: Zenner, MDL: ZPD, P/N PPD04	0.00	EA	\$0.00	\$67.00	\$0.00	\$0.00
IND2122200B2_2_003	7206700	Meter, 1 Inch Lead Free Brass Positive Displacement, MFR: Zenner, MDL: ZPD, P/N PPD07	300.00	EA	\$0.00	\$93.65	\$28,095.00	\$23,037.90
IND2122200B2_2_004	7206700	Meter, 1 1/2 Inch Lead Free Brass Flanged Ends Positive Displacement with Test Port, MFR: Zenner, MDL: ZPD, P/N PPD09	0.00	EA	\$0.00	\$275.00	\$0.00	\$0.00
IND2122200B2_2_005	7206700	Meter, 2 Inch Lead Free Brass Flanged Ends Positive Displacement with Test Port, MFR: Zenner, MDL: ZPD, P/N PPD12	0.00	EA	\$0.00	\$364.50	\$0.00	\$0.00
IND2122200B2_2_006	7206700	Meter, 5/8 Inch Lead Free Brass Multi-Jet, MFR: Zenner, MDL: PMN, P/N PMN02	0.00	EA	\$0.00	\$40.95	\$0.00	\$0.00
IND2122200B2_2_007	7206700	Meter, 1 Inch Lead Free Brass Multi- jet, MFR: Zenner, MDL: PMN, P/N PMN07	0.00	EA	\$0.00	\$93.65	\$0.00	\$0.00
IND2122200B2_2_008	7206700	Meter, 1 1/2 Inch Lead Free Brass Flanged Ends Multi-Jet w/ a Test	60.00	EA	\$0.00	\$225.00	\$13,500.00	\$13,500.00

jwilf@broward.org

Contract ID # IND2122200B2\_2

**Document Description**Water Meters and Repair Parts

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**Not To Exceed** \$721,207.80

Amount Ordered \$149,395.00

Vend#-AddrID-ContactID 0000013412 Legal Name CONSOLIDATED PIPE & SUPPLY COMPANY, INC. Vendor Contact Email alex.ashton@cpspipe.com

Item #	Category	Description	Total Line Qty Released	UOM	Maximum Line Amount	Unit Price	Total Line Released Amount	Amount Paid
		Port, MFR: Zenner, MDL: PMN, P/N PMN09						
IND2122200B2_2_009	7206700	Meter, 2 Inch Lead Free Brass Flanged Ends Multi-Jet w/ a Test Port, MFR: Zenner, MDL: PMN, P/N PMN12	50.00	EA	\$0.00	\$285.00	\$14,250.00	\$14,250.00
IND2122200B2_2_010	7206700	Meter, 3 Inch Lead Free Brass Hydrant Meter w/ Hydrant Couplings Turbine, MFR: Zenner, MDL: RPZ Hydrant Meter, P/N 3- Inch FHZD30	7.00	EA	\$0.00	\$1,950.00	\$13,650.00	\$13,650.00
IND2122200B2_2_011	7206700	Meter, 3 Inch Lead Free Brass Turbine w/ Bolt-On Strainer andTest Port, MFR: Zenner, MDL: ZTBM w/Strainer, P/N PMTB03	0.00	EA	\$0.00	\$1,000.00	\$0.00	\$0.00
IND2122200B2_2_012	7206700	Meter, 4 Inch Lead Free Brass Turbine w/ Bolt-On Strainer andTest Port, MFR: Zenner, MDL: ZTBM w/ Strainer, P/N PMTB04	0.00	EA	\$0.00	\$1,550.00	\$0.00	\$0.00
IND2122200B2_2_013	7206700	Meter, 6 Inch Lead Free Brass Turbine w/ Bolt-on Strainer and Test Port, MFR: Zenner, MDL: ZTBM w/ Strainer, P/N PMTB06	0.00	EA	\$0.00	\$2,580.00	\$0.00	\$0.00
IND2122200B2_2_014	7206700	Meter, 8 Inch Lead Free Brass Turbine w/ Bolt-on Strainer and Test Port, MFR: Zenner, MDL: ZTBM w/ Strainer 8, P/N PMTB08	0.00	EA	\$0.00	\$3,850.00	\$0.00	\$0.00

jwilf@broward.org

Contract ID # IND2122200B2\_2

**Document Description**Water Meters and Repair Parts

**Start Date** 10/1/2022

**End Date** 9/24/2024

**Not To Exceed** \$721,207.80

**Amount Ordered** \$149,395.00

Vend#-AddrID-ContactID 0000013412 Legal Name CONSOLIDATED PIPE & SUPPLY COMPANY, INC. **Vendor Contact Email** alex.ashton@cpspipe.com

Item #	Category	Description	Total Line Qty Released	UOM	Maximum Line Amount	Unit Price	Total Line Released Amount	Amount Paid
IND2122200B2_2_015	7206700	Meter, 10 Inch Lead Free Brass Turbine w/ Bolt-on Strainer and Test Port, MFR: Zenner, MDL: ZTBM w/ Strainer, P/N PMTB10	0.00	EA	\$0.00	\$2,400.00	\$0.00	\$0.00
IND2122200B2_2_016	7206700	Meter Reclaimed, 5/8 Inch Lead Free Brass Multi-Jet, MFR: Zenner, MDL: PMNR, P/N PMNR02	0.00	EA	\$0.00	\$43.00	\$0.00	\$0.00
IND2122200B2_2_017	7206700	Meter Reclaimed, 3/4 Inch Lead Free Brass Multi-jet, MFR: Zenner, MDL: PMNR, P/N PMNR04	0.00	EA	\$0.00	\$69.00	\$0.00	\$0.00
IND2122200B2_2_018	7206700	Meter Reclaimed, 1 Inch Lead Free Brass Multi-jet, MFR: Zenner, MDL: PMNR, P/N PMNR07	0.00	EA	\$0.00	\$95.65	\$0.00	\$0.00
IND2122200B2_2_019	7206700	Meter Reclaimed, 1 1/2 Inch Lead Free Brass Flanged Ends Multi-jet w/ Test Port, MFR: Zenner, MDL: PMNR, P/N PMNR09	0.00	EA	\$0.00	\$228.00	\$0.00	\$0.00
IND2122200B2_2_020	7206700	Meter Reclaimed, 2 Inch Lead Free Brass Flanged Ends Multi-jet w/ Test Port, MFR: Zenner, MDL: PMNR, P/N PMNR12	0.00	EA	\$0.00	\$288.00	\$0.00	\$0.00
IND2122200B2_2_021	7206700	Meter Reclaimed, 3 Inch Lead Free Brass Turbine w/ Bolt-on Strainer w/ Test Port, MFR: Zenner, MDL: ZTBM w/ Strainer, P/N PMBTR03	0.00	EA	\$0.00	\$1,005.00	\$0.00	\$0.00
IND2122200B2_2_022	7206700	Meter Reclaimed, 4 Inch Lead Free Brass Turbine w/ Bolt-on Strainer	0.00	EA	\$0.00	\$1,555.00	\$0.00	\$0.00

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Item #	Category	Description	Total Line Qty Released	UOM	Maximum Line Amount	Unit Price	Total Line Released Amount	Amount Paid
		and Test Port, MFR: Zenner, MDL: ZTBM w/ Strainer, P/N PMTBR04						
IND2122200B2_2_023	7206700	Meter Reclaimed, 6 Inch Lead Free Brass Turbine w/ Bolt-on Strainer and Test Port, MFR: Zenner, MDL: ZTBM w/ Strainer, P/N PMBTR06	0.00	EA	\$0.00	\$2,585.00	\$0.00	\$0.00
IND2122200B2_2_024	7206700	Meter Reclaimed, 8 Inch Lead Free Brass Turbine w/ Bolt-on Strainer and Test Port, MFR: Zenner, MDL: ZTBM w/ Strainer, P/N PMBTR08	0.00	EA	\$0.00	\$3,855.00	\$0.00	\$0.00
IND2122200B2_2_025	7206700	Meter Fire Service, 10 Inch x 2 Inch Lead Free Brass w/ Test Port, MFR: Zenner, MDL: PFS010X4, P/N 10 PFS010X4	0.00	EA	\$0.00	\$13,500.0 0	\$0.00	\$0.00
IND2122200B2_2_026	7206700	Meter Fire Service, 8 Inch x 2 Inch Lead Free Brass w/ Test Port, MFR: Zenner, MDL: PFS08X4, P/N 8 PFS08X4	0.00	EA	\$0.00	\$11,250.0 0	\$0.00	\$0.00
IND2122200B2_2_027	7206700	Meter Fire Service, 6 Inch x 2 Inch Lead Free Brass w/ Test Port, MFR: Zenner, MDL: PFS06X2, P/N 6 PFS06X2	0.00	EA	\$0.00	\$8,900.00	\$0.00	\$0.00
IND2122200B2_2_028	7206700	Meter Fire Service, 4 Inch x 1 1/2 Inch Lead Free Brass w/ Test Port, MFR: Zenner, MDL: PFS04X2, P/N 4 PFS04X2	0.00	EA	\$0.00	\$5,800.00	\$0.00	\$0.00
IND2122200B2_2_029	7206700	Meter Fire Service, 3 Inch x 1 Inch	0.00	EA	\$0.00	\$2,200.00	\$0.00	\$0.00

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**Document Description**Water Meters and Repair Parts

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**Not To Exceed** \$721,207.80

**Amount Ordered** \$149,395.00

Vend#-AddrID-ContactID 0000013412 Legal Name CONSOLIDATED PIPE & SUPPLY COMPANY, INC. Vendor Contact Email alex.ashton@cpspipe.com

Item #	Category	Description	Total Line Qty Released	UOM	Maximum Line Amount	Unit Price	Total Line Released Amount	Amount Paid
		Lead Free Brass w/ Test Port, MFR: Zenner, MDL: PMC03, P/N 3 PMC03						
IND2122200B2_2_030	7206700	Meter Residential Fire Service, 2 Inch Lead Free Brass Multi-jet w/ Red Register Lid, MFR: Zenner, MDL: PMN12, P/N 2 PMF/ZMF	0.00	EA	\$0.00	\$325.00	\$0.00	\$0.00
IND2122200B2_2_031	7206700	Meter Residential Fire Service, 1 1/2 Inch Lead Free Brass Multi-jet, MFR: Zenner, MDL: PMF09, P/N 1- 1/2 PMF/ZMF	0.00	EA	\$0.00	\$275.00	\$0.00	\$0.00
IND2122200B2_2_032	7206700	Meter Residential Fire Service, 1 Inch Lead Free Brass Multi-jet, MFR: Zenner, MDL: PMF07, P/N 1 PMF/ZMF	0.00	EA	\$0.00	\$190.00	\$0.00	\$0.00
IND2122200B2_2_033	7206700	Meter Residential Fire Service, 5/8 Inch Lead Free Brass Positive Displacement, MFR: Zenner, MDL: PMF03, P/N 3/4 SL PMF/ZMF	0.00	EA	\$0.00	\$125.00	\$0.00	\$0.00
IND2122200B2_2_034	7206700	Repair Parts for Water Meters, 20 Percent Discount Off of List/Catalog Price	0.00	LPS	\$0.00	\$1.00	\$0.00	\$0.00
		Vendor Total	-		\$0.00		\$149,395.00	\$144,337.90

Departmental Usage	# of PO's	<b>Amount Ordered</b>	Amount Paid	
WWS FISCAL OPERATIONS	2	\$149,395.00	\$144,337.90	

Departmental Usage	# of PO's	Amount Ordered	Amount Paid	
DIVISION				
Department Totals	2	\$149,395.00	\$144,337.90	

Renewals					
Line #	Starts	Expires			
1	10/1/22	9/24/23			
2	9/25/23	9/24/24			